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

DATA PACKAGE

VOLATILE ORGANICS

PROJECT NAME : US EPA RIVERSIDE INDUSTRIAL PARK SUPERFUND SITE

WOODARD & CURRAN

800 Westchester Avenue, Suite N507

Suite N507

Rye Brook, NY - 10573

Phone No: 800-807-4080

ORDER ID : Q1665

ATTENTION : Bryan Maurer

Laboratory Certification ID # 20012

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Fax : 908 789 8922

Cover Page

Order ID : Q1665

Project ID : US EPA Riverside Industrial Park Superfund Site

Client : Woodard & Curran

Lab Sample Number	Client Sample Number
Q1665-01	AA-DUP-1-3242025
Q1665-03	IA-B10-2-3242025
Q1665-04	AA-1-3242025
Q1665-05	IA-B2-3-3242025
Q1665-06	IA-B9-1-3242025
Q1665-07	IA-DUP-1-3242025
Q1665-08	IA-DUP-2-3242025
Q1665-09	IA-B9-2-3242025
Q1665-10	IA-B10-4-3242025
Q1665-11	IA-B10-1-3242025
Q1665-12	IA-B2-6-3242025
Q1665-15	IA-B14-1-3242025
Q1665-16	IA-B2-5-3242025
Q1665-18	IA-B10-3-3242025
Q1665-19	IA-B2-2-3242025
Q1665-20	IA-B9-3-3242025
Q1665-21	IA-B2-1-3242025
Q1665-22	IA-B2-4-3242025

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

Signature : _____

Date: 7/3/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

SHIPPING DOCUMENTS

Alliance TECHNICAL GROUP

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

Alliance Project No. : Q1665

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): ____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15			Indoor/Ambinet Air	Soil Gas		
AA-DUP-1 - 3/24/25	3/24/25 3/25/25	1445	1105	-30	-10	—	—	-30	-8.8	10470 ~~10515~~	8032 ~~10598~~	10323	6 L	4.16	~~VL041974.D~~	X				X			

	Temperature (Fahrenheit)			
	Ambient	Maximum	Minimum	
Start				
Stop				

GC/MS Analyst Signature (TO-15)

	Pressure (Inches of Hg)			
	Ambient	Maximum	Minimum	
Start				
Stop				

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

* Hold Pending 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:	Sam	Date/Time: 3/24/25	Canisters Received by:	Date/Time:	
Samples Relinquished by:	CMH	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 0910	**B2502051 - 35**
Relinquished by:		Date/Time: 3-26-25 1215	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Individual Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15	Indoor/Ambinet Air	Soil Gas
IA-810-2 3/24/25	3/24/25 3/25/25	1253	1219	-29	-7	70	70	-30	-8.4	10515 ~~10207~~	2981 ~~10599~~	6 L	4.16	~~VL041974.D~~	X	X	

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	48°F	60°F		
Stop	42°F	42°F		

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.75			
Stop	29.93			

10154

GC/MS Analyst Signature (TO-15)

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

- Hold Pending 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.3 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 3/26/25 1215	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 GT	10	B2502051 - 36
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
AA-1-3/24/25	3/24/25 3/25/25	1445	1105	-29	-5	—	—	-30	-7.1	10101 ~~10482~~	3362 ~~10275~~	6 L	4.16	~~VL042078.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	51°	60°	48°	
Stop	54°			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

10268

GC/MS Analyst Signature (TO-15)

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

* Hold Pending Analysis

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 3/24/25	Canisters Received by:	Date/Time:
Samples Relinquished by: Clayton	Date/Time: 3/24/25 0910	Received by:	Date/Time: 3-26-25 0910
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:

B2502051 - 11

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hartman	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Individual Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-02-B-3/24/25	3/24/25 3/25/25	1620	1512	-30	-4	70	70	-30	-8.0	10552 ~~10203~~	10624 ~~10443~~	6 L	4.16	~~VL041853.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

10281

GC/MS Analyst Signature (TO-15)

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

Hold Pending 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 3/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by: Clay	Date/Time: 3/24/25 0910	Received by:	Date/Time: 3-26-25 0910	B2502051 - 27	
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Christa Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15			Indoor/Ambinet Air	Soil Gas		
IA-BG-1-3/24/25	3/24/25 3/25/25	1715	1618	-30	-10	64	65	-30	-120	10204 ~~10558~~	5926 ~~10592~~	6 L	4.16	~~VL042052.D~~	X			X			

	Temperature (Fahrenheit)			
	Ambient	Maximum	Minimum	
Start	55	60	48	
Stop	60			

10198

GC/MS Analyst Signature (TO-15)

	Pressure (Inches of Hg)			
	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending 5556

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.03 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 3/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 0910		B2502051 - 31
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hastie	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507 Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Individual Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
TA-6UP-1-3/24/25	3/24/25 3/25/25	1620	1512	-30	-5.5	70	70	-30	-6.7	10713 ~~10101~~	2263 ~~10268~~	6 L	4.16	VL041954.D	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

10592

GC/MS Analyst Signature (TO-15)

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

Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 00 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 03/24/25	Canisters Received by:	Date/Time:	
Samples Relinquished by: Clayton	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 0910	**B2502051 - 8**
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID : **NYCHHC Environmental Services**		Sampler Name(s) : Clayton Nuttycombe	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Individual Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
TA-OOP.2-3/24/25	3/24/25 3/25/25	1715	1618	-30	-7	69	65	-30	-7.5	10207 ~~10206~~	10053 10331	6 L	4.16	~~VL042078.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	55	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending 506G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.03 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 3/24/25	Canisters Received by:	Date/Time:
Samples Relinquished by: [illegible]	Date/Time: 3/26/25 6910	Received by: [illegible]	Date/Time: 3-26-25 0910
Relinquished by: [illegible]	Date/Time: 3-26-25 1215	Received by: [illegible]	Date/Time:

B2502051 - 24

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Mathis	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507 Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-89-2-3/24/25	3/24/25 3/25/25	1720	1622	-29	-4	64	65	-30	-5.5	10168 ~~10552~~	10599 ~~10281~~	6 L	4.16	~~VL042052.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	55	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending Analysis

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings:

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 0910		B2502051 - 13
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hutton	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507 Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**	Analysis Turnaround Time		
State : **NY**	Standard : **10 business days** **OR**	Data Package Type :	
Zip Code : **10573**	Rush (Specify): _____ **Days**	EDD Type :	
Country :			

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-B10-4-3/24/25	3/24/25 3/26/25	1308	1229	-29	-5	70	70	-30	-7.1	10172 ~~10168~~	10492 ~~10053~~	6 L	4.16	~~VL041974.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	48°F	60F		
Stop	42°F	42°F		

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.75			
Stop	29.93			

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

X Hold Reading 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.3 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3.26.25 09	10	B2502051 - 1
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hofner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Individual Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
1A-BIO - 1-3/24/25	3/24/25 3/25/25	1248	1212	-23	-5	70	71	-30	~~-5~~ -6.3	10190 ~~10222~~	10598 ~~10271~~		6 L	4.16	VL042052.D	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	48°F	60°F		
Stop	42°F	42°F		

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.75			
Stop	29.93			

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

* Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.1 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:		Date/Time: 3/24/25	Canisters Received by:	Date/Time:	
Samples Relinquished by:		Date/Time: 3/26/25 0940	Received by:	Date/Time: 3-26-25 0940	B2502051 - 10
Relinquished by:		Date/Time: 3-26-25 1219	Received by:	Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Nuñez	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-B2-6-3/24/25	3/24/25 3/25/25	1648	1603	-29	-10.5	70	70	-30	-13.7	10626 ~~10240~~	10271 ~~10608~~	6 L	4.16	VL041974.D	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending 5556

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 3/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by: CNN	Date/Time: 3/26/25 0810	Received by:	Date/Time: 3-26-25 0810	**B2502051 - 41**	
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**	Batch Certified	
City : **Rye Brook**	Site Details:		
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15	Indoor/Ambinet Air	Soil Gas
1A-614-I-3/20/25	3/20/25 3/20/25	1357	1245	-30	-5	72	69	-30	-6.3	10505 ~~10505~~	10266 ~~10294~~	6 L	4.16	~~VL042078.D~~	X	X	

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	51	60°F	48°F	
Stop	54			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.74			
Stop	29.93			

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

* Hold Pending 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.3 ppm

Sampling site (State):

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/20/25 0910	Received by:	Date/Time: 3-26-25 0910	**B2502051 - 17**	
Relinquished by:	Date/Time: 3-20-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Cynthia Nuñez	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-82-5-3/24/25	3/24/25 3/25/25	1644	1504	-29	-8.5	70	70	-30	-8.0	10240 ~~10478~~	10608 ~~10323~~	6 L	4.16	~~VL041974.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

GC/MS Analyst Signature (TO-15)

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

* Hold Pending 555G

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by:	Date/Time: 3/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 0910	**B2502051 - 23**	
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information		Bottle Order ID :	**B2502051**	Courier :	_____ of _____ COCs
Client ID :	**WOOD06**	Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clyston Hefner	Analysis / Matrix
Customer Name :	**Woodard & Curran**	Project Manager :	**Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address :	**800 Westchester Avenue, Suite N507 Suite N507**	Phone Number :	**800-807-4080**		
		Fax Number :	**914-448-0147**		
		Site Details:		Batch Certified	
City :	**Rye Brook**				
State :	**NY**	Analysis Turnaround Time			
Zip Code :	**10573**	Standard :	**10 business days** **OR**	Data Package Type :	
Country :		Rush (Specify): _____	**Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15			Indoor/Ambinet Air	Soil Gas		
TA-B10-7-3/24/25	3/24/25 3/25/25	1302	1222	-29	-7.5	70	70	-30	-8.0	10476 ~~10204~~	10297 ~~10198~~	6 L	4.16	~~VL042052.D~~	X			X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	48°F	60°F		
Stop	42°F	42°F		

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

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.75			
Stop	29.93			

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

• Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.3 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:		Date/Time:	
Samples Relinquished by: Clyston	Date/Time: 3/26/25 0910	Received by:		Date/Time: 3-26-25 0910	18 B2502051 - 5
Relinquished by:	Date/Time: 3-26-25 1215	Received by:		Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clayton Hefner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15			Indoor/Ambinet Air	Soil Gas		
IA-B2-2-3/24/25	3/24/25 3/25/25	1616	1519	-30	-9	70	70	-30	-8.0	10206 ~~10172~~	10331 ~~10492~~	6 L	4.16	~~VL042143.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by:	Date/Time: 3/24/25	Canisters Received by:	Date/Time:		
Samples Relinquished by:	Date/Time: 3/26/25 0910	Received by:	Date/Time: 3-26-25 @ 10		B2502051 - 29
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:		

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	_____ of _____ COCs
Client ID : **WOOD06** Project ID : **NYCHHC Environmental Services**		Sampler Name(s) : Clayton Hutton	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507 Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15			Indoor/Ambinet Air	Soil Gas		
IA-BG-3 - 3/24/25	3/24/25 3/25/25	1722	1627	-29	-4.5	64	65	-30	-5.5	10232 ~~10713~~	10595 ~~10306~~	6 L	4.16	VL042052.D	X			X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	55	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15): [signature]

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:	Date/Time:
Samples Relinquished by: CAH	Date/Time: 3/26/25 0940	Received by:	Date/Time: 3-26-25 0940
Relinquished by:	Date/Time: 3-26-25 1215	Received by:	Date/Time:

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Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID :	**NYCHHC Environmental Services**	Sampler Name(s) : Clyde Hutton	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507 Suite N507**	Phone Number : **800-807-4080**		
	Fax Number : **914-448-0147**		
	Site Details:	Batch Certified	
City : **Rye Brook**			
State : **NY**	Analysis Turnaround Time		
Zip Code : **10573**	Standard : **10 business days** **OR**	Data Package Type :	
Country :	Rush (Specify): _____ **Days**	EDD Type :	

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-B2-1-3/24/25	3/24/25 3/25/25	1607	1501	-29	-6.5	70	70	-30	-7.5	10183 ~~10476~~	10332 ~~10154~~	6 L	4.16	~~VL041974.D~~	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54°	60°	48°	
Stop	60°			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending SSSG

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.00 ppm

Sampling site (State): New Jersey

Quick Connector required : No

Canisters Shiped by: Sam	Date/Time: 03/24/25	Canisters Received by:		Date/Time:	B2502051 - 4
Samples Relinquished by: Clyde	Date/Time: 3/26/25 0910	Received by:		Date/Time: 3-26-25 0910	
Relinquished by:	Date/Time: 3-26-25 1215	Received by:		Date/Time:	

Alliance TECHNICAL GROUP

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

Alliance Project No. : _____

Client Contact Information	Bottle Order ID : **B2502051**	Courier :	____ of ____ COCs
Client ID : **WOOD06** Project ID : **NYCHHC Environmental Services**		Sampler Name(s) : Clayton Nuttner	Analysis / Matrix
Customer Name : **Woodard & Curran**	Project Manager : **Stephanie rogacki**	AIR ANALYSIS CHAIN-OF-CUSTODY	
Address : **800 Westchester Avenue, Suite N507** **Suite N507**	Phone Number : **800-807-4080**		
City : **Rye Brook**	Fax Number : **914-448-0147**		
State : **NY**	Site Details:	Batch Certified	
Zip Code : **10573**	Analysis Turnaround Time	Data Package Type :	
Country :	Standard : **10 business days** **OR**	EDD Type :	
	Rush (Specify): _____ **Days**		

Sample Identification	Sample Date(s)	Time Start (24 hr Clock)	Time Stop (24 hr Clock)	Can Vacuum in Field ("Hg) (Start)	Can Vacuum in Field ("Hg) (Stop)**	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Out going Can Pressure ("Hg)(Lab)	In coming Can Pressure ("Hg)(Lab)	Flow Reg. ID	Can ID		Flow Controller Readout (ml/min)	Can Cert ID	TO-15				Indoor/Ambinet Air	Soil Gas		
IA-B2-4-3/24/25	3/24/25 3/25/25	1625	1507	-30	-5	70	70	-30	-7.1	10558 ~~40236~~	10306 ~~10332~~	6 L	4.16	VL042052.D	X				X			

Temperature (Fahrenheit)	Ambient	Maximum	Minimum	
Start	54	60	48	
Stop	60			

GC/MS Analyst Signature (TO-15)

Pressure (Inches of Hg)	Ambient	Maximum	Minimum	
Start	29.73			
Stop	29.93			

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

* Hold Pending 5886

Please follow the instructions on the back of this COC.

Special Instructions/QC Requirements & Comments :

Suspected Contamination: High Medium Low PID Readings: 0.0 ppm

Sampling site (State): New Jersey

Quick Connector required : NO

Canisters Shiped by: Sum	Date/Time: 03/24/25	Canisters Received by:		Date/Time:	
Samples Relinquished by: COM	Date/Time: 3/26/25 0910	Received by:		Date/Time: 3-26-25 0910	**B2502051 - 25**
Relinquished by:	Date/Time: 3-26-25 1215	Received by:		Date/Time:	

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Friday, April 25, 2025 10:03 AM
To: Yazmeen Gomez
Cc: Stephanie Rogacki; Bryan Maurer
Subject: RE: Q1665 instructions for further analysis

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Thanks for the info Yazmeen, let's go ahead and analyze them even though the hold was up on some yesterday.

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

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Friday, April 25, 2025 10:01 AM
To: Jill Tribley <jtribley@woodardcurran.com>
Cc: Stephanie Rogacki <SRogacki@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: RE: Q1665 instructions for further analysis

Good morning Jill,

Holding time is 30 days from the sampling date, so it would be up today (some yesterday). We can still run these if you need us to.

Best Regards,

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

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Friday, April 25, 2025 8:46 AM

To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Cc: Stephanie Rogacki <SRogacki@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: Q1665 instructions for further analysis

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Good morning Yameen, can we please get the remaining air samples from this SDG prepped for analysis and run for TO-15? Are we within a day or 2 of the hold time? Please see the pink highlights on the attached for which samples we are are requesting to be analyzed (it is basically, the rest of the samples in this group) and please reach out if you have any questions.
Thank you,
-Jill

Jill D. Tribley, P.G.
Technical Manager 2 | Principal

Woodard & Curran

412.535.0833 412.600.9893 woodardcurran.com
jtribley@woodardcurran.com
400 Penn Center Blvd., Suite 600, Pittsburgh, PA 15235

From: Bryan Maurer <bmaurer@woodardcurran.com>
Sent: Monday, April 14, 2025 10:36 AM
To: Jill Tribley; Yazmeen Gomez; Stephanie Rogacki; Kiran Saleem
Cc: Clayton Hefner
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

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Secured by Check Point

Yazmeen, please keep the -14 and -17 samples on hold…do not discard at this time.
Bryan

Bryan Maurer
Woodard & Curran
770-679-2043 (direct)
412-600-2561 (cell)

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Monday, April 14, 2025 10:28 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

The following HOLD sample can be analyzed:
Q1665-15, IA-B14-1-32425

The following two HOLD samples can be discarded:
Q1665-14, IA-B14-2-32425
Q1665-17, IA-B14-3-32425

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

From: Jill Tribley
Sent: Friday, April 11, 2025 11:10 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

Yes! They can be cleaned out, we won't need those.

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

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Friday, April 11, 2025 11:08 AM
To: Jill Tribley <jtribley@woodardcurran.com>; CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

To clarify, did you want us to run those two samples, or they are OK to be cleaned out?

As for everything else, sounds good!

Best Regards,

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

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Friday, April 11, 2025 11:05 AM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>; CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

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Hi Yazmeen, the following two summa cans can be removed from hold:

Q1665-02 (Sample ID IA-B16-1-32425)
Q1665-13 (Sample ID IA-B16-2-32425)

I am still awaiting instruction on B-14 samples (Q1665-14, -15, and -17) but will have an answer on that on Monday morning.

We are still in discussion on the B2 samples (Q1665-05, -12, -16, -20, -21, and -22). Hold time would be up on those 4/23/25, based on the sample date of 3/24/25, correct?

I believe this covers the remaining HOLD cans, but please correct me if I'm missing any.

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

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Friday, April 11, 2025 10:03 AM
To: Jill Tribley <jtribley@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>; CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

Good morning Jill,

Can we clean out the rest of the Summa Cans that aren't going to be activated? Or do you still need those on hold?

Best Regards,

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

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Thursday, April 10, 2025 4:48 PM
To: Kiran Saleem <Kiran.Saleem@alliancetg.com>; CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

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Hello Kiran, please analyze the samples from the attached SDGs:
Q1726 – all (Building 2 IA samples)
Q1668 – all (Building 1 IA samples)
Q1665 – Samples -03, -10, -11, and -18 (Building 10 samples) These are highlighted on the attached login summary; I sent previous instruction on this SDG earlier this week. These samples are in addition to the analysis we requested on 4/8.
Please reach out if you have any questions!

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

From: Kiran Saleem <Kiran.Saleem@alliancetg.com>
Sent: Thursday, April 10, 2025 2:06 PM
To: CHEMTECH-Data@chemtech.net; Bryan Maurer <bmaurer@woodardcurran.com>; Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Subject: Re: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

Good Afternoon Bryan,

Please review the results and let us know which samples you would want to activate from which are on hold.

Thank you!

NOTE: Chemtech is now an Alliance Technical Group company. Please add AllianceTG.com to your safe senders list to ensure receipt of important emails.

Regards,

Kiran Saleem
Project Manager
Alliance Technical Group
Main: 908-789-8900
Direct: 908-728-3148
Address: 284 Sheffield St, Ste 1, Mountainside, NJ 07092
www.alliancetg.com

From: CHEMTECH-Data@chemtech.net <CHEMTECH-Data@chemtech.net>
Sent: Thursday, April 10, 2025 1:26 PM
To: bmaurer@woodardcurran.com <bmaurer@woodardcurran.com>; jtribley@woodardcurran.com <jtribley@woodardcurran.com>; srogacki@woodardcurran.com <srogacki@woodardcurran.com>
Subject: Summary Report Details For Project US EPA Riverside Industrial Park Superfund Site-Q1725.

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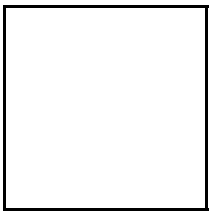

To Bryan Maurer;

Please see the attached Summary Report for the following project, or download the file using your login credentials from the link below.

Order ID	: Q1725
Project ID	: US EPA Riverside Industrial Park Superfund Site
Download File	: **https://chemtech.net/secureLogin.aspx**
Order Date	: 4/3/2025 1:48:00 PM

CHEMTECH's Project Manager	: YAZMEEN GOMEZ , YAZMEEN@CHEMTECH.NET , 908-357-0579 Ext :3149
CHEMTECH's Sales Executive	: Jordan Hedvat , jordan@chemtech.net , 908-728-3144 Ext :

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey **chemtech.net/ClientSurvey.aspx**.

Thank you,

Alliance Technical Group LLC.

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From: Yazmeen Gomez
Sent: Tuesday, April 08, 2025 1:33 PM
To: Jill Tribley; Bryan Maurer; Stephanie Rogacki
Cc: Clayton Hefner
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

Hi Jill,

No problem, Q1665 Samples - 01, 04, 06, 08, 09, and 20. Will be activated.

May I ask when you will know if you will need to run the remaining samples or not? Just so I can let the Air Lab know an estimate on how long these samples will be held.

Best Regards,

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

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Tuesday, April 8, 2025 1:27 PM
To: Bryan Maurer <bmaurer@woodardcurran.com>; Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Cc: Clayton Hefner <CHefner@woodardcurran.com>
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

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Hi Yazmeen, see attached marked up sample login for instructions, as well as below:
Please analyze the following samples from the Q1665 batch: -01, -04, -06, -08, -09, and -20.
I'm sorry we missed it before, but can you change the ID on sample -20 to: "IA-B9-3-32435"? (Not B4).
Thank you!
-Jill

Jill D. Tribley, P.G.
412-535-0833

From: Bryan Maurer <bmaurer@woodardcurran.com>
Sent: Tuesday, April 8, 2025 1:05 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jill Tribley <jtribley@woodardcurran.com>
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

Sorry Yazmeen, I meant to sent this to Jill, not you.
Jill, please see below and let Yazmeen know what we want to run.
Bryan

Bryan Maurer
Woodard & Curran
770-679-2043 (direct)
412-600-2561 (cell)

From: Bryan Maurer
Sent: Tuesday, April 8, 2025 1:04 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

Jill,
Let's go ahead and run the next set of Bldg 9 samples. Keep the Bldg 16 samples on hold for now.
Bryan

Bryan Maurer
Woodard & Curran
770-679-2043 (direct)
412-600-2561 (cell)

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Tuesday, April 8, 2025 12:26 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Bryan Maurer <bmaurer@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

We are awaiting client buy-in to our recommendations. As soon as we hear back, we will let you know.

Jill D. Tribley, P.G.
412-535-0833

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Tuesday, April 8, 2025 11:55 AM
To: Bryan Maurer <bmaurer@woodardcurran.com>; Jill Tribley <jtribley@woodardcurran.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>
Subject: RE: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

Please let me know if you will need to activate or disregard samples based off results.

Thank you!

Best Regards,

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

From: CHEMTECH-Data@chemtech.net <CHEMTECH-Data@chemtech.net>
Sent: Tuesday, April 8, 2025 11:39 AM
To: bmaurer@woodardcurran.com; jtribley@woodardcurran.com; srogacki@woodardcurran.com
Subject: Edd Details For Project US EPA Riverside Industrial Park Superfund Site-Q1669.

To Bryan Maurer;

Please see the attached EDD for the following project, or download the file using your login credentials from the link below.

Order ID	: Q1669
Project ID	: US EPA Riverside Industrial Park Superfund Site
Download File	: **https://chemtech.net/secureLogin.aspx**
Order Date	: 3/27/2025 2:02:00 PM
CHEMTECH's Project Manager	: YAZMEEN GOMEZ , YAZMEEN@CHEMTECH.NET , 908-357-0579 Ext :3149
CHEMTECH's Sales Executive	: Jordan Hedvat , jordan@chemtech.net , 908-728-3144 Ext :

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey **chemtech.net/ClientSurvey.aspx**.

Thank you,

Alliance Technical Group LLC.

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From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Thursday, March 27, 2025 5:08 PM
To: Yazmeen Gomez; Jill Tribley; Jordan Hedvat
Cc: Bryan Maurer; Kiran Saleem
Subject: Re: Sample Updates Request

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Very understandable, let's avoid the system crashes and report as is. Thank you!

Best regards,
Steph

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

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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

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From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Thursday, March 27, 2025 5:02 PM
To: Stephanie Rogacki <SRogacki@woodardcurran.com>; Jill Tribley <jtribley@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>

Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

We try to avoid certain characters in project names and sample IDs because it causes the system to crash or cause errors sometimes.
I can use "-" but "/" will likely cause an issue once QA/QC try's to upload the data.

Best Regards,

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

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Thursday, March 27, 2025 5:00 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Jill Tribley <jtribley@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>; Kiran Saleem <Kiran.Saleem@alliancetg.com>
Subject: Re: Sample Updates Request

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Confirmed.
And does the system not allow for the format with the following: IA-B9-3-3/24/2025 with the slashes or can the report/EDD still detail the sample IDs like this?

Best regards,
Steph

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

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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

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From: Yazmeen Gomez
Sent: Thursday, March 27, 2025 4:57 PM
To: Jill Tribley; Stephanie Rogacki; Jordan Hedvat
Cc: Bryan Maurer
Subject: RE: Sample Updates Request

Its B-9 in our system – for some reason its not changing on the login summary. Please see attached.

Best Regards,

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

From: Jill Tribley <jtribley@woodardcurran.com>
Sent: Thursday, March 27, 2025 4:52 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Bryan Maurer <bmaurer@woodardcurran.com>
Subject: RE: Sample Updates Request

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Thank you! I still see Q1665-20 listed with B4, full corrected sample ID should be IA-B9-3-3242025

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

From: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>
Sent: Thursday, March 27, 2025 4:49 PM
To: Stephanie Rogacki <SRogacki@woodardcurran.com>; Jordan Hedvat <Jordan.Hedvat@AllianceTG.com>
Cc: Jill Tribley <jtribley@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: RE: Sample Updates Request

Stephanie,

Just resent all of the updated login summaries.

Best Regards,

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

From: Stephanie Rogacki <SRogacki@woodardcurran.com>
Sent: Thursday, March 27, 2025 4:34 PM
To: Yazmeen Gomez <Yazmeen.Gomez@alliancetg.com>; Jordan Hedvat <Jordan.Hedvat@alliancetg.com>
Cc: Jill Tribley <jtribley@woodardcurran.com>; Bryan Maurer <bmaurer@woodardcurran.com>
Subject: Fw: Sample Updates Request

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Correction below in red (should have been Q1669 not Q1665) and also:
Please correct B4 to B9 in Q1665-20 from group Q1665.

Best regards,

Steph

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

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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

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From: Stephanie Rogacki
Sent: Thursday, March 27, 2025 4:27 PM
To: Yazmeen Gomez; Jill Tribley; Jordan Hedvat
Cc: Bryan Maurer; Clayton Hefner; Kiran Saleem
Subject: Re: Sample Updates Request

Hi Yazmeen,

A couple more things:

- Please use the "mm/dd/yyyy" format for all sample IDs.
- Please change the 2 digit year to the 4 digit year. For instance, where it was documented on the COC, as "3/25/25" please change these to "3/25/2025"

Q1669:

- AA-1-3/25/25 should be AA-2-3/25/2025
- AA-1-3/26/25 should be AA-3-3/25/2025

Could you confirm the reporting compound list is the same as the list attached for LLTO-15?

Also could you make sure to include me on distributions from this email: Data-EWR@alliancetg.com

Thank you!

Best regards,
Steph

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

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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From: Stephanie Rogacki
Sent: Thursday, March 27, 2025 3:10 PM
To: Yazmeen Gomez; Jill Tribley; Jordan Hedvat
Cc: Bryan Maurer; Clayton Hefner; Kiran Saleem
Subject: Re: Sample Updates Request

Hi Yazmeen,

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

Please analyze all samples listed in Q1669.

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

Best regards,

Steph

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

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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

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****

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

Jill,

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

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

Best Regards,

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

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

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Secured by Check Point

Hi Yazmeen, this will be standard TAT.

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

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

Jill,

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

Best Regards,

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

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

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

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

One of our folks can pick these up at 11 am at the lab.
We will be submitting these samples mid-next week.
A batch of samples and the unused 1.4 L canisters will be dropped off at the lab this afternoon.
Please confirm you can still accommodate this.
Thank you!
-Jill

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

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

<Kiran.Saleem@alliancetg.com>
Subject: RE: Sample Updates Request

Jill,

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

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

Best Regards,

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

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

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

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

Jill D. Tribley, P.G.
412-535-0833

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

Hi Stephanie,

Please see below responses in RED.

Best Regards,

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

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

EXTERNAL EMAIL - This email was sent by a person from outside your organization. Exercise caution when clicking links, opening attachments or taking further action, before validating its authenticity.

Secured by Check Point

Hi Yazmeen/Jordan,

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

Best regards,
Steph

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

Woodard & Curran

914.460.5641 201.774.0238 woodardcurran.com

srogacki@woodardcurran.com

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

****
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****

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

Laboratory Certification

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

New Jersey Department of Environmental Protection

Internal Chain of Custody

Instructions: Use 1 form for each 20 samples of aliquot

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

Laboratory: Chemtech
NAEB:
Field Sample Seal No. Q1665
Case No.: US EPA Riverside Industria

Location: 284 Sheffield Street, Mountainside,NJ 7092
Title: Sample Custodian
Date Broken 3/26/2025
Analytical Parameter/Fraction TO-15
Military Time Seal Broken: 09:10:00

Sample No.	Aliquot/Extract No.	Sample No.	Aliquot/Extract No.
Q1665-01	AA-DUP-1-32425	Q1665-11	IA-B10-1-32425
~~Q1665-02~~	~~IA-B10-1-32425~~	Q1665-12	IA-B2-6-32425
Q1665-03	IA-B10-2-32425	~~Q1665-13~~	~~IA-B10-2-32425~~
Q1665-04	AA-1-32425	~~Q1665-14~~	~~IA-B14-2-32425~~
Q1665-05	IA-B2-3-32425	Q1665-15	IA-B14-1-32425
Q1665-06	IA-B9-1-32425	Q1665-16	IA-B2-5-32425
Q1665-07	IA-DUP-1-32425	~~Q1665-17~~	~~IA-B14-3-32425~~
Q1665-08	IA-DUP-2-32425	Q1665-18	IA-B10-3-32425
Q1665-09	IA-B9-2-32425	Q1665-19	IA-B2-2-32425
Q1665-10	IA-B10-4-32425	Q1665-20	IA-B4-3-32425
		Q1665-21	IA-B2-1-32420 25
		Q1665-22	IA-B2-4-32420 25

Date	Time	Relinquished By	Received By	Purpose of Change of Custody
3-27-25	12:40	Signature	Signature	
		Printed Name Cassandra Pena	Printed Name Consultmyas Agent	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	
		Signature	Signature	
		Printed Name	Printed Name	

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

CHEMTECH 284 Sheffield Street Mountainside, NJ 07092

AIR SAMPLE PRESSURE & DILUTION LOGBOOK

Analyst Signature: _____ Supervisor Signature: _____

METHOD: TO-15 Pressure Gauge ID: AZ55971

Date	Sample Number	Canister #	Initial Pressure psia	Initial Pressure Hg	Final Pressure psia	Final Pressure Hg	Dilution Factor	Comment
03/26/25	Q1665-01	10323	10.4	-8.8				
	Q1665-02	10443	13.0	-3.5				
	Q1665-03	10154	10.6	-8.4				
	Q1665-04	10268	11.2	-7.1				
	Q1665-05	10281	10.8	-8.0				
	Q1665-06	10198	8.8	-12.0				
	Q1665-07	10592	11.4	-6.7				
	Q1665-08	10053	11.0	-7.5				
	Q1665-09	10599	12.0	-5.5				
	Q1665-10	10492	11.2	-7.1				
	Q1665-11	~~10598~~ 10598 Sy	11.6	-6.3				
	Q1665-12	10271	8.0	-13.7				
	Q1665-13	10315	13.8	-1.8				
	Q1665-14	10275	11.2	-7.1				
	Q1665-15	10266	11.6	-6.3				
	Q1665-16	10608	10.8	-8.0				
	Q1665-17	10294	11.4	-6.7				
	Q1665-18	10297	10.4	-8.0				
	Q1665-19	10331	10.8	-8.0				
	Q1665-20	10595	12.0	-5.5				
	Q1665-21	10332	11.0	-7.5				

AIR SAMPLE PRESSURE & DILUTION LOGBOOK

Analyst Signature: _____ Supervisor Signature: _____

METHOD: TO-15 Pressure Gauge ID: AZ55971

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

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: AA-1-3/24/25
Client Name: Woodland Commons
Project Name: PPG Riverside
Date: 3/24/25 - 3/25/25 Time: 11:05 on 3/25/25
Analysis: To-15
Comments:
Storage Location: Air Lab
Sample: Q1665-04
Cust #: AA-1-32425
Date Received:
Date of Disposal:
B250205

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: AA-Dup-3/24/25
Client Name: Woodland Commons
Project Name: PPG Riverside
Date: 3/24/25 - 3/25/25 Time: See # 11:05 on 3/25/25
Analysis: To-15
Comments:
Storage Location: Air Lab
Sample: Q1665-01
Cust #: AA-DUP-1-32425
Date Received:
B250205

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B1-1-3/24/25
Client Name: Woodland Commons
Project Name: PPG Riverside
Date: 3/24/25 - 3/25/25 Time: 1618
Analysis: To-15
Comments:
Storage Location: Air Lab
Sample: Q1665-06
Cust #: IA-B9-1-32425
Date Received:
Date of Disposal:
B250205

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-BP-2-3/24/25
Client Name: Wiggins & Curry
Project Name: PPG Riverside
Date: 3/24/25 Time: 1627 @ 3/25/25
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-20
Cust #: IA-B4-3-32425
B250205-1
10565
5.1

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-BP-2-3/24/25
Client Name: Wiggins & Curry
Project Name: PPG Riverside
Date: 3/24/25 Time: 1627 @ 3/25/25
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-09
Cust #: IA-B9-2-32425
B250205-1
10599
5.1

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-DUP-2-3/24/25
Client Name: Wiggins & Curry
Project Name: PPG Riverside
Date: 3/24/25 Time: 1618 @ 3/25/25
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-08
Cust #: IA-DUP-2-32425
B250205-1
10553
5.1

CHEMTECH

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

Client Sample ID #: IA-B10-1-3/24/25

Client Name: WLC

Project Name: Riverside

Date: 3/25/25 Time: 1212

Analysis: TO-15

Comments:

CHEMTECH'S SA

Date Received:

Storage Location: Air Lab
Sample: Q1665-11
Cust #: IA-B10-1-32425

B250205-1

CHEMTECH

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

Client Sample ID #: IA-B10-2-3/24/25

Client Name: WLC

Project Name: PPG Riverside

Date: 3/25/2025 Time: 1219

Analysis: TO-15

Comments:

CHEMTECH'S S

Date Received:

Storage Location: Air Lab
Sample: Q1665-03
Cust #: IA-B10-2-32425

B250205-2

CHEMTECH

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

Client Sample ID #: IA-B10-4-3/24/25

Client Name: WLC

Project Name: PPG Riverside

Date: 3/25/2025 Time: 1329

Analysis: TO-15

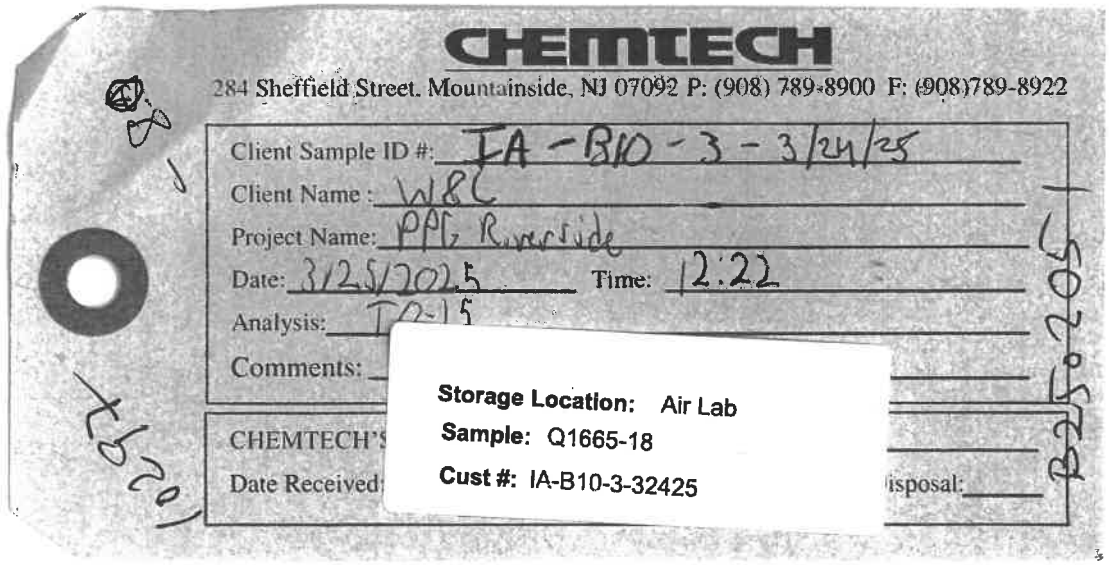
Comments:

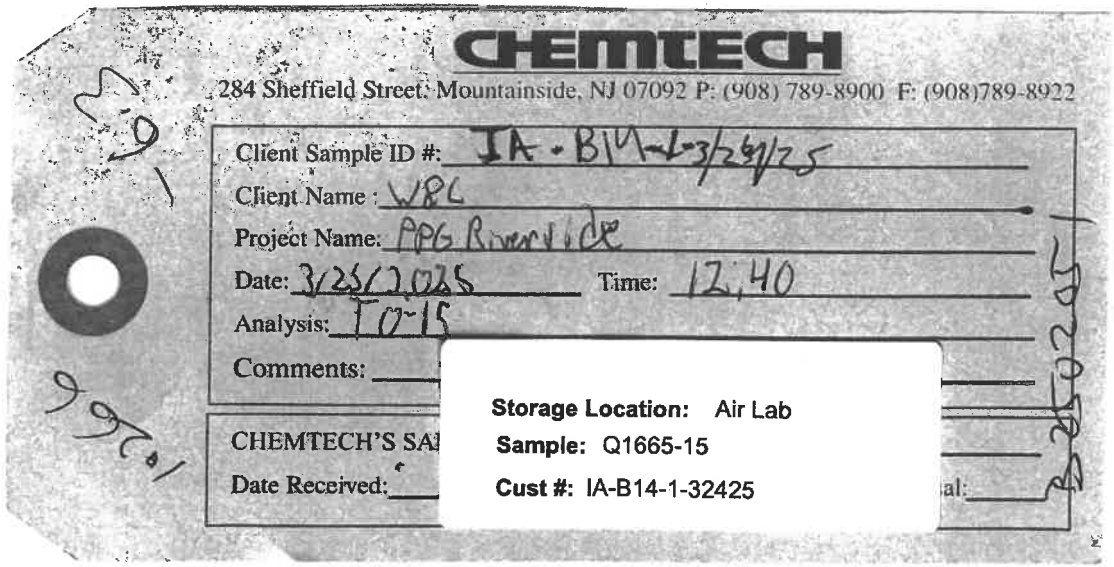
CHEMTECH'S SAM

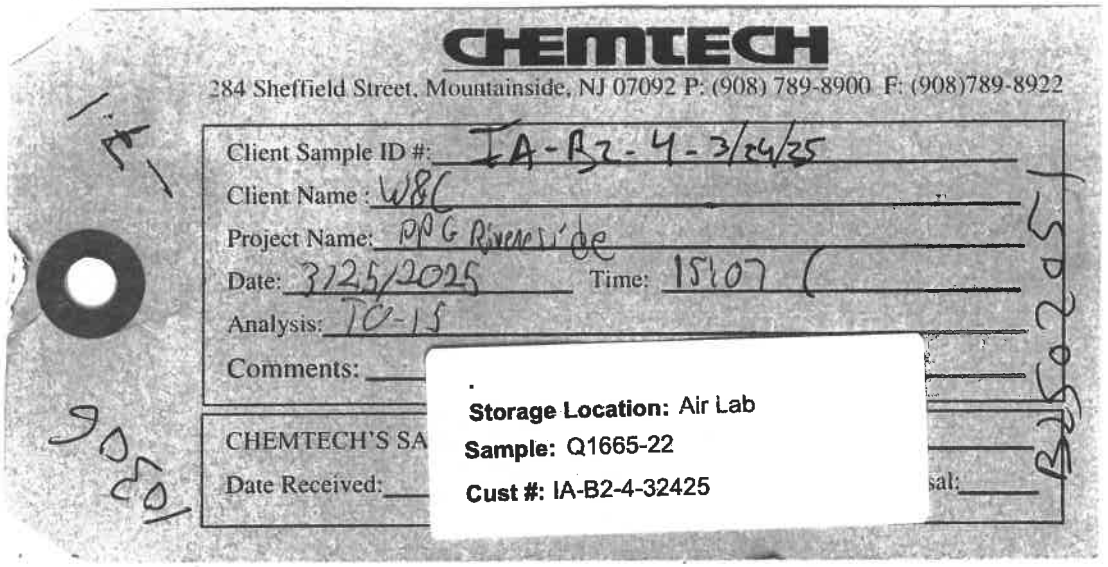
Date Received:

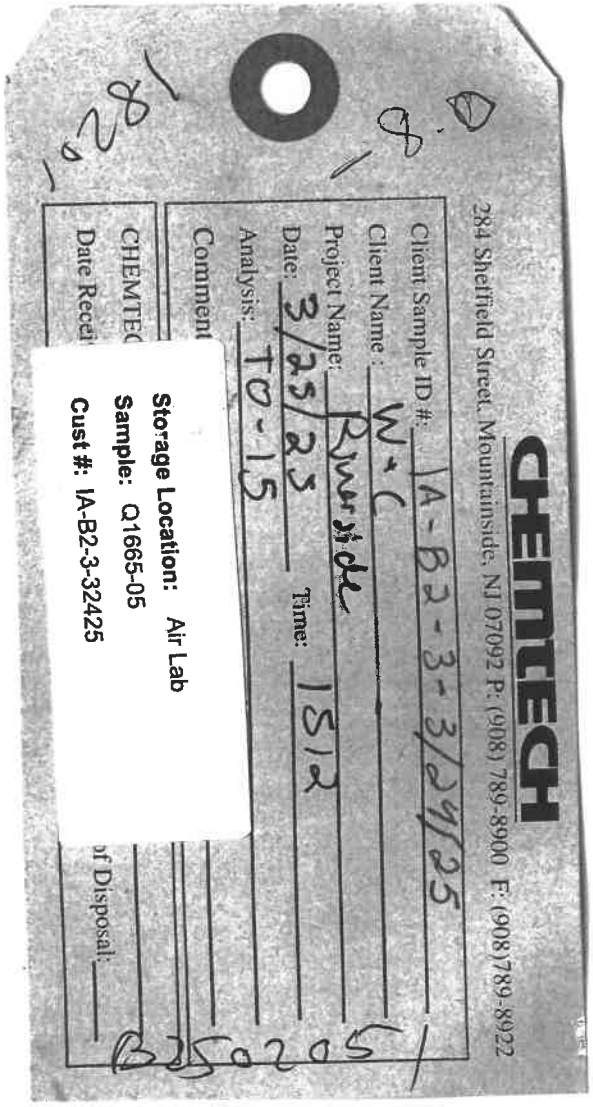
Storage Location: Air Lab
Sample: Q1665-10
Cust #: IA-B10-4-32425

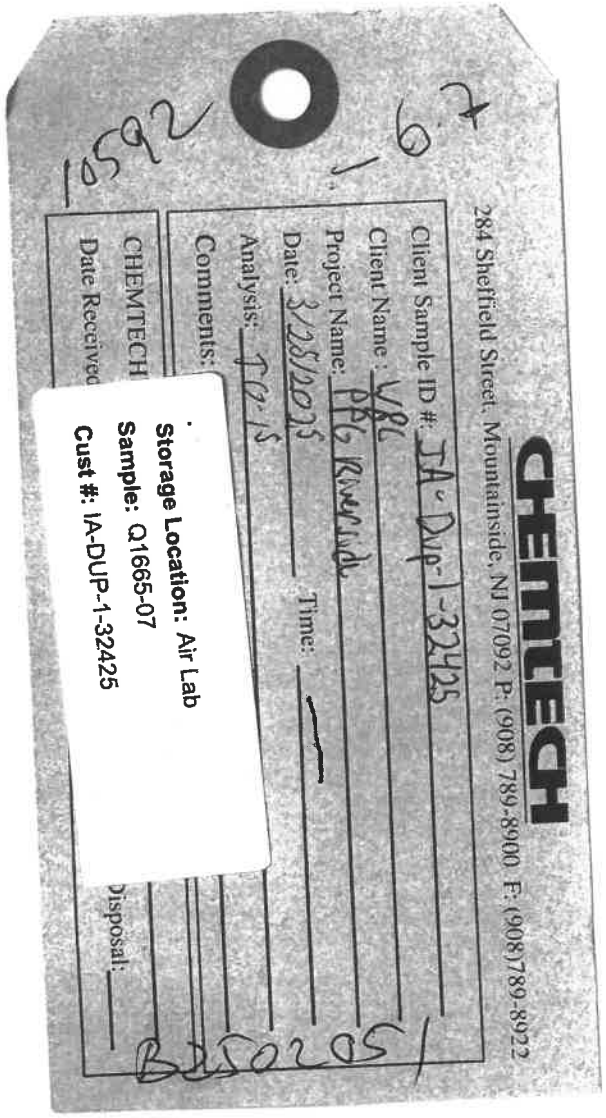
B250205-4

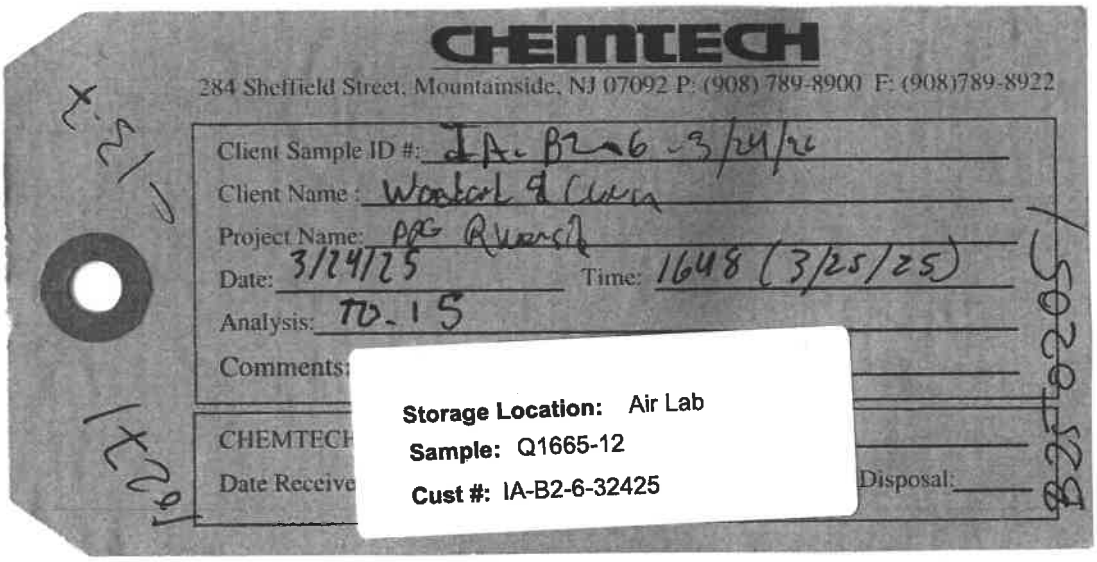

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B10-3-3/24/25
Client Name: WSP
Project Name: PPG Riverside
Date: 3/25/2025 Time: 12:22
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received
isposal:
Storage Location: Air Lab
Sample: Q1665-18
Cust #: IA-B10-3-32425

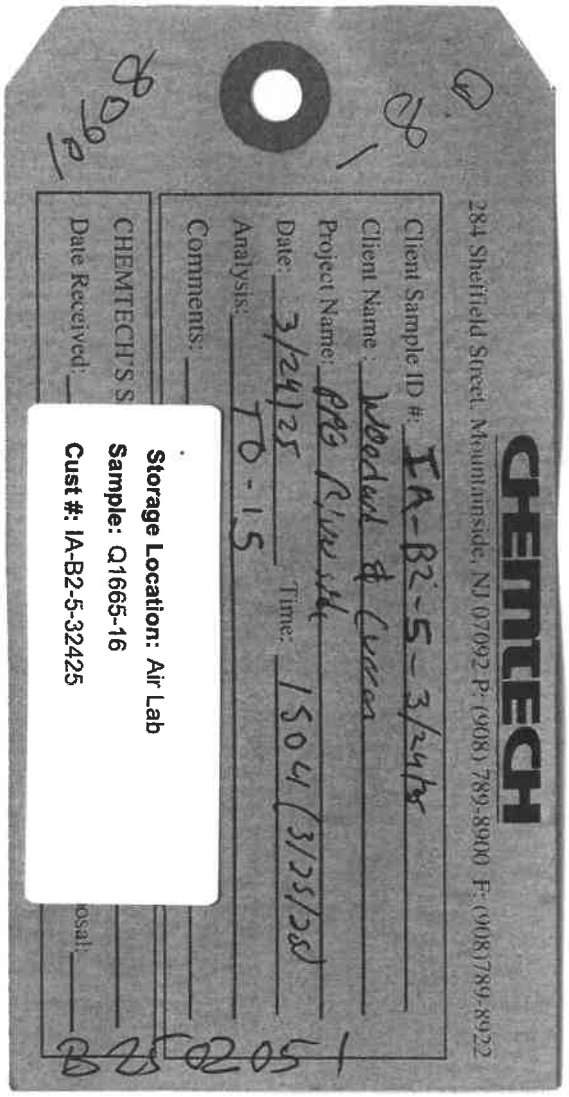

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B14-1-3/24/25
Client Name: WBC
Project Name: PPG Riverside
Date: 3/25/2025 Time: 12:40
Analysis: TO-15
Comments:
CHEMTECH'S SA
Date Received:
Storage Location: Air Lab
Sample: Q1665-15
Cust #: IA-B14-1-32425

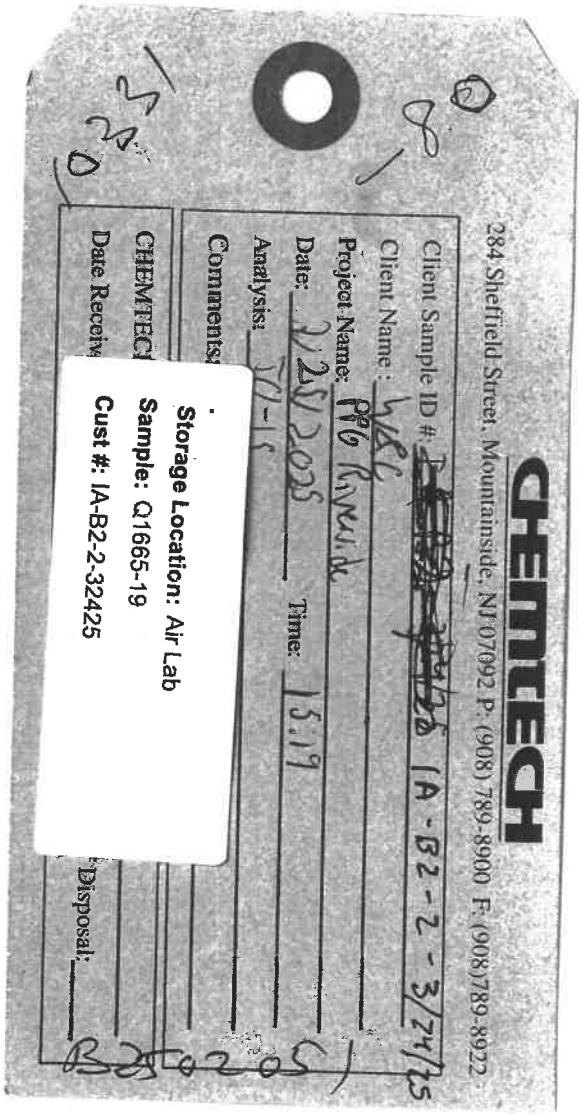

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-4-3/24/25
Client Name: W&C
Project Name: PPG Riverside
Date: 3/25/2025 Time: 15:07
Analysis: TO-15
Comments:
CHEMTECH'S SA
Date Received:
Storage Location: Air Lab
Sample: Q1665-22
Cust #: IA-B2-4-32425

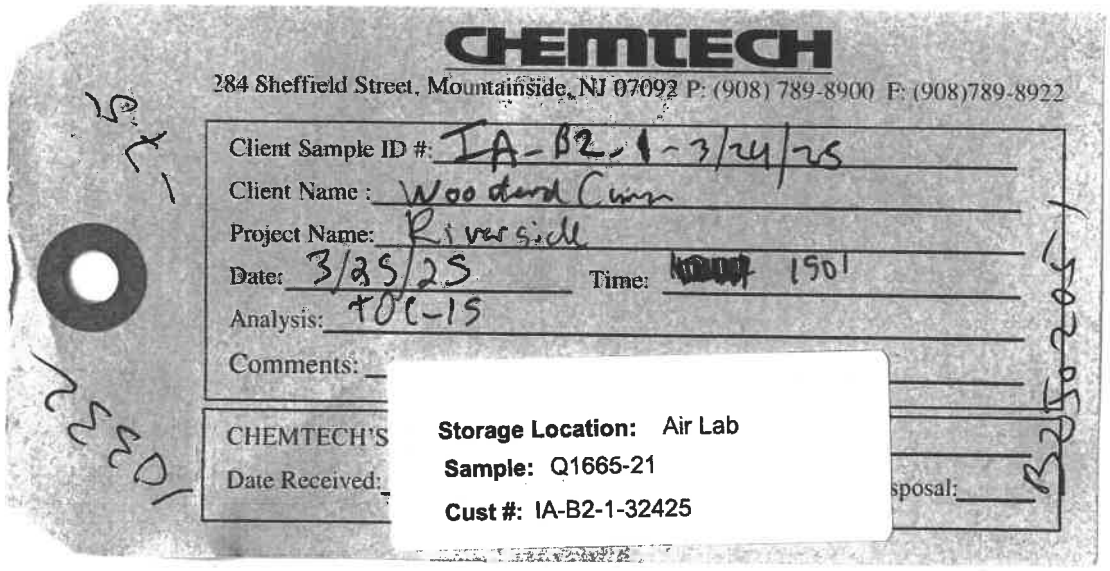

CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-3-3/24/25
Client Name: W+C
Project Name: Riverside
Date: 3/25/25 Time: 1512
Analysis: TO-15
Comments:
CHEMTECH
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-05
Cust #: IA-B2-3-32425


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-Dup-1-32425
Client Name: W+C
Project Name: PPG Riverside
Date: 3/25/2025 Time:
Analysis: TO-15
Comments:
CHEMTECH
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-07
Cust #: IA-DUP-1-32425


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-6-3/24/25
Client Name: Woodard & Curran
Project Name: PPG Riverside
Date: 3/24/25 Time: 1648 (3/25/25)
Analysis: TO-15
Comments:
CHEMTECH
Date Received:
Disposal:
Storage Location: Air Lab
Sample: Q1665-12
Cust #: IA-B2-6-32425


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-5-3/24/25
Client Name: Woodard & Curran
Project Name: PPG Riverside
Date: 3/24/25 Time: 1504 (3/25/25)
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
Disposal:
B250251
Storage Location: Air Lab
Sample: Q1665-16
Cust #: IA-B2-5-32425


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-2-3/24/25
Client Name:
Project Name: PPG Riverside
Date: 3/25/2025 Time: 1519
Analysis: TO-15
Comments:
CHEMTECH
Date Receiv
Disposal:
B250251
Storage Location: Air Lab
Sample: Q1665-19
Cust #: IA-B2-2-32425


CHEMTECH
284 Sheffield Street, Mountainside, NJ 07092 P: (908) 789-8900 F: (908)789-8922
Client Sample ID #: IA-B2-1-3/24/25
Client Name: Woodard Curran
Project Name: Riverside
Date: 3/25/25 Time: 1501
Analysis: TO-15
Comments:
CHEMTECH'S
Date Received:
sposal:
B250251
Storage Location: Air Lab
Sample: Q1665-21
Cust #: IA-B2-1-32425

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

CASE NARRATIVE

Woodard & Curran
Project Name: US EPA Riverside Industrial Park Superfund Site
Project # N/A
Chemtech Project # Q1665
Test Name: TO-15

A. Number of Samples and Date of Receipt:
18 Air samples were received on 03/26/2025.

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

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

D. QA/ QC Samples:
SamplesIA-B2-3-3242025,IA-DUP-1-3242025,IA-B2-6-3242025,IA-B2-5-3242025,IAB2-2-3242025,IA-B2-1-3242025 and IA-B2-4-3242025 Aalyzed out of holding time, Lab notified this issue to the client. See the communication in shipping Document section.

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

The RPD for {Q1665-01DUP} with File ID: VL042291.D met criteria except for m/p-Xylene[200%],due to difference in results of original and DUP.

The RPD for {Q1665-03DUP} with File ID: VL042318.D met criteria except for m/p-Xylene[200%],due to difference in results of original and DUP.

The Blank Spike for {VL0409ABS02} with File ID: VL042289.D met requirements for all samples except for Ethanol [45%],this compound did not meet the NJDKQP criteria and the in-house criteria.

The Blank Spike for {VL0411ABS01} with File ID: VL042314.D met requirements for all samples except for 1,1,2,2-Tetrachloroethane[132%], 1,2-Dichlorobenzene[132%],these compounds did not meet the NJDKQP criteria and the in-

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house criteria also it is failing high but no positive hit in associated samples therefore no corrective action taken.while Ethanol [42%] this compound did not meet the NJDKQP criteria and the in-house criteria.

The Blank Spike for {VL0415ABS01} with File ID: VL042328.D met requirements for all samples except for Methylene Chloride[67%], tert-Butyl Alcohol[68%],these compounds did not meet the NJDKQP criteria and the in-house criteria also it is failing low but only dilution samples analyzed under this Blank spike therefore no corrective action taken. while Ethanol [39%] this compound did not meet the NJDKQP criteria and the in-house criteria.

The Blank Spike for {VL0417ABS01} with File ID: VL042358.D met requirements for all samples except for Ethanol [32%],this compound did not meet the NJDKQP criteria and the in-house criteria

The Blank Spike for {VL0428ABS01} with File ID: VL042418.D met requirements for all samples except for Ethanol [30%],this compound did not meet the NJDKQP criteria and the in-house criteria

The Blank Spike for {VL0429ABS01} with File ID: VL042438.D met requirements for all samples except for Ethanol [29%],this compound did not meet the NJDKQP criteria and the in-house criteria

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration with dated 03/27/2025 with L Instrument met the requirements except for Ethanol.

The Initial Calibration with dated 04/17/2025 with L Instrument met the requirements except for Ethanol.

The Continuous Calibration File ID VL042286.D met the requirements except for Ethanol.

The Continuous Calibration File ID VL042312.D met the requirements except for Ethanol.

The Continuous Calibration File ID VL042326.D met the requirements except for Methylene Chloride and tert-Butyl alcohol are failing low but only dilution samples analyzed under this Continuous Calibration therefore no corrective action taken.While Ethanol did not met the requirements.

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The Continuous Calibration File ID VL042416.D met the requirements except for Ethanol.

The Continuous Calibration File ID VL042436.D met the requirements except for Ethanol.

The Tuning criteria met requirements.

Samples IA-B10-2-3242025, IA-DUP-1-3242025, IA-B10-4-3242025, IA-B10-4-3242025DL, IA-B10-1-3242025, IA-B14-1-3242025, IA-B10-3-3242025, IA-B2-2-3242025 and IA-B2-1-3242025 were diluted due to high concentrations.

E. Additional Comments:
This data Package has been revised to include Parameter Bromoethene, Ethanol and isopropyl alcohol.
This data Package has been revised to include DUP raw data.
The not QT review data is reported in the Miscellaneous.
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

The Sample #AA-DUP-1-3242025,IA-B10-2-3242025,AA-1-3242025, IA-B9-1-3242025, IA-DUP-2-3242025,IA-B9-2-3242025 ,IA-B10-4-3242025, IA-B10-1-3242025,IA-B2-6-3242025,IA-B14-1-3242025,IA-B14-1-3242025DL,IAB10-3-3242025, IA-DUP-1- 3242025DL, IA-B2-2-3242025DL and IAB2-1-3242025DL have the concentration of target compound belowMethod detection limits, therefore it is not reported as Hit in Form1.

The Manual Integrations are performed for the followings.

Manual Integration Report			
Sequence	VL032725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042172.D	m/p-Xylene	SAM	3/31/2025 11:24:55 AM	MMDadoda	4/3/2025 8:05:09 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042173.D	1,4-Dioxane	SAM	3/31/2025 11:25:0	MMDadoda	4/3/2025 8:05:13	Peak Integrated by

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				0 AM		AM	Software incorrectly
VSTDICC002	VL042173.D	Ethanol	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICC002	VL042173.D	m/p-Xylene	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	1,4-Dioxane	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Ethanol	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	m/p-Xylene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Methyl Methacrylate	SAM	3/31/2025	MMDadoda	4/3/2025	Peak Integrat

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				11:26:28 AM		8:05:22 AM	ed by Software incorrectly
VSTDICC001	VL042174.D	Propene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	t-1,3-Dichloropropene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	trans-1,2-Dichloroethene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC001	VL042174.D	Vinyl Acetate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	1,1,2-Trichloroethane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	1,4-Dioxane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.	VL042175	cis-1,3-	SAM	3/31/20	MMDado	4/3/202	Peak

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5	.D	Dichloropropene		25 11:26:33 AM	da	5 8:05:37 AM	Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Cyclohexane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	m/p-Xylene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Methyl Methacrylate	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Propene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Tetrahydrofuran	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042175.D	Trichloroethene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software incorrectly

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

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VSTDICC0.03	VL042177.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Tetrachloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Trichloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042177.D	Vinyl Chloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software incorrectly
VSTDICC015	VL042178.D	m/p-Xylene	SAM	3/31/2025 11:25:14 AM	MMDadoda	4/3/2025 8:06:09 AM	Peak Integrated by Software incorrectly
VSTDICV010	VL042179.D	m/p-Xylene	SAM	3/31/2025 11:28:50 AM	MMDadoda	4/3/2025 8:06:14 AM	Peak Integrated by Software incorrectly

Manual Integration Report			
Sequence	VL040925	Instrument	MSVOA_I

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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042286.D	m/p-Xylene	SAM	4/10/2025 12:04:04 PM	MMDadoda	4/10/2025 3:39:20 PM	Peak Integrated by Software incorrectly
VL0409ABS01	VL042288.D	m/p-Xylene	SAM	4/10/2025 12:04:11 PM	MMDadoda	4/10/2025 7:20:44 PM	Peak Integrated by Software incorrectly
VL0409ABS02	VL042289.D	m/p-Xylene	SAM	4/10/2025 12:04:58 PM	MMDadoda	4/10/2025 7:20:47 PM	Peak Integrated by Software incorrectly
Q1665-01	VL042290.D	Benzene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software incorrectly
Q1665-01	VL042290.D	Carbon Tetrachloride	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software incorrectly
Q1665-01	VL042290.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software incorrectly
Q1665-01	VL042290.D	Heptane	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Softwar

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Q1665-01	VL042290.D	m/p-Xylene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software incorrectly
Q1665-01	VL042290.D	Toluene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software incorrectly
Q1665-01DUP	VL042291.D	Carbon Tetrachloride	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software incorrectly
Q1665-01DUP	VL042291.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software incorrectly
Q1665-01DUP	VL042291.D	Heptane	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software incorrectly
Q1665-01DUP	VL042291.D	m/p-Xylene	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software incorrectly
Q1665-01DUP	VL042291.D	Trichlorofluoromethane	SAM	4/10/2025 12:05:0	MMDadoda	4/10/2025 7:20:53	Peak Integrated by

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Q1665-04	VL042292.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software incorrectly
Q1665-04	VL042292.D	m/p-Xylene	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software incorrectly
Q1665-04	VL042292.D	Toluene	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software incorrectly
Q1665-06	VL042293.D	Carbon Tetrachloride	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software incorrectly
Q1665-06	VL042293.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software incorrectly
Q1665-06	VL042293.D	Heptane	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software incorrectly
Q1665-06	VL042293.D	Propene	SAM	4/10/2025	MMDadoda	4/10/2025	Peak Integrat

				12:04:30 PM		7:20:58 PM	ed by Software incorrectly
Q1665-06	VL042293.D	Tetrahydrofuran	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software incorrectly
Q1665-08	VL042294.D	Benzene	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software incorrectly
Q1665-08	VL042294.D	Carbon Tetrachloride	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software incorrectly
Q1665-08	VL042294.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software incorrectly
Q1665-08	VL042294.D	Propene	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software incorrectly
Q1665-08	VL042294.D	tert-Butyl alcohol	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software incorrectly
Q1665-09	VL04229	Carbon	SAM	4/10/20	MMDado	4/10/20	Peak

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	5.D	Tetrachloride		25 12:04:26 PM	da	25 7:21:01 PM	Integrated by Software incorrectly
Q1665-09	VL042295.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software incorrectly
Q1665-09	VL042295.D	Heptane	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software incorrectly
Q1665-09	VL042295.D	m/p-Xylene	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software incorrectly
Q1665-09	VL042295.D	Propene	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software incorrectly
Q1665-20	VL042296.D	Chlorobenzene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software incorrectly
Q1665-20	VL042296.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software incorrectly

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Q1665-20	VL042296.D	Heptane	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software incorrectly
Q1665-20	VL042296.D	m/p-Xylene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software incorrectly
Q1665-20	VL042296.D	Propene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software incorrectly

Manual Integration Report

Sequence	VL041125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042312.D	m/p-Xylene	SAM	4/16/2025 9:17:16 PM	MMDadoda	4/17/2025 1:40:05 PM	Peak Integrated by Software incorrectly
VL0411ABS01	VL042314.D	m/p-Xylene	SAM	4/16/2025 9:17:26 PM	MMDadoda	4/17/2025 1:40:08 PM	Peak Integrated by Software incorrectly
Q1665-03	VL042317.D	Carbon Tetrachloride	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software

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Q1665-03	VL042317.D	Heptane	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software incorrectly
Q1665-03	VL042317.D	m/p-Xylene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software incorrectly
Q1665-03	VL042317.D	Propene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software incorrectly
Q1665-03	VL042317.D	Tetrachloroethene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	Carbon Tetrachloride	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	Heptane	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	m/p-Xylene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Softwar

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Q1665-03DUP	VL042318.D	o-Xylene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	Propene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	tert-Butyl alcohol	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	Tetrachloroethene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-03DUP	VL042318.D	Toluene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	2,2,4-Trimethylpentane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	Carbon Tetrachloride	SAM	4/16/2025 9:18:13	MMDadoda	4/17/2025 1:40:19	Peak Integrated by

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				PM		PM	Software incorrectly
Q1665-10	VL042319.D	Chlorodifluoromethane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	Heptane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	m/p-Xylene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	Propene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-10	VL042319.D	Toluene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software incorrectly
Q1665-11	VL042320.D	4-Methyl-2-Pentanone	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software incorrectly
Q1665-11	VL042320.D	Carbon Tetrachloride	SAM	4/16/2025	MMDadoda	4/17/2025	Peak Integrat

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				9:18:07 PM		1:40:21 PM	ed by Software incorrectly
Q1665-11	VL042320.D	m/p-Xylene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software incorrectly
Q1665-11	VL042320.D	Propene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software incorrectly
Q1665-11	VL042320.D	tert-Butyl alcohol	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software incorrectly
Q1665-11	VL042320.D	Toluene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	4-Methyl-2-Pentanone	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	Carbon Tetrachloride	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL04232	Chlorodifluoromet	SAM	4/16/20	MMDado	4/17/20	Peak

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	1.D	hane		25 9:18:36 PM	da	25 1:40:23 PM	Integrated by Software incorrectly
Q1665-18	VL042321.D	Heptane	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	m/p-Xylene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	o-Xylene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	Propene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	tert-Butyl alcohol	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly
Q1665-18	VL042321.D	Tetrachloroethene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software incorrectly

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Q1665-10DL	VL042323.D	Propene	SAM	4/16/2025 9:18:02 PM	MMDadoda	4/17/2025 1:40:25 PM	Peak Integrated by Software incorrectly
Q1665-11DL	VL042324.D	Chloroform	SAM	4/16/2025 9:17:57 PM	MMDadoda	4/17/2025 1:40:26 PM	Peak Integrated by Software incorrectly

Manual Integration Report			
Sequence	VL041525	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042326.D	m/p-Xylene	SAM	4/16/2025 2:13:04 PM	MMDadoda	4/16/2025 3:47:21 PM	Peak Integrated by Software incorrectly
VL0415ABS01	VL042328.D	m/p-Xylene	SAM	4/16/2025 2:13:09 PM	MMDadoda	4/16/2025 3:47:23 PM	Peak Integrated by Software incorrectly
Q1665-10DL2	VL042332.D	Propene	SAM	4/16/2025 2:13:14 PM	MMDadoda	4/16/2025 3:47:25 PM	Peak Integrated by Software incorrectly

Manual Integration Report			
Sequence	VL041725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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VSTDICCC010	VL042349.D	m/p-Xylene	SAM	4/18/2025 4:19:07 PM	MMDadoda	4/18/2025 10:45:20 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	1,4-Dioxane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	Ethanol	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	Heptane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	m/p-Xylene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly
VSTDICC002	VL042350.D	Trichloroethene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software incorrectly

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VSTDICC001	VL042351.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	1,3-Butadiene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	1,4-Dioxane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	Cyclohexane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	Ethanol	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly

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VSTDICC001	VL042351.D	Heptane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	m/p-Xylene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	Methyl Methacrylate	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC001	VL042351.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	1,2-Dichloropropane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	1,4-Dioxane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly

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VSTDICC0.5	VL042352.D	4-Methyl-2-Pentanone	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Chlorobenzene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Ethanol	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Heptane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	m/p-Xylene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Methyl Methacrylate	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly

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VSTDICC0.5	VL042352.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.5	VL042352.D	Tetrahydrofuran	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	1,2-Dibromoethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	Tetrachloroethene	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly
VSTDICC0.1	VL042353.D	Trichloroethene	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software incorrectly

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VSTDICC0.03	VL042354.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042354.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042354.D	Carbon Tetrachloride	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042354.D	Tetrachloroethene	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectly
VSTDICC0.03	VL042354.D	Trichloroethene	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software incorrectly
VSTDICC015	VL042355.D	m/p-Xylene	SAM	4/18/2025 4:21:35 PM	MMDadoda	4/18/2025 10:44:59 PM	Peak Integrated by Software incorrectly
VSTDICV010	VL042356.D	m/p-Xylene	SAM	4/18/2025 4:20:42 PM	MMDadoda	4/18/2025 10:44:57 PM	Peak Integrated by Software incorrectly

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VL0417ABS01	VL042358.D	m/p-Xylene	SAM	4/18/2025 4:21:39 PM	MMDadoda	4/18/2025 10:44:55 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	1,4-Dioxane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	2-Hexanone	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	4-Methyl-2-Pentanone	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	Benzene	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly

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Q1665-15	VL042359.D	Carbon Tetrachloride	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	Chlorodifluoromethane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	Heptane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15	VL042359.D	Naphthalene,2-methyl-	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software incorrectly
Q1665-15DL	VL042360.D	2-Butanone	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software incorrectly
Q1665-15DL	VL042360.D	Ethanol	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software incorrectly
Q1665-15DL	VL042360.D	m/p-Xylene	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software incorrectly

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Q1665-15DL	VL042360.D	Toluene	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software incorrectly

Manual Integration Report			
Sequence	VL042825	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042416.D	m/p-Xylene	SAM	4/29/2025 9:26:25 AM	MMDadoda	4/30/2025 2:28:57 PM	Peak Integrated by Software incorrectly
VL0428ABS01	VL042418.D	m/p-Xylene	SAM	4/29/2025 9:26:31 AM	MMDadoda	4/30/2025 2:29:13 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	4-Methyl-2-Pentanone	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Acetone	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software

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							incorrectly
Q1665-05	VL042419.D	Carbon Tetrachloride	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Chlorodifluoromethane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Cyclohexane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Heptane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Propene	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-05	VL042419.D	Tetrachloroethene	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Acetone	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Softwar

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							e incorrectly
Q1665-07	VL042420.D	Benzene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Carbon Tetrachloride	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Chlorodifluoromethane	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Heptane	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	m/p-Xylene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Propene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-07	VL042420.D	Tetrachloroethene	SAM	4/29/2025 9:26:36	MMDadoda	4/30/2025 2:29:25	Peak Integrated by

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				AM		PM	Software incorrectly
Q1665-07	VL042420.D	Tetrahydrofuran	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Benzene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Cyclohexane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Heptane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	m/p-Xylene	SAM	4/29/2025	MMDadoda	4/30/2025	Peak Integrat

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				9:27:26 AM		2:30:38 PM	ed by Software incorrectly
Q1665-12	VL042421.D	n-propylbenzene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Propene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-12	VL042421.D	Tetrahydrofuran	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL04242	Heptane	SAM	4/29/20	MMDado	4/30/20	Peak

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	2.D			25 9:27:50 AM	da	25 2:29:28 PM	Integrated by Software incorrectly
Q1665-16	VL042422.D	Propene	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	Styrene	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	tert-Butyl alcohol	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-16	VL042422.D	Tetrahydrofuran	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	2-Hexanone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly

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Q1665-19	VL042423.D	4-Ethyltoluene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	4-Methyl-2-Pentanone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	Acetone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	Cyclohexane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	Heptane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-19	VL042423.D	Propene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly

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Q1665-19	VL042423.D	Tetrachloroethene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software incorrectly
Q1665-21	VL042424.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-21	VL042424.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-21	VL042424.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-21	VL042424.D	Heptane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-21	VL042424.D	Propene	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software incorrectly
Q1665-22	VL042425.D	Acetone	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly

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Q1665-22	VL042425.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly
Q1665-22	VL042425.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly
Q1665-22	VL042425.D	Cyclohexane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly
Q1665-22	VL042425.D	Heptane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly
Q1665-22	VL042425.D	tert-Butyl alcohol	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software incorrectly

Manual Integration Report			
Sequence	VL042925	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042436.D	1,1,2-Trichloroethane	SAM	4/30/2025 7:49:08 AM	MMDadoda	4/30/2025 2:26:33 PM	Peak Integrated by Software

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							incorrectly
VSTDCCC010	VL042436.D	m/p-Xylene	SAM	4/30/2025 7:49:08 AM	MMDadoda	4/30/2025 2:26:33 PM	Peak Integrated by Software incorrectly
VL0429ABS01	VL042438.D	m/p-Xylene	SAM	4/30/2025 7:49:14 AM	MMDadoda	4/30/2025 2:26:38 PM	Peak Integrated by Software incorrectly
VL0429ABS01	VL042438.D	Methyl Methacrylate	SAM	4/30/2025 7:49:14 AM	MMDadoda	4/30/2025 2:26:38 PM	Peak Integrated by Software incorrectly
Q1665-07DL	VL042451.D	2,2,4-Trimethylpentane	SAM	4/30/2025 7:52:06 AM	MMDadoda	4/30/2025 2:27:43 PM	Peak Integrated by Software incorrectly
Q1665-07DL	VL042451.D	m/p-Xylene	SAM	4/30/2025 7:52:06 AM	MMDadoda	4/30/2025 2:27:43 PM	Peak Integrated by Software incorrectly
Q1665-19DL	VL042452.D	2,2,4-Trimethylpentane	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software incorrectly
Q1665-19DL	VL042452.D	m/p-Xylene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Softwar

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							e incorrectly
Q1665-19DL	VL042452.D	Propene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software incorrectly
Q1665-19DL	VL042452.D	Toluene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software incorrectly
Q1665-21DL	VL042453.D	m/p-Xylene	SAM	4/30/2025 7:52:12 AM	MMDadoda	4/30/2025 2:27:54 PM	Peak Integrated by Software incorrectly
Q1665-21DL	VL042453.D	Propene	SAM	4/30/2025 7:52:12 AM	MMDadoda	4/30/2025 2:27:54 PM	Peak Integrated by Software incorrectly

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

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

Signature_____

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DATA REPORTING QUALIFIERS- ORGANIC

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

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

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1665

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

QA Review Signature: MOHAMMAD AHMED **Date:** 07/03/2025

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LAB CHRONICLE

OrderID:	Q1665	**OrderDate:**	3/27/2025 11:29:02 AM
Client:	Woodard & Curran	**Project:**	US EPA Riverside Industrial Park Superfund Site
Contact:	Bryan Maurer	**Location:**	Air Lab

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1665-01	**AA-DUP-1-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/09/25	
Q1665-03	**IA-B10-2-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/11/25	
Q1665-03DL	**IA-B10-2-3242025DL**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/11/25	
Q1665-04	**AA-1-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/09/25	
Q1665-05	**IA-B2-3-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/28/25	
Q1665-06	**IA-B9-1-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/09/25	
Q1665-07	**IA-DUP-1-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/28/25	
Q1665-07DL	**IA-DUP-1-3242025DL**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/29/25	
Q1665-08	**IA-DUP-2-3242025**	**Air**			**03/24/25**			**03/26/25**
			TO-15	TO-15			04/09/25	
Q1665-09	**IA-B9-2-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/09/25	
Q1665-10	**IA-B10-4-3242025**	**Air**			**03/25/25**			**03/26/25**
			TO-15	TO-15			04/11/25	
Q1665-10DL	**IA-B10-4-3242025DL**	**Air**			**03/25/25**			**03/26/25**

LAB CHRONICLE

			TO-15	TO-15		04/11/25	
Q1665-10DL2	IA-B10-4-3242025DL2	Air			03/25/25		03/26/25
			TO-15	TO-15		04/15/25	
Q1665-11	IA-B10-1-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/11/25	
Q1665-11DL	IA-B10-1-3242025DL	Air			03/25/25		03/26/25
			TO-15	TO-15		04/11/25	
Q1665-12	IA-B2-6-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/28/25	
Q1665-15	IA-B14-1-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/17/25	
Q1665-15DL	IA-B14-1-3242025DL	Air			03/25/25		03/26/25
			TO-15	TO-15		04/17/25	
Q1665-16	IA-B2-5-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/28/25	
Q1665-18	IA-B10-3-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/11/25	
Q1665-18DL	IA-B10-3-3242025DL	Air			03/25/25		03/26/25
			TO-15	TO-15		04/15/25	
Q1665-19	IA-B2-2-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/28/25	
Q1665-19DL	IA-B2-2-3242025DL	Air			03/25/25		03/26/25
			TO-15	TO-15		04/29/25	
Q1665-20	IA-B9-3-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/09/25	
Q1665-21	IA-B2-1-3242025	Air			03/25/25		03/26/25
			TO-15	TO-15		04/28/25	
Q1665-21DL	IA-B2-1-3242025DL	Air			03/25/25		03/26/25

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LAB CHRONICLE

			TO-15	TO-15		04/29/25	
Q1665-22	**IA-B2-4-3242025**	**Air**			**03/25/25**		**03/26/25**
			TO-15	TO-15		04/28/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**AA-DUP-1-3242025**								
Q1665-01	AA-DUP-1-324202.	Air	Dichlorodifluoromethane		1.98	J	1.04	2.47	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Ethanol		25.3	Q	0.60	0.94	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Chloromethane		1.16		0.21	1.03	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Heptane		0.45	J	0.45	2.05	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Isopropyl Alcohol		4.42		0.17	1.23	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Acetone		8.55		0.57	1.19	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Methylene Chloride		3.30		0.66	1.74	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	2-Butanone		1.06	J	0.35	1.47	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Benzene		0.80	J	0.29	1.60	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Toluene		1.21	J	0.41	1.88	ug/m3
Q1665-01	AA-DUP-1-324202.	Air	Hexane		5.64		0.39	1.76	ug/m3
			Total Voc :		55.4				
Q1665-01	AA-DUP-1-324202.	Air	Butane	*	1.10	J	0	0	ppbv
Q1665-01	AA-DUP-1-324202.	Air	Chlorodifluoromethane	*	0.33	J	0.090	0.50	ppbv
Q1665-01	AA-DUP-1-324202.	Air	Propene	*	0.85	J	0.15	0.50	ppbv
			Total Tics :		2.28				
			Total Concentration:		57.7				
Client ID:	**IA-B10-2-3242025**								
Q1665-03	IA-B10-2-3242025	Air	Dichlorodifluoromethane		1.98	J	1.04	2.47	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Ethanol		2450	EQ	0.60	0.94	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Chloromethane		1.22		0.21	1.03	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-03	IA-B10-2-3242025	Air	tert-Butyl alcohol		1.42	J	0.58	1.52	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Heptane		0.70	J	0.45	2.05	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Isopropyl Alcohol		199	E	0.17	1.23	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Acetone		196	E	0.57	1.19	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Methylene Chloride		5.56		0.66	1.74	ug/m3
Q1665-03	IA-B10-2-3242025	Air	2-Butanone		79.0	E	0.35	1.47	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Carbon Tetrachloride		0.57		0.060	0.19	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Chloroform		6.84		0.39	2.44	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Benzene		1.92		0.29	1.60	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Toluene		1.85	J	0.41	1.88	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Tetrachloroethene		0.27		0.14	0.20	ug/m3
Q1665-03	IA-B10-2-3242025	Air	o-Xylene		0.52	J	0.52	2.17	ug/m3

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Hit Summary Sheet
SW-846

SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-03	IA-B10-2-3242025	Air	1,2,4-Trimethylbenzene		0.59	J	0.39	2.46	ug/m3
Q1665-03	IA-B10-2-3242025	Air	Hexane		8.81		0.39	1.76	ug/m3
			Total Voc :		2960				
Q1665-03	IA-B10-2-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-03	IA-B10-2-3242025	Air	Plumbane, diethyldimethyl-	*	65.1	J	0	0	ppbv
Q1665-03	IA-B10-2-3242025	Air	D-Limonene	*	21.3	J	0	0	ppbv
Q1665-03	IA-B10-2-3242025	Air	Butanoic acid, 2-methyl-, ethyl	*	1.50	J	0	0	ppbv
Q1665-03	IA-B10-2-3242025	Air	Propene	*	4.30	J	0.15	0.50	ppbv
			Total Tics :		93.5				
			Total Concentration:		3050				
Client ID:	**IA-B10-2-3242025DL**								
Q1665-03DL	IA-B10-2-3242025I	Air	Ethanol		3390	EDQ	6.03	9.42	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	Isopropyl Alcohol		216	D	1.70	12.3	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	Acetone		333	D	5.70	11.9	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	Methylene Chloride		11.5	JD	6.60	17.4	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	2-Butanone		63.4	D	3.54	14.8	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	Chloroform		6.84	JD	4.05	24.4	ug/m3
Q1665-03DL	IA-B10-2-3242025I	Air	Hexane		6.70	JD	3.88	17.6	ug/m3
			Total Voc :		4030				
			Total Concentration:		4030				
Client ID:	**AA-1-3242025**								
Q1665-04	AA-1-3242025	Air	Dichlorodifluoromethane		1.98	J	1.04	2.47	ug/m3
Q1665-04	AA-1-3242025	Air	Ethanol		24.1	Q	0.60	0.94	ug/m3
Q1665-04	AA-1-3242025	Air	Chloromethane		1.14		0.21	1.03	ug/m3
Q1665-04	AA-1-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-04	AA-1-3242025	Air	Isopropyl Alcohol		2.95		0.17	1.23	ug/m3
Q1665-04	AA-1-3242025	Air	Acetone		8.31		0.57	1.19	ug/m3
Q1665-04	AA-1-3242025	Air	Methylene Chloride		2.33		0.66	1.74	ug/m3
Q1665-04	AA-1-3242025	Air	2-Butanone		1.03	J	0.35	1.47	ug/m3
Q1665-04	AA-1-3242025	Air	Carbon Tetrachloride		0.57		0.060	0.19	ug/m3
Q1665-04	AA-1-3242025	Air	Benzene		0.80	J	0.29	1.60	ug/m3
Q1665-04	AA-1-3242025	Air	Toluene		1.06	J	0.41	1.88	ug/m3
Q1665-04	AA-1-3242025	Air	Hexane		3.88		0.39	1.76	ug/m3
			Total Voc :		49.4				
Q1665-04	AA-1-3242025	Air	Butane	*	1.00	J	0	0	ppbv
Q1665-04	AA-1-3242025	Air	Chlorodifluoromethane	*	0.29	J	0.090	0.50	ppbv
Q1665-04	AA-1-3242025	Air	Propene	*	0.75	J	0.15	0.50	ppbv

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Hit Summary Sheet
SW-846

SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
			Total Tics :		2.04				
			Total Concentration:		51.4				
Client ID:	**IA-B2-3-3242025**								
Q1665-05	IA-B2-3-3242025	Air	Dichlorodifluoromethane		2.27	J	1.04	2.47	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Ethanol		509	EQ	0.60	0.94	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Chloromethane		0.99	J	0.21	1.03	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-05	IA-B2-3-3242025	Air	tert-Butyl alcohol		9.40		0.58	1.52	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Heptane		2.05		0.45	2.05	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Isopropyl Alcohol		79.2	E	0.17	1.23	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Acetone		34.9		0.57	1.19	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Methylene Chloride		4.17		0.66	1.74	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Cyclohexane		0.86	J	0.76	1.72	ug/m3
Q1665-05	IA-B2-3-3242025	Air	2-Butanone		2.57		0.35	1.47	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-05	IA-B2-3-3242025	Air	2,2,4-Trimethylpentane		3.55		0.47	2.34	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Benzene		1.57	J	0.29	1.60	ug/m3
Q1665-05	IA-B2-3-3242025	Air	1,2-Dichloroethane		1.86	J	0.36	2.02	ug/m3
Q1665-05	IA-B2-3-3242025	Air	4-Methyl-2-Pentanone		1.48	J	0.37	2.05	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Toluene		17.3		0.41	1.88	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Tetrachloroethene		0.34		0.14	0.20	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Ethyl Benzene		2.43		0.52	2.17	ug/m3
Q1665-05	IA-B2-3-3242025	Air	m/p-Xylene		6.08		0.91	4.34	ug/m3
Q1665-05	IA-B2-3-3242025	Air	o-Xylene		2.52		0.52	2.17	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Styrene		1.96	J	0.47	2.13	ug/m3
Q1665-05	IA-B2-3-3242025	Air	1,3,5-Trimethylbenzene		0.88	J	0.54	2.46	ug/m3
Q1665-05	IA-B2-3-3242025	Air	1,2,4-Trimethylbenzene		2.36	J	0.39	2.46	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Naphthalene		0.58		0.42	0.52	ug/m3
Q1665-05	IA-B2-3-3242025	Air	4-Ethyltoluene		0.69	J	0.59	2.46	ug/m3
Q1665-05	IA-B2-3-3242025	Air	Hexane		8.11		0.39	1.76	ug/m3
			Total Voc :		699				
Q1665-05	IA-B2-3-3242025	Air	Hexanal	*	1.90	J	0	0	ppbv
Q1665-05	IA-B2-3-3242025	Air	1-Propanol	*	3.20	J	0	0	ppbv
Q1665-05	IA-B2-3-3242025	Air	.alpha.-Pinene	*	2.10	J	0	0	ppbv
Q1665-05	IA-B2-3-3242025	Air	Butane	*	5.90	J	0	0	ppbv
Q1665-05	IA-B2-3-3242025	Air	Pentane, 2-methyl-	*	1.90	J	0	0	ppbv
Q1665-05	IA-B2-3-3242025	Air	Di-tert-butyl peroxide	*	3.50	J	0	0	ppbv

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Hit Summary Sheet
SW-846

SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-05	IA-B2-3-3242025	Air	Chlorodifluoromethane	*	0.16	J	0.090	0.50	ppbv
Q1665-05	IA-B2-3-3242025	Air	Propene	*	1.80	J	0.15	0.50	ppbv
Q1665-05	IA-B2-3-3242025	Air	n-propylbenzene	*	0.12	J	0.080	0.50	ppbv
			Total Tics :		20.6				
			Total Concentration:		719				
Client ID:	**IA-B9-1-3242025**								
Q1665-06	IA-B9-1-3242025	Air	Dichlorodifluoromethane		1.83	J	1.04	2.47	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Ethanol		71.2	EQ	0.60	0.94	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Chloromethane		1.20		0.21	1.03	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Tetrahydrofuran		0.97	J	0.38	1.47	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Heptane		0.49	J	0.45	2.05	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Isopropyl Alcohol		57.5	E	0.17	1.23	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Acetone		20.2		0.57	1.19	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Methylene Chloride		3.82		0.66	1.74	ug/m3
Q1665-06	IA-B9-1-3242025	Air	2-Butanone		13.9		0.35	1.47	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Benzene		0.93	J	0.29	1.60	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Toluene		1.81	J	0.41	1.88	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Chlorobenzene		1.11	J	0.37	2.30	ug/m3
Q1665-06	IA-B9-1-3242025	Air	Hexane		7.05		0.39	1.76	ug/m3
			Total Voc :		184				
Q1665-06	IA-B9-1-3242025	Air	.alpha.-Pinene	*	1.70	J	0	0	ppbv
Q1665-06	IA-B9-1-3242025	Air	Benzaldehyde	*	6.60	J	0	0	ppbv
Q1665-06	IA-B9-1-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-06	IA-B9-1-3242025	Air	Chlorodifluoromethane	*	0.90	J	0.090	0.50	ppbv
Q1665-06	IA-B9-1-3242025	Air	Propene	*	2.20	J	0.15	0.50	ppbv
			Total Tics :		12.7				
			Total Concentration:		196				
Client ID:	**IA-DUP-1-3242025**								
Q1665-07	IA-DUP-1-3242025	Air	Dichlorodifluoromethane		2.13	J	1.04	2.47	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Ethanol		509	EQ	0.60	0.94	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Chloromethane		1.16		0.21	1.03	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Tetrahydrofuran		0.50	J	0.38	1.47	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	tert-Butyl alcohol		9.09		0.58	1.52	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Heptane		1.93	J	0.45	2.05	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-07	IA-DUP-1-3242025	Air	Isopropyl Alcohol		82.1	E	0.17	1.23	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Acetone		41.1	E	0.57	1.19	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Methylene Chloride		3.44		0.66	1.74	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Cyclohexane		0.83	J	0.76	1.72	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	2-Butanone		2.51		0.35	1.47	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	2,2,4-Trimethylpentane		2.94		0.47	2.34	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Benzene		1.57	J	0.29	1.60	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	1,2-Dichloroethane		1.94	J	0.36	2.02	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	4-Methyl-2-Pentanone		1.48	J	0.37	2.05	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Toluene		16.6		0.41	1.88	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Tetrachloroethene		0.34		0.14	0.20	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Ethyl Benzene		2.26		0.52	2.17	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	m/p-Xylene		5.65		0.91	4.34	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	o-Xylene		2.22		0.52	2.17	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Styrene		1.83	J	0.47	2.13	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	1,3,5-Trimethylbenzene		0.74	J	0.54	2.46	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	1,2,4-Trimethylbenzene		2.21	J	0.39	2.46	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	4-Ethyltoluene		0.69	J	0.59	2.46	ug/m3
Q1665-07	IA-DUP-1-3242025	Air	Hexane		8.11		0.39	1.76	ug/m3
			Total Voc :		704				
Q1665-07	IA-DUP-1-3242025	Air	Hexanal	*	1.90	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	.alpha.-Pinene	*	2.20	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	Butane	*	5.40	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	Pentane, 2-methyl-	*	1.90	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	Di-tert-butyl peroxide	*	3.30	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	2-Fluoropropene	*	3.50	J	0	0	ppbv
Q1665-07	IA-DUP-1-3242025	Air	Chlorodifluoromethane	*	0.23	J	0.090	0.50	ppbv
Q1665-07	IA-DUP-1-3242025	Air	Propene	*	1.70	J	0.15	0.50	ppbv
Q1665-07	IA-DUP-1-3242025	Air	n-propylbenzene	*	0.12	J	0.080	0.50	ppbv
			Total Tics :		20.3				
			Total Concentration:		724				
Client ID:	**IA-DUP-1-3242025DL**								
Q1665-07DL	IA-DUP-1-3242025	Air	Ethanol		528	EDQ	2.45	3.77	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	tert-Butyl alcohol		8.49	D	2.30	6.06	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	Isopropyl Alcohol		78.9	D	0.69	4.92	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	Acetone		40.6	D	2.28	4.75	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-07DL	IA-DUP-1-3242025	Air	2-Butanone		2.62	JD	1.42	5.90	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	2,2,4-Trimethylpentane		2.24	JD	1.87	9.34	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	Benzene		1.28	JD	1.12	6.39	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	Toluene		12.1	D	1.66	7.54	ug/m3
Q1665-07DL	IA-DUP-1-3242025	Air	Hexane		5.64	JD	1.55	7.05	ug/m3
			Total Voc :		679				
			Total Concentration:		679				
Client ID:	**IA-DUP-2-3242025**								
Q1665-08	IA-DUP-2-3242025	Air	Dichlorodifluoromethane		1.88	J	1.04	2.47	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Ethanol		64.4	EQ	0.60	0.94	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Chloromethane		2.27		0.21	1.03	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Tetrahydrofuran		0.62	J	0.38	1.47	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Trichlorofluoromethane		1.40	J	0.90	2.81	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Isopropyl Alcohol		44.0	E	0.17	1.23	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Acetone		27.6		0.57	1.19	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Methylene Chloride		3.47		0.66	1.74	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	2-Butanone		9.73		0.35	1.47	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Carbon Tetrachloride		0.82		0.060	0.19	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Chloroform		1.56	J	0.39	2.44	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Benzene		0.54	J	0.29	1.60	ug/m3
Q1665-08	IA-DUP-2-3242025	Air	Hexane		3.31		0.39	1.76	ug/m3
			Total Voc :		162				
Q1665-08	IA-DUP-2-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-08	IA-DUP-2-3242025	Air	Chlorodifluoromethane	*	0.96	J	0.090	0.50	ppbv
Q1665-08	IA-DUP-2-3242025	Air	Propene	*	2.40	J	0.15	0.50	ppbv
			Total Tics :		4.66				
			Total Concentration:		166				
Client ID:	**IA-B9-2-3242025**								
Q1665-09	IA-B9-2-3242025	Air	Dichlorodifluoromethane		2.08	J	1.04	2.47	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Ethanol		48.2	EQ	0.60	0.94	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Chloromethane		1.20		0.21	1.03	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Heptane		0.49	J	0.45	2.05	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Isopropyl Alcohol		52.1	E	0.17	1.23	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Acetone		15.2		0.57	1.19	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Methylene Chloride		4.17		0.66	1.74	ug/m3
Q1665-09	IA-B9-2-3242025	Air	2-Butanone		9.44		0.35	1.47	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-09	IA-B9-2-3242025	Air	Carbon Tetrachloride		0.57		0.060	0.19	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Benzene		0.96	J	0.29	1.60	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Toluene		1.47	J	0.41	1.88	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Chlorobenzene		0.92	J	0.37	2.30	ug/m3
Q1665-09	IA-B9-2-3242025	Air	Hexane		6.70		0.39	1.76	ug/m3
			Total Voc :		145				
Q1665-09	IA-B9-2-3242025	Air	.alpha.-Pinene	*	1.10	J	0	0	ppbv
Q1665-09	IA-B9-2-3242025	Air	Benzaldehyde	*	2.30	J	0	0	ppbv
Q1665-09	IA-B9-2-3242025	Air	Butane	*	2.10	J	0	0	ppbv
Q1665-09	IA-B9-2-3242025	Air	Chlorodifluoromethane	*	0.83	J	0.090	0.50	ppbv
Q1665-09	IA-B9-2-3242025	Air	Propene	*	4.50	J	0.15	0.50	ppbv
			Total Tics :		10.8				
			Total Concentration:		156				
Client ID:	**IA-B10-4-3242025**								
Q1665-10	IA-B10-4-3242025	Air	Dichlorodifluoromethane		1.93	J	1.04	2.47	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Ethanol		1640	EQ	0.60	0.94	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Chloromethane		1.26		0.21	1.03	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Trichlorofluoromethane		1.07	J	0.90	2.81	ug/m3
Q1665-10	IA-B10-4-3242025	Air	tert-Butyl alcohol		0.64	J	0.58	1.52	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Heptane		0.57	J	0.45	2.05	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Isopropyl Alcohol		516	E	0.17	1.23	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Acetone		182	E	0.57	1.19	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Methylene Chloride		2.05		0.66	1.74	ug/m3
Q1665-10	IA-B10-4-3242025	Air	2-Butanone		472	E	0.35	1.47	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Chloroform		2.83		0.39	2.44	ug/m3
Q1665-10	IA-B10-4-3242025	Air	2,2,4-Trimethylpentane		0.47	J	0.47	2.34	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Benzene		1.50	J	0.29	1.60	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Toluene		1.58	J	0.41	1.88	ug/m3
Q1665-10	IA-B10-4-3242025	Air	1,2,4-Trimethylbenzene		0.54	J	0.39	2.46	ug/m3
Q1665-10	IA-B10-4-3242025	Air	Hexane		7.75		0.39	1.76	ug/m3
			Total Voc :		2830				
Q1665-10	IA-B10-4-3242025	Air	Limonene	*	6.40	J	0	0	ppbv
Q1665-10	IA-B10-4-3242025	Air	Chlorodifluoromethane	*	0.31	J	0.090	0.50	ppbv
Q1665-10	IA-B10-4-3242025	Air	Propene	*	110	J	0.15	0.50	ppbv
			Total Tics :		117				
			Total Concentration:		2950				

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Client ID:	**IA-B10-4-3242025DL**								
Q1665-10DL	IA-B10-4-3242025I	Air	Ethanol		2070	EDQ	24.1	37.7	ug/m3
Q1665-10DL	IA-B10-4-3242025I	Air	Isopropyl Alcohol		1500	ED	6.88	49.2	ug/m3
Q1665-10DL	IA-B10-4-3242025I	Air	Acetone		333	D	22.8	47.5	ug/m3
Q1665-10DL	IA-B10-4-3242025I	Air	2-Butanone		2060	ED	14.2	59.0	ug/m3
			Total Voc :		5970				
			Total Concentration:		5970				
Client ID:	**IA-B10-4-3242025DL2**								
Q1665-10DL2	IA-B10-4-3242025I	Air	Ethanol		1490	DQ	60.3	94.2	ug/m3
Q1665-10DL2	IA-B10-4-3242025I	Air	Isopropyl Alcohol		1060	D	17.0	123	ug/m3
Q1665-10DL2	IA-B10-4-3242025I	Air	Acetone		285	D	57.0	119	ug/m3
Q1665-10DL2	IA-B10-4-3242025I	Air	2-Butanone		1420	D	35.4	147	ug/m3
			Total Voc :		4250				
			Total Concentration:		4250				
Client ID:	**IA-B10-1-3242025**								
Q1665-11	IA-B10-1-3242025	Air	Dichlorodifluoromethane		2.13	J	1.04	2.47	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Ethanol		2070	EQ	0.60	0.94	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Chloromethane		1.22		0.21	1.03	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-11	IA-B10-1-3242025	Air	tert-Butyl alcohol		1.27	J	0.58	1.52	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Isopropyl Alcohol		126	E	0.17	1.23	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Acetone		186	E	0.57	1.19	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Methylene Chloride		51.4		0.66	1.74	ug/m3
Q1665-11	IA-B10-1-3242025	Air	2-Butanone		36.3		0.35	1.47	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Chloroform		5.37		0.39	2.44	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Benzene		1.47	J	0.29	1.60	ug/m3
Q1665-11	IA-B10-1-3242025	Air	4-Methyl-2-Pentanone		0.66	J	0.37	2.05	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Toluene		1.51	J	0.41	1.88	ug/m3
Q1665-11	IA-B10-1-3242025	Air	m/p-Xylene		0.96	J	0.91	4.34	ug/m3
Q1665-11	IA-B10-1-3242025	Air	o-Xylene		0.65	J	0.52	2.17	ug/m3
Q1665-11	IA-B10-1-3242025	Air	1,3,5-Trimethylbenzene		0.79	J	0.54	2.46	ug/m3
Q1665-11	IA-B10-1-3242025	Air	1,2,4-Trimethylbenzene		2.80		0.39	2.46	ug/m3
Q1665-11	IA-B10-1-3242025	Air	Hexane		28.6		0.39	1.76	ug/m3
			Total Voc :		2520				
Q1665-11	IA-B10-1-3242025	Air	unknown3.230	*	1.30	J	0	0	ppbv
Q1665-11	IA-B10-1-3242025	Air	Butane	*	2.20	J	0	0	ppbv
Q1665-11	IA-B10-1-3242025	Air	Decane	*	1.80	J	0	0	ppbv

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Hit Summary Sheet
SW-846

SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-11	IA-B10-1-3242025	Air	1-Hexene, 4-methyl-	*	1.30	J	0	0	ppbv
Q1665-11	IA-B10-1-3242025	Air	D-Limonene	*	8.40	J	0	0	ppbv
Q1665-11	IA-B10-1-3242025	Air	Propene	*	3.80	J	0.15	0.50	ppbv
Q1665-11	IA-B10-1-3242025	Air	p-Isopropyltoluene	*	0.12	J	0.090	0.50	ppbv
			Total Tics :		18.9				
			Total Concentration:		2540				
Client ID:	**IA-B10-1-3242025DL**								
Q1665-11DL	IA-B10-1-3242025I	Air	Ethanol		2450	EDQ	6.03	9.42	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	Isopropyl Alcohol		119	D	1.70	12.3	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	Acetone		309	D	5.70	11.9	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	Methylene Chloride		57.0	D	6.60	17.4	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	2-Butanone		29.5	D	3.54	14.8	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	Chloroform		4.88	JD	4.05	24.4	ug/m3
Q1665-11DL	IA-B10-1-3242025I	Air	Hexane		15.5	JD	3.88	17.6	ug/m3
			Total Voc :		2980				
			Total Concentration:		2980				
Client ID:	**IA-B2-6-3242025**								
Q1665-12	IA-B2-6-3242025	Air	Dichlorodifluoromethane		2.27	J	1.04	2.47	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Ethanol		137	EQ	0.60	0.94	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Chloromethane		1.14		0.21	1.03	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Trichlorofluoromethane		1.29	J	0.90	2.81	ug/m3
Q1665-12	IA-B2-6-3242025	Air	tert-Butyl alcohol		5.76		0.58	1.52	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Heptane		1.43	J	0.45	2.05	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Isopropyl Alcohol		152	E	0.17	1.23	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Methylene Chloride		15.3		0.66	1.74	ug/m3
Q1665-12	IA-B2-6-3242025	Air	2-Butanone		2.33		0.35	1.47	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1665-12	IA-B2-6-3242025	Air	2,2,4-Trimethylpentane		0.98	J	0.47	2.34	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Benzene		1.18	J	0.29	1.60	ug/m3
Q1665-12	IA-B2-6-3242025	Air	4-Methyl-2-Pentanone		4.10		0.37	2.05	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Toluene		5.28		0.41	1.88	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Ethyl Benzene		2.17		0.52	2.17	ug/m3
Q1665-12	IA-B2-6-3242025	Air	m/p-Xylene		3.56	J	0.91	4.34	ug/m3
Q1665-12	IA-B2-6-3242025	Air	o-Xylene		1.48	J	0.52	2.17	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Styrene		1.92	J	0.47	2.13	ug/m3
Q1665-12	IA-B2-6-3242025	Air	1,3,5-Trimethylbenzene		0.98	J	0.54	2.46	ug/m3
Q1665-12	IA-B2-6-3242025	Air	1,2,4-Trimethylbenzene		3.24		0.39	2.46	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-12	IA-B2-6-3242025	Air	4-Ethyltoluene		0.79	J	0.59	2.46	ug/m3
Q1665-12	IA-B2-6-3242025	Air	Hexane		17.3		0.39	1.76	ug/m3
			Total Voc :		361				
Q1665-12	IA-B2-6-3242025	Air	Hexanal	*	1.60	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Acetic acid, 2-ethylhexyl ester	*	4.80	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Butane	*	2.40	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Tridecane	*	1.40	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Undecane	*	1.30	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	D-Limonene	*	2.00	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	11H-Dibenzo[b,e][1,4]diazepin	*	2.30	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Octane, 2,3,3-trimethyl-	*	1.50	J	0	0	ppbv
Q1665-12	IA-B2-6-3242025	Air	Chlorodifluoromethane	*	0.24	J	0.090	0.50	ppbv
Q1665-12	IA-B2-6-3242025	Air	Propene	*	1.10	J	0.15	0.50	ppbv
Q1665-12	IA-B2-6-3242025	Air	Isopropylbenzene	*	0.12	J	0.090	0.50	ppbv
Q1665-12	IA-B2-6-3242025	Air	n-propylbenzene	*	0.16	J	0.080	0.50	ppbv
			Total Tics :		18.9				
			Total Concentration:		380				
Client ID:	**IA-B14-1-3242025**								
Q1665-15	IA-B14-1-3242025	Air	Dichlorodifluoromethane		2.13	J	1.04	2.47	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Ethanol		32.6	EQ	0.60	0.94	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Chloromethane		1.36		0.21	1.03	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Heptane		0.61	J	0.45	2.05	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Isopropyl Alcohol		320	E	0.17	1.23	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Acetone		91.2	E	0.57	1.19	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Methylene Chloride		4.17		0.66	1.74	ug/m3
Q1665-15	IA-B14-1-3242025	Air	2-Butanone		2.18		0.35	1.47	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Chloroform		1.03	J	0.39	2.44	ug/m3
Q1665-15	IA-B14-1-3242025	Air	1,1,1-Trichloroethane		0.22		0.050	0.16	ug/m3
Q1665-15	IA-B14-1-3242025	Air	2,2,4-Trimethylpentane		0.84	J	0.47	2.34	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Benzene		0.77	J	0.29	1.60	ug/m3
Q1665-15	IA-B14-1-3242025	Air	4-Methyl-2-Pentanone		0.57	J	0.37	2.05	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Toluene		3.32		0.41	1.88	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Ethyl Benzene		21.7		0.52	2.17	ug/m3
Q1665-15	IA-B14-1-3242025	Air	m/p-Xylene		92.5		0.91	4.34	ug/m3
Q1665-15	IA-B14-1-3242025	Air	o-Xylene		17.8		0.52	2.17	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-15	IA-B14-1-3242025	Air	1,3,5-Trimethylbenzene		0.54	J	0.54	2.46	ug/m3
Q1665-15	IA-B14-1-3242025	Air	1,2,4-Trimethylbenzene		1.33	J	0.39	2.46	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Naphthalene		0.73		0.42	0.52	ug/m3
Q1665-15	IA-B14-1-3242025	Air	Hexane		9.52		0.39	1.76	ug/m3
Q1665-15	IA-B14-1-3242025	Air	1,4-Dioxane		3.60		0.76	1.80	ug/m3
			Total Voc :		610				
Q1665-15	IA-B14-1-3242025	Air	Hexanoic acid, methyl ester	*	4.30	J	0	0	ppbv
Q1665-15	IA-B14-1-3242025	Air	Heptanoic acid, methyl ester	*	10.6	J	0	0	ppbv
Q1665-15	IA-B14-1-3242025	Air	Butane	*	1.20	J	0	0	ppbv
Q1665-15	IA-B14-1-3242025	Air	1-Pentene, 2,4,4-trimethyl-	*	1.60	J	0	0	ppbv
Q1665-15	IA-B14-1-3242025	Air	Octanoic acid, methyl ester	*	6.40	J	0	0	ppbv
Q1665-15	IA-B14-1-3242025	Air	Chlorodifluoromethane	*	0.31	J	0.090	0.50	ppbv
Q1665-15	IA-B14-1-3242025	Air	Naphthalene,2-methyl-	*	0.15	J	0.15	0.50	ppbv
Q1665-15	IA-B14-1-3242025	Air	Propene	*	1.60	J	0.15	0.50	ppbv
Q1665-15	IA-B14-1-3242025	Air	2-Hexanone	*	1.50	J	0.080	0.50	ppbv
			Total Tics :		27.7				
			Total Concentration:		638				
Client ID:	**IA-B14-1-3242025DL**								
Q1665-15DL	IA-B14-1-3242025I	Air	Ethanol		52.4	DQ	6.03	9.42	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	Isopropyl Alcohol		418	ED	1.70	12.3	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	Acetone		101	D	5.70	11.9	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	2-Butanone		3.83	JD	3.54	14.8	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	Ethyl Benzene		22.1	D	5.21	21.7	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	m/p-Xylene		96.9	D	9.12	43.4	ug/m3
Q1665-15DL	IA-B14-1-3242025I	Air	o-Xylene		17.8	JD	5.21	21.7	ug/m3
			Total Voc :		712				
			Total Concentration:		712				
Client ID:	**IA-B2-5-3242025**								
Q1665-16	IA-B2-5-3242025	Air	Dichlorodifluoromethane		2.08	J	1.04	2.47	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Ethanol		904	EQ	0.60	0.94	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Chloromethane		2.07		0.21	1.03	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Tetrahydrofuran		0.47	J	0.38	1.47	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-16	IA-B2-5-3242025	Air	tert-Butyl alcohol		0.73	J	0.58	1.52	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Heptane		2.70		0.45	2.05	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Isopropyl Alcohol		72.0	E	0.17	1.23	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Acetone		27.8		0.57	1.19	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-16	IA-B2-5-3242025	Air	Methylene Chloride		2.26		0.66	1.74	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Cyclohexane		1.72		0.76	1.72	ug/m3
Q1665-16	IA-B2-5-3242025	Air	2-Butanone		2.36		0.35	1.47	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Carbon Tetrachloride		0.57		0.060	0.19	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Chloroform		0.88	J	0.39	2.44	ug/m3
Q1665-16	IA-B2-5-3242025	Air	2,2,4-Trimethylpentane		4.67		0.47	2.34	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Benzene		2.17		0.29	1.60	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Toluene		25.3		0.41	1.88	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Ethyl Benzene		2.52		0.52	2.17	ug/m3
Q1665-16	IA-B2-5-3242025	Air	m/p-Xylene		8.69		0.91	4.34	ug/m3
Q1665-16	IA-B2-5-3242025	Air	o-Xylene		3.00		0.52	2.17	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Styrene		1.06	J	0.47	2.13	ug/m3
Q1665-16	IA-B2-5-3242025	Air	2-Chlorotoluene		1.66	J	0.57	2.59	ug/m3
Q1665-16	IA-B2-5-3242025	Air	1,3,5-Trimethylbenzene		1.33	J	0.54	2.46	ug/m3
Q1665-16	IA-B2-5-3242025	Air	1,2,4-Trimethylbenzene		3.74		0.39	2.46	ug/m3
Q1665-16	IA-B2-5-3242025	Air	4-Ethyltoluene		1.18	J	0.59	2.46	ug/m3
Q1665-16	IA-B2-5-3242025	Air	Hexane		11.3		0.39	1.76	ug/m3
			Total Voc :		1090				
Q1665-16	IA-B2-5-3242025	Air	Hexanal	*	2.10	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Cyclopentane, methyl-	*	2.00	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Butane	*	1.20	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Pentane, 2-methyl-	*	2.30	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Pentane	*	1.10	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	1,3-Butanediamine	*	1.60	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Undecane	*	1.40	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	1-Hexene, 4-methyl-	*	1.60	J	0	0	ppbv
Q1665-16	IA-B2-5-3242025	Air	Chlorodifluoromethane	*	0.28	J	0.090	0.50	ppbv
Q1665-16	IA-B2-5-3242025	Air	Propene	*	1.30	J	0.15	0.50	ppbv
Q1665-16	IA-B2-5-3242025	Air	n-propylbenzene	*	0.14	J	0.080	0.50	ppbv
Q1665-16	IA-B2-5-3242025	Air	p-Isopropyltoluene	*	0.19	J	0.090	0.50	ppbv
			Total Tics :		15.2				
			Total Concentration:		1100				
Client ID:	**IA-B10-3-3242025**								
Q1665-18	IA-B10-3-3242025	Air	Dichlorodifluoromethane		2.18	J	1.04	2.47	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Ethanol		2640	EQ	0.60	0.94	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Chloromethane		1.26		0.21	1.03	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Trichlorofluoromethane		1.07	J	0.90	2.81	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-18	IA-B10-3-3242025	Air	tert-Butyl alcohol		1.36	J	0.58	1.52	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Heptane		0.78	J	0.45	2.05	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Isopropyl Alcohol		212	E	0.17	1.23	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Acetone		215	E	0.57	1.19	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Methylene Chloride		3.13		0.66	1.74	ug/m3
Q1665-18	IA-B10-3-3242025	Air	2-Butanone		67.0	E	0.35	1.47	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Chloroform		7.33		0.39	2.44	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Benzene		2.17		0.29	1.60	ug/m3
Q1665-18	IA-B10-3-3242025	Air	4-Methyl-2-Pentanone		1.84	J	0.37	2.05	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Toluene		2.03		0.41	1.88	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Tetrachloroethene		0.27		0.14	0.20	ug/m3
Q1665-18	IA-B10-3-3242025	Air	1,2,4-Trimethylbenzene		0.79	J	0.39	2.46	ug/m3
Q1665-18	IA-B10-3-3242025	Air	Hexane		9.52		0.39	1.76	ug/m3
			Total Voc :		3170				
Q1665-18	IA-B10-3-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-18	IA-B10-3-3242025	Air	D-Limonene	*	18.0	J	0	0	ppbv
Q1665-18	IA-B10-3-3242025	Air	Butanoic acid, 2-methyl-, ethyl	*	1.40	J	0	0	ppbv
Q1665-18	IA-B10-3-3242025	Air	Bicyclo[3.1.1]heptane, 6,6-dim	*	1.10	J	0	0	ppbv
Q1665-18	IA-B10-3-3242025	Air	Chlorodifluoromethane	*	0.18	J	0.090	0.50	ppbv
Q1665-18	IA-B10-3-3242025	Air	Propene	*	5.00	J	0.15	0.50	ppbv
Q1665-18	IA-B10-3-3242025	Air	p-Isopropyltoluene	*	0.11	J	0.090	0.50	ppbv
			Total Tics :		27.1				
			Total Concentration:		3190				
Client ID:	**IA-B10-3-3242025DL**								
Q1665-18DL	IA-B10-3-3242025I	Air	Ethanol		3390	EDQ	6.03	9.42	ug/m3
Q1665-18DL	IA-B10-3-3242025I	Air	Isopropyl Alcohol		194	D	1.70	12.3	ug/m3
Q1665-18DL	IA-B10-3-3242025I	Air	Acetone		356	D	5.70	11.9	ug/m3
Q1665-18DL	IA-B10-3-3242025I	Air	2-Butanone		44.5	D	3.54	14.8	ug/m3
Q1665-18DL	IA-B10-3-3242025I	Air	Chloroform		6.35	JD	4.05	24.4	ug/m3
Q1665-18DL	IA-B10-3-3242025I	Air	Hexane		5.99	JD	3.88	17.6	ug/m3
			Total Voc :		4000				
			Total Concentration:		4000				
Client ID:	**IA-B2-2-3242025**								
Q1665-19	IA-B2-2-3242025	Air	Dichlorodifluoromethane		2.27	J	1.04	2.47	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Ethanol		603	EQ	0.60	0.94	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Chloromethane		1.36		0.21	1.03	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-19	IA-B2-2-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-19	IA-B2-2-3242025	Air	tert-Butyl alcohol		8.79		0.58	1.52	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Heptane		2.01	J	0.45	2.05	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Isopropyl Alcohol		78.7	E	0.17	1.23	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Acetone		40.9	E	0.57	1.19	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Methylene Chloride		3.09		0.66	1.74	ug/m3
Q1665-19	IA-B2-2-3242025	Air	2-Butanone		4.72		0.35	1.47	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Carbon Tetrachloride		0.38		0.060	0.19	ug/m3
Q1665-19	IA-B2-2-3242025	Air	2,2,4-Trimethylpentane		3.13		0.47	2.34	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Benzene		1.44	J	0.29	1.60	ug/m3
Q1665-19	IA-B2-2-3242025	Air	1,2-Dichloroethane		1.86	J	0.36	2.02	ug/m3
Q1665-19	IA-B2-2-3242025	Air	4-Methyl-2-Pentanone		1.64	J	0.37	2.05	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Toluene		15.1		0.41	1.88	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Tetrachloroethene		0.34		0.14	0.20	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Ethyl Benzene		2.17		0.52	2.17	ug/m3
Q1665-19	IA-B2-2-3242025	Air	m/p-Xylene		5.21		0.91	4.34	ug/m3
Q1665-19	IA-B2-2-3242025	Air	o-Xylene		2.17		0.52	2.17	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Styrene		1.36	J	0.47	2.13	ug/m3
Q1665-19	IA-B2-2-3242025	Air	1,3,5-Trimethylbenzene		0.69	J	0.54	2.46	ug/m3
Q1665-19	IA-B2-2-3242025	Air	1,2,4-Trimethylbenzene		1.92	J	0.39	2.46	ug/m3
Q1665-19	IA-B2-2-3242025	Air	4-Ethyltoluene		0.59	J	0.59	2.46	ug/m3
Q1665-19	IA-B2-2-3242025	Air	Hexane		8.46		0.39	1.76	ug/m3
			Total Voc :		792				
Q1665-19	IA-B2-2-3242025	Air	1-Propanol	*	2.70	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	.alpha.-Pinene	*	2.30	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	3-Heptanone	*	23.7	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	Butane	*	24.9	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	Hexanal, 2-ethyl-	*	3.70	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	Butanal	*	2.00	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	Carbonic acid, monoamide, tert	*	2.60	J	0	0	ppbv
Q1665-19	IA-B2-2-3242025	Air	Propene	*	4.40	J	0.15	0.50	ppbv
Q1665-19	IA-B2-2-3242025	Air	2-Hexanone	*	0.25	J	0.080	0.50	ppbv
Q1665-19	IA-B2-2-3242025	Air	n-propylbenzene	*	0.11	J	0.080	0.50	ppbv
			Total Tics :		66.7				
			Total Concentration:		859				
Client ID:	**IA-B2-2-3242025DL**								
Q1665-19DL	IA-B2-2-3242025D	Air	Ethanol		603	EDQ	2.45	3.77	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-19DL	IA-B2-2-3242025D	Air	tert-Butyl alcohol		8.19	D	2.30	6.06	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	Isopropyl Alcohol		75.7	D	0.69	4.92	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	Acetone		41.1	D	2.28	4.75	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	Methylene Chloride		7.30	D	2.64	6.95	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	2-Butanone		4.13	JD	1.42	5.90	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	2,2,4-Trimethylpentane		2.34	JD	1.87	9.34	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	Toluene		10.6	D	1.66	7.54	ug/m3
Q1665-19DL	IA-B2-2-3242025D	Air	Hexane		5.99	JD	1.55	7.05	ug/m3
			Total Voc :		758				
			Total Concentration:		758				
Client ID:	**IA-B9-3-3242025**								
Q1665-20	IA-B9-3-3242025	Air	Dichlorodifluoromethane		2.08	J	1.04	2.47	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Ethanol		59.7	EQ	0.60	0.94	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Chloromethane		1.01	J	0.21	1.03	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Tetrahydrofuran		0.83	J	0.38	1.47	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Trichlorofluoromethane		1.18	J	0.90	2.81	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Heptane		0.66	J	0.45	2.05	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Isopropyl Alcohol		95.9	E	0.17	1.23	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Acetone		19.0		0.57	1.19	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Methylene Chloride		4.52		0.66	1.74	ug/m3
Q1665-20	IA-B9-3-3242025	Air	2-Butanone		7.37		0.35	1.47	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Carbon Tetrachloride		0.50		0.060	0.19	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Benzene		0.89	J	0.29	1.60	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Toluene		2.00		0.41	1.88	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Chlorobenzene		0.60	J	0.37	2.30	ug/m3
Q1665-20	IA-B9-3-3242025	Air	m/p-Xylene		0.96	J	0.91	4.34	ug/m3
Q1665-20	IA-B9-3-3242025	Air	o-Xylene		0.56	J	0.52	2.17	ug/m3
Q1665-20	IA-B9-3-3242025	Air	Hexane		5.29		0.39	1.76	ug/m3
			Total Voc :		203				
Q1665-20	IA-B9-3-3242025	Air	Benzaldehyde	*	1.10	J	0	0	ppbv
Q1665-20	IA-B9-3-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-20	IA-B9-3-3242025	Air	Chlorodifluoromethane	*	0.56	J	0.090	0.50	ppbv
Q1665-20	IA-B9-3-3242025	Air	Propene	*	3.10	J	0.15	0.50	ppbv
			Total Tics :		6.06				
			Total Concentration:		209				
Client ID:	**IA-B2-1-3242025**								
Q1665-21	IA-B2-1-3242025	Air	Dichlorodifluoromethane		2.27	J	1.04	2.47	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-21	IA-B2-1-3242025	Air	Ethanol		1300	EQ	0.60	0.94	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Chloromethane		1.42		0.21	1.03	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Trichlorofluoromethane		1.24	J	0.90	2.81	ug/m3
Q1665-21	IA-B2-1-3242025	Air	tert-Butyl alcohol		0.85	J	0.58	1.52	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Heptane		1.60	J	0.45	2.05	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Isopropyl Alcohol		98.3	E	0.17	1.23	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Acetone		36.1	E	0.57	1.19	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Methylene Chloride		5.56		0.66	1.74	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Cyclohexane		1.03	J	0.76	1.72	ug/m3
Q1665-21	IA-B2-1-3242025	Air	2-Butanone		2.09		0.35	1.47	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1665-21	IA-B2-1-3242025	Air	2,2,4-Trimethylpentane		2.29	J	0.47	2.34	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Benzene		1.37	J	0.29	1.60	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Toluene		32.0		0.41	1.88	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Ethyl Benzene		1.65	J	0.52	2.17	ug/m3
Q1665-21	IA-B2-1-3242025	Air	m/p-Xylene		5.21		0.91	4.34	ug/m3
Q1665-21	IA-B2-1-3242025	Air	o-Xylene		2.26		0.52	2.17	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Styrene		1.02	J	0.47	2.13	ug/m3
Q1665-21	IA-B2-1-3242025	Air	2-Chlorotoluene		0.57	J	0.57	2.59	ug/m3
Q1665-21	IA-B2-1-3242025	Air	1,3,5-Trimethylbenzene		0.64	J	0.54	2.46	ug/m3
Q1665-21	IA-B2-1-3242025	Air	1,2,4-Trimethylbenzene		1.33	J	0.39	2.46	ug/m3
Q1665-21	IA-B2-1-3242025	Air	4-Ethyltoluene		0.59	J	0.59	2.46	ug/m3
Q1665-21	IA-B2-1-3242025	Air	Hexane		10.6		0.39	1.76	ug/m3
			Total Voc :		1510				
Q1665-21	IA-B2-1-3242025	Air	Hexanal	*	1.90	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	Butane	*	1.30	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	Pentane	*	1.00	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	Butanal, 3-methyl-	*	1.20	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	1-Pentene, 2-methyl-	*	1.10	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	N-Vinylformamide	*	1.20	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	Isoxazolidine, 4-ethyl-2,5-dime	*	1.10	J	0	0	ppbv
Q1665-21	IA-B2-1-3242025	Air	Chlorodifluoromethane	*	0.31	J	0.090	0.50	ppbv
Q1665-21	IA-B2-1-3242025	Air	Propene	*	1.20	J	0.15	0.50	ppbv
			Total Tics :		10.3				
			Total Concentration:		1520				
Client ID:	**IA-B2-1-3242025DL**								
Q1665-21DL	IA-B2-1-3242025D	Air	Ethanol		1450	EDQ	2.45	3.77	ug/m3

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter		Concentration	C	MDL	RDL	Units
Q1665-21DL	IA-B2-1-3242025D	Air	Chloromethane		1.32	JD	0.81	4.13	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	Isopropyl Alcohol		90.5	D	0.69	4.92	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	Acetone		37.3	D	2.28	4.75	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	Methylene Chloride		11.1	D	2.64	6.95	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	2-Butanone		2.06	JD	1.42	5.90	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	Toluene		21.5	D	1.66	7.54	ug/m3
Q1665-21DL	IA-B2-1-3242025D	Air	Hexane		8.11	D	1.55	7.05	ug/m3
			Total Voc :		1620				
			Total Concentration:		1620				
Client ID:	**IA-B2-4-3242025**								
Q1665-22	IA-B2-4-3242025	Air	Dichlorodifluoromethane		2.47		1.04	2.47	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Ethanol		471	EQ	0.60	0.94	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Chloromethane		1.24		0.21	1.03	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Trichlorofluoromethane		1.29	J	0.90	2.81	ug/m3
Q1665-22	IA-B2-4-3242025	Air	tert-Butyl alcohol		0.91	J	0.58	1.52	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Heptane		2.70		0.45	2.05	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Isopropyl Alcohol		69.6	E	0.17	1.23	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Acetone		32.8		0.57	1.19	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Methylene Chloride		2.08		0.66	1.74	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Cyclohexane		0.89	J	0.76	1.72	ug/m3
Q1665-22	IA-B2-4-3242025	Air	2-Butanone		1.53		0.35	1.47	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Carbon Tetrachloride		0.44		0.060	0.19	ug/m3
Q1665-22	IA-B2-4-3242025	Air	2,2,4-Trimethylpentane		5.60		0.47	2.34	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Benzene		1.79		0.29	1.60	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Toluene		17.7		0.41	1.88	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Ethyl Benzene		2.22		0.52	2.17	ug/m3
Q1665-22	IA-B2-4-3242025	Air	m/p-Xylene		7.82		0.91	4.34	ug/m3
Q1665-22	IA-B2-4-3242025	Air	o-Xylene		3.00		0.52	2.17	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Styrene		0.60	J	0.47	2.13	ug/m3
Q1665-22	IA-B2-4-3242025	Air	1,3,5-Trimethylbenzene		0.93	J	0.54	2.46	ug/m3
Q1665-22	IA-B2-4-3242025	Air	1,2,4-Trimethylbenzene		2.51		0.39	2.46	ug/m3
Q1665-22	IA-B2-4-3242025	Air	4-Ethyltoluene		0.88	J	0.59	2.46	ug/m3
Q1665-22	IA-B2-4-3242025	Air	Hexane		9.52		0.39	1.76	ug/m3
			Total Voc :		640				
Q1665-22	IA-B2-4-3242025	Air	unknown4.263	*	1.20	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Hexanal	*	1.10	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	.alpha.-Pinene	*	1.40	J	0	0	ppbv

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Hit Summary Sheet
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SDG No.: Q1665

Client: Woodard & Curran

Sample ID	Client ID	Matrix	Parameter	Concentration	C	MDL	RDL	Units
Q1665-22	IA-B2-4-3242025	Air	Pentane, 3-methyl-	* 1.20	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Cyclopentane, methyl-	* 1.10	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Butane	* 2.00	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Pentane, 2-methyl-	* 1.70	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Pentane	* 1.50	J	0	0	ppbv
Q1665-22	IA-B2-4-3242025	Air	Chlorodifluoromethane	* 0.28	J	0.090	0.50	ppbv
Q1665-22	IA-B2-4-3242025	Air	Propene	* 1.20	J	0.15	0.50	ppbv
Q1665-22	IA-B2-4-3242025	Air	n-propylbenzene	* 0.12	J	0.080	0.50	ppbv
			Total Tics :	12.8				
			Total Concentration:	652				

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : AA-DUP-1-3242025

Analysis Date : 04/09/25

Laboratory Id Number : Q1665-01

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.4	J	1.98		
Ethanol	64-17-5	46.07	13.4		25.2		
Chloromethane	74-87-3	50.49	0.56		1.16		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.11	J	0.45		
Isopropyl Alcohol	67-63-0	60.1	1.8		4.42		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	3.6		8.55		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.95		3.3		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.36	J	1.06		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.25	J	0.8		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.32	J	1.21		

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

Field Id Number : AA-DUP-1-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-01 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.6		5.64		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-2-3242025

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-03

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.4	J	1.98		
Ethanol	64-17-5	46.07	1300	E	2449		
Chloromethane	74-87-3	50.49	0.59		1.22		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.47	J	1.42		
Heptane	142-82-5	100.2	0.17	J	0.7		
Isopropyl Alcohol	67-63-0	60.1	81.1	E	199		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	82.7	E	196		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.6		5.56		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	26.8	E	79.0		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	1.4		6.84		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.6		1.92		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.49	J	1.85		

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

Field Id Number : IA-B10-2-3242025 **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-03 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.04		0.27		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	J	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.12	J	0.59		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	2.5		8.81		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-2-3242025DL

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-03DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	2.1	UD	10.4		
Ethanol	64-17-5	46.07	1800	ED	3391		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.14	UD	0.36		
Bromomethane	74-83-9	94.94	1.4	UD	5.44		
Chloroethane	75-00-3	64.52	1.7	UD	4.49		
Tetrahydrofuran	109-99-9	72.11	1.3	UD	3.83		
Trichlorofluoromethane	75-69-4	137.4	1.6	UD	8.99		
Dichlorotetrafluoroethane	76-14-2	170.9	0.88	UD	6.15		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.6	UD	12.3		
Bromoethene	593-60-2	106.9	1.2	UD	5.25		
tert-Butyl alcohol	75-65-0	74.12	1.9	UD	5.76		
Heptane	142-82-5	100.2	1.1	UD	4.51		
Isopropyl Alcohol	67-63-0	60.1	88	D	216		
1,1-Dichloroethene	75-35-4	96.94	1.4	UD	5.55		
Acetone	67-64-1	58.08	140	D	332		
Carbon Disulfide	75-15-0	76.14	1.6	UD	4.98		
Methyl tert-Butyl Ether	1634-04-4	88.15	1.2	UD	4.33		
Methylene Chloride	75-09-2	84.94	3.3	JD	11.5		
trans-1,2-Dichloroethene	156-60-5	96.94	1.9	UD	7.53		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	21.5	D	63.4		
Carbon Tetrachloride	56-23-5	153.8	0.11	UD	0.69		
cis-1,2-Dichloroethene	156-59-2	96.94	0.89	UD	3.53		
Chloroform	67-66-3	119.4	1.4	JD	6.84		
1,1,1-Trichloroethane	71-55-6	133.4	0.1	UD	0.55		
2,2,4-Trimethylpentane	540-84-1	114.2	1	UD	4.67		
Benzene	71-43-2	78.11	0.87	UD	2.78		
1,2-Dichloroethane	107-06-2	98.96	0.91	UD	3.68		
Trichloroethene	79-01-6	131.4	0.17	UD	0.91		
1,2-Dichloropropane	78-87-5	113	1.1	UD	5.08		
Bromodichloromethane	75-27-4	163.8	0.77	UD	5.16		
4-Methyl-2-Pentanone	108-10-1	100.2	0.93	UD	3.81		
Toluene	108-88-3	92.14	1.1	UD	4.15		

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

Field Id Number : IA-B10-2-3242025DL **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-03DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.6	UD	2.72		
cis-1,3-Dichloropropene	10061-01-5	111	0.64	UD	2.91		
1,1,2-Trichloroethane	79-00-5	133.4	0.71	UD	3.87		
Dibromochloromethane	124-48-1	208.3	0.66	UD	5.62		
1,2-Dibromoethane	106-93-4	187.9	0.72	UD	5.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.76	UD	3.5		
Ethyl Benzene	100-41-4	106.2	1.2	UD	5.21		
m/p-Xylene	179601-23-1	106.2	2.1	UD	9.12		
o-Xylene	95-47-6	106.2	1.2	UD	5.21		
Styrene	100-42-5	104.1	1.1	UD	4.68		
Bromoform	75-25-2	252.8	0.57	UD	5.89		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.11	UD	0.76		
2-Chlorotoluene	95-49-8	126.6	1.1	UD	5.7		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	UD	5.41		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.78	UD	3.83		
1,3-Dichlorobenzene	541-73-1	147	0.8	UD	4.81		
1,4-Dichlorobenzene	106-46-7	147	0.53	UD	3.19		
1,2-Dichlorobenzene	95-50-1	147	0.75	UD	4.51		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.85	UD	6.31		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.85	UD	9.07		
Naphthalene	91-20-3	128.17	0.75	UD	3.93		
1,3-Butadiene	106-99-0	54.09	1.3	UD	2.88		
4-Ethyltoluene	622-96-8	120.2	1.2	UD	5.9		
Hexane	110-54-3	86.17	1.9	JD	6.7		
Allyl Chloride	107-05-1	76.53	1.5	UD	4.7		
1,4-Dioxane	123-91-1	88.12	2.1	UD	7.57		
Methyl Methacrylate	80-62-6	100.117	0.86	UD	3.52		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : AA-1-3242025

Analysis Date : 04/09/25

Laboratory Id Number : Q1665-04

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.4	J	1.98		
Ethanol	64-17-5	46.07	12.8		24.1		
Chloromethane	74-87-3	50.49	0.55		1.14		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.11	U	0.45		
Isopropyl Alcohol	67-63-0	60.1	1.2		2.95		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	3.5		8.31		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.67		2.33		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.35	J	1.03		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.25	J	0.8		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.28	J	1.06		

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

Field Id Number : AA-1-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-04 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.1		3.88		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-3-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-05

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.46	J	2.27		
Ethanol	64-17-5	46.07	270	E	508		
Chloromethane	74-87-3	50.49	0.48	J	0.99		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	3.1		9.4		
Heptane	142-82-5	100.2	0.5		2.05		
Isopropyl Alcohol	67-63-0	60.1	32.2	E	79.2		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	14.7		34.9		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.2		4.17		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.25	J	0.86		
2-Butanone	78-93-3	72.11	0.87		2.57		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.76		3.55		
Benzene	71-43-2	78.11	0.49	J	1.57		
1,2-Dichloroethane	107-06-2	98.96	0.46	J	1.86		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.36	J	1.48		
Toluene	108-88-3	92.14	4.6		17.3		

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

Field Id Number : IA-B2-3-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-05 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.05		0.34		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.56		2.43		
m/p-Xylene	179601-23-1	106.2	1.4		6.08		
o-Xylene	95-47-6	106.2	0.58		2.52		
Styrene	100-42-5	104.1	0.46	J	1.96		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.18	J	0.88		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.48	J	2.36		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.11		0.58		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.14	J	0.69		
Hexane	110-54-3	86.17	2.3		8.11		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B9-1-3242025

Analysis Date : 04/09/25

Laboratory Id Number : Q1665-06

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.37	J	1.83		
Ethanol	64-17-5	46.07	37.8	E	71.2		
Chloromethane	74-87-3	50.49	0.58		1.2		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.33	J	0.97		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.12	J	0.49		
Isopropyl Alcohol	67-63-0	60.1	23.4	E	57.5		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	8.5		20.2		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.1		3.82		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	4.7		13.9		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.29	J	0.93		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.48	J	1.81		

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

Field Id Number : IA-B9-1-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-06 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.24	J	1.11		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	2		7.05		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-DUP-1-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-07

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.43	J	2.13		
Ethanol	64-17-5	46.07	270	E	508		
Chloromethane	74-87-3	50.49	0.56		1.16		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.17	J	0.5		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	3		9.09		
Heptane	142-82-5	100.2	0.47	J	1.93		
Isopropyl Alcohol	67-63-0	60.1	33.4	E	82.1		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	17.3	E	41.1		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.99		3.44		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.24	J	0.83		
2-Butanone	78-93-3	72.11	0.85		2.51		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.63		2.94		
Benzene	71-43-2	78.11	0.49	J	1.57		
1,2-Dichloroethane	107-06-2	98.96	0.48	J	1.94		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.36	J	1.48		
Toluene	108-88-3	92.14	4.4		16.6		

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

Field Id Number : IA-DUP-1-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-07 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.05		0.34		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.52		2.26		
m/p-Xylene	179601-23-1	106.2	1.3		5.65		
o-Xylene	95-47-6	106.2	0.51		2.22		
Styrene	100-42-5	104.1	0.43	J	1.83		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.15	J	0.74		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.45	J	2.21		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.14	J	0.69		
Hexane	110-54-3	86.17	2.3		8.11		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-DUP-1-3242025DL

Analysis Date : 04/29/25

Laboratory Id Number : Q1665-07DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.84	UD	4.15		
Ethanol	64-17-5	46.07	280	ED	527		
Chloromethane	74-87-3	50.49	0.39	UD	0.81		
Vinyl Chloride	75-01-4	62.5	0.06	UD	0.15		
Bromomethane	74-83-9	94.94	0.56	UD	2.17		
Chloroethane	75-00-3	64.52	0.68	UD	1.79		
Tetrahydrofuran	109-99-9	72.11	0.52	UD	1.53		
Trichlorofluoromethane	75-69-4	137.4	0.64	UD	3.6		
Dichlorotetrafluoroethane	76-14-2	170.9	0.35	UD	2.45		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.64	UD	4.91		
Bromoethene	593-60-2	106.9	0.48	UD	2.1		
tert-Butyl alcohol	75-65-0	74.12	2.8	D	8.49		
Heptane	142-82-5	100.2	0.44	UD	1.8		
Isopropyl Alcohol	67-63-0	60.1	32.1	D	78.9		
1,1-Dichloroethene	75-35-4	96.94	0.56	UD	2.22		
Acetone	67-64-1	58.08	17.1	D	40.6		
Carbon Disulfide	75-15-0	76.14	0.64	UD	1.99		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.48	UD	1.73		
Methylene Chloride	75-09-2	84.94	0.76	UD	2.64		
trans-1,2-Dichloroethene	156-60-5	96.94	0.76	UD	3.01		
1,1-Dichloroethane	75-34-3	98.96	0.52	UD	2.1		
Cyclohexane	110-82-7	84.16	0.88	UD	3.03		
2-Butanone	78-93-3	72.11	0.89	JD	2.62		
Carbon Tetrachloride	56-23-5	153.8	0.04	UD	0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.36	UD	1.43		
Chloroform	67-66-3	119.4	0.33	UD	1.61		
1,1,1-Trichloroethane	71-55-6	133.4	0.04	UD	0.22		
2,2,4-Trimethylpentane	540-84-1	114.2	0.48	JD	2.24		
Benzene	71-43-2	78.11	0.4	JD	1.28		
1,2-Dichloroethane	107-06-2	98.96	0.36	UD	1.46		
Trichloroethene	79-01-6	131.4	0.07	UD	0.38		
1,2-Dichloropropane	78-87-5	113	0.44	UD	2.03		
Bromodichloromethane	75-27-4	163.8	0.31	UD	2.08		
4-Methyl-2-Pentanone	108-10-1	100.2	0.37	UD	1.52		
Toluene	108-88-3	92.14	3.2	D	12.1		

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

Field Id Number : IA-DUP-1-3242025DL **Analysis Date :** 04/29/25

Laboratory Id Number : Q1665-07DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.24	UD	1.09		
cis-1,3-Dichloropropene	10061-01-5	111	0.26	UD	1.18		
1,1,2-Trichloroethane	79-00-5	133.4	0.28	UD	1.53		
Dibromochloromethane	124-48-1	208.3	0.26	UD	2.22		
1,2-Dibromoethane	106-93-4	187.9	0.29	UD	2.23		
Tetrachloroethene	127-18-4	165.8	0.06	UD	0.41		
Chlorobenzene	108-90-7	112.6	0.3	UD	1.38		
Ethyl Benzene	100-41-4	106.2	0.48	UD	2.08		
m/p-Xylene	179601-23-1	106.2	0.84	UD	3.65		
o-Xylene	95-47-6	106.2	0.48	UD	2.08		
Styrene	100-42-5	104.1	0.44	UD	1.87		
Bromoform	75-25-2	252.8	0.23	UD	2.38		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.04	UD	0.27		
2-Chlorotoluene	95-49-8	126.6	0.44	UD	2.28		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.44	UD	2.16		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.31	UD	1.52		
1,3-Dichlorobenzene	541-73-1	147	0.32	UD	1.92		
1,4-Dichlorobenzene	106-46-7	147	0.21	UD	1.26		
1,2-Dichlorobenzene	95-50-1	147	0.3	UD	1.8		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.34	UD	2.52		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.34	UD	3.63		
Naphthalene	91-20-3	128.17	0.3	UD	1.57		
1,3-Butadiene	106-99-0	54.09	0.52	UD	1.15		
4-Ethyltoluene	622-96-8	120.2	0.48	UD	2.36		
Hexane	110-54-3	86.17	1.6	JD	5.64		
Allyl Chloride	107-05-1	76.53	0.6	UD	1.88		
1,4-Dioxane	123-91-1	88.12	0.84	UD	3.03		
Methyl Methacrylate	80-62-6	100.117	0.34	UD	1.39		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/24/25

Field Id Number : IA-DUP-2-3242025

Analysis Date : 04/09/25

Laboratory Id Number : Q1665-08

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.38	J	1.88		
Ethanol	64-17-5	46.07	34.2	E	64.4		
Chloromethane	74-87-3	50.49	1.1		2.27		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.21	J	0.62		
Trichlorofluoromethane	75-69-4	137.4	0.25	J	1.4		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.11	U	0.45		
Isopropyl Alcohol	67-63-0	60.1	17.9	E	44		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	11.6		27.6		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1		3.47		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	3.3		9.73		
Carbon Tetrachloride	56-23-5	153.8	0.13		0.82		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.32	J	1.56		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.17	J	0.54		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.11	U	0.41		

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Project : US EPA Riverside Industrial Park Superfund Site **Sampling Date :** 03/24/25

Field Id Number : IA-DUP-2-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-08 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	0.94		3.31		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site
Sampling Date : 03/25/25
Field Id Number : IA-B9-2-3242025
Analysis Date : 04/09/25
Laboratory Id Number : Q1665-09
Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.42	J	2.08		
Ethanol	64-17-5	46.07	25.6	E	48.2		
Chloromethane	74-87-3	50.49	0.58		1.2		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.12	J	0.49		
Isopropyl Alcohol	67-63-0	60.1	21.2	E	52.1		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	6.4		15.2		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.2		4.17		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	3.2		9.44		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.3	J	0.96		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.39	J	1.47		

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

Field Id Number : IA-B9-2-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-09 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.2	J	0.92		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.9		6.7		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-4-3242025

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-10

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.39	J	1.93		
Ethanol	64-17-5	46.07	870	E	1639		
Chloromethane	74-87-3	50.49	0.61		1.26		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.19	J	1.07		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.21	J	0.64		
Heptane	142-82-5	100.2	0.14	J	0.57		
Isopropyl Alcohol	67-63-0	60.1	210	E	516		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	76.7	E	182		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.59		2.05		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	160	E	471		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.58		2.83		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	J	0.47		
Benzene	71-43-2	78.11	0.47	J	1.5		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.42	J	1.58		

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

Field Id Number : IA-B10-4-3242025 **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-10 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.11	J	0.54		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	2.2		7.75		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-4-3242025DL

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-10DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	8.4	UD	41.5		
Ethanol	64-17-5	46.07	1100	ED	2072		
Chloromethane	74-87-3	50.49	3.9	UD	8.05		
Vinyl Chloride	75-01-4	62.5	0.56	UD	1.43		
Bromomethane	74-83-9	94.94	5.6	UD	21.7		
Chloroethane	75-00-3	64.52	6.8	UD	17.9		
Tetrahydrofuran	109-99-9	72.11	5.2	UD	15.3		
Trichlorofluoromethane	75-69-4	137.4	6.4	UD	36.0		
Dichlorotetrafluoroethane	76-14-2	170.9	3.5	UD	24.5		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	6.4	UD	49.0		
Bromoethene	593-60-2	106.9	4.8	UD	21.0		
tert-Butyl alcohol	75-65-0	74.12	7.6	UD	23.0		
Heptane	142-82-5	100.2	4.4	UD	18.0		
Isopropyl Alcohol	67-63-0	60.1	610	ED	1499		
1,1-Dichloroethene	75-35-4	96.94	5.6	UD	22.2		
Acetone	67-64-1	58.08	140	D	332		
Carbon Disulfide	75-15-0	76.14	6.4	UD	19.9		
Methyl tert-Butyl Ether	1634-04-4	88.15	4.8	UD	17.3		
Methylene Chloride	75-09-2	84.94	7.6	UD	26.4		
trans-1,2-Dichloroethene	156-60-5	96.94	7.6	UD	30.1		
1,1-Dichloroethane	75-34-3	98.96	5.2	UD	21.0		
Cyclohexane	110-82-7	84.16	8.8	UD	30.3		
2-Butanone	78-93-3	72.11	700	ED	2064		
Carbon Tetrachloride	56-23-5	153.8	0.44	UD	2.77		
cis-1,2-Dichloroethene	156-59-2	96.94	3.6	UD	14.3		
Chloroform	67-66-3	119.4	3.3	UD	16.1		
1,1,1-Trichloroethane	71-55-6	133.4	0.38	UD	2.07		
2,2,4-Trimethylpentane	540-84-1	114.2	4	UD	18.7		
Benzene	71-43-2	78.11	3.5	UD	11.2		
1,2-Dichloroethane	107-06-2	98.96	3.6	UD	14.6		
Trichloroethene	79-01-6	131.4	0.68	UD	3.65		
1,2-Dichloropropane	78-87-5	113	4.4	UD	20.3		
Bromodichloromethane	75-27-4	163.8	3.1	UD	20.8		
4-Methyl-2-Pentanone	108-10-1	100.2	3.7	UD	15.2		
Toluene	108-88-3	92.14	4.4	UD	16.6		

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

Field Id Number : IA-B10-4-3242025DL **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-10DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	2.4	UD	10.9		
cis-1,3-Dichloropropene	10061-01-5	111	2.6	UD	11.8		
1,1,2-Trichloroethane	79-00-5	133.4	2.8	UD	15.3		
Dibromochloromethane	124-48-1	208.3	2.6	UD	22.2		
1,2-Dibromoethane	106-93-4	187.9	2.9	UD	22.3		
Tetrachloroethene	127-18-4	165.8	0.6	UD	4.07		
Chlorobenzene	108-90-7	112.6	3	UD	13.8		
Ethyl Benzene	100-41-4	106.2	4.8	UD	20.8		
m/p-Xylene	179601-23-1	106.2	8.4	UD	36.5		
o-Xylene	95-47-6	106.2	4.8	UD	20.8		
Styrene	100-42-5	104.1	4.4	UD	18.7		
Bromoform	75-25-2	252.8	2.3	UD	23.8		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.44	UD	3.02		
2-Chlorotoluene	95-49-8	126.6	4.4	UD	22.8		
1,3,5-Trimethylbenzene	108-67-8	120.2	4.4	UD	21.6		
1,2,4-Trimethylbenzene	95-63-6	120.2	3.1	UD	15.2		
1,3-Dichlorobenzene	541-73-1	147	3.2	UD	19.2		
1,4-Dichlorobenzene	106-46-7	147	2.1	UD	12.6		
1,2-Dichlorobenzene	95-50-1	147	3	UD	18.0		
1,2,4-Trichlorobenzene	120-82-1	181.5	3.4	UD	25.2		
Hexachloro-1,3-Butadiene	87-68-3	260.8	3.4	UD	36.3		
Naphthalene	91-20-3	128.17	3	UD	15.7		
1,3-Butadiene	106-99-0	54.09	5.2	UD	11.5		
4-Ethyltoluene	622-96-8	120.2	4.8	UD	23.6		
Hexane	110-54-3	86.17	4.4	UD	15.5		
Allyl Chloride	107-05-1	76.53	6	UD	18.8		
1,4-Dioxane	123-91-1	88.12	8.4	UD	30.3		
Methyl Methacrylate	80-62-6	100.117	3.4	UD	13.9		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-4-3242025DL2

Analysis Date : 04/15/25

Laboratory Id Number : Q1665-10DL2

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	21	UD	103		
Ethanol	64-17-5	46.07	790	D	1488		
Chloromethane	74-87-3	50.49	9.8	UD	20.2		
Vinyl Chloride	75-01-4	62.5	1.4	UD	3.58		
Bromomethane	74-83-9	94.94	14	UD	54.4		
Chloroethane	75-00-3	64.52	17	UD	44.9		
Tetrahydrofuran	109-99-9	72.11	13	UD	38.3		
Trichlorofluoromethane	75-69-4	137.4	16	UD	89.9		
Dichlorotetrafluoroethane	76-14-2	170.9	8.8	UD	61.5		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	16	UD	122		
Bromoethene	593-60-2	106.9	12	UD	52.5		
tert-Butyl alcohol	75-65-0	74.12	19	UD	57.6		
Heptane	142-82-5	100.2	11	UD	45.1		
Isopropyl Alcohol	67-63-0	60.1	430	D	1056		
1,1-Dichloroethene	75-35-4	96.94	14	UD	55.5		
Acetone	67-64-1	58.08	120	D	285		
Carbon Disulfide	75-15-0	76.14	16	UD	49.8		
Methyl tert-Butyl Ether	1634-04-4	88.15	12	UD	43.3		
Methylene Chloride	75-09-2	84.94	19	UD	66.0		
trans-1,2-Dichloroethene	156-60-5	96.94	19	UD	75.3		
1,1-Dichloroethane	75-34-3	98.96	13	UD	52.6		
Cyclohexane	110-82-7	84.16	22	UD	75.7		
2-Butanone	78-93-3	72.11	480	D	1415		
Carbon Tetrachloride	56-23-5	153.8	1.1	UD	6.92		
cis-1,2-Dichloroethene	156-59-2	96.94	8.9	UD	35.3		
Chloroform	67-66-3	119.4	8.3	UD	40.5		
1,1,1-Trichloroethane	71-55-6	133.4	0.95	UD	5.18		
2,2,4-Trimethylpentane	540-84-1	114.2	10	UD	46.7		
Benzene	71-43-2	78.11	8.7	UD	27.8		
1,2-Dichloroethane	107-06-2	98.96	9.1	UD	36.8		
Trichloroethene	79-01-6	131.4	1.7	UD	9.14		
1,2-Dichloropropane	78-87-5	113	11	UD	50.8		
Bromodichloromethane	75-27-4	163.8	7.7	UD	51.6		
4-Methyl-2-Pentanone	108-10-1	100.2	9.3	UD	38.1		
Toluene	108-88-3	92.14	11	UD	41.4		

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

Field Id Number : IA-B10-4-3242025DL2 **Analysis Date :** 04/15/25

Laboratory Id Number : Q1665-10DL2 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	6	UD	27.2		
cis-1,3-Dichloropropene	10061-01-5	111	6.4	UD	29.1		
1,1,2-Trichloroethane	79-00-5	133.4	7.1	UD	38.7		
Dibromochloromethane	124-48-1	208.3	6.6	UD	56.2		
1,2-Dibromoethane	106-93-4	187.9	7.2	UD	55.3		
Tetrachloroethene	127-18-4	165.8	1.5	UD	10.2		
Chlorobenzene	108-90-7	112.6	7.6	UD	35		
Ethyl Benzene	100-41-4	106.2	12	UD	52.1		
m/p-Xylene	179601-23-1	106.2	21	UD	91.2		
o-Xylene	95-47-6	106.2	12	UD	52.1		
Styrene	100-42-5	104.1	11	UD	46.8		
Bromoform	75-25-2	252.8	5.7	UD	58.9		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	1.1	UD	7.55		
2-Chlorotoluene	95-49-8	126.6	11	UD	57.0		
1,3,5-Trimethylbenzene	108-67-8	120.2	11	UD	54.1		
1,2,4-Trimethylbenzene	95-63-6	120.2	7.8	UD	38.4		
1,3-Dichlorobenzene	541-73-1	147	8	UD	48.1		
1,4-Dichlorobenzene	106-46-7	147	5.3	UD	31.9		
1,2-Dichlorobenzene	95-50-1	147	7.5	UD	45.1		
1,2,4-Trichlorobenzene	120-82-1	181.5	8.5	UD	63.1		
Hexachloro-1,3-Butadiene	87-68-3	260.8	8.5	UD	90.7		
Naphthalene	91-20-3	128.17	7.5	UD	39.3		
1,3-Butadiene	106-99-0	54.09	13	UD	28.8		
4-Ethyltoluene	622-96-8	120.2	12	UD	59.0		
Hexane	110-54-3	86.17	11	UD	38.8		
Allyl Chloride	107-05-1	76.53	15	UD	47.0		
1,4-Dioxane	123-91-1	88.12	21	UD	75.7		
Methyl Methacrylate	80-62-6	100.117	8.6	UD	35.2		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-1-3242025

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-11

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.43	J	2.13		
Ethanol	64-17-5	46.07	1100	E	2072		
Chloromethane	74-87-3	50.49	0.59		1.22		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.42	J	1.27		
Heptane	142-82-5	100.2	0.11	U	0.45		
Isopropyl Alcohol	67-63-0	60.1	51.2	E	125		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	78.5	E	186		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	14.8		51.4		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	12.3		36.3		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	1.1		5.37		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.46	J	1.47		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.16	J	0.66		
Toluene	108-88-3	92.14	0.4	J	1.51		

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

Field Id Number : IA-B10-1-3242025 **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-11 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.22	J	0.96		
o-Xylene	95-47-6	106.2	0.15	J	0.65		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.16	J	0.79		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.57		2.8		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	8.1		28.6		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-1-3242025DL

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-11DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	2.1	UD	10.4		
Ethanol	64-17-5	46.07	1300	ED	2449		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.14	UD	0.36		
Bromomethane	74-83-9	94.94	1.4	UD	5.44		
Chloroethane	75-00-3	64.52	1.7	UD	4.49		
Tetrahydrofuran	109-99-9	72.11	1.3	UD	3.83		
Trichlorofluoromethane	75-69-4	137.4	1.6	UD	8.99		
Dichlorotetrafluoroethane	76-14-2	170.9	0.88	UD	6.15		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.6	UD	12.3		
Bromoethene	593-60-2	106.9	1.2	UD	5.25		
tert-Butyl alcohol	75-65-0	74.12	1.9	UD	5.76		
Heptane	142-82-5	100.2	1.1	UD	4.51		
Isopropyl Alcohol	67-63-0	60.1	48.3	D	118		
1,1-Dichloroethene	75-35-4	96.94	1.4	UD	5.55		
Acetone	67-64-1	58.08	130	D	308		
Carbon Disulfide	75-15-0	76.14	1.6	UD	4.98		
Methyl tert-Butyl Ether	1634-04-4	88.15	1.2	UD	4.33		
Methylene Chloride	75-09-2	84.94	16.4	D	57.0		
trans-1,2-Dichloroethene	156-60-5	96.94	1.9	UD	7.53		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	10	D	29.5		
Carbon Tetrachloride	56-23-5	153.8	0.11	UD	0.69		
cis-1,2-Dichloroethene	156-59-2	96.94	0.89	UD	3.53		
Chloroform	67-66-3	119.4	1	JD	4.88		
1,1,1-Trichloroethane	71-55-6	133.4	0.1	UD	0.55		
2,2,4-Trimethylpentane	540-84-1	114.2	1	UD	4.67		
Benzene	71-43-2	78.11	0.87	UD	2.78		
1,2-Dichloroethane	107-06-2	98.96	0.91	UD	3.68		
Trichloroethene	79-01-6	131.4	0.17	UD	0.91		
1,2-Dichloropropane	78-87-5	113	1.1	UD	5.08		
Bromodichloromethane	75-27-4	163.8	0.77	UD	5.16		
4-Methyl-2-Pentanone	108-10-1	100.2	0.93	UD	3.81		
Toluene	108-88-3	92.14	1.1	UD	4.15		

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

Field Id Number : IA-B10-1-3242025DL **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-11DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.6	UD	2.72		
cis-1,3-Dichloropropene	10061-01-5	111	0.64	UD	2.91		
1,1,2-Trichloroethane	79-00-5	133.4	0.71	UD	3.87		
Dibromochloromethane	124-48-1	208.3	0.66	UD	5.62		
1,2-Dibromoethane	106-93-4	187.9	0.72	UD	5.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.76	UD	3.5		
Ethyl Benzene	100-41-4	106.2	1.2	UD	5.21		
m/p-Xylene	179601-23-1	106.2	2.1	UD	9.12		
o-Xylene	95-47-6	106.2	1.2	UD	5.21		
Styrene	100-42-5	104.1	1.1	UD	4.68		
Bromoform	75-25-2	252.8	0.57	UD	5.89		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.11	UD	0.76		
2-Chlorotoluene	95-49-8	126.6	1.1	UD	5.7		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	UD	5.41		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.78	UD	3.83		
1,3-Dichlorobenzene	541-73-1	147	0.8	UD	4.81		
1,4-Dichlorobenzene	106-46-7	147	0.53	UD	3.19		
1,2-Dichlorobenzene	95-50-1	147	0.75	UD	4.51		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.85	UD	6.31		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.85	UD	9.07		
Naphthalene	91-20-3	128.17	0.75	UD	3.93		
1,3-Butadiene	106-99-0	54.09	1.3	UD	2.88		
4-Ethyltoluene	622-96-8	120.2	1.2	UD	5.9		
Hexane	110-54-3	86.17	4.4	JD	15.5		
Allyl Chloride	107-05-1	76.53	1.5	UD	4.7		
1,4-Dioxane	123-91-1	88.12	2.1	UD	7.57		
Methyl Methacrylate	80-62-6	100.117	0.86	UD	3.52		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-6-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-12

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.46	J	2.27		
Ethanol	64-17-5	46.07	72.5	E	136		
Chloromethane	74-87-3	50.49	0.55		1.14		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.23	J	1.29		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	1.9		5.76		
Heptane	142-82-5	100.2	0.35	J	1.43		
Isopropyl Alcohol	67-63-0	60.1	61.7	E	151		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	0.24	U	0.57		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	4.4		15.3		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.79		2.33		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.21	J	0.98		
Benzene	71-43-2	78.11	0.37	J	1.18		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	1		4.1		
Toluene	108-88-3	92.14	1.4		5.28		

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

Field Id Number : IA-B2-6-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-12 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.5		2.17		
m/p-Xylene	179601-23-1	106.2	0.82	J	3.56		
o-Xylene	95-47-6	106.2	0.34	J	1.48		
Styrene	100-42-5	104.1	0.45	J	1.92		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.2	J	0.98		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.66		3.24		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.16	J	0.79		
Hexane	110-54-3	86.17	4.9		17.3		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B14-1-3242025

Analysis Date : 04/17/25

Laboratory Id Number : Q1665-15

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.43	J	2.13		
Ethanol	64-17-5	46.07	17.3	E	32.6		
Chloromethane	74-87-3	50.49	0.66		1.36		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.15	J	0.61		
Isopropyl Alcohol	67-63-0	60.1	130	E	319		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	38.4	E	91.2		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.2		4.17		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	0.74		2.18		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.21	J	1.03		
1,1,1-Trichloroethane	71-55-6	133.4	0.04		0.22		
2,2,4-Trimethylpentane	540-84-1	114.2	0.18	J	0.84		
Benzene	71-43-2	78.11	0.24	J	0.77		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.14	J	0.57		
Toluene	108-88-3	92.14	0.88		3.32		

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

Field Id Number : IA-B14-1-3242025 **Analysis Date :** 04/17/25

Laboratory Id Number : Q1665-15 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	5		21.7		
m/p-Xylene	179601-23-1	106.2	21.3		92.5		
o-Xylene	95-47-6	106.2	4.1		17.8		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	J	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.27	J	1.33		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.14		0.73		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	2.7		9.52		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	1		3.6		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B14-1-3242025DL

Analysis Date : 04/17/25

Laboratory Id Number : Q1665-15DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	2.1	UD	10.4		
Ethanol	64-17-5	46.07	27.8	D	52.4		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.14	UD	0.36		
Bromomethane	74-83-9	94.94	1.4	UD	5.44		
Chloroethane	75-00-3	64.52	1.7	UD	4.49		
Tetrahydrofuran	109-99-9	72.11	1.3	UD	3.83		
Trichlorofluoromethane	75-69-4	137.4	1.6	UD	8.99		
Dichlorotetrafluoroethane	76-14-2	170.9	0.88	UD	6.15		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.6	UD	12.3		
Bromoethene	593-60-2	106.9	1.2	UD	5.25		
tert-Butyl alcohol	75-65-0	74.12	1.9	UD	5.76		
Heptane	142-82-5	100.2	1.1	UD	4.51		
Isopropyl Alcohol	67-63-0	60.1	170	ED	417		
1,1-Dichloroethene	75-35-4	96.94	1.4	UD	5.55		
Acetone	67-64-1	58.08	42.5	D	100		
Carbon Disulfide	75-15-0	76.14	1.6	UD	4.98		
Methyl tert-Butyl Ether	1634-04-4	88.15	1.2	UD	4.33		
Methylene Chloride	75-09-2	84.94	1.9	UD	6.6		
trans-1,2-Dichloroethene	156-60-5	96.94	1.9	UD	7.53		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	1.3	JD	3.83		
Carbon Tetrachloride	56-23-5	153.8	0.11	UD	0.69		
cis-1,2-Dichloroethene	156-59-2	96.94	0.89	UD	3.53		
Chloroform	67-66-3	119.4	0.83	UD	4.05		
1,1,1-Trichloroethane	71-55-6	133.4	0.1	UD	0.55		
2,2,4-Trimethylpentane	540-84-1	114.2	1	UD	4.67		
Benzene	71-43-2	78.11	0.87	UD	2.78		
1,2-Dichloroethane	107-06-2	98.96	0.91	UD	3.68		
Trichloroethene	79-01-6	131.4	0.17	UD	0.91		
1,2-Dichloropropane	78-87-5	113	1.1	UD	5.08		
Bromodichloromethane	75-27-4	163.8	0.77	UD	5.16		
4-Methyl-2-Pentanone	108-10-1	100.2	0.93	UD	3.81		
Toluene	108-88-3	92.14	1.1	UD	4.15		

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

Field Id Number : IA-B14-1-3242025DL **Analysis Date :** 04/17/25

Laboratory Id Number : Q1665-15DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.6	UD	2.72		
cis-1,3-Dichloropropene	10061-01-5	111	0.64	UD	2.91		
1,1,2-Trichloroethane	79-00-5	133.4	0.71	UD	3.87		
Dibromochloromethane	124-48-1	208.3	0.66	UD	5.62		
1,2-Dibromoethane	106-93-4	187.9	0.72	UD	5.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.76	UD	3.5		
Ethyl Benzene	100-41-4	106.2	5.1	D	22.2		
m/p-Xylene	179601-23-1	106.2	22.3	D	96.9		
o-Xylene	95-47-6	106.2	4.1	JD	17.8		
Styrene	100-42-5	104.1	1.1	UD	4.68		
Bromoform	75-25-2	252.8	0.57	UD	5.89		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.11	UD	0.76		
2-Chlorotoluene	95-49-8	126.6	1.1	UD	5.7		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	UD	5.41		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.78	UD	3.83		
1,3-Dichlorobenzene	541-73-1	147	0.8	UD	4.81		
1,4-Dichlorobenzene	106-46-7	147	0.53	UD	3.19		
1,2-Dichlorobenzene	95-50-1	147	0.75	UD	4.51		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.85	UD	6.31		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.85	UD	9.07		
Naphthalene	91-20-3	128.17	0.75	UD	3.93		
1,3-Butadiene	106-99-0	54.09	1.3	UD	2.88		
4-Ethyltoluene	622-96-8	120.2	1.2	UD	5.9		
Hexane	110-54-3	86.17	1.1	UD	3.88		
Allyl Chloride	107-05-1	76.53	1.5	UD	4.7		
1,4-Dioxane	123-91-1	88.12	2.1	UD	7.57		
Methyl Methacrylate	80-62-6	100.117	0.86	UD	3.52		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-5-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-16

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.42	J	2.08		
Ethanol	64-17-5	46.07	480	E	904		
Chloromethane	74-87-3	50.49	1		2.07		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.16	J	0.47		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.24	J	0.73		
Heptane	142-82-5	100.2	0.66		2.7		
Isopropyl Alcohol	67-63-0	60.1	29.3	E	72.0		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	11.7		27.8		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.65		2.26		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.5		1.72		
2-Butanone	78-93-3	72.11	0.8		2.36		
Carbon Tetrachloride	56-23-5	153.8	0.09		0.57		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.18	J	0.88		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	1		4.67		
Benzene	71-43-2	78.11	0.68		2.17		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	6.7		25.2		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-5-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-16

Target Analyts : Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.58		2.52		
m/p-Xylene	179601-23-1	106.2	2		8.69		
o-Xylene	95-47-6	106.2	0.69		3		
Styrene	100-42-5	104.1	0.25	J	1.06		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.32	J	1.66		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.27	J	1.33		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.76		3.74		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.24	J	1.18		
Hexane	110-54-3	86.17	3.2		11.3		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Sampling Date : 03/25/25

Field Id Number : IA-B10-3-3242025

Analysis Date : 04/11/25

Laboratory Id Number : Q1665-18

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.44	J	2.18		
Ethanol	64-17-5	46.07	1400	E	2637		
Chloromethane	74-87-3	50.49	0.61		1.26		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.19	J	1.07		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.45	J	1.36		
Heptane	142-82-5	100.2	0.19	J	0.78		
Isopropyl Alcohol	67-63-0	60.1	86.2	E	211		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	90.6	E	215		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.9		3.13		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	22.7	E	67.0		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	1.5		7.33		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.68		2.17		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.45	J	1.84		
Toluene	108-88-3	92.14	0.54		2.03		

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

Field Id Number : IA-B10-3-3242025 **Analysis Date :** 04/11/25

Laboratory Id Number : Q1665-18 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.04		0.27		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.21	U	0.91		
o-Xylene	95-47-6	106.2	0.12	U	0.52		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.16	J	0.79		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	2.7		9.52		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B10-3-3242025DL

Analysis Date : 04/15/25

Laboratory Id Number : Q1665-18DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	2.1	UD	10.4		
Ethanol	64-17-5	46.07	1800	ED	3391		
Chloromethane	74-87-3	50.49	0.98	UD	2.02		
Vinyl Chloride	75-01-4	62.5	0.14	UD	0.36		
Bromomethane	74-83-9	94.94	1.4	UD	5.44		
Chloroethane	75-00-3	64.52	1.7	UD	4.49		
Tetrahydrofuran	109-99-9	72.11	1.3	UD	3.83		
Trichlorofluoromethane	75-69-4	137.4	1.6	UD	8.99		
Dichlorotetrafluoroethane	76-14-2	170.9	0.88	UD	6.15		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	1.6	UD	12.3		
Bromoethene	593-60-2	106.9	1.2	UD	5.25		
tert-Butyl alcohol	75-65-0	74.12	1.9	UD	5.76		
Heptane	142-82-5	100.2	1.1	UD	4.51		
Isopropyl Alcohol	67-63-0	60.1	78.9	D	193		
1,1-Dichloroethene	75-35-4	96.94	1.4	UD	5.55		
Acetone	67-64-1	58.08	150	D	356		
Carbon Disulfide	75-15-0	76.14	1.6	UD	4.98		
Methyl tert-Butyl Ether	1634-04-4	88.15	1.2	UD	4.33		
Methylene Chloride	75-09-2	84.94	1.9	UD	6.6		
trans-1,2-Dichloroethene	156-60-5	96.94	1.9	UD	7.53		
1,1-Dichloroethane	75-34-3	98.96	1.3	UD	5.26		
Cyclohexane	110-82-7	84.16	2.2	UD	7.57		
2-Butanone	78-93-3	72.11	15.1	D	44.5		
Carbon Tetrachloride	56-23-5	153.8	0.11	UD	0.69		
cis-1,2-Dichloroethene	156-59-2	96.94	0.89	UD	3.53		
Chloroform	67-66-3	119.4	1.3	JD	6.35		
1,1,1-Trichloroethane	71-55-6	133.4	0.1	UD	0.55		
2,2,4-Trimethylpentane	540-84-1	114.2	1	UD	4.67		
Benzene	71-43-2	78.11	0.87	UD	2.78		
1,2-Dichloroethane	107-06-2	98.96	0.91	UD	3.68		
Trichloroethene	79-01-6	131.4	0.17	UD	0.91		
1,2-Dichloropropane	78-87-5	113	1.1	UD	5.08		
Bromodichloromethane	75-27-4	163.8	0.77	UD	5.16		
4-Methyl-2-Pentanone	108-10-1	100.2	0.93	UD	3.81		
Toluene	108-88-3	92.14	1.1	UD	4.15		

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

Field Id Number : IA-B10-3-3242025DL **Analysis Date :** 04/15/25

Laboratory Id Number : Q1665-18DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.6	UD	2.72		
cis-1,3-Dichloropropene	10061-01-5	111	0.64	UD	2.91		
1,1,2-Trichloroethane	79-00-5	133.4	0.71	UD	3.87		
Dibromochloromethane	124-48-1	208.3	0.66	UD	5.62		
1,2-Dibromoethane	106-93-4	187.9	0.72	UD	5.53		
Tetrachloroethene	127-18-4	165.8	0.15	UD	1.02		
Chlorobenzene	108-90-7	112.6	0.76	UD	3.5		
Ethyl Benzene	100-41-4	106.2	1.2	UD	5.21		
m/p-Xylene	179601-23-1	106.2	2.1	UD	9.12		
o-Xylene	95-47-6	106.2	1.2	UD	5.21		
Styrene	100-42-5	104.1	1.1	UD	4.68		
Bromoform	75-25-2	252.8	0.57	UD	5.89		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.11	UD	0.76		
2-Chlorotoluene	95-49-8	126.6	1.1	UD	5.7		
1,3,5-Trimethylbenzene	108-67-8	120.2	1.1	UD	5.41		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.78	UD	3.83		
1,3-Dichlorobenzene	541-73-1	147	0.8	UD	4.81		
1,4-Dichlorobenzene	106-46-7	147	0.53	UD	3.19		
1,2-Dichlorobenzene	95-50-1	147	0.75	UD	4.51		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.85	UD	6.31		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.85	UD	9.07		
Naphthalene	91-20-3	128.17	0.75	UD	3.93		
1,3-Butadiene	106-99-0	54.09	1.3	UD	2.88		
4-Ethyltoluene	622-96-8	120.2	1.2	UD	5.9		
Hexane	110-54-3	86.17	1.7	JD	5.99		
Allyl Chloride	107-05-1	76.53	1.5	UD	4.7		
1,4-Dioxane	123-91-1	88.12	2.1	UD	7.57		
Methyl Methacrylate	80-62-6	100.117	0.86	UD	3.52		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-2-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-19

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.46	J	2.27		
Ethanol	64-17-5	46.07	320	E	602		
Chloromethane	74-87-3	50.49	0.66		1.36		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	2.9		8.79		
Heptane	142-82-5	100.2	0.49	J	2.01		
Isopropyl Alcohol	67-63-0	60.1	32	E	78.7		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	17.2	E	40.9		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.89		3.09		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	1.6		4.72		
Carbon Tetrachloride	56-23-5	153.8	0.06		0.38		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.67		3.13		
Benzene	71-43-2	78.11	0.45	J	1.44		
1,2-Dichloroethane	107-06-2	98.96	0.46	J	1.86		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.4	J	1.64		
Toluene	108-88-3	92.14	4		15.1		

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

Field Id Number : IA-B2-2-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-19 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.05		0.34		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.5		2.17		
m/p-Xylene	179601-23-1	106.2	1.2		5.21		
o-Xylene	95-47-6	106.2	0.5		2.17		
Styrene	100-42-5	104.1	0.32	J	1.36		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.14	J	0.69		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.39	J	1.92		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	J	0.59		
Hexane	110-54-3	86.17	2.4		8.46		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-2-3242025DL

Analysis Date : 04/29/25

Laboratory Id Number : Q1665-19DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.84	UD	4.15		
Ethanol	64-17-5	46.07	320	ED	602		
Chloromethane	74-87-3	50.49	0.39	UD	0.81		
Vinyl Chloride	75-01-4	62.5	0.06	UD	0.15		
Bromomethane	74-83-9	94.94	0.56	UD	2.17		
Chloroethane	75-00-3	64.52	0.68	UD	1.79		
Tetrahydrofuran	109-99-9	72.11	0.52	UD	1.53		
Trichlorofluoromethane	75-69-4	137.4	0.64	UD	3.6		
Dichlorotetrafluoroethane	76-14-2	170.9	0.35	UD	2.45		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.64	UD	4.91		
Bromoethene	593-60-2	106.9	0.48	UD	2.1		
tert-Butyl alcohol	75-65-0	74.12	2.7	D	8.19		
Heptane	142-82-5	100.2	0.44	UD	1.8		
Isopropyl Alcohol	67-63-0	60.1	30.8	D	75.7		
1,1-Dichloroethene	75-35-4	96.94	0.56	UD	2.22		
Acetone	67-64-1	58.08	17.3	D	41.1		
Carbon Disulfide	75-15-0	76.14	0.64	UD	1.99		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.48	UD	1.73		
Methylene Chloride	75-09-2	84.94	2.1	D	7.3		
trans-1,2-Dichloroethene	156-60-5	96.94	0.76	UD	3.01		
1,1-Dichloroethane	75-34-3	98.96	0.52	UD	2.1		
Cyclohexane	110-82-7	84.16	0.88	UD	3.03		
2-Butanone	78-93-3	72.11	1.4	JD	4.13		
Carbon Tetrachloride	56-23-5	153.8	0.04	UD	0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.36	UD	1.43		
Chloroform	67-66-3	119.4	0.33	UD	1.61		
1,1,1-Trichloroethane	71-55-6	133.4	0.04	UD	0.22		
2,2,4-Trimethylpentane	540-84-1	114.2	0.5	JD	2.34		
Benzene	71-43-2	78.11	0.35	UD	1.12		
1,2-Dichloroethane	107-06-2	98.96	0.36	UD	1.46		
Trichloroethene	79-01-6	131.4	0.07	UD	0.38		
1,2-Dichloropropane	78-87-5	113	0.44	UD	2.03		
Bromodichloromethane	75-27-4	163.8	0.31	UD	2.08		
4-Methyl-2-Pentanone	108-10-1	100.2	0.37	UD	1.52		
Toluene	108-88-3	92.14	2.8	D	10.6		

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

Field Id Number : IA-B2-2-3242025DL **Analysis Date :** 04/29/25

Laboratory Id Number : Q1665-19DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.24	UD	1.09		
cis-1,3-Dichloropropene	10061-01-5	111	0.26	UD	1.18		
1,1,2-Trichloroethane	79-00-5	133.4	0.28	UD	1.53		
Dibromochloromethane	124-48-1	208.3	0.26	UD	2.22		
1,2-Dibromoethane	106-93-4	187.9	0.29	UD	2.23		
Tetrachloroethene	127-18-4	165.8	0.06	UD	0.41		
Chlorobenzene	108-90-7	112.6	0.3	UD	1.38		
Ethyl Benzene	100-41-4	106.2	0.48	UD	2.08		
m/p-Xylene	179601-23-1	106.2	0.84	UD	3.65		
o-Xylene	95-47-6	106.2	0.48	UD	2.08		
Styrene	100-42-5	104.1	0.44	UD	1.87		
Bromoform	75-25-2	252.8	0.23	UD	2.38		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.04	UD	0.27		
2-Chlorotoluene	95-49-8	126.6	0.44	UD	2.28		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.44	UD	2.16		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.31	UD	1.52		
1,3-Dichlorobenzene	541-73-1	147	0.32	UD	1.92		
1,4-Dichlorobenzene	106-46-7	147	0.21	UD	1.26		
1,2-Dichlorobenzene	95-50-1	147	0.3	UD	1.8		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.34	UD	2.52		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.34	UD	3.63		
Naphthalene	91-20-3	128.17	0.3	UD	1.57		
1,3-Butadiene	106-99-0	54.09	0.52	UD	1.15		
4-Ethyltoluene	622-96-8	120.2	0.48	UD	2.36		
Hexane	110-54-3	86.17	1.7	JD	5.99		
Allyl Chloride	107-05-1	76.53	0.6	UD	1.88		
1,4-Dioxane	123-91-1	88.12	0.84	UD	3.03		
Methyl Methacrylate	80-62-6	100.117	0.34	UD	1.39		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B9-3-3242025

Analysis Date : 04/09/25

Laboratory Id Number : Q1665-20

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.42	J	2.08		
Ethanol	64-17-5	46.07	31.7	E	59.7		
Chloromethane	74-87-3	50.49	0.49	J	1.01		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.28	J	0.83		
Trichlorofluoromethane	75-69-4	137.4	0.21	J	1.18		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.19	U	0.58		
Heptane	142-82-5	100.2	0.16	J	0.66		
Isopropyl Alcohol	67-63-0	60.1	39	E	95.9		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	8		19		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.3		4.52		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.22	U	0.76		
2-Butanone	78-93-3	72.11	2.5		7.37		
Carbon Tetrachloride	56-23-5	153.8	0.08		0.5		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.1	U	0.47		
Benzene	71-43-2	78.11	0.28	J	0.89		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	0.53		2		

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

Field Id Number : IA-B9-3-3242025 **Analysis Date :** 04/09/25

Laboratory Id Number : Q1665-20 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.13	J	0.6		
Ethyl Benzene	100-41-4	106.2	0.12	U	0.52		
m/p-Xylene	179601-23-1	106.2	0.22	J	0.96		
o-Xylene	95-47-6	106.2	0.13	J	0.56		
Styrene	100-42-5	104.1	0.11	U	0.47		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.11	U	0.54		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.08	U	0.39		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	U	0.59		
Hexane	110-54-3	86.17	1.5		5.29		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-1-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-21

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.46	J	2.27		
Ethanol	64-17-5	46.07	690	E	1300		
Chloromethane	74-87-3	50.49	0.69		1.42		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.22	J	1.24		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.28	J	0.85		
Heptane	142-82-5	100.2	0.39	J	1.6		
Isopropyl Alcohol	67-63-0	60.1	40	E	98.3		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	15.2	E	36.1		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	1.6		5.56		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.3	J	1.03		
2-Butanone	78-93-3	72.11	0.71		2.09		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	0.49	J	2.29		
Benzene	71-43-2	78.11	0.43	J	1.37		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	8.5		32.0		

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

Field Id Number : IA-B2-1-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-21 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.38	J	1.65		
m/p-Xylene	179601-23-1	106.2	1.2		5.21		
o-Xylene	95-47-6	106.2	0.52		2.26		
Styrene	100-42-5	104.1	0.24	J	1.02		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	J	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.13	J	0.64		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.27	J	1.33		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.12	J	0.59		
Hexane	110-54-3	86.17	3		10.6		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-1-3242025DL

Analysis Date : 04/29/25

Laboratory Id Number : Q1665-21DL

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.84	UD	4.15		
Ethanol	64-17-5	46.07	770	ED	1450		
Chloromethane	74-87-3	50.49	0.64	JD	1.32		
Vinyl Chloride	75-01-4	62.5	0.06	UD	0.15		
Bromomethane	74-83-9	94.94	0.56	UD	2.17		
Chloroethane	75-00-3	64.52	0.68	UD	1.79		
Tetrahydrofuran	109-99-9	72.11	0.52	UD	1.53		
Trichlorofluoromethane	75-69-4	137.4	0.64	UD	3.6		
Dichlorotetrafluoroethane	76-14-2	170.9	0.35	UD	2.45		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.64	UD	4.91		
Bromoethene	593-60-2	106.9	0.48	UD	2.1		
tert-Butyl alcohol	75-65-0	74.12	0.76	UD	2.3		
Heptane	142-82-5	100.2	0.44	UD	1.8		
Isopropyl Alcohol	67-63-0	60.1	36.8	D	90.5		
1,1-Dichloroethene	75-35-4	96.94	0.56	UD	2.22		
Acetone	67-64-1	58.08	15.7	D	37.3		
Carbon Disulfide	75-15-0	76.14	0.64	UD	1.99		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.48	UD	1.73		
Methylene Chloride	75-09-2	84.94	3.2	D	11.1		
trans-1,2-Dichloroethene	156-60-5	96.94	0.76	UD	3.01		
1,1-Dichloroethane	75-34-3	98.96	0.52	UD	2.1		
Cyclohexane	110-82-7	84.16	0.88	UD	3.03		
2-Butanone	78-93-3	72.11	0.7	JD	2.06		
Carbon Tetrachloride	56-23-5	153.8	0.04	UD	0.25		
cis-1,2-Dichloroethene	156-59-2	96.94	0.36	UD	1.43		
Chloroform	67-66-3	119.4	0.33	UD	1.61		
1,1,1-Trichloroethane	71-55-6	133.4	0.04	UD	0.22		
2,2,4-Trimethylpentane	540-84-1	114.2	0.4	UD	1.87		
Benzene	71-43-2	78.11	0.35	UD	1.12		
1,2-Dichloroethane	107-06-2	98.96	0.36	UD	1.46		
Trichloroethene	79-01-6	131.4	0.07	UD	0.38		
1,2-Dichloropropane	78-87-5	113	0.44	UD	2.03		
Bromodichloromethane	75-27-4	163.8	0.31	UD	2.08		
4-Methyl-2-Pentanone	108-10-1	100.2	0.37	UD	1.52		
Toluene	108-88-3	92.14	5.7	D	21.5		

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

Field Id Number : IA-B2-1-3242025DL **Analysis Date :** 04/29/25

Laboratory Id Number : Q1665-21DL **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.24	UD	1.09		
cis-1,3-Dichloropropene	10061-01-5	111	0.26	UD	1.18		
1,1,2-Trichloroethane	79-00-5	133.4	0.28	UD	1.53		
Dibromochloromethane	124-48-1	208.3	0.26	UD	2.22		
1,2-Dibromoethane	106-93-4	187.9	0.29	UD	2.23		
Tetrachloroethene	127-18-4	165.8	0.06	UD	0.41		
Chlorobenzene	108-90-7	112.6	0.3	UD	1.38		
Ethyl Benzene	100-41-4	106.2	0.48	UD	2.08		
m/p-Xylene	179601-23-1	106.2	0.84	UD	3.65		
o-Xylene	95-47-6	106.2	0.48	UD	2.08		
Styrene	100-42-5	104.1	0.44	UD	1.87		
Bromoform	75-25-2	252.8	0.23	UD	2.38		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.04	UD	0.27		
2-Chlorotoluene	95-49-8	126.6	0.44	UD	2.28		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.44	UD	2.16		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.31	UD	1.52		
1,3-Dichlorobenzene	541-73-1	147	0.32	UD	1.92		
1,4-Dichlorobenzene	106-46-7	147	0.21	UD	1.26		
1,2-Dichlorobenzene	95-50-1	147	0.3	UD	1.8		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.34	UD	2.52		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.34	UD	3.63		
Naphthalene	91-20-3	128.17	0.3	UD	1.57		
1,3-Butadiene	106-99-0	54.09	0.52	UD	1.15		
4-Ethyltoluene	622-96-8	120.2	0.48	UD	2.36		
Hexane	110-54-3	86.17	2.3	D	8.11		
Allyl Chloride	107-05-1	76.53	0.6	UD	1.88		
1,4-Dioxane	123-91-1	88.12	0.84	UD	3.03		
Methyl Methacrylate	80-62-6	100.117	0.34	UD	1.39		

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Project : US EPA Riverside Industrial Park Superfund Site

Sampling Date : 03/25/25

Field Id Number : IA-B2-4-3242025

Analysis Date : 04/28/25

Laboratory Id Number : Q1665-22

Target Analyts : Air Results

Chemical	Cas Number	Molecular Weight	Insert Results in PPBV	Qualifier	Generate Results in ug/m3	QAS Decision	Foot Notes
Dichlorodifluoromethane	75-71-8	120.9	0.5		2.47		
Ethanol	64-17-5	46.07	250	E	471		
Chloromethane	74-87-3	50.49	0.6		1.24		
Vinyl Chloride	75-01-4	62.5	0.01	U	0.03		
Bromomethane	74-83-9	94.94	0.14	U	0.54		
Chloroethane	75-00-3	64.52	0.17	U	0.45		
Tetrahydrofuran	109-99-9	72.11	0.13	U	0.38		
Trichlorofluoromethane	75-69-4	137.4	0.23	J	1.29		
Dichlorotetrafluoroethane	76-14-2	170.9	0.09	U	0.63		
1,1,2-Trichlorotrifluoroethane	76-13-1	187.4	0.16	U	1.23		
Bromoethene	593-60-2	106.9	0.12	U	0.52		
tert-Butyl alcohol	75-65-0	74.12	0.3	J	0.91		
Heptane	142-82-5	100.2	0.66		2.7		
Isopropyl Alcohol	67-63-0	60.1	28.3	E	69.6		
1,1-Dichloroethene	75-35-4	96.94	0.14	U	0.56		
Acetone	67-64-1	58.08	13.8		32.8		
Carbon Disulfide	75-15-0	76.14	0.16	U	0.5		
Methyl tert-Butyl Ether	1634-04-4	88.15	0.12	U	0.43		
Methylene Chloride	75-09-2	84.94	0.6		2.08		
trans-1,2-Dichloroethene	156-60-5	96.94	0.19	U	0.75		
1,1-Dichloroethane	75-34-3	98.96	0.13	U	0.53		
Cyclohexane	110-82-7	84.16	0.26	J	0.89		
2-Butanone	78-93-3	72.11	0.52		1.53		
Carbon Tetrachloride	56-23-5	153.8	0.07		0.44		
cis-1,2-Dichloroethene	156-59-2	96.94	0.09	U	0.36		
Chloroform	67-66-3	119.4	0.08	U	0.39		
1,1,1-Trichloroethane	71-55-6	133.4	0.01	U	0.05		
2,2,4-Trimethylpentane	540-84-1	114.2	1.2		5.6		
Benzene	71-43-2	78.11	0.56		1.79		
1,2-Dichloroethane	107-06-2	98.96	0.09	U	0.36		
Trichloroethene	79-01-6	131.4	0.02	U	0.11		
1,2-Dichloropropane	78-87-5	113	0.11	U	0.51		
Bromodichloromethane	75-27-4	163.8	0.08	U	0.54		
4-Methyl-2-Pentanone	108-10-1	100.2	0.09	U	0.37		
Toluene	108-88-3	92.14	4.7		17.7		

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

Field Id Number : IA-B2-4-3242025 **Analysis Date :** 04/28/25

Laboratory Id Number : Q1665-22 **Target Analyts :** Air Results

t-1,3-Dichloropropene	10061-02-6	111	0.06	U	0.27		
cis-1,3-Dichloropropene	10061-01-5	111	0.06	U	0.27		
1,1,2-Trichloroethane	79-00-5	133.4	0.07	U	0.38		
Dibromochloromethane	124-48-1	208.3	0.07	U	0.6		
1,2-Dibromoethane	106-93-4	187.9	0.07	U	0.54		
Tetrachloroethene	127-18-4	165.8	0.02	U	0.14		
Chlorobenzene	108-90-7	112.6	0.08	U	0.37		
Ethyl Benzene	100-41-4	106.2	0.51		2.22		
m/p-Xylene	179601-23-1	106.2	1.8		7.82		
o-Xylene	95-47-6	106.2	0.69		3		
Styrene	100-42-5	104.1	0.14	J	0.6		
Bromoform	75-25-2	252.8	0.06	U	0.62		
1,1,2,2-Tetrachloroethane	79-34-5	167.9	0.01	U	0.07		
2-Chlorotoluene	95-49-8	126.6	0.11	U	0.57		
1,3,5-Trimethylbenzene	108-67-8	120.2	0.19	J	0.93		
1,2,4-Trimethylbenzene	95-63-6	120.2	0.51		2.51		
1,3-Dichlorobenzene	541-73-1	147	0.08	U	0.48		
1,4-Dichlorobenzene	106-46-7	147	0.05	U	0.3		
1,2-Dichlorobenzene	95-50-1	147	0.08	U	0.48		
1,2,4-Trichlorobenzene	120-82-1	181.5	0.09	U	0.67		
Hexachloro-1,3-Butadiene	87-68-3	260.8	0.09	U	0.96		
Naphthalene	91-20-3	128.17	0.08	U	0.42		
1,3-Butadiene	106-99-0	54.09	0.13	U	0.29		
4-Ethyltoluene	622-96-8	120.2	0.18	J	0.88		
Hexane	110-54-3	86.17	2.7		9.52		
Allyl Chloride	107-05-1	76.53	0.15	U	0.47		
1,4-Dioxane	123-91-1	88.12	0.21	U	0.76		
Methyl Methacrylate	80-62-6	100.117	0.09	U	0.37		

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

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

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

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

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

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

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

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

QC SUMMARY

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

Surrogate Summary

SDG No.: Q1665

Client: Woodard & Curran

Analytical Method: SWTO-15

Lab Sample ID	Client ID	Parameter	Spike	Result	RecoveryQual	Limits Low	Limits High
Q1665-01	AA-DUP-1-3242025	1-Bromo-4-Fluorobenzene	10	9.12	91	70 (65)	130 (135)
Q1665-01DUP	AA-DUP-1-3242025DUP	1-Bromo-4-Fluorobenzene	10	9.35	93	70 (65)	130 (135)
Q1665-03	IA-B10-2-3242025	1-Bromo-4-Fluorobenzene	10	9.83	98	70 (65)	130 (135)
Q1665-03DL	IA-B10-2-3242025DL	1-Bromo-4-Fluorobenzene	10	9.07	91	70 (65)	130 (135)
Q1665-03DUP	IA-B10-2-3242025DUP	1-Bromo-4-Fluorobenzene	10	9.74	97	70 (65)	130 (135)
Q1665-04	AA-1-3242025	1-Bromo-4-Fluorobenzene	10	9.22	92	70 (65)	130 (135)
Q1665-05	IA-B2-3-3242025	1-Bromo-4-Fluorobenzene	10	10.5	105	70 (65)	130 (135)
Q1665-06	IA-B9-1-3242025	1-Bromo-4-Fluorobenzene	10	9.36	94	70 (65)	130 (135)
Q1665-07	IA-DUP-1-3242025	1-Bromo-4-Fluorobenzene	10	10.4	104	70 (65)	130 (135)
Q1665-07DL	IA-DUP-1-3242025DL	1-Bromo-4-Fluorobenzene	10	10.7	107	70 (65)	130 (135)
Q1665-08	IA-DUP-2-3242025	1-Bromo-4-Fluorobenzene	10	9.13	91	70 (65)	130 (135)
Q1665-09	IA-B9-2-3242025	1-Bromo-4-Fluorobenzene	10	9.71	97	70 (65)	130 (135)
Q1665-10	IA-B10-4-3242025	1-Bromo-4-Fluorobenzene	10	9.57	96	70 (65)	130 (135)
Q1665-10DL	IA-B10-4-3242025DL	1-Bromo-4-Fluorobenzene	10	9.14	91	70 (65)	130 (135)
Q1665-10DL2	IA-B10-4-3242025DL2	1-Bromo-4-Fluorobenzene	10	9.33	93	70 (65)	130 (135)
Q1665-11	IA-B10-1-3242025	1-Bromo-4-Fluorobenzene	10	10.0	100	70 (65)	130 (135)
Q1665-11DL	IA-B10-1-3242025DL	1-Bromo-4-Fluorobenzene	10	9.22	92	70 (65)	130 (135)
Q1665-12	IA-B2-6-3242025	1-Bromo-4-Fluorobenzene	10	10.5	105	70 (65)	130 (135)
Q1665-15	IA-B14-1-3242025	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
Q1665-15DL	IA-B14-1-3242025DL	1-Bromo-4-Fluorobenzene	10	10.2	102	70 (65)	130 (135)
Q1665-16	IA-B2-5-3242025	1-Bromo-4-Fluorobenzene	10	10.7	107	70 (65)	130 (135)
Q1665-18	IA-B10-3-3242025	1-Bromo-4-Fluorobenzene	10	9.39	94	70 (65)	130 (135)
Q1665-18DL	IA-B10-3-3242025DL	1-Bromo-4-Fluorobenzene	10	9.51	95	70 (65)	130 (135)
Q1665-19	IA-B2-2-3242025	1-Bromo-4-Fluorobenzene	10	10.7	107	70 (65)	130 (135)
Q1665-19DL	IA-B2-2-3242025DL	1-Bromo-4-Fluorobenzene	10	11.3	113	70 (65)	130 (135)
Q1665-20	IA-B9-3-3242025	1-Bromo-4-Fluorobenzene	10	9.39	94	70 (65)	130 (135)
Q1665-21	IA-B2-1-3242025	1-Bromo-4-Fluorobenzene	10	10.5	105	70 (65)	130 (135)
Q1665-21DL	IA-B2-1-3242025DL	1-Bromo-4-Fluorobenzene	10	10.9	109	70 (65)	130 (135)
Q1665-22	IA-B2-4-3242025	1-Bromo-4-Fluorobenzene	10	10.4	104	70 (65)	130 (135)
VL0409ABL01	VL0409ABL01	1-Bromo-4-Fluorobenzene	10	9.13	91	70 (65)	130 (135)
VL0409ABS02	VL0409ABS02	1-Bromo-4-Fluorobenzene	10	9.52	95	70 (65)	130 (135)
VL0411ABL01	VL0411ABL01	1-Bromo-4-Fluorobenzene	10	9.05	91	70 (65)	130 (135)
VL0411ABS01	VL0411ABS01	1-Bromo-4-Fluorobenzene	10	9.91	99	70 (65)	130 (135)
VL0415ABL01	VL0415ABL01	1-Bromo-4-Fluorobenzene	10	9.25	93	70 (65)	130 (135)
VL0415ABS01	VL0415ABS01	1-Bromo-4-Fluorobenzene	10	9.72	97	70 (65)	130 (135)
VL0417ABL01	VL0417ABL01	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
VL0417ABS01	VL0417ABS01	1-Bromo-4-Fluorobenzene	10	10.1	101	70 (65)	130 (135)
VL0428ABL01	VL0428ABL01	1-Bromo-4-Fluorobenzene	10	10.4	105	70 (65)	130 (135)
VL0428ABS01	VL0428ABS01	1-Bromo-4-Fluorobenzene	10	10.5	105	70 (65)	130 (135)
VL0429ABL01	VL0429ABL01	1-Bromo-4-Fluorobenzene	10	10.6	106	70 (65)	130 (135)
VL0429ABS01	VL0429ABS01	1-Bromo-4-Fluorobenzene	10	11.3	113	70 (65)	130 (135)

( ) = LABORATORY INHOUSE LIMIT

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042289.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0409ABS02	Dichlorodifluoromethane	10	9.60	ppbv	96			40 (70)	160 (130)	
	Ethanol	10	4.50	ppbv	45		*	70 (70)	130 (130)	
	Chloromethane	10	9.80	ppbv	98			40 (70)	160 (130)	
	Vinyl Chloride	10	8.70	ppbv	87			70 (70)	130 (130)	
	Bromomethane	10	9.00	ppbv	90			40 (70)	160 (130)	
	Chloroethane	10	9.20	ppbv	92			40 (70)	160 (130)	
	Tetrahydrofuran	10	10.7	ppbv	107			70 (70)	130 (130)	
	Trichlorofluoromethane	10	9.50	ppbv	95			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Bromoethene	10	8.80	ppbv	88			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	8.30	ppbv	83			70 (70)	130 (130)	
	Heptane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Isopropyl Alcohol	10	8.80	ppbv	88			70 (70)	130 (130)	
	1,1-Dichloroethene	10	8.90	ppbv	89			70 (70)	130 (130)	
	Acetone	10	8.90	ppbv	89			40 (70)	160 (130)	
	Carbon disulfide	10	9.30	ppbv	93			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	8.50	ppbv	85			70 (70)	130 (130)	
	Methylene Chloride	10	8.40	ppbv	84			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	8.80	ppbv	88			70 (70)	130 (130)	
	1,1-Dichloroethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	Cyclohexane	10	9.40	ppbv	94			70 (70)	130 (130)	
	2-Butanone	10	10.9	ppbv	109			40 (70)	160 (130)	
	Carbon Tetrachloride	10	10.4	ppbv	104			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.70	ppbv	97			70 (70)	130 (130)	
	Chloroform	10	10.4	ppbv	104			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	8.90	ppbv	89			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	10.7	ppbv	107			70 (70)	130 (130)	
	Benzene	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,2-Dichloroethane	10	11.0	ppbv	110			70 (70)	130 (130)	
	Trichloroethene	10	10.1	ppbv	101			70 (70)	130 (130)	
	1,2-Dichloropropane	10	10.6	ppbv	106			70 (70)	130 (130)	
	Bromodichloromethane	10	10.9	ppbv	109			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	9.60	ppbv	96			40 (70)	160 (130)	
	Toluene	10	9.90	ppbv	99			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	8.50	ppbv	85			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	10.8	ppbv	108			70 (70)	130 (130)	
	Dibromochloromethane	10	10.5	ppbv	105			70 (70)	130 (130)	
	1,2-Dibromoethane	10	10.6	ppbv	106			70 (70)	130 (130)	
	Tetrachloroethene	10	8.90	ppbv	89			70 (70)	130 (130)	
	Chlorobenzene	10	11.4	ppbv	114			70 (70)	130 (130)	
	Ethyl Benzene	10	10.6	ppbv	106			70 (70)	130 (130)	
	m/p-Xylene	20	22.2	ppbv	111			70 (70)	130 (130)	
	o-Xylene	10	11.0	ppbv	110			70 (70)	130 (130)	
	Styrene	10	10.0	ppbv	100			70 (70)	130 (130)	
	Bromoform	10	10.4	ppbv	104			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	11.8	ppbv	118			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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

SW-846

SDG No.:	**Q1665**	**Analytical Method:**	**SWTO-15**
Client:	**Woodard & Curran**	**Datafile :**	VL042289.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0409ABS02	2-Chlorotoluene	10	10.9	ppbv	109			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	10.9	ppbv	109			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	10.7	ppbv	107			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	11.6	ppbv	116			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	11.7	ppbv	117			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	11.9	ppbv	119			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	10.8	ppbv	108			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	9.30	ppbv	93			70 (70)	130 (130)	
	Naphthalene	10	11.3	ppbv	113			40 (70)	160 (130)	
	1,3-Butadiene	10	8.60	ppbv	86			70 (70)	130 (130)	
	4-Ethyltoluene	10	11.1	ppbv	111			70 (70)	130 (130)	
	Hexane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Allyl Chloride	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,4-Dioxane	10	9.40	ppbv	94			40 (70)	160 (130)	
	Methyl methacrylate	10	9.40	ppbv	94			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042314.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0411ABS01	Dichlorodifluoromethane	10	9.90	ppbv	99			40 (70)	160 (130)	
	Ethanol	10	4.20	ppbv	42		*	70 (70)	130 (130)	
	Chloromethane	10	10.2	ppbv	102			40 (70)	160 (130)	
	Vinyl Chloride	10	8.70	ppbv	87			70 (70)	130 (130)	
	Bromomethane	10	8.90	ppbv	89			40 (70)	160 (130)	
	Chloroethane	10	9.30	ppbv	93			40 (70)	160 (130)	
	Tetrahydrofuran	10	10.9	ppbv	109			70 (70)	130 (130)	
	Trichlorofluoromethane	10	9.60	ppbv	96			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.10	ppbv	91			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	9.80	ppbv	98			70 (70)	130 (130)	
	Bromoethene	10	8.80	ppbv	88			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	7.80	ppbv	78			70 (70)	130 (130)	
	Heptane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Isopropyl Alcohol	10	8.40	ppbv	84			70 (70)	130 (130)	
	1,1-Dichloroethene	10	8.40	ppbv	84			70 (70)	130 (130)	
	Acetone	10	9.20	ppbv	92			40 (70)	160 (130)	
	Carbon disulfide	10	8.80	ppbv	88			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	7.90	ppbv	79			70 (70)	130 (130)	
	Methylene Chloride	10	8.10	ppbv	81			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	8.70	ppbv	87			70 (70)	130 (130)	
	1,1-Dichloroethane	10	9.80	ppbv	98			70 (70)	130 (130)	
	Cyclohexane	10	9.00	ppbv	90			70 (70)	130 (130)	
	2-Butanone	10	11.3	ppbv	113			40 (70)	160 (130)	
	Carbon Tetrachloride	10	11.2	ppbv	112			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	Chloroform	10	10.5	ppbv	105			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	8.80	ppbv	88			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	11.4	ppbv	114			70 (70)	130 (130)	
	Benzene	10	11.1	ppbv	111			70 (70)	130 (130)	
	1,2-Dichloroethane	10	11.5	ppbv	115			70 (70)	130 (130)	
	Trichloroethene	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,2-Dichloropropane	10	11.2	ppbv	112			70 (70)	130 (130)	
	Bromodichloromethane	10	11.7	ppbv	117			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	10.1	ppbv	101			40 (70)	160 (130)	
	Toluene	10	10.1	ppbv	101			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	8.30	ppbv	83			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	11.7	ppbv	117			70 (70)	130 (130)	
	Dibromochloromethane	10	11.2	ppbv	112			70 (70)	130 (130)	
	1,2-Dibromoethane	10	11.2	ppbv	112			70 (70)	130 (130)	
	Tetrachloroethene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Chlorobenzene	10	12.5	ppbv	125			70 (70)	130 (130)	
	Ethyl Benzene	10	11.1	ppbv	111			70 (70)	130 (130)	
	m/p-Xylene	20	24.2	ppbv	121			70 (70)	130 (130)	
	o-Xylene	10	11.9	ppbv	119			70 (70)	130 (130)	
	Styrene	10	10.5	ppbv	105			70 (70)	130 (130)	
	Bromoform	10	11.3	ppbv	113			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	13.2	ppbv	132		*	70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042314.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0411ABS01	2-Chlorotoluene	10	11.8	ppbv	118			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	11.9	ppbv	119			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	11.9	ppbv	119			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	12.8	ppbv	128			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	12.9	ppbv	129			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	13.2	ppbv	132		*	70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	10.8	ppbv	108			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	9.80	ppbv	98			70 (70)	130 (130)	
	Naphthalene	10	10.9	ppbv	109			40 (70)	160 (130)	
	1,3-Butadiene	10	9.10	ppbv	91			70 (70)	130 (130)	
	4-Ethyltoluene	10	12.1	ppbv	121			70 (70)	130 (130)	
	Hexane	10	10.0	ppbv	100			70 (70)	130 (130)	
	Allyl Chloride	10	8.90	ppbv	89			70 (70)	130 (130)	
	1,4-Dioxane	10	9.40	ppbv	94			40 (70)	160 (130)	
	Methyl methacrylate	10	9.50	ppbv	95			70 (70)	130 (130)	

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

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042328.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0415ABS01	Dichlorodifluoromethane	10	8.40	ppbv	84			40 (70)	160 (130)	
	Ethanol	10	3.90	ppbv	39		*	70 (70)	130 (130)	
	Chloromethane	10	8.50	ppbv	85			40 (70)	160 (130)	
	Vinyl Chloride	10	7.50	ppbv	75			70 (70)	130 (130)	
	Bromomethane	10	7.70	ppbv	77			40 (70)	160 (130)	
	Chloroethane	10	7.90	ppbv	79			40 (70)	160 (130)	
	Tetrahydrofuran	10	9.40	ppbv	94			70 (70)	130 (130)	
	Trichlorofluoromethane	10	8.20	ppbv	82			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	7.60	ppbv	76			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	8.20	ppbv	82			70 (70)	130 (130)	
	Bromoethene	10	7.40	ppbv	74			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	6.80	ppbv	68		*	70 (70)	130 (130)	
	Heptane	10	8.50	ppbv	85			70 (70)	130 (130)	
	Isopropyl Alcohol	10	7.40	ppbv	74			70 (70)	130 (130)	
	1,1-Dichloroethene	10	7.30	ppbv	73			70 (70)	130 (130)	
	Acetone	10	7.40	ppbv	74			40 (70)	160 (130)	
	Carbon disulfide	10	7.40	ppbv	74			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	7.20	ppbv	72			70 (70)	130 (130)	
	Methylene Chloride	10	6.70	ppbv	67		*	70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	7.20	ppbv	72			70 (70)	130 (130)	
	1,1-Dichloroethane	10	8.30	ppbv	83			70 (70)	130 (130)	
	Cyclohexane	10	7.90	ppbv	79			70 (70)	130 (130)	
	2-Butanone	10	9.30	ppbv	93			40 (70)	160 (130)	
	Carbon Tetrachloride	10	9.10	ppbv	91			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	8.10	ppbv	81			70 (70)	130 (130)	
	Chloroform	10	8.80	ppbv	88			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	7.50	ppbv	75			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Benzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2-Dichloroethane	10	9.30	ppbv	93			70 (70)	130 (130)	
	Trichloroethene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.30	ppbv	93			70 (70)	130 (130)	
	Bromodichloromethane	10	9.40	ppbv	94			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	8.40	ppbv	84			40 (70)	160 (130)	
	Toluene	10	8.60	ppbv	86			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	7.20	ppbv	72			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	7.80	ppbv	78			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Dibromochloromethane	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.10	ppbv	91			70 (70)	130 (130)	
	Tetrachloroethene	10	8.00	ppbv	80			70 (70)	130 (130)	
	Chlorobenzene	10	9.70	ppbv	97			70 (70)	130 (130)	
	Ethyl Benzene	10	8.70	ppbv	87			70 (70)	130 (130)	
	m/p-Xylene	20	18.5	ppbv	93			70 (70)	130 (130)	
	o-Xylene	10	9.10	ppbv	91			70 (70)	130 (130)	
	Styrene	10	8.20	ppbv	82			70 (70)	130 (130)	
	Bromoform	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	10.2	ppbv	102			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042328.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0415ABS01	2-Chlorotoluene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	9.10	ppbv	91			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	8.90	ppbv	89			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	10.2	ppbv	102			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	8.10	ppbv	81			70 (70)	130 (130)	
	Naphthalene	10	10.0	ppbv	100			40 (70)	160 (130)	
	1,3-Butadiene	10	7.60	ppbv	76			70 (70)	130 (130)	
	4-Ethyltoluene	10	9.20	ppbv	92			70 (70)	130 (130)	
	Hexane	10	8.50	ppbv	85			70 (70)	130 (130)	
	Allyl Chloride	10	7.50	ppbv	75			70 (70)	130 (130)	
	1,4-Dioxane	10	8.10	ppbv	81			40 (70)	160 (130)	
	Methyl methacrylate	10	8.10	ppbv	81			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042358.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0417ABS01	Dichlorodifluoromethane	10	10.3	ppbv	103			40 (70)	160 (130)	
	Ethanol	10	3.20	ppbv	32		*	70 (70)	130 (130)	
	Chloromethane	10	10.1	ppbv	101			40 (70)	160 (130)	
	Vinyl Chloride	10	9.00	ppbv	90			70 (70)	130 (130)	
	Bromomethane	10	9.20	ppbv	92			40 (70)	160 (130)	
	Chloroethane	10	10.1	ppbv	101			40 (70)	160 (130)	
	Tetrahydrofuran	10	9.70	ppbv	97			70 (70)	130 (130)	
	Trichlorofluoromethane	10	10.1	ppbv	101			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	10.1	ppbv	101			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	Bromoethene	10	9.80	ppbv	98			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	9.80	ppbv	98			70 (70)	130 (130)	
	Heptane	10	9.20	ppbv	92			70 (70)	130 (130)	
	Isopropyl Alcohol	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,1-Dichloroethene	10	9.80	ppbv	98			70 (70)	130 (130)	
	Acetone	10	8.70	ppbv	87			40 (70)	160 (130)	
	Carbon disulfide	10	10.2	ppbv	102			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	9.50	ppbv	95			70 (70)	130 (130)	
	Methylene Chloride	10	8.90	ppbv	89			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	9.70	ppbv	97			70 (70)	130 (130)	
	1,1-Dichloroethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	Cyclohexane	10	10.1	ppbv	101			70 (70)	130 (130)	
	2-Butanone	10	9.80	ppbv	98			40 (70)	160 (130)	
	Carbon Tetrachloride	10	9.60	ppbv	96			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	10.4	ppbv	104			70 (70)	130 (130)	
	Chloroform	10	10.2	ppbv	102			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	9.70	ppbv	97			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	10.0	ppbv	100			70 (70)	130 (130)	
	Benzene	10	10.1	ppbv	101			70 (70)	130 (130)	
	1,2-Dichloroethane	10	10.4	ppbv	104			70 (70)	130 (130)	
	Trichloroethene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Bromodichloromethane	10	10.3	ppbv	103			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	8.80	ppbv	88			40 (70)	160 (130)	
	Toluene	10	9.80	ppbv	98			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	9.90	ppbv	99			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	10.1	ppbv	101			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	Dibromochloromethane	10	10.3	ppbv	103			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Tetrachloroethene	10	8.80	ppbv	88			70 (70)	130 (130)	
	Chlorobenzene	10	10.0	ppbv	100			70 (70)	130 (130)	
	Ethyl Benzene	10	10.0	ppbv	100			70 (70)	130 (130)	
	m/p-Xylene	20	19.8	ppbv	99			70 (70)	130 (130)	
	o-Xylene	10	9.80	ppbv	98			70 (70)	130 (130)	
	Styrene	10	10.1	ppbv	101			70 (70)	130 (130)	
	Bromoform	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	8.90	ppbv	89			70 (70)	130 (130)	

( ) = LABORATORY INHOUSE LIMIT

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	**Q1665**	**Analytical Method:**	**SWTO-15**
Client:	**Woodard & Curran**	**Datafile :**	VL042358.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0417ABS01	2-Chlorotoluene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	9.60	ppbv	96			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	9.40	ppbv	94			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	9.10	ppbv	91			70 (70)	130 (130)	
	Naphthalene	10	9.00	ppbv	90			40 (70)	160 (130)	
	1,3-Butadiene	10	9.10	ppbv	91			70 (70)	130 (130)	
	4-Ethyltoluene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Hexane	10	9.80	ppbv	98			70 (70)	130 (130)	
	Allyl Chloride	10	9.70	ppbv	97			70 (70)	130 (130)	
	1,4-Dioxane	10	8.70	ppbv	87			40 (70)	160 (130)	
	Methyl methacrylate	10	9.30	ppbv	93			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042418.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0428ABS01	Dichlorodifluoromethane	10	10.0	ppbv	100			40 (70)	160 (130)	
	Ethanol	10	3.00	ppbv	30		*	70 (70)	130 (130)	
	Chloromethane	10	9.70	ppbv	97			40 (70)	160 (130)	
	Vinyl Chloride	10	8.70	ppbv	87			70 (70)	130 (130)	
	Bromomethane	10	9.40	ppbv	94			40 (70)	160 (130)	
	Chloroethane	10	9.50	ppbv	95			40 (70)	160 (130)	
	Tetrahydrofuran	10	8.40	ppbv	84			70 (70)	130 (130)	
	Trichlorofluoromethane	10	10.0	ppbv	100			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	10.0	ppbv	100			70 (70)	130 (130)	
	Bromoethene	10	9.60	ppbv	96			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	8.90	ppbv	89			70 (70)	130 (130)	
	Heptane	10	7.60	ppbv	76			70 (70)	130 (130)	
	Isopropyl Alcohol	10	8.80	ppbv	88			70 (70)	130 (130)	
	1,1-Dichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	Acetone	10	8.60	ppbv	86			40 (70)	160 (130)	
	Carbon disulfide	10	9.40	ppbv	94			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	8.70	ppbv	87			70 (70)	130 (130)	
	Methylene Chloride	10	7.90	ppbv	79			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1-Dichloroethane	10	9.40	ppbv	94			70 (70)	130 (130)	
	Cyclohexane	10	8.60	ppbv	86			70 (70)	130 (130)	
	2-Butanone	10	8.60	ppbv	86			40 (70)	160 (130)	
	Carbon Tetrachloride	10	9.90	ppbv	99			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Chloroform	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	9.50	ppbv	95			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	8.70	ppbv	87			70 (70)	130 (130)	
	Benzene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,2-Dichloroethane	10	10.6	ppbv	106			70 (70)	130 (130)	
	Trichloroethene	10	8.30	ppbv	83			70 (70)	130 (130)	
	1,2-Dichloropropane	10	8.80	ppbv	88			70 (70)	130 (130)	
	Bromodichloromethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	7.70	ppbv	77			40 (70)	160 (130)	
	Toluene	10	8.90	ppbv	89			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	9.10	ppbv	91			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	9.10	ppbv	91			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	9.50	ppbv	95			70 (70)	130 (130)	
	Dibromochloromethane	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.20	ppbv	92			70 (70)	130 (130)	
	Tetrachloroethene	10	8.10	ppbv	81			70 (70)	130 (130)	
	Chlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Ethyl Benzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	m/p-Xylene	20	19.0	ppbv	95			70 (70)	130 (130)	
	o-Xylene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Styrene	10	9.10	ppbv	91			70 (70)	130 (130)	
	Bromoform	10	9.20	ppbv	92			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	8.80	ppbv	88			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042418.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0428ABS01	2-Chlorotoluene	10	9.60	ppbv	96			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	8.90	ppbv	89			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	9.10	ppbv	91			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	8.70	ppbv	87			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	8.80	ppbv	88			70 (70)	130 (130)	
	Naphthalene	10	8.50	ppbv	85			40 (70)	160 (130)	
	1,3-Butadiene	10	9.00	ppbv	90			70 (70)	130 (130)	
	4-Ethyltoluene	10	9.40	ppbv	94			70 (70)	130 (130)	
	Hexane	10	8.10	ppbv	81			70 (70)	130 (130)	
	Allyl Chloride	10	9.00	ppbv	90			70 (70)	130 (130)	
	1,4-Dioxane	10	8.00	ppbv	80			40 (70)	160 (130)	
	Methyl methacrylate	10	8.30	ppbv	83			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1665 **Analytical Method:** SWTO-15

Client: Woodard & Curran **Datafile :** VL042438.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0429ABS01	Dichlorodifluoromethane	10	11.6	ppbv	116			40 (70)	160 (130)	
	Ethanol	10	2.90	ppbv	29		*	70 (70)	130 (130)	
	Chloromethane	10	11.0	ppbv	110			40 (70)	160 (130)	
	Vinyl Chloride	10	9.60	ppbv	96			70 (70)	130 (130)	
	Bromomethane	10	10.7	ppbv	107			40 (70)	160 (130)	
	Chloroethane	10	10.5	ppbv	105			40 (70)	160 (130)	
	Tetrahydrofuran	10	8.50	ppbv	85			70 (70)	130 (130)	
	Trichlorofluoromethane	10	11.5	ppbv	115			40 (70)	160 (130)	
	1,1,2-Trichlorotrifluoroethane	10	10.9	ppbv	109			70 (70)	130 (130)	
	Dichlorotetrafluoethane	10	11.2	ppbv	112			70 (70)	130 (130)	
	Bromoethene	10	10.7	ppbv	107			70 (70)	130 (130)	
	tert-Butyl Alcohol	10	9.70	ppbv	97			70 (70)	130 (130)	
	Heptane	10	7.60	ppbv	76			70 (70)	130 (130)	
	Isopropyl Alcohol	10	9.80	ppbv	98			70 (70)	130 (130)	
	1,1-Dichloroethene	10	10.2	ppbv	102			70 (70)	130 (130)	
	Acetone	10	9.90	ppbv	99			40 (70)	160 (130)	
	Carbon disulfide	10	10.4	ppbv	104			40 (70)	160 (130)	
	Methyl tert-butyl Ether	10	9.30	ppbv	93			70 (70)	130 (130)	
	Methylene Chloride	10	9.00	ppbv	90			70 (70)	130 (130)	
	trans-1,2-Dichloroethene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,1-Dichloroethane	10	10.9	ppbv	109			70 (70)	130 (130)	
	Cyclohexane	10	8.60	ppbv	86			70 (70)	130 (130)	
	2-Butanone	10	9.30	ppbv	93			40 (70)	160 (130)	
	Carbon Tetrachloride	10	11.0	ppbv	110			70 (70)	130 (130)	
	cis-1,2-Dichloroethene	10	9.60	ppbv	96			70 (70)	130 (130)	
	Chloroform	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,1,1-Trichloroethane	10	10.3	ppbv	103			70 (70)	130 (130)	
	2,2,4-Trimethylpentane	10	9.00	ppbv	90			70 (70)	130 (130)	
	Benzene	10	9.30	ppbv	93			70 (70)	130 (130)	
	1,2-Dichloroethane	10	12.0	ppbv	120			70 (70)	130 (130)	
	Trichloroethene	10	8.50	ppbv	85			70 (70)	130 (130)	
	1,2-Dichloropropane	10	9.00	ppbv	90			70 (70)	130 (130)	
	Bromodichloromethane	10	11.1	ppbv	111			70 (70)	130 (130)	
	4-Methyl-2-Pentanone	10	7.80	ppbv	78			40 (70)	160 (130)	
	Toluene	10	8.80	ppbv	88			70 (70)	130 (130)	
	t-1,3-Dichloropropene	10	8.90	ppbv	89			70 (70)	130 (130)	
	cis-1,3-Dichloropropene	10	8.80	ppbv	88			70 (70)	130 (130)	
	1,1,2-Trichloroethane	10	9.90	ppbv	99			70 (70)	130 (130)	
	Dibromochloromethane	10	10.2	ppbv	102			70 (70)	130 (130)	
	1,2-Dibromoethane	10	9.60	ppbv	96			70 (70)	130 (130)	
	Tetrachloroethene	10	8.00	ppbv	80			70 (70)	130 (130)	
	Chlorobenzene	10	10.3	ppbv	103			70 (70)	130 (130)	
	Ethyl Benzene	10	10.1	ppbv	101			70 (70)	130 (130)	
	m/p-Xylene	20	20.9	ppbv	104			70 (70)	130 (130)	
	o-Xylene	10	10.6	ppbv	106			70 (70)	130 (130)	
	Styrene	10	9.20	ppbv	92			70 (70)	130 (130)	
	Bromoform	10	9.40	ppbv	94			70 (70)	130 (130)	
	1,1,2,2-Tetrachloroethane	10	9.80	ppbv	98			70 (70)	130 (130)	

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	**Q1665**	**Analytical Method:**	**SWTO-15**
Client:	**Woodard & Curran**	**Datafile :**	VL042438.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Limits Low	Limits High	RPD
VL0429ABS01	2-Chlorotoluene	10	10.6	ppbv	106			70 (70)	130 (130)	
	1,3,5-Trimethylbenzene	10	10.4	ppbv	104			70 (70)	130 (130)	
	1,2,4-Trimethylbenzene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,3-Dichlorobenzene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,4-Dichlorobenzene	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,2-Dichlorobenzene	10	10.1	ppbv	101			70 (70)	130 (130)	
	1,2,4-Trichlorobenzene	10	9.50	ppbv	95			70 (70)	130 (130)	
	Hexachloro-1,3-butadiene	10	10.0	ppbv	100			70 (70)	130 (130)	
	Naphthalene	10	9.40	ppbv	94			40 (70)	160 (130)	
	1,3-Butadiene	10	9.90	ppbv	99			70 (70)	130 (130)	
	4-Ethyltoluene	10	10.4	ppbv	104			70 (70)	130 (130)	
	Hexane	10	8.30	ppbv	83			70 (70)	130 (130)	
	Allyl Chloride	10	9.90	ppbv	99			70 (70)	130 (130)	
	1,4-Dioxane	10	7.50	ppbv	75			40 (70)	160 (130)	
	Methyl methacrylate	10	8.00	ppbv	80			70 (70)	130 (130)	

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Duplicate Sample Summary

Lab Sample Id :	Q1665-01DUP		Q1665-01	
Client Id :	AA-DUP-1-3242025DUP		AA-DUP-1-3242025	
DF :	1		1	
Datafile :	VL042291.D		VL042290.D	
Anal Date & Time :	04/09/2025	14:02	04/09/2025	13:25

Parameter	Result	Result	RPD
1,1,1-Trichloroethane	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0
1,1,2-Trichloroethane	0	0	0
1,1,2-Trichlorotrifluoroethane	0	0	0
1,1-Dichloroethane	0	0	0
1,1-Dichloroethene	0	0	0
1,2,4-Trichlorobenzene	0	0	0
1,2,4-Trimethylbenzene	0	0	0
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0	0	0
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0	0	0
1,3-Butadiene	0	0	0
1,3-Dichlorobenzene	0	0	0
1,4-Dichlorobenzene	0	0	0
1,4-Dioxane	0	0	0
2,2,4-Trimethylpentane	0	0	0
2-Butanone	0.33	0.36	8.7
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0	0	0
4-Methyl-2-Pentanone	0	0	0
Acetone	3.6	3.6	0
Allyl Chloride	0	0	0
Benzene	0.24	0.25	4.1
Bromodichloromethane	0	0	0
Bromoethene	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1665-01DUP	Q1665-01
Client Id :	AA-DUP-1-3242025DUP	AA-DUP-1-3242025
DF :	1	1
Datafile :	VL042291.D	VL042290.D
Anal Date & Time :	04/09/2025 14:02	04/09/2025 13:25

Parameter	Result	Result	RPD
Carbon Tetrachloride	0.08	0.07	13.3
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	0	0	0
Chloromethane	0.55	0.56	1.8
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	0	0	0
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.38	0.4	5.1
Dichlorotetrafluoroethane	0	0	0
Ethanol	12.8	13.4	4.6
Ethyl Benzene	0	0	0
Heptane	0.1	0.11	9.5
Hexachloro-1,3-Butadiene	0	0	0
Hexane	1.4	1.6	13.3
Isopropyl Alcohol	1.9	1.8	5.4
m/p-Xylene	0.12	0	200 *
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	0.95	0.95	0
Naphthalene	0	0	0
o-Xylene	0	0	0
Styrene	0	0	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0	0	0
Tetrachloroethene	0	0	0
Tetrahydrofuran	0	0	0
Toluene	0.28	0.32	13.3
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1665-01DUP		Q1665-01	
Client Id :	AA-DUP-1-3242025DUP		AA-DUP-1-3242025	
DF :	1		1	
Datafile :	VL042291.D		VL042290.D	
Anal Date & Time :	04/09/2025	14:02	04/09/2025	13:25

Parameter	Result	Result	RPD
Trichlorofluoromethane	0.22	0.21	4.7
Vinyl Chloride	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1665-03DUP	Q1665-03
Client Id :	IA-B10-2-3242025DUP	IA-B10-2-3242025
DF :	1	1
Datafile :	VL042318.D	VL042317.D
Anal Date & Time :	04/11/2025 13:52	04/11/2025 13:15

Parameter	Result	Result	RPD
1,1,1-Trichloroethane	0	0	0
1,1,2,2-Tetrachloroethane	0	0	0
1,1,2-Trichloroethane	0	0	0
1,1,2-Trichlorotrifluoroethane	0	0	0
1,1-Dichloroethane	0	0	0
1,1-Dichloroethene	0	0	0
1,2,4-Trichlorobenzene	0	0	0
1,2,4-Trimethylbenzene	0.13	0.12	8
1,2-Dibromoethane	0	0	0
1,2-Dichlorobenzene	0	0	0
1,2-Dichloroethane	0	0	0
1,2-Dichloropropane	0	0	0
1,3,5-Trimethylbenzene	0	0	0
1,3-Butadiene	0	0	0
1,3-Dichlorobenzene	0	0	0
1,4-Dichlorobenzene	0	0	0
1,4-Dioxane	0	0	0
2,2,4-Trimethylpentane	0	0	0
2-Butanone	26.6	26.8	0.75
2-Chlorotoluene	0	0	0
4-Ethyltoluene	0	0	0
4-Methyl-2-Pentanone	0	0	0
Acetone	82.1	82.7	0.73
Allyl Chloride	0	0	0
Benzene	0.6	0.6	0
Bromodichloromethane	0	0	0
Bromoethene	0	0	0
Bromoform	0	0	0
Bromomethane	0	0	0
Carbon Disulfide	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1665-03DUP		Q1665-03	
Client Id :	IA-B10-2-3242025DUP		IA-B10-2-3242025	
DF :	1		1	
Datafile :	VL042318.D		VL042317.D	
Anal Date & Time :	04/11/2025	13:52	04/11/2025	13:15

Parameter	Result	Result	RPD
Carbon Tetrachloride	0.09	0.09	0
Chlorobenzene	0	0	0
Chloroethane	0	0	0
Chloroform	1.4	1.4	0
Chloromethane	0.59	0.59	0
cis-1,2-Dichloroethene	0	0	0
cis-1,3-Dichloropropene	0	0	0
Cyclohexane	0	0	0
Dibromochloromethane	0	0	0
Dichlorodifluoromethane	0.42	0.4	4.9
Dichlorotetrafluoroethane	0	0	0
Ethanol	1300	1300	0
Ethyl Benzene	0	0	0
Heptane	0.19	0.17	11.1
Hexachloro-1,3-Butadiene	0	0	0
Hexane	2.7	2.5	7.7
Isopropyl Alcohol	83.2	81.1	2.6
m/p-Xylene	0.2	0	200 *
Methyl Methacrylate	0	0	0
Methyl tert-Butyl Ether	0	0	0
Methylene Chloride	1.6	1.6	0
Naphthalene	0	0	0
o-Xylene	0.12	0.12	0
Styrene	0	0	0
t-1,3-Dichloropropene	0	0	0
tert-Butyl alcohol	0.46	0.47	2.2
Tetrachloroethene	0.04	0.04	0
Tetrahydrofuran	0	0	0
Toluene	0.51	0.49	4
trans-1,2-Dichloroethene	0	0	0
Trichloroethene	0	0	0

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Duplicate Sample Summary

Lab Sample Id :	Q1665-03DUP		Q1665-03	
Client Id :	IA-B10-2-3242025DUP		IA-B10-2-3242025	
DF :	1		1	
Datafile :	VL042318.D		VL042317.D	
Anal Date & Time :	04/11/2025	13:52	04/11/2025	13:15

Parameter	Result	Result	RPD
Trichlorofluoromethane	0.22	0.21	4.7
Vinyl Chloride	0	0	0

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0409ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042287.D Lab Sample ID: VL0409ABL01

Date Analyzed: 04/09/2025 Time Analyzed: 11:03

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0409ABS02	VL0409ABS02	VL042289.D	04/09/2025
AA-DUP-1-3242025	Q1665-01	VL042290.D	04/09/2025
AA-DUP-1-3242025DUP	Q1665-01DUP	VL042291.D	04/09/2025
AA-1-3242025	Q1665-04	VL042292.D	04/09/2025
IA-B9-1-3242025	Q1665-06	VL042293.D	04/09/2025
IA-DUP-2-3242025	Q1665-08	VL042294.D	04/09/2025
IA-B9-2-3242025	Q1665-09	VL042295.D	04/09/2025
IA-B9-3-3242025	Q1665-20	VL042296.D	04/09/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0411ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042313.D Lab Sample ID: VL0411ABL01

Date Analyzed: 04/11/2025 Time Analyzed: 10:36

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0411ABS01	VL0411ABS01	VL042314.D	04/11/2025
IA-B10-2-3242025	Q1665-03	VL042317.D	04/11/2025
IA-B10-2-3242025DUP	Q1665-03DUP	VL042318.D	04/11/2025
IA-B10-4-3242025	Q1665-10	VL042319.D	04/11/2025
IA-B10-1-3242025	Q1665-11	VL042320.D	04/11/2025
IA-B10-3-3242025	Q1665-18	VL042321.D	04/11/2025
IA-B10-2-3242025DL	Q1665-03DL	VL042322.D	04/11/2025
IA-B10-4-3242025DL	Q1665-10DL	VL042323.D	04/11/2025
IA-B10-1-3242025DL	Q1665-11DL	VL042324.D	04/11/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0415ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042327.D Lab Sample ID: VL0415ABL01

Date Analyzed: 04/15/2025 Time Analyzed: 12:12

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0415ABS01	VL0415ABS01	VL042328.D	04/15/2025
IA-B10-3-3242025DL	Q1665-18DL	VL042331.D	04/15/2025
IA-B10-4-3242025DL2	Q1665-10DL2	VL042332.D	04/15/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0417ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042357.D Lab Sample ID: VL0417ABL01

Date Analyzed: 04/17/2025 Time Analyzed: 14:23

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0417ABS01	VL0417ABS01	VL042358.D	04/17/2025
IA-B14-1-3242025	Q1665-15	VL042359.D	04/17/2025
IA-B14-1-3242025DL	Q1665-15DL	VL042360.D	04/17/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0428ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042417.D Lab Sample ID: VL0428ABL01

Date Analyzed: 04/28/2025 Time Analyzed: 09:27

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0428ABS01	VL0428ABS01	VL042418.D	04/28/2025
IA-B2-3-3242025	Q1665-05	VL042419.D	04/28/2025
IA-DUP-1-3242025	Q1665-07	VL042420.D	04/28/2025
IA-B2-6-3242025	Q1665-12	VL042421.D	04/28/2025
IA-B2-5-3242025	Q1665-16	VL042422.D	04/28/2025
IA-B2-2-3242025	Q1665-19	VL042423.D	04/28/2025
IA-B2-1-3242025	Q1665-21	VL042424.D	04/28/2025
IA-B2-4-3242025	Q1665-22	VL042425.D	04/28/2025

COMMENTS:

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VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VL0429ABL01

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042437.D Lab Sample ID: VL0429ABL01

Date Analyzed: 04/29/2025 Time Analyzed: 09:25

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

Instrument ID: MSVOA_L

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
VL0429ABS01	VL0429ABS01	VL042438.D	04/29/2025
IA-DUP-1-3242025DL	Q1665-07DL	VL042451.D	04/29/2025
IA-B2-2-3242025DL	Q1665-19DL	VL042452.D	04/29/2025
IA-B2-1-3242025DL	Q1665-21DL	VL042453.D	04/29/2025

COMMENTS:

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

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

Instrument ID: MSVOA_L BFB Injection Time: 07:44

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23
75	30.0 - 66.0% of mass 95	56.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	63.8
175	4.0 - 9.0% of mass 174	5.1 (8) 1
176	93.0 - 101.0% of mass 174	61.1 (95.7) 1
177	5.0 - 9.0% of mass 176	4.2 (6.8) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042172.D	03/27/2025	08:26
VSTDICC002	VSTDICC002	VL042173.D	03/27/2025	08:59
VSTDICC001	VSTDICC001	VL042174.D	03/27/2025	09:30
VSTDICC0.5	VSTDICC0.5	VL042175.D	03/27/2025	10:01
VSTDICC0.1	VSTDICC0.1	VL042176.D	03/27/2025	10:32
VSTDICC0.03	VSTDICC0.03	VL042177.D	03/27/2025	11:03
VSTDICC015	VSTDICC015	VL042178.D	03/27/2025	11:36

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042285.D BFB Injection Date: 04/09/2025

Instrument ID: MSVOA_L BFB Injection Time: 09:38

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.2
75	30.0 - 66.0% of mass 95	57.1
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.5 (0.8) 1
174	50.0 - 120.0% of mass 95	61.3
175	4.0 - 9.0% of mass 174	4.2 (6.9) 1
176	93.0 - 101.0% of mass 174	57.5 (93.9) 1
177	5.0 - 9.0% of mass 176	3.7 (6.4) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042286.D	04/09/2025	10:20
VL0409ABL01	VL0409ABL01	VL042287.D	04/09/2025	11:03
VL0409ABS02	VL0409ABS02	VL042289.D	04/09/2025	12:31
AA-DUP-1-3242025	Q1665-01	VL042290.D	04/09/2025	13:25
AA-DUP-1-3242025DUP	Q1665-01DUP	VL042291.D	04/09/2025	14:02
AA-1-3242025	Q1665-04	VL042292.D	04/09/2025	14:36
IA-B9-1-3242025	Q1665-06	VL042293.D	04/09/2025	15:15
IA-DUP-2-3242025	Q1665-08	VL042294.D	04/09/2025	15:50
IA-B9-2-3242025	Q1665-09	VL042295.D	04/09/2025	16:23
IA-B9-3-3242025	Q1665-20	VL042296.D	04/09/2025	16:57

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042311.D BFB Injection Date: 04/11/2025

Instrument ID: MSVOA_L BFB Injection Time: 08:18

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.4
75	30.0 - 66.0% of mass 95	57.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.3 (0.5) 1
174	50.0 - 120.0% of mass 95	61.1
175	4.0 - 9.0% of mass 174	4.6 (7.5) 1
176	93.0 - 101.0% of mass 174	57.9 (94.7) 1
177	5.0 - 9.0% of mass 176	3.8 (6.6) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042312.D	04/11/2025	09:50
VL0411ABL01	VL0411ABL01	VL042313.D	04/11/2025	10:36
VL0411ABS01	VL0411ABS01	VL042314.D	04/11/2025	11:23
IA-B10-2-3242025	Q1665-03	VL042317.D	04/11/2025	13:15
IA-B10-2-3242025DUP	Q1665-03DUP	VL042318.D	04/11/2025	13:52
IA-B10-4-3242025	Q1665-10	VL042319.D	04/11/2025	14:27
IA-B10-1-3242025	Q1665-11	VL042320.D	04/11/2025	15:01
IA-B10-3-3242025	Q1665-18	VL042321.D	04/11/2025	15:36
IA-B10-2-3242025DL	Q1665-03DL	VL042322.D	04/11/2025	16:08
IA-B10-4-3242025DL	Q1665-10DL	VL042323.D	04/11/2025	16:39
IA-B10-1-3242025DL	Q1665-11DL	VL042324.D	04/11/2025	17:10

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042325.D BFB Injection Date: 04/15/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:45

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24
75	30.0 - 66.0% of mass 95	55.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.8 (1.3) 1
174	50.0 - 120.0% of mass 95	62.4
175	4.0 - 9.0% of mass 174	4.3 (6.8) 1
176	93.0 - 101.0% of mass 174	59.1 (94.8) 1
177	5.0 - 9.0% of mass 176	3.7 (6.2) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042326.D	04/15/2025	11:30
VL0415ABL01	VL0415ABL01	VL042327.D	04/15/2025	12:12
VL0415ABS01	VL0415ABS01	VL042328.D	04/15/2025	12:54
IA-B10-3-3242025DL	Q1665-18DL	VL042331.D	04/15/2025	14:29
IA-B10-4-3242025DL2	Q1665-10DL2	VL042332.D	04/15/2025	15:01

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042348.D BFB Injection Date: 04/17/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:50

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	23.1
75	30.0 - 66.0% of mass 95	57
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0) 1
174	50.0 - 120.0% of mass 95	59.5
175	4.0 - 9.0% of mass 174	4.5 (7.6) 1
176	93.0 - 101.0% of mass 174	57.6 (96.9) 1
177	5.0 - 9.0% of mass 176	3.6 (6.3) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDICCC010	VSTDICCC010	VL042349.D	04/17/2025	09:44
VSTDICC002	VSTDICC002	VL042350.D	04/17/2025	10:17
VSTDICC001	VSTDICC001	VL042351.D	04/17/2025	10:48
VSTDICC0.5	VSTDICC0.5	VL042352.D	04/17/2025	11:19
VSTDICC0.1	VSTDICC0.1	VL042353.D	04/17/2025	11:50
VSTDICC0.03	VSTDICC0.03	VL042354.D	04/17/2025	12:22
VSTDICC015	VSTDICC015	VL042355.D	04/17/2025	12:54
VL0417ABL01	VL0417ABL01	VL042357.D	04/17/2025	14:23
VL0417ABS01	VL0417ABS01	VL042358.D	04/17/2025	15:39
IA-B14-1-3242025	Q1665-15	VL042359.D	04/17/2025	16:12
IA-B14-1-3242025DL	Q1665-15DL	VL042360.D	04/17/2025	16:44

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042415.D BFB Injection Date: 04/28/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:59

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.1
75	30.0 - 66.0% of mass 95	62.3
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.1 (0.2) 1
174	50.0 - 120.0% of mass 95	53.8
175	4.0 - 9.0% of mass 174	3.9 (7.3) 1
176	93.0 - 101.0% of mass 174	53.9 (100.2) 1
177	5.0 - 9.0% of mass 176	3.3 (6.1) 2

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

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042416.D	04/28/2025	08:44
VL0428ABL01	VL0428ABL01	VL042417.D	04/28/2025	09:27
VL0428ABS01	VL0428ABS01	VL042418.D	04/28/2025	10:10
IA-B2-3-3242025	Q1665-05	VL042419.D	04/28/2025	10:59
IA-DUP-1-3242025	Q1665-07	VL042420.D	04/28/2025	11:33
IA-B2-6-3242025	Q1665-12	VL042421.D	04/28/2025	12:17
IA-B2-5-3242025	Q1665-16	VL042422.D	04/28/2025	12:51
IA-B2-2-3242025	Q1665-19	VL042423.D	04/28/2025	13:26
IA-B2-1-3242025	Q1665-21	VL042424.D	04/28/2025	14:00
IA-B2-4-3242025	Q1665-22	VL042425.D	04/28/2025	14:34

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VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042435.D BFB Injection Date: 04/29/2025

Instrument ID: MSVOA_L BFB Injection Time: 07:55

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	26.5
75	30.0 - 66.0% of mass 95	65.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.6 (1.1) 1
174	50.0 - 120.0% of mass 95	51.1
175	4.0 - 9.0% of mass 174	3.7 (7.3) 1
176	93.0 - 101.0% of mass 174	50.1 (98) 1
177	5.0 - 9.0% of mass 176	3.5 (7) 2

1-Value is % mass 174

2-Value is % mass 176

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTDCCC010	VSTDCCC010	VL042436.D	04/29/2025	08:39
VL0429ABL01	VL0429ABL01	VL042437.D	04/29/2025	09:25
VL0429ABS01	VL0429ABS01	VL042438.D	04/29/2025	10:08
IA-DUP-1-3242025DL	Q1665-07DL	VL042451.D	04/29/2025	17:37
IA-B2-2-3242025DL	Q1665-19DL	VL042452.D	04/29/2025	18:09
IA-B2-1-3242025DL	Q1665-21DL	VL042453.D	04/29/2025	18:42

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042286.D Date Analyzed: 04/09/2025

Instrument ID: MSVOA_L Time Analyzed: 10:20

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	155631	2.78	397176	3.96	350140	8.88
UPPER LIMIT	217883	3.11	556046	4.29	490196	9.21
LOWER LIMIT	93378.6	2.45	238306	3.63	210084	8.55
EPA SAMPLE NO.						
AA-DUP-1-3242025	159221	2.78	408039	3.95	345931	8.88
AA-DUP-1-3242025DUP	156655	2.78	397453	3.95	332015	8.88
AA-1-3242025	157856	2.78	383411	3.96	331322	8.88
IA-B9-1-3242025	162172	2.78	394727	3.95	338809	8.88
IA-DUP-2-3242025	159184	2.79	384747	3.96	314874	8.88
IA-B9-2-3242025	157163	2.79	385586	3.96	326865	8.88
IA-B9-3-3242025	161865	2.79	384782	3.96	329132	8.88
VL0409ABL01	156784	2.78	391570	3.96	334054	8.88
VL0409ABS02	160536	2.78	421845	3.95	368487	8.88

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042312.D Date Analyzed: 04/11/2025

Instrument ID: MSVOA_L Time Analyzed: 09:50

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	183700	2.79	463746	3.96	401340	8.89
UPPER LIMIT	257180	3.12	649244	4.29	561876	9.22
LOWER LIMIT	110220	2.46	278248	3.63	240804	8.56
EPA SAMPLE NO.						
IA-B10-2-3242025	179309	2.79	422807	3.97	360993	8.89
IA-B10-2-3242025DL	183437	2.79	437835	3.97	360512	8.89
IA-B10-2-3242025DUP	183054	2.79	442590	3.96	380933	8.88
IA-B10-4-3242025	190778	2.79	461210	3.96	383940	8.89
IA-B10-4-3242025DL	173105	2.79	400666	3.96	338211	8.89
IA-B10-1-3242025	183875	2.79	460651	3.96	381290	8.88
IA-B10-1-3242025DL	176603	2.79	398133	3.97	325777	8.89
IA-B10-3-3242025	184452	2.79	454008	3.96	391031	8.88
VL0411ABL01	180225	2.79	445487	3.96	373548	8.89
VL0411ABS01	178456	2.78	444353	3.96	386060	8.88

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042326.D Date Analyzed: 04/15/2025

Instrument ID: MSVOA_L Time Analyzed: 11:30

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	172263	2.81	457227	3.99	411493	8.91
UPPER LIMIT	241168	3.14	640118	4.32	576090	9.24
LOWER LIMIT	103358	2.48	274336	3.66	246896	8.58
EPA SAMPLE NO.						
IA-B10-4-3242025DL2	164444	2.81	385228	4.00	327587	8.92
IA-B10-3-3242025DL	168977	2.81	401158	3.99	339800	8.91
VL0415ABL01	173729	2.81	447320	3.99	385318	8.92
VL0415ABS01	171986	2.81	444595	3.99	399604	8.92

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042349.D Date Analyzed: 04/17/2025

Instrument ID: MSVOA_L Time Analyzed: 09:44

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	125455	2.79	366544	3.96	338126	8.88
UPPER LIMIT	175637	3.12	513162	4.29	473376	9.21
LOWER LIMIT	75273	2.46	219926	3.63	202876	8.55
EPA SAMPLE NO.						
IA-B14-1-3242025	123457	2.79	354157	3.96	318284	8.88
IA-B14-1-3242025DL	121918	2.79	347081	3.96	308280	8.88
VL0417ABL01	113566	2.79	328716	3.97	297633	8.89
VL0417ABS01	122375	2.79	352201	3.97	321521	8.89

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042416.D Date Analyzed: 04/28/2025

Instrument ID: MSVOA_L Time Analyzed: 08:44

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	121989	2.78	345031	3.96	305240	8.88
UPPER LIMIT	170785	3.11	483043	4.29	427336	9.21
LOWER LIMIT	73193.4	2.45	207019	3.63	183144	8.55
EPA SAMPLE NO.						
IA-B2-3-3242025	141298	2.78	401917	3.95	351139	8.88
IA-DUP-1-3242025	141186	2.78	402115	3.95	352885	8.87
IA-B2-6-3242025	140992	2.78	398020	3.95	341014	8.88
IA-B2-5-3242025	143445	2.78	401346	3.95	346372	8.87
IA-B2-2-3242025	134276	2.78	394249	3.95	337638	8.88
IA-B2-1-3242025	134924	2.78	377834	3.96	330143	8.88
IA-B2-4-3242025	133015	2.78	381932	3.96	330693	8.88
VL0428ABL01	121027	2.78	346921	3.95	302157	8.87
VL0428ABS01	122448	2.78	337202	3.95	299130	8.88

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

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VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG NO.: Q1665

Lab File ID: VL042436.D Date Analyzed: 04/29/2025

Instrument ID: MSVOA_L Time Analyzed: 08:39

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

	IS1 AREA #	RT #	IS2 AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	114553	2.78	311268	3.95	269987	8.88
UPPER LIMIT	160374	3.11	435775	4.28	377982	9.21
LOWER LIMIT	68731.8	2.45	186761	3.62	161992	8.55
EPA SAMPLE NO.						
IA-DUP-1-3242025DL	116268	2.80	307149	3.97	260772	8.90
IA-B2-2-3242025DL	114403	2.79	305602	3.97	261578	8.90
IA-B2-1-3242025DL	114227	2.80	302811	3.97	257605	8.90
VL0429ABL01	119014	2.79	328601	3.96	276498	8.89
VL0429ABS01	116772	2.79	317590	3.96	272312	8.88

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

AREA UPPER LIMIT = +40% of internal standard area
AREA LOWER LIMIT = -40% of internal standard area
RT UPPER LIMIT = +0.33 minutes of internal standard RT
RT LOWER LIMIT = -0.33 minutes of internal standard RT

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

SAMPLE DATA

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042290.D	1		04/09/25 13:25	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	J	1.04	2.47	ug/m3
64-17-5	Ethanol	13.4	25.3	Q	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.56	1.16		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	1.80	4.42		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	3.60	8.55		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.95	3.30		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.36	1.06	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.25	0.80	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.32	1.21	J	0.41	1.88	ug/m3

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042290.D	1		04/09/25 13:25	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.60	5.64		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	159000		2.784			
540-36-3	1,4-Difluorobenzene	408000		3.952			
3114-55-4	Chlorobenzene-d5	346000		8.875			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042290.D	1		04/09/25 13:25	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.33		J		1.47	ppbv
115-07-1	Propene	0.85		J		1.49	ppbv
000106-97-8	Butane	1.10		J		1.62	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:43:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	159221	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	408039	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	345931	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	258960	9.116	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	9289	0.395	ppbv		96
3) Chlorodifluoromethane	1.473	51	7907m	0.329	ppbv		
4) Chloromethane	1.531	50	5425	0.565	ppbv		93
9) Propene	1.486	41	9320	0.847	ppbv	#	80
10) Heptane	4.972	43	3212m	0.110	ppbv		
11) Trichlorofluoromethane	1.874	101	4760	0.208	ppbv		94
13) Ethanol	1.719	45	13916	13.373	ppbv		84
15) Acetone	1.835	43	79179	3.556	ppbv		93
19) Isopropyl Alcohol	1.884	45	22614	1.800	ppbv	#	35
20) Methylene Chloride	2.059	84	7901	0.953	ppbv		93
26) Hexane	2.823	57	34660	1.553	ppbv	#	37
34) 2-Butanone	2.561	43	10562	0.357	ppbv		99
35) Carbon Tetrachloride	3.761	117	2251m	0.071	ppbv		
36) Benzene	3.651	78	9975m	0.247	ppbv		
53) Toluene	6.930	91	15442m	0.322	ppbv		
59) m/p-Xylene	9.529	91	6464m	0.132	ppbv		

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:43:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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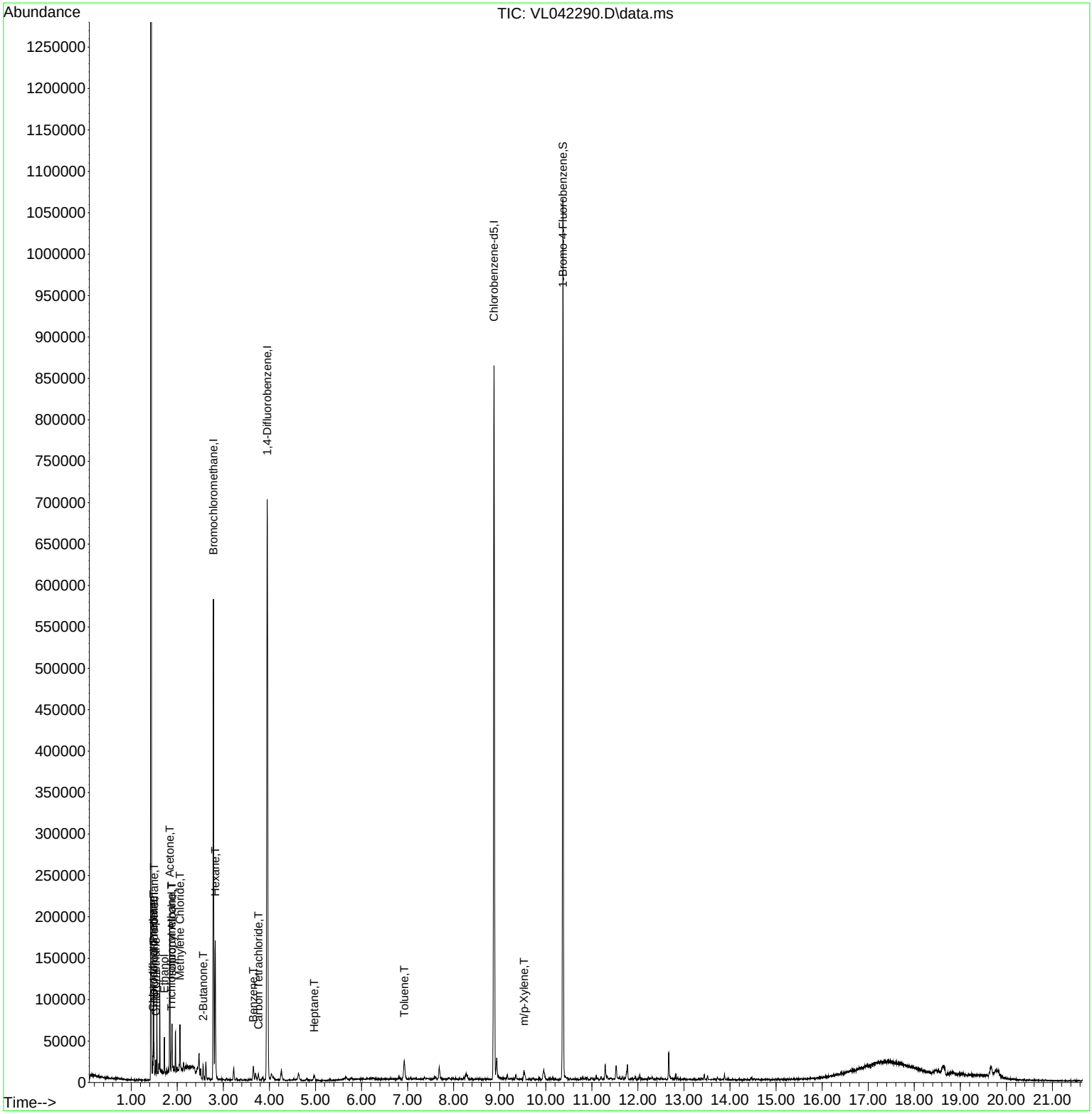
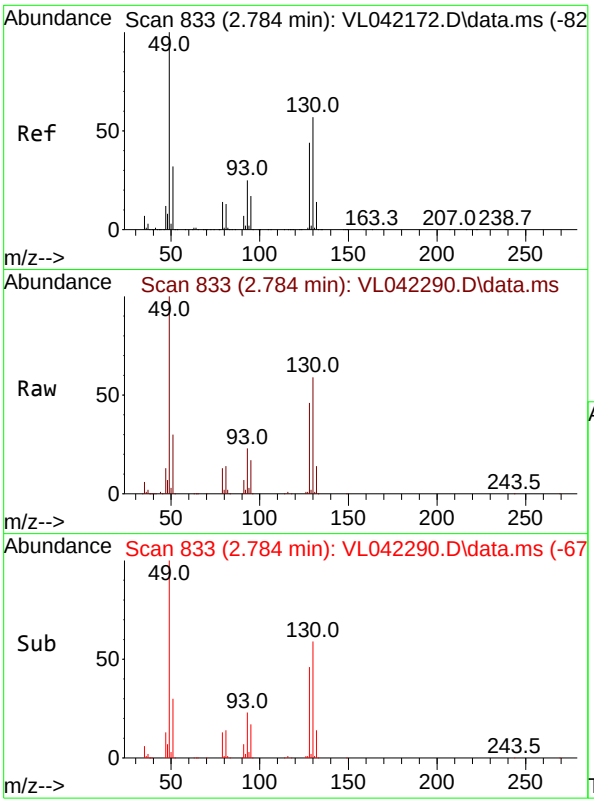
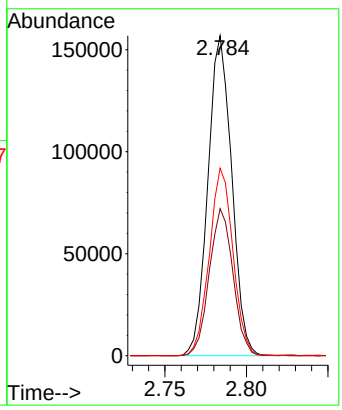




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 49 Resp: 15922

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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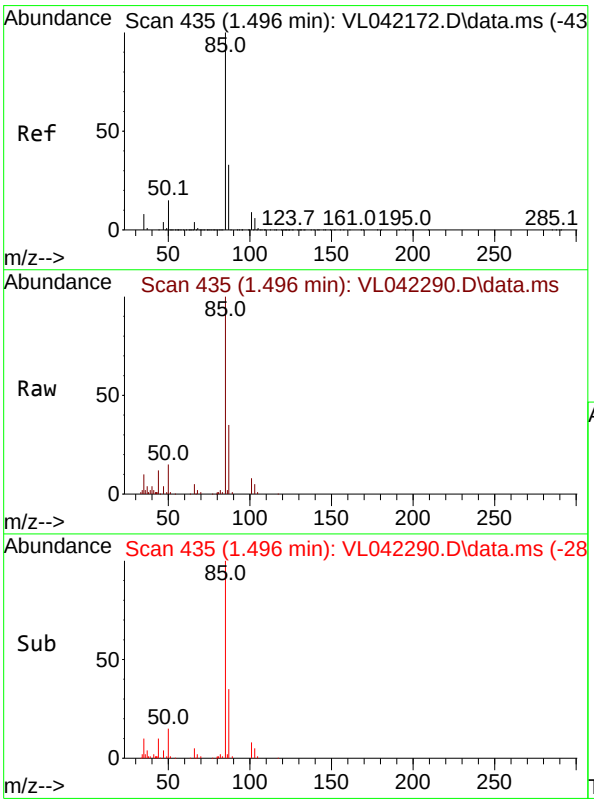
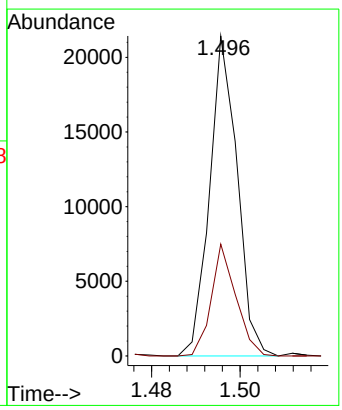
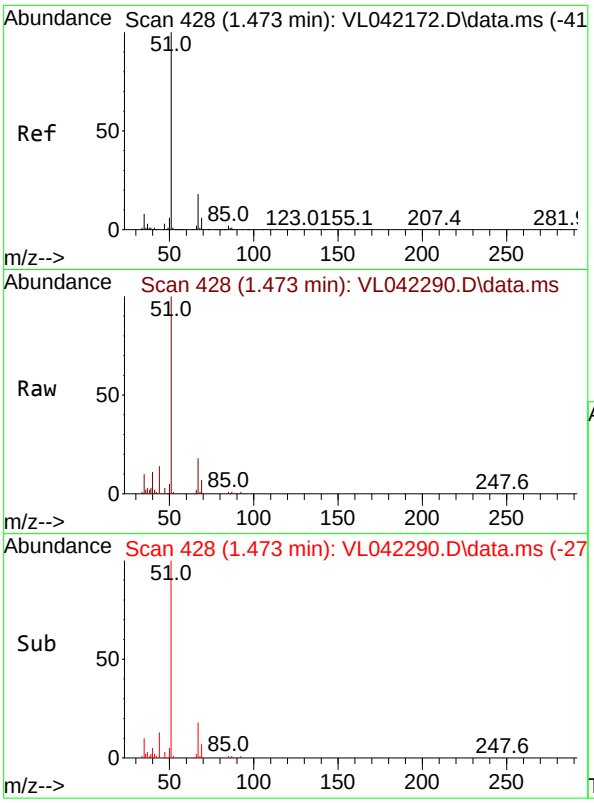


#2
Dichlorodifluoromethane
Concen: 0.395 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 85 Resp: 9289

Ion	Ratio	Lower	Upper
85	100		
87	34.9	26.1	39.1

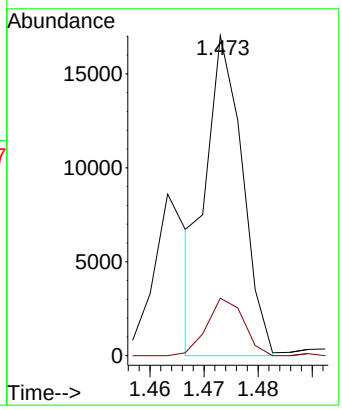




#3
Chlorodifluoromethane
Concen: 0.329 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 51 Resp: 790

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
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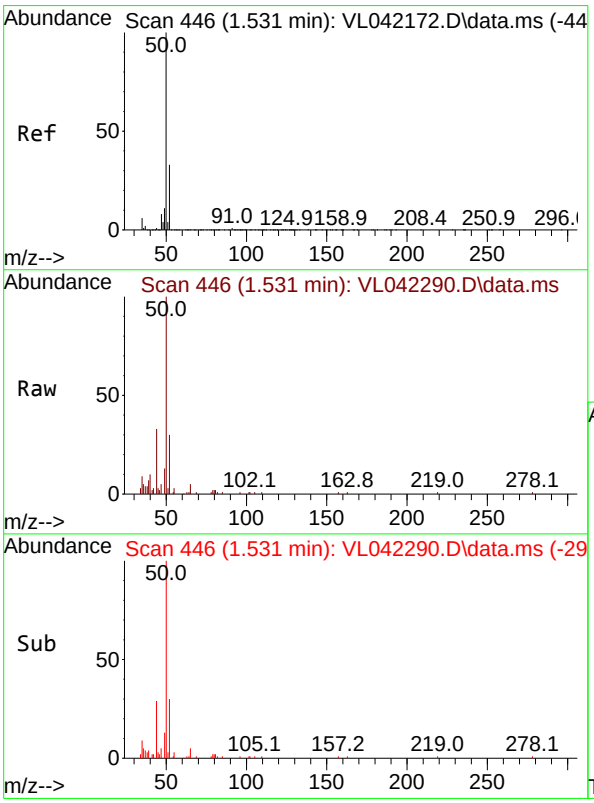
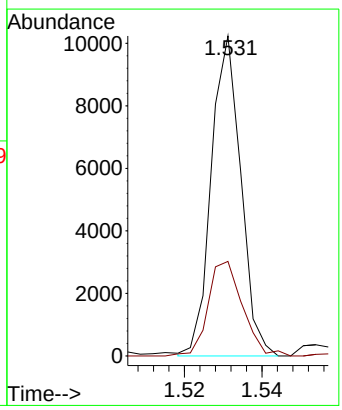
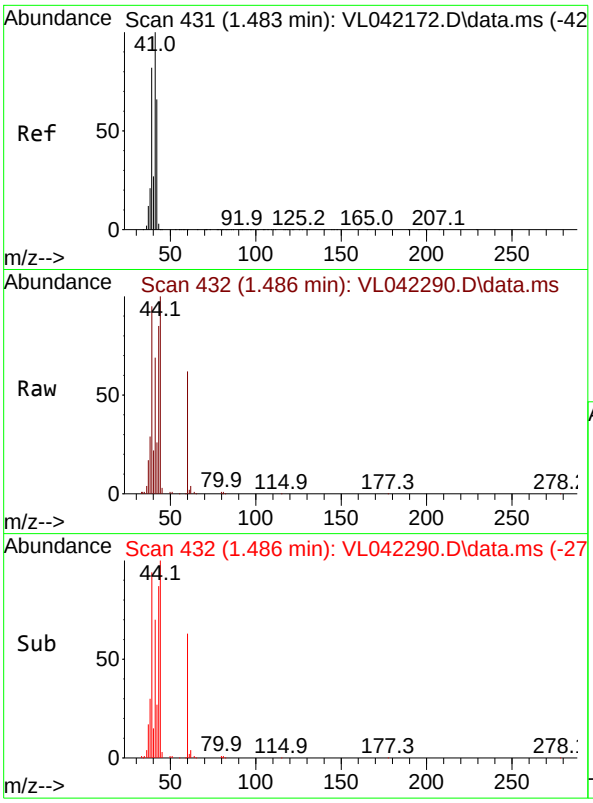


#4
Chloromethane
Concen: 0.565 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 50 Resp: 5425

Ion	Ratio	Lower	Upper
50	100		
52	28.9	26.1	39.1

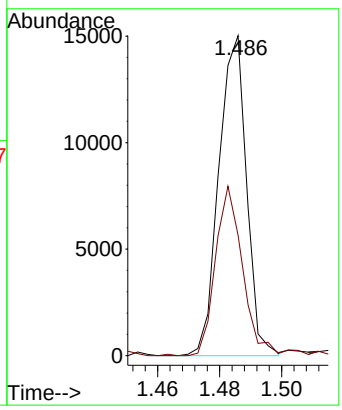




#9
Propene
Concen: 0.847 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 41 Resp: 932

Ion	Ratio	Lower	Upper
41	100		
42	52.7	55.4	83.2#



Instrument :
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ClientSampleId :
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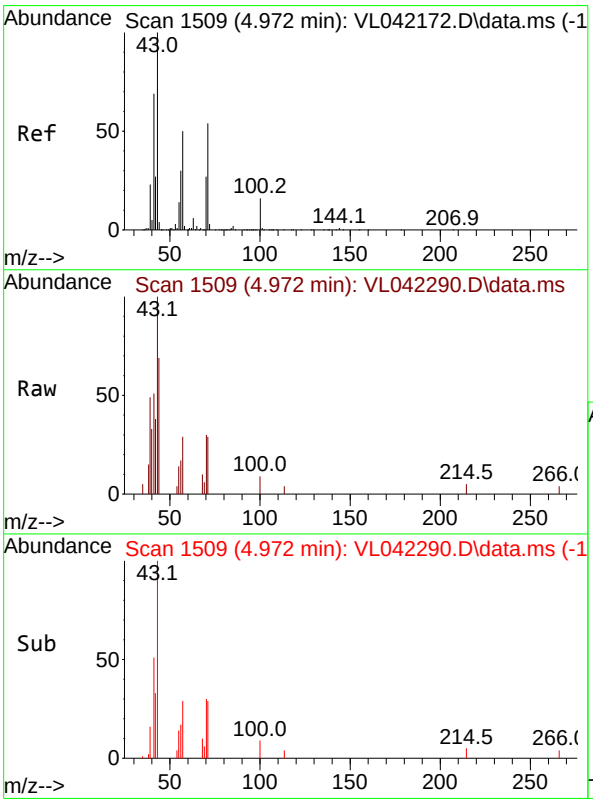
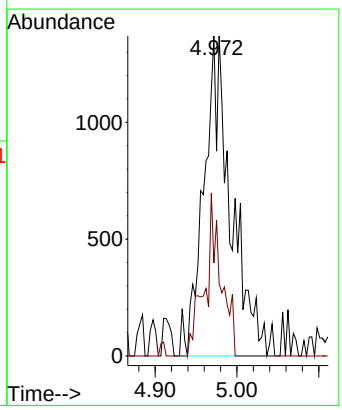
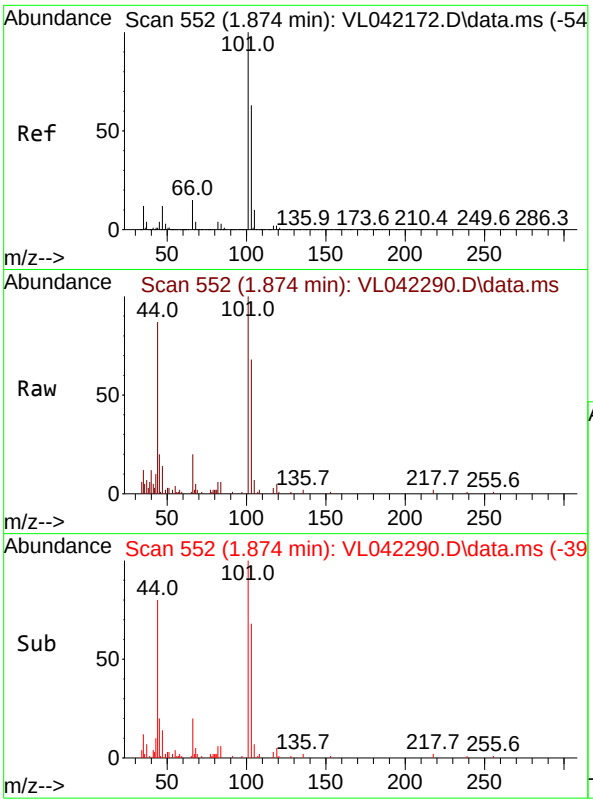


#10
Heptane
Concen: 0.110 ppbv m
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 43 Resp: 3212

Ion	Ratio	Lower	Upper
43	100		
57	29.6	39.4	59.2#

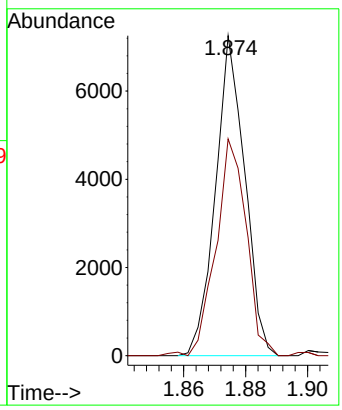




#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:101 Resp: 476

Ion	Ratio	Lower	Upper
101	100		
103	67.7	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Manual Integrations
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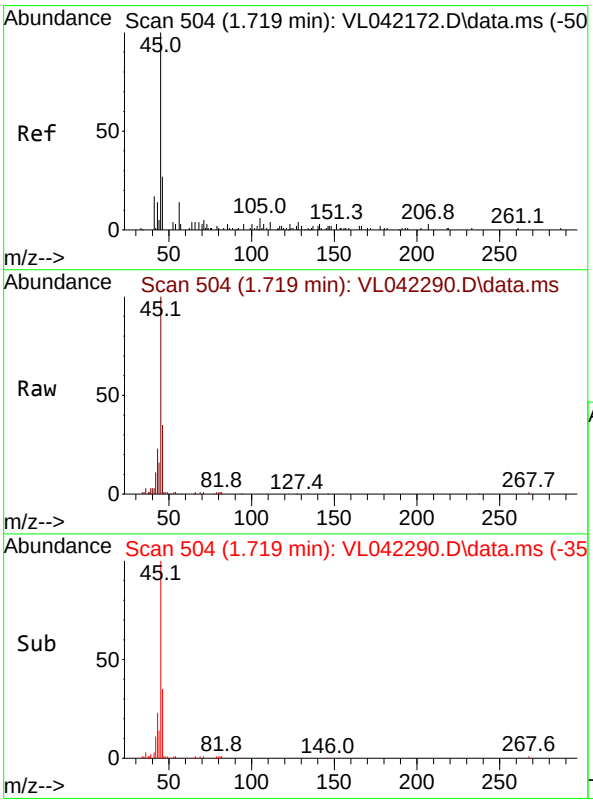
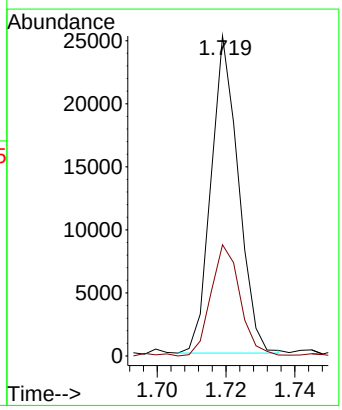
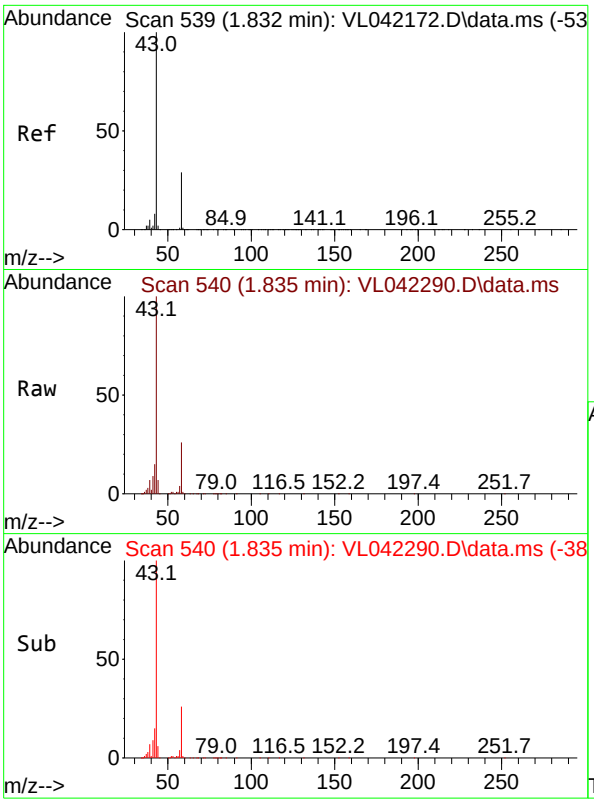


#13
Ethanol
Concen: 13.373 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 13916

Ion	Ratio	Lower	Upper
45	100		
46	39.5	20.2	80.8

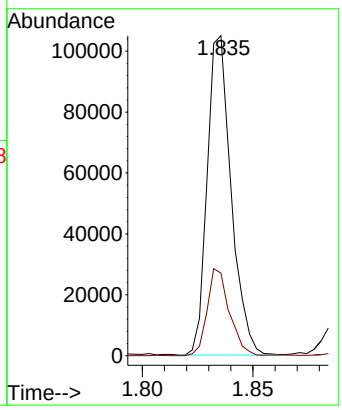




#15
Acetone
Concen: 3.556 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 43 Resp: 7917

Ion	Ratio	Lower	Upper
43	100		
58	25.4	23.2	34.8



Instrument :
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ClientSampleId :
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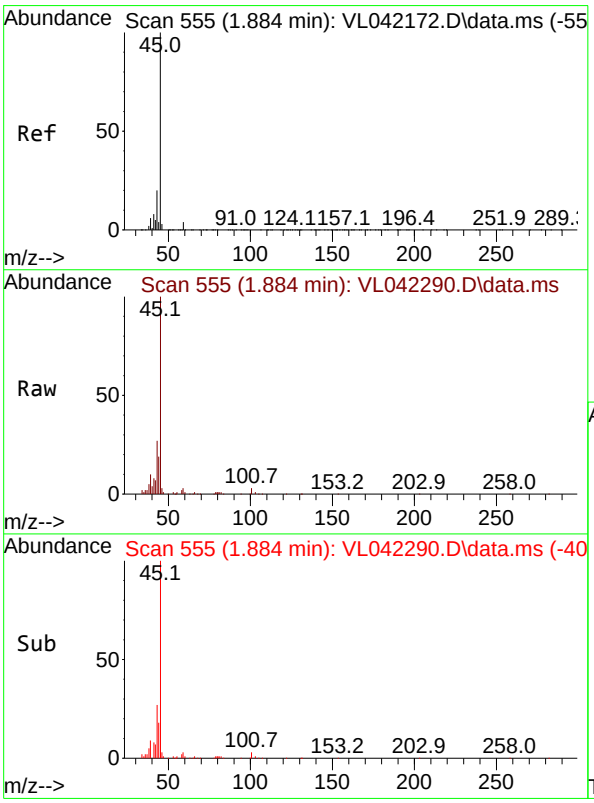
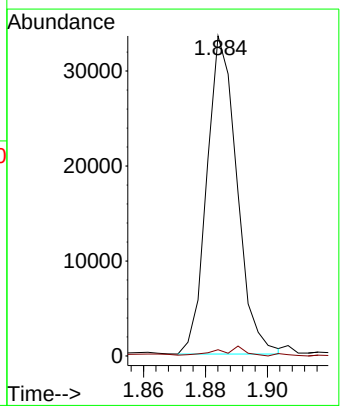
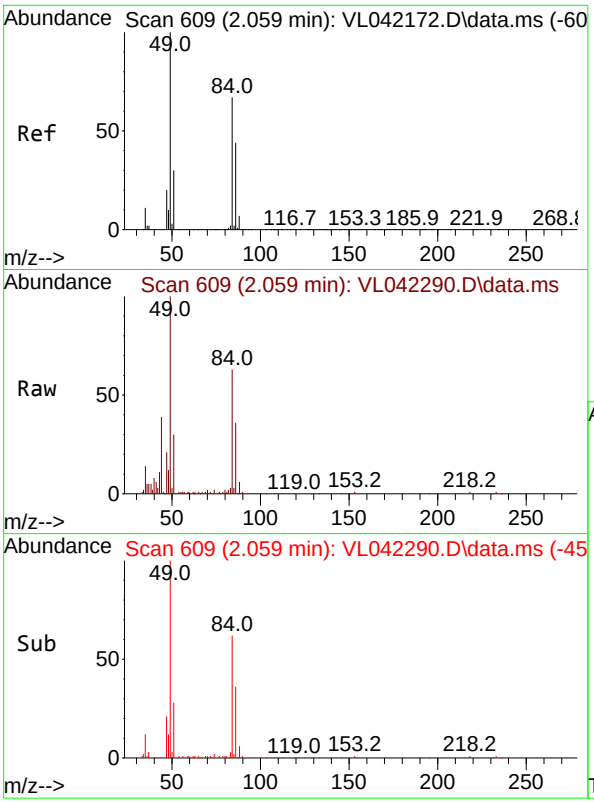


#19
Isopropyl Alcohol
Concen: 1.800 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 22614

Ion	Ratio	Lower	Upper
45	100		
58	89.0	36.9	55.3#

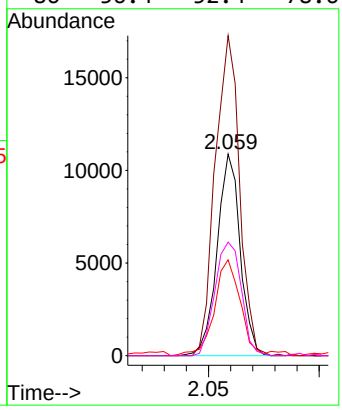




#20
Methylene Chloride
Concen: 0.953 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 84 Resp: 790

Ion	Ratio	Lower	Upper
84	100		
49	158.8	120.2	180.4
51	47.0	37.4	56.0
86	56.4	52.4	78.6



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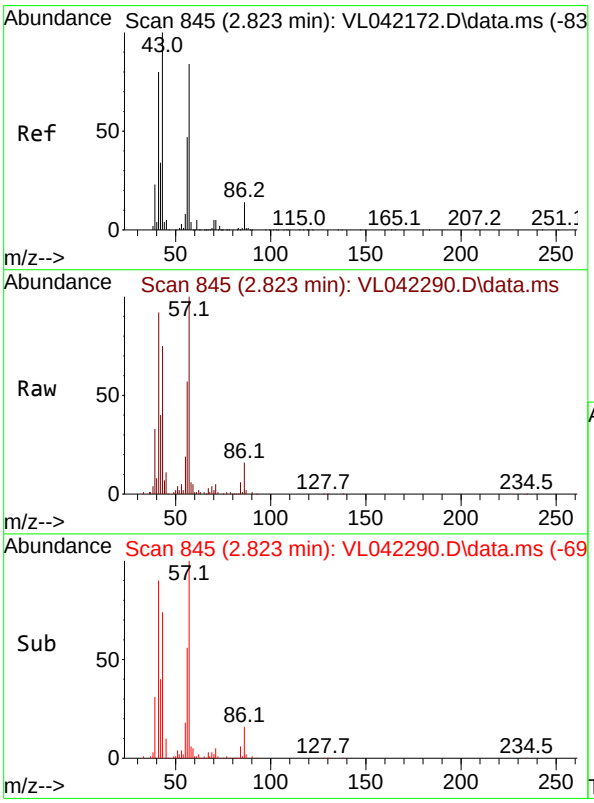
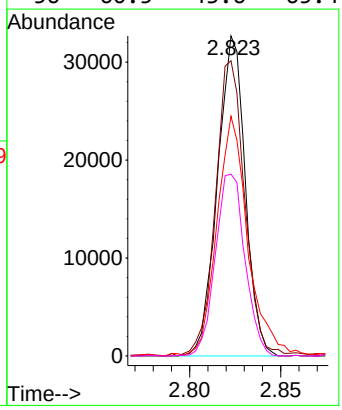
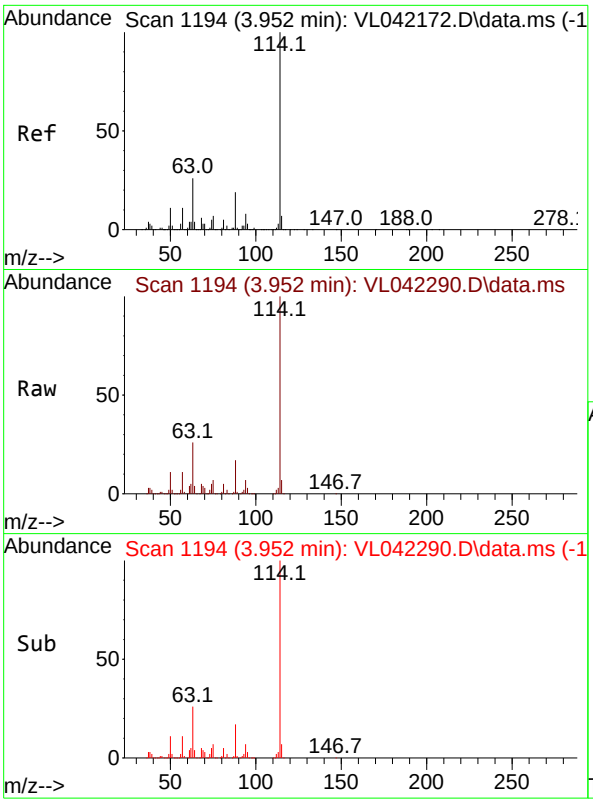


#26
Hexane
Concen: 1.553 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 57 Resp: 34660

Ion	Ratio	Lower	Upper
57	100		
41	96.0	76.6	114.8
43	85.4	207.8	311.8#
56	60.5	43.6	65.4





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:114 Resp: 40803

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.8	15.0	22.4

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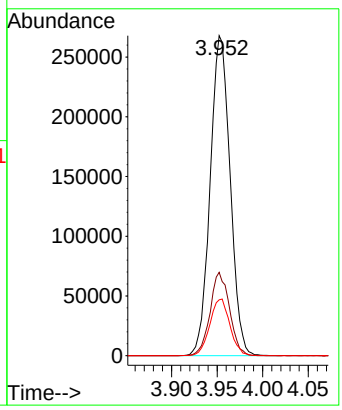
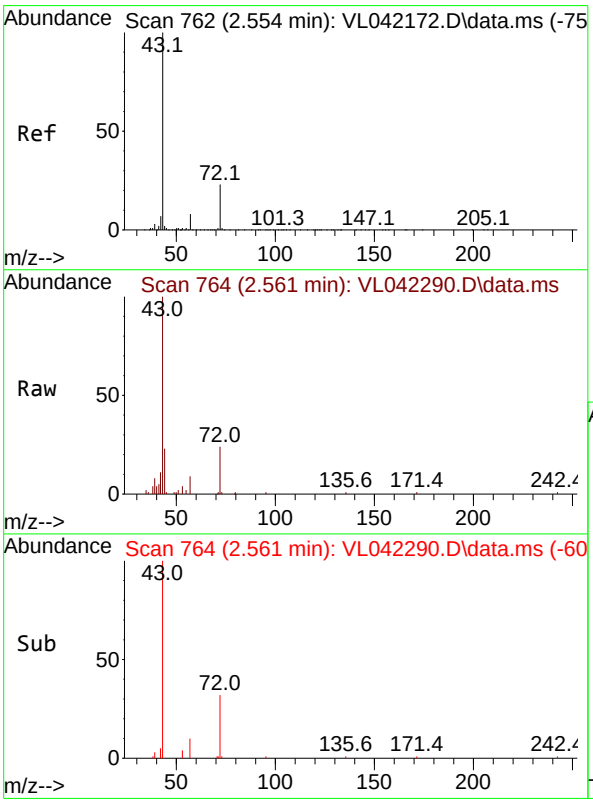
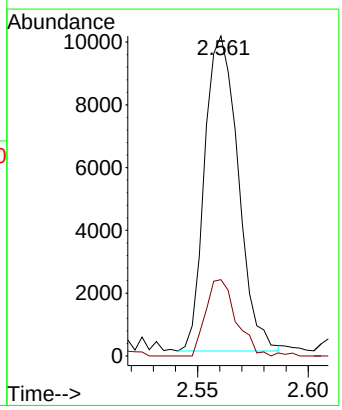


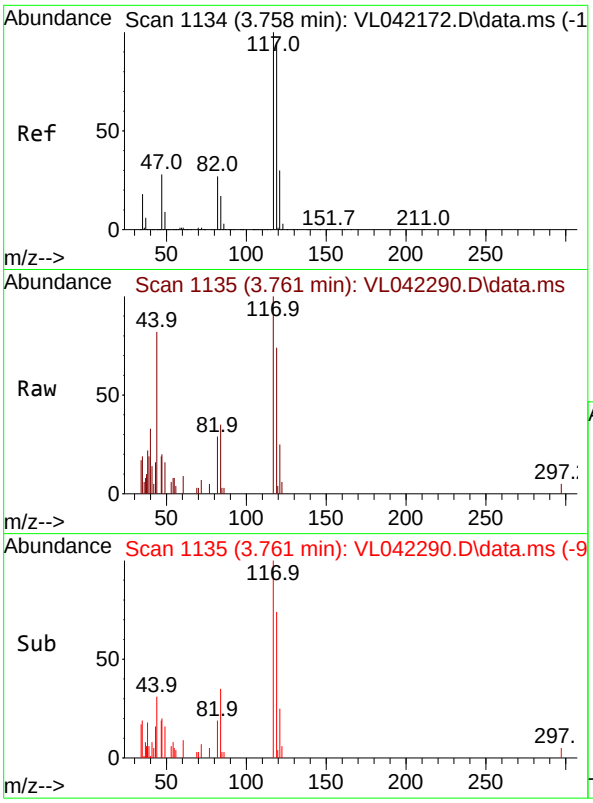


#34
2-Butanone
Concen: 0.357 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 43 Resp: 10562

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.071 ppbv m
RT: 3.761 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:117 Resp: 225

Ion	Ratio	Lower	Upper
117	100		
119	74.1	76.2	114.2#
121	24.5	24.2	36.4

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MSVOA_L
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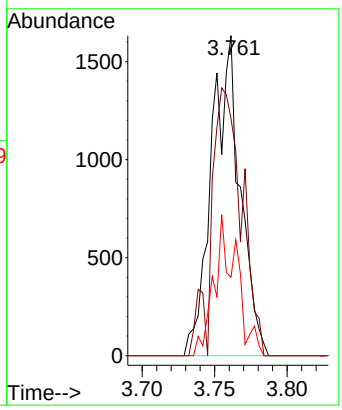
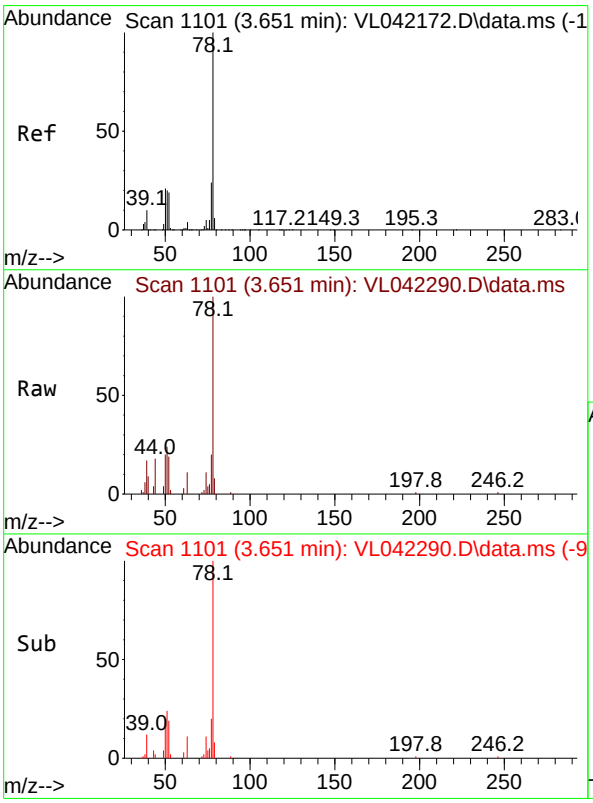
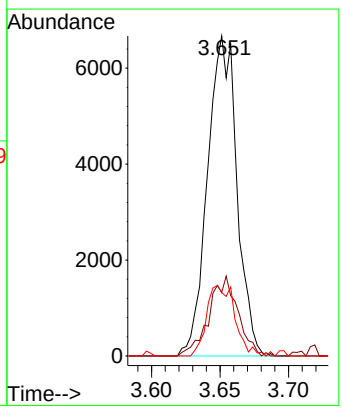


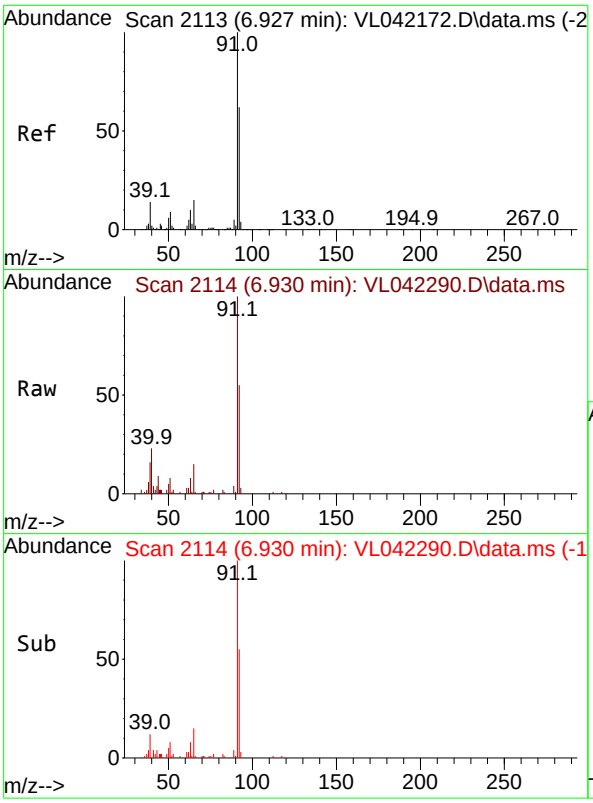


#36
Benzene
Concen: 0.247 ppbv m
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 78 Resp: 9975

Ion	Ratio	Lower	Upper
78	100		
77	19.9	19.1	28.7
50	19.8	16.6	24.8

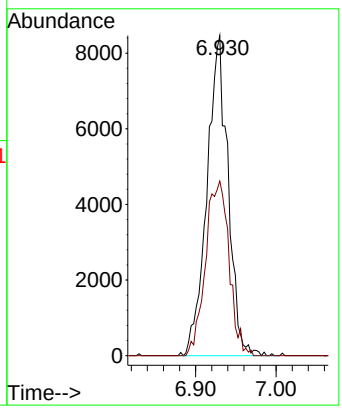




#53
Toluene
Concen: 0.322 ppbv m
RT: 6.930 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 91 Resp: 1544

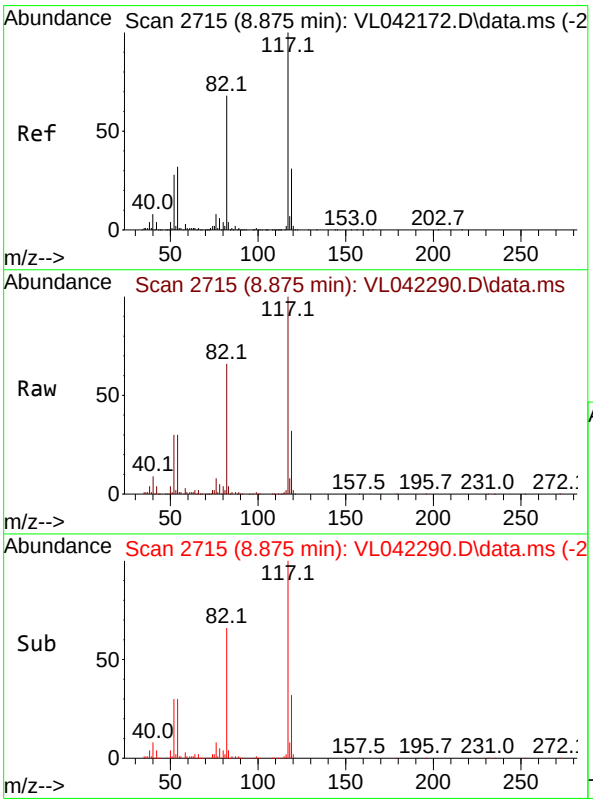
Ion	Ratio	Lower	Upper
91	100		
92	60.7	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Manual Integrations
APPROVED

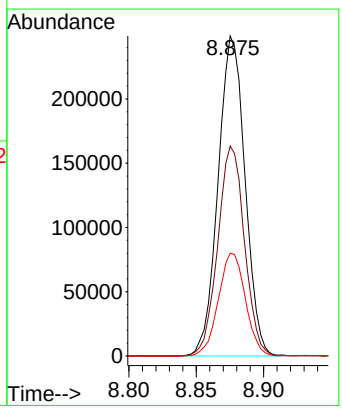
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

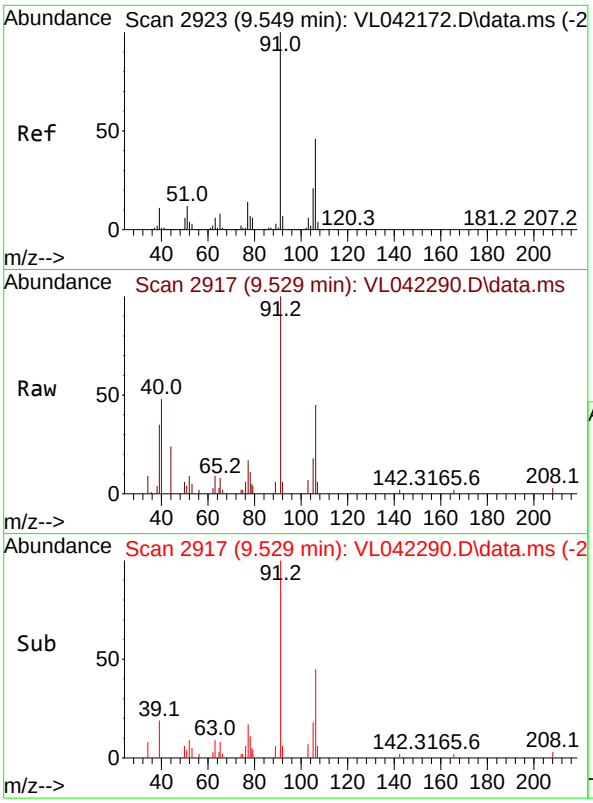


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:117 Resp: 345931

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.4	25.5	38.3





#59
m/p-Xylene
Concen: 0.132 ppbv m
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

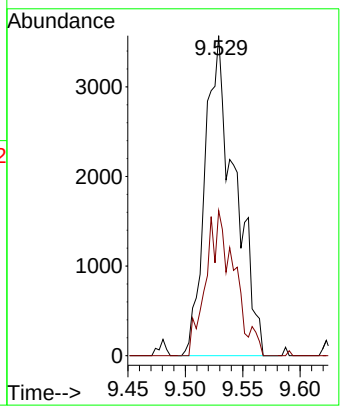
Tgt Ion: 91 Resp: 646

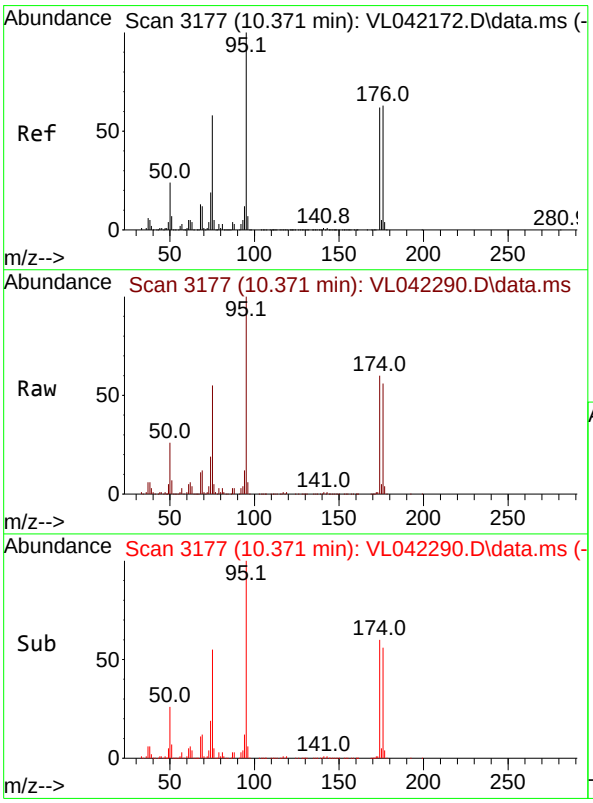
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

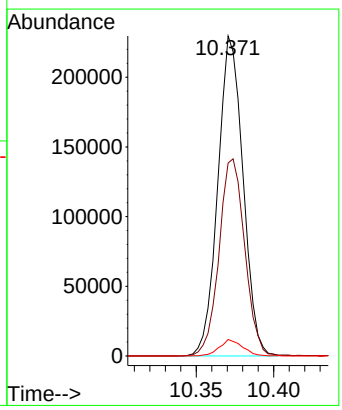




#68
1-Bromo-4-Fluorobenzene
Concen: 9.116 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 95 Resp: 258960

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.8	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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

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

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

Signal : TIC: VL042290.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4043153	4322373	100.00%	47.520%
2	1.486	427	432	434	rBV2	94090	49930	1.16%	0.549%
3	1.557	449	454	458	rBV	97756	50996	1.18%	0.561%
4	1.619	470	473	477	rVB	122404	63382	1.47%	0.697%
5	1.835	533	540	549	rBV2	182262	162453	3.76%	1.786%
6	1.884	549	555	560	rBV2	57956	51799	1.20%	0.569%
7	2.059	605	609	617	rVB	54805	45166	1.04%	0.497%
8	2.784	825	833	839	rBV	579526	591430	13.68%	6.502%
9	2.823	839	845	855	rVB2	165579	187537	4.34%	2.062%
10	3.952	1182	1194	1209	rBV	700409	1073780	24.84%	11.805%
11	6.927	2100	2113	2123	rBV3	21740	43524	1.01%	0.479%
12	8.875	2703	2715	2726	rBV	862041	1216021	28.13%	13.369%
13	10.371	3163	3177	3187	rBV	1063377	1237447	28.63%	13.605%

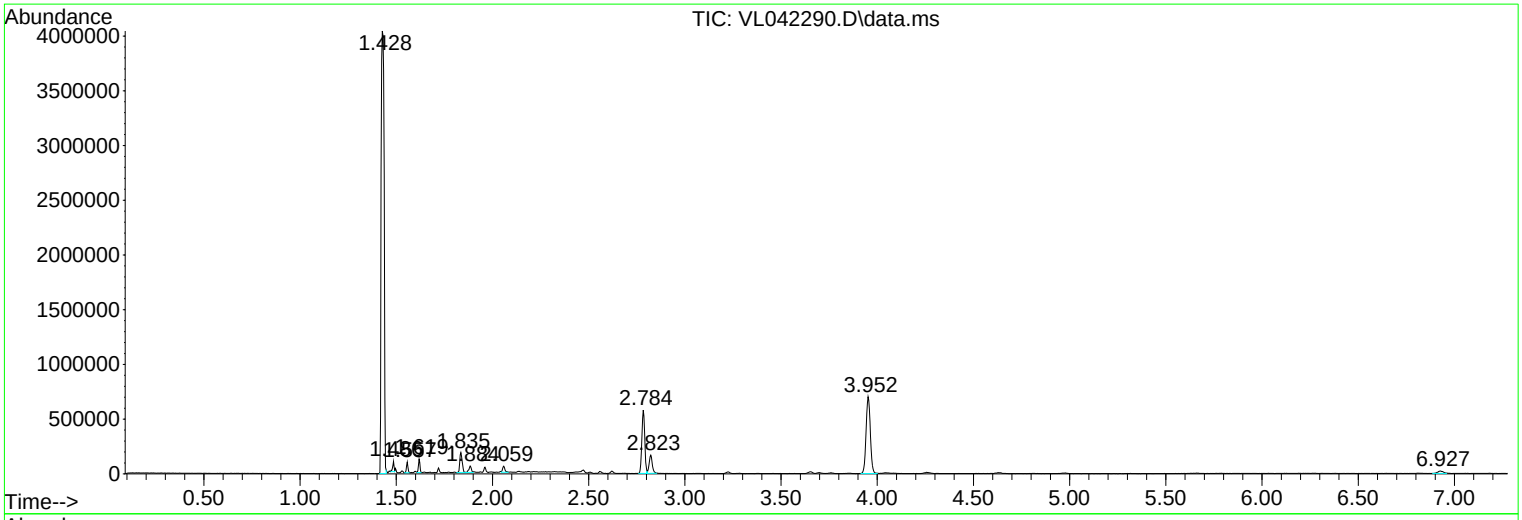
Sum of corrected areas: 9095838

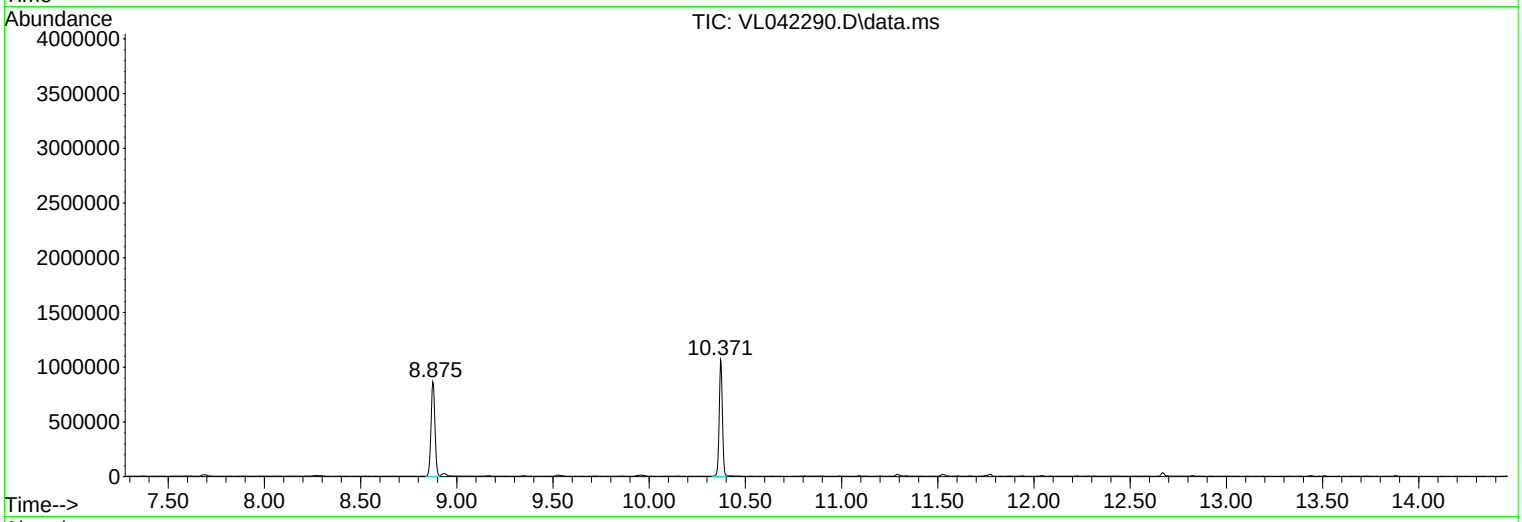
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

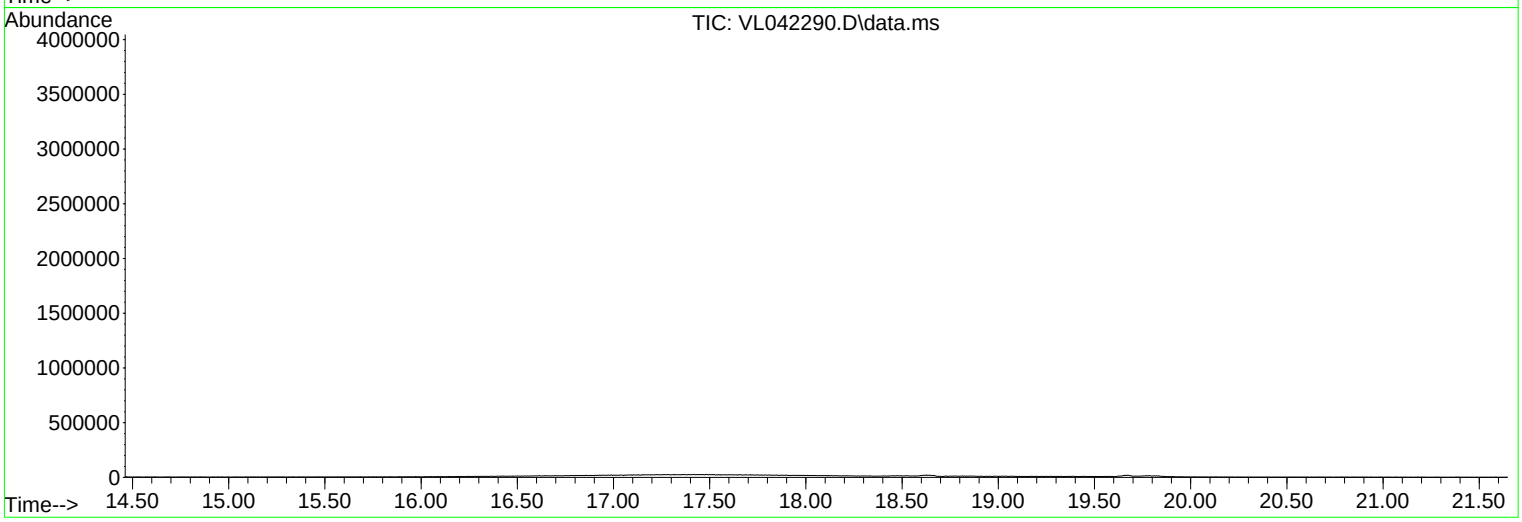
Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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

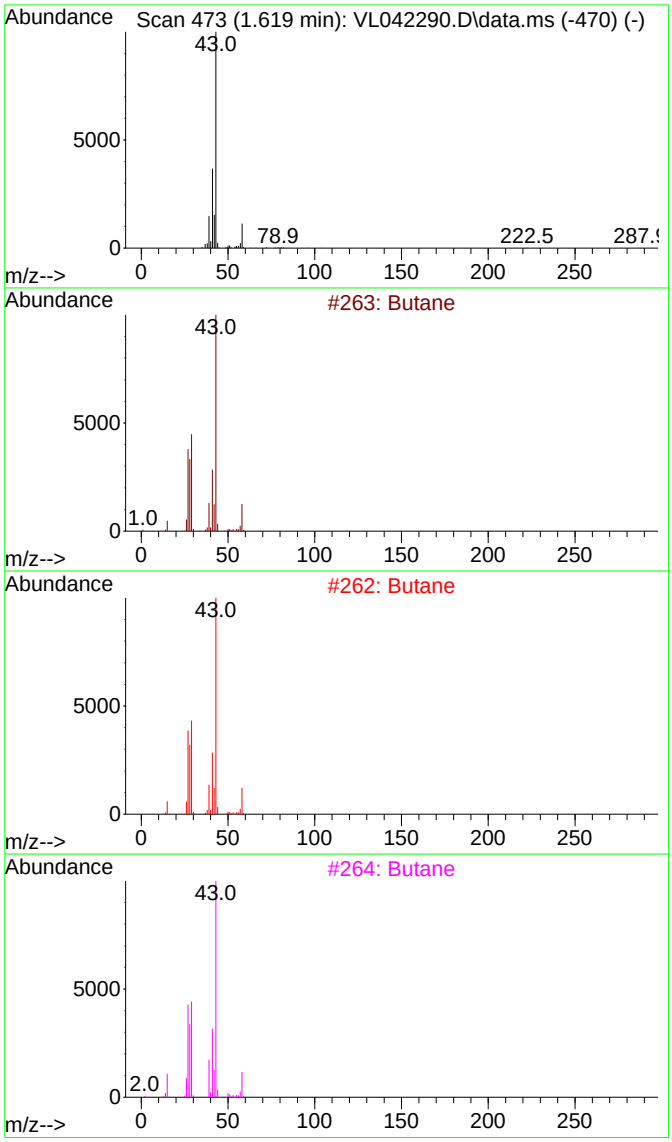
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

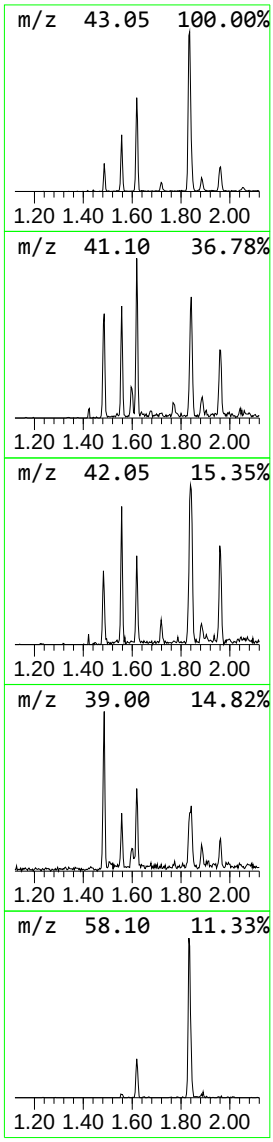
****

Peak Number 1 Butane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	1.07 ppbv	63382	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	59
2	Butane	58	C4H10	000106-97-8	59
3	Butane	58	C4H10	000106-97-8	45
4	Isopropylsulfonyl chloride	142	C3H7ClO2S	010147-37-2	23
5	Butane	58	C4H10	000106-97-8	9





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	1.1	ppbv	63382	1	2.784	591430	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-03	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042317.D	1		04/11/25 13:15	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	J	1.04	2.47	ug/m3
64-17-5	Ethanol	1300	2450	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.59	1.22		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.47	1.42	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.17	0.70	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	81.1	199	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	82.7	196	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.60	5.56		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	26.8	79.0	E	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.090	0.57		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	1.40	6.84		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.60	1.92		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.49	1.85	J	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-03	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042317.D	1		04/11/25 13:15	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.040	0.27		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	UQ	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.12	0.59	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	UQ	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.50	8.81		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.80			70 (65) - 130 (135)	98%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	179000		2.79			
540-36-3	1,4-Difluorobenzene	423000		3.965			
3114-55-4	Chlorobenzene-d5	361000		8.888			
TENTITIVE IDENTIFIED COMPOUNDS							

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-03	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042317.D	1		04/11/25 13:15	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
115-07-1	Propene	4.30		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv
007452-79-1	Butanoic acid, 2-methyl-, ethyl es	1.50		J		9.16	ppbv
005989-27-5	D-Limonene	21.3		J		12.0	ppbv
001762-27-2	Plumbane, diethyldimethyl-	65.1		J		13.4	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:59:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	179309	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.965	114	422807	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.888	117	360993	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	291371	9.829	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10578	0.400	ppbv		98
4) Chloromethane	1.531	50	6409	0.592	ppbv		93
9) Propene	1.489	41	53741m	4.335	ppbv		
10) Heptane	4.978	43	5613m	0.170	ppbv		
11) Trichlorofluoromethane	1.881	101	5509	0.214	ppbv		86
13) Ethanol	1.725	45	1540169	1314.265	ppbv		93
15) Acetone	1.835	43	2074699	82.732	ppbv	#	78
17) tert-Butyl alcohol	2.046	59	14565	0.466	ppbv		97
19) Isopropyl Alcohol	1.887	45	1147205	81.079	ppbv	#	58
20) Methylene Chloride	2.065	84	14725	1.577	ppbv		90
26) Hexane	2.829	57	64050	2.548	ppbv		93
29) Chloroform	2.855	83	50104	1.362	ppbv		95
34) 2-Butanone	2.560	43	822701	26.834	ppbv		98
35) Carbon Tetrachloride	3.768	117	2921m	0.088	ppbv		
36) Benzene	3.664	78	25066	0.598	ppbv	#	90
52) Tetrachloroethene	8.228	164	585m	0.035	ppbv		
53) Toluene	6.939	91	24232	0.488	ppbv		99
59) m/p-Xylene	9.535	91	9717m	0.190	ppbv		
60) o-Xylene	9.969	91	5940	0.116	ppbv		89
74) 1,2,4-Trimethylbenzene	11.542	105	7764	0.121	ppbv	#	72

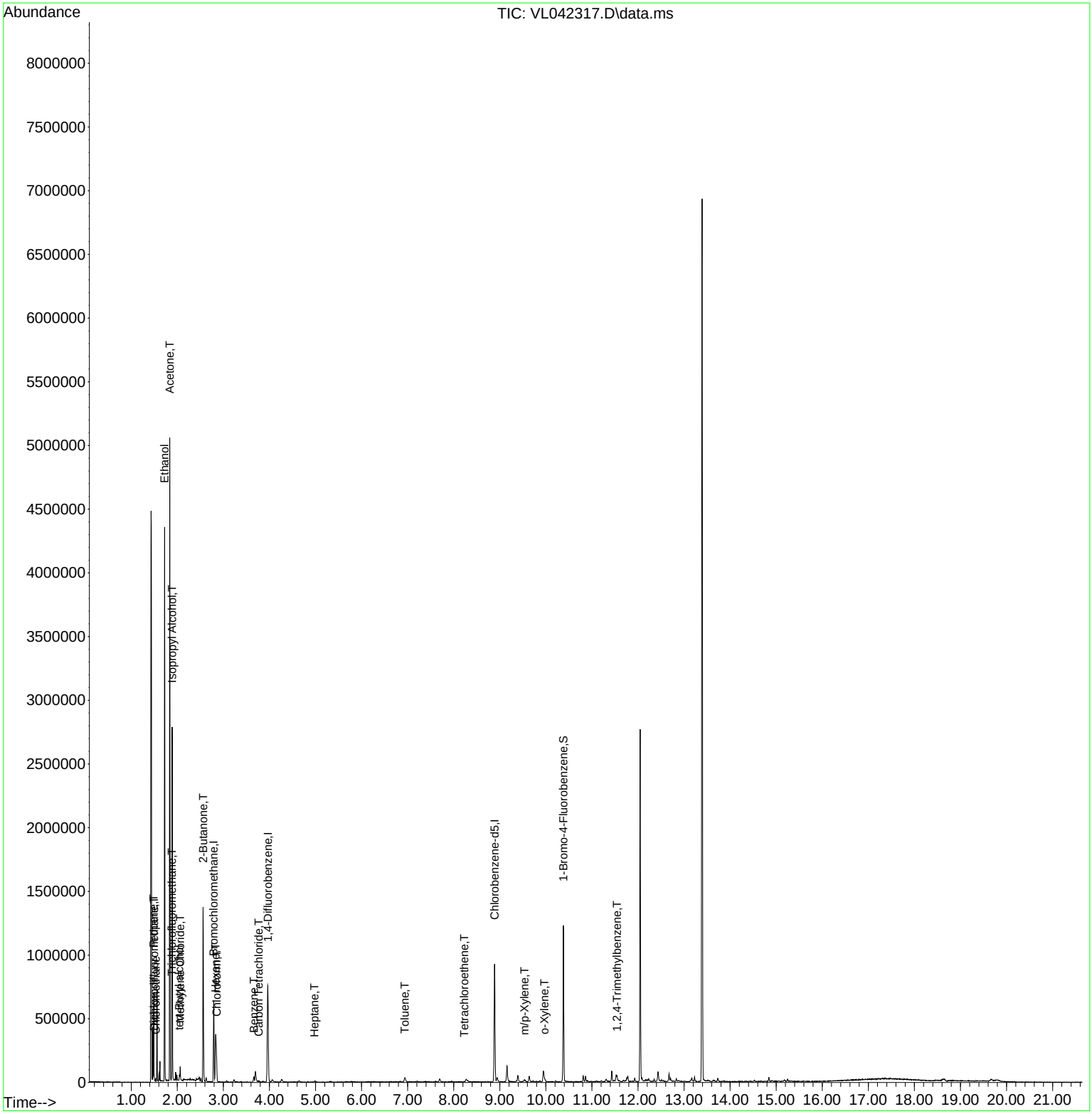
(#) = qualifier out of range (m) = manual integration (+) = signals summed

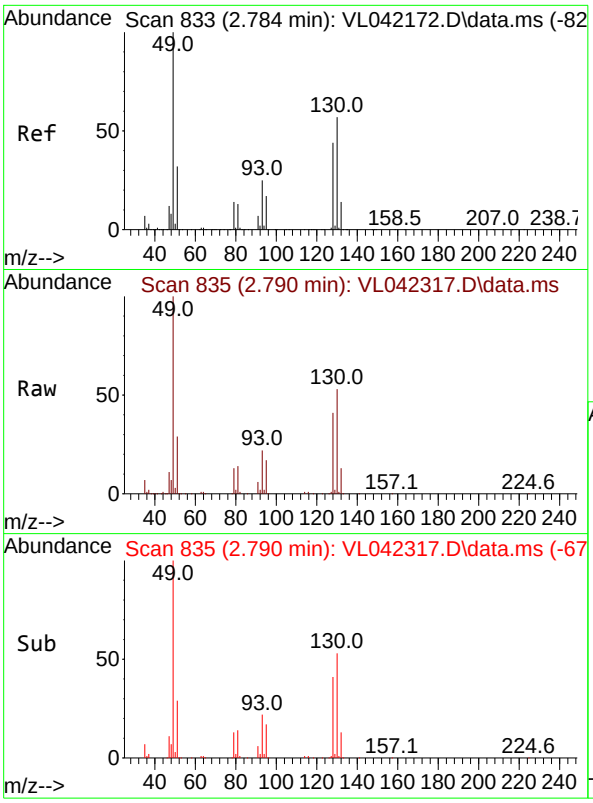
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:59:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

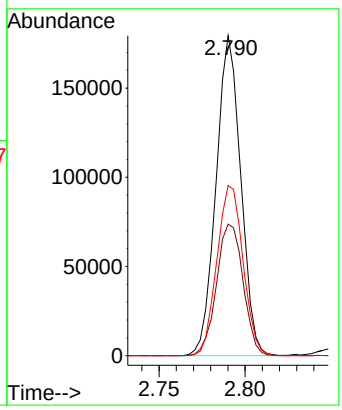




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 49 Resp: 17930

Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.9	68.5
130	56.5	28.8	86.4



Instrument :
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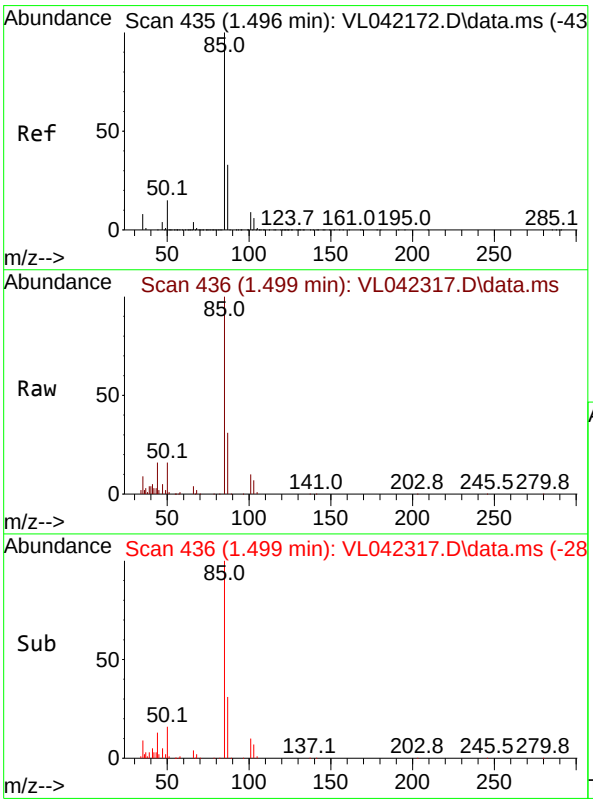
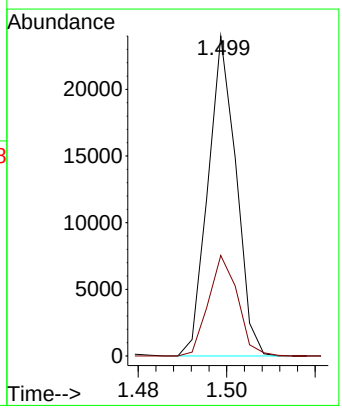
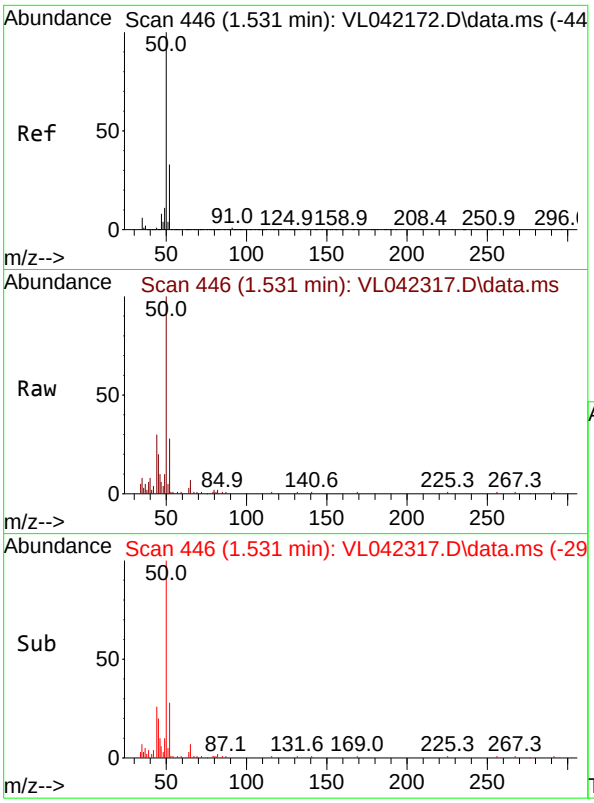


#2
Dichlorodifluoromethane
Concen: 0.400 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 85 Resp: 10578

Ion	Ratio	Lower	Upper
85	100		
87	31.4	26.1	39.1

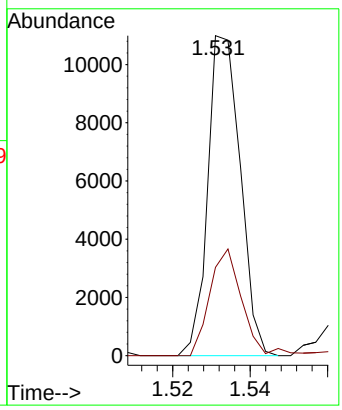




#4
Chloromethane
Concen: 0.592 ppbv
RT: 1.531 min Scan# 44
Delta R.T. -0.000 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 50 Resp: 640

Ion	Ratio	Lower	Upper
50	100		
52	28.9	26.1	39.1



Instrument :
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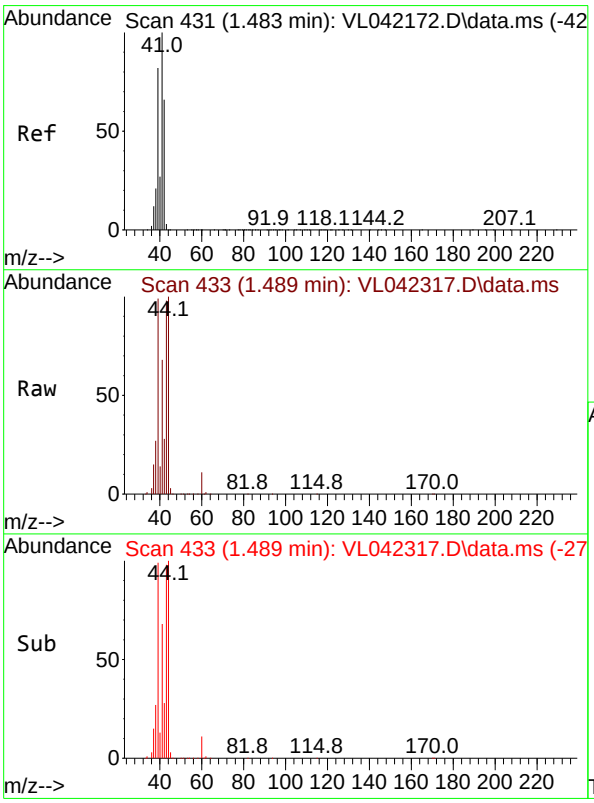
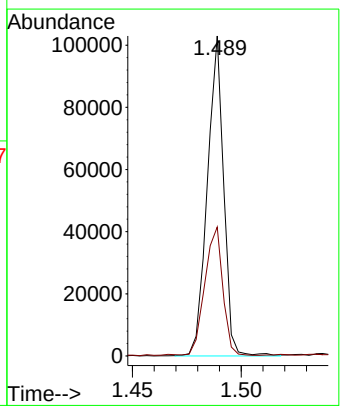
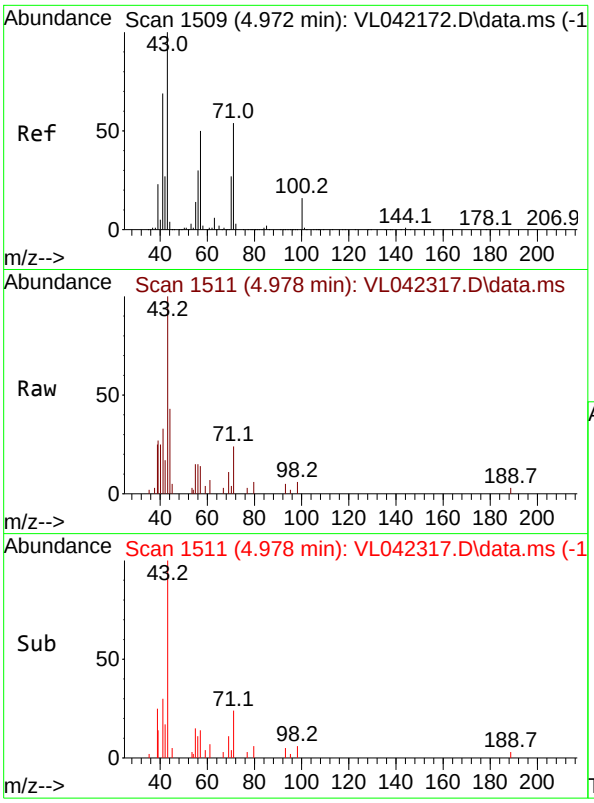


#9
Propene
Concen: 4.335 ppbv m
RT: 1.489 min Scan# 433
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 41 Resp: 53741

Ion	Ratio	Lower	Upper
41	100		
42	131.6	55.4	83.2#





#10
Heptane
Concen: 0.170 ppbv m
RT: 4.978 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 43 Resp: 561

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

Instrument :
MSVOA_L
ClientSampleId :
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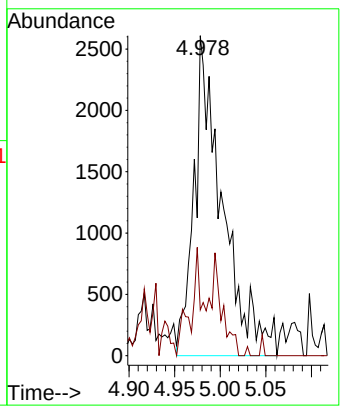
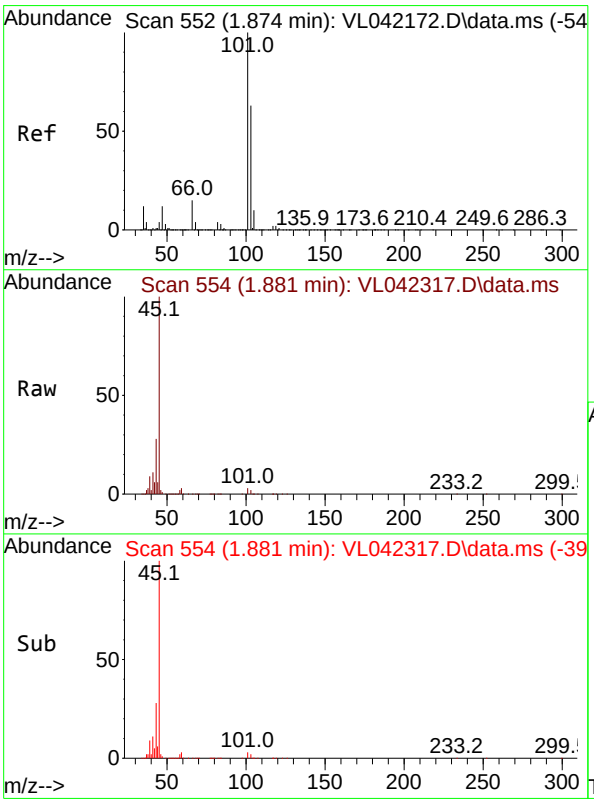
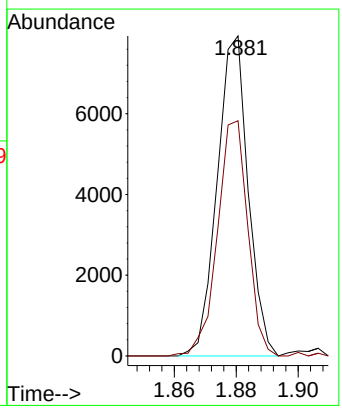


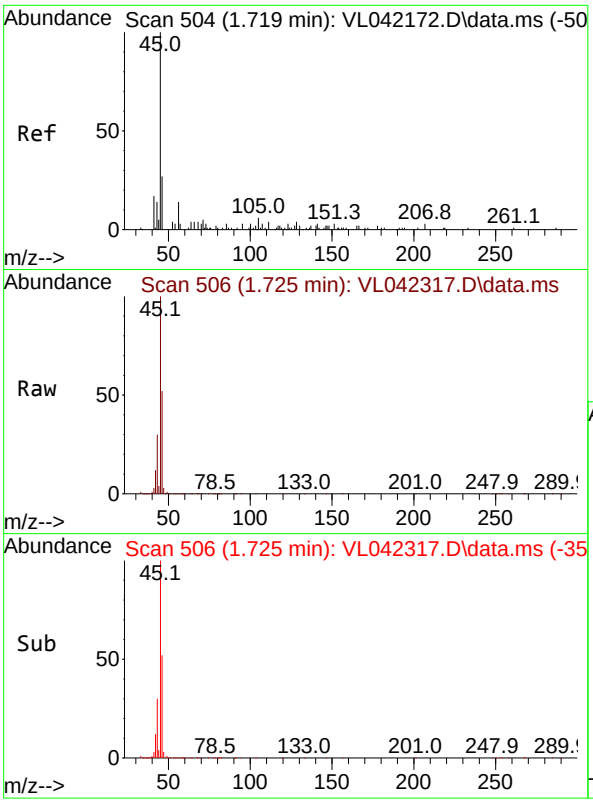


#11
Trichlorofluoromethane
Concen: 0.214 ppbv
RT: 1.881 min Scan# 554
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:101 Resp: 5509

Ion	Ratio	Lower	Upper
101	100		
103	73.5	50.2	75.2

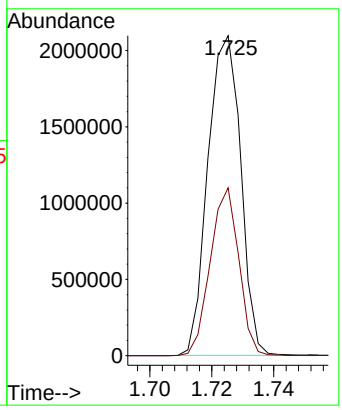




#13
Ethanol
Concen: 1314.265 ppbv
RT: 1.725 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 45 Resp: 154016

Ion	Ratio	Lower	Upper
45	100		
46	45.9	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
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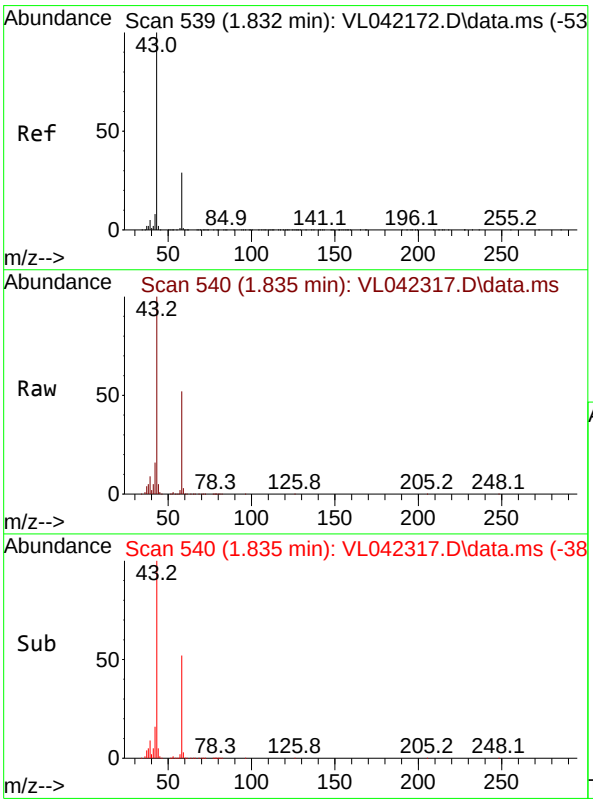
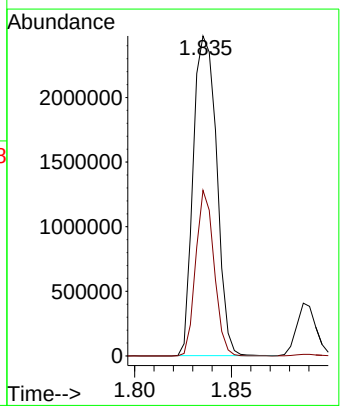
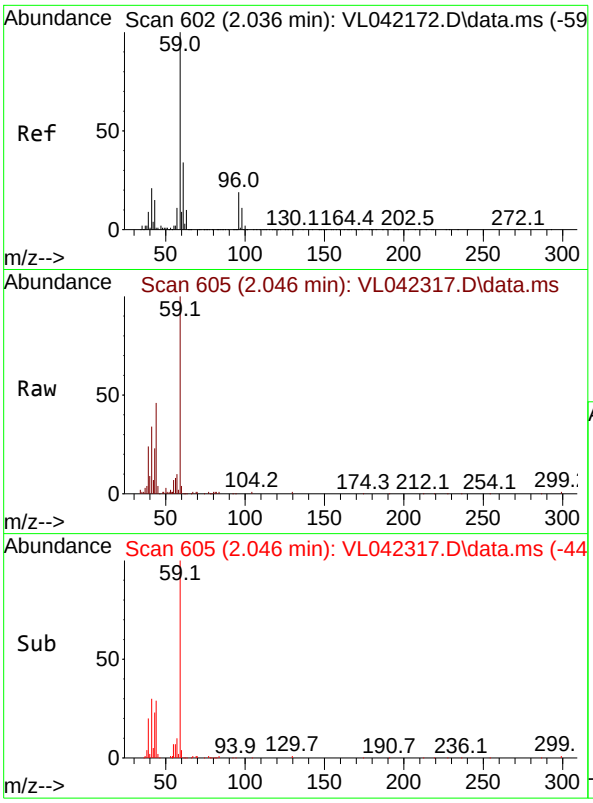


#15
Acetone
Concen: 82.732 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 43 Resp: 2074699

Ion	Ratio	Lower	Upper
43	100		
58	40.8	23.2	34.8#

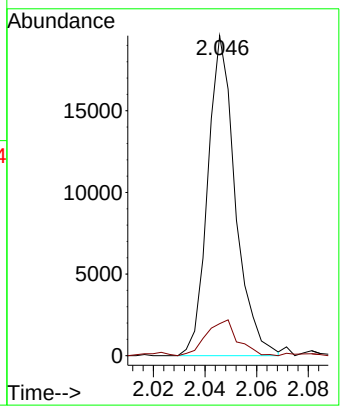




#17
tert-Butyl alcohol
Concen: 0.466 ppbv
RT: 2.046 min Scan# 6
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 59 Resp: 1456

Ion	Ratio	Lower	Upper
59	100		
57	12.2	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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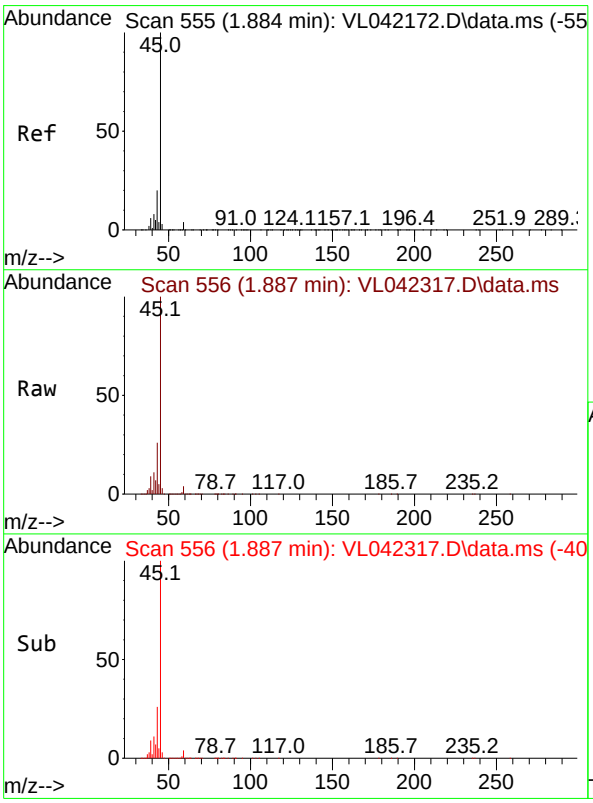
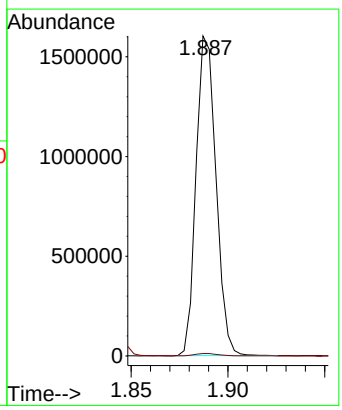
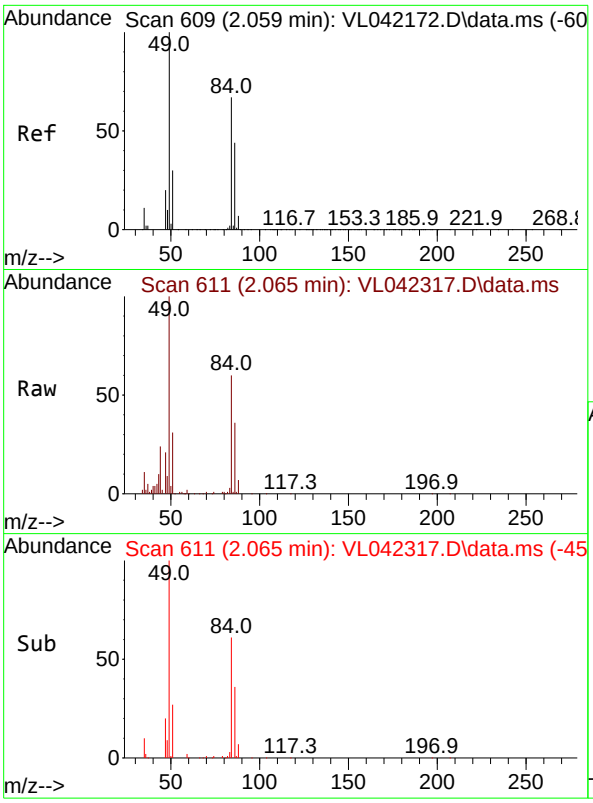


#19
Isopropyl Alcohol
Concen: 81.079 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 45 Resp: 1147205

Ion	Ratio	Lower	Upper
45	100		
58	73.9	36.9	55.3#

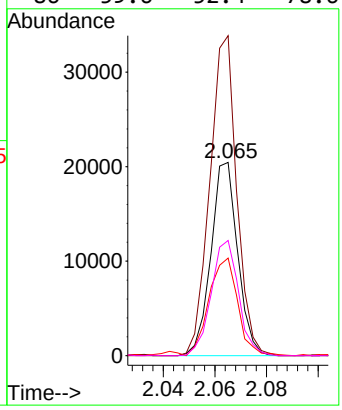




#20
Methylene Chloride
Concen: 1.577 ppbv
RT: 2.065 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 84 Resp: 1472

Ion	Ratio	Lower	Upper
84	100		
49	165.6	120.2	180.4
51	49.9	37.4	56.0
86	59.6	52.4	78.6



Instrument :
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ClientSampleId :
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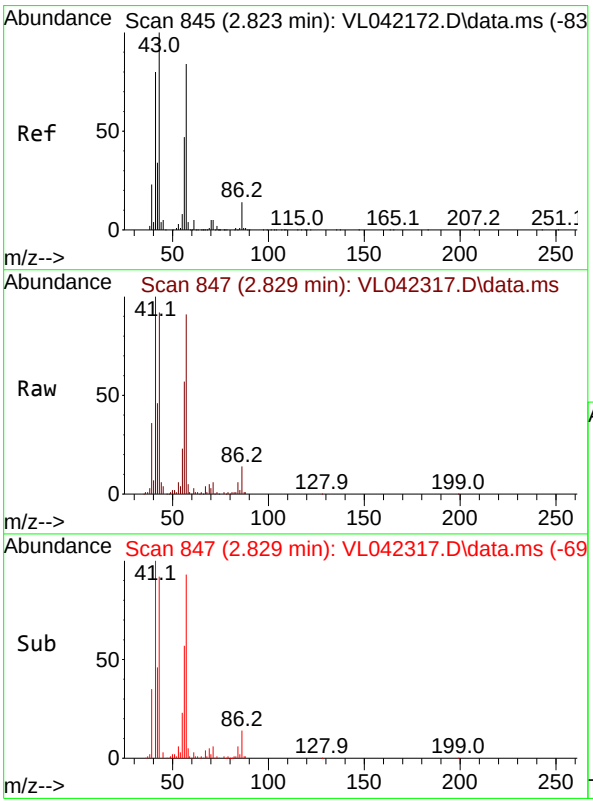
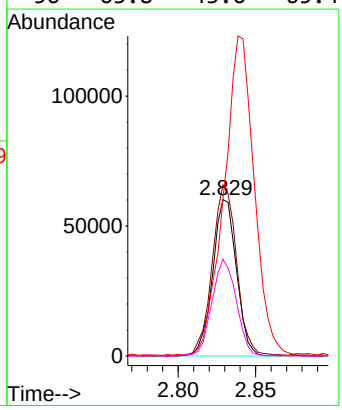
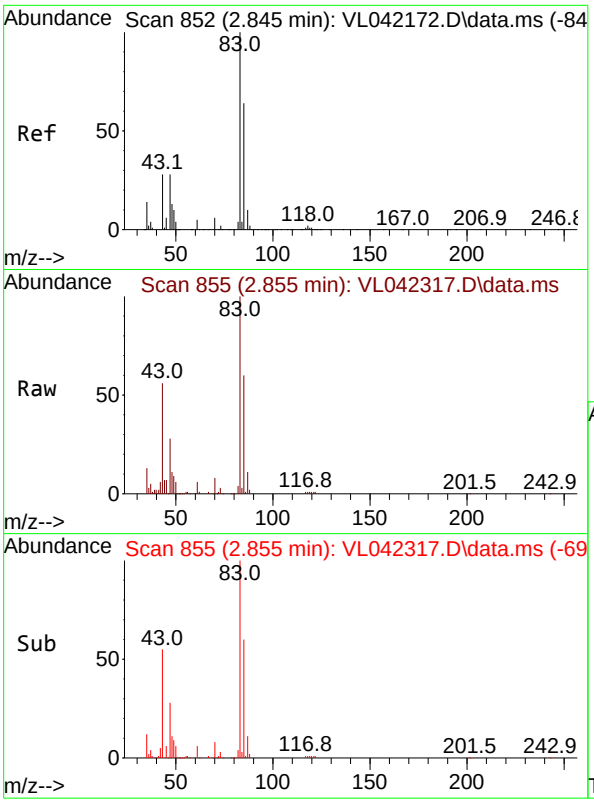


#26
Hexane
Concen: 2.548 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 57 Resp: 64050

Ion	Ratio	Lower	Upper
57	100		
41	113.9	76.6	114.8
43	263.8	207.8	311.8
56	63.8	43.6	65.4





#29
Chloroform
Concen: 1.362 ppbv
RT: 2.855 min Scan# 8
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 83 Resp: 5010

Ion	Ratio	Lower	Upper
83	100		
85	60.2	51.4	77.2

Instrument :
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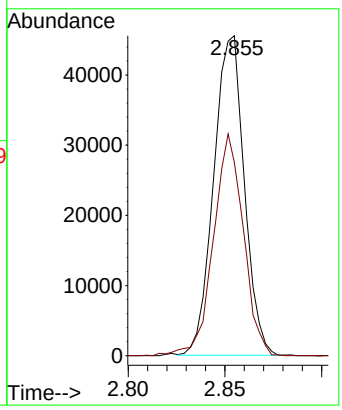
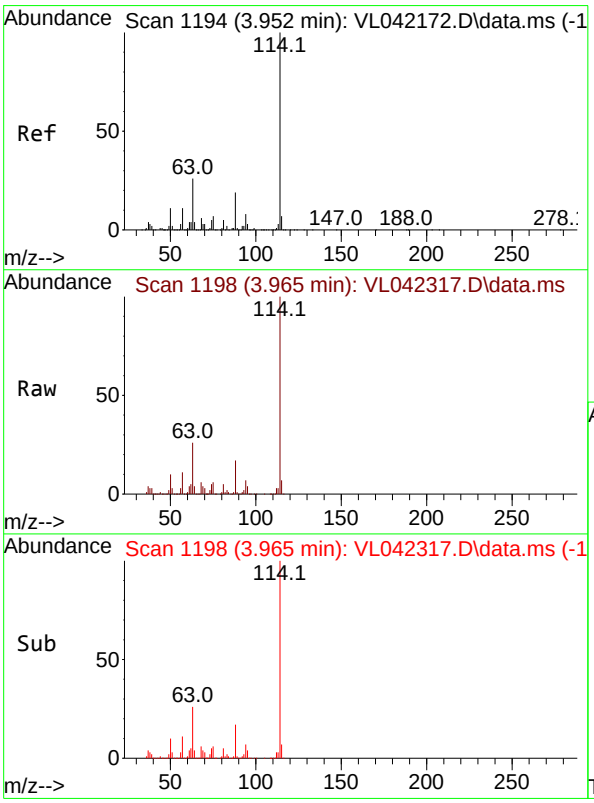
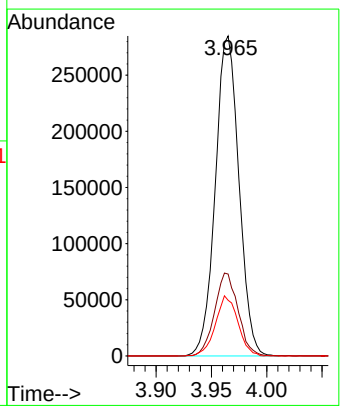


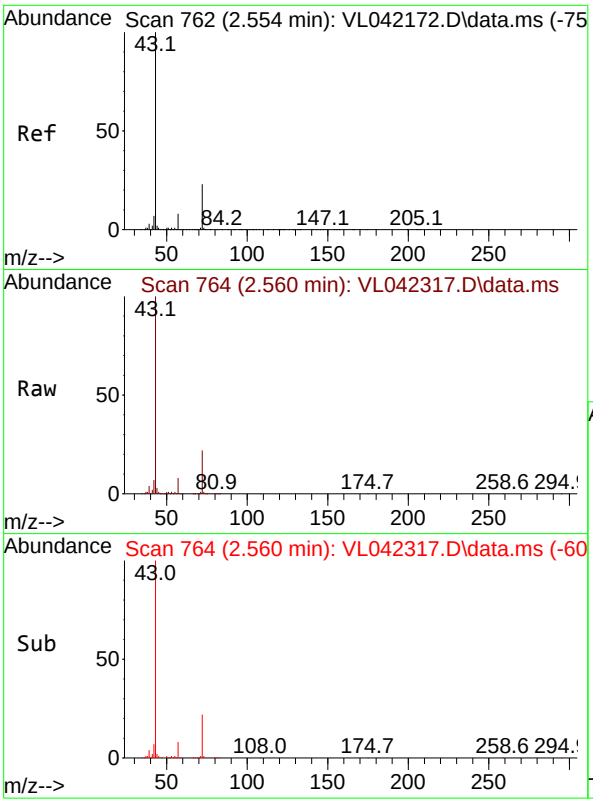


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:114 Resp: 422807

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





#34
2-Butanone
Concen: 26.834 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 43 Resp: 82270

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
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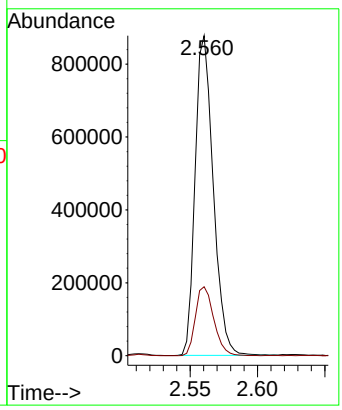
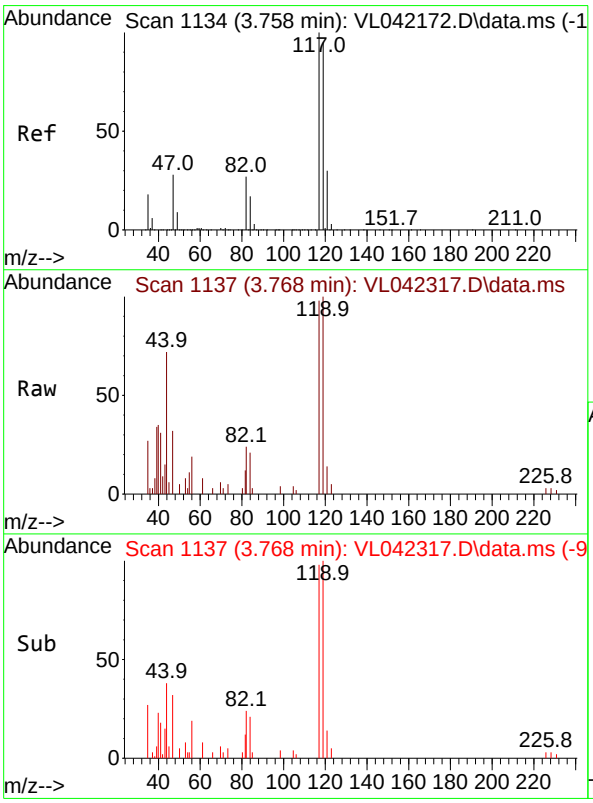
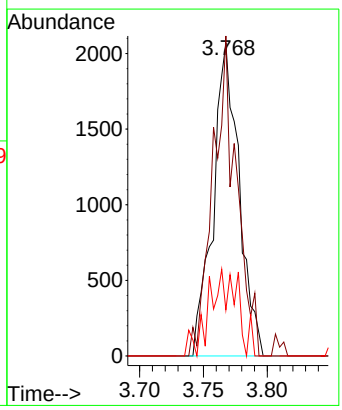


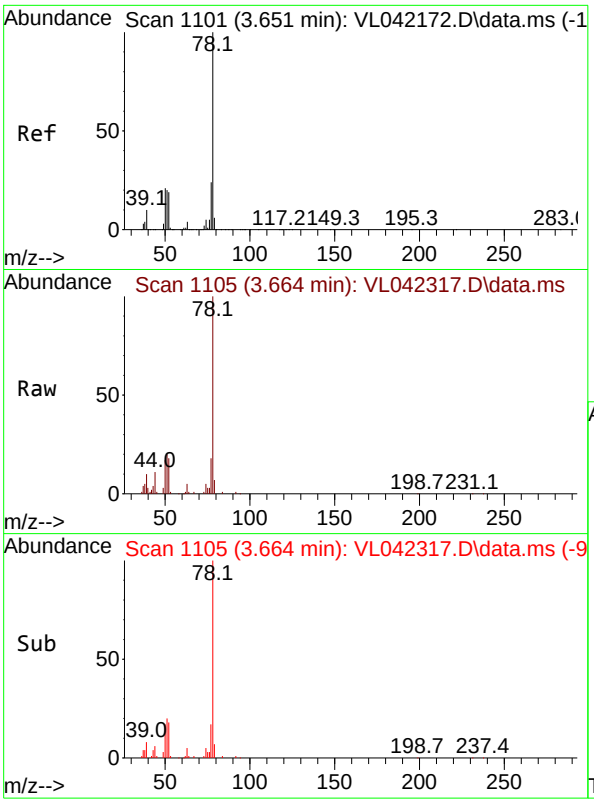


#35
Carbon Tetrachloride
Concen: 0.088 ppbv m
RT: 3.768 min Scan# 1137
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:117 Resp: 2921

Ion	Ratio	Lower	Upper
117	100		
119	102.2	76.2	114.2
121	14.7	24.2	36.4#

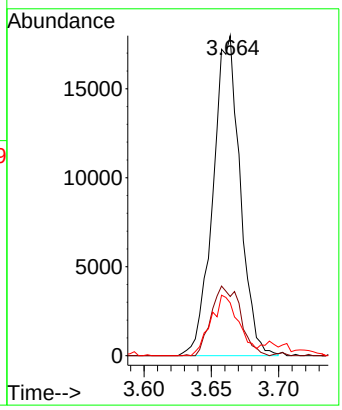




#36
Benzene
Concen: 0.598 ppbv
RT: 3.664 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 78 Resp: 2506

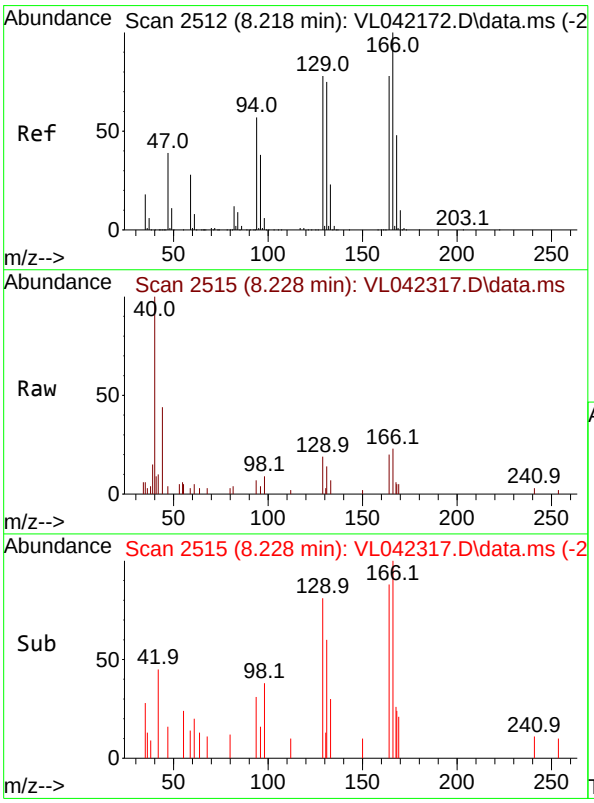
Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	16.5	16.6	24.8#



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations
APPROVED

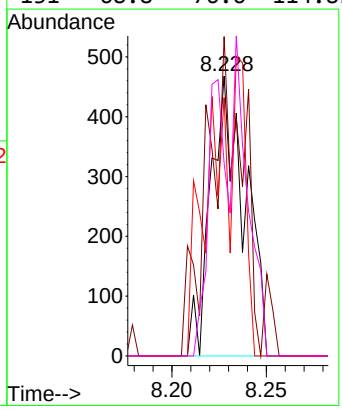
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

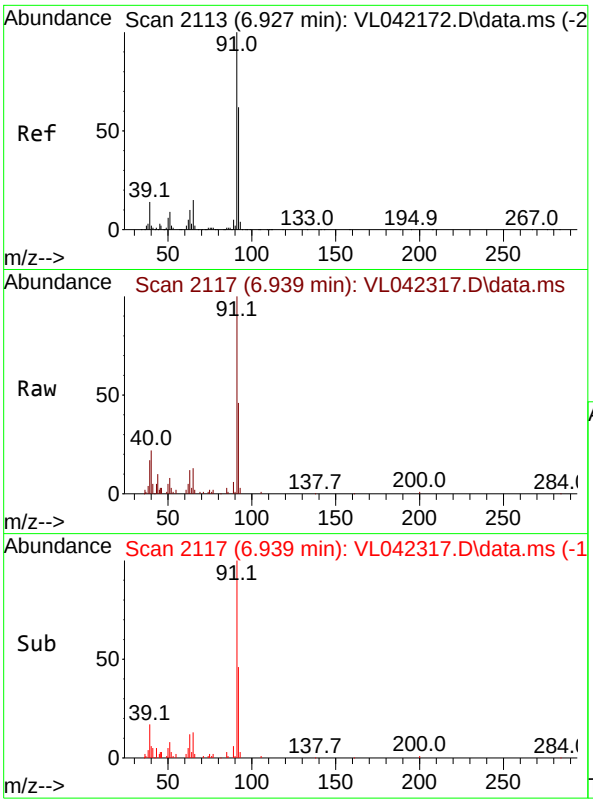


#52
Tetrachloroethene
Concen: 0.035 ppbv m
RT: 8.228 min Scan# 2515
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:164 Resp: 585

Ion	Ratio	Lower	Upper
164	100		
166	114.1	102.5	153.7
129	92.3	79.8	119.8
131	68.8	76.6	114.8#

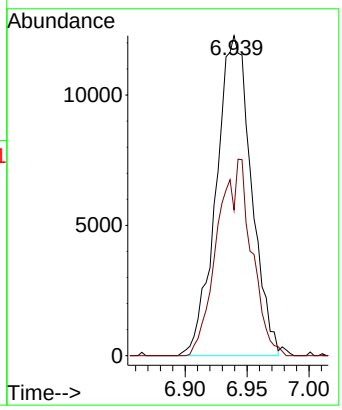




#53
Toluene
Concen: 0.488 ppbv
RT: 6.939 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 91 Resp: 2423

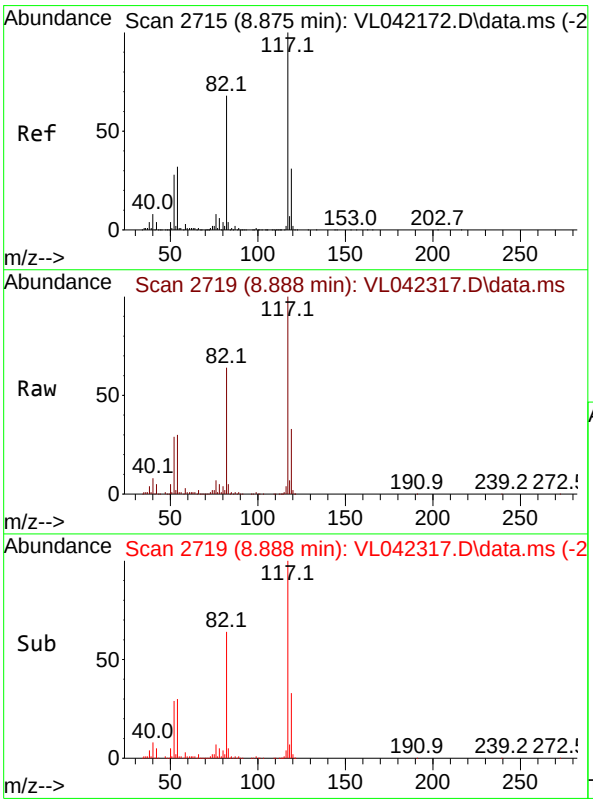
Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations
APPROVED

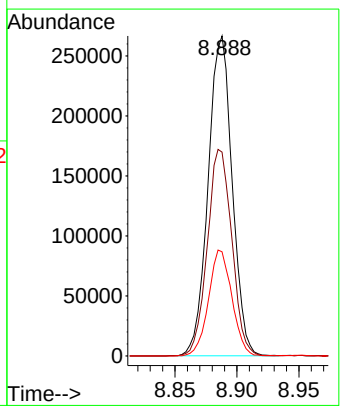
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

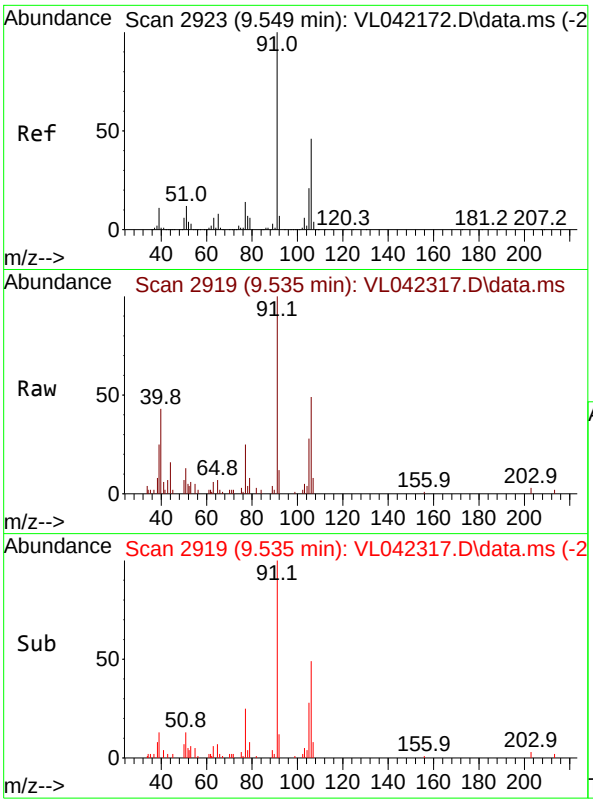


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:117 Resp: 360993

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	32.5	25.5	38.3





#59
m/p-Xylene
Concen: 0.190 ppbv m
RT: 9.535 min Scan# 2
Delta R.T. -0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

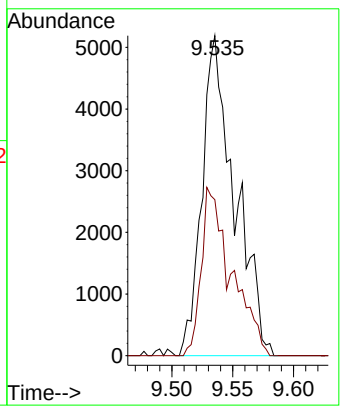
Tgt Ion: 91 Resp: 971

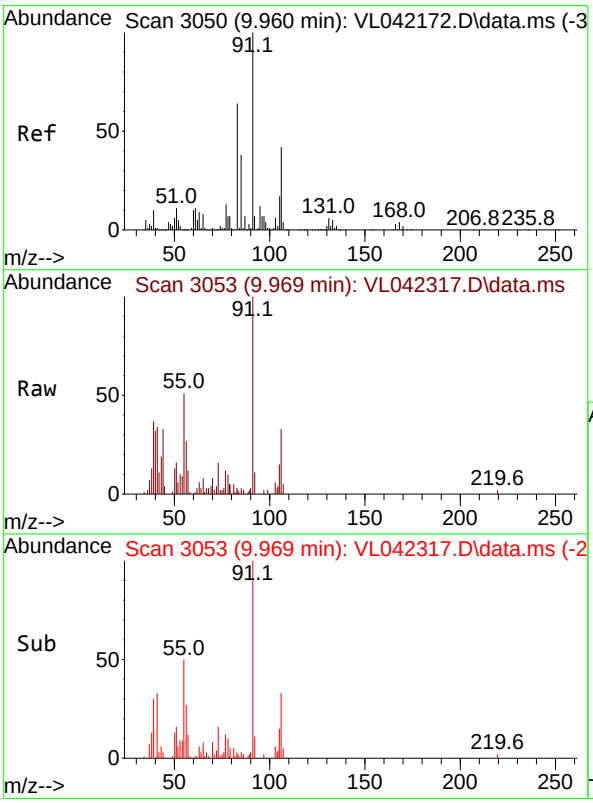
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

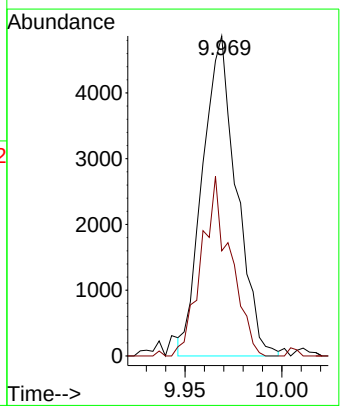


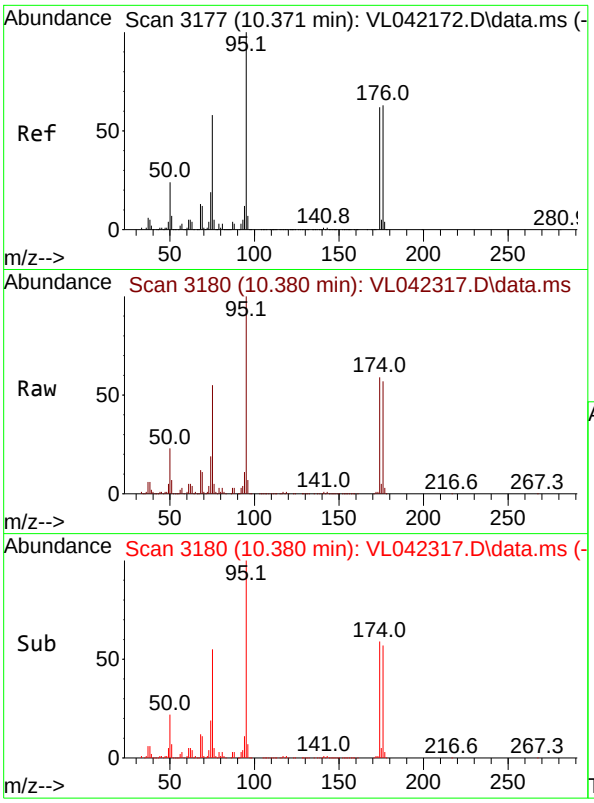


#60
o-Xylene
Concen: 0.116 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 91 Resp: 5940

Ion	Ratio	Lower	Upper
91	100		
106	48.4	20.8	62.5

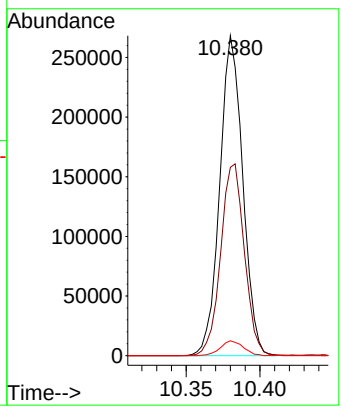




#68
1-Bromo-4-Fluorobenzene
Concen: 9.829 ppbv
RT: 10.380 min Scan# 3
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 95 Resp: 29137

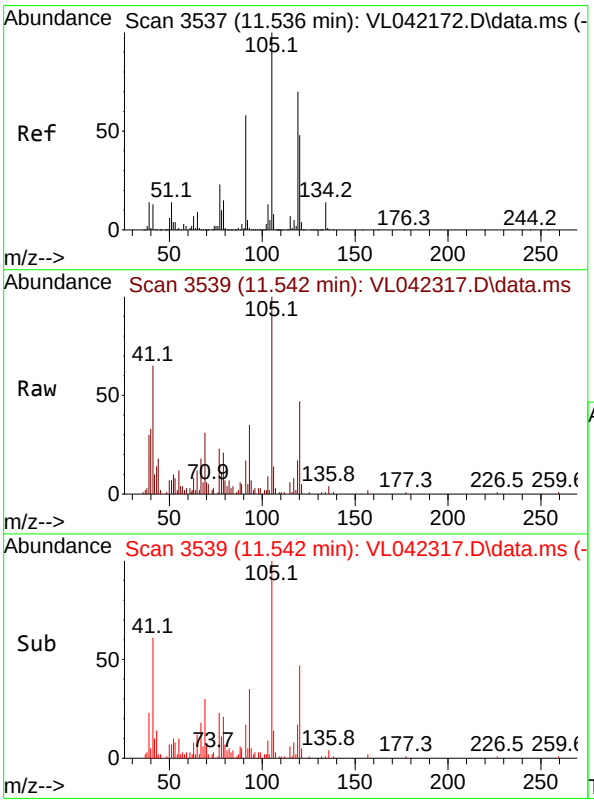
Ion	Ratio	Lower	Upper
95	100		
174	62.0	50.6	76.0
175	4.7	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Manual Integrations
APPROVED

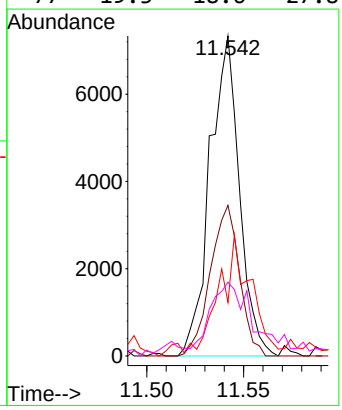
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.121 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:105 Resp: 7764

Ion	Ratio	Lower	Upper
105	100		
120	47.1	38.6	58.0
91	14.6	46.2	69.2#
77	19.3	18.6	27.8



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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

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

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

Signal : TIC: VL042317.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	421	rBV	4482541	5052124	60.26%	15.216%
2	1.466	423	426	429	rBV	386882	185005	2.21%	0.557%
3	1.489	429	433	436	rVV	662537	293642	3.50%	0.884%
4	1.560	450	455	463	rVB	716250	427524	5.10%	1.288%
5	1.622	471	474	478	rVB	154258	84399	1.01%	0.254%
6	1.725	501	506	515	rBV	4344863	2985888	35.62%	8.993%
7	1.835	536	540	549	rVB	5042209	3811166	45.46%	11.478%
8	1.887	549	556	569	rVB	2772547	1964262	23.43%	5.916%
9	2.062	607	610	619	rVB2	105530	85340	1.02%	0.257%
10	2.560	758	764	777	rBV	1369531	1292354	15.42%	3.892%
11	2.790	827	835	841	rBV	638381	661936	7.90%	1.994%
12	2.832	841	848	864	rVB3	372995	685725	8.18%	2.065%
13	3.696	1109	1115	1128	rVB4	76520	119959	1.43%	0.361%
14	3.962	1184	1197	1212	rBV	758733	1148776	13.70%	3.460%
15	8.888	2703	2719	2729	rBV	924924	1287814	15.36%	3.879%
16	9.157	2790	2802	2814	rBV3	125181	197996	2.36%	0.596%
17	9.946	3035	3046	3064	rBV8	85724	187553	2.24%	0.565%
18	10.380	3166	3180	3193	rBV	1227490	1385001	16.52%	4.171%
19	11.429	3492	3504	3512	rBV3	81675	101412	1.21%	0.305%
20	12.047	3686	3695	3705	rBV	2763242	2746269	32.76%	8.271%
21	12.435	3803	3815	3824	rBV7	74961	116054	1.38%	0.350%
22	13.390	4100	4110	4121	rBV2	6926152	8383575	100.00%	25.249%

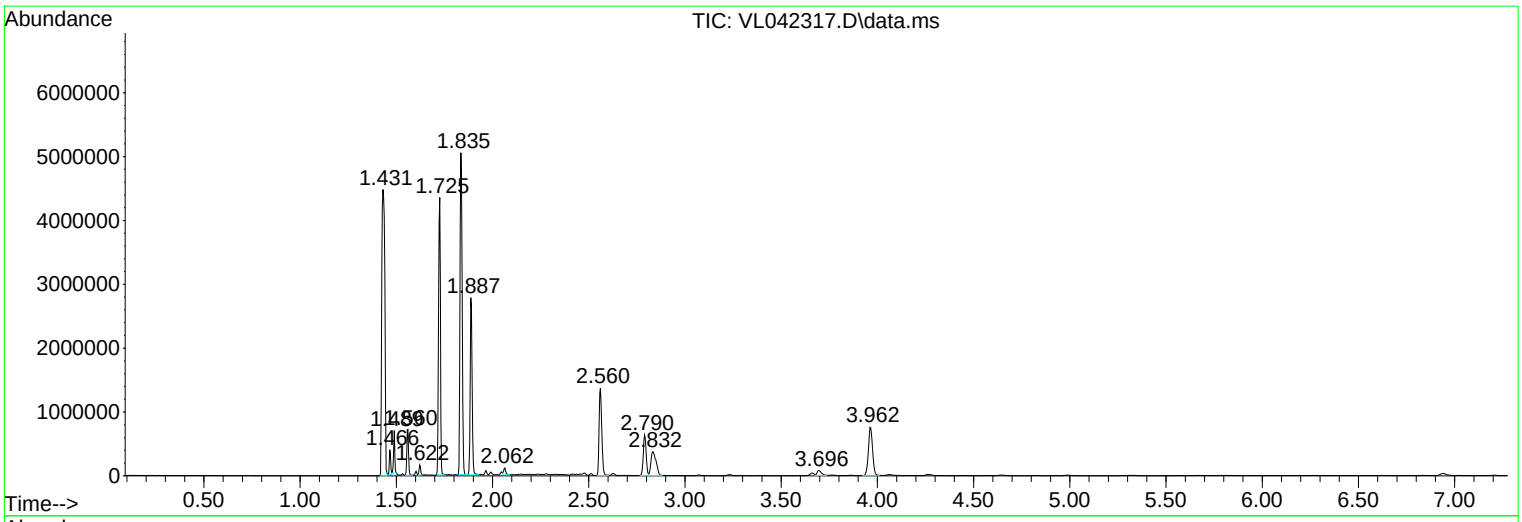
Sum of corrected areas: 33203774

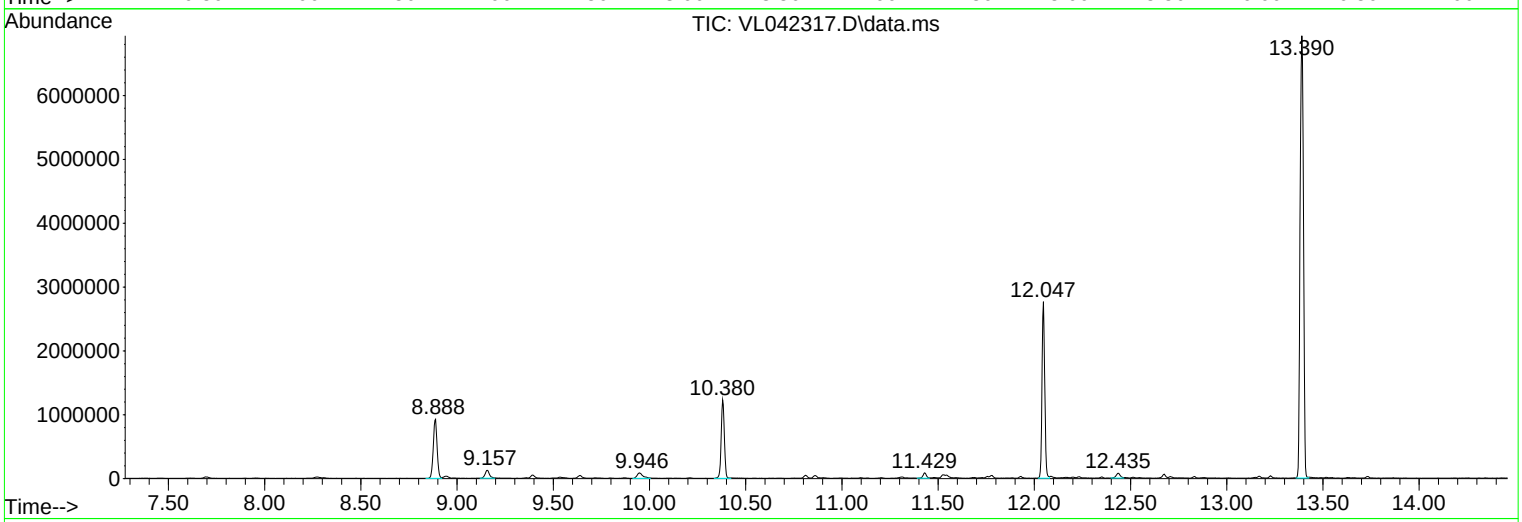
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

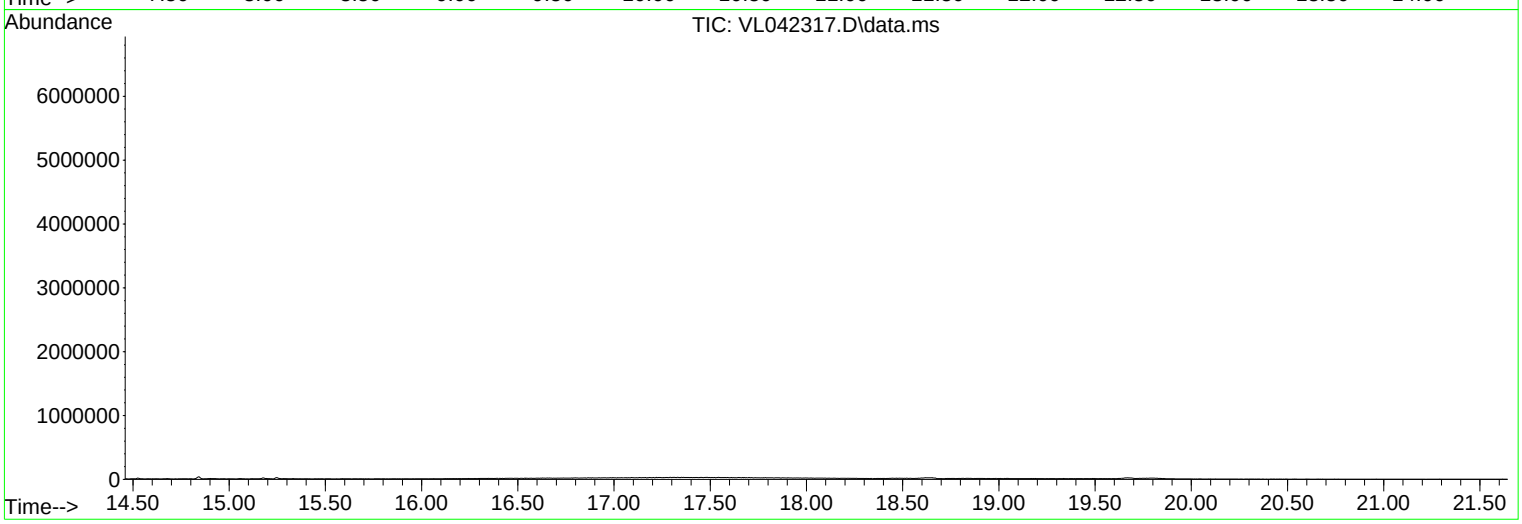
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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

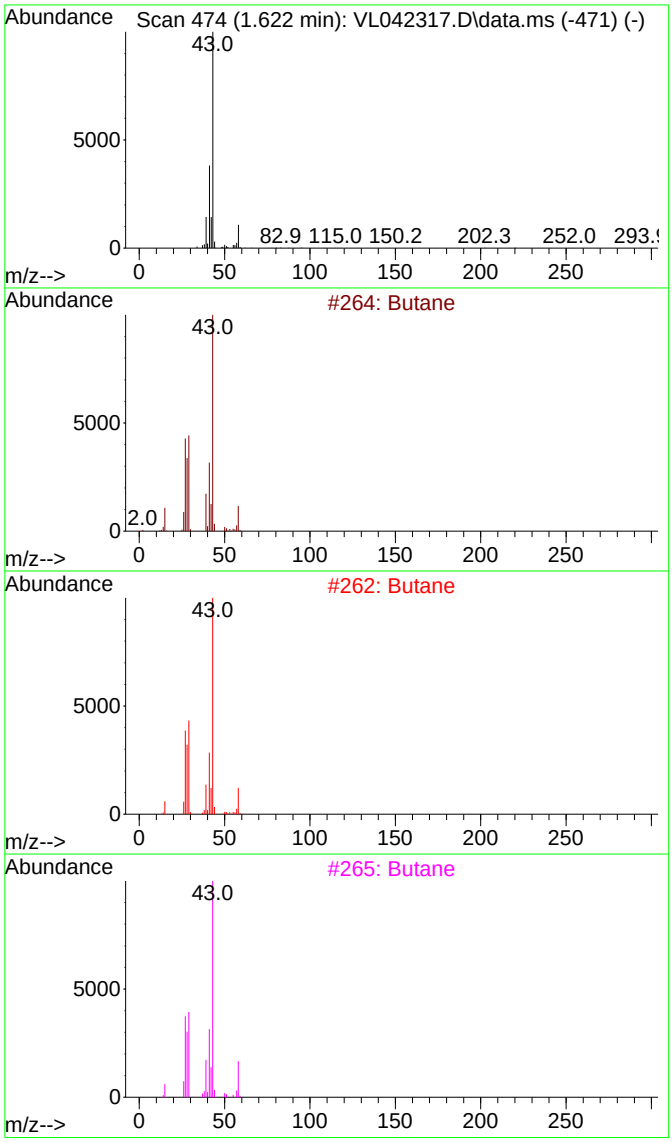
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

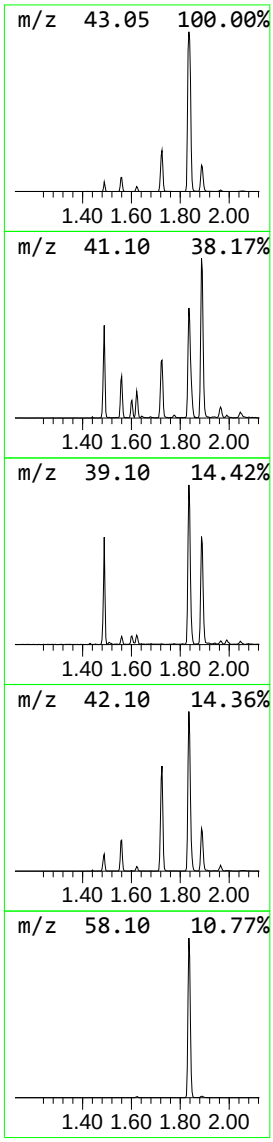
****

Peak Number 1 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.28 ppbv	84399	Bromochloromethane	2.790

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	59
3	Butane	58	C4H10	000106-97-8	59
4	Butane	58	C4H10	000106-97-8	59
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

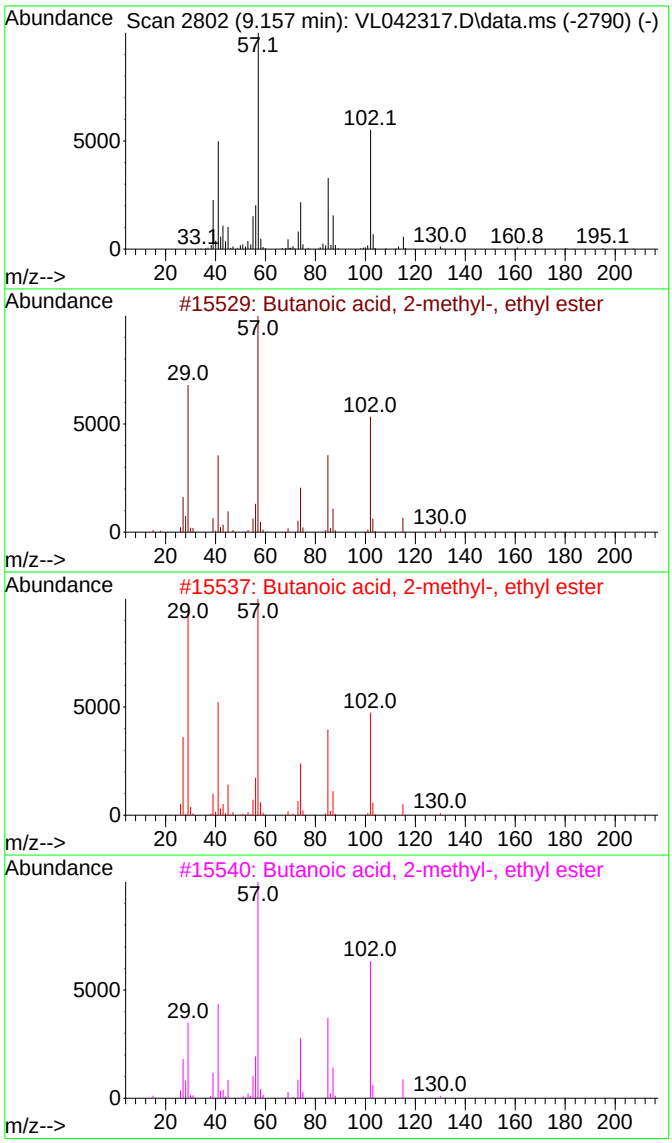
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

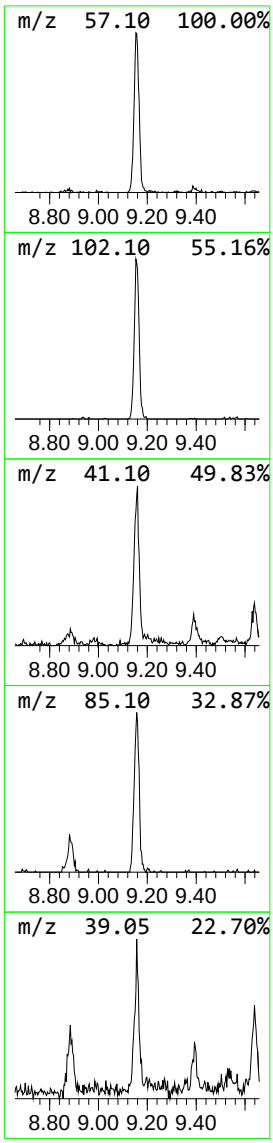
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Butanoic acid, 2-methyl-, e... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.157	1.54 ppbv	197996	Chlorobenzene-d5	8.888

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	93
2	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	81
3	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	76
4	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	74
5	Propanoic acid, ethyl ester	102	C5H10O2	000105-37-3	40





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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

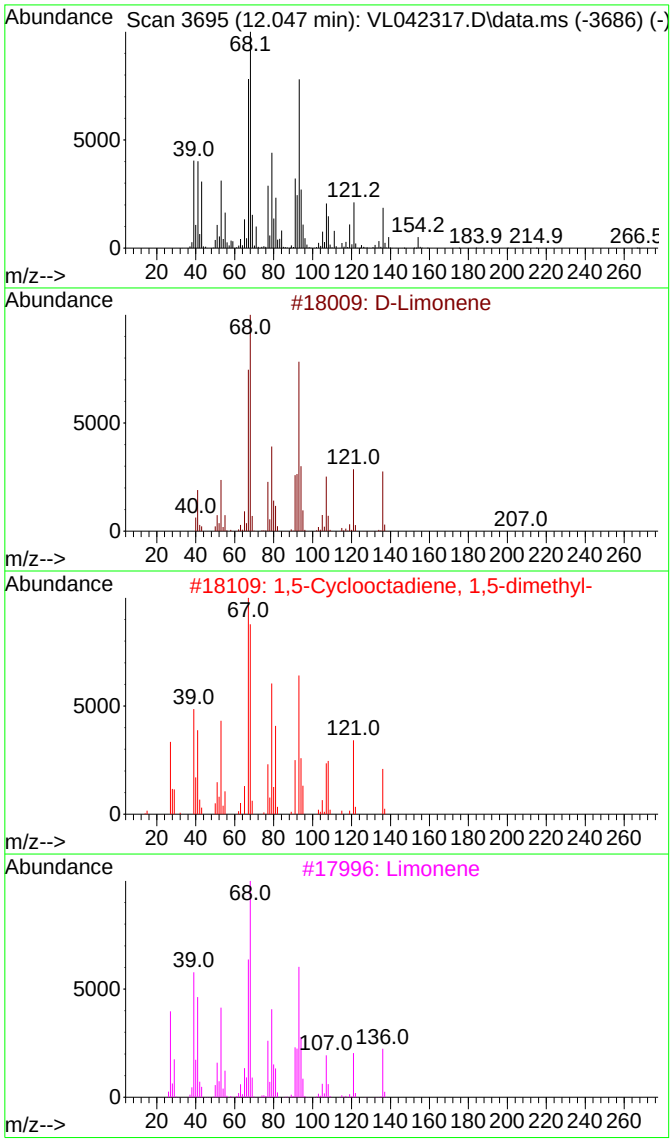
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

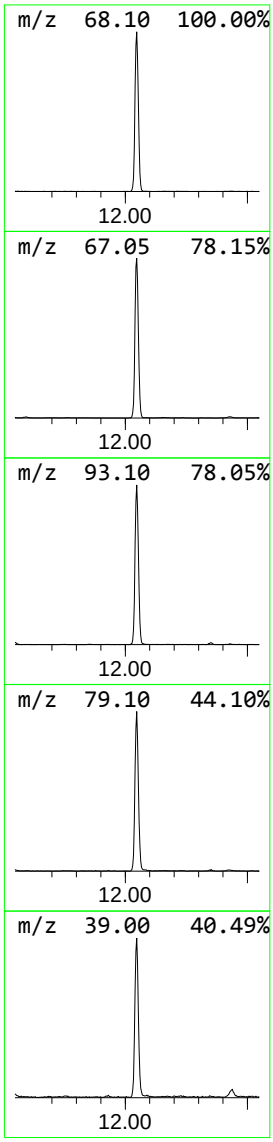
****

Peak Number 3 D-Limonene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.047	21.32 ppbv	2746270	Chlorobenzene-d5	8.888

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	97
2	1,5-Cyclooctadiene, 1,5-dimethyl-	136	C10H16	003760-14-3	92
3	Limonene	136	C10H16	000138-86-3	86
4	Limonene	136	C10H16	000138-86-3	81
5	D-Limonene	136	C10H16	005989-27-5	81





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

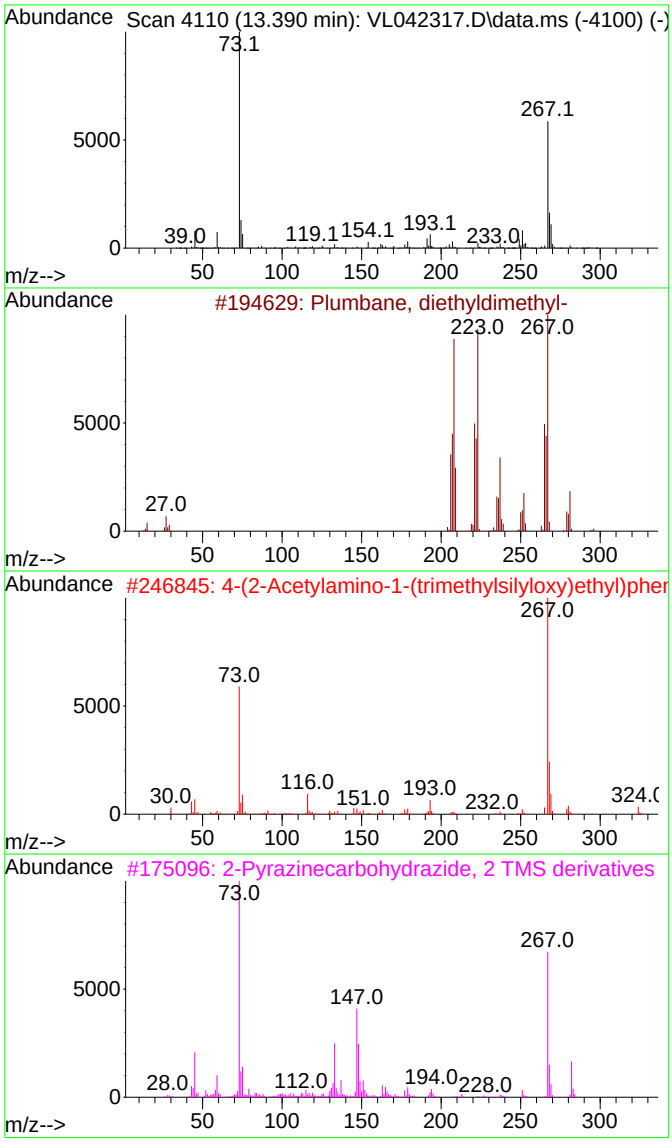
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

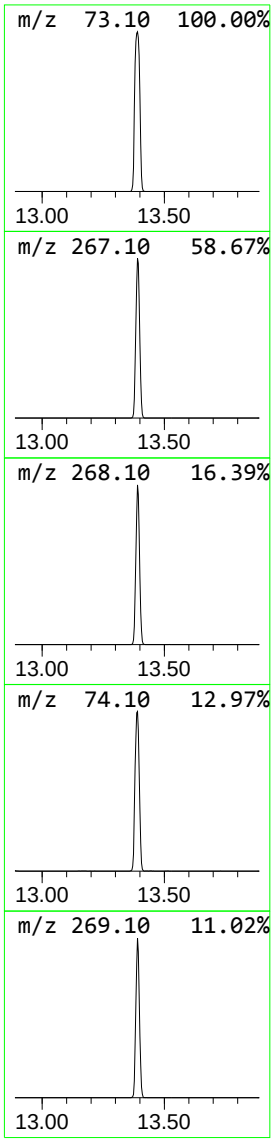
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Plumbane, diethyldimethyl- Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.390	65.10 ppbv	8383580	Chlorobenzene-d5	8.888

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Plumbane, diethyldimethyl-	296	C6H16Pb	001762-27-2	91
2	4-(2-Acetylamino-1-(trimethylsil...	339	C16H29NO3Si2	1000373-43-5	72
3	2-Pyrazinecarbohydrazide, 2 TMS ...	282	C11H22N4OSi2	1000477-45-2	72
4	2,5-Dihydroxybenzaldehyde, 2TMS ...	282	C13H22O3Si2	056114-69-3	64
5	Salicylic acid, 2TMS derivative	282	C13H22O3Si2	003789-85-3	64





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.3	ppbv	84399	1	2.790	661936	10.0
Butanoic acid, ...	9.157	1.5	ppbv	197996	3	8.888	1287810	10.0
D-Limonene	12.047	21.3	ppbv	2746270	3	8.888	1287810	10.0
Plumbane, dieth...	13.390	65.1	ppbv	8383580	3	8.888	1287810	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042322.D	10		04/11/25 16:08	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2.10	10.4	UD	10.4	24.7	ug/m3
64-17-5	Ethanol	1800	3390	EDQ	6.03	9.42	ug/m3
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3	ug/m3
75-01-4	Vinyl Chloride	0.14	0.36	UD	0.36	0.77	ug/m3
74-83-9	Bromomethane	1.40	5.44	UD	5.44	19.4	ug/m3
75-00-3	Chloroethane	1.70	4.49	UD	4.49	13.2	ug/m3
109-99-9	Tetrahydrofuran	1.30	3.83	UD	3.83	14.8	ug/m3
75-69-4	Trichlorofluoromethane	1.60	8.99	UD	8.99	28.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	1.60	12.3	UD	12.3	38.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.88	6.15	UD	6.15	35.0	ug/m3
593-60-2	Bromoethene	1.20	5.25	UD	5.25	21.9	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76	UD	5.76	15.2	ug/m3
142-82-5	Heptane	1.10	4.51	UD	4.51	20.5	ug/m3
67-63-0	Isopropyl Alcohol	88.0	216	D	1.70	12.3	ug/m3
75-35-4	1,1-Dichloroethene	1.40	5.55	UD	5.55	19.8	ug/m3
67-64-1	Acetone	140	333	D	5.70	11.9	ug/m3
75-15-0	Carbon Disulfide	1.60	4.98	UD	4.98	15.6	ug/m3
1634-04-4	Methyl tert-Butyl Ether	1.20	4.33	UD	4.33	18.0	ug/m3
75-09-2	Methylene Chloride	3.30	11.5	JD	6.60	17.4	ug/m3
156-60-5	trans-1,2-Dichloroethene	1.90	7.53	UD	7.53	19.8	ug/m3
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2	ug/m3
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2	ug/m3
78-93-3	2-Butanone	21.5	63.4	D	3.54	14.8	ug/m3
56-23-5	Carbon Tetrachloride	0.11	0.69	UD	0.69	1.89	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.89	3.53	UD	3.53	19.8	ug/m3
67-66-3	Chloroform	1.40	6.84	JD	4.05	24.4	ug/m3
71-55-6	1,1,1-Trichloroethane	0.10	0.55	UD	0.55	1.64	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67	UD	4.67	23.4	ug/m3
71-43-2	Benzene	0.87	2.78	UD	2.78	16.0	ug/m3
107-06-2	1,2-Dichloroethane	0.91	3.68	UD	3.68	20.2	ug/m3
79-01-6	Trichloroethene	0.17	0.91	UD	0.91	1.61	ug/m3
78-87-5	1,2-Dichloropropane	1.10	5.08	UD	5.08	23.1	ug/m3
75-27-4	Bromodichloromethane	0.77	5.16	UD	5.16	33.5	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.93	3.81	UD	3.81	20.5	ug/m3
108-88-3	Toluene	1.10	4.15	UD	4.15	18.8	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042322.D	10		04/11/25 16:08	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	UD	2.72	22.7	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.64	2.91	UD	2.91	22.7	ug/m3
79-00-5	1,1,2-Trichloroethane	0.71	3.87	UD	3.87	27.3	ug/m3
124-48-1	Dibromochloromethane	0.66	5.62	UD	5.62	42.6	ug/m3
106-93-4	1,2-Dibromoethane	0.72	5.53	UD	5.53	7.69	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	ug/m3
108-90-7	Chlorobenzene	0.76	3.50	UD	3.50	23.0	ug/m3
100-41-4	Ethyl Benzene	1.20	5.21	UD	5.21	21.7	ug/m3
179601-23-1	m/p-Xylene	2.10	9.12	UD	9.12	43.4	ug/m3
95-47-6	o-Xylene	1.20	5.21	UD	5.21	21.7	ug/m3
100-42-5	Styrene	1.10	4.68	UD	4.68	21.3	ug/m3
75-25-2	Bromoform	0.57	5.89	UD	5.89	51.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.11	0.76	UDQ	0.76	2.06	ug/m3
95-49-8	2-Chlorotoluene	1.10	5.70	UD	5.70	25.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.10	5.41	UD	5.41	24.6	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.78	3.83	UD	3.83	24.6	ug/m3
541-73-1	1,3-Dichlorobenzene	0.80	4.81	UD	4.81	30.1	ug/m3
106-46-7	1,4-Dichlorobenzene	0.53	3.19	UD	3.19	30.1	ug/m3
95-50-1	1,2-Dichlorobenzene	0.75	4.51	UDQ	4.51	30.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.85	6.31	UD	6.31	37.1	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.85	9.07	UD	9.07	53.3	ug/m3
106-99-0	1,3-Butadiene	1.30	2.88	UD	2.88	11.1	ug/m3
91-20-3	Naphthalene	0.75	3.93	UD	3.93	5.24	ug/m3
622-96-8	4-Ethyltoluene	1.20	5.90	UD	5.90	24.6	ug/m3
110-54-3	Hexane	1.90	6.70	JD	3.88	17.6	ug/m3
107-05-1	Allyl Chloride	1.50	4.70	UD	4.70	15.7	ug/m3
123-91-1	1,4-Dioxane	2.10	7.57	UD	7.57	18.0	ug/m3
80-62-6	Methyl Methacrylate	0.86	3.52	UD	3.52	20.5	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	183000		2.791			
540-36-3	1,4-Difluorobenzene	438000		3.965			
3114-55-4	Chlorobenzene-d5	361000		8.885			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042322.D	10		04/11/25 16:08	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042322.D
Acq On : 11 Apr 2025 16:08
Operator : SY/MD
Sample : Q1665-03DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Quant Time: Apr 11 23:02:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

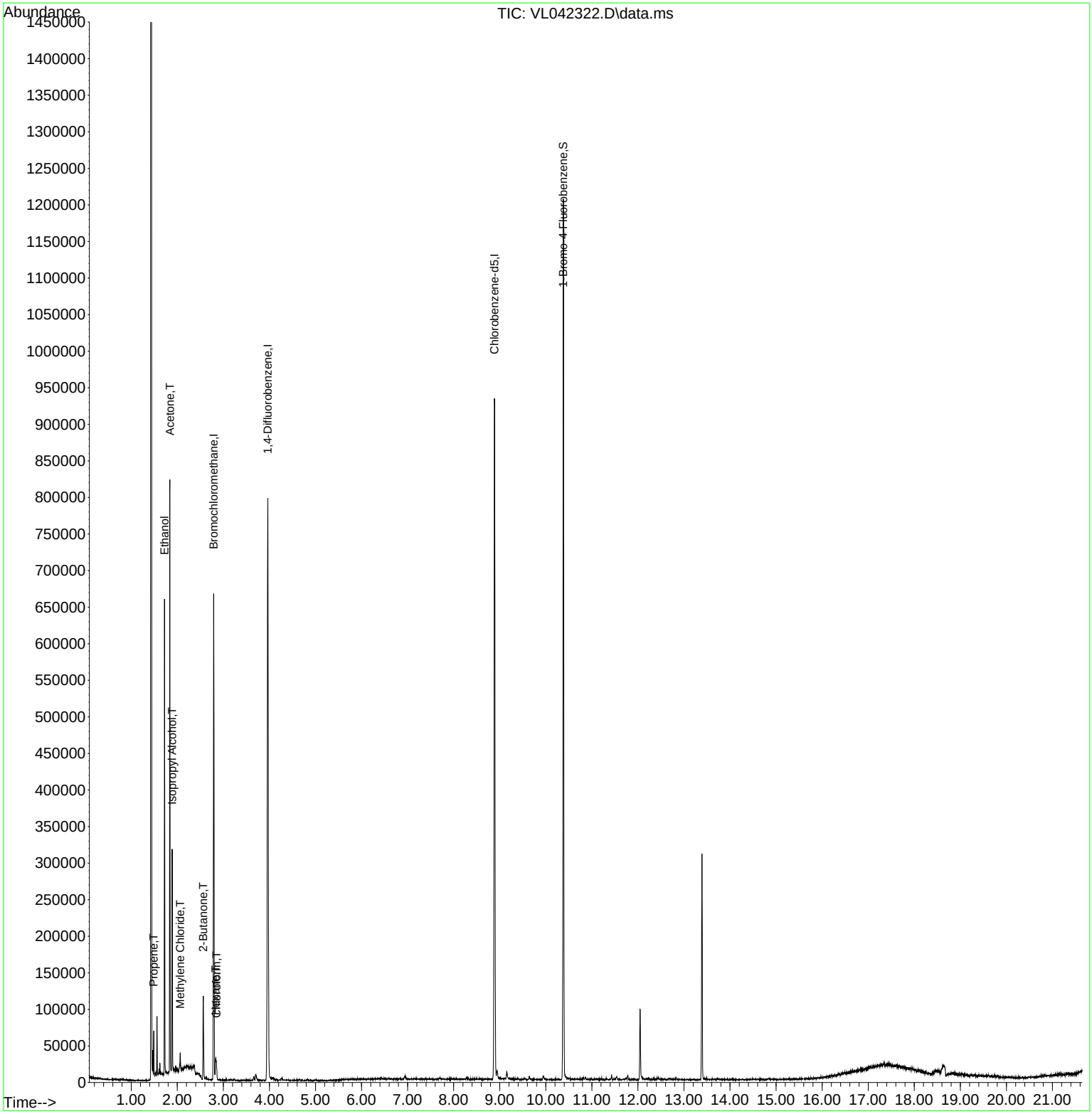
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.791	49	183437	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.965	114	437835	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.885	117	360512	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	268511	9.070	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 90.700%				
Target Compounds							Qvalue
9) Propene	1.489	41	5497	0.433	ppbv		91
13) Ethanol	1.722	45	212244	177.037	ppbv		84
15) Acetone	1.839	43	354601	13.822	ppbv		95
19) Isopropyl Alcohol	1.888	45	127328	8.796	ppbv	#	59
20) Methylene Chloride	2.062	84	3179	0.333	ppbv		93
26) Hexane	2.829	57	4958	0.193	ppbv	#	79
29) Chloroform	2.852	83	5087	0.135	ppbv		100
34) 2-Butanone	2.564	43	68236	2.149	ppbv		97

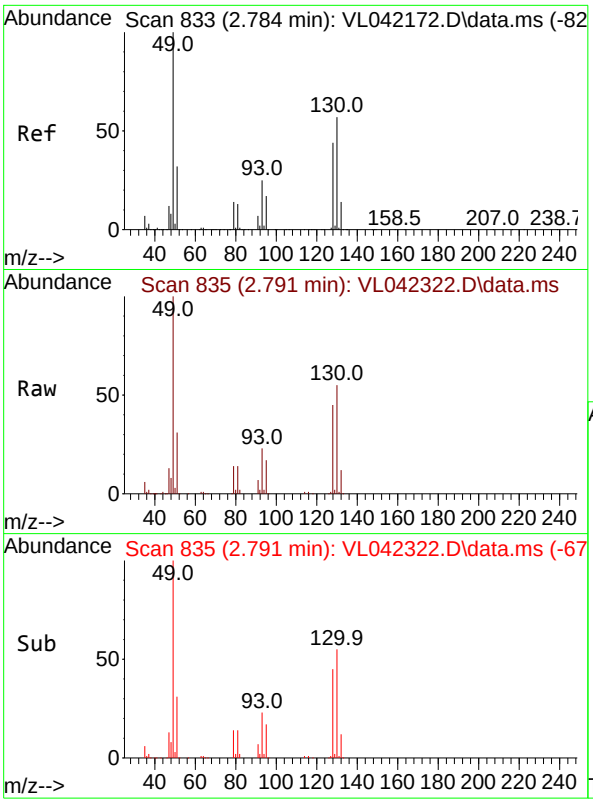
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042322.D
Acq On : 11 Apr 2025 16:08
Operator : SY/MD
Sample : Q1665-03DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 5 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Quant Time: Apr 11 23:02:16 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



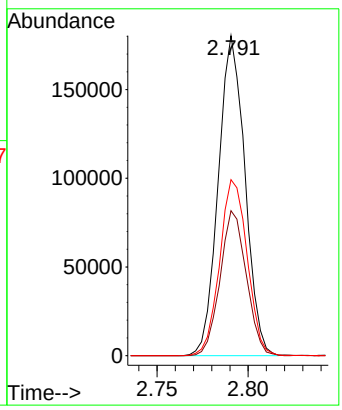


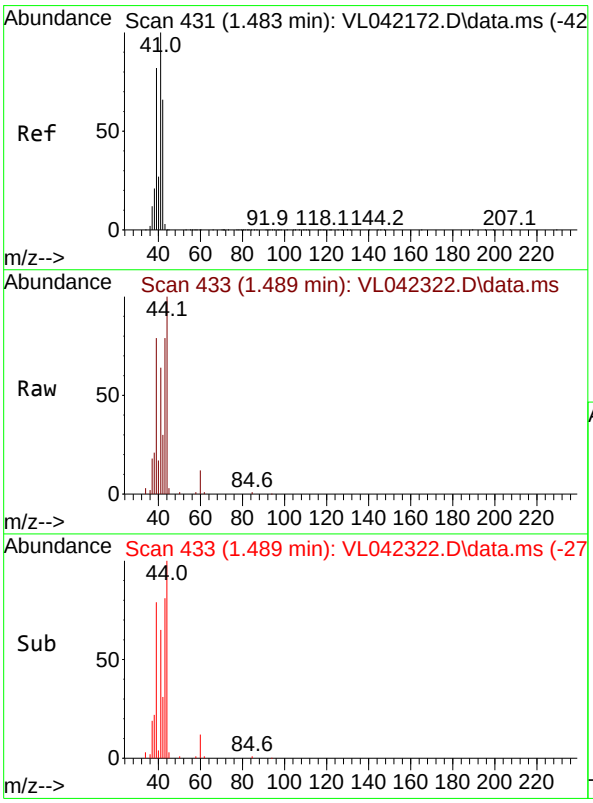
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion: 49 Resp: 183437

Ion	Ratio	Lower	Upper
49	100		
128	44.6	22.9	68.5
130	56.8	28.8	86.4

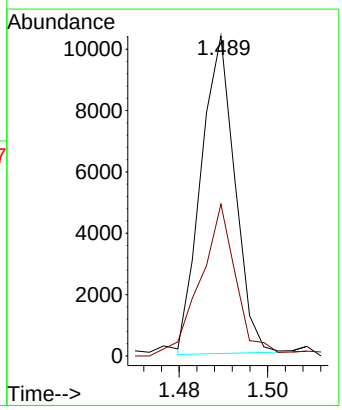


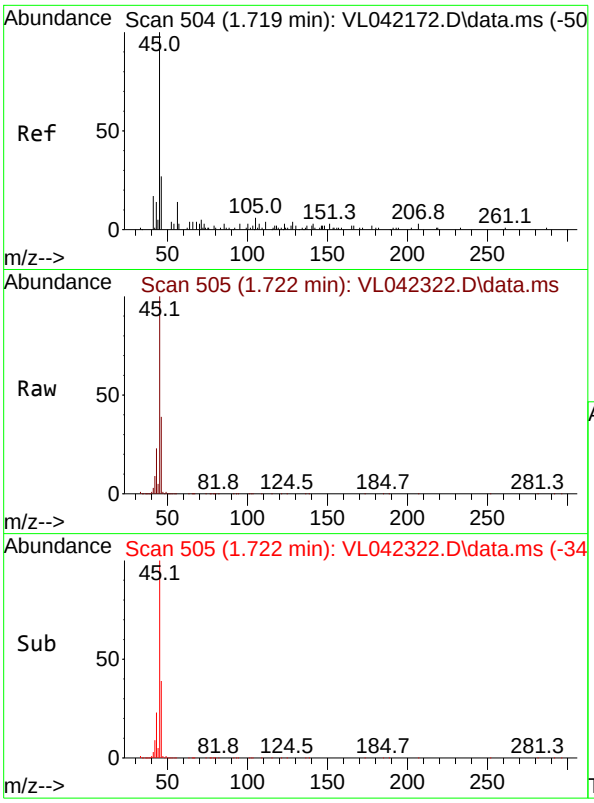


#9
Propene
Concen: 0.433 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 41 Resp: 5497

Ion	Ratio	Lower	Upper
41	100		
42	62.3	55.4	83.2



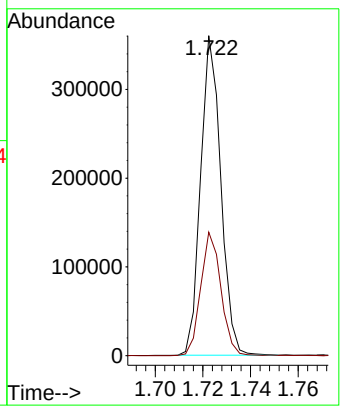


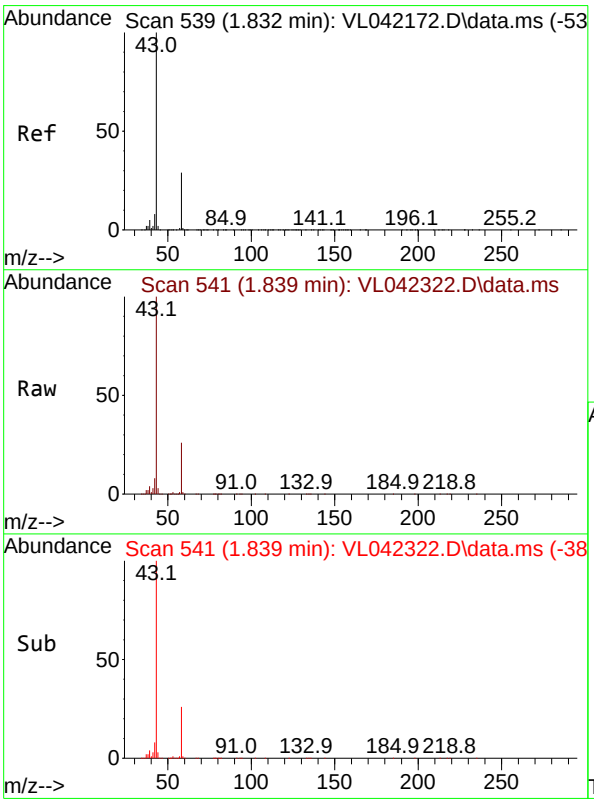
#13
Ethanol
Concen: 177.037 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion: 45 Resp: 212244

Ion	Ratio	Lower	Upper
45	100		
46	39.1	20.2	80.8

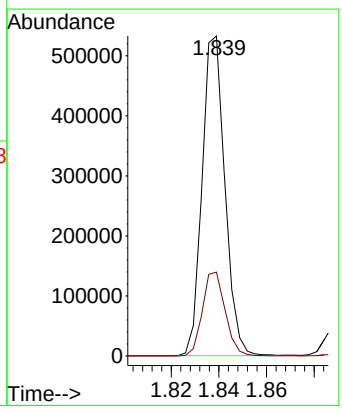


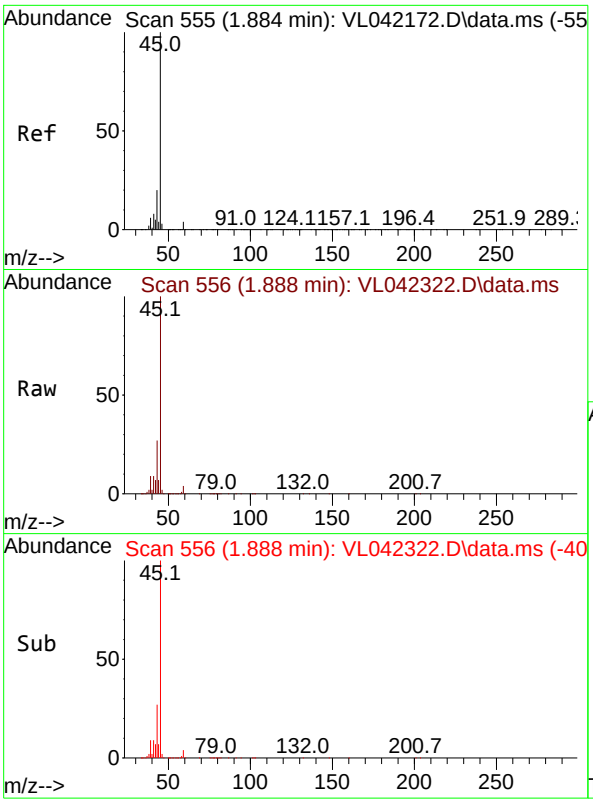


#15
Acetone
Concen: 13.822 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.007 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 43 Resp: 354601

Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8



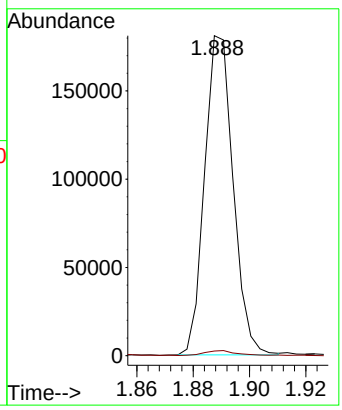


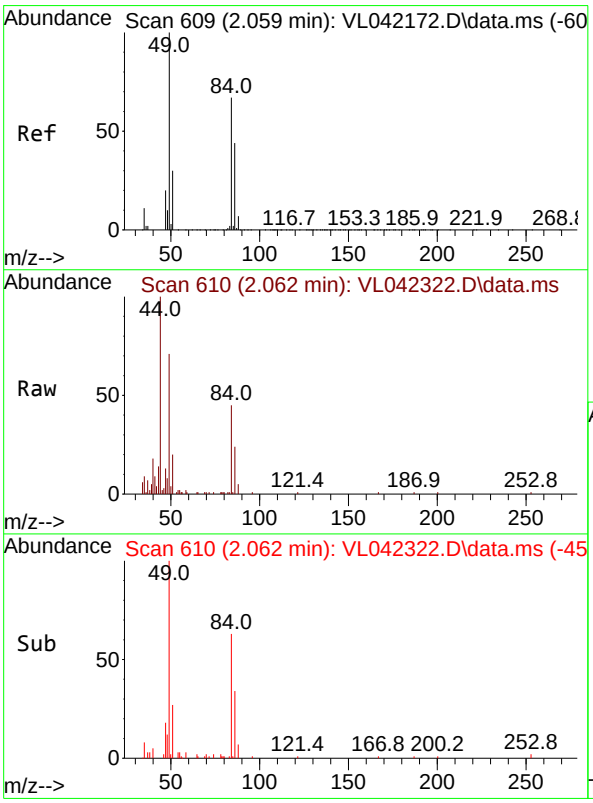
#19
Isopropyl Alcohol
Concen: 8.796 ppbv
RT: 1.888 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion: 45 Resp: 127328

Ion	Ratio	Lower	Upper
45	100		
58	73.2	36.9	55.3#

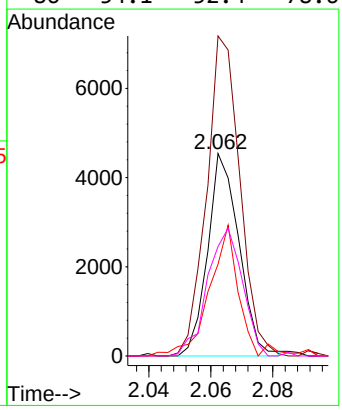


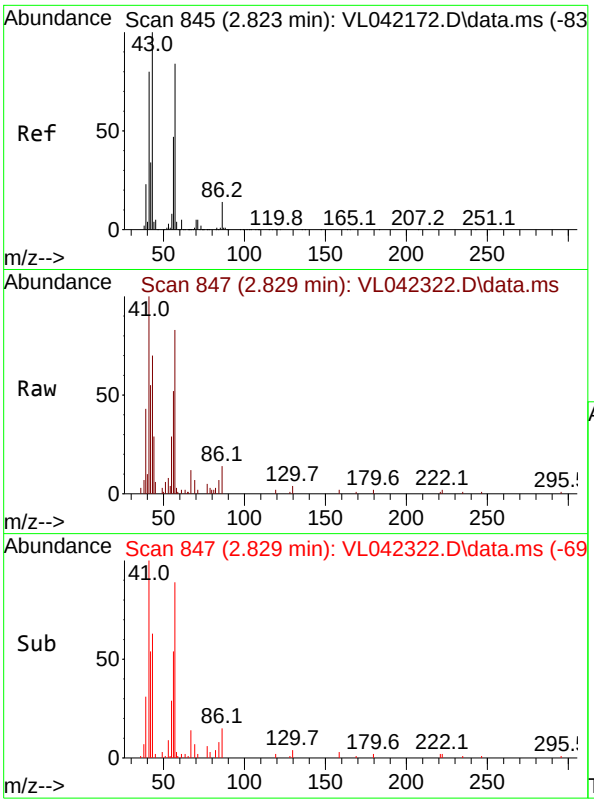


#20
Methylene Chloride
Concen: 0.333 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 84 Resp: 3179

Ion	Ratio	Lower	Upper
84	100		
49	156.6	120.2	180.4
51	43.2	37.4	56.0
86	54.1	52.4	78.6



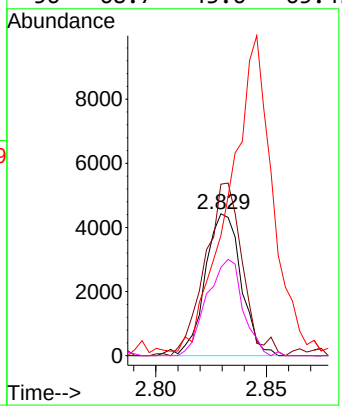


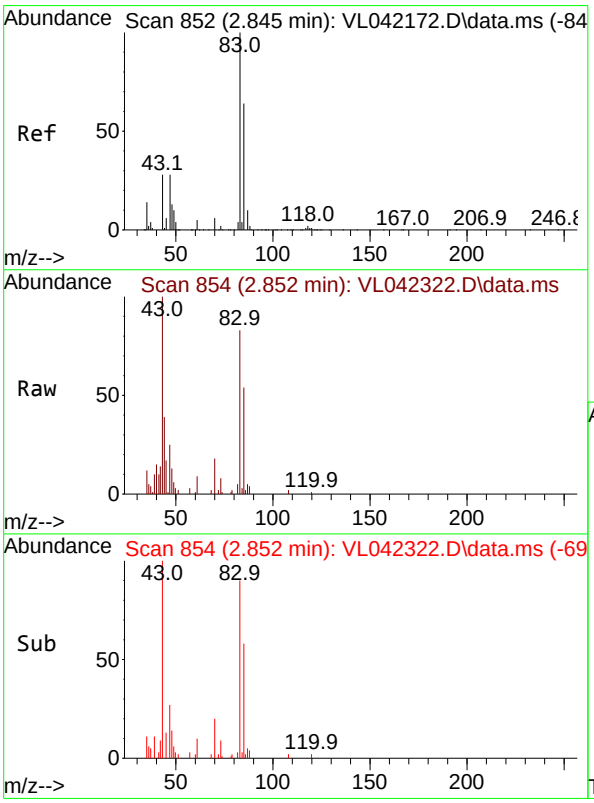
#26
Hexane
Concen: 0.193 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.007 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion: 57 Resp: 4958

Ion	Ratio	Lower	Upper
57	100		
41	135.9	76.6	114.8#
43	284.3	207.8	311.8
56	68.7	43.6	65.4#

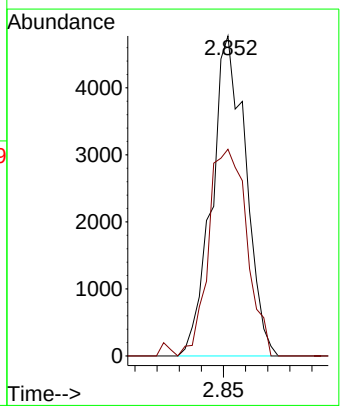


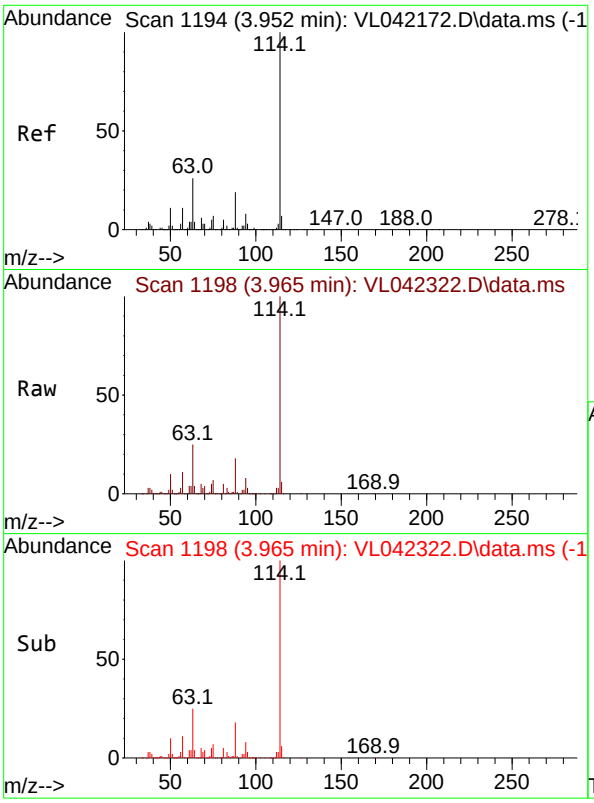


#29
Chloroform
Concen: 0.135 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.007 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 83 Resp: 5087

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.4	77.2



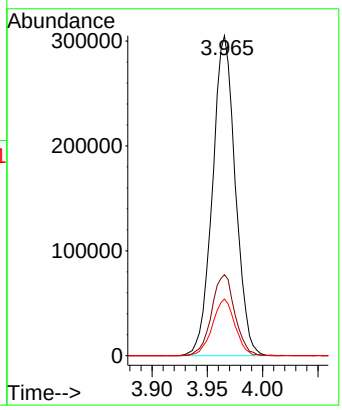


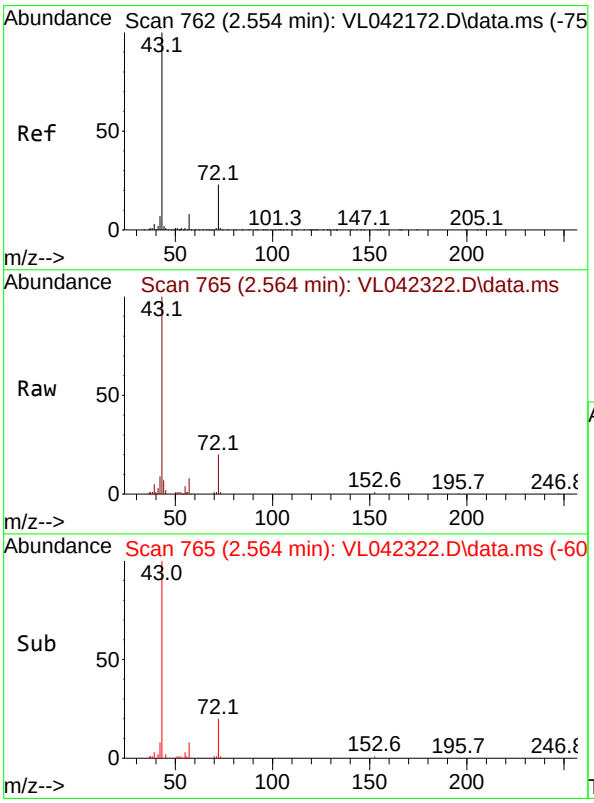
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion:114 Resp: 437835

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.5	15.0	22.4

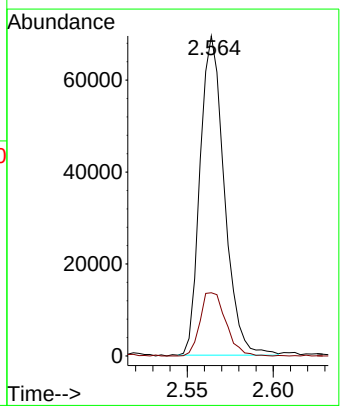


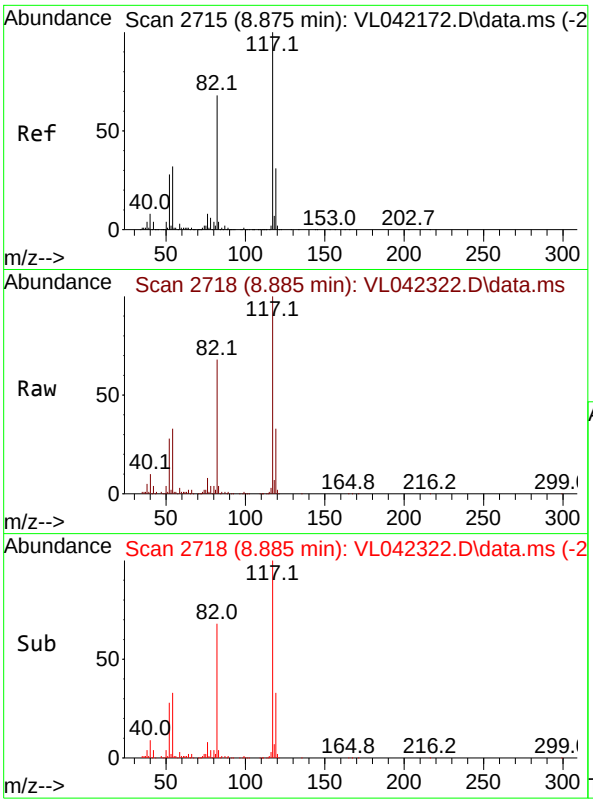


#34
2-Butanone
Concen: 2.149 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 43 Resp: 68236

Ion	Ratio	Lower	Upper
43	100		
72	21.2	18.2	27.2



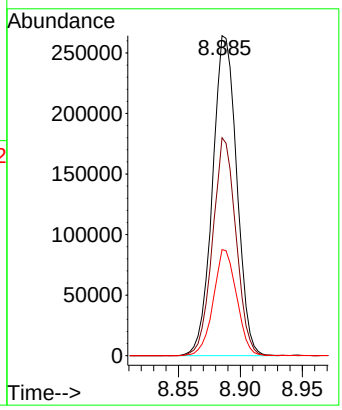


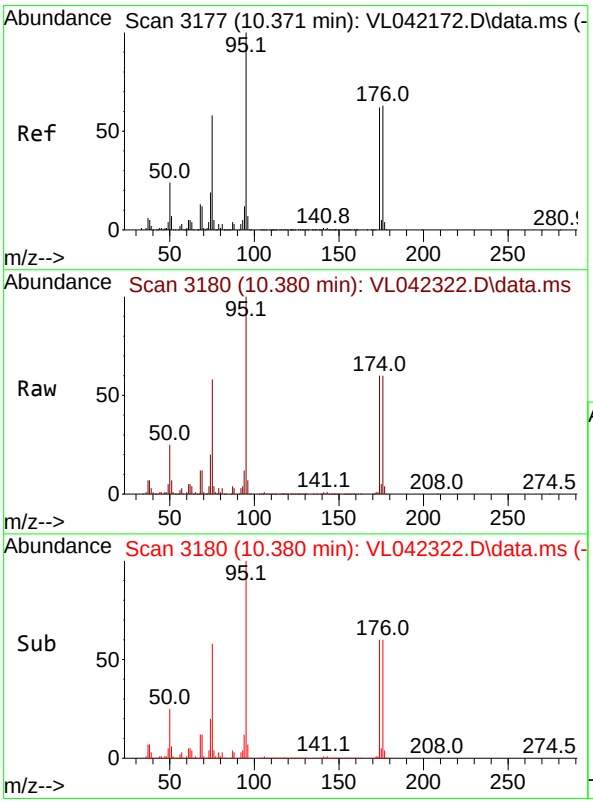
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DL

Tgt Ion:117 Resp: 360512

Ion	Ratio	Lower	Upper
117	100		
82	65.6	55.8	83.6
119	31.9	25.5	38.3

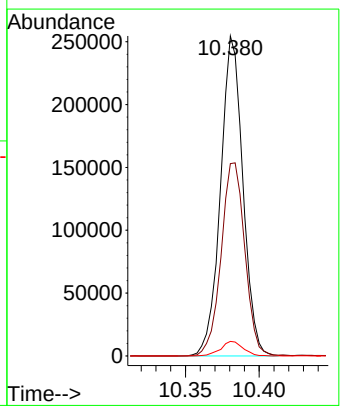




#68
1-Bromo-4-Fluorobenzene
Concen: 9.070 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.010 min
Lab File: VL042322.D
Acq: 11 Apr 2025 16:08

Tgt Ion: 95 Resp: 268511

Ion	Ratio	Lower	Upper
95	100		
174	64.6	50.6	76.0
175	4.7	3.8	5.6



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-04	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042292.D	1		04/09/25 14:36	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.40	1.98	J	1.04	2.47	ug/m3
64-17-5	Ethanol	12.8	24.1	Q	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.55	1.14		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	1.20	2.95		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	3.50	8.31		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.67	2.33		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.35	1.03	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.090	0.57		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.25	0.80	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.28	1.06	J	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-04	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042292.D	1		04/09/25 14:36	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.10	3.88		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.20			70 (65) - 130 (135)	92%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	158000		2.784			
540-36-3	1,4-Difluorobenzene	383000		3.956			
3114-55-4	Chlorobenzene-d5	331000		8.879			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	AA-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-04	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042292.D	1		04/09/25 14:36	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.29		J		1.47	ppbv
115-07-1	Propene	0.75		J		1.49	ppbv
000106-97-8	Butane	1.00		J		1.62	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:44:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	157856	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.956	114	383411	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	331322	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	250999	9.225	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	9272	0.398	ppbv		99
3) Chlorodifluoromethane	1.473	51	6821m	0.286	ppbv		
4) Chloromethane	1.531	50	5277	0.554	ppbv		92
9) Propene	1.486	41	8231	0.754	ppbv		93
11) Trichlorofluoromethane	1.874	101	4773	0.210	ppbv		100
13) Ethanol	1.719	45	13232	12.826	ppbv		88
15) Acetone	1.836	43	76719	3.475	ppbv		91
19) Isopropyl Alcohol	1.884	45	14854	1.192	ppbv	#	1
20) Methylene Chloride	2.059	84	5511	0.670	ppbv		96
26) Hexane	2.823	57	23758	1.073	ppbv	#	35
34) 2-Butanone	2.561	43	9840	0.354	ppbv		99
35) Carbon Tetrachloride	3.758	117	2688	0.090	ppbv		89
36) Benzene	3.651	78	9637	0.254	ppbv	#	85
53) Toluene	6.937	91	12644m	0.281	ppbv		
59) m/p-Xylene	9.529	91	5742m	0.122	ppbv		

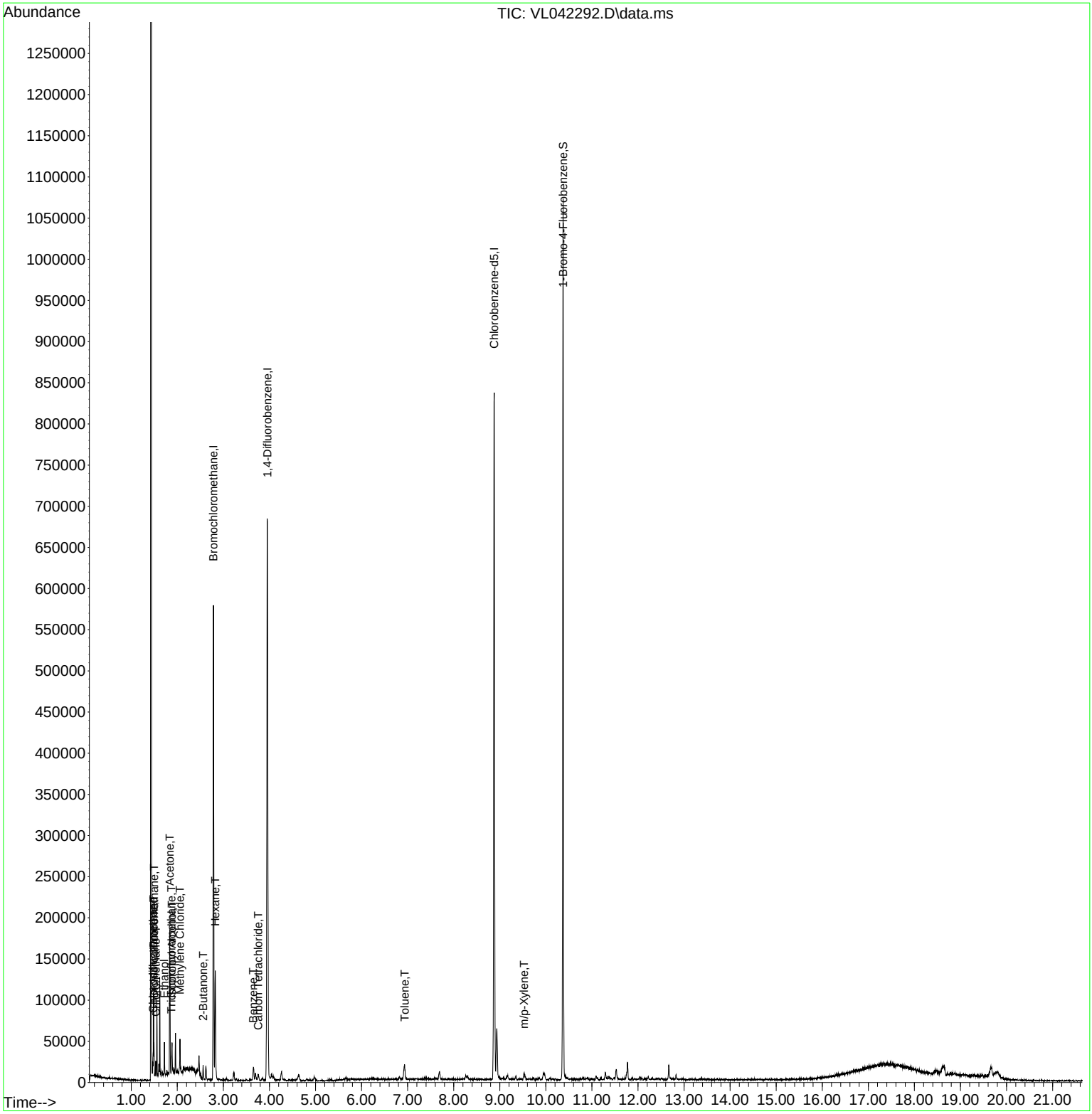
(#) = qualifier out of range (m) = manual integration (+) = signals summed

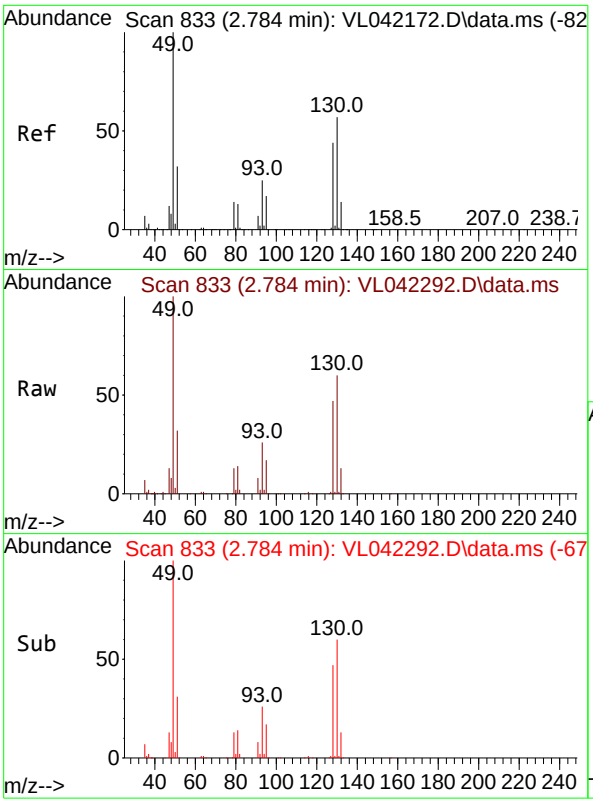
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:44:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

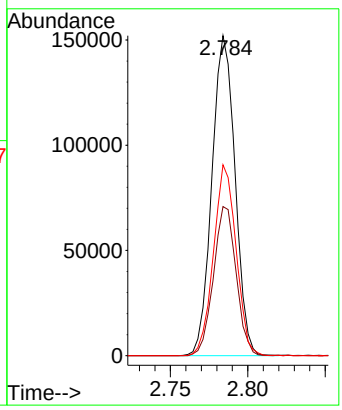




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 49 Resp: 15785

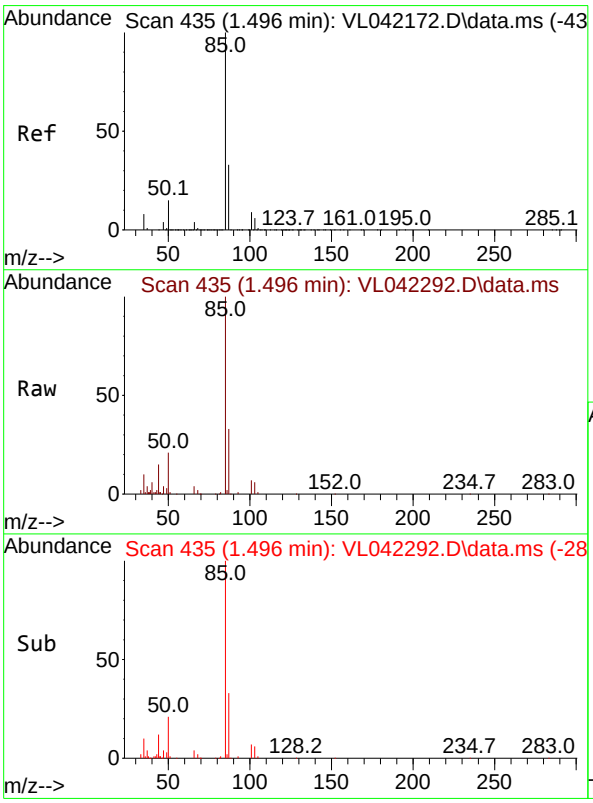
Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.3	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
APPROVED

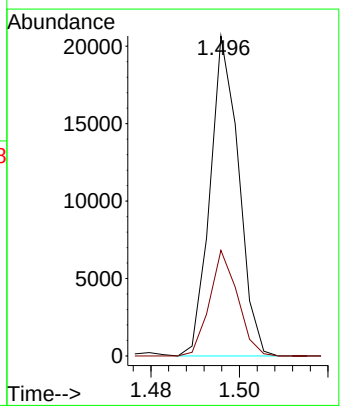
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

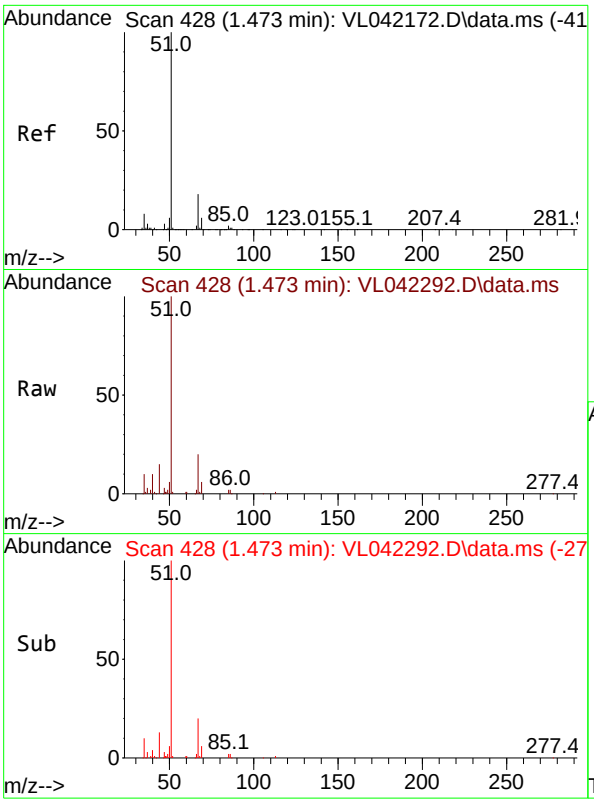


#2
Dichlorodifluoromethane
Concen: 0.398 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 85 Resp: 9272

Ion	Ratio	Lower	Upper
85	100		
87	33.0	26.1	39.1

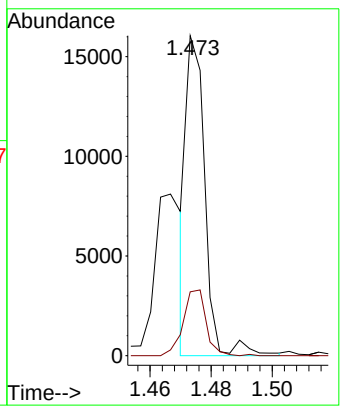




#3
Chlorodifluoromethane
Concen: 0.286 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 51 Resp: 682

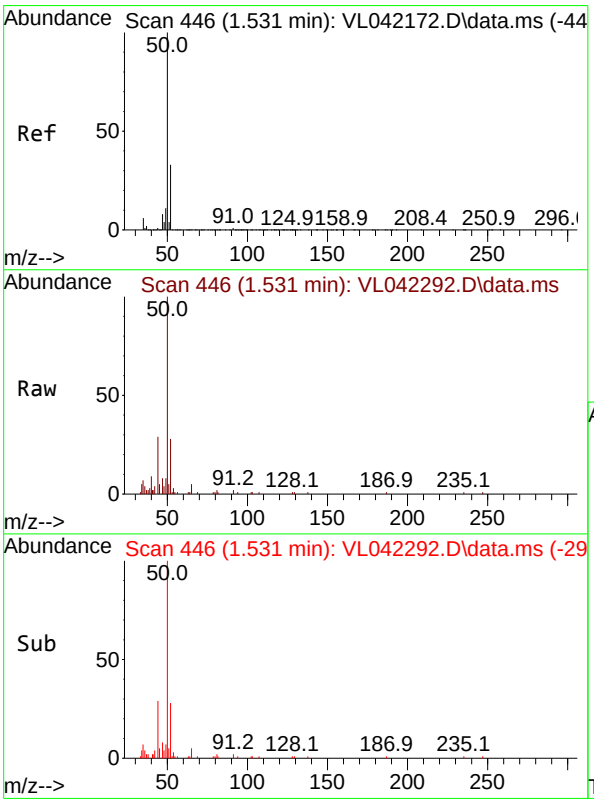
Ion	Ratio	Lower	Upper
51	100		
67	25.2	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
APPROVED

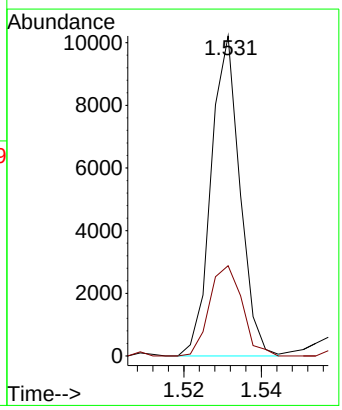
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

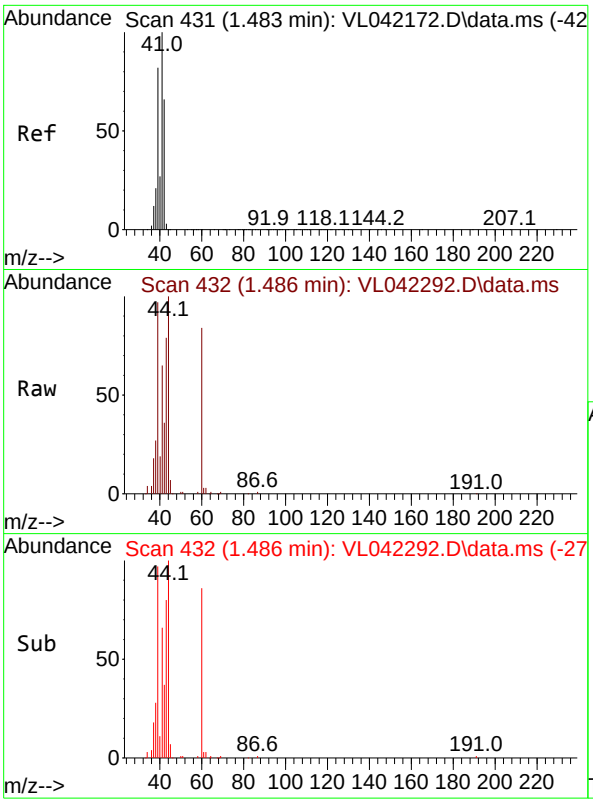


#4
Chloromethane
Concen: 0.554 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 50 Resp: 5277

Ion	Ratio	Lower	Upper
50	100		
52	28.2	26.1	39.1

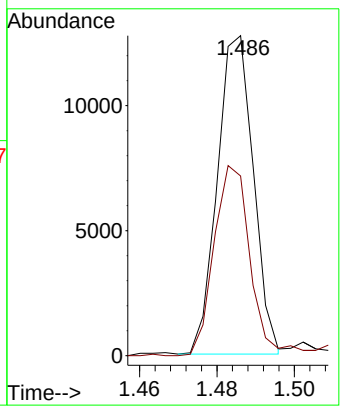




#9
Propene
Concen: 0.754 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 41 Resp: 823

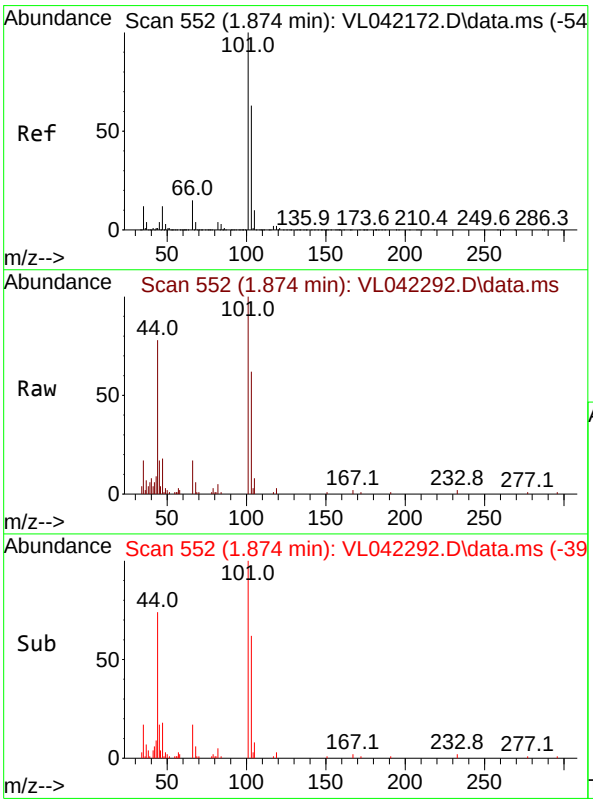
Ion	Ratio	Lower	Upper
41	100		
42	63.3	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
APPROVED

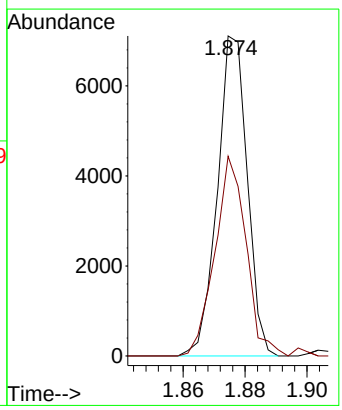
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

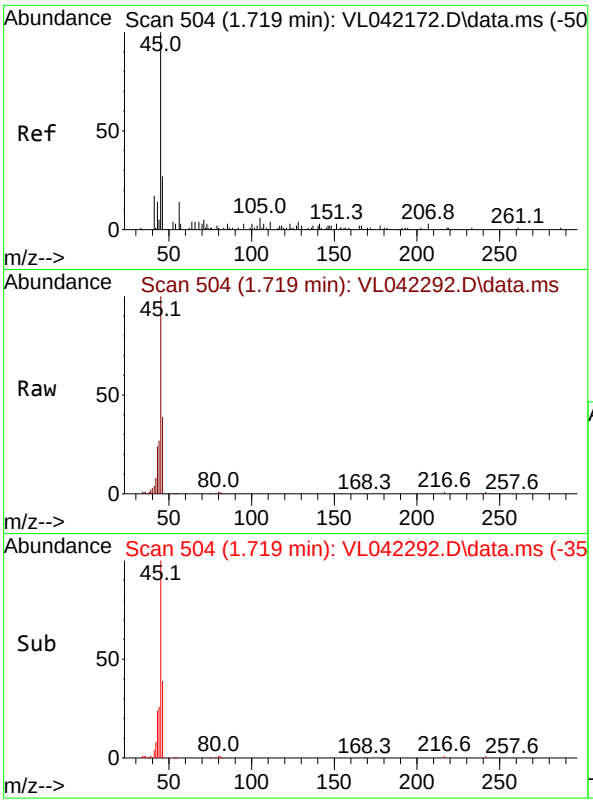


#11
Trichlorofluoromethane
Concen: 0.210 ppbv
RT: 1.874 min Scan# 552
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:101 Resp: 4773

Ion	Ratio	Lower	Upper
101	100		
103	62.4	50.2	75.2

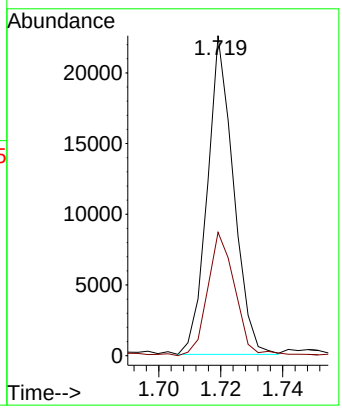




#13
Ethanol
Concen: 12.826 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 45 Resp: 1323

Ion	Ratio	Lower	Upper
45	100		
46	42.5	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
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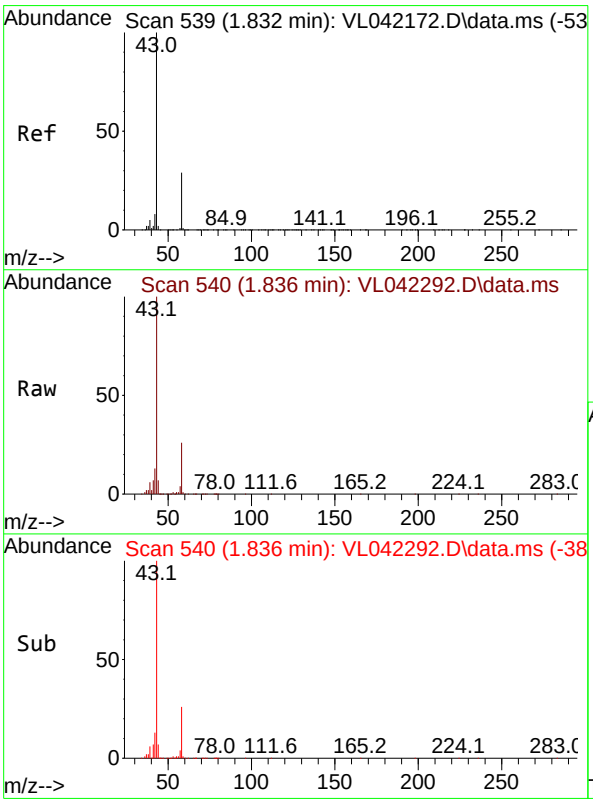
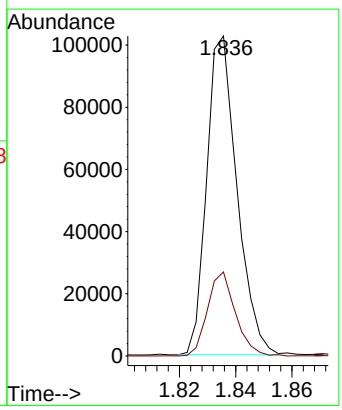
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

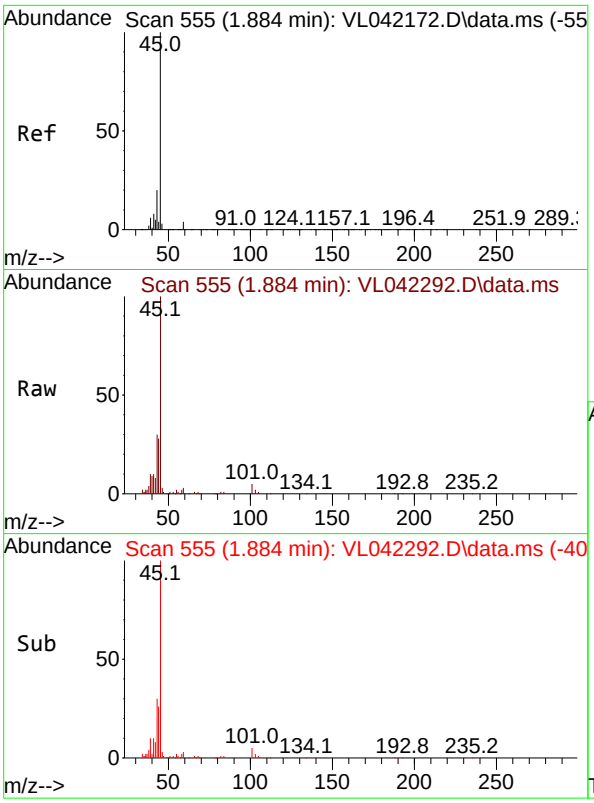


#15
Acetone
Concen: 3.475 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 43 Resp: 76719

Ion	Ratio	Lower	Upper
43	100		
58	24.3	23.2	34.8

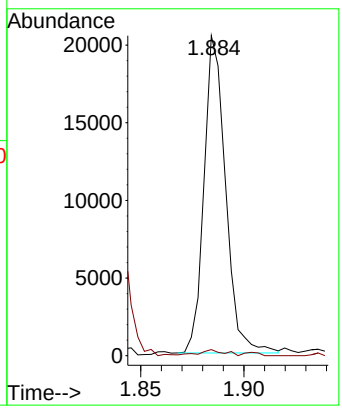




#19
Isopropyl Alcohol
Concen: 1.192 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 45 Resp: 1485

Ion	Ratio	Lower	Upper
45	100		
58	125.4	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
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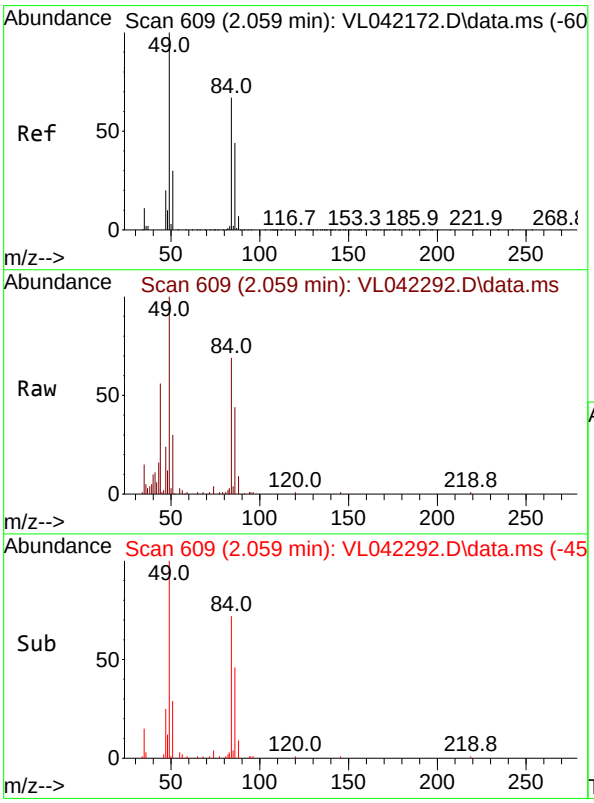
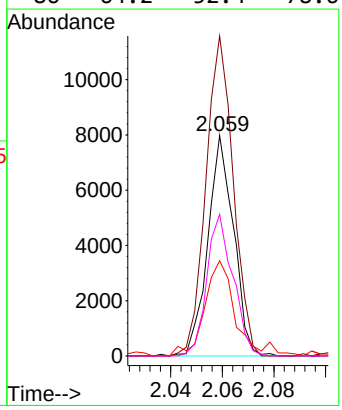
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

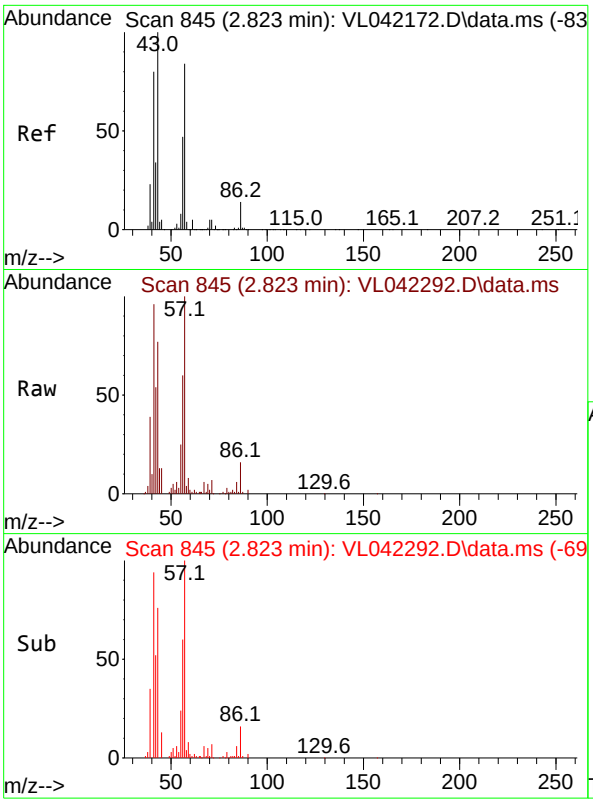


#20
Methylene Chloride
Concen: 0.670 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 84 Resp: 5511

Ion	Ratio	Lower	Upper
84	100		
49	145.1	120.2	180.4
51	42.4	37.4	56.0
86	64.2	52.4	78.6

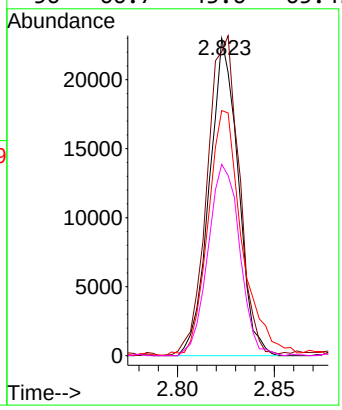




#26
Hexane
Concen: 1.073 ppbv
RT: 2.823 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 57 Resp: 2375

Ion	Ratio	Lower	Upper
57	100		
41	112.9	76.6	114.8
43	94.2	207.8	311.8#
56	66.7	43.6	65.4#



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
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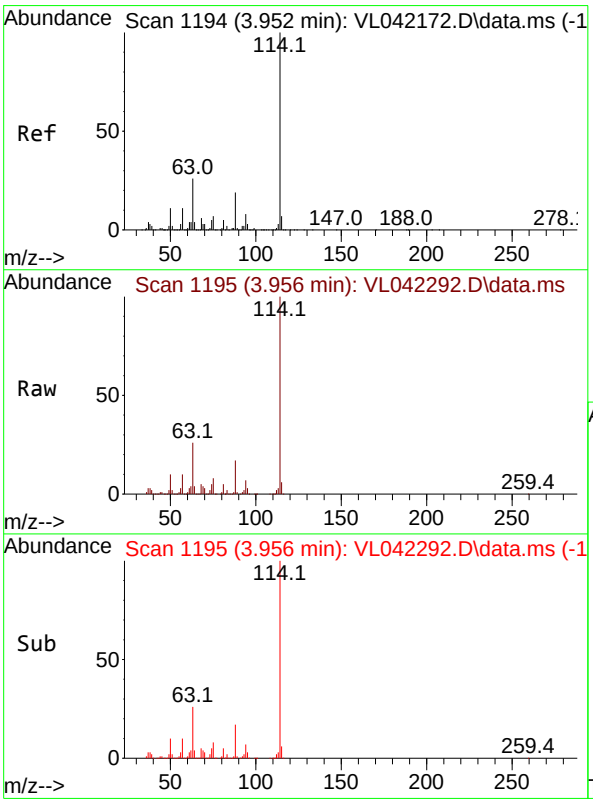
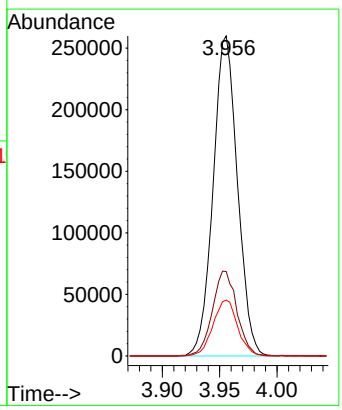
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

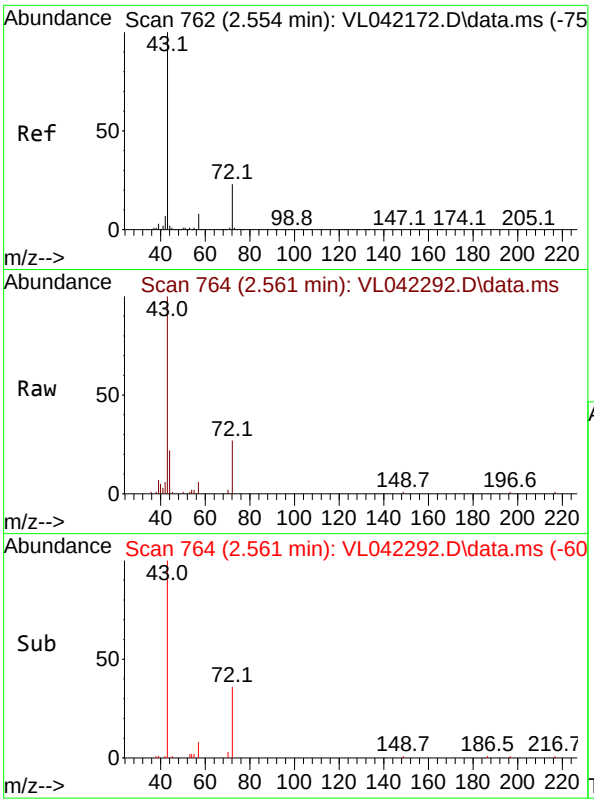


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:114 Resp: 383411

Ion	Ratio	Lower	Upper
114	100		
63	26.7	20.7	31.1
88	17.7	15.0	22.4

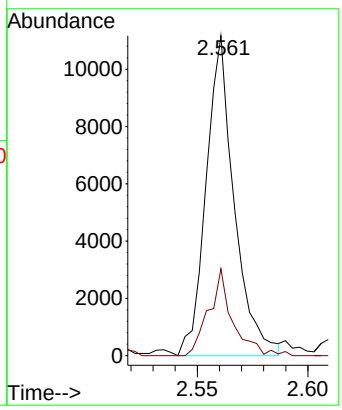




#34
2-Butanone
Concen: 0.354 ppbv
RT: 2.561 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 43 Resp: 984

Ion	Ratio	Lower	Upper
43	100		
72	23.2	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
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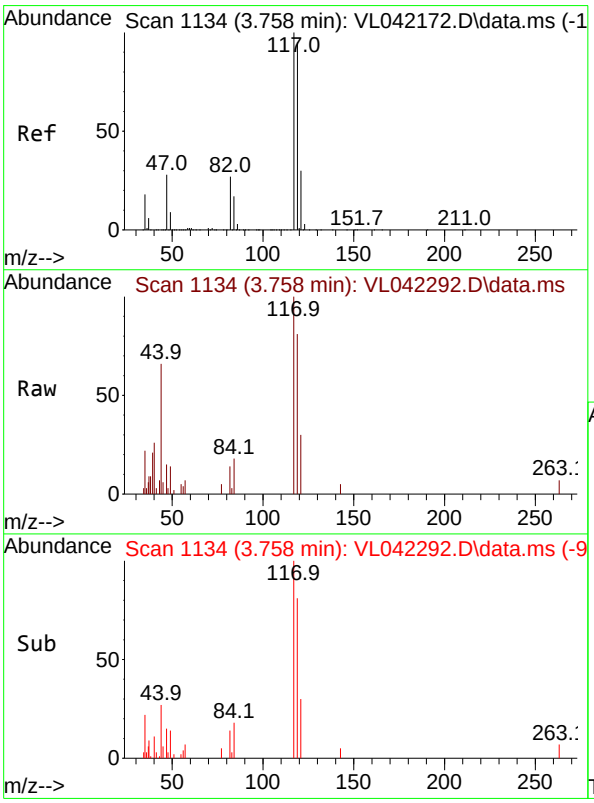
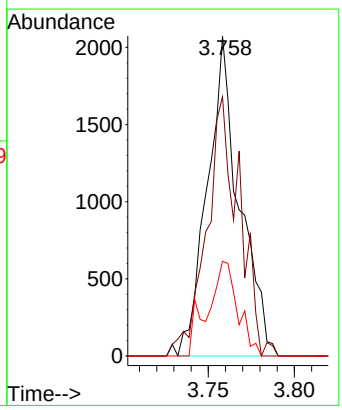
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

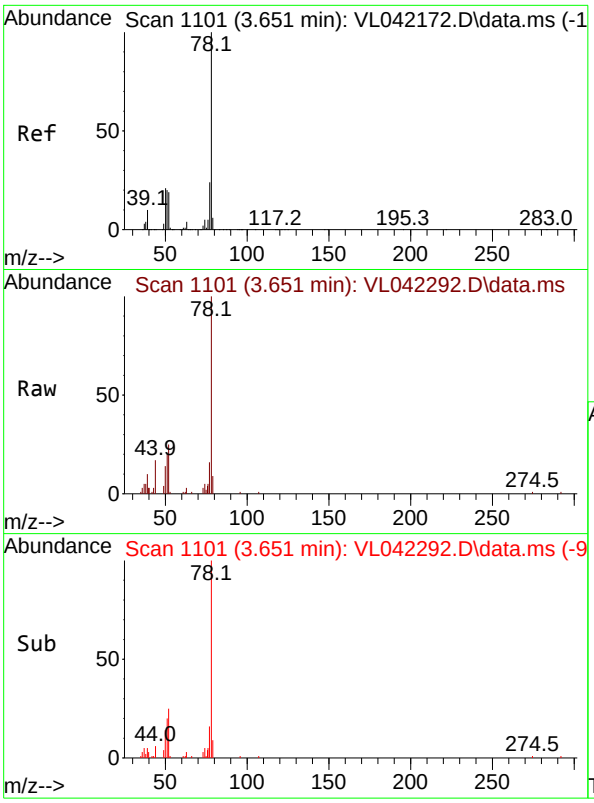


#35
Carbon Tetrachloride
Concen: 0.090 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:117 Resp: 2688

Ion	Ratio	Lower	Upper
117	100		
119	81.0	76.2	114.2
121	29.6	24.2	36.4

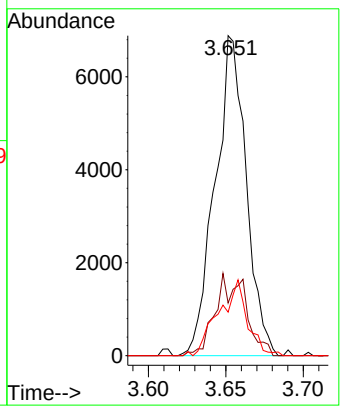




#36
Benzene
Concen: 0.254 ppbv
RT: 3.651 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 78 Resp: 963

Ion	Ratio	Lower	Upper
78	100		
77	16.4	19.1	28.7#
50	13.6	16.6	24.8#



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
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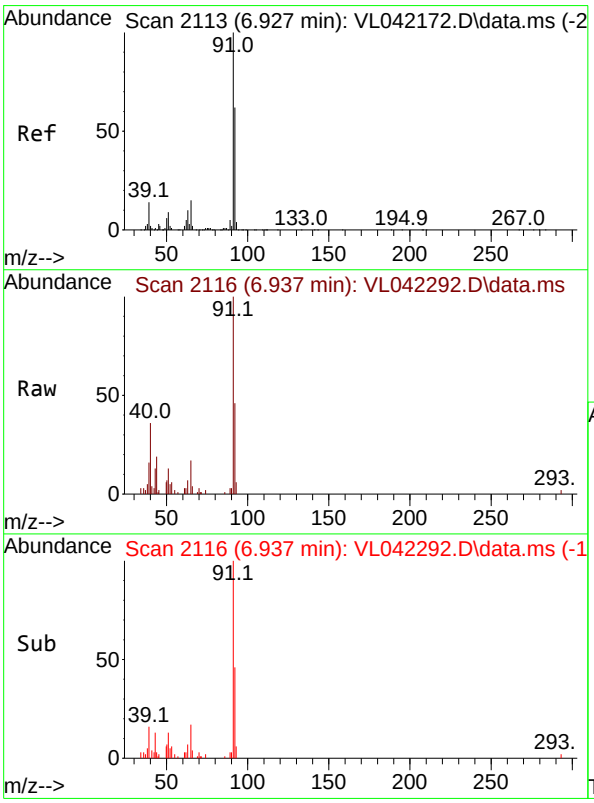
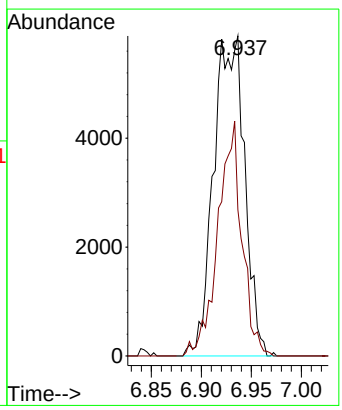
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

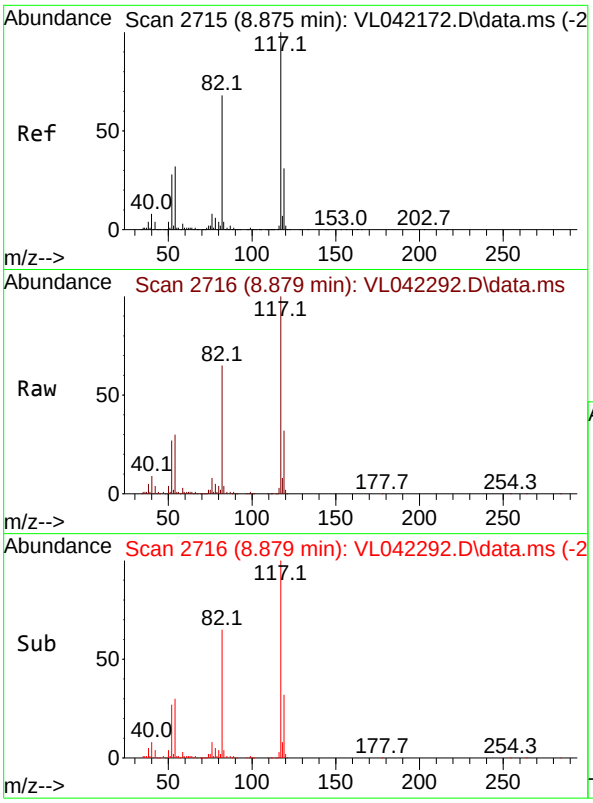


#53
Toluene
Concen: 0.281 ppbv m
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 91 Resp: 12644

Ion	Ratio	Lower	Upper
91	100		
92	56.7	48.4	72.6

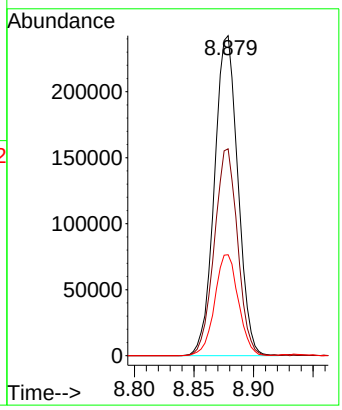




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:117 Resp: 33132

Ion	Ratio	Lower	Upper
117	100		
82	64.4	55.8	83.6
119	31.9	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

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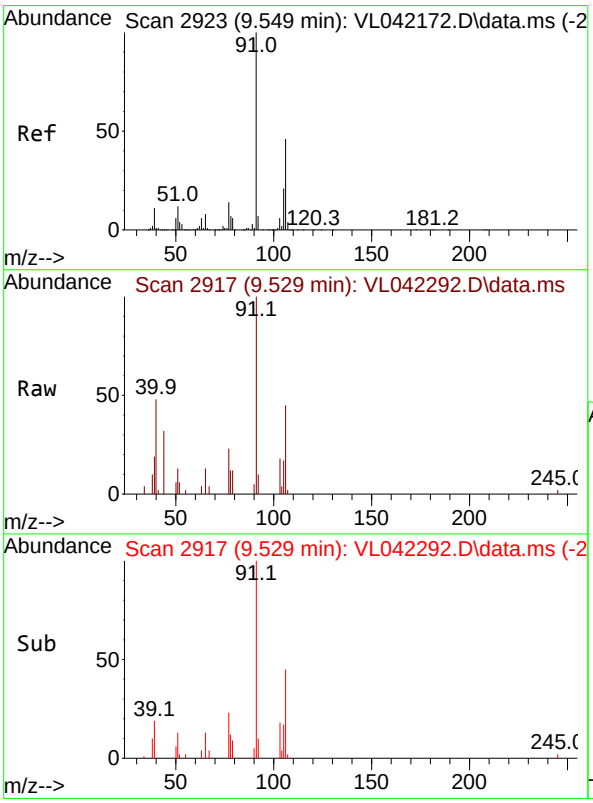
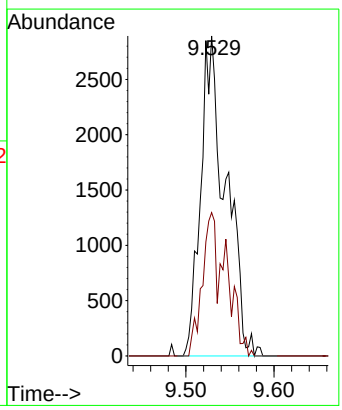
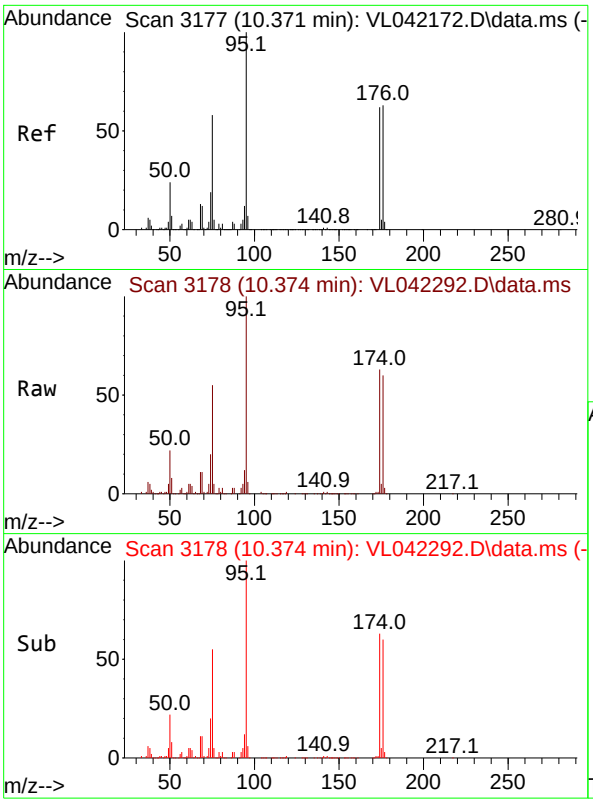


#59
m/p-Xylene
Concen: 0.122 ppbv m
RT: 9.529 min Scan# 2917
Delta R.T. -0.019 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 91 Resp: 5742

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

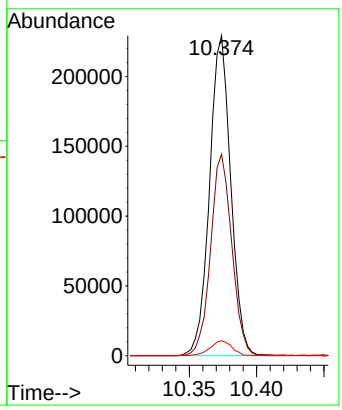




#68
1-Bromo-4-Fluorobenzene
Concen: 9.225 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 95 Resp: 25099

Ion	Ratio	Lower	Upper
95	100		
174	63.1	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

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

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

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

Signal : TIC: VL042292.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4055154	4358881	100.00%	48.851%
2	1.486	427	432	434	rBV2	89859	48474	1.11%	0.543%
3	1.557	449	454	458	rVB	91331	47137	1.08%	0.528%
4	1.619	470	473	477	rVB	118004	60050	1.38%	0.673%
5	1.836	535	540	547	rBV2	174929	156752	3.60%	1.757%
6	2.784	825	833	840	rBV	576389	591579	13.57%	6.630%
7	2.823	840	845	860	rVB2	132350	156487	3.59%	1.754%
8	3.952	1180	1194	1213	rBV	682675	1044834	23.97%	11.710%
9	8.879	2704	2716	2726	rBV	833986	1156517	26.53%	12.961%
10	8.937	2726	2734	2745	rVB5	59177	101204	2.32%	1.134%
11	10.374	3161	3178	3190	rBV	1070379	1200804	27.55%	13.458%

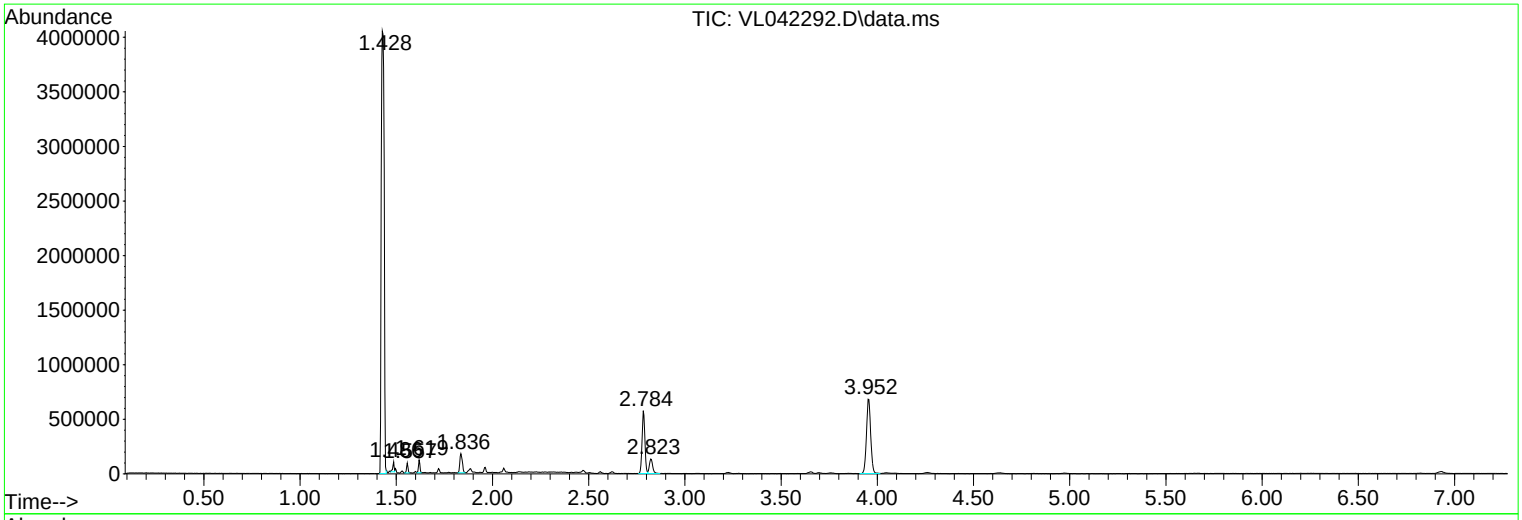
Sum of corrected areas: 8922719

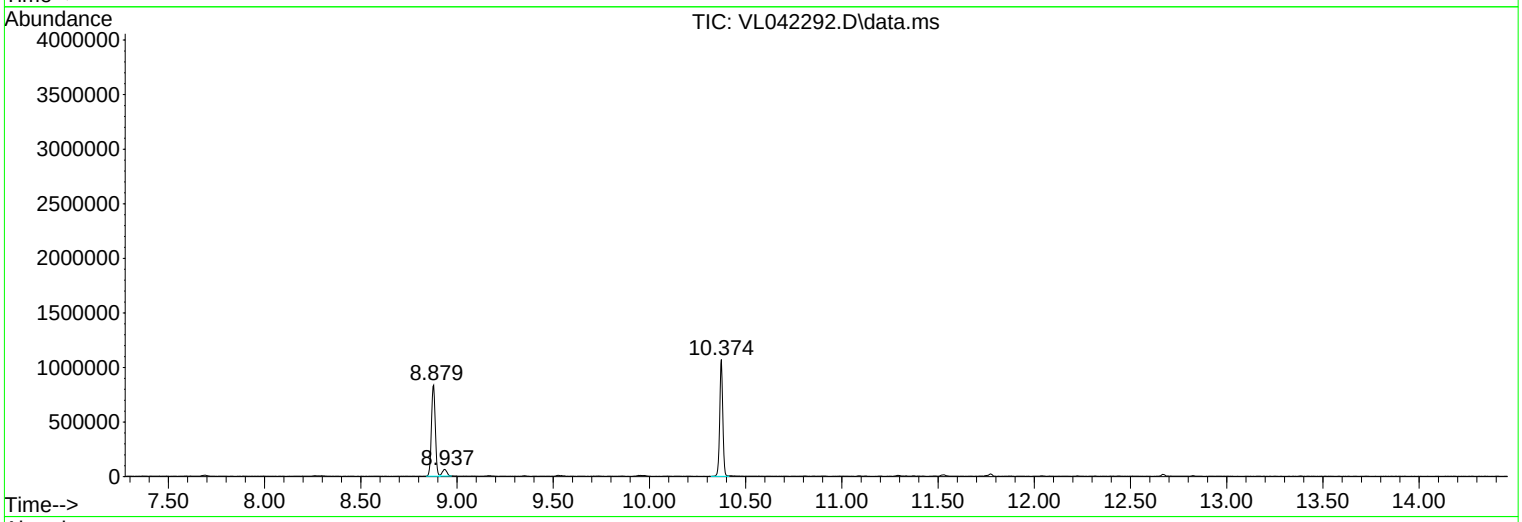
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

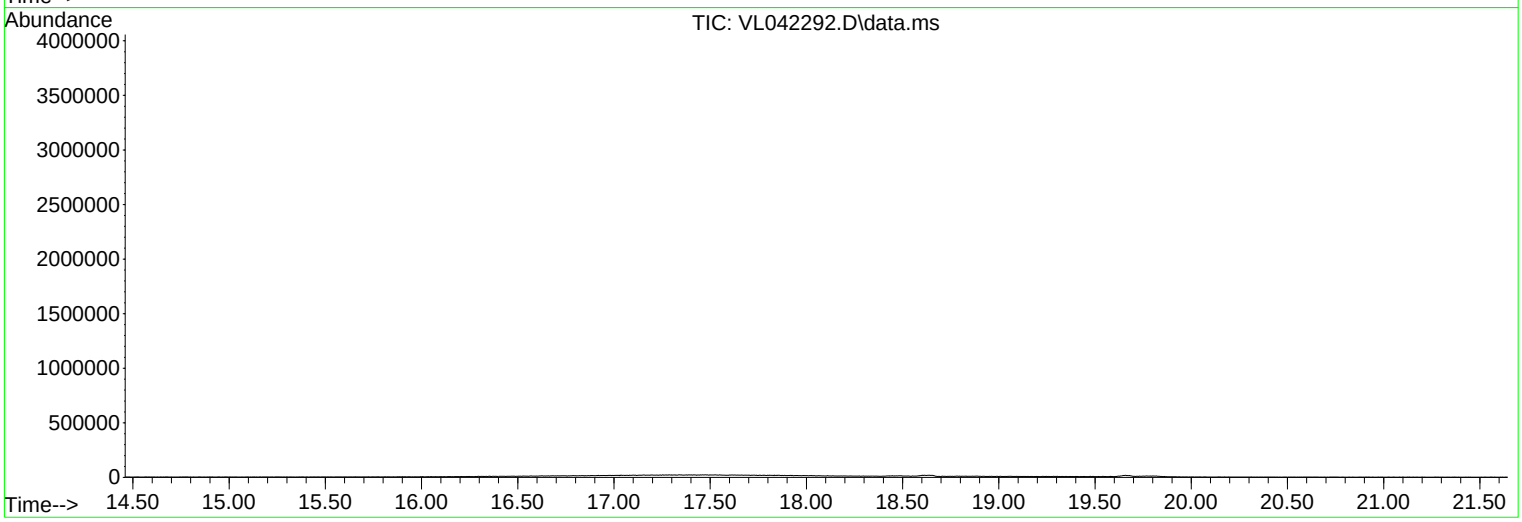
Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

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

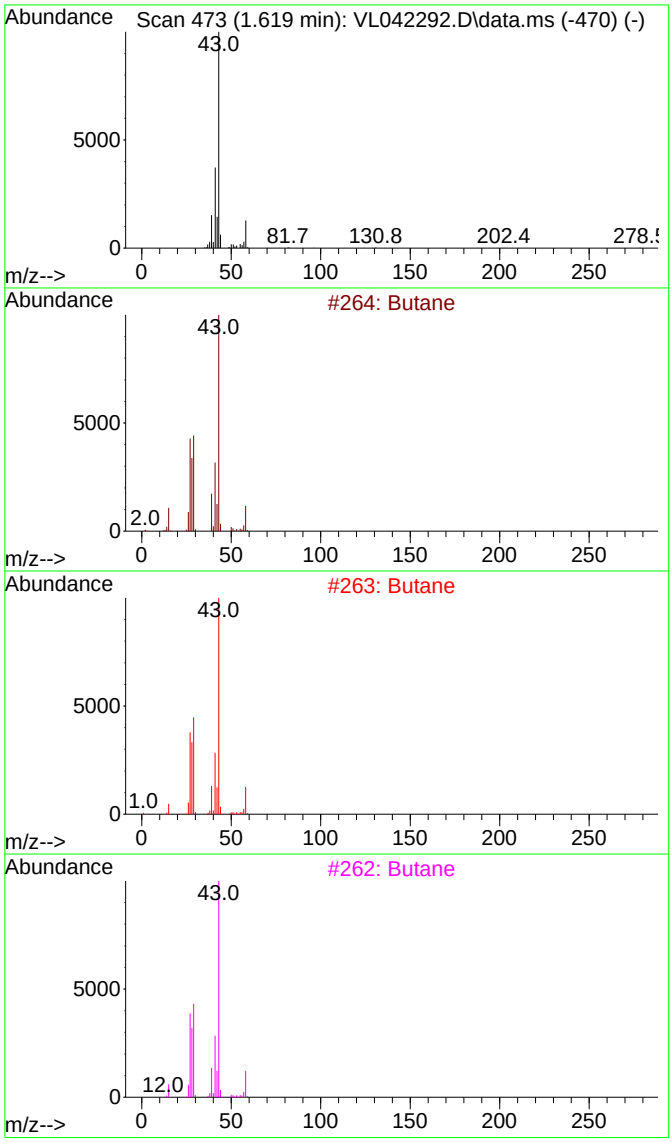
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

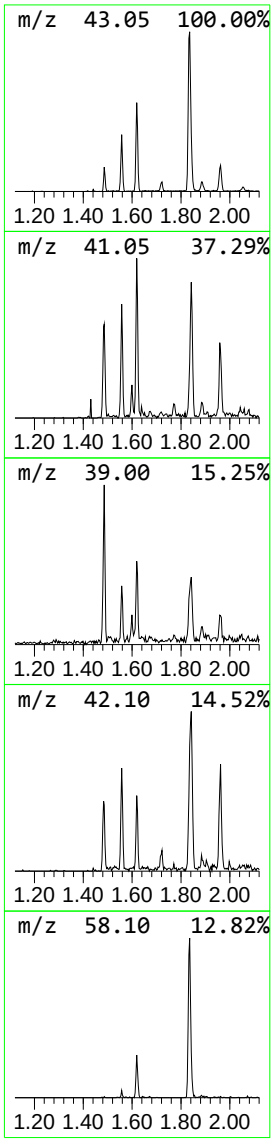
****

Peak Number 1 Butane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	1.02 ppbv	60050	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	64
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	64
5	Formic acid, chloro-, (3,4,4-tri...	194	C7H11ClO4	107323-92-2	39





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	1.0	ppbv	60050	1	2.784	591579	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-05	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042419.D	1		04/28/25 10:59	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.46	2.27	J	1.04	2.47	ug/m3
64-17-5	Ethanol	270	509	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.48	0.99	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	3.10	9.40		0.58	1.52	ug/m3
142-82-5	Heptane	0.50	2.05		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	32.2	79.2	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	14.7	34.9		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.20	4.17		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.25	0.86	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.87	2.57		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.76	3.55		0.47	2.34	ug/m3
71-43-2	Benzene	0.49	1.57	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.46	1.86	J	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.36	1.48	J	0.37	2.05	ug/m3
108-88-3	Toluene	4.60	17.3		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-05	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042419.D	1		04/28/25 10:59	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.050	0.34		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.56	2.43		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.40	6.08		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.58	2.52		0.52	2.17	ug/m3
100-42-5	Styrene	0.46	1.96	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.18	0.88	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.48	2.36	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.11	0.58		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.14	0.69	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.30	8.11		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	141000		2.784			
540-36-3	1,4-Difluorobenzene	402000		3.952			
3114-55-4	Chlorobenzene-d5	351000		8.875			
TENTITIVE IDENTIFIED COMPOUNDS							

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-05	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042419.D	1		04/28/25 10:59	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.16		J		1.47	ppbv
115-07-1	Propene	1.80		J		1.49	ppbv
000106-97-8	Butane	5.90		J		1.62	ppbv
000071-23-8	1-Propanol	3.20		J		2.27	ppbv
000107-83-5	Pentane, 2-methyl-	1.90		J		2.47	ppbv
000110-05-4	Di-tert-butyl peroxide	3.50		J		6.84	ppbv
000066-25-1	Hexanal	1.90		J		7.68	ppbv
000080-56-8	.alpha.-Pinene	2.10		J		10.9	ppbv
103-65-1	n-propylbenzene	0.12		J		11.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:33:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	141298	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	401917	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	351139	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	302429	10.481	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	11370	0.455	ppbv		96
3) Chlorodifluoromethane	1.473	51	3875m	0.163	ppbv		
4) Chloromethane	1.531	50	4722	0.478	ppbv	#	79
9) Propene	1.486	41	19126m	1.767	ppbv		
10) Heptane	4.965	43	15130m	0.497	ppbv		
11) Trichlorofluoromethane	1.874	101	5024	0.212	ppbv		97
13) Ethanol	1.719	45	460303	267.501	ppbv		76
15) Acetone	1.832	43	340098m	14.703	ppbv		
17) tert-Butyl alcohol	2.039	59	88272	3.079	ppbv		99
19) Isopropyl Alcohol	1.884	45	414153	32.231	ppbv	#	66
20) Methylene Chloride	2.059	84	10525	1.162	ppbv		85
26) Hexane	2.819	57	52451	2.273	ppbv	#	43
30) Cyclohexane	3.849	84	4707m	0.252	ppbv		
34) 2-Butanone	2.557	43	27638	0.869	ppbv		99
35) Carbon Tetrachloride	3.768	117	3056m	0.084	ppbv		
36) Benzene	3.648	78	21233	0.490	ppbv		98
37) 1,2-Dichloroethane	3.211	62	11865	0.456	ppbv		100
44) 2,2,4-Trimethylpentane	4.629	57	56896m	0.760	ppbv		
50) 4-Methyl-2-Pentanone	5.758	43	19082m	0.361	ppbv		
52) Tetrachloroethene	8.211	164	894m	0.053	ppbv		
53) Toluene	6.923	91	241564	4.644	ppbv		99
58) Ethyl Benzene	9.348	91	39060	0.561	ppbv		95
59) m/p-Xylene	9.526	91	78855	1.407	ppbv		100
60) o-Xylene	9.959	91	32637	0.578	ppbv		97
61) Styrene	9.869	104	12396	0.460	ppbv		94
64) n-propylbenzene	10.985	120	2557	0.123	ppbv		89
72) 4-Ethyltoluene	11.121	105	9307	0.135	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.199	105	10799	0.177	ppbv		90
74) 1,2,4-Trimethylbenzene	11.532	105	33801	0.475	ppbv	#	61
79) Naphthalene	13.507	128	9645	0.113	ppbv		99

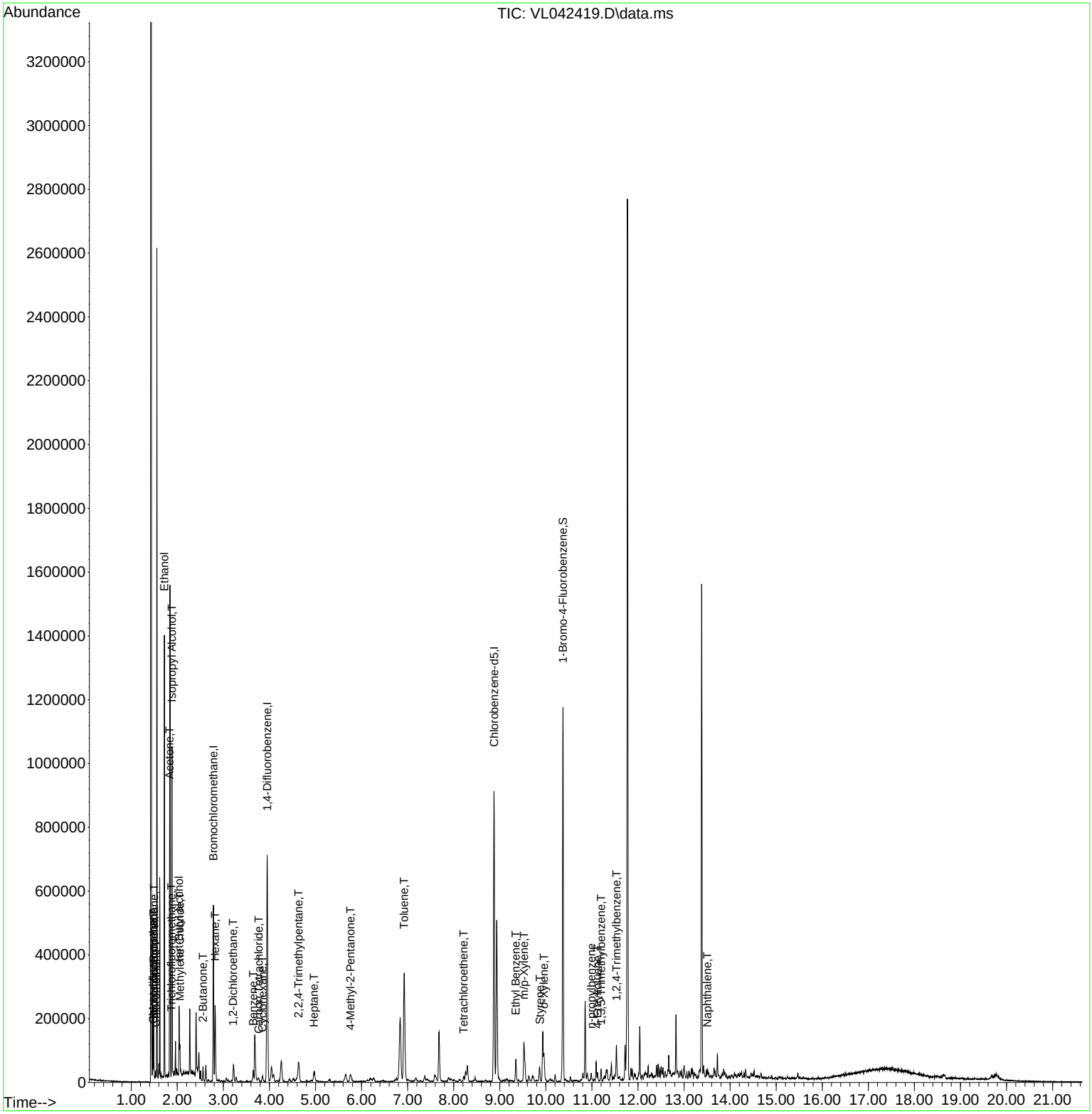
(#) = qualifier out of range (m) = manual integration (+) = signals summed

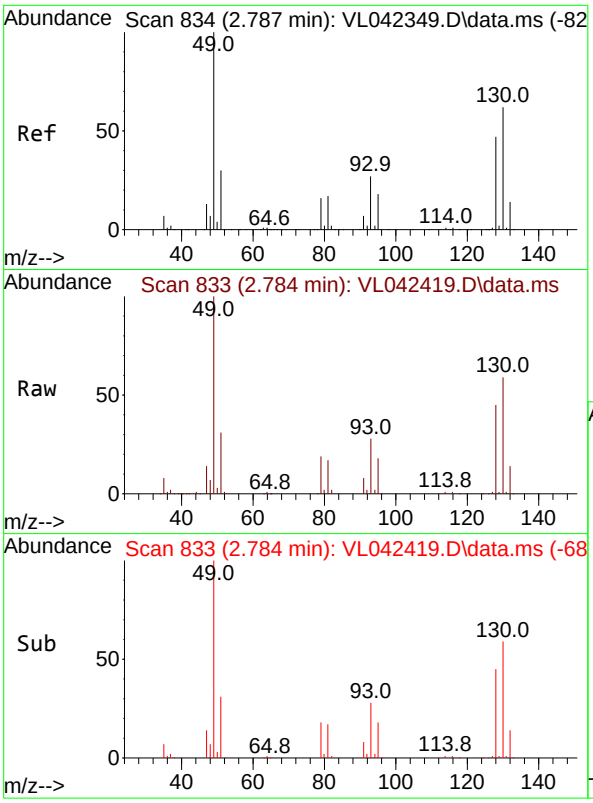
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:33:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

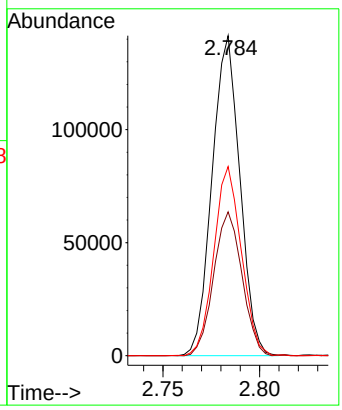
Tgt Ion: 49 Resp: 14129

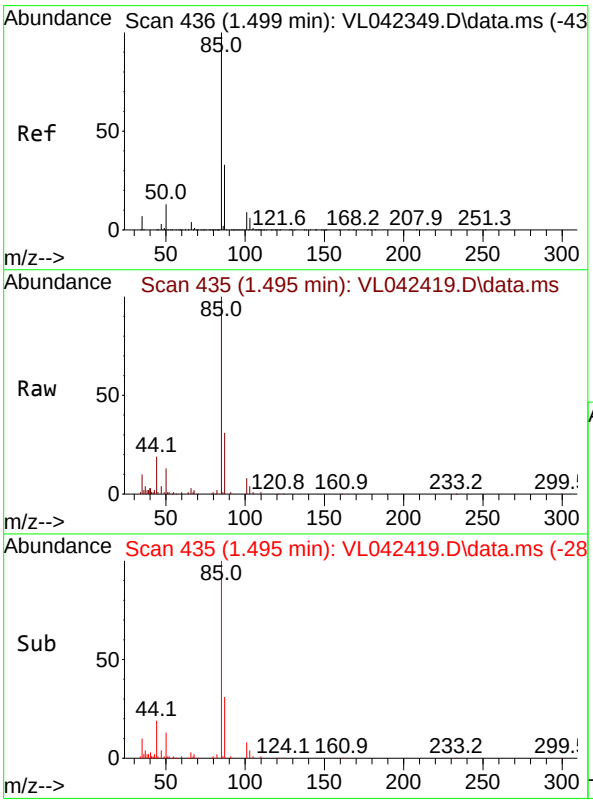
Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.8	68.4
130	58.6	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

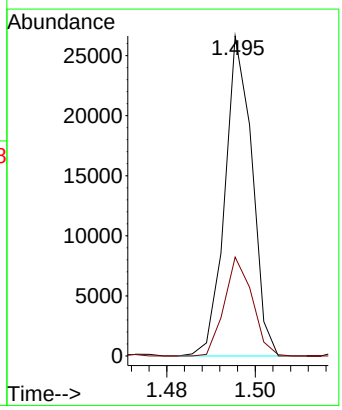


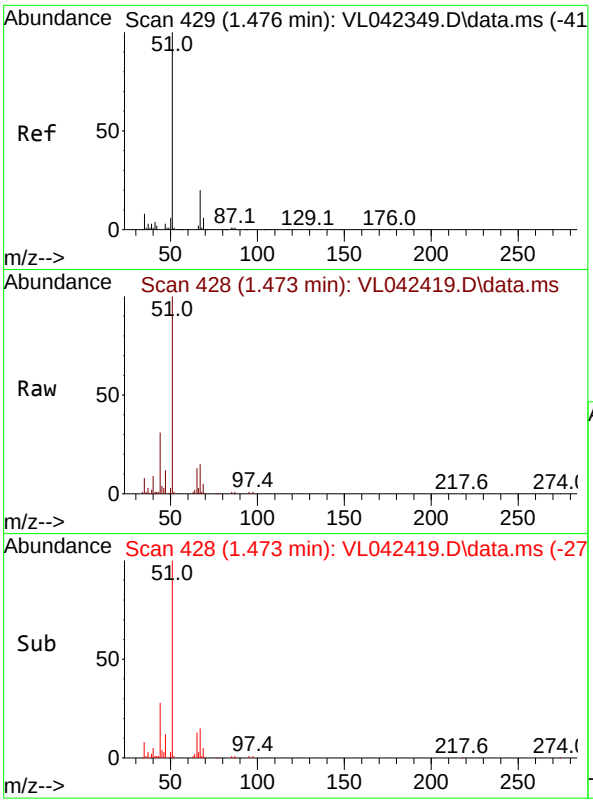


#2
Dichlorodifluoromethane
Concen: 0.455 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 85 Resp: 11370

Ion	Ratio	Lower	Upper
85	100		
87	30.9	26.6	39.8

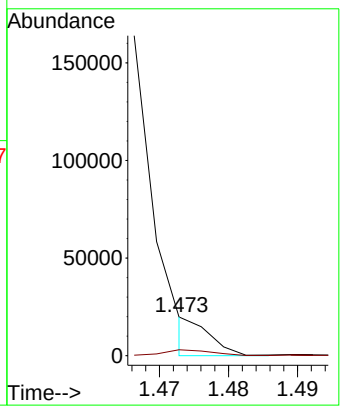




#3
Chlorodifluoromethane
Concen: 0.163 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 51 Resp: 387

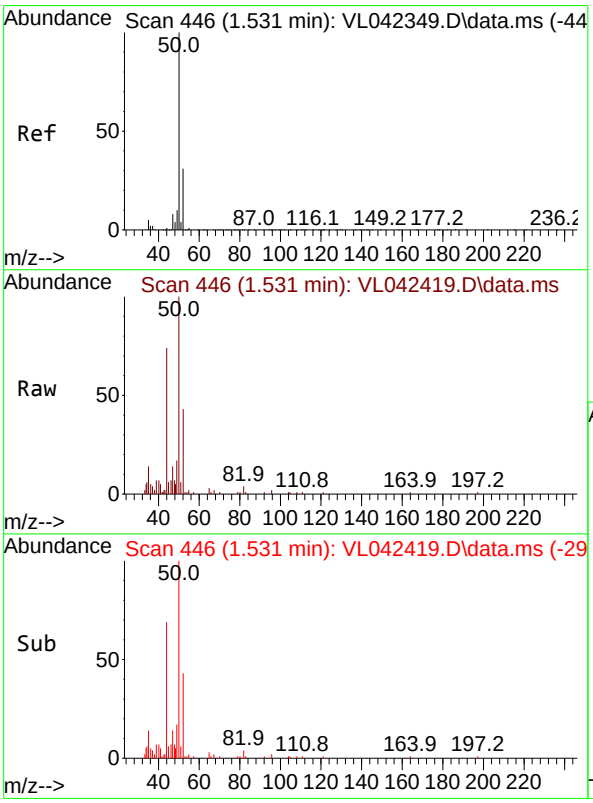
Ion	Ratio	Lower	Upper
51	100		
67	36.2	16.2	24.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

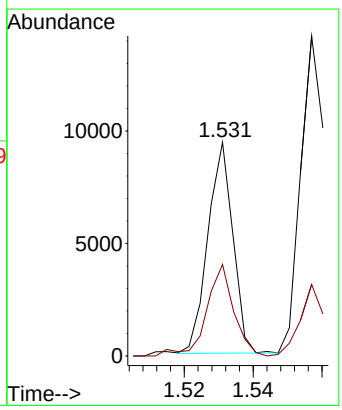
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

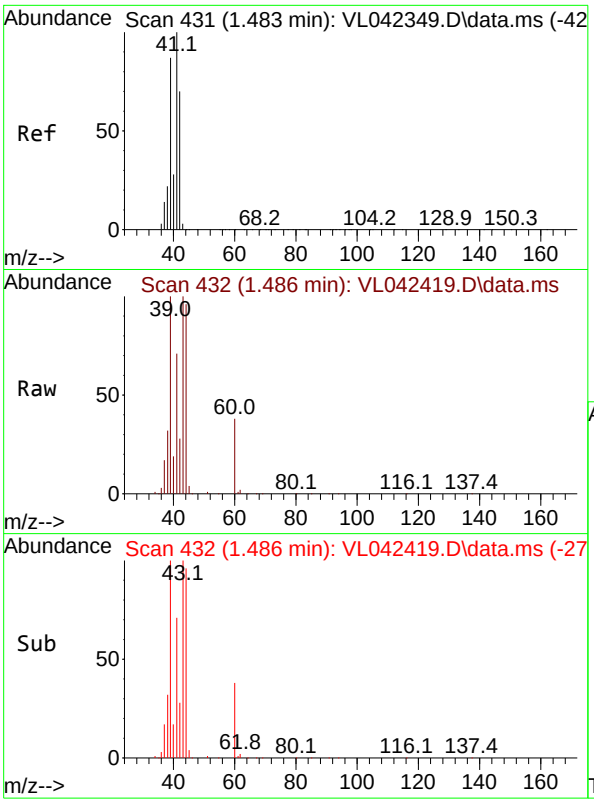


#4
Chloromethane
Concen: 0.478 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 50 Resp: 4722

Ion	Ratio	Lower	Upper
50	100		
52	42.6	24.7	37.1#

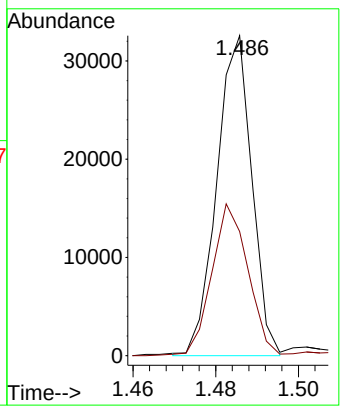




#9
Propene
Concen: 1.767 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 41 Resp: 1912

Ion	Ratio	Lower	Upper
41	100		
42	950.4	56.2	84.4



Instrument :
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ClientSampleId :
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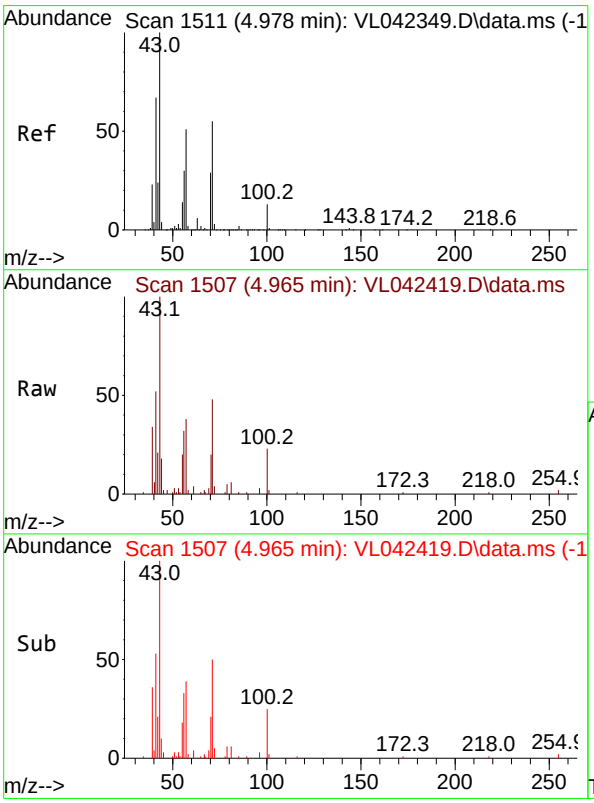
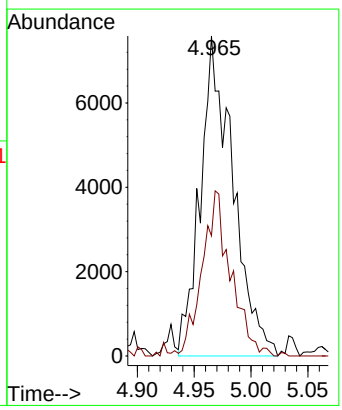
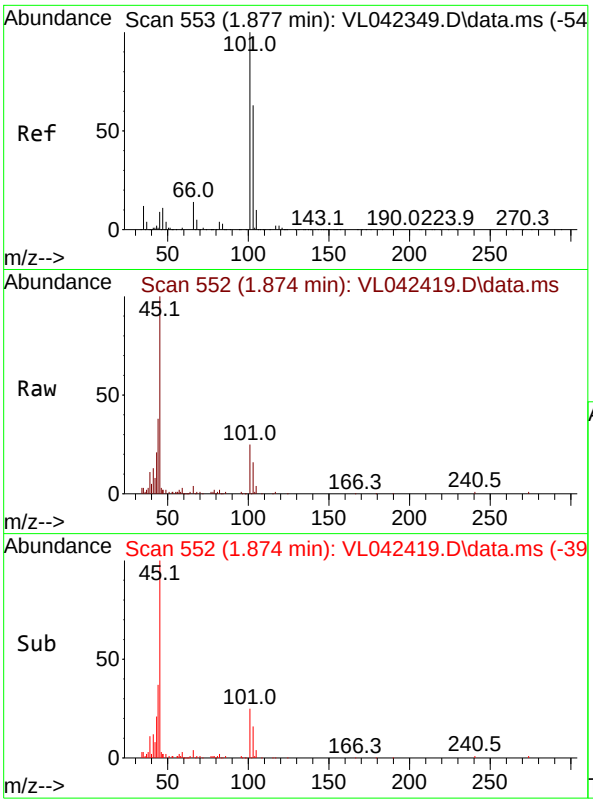


#10
Heptane
Concen: 0.497 ppbv m
RT: 4.965 min Scan# 1507
Delta R.T. -0.013 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 15130

Ion	Ratio	Lower	Upper
43	100		
57	46.3	39.9	59.9





#11
Trichlorofluoromethane
Concen: 0.212 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:101 Resp: 502

Ion	Ratio	Lower	Upper
101	100		
103	64.9	50.1	75.1

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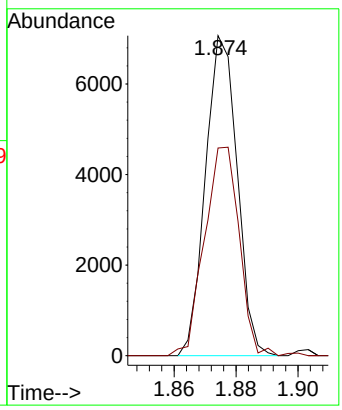
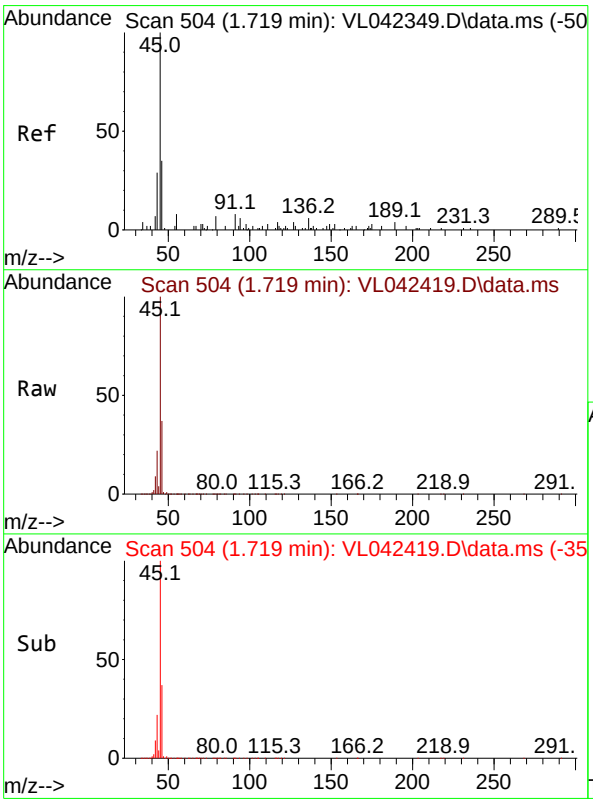
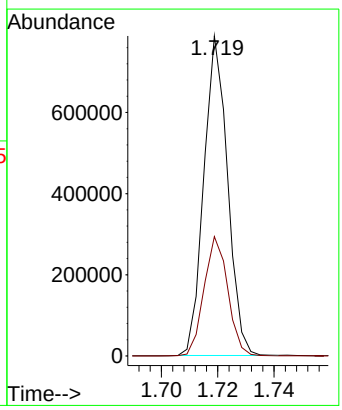


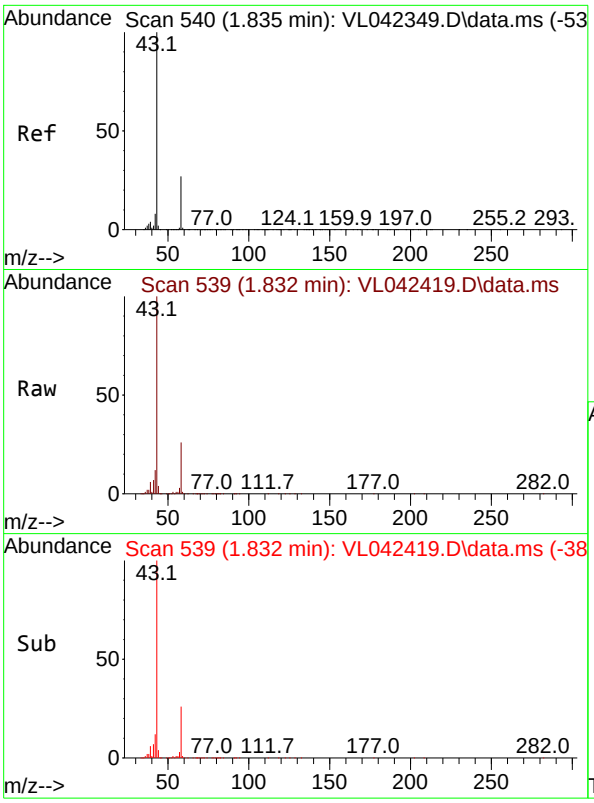


#13
Ethanol
Concen: 267.501 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 45 Resp: 460303

Ion	Ratio	Lower	Upper
45	100		
46	37.6	21.9	87.7

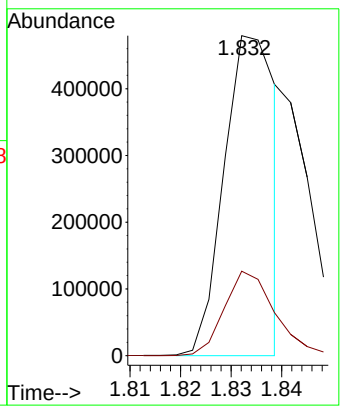




#15
Acetone
Concen: 14.703 ppbv m
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 34009

Ion	Ratio	Lower	Upper
43	100		
58	26.2	22.4	33.6



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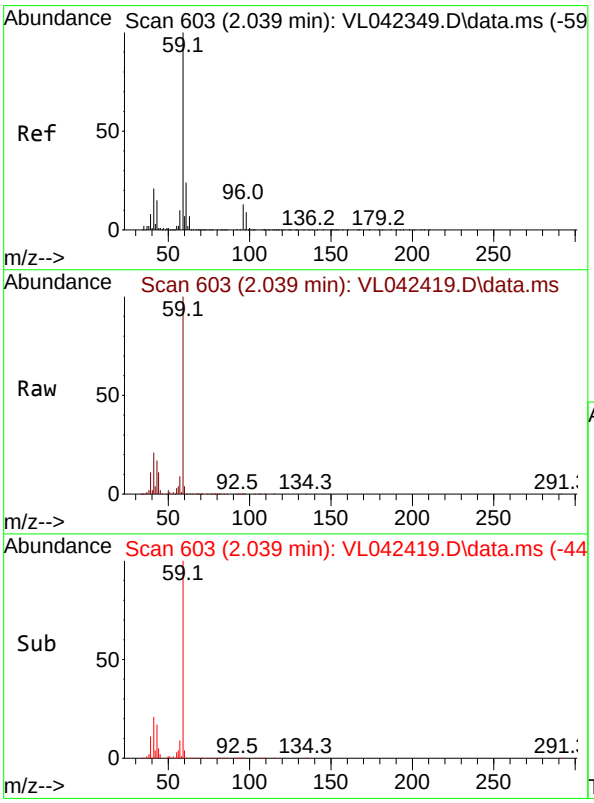
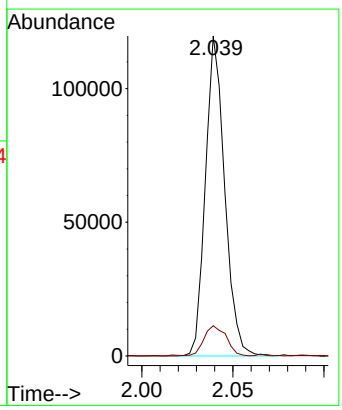
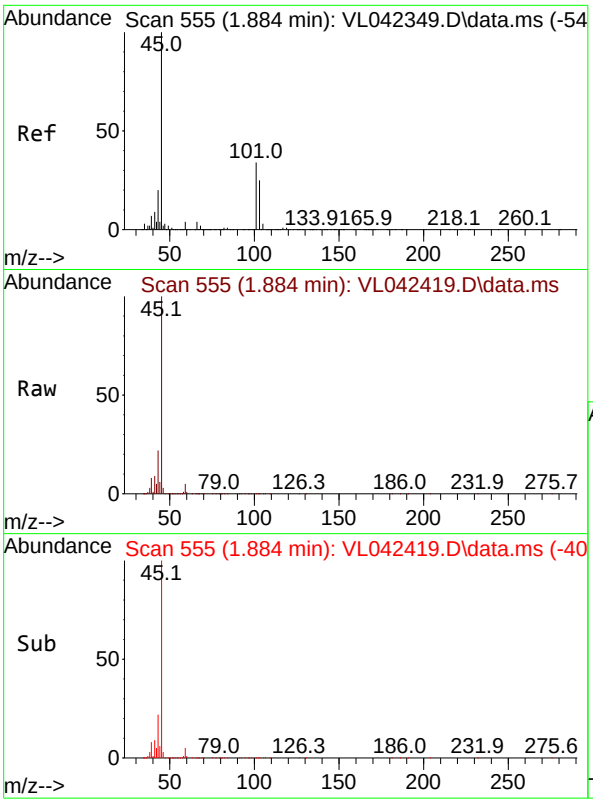


#17
tert-Butyl alcohol
Concen: 3.079 ppbv
RT: 2.039 min Scan# 603
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 59 Resp: 88272

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.7	13.1





#19
Isopropyl Alcohol
Concen: 32.231 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 45 Resp: 41415

Ion	Ratio	Lower	Upper
45	100		
58	21.5	34.5	51.7#

Instrument :
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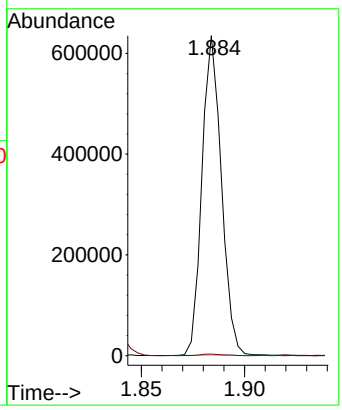
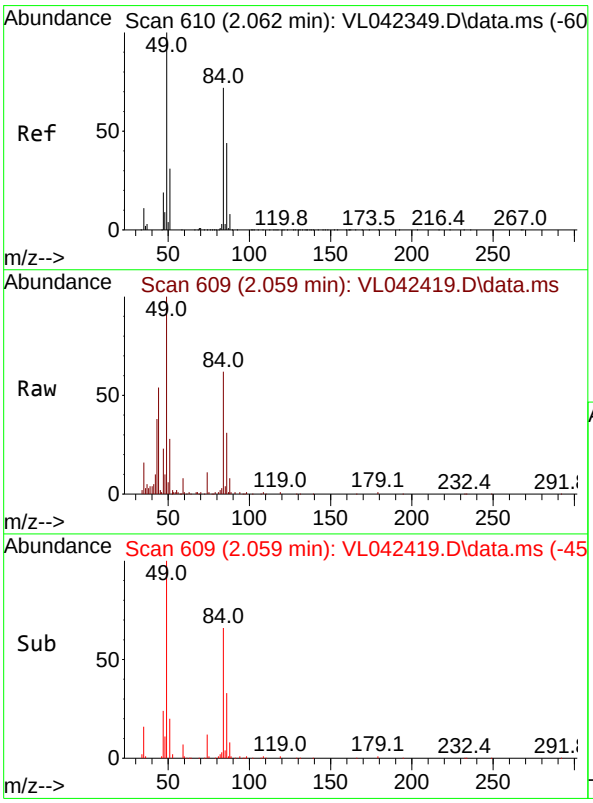
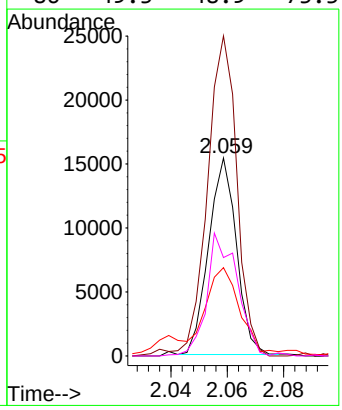


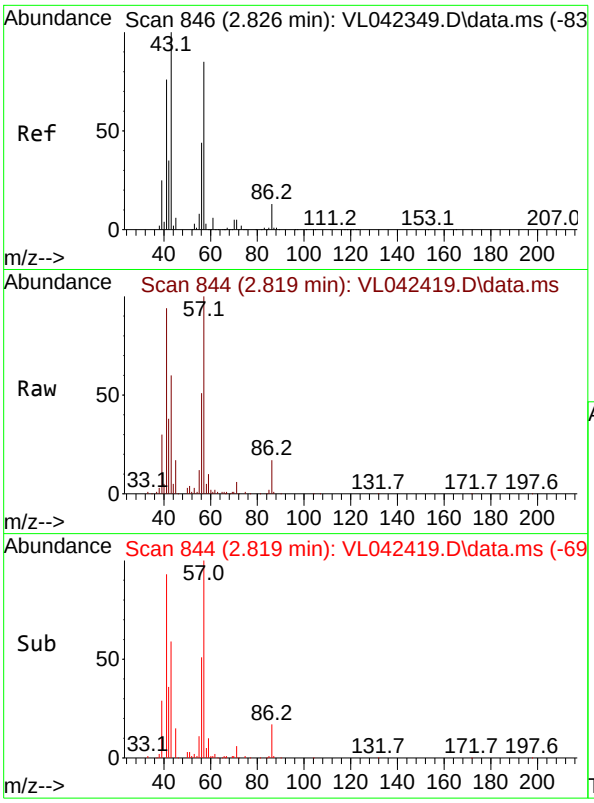


#20
Methylene Chloride
Concen: 1.162 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 84 Resp: 10525

Ion	Ratio	Lower	Upper
84	100		
49	162.9	111.6	167.4
51	42.8	35.1	52.7
86	49.3	48.9	73.3

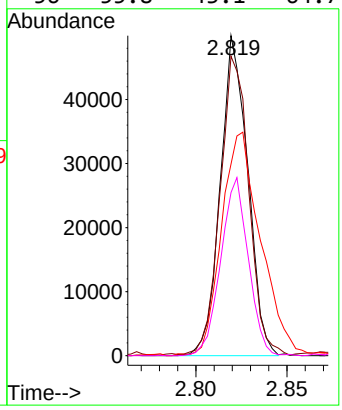




#26
Hexane
Concen: 2.273 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 57 Resp: 5245

Ion	Ratio	Lower	Upper
57	100		
41	97.9	77.9	116.9
43	99.2	208.4	312.6#
56	55.8	43.1	64.7



Instrument :
MSVOA_L
ClientSampleId :
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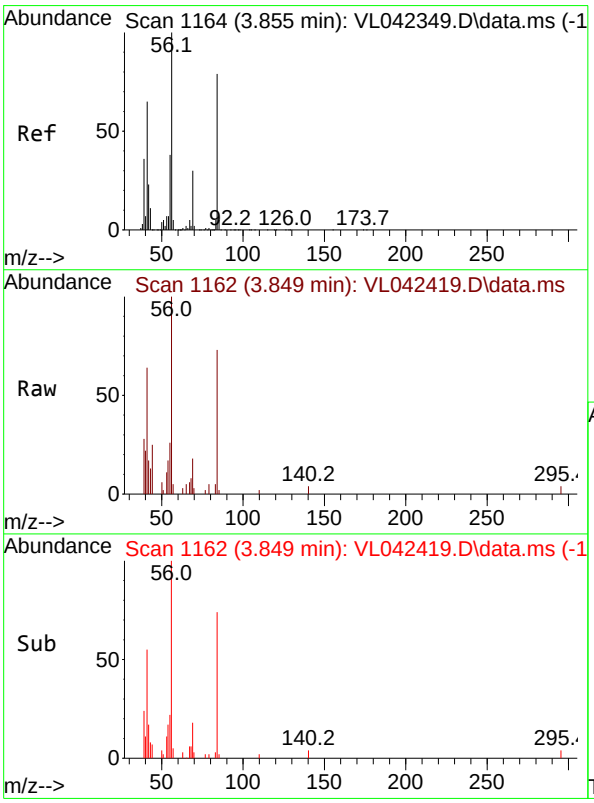
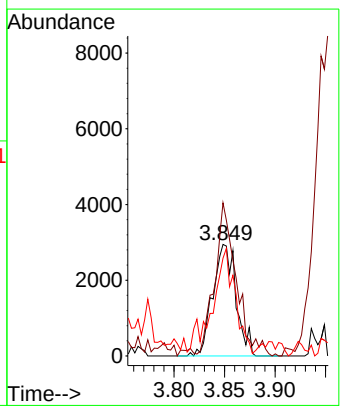
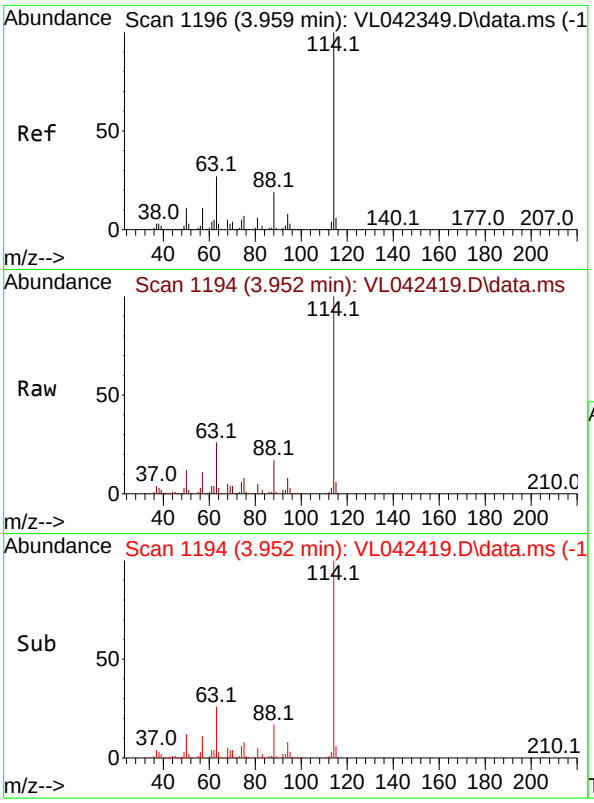


#30
Cyclohexane
Concen: 0.252 ppbv m
RT: 3.849 min Scan# 1162
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 84 Resp: 4707

Ion	Ratio	Lower	Upper
84	100		
56	131.0	101.0	151.4
41	110.2	67.4	101.0#

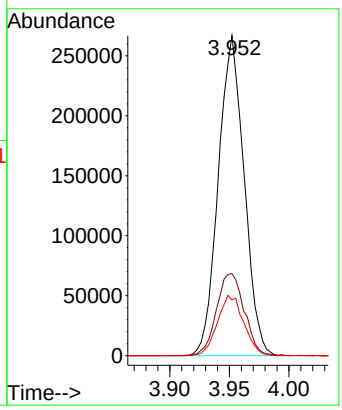




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:114 Resp: 40191

Ion	Ratio	Lower	Upper
114	100		
63	27.5	21.8	32.6
88	19.2	15.5	23.3



Instrument :
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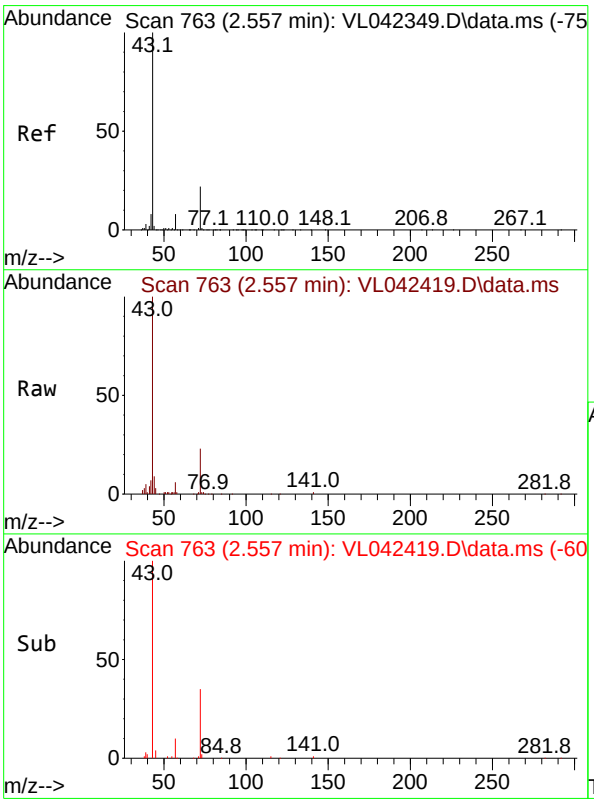
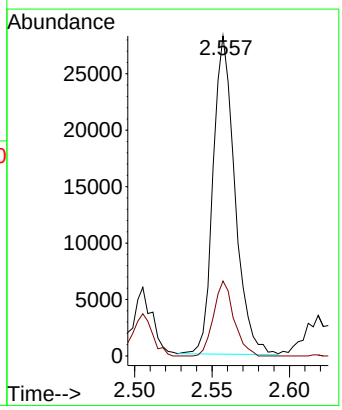
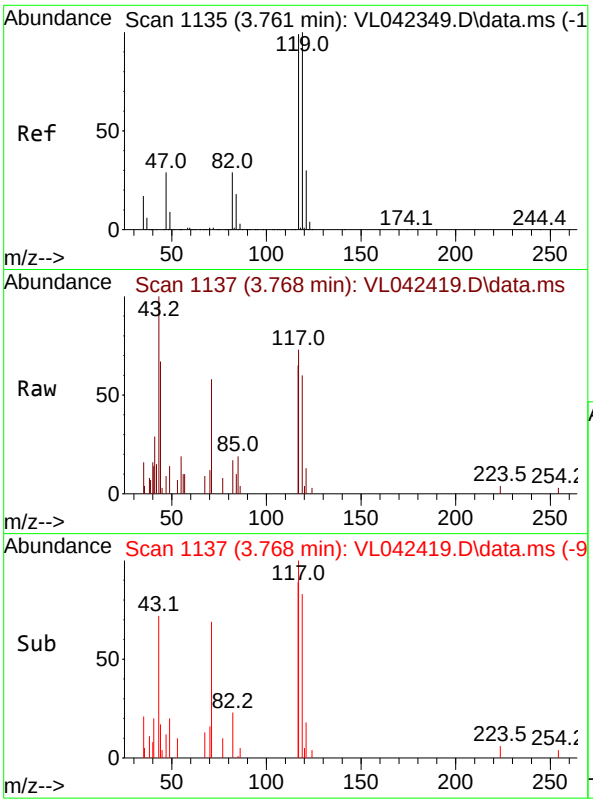


#34
2-Butanone
Concen: 0.869 ppbv
RT: 2.557 min Scan# 763
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 27638

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2

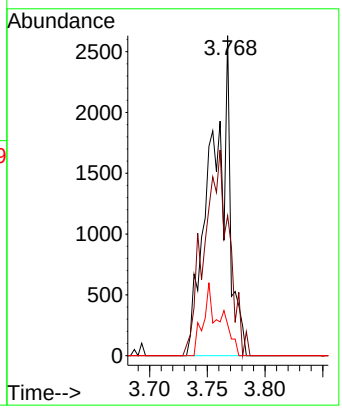




#35
Carbon Tetrachloride
Concen: 0.084 ppbv m
RT: 3.768 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:117 Resp: 305

Ion	Ratio	Lower	Upper
117	100		
119	82.6	80.5	120.7
121	18.4	24.2	36.2#



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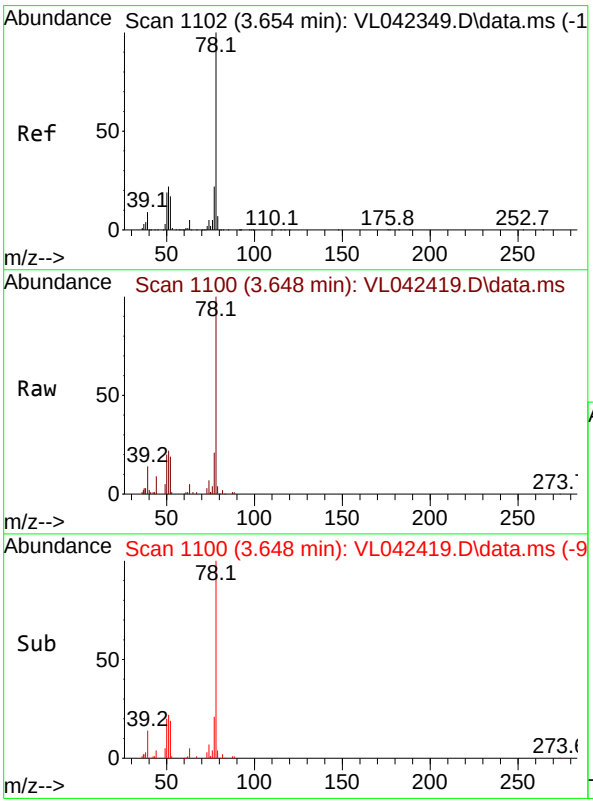
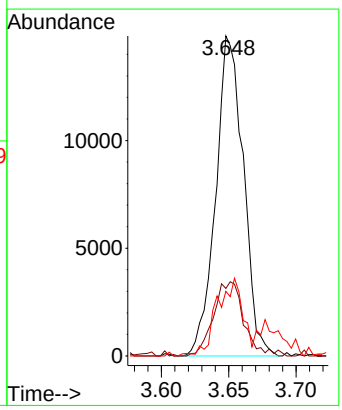
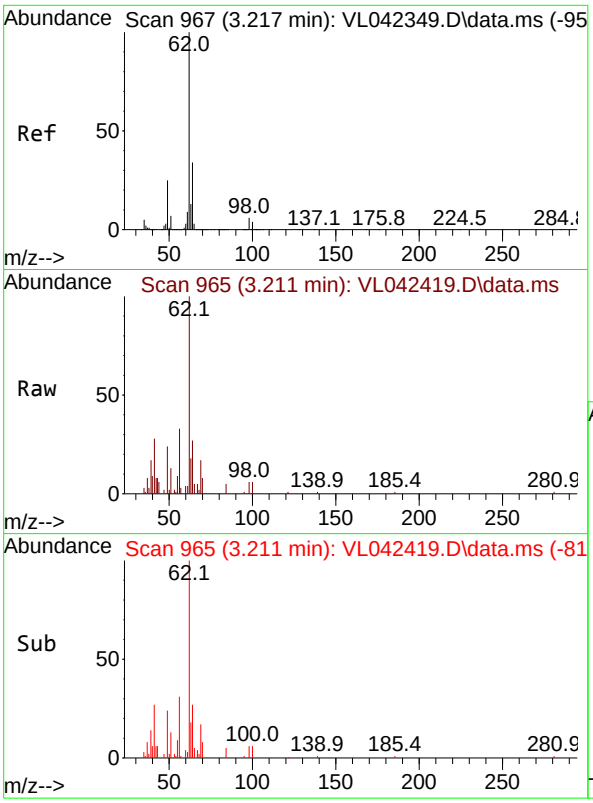


#36
Benzene
Concen: 0.490 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 78 Resp: 21233

Ion	Ratio	Lower	Upper
78	100		
77	21.1	17.4	26.0
50	20.2	15.5	23.3

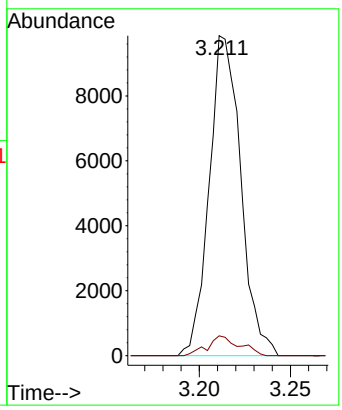




#37
1,2-Dichloroethane
Concen: 0.456 ppbv
RT: 3.211 min Scan# 9
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 62 Resp: 1186

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.1	7.7



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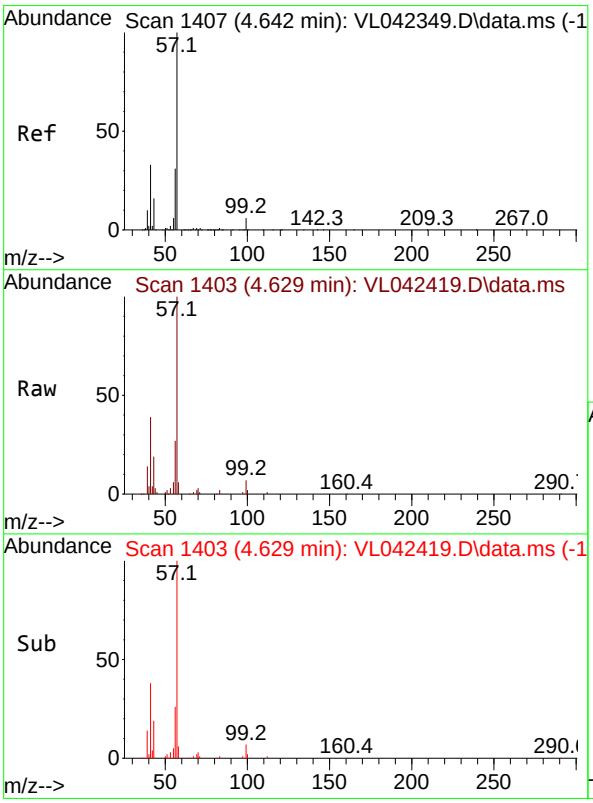
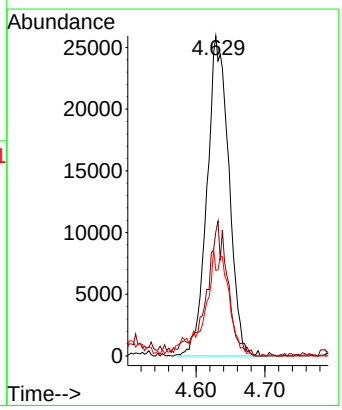
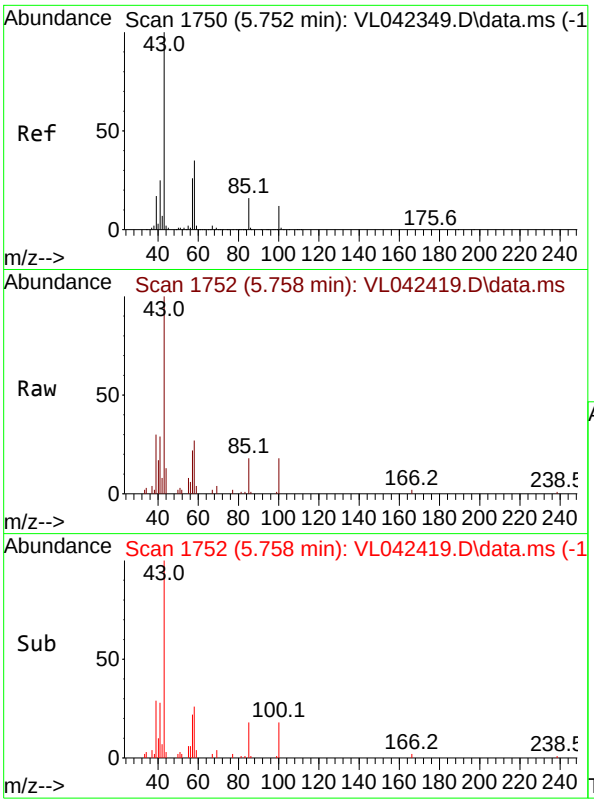


#44
2,2,4-Trimethylpentane
Concen: 0.760 ppbv m
RT: 4.629 min Scan# 1403
Delta R.T. -0.013 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 57 Resp: 56896

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8#
56	0.0	25.7	38.5#

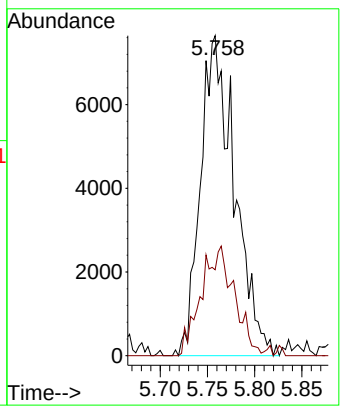




#50
4-Methyl-2-Pentanone
Concen: 0.361 ppbv m
RT: 5.758 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 1908

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.6	43.0#



Instrument :
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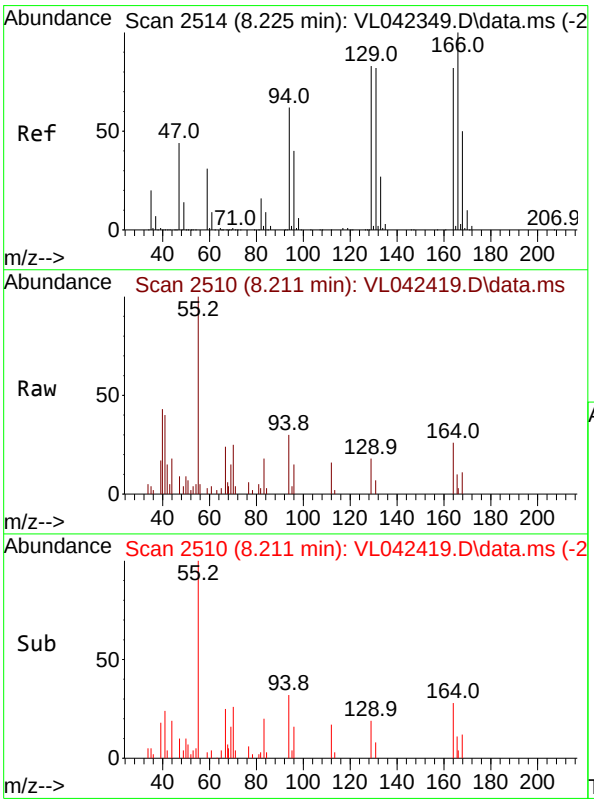
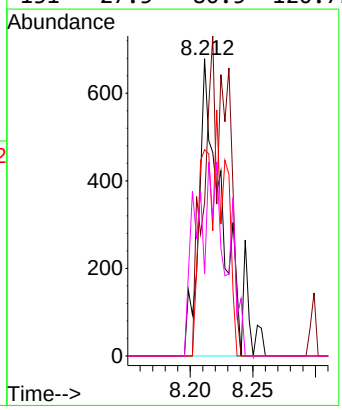
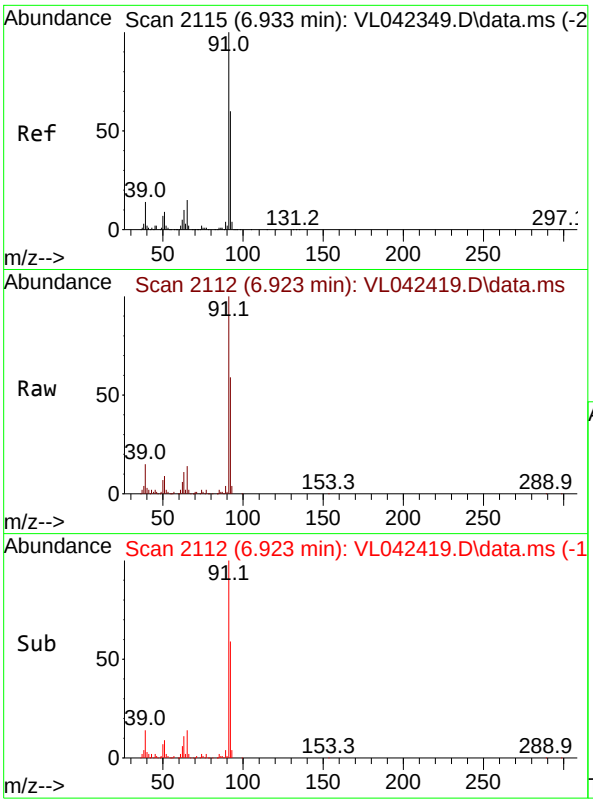


#52
Tetrachloroethene
Concen: 0.053 ppbv m
RT: 8.211 min Scan# 2510
Delta R.T. -0.013 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:164 Resp: 894

Ion	Ratio	Lower	Upper
164	100		
166	38.4	98.2	147.2#
129	69.4	81.8	122.8#
131	27.5	80.5	120.7#

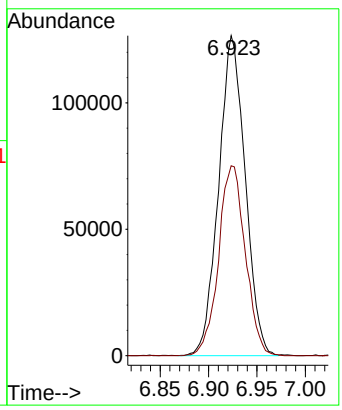




#53
Toluene
Concen: 4.644 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 24156

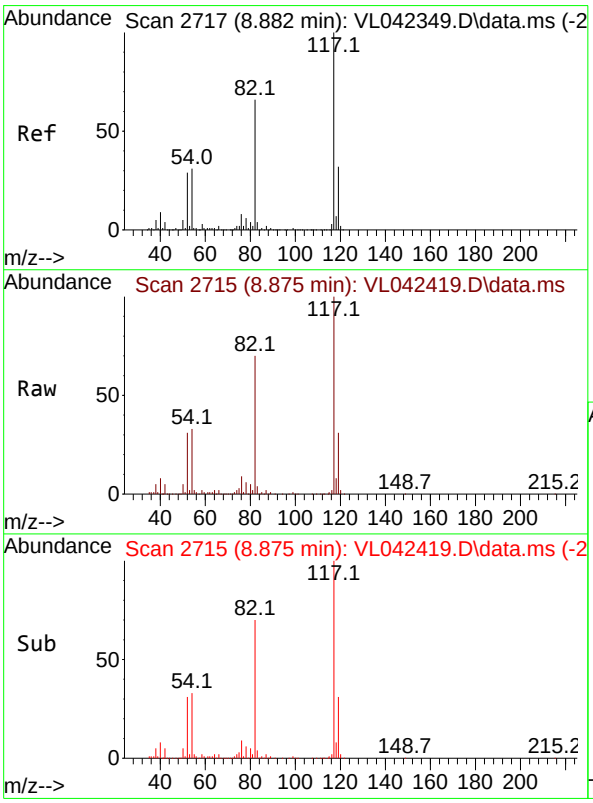
Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

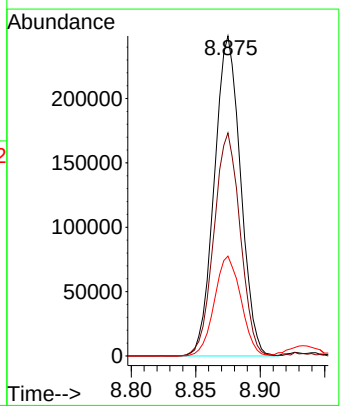
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

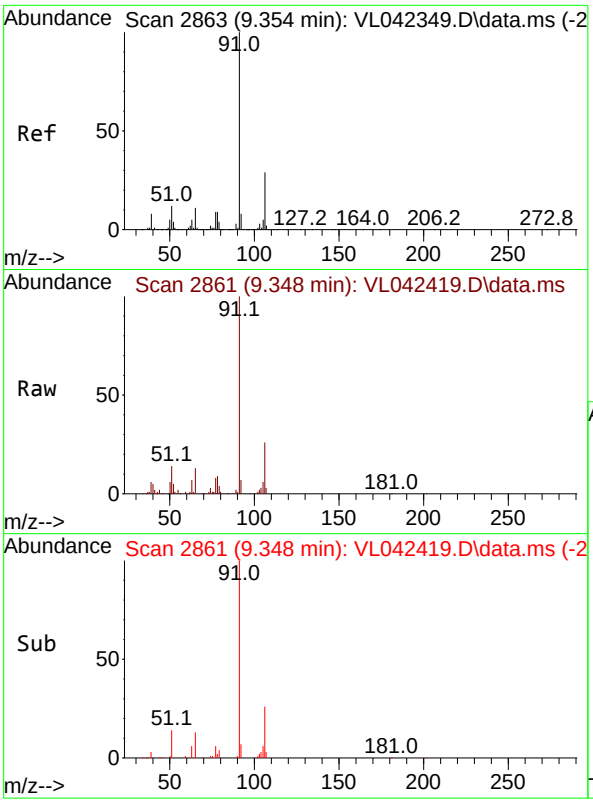


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:117 Resp: 351139

Ion	Ratio	Lower	Upper
117	100		
82	70.1	57.8	86.6
119	31.6	25.2	37.8





#58
Ethyl Benzene
Concen: 0.561 ppbv
RT: 9.348 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

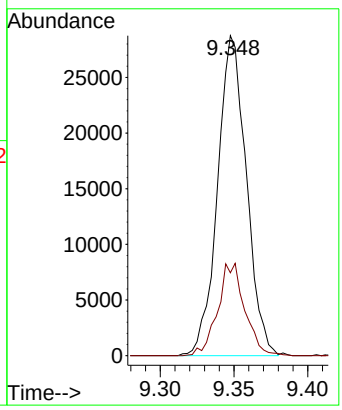
Tgt Ion: 91 Resp: 3906

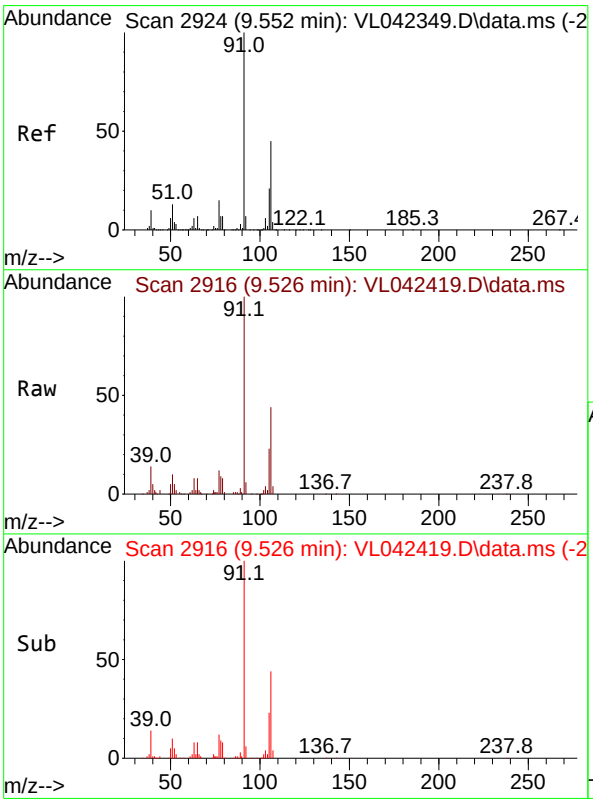
Ion	Ratio	Lower	Upper
91	100		
106	25.9	23.0	34.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

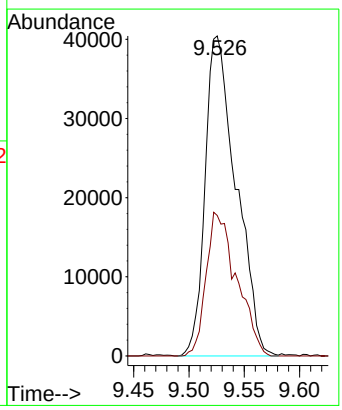


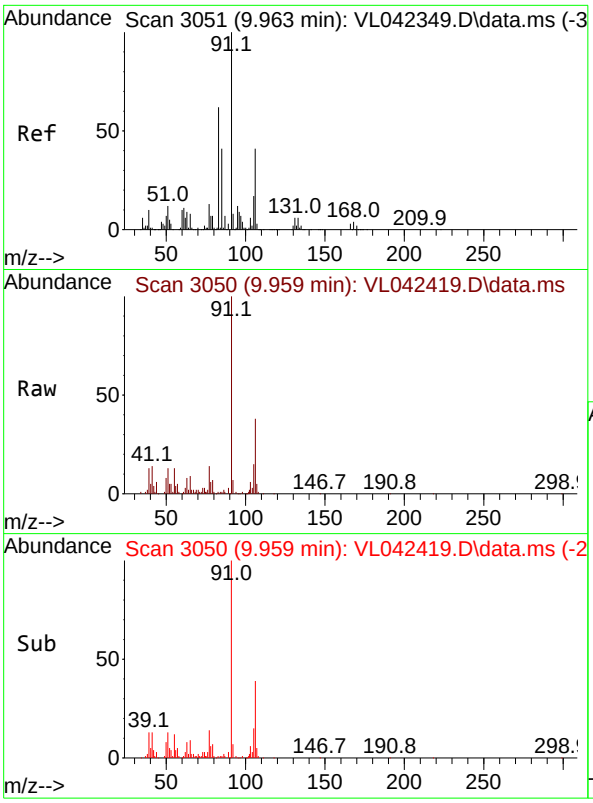


#59
m/p-Xylene
Concen: 1.407 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 78855

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2

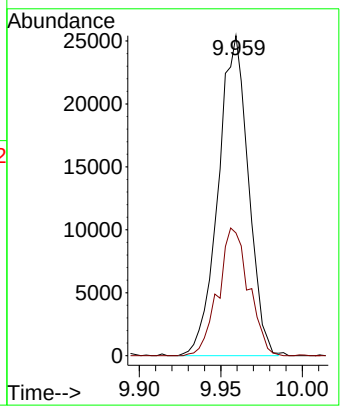




#60
o-Xylene
Concen: 0.578 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 3263

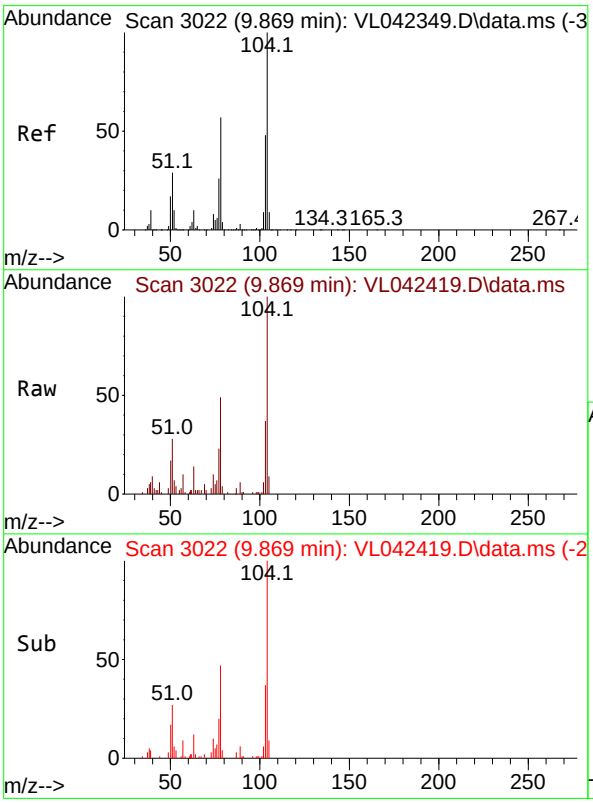
Ion	Ratio	Lower	Upper
91	100		
106	40.6	21.1	63.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

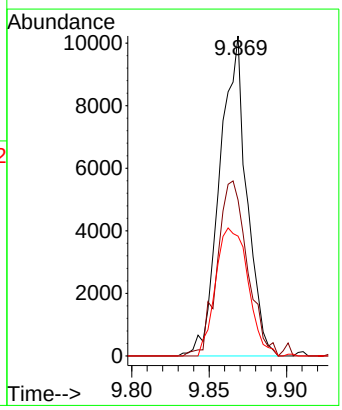
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

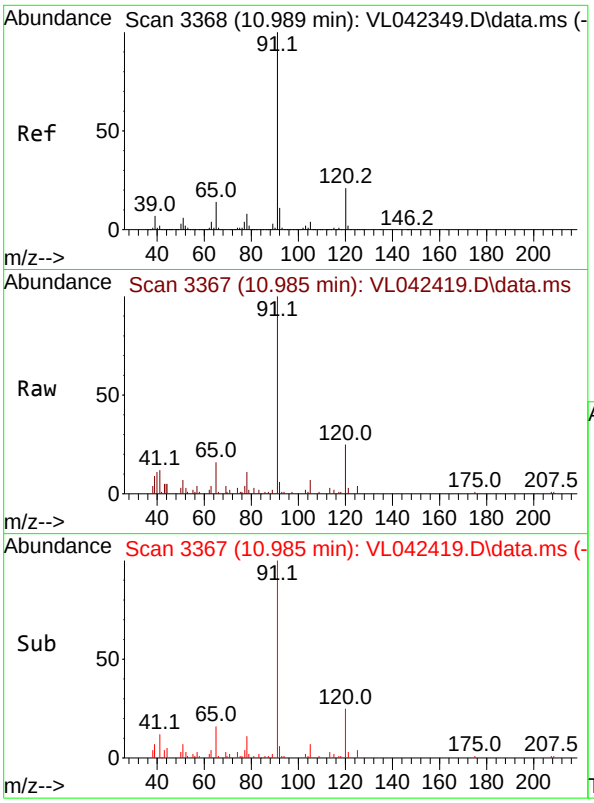


#61
Styrene
Concen: 0.460 ppbv
RT: 9.869 min Scan# 3022
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:104 Resp: 12396

Ion	Ratio	Lower	Upper
104	100		
78	62.2	44.6	66.8
103	48.4	37.4	56.0





#64
n-propylbenzene
Concen: 0.123 ppbv
RT: 10.985 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

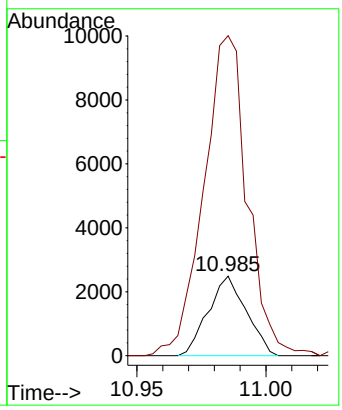
Tgt Ion:120 Resp: 255

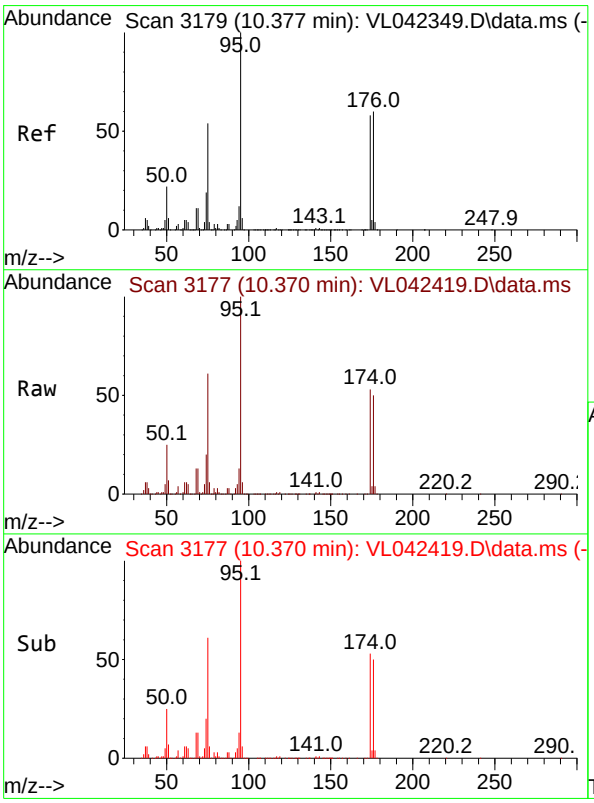
Ion	Ratio	Lower	Upper
120	100		
91	461.4	392.4	588.6

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

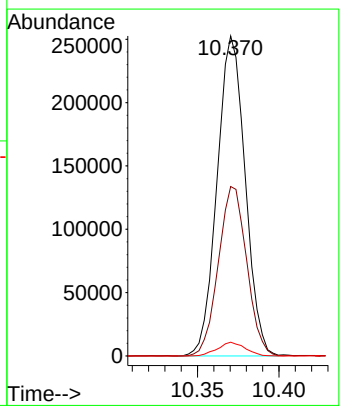


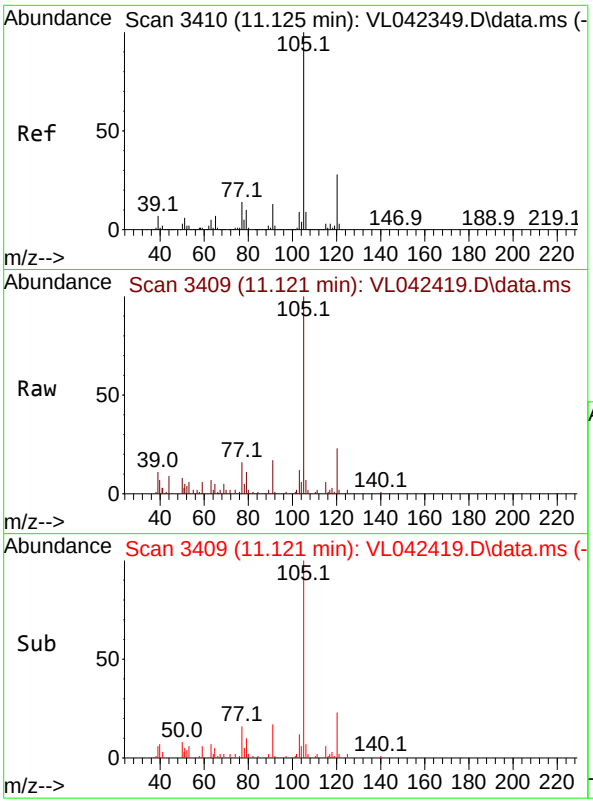


#68
1-Bromo-4-Fluorobenzene
Concen: 10.481 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 95 Resp: 302429

Ion	Ratio	Lower	Upper
95	100		
174	53.5	48.5	72.7
175	4.2	3.7	5.5

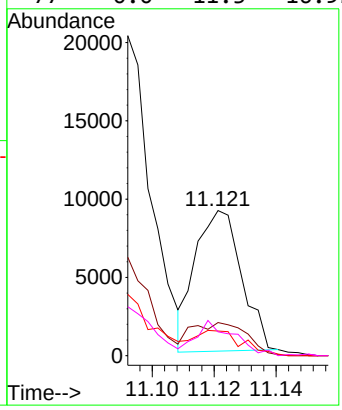




#72
4-Ethyltoluene
Concen: 0.135 ppbv
RT: 11.121 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:105 Resp: 930

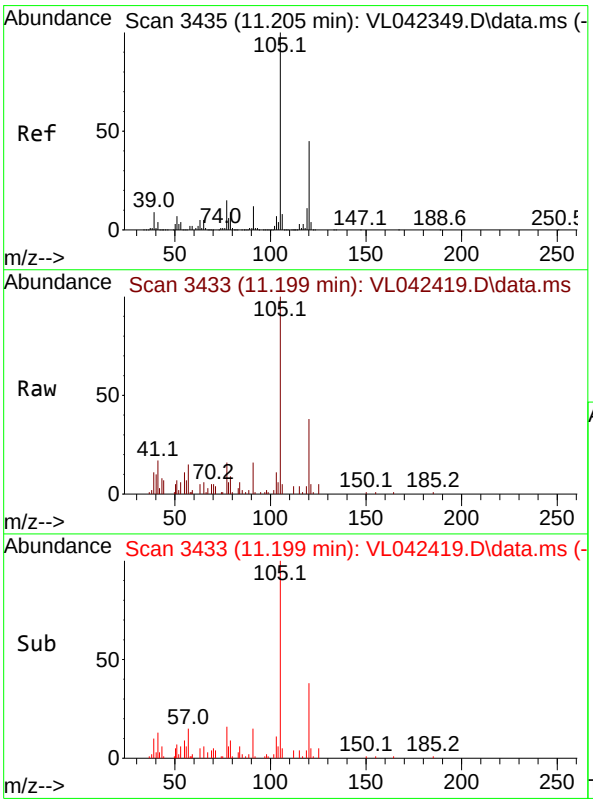
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

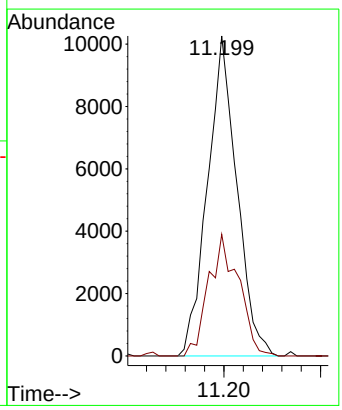
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

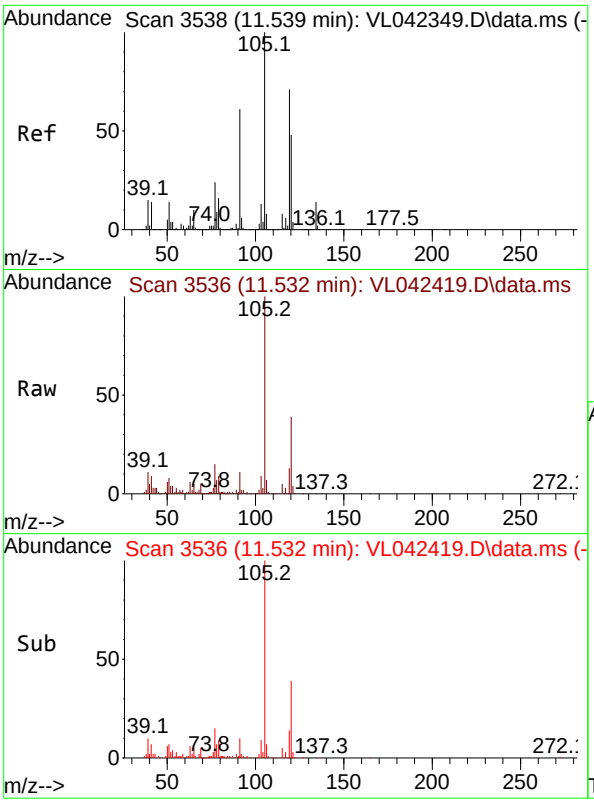


#73
1,3,5-Trimethylbenzene
Concen: 0.177 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:105 Resp: 10799

Ion	Ratio	Lower	Upper
105	100		
120	38.0	35.6	53.4

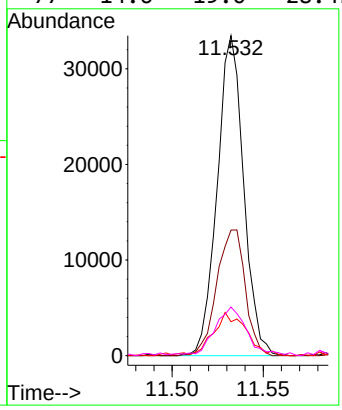




#74
1,2,4-Trimethylbenzene
Concen: 0.475 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:105 Resp: 3380

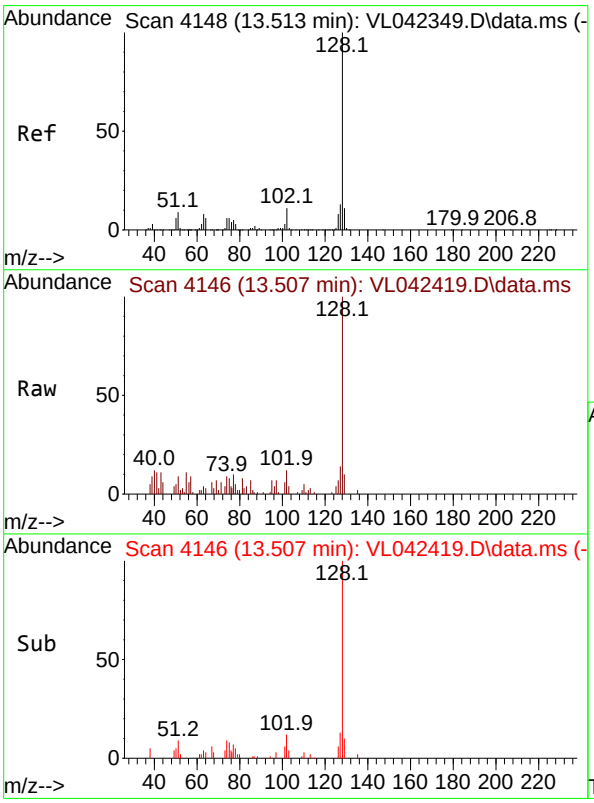
Ion	Ratio	Lower	Upper
105	100		
120	39.3	38.1	57.1
91	10.1	48.8	73.2#
77	14.6	19.0	28.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Manual Integrations
APPROVED

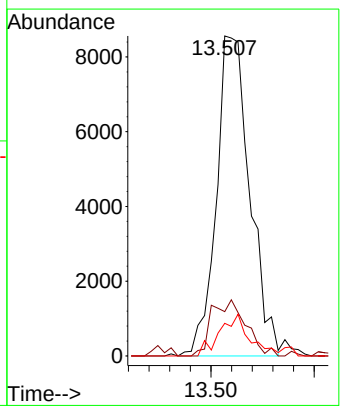
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#79
Naphthalene
Concen: 0.113 ppbv
RT: 13.507 min Scan# 4146
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:128 Resp: 9645

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.6	15.8
129	10.2	8.6	12.8



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042419.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4506965	5135248	100.00%	19.971%
2	1.463	422	425	429	rBV	421014	223277	4.35%	0.868%
3	1.486	429	432	434	rVV	193450	85350	1.66%	0.332%
4	1.557	450	454	458	rBV	2597879	1272098	24.77%	4.947%
5	1.618	469	473	478	rVB	626476	330155	6.43%	1.284%
6	1.719	500	504	512	rVB	1383524	810395	15.78%	3.152%
7	1.842	535	542	548	rBV2	1540249	1388196	27.03%	5.399%
8	1.884	548	555	560	rBV	1035018	687640	13.39%	2.674%
9	1.962	575	579	584	rBV	104300	67533	1.32%	0.263%
10	2.039	599	603	606	rBV	214233	161971	3.15%	0.630%
11	2.055	606	608	613	rVB2	84284	63748	1.24%	0.248%
12	2.269	668	674	681	rBV	203508	179945	3.50%	0.700%
13	2.408	711	717	723	rBV	196640	194323	3.78%	0.756%
14	2.470	728	736	742	rVB4	83308	108248	2.11%	0.421%
15	2.622	774	783	789	rBV	50564	54809	1.07%	0.213%
16	2.784	824	833	839	rBV	551996	560743	10.92%	2.181%
17	2.819	839	844	858	rVB2	236646	286583	5.58%	1.115%
18	3.217	960	967	979	rVB5	52399	78921	1.54%	0.307%
19	3.648	1088	1100	1106	rBV5	35452	58830	1.15%	0.229%
20	3.680	1106	1110	1125	rVB2	143321	217354	4.23%	0.845%
21	3.952	1182	1194	1206	rBV	708837	1117982	21.77%	4.348%
22	4.043	1212	1222	1230	rBV4	43223	78233	1.52%	0.304%
23	4.256	1274	1288	1303	rVB5	63919	138204	2.69%	0.537%
24	4.629	1394	1403	1420	rVB4	61017	138366	2.69%	0.538%
25	5.655	1702	1720	1732	rBV8	21305	56000	1.09%	0.218%
26	5.761	1739	1753	1763	rBV4	22814	57456	1.12%	0.223%
27	6.836	2068	2085	2099	rBV2	195019	468733	9.13%	1.823%
28	6.927	2099	2113	2129	rVB2	335620	695772	13.55%	2.706%
29	7.681	2336	2346	2358	rBV3	152808	255492	4.98%	0.994%
30	8.292	2528	2535	2550	rVB7	50303	95640	1.86%	0.372%
31	8.875	2700	2715	2724	rBV2	910919	1348888	26.27%	5.246%
32	8.933	2724	2733	2745	rVB2	495279	797933	15.54%	3.103%
33	9.348	2851	2861	2874	rBV	69371	104120	2.03%	0.405%
34	9.522	2905	2915	2933	rVB	120835	242077	4.71%	0.941%
35	9.862	3010	3020	3028	rBV6	44121	68270	1.33%	0.266%
36	9.933	3032	3042	3047	rVV2	156222	224672	4.38%	0.874%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	9.959	3047	3050	3070	rVB5	89818	126623	2.47%	0.492%
38	10.370	3162	3177	3187	rBV2	1173726	1461419	28.46%	5.683%
39	10.853	3317	3326	3334	rVB	243697	282763	5.51%	1.100%
40	11.092	3393	3400	3405	rBV	59576	67790	1.32%	0.264%
41	11.422	3496	3502	3508	rVB3	49990	58943	1.15%	0.229%
42	11.532	3526	3536	3546	rVB2	105104	144627	2.82%	0.562%
43	11.720	3583	3594	3598	rBV	110204	131642	2.56%	0.512%
44	11.772	3598	3610	3624	rVB2	2762131	3323481	64.72%	12.925%
45	12.037	3686	3692	3702	rVB3	165355	186261	3.63%	0.724%
46	12.668	3882	3887	3894	rVB4	58194	58579	1.14%	0.228%
47	12.824	3928	3935	3942	rBV2	187612	180664	3.52%	0.703%
48	12.998	3982	3989	4000	rVB7	38362	58139	1.13%	0.226%
49	13.380	4099	4107	4115	rVV2	1535788	1705492	33.21%	6.633%
50	13.723	4207	4213	4220	rBV3	70290	74000	1.44%	0.288%

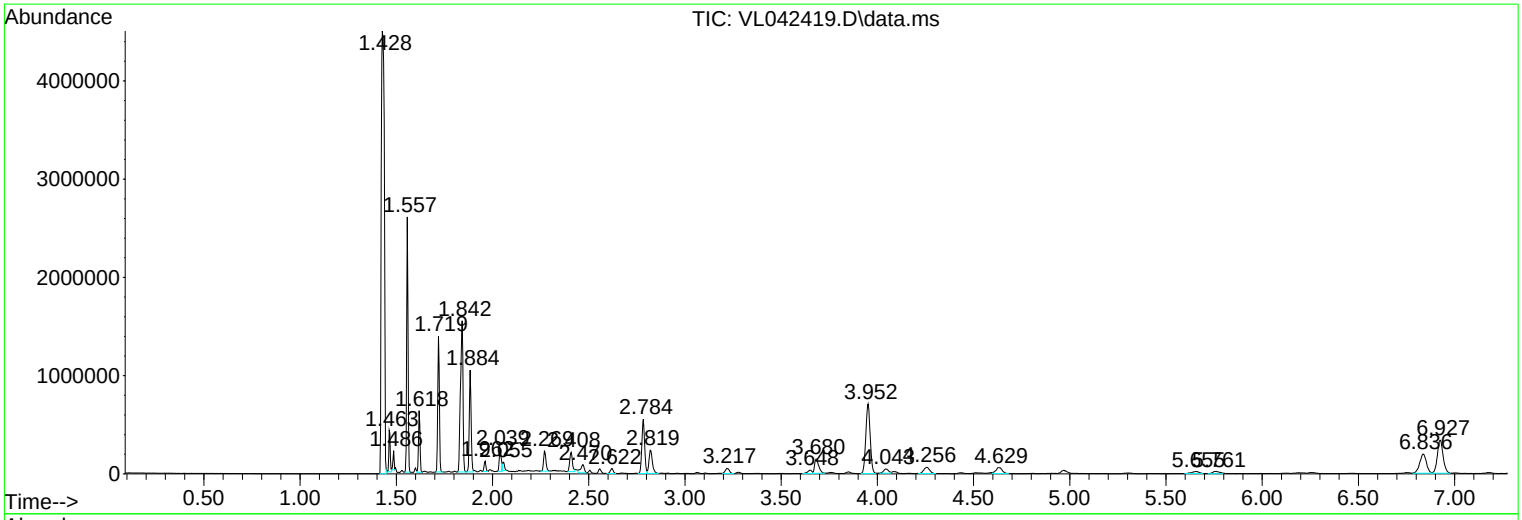
Sum of corrected areas: 25713628

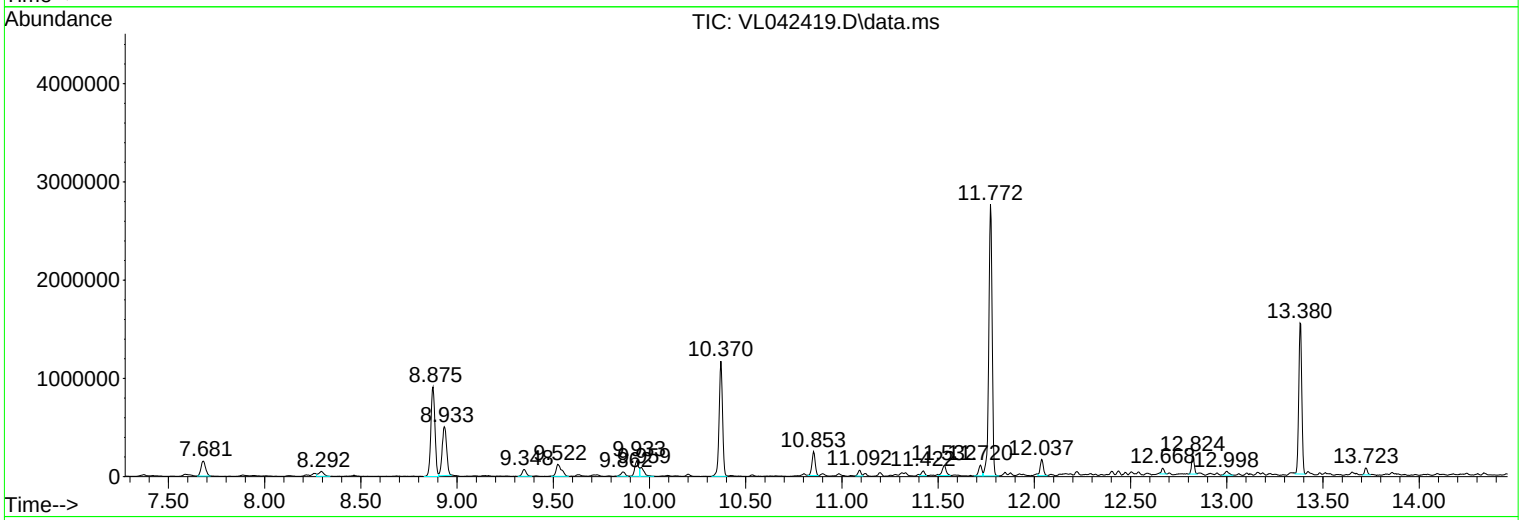
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

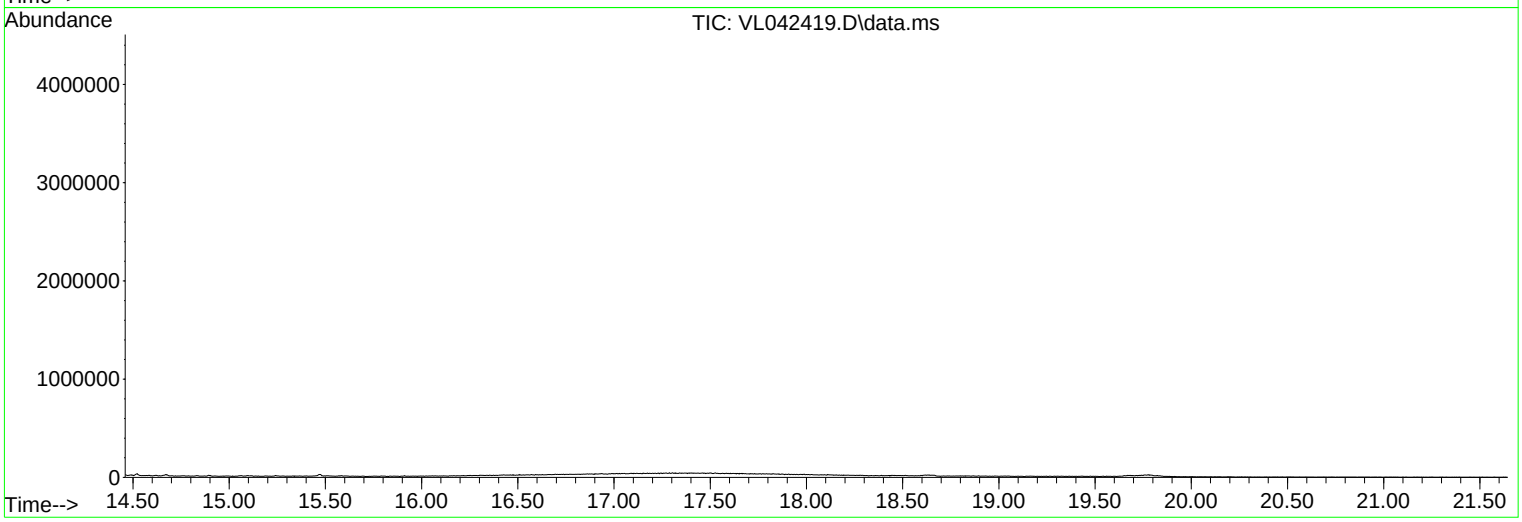
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

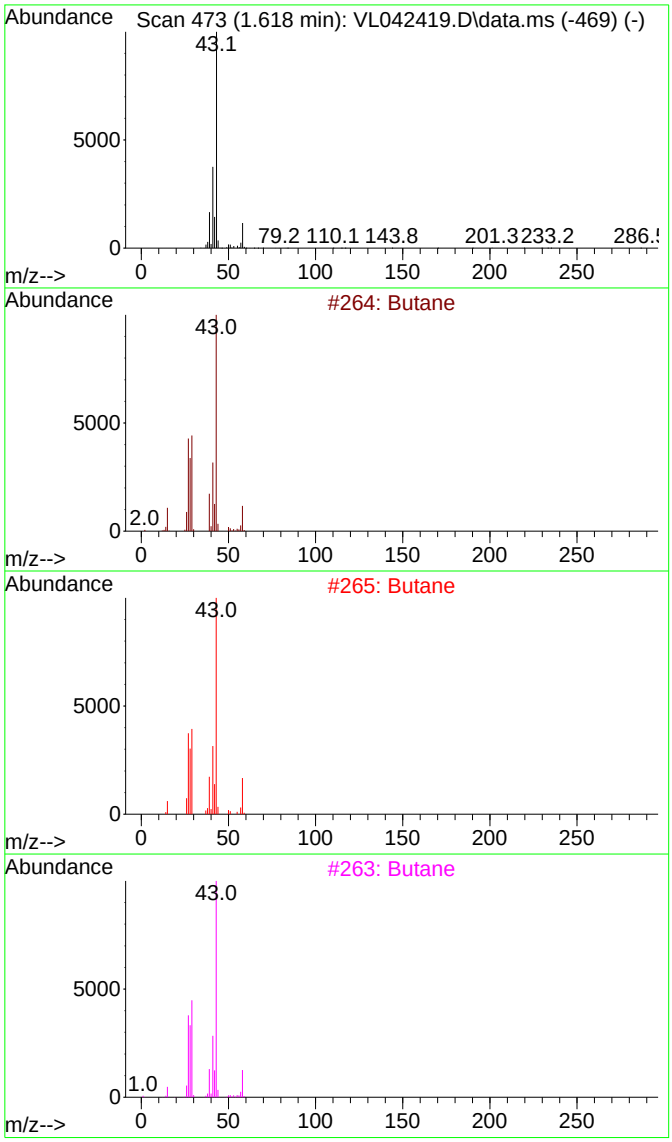
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

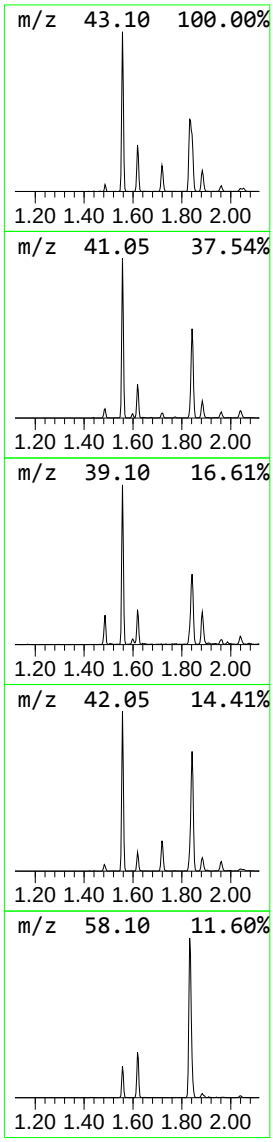
****

Peak Number 1 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.618	5.89 ppbv	330155	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	64
5	Propane, 2-nitro-	89	C3H7NO2	000079-46-9	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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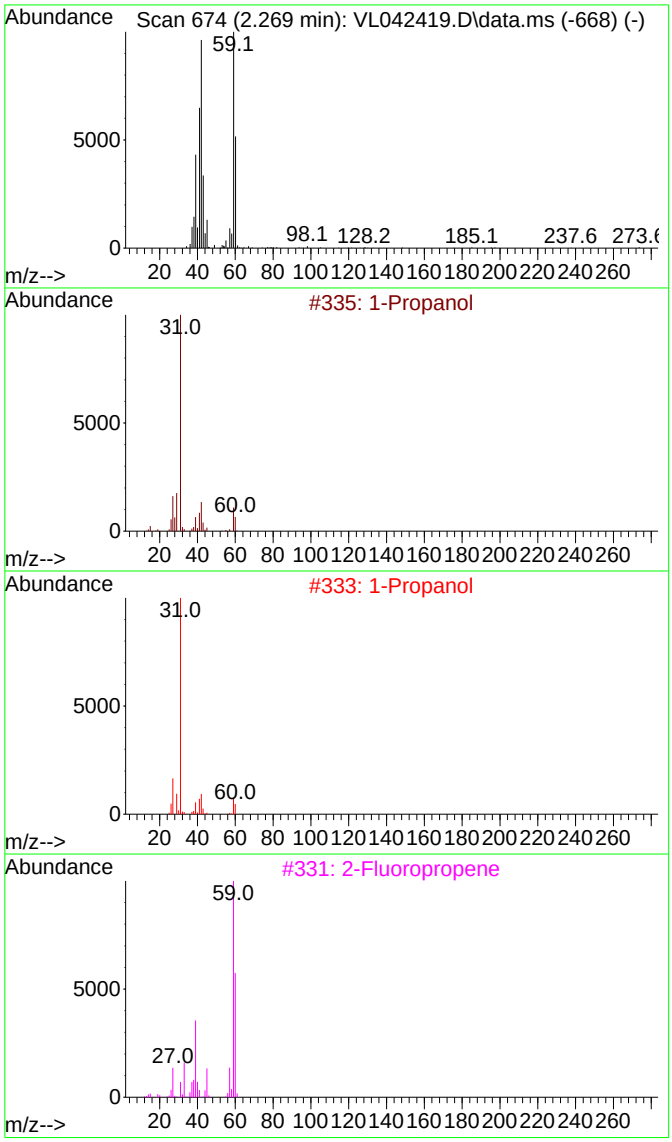
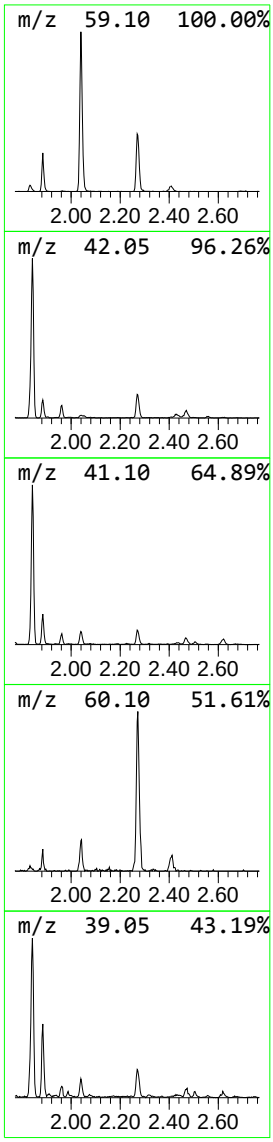
Peak Number 2 1-Propanol Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.269	3.21 ppbv	179945	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanol	60	C3H8O	000071-23-8	58
2	1-Propanol	60	C3H8O	000071-23-8	53
3	2-Fluoropropene	60	C3H5F	001184-60-7	43
4	1-Propanol	60	C3H8O	000071-23-8	40
5	Cyclopropane	42	C3H6	000075-19-4	38





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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Peak Number 4 Pentane, 2-methyl- Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.470	1.93 ppbv	108248	Bromochloromethane	2.784

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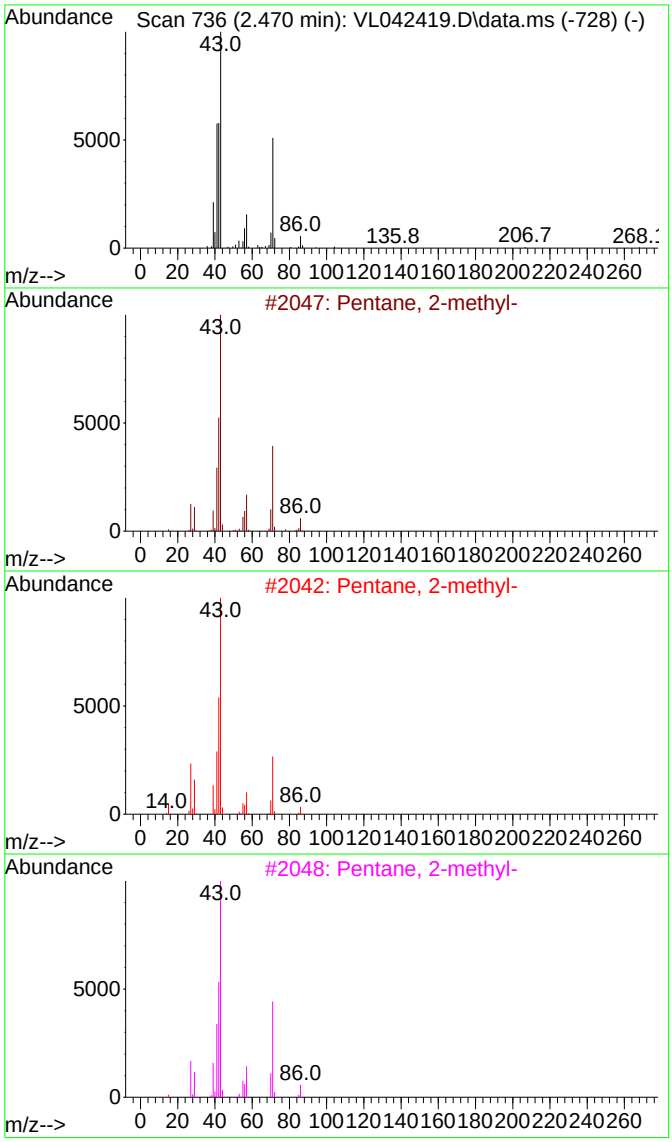

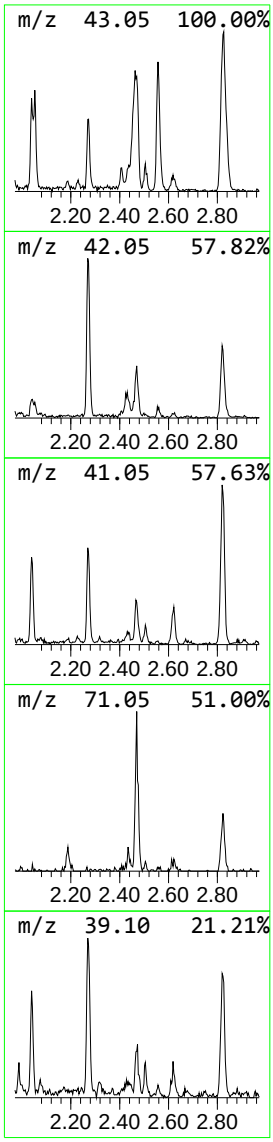

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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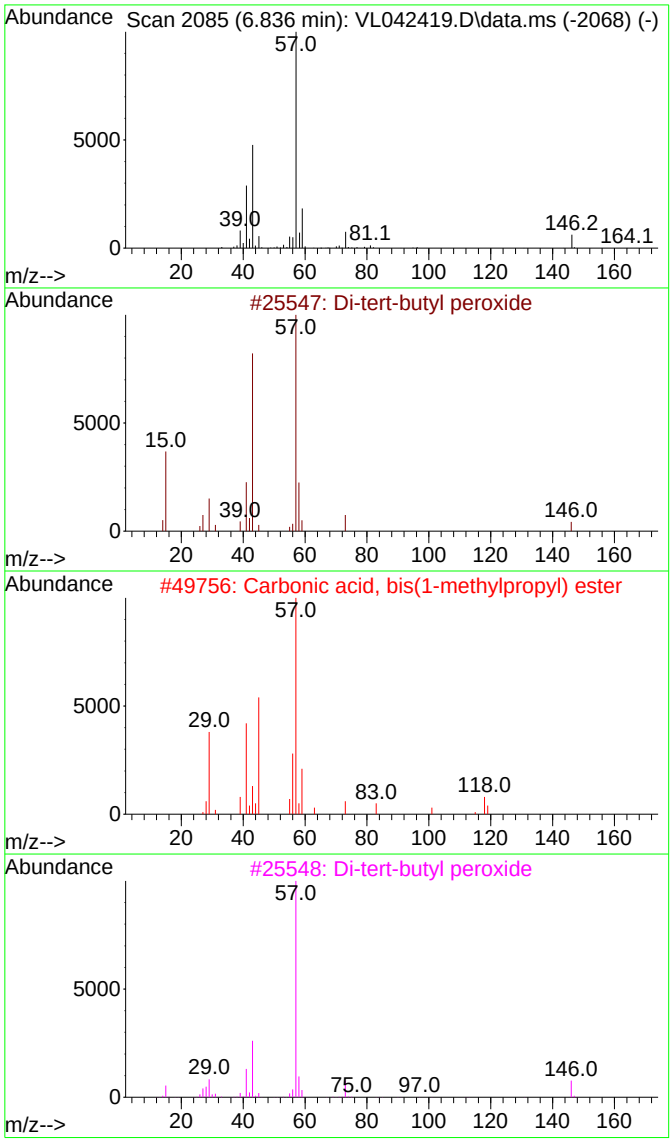
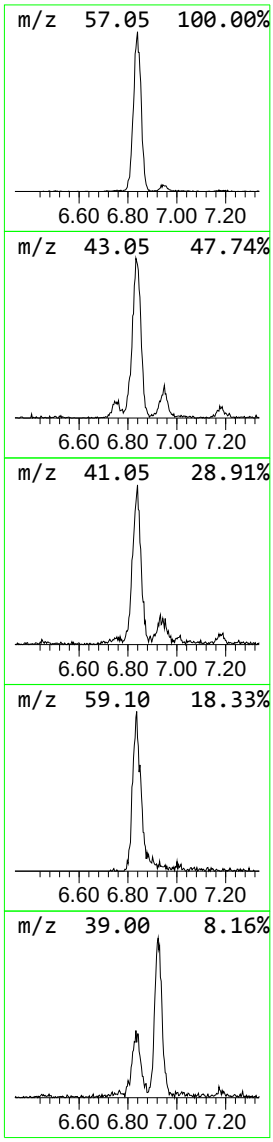
Peak Number 5 Di-tert-butyl peroxide Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.836	3.47 ppbv	468733	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	53
2	Carbonic acid, bis(1-methylpropy...	174	C9H18O3	000623-63-2	42
3	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	42
4	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	40
5	Propanoic acid, 2,2-dimethyl-, s...	208	C5H9AgO2	007324-58-5	38





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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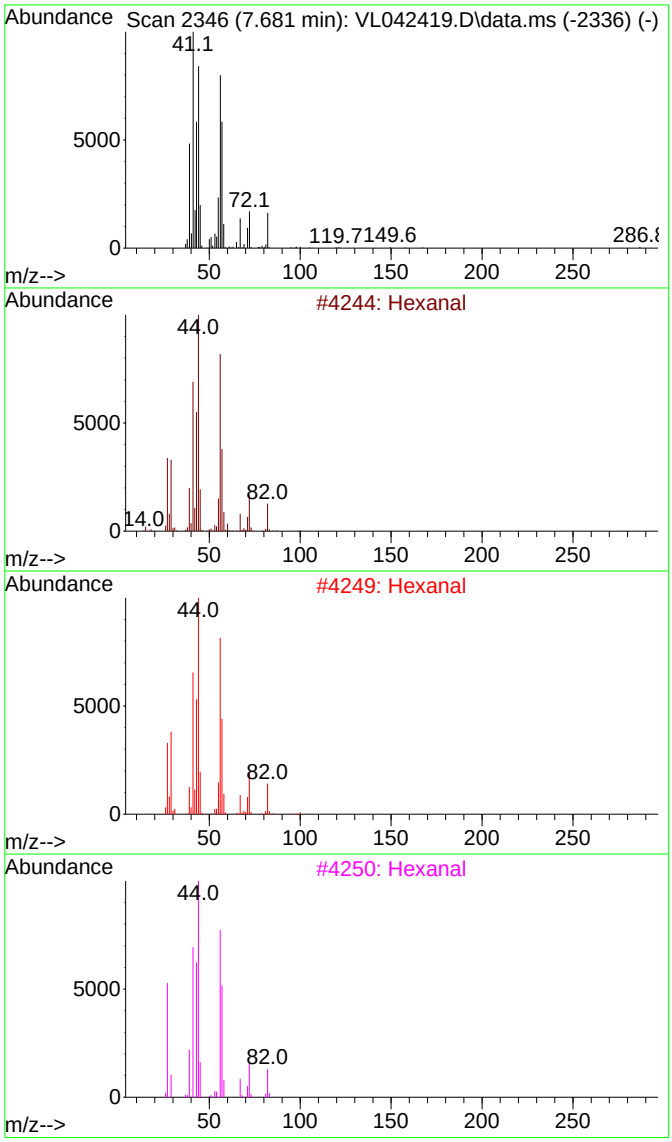
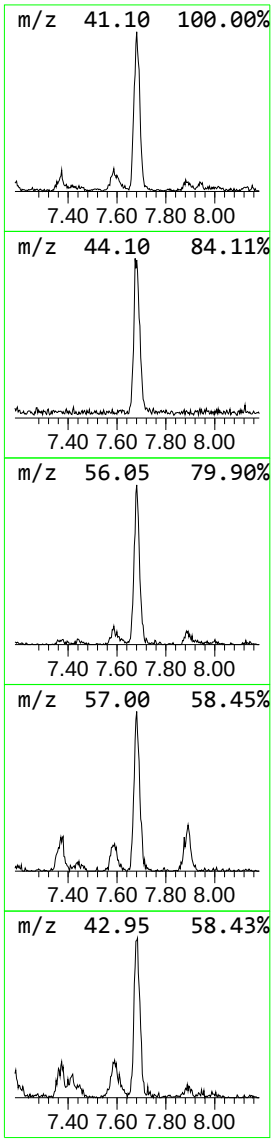
Peak Number 6 Hexanal Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.681	1.89 ppbv	255492	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	74
2	Hexanal	100	C6H12O	000066-25-1	72
3	Hexanal	100	C6H12O	000066-25-1	72
4	Hexanal	100	C6H12O	000066-25-1	64
5	Hexanal	100	C6H12O	000066-25-1	58





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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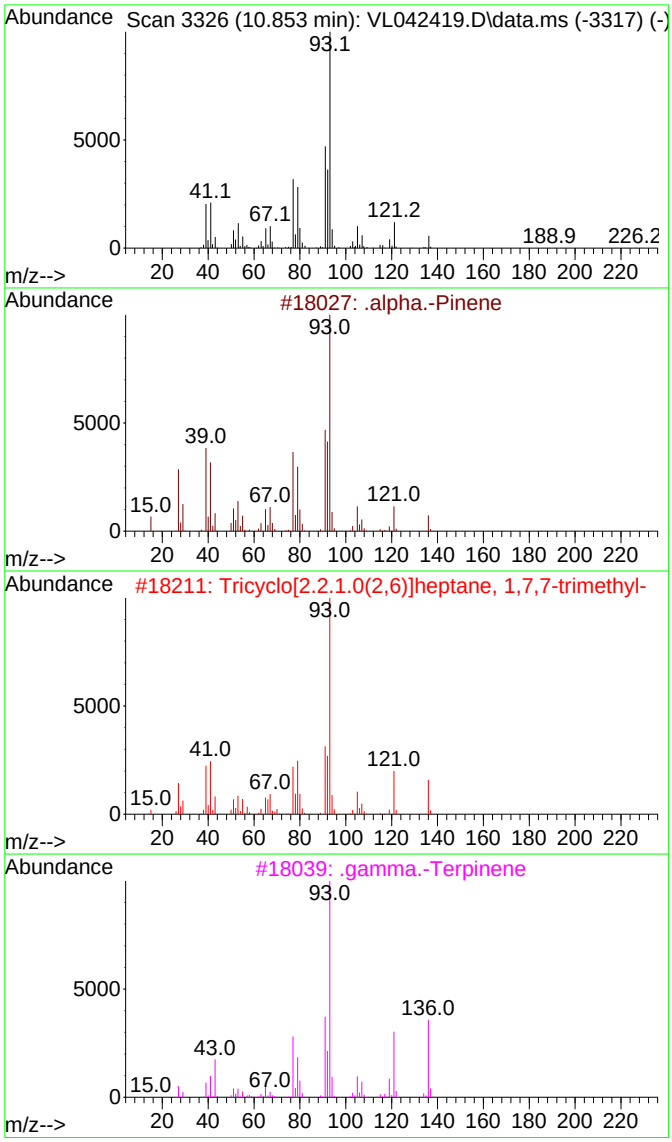
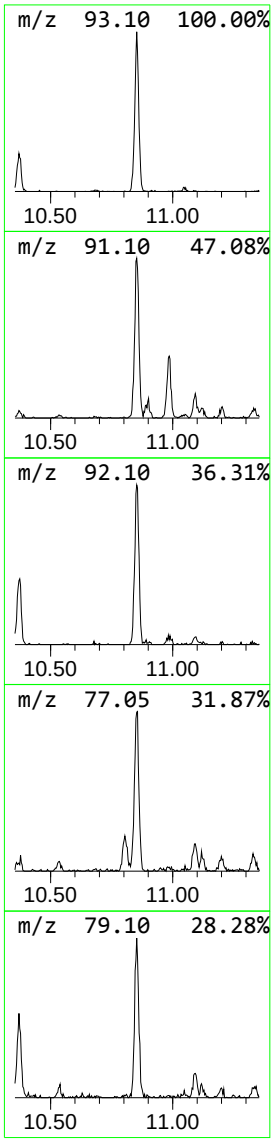
Peak Number 8 .alpha.-Pinene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.853	2.10 ppbv	282763	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	95
2	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000508-32-7	91
3	.gamma.-Terpinene	136	C10H16	000099-85-4	91
4	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	91
5	.gamma.-Terpinene	136	C10H16	000099-85-4	90





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.618	5.9	ppbv	330155	1	2.784	560743	10.0
1-Propanol	2.269	3.2	ppbv	179945	1	2.784	560743	10.0
Pentane, 2-methyl-	2.470	1.9	ppbv	108248	1	2.784	560743	10.0
Di-tert-butyl p...	6.836	3.5	ppbv	468733	3	8.875	1348890	10.0
Hexanal	7.681	1.9	ppbv	255492	3	8.875	1348890	10.0
.alpha.-Pinene	10.853	2.1	ppbv	282763	3	8.875	1348890	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-06	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042293.D	1		04/09/25 15:15	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.37	1.83	J	1.04	2.47	ug/m3
64-17-5	Ethanol	37.8	71.2	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.58	1.20		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.33	0.97	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.12	0.49	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	23.4	57.5	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	8.50	20.2		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.10	3.82		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	4.70	13.9		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.29	0.93	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.48	1.81	J	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-06	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042293.D	1		04/09/25 15:15	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.24	1.11	J	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.00	7.05		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.40			70 (65) - 130 (135)	94%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	162000		2.784			
540-36-3	1,4-Difluorobenzene	395000		3.952			
3114-55-4	Chlorobenzene-d5	339000		8.875			
TENTITIVE IDENTIFIED COMPOUNDS							

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-06	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042293.D	1		04/09/25 15:15	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.90		J		1.47	ppbv
115-07-1	Propene	2.20		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv
000100-52-7	Benzaldehyde	6.60		J		10.8	ppbv
000080-56-8	.alpha.-Pinene	1.70		J		10.9	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:45:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	162172	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	394727	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	338809	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	260496	9.362	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	8768	0.366	ppbv		100
3) Chlorodifluoromethane	1.473	51	21947m	0.897	ppbv		
4) Chloromethane	1.531	50	5713	0.584	ppbv		94
9) Propene	1.486	41	24421m	2.178	ppbv		
10) Heptane	4.975	43	3638m	0.122	ppbv		
11) Trichlorofluoromethane	1.874	101	5120	0.220	ppbv		94
13) Ethanol	1.719	45	40099	37.833	ppbv		81
15) Acetone	1.832	43	192031	8.467	ppbv		94
19) Isopropyl Alcohol	1.884	45	298845	23.353	ppbv	#	32
20) Methylene Chloride	2.059	84	9248	1.095	ppbv		97
26) Hexane	2.823	57	46406	2.041	ppbv	#	35
34) 2-Butanone	2.554	43	134955	4.715	ppbv		98
35) Carbon Tetrachloride	3.758	117	2420m	0.078	ppbv		
36) Benzene	3.651	78	11524	0.294	ppbv	#	90
41) Tetrahydrofuran	3.062	42	5513m	0.334	ppbv		
53) Toluene	6.930	91	22070	0.476	ppbv		98
57) Chlorobenzene	8.914	112	7743	0.241	ppbv	#	83
59) m/p-Xylene	9.529	91	8935	0.186	ppbv		95

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:45:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations APPROVED
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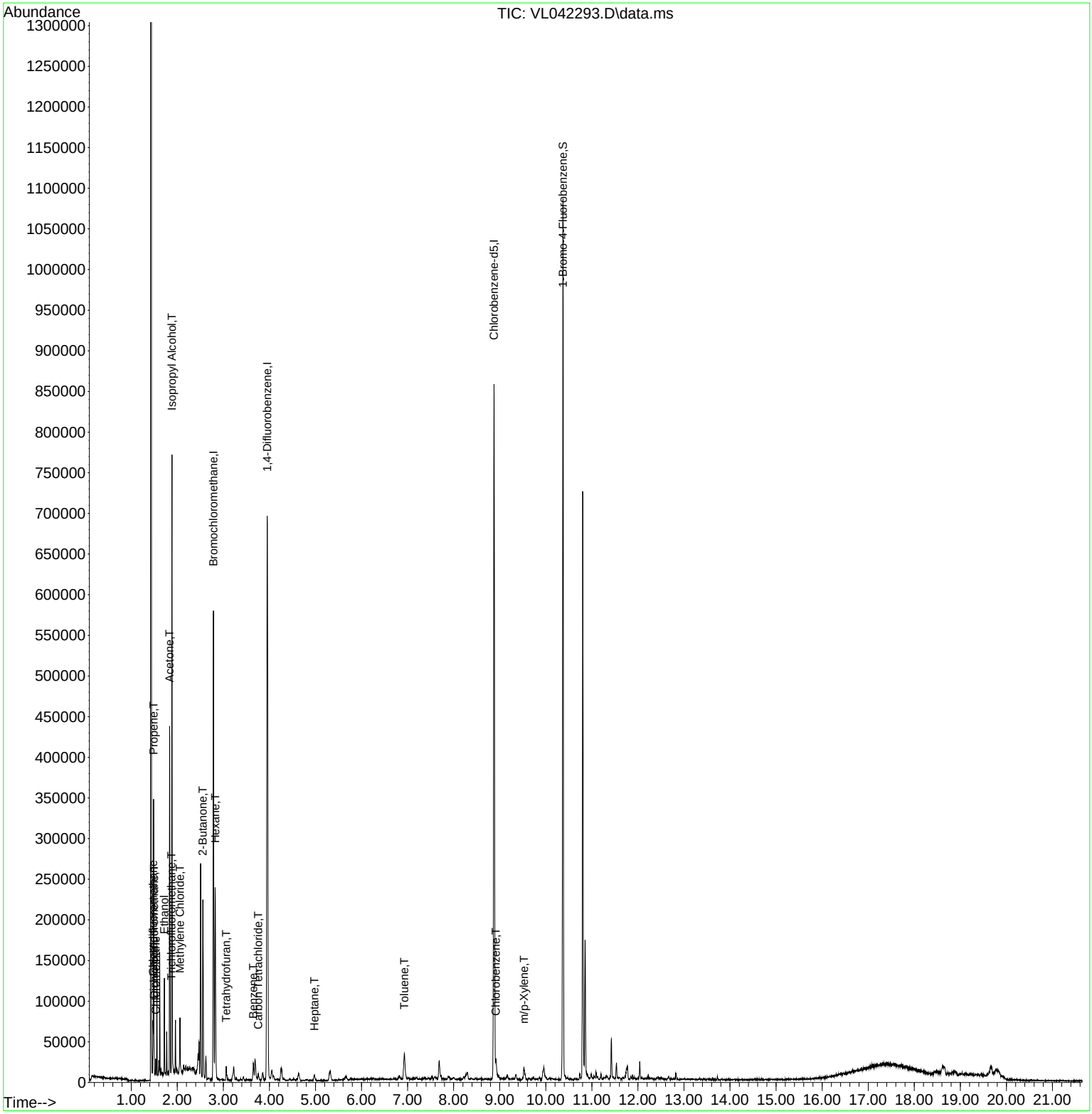
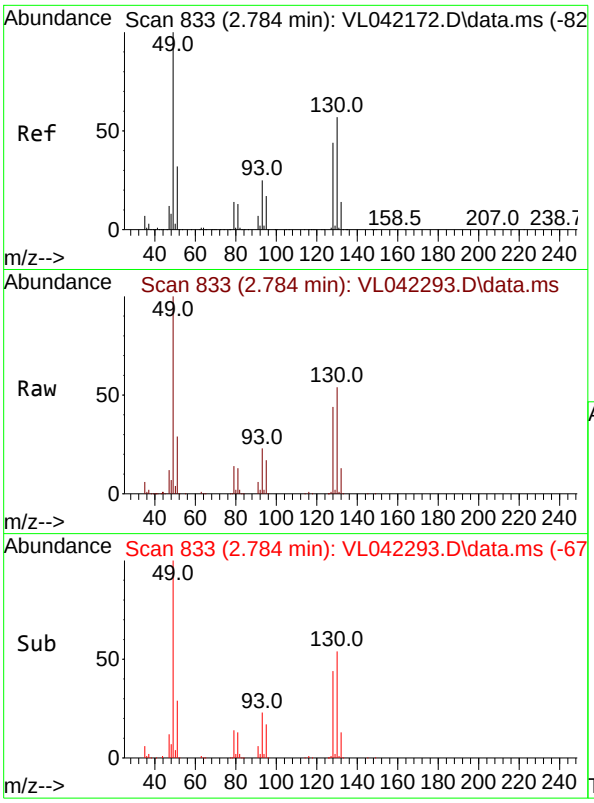
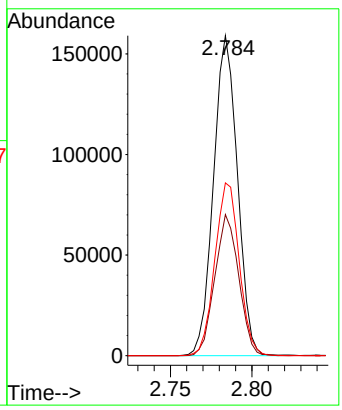




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 49 Resp: 16217

Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.9	68.5
130	55.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

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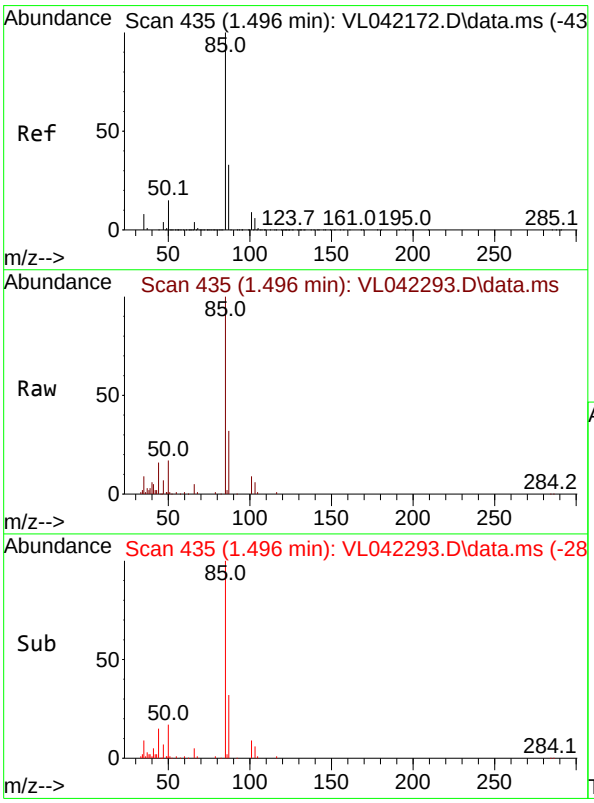
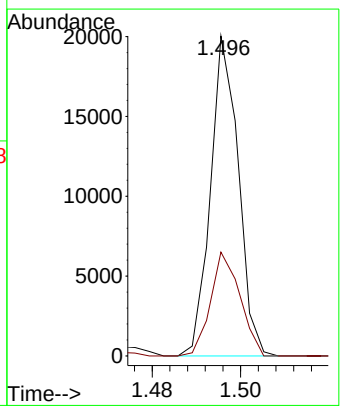
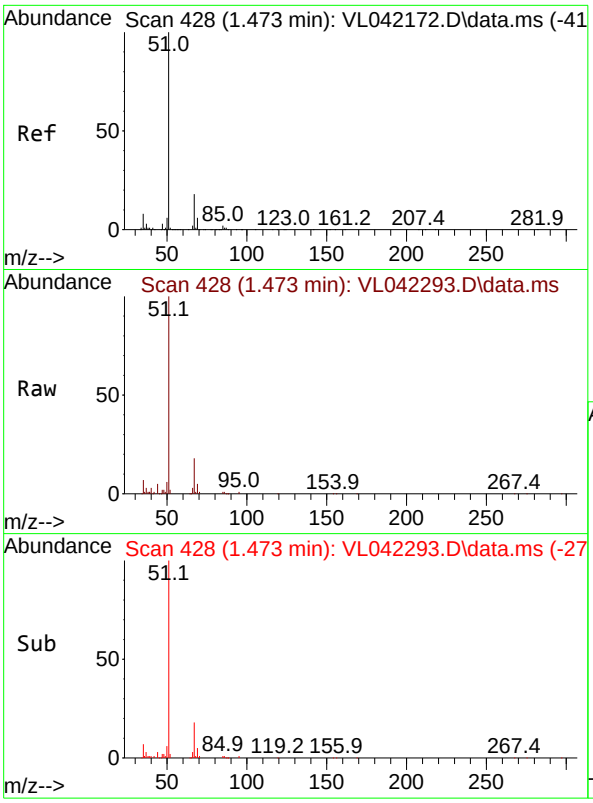


#2
Dichlorodifluoromethane
Concen: 0.366 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 85 Resp: 8768

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1

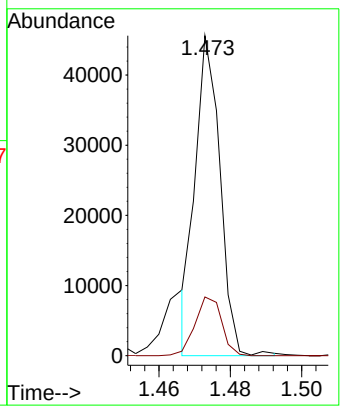




#3
Chlorodifluoromethane
Concen: 0.897 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 51 Resp: 2194

Ion	Ratio	Lower	Upper
51	100		
67	19.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
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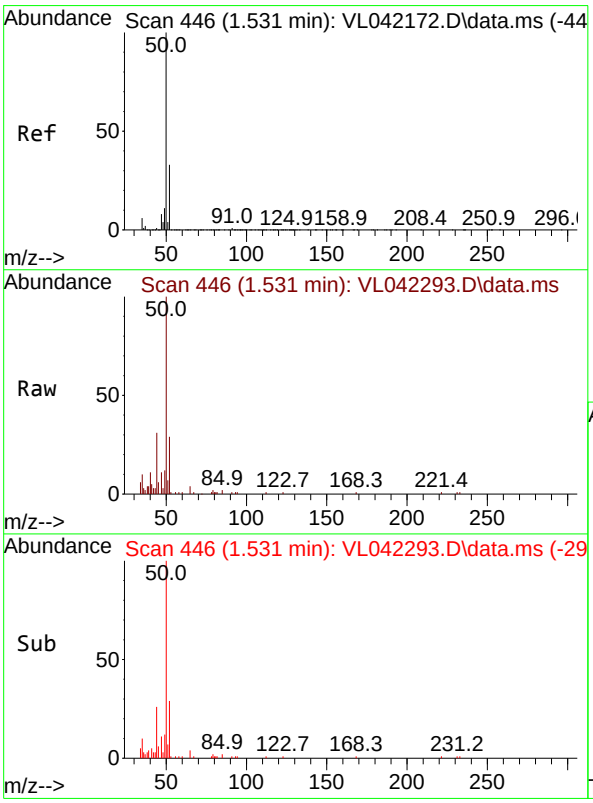
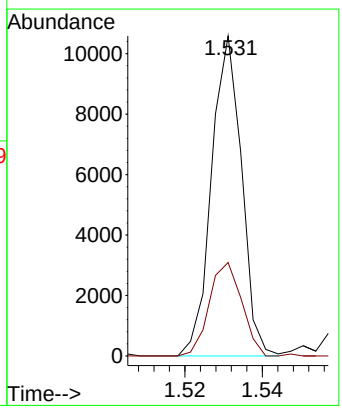
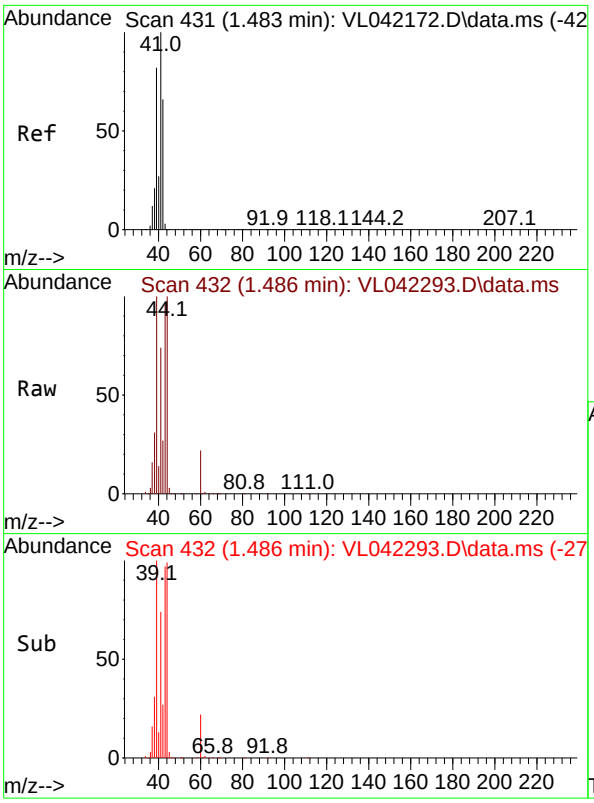


#4
Chloromethane
Concen: 0.584 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 50 Resp: 5713

Ion	Ratio	Lower	Upper
50	100		
52	29.2	26.1	39.1

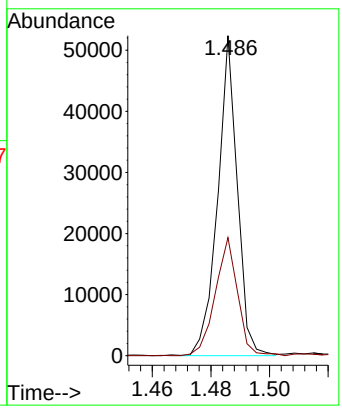




#9
Propene
Concen: 2.178 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 41 Resp: 2442

Ion	Ratio	Lower	Upper
41	100		
42	76.6	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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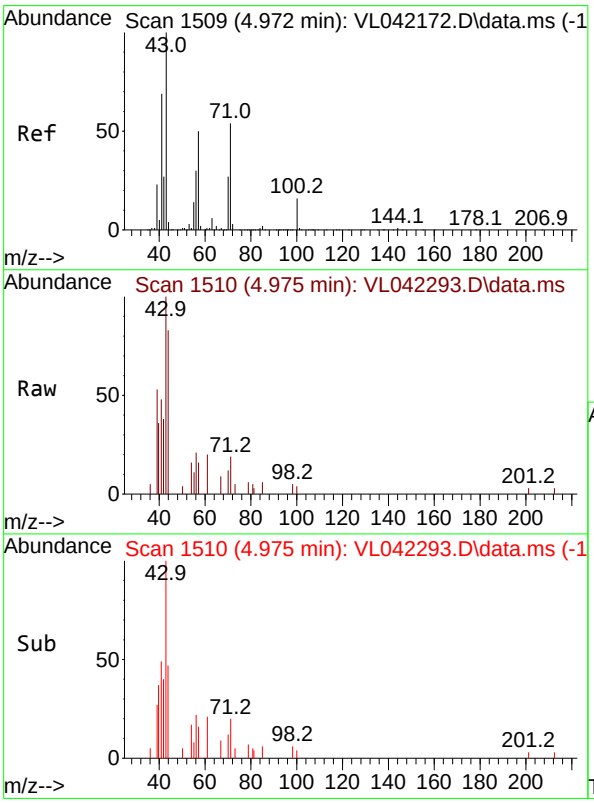
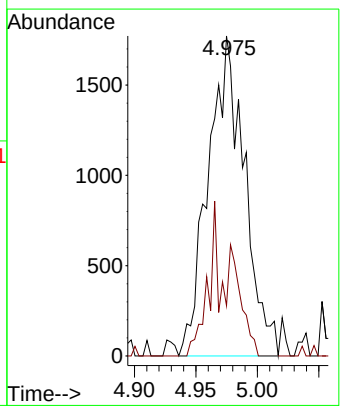
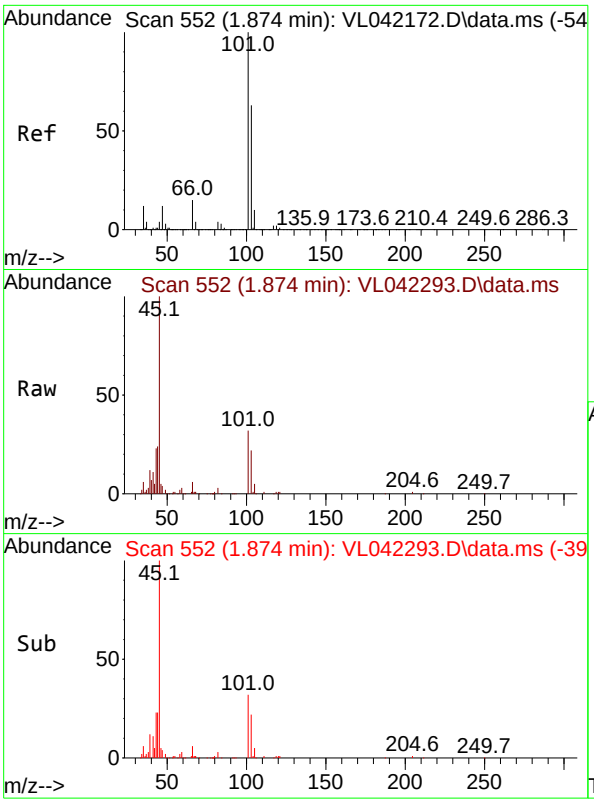


#10
Heptane
Concen: 0.122 ppbv m
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 3638

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

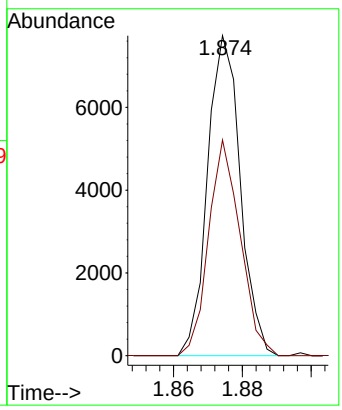




#11
Trichlorofluoromethane
Concen: 0.220 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:101 Resp: 512

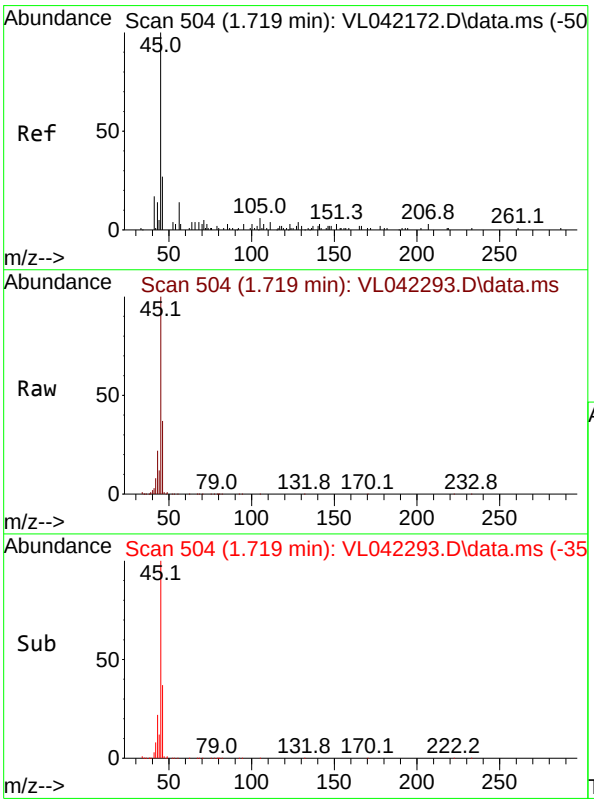
Ion	Ratio	Lower	Upper
101	100		
103	67.4	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

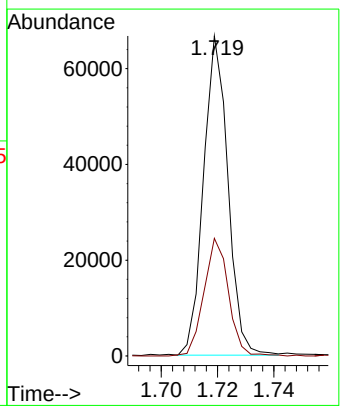
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

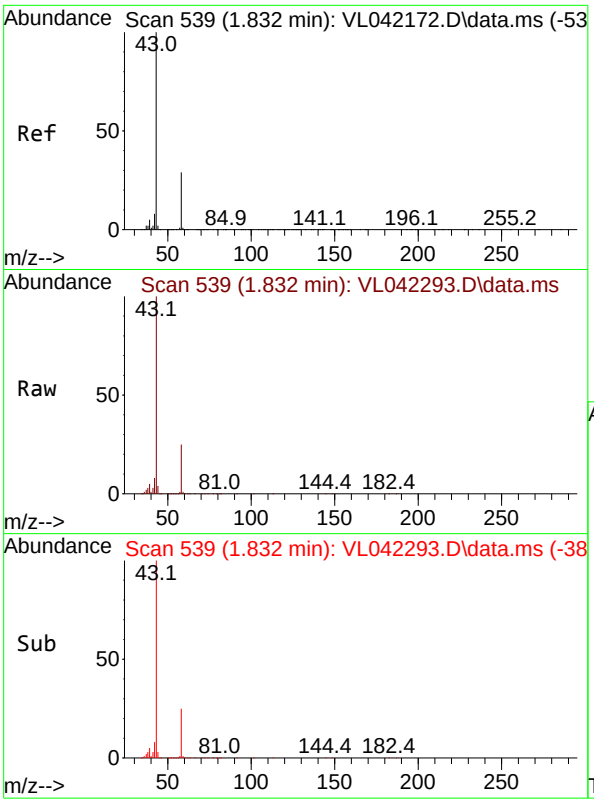


#13
Ethanol
Concen: 37.833 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 45 Resp: 40099

Ion	Ratio	Lower	Upper
45	100		
46	37.4	20.2	80.8

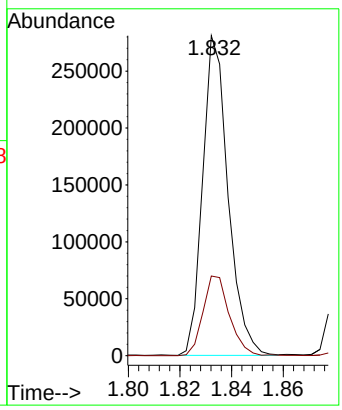




#15
Acetone
Concen: 8.467 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 19203

Ion	Ratio	Lower	Upper
43	100		
58	26.1	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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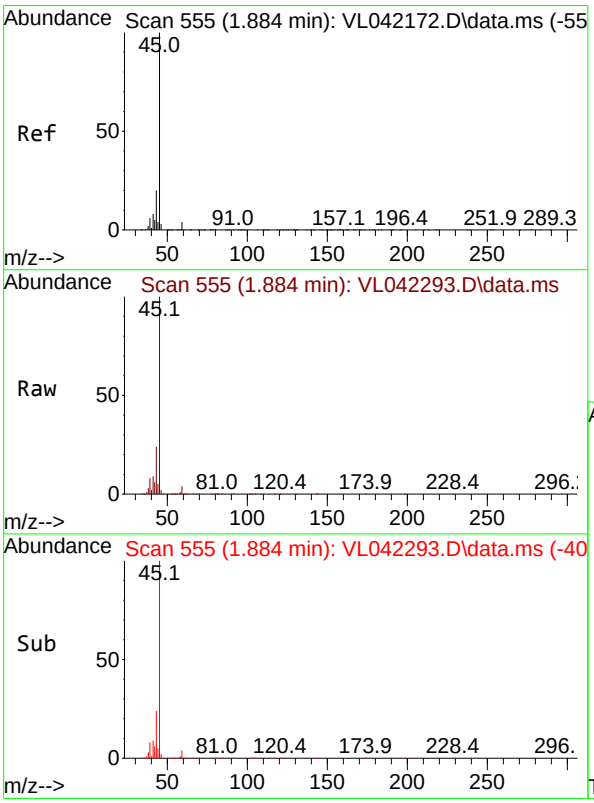
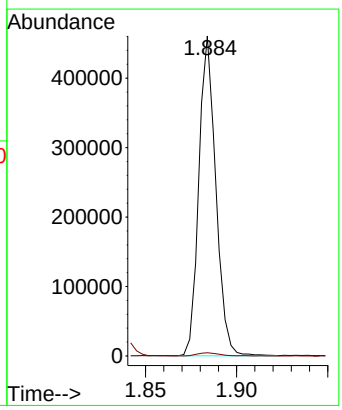
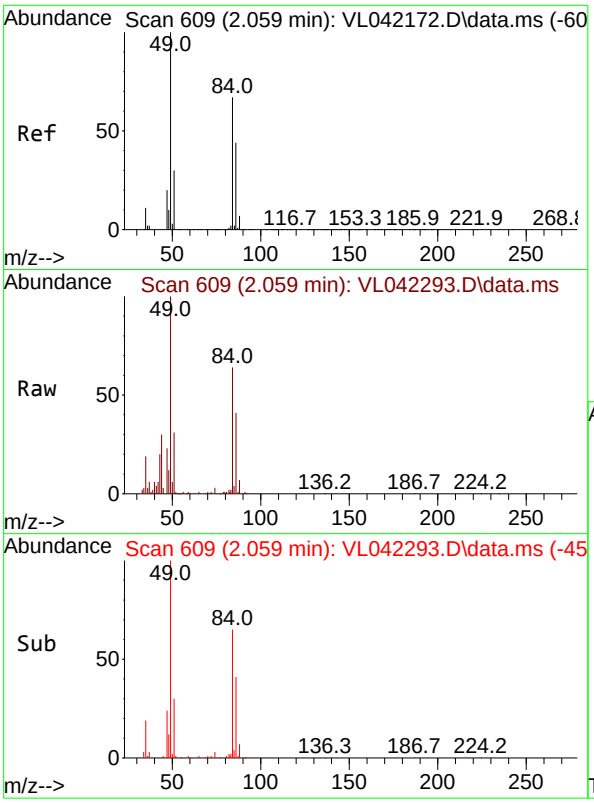


#19
Isopropyl Alcohol
Concen: 23.353 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 45 Resp: 298845

Ion	Ratio	Lower	Upper
45	100		
58	1.3	36.9	55.3#

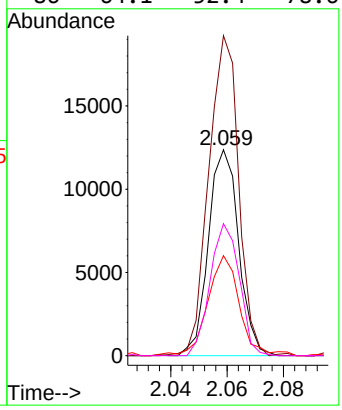




#20
Methylene Chloride
Concen: 1.095 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 84 Resp: 924

Ion	Ratio	Lower	Upper
84	100		
49	154.7	120.2	180.4
51	47.8	37.4	56.0
86	64.1	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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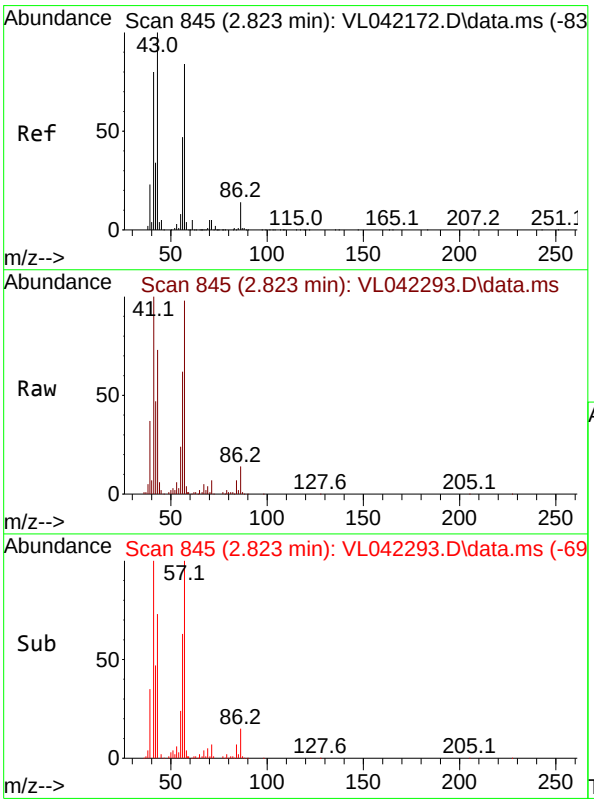
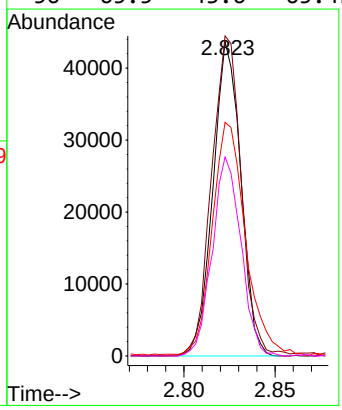
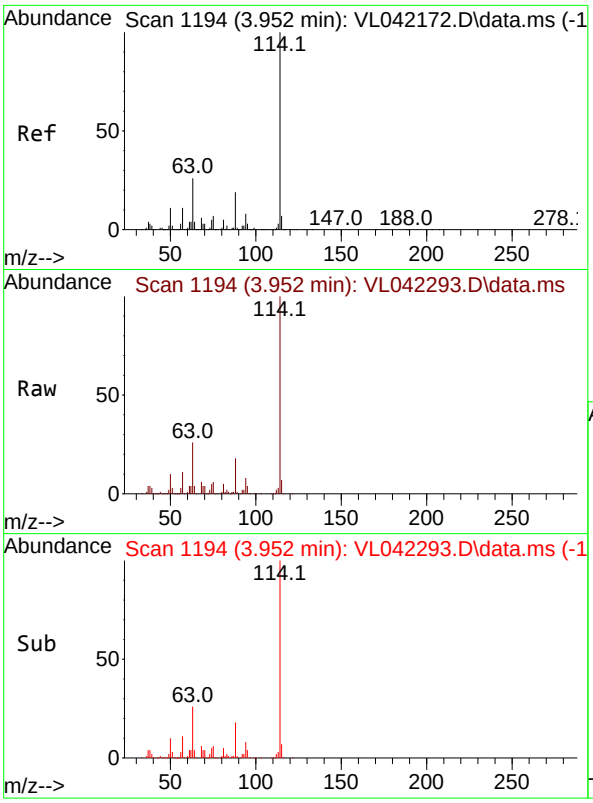


#26
Hexane
Concen: 2.041 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 57 Resp: 46406

Ion	Ratio	Lower	Upper
57	100		
41	108.6	76.6	114.8
43	89.9	207.8	311.8#
56	65.5	43.6	65.4#





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:114 Resp: 39472

Ion	Ratio	Lower	Upper
114	100		
63	25.3	20.7	31.1
88	17.6	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
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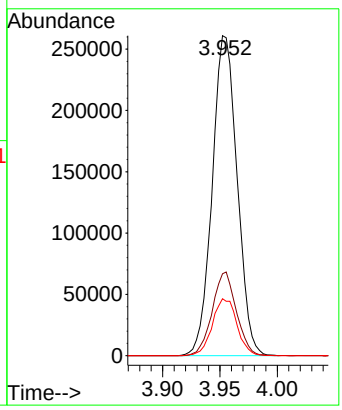
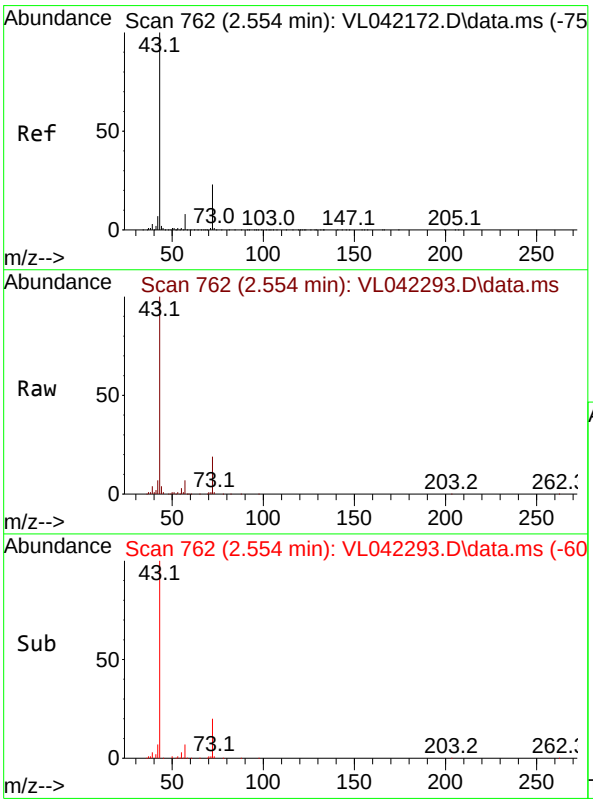
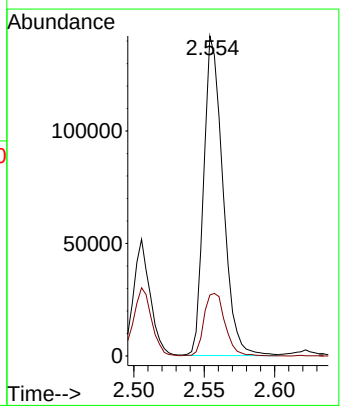


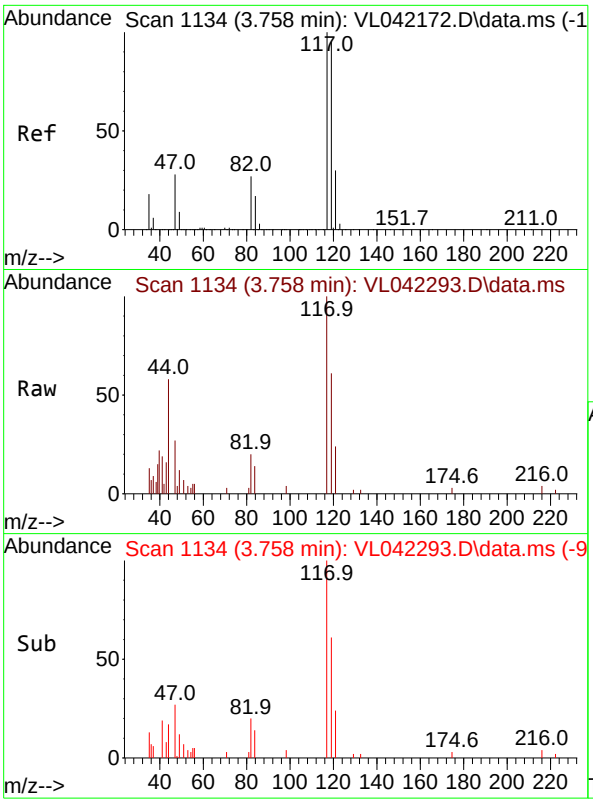


#34
2-Butanone
Concen: 4.715 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 134955

Ion	Ratio	Lower	Upper
43	100		
72	21.5	18.2	27.2

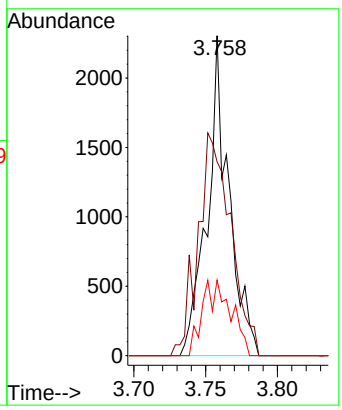




#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:117 Resp: 242

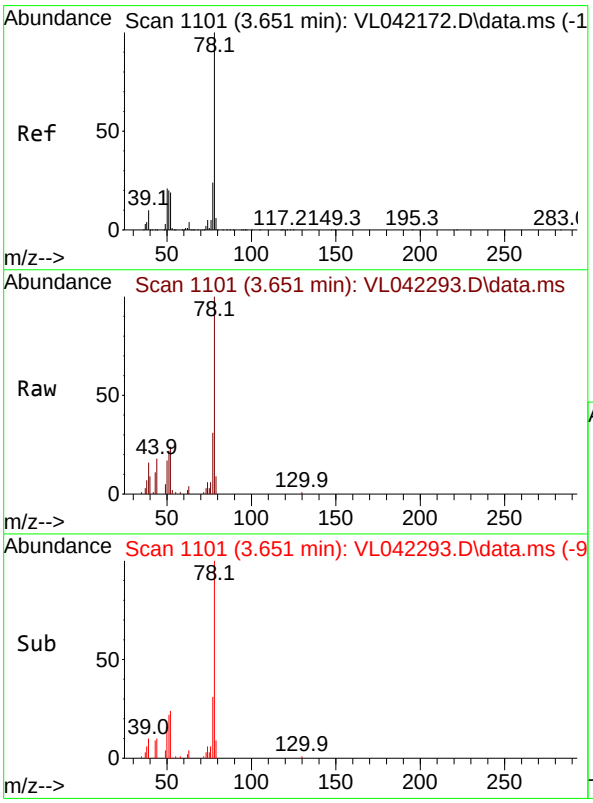
Ion	Ratio	Lower	Upper
117	100		
119	60.6	76.2	114.2#
121	23.6	24.2	36.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

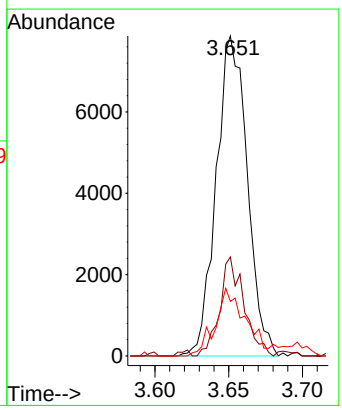
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

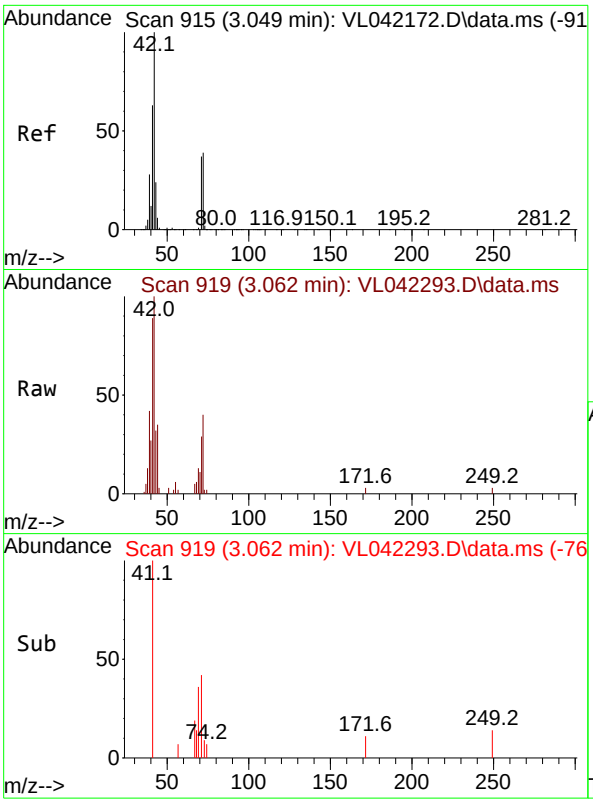


#36
Benzene
Concen: 0.294 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 78 Resp: 11524

Ion	Ratio	Lower	Upper
78	100		
77	29.8	19.1	28.7#
50	17.1	16.6	24.8

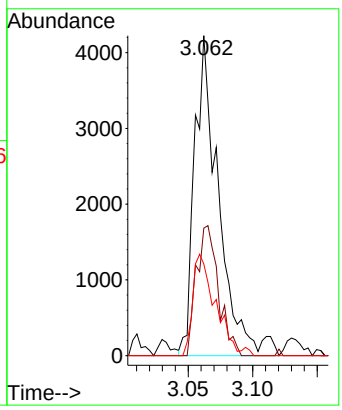




#41
Tetrahydrofuran
Concen: 0.334 ppbv m
RT: 3.062 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 42 Resp: 551

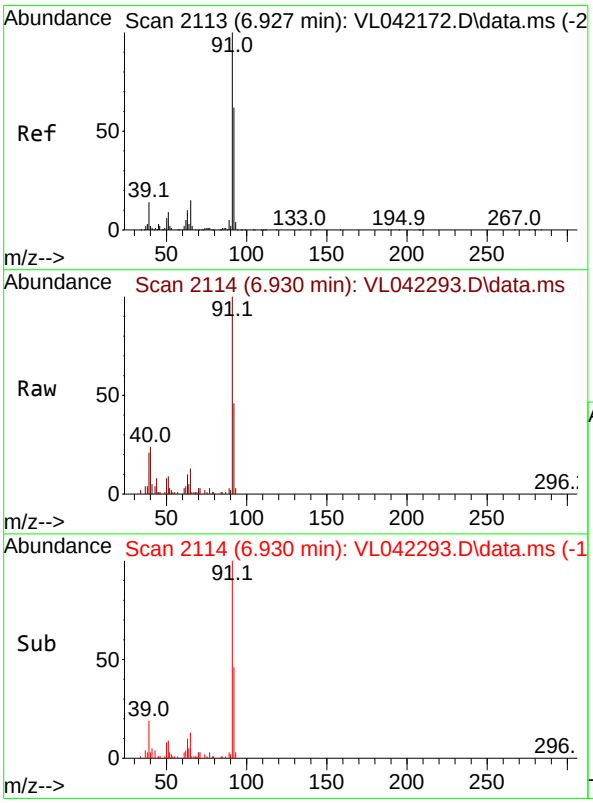
Ion	Ratio	Lower	Upper
42	100		
72	37.1	31.4	47.0
71	30.0	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

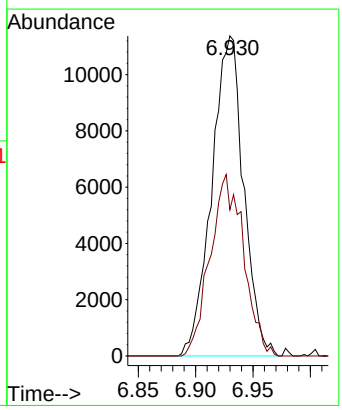
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

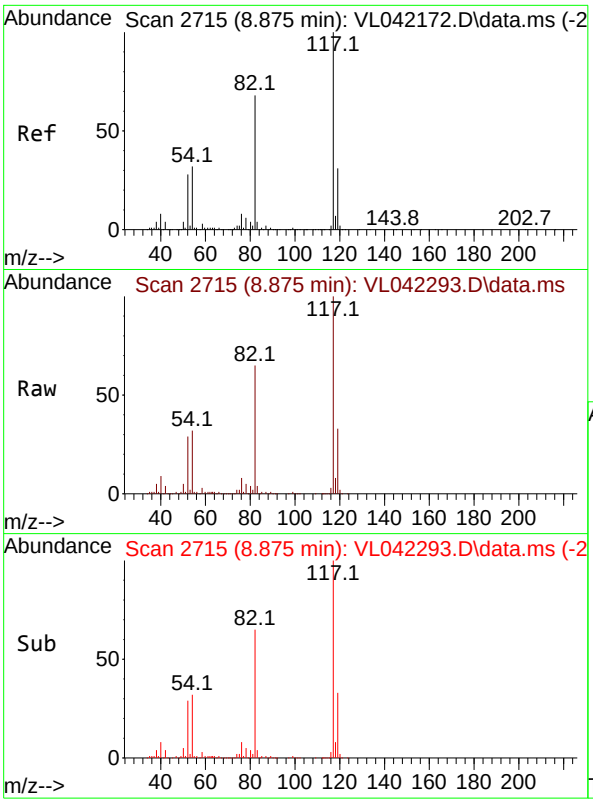


#53
Toluene
Concen: 0.476 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 91 Resp: 22070

Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.4	72.6

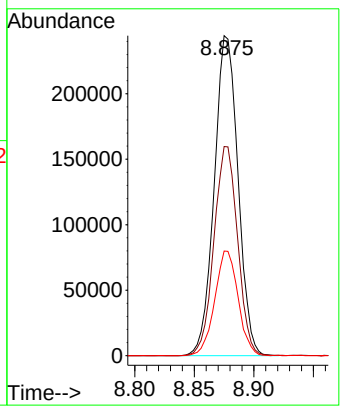




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:117 Resp: 338809

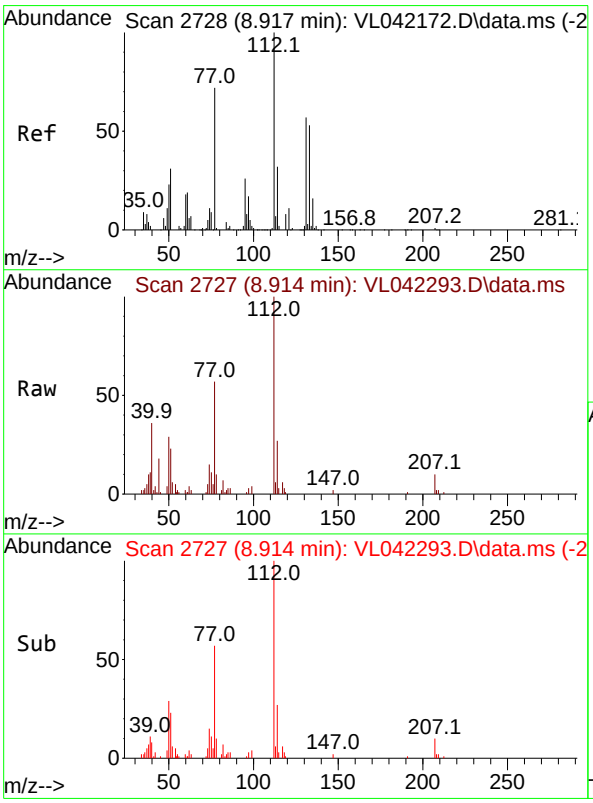
Ion	Ratio	Lower	Upper
117	100		
82	65.0	55.8	83.6
119	32.2	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

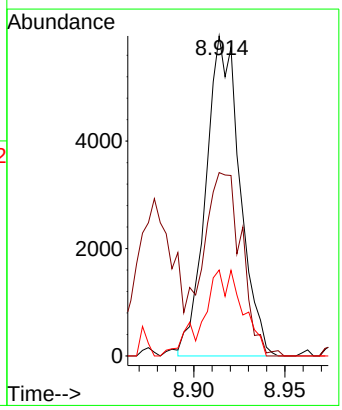
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

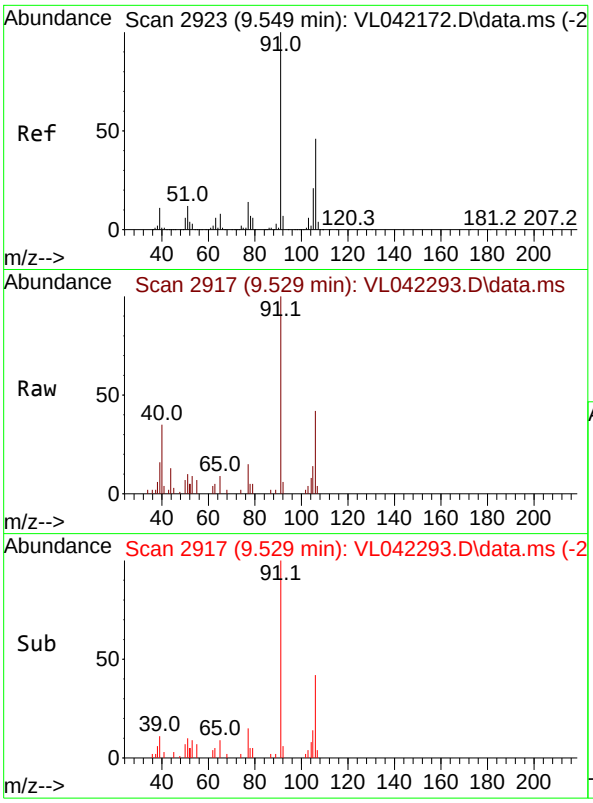


#57
Chlorobenzene
Concen: 0.241 ppbv
RT: 8.914 min Scan# 2727
Delta R.T. -0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:112 Resp: 7743

Ion	Ratio	Lower	Upper
112	100		
77	55.6	58.2	87.2#
114	26.9	29.1	35.5#





#59
m/p-Xylene
Concen: 0.186 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

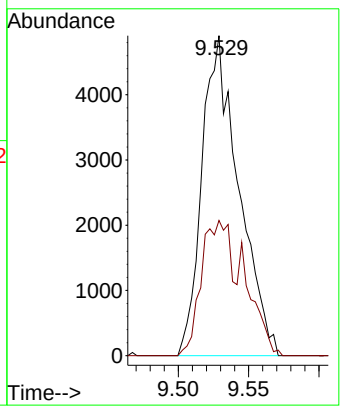
Tgt Ion: 91 Resp: 893

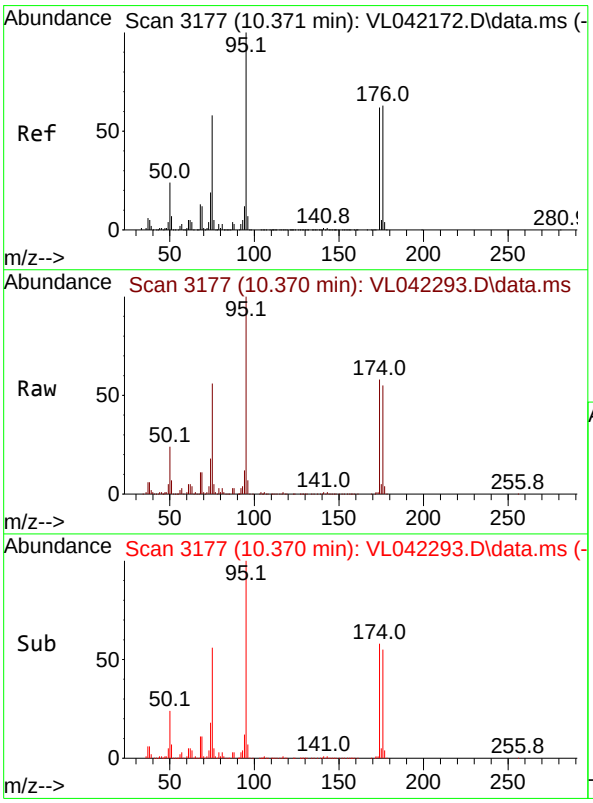
Ion	Ratio	Lower	Upper
91	100		
106	48.6	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

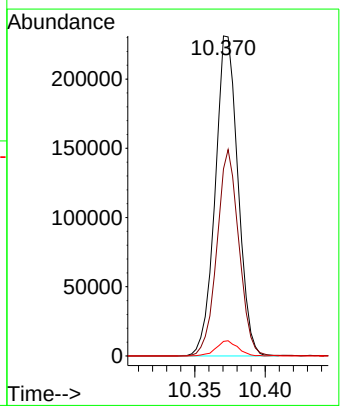




#68
1-Bromo-4-Fluorobenzene
Concen: 9.362 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 95 Resp: 260496

Ion	Ratio	Lower	Upper
95	100		
174	62.4	50.6	76.0
175	4.6	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

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

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

Signal : TIC: VL042293.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4017627	4259013	100.00%	36.952%
2	1.473	423	428	430	rBV	65327	47061	1.10%	0.408%
3	1.486	430	432	435	rVB	301256	120629	2.83%	1.047%
4	1.557	449	454	458	rBV2	147440	77747	1.83%	0.675%
5	1.619	470	473	477	rVB	151441	76764	1.80%	0.666%
6	1.719	500	504	509	rBV	117390	70063	1.65%	0.608%
7	1.832	535	539	547	rBV	427013	342294	8.04%	2.970%
8	1.884	547	555	567	rVV	760467	514963	12.09%	4.468%
9	1.962	575	579	584	rVB	64942	43543	1.02%	0.378%
10	2.059	600	609	620	rBV3	67970	63176	1.48%	0.548%
11	2.505	741	747	756	rVB2	262854	238162	5.59%	2.066%
12	2.554	756	762	774	rVB	219238	210809	4.95%	1.829%
13	2.784	824	833	840	rBV	577319	600058	14.09%	5.206%
14	2.823	840	845	856	rVB2	234561	264482	6.21%	2.295%
15	3.952	1181	1194	1206	rBV	693894	1051476	24.69%	9.123%
16	6.930	2100	2114	2129	rBV2	32120	73043	1.72%	0.634%
17	8.875	2702	2715	2725	rBV	854795	1196039	28.08%	10.377%
18	10.374	3164	3178	3191	rBV	1083409	1235983	29.02%	10.724%
19	10.801	3297	3310	3320	rBV	722340	786914	18.48%	6.827%
20	10.853	3320	3326	3335	rVB	165665	197699	4.64%	1.715%
21	11.422	3496	3502	3512	rVB4	47525	55874	1.31%	0.485%

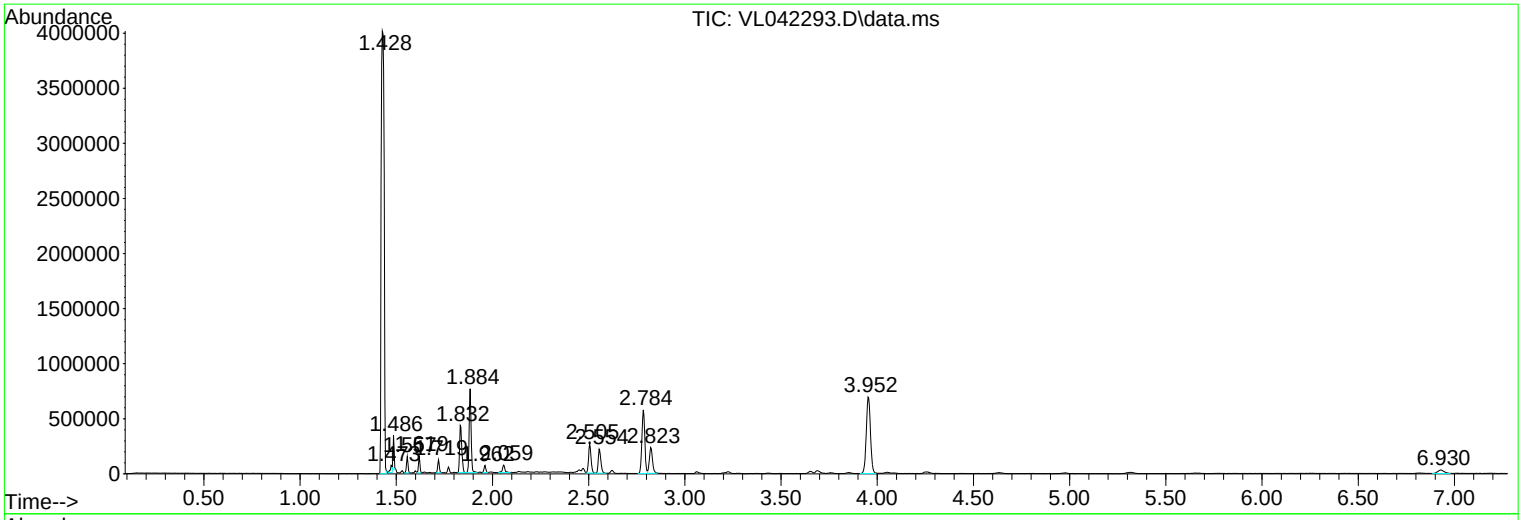
Sum of corrected areas: 11525792

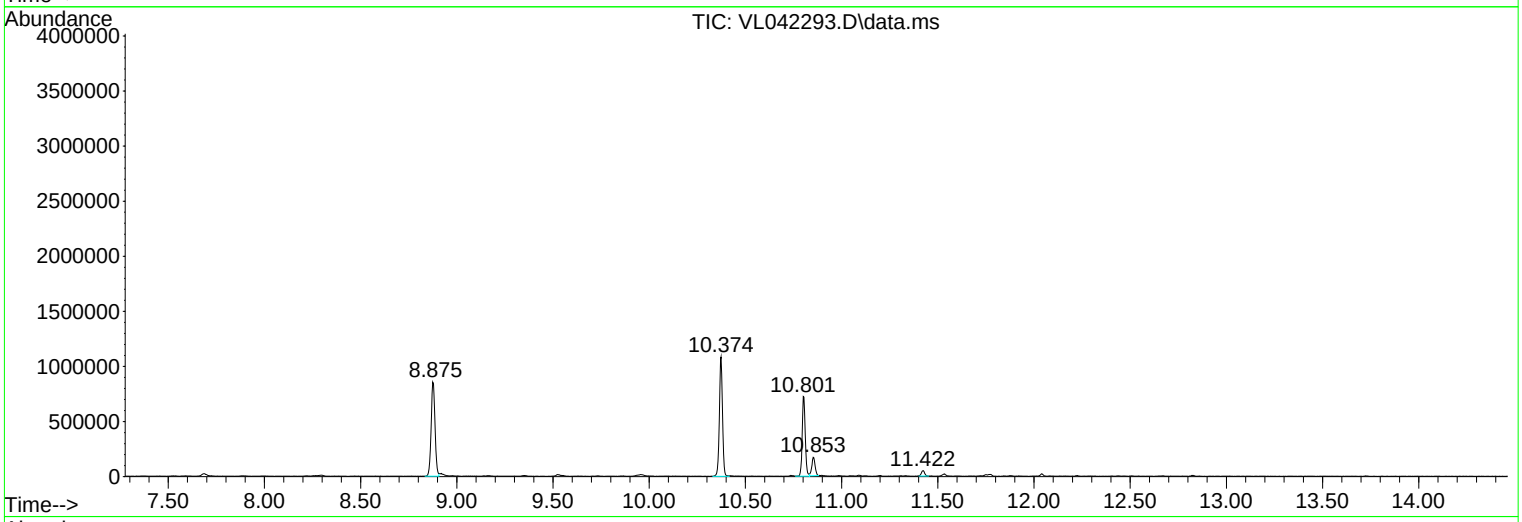
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

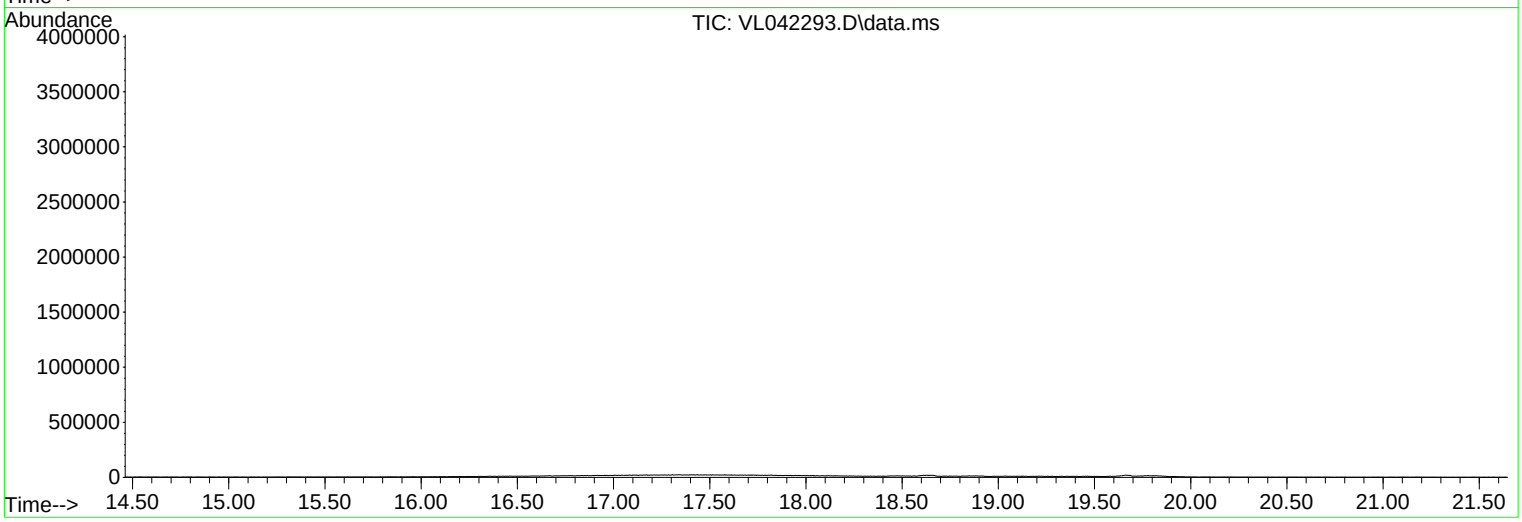
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

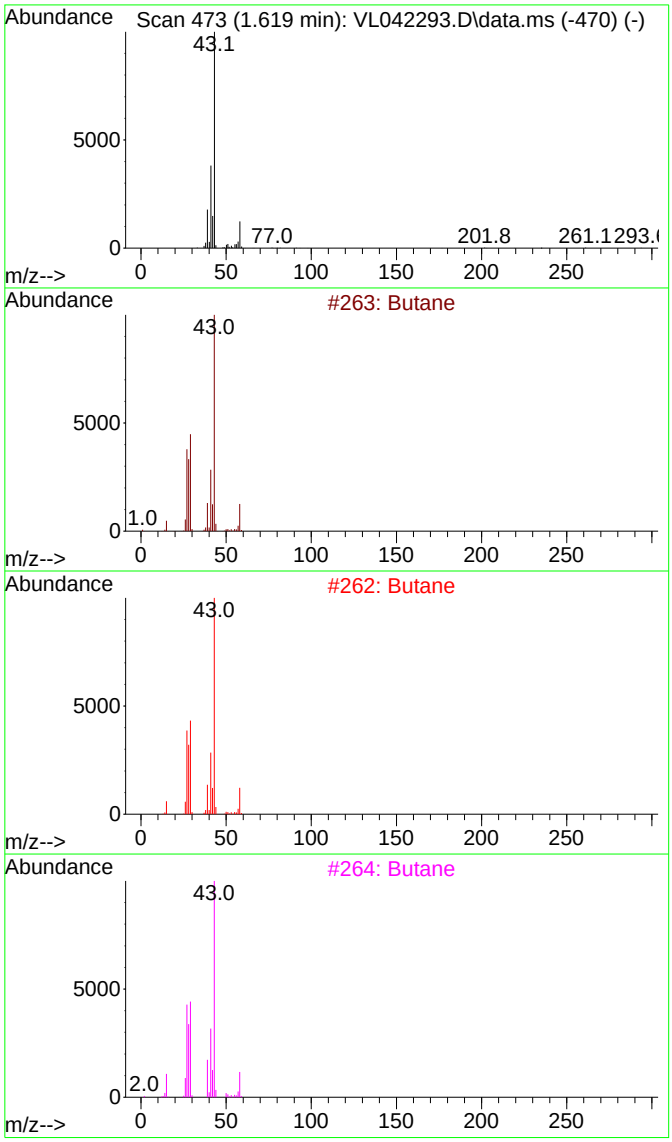
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

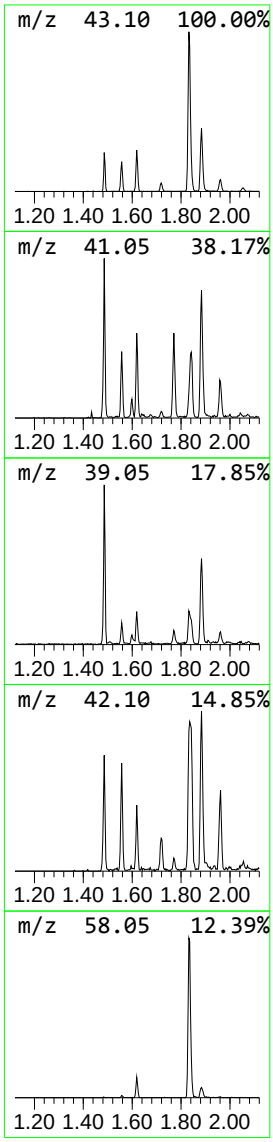
****

Peak Number 1 Butane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	1.28 ppbv	76764	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	72
4	Butane	58	C4H10	000106-97-8	59
5	Acetone	58	C3H6O	000067-64-1	5





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

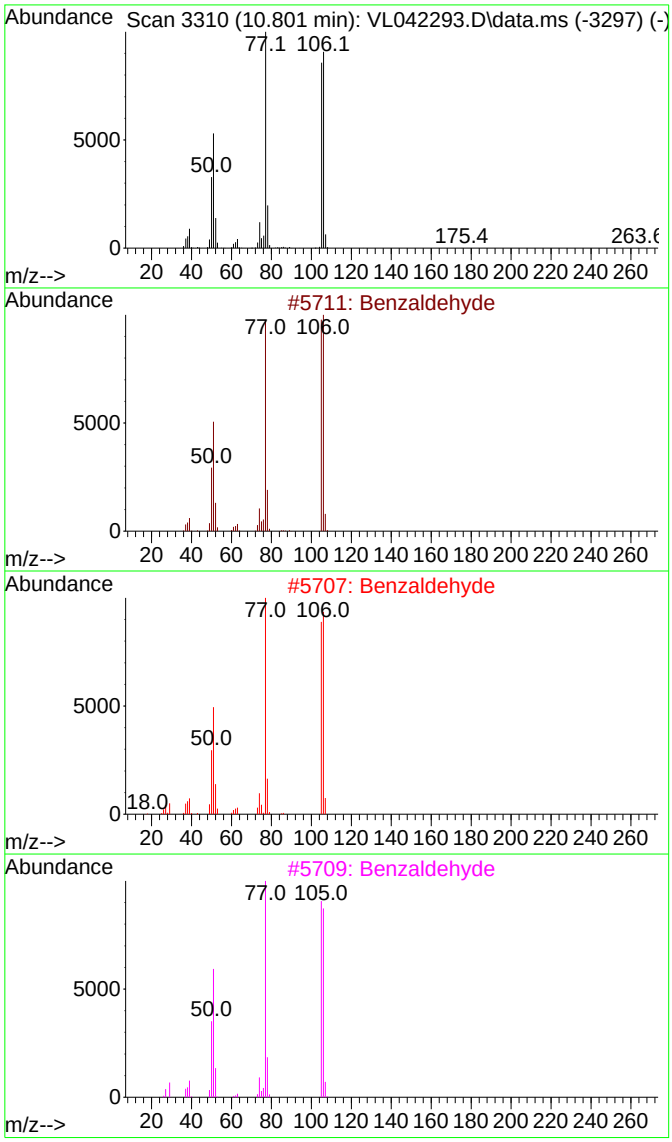
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

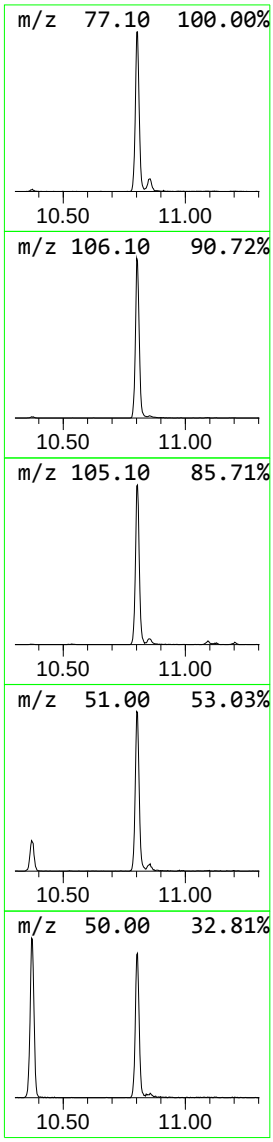
****

Peak Number 2 Benzaldehyde Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.801	6.58 ppbv	786914	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde	106	C7H6O	000100-52-7	97
2	Benzaldehyde	106	C7H6O	000100-52-7	96
3	Benzaldehyde	106	C7H6O	000100-52-7	96
4	Benzaldehyde	106	C7H6O	000100-52-7	95
5	Benzaldehyde	106	C7H6O	000100-52-7	91





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

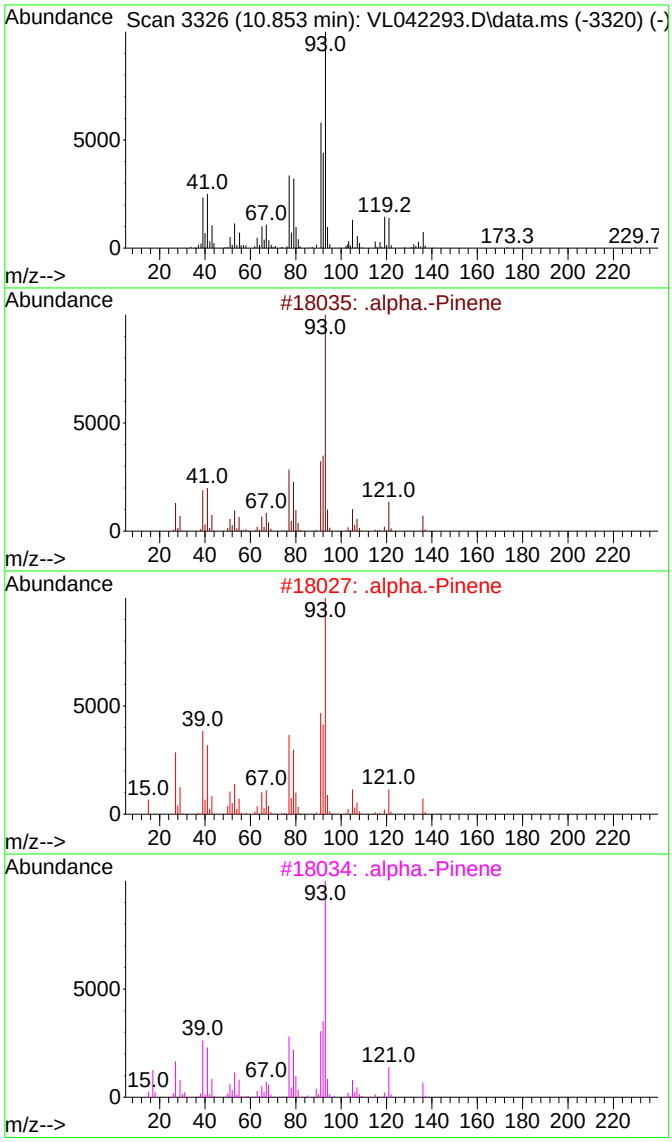
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

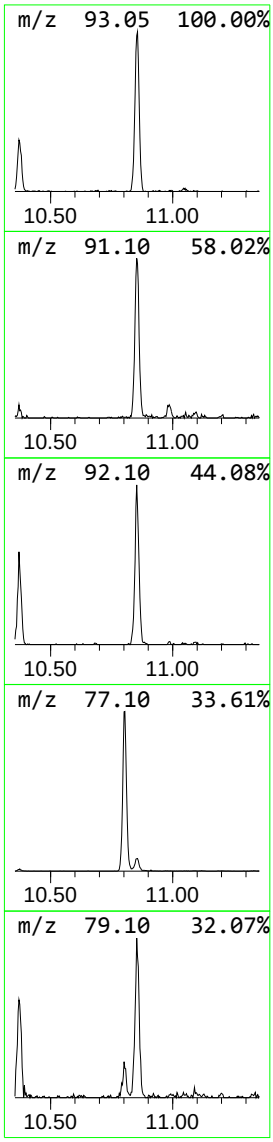
****

Peak Number 3 .alpha.-Pinene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.853	1.65 ppbv	197699	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	97
2	.alpha.-Pinene	136	C10H16	000080-56-8	93
3	.alpha.-Pinene	136	C10H16	000080-56-8	91
4	(1R)-2,6,6-Trimethylbicyclo[3.1....	136	C10H16	007785-70-8	90
5	Tricyclo[2.2.1.0(2,6)]heptane, 1...	136	C10H16	000488-97-1	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	1.3	ppbv	76764	1	2.784	600058	10.0
Benzaldehyde	10.801	6.6	ppbv	786914	3	8.875	1196040	10.0
.alpha.-Pinene	10.853	1.6	ppbv	197699	3	8.875	1196040	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-07	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042420.D	1		04/28/25 11:33	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.43	2.13	J	1.04	2.47	ug/m3
64-17-5	Ethanol	270	509	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.56	1.16		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.17	0.50	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	3.00	9.09		0.58	1.52	ug/m3
142-82-5	Heptane	0.47	1.93	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	33.4	82.1	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	17.3	41.1	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.99	3.44		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.24	0.83	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.85	2.51		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.63	2.94		0.47	2.34	ug/m3
71-43-2	Benzene	0.49	1.57	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.48	1.94	J	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.36	1.48	J	0.37	2.05	ug/m3
108-88-3	Toluene	4.40	16.6		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-07	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042420.D	1		04/28/25 11:33	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.050	0.34		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.52	2.26		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.30	5.65		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.51	2.22		0.52	2.17	ug/m3
100-42-5	Styrene	0.43	1.83	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.15	0.74	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.45	2.21	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.14	0.69	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.30	8.11		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.4			70 (65) - 130 (135)	104%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	141000		2.777			
540-36-3	1,4-Difluorobenzene	402000		3.949			
3114-55-4	Chlorobenzene-d5	353000		8.868			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-07	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042420.D	1		04/28/25 11:33	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.23		J		1.47	ppbv
115-07-1	Propene	1.70		J		1.48	ppbv
000106-97-8	Butane	5.40		J		1.62	ppbv
001184-60-7	2-Fluoropropene	3.50		J		2.27	ppbv
000107-83-5	Pentane, 2-methyl-	1.90		J		2.47	ppbv
000110-05-4	Di-tert-butyl peroxide	3.30		J		6.83	ppbv
000066-25-1	Hexanal	1.90		J		7.67	ppbv
000080-56-8	.alpha.-Pinene	2.20		J		10.8	ppbv
103-65-1	n-propylbenzene	0.12		J		11.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.777	49	141186	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.949	114	402115	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.868	117	352885	10.000	ppbv		-0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.367	95	302328	10.426	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10705	0.429	ppbv		100
3) Chlorodifluoromethane	1.470	51	5425m	0.228	ppbv		
4) Chloromethane	1.528	50	5568	0.564	ppbv		99
9) Propene	1.482	41	18668m	1.726	ppbv		
10) Heptane	4.965	43	14258m	0.469	ppbv		
11) Trichlorofluoromethane	1.871	101	4925	0.208	ppbv		88
13) Ethanol	1.719	45	472110	274.580	ppbv		77
15) Acetone	1.832	43	398840m	17.256	ppbv		
17) tert-Butyl alcohol	2.039	59	85888	2.999	ppbv		100
19) Isopropyl Alcohol	1.881	45	428440	33.369	ppbv	#	66
20) Methylene Chloride	2.055	84	8914	0.985	ppbv		95
26) Hexane	2.816	57	53184	2.306	ppbv	#	41
30) Cyclohexane	3.842	84	4557	0.244	ppbv	#	88
34) 2-Butanone	2.554	43	26974	0.848	ppbv		98
35) Carbon Tetrachloride	3.761	117	2508m	0.069	ppbv		
36) Benzene	3.641	78	21444m	0.494	ppbv		
37) 1,2-Dichloroethane	3.208	62	12506	0.480	ppbv		98
41) Tetrahydrofuran	3.059	42	3145m	0.170	ppbv		
44) 2,2,4-Trimethylpentane	4.625	57	47245	0.631	ppbv	#	85
50) 4-Methyl-2-Pentanone	5.748	43	18997	0.359	ppbv		100
52) Tetrachloroethene	8.215	164	871m	0.052	ppbv		
53) Toluene	6.920	91	226903	4.360	ppbv		99
58) Ethyl Benzene	9.344	91	36433	0.521	ppbv		97
59) m/p-Xylene	9.522	91	71388m	1.267	ppbv		
60) o-Xylene	9.956	91	28805	0.508	ppbv		99
61) Styrene	9.859	104	11652	0.430	ppbv		93
64) n-propylbenzene	10.979	120	2601	0.124	ppbv		72
72) 4-Ethyltoluene	11.118	105	9487	0.137	ppbv	#	64
73) 1,3,5-Trimethylbenzene	11.196	105	9349	0.153	ppbv	#	77
74) 1,2,4-Trimethylbenzene	11.529	105	32107	0.449	ppbv	#	65

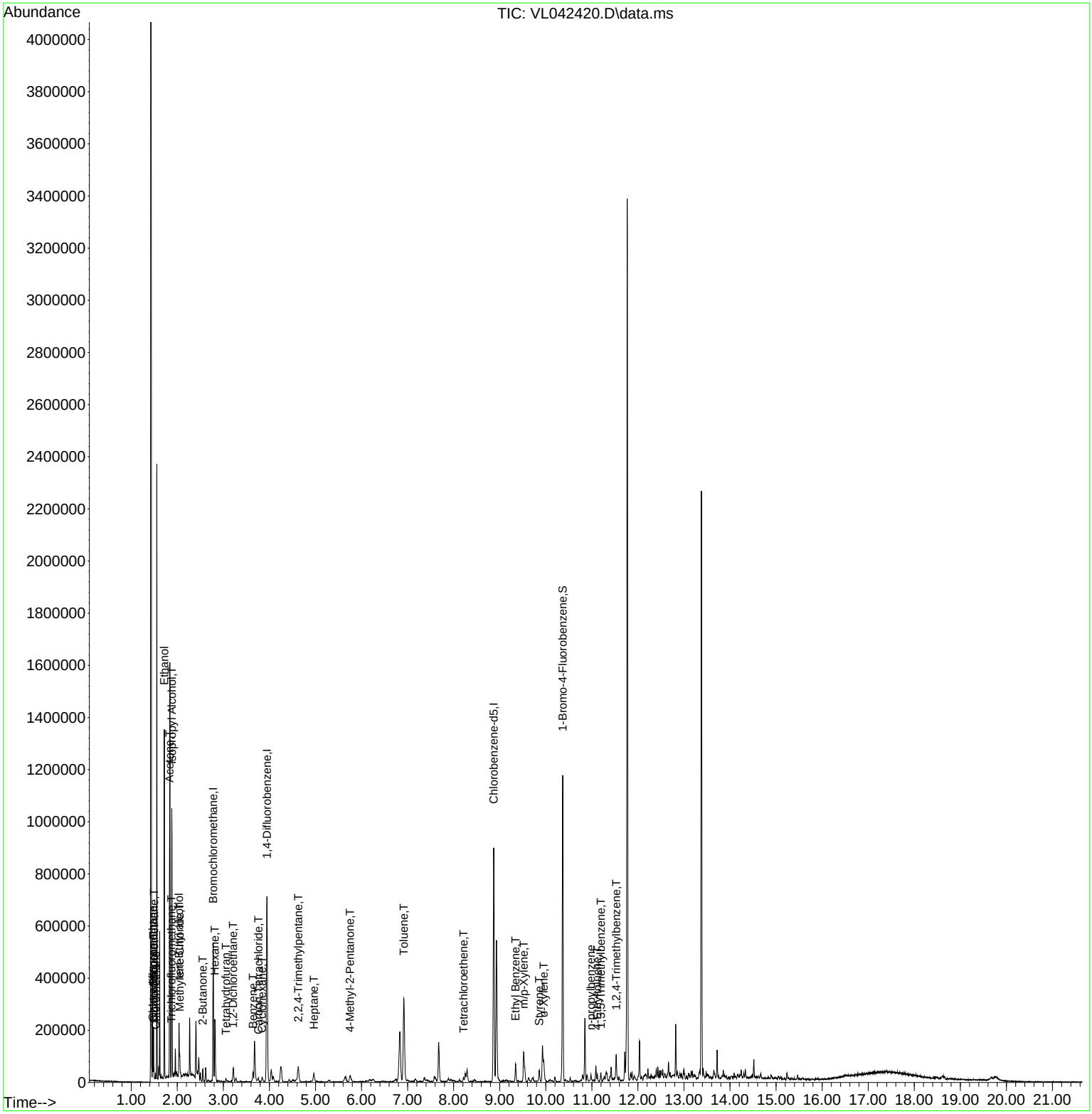
(#) = qualifier out of range (m) = manual integration (+) = signals summed

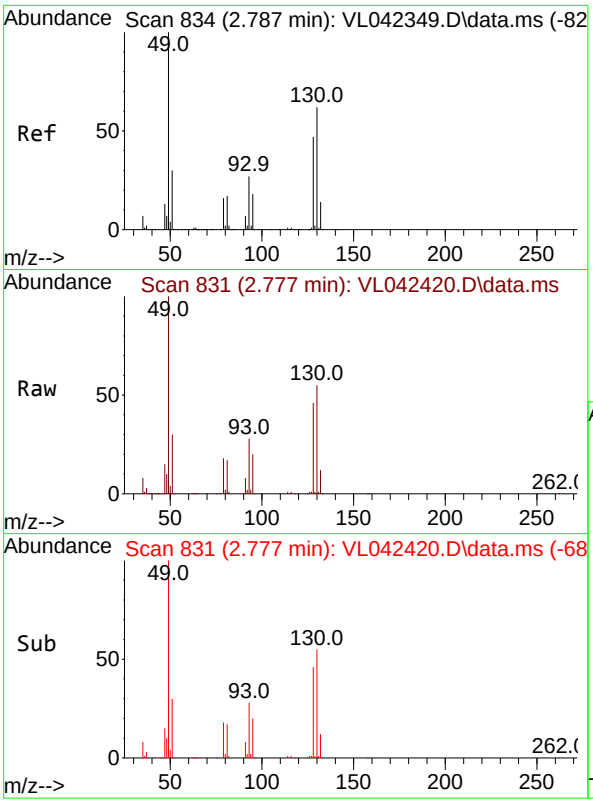
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

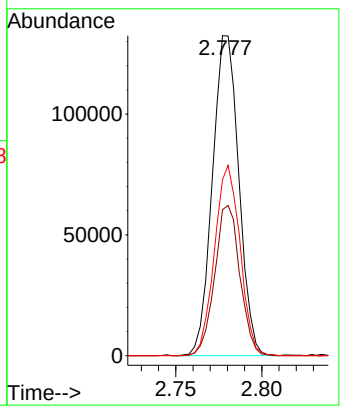




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.777 min Scan# 8
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 49 Resp: 14118

Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.8	68.4
130	57.5	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
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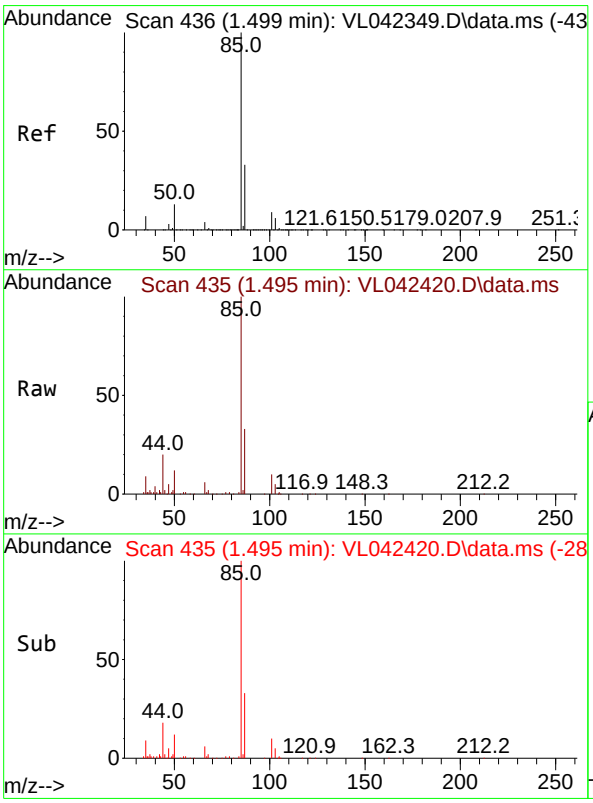
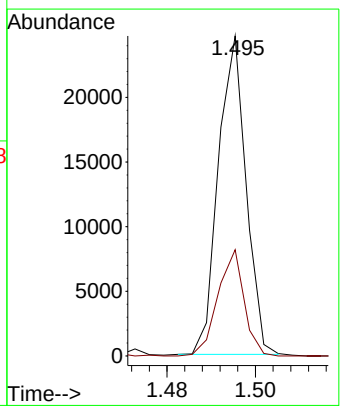
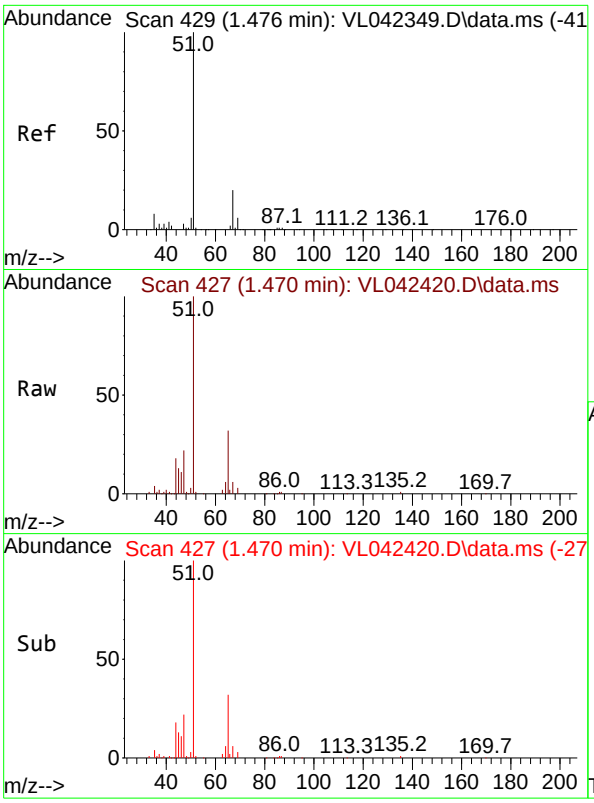


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 85 Resp: 10705

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.6	39.8





#3
Chlorodifluoromethane
Concen: 0.228 ppbv m
RT: 1.470 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

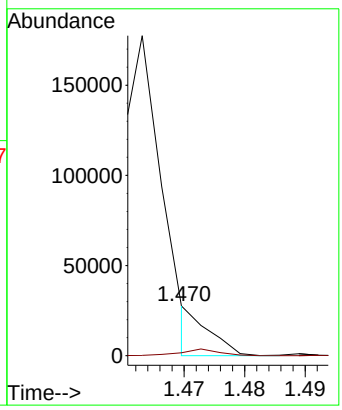
Tgt Ion: 51 Resp: 542

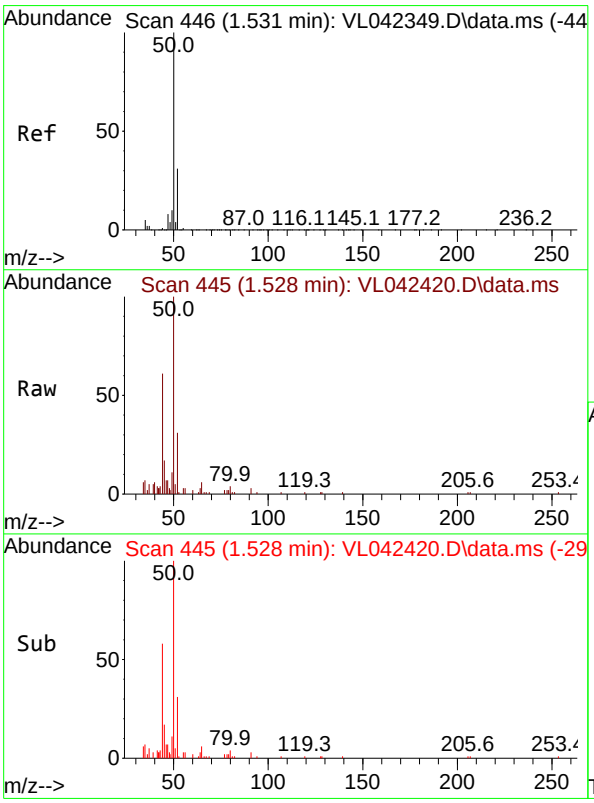
Ion	Ratio	Lower	Upper
51	100		
67	33.1	16.2	24.4

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

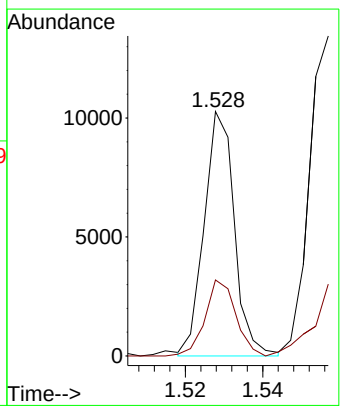


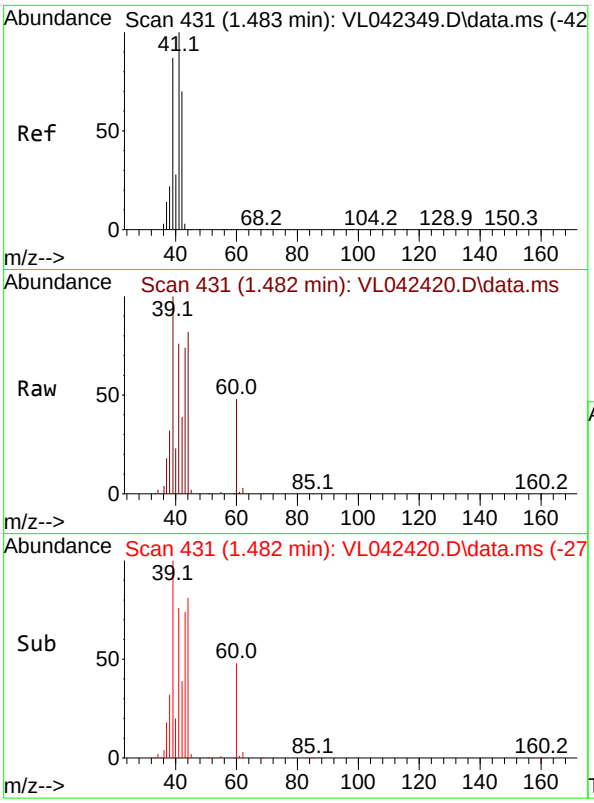


#4
Chloromethane
Concen: 0.564 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 50 Resp: 5568

Ion	Ratio	Lower	Upper
50	100		
52	30.2	24.7	37.1

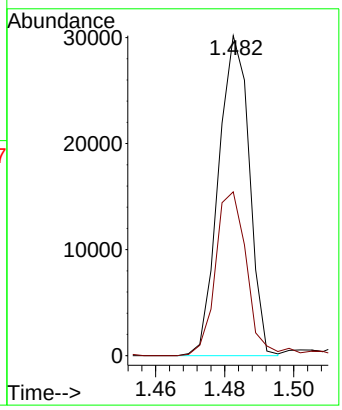




#9
Propene
Concen: 1.726 ppbv m
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 41 Resp: 1866

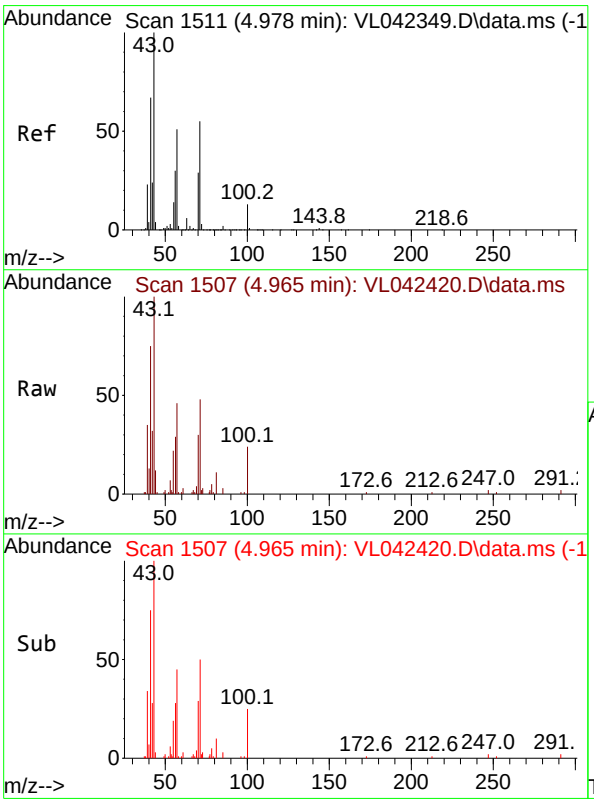
Ion	Ratio	Lower	Upper
41	100		
42	1003.3	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

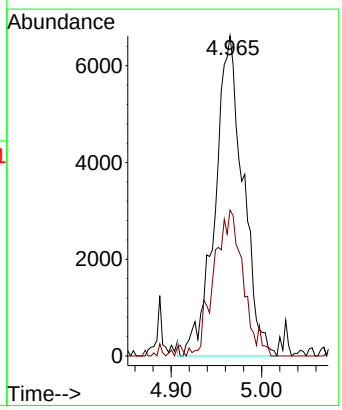
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

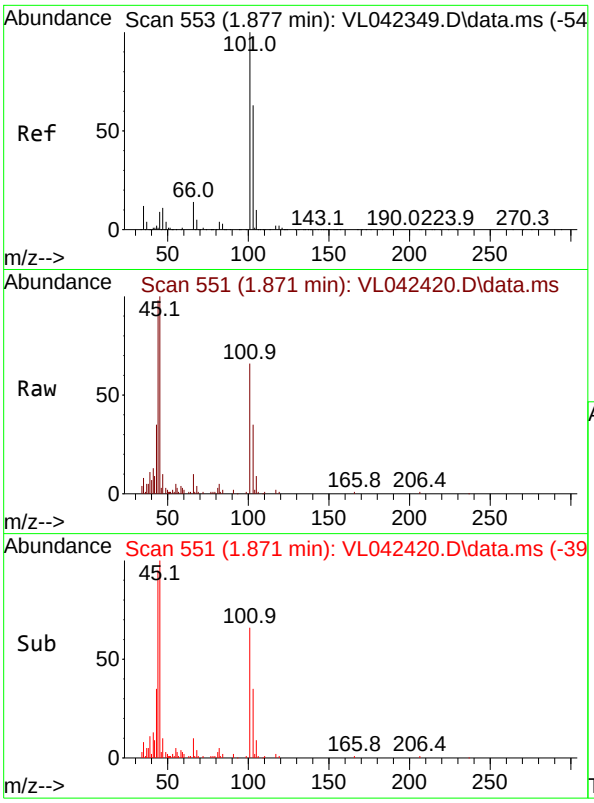


#10
Heptane
Concen: 0.469 ppbv m
RT: 4.965 min Scan# 1507
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 14258

Ion	Ratio	Lower	Upper
43	100		
57	48.8	39.9	59.9





#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.871 min Scan# 5
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

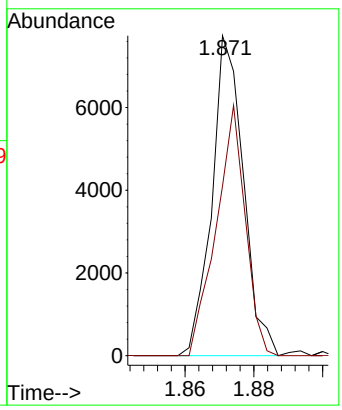
Tgt Ion:101 Resp: 492

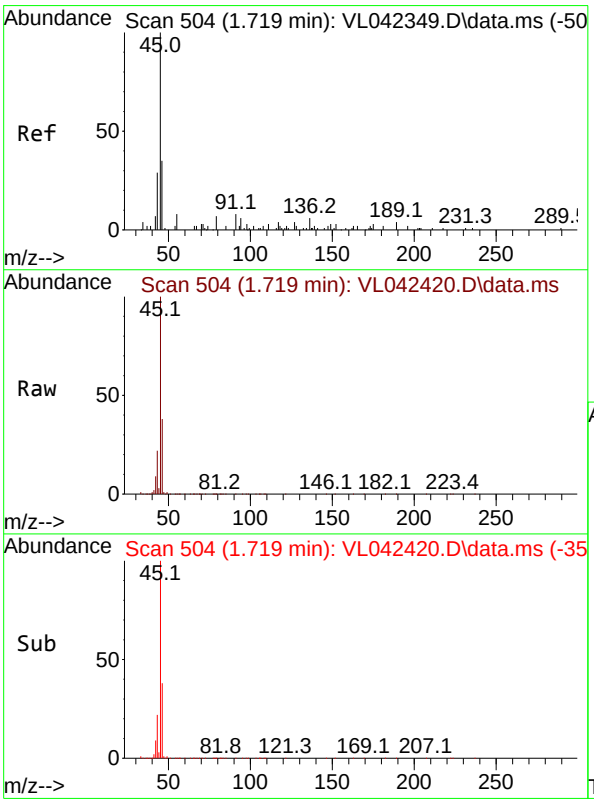
Ion	Ratio	Lower	Upper
101	100		
103	53.0	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

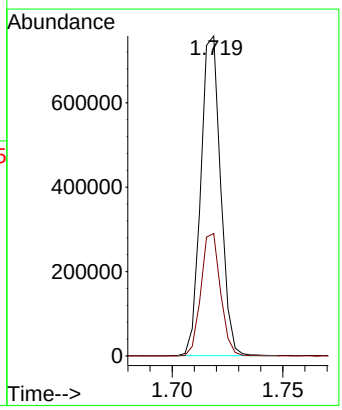


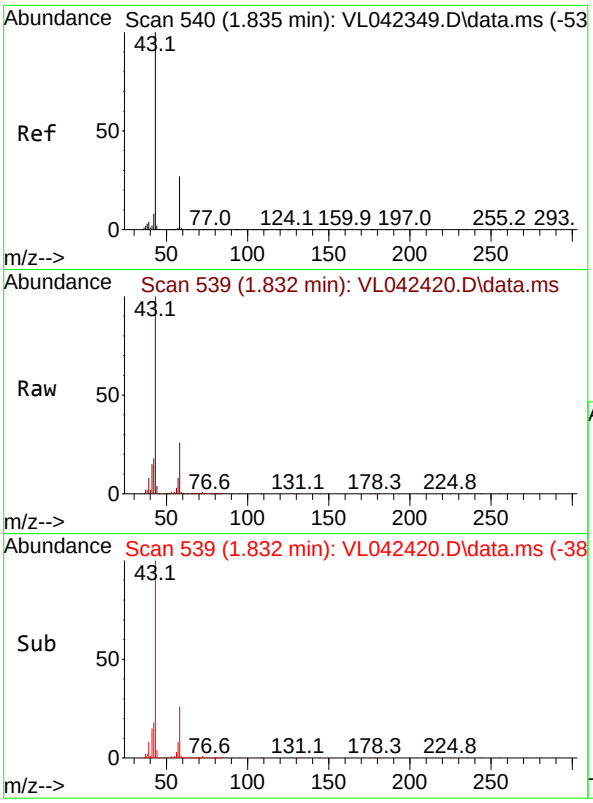


#13
Ethanol
Concen: 274.580 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 45 Resp: 472110

Ion	Ratio	Lower	Upper
45	100		
46	38.1	21.9	87.7

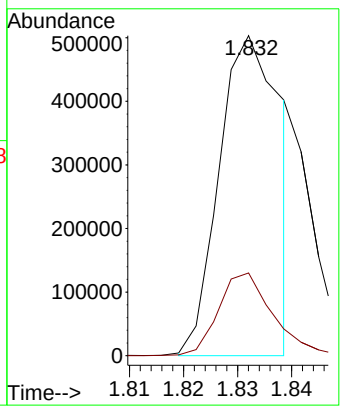




#15
Acetone
Concen: 17.256 ppbv m
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 39884

Ion	Ratio	Lower	Upper
43	100		
58	23.0	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
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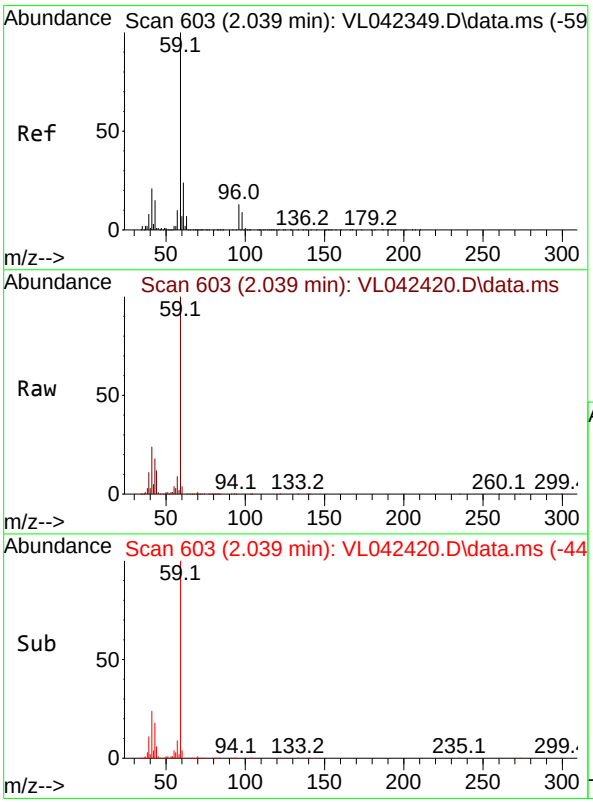
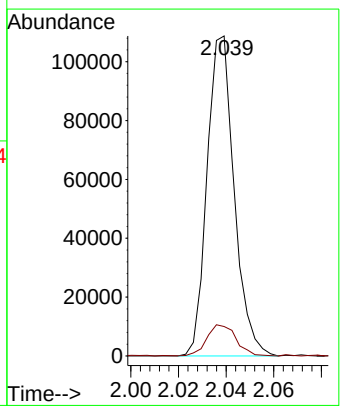
Supervised By :Mahesh Dadoda 04/30/2025

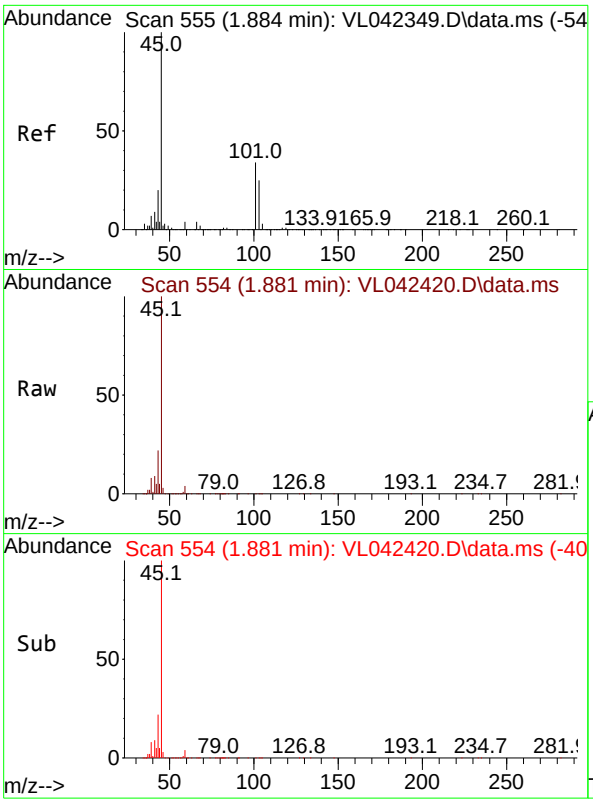


#17
tert-Butyl alcohol
Concen: 2.999 ppbv
RT: 2.039 min Scan# 603
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 59 Resp: 85888

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1





#19
Isopropyl Alcohol
Concen: 33.369 ppbv
RT: 1.881 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 45 Resp: 42844

Ion	Ratio	Lower	Upper
45	100		
58	21.4	34.5	51.7

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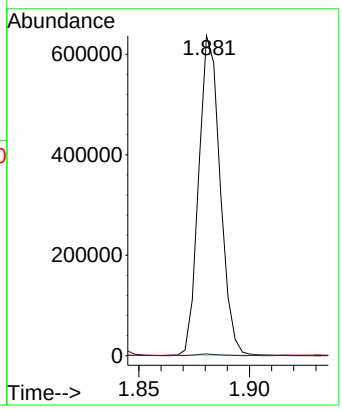
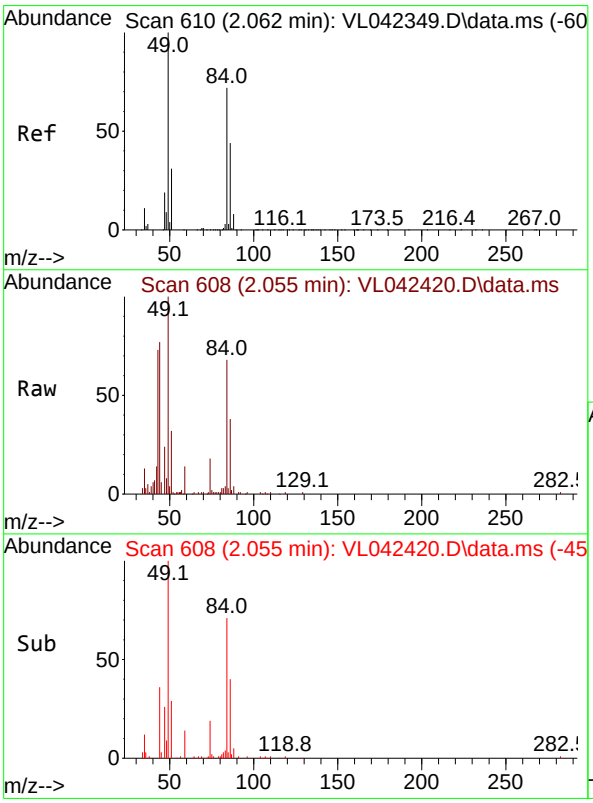
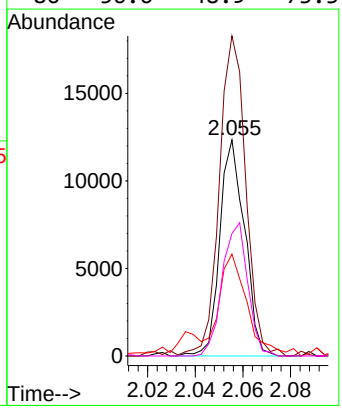


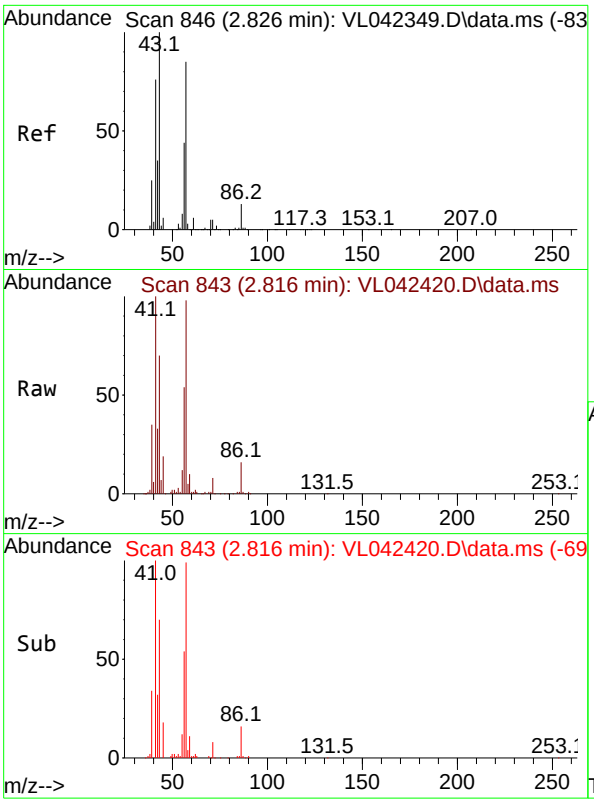


#20
Methylene Chloride
Concen: 0.985 ppbv
RT: 2.055 min Scan# 608
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 84 Resp: 8914

Ion	Ratio	Lower	Upper
84	100		
49	147.6	111.6	167.4
51	44.3	35.1	52.7
86	56.6	48.9	73.3

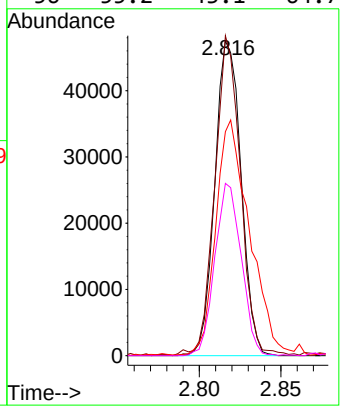




#26
Hexane
Concen: 2.306 ppbv
RT: 2.816 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 57 Resp: 5318

Ion	Ratio	Lower	Upper
57	100		
41	100.2	77.9	116.9
43	97.0	208.4	312.6#
56	55.2	43.1	64.7



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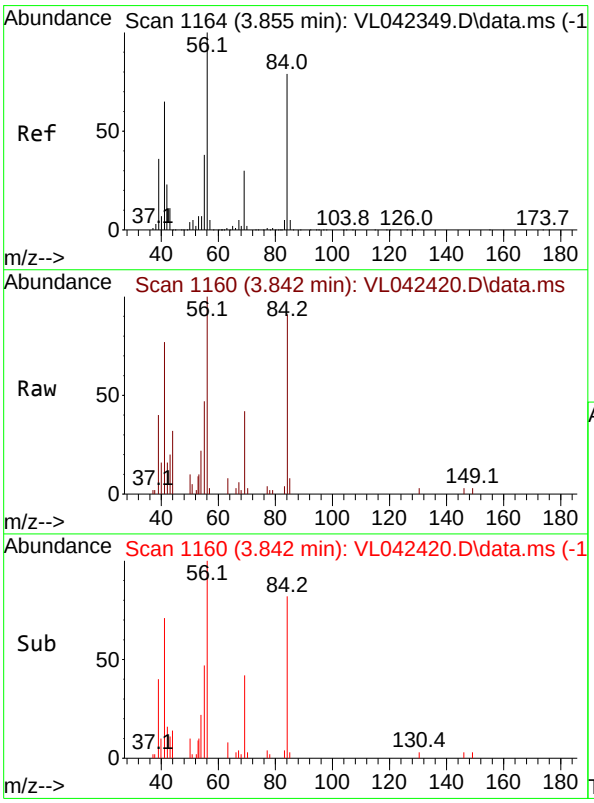
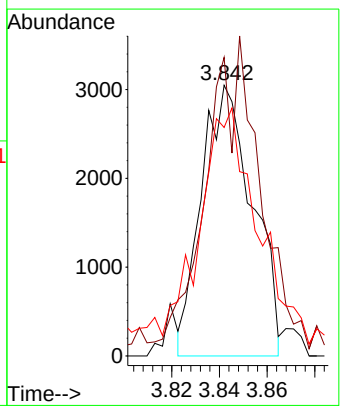
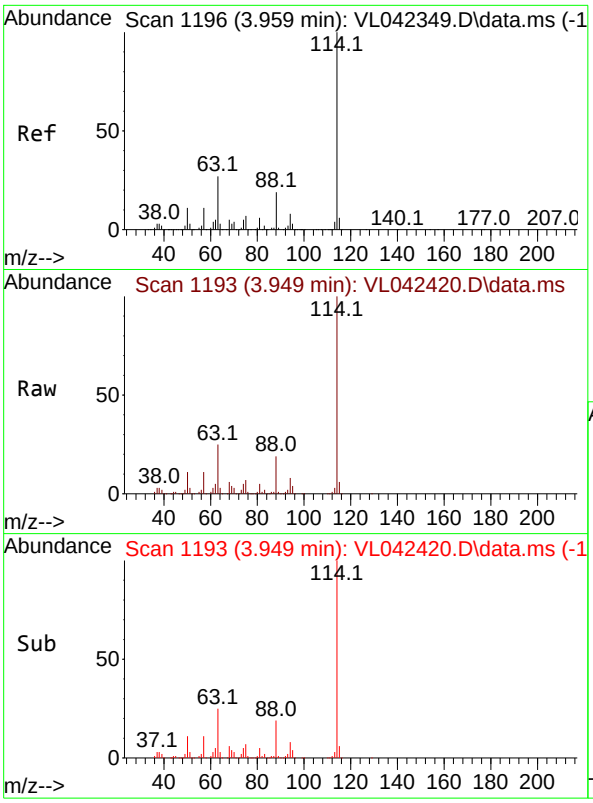


#30
Cyclohexane
Concen: 0.244 ppbv
RT: 3.842 min Scan# 1160
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 84 Resp: 4557

Ion	Ratio	Lower	Upper
84	100		
56	131.8	101.0	151.4
41	104.1	67.4	101.0#

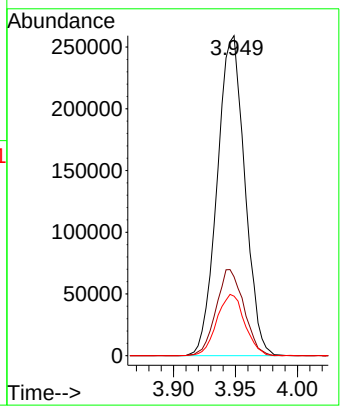




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:114 Resp: 40211

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.4	15.5	23.3



Instrument :
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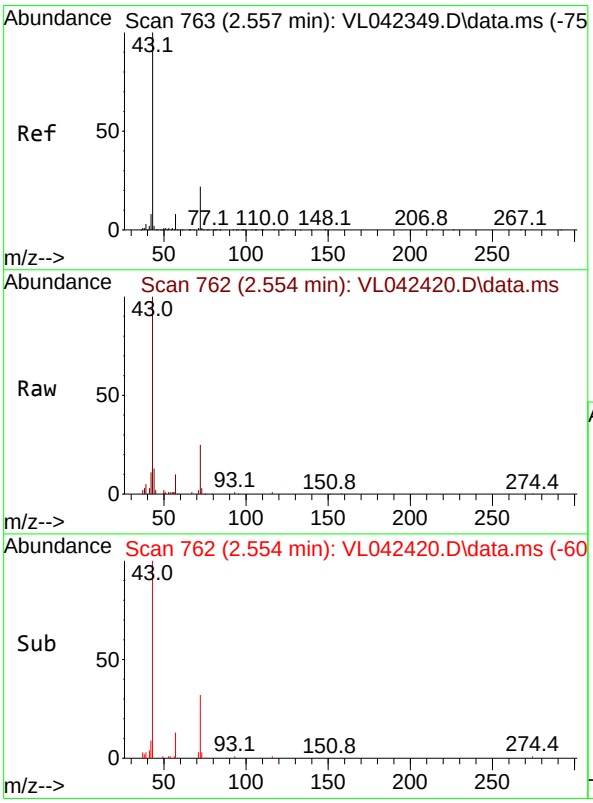
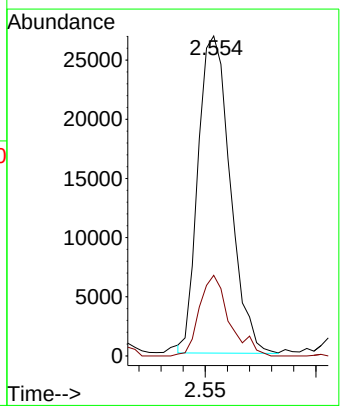
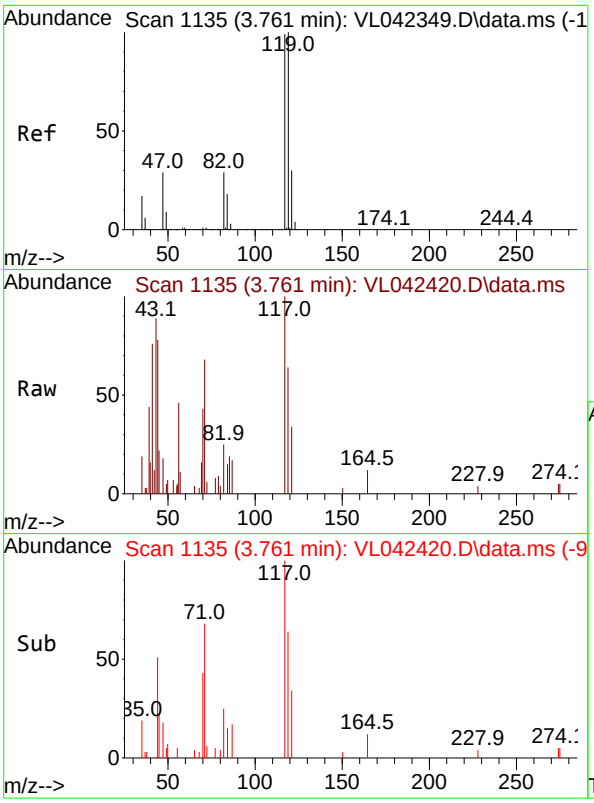


#34
2-Butanone
Concen: 0.848 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 26974

Ion	Ratio	Lower	Upper
43	100		
72	23.7	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.069 ppbv m
RT: 3.761 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:117 Resp: 250

Ion	Ratio	Lower	Upper
117	100		
119	64.4	80.5	120.7#
121	33.6	24.2	36.2

Instrument :
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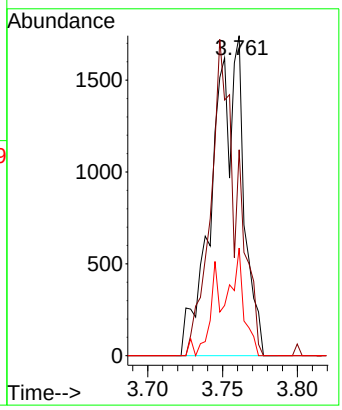
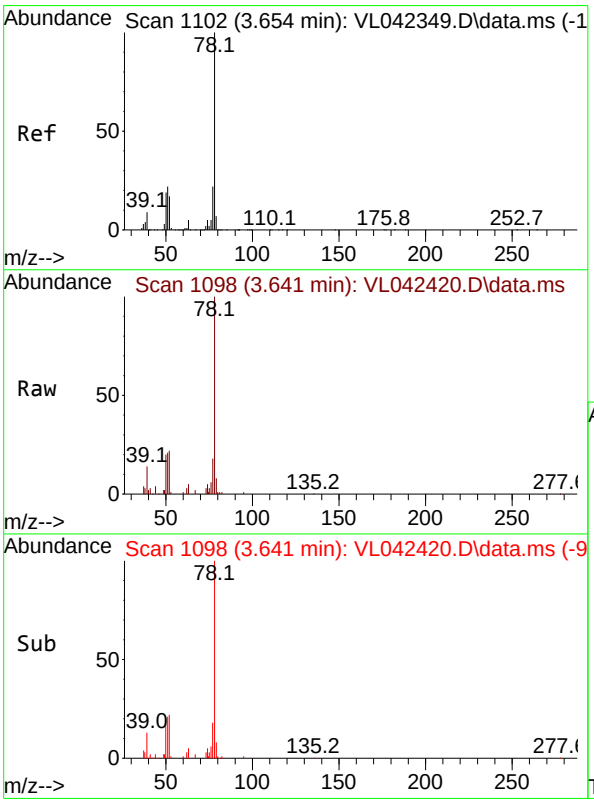
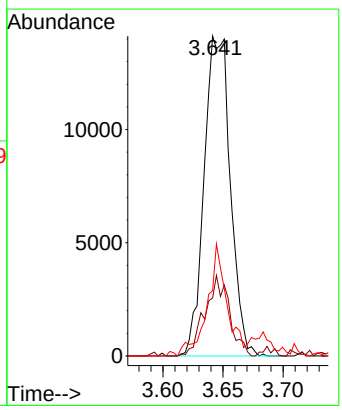


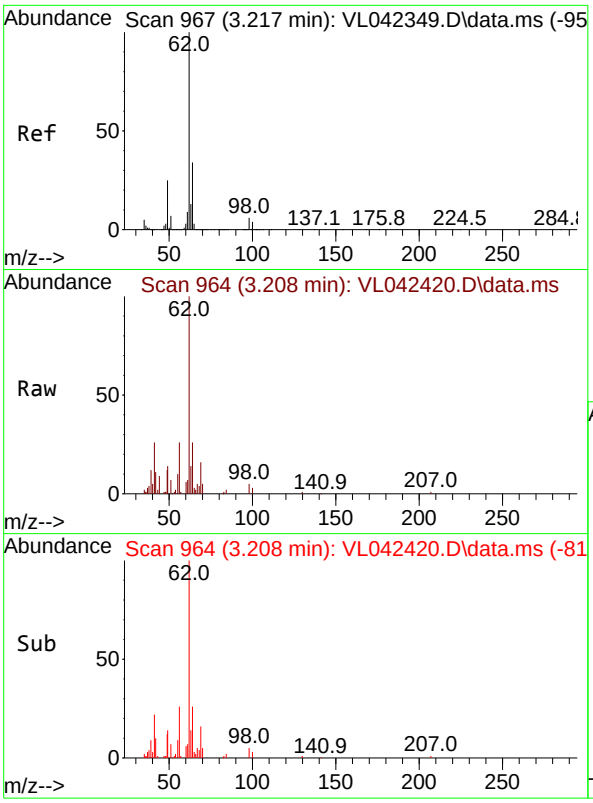


#36
Benzene
Concen: 0.494 ppbv m
RT: 3.641 min Scan# 1098
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 78 Resp: 21444

Ion	Ratio	Lower	Upper
78	100		
77	18.1	17.4	26.0
50	20.4	15.5	23.3

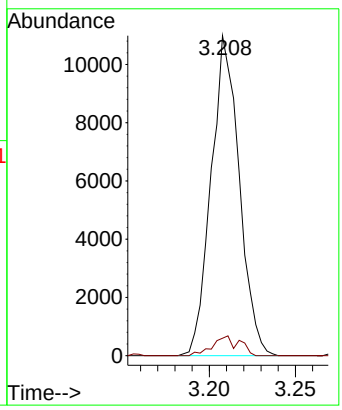




#37
1,2-Dichloroethane
Concen: 0.480 ppbv
RT: 3.208 min Scan# 9
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 62 Resp: 1250

Ion	Ratio	Lower	Upper
62	100		
98	5.9	5.1	7.7



Instrument :
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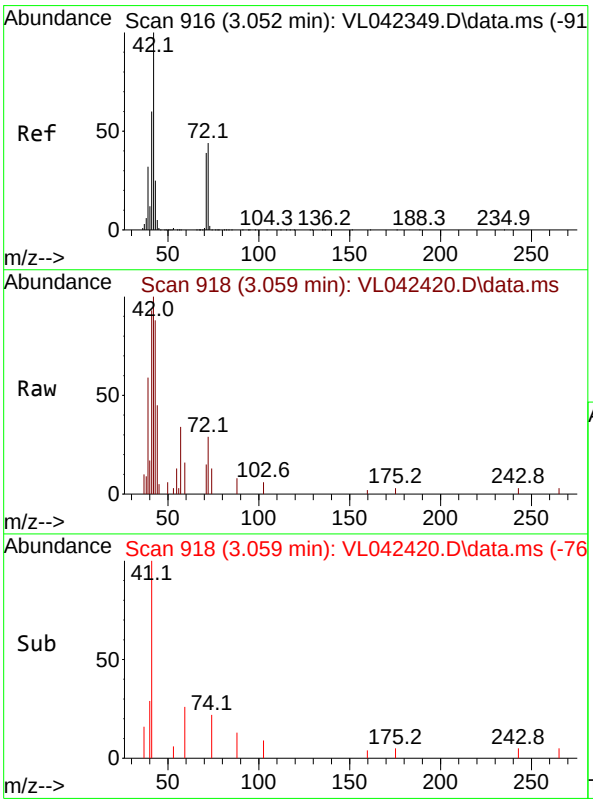
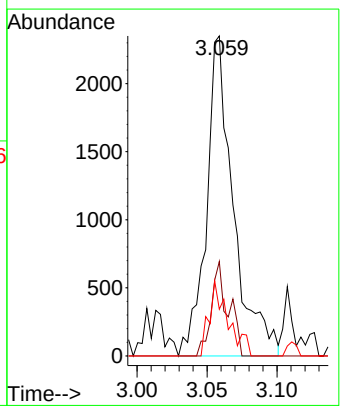
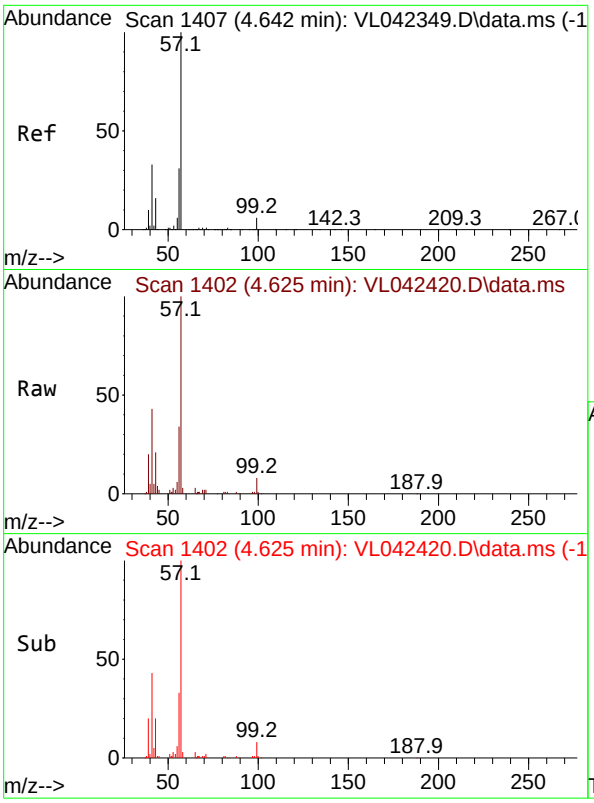


#41
Tetrahydrofuran
Concen: 0.170 ppbv m
RT: 3.059 min Scan# 918
Delta R.T. 0.006 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 42 Resp: 3145

Ion	Ratio	Lower	Upper
42	100		
72	18.5	32.3	48.5#
71	16.4	31.4	47.2#

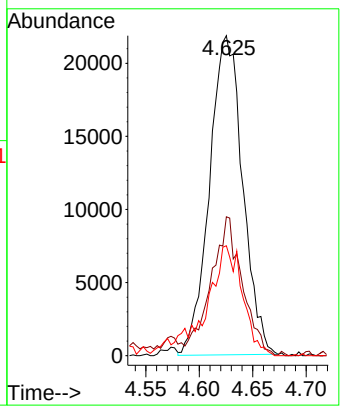




#44
2,2,4-Trimethylpentane
Concen: 0.631 ppbv
RT: 4.625 min Scan# 14
Delta R.T. -0.016 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 57 Resp: 4724

Ion	Ratio	Lower	Upper
57	100		
41	44.6	27.2	40.8
56	38.4	25.7	38.5



Instrument :
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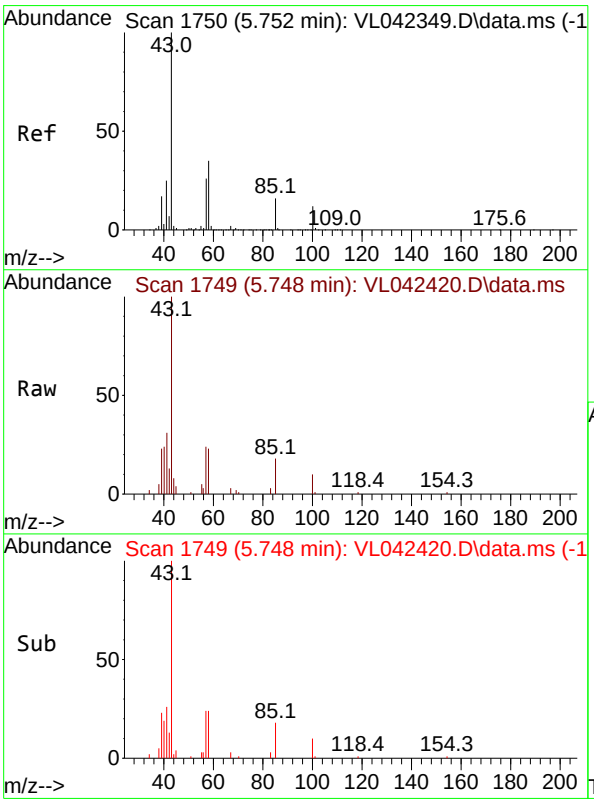
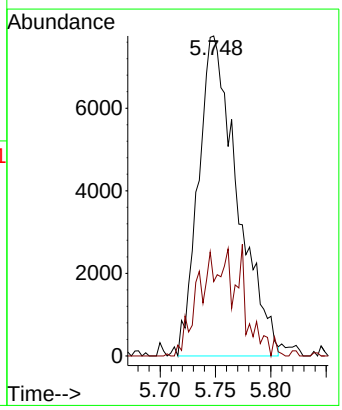
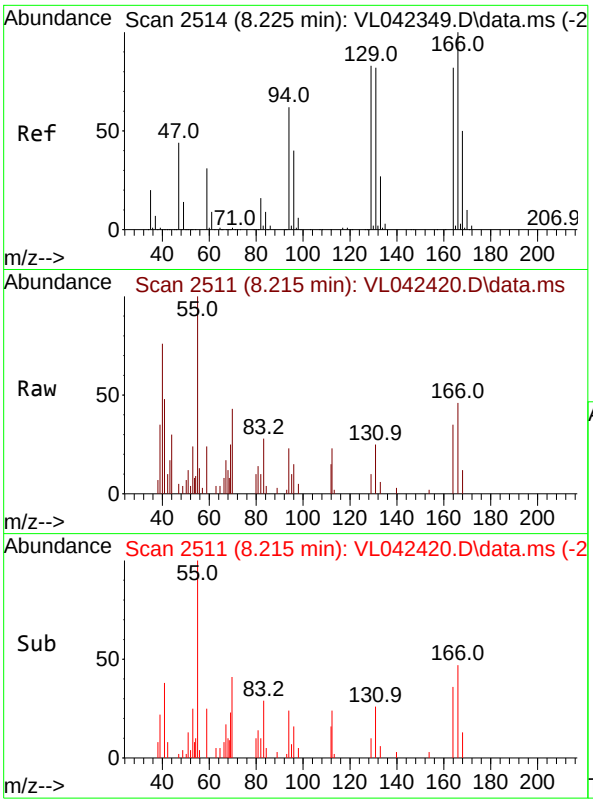


#50
4-Methyl-2-Pentanone
Concen: 0.359 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 18997

Ion	Ratio	Lower	Upper
43	100		
58	35.5	28.6	43.0

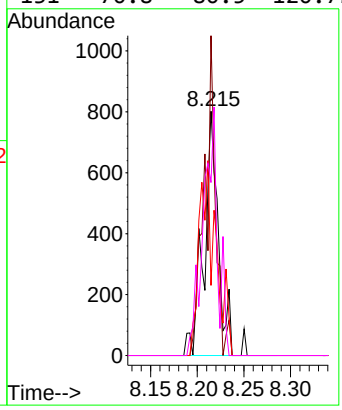




#52
Tetrachloroethene
Concen: 0.052 ppbv m
RT: 8.215 min Scan# 2
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:164 Resp: 87

Ion	Ratio	Lower	Upper
164	100		
166	130.9	98.2	147.2
129	28.7	81.8	122.8#
131	70.8	80.5	120.7#



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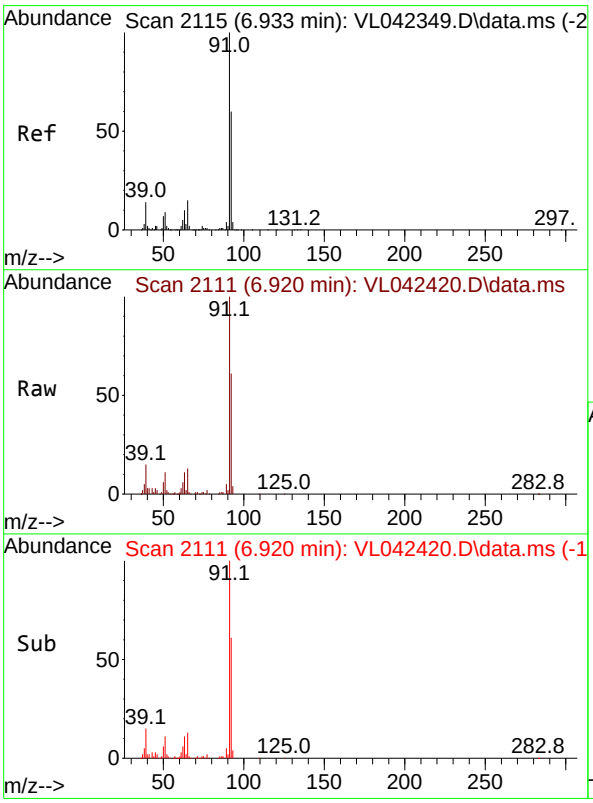
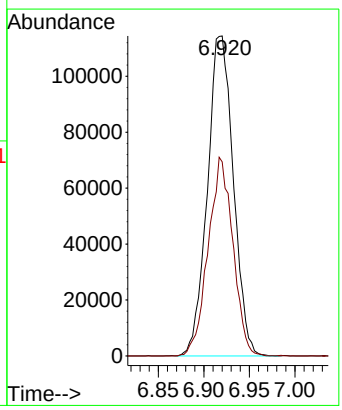
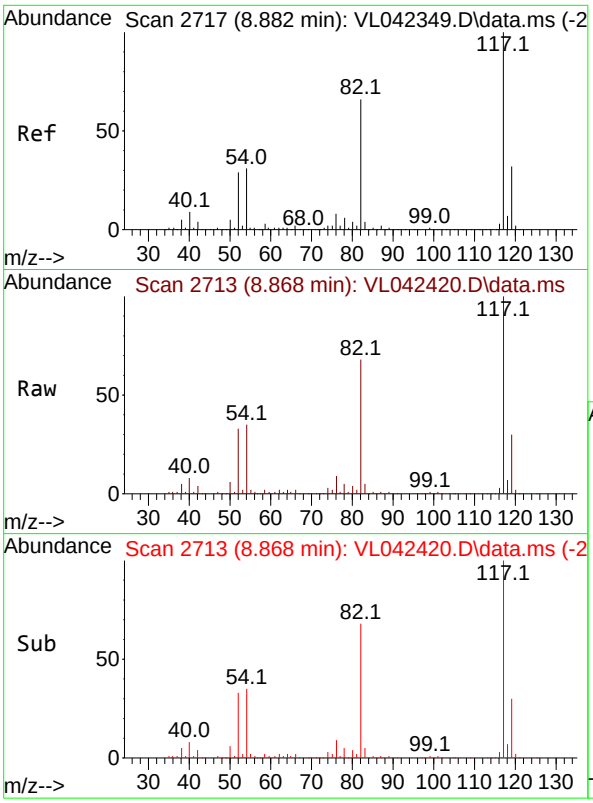


#53
Toluene
Concen: 4.360 ppbv
RT: 6.920 min Scan# 2111
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 226903

Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.2	72.4

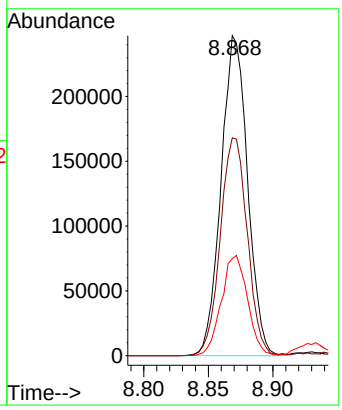




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.868 min Scan# 2
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:117 Resp: 35288

Ion	Ratio	Lower	Upper
117	100		
82	69.3	57.8	86.6
119	31.0	25.2	37.8



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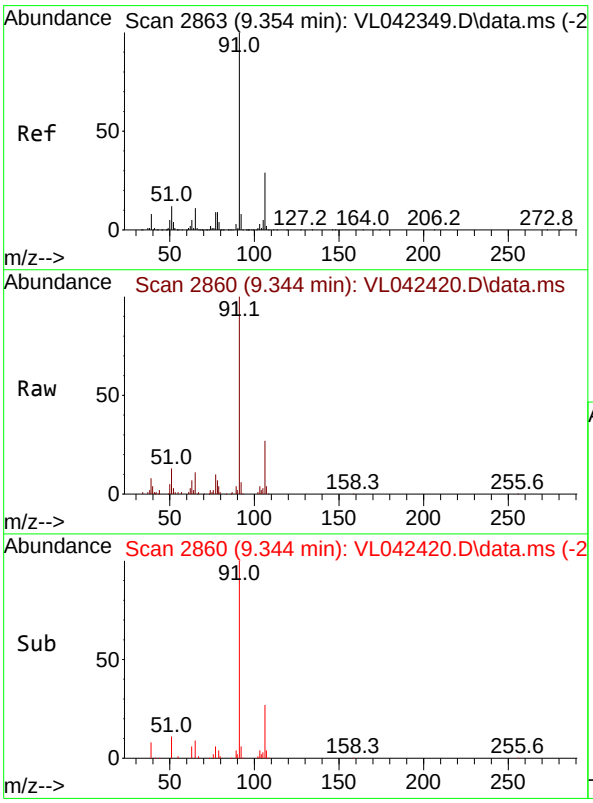
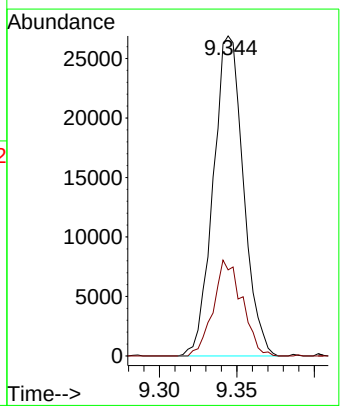
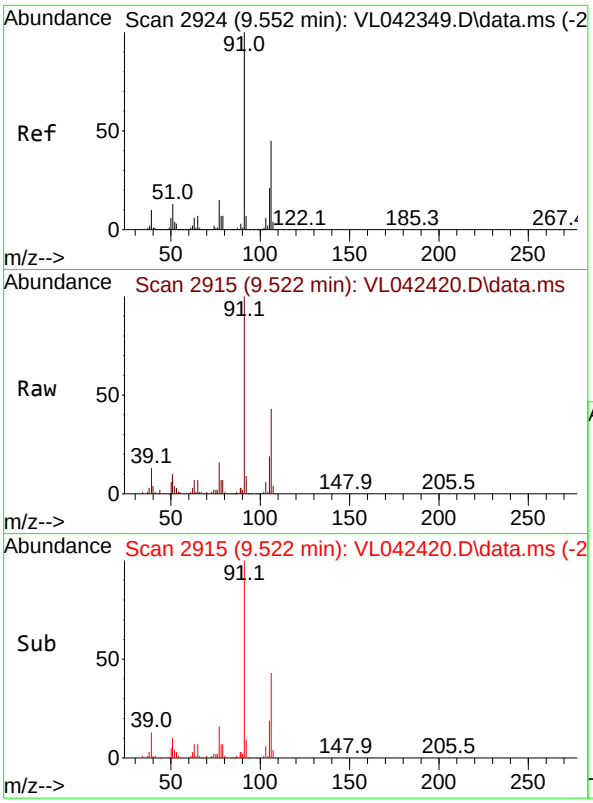


#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.344 min Scan# 2860
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 36433

Ion	Ratio	Lower	Upper
91	100		
106	26.9	23.0	34.4

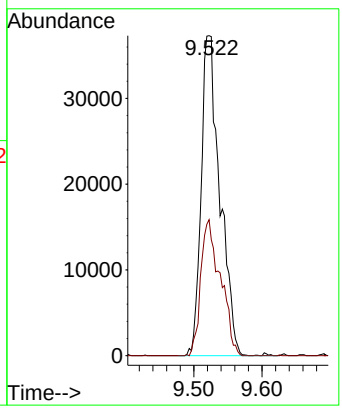




#59
m/p-Xylene
Concen: 1.267 ppbv m
RT: 9.522 min Scan# 2
Delta R.T. -0.029 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 7138

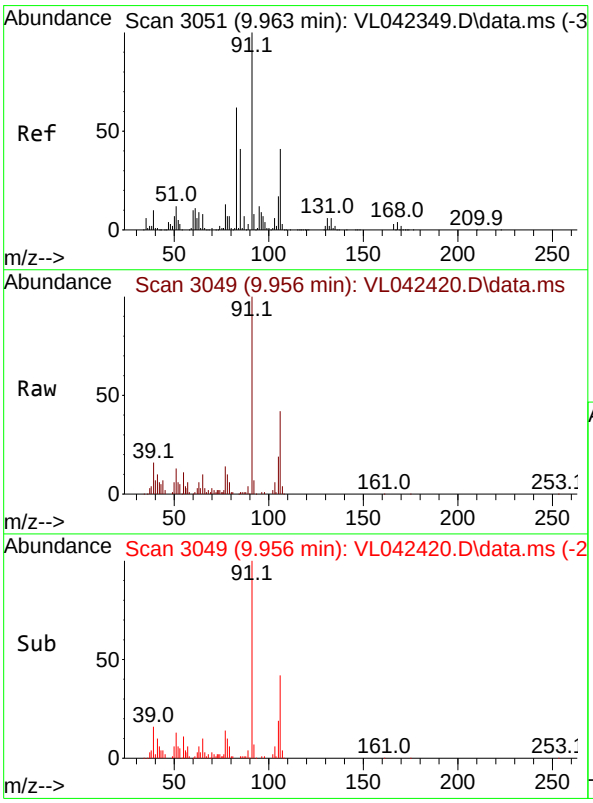
Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

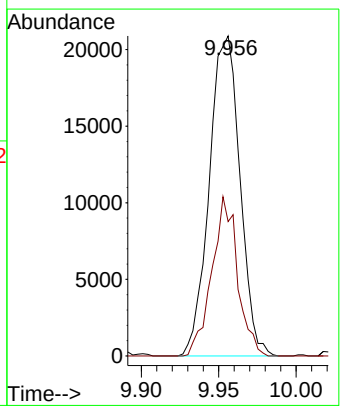
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

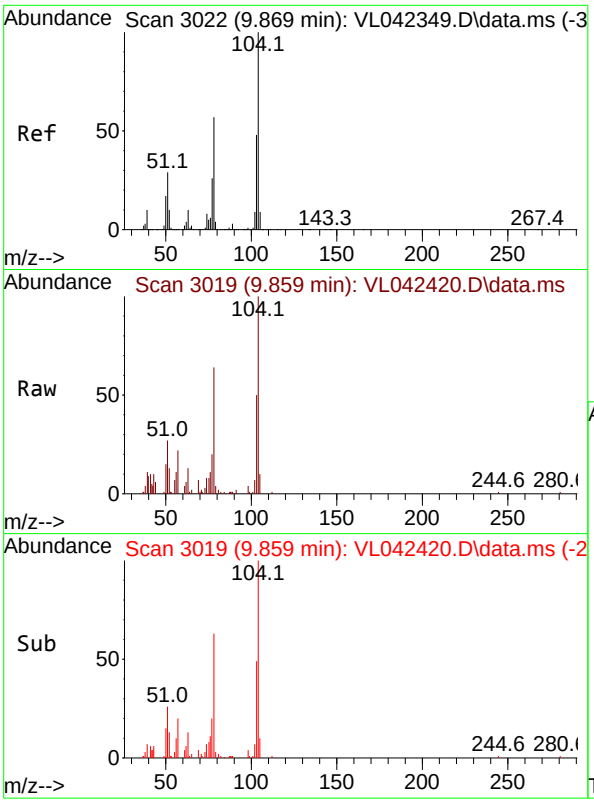


#60
o-Xylene
Concen: 0.508 ppbv
RT: 9.956 min Scan# 3049
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 28805

Ion	Ratio	Lower	Upper
91	100		
106	41.5	21.1	63.4

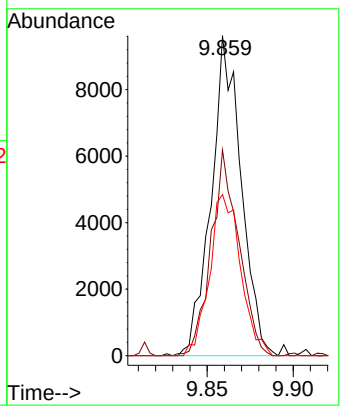




#61
Styrene
Concen: 0.430 ppbv
RT: 9.859 min Scan# 3(
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:104 Resp: 1165

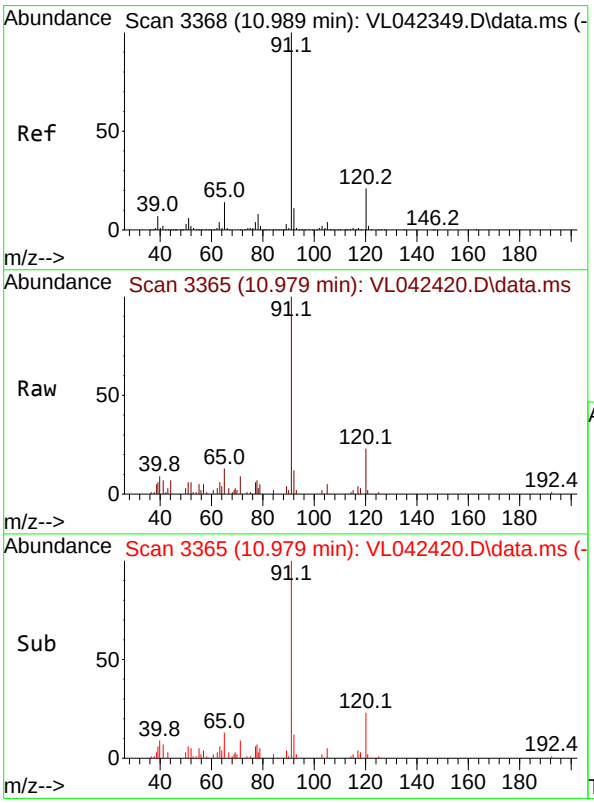
Ion	Ratio	Lower	Upper
104	100		
78	59.6	44.6	66.8
103	52.4	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

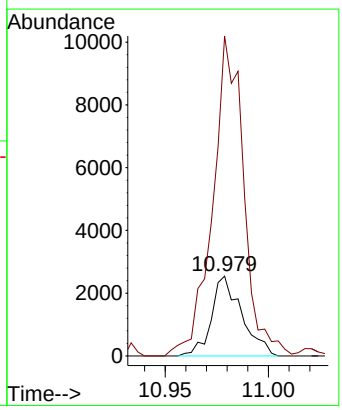
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

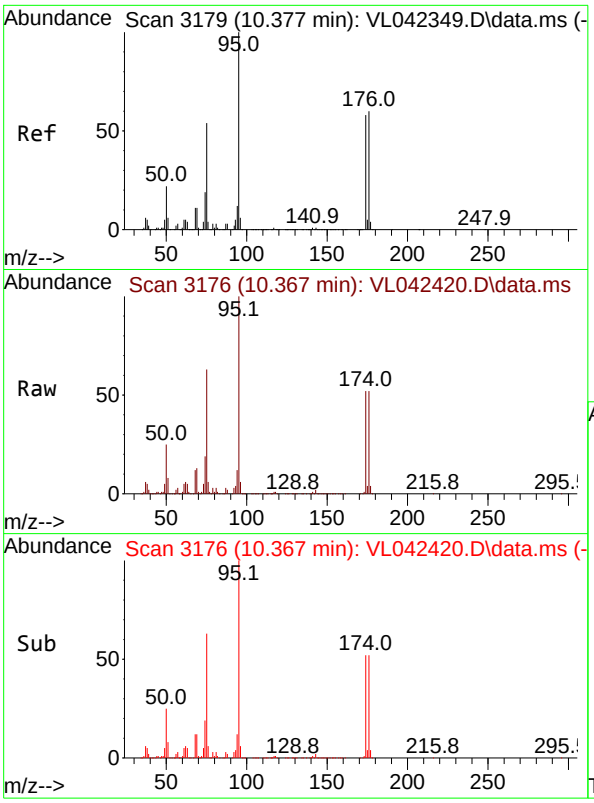


#64
n-propylbenzene
Concen: 0.124 ppbv
RT: 10.979 min Scan# 3365
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:120 Resp: 2601

Ion	Ratio	Lower	Upper
120	100		
91	415.6	392.4	588.6

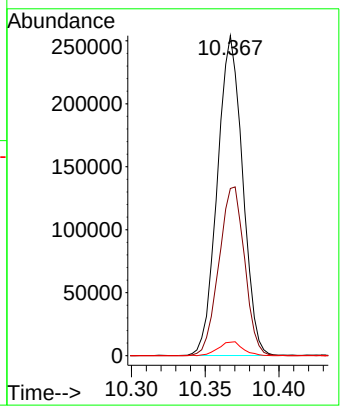




#68
1-Bromo-4-Fluorobenzene
Concen: 10.426 ppbv
RT: 10.367 min Scan# 3
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 95 Resp: 30232

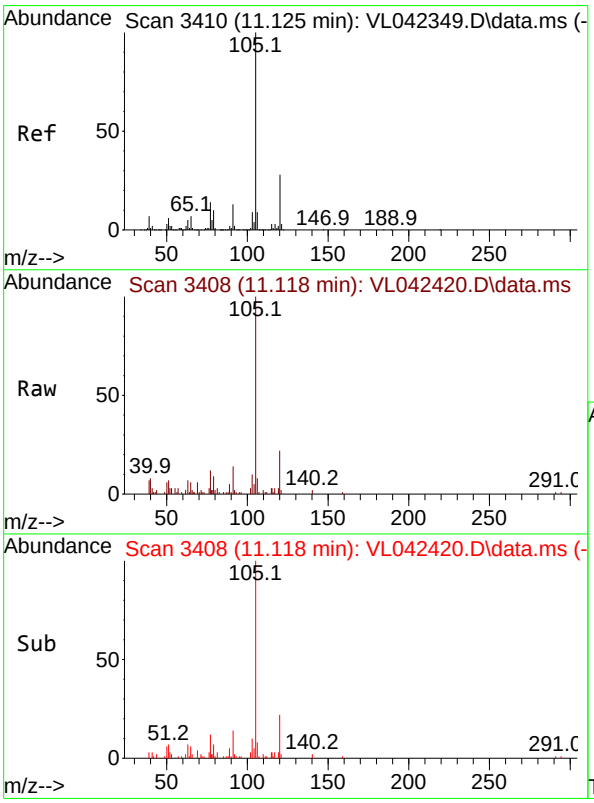
Ion	Ratio	Lower	Upper
95	100		
174	53.7	48.5	72.7
175	4.2	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

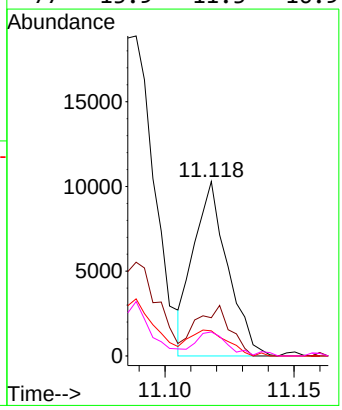
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

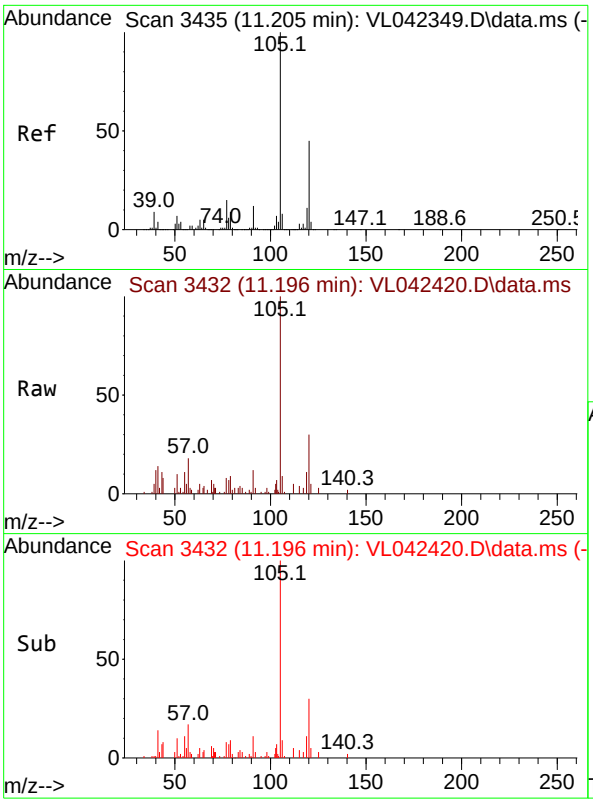


#72
4-Ethyltoluene
Concen: 0.137 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 9487

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	13.9	11.3	16.9

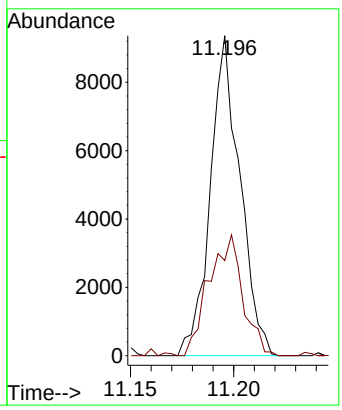




#73
1,3,5-Trimethylbenzene
Concen: 0.153 ppbv
RT: 11.196 min Scan# 34
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 934

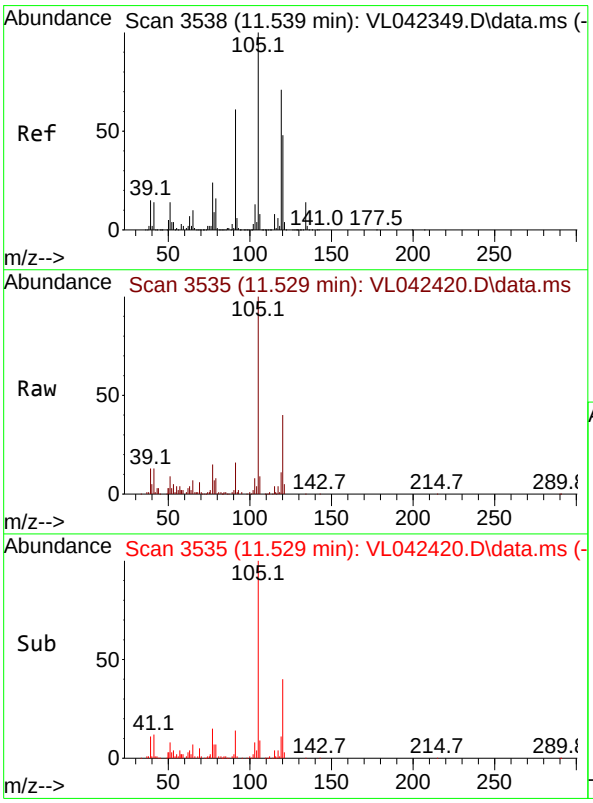
Ion	Ratio	Lower	Upper
105	100		
120	29.8	35.6	53.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Manual Integrations
APPROVED

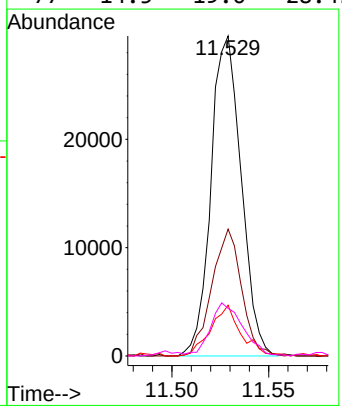
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.449 ppbv
RT: 11.529 min Scan# 3535
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 32107

Ion	Ratio	Lower	Upper
105	100		
120	39.7	38.1	57.1
91	15.9	48.8	73.2#
77	14.5	19.0	28.4#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042420.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.427	409	414	420	rBV	4575981	5213096	100.00%	19.143%
2	1.463	422	425	428	rBV	417175	194654	3.73%	0.715%
3	1.486	428	432	434	rVV2	173357	87278	1.67%	0.320%
4	1.557	450	454	458	rVB	2357835	1295061	24.84%	4.756%
5	1.618	469	473	477	rVB	563139	303366	5.82%	1.114%
6	1.719	499	504	511	rVB	1335484	830838	15.94%	3.051%
7	1.839	534	541	548	rBV2	1591719	1428300	27.40%	5.245%
8	1.881	548	554	561	rBV	1030988	703713	13.50%	2.584%
9	1.958	573	578	582	rVB	106374	73614	1.41%	0.270%
10	2.039	593	603	606	rBV	206174	180042	3.45%	0.661%
11	2.269	665	674	680	rBV	223689	195359	3.75%	0.717%
12	2.405	710	716	724	rBV	218384	228868	4.39%	0.840%
13	2.466	728	735	741	rVB2	86854	103452	1.98%	0.380%
14	2.615	774	781	788	rVV	53368	52445	1.01%	0.193%
15	2.780	823	832	838	rBV	532755	557758	10.70%	2.048%
16	2.816	838	843	856	rVB	239045	294711	5.65%	1.082%
17	3.217	958	967	975	rVB2	51395	73402	1.41%	0.270%
18	3.645	1086	1099	1104	rBV4	37109	58028	1.11%	0.213%
19	3.677	1104	1109	1123	rVB	152347	223832	4.29%	0.822%
20	3.946	1179	1192	1207	rBV2	709896	1118424	21.45%	4.107%
21	4.039	1210	1221	1228	rBV3	42753	73471	1.41%	0.270%
22	4.243	1274	1284	1285	rBV2	56797	57597	1.10%	0.211%
23	4.250	1285	1286	1302	rVB5	56978	72576	1.39%	0.267%
24	4.625	1380	1402	1417	rVB2	58488	135334	2.60%	0.497%
25	4.965	1496	1507	1521	rVB3	30944	57316	1.10%	0.210%
26	6.833	2065	2084	2097	rBV2	189096	447186	8.58%	1.642%
27	6.917	2097	2110	2128	rVB	315907	654501	12.55%	2.403%
28	7.674	2331	2344	2362	rVB4	150358	252178	4.84%	0.926%
29	8.289	2528	2534	2549	rVB5	47502	83280	1.60%	0.306%
30	8.868	2697	2713	2723	rBV	897638	1339523	25.70%	4.919%
31	8.930	2723	2732	2743	rVB	531392	840484	16.12%	3.086%
32	9.341	2850	2859	2870	rBV3	68323	94855	1.82%	0.348%
33	9.519	2905	2914	2920	rBV2	112294	175228	3.36%	0.643%
34	9.859	3008	3019	3029	rVB4	43447	63493	1.22%	0.233%
35	9.930	3031	3041	3045	rVV3	136375	191773	3.68%	0.704%
36	9.953	3045	3048	3065	rVB5	80711	125927	2.42%	0.462%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	10.367	3162	3176	3187	rBV2	1173470	1449415	27.80%	5.322%
38	10.849	3316	3325	3333	rVB	239417	289624	5.56%	1.064%
39	11.089	3392	3399	3404	rBV	57289	65202	1.25%	0.239%
40	11.419	3495	3501	3508	rVB3	48203	57001	1.09%	0.209%
41	11.529	3526	3535	3544	rVB2	93595	123335	2.37%	0.453%
42	11.713	3582	3592	3597	rBV	111140	130182	2.50%	0.478%
43	11.769	3597	3609	3620	rVB	3380314	4067318	78.02%	14.935%
44	12.034	3675	3691	3700	rBV4	150973	202073	3.88%	0.742%
45	12.665	3880	3886	3892	rVB5	52359	56665	1.09%	0.208%
46	12.820	3927	3934	3940	rBV2	198839	189856	3.64%	0.697%
47	12.998	3981	3989	4000	rVB2	41155	65465	1.26%	0.240%
48	13.377	4098	4106	4115	rVB2	2240897	2497432	47.91%	9.171%
49	13.720	4205	4212	4218	rVB2	104244	94143	1.81%	0.346%
50	14.516	4453	4458	4466	rVB	68509	63960	1.23%	0.235%

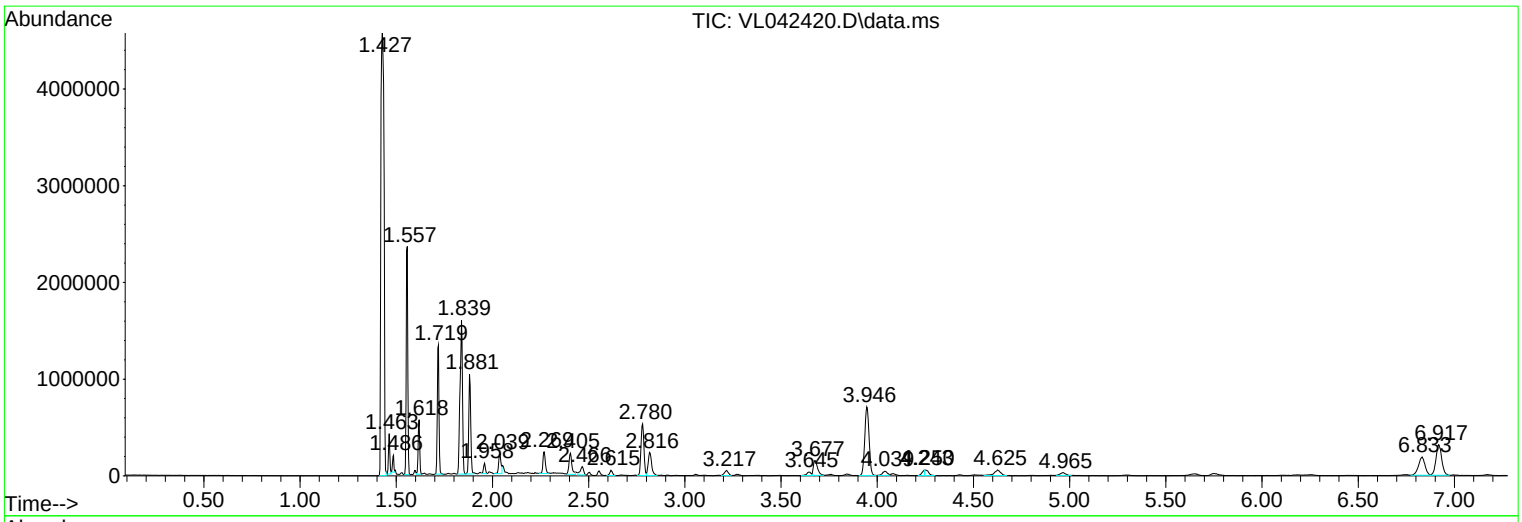
Sum of corrected areas: 27232634

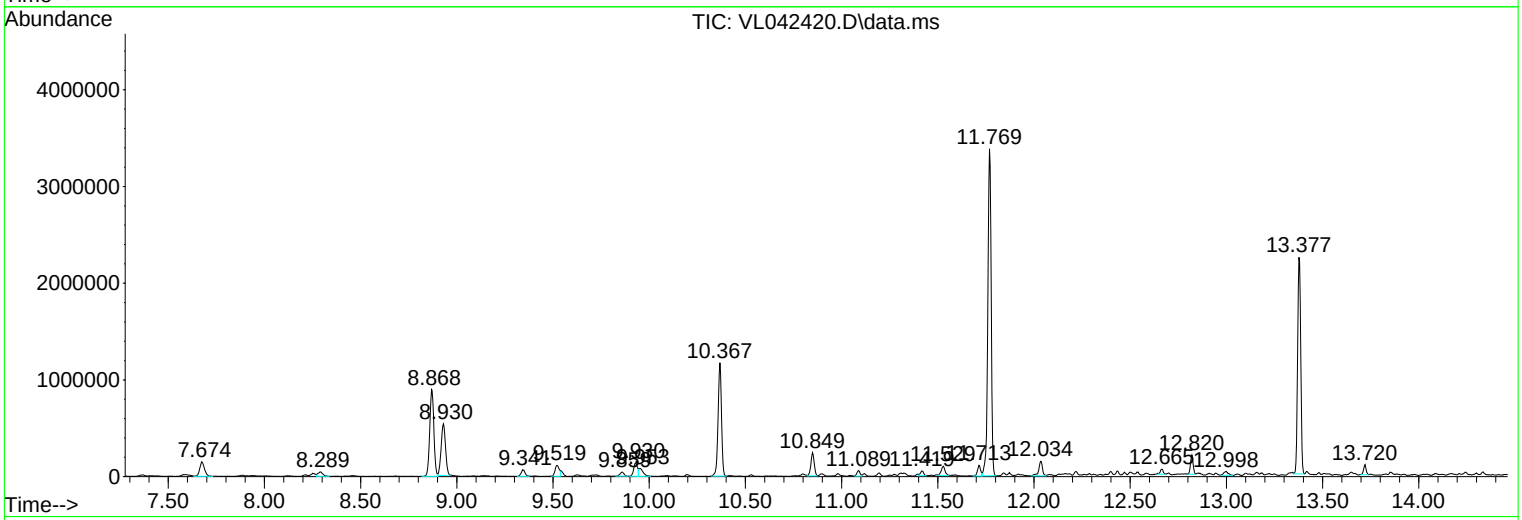
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

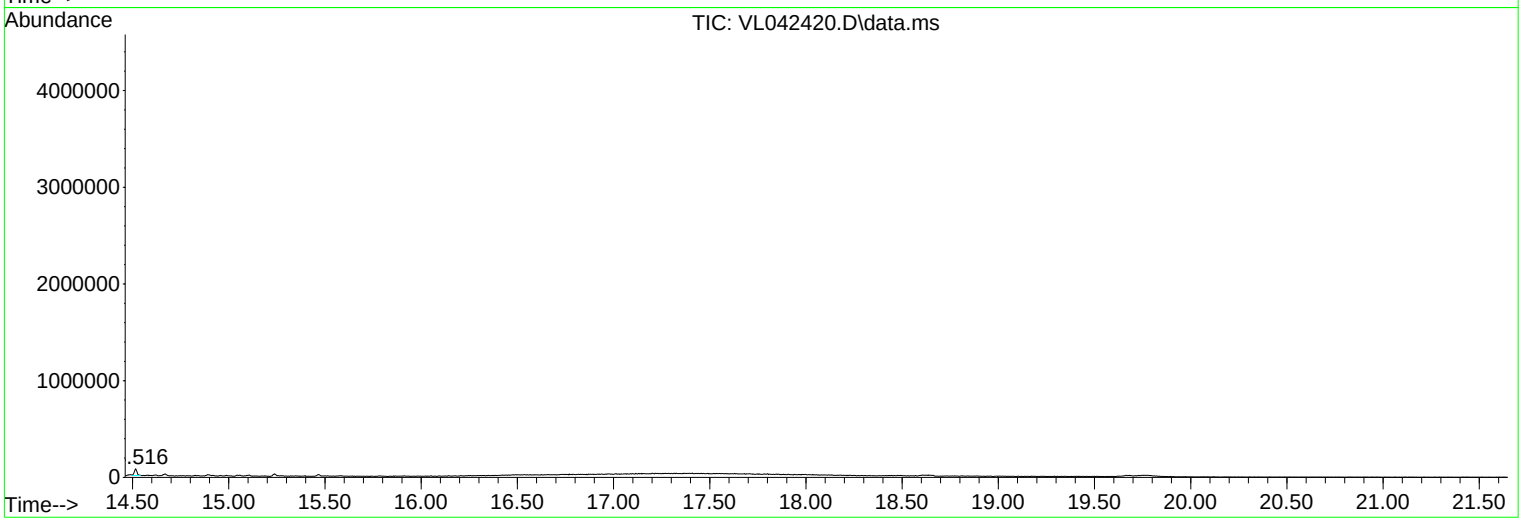
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

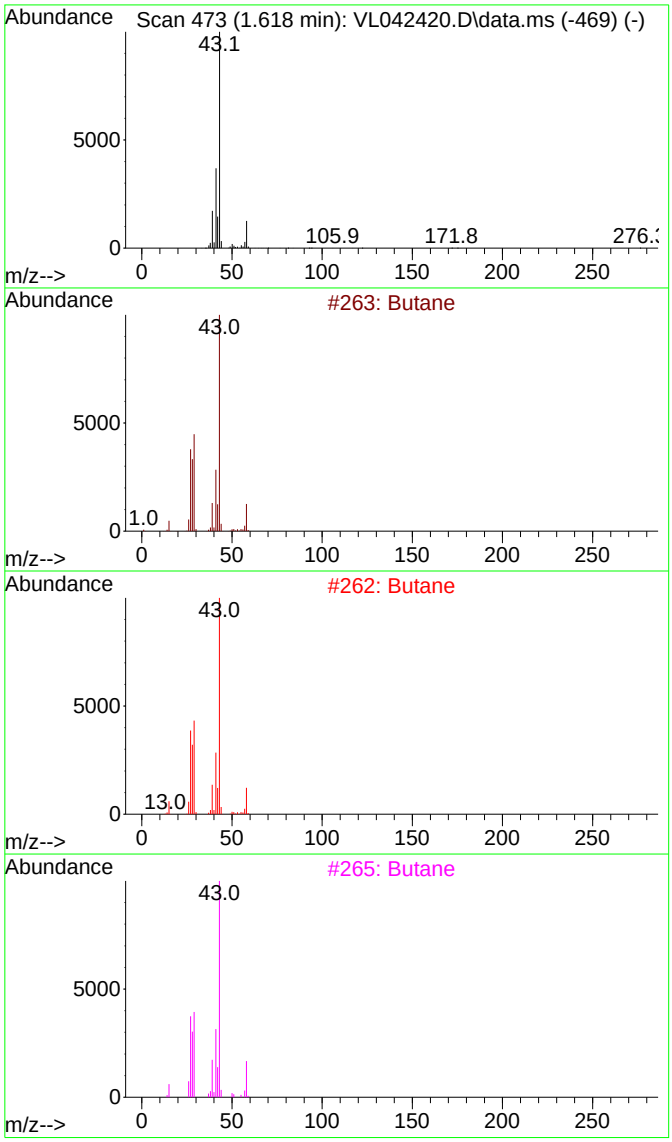
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

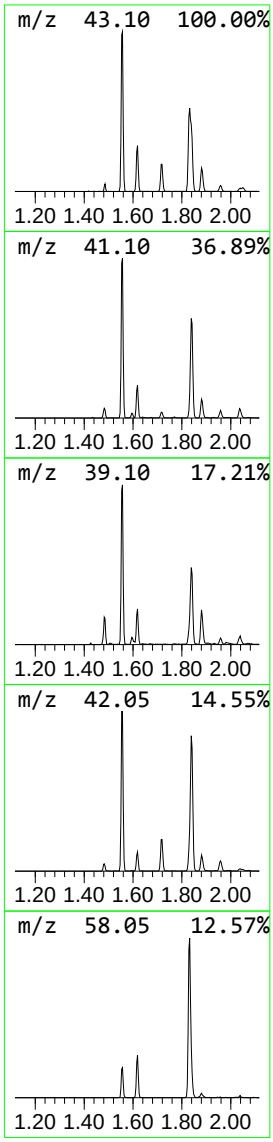
****

Peak Number 1 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.618	5.44 ppbv	303366	Bromochloromethane	2.777

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	52
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

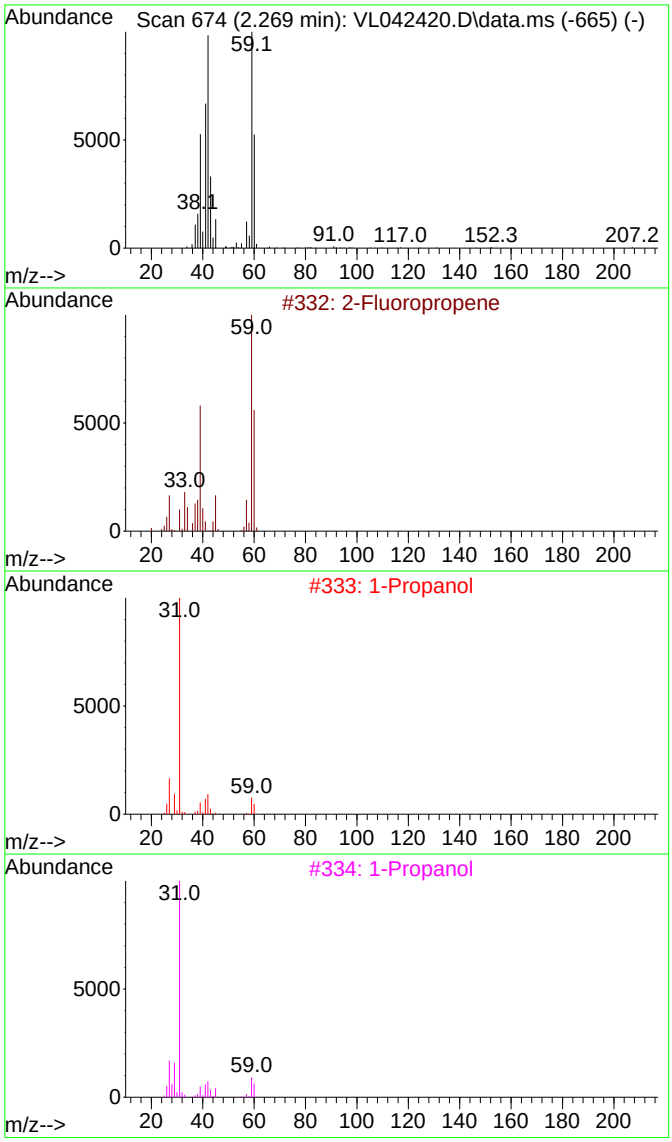
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

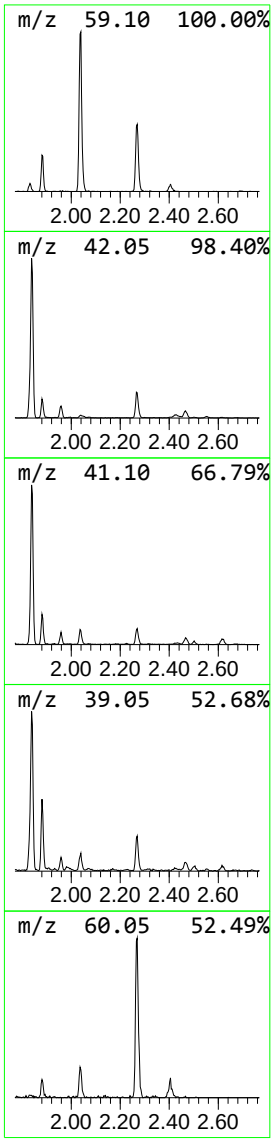
****

Peak Number 2 2-Fluoropropene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.269	3.50 ppbv	195359	Bromochloromethane	2.777

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	2-Fluoropropene	60	C3H5F	001184-60-7	53
2	1-Propanol	60	C3H8O	000071-23-8	53
3	1-Propanol	60	C3H8O	000071-23-8	50
4	1-Propanol	60	C3H8O	000071-23-8	46
5	2-Fluoropropene	60	C3H5F	001184-60-7	38





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

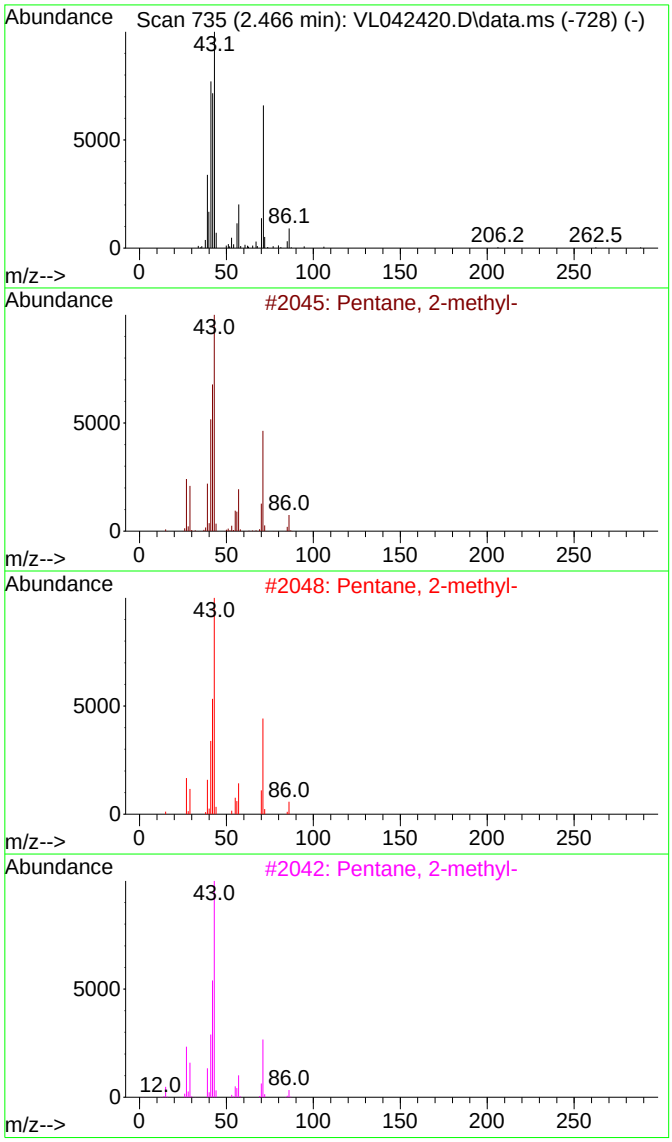
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

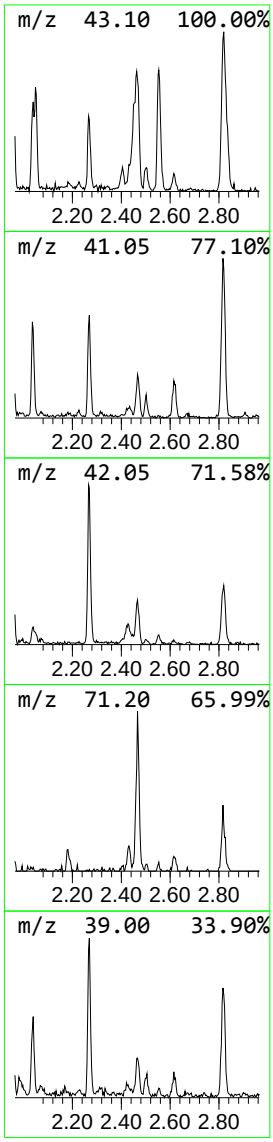
****

Peak Number 4 Pentane, 2-methyl- Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.466	1.85 ppbv	103452	Bromochloromethane	2.777

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	91
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	80
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	64
5	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

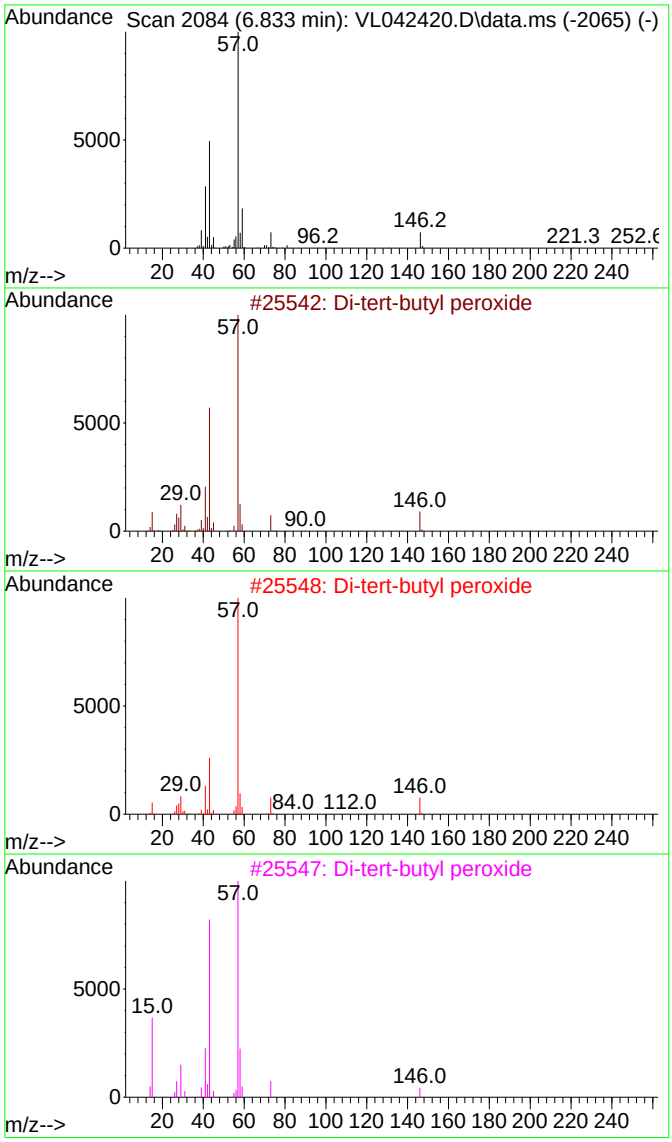
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

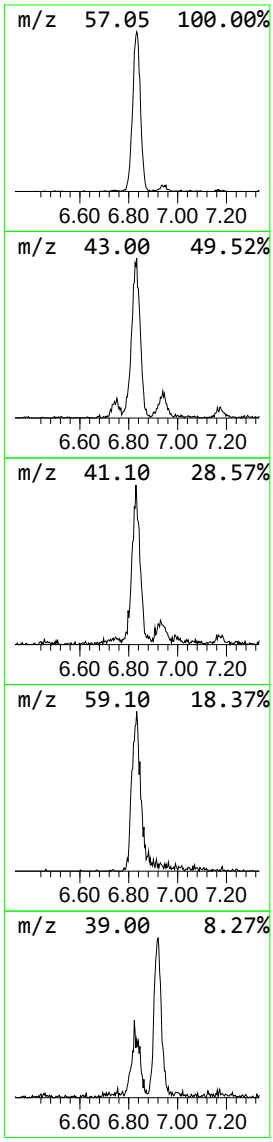
****

Peak Number 5 Di-tert-butyl peroxide Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.833	3.34 ppbv	447186	Chlorobenzene-d5	8.868

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	59
2	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	42
3	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	40
4	Phosphine, bis(1,1-dimethylethyl)-	146	C8H19P	000819-19-2	37
5	Propanoic acid, 2,2-dimethyl-	102	C5H10O2	000075-98-9	28





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

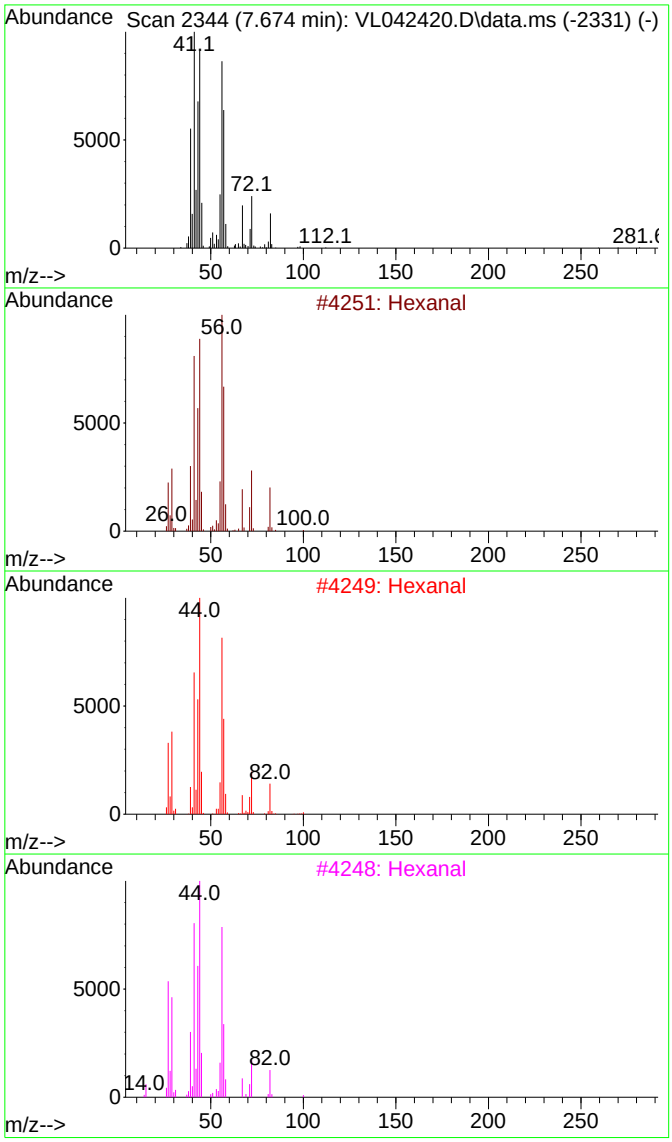
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

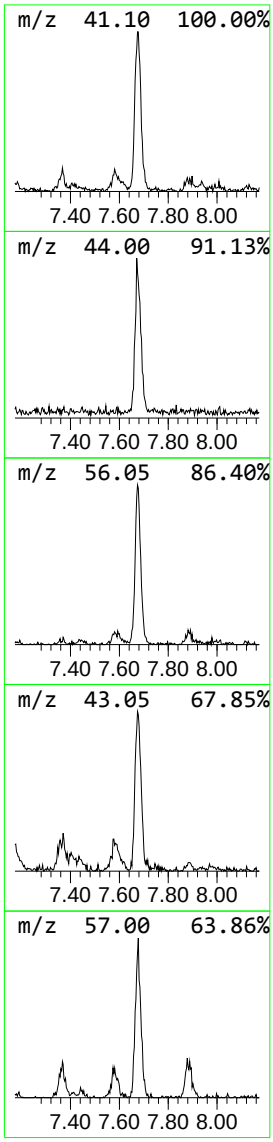
****

Peak Number 6 Hexanal Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.674	1.88 ppbv	252178	Chlorobenzene-d5	8.868

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	64
2	Hexanal	100	C6H12O	000066-25-1	64
3	Hexanal	100	C6H12O	000066-25-1	59
4	Hexanal	100	C6H12O	000066-25-1	50
5	Hexanal	100	C6H12O	000066-25-1	45





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

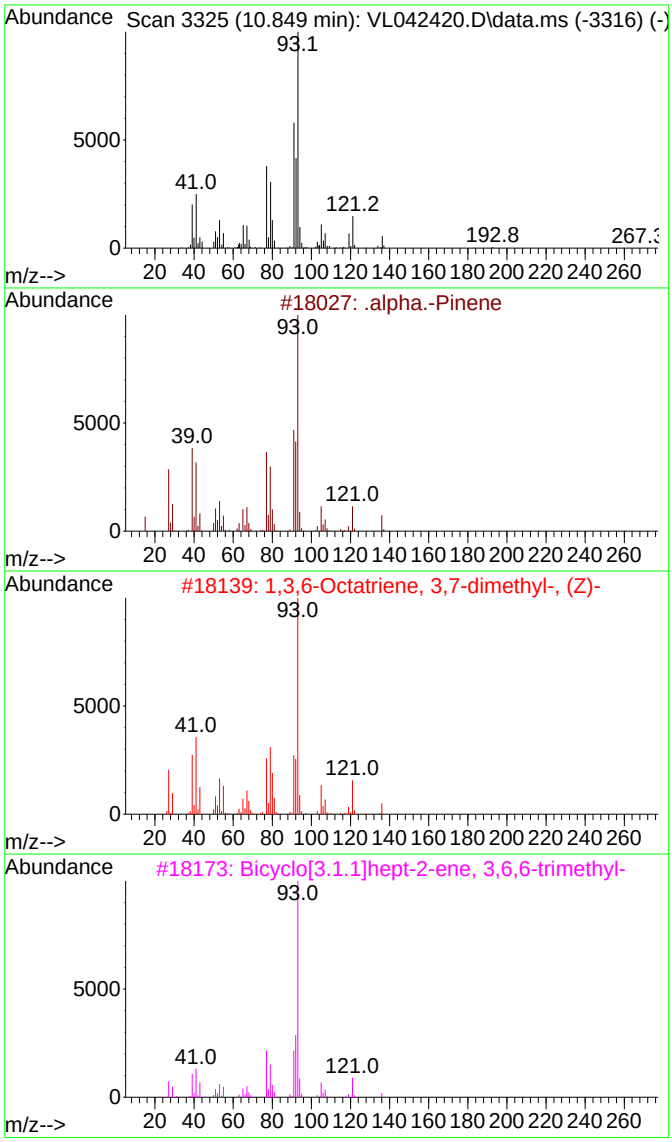
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

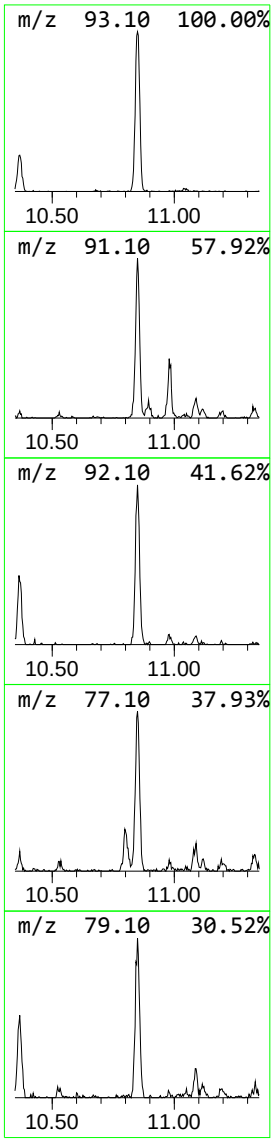
****

Peak Number 8 .alpha.-Pinene Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.849	2.16 ppbv	289624	Chlorobenzene-d5	8.868

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	94
2	1,3,6-Octatriene, 3,7-dimethyl-,...	136	C10H16	003338-55-4	93
3	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	91
4	4-Carene, (1S,3S,6R)-(-)-	136	C10H16	005208-50-4	90
5	.gamma.-Terpinene	136	C10H16	000099-85-4	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.618	5.4	ppbv	303366	1	2.777	557758	10.0
2-Fluoropropene	2.269	3.5	ppbv	195359	1	2.777	557758	10.0
Pentane, 2-methyl-	2.466	1.9	ppbv	103452	1	2.777	557758	10.0
Di-tert-butyl p...	6.833	3.3	ppbv	447186	3	8.868	1339520	10.0
Hexanal	7.674	1.9	ppbv	252178	3	8.868	1339520	10.0
.alpha.-Pinene	10.849	2.2	ppbv	289624	3	8.868	1339520	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-07DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042451.D	4		04/29/25 17:37	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.84	4.15	UD	4.15	9.89	ug/m3
64-17-5	Ethanol	280	528	EDQ	2.45	3.77	ug/m3
74-87-3	Chloromethane	0.39	0.81	UD	0.81	4.13	ug/m3
75-01-4	Vinyl Chloride	0.060	0.15	UD	0.15	0.31	ug/m3
74-83-9	Bromomethane	0.56	2.17	UD	2.17	7.77	ug/m3
75-00-3	Chloroethane	0.68	1.79	UD	1.79	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.52	1.53	UD	1.53	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.64	3.60	UD	3.60	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.64	4.91	UD	4.91	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.35	2.45	UD	2.45	14.0	ug/m3
593-60-2	Bromoethene	0.48	2.10	UD	2.10	8.74	ug/m3
75-65-0	tert-Butyl alcohol	2.80	8.49	D	2.30	6.06	ug/m3
142-82-5	Heptane	0.44	1.80	UD	1.80	8.20	ug/m3
67-63-0	Isopropyl Alcohol	32.1	78.9	D	0.69	4.92	ug/m3
75-35-4	1,1-Dichloroethene	0.56	2.22	UD	2.22	7.93	ug/m3
67-64-1	Acetone	17.1	40.6	D	2.28	4.75	ug/m3
75-15-0	Carbon Disulfide	0.64	1.99	UD	1.99	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.48	1.73	UD	1.73	7.21	ug/m3
75-09-2	Methylene Chloride	0.76	2.64	UD	2.64	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.76	3.01	UD	3.01	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.52	2.10	UD	2.10	8.09	ug/m3
110-82-7	Cyclohexane	0.88	3.03	UD	3.03	6.88	ug/m3
78-93-3	2-Butanone	0.89	2.62	JD	1.42	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25	UD	0.25	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.36	1.43	UD	1.43	7.93	ug/m3
67-66-3	Chloroform	0.33	1.61	UD	1.61	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.040	0.22	UD	0.22	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.48	2.24	JD	1.87	9.34	ug/m3
71-43-2	Benzene	0.40	1.28	JD	1.12	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.36	1.46	UD	1.46	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.44	2.03	UD	2.03	9.24	ug/m3
75-27-4	Bromodichloromethane	0.31	2.08	UD	2.08	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.37	1.52	UD	1.52	8.20	ug/m3
108-88-3	Toluene	3.20	12.1	D	1.66	7.54	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-07DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042451.D	4		04/29/25 17:37	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.24	1.09	UD	1.09	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.26	1.18	UD	1.18	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.28	1.53	UD	1.53	10.9	ug/m3
124-48-1	Dibromochloromethane	0.26	2.22	UD	2.22	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.29	2.23	UD	2.23	3.07	ug/m3
127-18-4	Tetrachloroethene	0.060	0.41	UD	0.41	0.81	ug/m3
108-90-7	Chlorobenzene	0.30	1.38	UD	1.38	9.21	ug/m3
100-41-4	Ethyl Benzene	0.48	2.08	UD	2.08	8.69	ug/m3
179601-23-1	m/p-Xylene	0.84	3.65	UD	3.65	17.4	ug/m3
95-47-6	o-Xylene	0.48	2.08	UD	2.08	8.69	ug/m3
100-42-5	Styrene	0.44	1.87	UD	1.87	8.52	ug/m3
75-25-2	Bromoform	0.23	2.38	UD	2.38	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.040	0.27	UD	0.27	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.44	2.28	UD	2.28	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.44	2.16	UD	2.16	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.31	1.52	UD	1.52	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.32	1.92	UD	1.92	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.21	1.26	UD	1.26	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.30	1.80	UD	1.80	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.34	2.52	UD	2.52	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.34	3.63	UD	3.63	21.3	ug/m3
106-99-0	1,3-Butadiene	0.52	1.15	UD	1.15	4.42	ug/m3
91-20-3	Naphthalene	0.30	1.57	UD	1.57	2.10	ug/m3
622-96-8	4-Ethyltoluene	0.48	2.36	UD	2.36	9.83	ug/m3
110-54-3	Hexane	1.60	5.64	JD	1.55	7.05	ug/m3
107-05-1	Allyl Chloride	0.60	1.88	UD	1.88	6.26	ug/m3
123-91-1	1,4-Dioxane	0.84	3.03	UD	3.03	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.34	1.39	UD	1.39	8.19	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.7			70 (65) - 130 (135)	107%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	116000		2.797			
540-36-3	1,4-Difluorobenzene	307000		3.972			
3114-55-4	Chlorobenzene-d5	261000		8.895			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-07DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042451.D	4		04/29/25 17:37	VL042925

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042451.D
Acq On : 29 Apr 2025 17:37
Operator : SY/MD
Sample : Q1665-07DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 30 01:23:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	116268	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.972	114	307149	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.895	117	260772	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	230005	10.733	ppbv		0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 107.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	2557	0.124	ppbv		93
9) Propene	1.492	41	3728	0.418	ppbv		89
13) Ethanol	1.725	45	99875	70.537	ppbv		75
15) Acetone	1.842	43	81145m	4.263	ppbv		
17) tert-Butyl alcohol	2.049	59	16691	0.708	ppbv	#	88
19) Isopropyl Alcohol	1.894	45	84766	8.017	ppbv	#	36
26) Hexane	2.839	57	7600	0.400	ppbv	#	41
34) 2-Butanone	2.570	43	5426	0.223	ppbv		96
36) Benzene	3.671	78	3299	0.100	ppbv		95
44) 2,2,4-Trimethylpentane	4.658	57	6925m	0.121	ppbv		
53) Toluene	6.956	91	32058	0.806	ppbv		99
59) m/p-Xylene	9.548	91	7657m	0.184	ppbv		

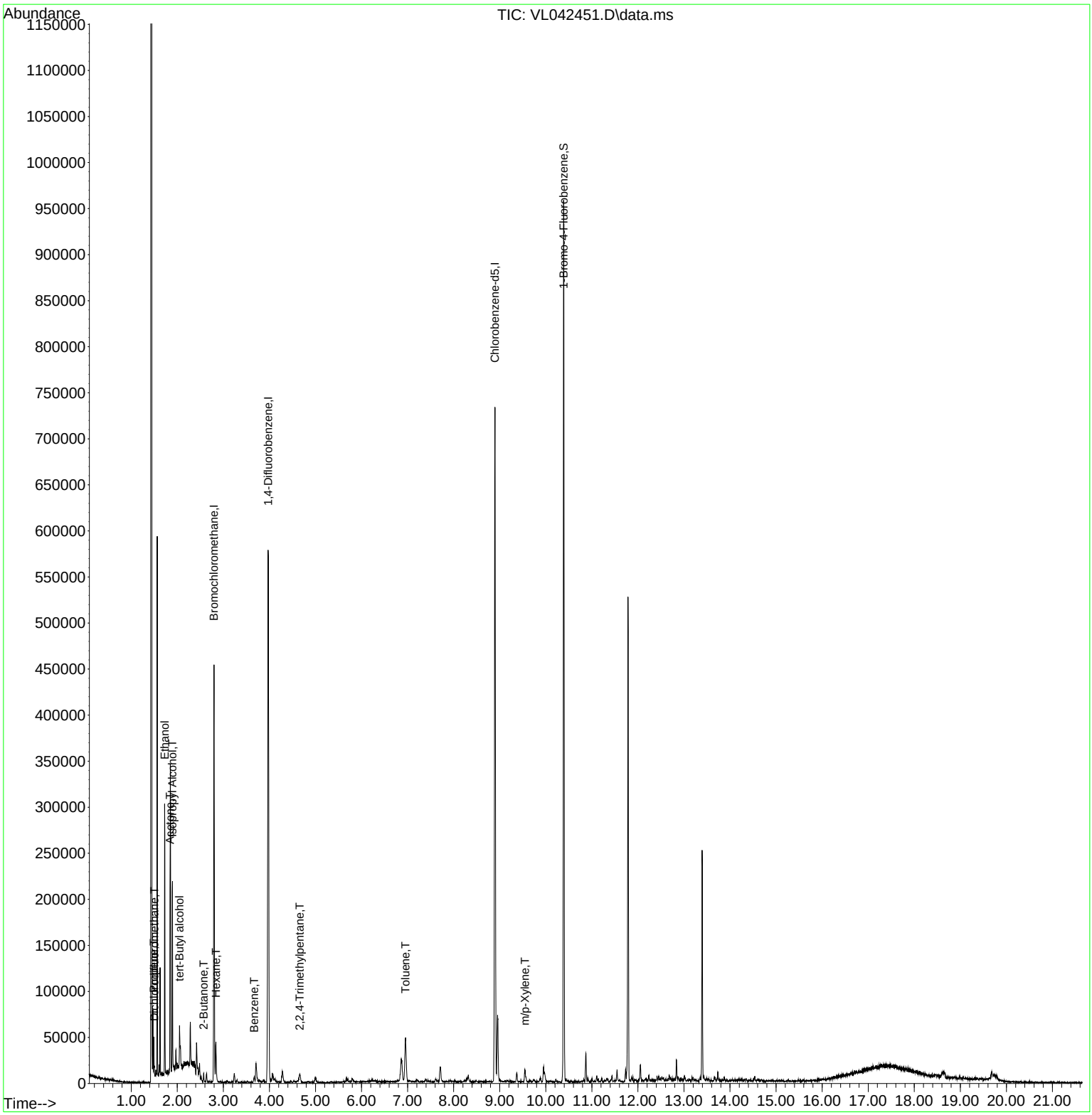
(#) = qualifier out of range (m) = manual integration (+) = signals summed

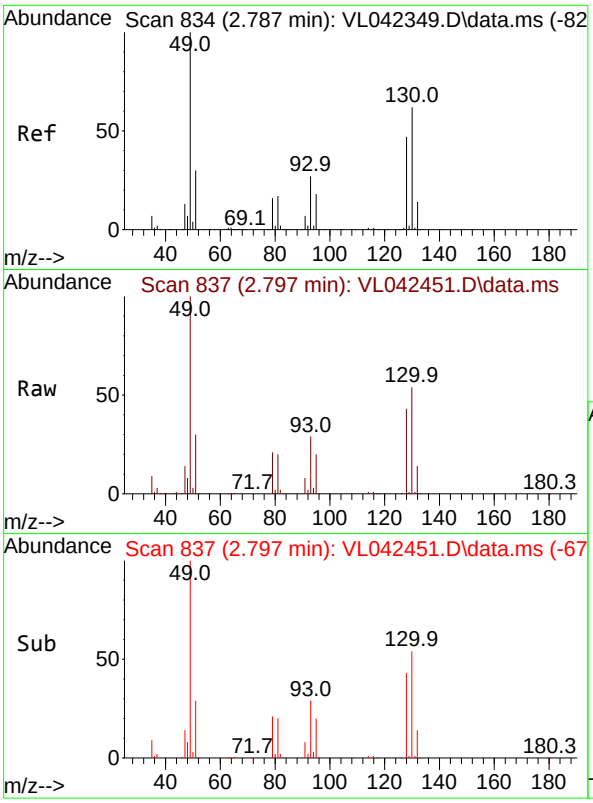
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042451.D
Acq On : 29 Apr 2025 17:37
Operator : SY/MD
Sample : Q1665-07DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 30 01:23:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 8
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 49 Resp: 11626

Ion	Ratio	Lower	Upper
49	100		
128	43.0	22.8	68.4
130	55.7	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations
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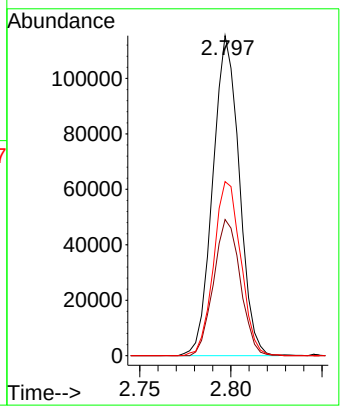
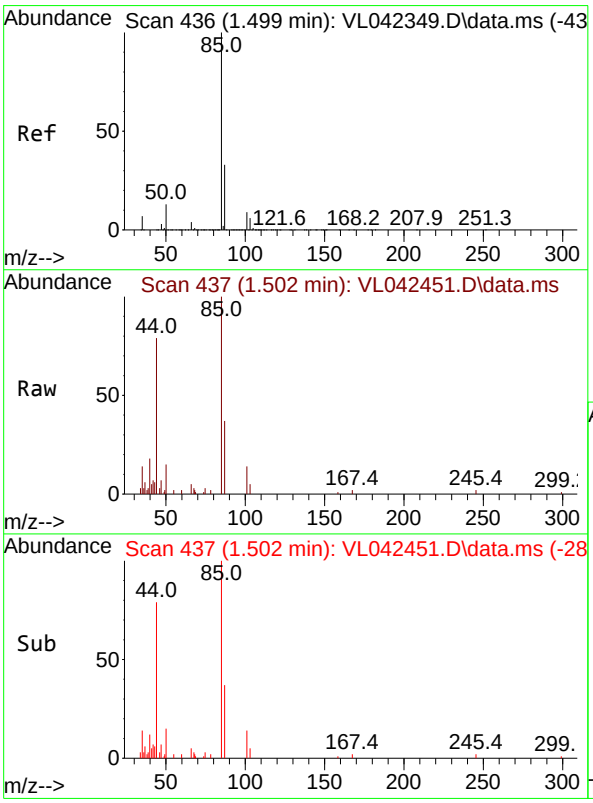
Supervised By :Mahesh Dadoda 04/30/2025

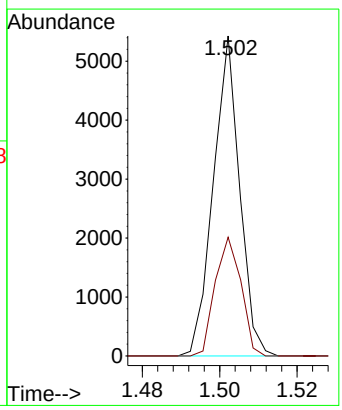


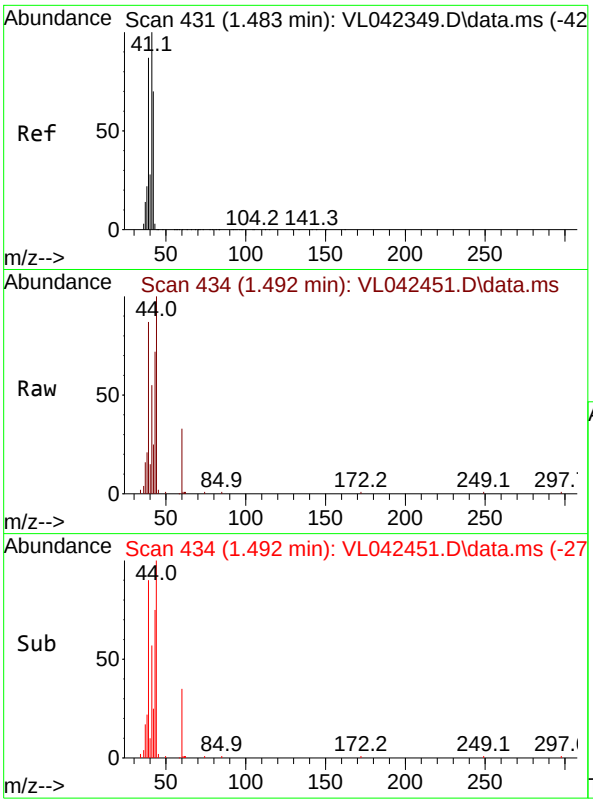


#2
Dichlorodifluoromethane
Concen: 0.124 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.003 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 85 Resp: 2557

Ion	Ratio	Lower	Upper
85	100		
87	37.1	26.6	39.8

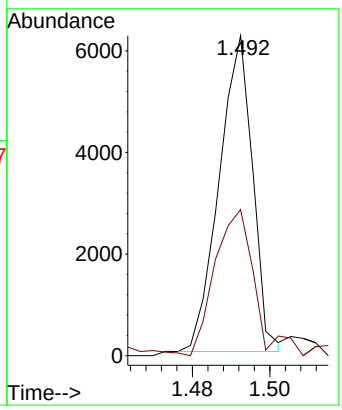




#9
Propene
Concen: 0.418 ppbv
RT: 1.492 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 41 Resp: 372

Ion	Ratio	Lower	Upper
41	100		
42	61.4	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

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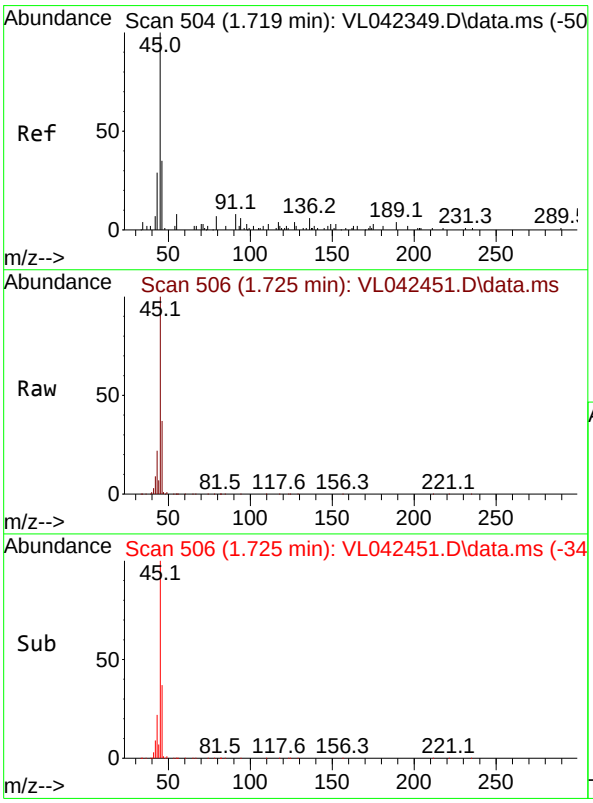
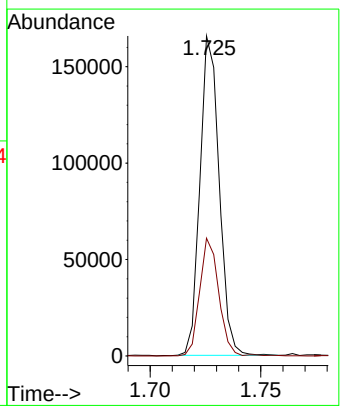
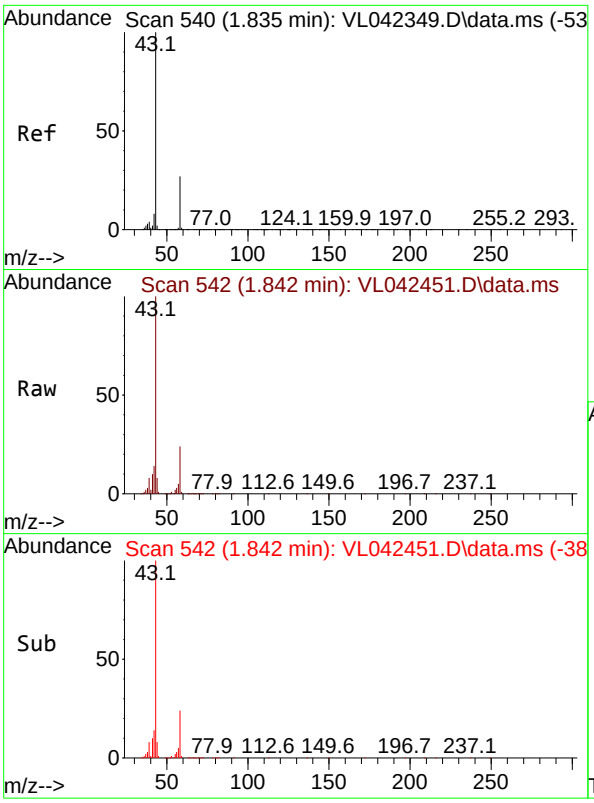


#13
Ethanol
Concen: 70.537 ppbv
RT: 1.725 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 45 Resp: 99875

Ion	Ratio	Lower	Upper
45	100		
46	36.8	21.9	87.7

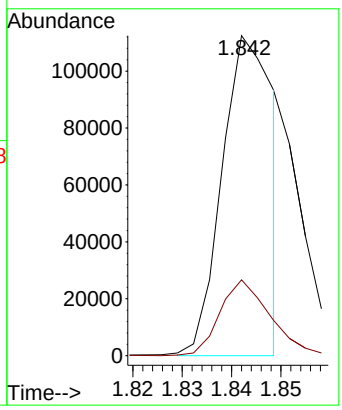




#15
Acetone
Concen: 4.263 ppbv m
RT: 1.842 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 43 Resp: 8114

Ion	Ratio	Lower	Upper
43	100		
58	23.7	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

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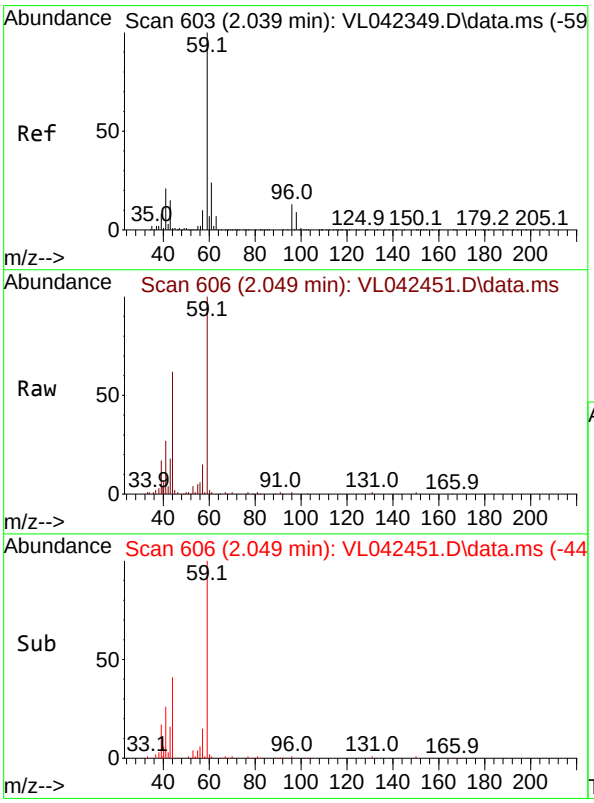
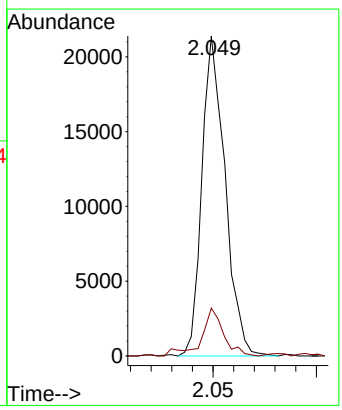
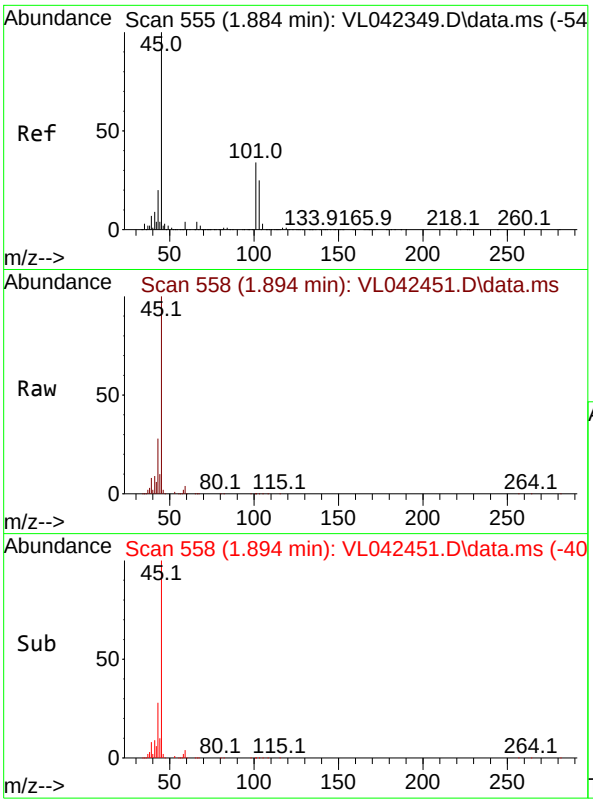


#17
tert-Butyl alcohol
Concen: 0.708 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 59 Resp: 16691

Ion	Ratio	Lower	Upper
59	100		
57	15.5	8.7	13.1#





#19
Isopropyl Alcohol
Concen: 8.017 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 45 Resp: 8476

Ion	Ratio	Lower	Upper
45	100		
58	2.1	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations
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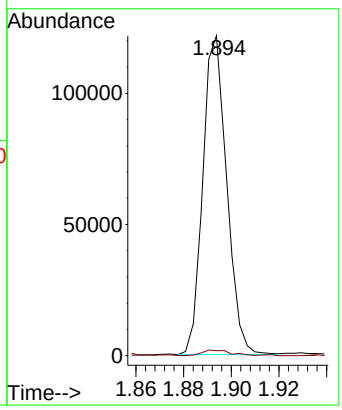
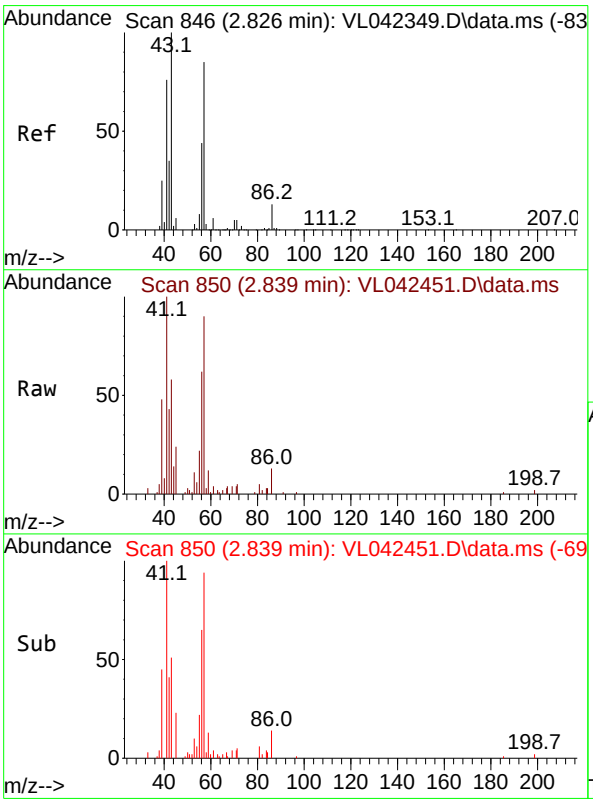
Supervised By :Mahesh Dadoda 04/30/2025

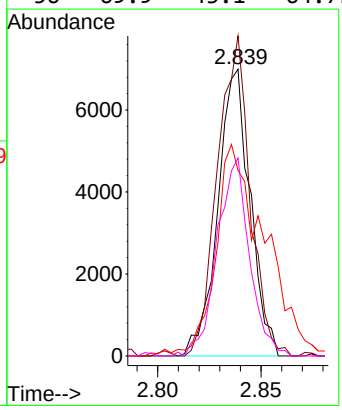


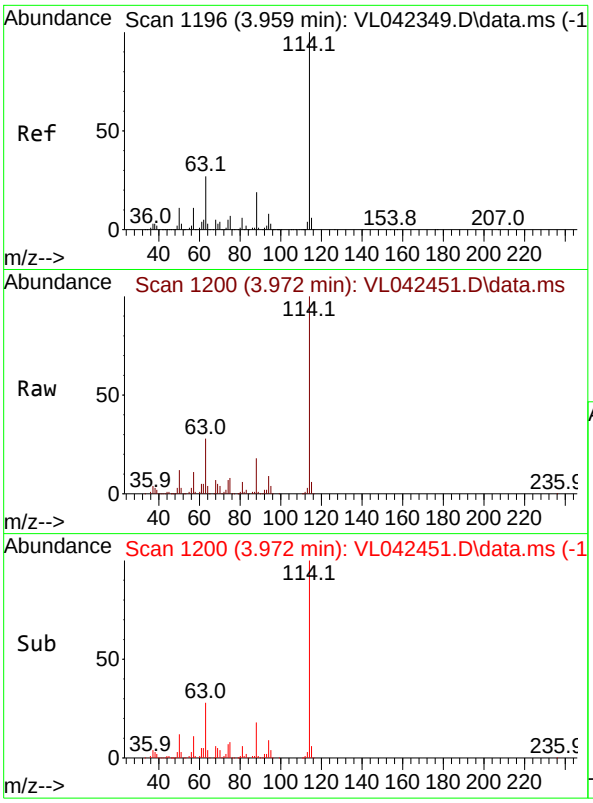


#26
Hexane
Concen: 0.400 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 57 Resp: 7600

Ion	Ratio	Lower	Upper
57	100		
41	113.7	77.9	116.9
43	111.5	208.4	312.6#
56	69.9	43.1	64.7#

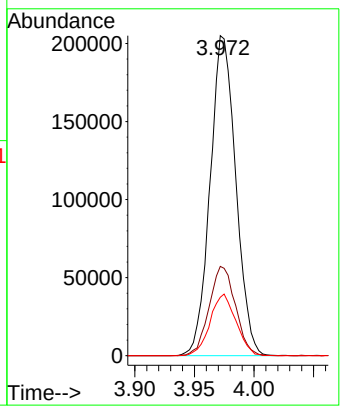




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion:114 Resp: 30714

Ion	Ratio	Lower	Upper
114	100		
63	28.6	21.8	32.6
88	19.5	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations
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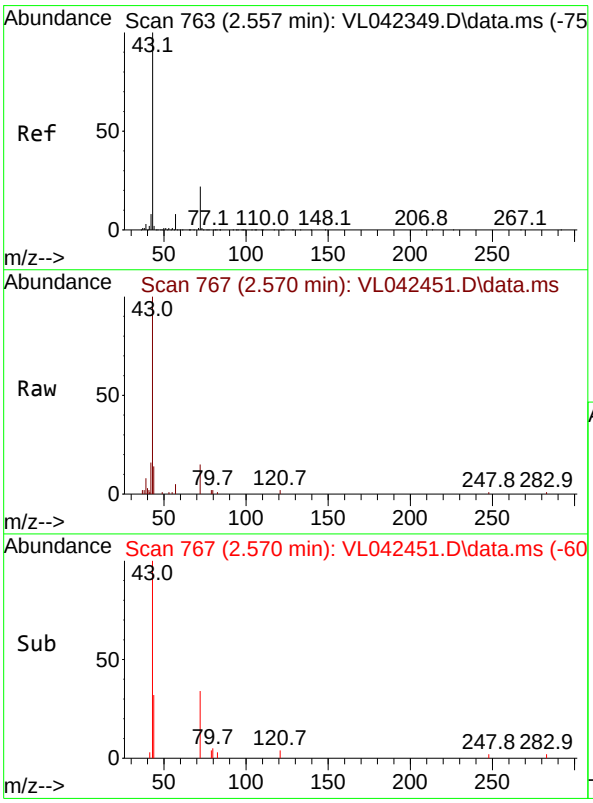
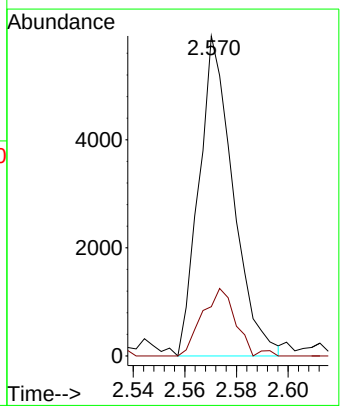
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

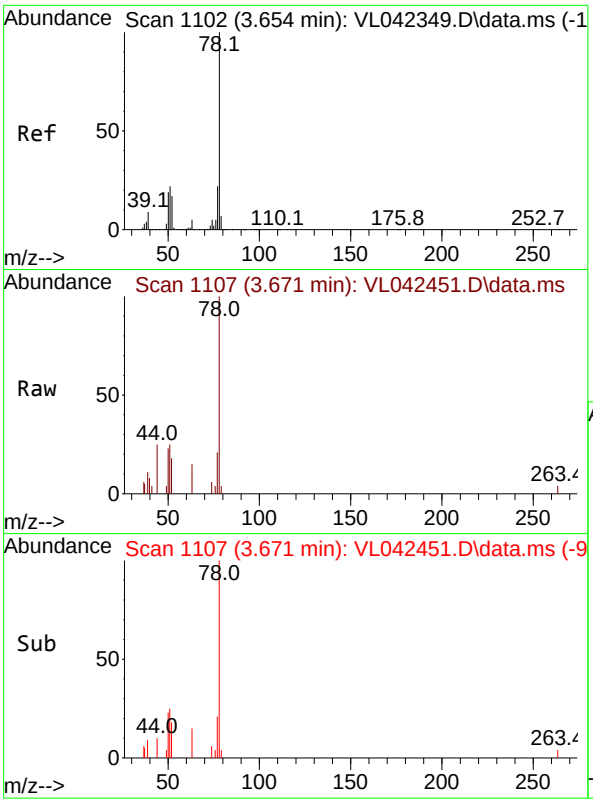


#34
2-Butanone
Concen: 0.223 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 43 Resp: 5426

Ion	Ratio	Lower	Upper
43	100		
72	20.8	18.2	27.2

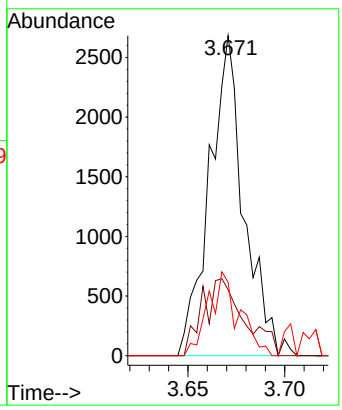




#36
Benzene
Concen: 0.100 ppbv
RT: 3.671 min Scan# 11
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 78 Resp: 329

Ion	Ratio	Lower	Upper
78	100		
77	20.6	17.4	26.0
50	23.0	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Manual Integrations
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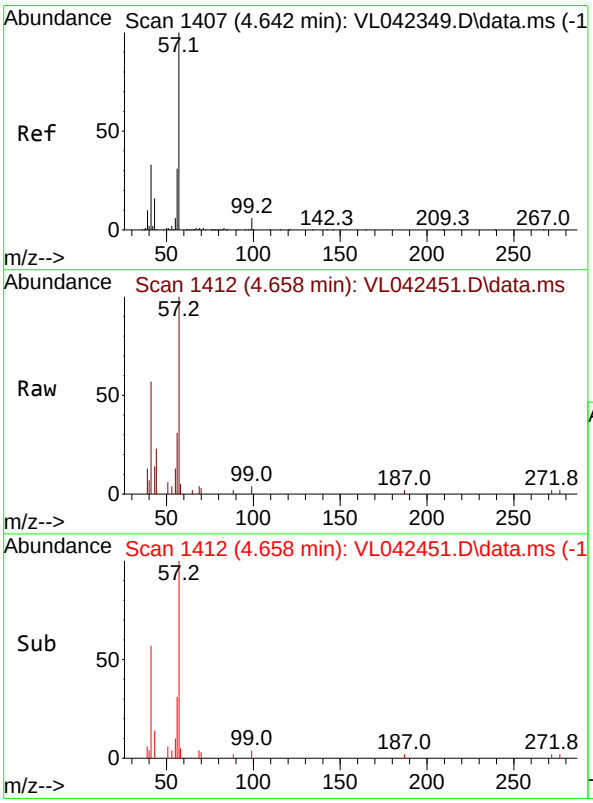
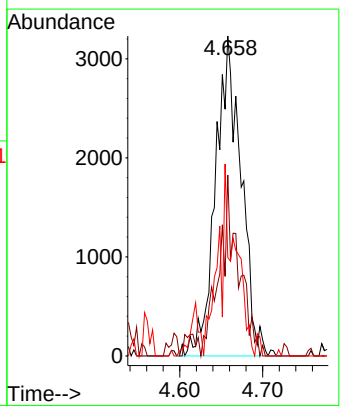
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

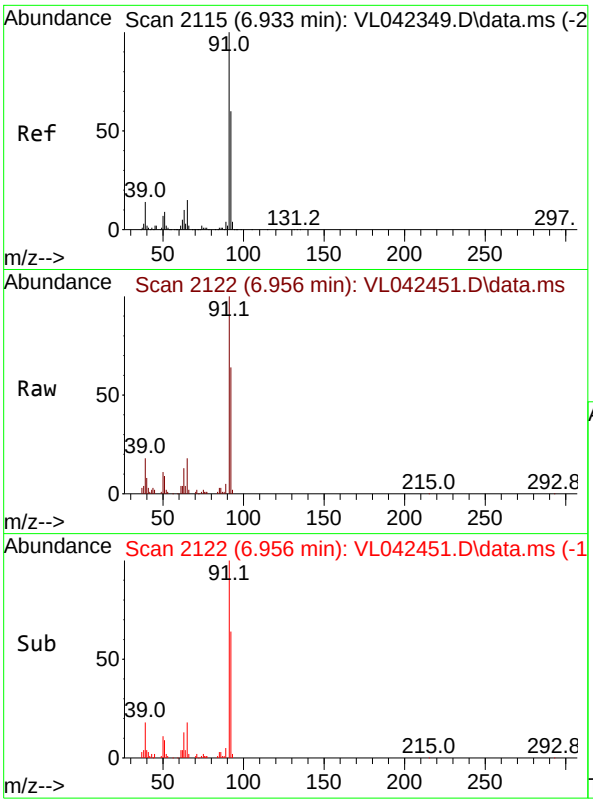


#44
2,2,4-Trimethylpentane
Concen: 0.121 ppbv m
RT: 4.658 min Scan# 1412
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 57 Resp: 6925

Ion	Ratio	Lower	Upper
57	100		
41	45.6	27.2	40.8#
56	46.2	25.7	38.5#

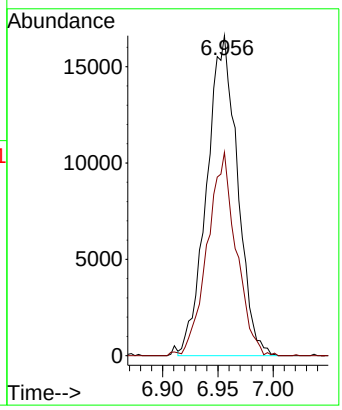




#53
Toluene
Concen: 0.806 ppbv
RT: 6.956 min Scan# 21
Delta R.T. 0.023 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 91 Resp: 3205

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

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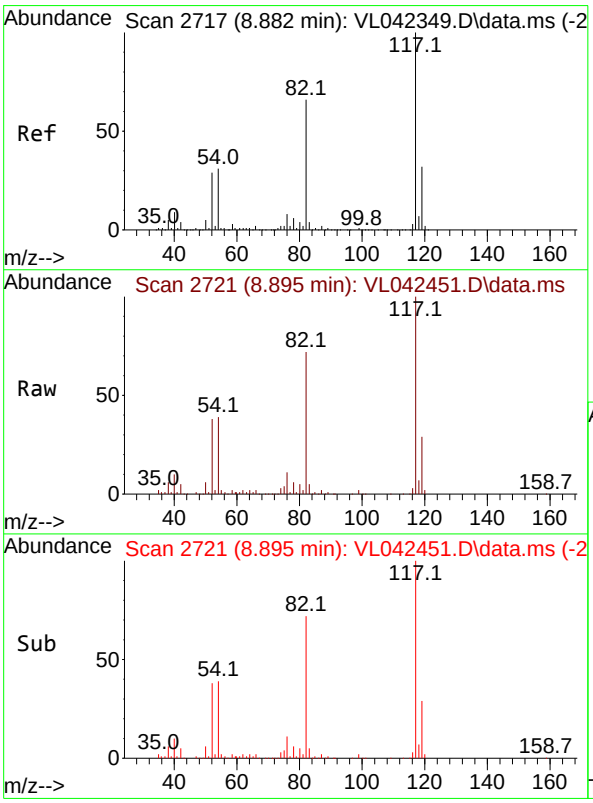
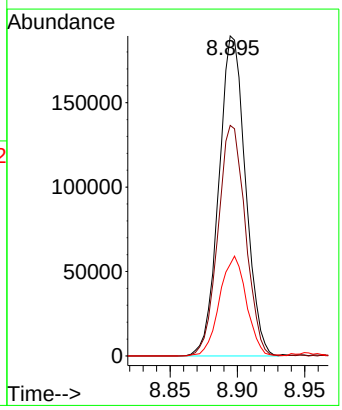
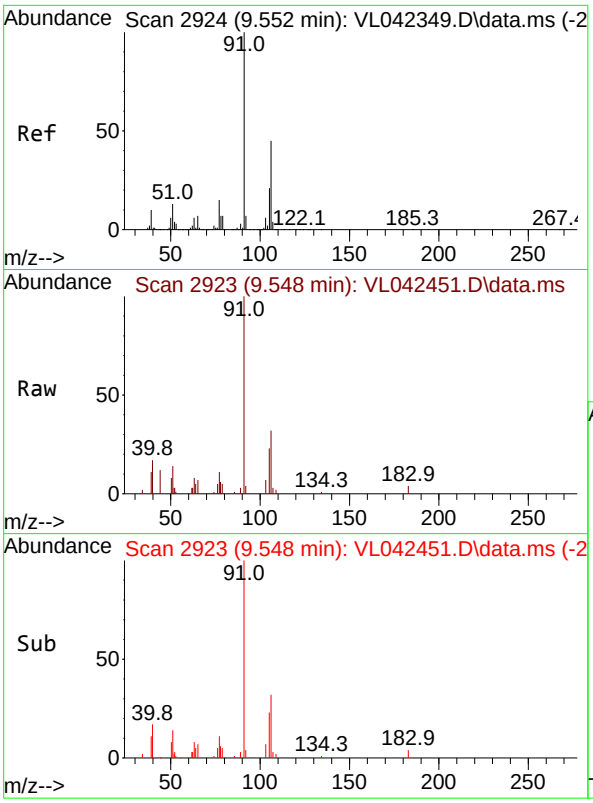


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2721
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion:117 Resp: 260772

Ion	Ratio	Lower	Upper
117	100		
82	74.0	57.8	86.6
119	31.5	25.2	37.8





#59
m/p-Xylene
Concen: 0.184 ppbv m
RT: 9.548 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 91 Resp: 765

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2

Instrument :
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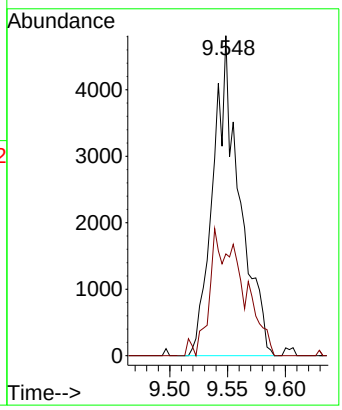
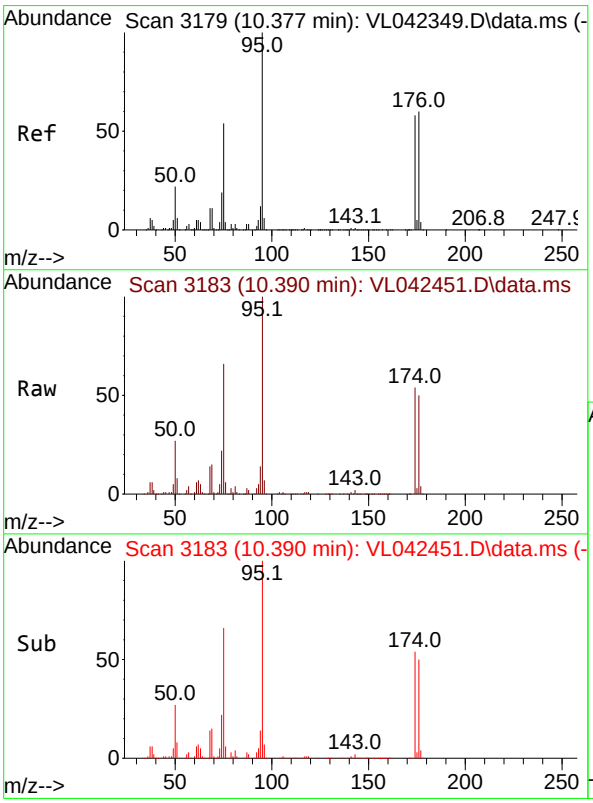
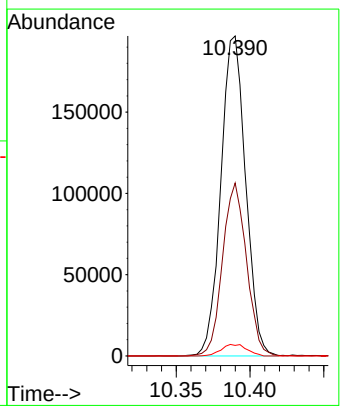




#68
1-Bromo-4-Fluorobenzene
Concen: 10.733 ppbv
RT: 10.390 min Scan# 3183
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 95 Resp: 230005

Ion	Ratio	Lower	Upper
95	100		
174	52.2	48.5	72.7
175	3.8	3.7	5.5



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/24/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-08	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042294.D	1		04/09/25 15:50	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.38	1.88	J	1.04	2.47	ug/m3
64-17-5	Ethanol	34.2	64.4	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	1.10	2.27		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.21	0.62	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.25	1.40	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	17.9	44.0	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	11.6	27.6		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.00	3.47		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	3.30	9.73		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.13	0.82		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.32	1.56	J	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.17	0.54	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/24/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-08	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042294.D	1		04/09/25 15:50	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.94	3.31		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	159000		2.787			
540-36-3	1,4-Difluorobenzene	385000		3.959			
3114-55-4	Chlorobenzene-d5	315000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/24/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-DUP-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-08	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042294.D	1		04/09/25 15:50	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.96		J		1.48	ppbv
115-07-1	Propene	2.40		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:45:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	159184	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	384747	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	314874	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	236151	9.133	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	9013	0.383	ppbv		100
3) Chlorodifluoromethane	1.476	51	22919m	0.955	ppbv		
4) Chloromethane	1.534	50	10945	1.139	ppbv		99
9) Propene	1.489	41	26110m	2.372	ppbv		
11) Trichlorofluoromethane	1.877	101	5632	0.246	ppbv		99
13) Ethanol	1.722	45	35576	34.196	ppbv		82
15) Acetone	1.835	43	257522	11.567	ppbv		96
17) tert-Butyl alcohol	2.046	59	3101m	0.112	ppbv		
19) Isopropyl Alcohol	1.887	45	224606	17.881	ppbv	#	33
20) Methylene Chloride	2.062	84	8683	1.047	ppbv	#	84
26) Hexane	2.829	57	20910	0.937	ppbv	#	31
29) Chloroform	2.848	83	10374	0.318	ppbv		96
34) 2-Butanone	2.560	43	91945	3.296	ppbv		97
35) Carbon Tetrachloride	3.764	117	3816m	0.127	ppbv		
36) Benzene	3.661	78	6378m	0.167	ppbv		
41) Tetrahydrofuran	3.069	42	3356m	0.209	ppbv		

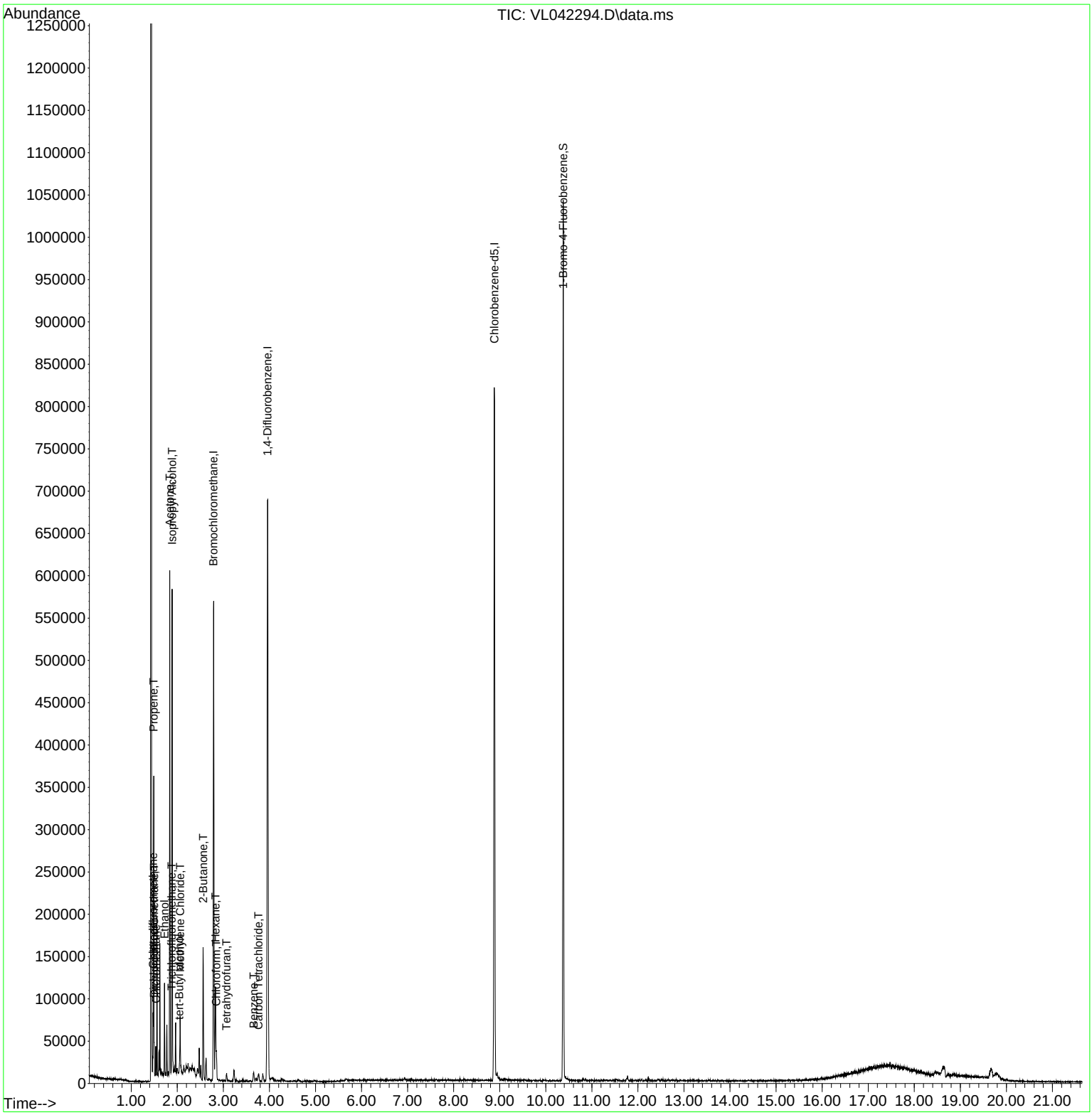
(#) = qualifier out of range (m) = manual integration (+) = signals summed

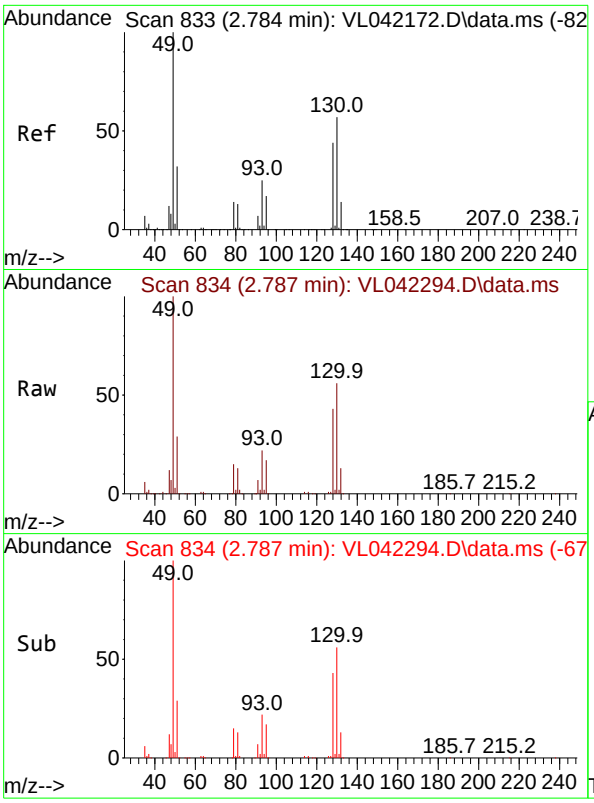
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:45:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

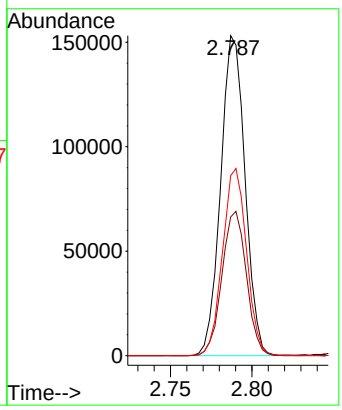




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 49 Resp: 15918

Ion	Ratio	Lower	Upper
49	100		
128	45.2	22.9	68.5
130	57.8	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
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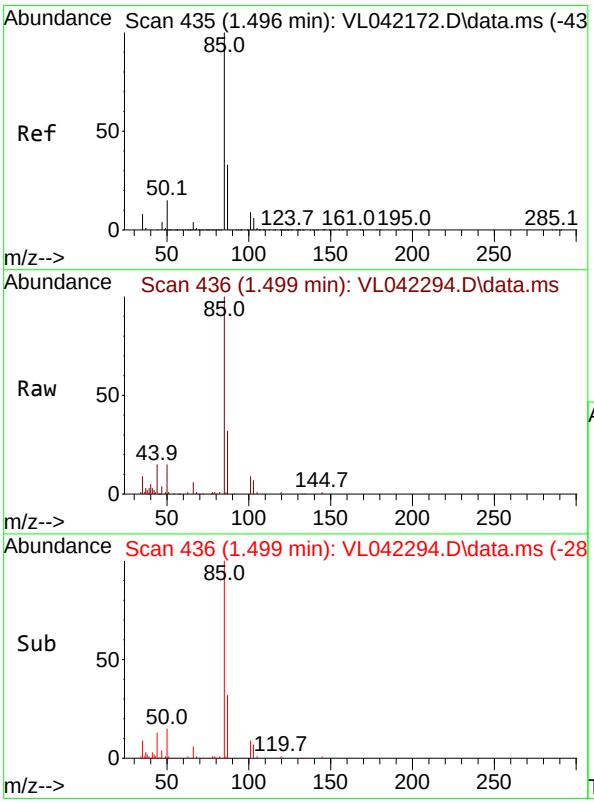
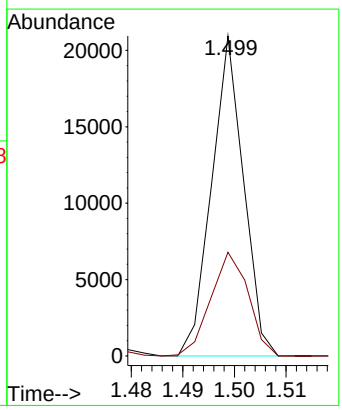
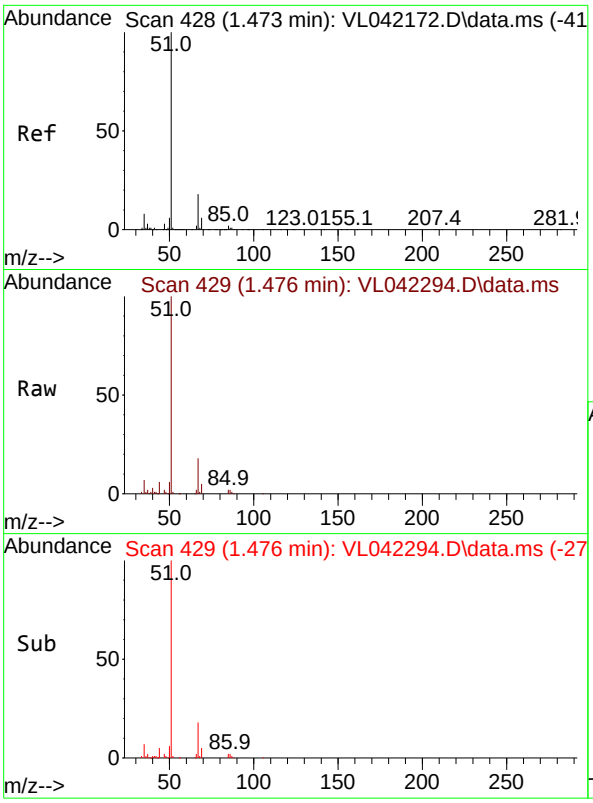


#2
Dichlorodifluoromethane
Concen: 0.383 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 85 Resp: 9013

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1

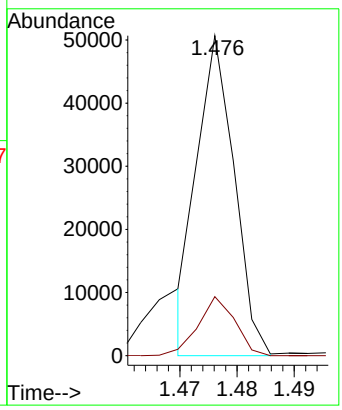




#3
Chlorodifluoromethane
Concen: 0.955 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 51 Resp: 2291

Ion	Ratio	Lower	Upper
51	100		
67	18.4	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
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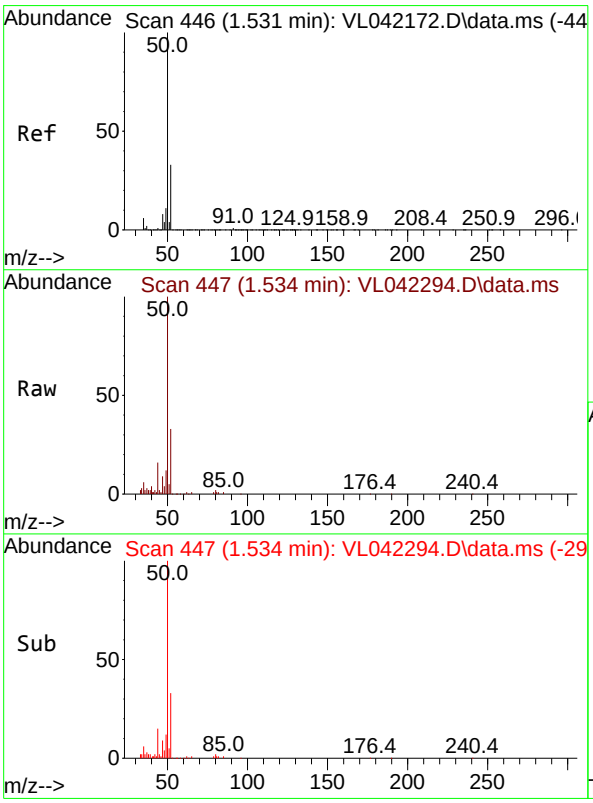
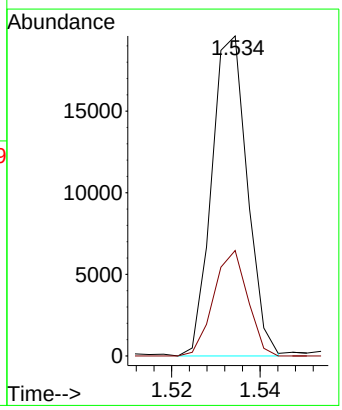
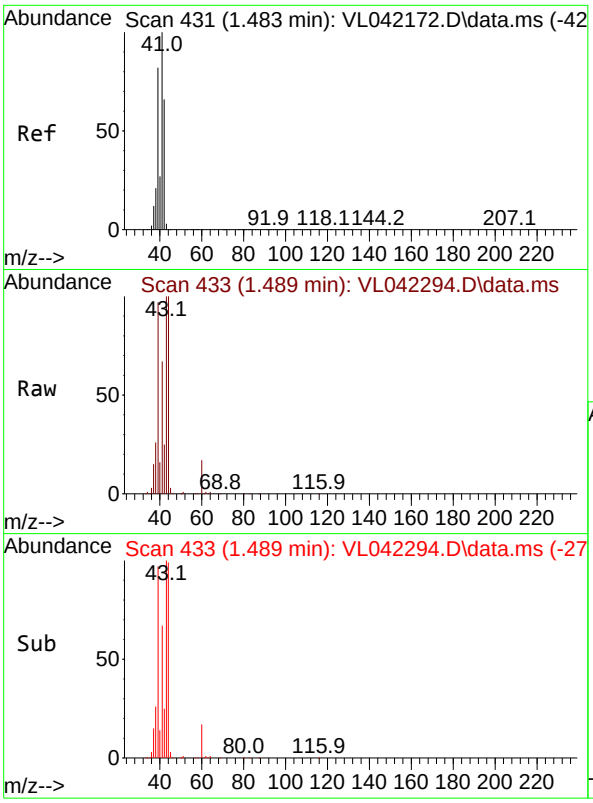


#4
Chloromethane
Concen: 1.139 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 50 Resp: 10945

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1

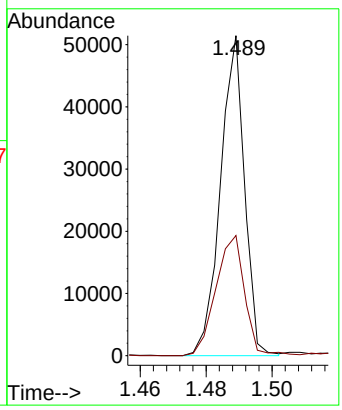




#9
Propene
Concen: 2.372 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 41 Resp: 2611

Ion	Ratio	Lower	Upper
41	100		
42	55.8	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/10/2025
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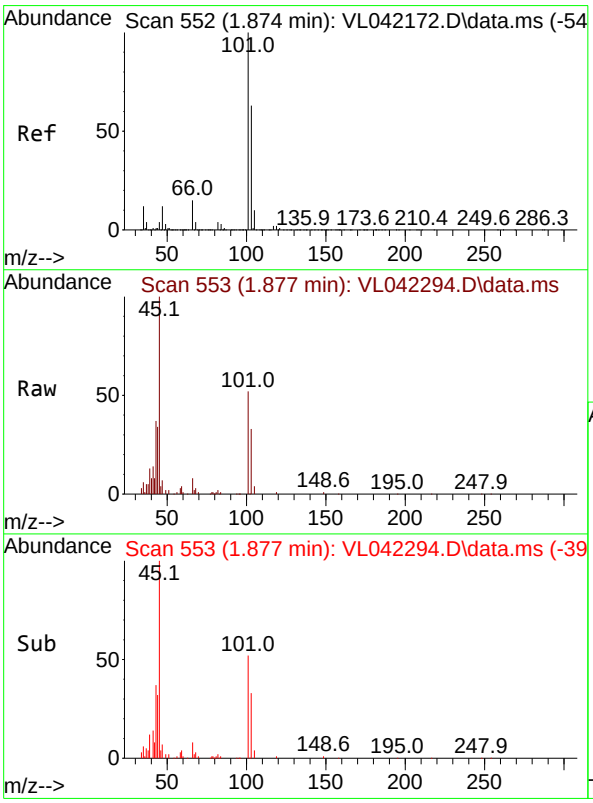
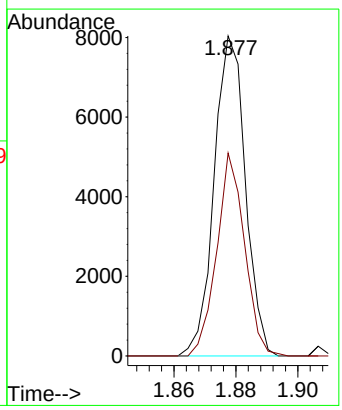
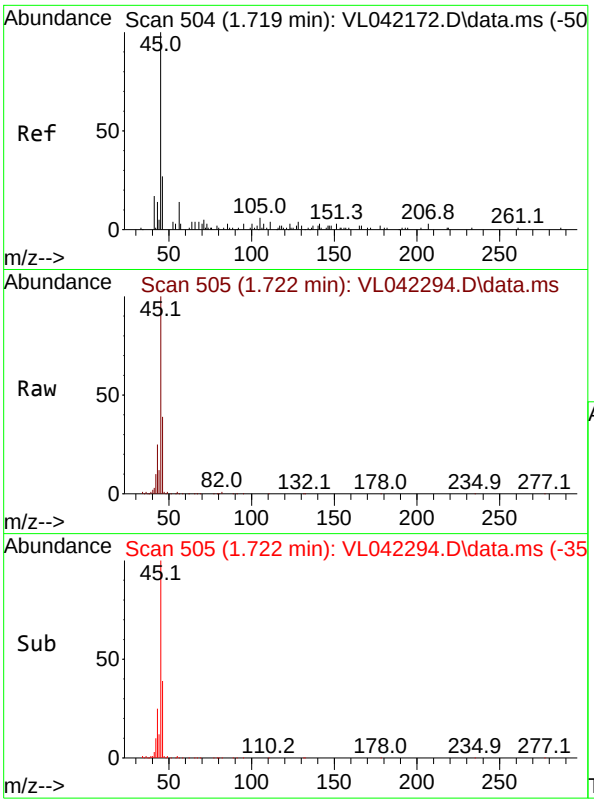


#11
Trichlorofluoromethane
Concen: 0.246 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion:101 Resp: 5632

Ion	Ratio	Lower	Upper
101	100		
103	63.4	50.2	75.2

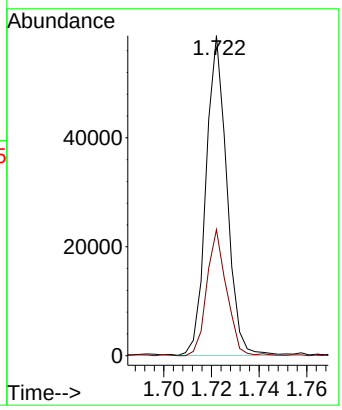




#13
Ethanol
Concen: 34.196 ppbv
RT: 1.722 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 45 Resp: 3557(

Ion	Ratio	Lower	Upper
45	100		
46	38.1	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/10/2025
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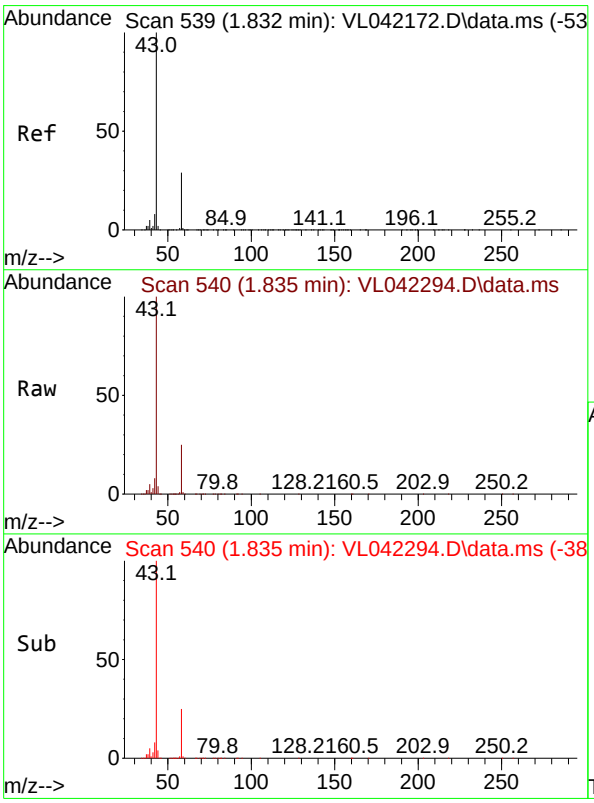
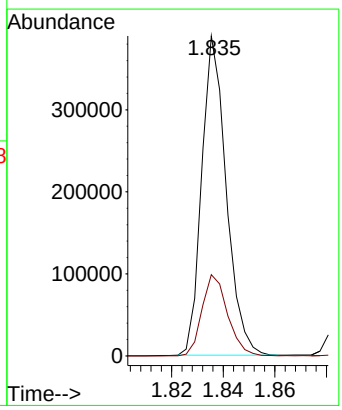
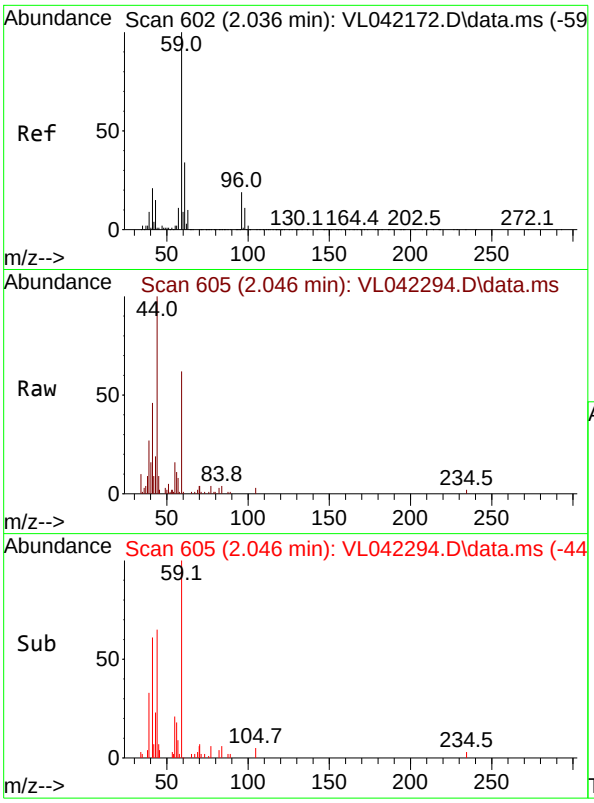


#15
Acetone
Concen: 11.567 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 43 Resp: 257522

Ion	Ratio	Lower	Upper
43	100		
58	26.6	23.2	34.8





#17
tert-Butyl alcohol
Concen: 0.112 ppbv m
RT: 2.046 min Scan# 6
Delta R.T. 0.009 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 59 Resp: 310

Ion	Ratio	Lower	Upper
59	100		
57	34.5	8.9	13.3#

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
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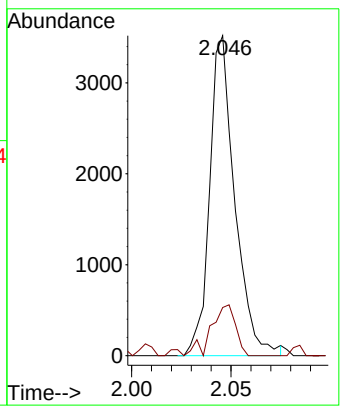
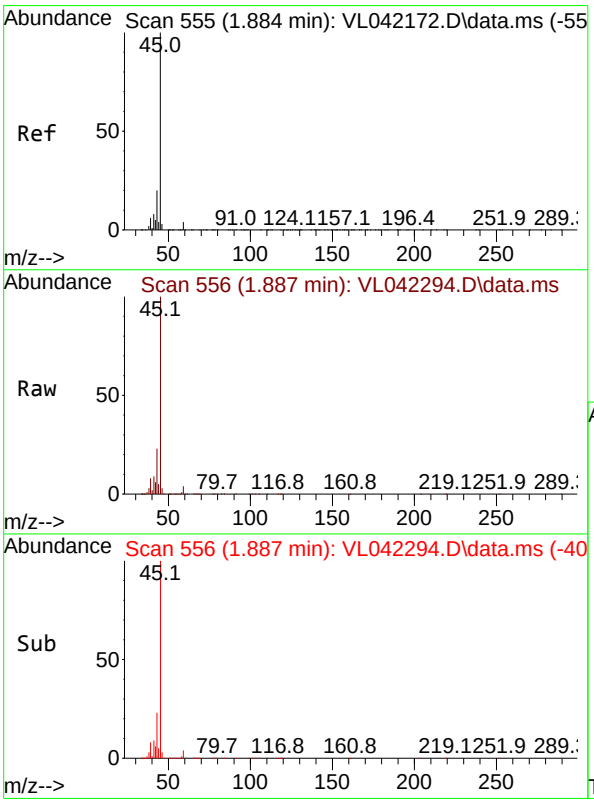
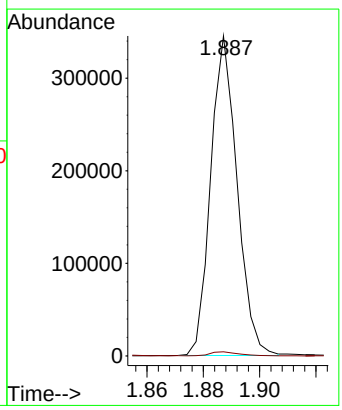


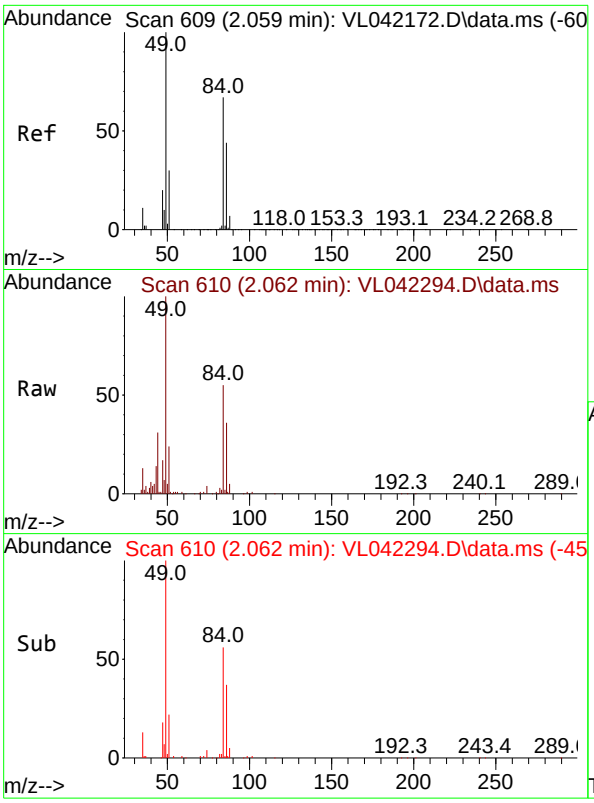


#19
Isopropyl Alcohol
Concen: 17.881 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 45 Resp: 224606

Ion	Ratio	Lower	Upper
45	100		
58	1.5	36.9	55.3#

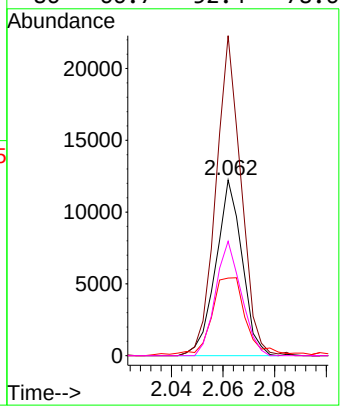




#20
Methylene Chloride
Concen: 1.047 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 84 Resp: 868

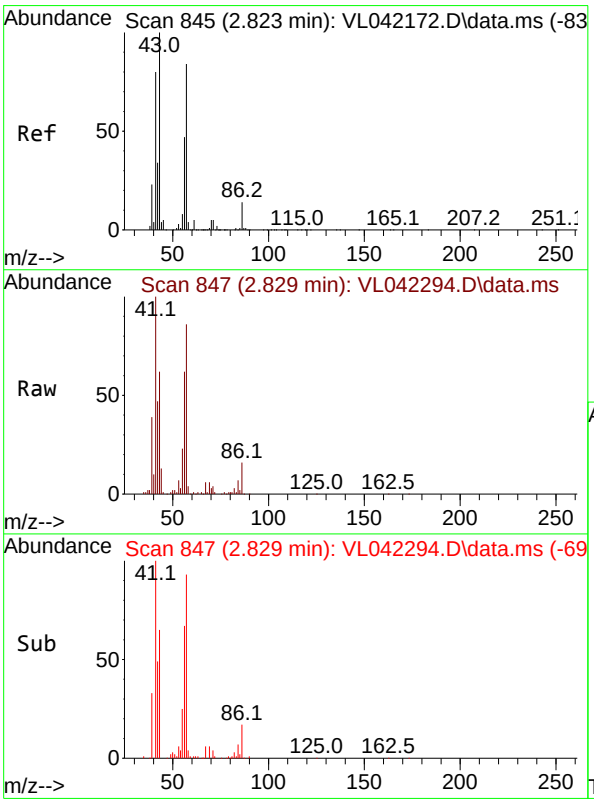
Ion	Ratio	Lower	Upper
84	100		
49	182.2	120.2	180.4#
51	43.8	37.4	56.0
86	66.7	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
APPROVED

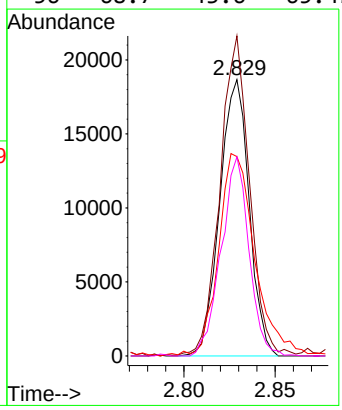
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

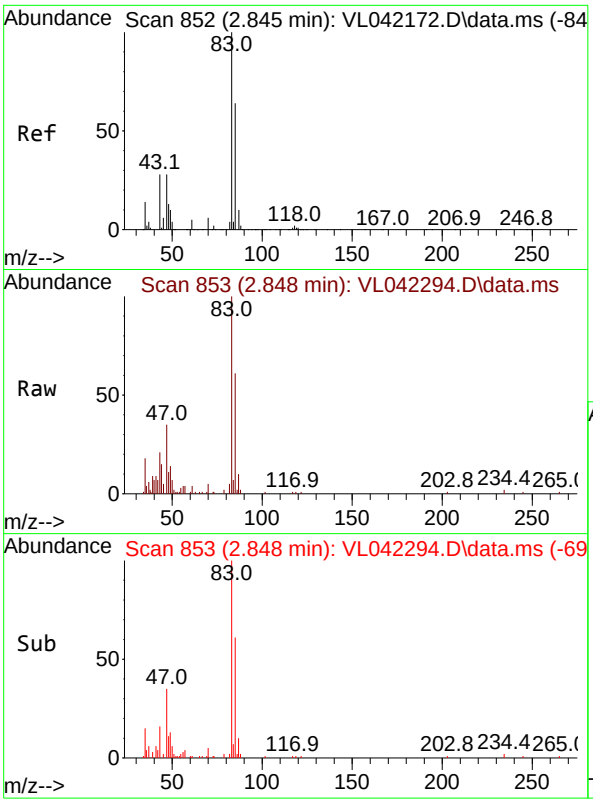


#26
Hexane
Concen: 0.937 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 57 Resp: 20910

Ion	Ratio	Lower	Upper
57	100		
41	120.6	76.6	114.8#
43	88.4	207.8	311.8#
56	68.7	43.6	65.4#





#29
Chloroform
Concen: 0.318 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

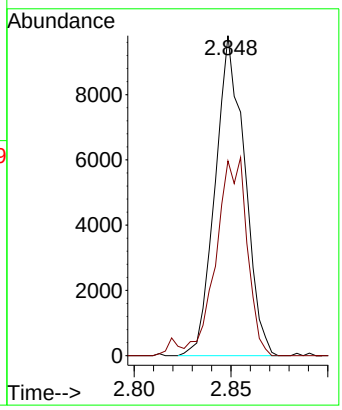
Tgt Ion: 83 Resp: 1037

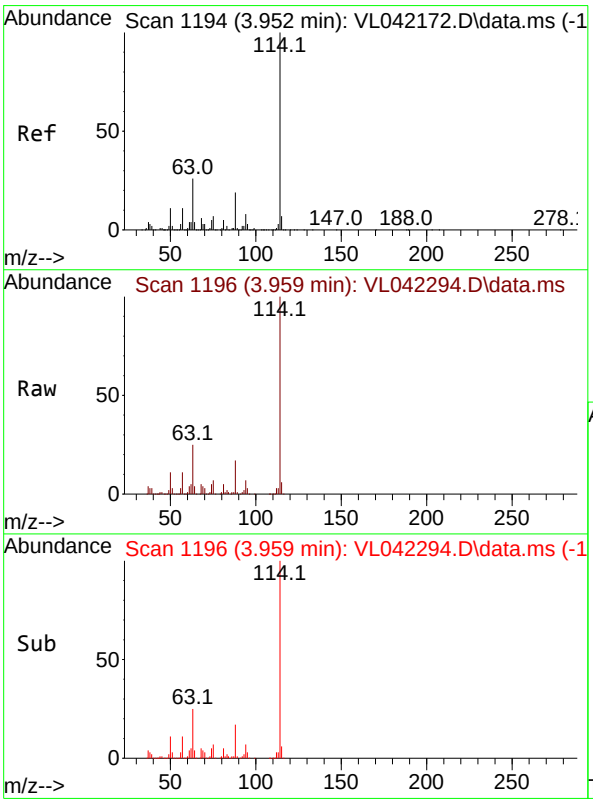
Ion	Ratio	Lower	Upper
83	100		
85	60.8	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

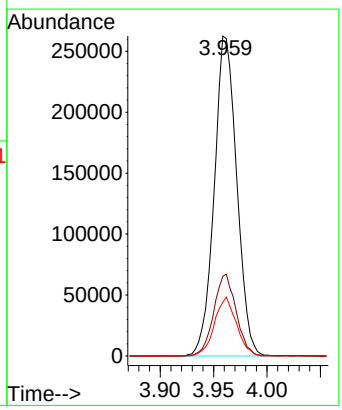


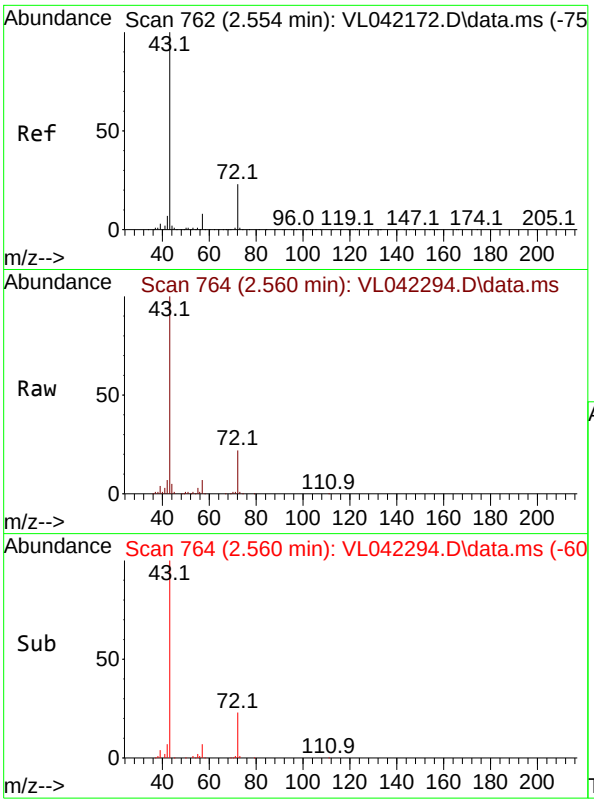


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion:114 Resp: 384747

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	18.0	15.0	22.4





#34
2-Butanone
Concen: 3.296 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

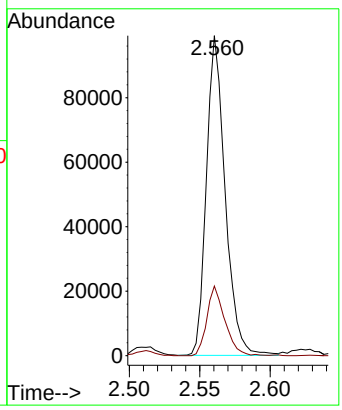
Tgt Ion: 43 Resp: 9194

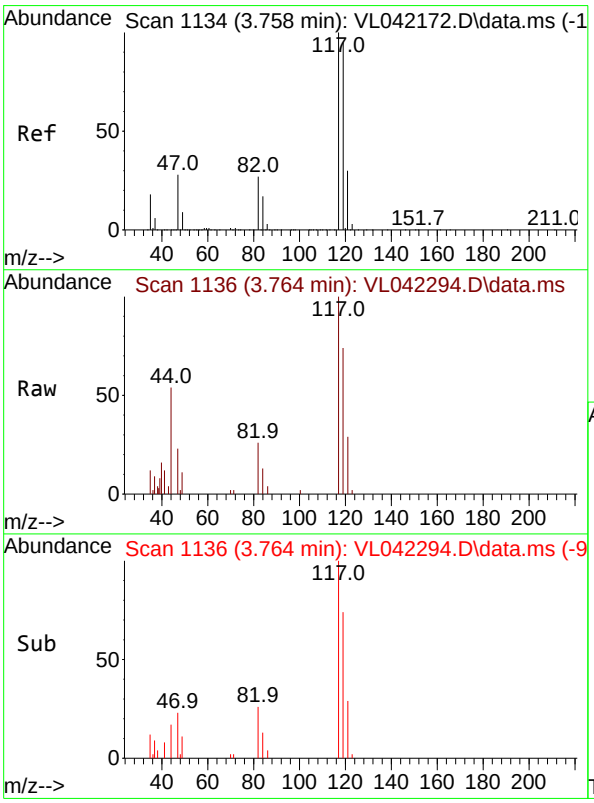
Ion	Ratio	Lower	Upper
43	100		
72	21.0	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

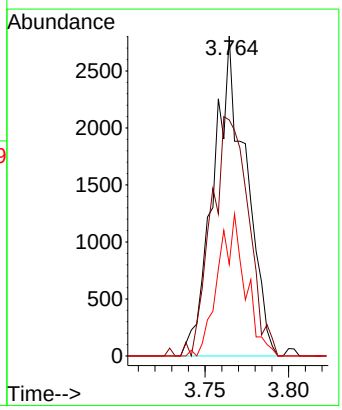


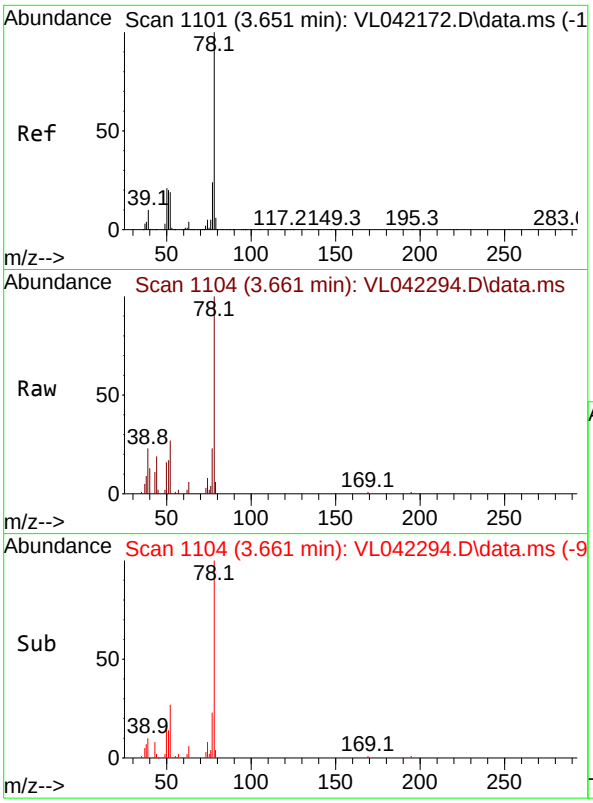


#35
Carbon Tetrachloride
Concen: 0.127 ppbv m
RT: 3.764 min Scan# 1136
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion:117 Resp: 3816

Ion	Ratio	Lower	Upper
117	100		
119	73.7	76.2	114.2#
121	28.6	24.2	36.4

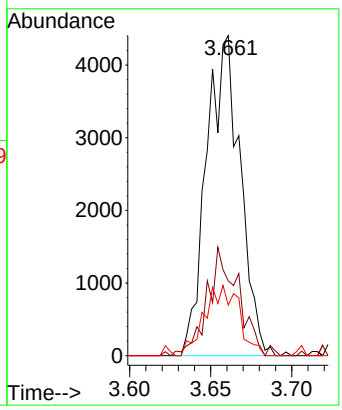




#36
Benzene
Concen: 0.167 ppbv m
RT: 3.661 min Scan# 1
Delta R.T. 0.009 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 78 Resp: 637

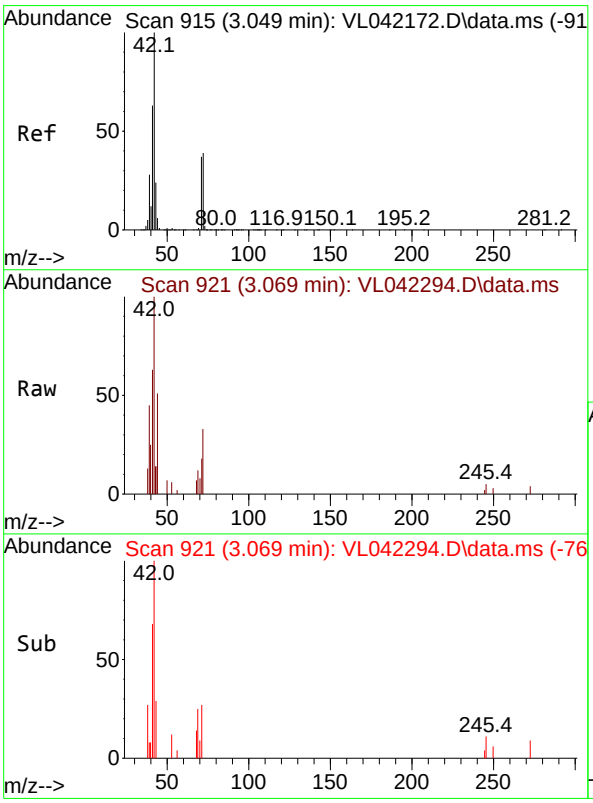
Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	15.8	16.6	24.8#



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
APPROVED

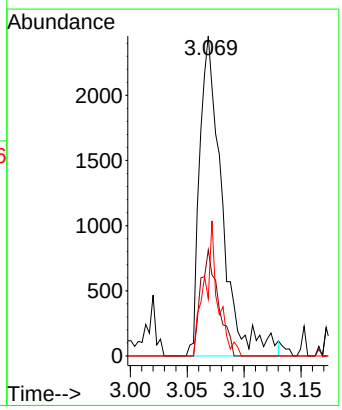
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

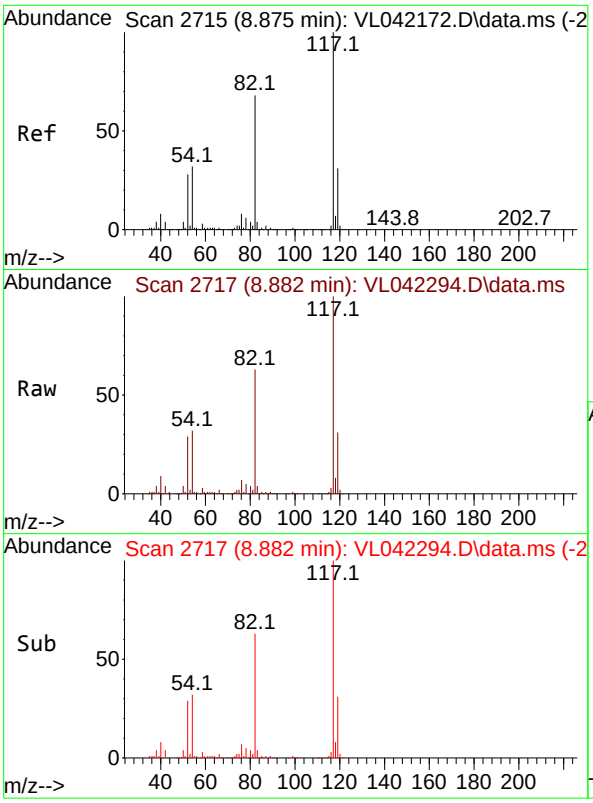


#41
Tetrahydrofuran
Concen: 0.209 ppbv m
RT: 3.069 min Scan# 921
Delta R.T. 0.019 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 42 Resp: 3356

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	0.0	30.2	45.4#

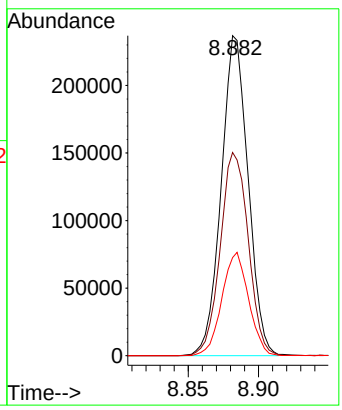




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion:117 Resp: 31487

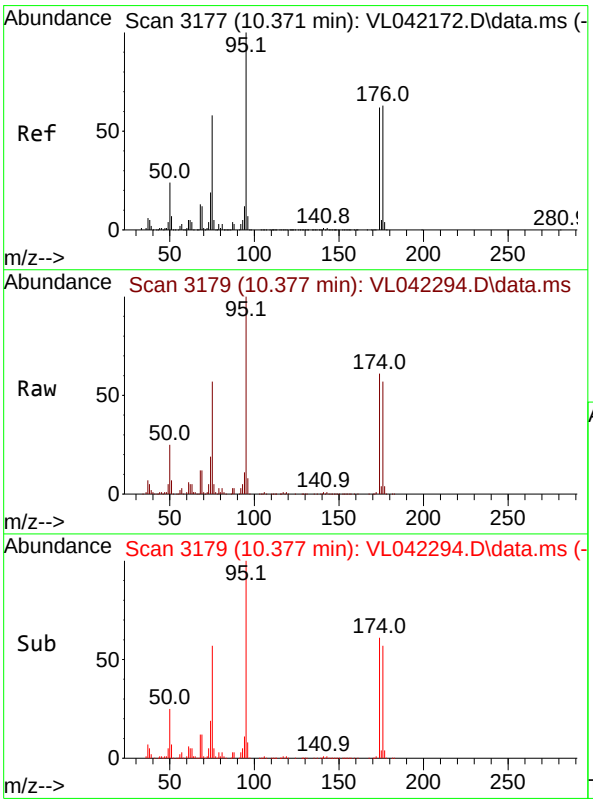
Ion	Ratio	Lower	Upper
117	100		
82	66.2	55.8	83.6
119	32.2	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Manual Integrations
APPROVED

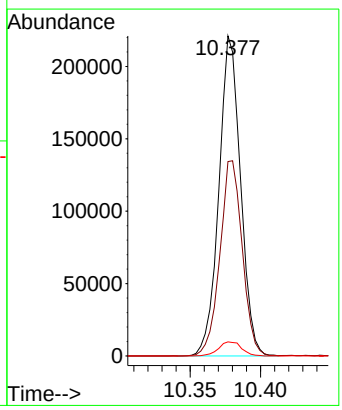
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.133 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 95 Resp: 236151

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

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

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

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

Signal : TIC: VL042294.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	421	rBV	4093843	4418420	100.00%	44.859%
2	1.489	430	433	435	rVB	316272	133654	3.02%	1.357%
3	1.560	451	455	458	rBV2	185941	103828	2.35%	1.054%
4	1.622	470	474	478	rVB	155150	79236	1.79%	0.804%
5	1.722	500	505	511	rVB	108861	65226	1.48%	0.662%
6	1.835	536	540	548	rBV	594224	443224	10.03%	4.500%
7	1.887	548	556	567	rBV	572012	397343	8.99%	4.034%
8	2.062	599	610	614	rBV4	67860	62620	1.42%	0.636%
9	2.560	759	764	773	rBV	156399	144584	3.27%	1.468%
10	2.790	823	835	841	rBV	566438	593553	13.43%	6.026%
11	2.829	841	847	852	rBV	97408	108402	2.45%	1.101%
12	3.962	1183	1197	1212	rBV	687429	1034469	23.41%	10.503%
13	8.882	2705	2717	2729	rBV	819517	1132351	25.63%	11.496%
14	10.377	3169	3179	3192	rBV	1040232	1132652	25.63%	11.500%

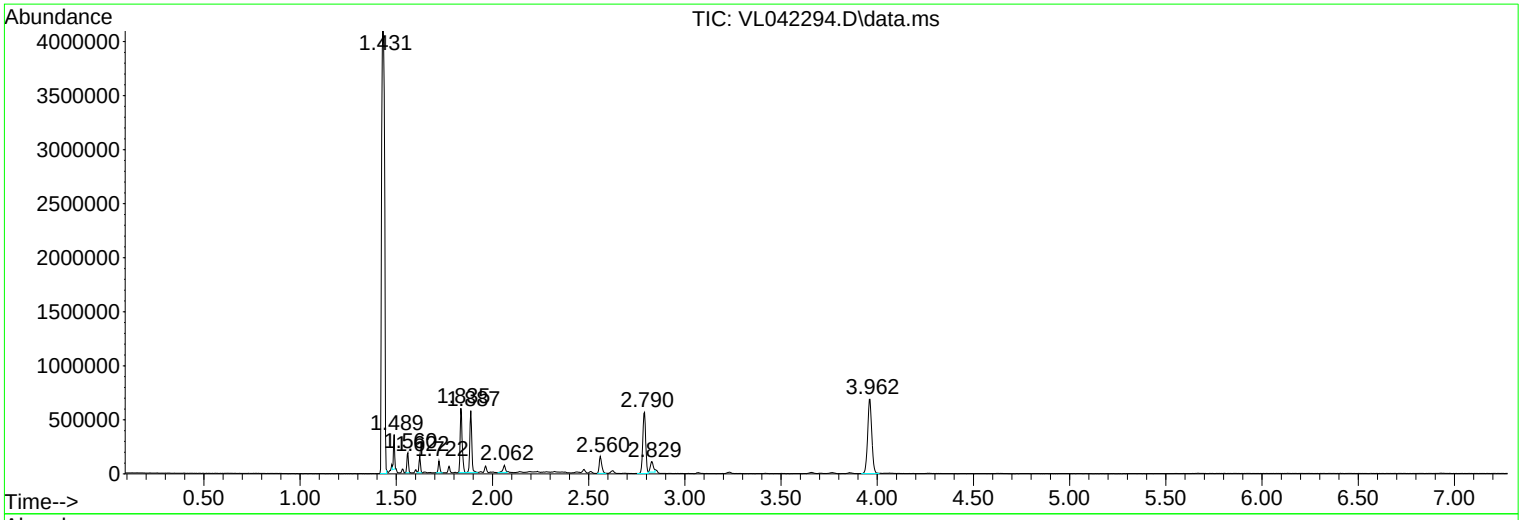
Sum of corrected areas: 9849562

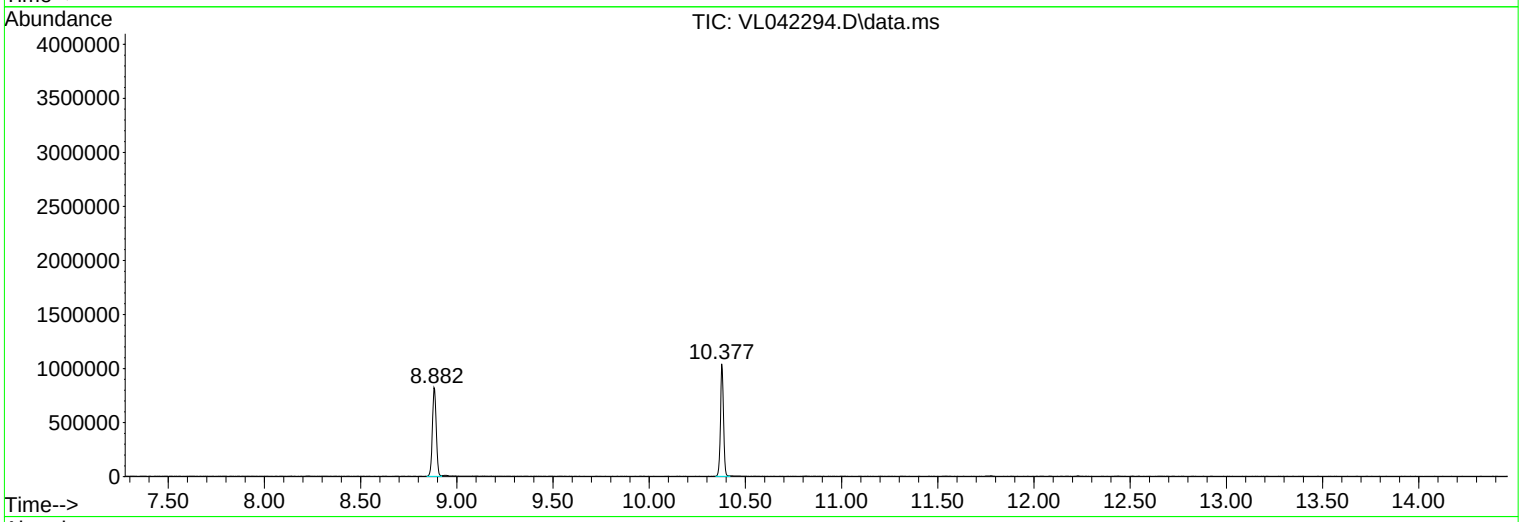
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

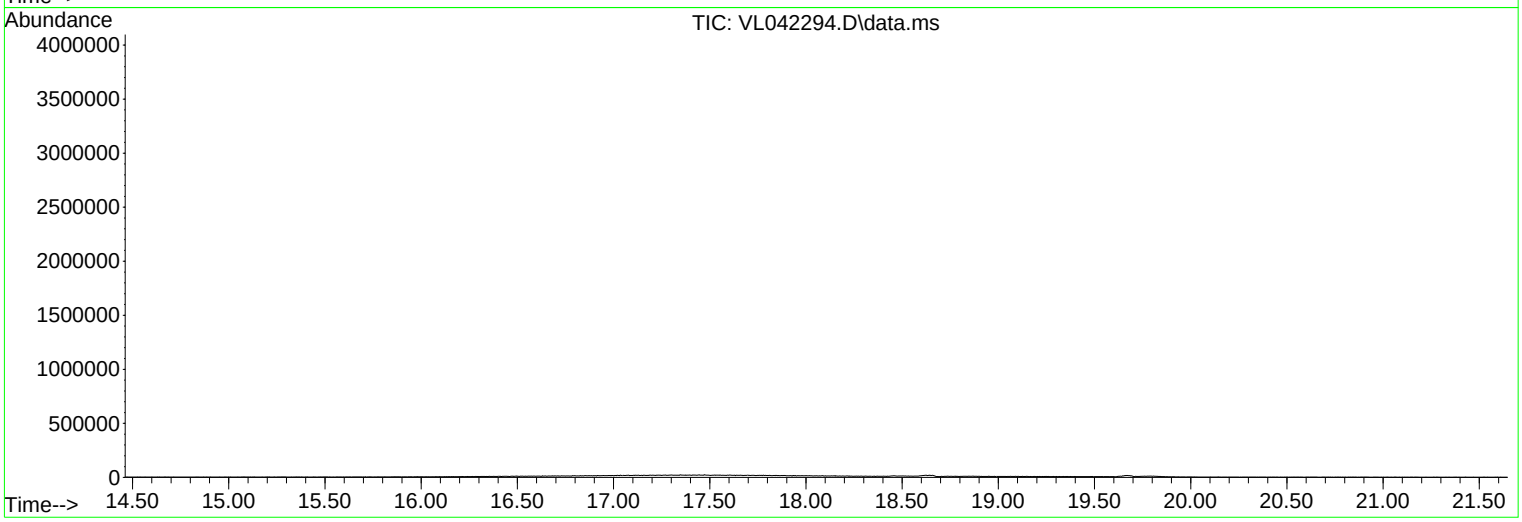
Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

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

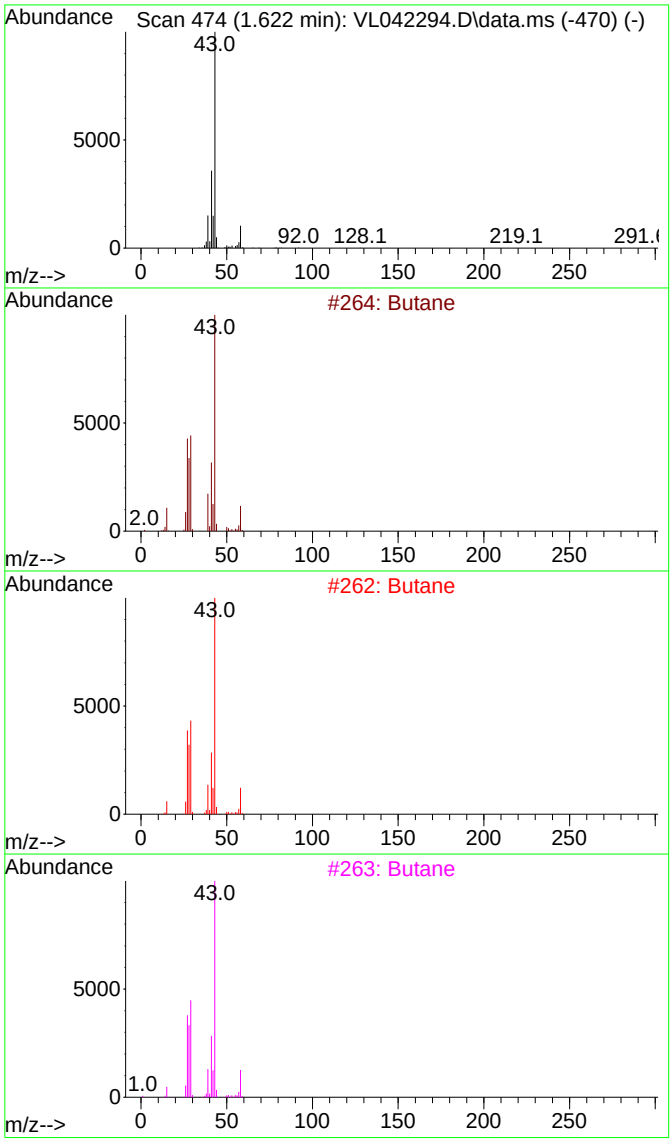
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

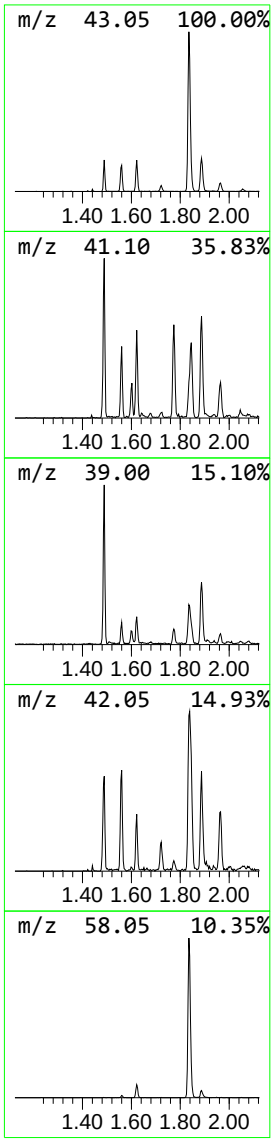
****

Peak Number 1 Butane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.33 ppbv	79236	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	64
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	64
5	Isobutane	58	C4H10	000075-28-5	9





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.3	ppbv	79236	1	2.787	593553	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-09	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042295.D	1		04/09/25 16:23	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.42	2.08	J	1.04	2.47	ug/m3
64-17-5	Ethanol	25.6	48.2	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.58	1.20		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.12	0.49	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	21.2	52.1	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	6.40	15.2		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.20	4.17		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	3.20	9.44		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.090	0.57		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.30	0.96	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.39	1.47	J	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-09	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042295.D	1		04/09/25 16:23	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.20	0.92	J	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.90	6.70		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.70			70 (65) - 130 (135)	97%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	157000		2.787			
540-36-3	1,4-Difluorobenzene	386000		3.959			
3114-55-4	Chlorobenzene-d5	327000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-09	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042295.D	1		04/09/25 16:23	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.83		J		1.48	ppbv
115-07-1	Propene	4.50		J		1.49	ppbv
000106-97-8	Butane	2.10		J		1.62	ppbv
000100-52-7	Benzaldehyde	2.30		J		10.8	ppbv
000080-56-8	.alpha.-Pinene	1.10		J		10.9	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:46:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	157163	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	385586	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	326865	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	260627	9.709	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	9767	0.421	ppbv		99
3) Chlorodifluoromethane	1.476	51	19628m	0.828	ppbv		
4) Chloromethane	1.531	50	5476	0.577	ppbv		100
9) Propene	1.489	41	49325m	4.540	ppbv		
10) Heptane	4.988	43	3418m	0.118	ppbv		
11) Trichlorofluoromethane	1.877	101	5036	0.223	ppbv		91
13) Ethanol	1.722	45	26305	25.610	ppbv		83
15) Acetone	1.835	43	140811	6.406	ppbv		91
19) Isopropyl Alcohol	1.887	45	262397	21.158	ppbv	#	33
20) Methylene Chloride	2.062	84	9600	1.173	ppbv		93
26) Hexane	2.826	57	42387	1.924	ppbv	#	35
34) 2-Butanone	2.560	43	89072	3.186	ppbv		97
35) Carbon Tetrachloride	3.758	117	2602m	0.086	ppbv		
36) Benzene	3.654	78	11286	0.295	ppbv		92
53) Toluene	6.933	91	17473	0.386	ppbv		97
57) Chlorobenzene	8.924	112	6308	0.203	ppbv	#	76
59) m/p-Xylene	9.529	91	9059m	0.195	ppbv		
60) o-Xylene	9.963	91	4768	0.103	ppbv		97

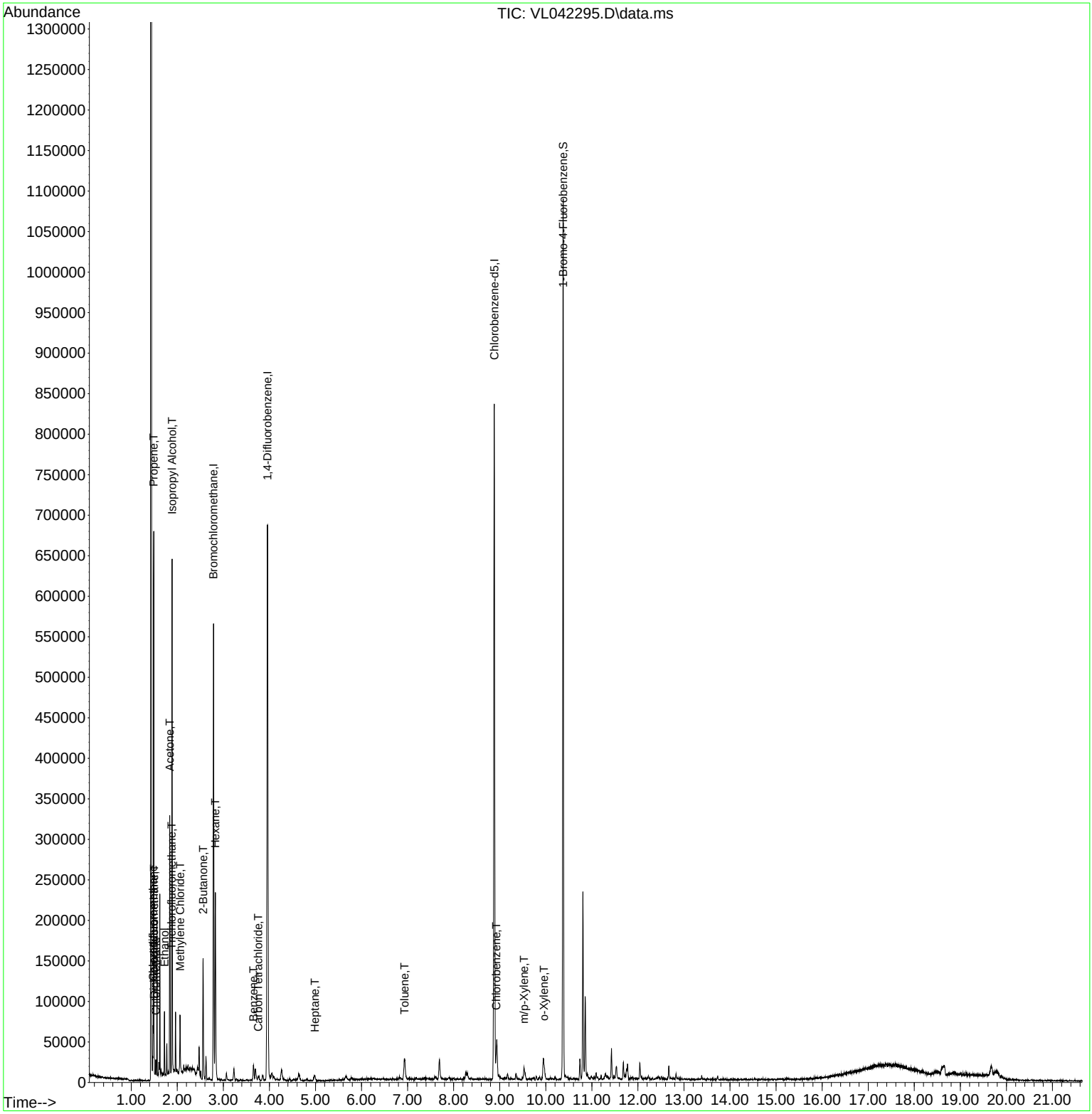
(#) = qualifier out of range (m) = manual integration (+) = signals summed

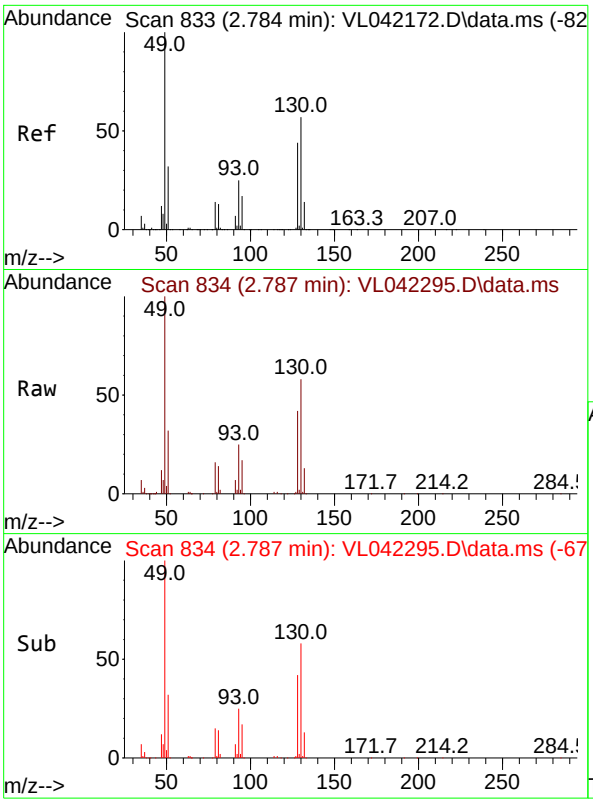
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:46:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

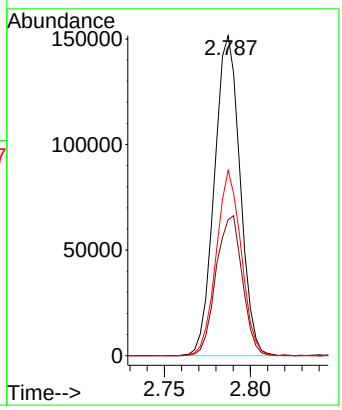




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 49 Resp: 15716

Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.9	68.5
130	56.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
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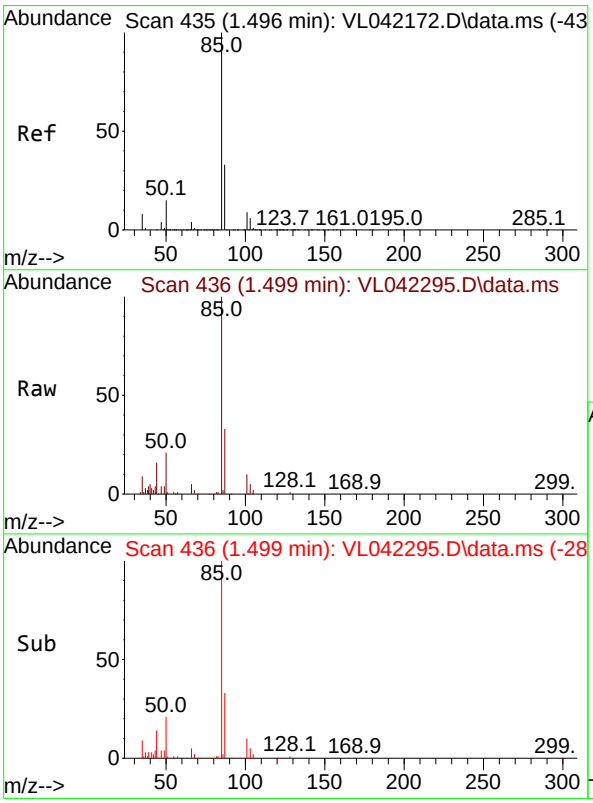
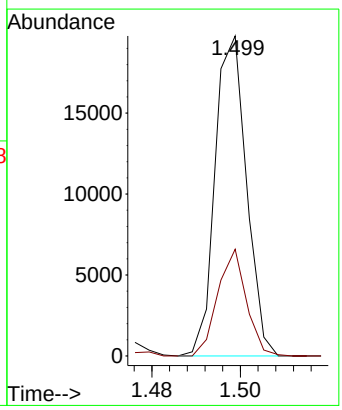
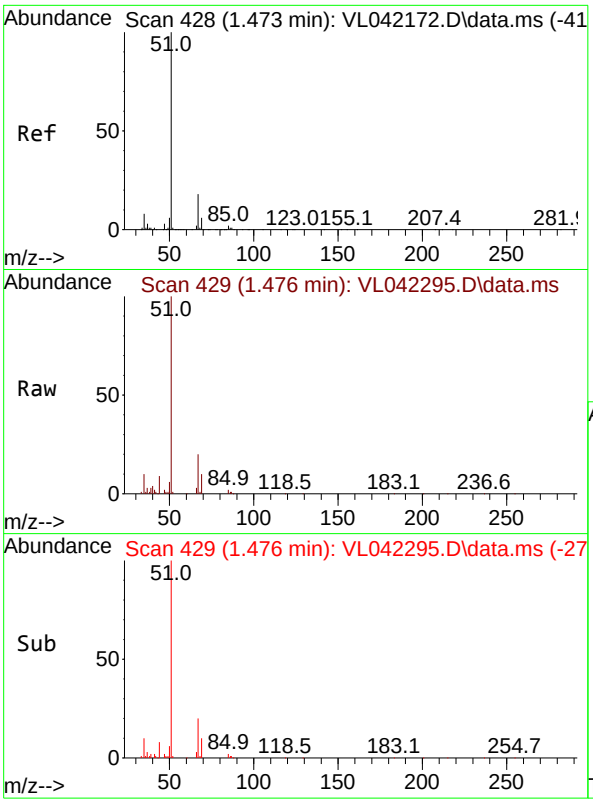


#2
Dichlorodifluoromethane
Concen: 0.421 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 85 Resp: 9767

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1

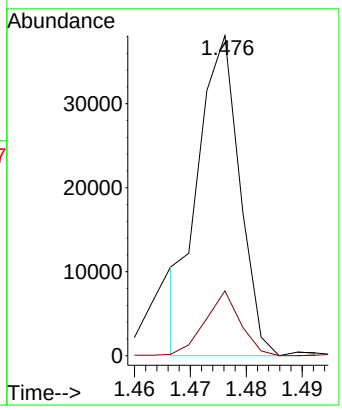




#3
Chlorodifluoromethane
Concen: 0.828 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 51 Resp: 1962

Ion	Ratio	Lower	Upper
51	100		
67	17.6	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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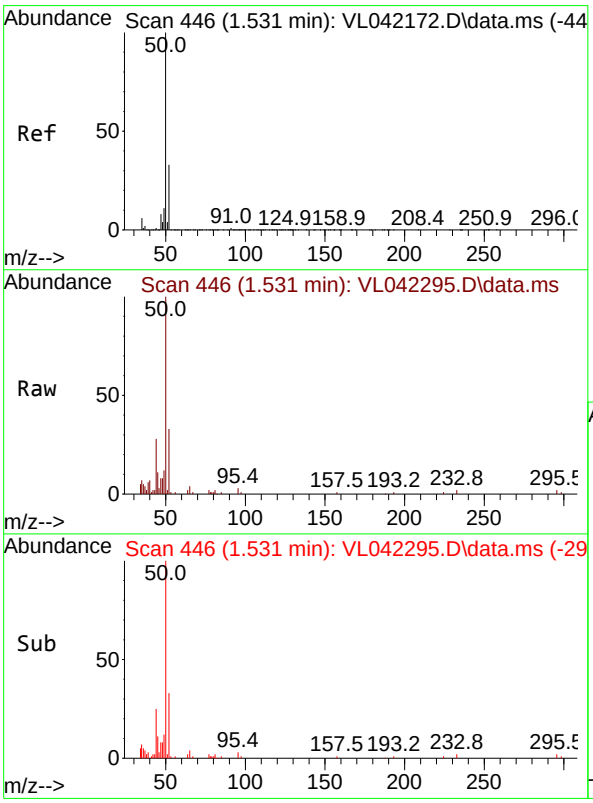
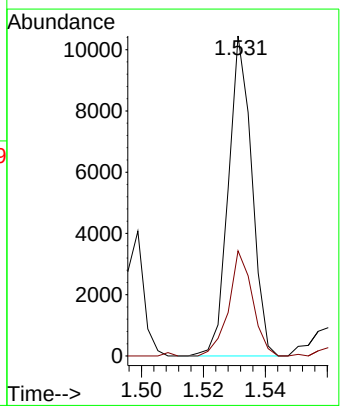
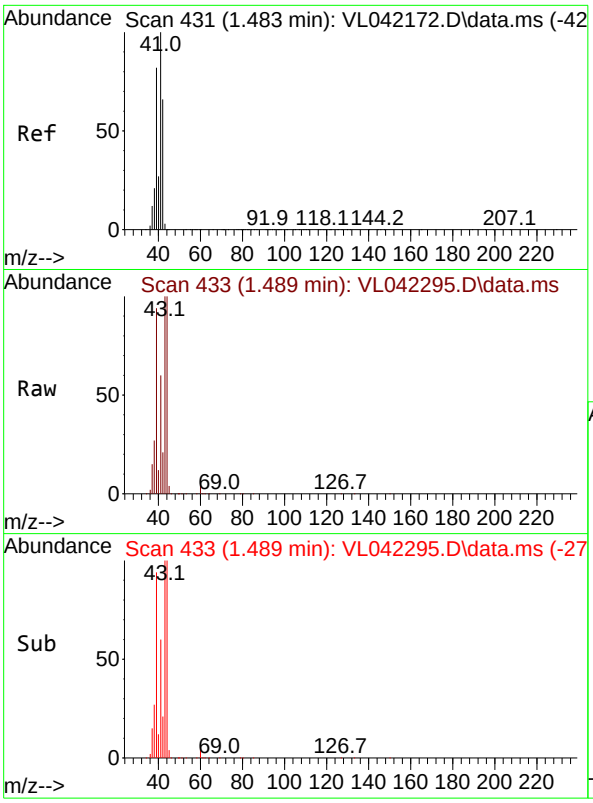


#4
Chloromethane
Concen: 0.577 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 50 Resp: 5476

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1

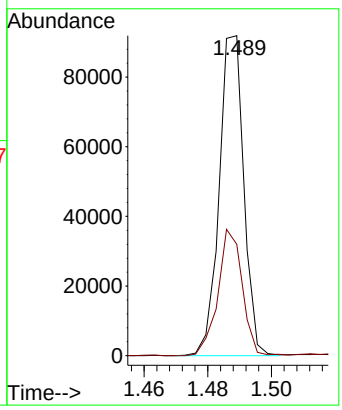




#9
Propene
Concen: 4.540 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 41 Resp: 4932

Ion	Ratio	Lower	Upper
41	100		
42	30.3	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
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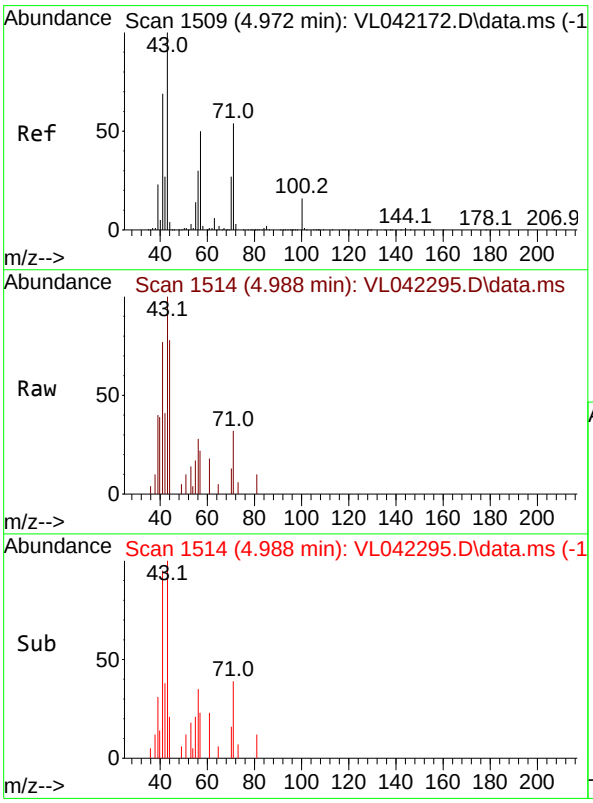
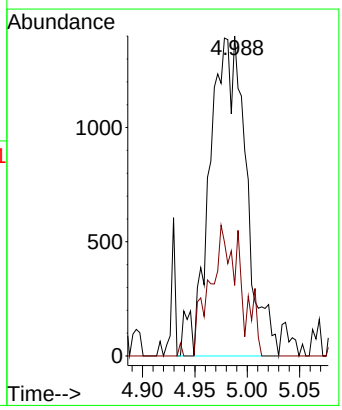
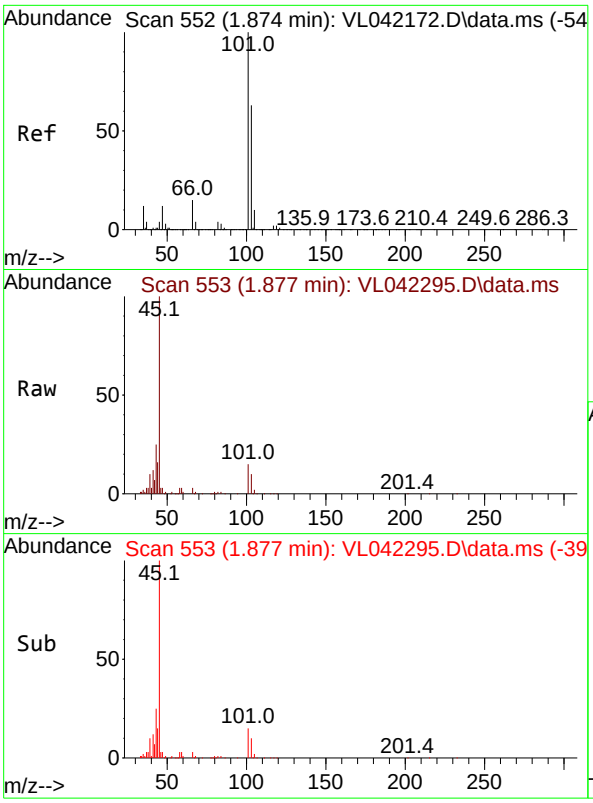


#10
Heptane
Concen: 0.118 ppbv m
RT: 4.988 min Scan# 1514
Delta R.T. 0.016 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 43 Resp: 3418

Ion	Ratio	Lower	Upper
43	100		
57	34.3	39.4	59.2#





#11
Trichlorofluoromethane
Concen: 0.223 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:101 Resp: 503

Ion	Ratio	Lower	Upper
101	100		
103	69.5	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
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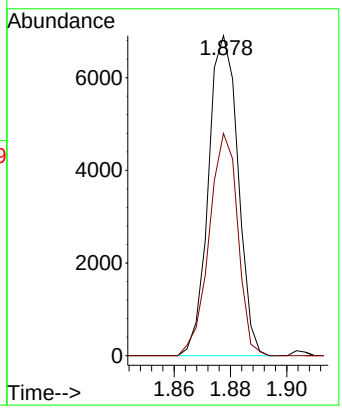
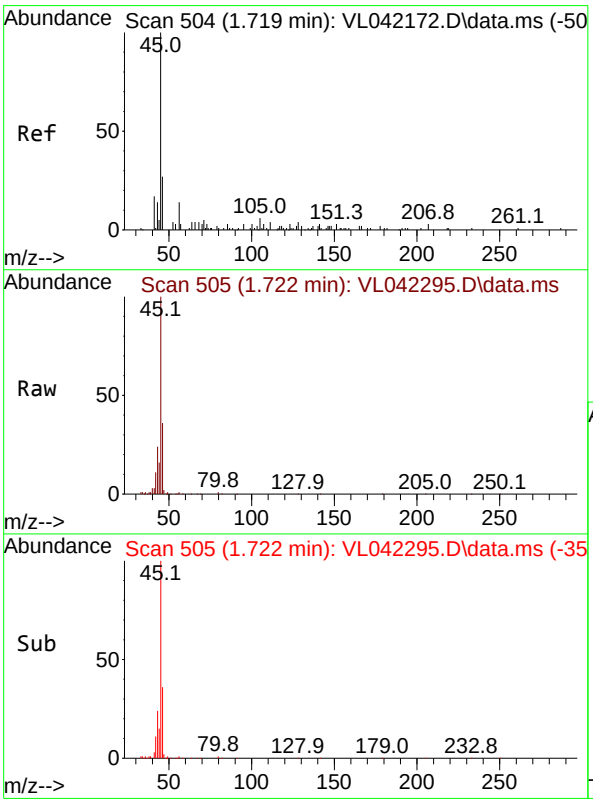
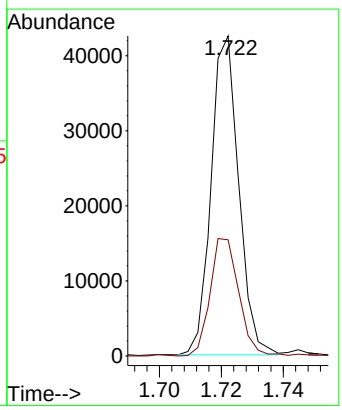


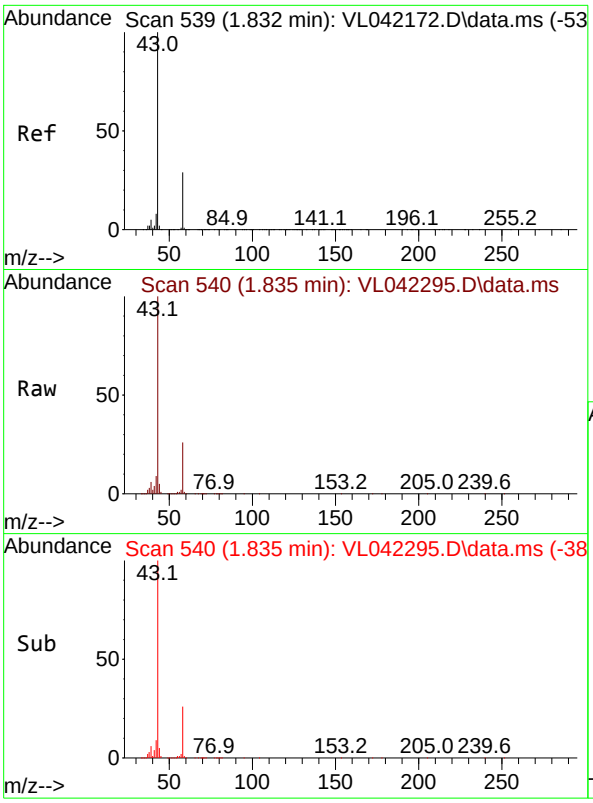


#13
Ethanol
Concen: 25.610 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 45 Resp: 26305

Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8

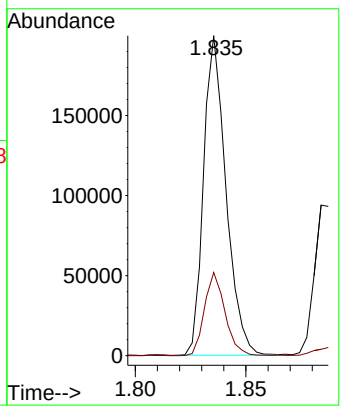




#15
Acetone
Concen: 6.406 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 43 Resp: 14081

Ion	Ratio	Lower	Upper
43	100		
58	24.0	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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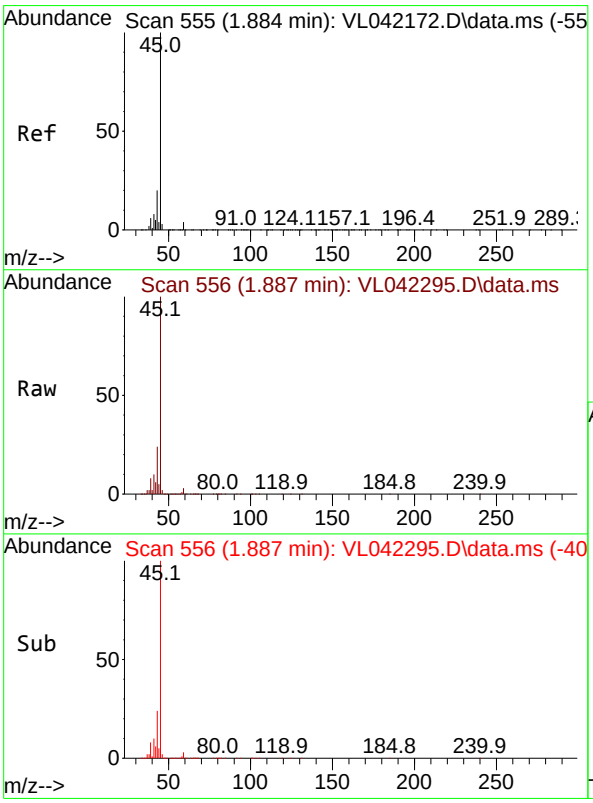
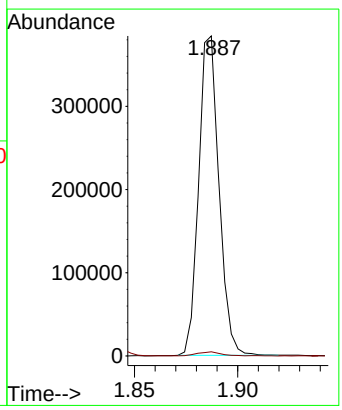
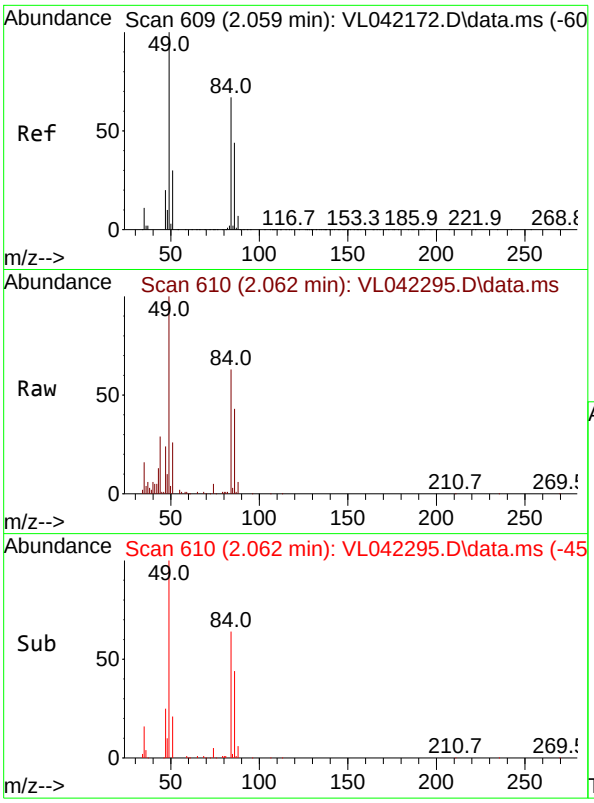


#19
Isopropyl Alcohol
Concen: 21.158 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 45 Resp: 262397

Ion	Ratio	Lower	Upper
45	100		
58	1.6	36.9	55.3#

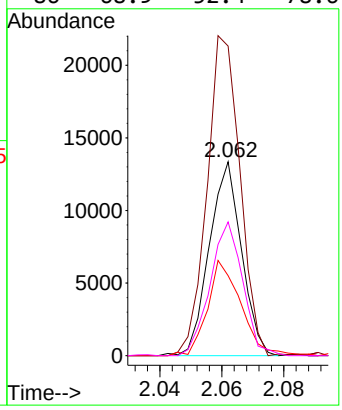




#20
Methylene Chloride
Concen: 1.173 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 84 Resp: 960

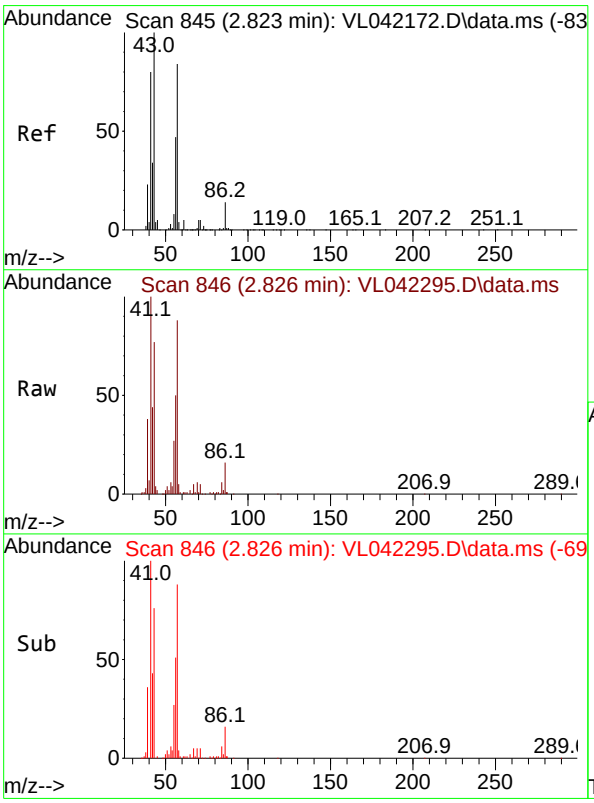
Ion	Ratio	Lower	Upper
84	100		
49	158.7	120.2	180.4
51	39.5	37.4	56.0
86	68.9	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
APPROVED

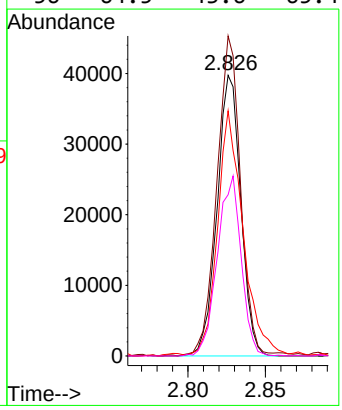
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

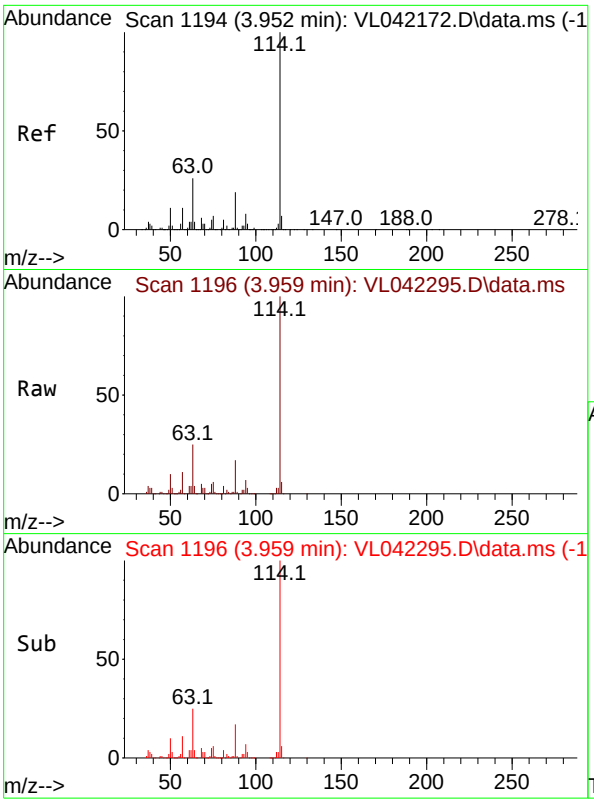


#26
Hexane
Concen: 1.924 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 57 Resp: 42387

Ion	Ratio	Lower	Upper
57	100		
41	114.5	76.6	114.8
43	95.4	207.8	311.8#
56	64.5	43.6	65.4





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:114 Resp: 38558

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.6	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
APPROVED

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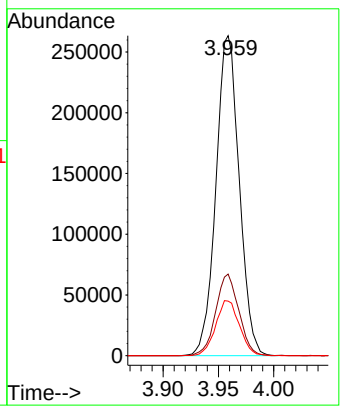
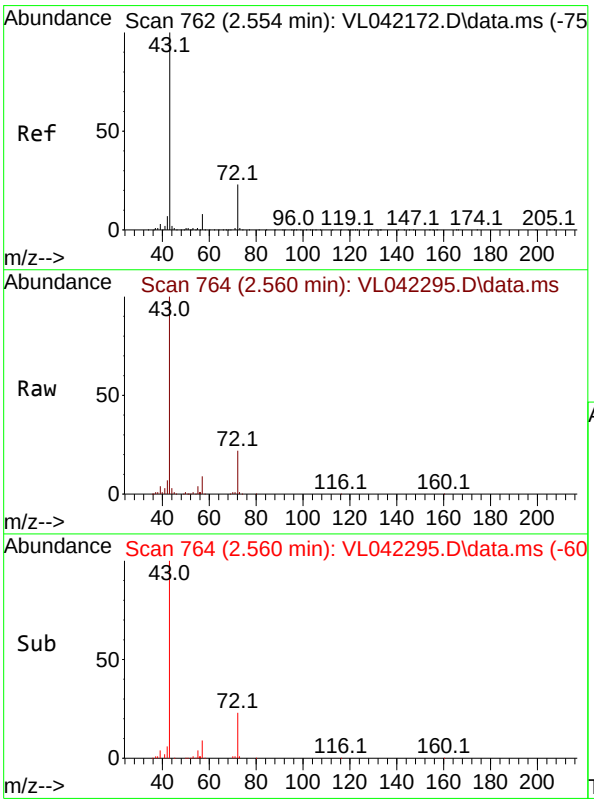
Supervised By :Mahesh Dadoda 04/10/2025

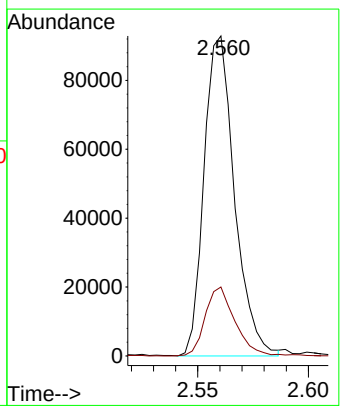


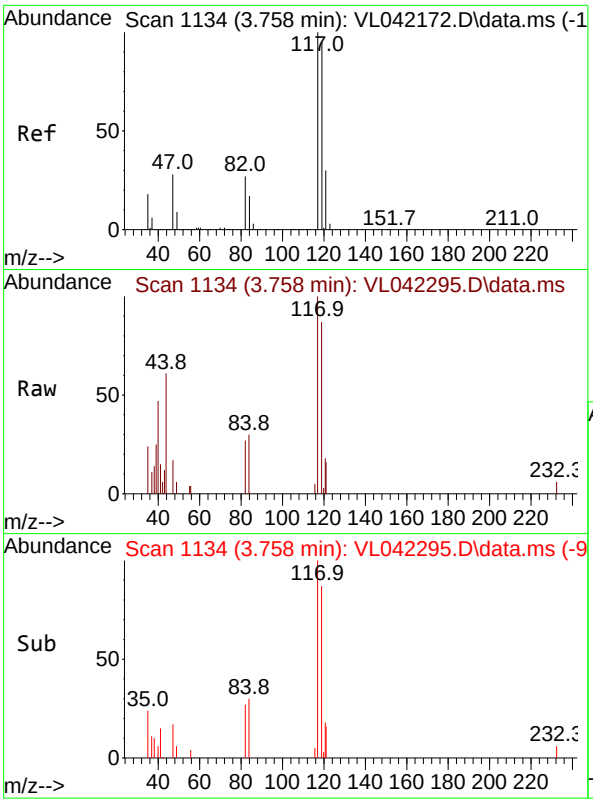


#34
2-Butanone
Concen: 3.186 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 43 Resp: 89072

Ion	Ratio	Lower	Upper
43	100		
72	21.3	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.086 ppbv m
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:117 Resp: 260

Ion	Ratio	Lower	Upper
117	100		
119	86.9	76.2	114.2
121	16.3	24.2	36.4#

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
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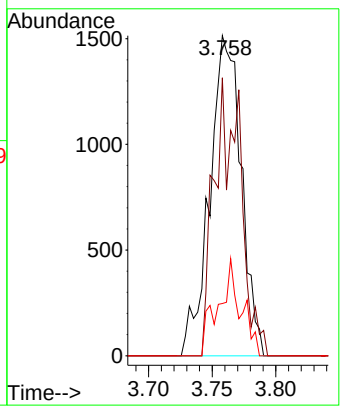
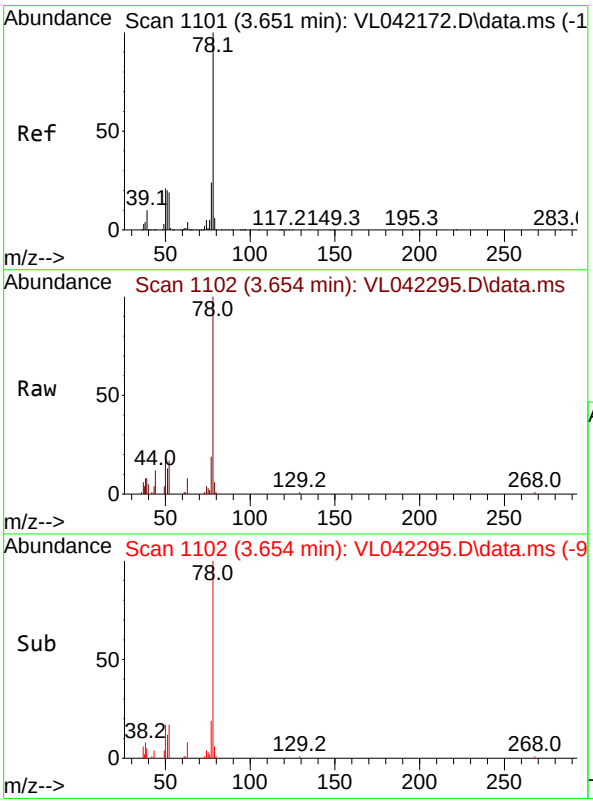
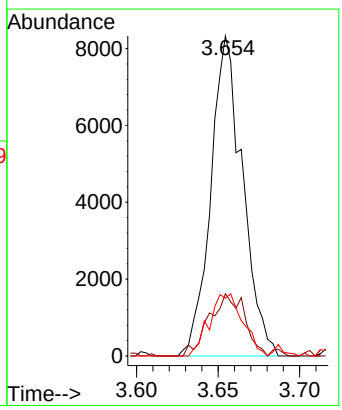


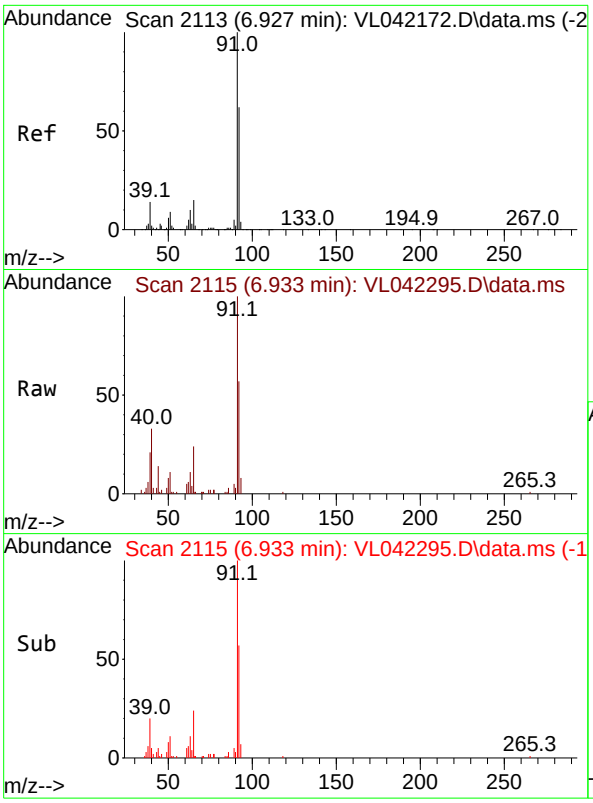


#36
Benzene
Concen: 0.295 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 78 Resp: 11286

Ion	Ratio	Lower	Upper
78	100		
77	19.4	19.1	28.7
50	18.0	16.6	24.8

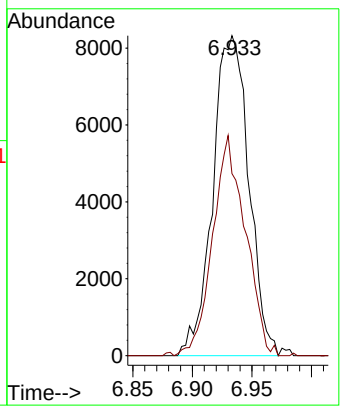




#53
Toluene
Concen: 0.386 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 91 Resp: 1747

Ion	Ratio	Lower	Upper
91	100		
92	62.6	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
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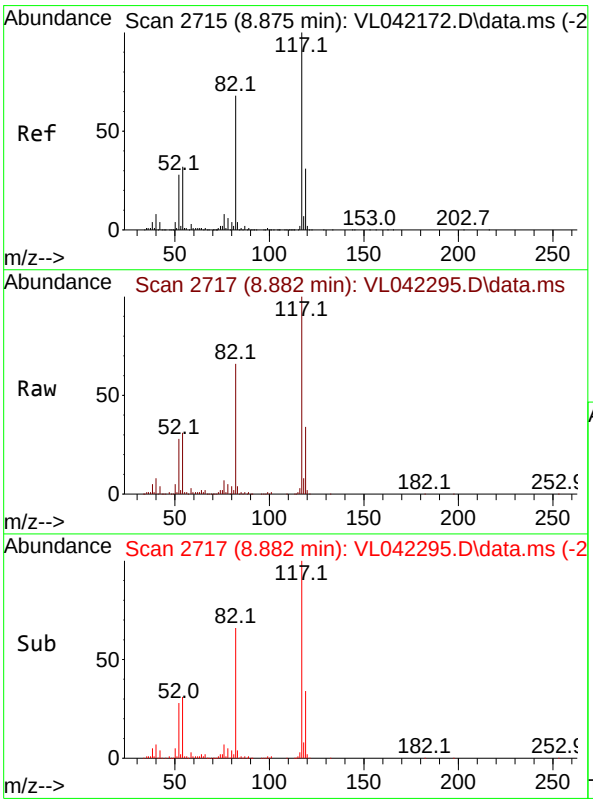
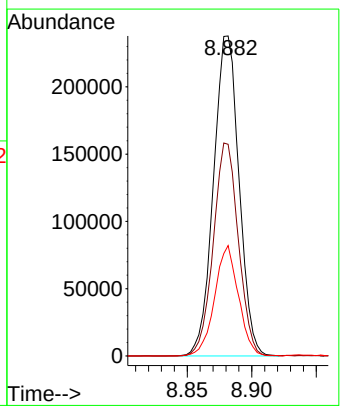
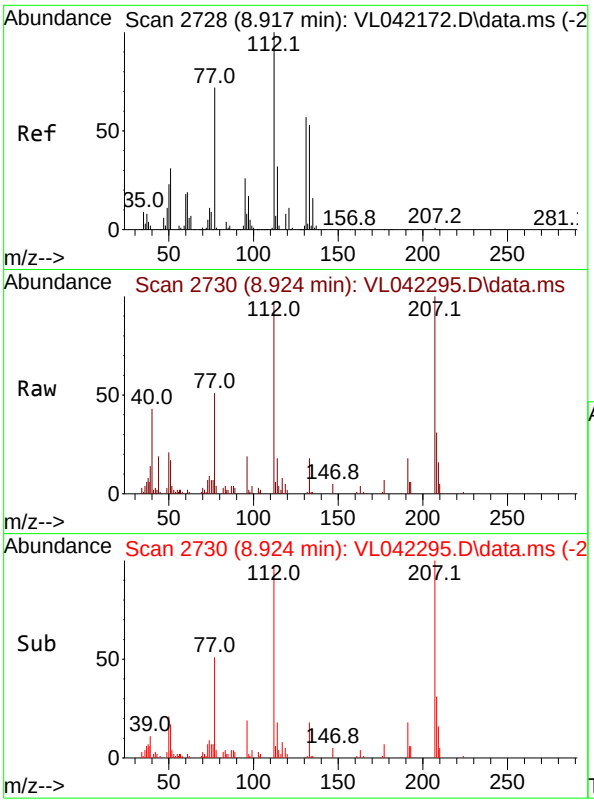


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:117 Resp: 326865

Ion	Ratio	Lower	Upper
117	100		
82	65.3	55.8	83.6
119	32.2	25.5	38.3





#57
Chlorobenzene
Concen: 0.203 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

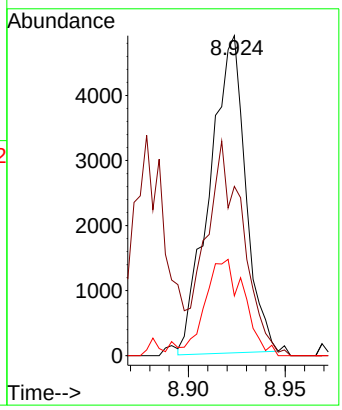
Tgt Ion:112 Resp: 630

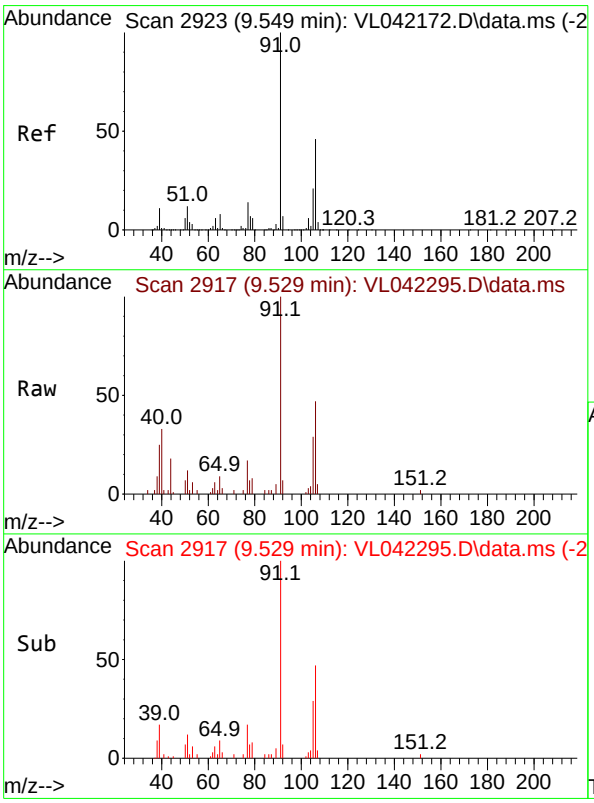
Ion	Ratio	Lower	Upper
112	100		
77	52.5	58.2	87.2#
114	18.9	29.1	35.5#

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

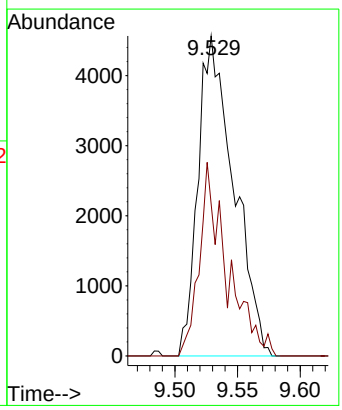


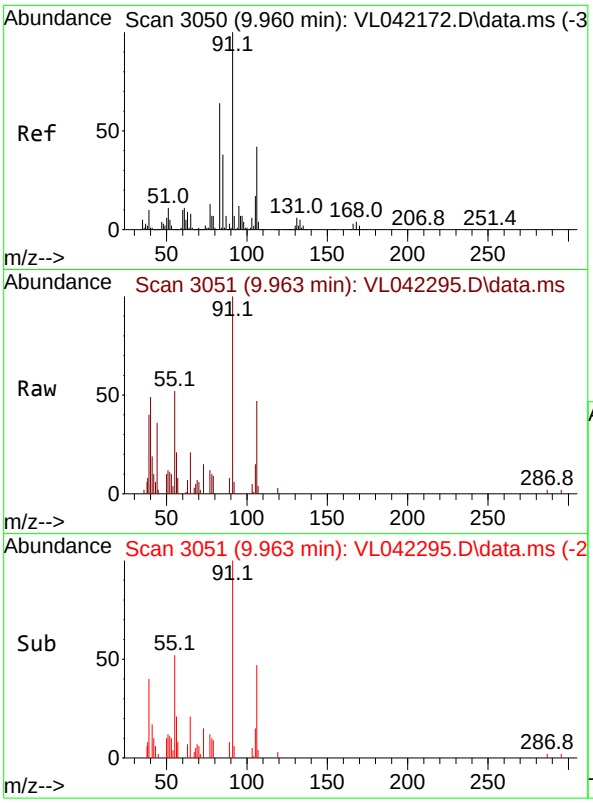


#59
m/p-Xylene
Concen: 0.195 ppbv m
RT: 9.529 min Scan# 2917
Delta R.T. -0.020 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 91 Resp: 9059

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

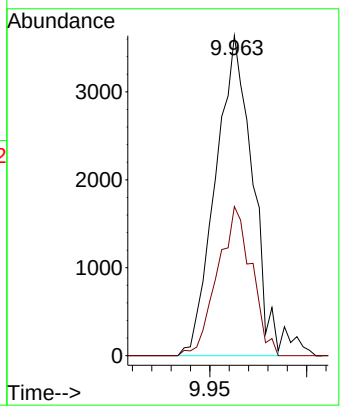




#60
o-Xylene
Concen: 0.103 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 91 Resp: 476

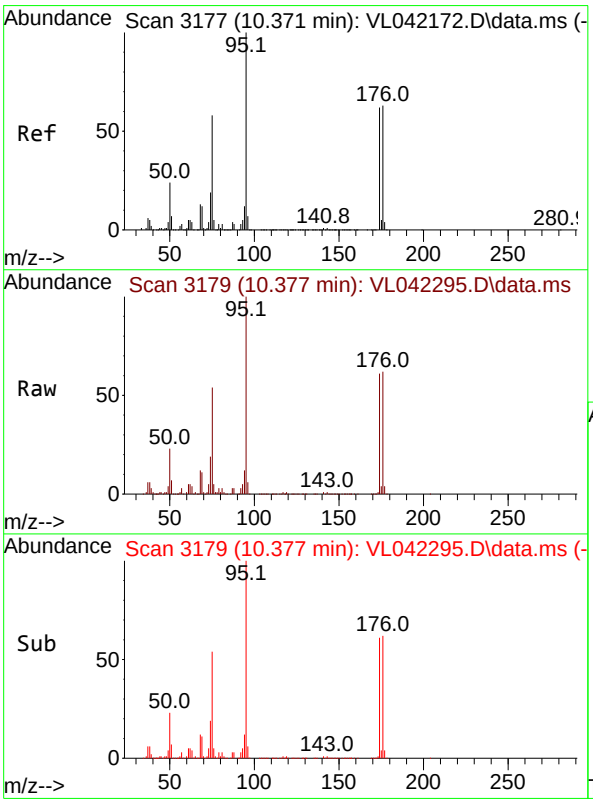
Ion	Ratio	Lower	Upper
91	100		
106	43.4	20.8	62.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Manual Integrations
APPROVED

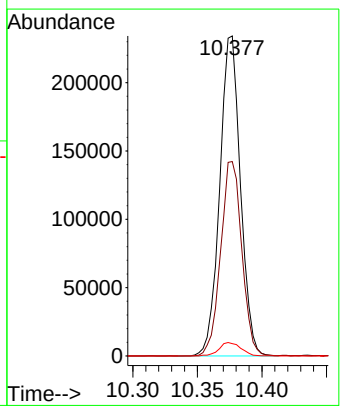
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.709 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 95 Resp: 260627

Ion	Ratio	Lower	Upper
95	100		
174	62.2	50.6	76.0
175	4.5	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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

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

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

Signal : TIC: VL042295.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4129338	4562717	100.00%	41.033%
2	1.489	430	433	439	rVB2	670119	339449	7.44%	3.053%
3	1.560	451	455	459	rVB2	191945	107746	2.36%	0.969%
4	1.622	470	474	478	rVB	223093	119679	2.62%	1.076%
5	1.722	500	505	509	rVB	78708	48107	1.05%	0.433%
6	1.835	535	540	548	rBV2	318759	270034	5.92%	2.428%
7	1.887	548	556	564	rBV	634452	460116	10.08%	4.138%
8	1.962	575	579	584	rVB	74343	51516	1.13%	0.463%
9	2.059	599	609	618	rBV2	72583	70998	1.56%	0.638%
10	2.560	758	764	775	rBV	148170	142597	3.13%	1.282%
11	2.787	825	834	840	rBV	563234	583683	12.79%	5.249%
12	2.826	840	846	861	rVB2	231138	263623	5.78%	2.371%
13	3.959	1181	1196	1213	rBV	685084	1034851	22.68%	9.306%
14	6.933	2103	2115	2129	rBV4	25955	60156	1.32%	0.541%
15	7.694	2338	2350	2363	rBV6	24740	45915	1.01%	0.413%
16	8.882	2704	2717	2726	rBV	833396	1155582	25.33%	10.392%
17	8.937	2726	2734	2743	rVB5	44994	81546	1.79%	0.733%
18	9.946	3038	3046	3065	rVB9	26083	59766	1.31%	0.537%
19	10.377	3166	3179	3190	rBV	1085554	1229439	26.95%	11.056%
20	10.807	3302	3312	3320	rBV2	229938	262238	5.75%	2.358%
21	10.856	3320	3327	3337	rVB2	98488	122350	2.68%	1.100%
22	11.426	3492	3503	3515	rVB4	37751	47637	1.04%	0.428%

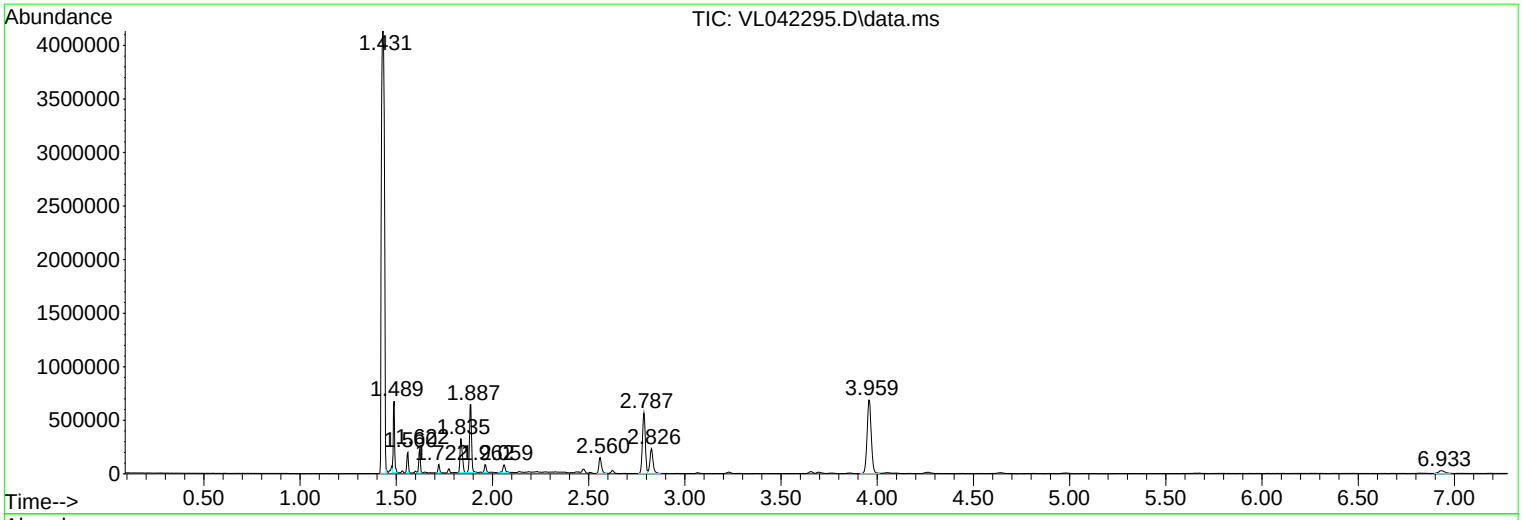
Sum of corrected areas: 11119745

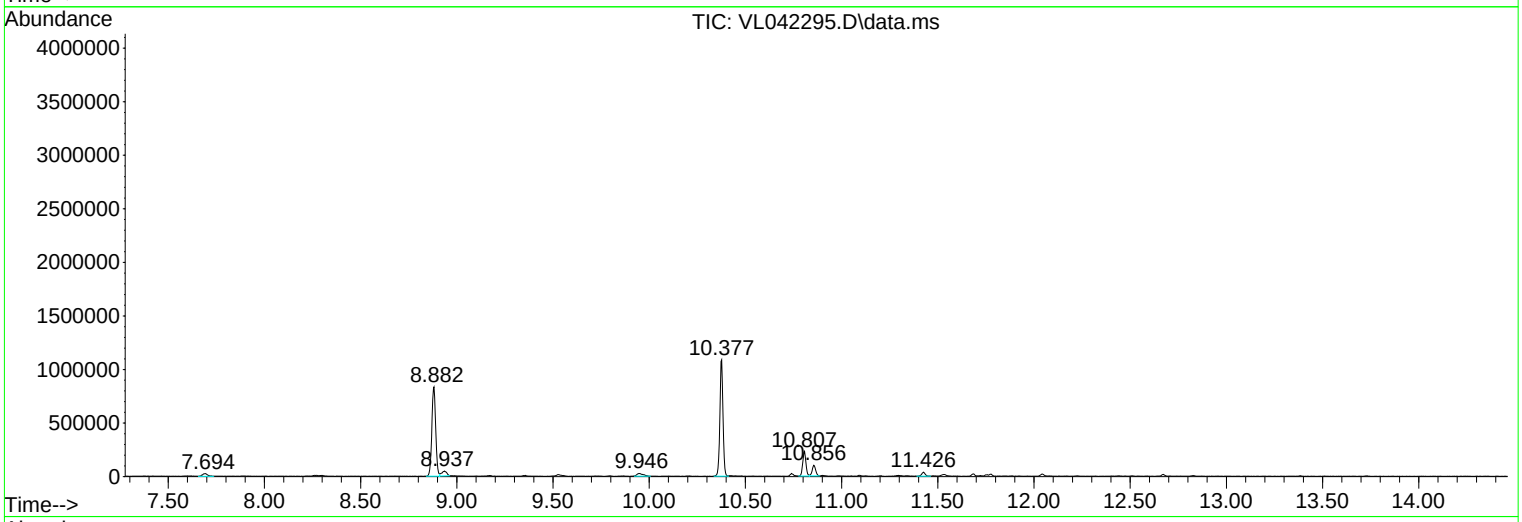
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

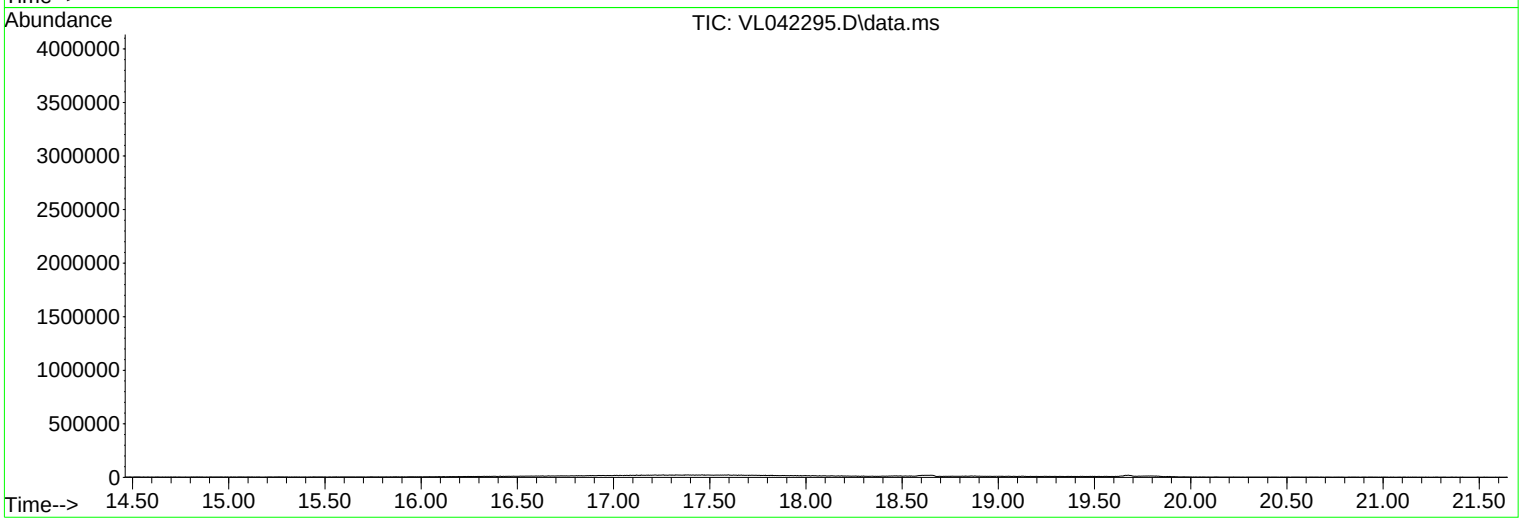
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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

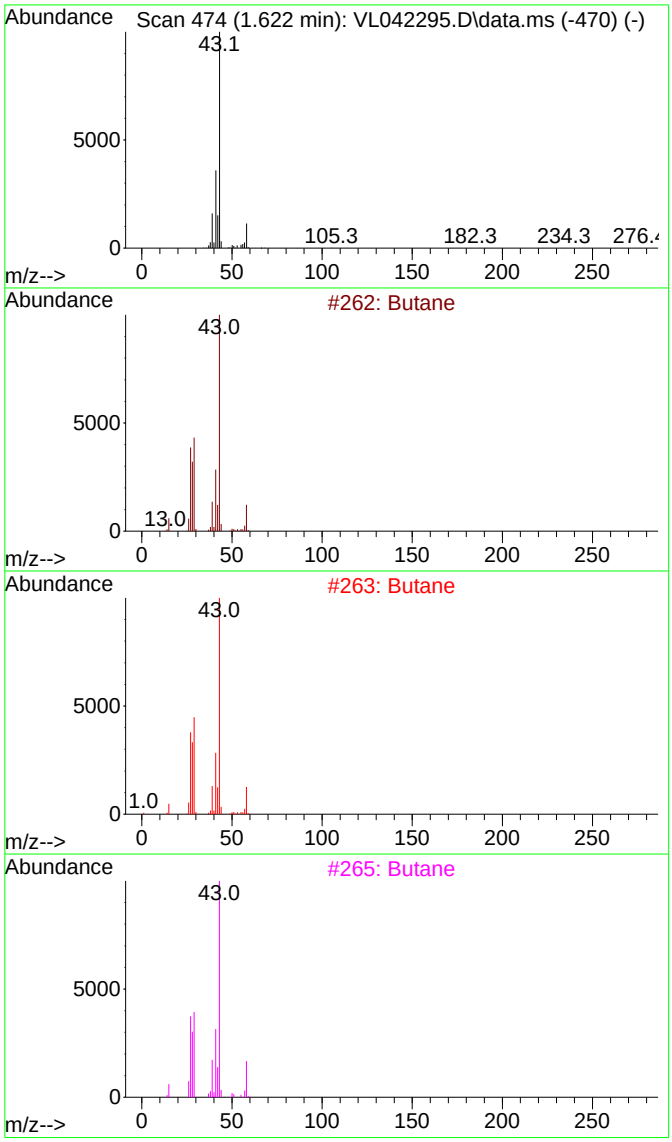
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

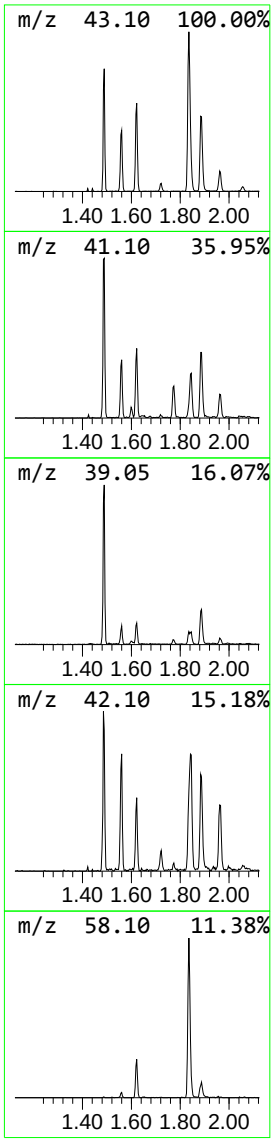
****

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	2.05 ppbv	119679	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	64
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

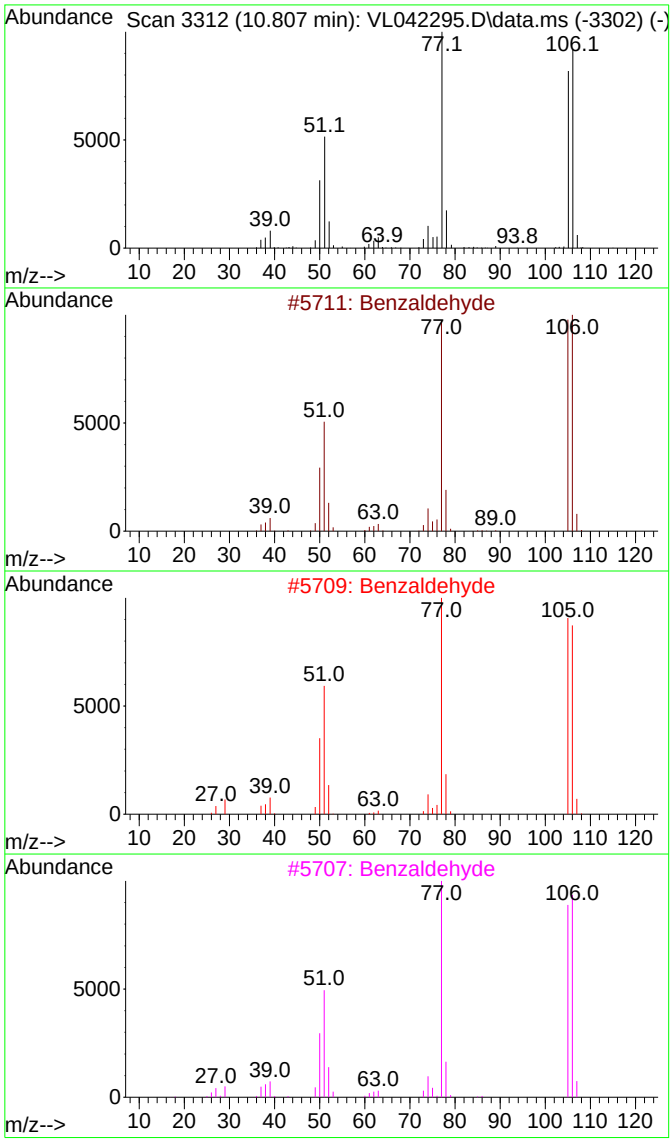
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

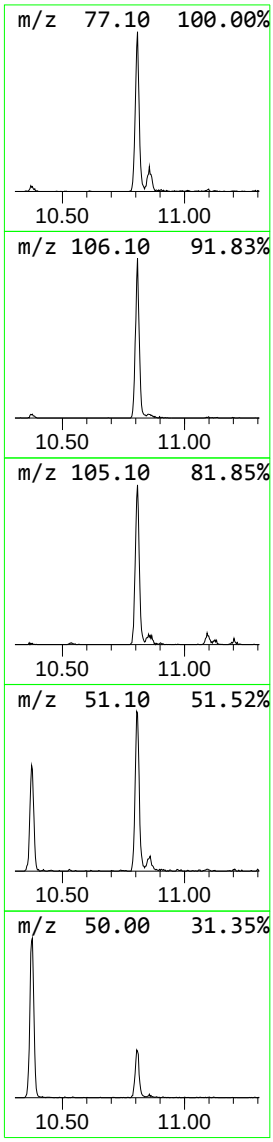
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Benzaldehyde Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.807	2.27 ppbv	262238	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde	106	C7H6O	000100-52-7	97
2	Benzaldehyde	106	C7H6O	000100-52-7	97
3	Benzaldehyde	106	C7H6O	000100-52-7	96
4	Benzaldehyde	106	C7H6O	000100-52-7	94
5	Benzaldehyde	106	C7H6O	000100-52-7	91





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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

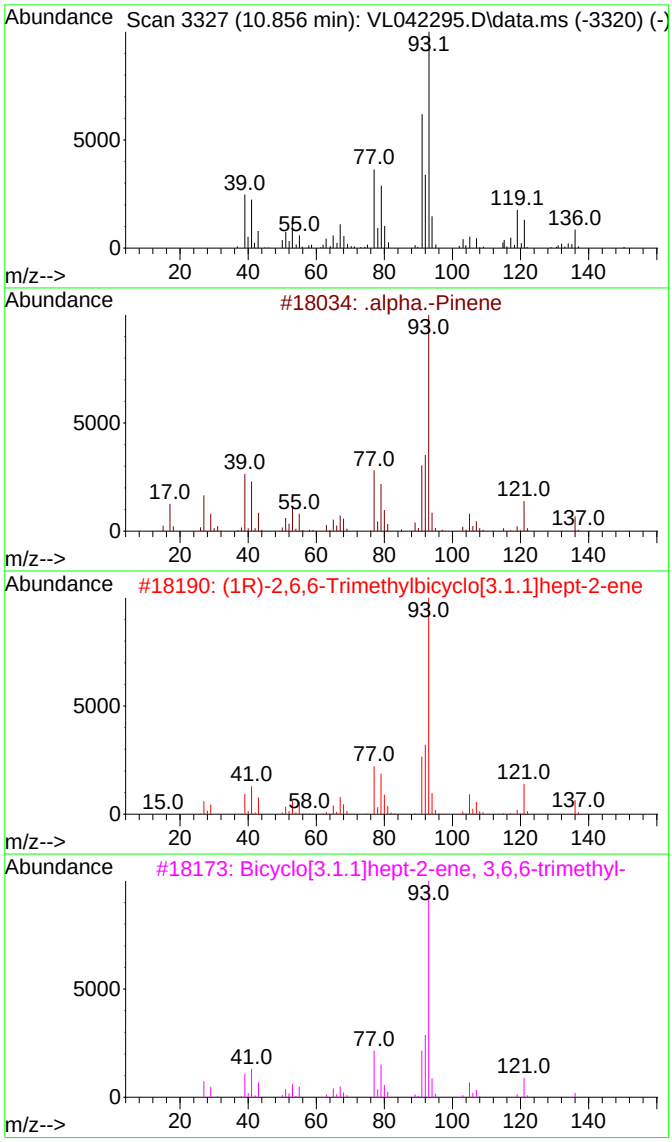
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

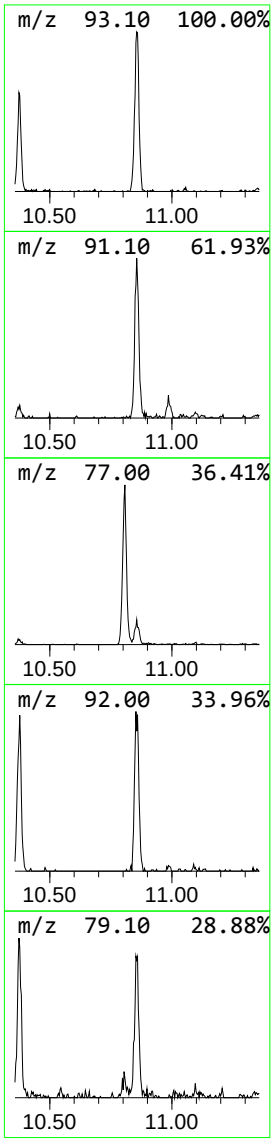
****

Peak Number 3 .alpha.-Pinene Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.856	1.06 ppbv	122350	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	90
2	(1R)-2,6,6-Trimethylbicyclo[3.1....	136	C10H16	007785-70-8	90
3	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	90
4	.gamma.-Terpinene	136	C10H16	000099-85-4	90
5	.beta.-Pinene	136	C10H16	000127-91-3	87





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	2.0	ppbv	119679	1	2.787	583683	10.0
Benzaldehyde	10.807	2.3	ppbv	262238	3	8.882	1155580	10.0
.alpha.-Pinene	10.856	1.1	ppbv	122350	3	8.882	1155580	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-10	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042319.D	1		04/11/25 14:27	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.39	1.93	J	1.04	2.47	ug/m3
64-17-5	Ethanol	870	1640	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.61	1.26		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.19	1.07	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.21	0.64	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.14	0.57	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	210	516	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	76.7	182	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.59	2.05		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	160	472	E	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.58	2.83		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.47	1.50	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.42	1.58	J	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-10	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042319.D	1		04/11/25 14:27	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	UQ	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.11	0.54	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	UQ	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.20	7.75		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.60			70 (65) - 130 (135)	96%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	191000		2.787			
540-36-3	1,4-Difluorobenzene	461000		3.962			
3114-55-4	Chlorobenzene-d5	384000		8.885			
TENTITIVE IDENTIFIED COMPOUNDS							

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-10	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042319.D	1		04/11/25 14:27	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.31		J		1.48	ppbv
115-07-1	Propene	110		J		1.49	ppbv
000138-86-3	Limonene	6.40		J		12.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 23:00:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	190778	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	461210	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	383940	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	301822	9.573	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10940	0.388	ppbv		100
3) Chlorodifluoromethane	1.476	51	8870m	0.308	ppbv		
4) Chloromethane	1.531	50	6976	0.606	ppbv		98
9) Propene	1.486	41	1470651m	111.500	ppbv		
10) Heptane	4.985	43	4922m	0.140	ppbv		
11) Trichlorofluoromethane	1.878	101	5102	0.186	ppbv		87
13) Ethanol	1.722	45	1088476	872.986	ppbv		86
15) Acetone	1.836	43	2047600	76.743	ppbv	#	79
17) tert-Butyl alcohol	2.046	59	6995	0.210	ppbv	#	37
19) Isopropyl Alcohol	1.891	45	3151010	209.311	ppbv	#	32
20) Methylene Chloride	2.062	84	5890	0.593	ppbv		86
26) Hexane	2.826	57	60038	2.245	ppbv	#	4
29) Chloroform	2.849	83	22740	0.581	ppbv		100
34) 2-Butanone	2.564	43	5516146	164.939	ppbv	#	36
35) Carbon Tetrachloride	3.761	117	2766m	0.077	ppbv		
36) Benzene	3.655	78	21386	0.468	ppbv	#	93
44) 2,2,4-Trimethylpentane	4.645	57	7908m	0.102	ppbv		
53) Toluene	6.937	91	22633m	0.418	ppbv		
59) m/p-Xylene	9.532	91	10027m	0.184	ppbv		
74) 1,2,4-Trimethylbenzene	11.539	105	7147	0.105	ppbv	#	67

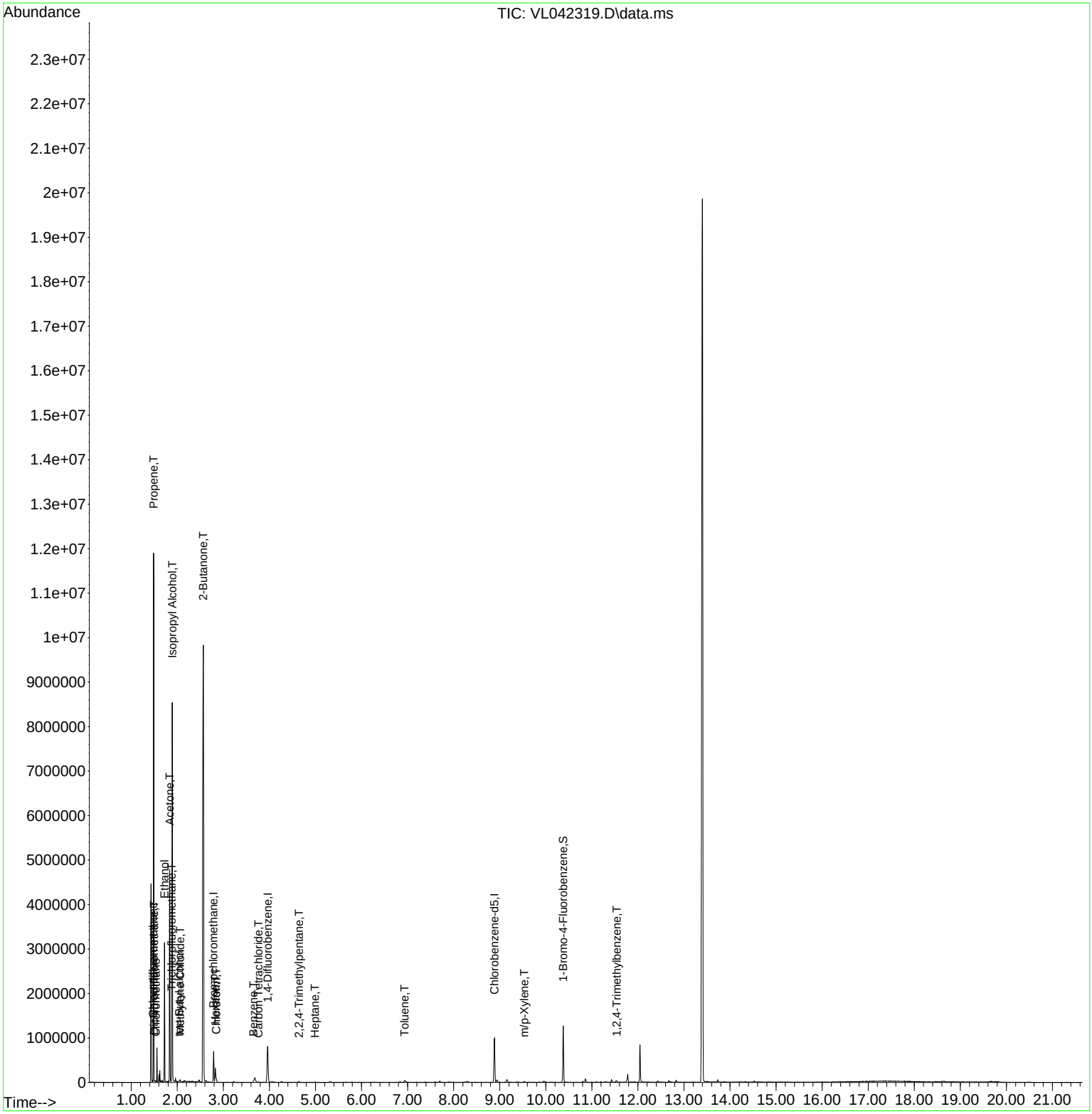
(#) = qualifier out of range (m) = manual integration (+) = signals summed

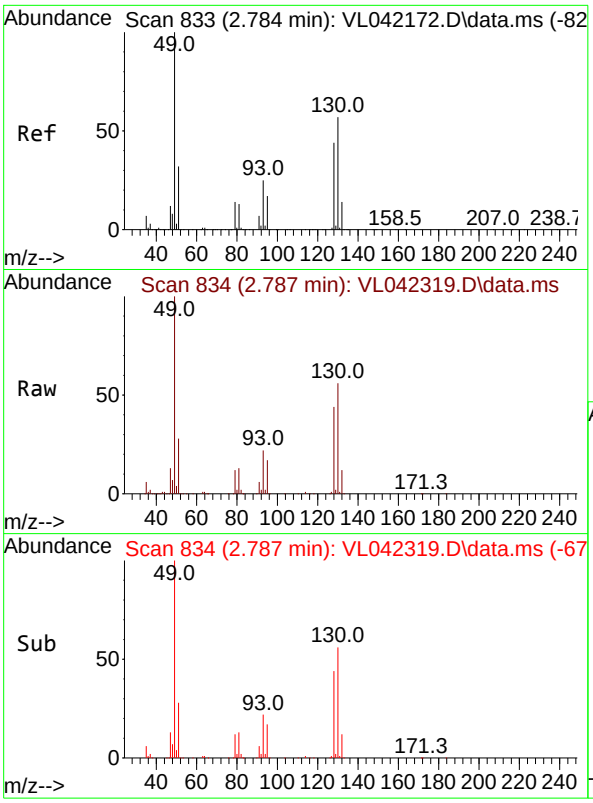
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 11 23:00:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

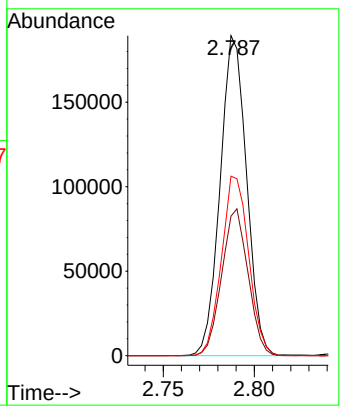




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 49 Resp: 19077

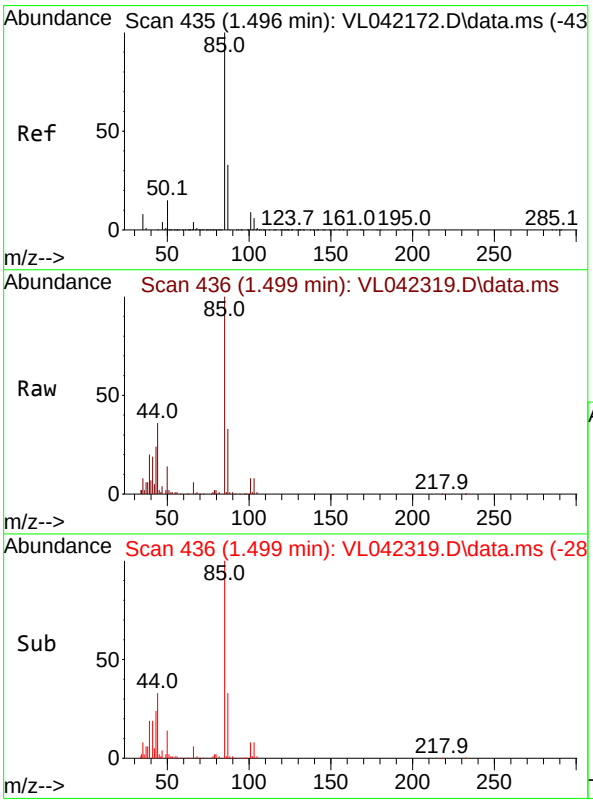
Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.8	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Manual Integrations
APPROVED

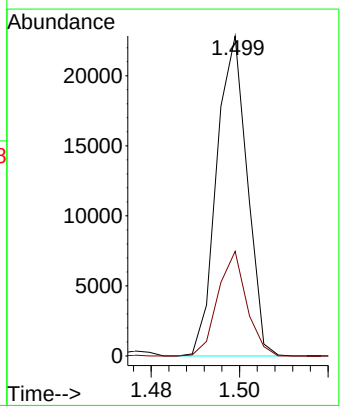
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

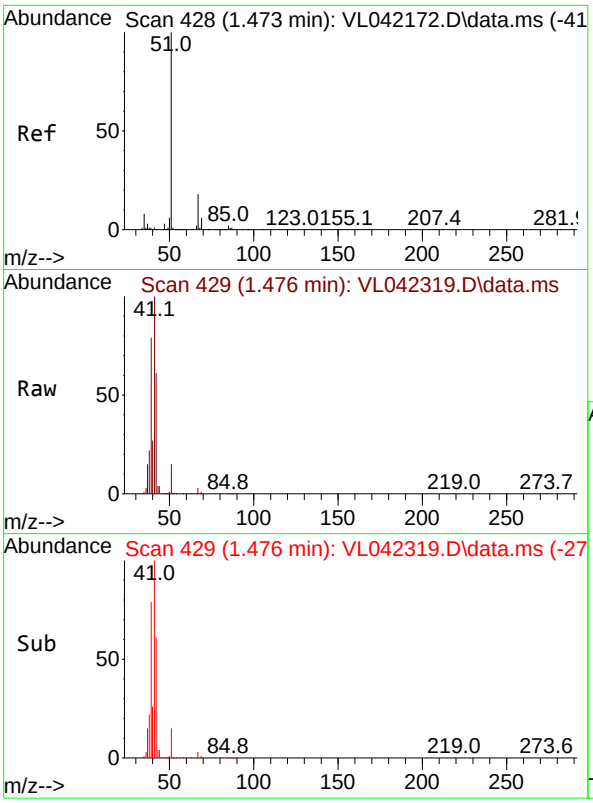


#2
Dichlorodifluoromethane
Concen: 0.388 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 85 Resp: 10940

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.1	39.1

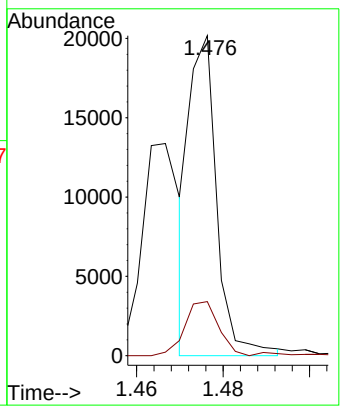




#3
Chlorodifluoromethane
Concen: 0.308 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 51 Resp: 887

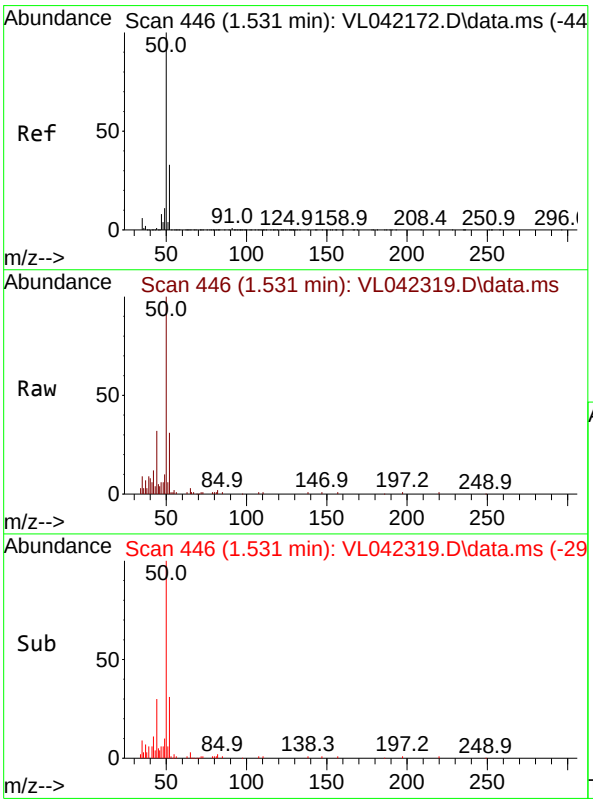
Ion	Ratio	Lower	Upper
51	100		
67	24.1	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Manual Integrations
APPROVED

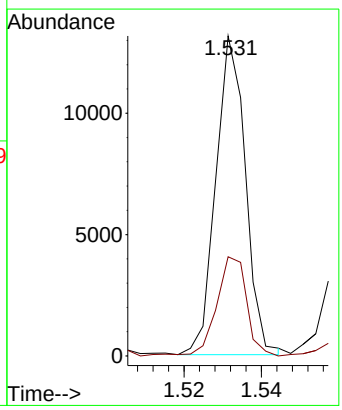
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

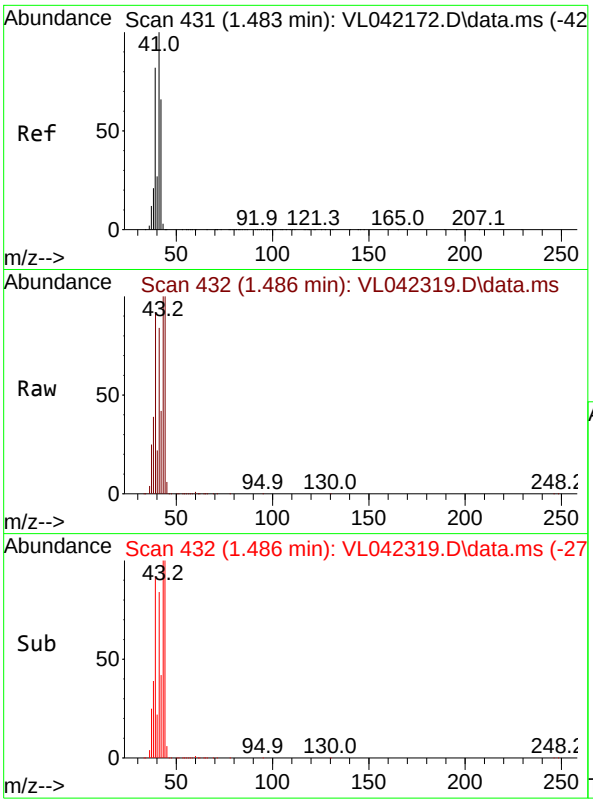


#4
Chloromethane
Concen: 0.606 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 50 Resp: 6976

Ion	Ratio	Lower	Upper
50	100		
52	31.5	26.1	39.1

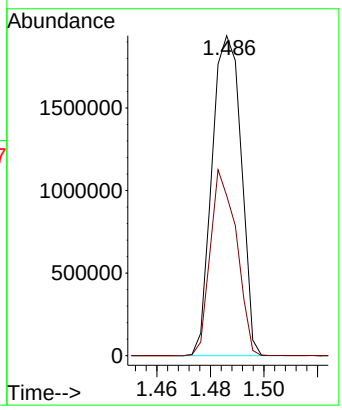




#9
Propene
Concen: 111.500 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 41 Resp: 147065

Ion	Ratio	Lower	Upper
41	100		
42	4.1	55.4	83.2#



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MSVOA_L
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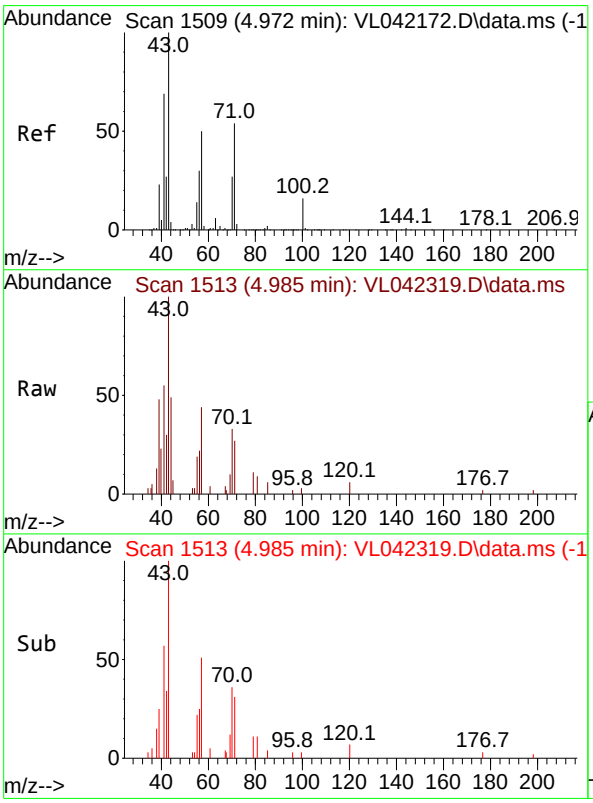
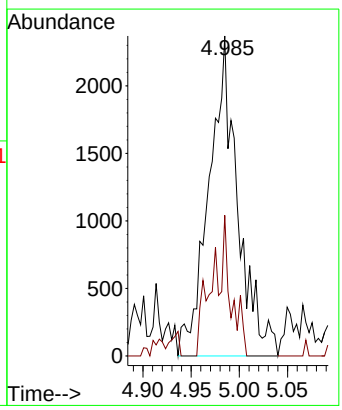
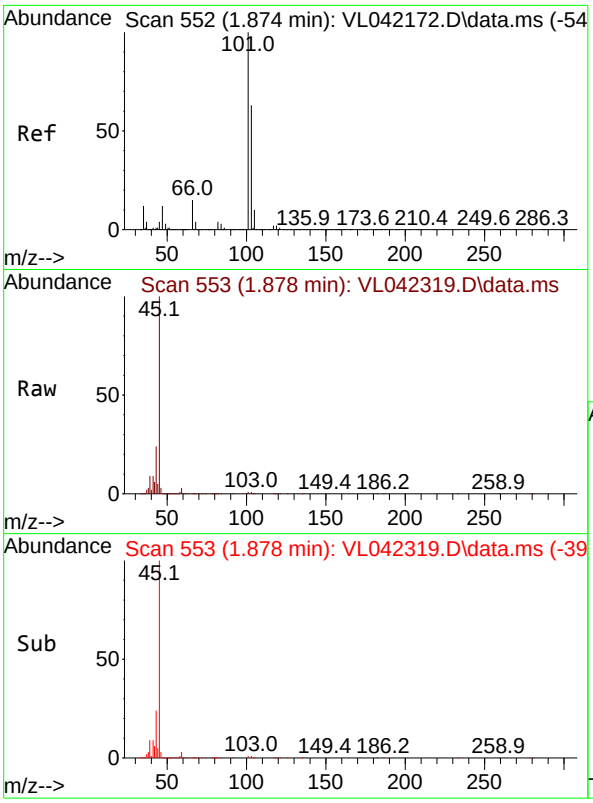


#10
Heptane
Concen: 0.140 ppbv m
RT: 4.985 min Scan# 1513
Delta R.T. 0.013 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 4922

Ion	Ratio	Lower	Upper
43	100		
57	27.8	39.4	59.2#

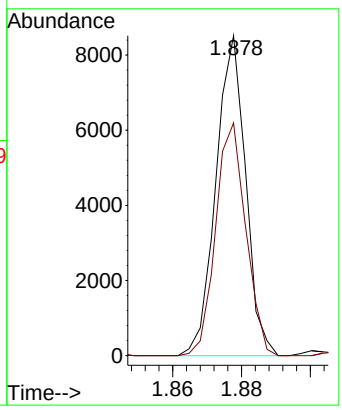




#11
Trichlorofluoromethane
Concen: 0.186 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:101 Resp: 510

Ion	Ratio	Lower	Upper
101	100		
103	72.7	50.2	75.2



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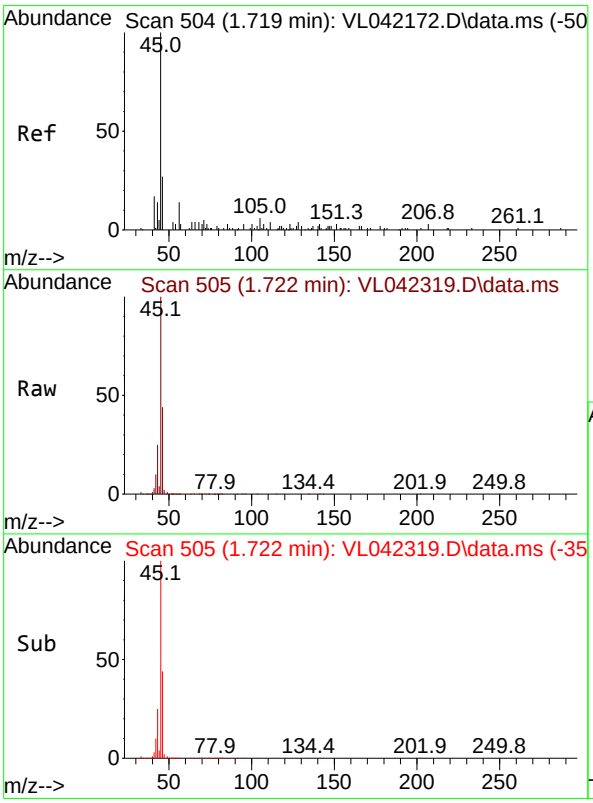
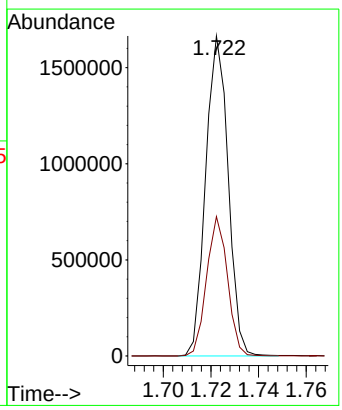
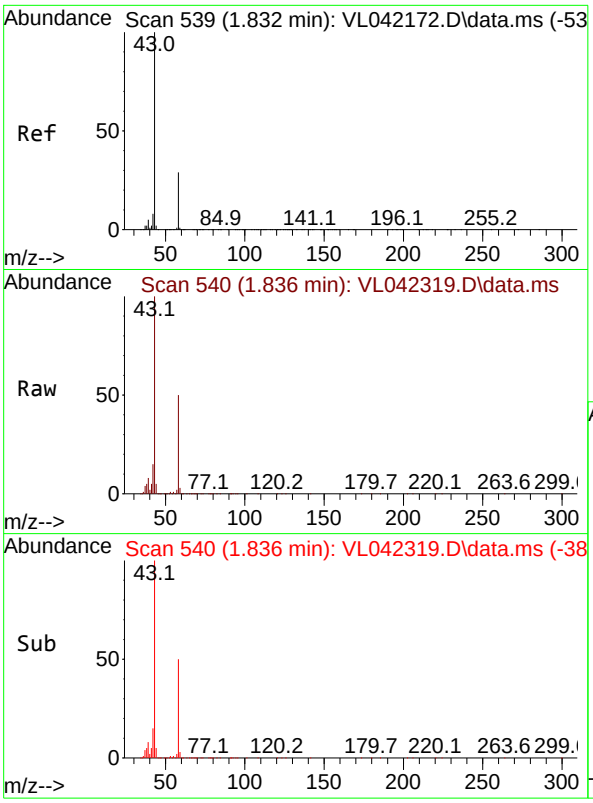


#13
Ethanol
Concen: 872.986 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 45 Resp: 1088476

Ion	Ratio	Lower	Upper
45	100		
46	40.7	20.2	80.8





#15
Acetone
Concen: 76.743 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 204760

Ion	Ratio	Lower	Upper
43	100		
58	40.0	23.2	34.8#

Instrument :
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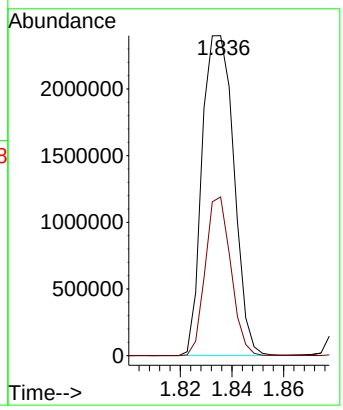
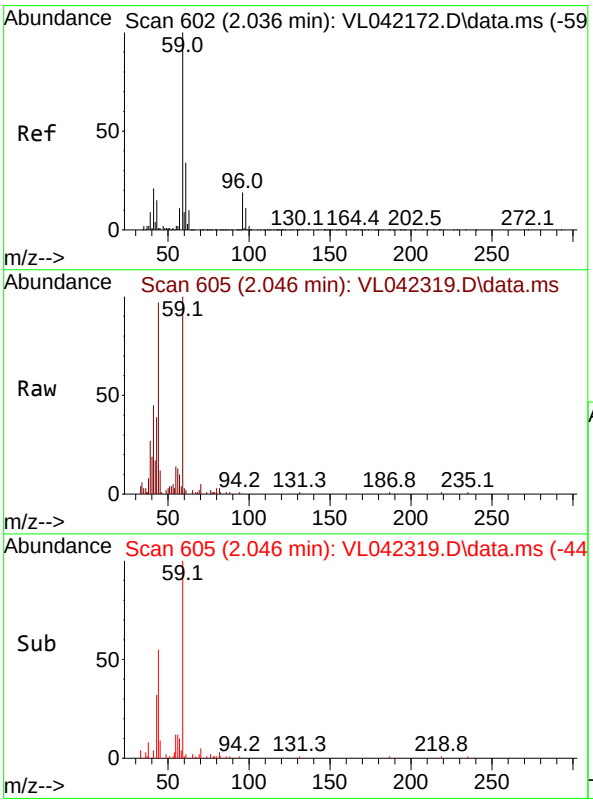
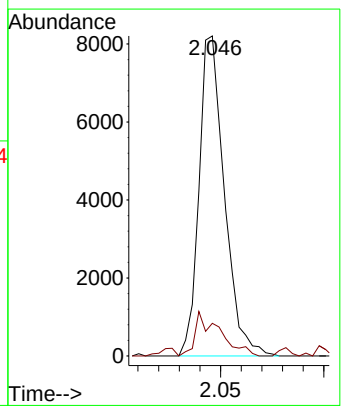


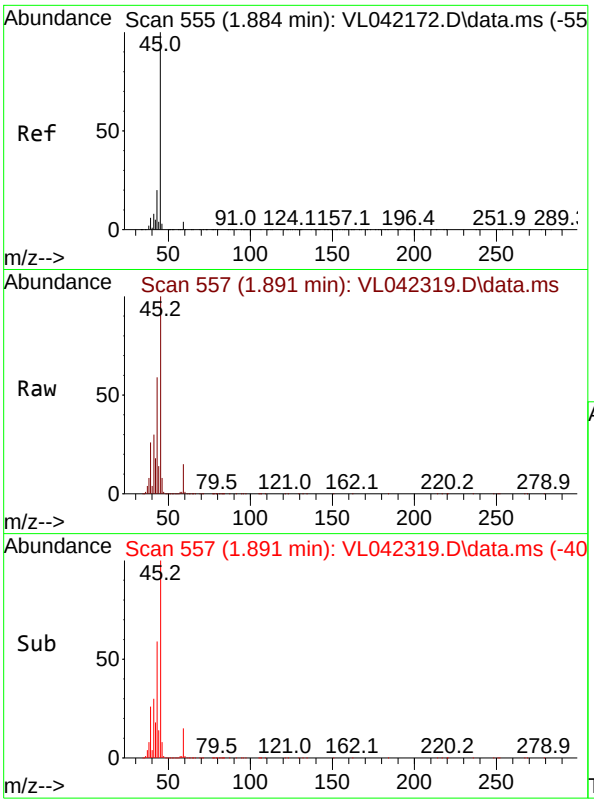


#17
tert-Butyl alcohol
Concen: 0.210 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 59 Resp: 6995

Ion	Ratio	Lower	Upper
59	100		
57	35.0	8.9	13.3#

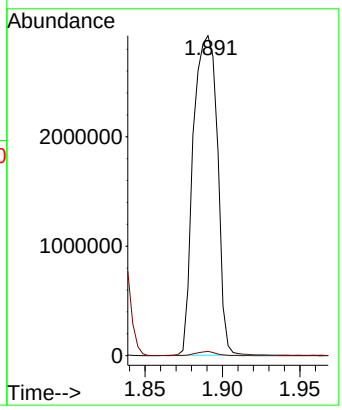




#19
Isopropyl Alcohol
Concen: 209.311 ppbv
RT: 1.891 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 45 Resp: 315101

Ion	Ratio	Lower	Upper
45	100		
58	1.1	36.9	55.3#



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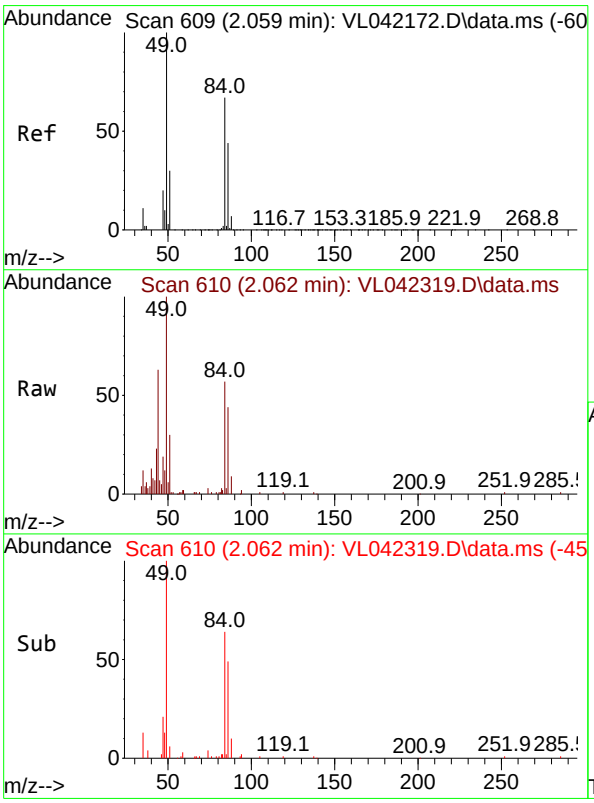
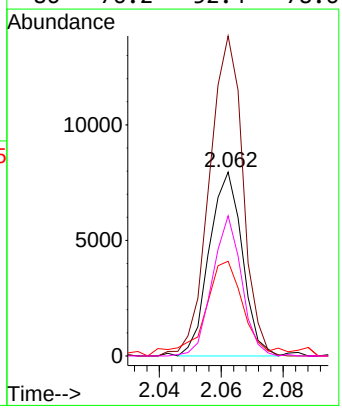
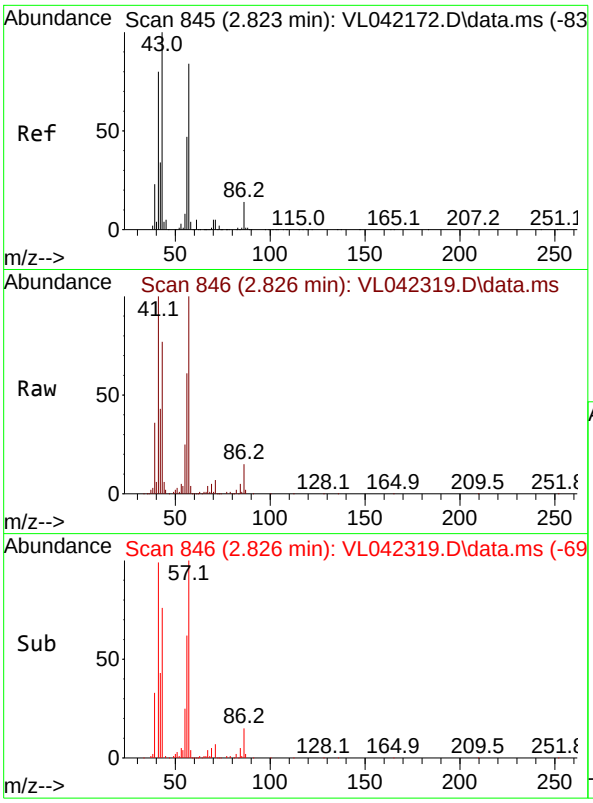


#20
Methylene Chloride
Concen: 0.593 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 84 Resp: 5890

Ion	Ratio	Lower	Upper
84	100		
49	173.3	120.2	180.4
51	47.2	37.4	56.0
86	76.2	52.4	78.6

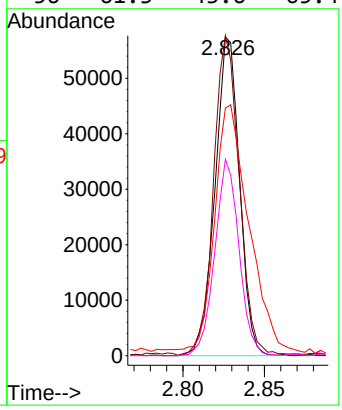




#26
Hexane
Concen: 2.245 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 57 Resp: 6003

Ion	Ratio	Lower	Upper
57	100		
41	106.2	76.6	114.8
43	0.0	207.8	311.8
56	61.3	43.6	65.4



Instrument :
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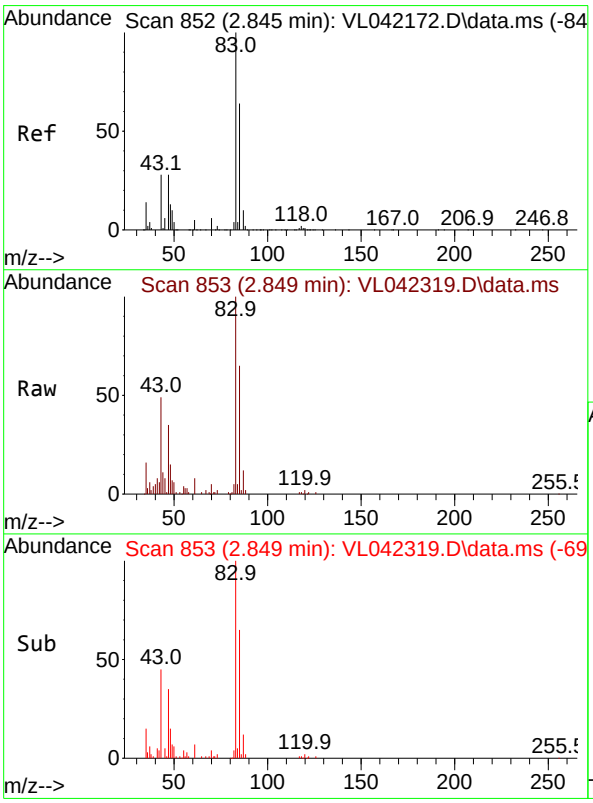
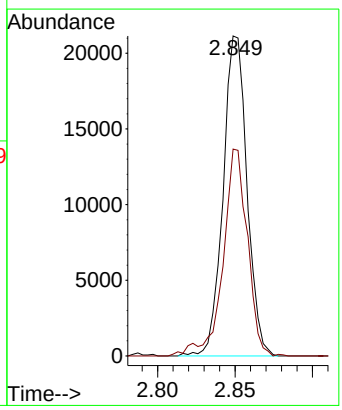
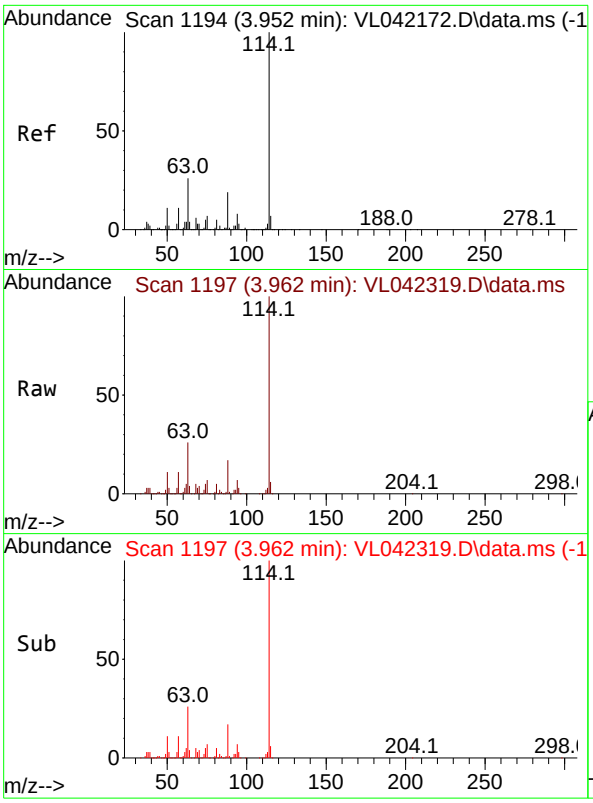


#29
Chloroform
Concen: 0.581 ppbv
RT: 2.849 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 83 Resp: 22740

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.4	77.2

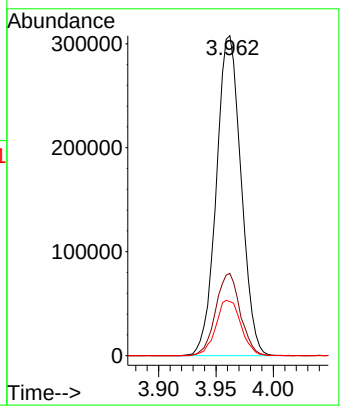




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:114 Resp: 46121

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.7	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
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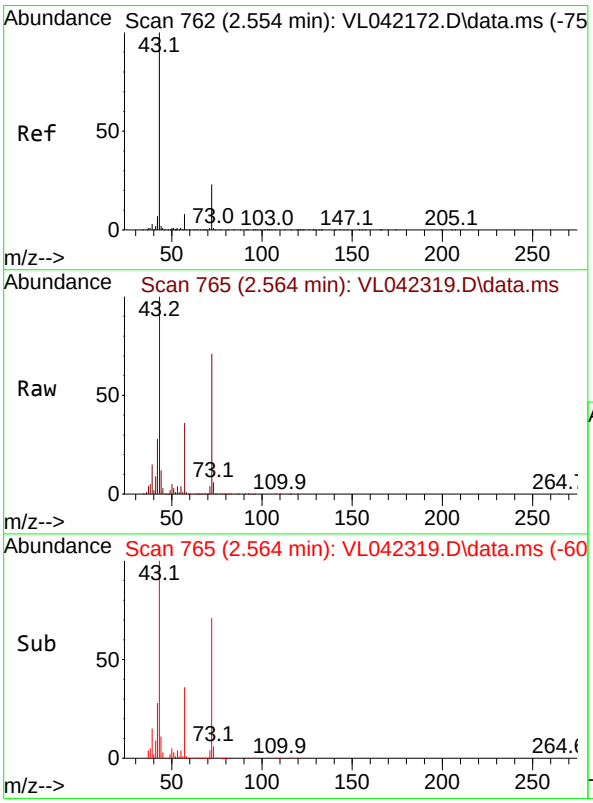
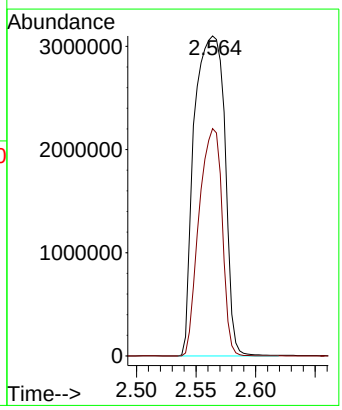
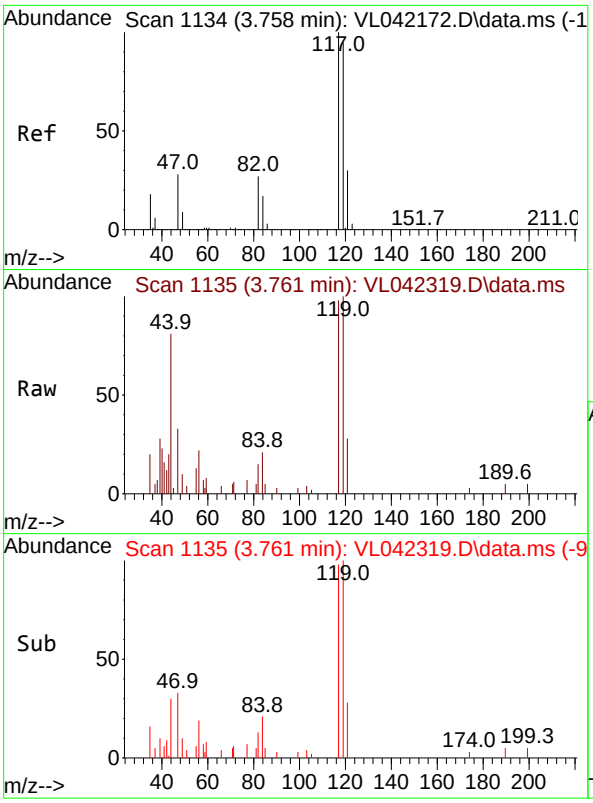


#34
2-Butanone
Concen: 164.939 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 5516146

Ion	Ratio	Lower	Upper
43	100		
72	53.8	18.2	27.2#

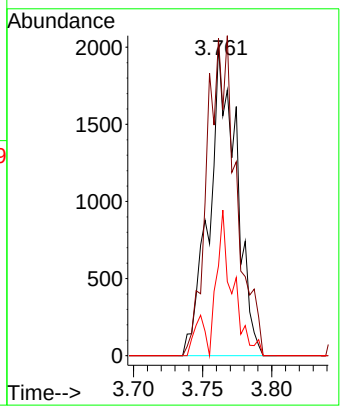




#35
Carbon Tetrachloride
Concen: 0.077 ppbv m
RT: 3.761 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:117 Resp: 276

Ion	Ratio	Lower	Upper
117	100		
119	102.3	76.2	114.2
121	29.0	24.2	36.4



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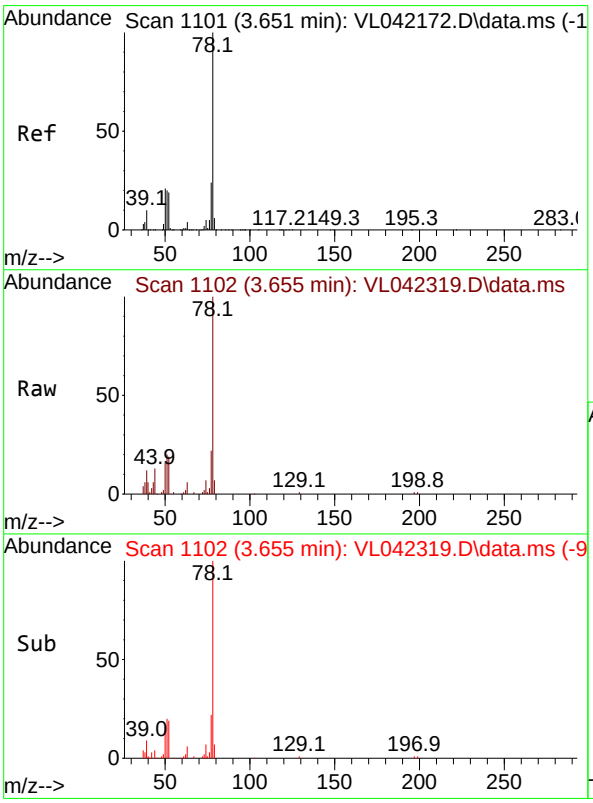
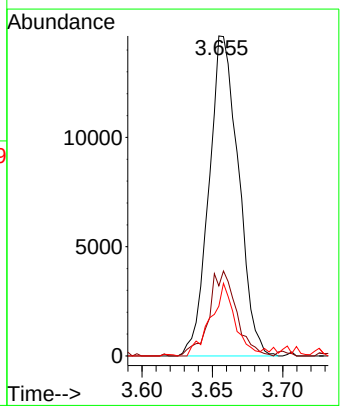
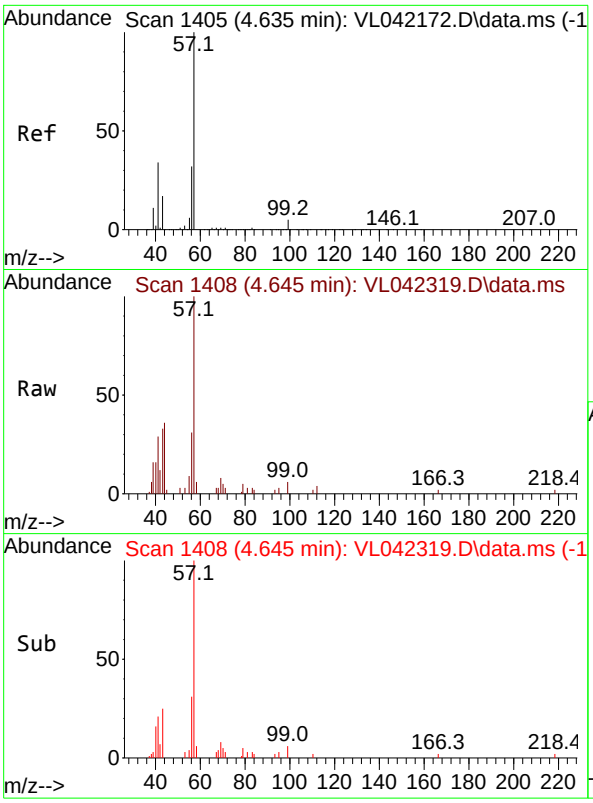


#36
Benzene
Concen: 0.468 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 78 Resp: 21386

Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	15.6	16.6	24.8#

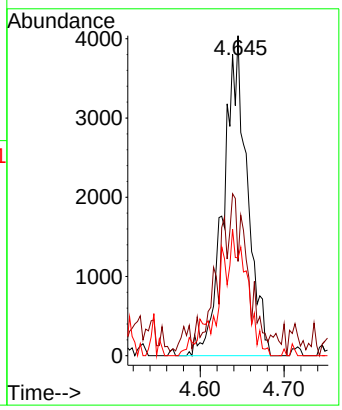




#44
2,2,4-Trimethylpentane
Concen: 0.102 ppbv m
RT: 4.645 min Scan# 14
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 57 Resp: 790

Ion	Ratio	Lower	Upper
57	100		
41	62.5	26.8	40.2#
56	47.2	25.6	38.4#



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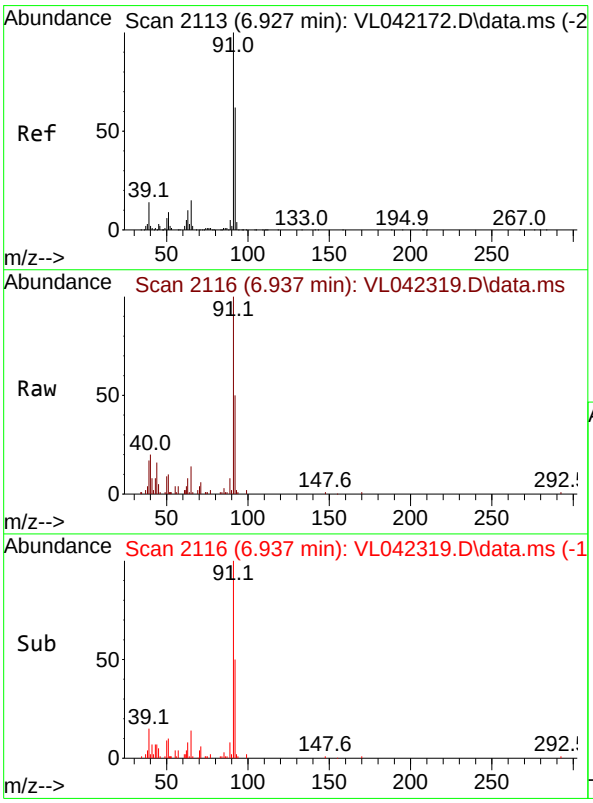
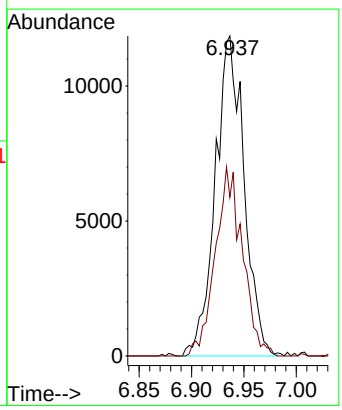
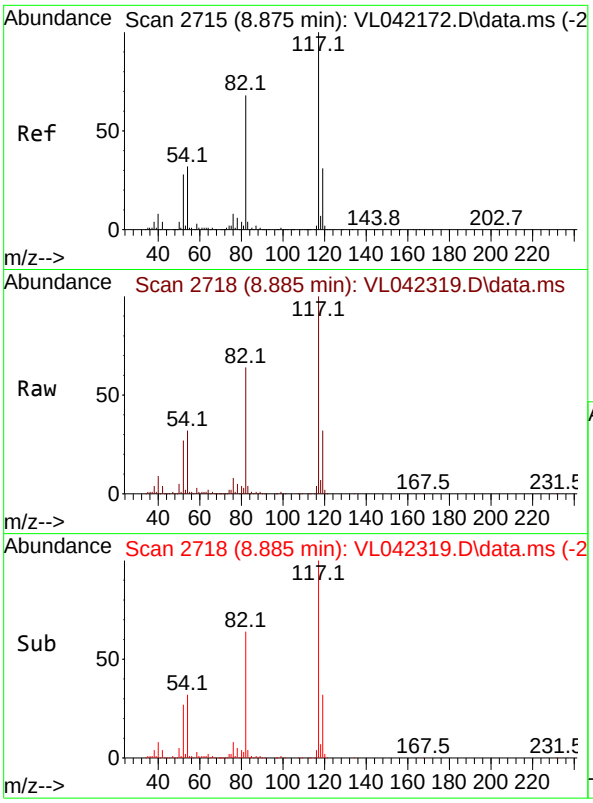


#53
Toluene
Concen: 0.418 ppbv m
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 22633

Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.4	72.6#

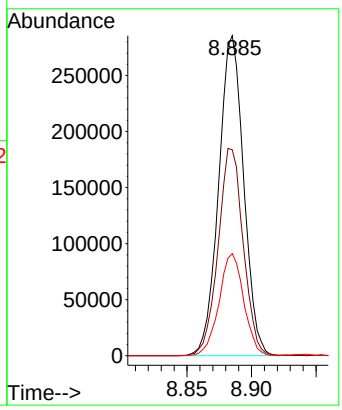




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:117 Resp: 38394

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	31.7	25.5	38.3



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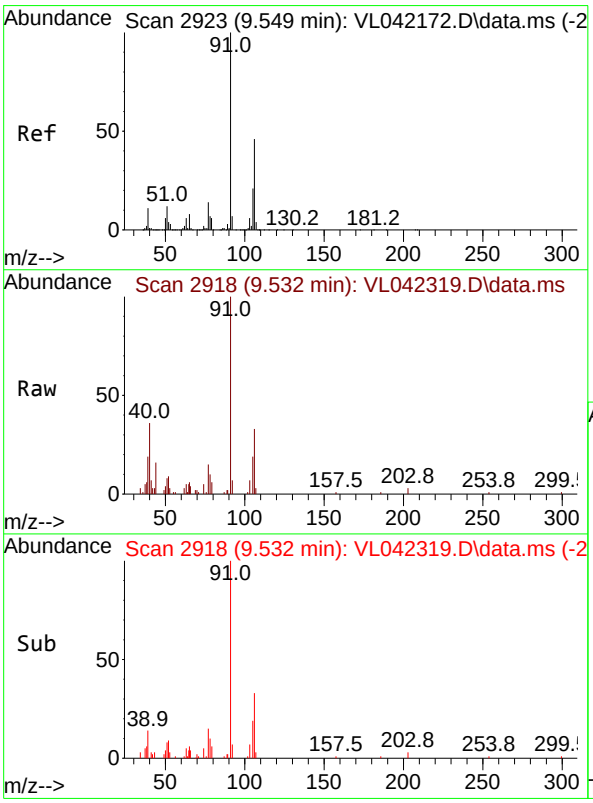
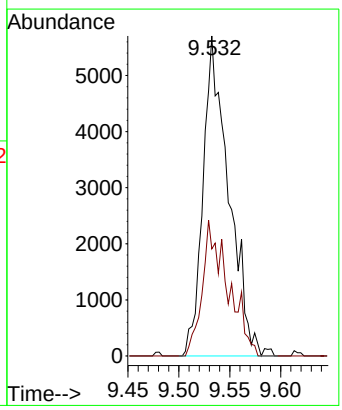
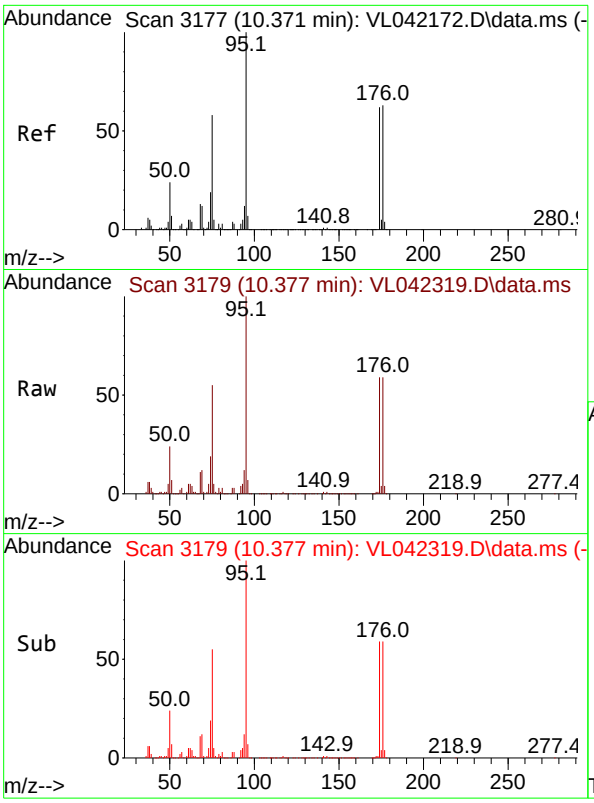


#59
m/p-Xylene
Concen: 0.184 ppbv m
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 10027

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

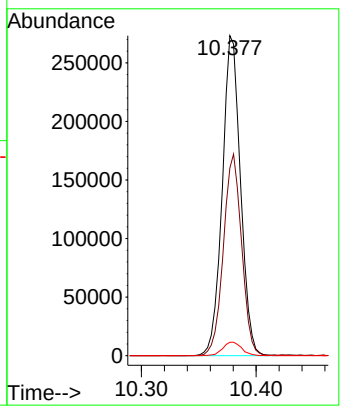




#68
1-Bromo-4-Fluorobenzene
Concen: 9.573 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 95 Resp: 30182

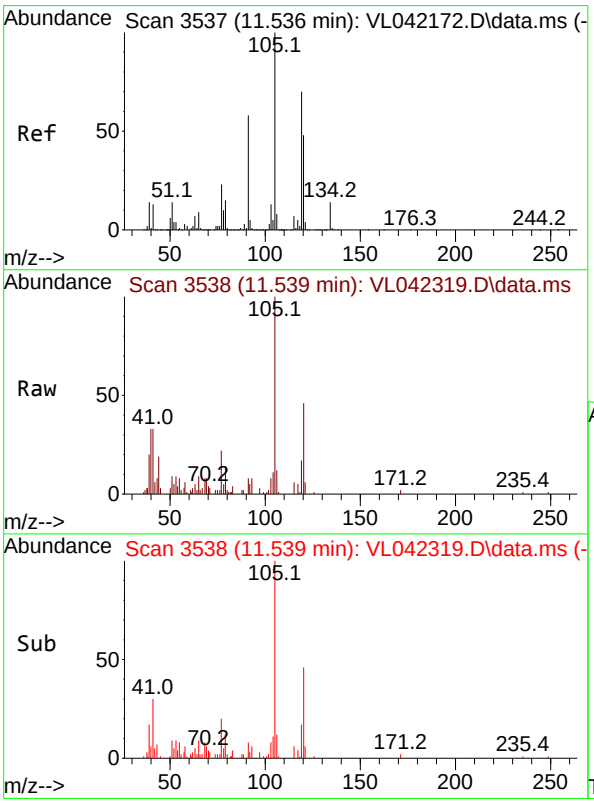
Ion	Ratio	Lower	Upper
95	100		
174	63.1	50.6	76.0
175	4.4	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Manual Integrations
APPROVED

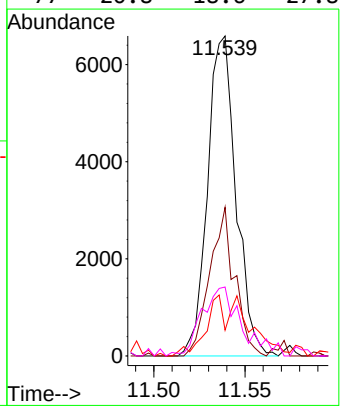
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.105 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:105 Resp: 7147

Ion	Ratio	Lower	Upper
105	100		
120	46.5	38.6	58.0
91	6.7	46.2	69.2#
77	20.8	18.6	27.8



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

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

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

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

Signal : TIC: VL042319.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4461856	5036438	15.29%	6.311%
2	1.486	427	432	436	rBV2	11872708	8270577	25.11%	10.364%
3	1.561	450	455	459	rBV	769173	428453	1.30%	0.537%
4	1.722	500	505	517	rBV	3136769	2001187	6.08%	2.508%
5	1.836	535	540	547	rBV	4778992	3716760	11.28%	4.657%
6	1.891	551	557	569	rVB	8516802	7444641	22.60%	9.329%
7	2.564	756	765	779	rBV	9828517	13918858	42.26%	17.441%
8	2.790	826	835	841	rBV	681158	715232	2.17%	0.896%
9	2.826	841	846	861	rVB2	301318	411098	1.25%	0.515%
10	3.962	1181	1197	1218	rBV	804813	1249606	3.79%	1.566%
11	8.885	2705	2718	2728	rBV	985107	1356122	4.12%	1.699%
12	10.377	3165	3179	3192	rBV	1273943	1448388	4.40%	1.815%
13	12.044	3680	3694	3704	rBV	839703	866648	2.63%	1.086%
14	13.400	4099	4113	4128	rBV2	19852849	32939482	100.00%	41.276%

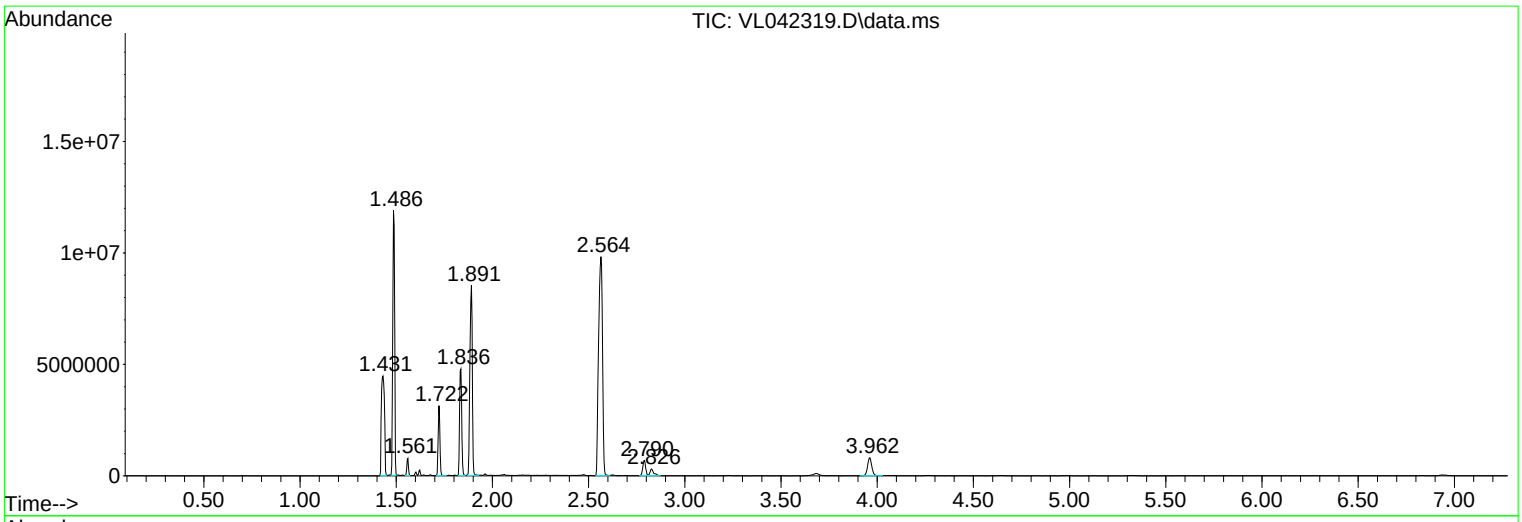
Sum of corrected areas: 79803490

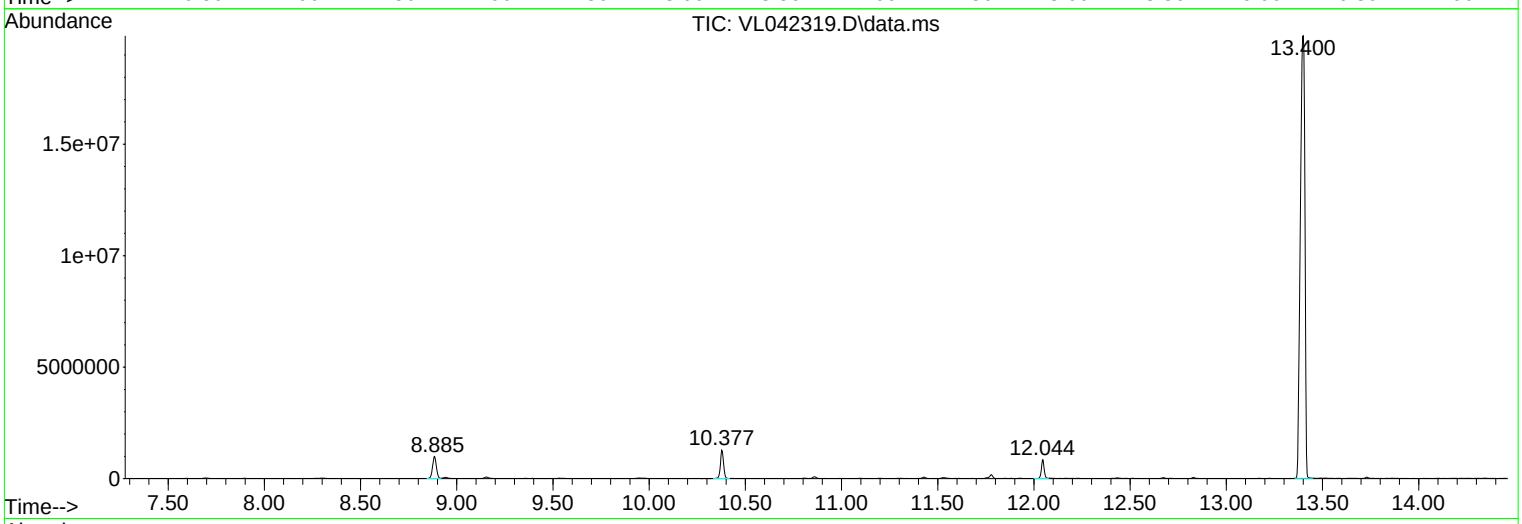
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

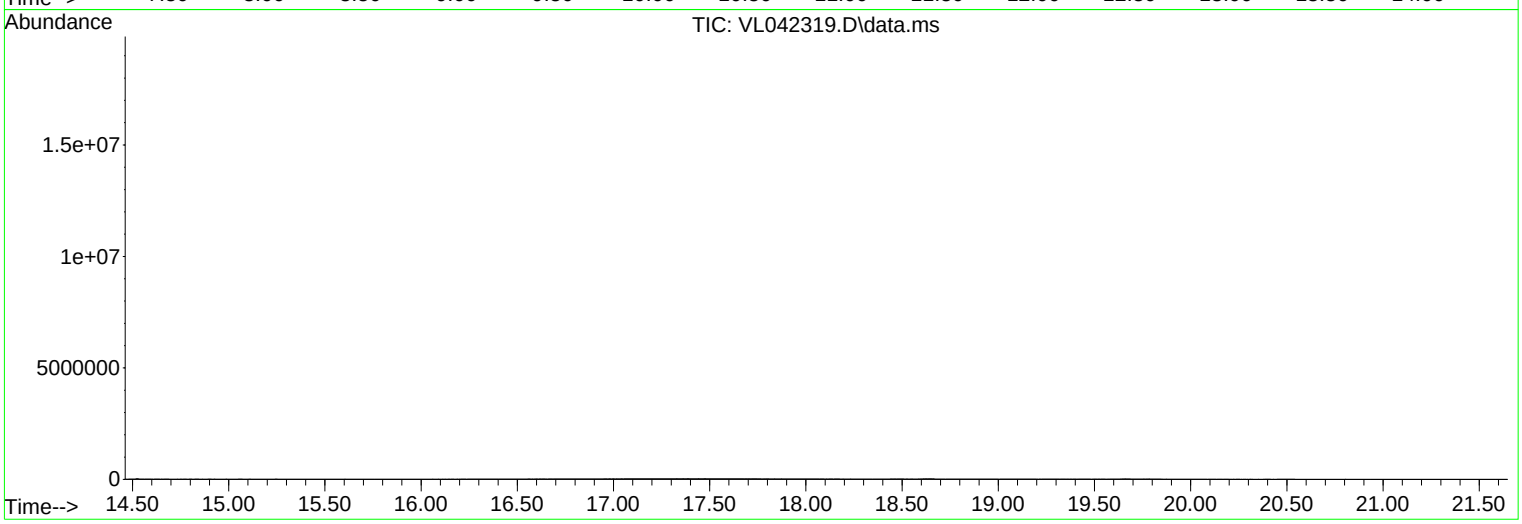
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

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

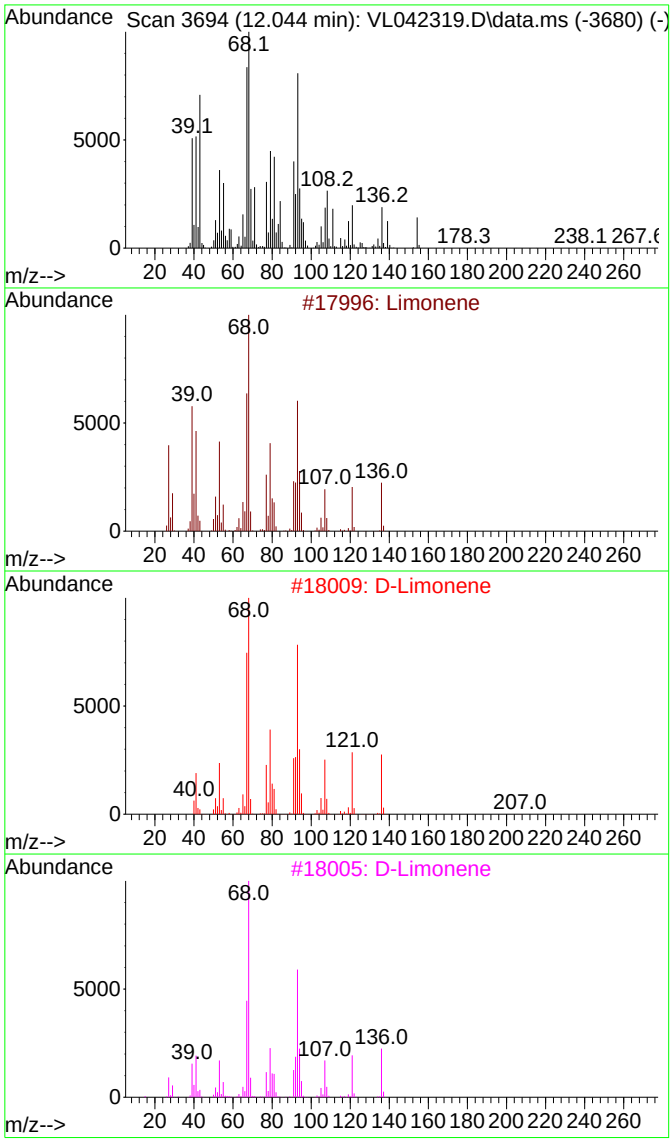
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

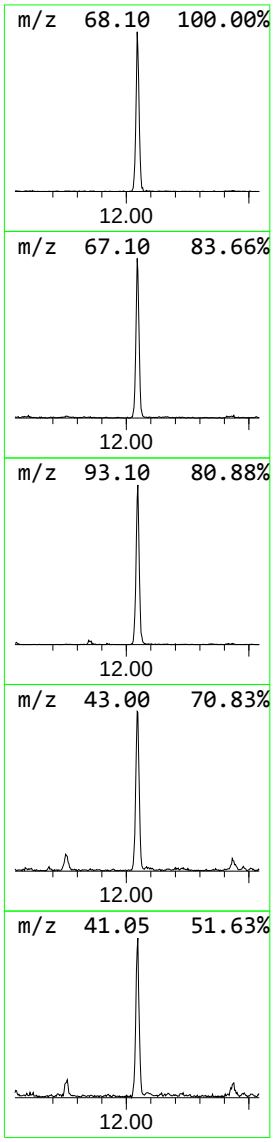
****

Peak Number 1 Limonene Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.044	6.39 ppbv	866648	Chlorobenzene-d5	8.885

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Limonene	136	C10H16	000138-86-3	91
2	D-Limonene	136	C10H16	005989-27-5	91
3	D-Limonene	136	C10H16	005989-27-5	70
4	D-Limonene	136	C10H16	005989-27-5	70
5	D-Limonene	136	C10H16	005989-27-5	70





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

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

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

					--Internal Standard---		
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Limonene	12.044	6.4	ppbv	866648	3	8.885	1356120	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042323.D	40		04/11/25 16:39	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	8.40	41.5	UD	41.5	98.9	ug/m3
64-17-5	Ethanol	1100	2070	EDQ	24.1	37.7	ug/m3
74-87-3	Chloromethane	3.90	8.05	UD	8.05	41.3	ug/m3
75-01-4	Vinyl Chloride	0.56	1.43	UD	1.43	3.07	ug/m3
74-83-9	Bromomethane	5.60	21.7	UD	21.7	77.7	ug/m3
75-00-3	Chloroethane	6.80	17.9	UD	17.9	52.8	ug/m3
109-99-9	Tetrahydrofuran	5.20	15.3	UD	15.3	59.0	ug/m3
75-69-4	Trichlorofluoromethane	6.40	36.0	UD	36.0	112	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	6.40	49.0	UD	49.0	153	ug/m3
76-14-2	Dichlorotetrafluoroethane	3.50	24.5	UD	24.5	140	ug/m3
593-60-2	Bromoethene	4.80	21.0	UD	21.0	87.4	ug/m3
75-65-0	tert-Butyl alcohol	7.60	23.0	UD	23.0	60.6	ug/m3
142-82-5	Heptane	4.40	18.0	UD	18.0	82.0	ug/m3
67-63-0	Isopropyl Alcohol	610	1500	ED	6.88	49.2	ug/m3
75-35-4	1,1-Dichloroethene	5.60	22.2	UD	22.2	79.3	ug/m3
67-64-1	Acetone	140	333	D	22.8	47.5	ug/m3
75-15-0	Carbon Disulfide	6.40	19.9	UD	19.9	62.3	ug/m3
1634-04-4	Methyl tert-Butyl Ether	4.80	17.3	UD	17.3	72.1	ug/m3
75-09-2	Methylene Chloride	7.60	26.4	UD	26.4	69.5	ug/m3
156-60-5	trans-1,2-Dichloroethene	7.60	30.1	UD	30.1	79.3	ug/m3
75-34-3	1,1-Dichloroethane	5.20	21.1	UD	21.1	81.0	ug/m3
110-82-7	Cyclohexane	8.80	30.3	UD	30.3	68.8	ug/m3
78-93-3	2-Butanone	700	2060	ED	14.2	59.0	ug/m3
56-23-5	Carbon Tetrachloride	0.44	2.77	UD	2.77	7.55	ug/m3
156-59-2	cis-1,2-Dichloroethene	3.60	14.3	UD	14.3	79.3	ug/m3
67-66-3	Chloroform	3.30	16.1	UD	16.1	97.7	ug/m3
71-55-6	1,1,1-Trichloroethane	0.38	2.07	UD	2.07	6.55	ug/m3
540-84-1	2,2,4-Trimethylpentane	4.00	18.7	UD	18.7	93.4	ug/m3
71-43-2	Benzene	3.50	11.2	UD	11.2	63.9	ug/m3
107-06-2	1,2-Dichloroethane	3.60	14.6	UD	14.6	81.0	ug/m3
79-01-6	Trichloroethene	0.68	3.65	UD	3.65	6.45	ug/m3
78-87-5	1,2-Dichloropropane	4.40	20.3	UD	20.3	92.4	ug/m3
75-27-4	Bromodichloromethane	3.10	20.8	UD	20.8	134	ug/m3
108-10-1	4-Methyl-2-Pentanone	3.70	15.2	UD	15.2	82.0	ug/m3
108-88-3	Toluene	4.40	16.6	UD	16.6	75.4	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042323.D	40		04/11/25 16:39	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	2.40	10.9	UD	10.9	90.8	ug/m3
10061-01-5	cis-1,3-Dichloropropene	2.60	11.8	UD	11.8	90.8	ug/m3
79-00-5	1,1,2-Trichloroethane	2.80	15.3	UD	15.3	109	ug/m3
124-48-1	Dibromochloromethane	2.60	22.1	UD	22.1	170	ug/m3
106-93-4	1,2-Dibromoethane	2.90	22.3	UD	22.3	30.7	ug/m3
127-18-4	Tetrachloroethene	0.60	4.07	UD	4.07	8.14	ug/m3
108-90-7	Chlorobenzene	3.00	13.8	UD	13.8	92.1	ug/m3
100-41-4	Ethyl Benzene	4.80	20.9	UD	20.9	86.9	ug/m3
179601-23-1	m/p-Xylene	8.40	36.5	UD	36.5	174	ug/m3
95-47-6	o-Xylene	4.80	20.9	UD	20.9	86.9	ug/m3
100-42-5	Styrene	4.40	18.7	UD	18.7	85.2	ug/m3
75-25-2	Bromoform	2.30	23.8	UD	23.8	207	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.44	3.02	UDQ	3.02	8.24	ug/m3
95-49-8	2-Chlorotoluene	4.40	22.8	UD	22.8	104	ug/m3
108-67-8	1,3,5-Trimethylbenzene	4.40	21.6	UD	21.6	98.3	ug/m3
95-63-6	1,2,4-Trimethylbenzene	3.10	15.2	UD	15.2	98.3	ug/m3
541-73-1	1,3-Dichlorobenzene	3.20	19.2	UD	19.2	120	ug/m3
106-46-7	1,4-Dichlorobenzene	2.10	12.6	UD	12.6	120	ug/m3
95-50-1	1,2-Dichlorobenzene	3.00	18.0	UDQ	18.0	120	ug/m3
120-82-1	1,2,4-Trichlorobenzene	3.40	25.2	UD	25.2	148	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	3.40	36.3	UD	36.3	213	ug/m3
106-99-0	1,3-Butadiene	5.20	11.5	UD	11.5	44.3	ug/m3
91-20-3	Naphthalene	3.00	15.7	UD	15.7	21.0	ug/m3
622-96-8	4-Ethyltoluene	4.80	23.6	UD	23.6	98.3	ug/m3
110-54-3	Hexane	4.40	15.5	UD	15.5	70.5	ug/m3
107-05-1	Allyl Chloride	6.00	18.8	UD	18.8	62.6	ug/m3
123-91-1	1,4-Dioxane	8.40	30.3	UD	30.3	72.1	ug/m3
80-62-6	Methyl Methacrylate	3.40	13.9	UD	13.9	81.9	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	173000		2.787			
540-36-3	1,4-Difluorobenzene	401000		3.962			
3114-55-4	Chlorobenzene-d5	338000		8.885			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042323.D	40		04/11/25 16:39	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042323.D
Acq On : 11 Apr 2025 16:39
Operator : SY/MD
Sample : Q1665-10DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 23:02:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	173105	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	400666	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	338211	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	253785	9.137	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.400%				
Target Compounds							Qvalue
9) Propene	1.489	41	65076m	5.438	ppbv		
13) Ethanol	1.742	45	31113	27.501	ppbv		85
15) Acetone	1.842	43	84634	3.496	ppbv		95
19) Isopropyl Alcohol	1.900	45	207505	15.191	ppbv	#	34
34) 2-Butanone	2.564	43	510012	17.554	ppbv		98

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

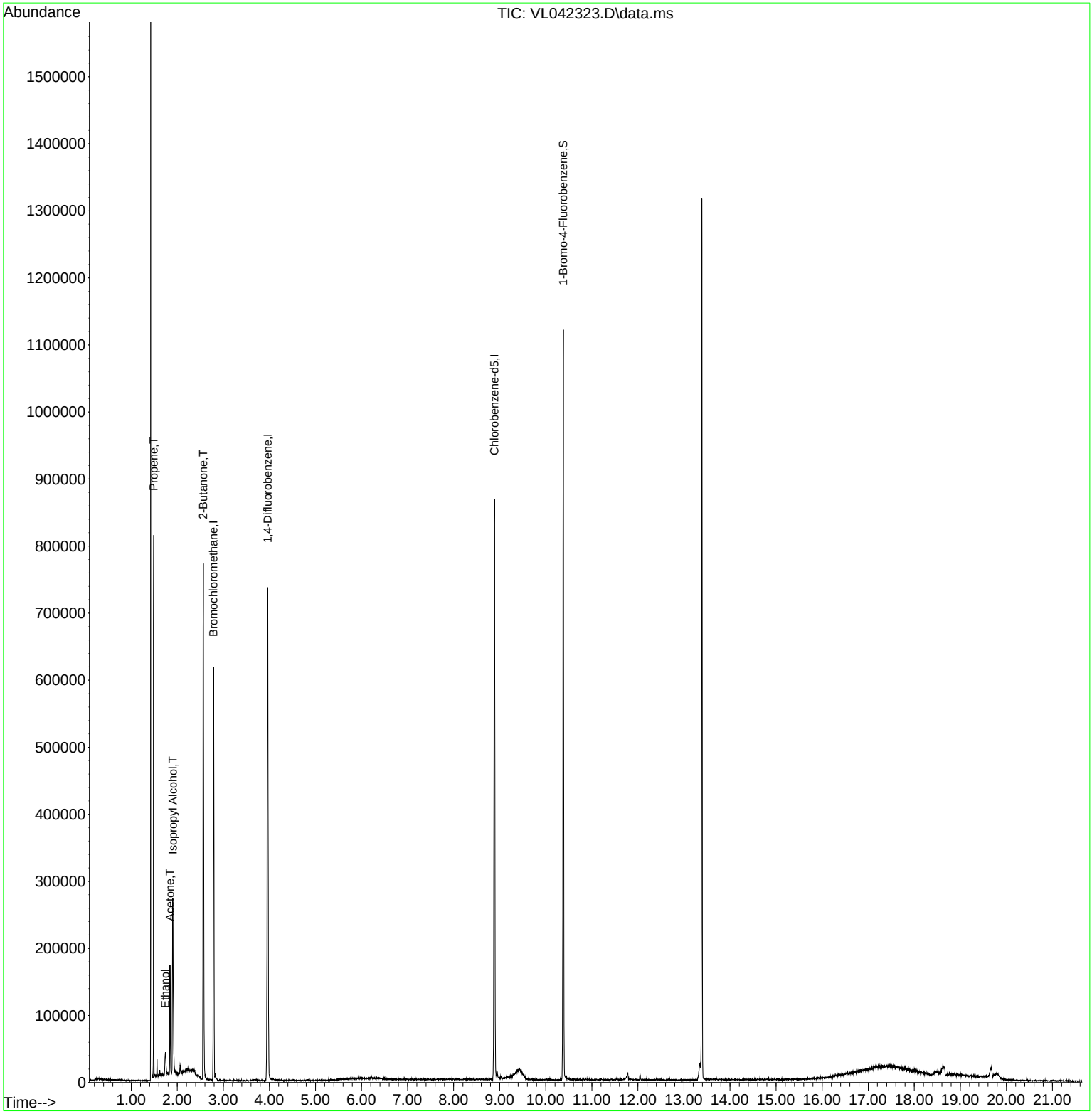
Quantitation Report (QT Reviewed)

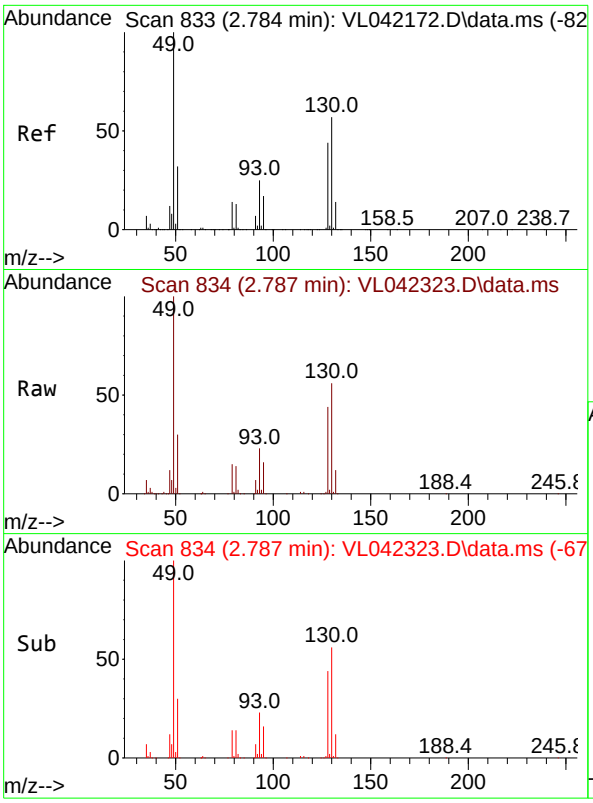
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042323.D
Acq On : 11 Apr 2025 16:39
Operator : SY/MD
Sample : Q1665-10DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 11 23:02:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

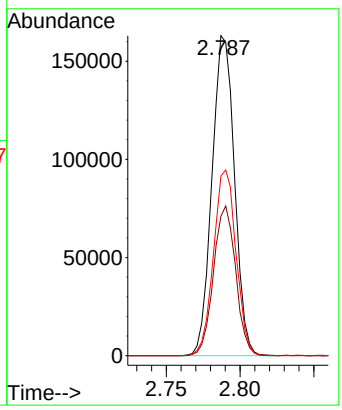




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 49 Resp: 17310

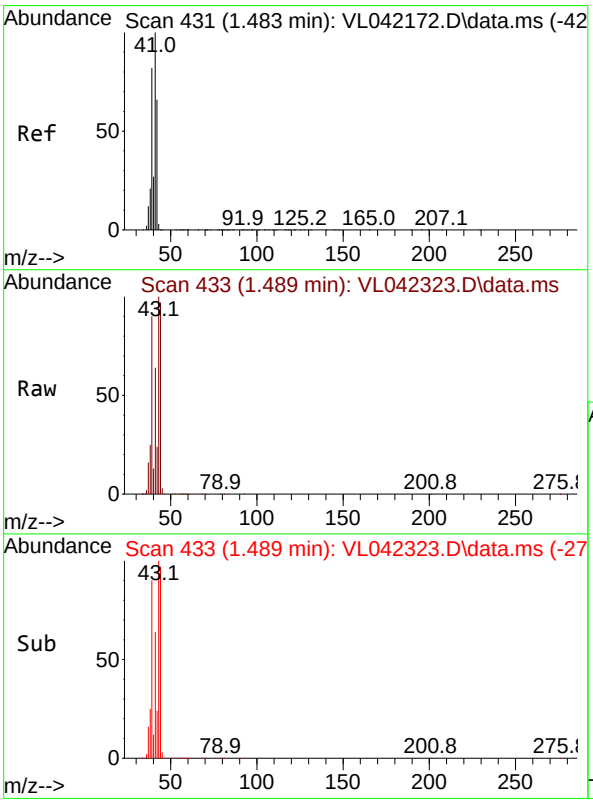
Ion	Ratio	Lower	Upper
49	100		
128	46.0	22.9	68.5
130	58.2	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations
APPROVED

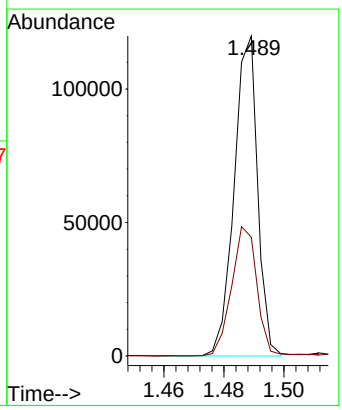
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

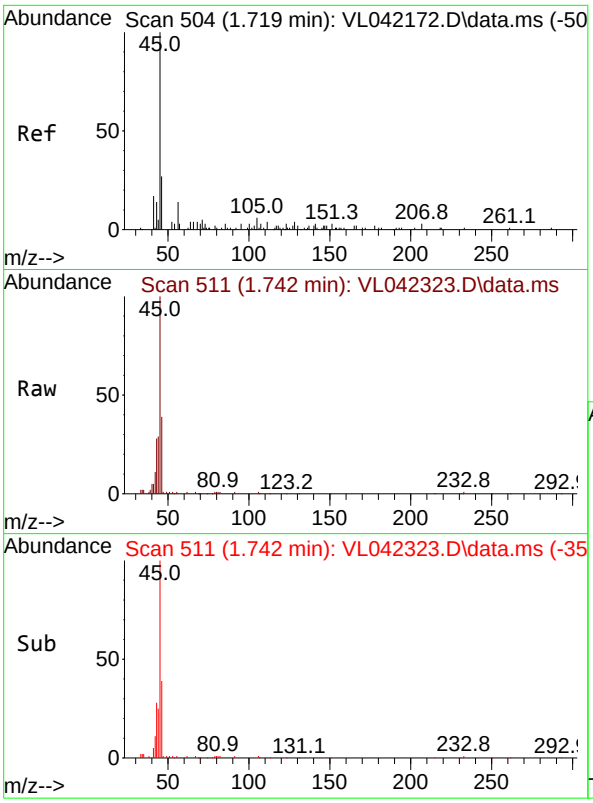


#9
Propene
Concen: 5.438 ppbv m
RT: 1.489 min Scan# 433
Delta R.T. 0.006 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 41 Resp: 65076

Ion	Ratio	Lower	Upper
41	100		
42	21.2	55.4	83.2#

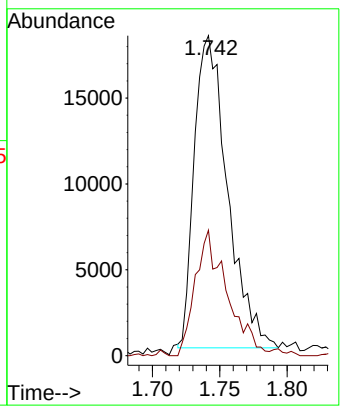




#13
Ethanol
Concen: 27.501 ppbv
RT: 1.742 min Scan# 5
Delta R.T. 0.022 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 45 Resp: 3111

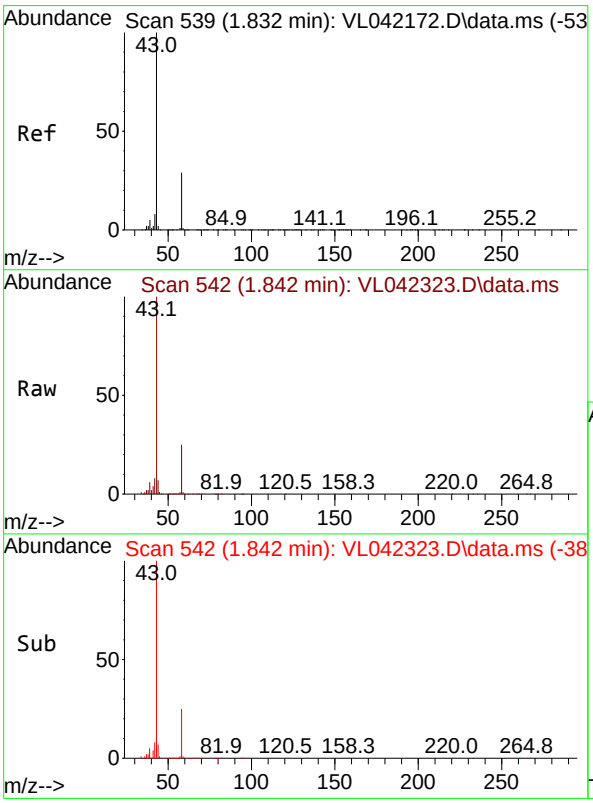
Ion	Ratio	Lower	Upper
45	100		
46	40.0	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations
APPROVED

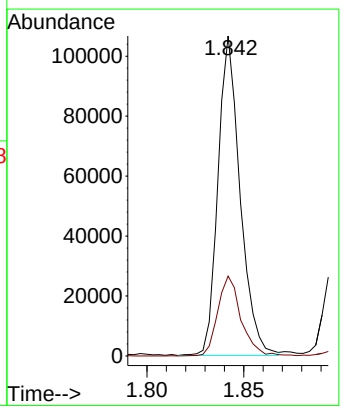
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

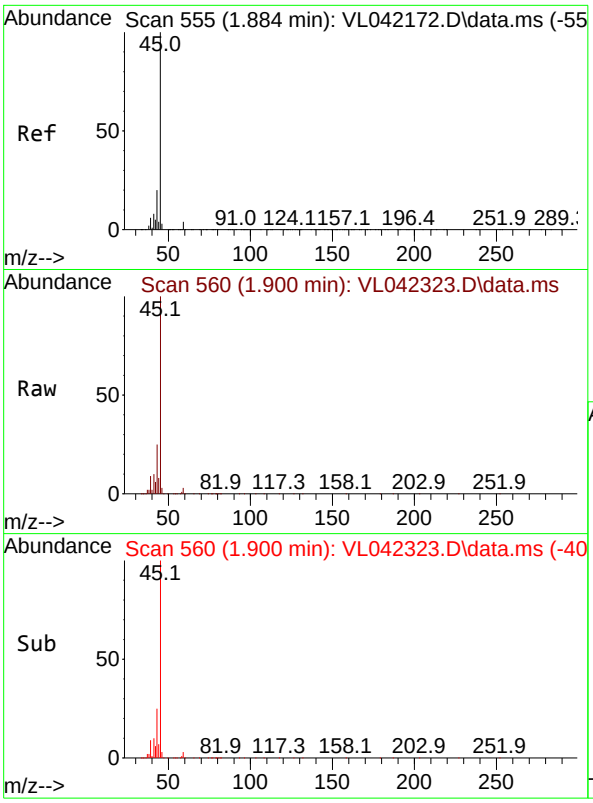


#15
Acetone
Concen: 3.496 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 43 Resp: 84634

Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8





#19
Isopropyl Alcohol
Concen: 15.191 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

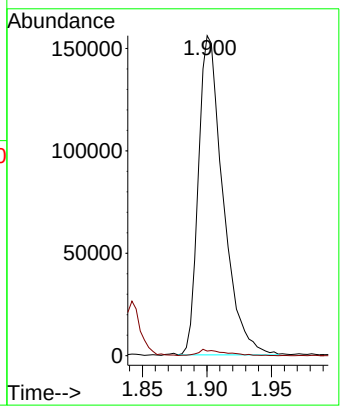
Tgt Ion: 45 Resp: 20750

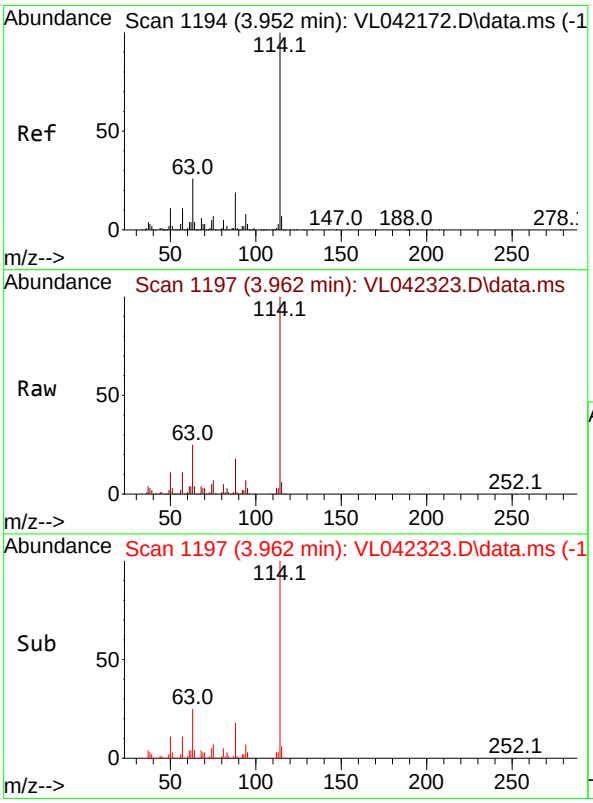
Ion	Ratio	Lower	Upper
45	100		
58	2.1	36.9	55.3#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

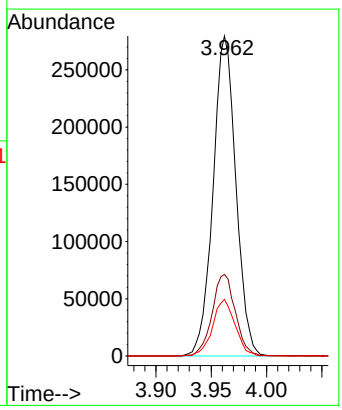


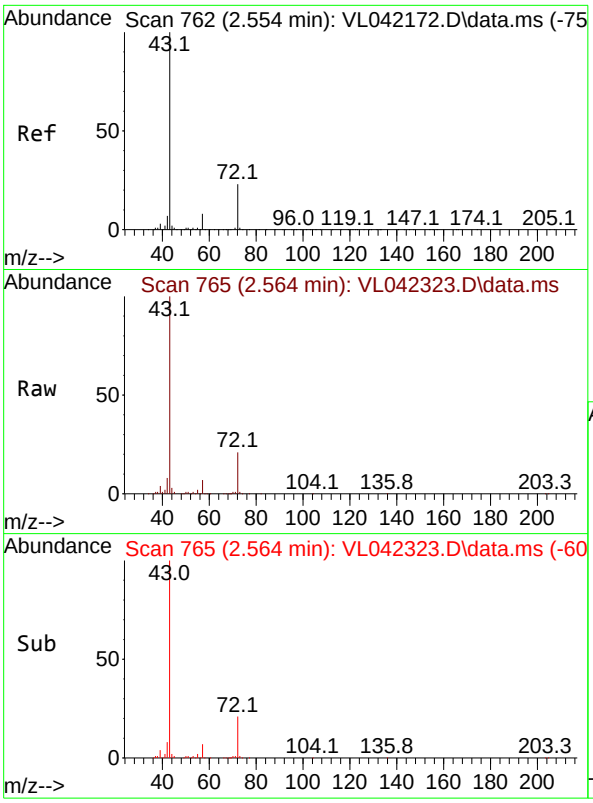


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion:114 Resp: 400666

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.4	15.0	22.4

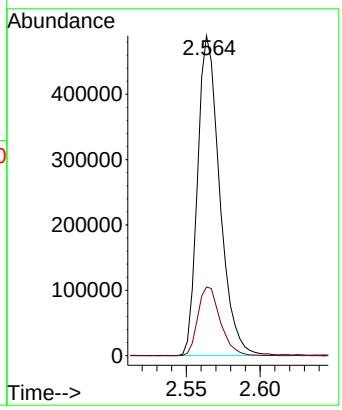




#34
2-Butanone
Concen: 17.554 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 43 Resp: 51001

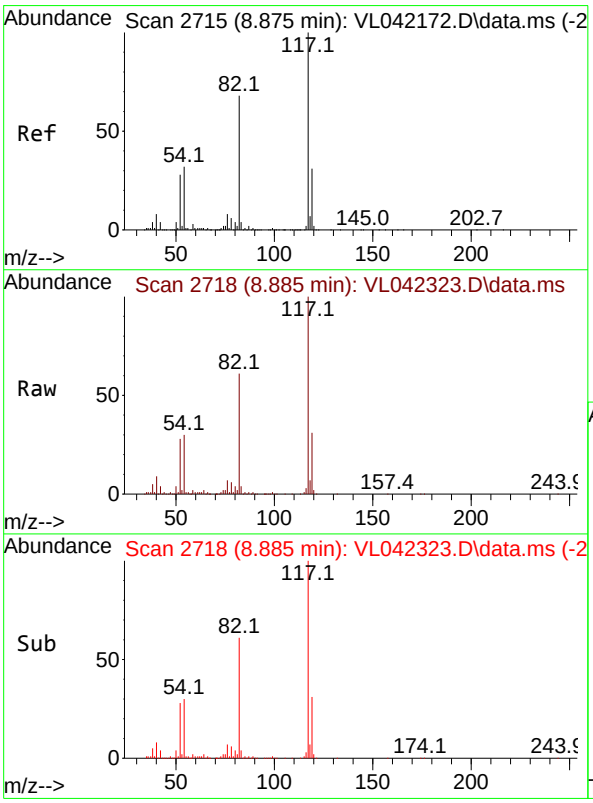
Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations
APPROVED

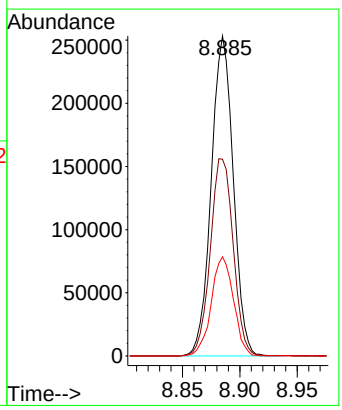
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

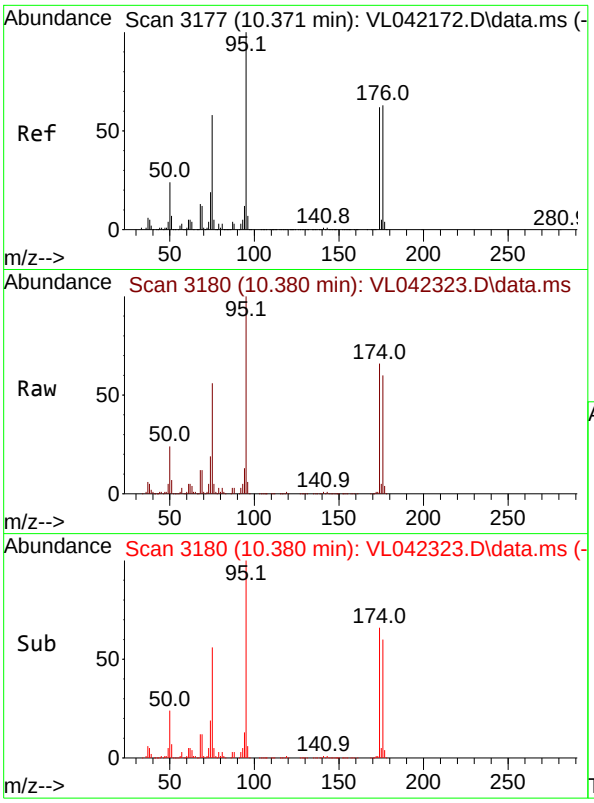


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion:117 Resp: 338211

Ion	Ratio	Lower	Upper
117	100		
82	64.2	55.8	83.6
119	31.4	25.5	38.3

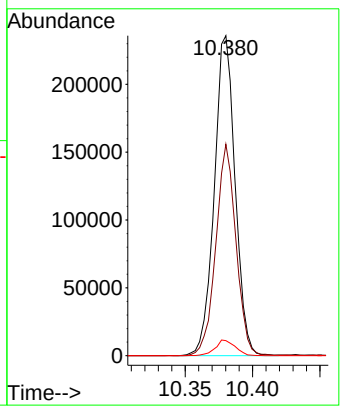




#68
1-Bromo-4-Fluorobenzene
Concen: 9.137 ppbv
RT: 10.380 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 95 Resp: 25378

Ion	Ratio	Lower	Upper
95	100		
174	64.4	50.6	76.0
175	4.7	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL2	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL2	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042332.D	100		04/15/25 15:01	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	21.0	104	UD	104	247	ug/m3
64-17-5	Ethanol	790	1490	DQ	60.3	94.2	ug/m3
74-87-3	Chloromethane	9.80	20.2	UD	20.2	103	ug/m3
75-01-4	Vinyl Chloride	1.40	3.58	UD	3.58	7.67	ug/m3
74-83-9	Bromomethane	14.0	54.4	UD	54.4	194	ug/m3
75-00-3	Chloroethane	17.0	44.9	UD	44.9	132	ug/m3
109-99-9	Tetrahydrofuran	13.0	38.3	UD	38.3	147	ug/m3
75-69-4	Trichlorofluoromethane	16.0	89.9	UD	89.9	281	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	16.0	123	UD	123	383	ug/m3
76-14-2	Dichlorotetrafluoroethane	8.80	61.5	UD	61.5	349	ug/m3
593-60-2	Bromoethene	12.0	52.5	UD	52.5	219	ug/m3
75-65-0	tert-Butyl alcohol	19.0	57.6	UDQ	57.6	152	ug/m3
142-82-5	Heptane	11.0	45.1	UD	45.1	205	ug/m3
67-63-0	Isopropyl Alcohol	430	1060	D	17.0	123	ug/m3
75-35-4	1,1-Dichloroethene	14.0	55.5	UD	55.5	198	ug/m3
67-64-1	Acetone	120	285	D	57.0	119	ug/m3
75-15-0	Carbon Disulfide	16.0	49.8	UD	49.8	156	ug/m3
1634-04-4	Methyl tert-Butyl Ether	12.0	43.3	UD	43.3	180	ug/m3
75-09-2	Methylene Chloride	19.0	66.0	UDQ	66.0	174	ug/m3
156-60-5	trans-1,2-Dichloroethene	19.0	75.3	UD	75.3	198	ug/m3
75-34-3	1,1-Dichloroethane	13.0	52.6	UD	52.6	202	ug/m3
110-82-7	Cyclohexane	22.0	75.7	UD	75.7	172	ug/m3
78-93-3	2-Butanone	480	1420	D	35.4	147	ug/m3
56-23-5	Carbon Tetrachloride	1.10	6.92	UD	6.92	18.9	ug/m3
156-59-2	cis-1,2-Dichloroethene	8.90	35.3	UD	35.3	198	ug/m3
67-66-3	Chloroform	8.30	40.5	UD	40.5	244	ug/m3
71-55-6	1,1,1-Trichloroethane	0.95	5.18	UD	5.18	16.4	ug/m3
540-84-1	2,2,4-Trimethylpentane	10.0	46.7	UD	46.7	234	ug/m3
71-43-2	Benzene	8.70	27.8	UD	27.8	160	ug/m3
107-06-2	1,2-Dichloroethane	9.10	36.8	UD	36.8	202	ug/m3
79-01-6	Trichloroethene	1.70	9.14	UD	9.14	16.1	ug/m3
78-87-5	1,2-Dichloropropane	11.0	50.8	UD	50.8	231	ug/m3
75-27-4	Bromodichloromethane	7.70	51.6	UD	51.6	335	ug/m3
108-10-1	4-Methyl-2-Pentanone	9.30	38.1	UD	38.1	205	ug/m3
108-88-3	Toluene	11.0	41.5	UD	41.5	188	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL2	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL2	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042332.D	100		04/15/25 15:01	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	6.00	27.2	UD	27.2	227	ug/m3
10061-01-5	cis-1,3-Dichloropropene	6.40	29.1	UD	29.1	227	ug/m3
79-00-5	1,1,2-Trichloroethane	7.10	38.7	UD	38.7	273	ug/m3
124-48-1	Dibromochloromethane	6.60	56.2	UD	56.2	426	ug/m3
106-93-4	1,2-Dibromoethane	7.20	55.3	UD	55.3	76.8	ug/m3
127-18-4	Tetrachloroethene	1.50	10.2	UD	10.2	20.3	ug/m3
108-90-7	Chlorobenzene	7.60	35.0	UD	35.0	230	ug/m3
100-41-4	Ethyl Benzene	12.0	52.1	UD	52.1	217	ug/m3
179601-23-1	m/p-Xylene	21.0	91.2	UD	91.2	434	ug/m3
95-47-6	o-Xylene	12.0	52.1	UD	52.1	217	ug/m3
100-42-5	Styrene	11.0	46.8	UD	46.8	213	ug/m3
75-25-2	Bromoform	5.70	58.9	UD	58.9	517	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	1.10	7.55	UD	7.55	20.6	ug/m3
95-49-8	2-Chlorotoluene	11.0	57.0	UD	57.0	259	ug/m3
108-67-8	1,3,5-Trimethylbenzene	11.0	54.1	UD	54.1	246	ug/m3
95-63-6	1,2,4-Trimethylbenzene	7.80	38.4	UD	38.4	246	ug/m3
541-73-1	1,3-Dichlorobenzene	8.00	48.1	UD	48.1	301	ug/m3
106-46-7	1,4-Dichlorobenzene	5.30	31.9	UD	31.9	301	ug/m3
95-50-1	1,2-Dichlorobenzene	7.50	45.1	UD	45.1	301	ug/m3
120-82-1	1,2,4-Trichlorobenzene	8.50	63.1	UD	63.1	371	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	8.50	90.7	UD	90.7	533	ug/m3
106-99-0	1,3-Butadiene	13.0	28.8	UD	28.8	111	ug/m3
91-20-3	Naphthalene	7.50	39.3	UD	39.3	52.4	ug/m3
622-96-8	4-Ethyltoluene	12.0	59.0	UD	59.0	246	ug/m3
110-54-3	Hexane	11.0	38.8	UD	38.8	176	ug/m3
107-05-1	Allyl Chloride	15.0	47.0	UD	47.0	157	ug/m3
123-91-1	1,4-Dioxane	21.0	75.7	UD	75.7	180	ug/m3
80-62-6	Methyl Methacrylate	8.60	35.2	UD	35.2	205	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.30			70 (65) - 130 (135)	93%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	164000		2.81			
540-36-3	1,4-Difluorobenzene	385000		3.998			
3114-55-4	Chlorobenzene-d5	328000		8.917			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-4-3242025DL2	SDG No.:	Q1665
Lab Sample ID:	Q1665-10DL2	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042332.D	100		04/15/25 15:01	VL041525

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042332.D
Acq On : 15 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-10DL2 100X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:32:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.810	49	164444	10.000	ppbv		0.03
33) 1,4-Difluorobenzene	3.998	114	385228	10.000	ppbv		0.05
55) Chlorobenzene-d5	8.917	117	327587	10.000	ppbv		0.04
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.406	95	251001	9.330	ppbv		0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.300%				
Target Compounds							Qvalue
9) Propene	1.499	41	20713m	1.822	ppbv		
13) Ethanol	1.732	45	8531	7.938	ppbv		83
15) Acetone	1.848	43	26934	1.171	ppbv		95
19) Isopropyl Alcohol	1.900	45	55262	4.259	ppbv	#	34
34) 2-Butanone	2.580	43	135118	4.837	ppbv		97

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

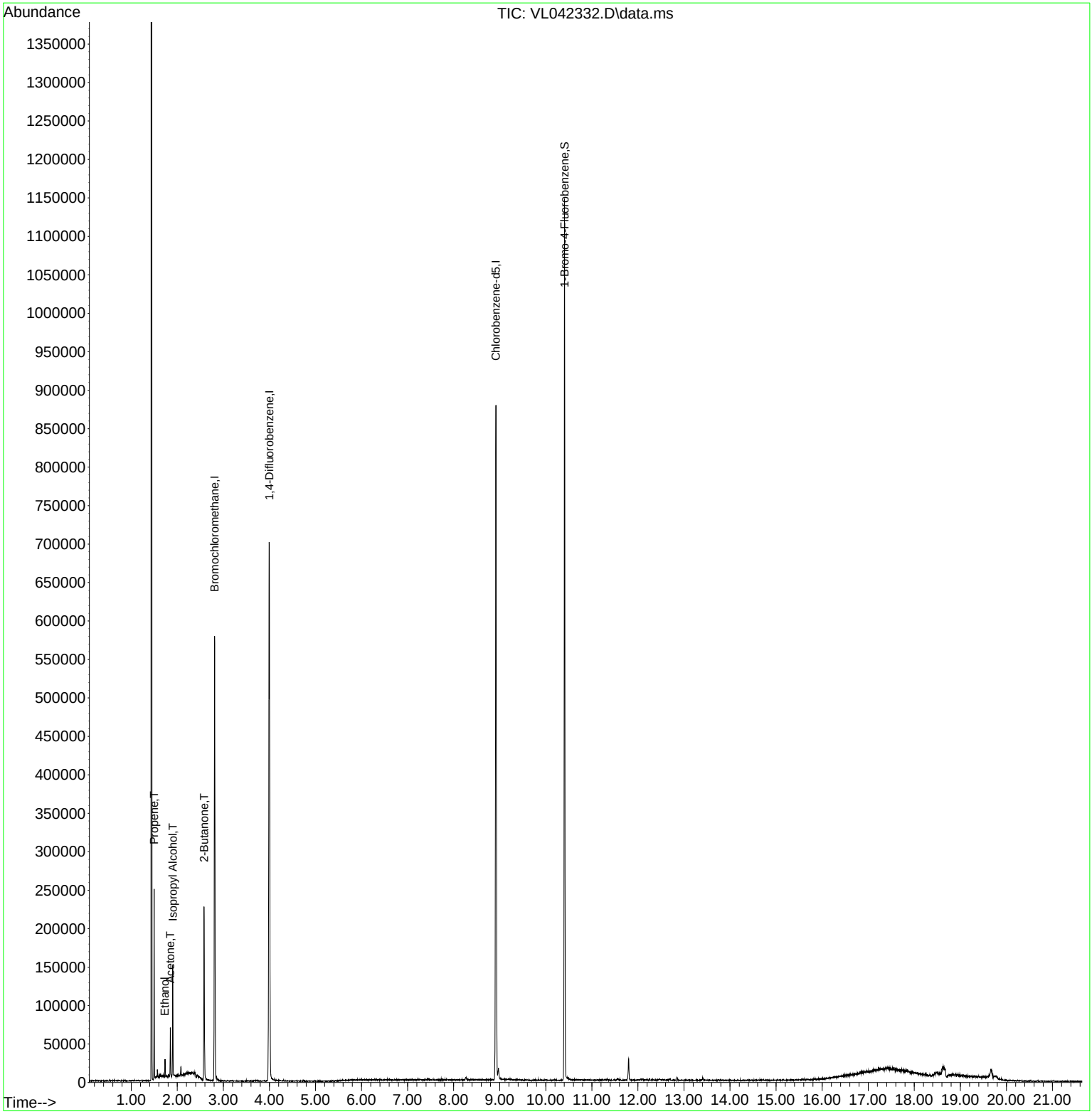
Quantitation Report (QT Reviewed)

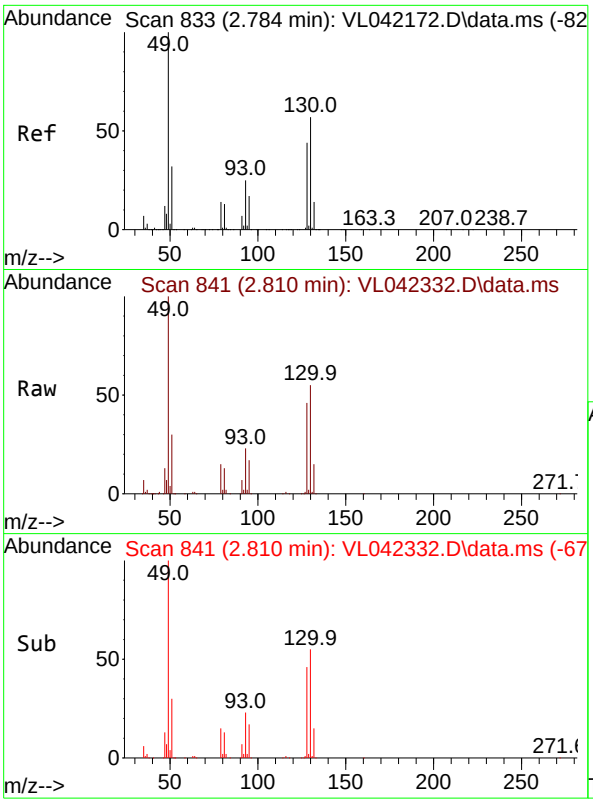
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042332.D
Acq On : 15 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-10DL2 100X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:32:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

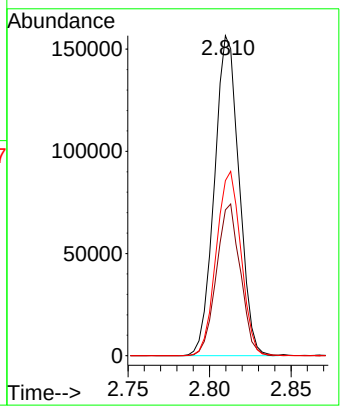




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.810 min Scan# 84
Delta R.T. 0.026 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 49 Resp: 16444

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	57.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

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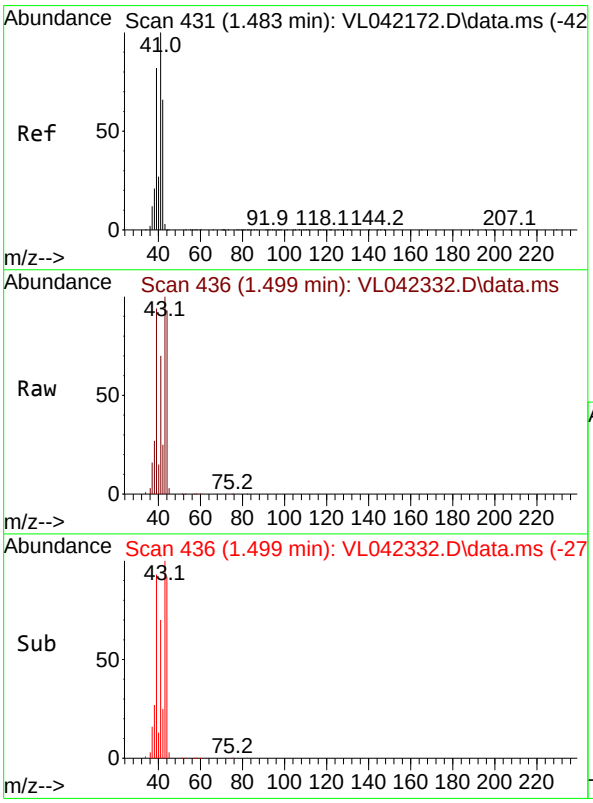
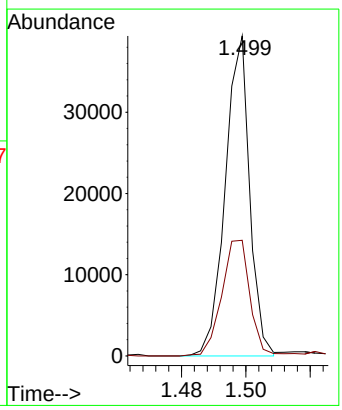
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

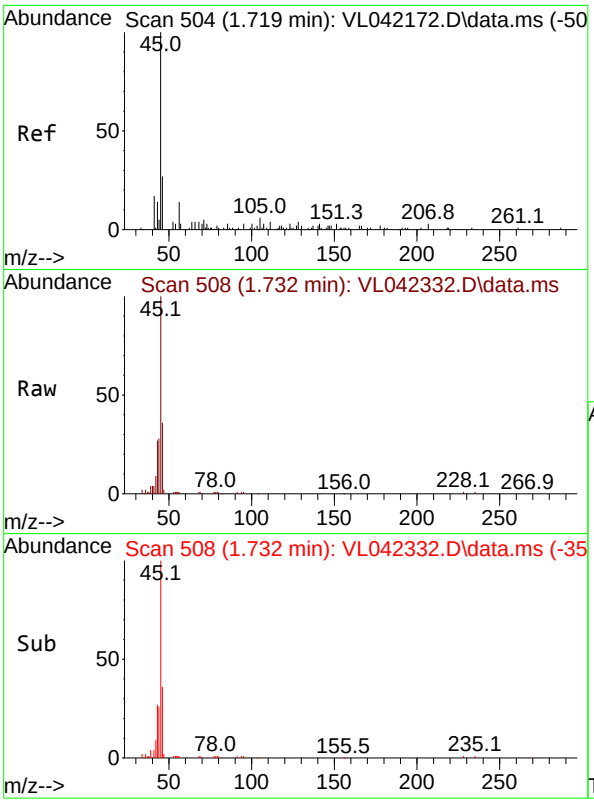


#9
Propene
Concen: 1.822 ppbv m
RT: 1.499 min Scan# 436
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 41 Resp: 20713

Ion	Ratio	Lower	Upper
41	100		
42	19.5	55.4	83.2#

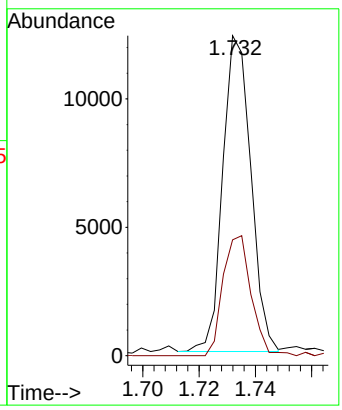




#13
Ethanol
Concen: 7.938 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 45 Resp: 853

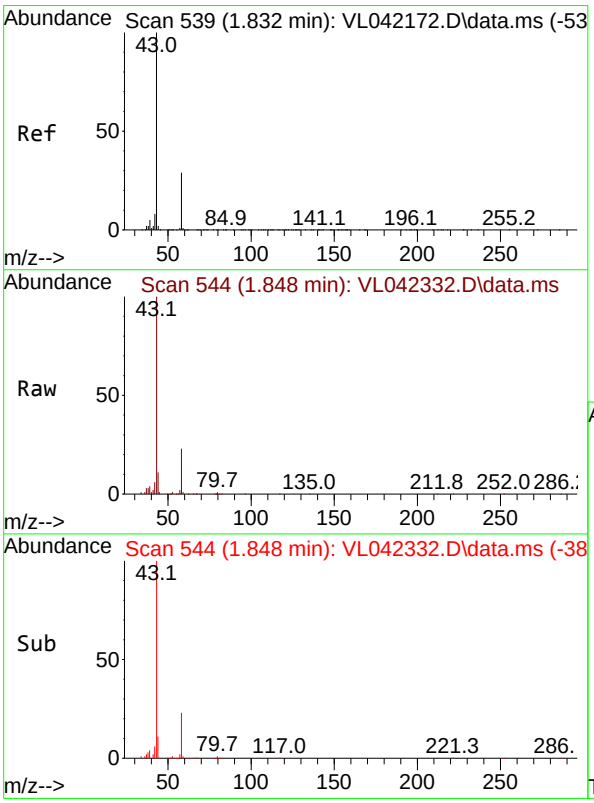
Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations
APPROVED

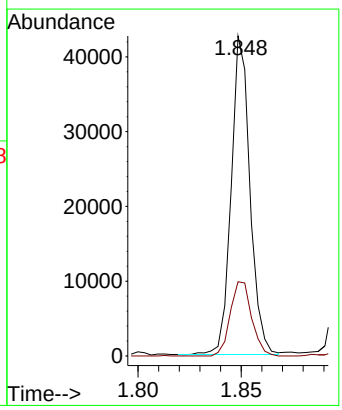
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

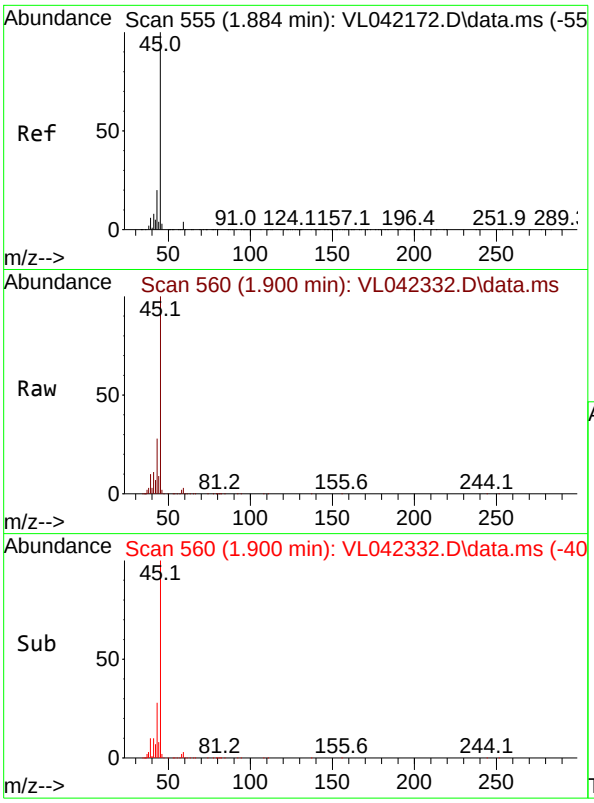


#15
Acetone
Concen: 1.171 ppbv
RT: 1.848 min Scan# 544
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 43 Resp: 26934

Ion	Ratio	Lower	Upper
43	100		
58	26.6	23.2	34.8





#19
Isopropyl Alcohol
Concen: 4.259 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 45 Resp: 5526

Ion	Ratio	Lower	Upper
45	100		
58	2.5	36.9	55.3#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
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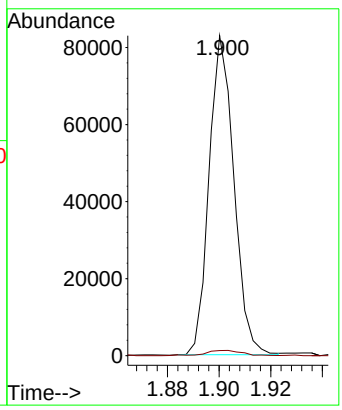
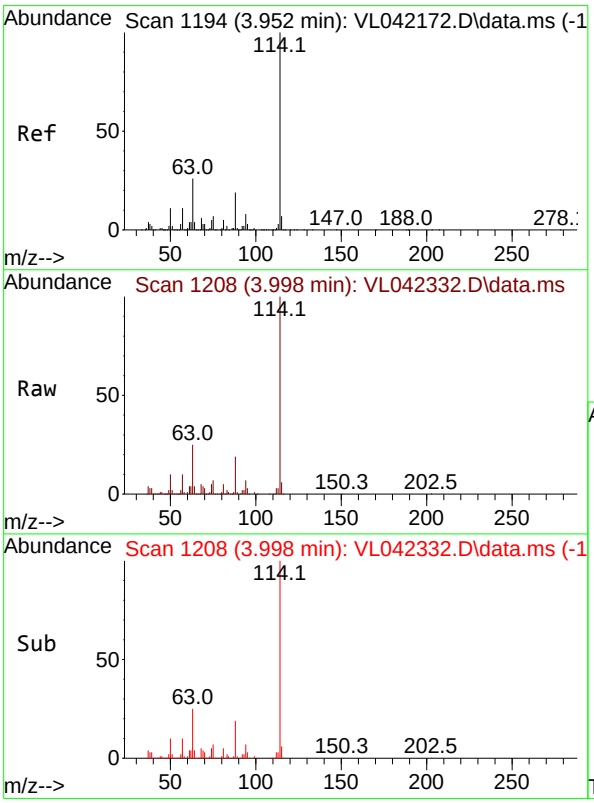
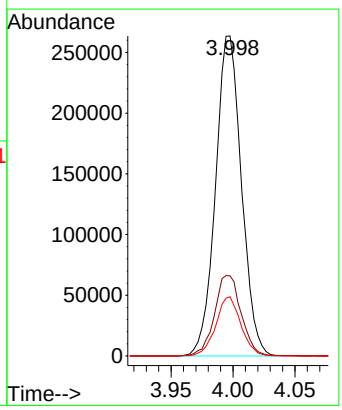


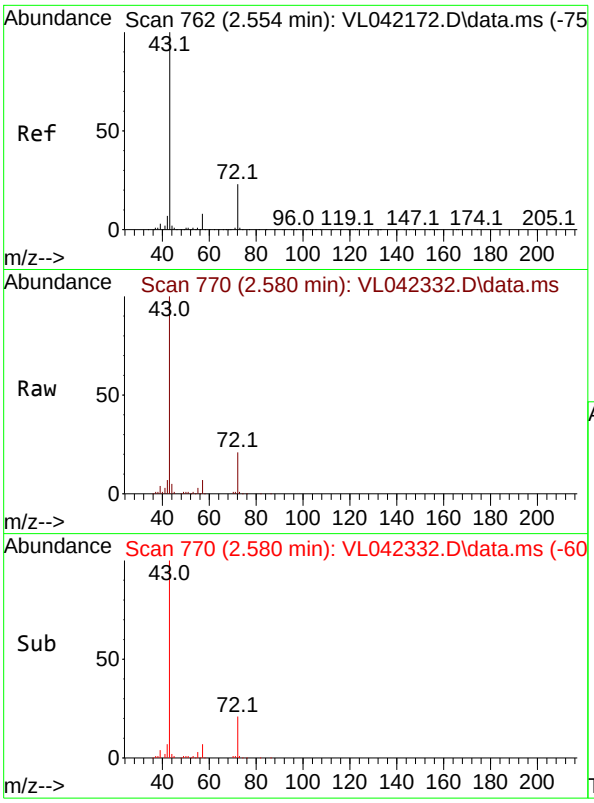


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.998 min Scan# 1208
Delta R.T. 0.045 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion:114 Resp: 385228

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.9	15.0	22.4





#34
2-Butanone
Concen: 4.837 ppbv
RT: 2.580 min Scan# 7
Delta R.T. 0.026 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 43 Resp: 13511

Ion	Ratio	Lower	Upper
43	100		
72	21.0	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
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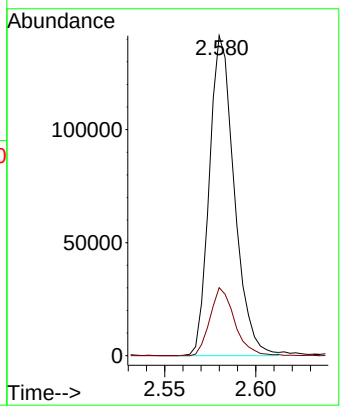
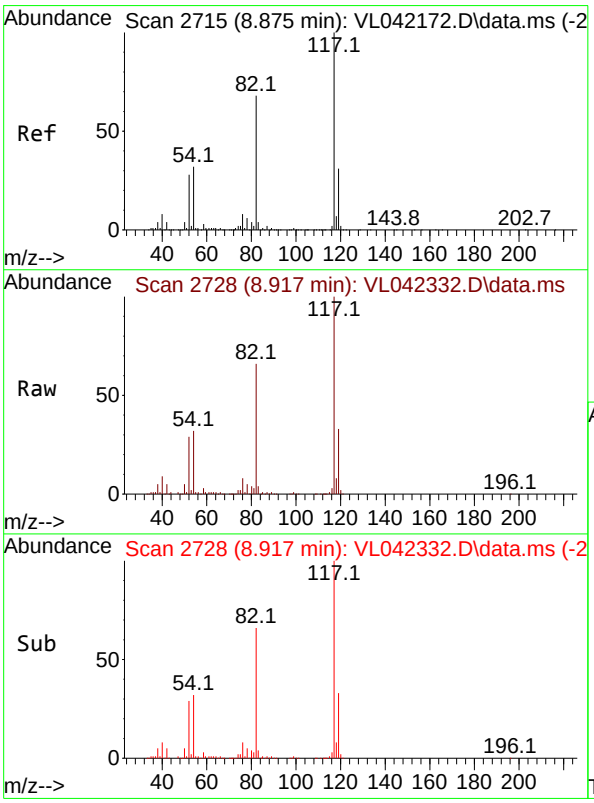
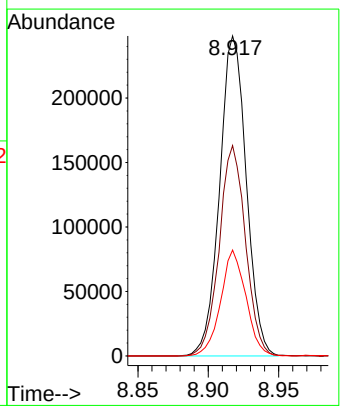


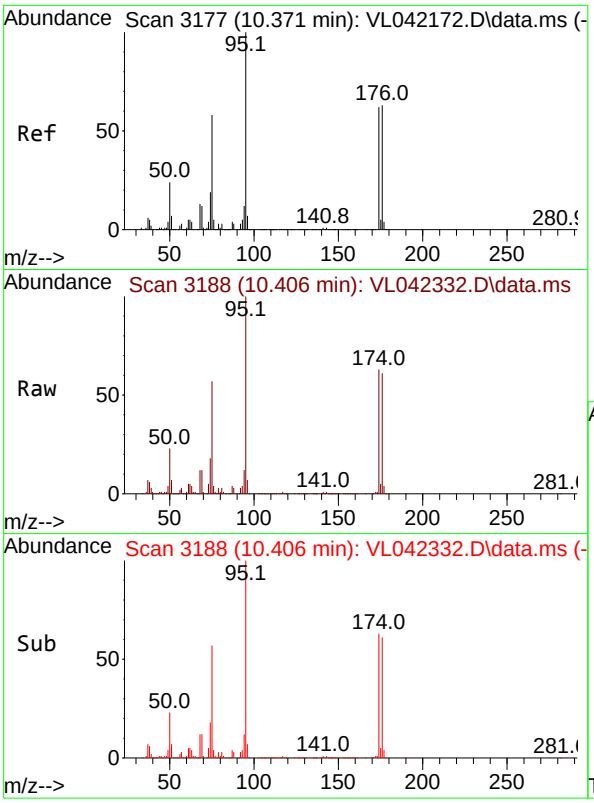


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.042 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion:117 Resp: 327587

Ion	Ratio	Lower	Upper
117	100		
82	64.9	55.8	83.6
119	31.5	25.5	38.3

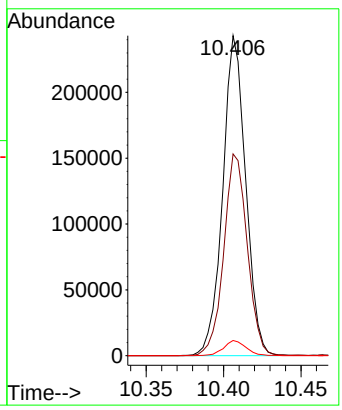




#68
1-Bromo-4-Fluorobenzene
Concen: 9.330 ppbv
RT: 10.406 min Scan# 3
Delta R.T. 0.035 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 95 Resp: 25100

Ion	Ratio	Lower	Upper
95	100		
174	64.9	50.6	76.0
175	4.6	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-11	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042320.D	1		04/11/25 15:01	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.43	2.13	J	1.04	2.47	ug/m3
64-17-5	Ethanol	1100	2070	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.59	1.22		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.42	1.27	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	51.2	126	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	78.5	186	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	14.8	51.4		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	12.3	36.3		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	1.10	5.37		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.46	1.47	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.16	0.66	J	0.37	2.05	ug/m3
108-88-3	Toluene	0.40	1.51	J	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-11	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042320.D	1		04/11/25 15:01	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.22	0.96	J	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.15	0.65	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	UQ	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.16	0.79	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.57	2.80		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	UQ	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	8.10	28.6		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.0			70 (65) - 130 (135)	100%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	184000		2.787			
540-36-3	1,4-Difluorobenzene	461000		3.955			
3114-55-4	Chlorobenzene-d5	381000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							

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

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-11	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042320.D	1		04/11/25 15:01	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
115-07-1	Propene	3.80		J		1.49	ppbv
000106-97-8	Butane	2.20		J		1.62	ppbv
003769-23-1	1-Hexene, 4-methyl-	1.30		J		2.63	ppbv
	unknown3.230	1.30		J		3.23	ppbv
000124-18-5	Decane	1.80		J		11.8	ppbv
99-87-6	p-Isopropyltoluene	0.12		J		11.9	ppbv
005989-27-5	D-Limonene	8.40		J		12.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 23:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	183875	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	460651	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	381290	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	314052	10.030	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11636	0.429	ppbv		90
4) Chloromethane	1.531	50	6489	0.585	ppbv	#	86
9) Propene	1.486	41	48793m	3.838	ppbv		
11) Trichlorofluoromethane	1.877	101	5866	0.222	ppbv		100
13) Ethanol	1.722	45	1300122	1081.877	ppbv		88
15) Acetone	1.832	43	2018088	78.476	ppbv	#	79
17) tert-Butyl alcohol	2.043	59	13419m	0.419	ppbv		
19) Isopropyl Alcohol	1.884	45	743440	51.238	ppbv	#	5
20) Methylene Chloride	2.062	84	141997	14.826	ppbv		96
26) Hexane	2.826	57	208675	8.094	ppbv	#	41
29) Chloroform	2.848	83	40045	1.061	ppbv		96
34) 2-Butanone	2.557	43	411404	12.316	ppbv		98
35) Carbon Tetrachloride	3.755	117	2791m	0.078	ppbv		
36) Benzene	3.654	78	21158	0.463	ppbv		98
50) 4-Methyl-2-Pentanone	5.774	43	8442m	0.159	ppbv		
53) Toluene	6.930	91	21762m	0.402	ppbv		
59) m/p-Xylene	9.532	91	12058m	0.223	ppbv		
60) o-Xylene	9.966	91	7975	0.147	ppbv		99
69) p-Isopropyltoluene	11.927	119	10393	0.116	ppbv	#	90
72) 4-Ethyltoluene	11.125	105	7507	0.111	ppbv	#	64
73) 1,3,5-Trimethylbenzene	11.205	105	9483	0.161	ppbv		96
74) 1,2,4-Trimethylbenzene	11.536	105	38801	0.571	ppbv	#	68

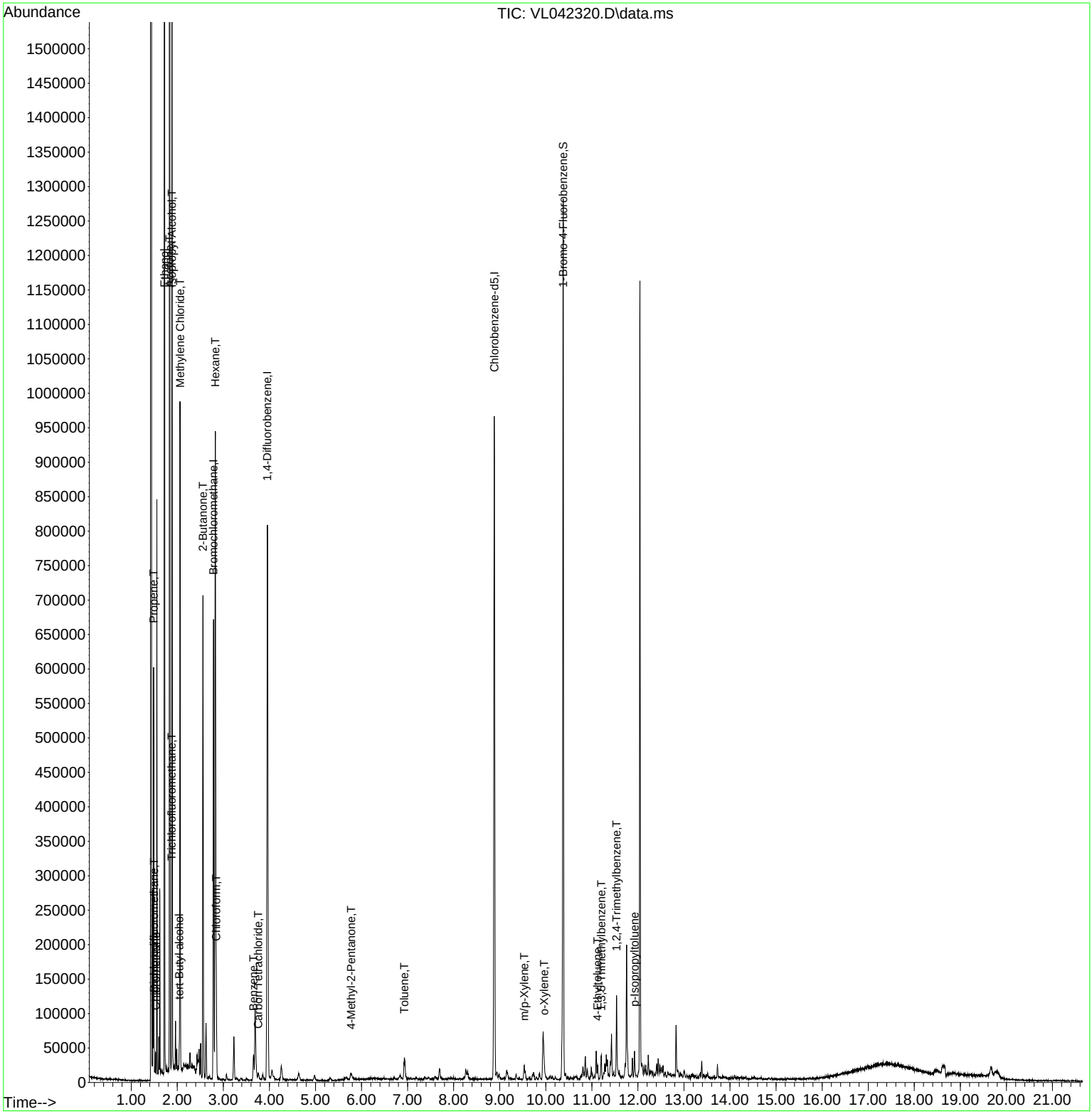
(#) = qualifier out of range (m) = manual integration (+) = signals summed

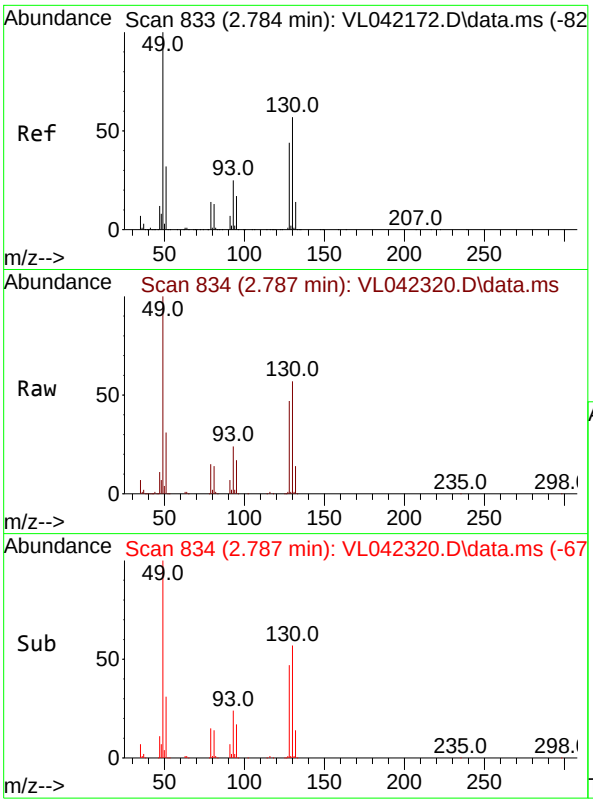
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 11 23:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

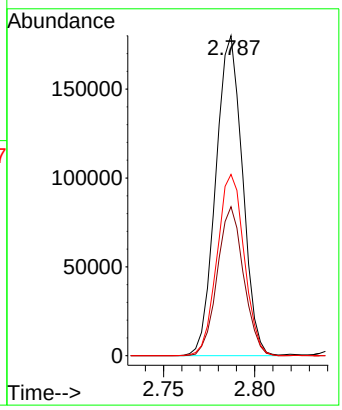




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 49 Resp: 18387

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
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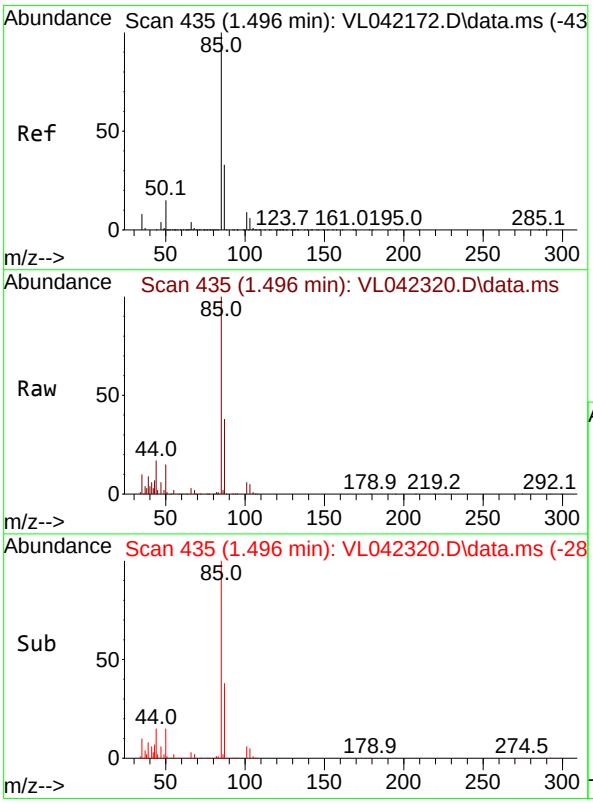
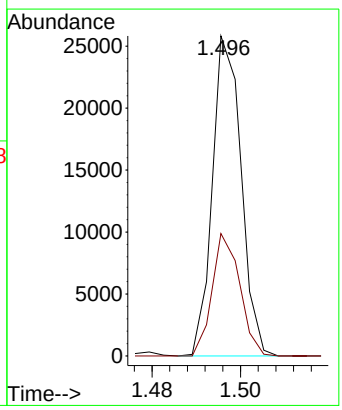
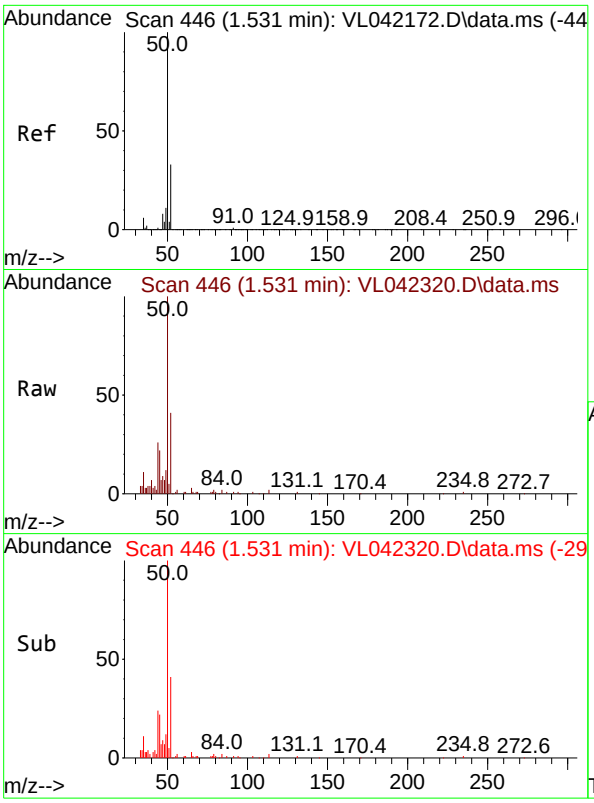


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 85 Resp: 11636

Ion	Ratio	Lower	Upper
85	100		
87	38.2	26.1	39.1

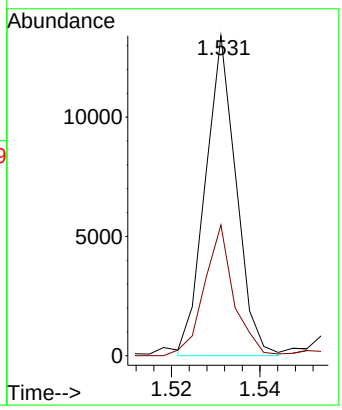




#4
Chloromethane
Concen: 0.585 ppbv
RT: 1.531 min Scan# 44
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 50 Resp: 648

Ion	Ratio	Lower	Upper
50	100		
52	40.7	26.1	39.1#



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
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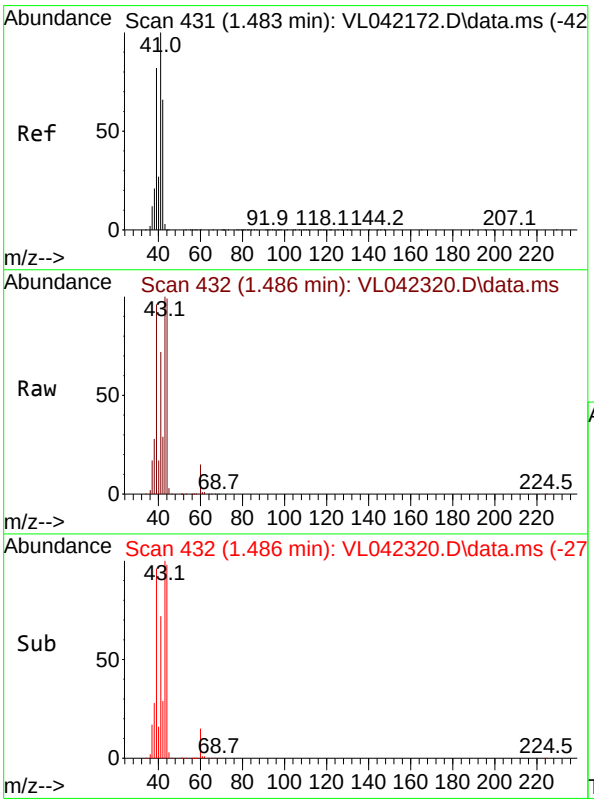
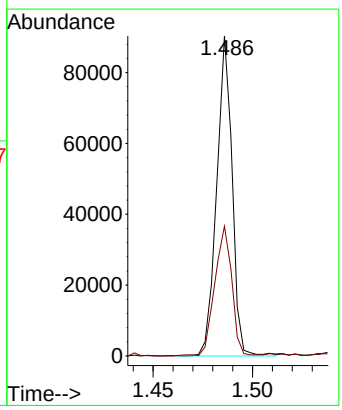
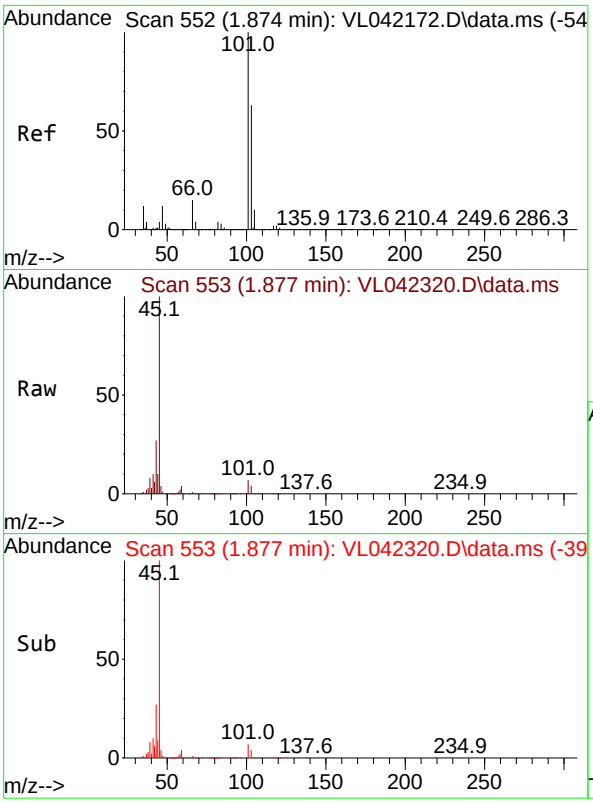


#9
Propene
Concen: 3.838 ppbv m
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 41 Resp: 48793

Ion	Ratio	Lower	Upper
41	100		
42	87.5	55.4	83.2#

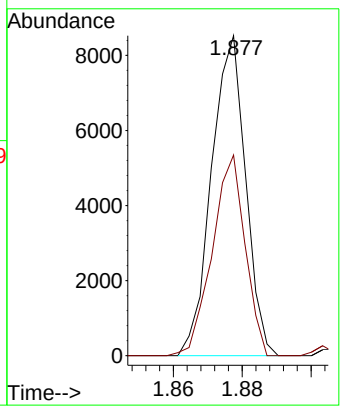




#11
Trichlorofluoromethane
Concen: 0.222 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:101 Resp: 586

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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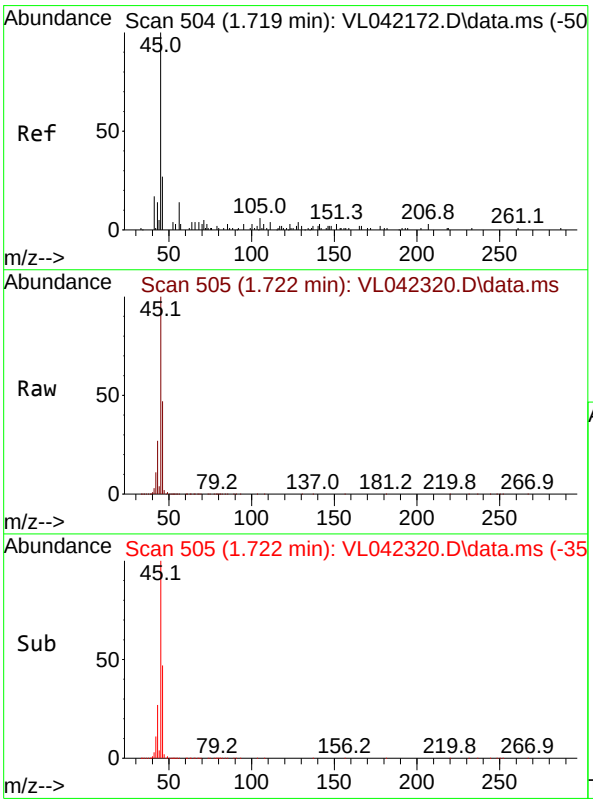
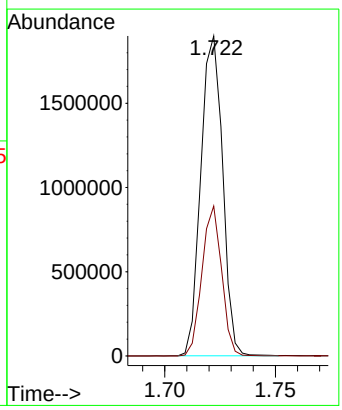
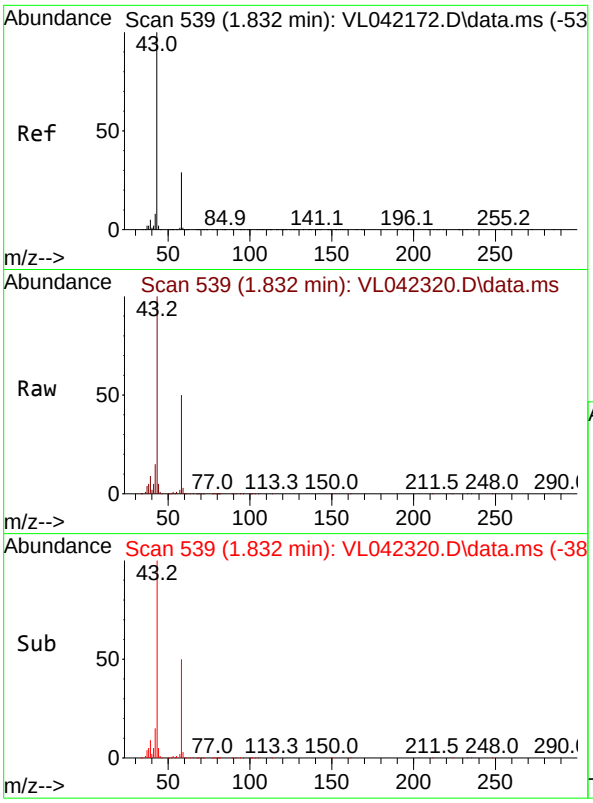


#13
Ethanol
Concen: 1081.877 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 45 Resp: 1300122

Ion	Ratio	Lower	Upper
45	100		
46	42.5	20.2	80.8





#15
Acetone
Concen: 78.476 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 43 Resp: 201808

Ion	Ratio	Lower	Upper
43	100		
58	40.0	23.2	34.8#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
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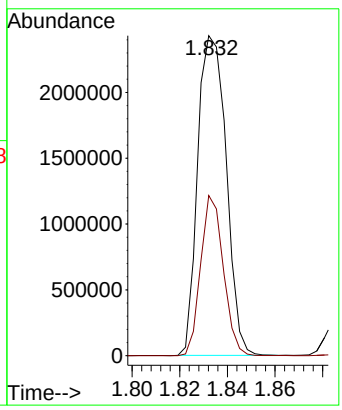
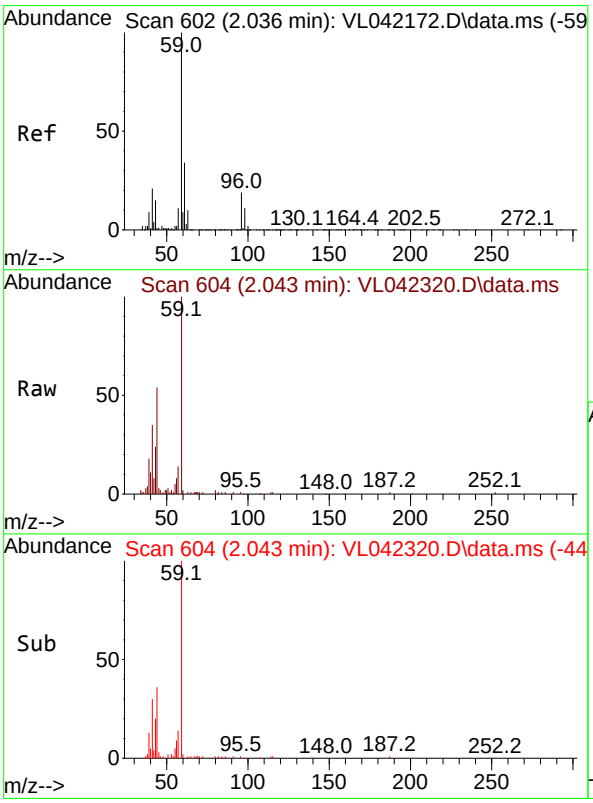
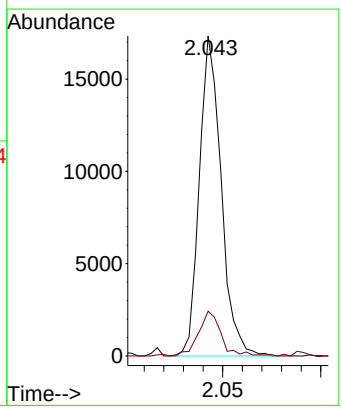


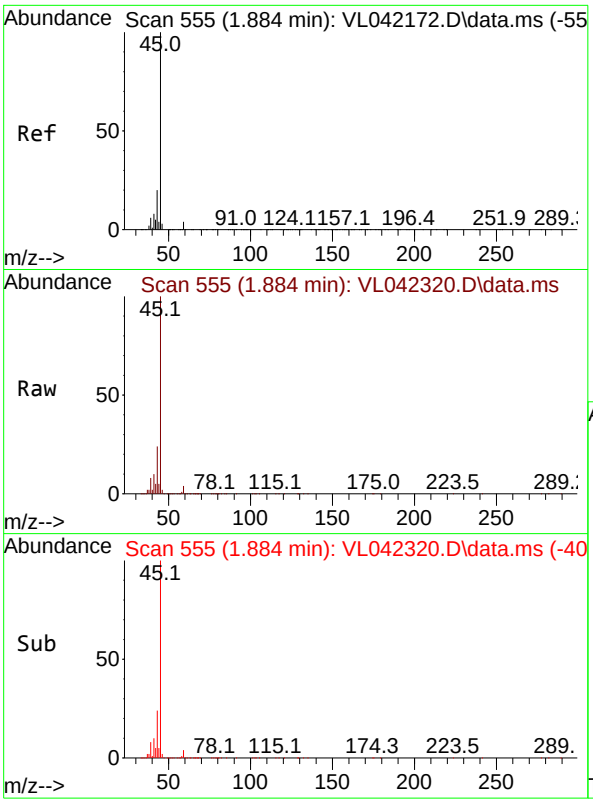


#17
tert-Butyl alcohol
Concen: 0.419 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 59 Resp: 13419

Ion	Ratio	Lower	Upper
59	100		
57	20.2	8.9	13.3#





#19
Isopropyl Alcohol
Concen: 51.238 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 45 Resp: 74344

Ion	Ratio	Lower	Upper
45	100		
58	108.7	36.9	55.3#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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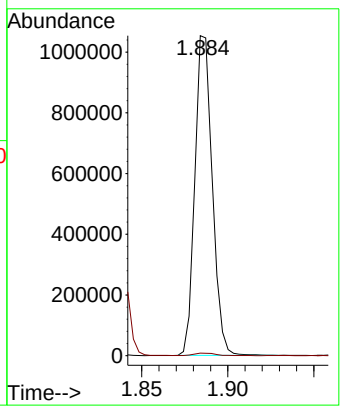
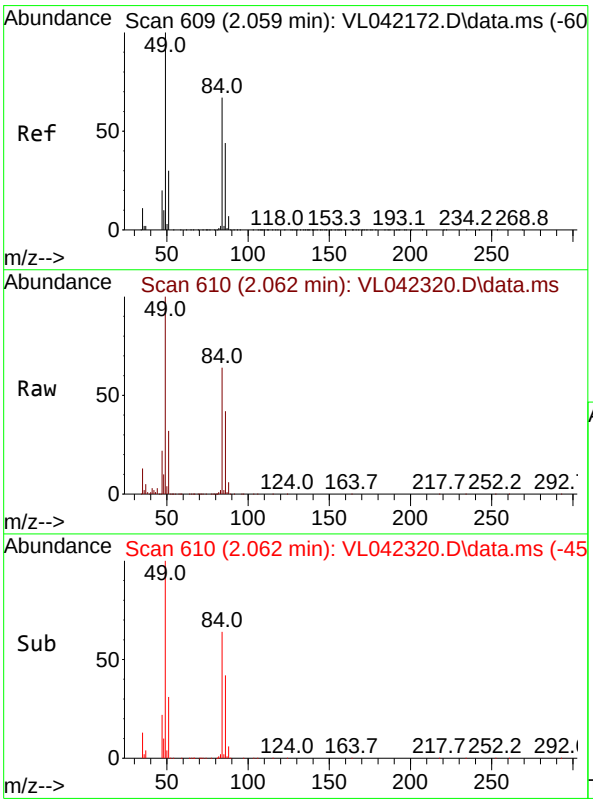
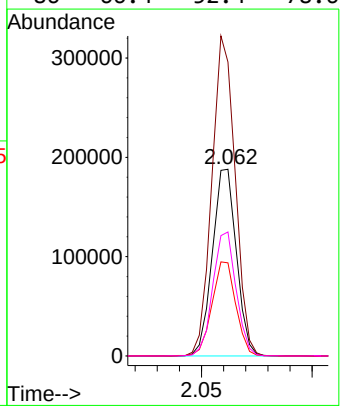


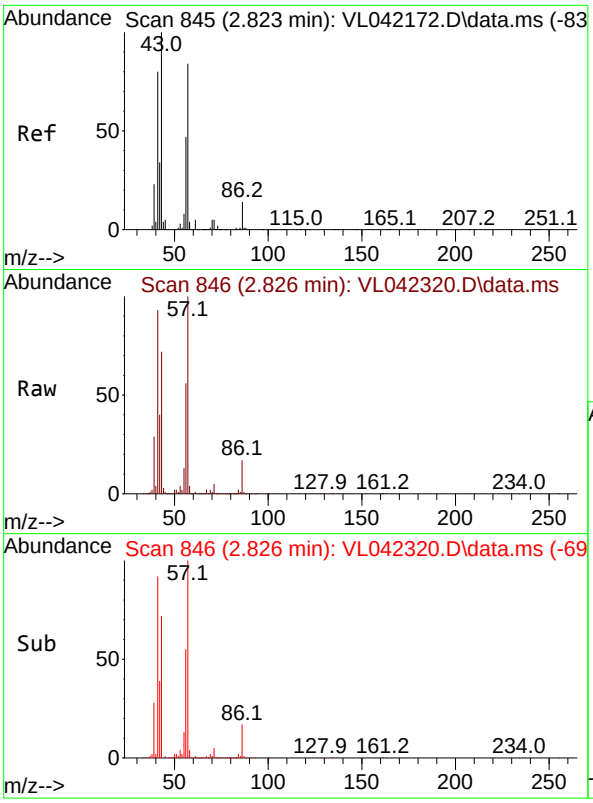


#20
Methylene Chloride
Concen: 14.826 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 84 Resp: 141997

Ion	Ratio	Lower	Upper
84	100		
49	157.4	120.2	180.4
51	49.9	37.4	56.0
86	66.4	52.4	78.6

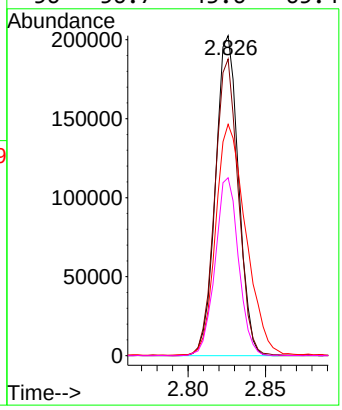




#26
Hexane
Concen: 8.094 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 57 Resp: 20867

Ion	Ratio	Lower	Upper
57	100		
41	94.9	76.6	114.8
43	94.7	207.8	311.8
56	56.7	43.6	65.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
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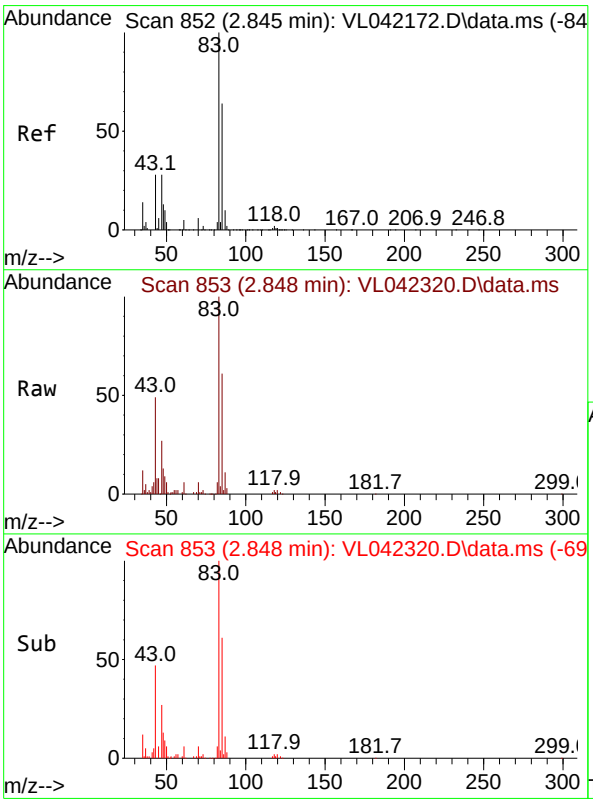
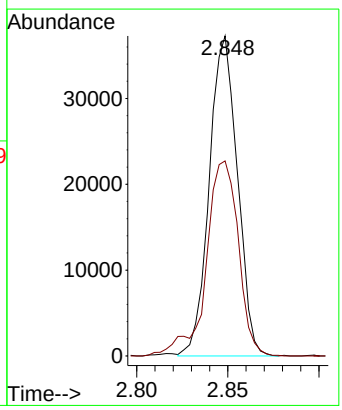
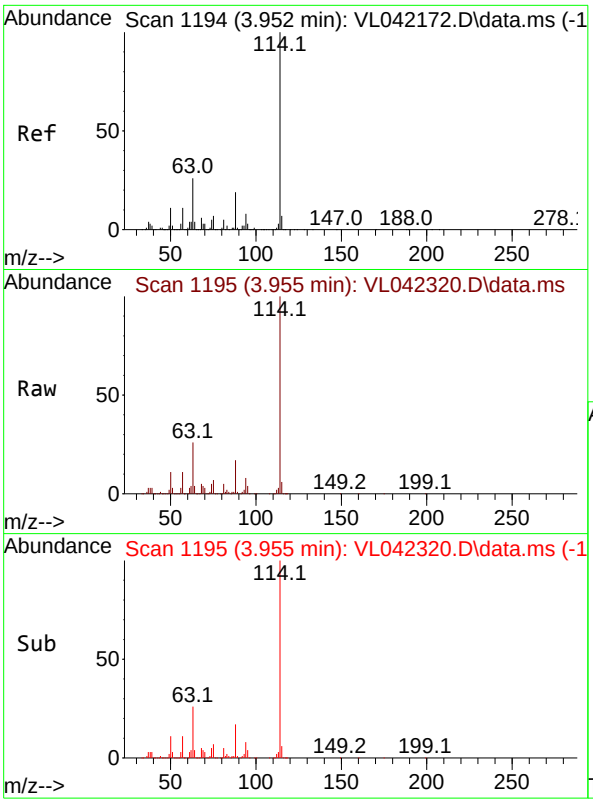


#29
Chloroform
Concen: 1.061 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 83 Resp: 40045

Ion	Ratio	Lower	Upper
83	100		
85	60.9	51.4	77.2





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:114 Resp: 46065

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	17.2	15.0	22.4

Instrument :
MSVOA_L
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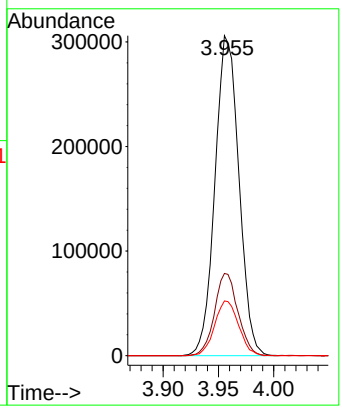
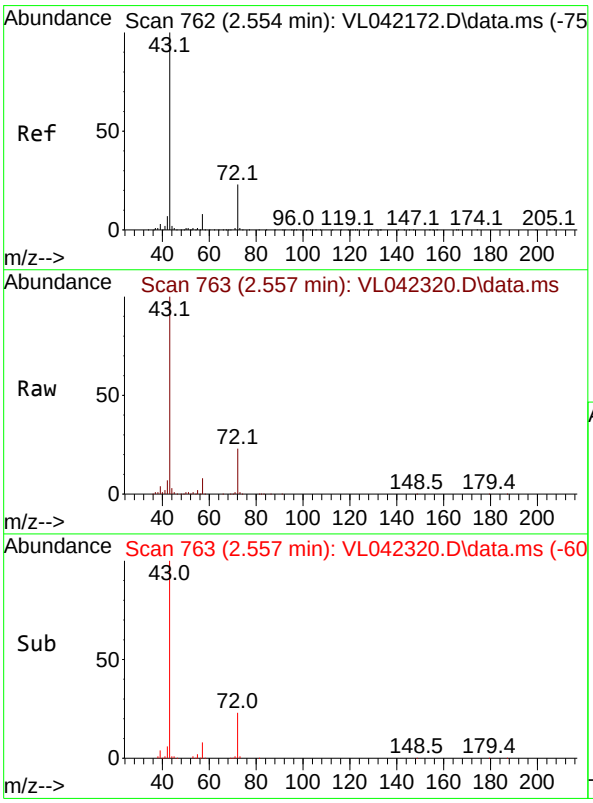
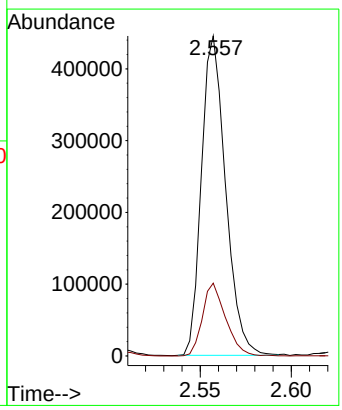


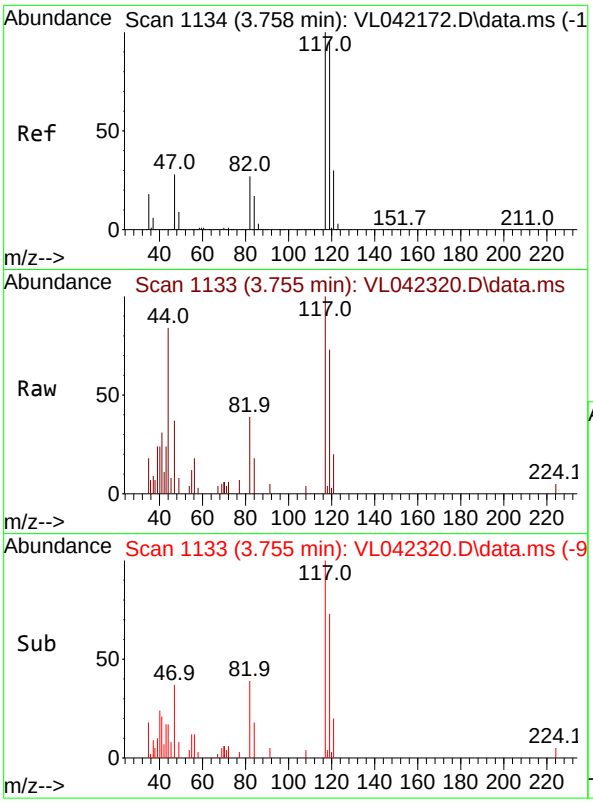


#34
2-Butanone
Concen: 12.316 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 43 Resp: 411404

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

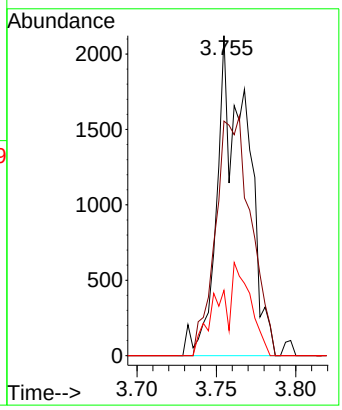




#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 3.755 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:117 Resp: 279

Ion	Ratio	Lower	Upper
117	100		
119	73.3	76.2	114.2#
121	20.4	24.2	36.4#



Instrument :
MSVOA_L
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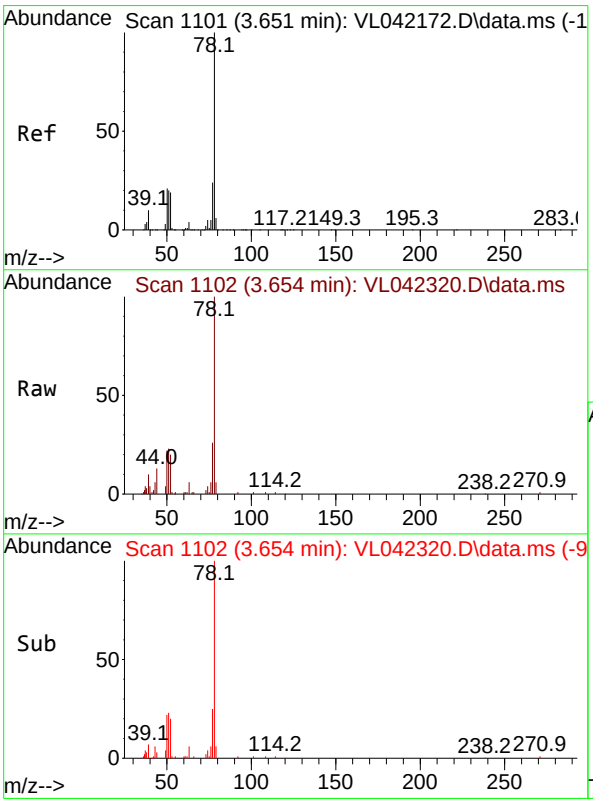
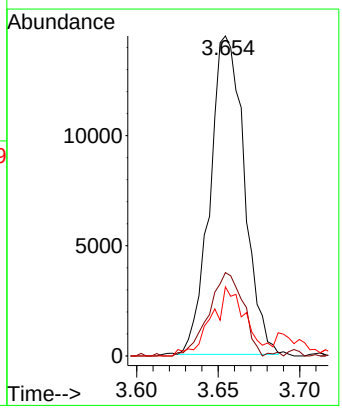
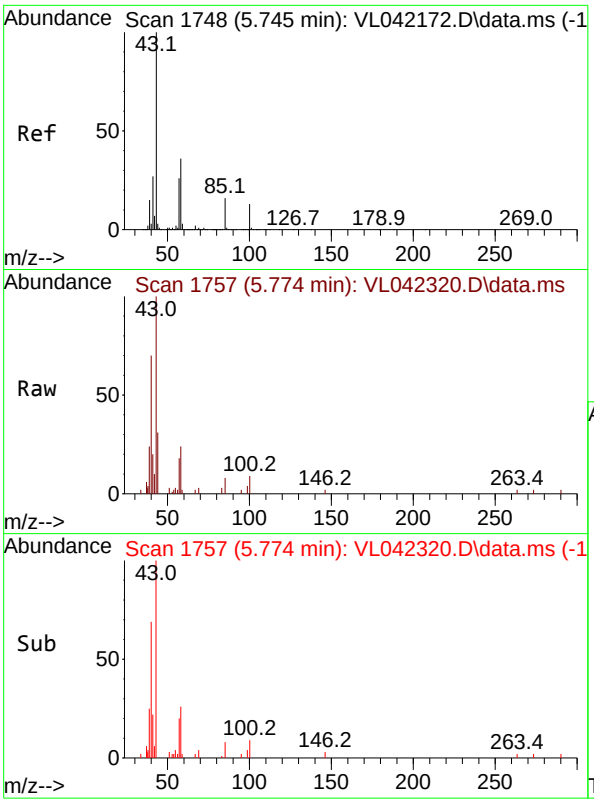


#36
Benzene
Concen: 0.463 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 78 Resp: 21158

Ion	Ratio	Lower	Upper
78	100		
77	25.2	19.1	28.7
50	19.8	16.6	24.8

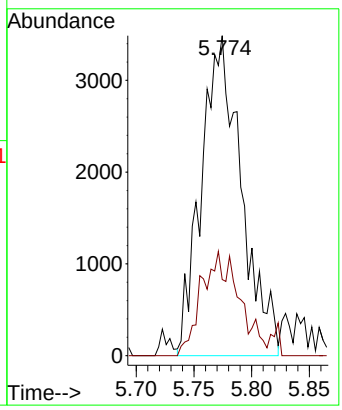




#50
4-Methyl-2-Pentanone
Concen: 0.159 ppbv m
RT: 5.774 min Scan# 1
Delta R.T. 0.029 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 43 Resp: 844

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



Instrument :
MSVOA_L
ClientSampleId :
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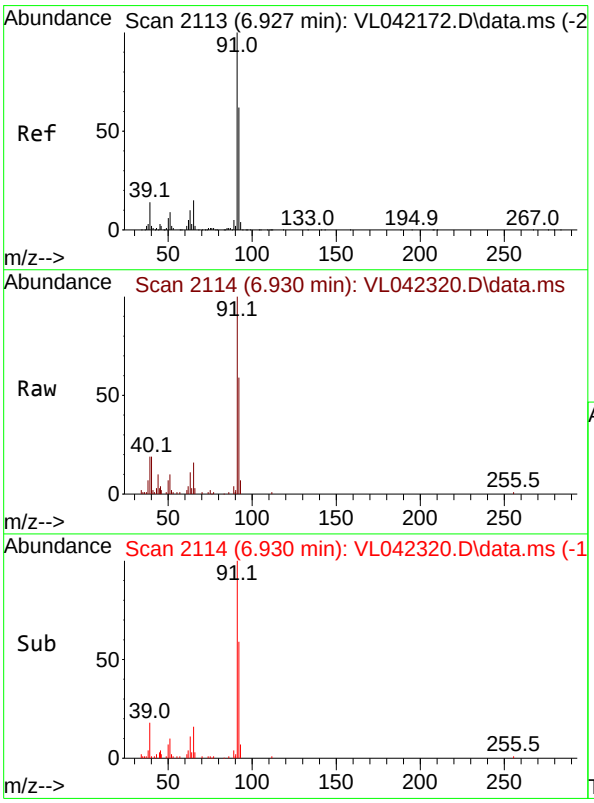
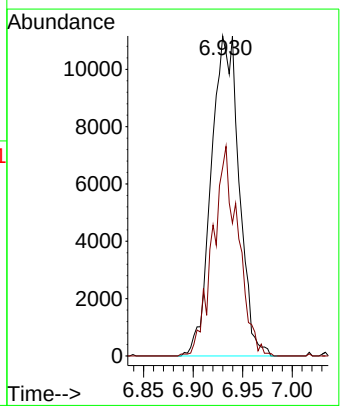
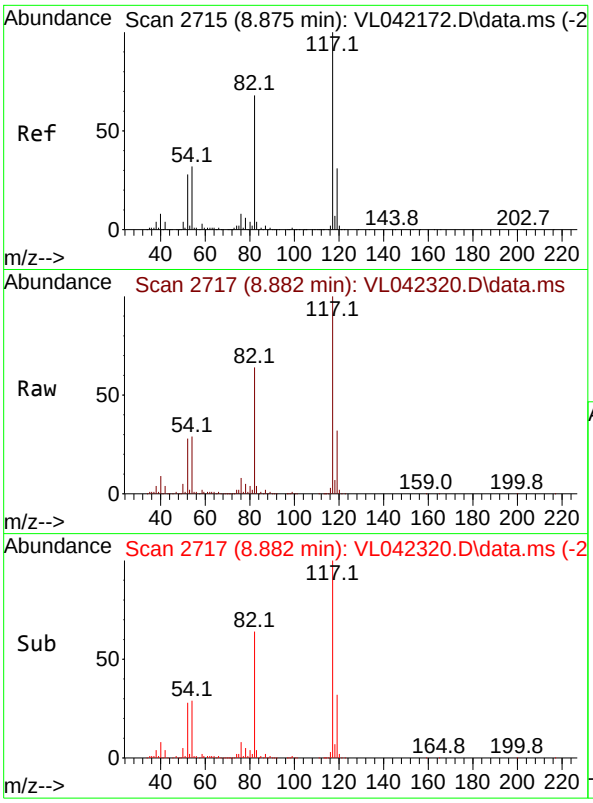


#53
Toluene
Concen: 0.402 ppbv m
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 21762

Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.4	72.6

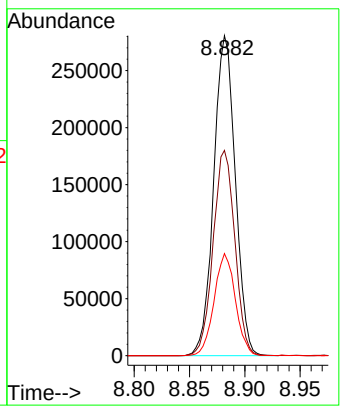




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:117 Resp: 38129

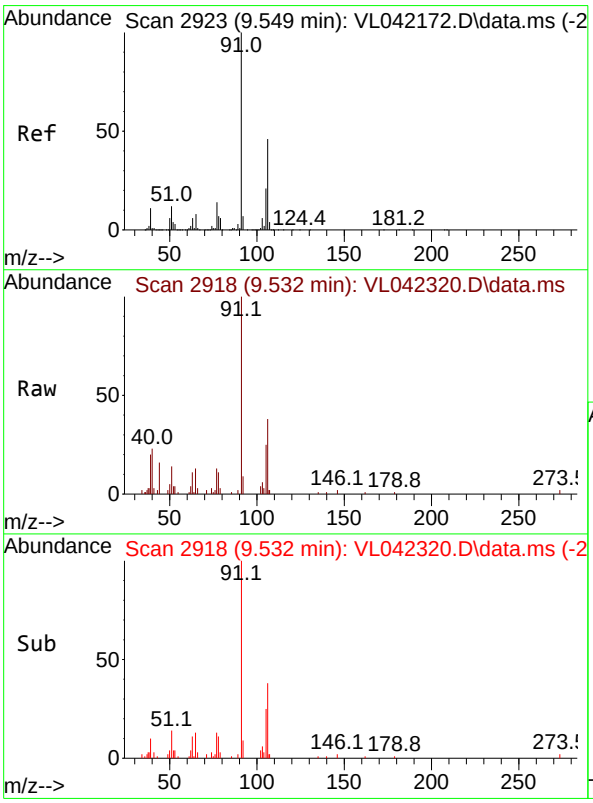
Ion	Ratio	Lower	Upper
117	100		
82	64.4	55.8	83.6
119	31.5	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
APPROVED

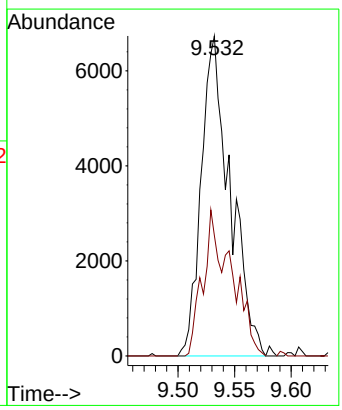
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

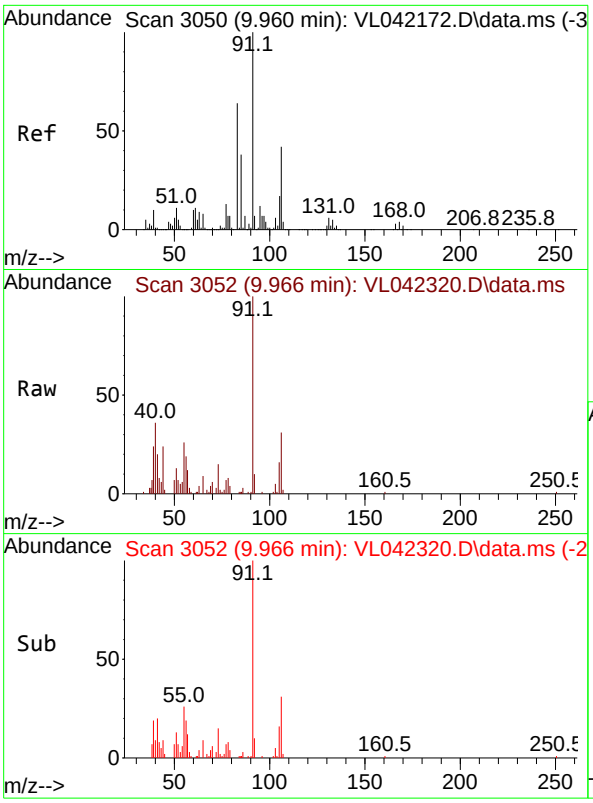


#59
m/p-Xylene
Concen: 0.223 ppbv m
RT: 9.532 min Scan# 2918
Delta R.T. -0.016 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 12058

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

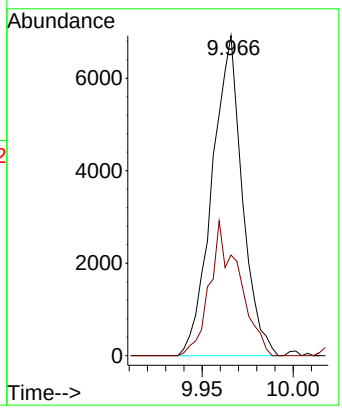




#60
o-Xylene
Concen: 0.147 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 797

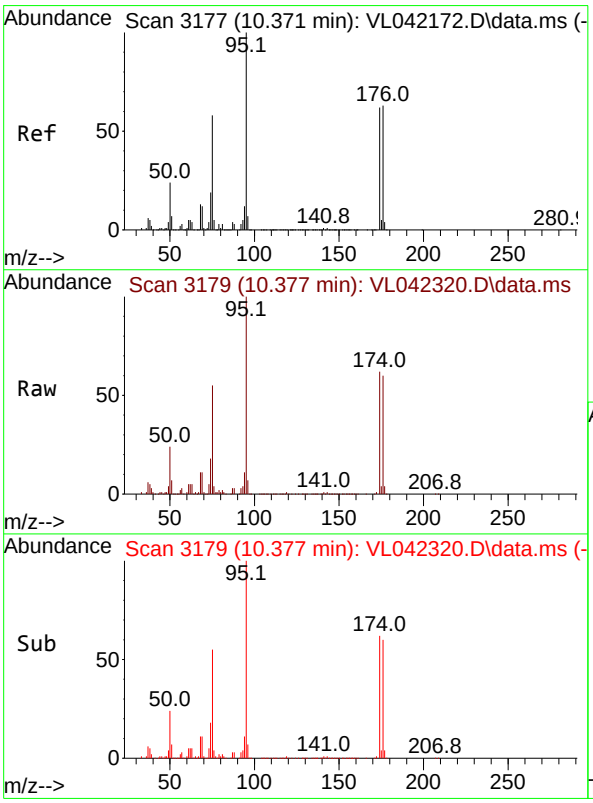
Ion	Ratio	Lower	Upper
91	100		
106	41.2	20.8	62.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
APPROVED

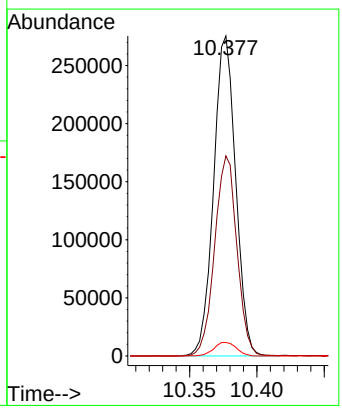
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

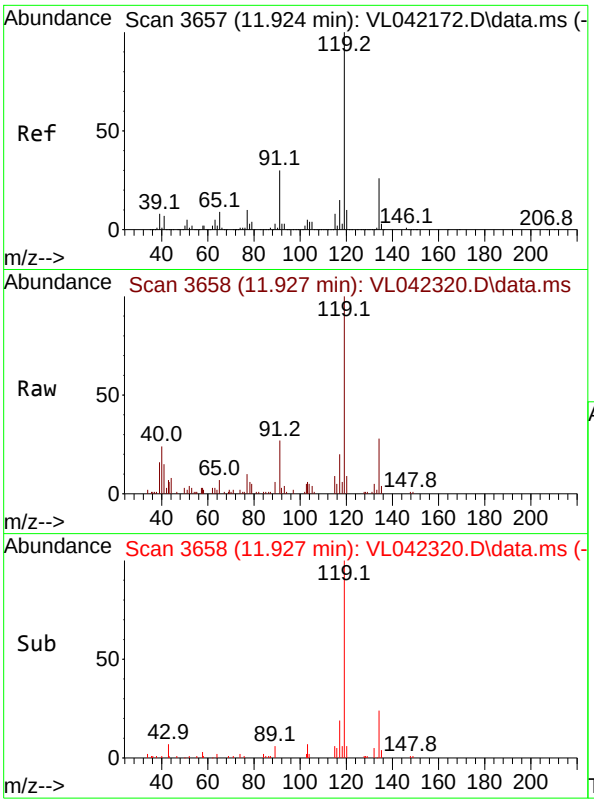


#68
1-Bromo-4-Fluorobenzene
Concen: 10.030 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 95 Resp: 314052

Ion	Ratio	Lower	Upper
95	100		
174	63.2	50.6	76.0
175	4.3	3.8	5.6

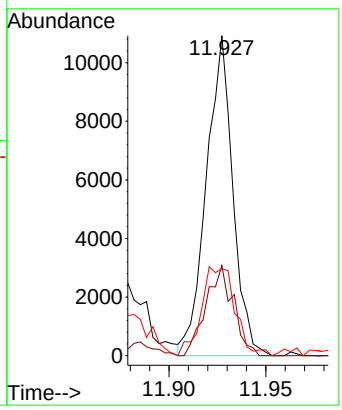




#69
p-Isopropyltoluene
Concen: 0.116 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:119 Resp: 1039

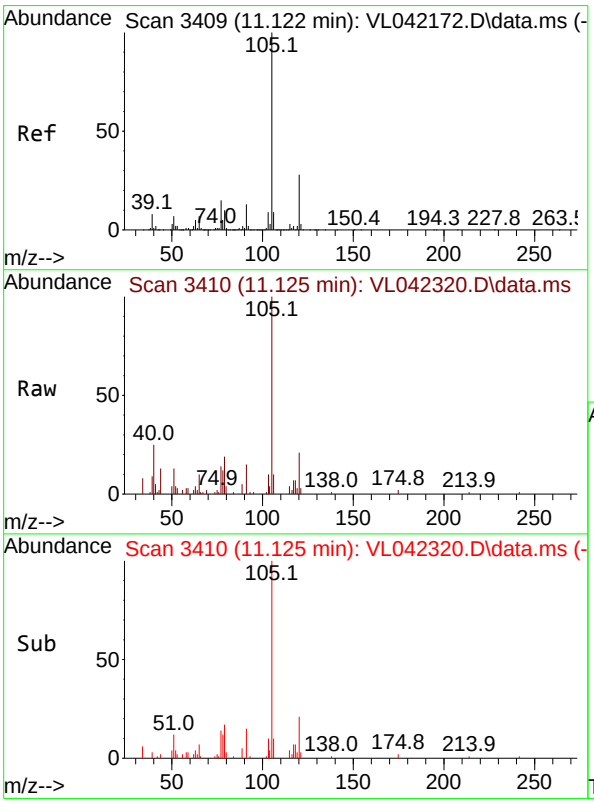
Ion	Ratio	Lower	Upper
119	100		
134	33.8	20.4	30.6#
91	32.3	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
APPROVED

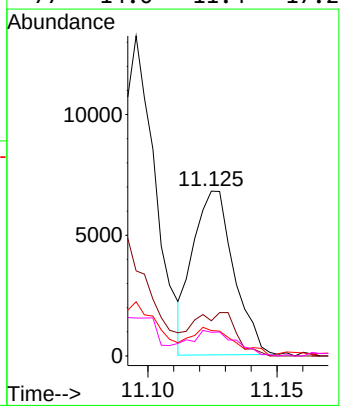
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

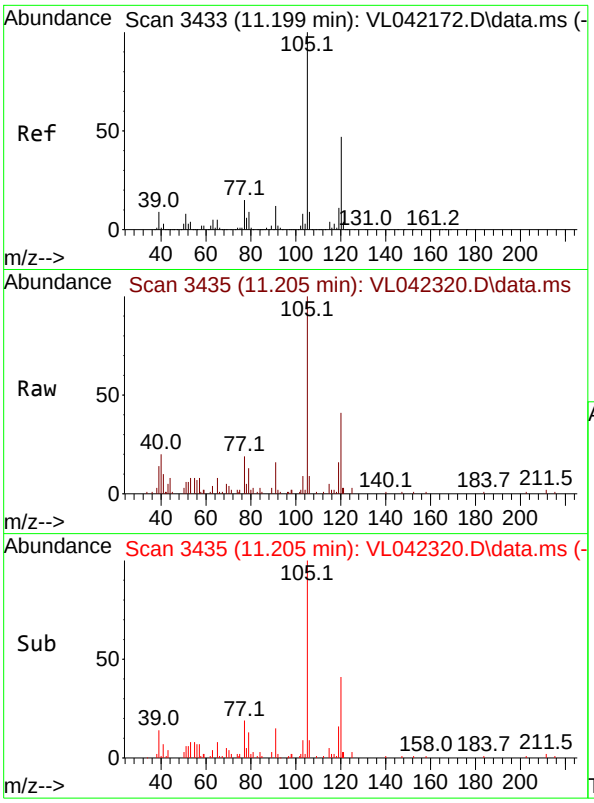


#72
4-Ethyltoluene
Concen: 0.111 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:105 Resp: 7507

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	14.0	11.4	17.2

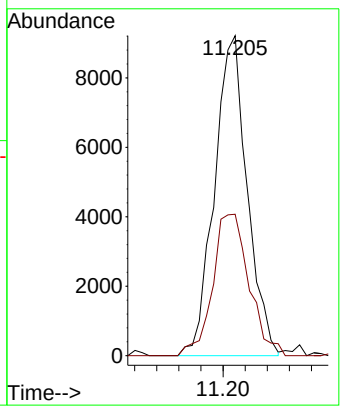




#73
1,3,5-Trimethylbenzene
Concen: 0.161 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:105 Resp: 948

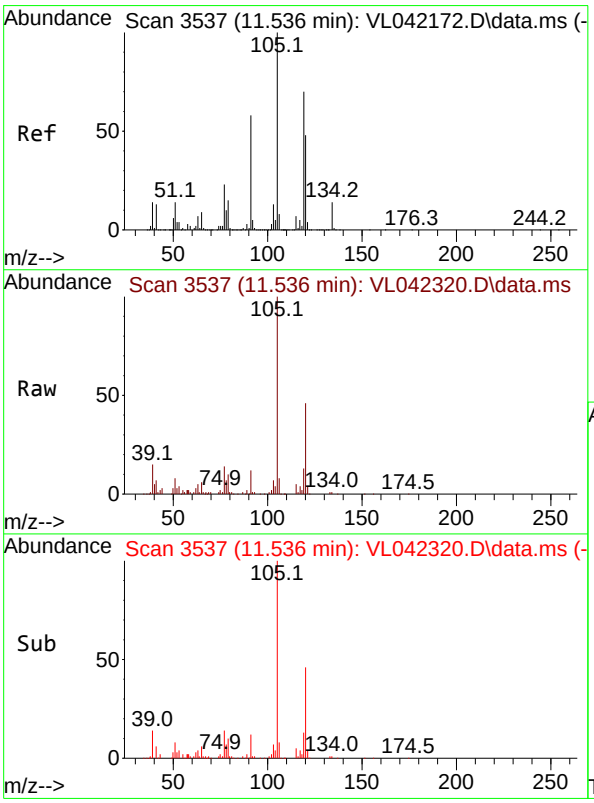
Ion	Ratio	Lower	Upper
105	100		
120	44.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Manual Integrations
APPROVED

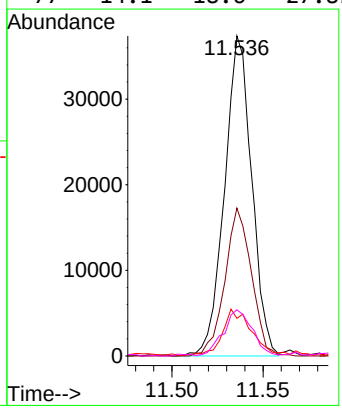
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.571 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:105 Resp: 38801

Ion	Ratio	Lower	Upper
105	100		
120	46.2	38.6	58.0
91	11.5	46.2	69.2#
77	14.1	18.6	27.8#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

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

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

Signal : TIC: VL042320.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	409	415	420	rBV	4521054	5174698	100.00%	22.327%
2	1.466	423	426	429	rVV	269253	151719	2.93%	0.655%
3	1.486	429	432	438	rVB2	588237	309195	5.98%	1.334%
4	1.557	450	454	461	rVB2	833918	442946	8.56%	1.911%
5	1.619	470	473	478	rVB	269204	152176	2.94%	0.657%
6	1.722	500	505	516	rBV	3716599	2427848	46.92%	10.475%
7	1.832	535	539	548	rBV	4850992	3655379	70.64%	15.772%
8	1.884	548	555	568	rVB	1736706	1240418	23.97%	5.352%
9	2.059	600	609	618	rVB	969996	755882	14.61%	3.261%
10	2.557	757	763	774	rVV	700392	647954	12.52%	2.796%
11	2.625	776	784	791	rVB	80469	87301	1.69%	0.377%
12	2.787	824	834	840	rBV	666814	689399	13.32%	2.975%
13	2.826	840	846	861	rVB2	938666	1179414	22.79%	5.089%
14	3.230	959	971	979	rBV	63135	87401	1.69%	0.377%
15	3.658	1092	1103	1107	rBV3	36811	54817	1.06%	0.237%
16	3.687	1107	1112	1127	rVB3	98863	160073	3.09%	0.691%
17	3.955	1183	1195	1211	rBV	805569	1221021	23.60%	5.268%
18	6.933	2101	2115	2126	rBV2	30809	65965	1.27%	0.285%
19	8.882	2702	2717	2728	rBV	961877	1334856	25.80%	5.759%
20	9.943	3035	3045	3062	rBV6	68894	148791	2.88%	0.642%
21	10.377	3164	3179	3191	rBV	1277243	1538599	29.73%	6.639%
22	11.426	3498	3503	3511	rVB3	60665	68529	1.32%	0.296%
23	11.536	3529	3537	3550	rBV2	117241	142672	2.76%	0.616%
24	11.756	3598	3605	3617	rVB2	189415	233878	4.52%	1.009%
25	12.044	3685	3694	3704	rBV	1148822	1120777	21.66%	4.836%
26	12.827	3930	3936	3944	rBV2	74331	85044	1.64%	0.367%

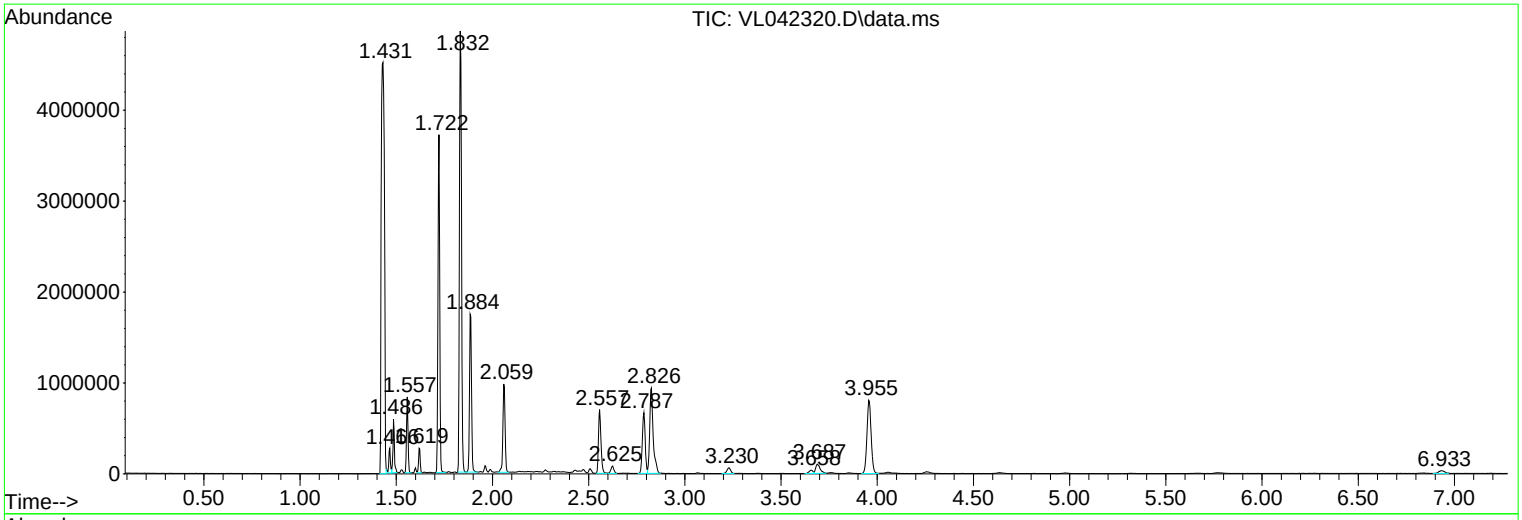
Sum of corrected areas: 23176752

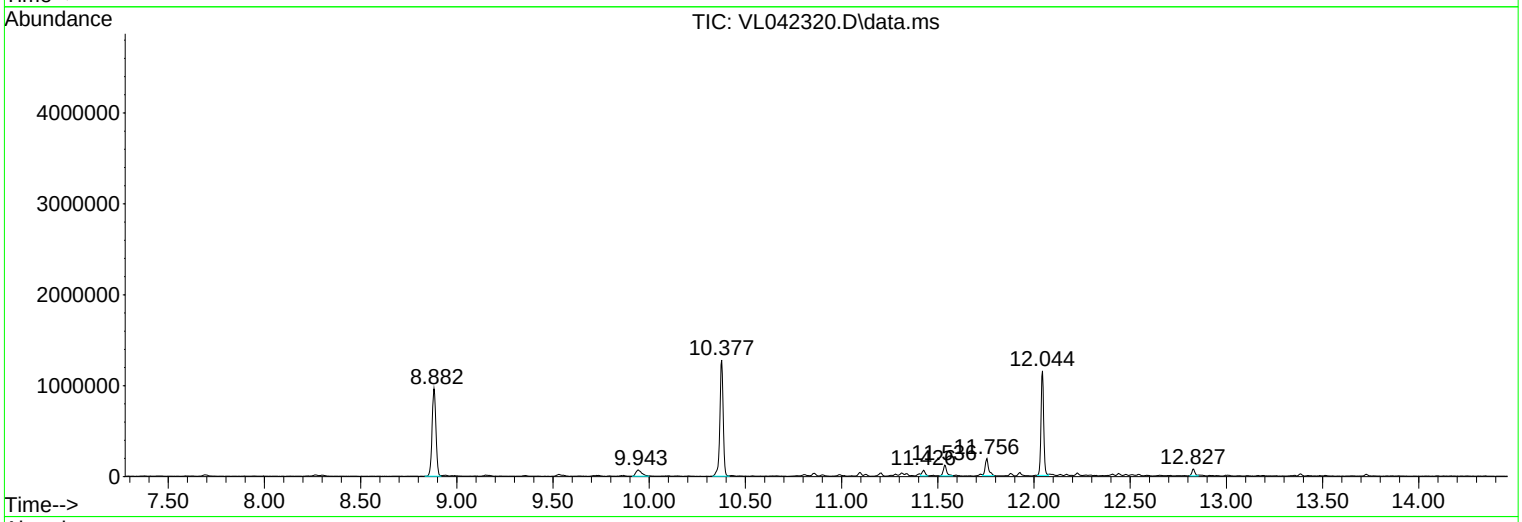
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

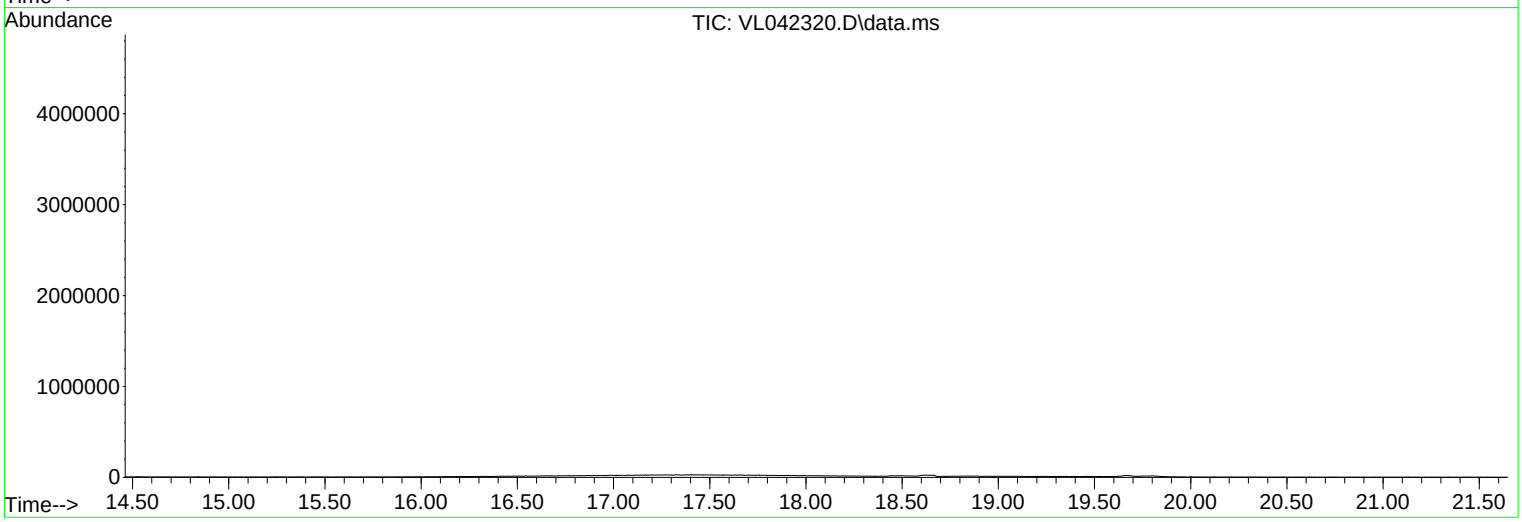
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

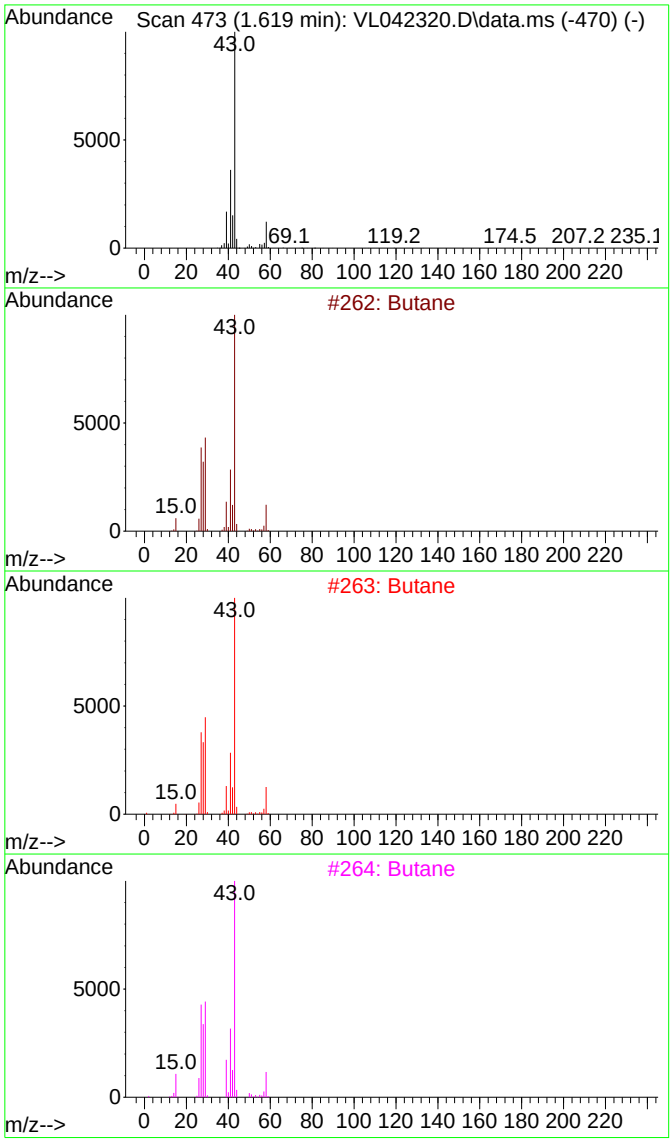
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

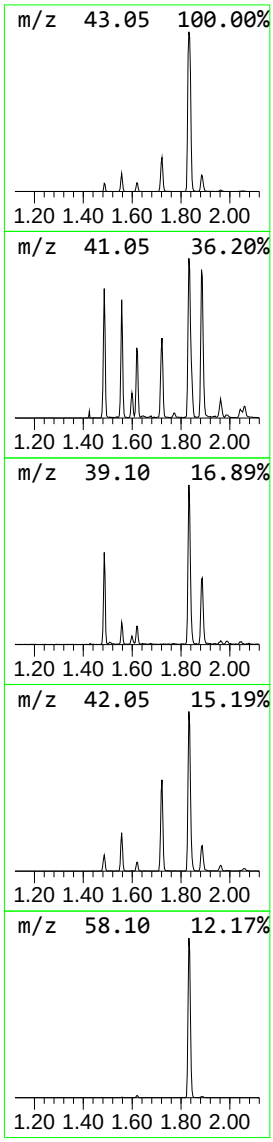
****

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	2.21 ppbv	152176	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	80
2	Butane	58	C4H10	000106-97-8	80
3	Butane	58	C4H10	000106-97-8	72
4	Butane	58	C4H10	000106-97-8	72
5	Isopropylsulfonyl chloride	142	C3H7ClO2S	010147-37-2	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

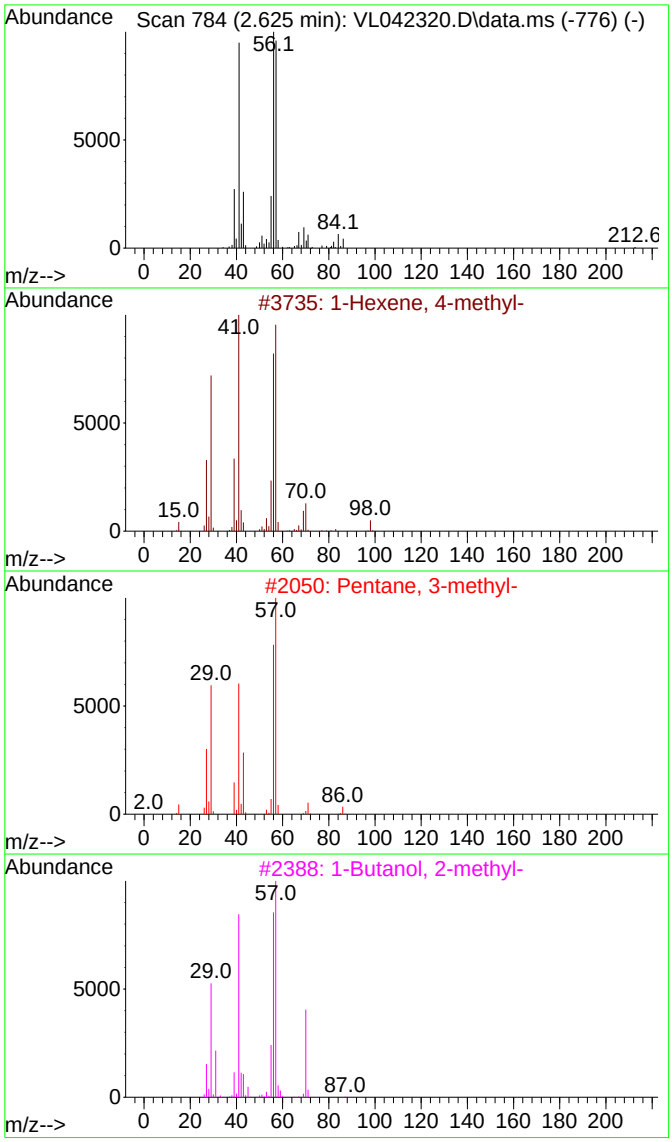
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

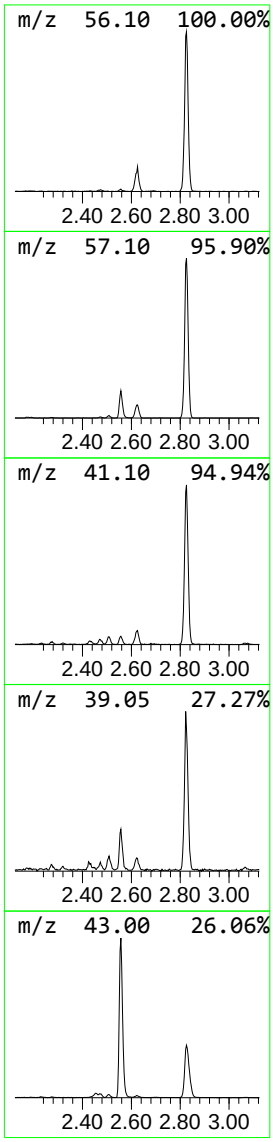
****

Peak Number 2 1-Hexene, 4-methyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.625	1.27 ppbv	87301	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	72
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	59
3	1-Butanol, 2-methyl-	88	C5H12O	000137-32-6	56
4	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	56
5	Cyclopropane, propyl-	84	C6H12	002415-72-7	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

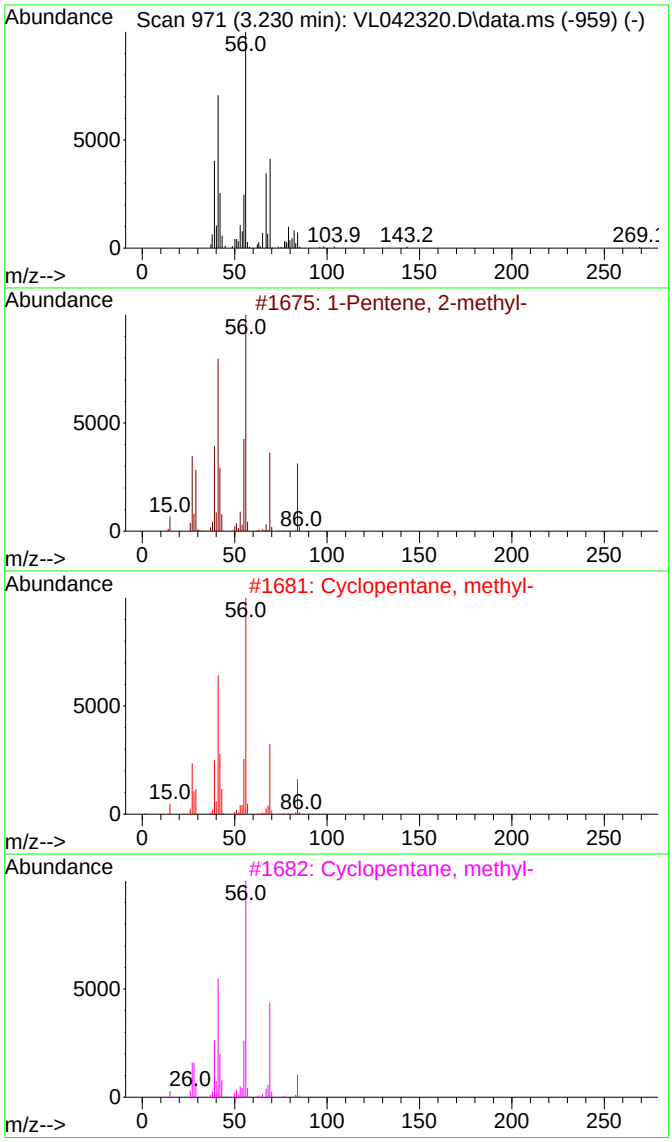
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

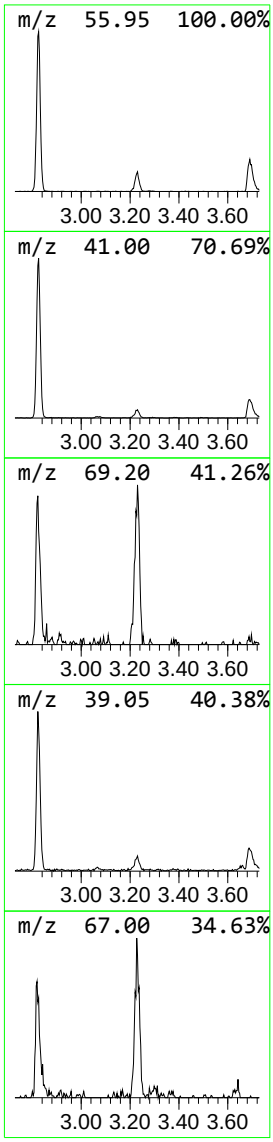
****

Peak Number 3 unknown3.230 Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.230	1.27 ppbv	87401	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	47
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	43
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	38
4	2-Butene	56	C4H8	000107-01-7	38
5	Cyclobutane	56	C4H8	000287-23-0	35





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

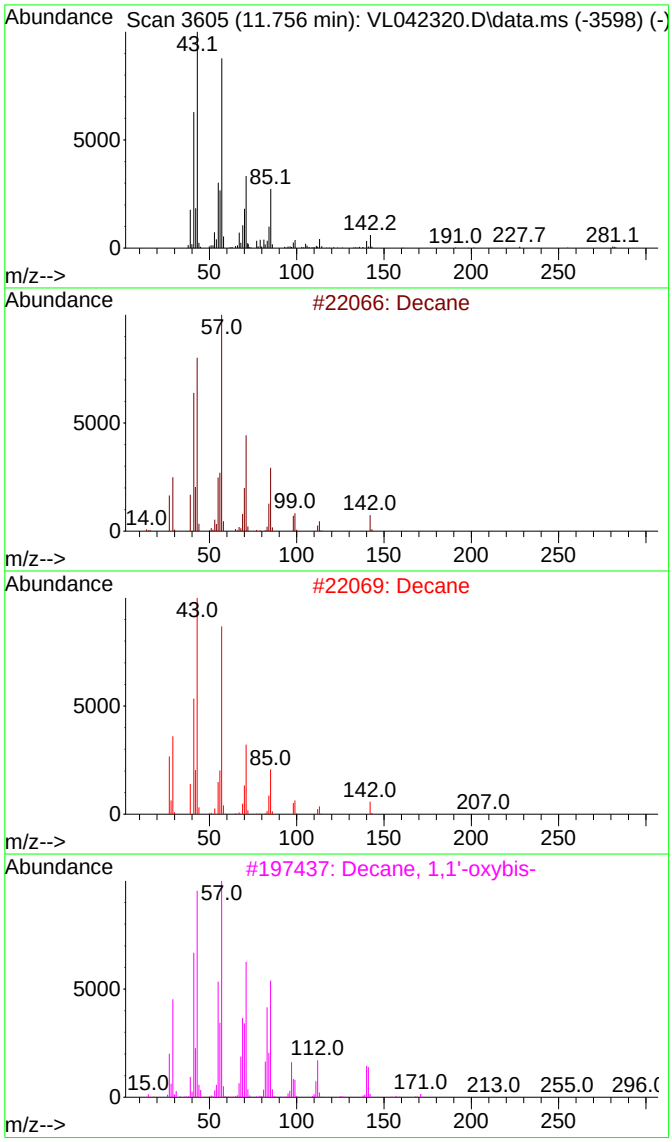
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

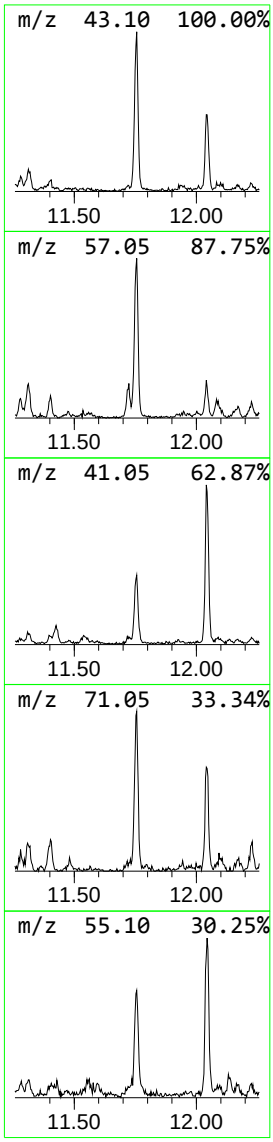
****

Peak Number 4 Decane Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.756	1.75 ppbv	233878	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Decane	142	C10H22	000124-18-5	90
2	Decane	142	C10H22	000124-18-5	90
3	Decane, 1,1'-oxybis-	298	C20H42O	002456-28-2	78
4	Decane	142	C10H22	000124-18-5	74
5	Hexane, 2,4-dimethyl-	114	C8H18	000589-43-5	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

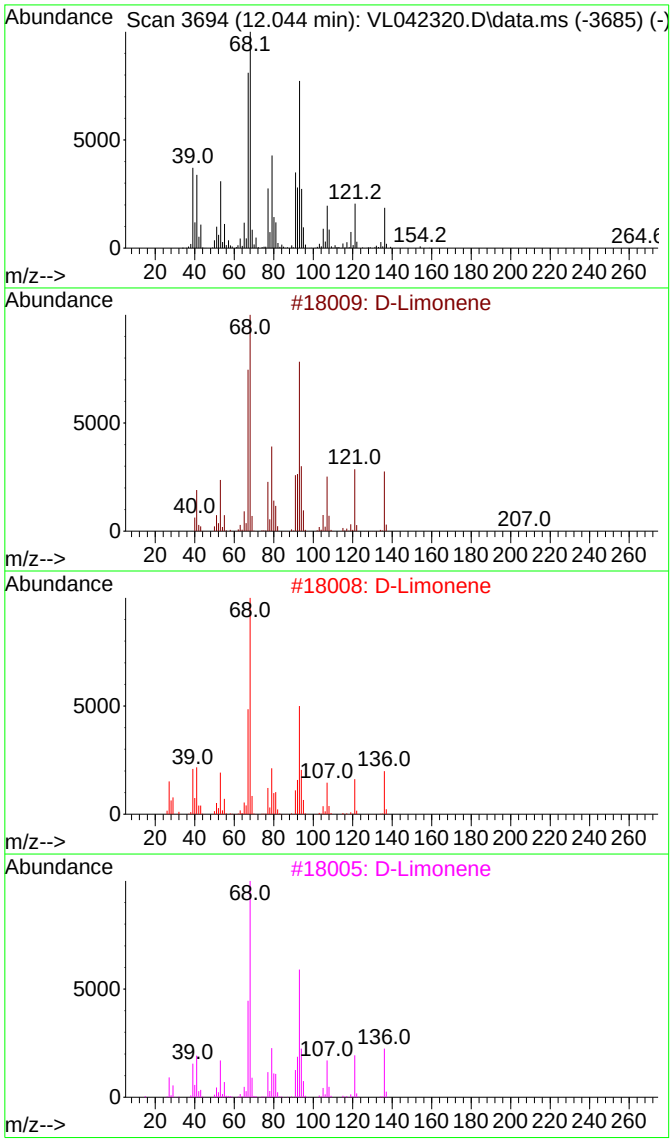
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

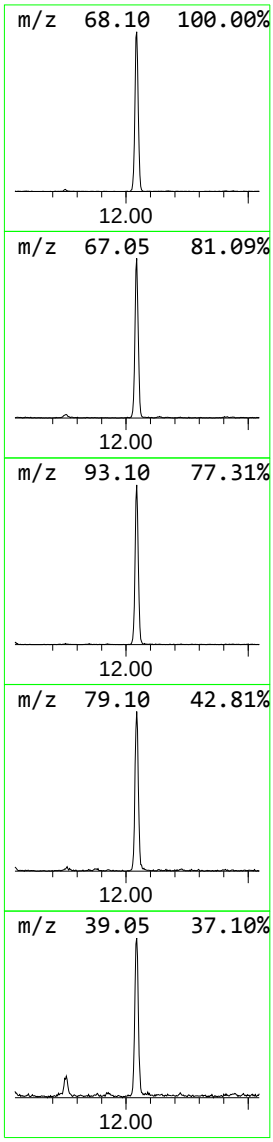
****

Peak Number 5 D-Limonene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.044	8.40 ppbv	1120780	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	98
2	D-Limonene	136	C10H16	005989-27-5	93
3	D-Limonene	136	C10H16	005989-27-5	93
4	Limonene	136	C10H16	000138-86-3	91
5	Limonene	136	C10H16	000138-86-3	81





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	2.2	ppbv	152176	1	2.787	689399	10.0
1-Hexene, 4-met...	2.625	1.3	ppbv	87301	1	2.787	689399	10.0
unknown3.230	3.230	1.3	ppbv	87401	1	2.787	689399	10.0
Decane	11.756	1.8	ppbv	233878	3	8.882	1334860	10.0
D-Limonene	12.044	8.4	ppbv	1120780	3	8.882	1334860	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-11DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042324.D	10		04/11/25 17:10	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2.10	10.4	UD	10.4	24.7	ug/m3
64-17-5	Ethanol	1300	2450	EDQ	6.03	9.42	ug/m3
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3	ug/m3
75-01-4	Vinyl Chloride	0.14	0.36	UD	0.36	0.77	ug/m3
74-83-9	Bromomethane	1.40	5.44	UD	5.44	19.4	ug/m3
75-00-3	Chloroethane	1.70	4.49	UD	4.49	13.2	ug/m3
109-99-9	Tetrahydrofuran	1.30	3.83	UD	3.83	14.8	ug/m3
75-69-4	Trichlorofluoromethane	1.60	8.99	UD	8.99	28.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	1.60	12.3	UD	12.3	38.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.88	6.15	UD	6.15	35.0	ug/m3
593-60-2	Bromoethene	1.20	5.25	UD	5.25	21.9	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76	UD	5.76	15.2	ug/m3
142-82-5	Heptane	1.10	4.51	UD	4.51	20.5	ug/m3
67-63-0	Isopropyl Alcohol	48.3	119	D	1.70	12.3	ug/m3
75-35-4	1,1-Dichloroethene	1.40	5.55	UD	5.55	19.8	ug/m3
67-64-1	Acetone	130	309	D	5.70	11.9	ug/m3
75-15-0	Carbon Disulfide	1.60	4.98	UD	4.98	15.6	ug/m3
1634-04-4	Methyl tert-Butyl Ether	1.20	4.33	UD	4.33	18.0	ug/m3
75-09-2	Methylene Chloride	16.4	57.0	D	6.60	17.4	ug/m3
156-60-5	trans-1,2-Dichloroethene	1.90	7.53	UD	7.53	19.8	ug/m3
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2	ug/m3
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2	ug/m3
78-93-3	2-Butanone	10.0	29.5	D	3.54	14.8	ug/m3
56-23-5	Carbon Tetrachloride	0.11	0.69	UD	0.69	1.89	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.89	3.53	UD	3.53	19.8	ug/m3
67-66-3	Chloroform	1.00	4.88	JD	4.05	24.4	ug/m3
71-55-6	1,1,1-Trichloroethane	0.10	0.55	UD	0.55	1.64	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67	UD	4.67	23.4	ug/m3
71-43-2	Benzene	0.87	2.78	UD	2.78	16.0	ug/m3
107-06-2	1,2-Dichloroethane	0.91	3.68	UD	3.68	20.2	ug/m3
79-01-6	Trichloroethene	0.17	0.91	UD	0.91	1.61	ug/m3
78-87-5	1,2-Dichloropropane	1.10	5.08	UD	5.08	23.1	ug/m3
75-27-4	Bromodichloromethane	0.77	5.16	UD	5.16	33.5	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.93	3.81	UD	3.81	20.5	ug/m3
108-88-3	Toluene	1.10	4.15	UD	4.15	18.8	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-11DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042324.D	10		04/11/25 17:10	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	UD	2.72	22.7	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.64	2.91	UD	2.91	22.7	ug/m3
79-00-5	1,1,2-Trichloroethane	0.71	3.87	UD	3.87	27.3	ug/m3
124-48-1	Dibromochloromethane	0.66	5.62	UD	5.62	42.6	ug/m3
106-93-4	1,2-Dibromoethane	0.72	5.53	UD	5.53	7.69	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	ug/m3
108-90-7	Chlorobenzene	0.76	3.50	UD	3.50	23.0	ug/m3
100-41-4	Ethyl Benzene	1.20	5.21	UD	5.21	21.7	ug/m3
179601-23-1	m/p-Xylene	2.10	9.12	UD	9.12	43.4	ug/m3
95-47-6	o-Xylene	1.20	5.21	UD	5.21	21.7	ug/m3
100-42-5	Styrene	1.10	4.68	UD	4.68	21.3	ug/m3
75-25-2	Bromoform	0.57	5.89	UD	5.89	51.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.11	0.76	UDQ	0.76	2.06	ug/m3
95-49-8	2-Chlorotoluene	1.10	5.70	UD	5.70	25.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.10	5.41	UD	5.41	24.6	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.78	3.83	UD	3.83	24.6	ug/m3
541-73-1	1,3-Dichlorobenzene	0.80	4.81	UD	4.81	30.1	ug/m3
106-46-7	1,4-Dichlorobenzene	0.53	3.19	UD	3.19	30.1	ug/m3
95-50-1	1,2-Dichlorobenzene	0.75	4.51	UDQ	4.51	30.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.85	6.31	UD	6.31	37.1	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.85	9.07	UD	9.07	53.3	ug/m3
106-99-0	1,3-Butadiene	1.30	2.88	UD	2.88	11.1	ug/m3
91-20-3	Naphthalene	0.75	3.93	UD	3.93	5.24	ug/m3
622-96-8	4-Ethyltoluene	1.20	5.90	UD	5.90	24.6	ug/m3
110-54-3	Hexane	4.40	15.5	JD	3.88	17.6	ug/m3
107-05-1	Allyl Chloride	1.50	4.70	UD	4.70	15.7	ug/m3
123-91-1	1,4-Dioxane	2.10	7.57	UD	7.57	18.0	ug/m3
80-62-6	Methyl Methacrylate	0.86	3.52	UD	3.52	20.5	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.20			70 (65) - 130 (135)	92%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	177000		2.793			
540-36-3	1,4-Difluorobenzene	398000		3.968			
3114-55-4	Chlorobenzene-d5	326000		8.888			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-11DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042324.D	10		04/11/25 17:10	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042324.D
Acq On : 11 Apr 2025 17:10
Operator : SY/MD
Sample : Q1665-11DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 23:03:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.793	49	176603	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	398133	10.000	ppbv		0.02
55) Chlorobenzene-d5	8.888	117	325777	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.383	95	246592	9.217	ppbv		0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.200%				
Target Compounds							Qvalue
9) Propene	1.489	41	4857	0.398	ppbv		87
13) Ethanol	1.725	45	151755	131.481	ppbv		81
15) Acetone	1.839	43	316091	12.798	ppbv		96
19) Isopropyl Alcohol	1.890	45	67257	4.826	ppbv	#	1
20) Methylene Chloride	2.065	84	15039	1.635	ppbv		90
26) Hexane	2.832	57	10875	0.439	ppbv	#	41
29) Chloroform	2.855	83	3754m	0.104	ppbv		
34) 2-Butanone	2.564	43	28789	0.997	ppbv		97

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042324.D
Acq On : 11 Apr 2025 17:10
Operator : SY/MD
Sample : Q1665-11DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 11 23:03:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
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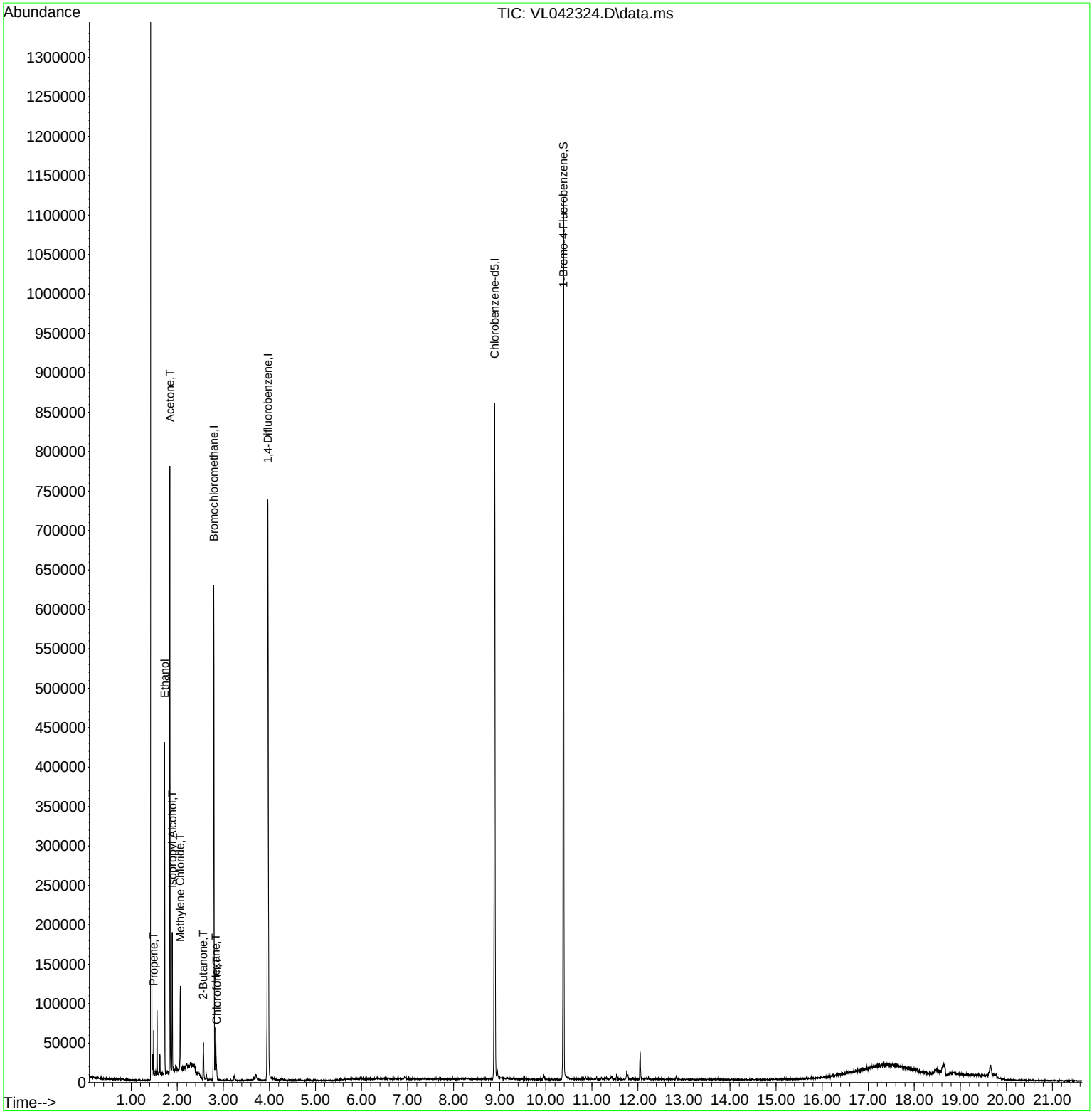
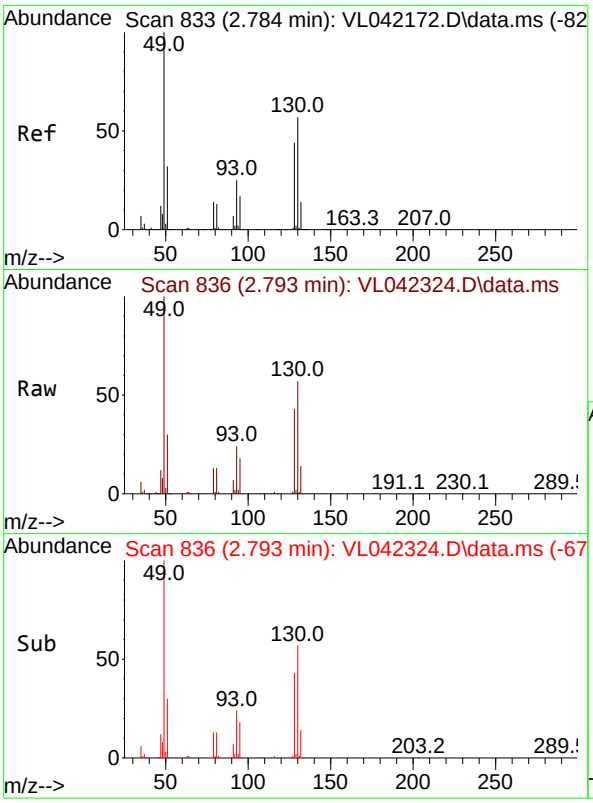
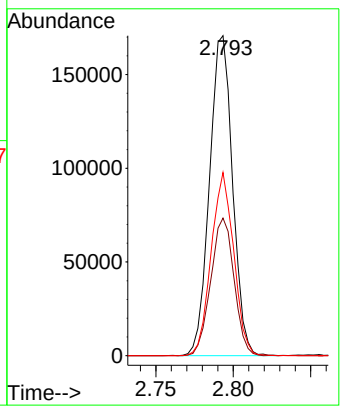




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.793 min Scan# 8
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 49 Resp: 17660

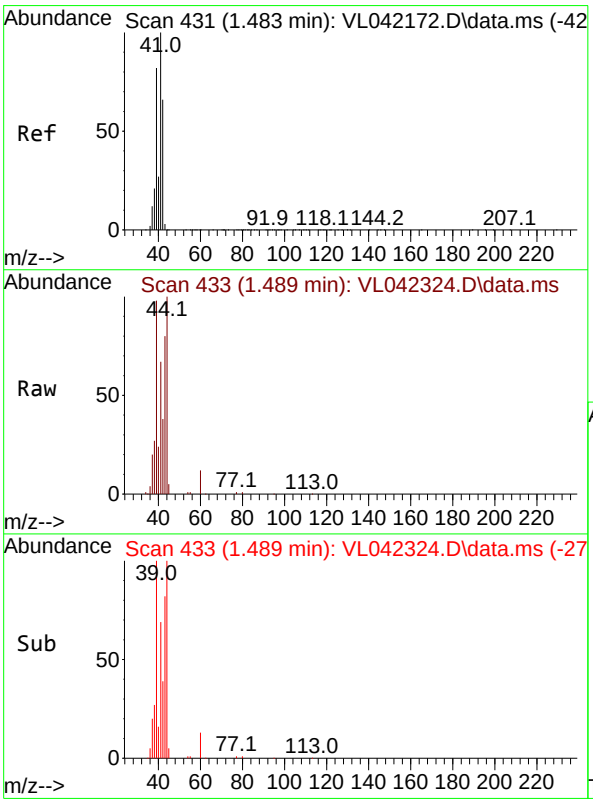
Ion	Ratio	Lower	Upper
49	100		
128	43.4	22.9	68.5
130	56.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

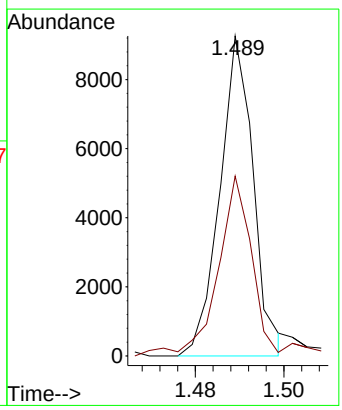
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

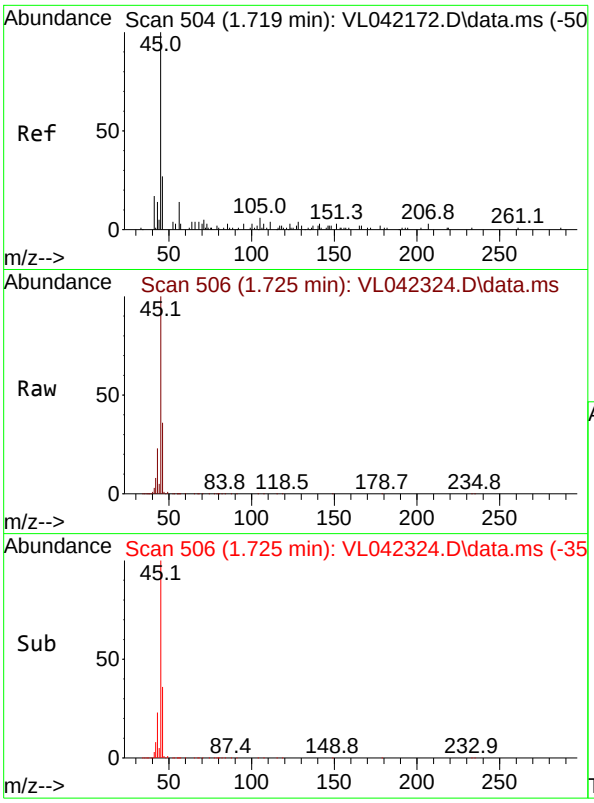


#9
Propene
Concen: 0.398 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 41 Resp: 4857

Ion	Ratio	Lower	Upper
41	100		
42	59.0	55.4	83.2

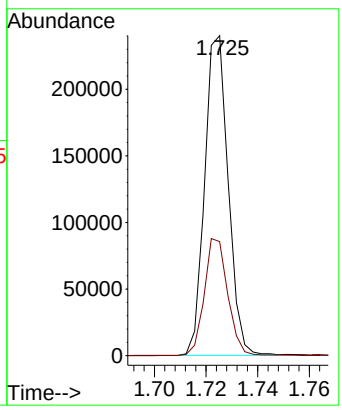




#13
Ethanol
Concen: 131.481 ppbv
RT: 1.725 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 45 Resp: 15175

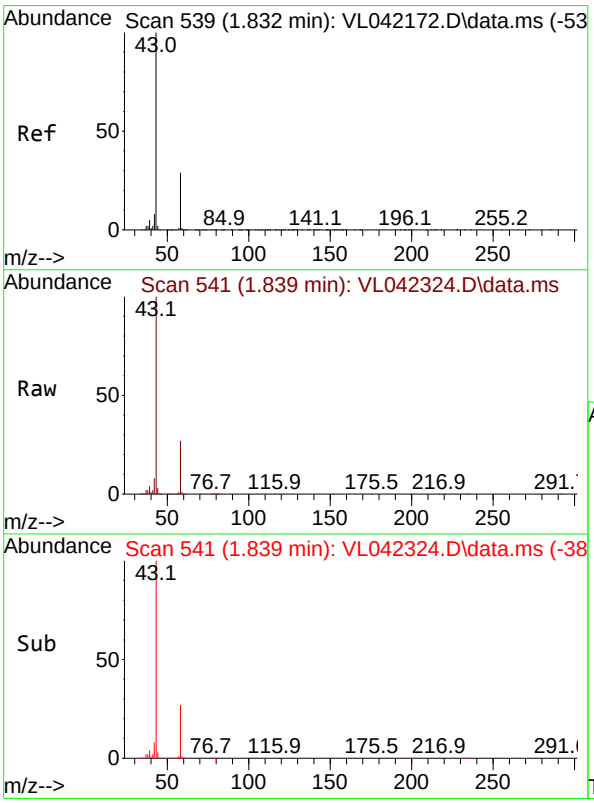
Ion	Ratio	Lower	Upper
45	100		
46	37.0	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

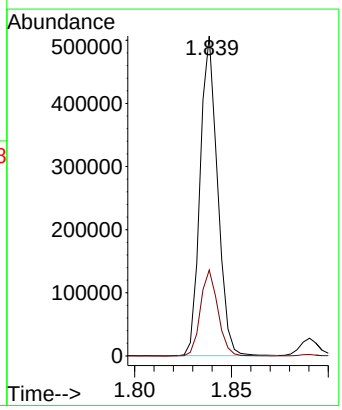
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

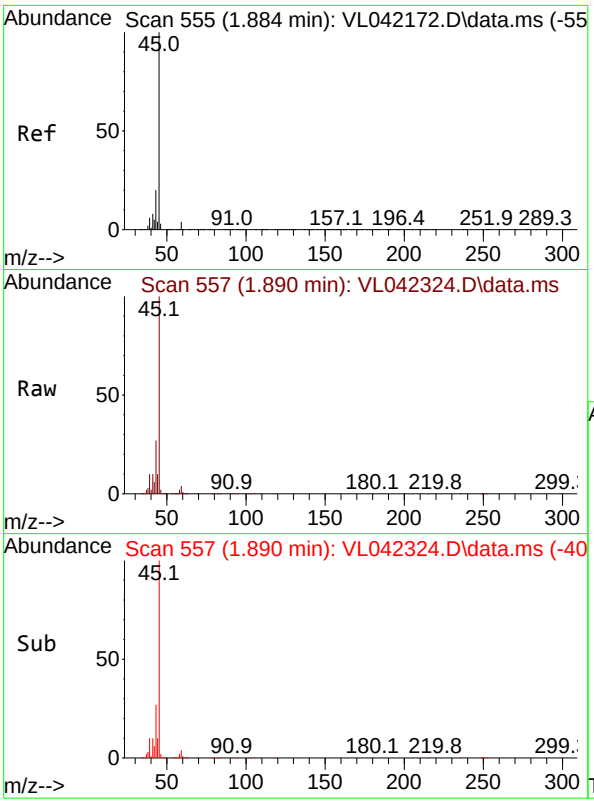


#15
Acetone
Concen: 12.798 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 43 Resp: 316091

Ion	Ratio	Lower	Upper
43	100		
58	26.9	23.2	34.8

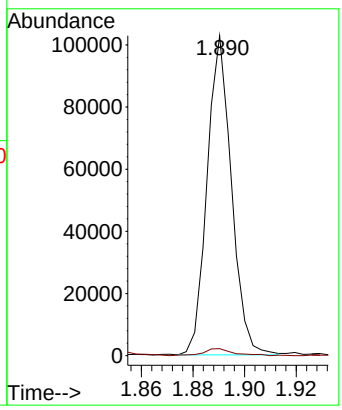




#19
Isopropyl Alcohol
Concen: 4.826 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 45 Resp: 6725

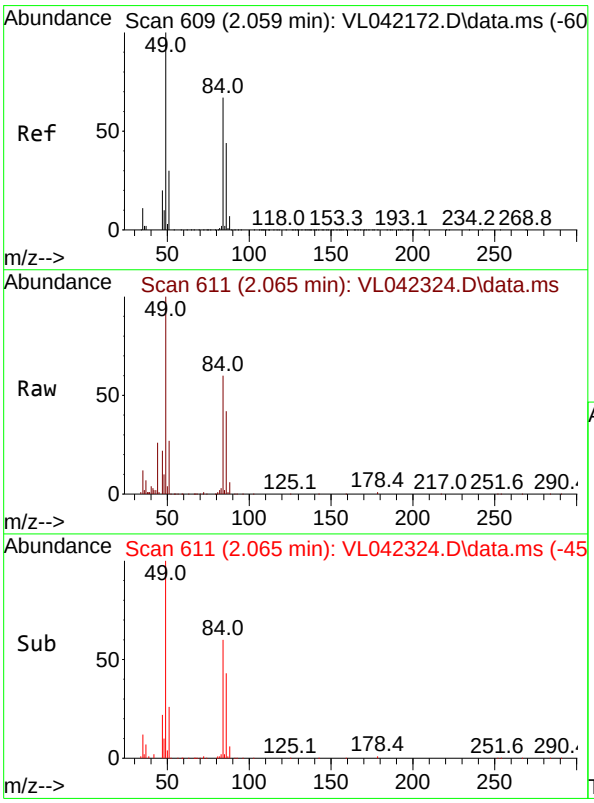
Ion	Ratio	Lower	Upper
45	100		
58	126.4	36.9	55.3#



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

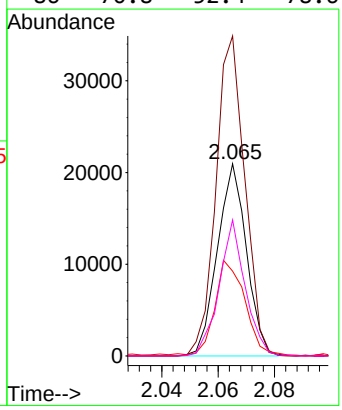
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

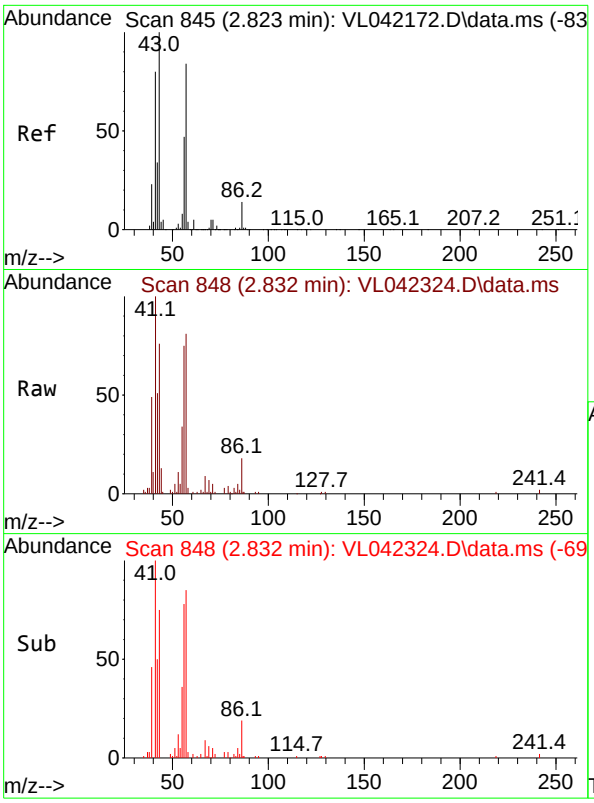


#20
Methylene Chloride
Concen: 1.635 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 84 Resp: 15039

Ion	Ratio	Lower	Upper
84	100		
49	166.5	120.2	180.4
51	42.7	37.4	56.0
86	70.8	52.4	78.6

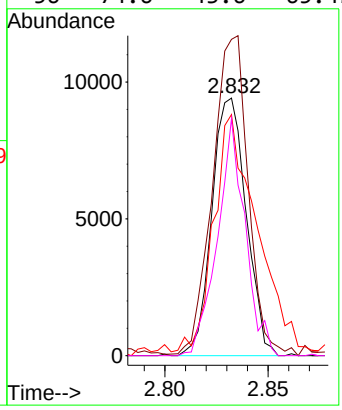




#26
Hexane
Concen: 0.439 ppbv
RT: 2.832 min Scan# 84
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 57 Resp: 1087

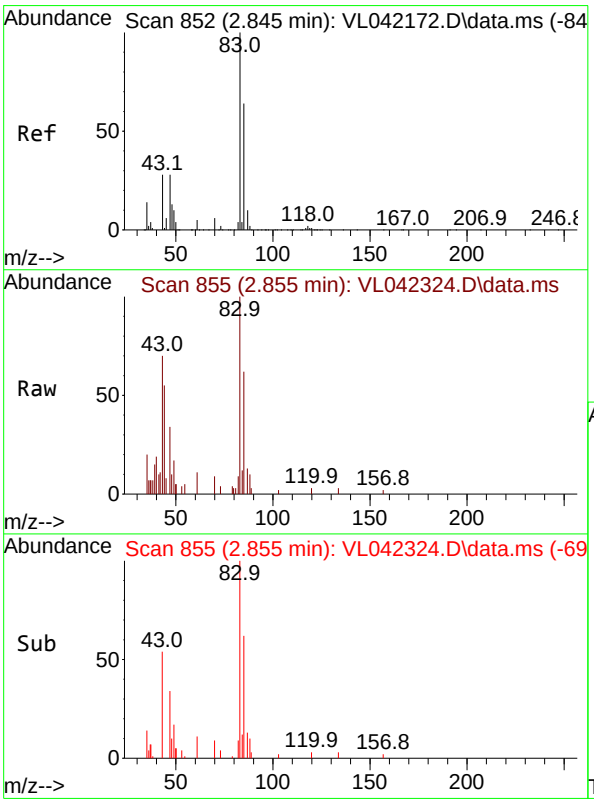
Ion	Ratio	Lower	Upper
57	100		
41	127.0	76.6	114.8#
43	125.5	207.8	311.8#
56	74.6	43.6	65.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

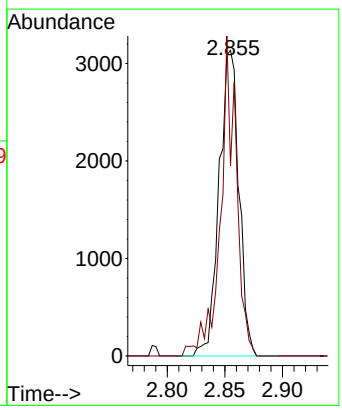
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

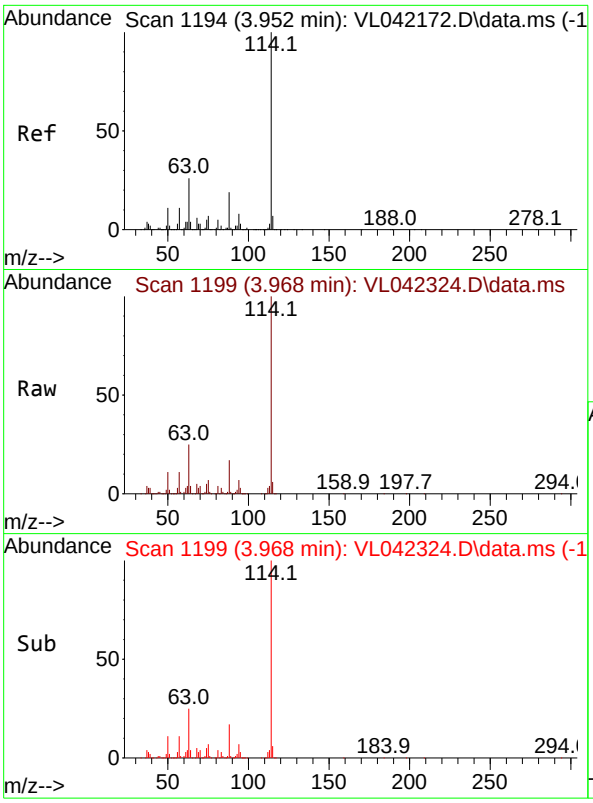


#29
Chloroform
Concen: 0.104 ppbv m
RT: 2.855 min Scan# 855
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 83 Resp: 3754

Ion	Ratio	Lower	Upper
83	100		
85	62.2	51.4	77.2

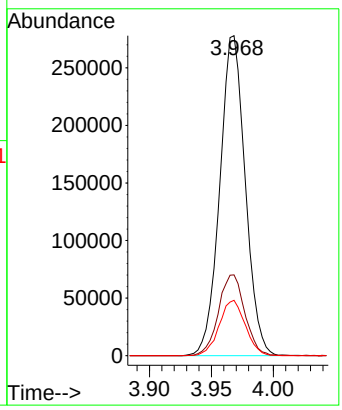




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.968 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion:114 Resp: 39813

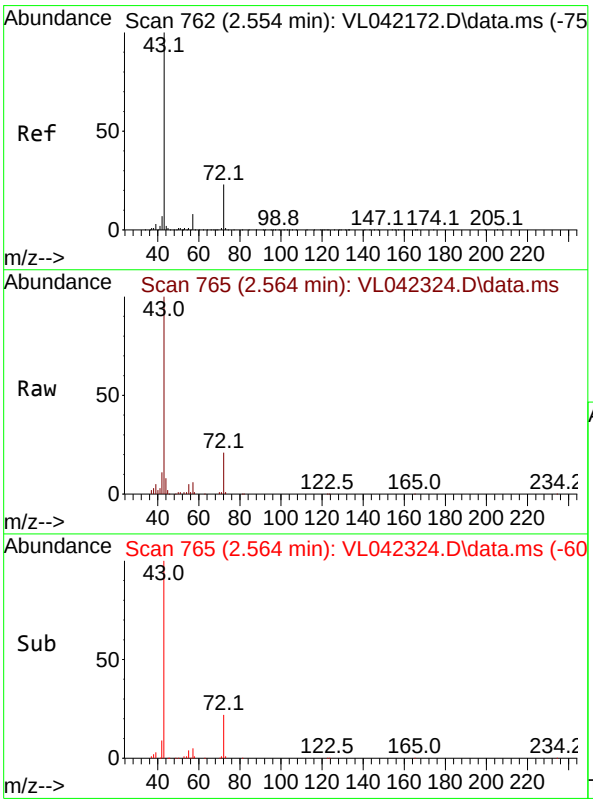
Ion	Ratio	Lower	Upper
114	100		
63	26.2	20.7	31.1
88	17.7	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

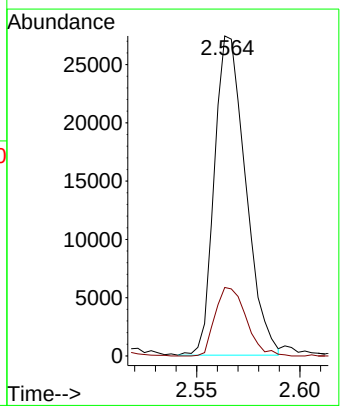
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

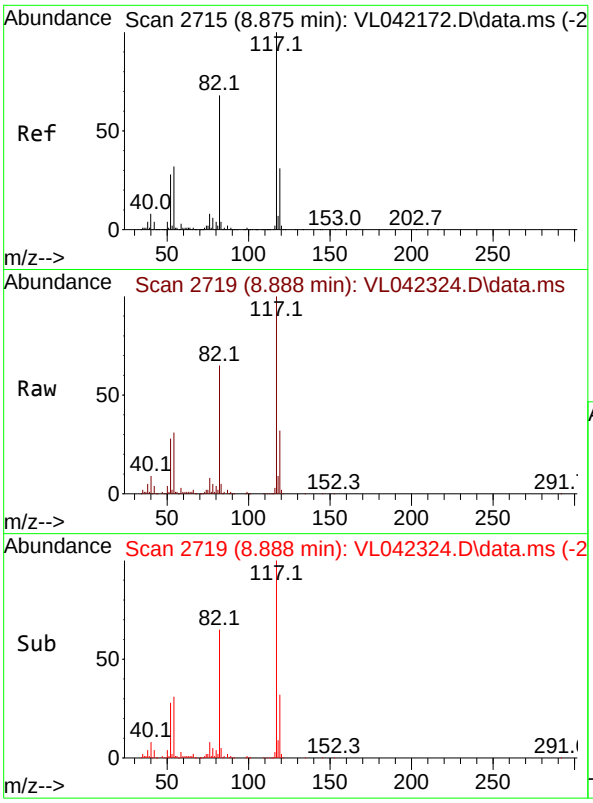


#34
2-Butanone
Concen: 0.997 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 43 Resp: 28789

Ion	Ratio	Lower	Upper
43	100		
72	21.4	18.2	27.2

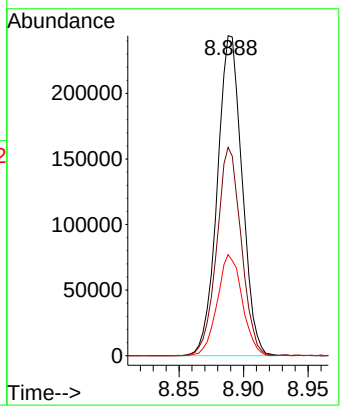




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion:117 Resp: 32577

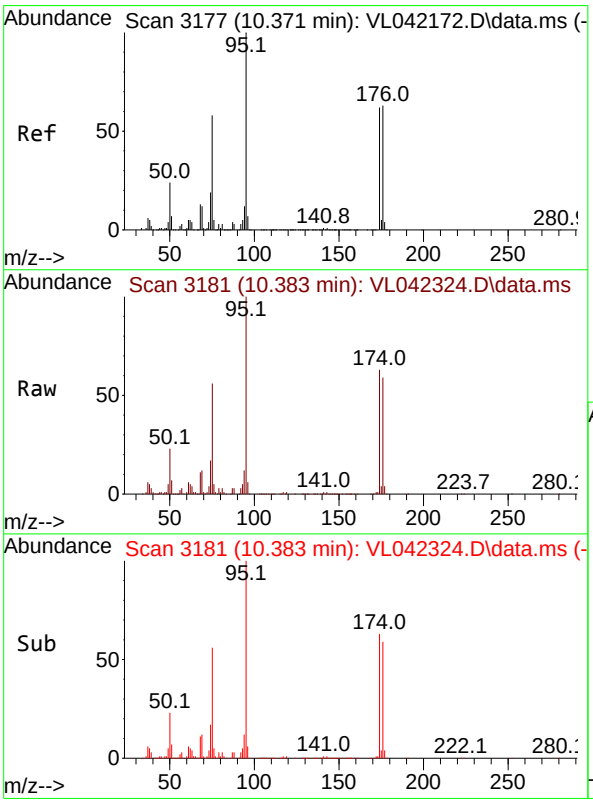
Ion	Ratio	Lower	Upper
117	100		
82	64.5	55.8	83.6
119	31.8	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Manual Integrations
APPROVED

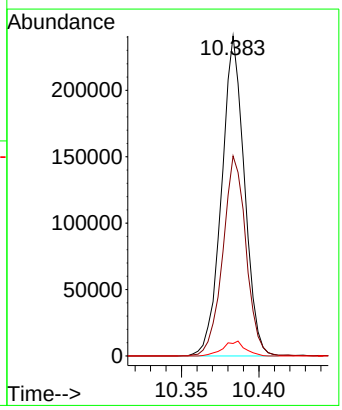
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.217 ppbv
RT: 10.383 min Scan# 3181
Delta R.T. 0.013 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 95 Resp: 246592

Ion	Ratio	Lower	Upper
95	100		
174	63.8	50.6	76.0
175	4.5	3.8	5.6



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-6-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-12	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042421.D	1		04/28/25 12:17	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.46	2.27	J	1.04	2.47	ug/m3
64-17-5	Ethanol	72.5	137	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.55	1.14		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.23	1.29	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76		0.58	1.52	ug/m3
142-82-5	Heptane	0.35	1.43	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	61.7	152	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	4.40	15.3		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.79	2.33		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.21	0.98	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.37	1.18	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	1.00	4.10		0.37	2.05	ug/m3
108-88-3	Toluene	1.40	5.28		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-6-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-12	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042421.D	1		04/28/25 12:17	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.50	2.17		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.82	3.56	J	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.34	1.48	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.45	1.92	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.20	0.98	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.66	3.24		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.16	0.79	J	0.59	2.46	ug/m3
110-54-3	Hexane	4.90	17.3		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	141000		2.781			
540-36-3	1,4-Difluorobenzene	398000		3.953			
3114-55-4	Chlorobenzene-d5	341000		8.875			
TENTITIVE IDENTIFIED COMPOUNDS							

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-6-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-12	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042421.D	1		04/28/25 12:17	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.24		J		1.47	ppbv
115-07-1	Propene	1.10		J		1.48	ppbv
000106-97-8	Butane	2.40		J		1.62	ppbv
000066-25-1	Hexanal	1.60		J		7.68	ppbv
98-82-8	Isopropylbenzene	0.12		J		10.5	ppbv
103-65-1	n-propylbenzene	0.16		J		11.0	ppbv
005989-27-5	D-Limonene	2.00		J		12.0	ppbv
001120-21-4	Undecane	1.30		J		12.8	ppbv
000103-09-3	Acetic acid, 2-ethylhexyl ester	4.80		J		13.1	ppbv
013450-73-2	11H-Dibenzo[b,e][1,4]diazepin-11-o	2.30		J		13.4	ppbv
062016-30-2	Octane, 2,3,3-trimethyl-	1.50		J		13.7	ppbv
000629-50-5	Tridecane	1.40		J		14.5	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.781	49	140992	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.953	114	398020	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	341014	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	295244	10.536	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11407	0.458	ppbv		97
3) Chlorodifluoromethane	1.473	51	5728m	0.241	ppbv		
4) Chloromethane	1.532	50	5396	0.547	ppbv		89
9) Propene	1.483	41	12113m	1.121	ppbv		
10) Heptane	4.972	43	10567m	0.348	ppbv		
11) Trichlorofluoromethane	1.875	101	5389	0.227	ppbv		95
13) Ethanol	1.719	45	124500	72.509	ppbv		76
17) tert-Butyl alcohol	2.040	59	53033	1.854	ppbv	#	71
19) Isopropyl Alcohol	1.881	45	791511	61.732	ppbv	#	34
20) Methylene Chloride	2.059	84	39463	4.366	ppbv	#	77
26) Hexane	2.820	57	111715	4.851	ppbv	#	33
30) Cyclohexane	3.852	84	3883m	0.209	ppbv		
34) 2-Butanone	2.554	43	25006	0.794	ppbv		99
35) Carbon Tetrachloride	3.755	117	2578m	0.072	ppbv		
36) Benzene	3.645	78	15779m	0.368	ppbv		
41) Tetrahydrofuran	3.059	42	2097m	0.114	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	15729	0.212	ppbv	#	65
50) 4-Methyl-2-Pentanone	5.749	43	54716	1.046	ppbv		96
53) Toluene	6.921	91	71766	1.393	ppbv		99
58) Ethyl Benzene	9.345	91	33666	0.498	ppbv		96
59) m/p-Xylene	9.526	91	44376m	0.815	ppbv		
60) o-Xylene	9.957	91	18390	0.336	ppbv		97
61) Styrene	9.863	104	11677	0.446	ppbv		91
62) Isopropylbenzene	10.529	105	9651	0.120	ppbv		98
64) n-propylbenzene	10.986	120	3222m	0.159	ppbv		
72) 4-Ethyltoluene	11.118	105	10909	0.163	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.199	105	11852	0.200	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	45414	0.657	ppbv	#	59

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

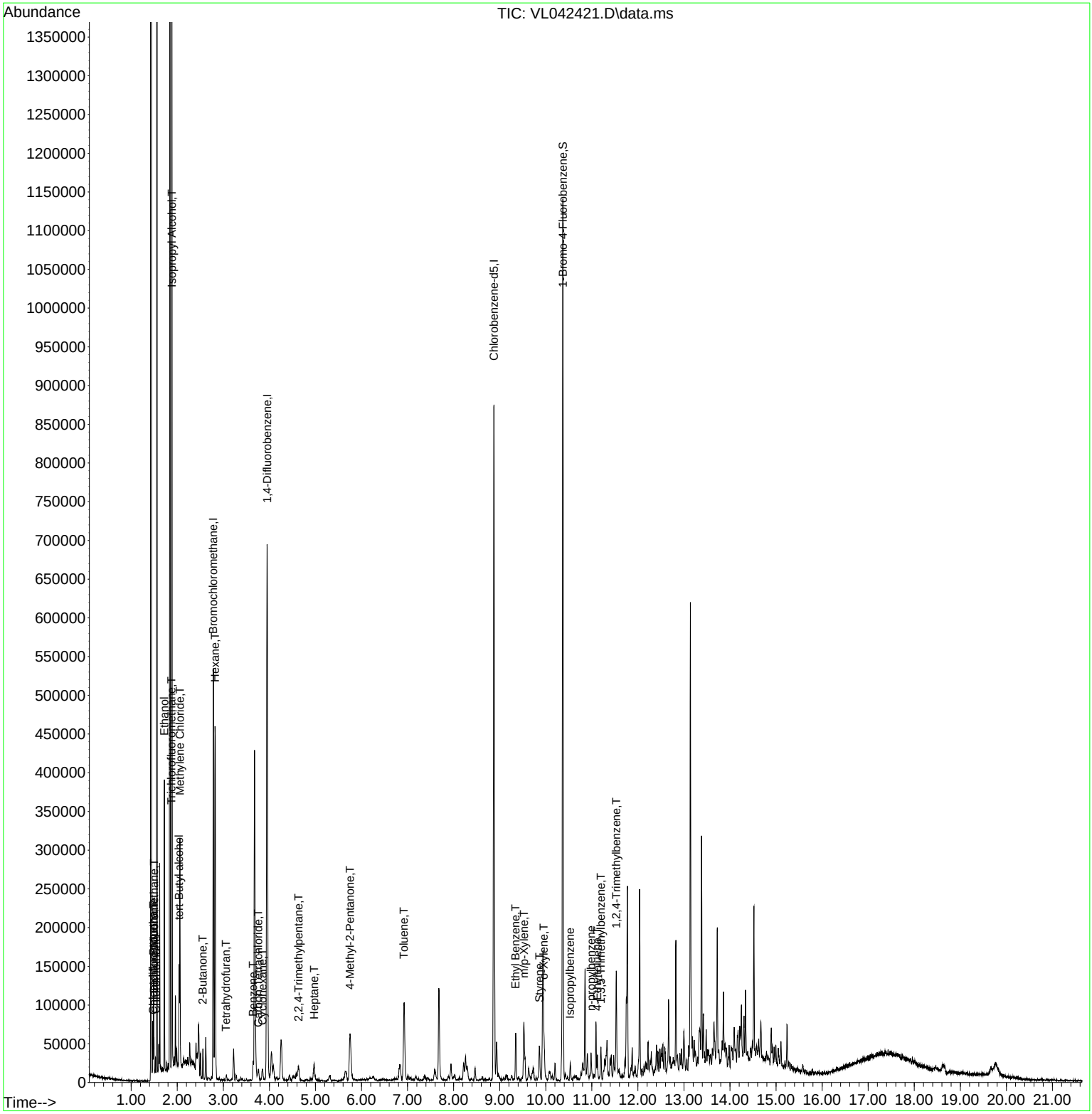
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

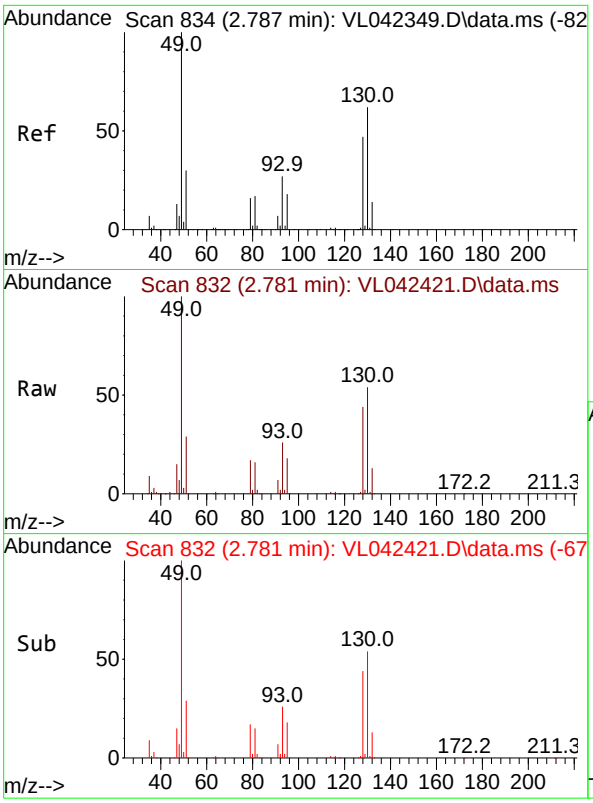
Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

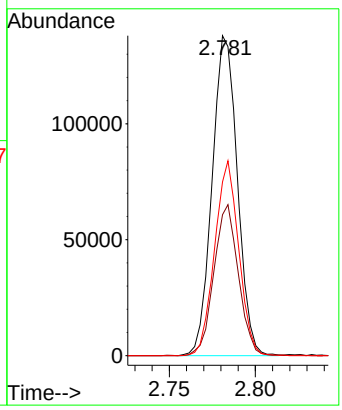




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.781 min Scan# 8
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 49 Resp: 14099

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.8	68.4
130	58.0	29.3	88.0



Instrument :
MSVOA_L
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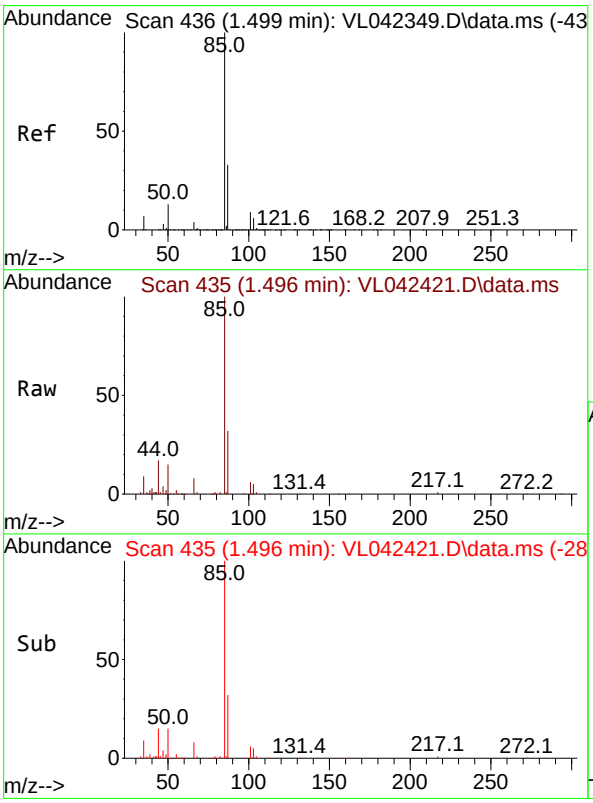
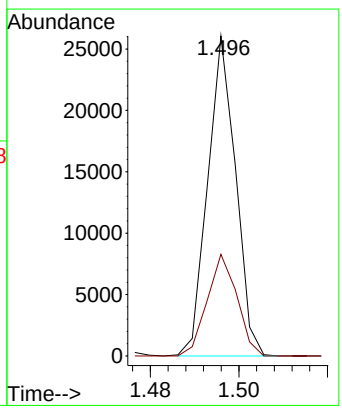
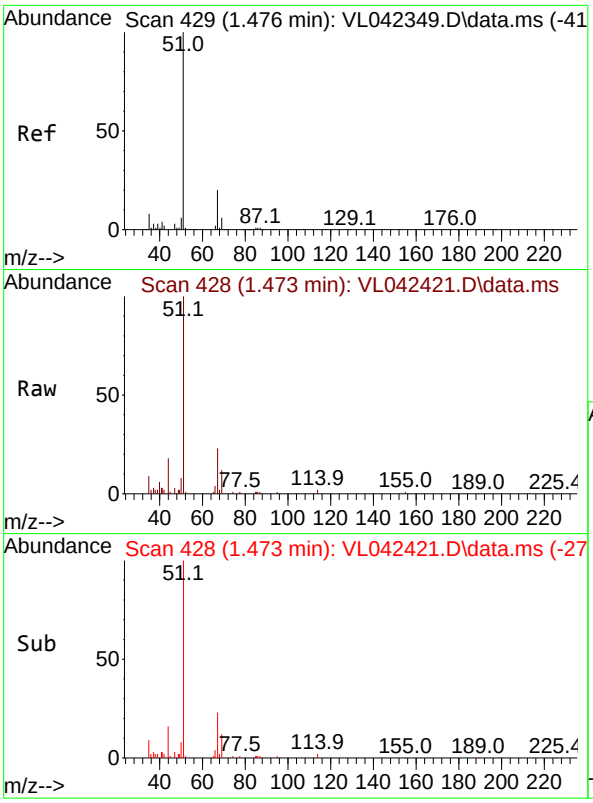


#2
Dichlorodifluoromethane
Concen: 0.458 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 85 Resp: 11407

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.6	39.8

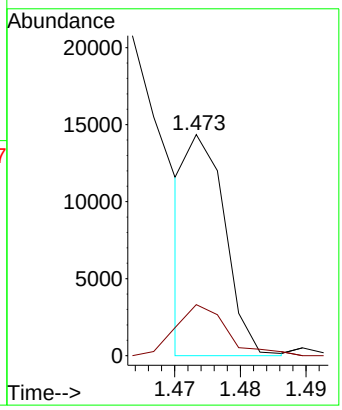




#3
Chlorodifluoromethane
Concen: 0.241 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 51 Resp: 572

Ion	Ratio	Lower	Upper
51	100		
67	32.1	16.2	24.4



Instrument :
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ClientSampleId :
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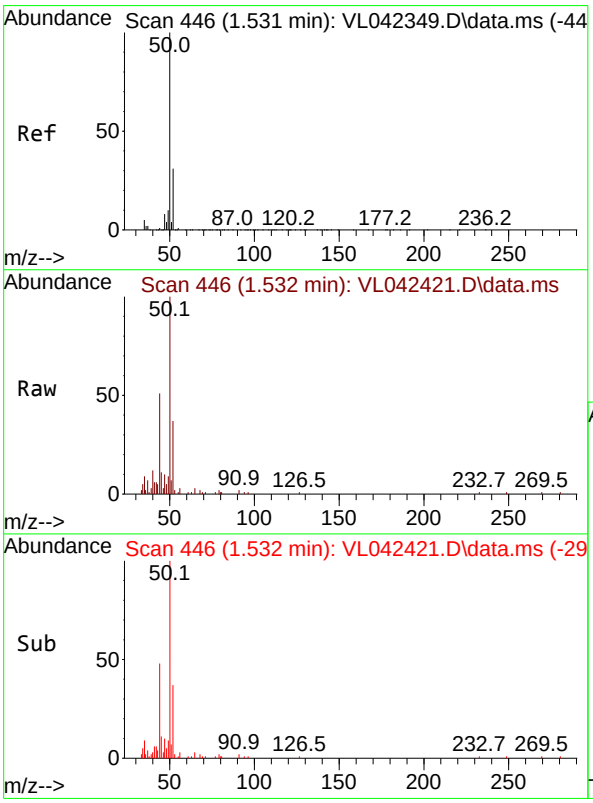
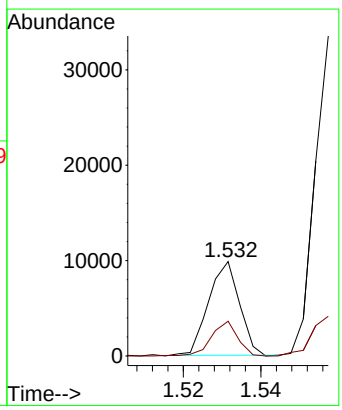
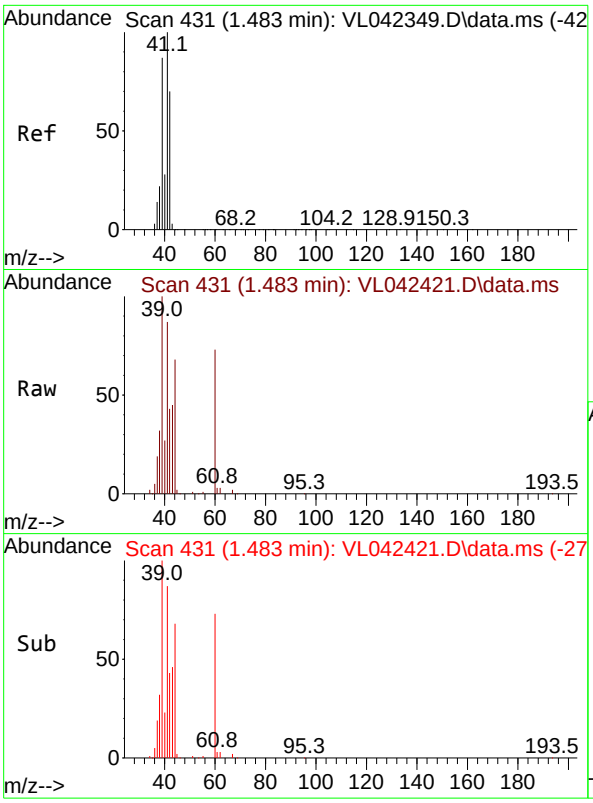


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 50 Resp: 5396

Ion	Ratio	Lower	Upper
50	100		
52	37.0	24.7	37.1

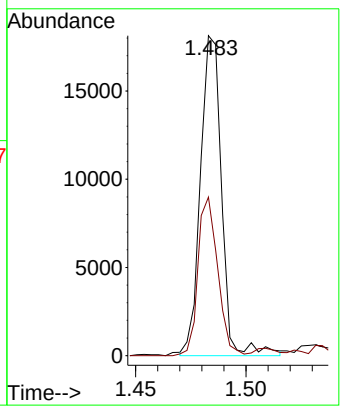




#9
Propene
Concen: 1.121 ppbv m
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 41 Resp: 1211

Ion	Ratio	Lower	Upper
41	100		
42	3382.2	56.2	84.4



Instrument :
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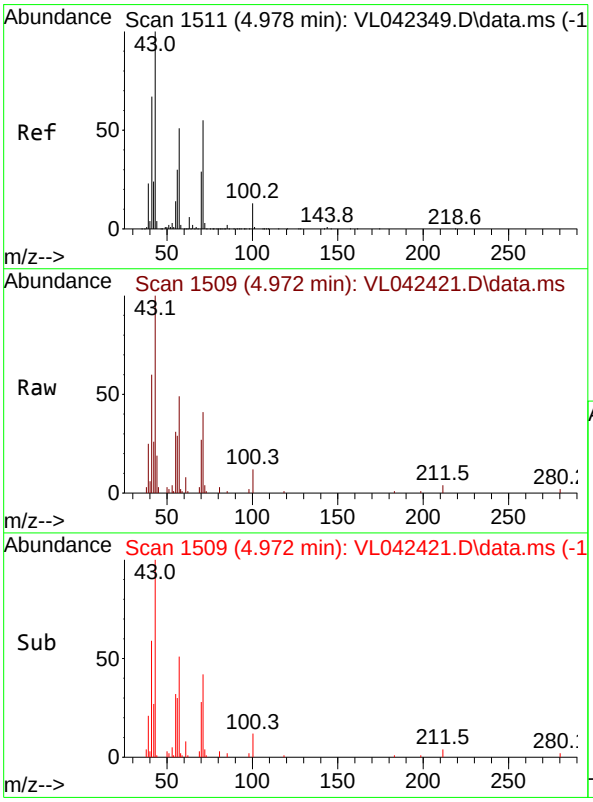
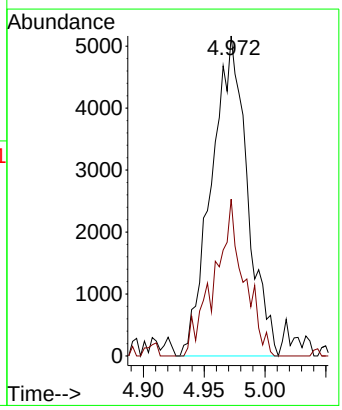
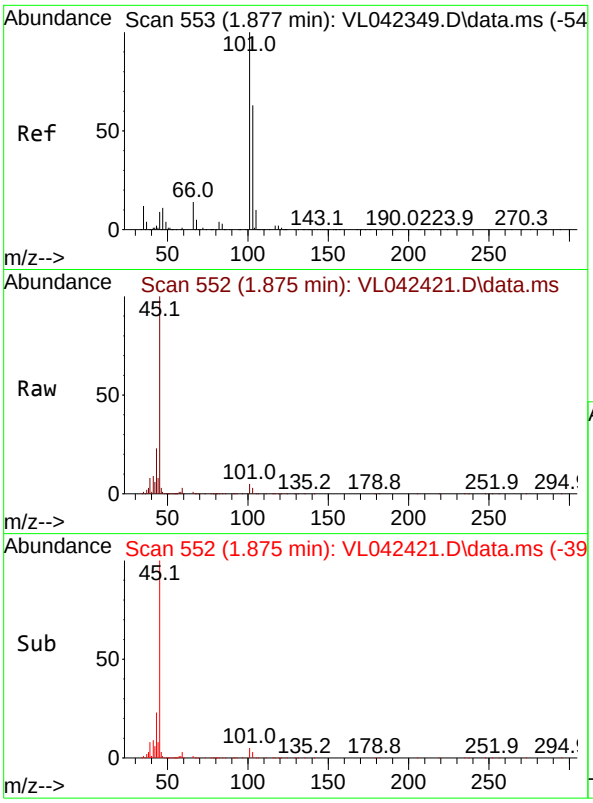


#10
Heptane
Concen: 0.348 ppbv m
RT: 4.972 min Scan# 1509
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 10567

Ion	Ratio	Lower	Upper
43	100		
57	40.8	39.9	59.9

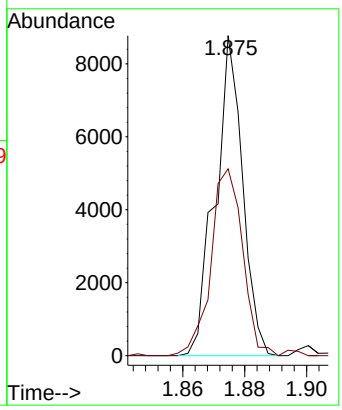




#11
Trichlorofluoromethane
Concen: 0.227 ppbv
RT: 1.875 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:101 Resp: 538

Ion	Ratio	Lower	Upper
101	100		
103	58.4	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
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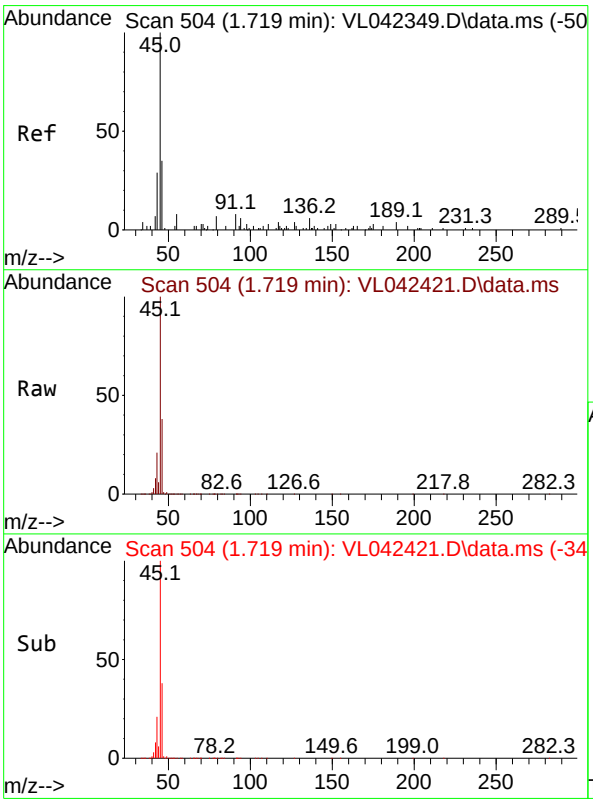
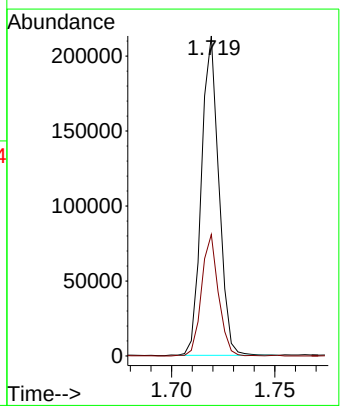
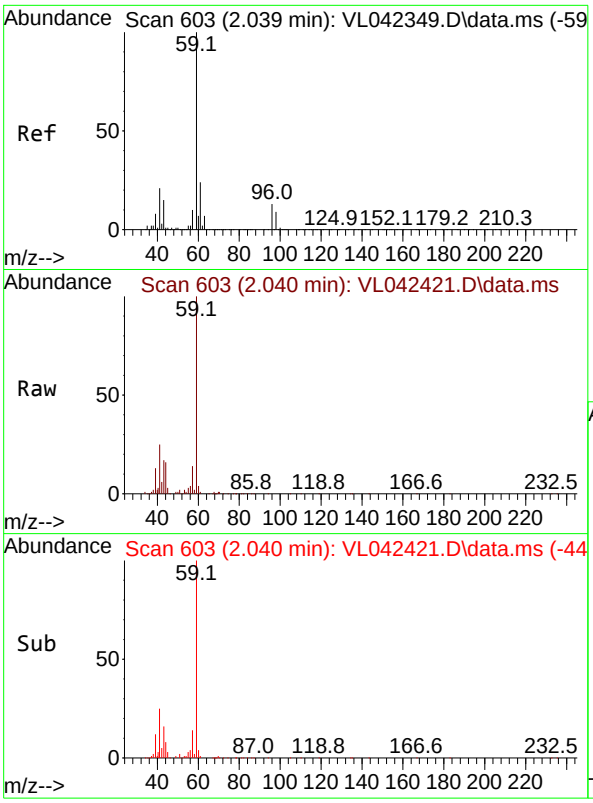


#13
Ethanol
Concen: 72.509 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 45 Resp: 124500

Ion	Ratio	Lower	Upper
45	100		
46	37.4	21.9	87.7





#17
tert-Butyl alcohol
Concen: 1.854 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 59 Resp: 5303

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.7	13.1#

Instrument :
MSVOA_L
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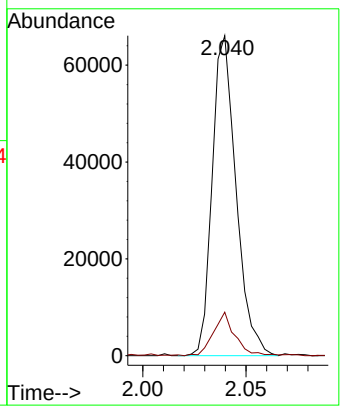
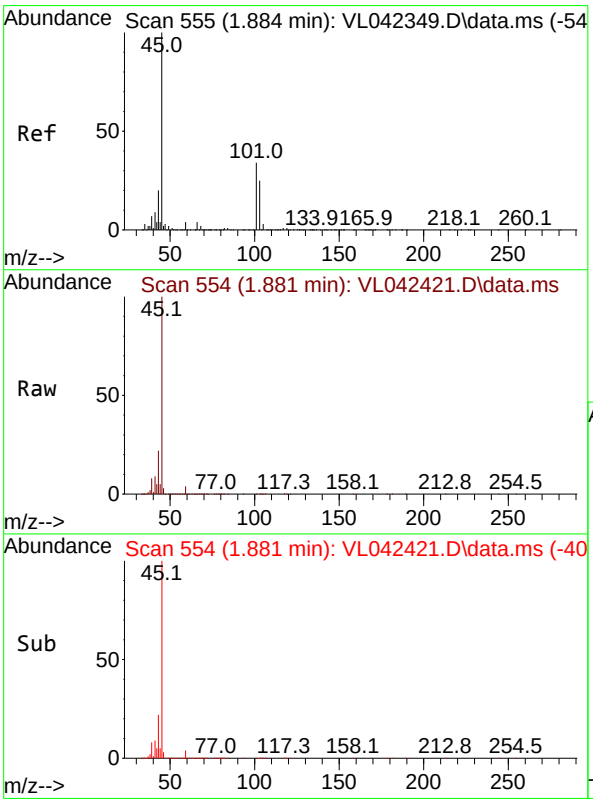
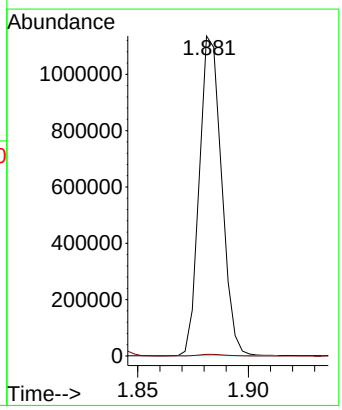


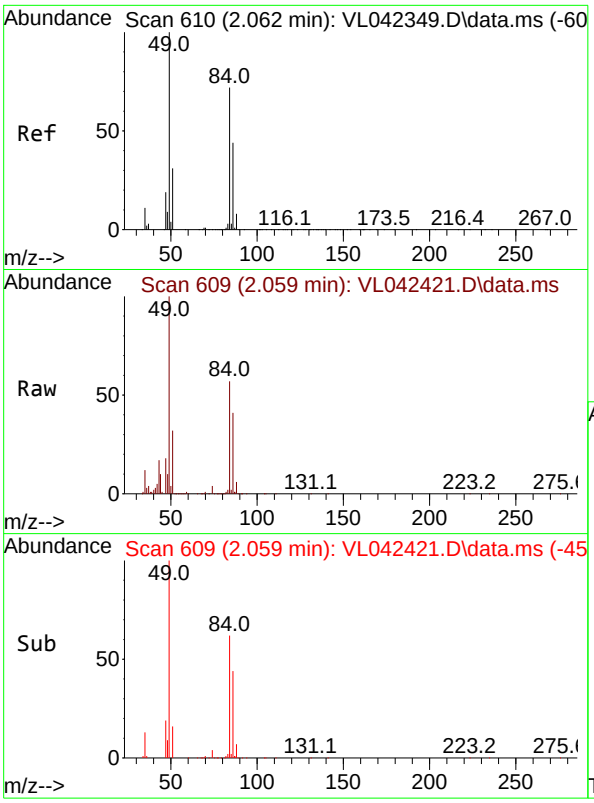


#19
Isopropyl Alcohol
Concen: 61.732 ppbv
RT: 1.881 min Scan# 554
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 45 Resp: 791511

Ion	Ratio	Lower	Upper
45	100		
58	0.6	34.5	51.7#

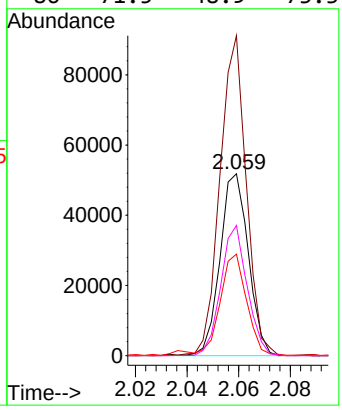




#20
Methylene Chloride
Concen: 4.366 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 84 Resp: 3946

Ion	Ratio	Lower	Upper
84	100		
49	175.5	111.6	167.4#
51	55.1	35.1	52.7#
86	71.5	48.9	73.3



Instrument :
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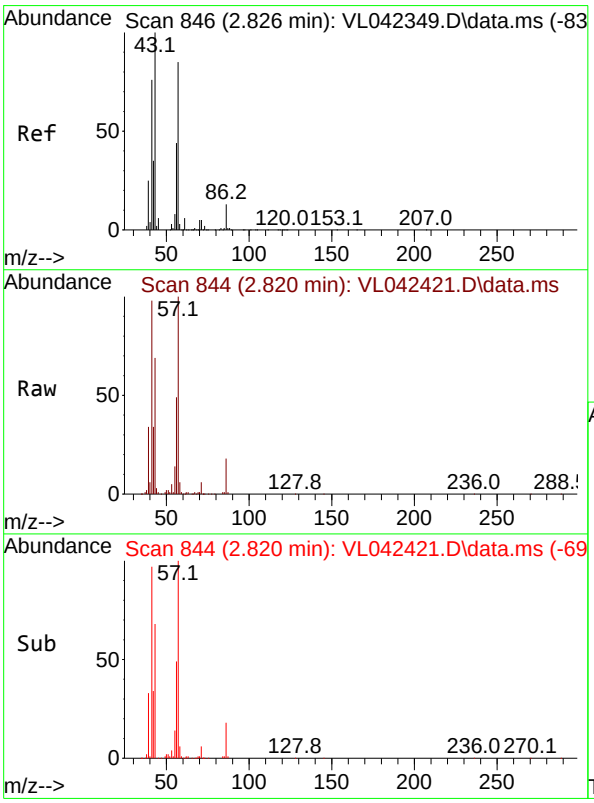
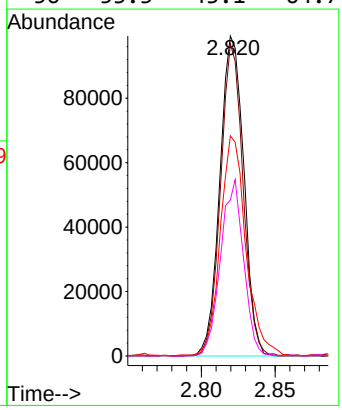
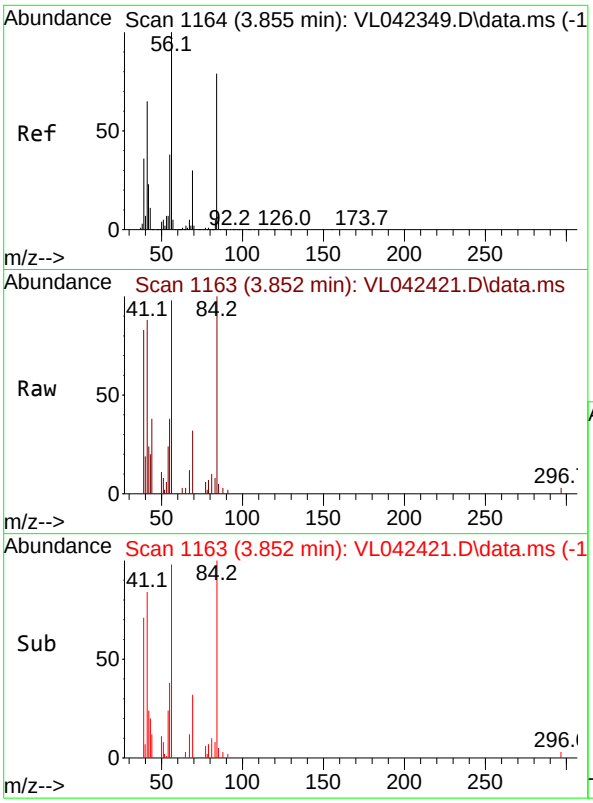


#26
Hexane
Concen: 4.851 ppbv
RT: 2.820 min Scan# 844
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 57 Resp: 111715

Ion	Ratio	Lower	Upper
57	100		
41	92.0	77.9	116.9
43	74.4	208.4	312.6#
56	53.3	43.1	64.7

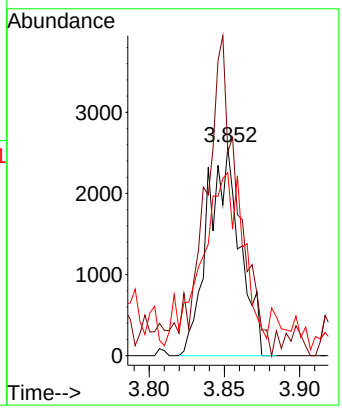




#30
Cyclohexane
Concen: 0.209 ppbv m
RT: 3.852 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 84 Resp: 388

Ion	Ratio	Lower	Upper
84	100		
56	163.8	101.0	151.4#
41	0.0	67.4	101.0#



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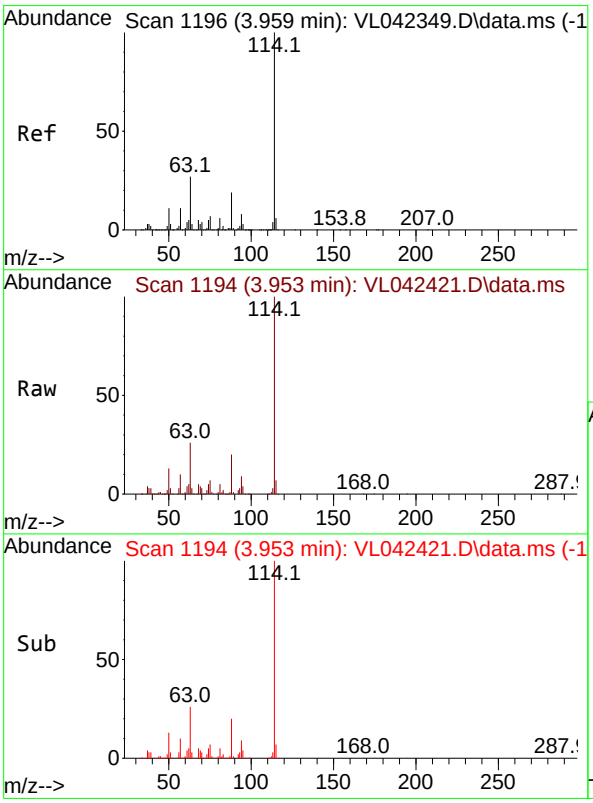
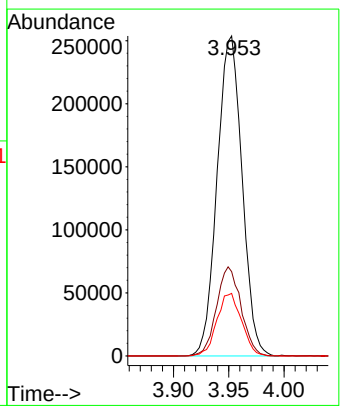
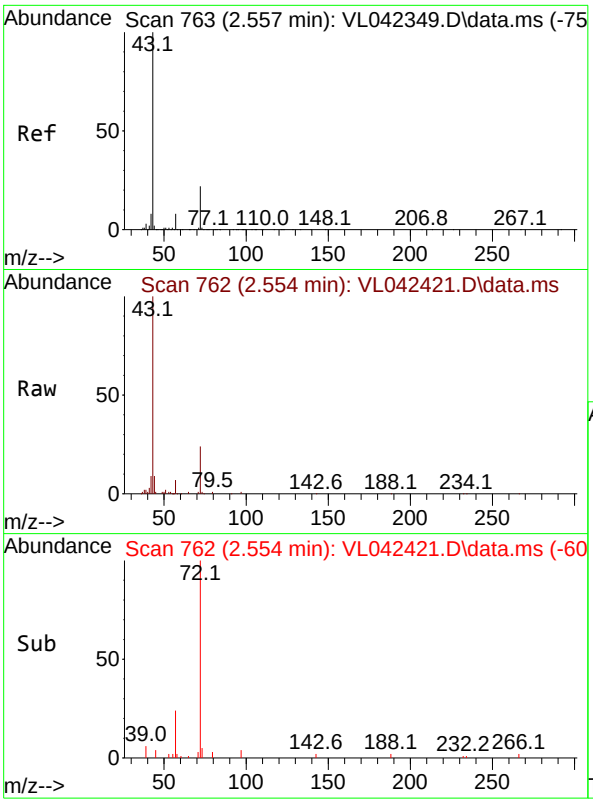


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.953 min Scan# 1194
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:114 Resp: 398020

Ion	Ratio	Lower	Upper
114	100		
63	27.3	21.8	32.6
88	19.3	15.5	23.3

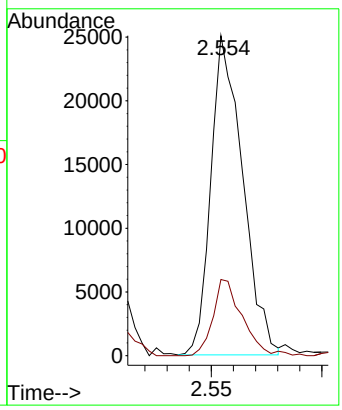




#34
2-Butanone
Concen: 0.794 ppbv
RT: 2.554 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 2500

Ion	Ratio	Lower	Upper
43	100		
72	22.5	18.2	27.2



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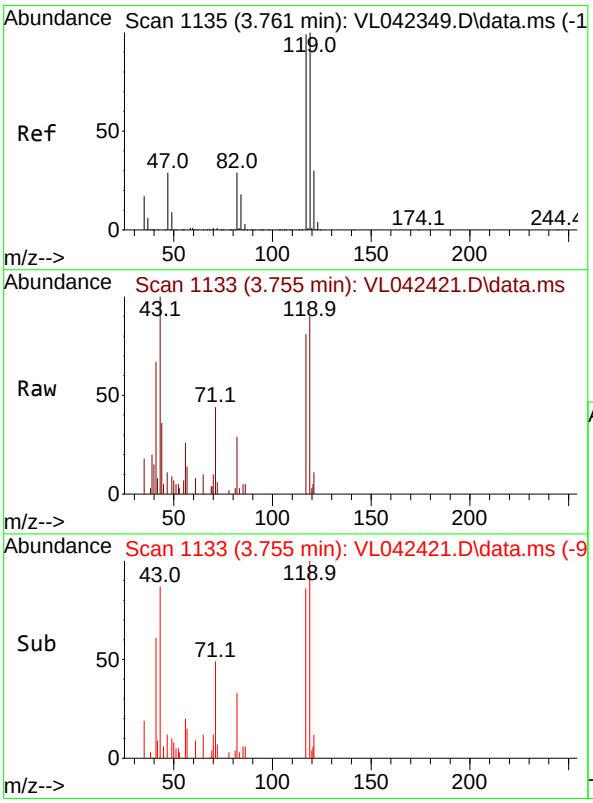
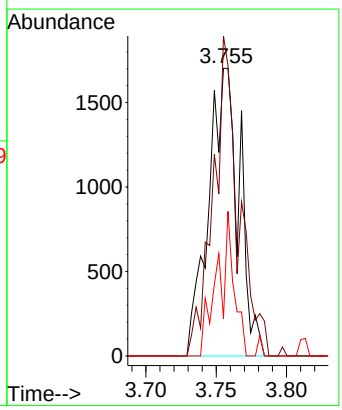
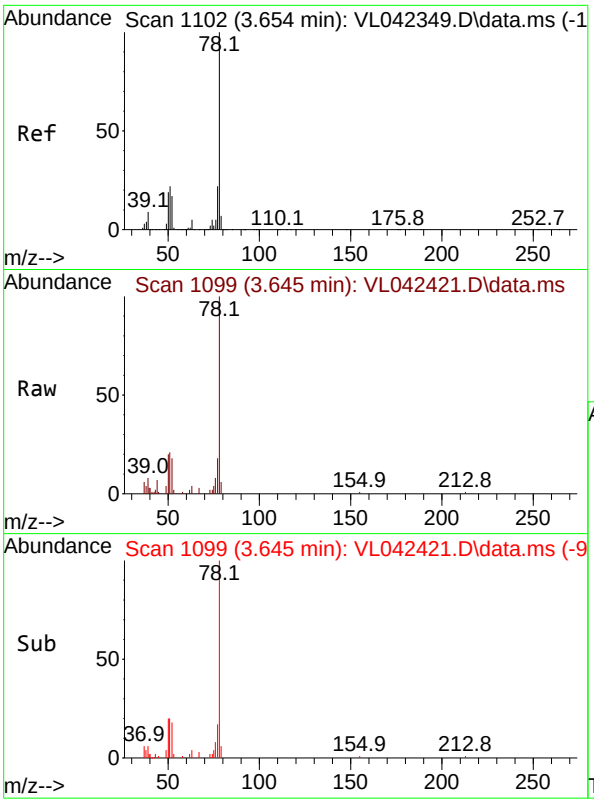


#35
Carbon Tetrachloride
Concen: 0.072 ppbv m
RT: 3.755 min Scan# 1133
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:117 Resp: 2578

Ion	Ratio	Lower	Upper
117	100		
119	111.2	80.5	120.7
121	13.0	24.2	36.2#

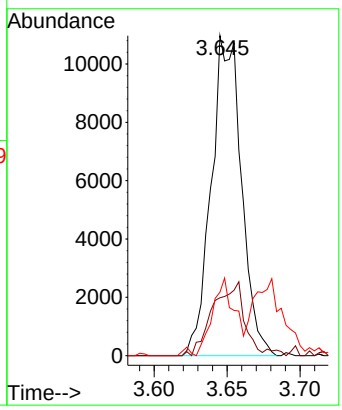




#36
Benzene
Concen: 0.368 ppbv m
RT: 3.645 min Scan# 1
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 78 Resp: 1577

Ion	Ratio	Lower	Upper
78	100		
77	18.1	17.4	26.0
50	19.9	15.5	23.3



Instrument :
MSVOA_L
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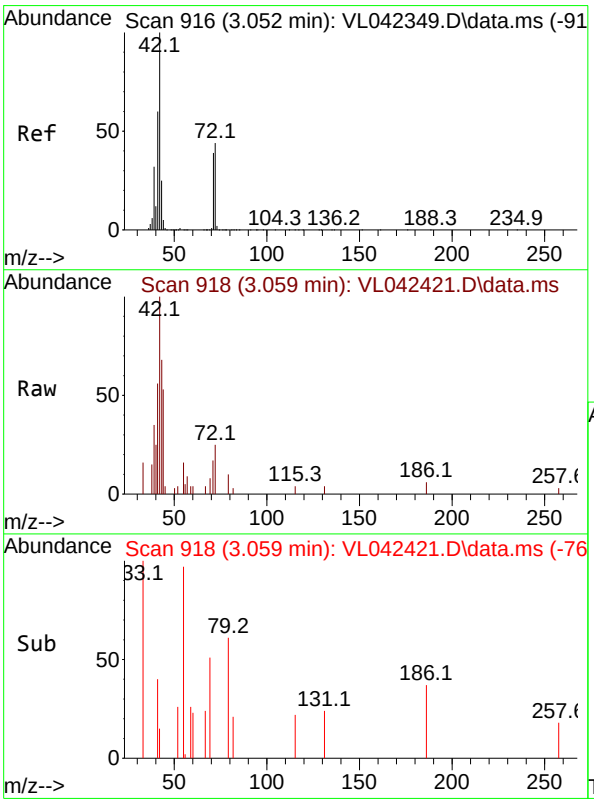
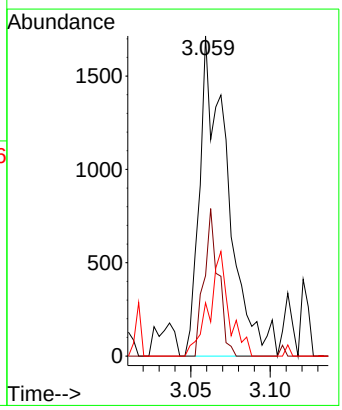
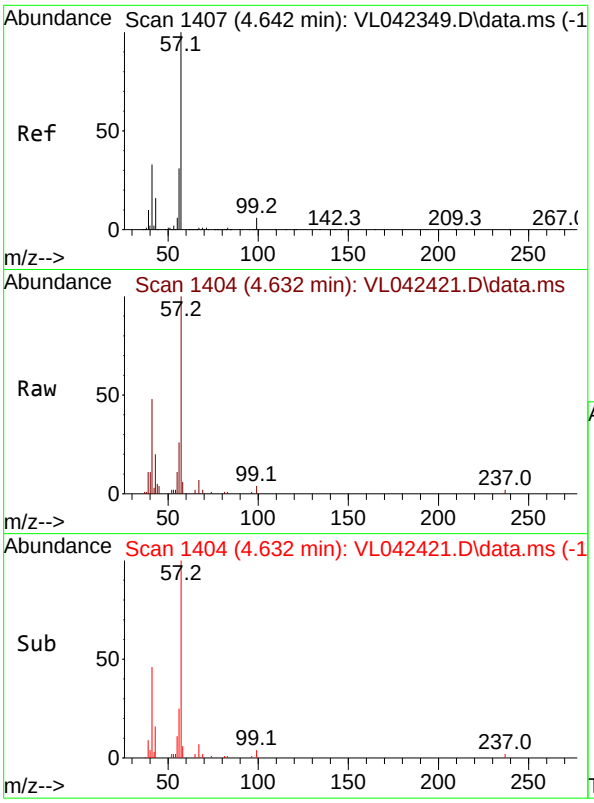


#41
Tetrahydrofuran
Concen: 0.114 ppbv m
RT: 3.059 min Scan# 918
Delta R.T. 0.007 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 42 Resp: 2097

Ion	Ratio	Lower	Upper
42	100		
72	23.6	32.3	48.5#
71	0.0	31.4	47.2#

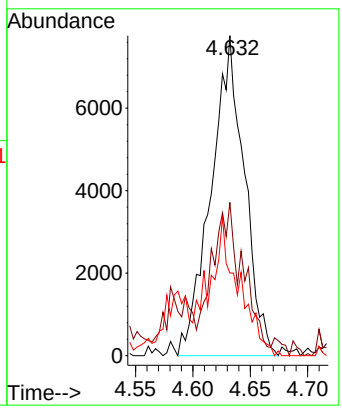




#44
2,2,4-Trimethylpentane
Concen: 0.212 ppbv
RT: 4.632 min Scan# 14
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 57 Resp: 1572

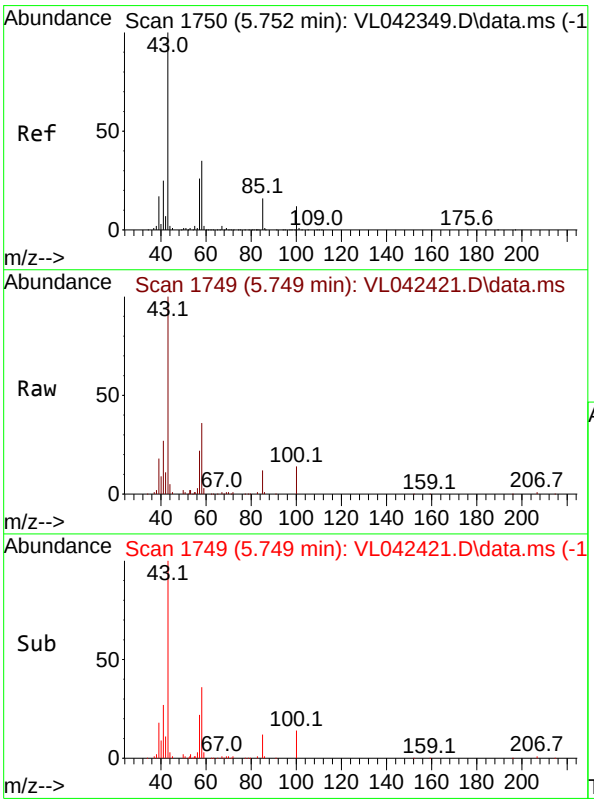
Ion	Ratio	Lower	Upper
57	100		
41	52.6	27.2	40.8#
56	53.5	25.7	38.5#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

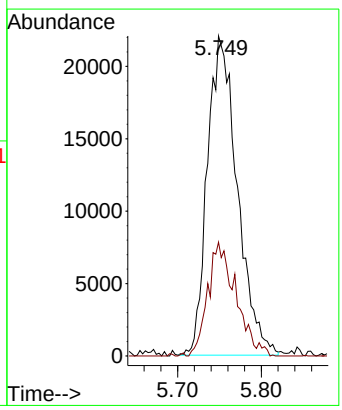
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

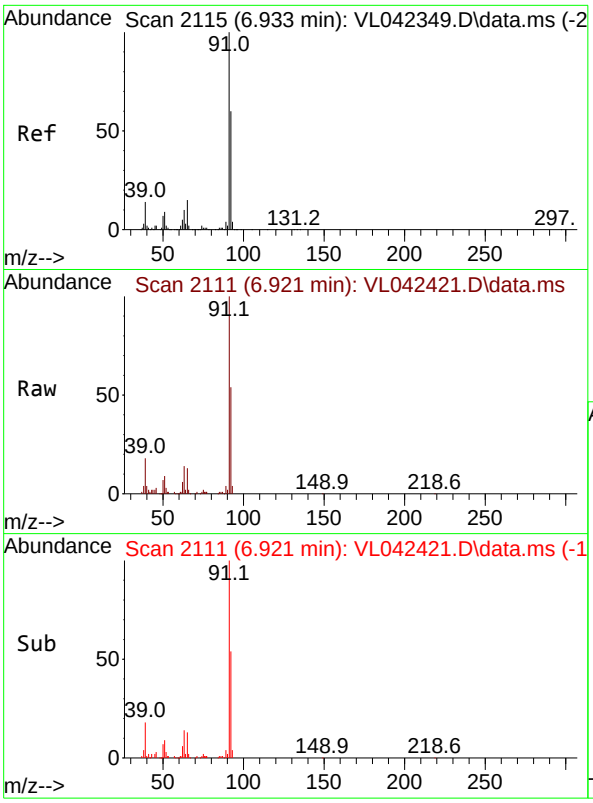


#50
4-Methyl-2-Pentanone
Concen: 1.046 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 54716

Ion	Ratio	Lower	Upper
43	100		
58	33.7	28.6	43.0

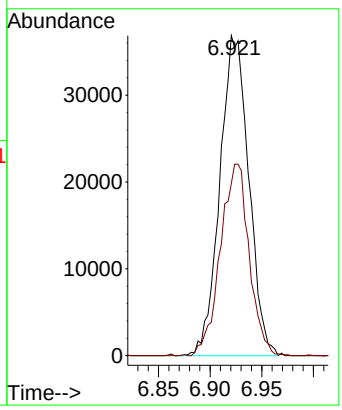




#53
Toluene
Concen: 1.393 ppbv
RT: 6.921 min Scan# 21
Delta R.T. -0.013 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 7176

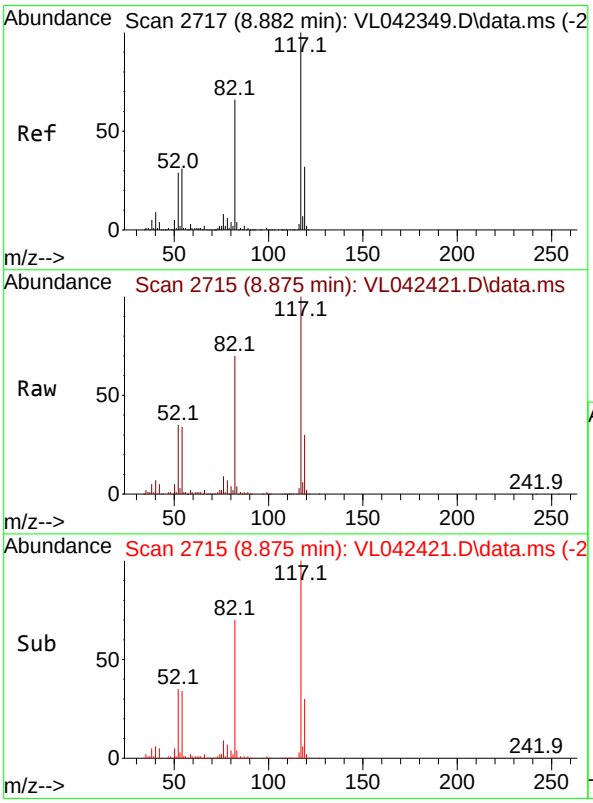
Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

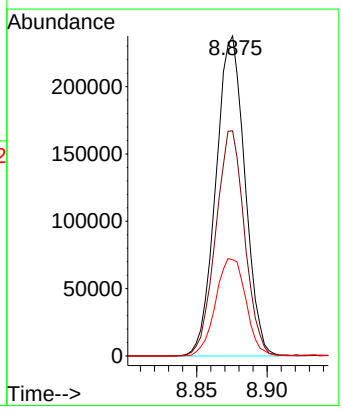
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

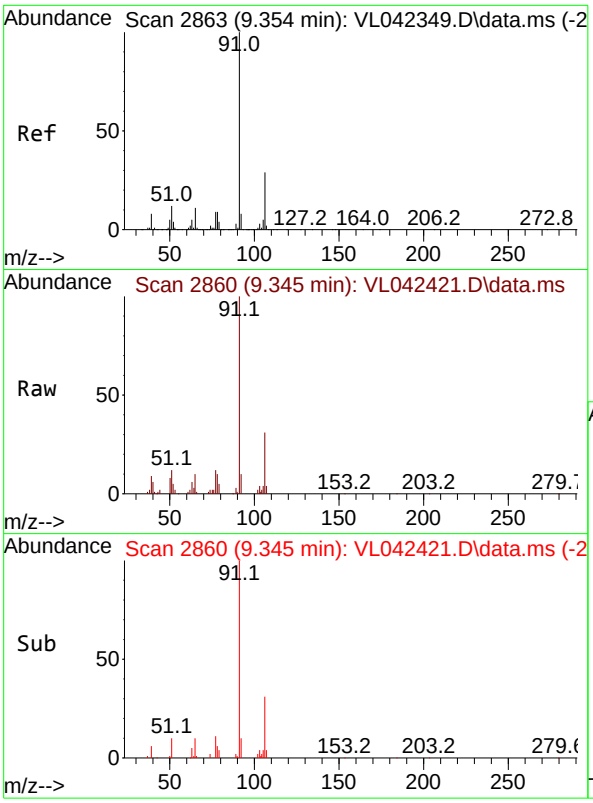


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:117 Resp: 341014

Ion	Ratio	Lower	Upper
117	100		
82	70.2	57.8	86.6
119	31.8	25.2	37.8

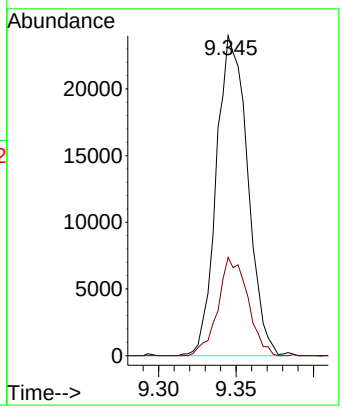




#58
Ethyl Benzene
Concen: 0.498 ppbv
RT: 9.345 min Scan# 2
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 3366

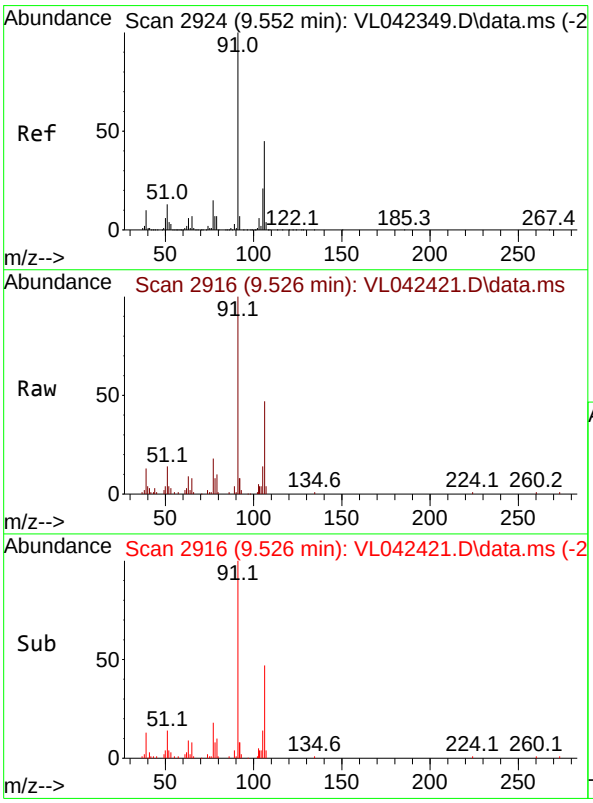
Ion	Ratio	Lower	Upper
91	100		
106	30.7	23.0	34.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

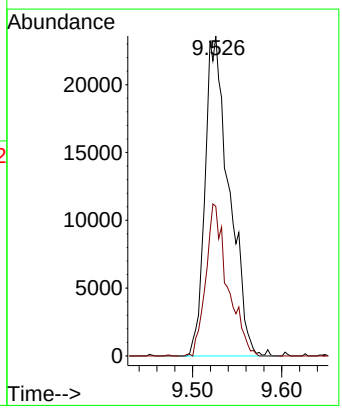
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

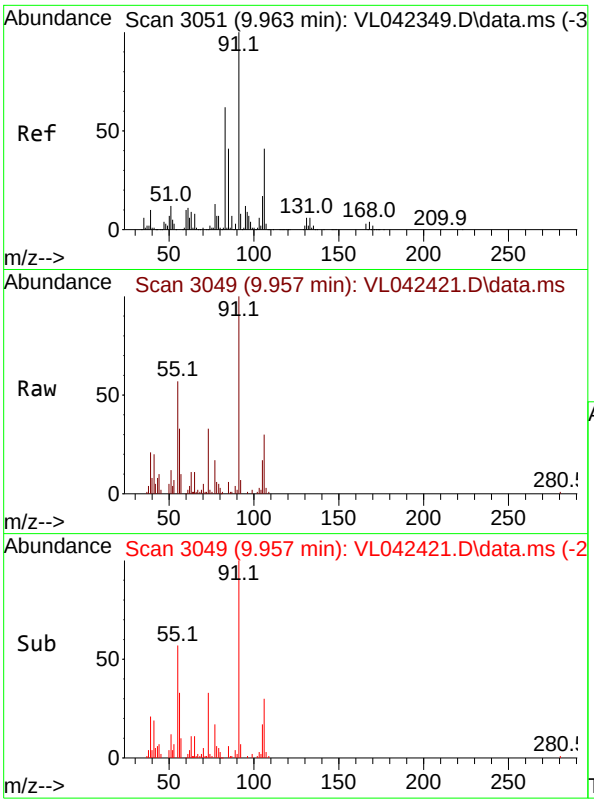


#59
m/p-Xylene
Concen: 0.815 ppbv m
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 44376

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

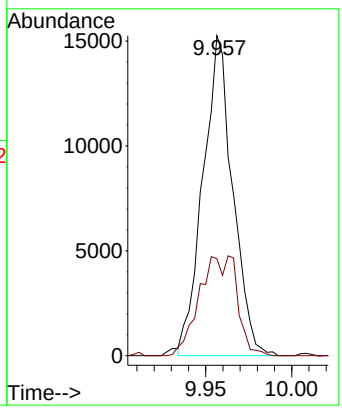




#60
o-Xylene
Concen: 0.336 ppbv
RT: 9.957 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 1839

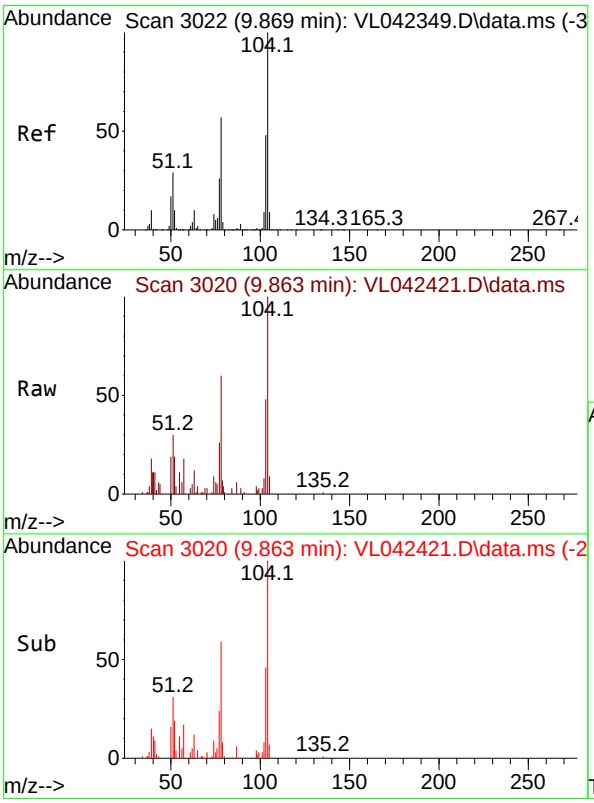
Ion	Ratio	Lower	Upper
91	100		
106	40.3	21.1	63.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

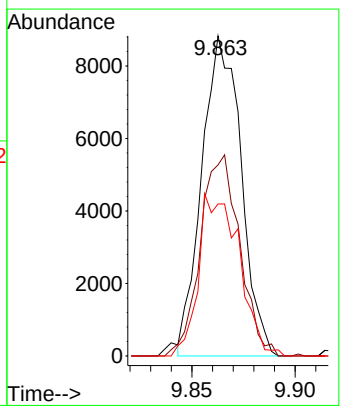
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

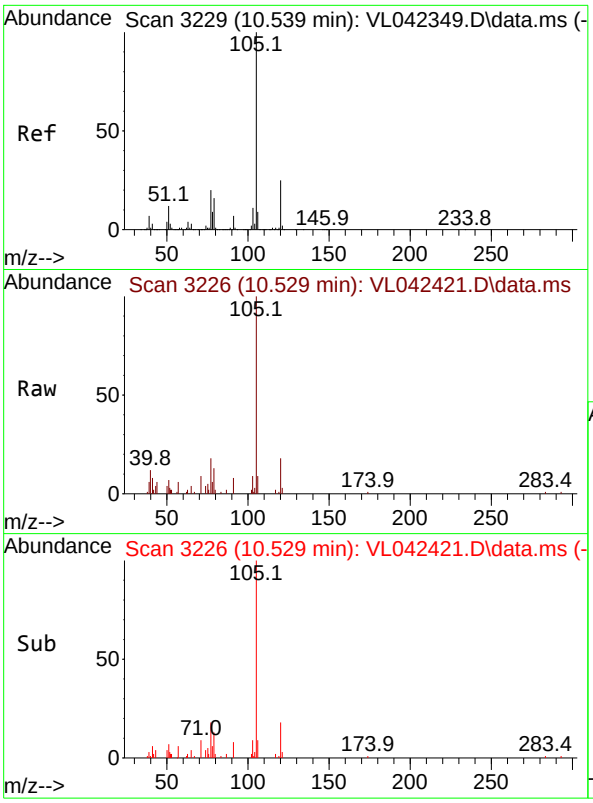


#61
Styrene
Concen: 0.446 ppbv
RT: 9.863 min Scan# 3020
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:104 Resp: 11677

Ion	Ratio	Lower	Upper
104	100		
78	62.9	44.6	66.8
103	52.1	37.4	56.0

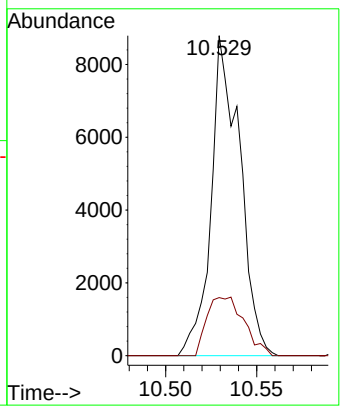




#62
Isopropylbenzene
Concen: 0.120 ppbv
RT: 10.529 min Scan# 3
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 965

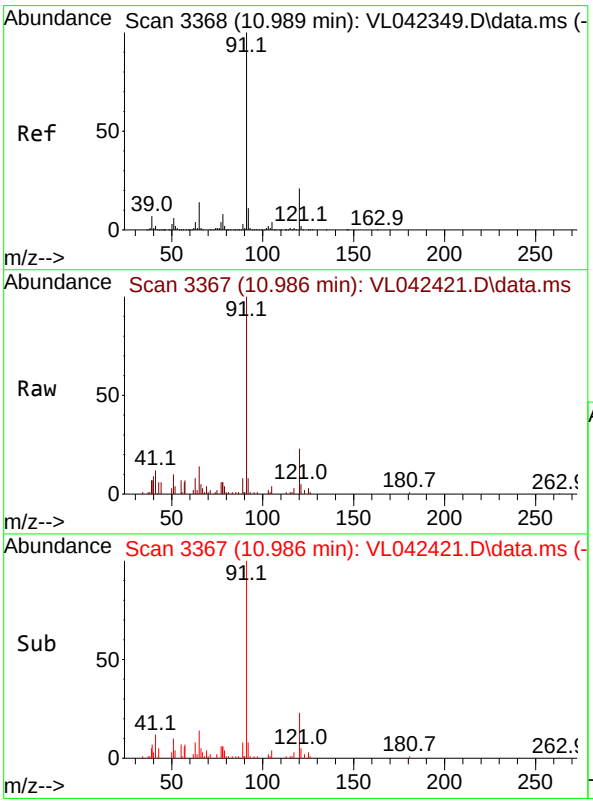
Ion	Ratio	Lower	Upper
105	100		
120	23.7	19.8	29.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

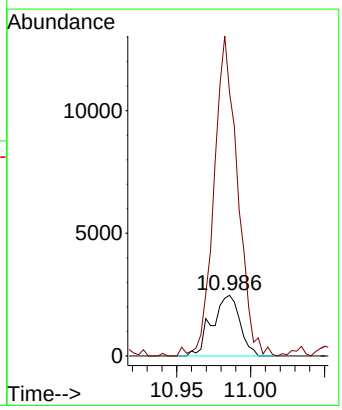
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

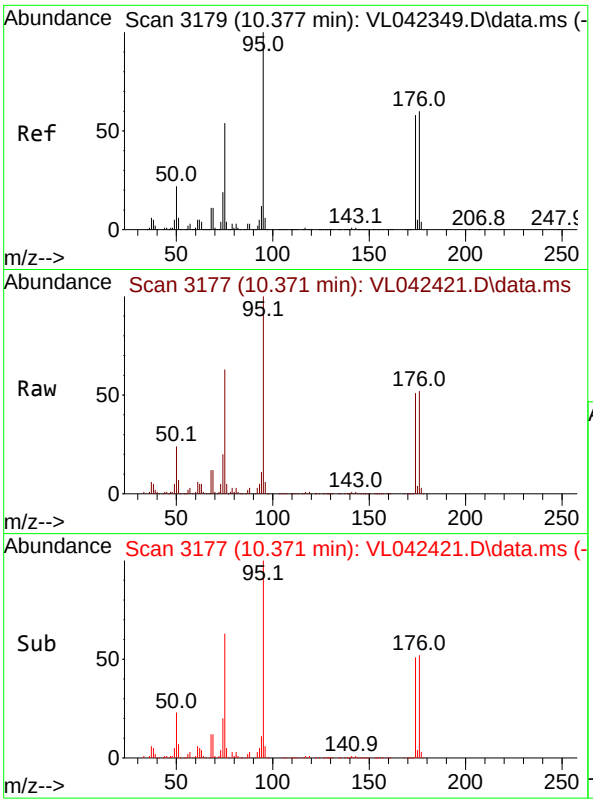


#64
n-propylbenzene
Concen: 0.159 ppbv m
RT: 10.986 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:120 Resp: 3222

Ion	Ratio	Lower	Upper
120	100		
91	451.4	392.4	588.6

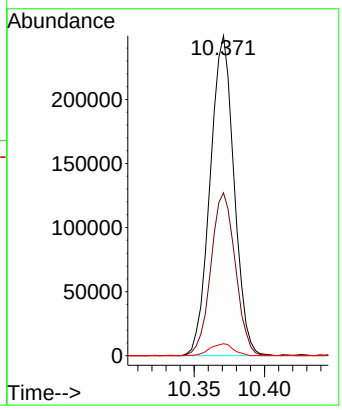




#68
1-Bromo-4-Fluorobenzene
Concen: 10.536 ppbv
RT: 10.371 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 95 Resp: 29524

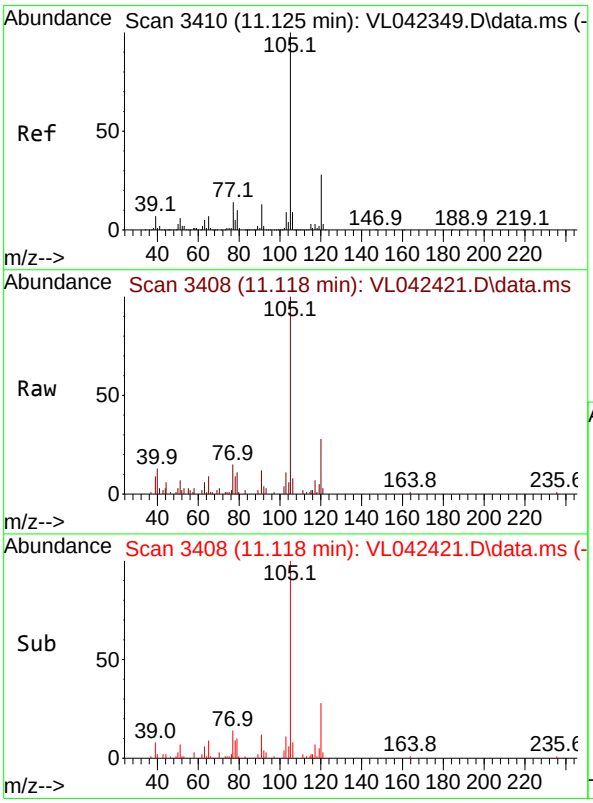
Ion	Ratio	Lower	Upper
95	100		
174	52.1	48.5	72.7
175	3.7	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

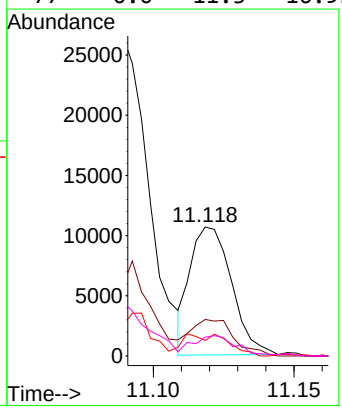
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

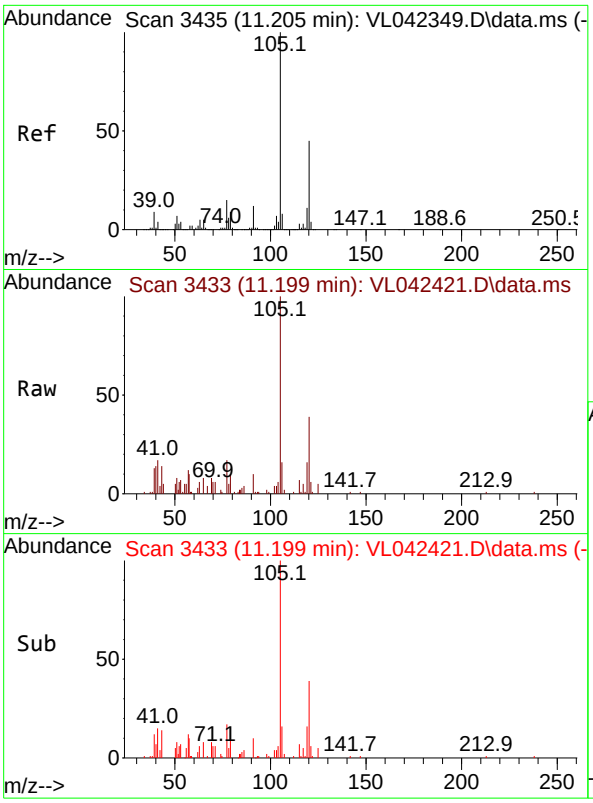


#72
4-Ethyltoluene
Concen: 0.163 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 10909

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

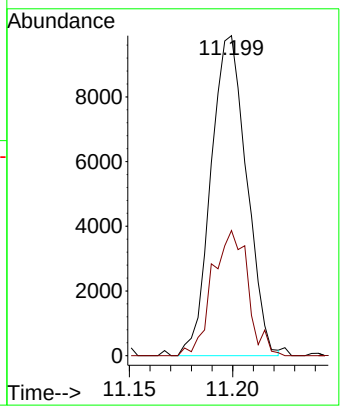




#73
1,3,5-Trimethylbenzene
Concen: 0.200 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 1185

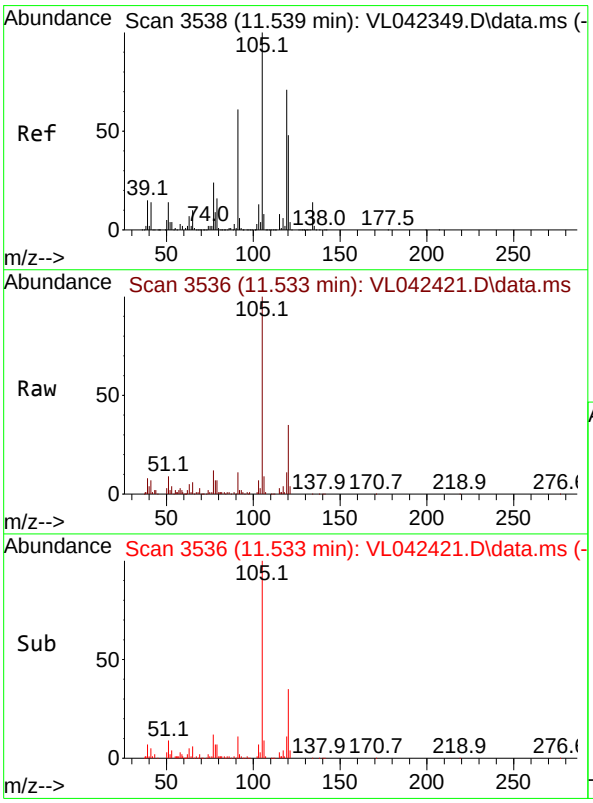
Ion	Ratio	Lower	Upper
105	100		
120	39.1	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Manual Integrations
APPROVED

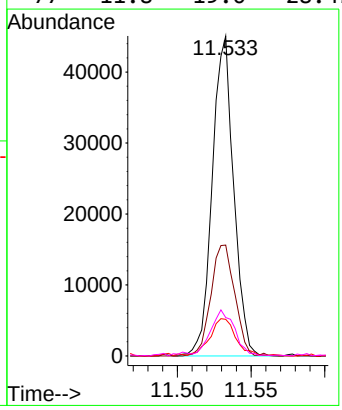
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.657 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 45414

Ion	Ratio	Lower	Upper
105	100		
120	34.6	38.1	57.1#
91	11.1	48.8	73.2#
77	11.8	19.0	28.4#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument : MSVOA_L
ClientSampleId : IA-B2-6-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042421.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4339981	4677094	100.00%	21.037%
2	1.486	427	432	434	rBV2	104159	52096	1.11%	0.234%
3	1.557	450	454	458	rBV	5213277	2693187	57.58%	12.113%
4	1.619	469	473	477	rVB	265335	131785	2.82%	0.593%
5	1.719	499	504	509	rBV	376180	221267	4.73%	0.995%
6	1.842	535	542	548	rBV2	2714342	2026186	43.32%	9.113%
7	1.881	548	554	566	rVV	1838189	1301445	27.83%	5.854%
8	1.959	574	578	583	rVB	90262	64580	1.38%	0.290%
9	2.040	598	603	605	rBV	129863	95852	2.05%	0.431%
10	2.056	605	608	621	rVB2	295123	241598	5.17%	1.087%
11	2.464	725	734	742	rVB3	66508	112822	2.41%	0.507%
12	2.619	772	782	790	rVB2	55398	56047	1.20%	0.252%
13	2.784	825	833	838	rBV	529883	546027	11.67%	2.456%
14	2.820	838	844	856	rVB	455451	518932	11.10%	2.334%
15	3.221	958	968	977	rVB2	40930	57299	1.23%	0.258%
16	3.677	1103	1109	1125	rVB	421053	607007	12.98%	2.730%
17	3.949	1179	1193	1207	rBV	691564	1120429	23.96%	5.039%
18	4.043	1212	1222	1231	rBV4	34175	64628	1.38%	0.291%
19	4.254	1277	1287	1304	rVB7	51909	115580	2.47%	0.520%
20	5.749	1736	1749	1771	rBV5	60297	157394	3.37%	0.708%
21	6.927	2100	2113	2132	rVB2	99913	210980	4.51%	0.949%
22	7.678	2334	2345	2358	rBV2	117694	204218	4.37%	0.919%
23	8.875	2702	2715	2725	rBV	871997	1285075	27.48%	5.780%
24	8.934	2725	2733	2741	rVB3	45658	70516	1.51%	0.317%
25	9.345	2852	2860	2871	rBV3	59936	85898	1.84%	0.386%
26	9.526	2907	2916	2923	rBV3	73111	119543	2.56%	0.538%
27	9.859	3012	3019	3031	rVB5	43870	66616	1.42%	0.300%
28	9.940	3031	3044	3062	rBV4	167174	347491	7.43%	1.563%
29	10.371	3161	3177	3188	rBV	1137546	1422025	30.40%	6.396%
30	10.853	3319	3326	3333	rVB2	136312	161623	3.46%	0.727%
31	10.983	3359	3366	3380	rVB2	33498	50194	1.07%	0.226%
32	11.089	3391	3399	3405	rBV2	72161	82995	1.77%	0.373%
33	11.196	3422	3432	3439	rVB3	41012	51882	1.11%	0.233%
34	11.329	3468	3473	3481	rVB5	44872	58086	1.24%	0.261%
35	11.530	3527	3535	3547	rVB	131748	168734	3.61%	0.759%
36	11.750	3597	3603	3604	rBV	91250	75255	1.61%	0.338%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	11.772	3604	3610	3619	rVB2	247306	308554	6.60%	1.388%
38	12.038	3685	3692	3702	rVB4	239975	260220	5.56%	1.170%
39	12.666	3874	3886	3894	rBV5	92634	114180	2.44%	0.514%
40	12.824	3929	3935	3941	rBV2	162429	164216	3.51%	0.739%
41	12.999	3981	3989	4001	rVB7	49548	78079	1.67%	0.351%
42	13.138	4024	4032	4043	rBV	586839	618191	13.22%	2.780%
43	13.336	4085	4093	4094	rBV7	43881	53535	1.14%	0.241%
44	13.381	4101	4107	4114	rVB2	287612	295124	6.31%	1.327%
45	13.423	4114	4120	4125	rBV3	57970	59472	1.27%	0.267%
46	13.653	4185	4191	4201	rVB3	46419	70666	1.51%	0.318%
47	13.724	4201	4213	4218	rBV	168740	185976	3.98%	0.836%
48	13.857	4249	4254	4261	rVB2	76582	71431	1.53%	0.321%
49	14.090	4319	4326	4332	rBV6	41812	50465	1.08%	0.227%
50	14.248	4367	4375	4381	rVB4	60748	72472	1.55%	0.326%
51	14.303	4383	4392	4397	rBV4	52488	51010	1.09%	0.229%
52	14.336	4397	4402	4409	rVB3	84059	90488	1.93%	0.407%
53	14.520	4452	4459	4464	rVB	186471	180786	3.87%	0.813%
54	14.669	4496	4505	4512	rVB9	46922	66648	1.42%	0.300%
55	14.896	4566	4575	4579	rBV6	48287	59516	1.27%	0.268%
56	15.235	4673	4680	4688	rBV4	54852	59802	1.28%	0.269%

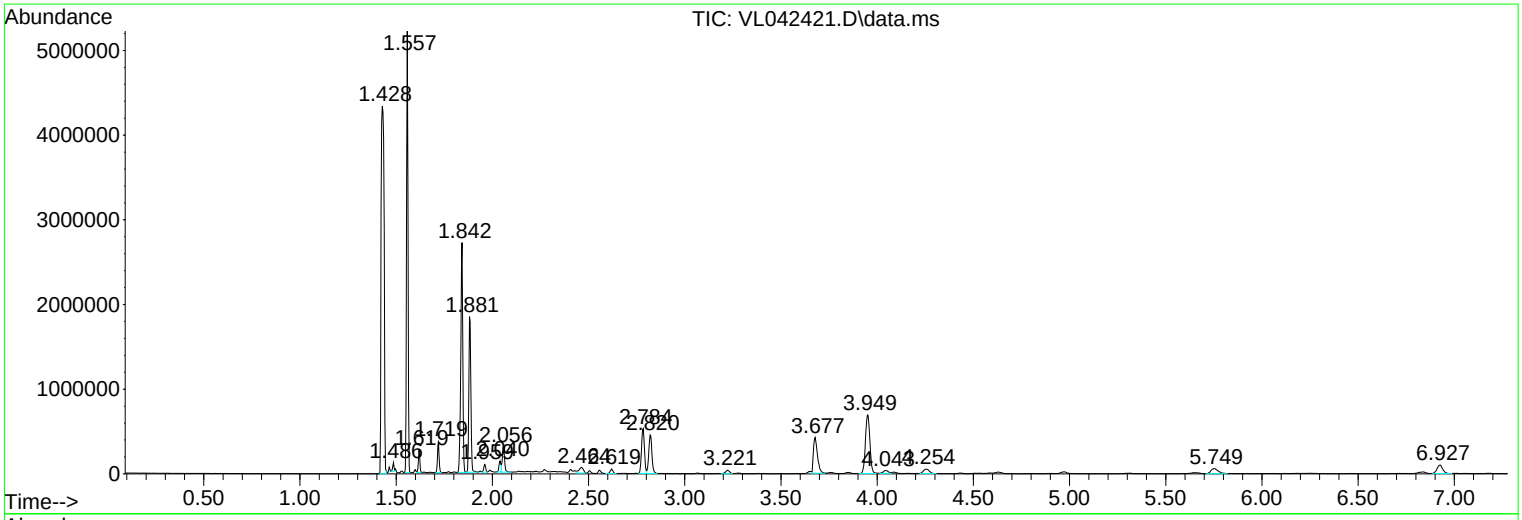
Sum of corrected areas: 22233217

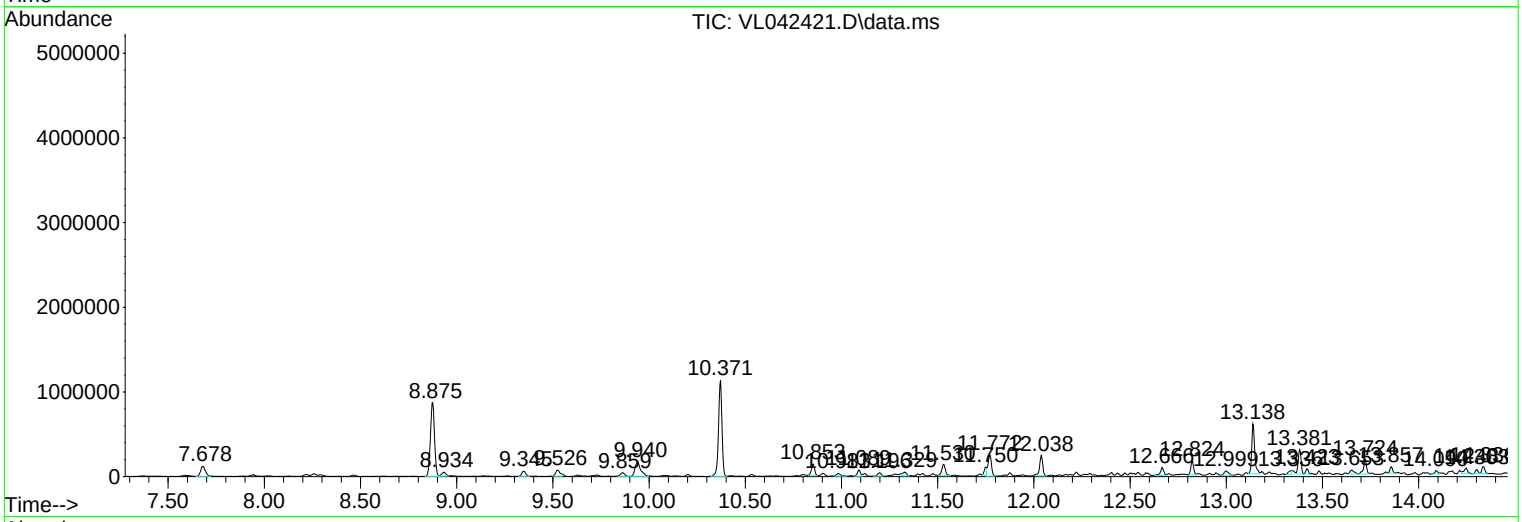
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

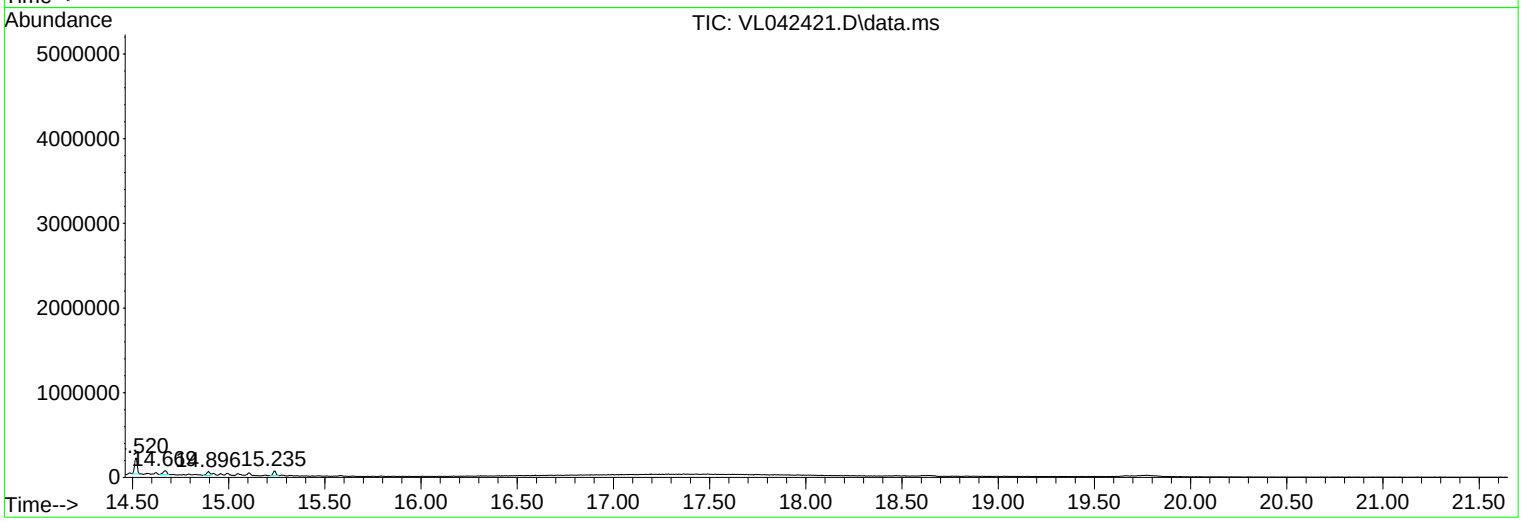
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

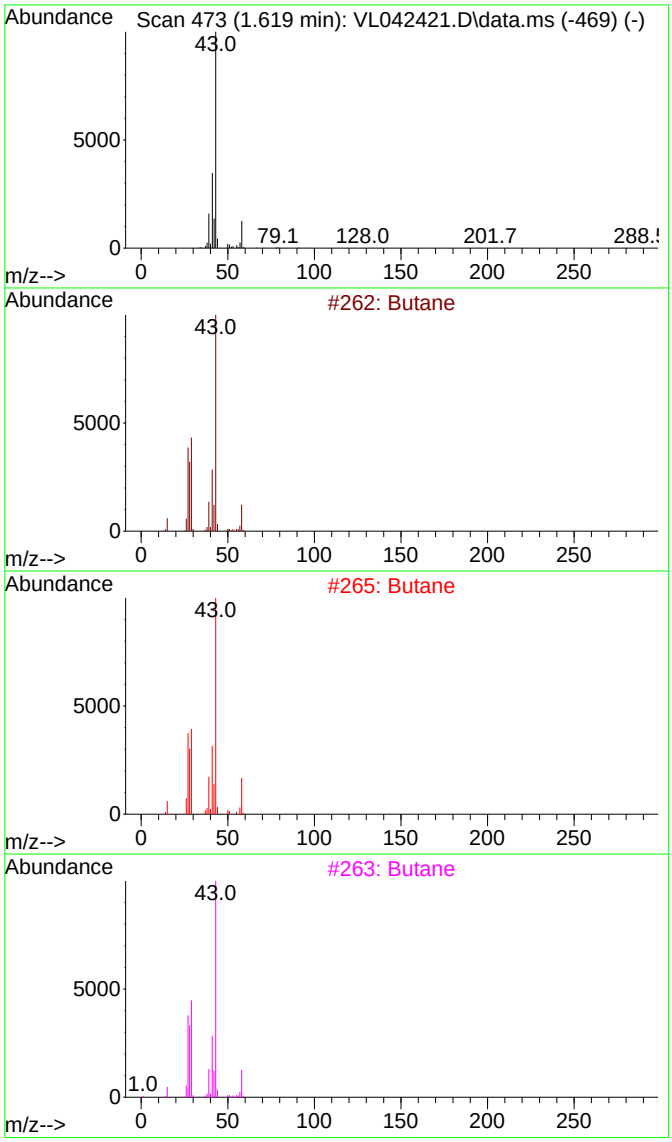
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

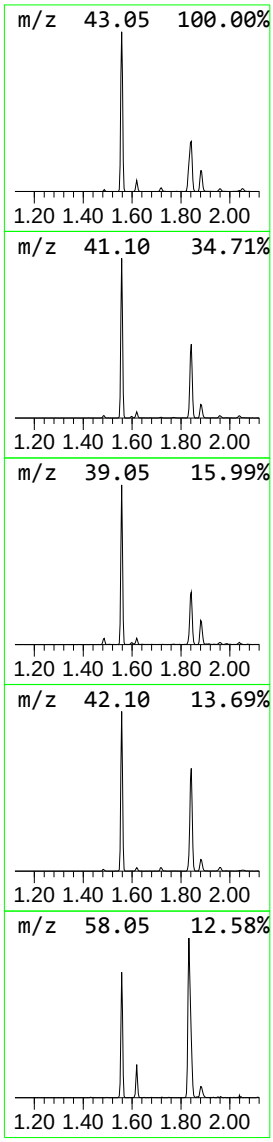
****

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	2.41 ppbv	131785	Bromochloromethane	2.781

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	80
2	Butane	58	C4H10	000106-97-8	80
3	Butane	58	C4H10	000106-97-8	80
4	Butane	58	C4H10	000106-97-8	58
5	Formic acid, chloro-, (3,4,4-tri...	194	C7H11ClO4	107323-92-2	40





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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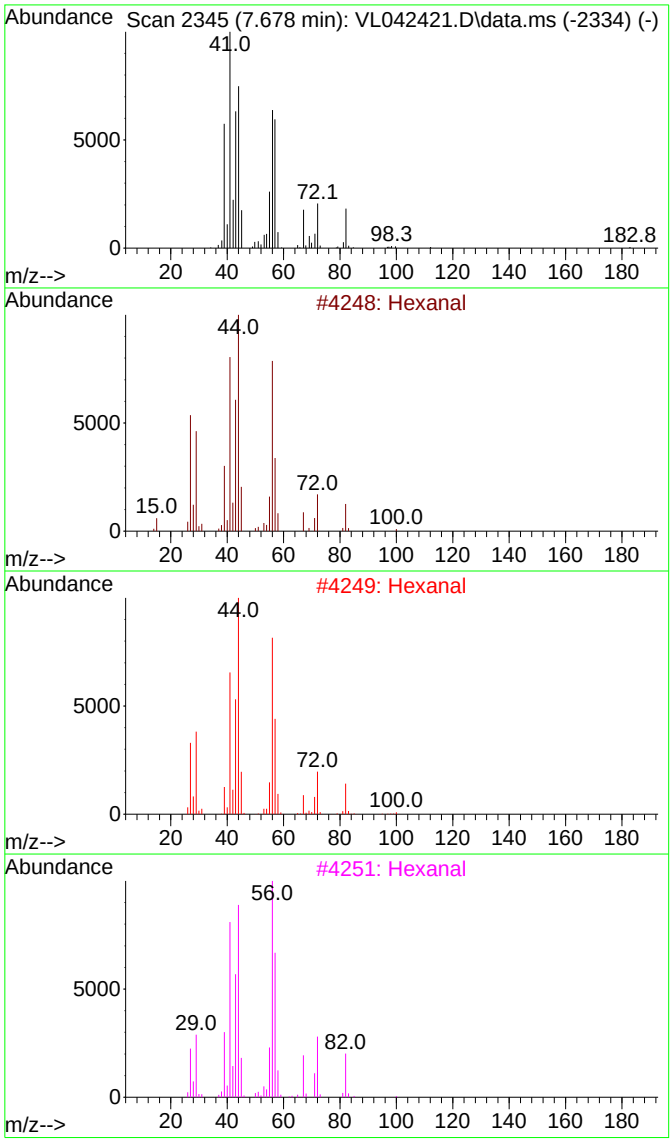
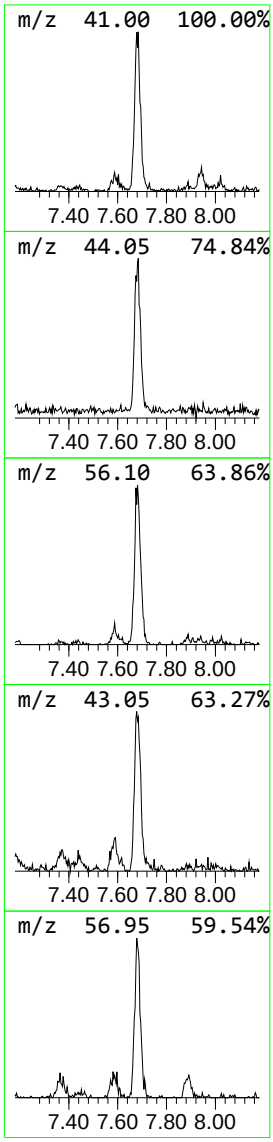
Peak Number 3 Hexanal Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.678	1.59 ppbv	204218	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	58
2	Hexanal	100	C6H12O	000066-25-1	58
3	Hexanal	100	C6H12O	000066-25-1	45
4	Hexanal	100	C6H12O	000066-25-1	40
5	Hexanal	100	C6H12O	000066-25-1	40





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Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

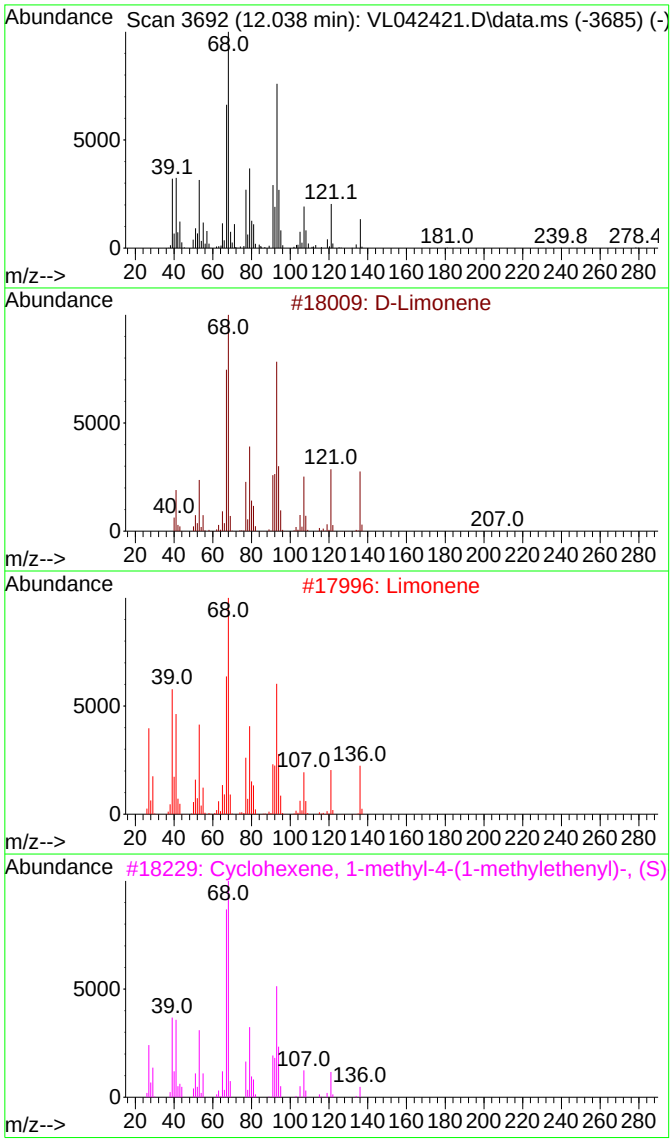
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

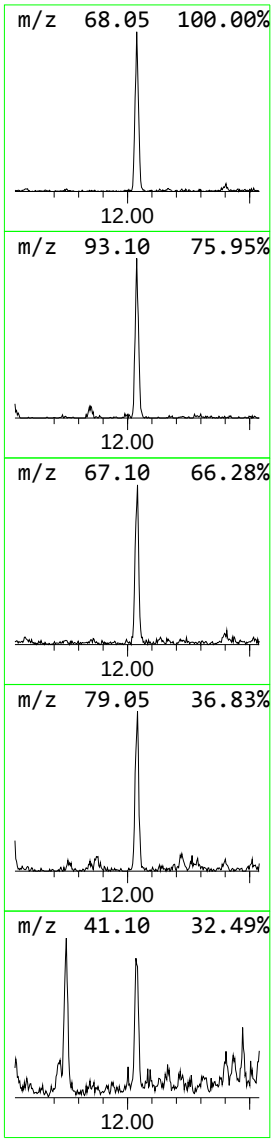
****

Peak Number 5 D-Limonene Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.038	2.02 ppbv	260220	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	96
2	Limonene	136	C10H16	000138-86-3	94
3	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	94
4	D-Limonene	136	C10H16	005989-27-5	93
5	D-Limonene	136	C10H16	005989-27-5	93





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

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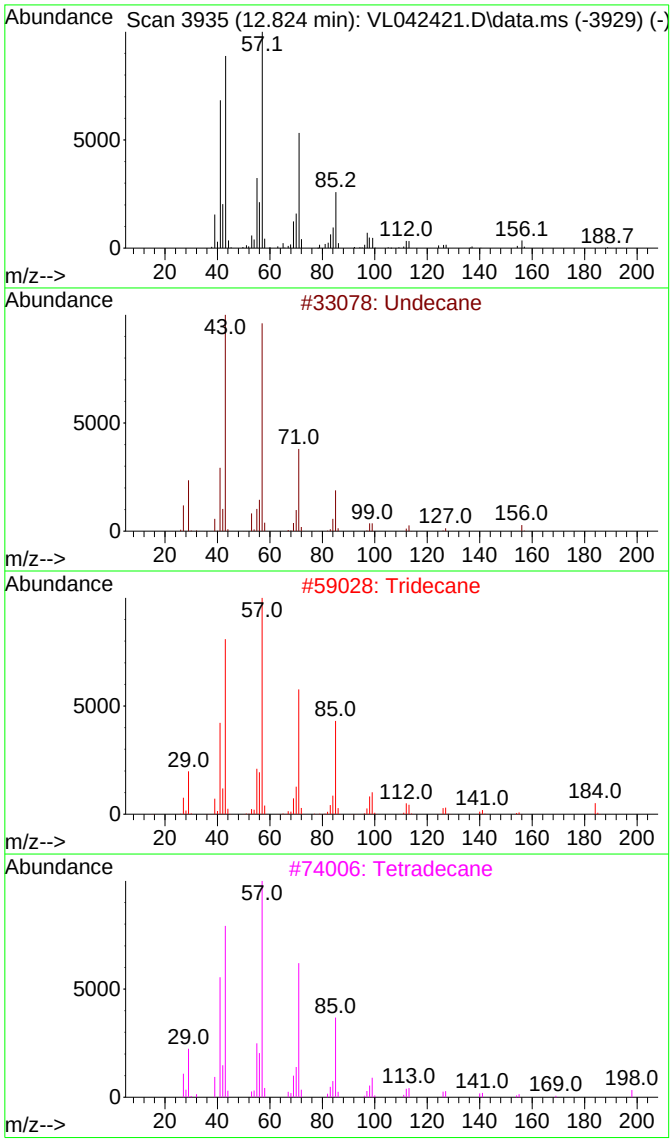
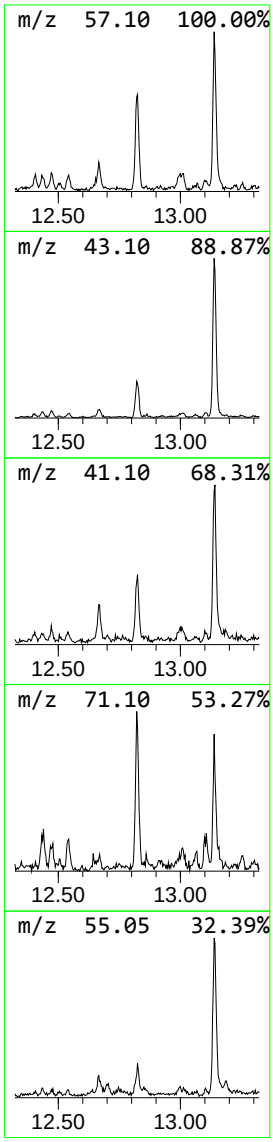
Peak Number 6 Undecane Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.824	1.28 ppbv	164216	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	87
2	Tridecane	184	C13H28	000629-50-5	80
3	Tetradecane	198	C14H30	000629-59-4	72
4	Dodecane	170	C12H26	000112-40-3	72
5	Tridecane	184	C13H28	000629-50-5	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

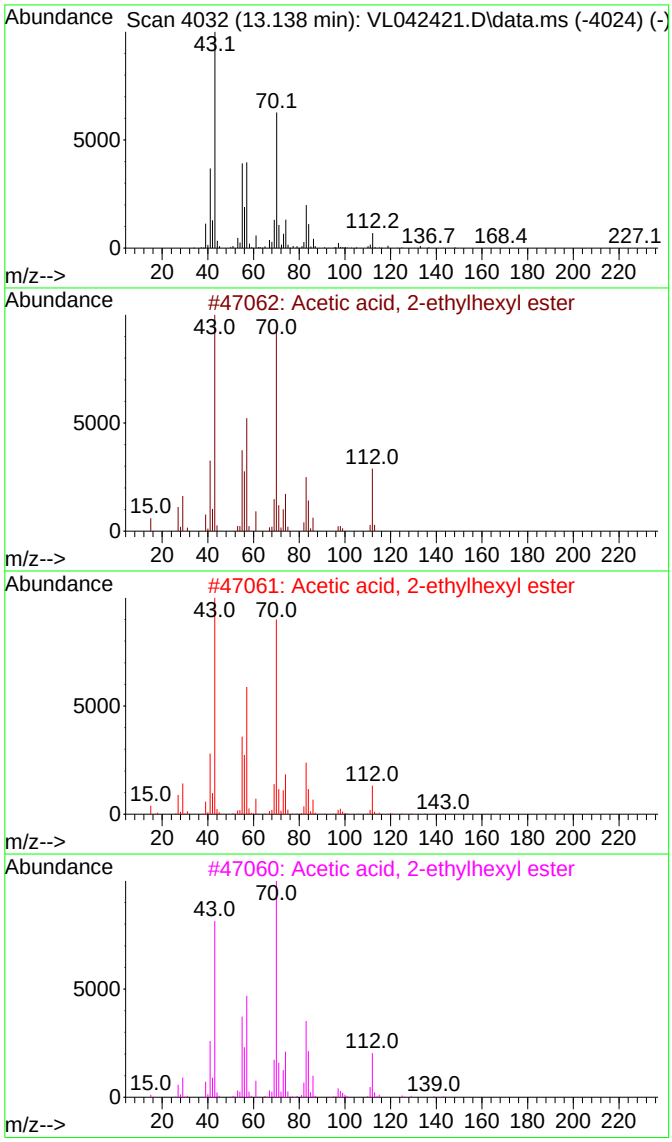
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

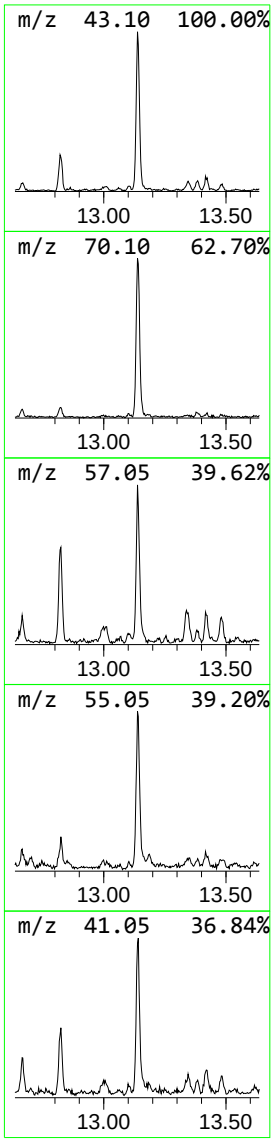
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 7 Acetic acid, 2-ethylhexyl e... Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.138	4.81 ppbv	618191	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Acetic acid, 2-ethylhexyl ester	172	C10H20O2	000103-09-3	90
2	Acetic acid, 2-ethylhexyl ester	172	C10H20O2	000103-09-3	83
3	Acetic acid, 2-ethylhexyl ester	172	C10H20O2	000103-09-3	83
4	2-Ethylhexyl acrylate	184	C11H20O2	000103-11-7	72
5	3-Methylheptyl acetate	172	C10H20O2	072218-58-7	72





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

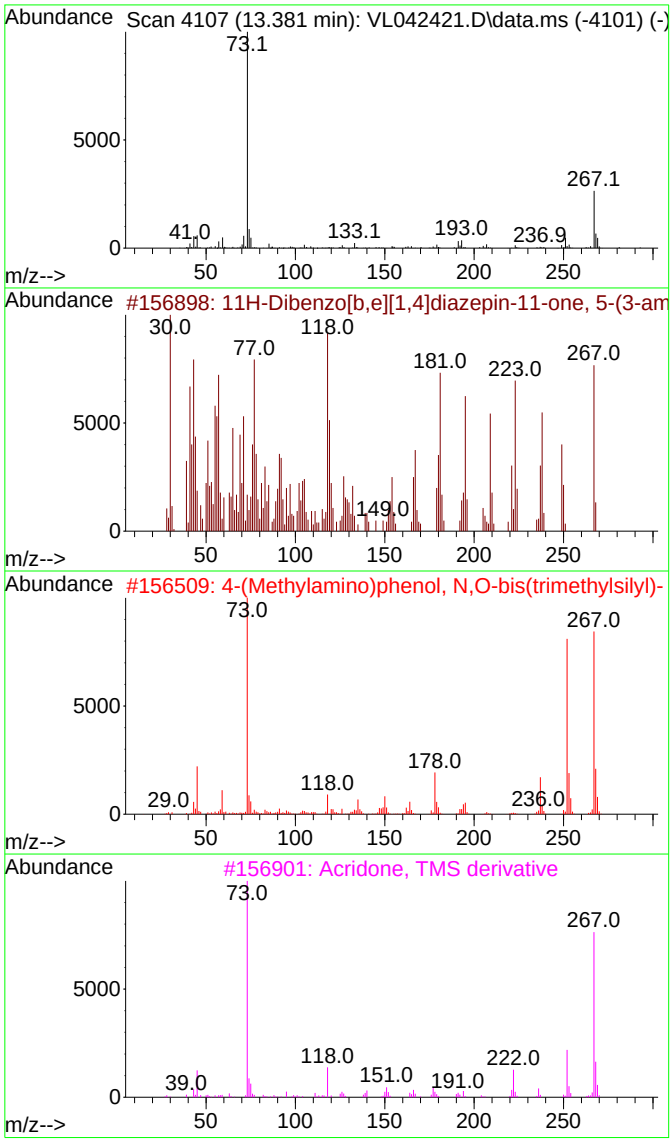
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

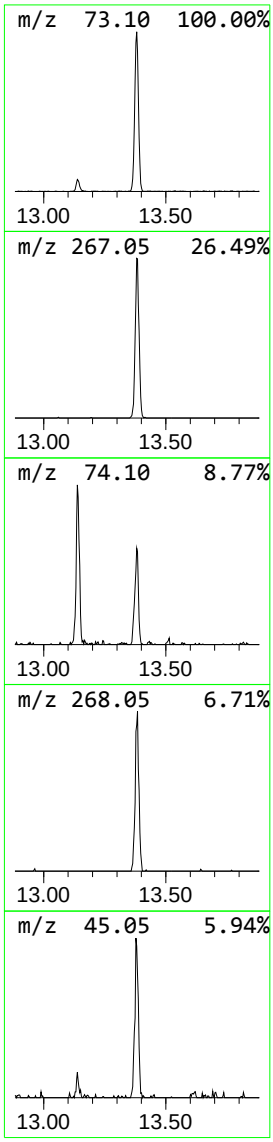
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 8 11H-Dibenzo[b,e][1,4]diazep... Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.381	2.30 ppbv	295124	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	11H-Dibenzo[b,e][1,4]diazepin-11...	267	C16H17N3O	013450-73-2	93
2	4-(Methylamino)phenol, N,O-bis(t...	267	C13H25NOSi2	1000471-13-0	53
3	Acridone, TMS derivative	267	C16H17NOSi	1000478-16-0	50
4	2-Amino-m-cresol, N,O-bis(trimet...	267	C13H25NOSi2	1000449-77-1	50
5	9-Acridinol, trimethylsilyl ether	267	C16H17NOSi	1000463-65-5	50





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Data File : VL042421.D
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Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

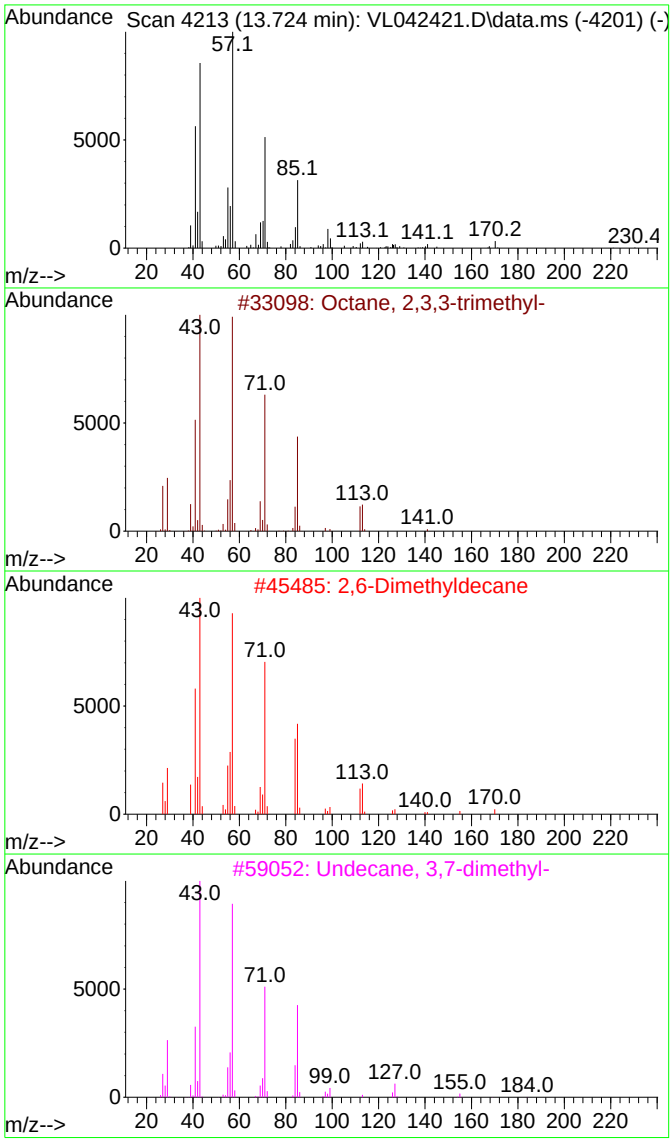
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

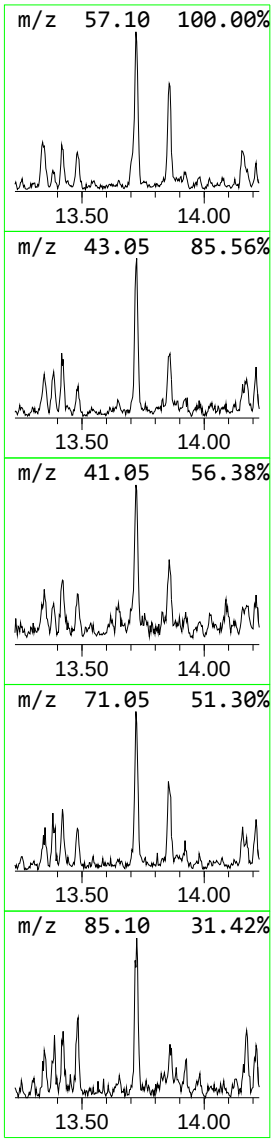
****

Peak Number 9 Octane, 2,3,3-trimethyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
13.724	1.45 ppbv	185976	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octane, 2,3,3-trimethyl-	156	C11H24	062016-30-2	72
2	2,6-Dimethyldecane	170	C12H26	013150-81-7	59
3	Undecane, 3,7-dimethyl-	184	C13H28	017301-29-0	59
4	Dodecane, 2,6,11-trimethyl-	212	C15H32	031295-56-4	59
5	Carbonic acid, octyl vinyl ester	200	C11H20O3	1000383-25-5	59





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Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

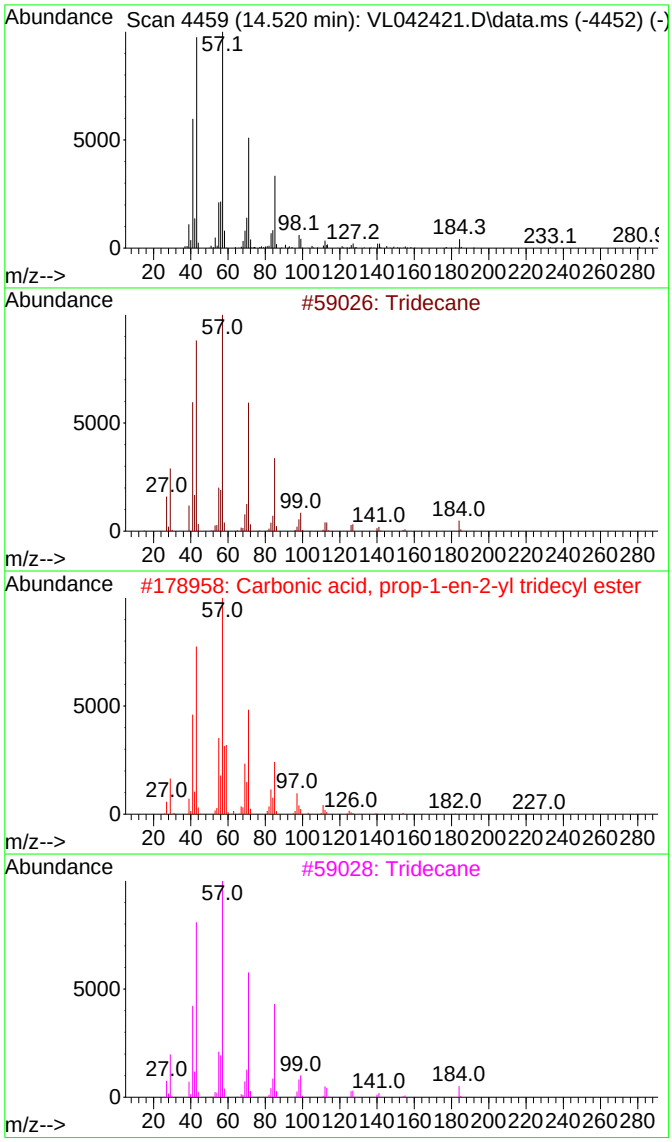
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

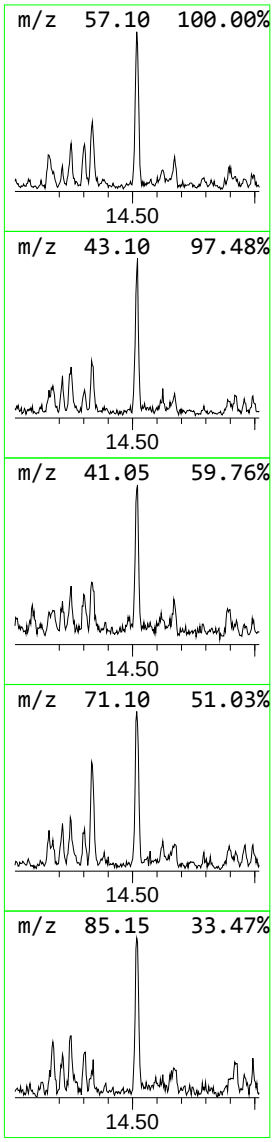
****

Peak Number 10 Tridecane Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
14.520	1.41 ppbv	180786	Chlorobenzene-d5	8.875

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Tridecane	184	C13H28	000629-50-5	93
2	Carbonic acid, prop-1-en-2-yl tr...	284	C17H32O3	1000382-90-8	90
3	Tridecane	184	C13H28	000629-50-5	87
4	Tetradecane	198	C14H30	000629-59-4	86
5	Tridecane	184	C13H28	000629-50-5	83





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	2.4	ppbv	131785	1	2.781	546027	10.0
Hexanal	7.678	1.6	ppbv	204218	3	8.875	1285080	10.0
D-Limonene	12.038	2.0	ppbv	260220	3	8.875	1285080	10.0
Undecane	12.824	1.3	ppbv	164216	3	8.875	1285080	10.0
Acetic acid, 2-...	13.138	4.8	ppbv	618191	3	8.875	1285080	10.0
11H-Dibenzo[b,e...	13.381	2.3	ppbv	295124	3	8.875	1285080	10.0
Octane, 2,3,3-t...	13.724	1.5	ppbv	185976	3	8.875	1285080	10.0
Tridecane	14.520	1.4	ppbv	180786	3	8.875	1285080	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-15	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042359.D	1		04/17/25 16:12	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.43	2.13	J	1.04	2.47	ug/m3
64-17-5	Ethanol	17.3	32.6	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.66	1.36		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.15	0.61	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	130	320	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	38.4	91.2	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.20	4.17		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.74	2.18		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.21	1.03	J	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.040	0.22		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.18	0.84	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.24	0.77	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.14	0.57	J	0.37	2.05	ug/m3
108-88-3	Toluene	0.88	3.32		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-15	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042359.D	1		04/17/25 16:12	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	5.00	21.7		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	21.3	92.5		0.91	4.34	ug/m3
95-47-6	o-Xylene	4.10	17.8		0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.27	1.33	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.14	0.73		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.70	9.52		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	1.00	3.60		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	123000		2.787			
540-36-3	1,4-Difluorobenzene	354000		3.962			
3114-55-4	Chlorobenzene-d5	318000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-15	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042359.D	1		04/17/25 16:12	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.31		J		1.48	ppbv
115-07-1	Propene	1.60		J		1.49	ppbv
000106-97-8	Butane	1.20		J		1.62	ppbv
000107-39-1	1-Pentene, 2,4,4-trimethyl-	1.60		J		5.32	ppbv
591-78-6	2-Hexanone	1.50		J		7.44	ppbv
000106-70-7	Hexanoic acid, methyl ester	4.30		J		10.5	ppbv
000106-73-0	Heptanoic acid, methyl ester	10.6		J		11.8	ppbv
000111-11-5	Octanoic acid, methyl ester	6.40		J		12.9	ppbv
91-57-6	Naphthalene,2-methyl-	0.15		J		14.5	ppbv

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:37:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	123457	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	354157	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	318284	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	265265	10.142	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	9411	0.431	ppbv		90
3) Chlorodifluoromethane	1.476	51	6345m	0.305	ppbv		
4) Chloromethane	1.531	50	5667	0.657	ppbv		96
9) Propene	1.489	41	15185	1.605	ppbv		84
10) Heptane	4.975	43	3917m	0.147	ppbv		
11) Trichlorofluoromethane	1.877	101	4367	0.211	ppbv		92
13) Ethanol	1.722	45	25940	17.253	ppbv		75
15) Acetone	1.835	43	775779	38.385	ppbv		99
17) tert-Butyl alcohol	2.046	59	3528	0.141	ppbv	#	74
19) Isopropyl Alcohol	1.887	45	1485068	132.276	ppbv	#	56
20) Methylene Chloride	2.062	84	9718	1.228	ppbv	#	92
26) Hexane	2.826	57	54108	2.683	ppbv	#	32
29) Chloroform	2.852	83	5846	0.205	ppbv		85
32) 1,1,1-Trichloroethane	3.370	97	1146m	0.036	ppbv		
34) 2-Butanone	2.560	43	20685	0.739	ppbv		98
35) Carbon Tetrachloride	3.761	117	2635m	0.082	ppbv		
36) Benzene	3.658	78	9024m	0.236	ppbv		
40) 1,4-Dioxane	4.596	88	7820m	1.000	ppbv		
44) 2,2,4-Trimethylpentane	4.642	57	12166m	0.184	ppbv		
50) 4-Methyl-2-Pentanone	5.774	43	6399m	0.137	ppbv		
51) 2-Hexanone	7.438	43	61191m	1.466	ppbv		
53) Toluene	6.936	91	40500	0.884	ppbv		97
58) Ethyl Benzene	9.354	91	315931	5.010	ppbv		99
59) m/p-Xylene	9.532	91	1082733	21.313	ppbv		100
60) o-Xylene	9.963	91	207265	4.051	ppbv		98
73) 1,3,5-Trimethylbenzene	11.202	105	6133	0.111	ppbv		90
74) 1,2,4-Trimethylbenzene	11.536	105	17646	0.274	ppbv	#	70
79) Naphthalene	13.513	128	10816	0.140	ppbv		97
80) Naphthalene,2-methyl-	14.462	142	6445m	0.147	ppbv		

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

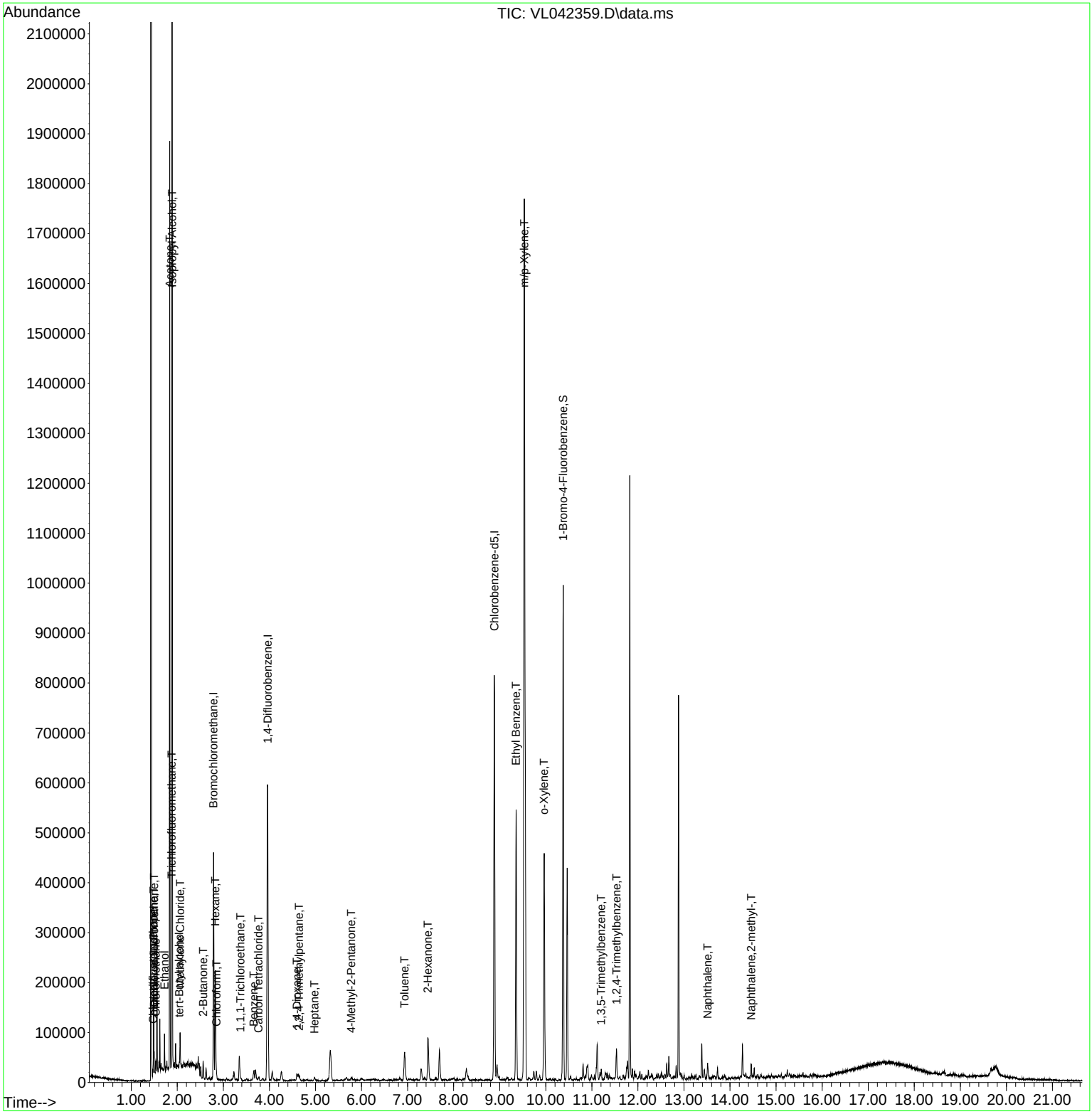
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

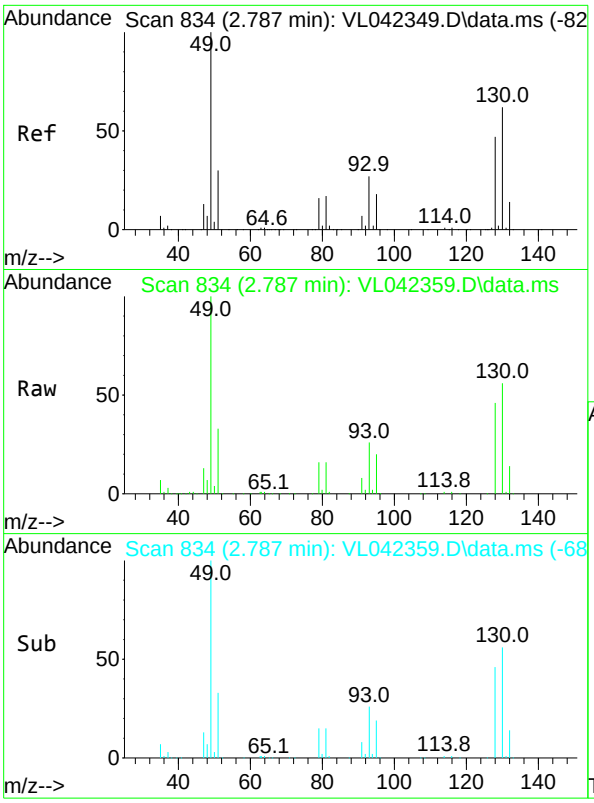
Quant Time: Apr 18 02:37:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

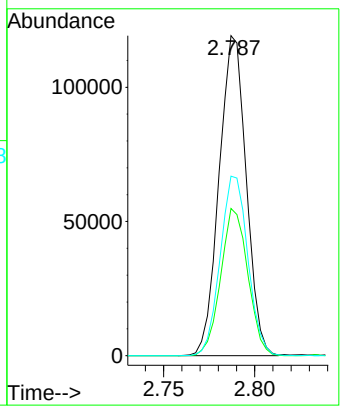




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 49 Resp: 12345

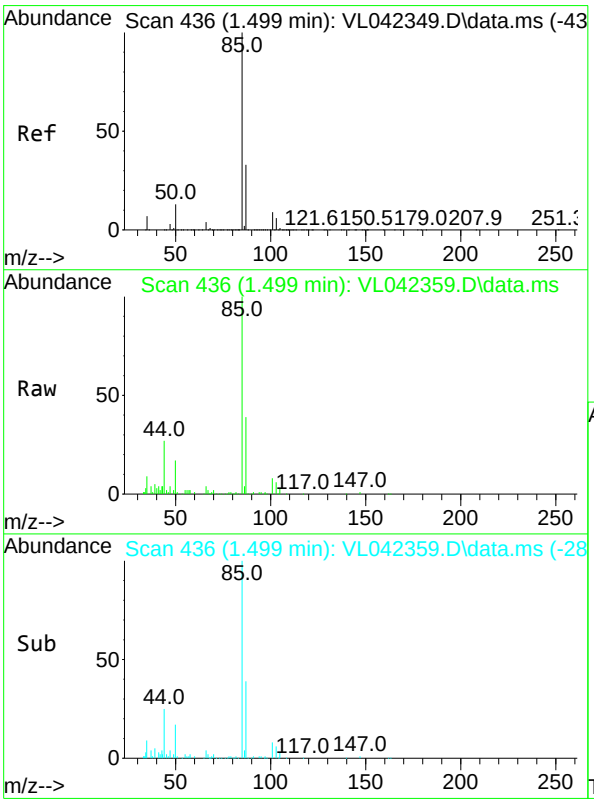
Ion	Ratio	Lower	Upper
49	100		
128	46.0	22.8	68.4
130	57.2	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

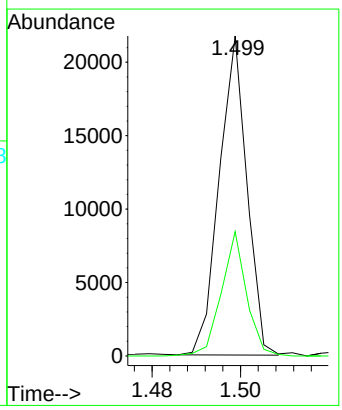
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

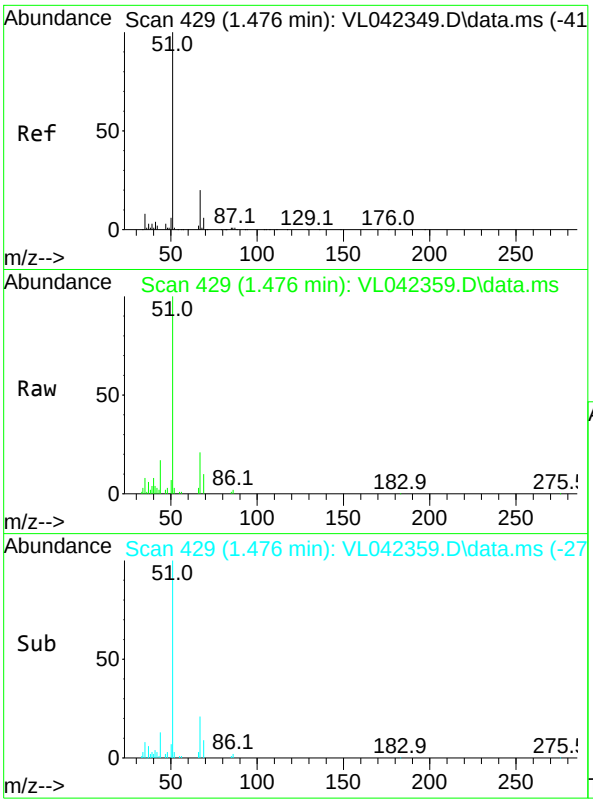


#2
Dichlorodifluoromethane
Concen: 0.431 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 85 Resp: 9411

Ion	Ratio	Lower	Upper
85	100		
87	38.7	26.6	39.8

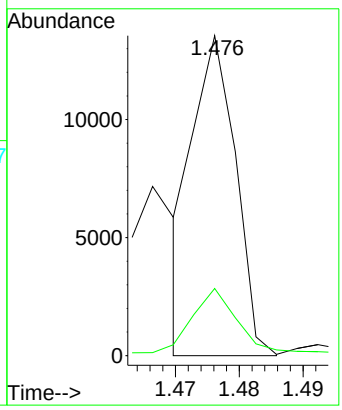




#3
Chlorodifluoromethane
Concen: 0.305 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 51 Resp: 634

Ion	Ratio	Lower	Upper
51	100		
67	8.2	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
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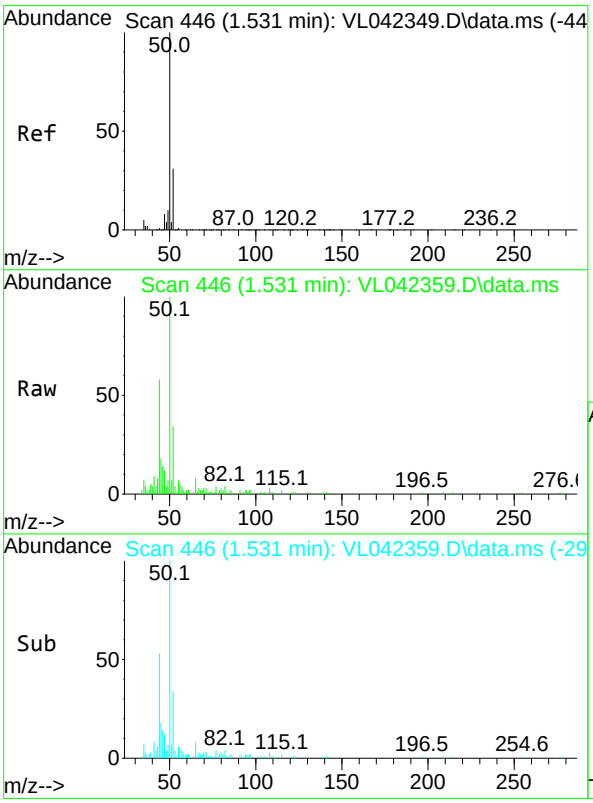
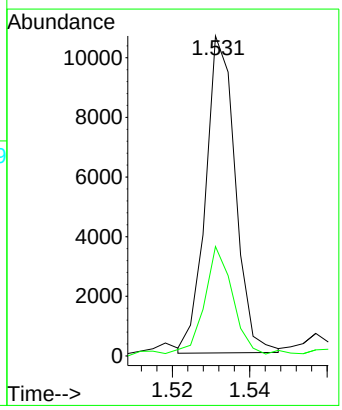
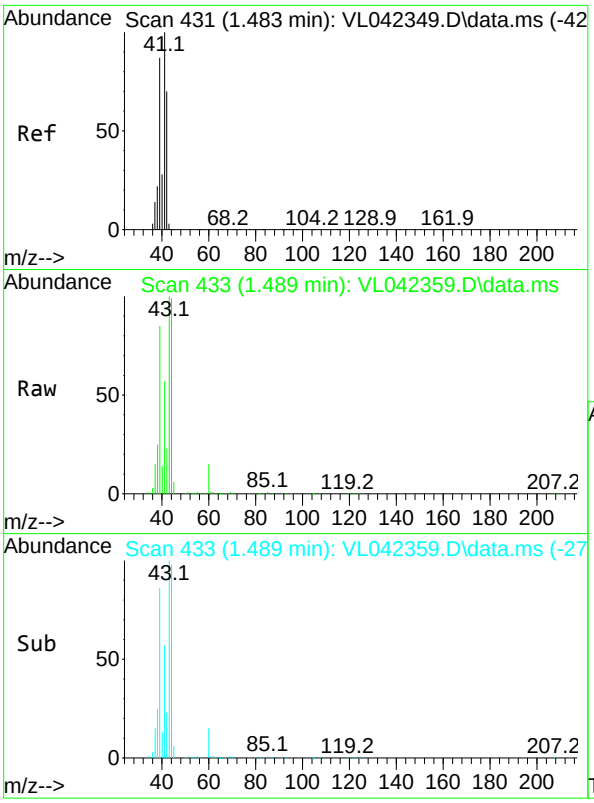


#4
Chloromethane
Concen: 0.657 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 50 Resp: 5667

Ion	Ratio	Lower	Upper
50	100		
52	33.3	24.7	37.1

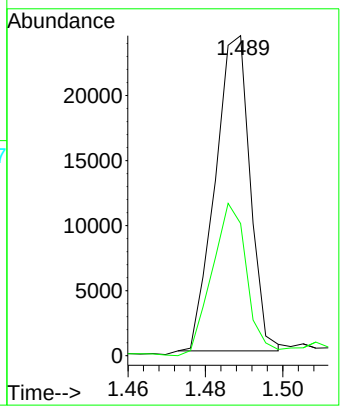




#9
Propene
Concen: 1.605 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 41 Resp: 1518

Ion	Ratio	Lower	Upper
41	100		
42	57.1	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/18/2025
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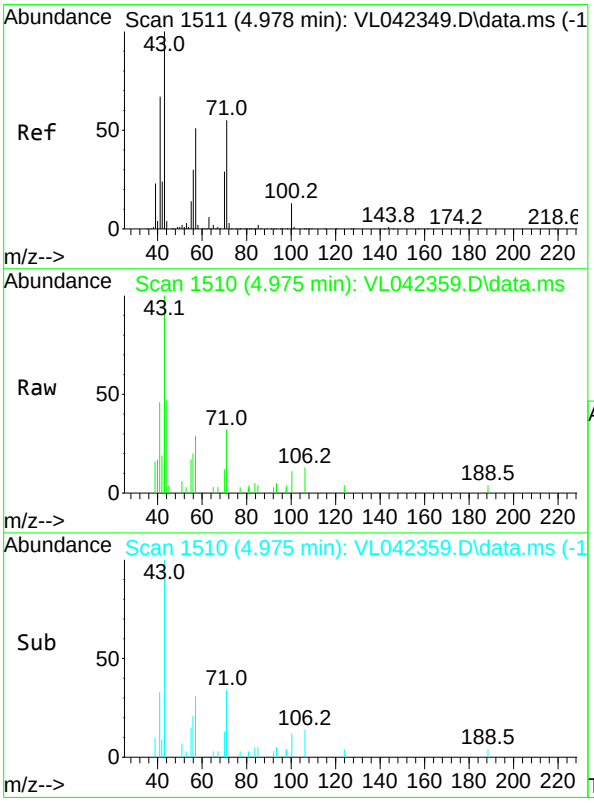
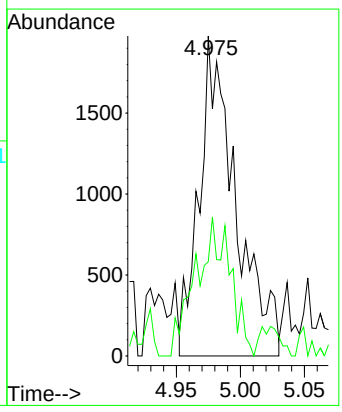
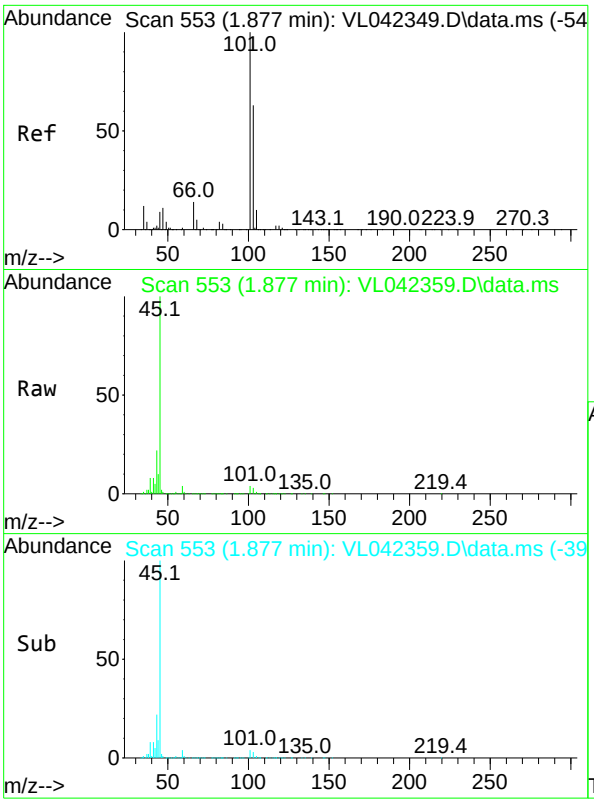


#10
Heptane
Concen: 0.147 ppbv m
RT: 4.975 min Scan# 1510
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 3917

Ion	Ratio	Lower	Upper
43	100		
57	45.4	39.9	59.9

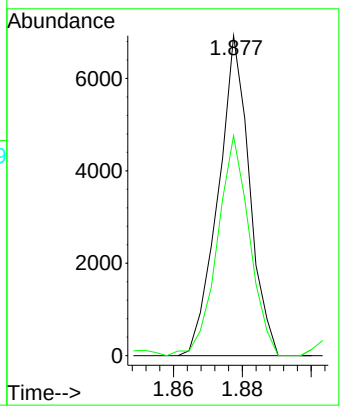




#11
Trichlorofluoromethane
Concen: 0.211 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:101 Resp: 436

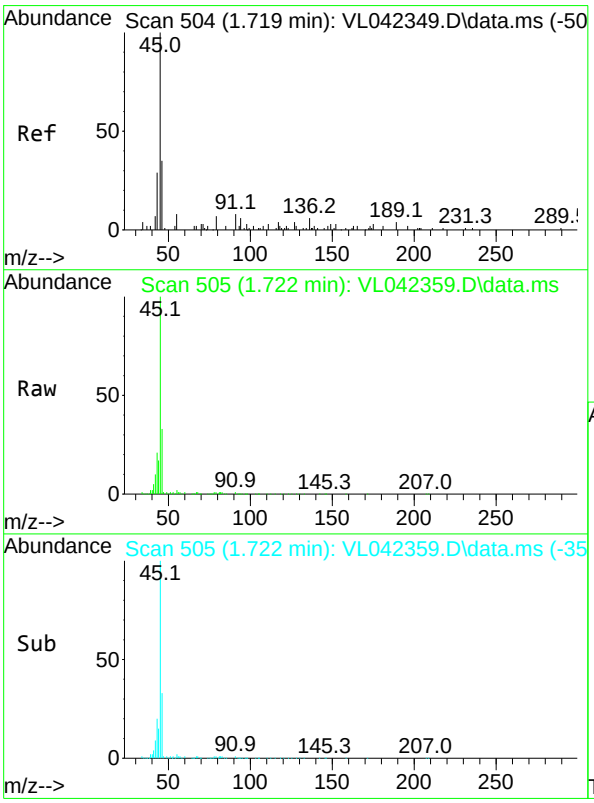
Ion	Ratio	Lower	Upper
101	100		
103	68.8	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

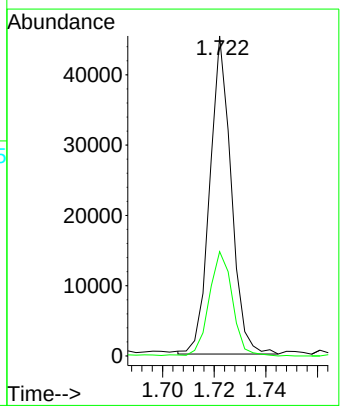
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

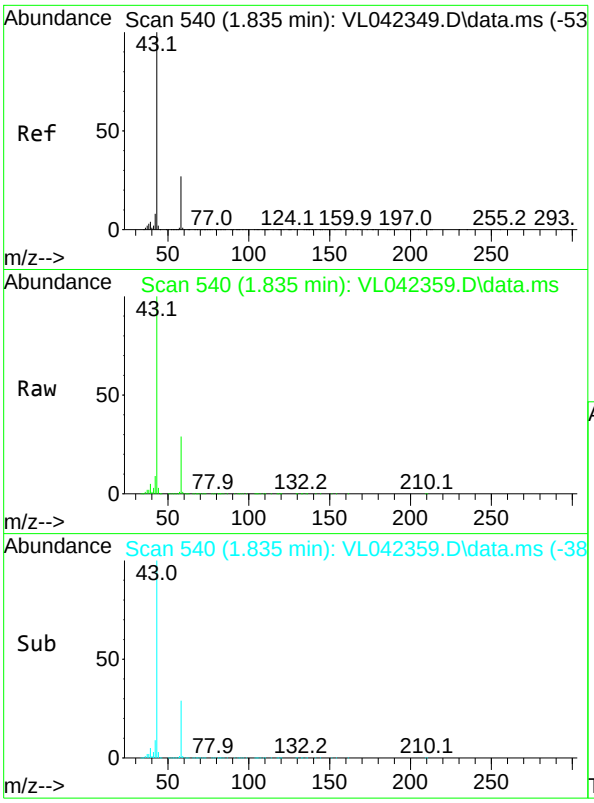


#13
Ethanol
Concen: 17.253 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 45 Resp: 25940

Ion	Ratio	Lower	Upper
45	100		
46	36.5	21.9	87.7

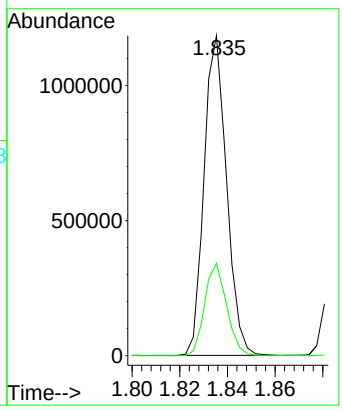




#15
Acetone
Concen: 38.385 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 775779

Ion	Ratio	Lower	Upper
43	100		
58	28.3	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
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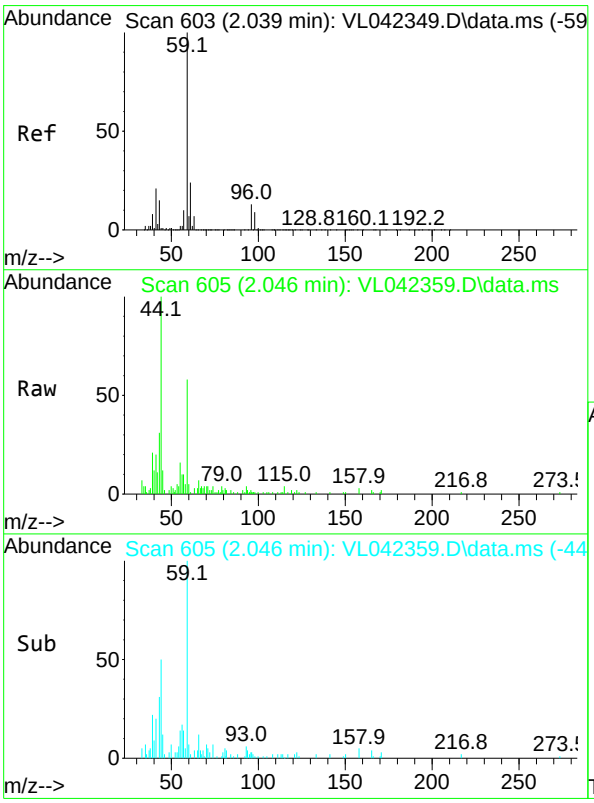
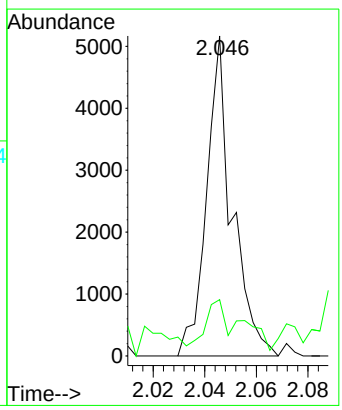
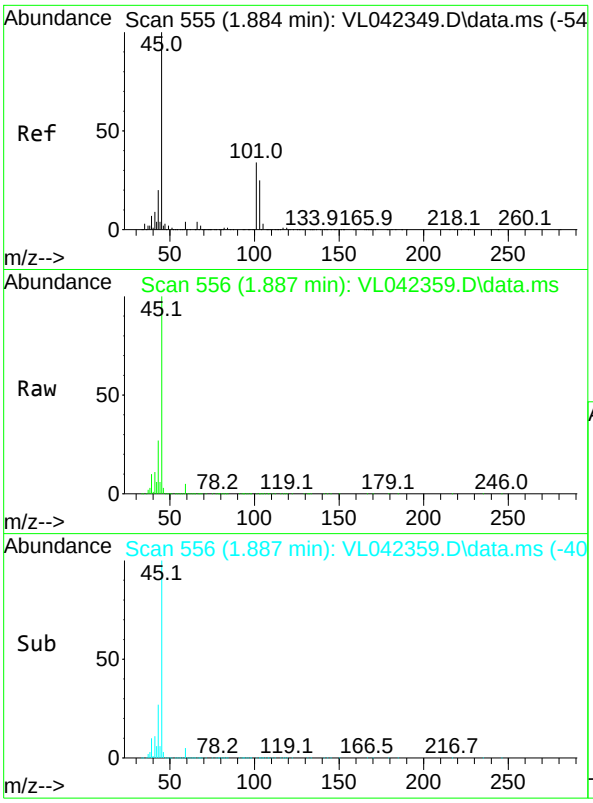


#17
tert-Butyl alcohol
Concen: 0.141 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 59 Resp: 3528

Ion	Ratio	Lower	Upper
59	100		
57	20.6	8.7	13.1#





#19
Isopropyl Alcohol
Concen: 132.276 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 45 Resp: 148506

Ion	Ratio	Lower	Upper
45	100		
58	14.8	34.5	51.7#

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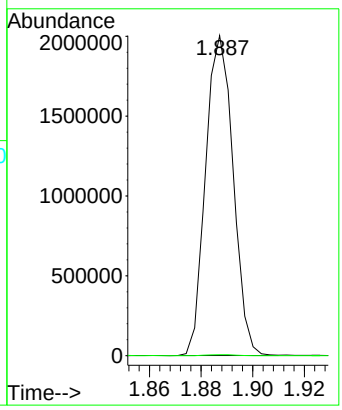
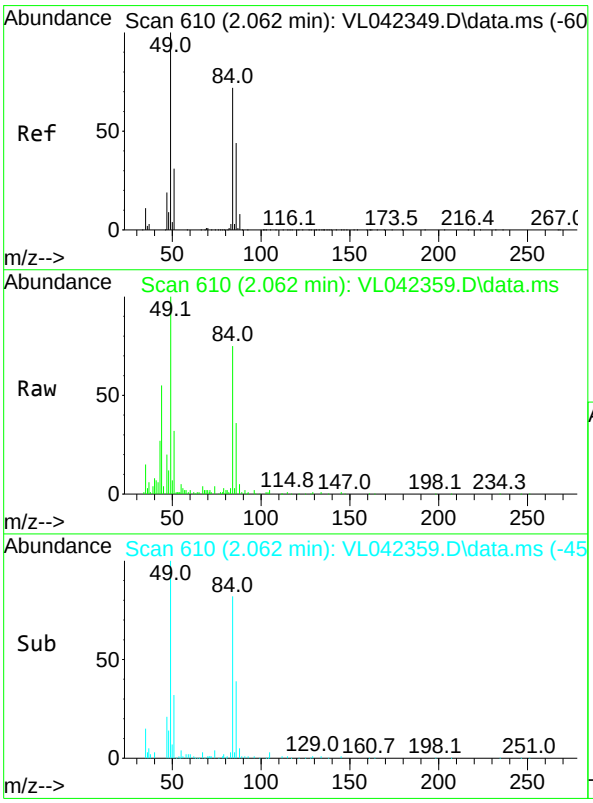
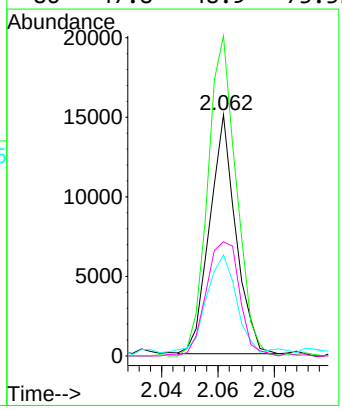


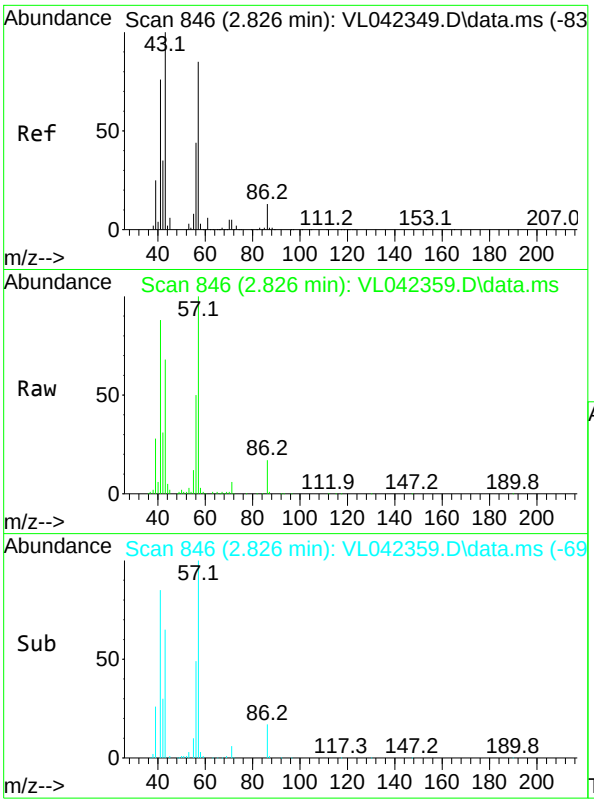


#20
Methylene Chloride
Concen: 1.228 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 84 Resp: 9718

Ion	Ratio	Lower	Upper
84	100		
49	134.0	111.6	167.4
51	39.7	35.1	52.7
86	47.8	48.9	73.3#

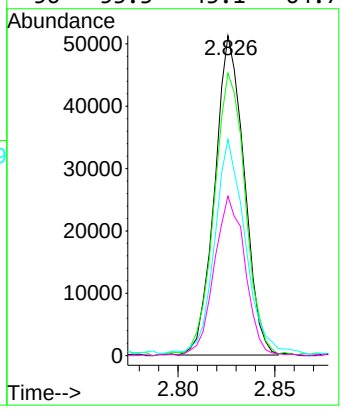




#26
Hexane
Concen: 2.683 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 57 Resp: 5410

Ion	Ratio	Lower	Upper
57	100		
41	93.4	77.9	116.9
43	70.0	208.4	312.6
56	53.3	43.1	64.7



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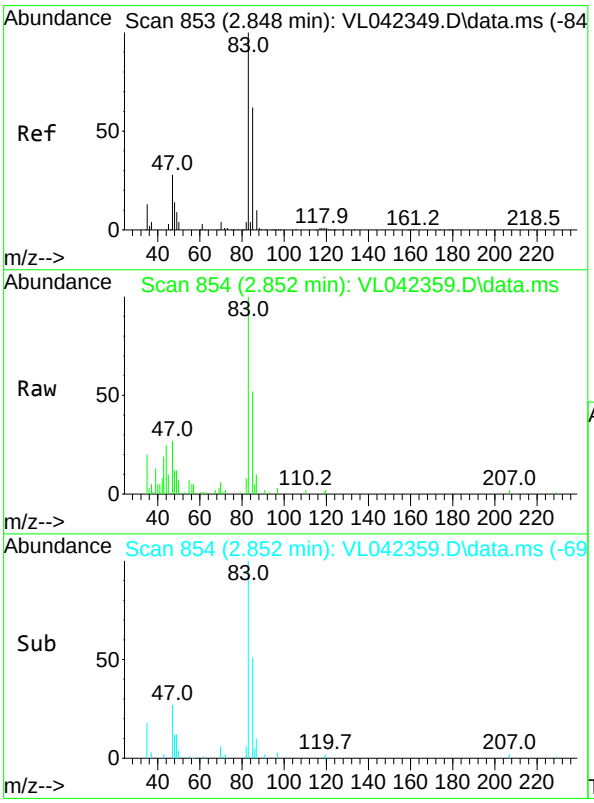
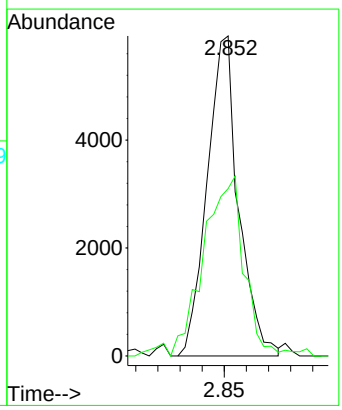
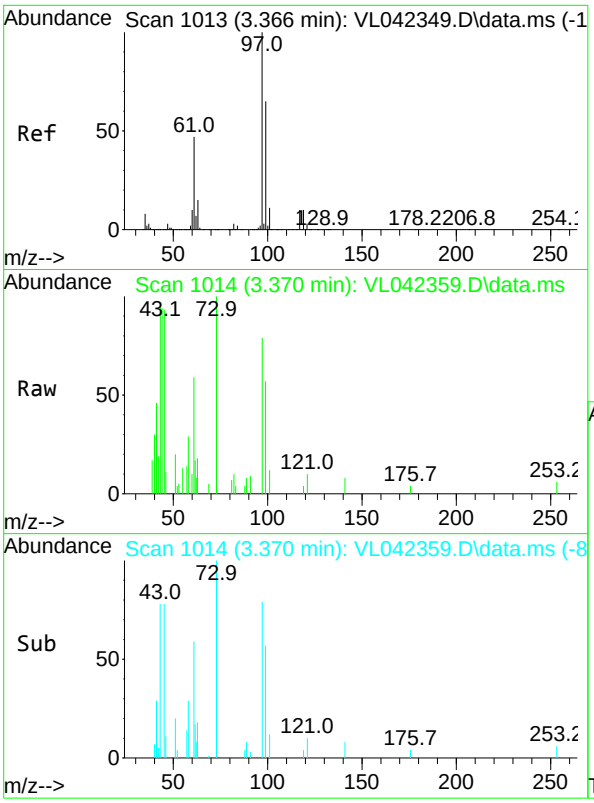


#29
Chloroform
Concen: 0.205 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 83 Resp: 5846

Ion	Ratio	Lower	Upper
83	100		
85	51.1	50.0	75.0

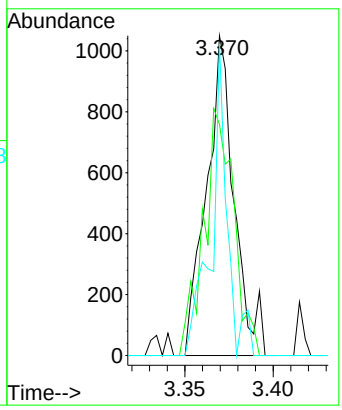




#32
1,1,1-Trichloroethane
Concen: 0.036 ppbv m
RT: 3.370 min Scan# 1(
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 97 Resp: 114(

Ion	Ratio	Lower	Upper
97	100		
99	83.5	51.0	76.4#
61	56.3	38.8	58.2



Instrument :
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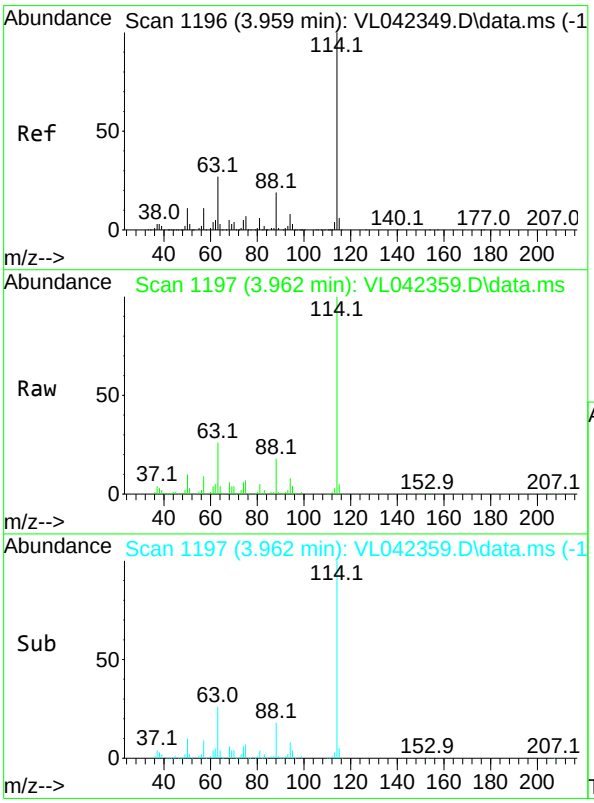
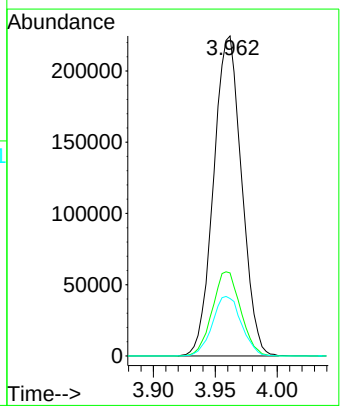
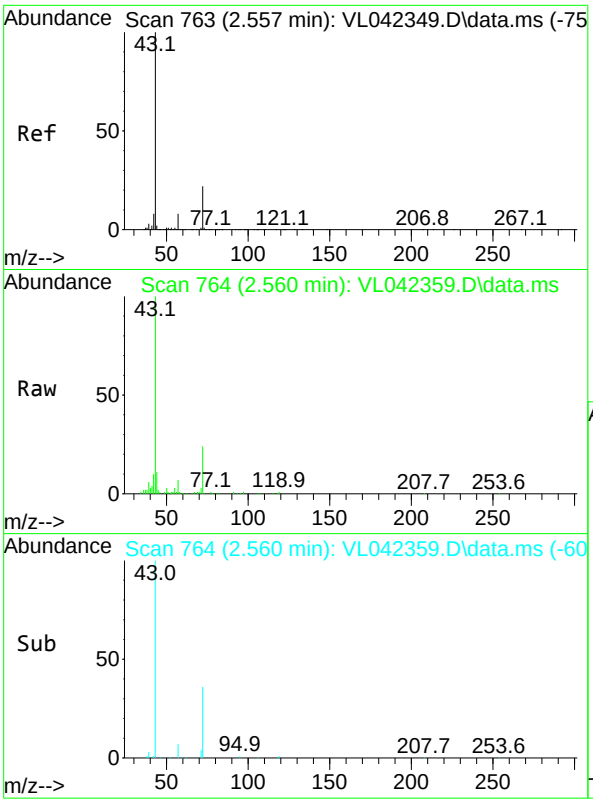


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:114 Resp: 354157

Ion	Ratio	Lower	Upper
114	100		
63	26.6	21.8	32.6
88	19.2	15.5	23.3

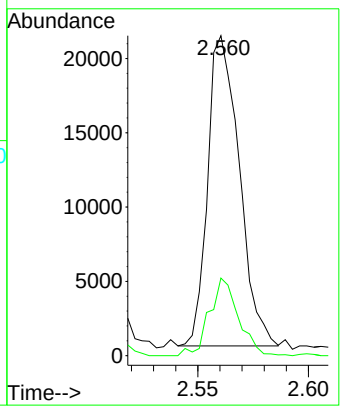




#34
2-Butanone
Concen: 0.739 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 2068

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2



Instrument :
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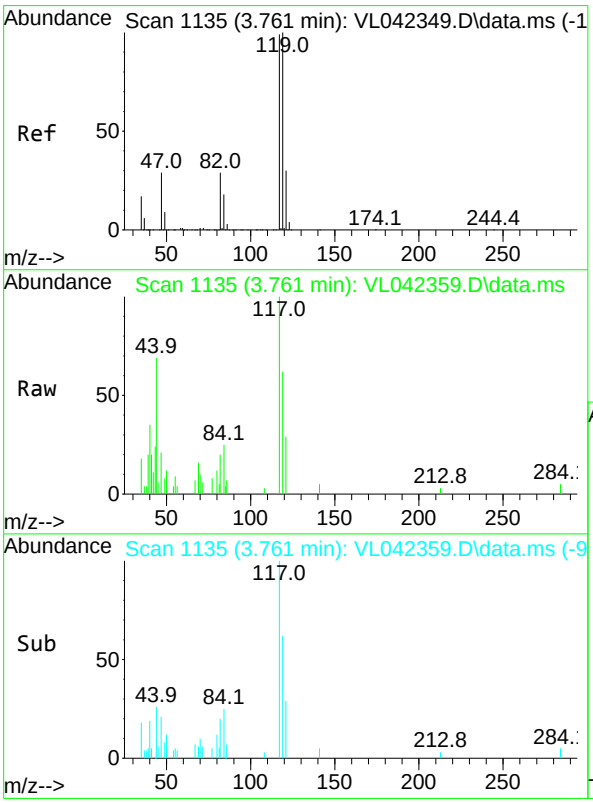
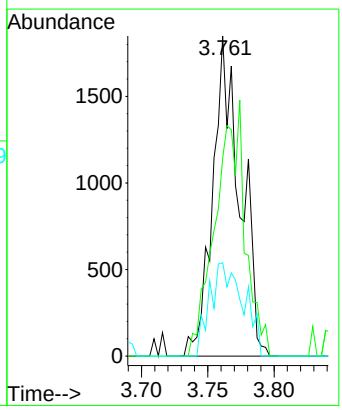
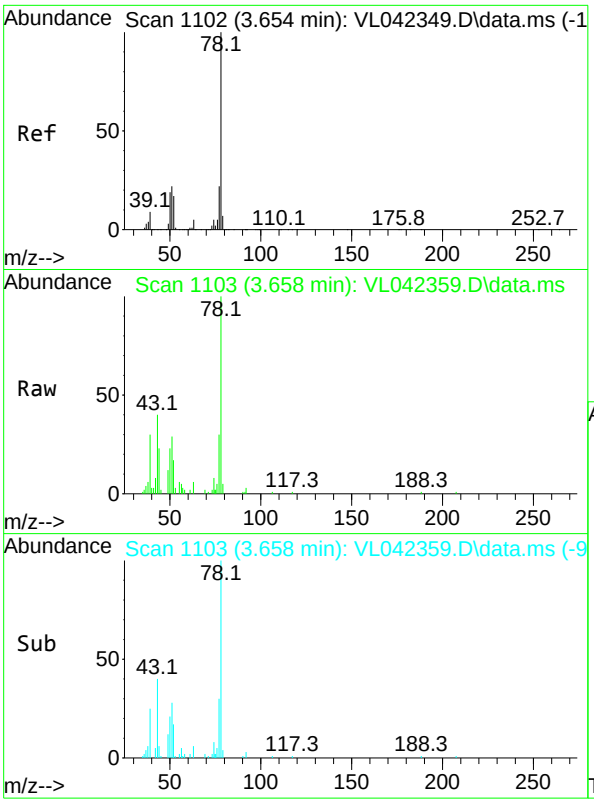


#35
Carbon Tetrachloride
Concen: 0.082 ppbv m
RT: 3.761 min Scan# 1135
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:117 Resp: 2635

Ion	Ratio	Lower	Upper
117	100		
119	61.8	80.5	120.7#
121	29.2	24.2	36.2

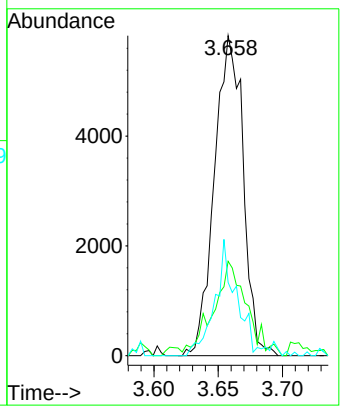




#36
Benzene
Concen: 0.236 ppbv m
RT: 3.658 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 78 Resp: 902

Ion	Ratio	Lower	Upper
78	100		
77	29.5	17.4	26.0#
50	22.9	15.5	23.3



Instrument :
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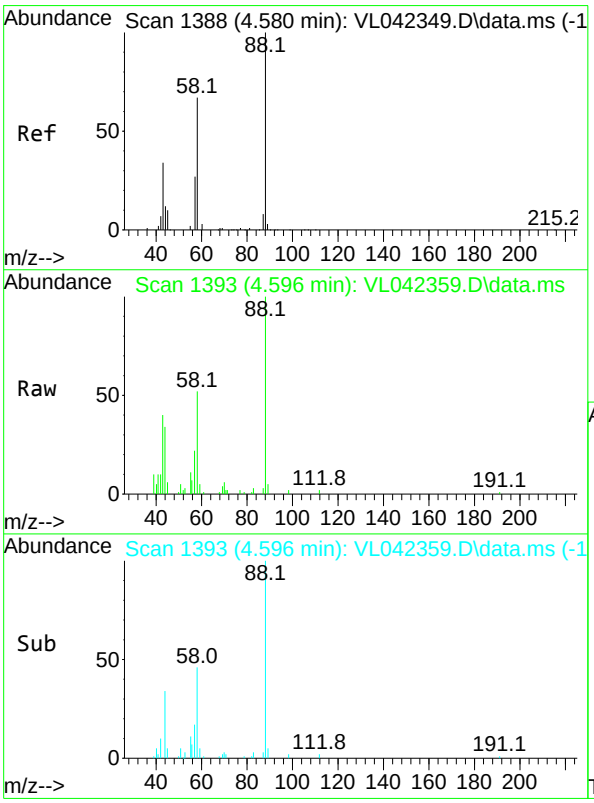
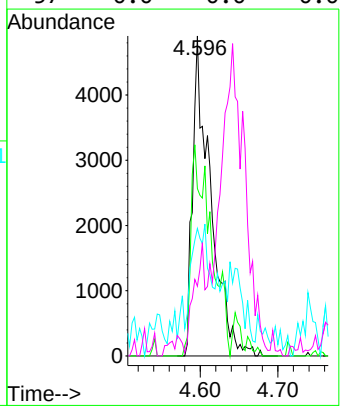
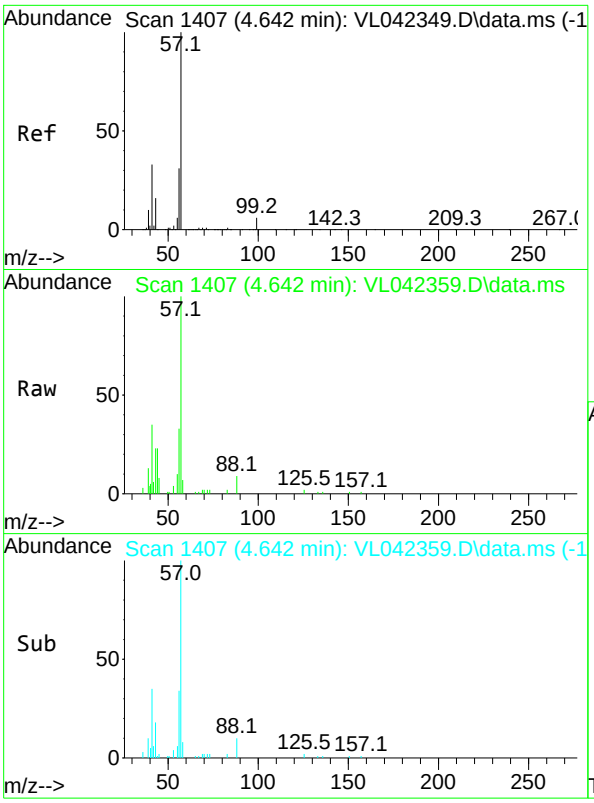


#40
1,4-Dioxane
Concen: 1.000 ppbv m
RT: 4.596 min Scan# 1393
Delta R.T. 0.016 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 88 Resp: 7820

Ion	Ratio	Lower	Upper
88	100		
58	80.9	61.4	92.0
43	3.4	23.2	34.8#
57	0.0	0.0	0.0

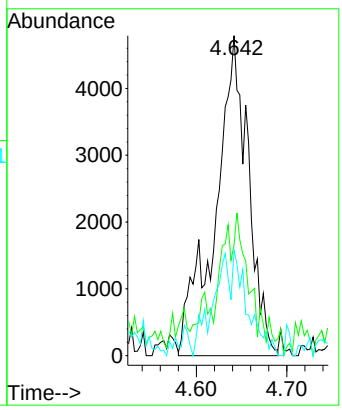




#44
2,2,4-Trimethylpentane
Concen: 0.184 ppbv m
RT: 4.642 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 57 Resp: 1216

Ion	Ratio	Lower	Upper
57	100		
41	39.1	27.2	40.8
56	35.1	25.7	38.5



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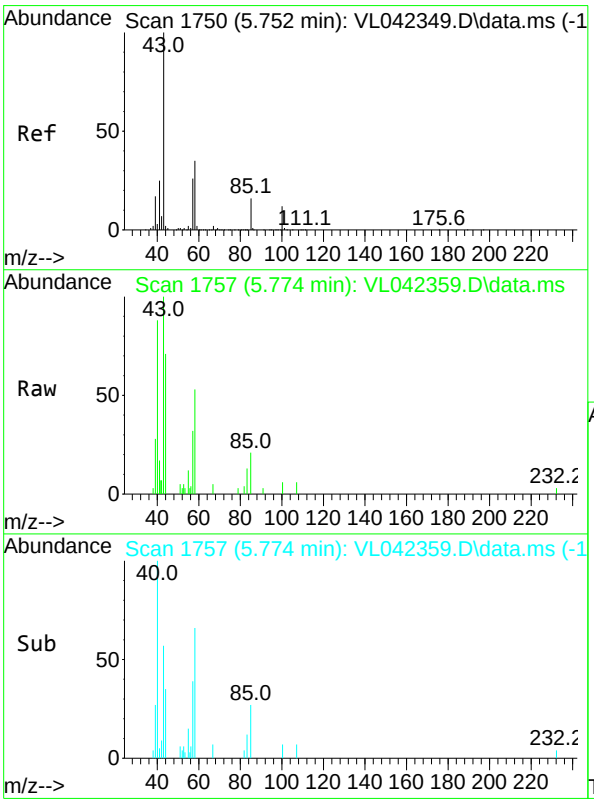
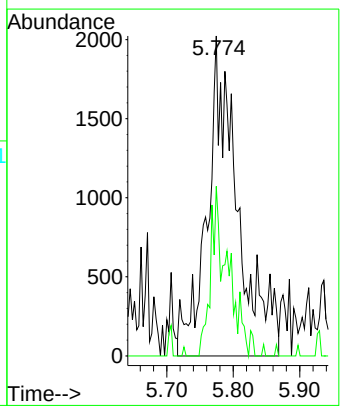
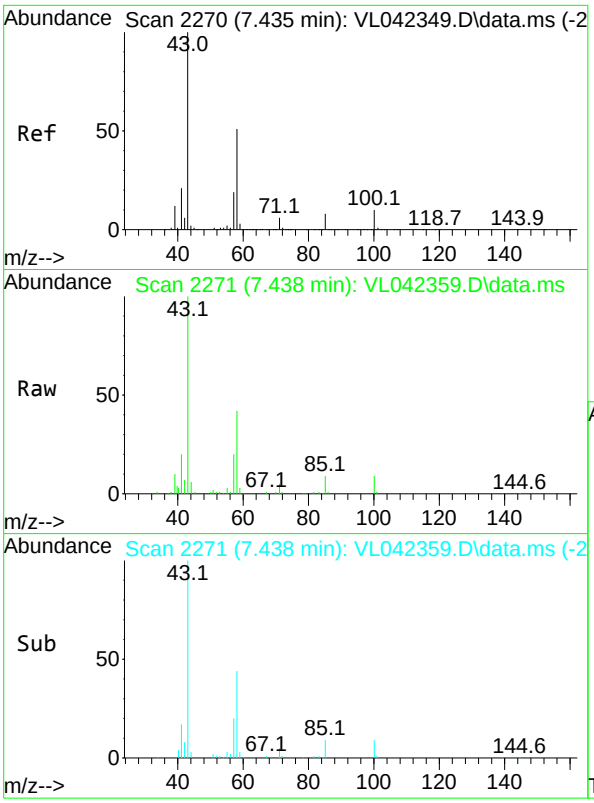


#50
4-Methyl-2-Pentanone
Concen: 0.137 ppbv m
RT: 5.774 min Scan# 1757
Delta R.T. 0.023 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 6399

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.6	43.0#

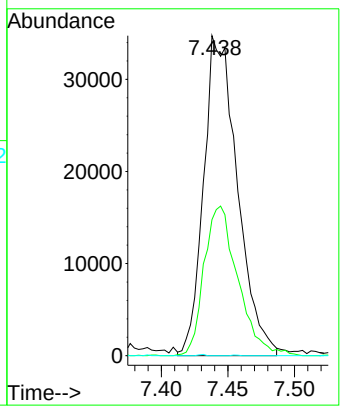




#51
2-Hexanone
Concen: 1.466 ppbv m
RT: 7.438 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 6119

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.2	60.4#
98	0.0	0.1	0.1#



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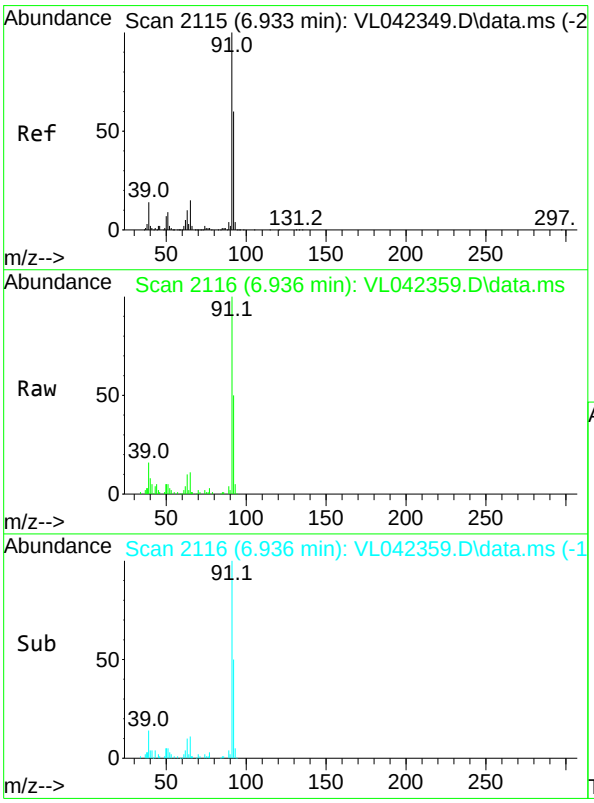
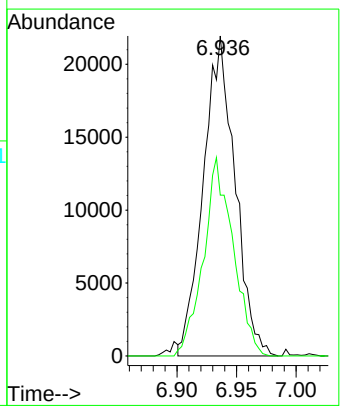
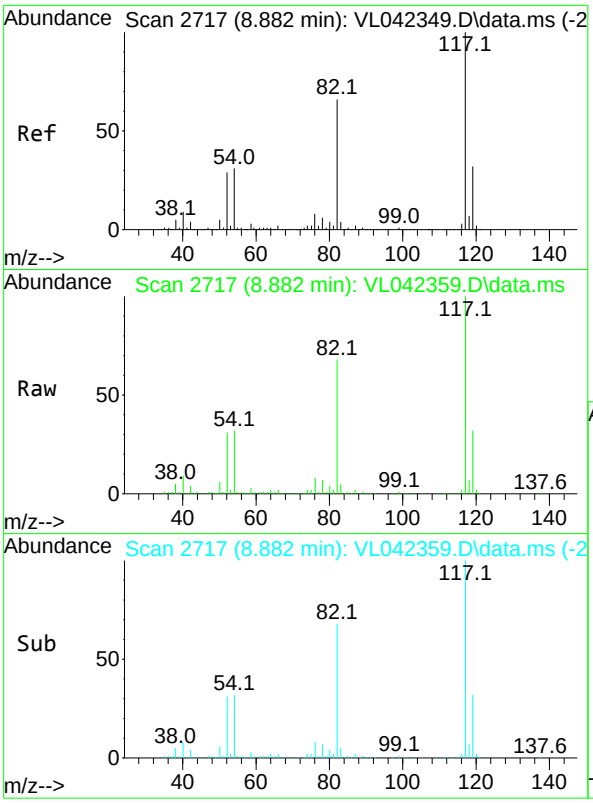


#53
Toluene
Concen: 0.884 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 40500

Ion	Ratio	Lower	Upper
91	100		
92	58.2	48.2	72.4

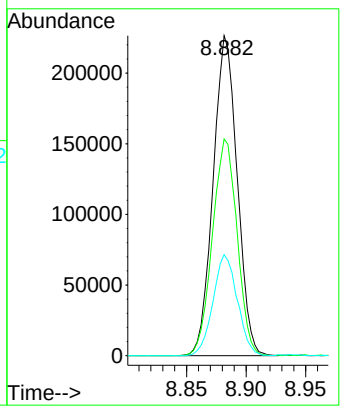




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:117 Resp: 31828

Ion	Ratio	Lower	Upper
117	100		
82	69.4	57.8	86.6
119	31.8	25.2	37.8



Instrument :
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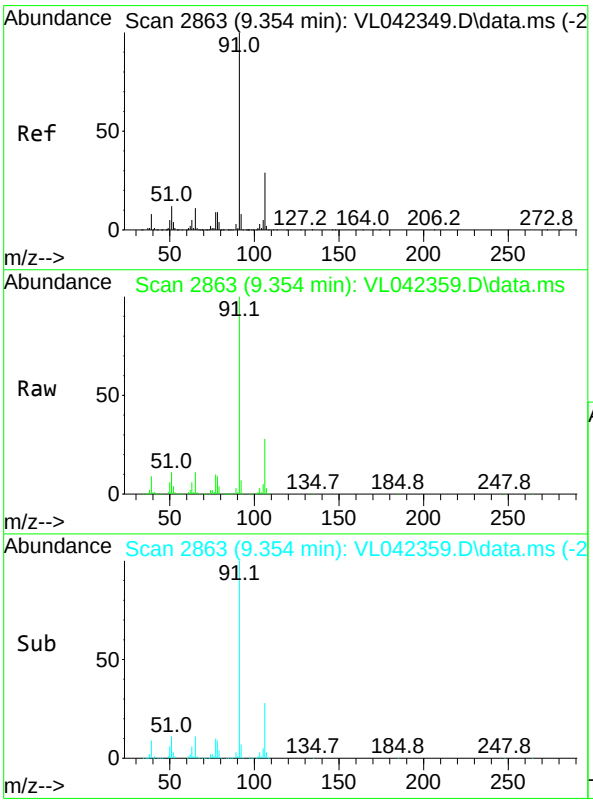
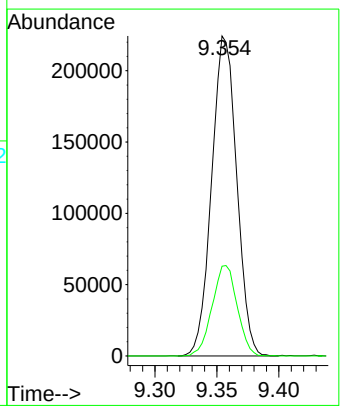
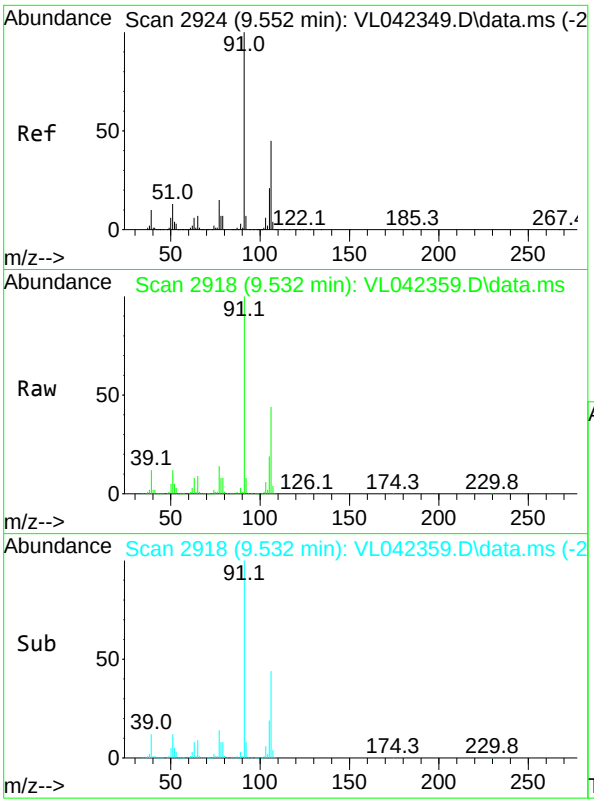


#58
Ethyl Benzene
Concen: 5.010 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 315931

Ion	Ratio	Lower	Upper
91	100		
106	28.1	23.0	34.4





#59
m/p-Xylene
Concen: 21.313 ppbv
RT: 9.532 min Scan# 2
Delta R.T. -0.019 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

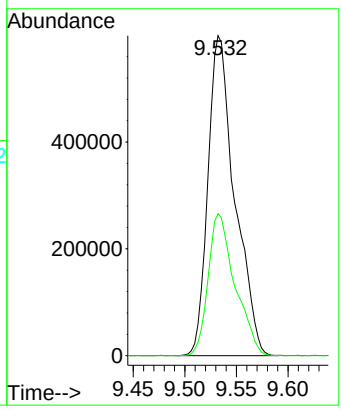
Tgt Ion: 91 Resp: 108273

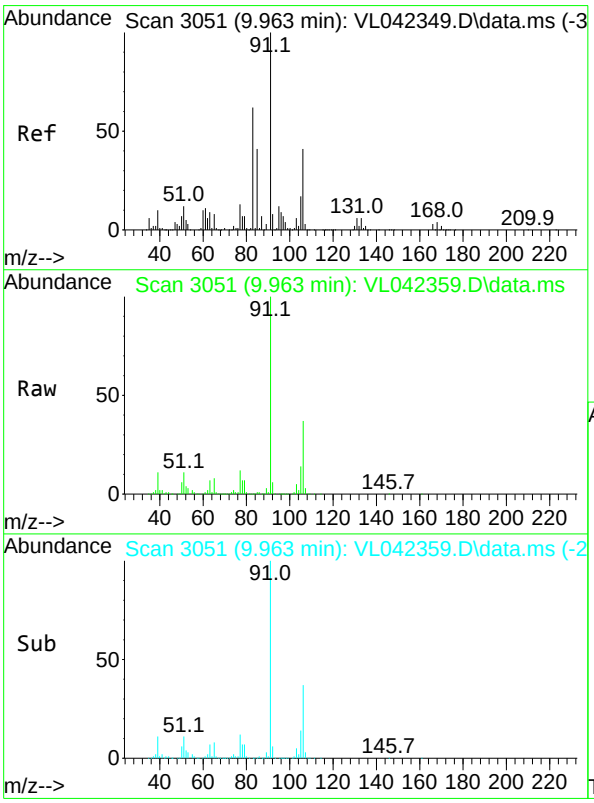
Ion	Ratio	Lower	Upper
91	100		
106	44.4	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

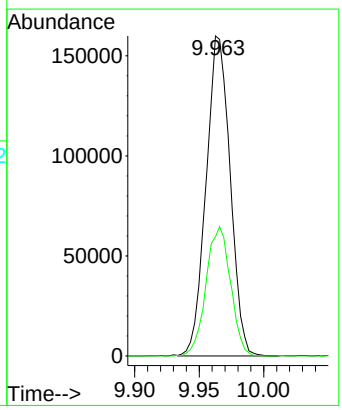


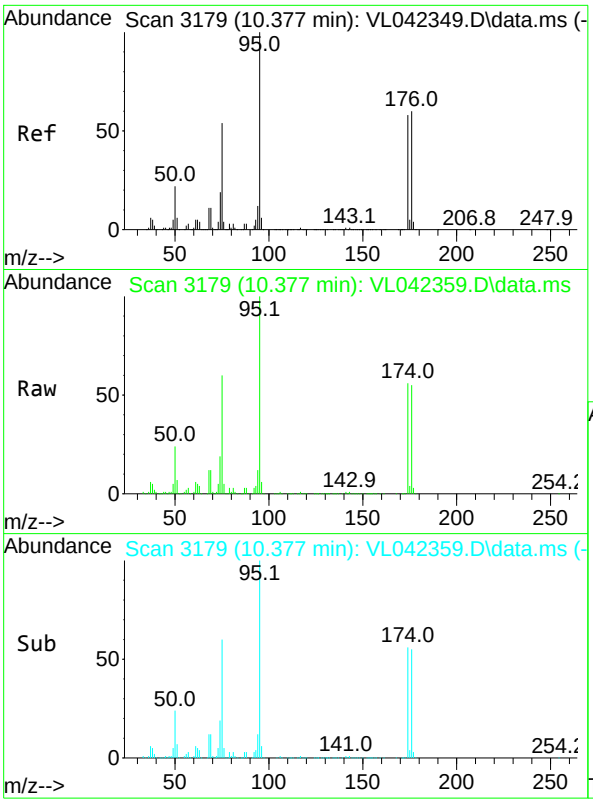


#60
o-Xylene
Concen: 4.051 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 207265

Ion	Ratio	Lower	Upper
91	100		
106	41.1	21.1	63.4

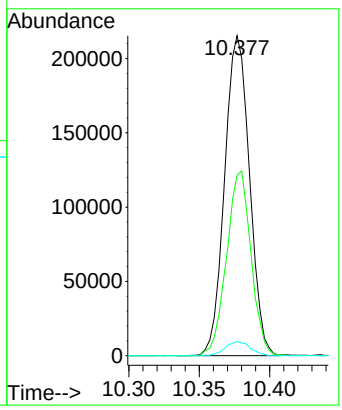




#68
1-Bromo-4-Fluorobenzene
Concen: 10.142 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 95 Resp: 26526

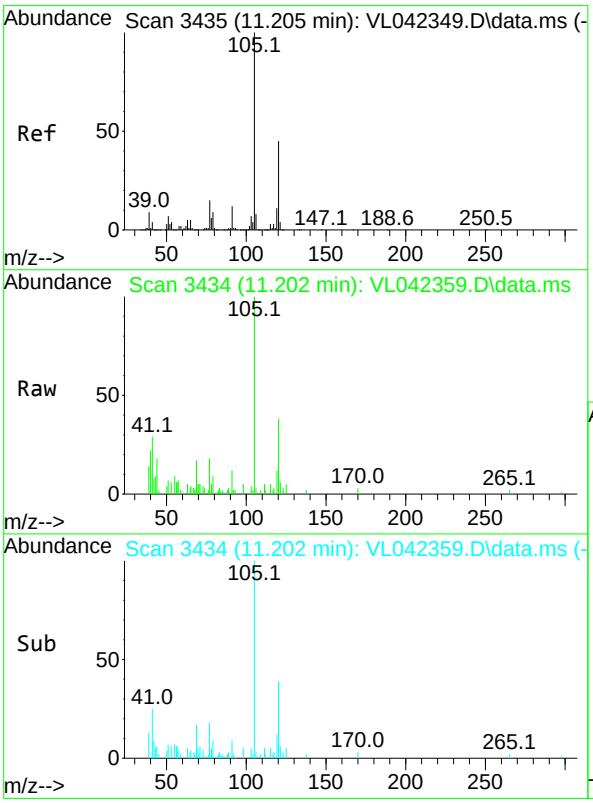
Ion	Ratio	Lower	Upper
95	100		
174	56.8	48.5	72.7
175	4.4	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

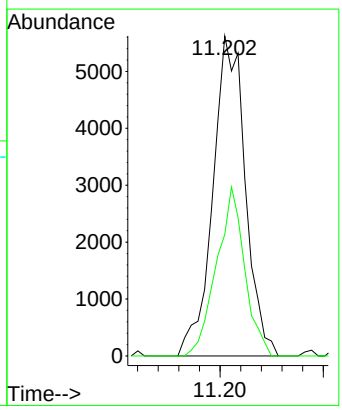
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

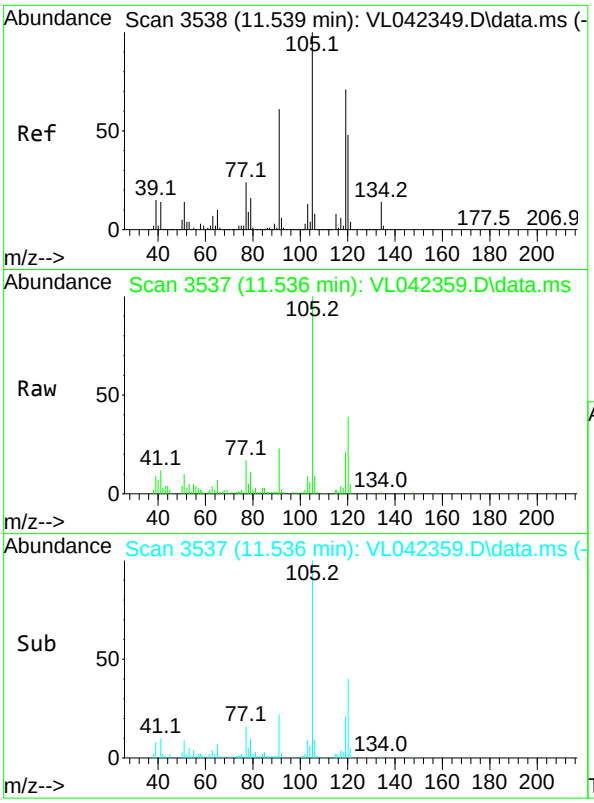


#73
1,3,5-Trimethylbenzene
Concen: 0.111 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:105 Resp: 6133

Ion	Ratio	Lower	Upper
105	100		
120	38.0	35.6	53.4

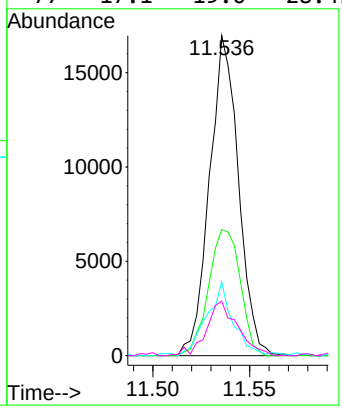




#74
1,2,4-Trimethylbenzene
Concen: 0.274 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:105 Resp: 1764

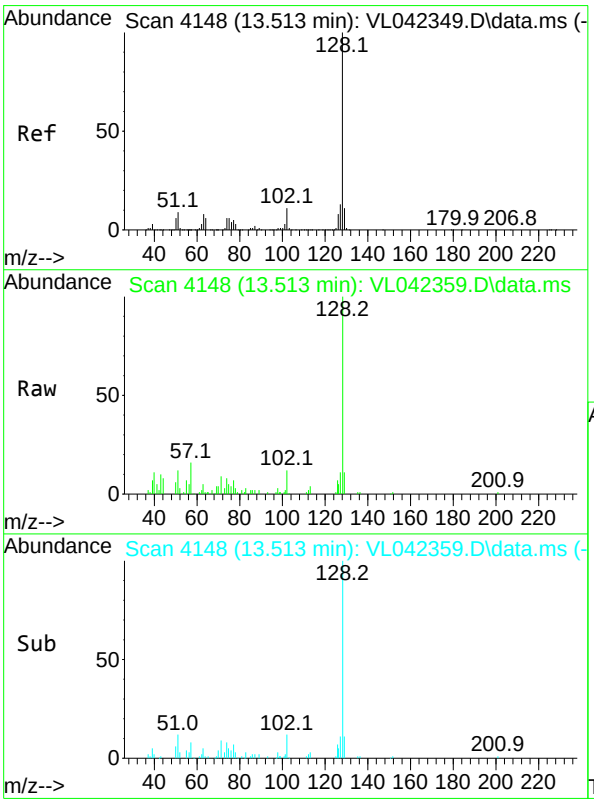
Ion	Ratio	Lower	Upper
105	100		
120	39.5	38.1	57.1
91	23.0	48.8	73.2#
77	17.1	19.0	28.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

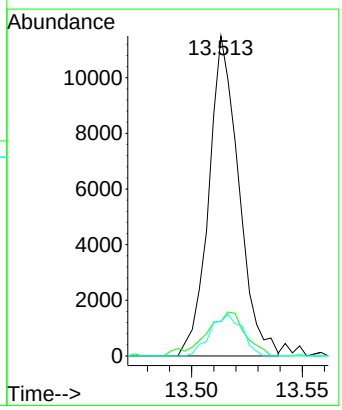
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

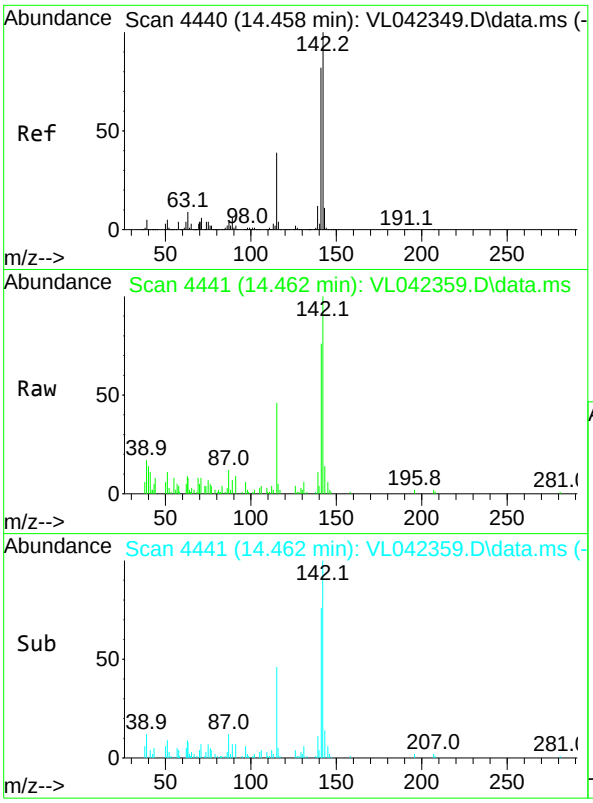


#79
Naphthalene
Concen: 0.140 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:128 Resp: 10816

Ion	Ratio	Lower	Upper
128	100		
127	10.8	10.6	15.8
129	10.8	8.6	12.8

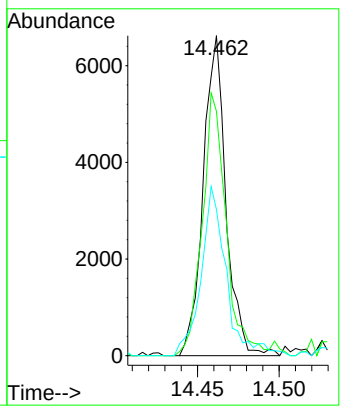




#80
Naphthalene,2-methyl-
Concen: 0.147 ppbv m
RT: 14.462 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:142 Resp: 644

Ion	Ratio	Lower	Upper
142	100		
141	22.5	66.8	100.2#
115	13.8	33.4	50.2#



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042359.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4167250	4711580	100.00%	22.523%
2	1.489	427	433	435	rBV2	177771	96323	2.04%	0.460%
3	1.557	450	454	462	rVB2	275399	181667	3.86%	0.868%
4	1.622	470	474	478	rVB	104166	57617	1.22%	0.275%
5	1.835	535	540	547	rBV	1859303	1244192	26.41%	5.948%
6	1.887	551	556	567	rVB	3498328	2490804	52.87%	11.907%
7	2.787	826	834	841	rBV	452912	477223	10.13%	2.281%
8	2.826	841	846	860	rVB2	218353	253193	5.37%	1.210%
9	3.347	1000	1007	1018	rBV	48995	70231	1.49%	0.336%
10	3.959	1185	1196	1211	rVB2	592332	954188	20.25%	4.561%
11	5.321	1599	1617	1634	rVB3	60586	154255	3.27%	0.737%
12	6.936	2102	2116	2127	rBV3	56741	116984	2.48%	0.559%
13	7.292	2214	2226	2239	rBV5	23305	48184	1.02%	0.230%
14	7.438	2264	2271	2272	rBV	84627	64560	1.37%	0.309%
15	7.444	2272	2273	2289	rVB2	83297	89420	1.90%	0.427%
16	7.690	2340	2349	2361	rBV5	60077	101742	2.16%	0.486%
17	8.882	2705	2717	2728	rBV	809288	1154517	24.50%	5.519%
18	9.354	2853	2863	2876	rBV	540491	760417	16.14%	3.635%
19	9.532	2900	2918	2936	rBV	1764736	3183410	67.57%	15.218%
20	9.966	3039	3052	3064	rBV2	453275	675767	14.34%	3.230%
21	10.377	3164	3179	3190	rBV2	991428	1238425	26.28%	5.920%
22	10.464	3198	3206	3218	rVB	424500	500758	10.63%	2.394%
23	11.115	3393	3407	3417	rBV3	70919	111463	2.37%	0.533%
24	11.536	3528	3537	3544	rBV4	58481	76465	1.62%	0.366%
25	11.824	3618	3626	3639	rBV	1207135	1222142	25.94%	5.842%
26	12.882	3942	3953	3962	rBV	766928	737294	15.65%	3.525%
27	13.384	4103	4108	4116	rVB	67371	69174	1.47%	0.331%
28	14.267	4374	4381	4390	rBV2	66101	76518	1.62%	0.366%

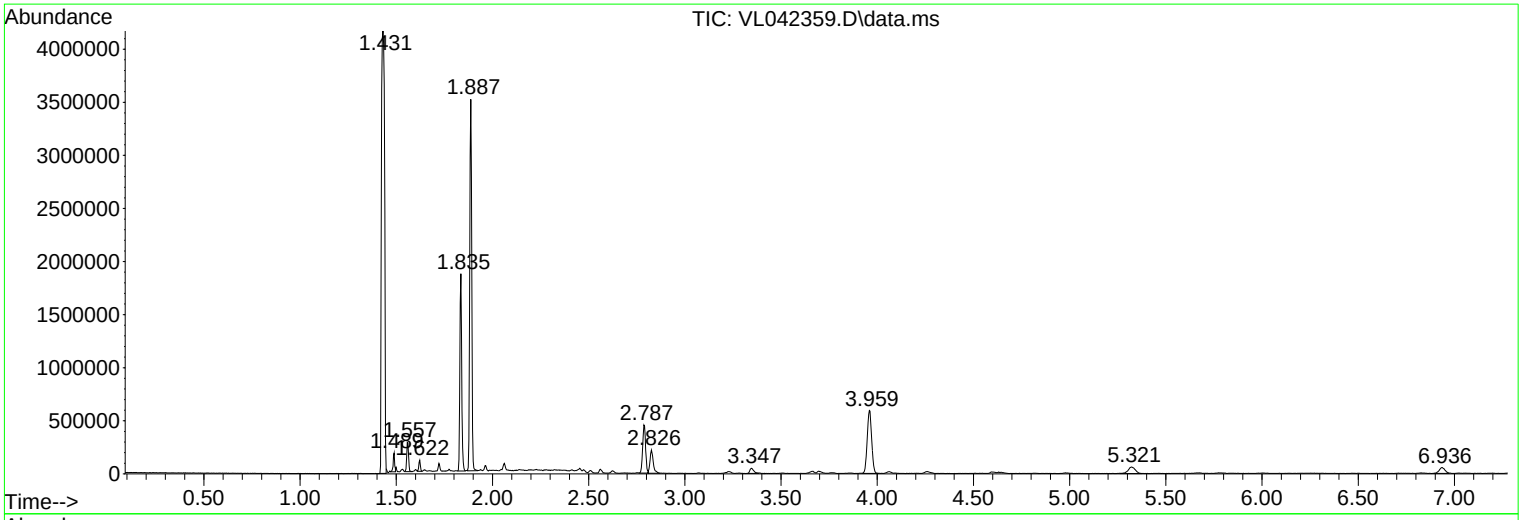
Sum of corrected areas: 20918513

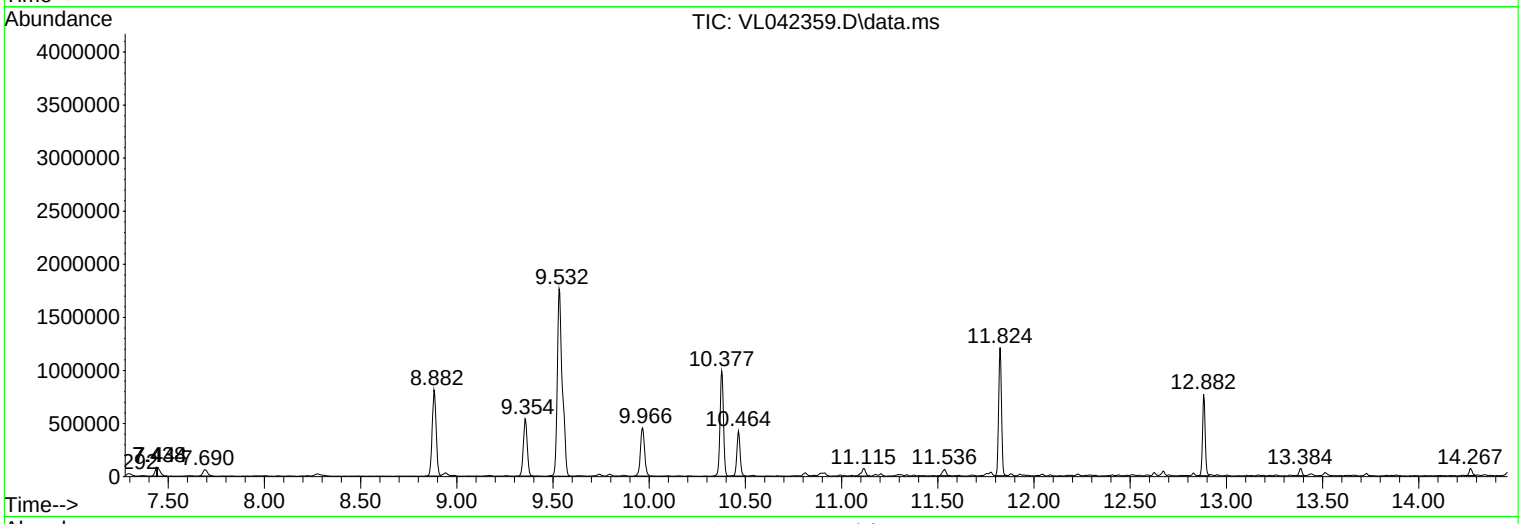
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

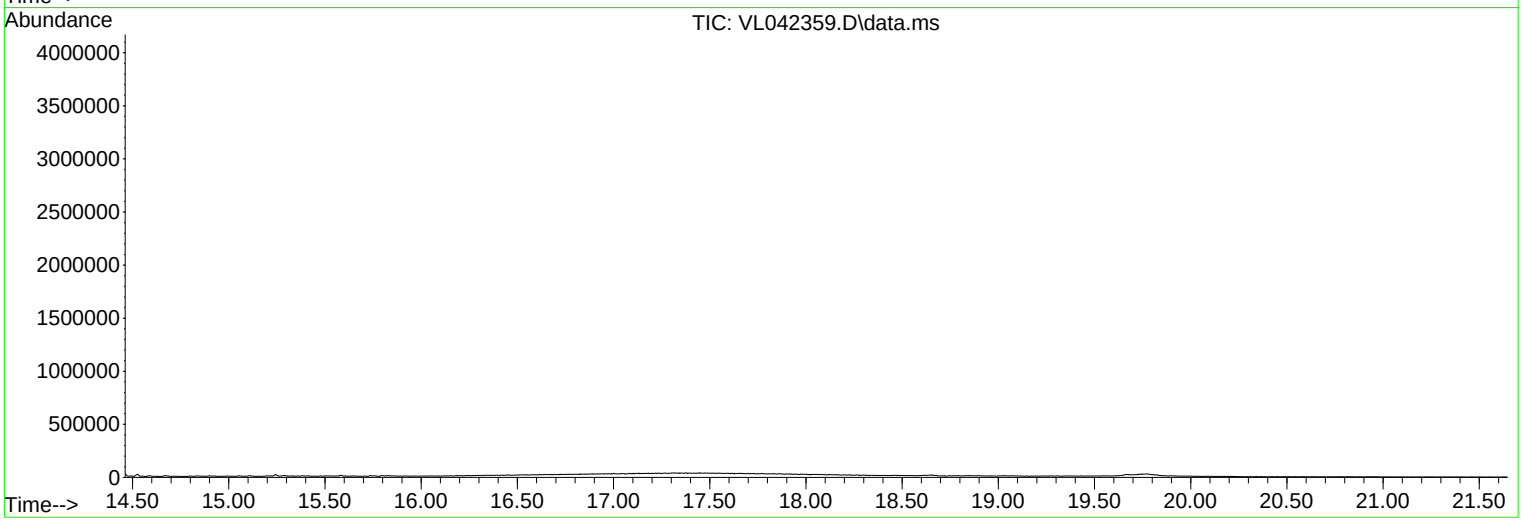
Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

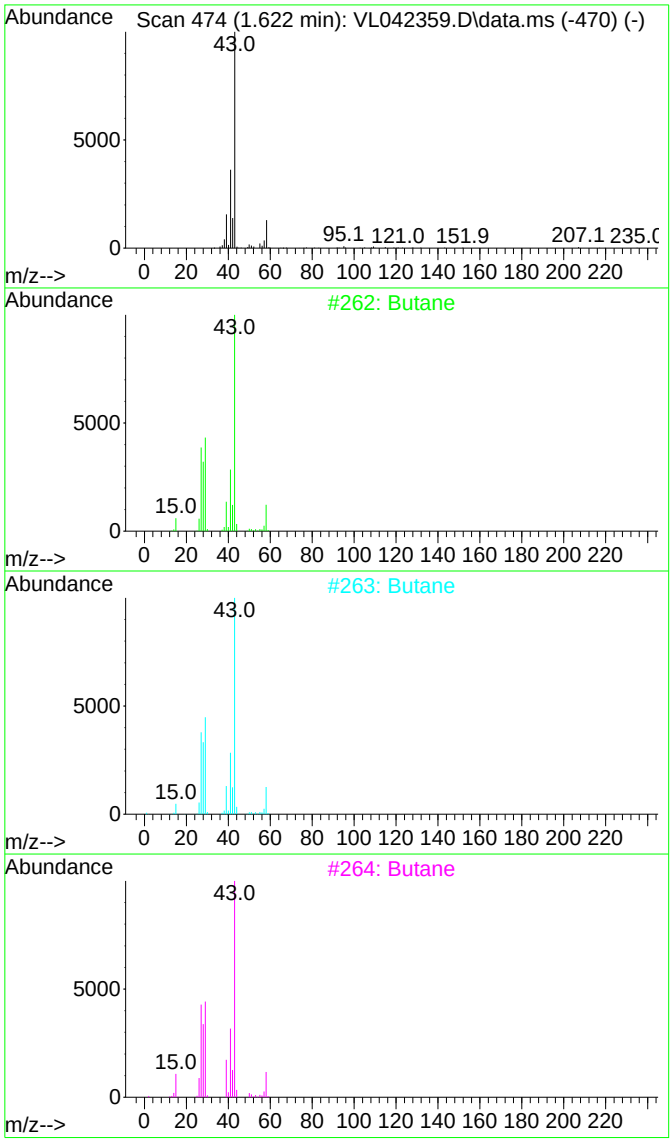
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

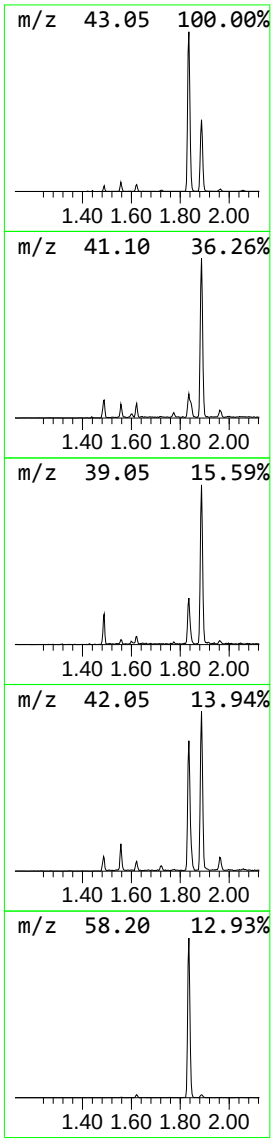
****

Peak Number 1 Butane Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.21 ppbv	57617	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	59
2	Butane	58	C4H10	000106-97-8	53
3	Butane	58	C4H10	000106-97-8	42
4	Butane	58	C4H10	000106-97-8	42
5	1-Propen-2-ol, acetate	100	C5H8O2	000108-22-5	39





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

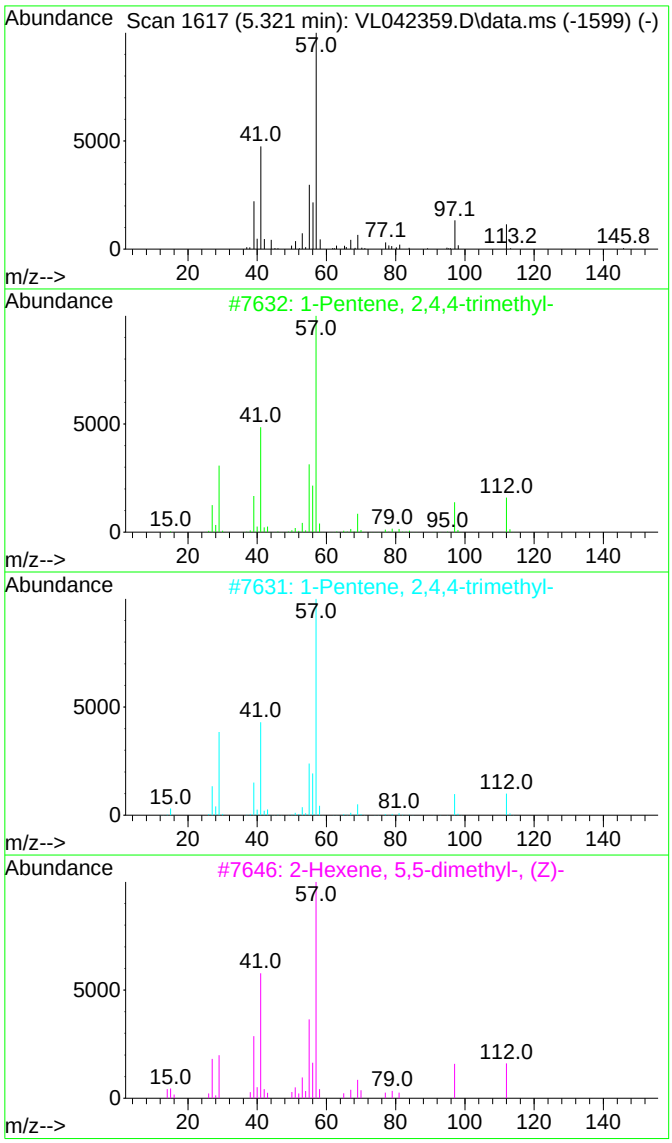
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

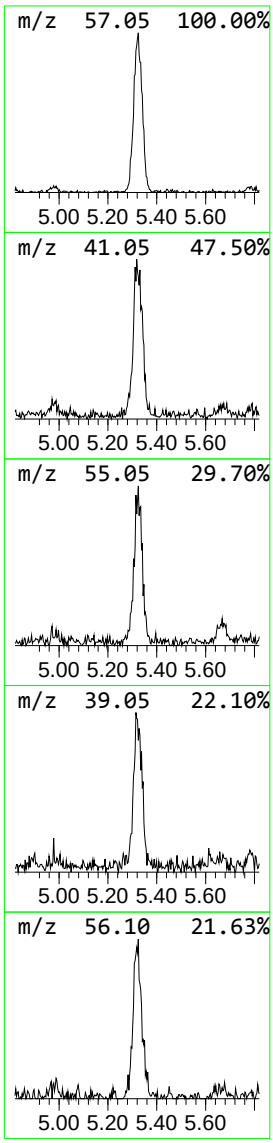
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 1-Pentene, 2,4,4-trimethyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
5.321	1.62 ppbv	154255	1,4-Difluorobenzene	3.962

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 2,4,4-trimethyl-	112	C8H16	000107-39-1	87
2	1-Pentene, 2,4,4-trimethyl-	112	C8H16	000107-39-1	86
3	2-Hexene, 5,5-dimethyl-, (Z)-	112	C8H16	039761-61-0	81
4	1-Pentene, 2,4,4-trimethyl-	112	C8H16	000107-39-1	74
5	1-Pentene, 2,4,4-trimethyl-	112	C8H16	000107-39-1	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

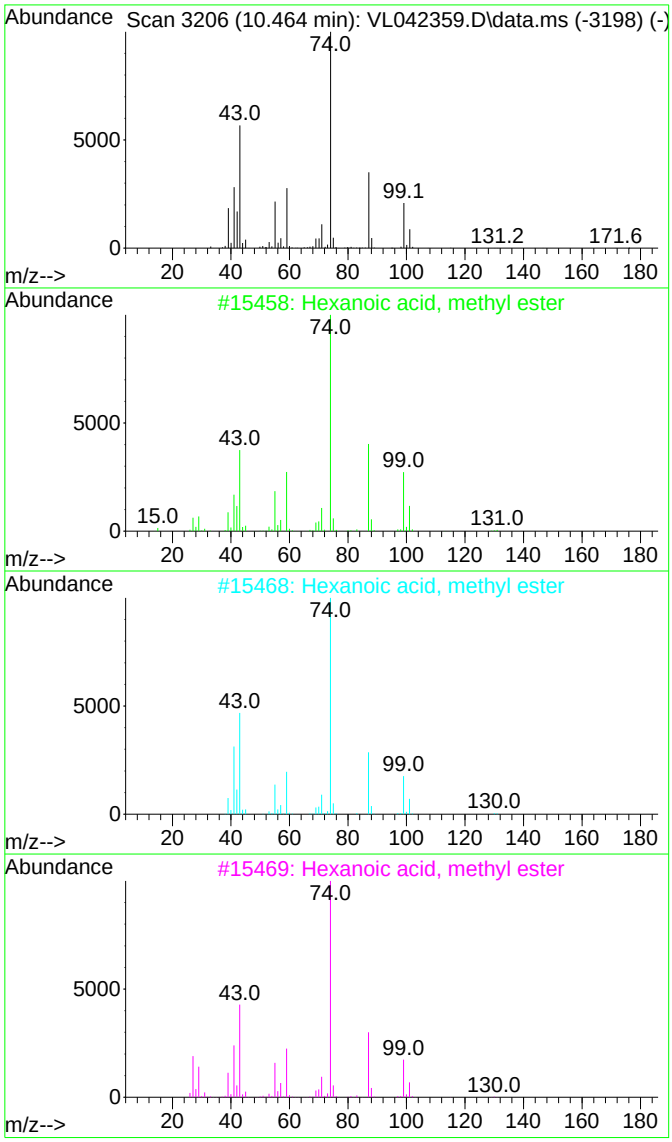
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

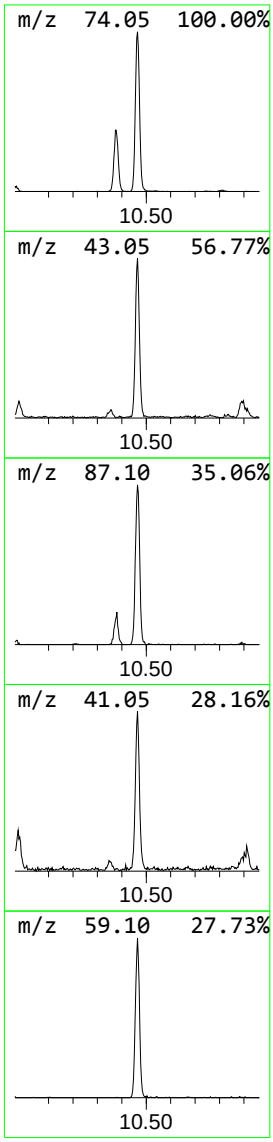
****

Peak Number 3 Hexanoic acid, methyl ester Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.464	4.34 ppbv	500758	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanoic acid, methyl ester	130	C7H14O2	000106-70-7	90
2	Hexanoic acid, methyl ester	130	C7H14O2	000106-70-7	90
3	Hexanoic acid, methyl ester	130	C7H14O2	000106-70-7	78
4	Methyl valerate	116	C6H12O2	000624-24-8	59
5	Methyl valerate	116	C6H12O2	000624-24-8	45





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

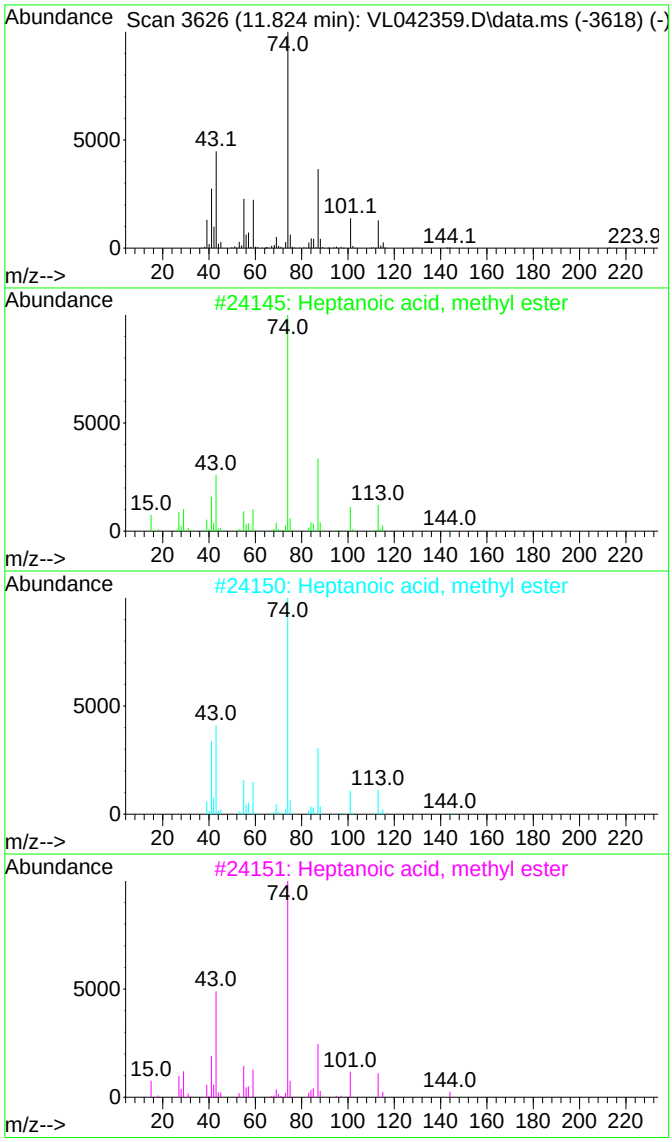
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

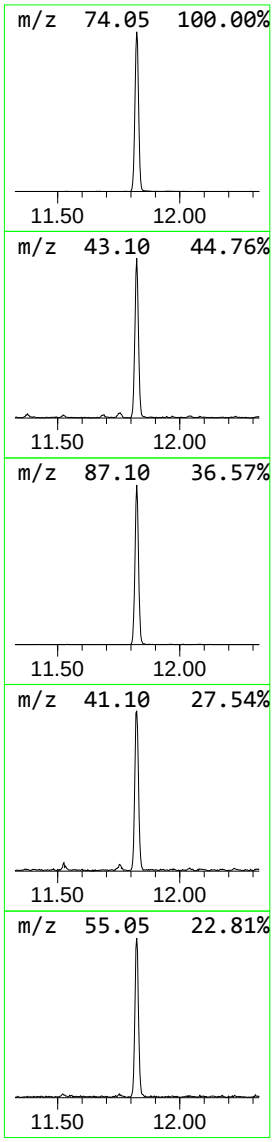
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 4 Heptanoic acid, methyl ester Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.824	10.59 ppbv	1222140	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Heptanoic acid, methyl ester	144	C8H16O2	000106-73-0	83
2	Heptanoic acid, methyl ester	144	C8H16O2	000106-73-0	80
3	Heptanoic acid, methyl ester	144	C8H16O2	000106-73-0	72
4	Heptanoic acid, methyl ester	144	C8H16O2	000106-73-0	72
5	Hexanoic acid, methyl ester	130	C7H14O2	000106-70-7	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

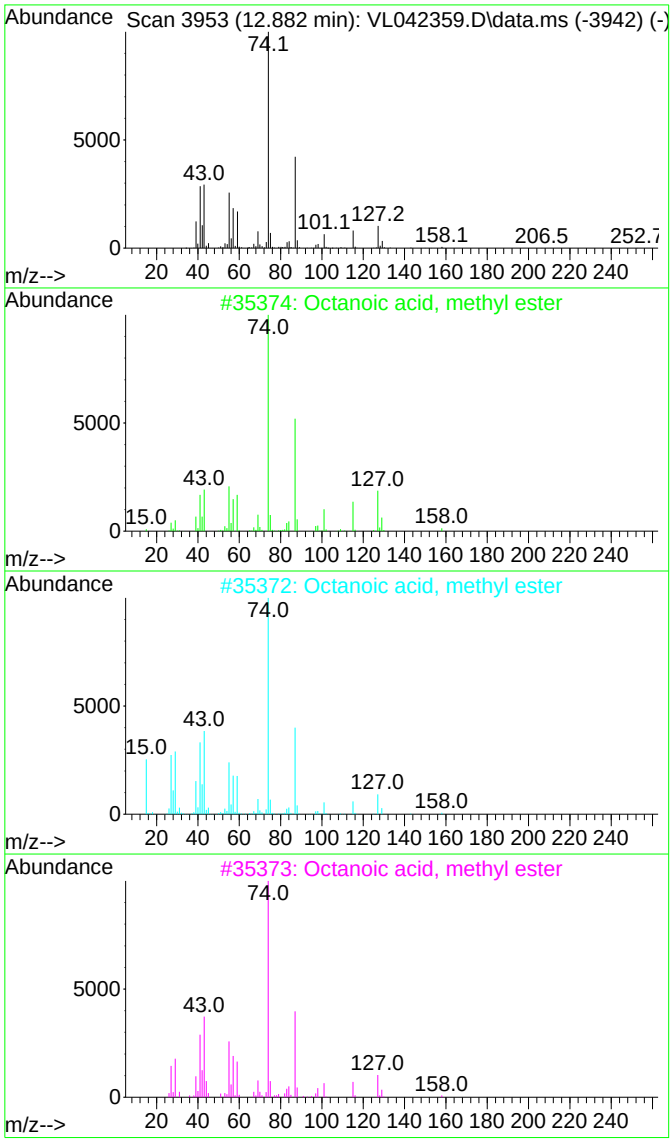
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

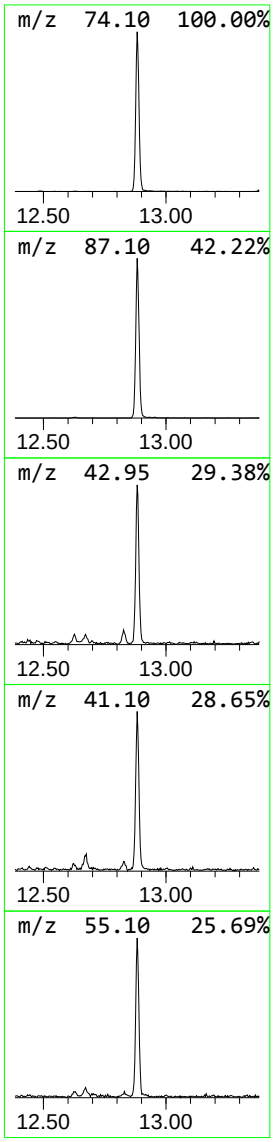
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Octanoic acid, methyl ester Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.882	6.39 ppbv	737294	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Octanoic acid, methyl ester	158	C9H18O2	000111-11-5	95
2	Octanoic acid, methyl ester	158	C9H18O2	000111-11-5	91
3	Octanoic acid, methyl ester	158	C9H18O2	000111-11-5	90
4	Octanoic acid, methyl ester	158	C9H18O2	000111-11-5	90
5	Octanoic acid, methyl ester	158	C9H18O2	000111-11-5	86





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.2	ppbv	57617	1	2.787	477223	10.0
1-Pentene, 2,4,...	5.321	1.6	ppbv	154255	2	3.962	954188	10.0
Hexanoic acid, ...	10.464	4.3	ppbv	500758	3	8.882	1154520	10.0
Heptanoic acid,...	11.824	10.6	ppbv	1222140	3	8.882	1154520	10.0
Octanoic acid, ...	12.882	6.4	ppbv	737294	3	8.882	1154520	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-15DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042360.D	10		04/17/25 16:44	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2.10	10.4	UD	10.4	24.7	ug/m3
64-17-5	Ethanol	27.8	52.4	DQ	6.03	9.42	ug/m3
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3	ug/m3
75-01-4	Vinyl Chloride	0.14	0.36	UD	0.36	0.77	ug/m3
74-83-9	Bromomethane	1.40	5.44	UD	5.44	19.4	ug/m3
75-00-3	Chloroethane	1.70	4.49	UD	4.49	13.2	ug/m3
109-99-9	Tetrahydrofuran	1.30	3.83	UD	3.83	14.8	ug/m3
75-69-4	Trichlorofluoromethane	1.60	8.99	UD	8.99	28.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	1.60	12.3	UD	12.3	38.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.88	6.15	UD	6.15	35.0	ug/m3
593-60-2	Bromoethene	1.20	5.25	UD	5.25	21.9	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76	UD	5.76	15.2	ug/m3
142-82-5	Heptane	1.10	4.51	UD	4.51	20.5	ug/m3
67-63-0	Isopropyl Alcohol	170	418	ED	1.70	12.3	ug/m3
75-35-4	1,1-Dichloroethene	1.40	5.55	UD	5.55	19.8	ug/m3
67-64-1	Acetone	42.5	101	D	5.70	11.9	ug/m3
75-15-0	Carbon Disulfide	1.60	4.98	UD	4.98	15.6	ug/m3
1634-04-4	Methyl tert-Butyl Ether	1.20	4.33	UD	4.33	18.0	ug/m3
75-09-2	Methylene Chloride	1.90	6.60	UD	6.60	17.4	ug/m3
156-60-5	trans-1,2-Dichloroethene	1.90	7.53	UD	7.53	19.8	ug/m3
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2	ug/m3
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2	ug/m3
78-93-3	2-Butanone	1.30	3.83	JD	3.54	14.8	ug/m3
56-23-5	Carbon Tetrachloride	0.11	0.69	UD	0.69	1.89	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.89	3.53	UD	3.53	19.8	ug/m3
67-66-3	Chloroform	0.83	4.05	UD	4.05	24.4	ug/m3
71-55-6	1,1,1-Trichloroethane	0.10	0.55	UD	0.55	1.64	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67	UD	4.67	23.4	ug/m3
71-43-2	Benzene	0.87	2.78	UD	2.78	16.0	ug/m3
107-06-2	1,2-Dichloroethane	0.91	3.68	UD	3.68	20.2	ug/m3
79-01-6	Trichloroethene	0.17	0.91	UD	0.91	1.61	ug/m3
78-87-5	1,2-Dichloropropane	1.10	5.08	UD	5.08	23.1	ug/m3
75-27-4	Bromodichloromethane	0.77	5.16	UD	5.16	33.5	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.93	3.81	UD	3.81	20.5	ug/m3
108-88-3	Toluene	1.10	4.15	UD	4.15	18.8	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-15DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042360.D	10		04/17/25 16:44	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	UD	2.72	22.7	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.64	2.91	UD	2.91	22.7	ug/m3
79-00-5	1,1,2-Trichloroethane	0.71	3.87	UD	3.87	27.3	ug/m3
124-48-1	Dibromochloromethane	0.66	5.62	UD	5.62	42.6	ug/m3
106-93-4	1,2-Dibromoethane	0.72	5.53	UD	5.53	7.69	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	ug/m3
108-90-7	Chlorobenzene	0.76	3.50	UD	3.50	23.0	ug/m3
100-41-4	Ethyl Benzene	5.10	22.1	D	5.21	21.7	ug/m3
179601-23-1	m/p-Xylene	22.3	96.9	D	9.12	43.4	ug/m3
95-47-6	o-Xylene	4.10	17.8	JD	5.21	21.7	ug/m3
100-42-5	Styrene	1.10	4.68	UD	4.68	21.3	ug/m3
75-25-2	Bromoform	0.57	5.89	UD	5.89	51.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.11	0.76	UD	0.76	2.06	ug/m3
95-49-8	2-Chlorotoluene	1.10	5.70	UD	5.70	25.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.10	5.41	UD	5.41	24.6	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.78	3.83	UD	3.83	24.6	ug/m3
541-73-1	1,3-Dichlorobenzene	0.80	4.81	UD	4.81	30.1	ug/m3
106-46-7	1,4-Dichlorobenzene	0.53	3.19	UD	3.19	30.1	ug/m3
95-50-1	1,2-Dichlorobenzene	0.75	4.51	UD	4.51	30.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.85	6.31	UD	6.31	37.1	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.85	9.07	UD	9.07	53.3	ug/m3
106-99-0	1,3-Butadiene	1.30	2.88	UD	2.88	11.1	ug/m3
91-20-3	Naphthalene	0.75	3.93	UD	3.93	5.24	ug/m3
622-96-8	4-Ethyltoluene	1.20	5.90	UD	5.90	24.6	ug/m3
110-54-3	Hexane	1.10	3.88	UD	3.88	17.6	ug/m3
107-05-1	Allyl Chloride	1.50	4.70	UD	4.70	15.7	ug/m3
123-91-1	1,4-Dioxane	2.10	7.57	UD	7.57	18.0	ug/m3
80-62-6	Methyl Methacrylate	0.86	3.52	UD	3.52	20.5	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.2			70 (65) - 130 (135)	102%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	122000		2.787			
540-36-3	1,4-Difluorobenzene	347000		3.962			
3114-55-4	Chlorobenzene-d5	308000		8.882			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B14-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-15DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042360.D	10		04/17/25 16:44	VL041725

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042360.D
Acq On : 17 Apr 2025 16:44
Operator : SY/MD
Sample : Q1665-15DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:38:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	121918	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	347081	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	308280	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	259047	10.226	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.300%				
Target Compounds							Qvalue
9) Propene	1.489	41	2087	0.223	ppbv		85
13) Ethanol	1.722	45	4134m	2.784	ppbv		
15) Acetone	1.836	43	84869	4.252	ppbv		100
19) Isopropyl Alcohol	1.887	45	188363	16.989	ppbv	#	52
34) 2-Butanone	2.564	43	3500m	0.128	ppbv		
51) 2-Hexanone	7.448	43	5539	0.135	ppbv	#	96
53) Toluene	6.937	91	4561m	0.102	ppbv		
58) Ethyl Benzene	9.358	91	30946	0.507	ppbv		93
59) m/p-Xylene	9.532	91	109489m	2.225	ppbv		
60) o-Xylene	9.966	91	20222	0.408	ppbv		97

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042360.D
Acq On : 17 Apr 2025 16:44
Operator : SY/MD
Sample : Q1665-15DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:38:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
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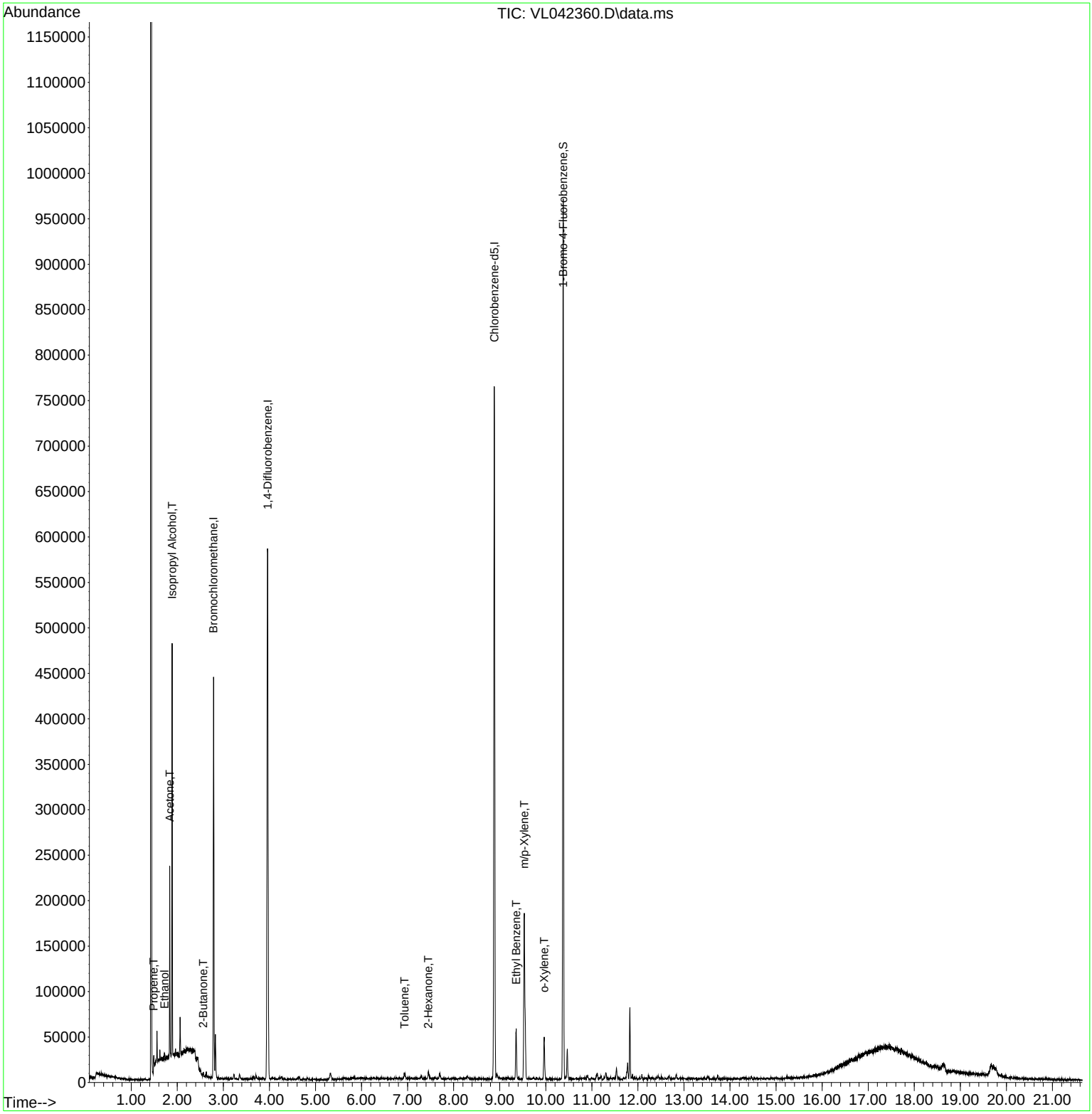
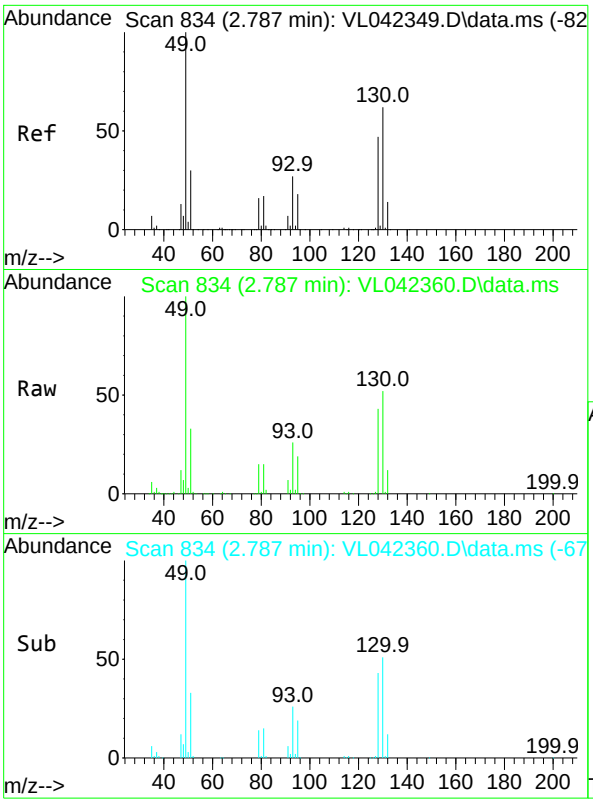
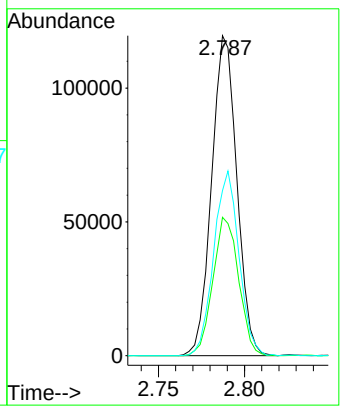




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 49 Resp: 12191

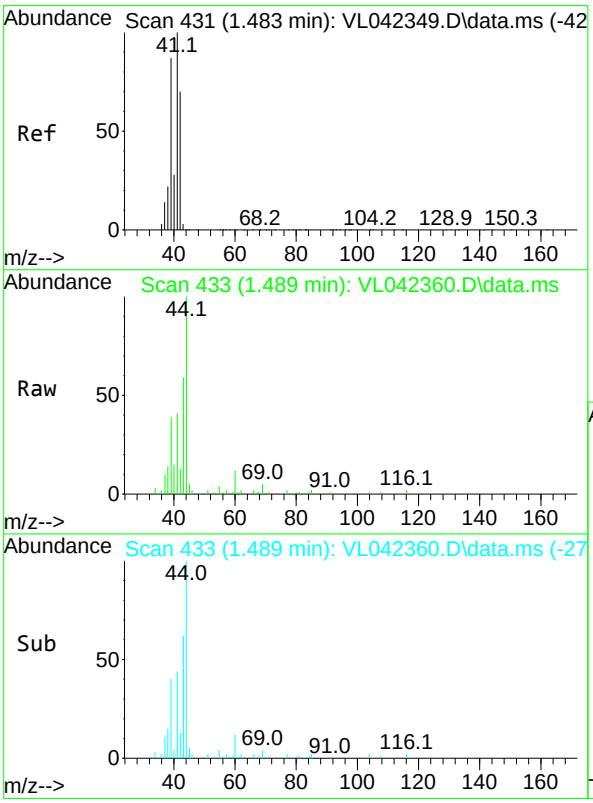
Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.8	68.4
130	57.9	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

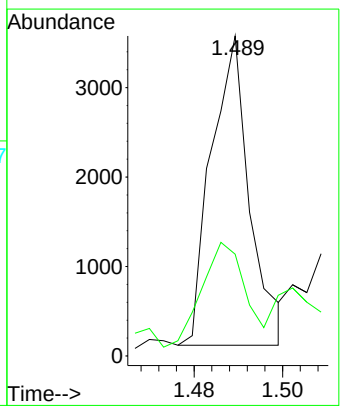
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

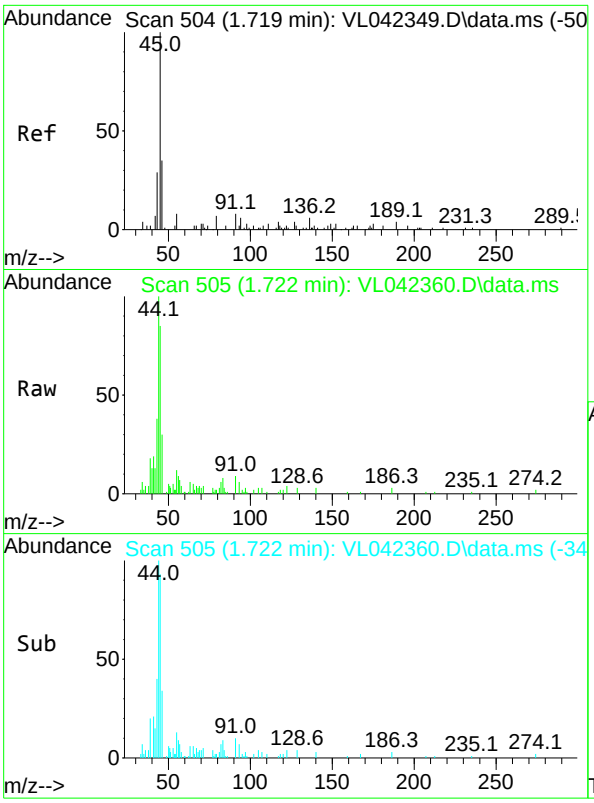


#9
Propene
Concen: 0.223 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 41 Resp: 2087

Ion	Ratio	Lower	Upper
41	100		
42	82.3	56.2	84.4

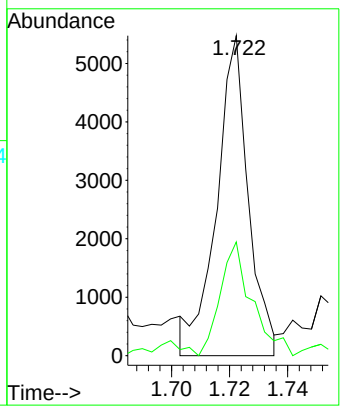




#13
Ethanol
Concen: 2.784 ppbv m
RT: 1.722 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 45 Resp: 413

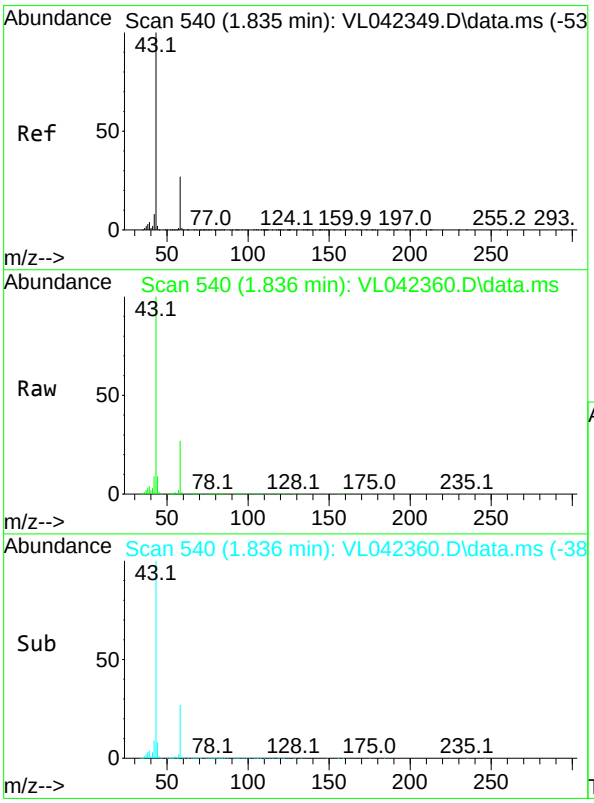
Ion	Ratio	Lower	Upper
45	100		
46	0.0	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

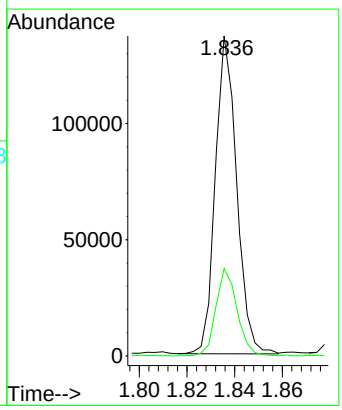
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

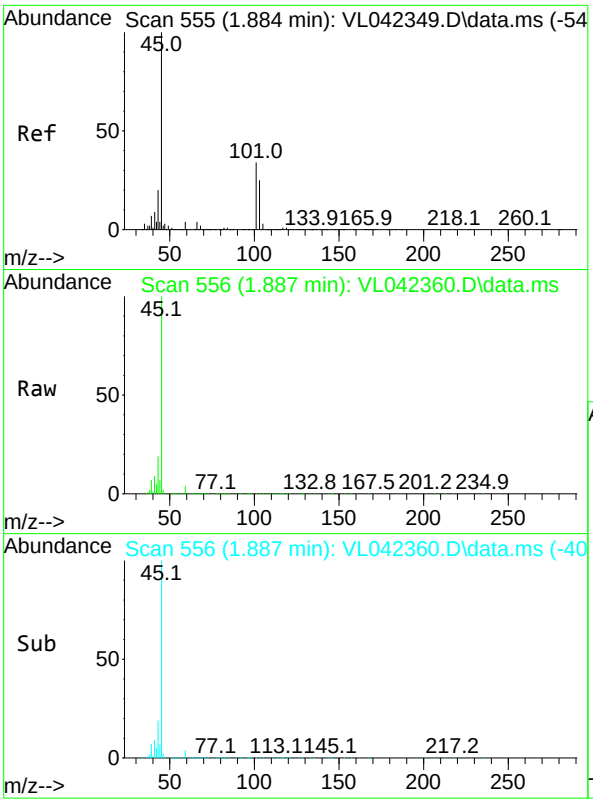


#15
Acetone
Concen: 4.252 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 43 Resp: 84869

Ion	Ratio	Lower	Upper
43	100		
58	27.8	22.4	33.6





#19
Isopropyl Alcohol
Concen: 16.989 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

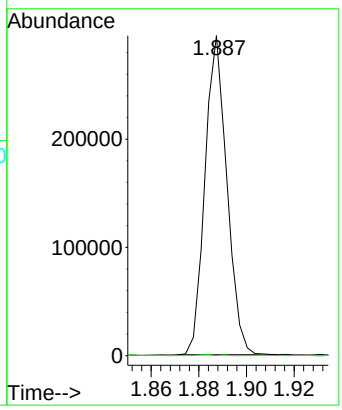
Tgt Ion: 45 Resp: 18836

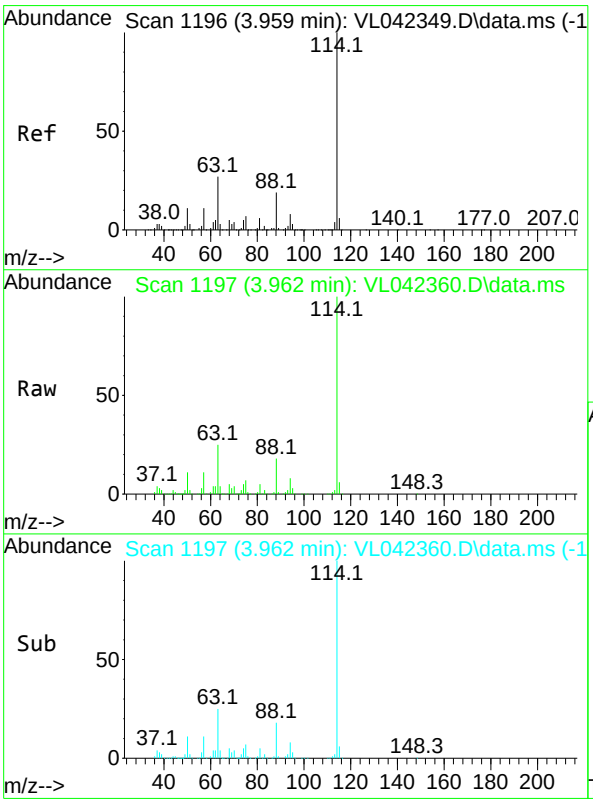
Ion	Ratio	Lower	Upper
45	100		
58	12.5	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

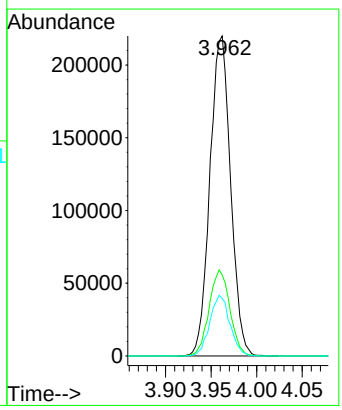


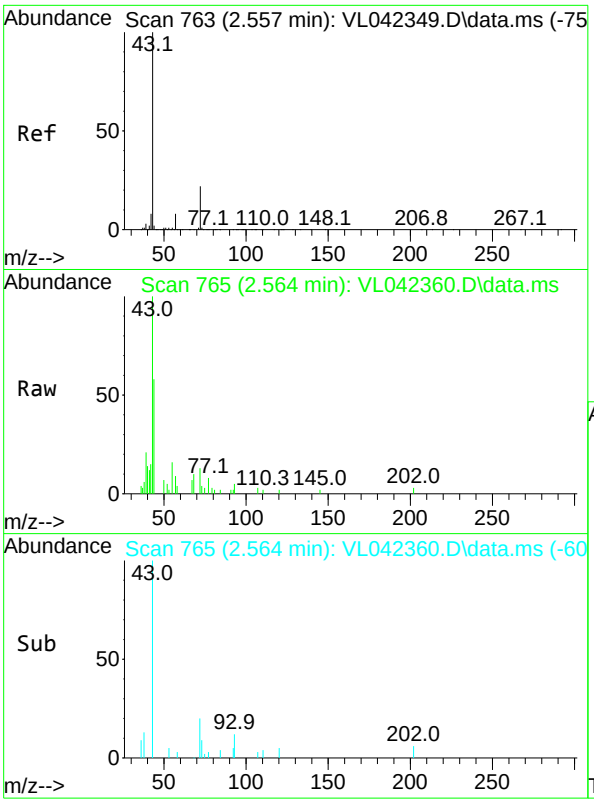


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion:114 Resp: 347081

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	18.4	15.5	23.3





#34
2-Butanone
Concen: 0.128 ppbv m
RT: 2.564 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

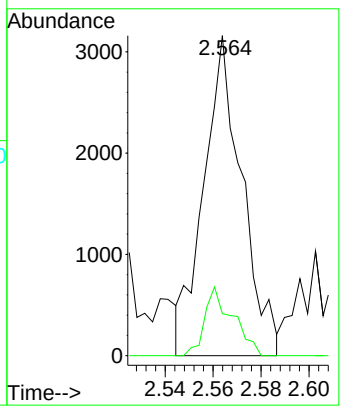
Tgt Ion: 43 Resp: 350

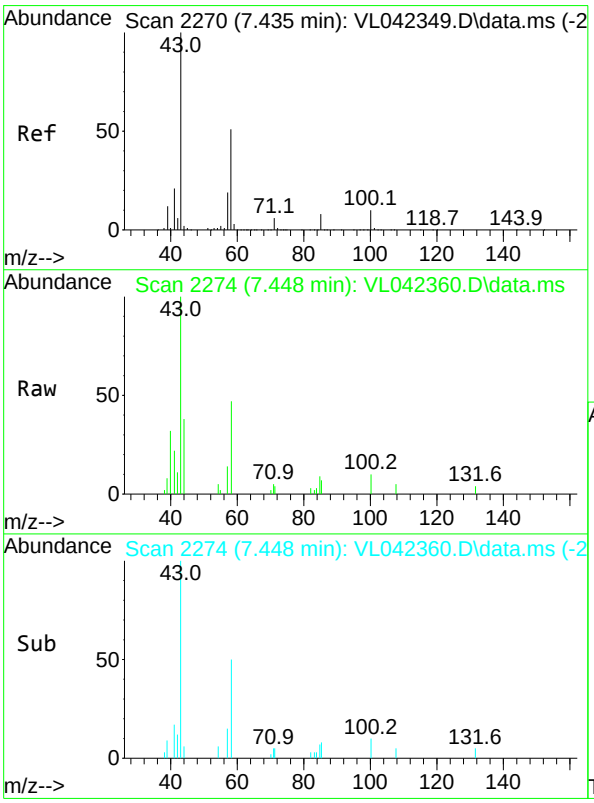
Ion	Ratio	Lower	Upper
43	100		
72	15.7	18.2	27.2#

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

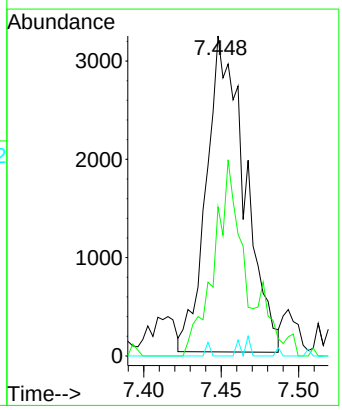


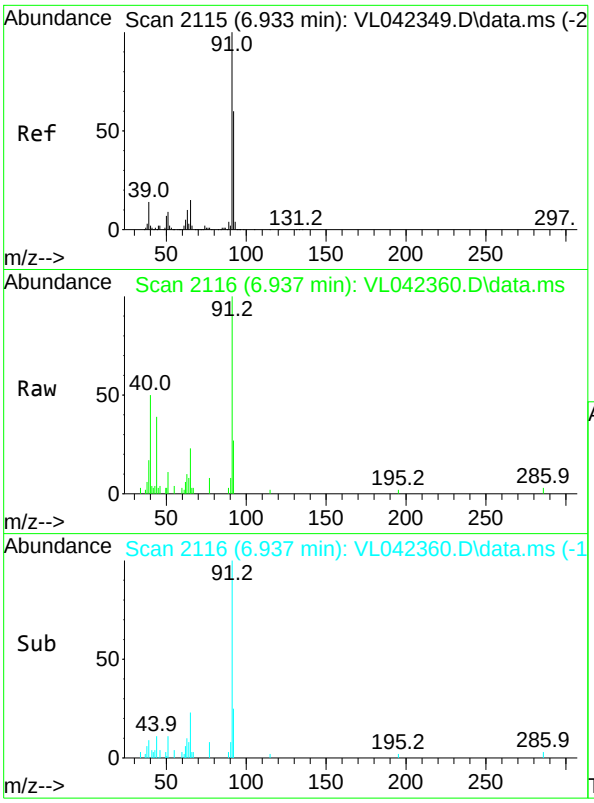


#51
2-Hexanone
Concen: 0.135 ppbv
RT: 7.448 min Scan# 2274
Delta R.T. 0.013 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 43 Resp: 5539

Ion	Ratio	Lower	Upper
43	100		
58	53.1	40.2	60.4
98	0.0	0.1	0.1#





#53
Toluene
Concen: 0.102 ppbv m
RT: 6.937 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

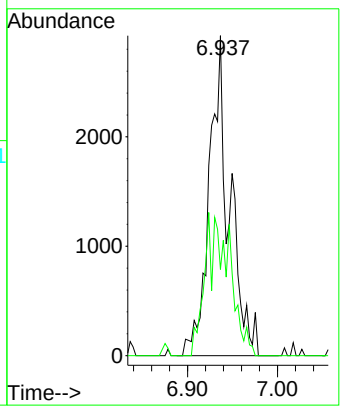
Tgt Ion: 91 Resp: 456

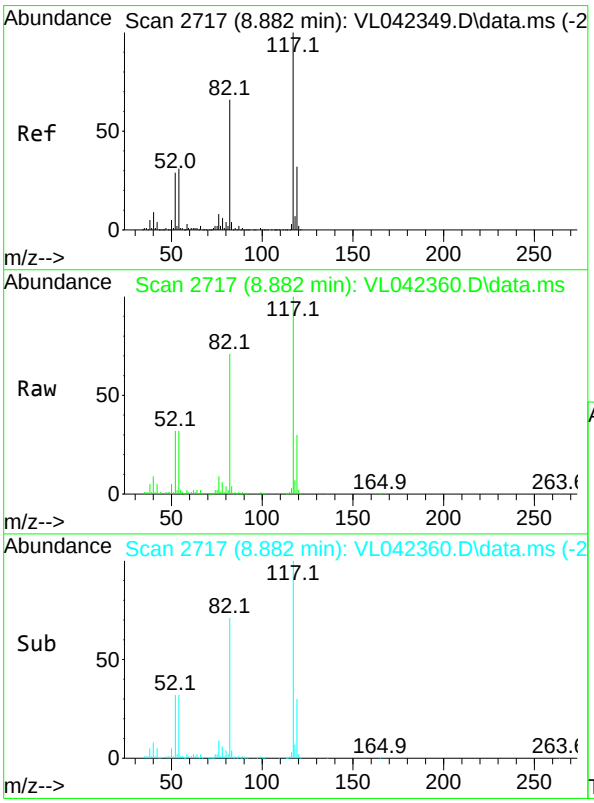
Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.2	72.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

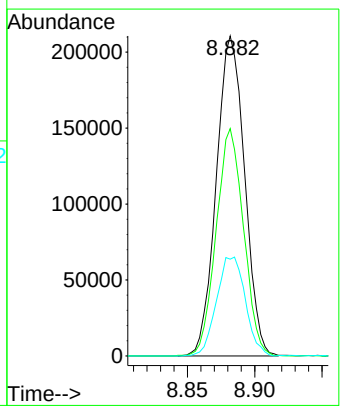


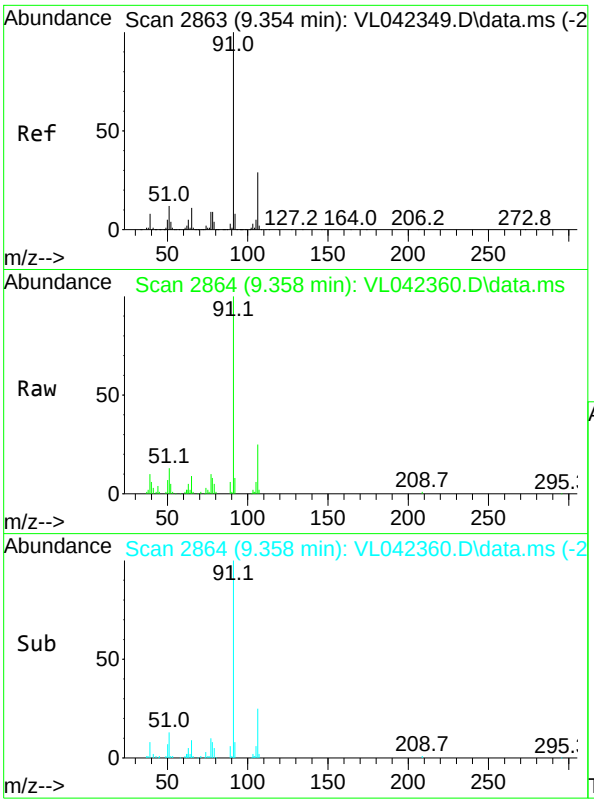


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion:117 Resp: 308280

Ion	Ratio	Lower	Upper
117	100		
82	68.8	57.8	86.6
119	31.5	25.2	37.8

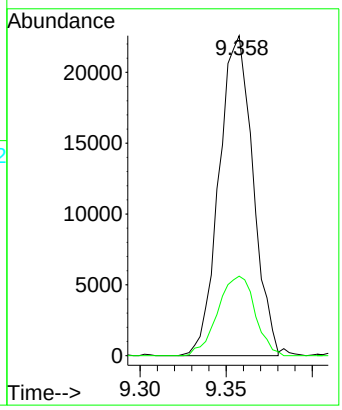




#58
Ethyl Benzene
Concen: 0.507 ppbv
RT: 9.358 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 91 Resp: 3094

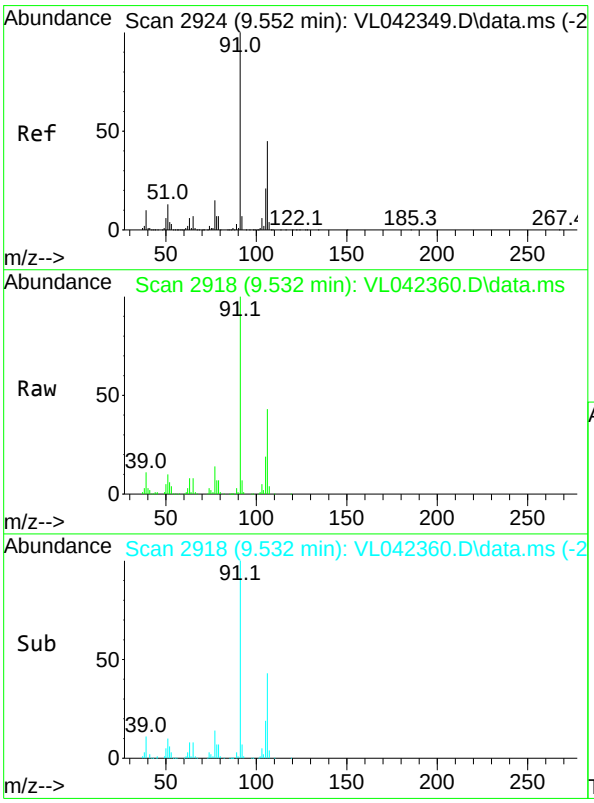
Ion	Ratio	Lower	Upper
91	100		
106	24.8	23.0	34.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

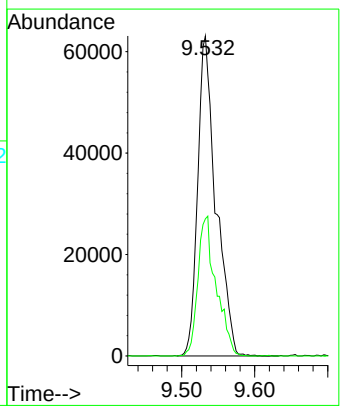
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

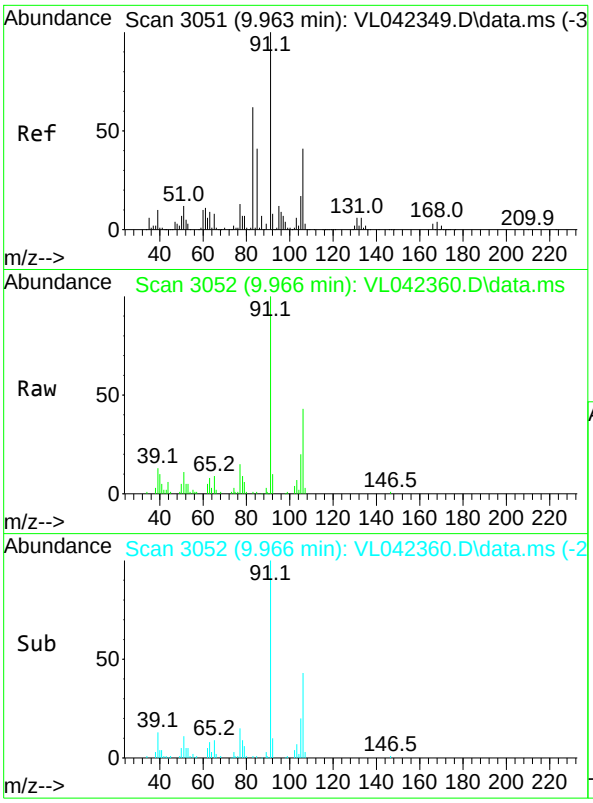


#59
m/p-Xylene
Concen: 2.225 ppbv m
RT: 9.532 min Scan# 2918
Delta R.T. -0.019 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 91 Resp: 109489

Ion	Ratio	Lower	Upper
91	100		
106	43.8	35.4	53.2

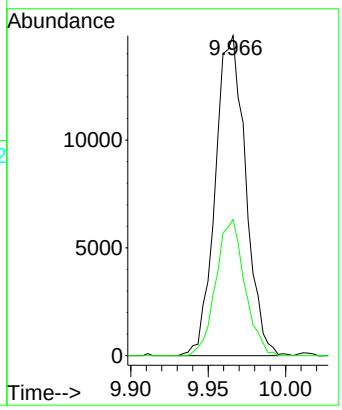




#60
o-Xylene
Concen: 0.408 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 91 Resp: 2022

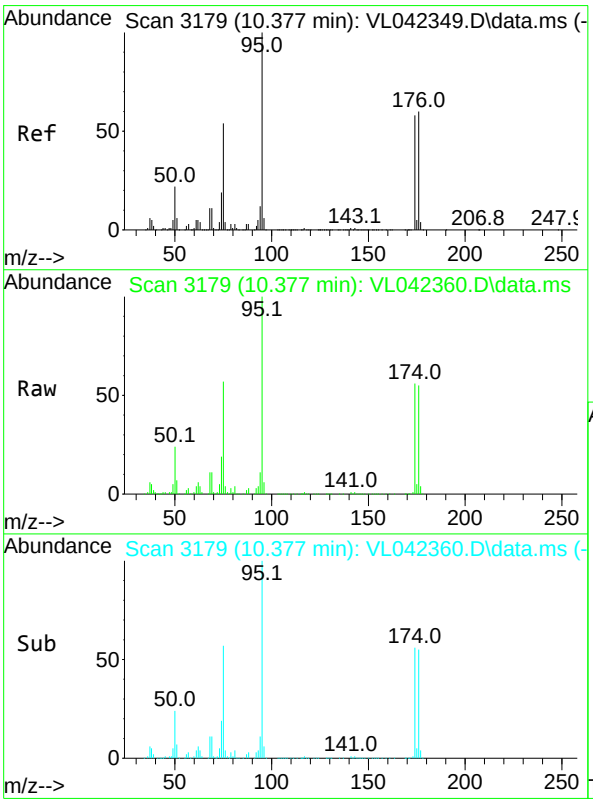
Ion	Ratio	Lower	Upper
91	100		
106	40.4	21.1	63.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Manual Integrations
APPROVED

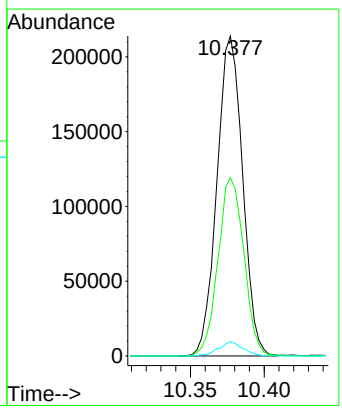
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 10.226 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 95 Resp: 259047

Ion	Ratio	Lower	Upper
95	100		
174	56.2	48.5	72.7
175	4.3	3.7	5.5



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-5-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-16	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042422.D	1		04/28/25 12:51	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.42	2.08	J	1.04	2.47	ug/m3
64-17-5	Ethanol	480	904	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	1.00	2.07		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.16	0.47	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.24	0.73	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.66	2.70		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	29.3	72.0	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	11.7	27.8		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.65	2.26		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.50	1.72		0.76	1.72	ug/m3
78-93-3	2-Butanone	0.80	2.36		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.090	0.57		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.18	0.88	J	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67		0.47	2.34	ug/m3
71-43-2	Benzene	0.68	2.17		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	6.70	25.3		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-5-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-16	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042422.D	1		04/28/25 12:51	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.58	2.52		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	2.00	8.69		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.69	3.00		0.52	2.17	ug/m3
100-42-5	Styrene	0.25	1.06	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.32	1.66	J	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.27	1.33	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.76	3.74		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.24	1.18	J	0.59	2.46	ug/m3
110-54-3	Hexane	3.20	11.3		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.7			70 (65) - 130 (135)	107%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	143000		2.78			
540-36-3	1,4-Difluorobenzene	401000		3.949			
3114-55-4	Chlorobenzene-d5	346000		8.872			
TENTITIVE IDENTIFIED COMPOUNDS							

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-5-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-16	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042422.D	1		04/28/25 12:51	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.28		J		1.47	ppbv
115-07-1	Propene	1.30		J		1.48	ppbv
000106-97-8	Butane	1.20		J		1.62	ppbv
000109-66-0	Pentane	1.10		J		1.96	ppbv
000107-83-5	Pentane, 2-methyl-	2.30		J		2.47	ppbv
003769-23-1	1-Hexene, 4-methyl-	1.60		J		2.62	ppbv
000096-37-7	Cyclopentane, methyl-	2.00		J		3.22	ppbv
000590-88-5	1,3-Butanediamine	1.60		J		4.25	ppbv
000066-25-1	Hexanal	2.10		J		7.67	ppbv
103-65-1	n-propylbenzene	0.14		J		11.0	ppbv
99-87-6	p-Isopropyltoluene	0.19		J		11.9	ppbv
001120-21-4	Undecane	1.40		J		12.8	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Quant Time: Apr 29 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.780	49	143445	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.949	114	401346	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.872	117	346372	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.367	95	304530	10.699	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 107.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10522	0.415	ppbv		95
3) Chlorodifluoromethane	1.473	51	6648m	0.275	ppbv		
4) Chloromethane	1.528	50	10118	1.009	ppbv	#	85
9) Propene	1.483	41	13832m	1.259	ppbv		
10) Heptane	4.968	43	20505m	0.664	ppbv		
11) Trichlorofluoromethane	1.874	101	5172	0.215	ppbv		93
13) Ethanol	1.719	45	834583	477.751	ppbv		78
15) Acetone	1.832	43	273996	11.668	ppbv		98
17) tert-Butyl alcohol	2.039	59	7025m	0.241	ppbv		
19) Isopropyl Alcohol	1.881	45	382160	29.296	ppbv	#	34
20) Methylene Chloride	2.059	84	5939	0.646	ppbv	#	95
26) Hexane	2.816	57	74514	3.180	ppbv	#	37
29) Chloroform	2.839	83	6046	0.183	ppbv	#	82
30) Cyclohexane	3.849	84	9447	0.499	ppbv		90
34) 2-Butanone	2.554	43	25286	0.797	ppbv		99
35) Carbon Tetrachloride	3.751	117	3431m	0.094	ppbv		
36) Benzene	3.645	78	29627	0.684	ppbv	#	91
41) Tetrahydrofuran	3.065	42	2983m	0.161	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	77694m	1.039	ppbv		
53) Toluene	6.923	91	350451	6.746	ppbv		99
58) Ethyl Benzene	9.348	91	39720	0.579	ppbv		94
59) m/p-Xylene	9.522	91	108081	1.955	ppbv		97
60) o-Xylene	9.956	91	38480	0.691	ppbv		95
61) Styrene	9.862	104	6537m	0.246	ppbv		
64) n-propylbenzene	10.982	120	2864	0.139	ppbv	#	46
69) p-Isopropyltoluene	11.921	119	17184	0.189	ppbv		98
71) 2-Chlorotoluene	10.895	91	20426	0.319	ppbv		94
72) 4-Ethyltoluene	11.118	105	16614	0.244	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.199	105	16186	0.269	ppbv		92
74) 1,2,4-Trimethylbenzene	11.529	105	53644	0.764	ppbv	#	61

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

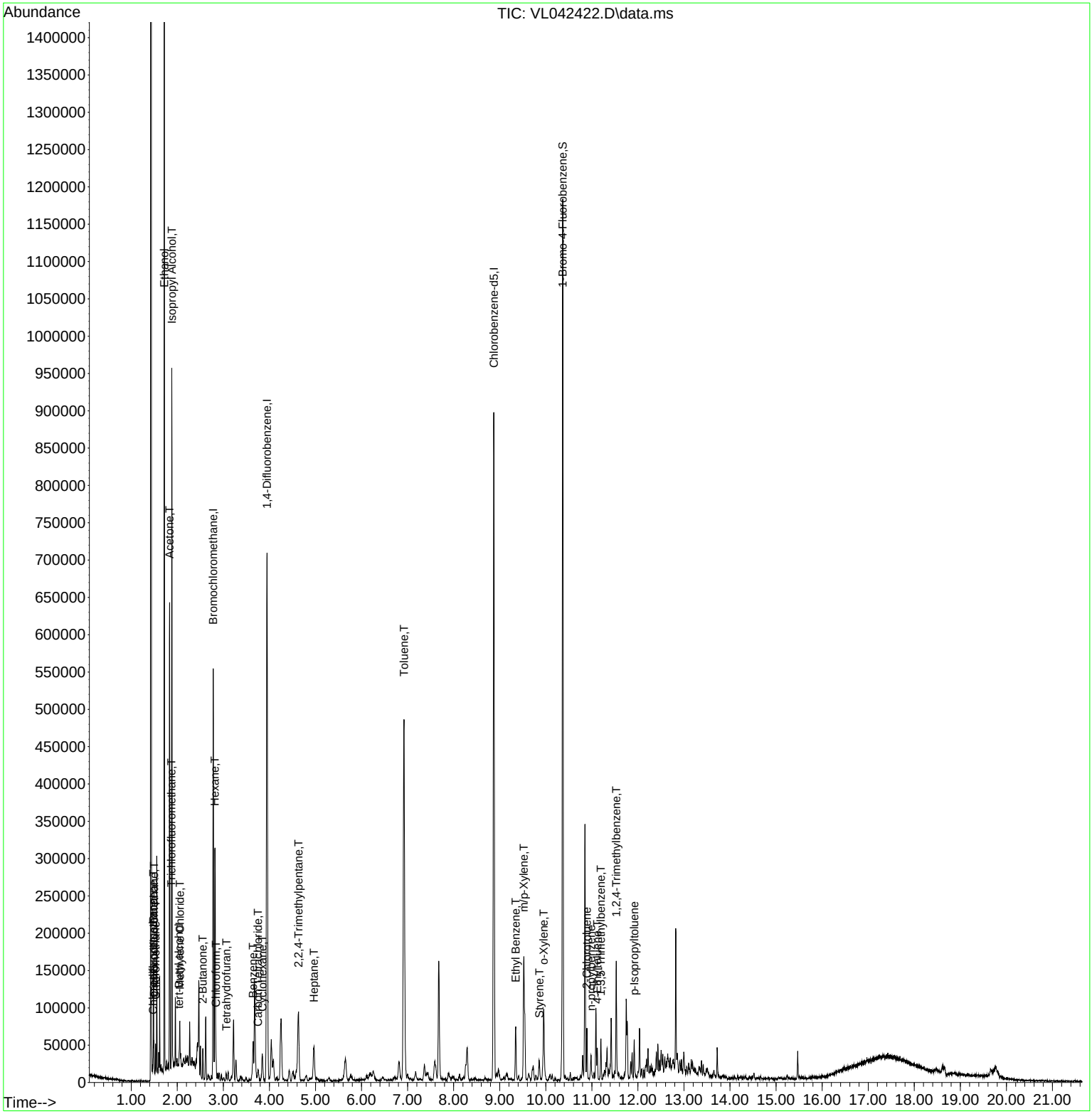
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

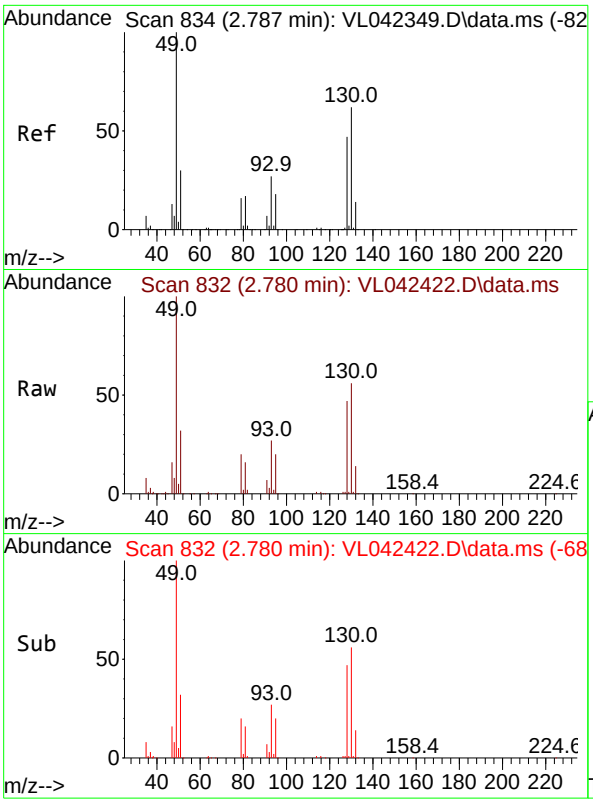
Quant Time: Apr 29 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

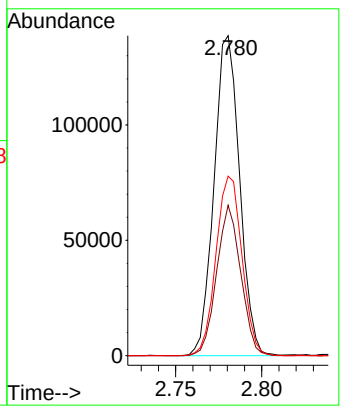




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 49 Resp: 14344

Ion	Ratio	Lower	Upper
49	100		
128	44.3	22.8	68.4
130	57.0	29.3	88.0



Instrument :
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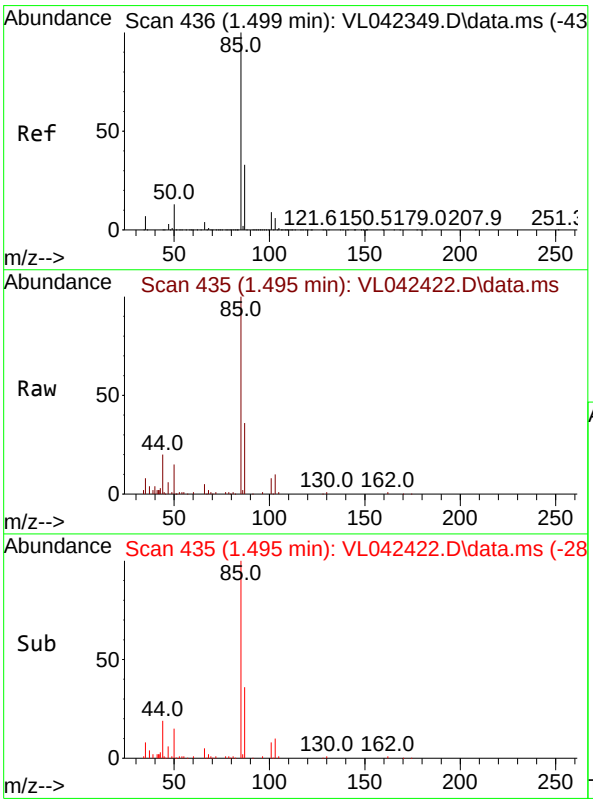
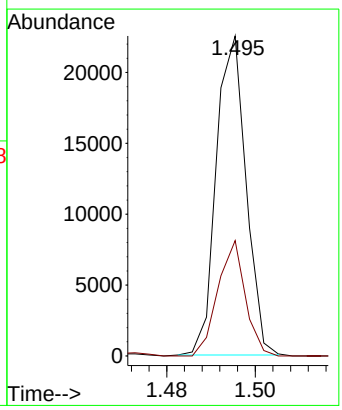
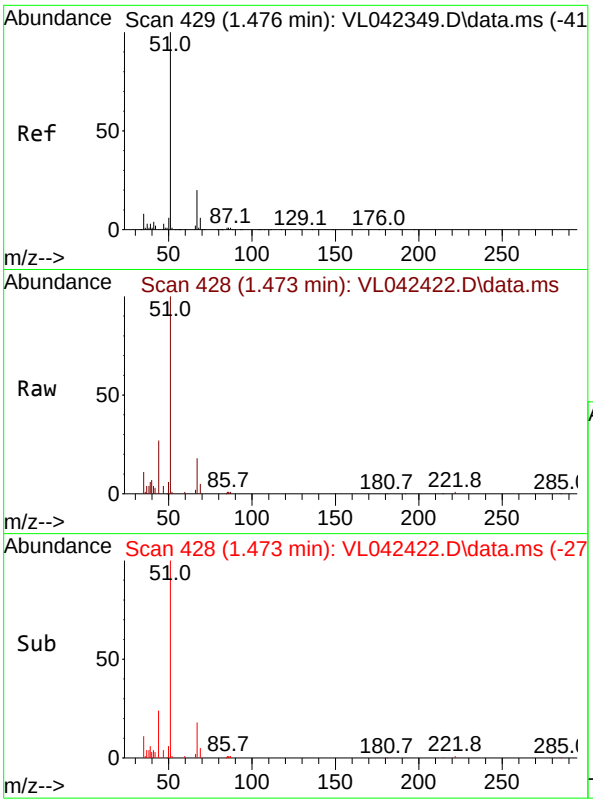


#2
Dichlorodifluoromethane
Concen: 0.415 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 85 Resp: 10522

Ion	Ratio	Lower	Upper
85	100		
87	36.2	26.6	39.8





#3
Chlorodifluoromethane
Concen: 0.275 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 51 Resp: 664

Ion	Ratio	Lower	Upper
51	100		
67	24.4	16.2	24.4#

Instrument :
MSVOA_L
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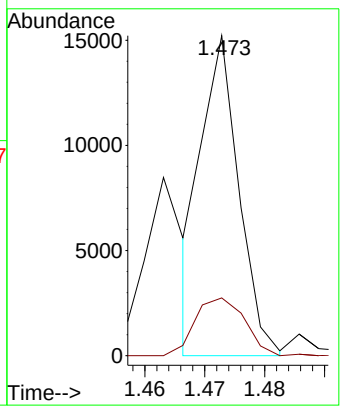
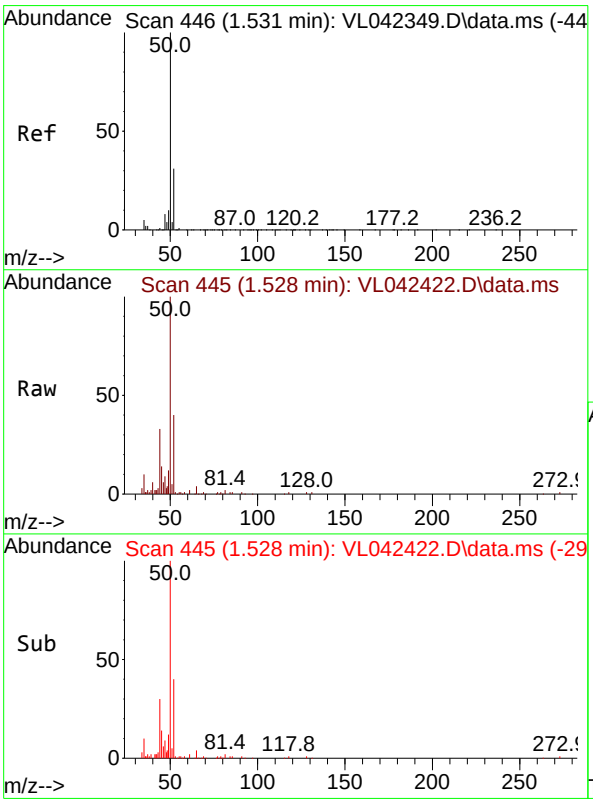
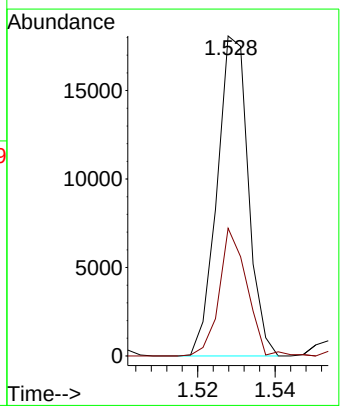


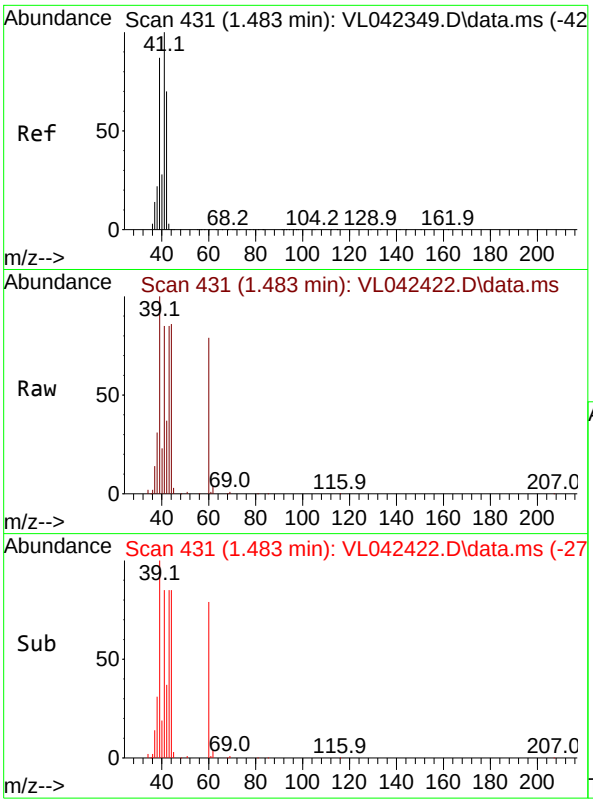


#4
Chloromethane
Concen: 1.009 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 50 Resp: 10118

Ion	Ratio	Lower	Upper
50	100		
52	39.3	24.7	37.1#

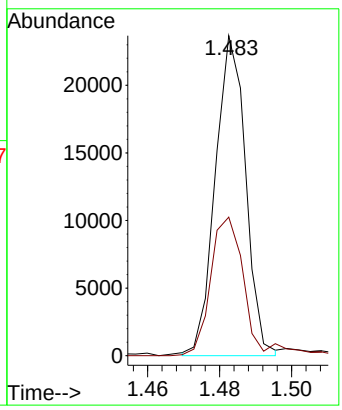




#9
Propene
Concen: 1.259 ppbv m
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 41 Resp: 1383

Ion	Ratio	Lower	Upper
41	100		
42	155.2	56.2	84.4



Instrument :
MSVOA_L
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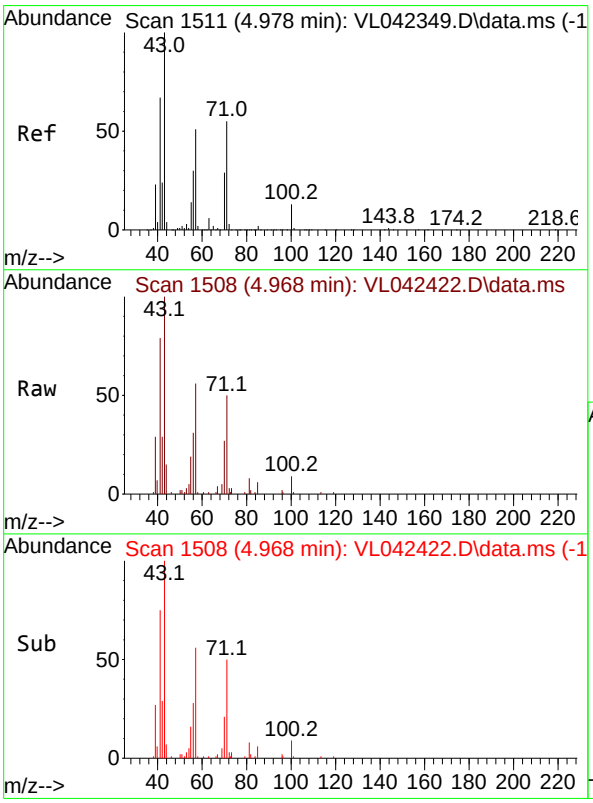
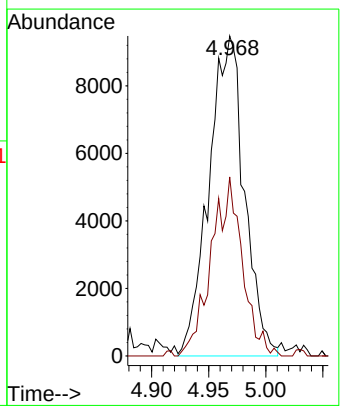
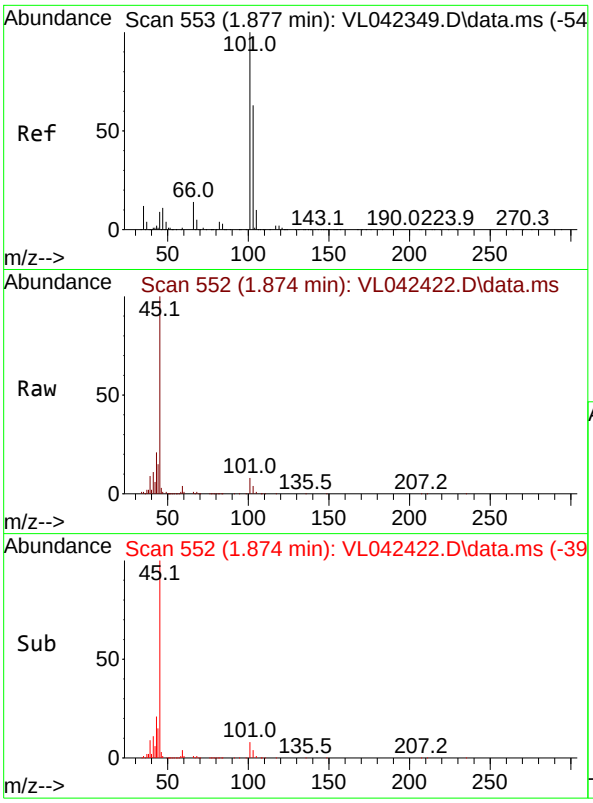


#10
Heptane
Concen: 0.664 ppbv m
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 20505

Ion	Ratio	Lower	Upper
43	100		
57	49.0	39.9	59.9





#11
Trichlorofluoromethane
Concen: 0.215 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:101 Resp: 517

Ion	Ratio	Lower	Upper
101	100		
103	57.2	50.1	75.1

Instrument :
MSVOA_L
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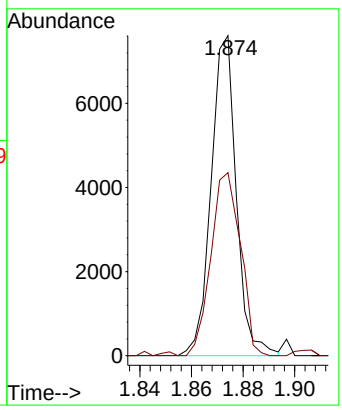
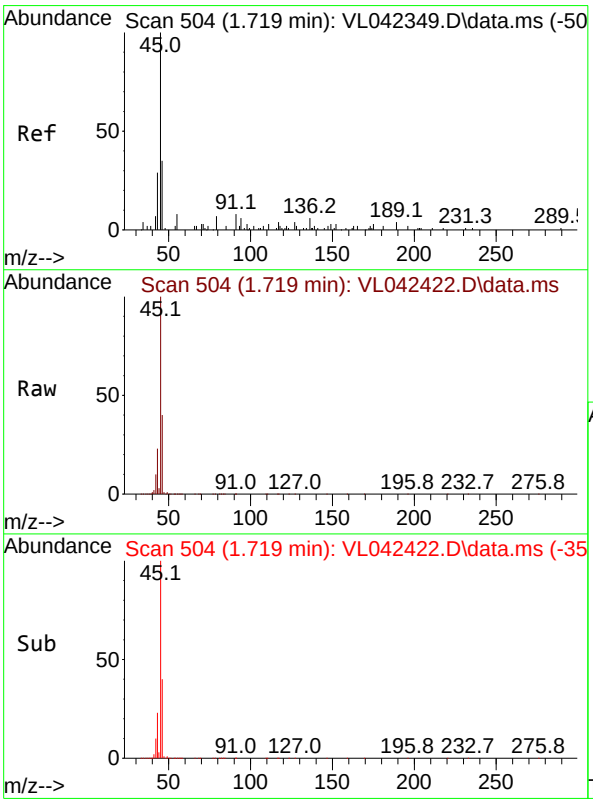
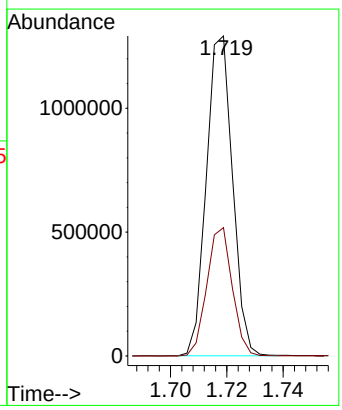


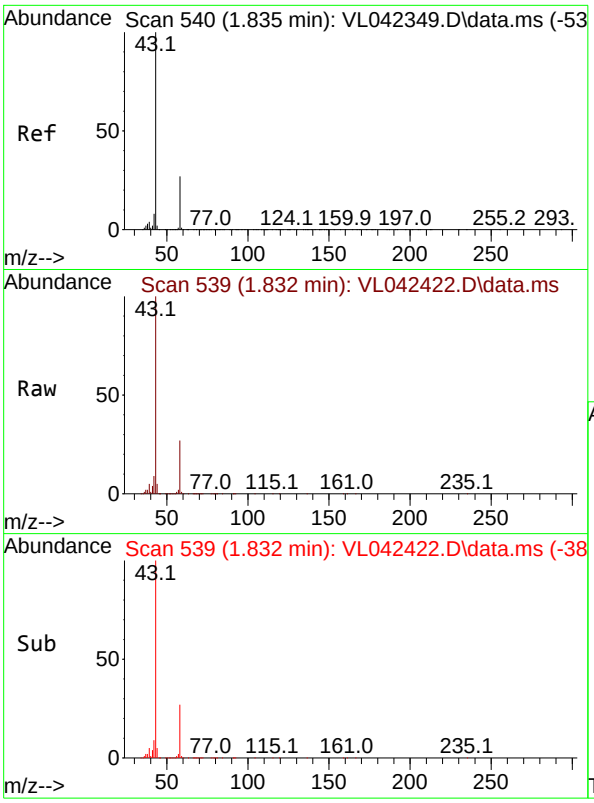


#13
Ethanol
Concen: 477.751 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 45 Resp: 834583

Ion	Ratio	Lower	Upper
45	100		
46	39.0	21.9	87.7

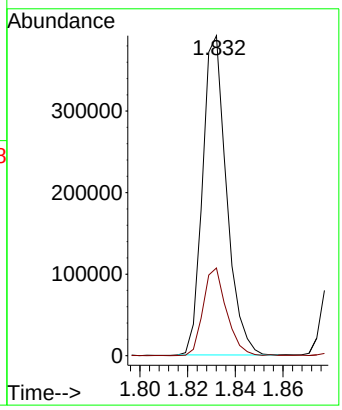




#15
Acetone
Concen: 11.668 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 27399

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
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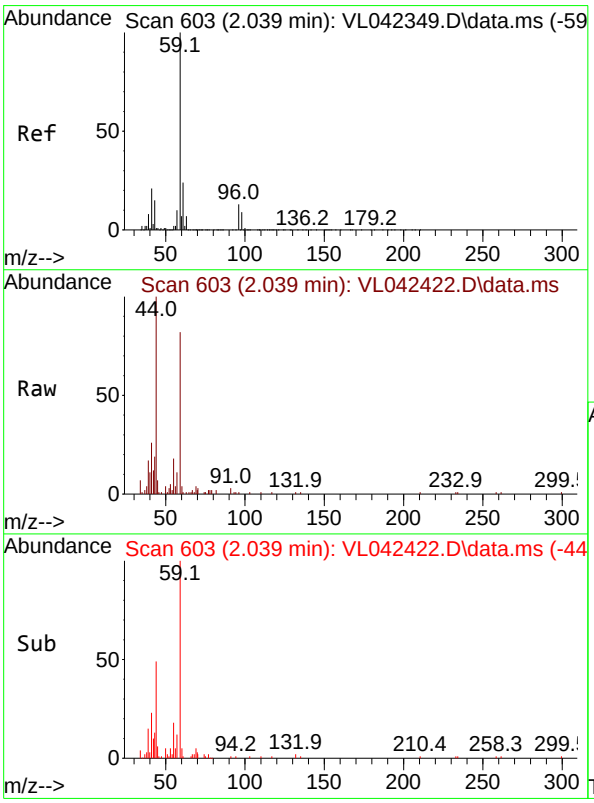
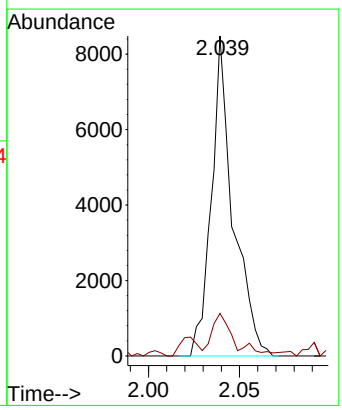
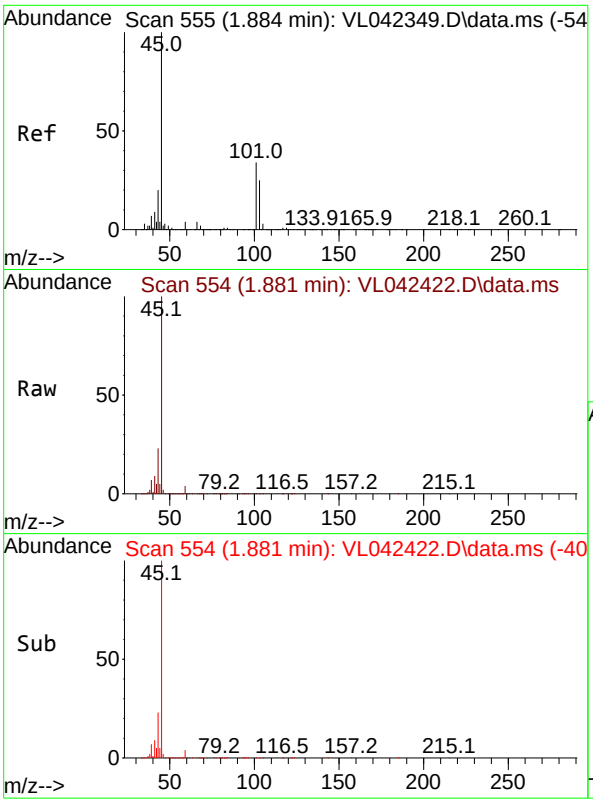


#17
tert-Butyl alcohol
Concen: 0.241 ppbv m
RT: 2.039 min Scan# 603
Delta R.T. -0.000 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 59 Resp: 7025

Ion	Ratio	Lower	Upper
59	100		
57	26.7	8.7	13.1#





#19
Isopropyl Alcohol
Concen: 29.296 ppbv
RT: 1.881 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 45 Resp: 38216

Ion	Ratio	Lower	Upper
45	100		
58	0.8	34.5	51.7#

Instrument :
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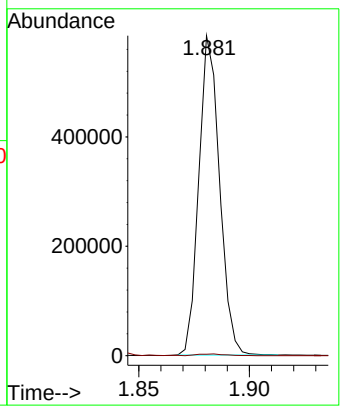
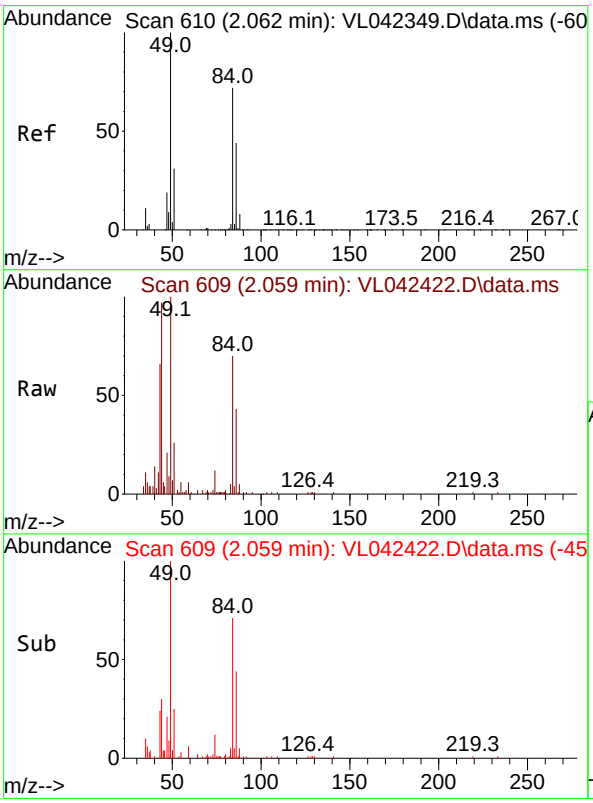
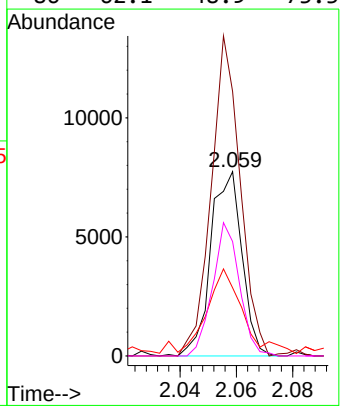


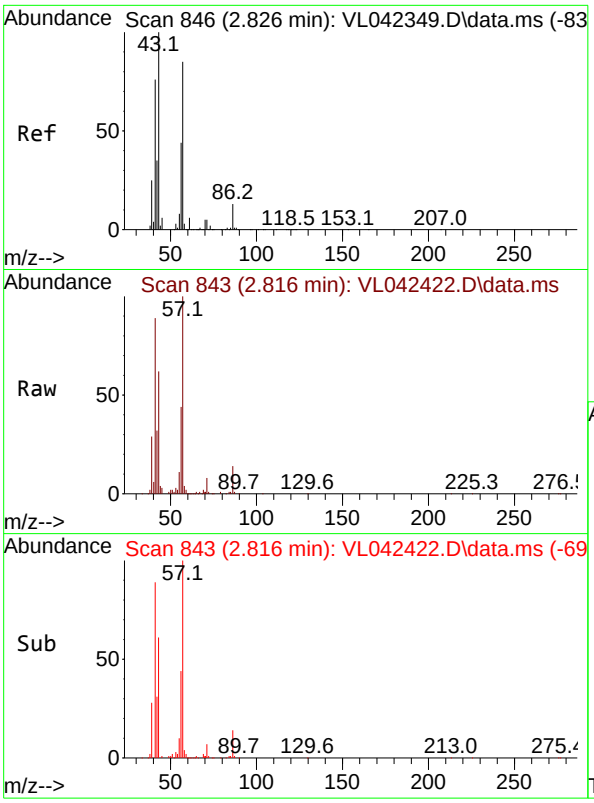


#20
Methylene Chloride
Concen: 0.646 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 84 Resp: 5939

Ion	Ratio	Lower	Upper
84	100		
49	143.4	111.6	167.4
51	35.0	35.1	52.7#
86	62.1	48.9	73.3

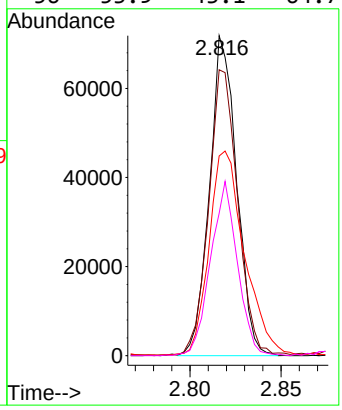




#26
Hexane
Concen: 3.180 ppbv
RT: 2.816 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 57 Resp: 7451

Ion	Ratio	Lower	Upper
57	100		
41	95.0	77.9	116.9
43	82.5	208.4	312.6#
56	53.9	43.1	64.7



Instrument :
MSVOA_L
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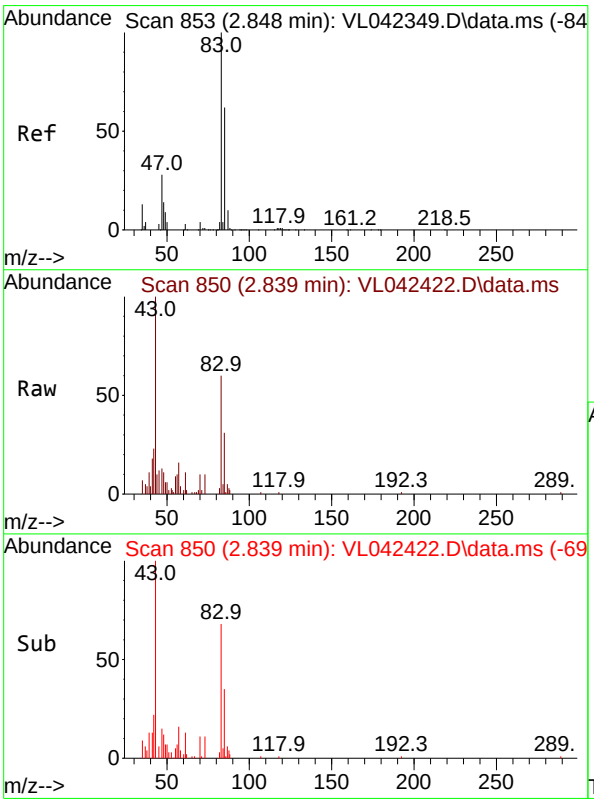
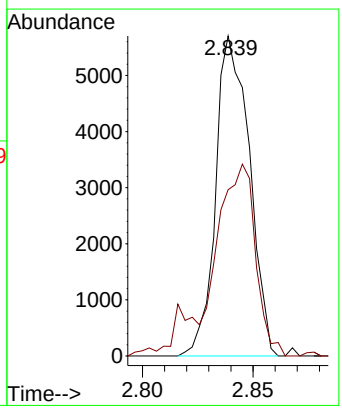
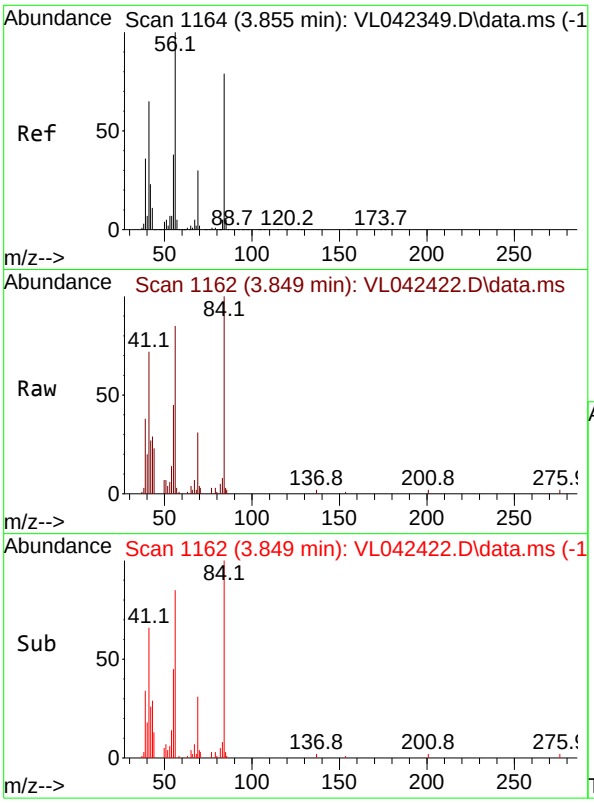


#29
Chloroform
Concen: 0.183 ppbv
RT: 2.839 min Scan# 850
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 83 Resp: 6046

Ion	Ratio	Lower	Upper
83	100		
85	49.0	50.0	75.0#

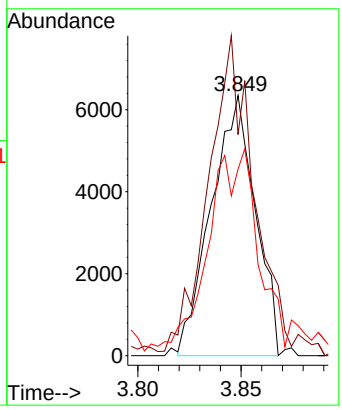




#30
Cyclohexane
Concen: 0.499 ppbv
RT: 3.849 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 84 Resp: 944

Ion	Ratio	Lower	Upper
84	100		
56	135.0	101.0	151.4
41	96.3	67.4	101.0



Instrument :
MSVOA_L
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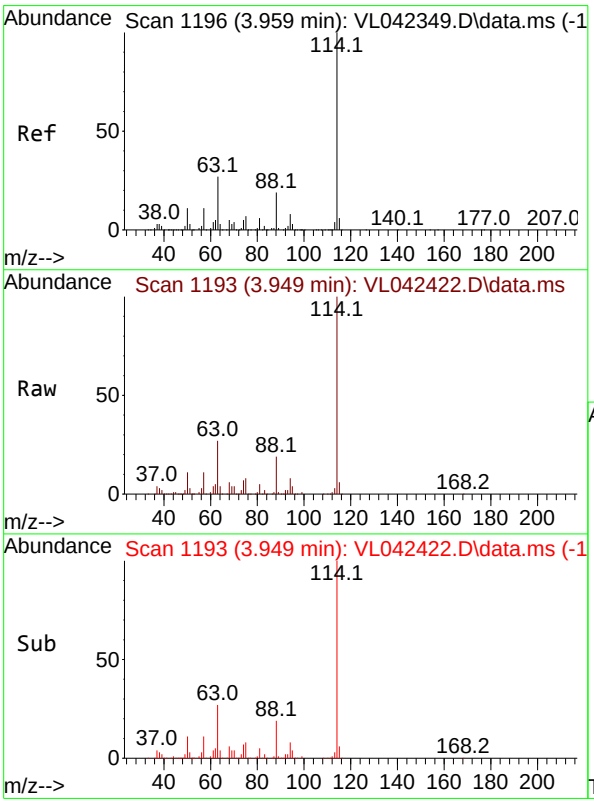
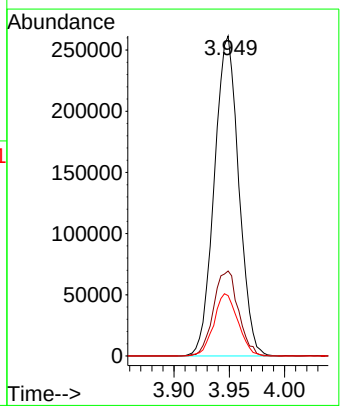
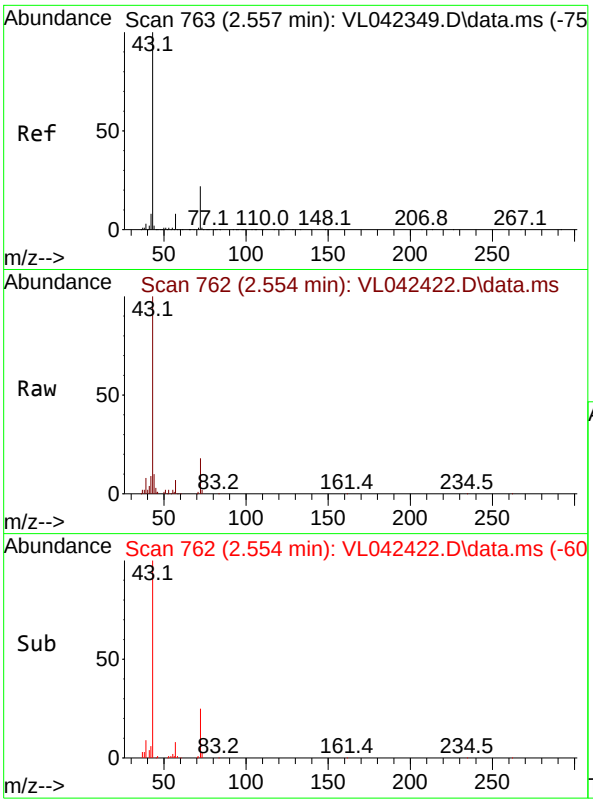


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:114 Resp: 401346

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.2	15.5	23.3

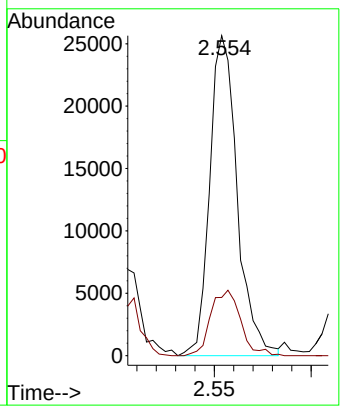




#34
2-Butanone
Concen: 0.797 ppbv
RT: 2.554 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 2528

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations
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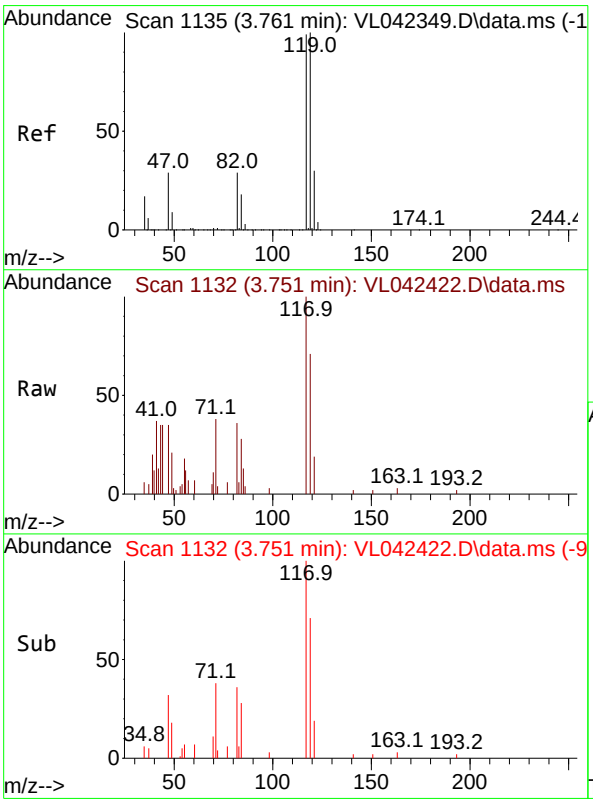
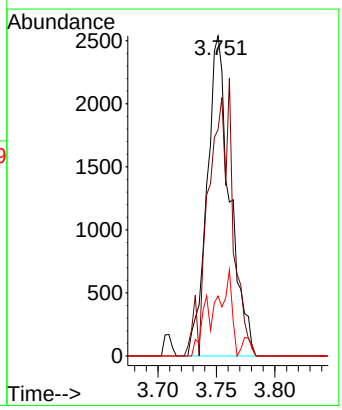
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

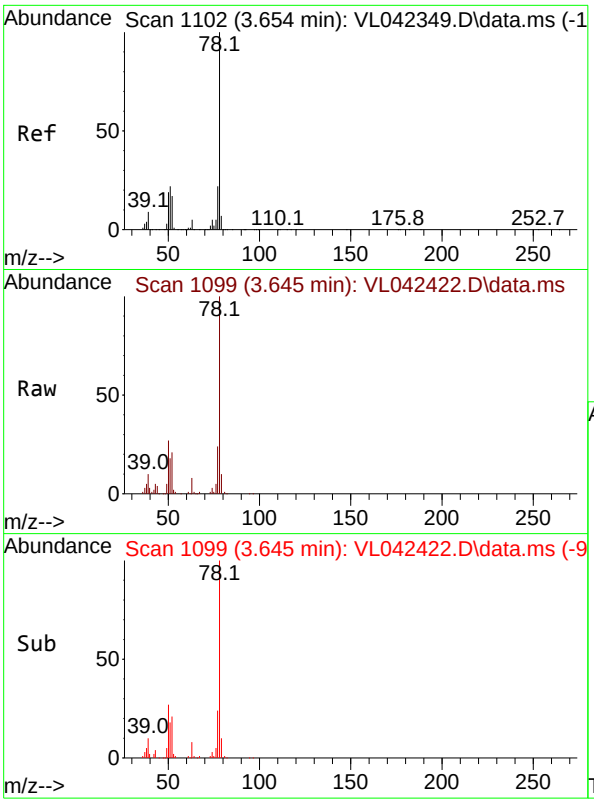


#35
Carbon Tetrachloride
Concen: 0.094 ppbv m
RT: 3.751 min Scan# 1132
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:117 Resp: 3431

Ion	Ratio	Lower	Upper
117	100		
119	70.8	80.5	120.7#
121	18.8	24.2	36.2#

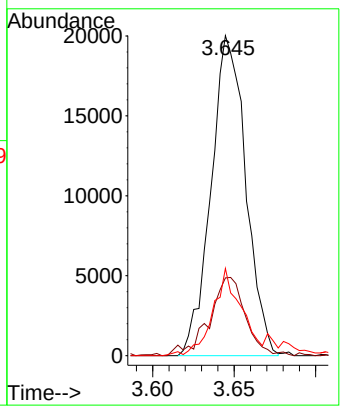




#36
Benzene
Concen: 0.684 ppbv
RT: 3.645 min Scan# 1
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 78 Resp: 2962

Ion	Ratio	Lower	Upper
78	100		
77	23.4	17.4	26.0
50	26.0	15.5	23.3#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations
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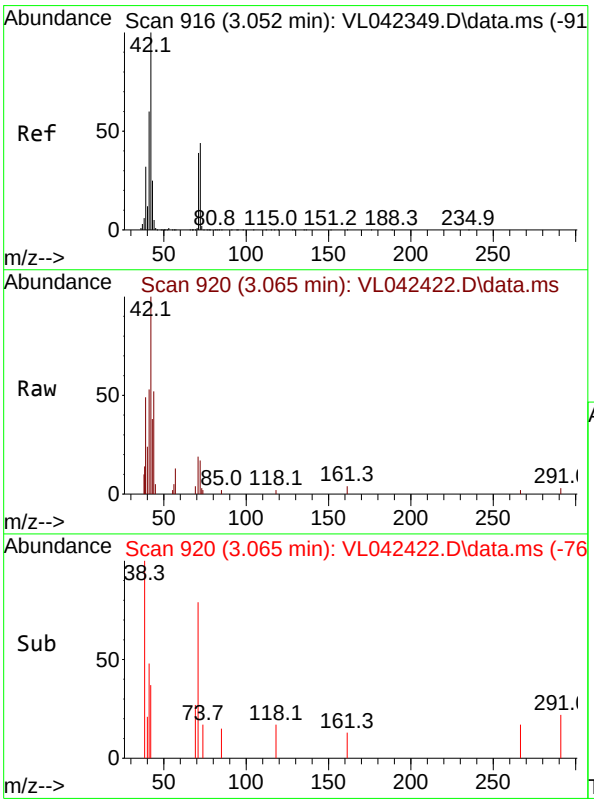
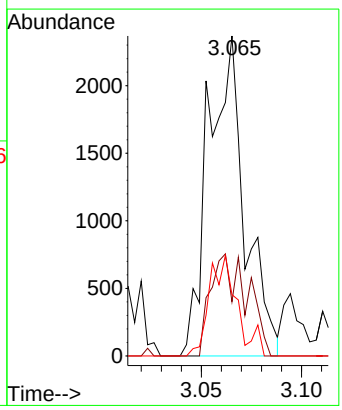
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

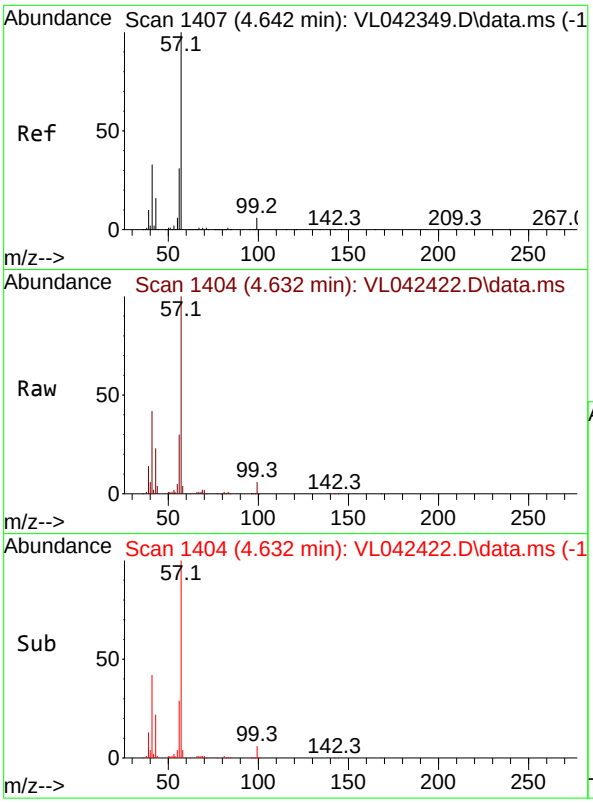


#41
Tetrahydrofuran
Concen: 0.161 ppbv m
RT: 3.065 min Scan# 920
Delta R.T. 0.013 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 42 Resp: 2983

Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.3	48.5#
71	0.0	31.4	47.2#

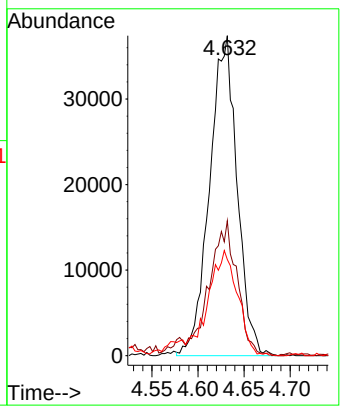




#44
2,2,4-Trimethylpentane
Concen: 1.039 ppbv m
RT: 4.632 min Scan# 14
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 57 Resp: 7769

Ion	Ratio	Lower	Upper
57	100		
41	44.2	27.2	40.8#
56	38.7	25.7	38.5#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

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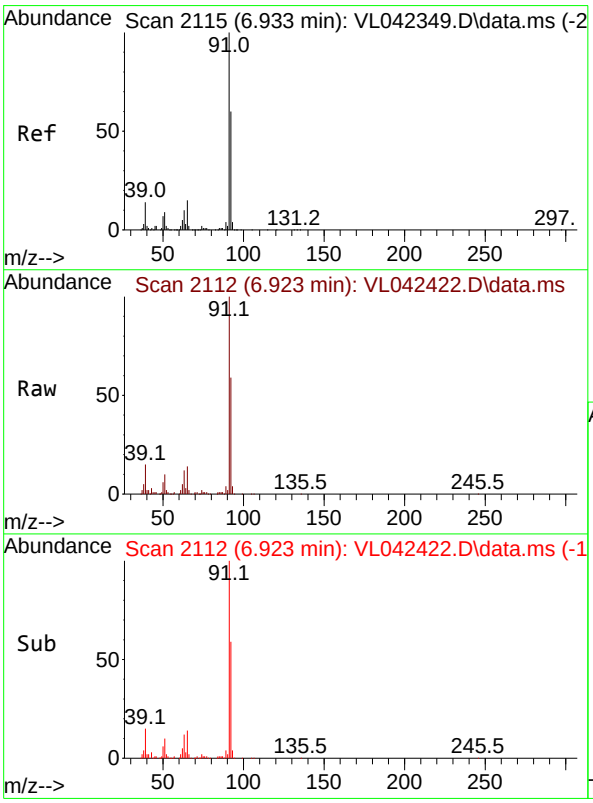
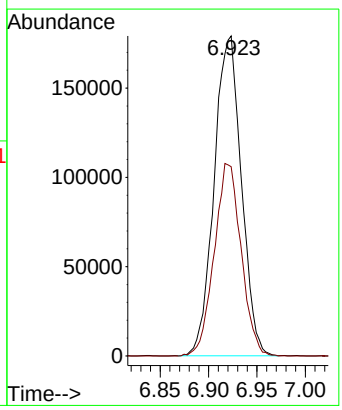
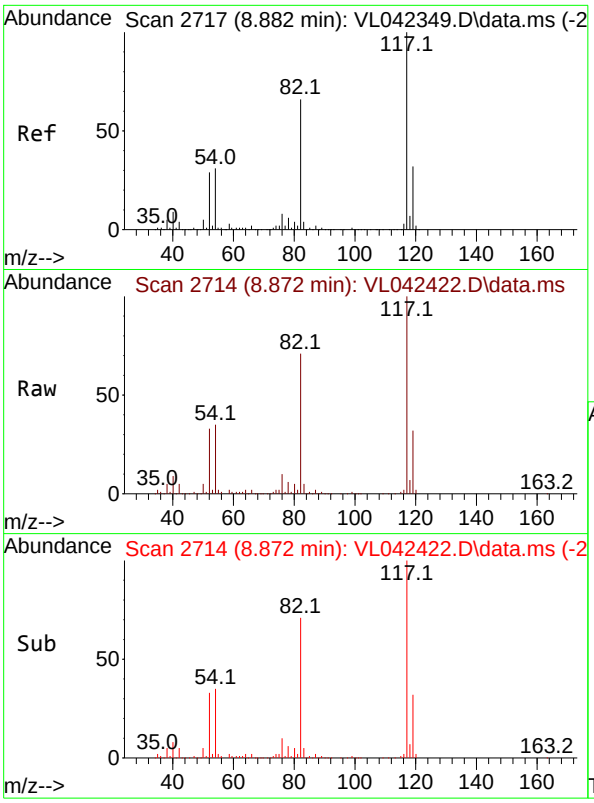


#53
Toluene
Concen: 6.746 ppbv
RT: 6.923 min Scan# 2112
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 350451

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.2	72.4

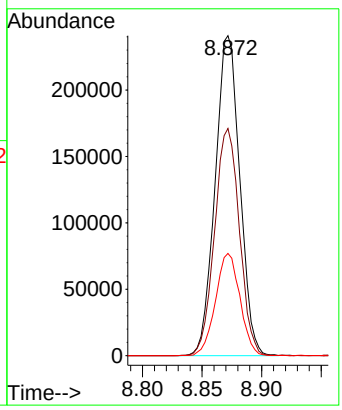




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 2
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:117 Resp: 34637

Ion	Ratio	Lower	Upper
117	100		
82	71.5	57.8	86.6
119	31.7	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
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Reviewed By :Semsettin Yesilyurt 04/29/2025
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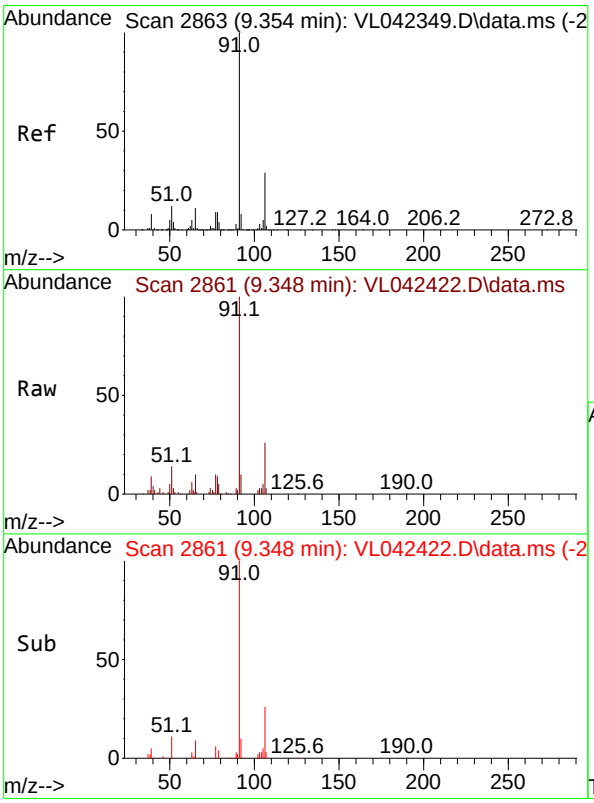
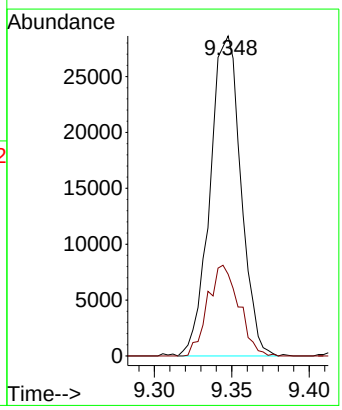
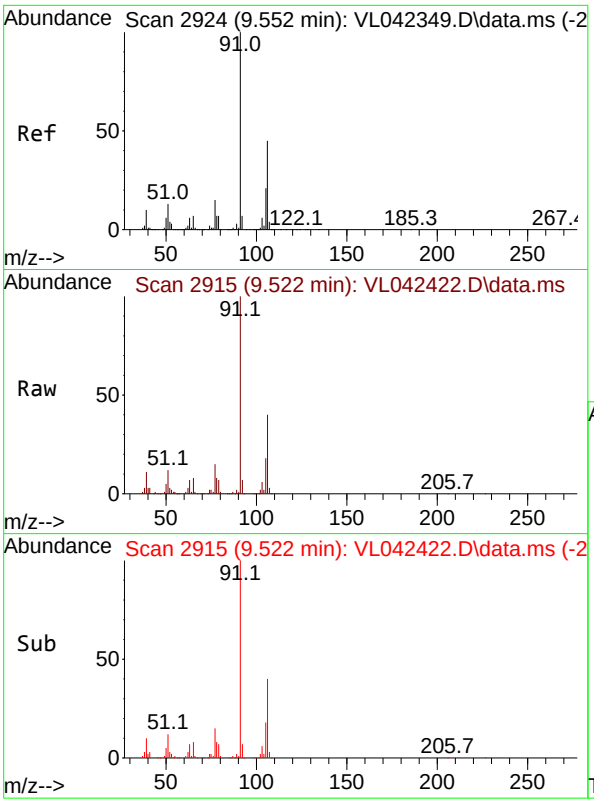


#58
Ethyl Benzene
Concen: 0.579 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 39720

Ion	Ratio	Lower	Upper
91	100		
106	25.5	23.0	34.4

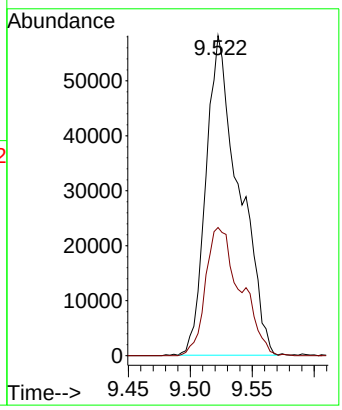




#59
m/p-Xylene
Concen: 1.955 ppbv
RT: 9.522 min Scan# 2
Delta R.T. -0.029 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 10808

Ion	Ratio	Lower	Upper
91	100		
106	42.5	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations
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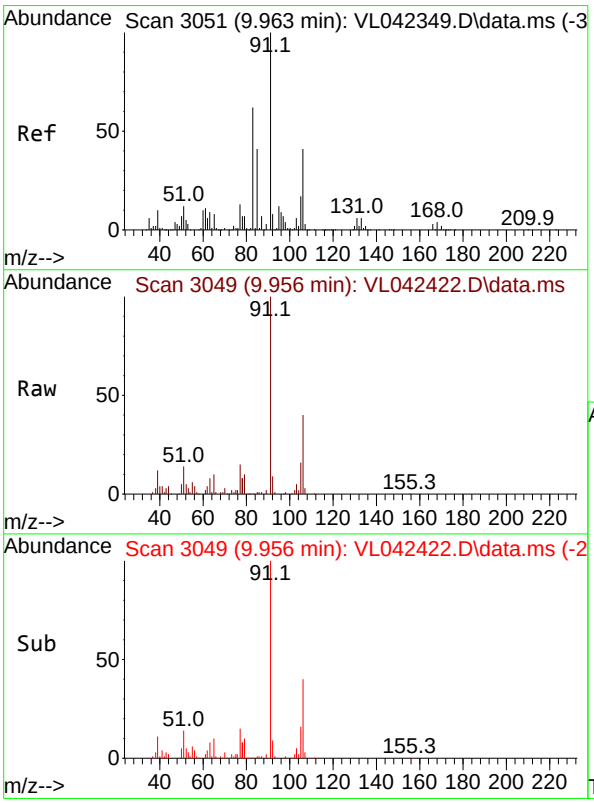
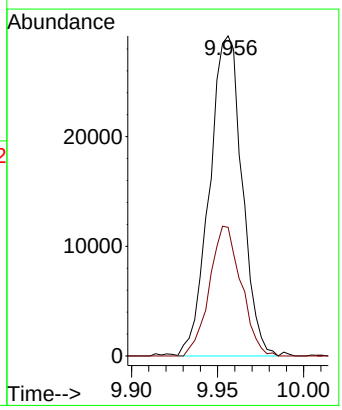
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

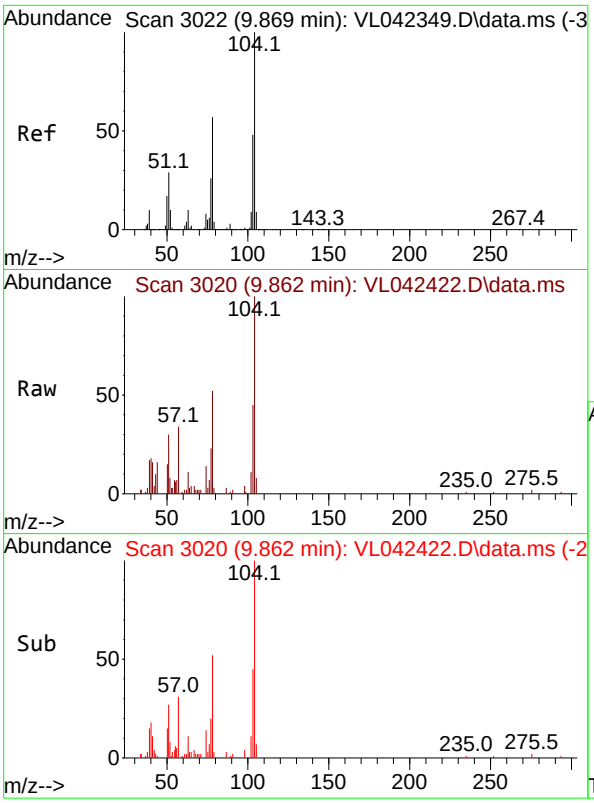


#60
o-Xylene
Concen: 0.691 ppbv
RT: 9.956 min Scan# 3049
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 38480

Ion	Ratio	Lower	Upper
91	100		
106	39.4	21.1	63.4

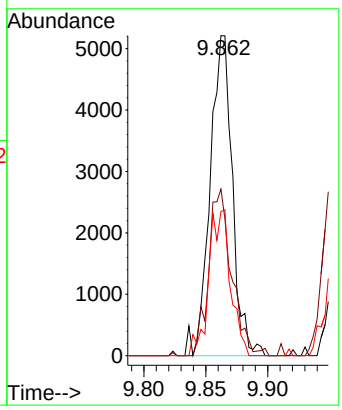




#61
Styrene
Concen: 0.246 ppbv m
RT: 9.862 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:104 Resp: 653

Ion	Ratio	Lower	Upper
104	100		
78	54.0	44.6	66.8
103	44.5	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Manual Integrations
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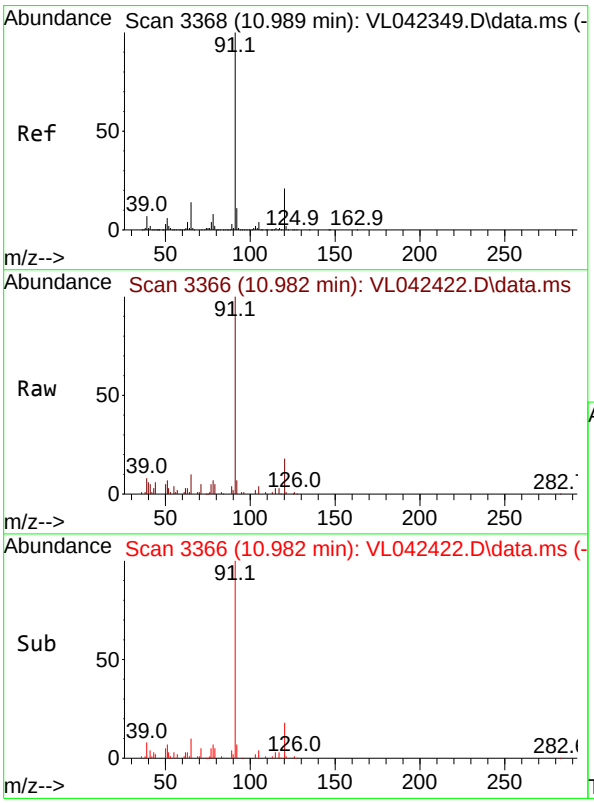
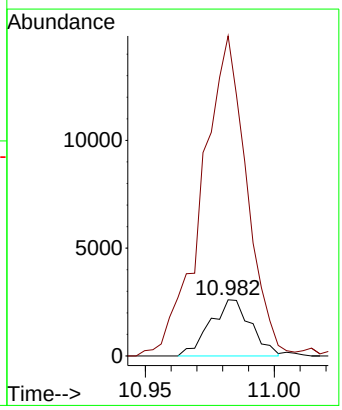
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

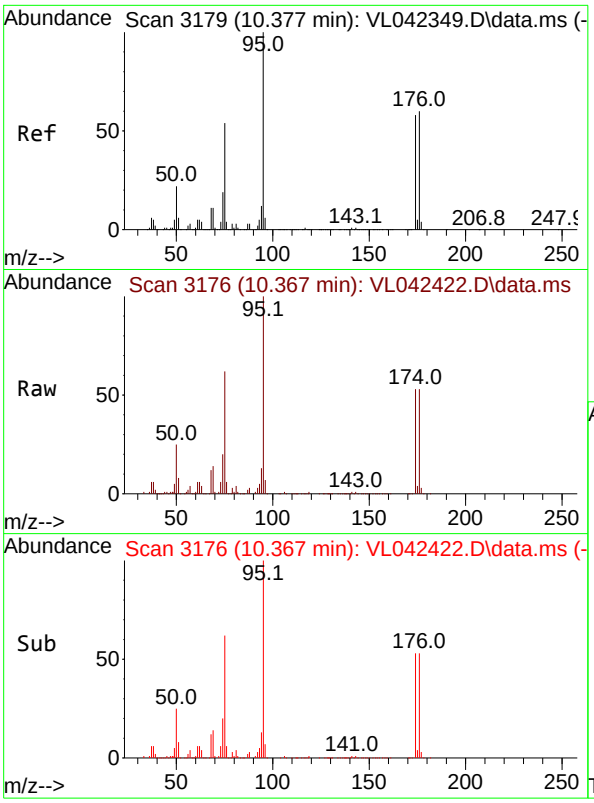


#64
n-propylbenzene
Concen: 0.139 ppbv
RT: 10.982 min Scan# 3366
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:120 Resp: 2864

Ion	Ratio	Lower	Upper
120	100		
91	636.1	392.4	588.6#

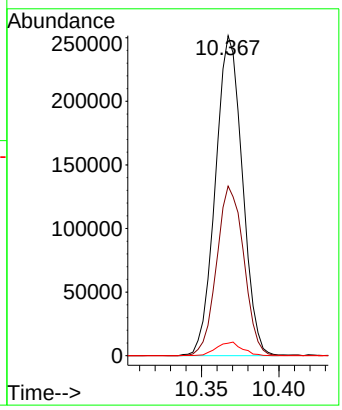




#68
1-Bromo-4-Fluorobenzene
Concen: 10.699 ppbv
RT: 10.367 min Scan# 3
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 95 Resp: 30453

Ion	Ratio	Lower	Upper
95	100		
174	53.5	48.5	72.7
175	4.1	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

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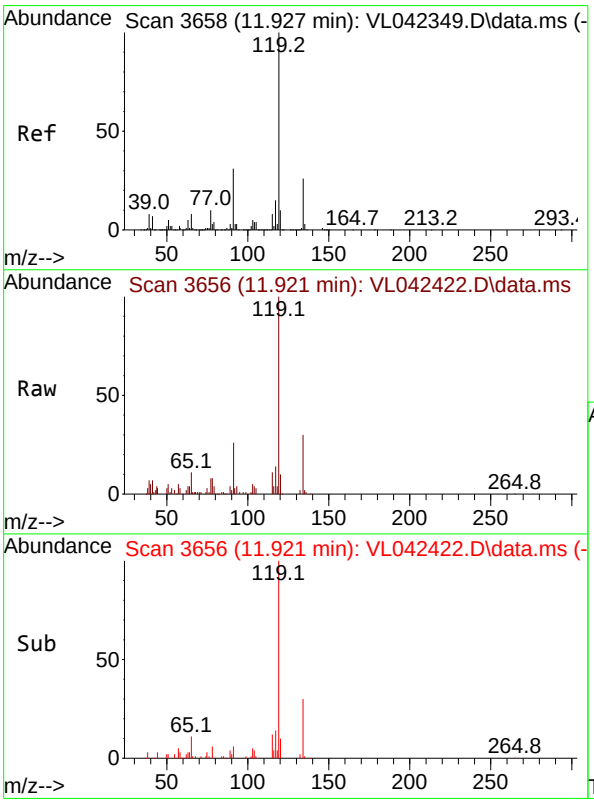
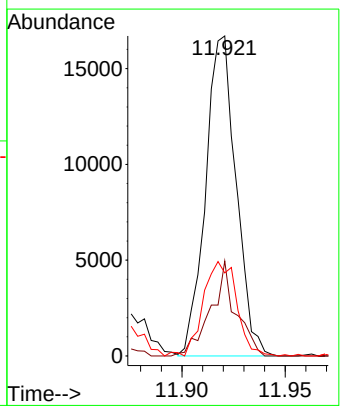
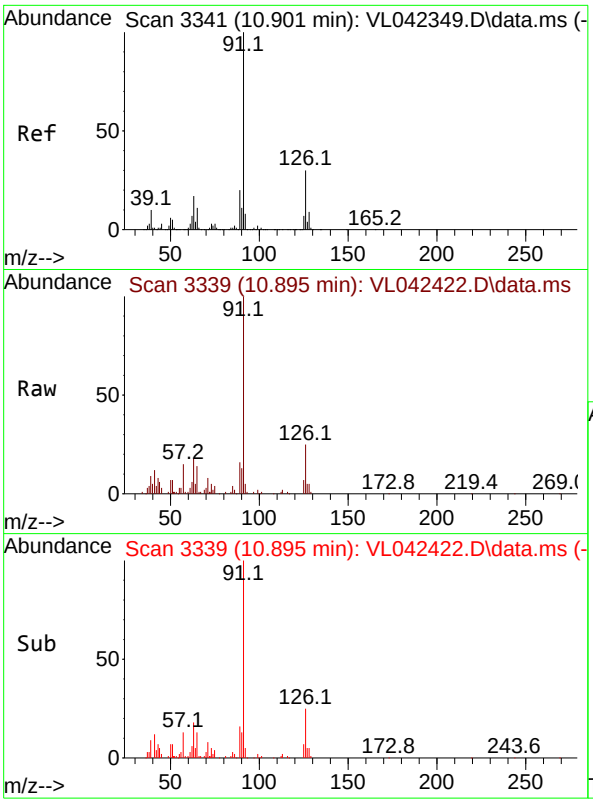


#69
p-Isopropyltoluene
Concen: 0.189 ppbv
RT: 11.921 min Scan# 3656
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:119 Resp: 17184

Ion	Ratio	Lower	Upper
119	100		
134	24.4	20.0	30.0
91	32.0	24.4	36.6

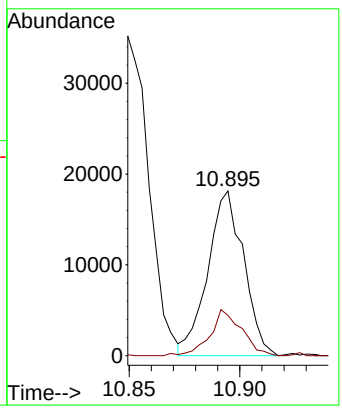




#71
2-Chlorotoluene
Concen: 0.319 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 2042

Ion	Ratio	Lower	Upper
91	100		
126	25.0	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
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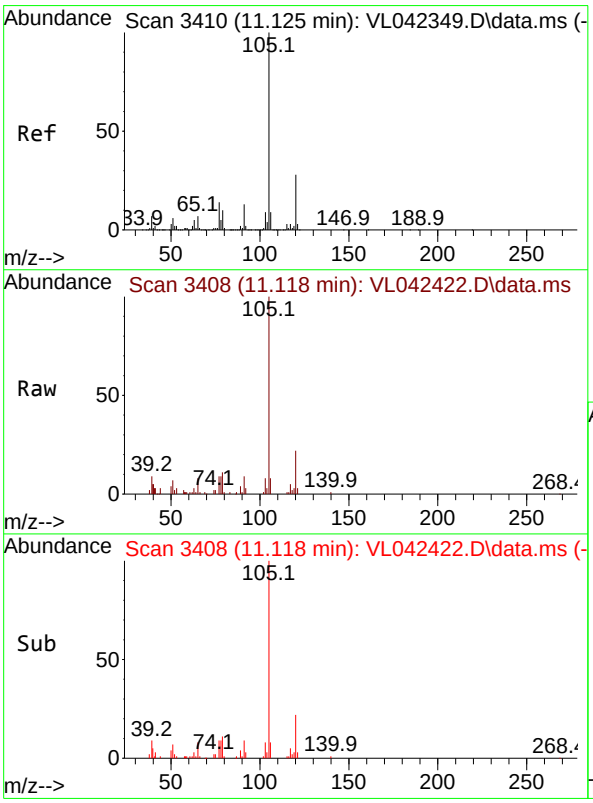
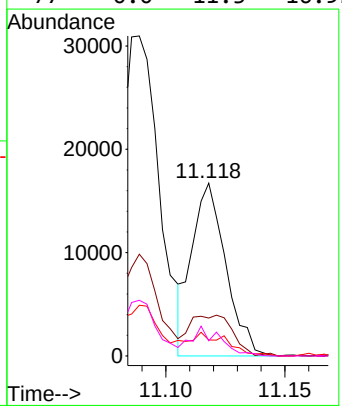
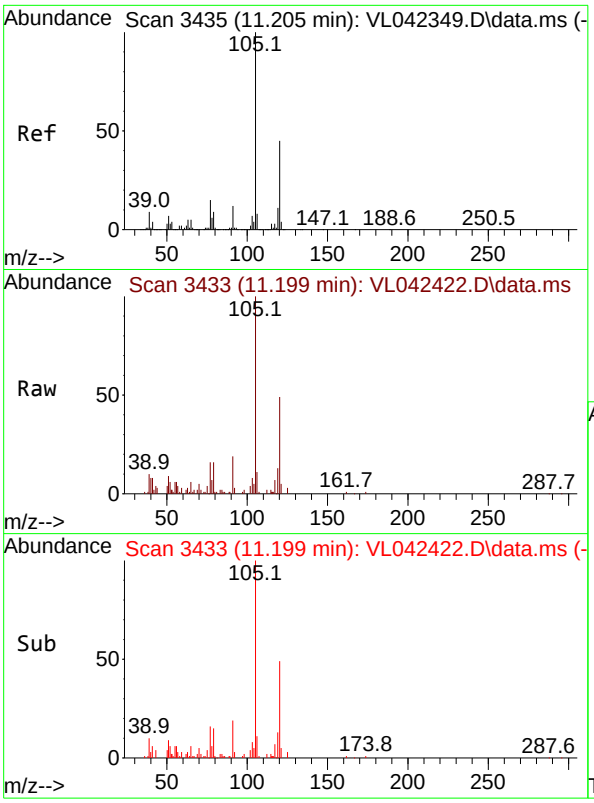


#72
4-Ethyltoluene
Concen: 0.244 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:105 Resp: 16614

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

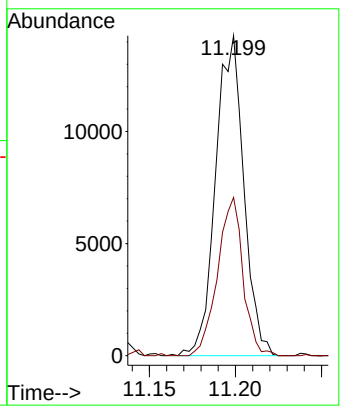




#73
1,3,5-Trimethylbenzene
Concen: 0.269 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:105 Resp: 1618

Ion	Ratio	Lower	Upper
105	100		
120	49.5	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

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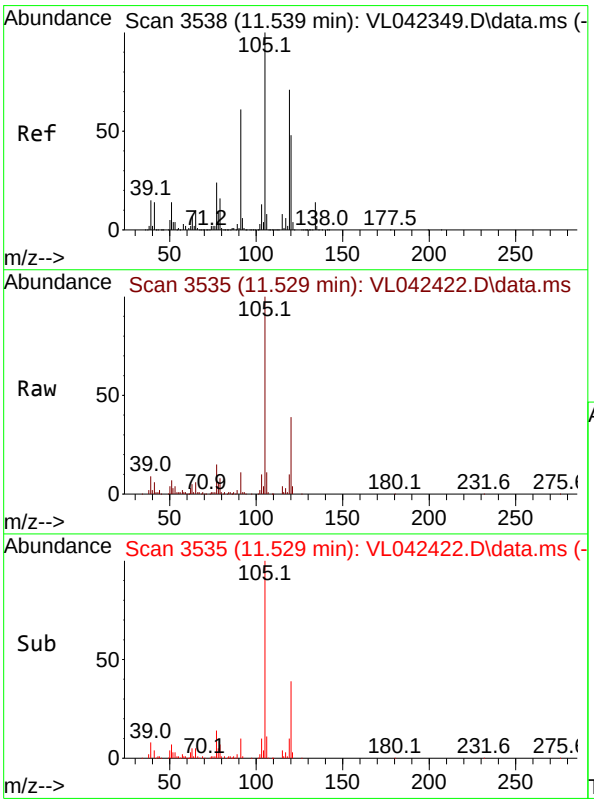
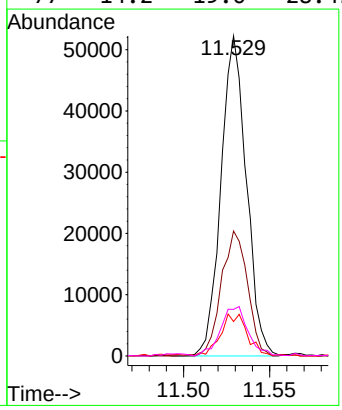


#74
1,2,4-Trimethylbenzene
Concen: 0.764 ppbv
RT: 11.529 min Scan# 3535
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:105 Resp: 53644

Ion	Ratio	Lower	Upper
105	100		
120	39.0	38.1	57.1
91	10.4	48.8	73.2#
77	14.2	19.0	28.4#



LSC Area Percent Report

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Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042422.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	409	414	420	rBV	4460760	5032148	100.00%	28.161%
2	1.486	426	432	434	rBV3	137920	85842	1.71%	0.480%
3	1.554	449	453	458	rBV2	289169	157190	3.12%	0.880%
4	1.618	469	473	476	rVB	127032	67891	1.35%	0.380%
5	1.719	499	504	510	rBV	2334806	1489559	29.60%	8.336%
6	1.832	534	539	547	rBV	626145	500494	9.95%	2.801%
7	1.881	547	554	560	rBV	938602	634087	12.60%	3.548%
8	1.958	574	578	584	rVB	92099	62902	1.25%	0.352%
9	2.055	599	608	611	rBV4	60902	65138	1.29%	0.365%
10	2.466	730	735	742	rVB2	126705	130928	2.60%	0.733%
11	2.619	774	782	789	rVB	84592	90164	1.79%	0.505%
12	2.780	824	832	838	rBV2	550256	561308	11.15%	3.141%
13	2.819	838	844	858	rVB	308935	375303	7.46%	2.100%
14	3.221	956	968	977	rVB3	80710	113229	2.25%	0.634%
15	3.648	1084	1100	1104	rBV4	52800	88391	1.76%	0.495%
16	3.677	1104	1109	1123	rVB3	126270	194062	3.86%	1.086%
17	3.845	1148	1161	1170	rBV4	36639	64167	1.28%	0.359%
18	3.949	1180	1193	1207	rBV	706631	1114552	22.15%	6.237%
19	4.039	1210	1221	1229	rBV2	52153	90733	1.80%	0.508%
20	4.253	1274	1287	1301	rBV5	82085	177342	3.52%	0.992%
21	4.632	1390	1404	1416	rVB2	91753	203730	4.05%	1.140%
22	4.968	1493	1508	1519	rVB4	43794	90355	1.80%	0.506%
23	5.648	1699	1718	1731	rBV10	29310	79946	1.59%	0.447%
24	6.813	2064	2078	2090	rBV5	24013	58160	1.16%	0.325%
25	6.920	2095	2111	2128	rBV2	483031	994319	19.76%	5.564%
26	7.590	2306	2318	2324	rBV8	25713	55922	1.11%	0.313%
27	7.674	2333	2344	2362	rVB4	157976	277952	5.52%	1.555%
28	8.289	2528	2534	2552	rVB9	45111	91441	1.82%	0.512%
29	8.872	2697	2714	2726	rBV	895588	1326674	26.36%	7.424%
30	9.348	2851	2861	2873	rBV2	72192	106349	2.11%	0.595%
31	9.522	2906	2915	2932	rVB2	165371	331234	6.58%	1.854%
32	9.956	3034	3049	3060	rBV5	94073	168970	3.36%	0.946%
33	10.367	3160	3176	3188	rBV	1181166	1469842	29.21%	8.226%
34	10.849	3316	3325	3333	rBV2	336986	407663	8.10%	2.281%
35	10.891	3333	3338	3347	rVB3	67337	78151	1.55%	0.437%
36	10.982	3356	3366	3379	rBV2	32756	53493	1.06%	0.299%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	11.089	3391	3399	3404	rBV	93773	106842	2.12%	0.598%
38	11.196	3422	3432	3442	rBV2	54977	64993	1.29%	0.364%
39	11.419	3490	3501	3510	rVB6	80544	112242	2.23%	0.628%
40	11.529	3528	3535	3549	rVB2	154227	184290	3.66%	1.031%
41	11.746	3594	3602	3606	rBV3	100868	113241	2.25%	0.634%
42	11.769	3606	3609	3617	rVB2	76201	79599	1.58%	0.445%
43	11.921	3649	3656	3662	rBV3	50931	60103	1.19%	0.336%
44	12.034	3683	3691	3698	rVB8	63352	71664	1.42%	0.401%
45	12.820	3928	3934	3940	rBV	187136	186715	3.71%	1.045%

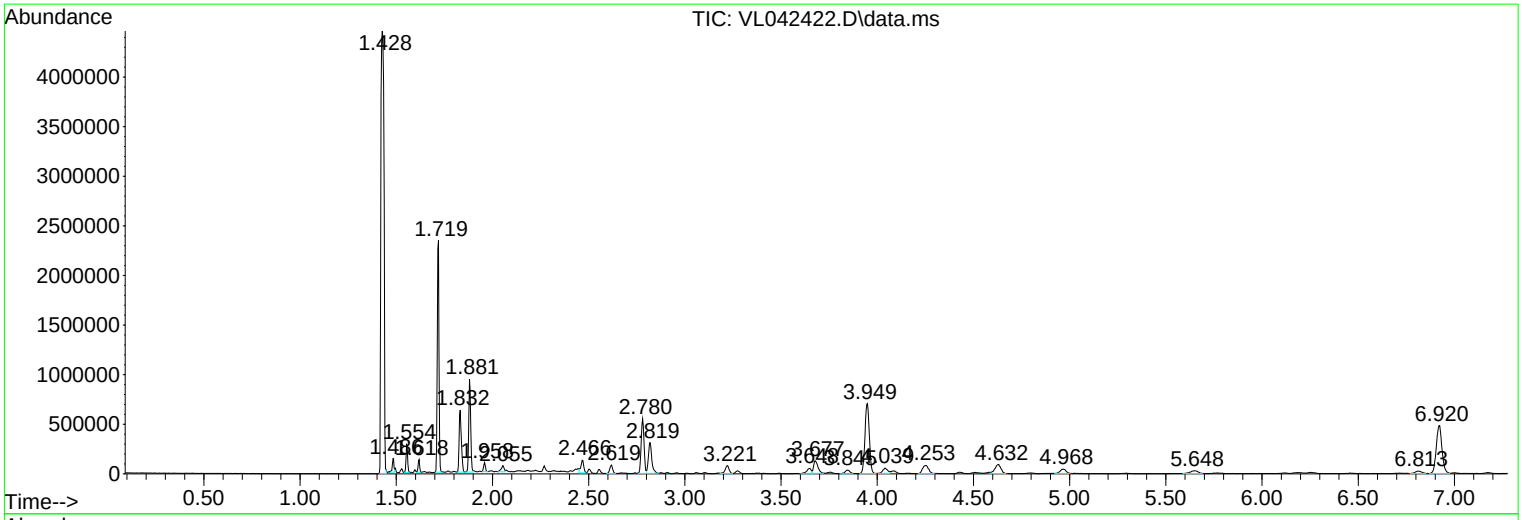
Sum of corrected areas: 17869320

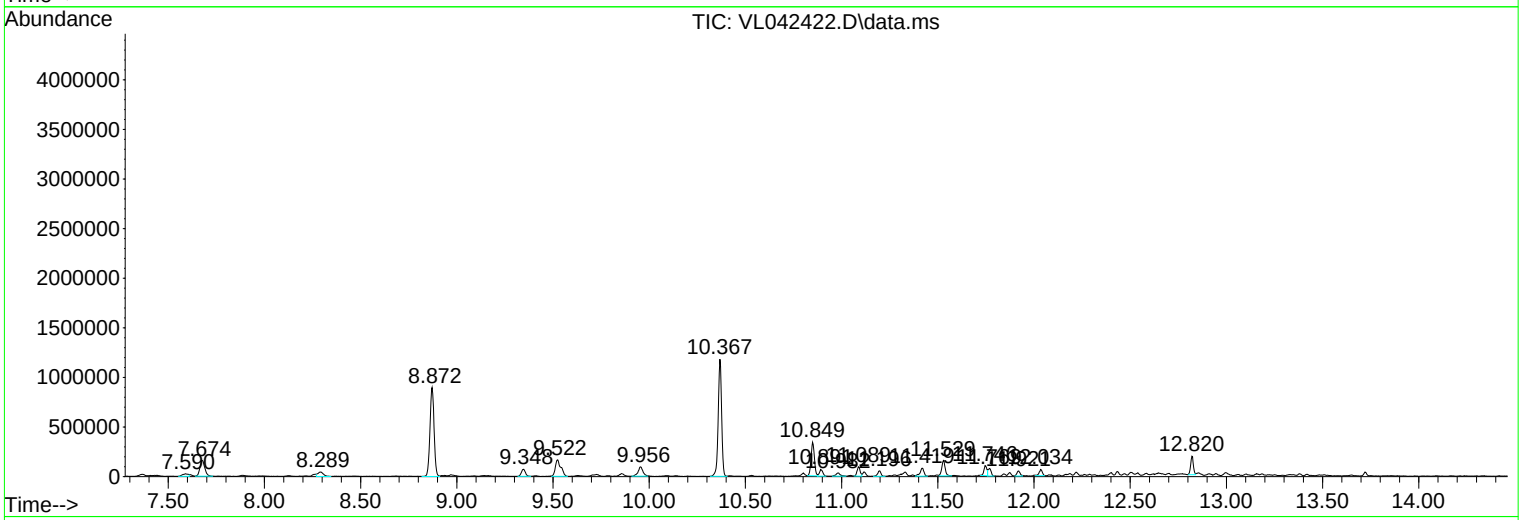
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

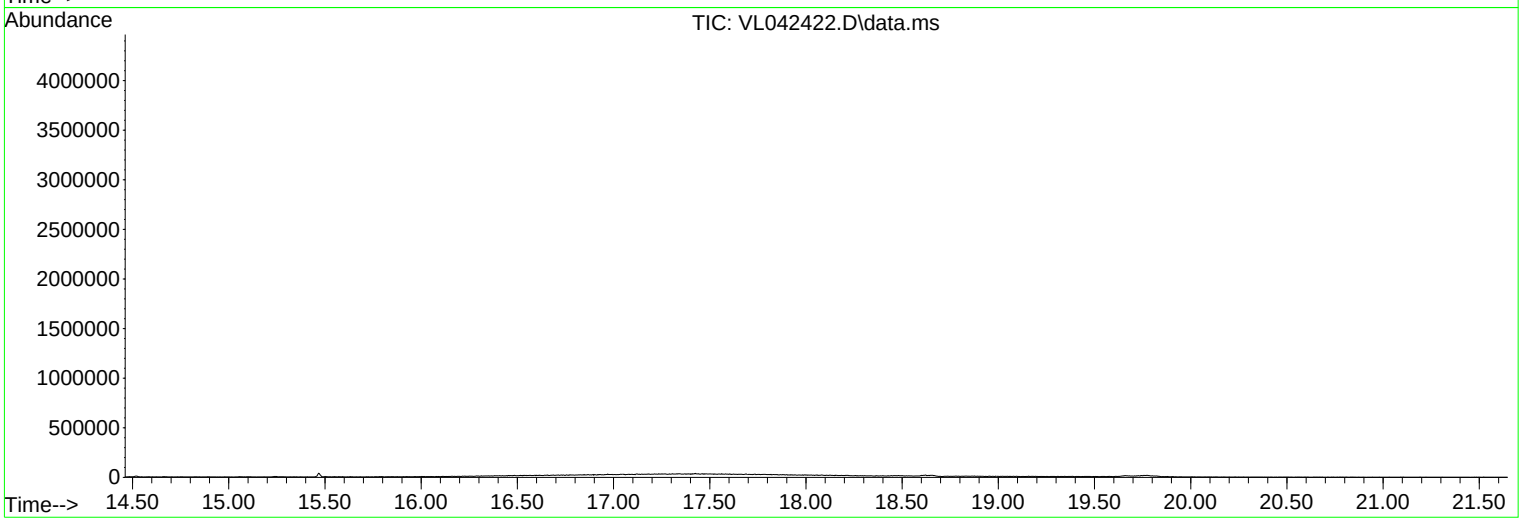
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

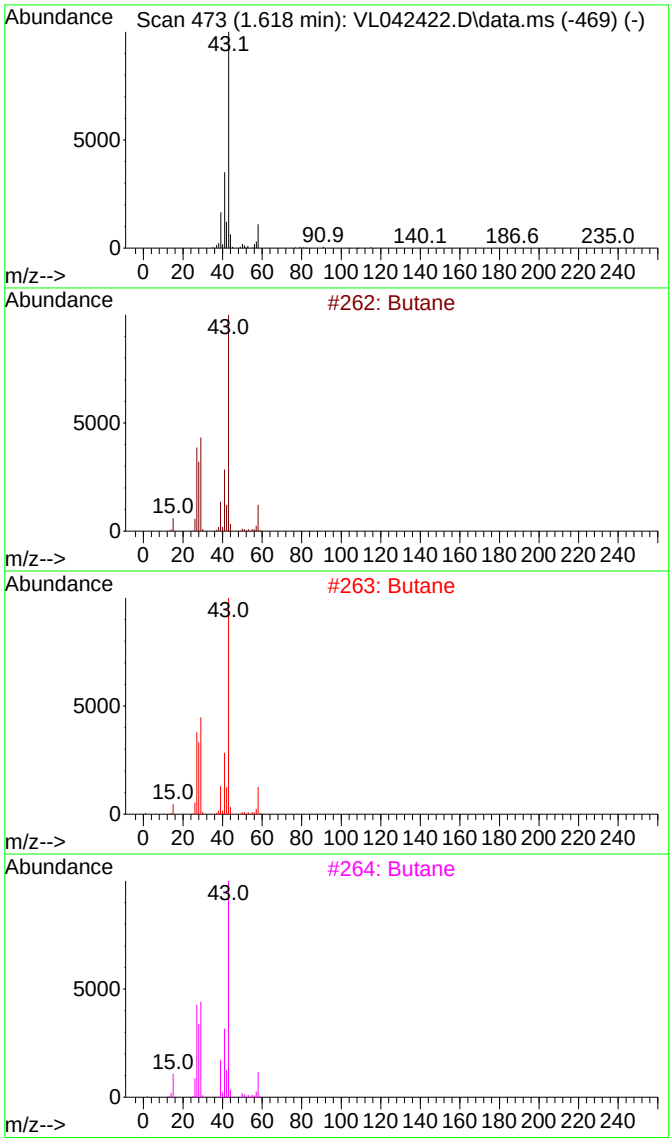
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

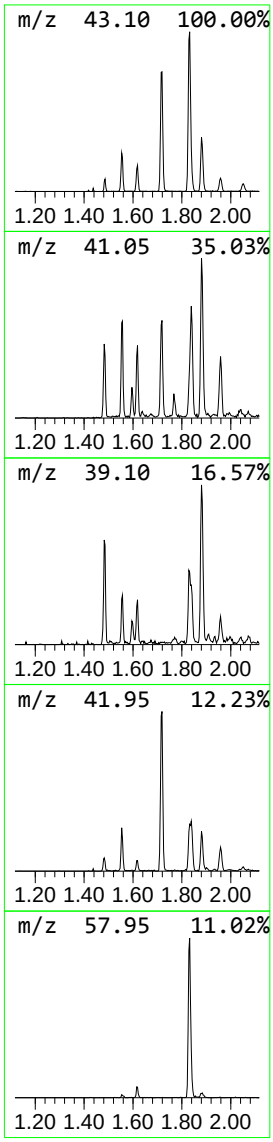
****

Peak Number 1 Butane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.618	1.21 ppbv	67891	Bromochloromethane	2.780

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	64
2	Butane	58	C4H10	000106-97-8	64
3	Butane	58	C4H10	000106-97-8	50
4	Formic acid, chloro-, (3,4,4-tri...	194	C7H11ClO4	107323-92-2	39
5	Methyl glyoxal	72	C3H4O2	000078-98-8	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

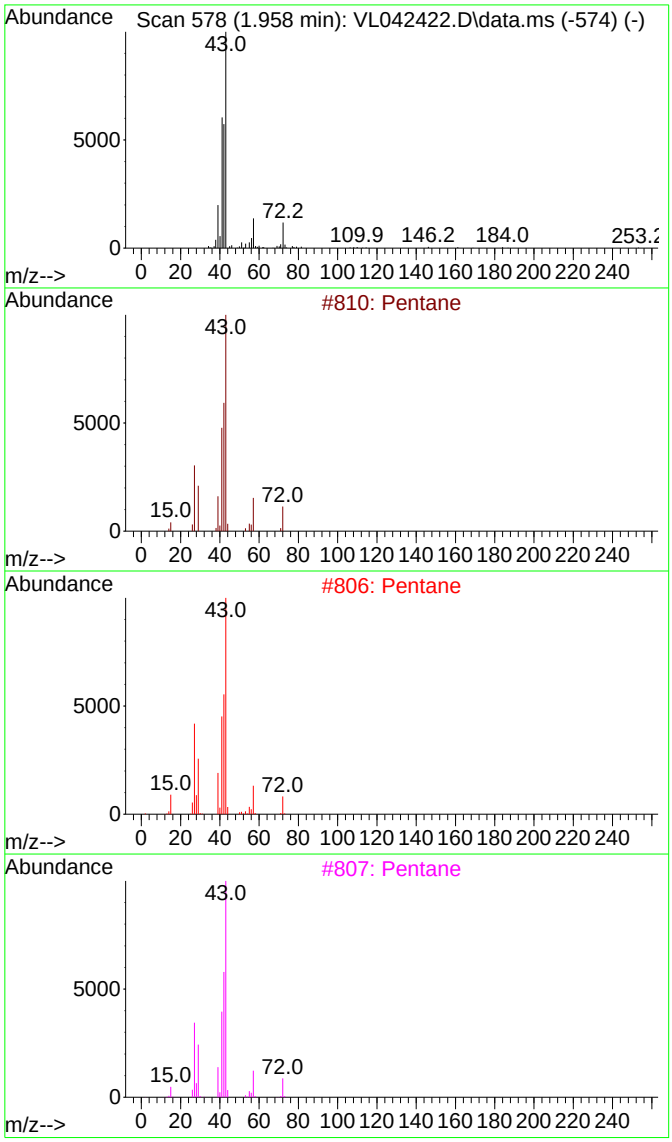
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

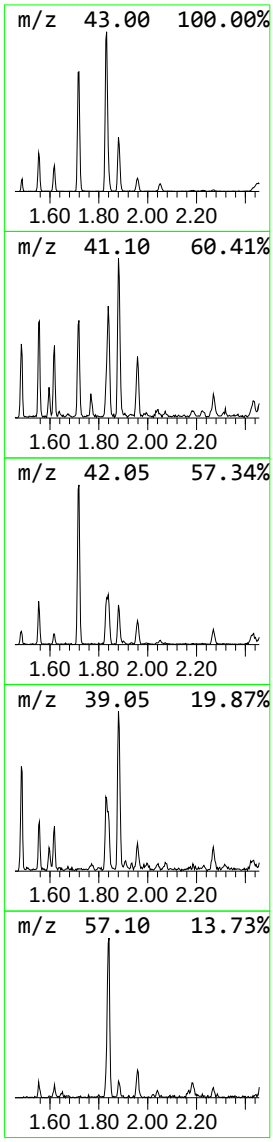
****

Peak Number 2 Pentane Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.958	1.12 ppbv	62902	Bromochloromethane	2.780

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	80
2	Pentane	72	C5H12	000109-66-0	80
3	Pentane	72	C5H12	000109-66-0	72
4	Pentane	72	C5H12	000109-66-0	58
5	Pentane	72	C5H12	000109-66-0	42





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

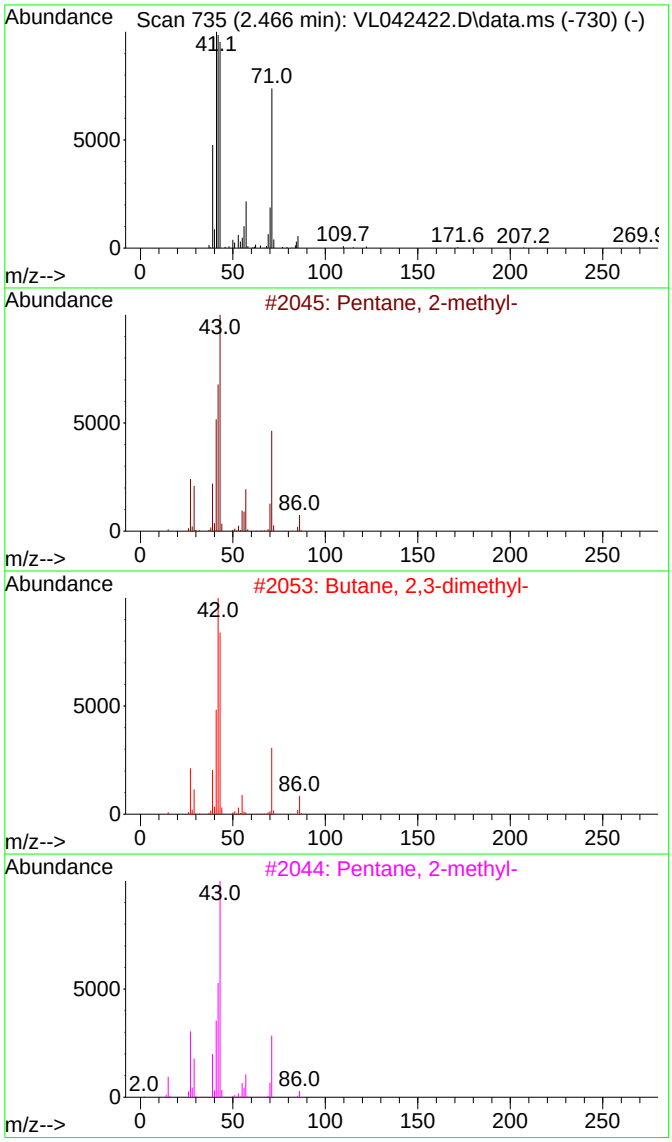
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

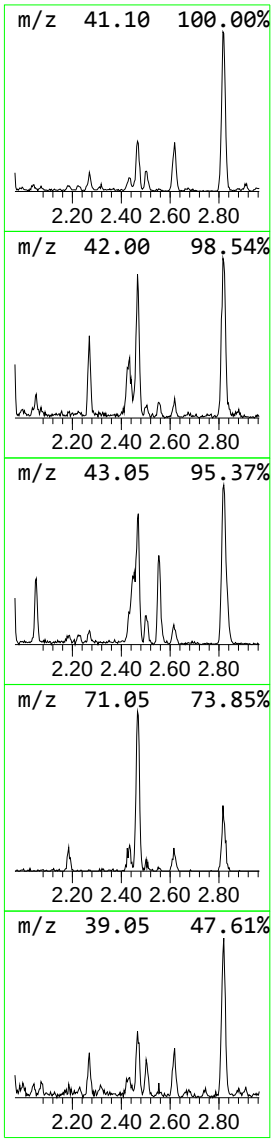
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.466	2.33 ppbv	130928	Bromochloromethane	2.780

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	50
2	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	45
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	42
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	42
5	Sulfurous acid, isobutyl 2-penty...	208	C9H20O3S	1000309-15-2	37





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

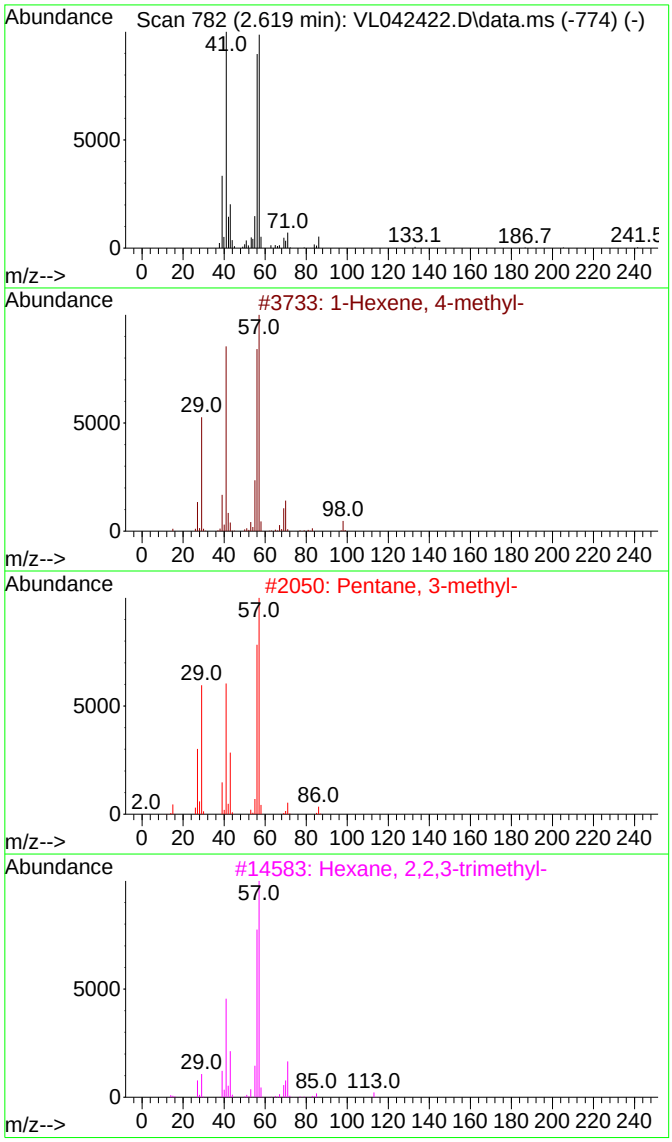
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

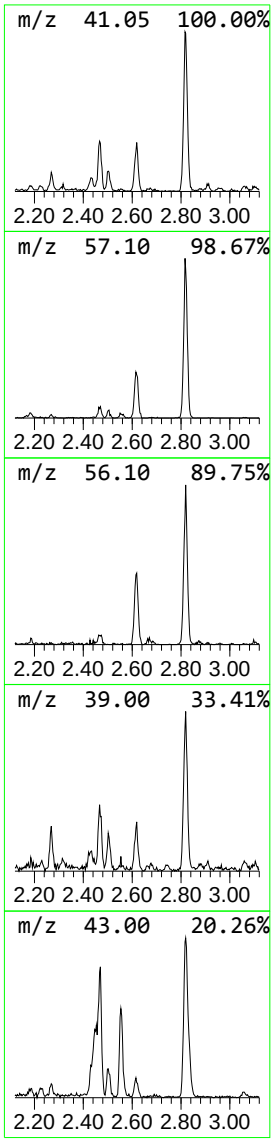
****

Peak Number 4 1-Hexene, 4-methyl- Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.619	1.61 ppbv	90164	Bromochloromethane	2.780

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Hexene, 4-methyl-	98	C7H14	003769-23-1	78
2	Pentane, 3-methyl-	86	C6H14	000096-14-0	64
3	Hexane, 2,2,3-trimethyl-	128	C9H20	016747-25-4	64
4	Pentane, 3-methyl-	86	C6H14	000096-14-0	64
5	Pentane, 3-methyl-	86	C6H14	000096-14-0	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

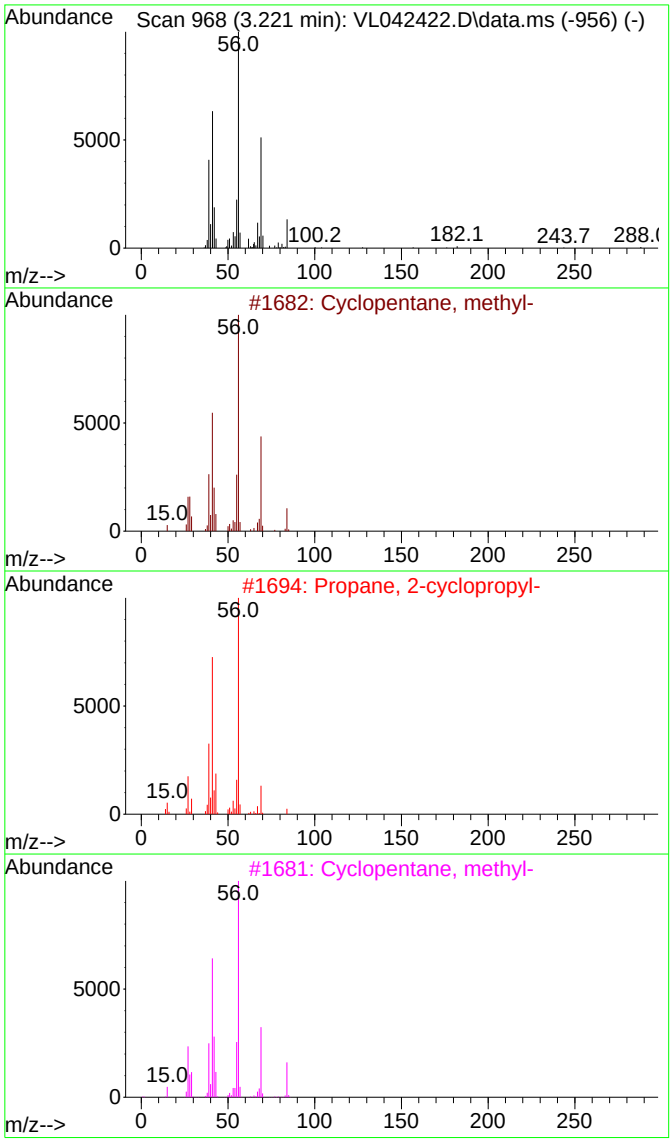
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

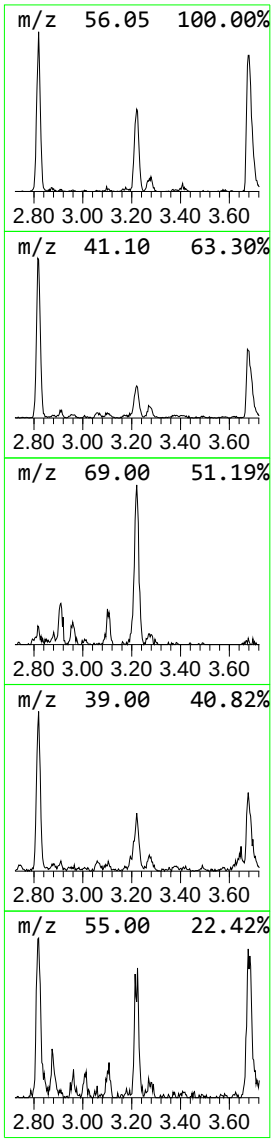
****

Peak Number 5 Cyclopentane, methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.221	2.02 ppbv	113229	Bromochloromethane	2.780

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Cyclopentane, methyl-	84	C6H12	000096-37-7	52
2	Propane, 2-cyclopropyl-	84	C6H12	003638-35-5	49
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	49
4	1-Pentanol, 3-methyl-	102	C6H14O	000589-35-5	47
5	Cyclopentane, methyl-	84	C6H12	000096-37-7	47





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

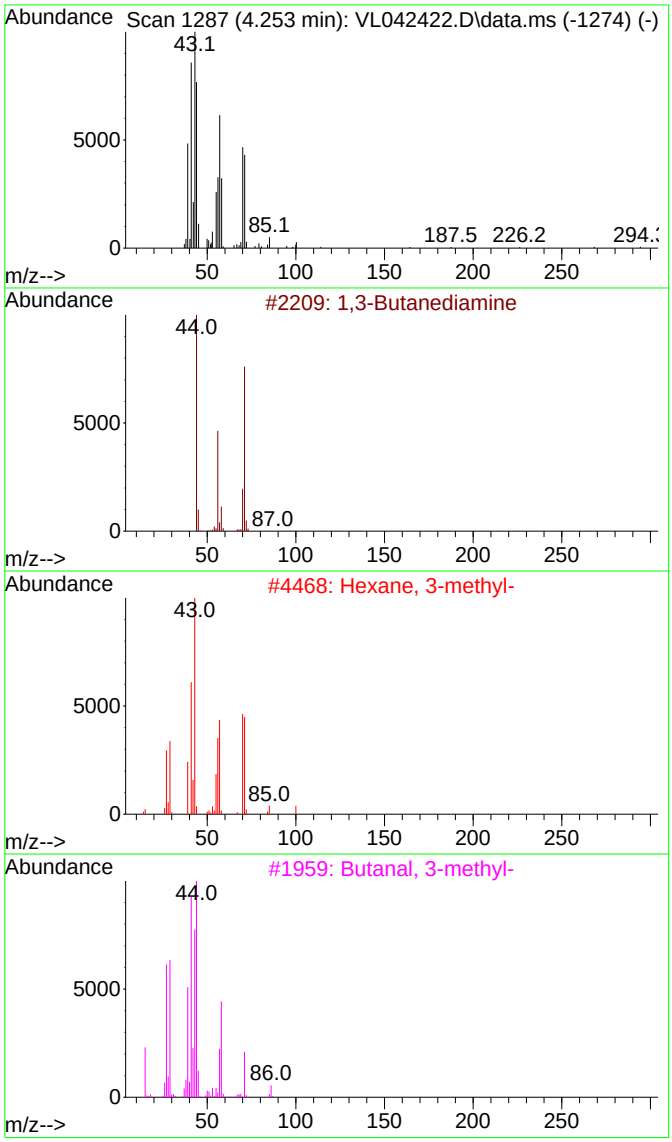
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

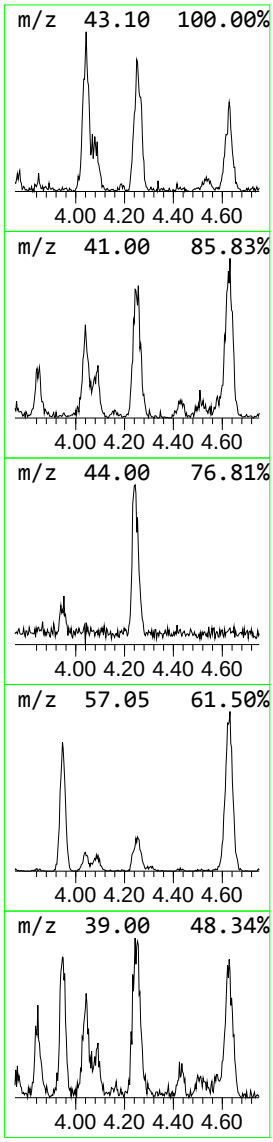
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 6 1,3-Butanediamine Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.253	1.59 ppbv	177342	1,4-Difluorobenzene	3.949

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1,3-Butanediamine	88	C4H12N2	000590-88-5	53
2	Hexane, 3-methyl-	100	C7H16	000589-34-4	45
3	Butanal, 3-methyl-	86	C5H10O	000590-86-3	40
4	Hexane, 3-methyl-	100	C7H16	000589-34-4	38
5	1-Heptene, 4-methyl-	112	C8H16	013151-05-8	38





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

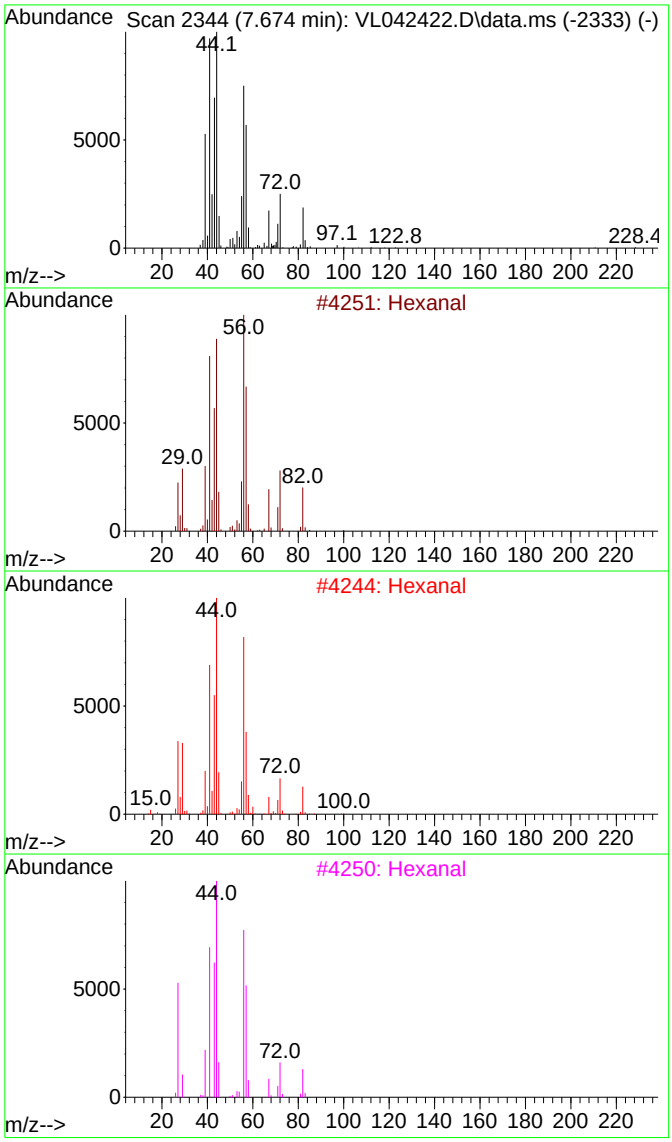
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

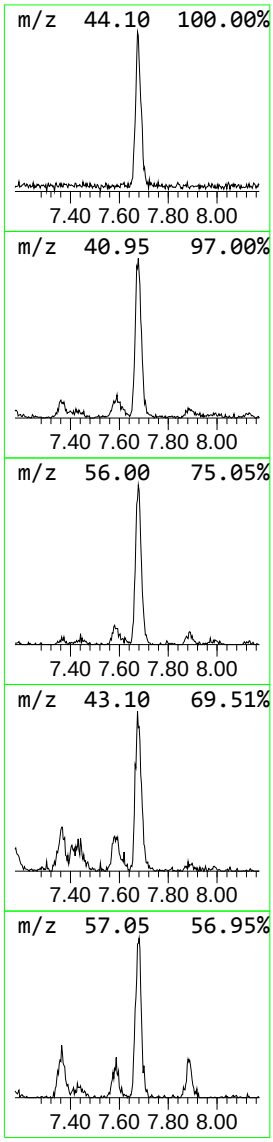
****

Peak Number 7 Hexanal Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.674	2.10 ppbv	277952	Chlorobenzene-d5	8.872

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	81
2	Hexanal	100	C6H12O	000066-25-1	53
3	Hexanal	100	C6H12O	000066-25-1	42
4	Butanal, 3-methyl-	86	C5H10O	000590-86-3	38
5	1,2,4-Trioxolane, 3,5-dipropyl-	160	C8H16O3	001696-03-3	35





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

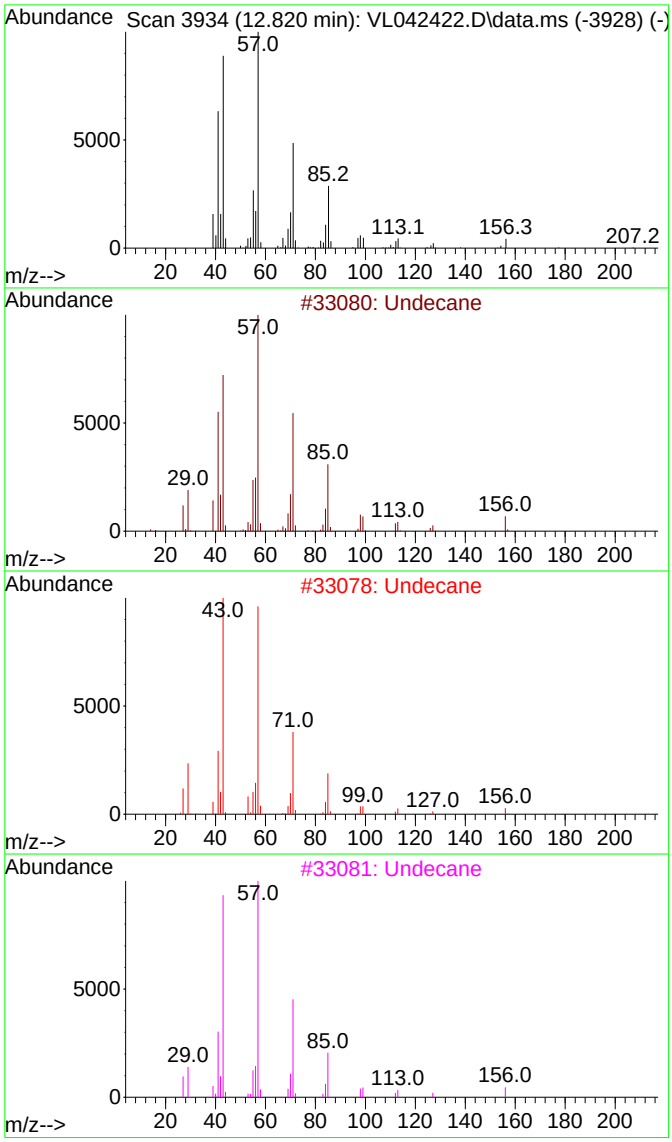
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

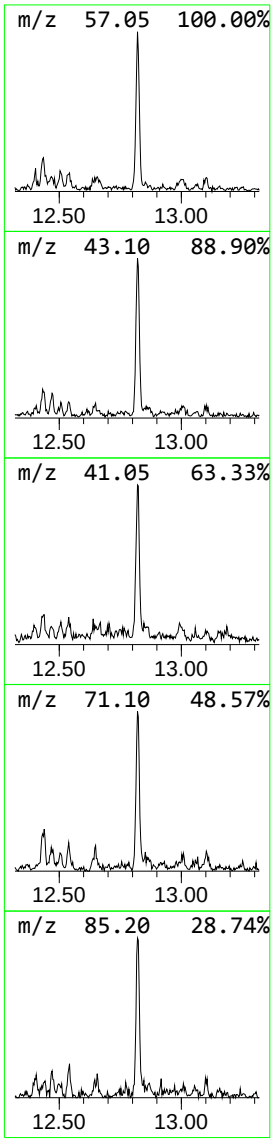
****

Peak Number 8 Undecane Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.820	1.41 ppbv	186715	Chlorobenzene-d5	8.872

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Undecane	156	C11H24	001120-21-4	93
2	Undecane	156	C11H24	001120-21-4	90
3	Undecane	156	C11H24	001120-21-4	90
4	Undecane	156	C11H24	001120-21-4	87
5	Dodecane	170	C12H26	000112-40-3	80





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.618	1.2	ppbv	67891	1	2.780	561308	10.0
Pentane	1.958	1.1	ppbv	62902	1	2.780	561308	10.0
Pentane, 2-methyl-	2.466	2.3	ppbv	130928	1	2.780	561308	10.0
1-Hexene, 4-met...	2.619	1.6	ppbv	90164	1	2.780	561308	10.0
Cyclopentane, m...	3.221	2.0	ppbv	113229	1	2.780	561308	10.0
1,3-Butanediamine	4.253	1.6	ppbv	177342	2	3.949	1114550	10.0
Hexanal	7.674	2.1	ppbv	277952	3	8.872	1326670	10.0
Undecane	12.820	1.4	ppbv	186715	3	8.872	1326670	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-18	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042321.D	1		04/11/25 15:36	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.44	2.18	J	1.04	2.47	ug/m3
64-17-5	Ethanol	1400	2640	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.61	1.26		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.19	1.07	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.45	1.36	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.19	0.78	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	86.2	212	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	90.6	215	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.90	3.13		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	22.7	67.0	E	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	1.50	7.33		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.68	2.17		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.45	1.84	J	0.37	2.05	ug/m3
108-88-3	Toluene	0.54	2.03		0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-18	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042321.D	1		04/11/25 15:36	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.040	0.27		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	UQ	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.16	0.79	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	UQ	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.70	9.52		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.40			70 (65) - 130 (135)	94%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	184000		2.787			
540-36-3	1,4-Difluorobenzene	454000		3.959			
3114-55-4	Chlorobenzene-d5	391000		8.882			
TENTITIVE IDENTIFIED COMPOUNDS							

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-18	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042321.D	1		04/11/25 15:36	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.18		J		1.47	ppbv
115-07-1	Propene	5.00		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv
007452-79-1	Butanoic acid, 2-methyl-, ethyl es	1.40		J		9.15	ppbv
018172-67-3	Bicyclo[3.1.1]heptane, 6,6-dimethy	1.10		J		11.4	ppbv
99-87-6	p-Isopropyltoluene	0.11		J		11.9	ppbv
005989-27-5	D-Limonene	18.0		J		12.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 23:01:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	184452	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	454008	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	391031	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	301415	9.386	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11984	0.440	ppbv		90
3) Chlorodifluoromethane	1.473	51	5086m	0.183	ppbv		
4) Chloromethane	1.531	50	6779	0.609	ppbv		99
9) Propene	1.486	41	63490m	4.979	ppbv		
10) Heptane	4.975	43	6471m	0.191	ppbv		
11) Trichlorofluoromethane	1.877	101	5150	0.194	ppbv		94
13) Ethanol	1.722	45	1721714	1428.217	ppbv		97
15) Acetone	1.832	43	2336283	90.565	ppbv	#	69
17) tert-Butyl alcohol	2.043	59	14483m	0.451	ppbv		
19) Isopropyl Alcohol	1.887	45	1254135	86.165	ppbv	#	41
20) Methylene Chloride	2.062	84	8636	0.899	ppbv	#	76
26) Hexane	2.826	57	70462	2.725	ppbv		92
29) Chloroform	2.848	83	55947	1.478	ppbv		100
34) 2-Butanone	2.557	43	746435	22.673	ppbv		99
35) Carbon Tetrachloride	3.764	117	2892m	0.082	ppbv		
36) Benzene	3.654	78	30723	0.683	ppbv		95
50) 4-Methyl-2-Pentanone	5.768	43	23404m	0.449	ppbv		
52) Tetrachloroethene	8.225	164	653m	0.037	ppbv		
53) Toluene	6.933	91	28699	0.538	ppbv		98
59) m/p-Xylene	9.529	91	11090m	0.200	ppbv		
60) o-Xylene	9.959	91	6064m	0.109	ppbv		
69) p-Isopropyltoluene	11.927	119	10463	0.114	ppbv	#	93
74) 1,2,4-Trimethylbenzene	11.536	105	10882	0.156	ppbv	#	68

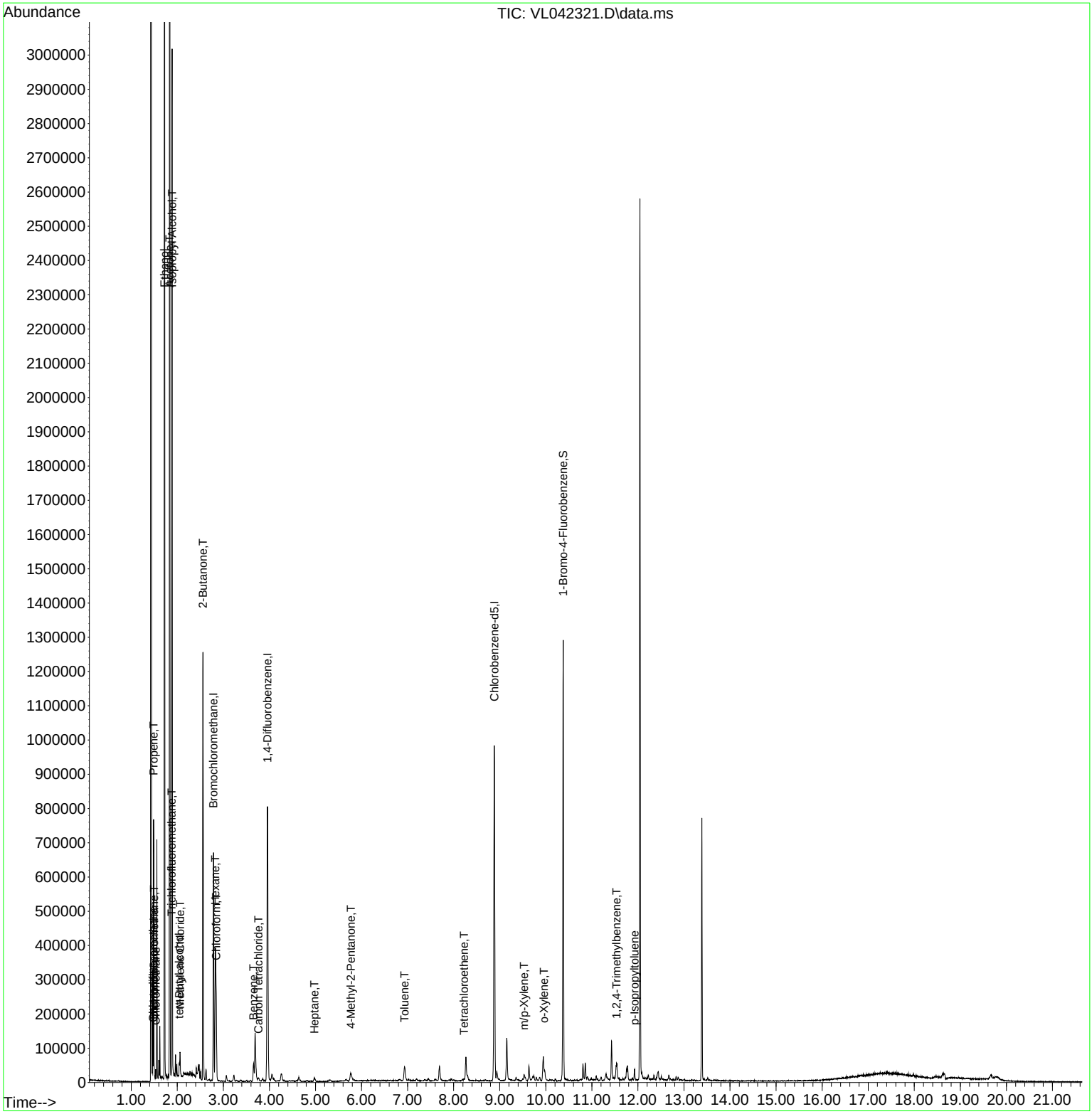
(#) = qualifier out of range (m) = manual integration (+) = signals summed

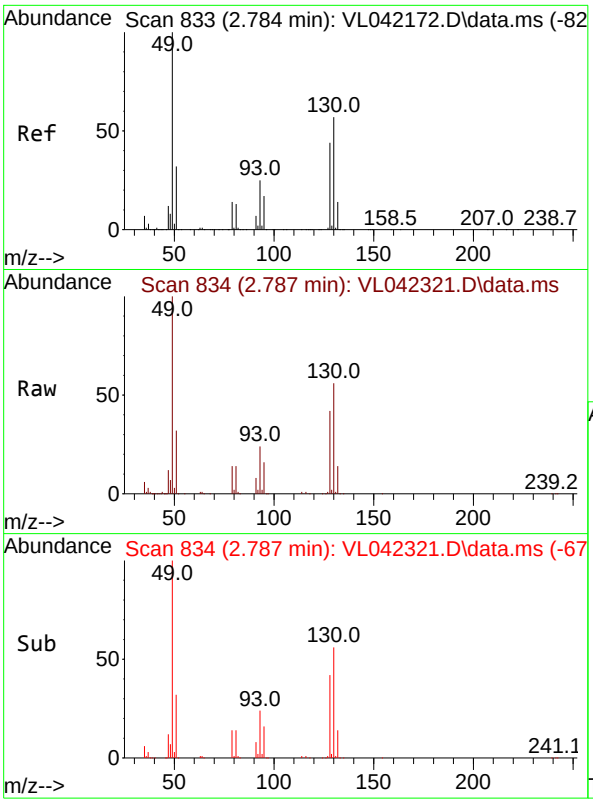
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 11 23:01:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

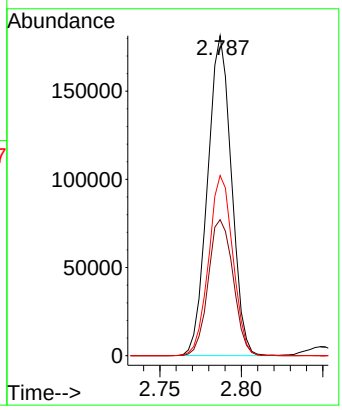




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 49 Resp: 18445

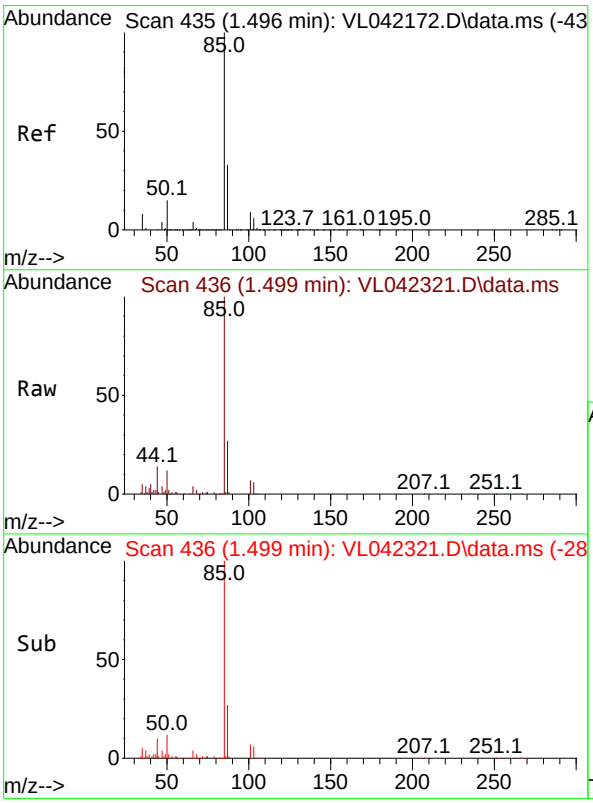
Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.9	68.5
130	57.1	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations
APPROVED

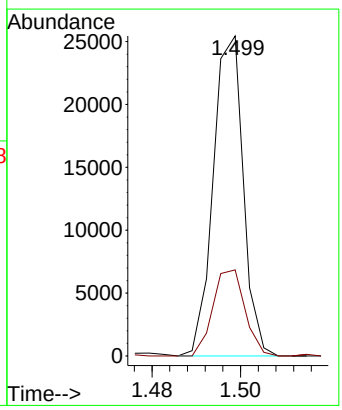
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

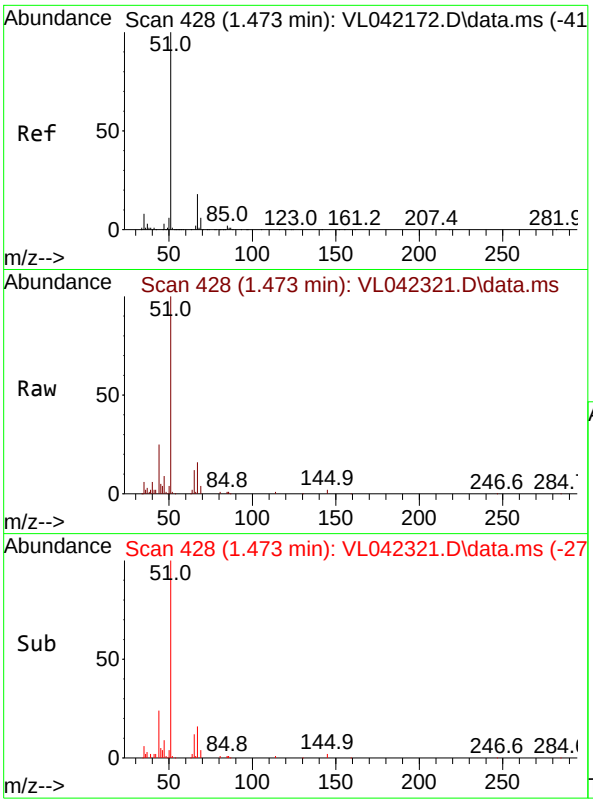


#2
Dichlorodifluoromethane
Concen: 0.440 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 85 Resp: 11984

Ion	Ratio	Lower	Upper
85	100		
87	26.9	26.1	39.1

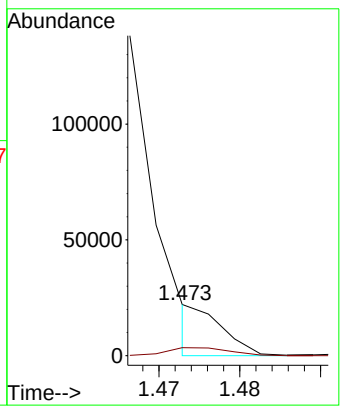




#3
Chlorodifluoromethane
Concen: 0.183 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 51 Resp: 508

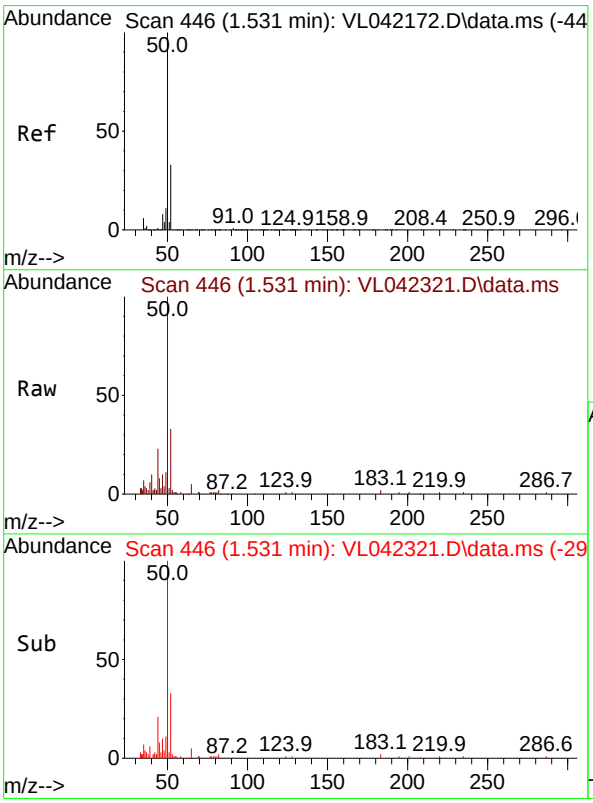
Ion	Ratio	Lower	Upper
51	100		
67	37.0	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations
APPROVED

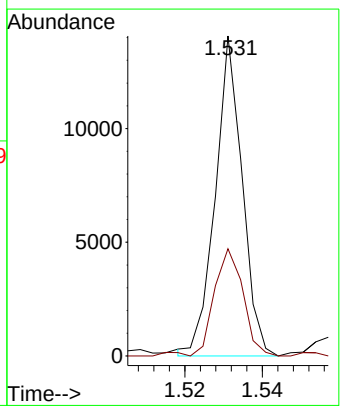
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

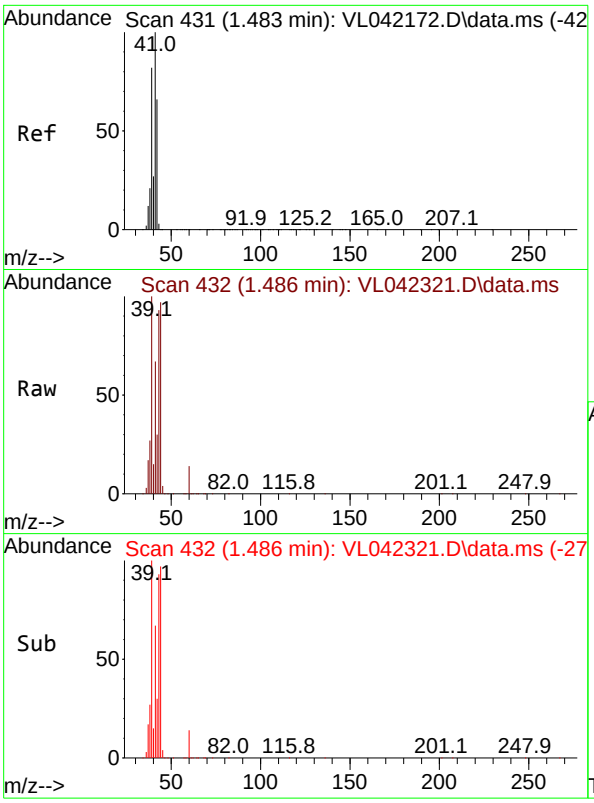


#4
Chloromethane
Concen: 0.609 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 50 Resp: 6779

Ion	Ratio	Lower	Upper
50	100		
52	33.0	26.1	39.1

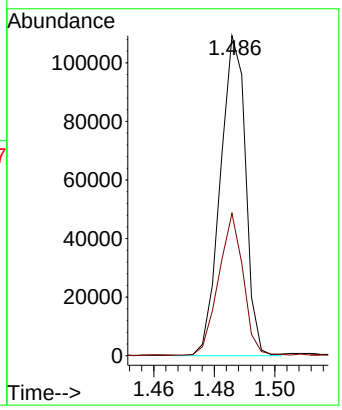




#9
Propene
Concen: 4.979 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 41 Resp: 6349

Ion	Ratio	Lower	Upper
41	100		
42	119.1	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
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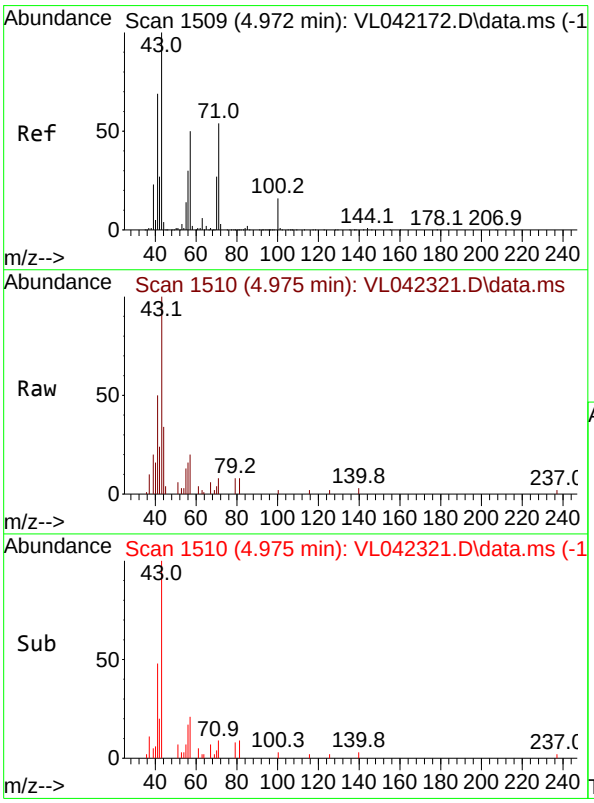
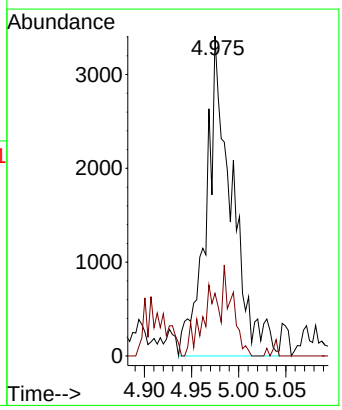
Supervised By :Mahesh Dadoda 04/17/2025

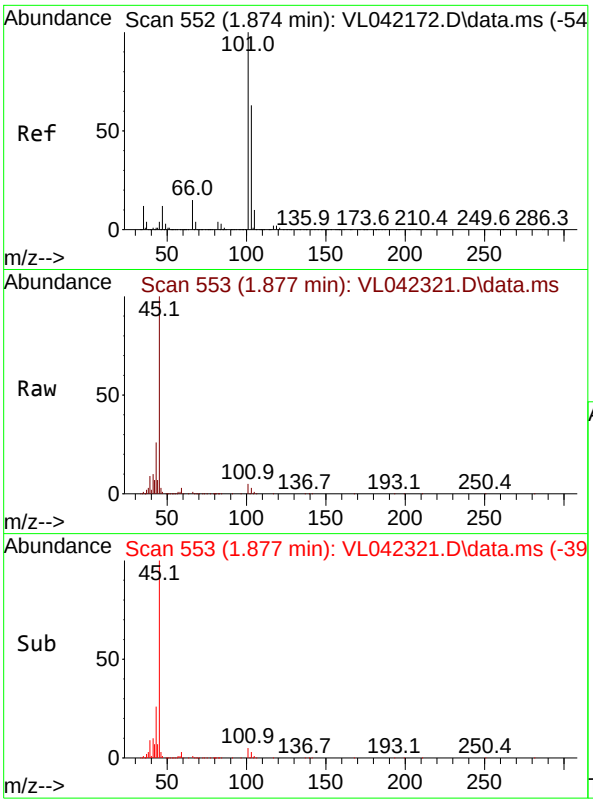


#10
Heptane
Concen: 0.191 ppbv m
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 6471

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

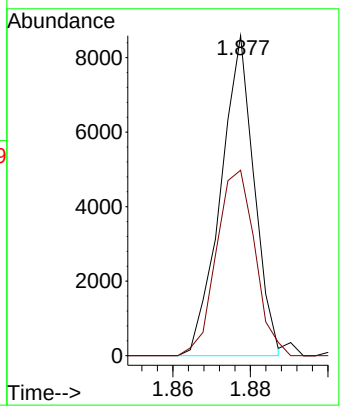




#11
Trichlorofluoromethane
Concen: 0.194 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:101 Resp: 515

Ion	Ratio	Lower	Upper
101	100		
103	58.0	50.2	75.2



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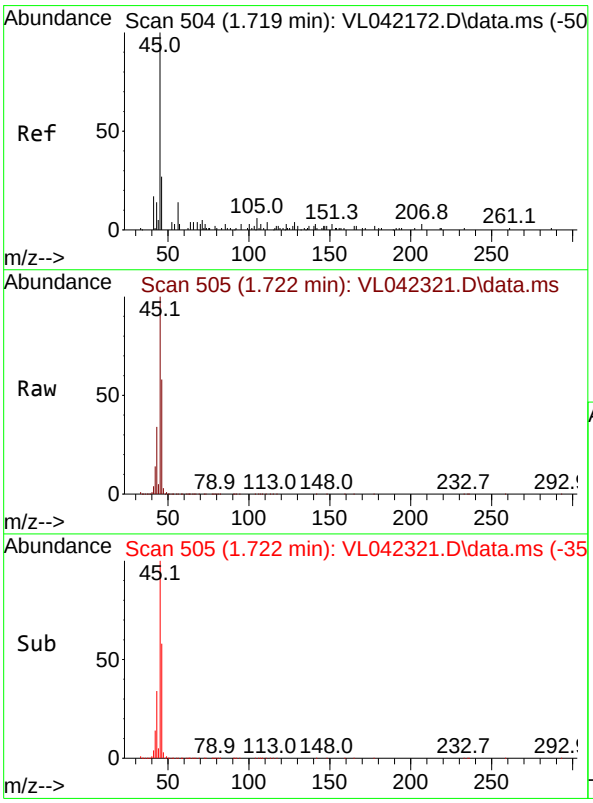
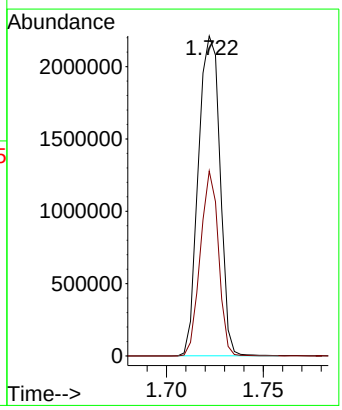
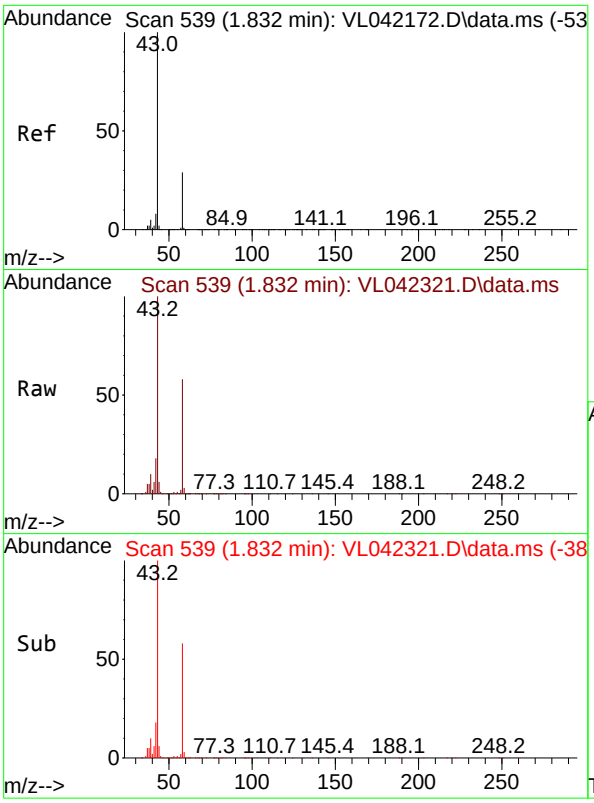


#13
Ethanol
Concen: 1428.217 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 45 Resp: 1721714

Ion	Ratio	Lower	Upper
45	100		
46	48.6	20.2	80.8





#15
Acetone
Concen: 90.565 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 233628

Ion	Ratio	Lower	Upper
43	100		
58	45.7	23.2	34.8#

Instrument :
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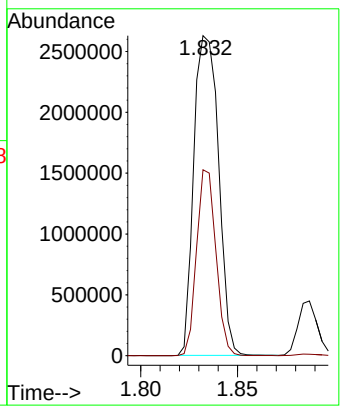
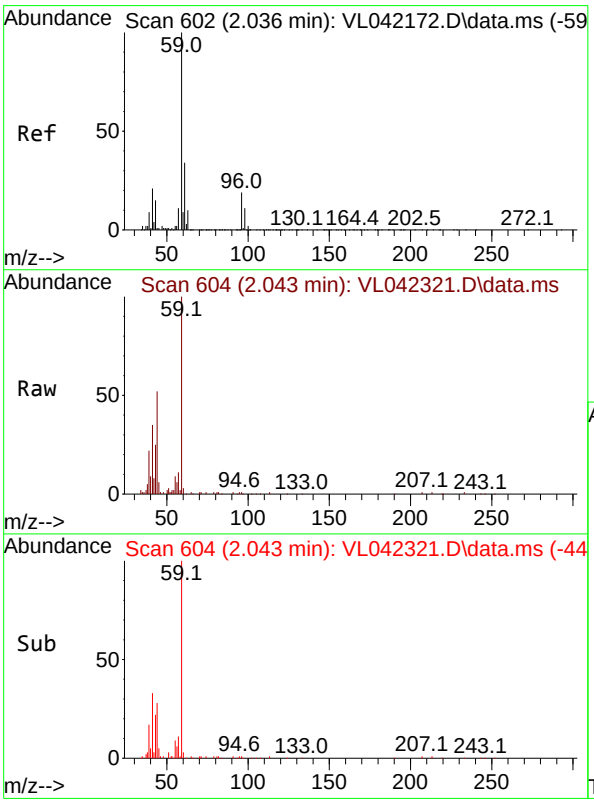
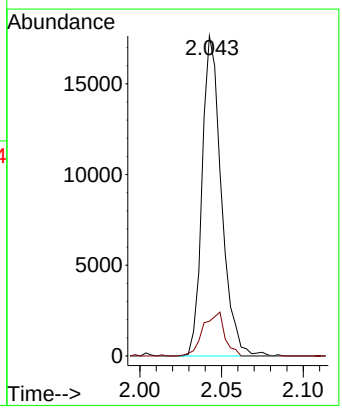


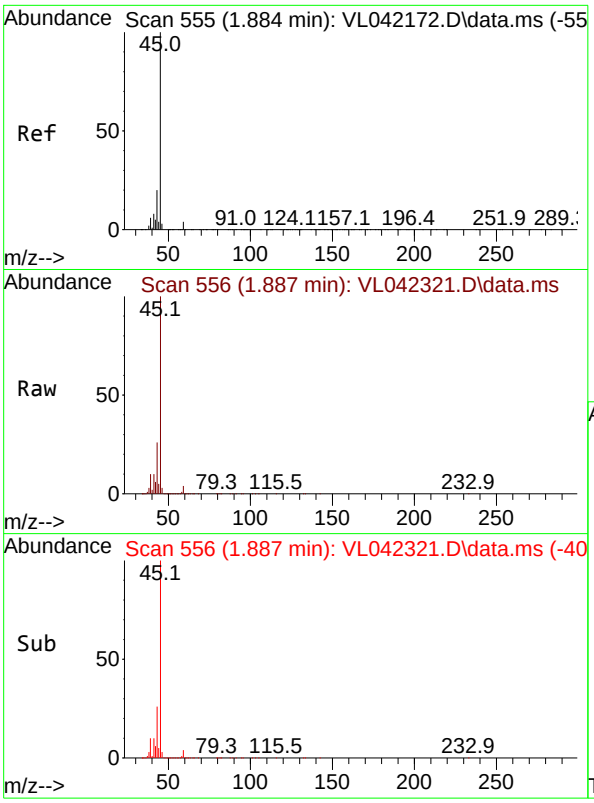


#17
tert-Butyl alcohol
Concen: 0.451 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 59 Resp: 14483

Ion	Ratio	Lower	Upper
59	100		
57	33.0	8.9	13.3#

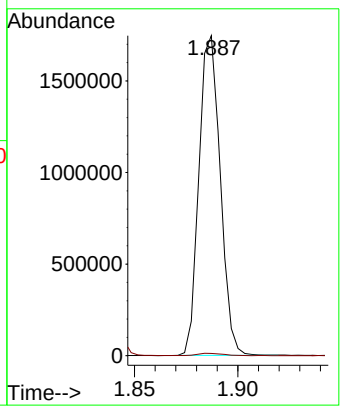




#19
Isopropyl Alcohol
Concen: 86.165 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 45 Resp: 125413

Ion	Ratio	Lower	Upper
45	100		
58	85.1	36.9	55.3#



Instrument :
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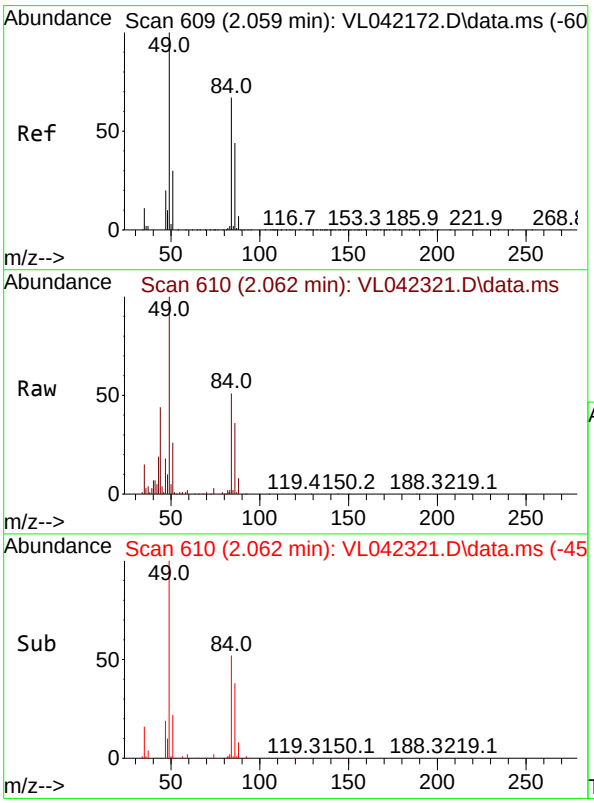
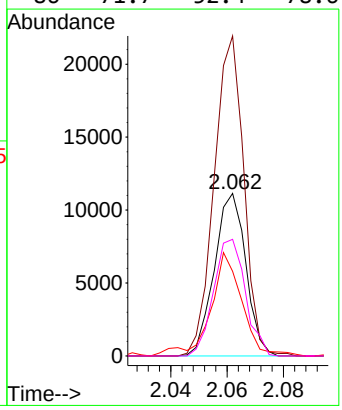
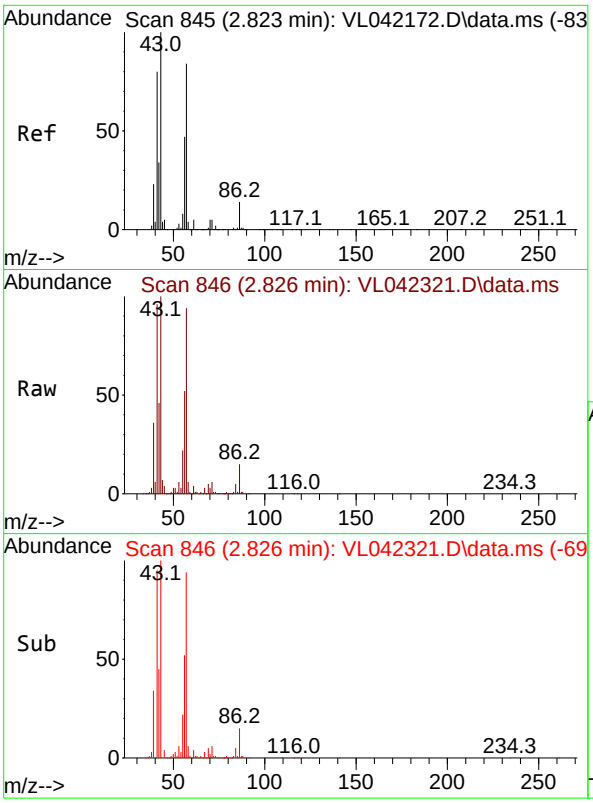


#20
Methylene Chloride
Concen: 0.899 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 84 Resp: 8636

Ion	Ratio	Lower	Upper
84	100		
49	196.9	120.2	180.4#
51	49.7	37.4	56.0
86	71.7	52.4	78.6

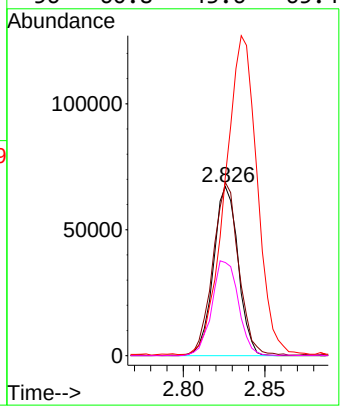




#26
Hexane
Concen: 2.725 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 57 Resp: 7046

Ion	Ratio	Lower	Upper
57	100		
41	107.0	76.6	114.8
43	249.4	207.8	311.8
56	60.8	43.6	65.4



Instrument :
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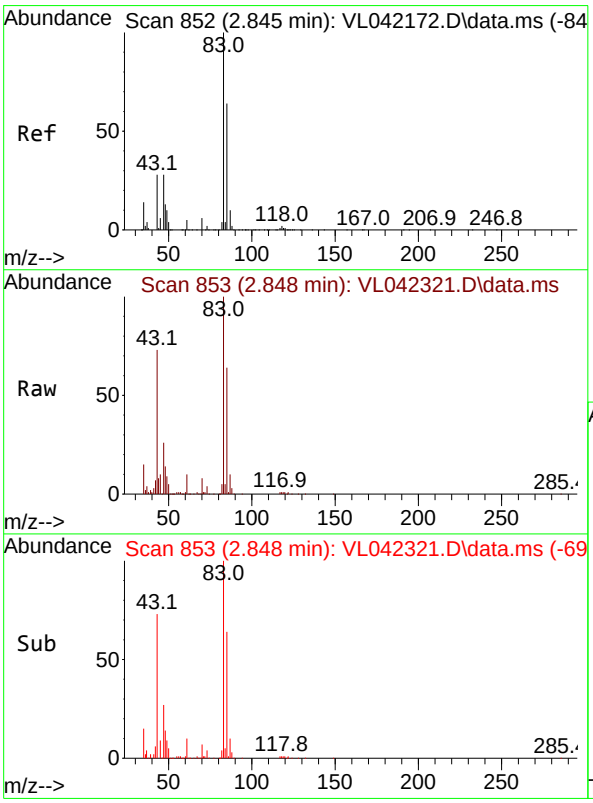
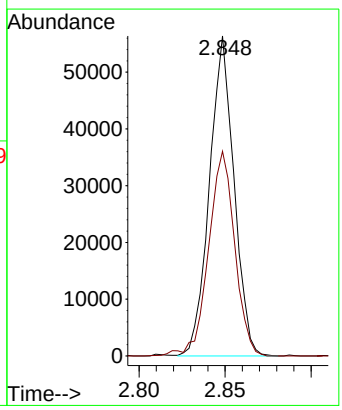
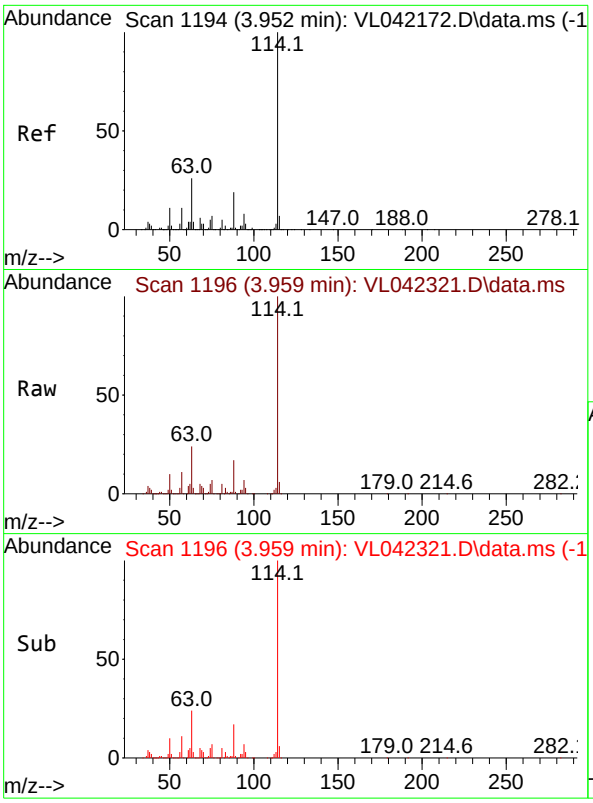


#29
Chloroform
Concen: 1.478 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 83 Resp: 55947

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2

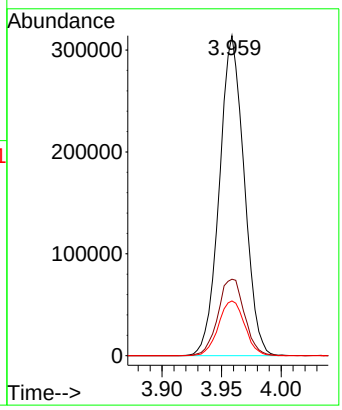




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:114 Resp: 45400

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.1	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
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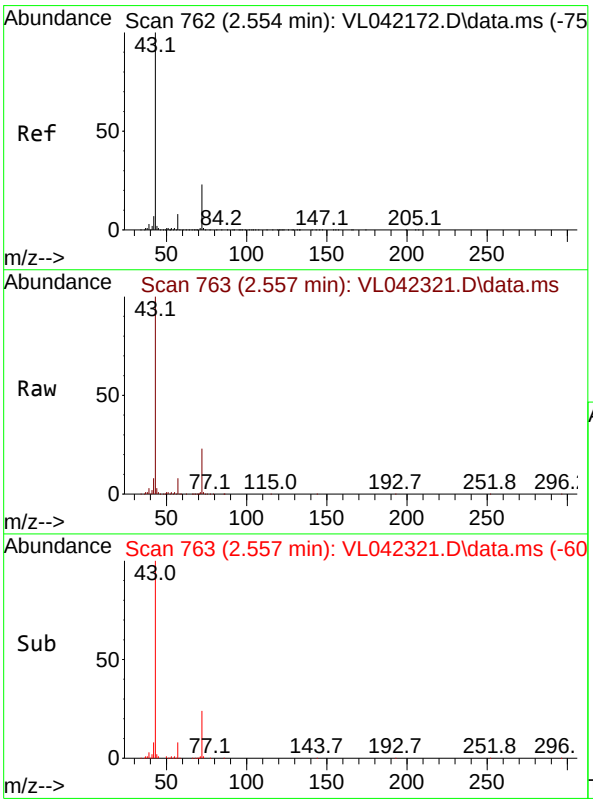
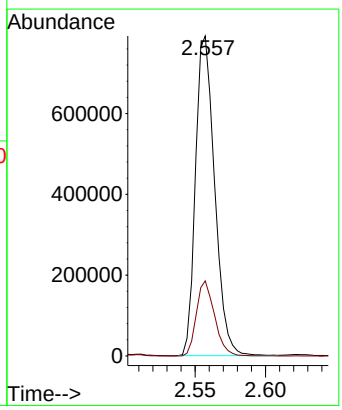
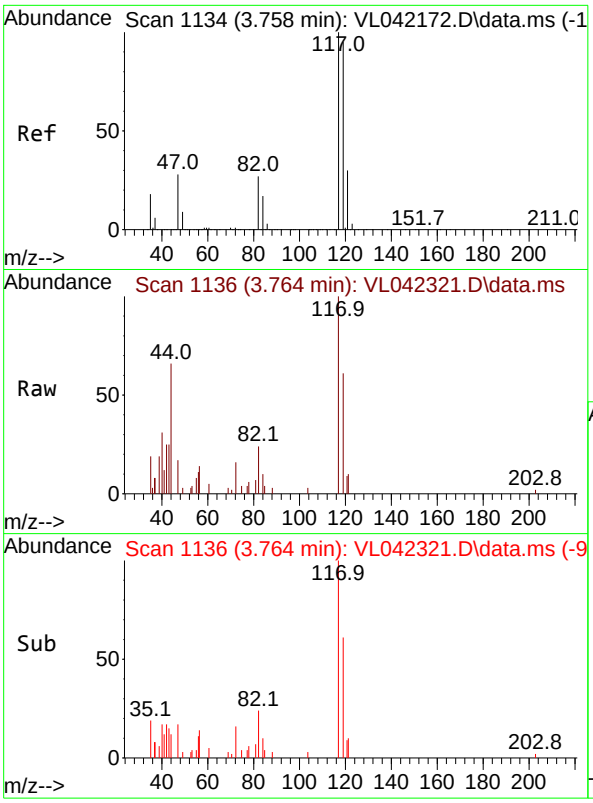


#34
2-Butanone
Concen: 22.673 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 746435

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2

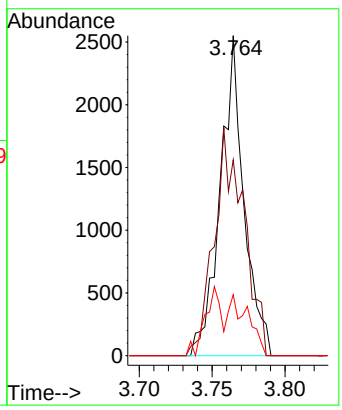




#35
Carbon Tetrachloride
Concen: 0.082 ppbv m
RT: 3.764 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:117 Resp: 289

Ion	Ratio	Lower	Upper
117	100		
119	61.2	76.2	114.2#
121	10.2	24.2	36.4#



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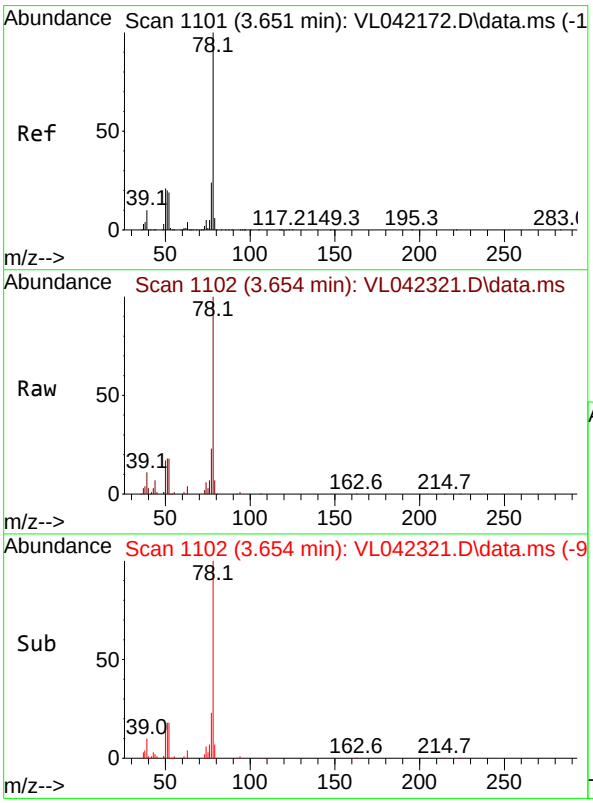
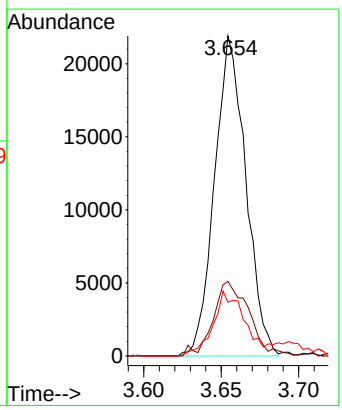
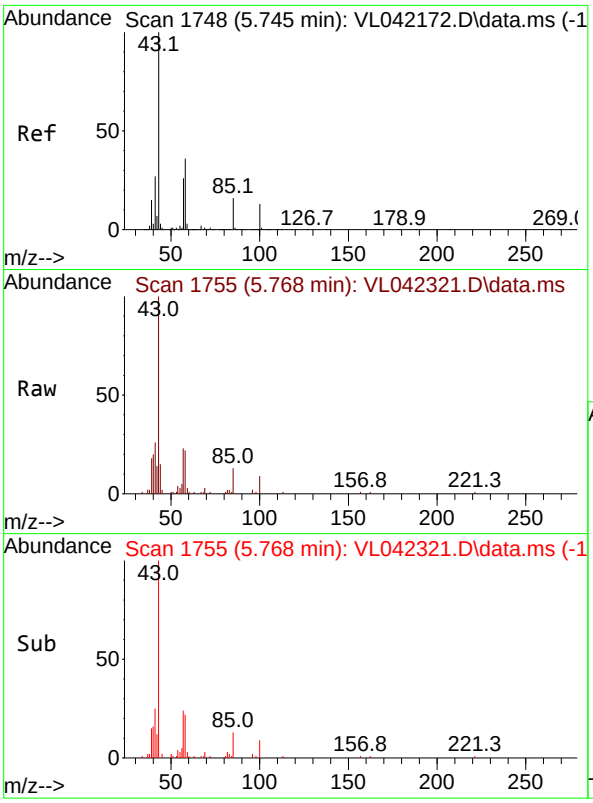


#36
Benzene
Concen: 0.683 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 78 Resp: 30723

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	16.8	16.6	24.8

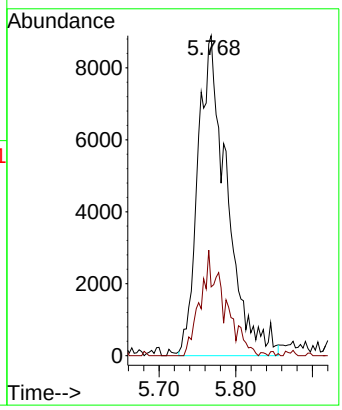




#50
4-Methyl-2-Pentanone
Concen: 0.449 ppbv m
RT: 5.768 min Scan# 1
Delta R.T. 0.022 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 2340

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



Instrument :
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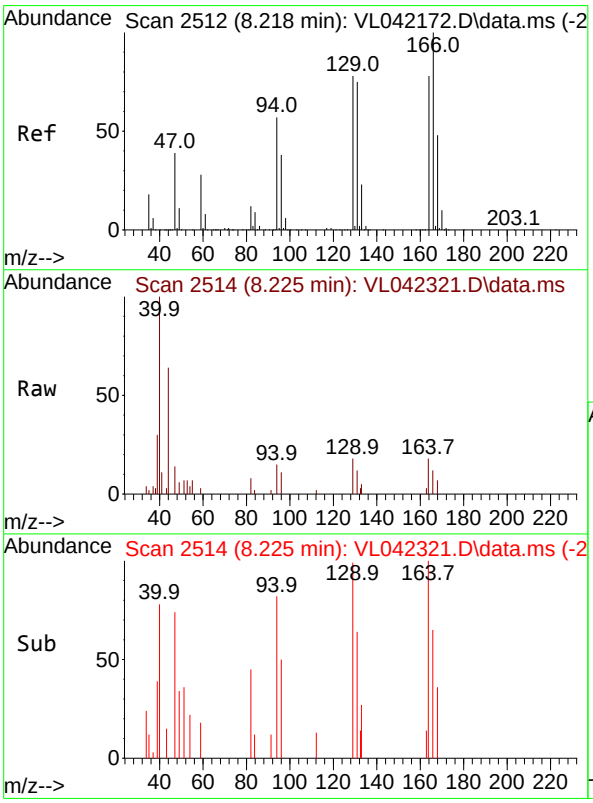
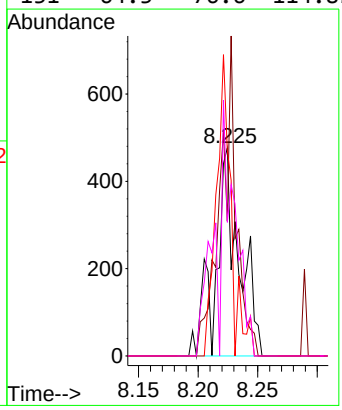
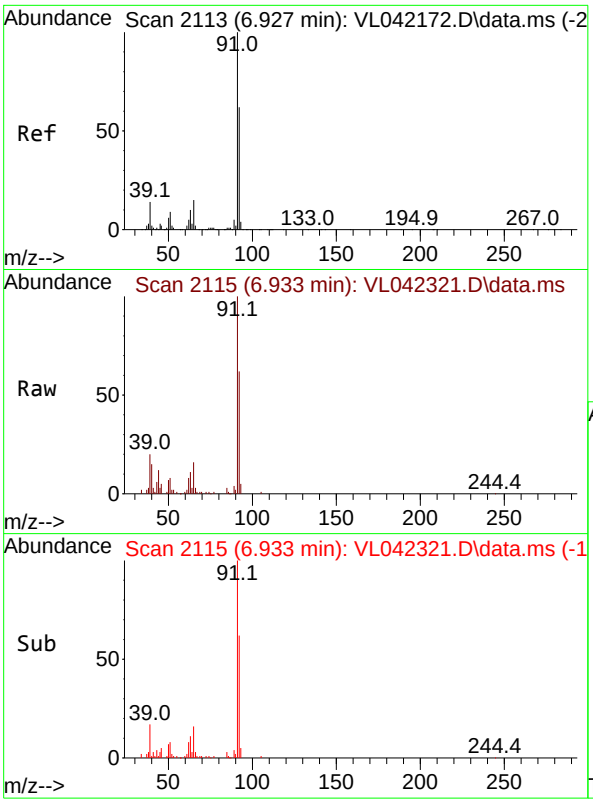


#52
Tetrachloroethene
Concen: 0.037 ppbv m
RT: 8.225 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:164 Resp: 653

Ion	Ratio	Lower	Upper
164	100		
166	64.9	102.5	153.7#
129	98.9	79.8	119.8
131	64.3	76.6	114.8#

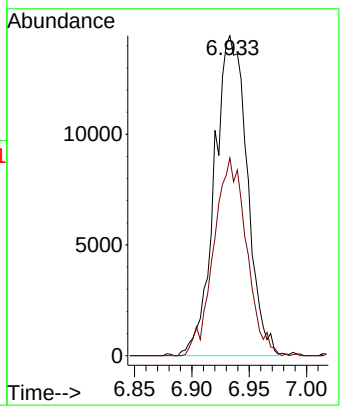




#53
Toluene
Concen: 0.538 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 91 Resp: 2869

Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.4	72.6



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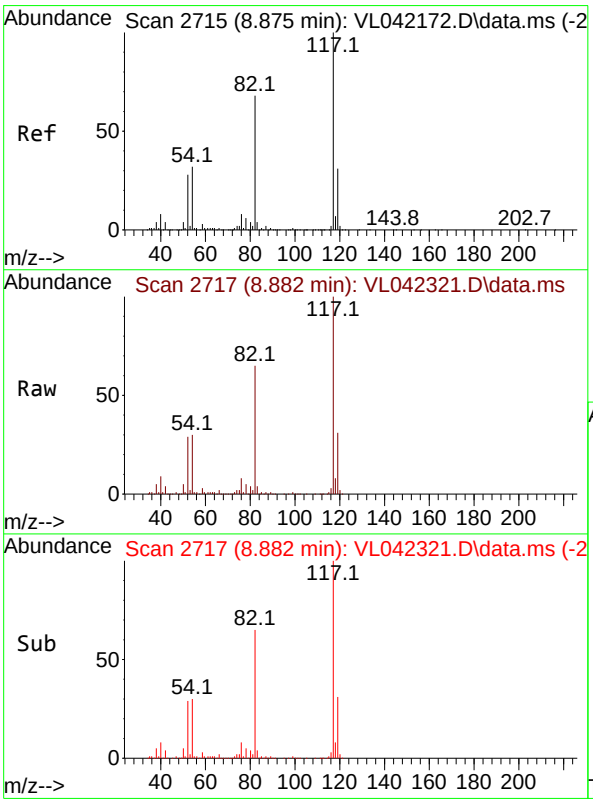
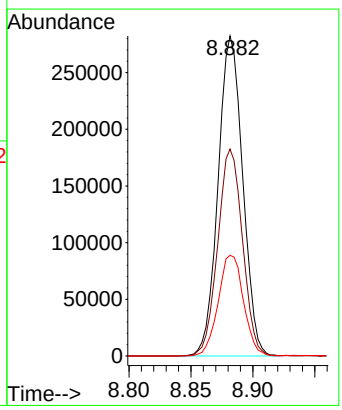
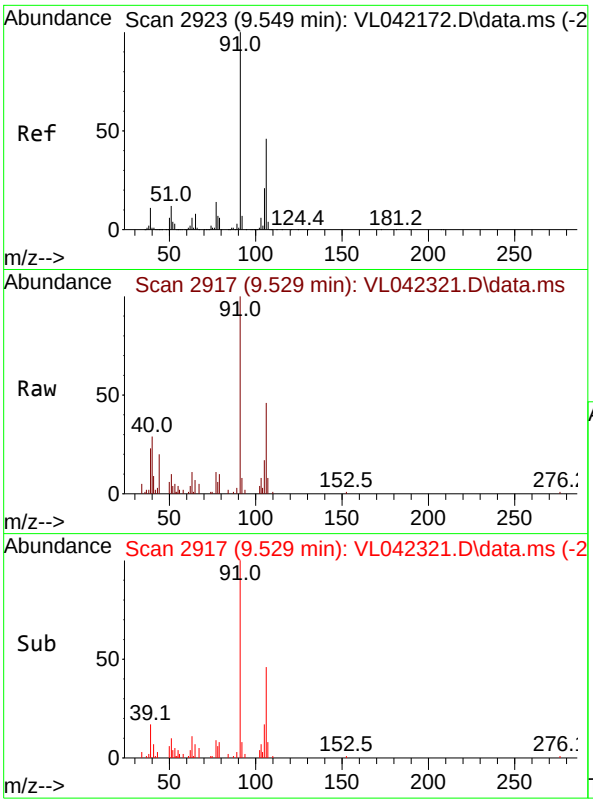


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:117 Resp: 391031

Ion	Ratio	Lower	Upper
117	100		
82	65.2	55.8	83.6
119	32.4	25.5	38.3





#59
m/p-Xylene
Concen: 0.200 ppbv m
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 91 Resp: 1109

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
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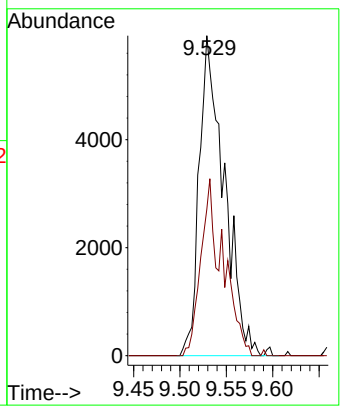
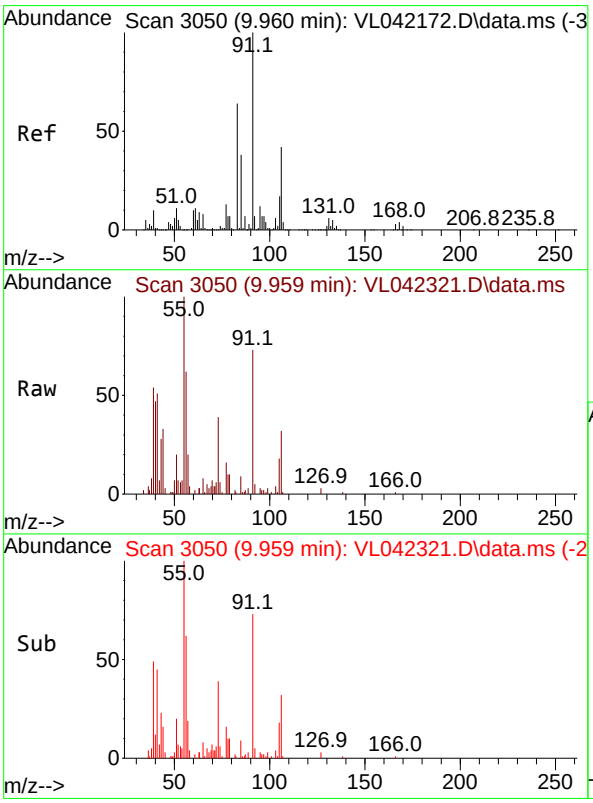
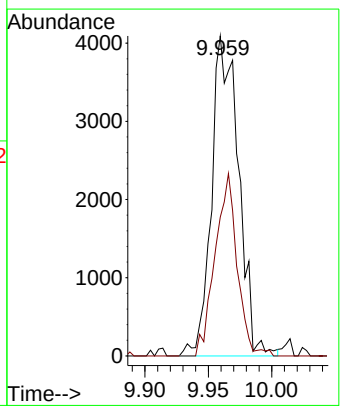


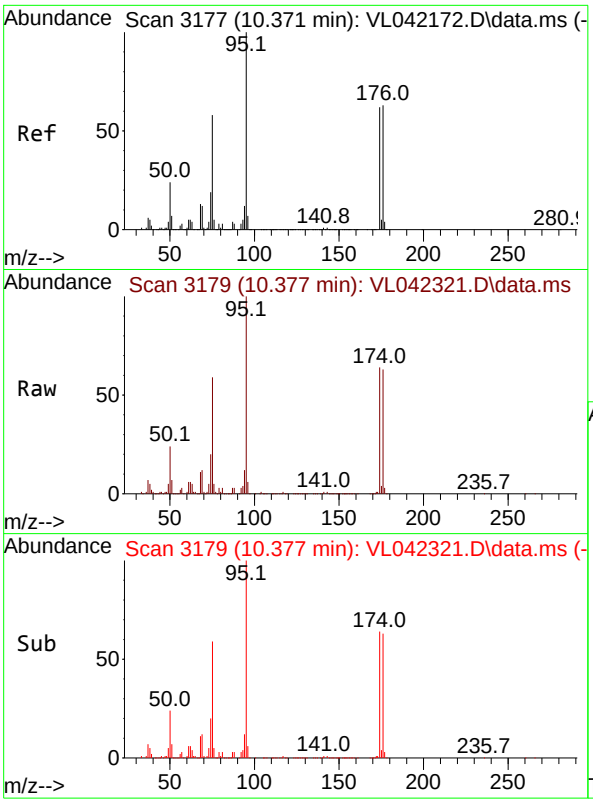


#60
o-Xylene
Concen: 0.109 ppbv m
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 91 Resp: 6064

Ion	Ratio	Lower	Upper
91	100		
106	46.6	20.8	62.5

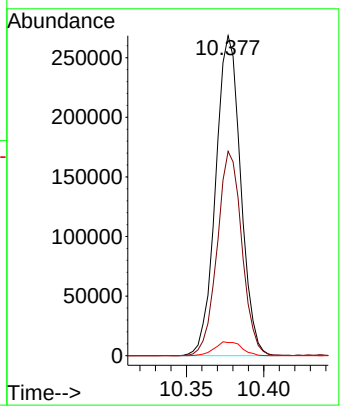




#68
1-Bromo-4-Fluorobenzene
Concen: 9.386 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 95 Resp: 30141

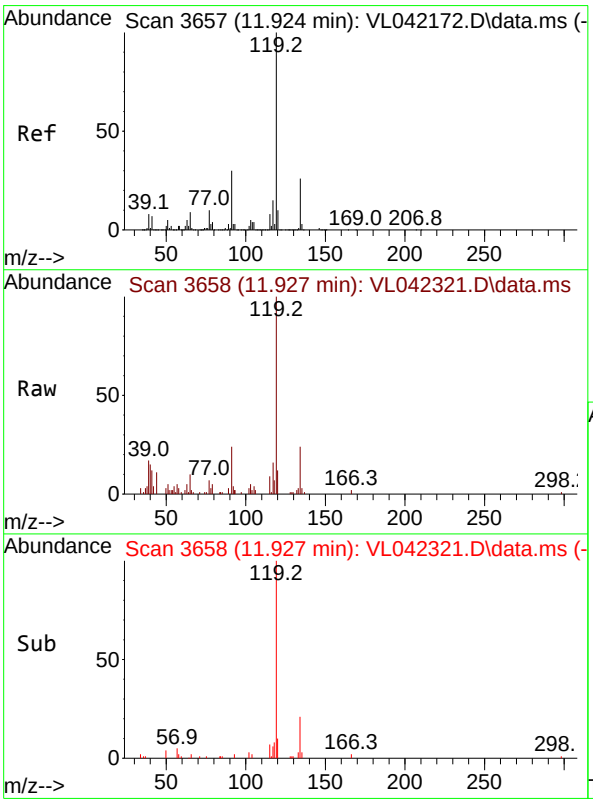
Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations
APPROVED

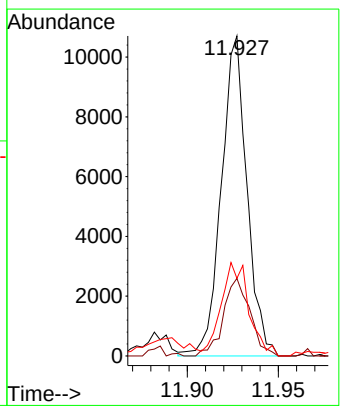
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

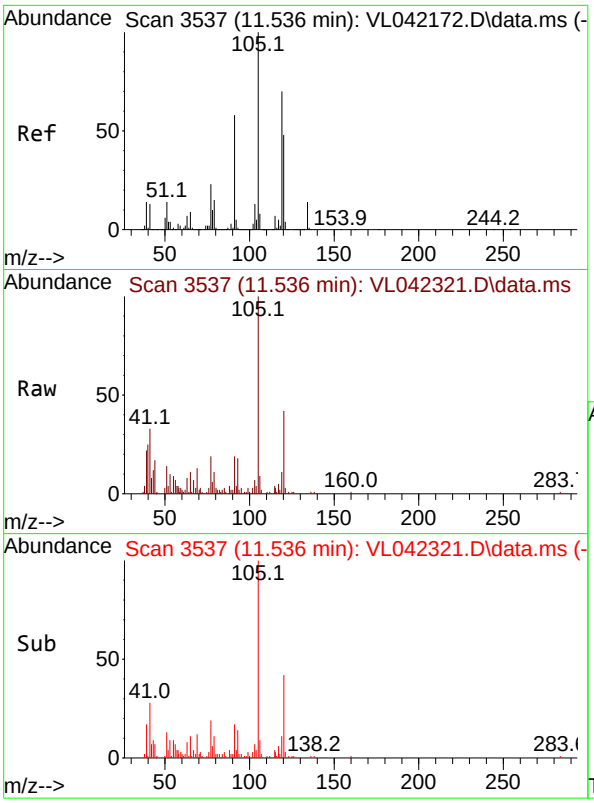


#69
p-Isopropyltoluene
Concen: 0.114 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:119 Resp: 10463

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	36.3	23.7	35.5#

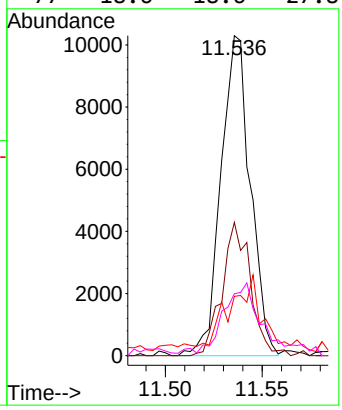




#74
1,2,4-Trimethylbenzene
Concen: 0.156 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:105 Resp: 1088

Ion	Ratio	Lower	Upper
105	100		
120	40.0	38.6	58.0
91	15.8	46.2	69.2#
77	18.6	18.6	27.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

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

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

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

Signal : TIC: VL042321.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4517017	5153864	100.00%	18.717%
2	1.466	423	426	428	rVV	312649	159503	3.09%	0.579%
3	1.486	428	432	438	rVB2	749422	405028	7.86%	1.471%
4	1.557	450	454	461	rBV	697970	378399	7.34%	1.374%
5	1.622	470	474	478	rVB	152301	85941	1.67%	0.312%
6	1.722	500	505	518	rBV	4849867	3440613	66.76%	12.495%
7	1.832	535	539	549	rBV	5743431	4524378	87.79%	16.431%
8	1.887	551	556	568	rVB	2999529	2140699	41.54%	7.774%
9	2.557	757	763	774	rBV	1249370	1168551	22.67%	4.244%
10	2.787	826	834	840	rBV	665833	681609	13.23%	2.475%
11	2.829	840	847	862	rVB4	386924	723248	14.03%	2.627%
12	3.658	1092	1103	1108	rBV3	52362	79481	1.54%	0.289%
13	3.690	1108	1113	1129	rVB2	137575	209630	4.07%	0.761%
14	3.959	1183	1196	1210	rBV	802244	1219447	23.66%	4.429%
15	5.765	1741	1754	1769	rBV3	24314	64903	1.26%	0.236%
16	6.933	2102	2115	2128	rBV2	40994	90852	1.76%	0.330%
17	7.694	2337	2350	2359	rBV4	42230	76460	1.48%	0.278%
18	8.267	2516	2527	2536	rBV3	66192	104592	2.03%	0.380%
19	8.882	2703	2717	2728	rBV	979887	1401276	27.19%	5.089%
20	9.153	2790	2801	2813	rBV2	122986	188629	3.66%	0.685%
21	9.632	2940	2949	2960	rBV2	44595	68239	1.32%	0.248%
22	9.946	3034	3046	3053	rBV6	71633	130873	2.54%	0.475%
23	10.377	3163	3179	3188	rBV	1287388	1451377	28.16%	5.271%
24	10.807	3305	3312	3321	rBV3	46584	56863	1.10%	0.207%
25	11.426	3490	3503	3513	rBV3	115794	147995	2.87%	0.537%
26	11.536	3527	3537	3549	rVB6	47089	90827	1.76%	0.330%
27	12.044	3684	3694	3703	rBV	2571263	2526939	49.03%	9.177%
28	12.442	3801	3817	3824	rBV8	25442	58837	1.14%	0.214%
29	13.387	4100	4109	4118	rBV2	766919	706774	13.71%	2.567%

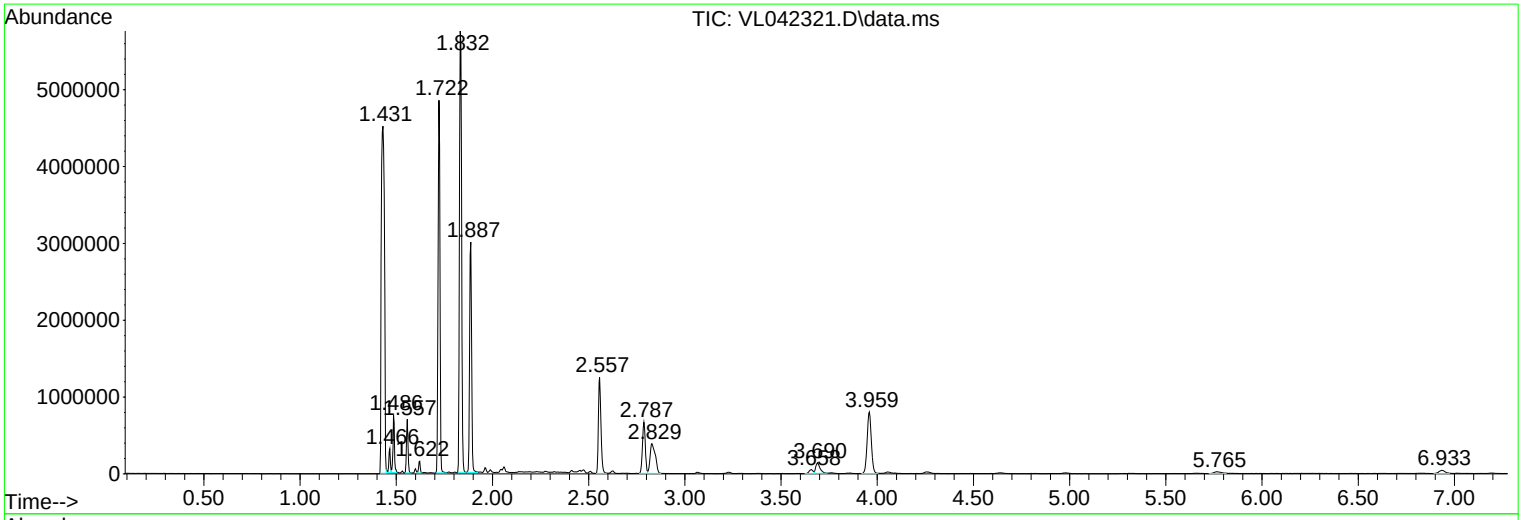
Sum of corrected areas: 27535827

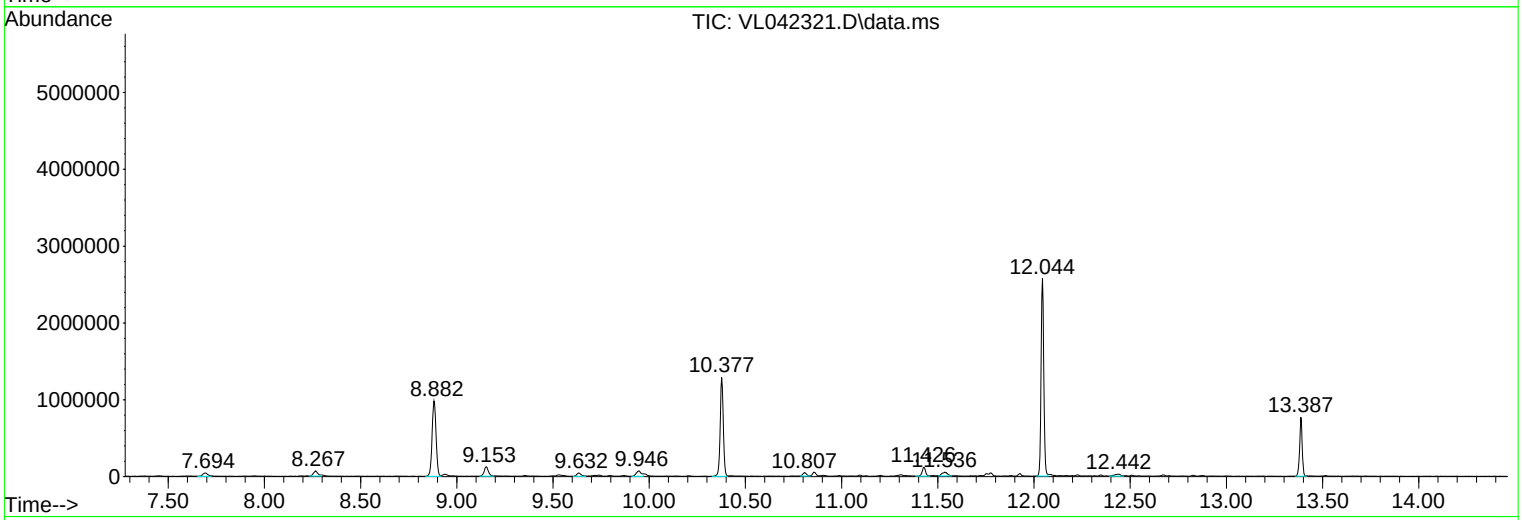
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

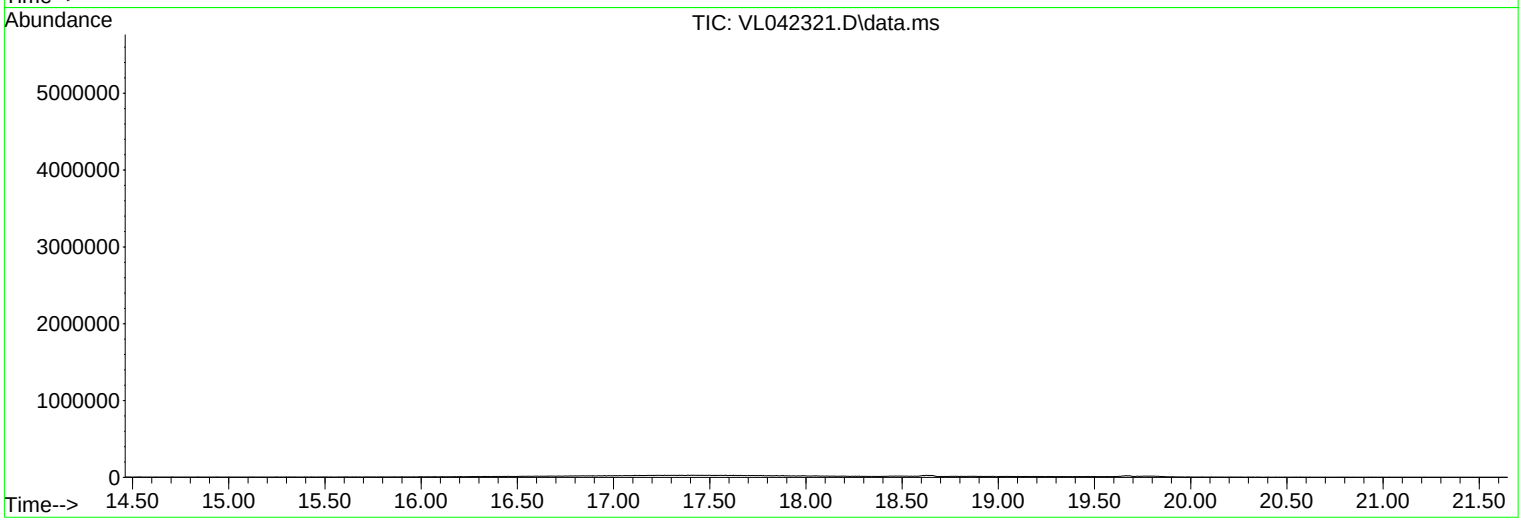
Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

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

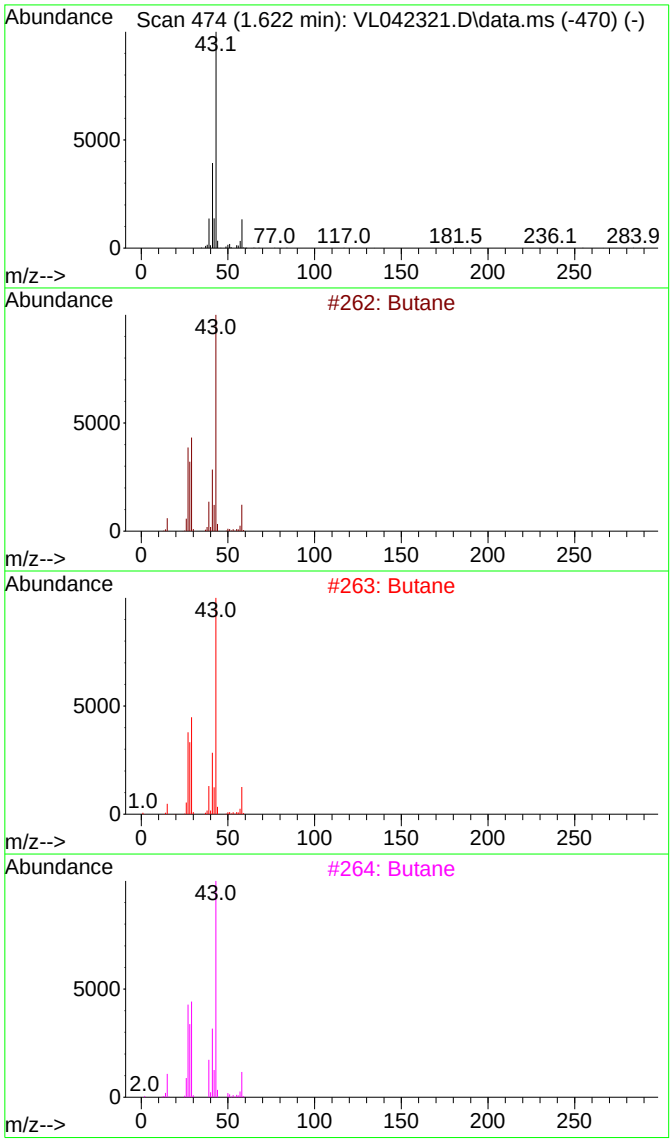
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

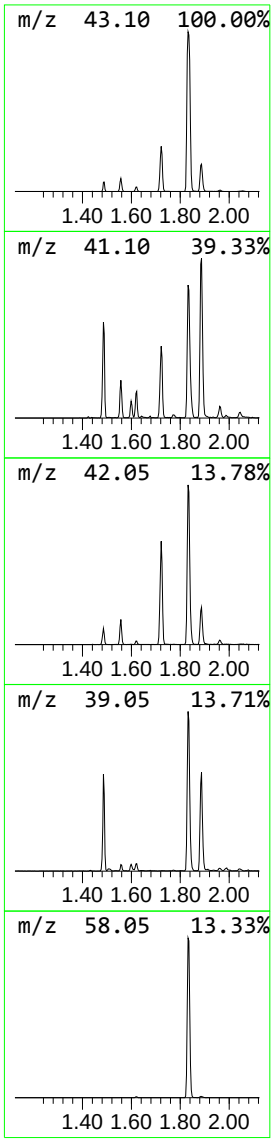
****

Peak Number 1 Butane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.26 ppbv	85941	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	72
2	Butane	58	C4H10	000106-97-8	72
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	59
5	Diazene, dimethyl-	58	C2H6N2	000503-28-6	4





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

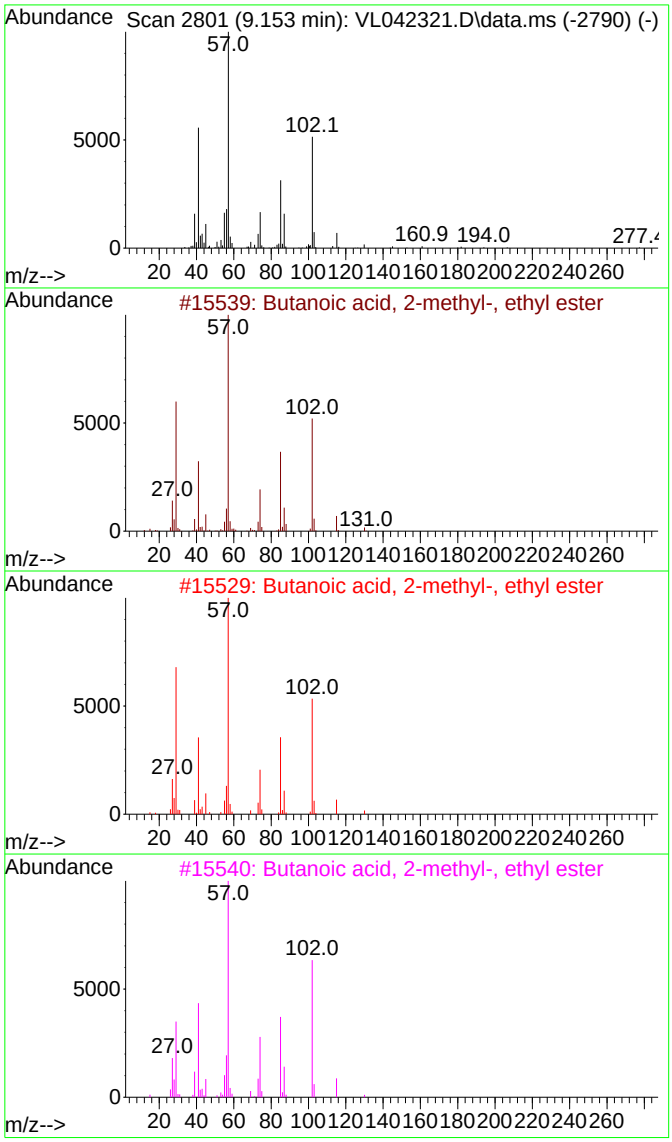
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

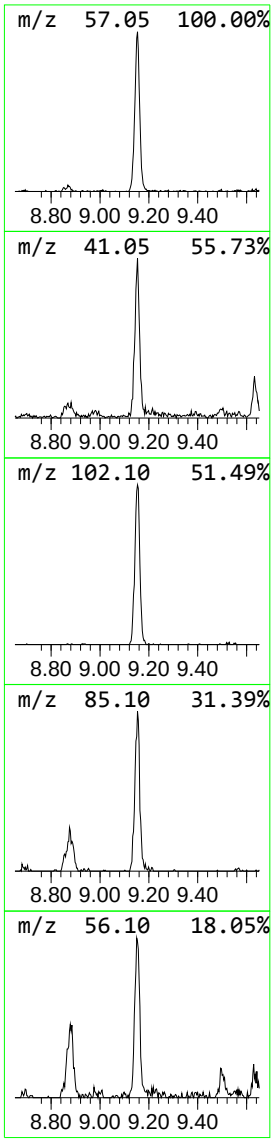
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 2 Butanoic acid, 2-methyl-, e... Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.153	1.35 ppbv	188629	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	91
2	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	91
3	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	72
4	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	64
5	Butanoic acid, 2-methyl-, ethyl ...	130	C7H14O2	007452-79-1	49





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

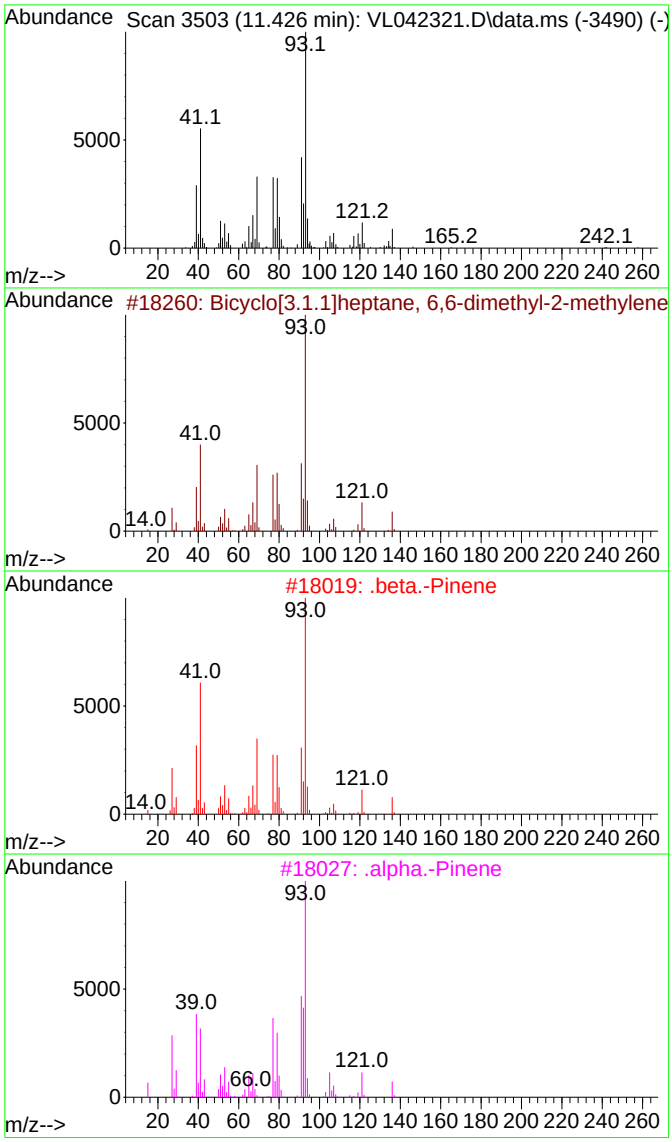
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

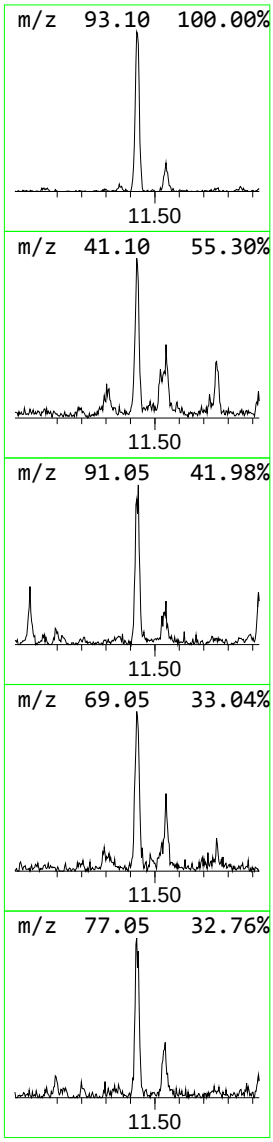
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Bicyclo[3.1.1]heptane, 6,6-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
11.426	1.06 ppbv	147995	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Bicyclo[3.1.1]heptane, 6,6-dimet...	136	C10H16	018172-67-3	94
2	.beta.-Pinene	136	C10H16	000127-91-3	93
3	.alpha.-Pinene	136	C10H16	000080-56-8	91
4	.beta.-Pinene	136	C10H16	000127-91-3	90
5	(+)-3-Carene	136	C10H16	000498-15-7	87





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

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

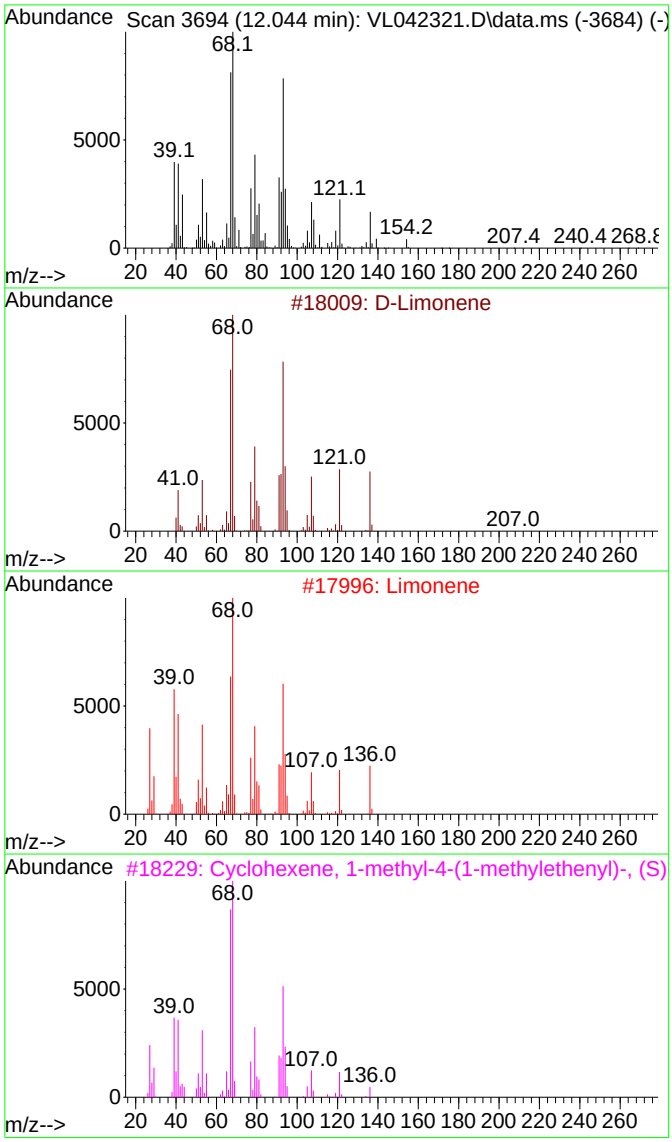
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

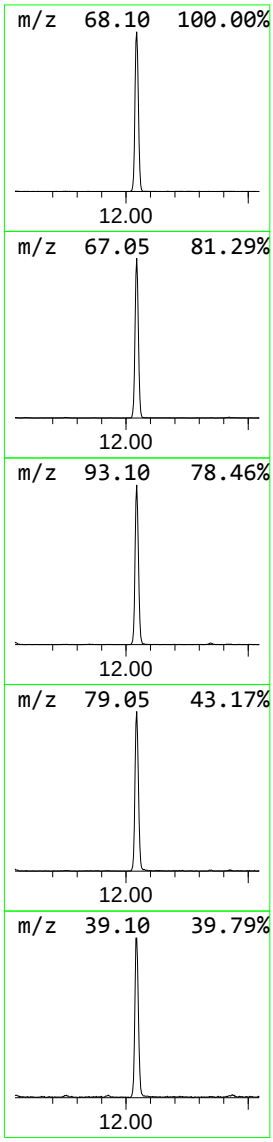
****

Peak Number 4 D-Limonene Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
12.044	18.03 ppbv	2526940	Chlorobenzene-d5	8.882

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	D-Limonene	136	C10H16	005989-27-5	97
2	Limonene	136	C10H16	000138-86-3	94
3	Cyclohexene, 1-methyl-4-(1-methy...	136	C10H16	005989-54-8	91
4	Limonene	136	C10H16	000138-86-3	89
5	Limonene	136	C10H16	000138-86-3	81





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.3	ppbv	85941	1	2.787	681609	10.0
Butanoic acid, ...	9.153	1.4	ppbv	188629	3	8.882	1401280	10.0
Bicyclo[3.1.1]h...	11.426	1.1	ppbv	147995	3	8.882	1401280	10.0
D-Limonene	12.044	18.0	ppbv	2526940	3	8.882	1401280	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-18DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042331.D	10		04/15/25 14:29	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	2.10	10.4	UD	10.4	24.7	ug/m3
64-17-5	Ethanol	1800	3390	EDQ	6.03	9.42	ug/m3
74-87-3	Chloromethane	0.98	2.02	UD	2.02	10.3	ug/m3
75-01-4	Vinyl Chloride	0.14	0.36	UD	0.36	0.77	ug/m3
74-83-9	Bromomethane	1.40	5.44	UD	5.44	19.4	ug/m3
75-00-3	Chloroethane	1.70	4.49	UD	4.49	13.2	ug/m3
109-99-9	Tetrahydrofuran	1.30	3.83	UD	3.83	14.8	ug/m3
75-69-4	Trichlorofluoromethane	1.60	8.99	UD	8.99	28.1	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	1.60	12.3	UD	12.3	38.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.88	6.15	UD	6.15	35.0	ug/m3
593-60-2	Bromoethene	1.20	5.25	UD	5.25	21.9	ug/m3
75-65-0	tert-Butyl alcohol	1.90	5.76	UDQ	5.76	15.2	ug/m3
142-82-5	Heptane	1.10	4.51	UD	4.51	20.5	ug/m3
67-63-0	Isopropyl Alcohol	78.9	194	D	1.70	12.3	ug/m3
75-35-4	1,1-Dichloroethene	1.40	5.55	UD	5.55	19.8	ug/m3
67-64-1	Acetone	150	356	D	5.70	11.9	ug/m3
75-15-0	Carbon Disulfide	1.60	4.98	UD	4.98	15.6	ug/m3
1634-04-4	Methyl tert-Butyl Ether	1.20	4.33	UD	4.33	18.0	ug/m3
75-09-2	Methylene Chloride	1.90	6.60	UDQ	6.60	17.4	ug/m3
156-60-5	trans-1,2-Dichloroethene	1.90	7.53	UD	7.53	19.8	ug/m3
75-34-3	1,1-Dichloroethane	1.30	5.26	UD	5.26	20.2	ug/m3
110-82-7	Cyclohexane	2.20	7.57	UD	7.57	17.2	ug/m3
78-93-3	2-Butanone	15.1	44.5	D	3.54	14.8	ug/m3
56-23-5	Carbon Tetrachloride	0.11	0.69	UD	0.69	1.89	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.89	3.53	UD	3.53	19.8	ug/m3
67-66-3	Chloroform	1.30	6.35	JD	4.05	24.4	ug/m3
71-55-6	1,1,1-Trichloroethane	0.10	0.55	UD	0.55	1.64	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.00	4.67	UD	4.67	23.4	ug/m3
71-43-2	Benzene	0.87	2.78	UD	2.78	16.0	ug/m3
107-06-2	1,2-Dichloroethane	0.91	3.68	UD	3.68	20.2	ug/m3
79-01-6	Trichloroethene	0.17	0.91	UD	0.91	1.61	ug/m3
78-87-5	1,2-Dichloropropane	1.10	5.08	UD	5.08	23.1	ug/m3
75-27-4	Bromodichloromethane	0.77	5.16	UD	5.16	33.5	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.93	3.81	UD	3.81	20.5	ug/m3
108-88-3	Toluene	1.10	4.15	UD	4.15	18.8	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-18DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042331.D	10		04/15/25 14:29	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.60	2.72	UD	2.72	22.7	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.64	2.91	UD	2.91	22.7	ug/m3
79-00-5	1,1,2-Trichloroethane	0.71	3.87	UD	3.87	27.3	ug/m3
124-48-1	Dibromochloromethane	0.66	5.62	UD	5.62	42.6	ug/m3
106-93-4	1,2-Dibromoethane	0.72	5.53	UD	5.53	7.69	ug/m3
127-18-4	Tetrachloroethene	0.15	1.02	UD	1.02	2.03	ug/m3
108-90-7	Chlorobenzene	0.76	3.50	UD	3.50	23.0	ug/m3
100-41-4	Ethyl Benzene	1.20	5.21	UD	5.21	21.7	ug/m3
179601-23-1	m/p-Xylene	2.10	9.12	UD	9.12	43.4	ug/m3
95-47-6	o-Xylene	1.20	5.21	UD	5.21	21.7	ug/m3
100-42-5	Styrene	1.10	4.68	UD	4.68	21.3	ug/m3
75-25-2	Bromoform	0.57	5.89	UD	5.89	51.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.11	0.76	UD	0.76	2.06	ug/m3
95-49-8	2-Chlorotoluene	1.10	5.70	UD	5.70	25.9	ug/m3
108-67-8	1,3,5-Trimethylbenzene	1.10	5.41	UD	5.41	24.6	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.78	3.83	UD	3.83	24.6	ug/m3
541-73-1	1,3-Dichlorobenzene	0.80	4.81	UD	4.81	30.1	ug/m3
106-46-7	1,4-Dichlorobenzene	0.53	3.19	UD	3.19	30.1	ug/m3
95-50-1	1,2-Dichlorobenzene	0.75	4.51	UD	4.51	30.1	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.85	6.31	UD	6.31	37.1	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.85	9.07	UD	9.07	53.3	ug/m3
106-99-0	1,3-Butadiene	1.30	2.88	UD	2.88	11.1	ug/m3
91-20-3	Naphthalene	0.75	3.93	UD	3.93	5.24	ug/m3
622-96-8	4-Ethyltoluene	1.20	5.90	UD	5.90	24.6	ug/m3
110-54-3	Hexane	1.70	5.99	JD	3.88	17.6	ug/m3
107-05-1	Allyl Chloride	1.50	4.70	UD	4.70	15.7	ug/m3
123-91-1	1,4-Dioxane	2.10	7.57	UD	7.57	18.0	ug/m3
80-62-6	Methyl Methacrylate	0.86	3.52	UD	3.52	20.5	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.50			70 (65) - 130 (135)	95%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	169000		2.81			
540-36-3	1,4-Difluorobenzene	401000		3.994			
3114-55-4	Chlorobenzene-d5	340000		8.914			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B10-3-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-18DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042331.D	10		04/15/25 14:29	VL041525

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042331.D
Acq On : 15 Apr 2025 14:29
Operator : SY/MD
Sample : Q1665-18DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Quant Time: Apr 16 01:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.810	49	168977	10.000	ppbv	0.03
33) 1,4-Difluorobenzene	3.994	114	401158	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.914	117	339800	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.406	95	265292	9.507	ppbv	0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.100%			
Target Compounds						Qvalue
9) Propene	1.495	41	4953	0.424	ppbv	90
13) Ethanol	1.732	45	197027	178.408	ppbv	81
15) Acetone	1.848	43	351816	14.887	ppbv	96
19) Isopropyl Alcohol	1.900	45	105242	7.893	ppbv #	35
26) Hexane	2.852	57	4022	0.170	ppbv #	86
29) Chloroform	2.871	83	4529	0.131	ppbv	89
34) 2-Butanone	2.580	43	44053	1.514	ppbv	100

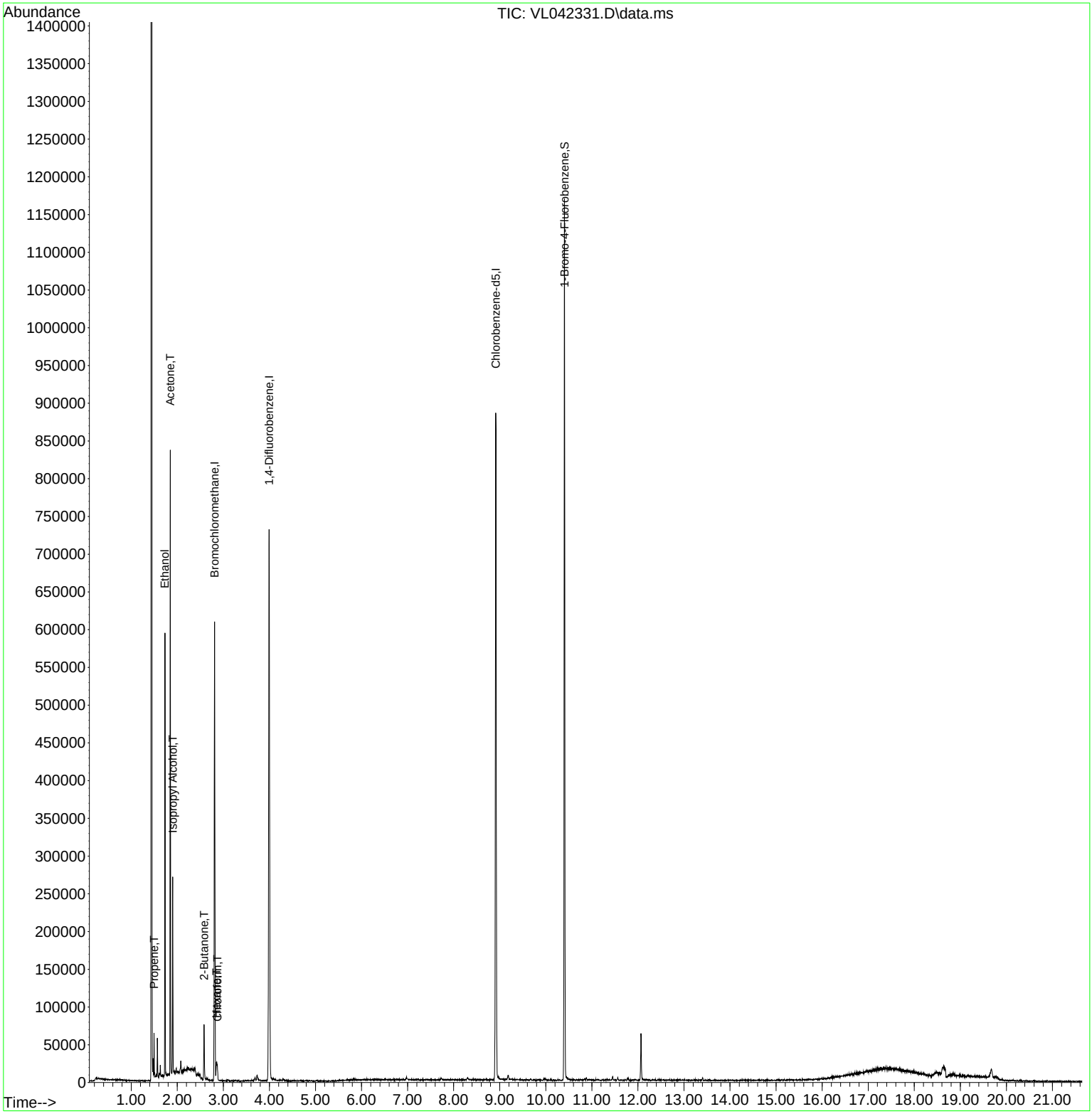
(#) = qualifier out of range (m) = manual integration (+) = signals summed

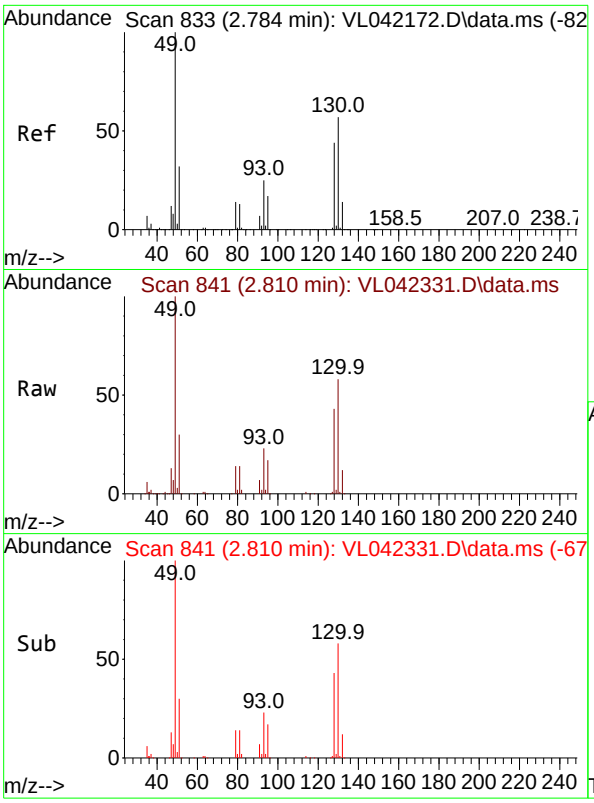
Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042331.D
Acq On : 15 Apr 2025 14:29
Operator : SY/MD
Sample : Q1665-18DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Quant Time: Apr 16 01:32:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



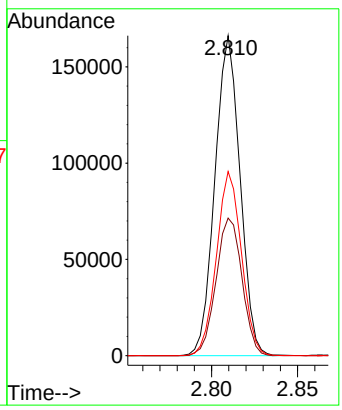


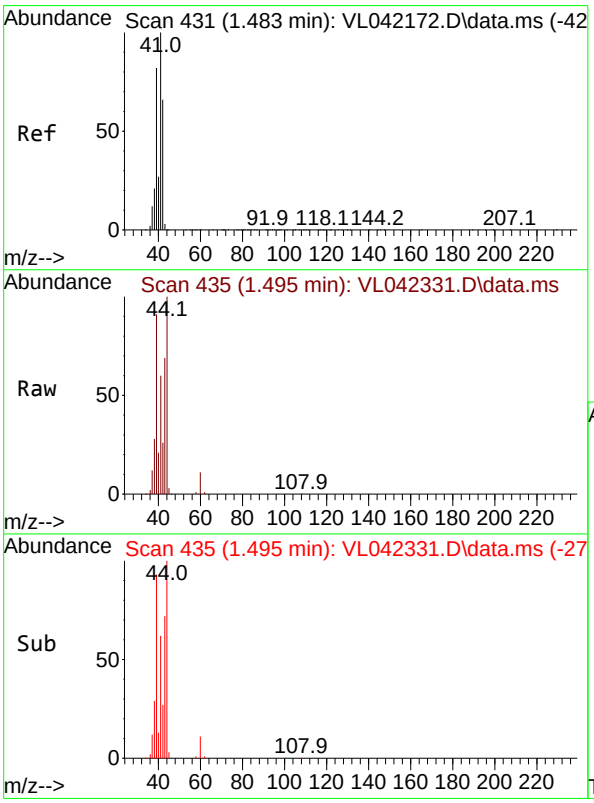
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.810 min Scan# 84
Delta R.T. 0.026 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 49 Resp: 168977

Ion	Ratio	Lower	Upper
49	100		
128	44.4	22.9	68.5
130	57.3	28.8	86.4

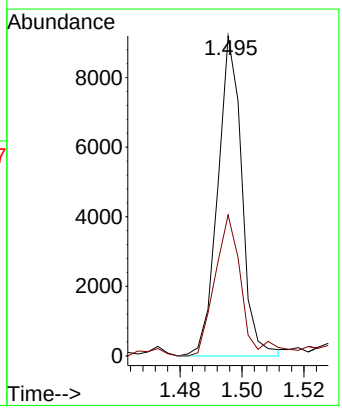


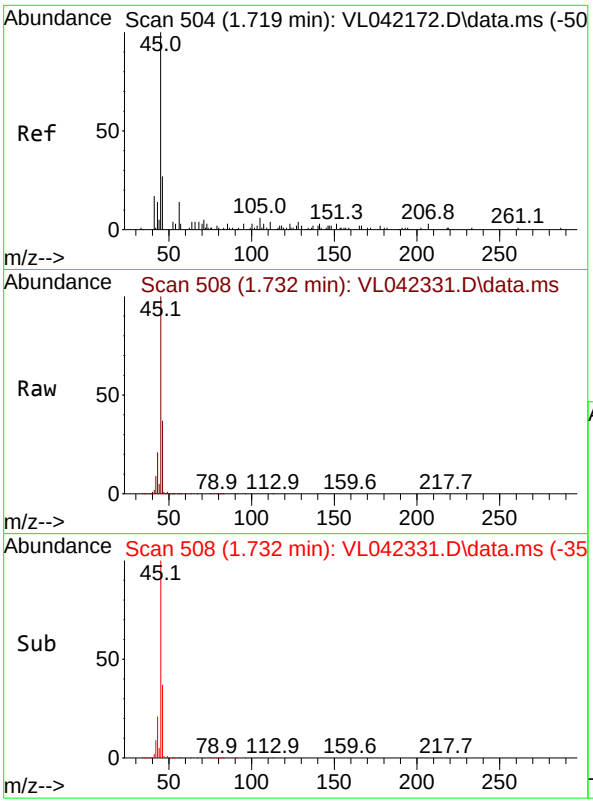


#9
Propene
Concen: 0.424 ppbv
RT: 1.495 min Scan# 435
Delta R.T. 0.013 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 41 Resp: 4953

Ion	Ratio	Lower	Upper
41	100		
42	61.5	55.4	83.2



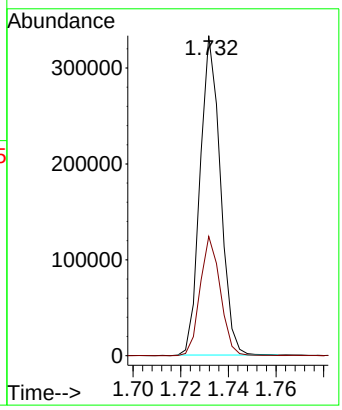


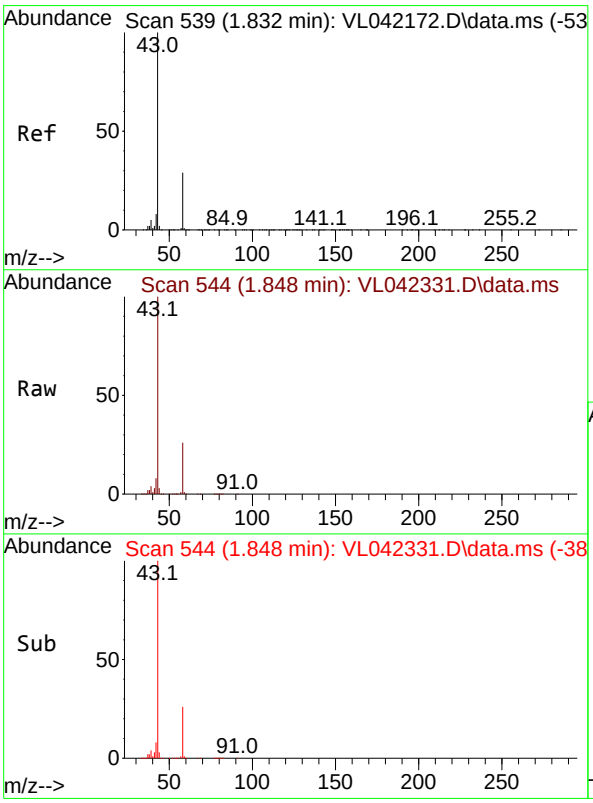
#13
Ethanol
Concen: 178.408 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 45 Resp: 197027

Ion	Ratio	Lower	Upper
45	100		
46	37.5	20.2	80.8

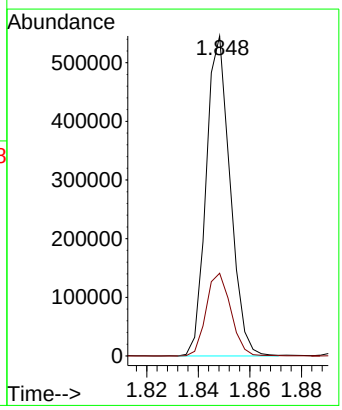


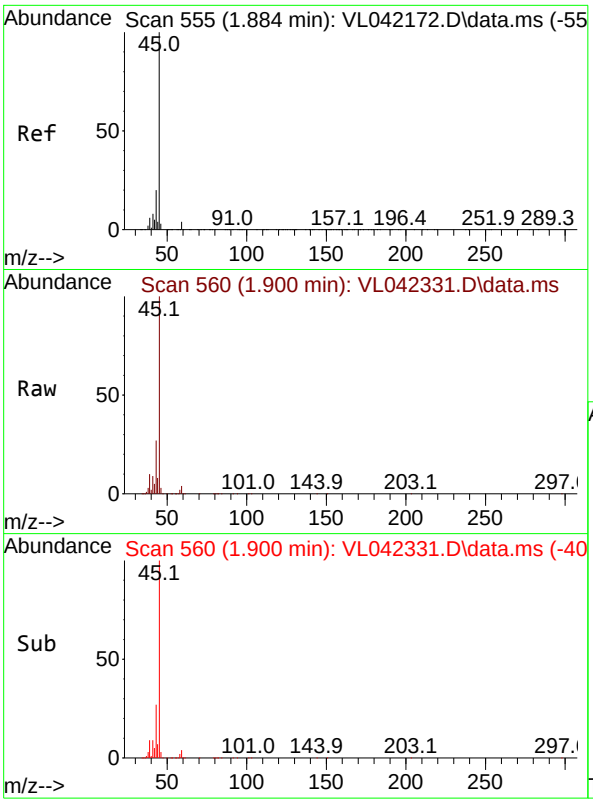


#15
Acetone
Concen: 14.887 ppbv
RT: 1.848 min Scan# 544
Delta R.T. 0.016 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 43 Resp: 351816

Ion	Ratio	Lower	Upper
43	100		
58	26.7	23.2	34.8



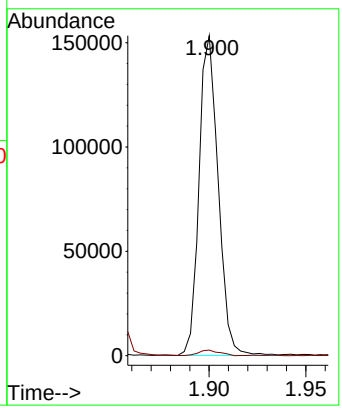


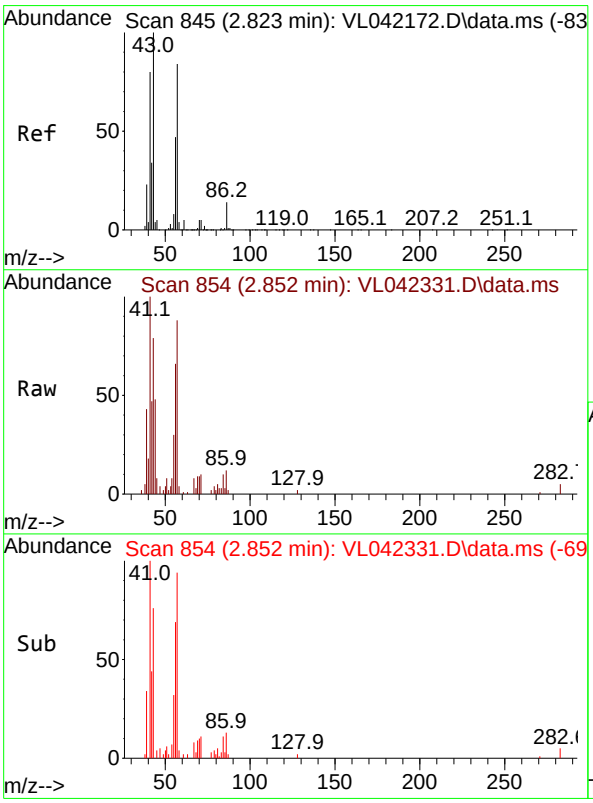
#19
Isopropyl Alcohol
Concen: 7.893 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 45 Resp: 105242

Ion	Ratio	Lower	Upper
45	100		
58	89.3	36.9	55.3#

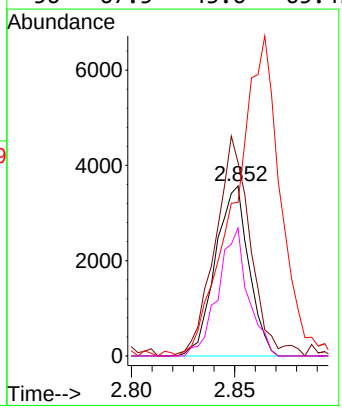


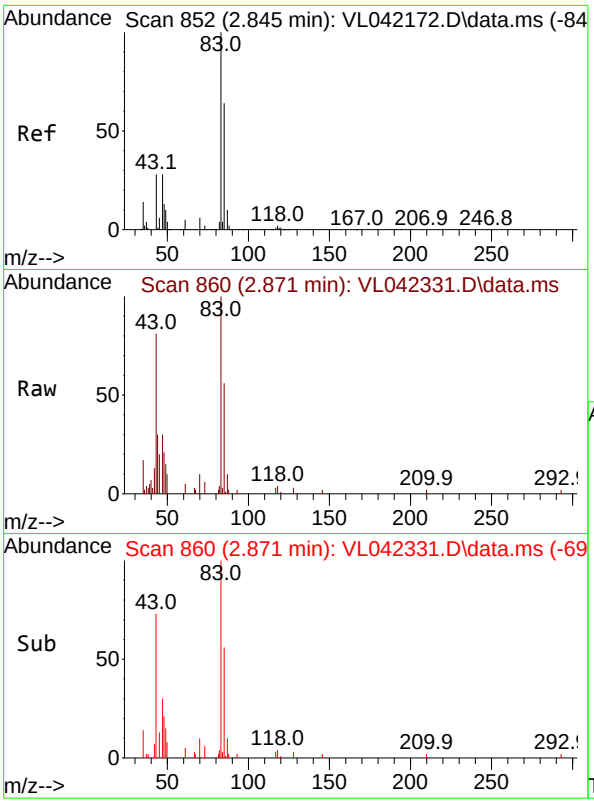


#26
Hexane
Concen: 0.170 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.029 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Tgt Ion: 57 Resp: 4022

Ion	Ratio	Lower	Upper
57	100		
41	141.6	76.6	114.8#
43	262.3	207.8	311.8
56	67.5	43.6	65.4#



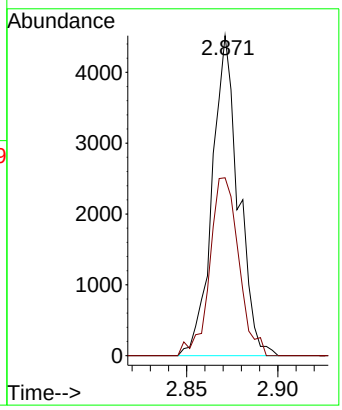


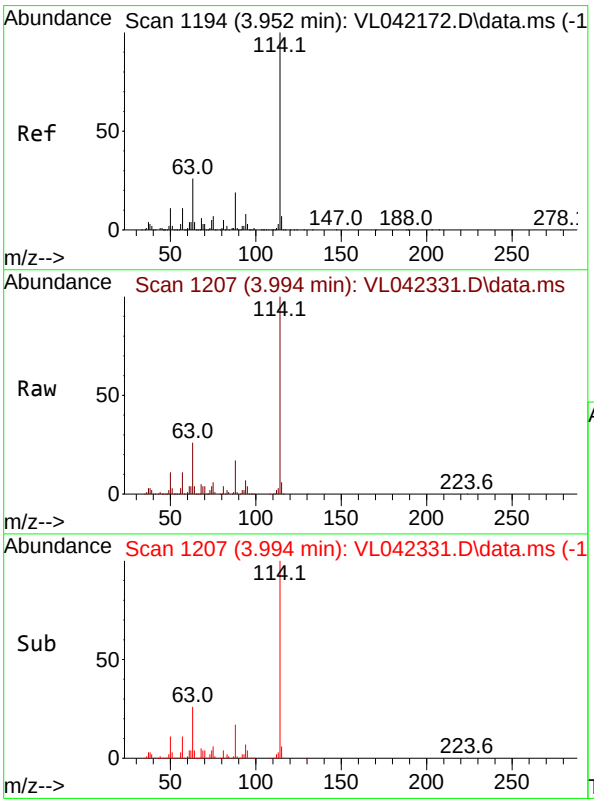
#29
Chloroform
Concen: 0.131 ppbv
RT: 2.871 min Scan# 8
Delta R.T. 0.026 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 83 Resp: 4529

Ion	Ratio	Lower	Upper
83	100		
85	55.6	51.4	77.2

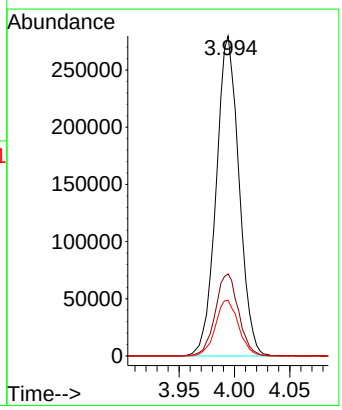


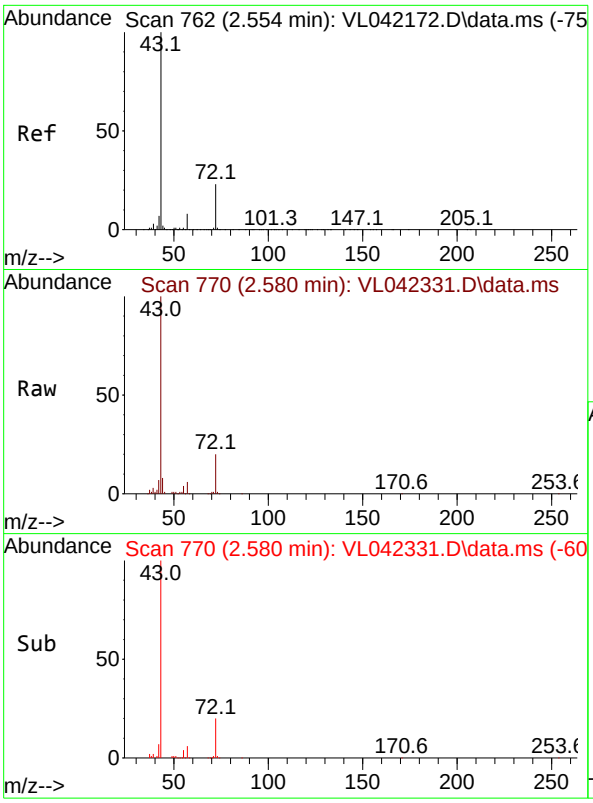


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.994 min Scan# 1207
Delta R.T. 0.042 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Tgt Ion:114 Resp: 401158

Ion	Ratio	Lower	Upper
114	100		
63	26.2	20.7	31.1
88	17.7	15.0	22.4



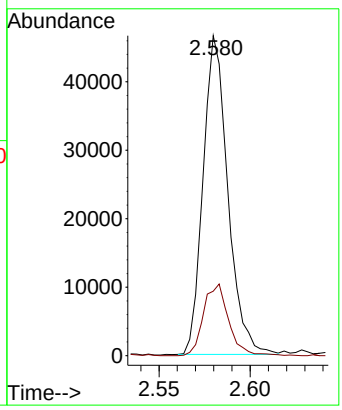


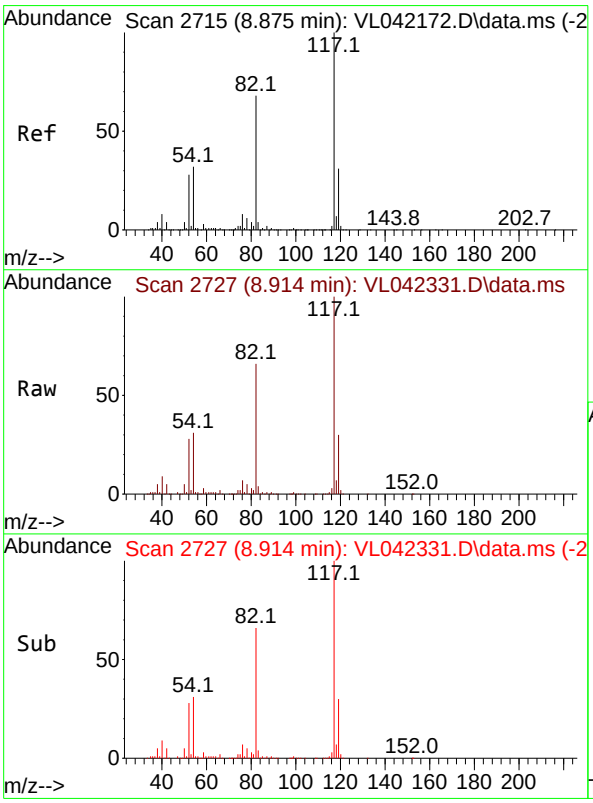
#34
2-Butanone
Concen: 1.514 ppbv
RT: 2.580 min Scan# 7
Delta R.T. 0.026 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 43 Resp: 44053

Ion	Ratio	Lower	Upper
43	100		
72	22.9	18.2	27.2

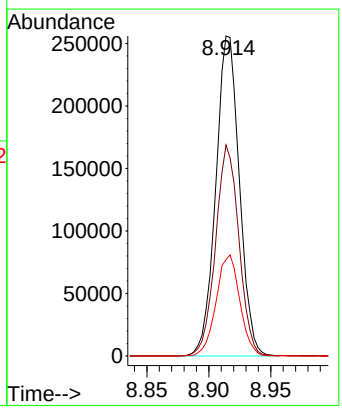


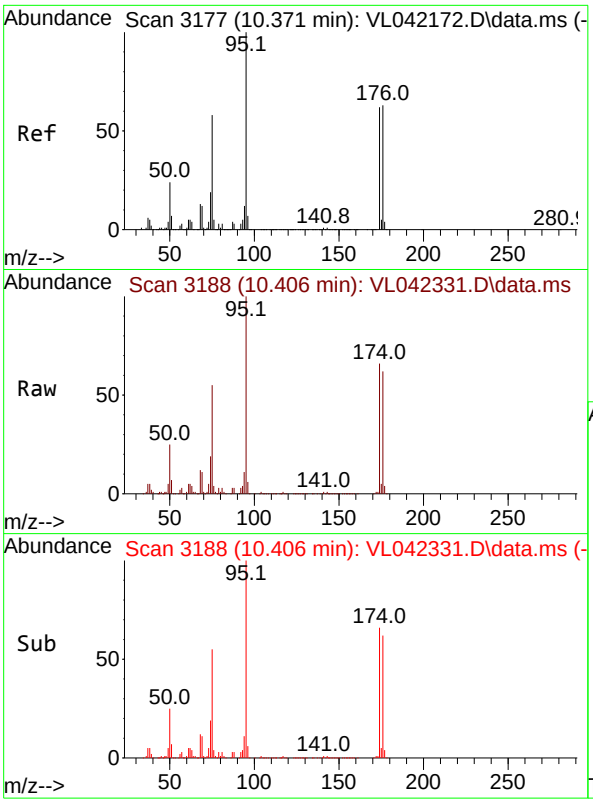


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.914 min Scan# 2727
Delta R.T. 0.039 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Tgt Ion:117 Resp: 339800

Ion	Ratio	Lower	Upper
117	100		
82	65.2	55.8	83.6
119	31.8	25.5	38.3



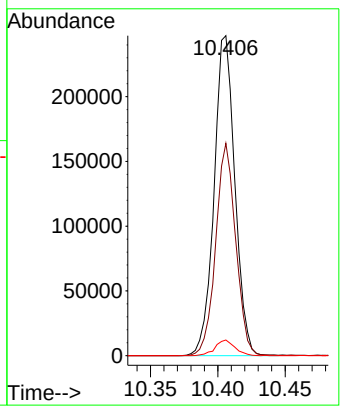


#68
1-Bromo-4-Fluorobenzene
Concen: 9.507 ppbv
RT: 10.406 min Scan# 3
Delta R.T. 0.035 min
Lab File: VL042331.D
Acq: 15 Apr 2025 14:29

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025DL

Tgt Ion: 95 Resp: 265292

Ion	Ratio	Lower	Upper
95	100		
174	64.1	50.6	76.0
175	4.7	3.8	5.6



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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-19	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042423.D	1		04/28/25 13:26	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.46	2.27	J	1.04	2.47	ug/m3
64-17-5	Ethanol	320	603	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.66	1.36		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	2.90	8.79		0.58	1.52	ug/m3
142-82-5	Heptane	0.49	2.01	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	32.0	78.7	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	17.2	40.9	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.89	3.09		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	1.60	4.72		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.060	0.38		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.67	3.13		0.47	2.34	ug/m3
71-43-2	Benzene	0.45	1.44	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.46	1.86	J	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.40	1.64	J	0.37	2.05	ug/m3
108-88-3	Toluene	4.00	15.1		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-19	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042423.D	1		04/28/25 13:26	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.050	0.34		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.50	2.17		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.20	5.21		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.50	2.17		0.52	2.17	ug/m3
100-42-5	Styrene	0.32	1.36	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.14	0.69	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.39	1.92	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.40	8.46		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.7			70 (65) - 130 (135)	107%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	134000		2.784			
540-36-3	1,4-Difluorobenzene	394000		3.953			
3114-55-4	Chlorobenzene-d5	338000		8.879			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-19	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042423.D	1		04/28/25 13:26	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
115-07-1	Propene	4.40		J		1.49	ppbv
000106-97-8	Butane	24.9		J		1.62	ppbv
000071-23-8	1-Propanol	2.70		J		2.27	ppbv
000123-72-8	Butanal	2.00		J		2.51	ppbv
1000420-59-4	Carbonic acid, monoamide, tert-but	2.60		J		6.84	ppbv
591-78-6	2-Hexanone	0.25		J		7.44	ppbv
000106-35-4	3-Heptanone	23.7		J		9.74	ppbv
000080-56-8	.alpha.-Pinene	2.30		J		10.9	ppbv
000123-05-7	Hexanal, 2-ethyl-	3.70		J		10.9	ppbv
103-65-1	n-propylbenzene	0.11		J		11.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 29 01:36:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	134276	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.953	114	394249	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	337638	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	295822	10.662	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 106.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	10922	0.460	ppbv		97
4) Chloromethane	1.532	50	6178	0.658	ppbv		94
9) Propene	1.486	41	45181m	4.392	ppbv		
10) Heptane	4.969	43	14174m	0.490	ppbv		
11) Trichlorofluoromethane	1.875	101	5064	0.224	ppbv		96
13) Ethanol	1.719	45	530749	324.570	ppbv		75
15) Acetone	1.833	43	377040m	17.153	ppbv		
17) tert-Butyl alcohol	2.043	59	80244	2.946	ppbv		100
19) Isopropyl Alcohol	1.884	45	390564	31.985	ppbv	#	77
20) Methylene Chloride	2.059	84	7626	0.886	ppbv		89
26) Hexane	2.826	57	51632	2.354	ppbv	#	42
30) Cyclohexane	3.852	84	3756m	0.212	ppbv		
34) 2-Butanone	2.558	43	49884	1.600	ppbv		96
35) Carbon Tetrachloride	3.762	117	2109m	0.059	ppbv		
36) Benzene	3.655	78	19225	0.452	ppbv	#	86
37) 1,2-Dichloroethane	3.215	62	11718	0.459	ppbv		97
44) 2,2,4-Trimethylpentane	4.632	57	49004m	0.667	ppbv		
50) 4-Methyl-2-Pentanone	5.755	43	20843m	0.402	ppbv		
51) 2-Hexanone	7.442	43	11653m	0.251	ppbv		
52) Tetrachloroethene	8.215	164	744m	0.045	ppbv		
53) Toluene	6.930	91	202018	3.959	ppbv		100
58) Ethyl Benzene	9.351	91	33321	0.498	ppbv		99
59) m/p-Xylene	9.526	91	66442	1.233	ppbv		97
60) o-Xylene	9.963	91	27079	0.499	ppbv		97
61) Styrene	9.869	104	8176	0.316	ppbv		94
64) n-propylbenzene	10.986	120	2190	0.109	ppbv		89
72) 4-Ethyltoluene	11.128	105	8239m	0.124	ppbv		
73) 1,3,5-Trimethylbenzene	11.203	105	8221	0.140	ppbv	#	83
74) 1,2,4-Trimethylbenzene	11.533	105	26441	0.387	ppbv	#	63

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

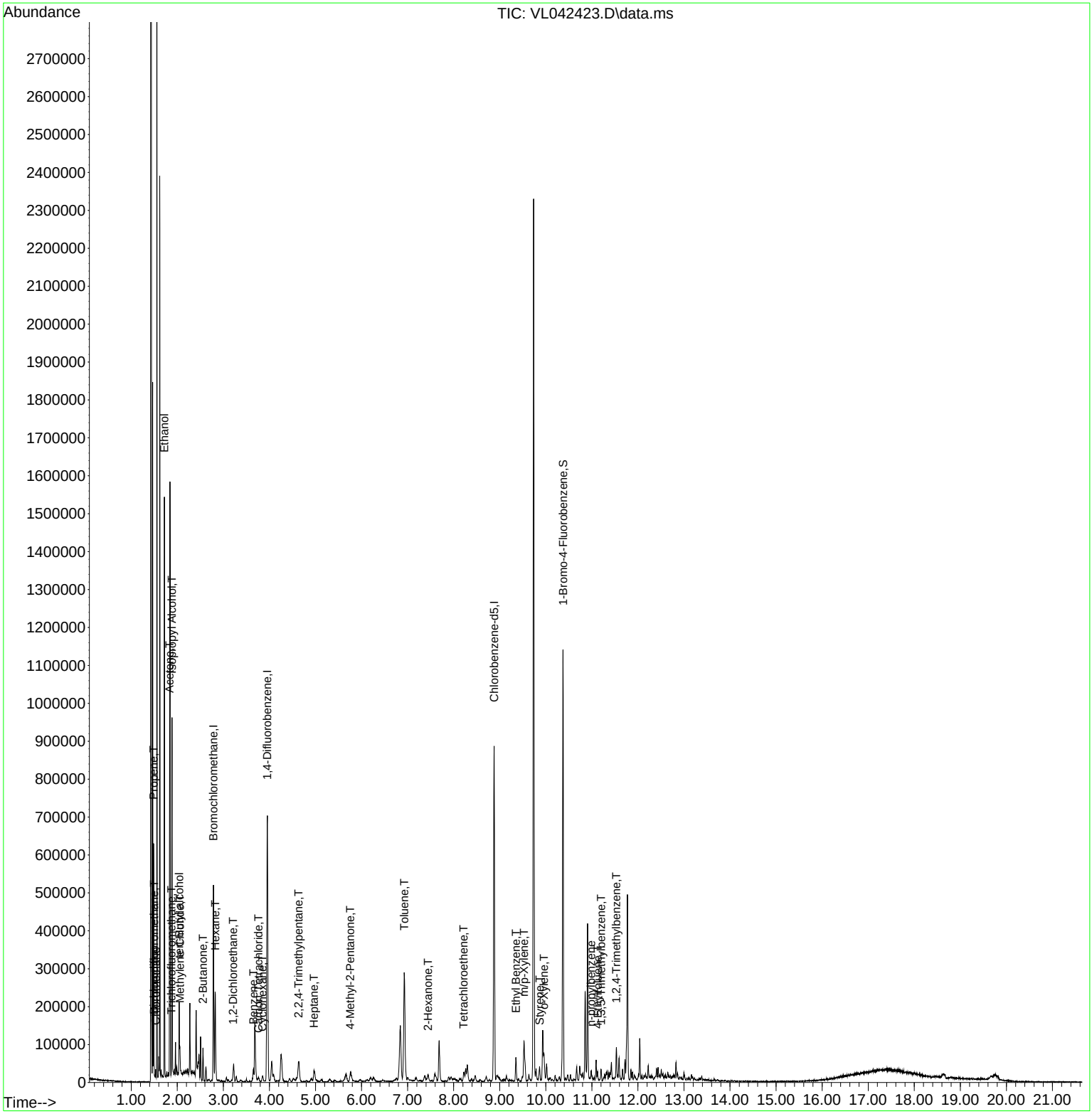
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

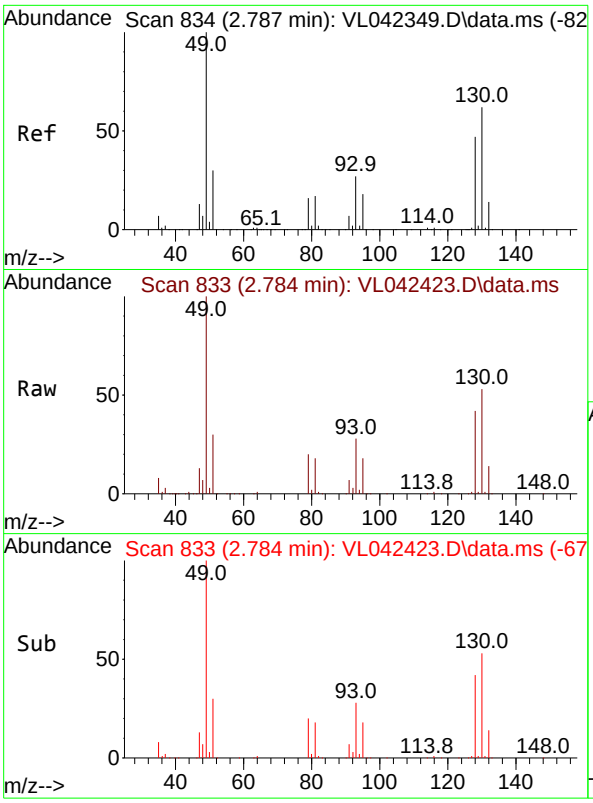
Quant Time: Apr 29 01:36:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

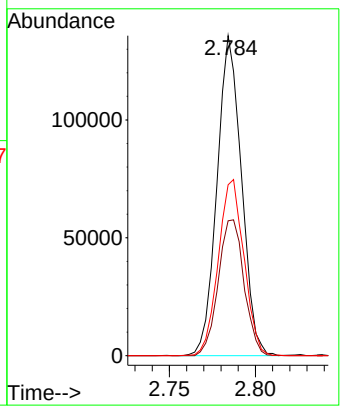




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 49 Resp: 13427

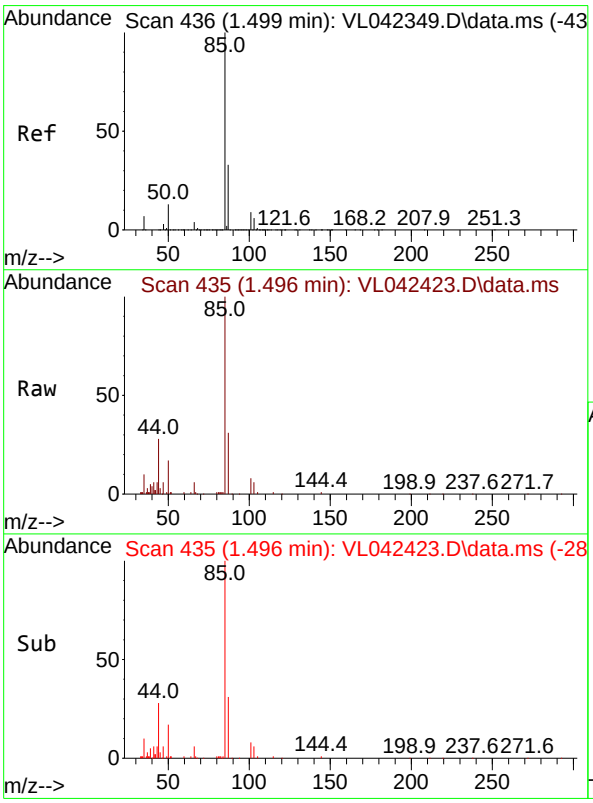
Ion	Ratio	Lower	Upper
49	100		
128	44.7	22.8	68.4
130	57.8	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

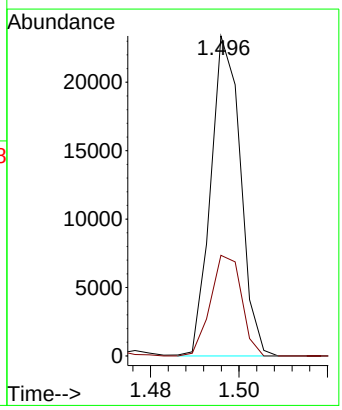
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

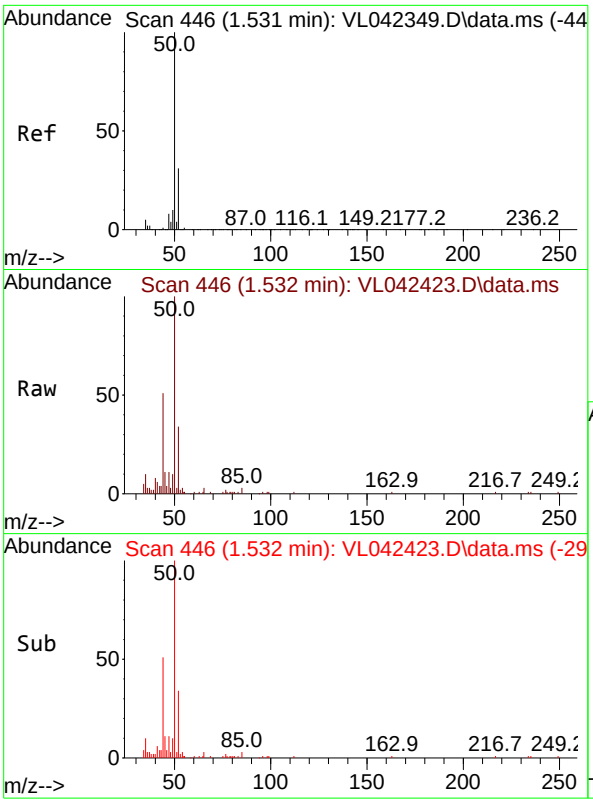


#2
Dichlorodifluoromethane
Concen: 0.460 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 85 Resp: 10922

Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.6	39.8

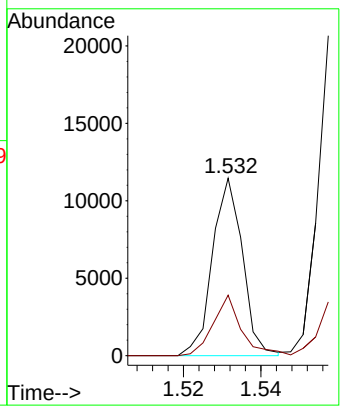




#4
Chloromethane
Concen: 0.658 ppbv
RT: 1.532 min Scan# 44
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 50 Resp: 617

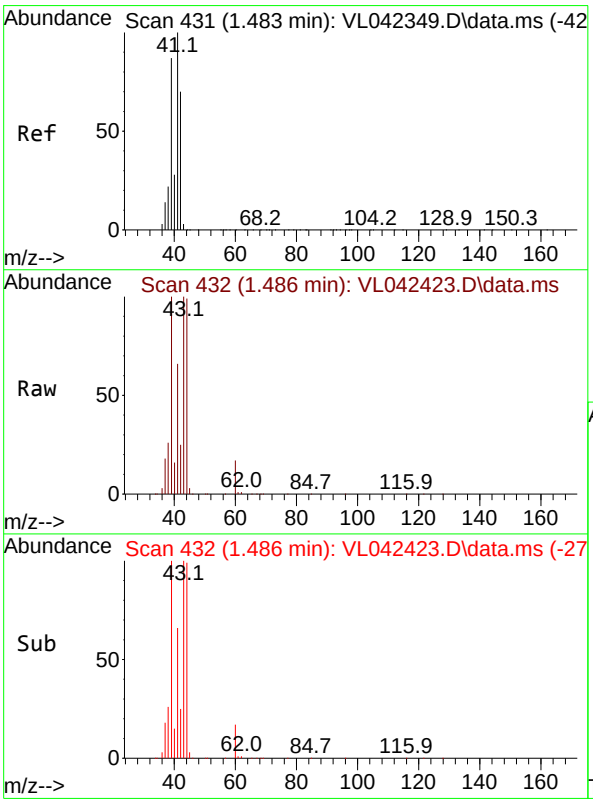
Ion	Ratio	Lower	Upper
50	100		
52	34.1	24.7	37.1



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

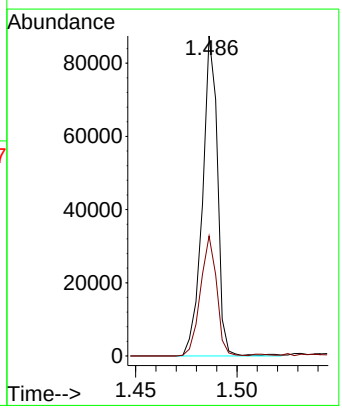
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

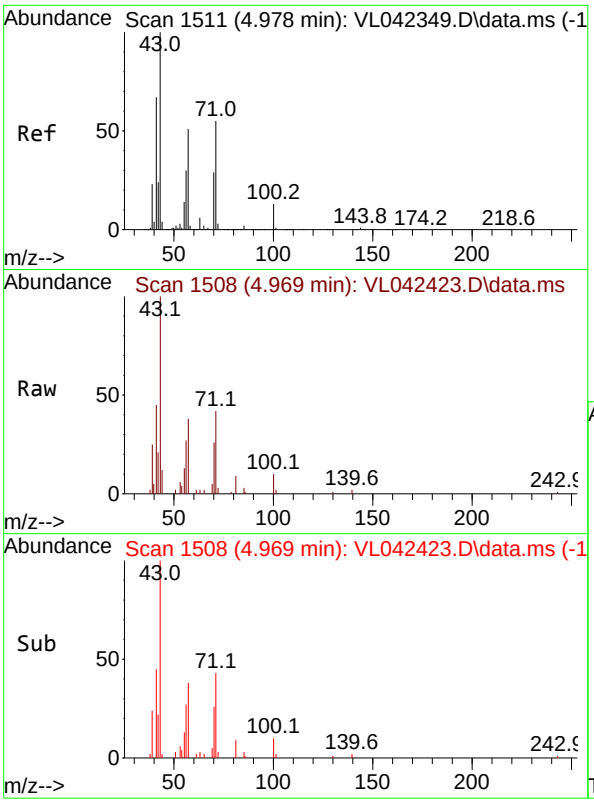


#9
Propene
Concen: 4.392 ppbv m
RT: 1.486 min Scan# 432
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 41 Resp: 45181

Ion	Ratio	Lower	Upper
41	100		
42	579.0	56.2	84.4#

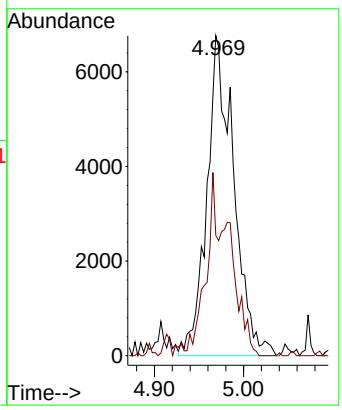




#10
Heptane
Concen: 0.490 ppbv m
RT: 4.969 min Scan# 1
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 1417

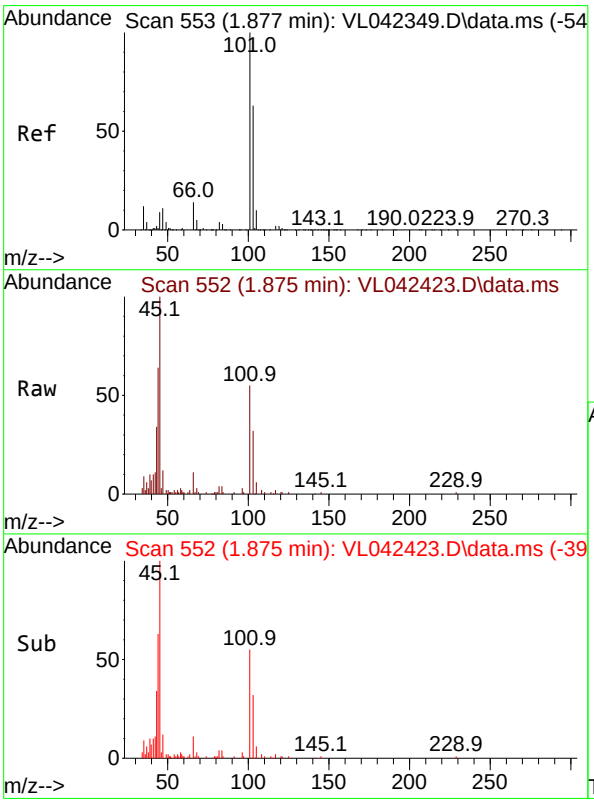
Ion	Ratio	Lower	Upper
43	100		
57	52.9	39.9	59.9



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

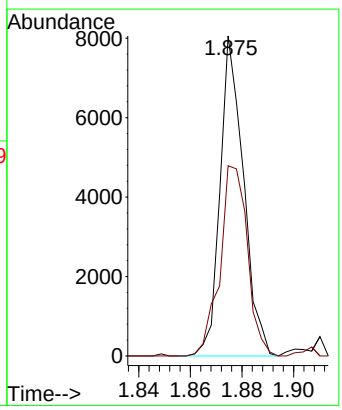
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

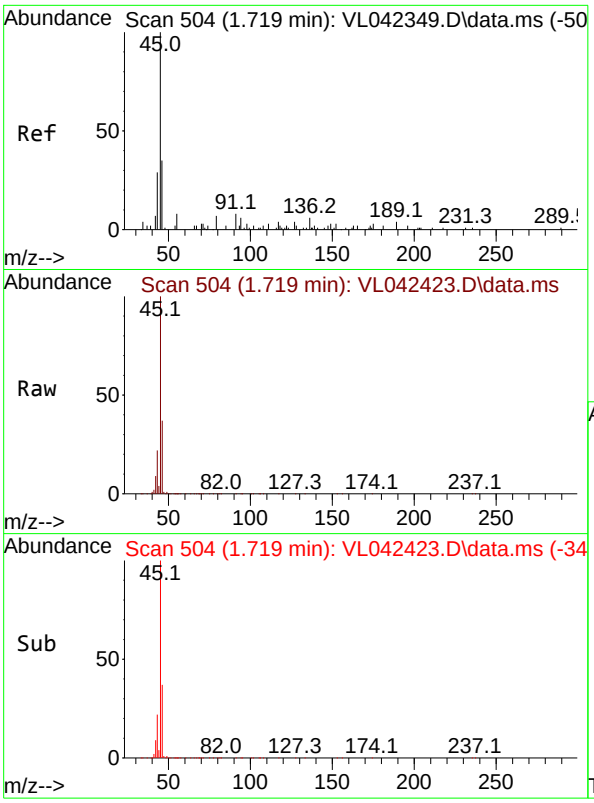


#11
Trichlorofluoromethane
Concen: 0.224 ppbv
RT: 1.875 min Scan# 552
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:101 Resp: 5064

Ion	Ratio	Lower	Upper
101	100		
103	59.4	50.1	75.1

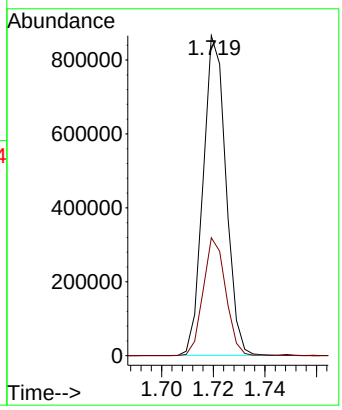




#13
Ethanol
Concen: 324.570 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 45 Resp: 53074

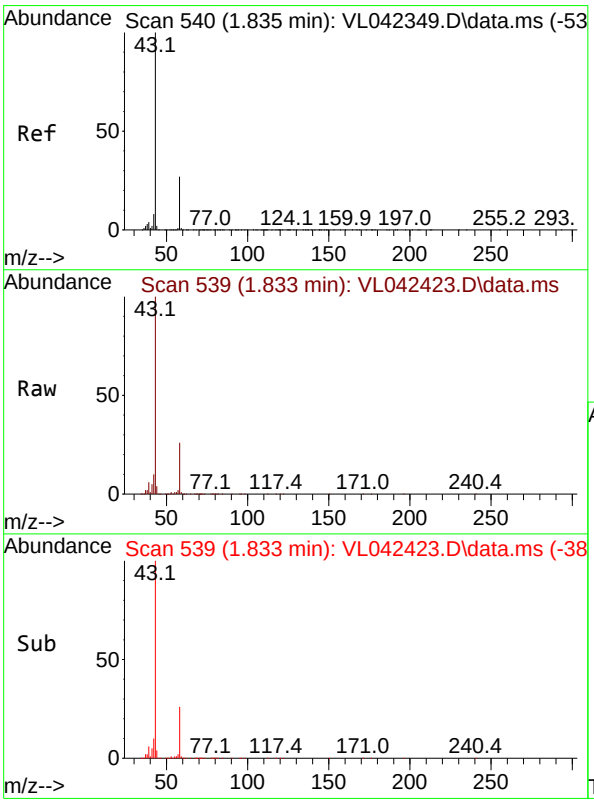
Ion	Ratio	Lower	Upper
45	100		
46	36.6	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

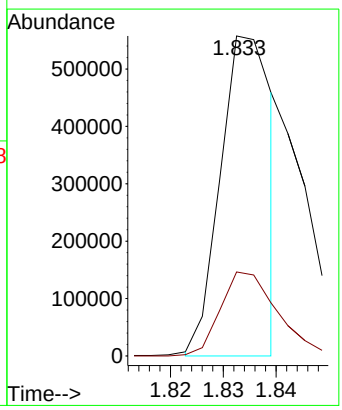
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

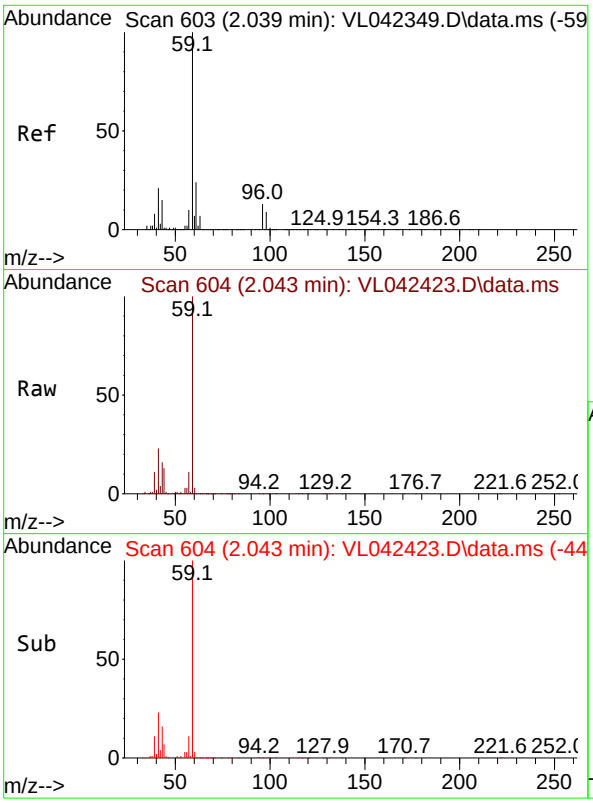


#15
Acetone
Concen: 17.153 ppbv m
RT: 1.833 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 377040

Ion	Ratio	Lower	Upper
43	100		
58	29.4	22.4	33.6

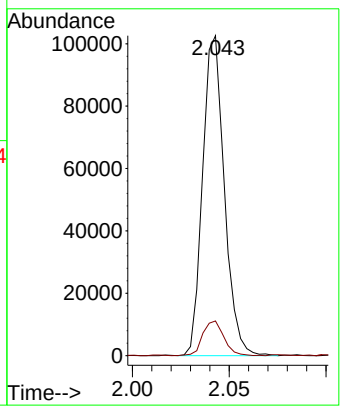




#17
tert-Butyl alcohol
Concen: 2.946 ppbv
RT: 2.043 min Scan# 6(
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 59 Resp: 8024

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.7	13.1



Instrument :
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ClientSampleId :
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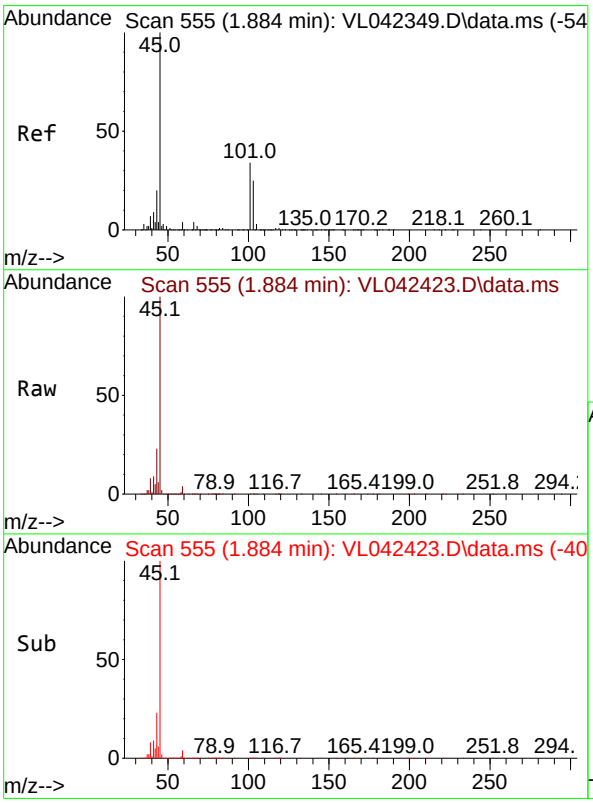
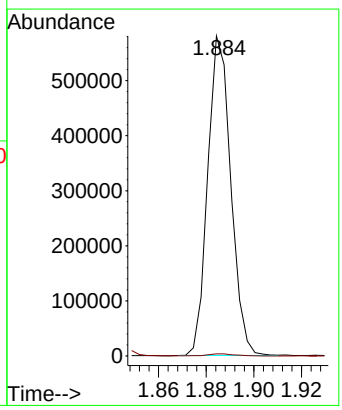
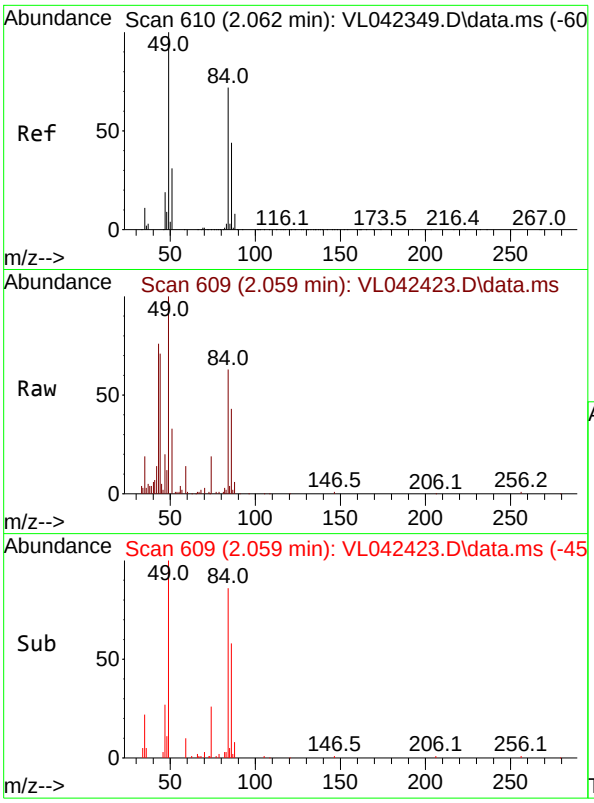


#19
Isopropyl Alcohol
Concen: 31.985 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 45 Resp: 390564

Ion	Ratio	Lower	Upper
45	100		
58	28.3	34.5	51.7#

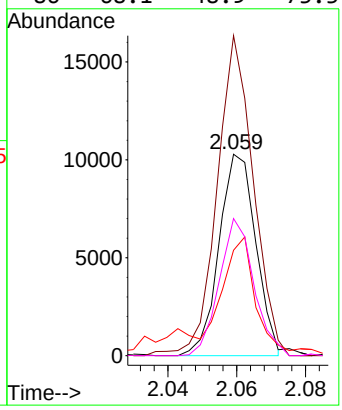




#20
Methylene Chloride
Concen: 0.886 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 84 Resp: 762

Ion	Ratio	Lower	Upper
84	100		
49	156.3	111.6	167.4
51	47.0	35.1	52.7
86	68.1	48.9	73.3



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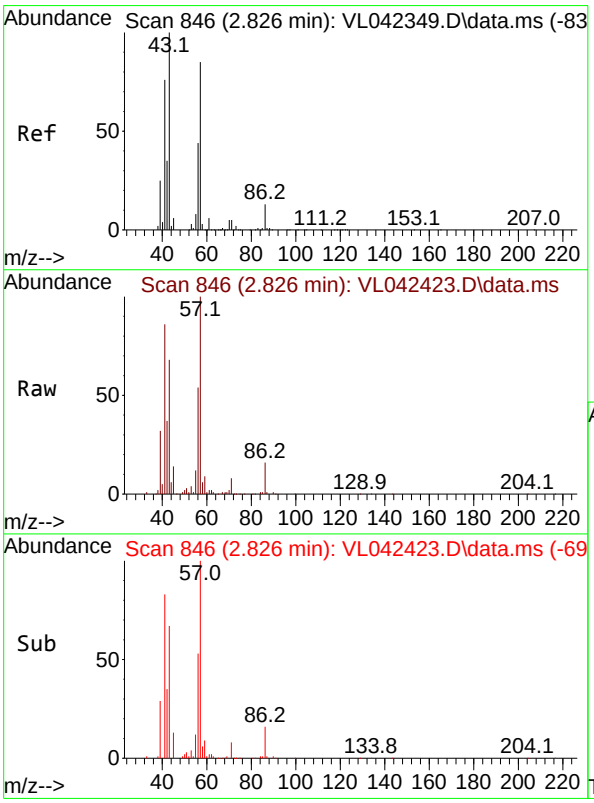
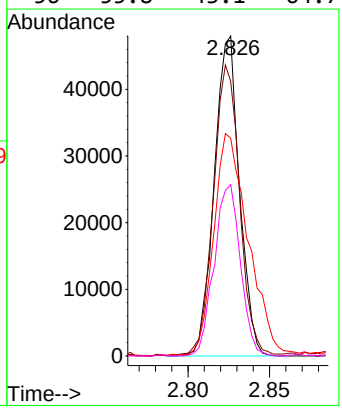
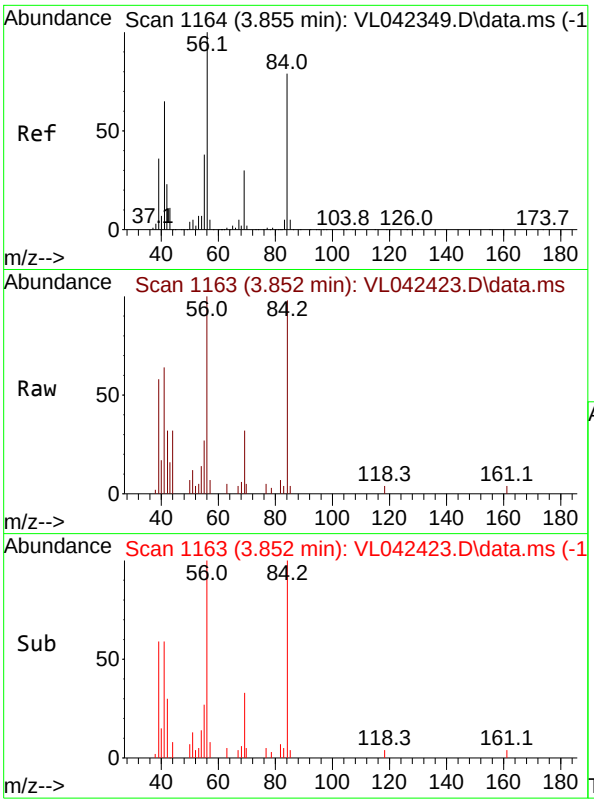


#26
Hexane
Concen: 2.354 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 57 Resp: 51632

Ion	Ratio	Lower	Upper
57	100		
41	95.5	77.9	116.9
43	97.6	208.4	312.6#
56	55.8	43.1	64.7

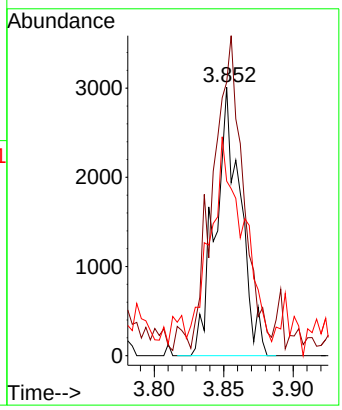




#30
Cyclohexane
Concen: 0.212 ppbv m
RT: 3.852 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 84 Resp: 375

Ion	Ratio	Lower	Upper
84	100		
56	147.4	101.0	151.4
41	101.7	67.4	101.0



Instrument :
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ClientSampleId :
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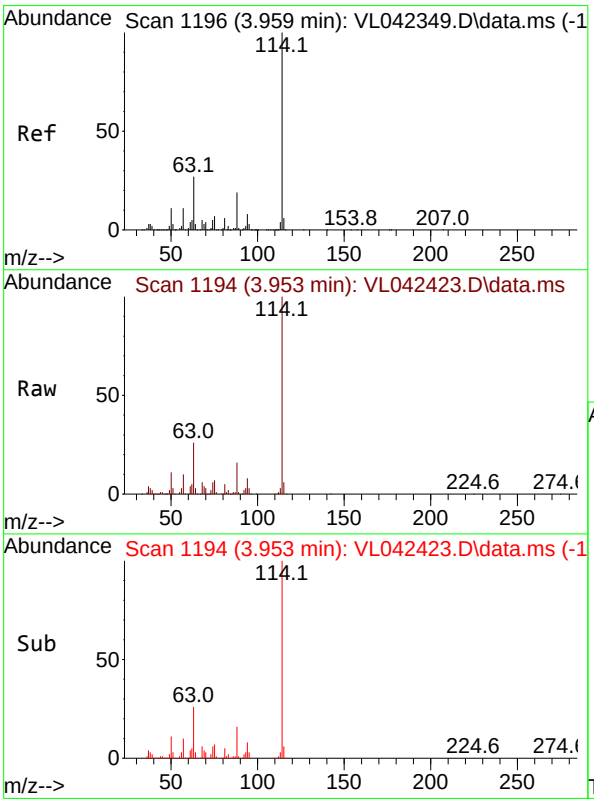
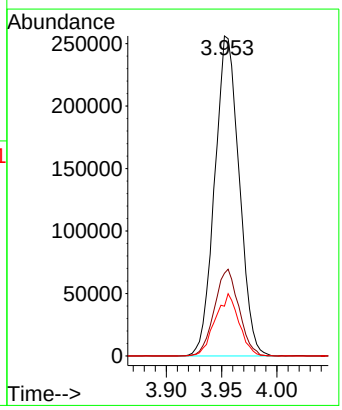
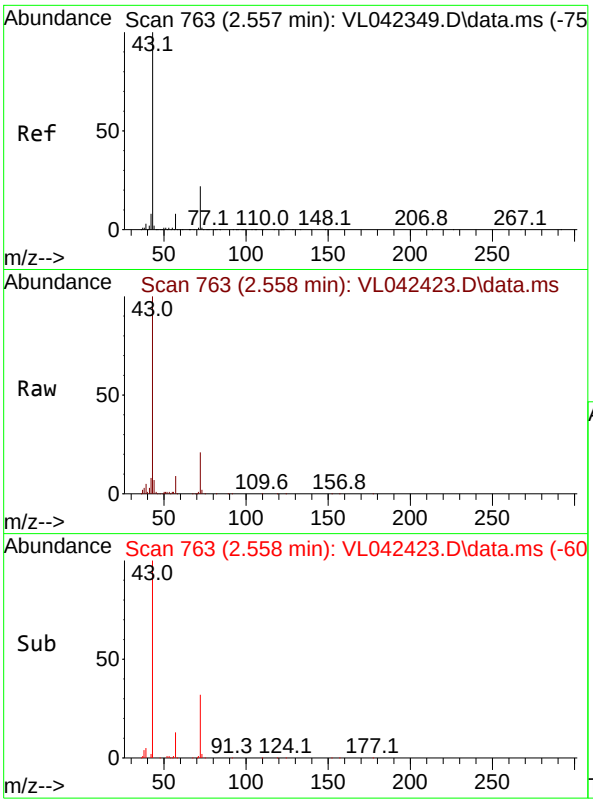


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.953 min Scan# 1194
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:114 Resp: 394249

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.0	15.5	23.3





#34
2-Butanone
Concen: 1.600 ppbv
RT: 2.558 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 4988

Ion	Ratio	Lower	Upper
43	100		
72	20.7	18.2	27.2

Instrument :
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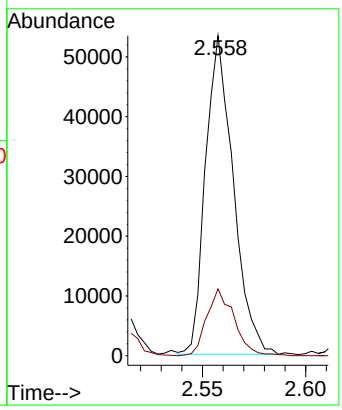
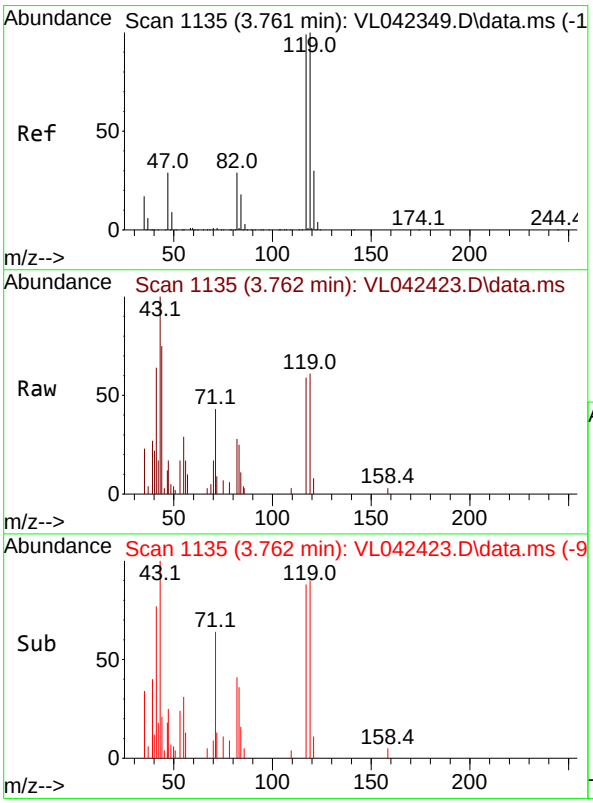
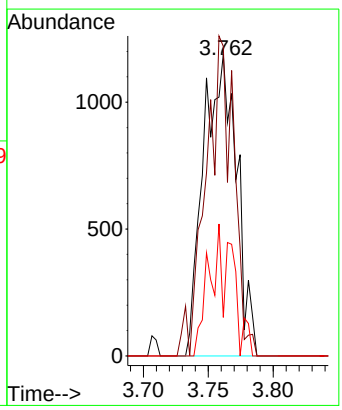


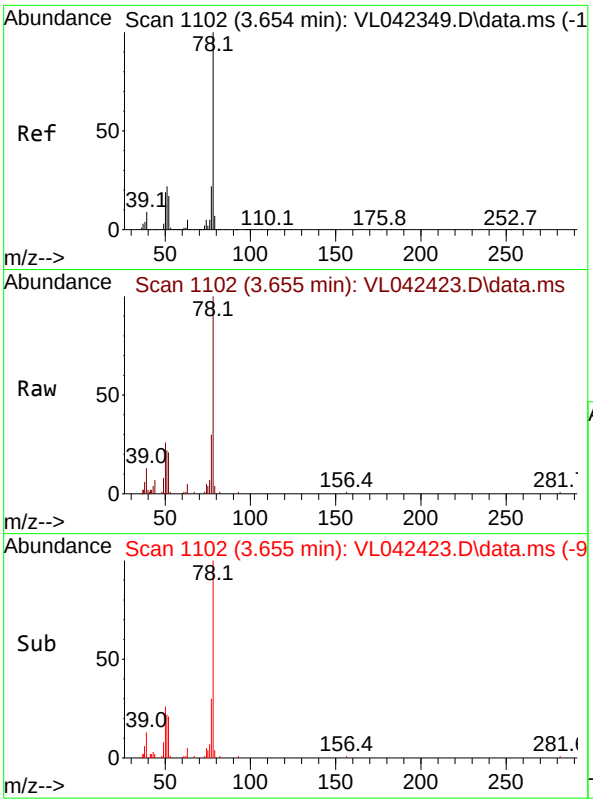


#35
Carbon Tetrachloride
Concen: 0.059 ppbv m
RT: 3.762 min Scan# 1135
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:117 Resp: 2109

Ion	Ratio	Lower	Upper
117	100		
119	102.5	80.5	120.7
121	12.8	24.2	36.2#

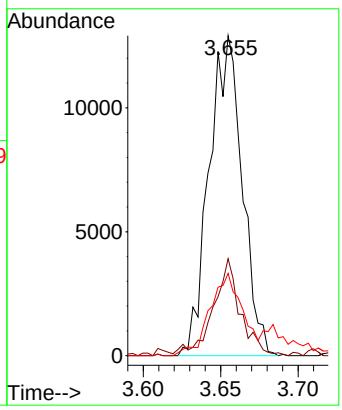




#36
Benzene
Concen: 0.452 ppbv
RT: 3.655 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 78 Resp: 1922

Ion	Ratio	Lower	Upper
78	100		
77	29.4	17.4	26.0#
50	24.8	15.5	23.3#



Instrument :
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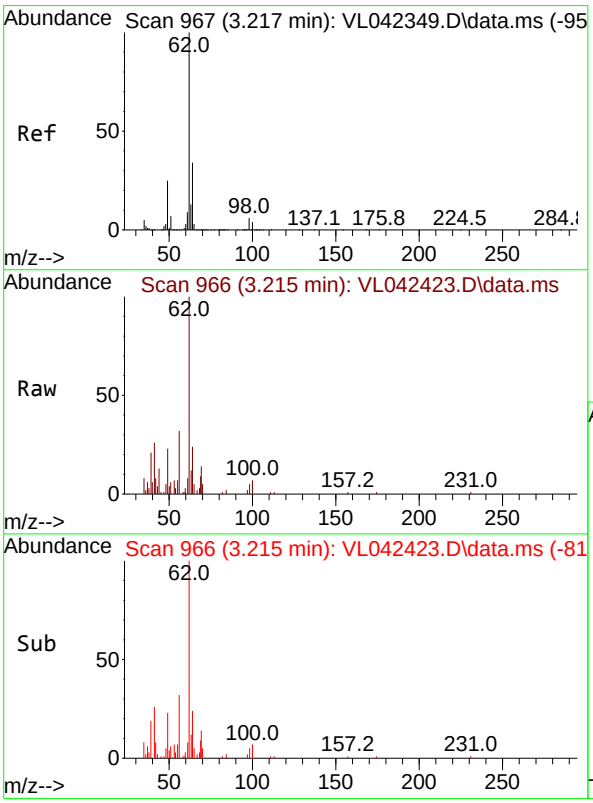
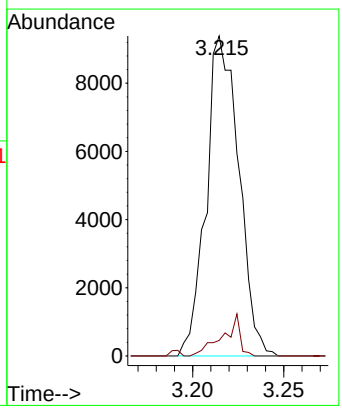
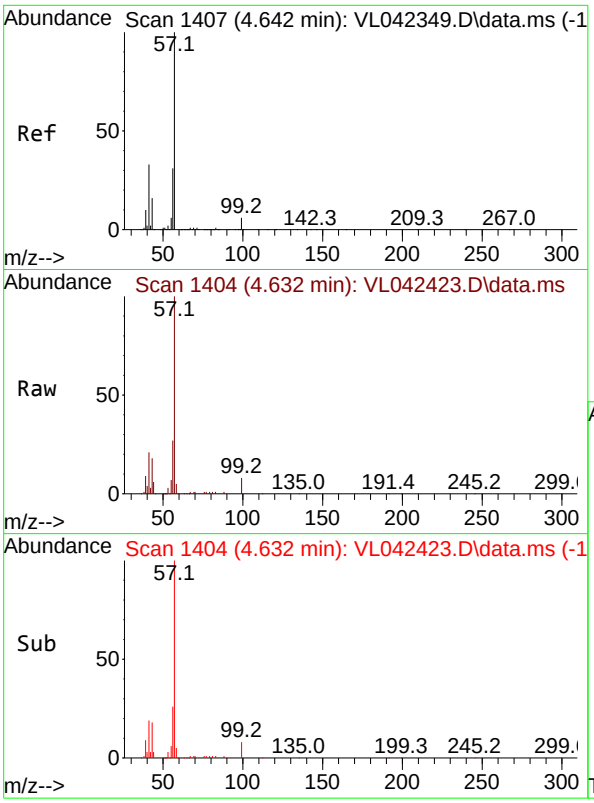


#37
1,2-Dichloroethane
Concen: 0.459 ppbv
RT: 3.215 min Scan# 966
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 62 Resp: 11718

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.1	7.7

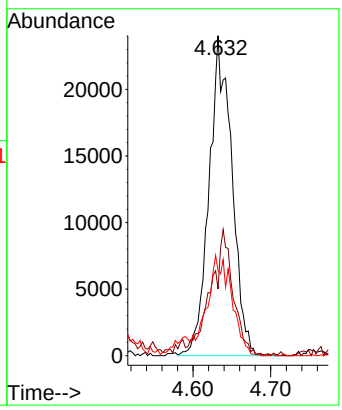




#44
2,2,4-Trimethylpentane
Concen: 0.667 ppbv m
RT: 4.632 min Scan# 14
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 57 Resp: 4900

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8
56	38.1	25.7	38.5



Instrument :
MSVOA_L
ClientSampleId :
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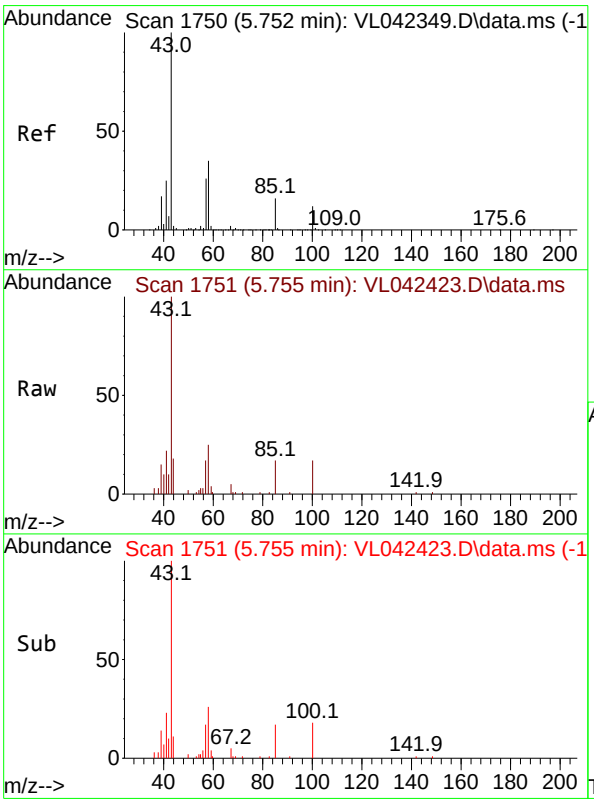
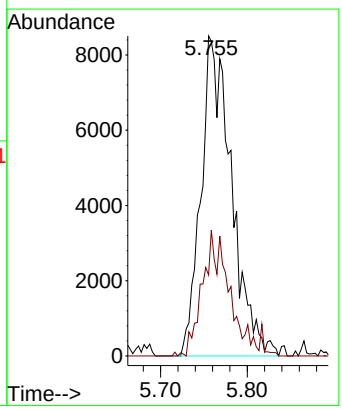
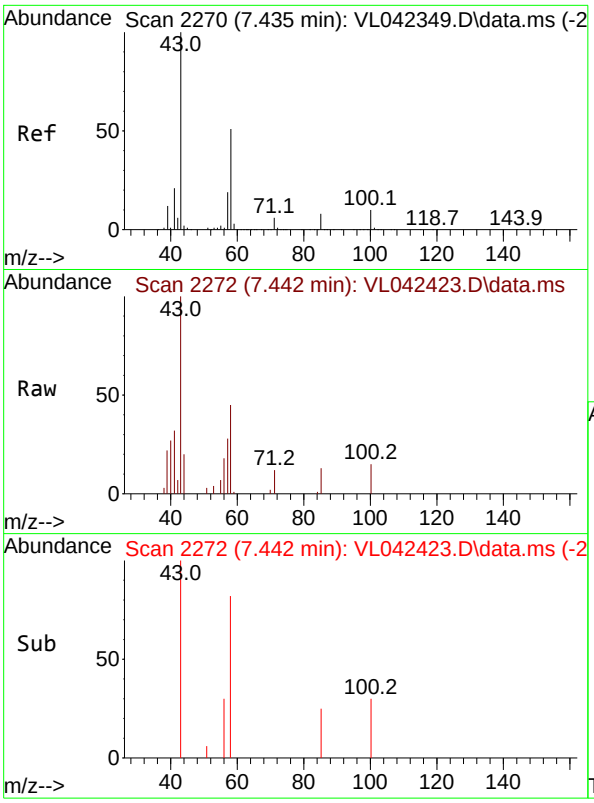


#50
4-Methyl-2-Pentanone
Concen: 0.402 ppbv m
RT: 5.755 min Scan# 1751
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 20843

Ion	Ratio	Lower	Upper
43	100		
58	35.4	28.6	43.0

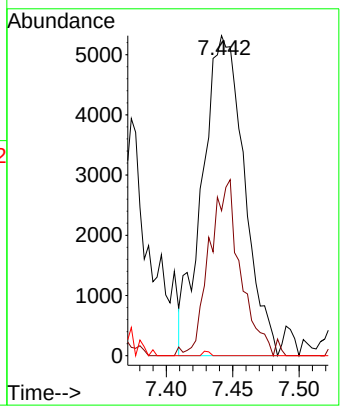




#51
2-Hexanone
Concen: 0.251 ppbv m
RT: 7.442 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 1165

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.2	60.4#
98	0.2	0.1	0.1#



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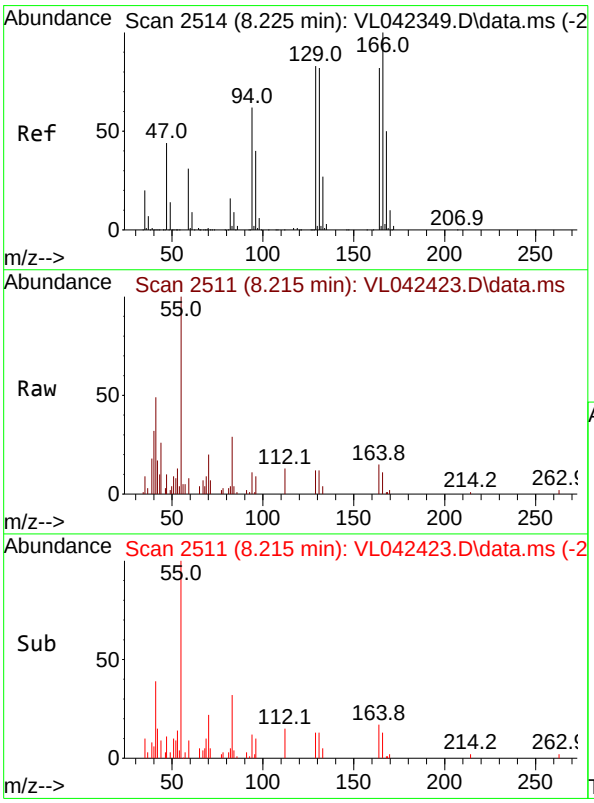
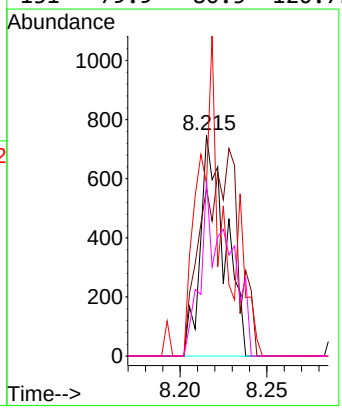
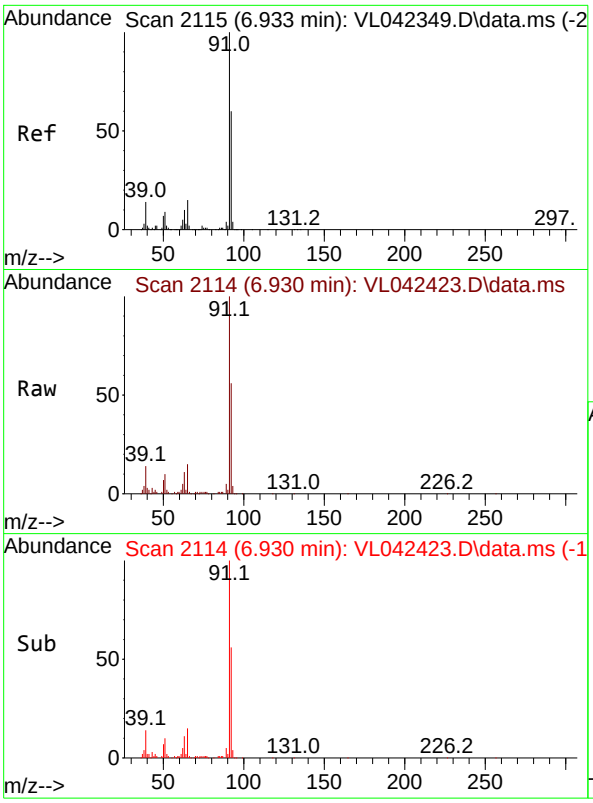


#52
Tetrachloroethene
Concen: 0.045 ppbv m
RT: 8.215 min Scan# 2511
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:164 Resp: 744

Ion	Ratio	Lower	Upper
164	100		
166	75.9	98.2	147.2#
129	78.0	81.8	122.8#
131	79.9	80.5	120.7#

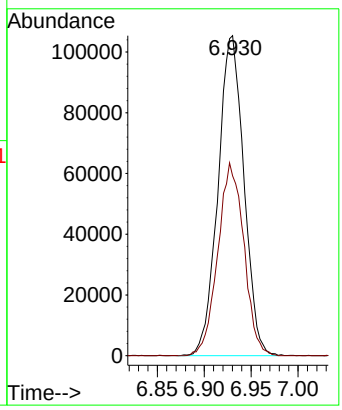




#53
Toluene
Concen: 3.959 ppbv
RT: 6.930 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 91 Resp: 20201

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
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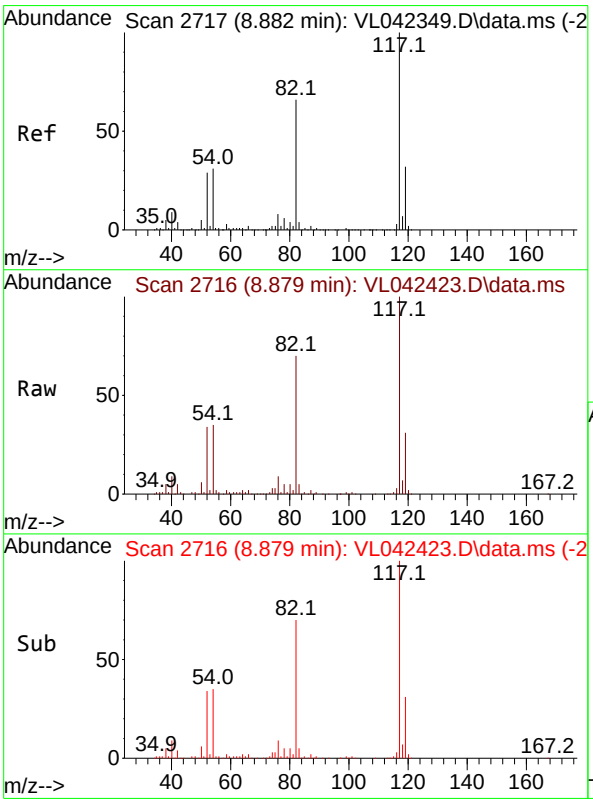
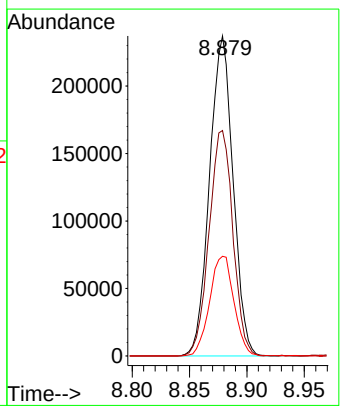
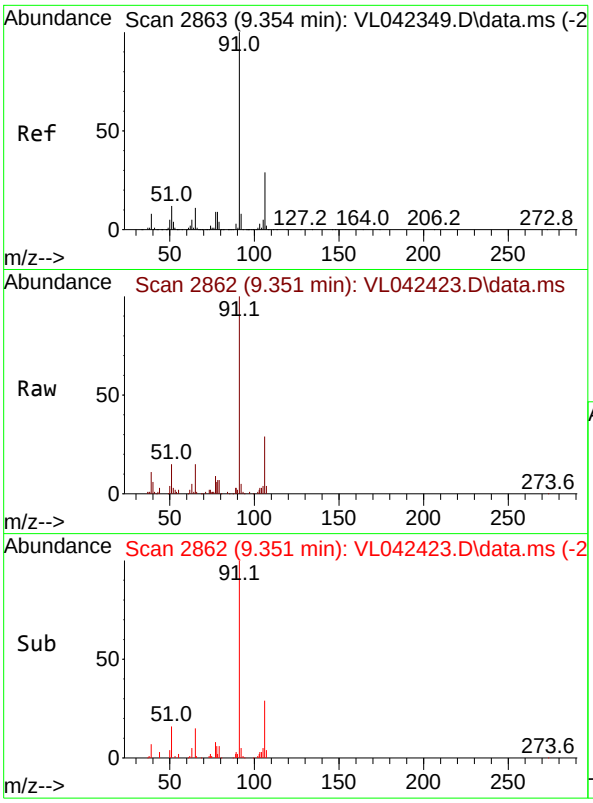


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2716
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:117 Resp: 337638

Ion	Ratio	Lower	Upper
117	100		
82	71.5	57.8	86.6
119	32.3	25.2	37.8





#58
Ethyl Benzene
Concen: 0.498 ppbv
RT: 9.351 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 91 Resp: 3332

Ion	Ratio	Lower	Upper
91	100		
106	29.3	23.0	34.4

Instrument :
MSVOA_L
ClientSampleId :
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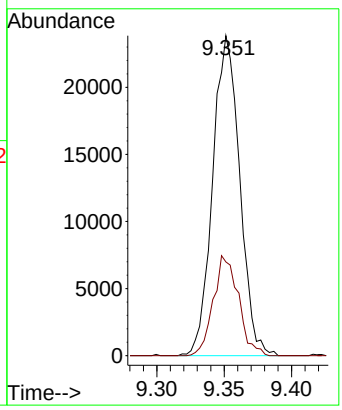
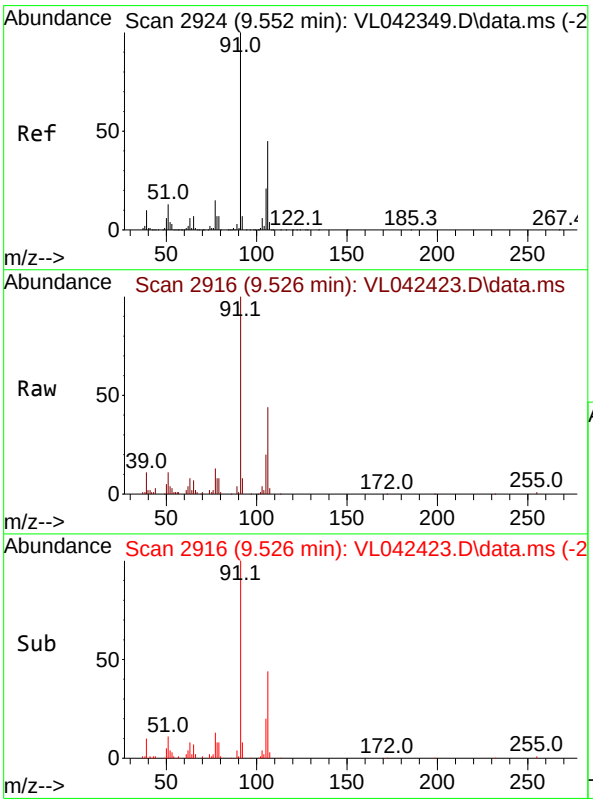
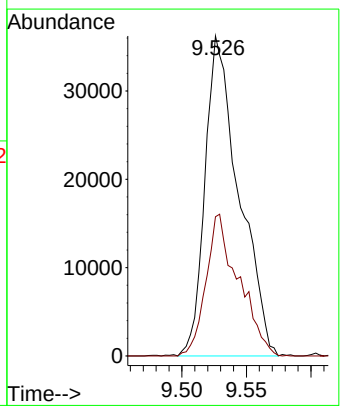


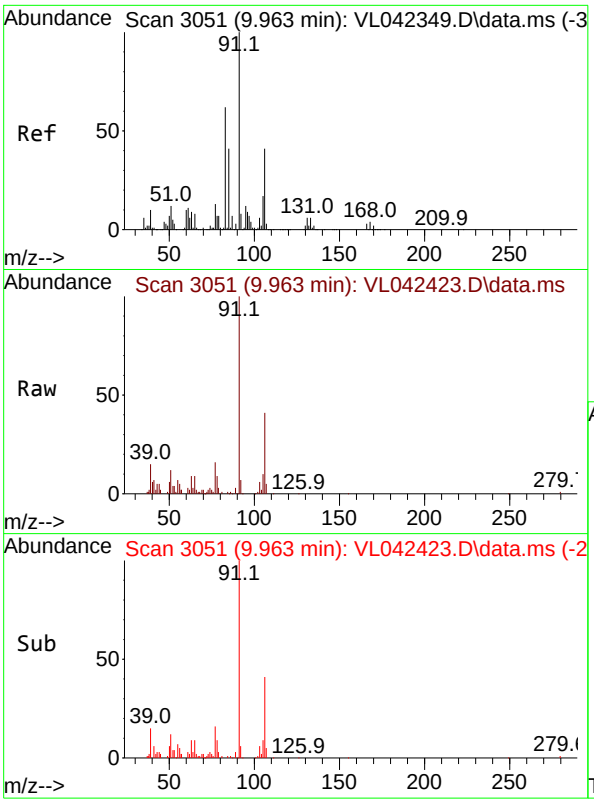


#59
m/p-Xylene
Concen: 1.233 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 91 Resp: 66442

Ion	Ratio	Lower	Upper
91	100		
106	42.5	35.4	53.2

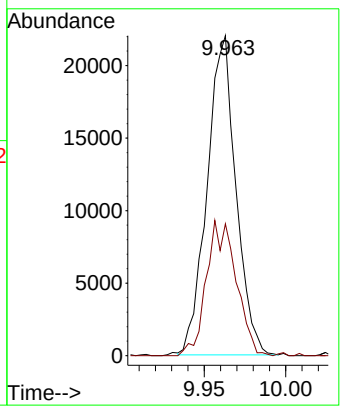




#60
o-Xylene
Concen: 0.499 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 91 Resp: 2707

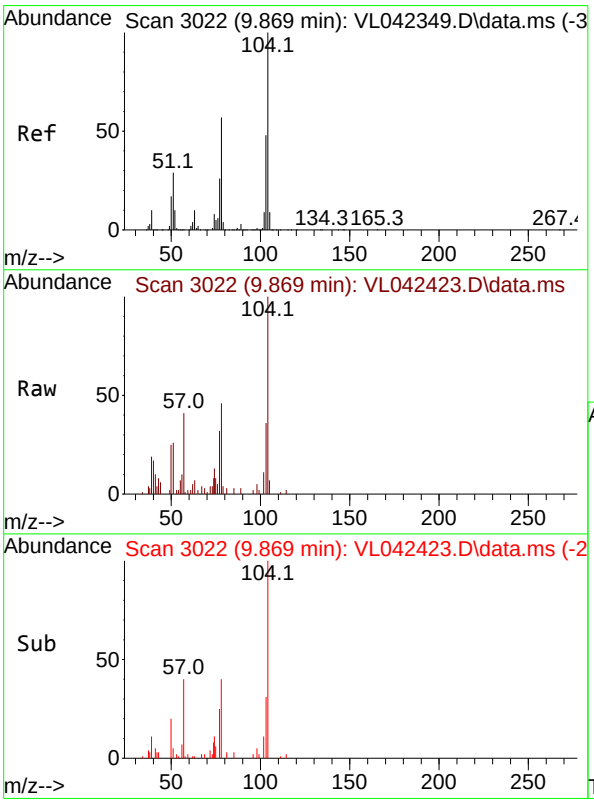
Ion	Ratio	Lower	Upper
91	100		
106	43.9	21.1	63.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

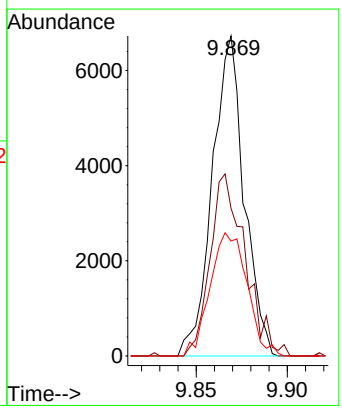
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

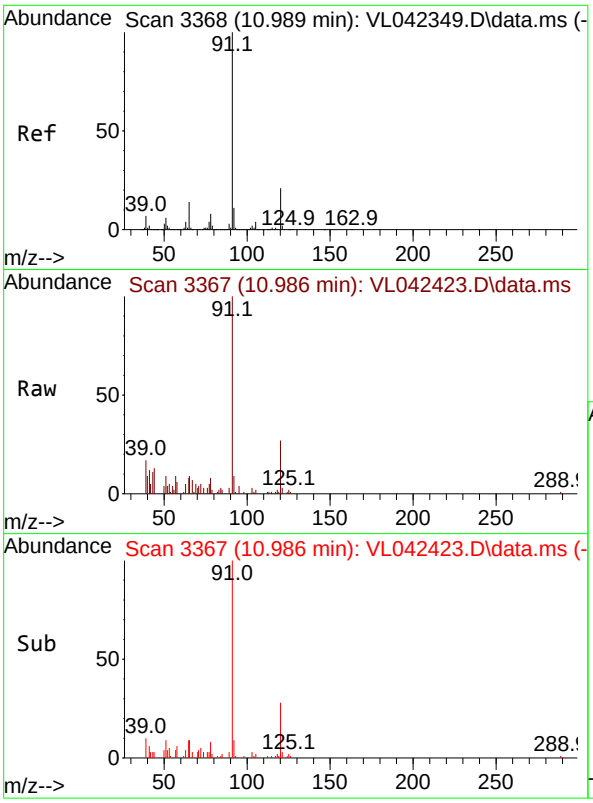


#61
Styrene
Concen: 0.316 ppbv
RT: 9.869 min Scan# 3022
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:104 Resp: 8176

Ion	Ratio	Lower	Upper
104	100		
78	62.6	44.6	66.8
103	44.8	37.4	56.0

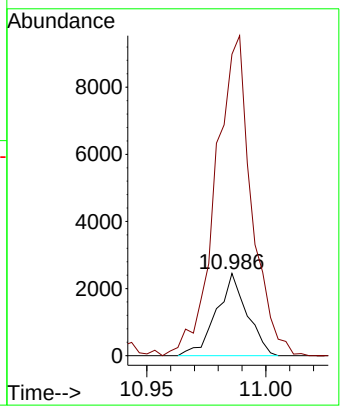




#64
n-propylbenzene
Concen: 0.109 ppbv
RT: 10.986 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:120 Resp: 219

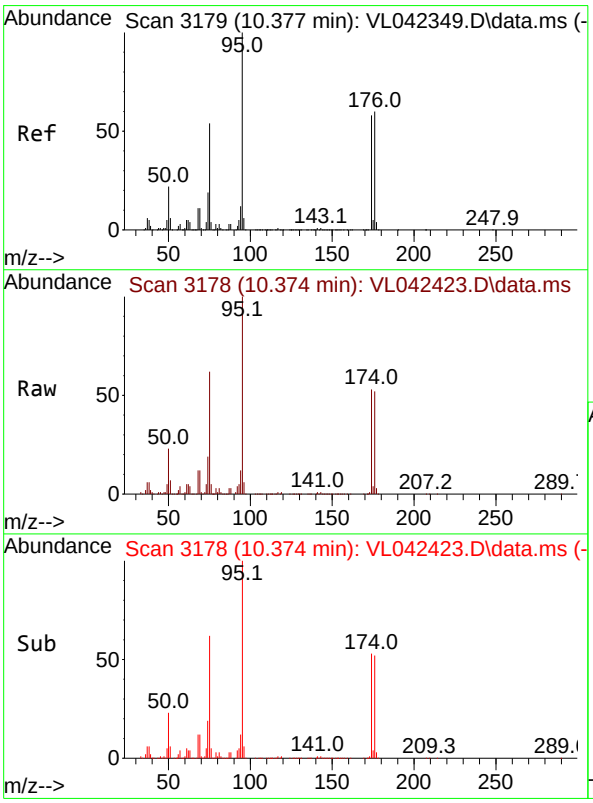
Ion	Ratio	Lower	Upper
120	100		
91	459.9	392.4	588.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

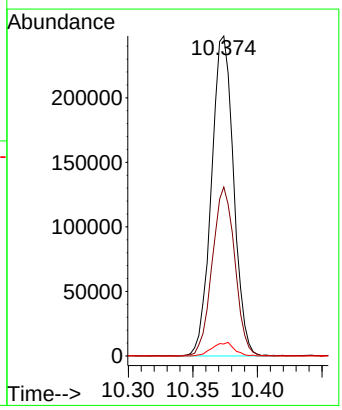
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

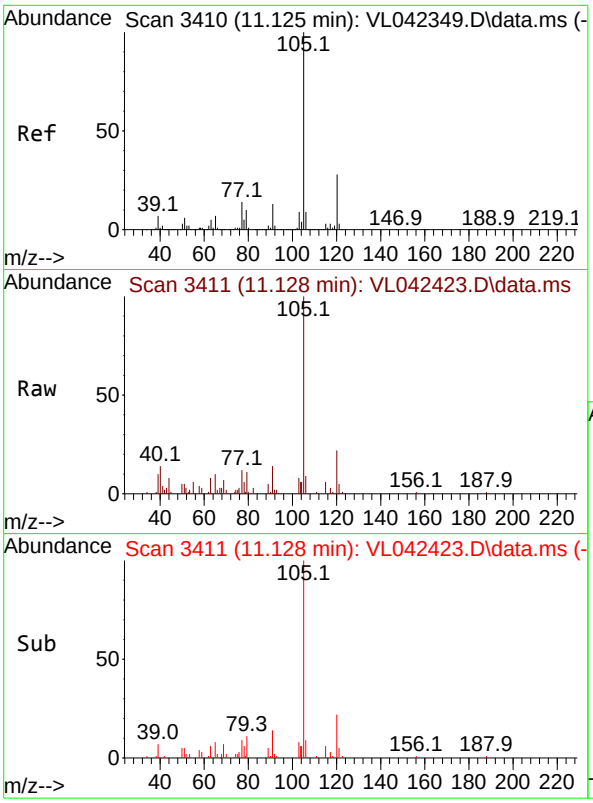


#68
1-Bromo-4-Fluorobenzene
Concen: 10.662 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 95 Resp: 295822

Ion	Ratio	Lower	Upper
95	100		
174	53.7	48.5	72.7
175	4.2	3.7	5.5

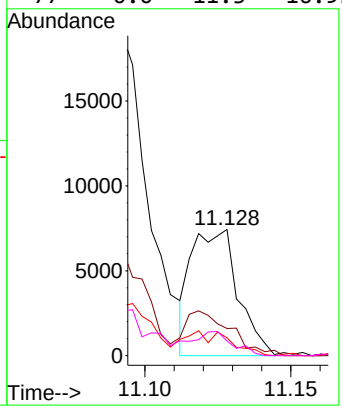




#72
4-Ethyltoluene
Concen: 0.124 ppbv m
RT: 11.128 min Scan# 34
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:105 Resp: 823

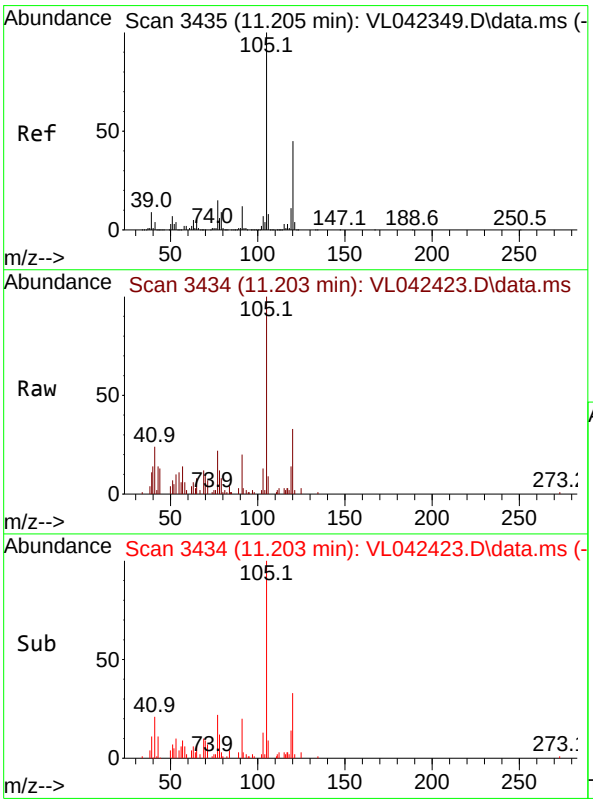
Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

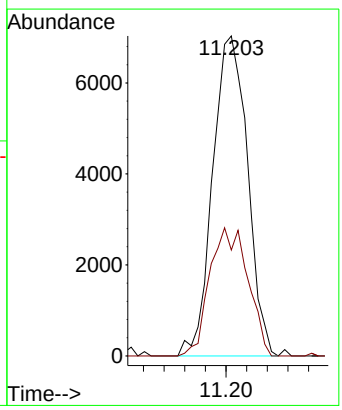
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

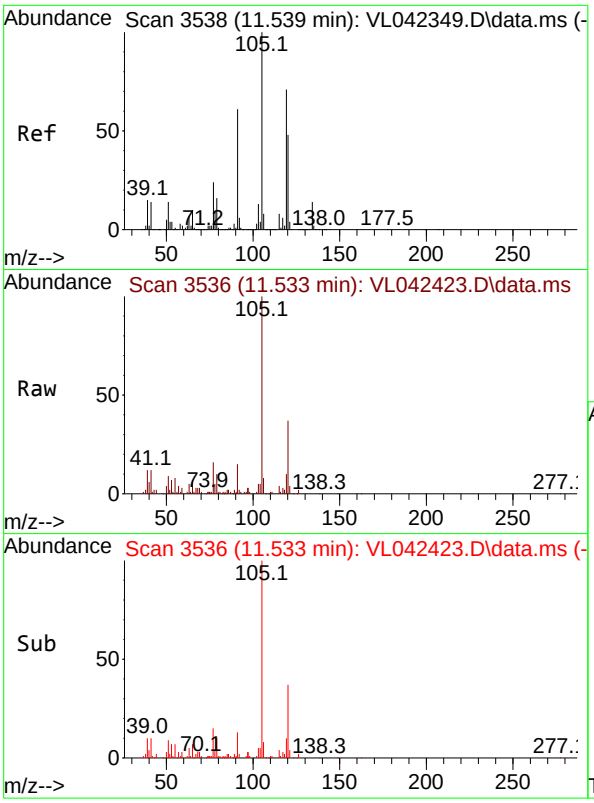


#73
1,3,5-Trimethylbenzene
Concen: 0.140 ppbv
RT: 11.203 min Scan# 3434
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:105 Resp: 8221

Ion	Ratio	Lower	Upper
105	100		
120	33.1	35.6	53.4#

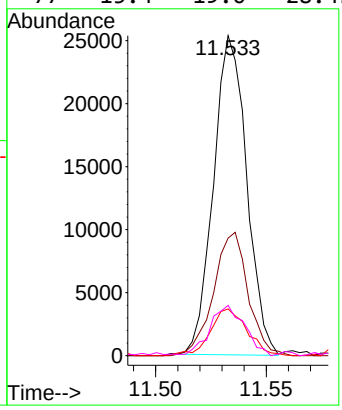




#74
1,2,4-Trimethylbenzene
Concen: 0.387 ppbv
RT: 11.533 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:105 Resp: 2644

Ion	Ratio	Lower	Upper
105	100		
120	36.4	38.1	57.1#
91	14.0	48.8	73.2#
77	15.4	19.0	28.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042423.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.428	410	414	420	rBV	4495721	5123508	100.00%	19.950%
2	1.467	422	426	429	rVV	1832964	975350	19.04%	3.798%
3	1.486	429	432	438	rVB2	613219	301988	5.89%	1.176%
4	1.557	450	454	459	rBV	3609938	1807242	35.27%	7.037%
5	1.619	469	473	478	rVB	2373472	1330465	25.97%	5.181%
6	1.719	500	504	511	rBV	1527919	931921	18.19%	3.629%
7	1.842	535	542	548	rBV2	1566169	1482933	28.94%	5.774%
8	1.884	548	555	562	rBV	944008	651021	12.71%	2.535%
9	1.962	575	579	583	rVB	86254	57009	1.11%	0.222%
10	2.040	599	603	607	rBV	187714	158732	3.10%	0.618%
11	2.273	670	675	681	rVB	182031	142156	2.77%	0.554%
12	2.409	711	717	725	rBV	173586	182129	3.55%	0.709%
13	2.470	733	736	742	rVB3	60904	58096	1.13%	0.226%
14	2.506	742	747	755	rVB2	116405	105594	2.06%	0.411%
15	2.558	757	763	772	rVB	87532	81347	1.59%	0.317%
16	2.784	825	833	840	rBV	516118	534680	10.44%	2.082%
17	2.823	840	845	859	rVB2	235170	284012	5.54%	1.106%
18	3.221	959	968	977	rVB5	44401	70927	1.38%	0.276%
19	3.655	1090	1102	1106	rBV4	33278	53611	1.05%	0.209%
20	3.684	1106	1111	1125	rVB	157430	231764	4.52%	0.902%
21	3.956	1183	1195	1209	rBV	699794	1082156	21.12%	4.214%
22	4.050	1213	1224	1232	rBV4	50344	89508	1.75%	0.349%
23	4.254	1275	1287	1302	rBV7	71588	161577	3.15%	0.629%
24	4.632	1391	1404	1405	rBV2	45599	56520	1.10%	0.220%
25	4.639	1405	1406	1419	rVB2	52966	59321	1.16%	0.231%
26	4.972	1500	1509	1521	rBV5	26372	54274	1.06%	0.211%
27	6.843	2069	2087	2100	rBV3	143454	340530	6.65%	1.326%
28	6.927	2100	2113	2131	rVB2	283552	584714	11.41%	2.277%
29	7.684	2336	2347	2362	rVB4	106187	179490	3.50%	0.699%
30	8.296	2529	2536	2549	rVB7	41567	74529	1.45%	0.290%
31	8.879	2700	2716	2727	rBV2	882854	1294323	25.26%	5.040%
32	9.351	2853	2862	2871	rBV2	63092	89858	1.75%	0.350%
33	9.526	2907	2916	2933	rVB2	105769	213723	4.17%	0.832%
34	9.736	2965	2981	2992	rBV	2325820	3071122	59.94%	11.958%
35	9.866	3011	3021	3030	rVB7	36917	54202	1.06%	0.211%
36	9.934	3030	3042	3047	rBV2	132624	190328	3.71%	0.741%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

37	9.956	3047	3049	3060	rVV3	70912	98702	1.93%	0.384%
38	10.018	3060	3068	3077	rVB4	42460	57642	1.13%	0.224%
39	10.374	3163	3178	3189	rBV	1136048	1419821	27.71%	5.529%
40	10.737	3282	3290	3296	rBV6	38021	53477	1.04%	0.208%
41	10.856	3319	3327	3335	rBV	227237	293730	5.73%	1.144%
42	10.908	3335	3343	3355	rVB	408915	482281	9.41%	1.878%
43	11.093	3392	3400	3405	rBV2	53660	62175	1.21%	0.242%
44	11.423	3497	3502	3511	rVB4	43658	53790	1.05%	0.209%
45	11.533	3529	3536	3546	rBV2	80343	98813	1.93%	0.385%
46	11.591	3546	3554	3559	rBV5	52400	58667	1.15%	0.228%
47	11.720	3588	3594	3598	rBV2	50212	59182	1.16%	0.230%
48	11.772	3598	3610	3623	rVB2	488845	665778	12.99%	2.592%
49	12.041	3687	3693	3701	rVB3	106189	116964	2.28%	0.455%

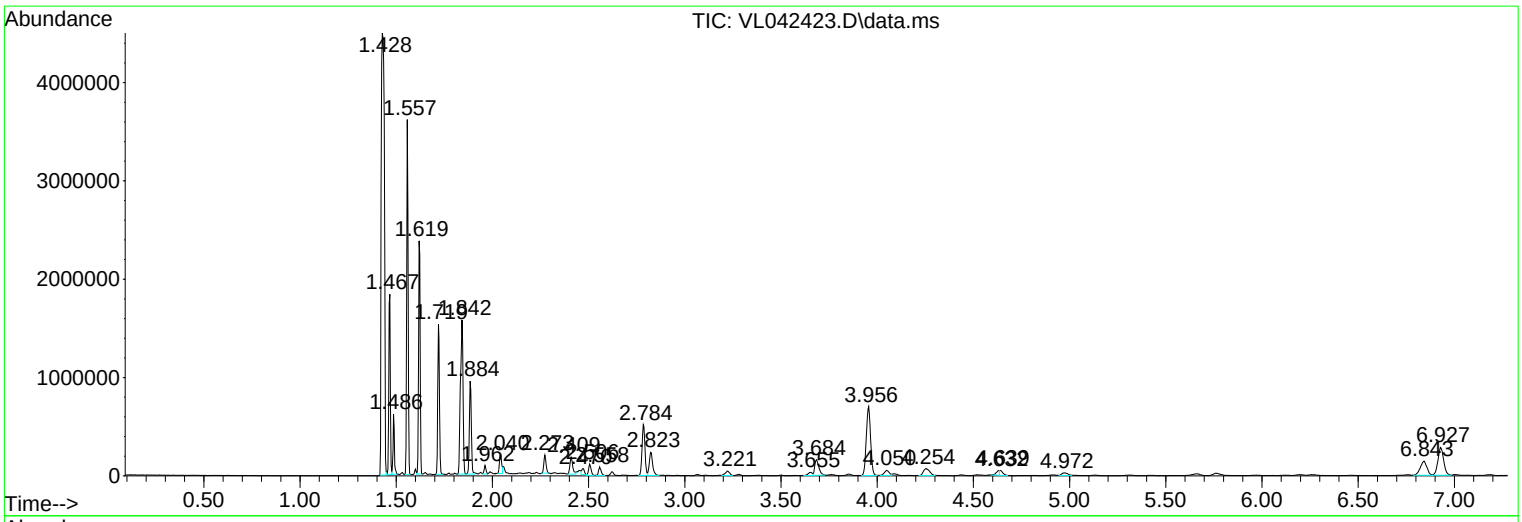
Sum of corrected areas: 25681682

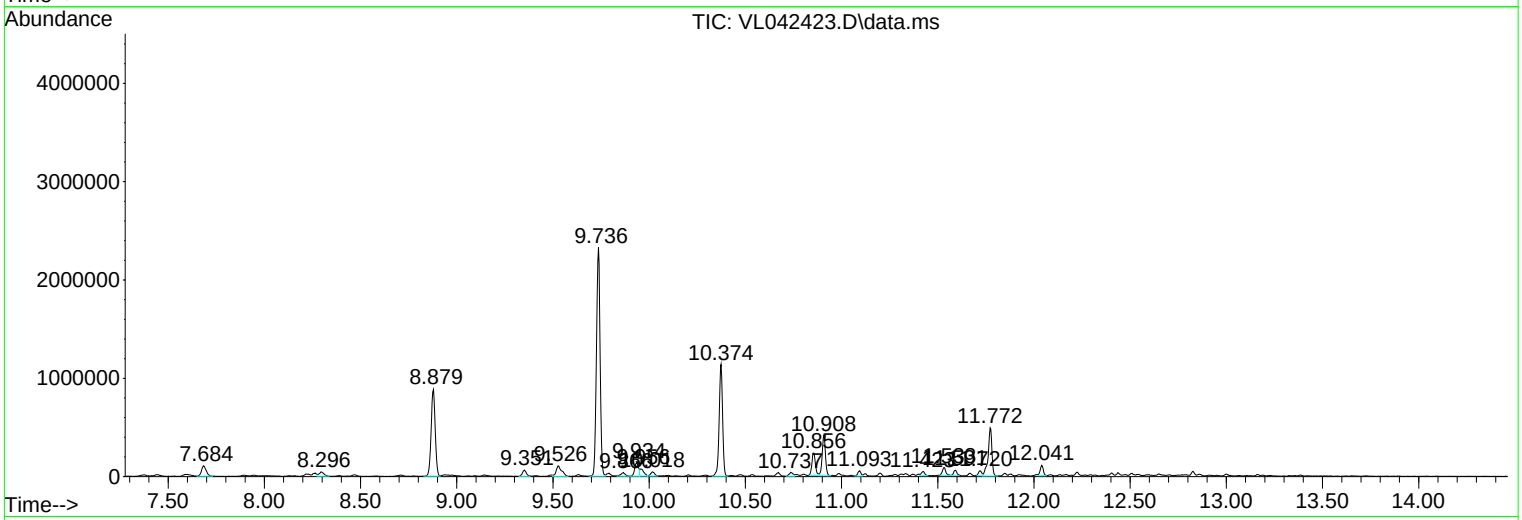
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

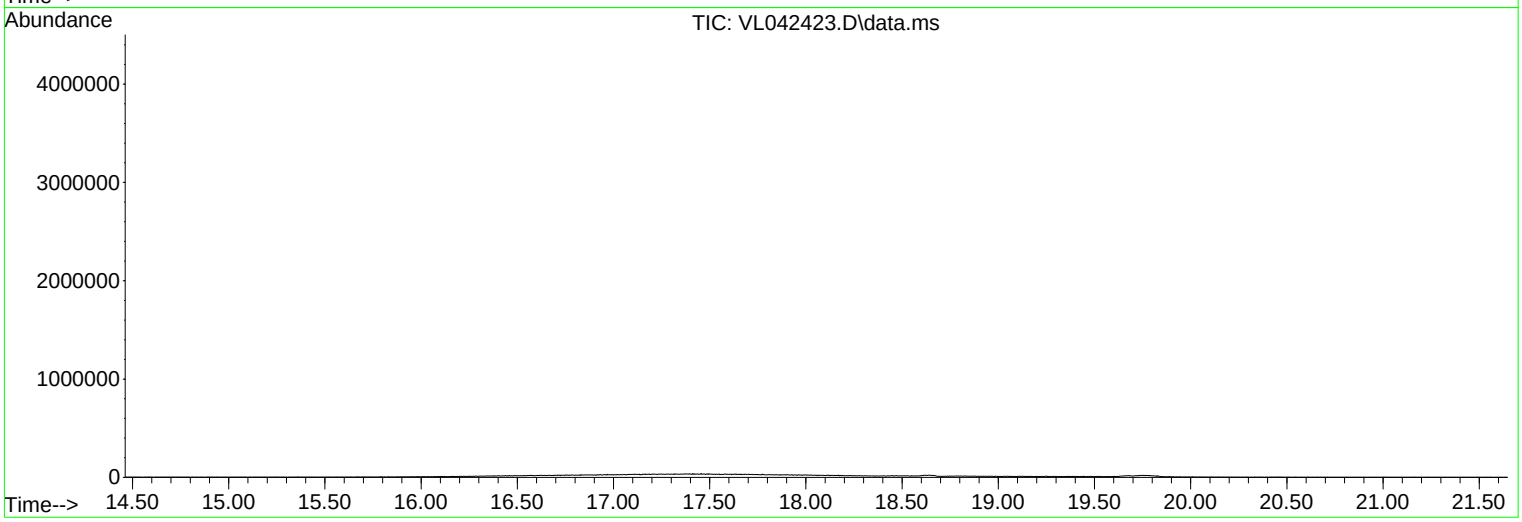
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

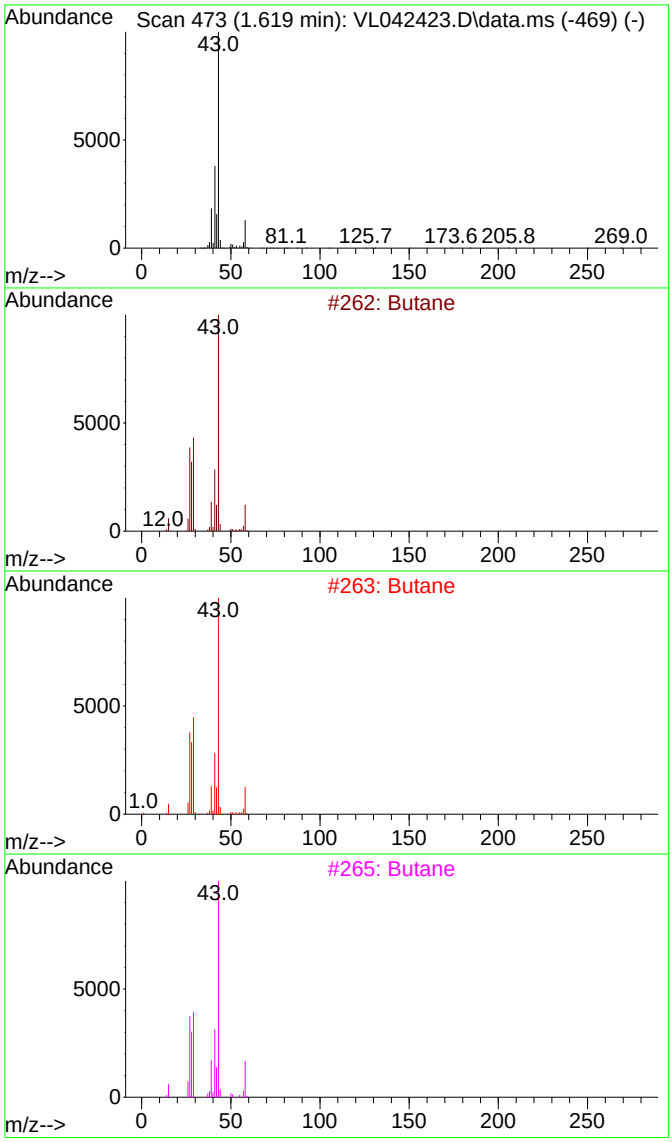
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

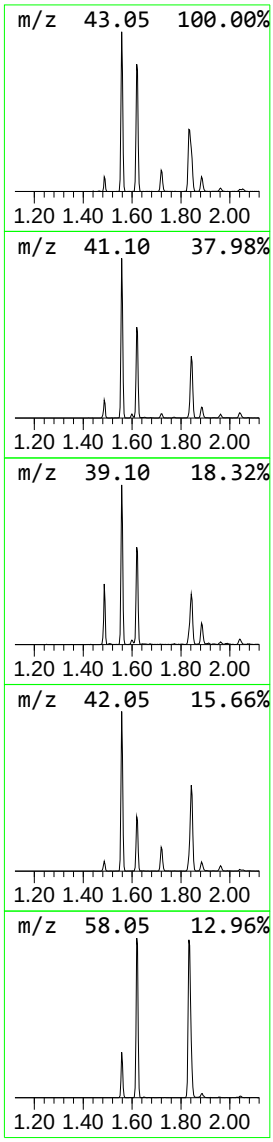
****

Peak Number 2 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	24.88 ppbv	1330470	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	80
2	Butane	58	C4H10	000106-97-8	80
3	Butane	58	C4H10	000106-97-8	72
4	Butane	58	C4H10	000106-97-8	58
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

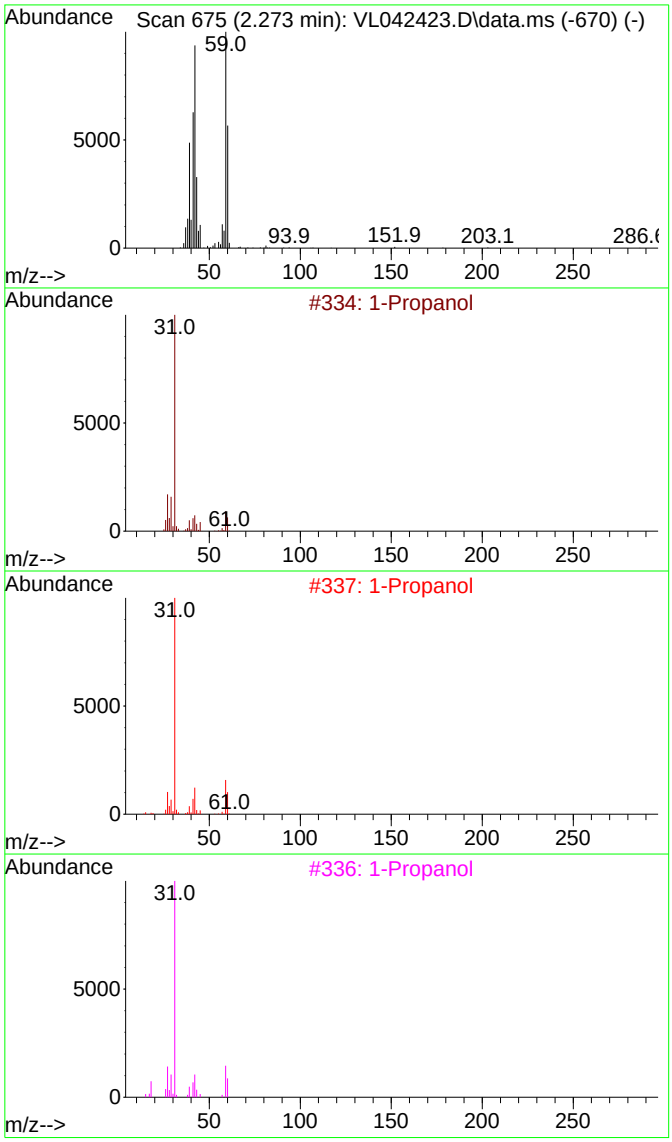
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

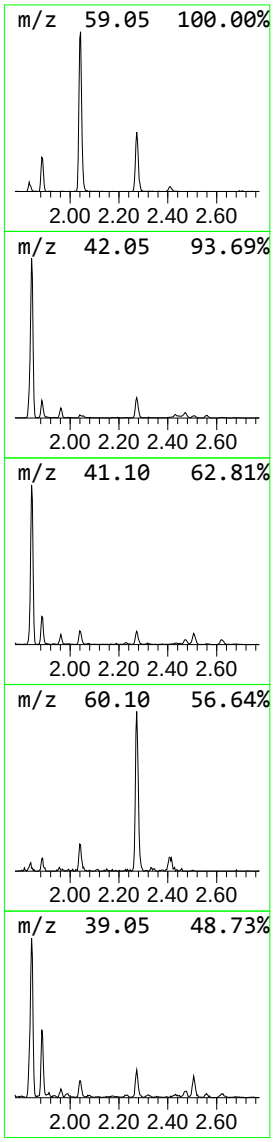
****

Peak Number 3 1-Propanol Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.273	2.66 ppbv	142156	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Propanol	60	C3H8O	000071-23-8	59
2	1-Propanol	60	C3H8O	000071-23-8	53
3	1-Propanol	60	C3H8O	000071-23-8	53
4	1-Propanol	60	C3H8O	000071-23-8	53
5	1-Propanol	60	C3H8O	000071-23-8	46





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

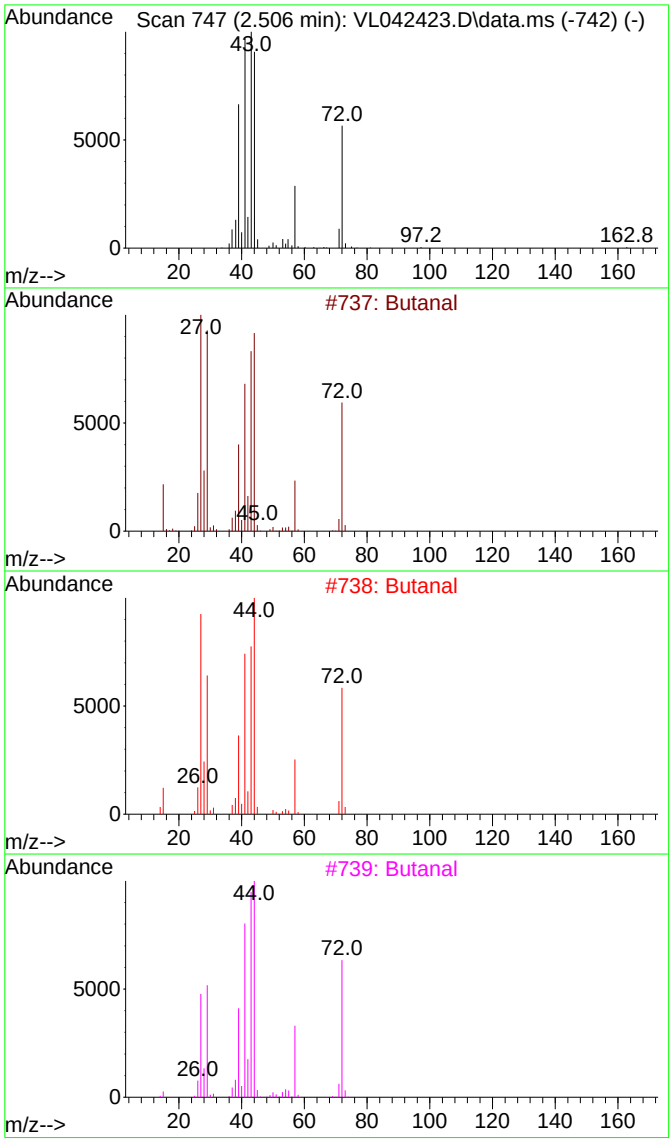
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

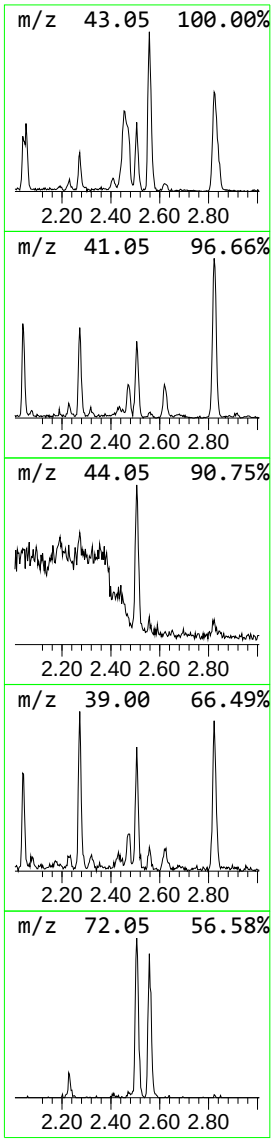
****

Peak Number 5 Butanal Concentration Rank 10

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.506	1.97 ppbv	105594	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanal	72	C4H8O	000123-72-8	86
2	Butanal	72	C4H8O	000123-72-8	72
3	Butanal	72	C4H8O	000123-72-8	59
4	Butanal	72	C4H8O	000123-72-8	50
5	Ethene, ethoxy-	72	C4H8O	000109-92-2	50





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

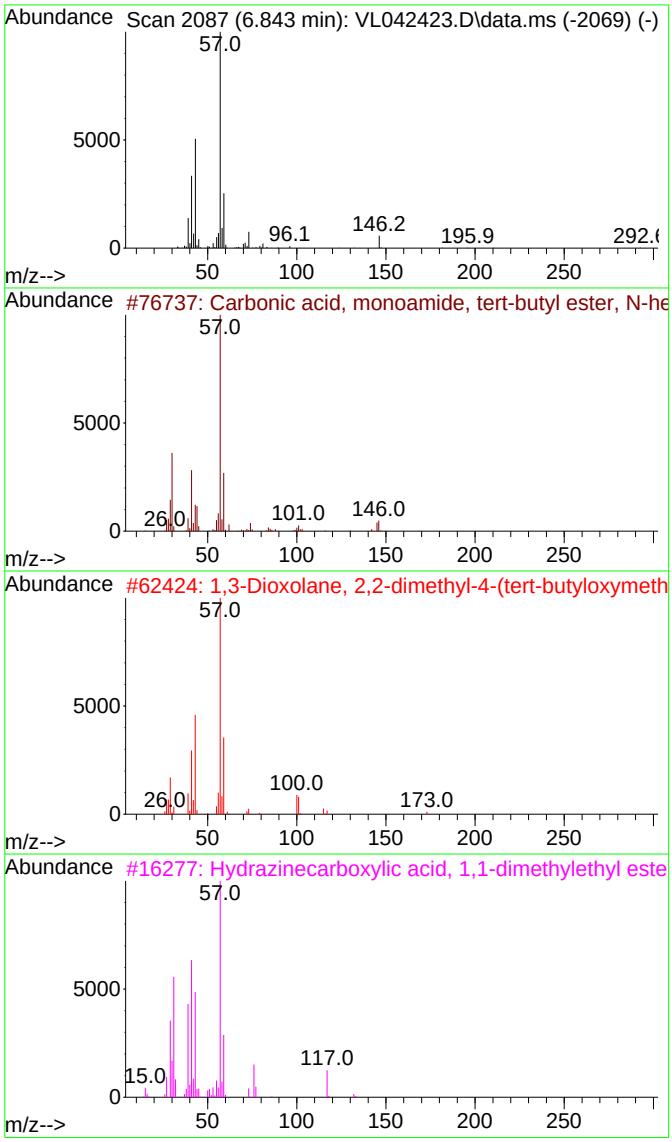
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

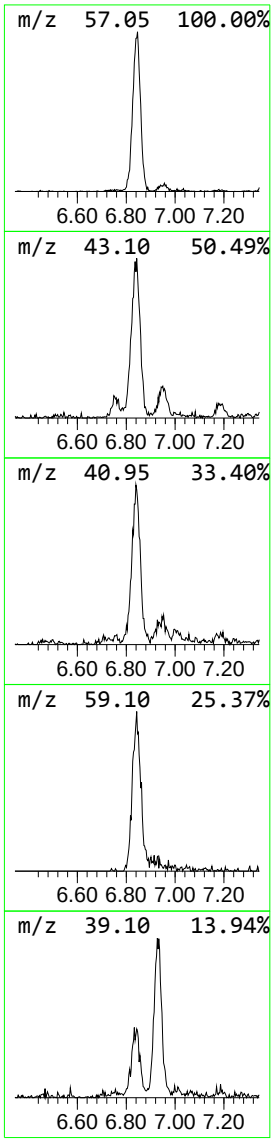
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 6 Carbonic acid, monoamide, t... Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
6.843	2.63 ppbv	340530	Chlorobenzene-d5	8.879

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Carbonic acid, monoamide, tert-b...	201	C11H23NO2	1000420-59-4	50
2	1,3-Dioxolane, 2,2-dimethyl-4-(t...	188	C10H20O3	1000381-76-2	50
3	Hydrazinecarboxylic acid, 1,1-di...	132	C5H12N2O2	000870-46-2	39
4	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	32
5	Di-tert-butyl peroxide	146	C8H18O2	000110-05-4	27





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

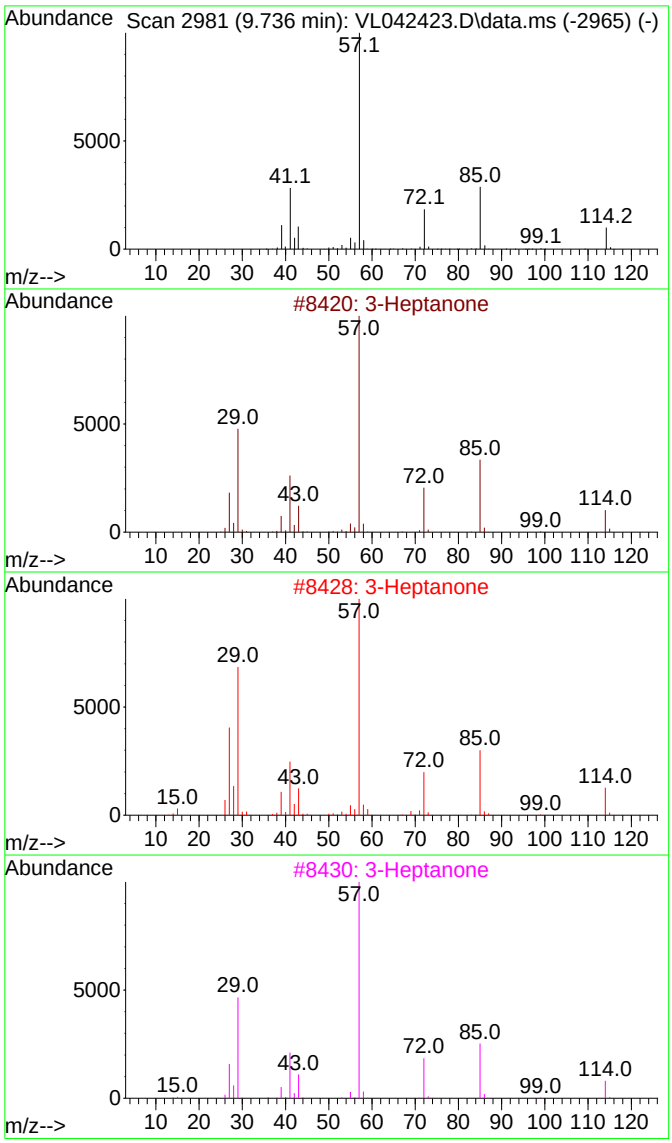
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

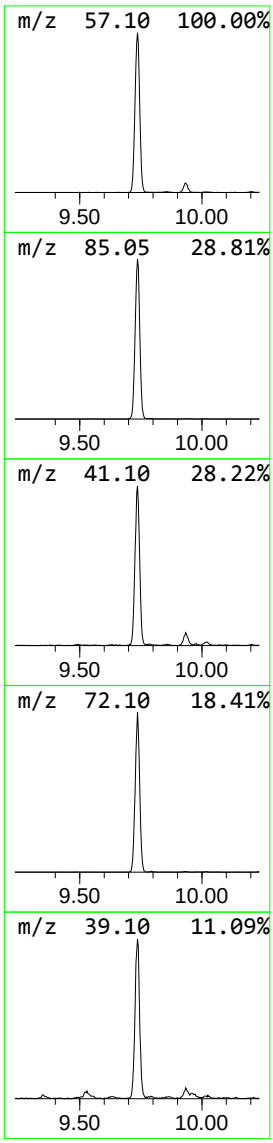
****

Peak Number 7 3-Heptanone Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
9.736	23.73 ppbv	3071120	Chlorobenzene-d5	8.879

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Heptanone	114	C7H14O	000106-35-4	91
2	3-Heptanone	114	C7H14O	000106-35-4	91
3	3-Heptanone	114	C7H14O	000106-35-4	90
4	3-Heptanone	114	C7H14O	000106-35-4	80
5	3-Hexanone, 5-methyl-	114	C7H14O	000623-56-3	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

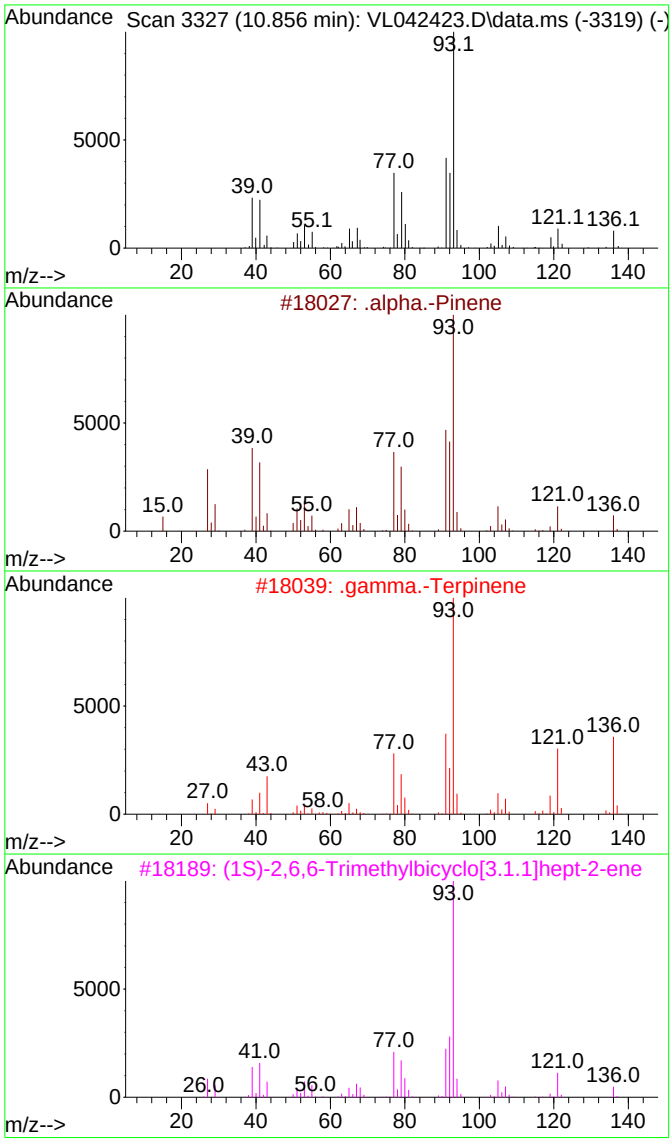
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

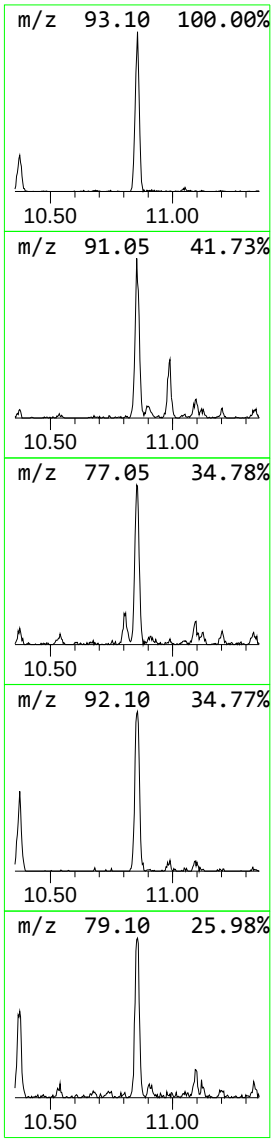
****

Peak Number 8 .alpha.-Pinene Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.856	2.27 ppbv	293730	Chlorobenzene-d5	8.879

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	93
2	.gamma.-Terpinene	136	C10H16	000099-85-4	91
3	(1S)-2,6,6-Trimethylbicyclo[3.1....	136	C10H16	007785-26-4	91
4	(1R)-2,6,6-Trimethylbicyclo[3.1....	136	C10H16	007785-70-8	91
5	.alpha.-Pinene	136	C10H16	000080-56-8	90





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

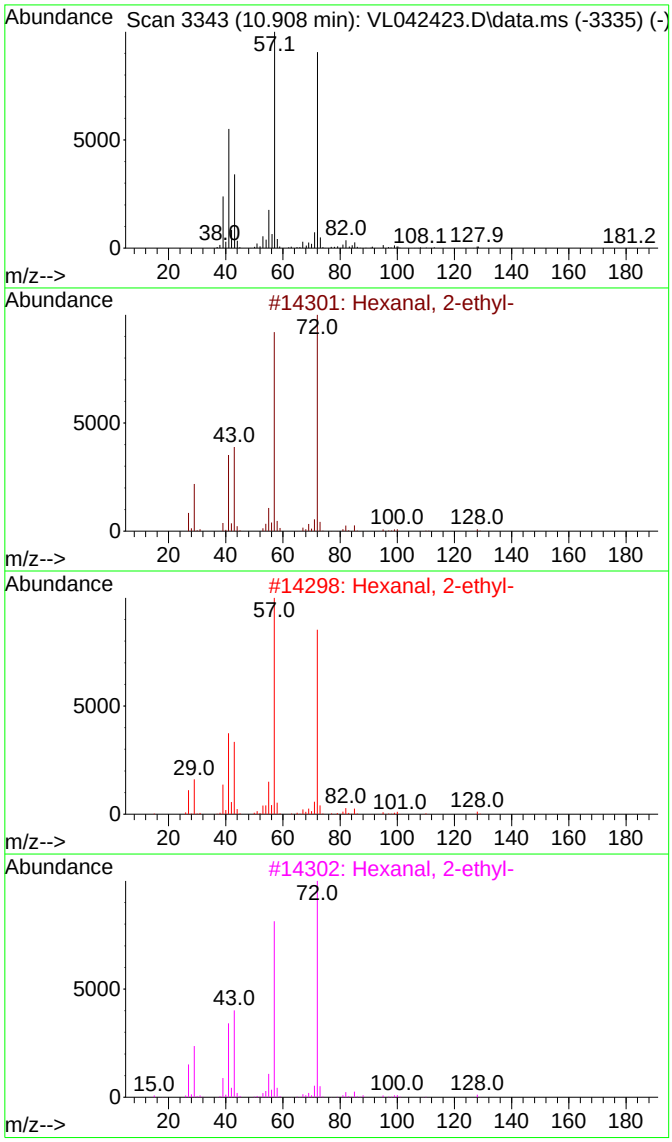
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

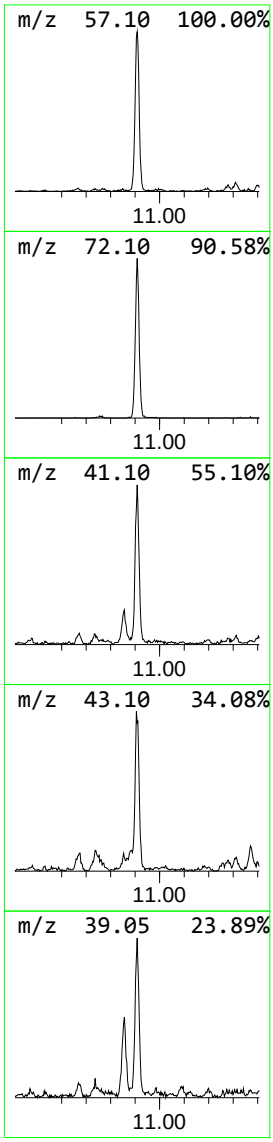
****

Peak Number 9 Hexanal, 2-ethyl- Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.908	3.73 ppbv	482281	Chlorobenzene-d5	8.879

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal, 2-ethyl-	128	C8H16O	000123-05-7	90
2	Hexanal, 2-ethyl-	128	C8H16O	000123-05-7	90
3	Hexanal, 2-ethyl-	128	C8H16O	000123-05-7	86
4	Hexanal, 2-ethyl-	128	C8H16O	000123-05-7	72
5	trans-1-Butene,1-butoxy-	128	C8H16O	1000139-52-8	72





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	24.9	ppbv	1330470	1	2.784	534680	10.0
1-Propanol	2.273	2.7	ppbv	142156	1	2.784	534680	10.0
Butanal	2.506	2.0	ppbv	105594	1	2.784	534680	10.0
Carbonic acid, ...	6.843	2.6	ppbv	340530	3	8.879	1294320	10.0
3-Heptanone	9.736	23.7	ppbv	3071120	3	8.879	1294320	10.0
.alpha.-Pinene	10.856	2.3	ppbv	293730	3	8.879	1294320	10.0
Hexanal, 2-ethyl-	10.908	3.7	ppbv	482281	3	8.879	1294320	10.0

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-19DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042452.D	4		04/29/25 18:09	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.84	4.15	UD	4.15	9.89	ug/m3
64-17-5	Ethanol	320	603	EDQ	2.45	3.77	ug/m3
74-87-3	Chloromethane	0.39	0.81	UD	0.81	4.13	ug/m3
75-01-4	Vinyl Chloride	0.060	0.15	UD	0.15	0.31	ug/m3
74-83-9	Bromomethane	0.56	2.17	UD	2.17	7.77	ug/m3
75-00-3	Chloroethane	0.68	1.79	UD	1.79	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.52	1.53	UD	1.53	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.64	3.60	UD	3.60	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.64	4.91	UD	4.91	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.35	2.45	UD	2.45	14.0	ug/m3
593-60-2	Bromoethene	0.48	2.10	UD	2.10	8.74	ug/m3
75-65-0	tert-Butyl alcohol	2.70	8.19	D	2.30	6.06	ug/m3
142-82-5	Heptane	0.44	1.80	UD	1.80	8.20	ug/m3
67-63-0	Isopropyl Alcohol	30.8	75.7	D	0.69	4.92	ug/m3
75-35-4	1,1-Dichloroethene	0.56	2.22	UD	2.22	7.93	ug/m3
67-64-1	Acetone	17.3	41.1	D	2.28	4.75	ug/m3
75-15-0	Carbon Disulfide	0.64	1.99	UD	1.99	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.48	1.73	UD	1.73	7.21	ug/m3
75-09-2	Methylene Chloride	2.10	7.30	D	2.64	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.76	3.01	UD	3.01	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.52	2.10	UD	2.10	8.09	ug/m3
110-82-7	Cyclohexane	0.88	3.03	UD	3.03	6.88	ug/m3
78-93-3	2-Butanone	1.40	4.13	JD	1.42	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25	UD	0.25	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.36	1.43	UD	1.43	7.93	ug/m3
67-66-3	Chloroform	0.33	1.61	UD	1.61	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.040	0.22	UD	0.22	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.50	2.34	JD	1.87	9.34	ug/m3
71-43-2	Benzene	0.35	1.12	UD	1.12	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.36	1.46	UD	1.46	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.44	2.03	UD	2.03	9.24	ug/m3
75-27-4	Bromodichloromethane	0.31	2.08	UD	2.08	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.37	1.52	UD	1.52	8.20	ug/m3
108-88-3	Toluene	2.80	10.6	D	1.66	7.54	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-19DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042452.D	4		04/29/25 18:09	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.24	1.09	UD	1.09	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.26	1.18	UD	1.18	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.28	1.53	UD	1.53	10.9	ug/m3
124-48-1	Dibromochloromethane	0.26	2.22	UD	2.22	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.29	2.23	UD	2.23	3.07	ug/m3
127-18-4	Tetrachloroethene	0.060	0.41	UD	0.41	0.81	ug/m3
108-90-7	Chlorobenzene	0.30	1.38	UD	1.38	9.21	ug/m3
100-41-4	Ethyl Benzene	0.48	2.08	UD	2.08	8.69	ug/m3
179601-23-1	m/p-Xylene	0.84	3.65	UD	3.65	17.4	ug/m3
95-47-6	o-Xylene	0.48	2.08	UD	2.08	8.69	ug/m3
100-42-5	Styrene	0.44	1.87	UD	1.87	8.52	ug/m3
75-25-2	Bromoform	0.23	2.38	UD	2.38	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.040	0.27	UD	0.27	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.44	2.28	UD	2.28	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.44	2.16	UD	2.16	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.31	1.52	UD	1.52	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.32	1.92	UD	1.92	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.21	1.26	UD	1.26	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.30	1.80	UD	1.80	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.34	2.52	UD	2.52	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.34	3.63	UD	3.63	21.3	ug/m3
106-99-0	1,3-Butadiene	0.52	1.15	UD	1.15	4.42	ug/m3
91-20-3	Naphthalene	0.30	1.57	UD	1.57	2.10	ug/m3
622-96-8	4-Ethyltoluene	0.48	2.36	UD	2.36	9.83	ug/m3
110-54-3	Hexane	1.70	5.99	JD	1.55	7.05	ug/m3
107-05-1	Allyl Chloride	0.60	1.88	UD	1.88	6.26	ug/m3
123-91-1	1,4-Dioxane	0.84	3.03	UD	3.03	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.34	1.39	UD	1.39	8.19	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	11.3			70 (65) - 130 (135)	113%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	114000		2.794			
540-36-3	1,4-Difluorobenzene	306000		3.972			
3114-55-4	Chlorobenzene-d5	262000		8.895			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-2-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-19DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042452.D	4		04/29/25 18:09	VL042925

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042452.D
Acq On : 29 Apr 2025 18:09
Operator : SY/MD
Sample : Q1665-19DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 30 01:24:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.794	49	114403	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.972	114	305602	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.895	117	261578	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.387	95	242040	11.260	ppbv		0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 112.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	2645	0.131	ppbv		99
9) Propene	1.489	41	8905m	1.016	ppbv		
13) Ethanol	1.726	45	110989	79.664	ppbv		76
15) Acetone	1.842	43	80971m	4.324	ppbv		
17) tert-Butyl alcohol	2.049	59	15817	0.681	ppbv	#	92
19) Isopropyl Alcohol	1.891	45	80028	7.692	ppbv	#	36
20) Methylene Chloride	2.069	84	3847	0.525	ppbv	#	83
26) Hexane	2.836	57	8047	0.431	ppbv	#	42
34) 2-Butanone	2.567	43	8758	0.362	ppbv		97
44) 2,2,4-Trimethylpentane	4.655	57	7159m	0.126	ppbv		
53) Toluene	6.943	91	27990m	0.708	ppbv		
59) m/p-Xylene	9.545	91	7293m	0.175	ppbv		

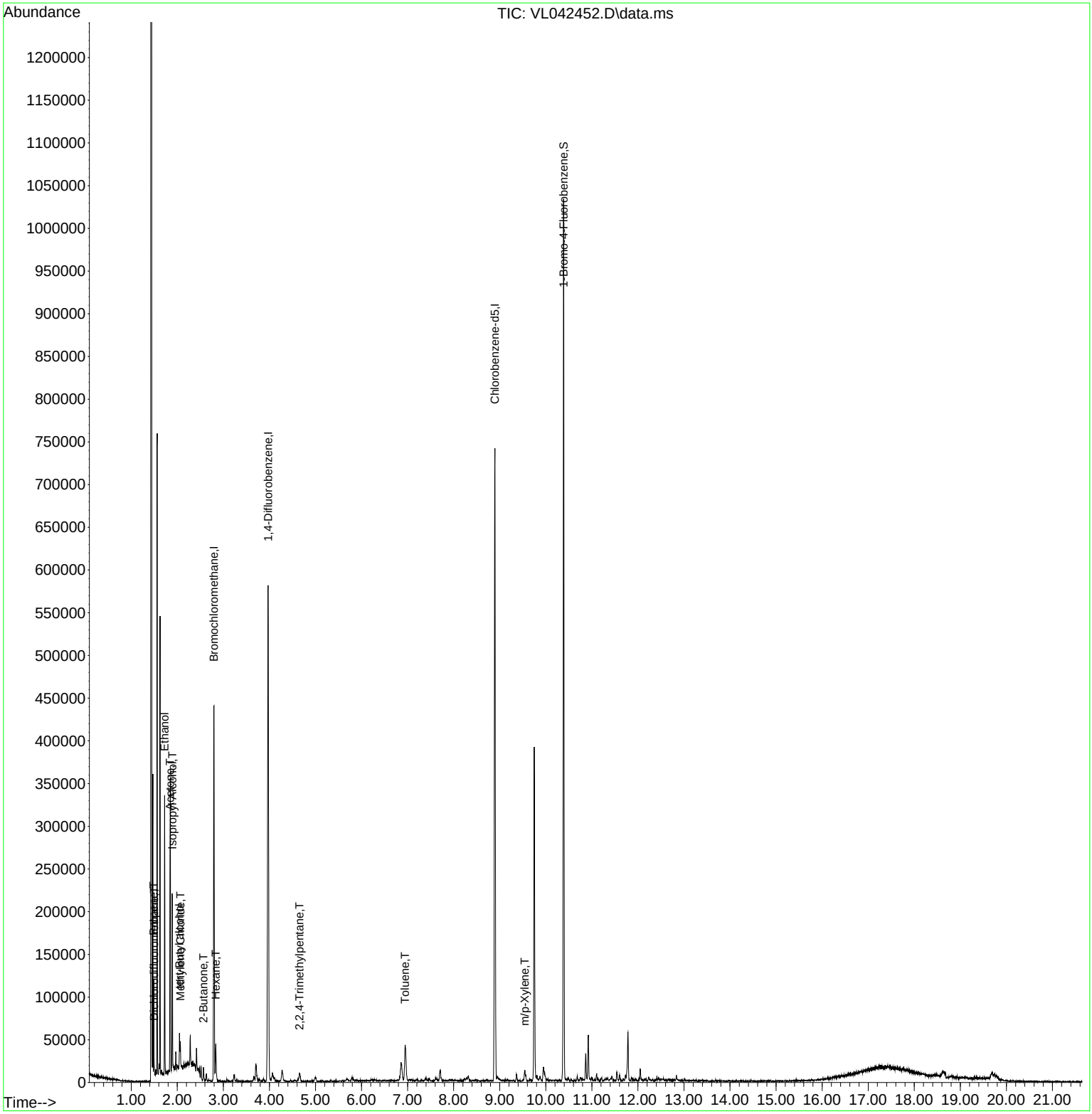
(#) = qualifier out of range (m) = manual integration (+) = signals summed

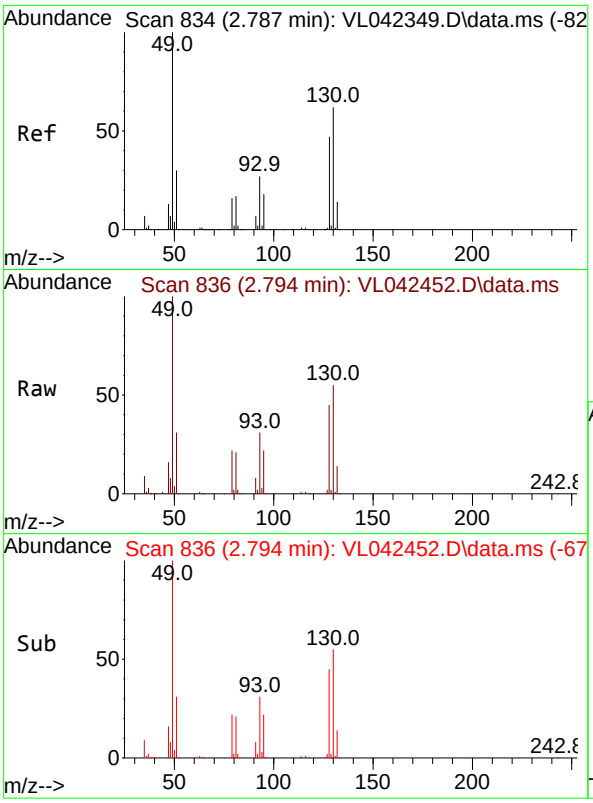
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042452.D
Acq On : 29 Apr 2025 18:09
Operator : SY/MD
Sample : Q1665-19DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 30 01:24:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.794 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 49 Resp: 11440

Ion	Ratio	Lower	Upper
49	100		
128	44.4	22.8	68.4
130	55.9	29.3	88.0

Instrument :
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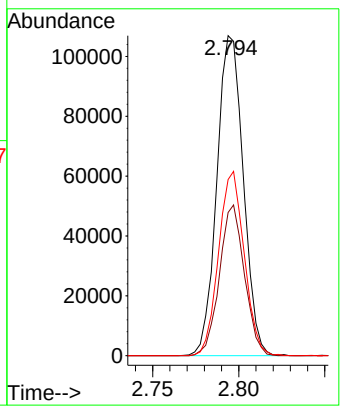
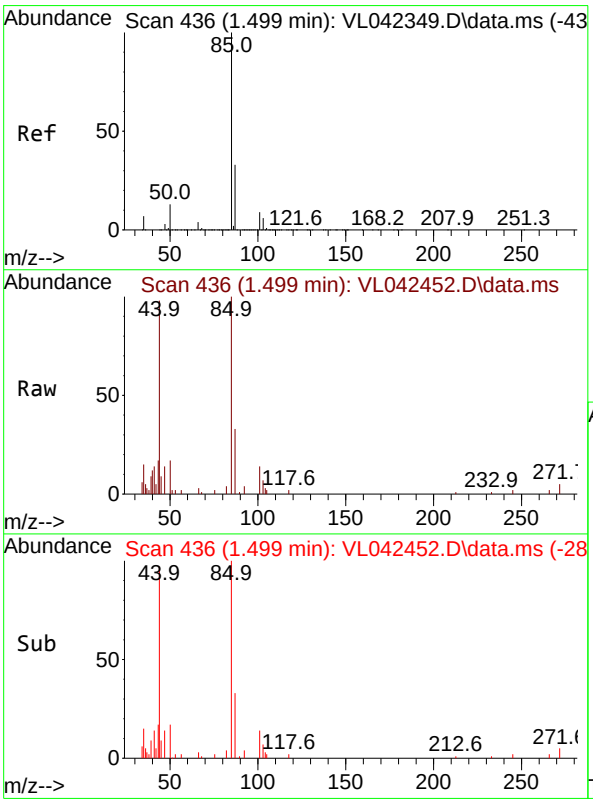
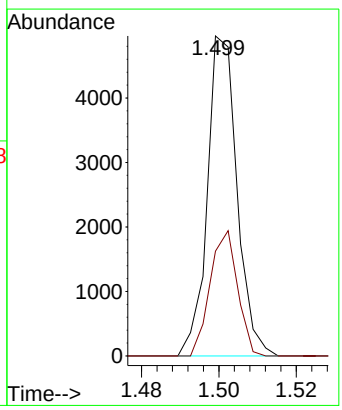


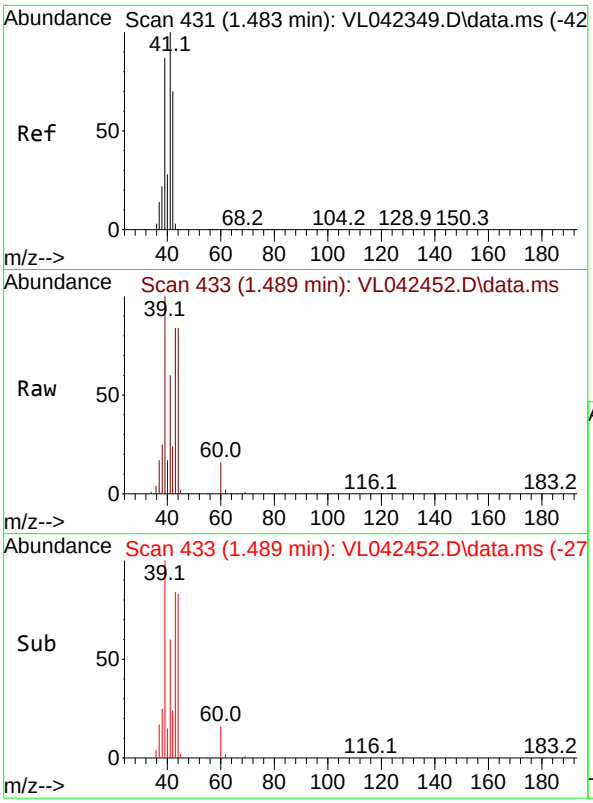


#2
Dichlorodifluoromethane
Concen: 0.131 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 85 Resp: 2645

Ion	Ratio	Lower	Upper
85	100		
87	32.8	26.6	39.8

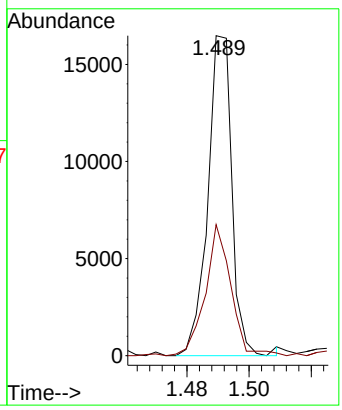




#9
Propene
Concen: 1.016 ppbv m
RT: 1.489 min Scan# 4
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 41 Resp: 890

Ion	Ratio	Lower	Upper
41	100		
42	661.6	56.2	84.4



Instrument :
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ClientSampleId :
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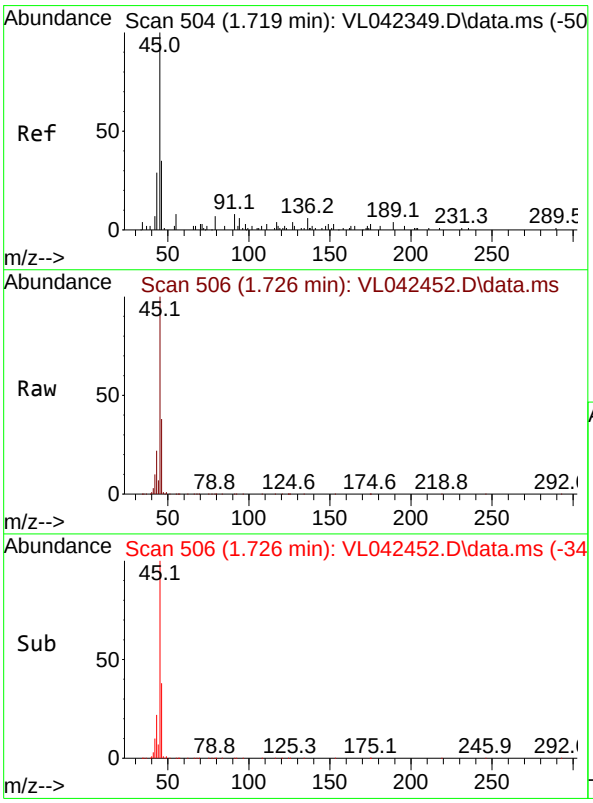
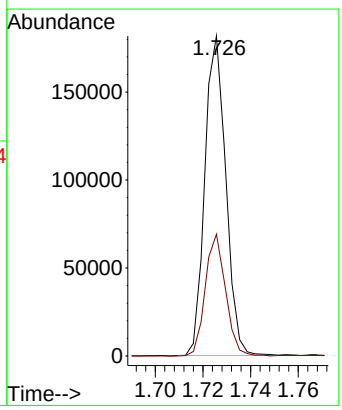
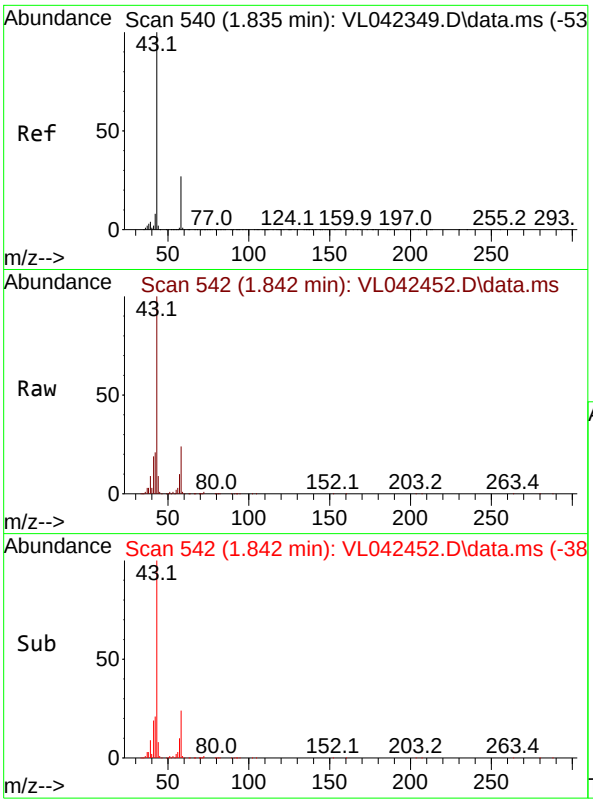


#13
Ethanol
Concen: 79.664 ppbv
RT: 1.726 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 45 Resp: 110989

Ion	Ratio	Lower	Upper
45	100		
46	37.3	21.9	87.7

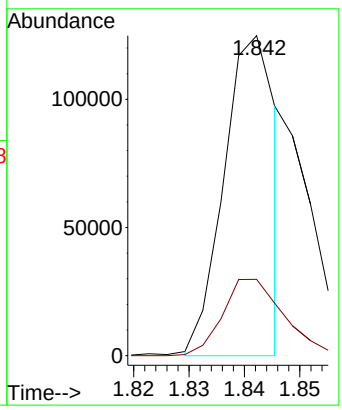




#15
Acetone
Concen: 4.324 ppbv m
RT: 1.842 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 43 Resp: 8097

Ion	Ratio	Lower	Upper
43	100		
58	28.7	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
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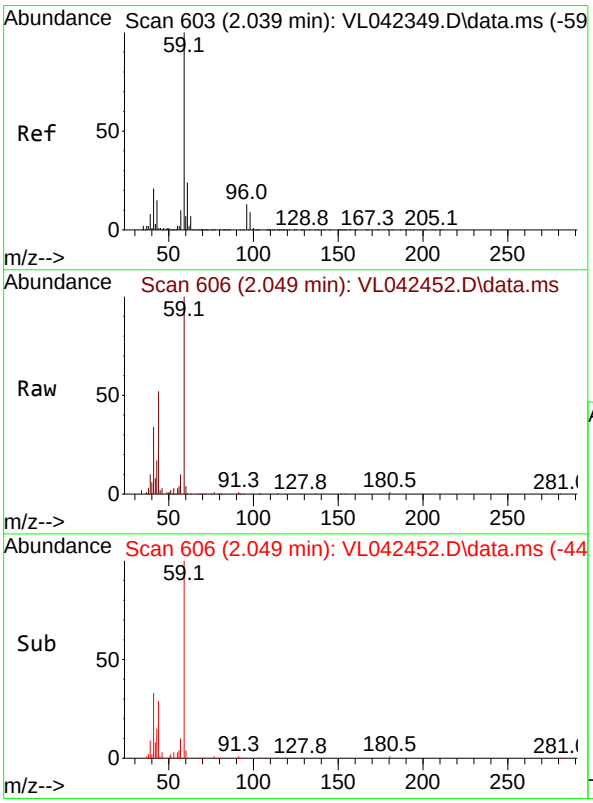
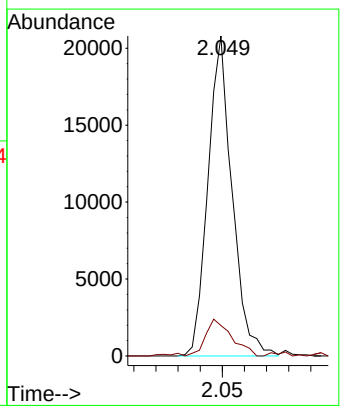
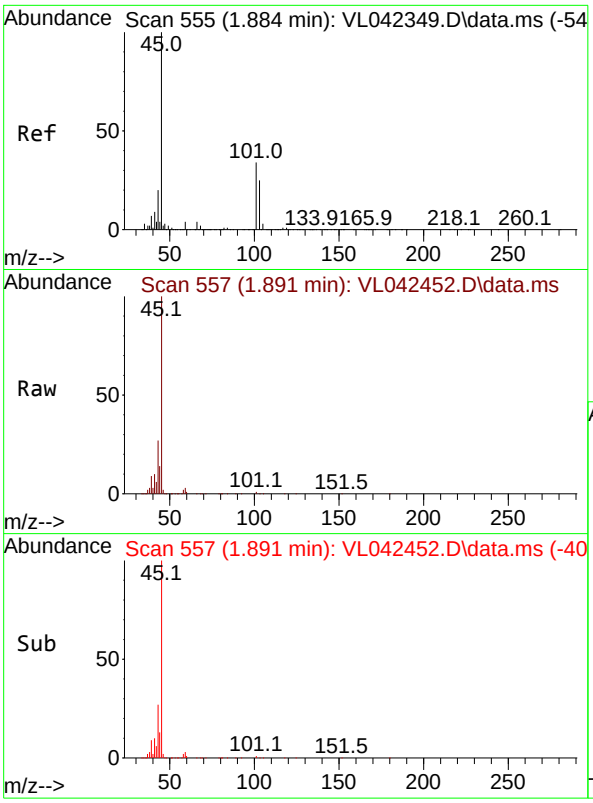


#17
tert-Butyl alcohol
Concen: 0.681 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 59 Resp: 15817

Ion	Ratio	Lower	Upper
59	100		
57	14.1	8.7	13.1#





#19
Isopropyl Alcohol
Concen: 7.692 ppbv
RT: 1.891 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 45 Resp: 8002

Ion	Ratio	Lower	Upper
45	100		
58	2.3	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

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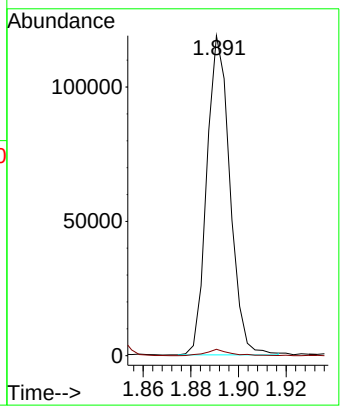
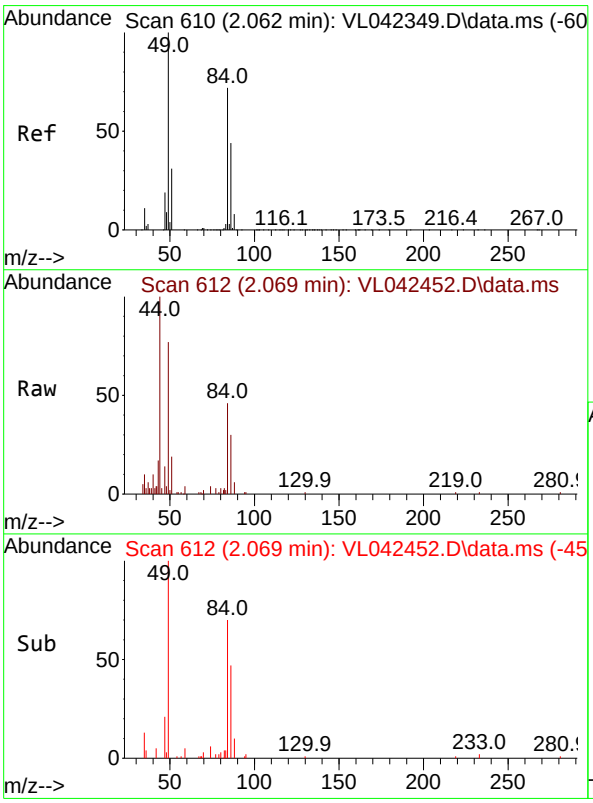
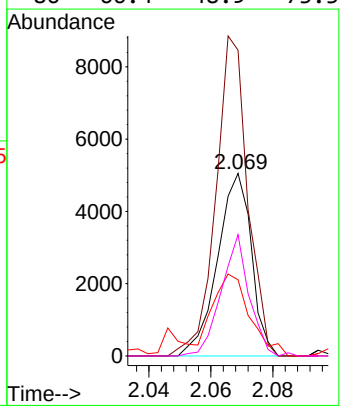


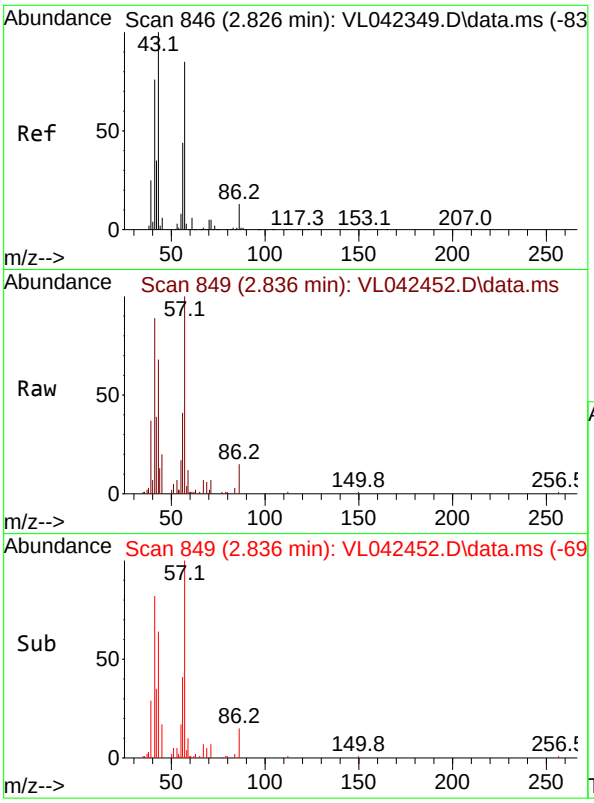


#20
Methylene Chloride
Concen: 0.525 ppbv
RT: 2.069 min Scan# 612
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 84 Resp: 3847

Ion	Ratio	Lower	Upper
84	100		
49	167.5	111.6	167.4#
51	35.0	35.1	52.7#
86	66.4	48.9	73.3

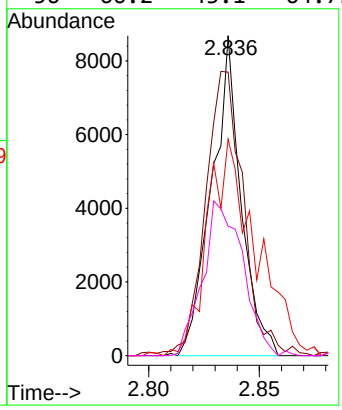




#26
Hexane
Concen: 0.431 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 57 Resp: 804

Ion	Ratio	Lower	Upper
57	100		
41	114.0	77.9	116.9
43	112.8	208.4	312.6#
56	66.2	43.1	64.7#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

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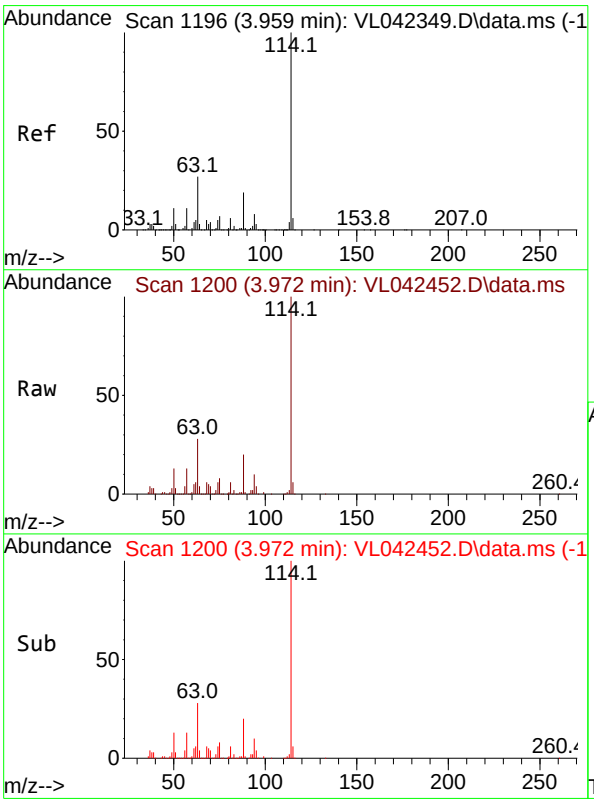
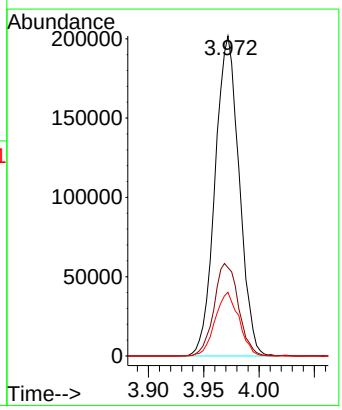
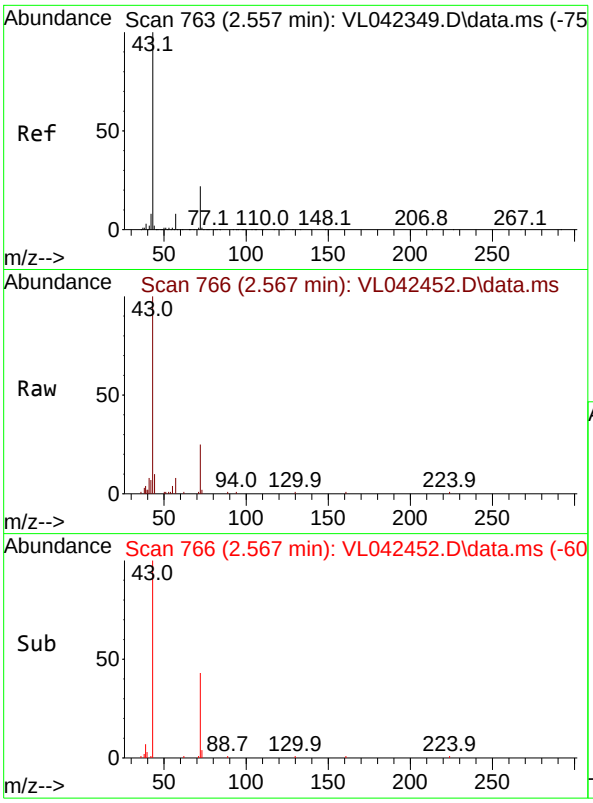


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion:114 Resp: 305602

Ion	Ratio	Lower	Upper
114	100		
63	29.3	21.8	32.6
88	19.7	15.5	23.3

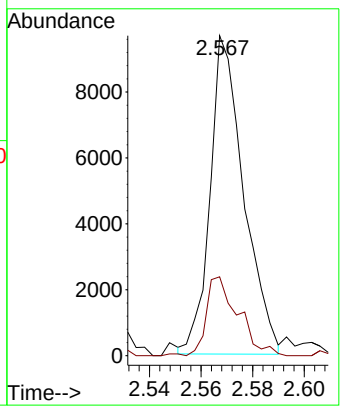




#34
2-Butanone
Concen: 0.362 ppbv
RT: 2.567 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 43 Resp: 875

Ion	Ratio	Lower	Upper
43	100		
72	24.0	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

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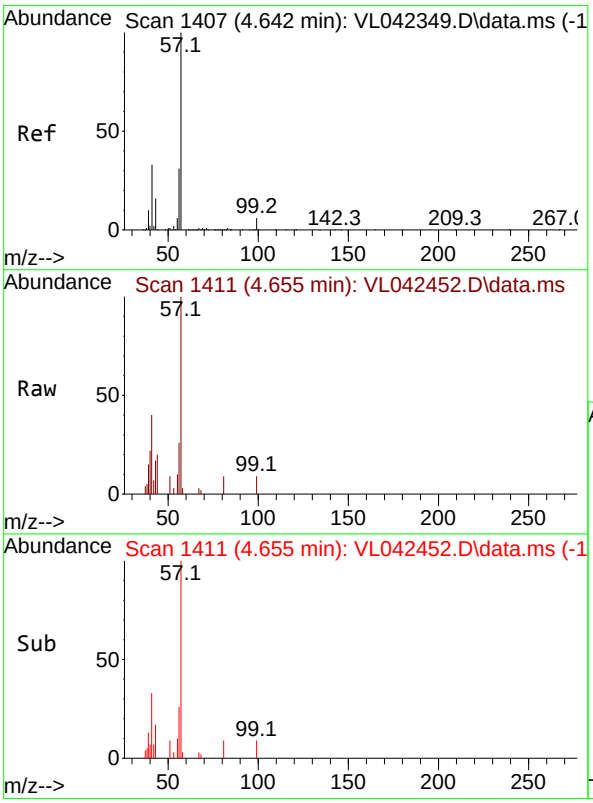
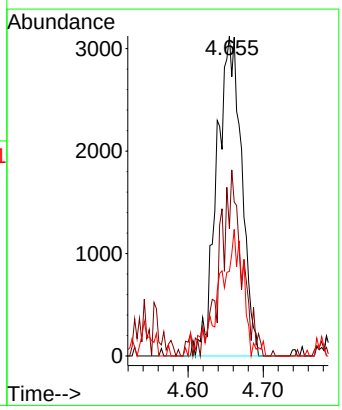
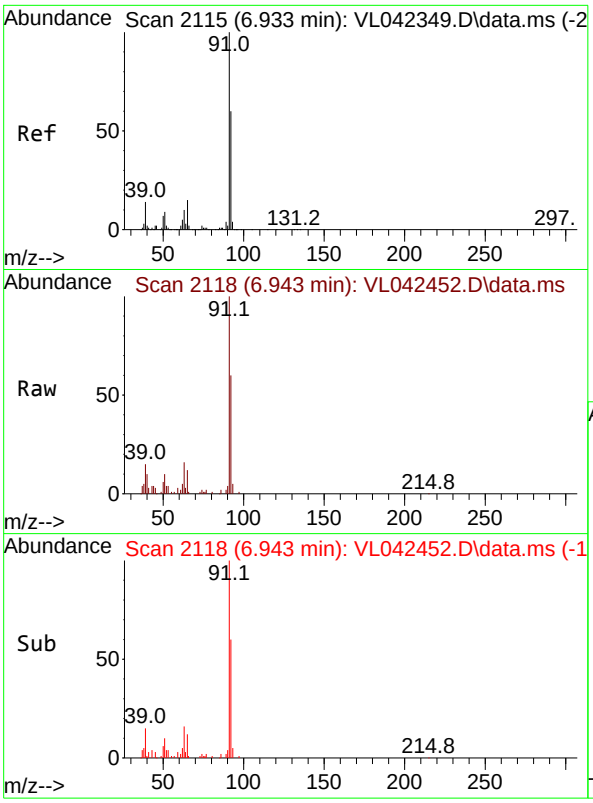


#44
2,2,4-Trimethylpentane
Concen: 0.126 ppbv m
RT: 4.655 min Scan# 1411
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 57 Resp: 7159

Ion	Ratio	Lower	Upper
57	100		
41	53.0	27.2	40.8#
56	0.0	25.7	38.5#

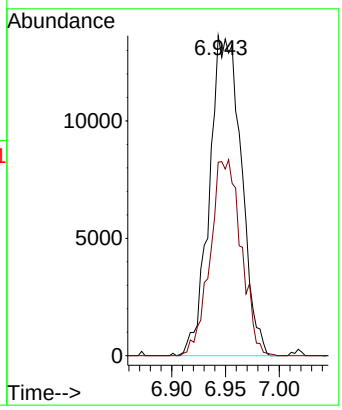




#53
Toluene
Concen: 0.708 ppbv m
RT: 6.943 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 91 Resp: 2799

Ion	Ratio	Lower	Upper
91	100		
92	59.9	48.2	72.4



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IA-B2-2-3242025DL

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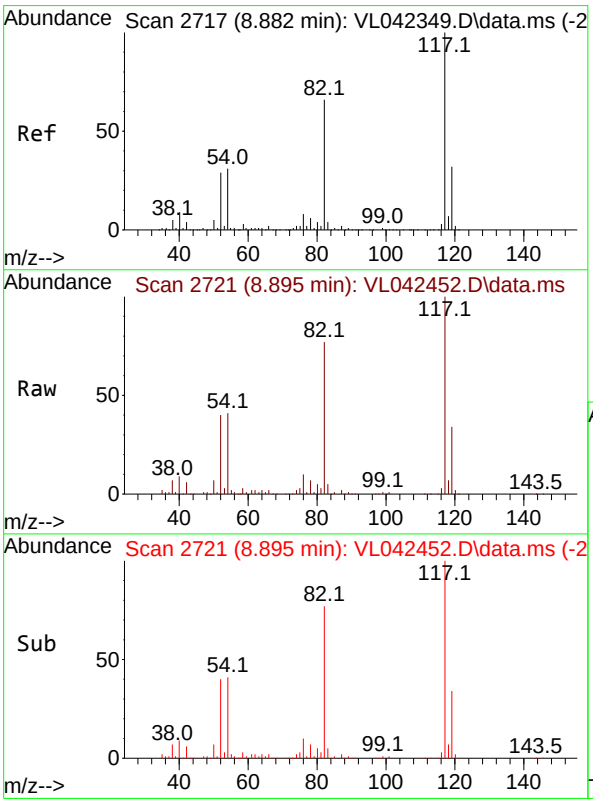
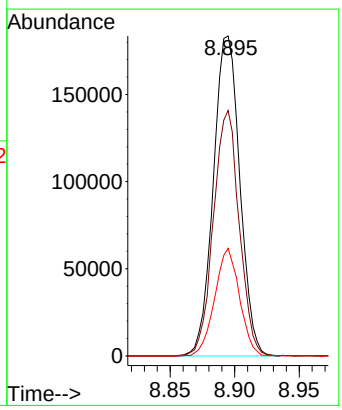
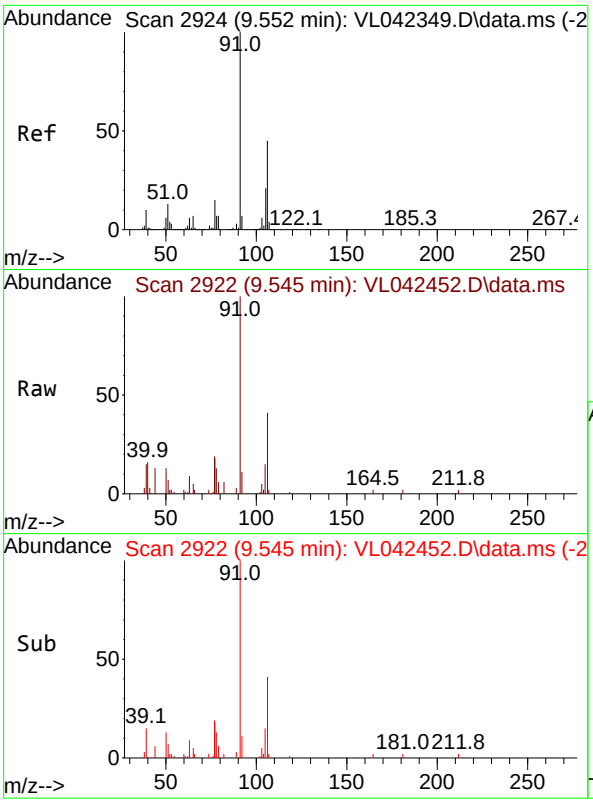


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2721
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion:117 Resp: 261578

Ion	Ratio	Lower	Upper
117	100		
82	74.7	57.8	86.6
119	31.6	25.2	37.8





#59
m/p-Xylene
Concen: 0.175 ppbv m
RT: 9.545 min Scan# 2
Delta R.T. -0.006 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 91 Resp: 729

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

Instrument :
MSVOA_L
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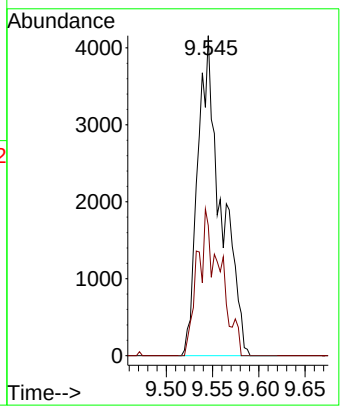
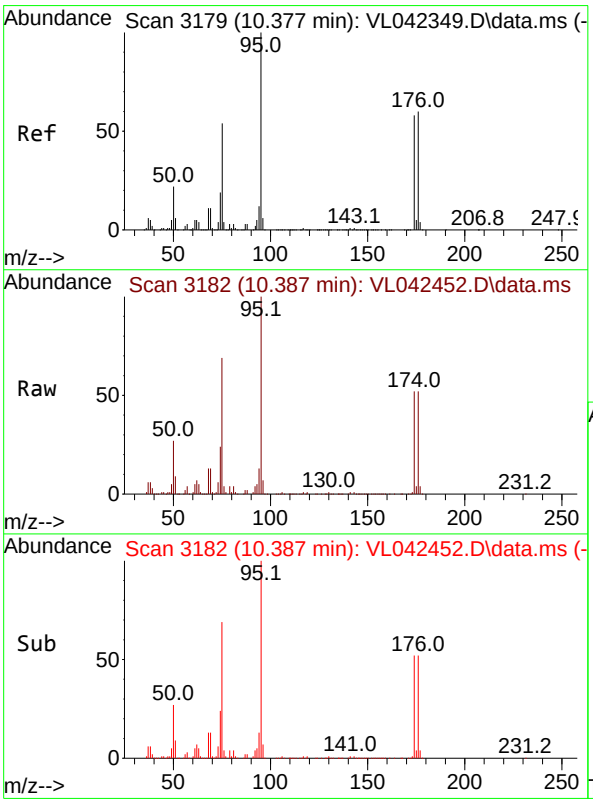
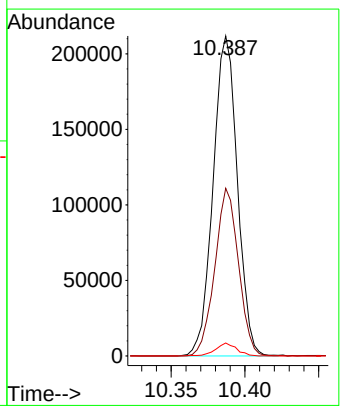




#68
1-Bromo-4-Fluorobenzene
Concen: 11.260 ppbv
RT: 10.387 min Scan# 3182
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 95 Resp: 242040

Ion	Ratio	Lower	Upper
95	100		
174	51.1	48.5	72.7
175	3.5	3.7	5.5#



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-20	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042296.D	1		04/09/25 16:57	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.42	2.08	J	1.04	2.47	ug/m3
64-17-5	Ethanol	31.7	59.7	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.49	1.01	J	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.28	0.83	J	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.21	1.18	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.16	0.66	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	39.0	95.9	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	8.00	19.0		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.30	4.52		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	2.50	7.37		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.28	0.89	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.53	2.00		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-20	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042296.D	1		04/09/25 16:57	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.13	0.60	J	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.22	0.96	J	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.13	0.56	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.50	5.29		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.40			70 (65) - 130 (135)	94%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	162000		2.787			
540-36-3	1,4-Difluorobenzene	385000		3.959			
3114-55-4	Chlorobenzene-d5	329000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B9-3-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-20	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042296.D	1		04/09/25 16:57	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.56		J		1.48	ppbv
115-07-1	Propene	3.10		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv
000100-52-7	Benzaldehyde	1.10		J		10.8	ppbv

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:46:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	161865	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	384782	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	329132	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	253889	9.393	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10098	0.423	ppbv		94
3) Chlorodifluoromethane	1.476	51	13698m	0.561	ppbv		
4) Chloromethane	1.531	50	4745	0.486	ppbv		96
9) Propene	1.486	41	34342m	3.069	ppbv		
10) Heptane	4.981	43	4849m	0.163	ppbv		
11) Trichlorofluoromethane	1.877	101	4945	0.213	ppbv	#	74
13) Ethanol	1.722	45	33576	31.739	ppbv		81
15) Acetone	1.835	43	182118	8.045	ppbv		92
19) Isopropyl Alcohol	1.884	45	498343	39.016	ppbv	#	32
20) Methylene Chloride	2.062	84	11004	1.305	ppbv		96
26) Hexane	2.826	57	33283	1.467	ppbv	#	36
34) 2-Butanone	2.560	43	71103	2.548	ppbv		95
35) Carbon Tetrachloride	3.758	117	2271	0.076	ppbv	#	90
36) Benzene	3.654	78	10547	0.276	ppbv	#	94
41) Tetrahydrofuran	3.062	42	4483	0.279	ppbv		92
53) Toluene	6.930	91	24055	0.532	ppbv		98
57) Chlorobenzene	8.914	112	3957m	0.127	ppbv		
59) m/p-Xylene	9.526	91	10336m	0.221	ppbv		
60) o-Xylene	9.963	91	5830	0.125	ppbv		99

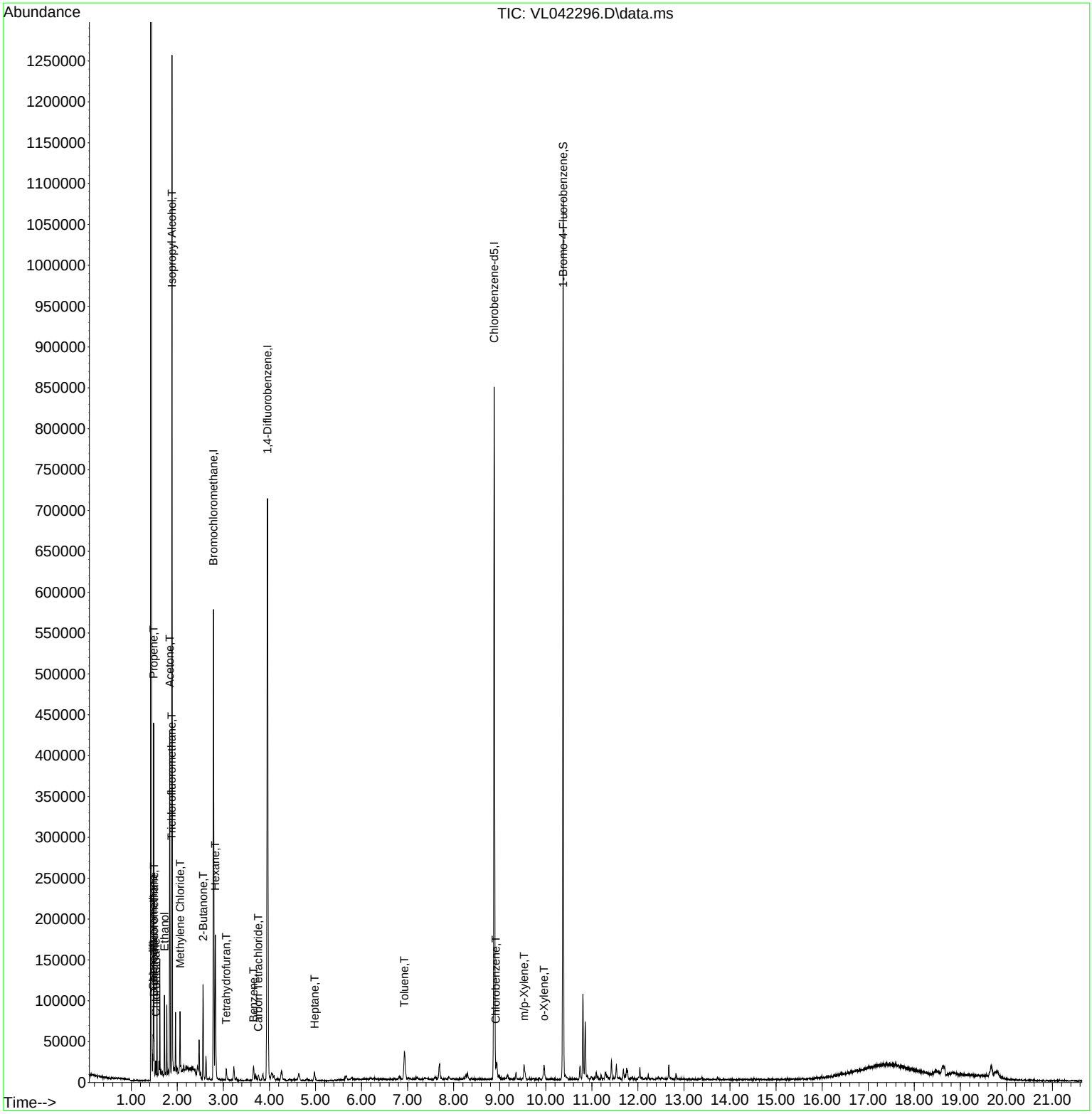
(#) = qualifier out of range (m) = manual integration (+) = signals summed

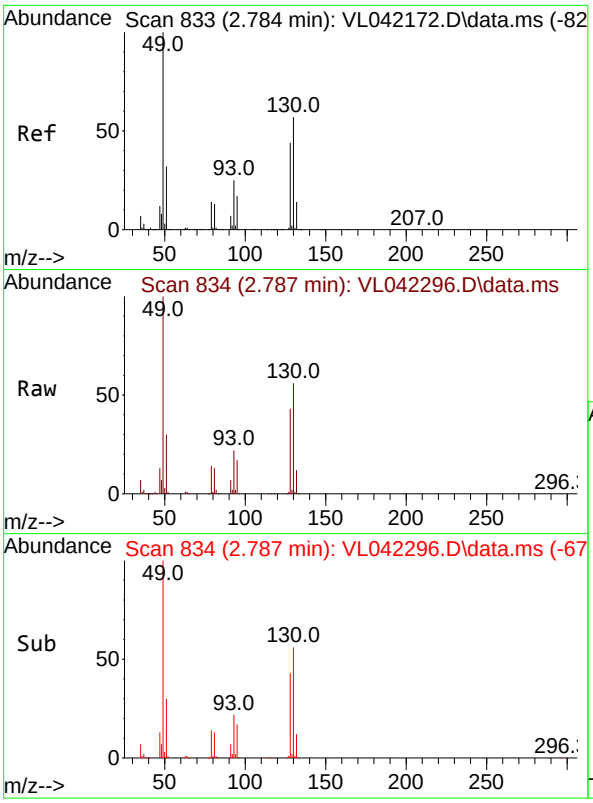
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:46:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

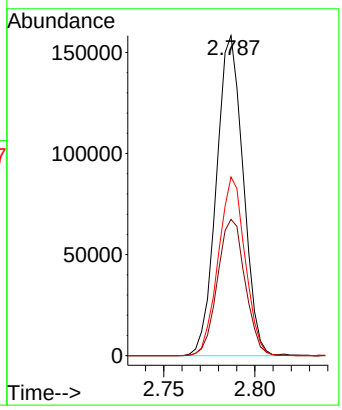




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 49 Resp: 16186

Ion	Ratio	Lower	Upper
49	100		
128	43.9	22.9	68.5
130	55.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
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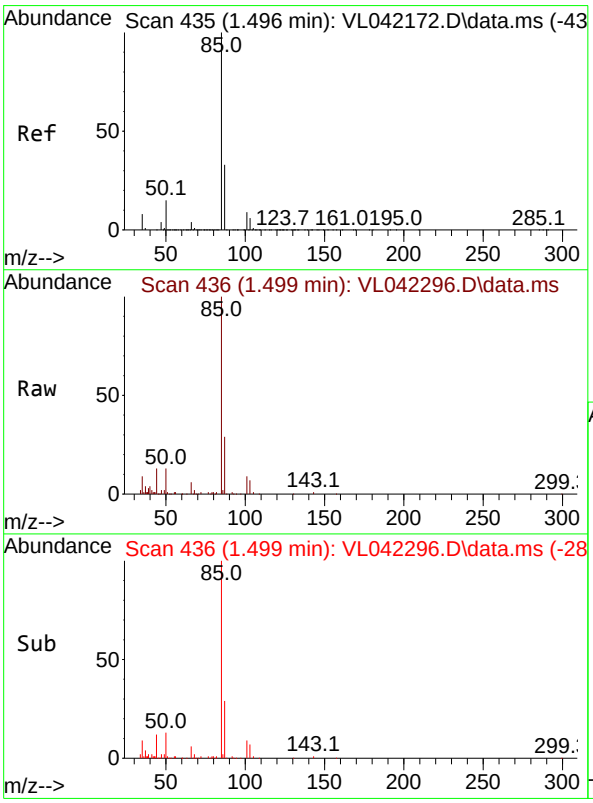
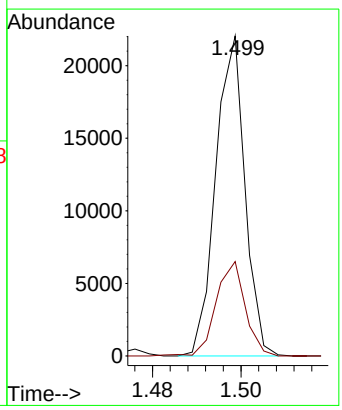
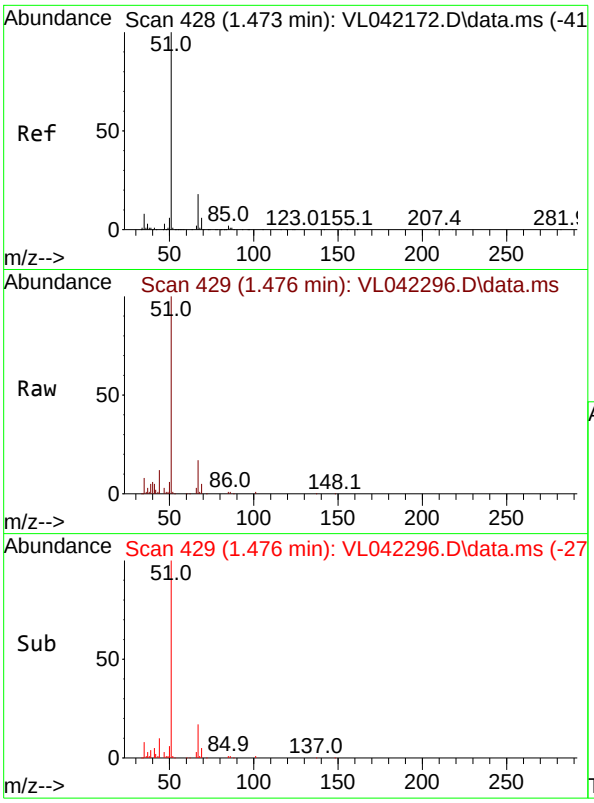


#2
Dichlorodifluoromethane
Concen: 0.423 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 85 Resp: 10098

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1

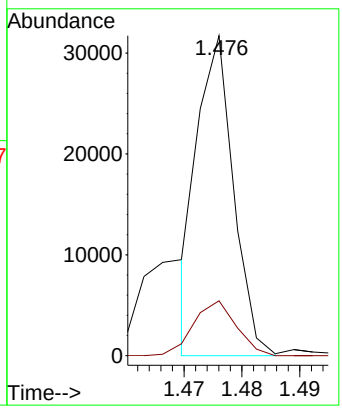




#3
Chlorodifluoromethane
Concen: 0.561 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 51 Resp: 1369

Ion	Ratio	Lower	Upper
51	100		
67	2.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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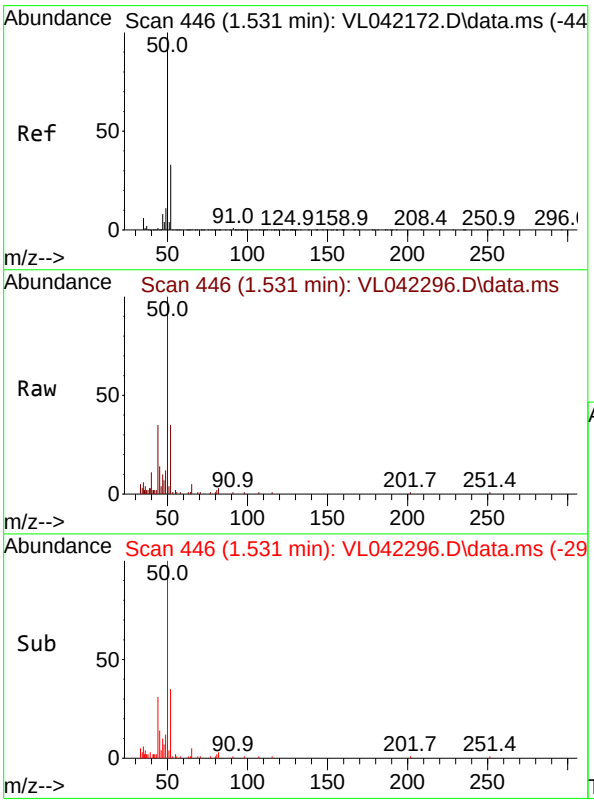
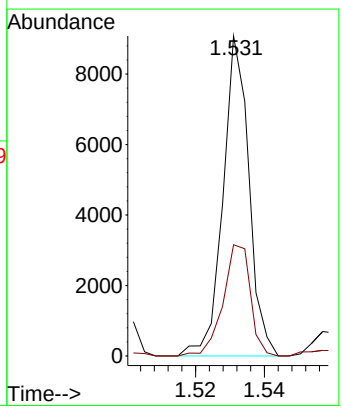
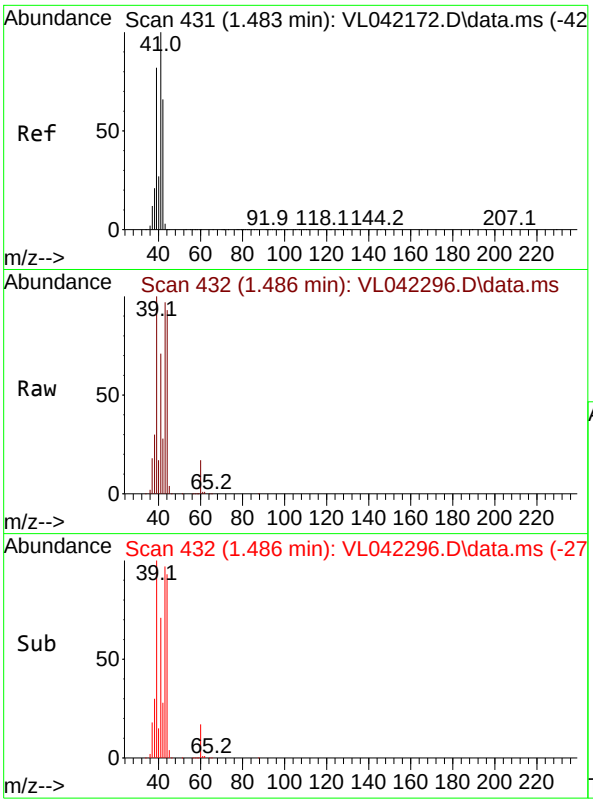


#4
Chloromethane
Concen: 0.486 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 50 Resp: 4745

Ion	Ratio	Lower	Upper
50	100		
52	34.8	26.1	39.1

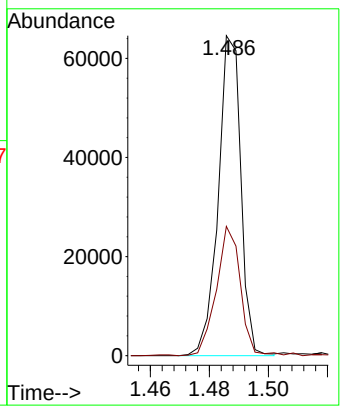




#9
Propene
Concen: 3.069 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 41 Resp: 3434

Ion	Ratio	Lower	Upper
41	100		
42	87.7	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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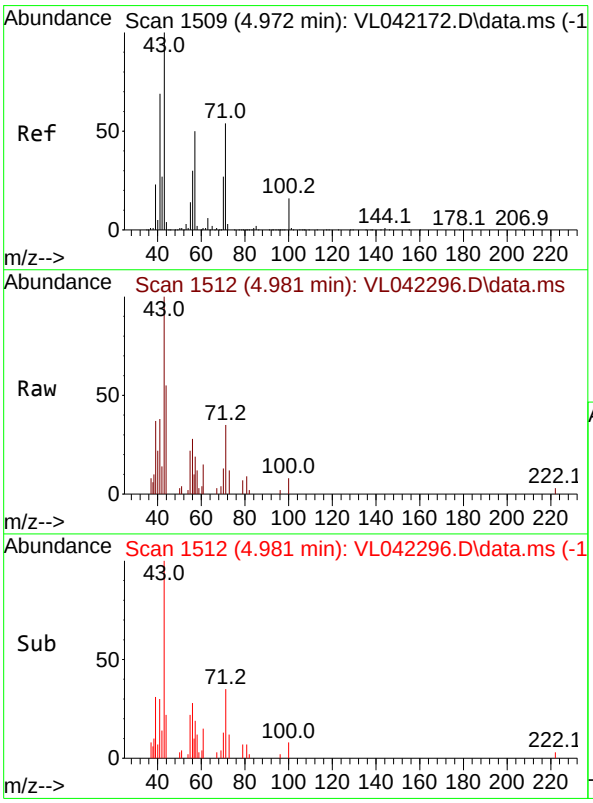
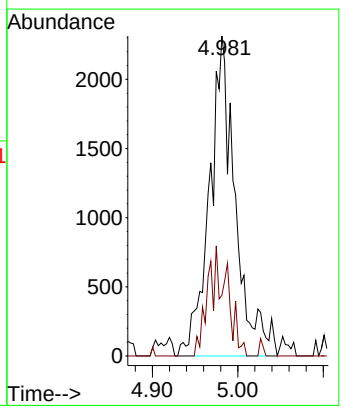
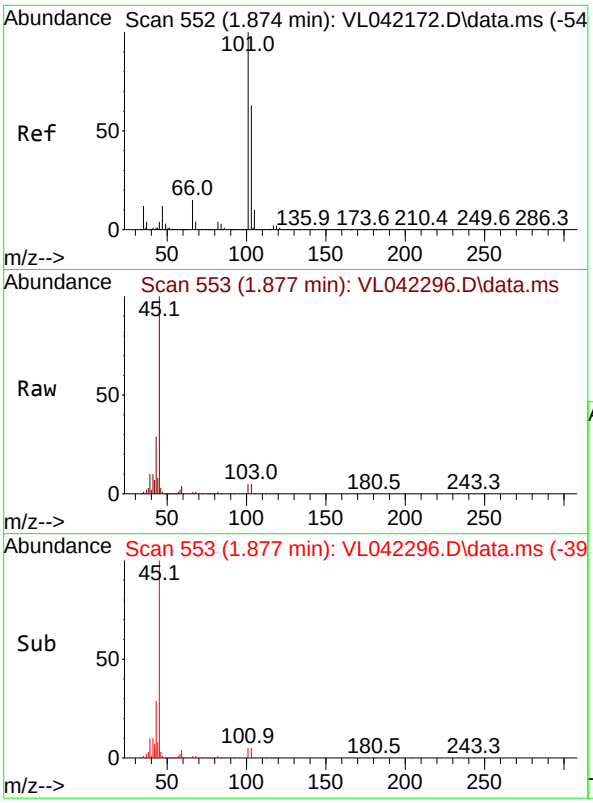


#10
Heptane
Concen: 0.163 ppbv m
RT: 4.981 min Scan# 1512
Delta R.T. 0.009 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 43 Resp: 4849

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

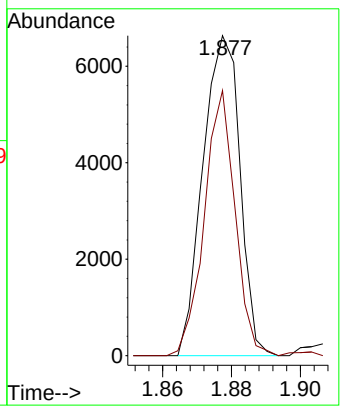




#11
Trichlorofluoromethane
Concen: 0.213 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:101 Resp: 494

Ion	Ratio	Lower	Upper
101	100		
103	82.8	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
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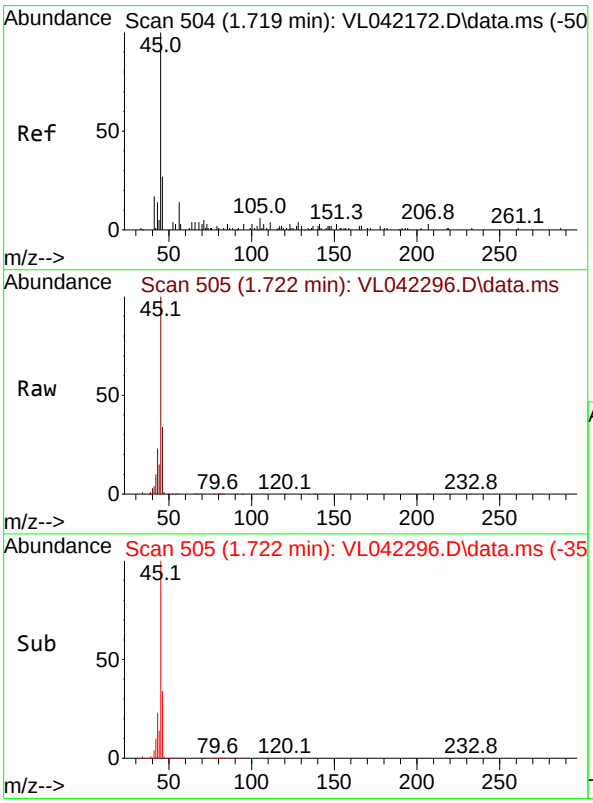
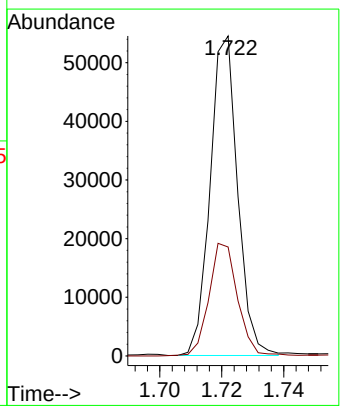
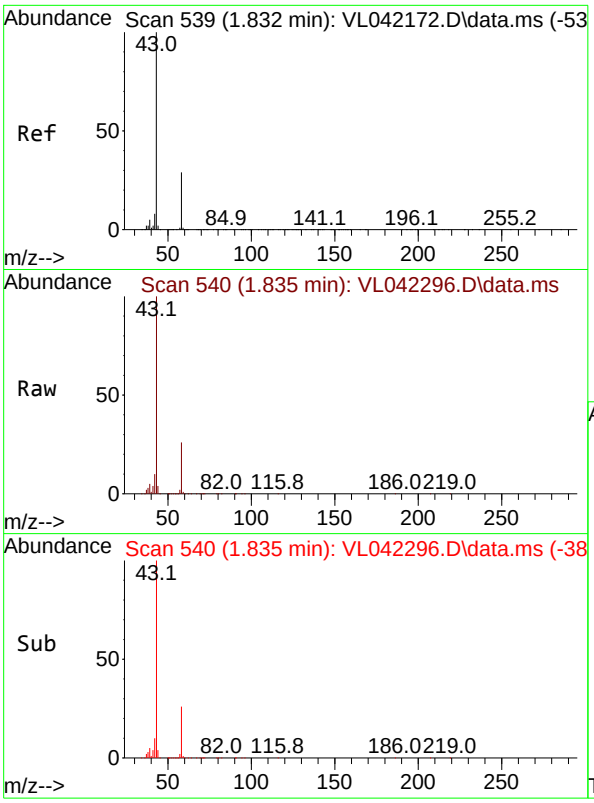


#13
Ethanol
Concen: 31.739 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 45 Resp: 33576

Ion	Ratio	Lower	Upper
45	100		
46	37.1	20.2	80.8

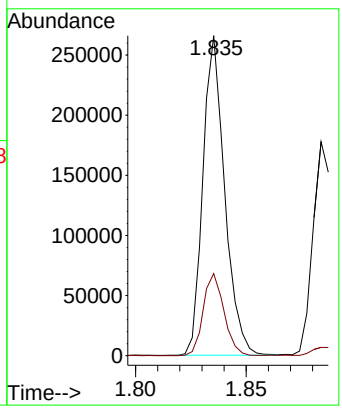




#15
Acetone
Concen: 8.045 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 43 Resp: 18211

Ion	Ratio	Lower	Upper
43	100		
58	24.5	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/10/2025
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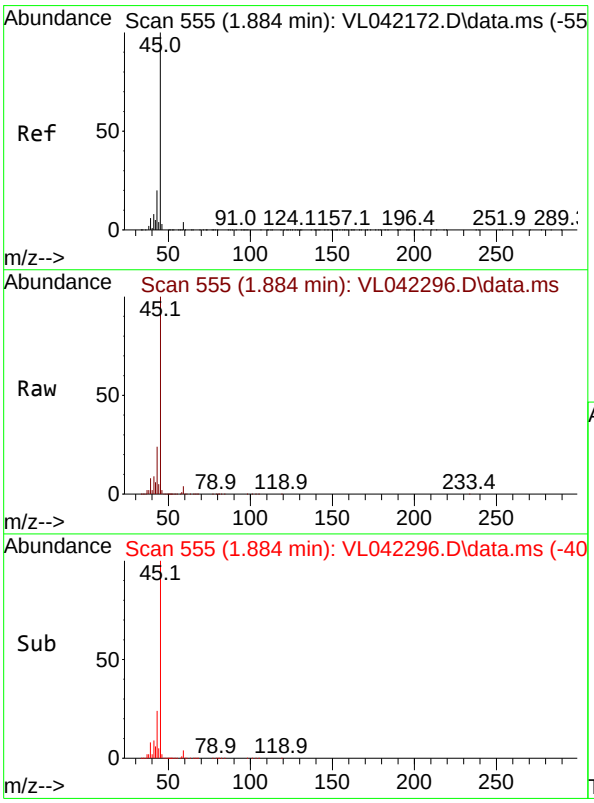
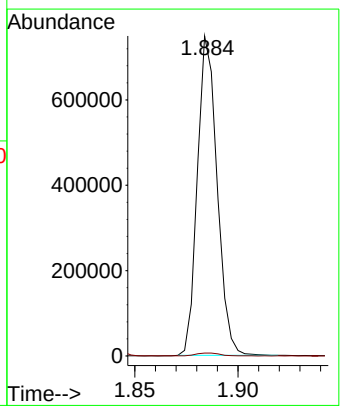
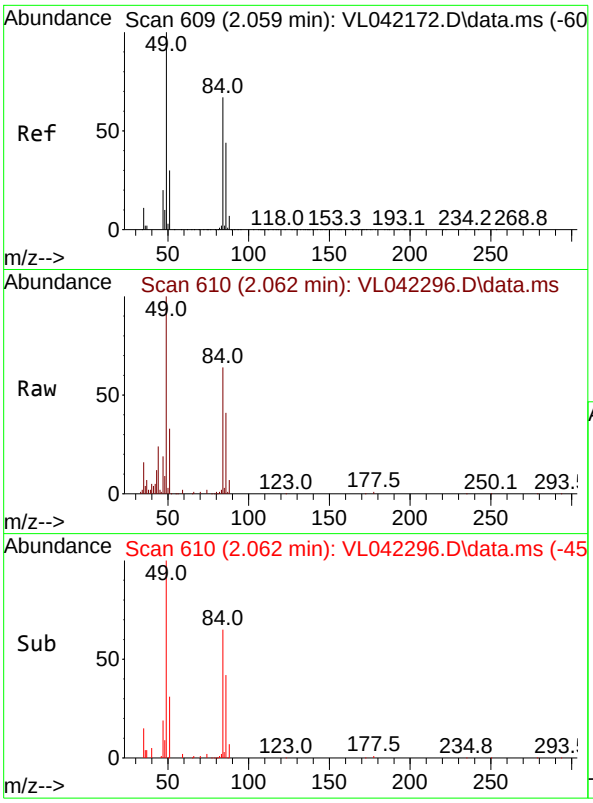


#19
Isopropyl Alcohol
Concen: 39.016 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 45 Resp: 498343

Ion	Ratio	Lower	Upper
45	100		
58	1.2	36.9	55.3#

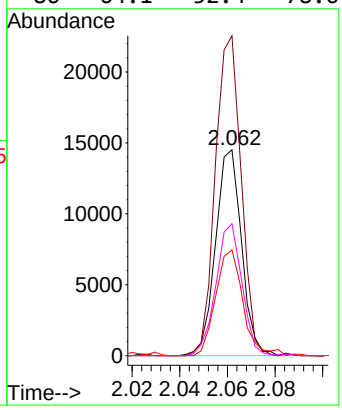




#20
Methylene Chloride
Concen: 1.305 ppbv
RT: 2.062 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 84 Resp: 1100

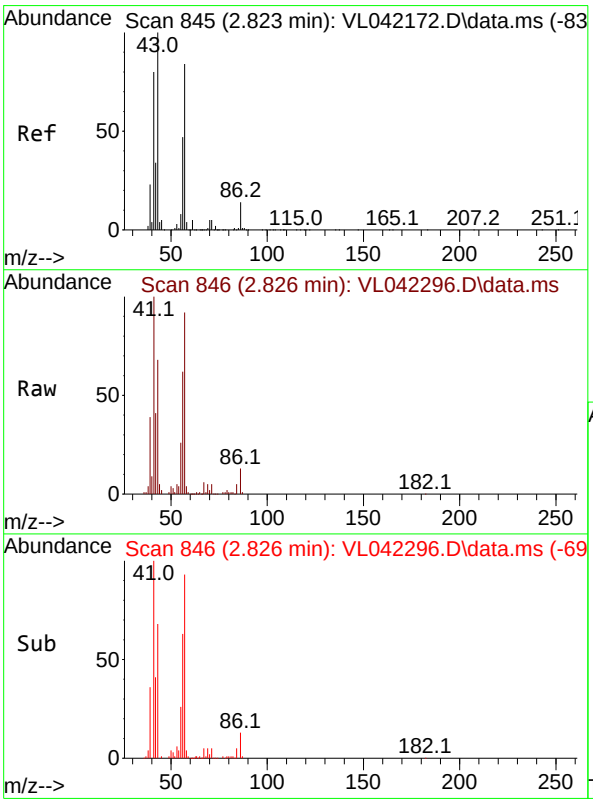
Ion	Ratio	Lower	Upper
84	100		
49	155.3	120.2	180.4
51	51.4	37.4	56.0
86	64.1	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

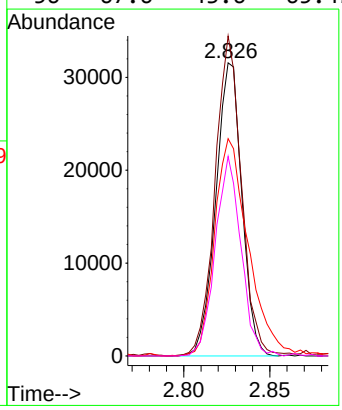
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

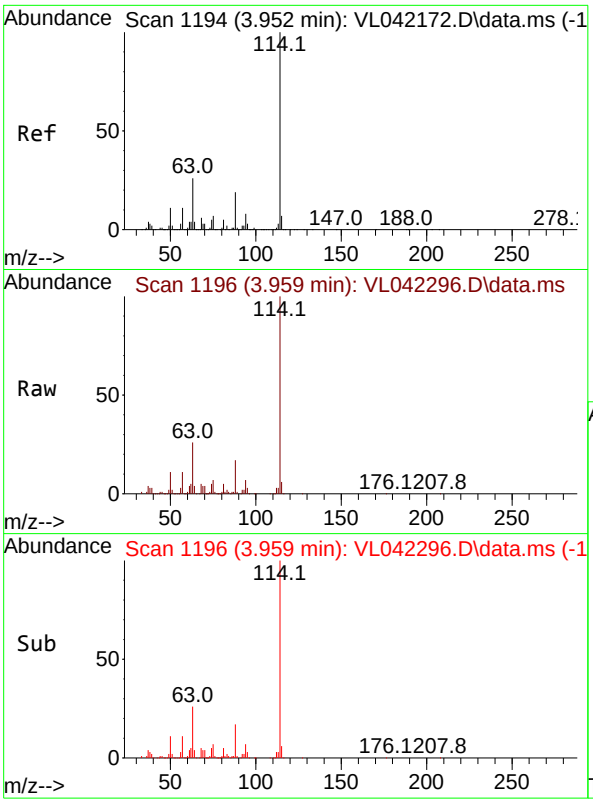


#26
Hexane
Concen: 1.467 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 57 Resp: 33283

Ion	Ratio	Lower	Upper
57	100		
41	112.6	76.6	114.8
43	96.8	207.8	311.8#
56	67.6	43.6	65.4#

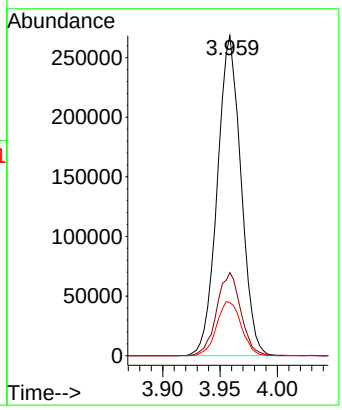




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:114 Resp: 38478

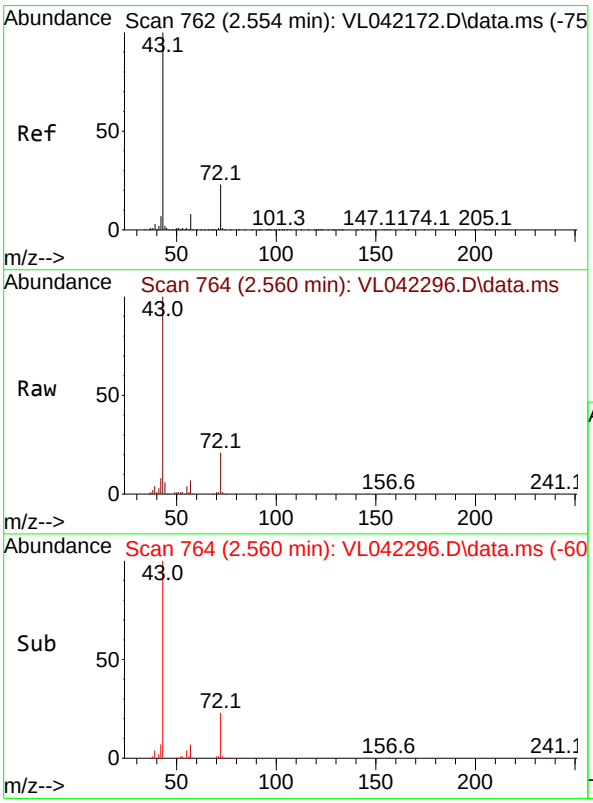
Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	17.6	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

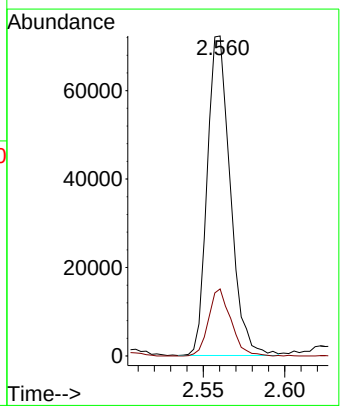
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

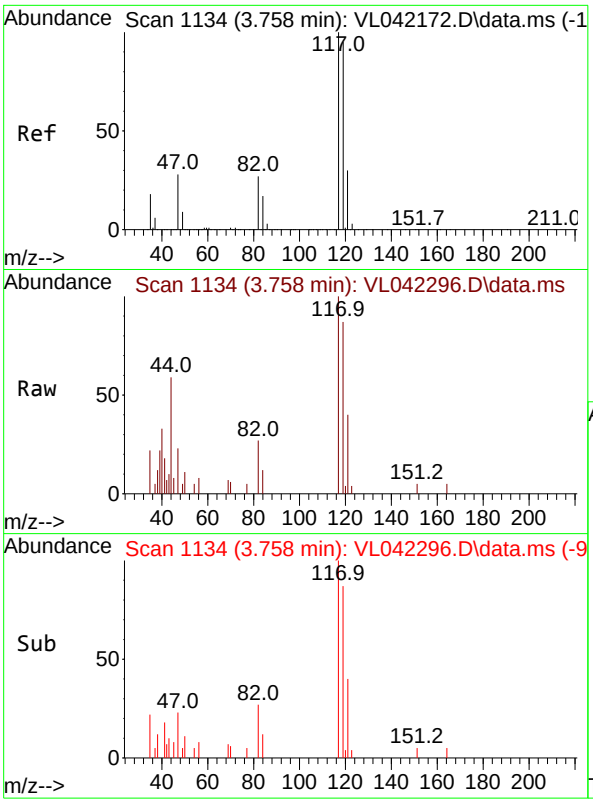


#34
2-Butanone
Concen: 2.548 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 43 Resp: 71103

Ion	Ratio	Lower	Upper
43	100		
72	20.4	18.2	27.2

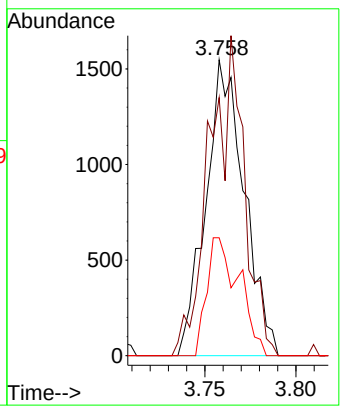




#35
Carbon Tetrachloride
Concen: 0.076 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:117 Resp: 227

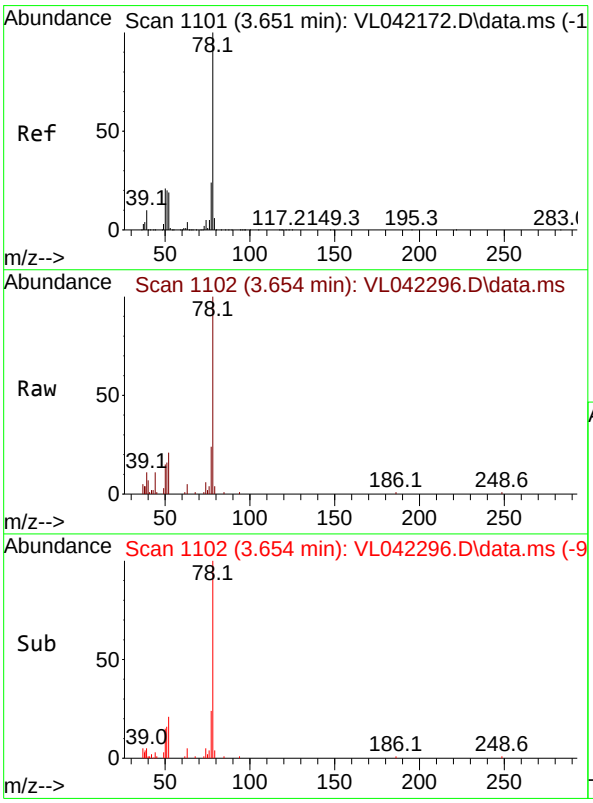
Ion	Ratio	Lower	Upper
117	100		
119	87.2	76.2	114.2
121	39.9	24.2	36.4#



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

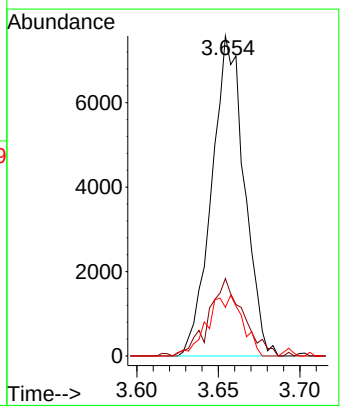
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

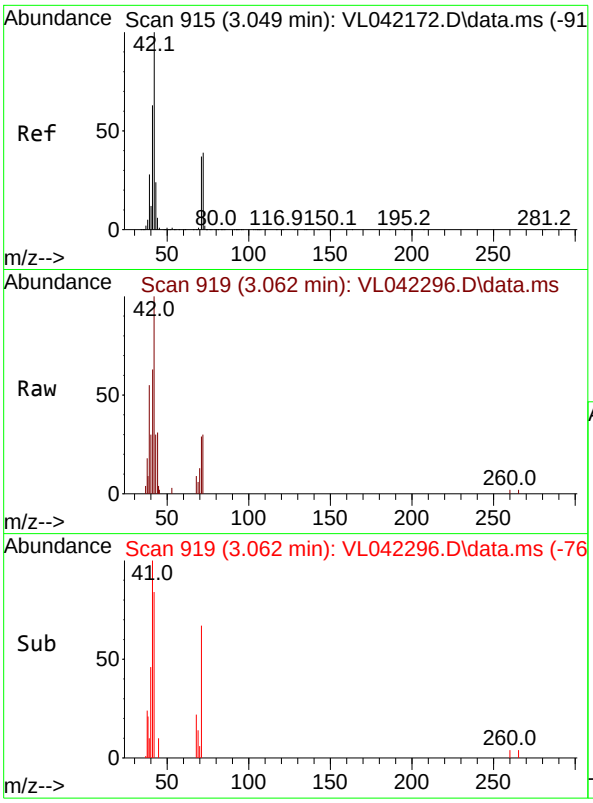


#36
Benzene
Concen: 0.276 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 78 Resp: 10547

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.1	28.7
50	15.2	16.6	24.8#





#41
Tetrahydrofuran
Concen: 0.279 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

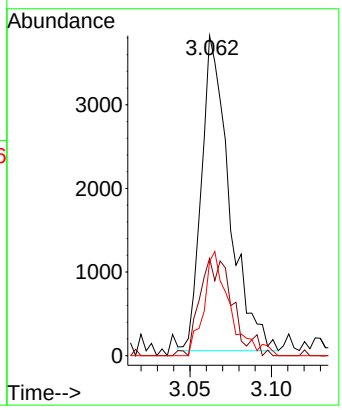
Tgt Ion: 42 Resp: 448

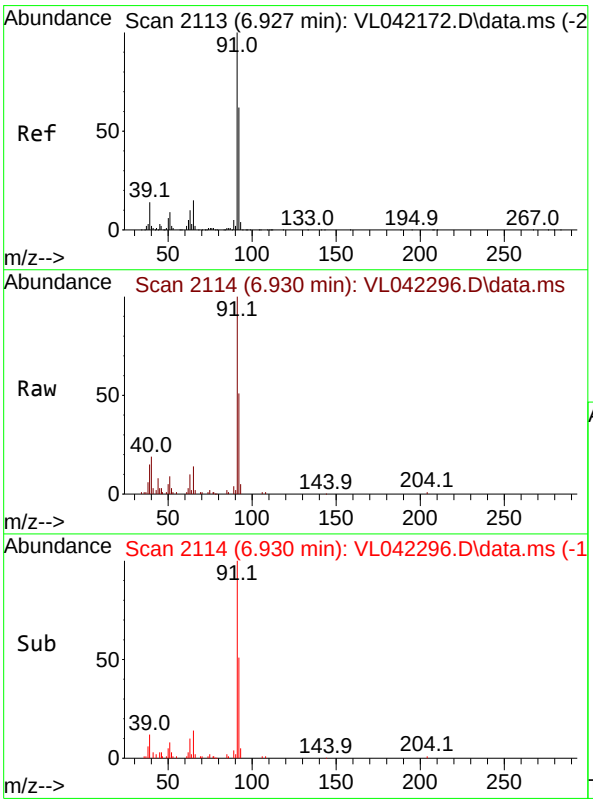
Ion	Ratio	Lower	Upper
42	100		
72	36.6	31.4	47.0
71	30.6	30.2	45.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

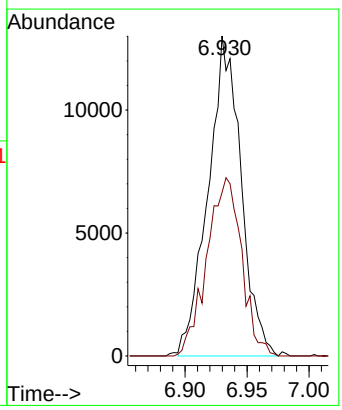


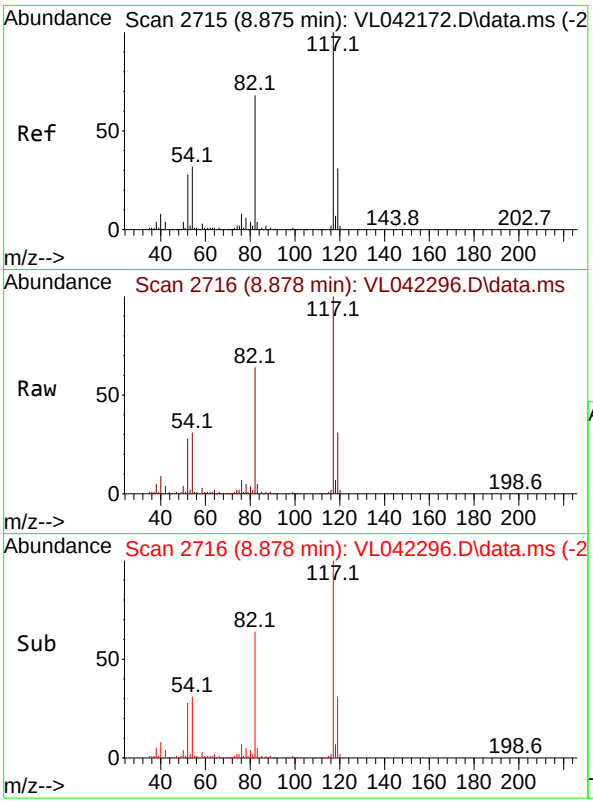


#53
Toluene
Concen: 0.532 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 91 Resp: 24055

Ion	Ratio	Lower	Upper
91	100		
92	58.8	48.4	72.6

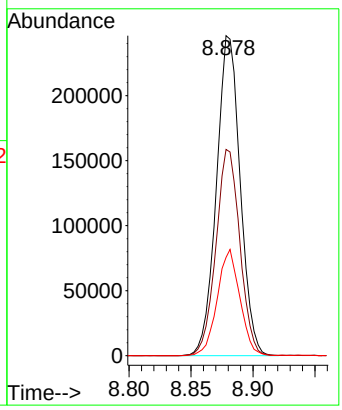




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:117 Resp: 32913

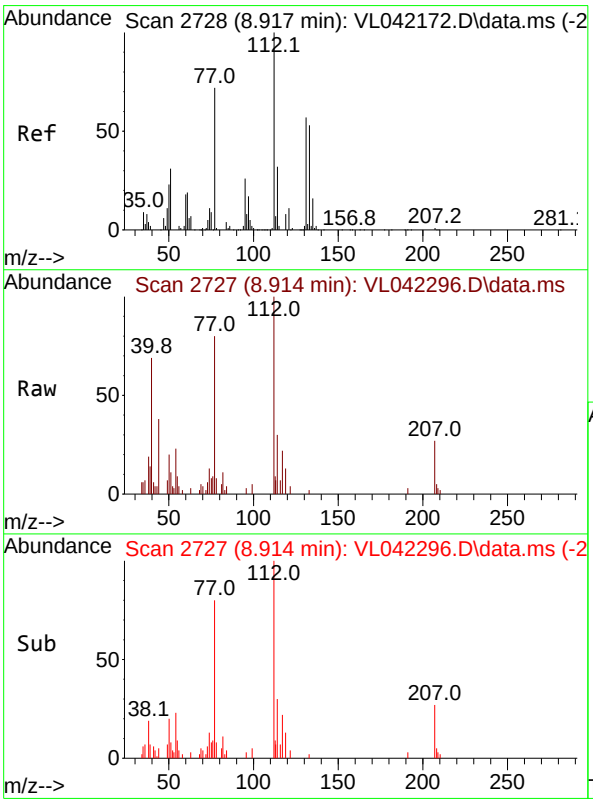
Ion	Ratio	Lower	Upper
117	100		
82	64.9	55.8	83.6
119	31.8	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

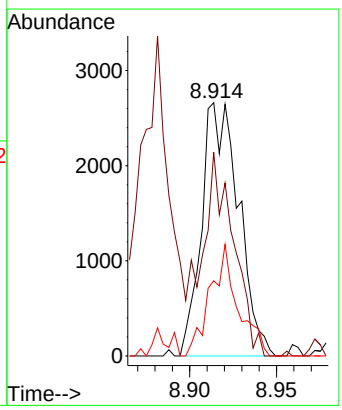
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

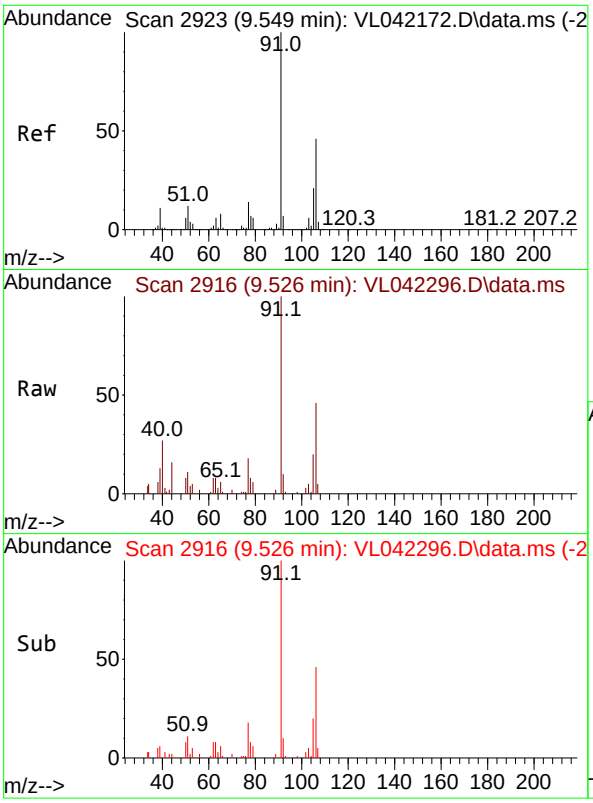


#57
Chlorobenzene
Concen: 0.127 ppbv m
RT: 8.914 min Scan# 2727
Delta R.T. -0.004 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:112 Resp: 3957

Ion	Ratio	Lower	Upper
112	100		
77	80.4	58.2	87.2
114	29.7	29.1	35.5

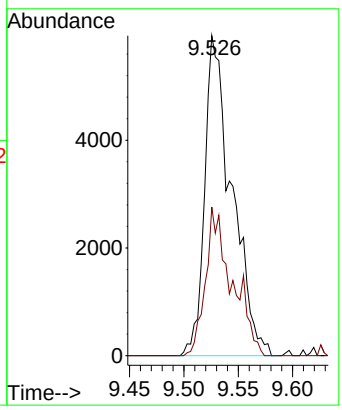




#59
m/p-Xylene
Concen: 0.221 ppbv m
RT: 9.526 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 91 Resp: 1033

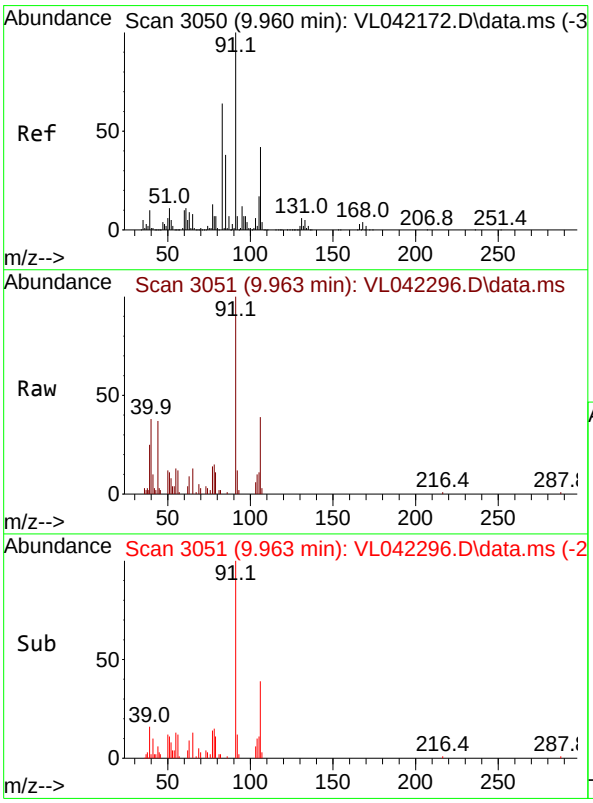
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

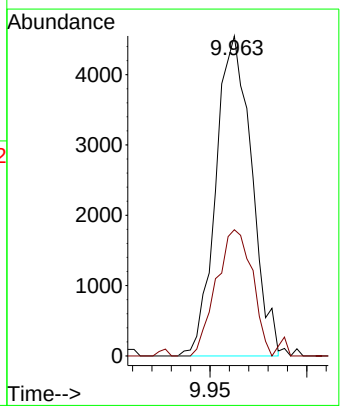
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

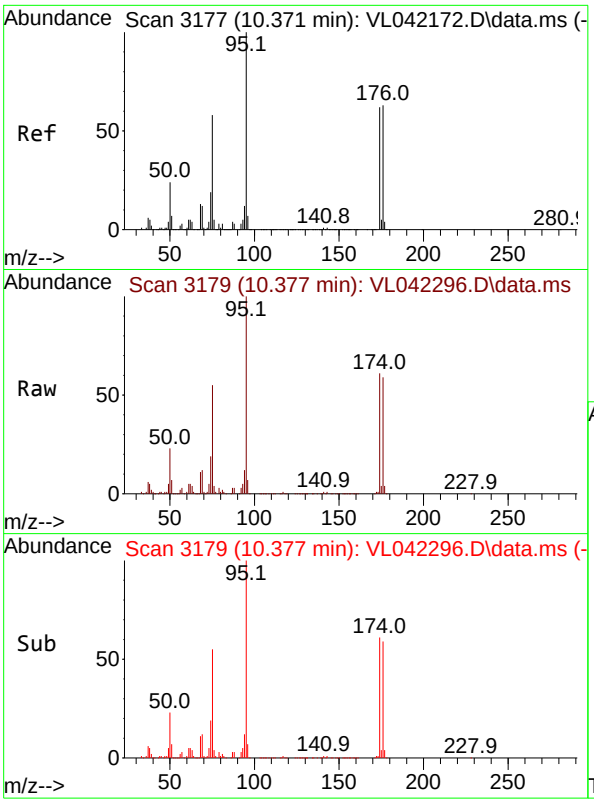


#60
o-Xylene
Concen: 0.125 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 91 Resp: 5830

Ion	Ratio	Lower	Upper
91	100		
106	41.2	20.8	62.5

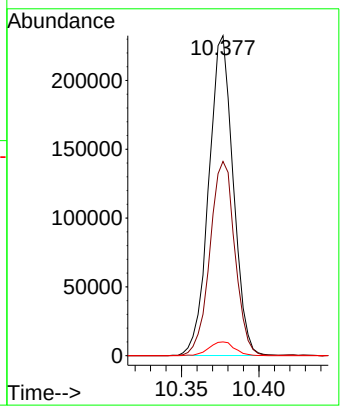




#68
1-Bromo-4-Fluorobenzene
Concen: 9.393 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 95 Resp: 25388

Ion	Ratio	Lower	Upper
95	100		
174	62.7	50.6	76.0
175	4.6	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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

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

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

Signal : TIC: VL042296.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4147564	4613089	100.00%	41.703%
2	1.486	430	432	440	rVB2	431303	237206	5.14%	2.144%
3	1.557	451	454	459	rVB	121041	68488	1.48%	0.619%
4	1.622	470	474	478	rVB	140859	77881	1.69%	0.704%
5	1.722	500	505	509	rBV	97715	61161	1.33%	0.553%
6	1.774	516	521	526	rBV	86096	57793	1.25%	0.522%
7	1.835	535	540	549	rBV	420077	335010	7.26%	3.029%
8	1.884	549	555	568	rVV	1245434	854542	18.52%	7.725%
9	1.962	575	579	584	rVB	72958	50416	1.09%	0.456%
10	2.059	599	609	614	rBV2	75192	67543	1.46%	0.611%
11	2.557	756	763	775	rBV	116113	116075	2.52%	1.049%
12	2.787	824	834	840	rBV	575581	594126	12.88%	5.371%
13	2.826	840	846	858	rVB2	176209	207363	4.50%	1.875%
14	3.959	1181	1196	1212	rBV	711852	1050717	22.78%	9.499%
15	6.930	2102	2114	2128	rBV4	33782	74089	1.61%	0.670%
16	8.878	2705	2716	2727	rBV	847108	1165848	25.27%	10.540%
17	10.377	3162	3179	3188	rBV	1078468	1215713	26.35%	10.990%
18	10.807	3303	3312	3320	rBV2	104007	129076	2.80%	1.167%
19	10.856	3320	3327	3335	rVB2	67442	85501	1.85%	0.773%

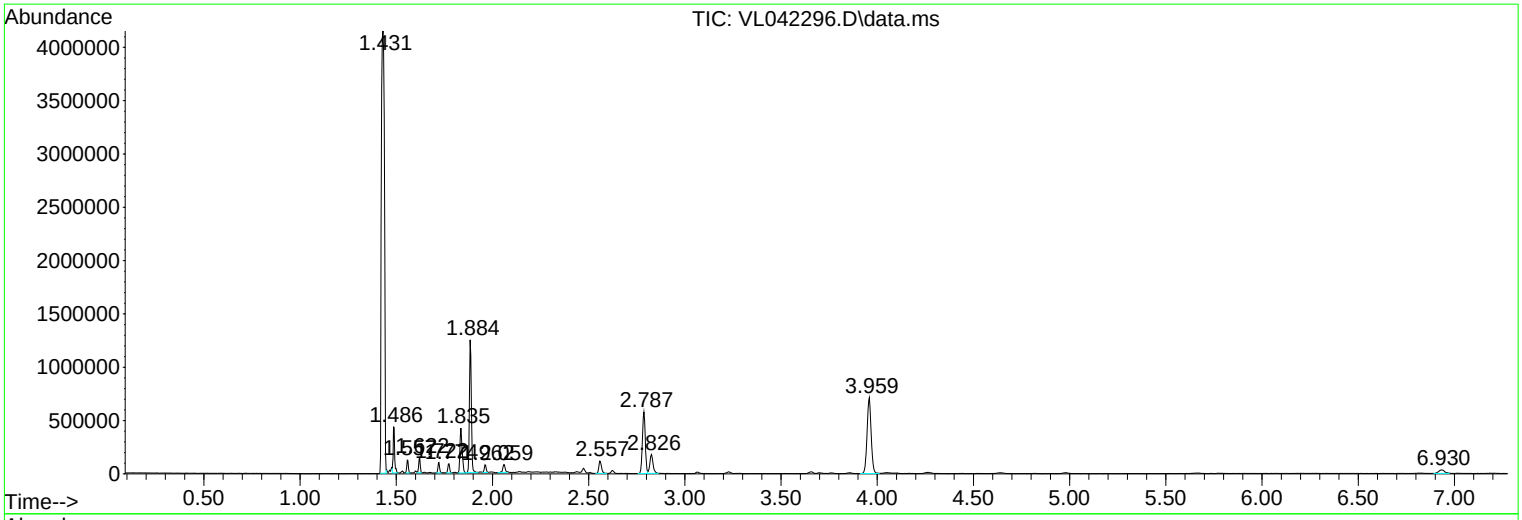
Sum of corrected areas: 11061637

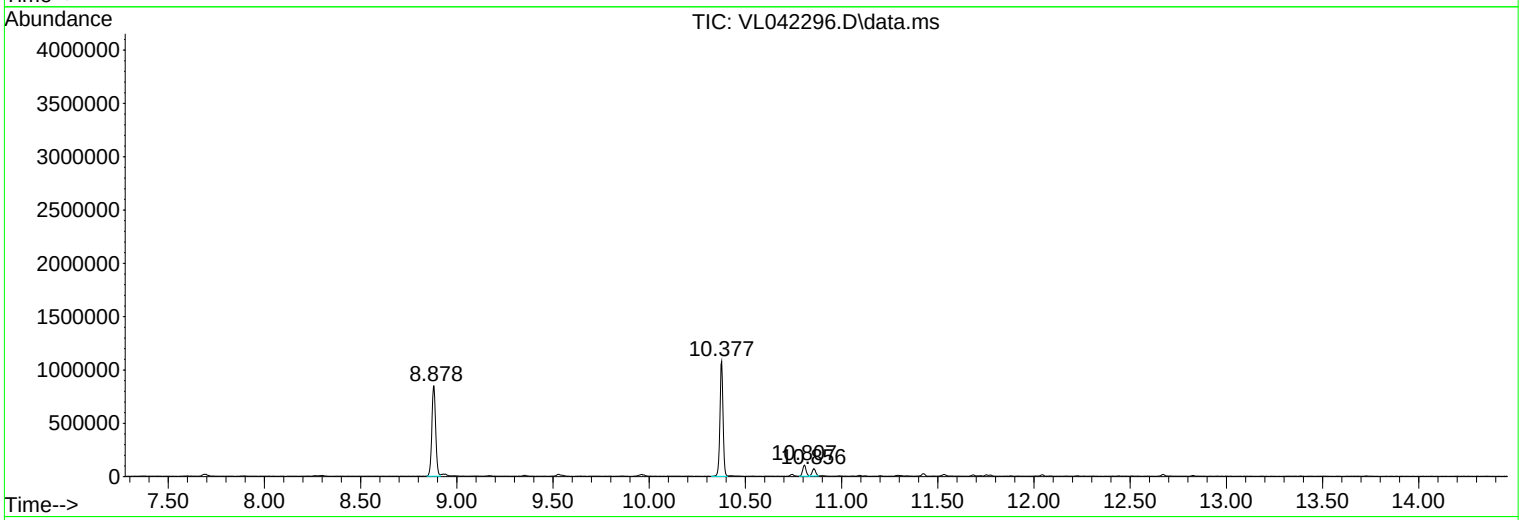
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

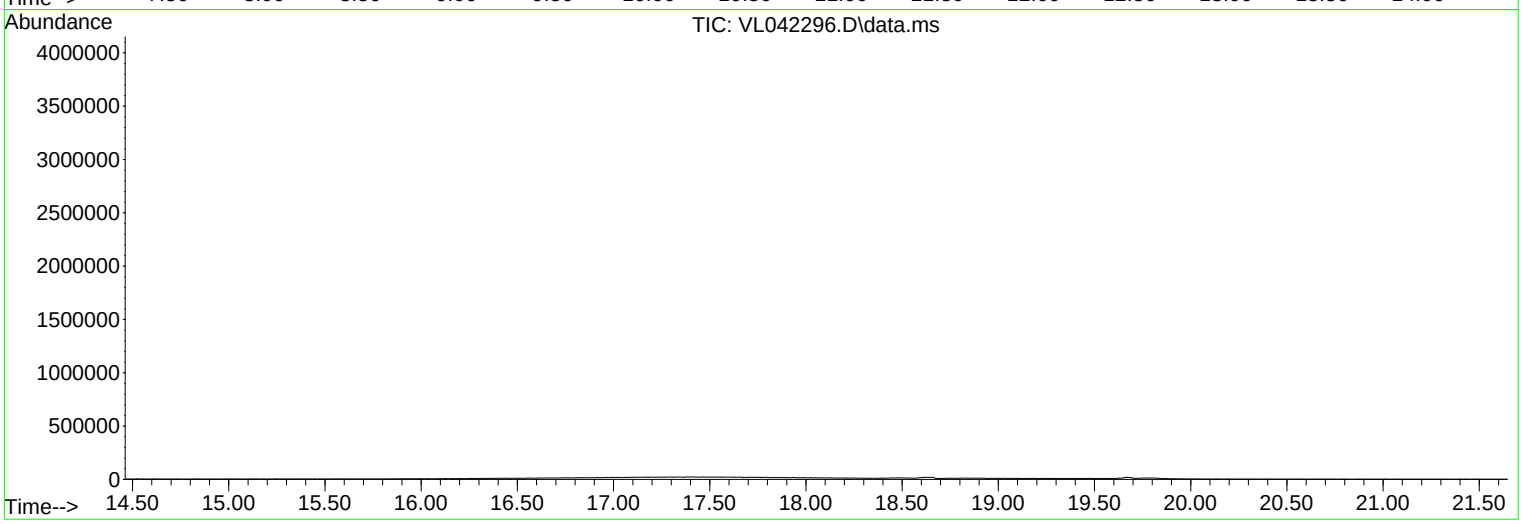
Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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

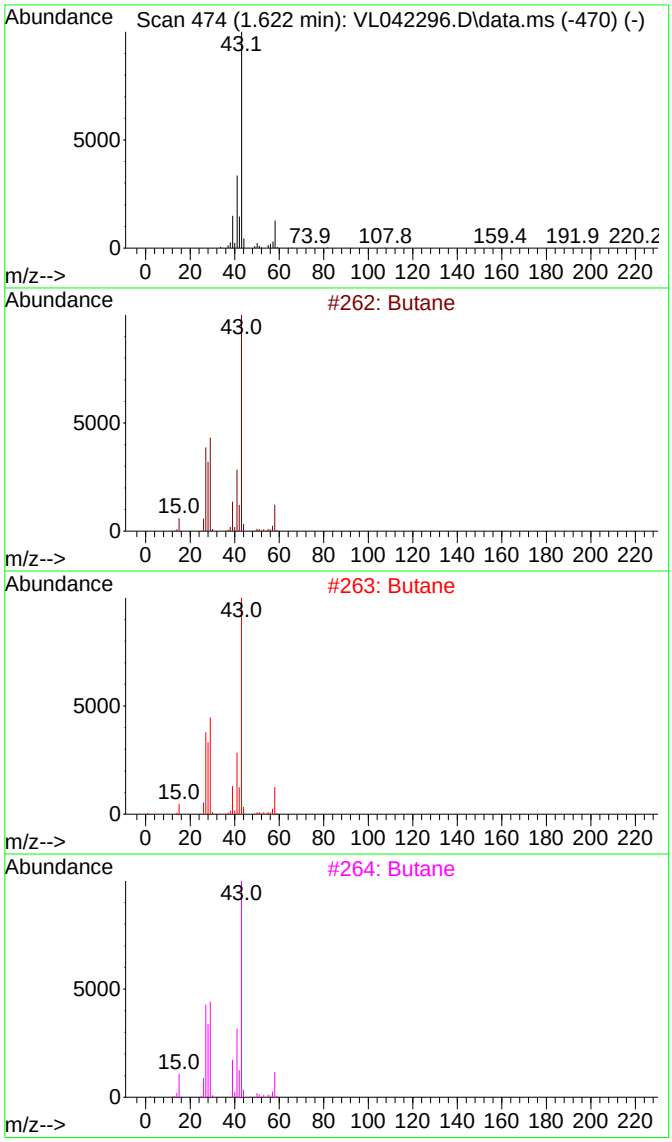
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

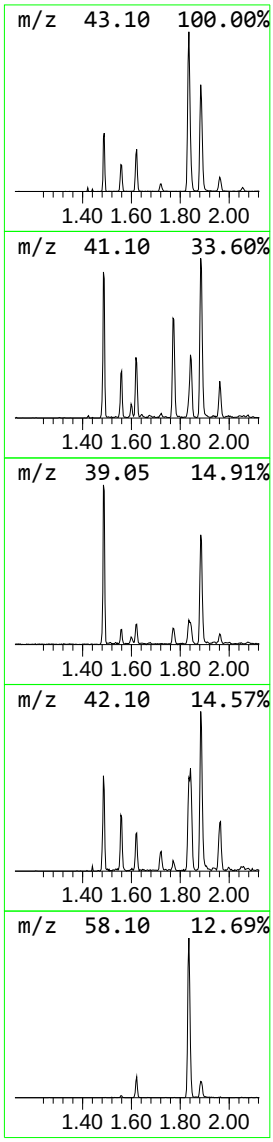
****

Peak Number 1 Butane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.31 ppbv	77881	Bromochloromethane	2.787

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	80
2	Butane	58	C4H10	000106-97-8	80
3	Butane	58	C4H10	000106-97-8	64
4	Butane	58	C4H10	000106-97-8	64
5	Formic acid, chloro-, (3,4,4-tri...	194	C7H11ClO4	107323-92-2	56





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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

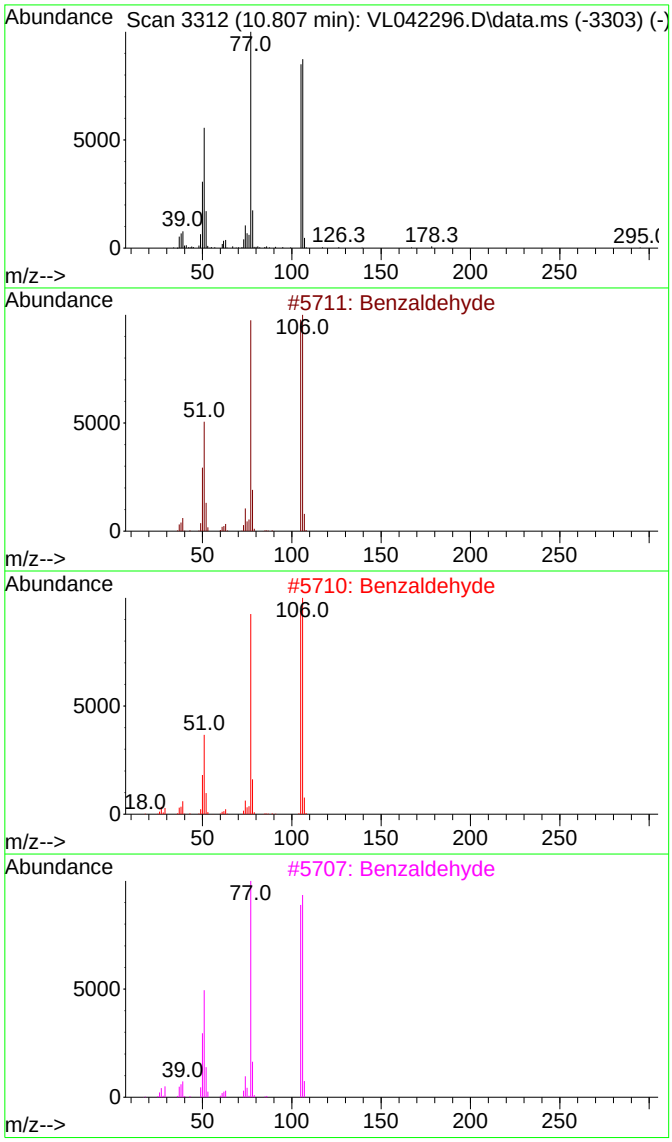
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

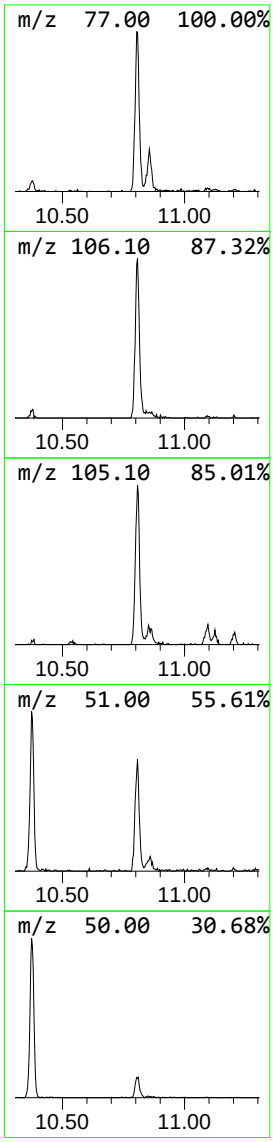
****

Peak Number 2 Benzaldehyde Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.807	1.11 ppbv	129076	Chlorobenzene-d5	8.878

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Benzaldehyde	106	C7H6O	000100-52-7	95
2	Benzaldehyde	106	C7H6O	000100-52-7	95
3	Benzaldehyde	106	C7H6O	000100-52-7	94
4	Benzaldehyde	106	C7H6O	000100-52-7	94
5	Benzaldehyde	106	C7H6O	000100-52-7	94





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.3	ppbv	77881	1	2.787	594126	10.0
Benzaldehyde	10.807	1.1	ppbv	129076	3	8.878	1165850	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-21	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042424.D	1		04/28/25 14:00	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.46	2.27	J	1.04	2.47	ug/m3
64-17-5	Ethanol	690	1300	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.69	1.42		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.28	0.85	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.39	1.60	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	40.0	98.3	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	15.2	36.1	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.60	5.56		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.30	1.03	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.71	2.09		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.49	2.29	J	0.47	2.34	ug/m3
71-43-2	Benzene	0.43	1.37	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	8.50	32.0		0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-21	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042424.D	1		04/28/25 14:00	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.38	1.65	J	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.20	5.21		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.52	2.26		0.52	2.17	ug/m3
100-42-5	Styrene	0.24	1.02	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	J	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.13	0.64	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.27	1.33	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	J	0.59	2.46	ug/m3
110-54-3	Hexane	3.00	10.6		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	135000		2.784			
540-36-3	1,4-Difluorobenzene	378000		3.955			
3114-55-4	Chlorobenzene-d5	330000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-21	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042424.D	1		04/28/25 14:00	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.31		J		1.48	ppbv
115-07-1	Propene	1.20		J		1.49	ppbv
000106-97-8	Butane	1.30		J		1.62	ppbv
000109-66-0	Pentane	1.00		J		1.96	ppbv
056728-13-3	Isoxazolidine, 4-ethyl-2,5-dimethy	1.10		J		2.28	ppbv
013162-05-5	N-Vinylformamide	1.20		J		2.47	ppbv
000763-29-1	1-Pentene, 2-methyl-	1.10		J		3.23	ppbv
000590-86-3	Butanal, 3-methyl-	1.20		J		4.25	ppbv
000066-25-1	Hexanal	1.90		J		7.69	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 01:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	134924	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	377834	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	330143	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	284407	10.483	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10943	0.459	ppbv		93
3) Chlorodifluoromethane	1.476	51	6923m	0.305	ppbv		
4) Chloromethane	1.531	50	6517	0.691	ppbv		93
9) Propene	1.486	41	11972m	1.158	ppbv		
10) Heptane	4.978	43	11454m	0.394	ppbv		
11) Trichlorofluoromethane	1.877	101	4919	0.217	ppbv		92
13) Ethanol	1.722	45	1134596	690.509	ppbv		81
15) Acetone	1.835	43	335719	15.200	ppbv		100
17) tert-Butyl alcohol	2.043	59	7751	0.283	ppbv		97
19) Isopropyl Alcohol	1.884	45	490461	39.973	ppbv	#	63
20) Methylene Chloride	2.059	84	13523	1.563	ppbv		95
26) Hexane	2.826	57	65044	2.951	ppbv	#	42
30) Cyclohexane	3.855	84	5289	0.297	ppbv		92
34) 2-Butanone	2.560	43	21181	0.709	ppbv		100
35) Carbon Tetrachloride	3.761	117	2391m	0.070	ppbv		
36) Benzene	3.654	78	17661	0.433	ppbv	#	94
44) 2,2,4-Trimethylpentane	4.642	57	34215m	0.486	ppbv		
53) Toluene	6.930	91	417734	8.542	ppbv		100
58) Ethyl Benzene	9.351	91	24772	0.379	ppbv		95
59) m/p-Xylene	9.529	91	65650	1.246	ppbv		93
60) o-Xylene	9.963	91	27701	0.522	ppbv		97
61) Styrene	9.865	104	6130	0.242	ppbv		91
71) 2-Chlorotoluene	10.901	91	6948	0.114	ppbv		82
72) 4-Ethyltoluene	11.125	105	7865	0.121	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.205	105	7185	0.125	ppbv		95
74) 1,2,4-Trimethylbenzene	11.536	105	17740	0.265	ppbv	#	68

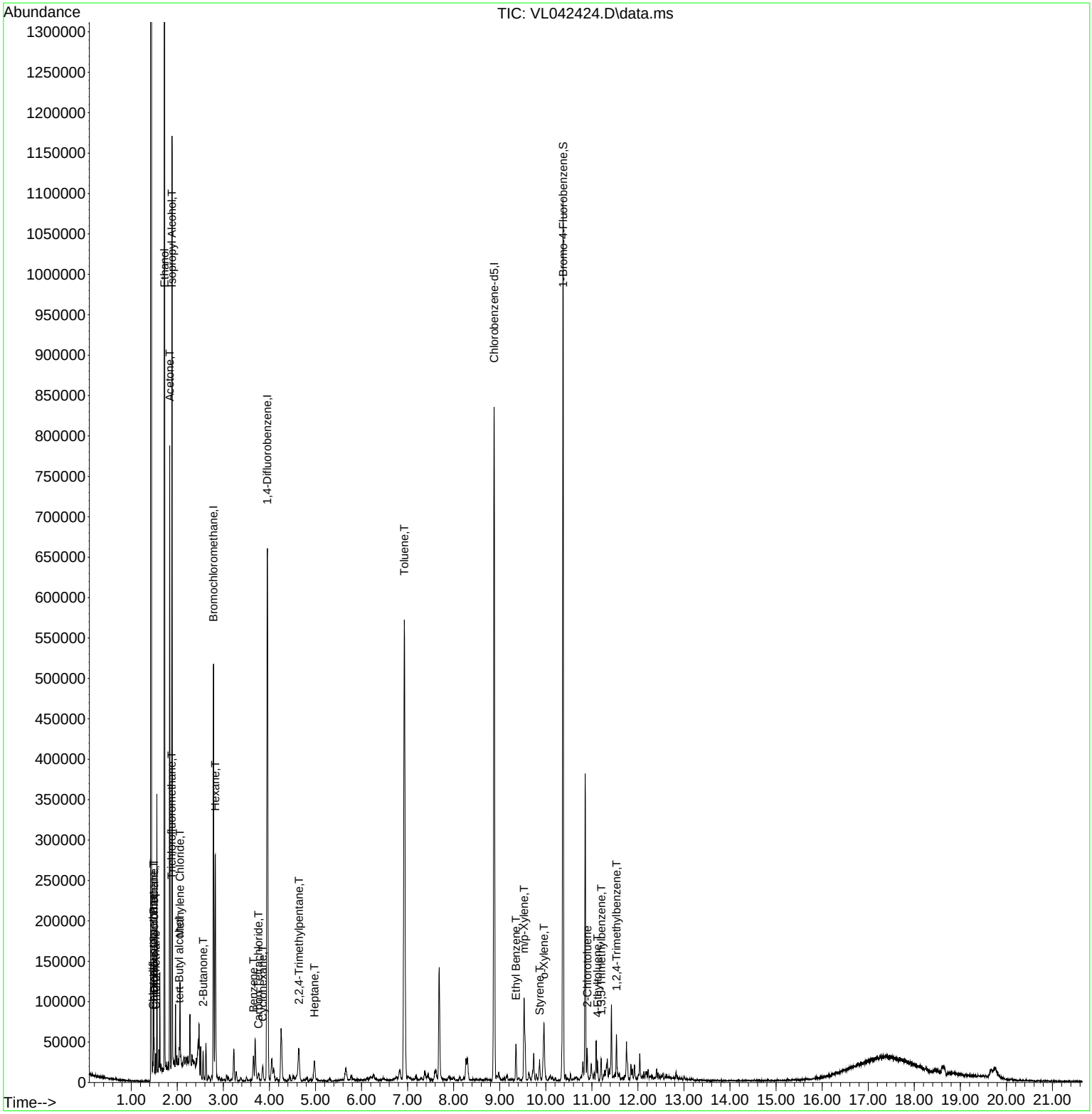
(#) = qualifier out of range (m) = manual integration (+) = signals summed

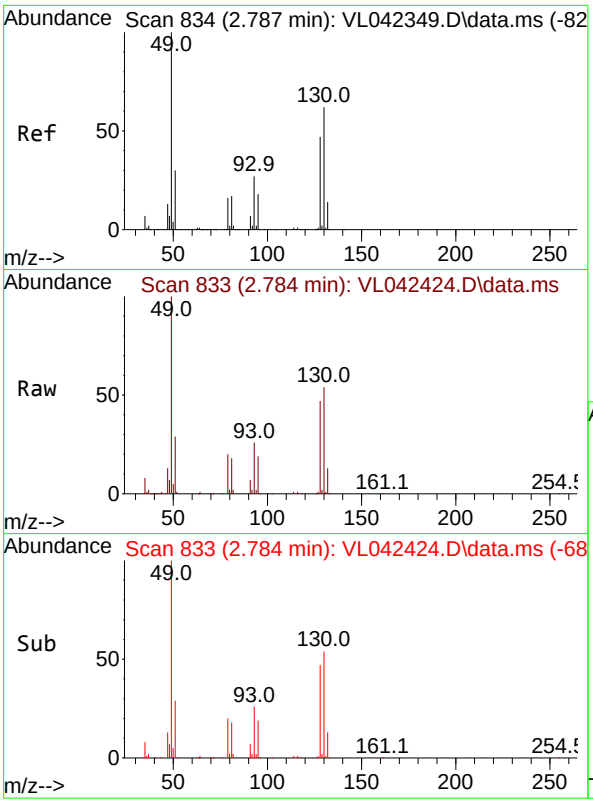
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 29 01:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

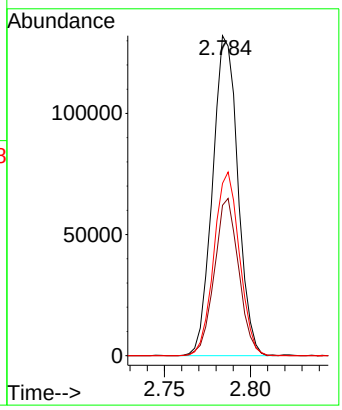




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 49 Resp: 13492

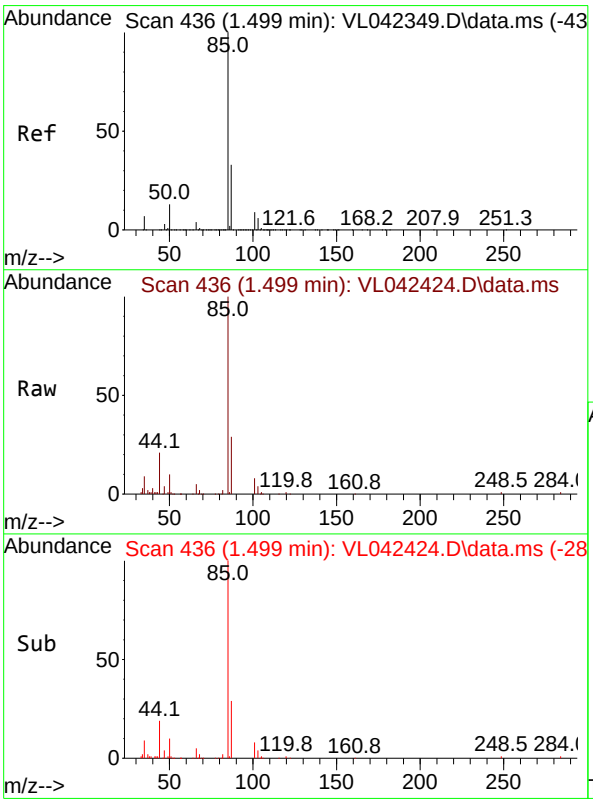
Ion	Ratio	Lower	Upper
49	100		
128	47.5	22.8	68.4
130	57.9	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

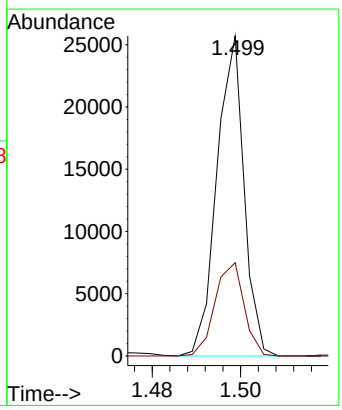
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

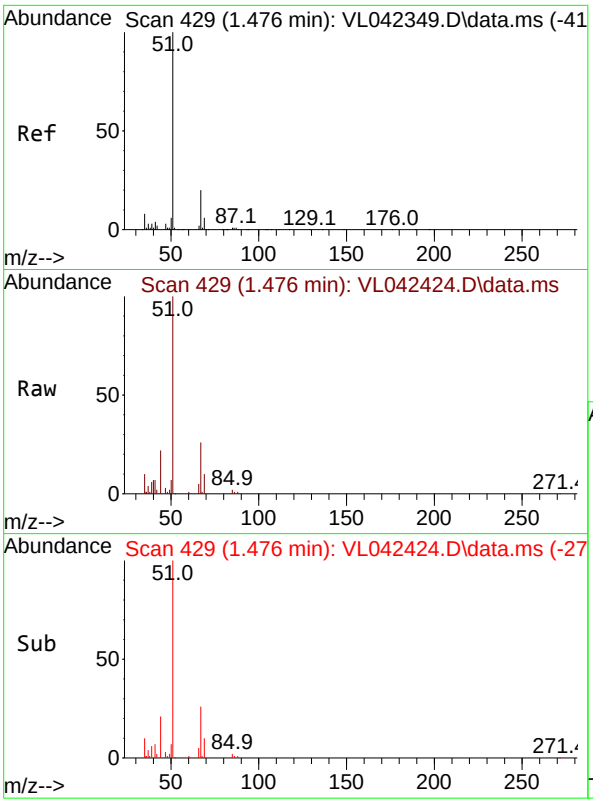


#2
Dichlorodifluoromethane
Concen: 0.459 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 85 Resp: 10943

Ion	Ratio	Lower	Upper
85	100		
87	29.1	26.6	39.8

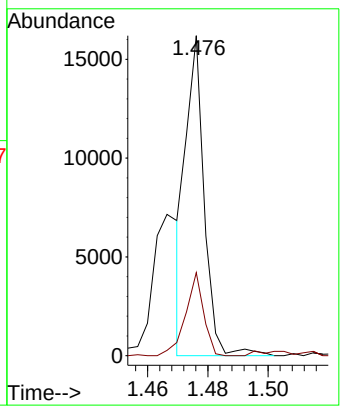




#3
Chlorodifluoromethane
Concen: 0.305 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 51 Resp: 692

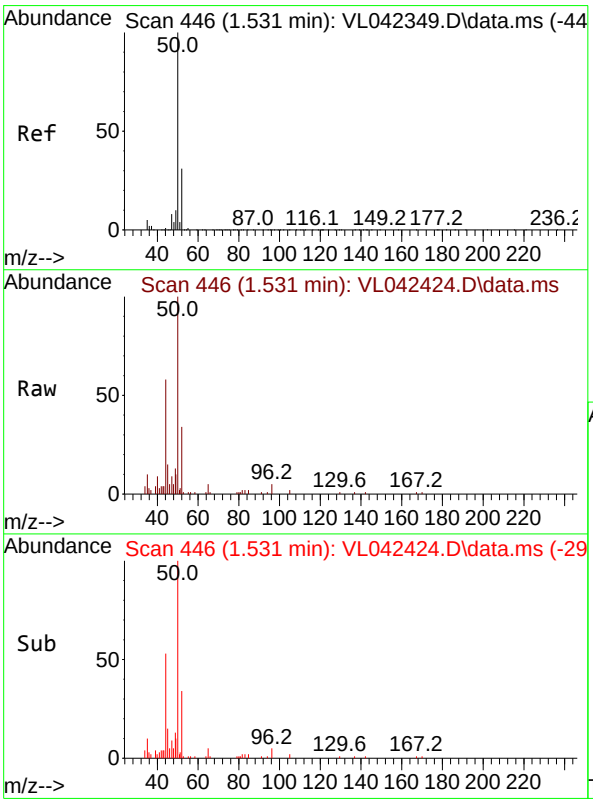
Ion	Ratio	Lower	Upper
51	100		
67	29.0	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

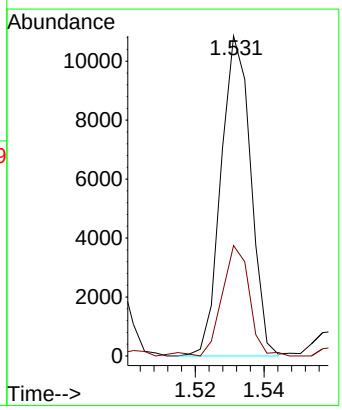
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

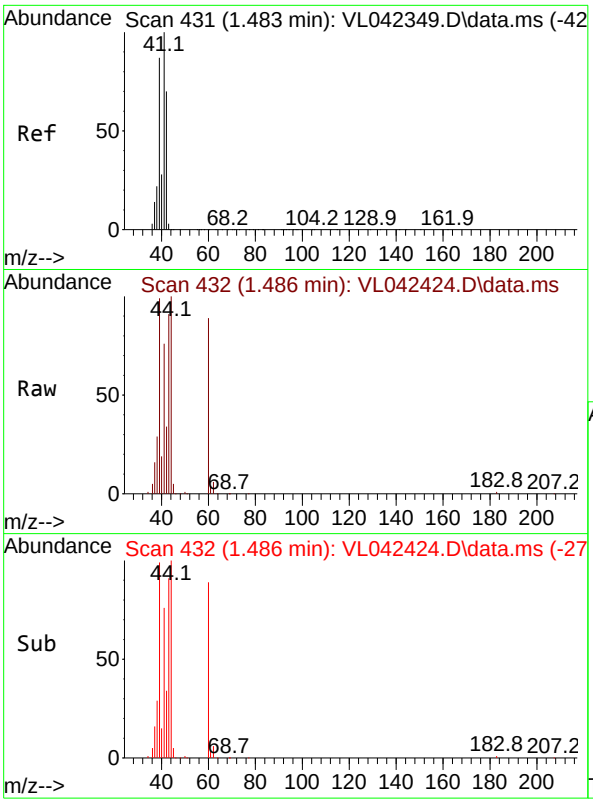


#4
Chloromethane
Concen: 0.691 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 50 Resp: 6517

Ion	Ratio	Lower	Upper
50	100		
52	34.6	24.7	37.1





#9
Propene
Concen: 1.158 ppbv m
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 41 Resp: 1197

Ion	Ratio	Lower	Upper
41	100		
42	217.8	56.2	84.4#

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

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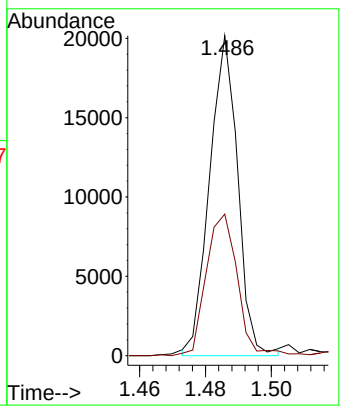
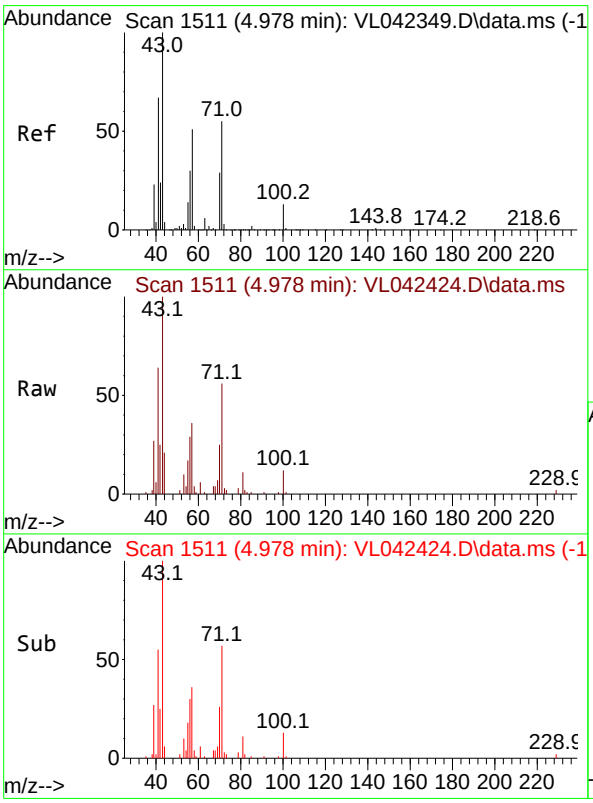
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

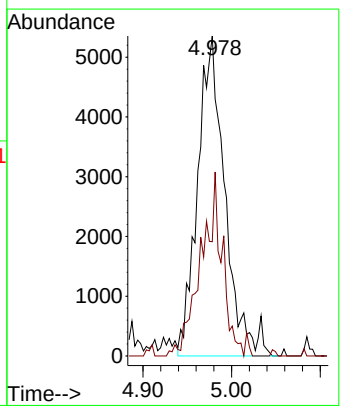


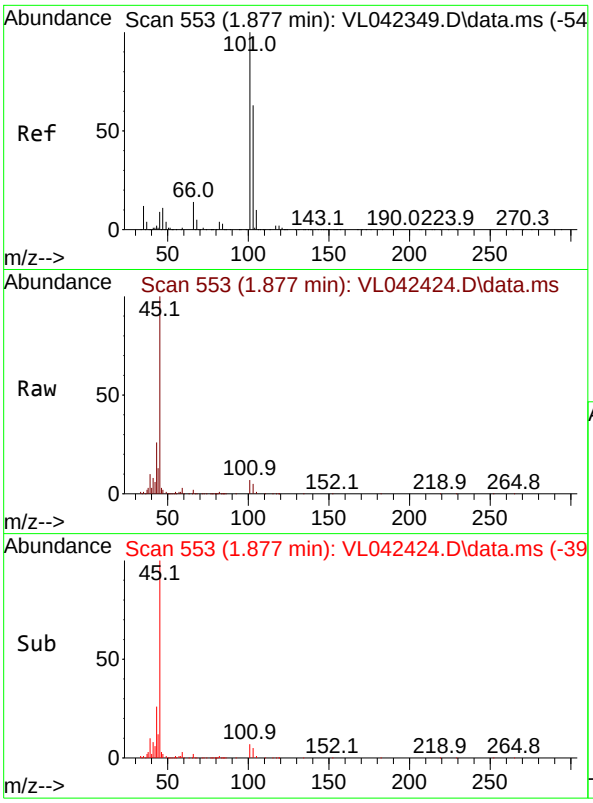


#10
Heptane
Concen: 0.394 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 11454

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.9	59.9#

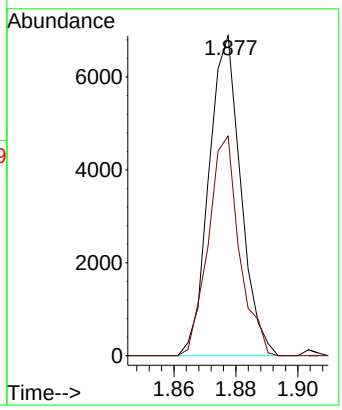




#11
Trichlorofluoromethane
Concen: 0.217 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:101 Resp: 491

Ion	Ratio	Lower	Upper
101	100		
103	68.7	50.1	75.1



Instrument :
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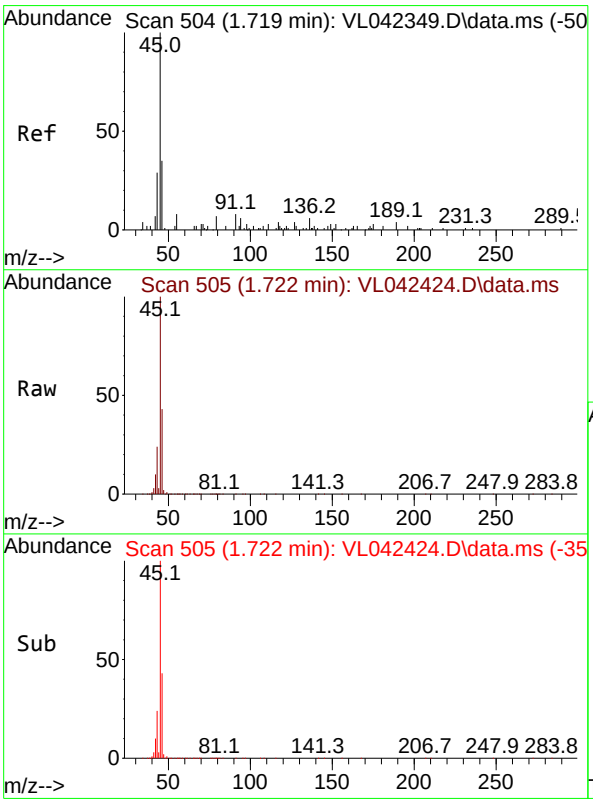
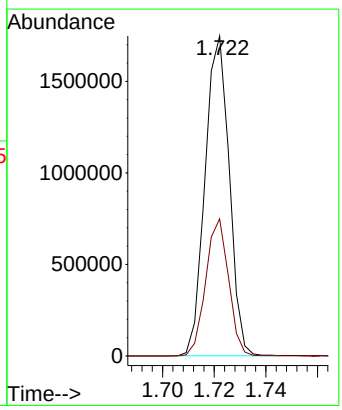
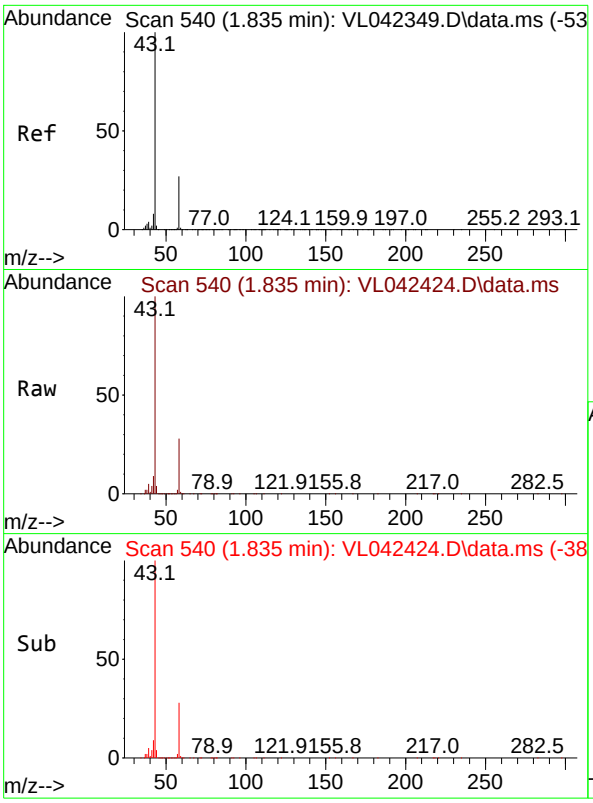


#13
Ethanol
Concen: 690.509 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 45 Resp: 1134596

Ion	Ratio	Lower	Upper
45	100		
46	40.7	21.9	87.7

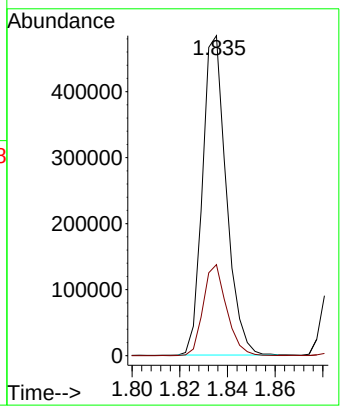




#15
Acetone
Concen: 15.200 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 335719

Ion	Ratio	Lower	Upper
43	100		
58	28.2	22.4	33.6



Instrument :
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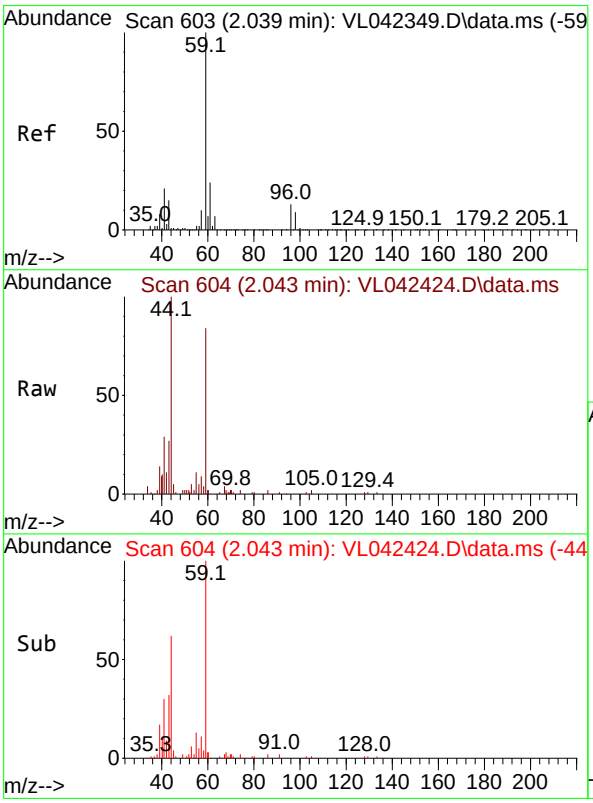
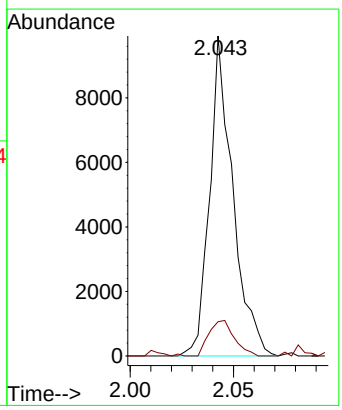
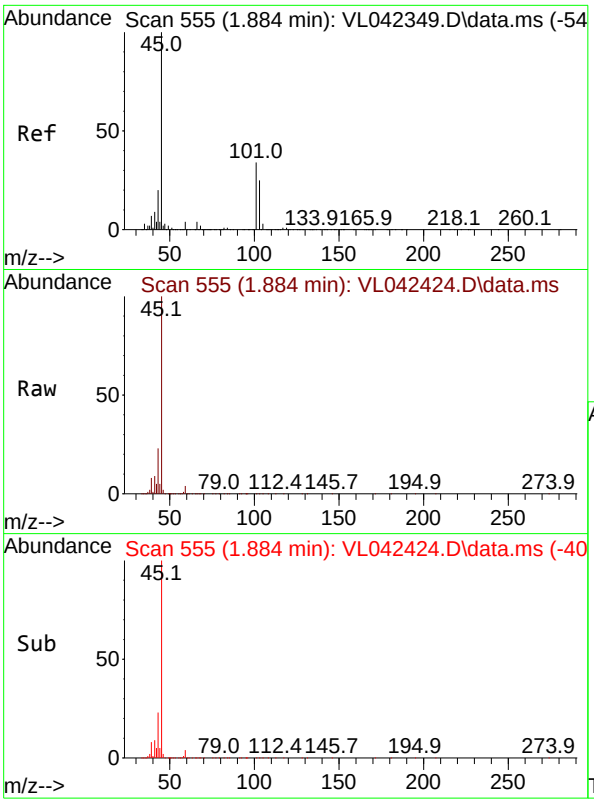


#17
tert-Butyl alcohol
Concen: 0.283 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 59 Resp: 7751

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.7	13.1





#19
Isopropyl Alcohol
Concen: 39.973 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 45 Resp: 49046

Ion	Ratio	Lower	Upper
45	100		
58	19.3	34.5	51.7#

Instrument :
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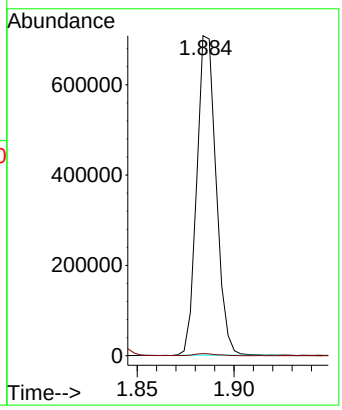
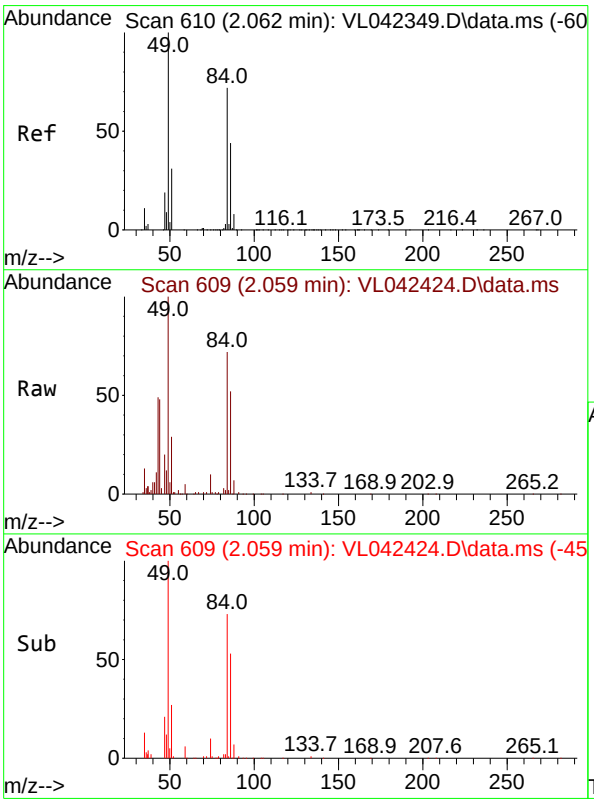
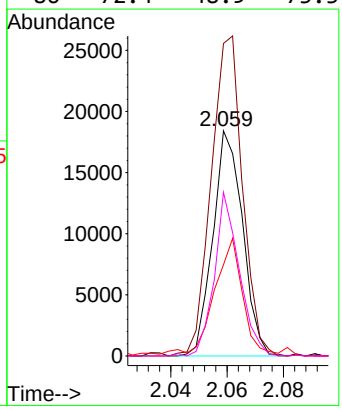


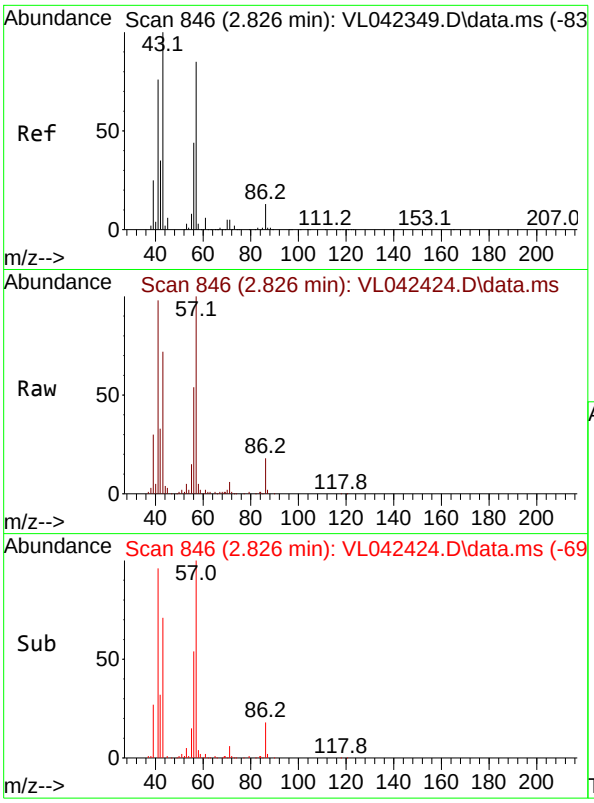


#20
Methylene Chloride
Concen: 1.563 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 84 Resp: 13523

Ion	Ratio	Lower	Upper
84	100		
49	138.8	111.6	167.4
51	39.3	35.1	52.7
86	72.4	48.9	73.3

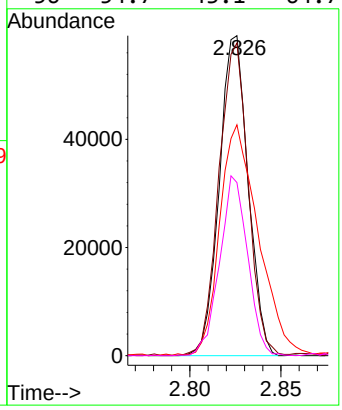




#26
Hexane
Concen: 2.951 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 57 Resp: 6504

Ion	Ratio	Lower	Upper
57	100		
41	100.1	77.9	116.9
43	98.3	208.4	312.6
56	54.7	43.1	64.7



Instrument :
MSVOA_L
ClientSampleId :
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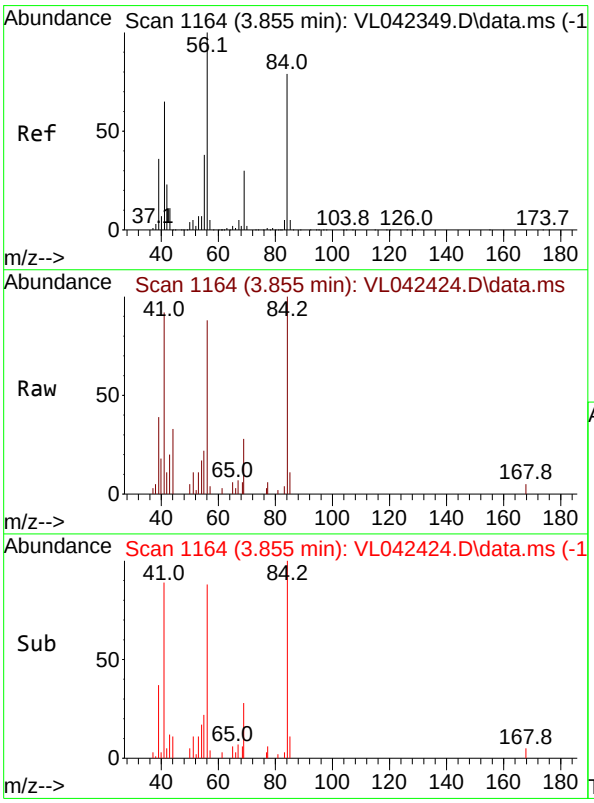
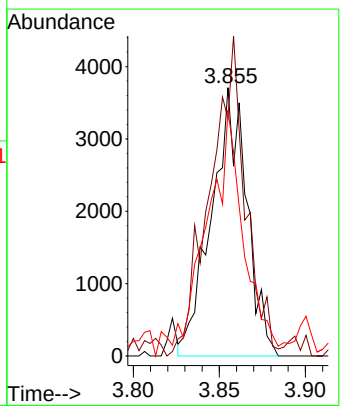
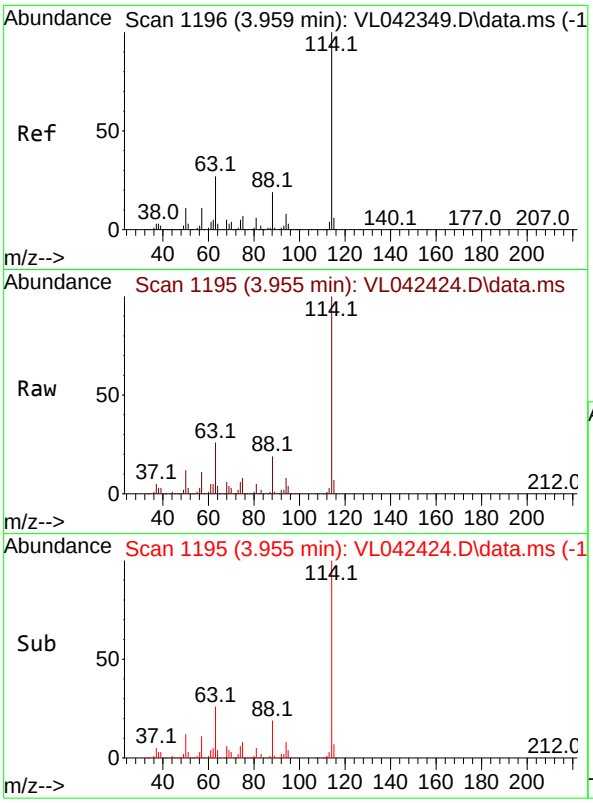


#30
Cyclohexane
Concen: 0.297 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 84 Resp: 5289

Ion	Ratio	Lower	Upper
84	100		
56	130.1	101.0	151.4
41	98.5	67.4	101.0

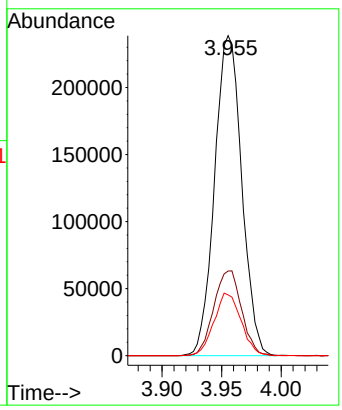




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:114 Resp: 37783

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.5	15.5	23.3



Instrument :
MSVOA_L
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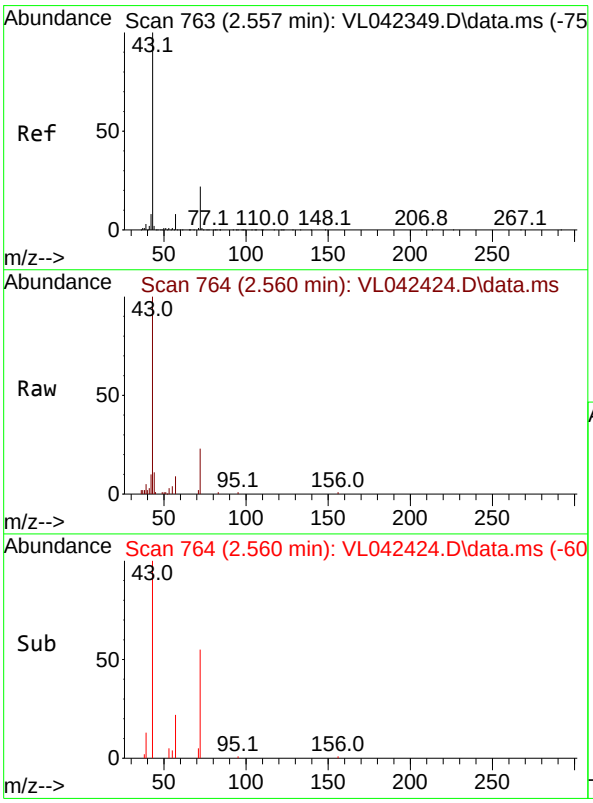
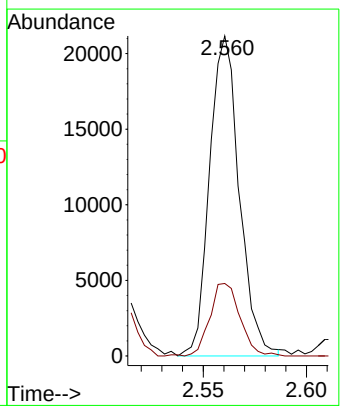
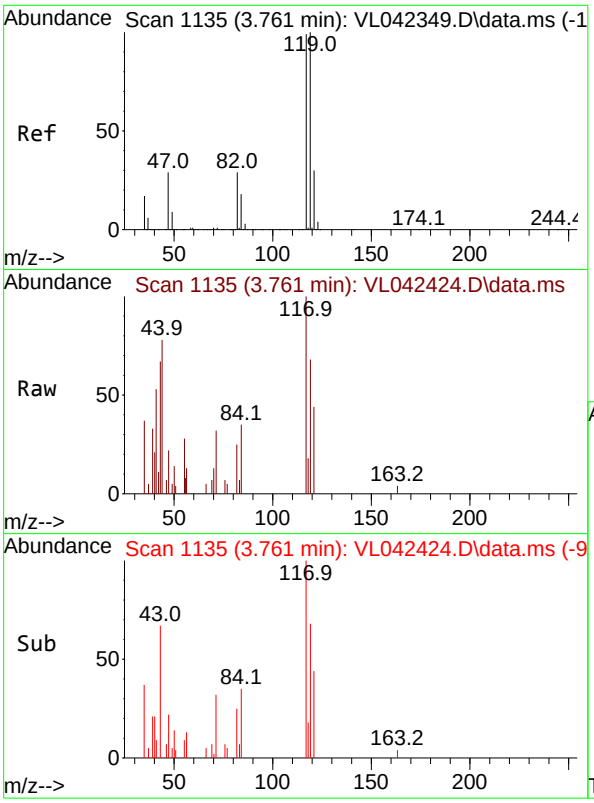


#34
2-Butanone
Concen: 0.709 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 21181

Ion	Ratio	Lower	Upper
43	100		
72	22.9	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 3.761 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:117 Resp: 239

Ion	Ratio	Lower	Upper
117	100		
119	67.5	80.5	120.7#
121	43.8	24.2	36.2#

Instrument :
MSVOA_L
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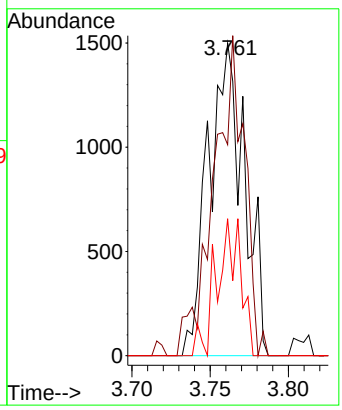
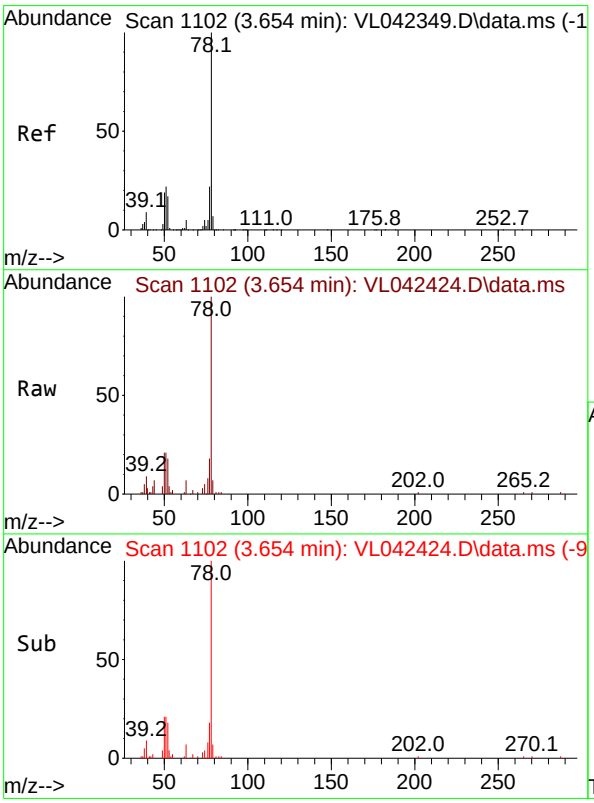
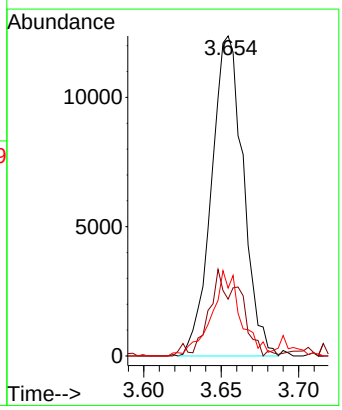


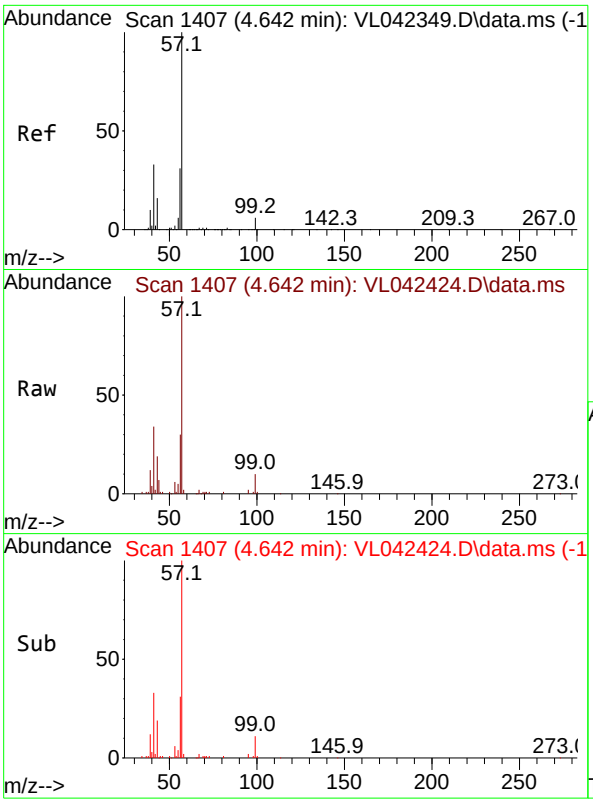


#36
Benzene
Concen: 0.433 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 78 Resp: 17661

Ion	Ratio	Lower	Upper
78	100		
77	17.3	17.4	26.0#
50	20.2	15.5	23.3

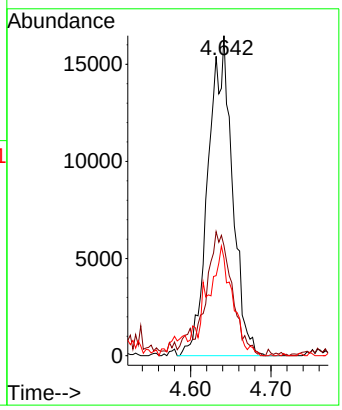




#44
2,2,4-Trimethylpentane
Concen: 0.486 ppbv m
RT: 4.642 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 57 Resp: 3421

Ion	Ratio	Lower	Upper
57	100		
41	45.1	27.2	40.8#
56	0.0	25.7	38.5#



Instrument :
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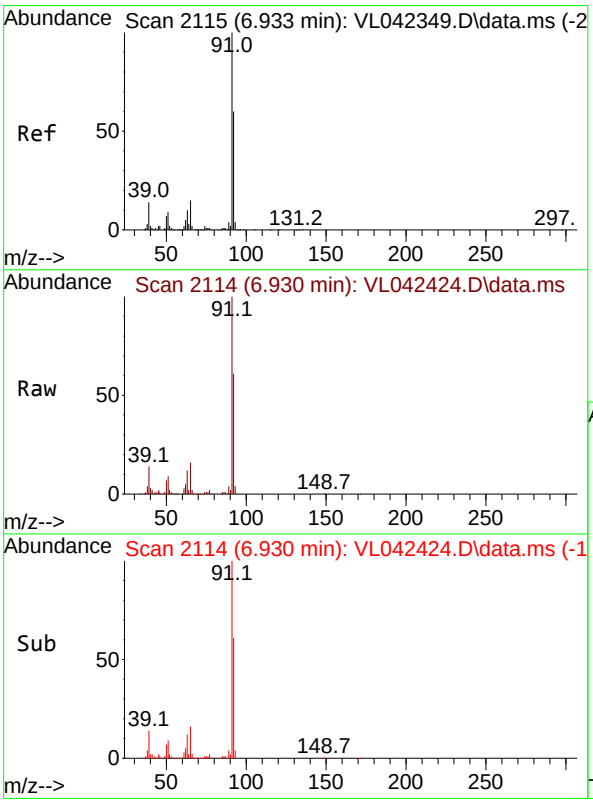
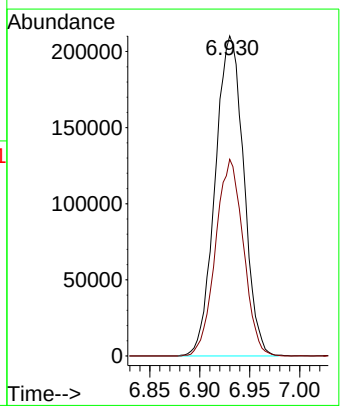
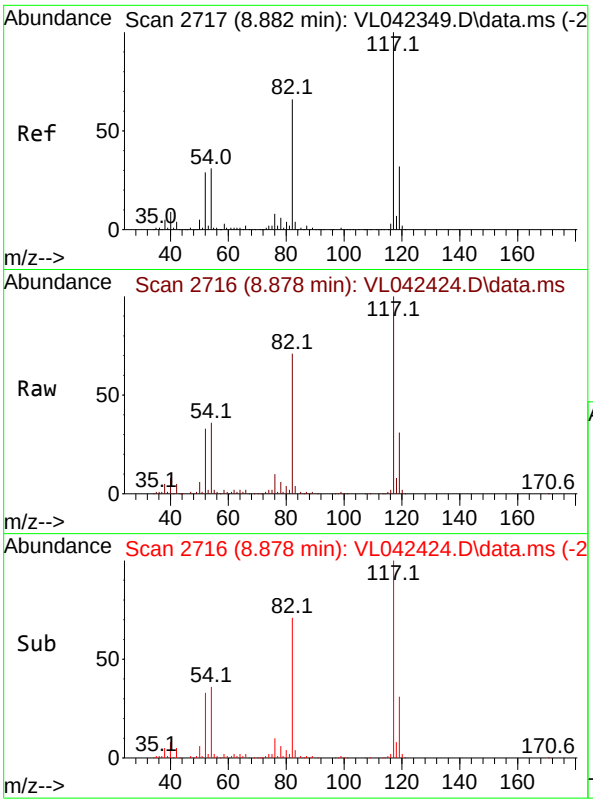


#53
Toluene
Concen: 8.542 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 417734

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.2	72.4

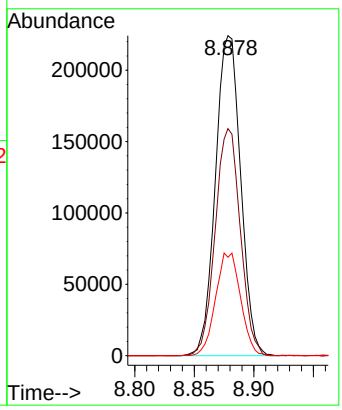




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:117 Resp: 33014

Ion	Ratio	Lower	Upper
117	100		
82	70.7	57.8	86.6
119	31.8	25.2	37.8



Instrument :
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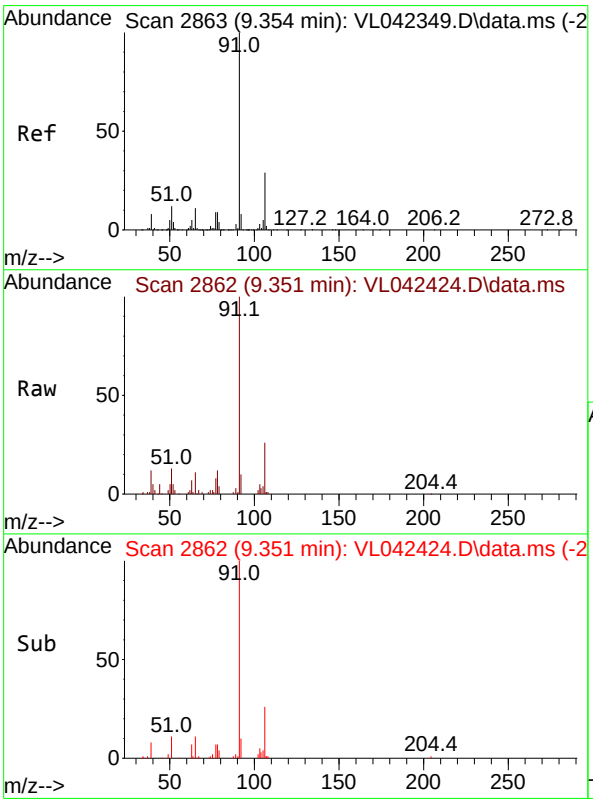
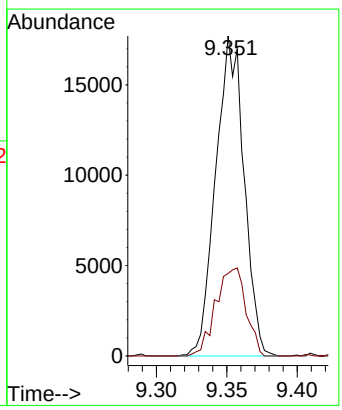
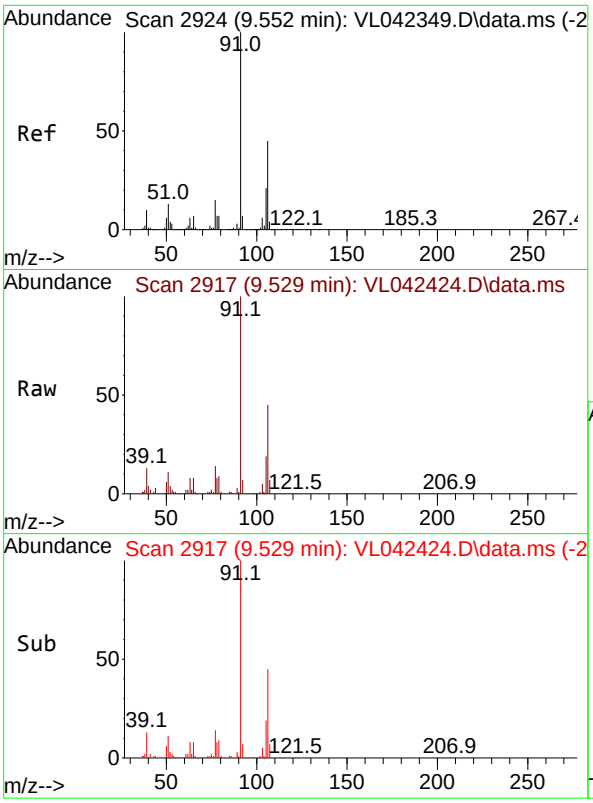


#58
Ethyl Benzene
Concen: 0.379 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 24772

Ion	Ratio	Lower	Upper
91	100		
106	25.8	23.0	34.4





#59
m/p-Xylene
Concen: 1.246 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

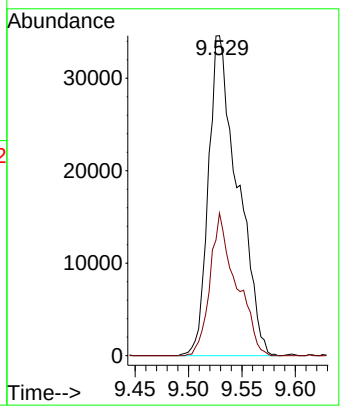
Tgt Ion: 91 Resp: 6565

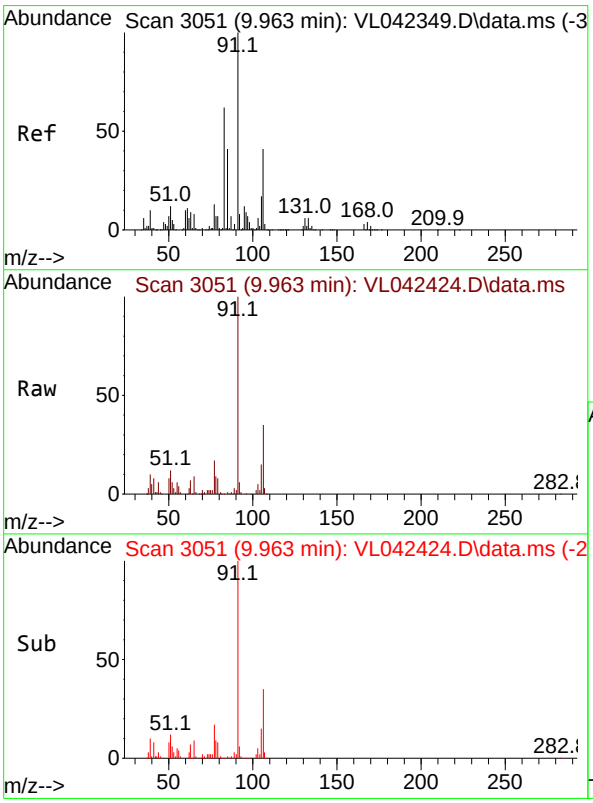
Ion	Ratio	Lower	Upper
91	100		
106	40.1	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

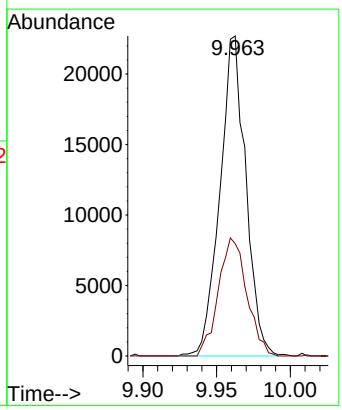


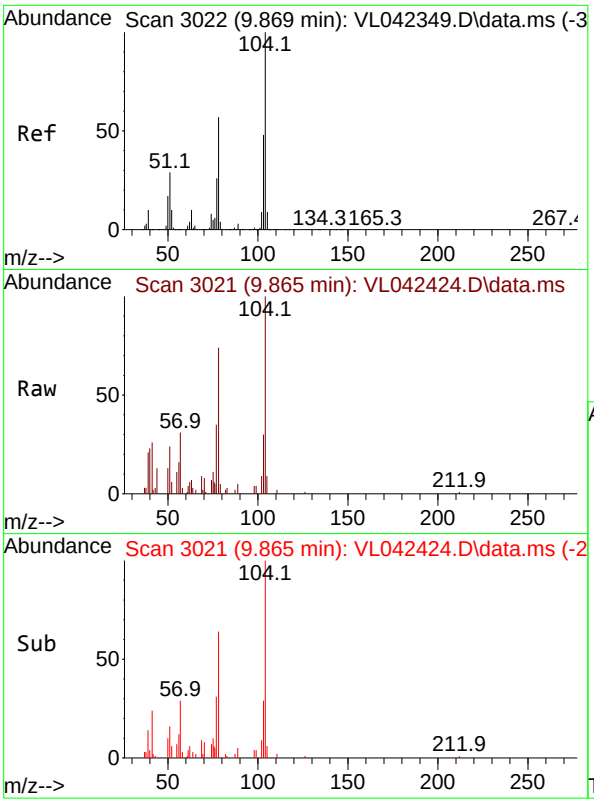


#60
o-Xylene
Concen: 0.522 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 27701

Ion	Ratio	Lower	Upper
91	100		
106	40.5	21.1	63.4

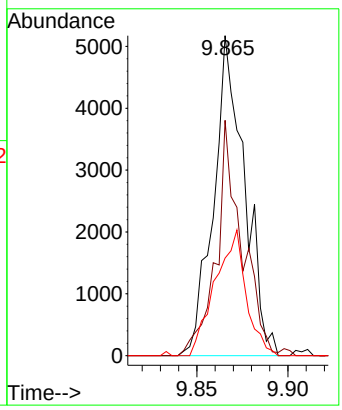




#61
Styrene
Concen: 0.242 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:104 Resp: 613

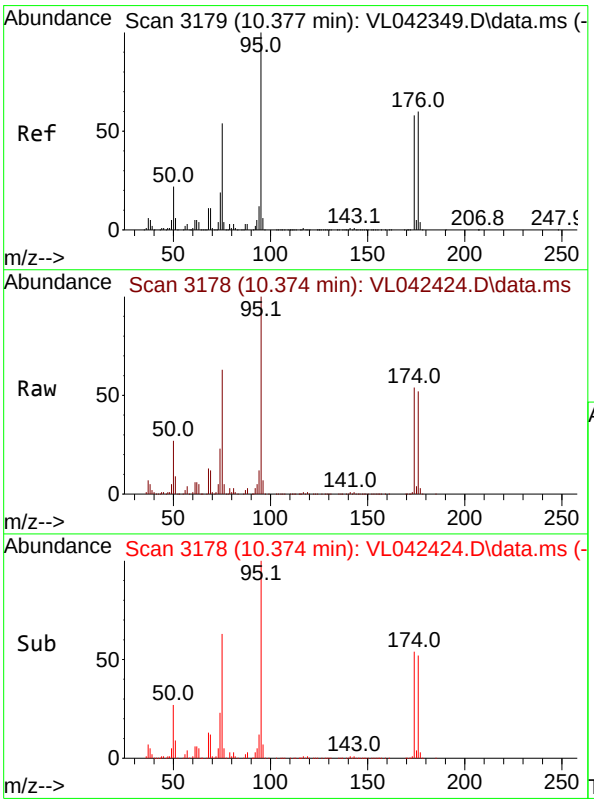
Ion	Ratio	Lower	Upper
104	100		
78	61.0	44.6	66.8
103	39.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

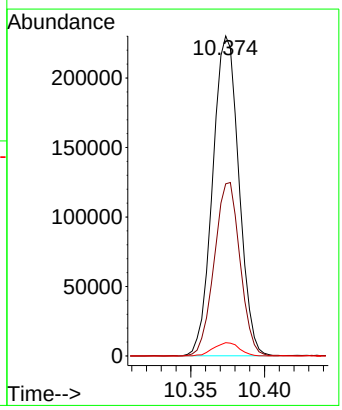
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

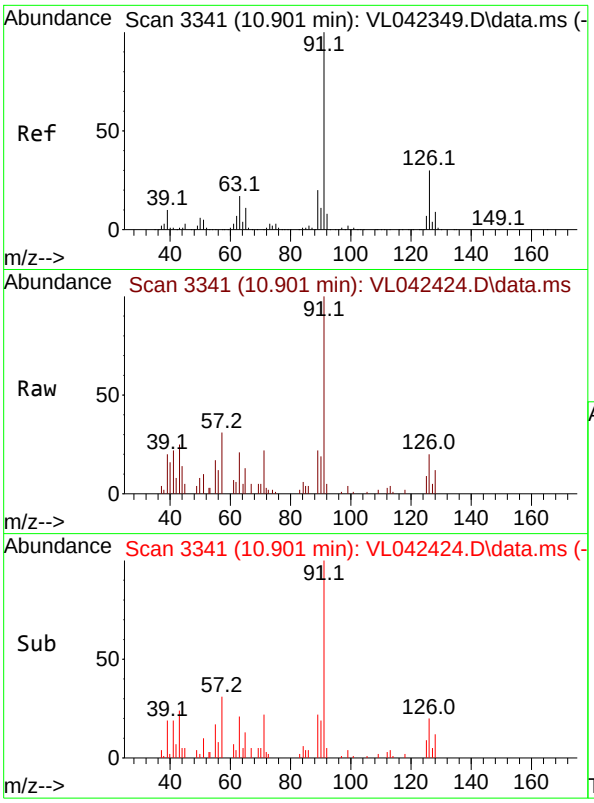


#68
1-Bromo-4-Fluorobenzene
Concen: 10.483 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 95 Resp: 284407

Ion	Ratio	Lower	Upper
95	100		
174	53.4	48.5	72.7
175	4.1	3.7	5.5

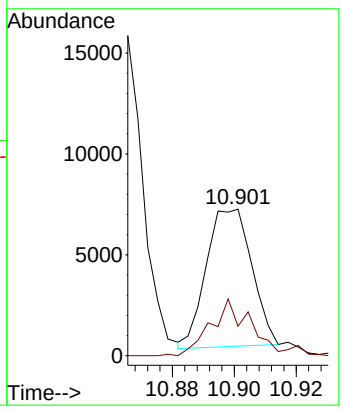




#71
2-Chlorotoluene
Concen: 0.114 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 694

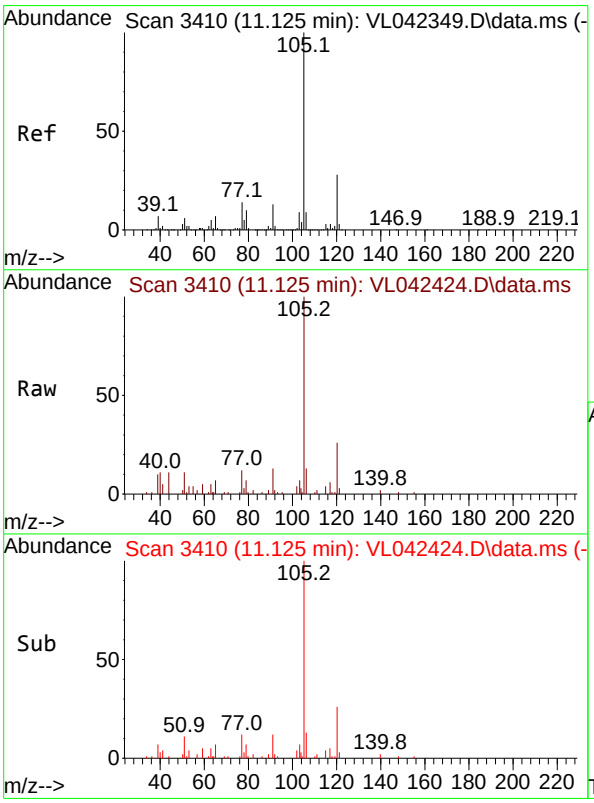
Ion	Ratio	Lower	Upper
91	100		
126	37.9	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

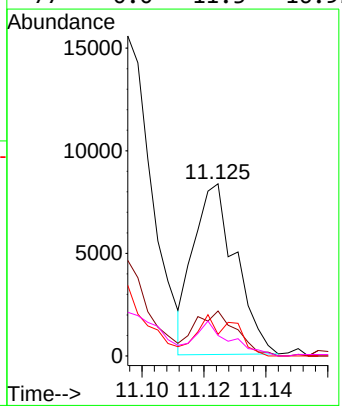
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

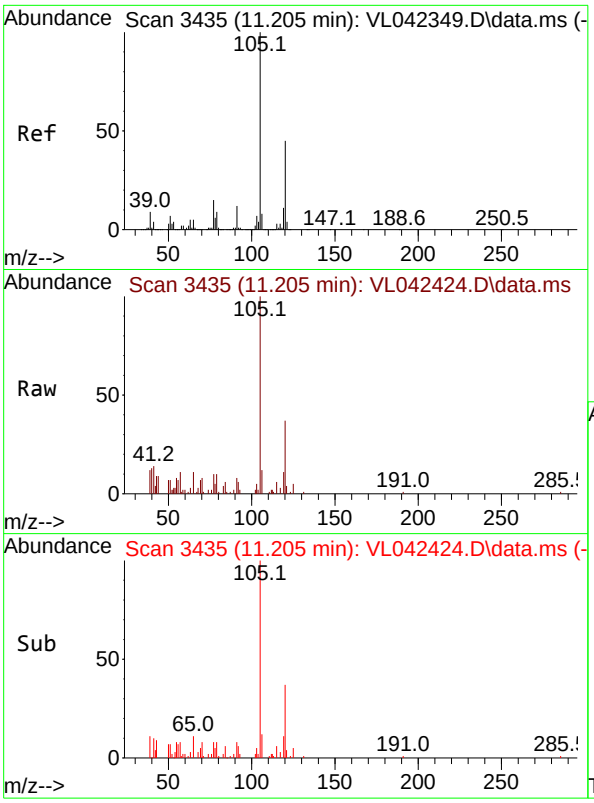


#72
4-Ethyltoluene
Concen: 0.121 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 7865

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#





#73
1,3,5-Trimethylbenzene
Concen: 0.125 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

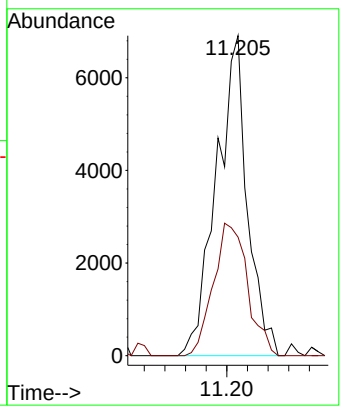
Tgt Ion:105 Resp: 718

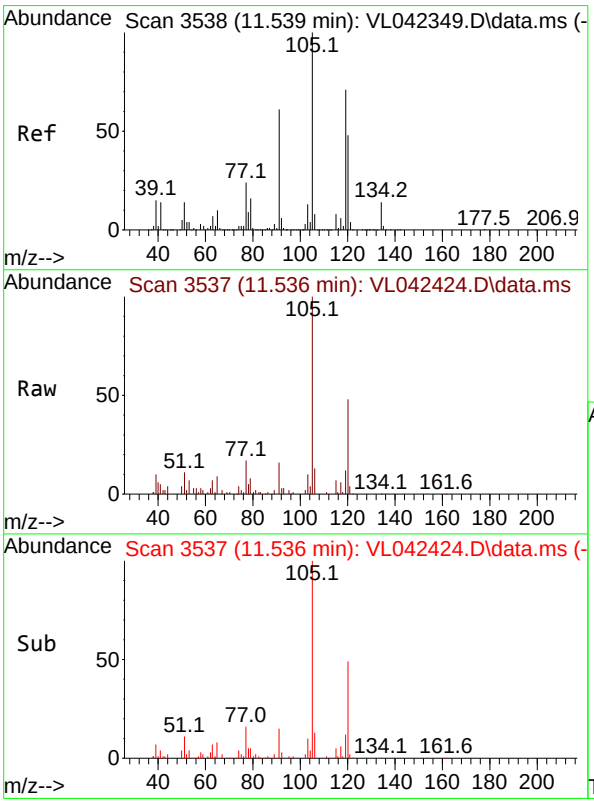
Ion	Ratio	Lower	Upper
105	100		
120	41.4	35.6	53.4

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

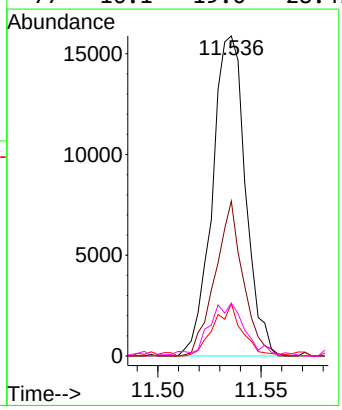




#74
1,2,4-Trimethylbenzene
Concen: 0.265 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 17740

Ion	Ratio	Lower	Upper
105	100		
120	52.3	38.1	57.1
91	16.4	48.8	73.2#
77	16.1	19.0	28.4#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042424.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4453684	5130355	100.00%	30.756%
2	1.486	427	432	434	rBV2	133255	69285	1.35%	0.415%
3	1.557	450	454	458	rBV2	344547	184584	3.60%	1.107%
4	1.622	470	474	478	rVB	122073	70727	1.38%	0.424%
5	1.722	500	505	512	rBV	3252290	2071007	40.37%	12.416%
6	1.835	535	540	547	rBV	772772	597296	11.64%	3.581%
7	1.884	549	555	563	rBV	1154046	819882	15.98%	4.915%
8	1.962	575	579	584	rBV	77587	55488	1.08%	0.333%
9	2.059	605	609	614	rVB2	92933	68988	1.34%	0.414%
10	2.276	669	676	683	rVB3	62455	58563	1.14%	0.351%
11	2.470	733	736	743	rVB	63804	63471	1.24%	0.381%
12	2.787	826	834	840	rBV	512857	536058	10.45%	3.214%
13	2.826	840	846	857	rVB	275455	333630	6.50%	2.000%
14	3.227	959	970	980	rVB4	38811	58235	1.14%	0.349%
15	3.658	1087	1103	1108	rBV4	30874	53290	1.04%	0.319%
16	3.690	1108	1113	1126	rVB2	49510	76517	1.49%	0.459%
17	3.955	1183	1195	1208	rVB2	656643	1047525	20.42%	6.280%
18	4.253	1276	1287	1302	rBV6	64826	129682	2.53%	0.777%
19	6.930	2098	2114	2131	rBV2	568690	1143292	22.28%	6.854%
20	7.687	2338	2348	2366	rVB3	138634	242053	4.72%	1.451%
21	8.302	2531	2538	2551	rVB9	27758	53329	1.04%	0.320%
22	8.878	2702	2716	2729	rBV2	833653	1267582	24.71%	7.599%
23	9.351	2853	2862	2871	rBV3	44560	65293	1.27%	0.391%
24	9.529	2908	2917	2935	rVB3	102177	200305	3.90%	1.201%
25	9.959	3034	3050	3062	rBV5	70893	146205	2.85%	0.876%
26	10.374	3160	3178	3190	rBV2	1091012	1378657	26.87%	8.265%
27	10.856	3318	3327	3335	rBV3	372854	445078	8.68%	2.668%
28	11.095	3393	3401	3406	rBV2	47766	58593	1.14%	0.351%
29	11.426	3491	3503	3510	rVB3	90950	115279	2.25%	0.691%
30	11.532	3530	3536	3547	rBV3	52221	64850	1.26%	0.389%
31	11.752	3598	3604	3618	rVB6	47133	75612	1.47%	0.453%

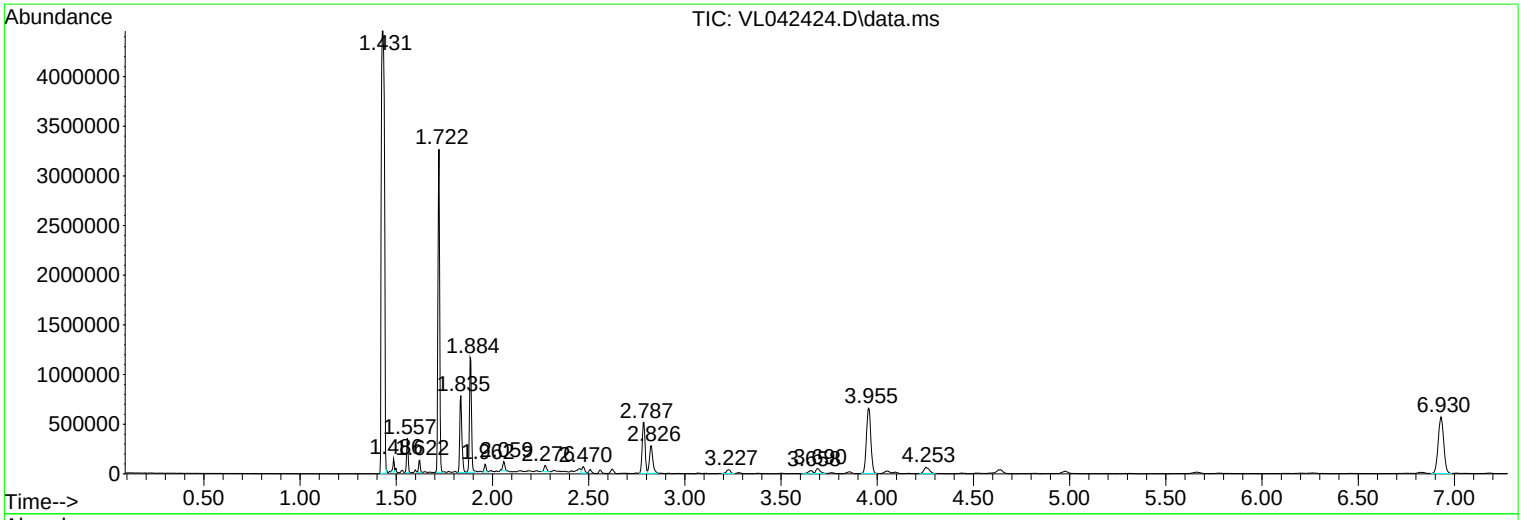
Sum of corrected areas: 16680711

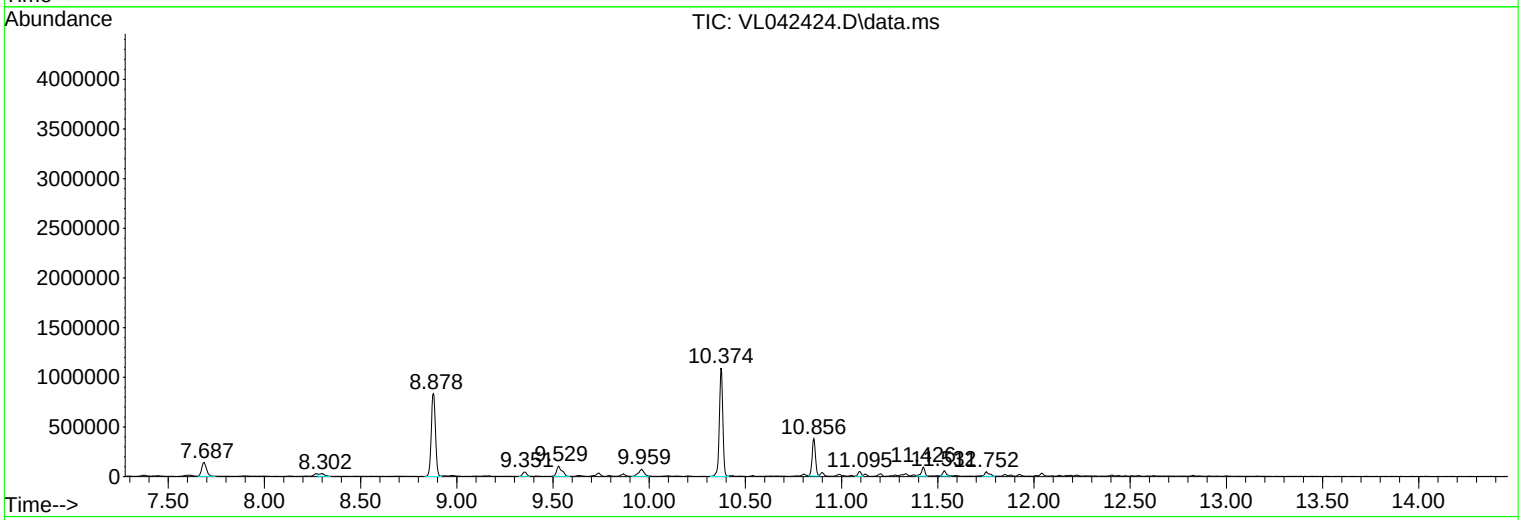
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

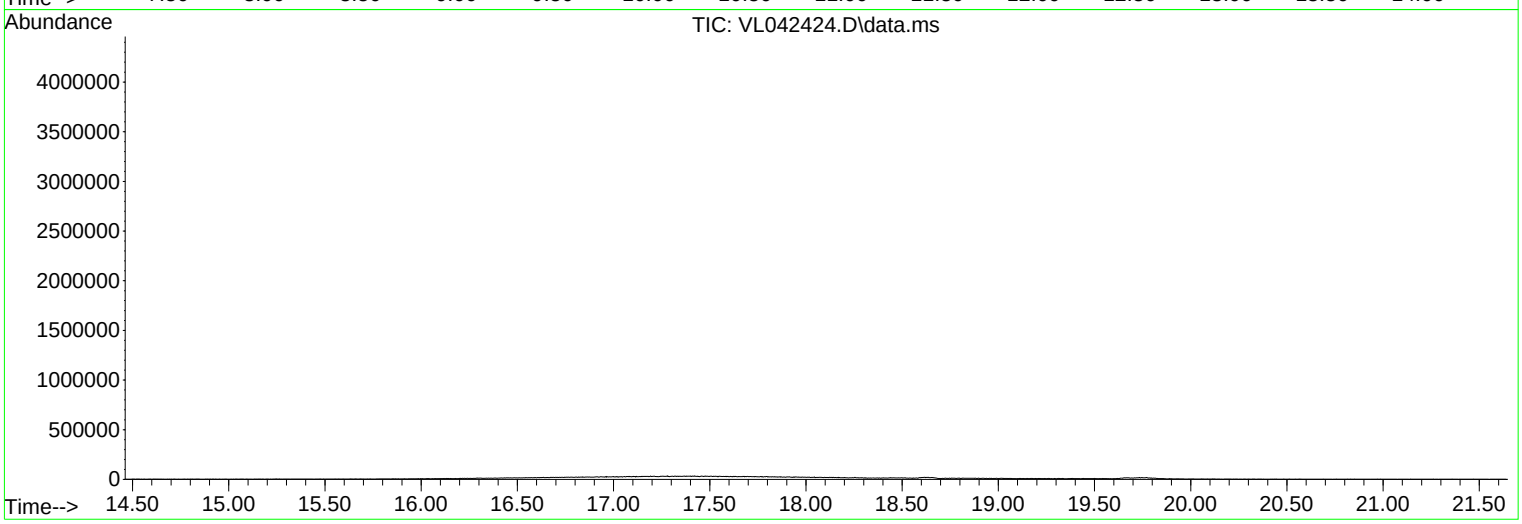
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







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Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

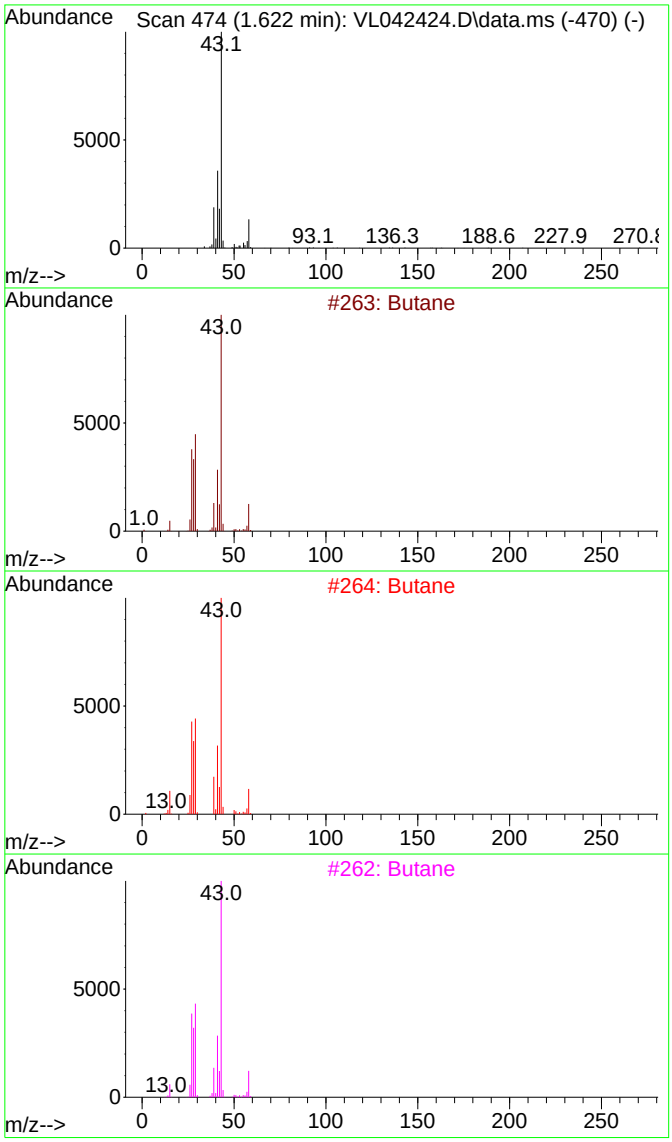
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

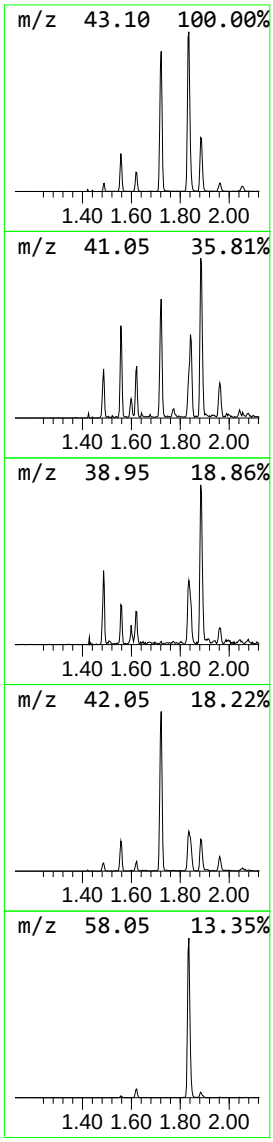
****

Peak Number 1 Butane Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.622	1.32 ppbv	70727	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	50
2	Butane	58	C4H10	000106-97-8	50
3	Butane	58	C4H10	000106-97-8	50
4	Butane, 2,3-dimethyl-	86	C6H14	000079-29-8	9
5	Isobutane	58	C4H10	000075-28-5	9





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

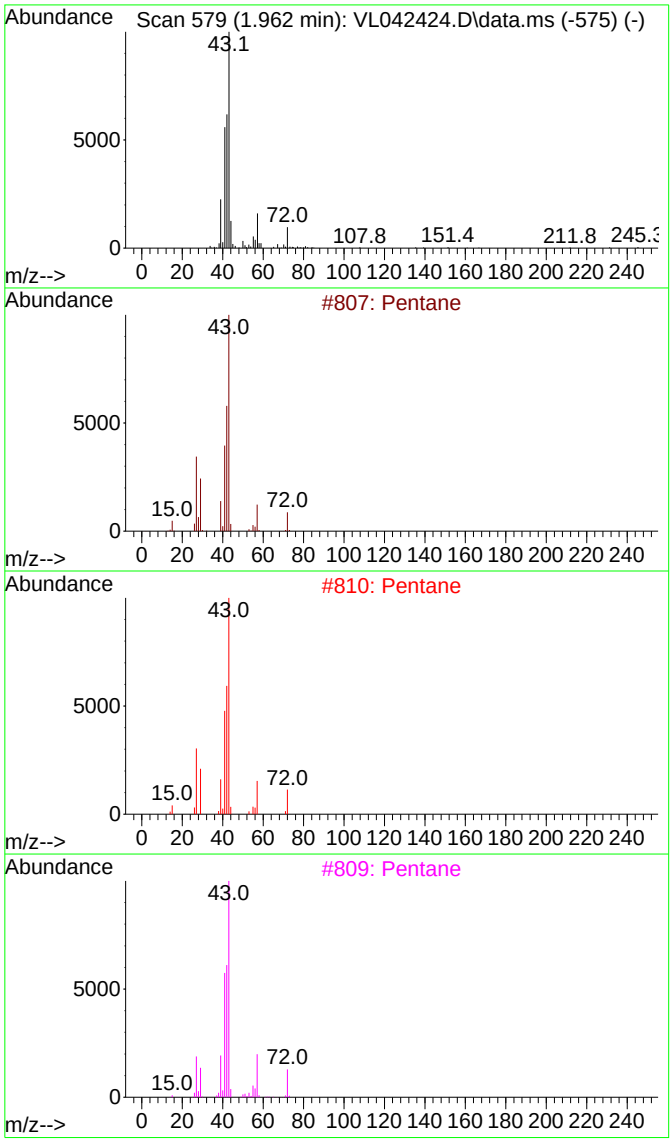
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

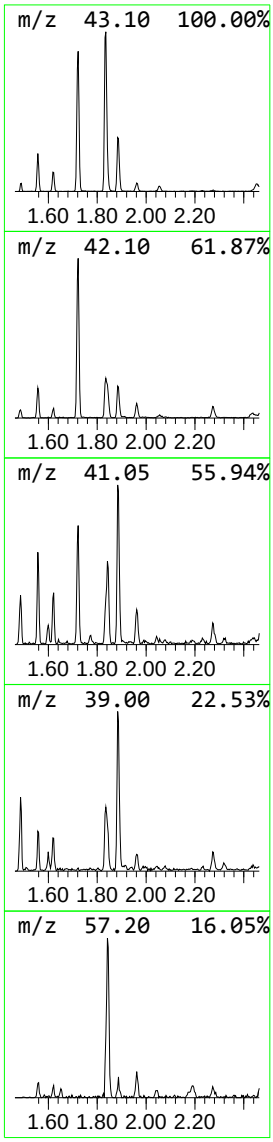
****

Peak Number 2 Pentane Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.962	1.04 ppbv	55488	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	72
2	Pentane	72	C5H12	000109-66-0	72
3	Pentane	72	C5H12	000109-66-0	72
4	Pentane	72	C5H12	000109-66-0	72
5	Pentane	72	C5H12	000109-66-0	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

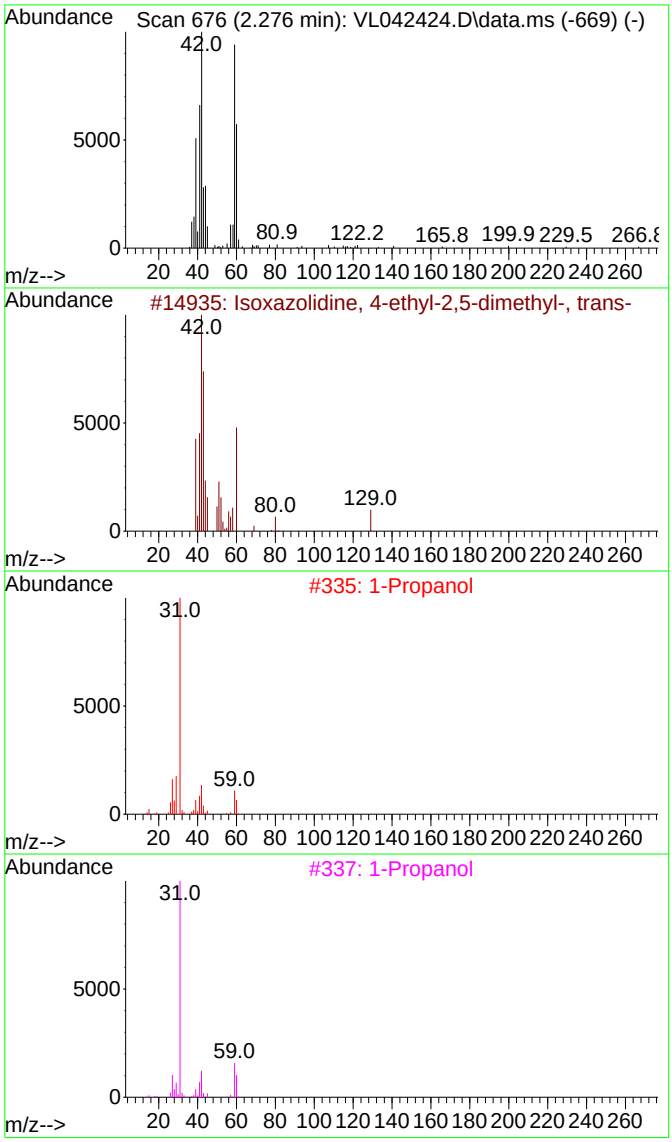
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

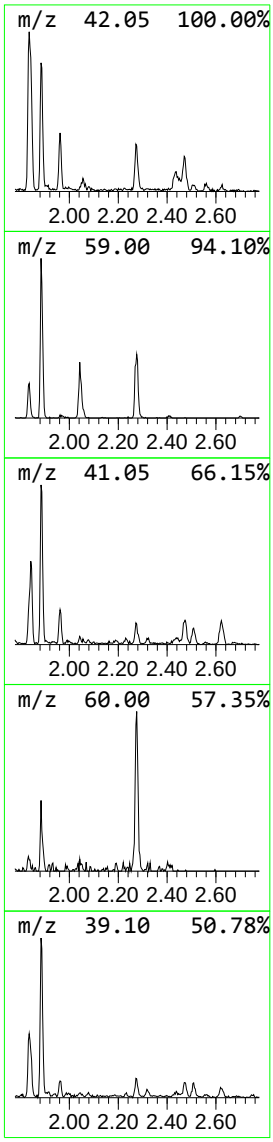
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 3 Isoxazolidine, 4-ethyl-2,5-... Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.276	1.09 ppbv	58563	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Isoxazolidine, 4-ethyl-2,5-dimet...	129	C7H15NO	056728-13-3	53
2	1-Propanol	60	C3H8O	000071-23-8	50
3	1-Propanol	60	C3H8O	000071-23-8	50
4	1-Propanol	60	C3H8O	000071-23-8	43
5	1-Propanol	60	C3H8O	000071-23-8	43





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

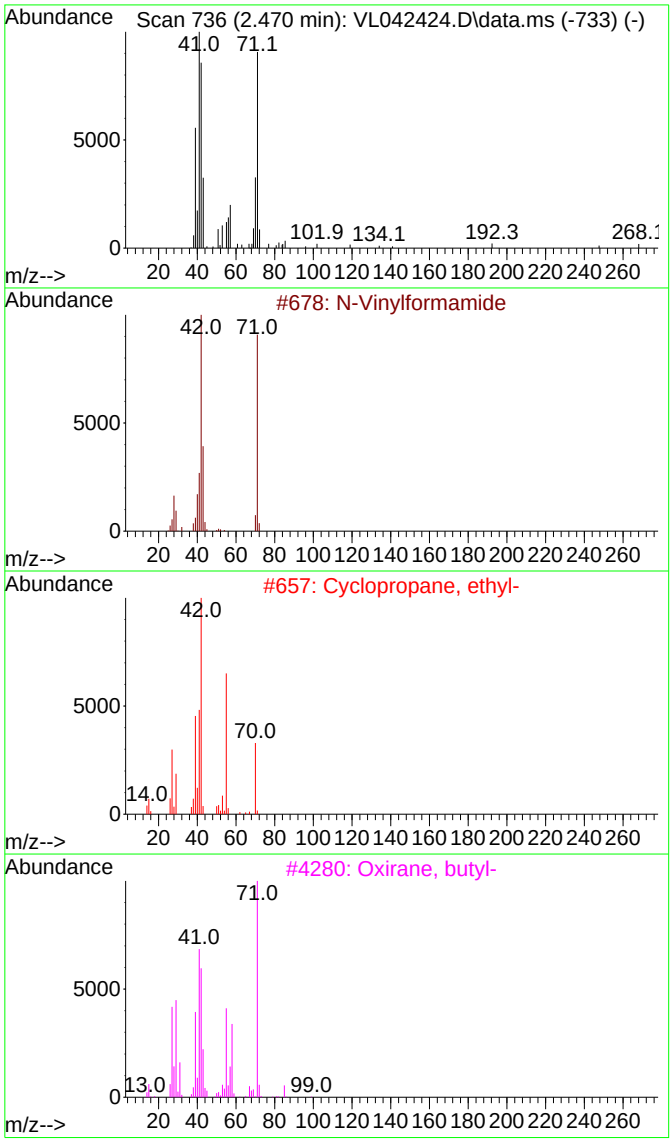
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

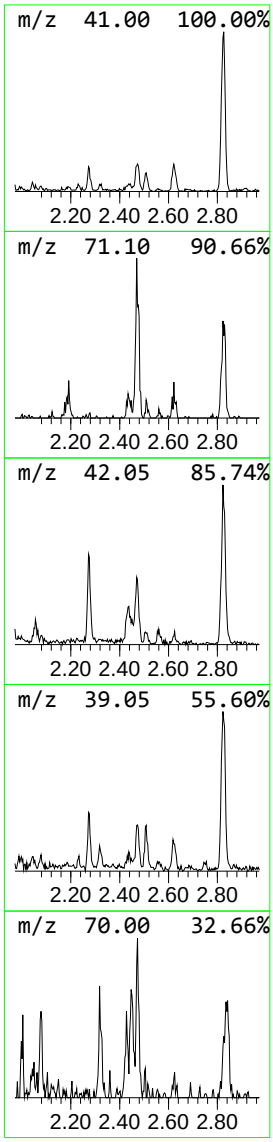
****

Peak Number 4 N-Vinylformamide Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.470	1.18 ppbv	63471	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	N-Vinylformamide	71	C3H5NO	013162-05-5	53
2	Cyclopropane, ethyl-	70	C5H10	001191-96-4	43
3	Oxirane, butyl-	100	C6H12O	001436-34-6	40
4	Oxirane, propyl-	86	C5H10O	001003-14-1	35
5	Butane, 1-bromo-2-methyl-	150	C5H11Br	005973-11-5	28





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

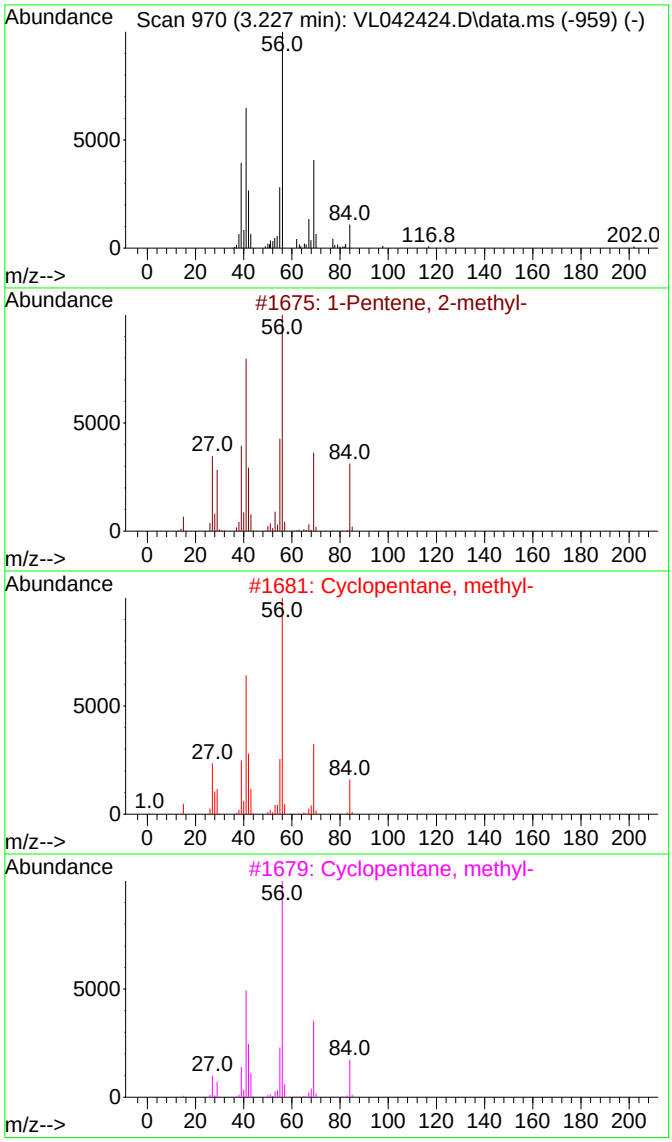
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

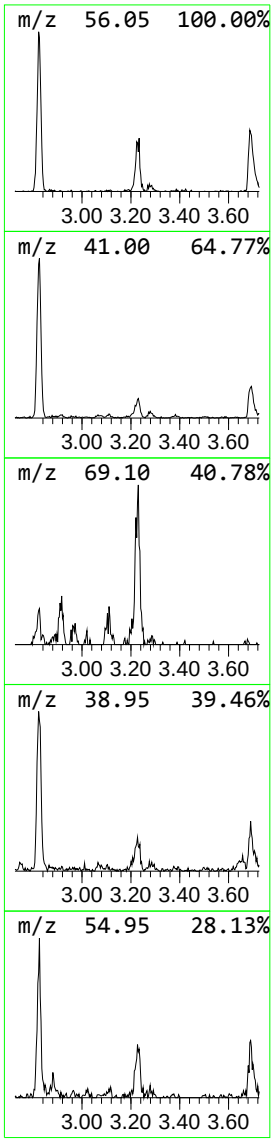
****

Peak Number 5 1-Pentene, 2-methyl- Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.227	1.09 ppbv	58235	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	1-Pentene, 2-methyl-	84	C6H12	000763-29-1	72
2	Cyclopentane, methyl-	84	C6H12	000096-37-7	52
3	Cyclopentane, methyl-	84	C6H12	000096-37-7	52
4	Cyclohexane	84	C6H12	000110-82-7	50
5	1H-Tetrazole, 5-methyl-	84	C2H4N4	004076-36-2	49





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

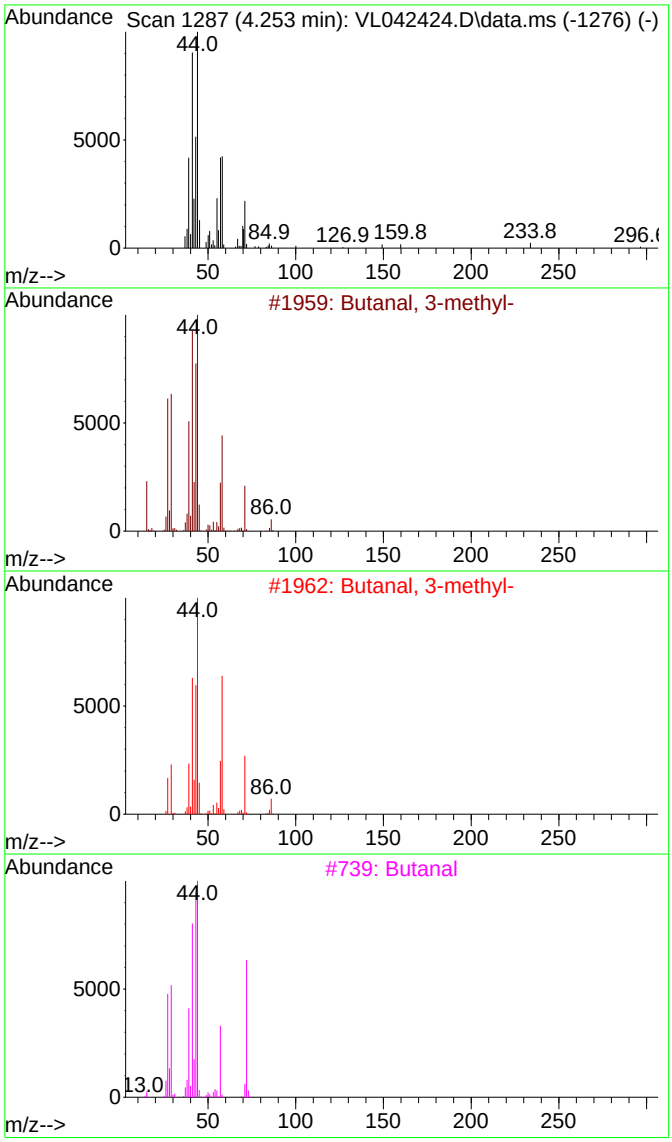
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

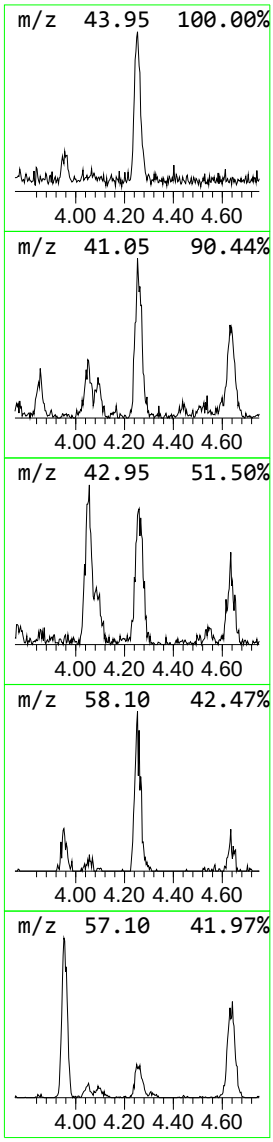
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 6 Butanal, 3-methyl- Concentration Rank 3

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.253	1.24 ppbv	129682	1,4-Difluorobenzene	3.955

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butanal, 3-methyl-	86	C5H10O	000590-86-3	78
2	Butanal, 3-methyl-	86	C5H10O	000590-86-3	40
3	Butanal	72	C4H8O	000123-72-8	38
4	Pentanal	86	C5H10O	000110-62-3	38
5	Butanal, 3-methyl-	86	C5H10O	000590-86-3	33





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

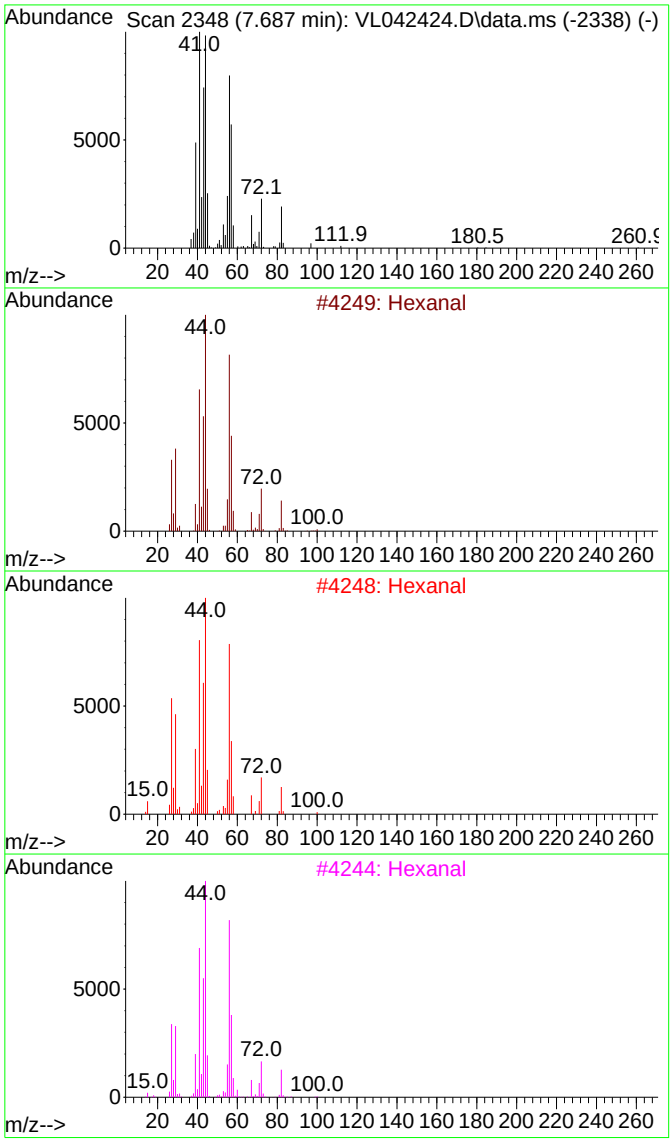
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

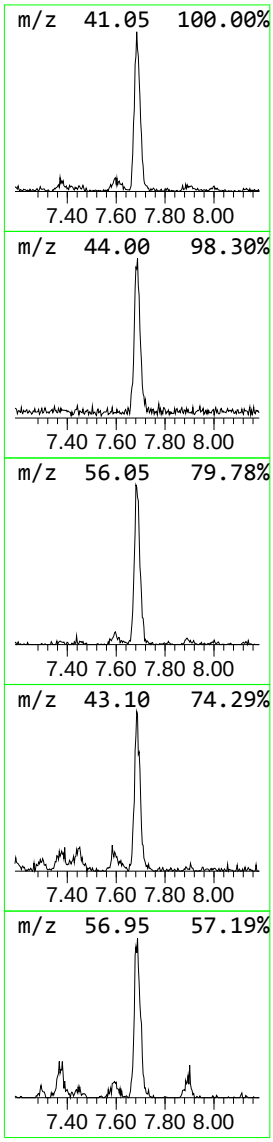
****

Peak Number 7 Hexanal Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.687	1.91 ppbv	242053	Chlorobenzene-d5	8.878

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	64
2	Hexanal	100	C6H12O	000066-25-1	64
3	Hexanal	100	C6H12O	000066-25-1	64
4	Hexanal	100	C6H12O	000066-25-1	59
5	Cyclobutanol, 2-ethyl-	100	C6H12O	035301-43-0	50





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.622	1.3	ppbv	70727	1	2.784	536058	10.0
Pentane	1.962	1.0	ppbv	55488	1	2.784	536058	10.0
Isoxazolidine, ...	2.276	1.1	ppbv	58563	1	2.784	536058	10.0
N-Vinylformamide	2.470	1.2	ppbv	63471	1	2.784	536058	10.0
1-Pentene, 2-me...	3.227	1.1	ppbv	58235	1	2.784	536058	10.0
Butanal, 3-methyl-	4.253	1.2	ppbv	129682	2	3.955	1047530	10.0
Hexanal	7.687	1.9	ppbv	242053	3	8.878	1267580	10.0

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-21DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042453.D	4		04/29/25 18:42	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.84	4.15	UD	4.15	9.89	ug/m3
64-17-5	Ethanol	770	1450	EDQ	2.45	3.77	ug/m3
74-87-3	Chloromethane	0.64	1.32	JD	0.81	4.13	ug/m3
75-01-4	Vinyl Chloride	0.060	0.15	UD	0.15	0.31	ug/m3
74-83-9	Bromomethane	0.56	2.17	UD	2.17	7.77	ug/m3
75-00-3	Chloroethane	0.68	1.79	UD	1.79	5.28	ug/m3
109-99-9	Tetrahydrofuran	0.52	1.53	UD	1.53	5.90	ug/m3
75-69-4	Trichlorofluoromethane	0.64	3.60	UD	3.60	11.2	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.64	4.91	UD	4.91	15.3	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.35	2.45	UD	2.45	14.0	ug/m3
593-60-2	Bromoethene	0.48	2.10	UD	2.10	8.74	ug/m3
75-65-0	tert-Butyl alcohol	0.76	2.30	UD	2.30	6.06	ug/m3
142-82-5	Heptane	0.44	1.80	UD	1.80	8.20	ug/m3
67-63-0	Isopropyl Alcohol	36.8	90.5	D	0.69	4.92	ug/m3
75-35-4	1,1-Dichloroethene	0.56	2.22	UD	2.22	7.93	ug/m3
67-64-1	Acetone	15.7	37.3	D	2.28	4.75	ug/m3
75-15-0	Carbon Disulfide	0.64	1.99	UD	1.99	6.23	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.48	1.73	UD	1.73	7.21	ug/m3
75-09-2	Methylene Chloride	3.20	11.1	D	2.64	6.95	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.76	3.01	UD	3.01	7.93	ug/m3
75-34-3	1,1-Dichloroethane	0.52	2.10	UD	2.10	8.09	ug/m3
110-82-7	Cyclohexane	0.88	3.03	UD	3.03	6.88	ug/m3
78-93-3	2-Butanone	0.70	2.06	JD	1.42	5.90	ug/m3
56-23-5	Carbon Tetrachloride	0.040	0.25	UD	0.25	0.75	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.36	1.43	UD	1.43	7.93	ug/m3
67-66-3	Chloroform	0.33	1.61	UD	1.61	9.77	ug/m3
71-55-6	1,1,1-Trichloroethane	0.040	0.22	UD	0.22	0.65	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.40	1.87	UD	1.87	9.34	ug/m3
71-43-2	Benzene	0.35	1.12	UD	1.12	6.39	ug/m3
107-06-2	1,2-Dichloroethane	0.36	1.46	UD	1.46	8.09	ug/m3
79-01-6	Trichloroethene	0.070	0.38	UD	0.38	0.64	ug/m3
78-87-5	1,2-Dichloropropane	0.44	2.03	UD	2.03	9.24	ug/m3
75-27-4	Bromodichloromethane	0.31	2.08	UD	2.08	13.4	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.37	1.52	UD	1.52	8.20	ug/m3
108-88-3	Toluene	5.70	21.5	D	1.66	7.54	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-21DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042453.D	4		04/29/25 18:42	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.24	1.09	UD	1.09	9.08	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.26	1.18	UD	1.18	9.08	ug/m3
79-00-5	1,1,2-Trichloroethane	0.28	1.53	UD	1.53	10.9	ug/m3
124-48-1	Dibromochloromethane	0.26	2.22	UD	2.22	17.0	ug/m3
106-93-4	1,2-Dibromoethane	0.29	2.23	UD	2.23	3.07	ug/m3
127-18-4	Tetrachloroethene	0.060	0.41	UD	0.41	0.81	ug/m3
108-90-7	Chlorobenzene	0.30	1.38	UD	1.38	9.21	ug/m3
100-41-4	Ethyl Benzene	0.48	2.08	UD	2.08	8.69	ug/m3
179601-23-1	m/p-Xylene	0.84	3.65	UD	3.65	17.4	ug/m3
95-47-6	o-Xylene	0.48	2.08	UD	2.08	8.69	ug/m3
100-42-5	Styrene	0.44	1.87	UD	1.87	8.52	ug/m3
75-25-2	Bromoform	0.23	2.38	UD	2.38	20.7	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.040	0.27	UD	0.27	0.82	ug/m3
95-49-8	2-Chlorotoluene	0.44	2.28	UD	2.28	10.4	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.44	2.16	UD	2.16	9.83	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.31	1.52	UD	1.52	9.83	ug/m3
541-73-1	1,3-Dichlorobenzene	0.32	1.92	UD	1.92	12.0	ug/m3
106-46-7	1,4-Dichlorobenzene	0.21	1.26	UD	1.26	12.0	ug/m3
95-50-1	1,2-Dichlorobenzene	0.30	1.80	UD	1.80	12.0	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.34	2.52	UD	2.52	14.8	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.34	3.63	UD	3.63	21.3	ug/m3
106-99-0	1,3-Butadiene	0.52	1.15	UD	1.15	4.42	ug/m3
91-20-3	Naphthalene	0.30	1.57	UD	1.57	2.10	ug/m3
622-96-8	4-Ethyltoluene	0.48	2.36	UD	2.36	9.83	ug/m3
110-54-3	Hexane	2.30	8.11	D	1.55	7.05	ug/m3
107-05-1	Allyl Chloride	0.60	1.88	UD	1.88	6.26	ug/m3
123-91-1	1,4-Dioxane	0.84	3.03	UD	3.03	7.21	ug/m3
80-62-6	Methyl Methacrylate	0.34	1.39	UD	1.39	8.19	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.9			70 (65) - 130 (135)	109%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	114000		2.797			
540-36-3	1,4-Difluorobenzene	303000		3.972			
3114-55-4	Chlorobenzene-d5	258000		8.895			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-1-3242025DL	SDG No.:	Q1665
Lab Sample ID:	Q1665-21DL	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042453.D	4		04/29/25 18:42	VL042925

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042453.D
Acq On : 29 Apr 2025 18:42
Operator : SY/MD
Sample : Q1665-21DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 30 01:24:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	114227	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.972	114	302811	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.895	117	257605	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	229916	10.861	ppbv	0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 108.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	2620	0.130	ppbv #	72
4) Chloromethane	1.535	50	1272	0.159	ppbv #	87
9) Propene	1.493	41	2655m	0.303	ppbv	
13) Ethanol	1.726	45	267493	192.292	ppbv	76
15) Acetone	1.842	43	73473	3.929	ppbv	100
19) Isopropyl Alcohol	1.891	45	95671	9.210	ppbv #	36
20) Methylene Chloride	2.069	84	5787	0.790	ppbv	92
26) Hexane	2.836	57	10634	0.570	ppbv #	39
34) 2-Butanone	2.567	43	4171	0.174	ppbv	94
53) Toluene	6.950	91	56027	1.429	ppbv	97
59) m/p-Xylene	9.539	91	7499m	0.182	ppbv	

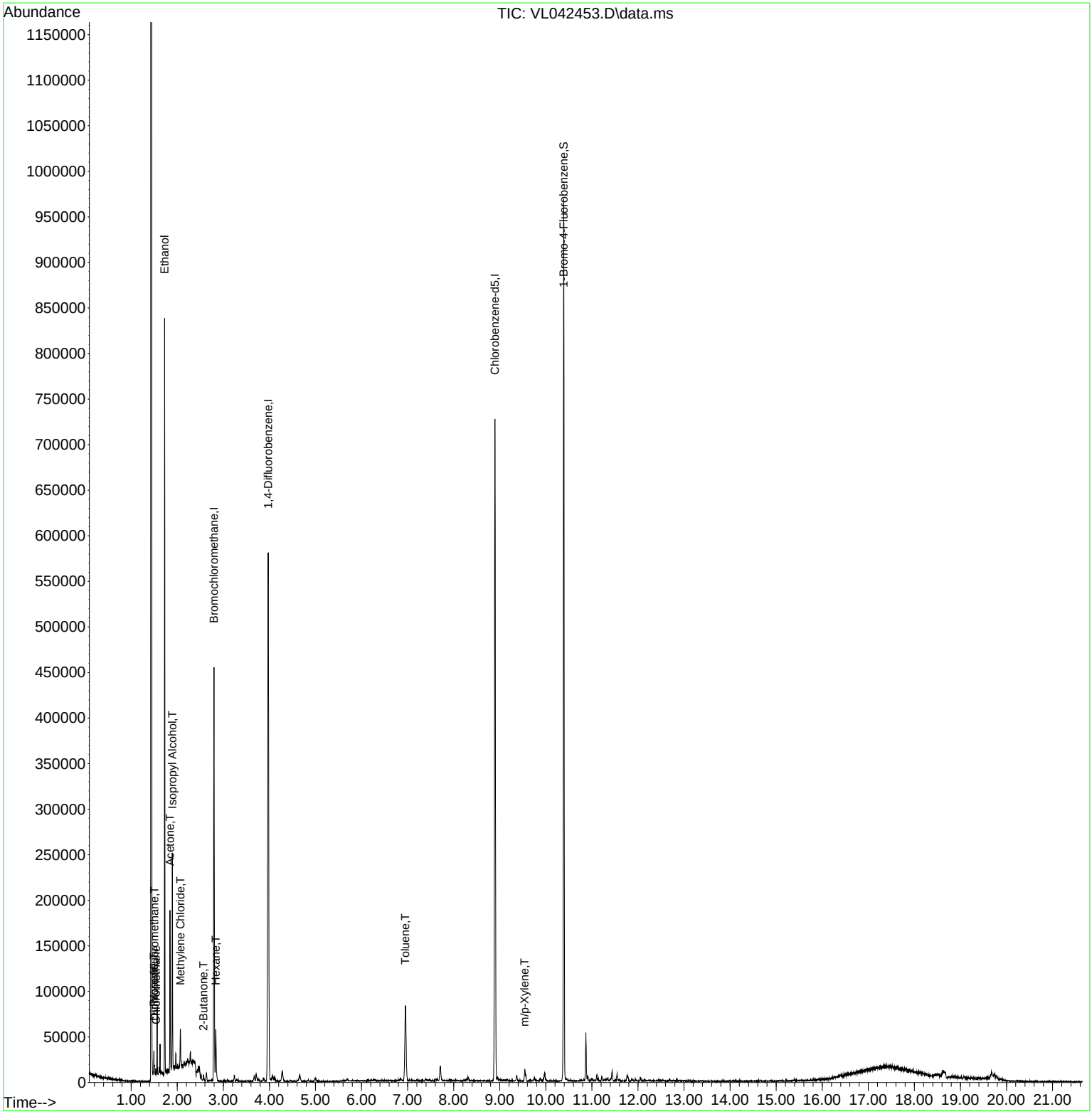
(#) = qualifier out of range (m) = manual integration (+) = signals summed

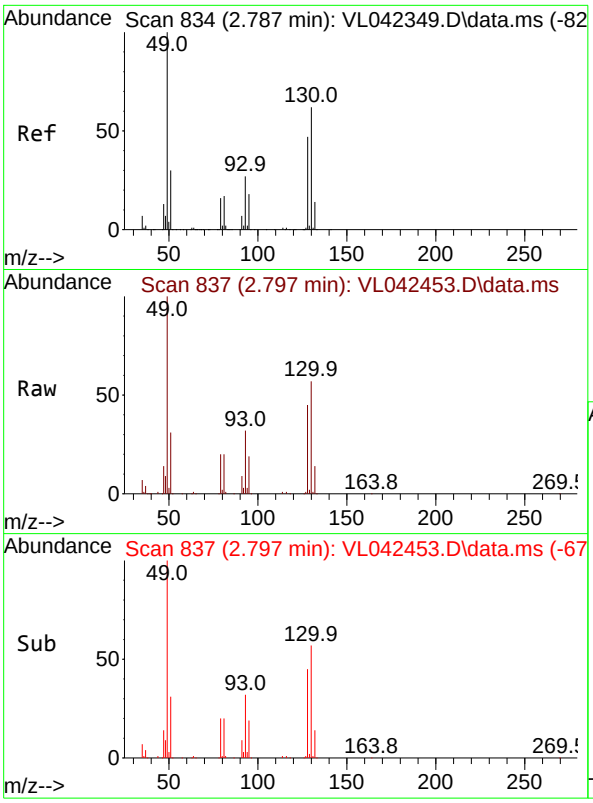
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042453.D
Acq On : 29 Apr 2025 18:42
Operator : SY/MD
Sample : Q1665-21DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 30 01:24:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 8
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

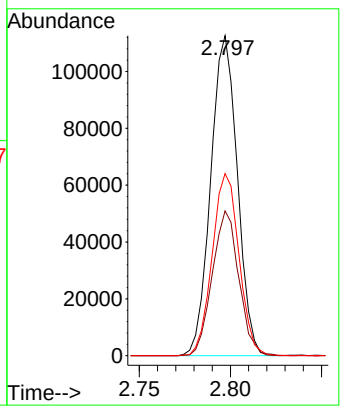
Tgt Ion: 49 Resp: 11422

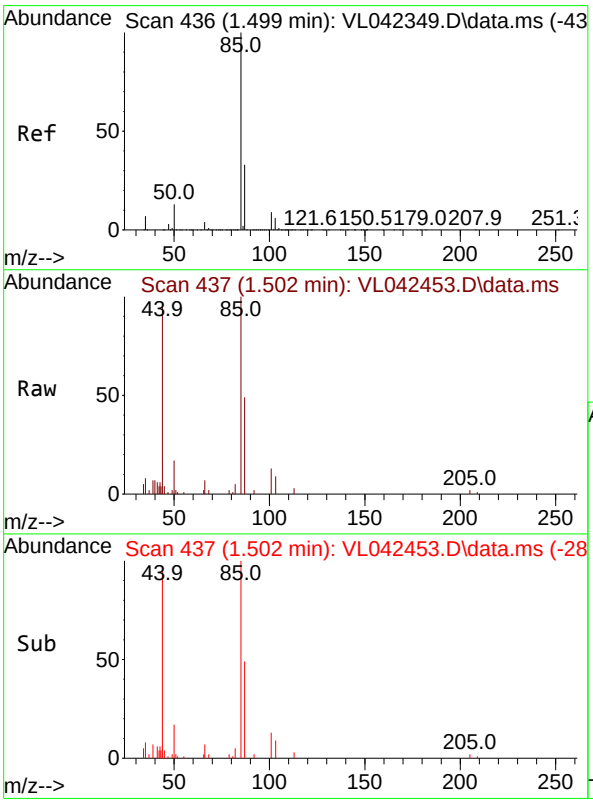
Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.8	68.4
130	57.3	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

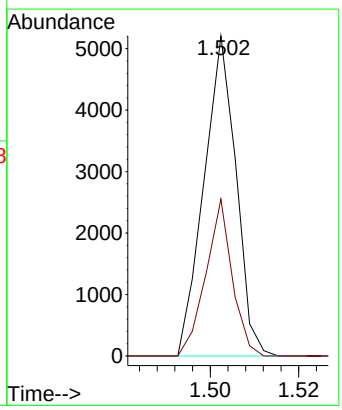


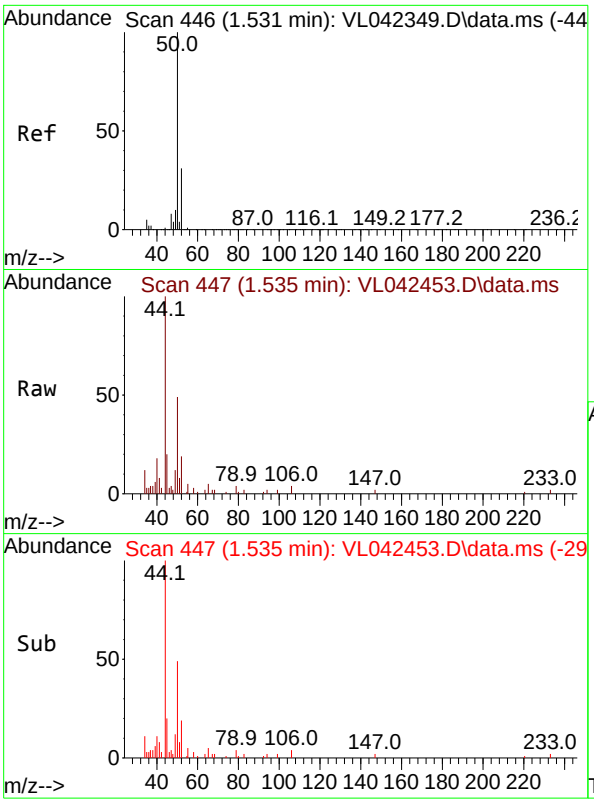


#2
Dichlorodifluoromethane
Concen: 0.130 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 85 Resp: 2620

Ion	Ratio	Lower	Upper
85	100		
87	49.0	26.6	39.8#

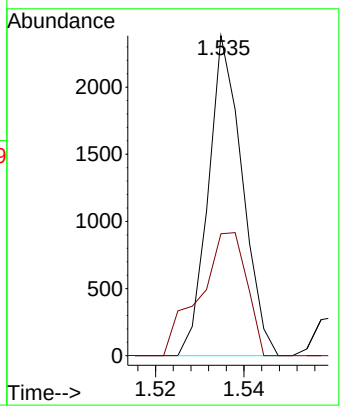




#4
Chloromethane
Concen: 0.159 ppbv
RT: 1.535 min Scan# 44
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 50 Resp: 127

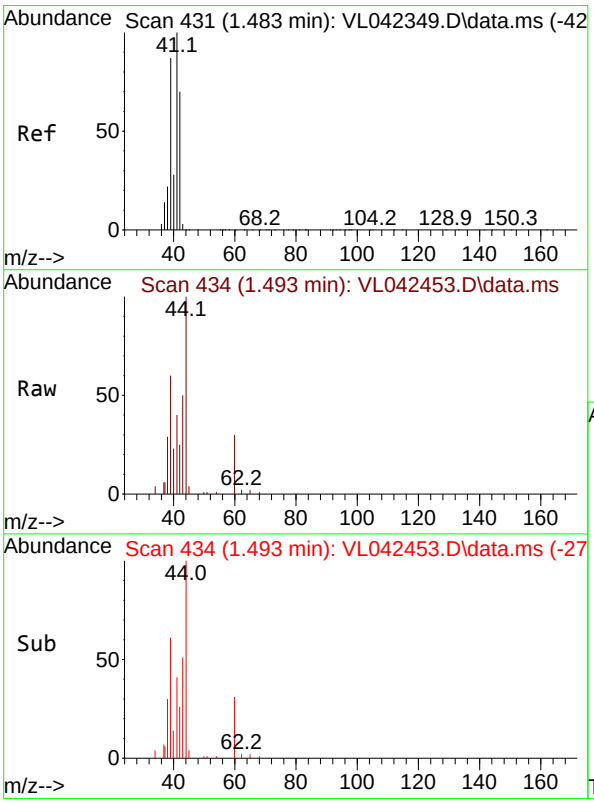
Ion	Ratio	Lower	Upper
50	100		
52	38.1	24.7	37.1#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
APPROVED

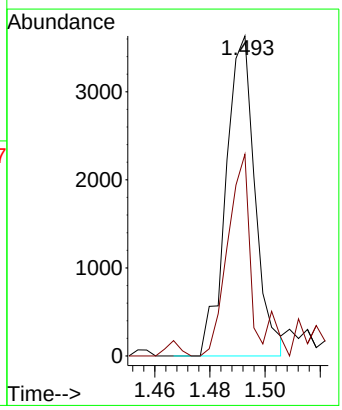
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

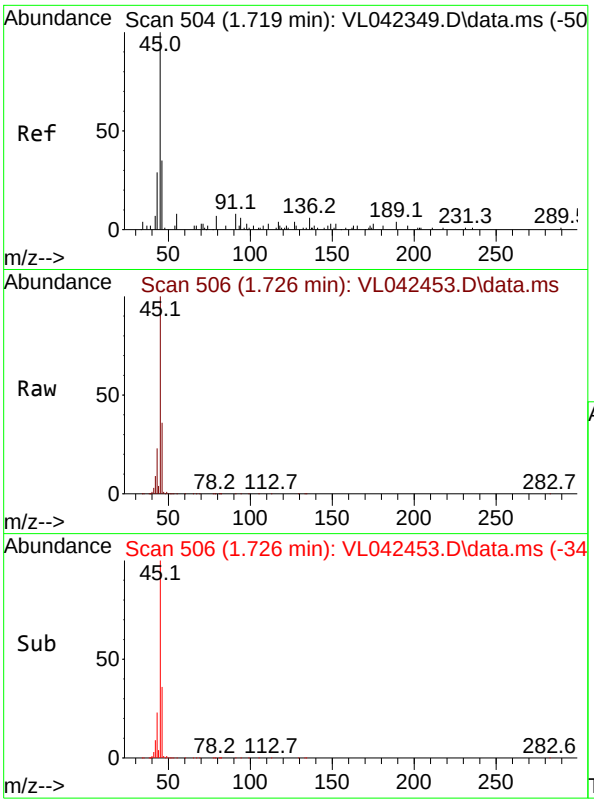


#9
Propene
Concen: 0.303 ppbv m
RT: 1.493 min Scan# 434
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 41 Resp: 2655

Ion	Ratio	Lower	Upper
41	100		
42	77.1	56.2	84.4

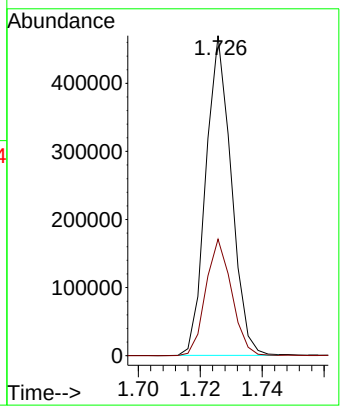




#13
Ethanol
Concen: 192.292 ppbv
RT: 1.726 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 45 Resp: 26749

Ion	Ratio	Lower	Upper
45	100		
46	37.5	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
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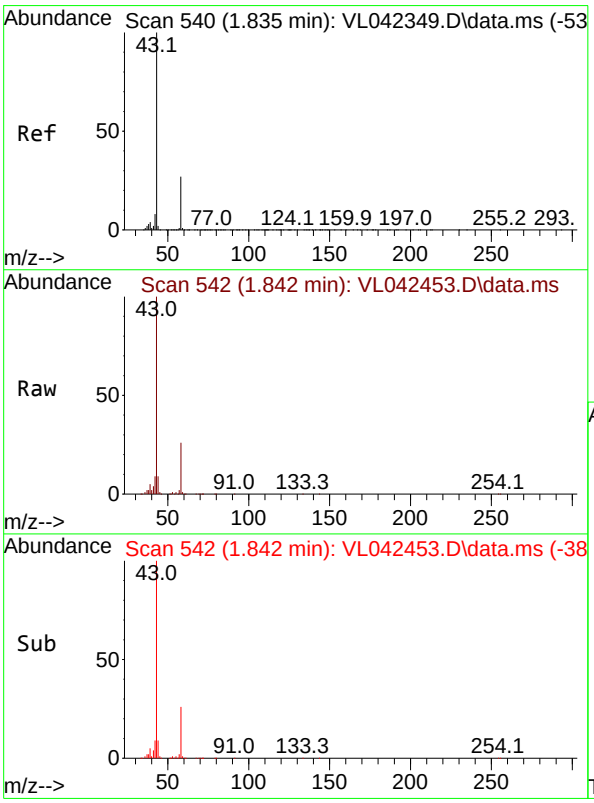
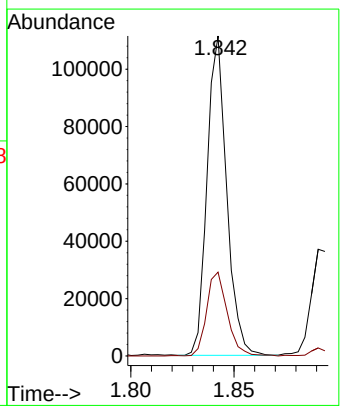
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

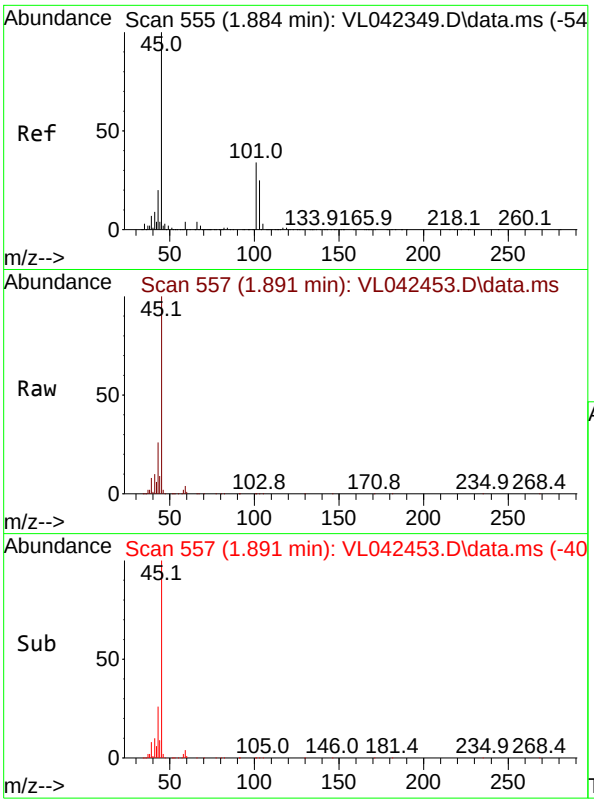


#15
Acetone
Concen: 3.929 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 43 Resp: 73473

Ion	Ratio	Lower	Upper
43	100		
58	27.8	22.4	33.6

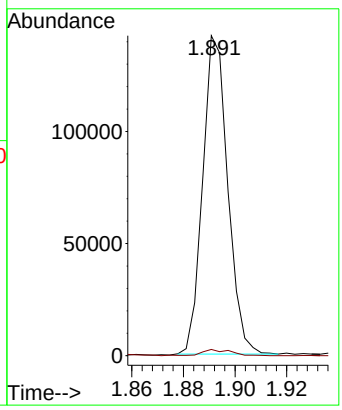




#19
Isopropyl Alcohol
Concen: 9.210 ppbv
RT: 1.891 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 45 Resp: 9567

Ion	Ratio	Lower	Upper
45	100		
58	2.3	34.5	51.7#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
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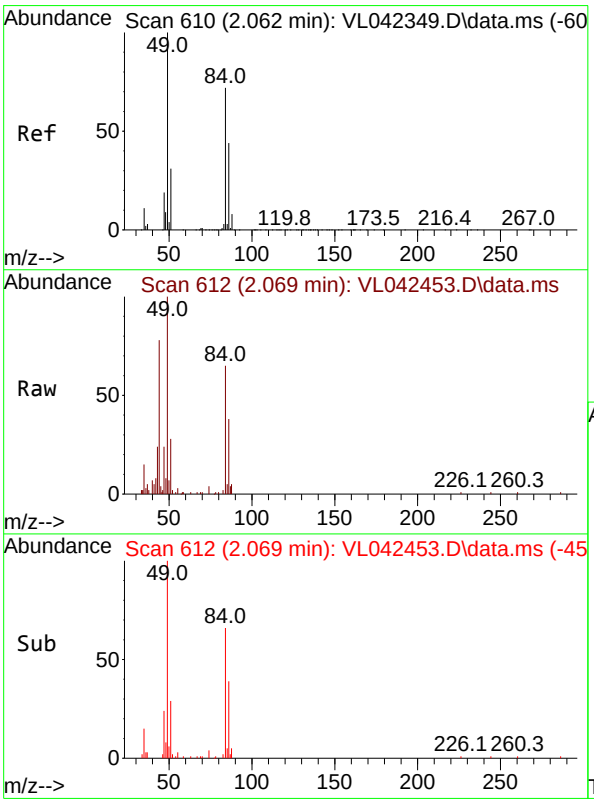
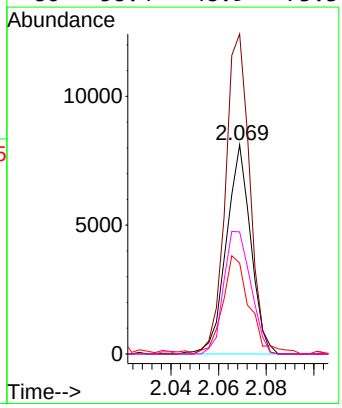
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

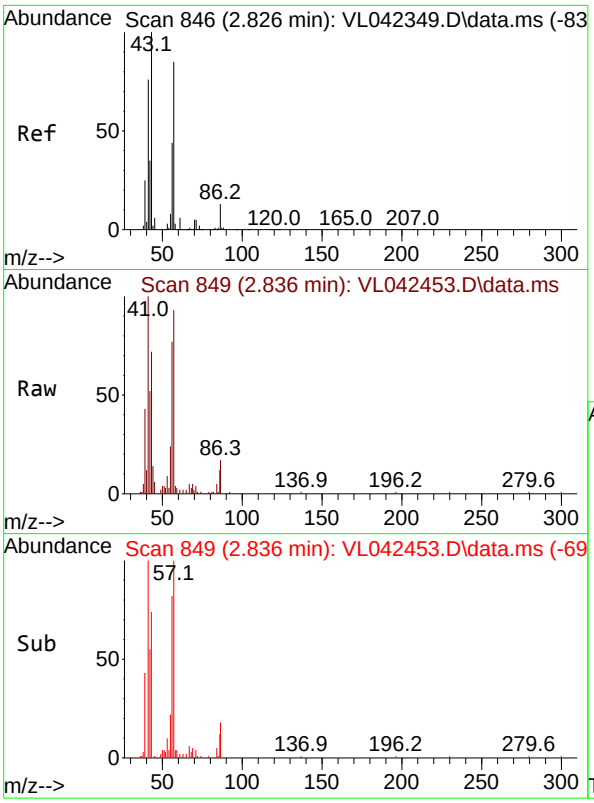


#20
Methylene Chloride
Concen: 0.790 ppbv
RT: 2.069 min Scan# 612
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 84 Resp: 5787

Ion	Ratio	Lower	Upper
84	100		
49	153.1	111.6	167.4
51	42.5	35.1	52.7
86	58.4	48.9	73.3

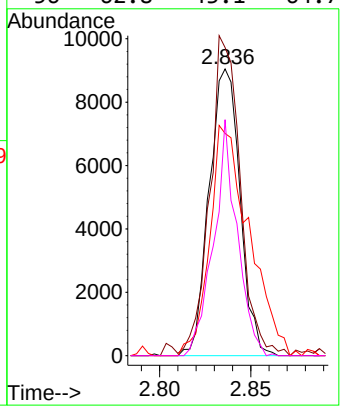




#26
Hexane
Concen: 0.570 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 57 Resp: 1063

Ion	Ratio	Lower	Upper
57	100		
41	112.6	77.9	116.9
43	102.9	208.4	312.6
56	62.8	43.1	64.7



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
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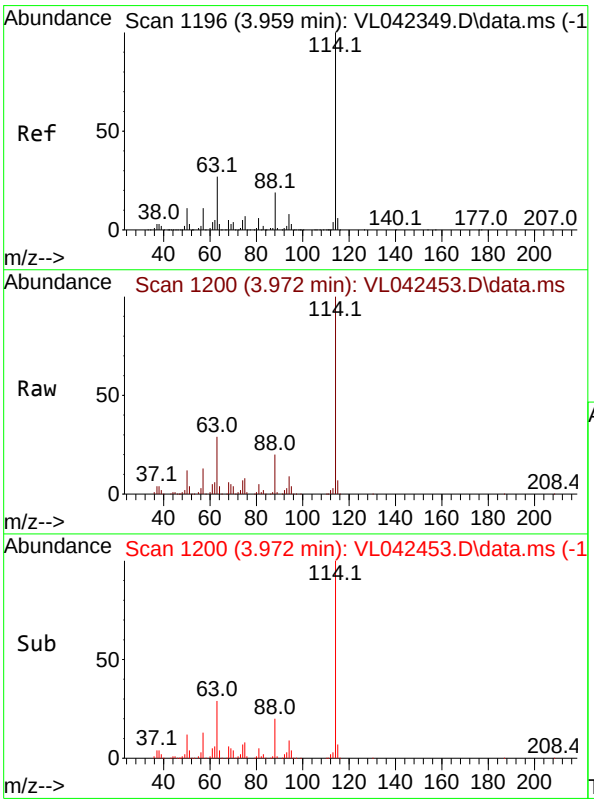
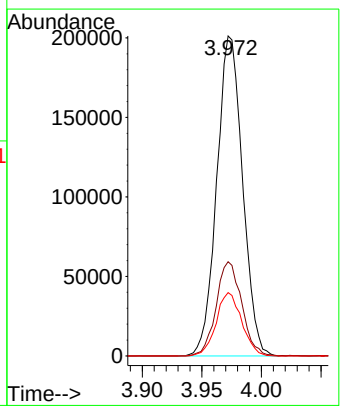
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

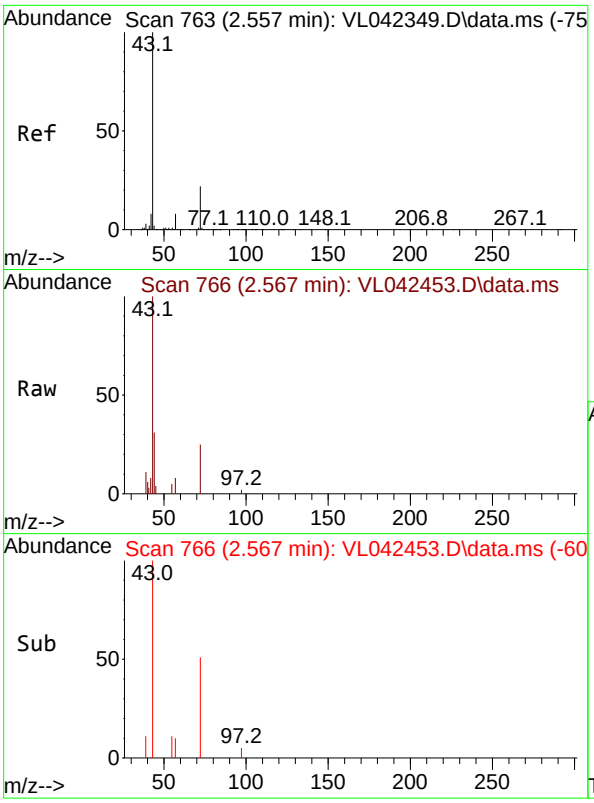


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion:114 Resp: 302811

Ion	Ratio	Lower	Upper
114	100		
63	29.1	21.8	32.6
88	19.6	15.5	23.3

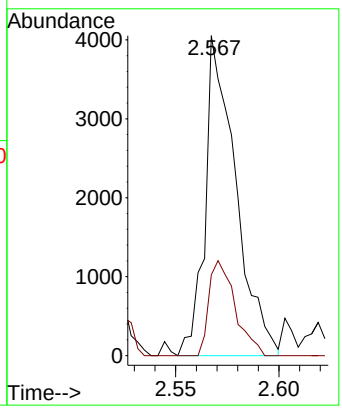




#34
2-Butanone
Concen: 0.174 ppbv
RT: 2.567 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 43 Resp: 417

Ion	Ratio	Lower	Upper
43	100		
72	25.4	18.2	27.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
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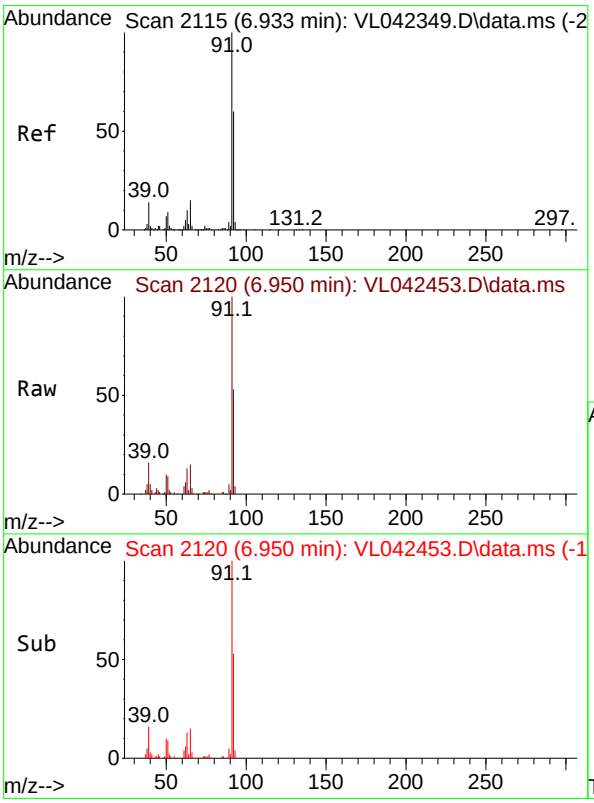
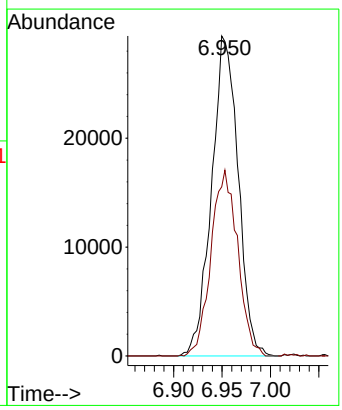
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

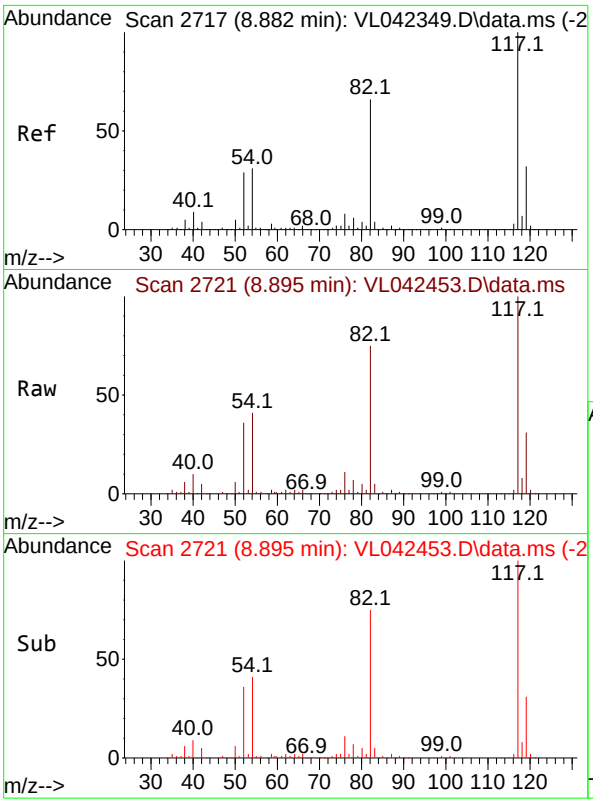


#53
Toluene
Concen: 1.429 ppbv
RT: 6.950 min Scan# 2120
Delta R.T. 0.017 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 91 Resp: 56027

Ion	Ratio	Lower	Upper
91	100		
92	58.2	48.2	72.4

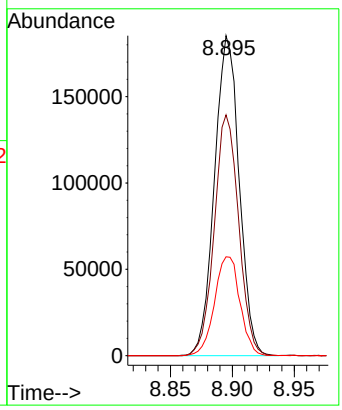




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion:117 Resp: 25760

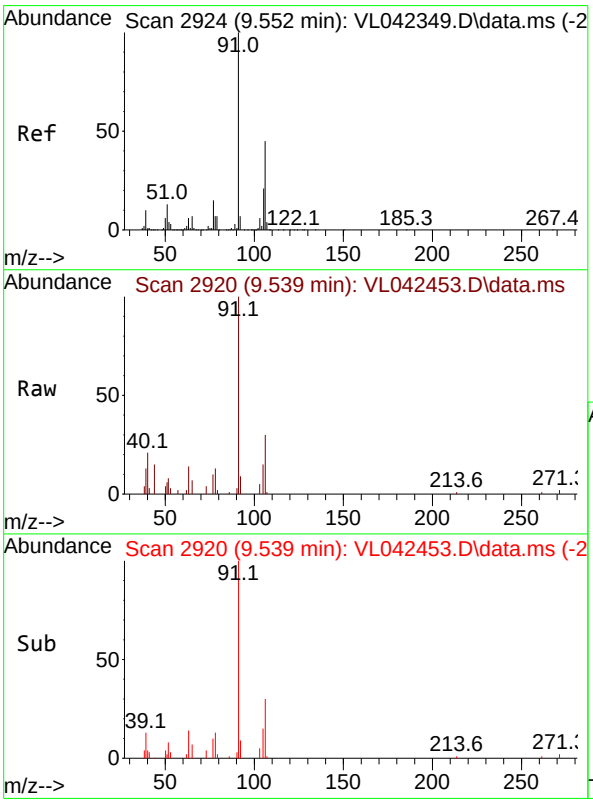
Ion	Ratio	Lower	Upper
117	100		
82	74.3	57.8	86.6
119	31.9	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
APPROVED

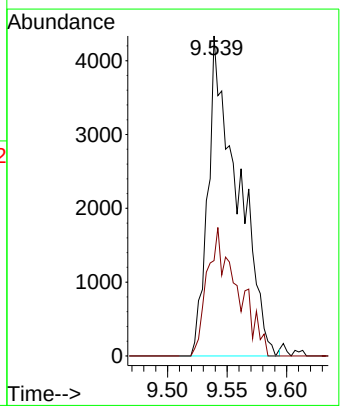
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

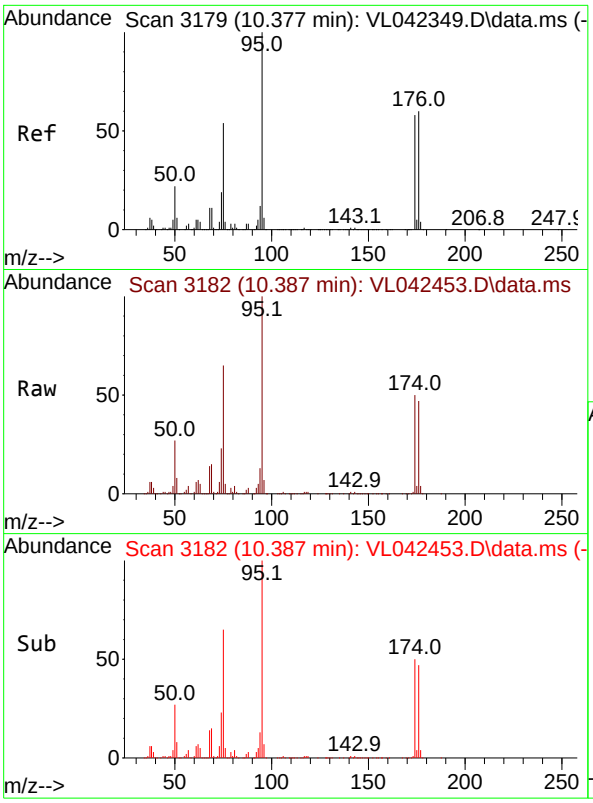


#59
m/p-Xylene
Concen: 0.182 ppbv m
RT: 9.539 min Scan# 2920
Delta R.T. -0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 91 Resp: 7499

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

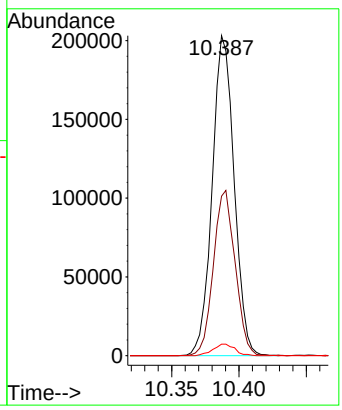




#68
1-Bromo-4-Fluorobenzene
Concen: 10.861 ppbv
RT: 10.387 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 95 Resp: 22991

Ion	Ratio	Lower	Upper
95	100		
174	51.3	48.5	72.7
175	3.6	3.7	5.5#



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-22	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042425.D	1		04/28/25 14:34	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.50	2.47		1.04	2.47	ug/m3
64-17-5	Ethanol	250	471	EQ	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.60	1.24		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.23	1.29	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.30	0.91	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.66	2.70		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	28.3	69.6	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	13.8	32.8		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.60	2.08		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.26	0.89	J	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.52	1.53		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.070	0.44		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	1.20	5.60		0.47	2.34	ug/m3
71-43-2	Benzene	0.56	1.79		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	4.70	17.7		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-22	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042425.D	1		04/28/25 14:34	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.51	2.22		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	1.80	7.82		0.91	4.34	ug/m3
95-47-6	o-Xylene	0.69	3.00		0.52	2.17	ug/m3
100-42-5	Styrene	0.14	0.60	J	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.19	0.93	J	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.51	2.51		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.18	0.88	J	0.59	2.46	ug/m3
110-54-3	Hexane	2.70	9.52		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.4			70 (65) - 130 (135)	104%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	133000		2.784			
540-36-3	1,4-Difluorobenzene	382000		3.955			
3114-55-4	Chlorobenzene-d5	331000		8.878			
TENTITIVE IDENTIFIED COMPOUNDS							

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	03/25/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	03/26/25
Client Sample ID:	IA-B2-4-3242025	SDG No.:	Q1665
Lab Sample ID:	Q1665-22	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042425.D	1		04/28/25 14:34	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
75-45-6	Chlorodifluoromethane	0.28		J		1.48	ppbv
115-07-1	Propene	1.20		J		1.49	ppbv
000106-97-8	Butane	2.00		J		1.62	ppbv
000109-66-0	Pentane	1.50		J		1.96	ppbv
000107-83-5	Pentane, 2-methyl-	1.70		J		2.47	ppbv
000096-14-0	Pentane, 3-methyl-	1.20		J		2.62	ppbv
000096-37-7	Cyclopentane, methyl-	1.10		J		3.23	ppbv
	unknown4.263	1.20		J		4.26	ppbv
000066-25-1	Hexanal	1.10		J		7.69	ppbv
000080-56-8	.alpha.-Pinene	1.40		J		10.9	ppbv
103-65-1	n-propylbenzene	0.12		J		11.0	ppbv

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 01:37:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	133015	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	381932	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	330693	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	282648	10.401	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11713	0.498	ppbv	#	86
3) Chlorodifluoromethane	1.476	51	6357m	0.284	ppbv		
4) Chloromethane	1.531	50	5550	0.597	ppbv		99
9) Propene	1.486	41	12230	1.200	ppbv		85
10) Heptane	4.985	43	18959m	0.662	ppbv		
11) Trichlorofluoromethane	1.877	101	5207	0.233	ppbv		98
13) Ethanol	1.719	45	406613	251.014	ppbv		76
15) Acetone	1.835	43	301557m	13.849	ppbv		
17) tert-Butyl alcohol	2.043	59	8174m	0.303	ppbv		
19) Isopropyl Alcohol	1.884	45	341849	28.261	ppbv	#	34
20) Methylene Chloride	2.059	84	5072	0.595	ppbv		87
26) Hexane	2.823	57	57941	2.667	ppbv	#	36
30) Cyclohexane	3.849	84	4624m	0.263	ppbv		
34) 2-Butanone	2.560	43	15646	0.518	ppbv		97
35) Carbon Tetrachloride	3.758	117	2406m	0.070	ppbv		
36) Benzene	3.654	78	23147	0.562	ppbv		95
44) 2,2,4-Trimethylpentane	4.638	57	84397	1.186	ppbv	#	91
53) Toluene	6.933	91	232100	4.695	ppbv		99
58) Ethyl Benzene	9.354	91	33267	0.508	ppbv		98
59) m/p-Xylene	9.529	91	92347	1.750	ppbv		100
60) o-Xylene	9.959	91	36544	0.688	ppbv		97
61) Styrene	9.869	104	3587	0.141	ppbv		91
64) n-propylbenzene	10.985	120	2357	0.120	ppbv		86
72) 4-Ethyltoluene	11.118	105	11801	0.182	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.202	105	10642	0.186	ppbv		88
74) 1,2,4-Trimethylbenzene	11.536	105	34307	0.512	ppbv	#	67

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

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 29 01:37:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations APPROVED

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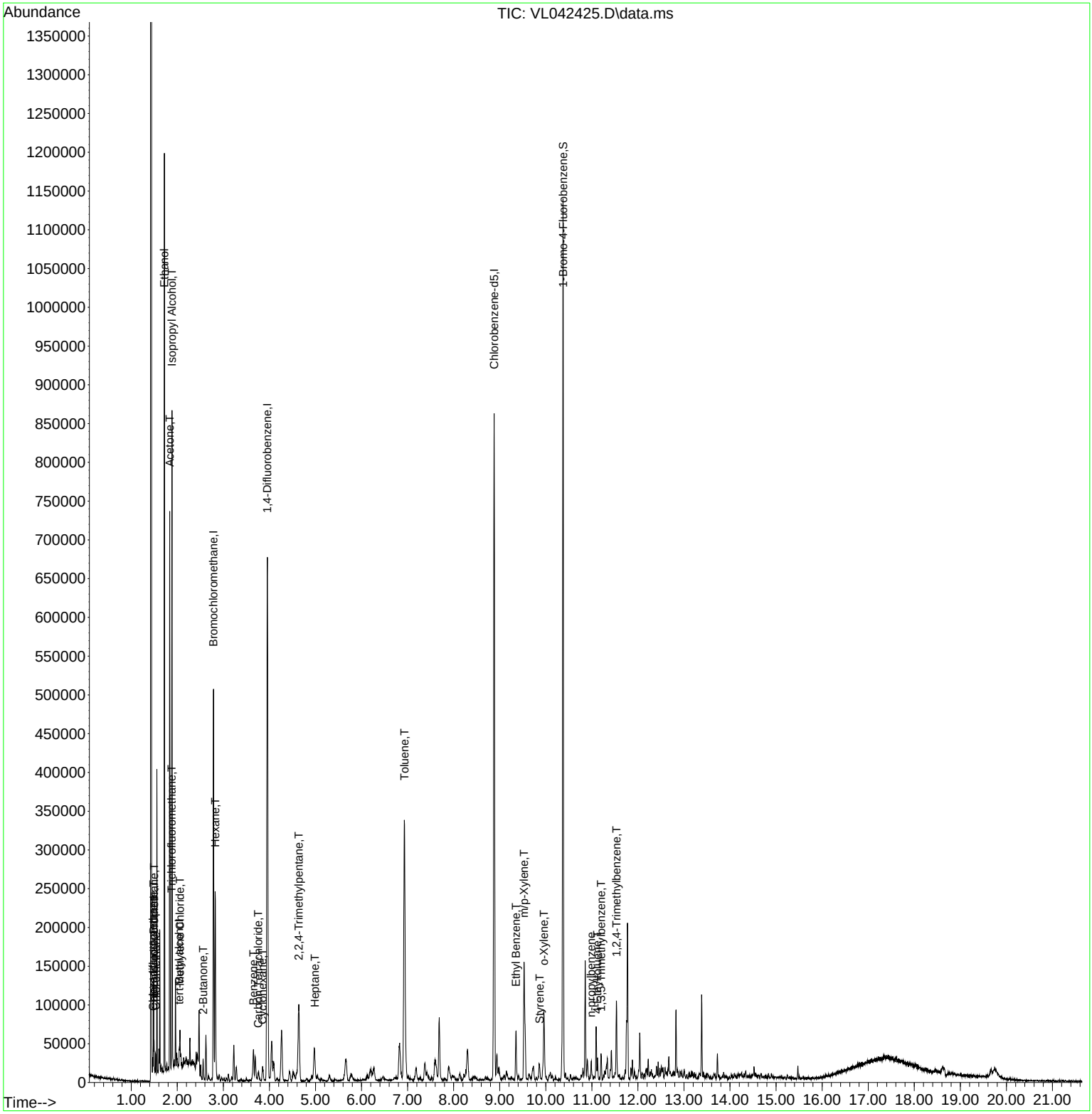
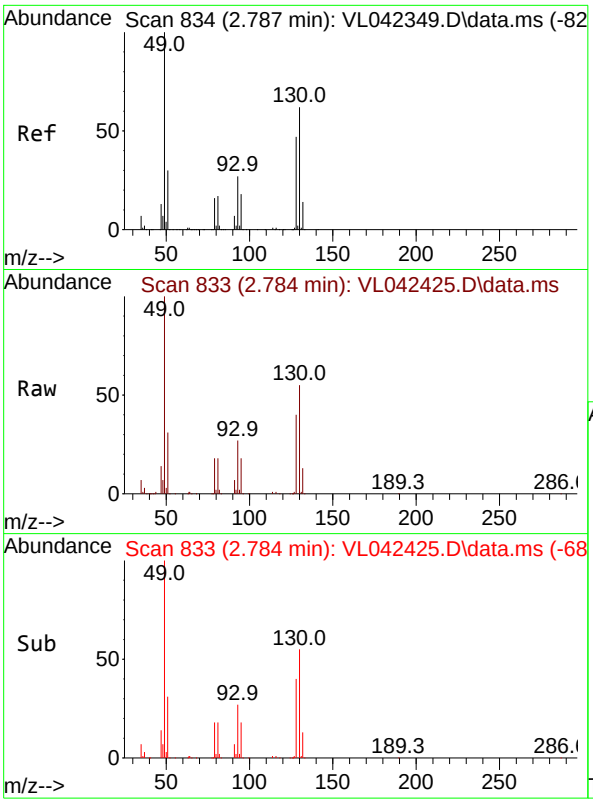
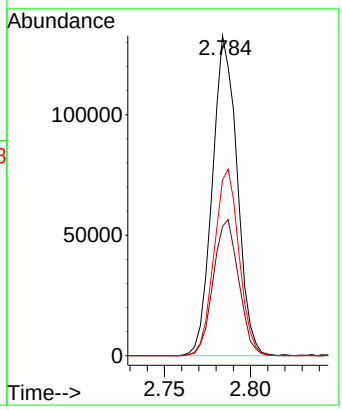




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 49 Resp: 13301

Ion	Ratio	Lower	Upper
49	100		
128	43.7	22.8	68.4
130	58.6	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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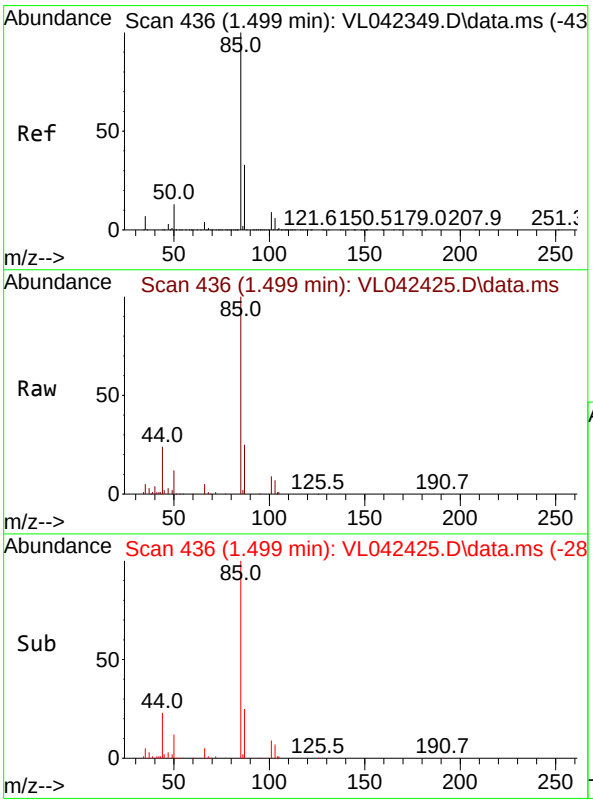
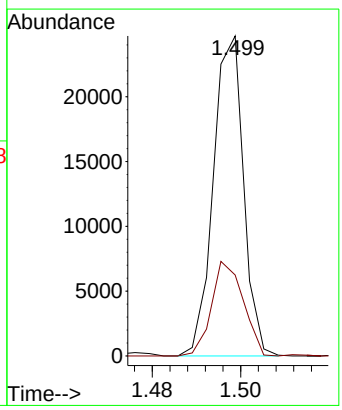
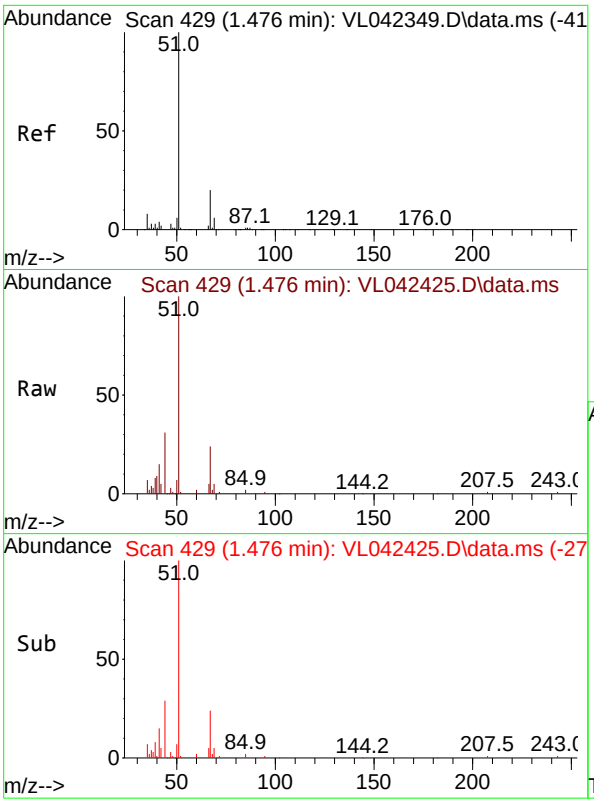


#2
Dichlorodifluoromethane
Concen: 0.498 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 85 Resp: 11713

Ion	Ratio	Lower	Upper
85	100		
87	25.3	26.6	39.8#

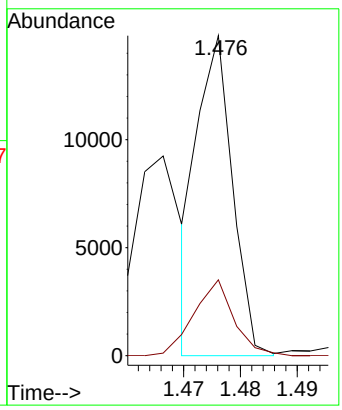




#3
Chlorodifluoromethane
Concen: 0.284 ppbv m
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 51 Resp: 635

Ion	Ratio	Lower	Upper
51	100		
67	27.2	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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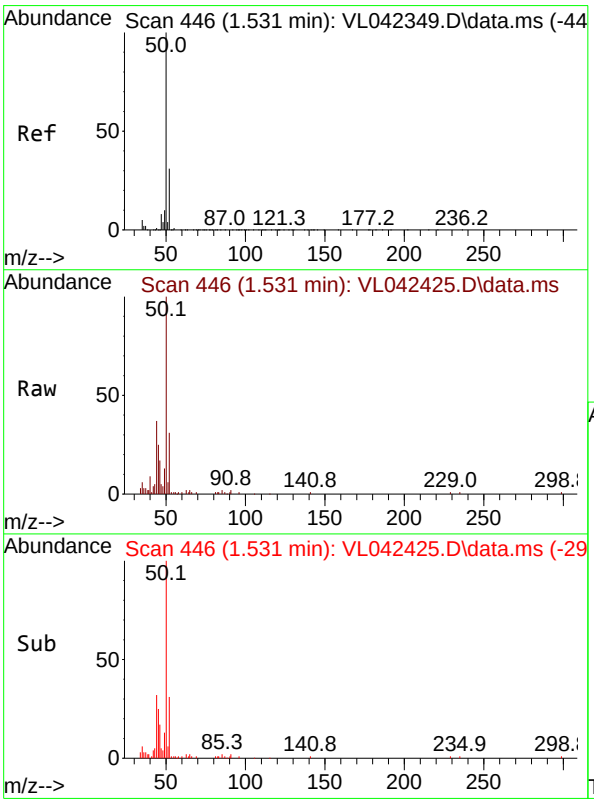
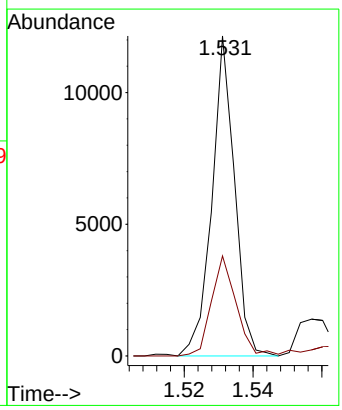
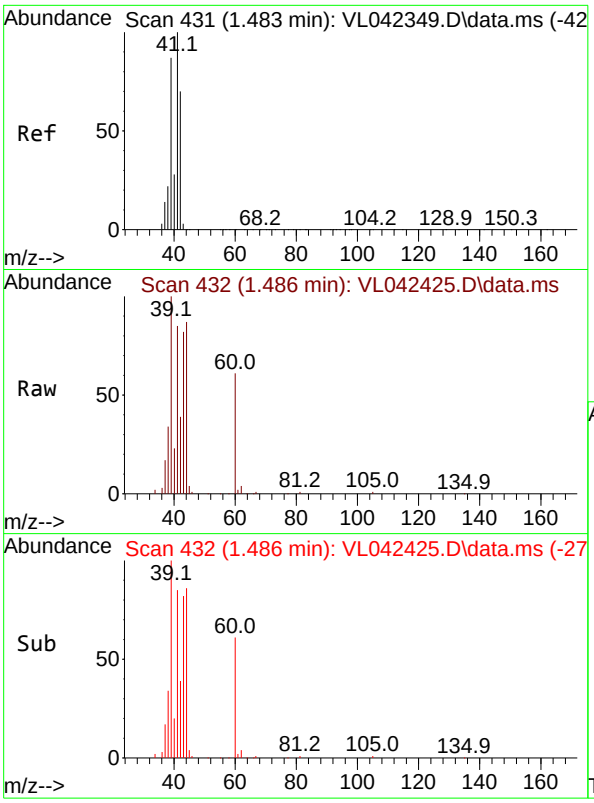


#4
Chloromethane
Concen: 0.597 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 50 Resp: 5550

Ion	Ratio	Lower	Upper
50	100		
52	31.2	24.7	37.1

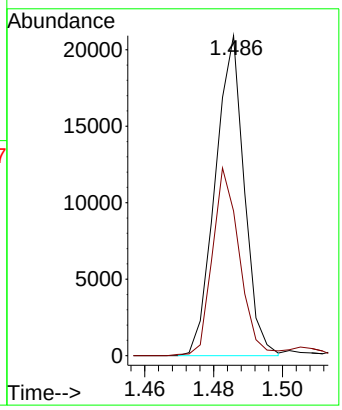




#9
Propene
Concen: 1.200 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 41 Resp: 1223

Ion	Ratio	Lower	Upper
41	100		
42	57.6	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/29/2025
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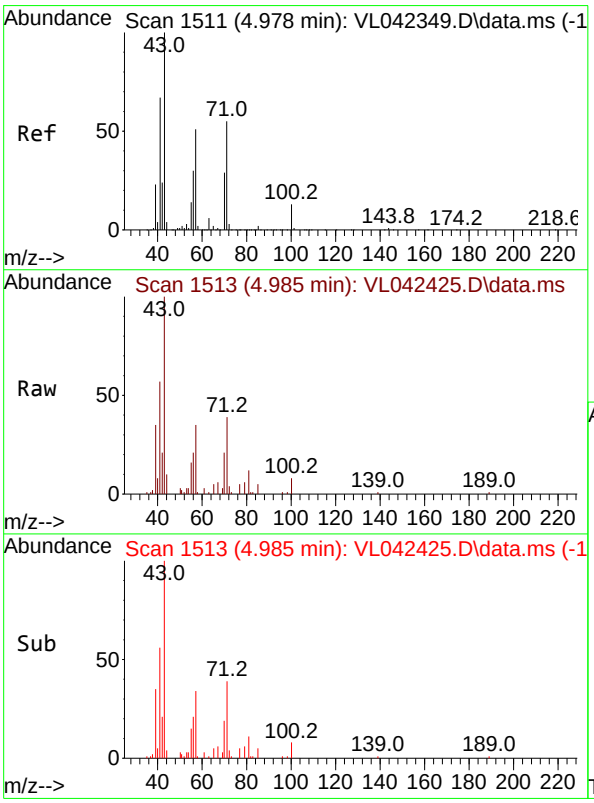
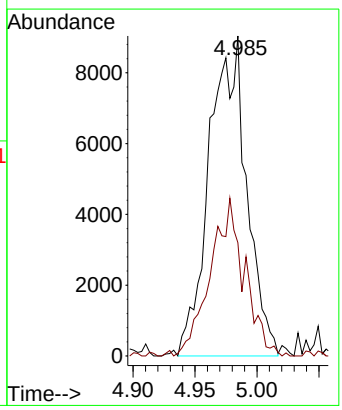
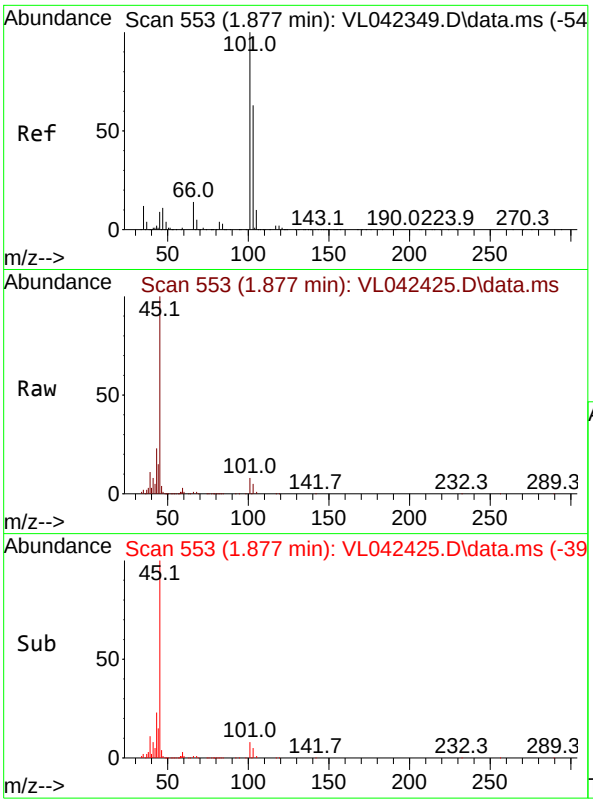


#10
Heptane
Concen: 0.662 ppbv m
RT: 4.985 min Scan# 1513
Delta R.T. 0.006 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 18959

Ion	Ratio	Lower	Upper
43	100		
57	45.2	39.9	59.9





#11
Trichlorofluoromethane
Concen: 0.233 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:101 Resp: 520

Ion	Ratio	Lower	Upper
101	100		
103	64.2	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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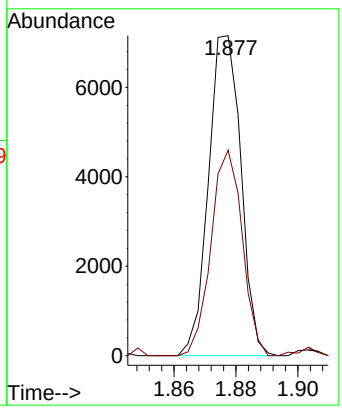
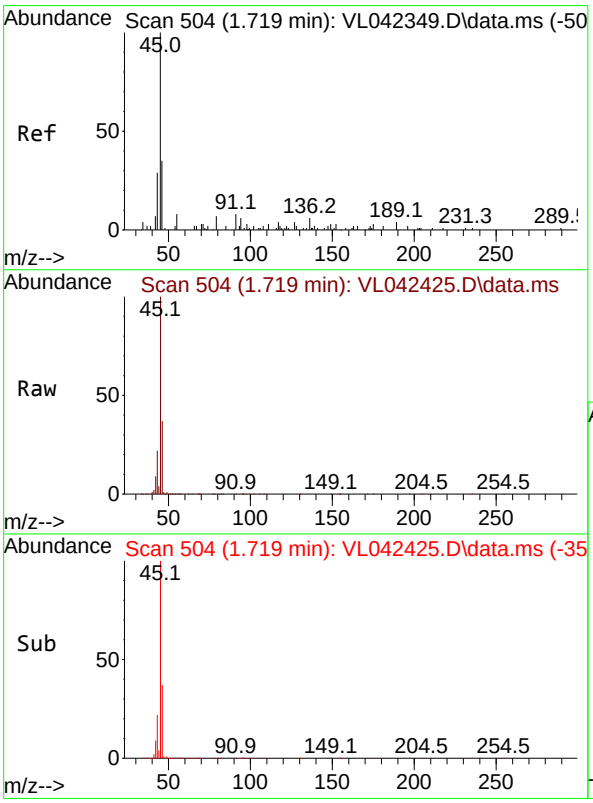
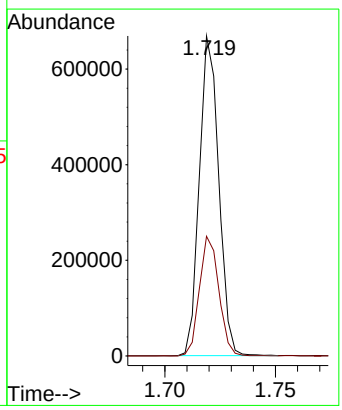


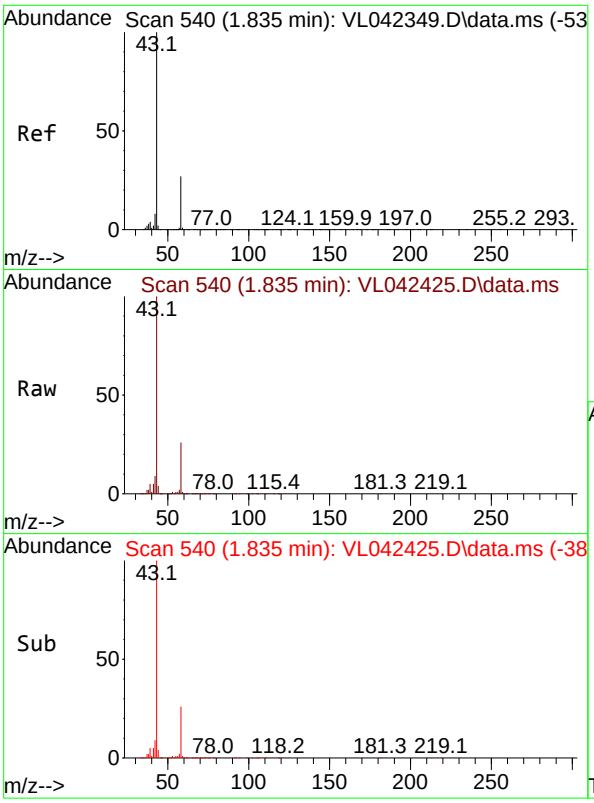


#13
Ethanol
Concen: 251.014 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 45 Resp: 406613

Ion	Ratio	Lower	Upper
45	100		
46	37.8	21.9	87.7

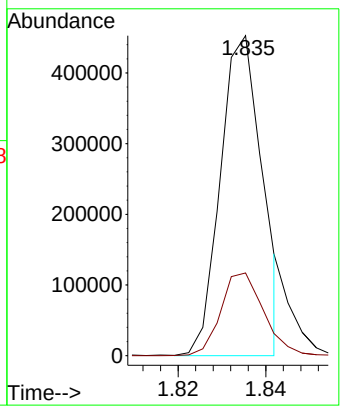




#15
Acetone
Concen: 13.849 ppbv m
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 30155

Ion	Ratio	Lower	Upper
43	100		
58	26.6	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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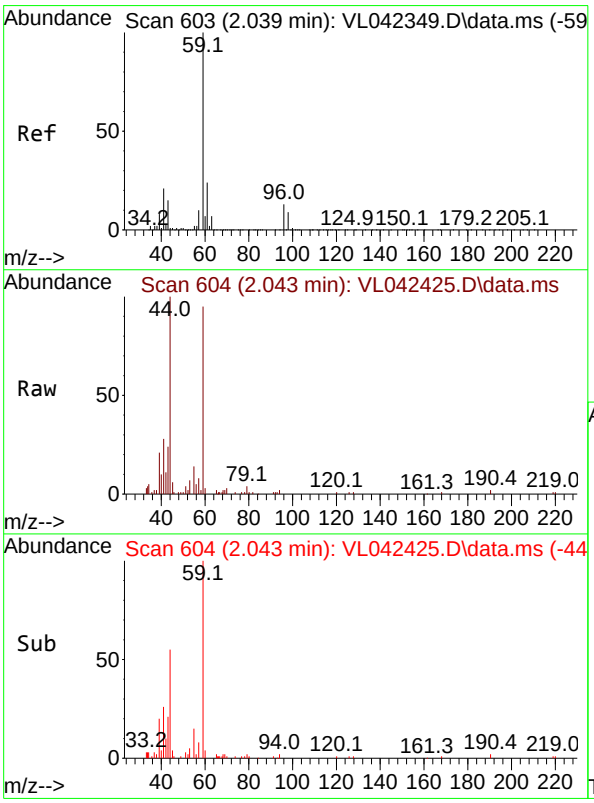
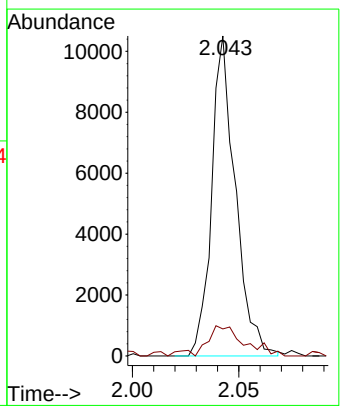
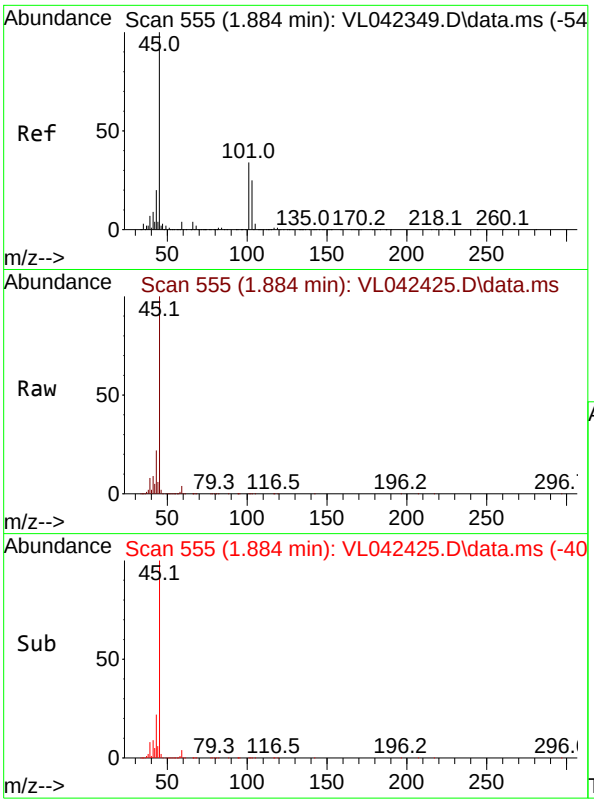


#17
tert-Butyl alcohol
Concen: 0.303 ppbv m
RT: 2.043 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 59 Resp: 8174

Ion	Ratio	Lower	Upper
59	100		
57	16.8	8.7	13.1#





#19
Isopropyl Alcohol
Concen: 28.261 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

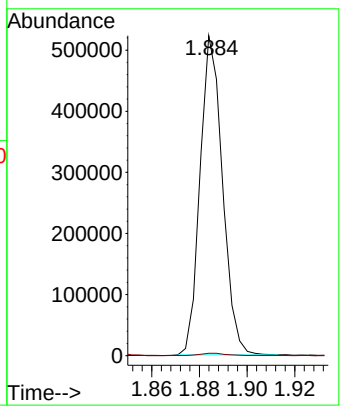
Tgt Ion: 45 Resp: 34184

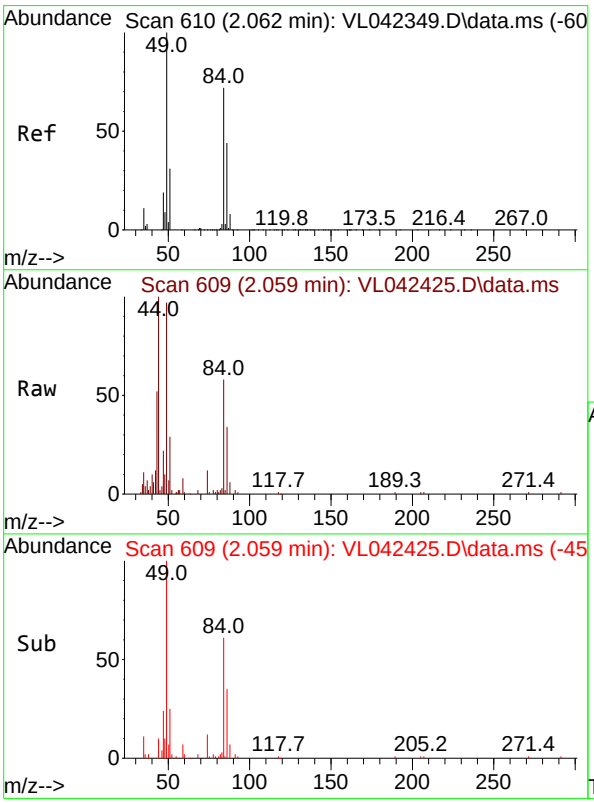
Ion	Ratio	Lower	Upper
45	100		
58	1.1	34.5	51.7

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

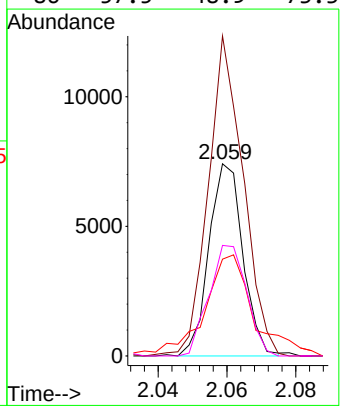


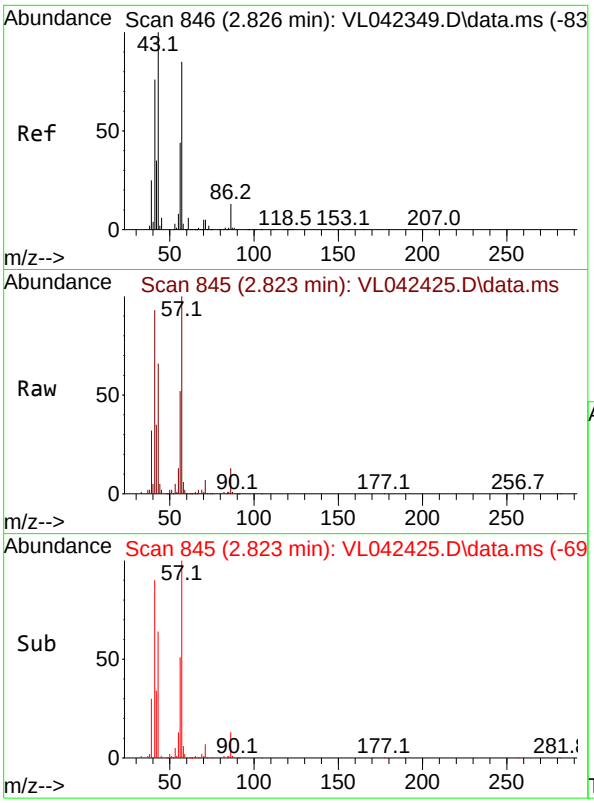


#20
Methylene Chloride
Concen: 0.595 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 84 Resp: 5072

Ion	Ratio	Lower	Upper
84	100		
49	165.2	111.6	167.4
51	44.3	35.1	52.7
86	57.5	48.9	73.3

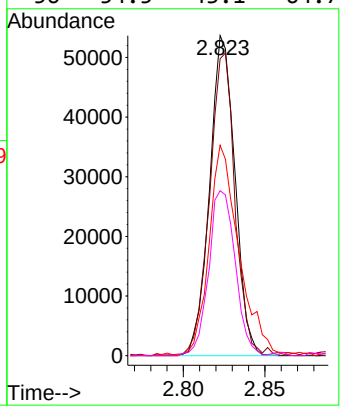




#26
Hexane
Concen: 2.667 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 57 Resp: 5794

Ion	Ratio	Lower	Upper
57	100		
41	96.5	77.9	116.9
43	79.5	208.4	312.6#
56	54.5	43.1	64.7



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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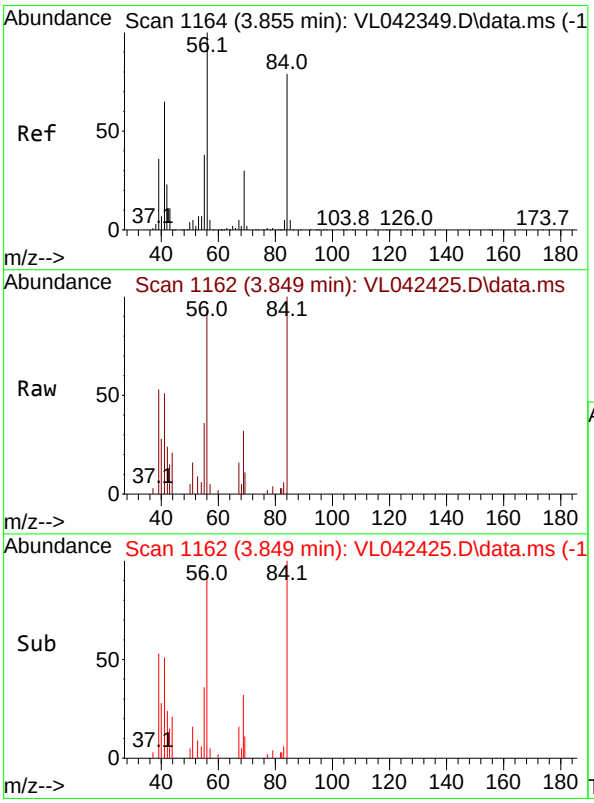
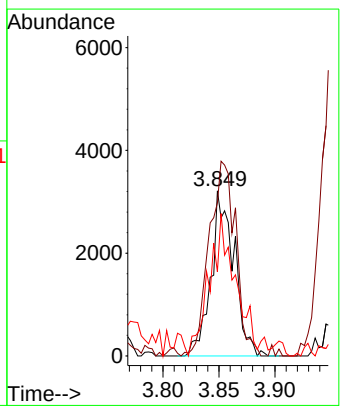
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

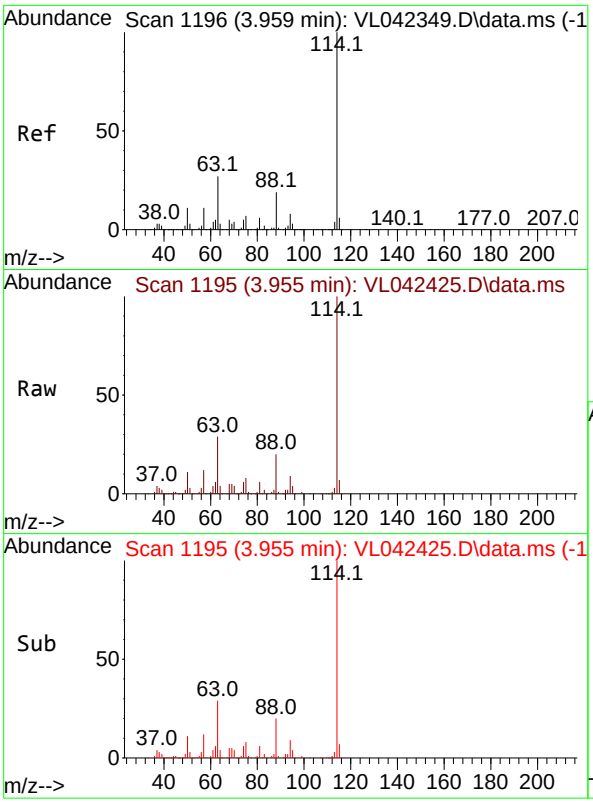


#30
Cyclohexane
Concen: 0.263 ppbv m
RT: 3.849 min Scan# 1162
Delta R.T. -0.006 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 84 Resp: 4624

Ion	Ratio	Lower	Upper
84	100		
56	0.0	101.0	151.4#
41	0.0	67.4	101.0#

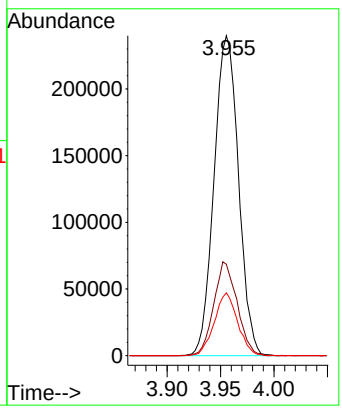




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:114 Resp: 38193

Ion	Ratio	Lower	Upper
114	100		
63	28.1	21.8	32.6
88	18.8	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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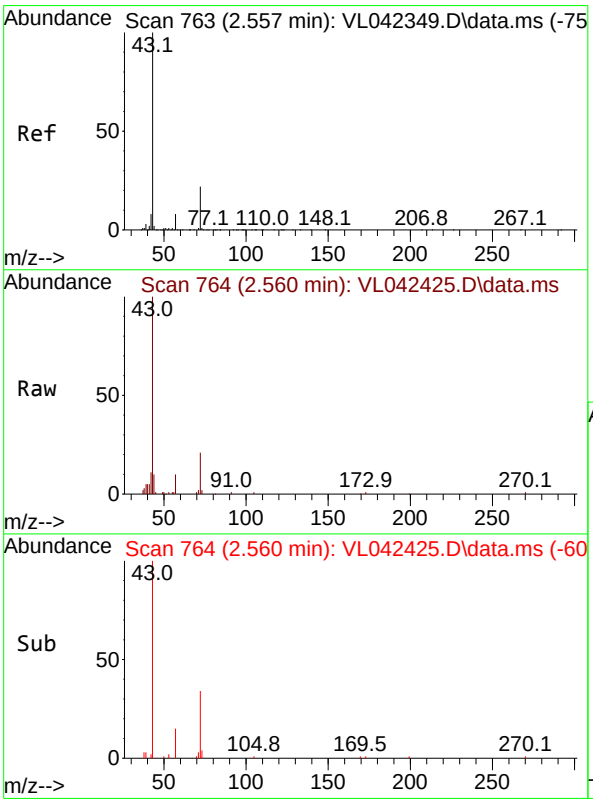
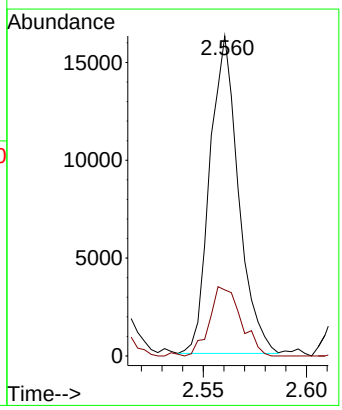
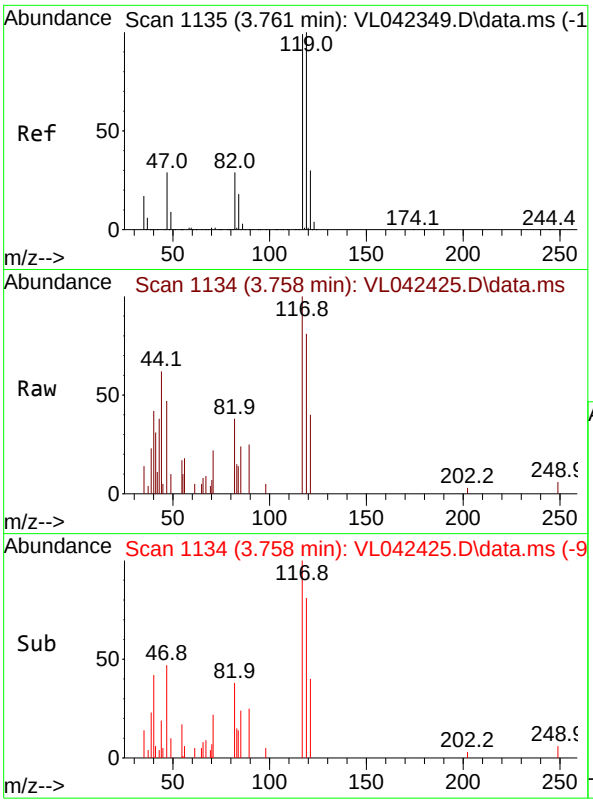


#34
2-Butanone
Concen: 0.518 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 15646

Ion	Ratio	Lower	Upper
43	100		
72	23.9	18.2	27.2

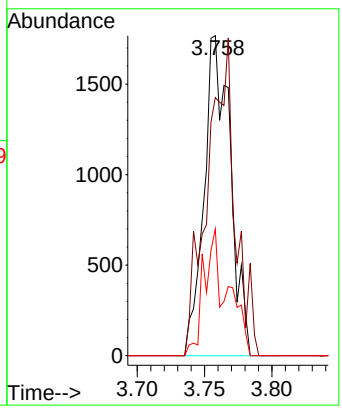




#35
Carbon Tetrachloride
Concen: 0.070 ppbv m
RT: 3.758 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:117 Resp: 240

Ion	Ratio	Lower	Upper
117	100		
119	80.7	80.5	120.7
121	39.6	24.2	36.2#



Instrument :
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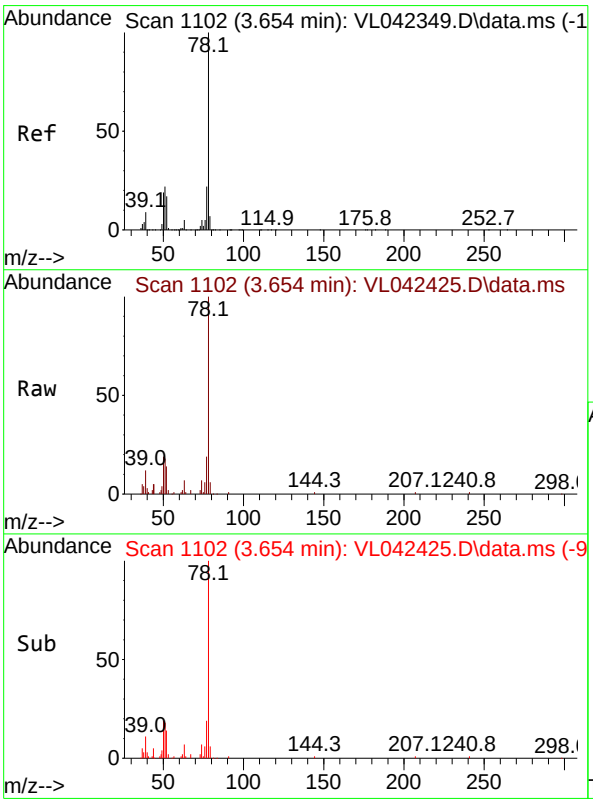
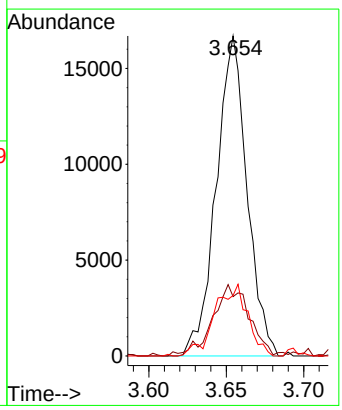
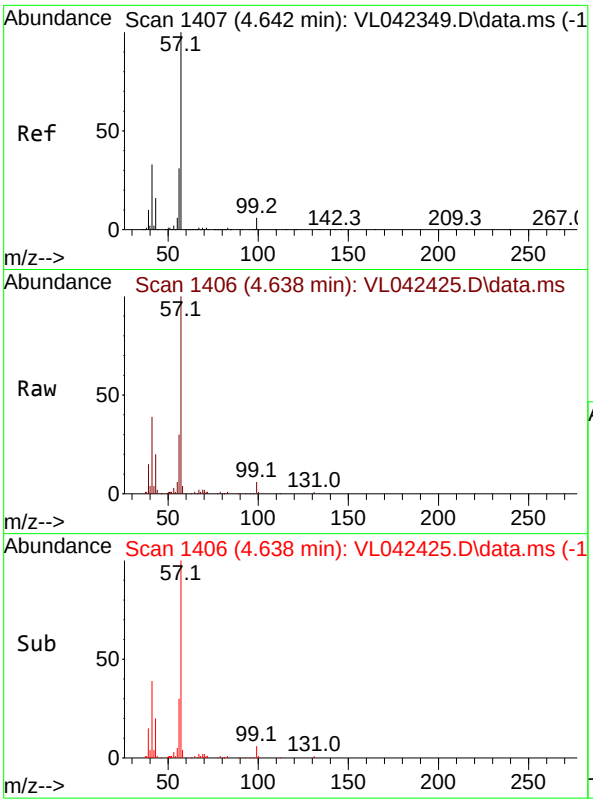


#36
Benzene
Concen: 0.562 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 78 Resp: 23147

Ion	Ratio	Lower	Upper
78	100		
77	17.7	17.4	26.0
50	18.9	15.5	23.3

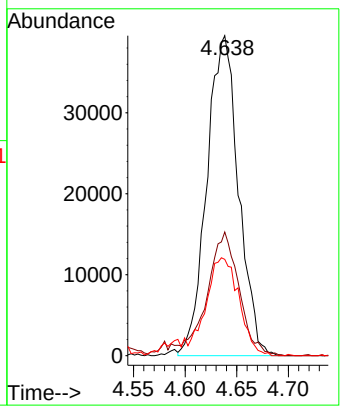




#44
2,2,4-Trimethylpentane
Concen: 1.186 ppbv
RT: 4.638 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 57 Resp: 8439

Ion	Ratio	Lower	Upper
57	100		
41	40.9	27.2	40.8
56	35.2	25.7	38.5



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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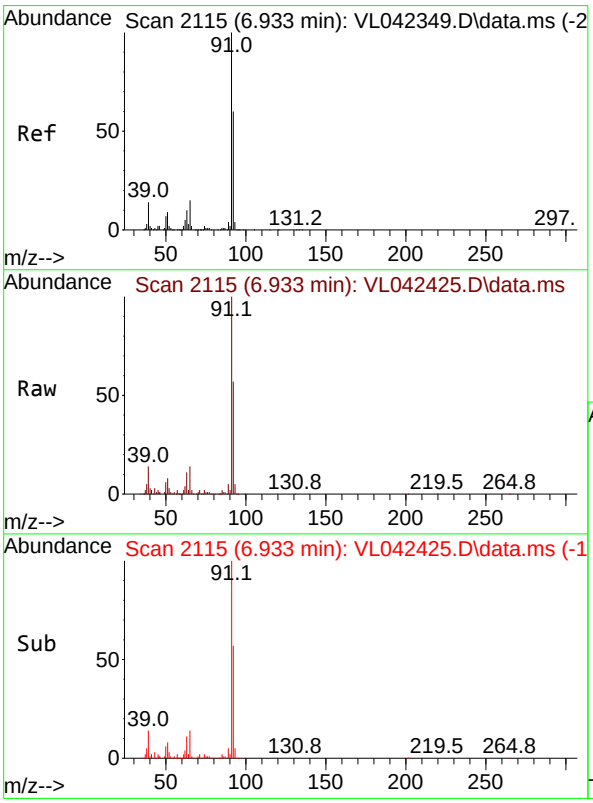
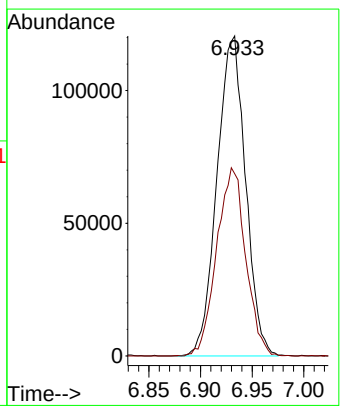
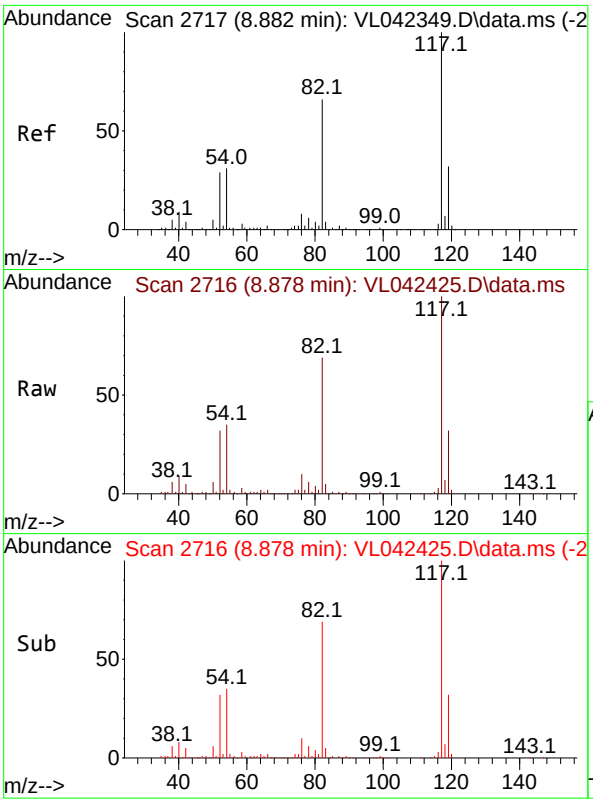


#53
Toluene
Concen: 4.695 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 232100

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4

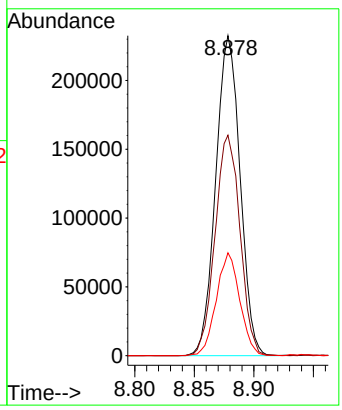




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:117 Resp: 33069

Ion	Ratio	Lower	Upper
117	100		
82	70.5	57.8	86.6
119	31.0	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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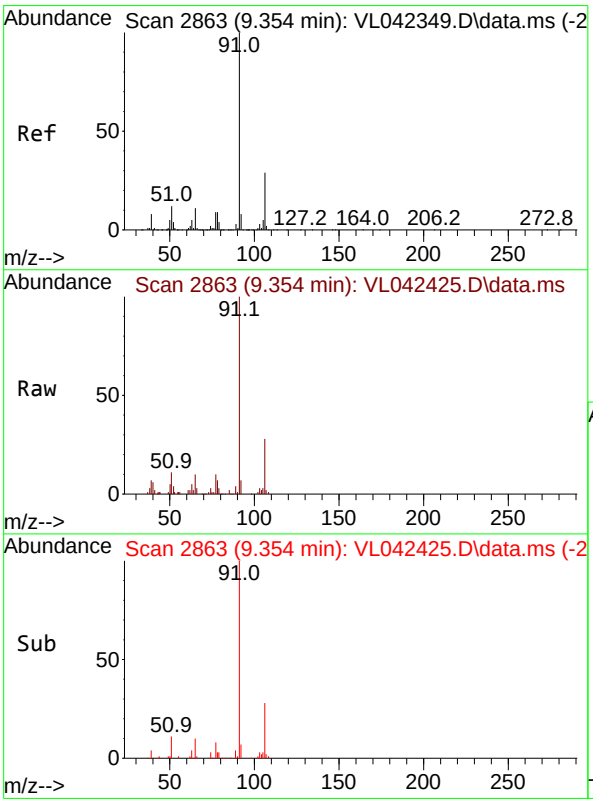
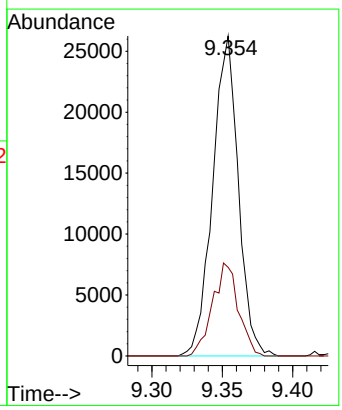
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

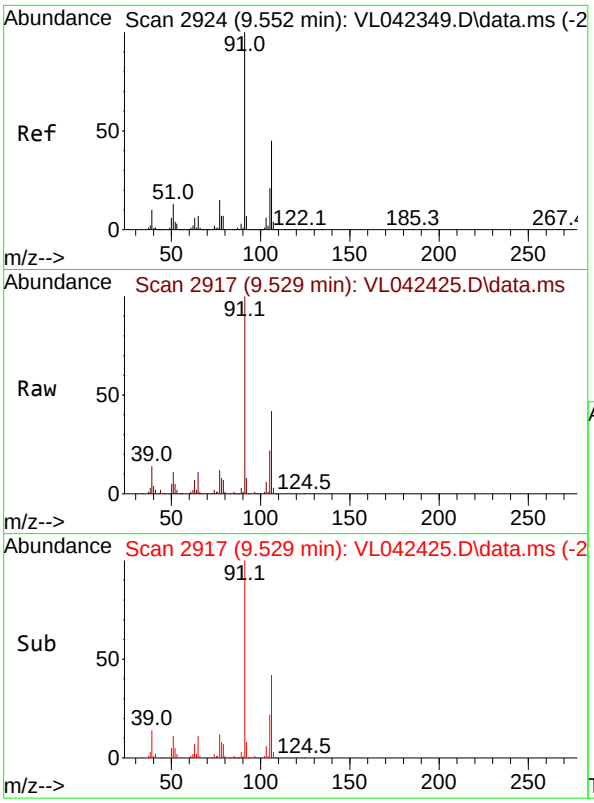


#58
Ethyl Benzene
Concen: 0.508 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 33267

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.0	34.4





#59
m/p-Xylene
Concen: 1.750 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 9234

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Manual Integrations
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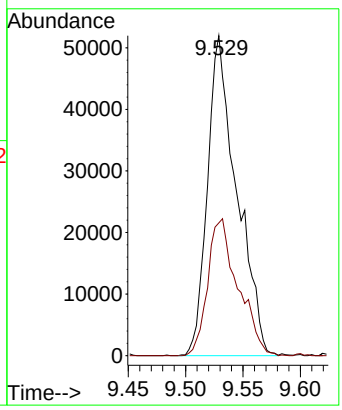
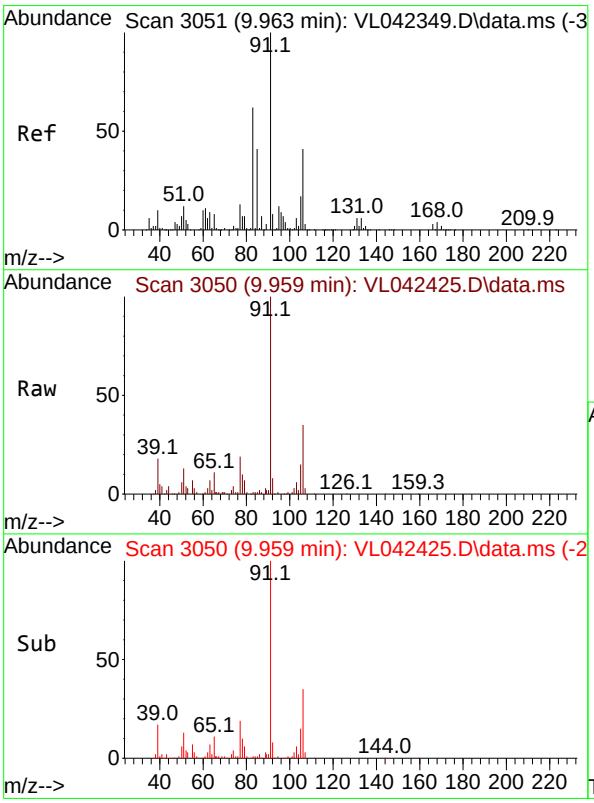
Supervised By :Mahesh Dadoda 04/30/2025

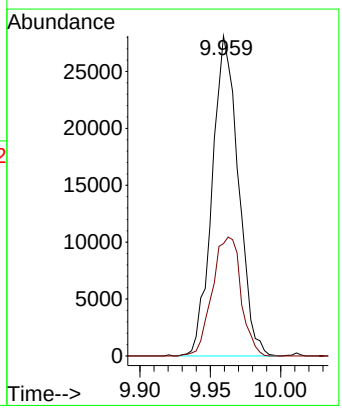


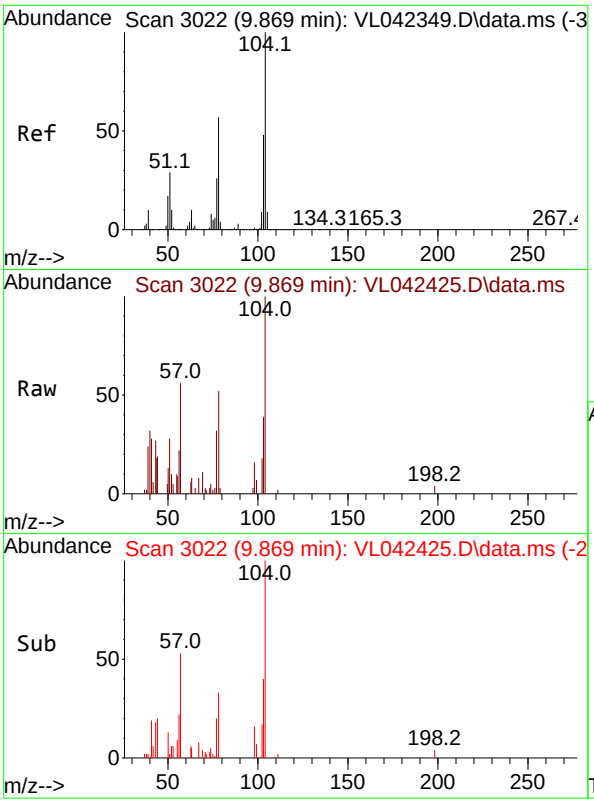


#60
o-Xylene
Concen: 0.688 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 36544

Ion	Ratio	Lower	Upper
91	100		
106	40.5	21.1	63.4





#61
Styrene
Concen: 0.141 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:104 Resp: 358

Ion	Ratio	Lower	Upper
104	100		
78	48.8	44.6	66.8
103	41.0	37.4	56.0

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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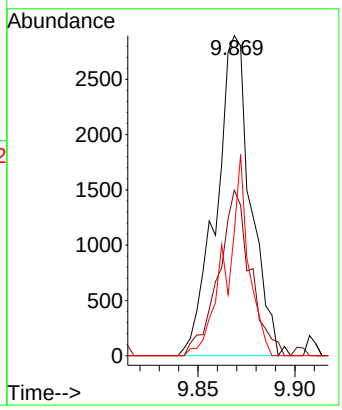
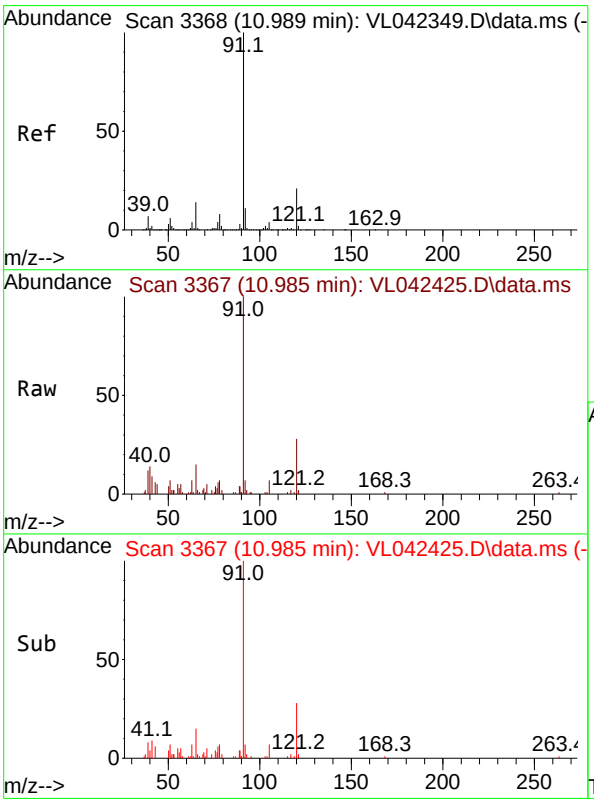
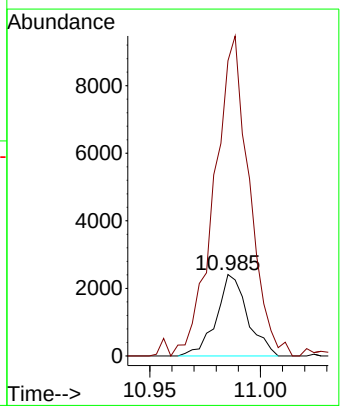


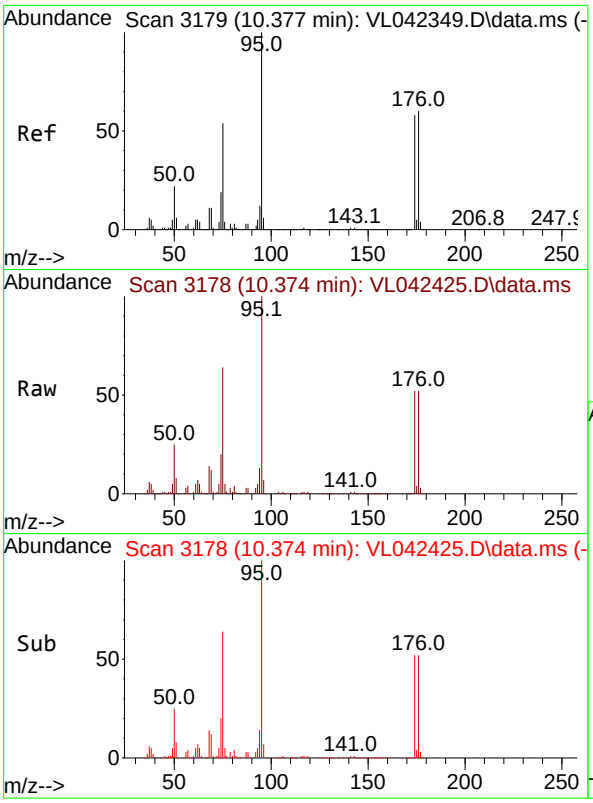


#64
n-propylbenzene
Concen: 0.120 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:120 Resp: 2357

Ion	Ratio	Lower	Upper
120	100		
91	452.8	392.4	588.6

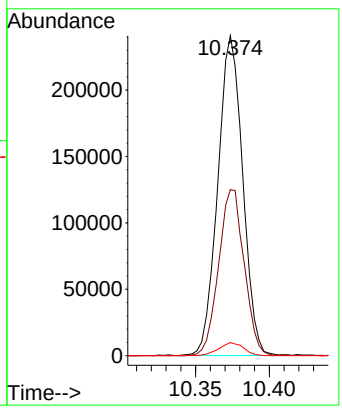




#68
1-Bromo-4-Fluorobenzene
Concen: 10.401 ppbv
RT: 10.374 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 95 Resp: 28264

Ion	Ratio	Lower	Upper
95	100		
174	53.4	48.5	72.7
175	4.1	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
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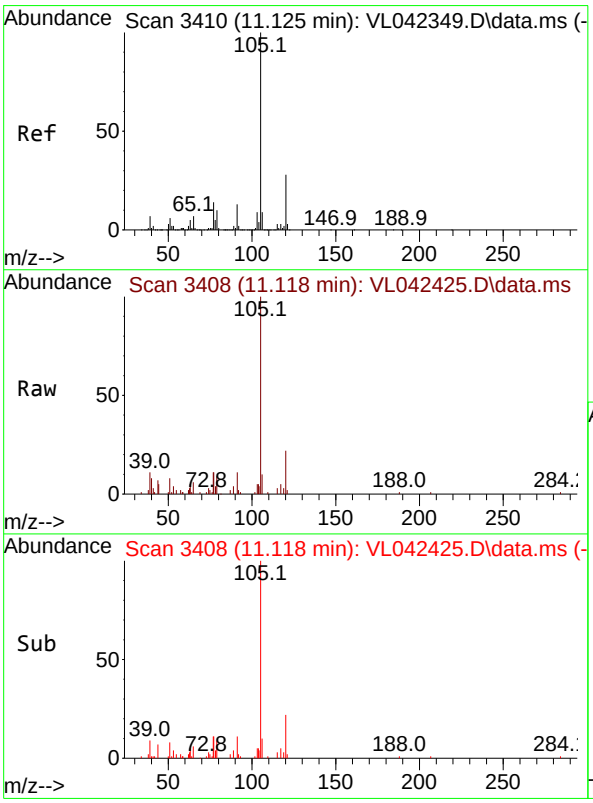
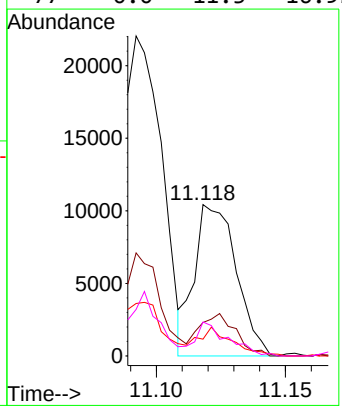
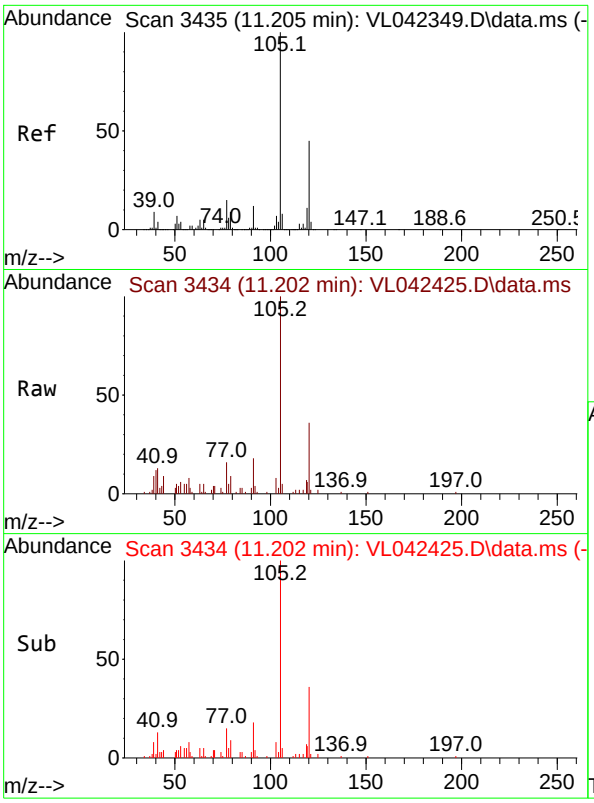


#72
4-Ethyltoluene
Concen: 0.182 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.007 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:105 Resp: 11801

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#





#73
1,3,5-Trimethylbenzene
Concen: 0.186 ppbv
RT: 11.202 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:105 Resp: 1064

Ion	Ratio	Lower	Upper
105	100		
120	36.6	35.6	53.4

Instrument :
MSVOA_L
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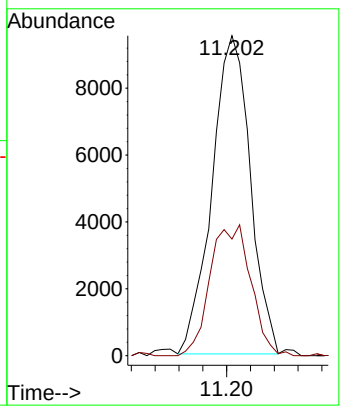
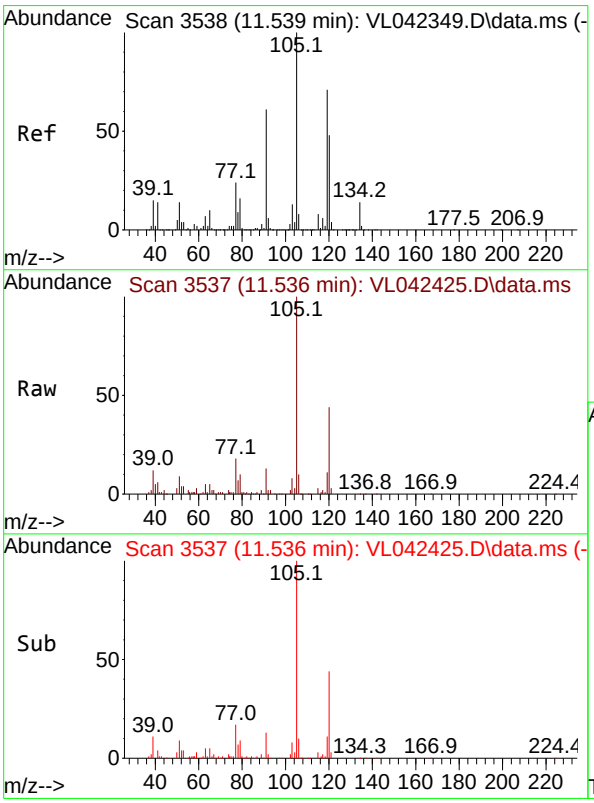
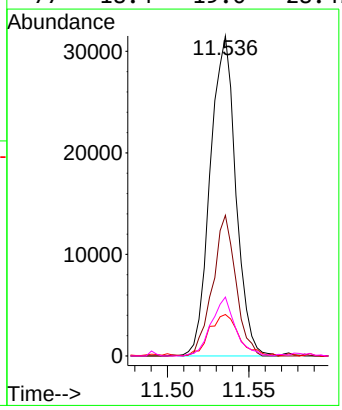




#74
1,2,4-Trimethylbenzene
Concen: 0.512 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:105 Resp: 34307

Ion	Ratio	Lower	Upper
105	100		
120	44.0	38.1	57.1
91	13.0	48.8	73.2#
77	18.4	19.0	28.4#



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042425.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	420	rBV	4482212	5135429	100.00%	33.531%
2	1.486	427	432	434	rBV3	114243	65451	1.27%	0.427%
3	1.557	450	454	459	rBV	392491	212777	4.14%	1.389%
4	1.619	470	473	478	rVB	183387	106932	2.08%	0.698%
5	1.719	500	504	510	rBV	1184701	722250	14.06%	4.716%
6	1.835	535	540	549	rBV2	720522	622291	12.12%	4.063%
7	1.884	549	555	568	rVV	849343	577036	11.24%	3.768%
8	1.962	574	579	584	rBV2	111978	76967	1.50%	0.503%
9	2.470	731	736	743	rVB	85106	89097	1.73%	0.582%
10	2.622	777	783	793	rVB3	58541	61796	1.20%	0.403%
11	2.787	825	834	840	rBV	503882	529937	10.32%	3.460%
12	2.823	840	845	858	rVB2	241748	277679	5.41%	1.813%
13	3.227	962	970	978	rVB2	45399	60561	1.18%	0.395%
14	3.654	1087	1102	1109	rBV4	41033	72508	1.41%	0.473%
15	3.955	1183	1195	1211	rBV	674451	1069178	20.82%	6.981%
16	4.049	1214	1224	1232	rBV2	46905	82164	1.60%	0.536%
17	4.263	1278	1290	1303	rBV5	65234	130961	2.55%	0.855%
18	4.638	1393	1406	1425	rVB2	99200	221642	4.32%	1.447%
19	4.975	1498	1510	1523	rVB4	39478	81903	1.59%	0.535%
20	6.826	2080	2082	2097	rVV5	45571	68671	1.34%	0.448%
21	6.930	2099	2114	2133	rVB3	333234	709144	13.81%	4.630%
22	7.687	2338	2348	2365	rVB4	80559	141385	2.75%	0.923%
23	8.299	2529	2537	2551	rVB10	38974	82307	1.60%	0.537%
24	8.878	2701	2716	2726	rBV2	860002	1263575	24.61%	8.250%
25	9.354	2854	2863	2874	rBV	63902	96513	1.88%	0.630%
26	9.529	2908	2917	2933	rVB3	150413	282843	5.51%	1.847%
27	9.959	3036	3050	3064	rBV3	89900	159657	3.11%	1.042%
28	10.374	3163	3178	3190	rBV	1135230	1374713	26.77%	8.976%
29	10.856	3318	3327	3335	rBV2	149165	171668	3.34%	1.121%
30	11.092	3392	3400	3405	rBV	66859	74429	1.45%	0.486%
31	11.532	3528	3536	3546	rVB	96734	123135	2.40%	0.804%
32	11.752	3598	3604	3606	rBV2	69225	70508	1.37%	0.460%
33	11.775	3606	3611	3619	rVB2	200288	234316	4.56%	1.530%
34	12.040	3686	3693	3702	rVB6	58535	69678	1.36%	0.455%
35	12.827	3929	3936	3942	rBV2	85196	87925	1.71%	0.574%
36	13.384	4101	4108	4115	rVB2	106361	108457	2.11%	0.708%

LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

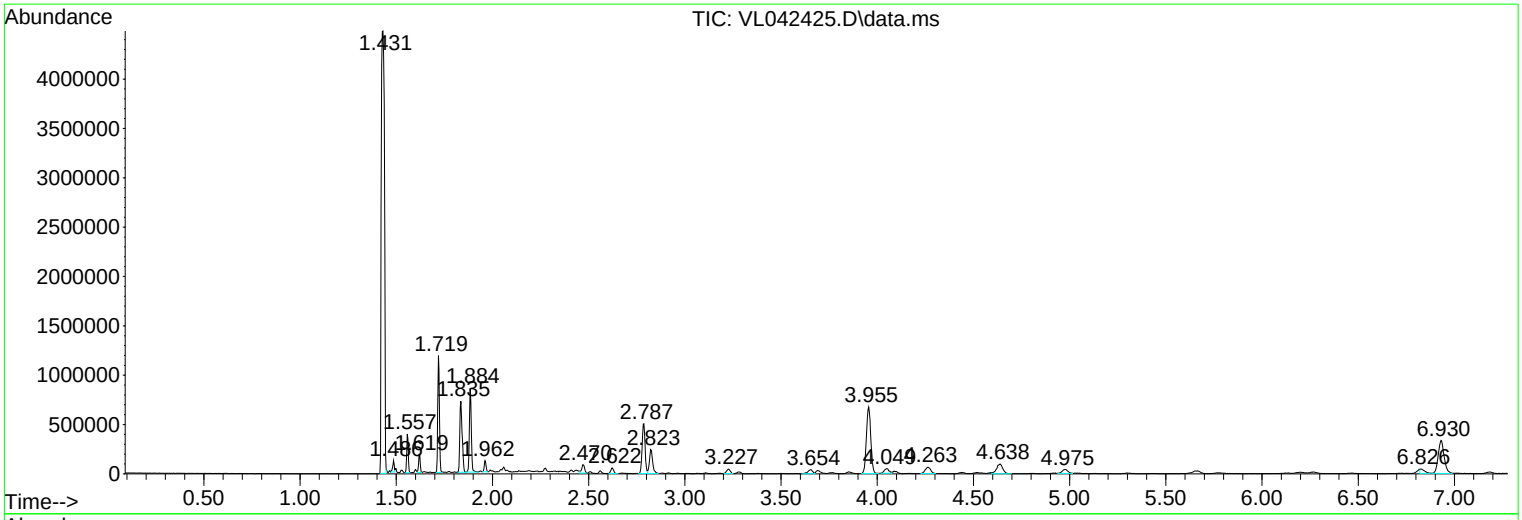
Sum of corrected areas: 15315483

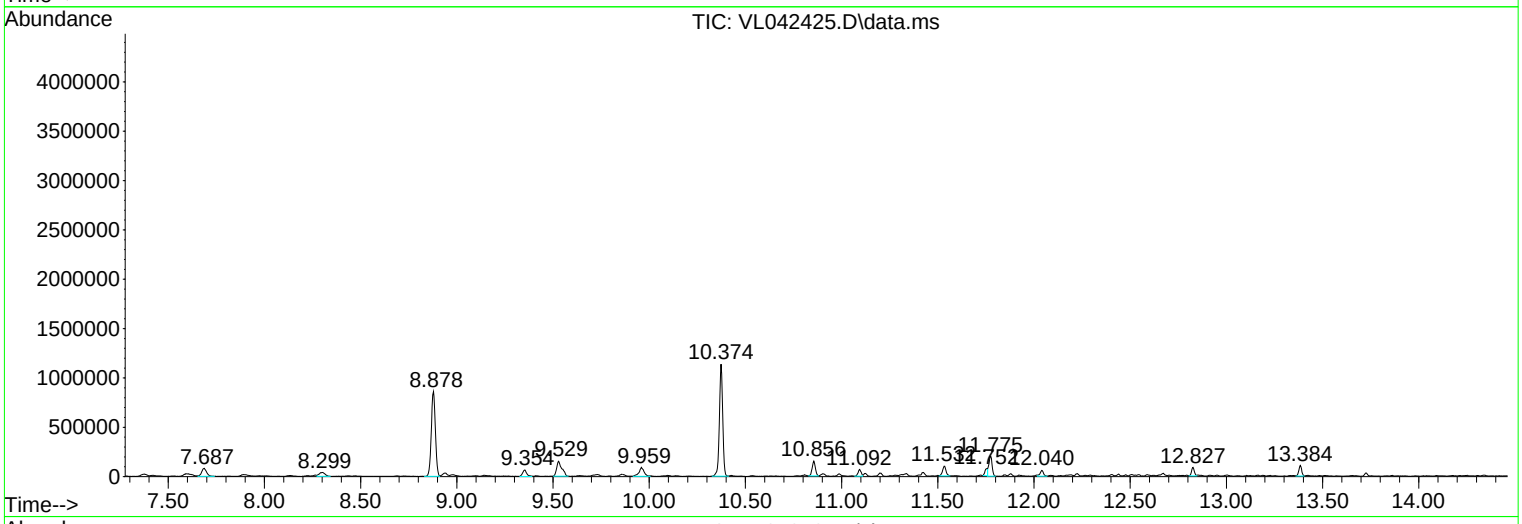
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

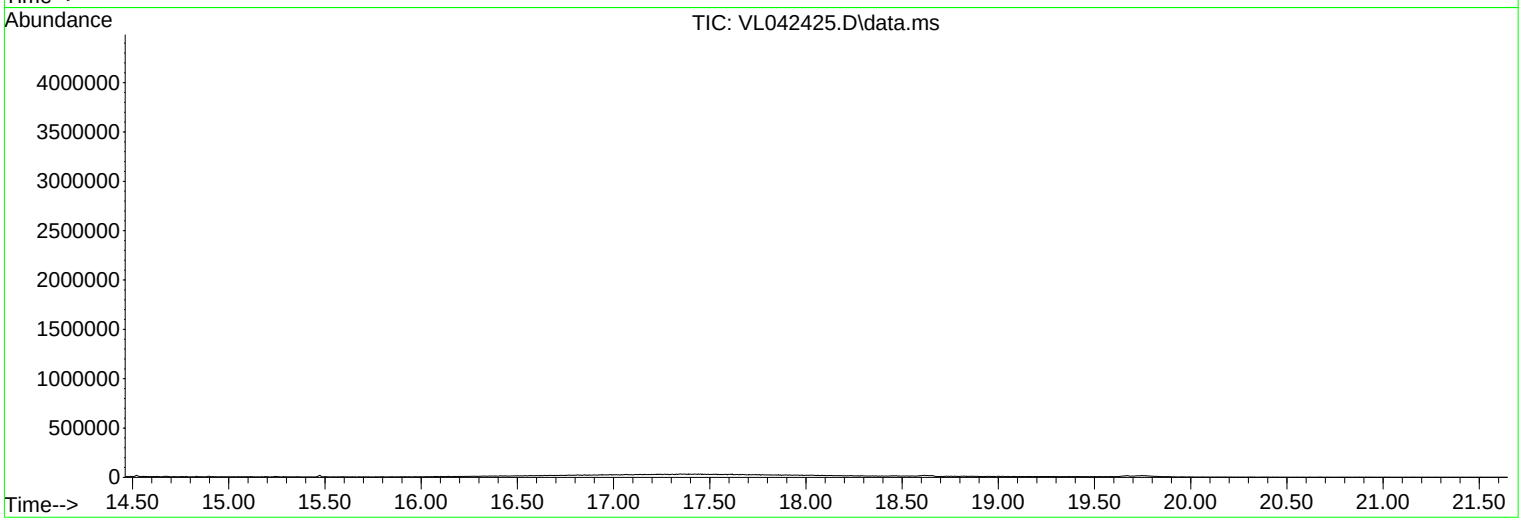
Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

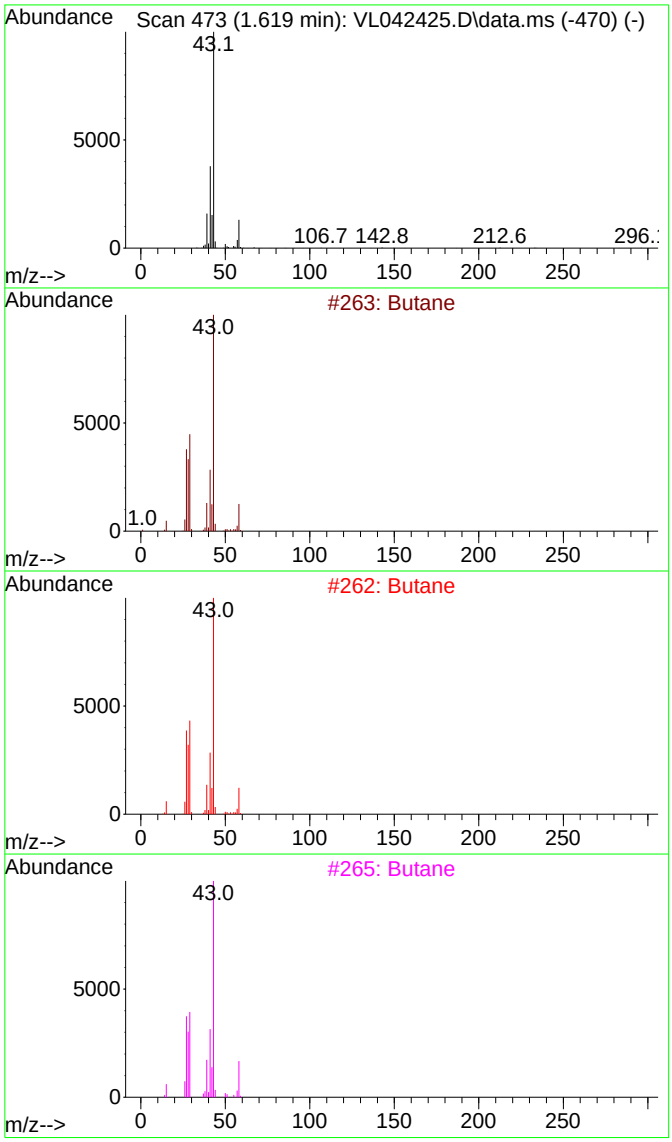
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

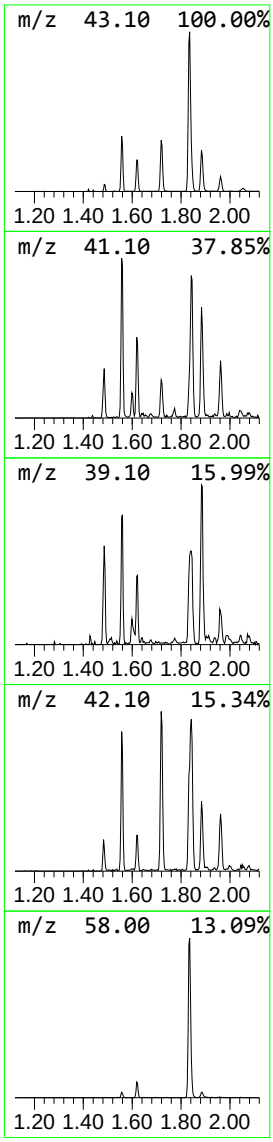
****

Peak Number 1 Butane Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.619	2.02 ppbv	106932	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Butane	58	C4H10	000106-97-8	86
2	Butane	58	C4H10	000106-97-8	86
3	Butane	58	C4H10	000106-97-8	72
4	Butane	58	C4H10	000106-97-8	72
5	Isobutane	58	C4H10	000075-28-5	32





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

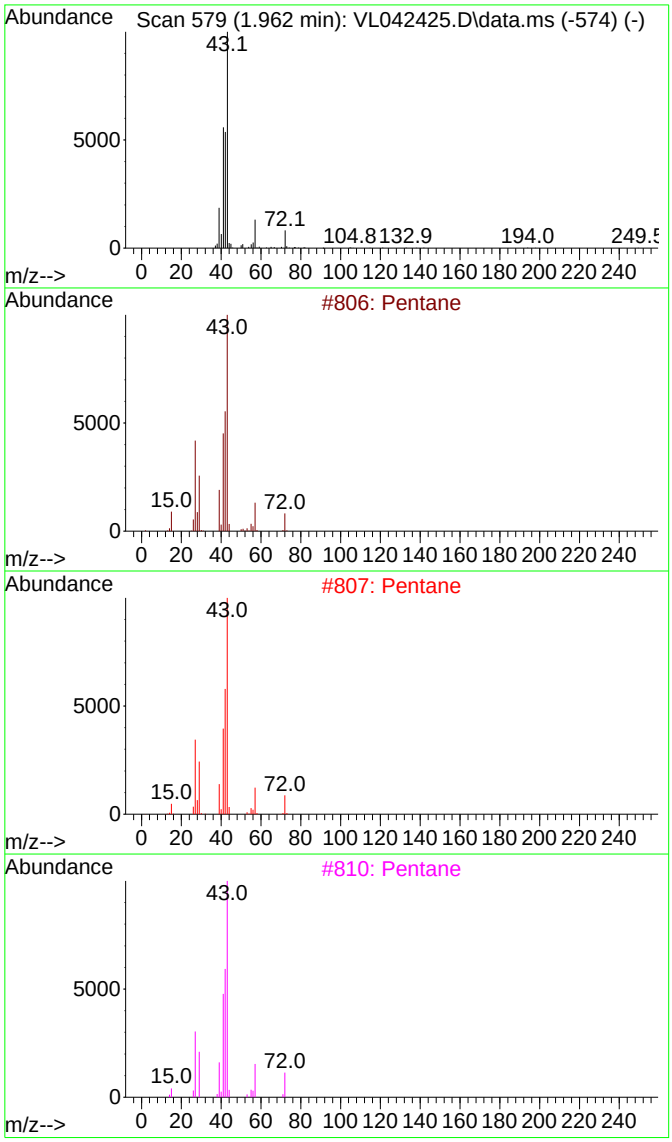
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

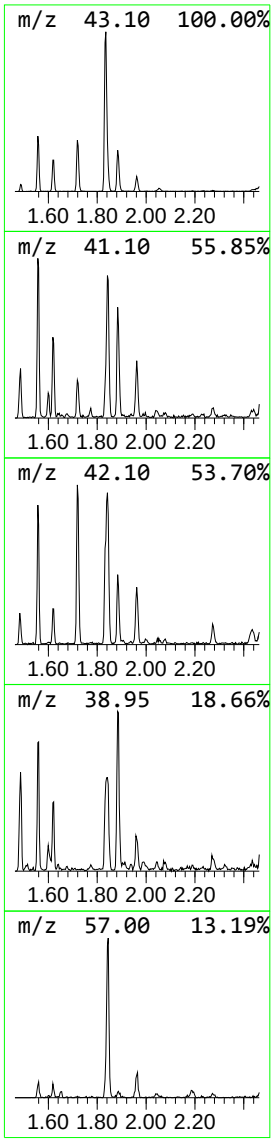
****

Peak Number 2 Pentane Concentration Rank 4

R.T.	EstConc	Area	Relative to ISTD	R.T.
1.962	1.45 ppbv	76967	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane	72	C5H12	000109-66-0	78
2	Pentane	72	C5H12	000109-66-0	72
3	Pentane	72	C5H12	000109-66-0	72
4	Pentane	72	C5H12	000109-66-0	59
5	Oxirane, ethyl-	72	C4H8O	000106-88-7	53





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

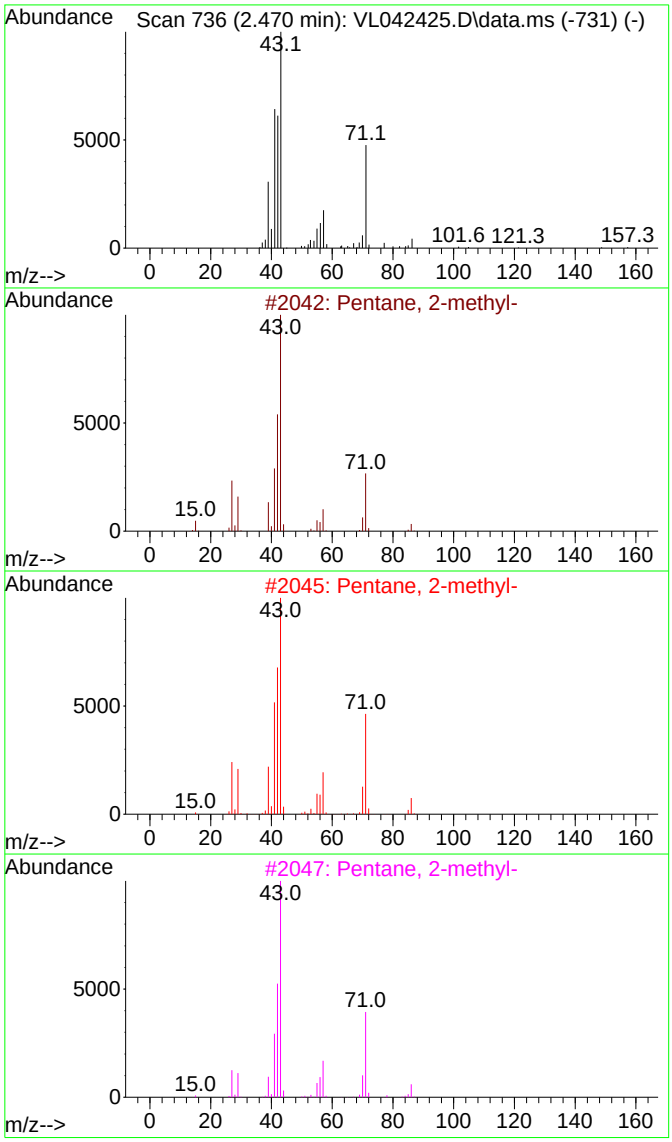
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

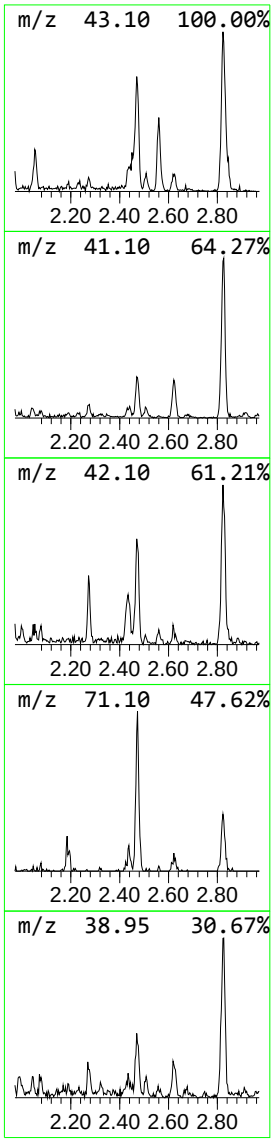
****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.470	1.68 ppbv	89097	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
2	Pentane, 2-methyl-	86	C6H14	000107-83-5	78
3	Pentane, 2-methyl-	86	C6H14	000107-83-5	72
4	Pentane, 2-methyl-	86	C6H14	000107-83-5	64
5	Pentane, 2-methyl-	86	C6H14	000107-83-5	59





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

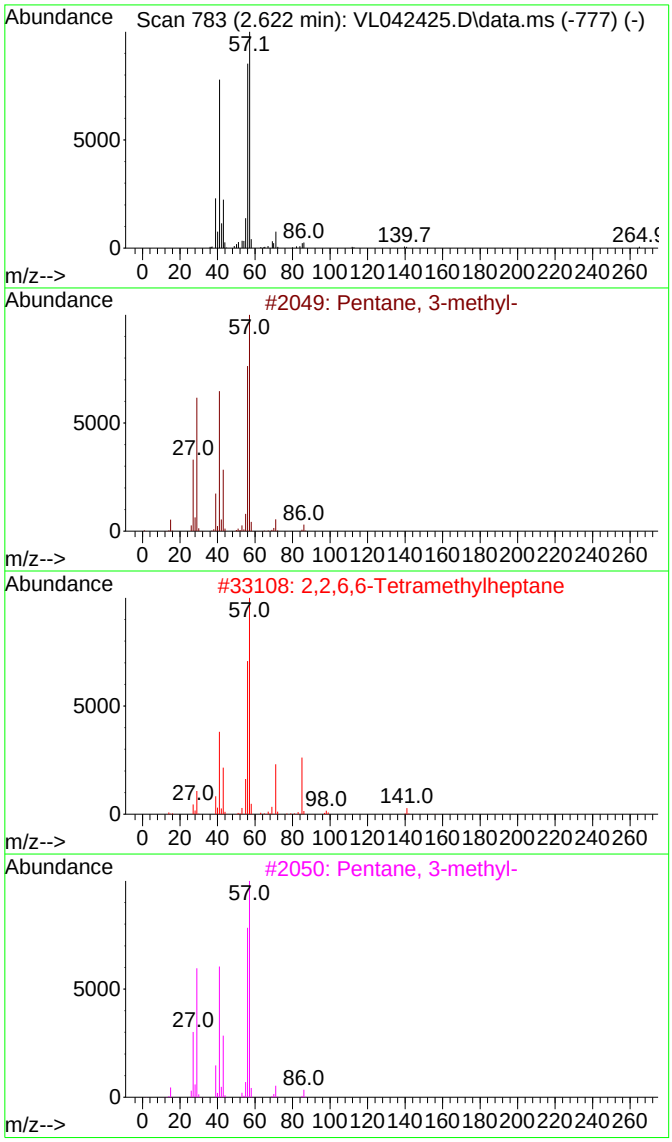
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

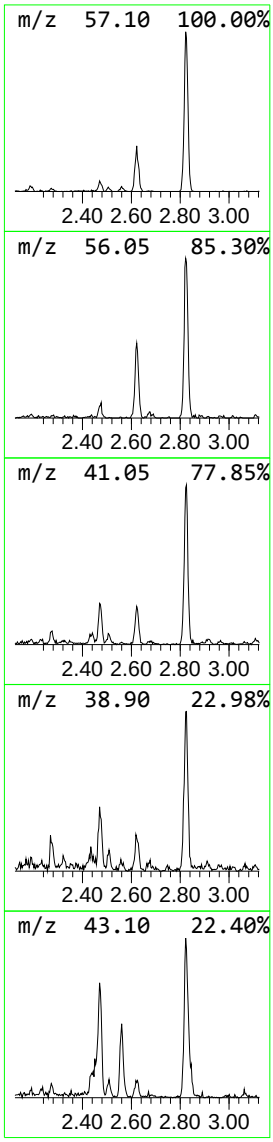
****

Peak Number 4 Pentane, 3-methyl- Concentration Rank 7

R.T.	EstConc	Area	Relative to ISTD	R.T.
2.622	1.17 ppbv	61796	Bromochloromethane	2.784

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Pentane, 3-methyl-	86	C6H14	000096-14-0	86
2	2,2,6,6-Tetramethylheptane	156	C11H24	040117-45-1	72
3	Pentane, 3-methyl-	86	C6H14	000096-14-0	72
4	Pentane, 3-methyl-	86	C6H14	000096-14-0	64
5	Oxirane, 2-methyl-3-(1-methyleth...	100	C6H12O	001192-31-0	64





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

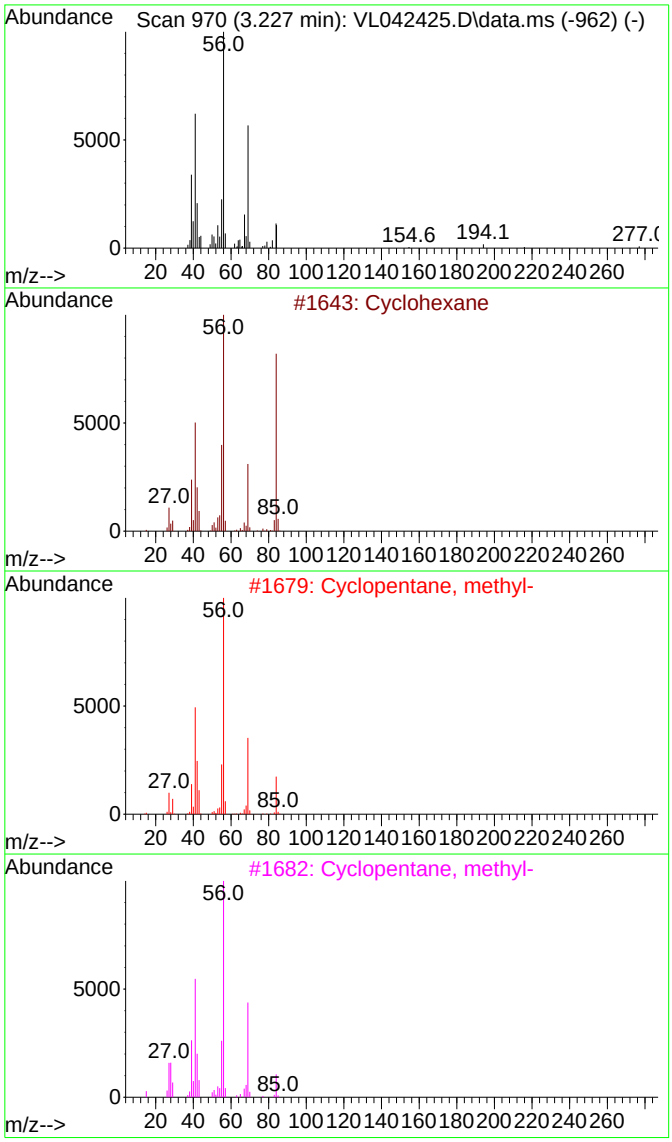
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

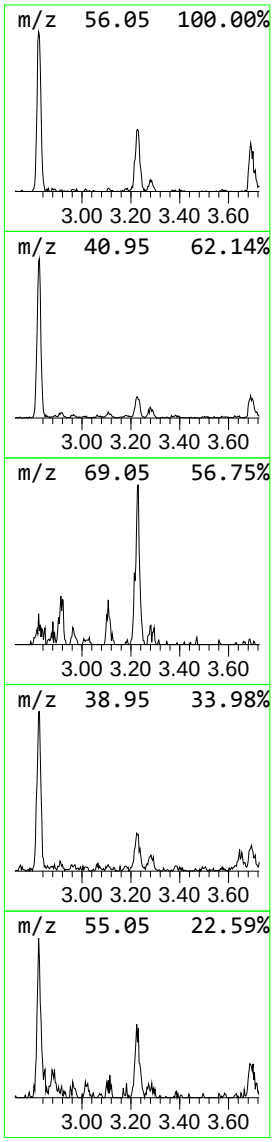
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

****
Peak Number 5 Cyclopentane, methyl- Concentration Rank 8

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.227	1.14 ppbv	60561	Bromochloromethane	2.784

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





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

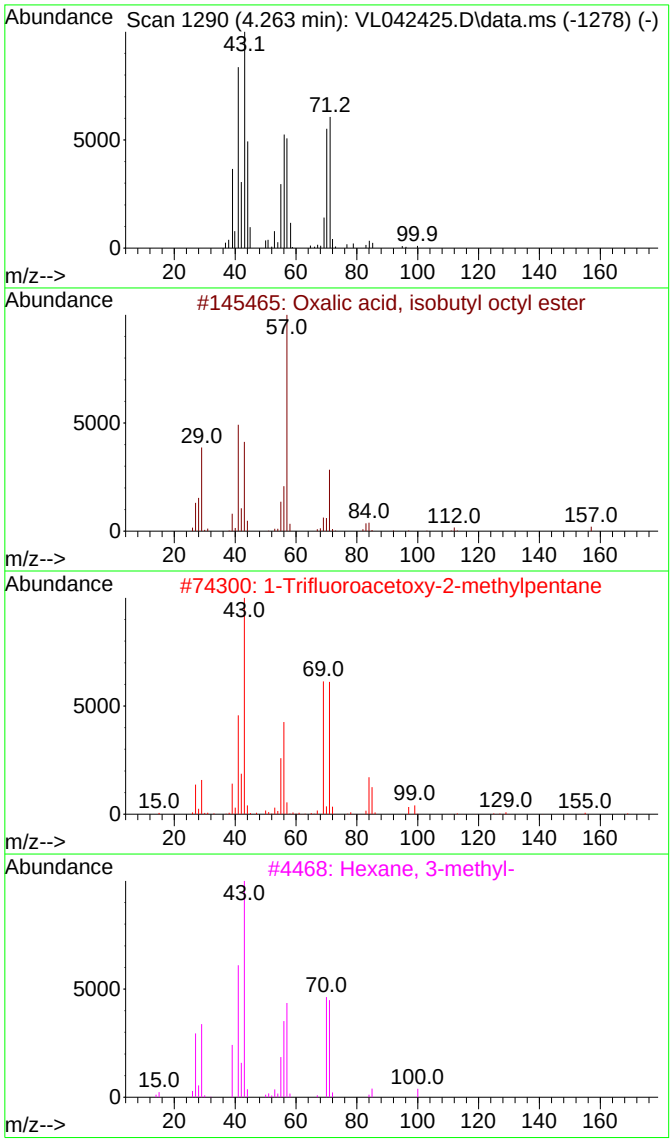
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

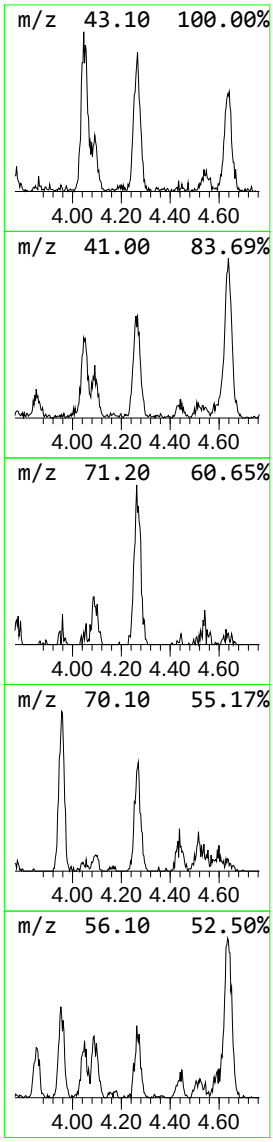
****

Peak Number 6 unknown4.263 Concentration Rank 6

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.263	1.22 ppbv	130961	1,4-Difluorobenzene	3.955

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Oxalic acid, isobutyl octyl ester	258	C14H26O4	1000309-37-3	47
2	1-Trifluoroacetoxy-2-methylpentane	198	C8H13F3O2	155089-96-6	43
3	Hexane, 3-methyl-	100	C7H16	000589-34-4	42
4	Hexane, 3-methyl-	100	C7H16	000589-34-4	40
5	Hexane, 3-ethyl-4-methyl-	128	C9H20	003074-77-9	37





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

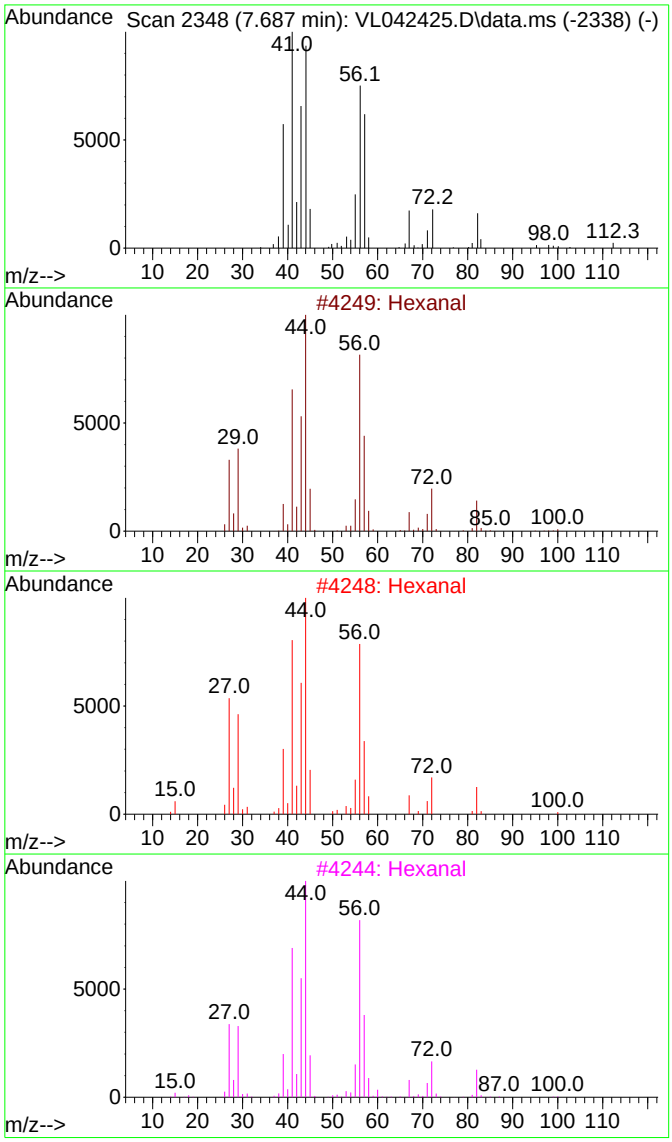
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

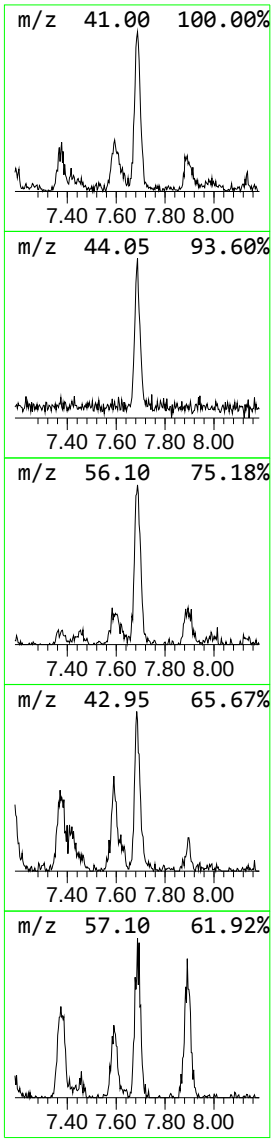
****

Peak Number 7 Hexanal Concentration Rank 9

R.T.	EstConc	Area	Relative to ISTD	R.T.
7.687	1.12 ppbv	141385	Chlorobenzene-d5	8.878

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Hexanal	100	C6H12O	000066-25-1	74
2	Hexanal	100	C6H12O	000066-25-1	45
3	Hexanal	100	C6H12O	000066-25-1	45
4	Hexanal	100	C6H12O	000066-25-1	40
5	1-Propene, 2-methyl-	56	C4H8	000115-11-7	35





Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

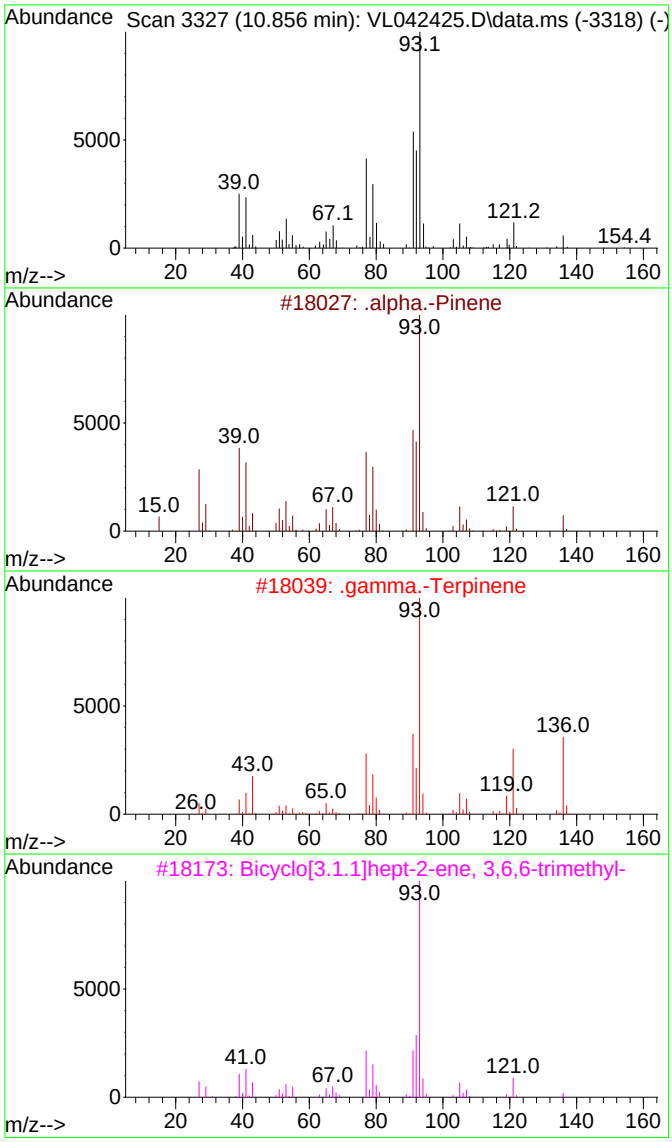
TIC Library : C:\Database\NIST20.L
TIC Integration Parameters: LSCINT.P

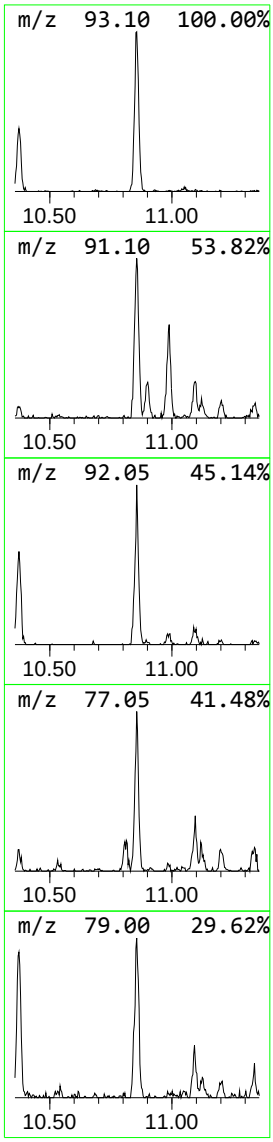
****

Peak Number 8 .alpha.-Pinene Concentration Rank 5

R.T.	EstConc	Area	Relative to ISTD	R.T.
10.856	1.36 ppbv	171668	Chlorobenzene-d5	8.878

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	.alpha.-Pinene	136	C10H16	000080-56-8	94
2	.gamma.-Terpinene	136	C10H16	000099-85-4	90
3	Bicyclo[3.1.1]hept-2-ene, 3,6,6-...	136	C10H16	004889-83-2	87
4	.gamma.-Terpinene	136	C10H16	000099-85-4	87
5	(1S)-2,6,6-Trimethylbicyclo[3.1....	136	C10H16	007785-26-4	86





Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc
Butane	1.619	2.0	ppbv	106932	1	2.784	529937	10.0
Pentane	1.962	1.5	ppbv	76967	1	2.784	529937	10.0
Pentane, 2-methyl-	2.470	1.7	ppbv	89097	1	2.784	529937	10.0
Pentane, 3-methyl-	2.622	1.2	ppbv	61796	1	2.784	529937	10.0
Cyclopentane, m...	3.227	1.1	ppbv	60561	1	2.784	529937	10.0
unknown4.263	4.263	1.2	ppbv	130961	2	3.955	1069180	10.0
Hexanal	7.687	1.1	ppbv	141385	3	8.878	1263580	10.0
.alpha.-Pinene	10.856	1.4	ppbv	171668	3	8.878	1263580	10.0

CALIBRATION SUMMARY

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042177.D 0.1 =VL042176.D 0.5 =VL042175.D 1 =VL042174.D 2 =VL042173.D 10 =VL042172.D 15 =VL042178.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.602	1.514	1.482	1.404	1.380	1.476	6.03
3)		Chlorodifluoro...			1.622	1.541	1.514	1.457	1.408	1.508	5.41
4)		Chloromethane			0.660	0.597	0.618	0.573	0.570	0.603	6.17
5)	T	Vinyl Chloride	0.882	0.705	0.635	0.576	0.584	0.549	0.546	0.639	18.84
6)	T	Bromomethane			0.327	0.268	0.266	0.256	0.250	0.273	11.20
7)		Chloroethane			0.286	0.248	0.223	0.227	0.226	0.242	10.92
8)	T	Dichlorotetraf...			1.306	1.283	1.274	1.214	1.211	1.257	3.40
9)	T	Propene			0.734	0.736	0.698	0.660	0.630	0.691	6.69
10)	T	Heptane			1.847	1.940	1.897	1.792	1.719	1.839	4.73
11)	T	Trichlorofluor...			1.562	1.457	1.480	1.339	1.346	1.437	6.59
12)	T	1,1,2-Trichlor...			1.247	1.215	1.188	1.120	1.135	1.181	4.52
13)		Ethanol			0.110	0.086	0.073	0.029	0.028	0.065	55.48
14)	T	Bromoethene			0.529	0.447	0.460	0.417	0.409	0.452	10.47
15)	T	Acetone			1.699	1.573	1.469	1.113	1.139	1.399	18.73
16)	T	1,3-Butadiene			0.952	0.705	0.608	0.573	0.577	0.683	23.38
17)		tert-Butyl alc...			1.935	1.799	1.756	1.618	1.601	1.742	7.91
18)	T	1,1-Dichloroet...			0.624	0.565	0.560	0.504	0.507	0.552	8.99
19)	T	Isopropyl Alcohol			1.016	0.800	0.738	0.702	0.689	0.789	16.99
20)	T	Methylene Chlo...			0.624	0.563	0.545	0.438	0.435	0.521	15.85
21)	T	Allyl Chloride			1.067	1.022	1.020	0.902	0.921	0.986	7.25
22)	T	trans-1,2-Dich...			0.704	0.701	0.621	0.590	0.575	0.638	9.56
23)	T	Vinyl Acetate			0.754	0.692	0.550	0.498	0.532	0.605	18.40
24)	T	1,1-Dichloroet...			1.247	1.208	1.187	1.122	1.149	1.183	4.17
25)	T	Ethyl Acetate			4.017	3.619	3.703	3.457	3.353	3.630	7.06
26)	T	Hexane			1.507	1.462	1.383	1.333	1.325	1.402	5.71
27)	T	Carbon Disulfide			1.608	1.512	1.538	1.436	1.423	1.503	5.07
28)	T	Methyl tert-Bu...			0.921	0.886	0.894	0.831	0.832	0.873	4.56
29)	T	Chloroform			2.233	2.068	2.071	1.932	1.956	2.052	5.81
30)	T	Cyclohexane			1.337	1.238	1.211	1.162	1.140	1.217	6.33
31)	T	cis-1,2-Dichlo...			1.507	1.460	1.426	1.371	1.353	1.423	4.44
32)	T	1,1,1-Trichlor...	3.151	2.495	2.279	2.201	2.152	2.062	2.105	2.349	16.23
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.754	0.771	0.770	0.667	0.664	0.725	7.58
35)	T	Carbon Tetrach...	1.069	0.782	0.709	0.732	0.748	0.703	0.725	0.781	16.60
36)	T	Benzene			1.049	1.027	1.013	0.934	0.934	0.991	5.47
37)	T	1,2-Dichloroet...			0.613	0.569	0.563	0.537	0.556	0.568	4.95
38)	T	Trichloroethene	0.463	0.437	0.438	0.408	0.398	0.374	0.378	0.414	8.00
39)	T	1,2-Dichloropr...			0.386	0.373	0.365	0.337	0.344	0.361	5.68

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL032725AIR.M

40)	T	1,4-Dioxane			0.234	0.197	0.191	0.169	0.167	0.192	14.08
41)	T	Tetrahydrofuran			0.439	0.425	0.432	0.398	0.393	0.418	4.98
42)	T	Bromodichlorom...			0.778	0.779	0.802	0.769	0.785	0.782	1.58
43)		Methyl Methacr...			0.442	0.451	0.408	0.403	0.394	0.420	6.03
44)	T	2,2,4-Trimethy...			1.781	1.689	1.723	1.608	1.576	1.675	5.00
45)	T	t-1,3-Dichloro...			0.474	0.447	0.453	0.439	0.440	0.450	3.15
46)	T	cis-1,3-Dichlo...			0.549	0.560	0.566	0.550	0.535	0.552	2.12
47)	T	1,1,2-Trichlor...			0.419	0.382	0.379	0.364	0.365	0.382	5.88
48)	T	Dibromochlorom...			0.651	0.641	0.663	0.636	0.644	0.647	1.62
49)	T	Bromoform			0.566	0.588	0.597	0.582	0.570	0.581	2.18
50)	T	4-Methyl-2-Pen...			1.286	1.214	1.211	1.027	1.008	1.149	10.79
51)	T	2-Hexanone			0.999	1.018	1.031	0.844	0.827	0.944	10.56
52)	T	Tetrachloroethene	0.572	0.359	0.401	0.361	0.371	0.343	0.345	0.393	20.64
53)	T	Toluene			1.239	1.203	1.202	1.125	1.108	1.175	4.76
54)	T	1,2-Dibromoethane		0.574	0.543	0.538	0.520	0.508	0.510	0.532	4.74
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.576	0.575	0.576	0.510	0.515	0.550	6.30
57)	T	Chlorobenzene			1.024	0.979	0.994	0.875	0.871	0.949	7.46
58)	T	Ethyl Benzene			1.850	1.822	1.894	1.671	1.645	1.776	6.28
59)	T	m/p-Xylene			1.505	1.472	1.484	1.321	1.309	1.418	6.71
60)	T	o-Xylene			1.521	1.475	1.499	1.328	1.287	1.422	7.50
61)	T	Styrene			0.709	0.722	0.735	0.683	0.668	0.703	3.92
62)		Isopropylbenzene			2.290	2.199	2.261	1.962	1.920	2.126	8.14
63)	T	1,1,2,2-Tetrac...	0.986	0.800	0.907	0.889	0.893	0.796	0.777	0.864	8.78
64)		n-propylbenzene			0.578	0.581	0.576	0.499	0.502	0.547	7.81
65)		tert-Butylbenzene			2.190	2.071	2.144	1.736	1.691	1.966	11.96
66)	T	Benzyl Chloride			0.217	0.213	0.221	0.203	0.189	0.209	6.06
67)		sec-Butylbenzene			3.005	2.994	2.947	2.404	2.316	2.733	12.54
68)	S	1-Bromo-4-Fluo...	0.820	0.827	0.832	0.810	0.828	0.813	0.820	0.821	0.98
69)		p-Isopropyltol...			2.554	2.551	2.560	2.078	2.025	2.354	11.74
70)		n-Butylbenzene			2.536	2.598	2.682	2.137	2.082	2.407	11.51
71)		2-Chlorotoluene			1.717	1.728	1.759	1.538	1.510	1.650	7.07
72)	T	4-Ethyltoluene			1.834	1.859	1.929	1.629	1.601	1.770	8.26
73)	T	1,3,5-Trimethy...			1.616	1.671	1.677	1.387	1.381	1.546	9.71
74)	T	1,2,4-Trimethy...			1.994	1.958	1.966	1.510	1.478	1.781	14.74
75)	T	1,3-Dichlorobe...			1.036	1.022	1.063	0.882	0.882	0.977	8.99
76)	T	1,4-Dichlorobe...			1.030	1.017	1.040	0.888	0.886	0.972	8.05
77)	T	1,2-Dichlorobe...			1.012	1.031	1.014	0.850	0.850	0.951	9.78
78)	T	Hexachloro-1,3...			1.057	1.113	1.086	0.802	0.784	0.968	16.65
79)	T	Naphthalene		1.637	1.979	2.181	2.314	1.806	1.773	1.948	13.31
80)	T	Naphthalene,2-...			0.721	0.891	1.163	0.990	1.013	0.955	17.09
81)	T	1,2,4-Trichlor...			0.821	0.941	1.028	0.859	0.843	0.899	9.51

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	187002	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	545068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	519536	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	422410	9.901	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	262496	9.507	ppbv	100
3) Chlorodifluoromethane	1.473	51	272522	9.662	ppbv	100
4) Chloromethane	1.531	50	107099	9.491	ppbv	100
5) Vinyl Chloride	1.577	62	102699	8.925	ppbv	100
6) Bromomethane	1.664	94	47950	9.377	ppbv	100
7) Chloroethane	1.703	64	42516	9.387	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	227041	9.656	ppbv	100
9) Propene	1.483	41	123386	9.709	ppbv	100
10) Heptane	4.972	43	335086	9.744	ppbv	100
11) Trichlorofluoromethane	1.874	101	250349	9.318	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	209365	9.481	ppbv	100
13) Ethanol	1.719	45	5338	5.364	ppbv	100
14) Bromoethene	1.777	108	77999	9.220	ppbv	100
15) Acetone	1.832	43	208061	7.955	ppbv	100
16) 1,3-Butadiene	1.606	39	107104	9.105	ppbv	100
17) tert-Butyl alcohol	2.036	59	302616	9.290	ppbv	100
18) 1,1-Dichloroethene	2.030	96	94236	9.128	ppbv	100
19) Isopropyl Alcohol	1.884	45	131359	8.902	ppbv	100
20) Methylene Chloride	2.059	84	81828	8.401	ppbv	100
21) Allyl Chloride	2.091	41	168602	9.141	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	110371	9.149	ppbv	100
23) Vinyl Acetate	2.460	43	93080	8.563	ppbv	100
24) 1,1-Dichloroethane	2.405	63	209753	9.484	ppbv	100
25) Ethyl Acetate	2.833	43	646501	9.524	ppbv	100
26) Hexane	2.823	57	249331	9.510	ppbv	100
27) Carbon Disulfide	2.146	76	268507	9.550	ppbv	100
28) Methyl tert-Butyl Ether	2.438	73	155398	9.520	ppbv	100
29) Chloroform	2.845	83	361264	9.415	ppbv	100
30) Cyclohexane	3.852	84	217215	9.537	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	256425	9.634	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	385628	8.784	ppbv	100
34) 2-Butanone	2.554	43	363735	9.203	ppbv	100
35) Carbon Tetrachloride	3.758	117	382925	9.129	ppbv	100
36) Benzene	3.651	78	508860	9.417	ppbv	100
37) 1,2-Dichloroethane	3.214	62	292937	9.469	ppbv	100
38) Trichloroethene	4.545	130	204027	9.045	ppbv	100
39) 1,2-Dichloropropane	4.312	63	183439	9.321	ppbv	100
40) 1,4-Dioxane	4.577	88	92327	9.042	ppbv #	100
41) Tetrahydrofuran	3.049	42	216851	9.643	ppbv	100
42) Bromodichloromethane	4.483	83	418887	9.822	ppbv	100
43) Methyl Methacrylate	4.872	69	219399	9.618	ppbv	100
44) 2,2,4-Trimethylpentane	4.635	57	876649	9.600	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	239180	9.746	ppbv	100

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	300021	9.973	ppbv		100
47) 1,1,2-Trichloroethane	6.574	97	198176	9.526	ppbv		100
48) Dibromochloromethane	7.380	129	346499	9.828	ppbv		100
49) Bromoform	9.477	173	317189	10.021	ppbv		100
50) 4-Methyl-2-Pentanone	5.745	43	559800	8.934	ppbv		100
51) 2-Hexanone	7.432	43	460013	8.848	ppbv	#	100
52) Tetrachloroethene	8.218	164	186912	8.722	ppbv		100
53) Toluene	6.927	91	613378	9.576	ppbv		100
54) 1,2-Dibromoethane	7.649	107	276797	9.536	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.917	131	265037	9.268	ppbv		100
57) Chlorobenzene	8.917	112	454511	9.223	ppbv		100
58) Ethyl Benzene	9.351	91	868003	9.406	ppbv		100
59) m/p-Xylene	9.549	91	1372806m	18.607	ppbv		
60) o-Xylene	9.960	91	689933	9.340	ppbv		100
61) Styrene	9.866	104	354697	9.706	ppbv		100
62) Isopropylbenzene	10.536	105	1019255	9.227	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.960	83	413392	9.210	ppbv		100
64) n-propylbenzene	10.986	120	259405	9.122	ppbv		100
65) tert-Butylbenzene	11.529	119	901951	8.828	ppbv		100
66) Benzyl Chloride	11.610	91	105411	9.724	ppbv		100
67) sec-Butylbenzene	11.766	105	1249106	8.796	ppbv		100
69) p-Isopropyltoluene	11.924	119	1079675	8.830	ppbv		100
70) n-Butylbenzene	12.277	91	1110351	8.879	ppbv		100
71) 2-Chlorotoluene	10.898	91	799102	9.320	ppbv		100
72) 4-Ethyltoluene	11.122	105	846232	9.200	ppbv		100
73) 1,3,5-Trimethylbenzene	11.199	105	720566	8.970	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	784745	8.480	ppbv		100
75) 1,3-Dichlorobenzene	11.604	146	458226	9.028	ppbv		100
76) 1,4-Dichlorobenzene	11.669	146	461371	9.134	ppbv		100
77) 1,2-Dichlorobenzene	11.944	146	441473	8.933	ppbv		100
78) Hexachloro-1,3-Butadiene	13.879	225	416735	8.284	ppbv		100
79) Naphthalene	13.510	128	938470	9.271	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	514394	10.436	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	446420	9.561	ppbv		100

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

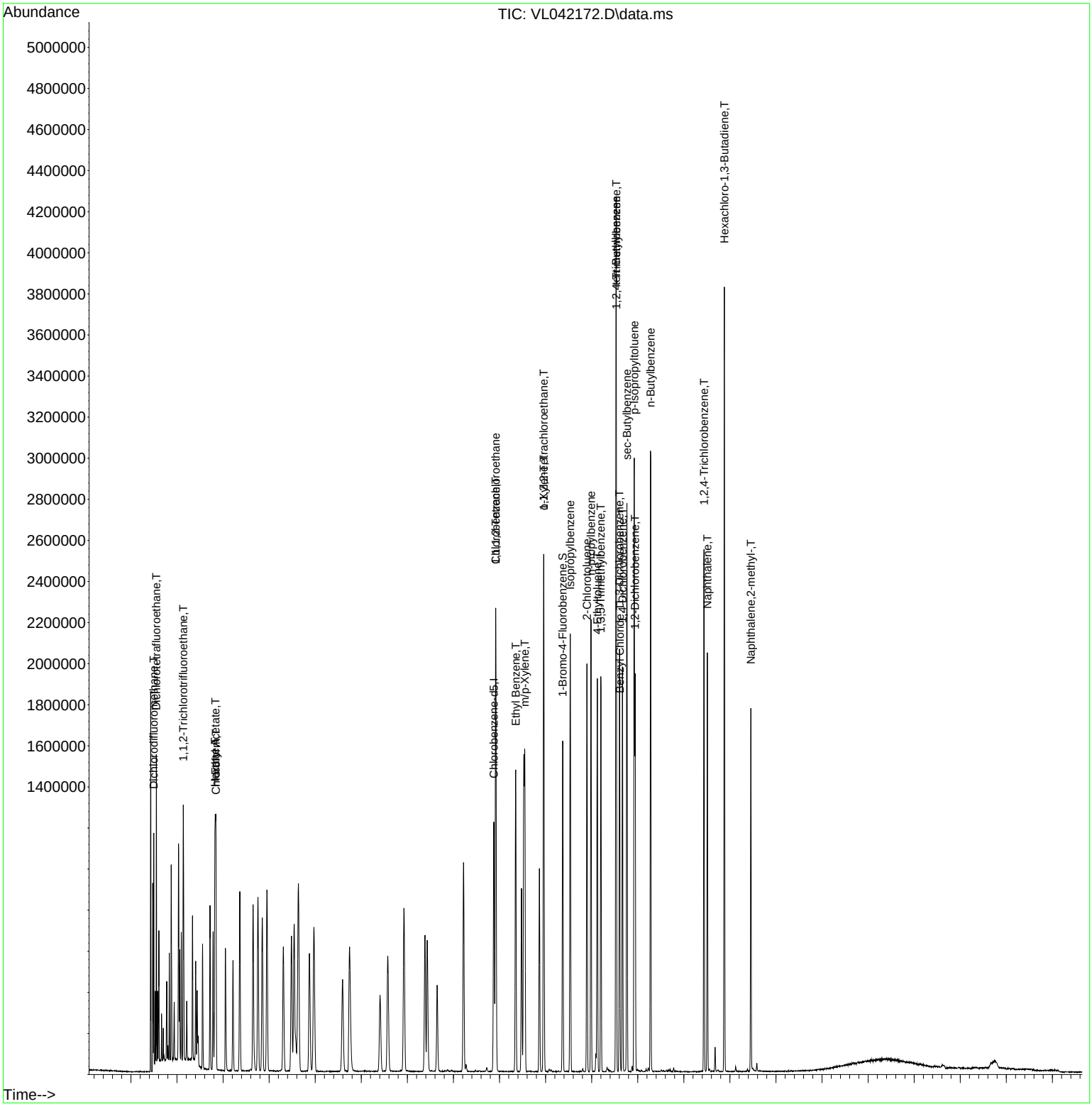
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

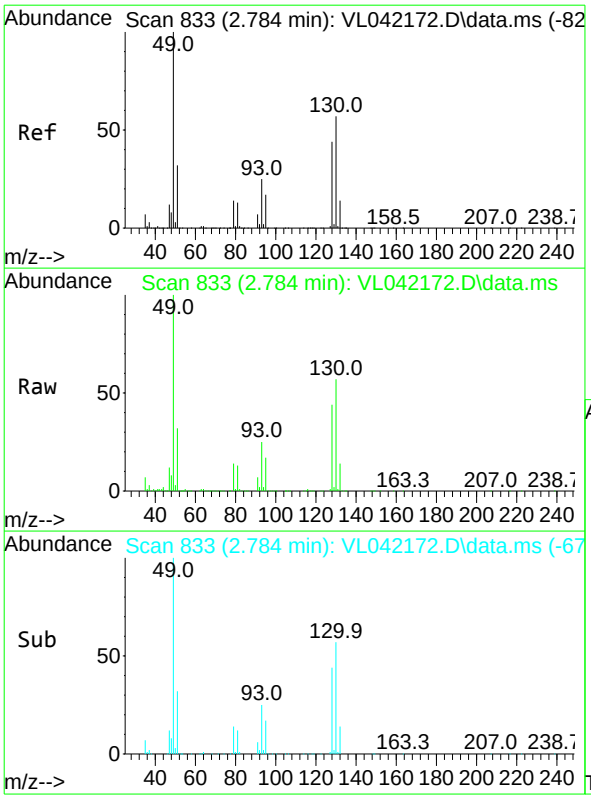
Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

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

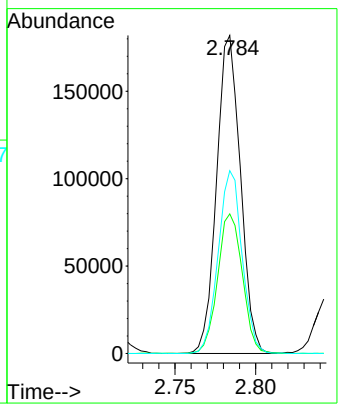




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 49 Resp: 187002

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.6	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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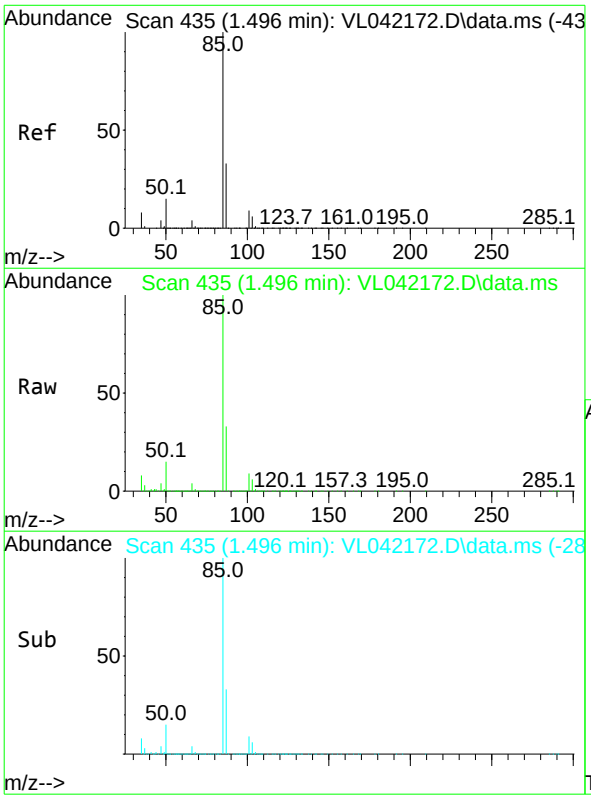
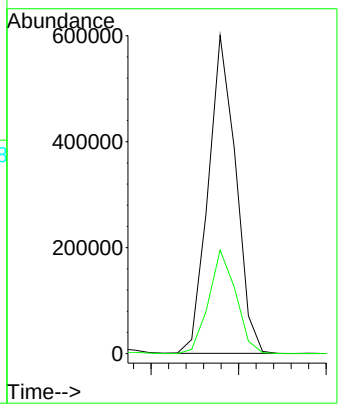
Supervised By :Mahesh Dadoda 04/03/2025

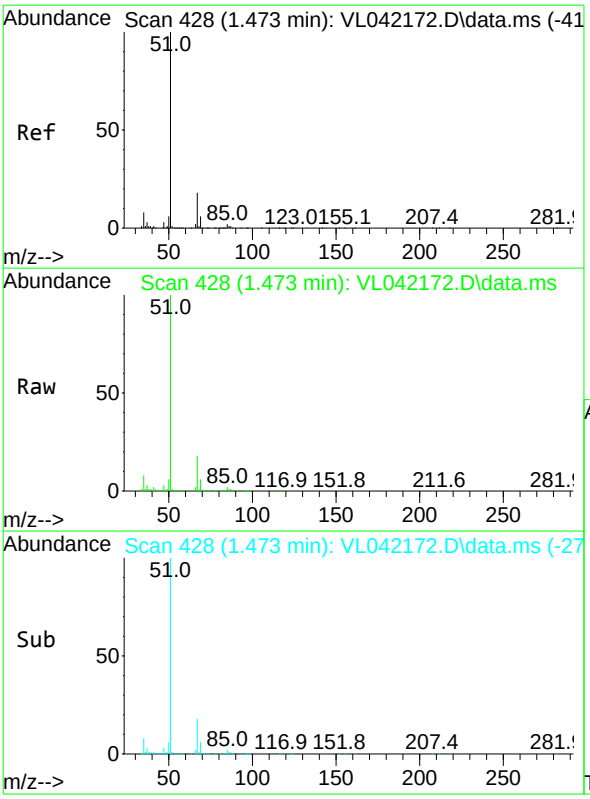


#2
Dichlorodifluoromethane
Concen: 9.507 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 262496

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.1	39.1

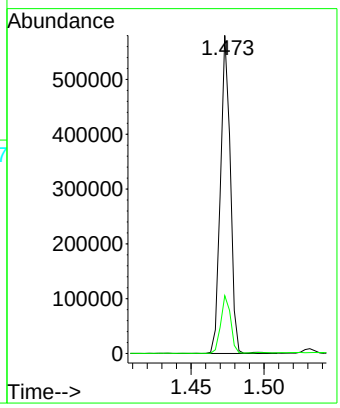




#3
Chlorodifluoromethane
Concen: 9.662 ppbv
RT: 1.473 min Scan# 42
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 51 Resp: 272522

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.0	22.6



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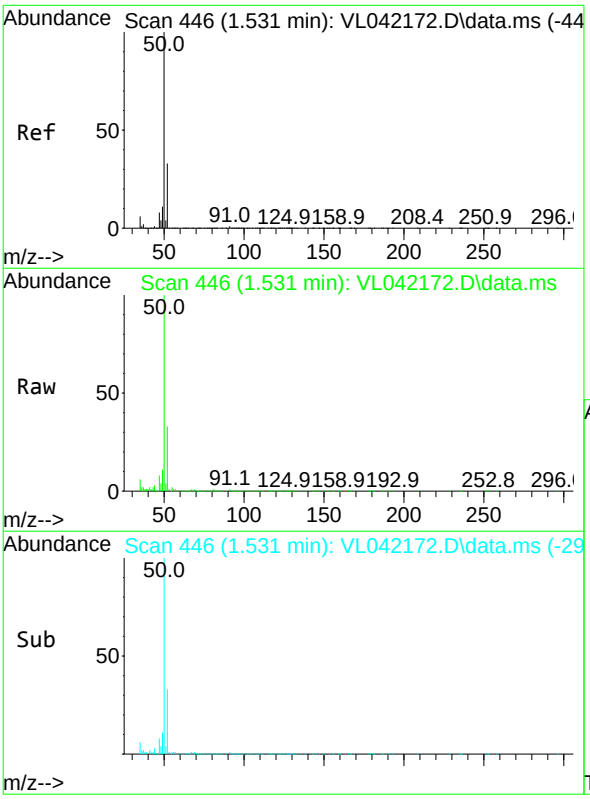
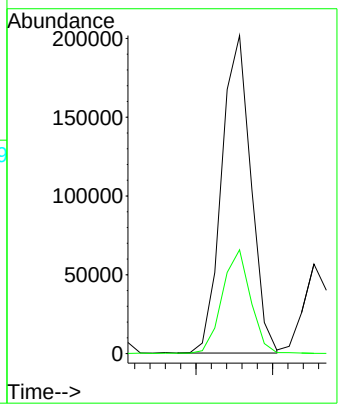
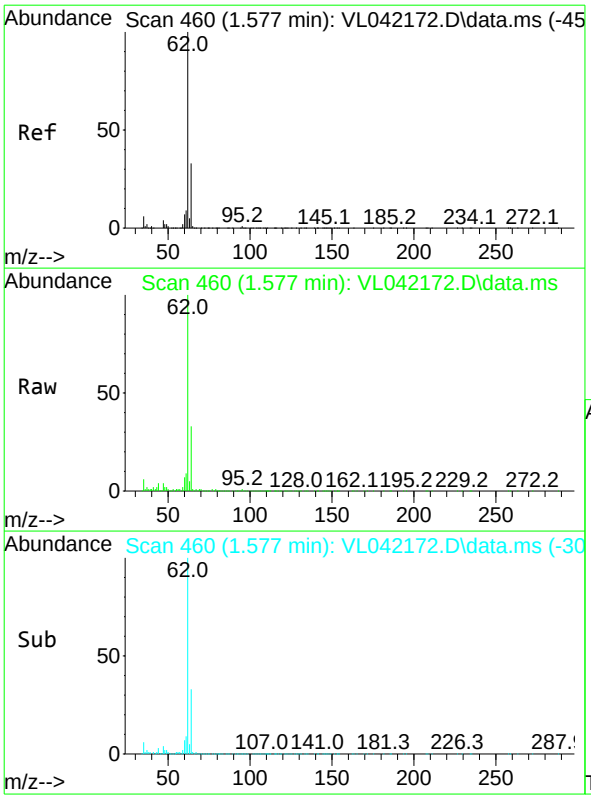


#4
Chloromethane
Concen: 9.491 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 50 Resp: 107099

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1

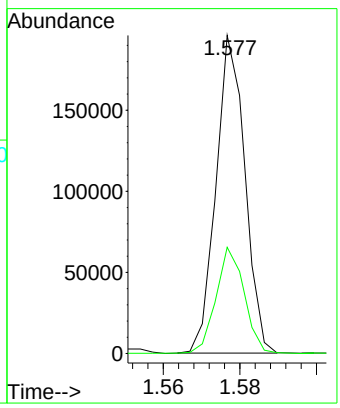




#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.577 min Scan# 46
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 62 Resp: 102699

Ion	Ratio	Lower	Upper
62	100		
64	33.3	26.6	40.0



Instrument :
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ClientSampleId :
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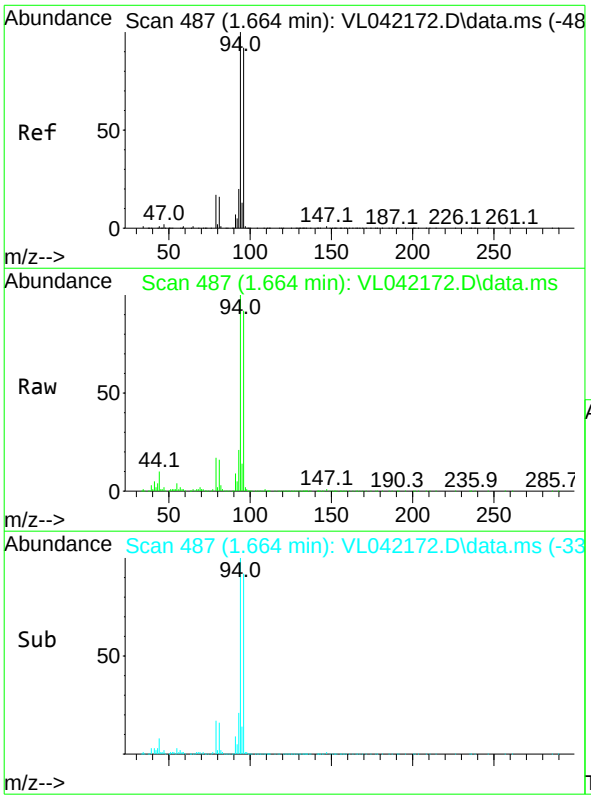
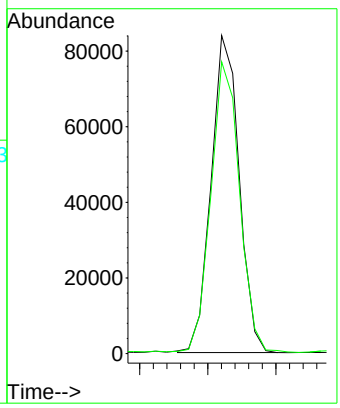
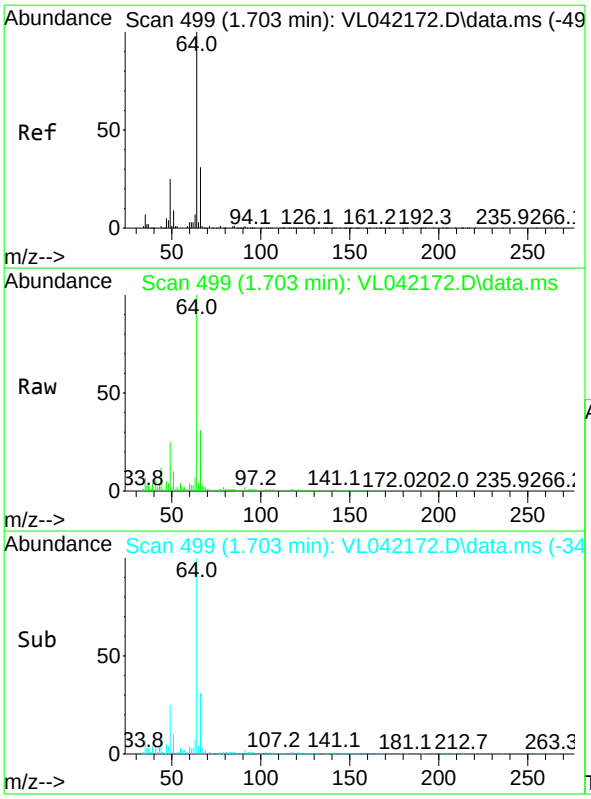


#6
Bromomethane
Concen: 9.377 ppbv
RT: 1.664 min Scan# 487
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 94 Resp: 47950

Ion	Ratio	Lower	Upper
94	100		
96	91.4	73.1	109.7

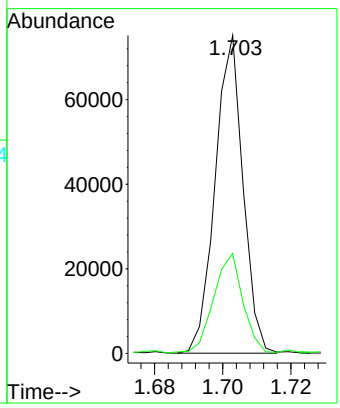




#7
Chloroethane
Concen: 9.387 ppbv
RT: 1.703 min Scan# 49
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 64 Resp: 42516

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
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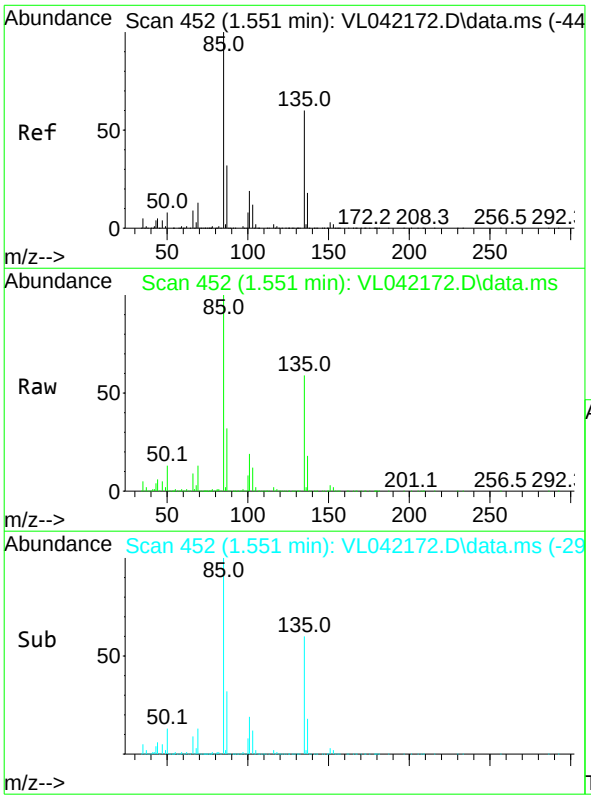
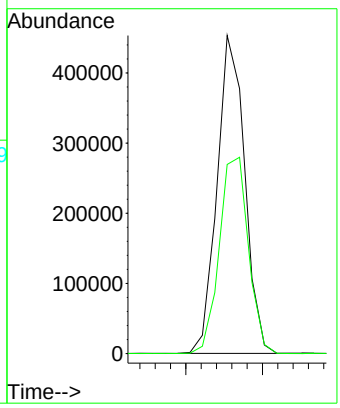
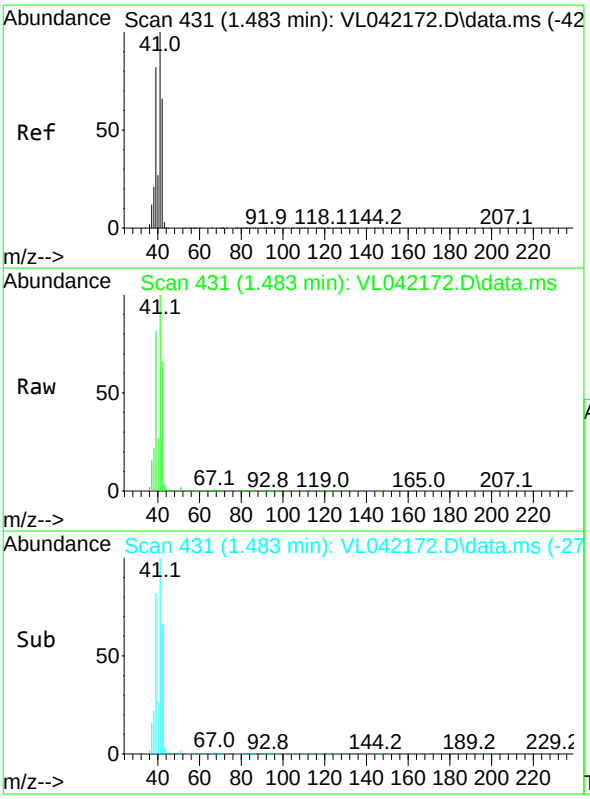


#8
Dichlorotetrafluoroethane
Concen: 9.656 ppbv
RT: 1.551 min Scan# 452
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 227041

Ion	Ratio	Lower	Upper
85	100		
135	65.5	52.4	78.6

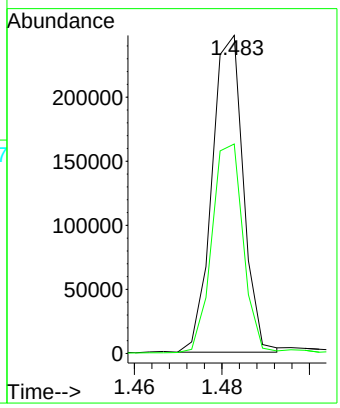




#9
Propene
Concen: 9.709 ppbv
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 41 Resp: 123386

Ion	Ratio	Lower	Upper
41	100		
42	69.3	55.4	83.2



Instrument :
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ClientSampleId :
VSTDICCC010

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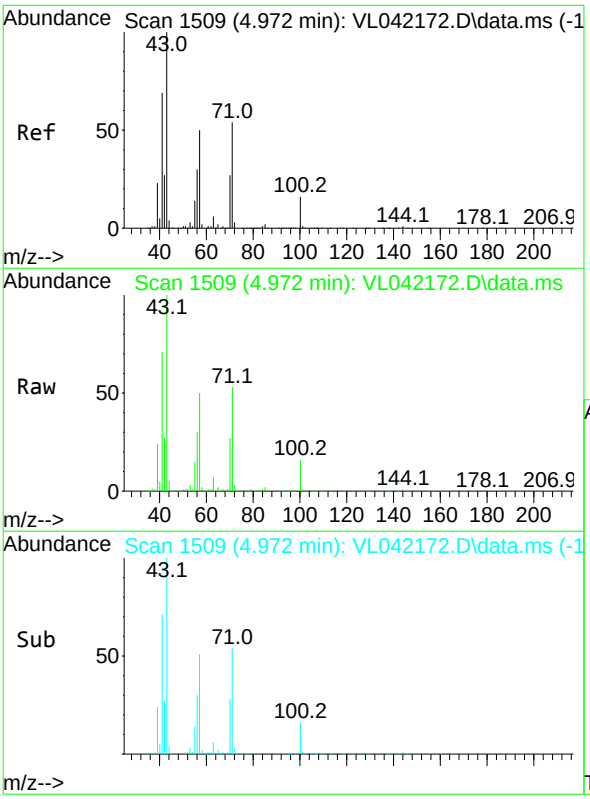
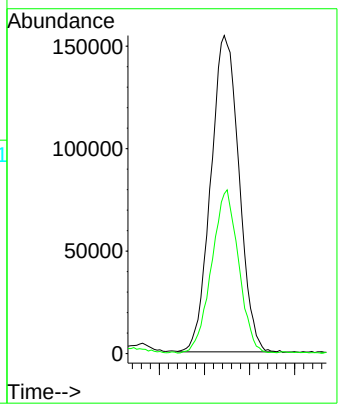
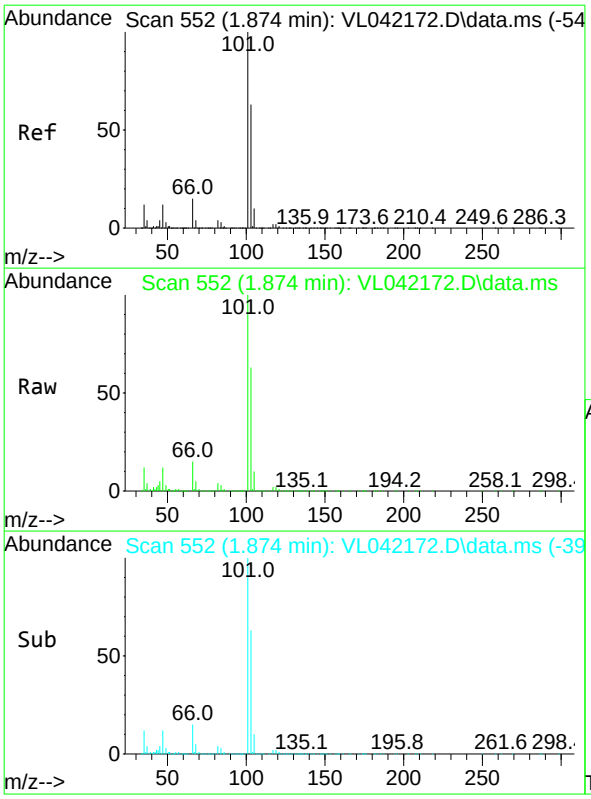


#10
Heptane
Concen: 9.744 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 335086

Ion	Ratio	Lower	Upper
43	100		
57	49.3	39.4	59.2

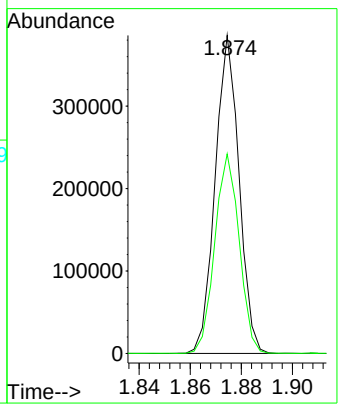




#11
Trichlorofluoromethane
Concen: 9.318 ppbv
RT: 1.874 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 250349

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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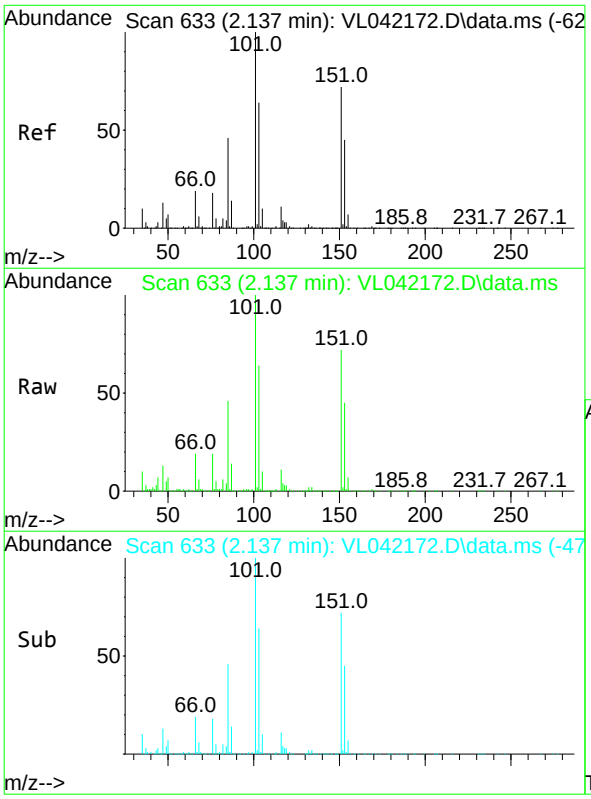
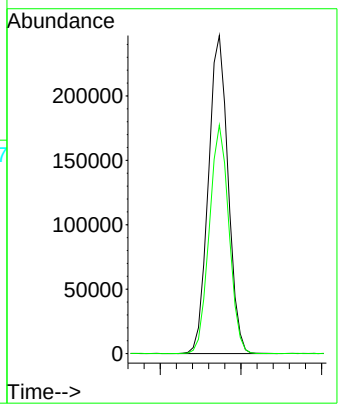
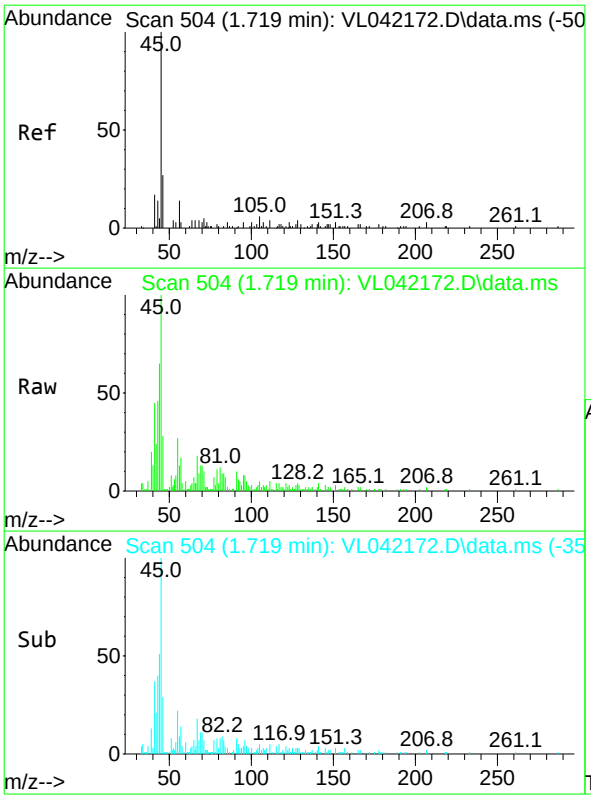


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.481 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 209365

Ion	Ratio	Lower	Upper
101	100		
151	71.4	57.1	85.7

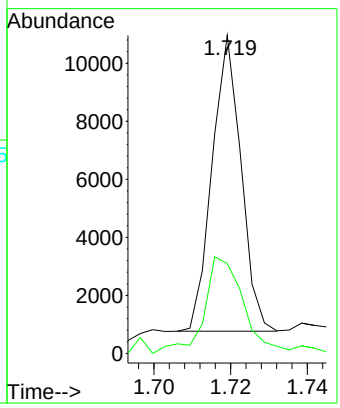




#13
Ethanol
Concen: 5.364 ppbv
RT: 1.719 min Scan# 50
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 45 Resp: 5338

Ion	Ratio	Lower	Upper
45	100		
46	50.5	20.2	80.8



Instrument :
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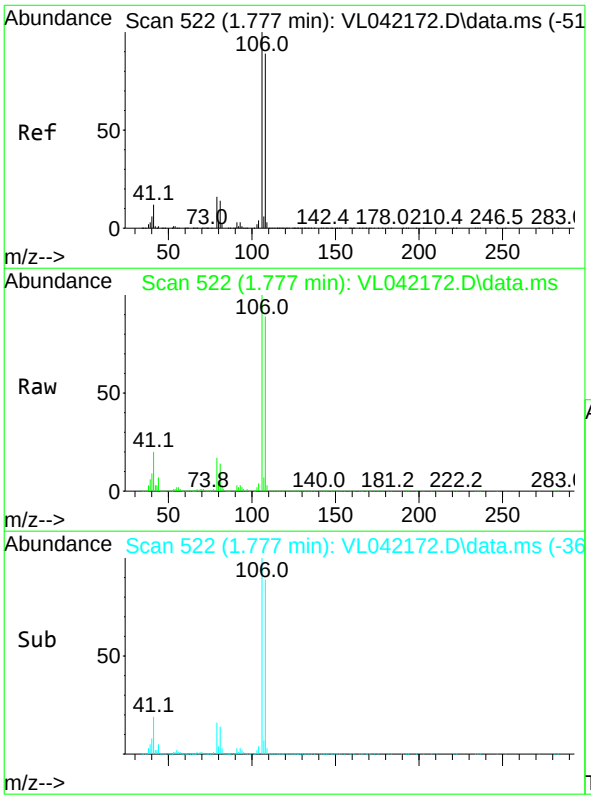
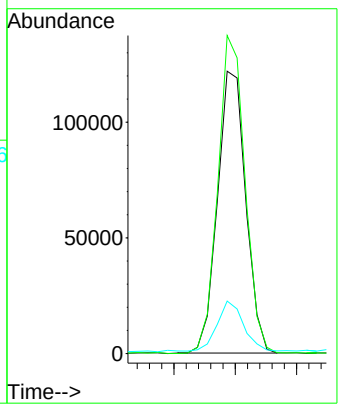
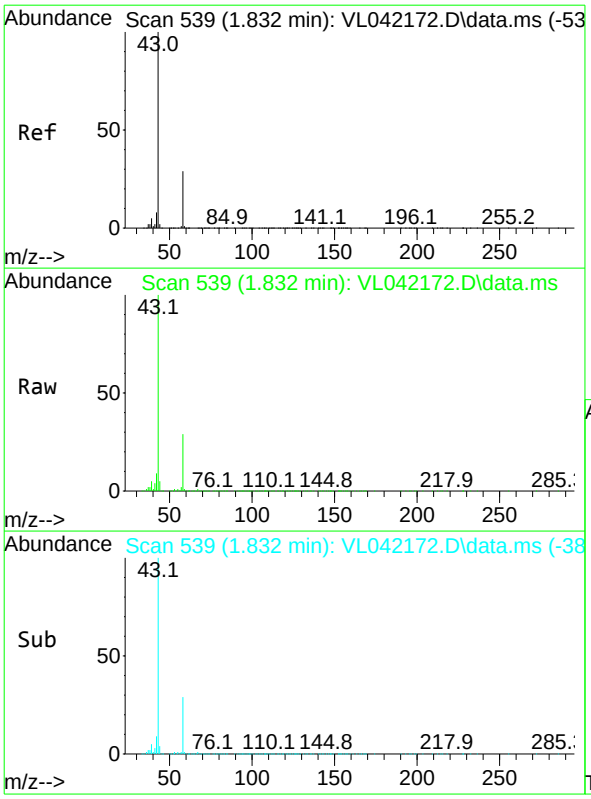


#14
Bromoethene
Concen: 9.220 ppbv
RT: 1.777 min Scan# 522
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:108 Resp: 77999

Ion	Ratio	Lower	Upper
108	100		
106	108.5	86.8	130.2
79	18.8	15.0	22.6

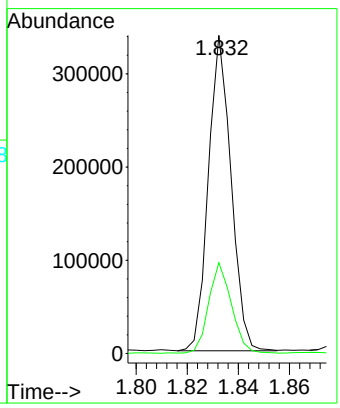




#15
Acetone
Concen: 7.955 ppbv
RT: 1.832 min Scan# 53
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 208061

Ion	Ratio	Lower	Upper
43	100		
58	29.0	23.2	34.8



Instrument :
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ClientSampleId :
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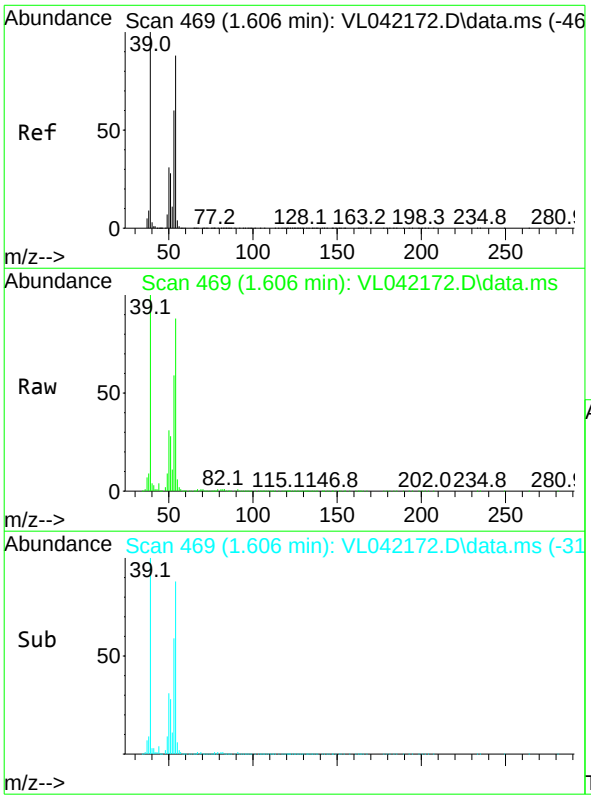
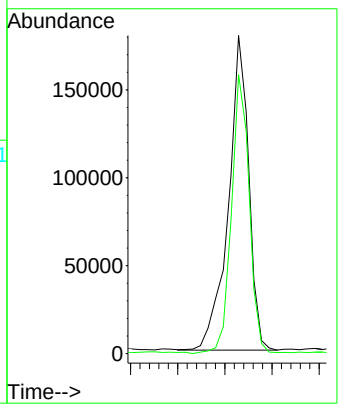
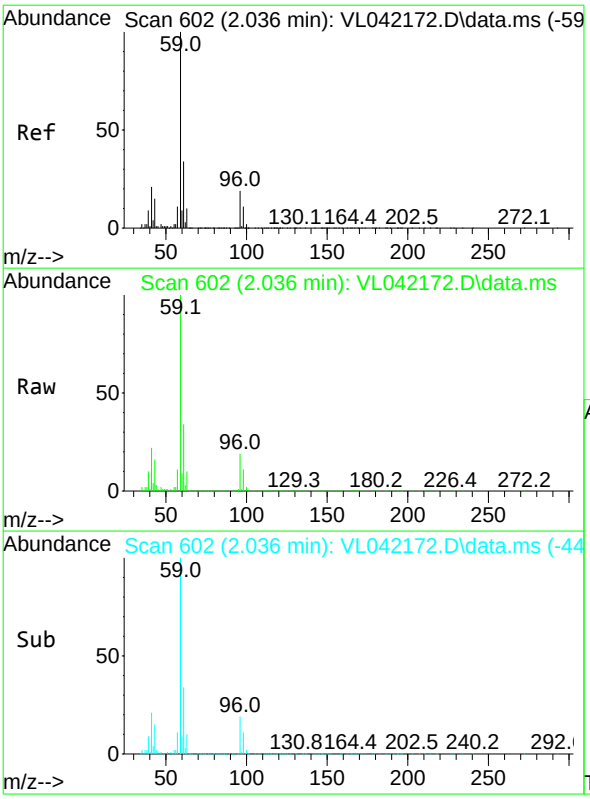


#16
1,3-Butadiene
Concen: 9.105 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 39 Resp: 107104

Ion	Ratio	Lower	Upper
39	100		
54	75.9	60.7	91.1

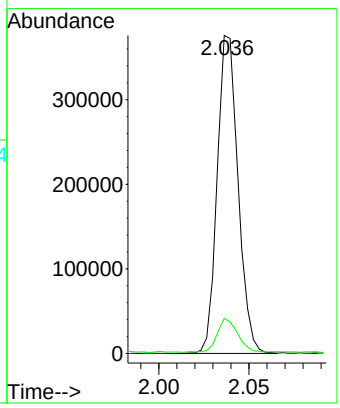




#17
tert-Butyl alcohol
Concen: 9.290 ppbv
RT: 2.036 min Scan# 60
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 59 Resp: 302616

Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
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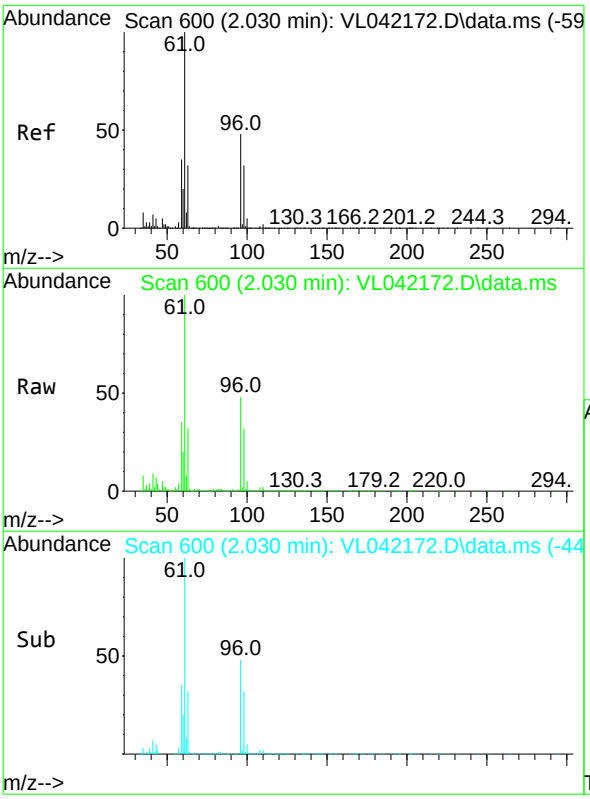
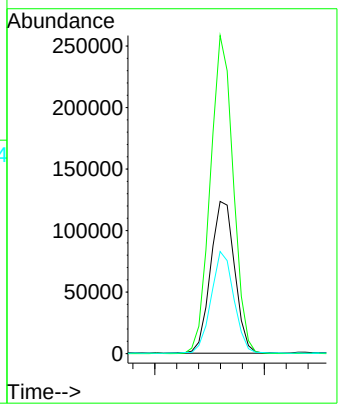
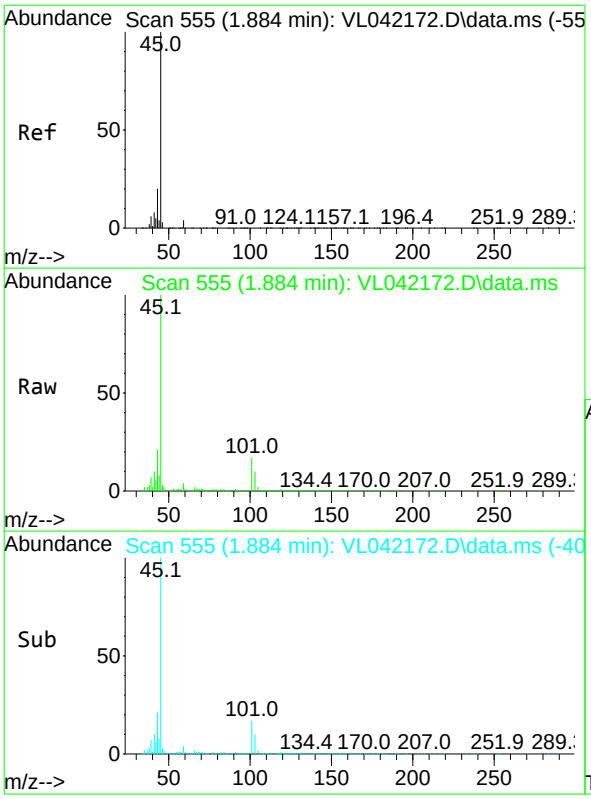


#18
1,1-Dichloroethene
Concen: 9.128 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 94236

Ion	Ratio	Lower	Upper
96	100		
61	209.5	167.6	251.4
98	66.9	53.5	80.3

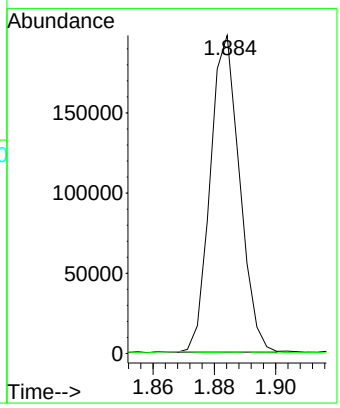




#19
Isopropyl Alcohol
Concen: 8.902 ppbv
RT: 1.884 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 45 Resp: 131359

Ion	Ratio	Lower	Upper
45	100		
58	46.1	36.9	55.3



Instrument :
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ClientSampleId :
VSTDICCC010

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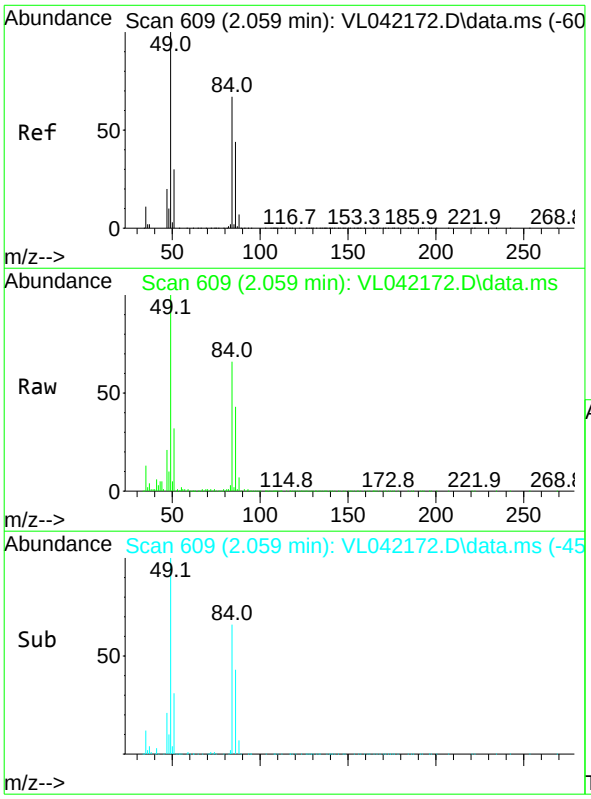
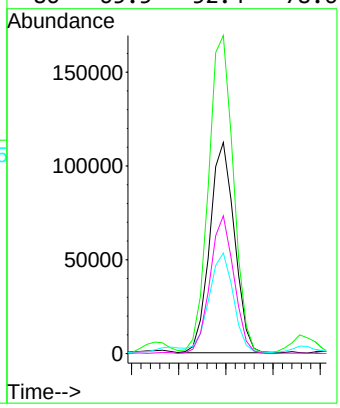
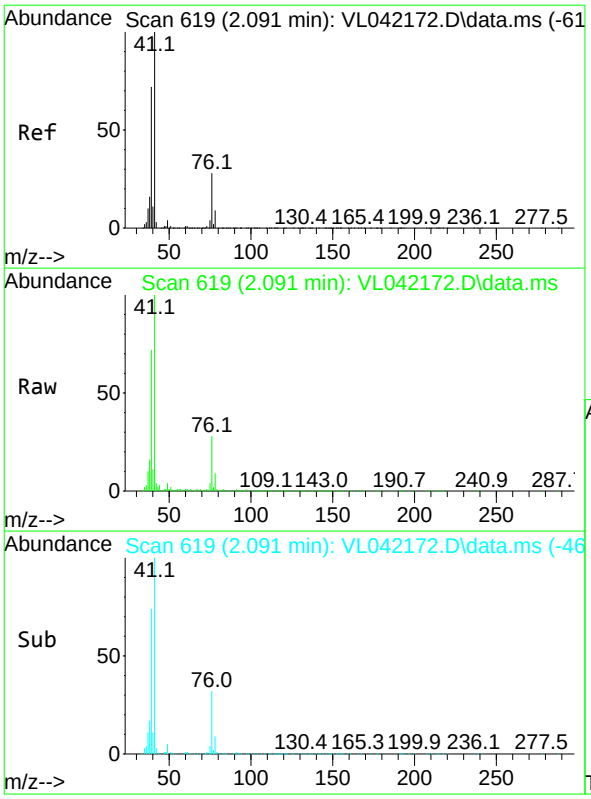


#20
Methylene Chloride
Concen: 8.401 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 81828

Ion	Ratio	Lower	Upper
84	100		
49	150.3	120.2	180.4
51	46.7	37.4	56.0
86	65.5	52.4	78.6

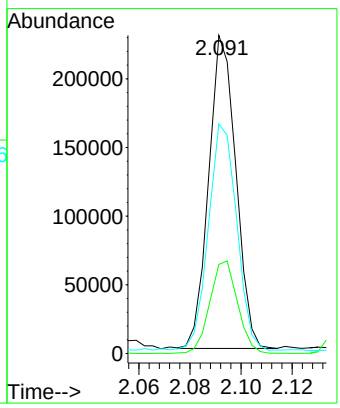




#21
Allyl Chloride
Concen: 9.141 ppbv
RT: 2.091 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 41 Resp: 168602

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.1	36.1
39	76.4	61.1	91.7



Instrument :
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ClientSampleId :
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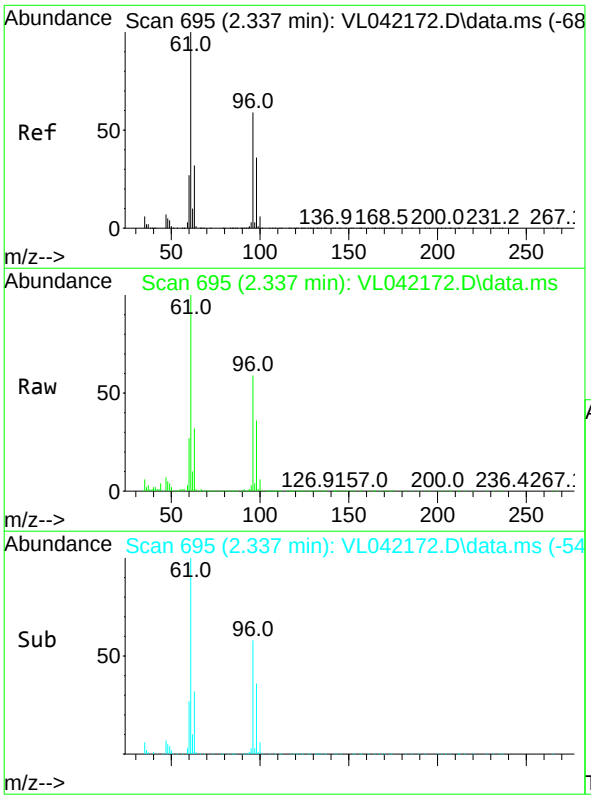
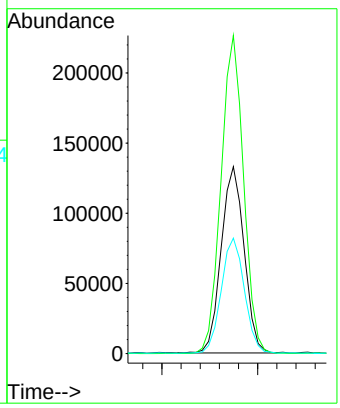
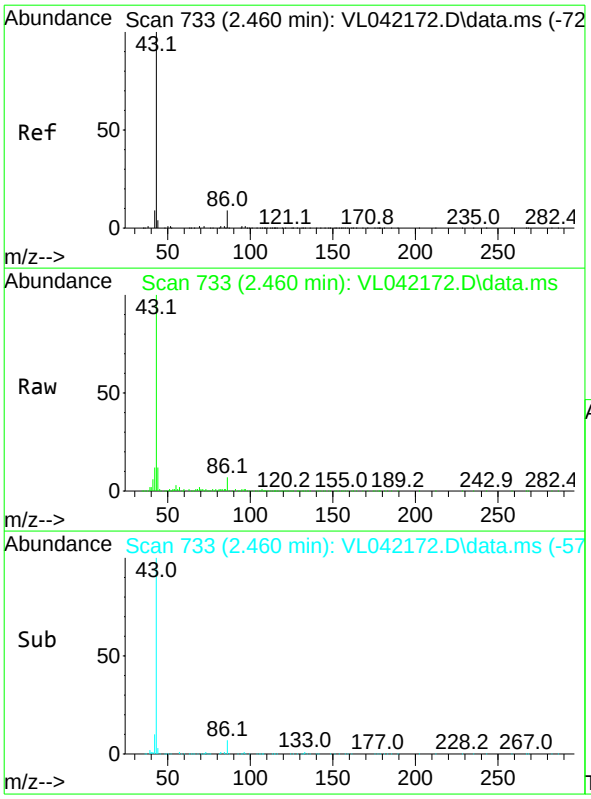


#22
trans-1,2-Dichloroethene
Concen: 9.149 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 110371

Ion	Ratio	Lower	Upper
96	100		
61	170.7	136.6	204.8
98	61.8	49.4	74.2

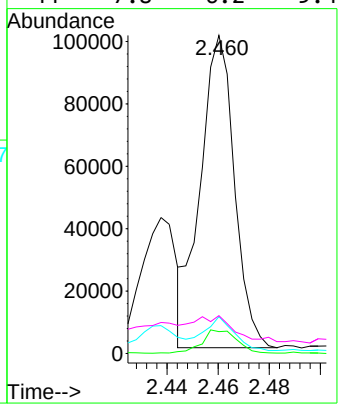




#23
Vinyl Acetate
Concen: 8.563 ppbv
RT: 2.460 min Scan# 73
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 93080

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.8	8.6	13.0
44	7.8	6.2	9.4



Instrument :
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ClientSampleId :
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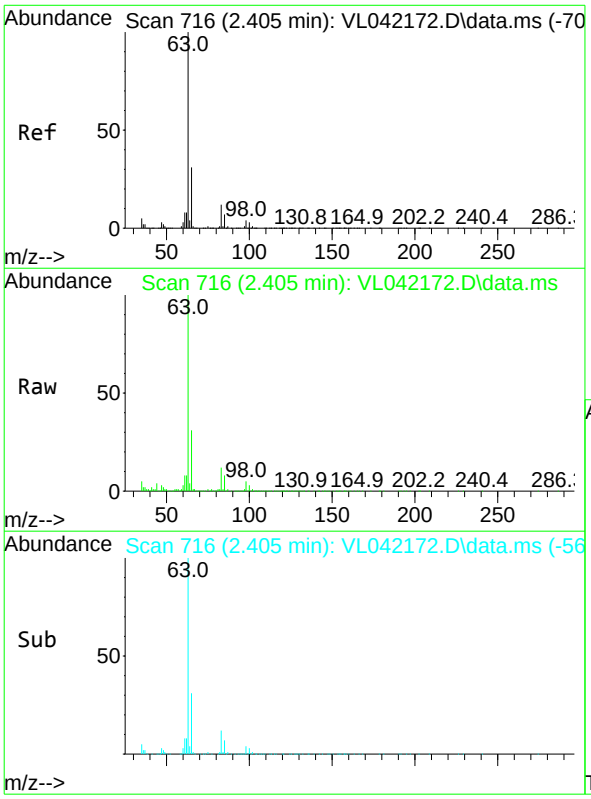
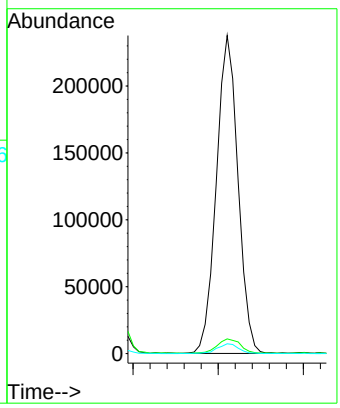
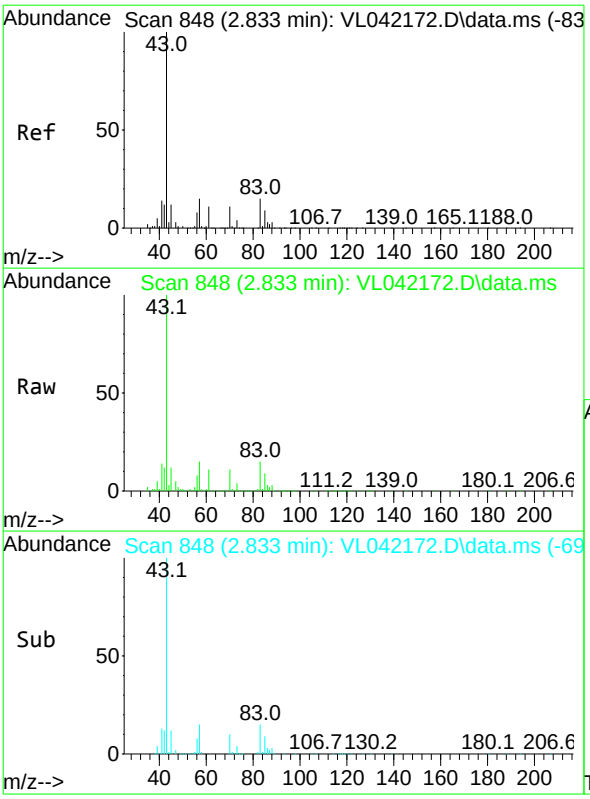


#24
1,1-Dichloroethane
Concen: 9.484 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 209753

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.1	1.6	4.7

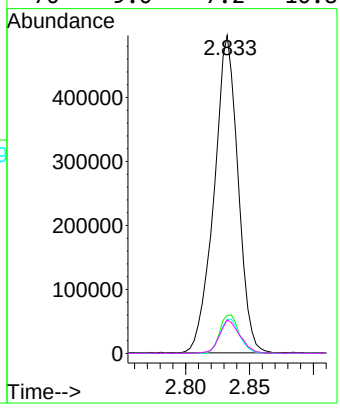




#25
Ethyl Acetate
Concen: 9.524 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 646501

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.1	7.3	10.9
70	9.0	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
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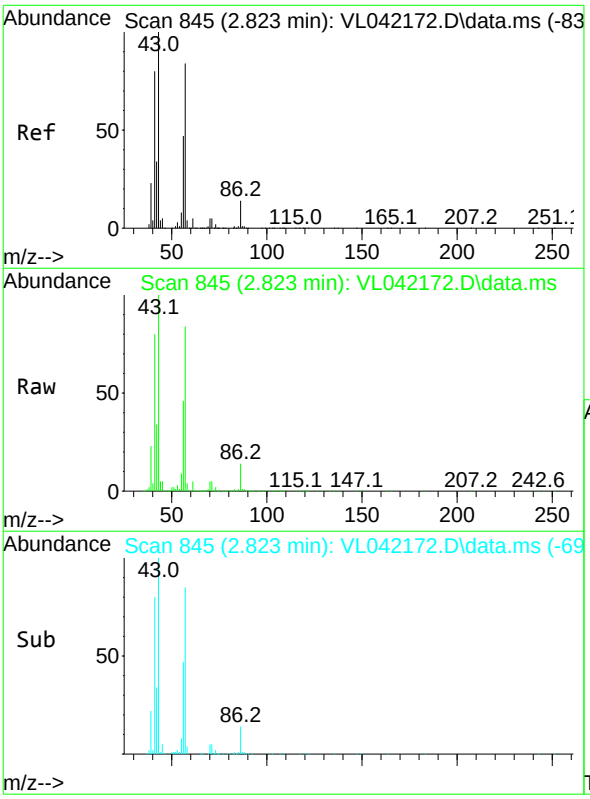
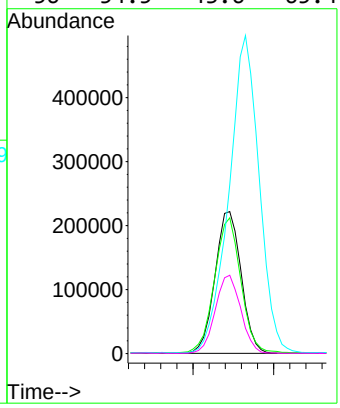
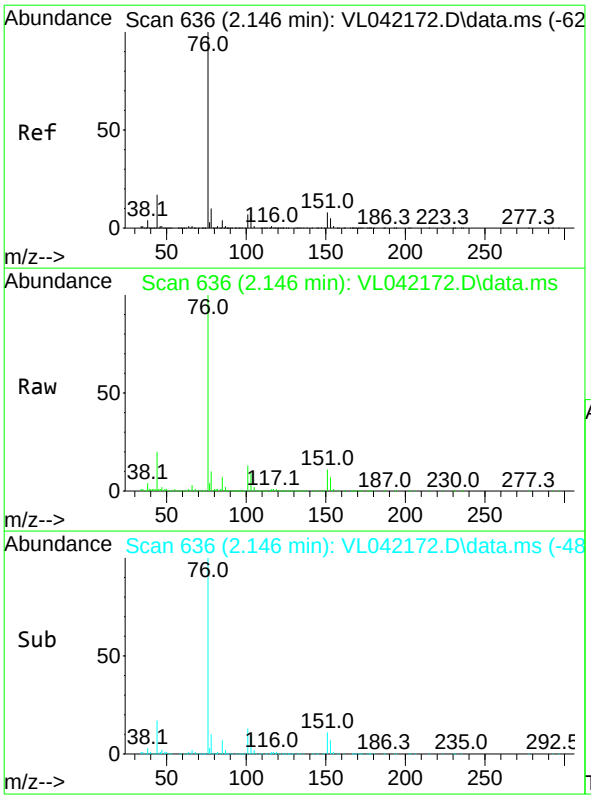


#26
Hexane
Concen: 9.510 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 249331

Ion	Ratio	Lower	Upper
57	100		
41	95.7	76.6	114.8
43	259.8	207.8	311.8
56	54.5	43.6	65.4

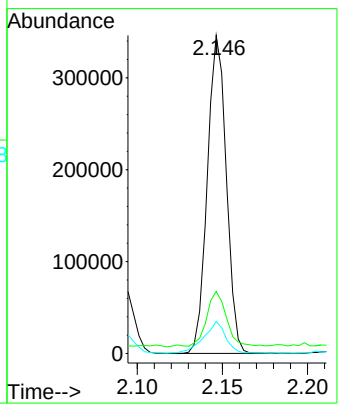




#27
Carbon Disulfide
Concen: 9.550 ppbv
RT: 2.146 min Scan# 63
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 76 Resp: 268507

Ion	Ratio	Lower	Upper
76	100		
44	18.4	14.7	22.1
78	11.6	9.3	13.9



Instrument :
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ClientSampleId :
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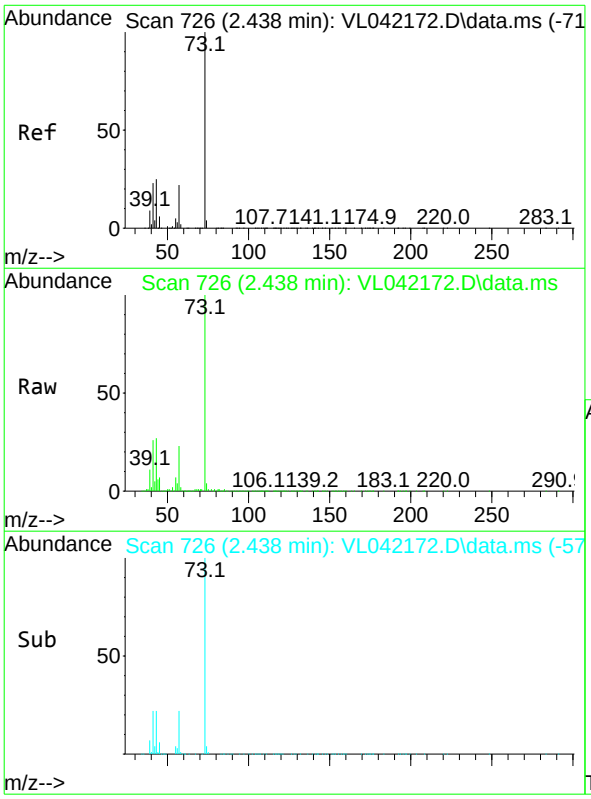
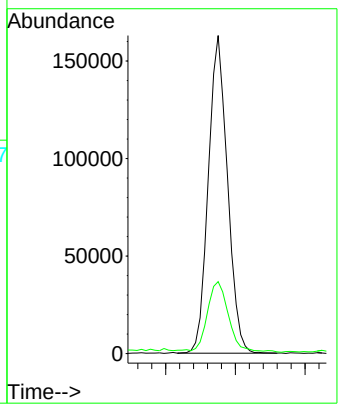
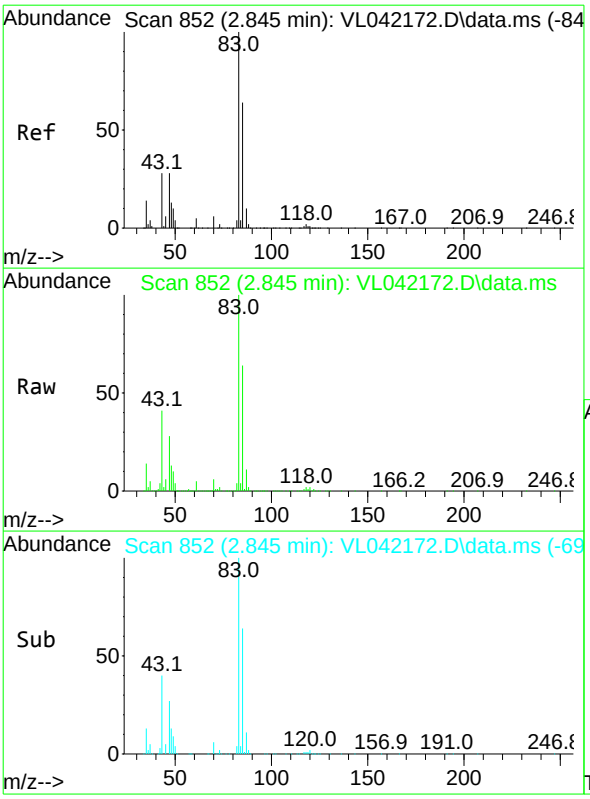


#28
Methyl tert-Butyl Ether
Concen: 9.520 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 73 Resp: 155398

Ion	Ratio	Lower	Upper
73	100		
57	25.6	20.5	30.7

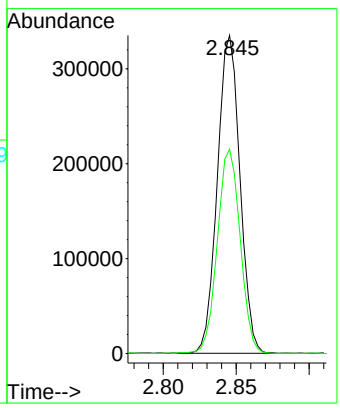




#29
Chloroform
Concen: 9.415 ppbv
RT: 2.845 min Scan# 85
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 361264

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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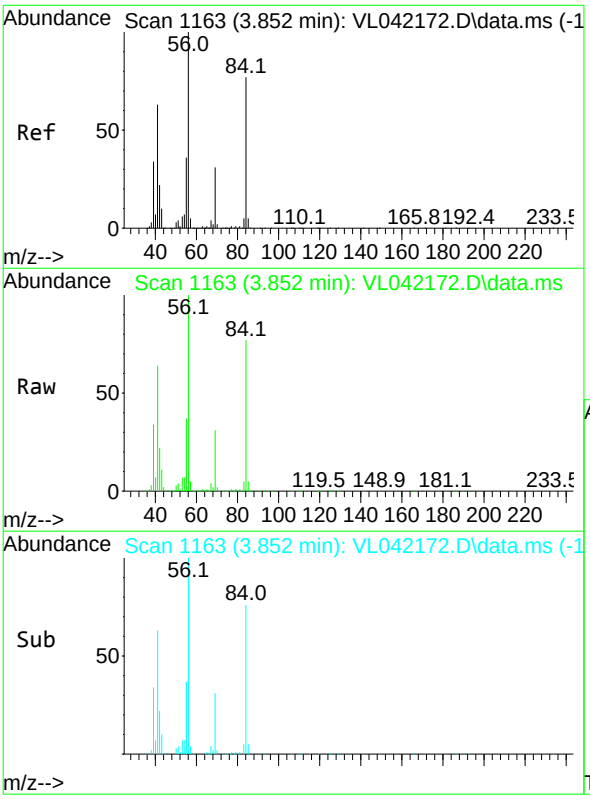
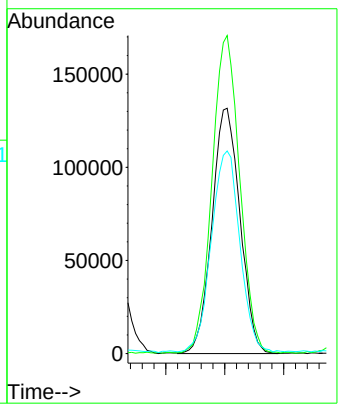
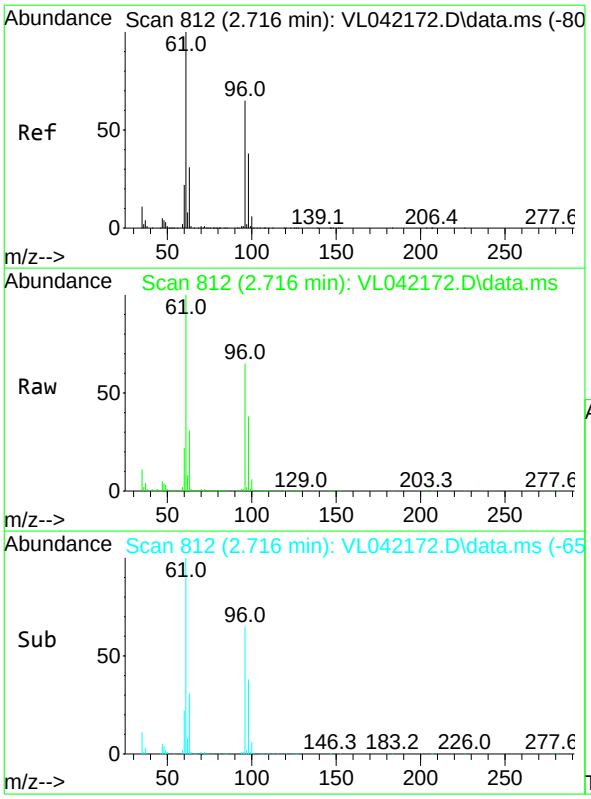


#30
Cyclohexane
Concen: 9.537 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 217215

Ion	Ratio	Lower	Upper
84	100		
56	128.5	102.8	154.2
41	83.1	66.5	99.7

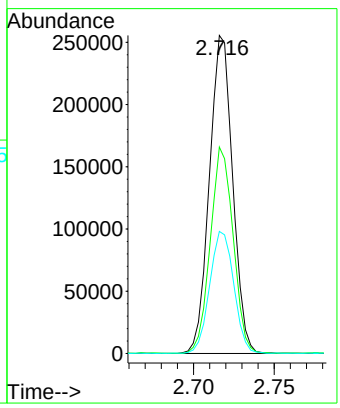




#31
cis-1,2-Dichloroethene
Concen: 9.634 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 61 Resp: 256425

Ion	Ratio	Lower	Upper
61	100		
96	64.8	51.8	77.8
98	38.3	30.6	46.0



Instrument :
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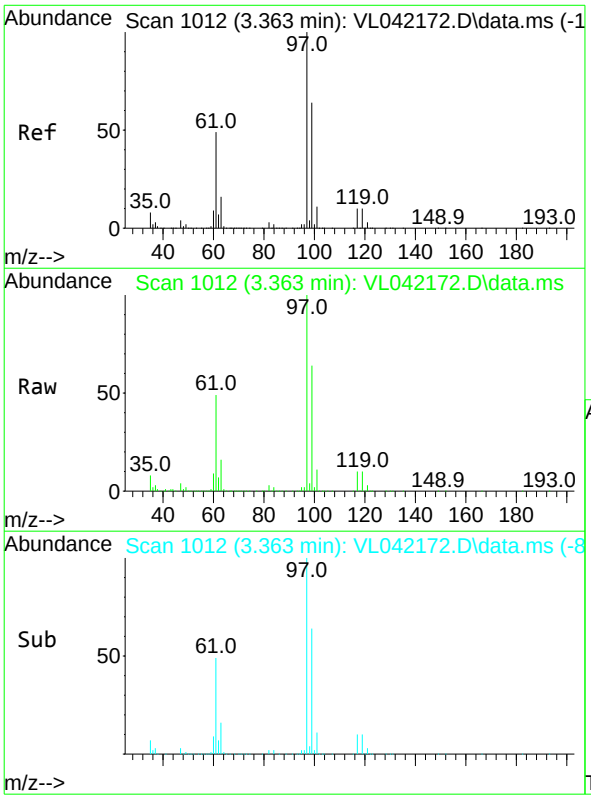
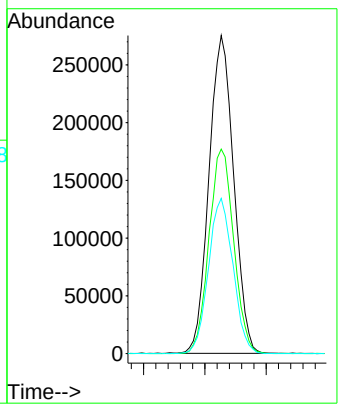
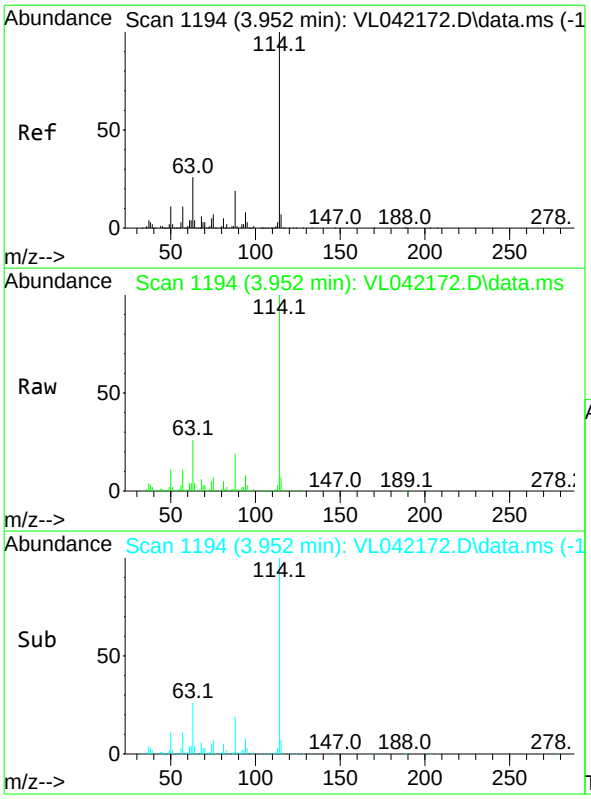


#32
1,1,1-Trichloroethane
Concen: 8.784 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 385628

Ion	Ratio	Lower	Upper
97	100		
99	64.4	51.5	77.3
61	48.4	38.7	58.1

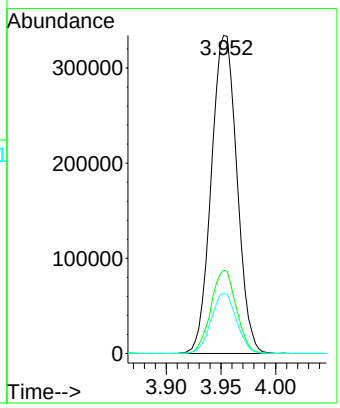




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:114 Resp: 545068

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.7	15.0	22.4



Instrument :
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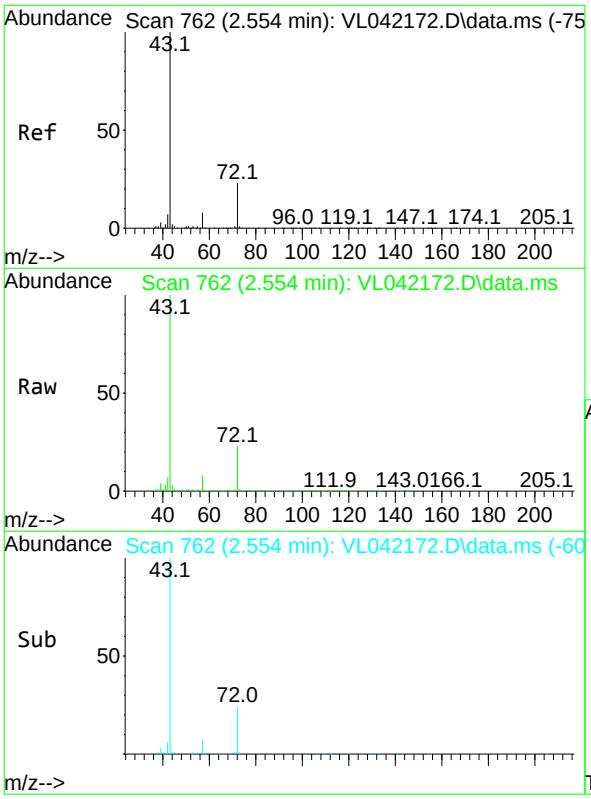
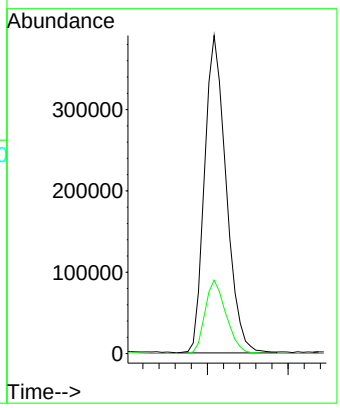
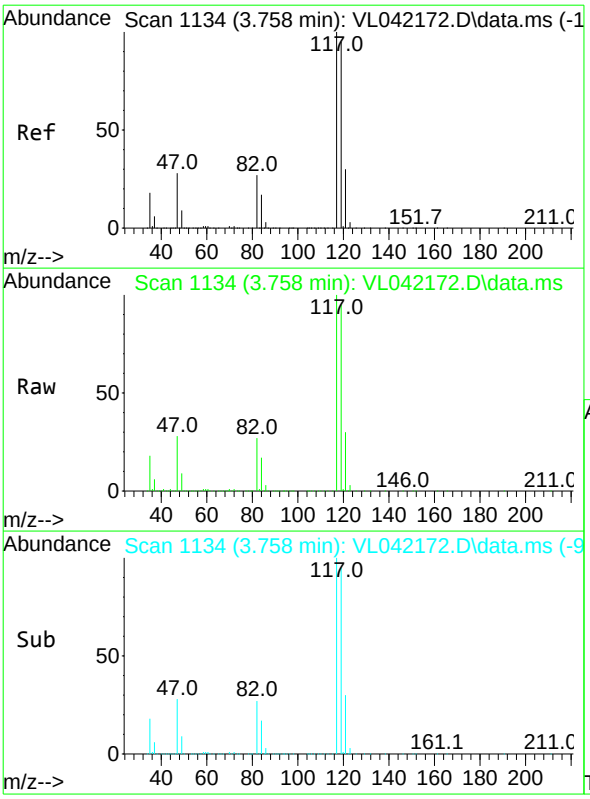


#34
2-Butanone
Concen: 9.203 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 363735

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2

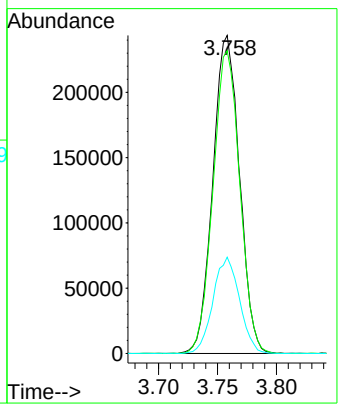




#35
Carbon Tetrachloride
Concen: 9.129 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:117 Resp: 382925

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	30.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
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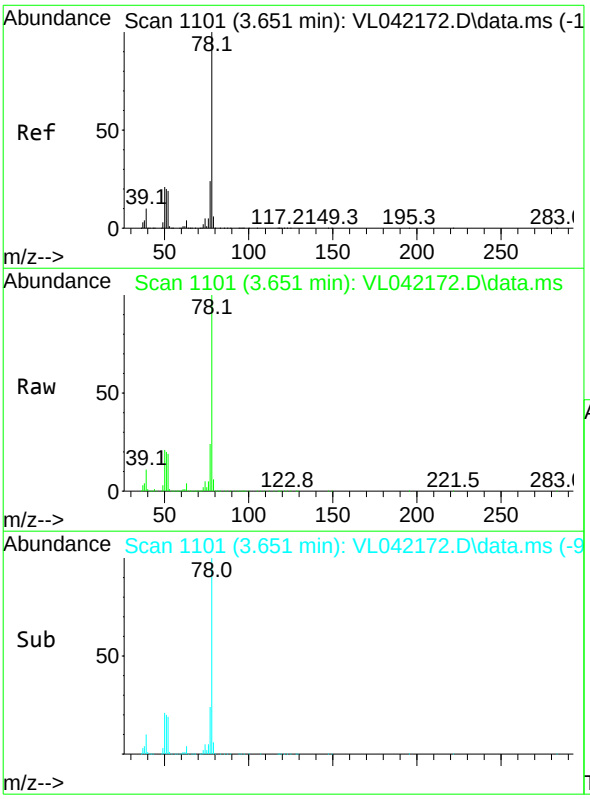
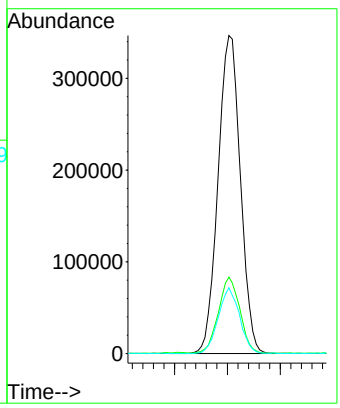
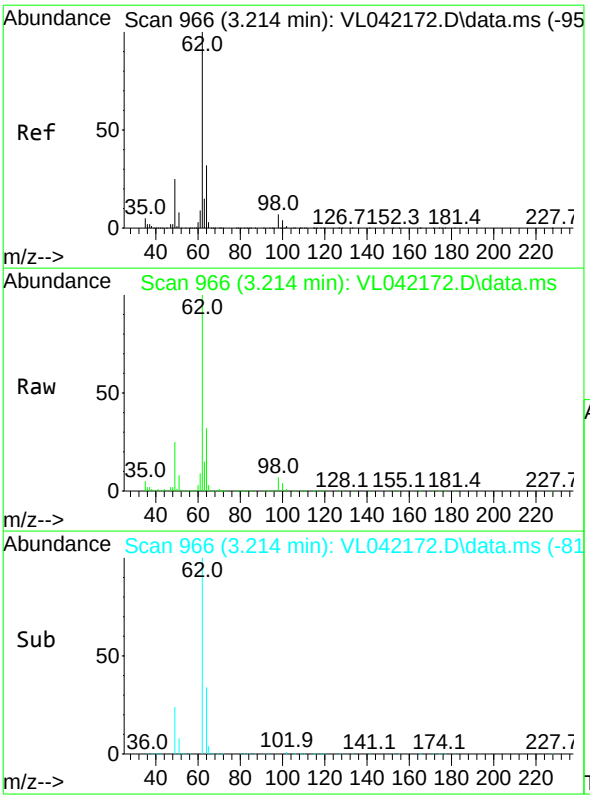


#36
Benzene
Concen: 9.417 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 78 Resp: 508860

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.1	28.7
50	20.7	16.6	24.8

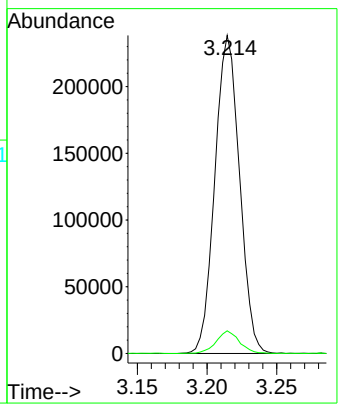




#37
1,2-Dichloroethane
Concen: 9.469 ppbv
RT: 3.214 min Scan# 96
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 62 Resp: 292937

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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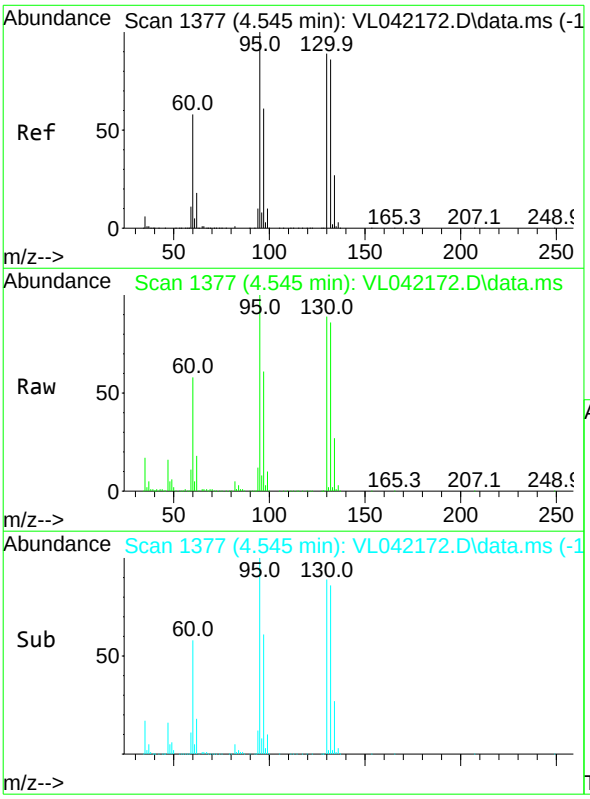
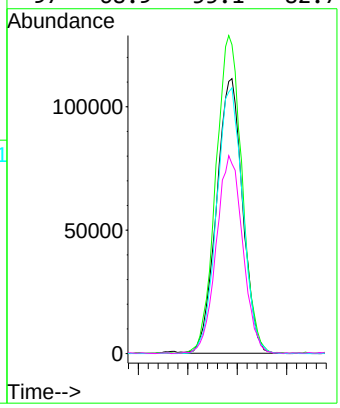
Supervised By :Mahesh Dadoda 04/03/2025

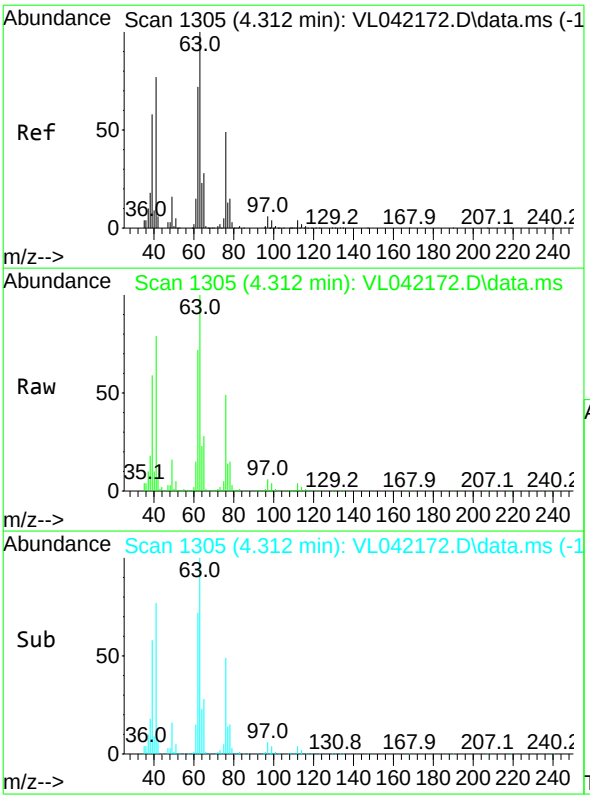


#38
Trichloroethene
Concen: 9.045 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:130 Resp: 204027

Ion	Ratio	Lower	Upper
130	100		
95	112.3	89.8	134.8
132	96.8	77.4	116.2
97	68.9	55.1	82.7

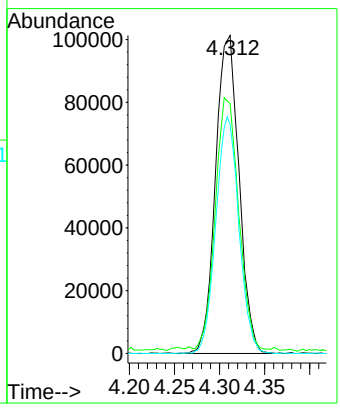




#39
1,2-Dichloropropane
Concen: 9.321 ppbv
RT: 4.312 min Scan# 13
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 183439

Ion	Ratio	Lower	Upper
63	100		
41	77.1	61.7	92.5
62	72.0	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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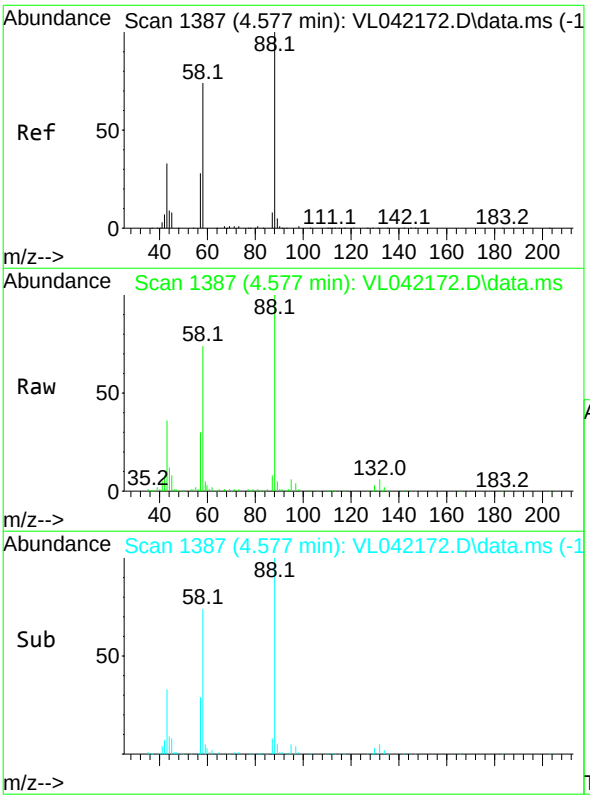
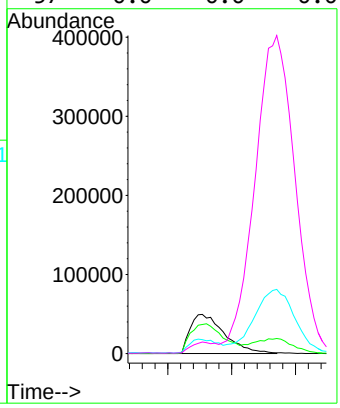
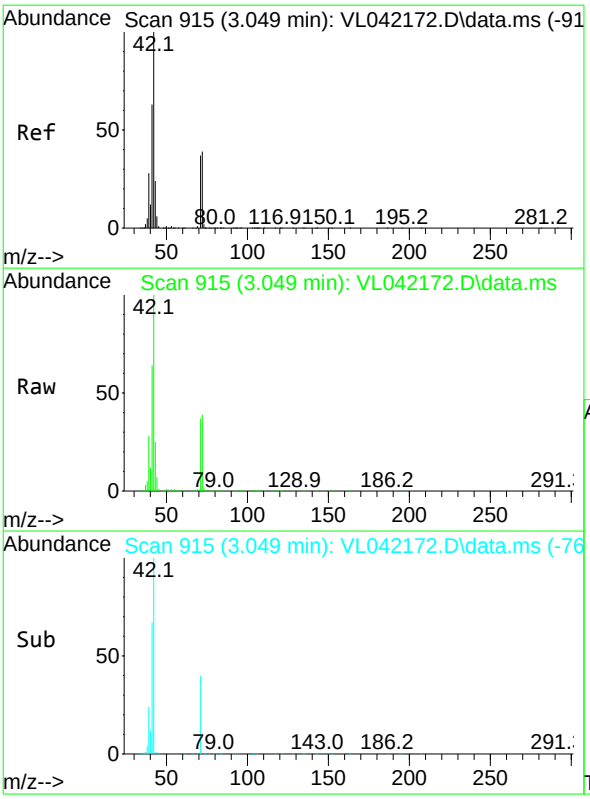


#40
1,4-Dioxane
Concen: 9.042 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 88 Resp: 92327

Ion	Ratio	Lower	Upper
88	100		
58	78.4	62.7	94.1
43	28.7	23.0	34.4
57	0.0	0.0	0.0

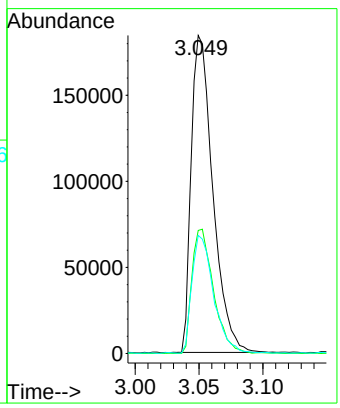




#41
Tetrahydrofuran
Concen: 9.643 ppbv
RT: 3.049 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 42 Resp: 216851

Ion	Ratio	Lower	Upper
42	100		
72	39.2	31.4	47.0
71	37.8	30.2	45.4



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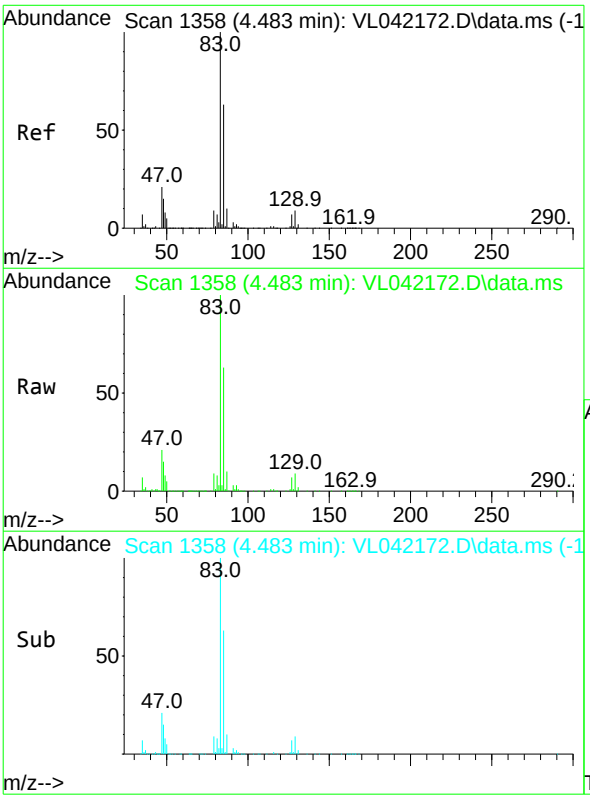
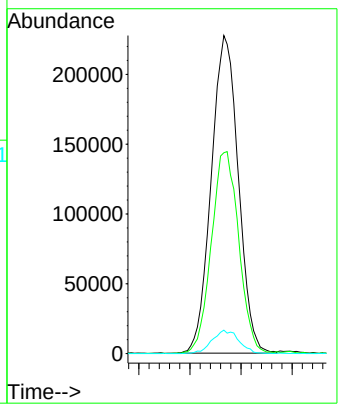
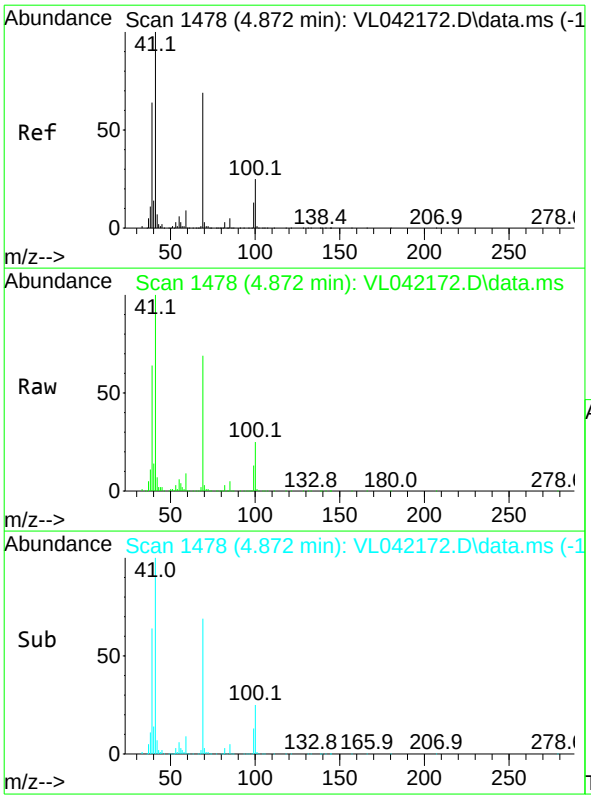


#42
Bromodichloromethane
Concen: 9.822 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 418887

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9

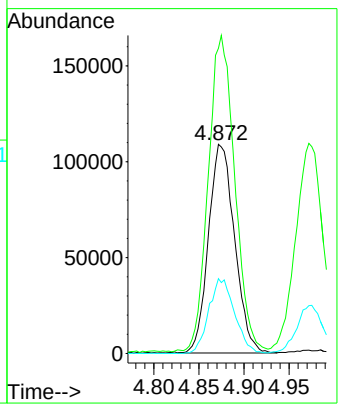




#43
Methyl Methacrylate
Concen: 9.618 ppbv
RT: 4.872 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 69 Resp: 219399

Ion	Ratio	Lower	Upper
69	100		
41	154.7	123.8	185.6
100	35.5	28.4	42.6



Instrument :
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ClientSampleId :
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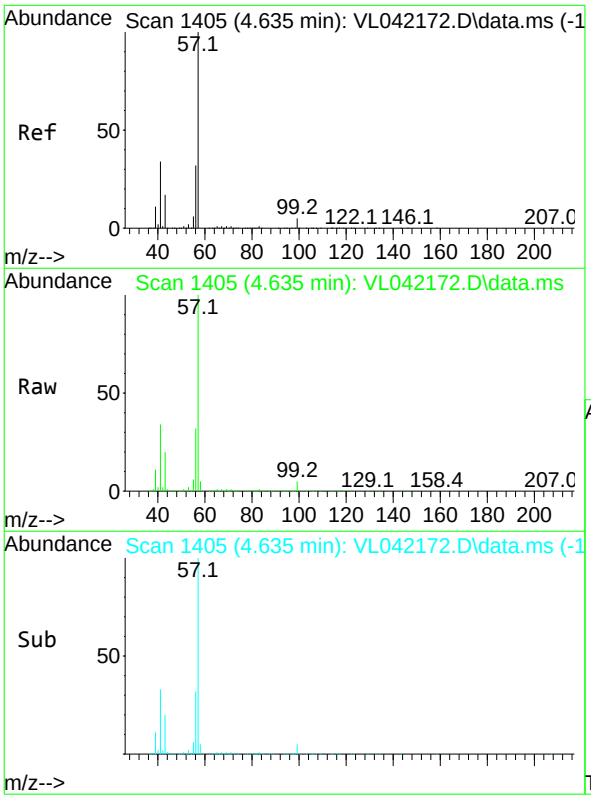
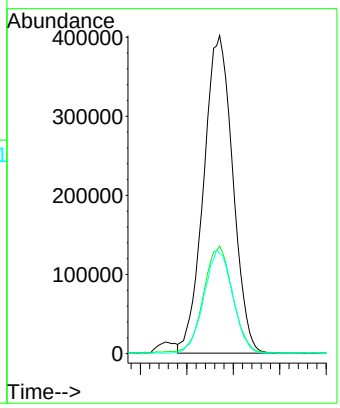
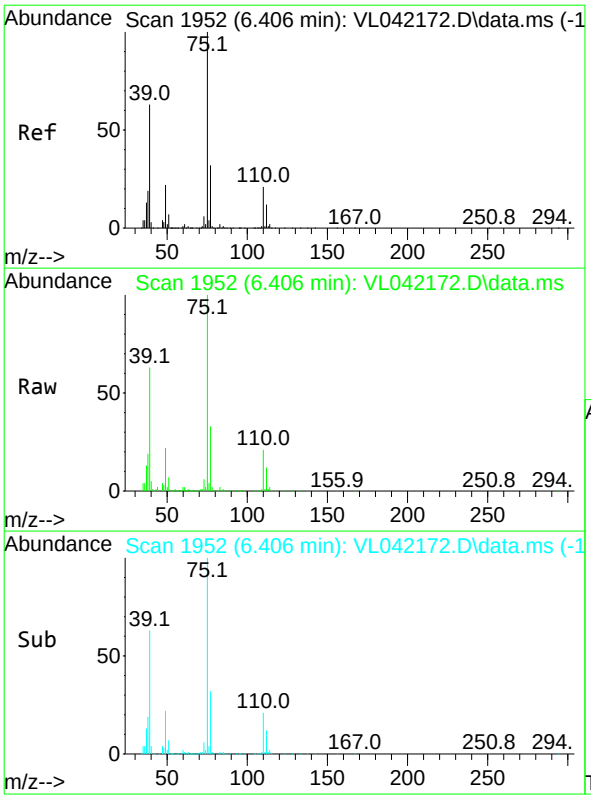


#44
2,2,4-Trimethylpentane
Concen: 9.600 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 876649

Ion	Ratio	Lower	Upper
57	100		
41	33.5	26.8	40.2
56	32.0	25.6	38.4

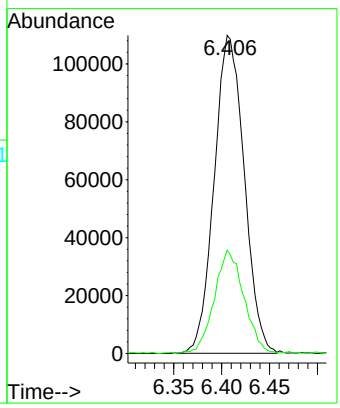




#45
t-1,3-Dichloropropene
Concen: 9.746 ppbv
RT: 6.406 min Scan# 19
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 239180

Ion	Ratio	Lower	Upper
75	100		
77	32.5	26.0	39.0



Instrument :
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ClientSampleId :
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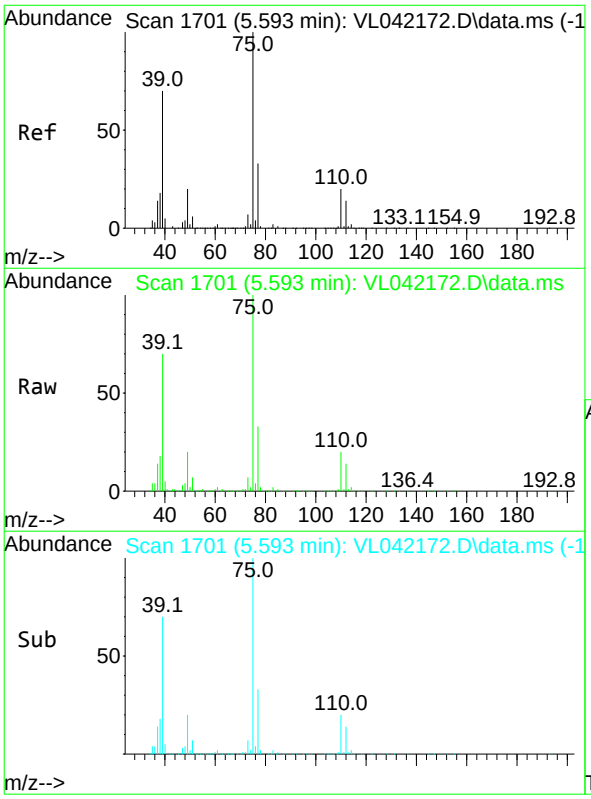
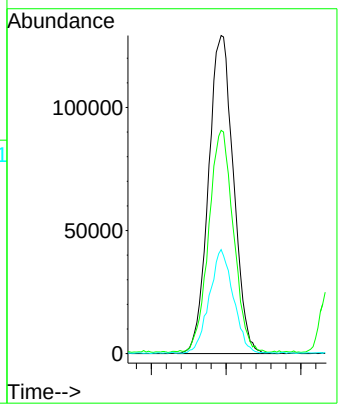
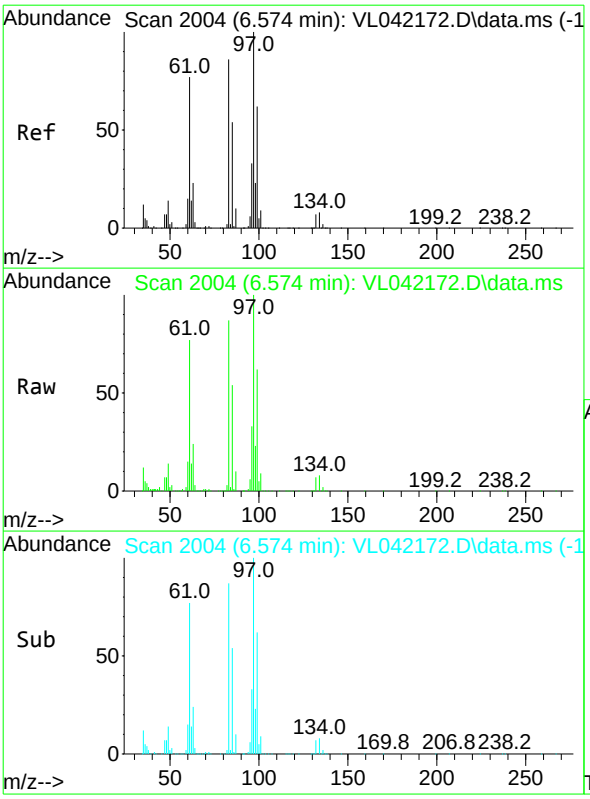


#46
cis-1,3-Dichloropropene
Concen: 9.973 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 300021

Ion	Ratio	Lower	Upper
75	100		
39	69.7	55.8	83.6
77	32.5	26.0	39.0

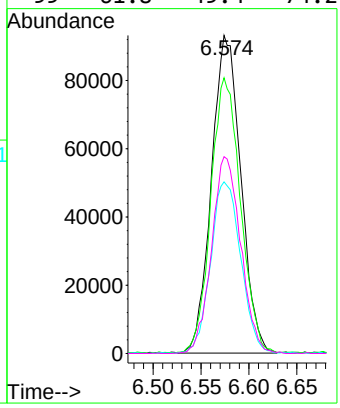




#47
1,1,2-Trichloroethane
Concen: 9.526 ppbv
RT: 6.574 min Scan# 20
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 198176

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.2	103.8
85	53.9	43.1	64.7
99	61.8	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
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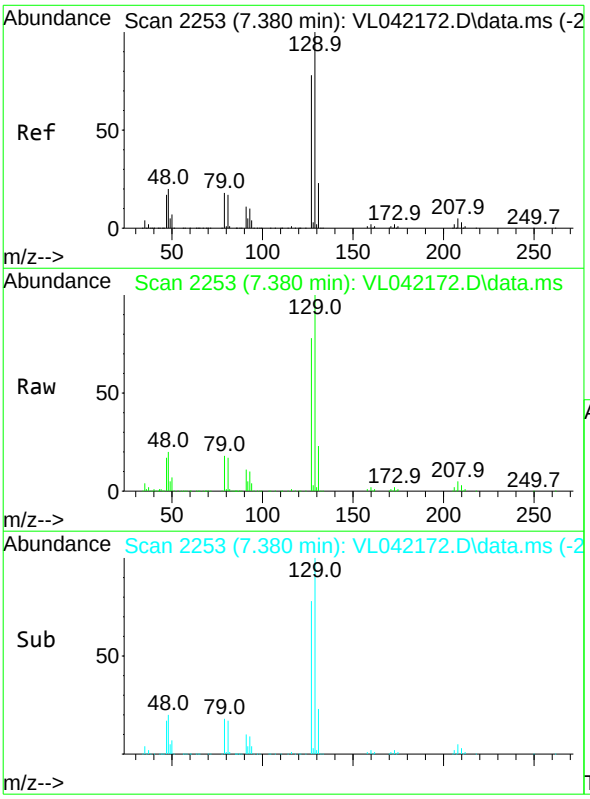
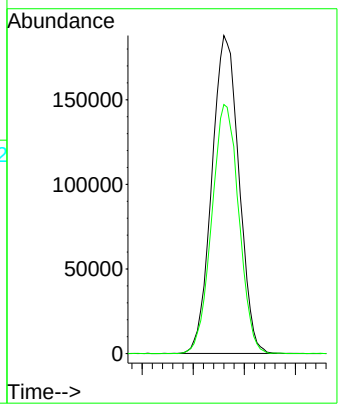
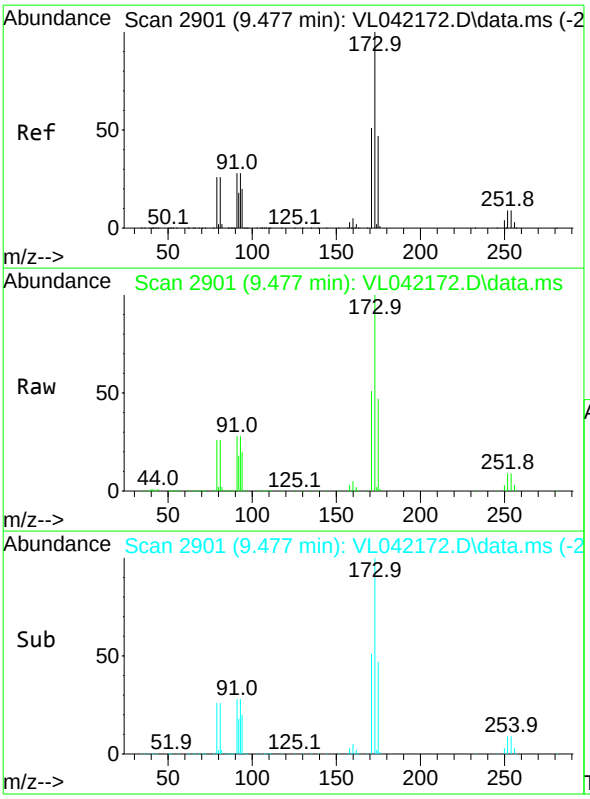


#48
Dibromochloromethane
Concen: 9.828 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:129 Resp: 346499

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2

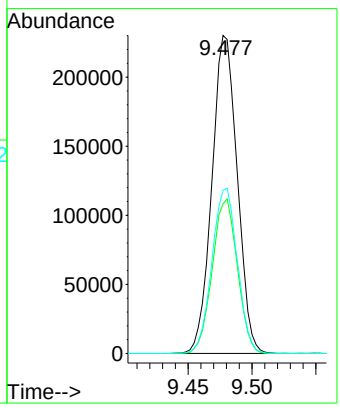




#49
Bromoform
Concen: 10.021 ppbv
RT: 9.477 min Scan# 29
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:173 Resp: 317189

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.6	57.8
171	52.2	41.8	62.6



Instrument :
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ClientSampleId :
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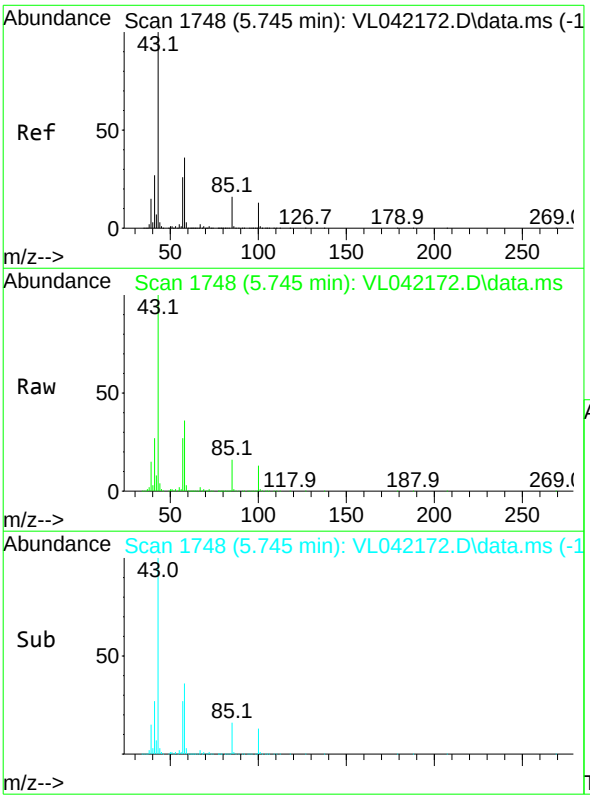
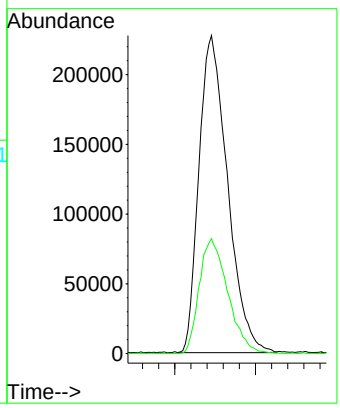
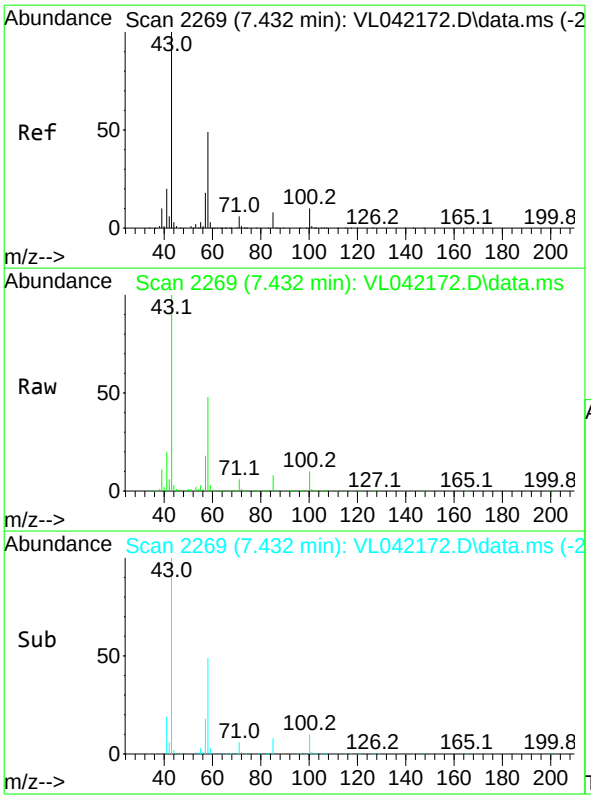


#50
4-Methyl-2-Pentanone
Concen: 8.934 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 559800

Ion	Ratio	Lower	Upper
43	100		
58	36.3	29.0	43.6

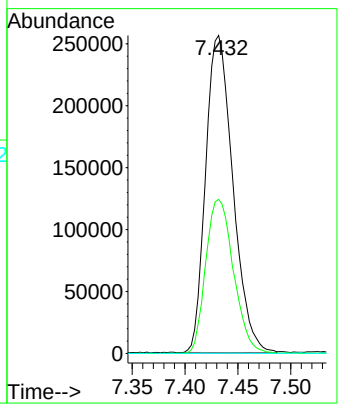




#51
2-Hexanone
Concen: 8.848 ppbv
RT: 7.432 min Scan# 22
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 460013

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



Instrument :
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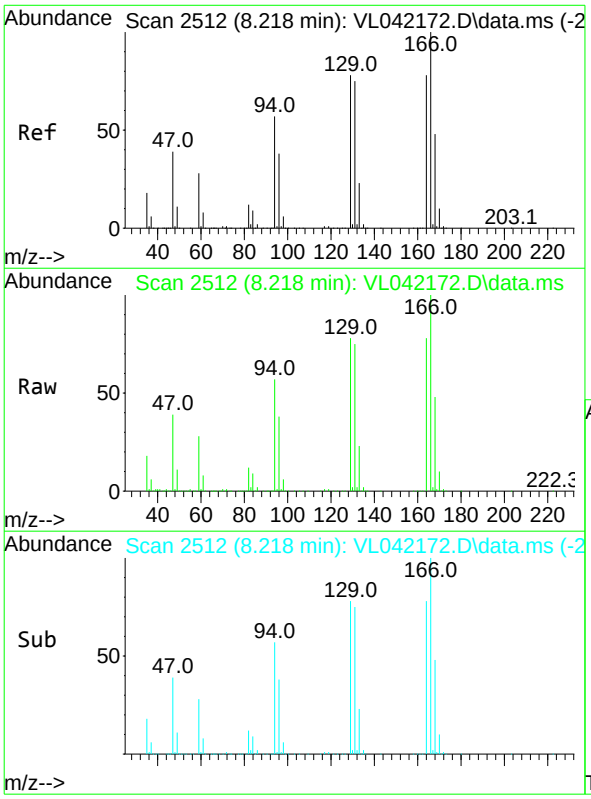
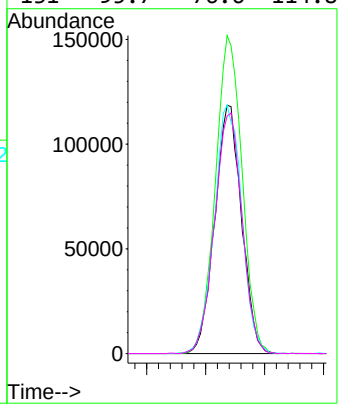
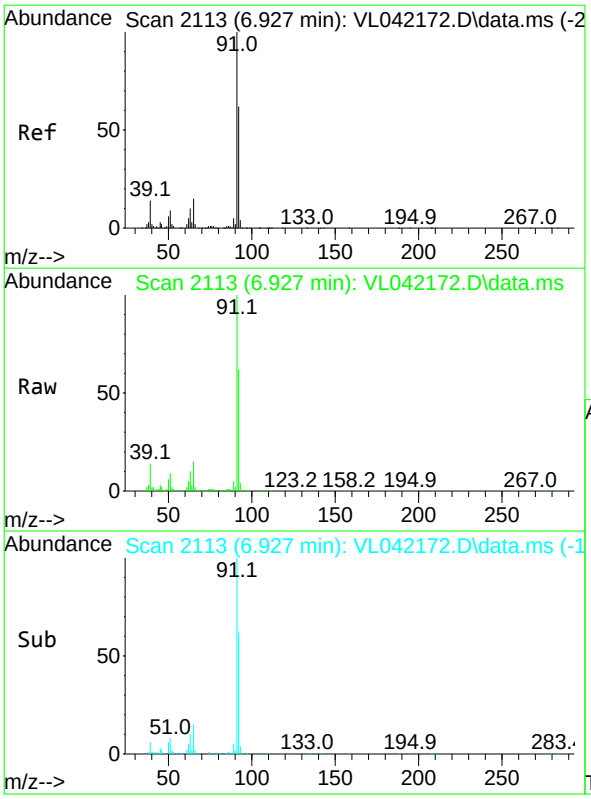


#52
Tetrachloroethene
Concen: 8.722 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:164 Resp: 186912

Ion	Ratio	Lower	Upper
164	100		
166	128.1	102.5	153.7
129	99.8	79.8	119.8
131	95.7	76.6	114.8

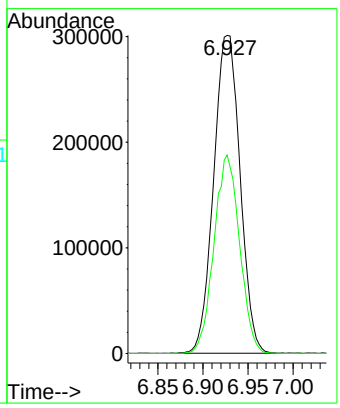




#53
Toluene
Concen: 9.576 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 613378

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6



Instrument :
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ClientSampleId :
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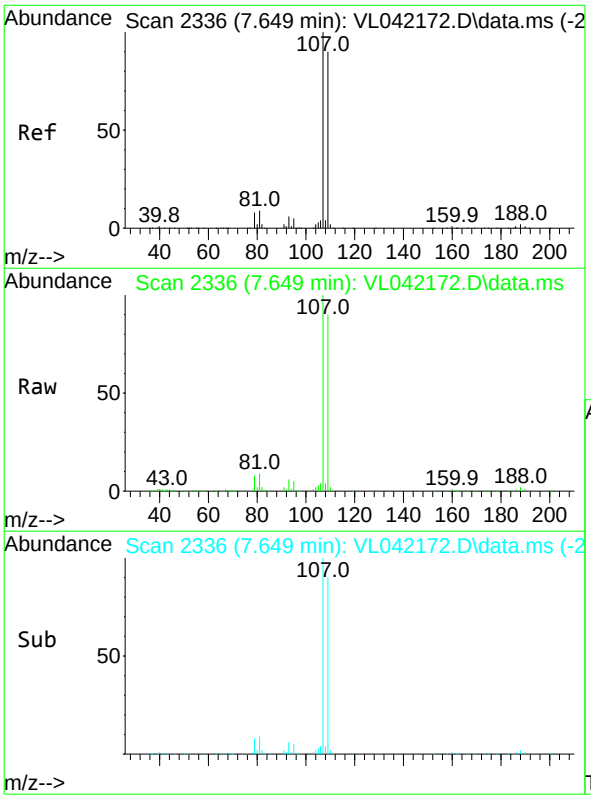
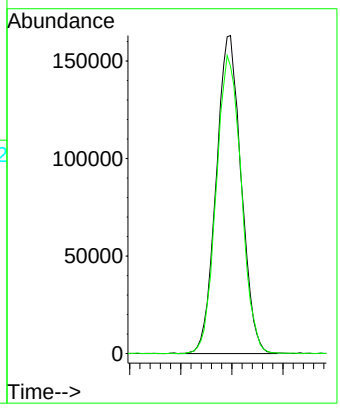
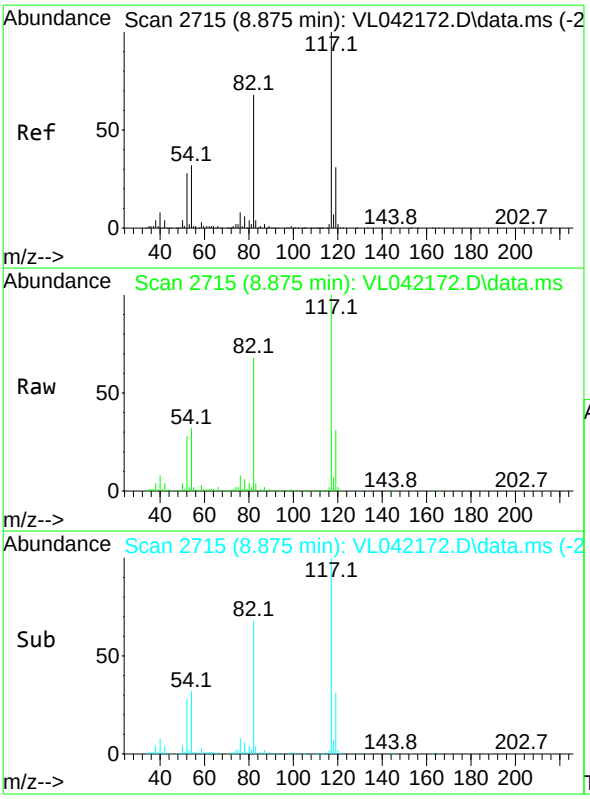


#54
1,2-Dibromoethane
Concen: 9.536 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:107 Resp: 276797

Ion	Ratio	Lower	Upper
107	100		
109	90.3	72.2	108.4

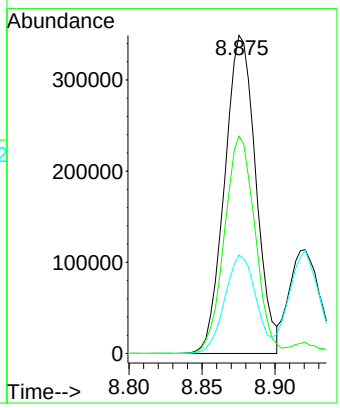




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:117 Resp: 519536

Ion	Ratio	Lower	Upper
117	100		
82	69.7	55.8	83.6
119	31.9	25.5	38.3



Instrument :
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ClientSampleId :
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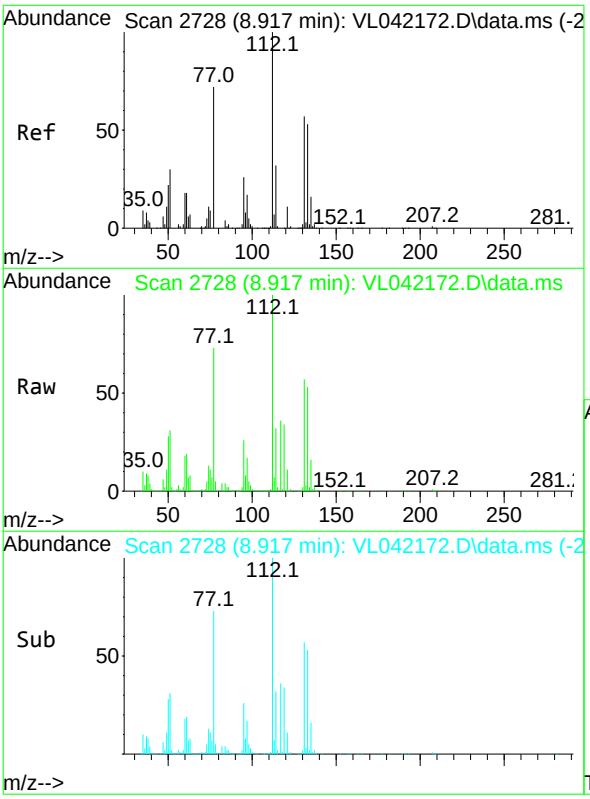
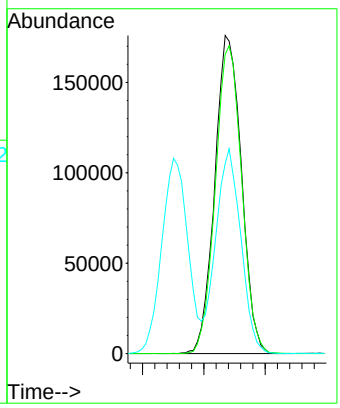
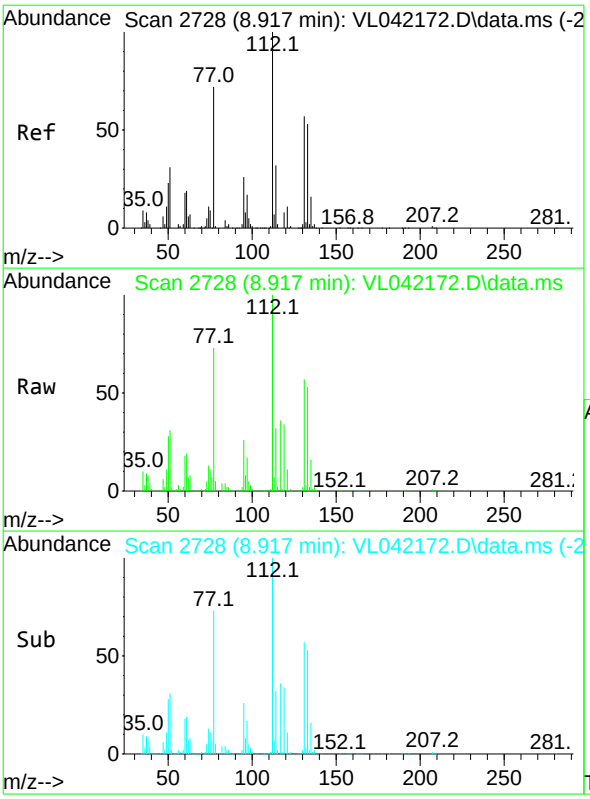


#56
1,1,1,2-Tetrachloroethane
Concen: 9.268 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:131 Resp: 265037

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.2	49.8	74.6

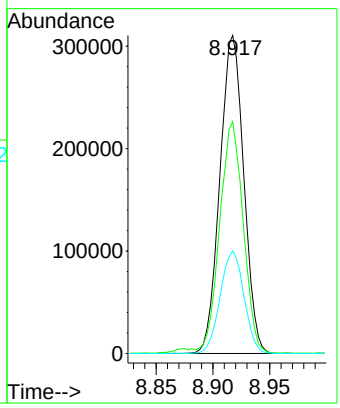




#57
Chlorobenzene
Concen: 9.223 ppbv
RT: 8.917 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:112 Resp: 454511

Ion	Ratio	Lower	Upper
112	100		
77	72.7	58.2	87.2
114	32.3	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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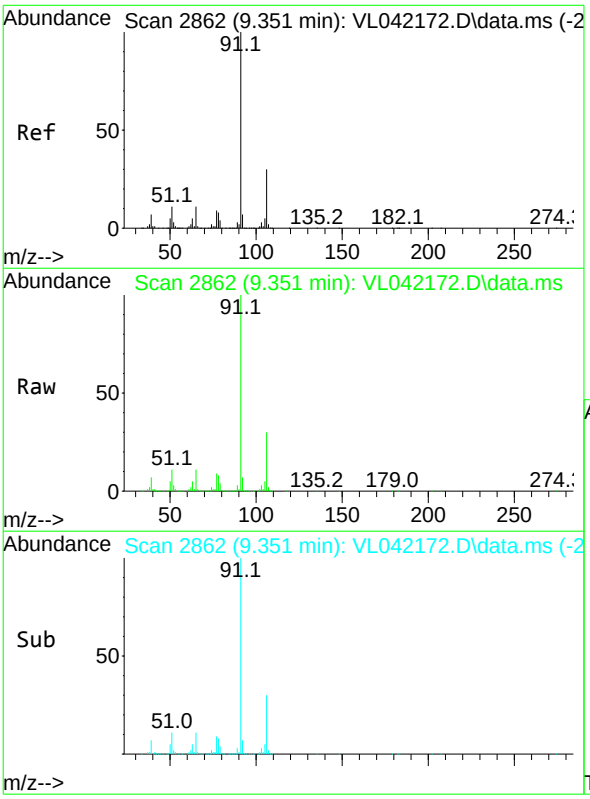
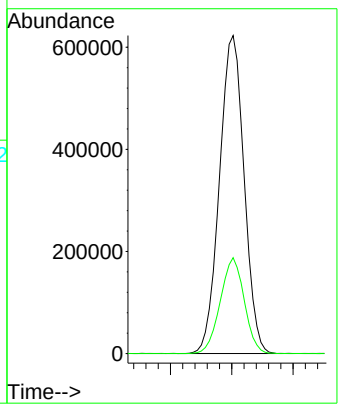
Supervised By :Mahesh Dadoda 04/03/2025

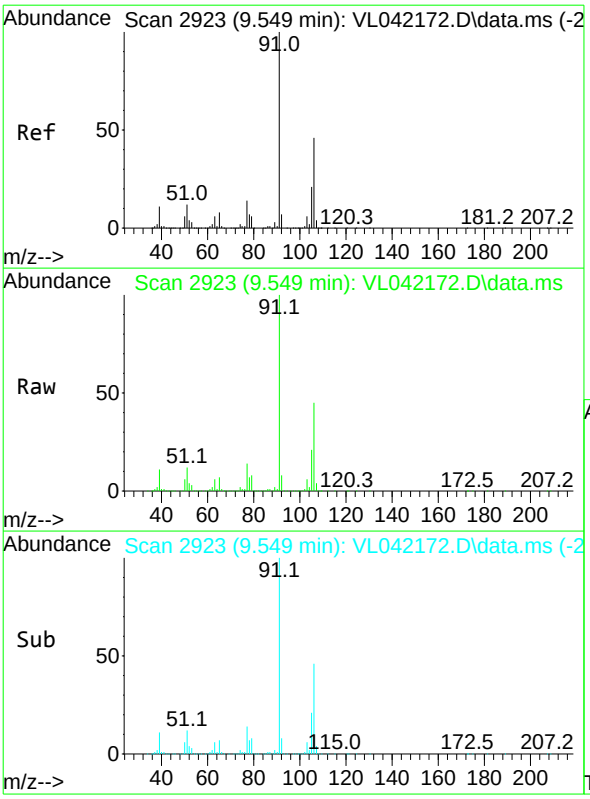


#58
Ethyl Benzene
Concen: 9.406 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 868003

Ion	Ratio	Lower	Upper
91	100		
106	30.2	24.2	36.2

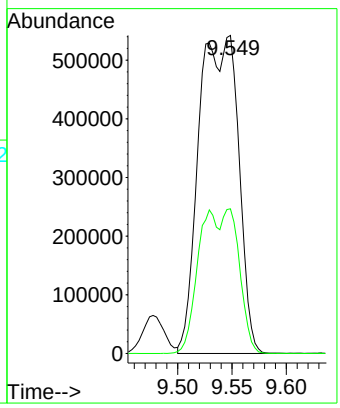




#59
m/p-Xylene
Concen: 18.607 ppbv m
RT: 9.549 min Scan# 29
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1372806

Ion	Ratio	Lower	Upper
91	100		
106	45.5	36.4	54.6



Instrument :
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ClientSampleId :
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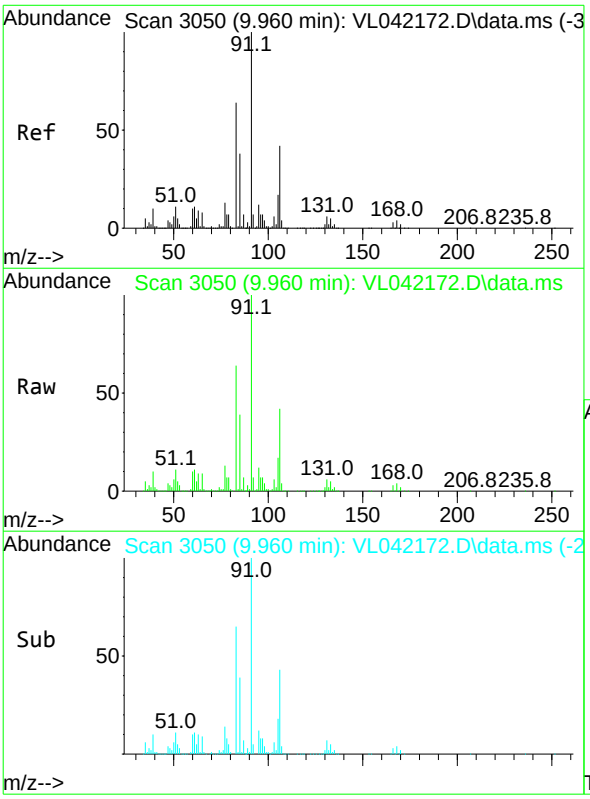
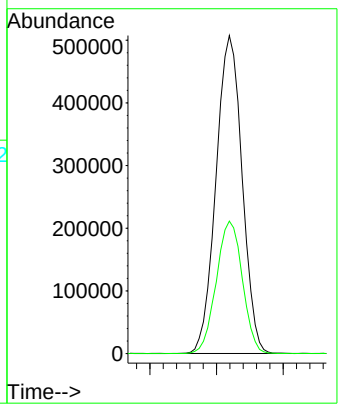
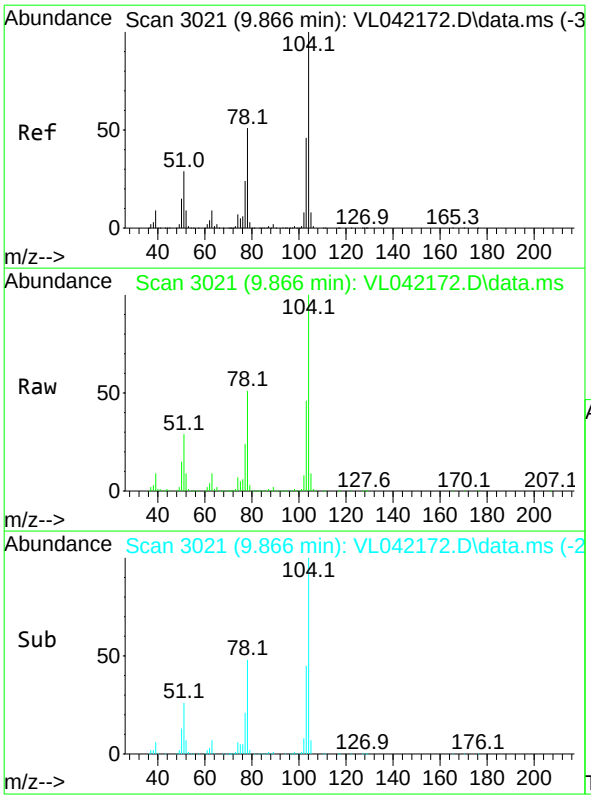


#60
o-Xylene
Concen: 9.340 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 689933

Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5

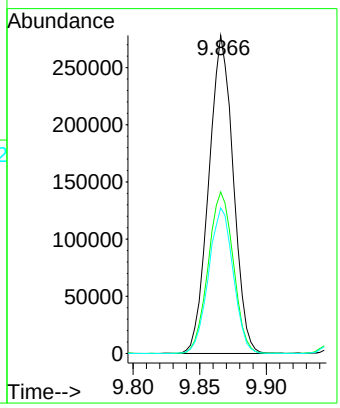




#61
Styrene
Concen: 9.706 ppbv
RT: 9.866 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:104 Resp: 354697

Ion	Ratio	Lower	Upper
104	100		
78	52.2	41.8	62.6
103	46.2	37.0	55.4



Instrument :
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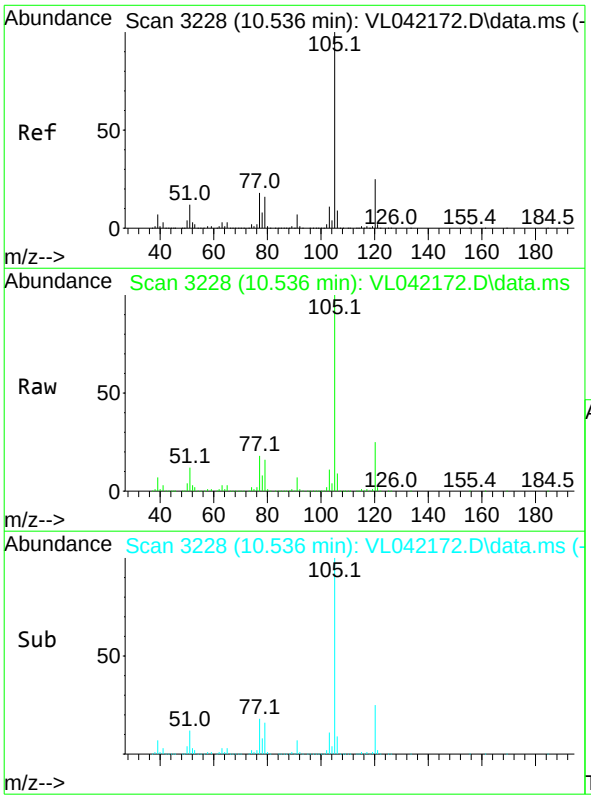
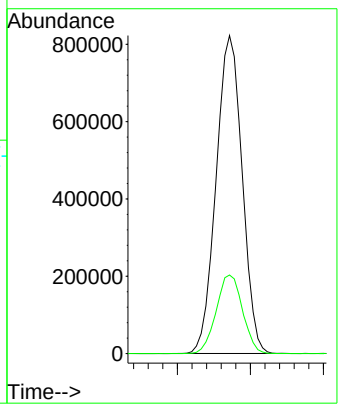
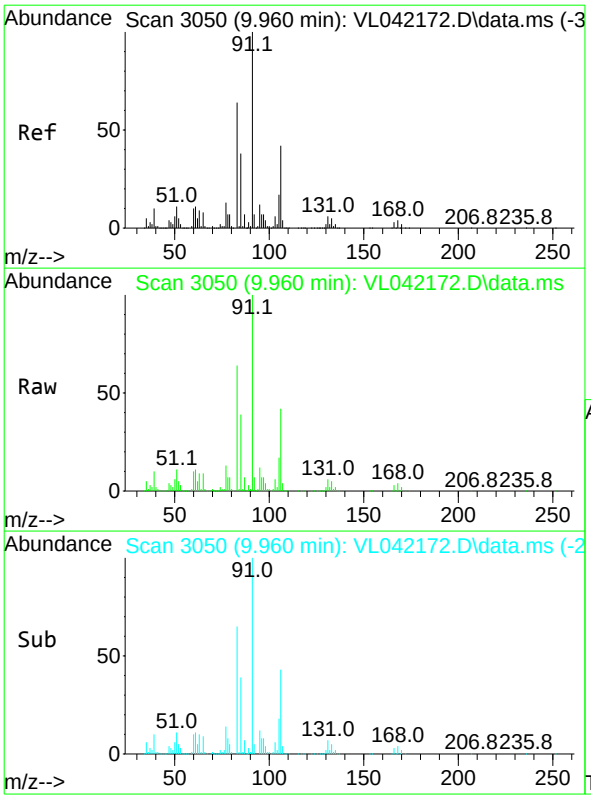


#62
Isopropylbenzene
Concen: 9.227 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1019255

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9

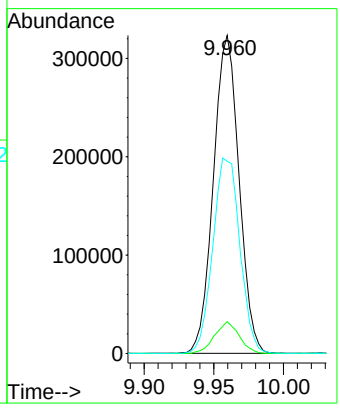




#63
1,1,2,2-Tetrachloroethane
Concen: 9.210 ppbv
RT: 9.960 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 413392

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	65.0	32.5	97.5



Instrument :
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ClientSampleId :
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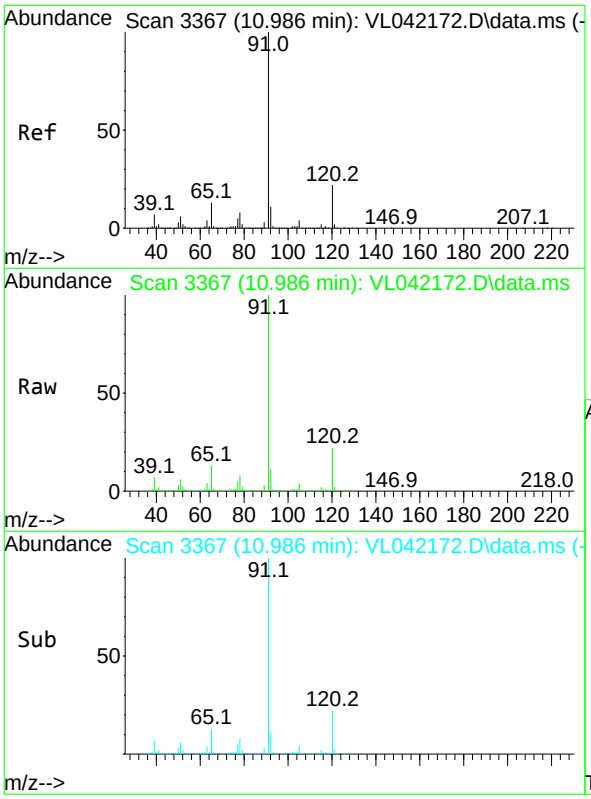
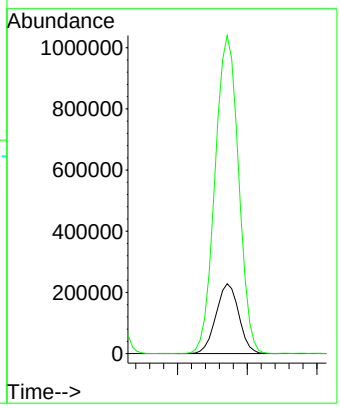
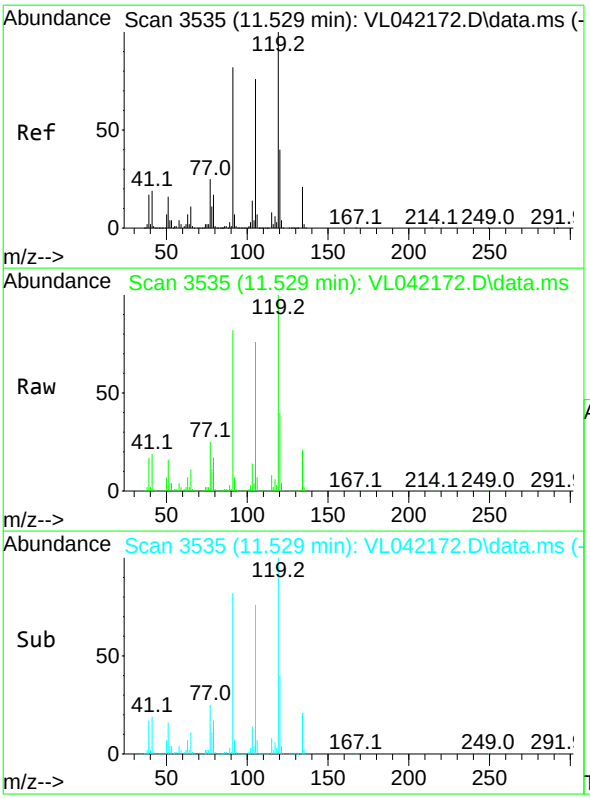


#64
n-propylbenzene
Concen: 9.122 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:120 Resp: 259405

Ion	Ratio	Lower	Upper
120	100		
91	471.1	376.9	565.3

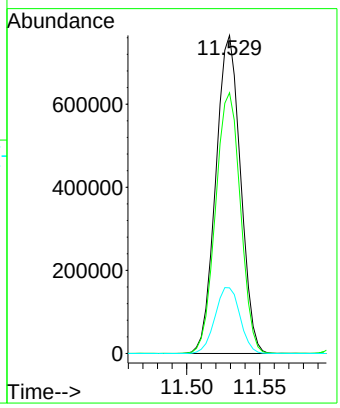




#65
tert-Butylbenzene
Concen: 8.828 ppbv
RT: 11.529 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:119 Resp: 901951

Ion	Ratio	Lower	Upper
119	100		
91	82.5	66.0	99.0
134	20.9	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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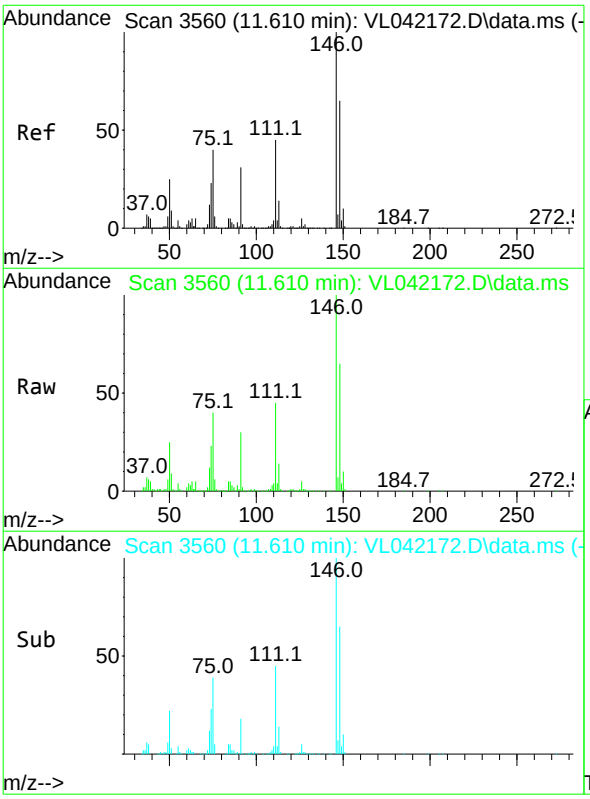
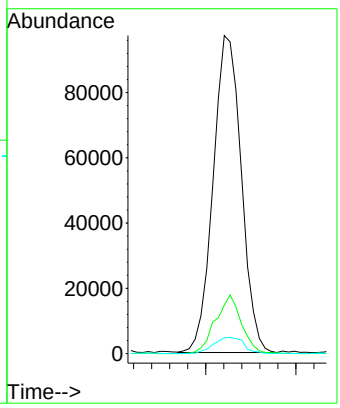
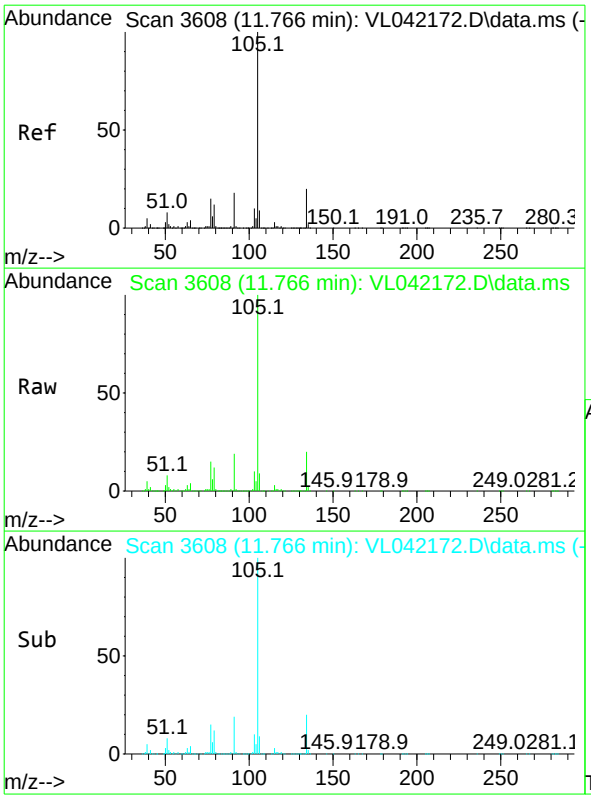


#66
Benzyl Chloride
Concen: 9.724 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 105411

Ion	Ratio	Lower	Upper
91	100		
126	17.2	13.8	20.6
128	5.6	4.5	6.7

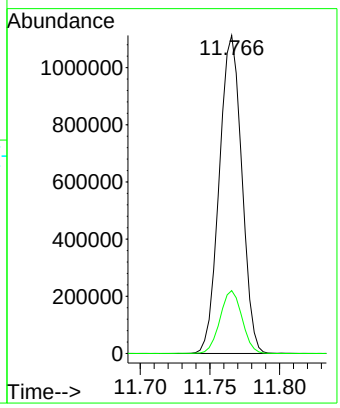




#67
sec-Butylbenzene
Concen: 8.796 ppbv
RT: 11.766 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1249106

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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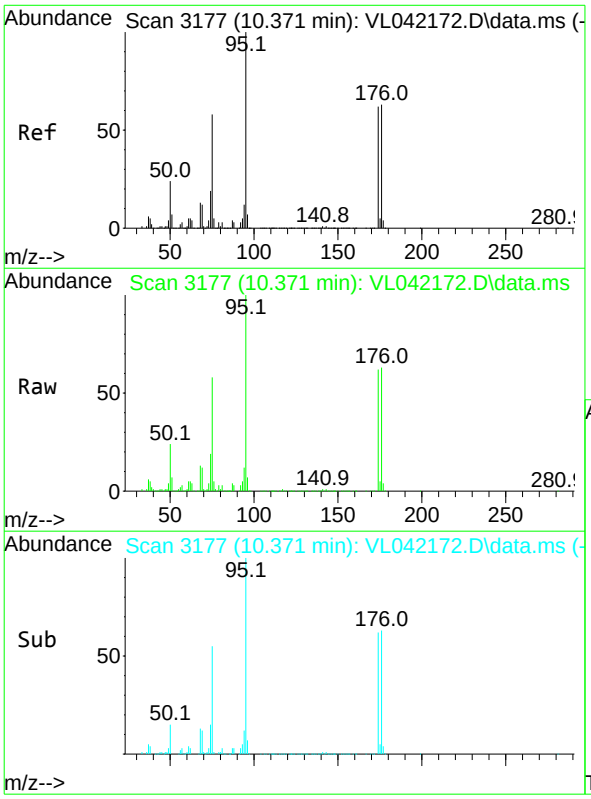
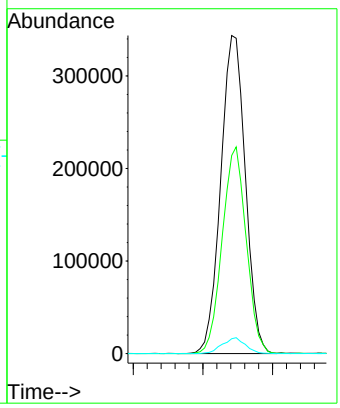
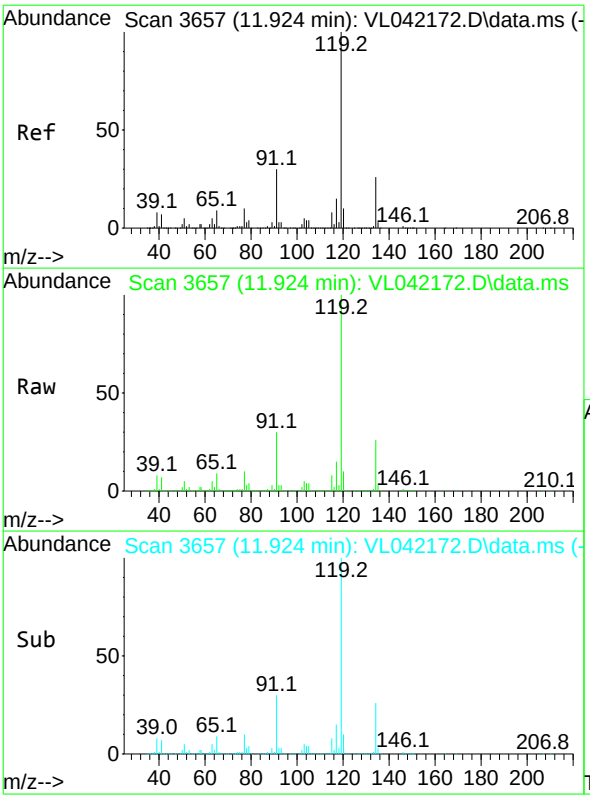


#68
1-Bromo-4-Fluorobenzene
Concen: 9.901 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 95 Resp: 422410

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6

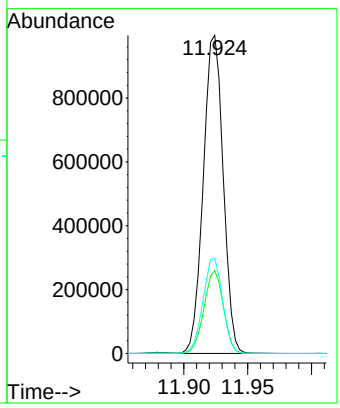




#69
p-Isopropyltoluene
Concen: 8.830 ppbv
RT: 11.924 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:119 Resp: 1079675

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	29.6	23.7	35.5



Instrument :
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ClientSampleId :
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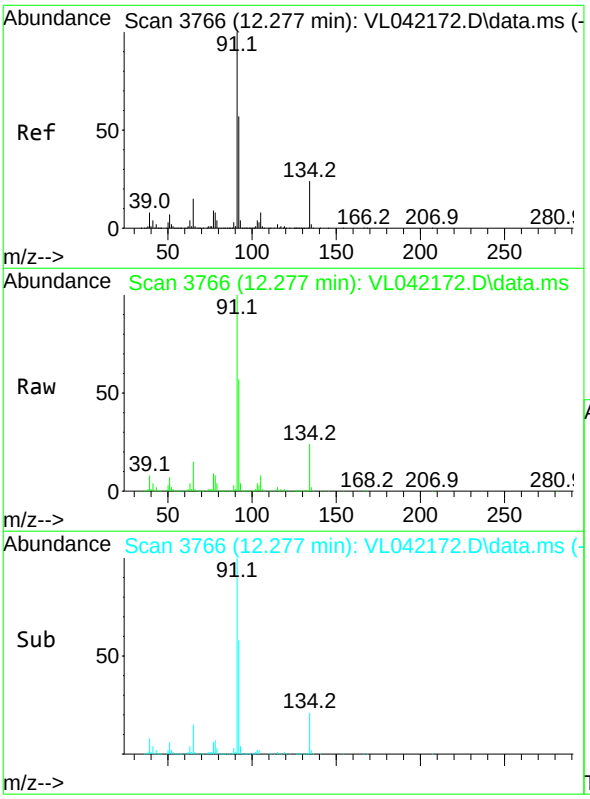
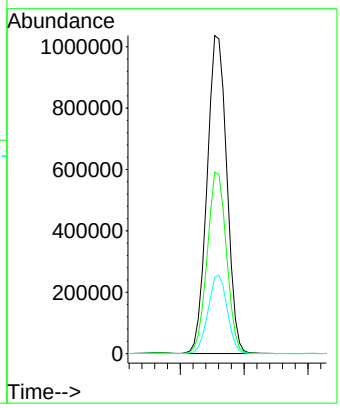
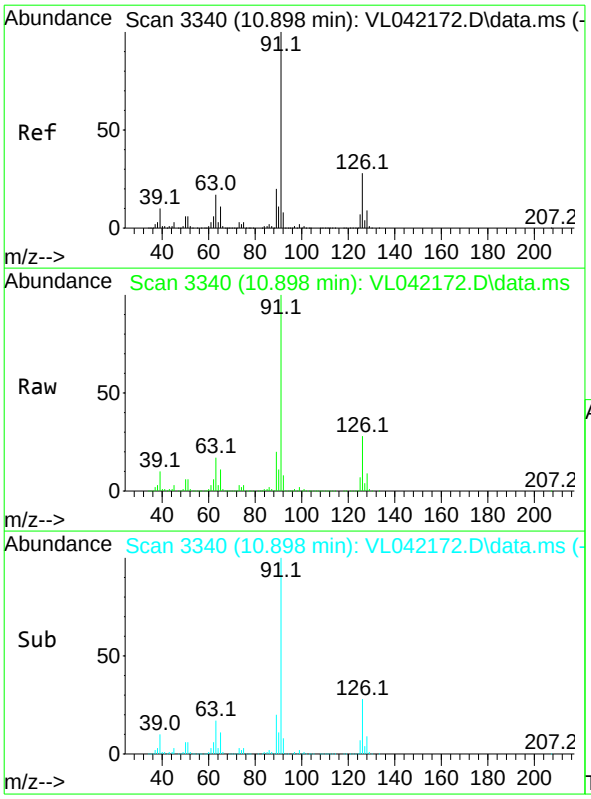


#70
n-Butylbenzene
Concen: 8.879 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1110351

Ion	Ratio	Lower	Upper
91	100		
92	56.1	44.9	67.3
134	24.0	19.2	28.8

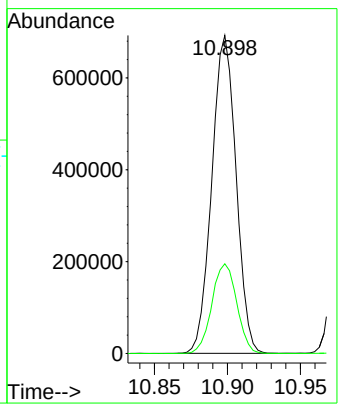




#71
2-Chlorotoluene
Concen: 9.320 ppbv
RT: 10.898 min Scan# 33
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 799102

Ion	Ratio	Lower	Upper
91	100		
126	29.0	11.6	46.4



Instrument :
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ClientSampleId :
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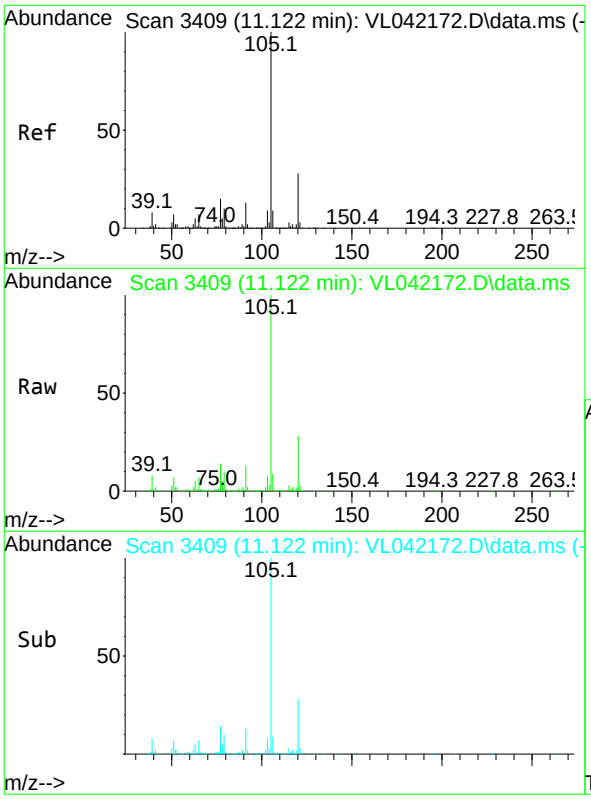
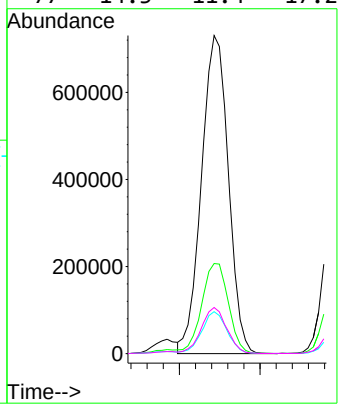
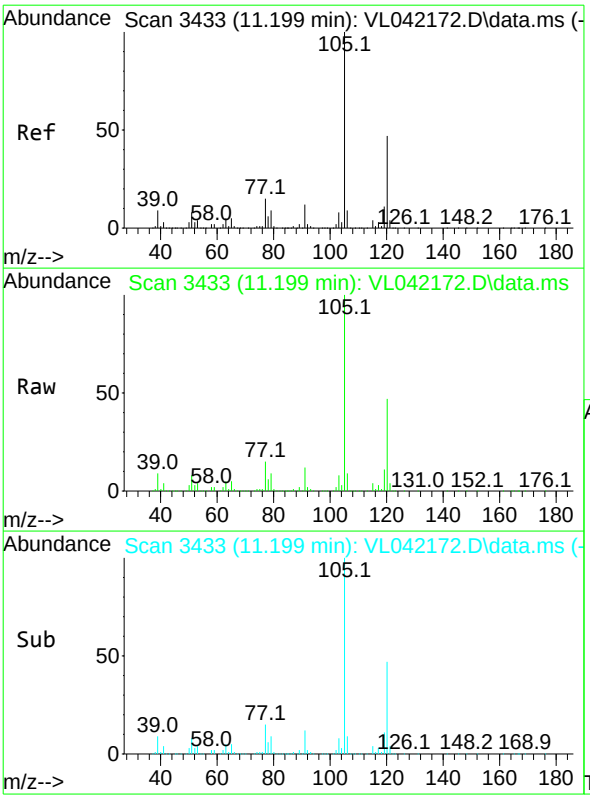


#72
4-Ethyltoluene
Concen: 9.200 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 846232

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	12.9	10.3	15.5
77	14.3	11.4	17.2

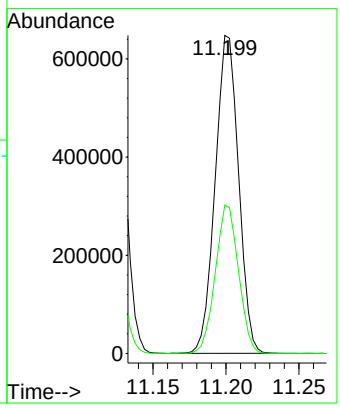




#73
1,3,5-Trimethylbenzene
Concen: 8.970 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 720566

Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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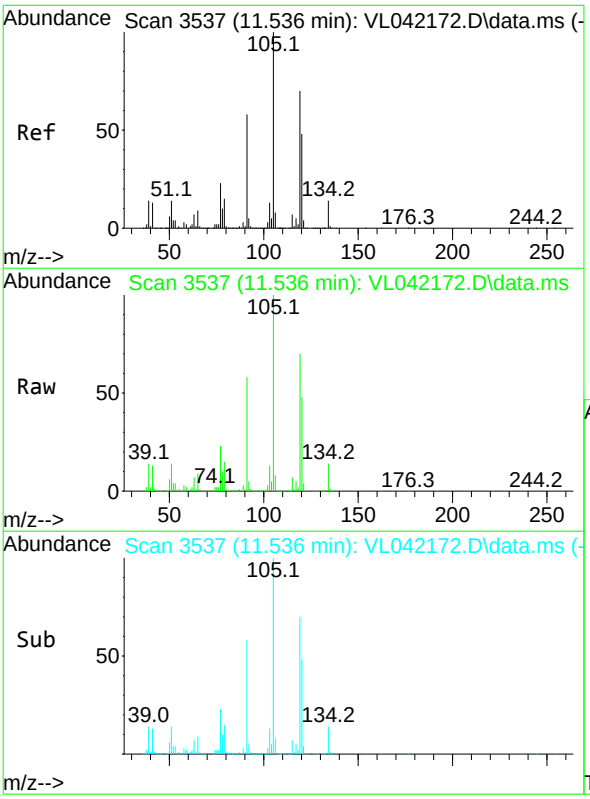
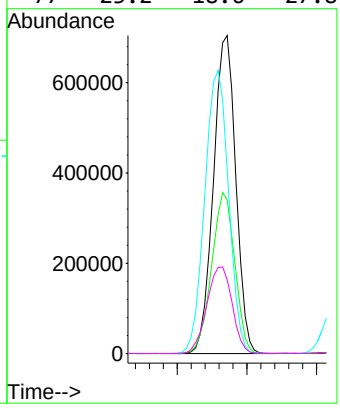
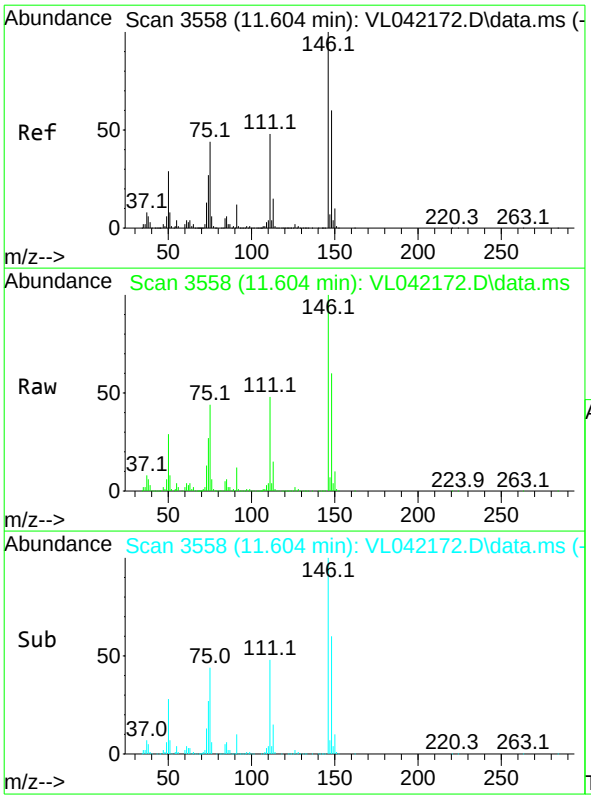


#74
1,2,4-Trimethylbenzene
Concen: 8.480 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 784745

Ion	Ratio	Lower	Upper
105	100		
120	48.3	38.6	58.0
91	57.7	46.2	69.2
77	23.2	18.6	27.8

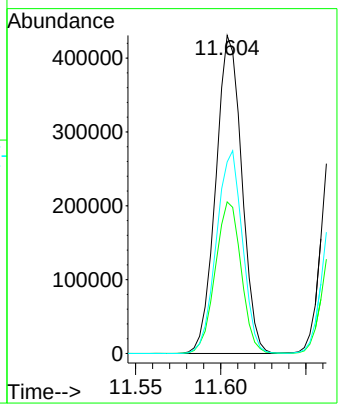




#75
1,3-Dichlorobenzene
Concen: 9.028 ppbv
RT: 11.604 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 458226

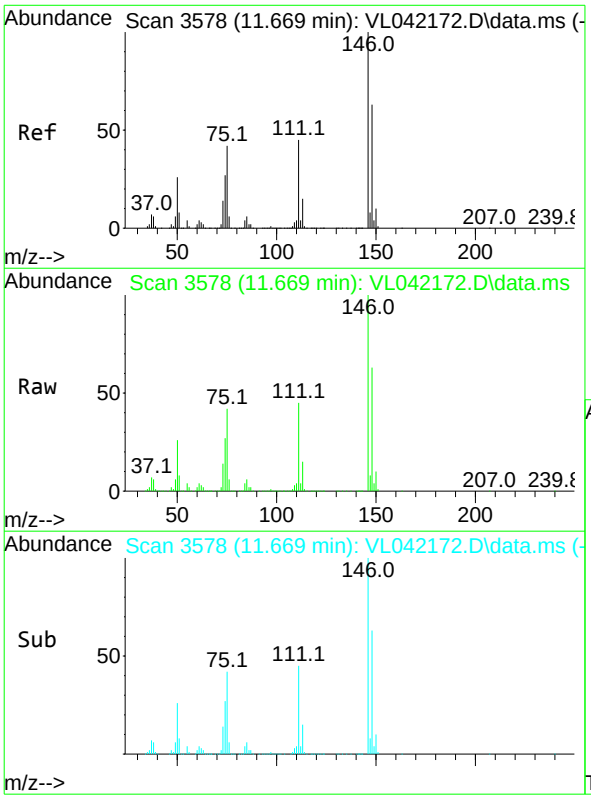
Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.9	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

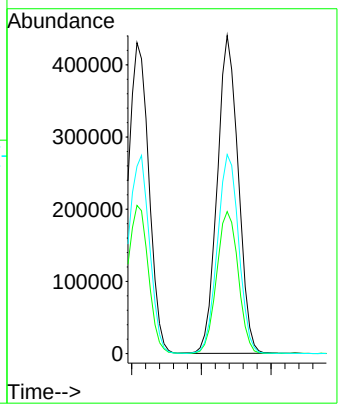
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

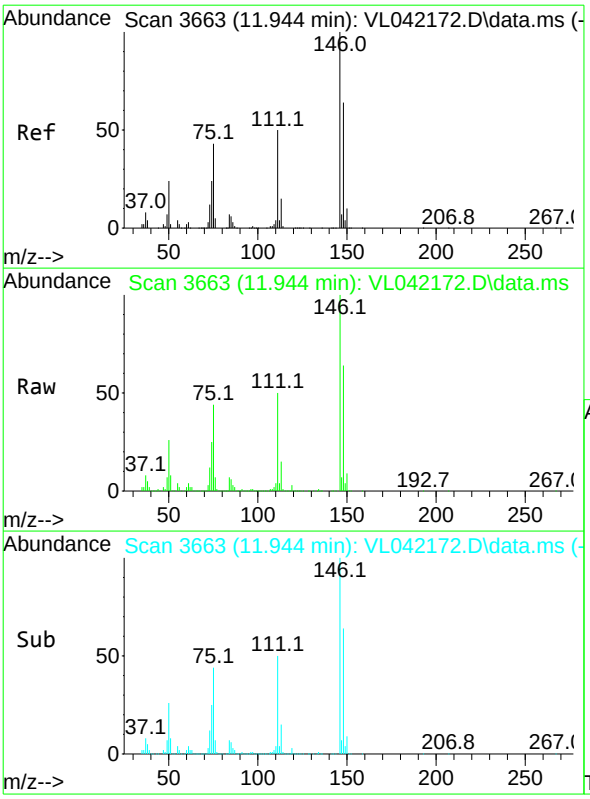


#76
1,4-Dichlorobenzene
Concen: 9.134 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 461371

Ion	Ratio	Lower	Upper
146	100		
111	46.0	23.0	69.0
148	63.8	31.9	95.7

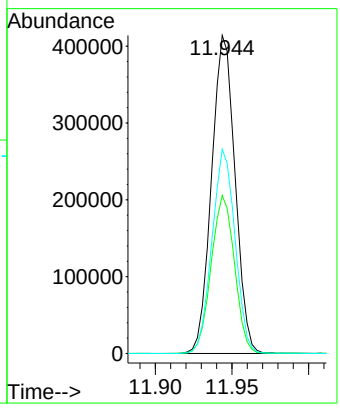




#77
1,2-Dichlorobenzene
Concen: 8.933 ppbv
RT: 11.944 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 441473

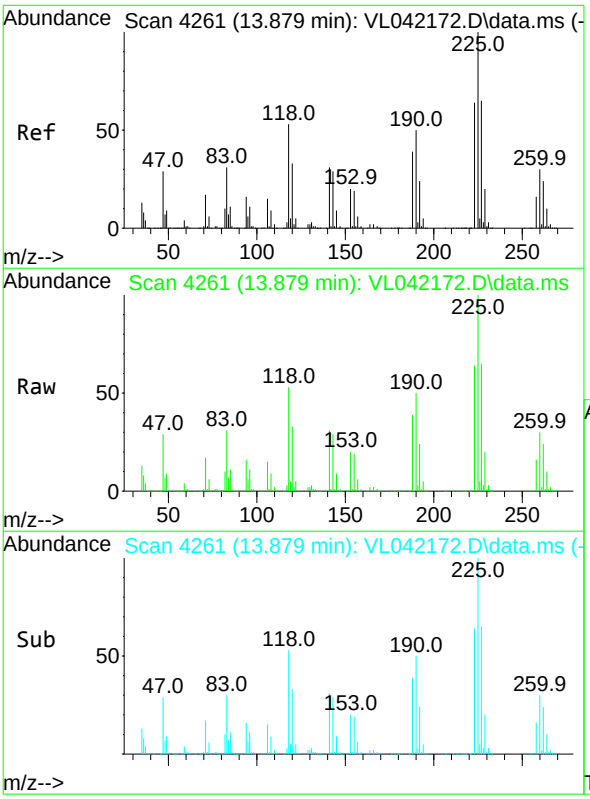
Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.8	74.3
148	63.2	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

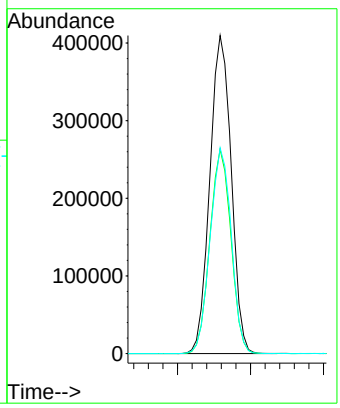
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

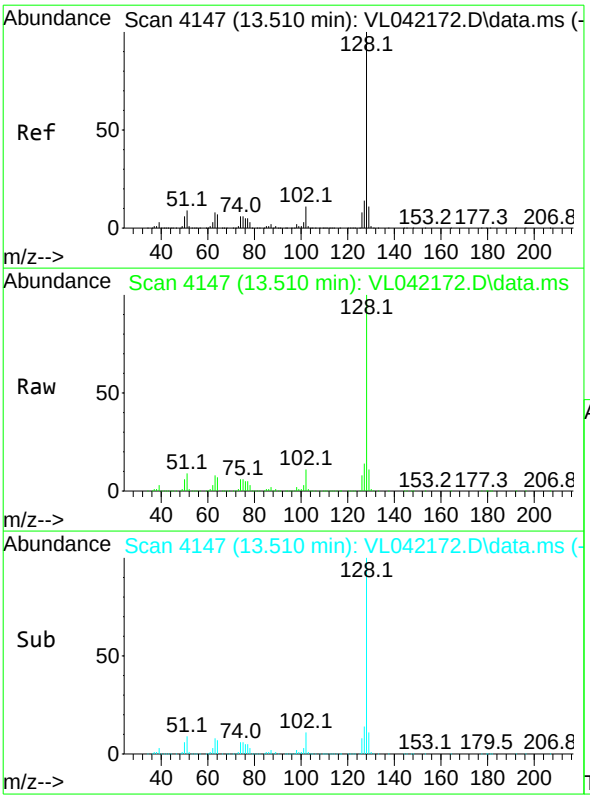


#78
Hexachloro-1,3-Butadiene
Concen: 8.284 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:225 Resp: 416735

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.6	76.0
227	64.0	51.2	76.8

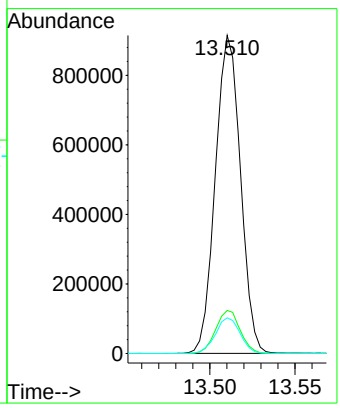




#79
Naphthalene
Concen: 9.271 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:128 Resp: 938470

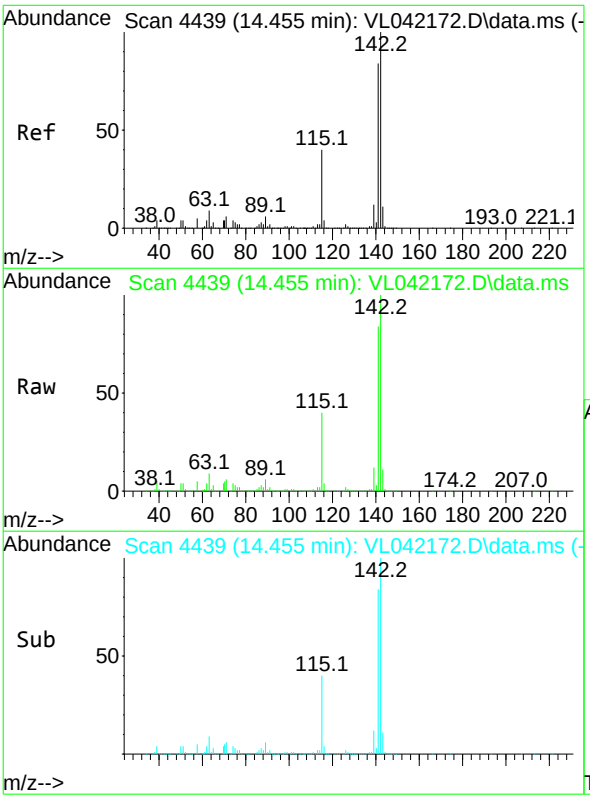
Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.8	16.2
129	11.2	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

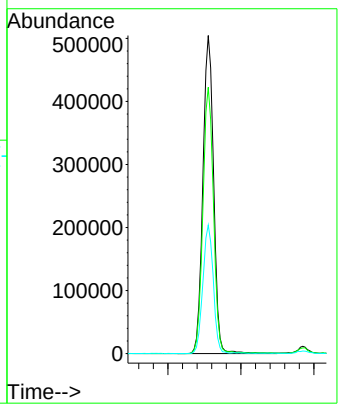
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

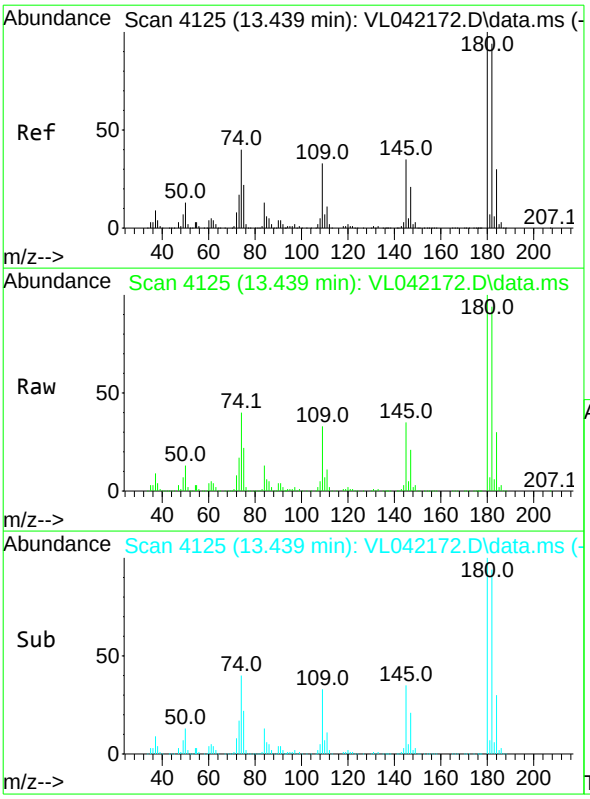


#80
Naphthalene,2-methyl-
Concen: 10.436 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:142 Resp: 514394

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.5	31.6	47.4

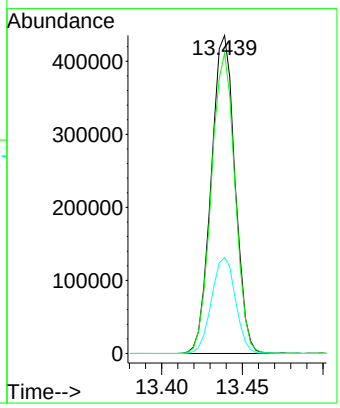




#81
1,2,4-Trichlorobenzene
Concen: 9.561 ppbv
RT: 13.439 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:180 Resp: 446420

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.5	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	188395	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	546394	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	504538	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	417532	10.077	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	55859	2.008	ppbv		99
3) Chlorodifluoromethane	1.473	51	57045	2.007	ppbv		99
4) Chloromethane	1.531	50	23293	2.049	ppbv		94
5) Vinyl Chloride	1.576	62	21989	1.897	ppbv		99
6) Bromomethane	1.664	94	10027	1.946	ppbv		98
7) Chloroethane	1.703	64	8413	1.844	ppbv		92
8) Dichlorotetrafluoroethane	1.551	85	48008	2.027	ppbv		98
9) Propene	1.483	41	26295	2.054	ppbv		94
10) Heptane	4.972	43	71466	2.063	ppbv		99
11) Trichlorofluoromethane	1.874	101	55754	2.060	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.136	101	44761	2.012	ppbv		98
13) Ethanol	1.719	45	2748m	2.741	ppbv		
14) Bromoethene	1.780	108	17323	2.033	ppbv	#	89
15) Acetone	1.832	43	55365	2.101	ppbv		95
16) 1,3-Butadiene	1.606	39	22894	1.932	ppbv		95
17) tert-Butyl alcohol	2.039	59	66174	2.016	ppbv		100
18) 1,1-Dichloroethene	2.030	96	21103	2.029	ppbv		95
19) Isopropyl Alcohol	1.884	45	27804	1.870	ppbv	#	35
20) Methylene Chloride	2.059	84	20518	2.091	ppbv		96
21) Allyl Chloride	2.094	41	38425	2.068	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	23384	1.924	ppbv		92
23) Vinyl Acetate	2.460	43	20736	1.894	ppbv	#	97
24) 1,1-Dichloroethane	2.405	63	44740	2.008	ppbv		99
25) Ethyl Acetate	2.832	43	139516	2.040	ppbv		99
26) Hexane	2.823	57	52095	1.972	ppbv		92
27) Carbon Disulfide	2.146	76	57969	2.047	ppbv	#	76
28) Methyl tert-Butyl Ether	2.437	73	33703	2.049	ppbv		99
29) Chloroform	2.845	83	78043	2.019	ppbv		95
30) Cyclohexane	3.852	84	45641	1.989	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	53713	2.003	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	81070	1.833	ppbv		99
34) 2-Butanone	2.554	43	84157	2.124	ppbv		99
35) Carbon Tetrachloride	3.758	117	81735	1.944	ppbv		96
36) Benzene	3.651	78	110727	2.044	ppbv		97
37) 1,2-Dichloroethane	3.214	62	61476	1.982	ppbv		97
38) Trichloroethene	4.541	130	43501	1.924	ppbv		97
39) 1,2-Dichloropropane	4.308	63	39912	2.023	ppbv		93
40) 1,4-Dioxane	4.587	88	20884m	2.040	ppbv		
41) Tetrahydrofuran	3.056	42	47262	2.097	ppbv		99
42) Bromodichloromethane	4.483	83	87640	2.050	ppbv		99
43) Methyl Methacrylate	4.878	69	44624	1.952	ppbv		97
44) 2,2,4-Trimethylpentane	4.632	57	188282	2.057	ppbv		100
45) t-1,3-Dichloropropene	6.406	75	49461	2.011	ppbv		99

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	61829	2.050	ppbv	#	91
47) 1,1,2-Trichloroethane	6.577	97	41387	1.985	ppbv		95
48) Dibromochloromethane	7.383	129	72441	2.050	ppbv		100
49) Bromoform	9.477	173	65221	2.056	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	132328	2.107	ppbv		99
51) 2-Hexanone	7.435	43	112681	2.162	ppbv	#	99
52) Tetrachloroethene	8.221	164	40558	1.888	ppbv		98
53) Toluene	6.923	91	131314	2.045	ppbv		99
54) 1,2-Dibromoethane	7.648	107	56799	1.952	ppbv		90
56) 1,1,1,2-Tetrachloroethane	8.920	131	58141	2.093	ppbv		97
57) Chlorobenzene	8.914	112	100308	2.096	ppbv	#	94
58) Ethyl Benzene	9.351	91	191114	2.132	ppbv		96
59) m/p-Xylene	9.548	91	299531m	4.181	ppbv		
60) o-Xylene	9.959	91	151292	2.109	ppbv		98
61) Styrene	9.865	104	74134	2.089	ppbv		98
62) Isopropylbenzene	10.535	105	228191	2.127	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.956	83	90114	2.067	ppbv		99
64) n-propylbenzene	10.985	120	58105	2.104	ppbv		92
65) tert-Butylbenzene	11.529	119	216336	2.180	ppbv		99
66) Benzyl Chloride	11.610	91	22272	2.116	ppbv		95
67) sec-Butylbenzene	11.762	105	297381	2.156	ppbv		99
69) p-Isopropyltoluene	11.921	119	258357	2.176	ppbv		100
70) n-Butylbenzene	12.277	91	270616	2.228	ppbv		99
71) 2-Chlorotoluene	10.898	91	177487	2.132	ppbv		100
72) 4-Ethyltoluene	11.121	105	194660	2.179	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	169221	2.169	ppbv		96
74) 1,2,4-Trimethylbenzene	11.532	105	198351	2.207	ppbv		96
75) 1,3-Dichlorobenzene	11.604	146	107217	2.175	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	104925	2.139	ppbv		99
77) 1,2-Dichlorobenzene	11.943	146	102310	2.132	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	109539	2.242	ppbv		99
79) Naphthalene	13.510	128	233451	2.375	ppbv		97
80) Naphthalene,2-methyl-	14.455	142	117313	2.451	ppbv		99
81) 1,2,4-Trichlorobenzene	13.435	180	103765	2.288	ppbv		97

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

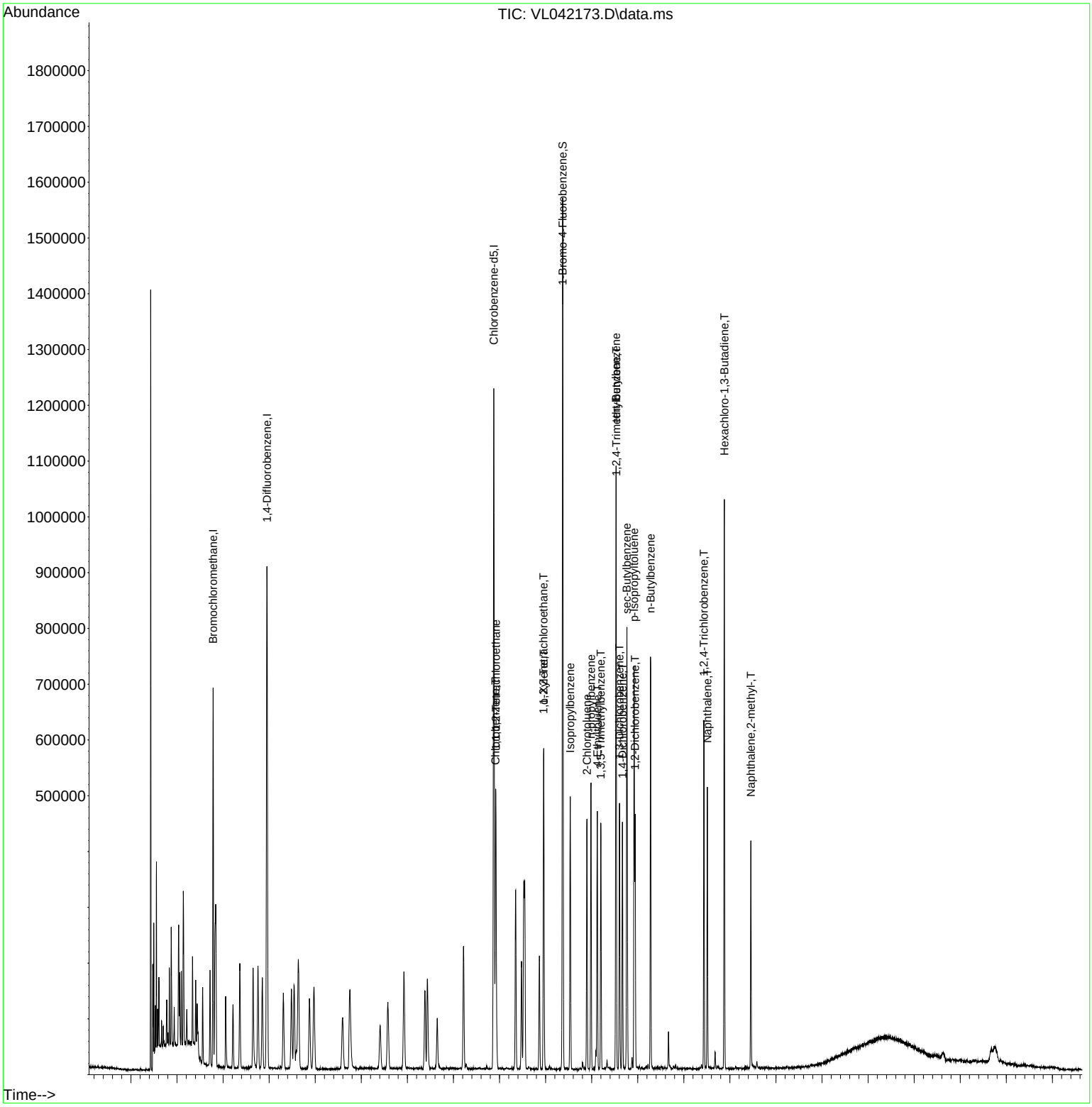
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

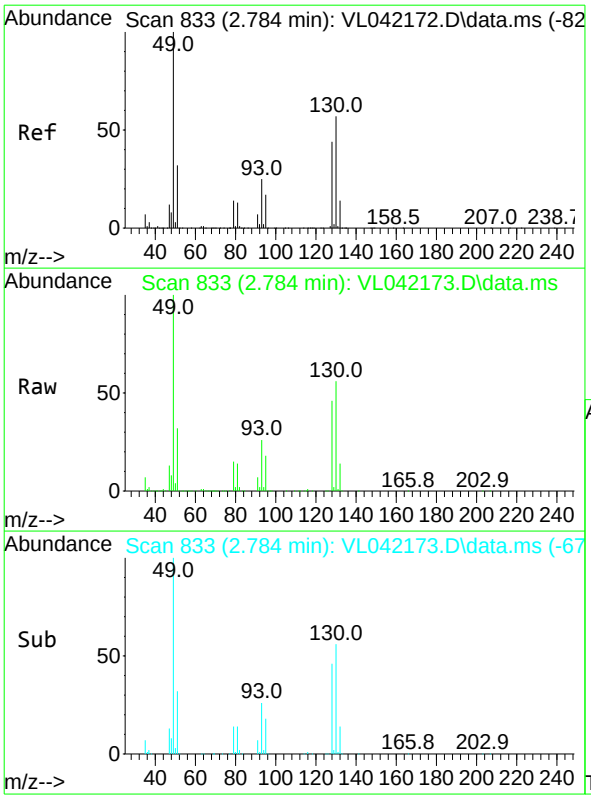
Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

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

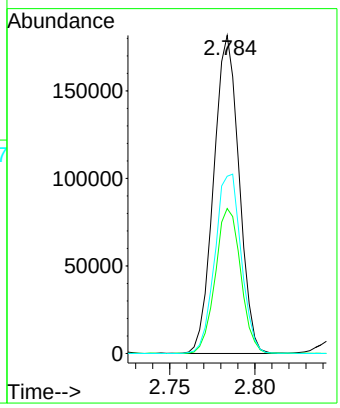




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 49 Resp: 188395

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

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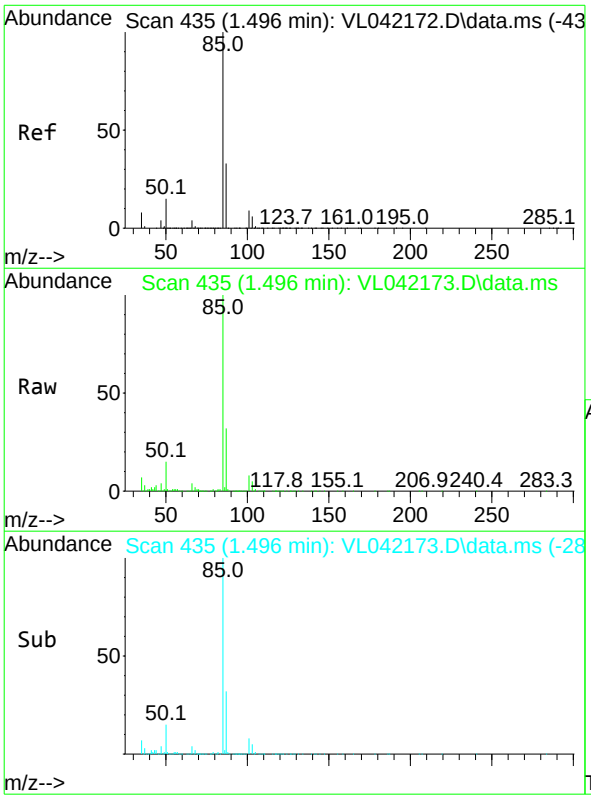
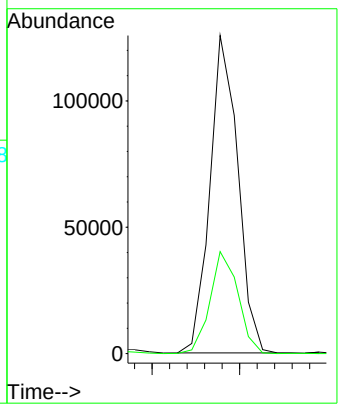
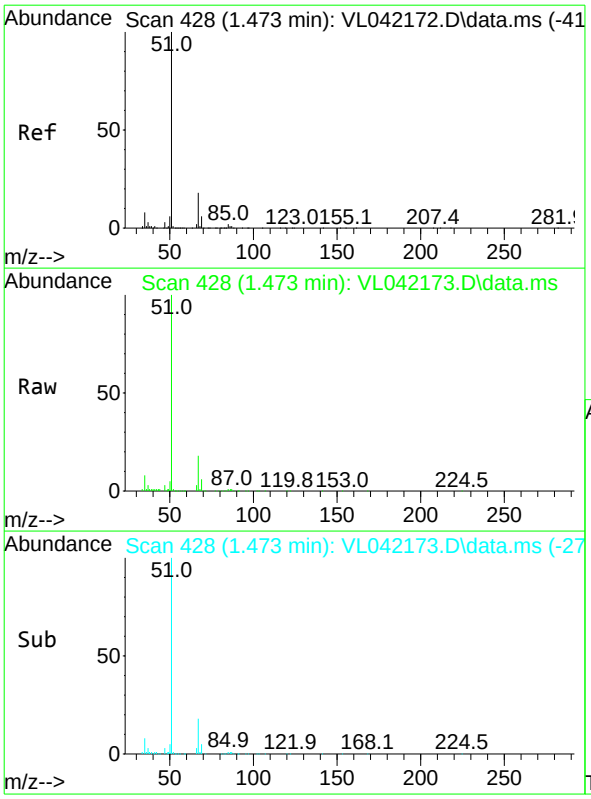


#2
Dichlorodifluoromethane
Concen: 2.008 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 55859

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1

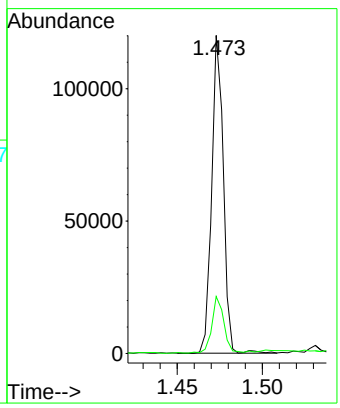




#3
Chlorodifluoromethane
Concen: 2.007 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 51 Resp: 57045

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

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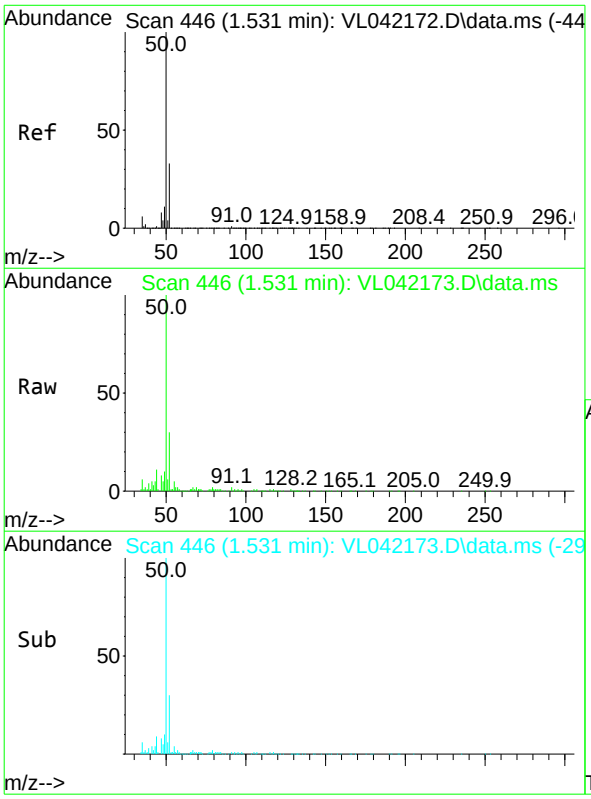
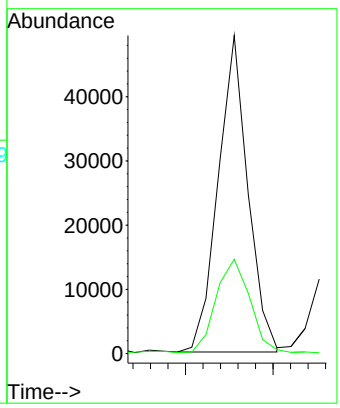
Supervised By :Mahesh Dadoda 04/03/2025

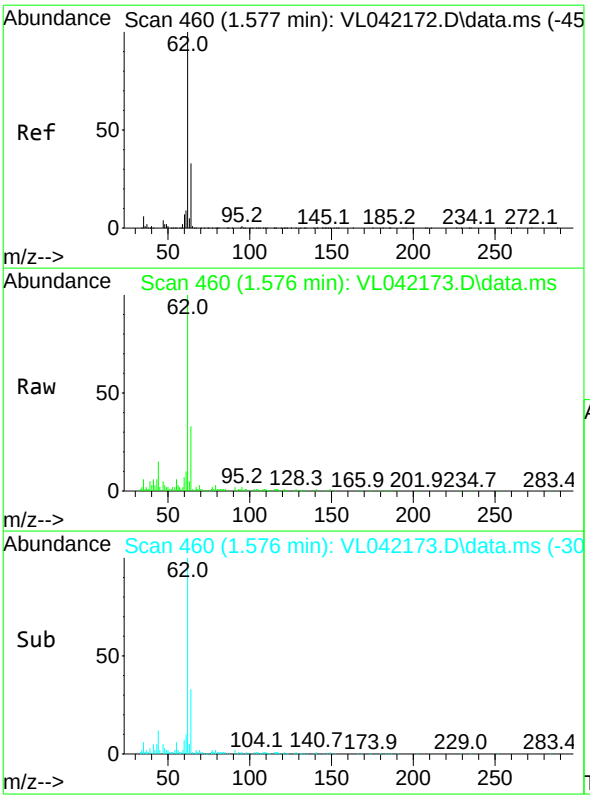


#4
Chloromethane
Concen: 2.049 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 50 Resp: 23293

Ion	Ratio	Lower	Upper
50	100		
52	29.5	26.1	39.1

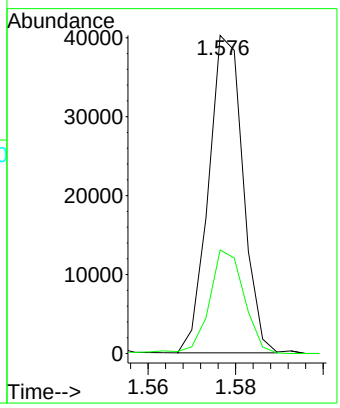




#5
Vinyl Chloride
Concen: 1.897 ppbv
RT: 1.576 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 62 Resp: 21989

Ion	Ratio	Lower	Upper
62	100		
64	32.5	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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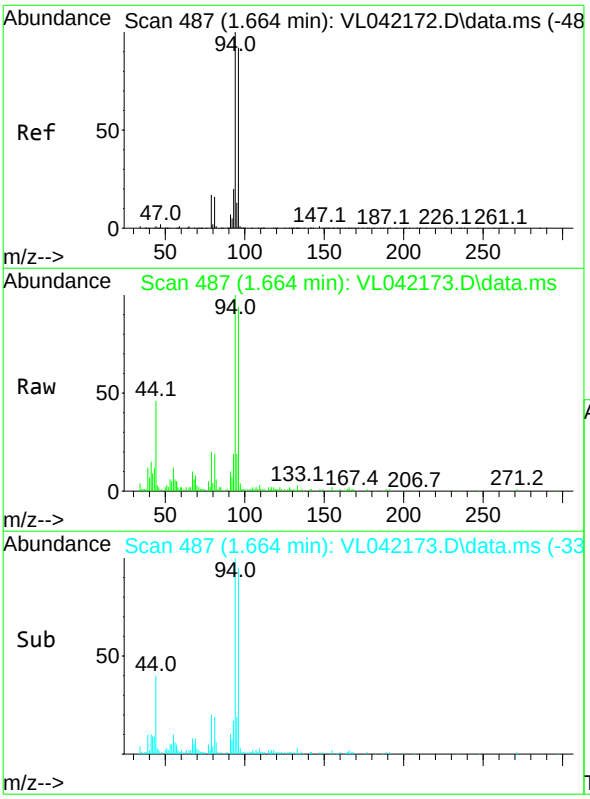
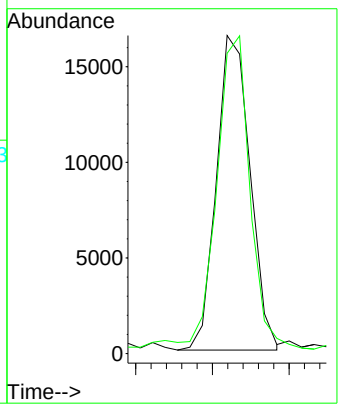
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

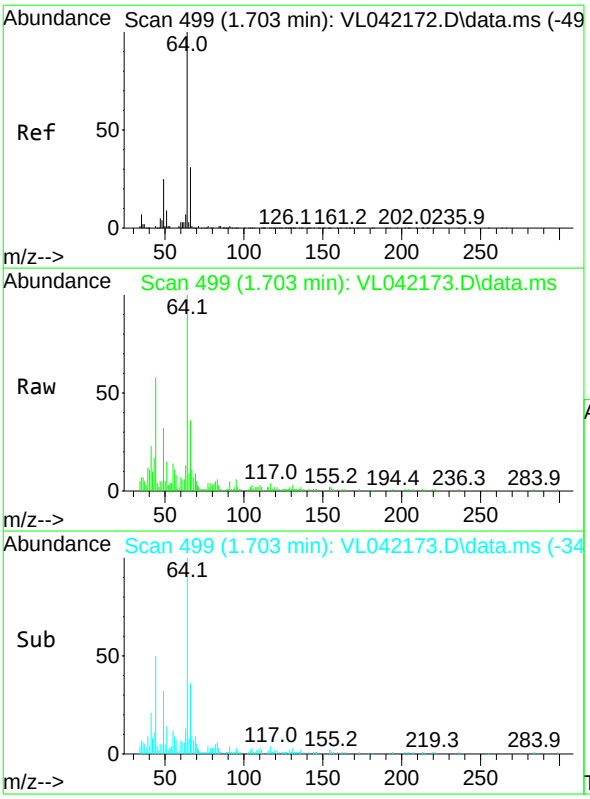


#6
Bromomethane
Concen: 1.946 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 94 Resp: 10027

Ion	Ratio	Lower	Upper
94	100		
96	93.6	73.1	109.7

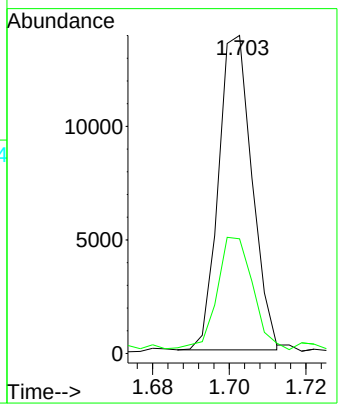




#7
Chloroethane
Concen: 1.844 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 64 Resp: 8413

Ion	Ratio	Lower	Upper
64	100		
66	36.1	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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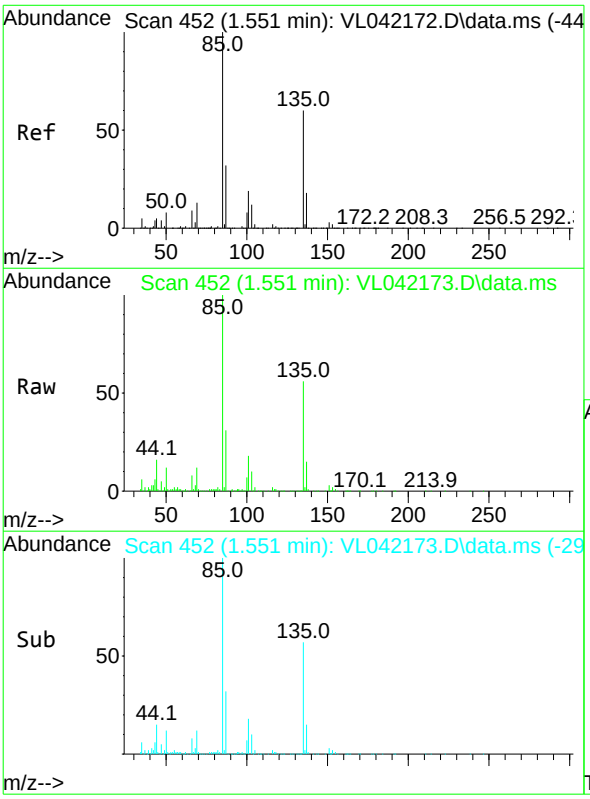
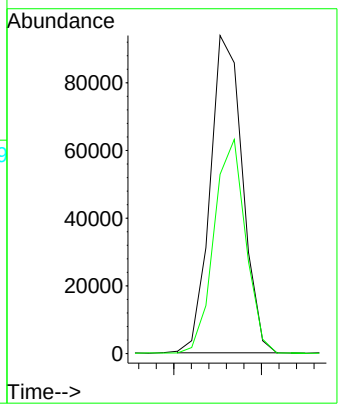
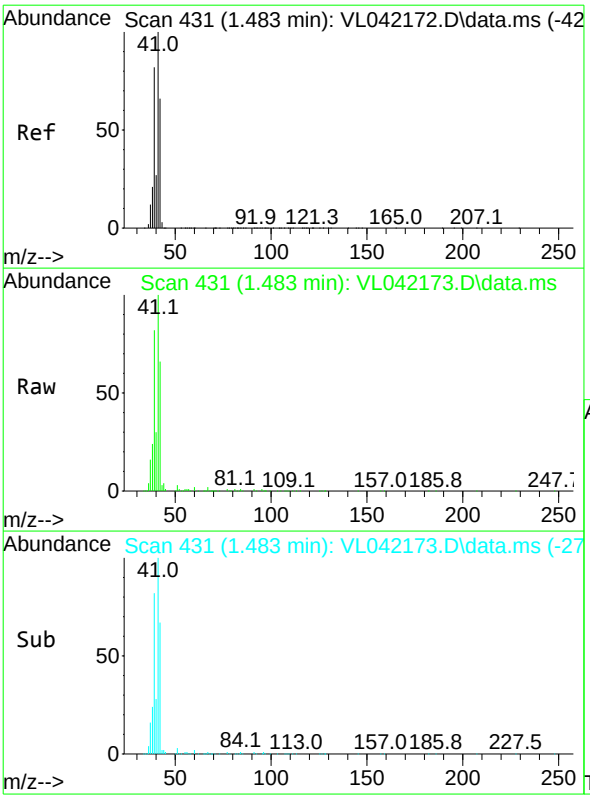


#8
Dichlorotetrafluoroethane
Concen: 2.027 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 48008

Ion	Ratio	Lower	Upper
85	100		
135	66.8	52.4	78.6

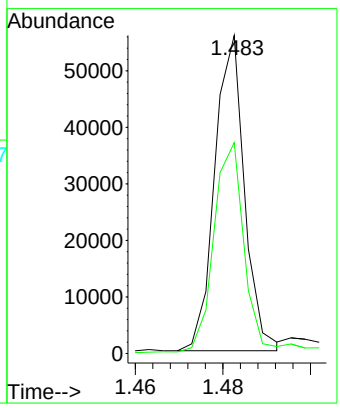




#9
Propene
Concen: 2.054 ppbv
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 41 Resp: 26295

Ion	Ratio	Lower	Upper
41	100		
42	73.9	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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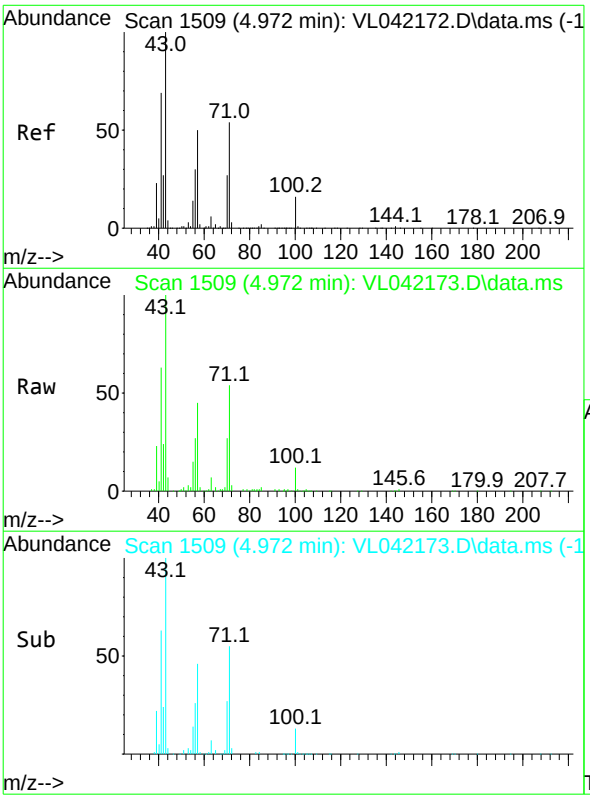
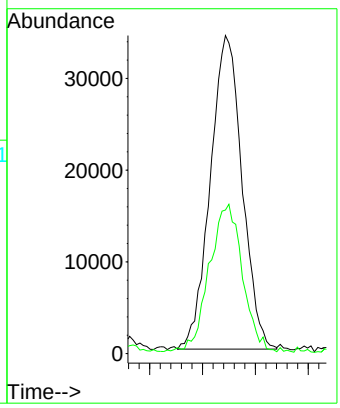
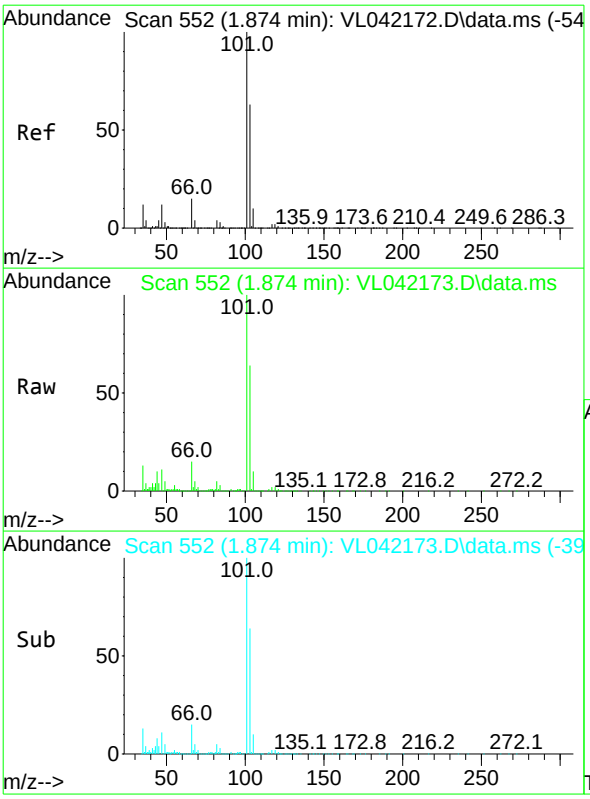


#10
Heptane
Concen: 2.063 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 71466

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2

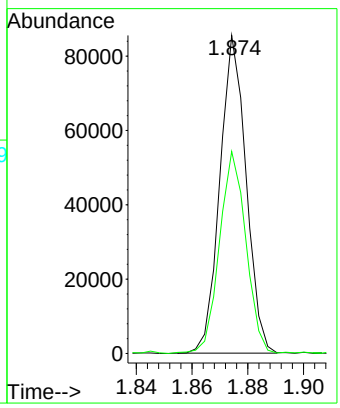




#11
Trichlorofluoromethane
Concen: 2.060 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 55754

Ion	Ratio	Lower	Upper
101	100		
103	63.5	50.2	75.2



Instrument :
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ClientSampleId :
VSTDICC002

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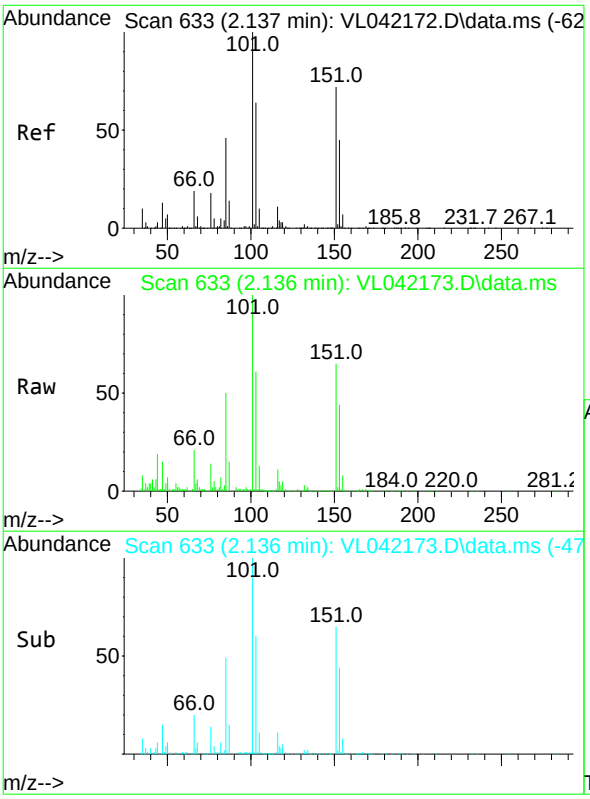
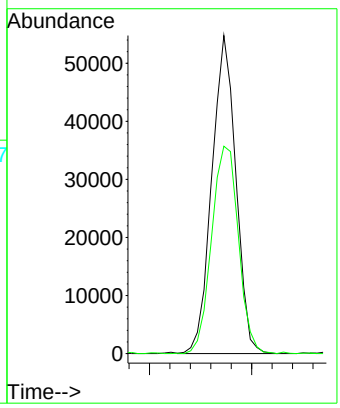
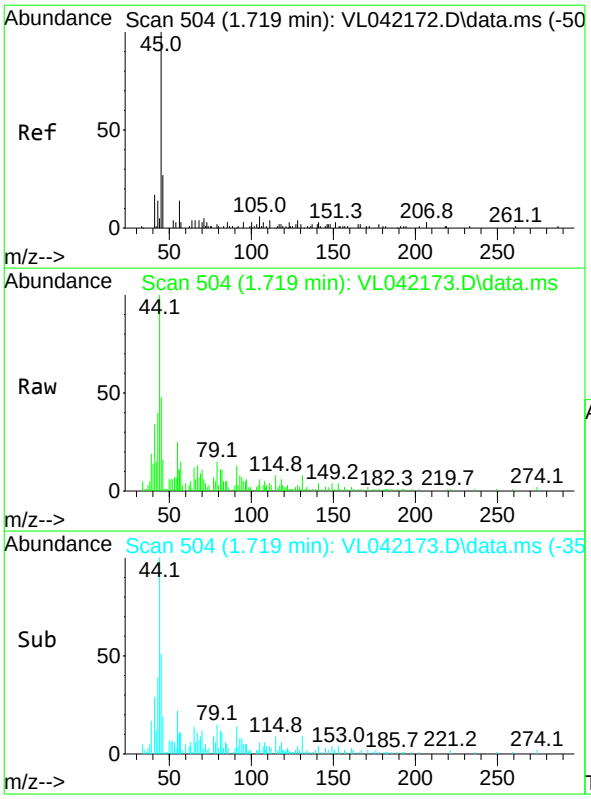


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.012 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 44761

Ion	Ratio	Lower	Upper
101	100		
151	73.0	57.1	85.7

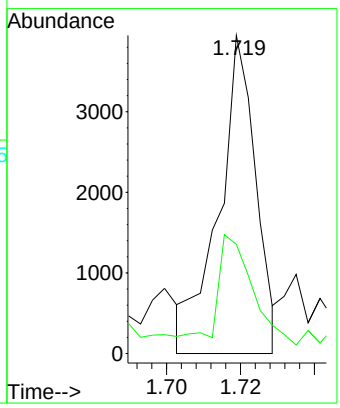




#13
Ethanol
Concen: 2.741 ppbv m
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 45 Resp: 2748

Ion	Ratio	Lower	Upper
45	100		
46	56.9	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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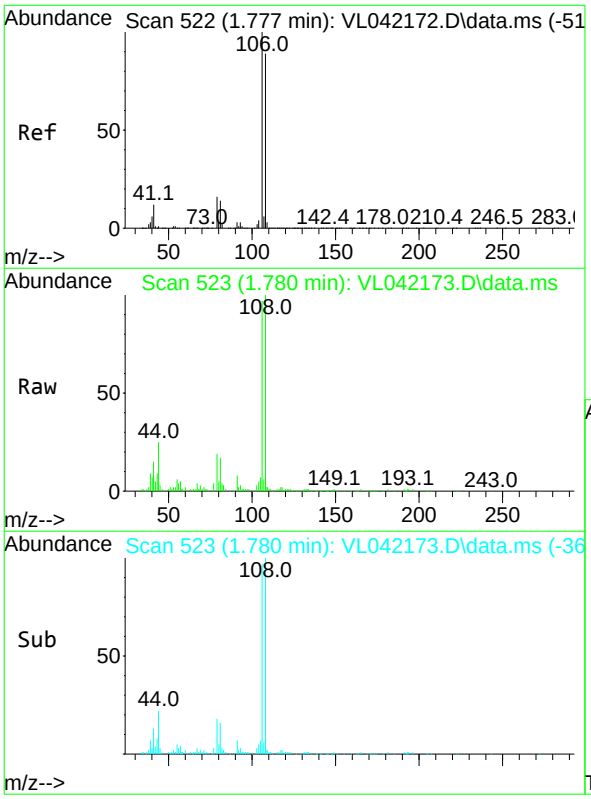
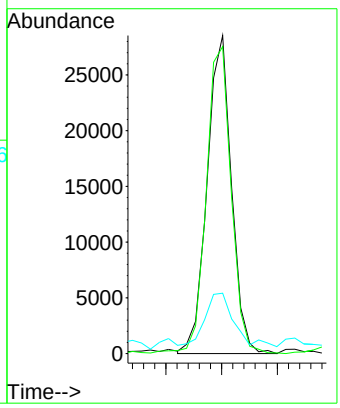
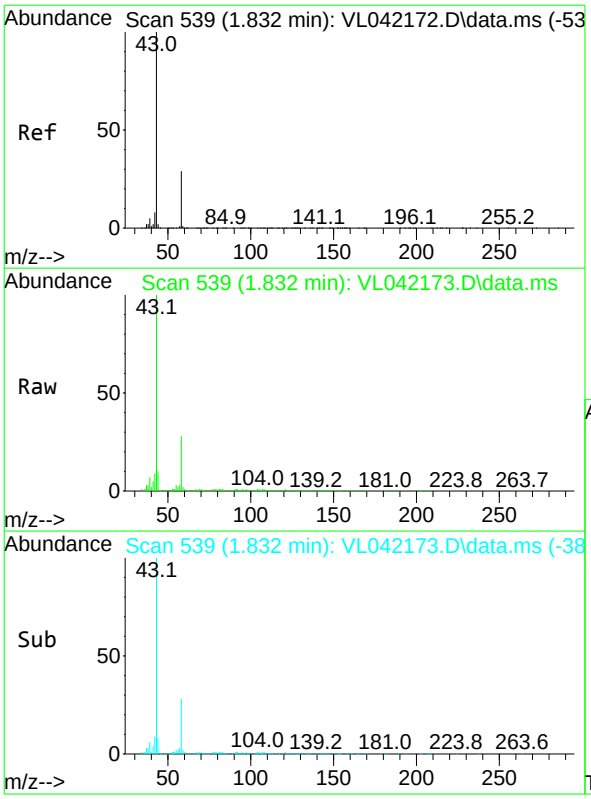


#14
Bromoethene
Concen: 2.033 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:108 Resp: 17323

Ion	Ratio	Lower	Upper
108	100		
106	100.6	86.8	130.2
79	32.0	15.0	22.6#

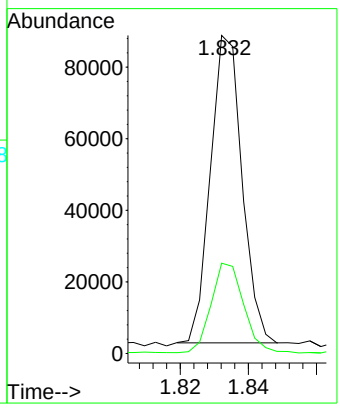




#15
Acetone
Concen: 2.101 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 55365

Ion	Ratio	Lower	Upper
43	100		
58	31.8	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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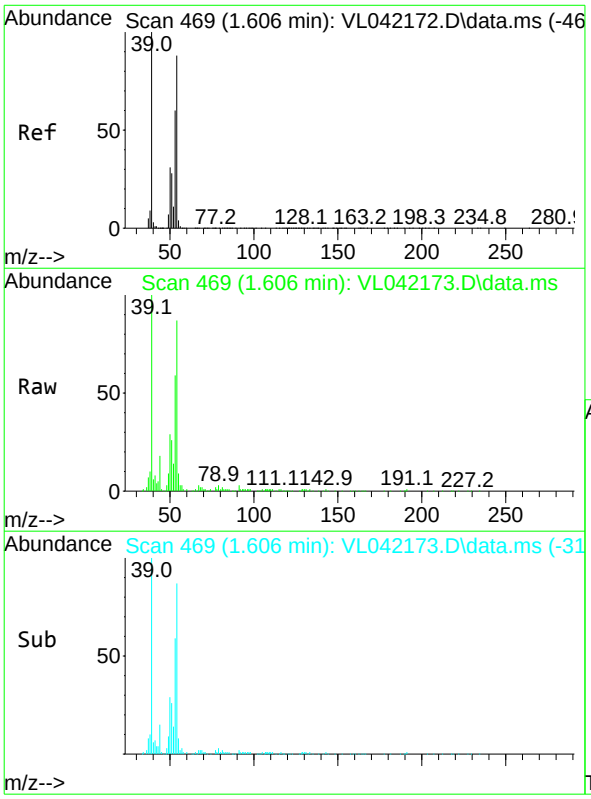
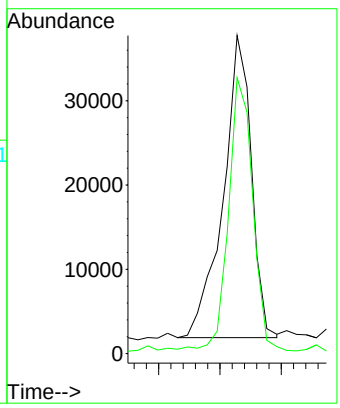
Supervised By :Mahesh Dadoda 04/03/2025

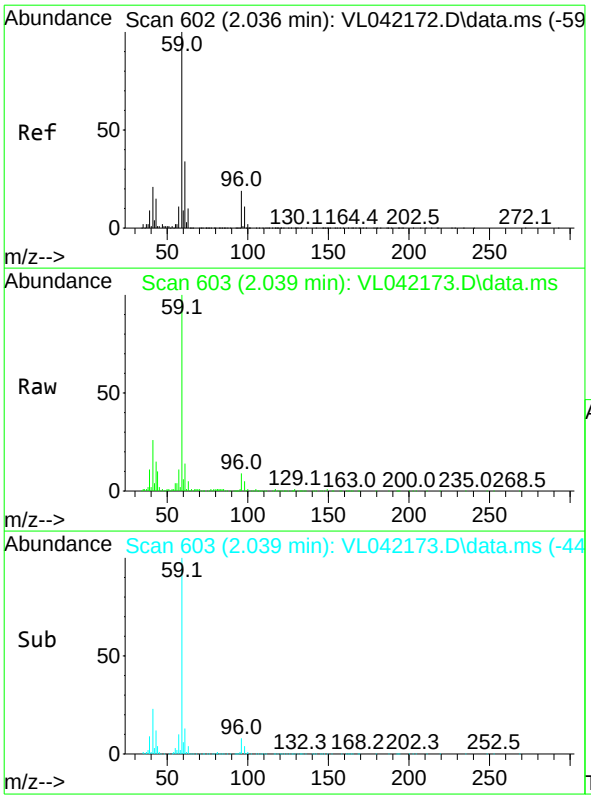


#16
1,3-Butadiene
Concen: 1.932 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 39 Resp: 22894

Ion	Ratio	Lower	Upper
39	100		
54	79.9	60.7	91.1

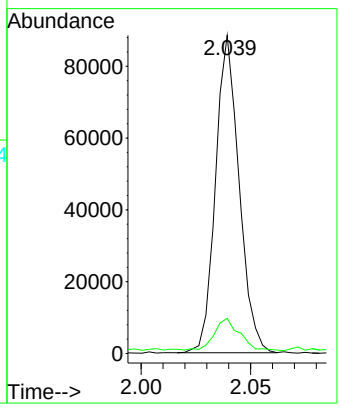




#17
tert-Butyl alcohol
Concen: 2.016 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 59 Resp: 66174

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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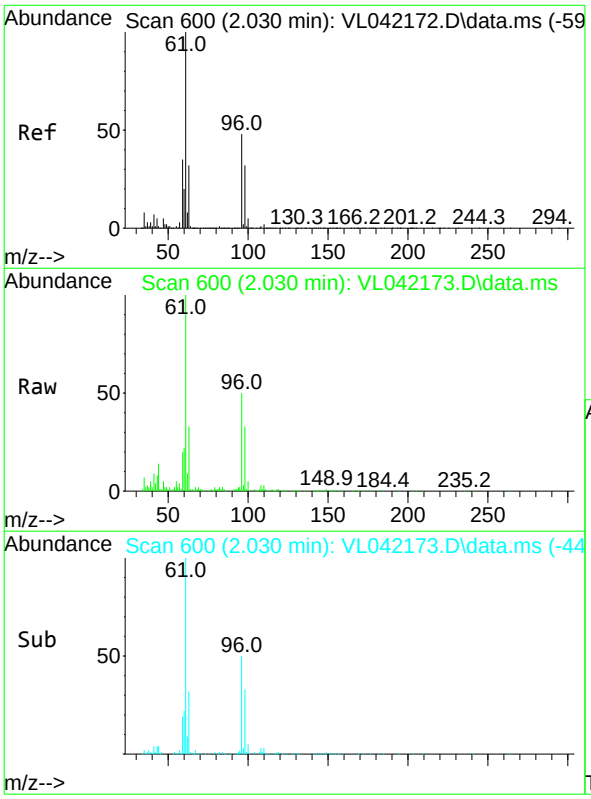
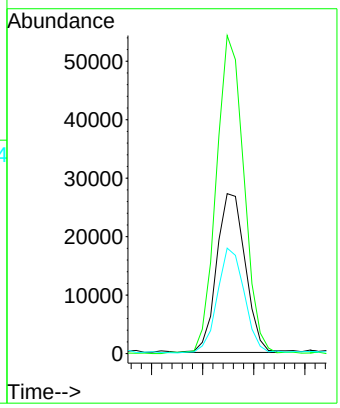
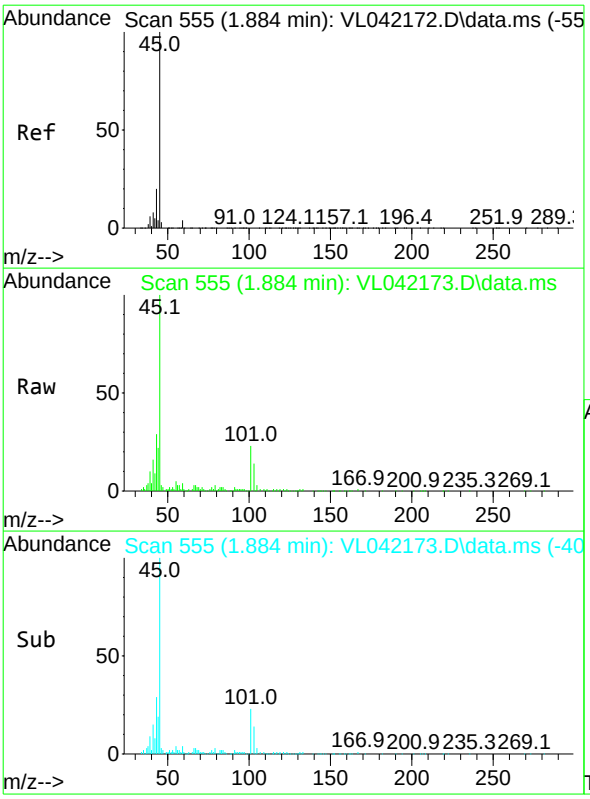


#18
1,1-Dichloroethene
Concen: 2.029 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 21103

Ion	Ratio	Lower	Upper
96	100		
61	199.8	167.6	251.4
98	66.0	53.5	80.3

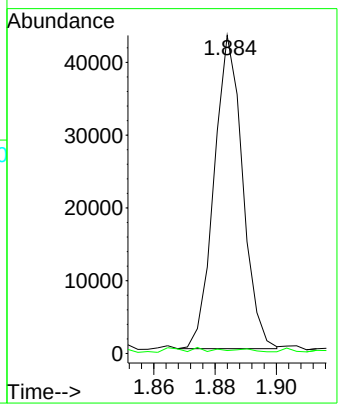




#19
Isopropyl Alcohol
Concen: 1.870 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 45 Resp: 27804

Ion	Ratio	Lower	Upper
45	100		
58	3.3	36.9	55.3#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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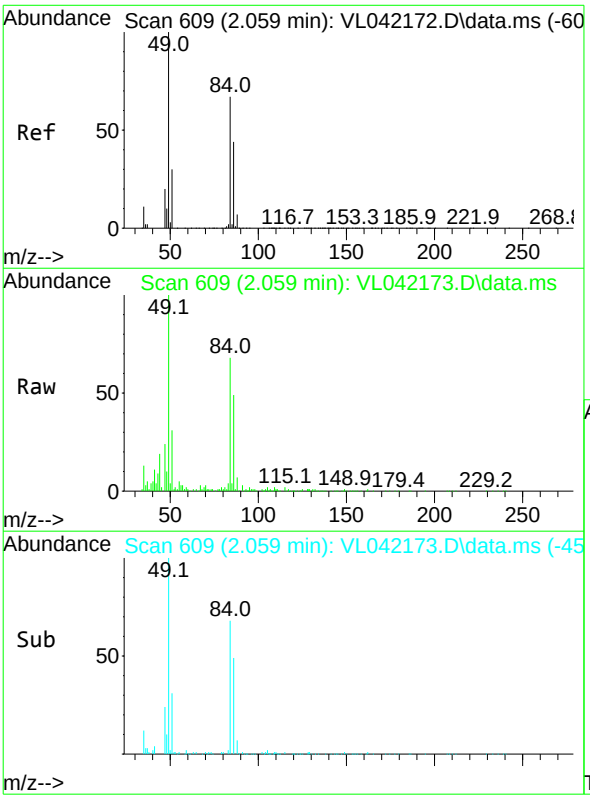
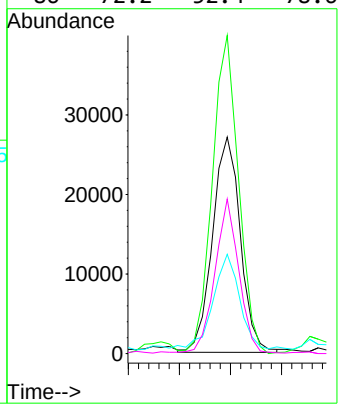
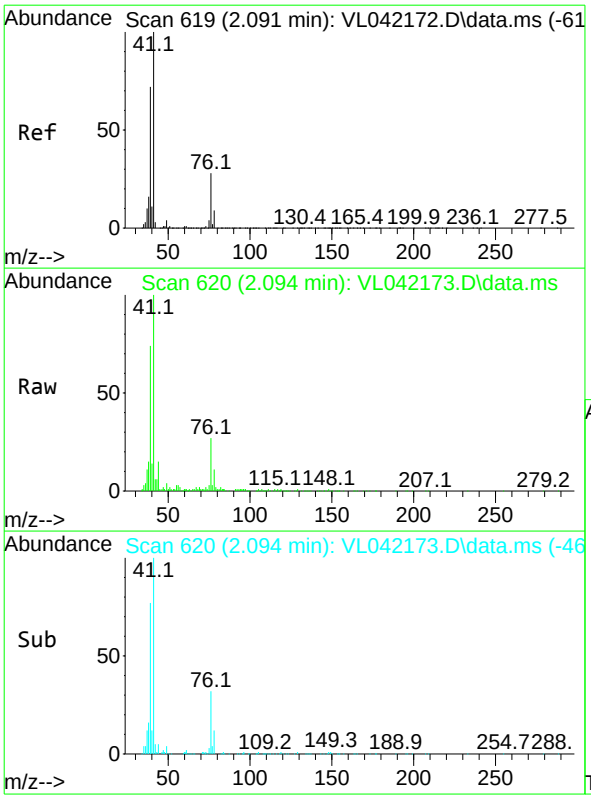


#20
Methylene Chloride
Concen: 2.091 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 20518

Ion	Ratio	Lower	Upper
84	100		
49	148.8	120.2	180.4
51	43.5	37.4	56.0
86	72.2	52.4	78.6

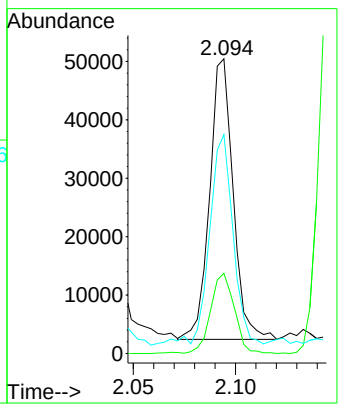




#21
Allyl Chloride
Concen: 2.068 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 41 Resp: 38425

Ion	Ratio	Lower	Upper
41	100		
76	29.0	24.1	36.1
39	77.5	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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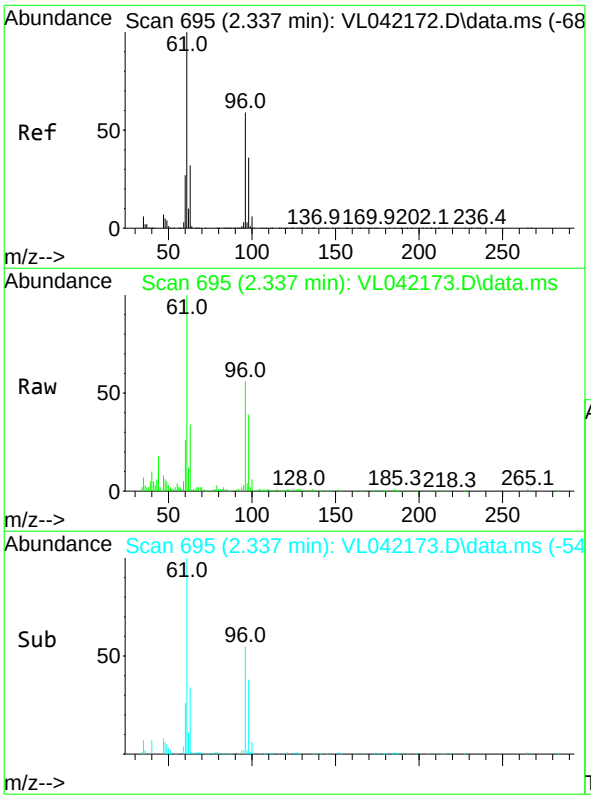
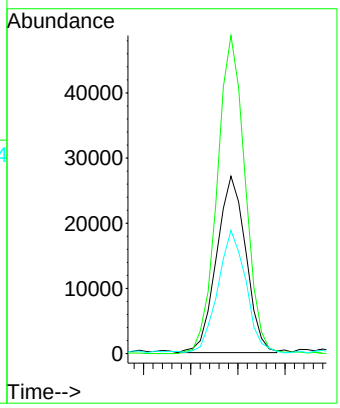
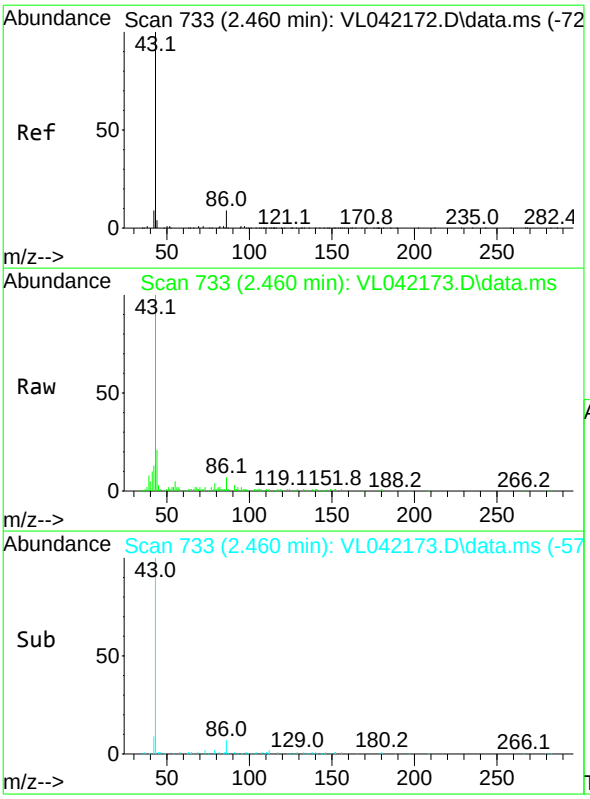


#22
trans-1,2-Dichloroethene
Concen: 1.924 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 23384

Ion	Ratio	Lower	Upper
96	100		
61	180.3	136.6	204.8
98	68.6	49.4	74.2

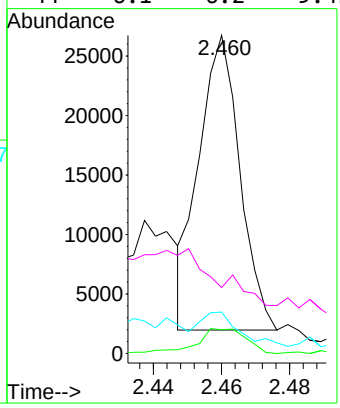




#23
Vinyl Acetate
Concen: 1.894 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 20736

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.4	8.6	13.0
44	6.1	6.2	9.4#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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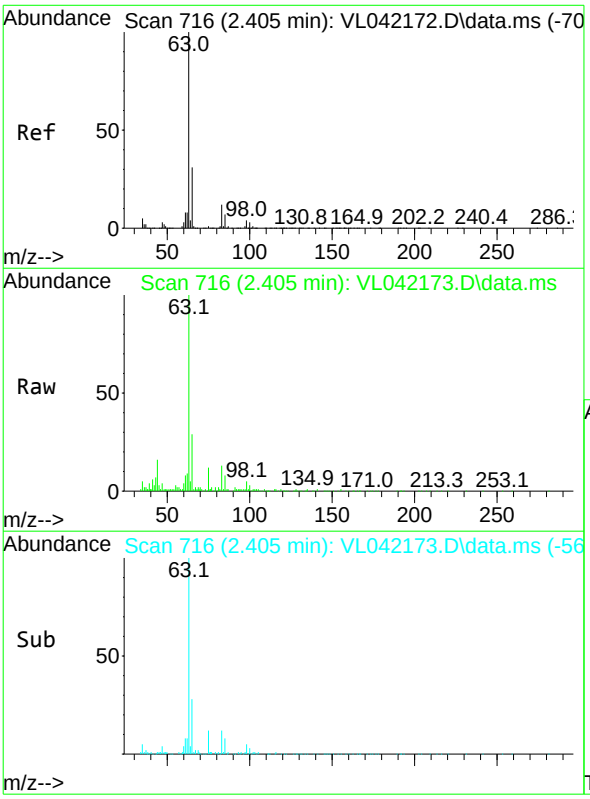
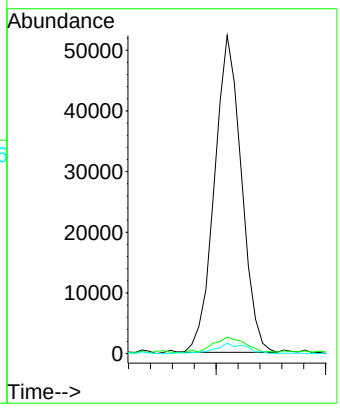
Supervised By :Mahesh Dadoda 04/03/2025

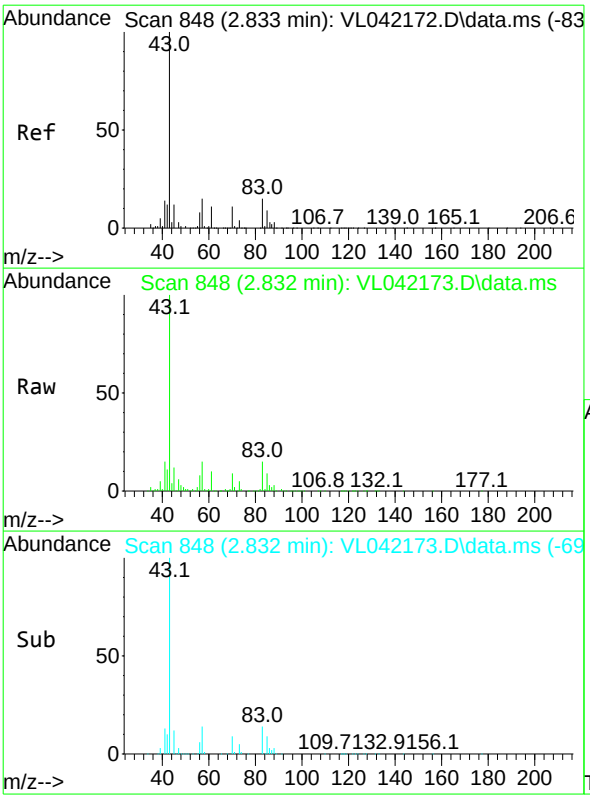


#24
1,1-Dichloroethane
Concen: 2.008 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 44740

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.3	1.6	4.7

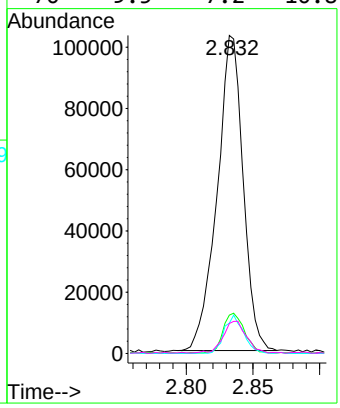




#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 139516

Ion	Ratio	Lower	Upper
43	100		
45	10.9	8.2	12.2
61	9.1	7.3	10.9
70	9.5	7.2	10.8



Instrument :
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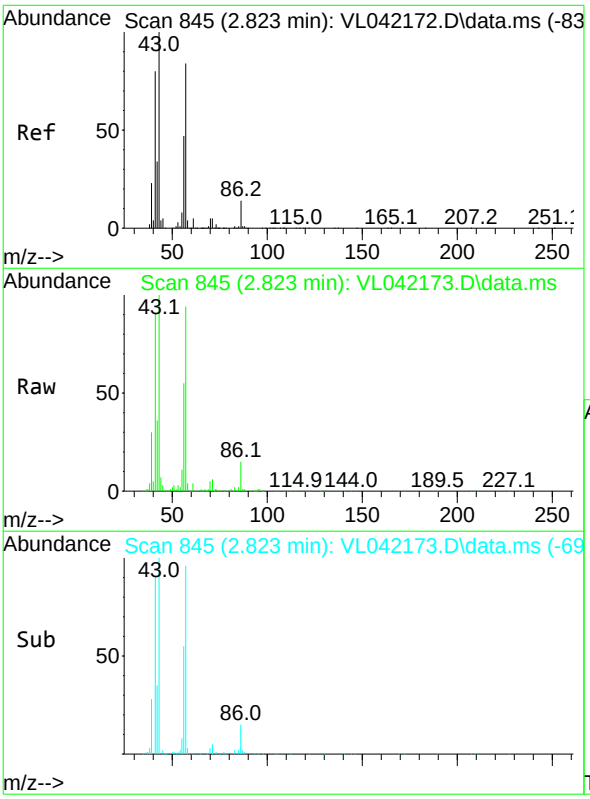
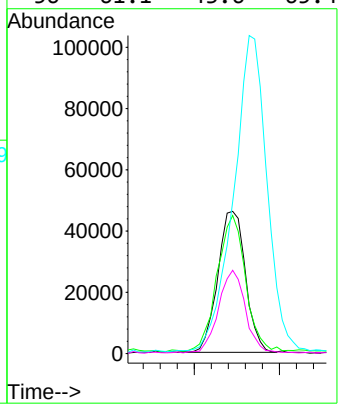
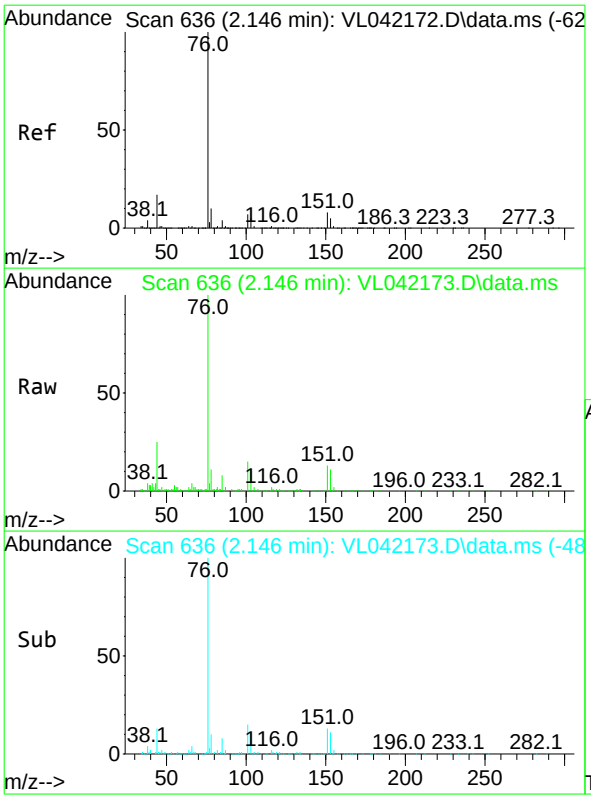


#26
Hexane
Concen: 1.972 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 52095

Ion	Ratio	Lower	Upper
57	100		
41	100.9	76.6	114.8
43	274.8	207.8	311.8
56	61.1	43.6	65.4

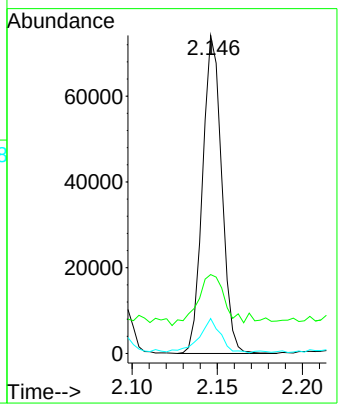




#27
Carbon Disulfide
Concen: 2.047 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 76 Resp: 57969

Ion	Ratio	Lower	Upper
76	100		
44	35.2	14.7	22.1#
78	12.0	9.3	13.9



Instrument :
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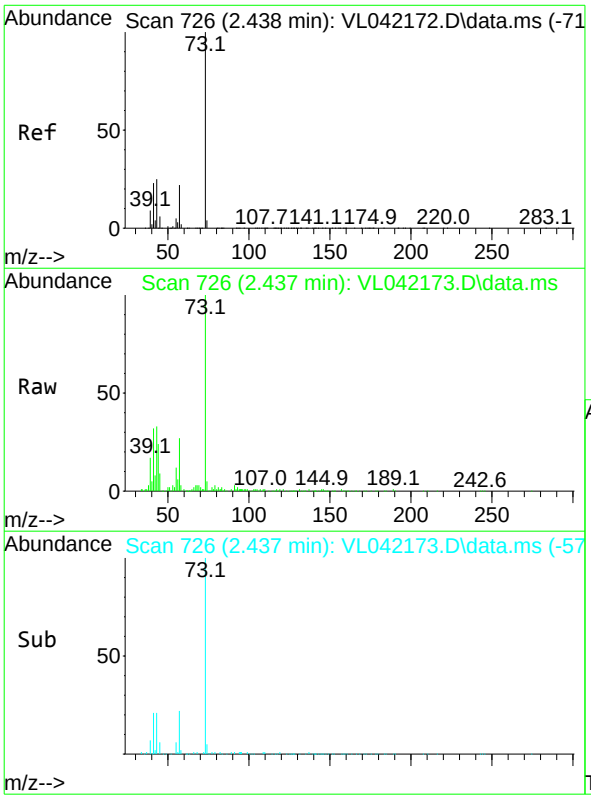
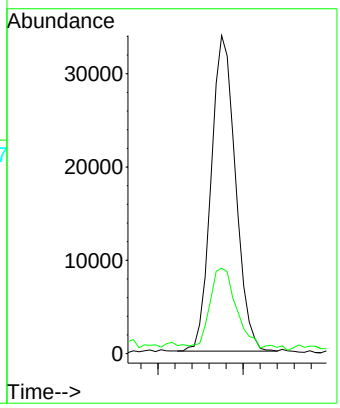
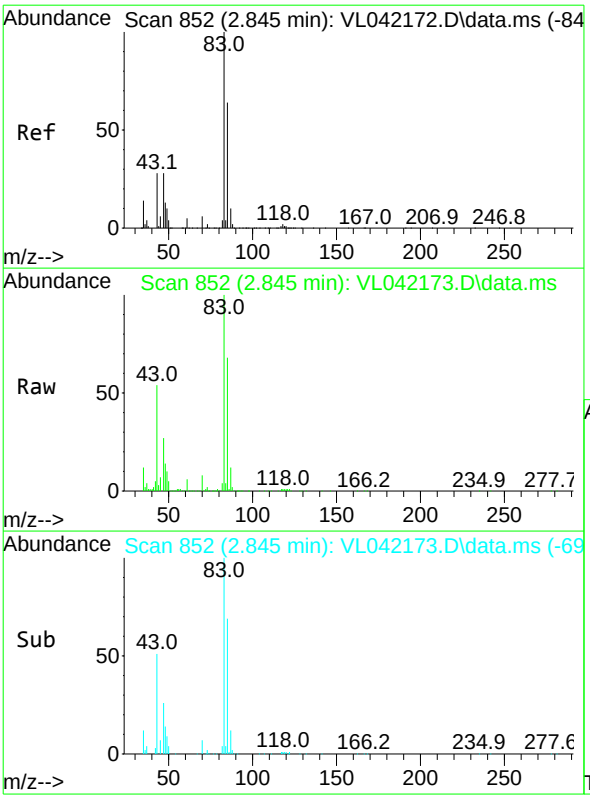


#28
Methyl tert-Butyl Ether
Concen: 2.049 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 73 Resp: 33703

Ion	Ratio	Lower	Upper
73	100		
57	25.2	20.5	30.7

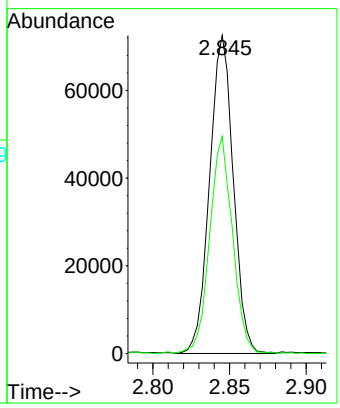




#29
Chloroform
Concen: 2.019 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 78043

Ion	Ratio	Lower	Upper
83	100		
85	68.2	51.4	77.2



Instrument :
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ClientSampleId :
VSTDICC002

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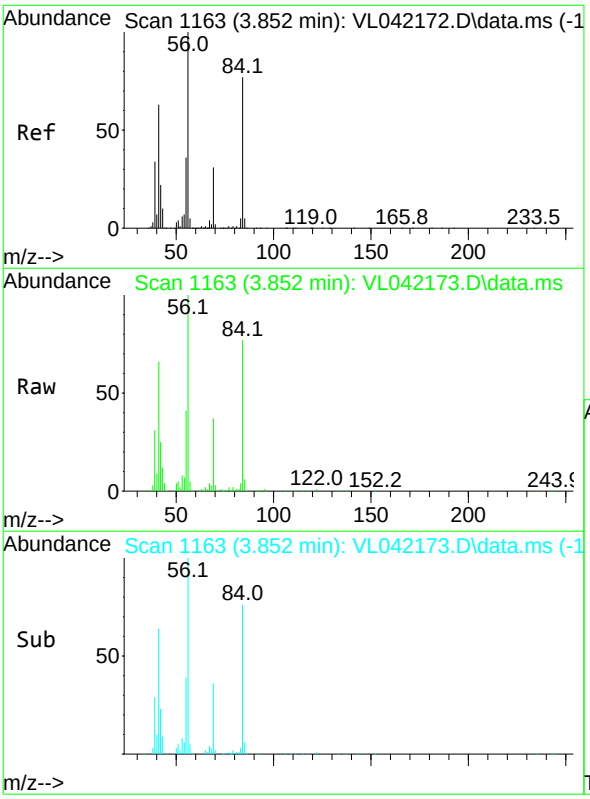
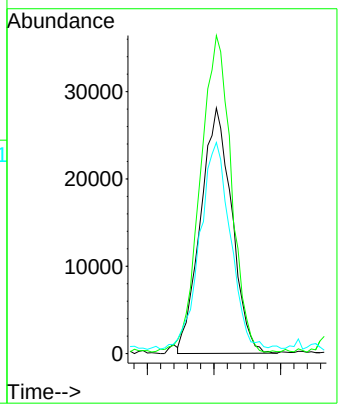
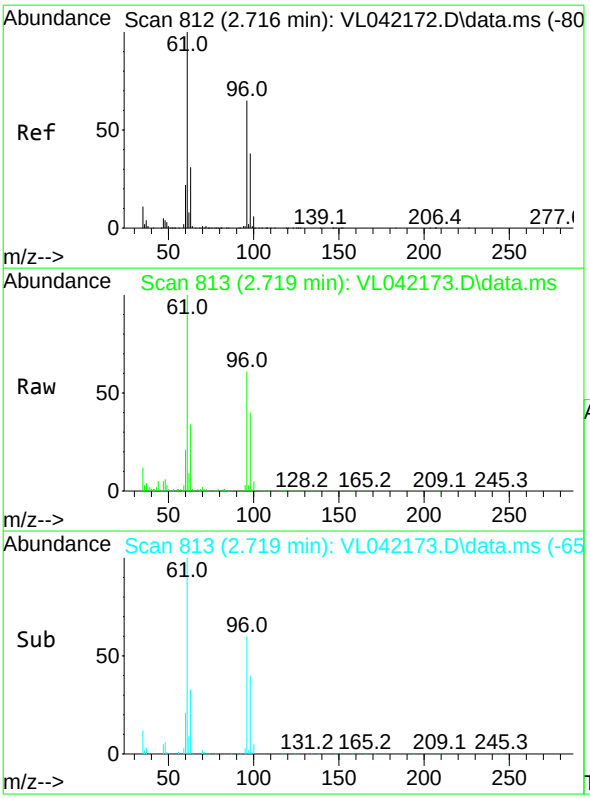


#30
Cyclohexane
Concen: 1.989 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 45641

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	84.6	66.5	99.7

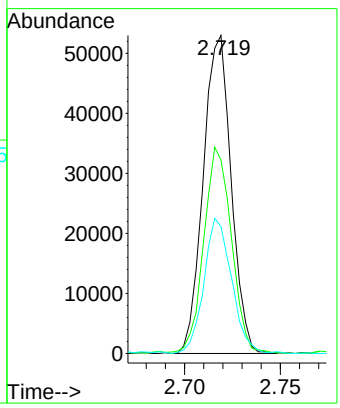




#31
cis-1,2-Dichloroethene
Concen: 2.003 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 61 Resp: 53713

Ion	Ratio	Lower	Upper
61	100		
96	60.6	51.8	77.8
98	39.6	30.6	46.0



Instrument :
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ClientSampleId :
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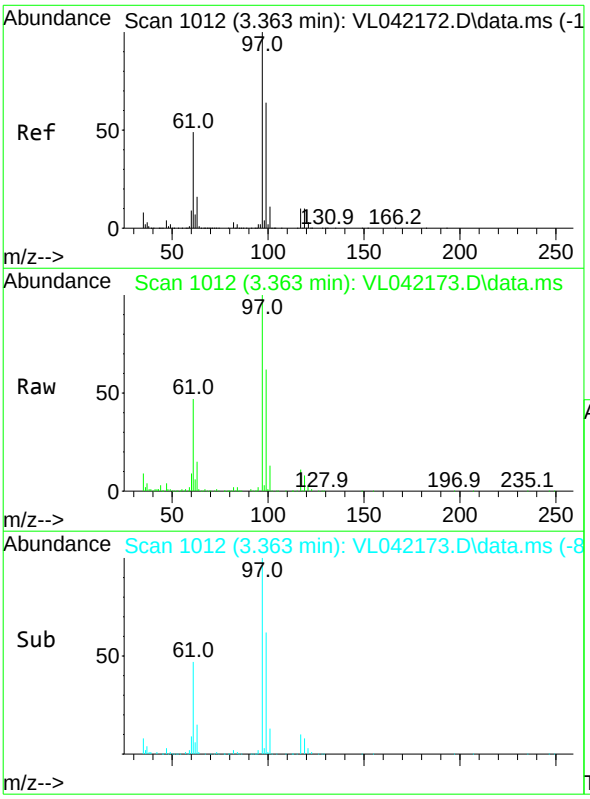
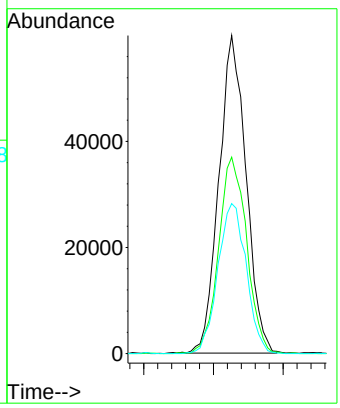
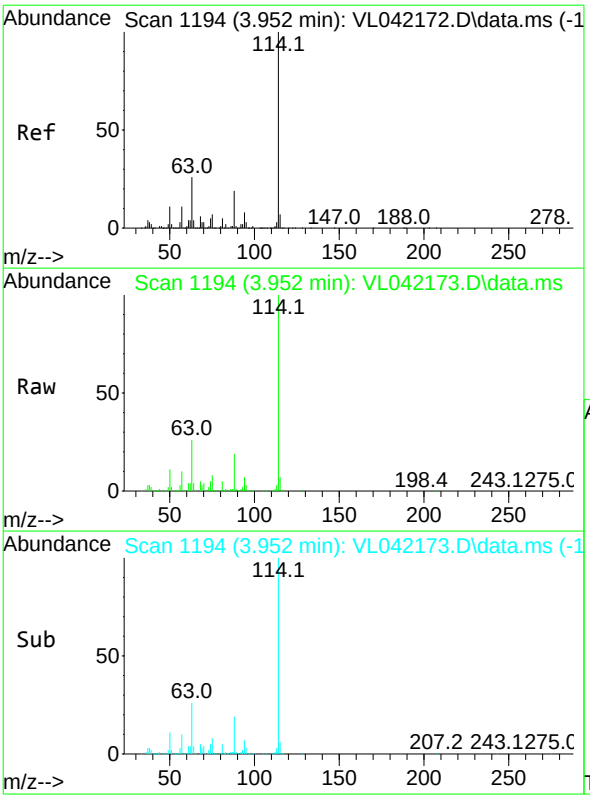


#32
1,1,1-Trichloroethane
Concen: 1.833 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 81070

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	49.3	38.7	58.1

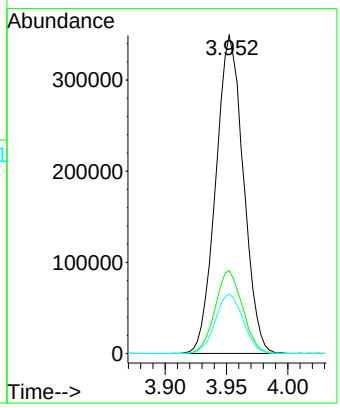




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:114 Resp: 546394

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.9	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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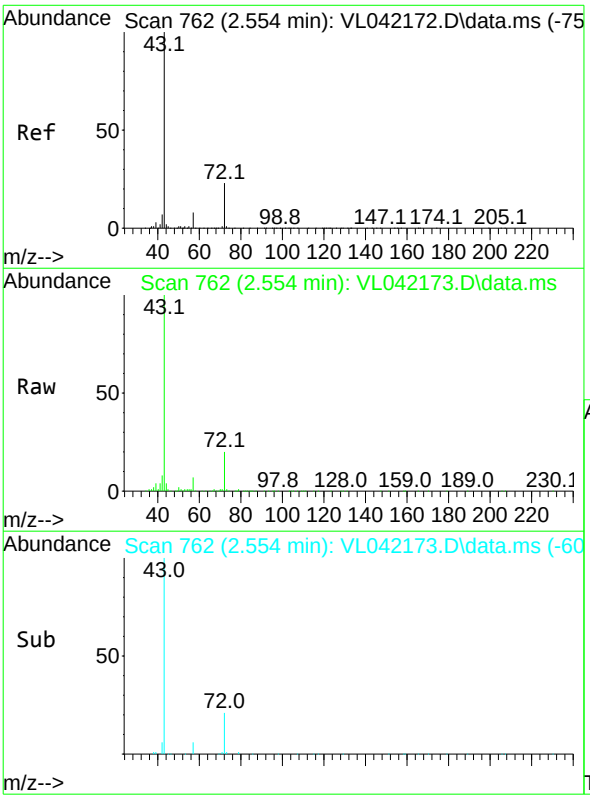
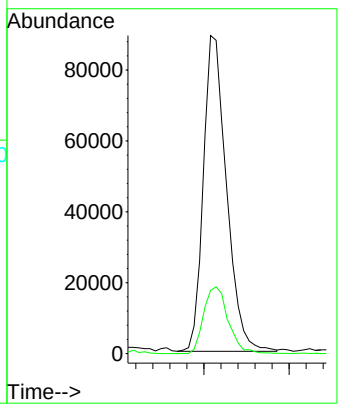
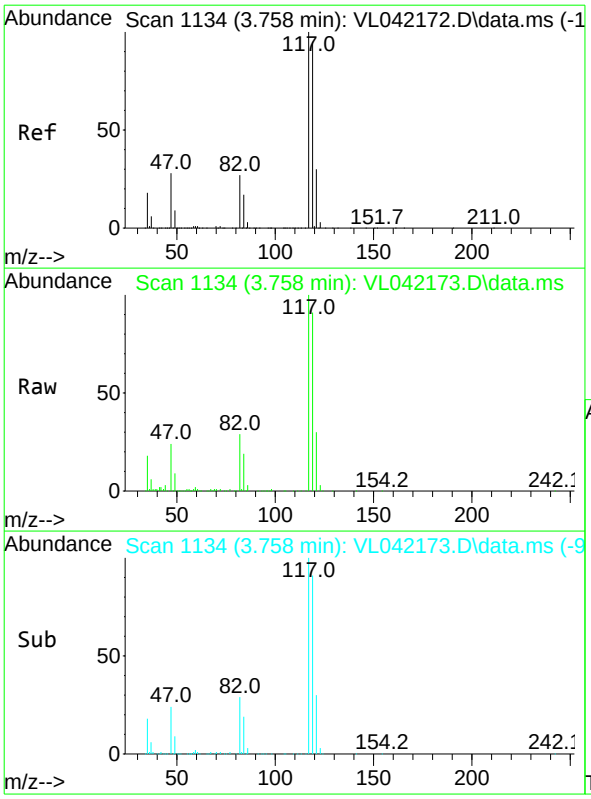


#34
2-Butanone
Concen: 2.124 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 84157

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2

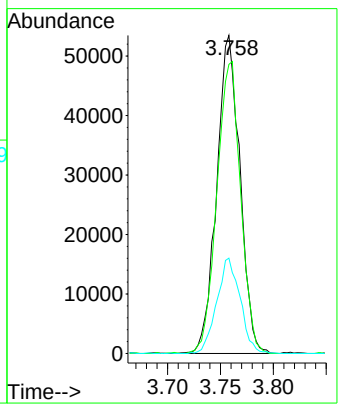




#35
Carbon Tetrachloride
Concen: 1.944 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:117 Resp: 81735

Ion	Ratio	Lower	Upper
117	100		
119	90.8	76.2	114.2
121	30.0	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
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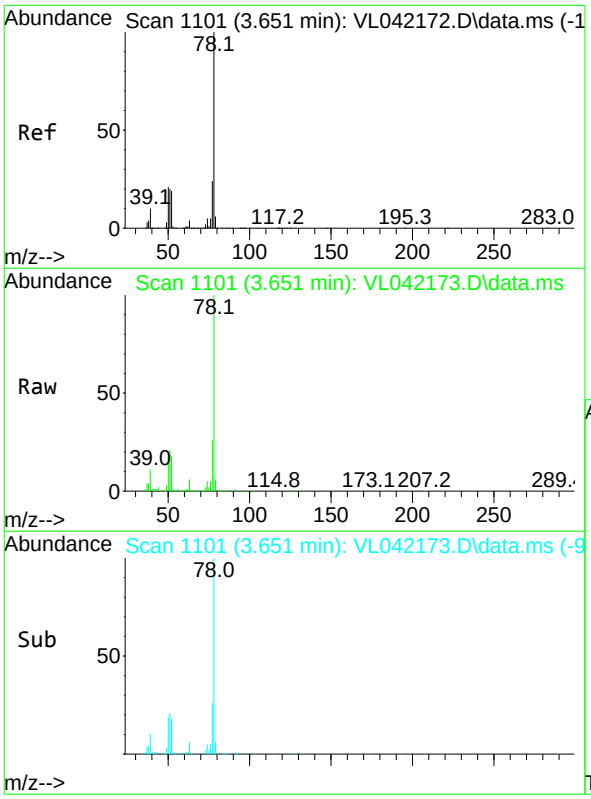
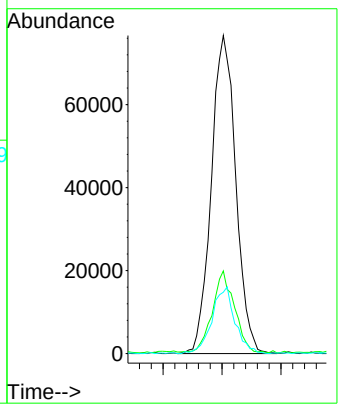
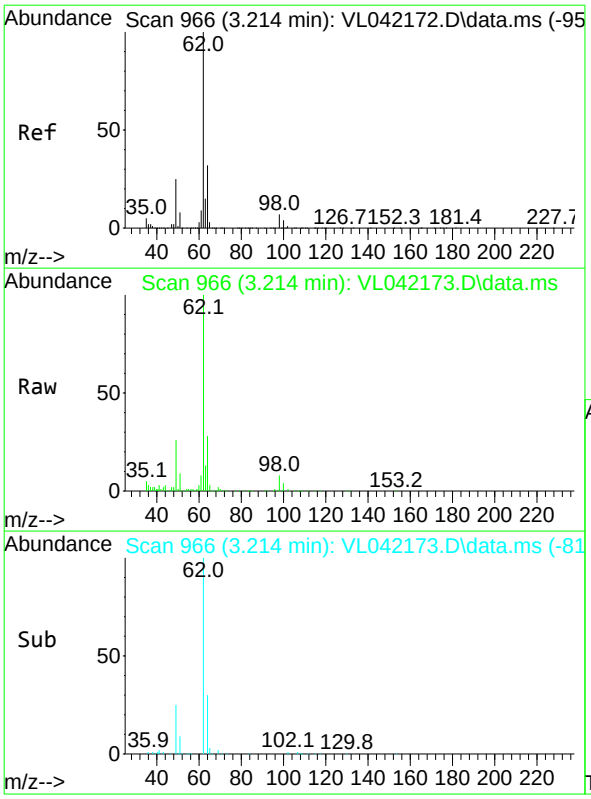


#36
Benzene
Concen: 2.044 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 78 Resp: 110727

Ion	Ratio	Lower	Upper
78	100		
77	25.7	19.1	28.7
50	19.3	16.6	24.8

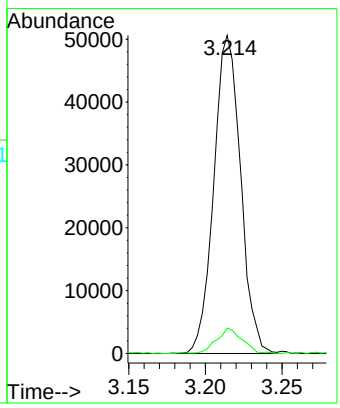




#37
1,2-Dichloroethane
Concen: 1.982 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 62 Resp: 61476

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2



Instrument :
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ClientSampleId :
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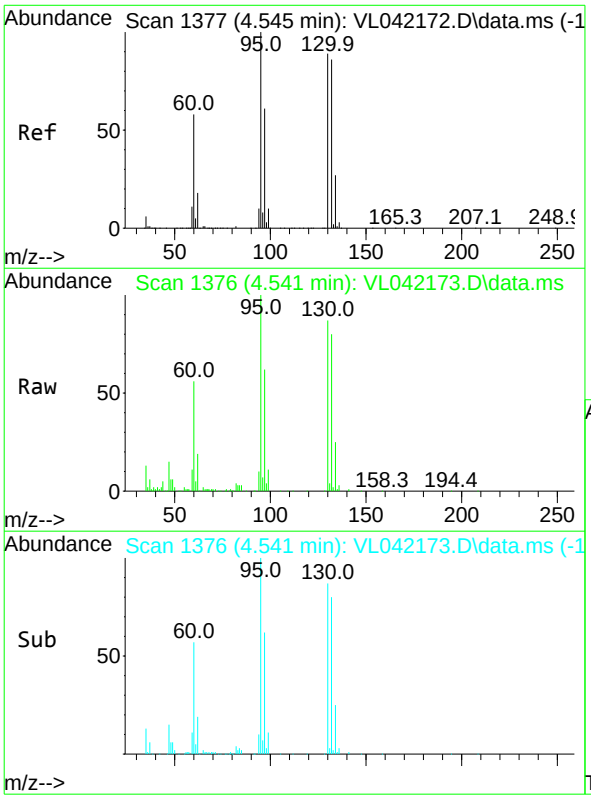
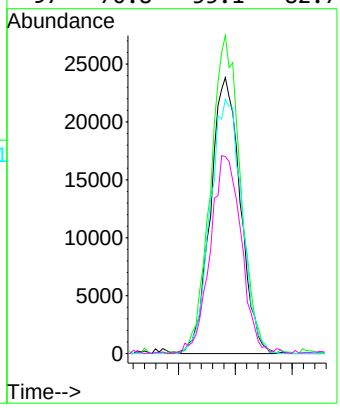
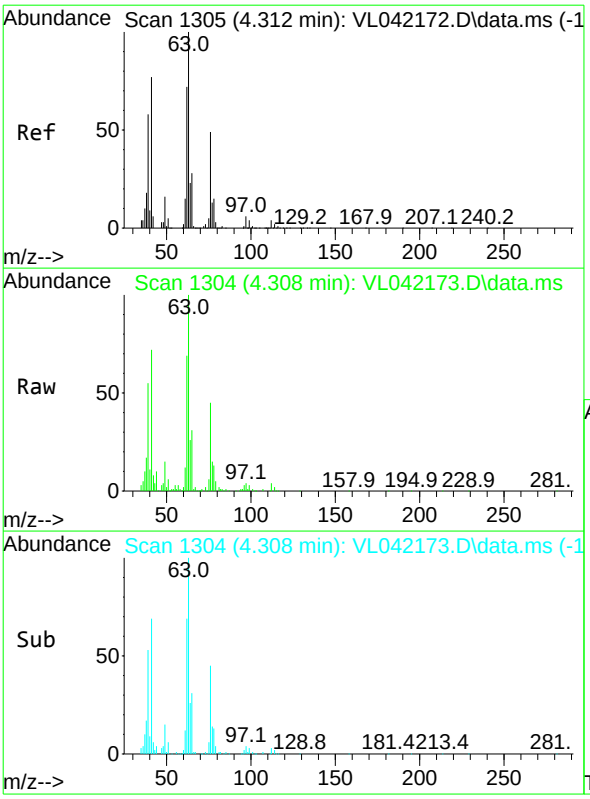


#38
Trichloroethene
Concen: 1.924 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:130 Resp: 43501

Ion	Ratio	Lower	Upper
130	100		
95	114.8	89.8	134.8
132	92.2	77.4	116.2
97	70.8	55.1	82.7

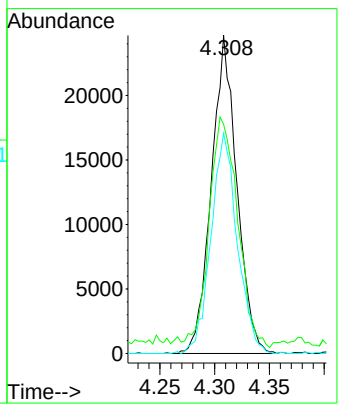




#39
1,2-Dichloropropane
Concen: 2.023 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 39912

Ion	Ratio	Lower	Upper
63	100		
41	68.6	61.7	92.5
62	69.2	57.6	86.4



Instrument :
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ClientSampleId :
VSTDICC002

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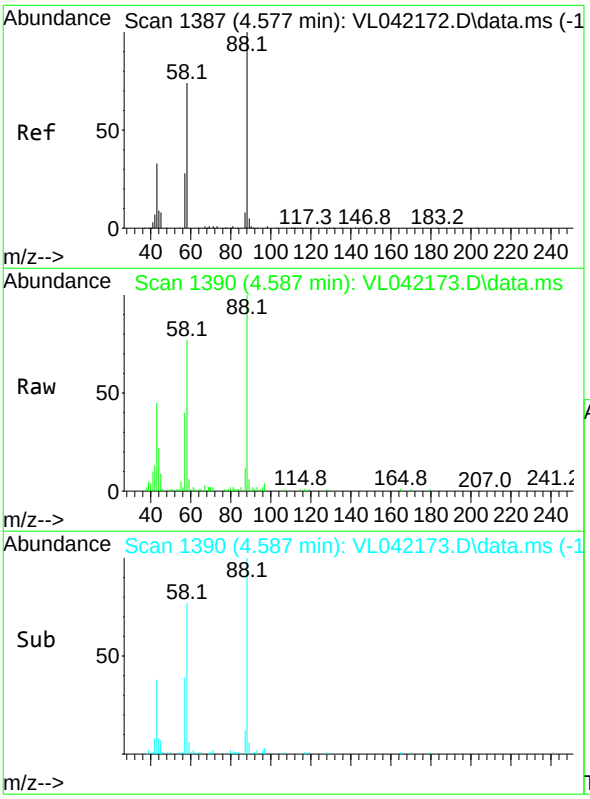
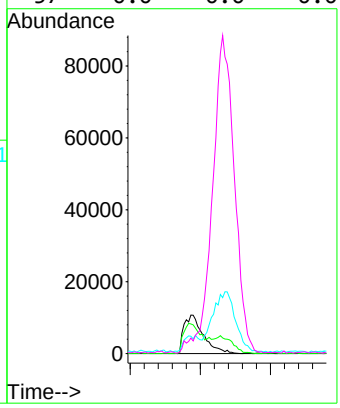
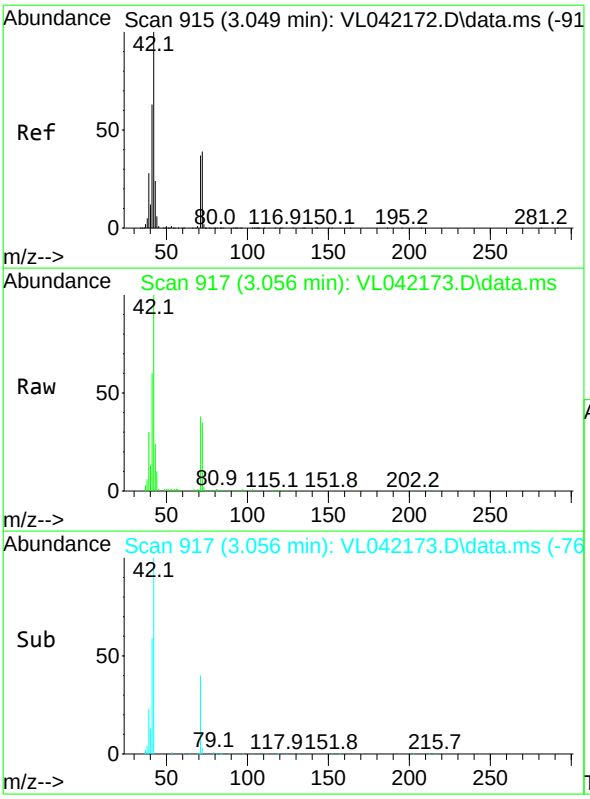


#40
1,4-Dioxane
Concen: 2.040 ppbv m
RT: 4.587 min Scan# 1390
Delta R.T. 0.009 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 88 Resp: 20884

Ion	Ratio	Lower	Upper
88	100		
58	119.5	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

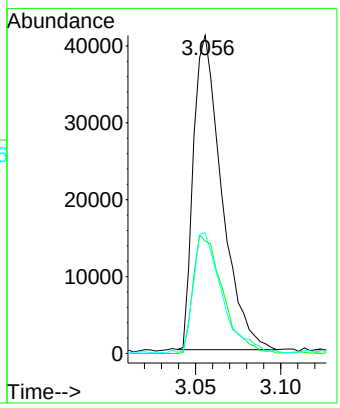




#41
Tetrahydrofuran
Concen: 2.097 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 42 Resp: 47262

Ion	Ratio	Lower	Upper
42	100		
72	39.6	31.4	47.0
71	39.0	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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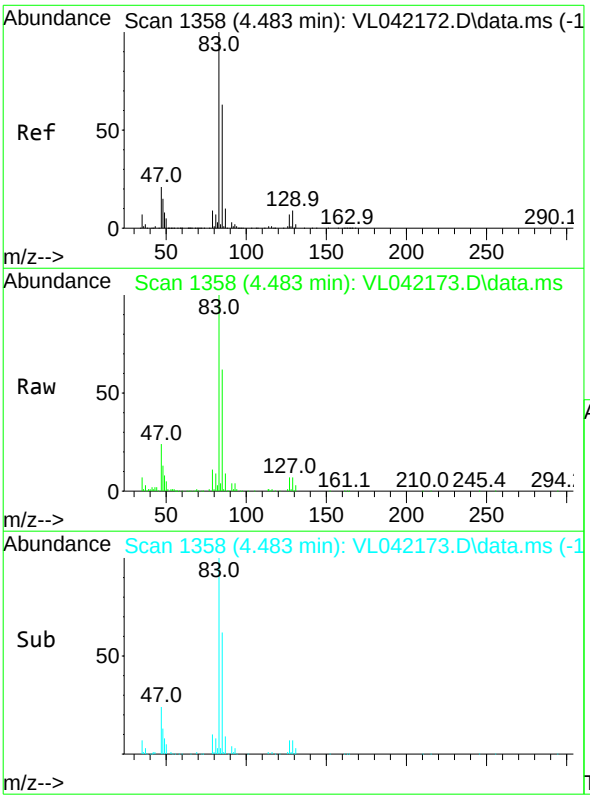
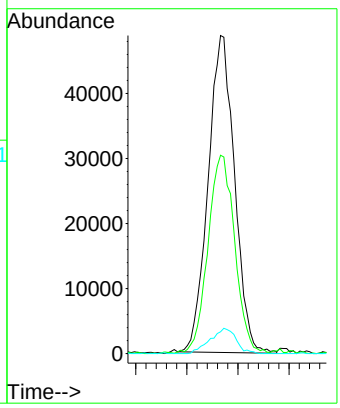
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

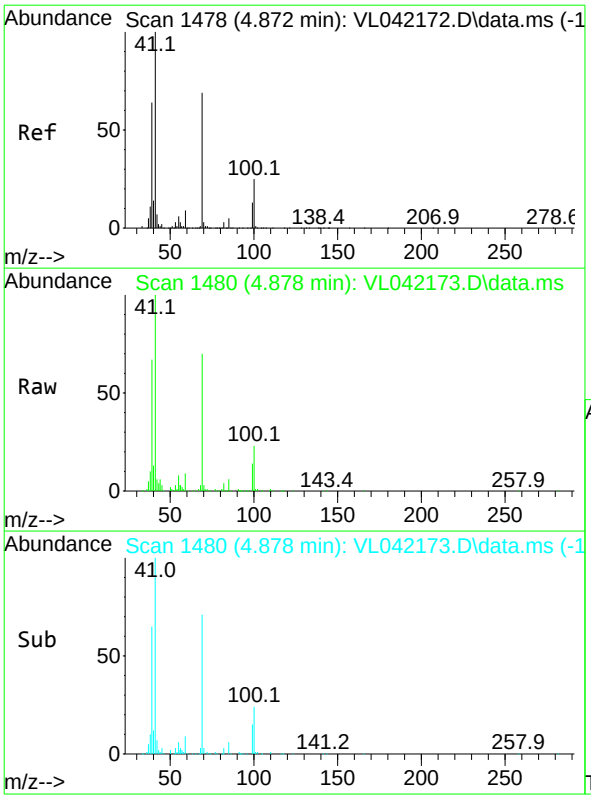


#42
Bromodichloromethane
Concen: 2.050 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 87640

Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.5	75.7
127	6.9	5.9	8.9

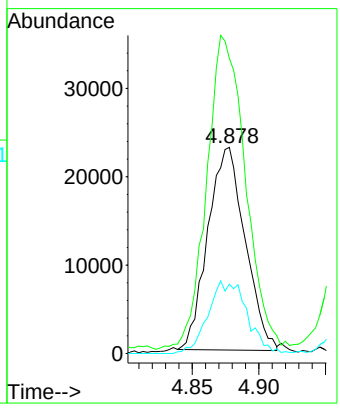




#43
Methyl Methacrylate
Concen: 1.952 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 69 Resp: 44624

Ion	Ratio	Lower	Upper
69	100		
41	158.7	123.8	185.6
100	37.5	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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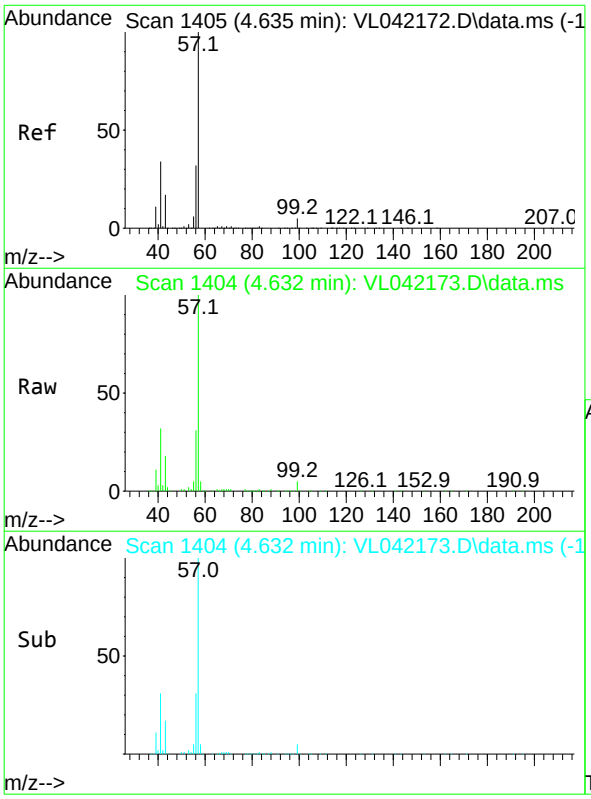
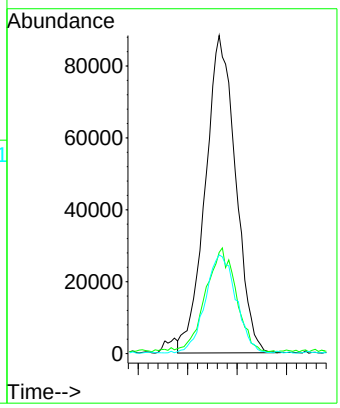
Supervised By :Mahesh Dadoda 04/03/2025

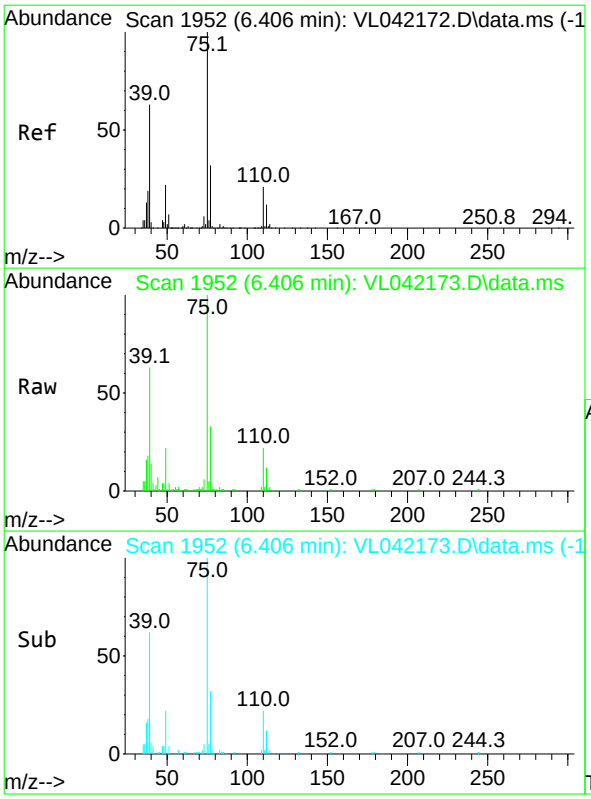


#44
2,2,4-Trimethylpentane
Concen: 2.057 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 188282

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	31.8	25.6	38.4

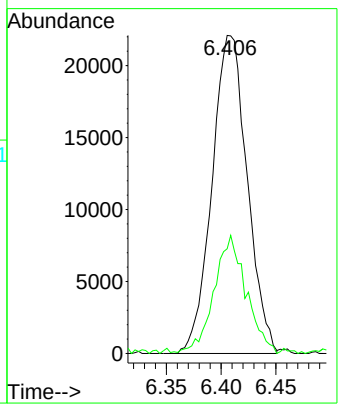




#45
t-1,3-Dichloropropene
Concen: 2.011 ppbv
RT: 6.406 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 49461

Ion	Ratio	Lower	Upper
75	100		
77	32.9	26.0	39.0



Instrument :
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ClientSampleId :
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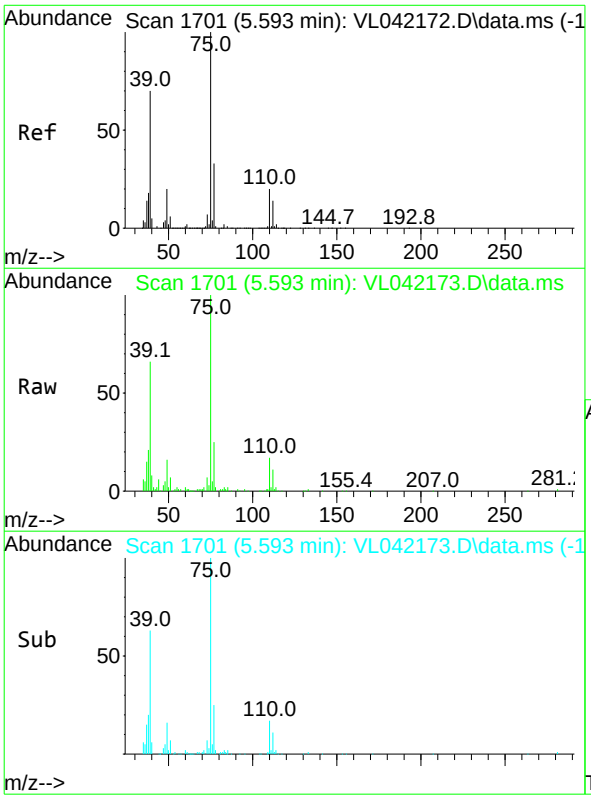
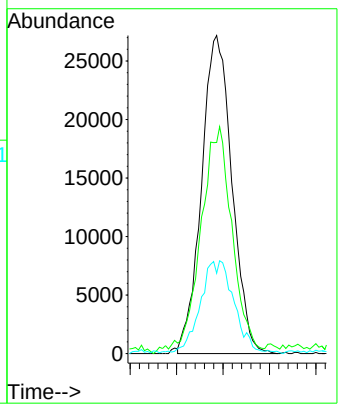
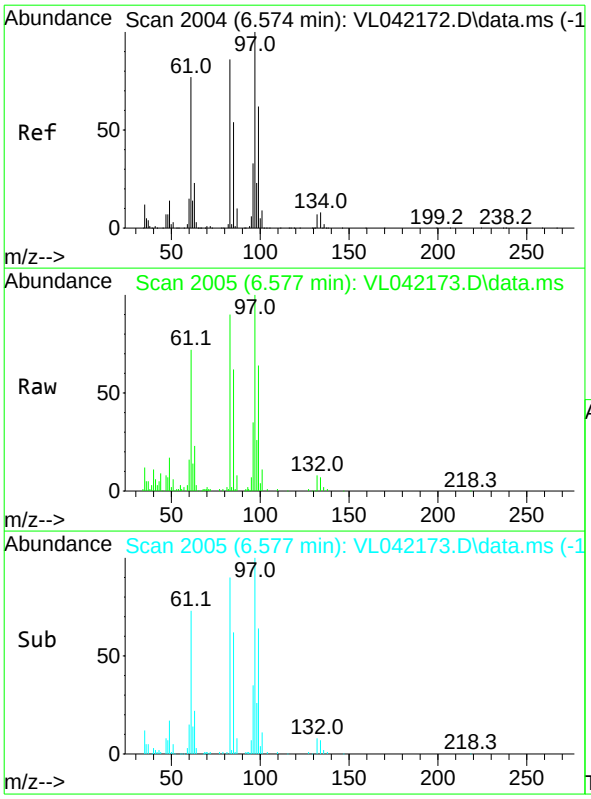


#46
cis-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 61829

Ion	Ratio	Lower	Upper
75	100		
39	64.4	55.8	83.6
77	24.5	26.0	39.0#

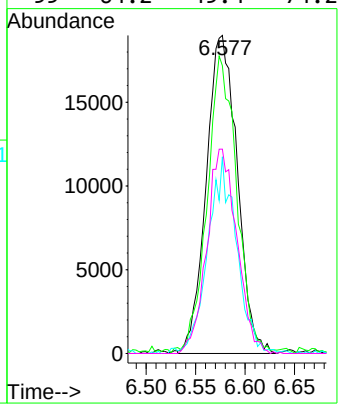




#47
1,1,2-Trichloroethane
Concen: 1.985 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 41387

Ion	Ratio	Lower	Upper
97	100		
83	89.4	69.2	103.8
85	61.3	43.1	64.7
99	64.2	49.4	74.2



Instrument :
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ClientSampleId :
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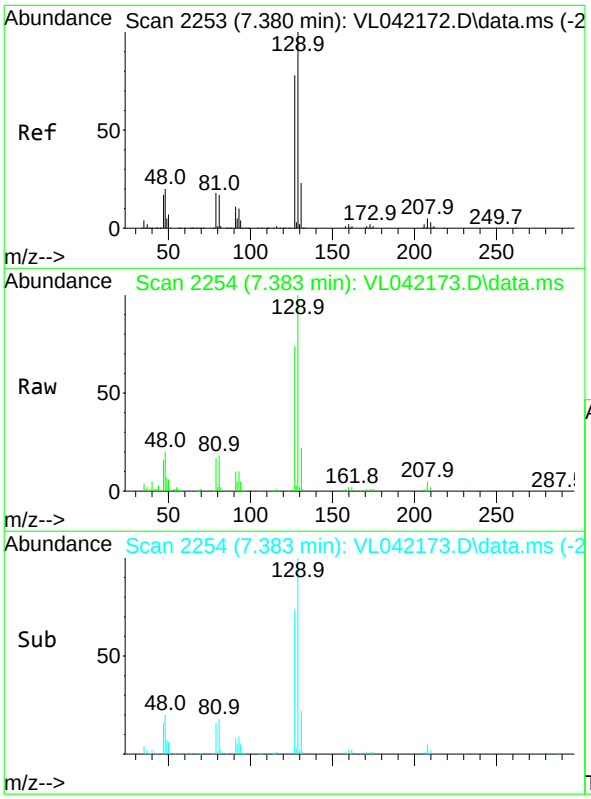
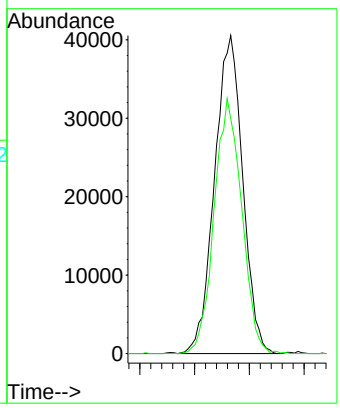
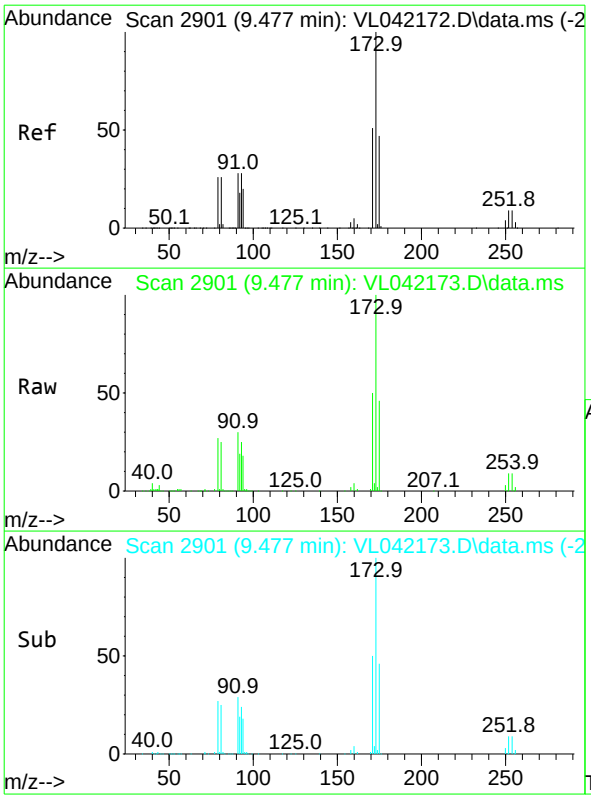


#48
Dibromochloromethane
Concen: 2.050 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:129 Resp: 72441

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2

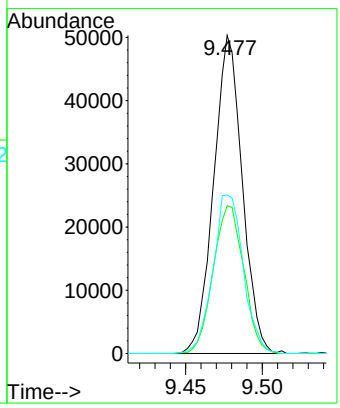




#49
Bromoform
Concen: 2.056 ppbv
RT: 9.477 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:173 Resp: 65221

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.0	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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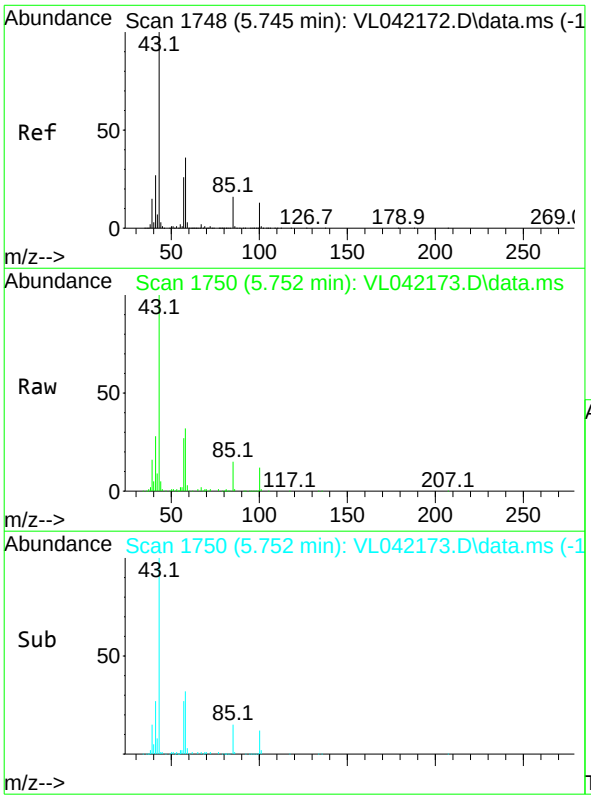
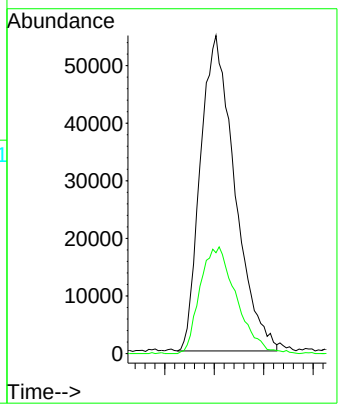
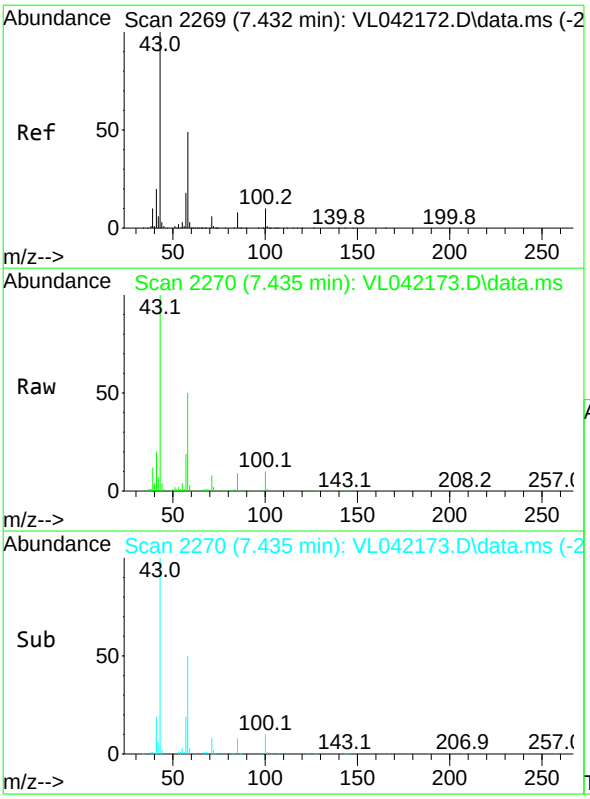


#50
4-Methyl-2-Pentanone
Concen: 2.107 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 132328

Ion	Ratio	Lower	Upper
43	100		
58	35.9	29.0	43.6

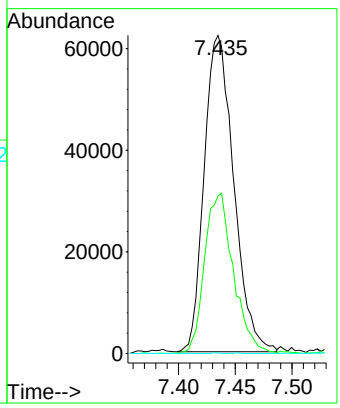




#51
2-Hexanone
Concen: 2.162 ppbv
RT: 7.435 min Scan# 22
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 112681

Ion	Ratio	Lower	Upper
43	100		
58	50.0	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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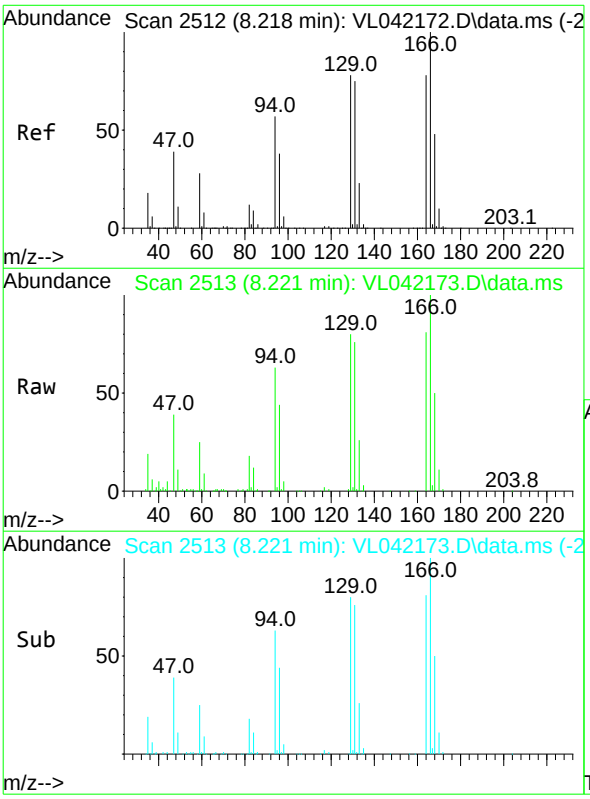
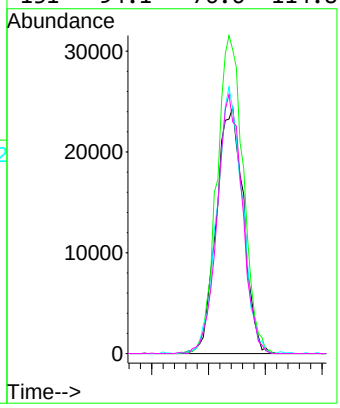
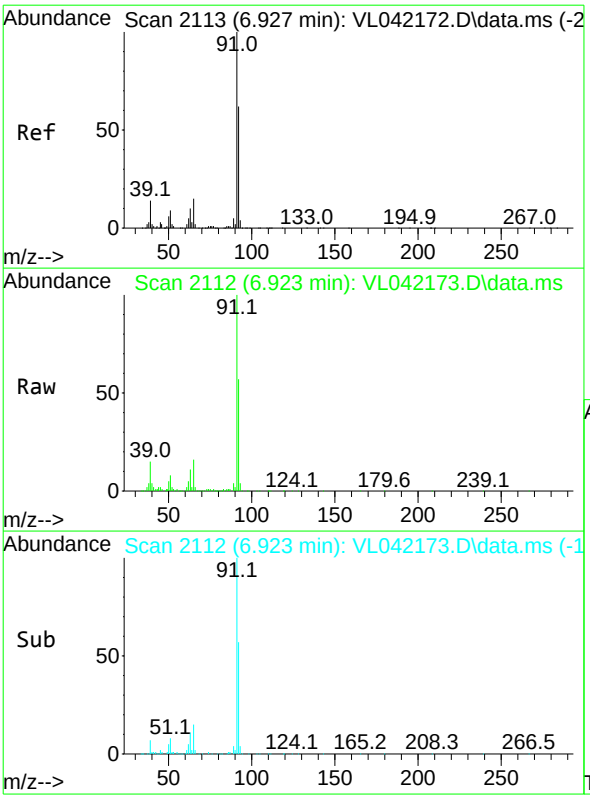


#52
Tetrachloroethene
Concen: 1.888 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:164 Resp: 40558

Ion	Ratio	Lower	Upper
164	100		
166	123.4	102.5	153.7
129	99.2	79.8	119.8
131	94.1	76.6	114.8

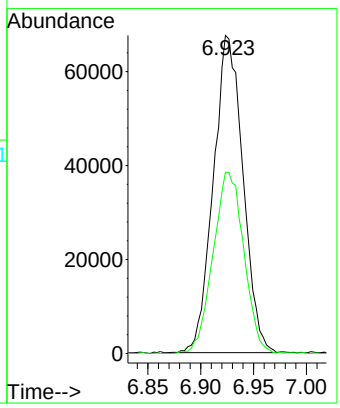




#53
Toluene
Concen: 2.045 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 131314

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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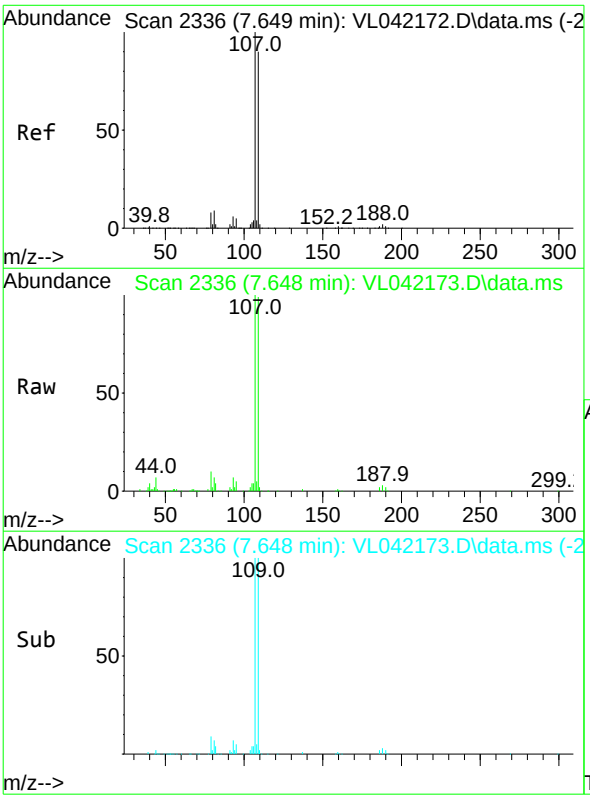
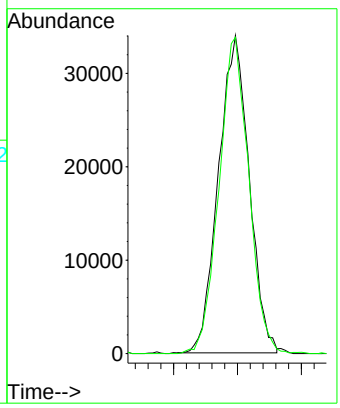
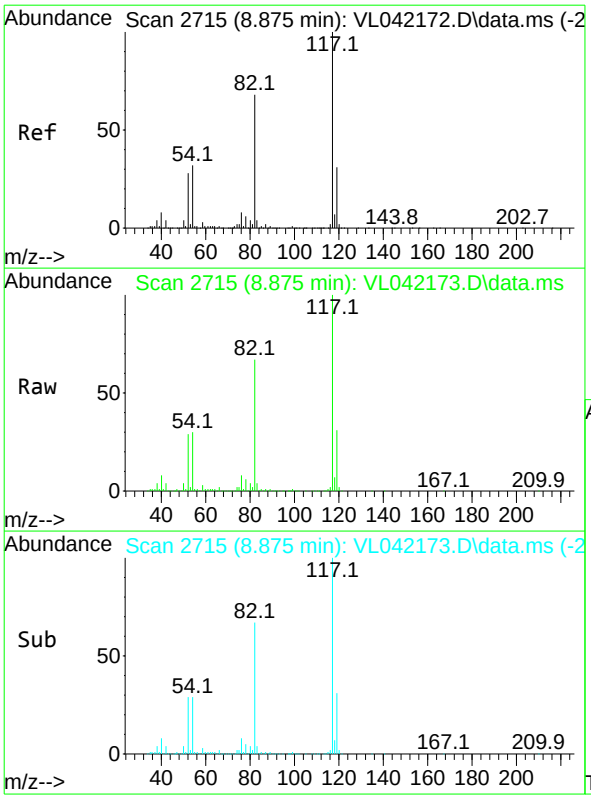


#54
1,2-Dibromoethane
Concen: 1.952 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:107 Resp: 56799

Ion	Ratio	Lower	Upper
107	100		
109	99.7	72.2	108.4

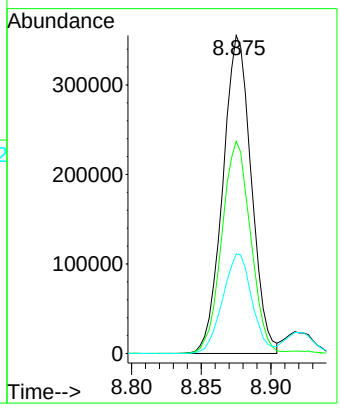




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:117 Resp: 504538

Ion	Ratio	Lower	Upper
117	100		
82	68.2	55.8	83.6
119	33.0	25.5	38.3



Instrument :
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ClientSampleId :
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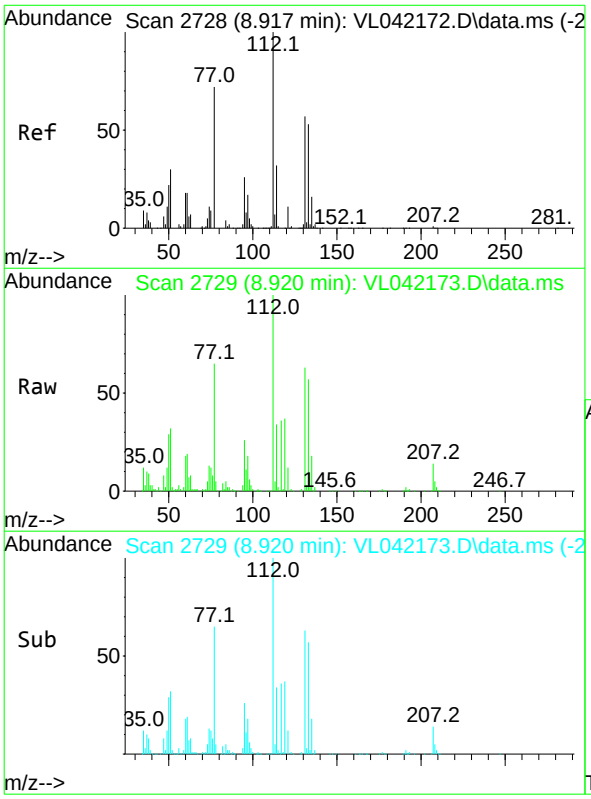
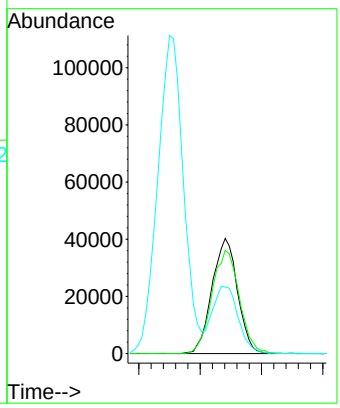
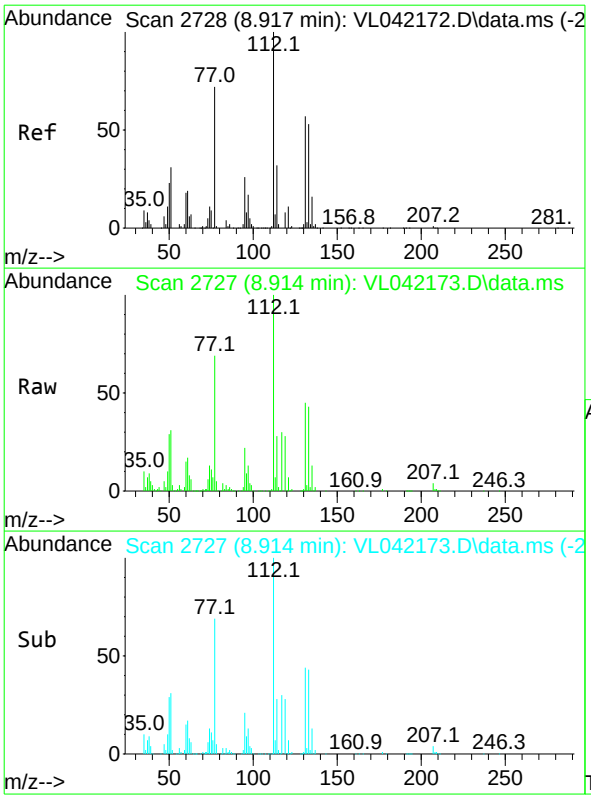


#56
1,1,1,2-Tetrachloroethane
Concen: 2.093 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:131 Resp: 58141

Ion	Ratio	Lower	Upper
131	100		
133	96.6	76.6	114.8
119	58.3	49.8	74.6

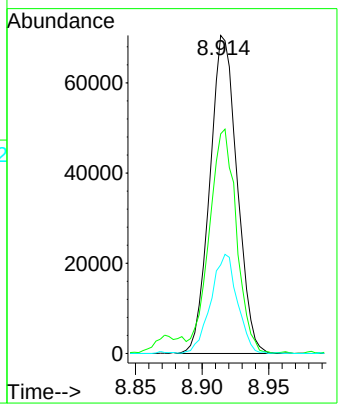




#57
Chlorobenzene
Concen: 2.096 ppbv
RT: 8.914 min Scan# 27
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:112 Resp: 100308

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	27.8	29.1	35.5#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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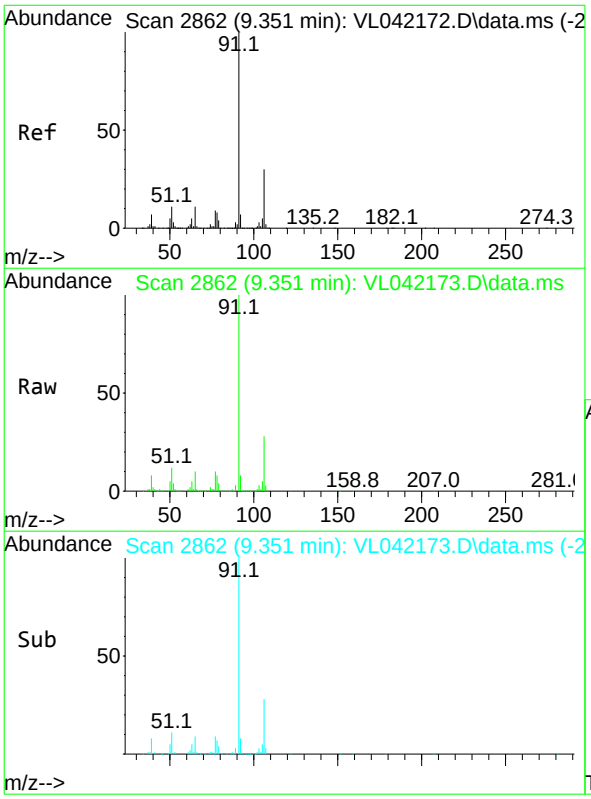
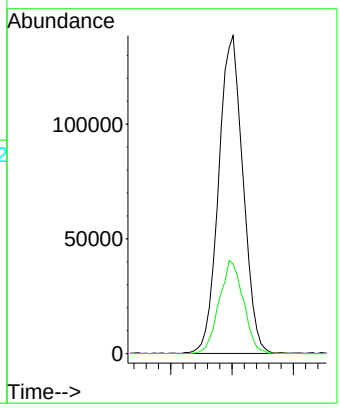
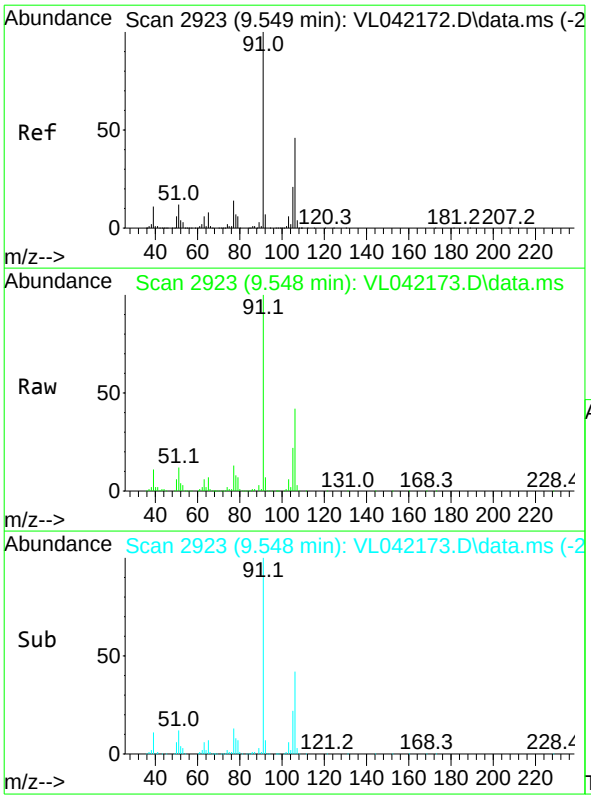


#58
Ethyl Benzene
Concen: 2.132 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 191114

Ion	Ratio	Lower	Upper
91	100		
106	28.3	24.2	36.2

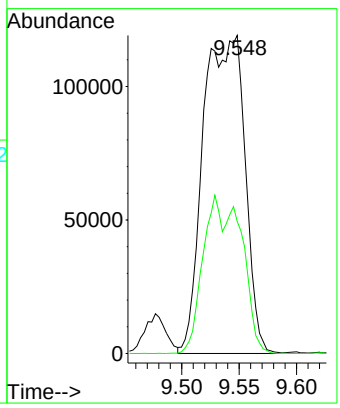




#59
m/p-Xylene
Concen: 4.181 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 299531

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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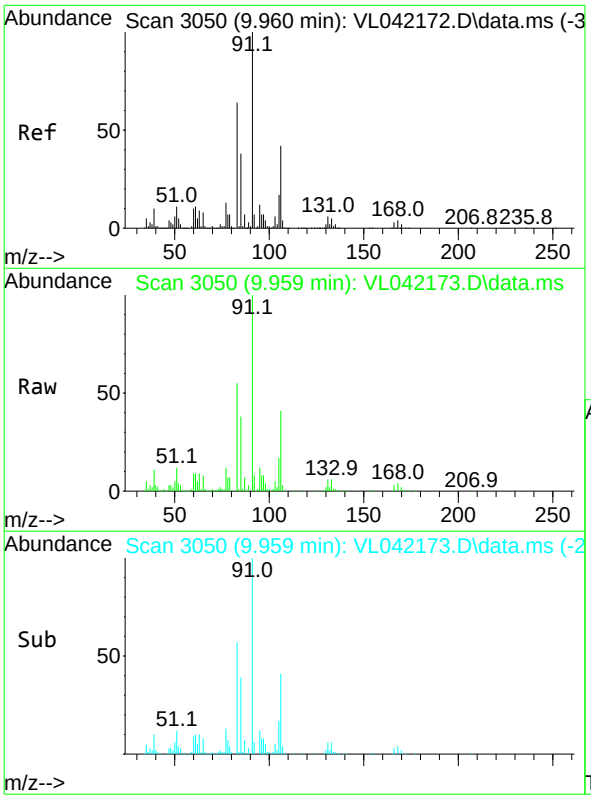
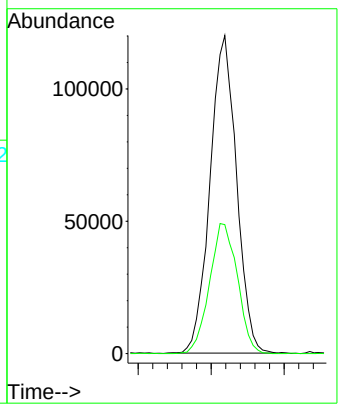
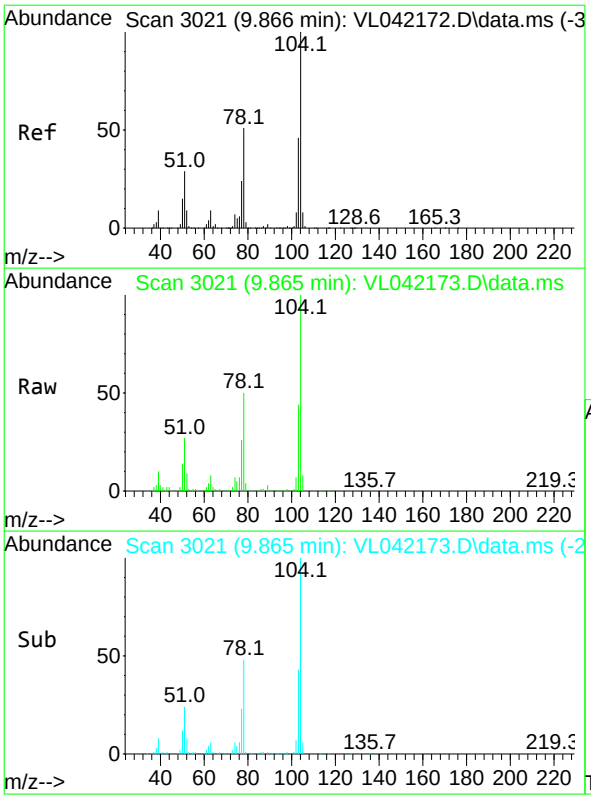


#60
o-Xylene
Concen: 2.109 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 151292

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5

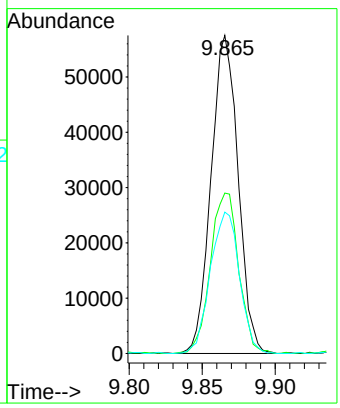




#61
Styrene
Concen: 2.089 ppbv
RT: 9.865 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:104 Resp: 74134

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	47.8	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
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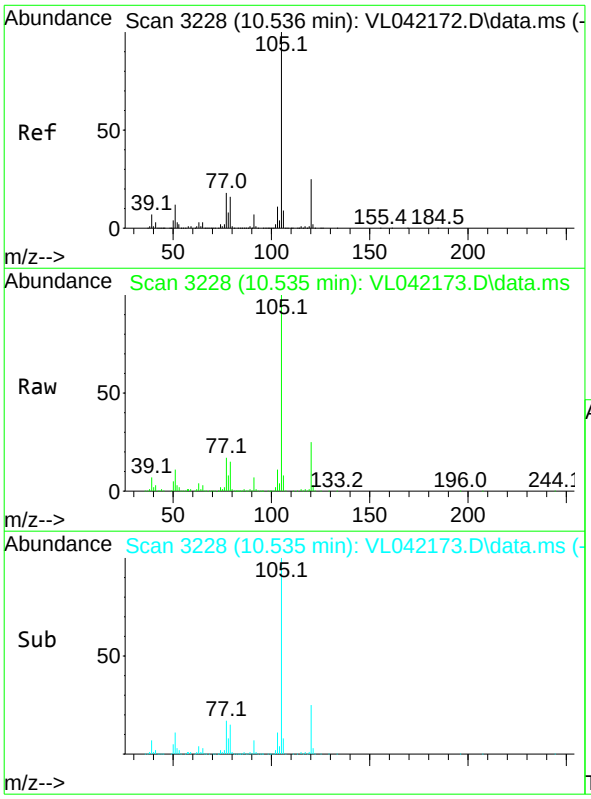
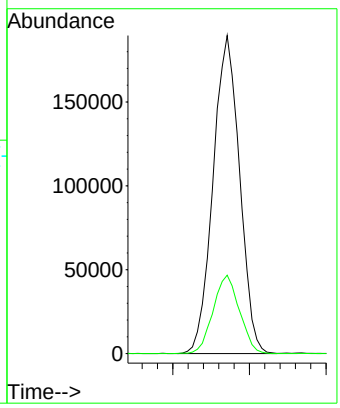
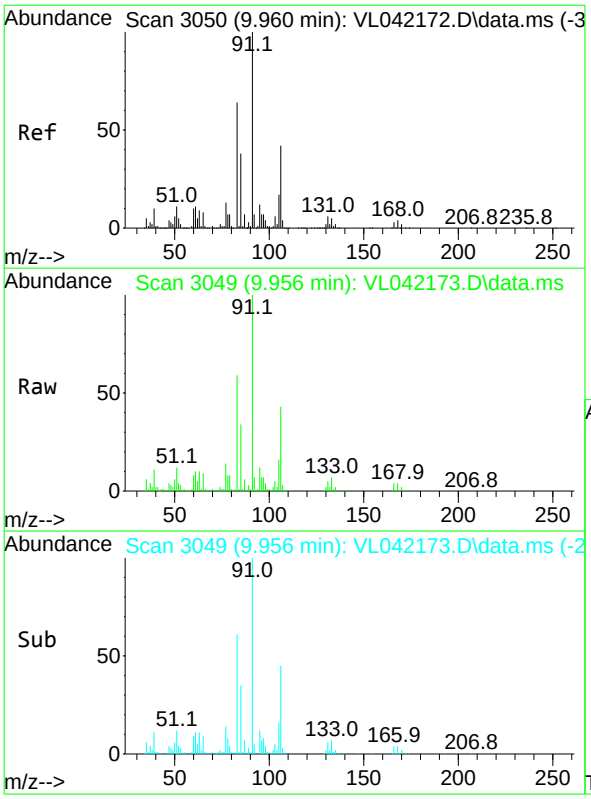


#62
Isopropylbenzene
Concen: 2.127 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 228191

Ion	Ratio	Lower	Upper
105	100		
120	24.4	19.9	29.9

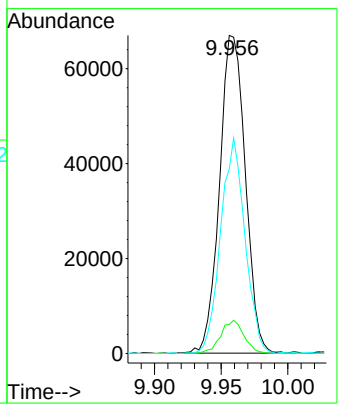




#63
1,1,2,2-Tetrachloroethane
Concen: 2.067 ppbv
RT: 9.956 min Scan# 30
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 90114

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.4	32.5	97.5



Instrument :
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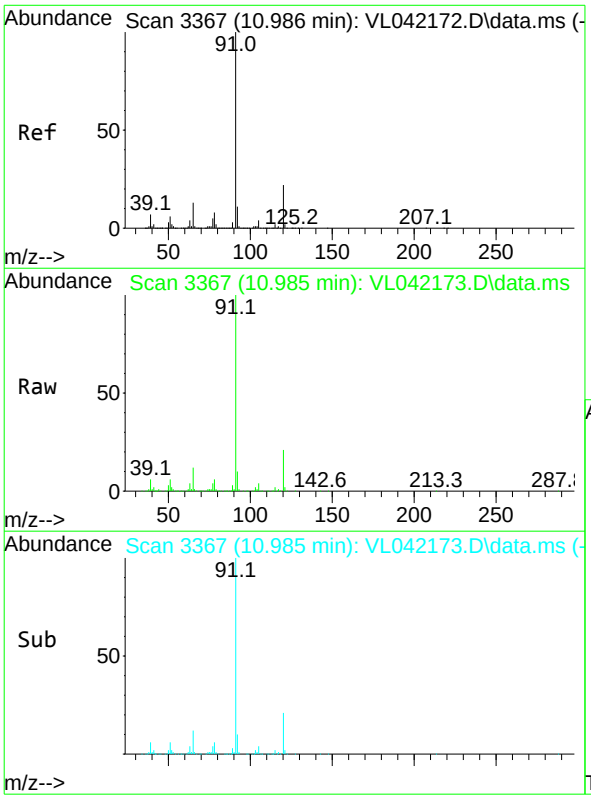
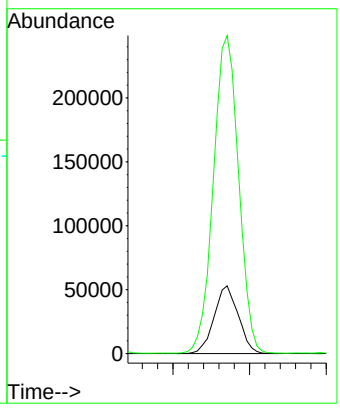
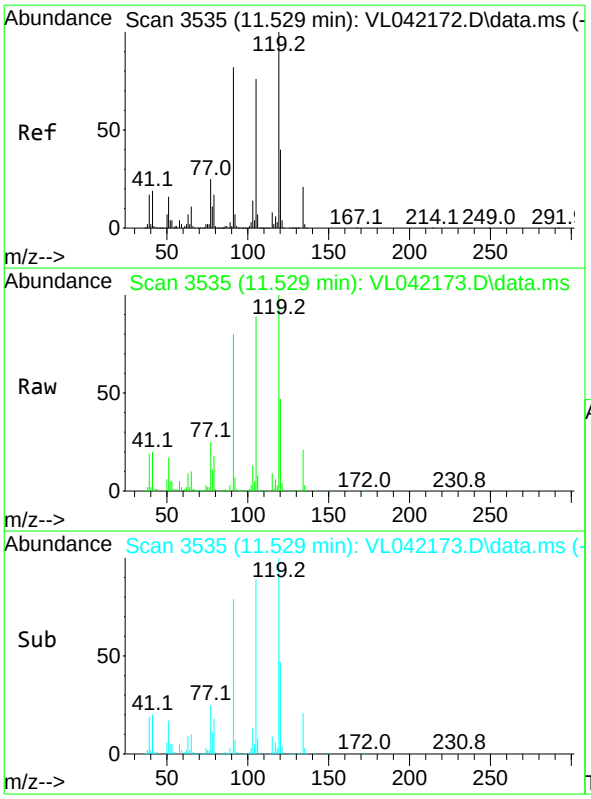


#64
n-propylbenzene
Concen: 2.104 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:120 Resp: 58105

Ion	Ratio	Lower	Upper
120	100		
91	491.1	376.9	565.3





#65
tert-Butylbenzene
Concen: 2.180 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:119 Resp: 216336

Ion	Ratio	Lower	Upper
119	100		
91	81.5	66.0	99.0
134	20.2	16.7	25.1

Instrument :
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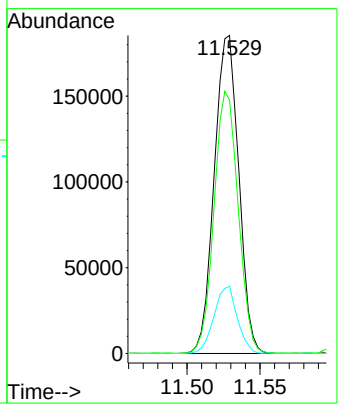
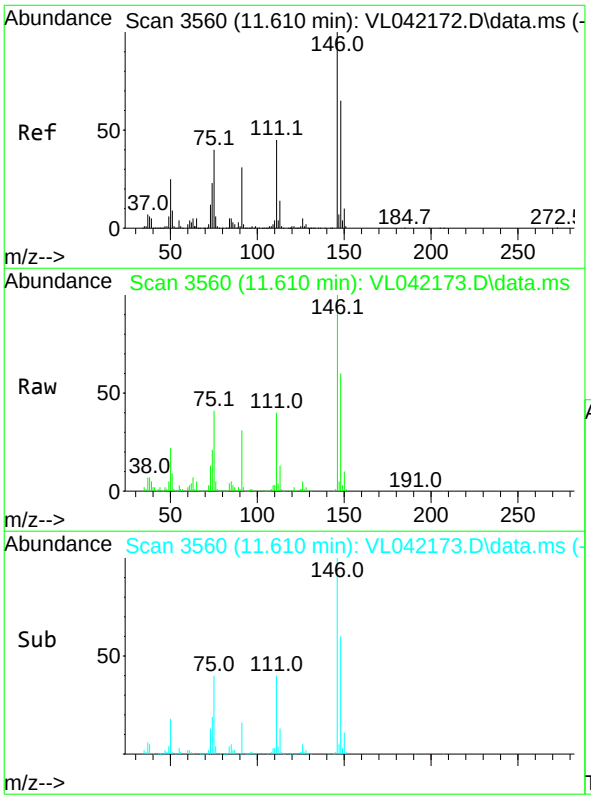
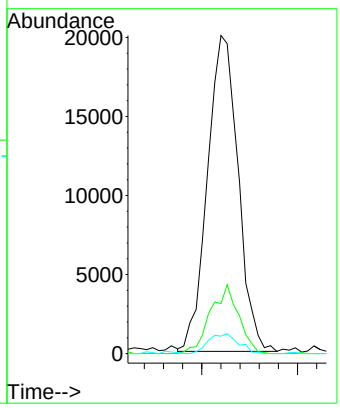


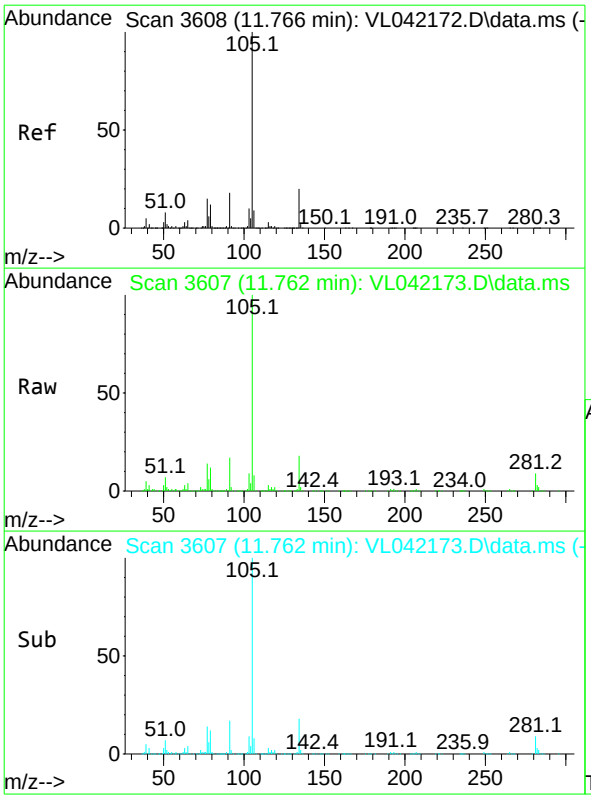


#66
Benzyl Chloride
Concen: 2.116 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 22272

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	6.5	4.5	6.7

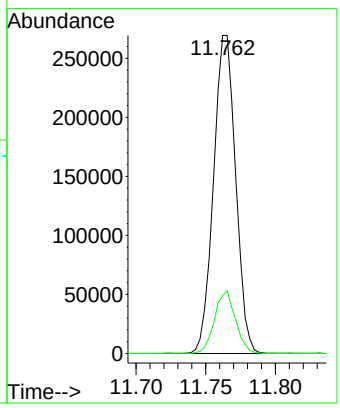




#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 297381

Ion	Ratio	Lower	Upper
105	100		
134	18.8	15.5	23.3



Instrument :
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ClientSampleId :
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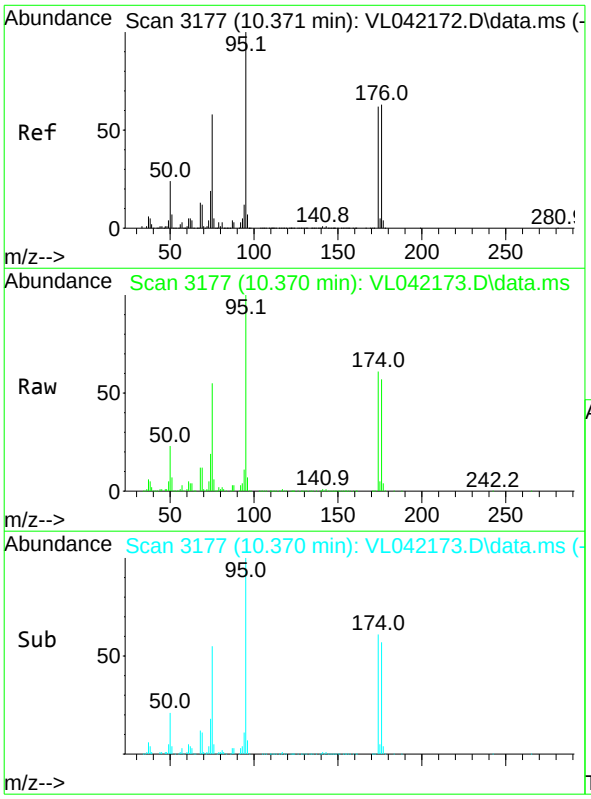
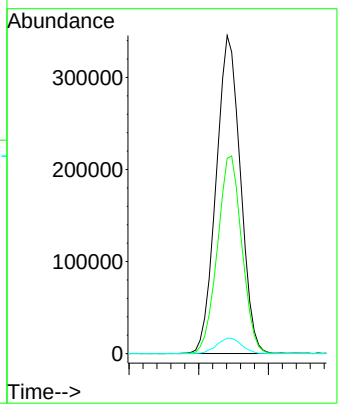
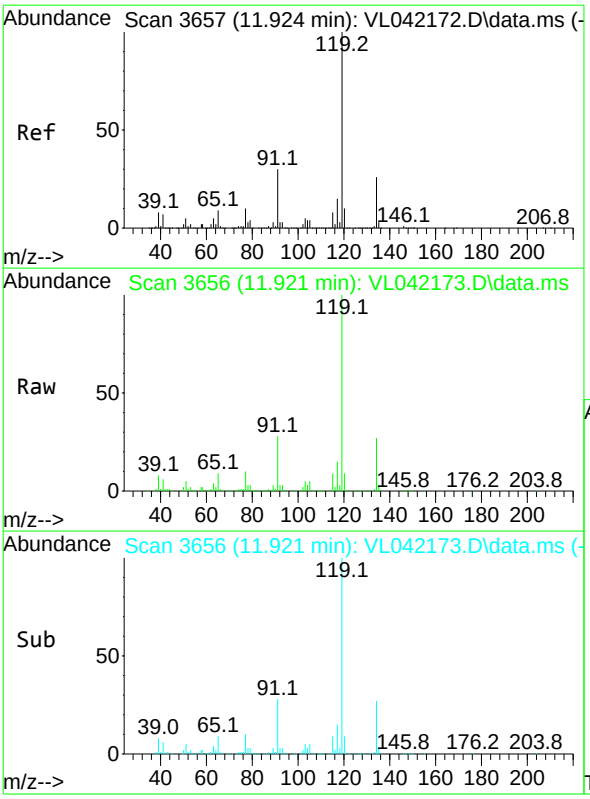


#68
1-Bromo-4-Fluorobenzene
Concen: 10.077 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 95 Resp: 417532

Ion	Ratio	Lower	Upper
95	100		
174	62.6	50.6	76.0
175	5.0	3.8	5.6





#69
p-Isopropyltoluene
Concen: 2.176 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:119 Resp: 258357

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	29.5	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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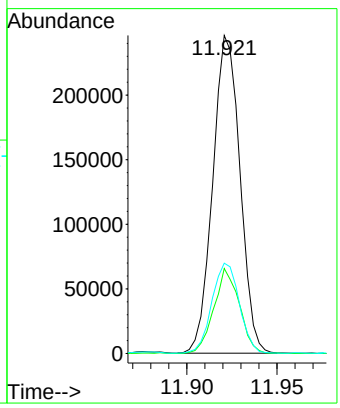
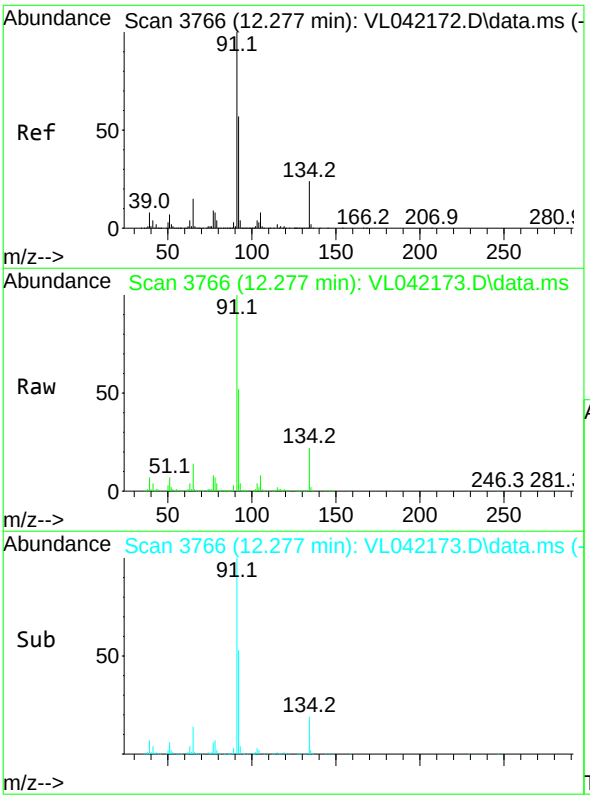
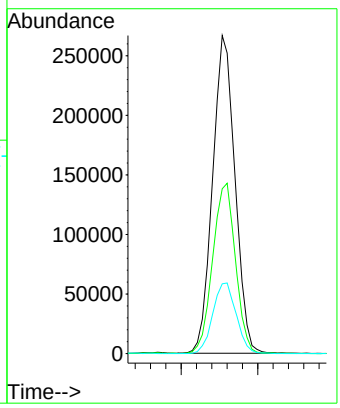


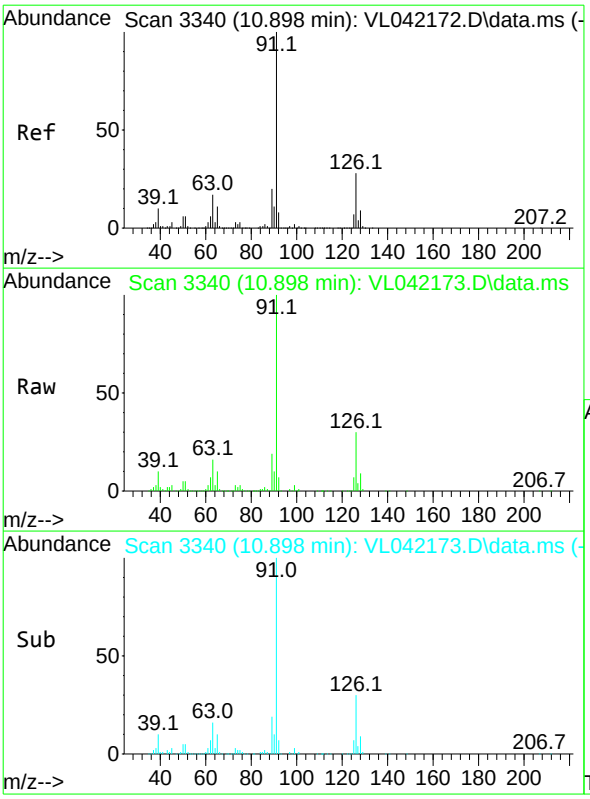


#70
n-Butylbenzene
Concen: 2.228 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 270616

Ion	Ratio	Lower	Upper
91	100		
92	55.1	44.9	67.3
134	23.3	19.2	28.8

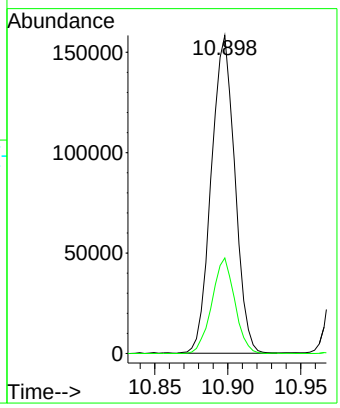




#71
2-Chlorotoluene
Concen: 2.132 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 177487

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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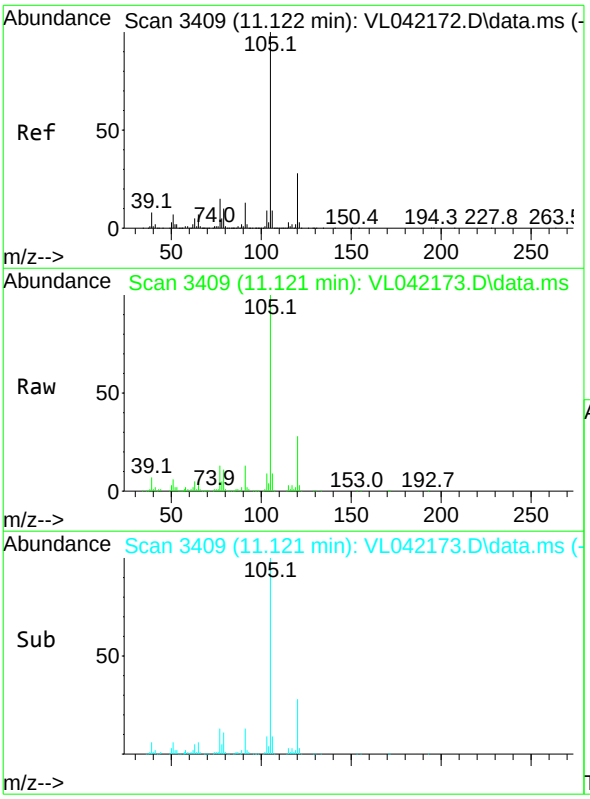
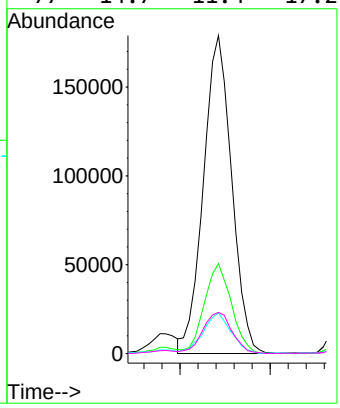
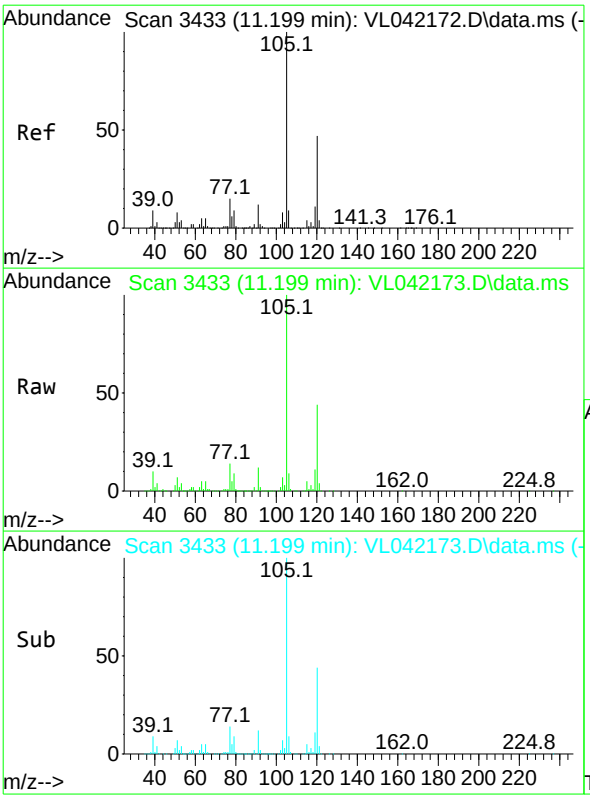


#72
4-Ethyltoluene
Concen: 2.179 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 194660

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	13.7	10.3	15.5
77	14.7	11.4	17.2

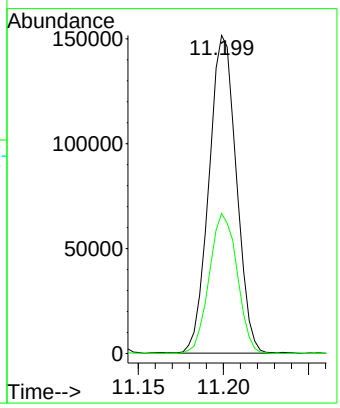




#73
1,3,5-Trimethylbenzene
Concen: 2.169 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 169221

Ion	Ratio	Lower	Upper
105	100		
120	44.0	37.4	56.0



Instrument :
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ClientSampleId :
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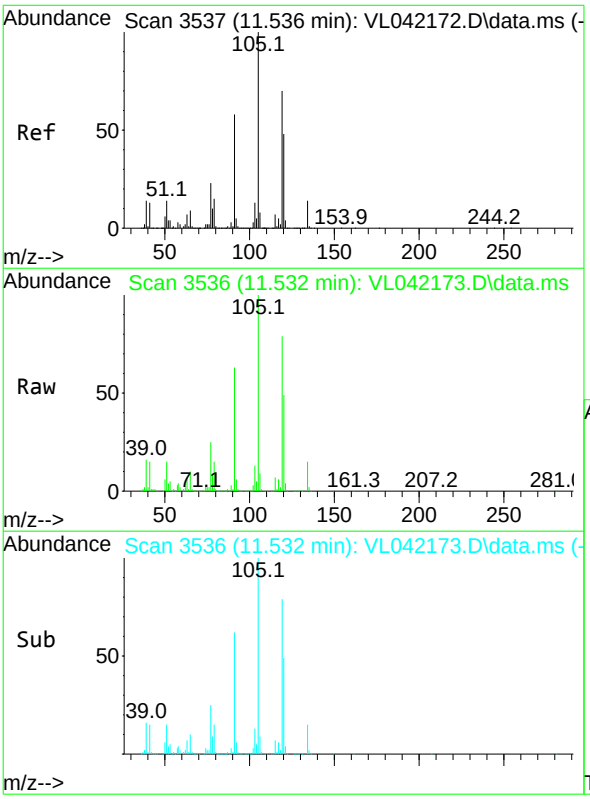
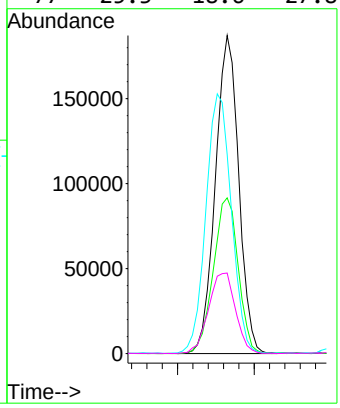
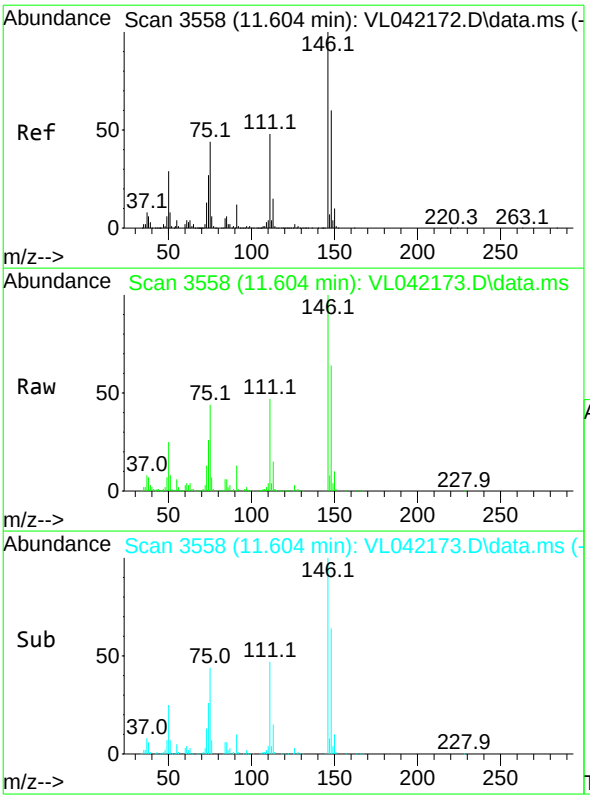


#74
1,2,4-Trimethylbenzene
Concen: 2.207 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 198351

Ion	Ratio	Lower	Upper
105	100		
120	49.0	38.6	58.0
91	62.4	46.2	69.2
77	25.3	18.6	27.8

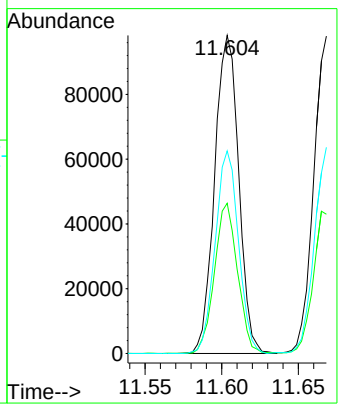




#75
1,3-Dichlorobenzene
Concen: 2.175 ppbv
RT: 11.604 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 107217

Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	61.6	31.9	95.9



Instrument :
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ClientSampleId :
VSTDICC002

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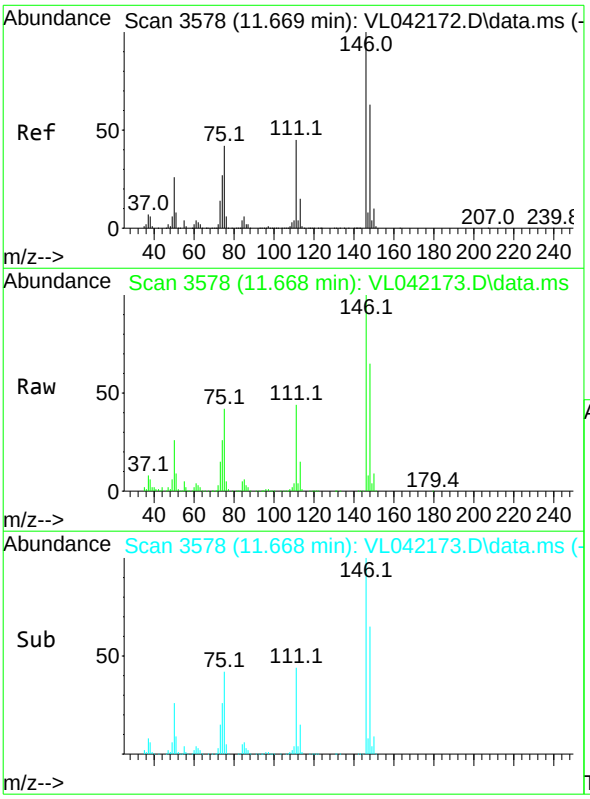
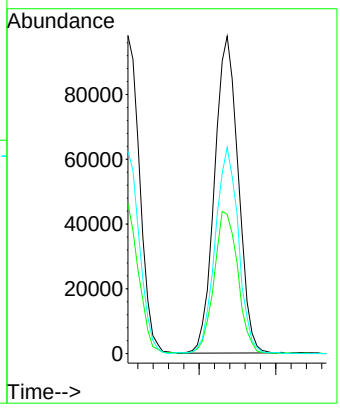
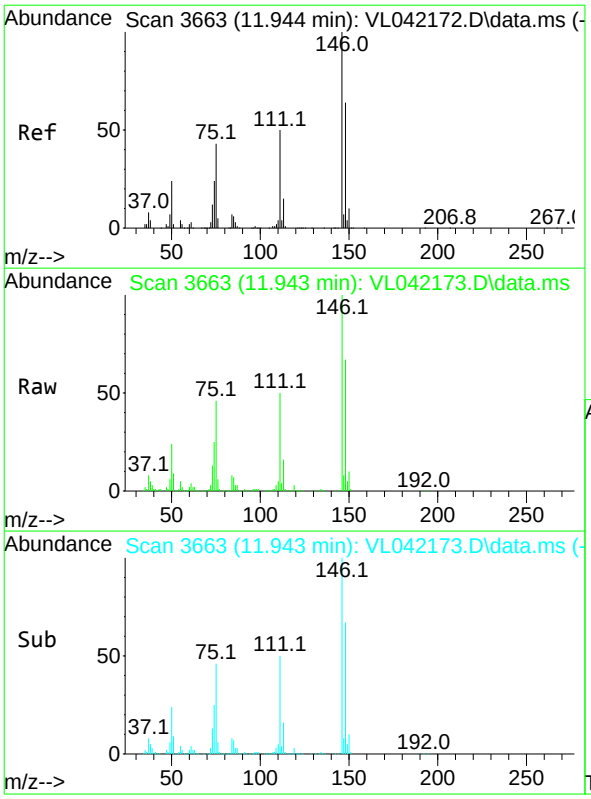


#76
1,4-Dichlorobenzene
Concen: 2.139 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 104925

Ion	Ratio	Lower	Upper
146	100		
111	45.3	23.0	69.0
148	64.0	31.9	95.7

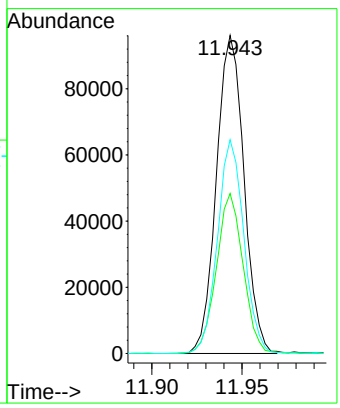




#77
1,2-Dichlorobenzene
Concen: 2.132 ppbv
RT: 11.943 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 102310

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	64.6	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
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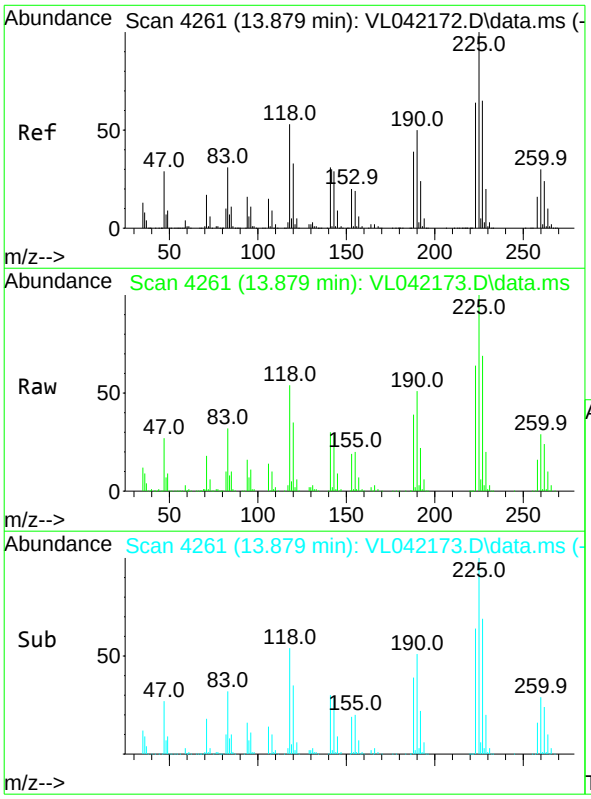
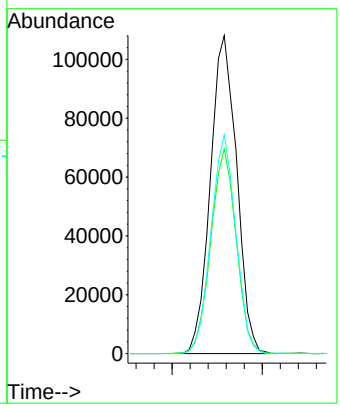
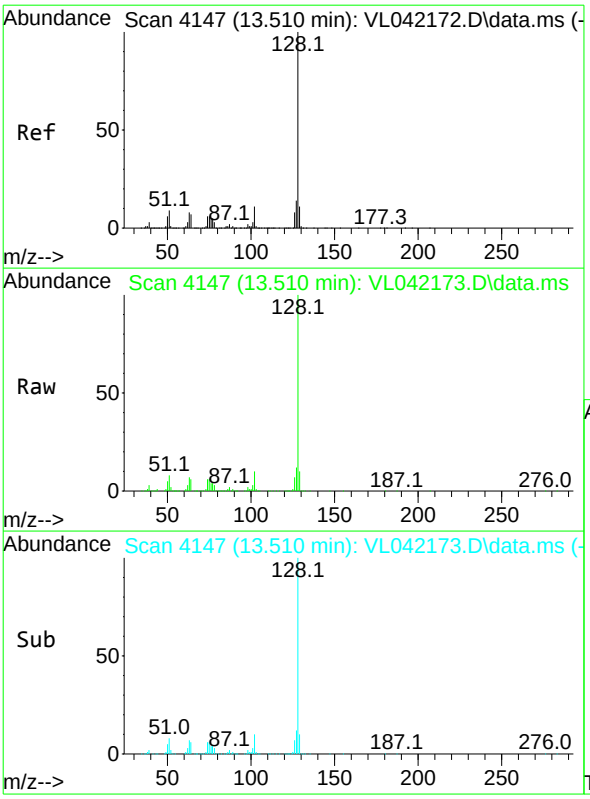


#78
Hexachloro-1,3-Butadiene
Concen: 2.242 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:225 Resp: 109539

Ion	Ratio	Lower	Upper
225	100		
223	62.2	50.6	76.0
227	64.9	51.2	76.8

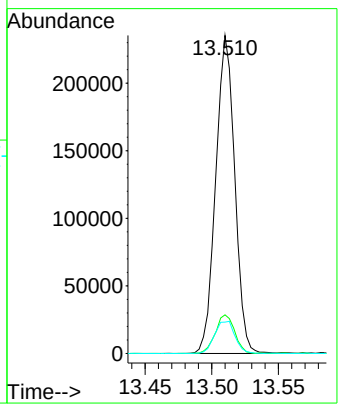




#79
Naphthalene
Concen: 2.375 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:128 Resp: 233451

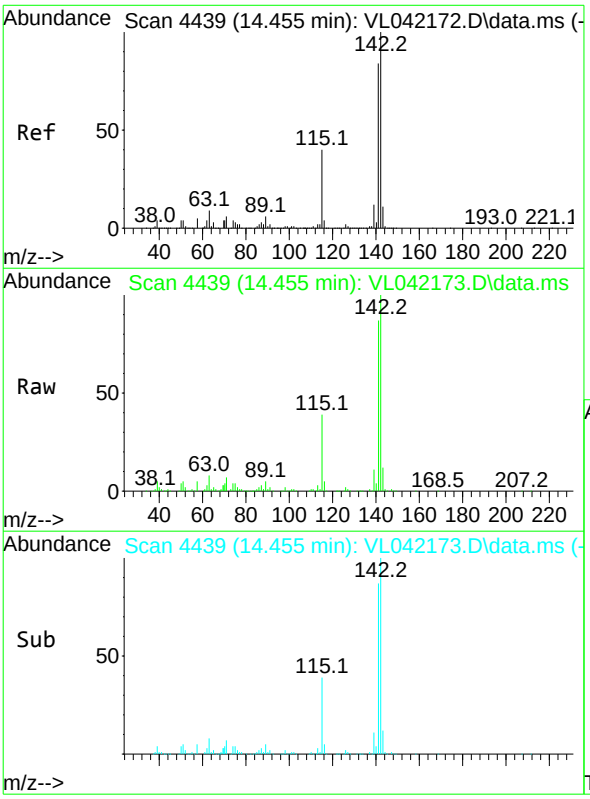
Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.8	16.2
129	9.9	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

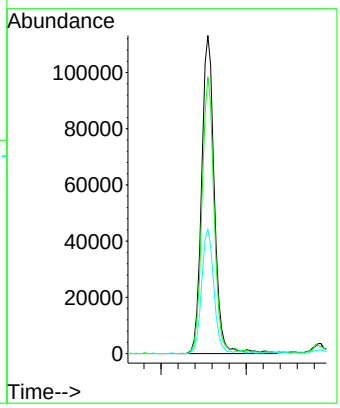
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

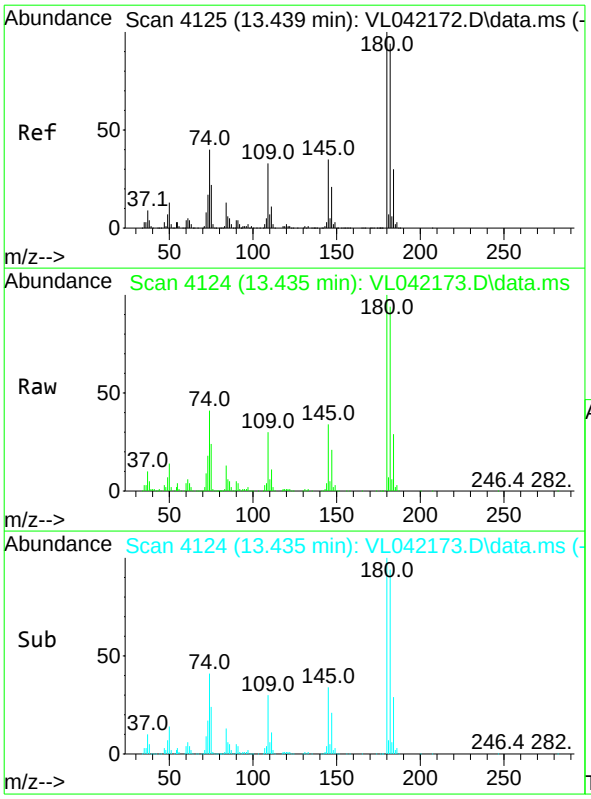


#80
Naphthalene,2-methyl-
Concen: 2.451 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:142 Resp: 117313

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	38.5	31.6	47.4

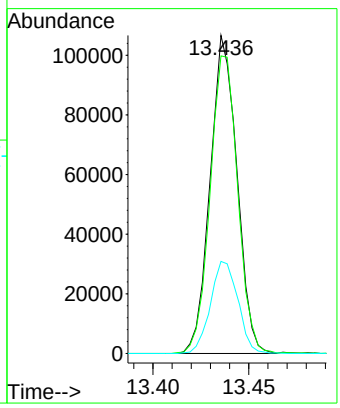




#81
1,2,4-Trichlorobenzene
Concen: 2.288 ppbv
RT: 13.435 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:180 Resp: 103765

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.1	112.7
184	29.6	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	186244	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	537244	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	499830	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	404753	9.861	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	28203	1.026	ppbv		99
3) Chlorodifluoromethane	1.473	51	28693	1.021	ppbv		94
4) Chloromethane	1.531	50	11111	0.989	ppbv		99
5) Vinyl Chloride	1.577	62	10723	0.936	ppbv		98
6) Bromomethane	1.667	94	4984	0.979	ppbv		97
7) Chloroethane	1.703	64	4622	1.025	ppbv		100
8) Dichlorotetrafluoroethane	1.554	85	23886	1.020	ppbv		98
9) Propene	1.483	41	13699m	1.082	ppbv		
10) Heptane	4.975	43	36132	1.055	ppbv		100
11) Trichlorofluoromethane	1.875	101	27136	1.014	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.137	101	22629	1.029	ppbv		99
13) Ethanol	1.719	45	1610m	1.624	ppbv		
14) Bromoethene	1.781	108	8330	0.989	ppbv	#	82
15) Acetone	1.836	43	29294	1.125	ppbv		95
16) 1,3-Butadiene	1.606	39	13133	1.121	ppbv		97
17) tert-Butyl alcohol	2.040	59	33500	1.033	ppbv		97
18) 1,1-Dichloroethene	2.033	96	10532	1.024	ppbv		89
19) Isopropyl Alcohol	1.884	45	14903	1.014	ppbv	#	38
20) Methylene Chloride	2.059	84	10481	1.080	ppbv		93
21) Allyl Chloride	2.095	41	19039	1.036	ppbv		99
22) trans-1,2-Dichloroethene	2.341	96	13051m	1.086	ppbv		
23) Vinyl Acetate	2.464	43	12883m	1.190	ppbv		
24) 1,1-Dichloroethane	2.409	63	22505	1.022	ppbv		99
25) Ethyl Acetate	2.836	43	67402	0.997	ppbv	#	96
26) Hexane	2.823	57	27223	1.043	ppbv		98
27) Carbon Disulfide	2.146	76	28167	1.006	ppbv	#	47
28) Methyl tert-Butyl Ether	2.441	73	16501	1.015	ppbv		95
29) Chloroform	2.845	83	38516	1.008	ppbv		96
30) Cyclohexane	3.852	84	23052	1.016	ppbv		97
31) cis-1,2-Dichloroethene	2.716	61	27187	1.026	ppbv		89
32) 1,1,1-Trichloroethane	3.363	97	40993	0.938	ppbv		99
34) 2-Butanone	2.557	43	41423	1.063	ppbv		98
35) Carbon Tetrachloride	3.758	117	39345	0.952	ppbv		93
36) Benzene	3.651	78	55156	1.036	ppbv		94
37) 1,2-Dichloroethane	3.218	62	30543	1.002	ppbv		98
38) Trichloroethene	4.545	130	21906	0.985	ppbv		93
39) 1,2-Dichloropropane	4.312	63	20020	1.032	ppbv		99
40) 1,4-Dioxane	4.593	88	10592m	1.052	ppbv		
41) Tetrahydrofuran	3.056	42	22818	1.029	ppbv		97
42) Bromodichloromethane	4.483	83	41864	0.996	ppbv		90
43) Methyl Methacrylate	4.875	69	24233m	1.078	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	90727	1.008	ppbv		96
45) t-1,3-Dichloropropene	6.403	75	23993m	0.992	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	30063	1.014	ppbv		93
47) 1,1,2-Trichloroethane	6.577	97	20546	1.002	ppbv		96
48) Dibromochloromethane	7.383	129	34425	0.991	ppbv		100
49) Bromoform	9.481	173	31610	1.013	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	65226m	1.056	ppbv		
51) 2-Hexanone	7.438	43	54680	1.067	ppbv	#	100
52) Tetrachloroethene	8.222	164	19415	0.919	ppbv		95
53) Toluene	6.927	91	64612	1.023	ppbv		99
54) 1,2-Dibromoethane	7.652	107	28879	1.009	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.924	131	28764	1.045	ppbv	#	87
57) Chlorobenzene	8.917	112	48930	1.032	ppbv		93
58) Ethyl Benzene	9.348	91	91086	1.026	ppbv		97
59) m/p-Xylene	9.529	91	147162m	2.073	ppbv		
60) o-Xylene	9.960	91	73702	1.037	ppbv		96
61) Styrene	9.866	104	36110	1.027	ppbv		97
62) Isopropylbenzene	10.536	105	109897	1.034	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.960	83	44431	1.029	ppbv		99
64) n-propylbenzene	10.986	120	29054	1.062	ppbv		98
65) tert-Butylbenzene	11.526	119	103520	1.053	ppbv		96
66) Benzyl Chloride	11.614	91	10660	1.022	ppbv	#	93
67) sec-Butylbenzene	11.762	105	149660	1.095	ppbv		97
69) p-Isopropyltoluene	11.921	119	127509	1.084	ppbv		99
70) n-Butylbenzene	12.280	91	129860	1.079	ppbv		99
71) 2-Chlorotoluene	10.898	91	86356	1.047	ppbv		100
72) 4-Ethyltoluene	11.122	105	92912	1.050	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	83497	1.080	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	97858	1.099	ppbv		94
75) 1,3-Dichlorobenzene	11.604	146	51096	1.046	ppbv		99
76) 1,4-Dichlorobenzene	11.669	146	50841	1.046	ppbv		99
77) 1,2-Dichlorobenzene	11.944	146	51523	1.084	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	55611	1.149	ppbv		97
79) Naphthalene	13.510	128	109031	1.120	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	44518	0.939	ppbv		99
81) 1,2,4-Trichlorobenzene	13.436	180	47040	1.047	ppbv		98

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

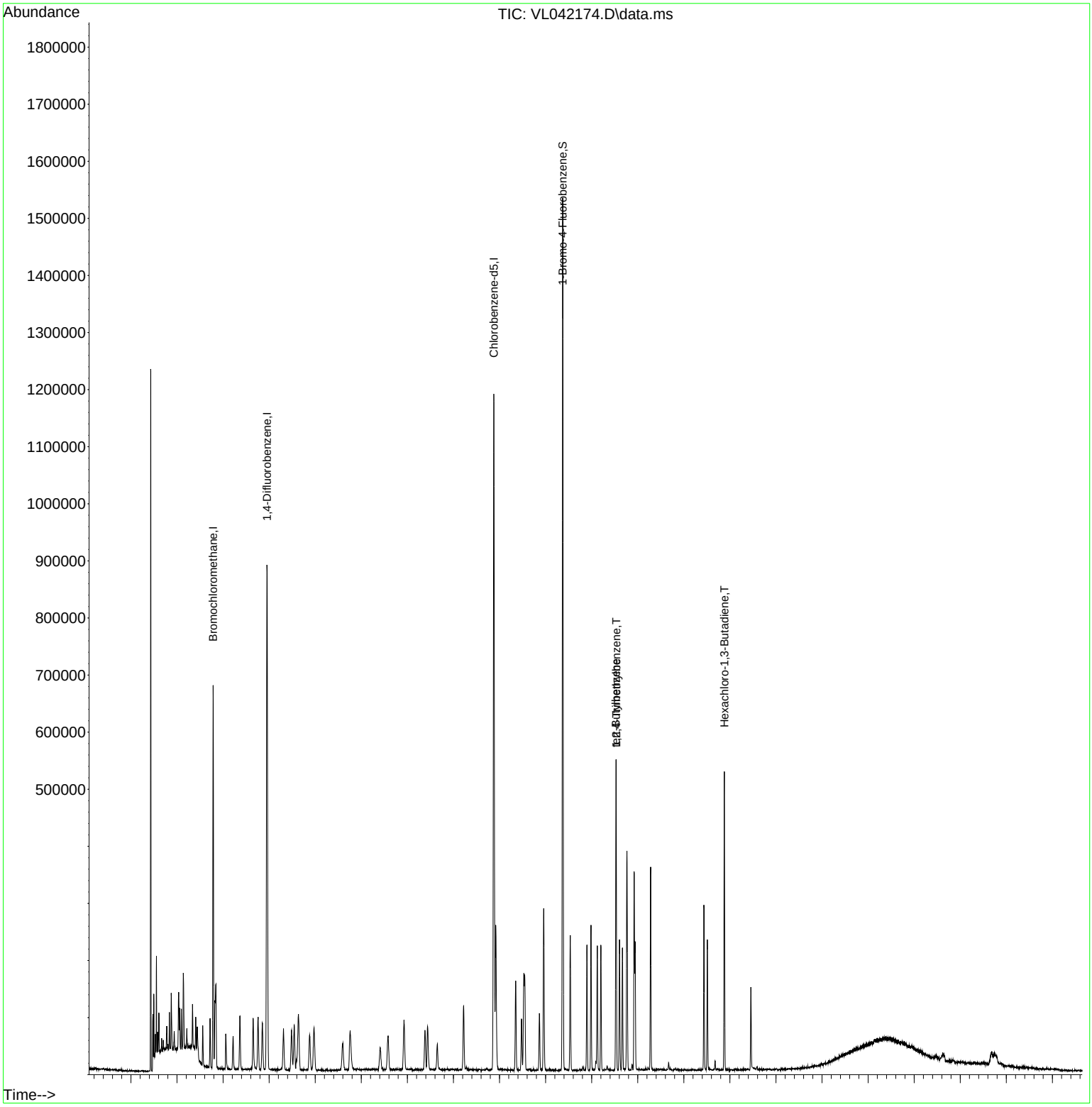
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

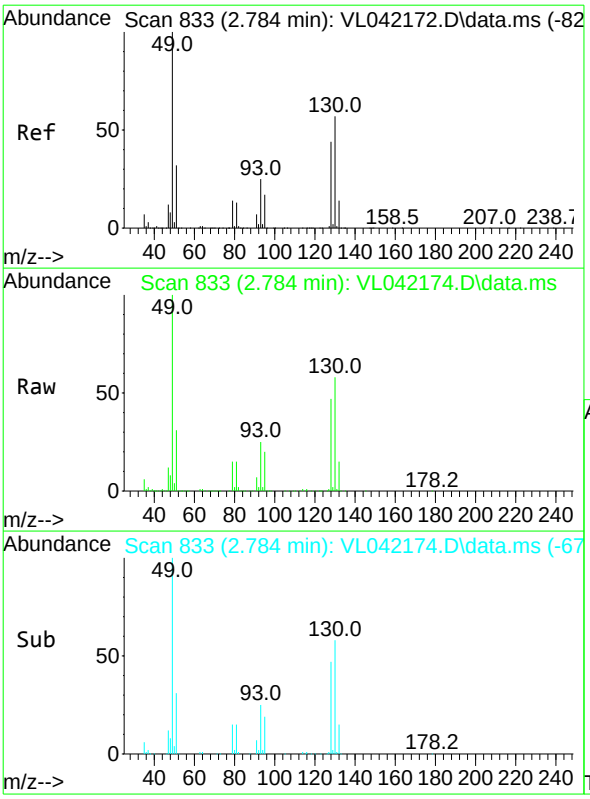
Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

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

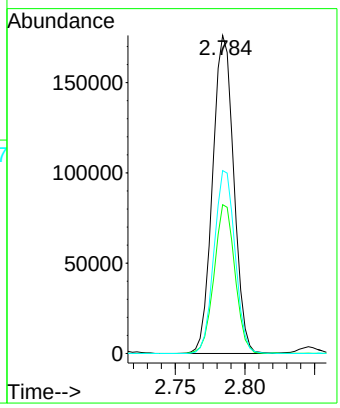




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 49 Resp: 186244

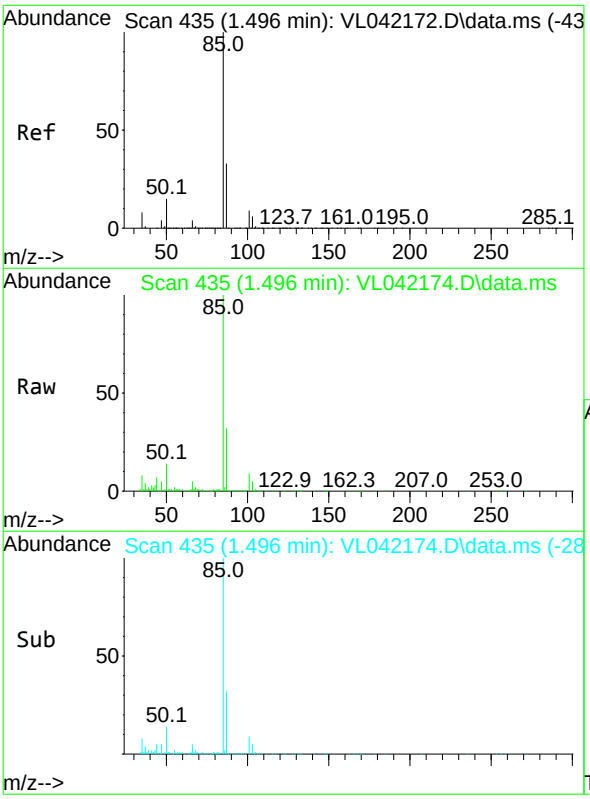
Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.5
130	57.0	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

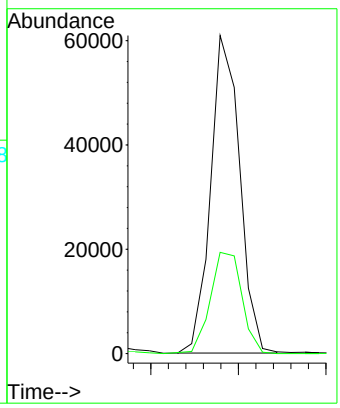
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

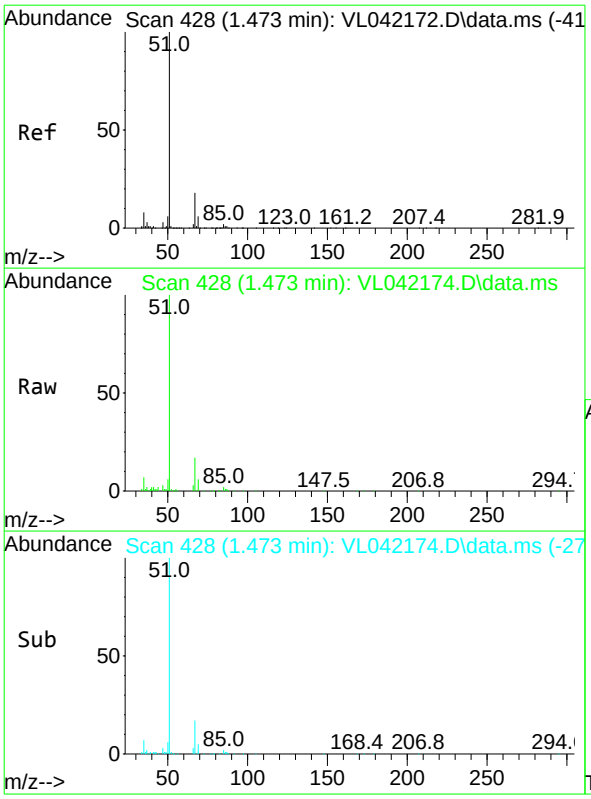


#2
Dichlorodifluoromethane
Concen: 1.026 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 28203

Ion	Ratio	Lower	Upper
85	100		
87	31.9	26.1	39.1

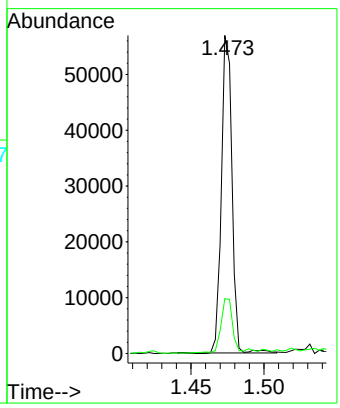




#3
Chlorodifluoromethane
Concen: 1.021 ppbv
RT: 1.473 min Scan# 42
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 51 Resp: 28693

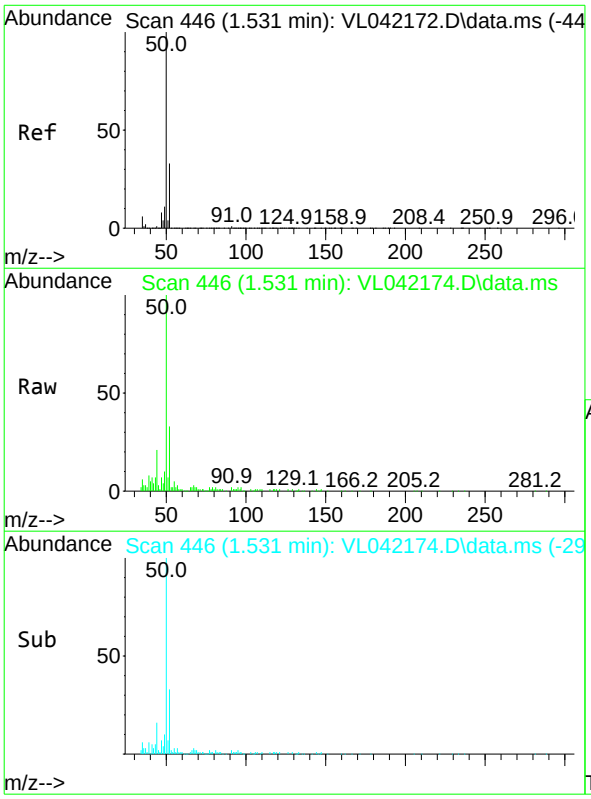
Ion	Ratio	Lower	Upper
51	100		
67	21.5	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

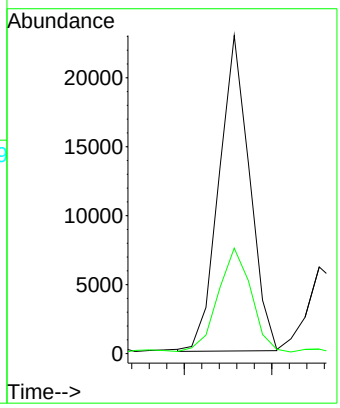
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

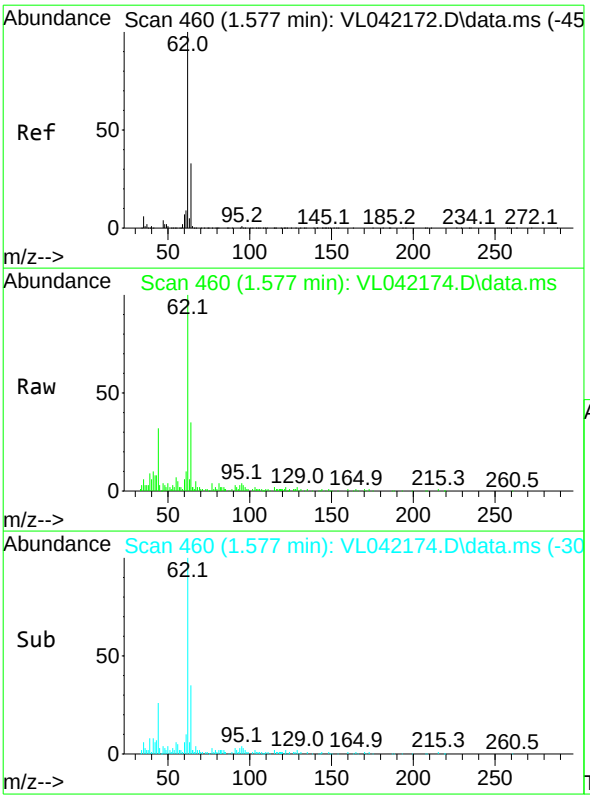


#4
Chloromethane
Concen: 0.989 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 50 Resp: 11111

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1

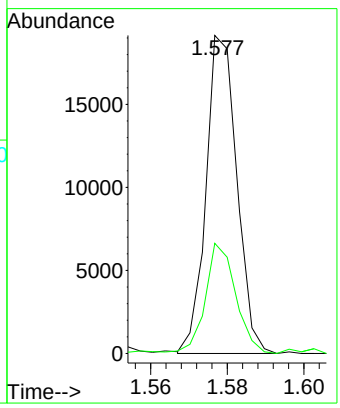




#5
Vinyl Chloride
Concen: 0.936 ppbv
RT: 1.577 min Scan# 46
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 62 Resp: 10723

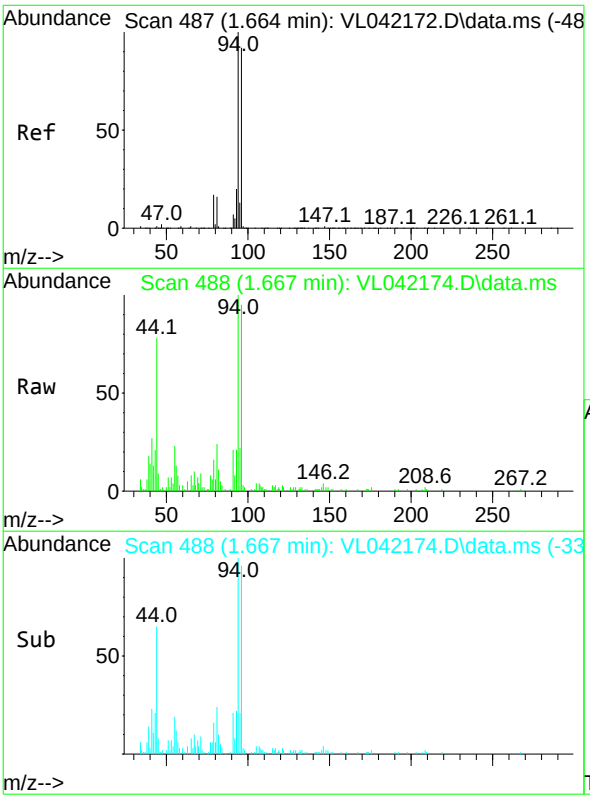
Ion	Ratio	Lower	Upper
62	100		
64	34.6	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

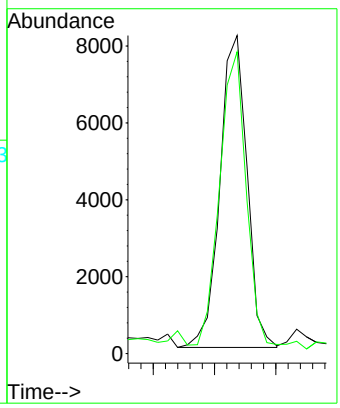
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

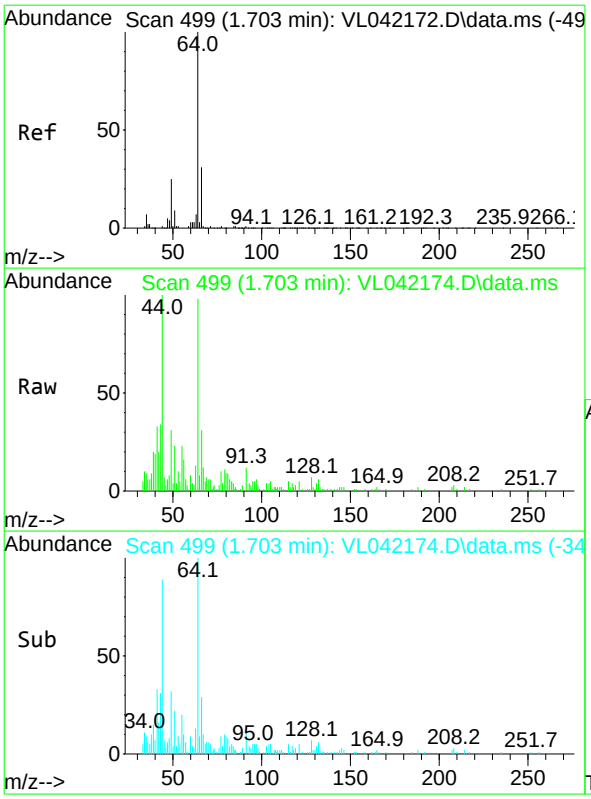


#6
Bromomethane
Concen: 0.979 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 94 Resp: 4984

Ion	Ratio	Lower	Upper
94	100		
96	93.8	73.1	109.7

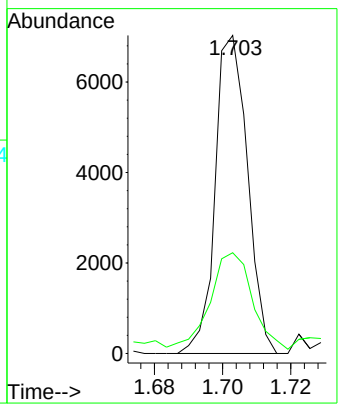




#7
Chloroethane
Concen: 1.025 ppbv
RT: 1.703 min Scan# 49
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 64 Resp: 4622

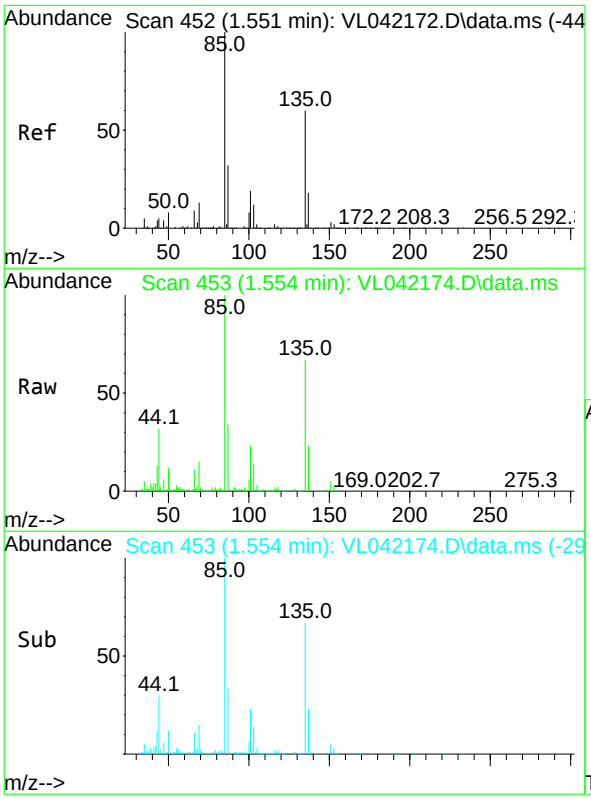
Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

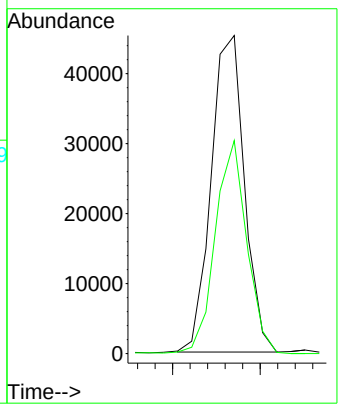
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

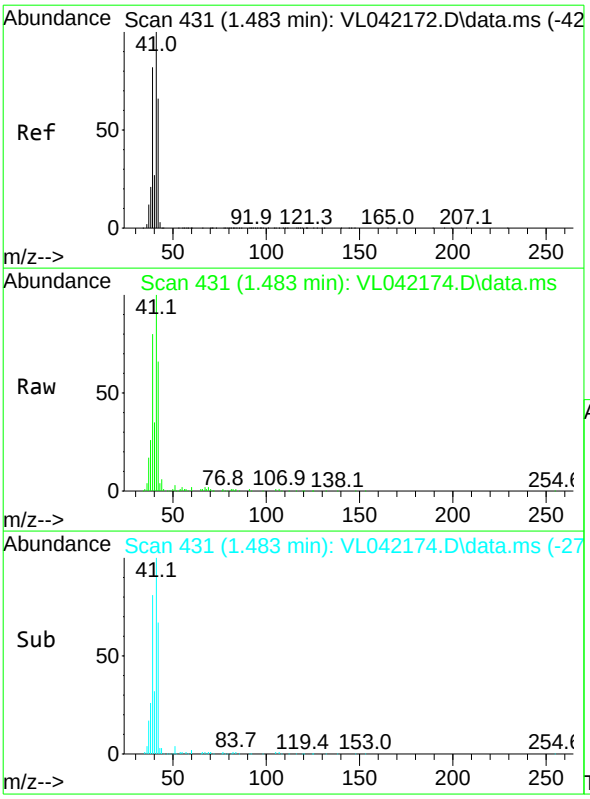


#8
Dichlorotetrafluoroethane
Concen: 1.020 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 23886

Ion	Ratio	Lower	Upper
85	100		
135	64.2	52.4	78.6

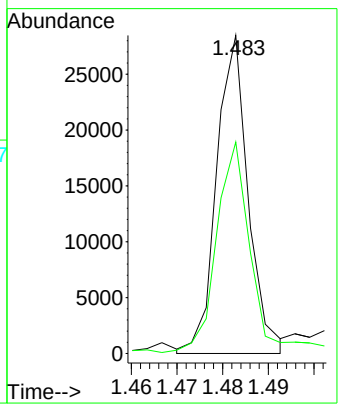




#9
Propene
Concen: 1.082 ppbv m
RT: 1.483 min Scan# 43
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 41 Resp: 13699

Ion	Ratio	Lower	Upper
41	100		
42	7.5	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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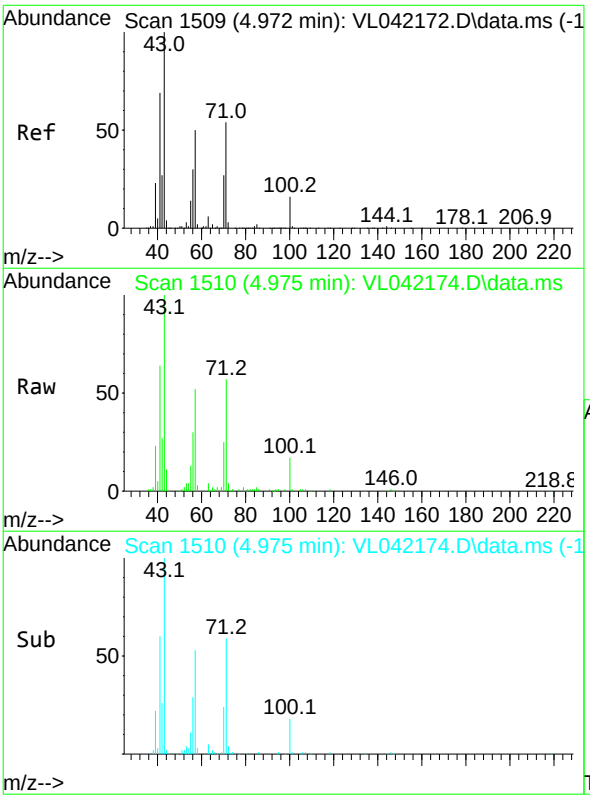
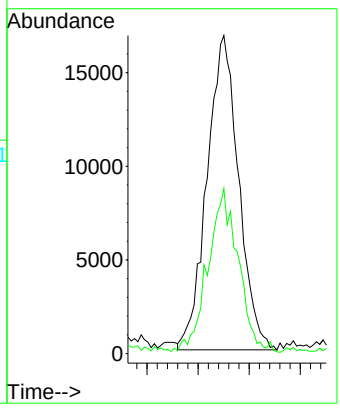
Supervised By :Mahesh Dadoda 04/03/2025

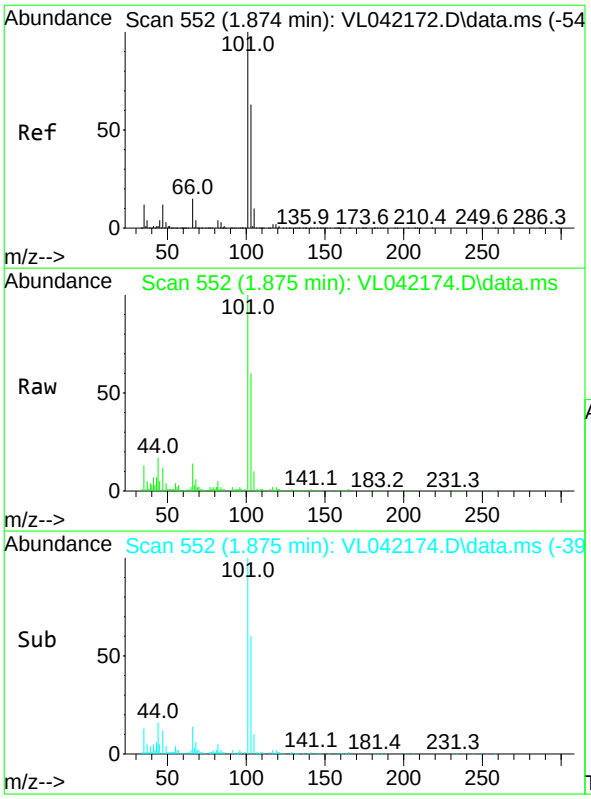


#10
Heptane
Concen: 1.055 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 36132

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2

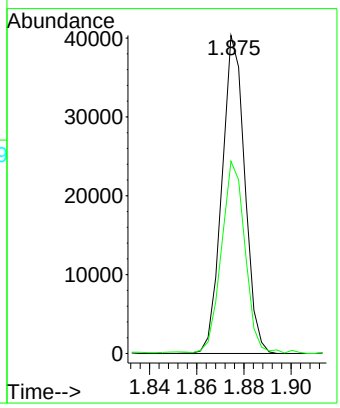




#11
Trichlorofluoromethane
Concen: 1.014 ppbv
RT: 1.875 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 27136

Ion	Ratio	Lower	Upper
101	100		
103	59.9	50.2	75.2



Instrument :
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ClientSampleId :
VSTDICC001

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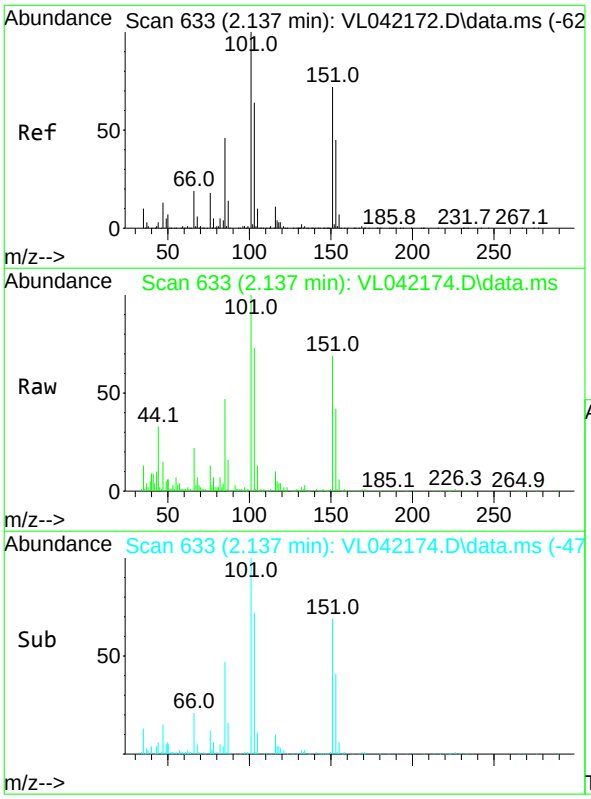
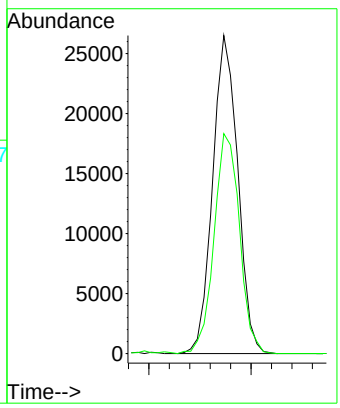
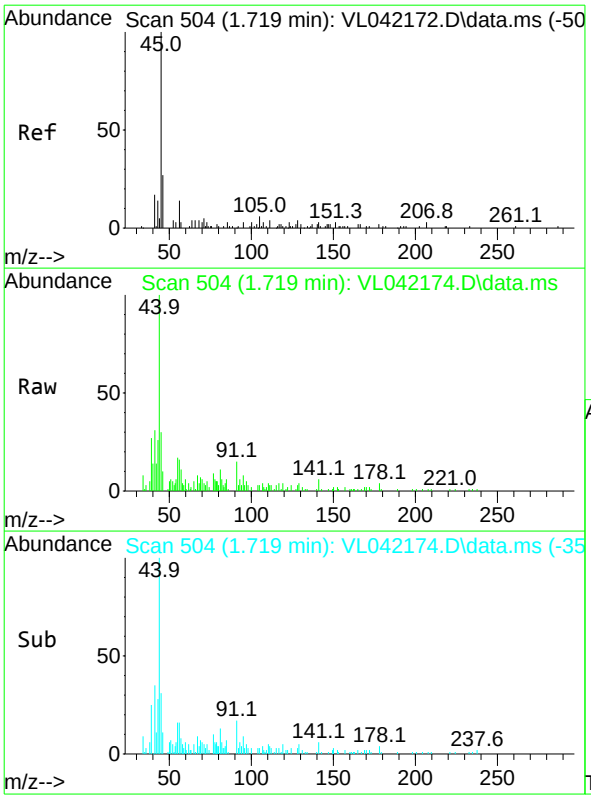


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.029 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 22629

Ion	Ratio	Lower	Upper
101	100		
151	70.3	57.1	85.7

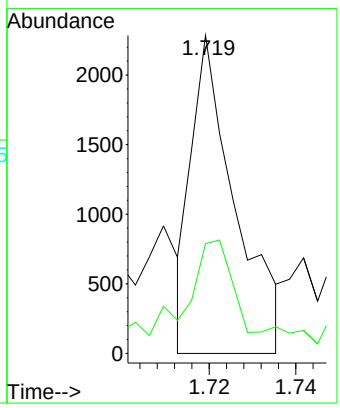




#13
Ethanol
Concen: 1.624 ppbv m
RT: 1.719 min Scan# 50
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 45 Resp: 1610

Ion	Ratio	Lower	Upper
45	100		
46	73.4	20.2	80.8



Instrument :
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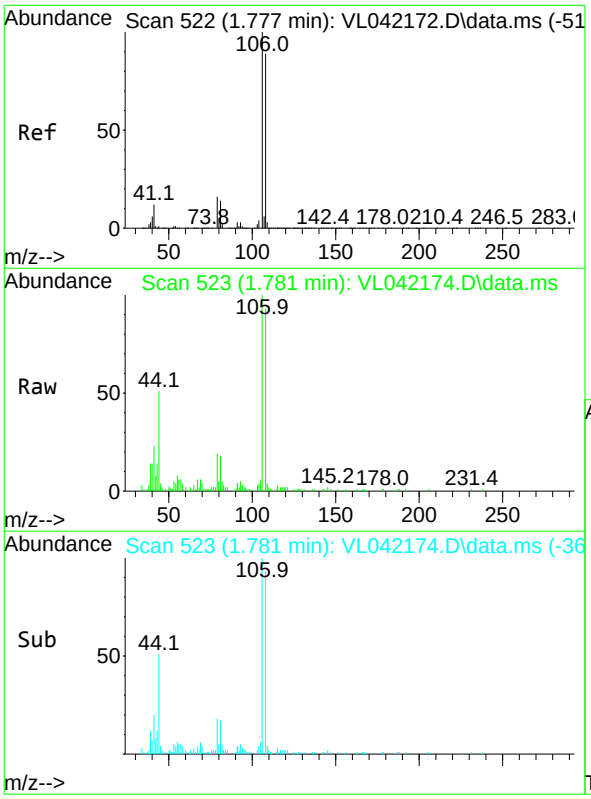
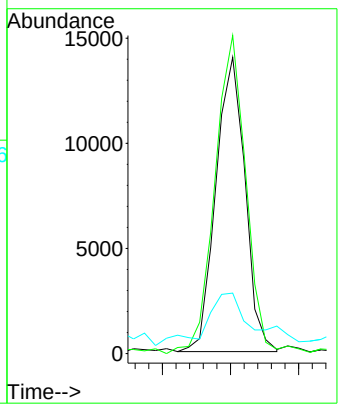
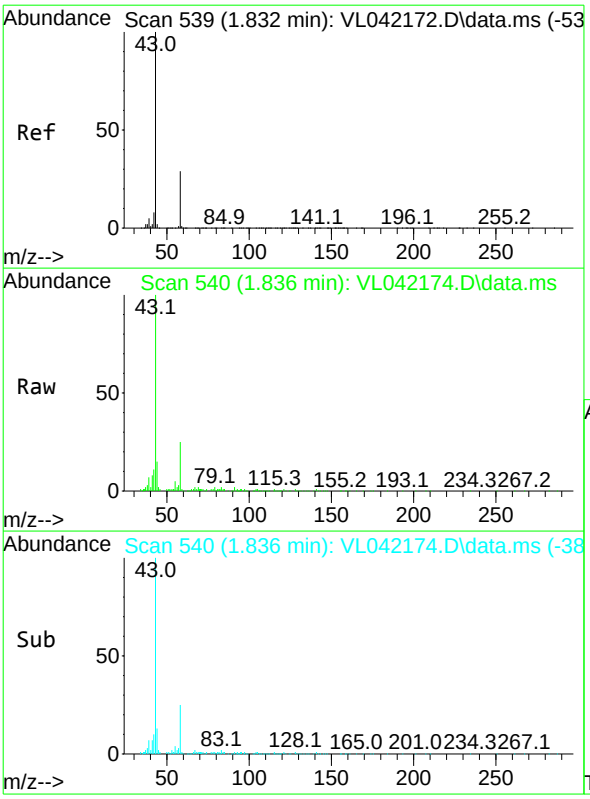


#14
Bromoethene
Concen: 0.989 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:108 Resp: 8330

Ion	Ratio	Lower	Upper
108	100		
106	115.2	86.8	130.2
79	57.0	15.0	22.6#

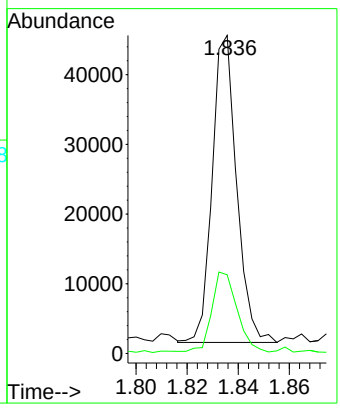




#15
Acetone
Concen: 1.125 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 29294

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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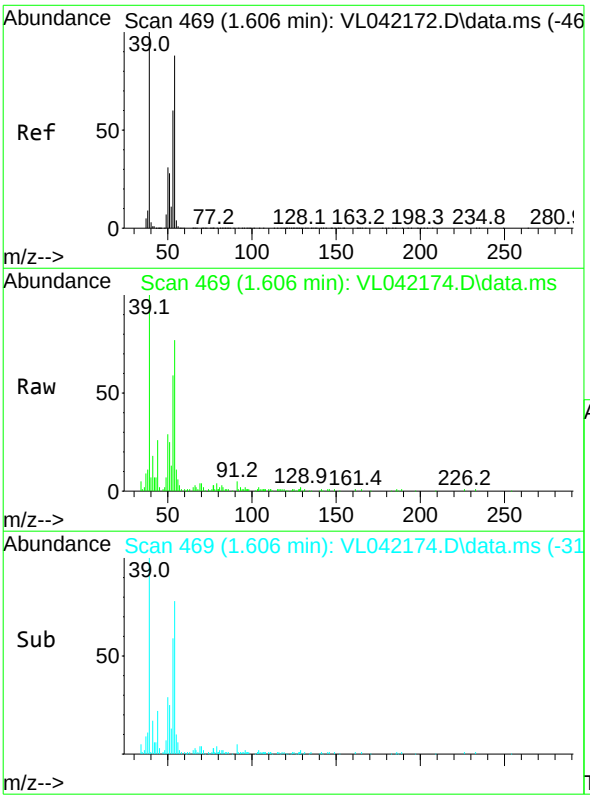
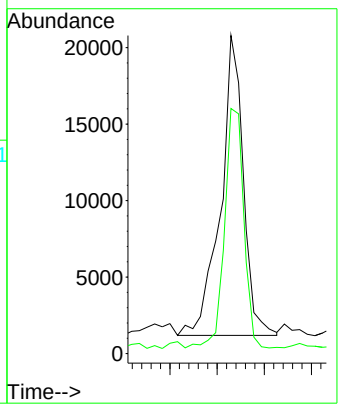
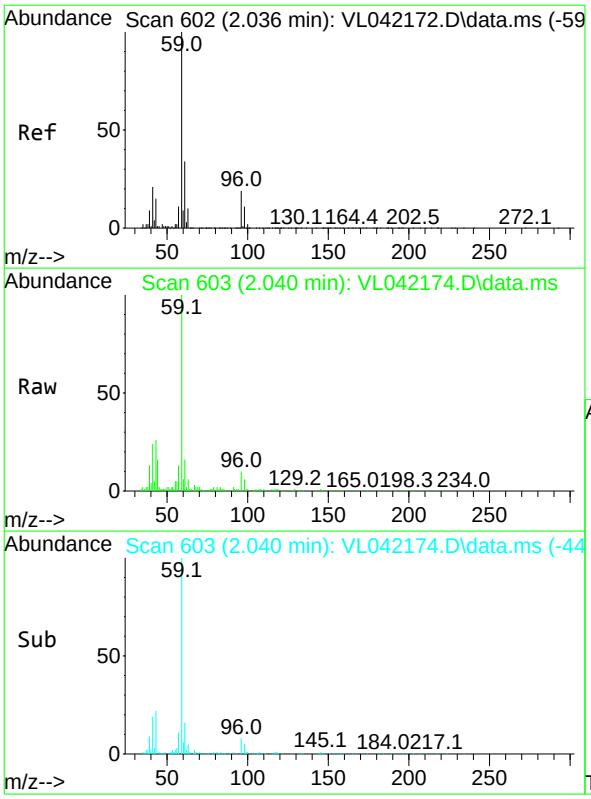


#16
1,3-Butadiene
Concen: 1.121 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 39 Resp: 13133

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1

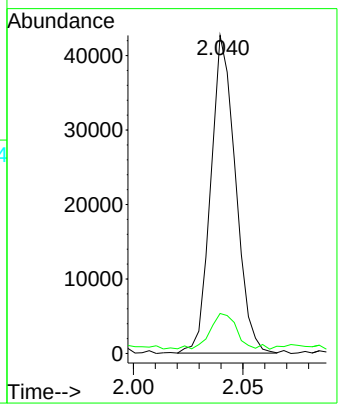




#17
tert-Butyl alcohol
Concen: 1.033 ppbv
RT: 2.040 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 59 Resp: 33500

Ion	Ratio	Lower	Upper
59	100		
57	12.3	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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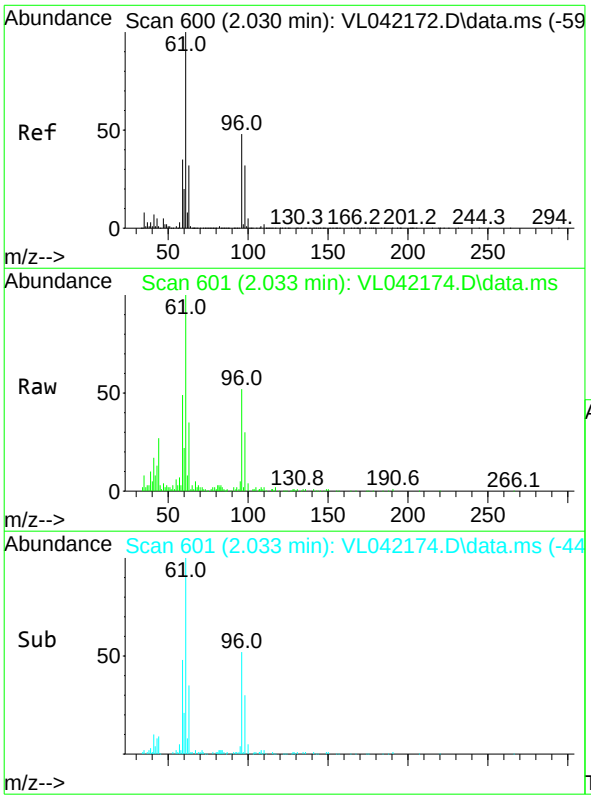
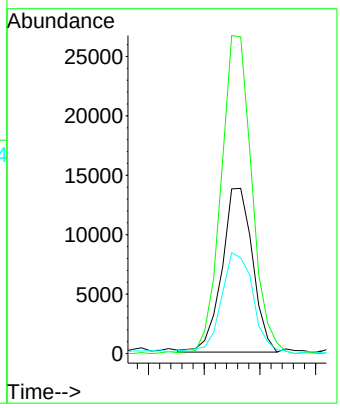
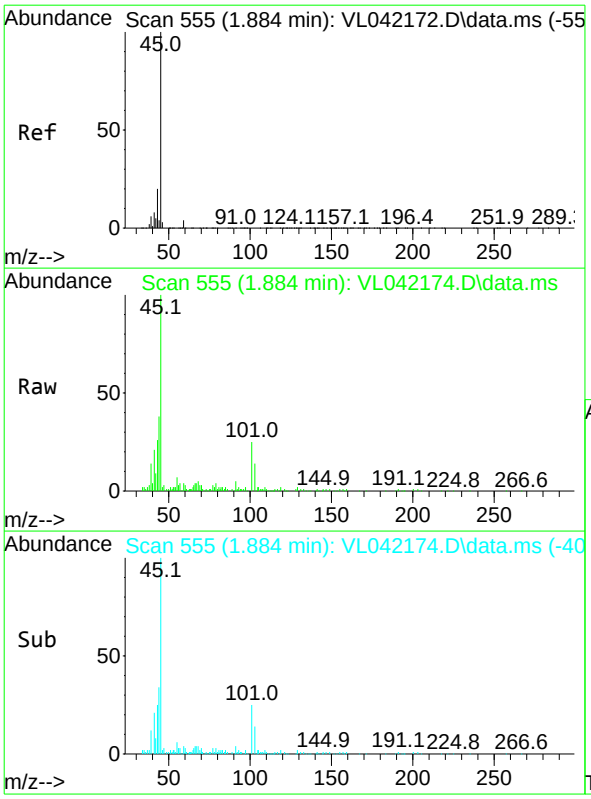


#18
1,1-Dichloroethene
Concen: 1.024 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	167.6	251.4
98	56.7	53.5	80.3

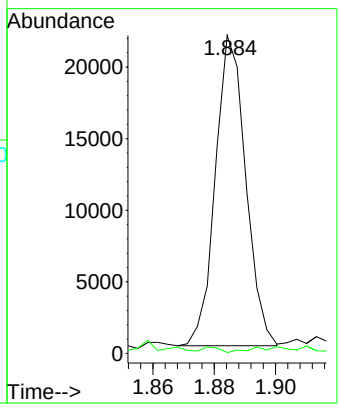




#19
Isopropyl Alcohol
Concen: 1.014 ppbv
RT: 1.884 min Scan# 55
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 45 Resp: 14903

Ion	Ratio	Lower	Upper
45	100		
58	4.9	36.9	55.3#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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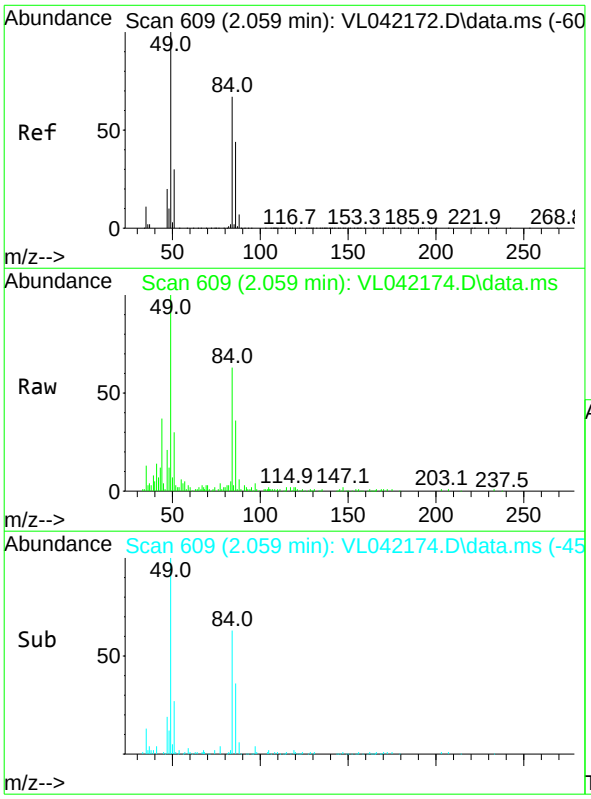
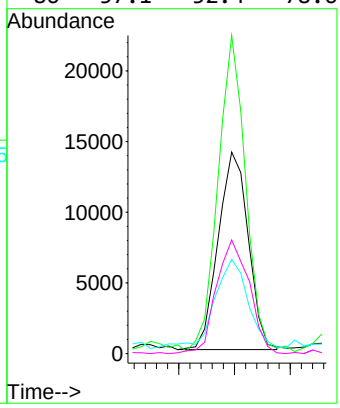
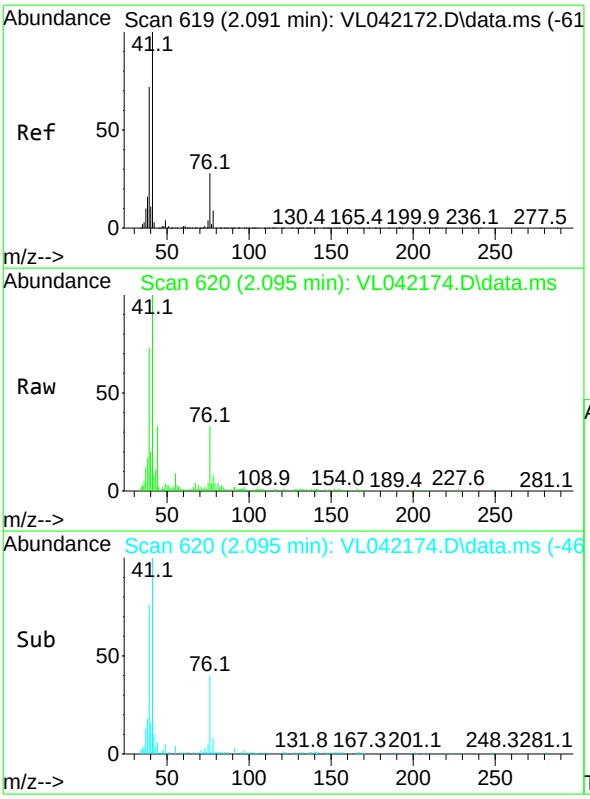


#20
Methylene Chloride
Concen: 1.080 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 10481

Ion	Ratio	Lower	Upper
84	100		
49	158.3	120.2	180.4
51	44.3	37.4	56.0
86	57.1	52.4	78.6

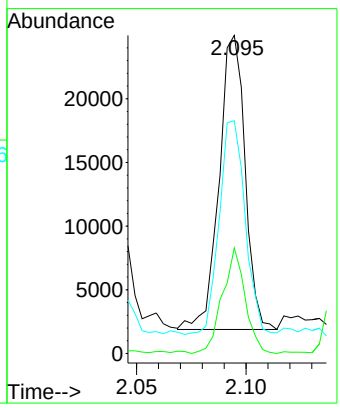




#21
Allyl Chloride
Concen: 1.036 ppbv
RT: 2.095 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 41 Resp: 19039

Ion	Ratio	Lower	Upper
41	100		
76	30.5	24.1	36.1
39	77.8	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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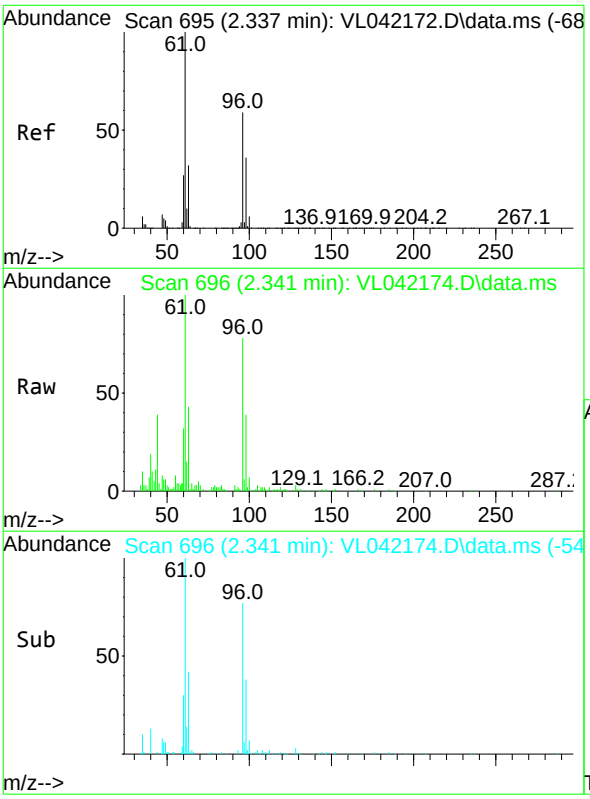
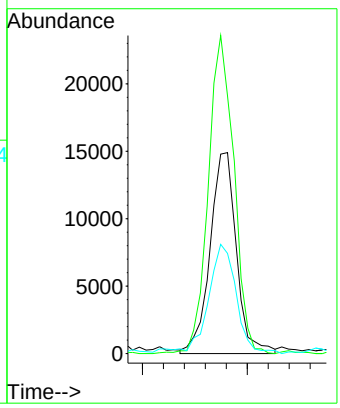
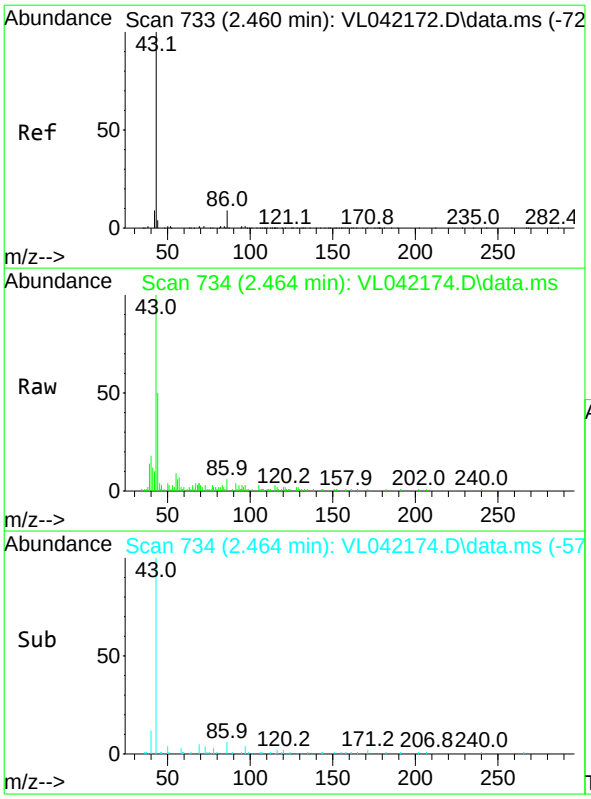


#22
trans-1,2-Dichloroethene
Concen: 1.086 ppbv m
RT: 2.341 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 13051

Ion	Ratio	Lower	Upper
96	100		
61	128.3	136.6	204.8#
98	49.9	49.4	74.2

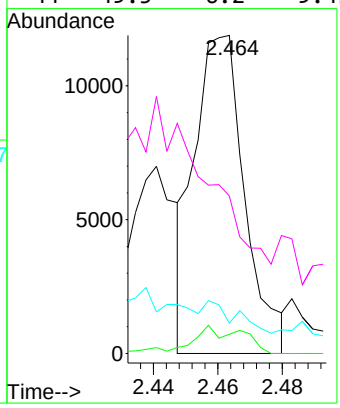




#23
Vinyl Acetate
Concen: 1.190 ppbv m
RT: 2.464 min Scan# 73
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 12883

Ion	Ratio	Lower	Upper
43	100		
86	6.0	5.5	8.3
42	9.5	8.6	13.0
44	49.5	6.2	9.4#



Instrument :
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ClientSampleId :
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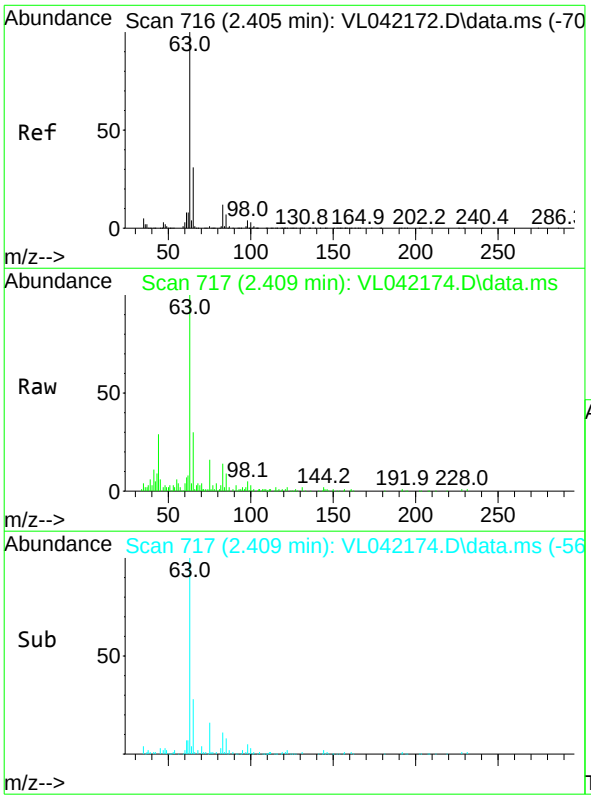
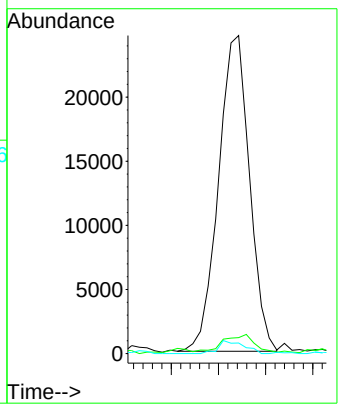
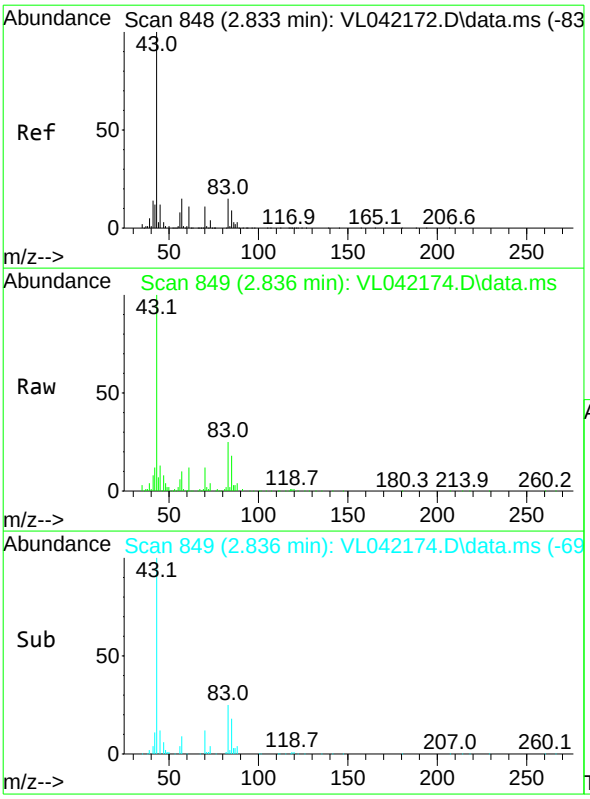


#24
1,1-Dichloroethane
Concen: 1.022 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 22505

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.4	1.6	4.7

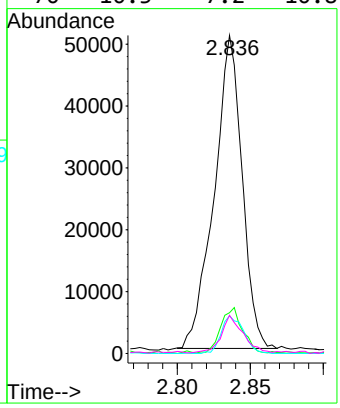




#25
Ethyl Acetate
Concen: 0.997 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 67402

Ion	Ratio	Lower	Upper
43	100		
45	12.3	8.2	12.2#
61	9.6	7.3	10.9
70	10.3	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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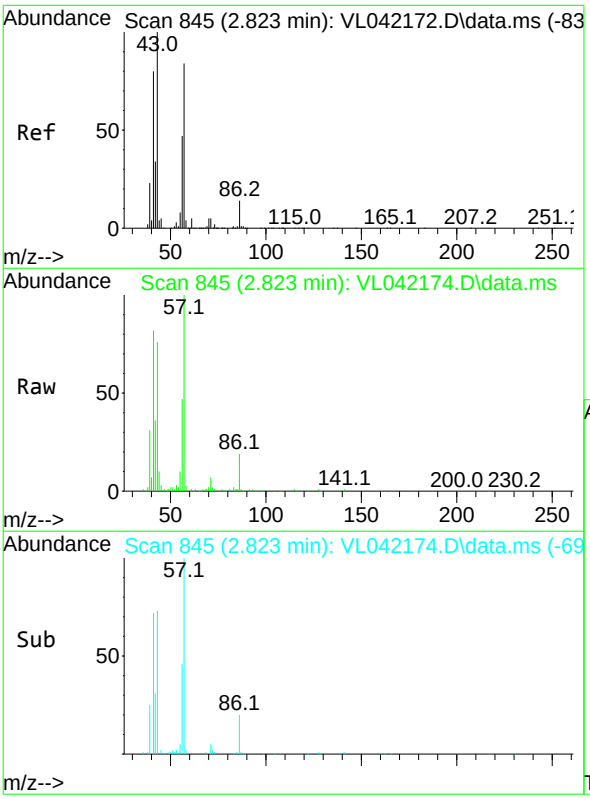
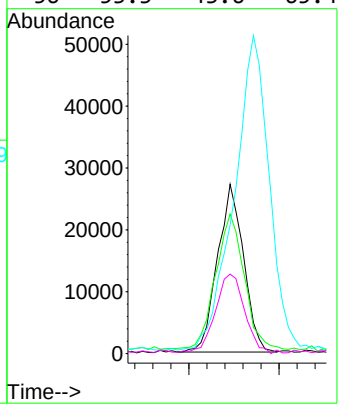
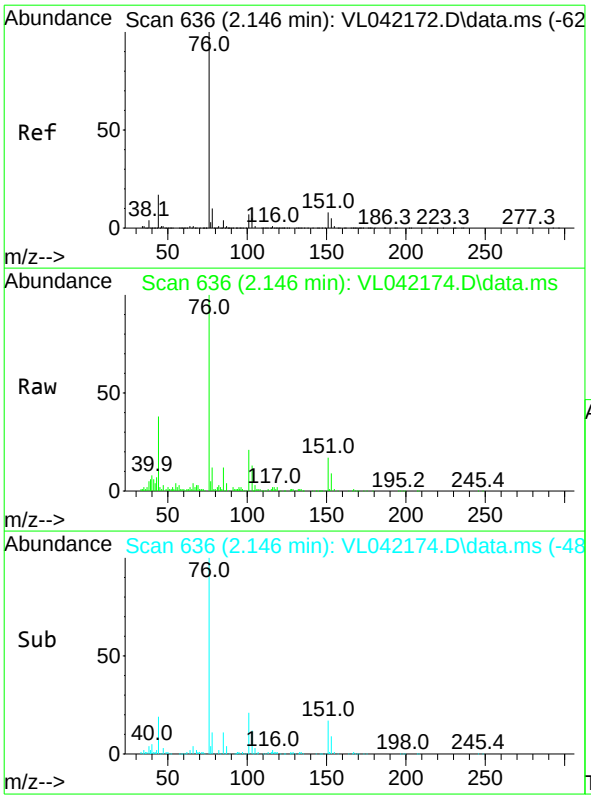


#26
Hexane
Concen: 1.043 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 27223

Ion	Ratio	Lower	Upper
57	100		
41	93.5	76.6	114.8
43	256.9	207.8	311.8
56	53.3	43.6	65.4

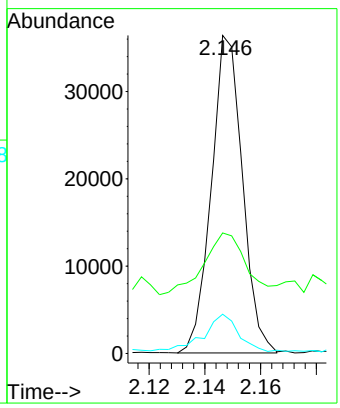




#27
Carbon Disulfide
Concen: 1.006 ppbv
RT: 2.146 min Scan# 63
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 76 Resp: 28167

Ion	Ratio	Lower	Upper
76	100		
44	54.6	14.7	22.1#
78	15.0	9.3	13.9#



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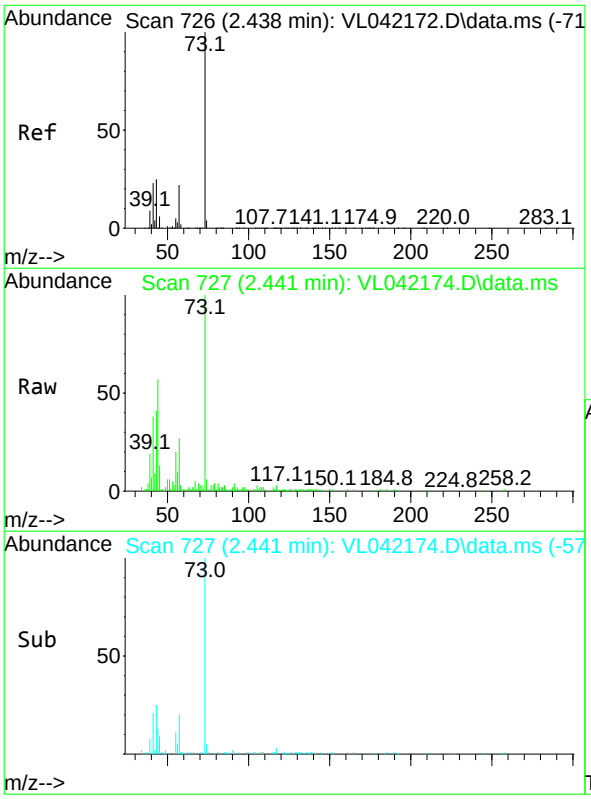
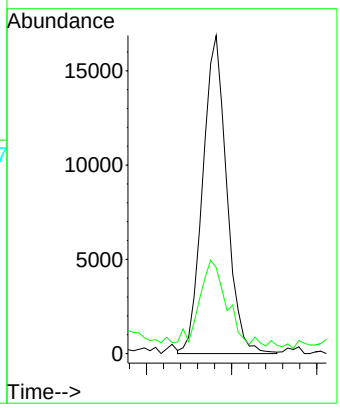
Supervised By :Mahesh Dadoda 04/03/2025

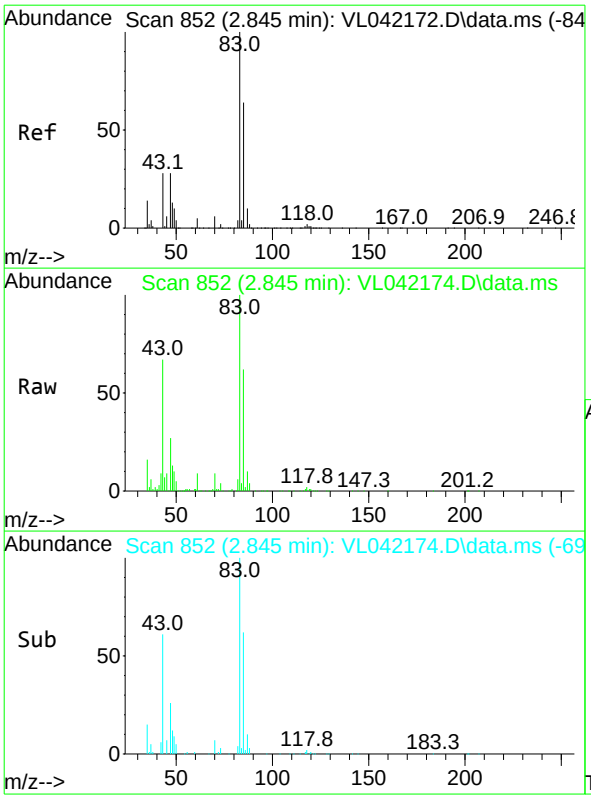


#28
Methyl tert-Butyl Ether
Concen: 1.015 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 73 Resp: 16501

Ion	Ratio	Lower	Upper
73	100		
57	28.0	20.5	30.7





#29
Chloroform
Concen: 1.008 ppbv
RT: 2.845 min Scan# 85
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 38516

Ion	Ratio	Lower	Upper
83	100		
85	61.6	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
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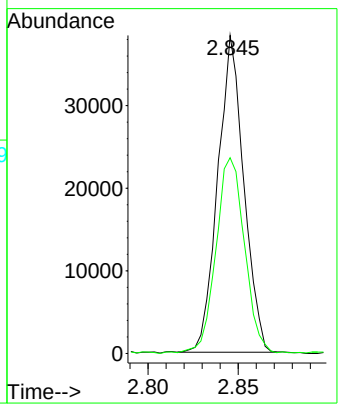
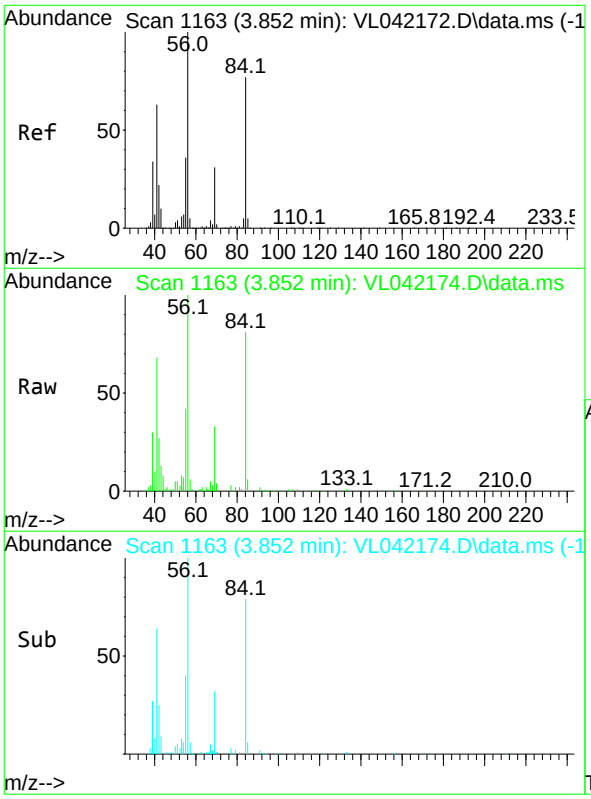
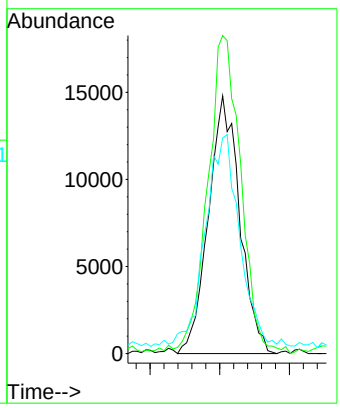


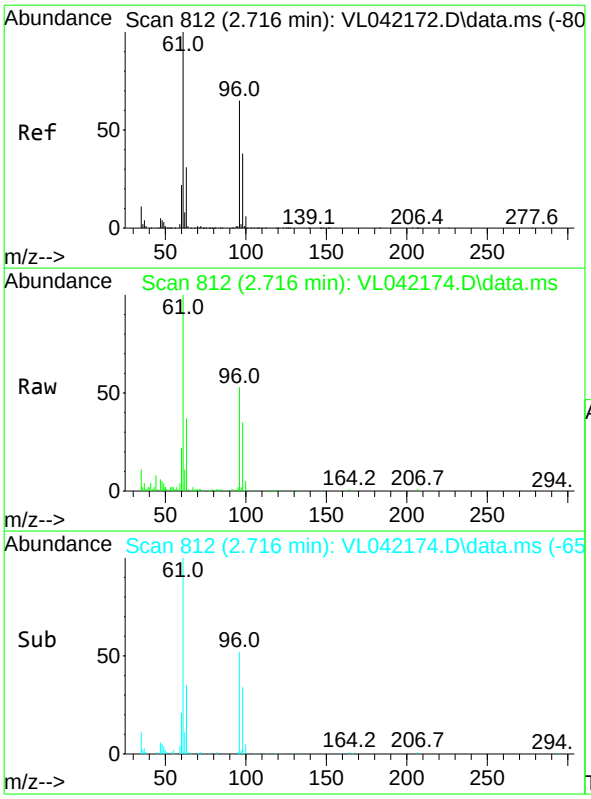


#30
Cyclohexane
Concen: 1.016 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 23052

Ion	Ratio	Lower	Upper
84	100		
56	128.9	102.8	154.2
41	89.3	66.5	99.7

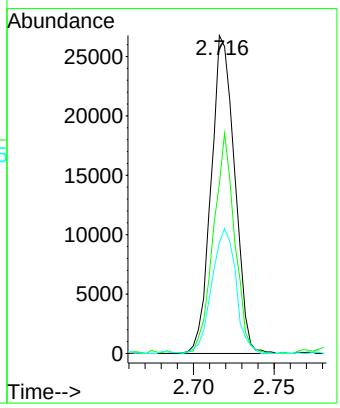




#31
cis-1,2-Dichloroethene
Concen: 1.026 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 61 Resp: 27187

Ion	Ratio	Lower	Upper
61	100		
96	53.3	51.8	77.8
98	34.8	30.6	46.0



Instrument :
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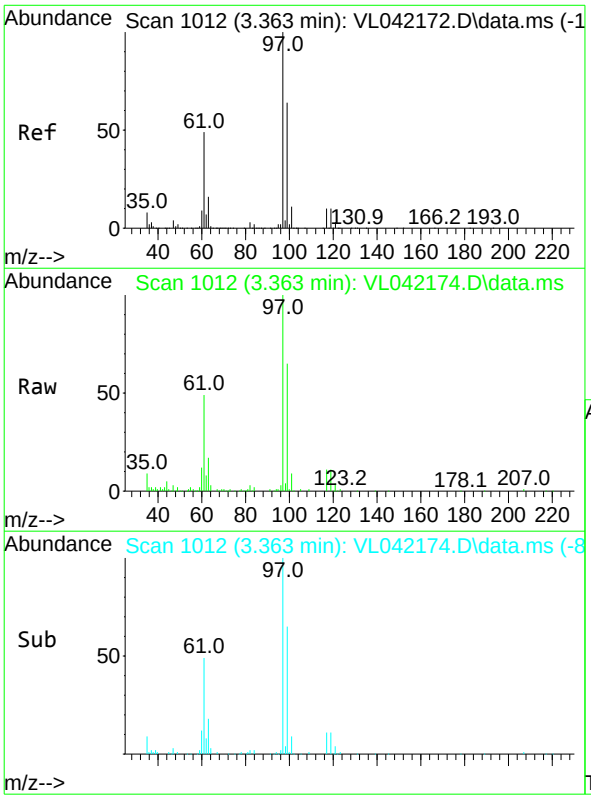
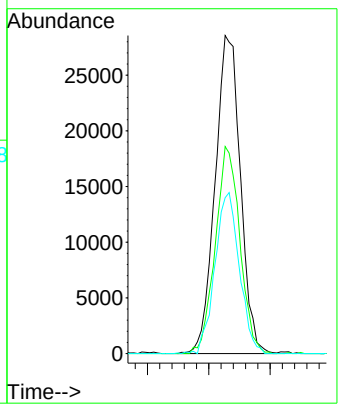
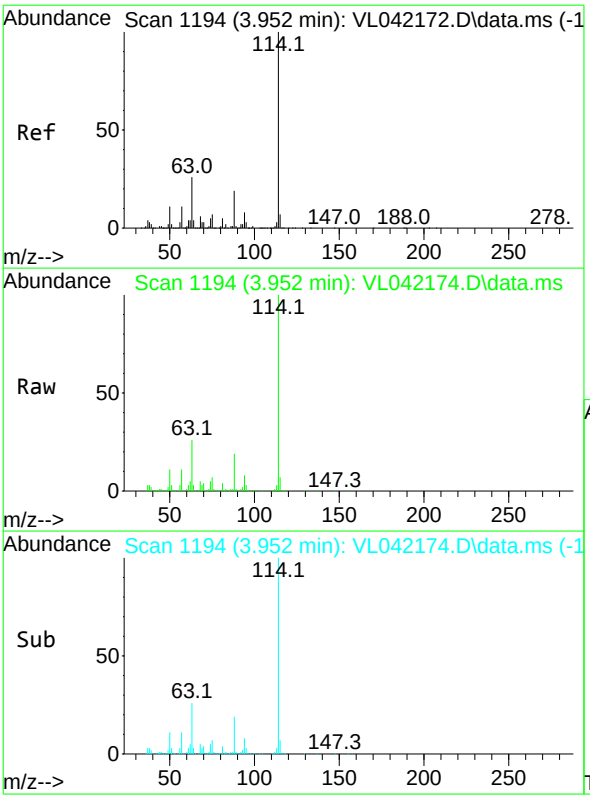


#32
1,1,1-Trichloroethane
Concen: 0.938 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 40993

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	48.8	38.7	58.1

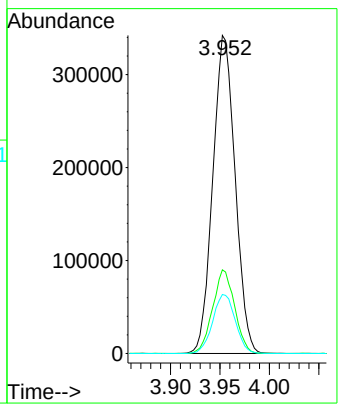




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:114 Resp: 537244

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.8	15.0	22.4



Instrument :
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ClientSampleId :
VSTDICC001

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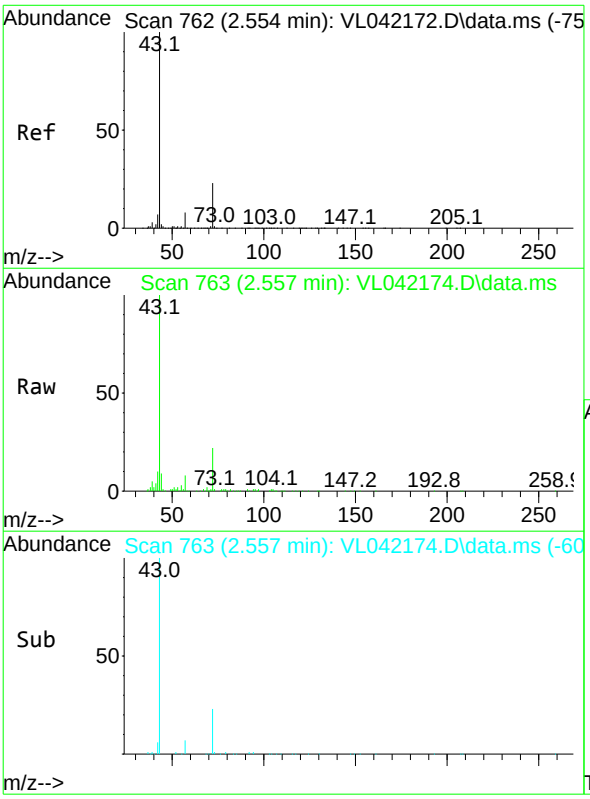
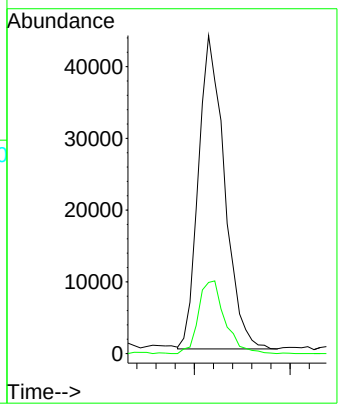
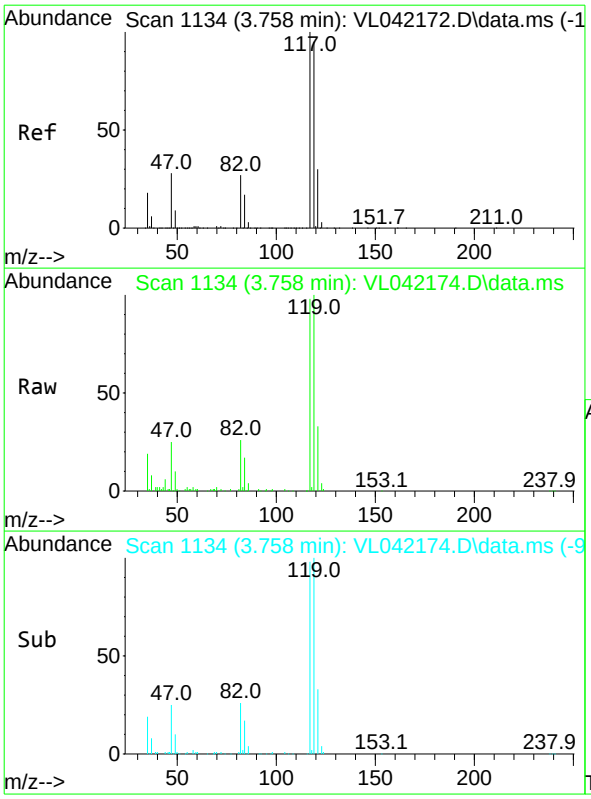


#34
2-Butanone
Concen: 1.063 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 41423

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2

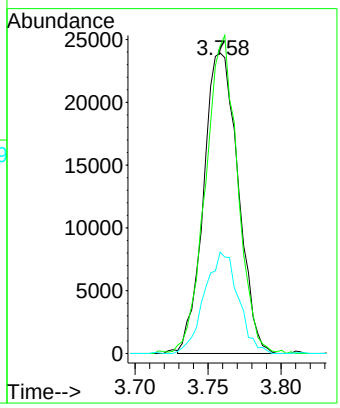




#35
Carbon Tetrachloride
Concen: 0.952 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:117 Resp: 39345

Ion	Ratio	Lower	Upper
117	100		
119	101.8	76.2	114.2
121	33.7	24.2	36.4



Instrument :
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ClientSampleId :
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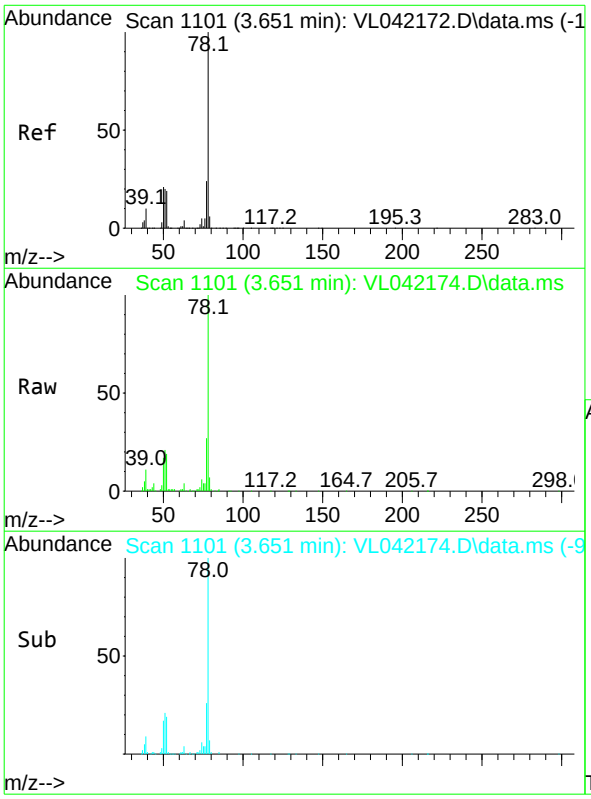
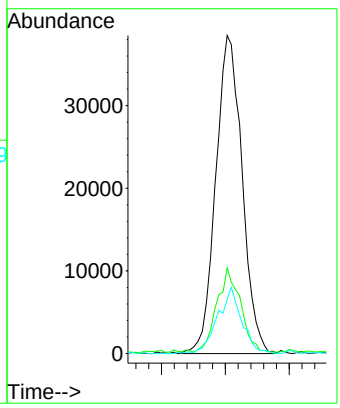
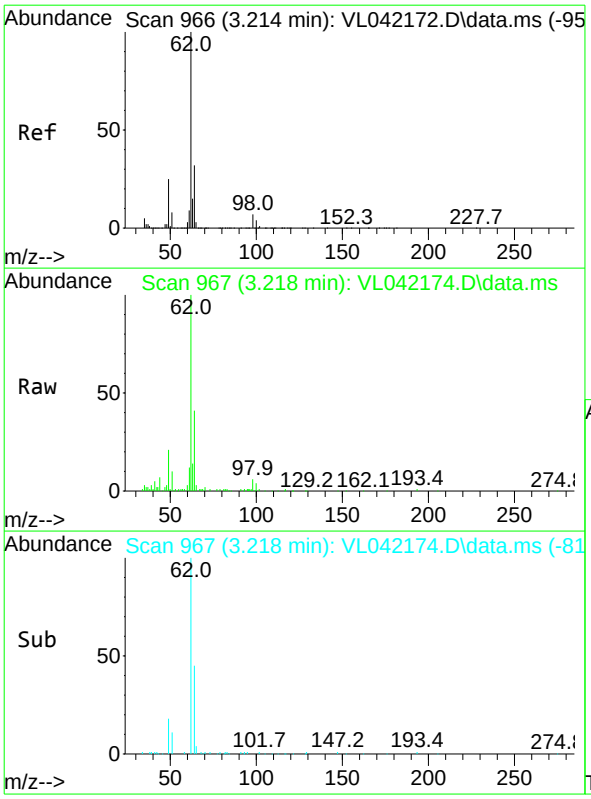


#36
Benzene
Concen: 1.036 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 78 Resp: 55156

Ion	Ratio	Lower	Upper
78	100		
77	26.5	19.1	28.7
50	17.1	16.6	24.8

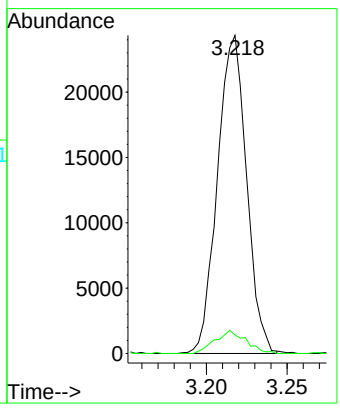




#37
1,2-Dichloroethane
Concen: 1.002 ppbv
RT: 3.218 min Scan# 96
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 62 Resp: 30543

Ion	Ratio	Lower	Upper
62	100		
98	7.6	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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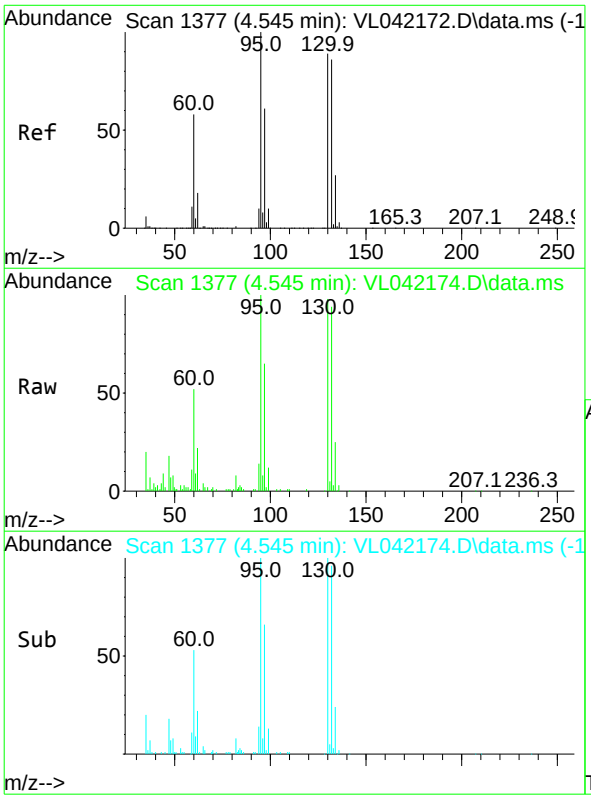
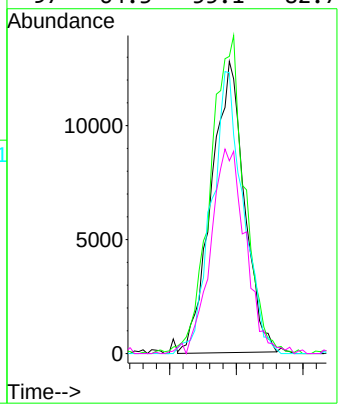
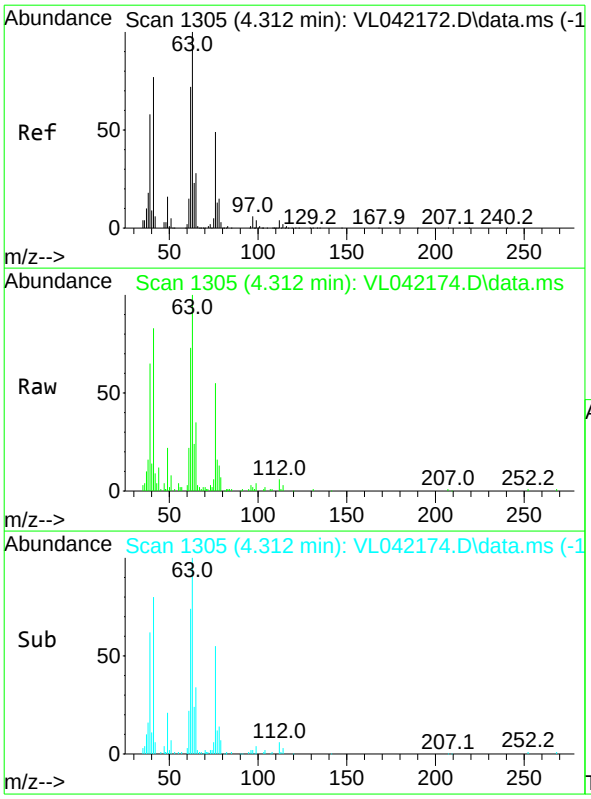


#38
Trichloroethene
Concen: 0.985 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:130 Resp: 21906

Ion	Ratio	Lower	Upper
130	100		
95	100.2	89.8	134.8
132	95.3	77.4	116.2
97	64.3	55.1	82.7

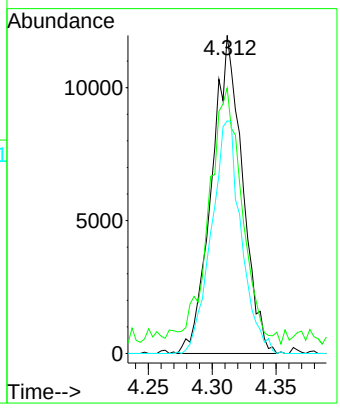




#39
1,2-Dichloropropane
Concen: 1.032 ppbv
RT: 4.312 min Scan# 13
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 20020

Ion	Ratio	Lower	Upper
63	100		
41	76.8	61.7	92.5
62	73.1	57.6	86.4



Instrument :
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ClientSampleId :
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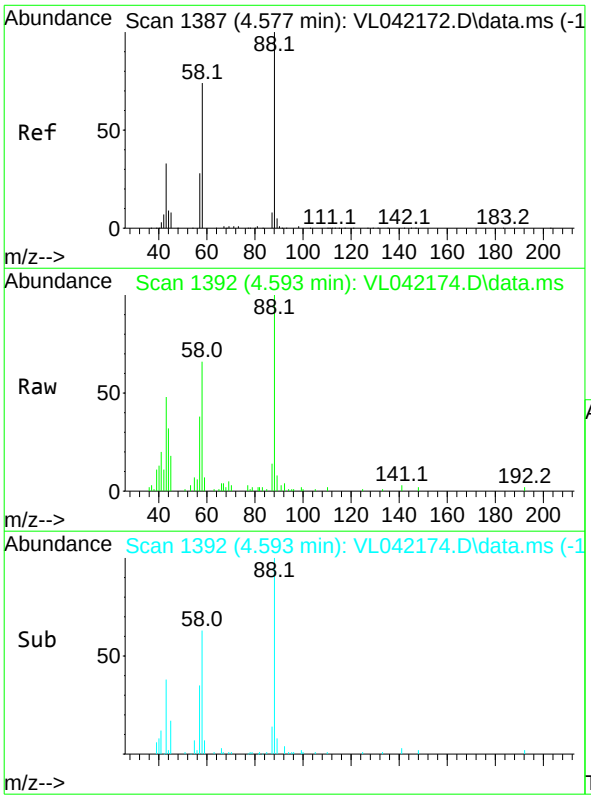
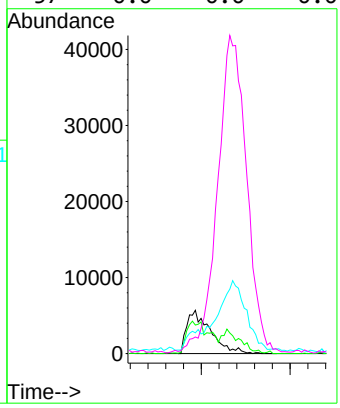
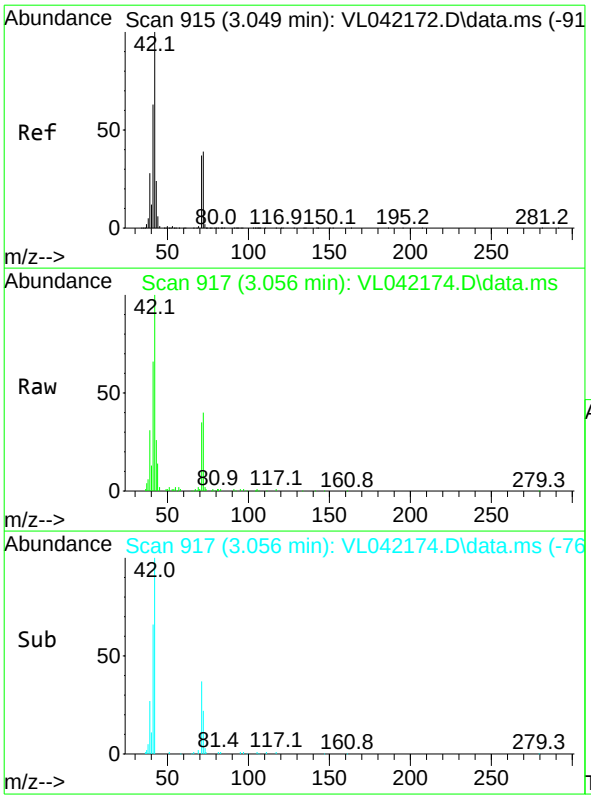


#40
1,4-Dioxane
Concen: 1.052 ppbv m
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 88 Resp: 10592

Ion	Ratio	Lower	Upper
88	100		
58	115.3	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

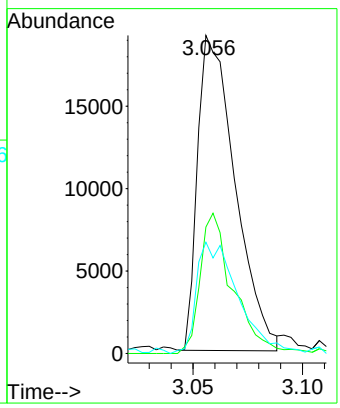




#41
Tetrahydrofuran
Concen: 1.029 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 42 Resp: 22818

Ion	Ratio	Lower	Upper
42	100		
72	39.4	31.4	47.0
71	40.8	30.2	45.4



Instrument :
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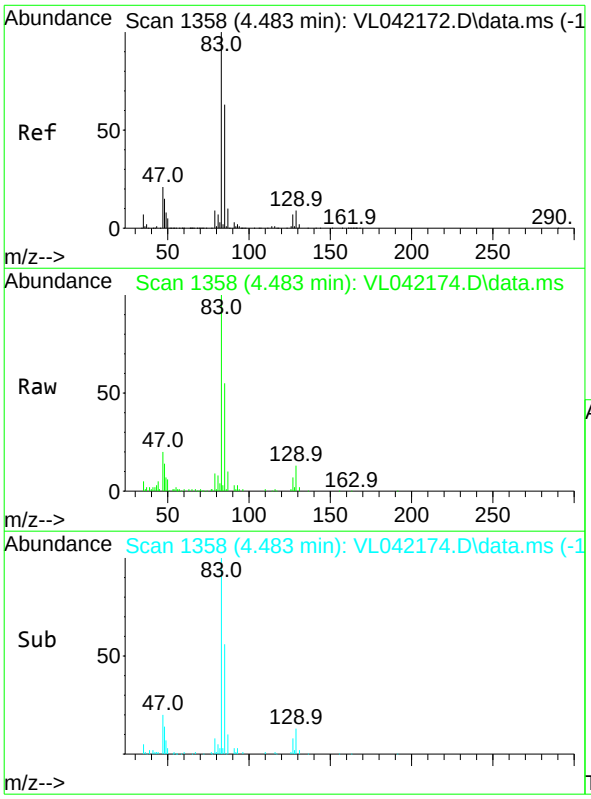
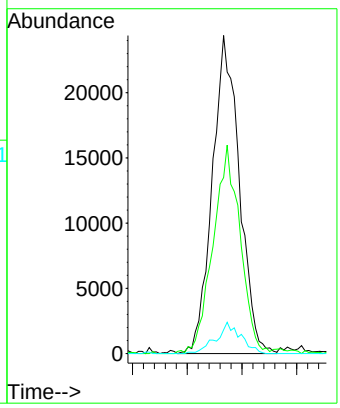
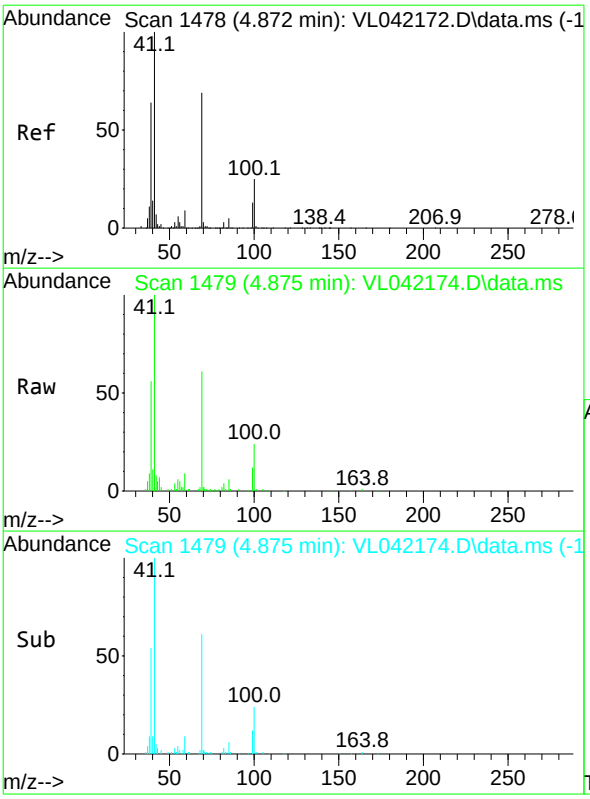


#42
Bromodichloromethane
Concen: 0.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 41864

Ion	Ratio	Lower	Upper
83	100		
85	54.7	50.5	75.7
127	7.5	5.9	8.9

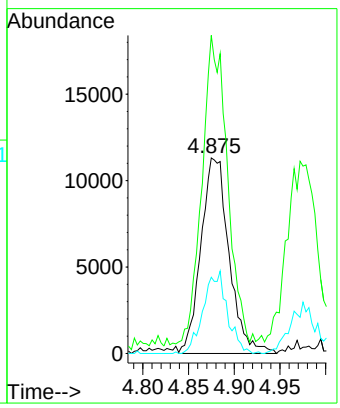




#43
Methyl Methacrylate
Concen: 1.078 ppbv m
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 69 Resp: 24233

Ion	Ratio	Lower	Upper
69	100		
41	146.1	123.8	185.6
100	0.0	28.4	42.6#



Instrument :
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ClientSampleId :
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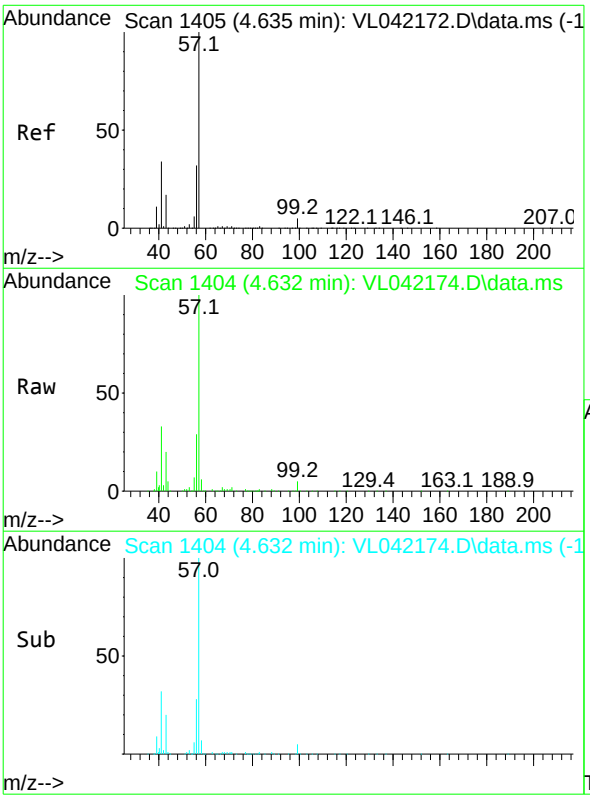
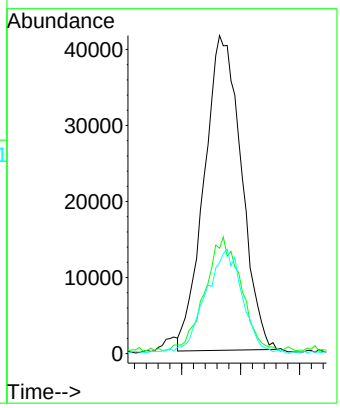
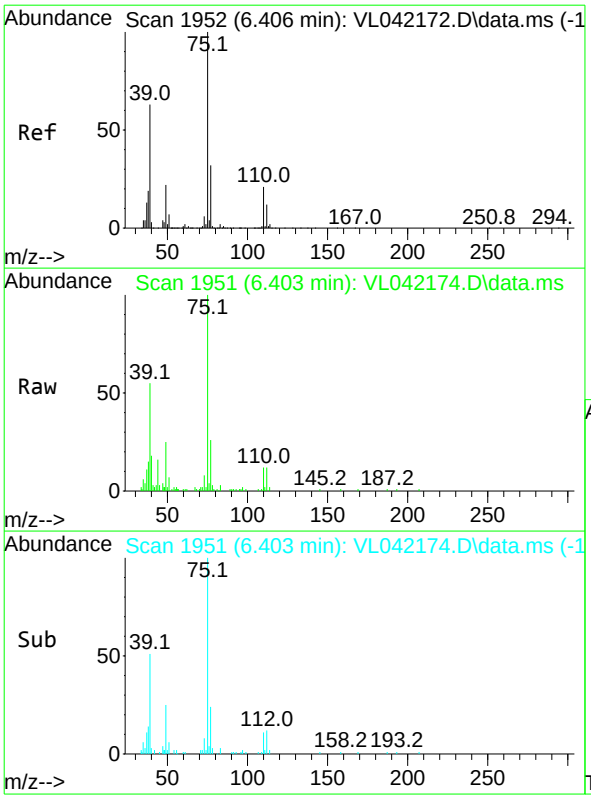


#44
2,2,4-Trimethylpentane
Concen: 1.008 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 90727

Ion	Ratio	Lower	Upper
57	100		
41	35.9	26.8	40.2
56	33.7	25.6	38.4

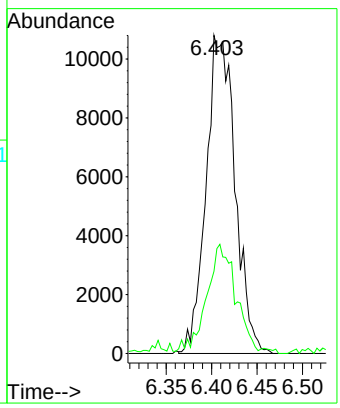




#45
t-1,3-Dichloropropene
Concen: 0.992 ppbv m
RT: 6.403 min Scan# 19
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 23993

Ion	Ratio	Lower	Upper
75	100		
77	25.9	26.0	39.0#



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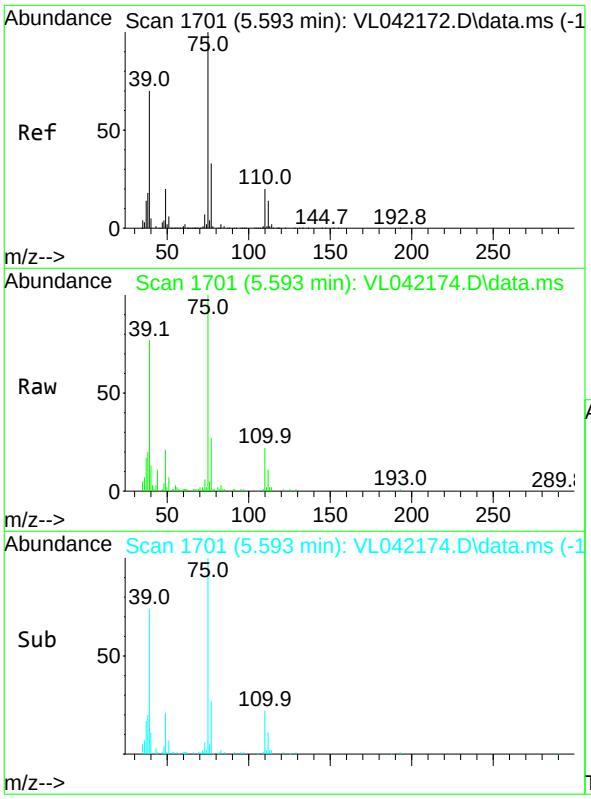
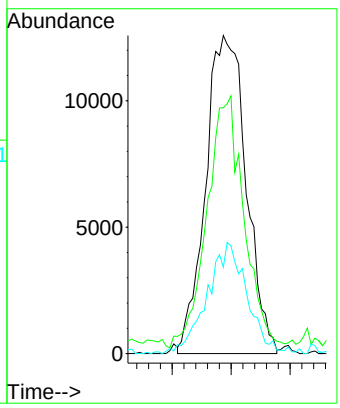
Supervised By :Mahesh Dadoda 04/03/2025

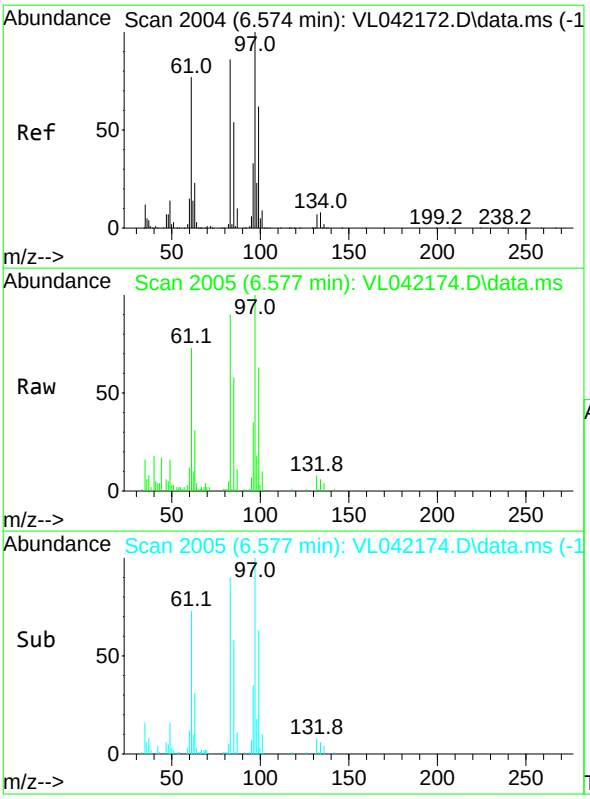


#46
cis-1,3-Dichloropropene
Concen: 1.014 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 30063

Ion	Ratio	Lower	Upper
75	100		
39	74.2	55.8	83.6
77	26.4	26.0	39.0

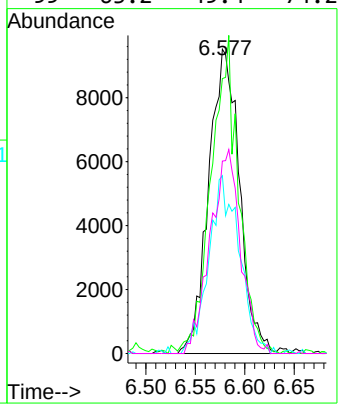




#47
1,1,2-Trichloroethane
Concen: 1.002 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 20546

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	58.4	43.1	64.7
99	63.2	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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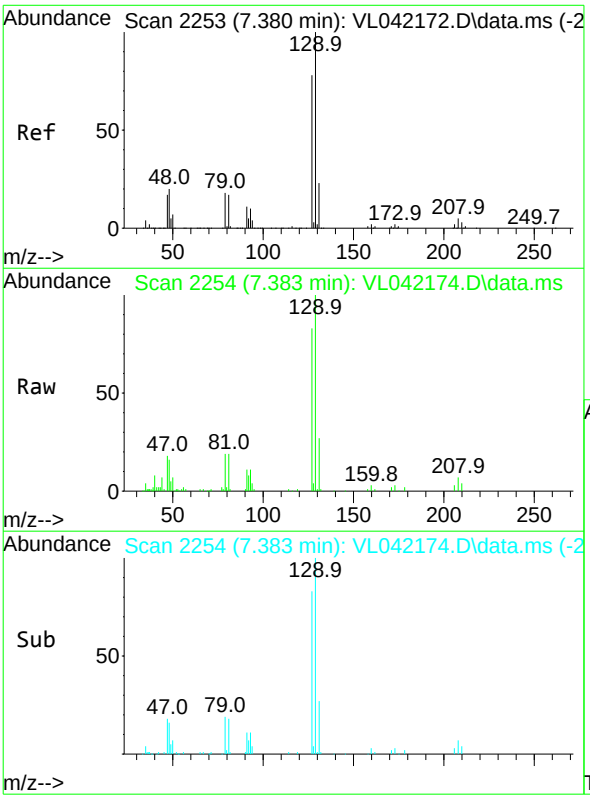
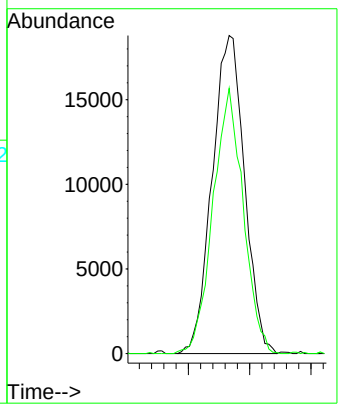
Supervised By :Mahesh Dadoda 04/03/2025

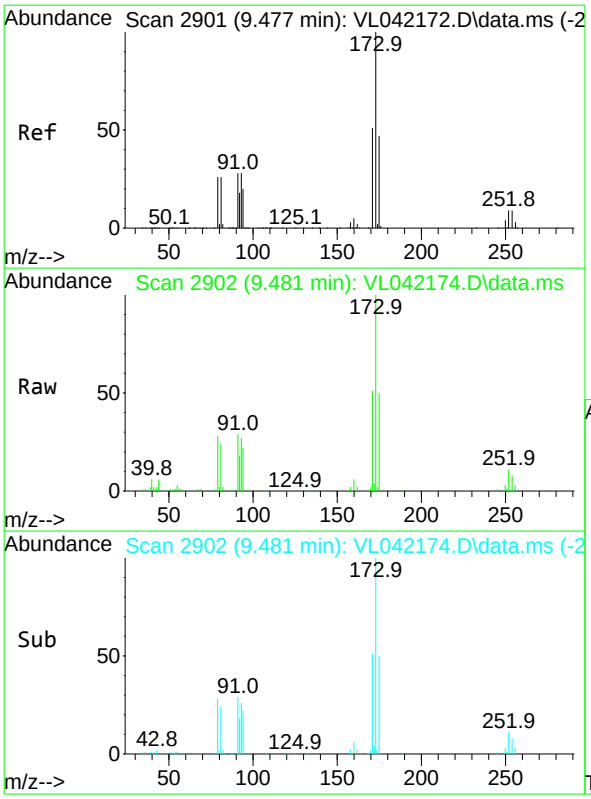


#48
Dibromochloromethane
Concen: 0.991 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:129 Resp: 34425

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2

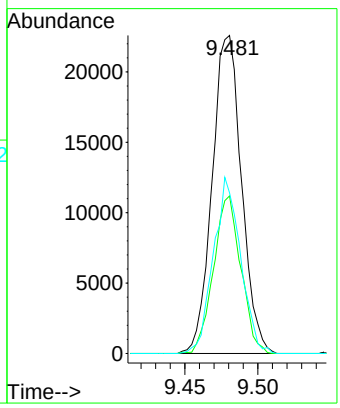




#49
Bromoform
Concen: 1.013 ppbv
RT: 9.481 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:173 Resp: 31610

Ion	Ratio	Lower	Upper
173	100		
175	46.1	38.6	57.8
171	51.3	41.8	62.6



Instrument :
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ClientSampleId :
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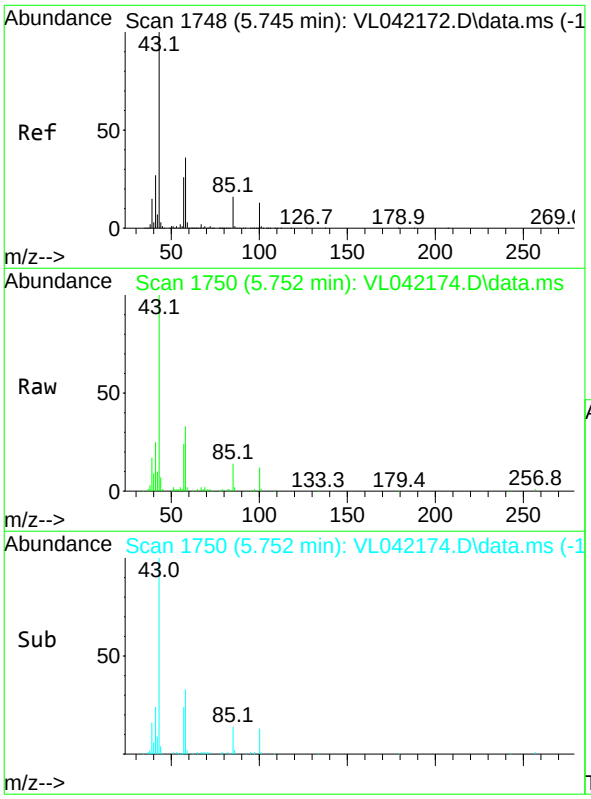
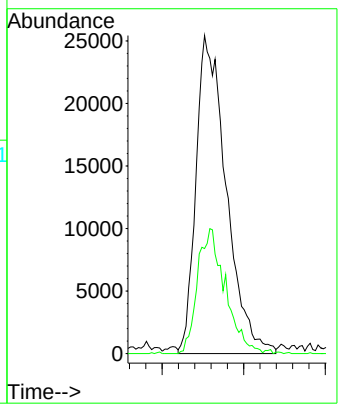
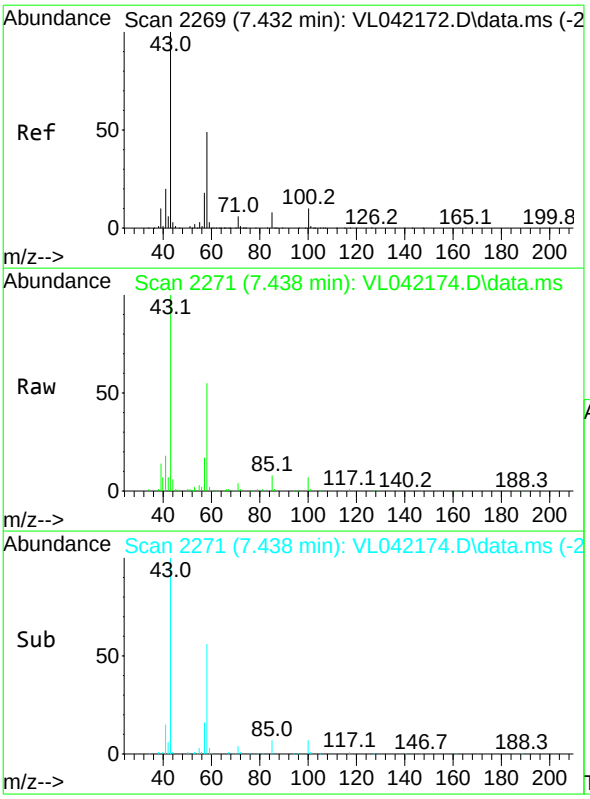


#50
4-Methyl-2-Pentanone
Concen: 1.056 ppbv m
RT: 5.752 min Scan# 1750
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 65226

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#

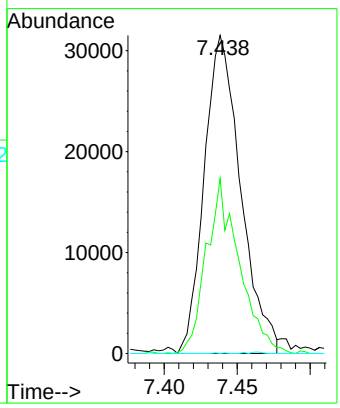




#51
2-Hexanone
Concen: 1.067 ppbv
RT: 7.438 min Scan# 22
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 54680

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.2	0.1	0.1#



Instrument :
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ClientSampleId :
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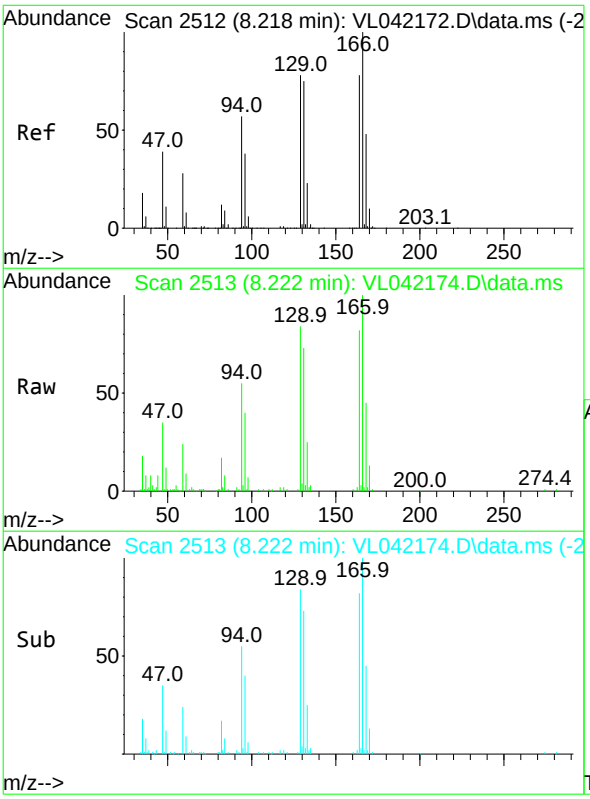
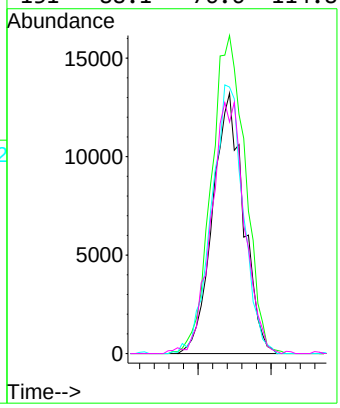
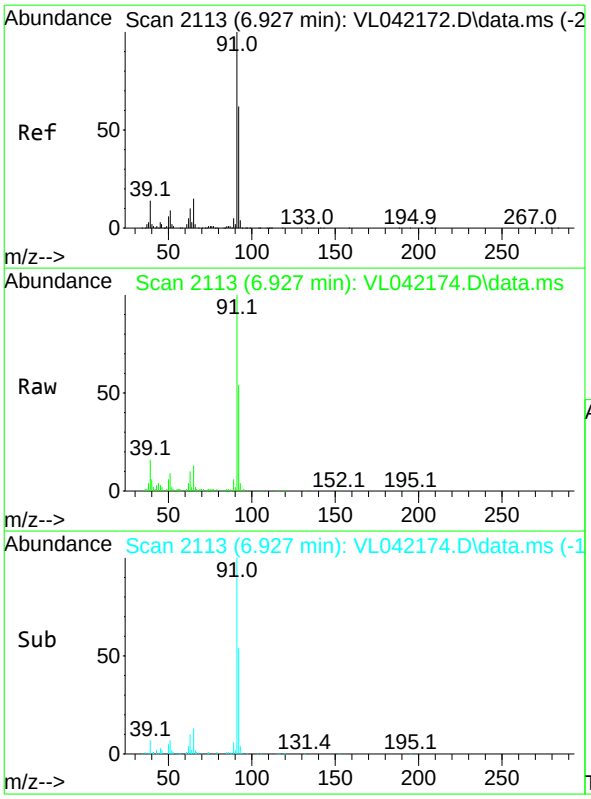


#52
Tetrachloroethene
Concen: 0.919 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:164 Resp: 19415

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	102.4	79.8	119.8
131	88.1	76.6	114.8

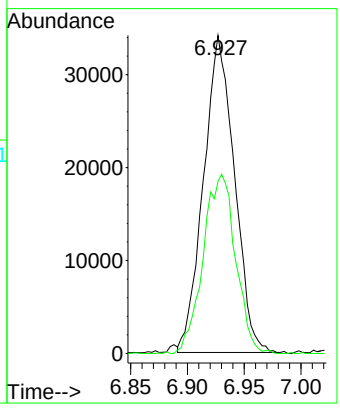




#53
Toluene
Concen: 1.023 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 64612

Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.4	72.6



Instrument :
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ClientSampleId :
VSTDICC001

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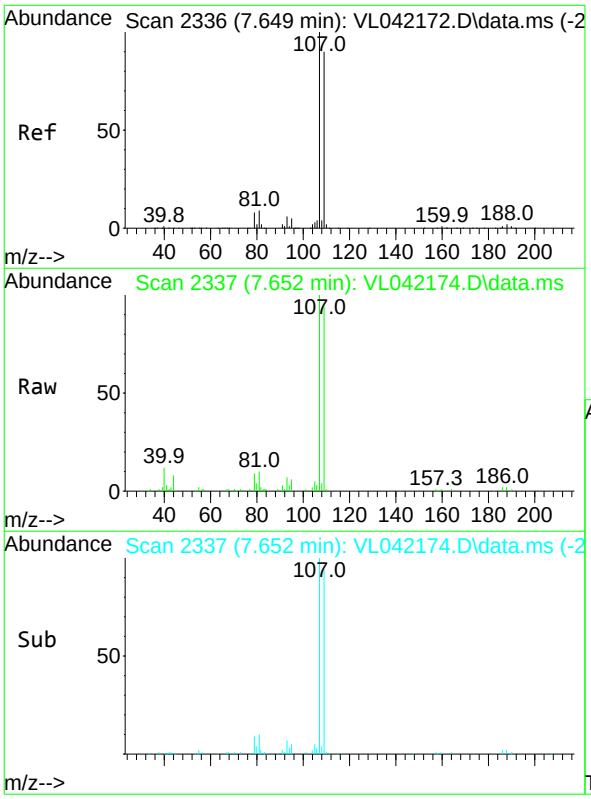
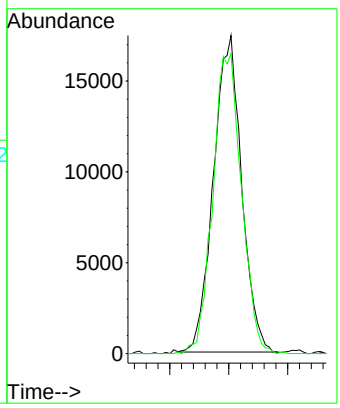
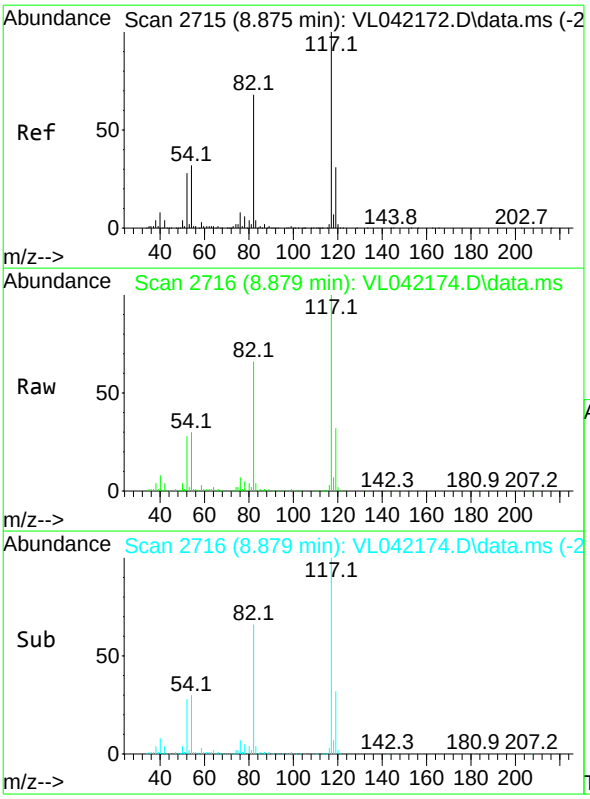


#54
1,2-Dibromoethane
Concen: 1.009 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:107 Resp: 28879

Ion	Ratio	Lower	Upper
107	100		
109	94.8	72.2	108.4

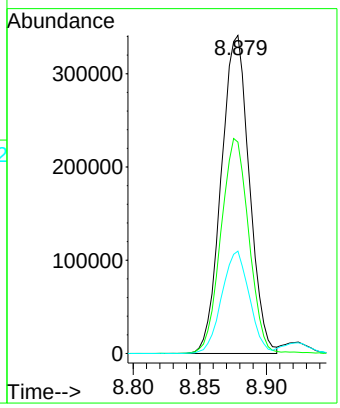




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:117 Resp: 499830

Ion	Ratio	Lower	Upper
117	100		
82	67.6	55.8	83.6
119	32.2	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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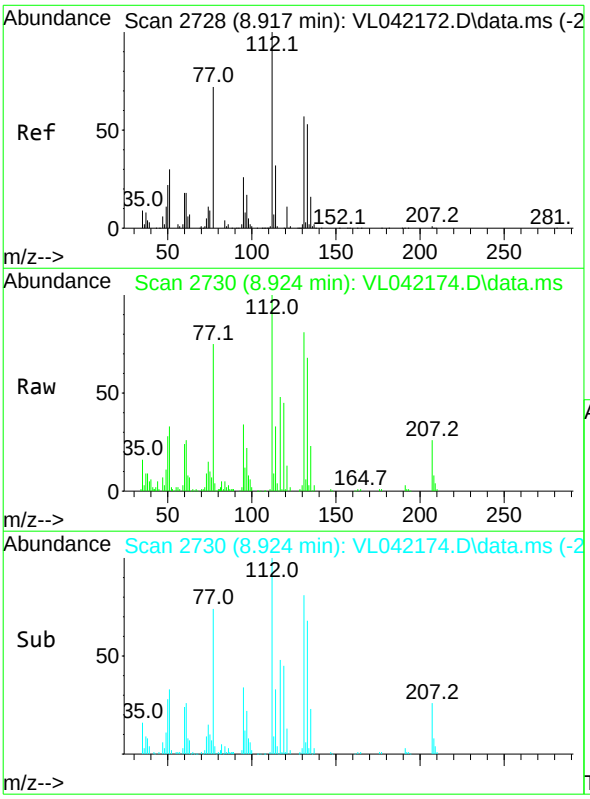
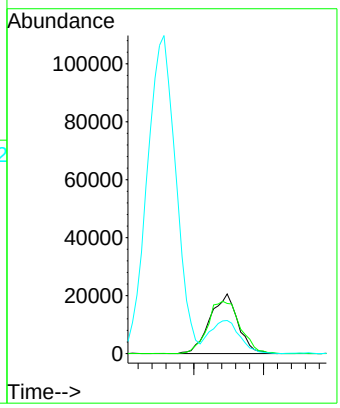
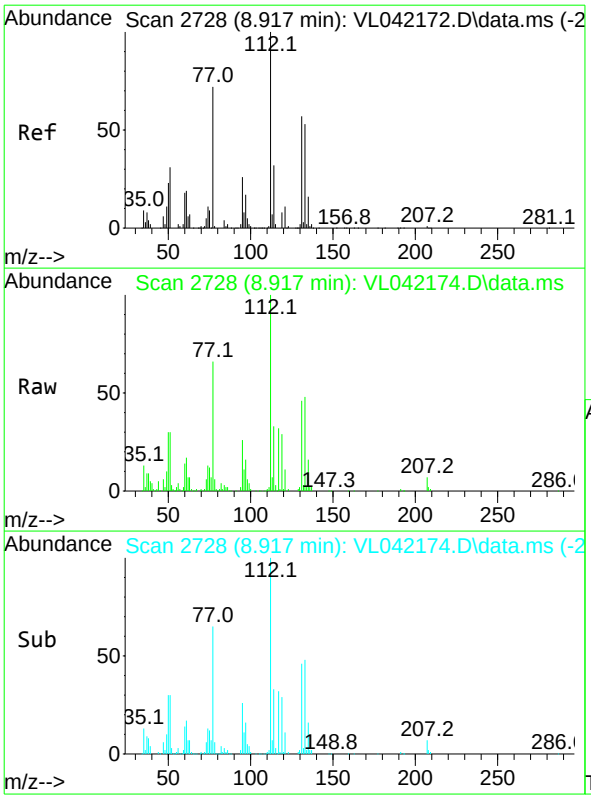


#56
1,1,1,2-Tetrachloroethane
Concen: 1.045 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:131 Resp: 28764

Ion	Ratio	Lower	Upper
131	100		
133	101.7	76.6	114.8
119	44.1	49.8	74.6#

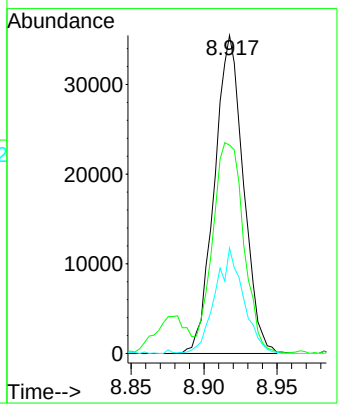




#57
Chlorobenzene
Concen: 1.032 ppbv
RT: 8.917 min Scan# 27
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:112 Resp: 48930

Ion	Ratio	Lower	Upper
112	100		
77	65.0	58.2	87.2
114	32.9	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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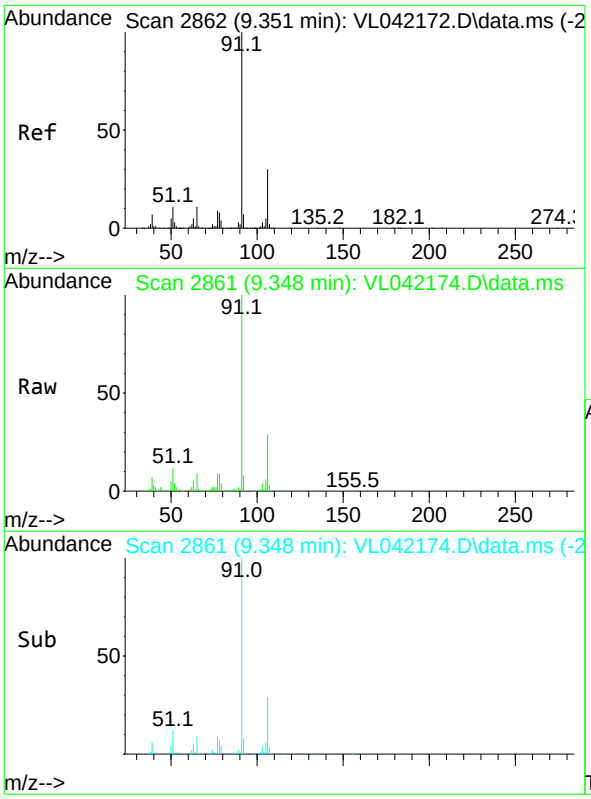
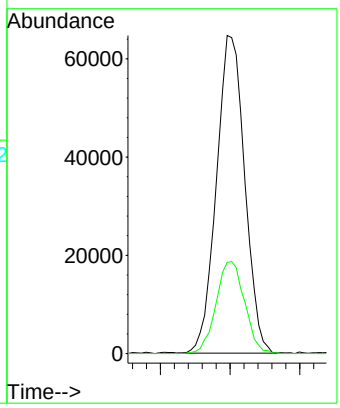
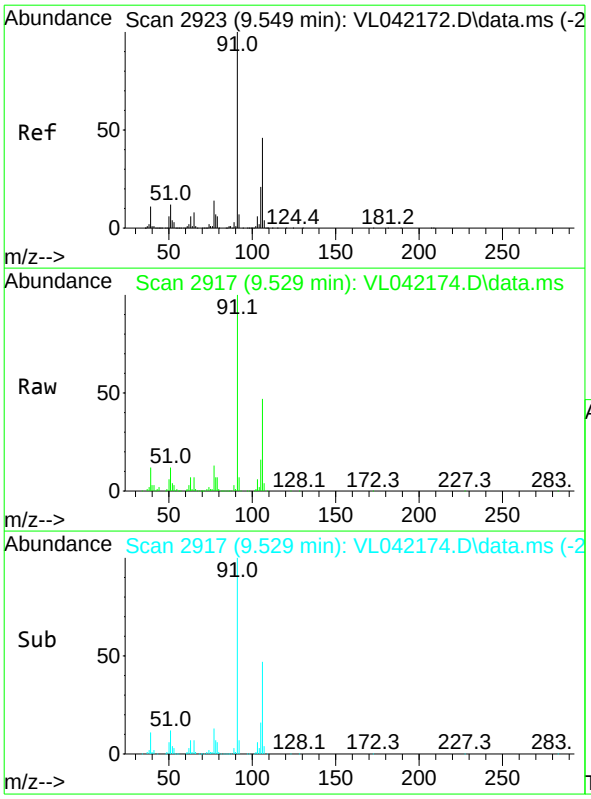


#58
Ethyl Benzene
Concen: 1.026 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 91086

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2

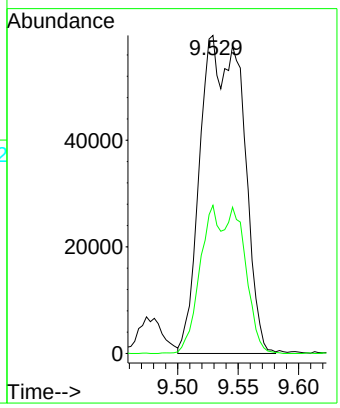




#59
m/p-Xylene
Concen: 2.073 ppbv m
RT: 9.529 min Scan# 29
Delta R.T. -0.019 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 147162

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



Instrument :
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ClientSampleId :
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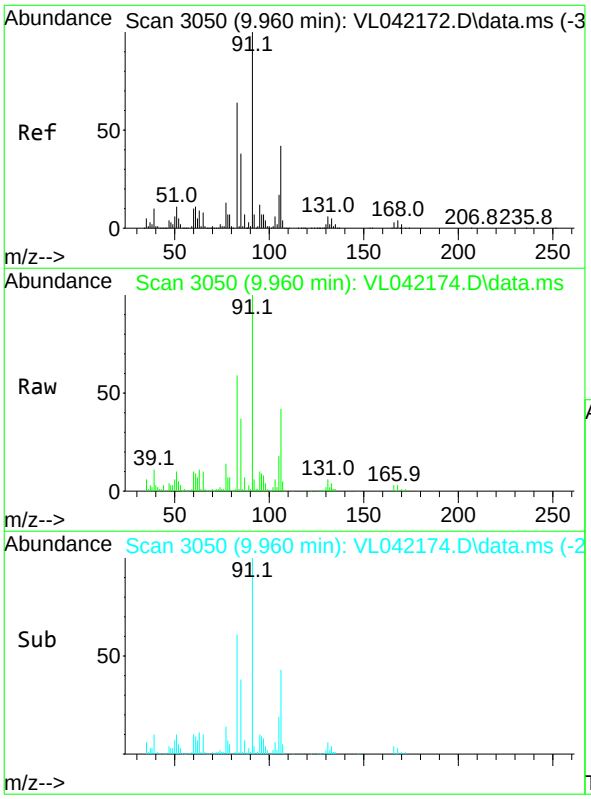
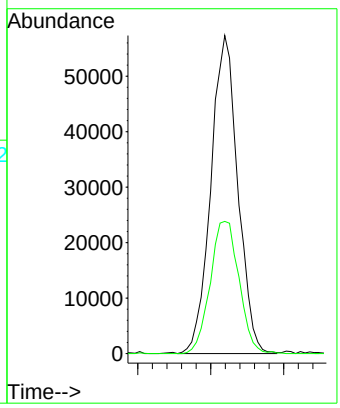
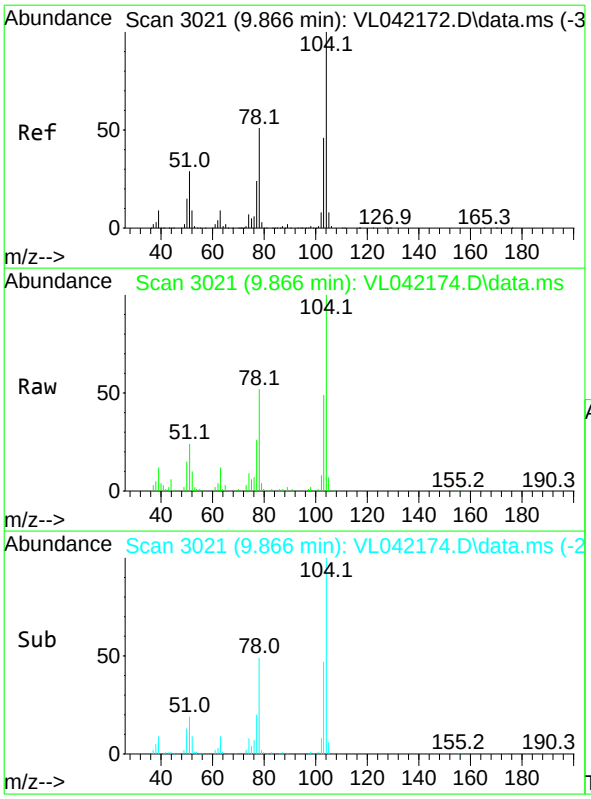


#60
o-Xylene
Concen: 1.037 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 73702

Ion	Ratio	Lower	Upper
91	100		
106	44.3	20.8	62.5

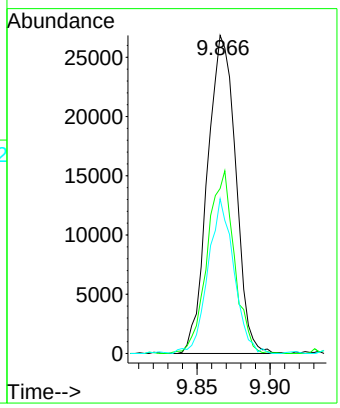




#61
Styrene
Concen: 1.027 ppbv
RT: 9.866 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:104 Resp: 36110

Ion	Ratio	Lower	Upper
104	100		
78	54.9	41.8	62.6
103	45.1	37.0	55.4



Instrument :
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ClientSampleId :
VSTDICC001

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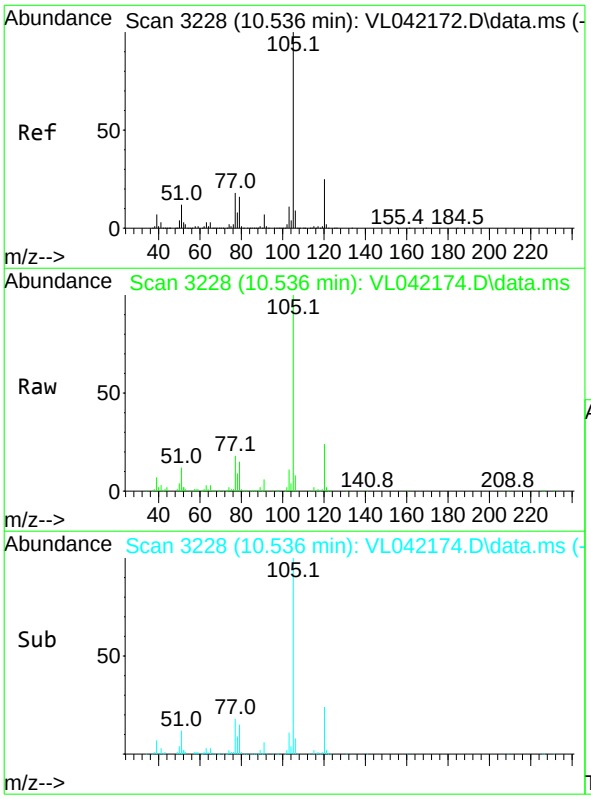
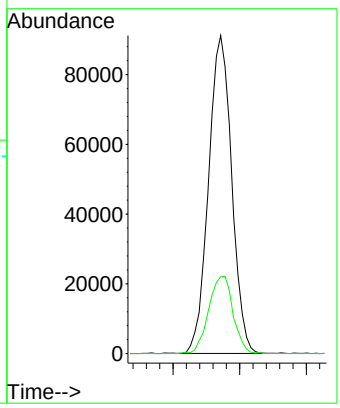
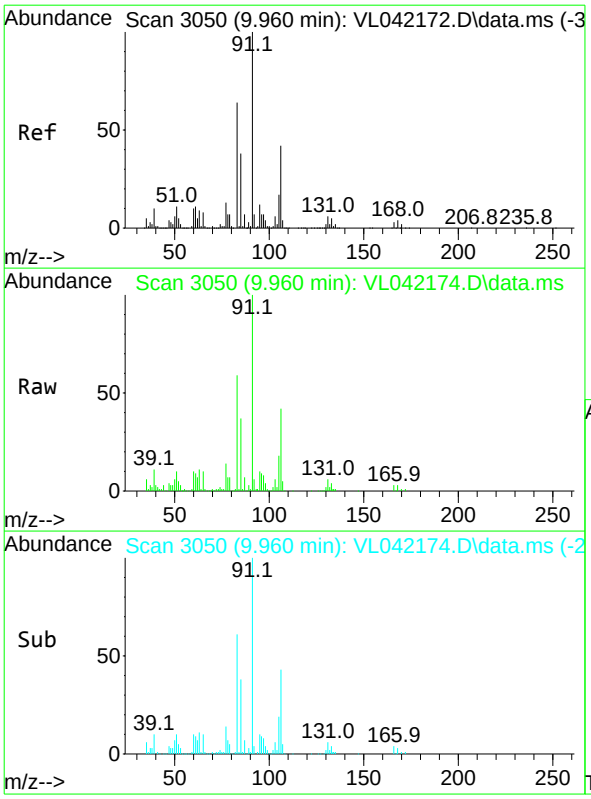


#62
Isopropylbenzene
Concen: 1.034 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 109897

Ion	Ratio	Lower	Upper
105	100		
120	25.7	19.9	29.9

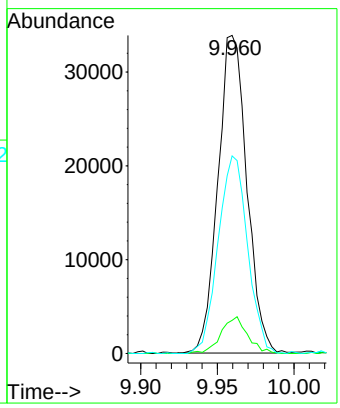




#63
1,1,2,2-Tetrachloroethane
Concen: 1.029 ppbv
RT: 9.960 min Scan# 30
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 44431

Ion	Ratio	Lower	Upper
83	100		
131	10.6	4.8	14.4
85	64.0	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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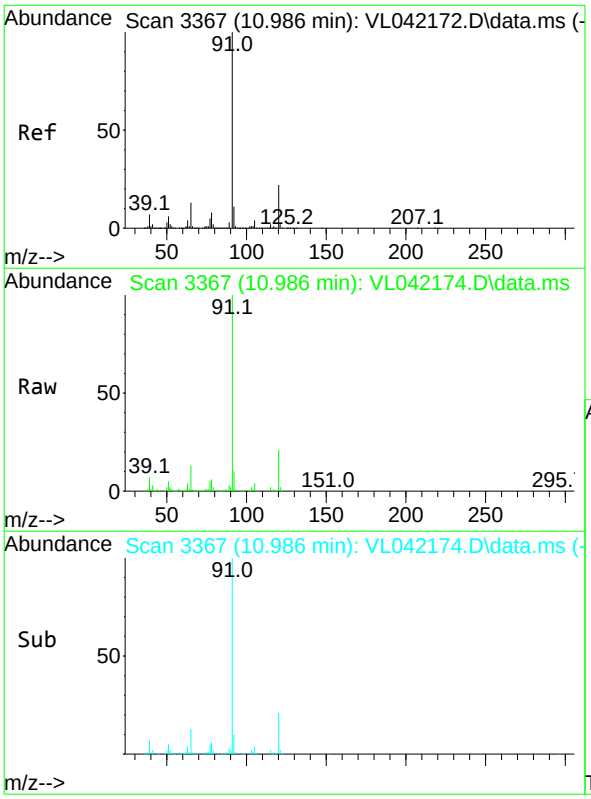
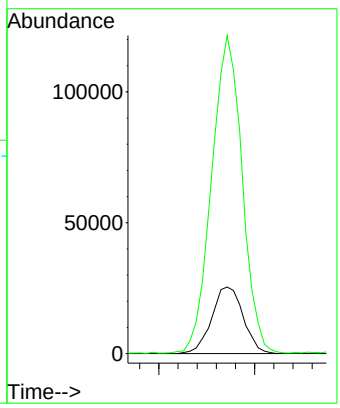
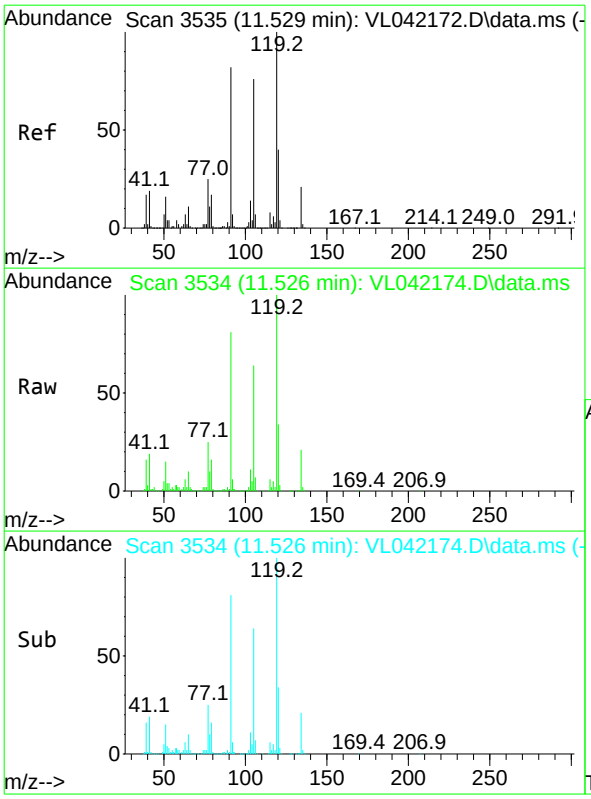


#64
n-propylbenzene
Concen: 1.062 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:120 Resp: 29054

Ion	Ratio	Lower	Upper
120	100		
91	466.9	376.9	565.3

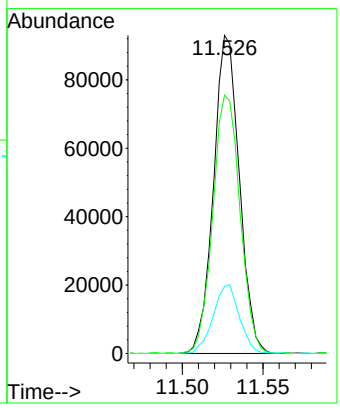




#65
tert-Butylbenzene
Concen: 1.053 ppbv
RT: 11.526 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:119 Resp: 103520

Ion	Ratio	Lower	Upper
119	100		
91	85.9	66.0	99.0
134	22.1	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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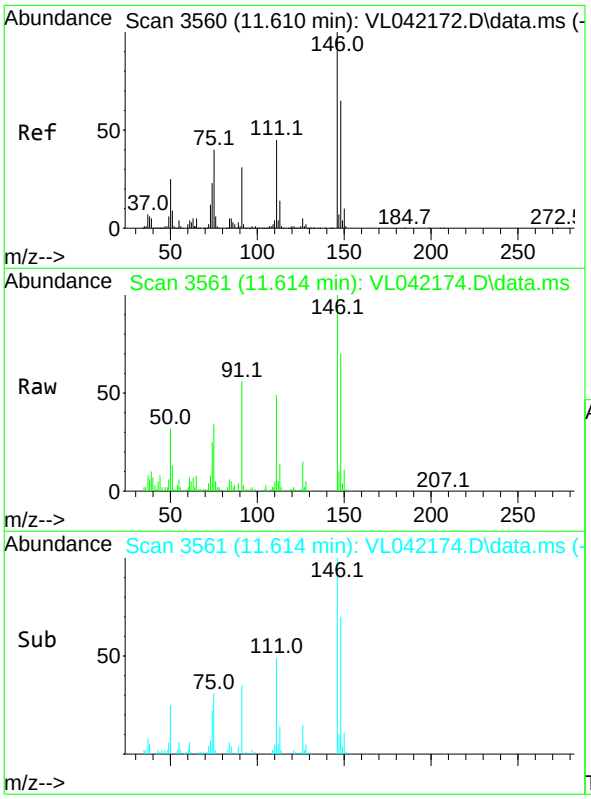
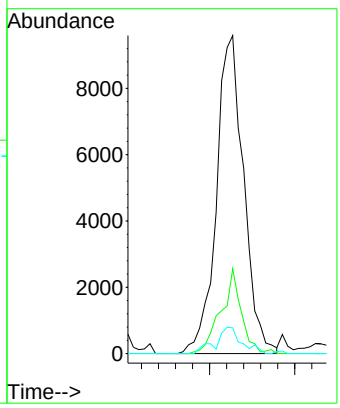
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

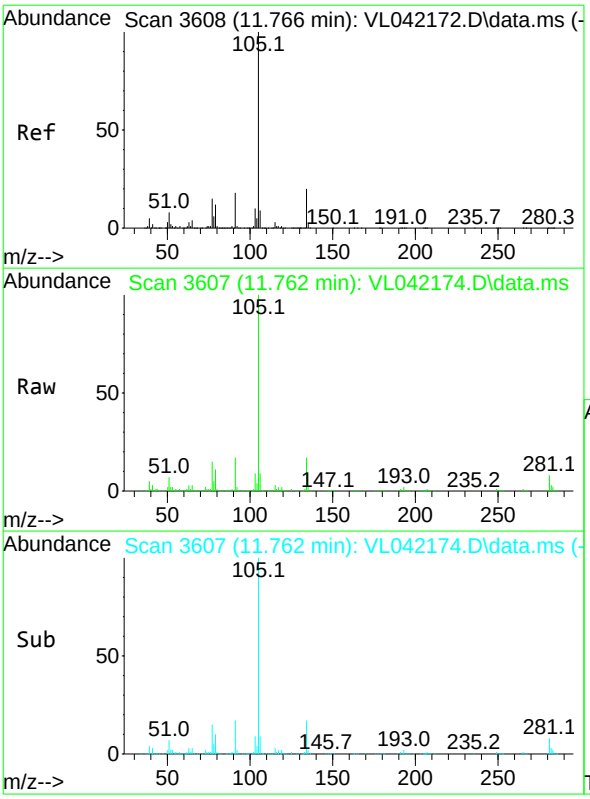


#66
Benzyl Chloride
Concen: 1.022 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 10660

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	8.0	4.5	6.7#

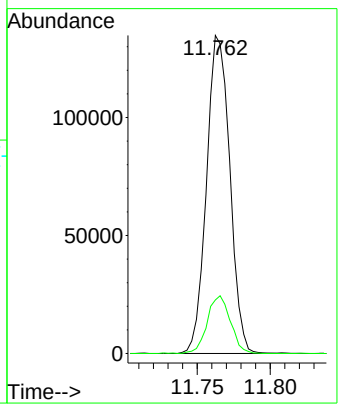




#67
sec-Butylbenzene
Concen: 1.095 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 149660

Ion	Ratio	Lower	Upper
105	100		
134	18.1	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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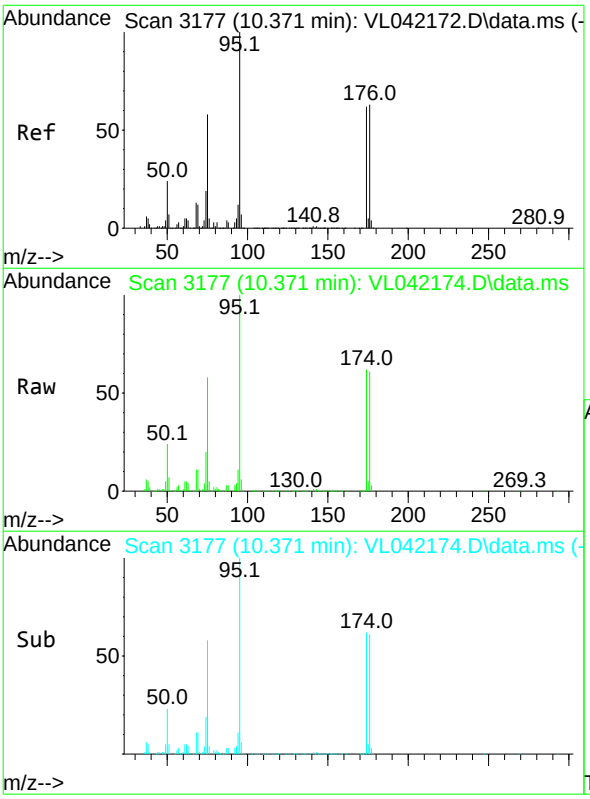
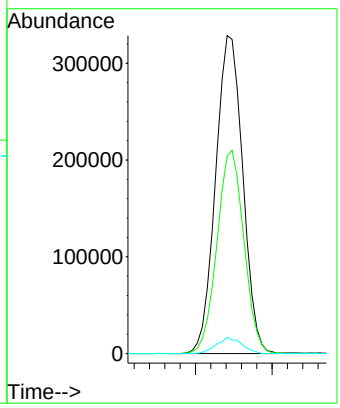
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

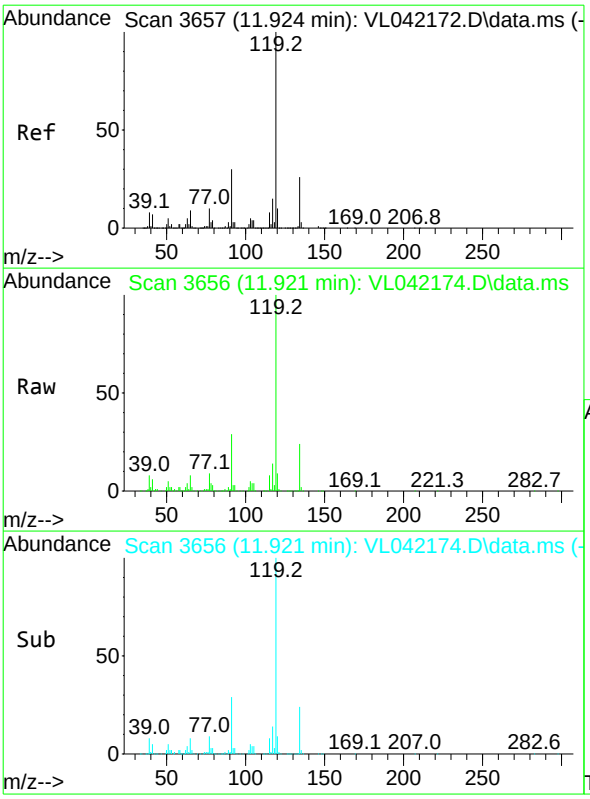


#68
1-Bromo-4-Fluorobenzene
Concen: 9.861 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 95 Resp: 404753

Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6





#69
p-Isopropyltoluene
Concen: 1.084 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:119 Resp: 127509

Ion	Ratio	Lower	Upper
119	100		
134	24.6	20.4	30.6
91	30.0	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

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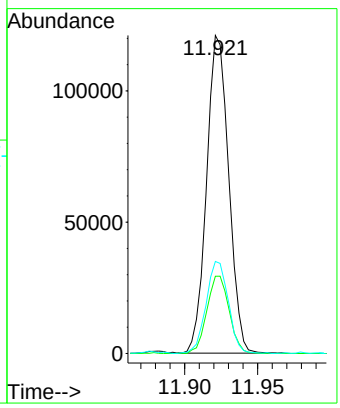
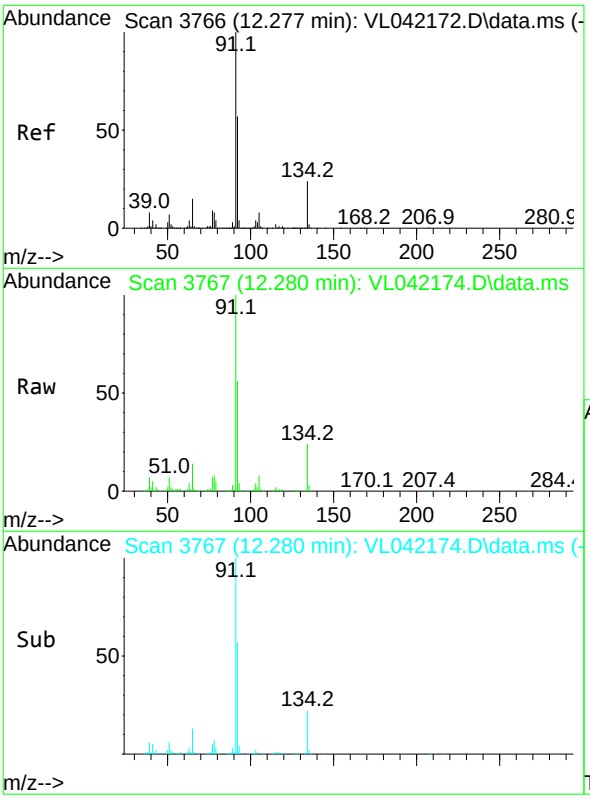
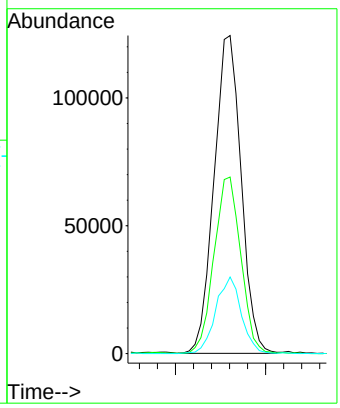


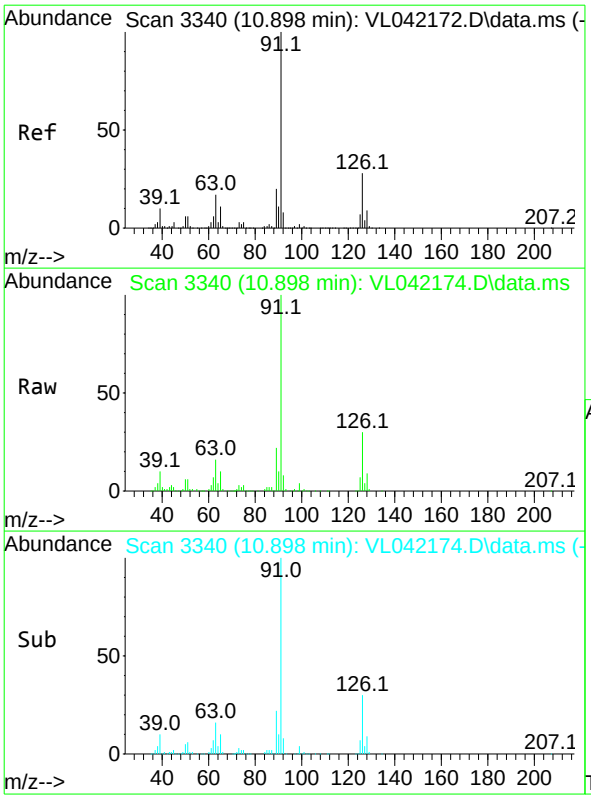


#70
n-Butylbenzene
Concen: 1.079 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 129860

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	22.8	19.2	28.8

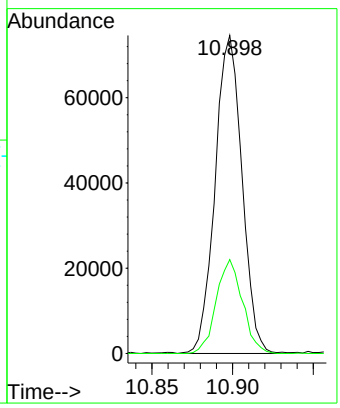




#71
2-Chlorotoluene
Concen: 1.047 ppbv
RT: 10.898 min Scan# 33
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 86356

Ion	Ratio	Lower	Upper
91	100		
126	28.8	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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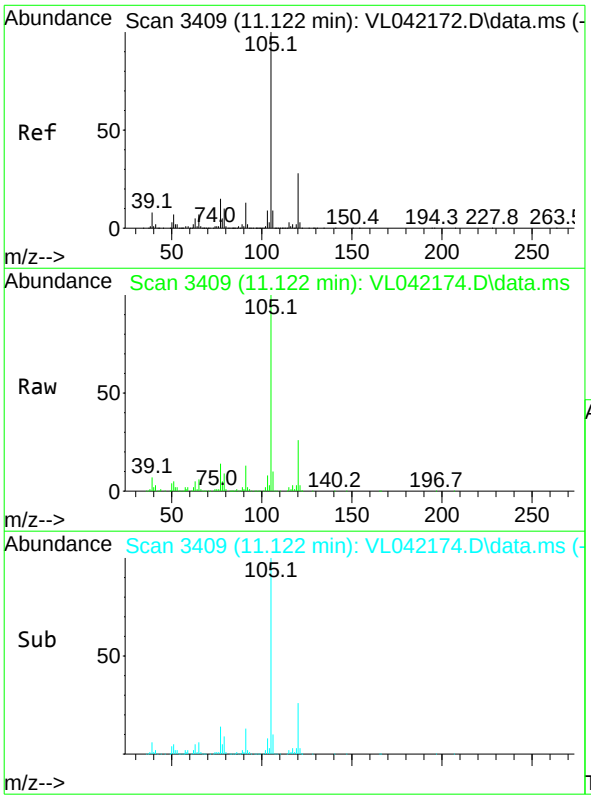
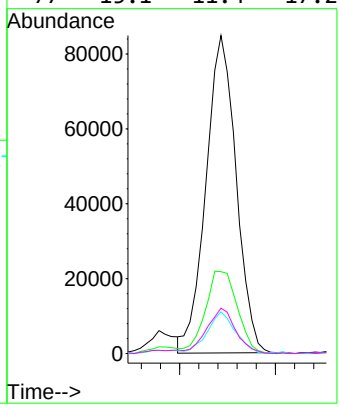
Supervised By :Mahesh Dadoda 04/03/2025

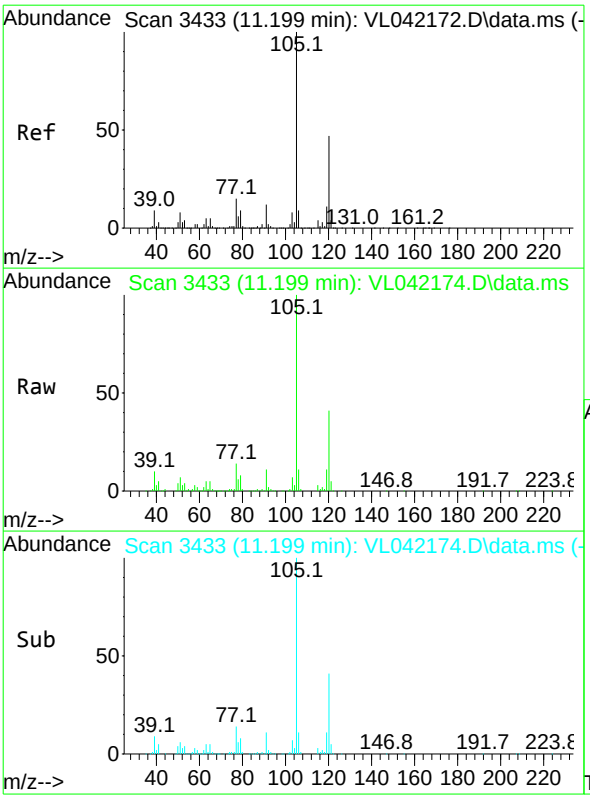


#72
4-Ethyltoluene
Concen: 1.050 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 92912

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.5	10.3	15.5
77	15.1	11.4	17.2

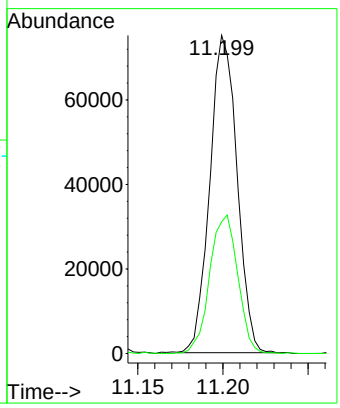




#73
1,3,5-Trimethylbenzene
Concen: 1.080 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 83497

Ion	Ratio	Lower	Upper
105	100		
120	41.3	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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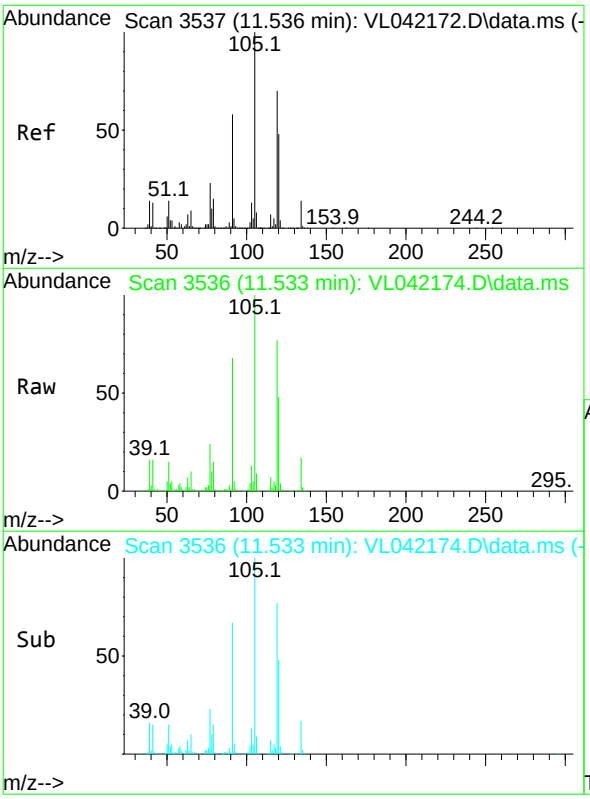
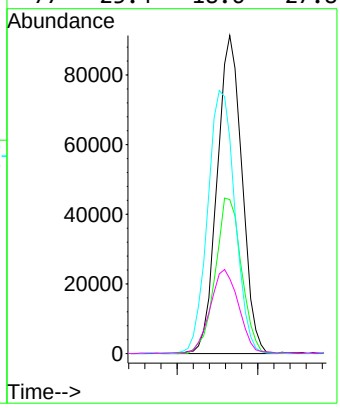
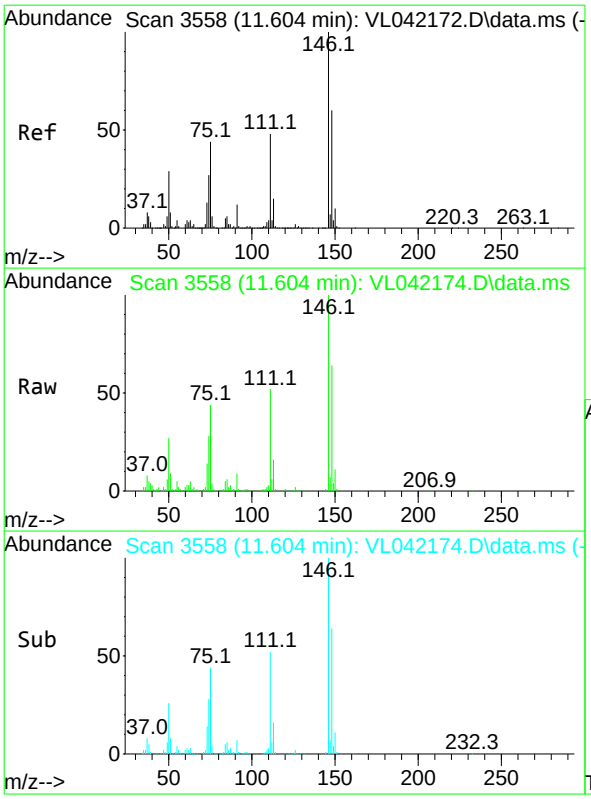


#74
1,2,4-Trimethylbenzene
Concen: 1.099 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 97858

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	67.6	46.2	69.2
77	23.4	18.6	27.8

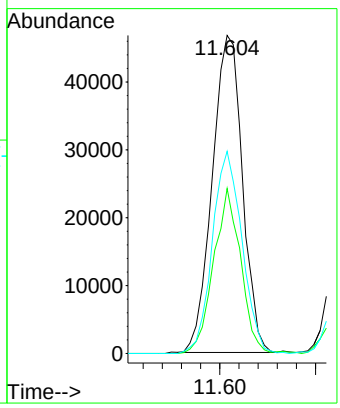




#75
1,3-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.604 min Scan# 35
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 51096

Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.8	71.2
148	62.6	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
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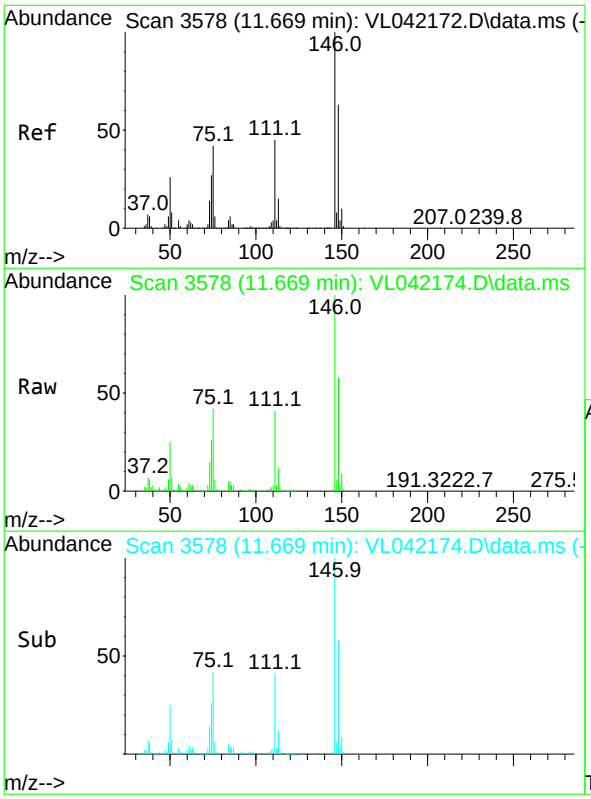
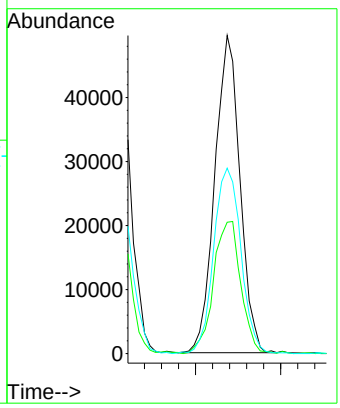
Supervised By :Mahesh Dadoda 04/03/2025

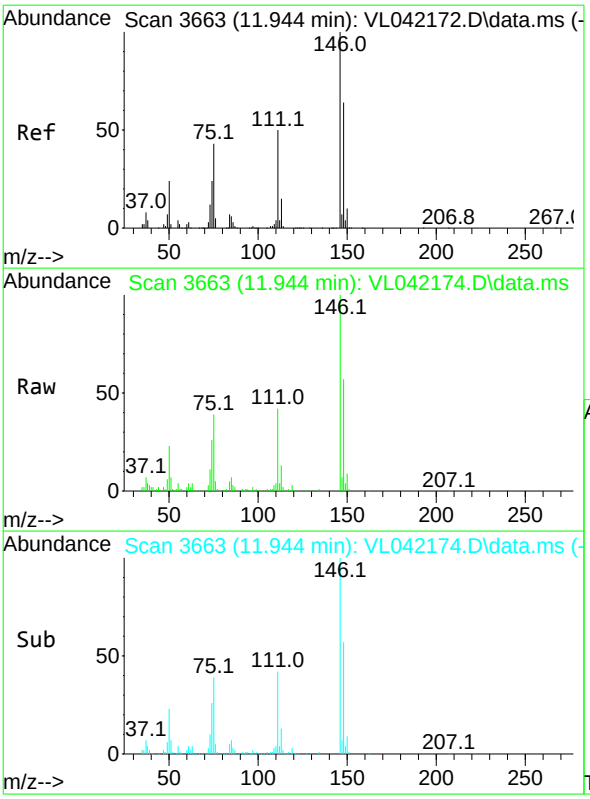


#76
1,4-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 50841

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.6	31.9	95.7

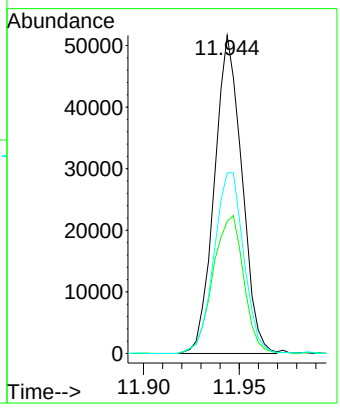




#77
1,2-Dichlorobenzene
Concen: 1.084 ppbv
RT: 11.944 min Scan# 36
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 51523

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	61.9	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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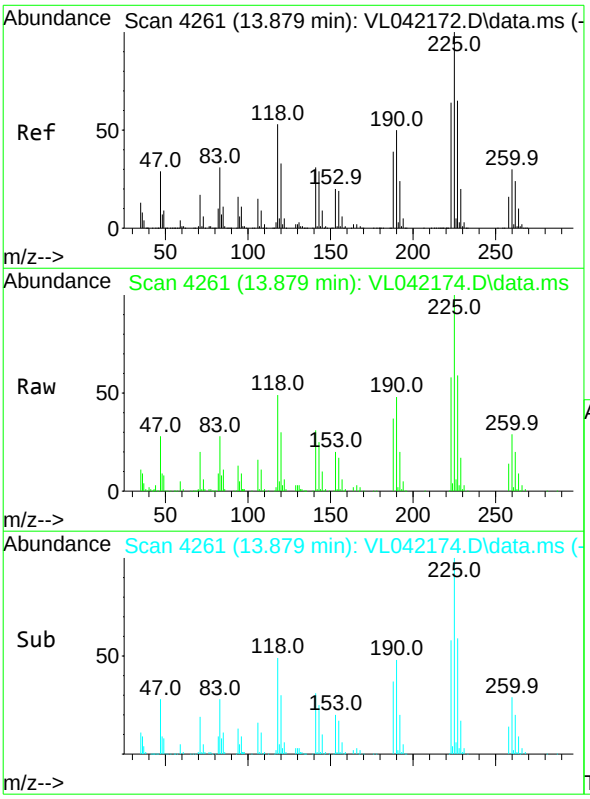
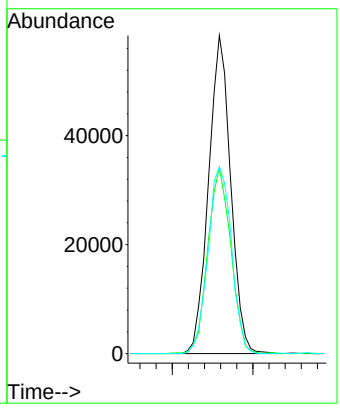
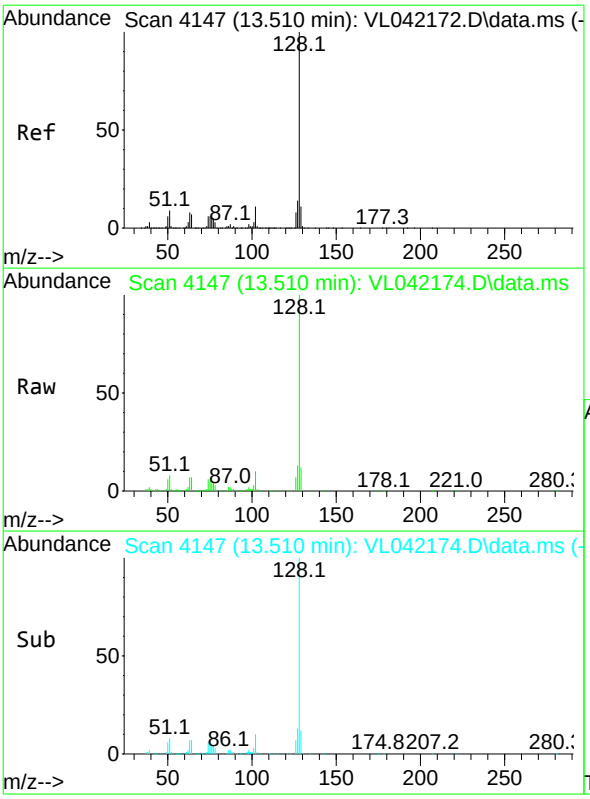


#78
Hexachloro-1,3-Butadiene
Concen: 1.149 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:225 Resp: 55611

Ion	Ratio	Lower	Upper
225	100		
223	60.8	50.6	76.0
227	62.3	51.2	76.8

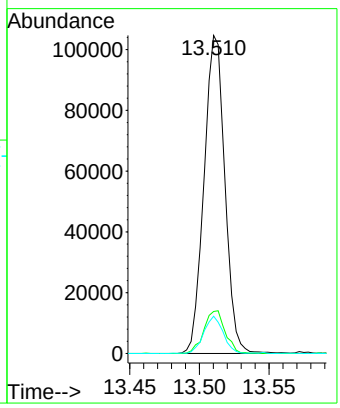




#79
Naphthalene
Concen: 1.120 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:128 Resp: 109031

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	11.7	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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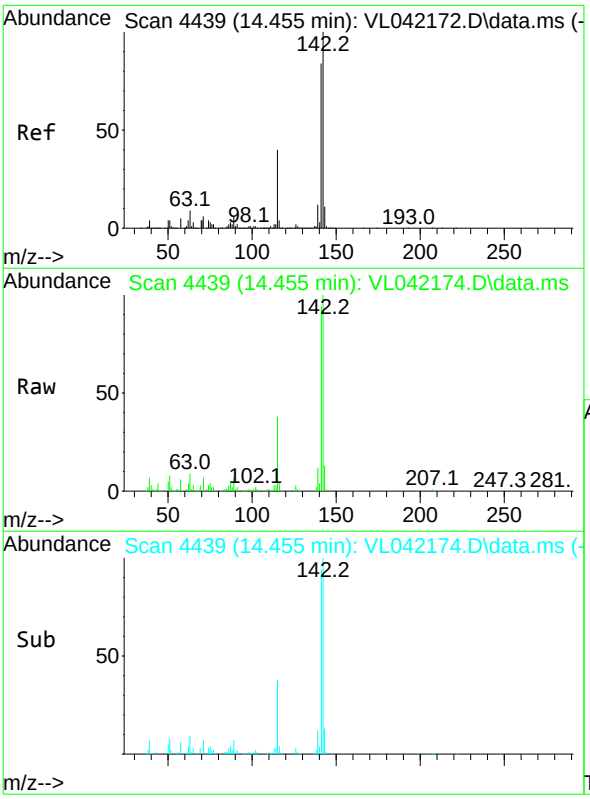
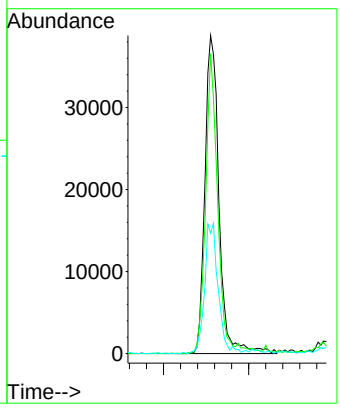
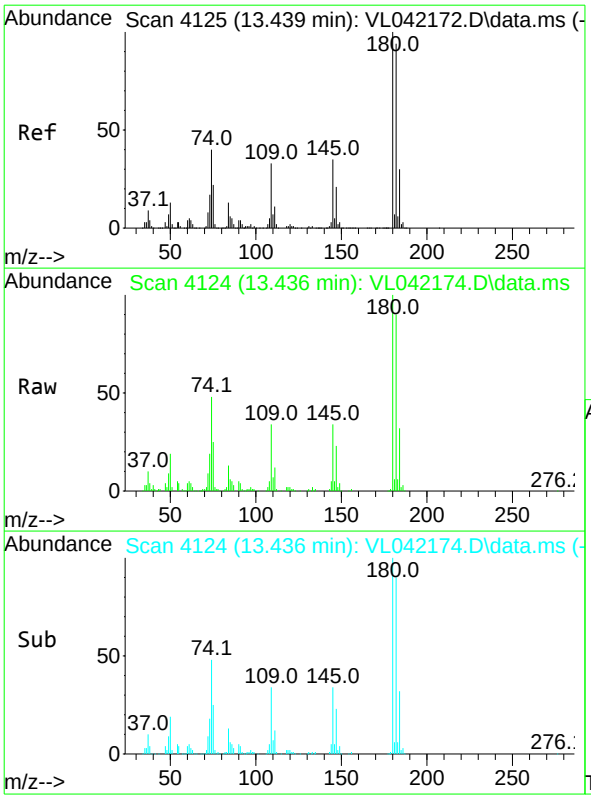


#80
Naphthalene,2-methyl-
Concen: 0.939 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:142 Resp: 44518

Ion	Ratio	Lower	Upper
142	100		
141	83.4	66.3	99.5
115	41.5	31.6	47.4

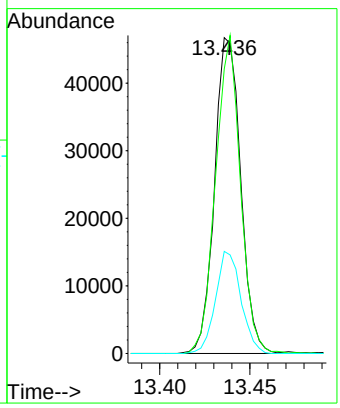




#81
1,2,4-Trichlorobenzene
Concen: 1.047 ppbv
RT: 13.436 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:180 Resp: 47040

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.1	112.7
184	31.4	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	180502	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	523832	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	485078	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	403513	10.130	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	14455	0.542	ppbv		95
3) Chlorodifluoromethane	1.473	51	14637	0.538	ppbv	#	89
4) Chloromethane	1.531	50	5956	0.547	ppbv		94
5) Vinyl Chloride	1.577	62	5732	0.516	ppbv		92
6) Bromomethane	1.664	94	2949	0.597	ppbv		95
7) Chloroethane	1.703	64	2582	0.591	ppbv	#	87
8) Dichlorotetrafluoroethane	1.551	85	11783	0.519	ppbv		98
9) Propene	1.483	41	6622m	0.540	ppbv		
10) Heptane	4.972	43	16673	0.502	ppbv		89
11) Trichlorofluoromethane	1.874	101	14099	0.544	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.136	101	11252	0.528	ppbv		99
13) Ethanol	1.722	45	997	1.038	ppbv	#	36
14) Bromoethene	1.780	108	4770	0.584	ppbv	#	86
15) Acetone	1.835	43	15331	0.607	ppbv	#	85
16) 1,3-Butadiene	1.606	39	8594	0.757	ppbv		82
17) tert-Butyl alcohol	2.039	59	17467	0.556	ppbv		97
18) 1,1-Dichloroethene	2.030	96	5634	0.565	ppbv	#	92
19) Isopropyl Alcohol	1.884	45	9171	0.644	ppbv	#	39
20) Methylene Chloride	2.059	84	5634	0.599	ppbv	#	93
21) Allyl Chloride	2.091	41	9632	0.541	ppbv		89
22) trans-1,2-Dichloroethene	2.334	96	6353	0.546	ppbv		83
23) Vinyl Acetate	2.457	43	6809	0.649	ppbv	#	91
24) 1,1-Dichloroethane	2.405	63	11258	0.527	ppbv		97
25) Ethyl Acetate	2.836	43	36258	0.553	ppbv		98
26) Hexane	2.823	57	13605	0.538	ppbv		92
27) Carbon Disulfide	2.146	76	14510	0.535	ppbv	#	1
28) Methyl tert-Butyl Ether	2.437	73	8310	0.527	ppbv	#	89
29) Chloroform	2.845	83	20149	0.544	ppbv		98
30) Cyclohexane	3.852	84	12063m	0.549	ppbv		
31) cis-1,2-Dichloroethene	2.719	61	13601	0.529	ppbv		92
32) 1,1,1-Trichloroethane	3.360	97	20567	0.485	ppbv		100
34) 2-Butanone	2.557	43	19739	0.520	ppbv		96
35) Carbon Tetrachloride	3.755	117	18558	0.460	ppbv		93
36) Benzene	3.651	78	27488	0.529	ppbv	#	87
37) 1,2-Dichloroethane	3.214	62	16062	0.540	ppbv		100
38) Trichloroethene	4.538	130	11460m	0.529	ppbv		
39) 1,2-Dichloropropane	4.308	63	10123	0.535	ppbv		92
40) 1,4-Dioxane	4.593	88	6121m	0.624	ppbv		
41) Tetrahydrofuran	3.059	42	11509m	0.533	ppbv		
42) Bromodichloromethane	4.483	83	20374	0.497	ppbv	#	98
43) Methyl Methacrylate	4.875	69	11583m	0.528	ppbv		
44) 2,2,4-Trimethylpentane	4.632	57	46646	0.532	ppbv		95
45) t-1,3-Dichloropropene	6.406	75	12404	0.526	ppbv	#	79

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	14374m	0.497	ppbv		
47) 1,1,2-Trichloroethane	6.574	97	10972m	0.549	ppbv		
48) Dibromochloromethane	7.380	129	17042	0.503	ppbv		99
49) Bromoform	9.480	173	14828	0.487	ppbv		98
50) 4-Methyl-2-Pentanone	5.758	43	33674	0.559	ppbv		97
51) 2-Hexanone	7.438	43	26154	0.523	ppbv	#	100
52) Tetrachloroethene	8.218	164	10502	0.510	ppbv		94
53) Toluene	6.923	91	32444	0.527	ppbv		98
54) 1,2-Dibromoethane	7.648	107	14220	0.510	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.920	131	13959	0.523	ppbv	#	1
57) Chlorobenzene	8.914	112	24826	0.540	ppbv	#	91
58) Ethyl Benzene	9.348	91	44862	0.521	ppbv		96
59) m/p-Xylene	9.542	91	73028m	1.060	ppbv		
60) o-Xylene	9.959	91	36879	0.535	ppbv		98
61) Styrene	9.866	104	17198	0.504	ppbv		96
62) Isopropylbenzene	10.536	105	55531	0.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	21989	0.525	ppbv		96
64) n-propylbenzene	10.985	120	14030	0.528	ppbv		95
65) tert-Butylbenzene	11.526	119	53115	0.557	ppbv		100
66) Benzyl Chloride	11.613	91	5263	0.520	ppbv		97
67) sec-Butylbenzene	11.762	105	72879	0.550	ppbv		98
69) p-Isopropyltoluene	11.921	119	61933	0.542	ppbv		100
70) n-Butylbenzene	12.277	91	61507	0.527	ppbv		99
71) 2-Chlorotoluene	10.895	91	41637	0.520	ppbv		95
72) 4-Ethyltoluene	11.121	105	44473	0.518	ppbv	#	94
73) 1,3,5-Trimethylbenzene	11.199	105	39190	0.523	ppbv		97
74) 1,2,4-Trimethylbenzene	11.532	105	48370	0.560	ppbv		97
75) 1,3-Dichlorobenzene	11.600	146	25122	0.530	ppbv		100
76) 1,4-Dichlorobenzene	11.668	146	24991	0.530	ppbv		97
77) 1,2-Dichlorobenzene	11.943	146	24548	0.532	ppbv		96
78) Hexachloro-1,3-Butadiene	13.879	225	25636	0.546	ppbv		99
79) Naphthalene	13.510	128	47990	0.508	ppbv		95
80) Naphthalene,2-methyl-	14.458	142	17486	0.380	ppbv		98
81) 1,2,4-Trichlorobenzene	13.436	180	19924	0.457	ppbv		97

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

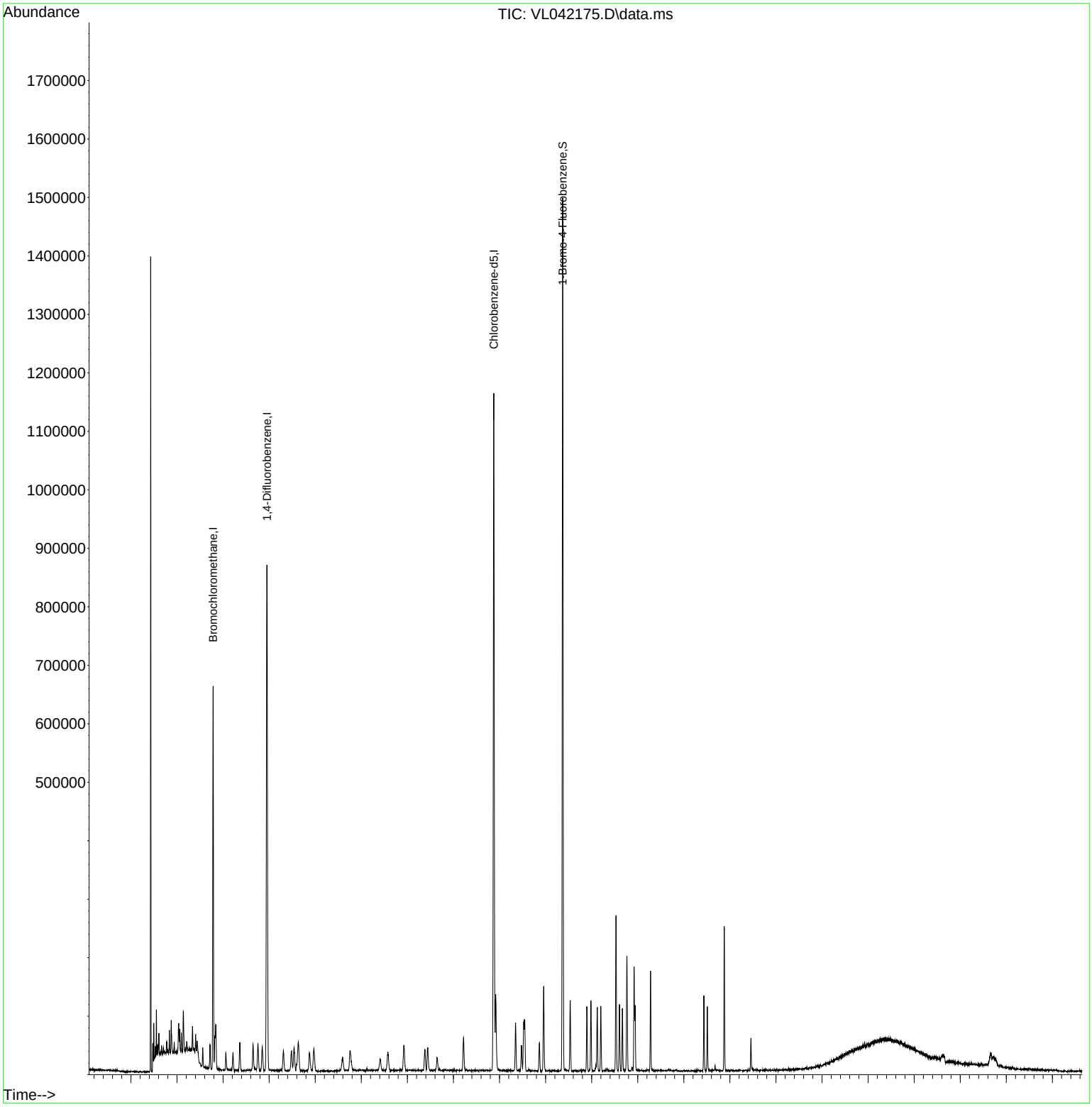
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

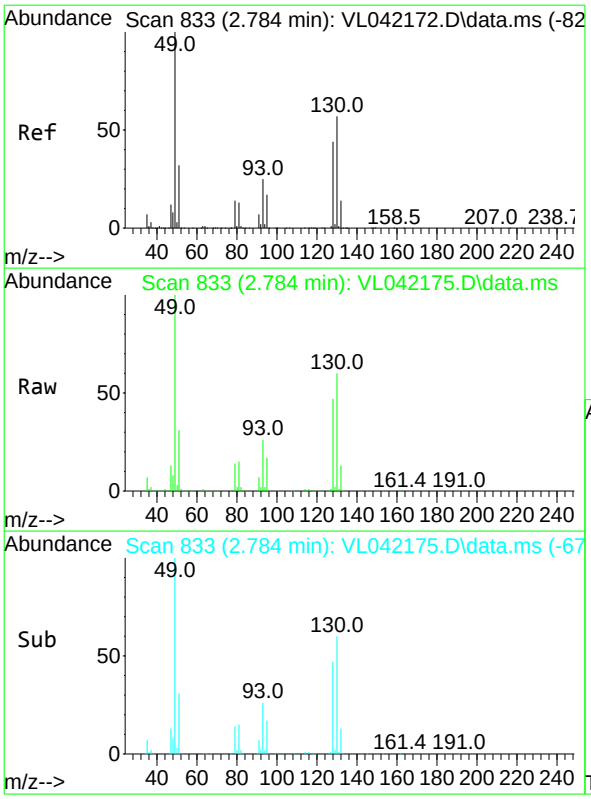
Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

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

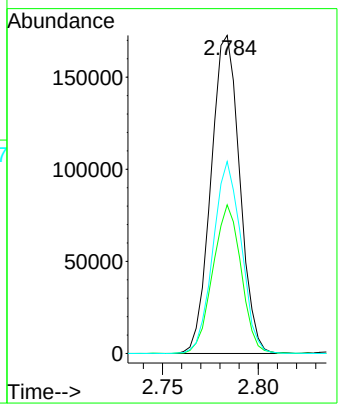




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 49 Resp: 180502

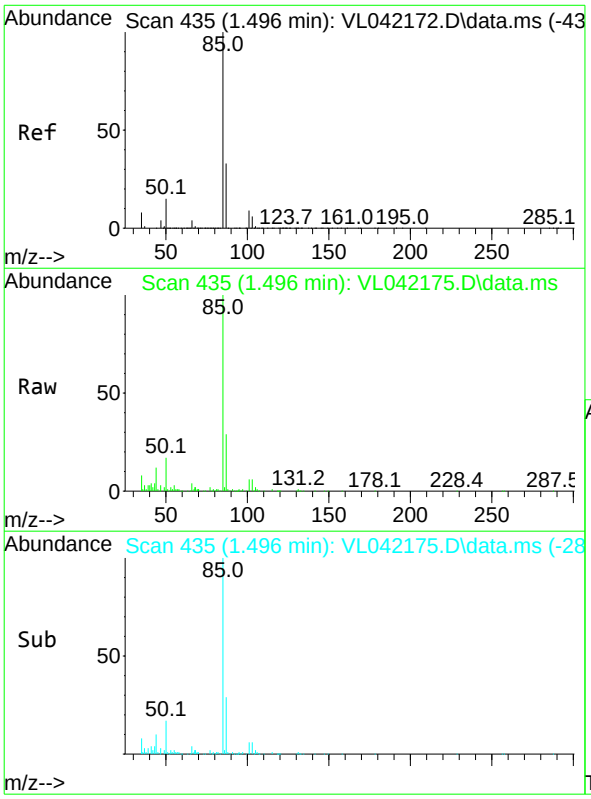
Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.2	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

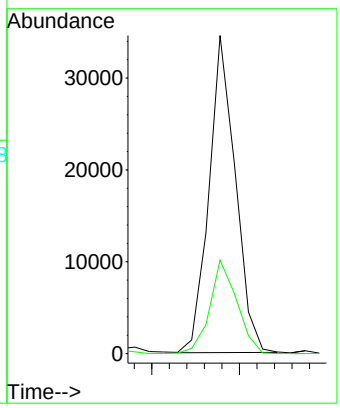
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

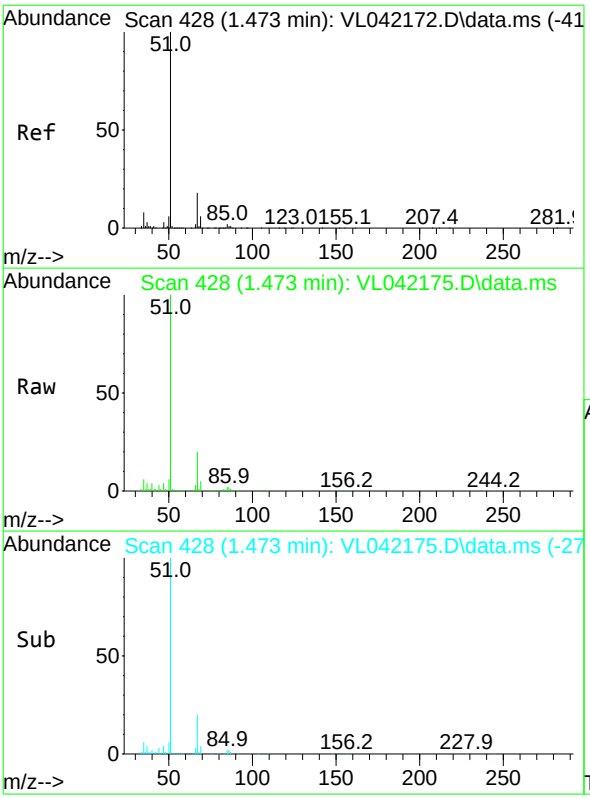


#2
Dichlorodifluoromethane
Concen: 0.542 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 14455

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1

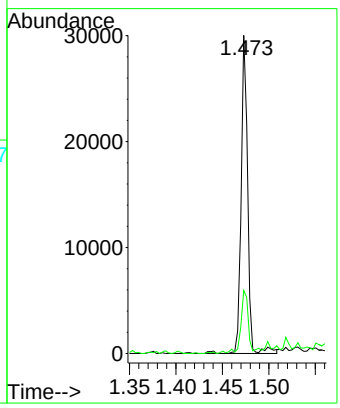




#3
Chlorodifluoromethane
Concen: 0.538 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 51 Resp: 14637

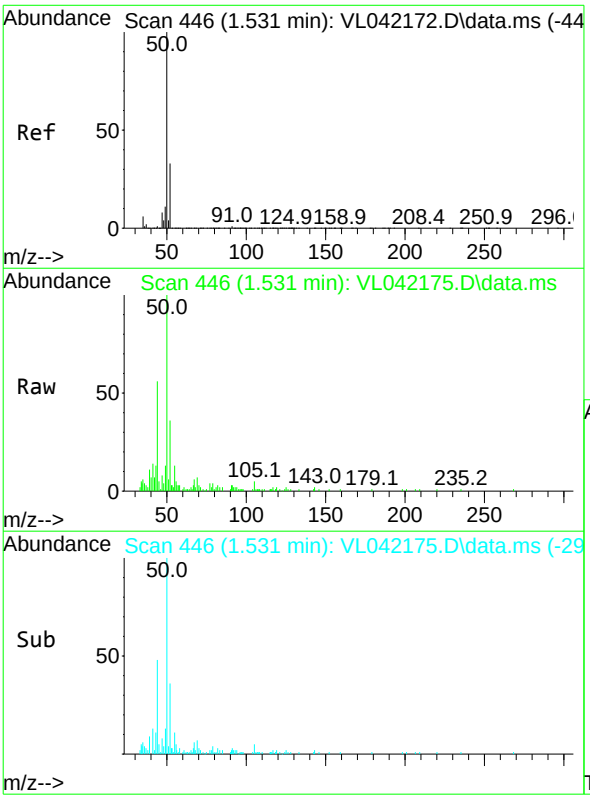
Ion	Ratio	Lower	Upper
51	100		
67	23.6	15.0	22.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

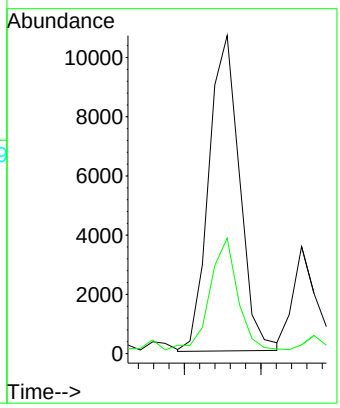
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

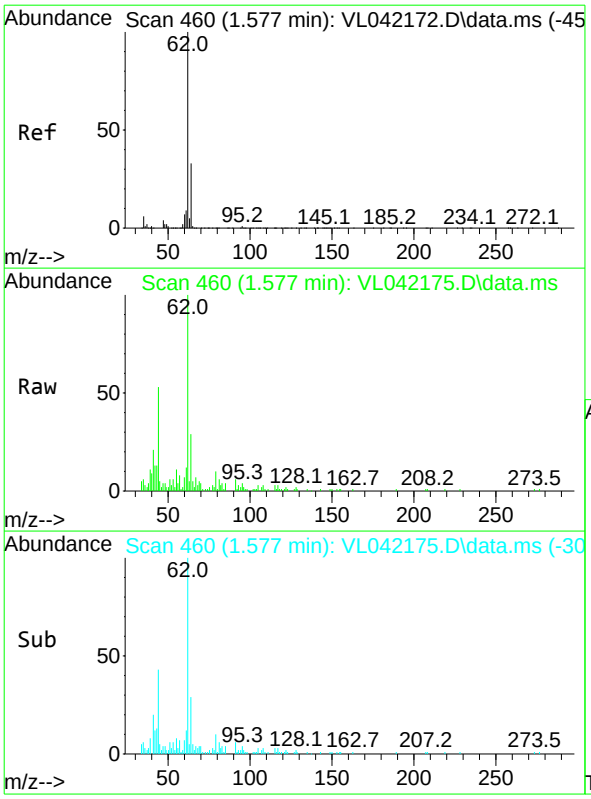


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 50 Resp: 5956

Ion	Ratio	Lower	Upper
50	100		
52	36.1	26.1	39.1

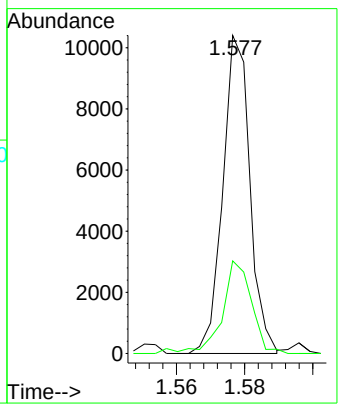




#5
Vinyl Chloride
Concen: 0.516 ppbv
RT: 1.577 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 62 Resp: 5732

Ion	Ratio	Lower	Upper
62	100		
64	28.5	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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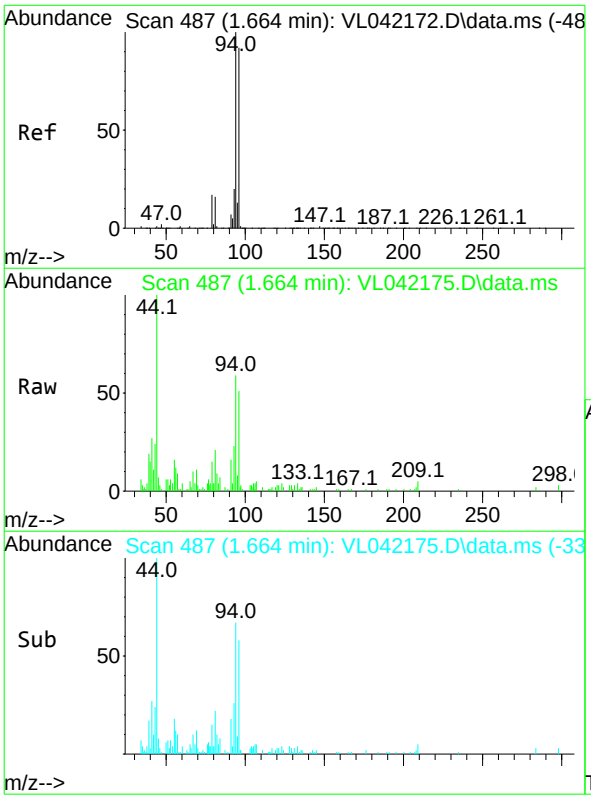
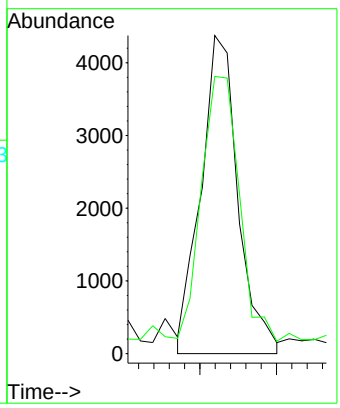
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

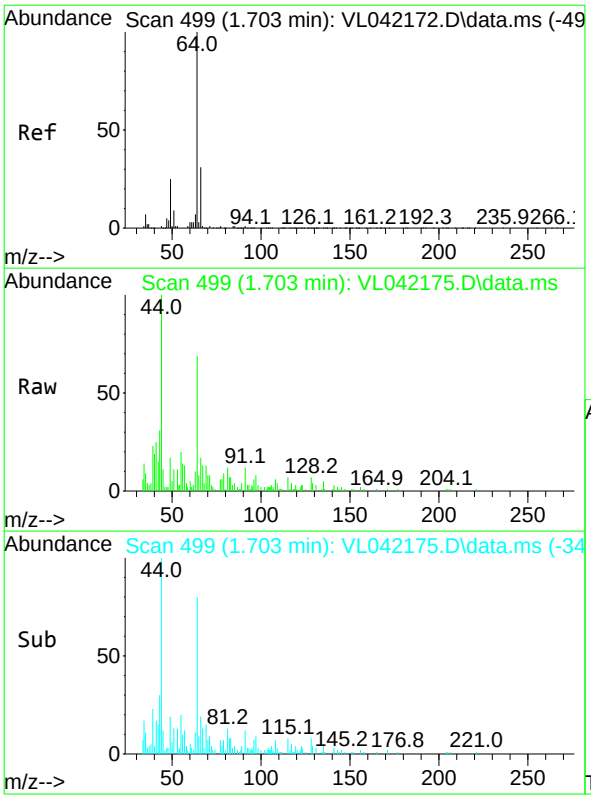


#6
Bromomethane
Concen: 0.597 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 94 Resp: 2949

Ion	Ratio	Lower	Upper
94	100		
96	86.2	73.1	109.7

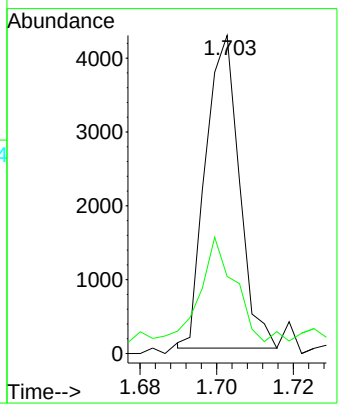




#7
Chloroethane
Concen: 0.591 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 64 Resp: 2582

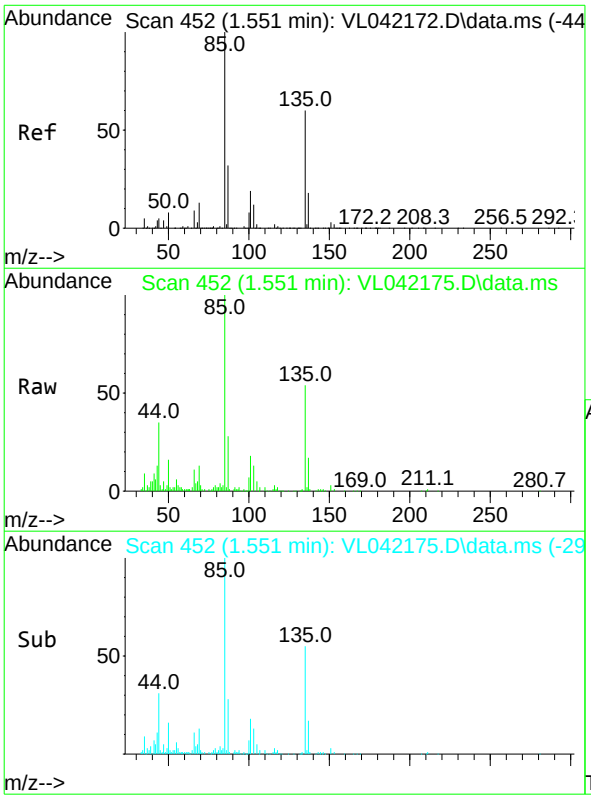
Ion	Ratio	Lower	Upper
64	100		
66	24.2	25.2	37.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

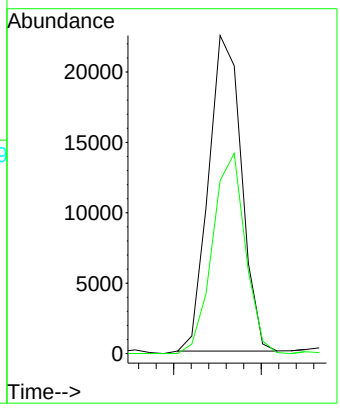
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

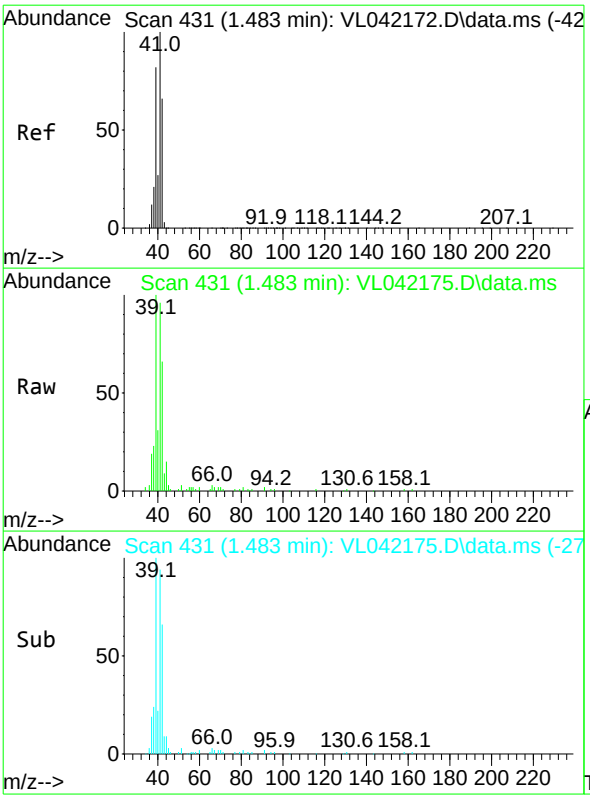


#8
Dichlorotetrafluoroethane
Concen: 0.519 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 11783

Ion	Ratio	Lower	Upper
85	100		
135	63.7	52.4	78.6

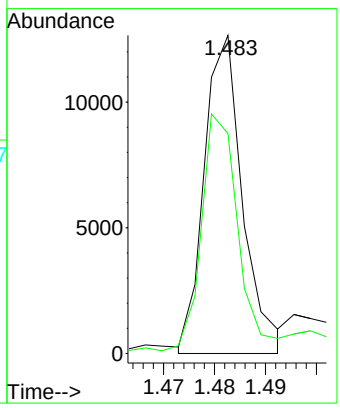




#9
Propene
Concen: 0.540 ppbv m
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 41 Resp: 6622

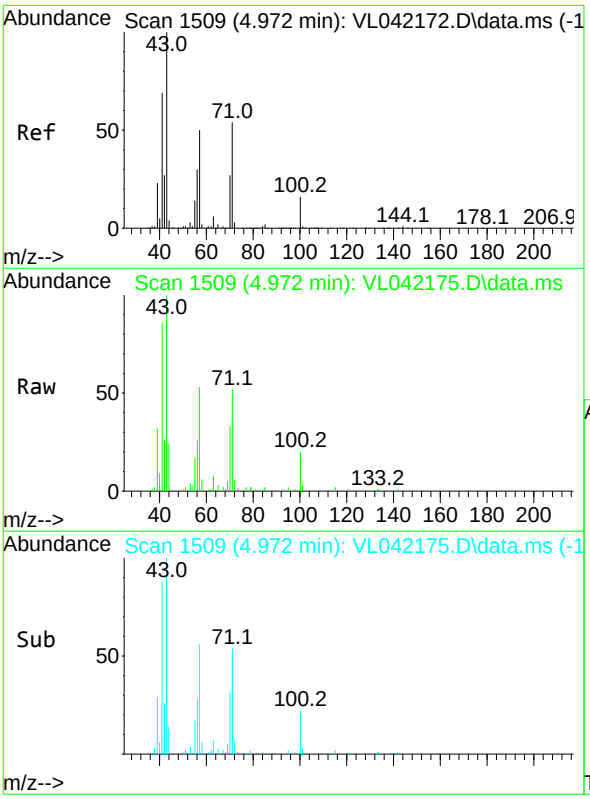
Ion	Ratio	Lower	Upper
41	100		
42	19.5	55.4	83.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

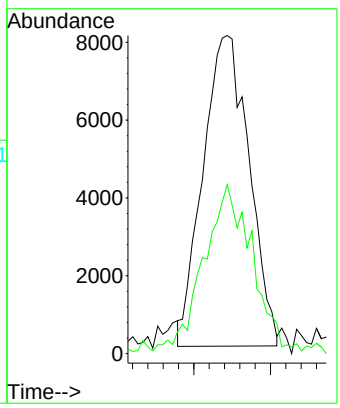
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

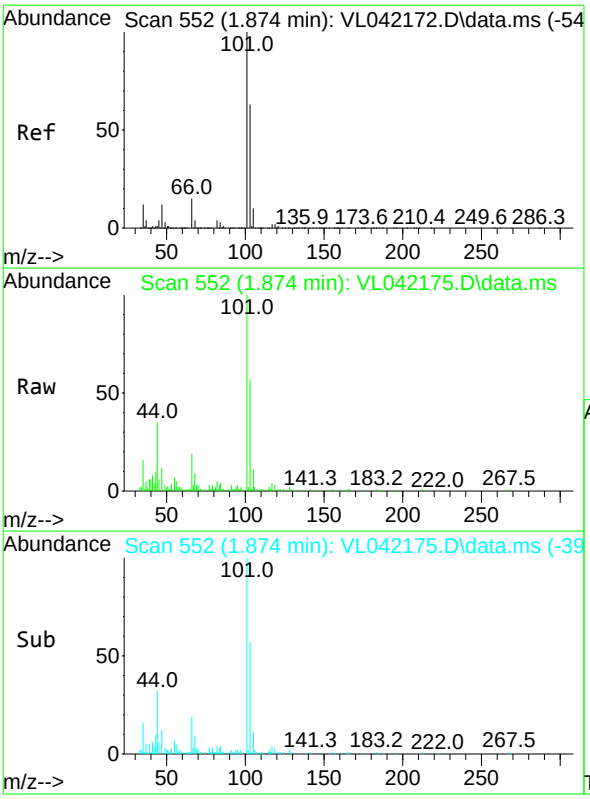


#10
Heptane
Concen: 0.502 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 16673

Ion	Ratio	Lower	Upper
43	100		
57	57.0	39.4	59.2





#11
Trichlorofluoromethane
Concen: 0.544 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 14099

Ion	Ratio	Lower	Upper
101	100		
103	56.3	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

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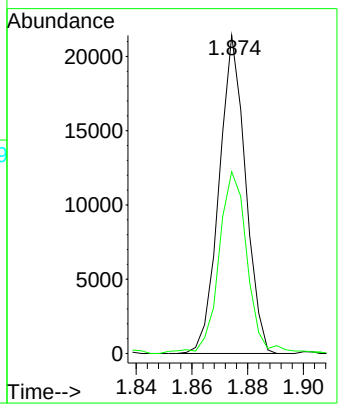
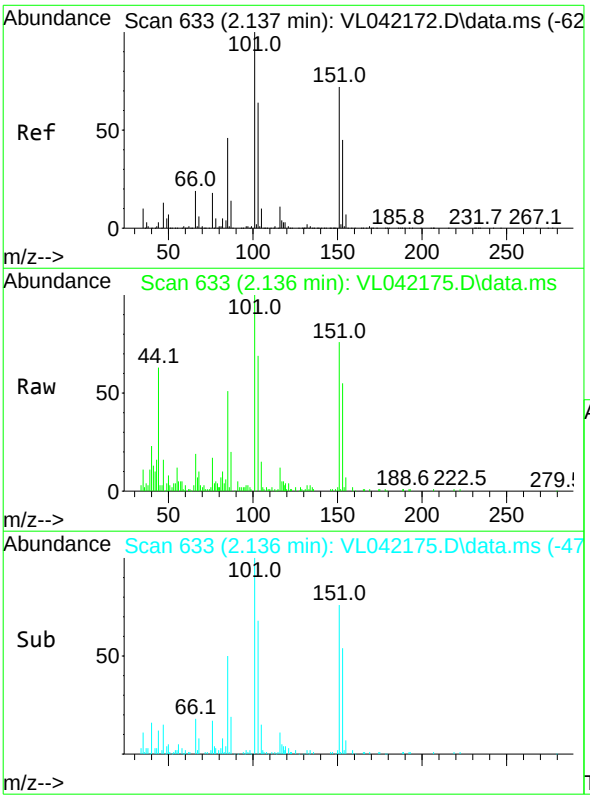
Supervised By :Mahesh Dadoda 04/03/2025

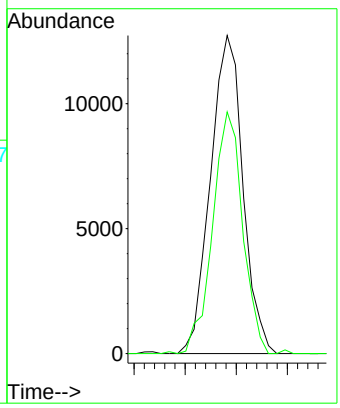


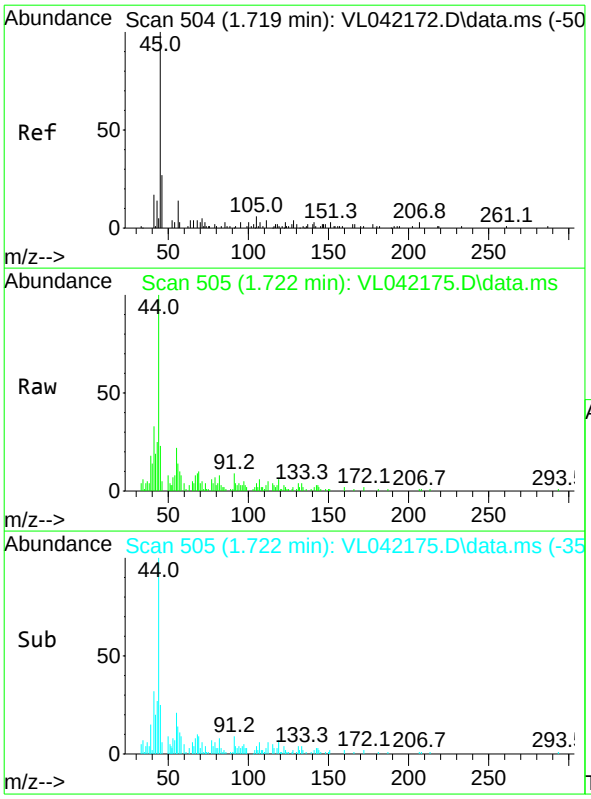


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.528 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 11252

Ion	Ratio	Lower	Upper
101	100		
151	70.6	57.1	85.7

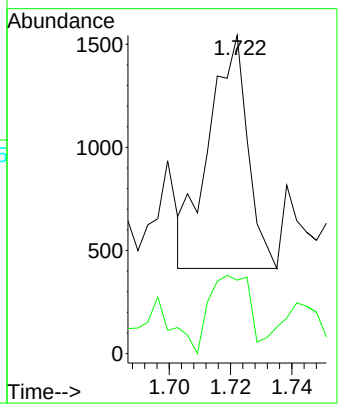




#13
Ethanol
Concen: 1.038 ppbv
RT: 1.722 min Scan# 50
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 45 Resp: 997

Ion	Ratio	Lower	Upper
45	100		
46	94.5	20.2	80.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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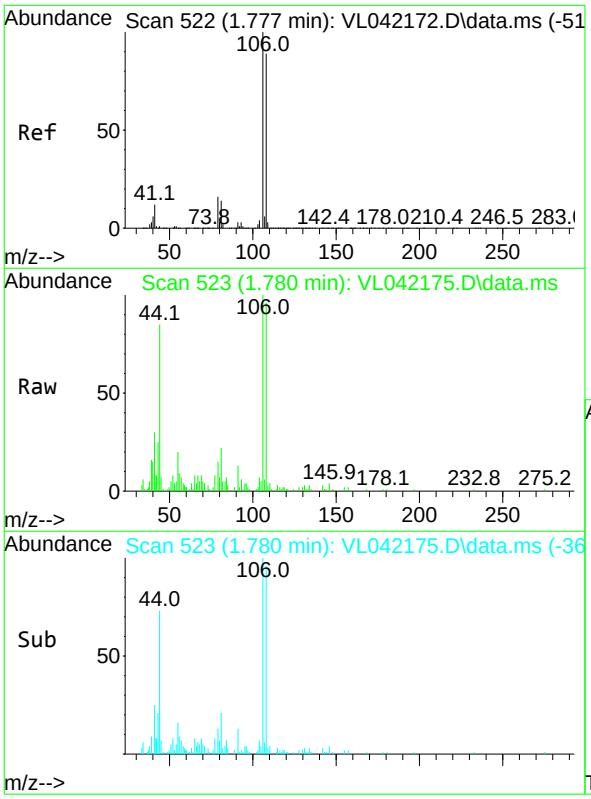
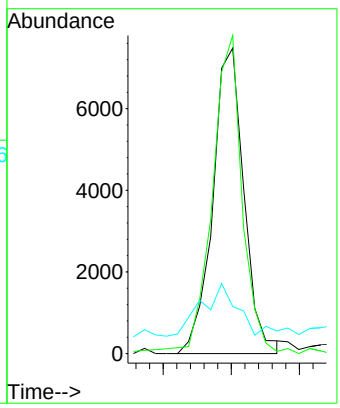
Supervised By :Mahesh Dadoda 04/03/2025

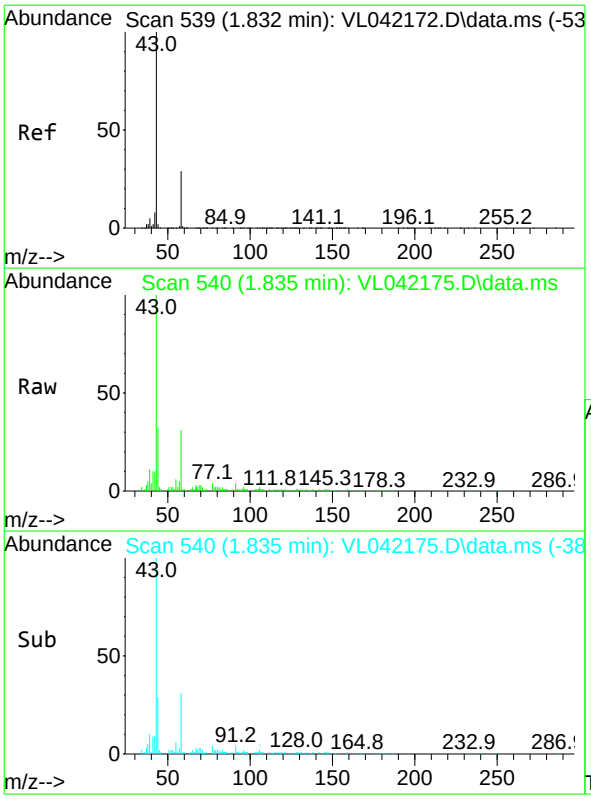


#14
Bromoethene
Concen: 0.584 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:108 Resp: 4770

Ion	Ratio	Lower	Upper
108	100		
106	101.3	86.8	130.2
79	42.6	15.0	22.6#

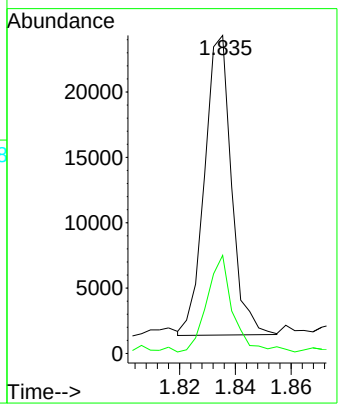




#15
Acetone
Concen: 0.607 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 15331

Ion	Ratio	Lower	Upper
43	100		
58	37.1	23.2	34.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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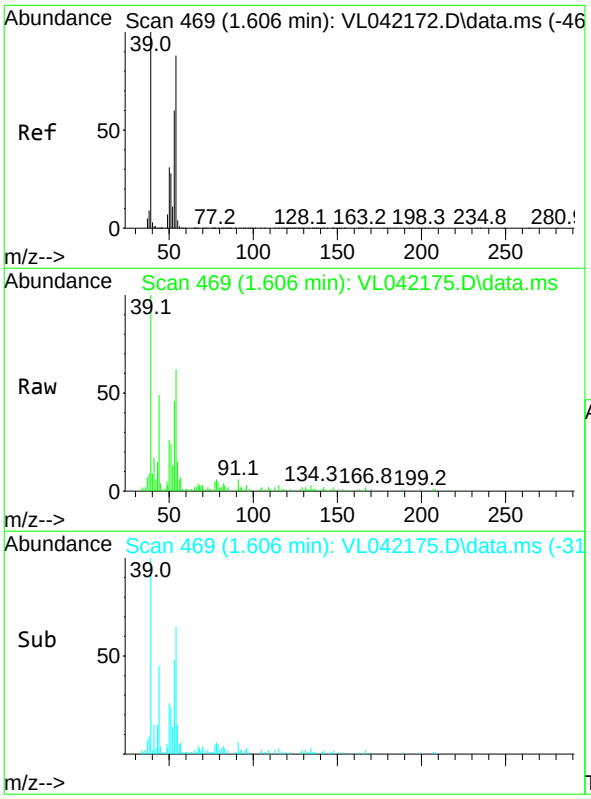
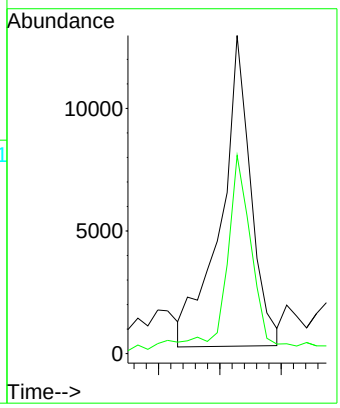
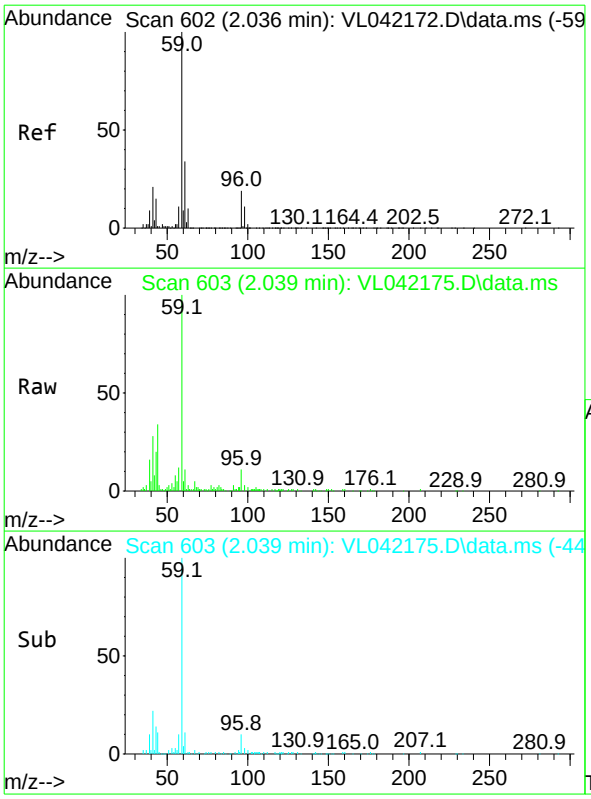


#16
1,3-Butadiene
Concen: 0.757 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 39 Resp: 8594

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.7	91.1

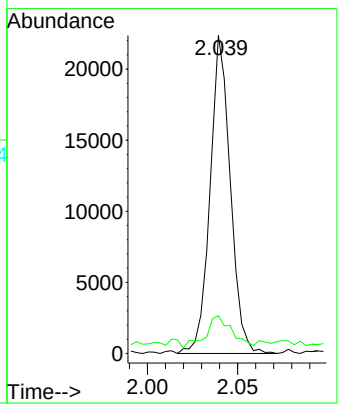




#17
tert-Butyl alcohol
Concen: 0.556 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 59 Resp: 17467

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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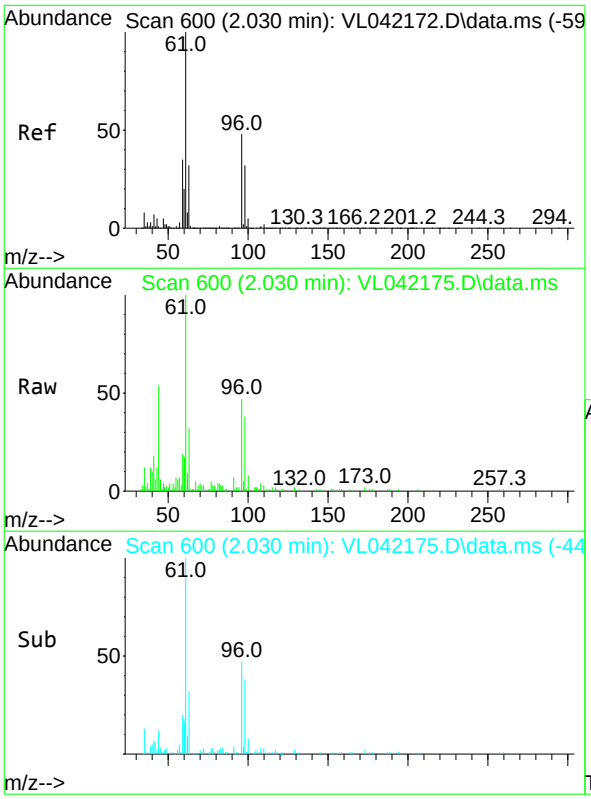
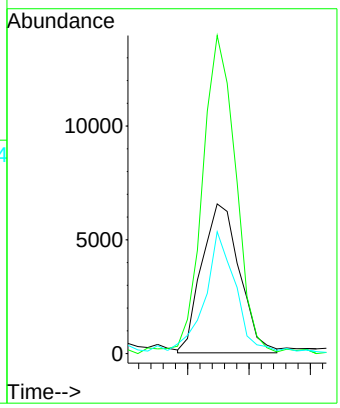
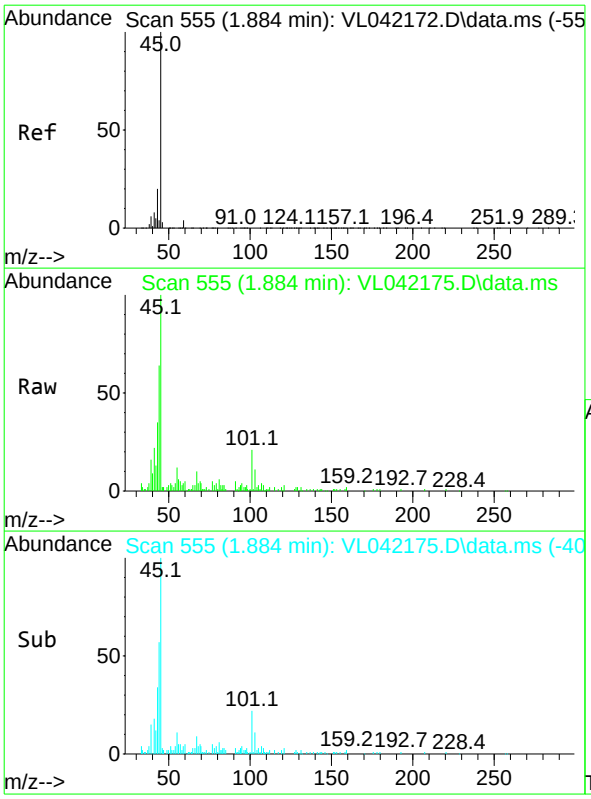


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 5634

Ion	Ratio	Lower	Upper
96	100		
61	216.6	167.6	251.4
98	81.2	53.5	80.3#

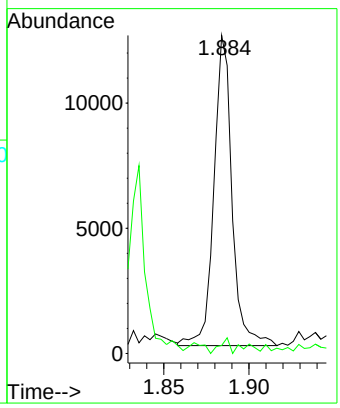




#19
Isopropyl Alcohol
Concen: 0.644 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 45 Resp: 9171

Ion	Ratio	Lower	Upper
45	100		
58	5.5	36.9	55.3#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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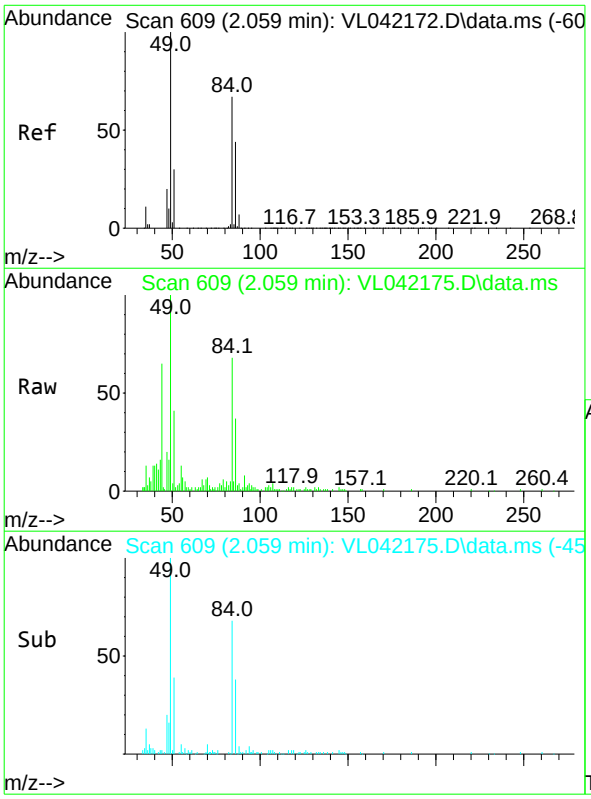
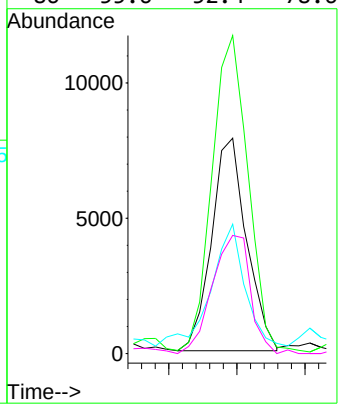
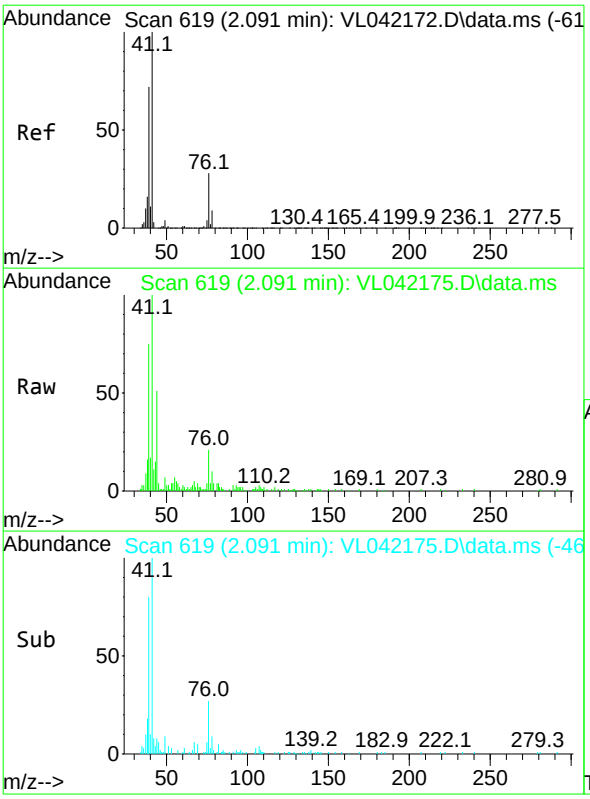


#20
Methylene Chloride
Concen: 0.599 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 5634

Ion	Ratio	Lower	Upper
84	100		
49	148.1	120.2	180.4
51	56.1	37.4	56.0#
86	55.6	52.4	78.6

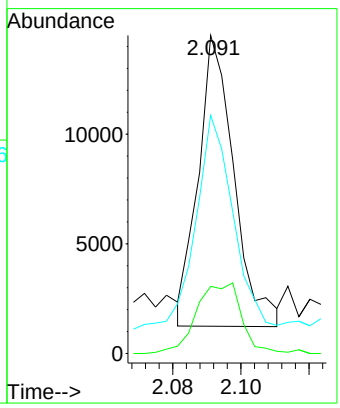




#21
Allyl Chloride
Concen: 0.541 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 41 Resp: 9632

Ion	Ratio	Lower	Upper
41	100		
76	30.9	24.1	36.1
39	88.9	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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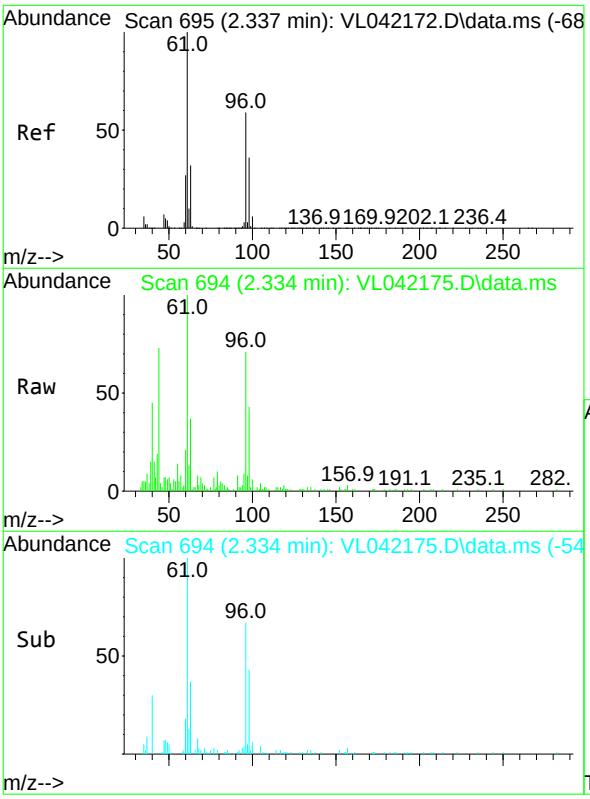
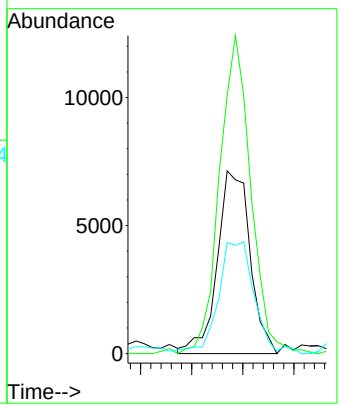
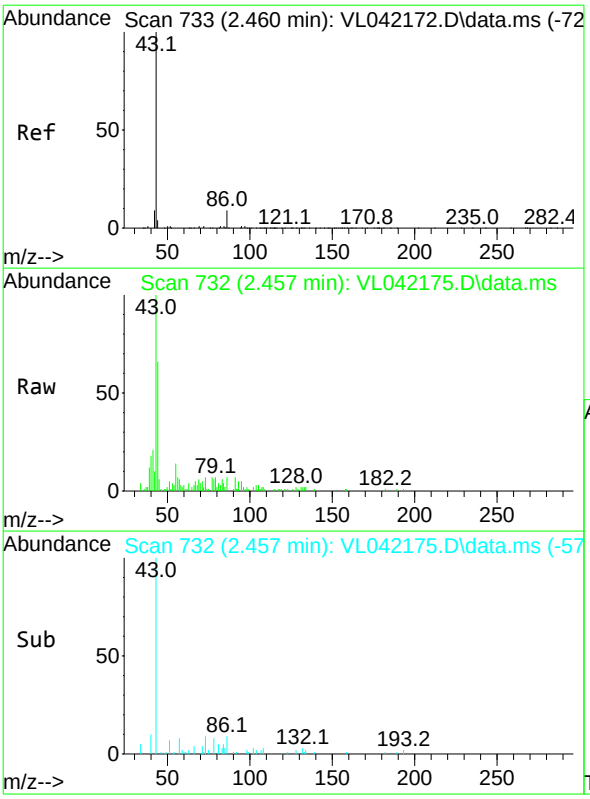


#22
trans-1,2-Dichloroethene
Concen: 0.546 ppbv
RT: 2.334 min Scan# 694
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 6353

Ion	Ratio	Lower	Upper
96	100		
61	141.3	136.6	204.8
98	59.4	49.4	74.2

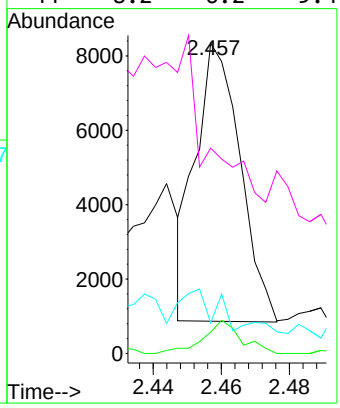




#23
Vinyl Acetate
Concen: 0.649 ppbv
RT: 2.457 min Scan# 73
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 6809

Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.5	8.3
42	3.2	8.6	13.0#
44	8.2	6.2	9.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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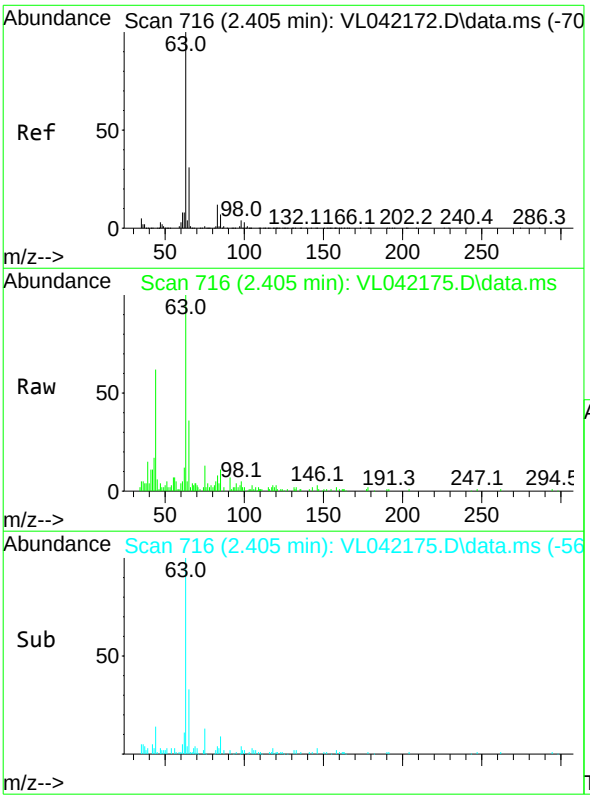
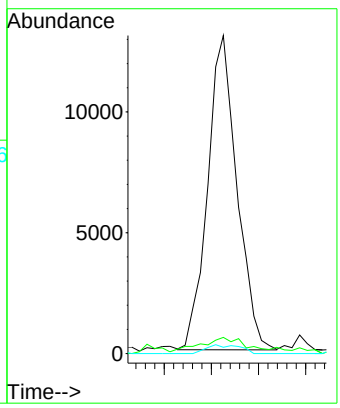
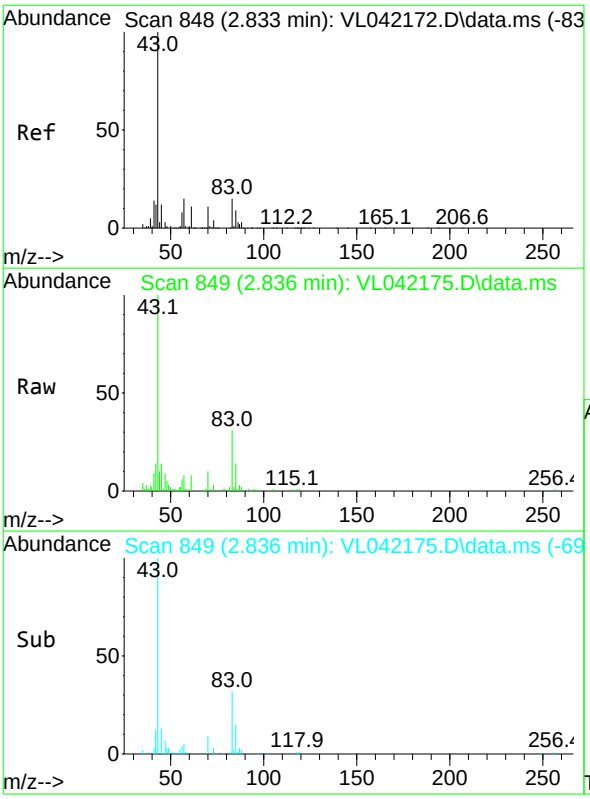


#24
1,1-Dichloroethane
Concen: 0.527 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 11258

Ion	Ratio	Lower	Upper
63	100		
98	3.7	2.3	6.8
100	2.0	1.6	4.7

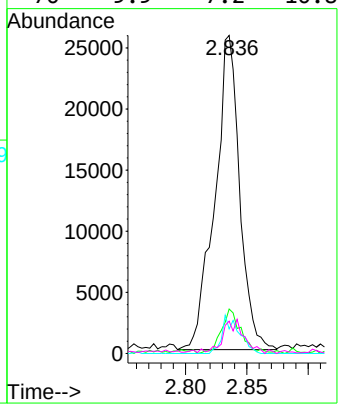




#25
Ethyl Acetate
Concen: 0.553 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 36258

Ion	Ratio	Lower	Upper
43	100		
45	11.2	8.2	12.2
61	8.3	7.3	10.9
70	9.9	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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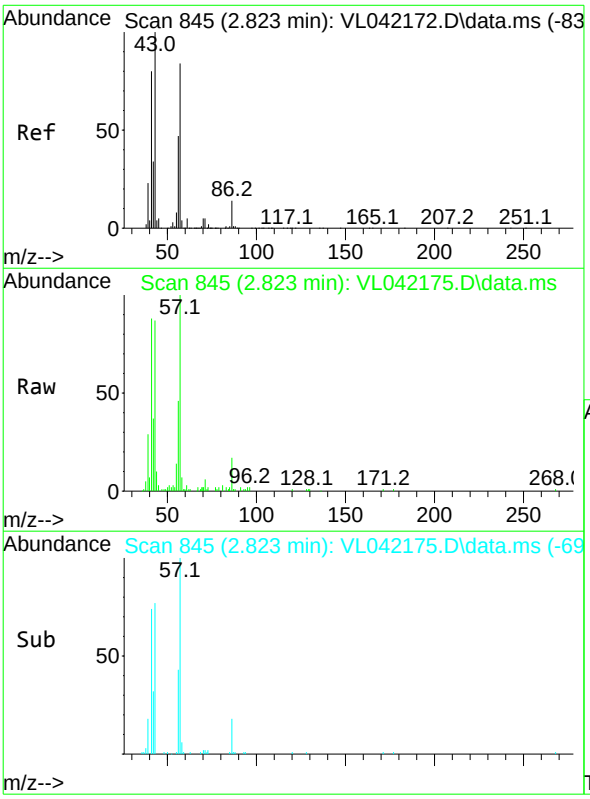
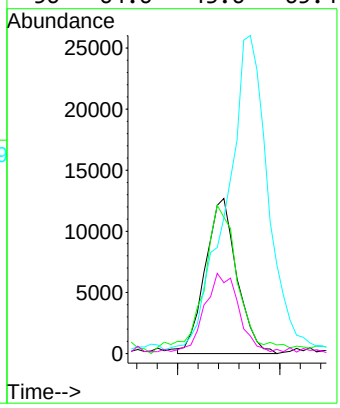
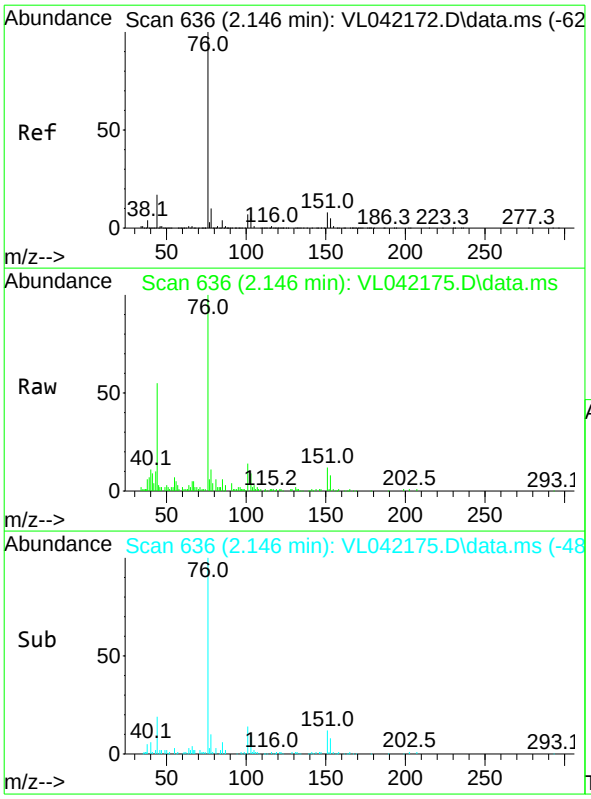


#26
Hexane
Concen: 0.538 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 13605

Ion	Ratio	Lower	Upper
57	100		
41	92.1	76.6	114.8
43	273.4	207.8	311.8
56	64.6	43.6	65.4





#27
Carbon Disulfide
Concen: 0.535 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 76 Resp: 14510

Ion	Ratio	Lower	Upper
76	100		
44	115.5	14.7	22.1#
78	14.9	9.3	13.9#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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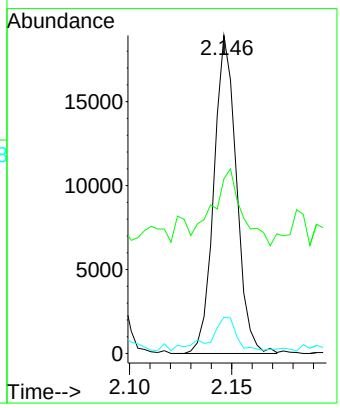
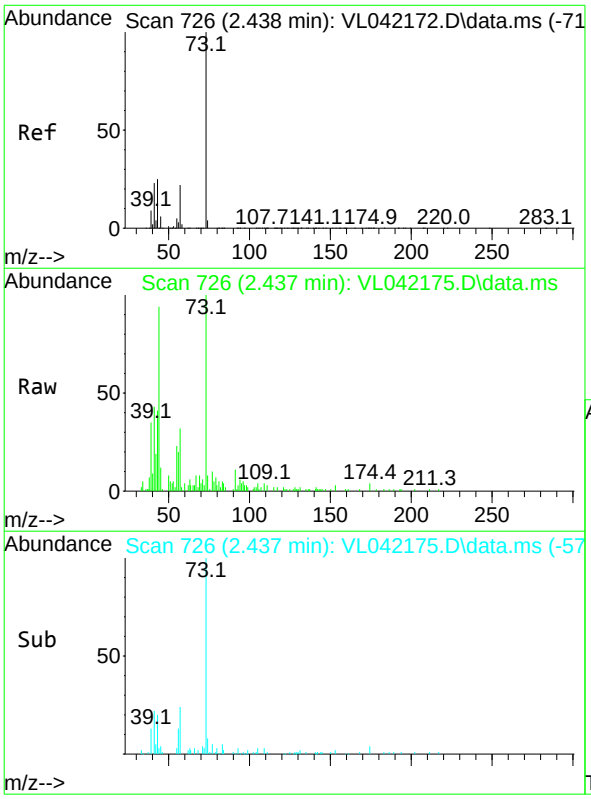
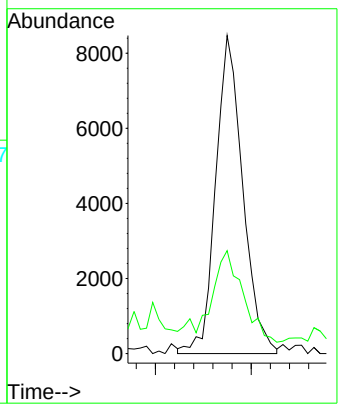


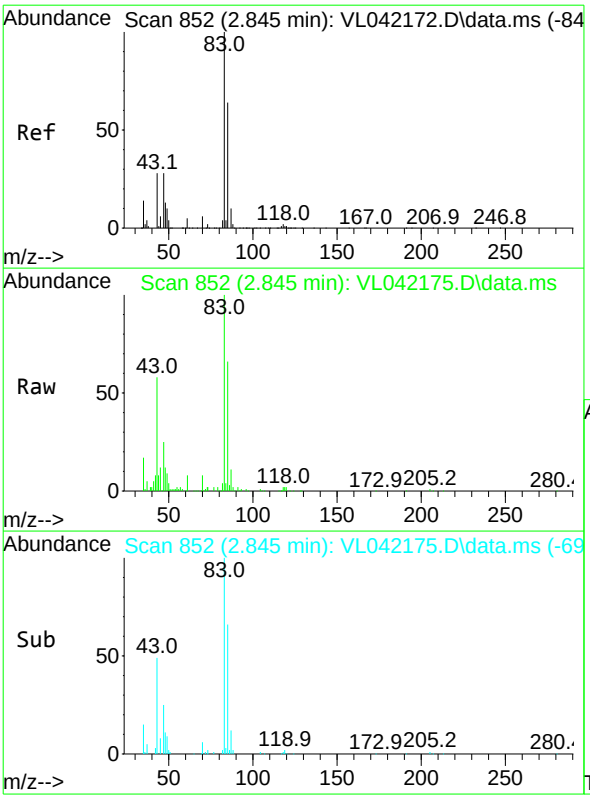


#28
Methyl tert-Butyl Ether
Concen: 0.527 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 73 Resp: 8310

Ion	Ratio	Lower	Upper
73	100		
57	31.1	20.5	30.7#

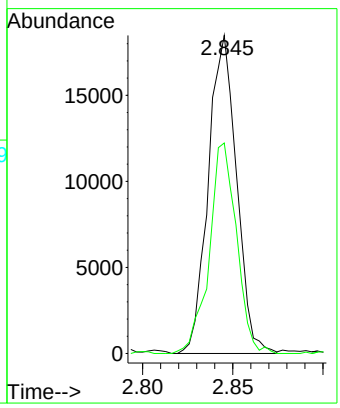




#29
Chloroform
Concen: 0.544 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20149

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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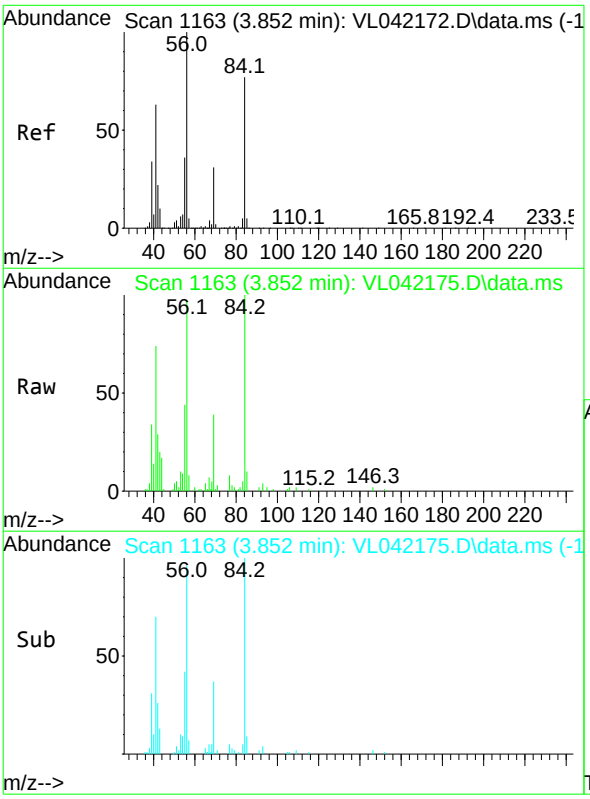
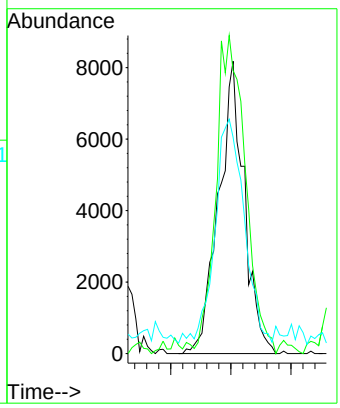
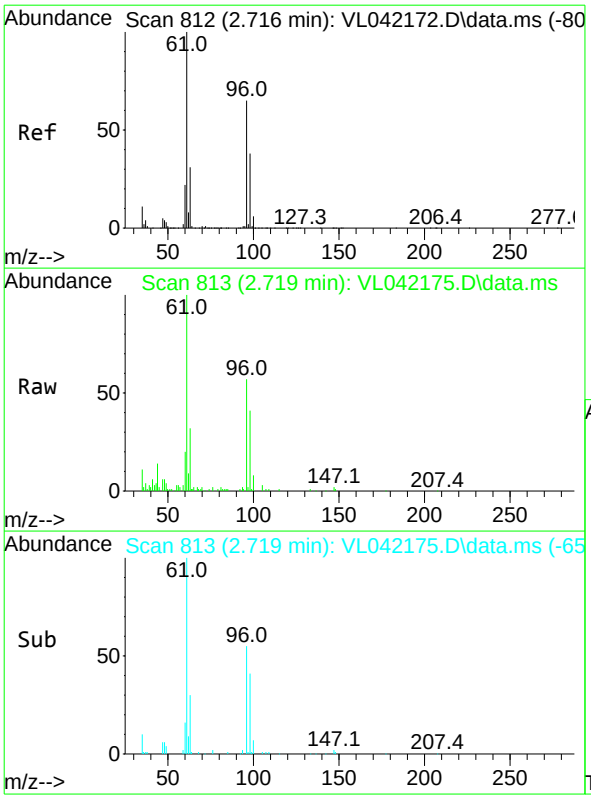


#30
Cyclohexane
Concen: 0.549 ppbv m
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 12063

Ion	Ratio	Lower	Upper
84	100		
56	126.3	102.8	154.2
41	93.5	66.5	99.7

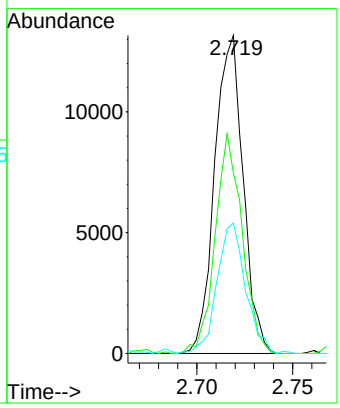




#31
cis-1,2-Dichloroethene
Concen: 0.529 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 61 Resp: 13601

Ion	Ratio	Lower	Upper
61	100		
96	56.8	51.8	77.8
98	41.0	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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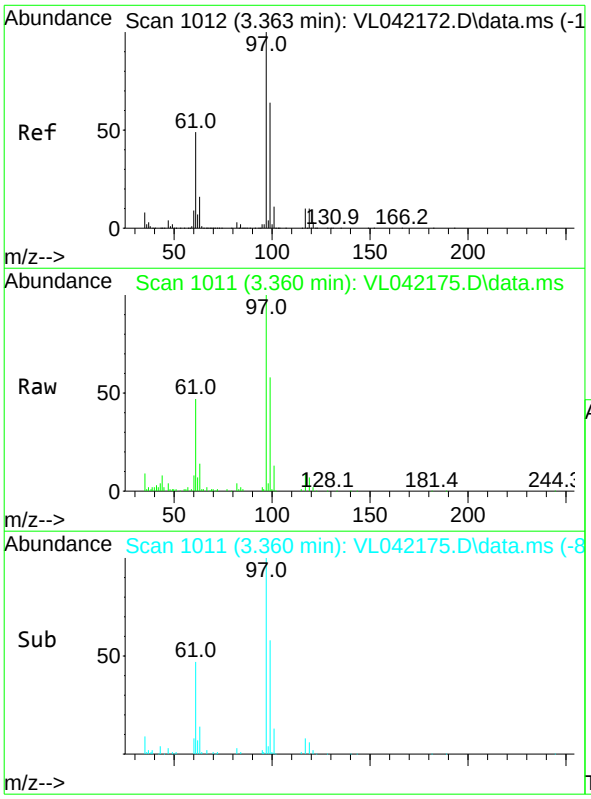
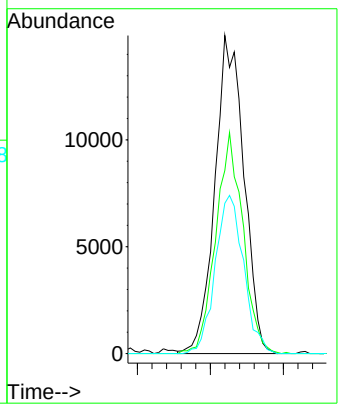
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

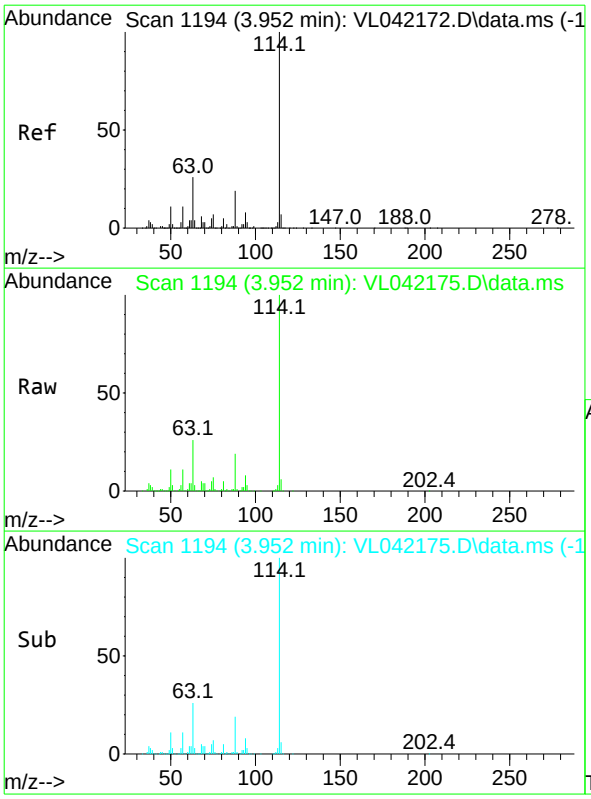


#32
1,1,1-Trichloroethane
Concen: 0.485 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 20567

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	48.6	38.7	58.1

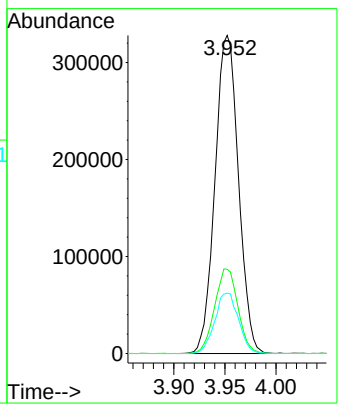




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:114 Resp: 523832

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	19.1	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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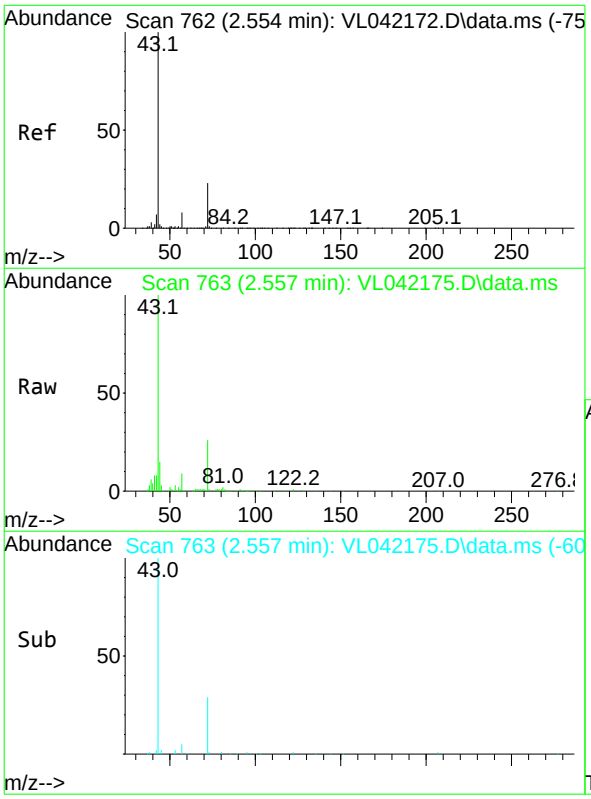
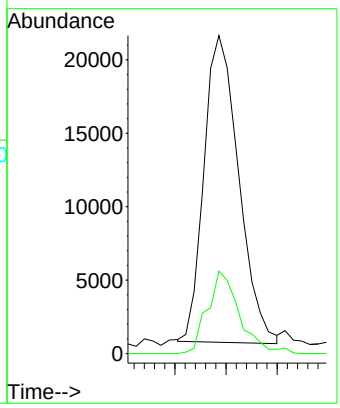
Supervised By :Mahesh Dadoda 04/03/2025

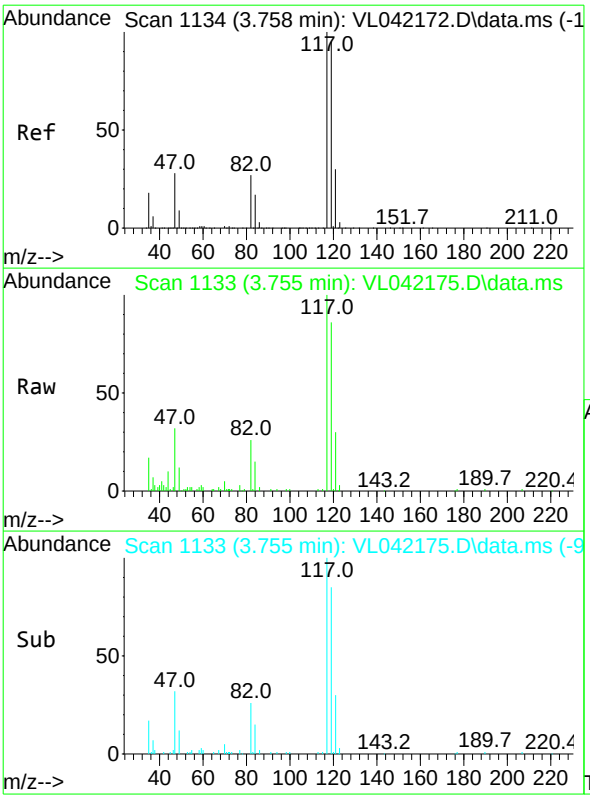


#34
2-Butanone
Concen: 0.520 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 19739

Ion	Ratio	Lower	Upper
43	100		
72	24.8	18.2	27.2





#35
Carbon Tetrachloride
Concen: 0.460 ppbv
RT: 3.755 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:117 Resp: 18558

Ion	Ratio	Lower	Upper
117	100		
119	86.4	76.2	114.2
121	30.1	24.2	36.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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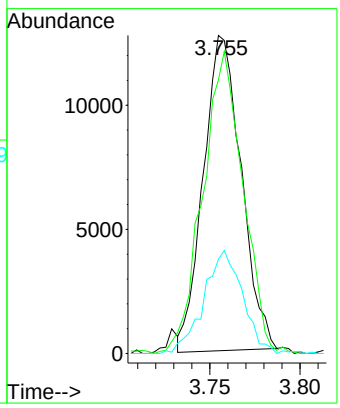
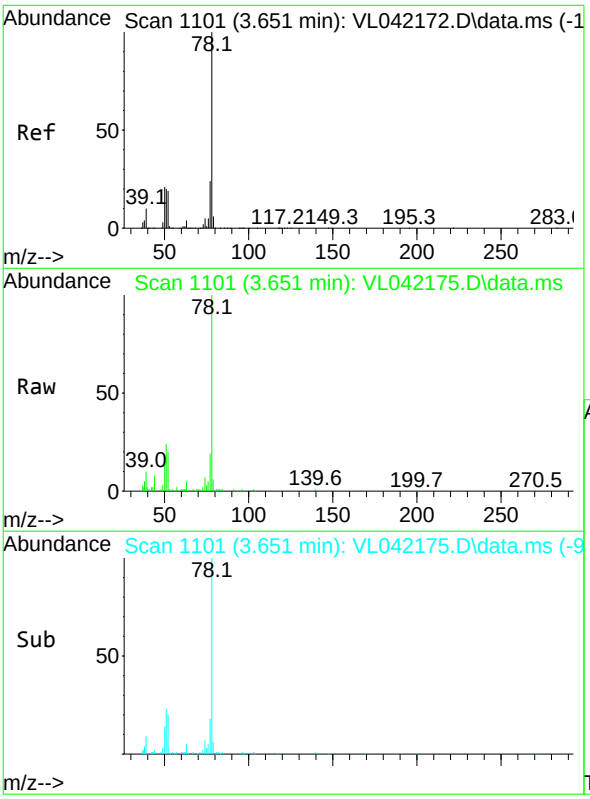
Supervised By :Mahesh Dadoda 04/03/2025

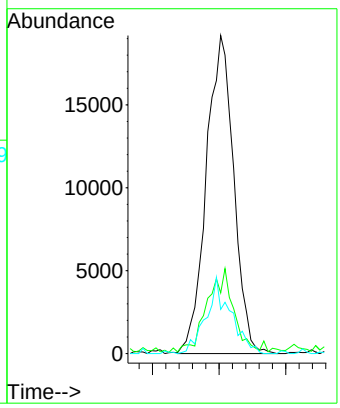


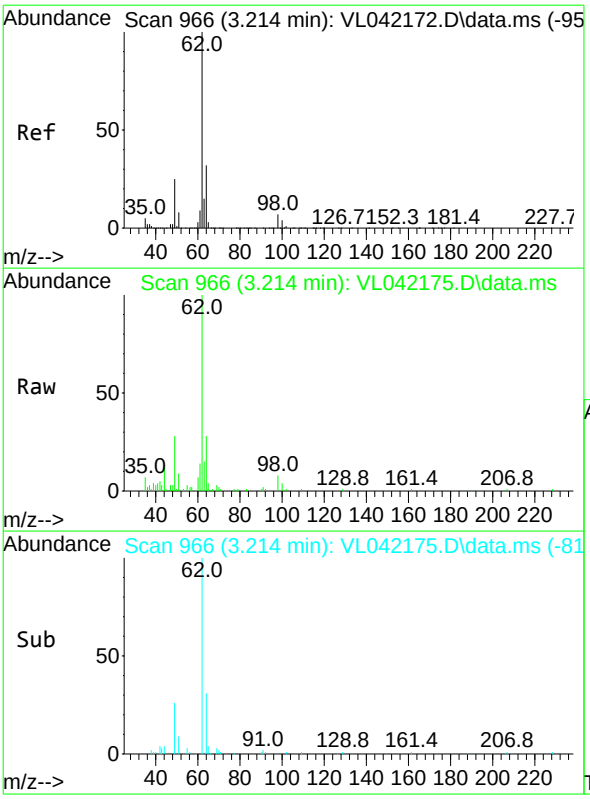


#36
Benzene
Concen: 0.529 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 78 Resp: 27488

Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	13.9	16.6	24.8#

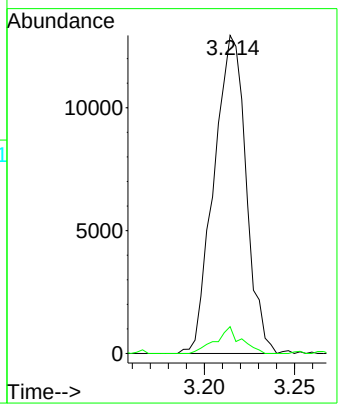




#37
1,2-Dichloroethane
Concen: 0.540 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 62 Resp: 16062

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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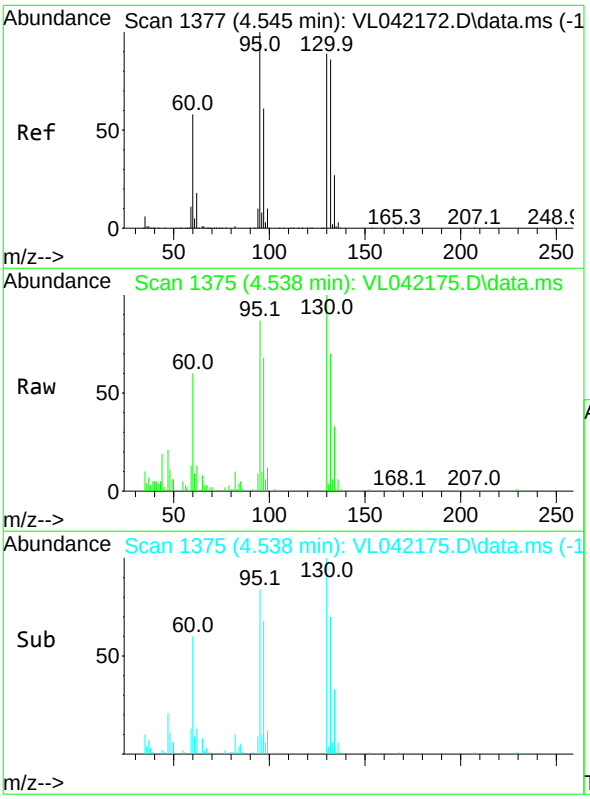
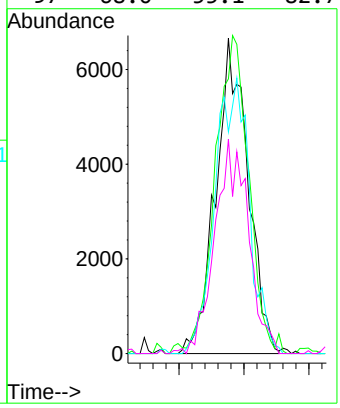
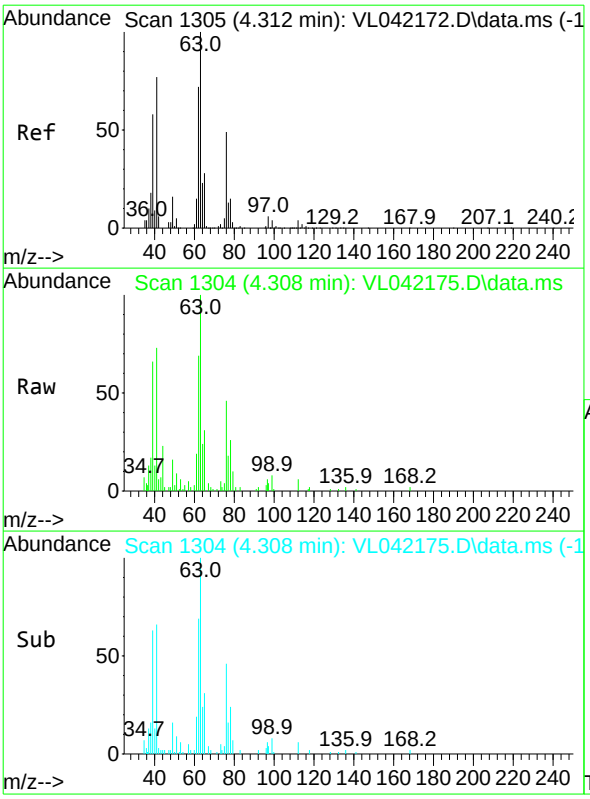


#38
Trichloroethene
Concen: 0.529 ppbv m
RT: 4.538 min Scan# 1375
Delta R.T. -0.007 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:130 Resp: 11460

Ion	Ratio	Lower	Upper
130	100		
95	87.1	89.8	134.8#
132	70.3	77.4	116.2#
97	68.0	55.1	82.7

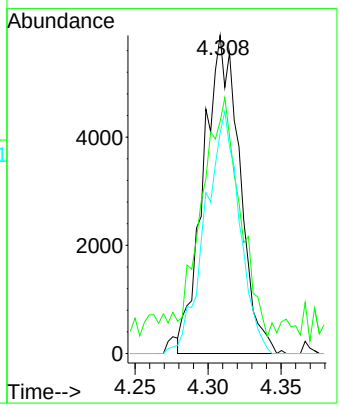




#39
1,2-Dichloropropane
Concen: 0.535 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 10123

Ion	Ratio	Lower	Upper
63	100		
41	66.4	61.7	92.5
62	69.3	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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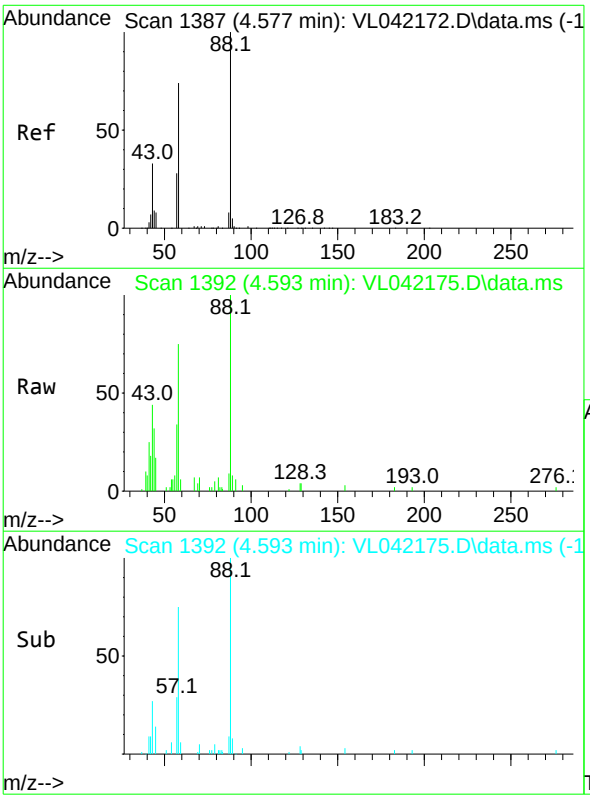
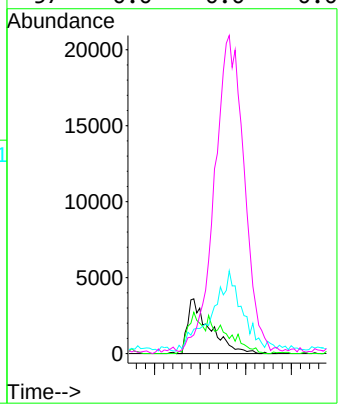
Supervised By :Mahesh Dadoda 04/03/2025

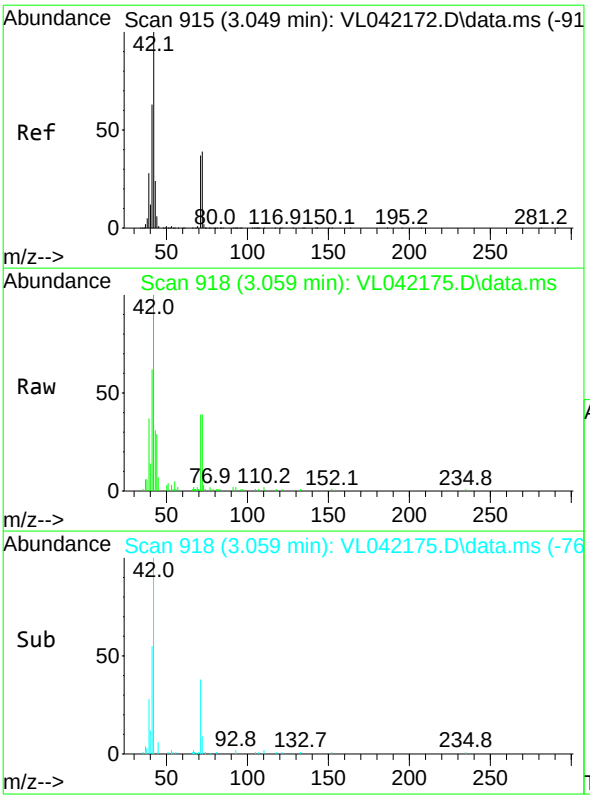


#40
1,4-Dioxane
Concen: 0.624 ppbv m
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 88 Resp: 6121

Ion	Ratio	Lower	Upper
88	100		
58	111.2	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

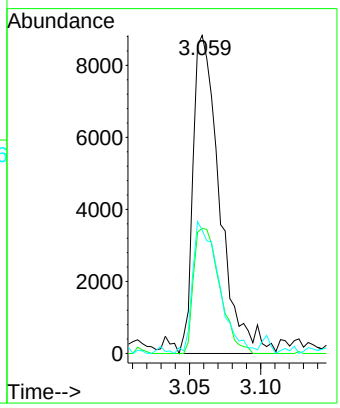




#41
Tetrahydrofuran
Concen: 0.533 ppbv m
RT: 3.059 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 42 Resp: 11509

Ion	Ratio	Lower	Upper
42	100		
72	38.4	31.4	47.0
71	40.7	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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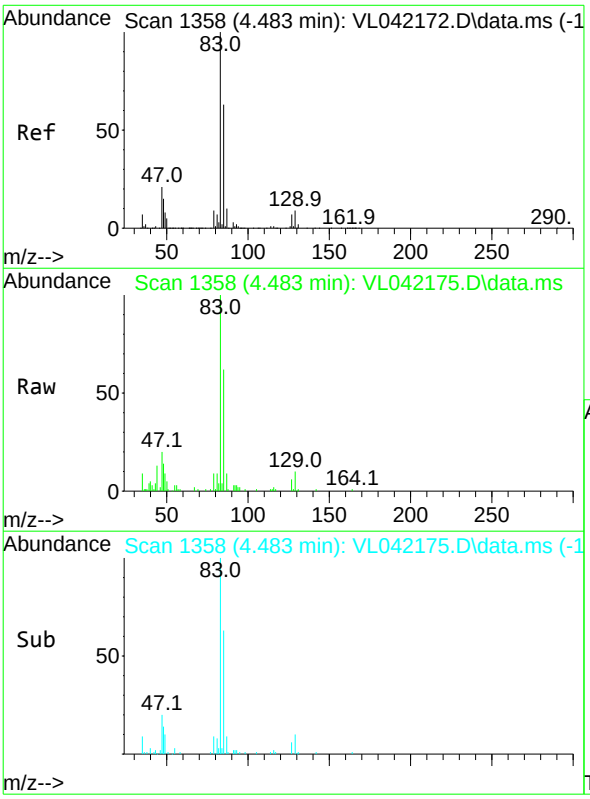
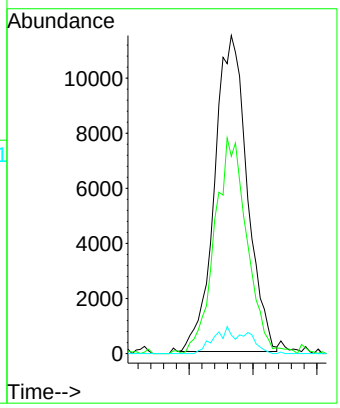
Supervised By :Mahesh Dadoda 04/03/2025

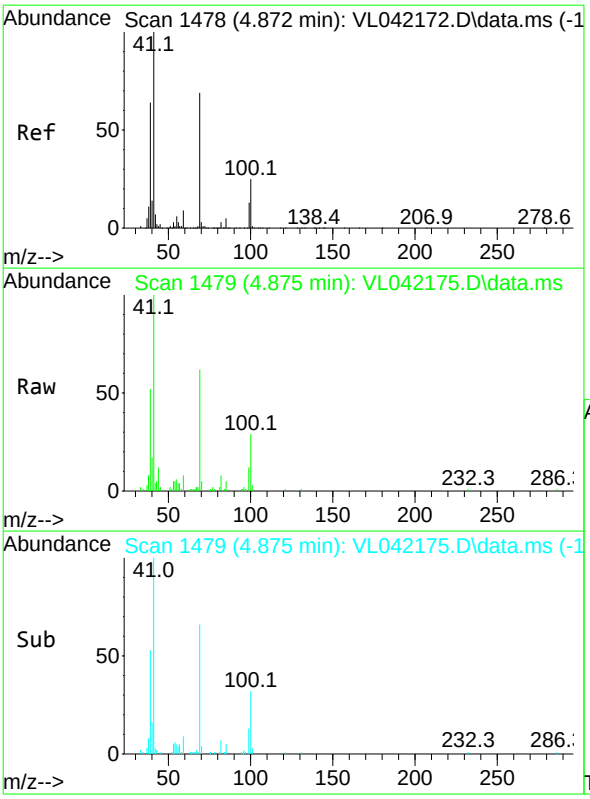


#42
Bromodichloromethane
Concen: 0.497 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20374

Ion	Ratio	Lower	Upper
83	100		
85	61.6	50.5	75.7
127	5.9	5.9	8.9#

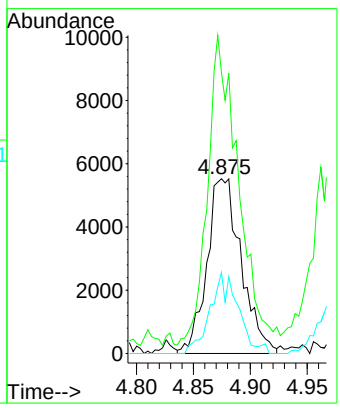




#43
Methyl Methacrylate
Concen: 0.528 ppbv m
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 69 Resp: 11583

Ion	Ratio	Lower	Upper
69	100		
41	150.3	123.8	185.6
100	37.9	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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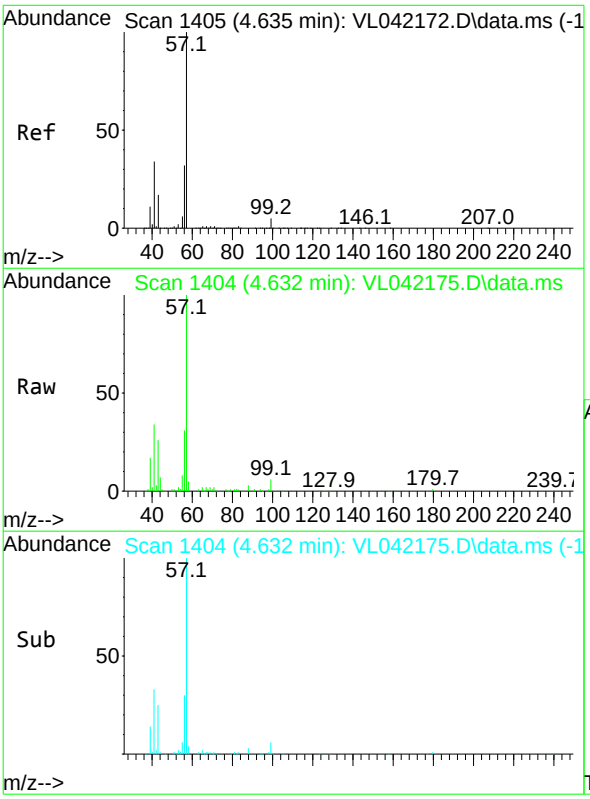
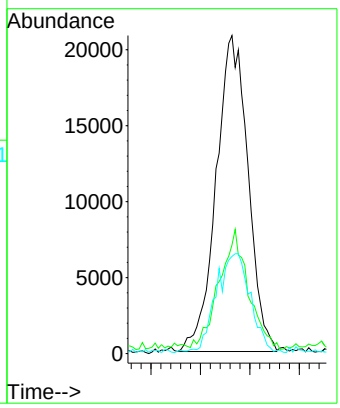
Supervised By :Mahesh Dadoda 04/03/2025

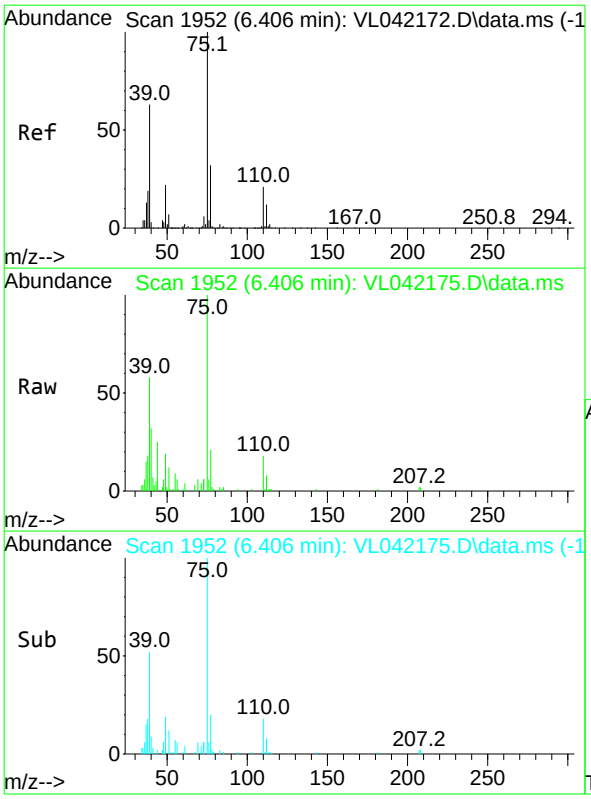


#44
2,2,4-Trimethylpentane
Concen: 0.532 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 46646

Ion	Ratio	Lower	Upper
57	100		
41	36.7	26.8	40.2
56	34.3	25.6	38.4

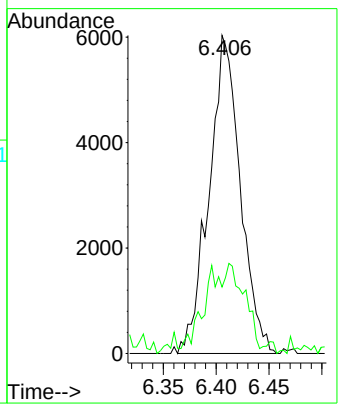




#45
t-1,3-Dichloropropene
Concen: 0.526 ppbv
RT: 6.406 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 12404

Ion	Ratio	Lower	Upper
75	100		
77	20.9	26.0	39.0#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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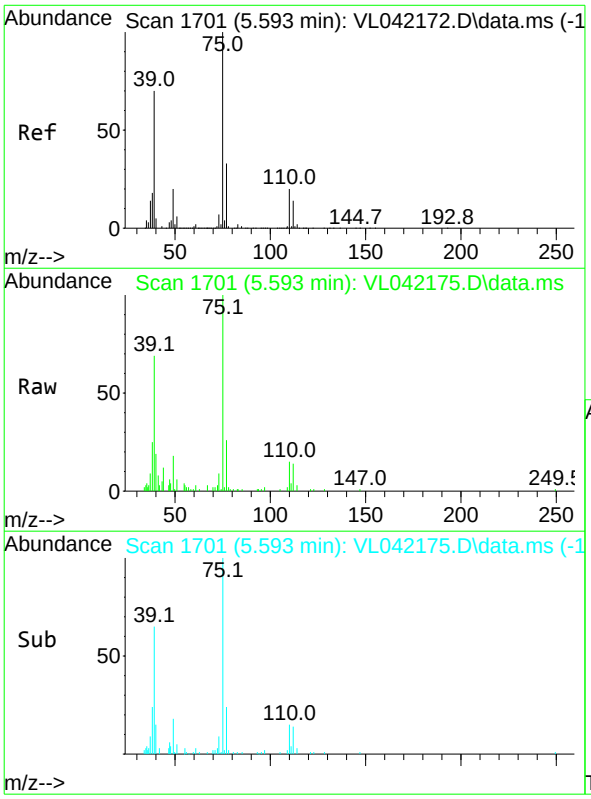
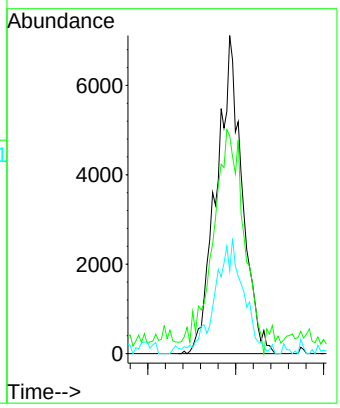
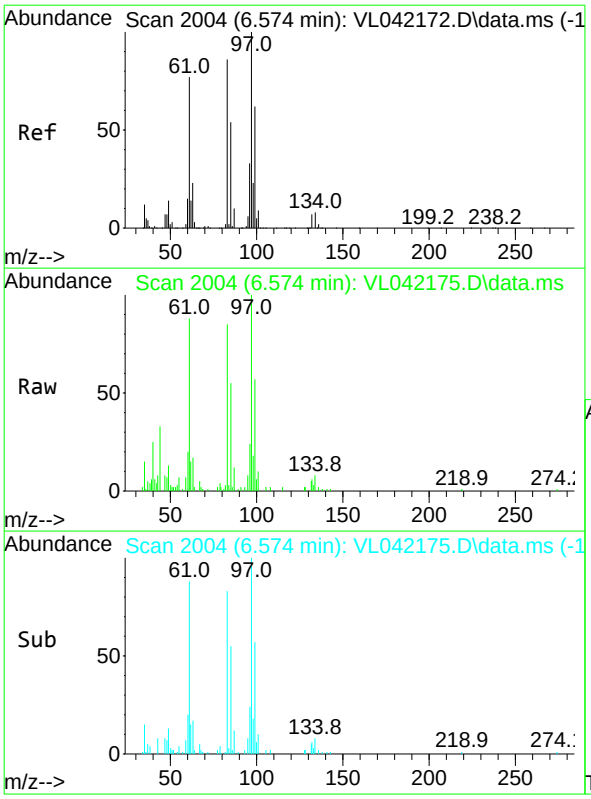


#46
cis-1,3-Dichloropropene
Concen: 0.497 ppbv m
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 14374

Ion	Ratio	Lower	Upper
75	100		
39	68.5	55.8	83.6
77	26.1	26.0	39.0

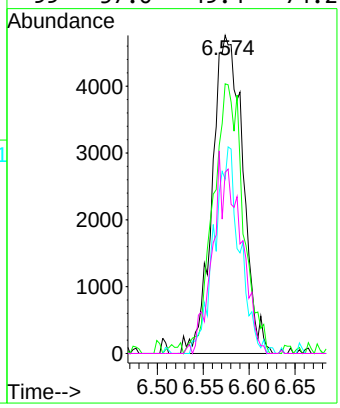




#47
1,1,2-Trichloroethane
Concen: 0.549 ppbv m
RT: 6.574 min Scan# 20
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 10972

Ion	Ratio	Lower	Upper
97	100		
83	84.8	69.2	103.8
85	54.9	43.1	64.7
99	57.0	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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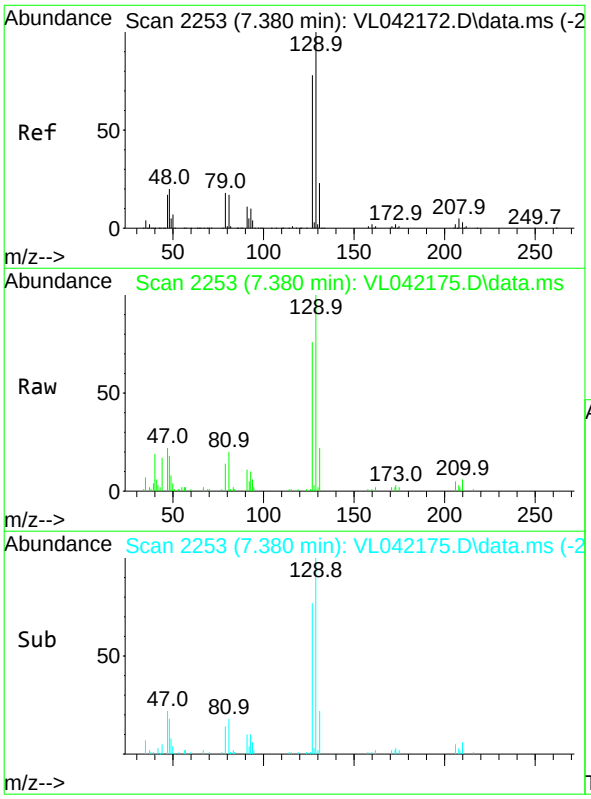
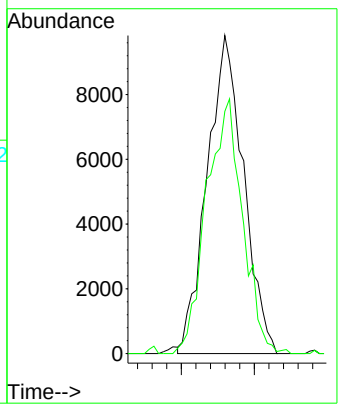
Supervised By :Mahesh Dadoda 04/03/2025

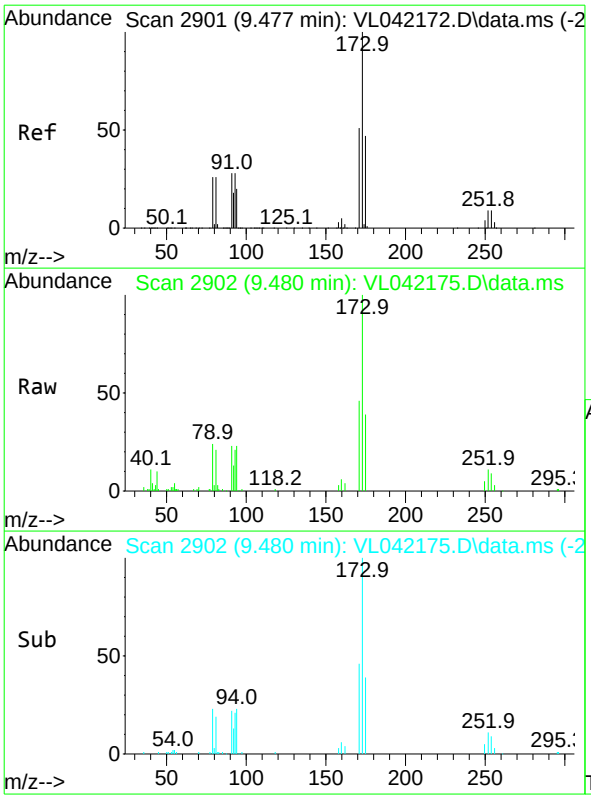


#48
Dibromochloromethane
Concen: 0.503 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:129 Resp: 17042

Ion	Ratio	Lower	Upper
129	100		
127	79.4	39.1	117.2

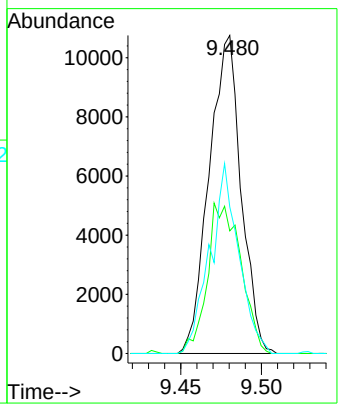




#49
Bromoform
Concen: 0.487 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:173 Resp: 14828

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.8	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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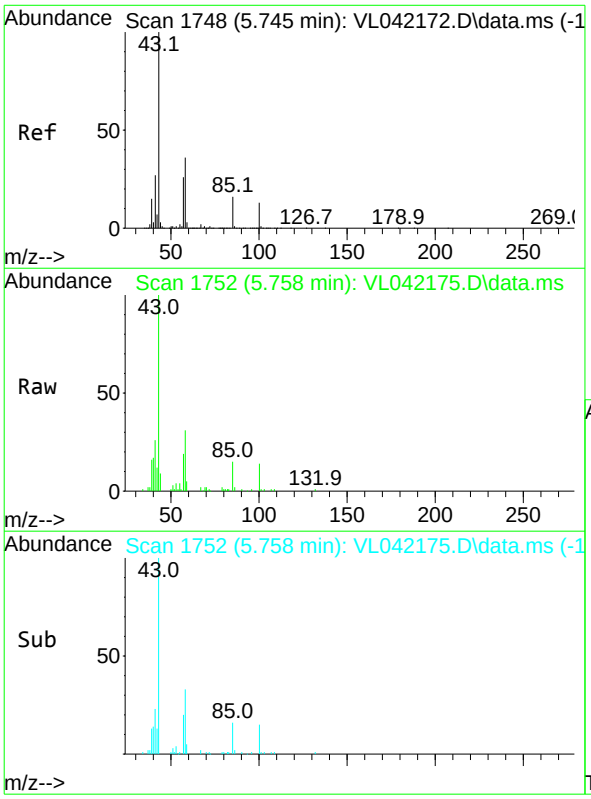
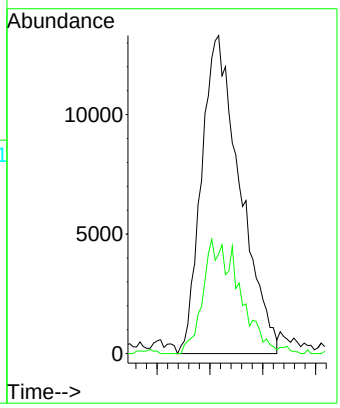
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

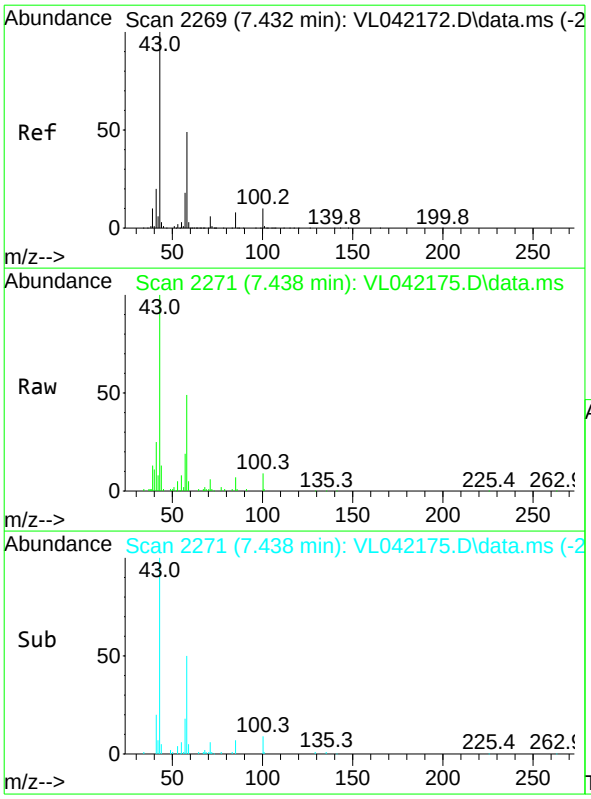


#50
4-Methyl-2-Pentanone
Concen: 0.559 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.013 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 33674

Ion	Ratio	Lower	Upper
43	100		
58	34.4	29.0	43.6

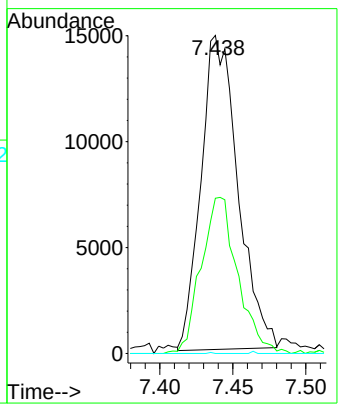




#51
2-Hexanone
Concen: 0.523 ppbv
RT: 7.438 min Scan# 22
Delta R.T. 0.006 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 26154

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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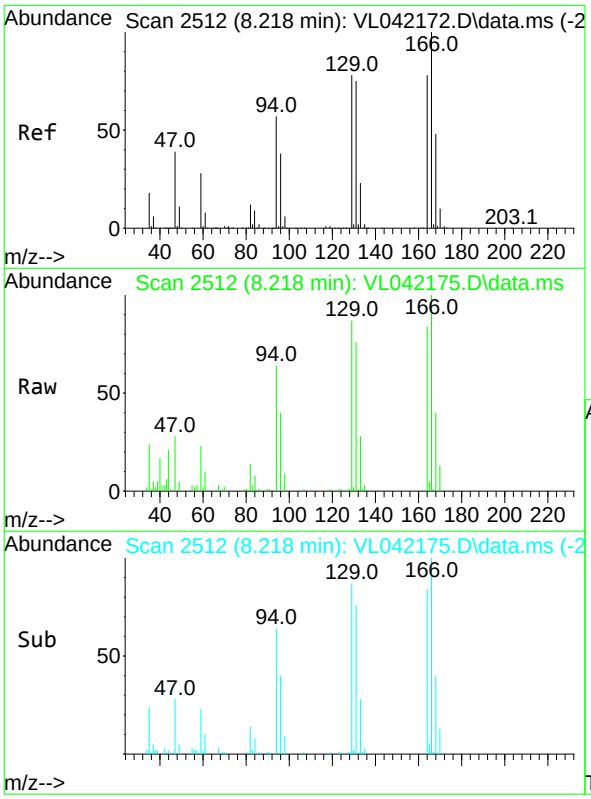
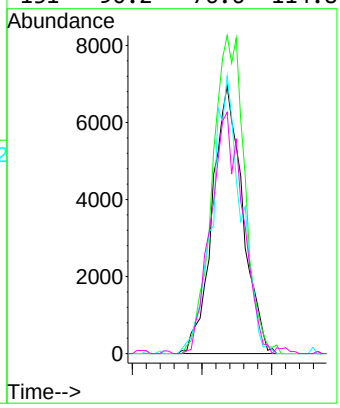
Supervised By :Mahesh Dadoda 04/03/2025

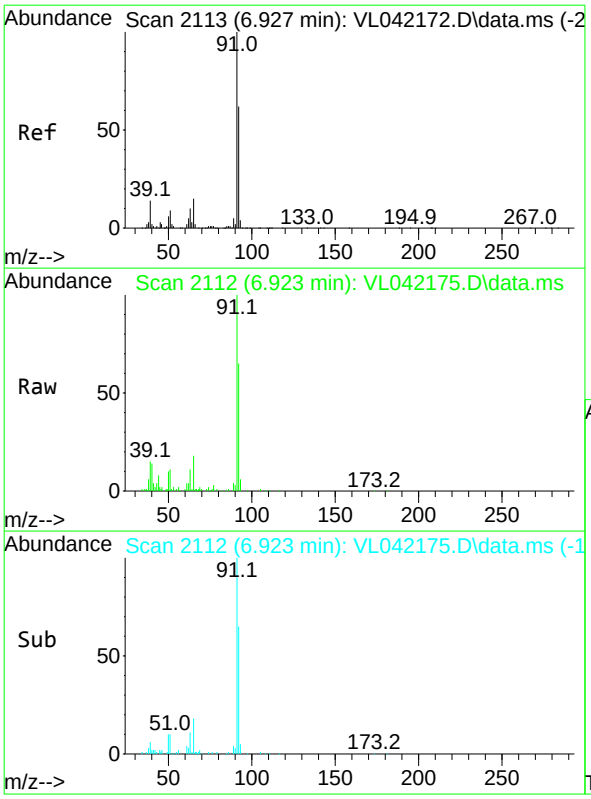


#52
Tetrachloroethene
Concen: 0.510 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:164 Resp: 10502

Ion	Ratio	Lower	Upper
164	100		
166	118.9	102.5	153.7
129	103.8	79.8	119.8
131	90.2	76.6	114.8

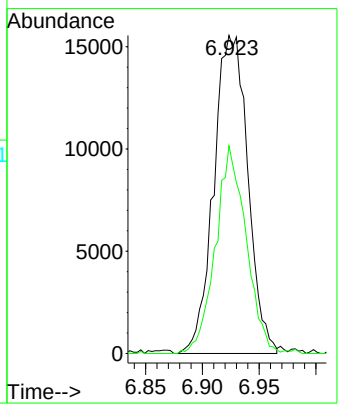




#53
Toluene
Concen: 0.527 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 32444

Ion	Ratio	Lower	Upper
91	100		
92	58.9	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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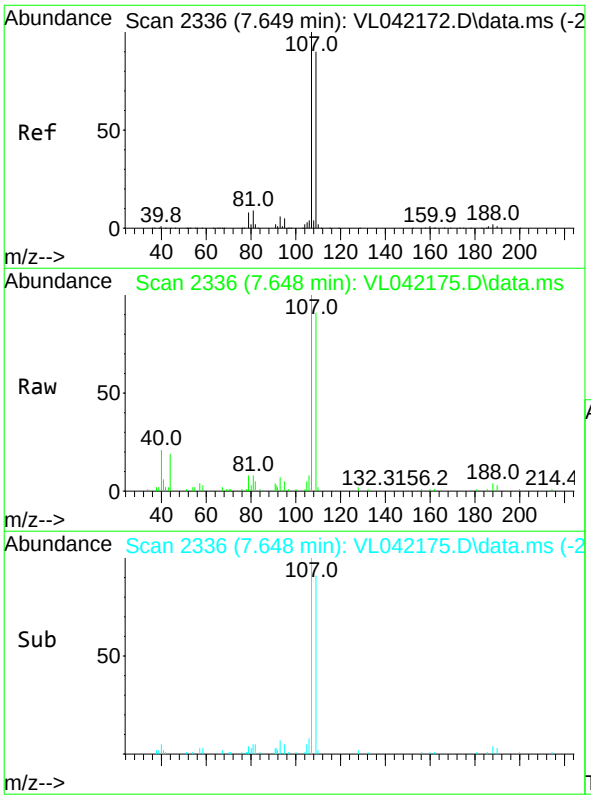
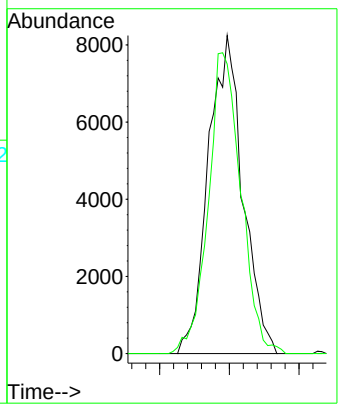
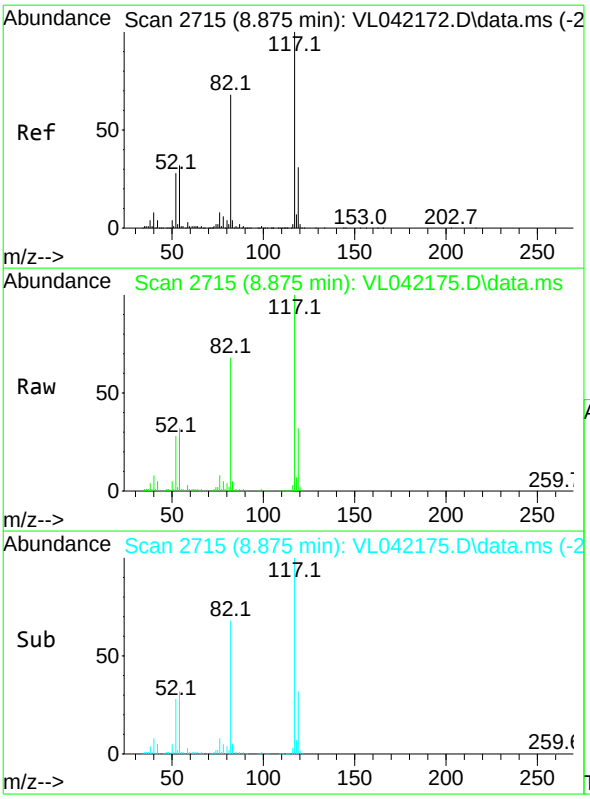


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:107 Resp: 14220

Ion	Ratio	Lower	Upper
107	100		
109	89.1	72.2	108.4

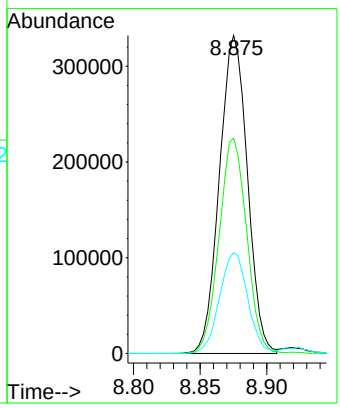




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:117 Resp: 485078

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.7	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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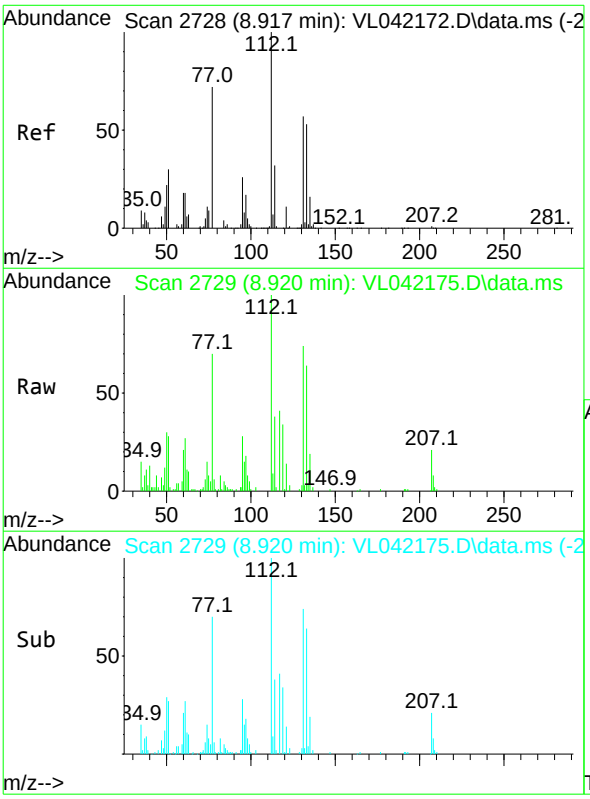
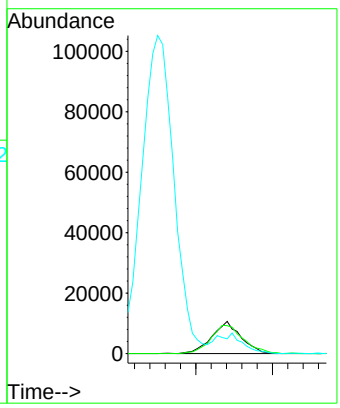
Supervised By :Mahesh Dadoda 04/03/2025

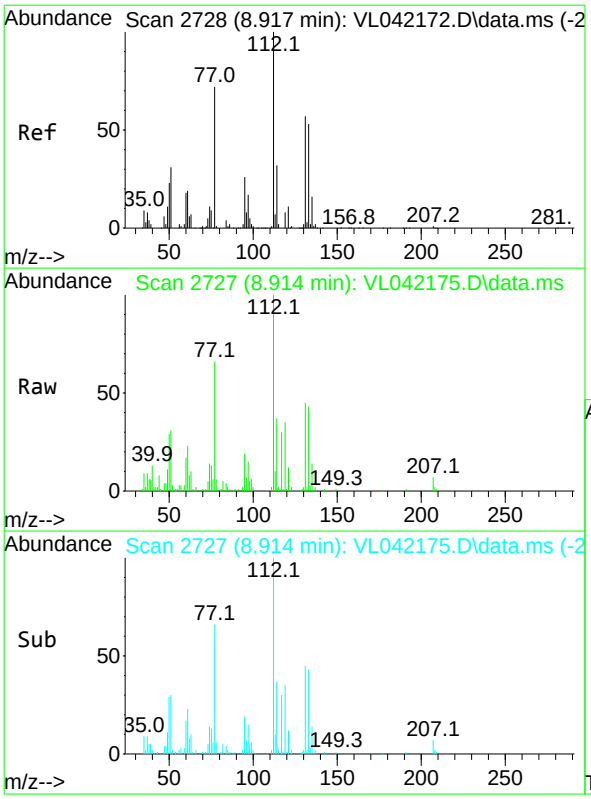


#56
1,1,1,2-Tetrachloroethane
Concen: 0.523 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:131 Resp: 13959

Ion	Ratio	Lower	Upper
131	100		
133	99.6	76.6	114.8
119	1170.3	49.8	74.6#

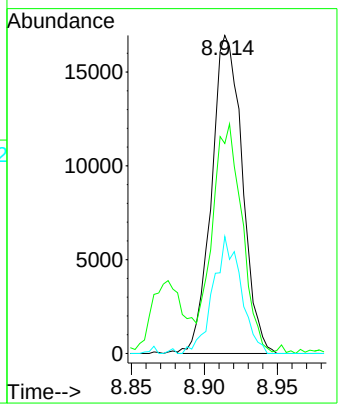




#57
Chlorobenzene
Concen: 0.540 ppbv
RT: 8.914 min Scan# 27
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:112 Resp: 24826

Ion	Ratio	Lower	Upper
112	100		
77	65.1	58.2	87.2
114	36.8	29.1	35.5#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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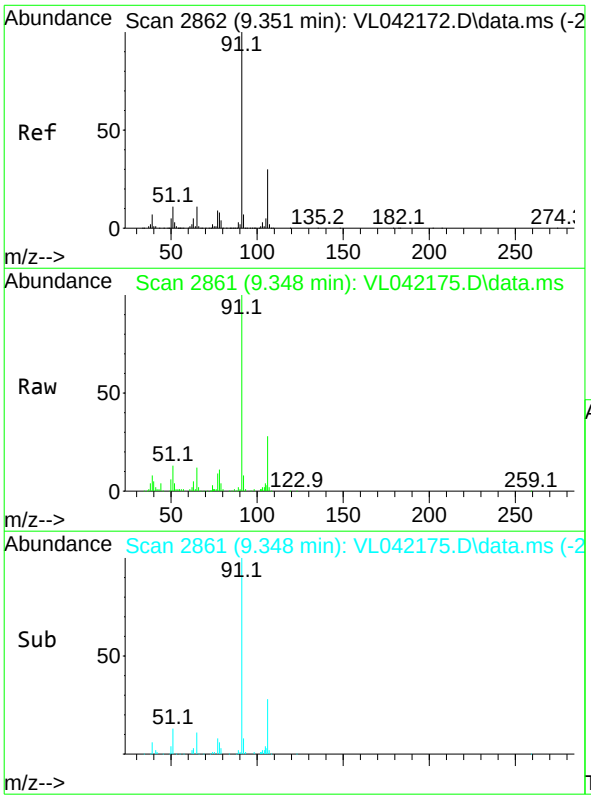
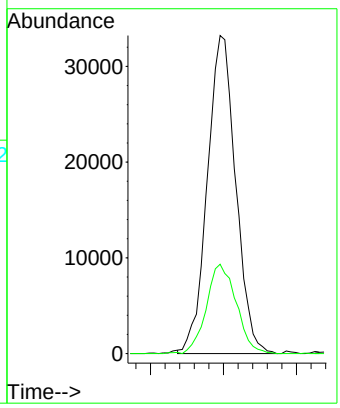
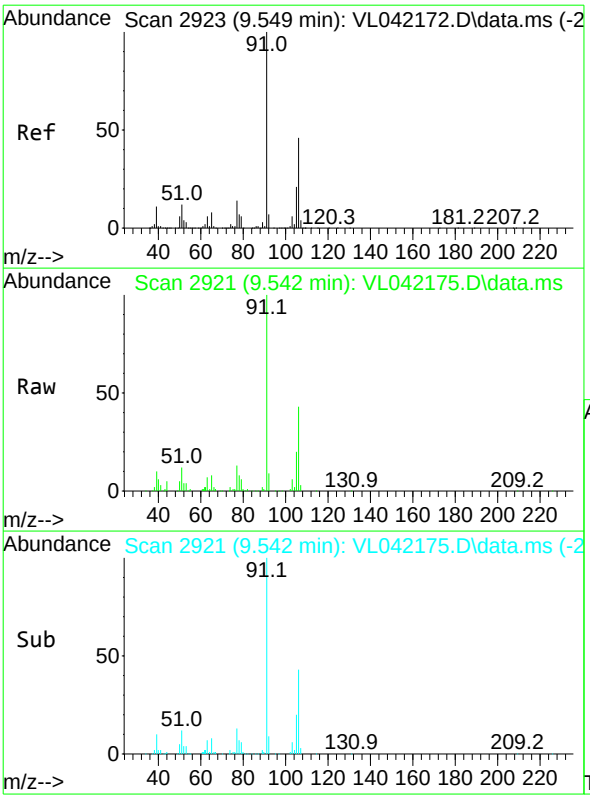


#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 44862

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.2	36.2

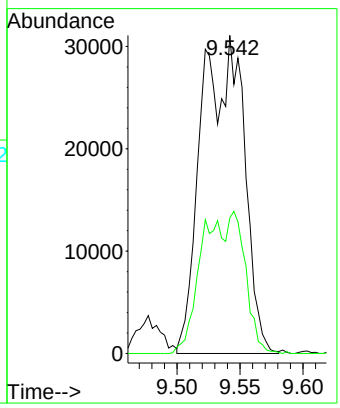




#59
m/p-Xylene
Concen: 1.060 ppbv m
RT: 9.542 min Scan# 29
Delta R.T. -0.007 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 73028

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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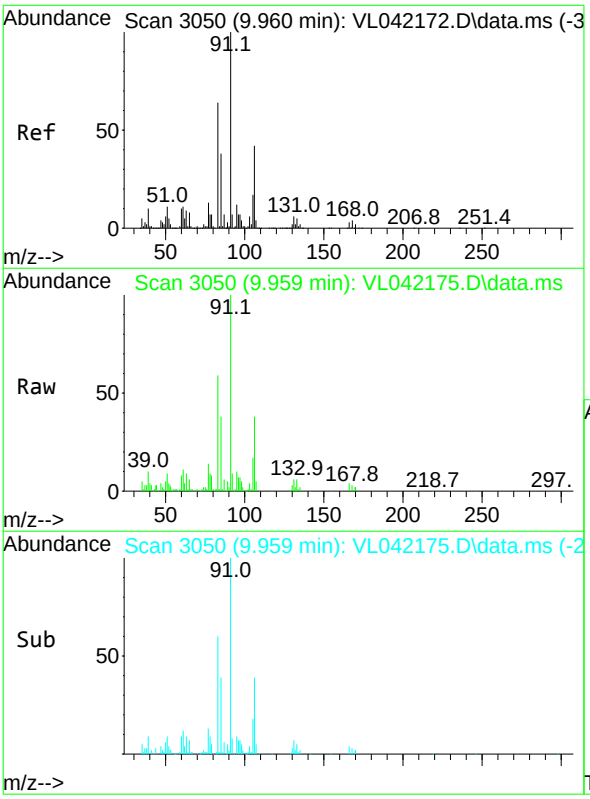
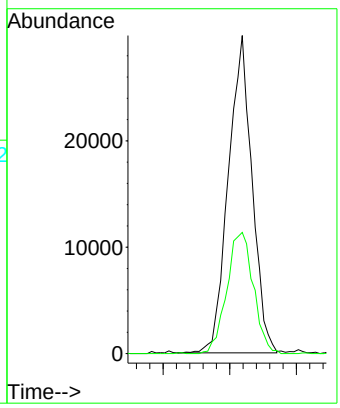
Supervised By :Mahesh Dadoda 04/03/2025

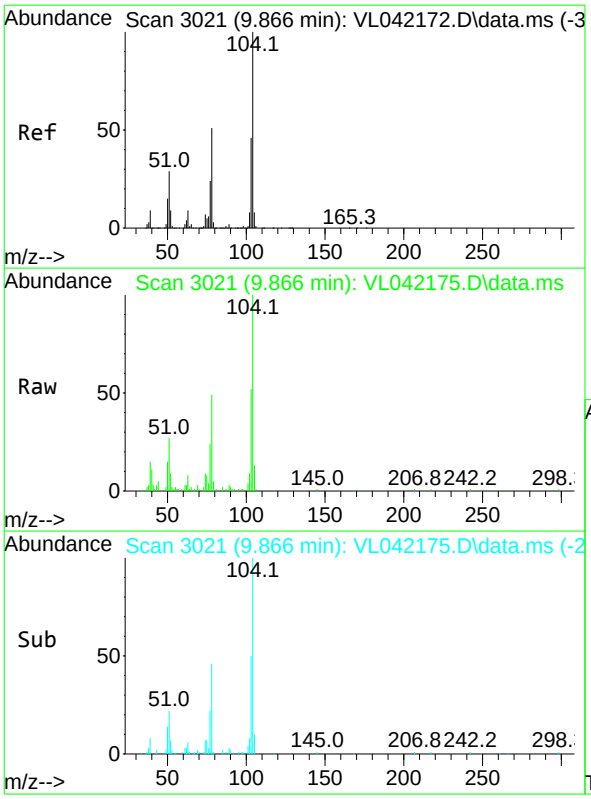


#60
o-Xylene
Concen: 0.535 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 36879

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5

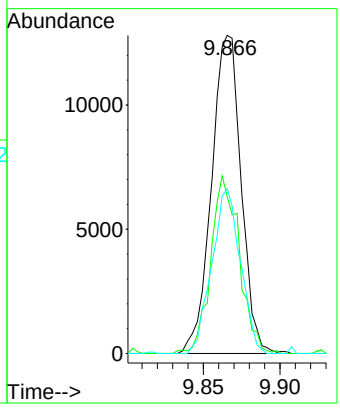




#61
Styrene
Concen: 0.504 ppbv
RT: 9.866 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:104 Resp: 17198

Ion	Ratio	Lower	Upper
104	100		
78	53.7	41.8	62.6
103	50.2	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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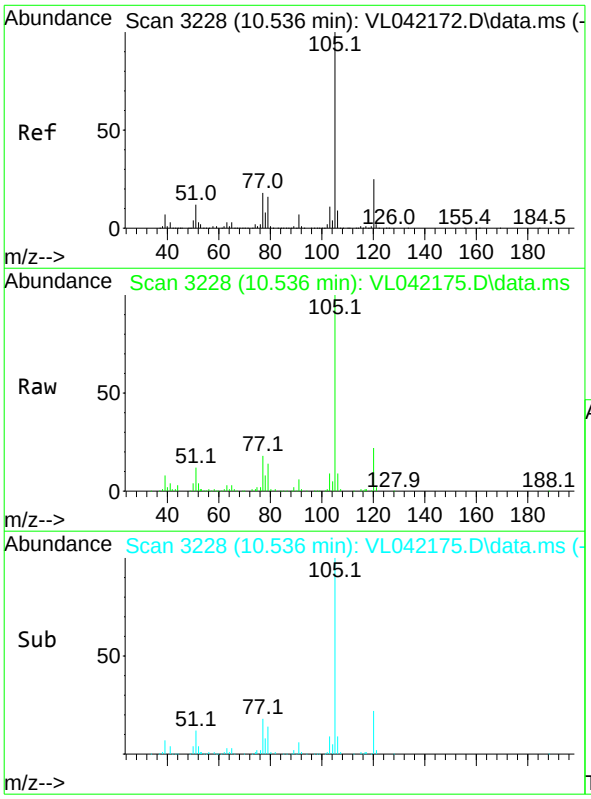
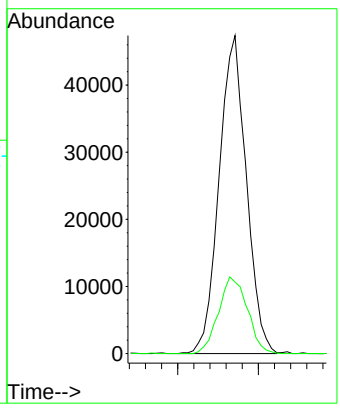
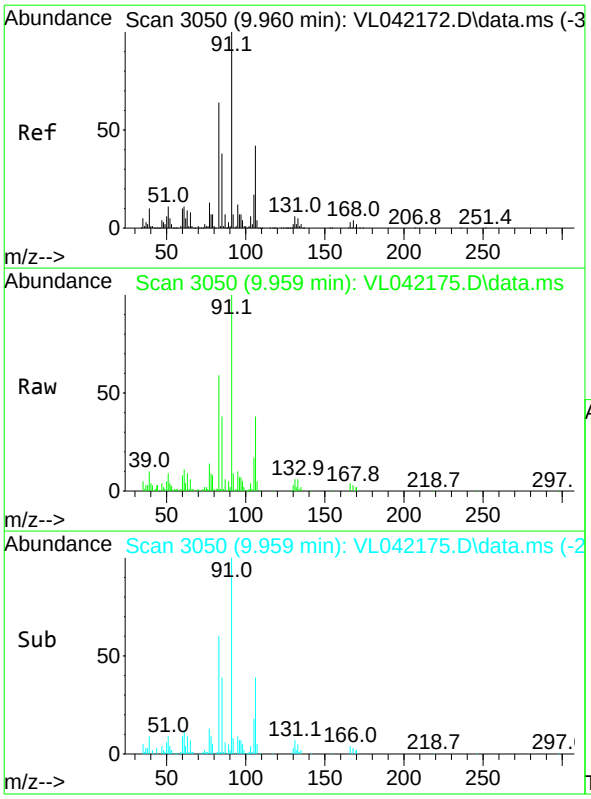


#62
Isopropylbenzene
Concen: 0.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 55531

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9

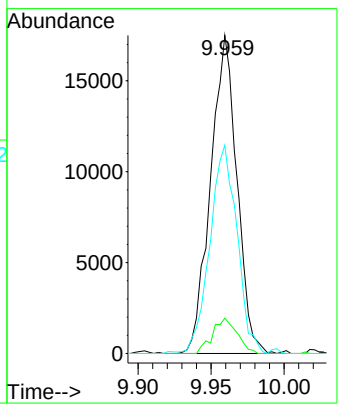




#63
1,1,2,2-Tetrachloroethane
Concen: 0.525 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 21989

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	68.1	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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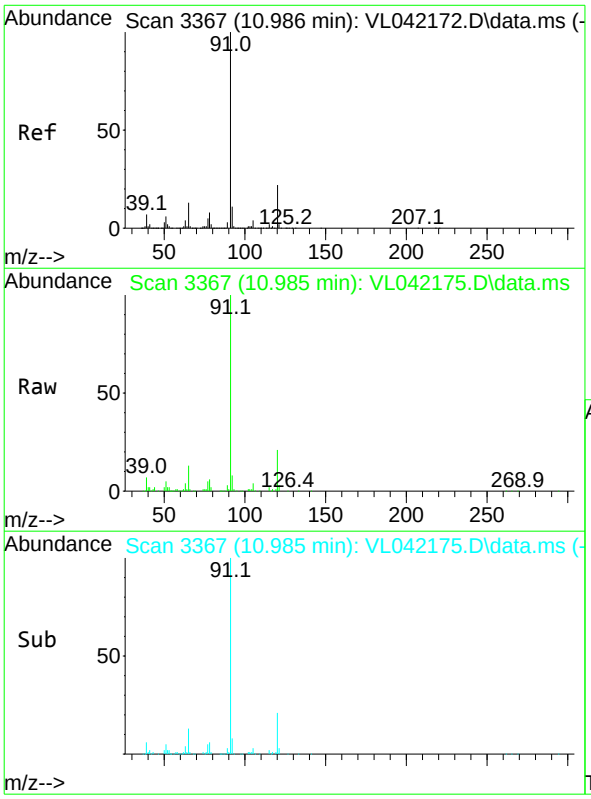
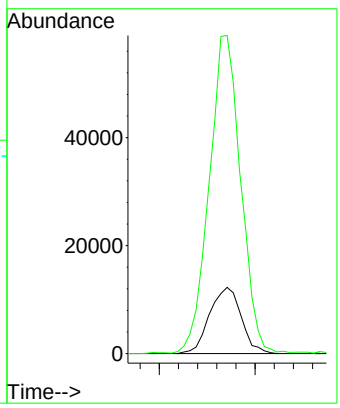
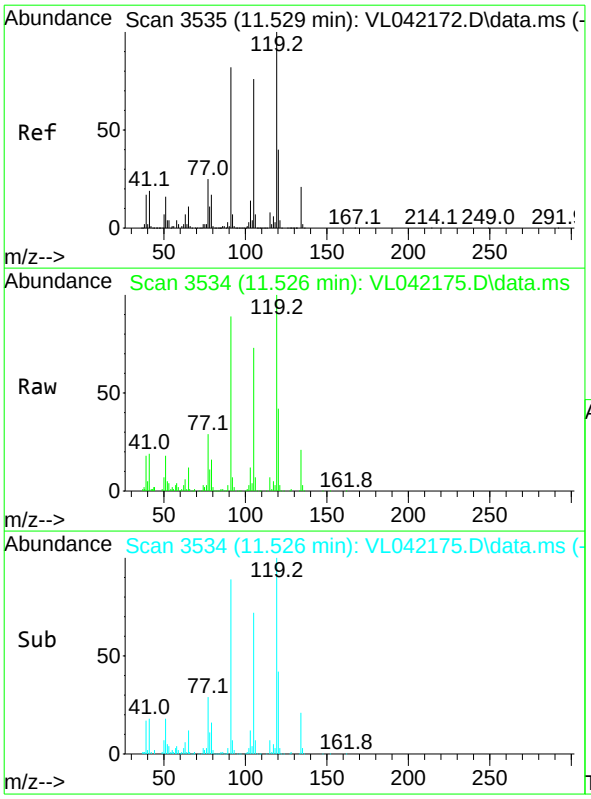


#64
n-propylbenzene
Concen: 0.528 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:120 Resp: 14030

Ion	Ratio	Lower	Upper
120	100		
91	483.1	376.9	565.3

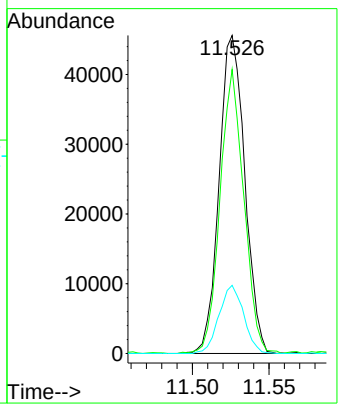




#65
tert-Butylbenzene
Concen: 0.557 ppbv
RT: 11.526 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:119 Resp: 53115

Ion	Ratio	Lower	Upper
119	100		
91	82.9	66.0	99.0
134	20.6	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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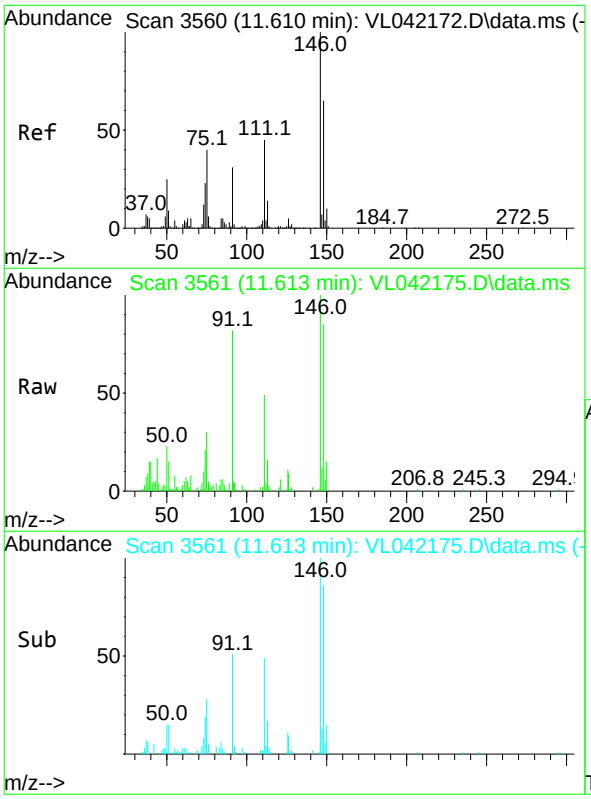
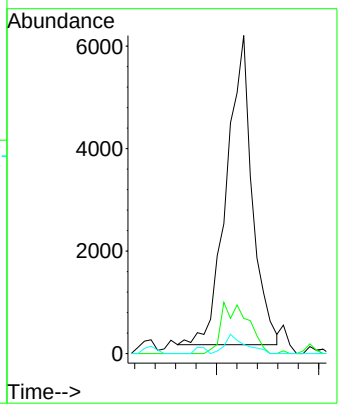
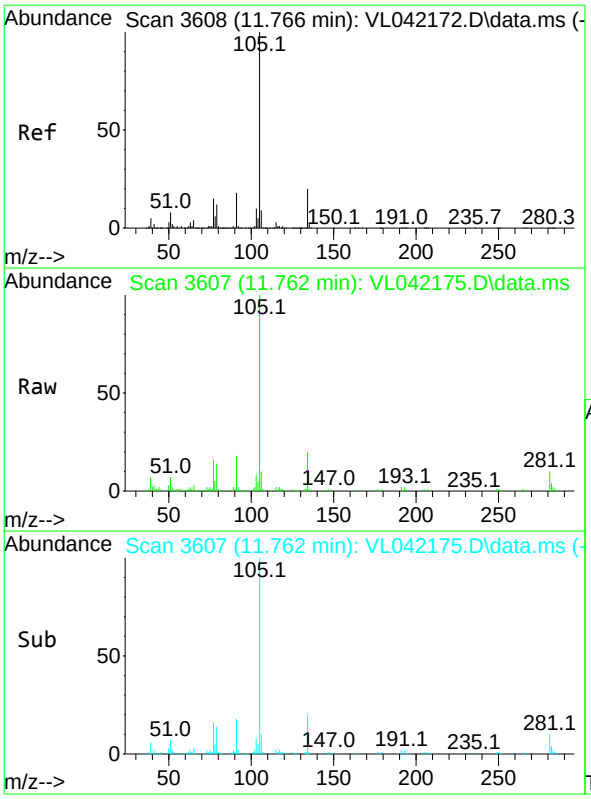


#66
Benzyl Chloride
Concen: 0.520 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 5263

Ion	Ratio	Lower	Upper
91	100		
126	18.7	13.8	20.6
128	5.8	4.5	6.7

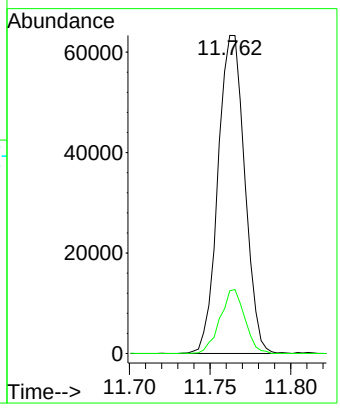




#67
sec-Butylbenzene
Concen: 0.550 ppbv
RT: 11.762 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 72879

Ion	Ratio	Lower	Upper
105	100		
134	18.6	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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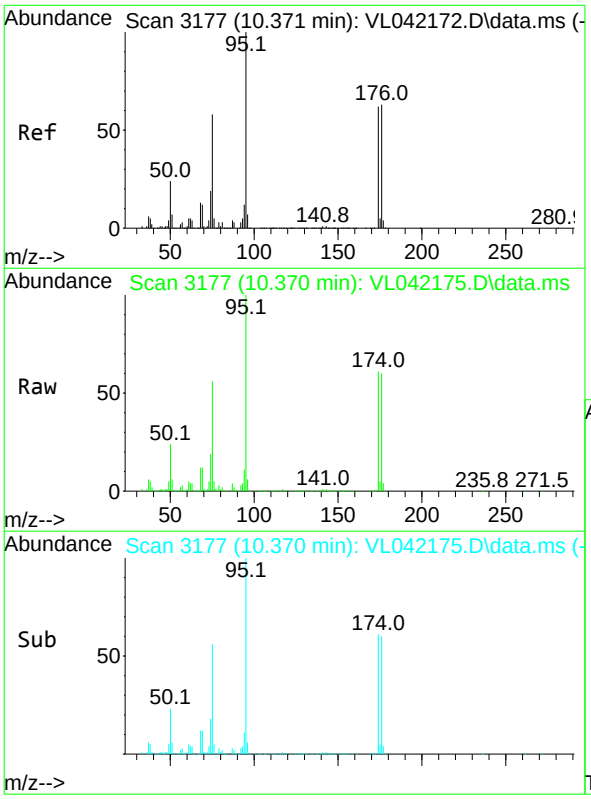
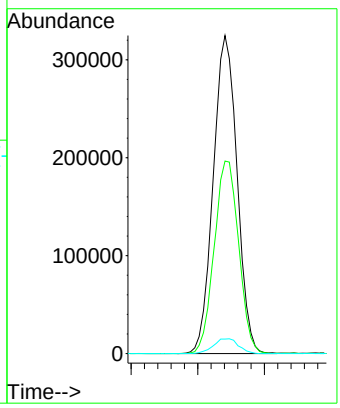
Supervised By :Mahesh Dadoda 04/03/2025

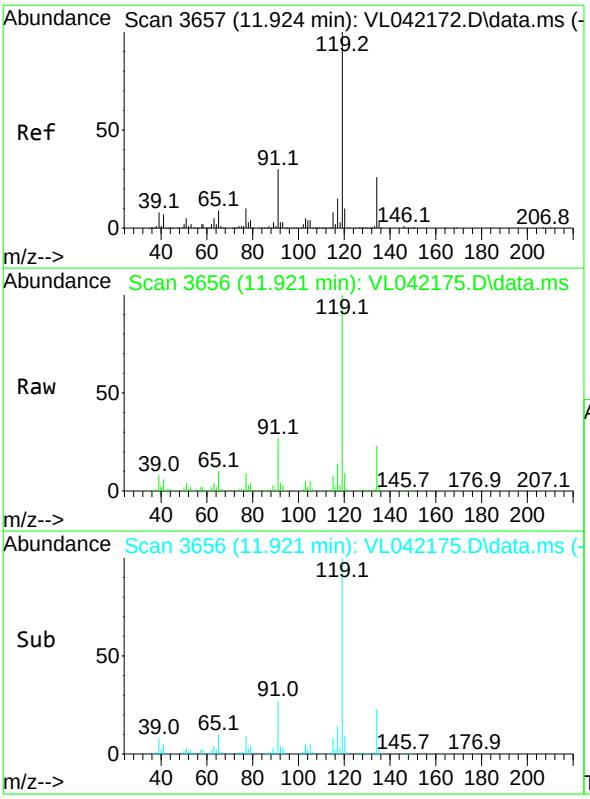


#68
1-Bromo-4-Fluorobenzene
Concen: 10.130 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 95 Resp: 403513

Ion	Ratio	Lower	Upper
95	100		
174	62.3	50.6	76.0
175	4.9	3.8	5.6

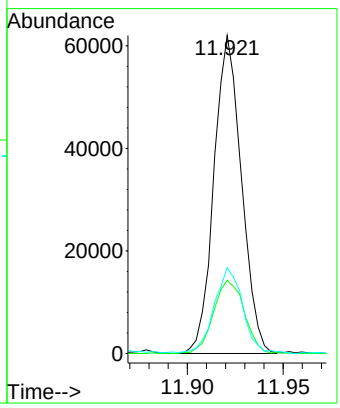




#69
p-Isopropyltoluene
Concen: 0.542 ppbv
RT: 11.921 min Scan# 36
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:119 Resp: 61933

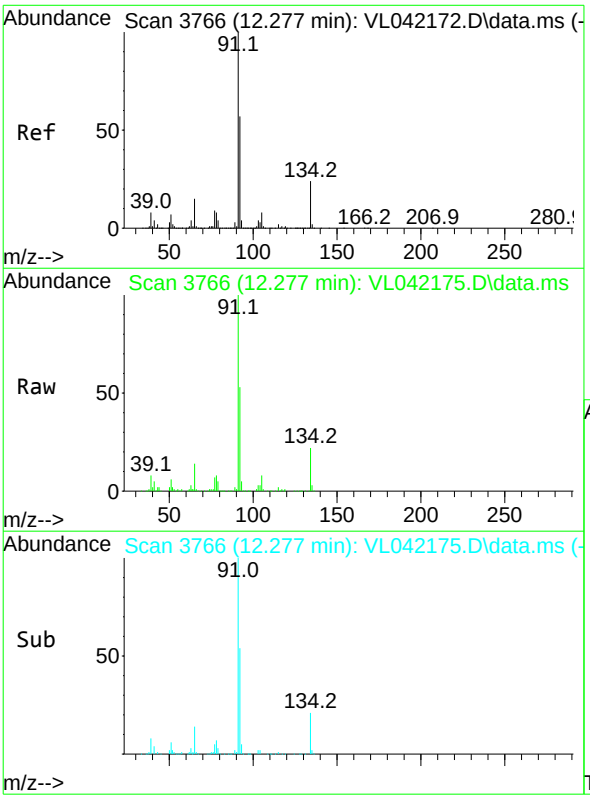
Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.4	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

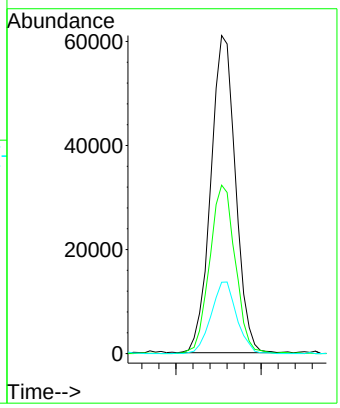
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

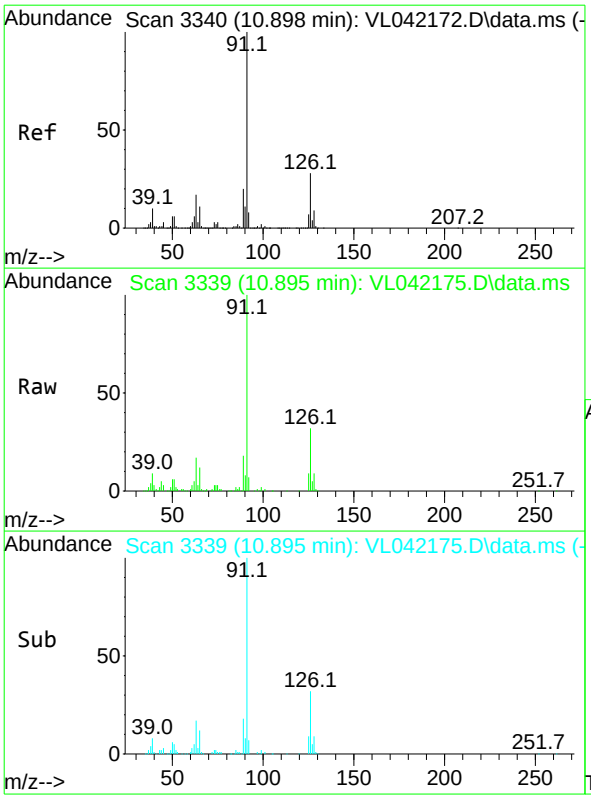


#70
n-Butylbenzene
Concen: 0.527 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 61507

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.4	19.2	28.8

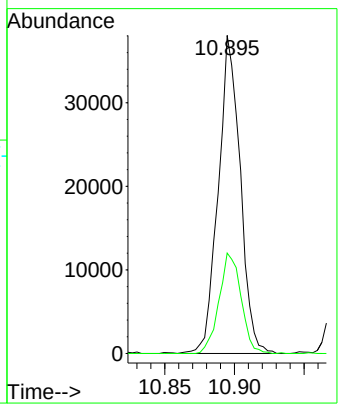




#71
2-Chlorotoluene
Concen: 0.520 ppbv
RT: 10.895 min Scan# 33
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 41637

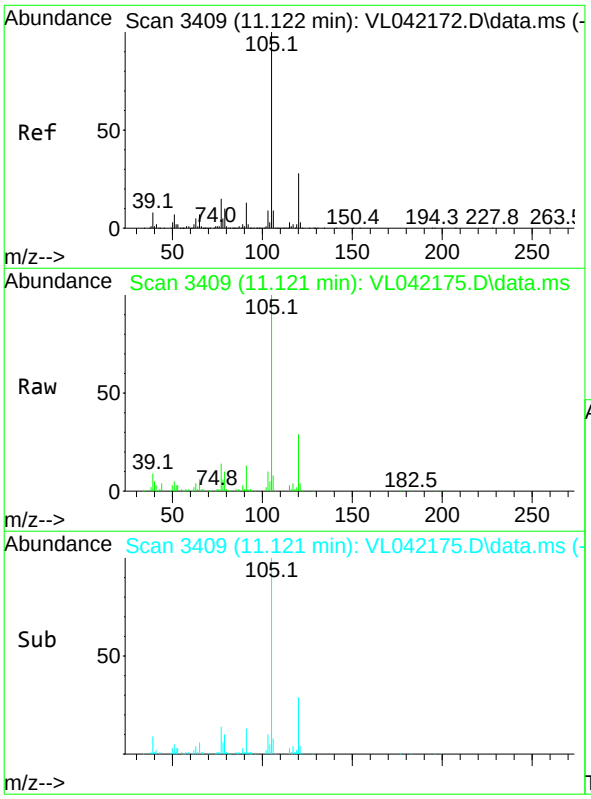
Ion	Ratio	Lower	Upper
91	100		
126	31.7	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

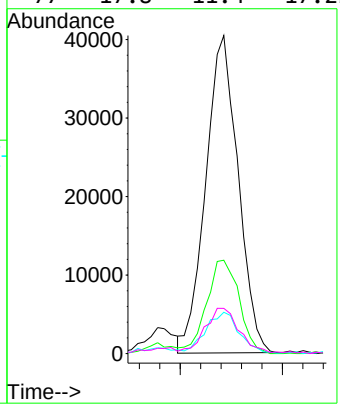
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

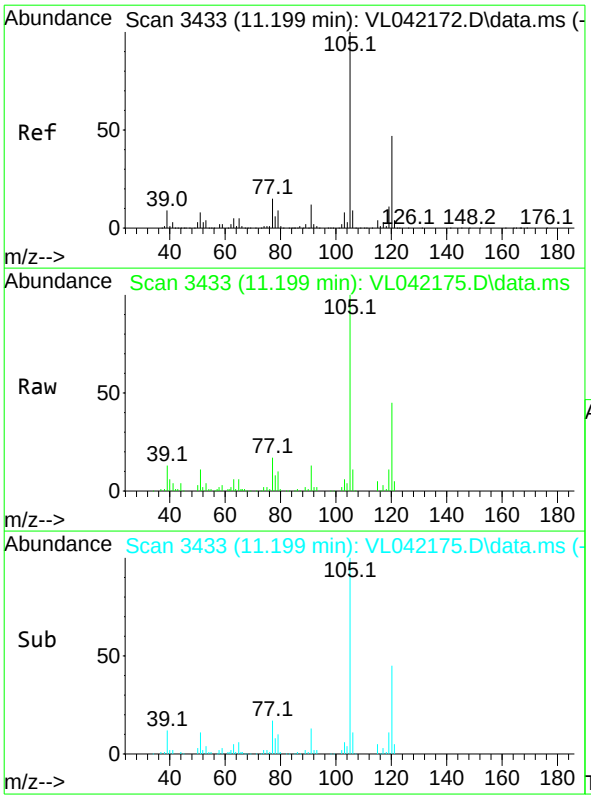


#72
4-Ethyltoluene
Concen: 0.518 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 44473

Ion	Ratio	Lower	Upper
105	100		
120	32.3	23.4	35.0
91	14.9	10.3	15.5
77	17.8	11.4	17.2#

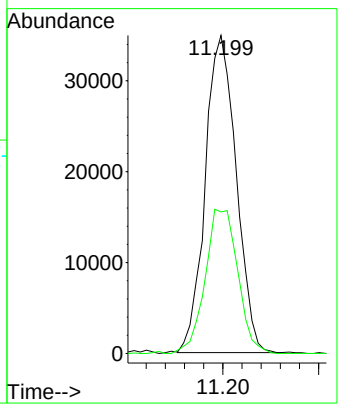




#73
1,3,5-Trimethylbenzene
Concen: 0.523 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 39190

Ion	Ratio	Lower	Upper
105	100		
120	44.6	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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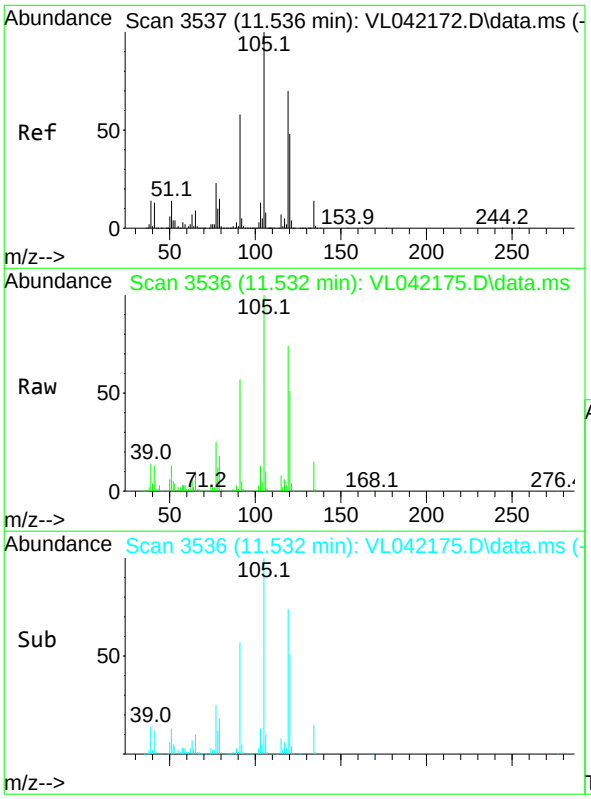
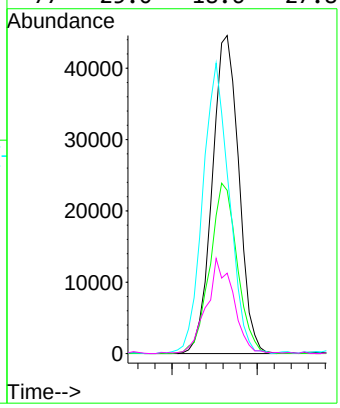
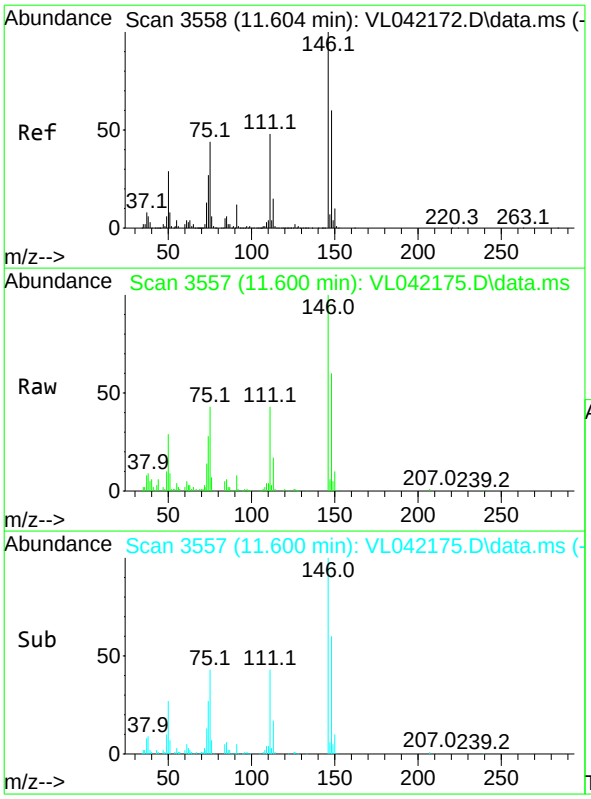


#74
1,2,4-Trimethylbenzene
Concen: 0.560 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 48370

Ion	Ratio	Lower	Upper
105	100		
120	51.3	38.6	58.0
91	56.5	46.2	69.2
77	25.0	18.6	27.8

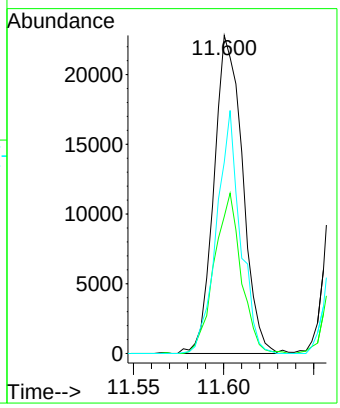




#75
1,3-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.600 min Scan# 35
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 25122

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.7	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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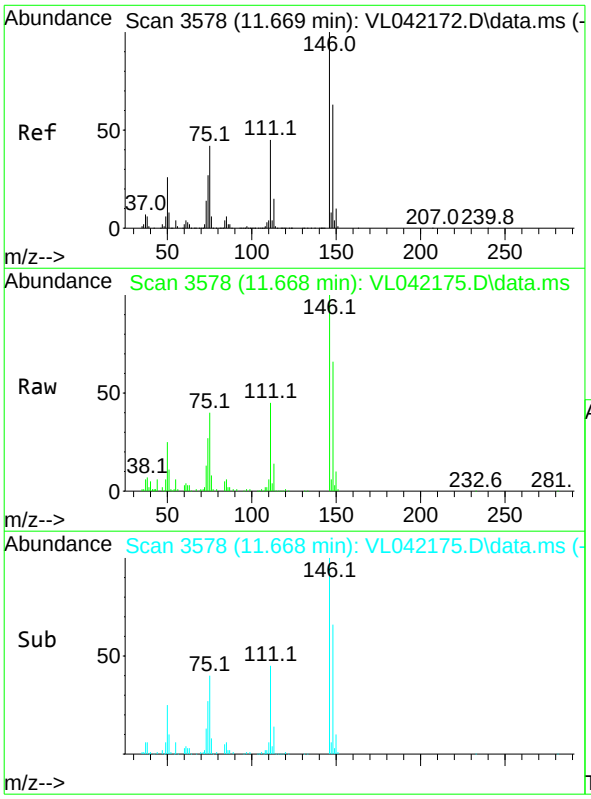
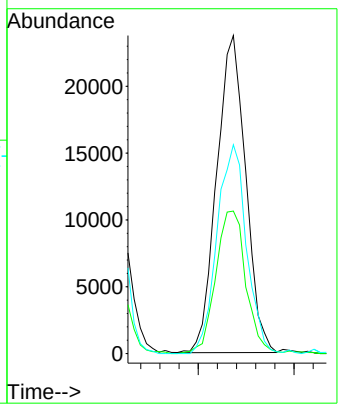
Supervised By :Mahesh Dadoda 04/03/2025

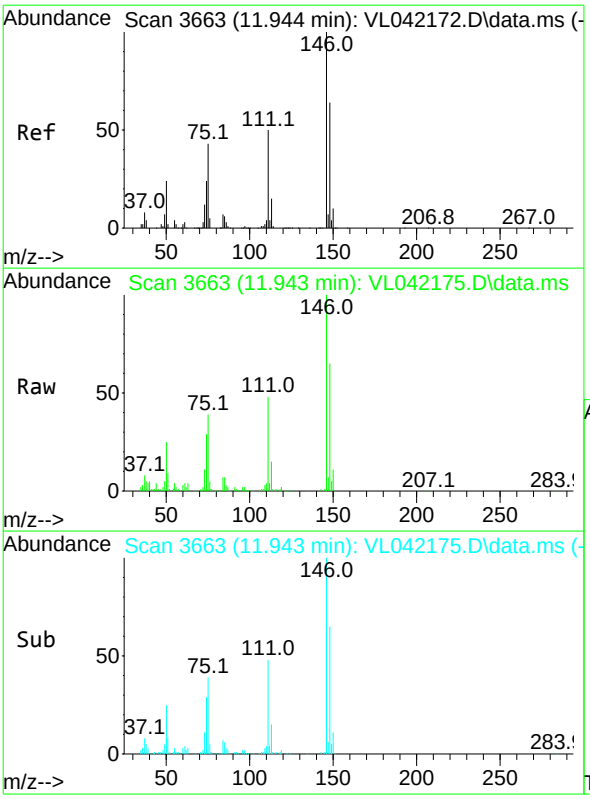


#76
1,4-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24991

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.0	69.0
148	67.5	31.9	95.7

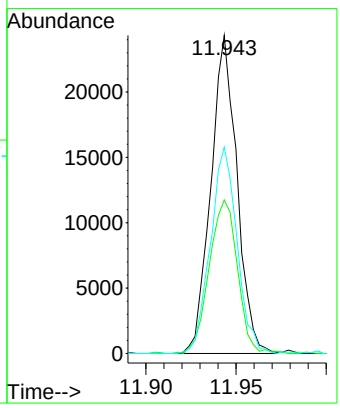




#77
1,2-Dichlorobenzene
Concen: 0.532 ppbv
RT: 11.943 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24548

Ion	Ratio	Lower	Upper
146	100		
111	52.2	24.8	74.3
148	66.6	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

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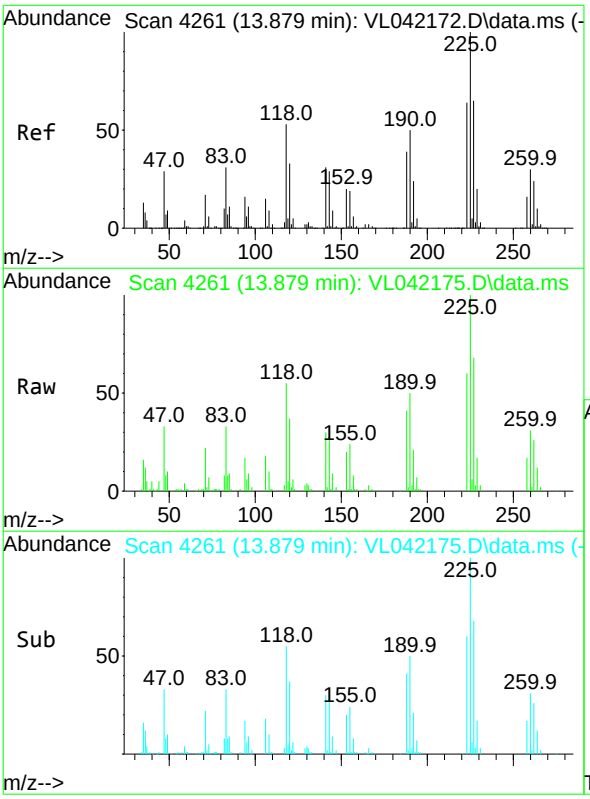
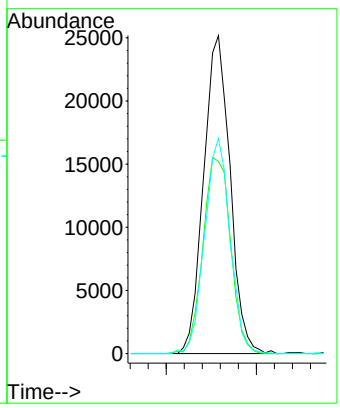
Supervised By :Mahesh Dadoda 04/03/2025

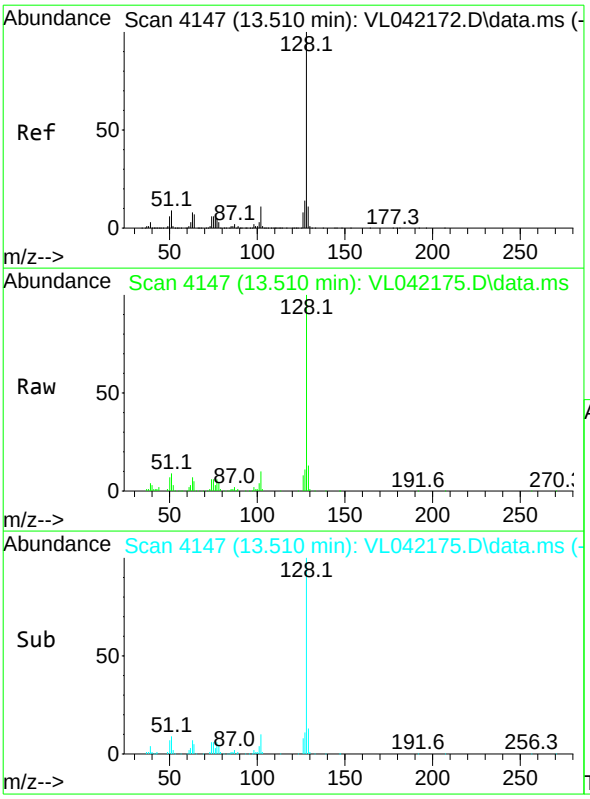


#78
Hexachloro-1,3-Butadiene
Concen: 0.546 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:225 Resp: 25636

Ion	Ratio	Lower	Upper
225	100		
223	64.5	50.6	76.0
227	64.8	51.2	76.8

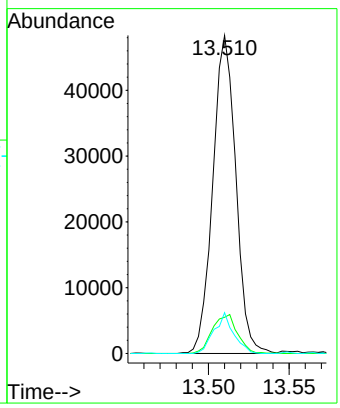




#79
Naphthalene
Concen: 0.508 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:128 Resp: 47990

Ion	Ratio	Lower	Upper
128	100		
127	11.4	10.8	16.2
129	12.8	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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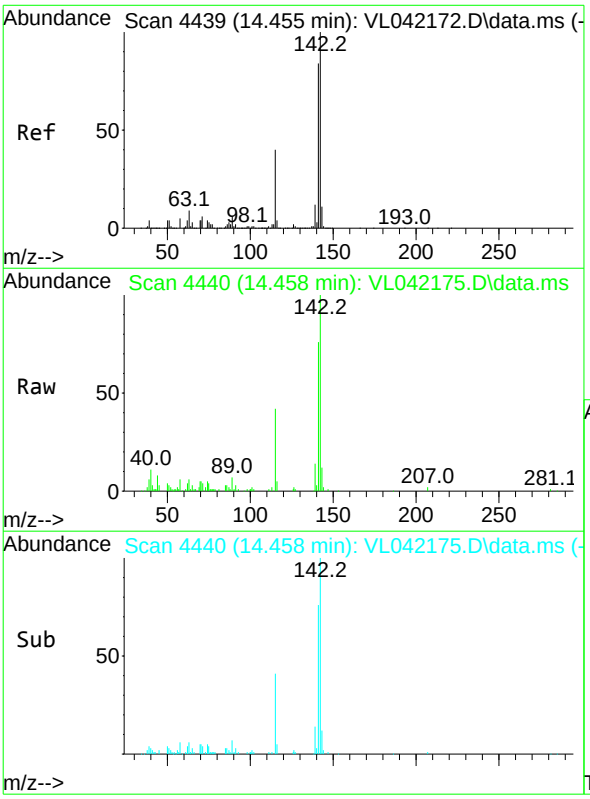
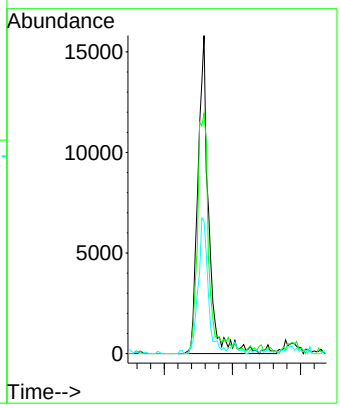
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

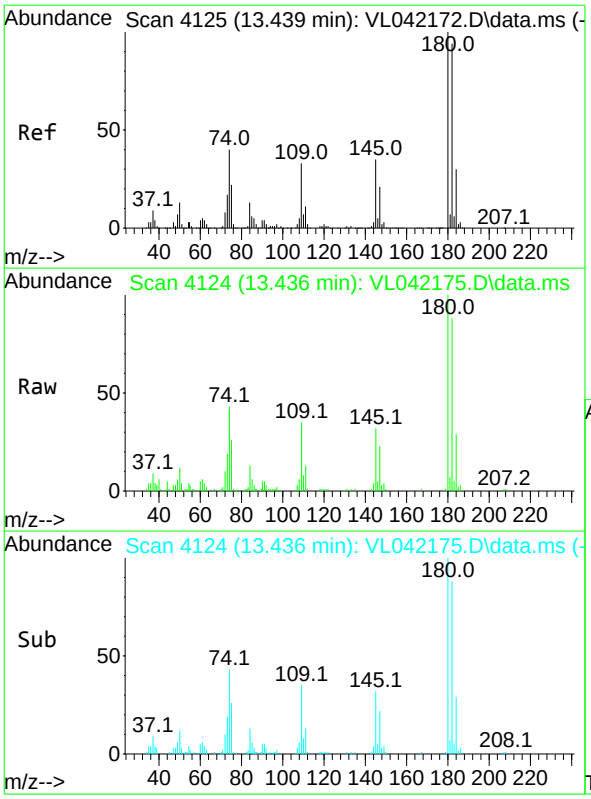


#80
Naphthalene,2-methyl-
Concen: 0.380 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:142 Resp: 17486

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	43.5	31.6	47.4

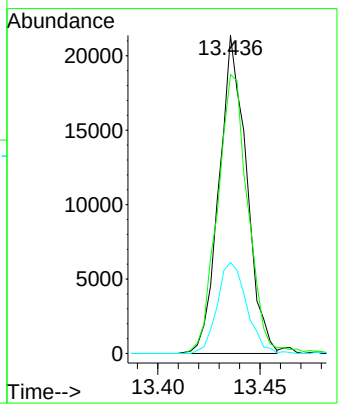




#81
1,2,4-Trichlorobenzene
Concen: 0.457 ppbv
RT: 13.436 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:180 Resp: 19924

Ion	Ratio	Lower	Upper
180	100		
182	97.9	75.1	112.7
184	31.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	180740	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	528028	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	481506	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	398069	10.067	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	1274	0.115	ppbv	# 42
32) 1,1,1-Trichloroethane	3.366	97	4509m	0.106	ppbv	
35) Carbon Tetrachloride	3.768	117	4131m	0.102	ppbv	
38) Trichloroethene	4.551	130	2306m	0.106	ppbv	
52) Tetrachloroethene	8.225	164	1895m	0.091	ppbv	
54) 1,2-Dibromoethane	7.652	107	3033m	0.108	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	3852m	0.093	ppbv	
79) Naphthalene	13.513	128	7882	0.084	ppbv	# 92

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

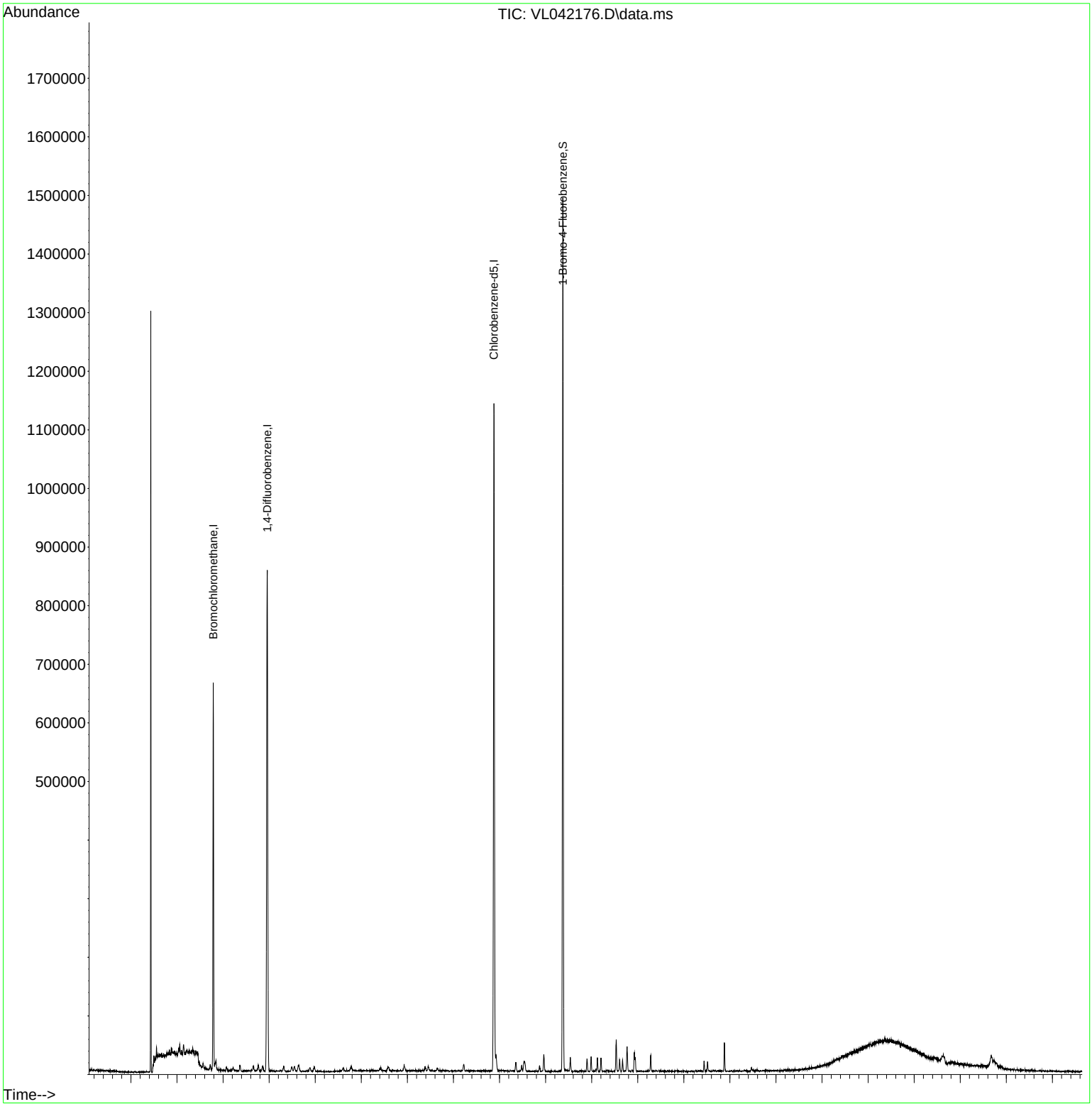
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

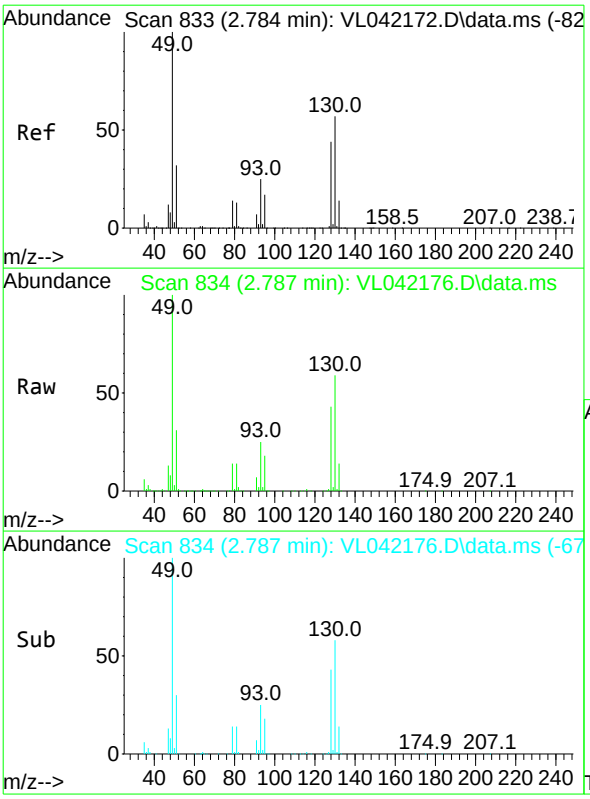
Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

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

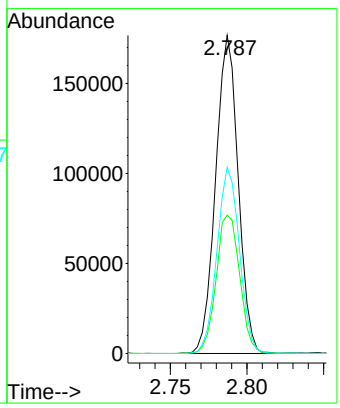




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 49 Resp: 180740

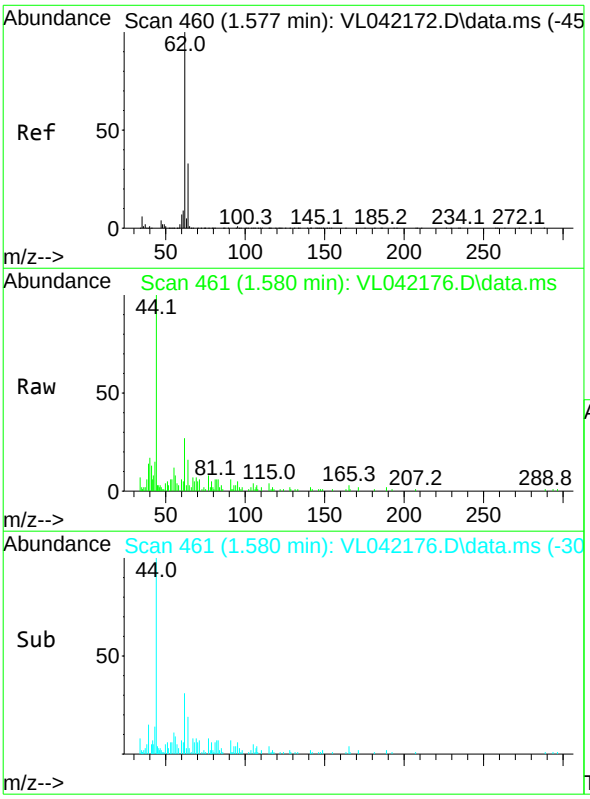
Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.5
130	58.5	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

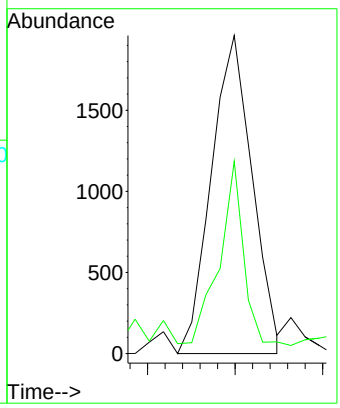
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

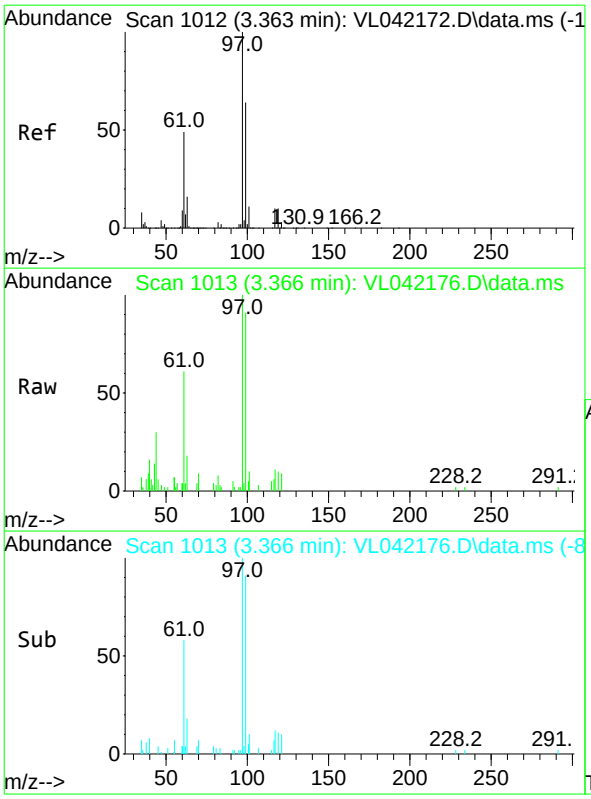


#5
Vinyl Chloride
Concen: 0.115 ppbv
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 62 Resp: 1274

Ion	Ratio	Lower	Upper
62	100		
64	66.4	26.6	40.0#





#32
1,1,1-Trichloroethane
Concen: 0.106 ppbv m
RT: 3.366 min Scan# 10
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

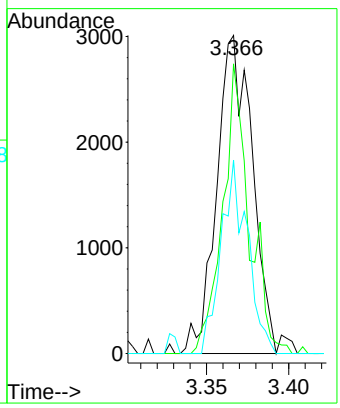
Tgt Ion: 97 Resp: 4509

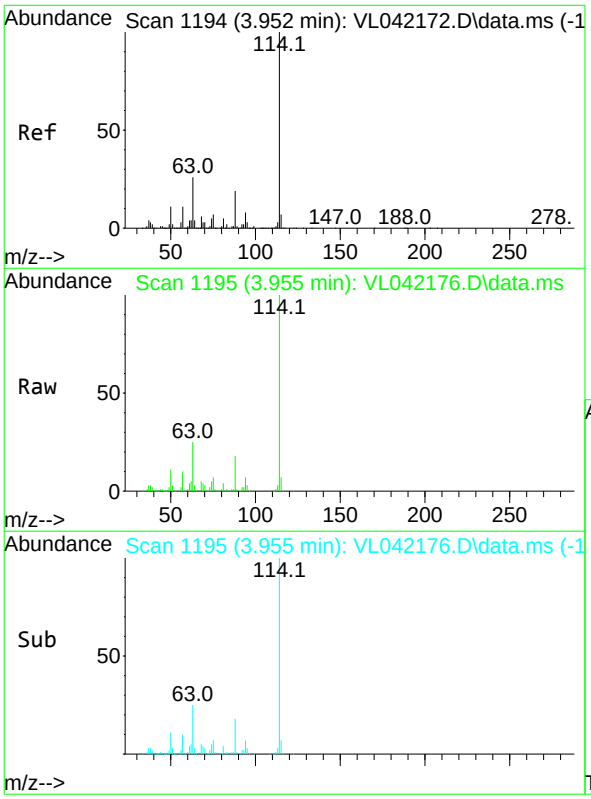
Ion	Ratio	Lower	Upper
97	100		
99	68.6	51.5	77.3
61	45.4	38.7	58.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

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

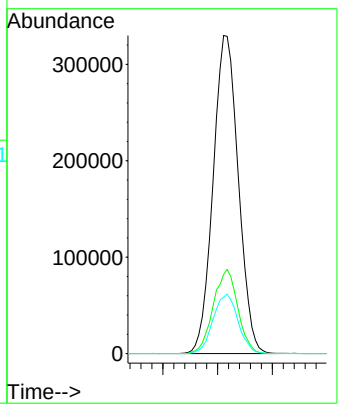


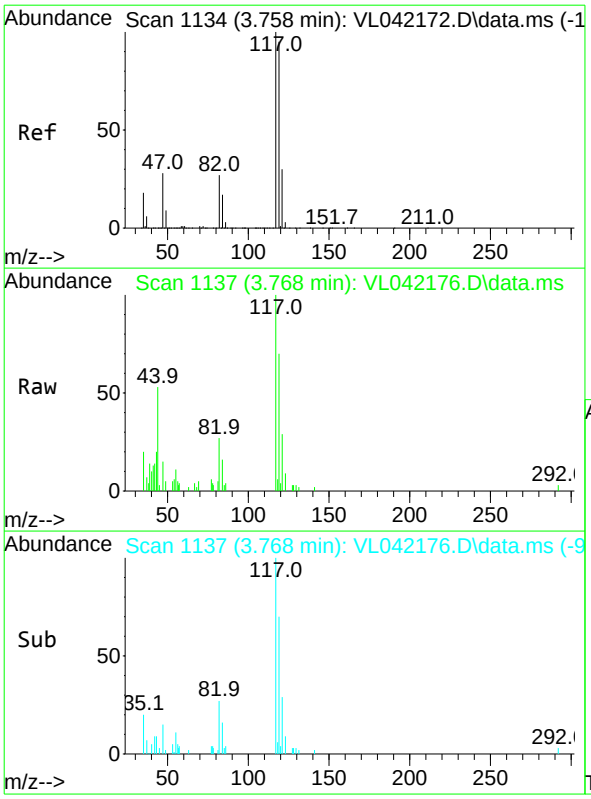


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:114 Resp: 528028

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.5	15.0	22.4

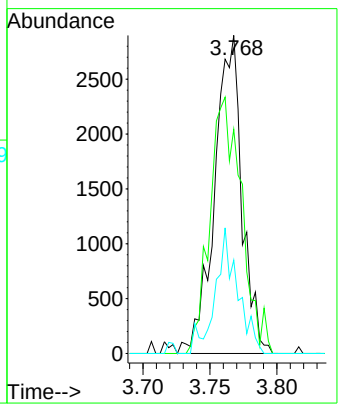




#35
Carbon Tetrachloride
Concen: 0.102 ppbv m
RT: 3.768 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:117 Resp: 4131

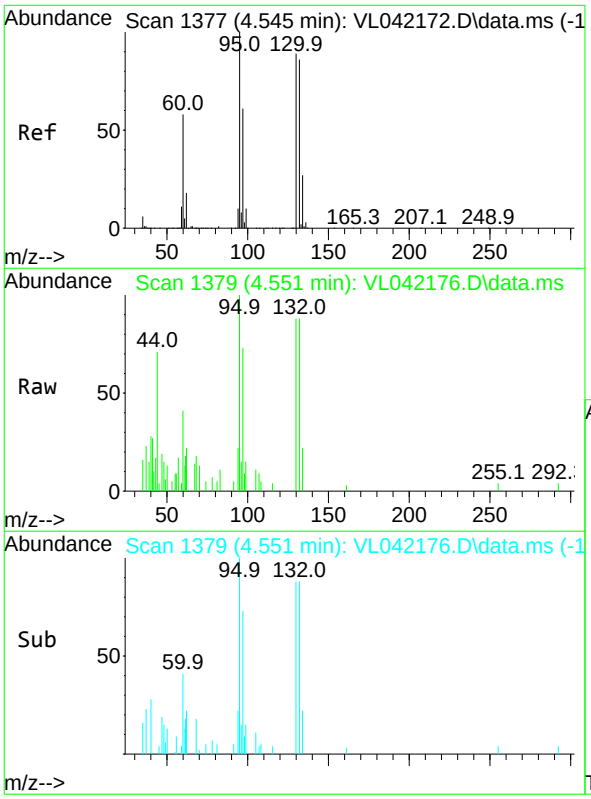
Ion	Ratio	Lower	Upper
117	100		
119	70.5	76.2	114.2#
121	29.4	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

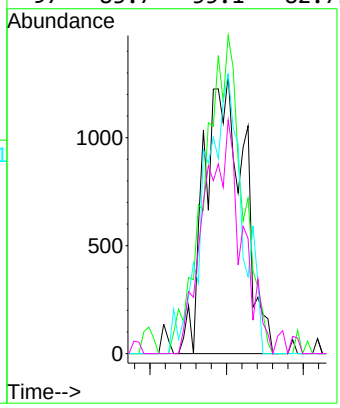
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

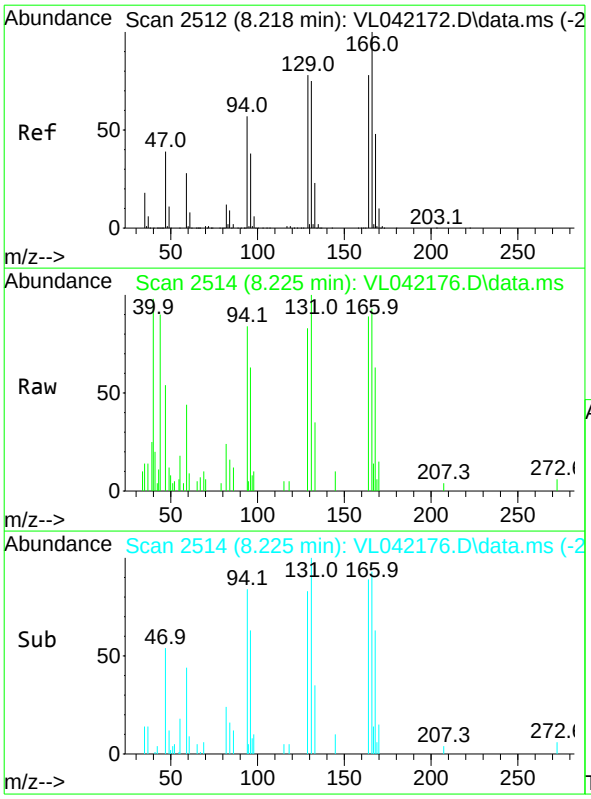


#38
Trichloroethene
Concen: 0.106 ppbv m
RT: 4.551 min Scan# 1379
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:130 Resp: 2306

Ion	Ratio	Lower	Upper
130	100		
95	114.0	89.8	134.8
132	100.2	77.4	116.2
97	83.7	55.1	82.7#

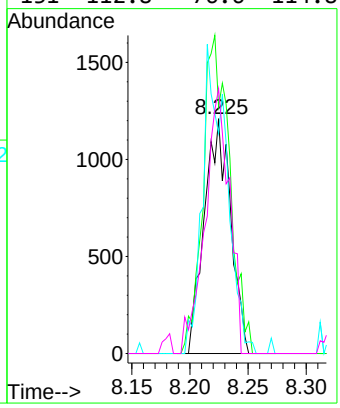




#52
Tetrachloroethene
Concen: 0.091 ppbv m
RT: 8.225 min Scan# 25
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:164 Resp: 1895

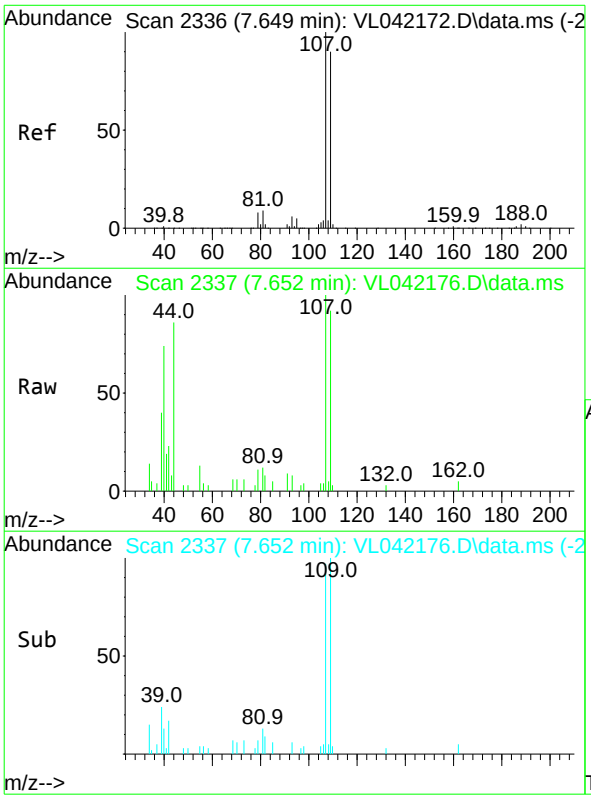
Ion	Ratio	Lower	Upper
164	100		
166	105.1	102.5	153.7
129	93.7	79.8	119.8
131	112.8	76.6	114.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

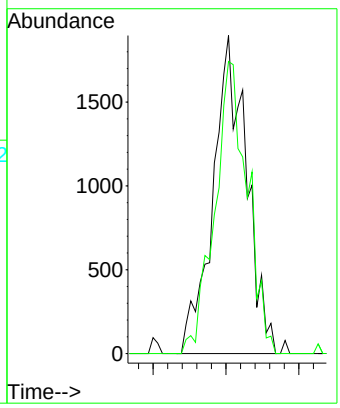
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

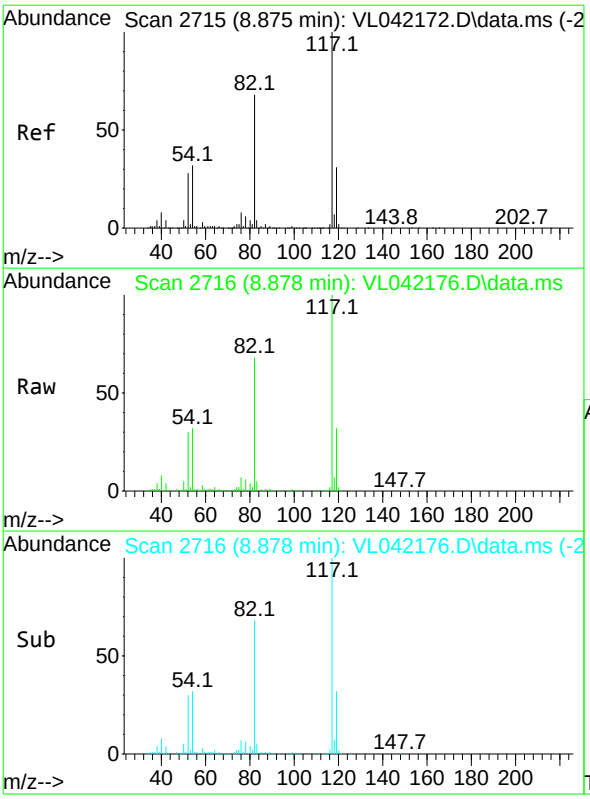


#54
1,2-Dibromoethane
Concen: 0.108 ppbv m
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:107 Resp: 3033

Ion	Ratio	Lower	Upper
107	100		
109	91.8	72.2	108.4

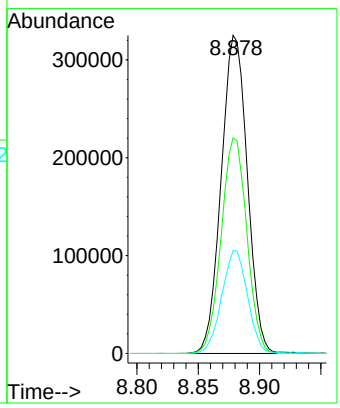




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:117 Resp: 481506

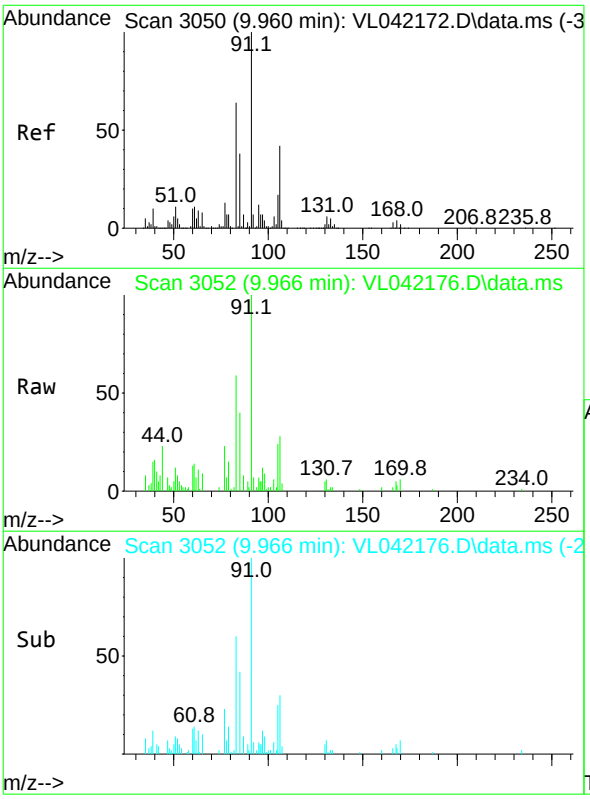
Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	32.3	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

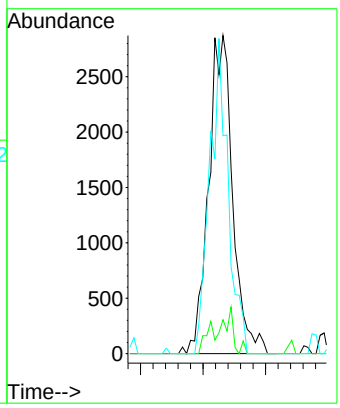
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

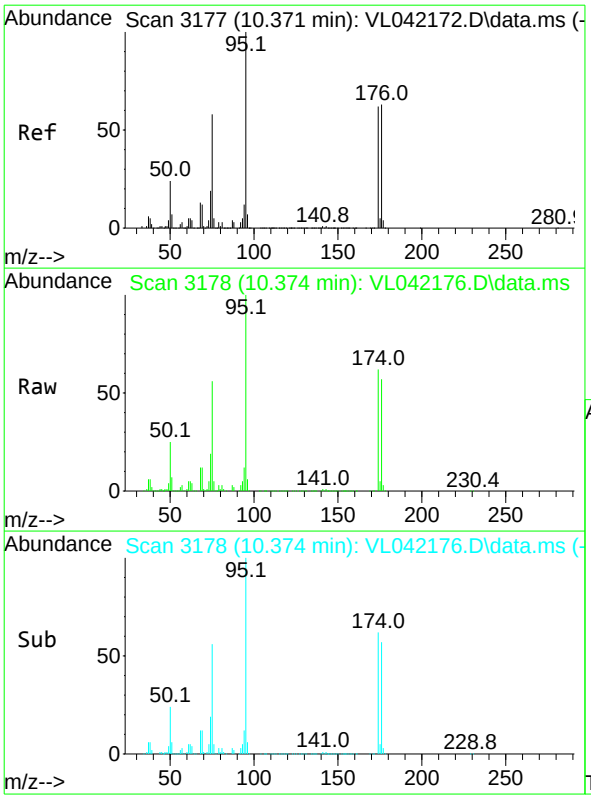


#63
1,1,2,2-Tetrachloroethane
Concen: 0.093 ppbv m
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 83 Resp: 3852

Ion	Ratio	Lower	Upper
83	100		
131	0.0	4.8	14.4#
85	0.0	32.5	97.5#

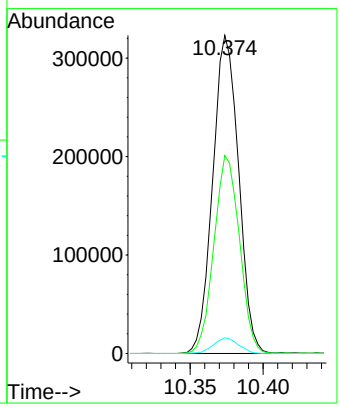




#68
1-Bromo-4-Fluorobenzene
Concen: 10.067 ppbv
RT: 10.374 min Scan# 31
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 95 Resp: 398069

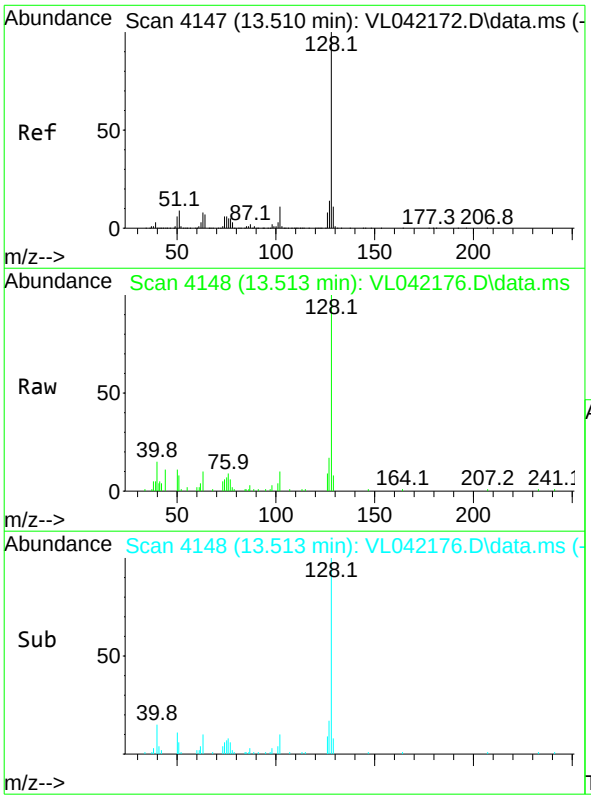
Ion	Ratio	Lower	Upper
95	100		
174	61.5	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

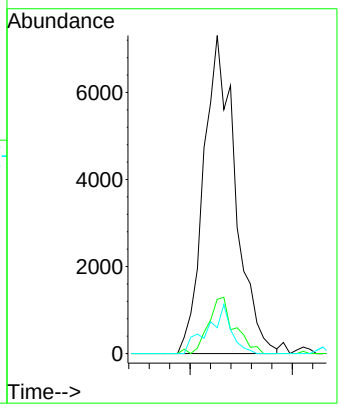
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025



#79
Naphthalene
Concen: 0.084 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:128 Resp: 7882

Ion	Ratio	Lower	Upper
128	100		
127	17.1	10.8	16.2#
129	8.1	9.0	13.4#



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	178058	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	512915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	475617	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	389935	9.983	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	471m	0.043	ppbv	
32) 1,1,1-Trichloroethane	3.366	97	1683m	0.040	ppbv	
35) Carbon Tetrachloride	3.758	117	1645m	0.042	ppbv	
38) Trichloroethene	4.541	130	712m	0.034	ppbv	
52) Tetrachloroethene	8.208	164	880m	0.044	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.963	83	1407m	0.034	ppbv	

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

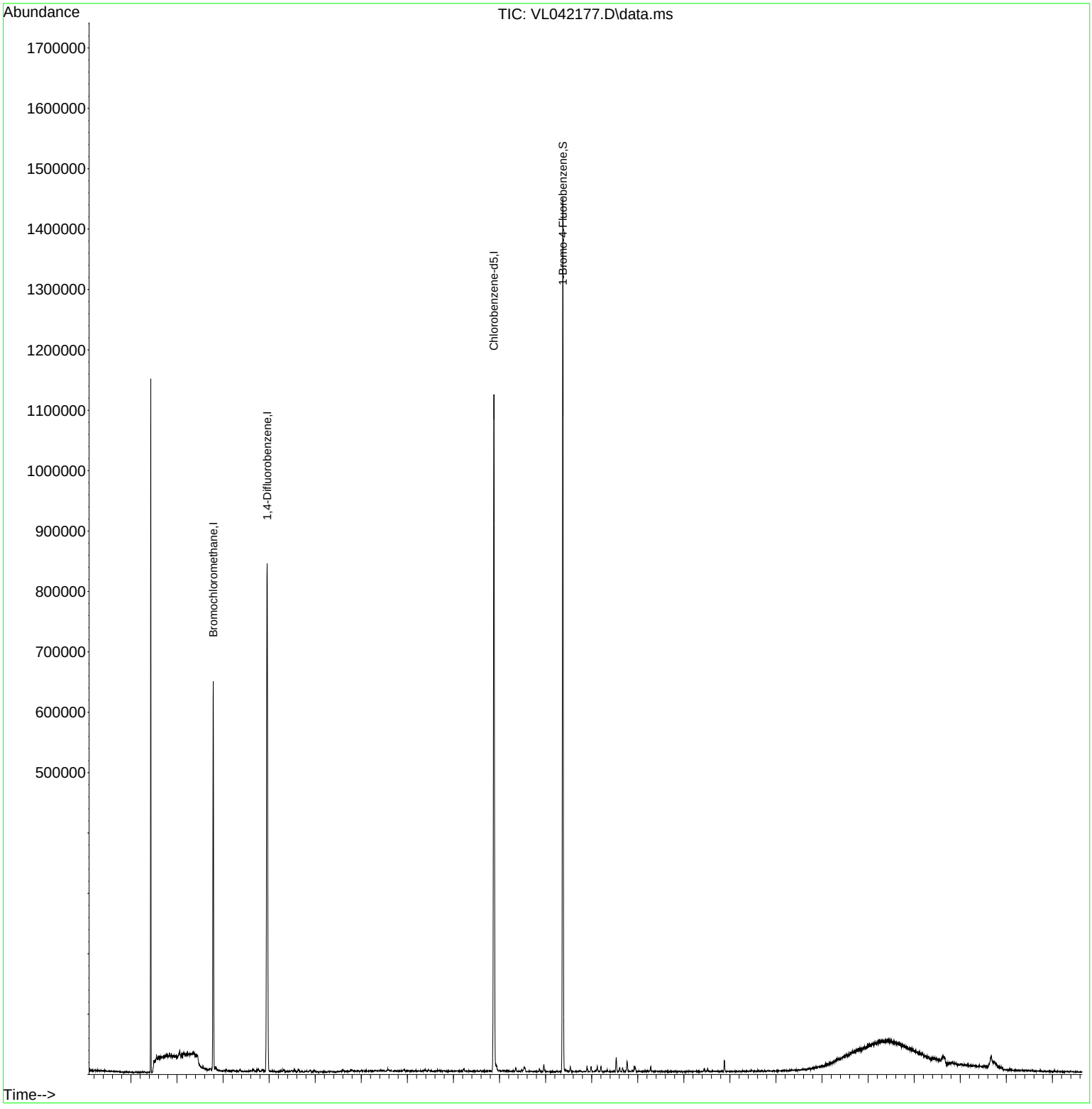
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

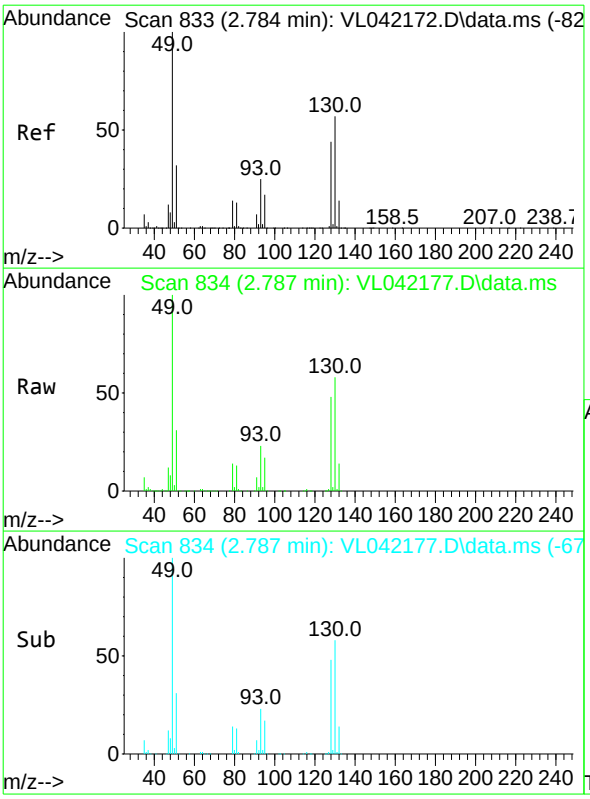
Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

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

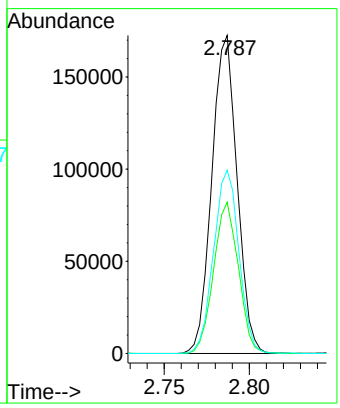




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 83
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 49 Resp: 178058

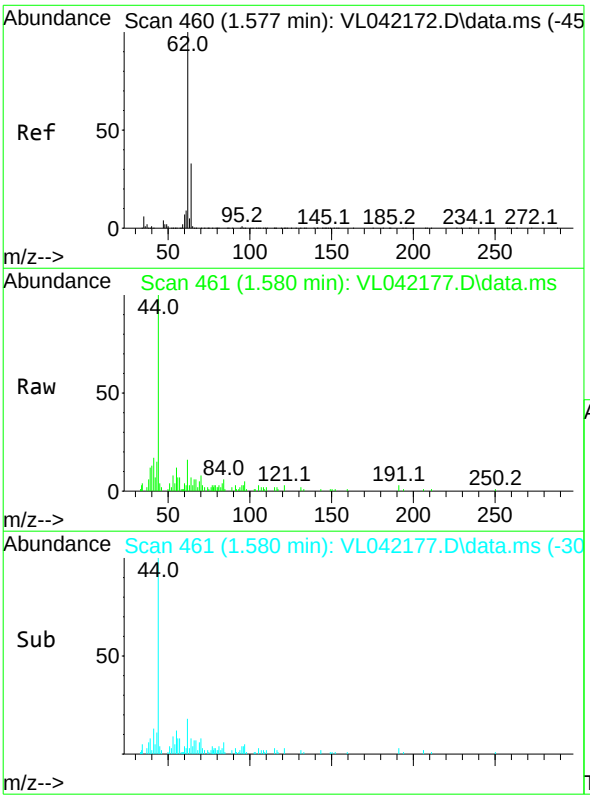
Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	57.9	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

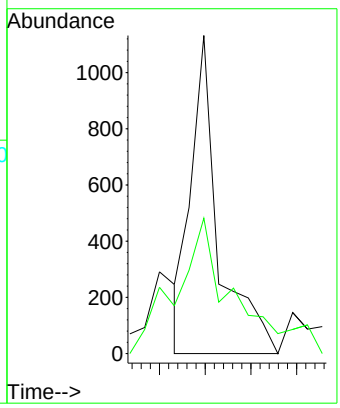
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

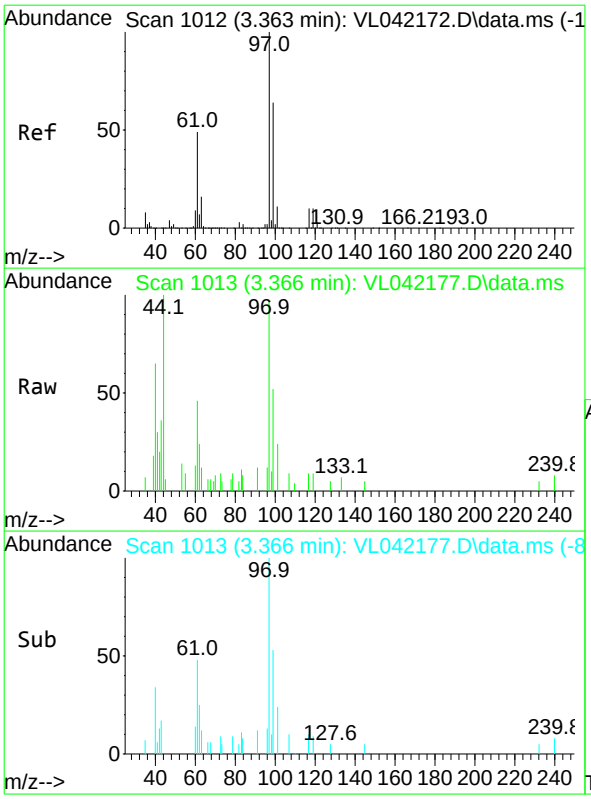


#5
Vinyl Chloride
Concen: 0.043 ppbv m
RT: 1.580 min Scan# 461
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 62 Resp: 471

Ion	Ratio	Lower	Upper
62	100		
64	42.6	26.6	40.0#

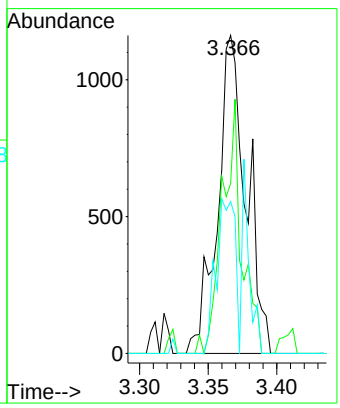




#32
1,1,1-Trichloroethane
Concen: 0.040 ppbv m
RT: 3.366 min Scan# 10
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 97 Resp: 1683

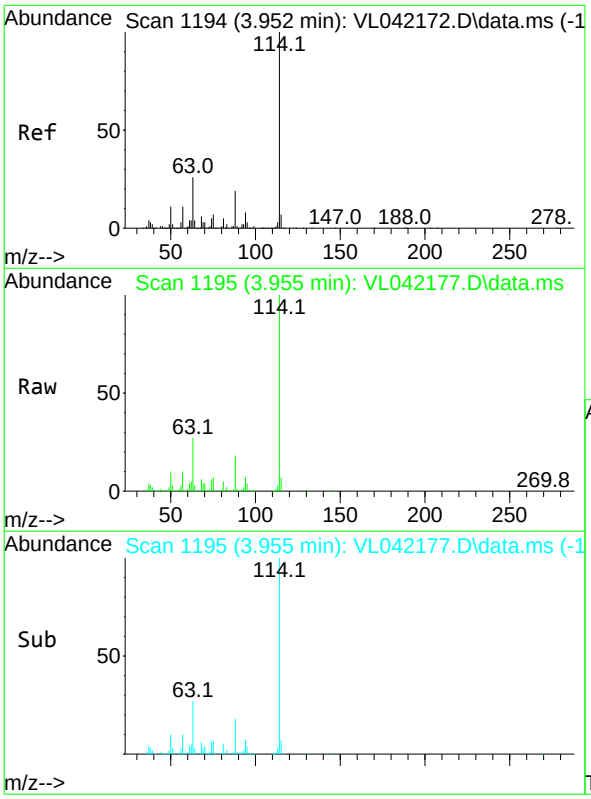
Ion	Ratio	Lower	Upper
97	100		
99	3.8	51.5	77.3#
61	2.1	38.7	58.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

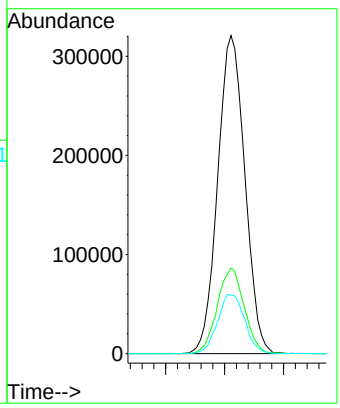
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

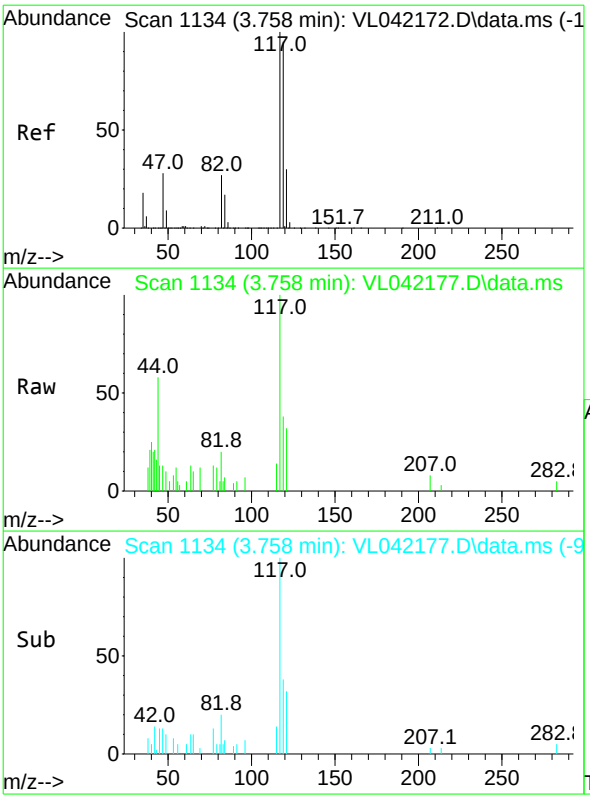


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:114 Resp: 512915

Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	18.6	15.0	22.4

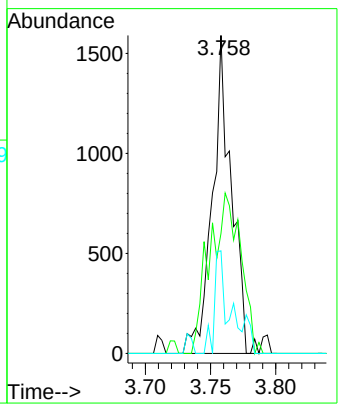




#35
Carbon Tetrachloride
Concen: 0.042 ppbv m
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 1645

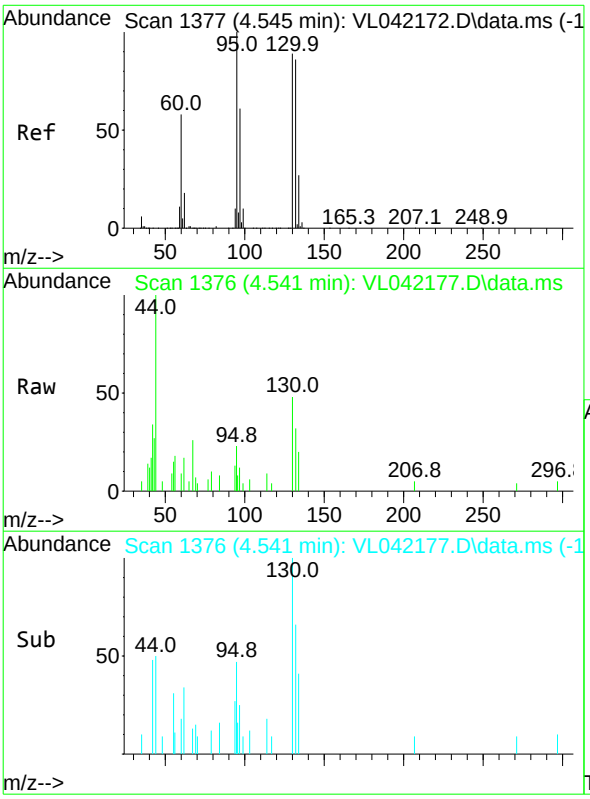
Ion	Ratio	Lower	Upper
117	100		
119	37.7	76.2	114.2#
121	32.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

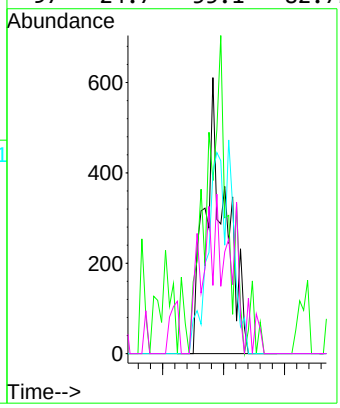
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

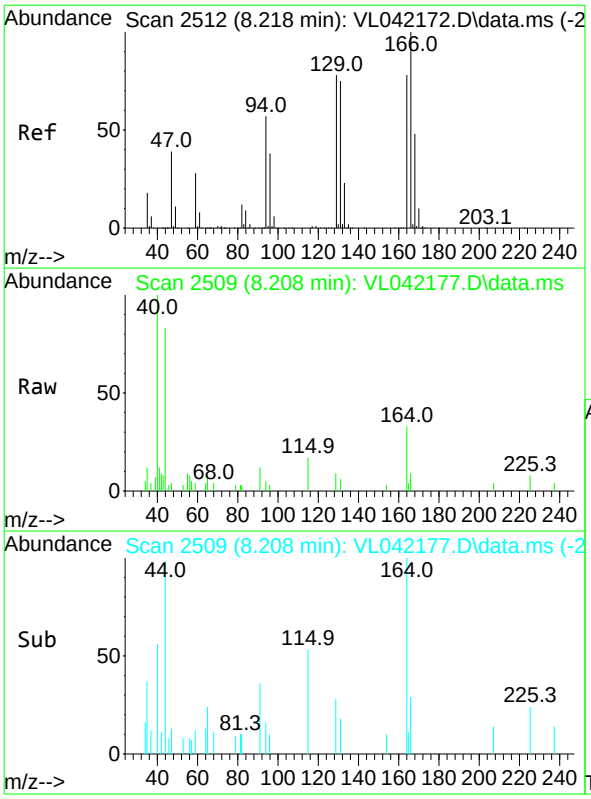


#38
Trichloroethene
Concen: 0.034 ppbv m
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:130 Resp: 712

Ion	Ratio	Lower	Upper
130	100		
95	47.0	89.8	134.8#
132	65.6	77.4	116.2#
97	24.7	55.1	82.7#

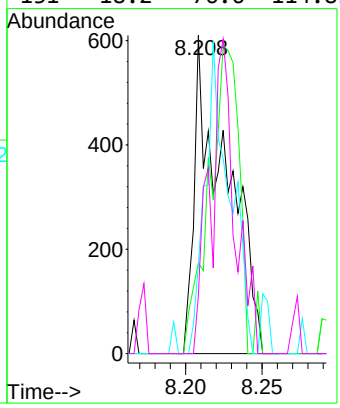




#52
Tetrachloroethene
Concen: 0.044 ppbv m
RT: 8.208 min Scan# 25
Delta R.T. -0.010 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:164 Resp: 880

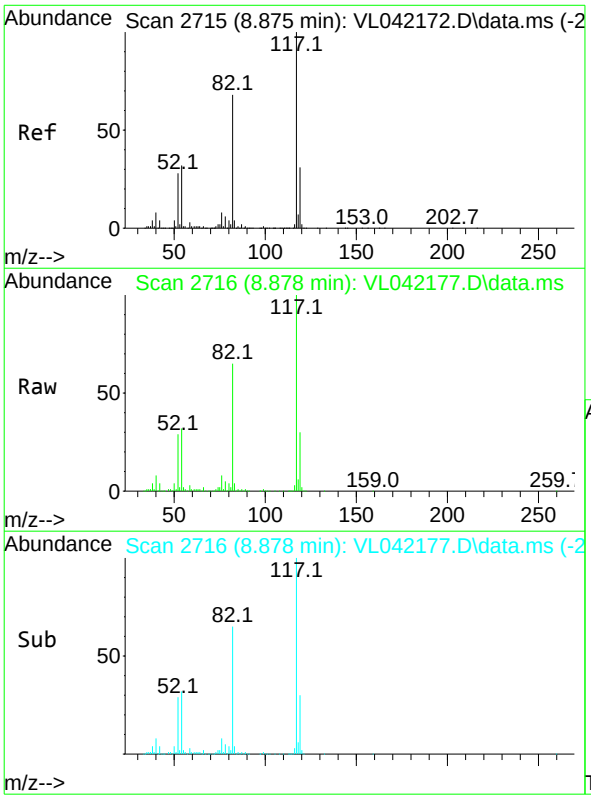
Ion	Ratio	Lower	Upper
164	100		
166	28.5	102.5	153.7#
129	27.7	79.8	119.8#
131	18.2	76.6	114.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

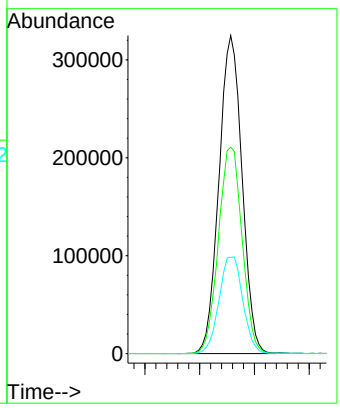
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

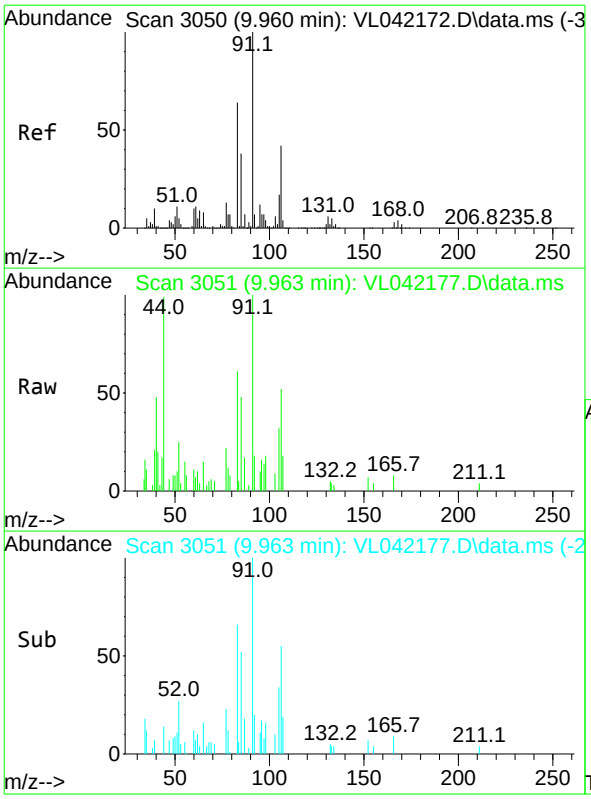


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 475617

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	31.5	25.5	38.3





#63
1,1,2,2-Tetrachloroethane
Concen: 0.034 ppbv m
RT: 9.963 min Scan# 30
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

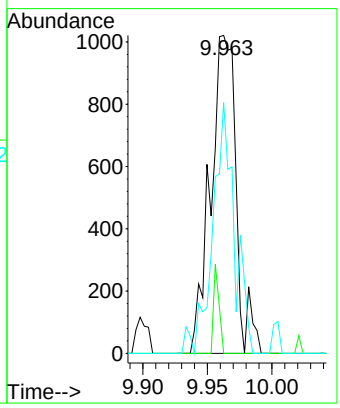
Tgt Ion: 83 Resp: 1407

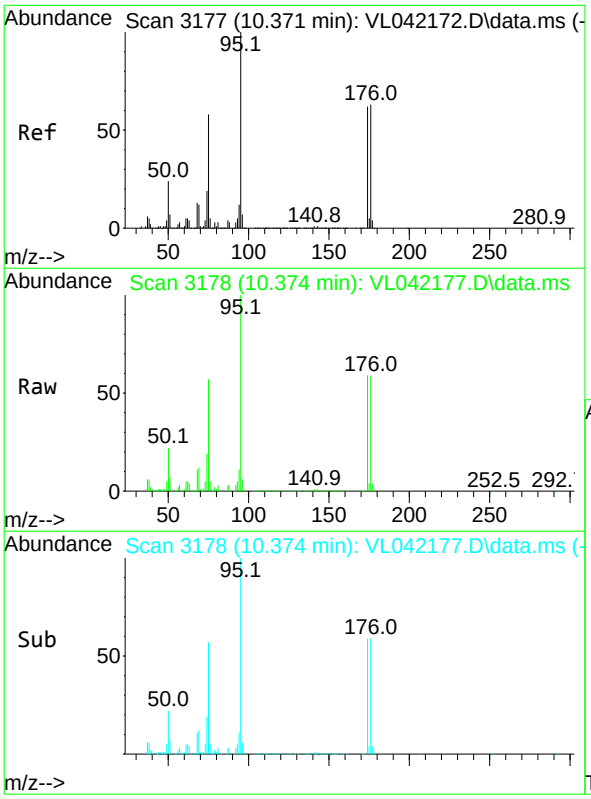
Ion	Ratio	Lower	Upper
83	100		
131	6.0	4.8	14.4
85	67.2	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

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

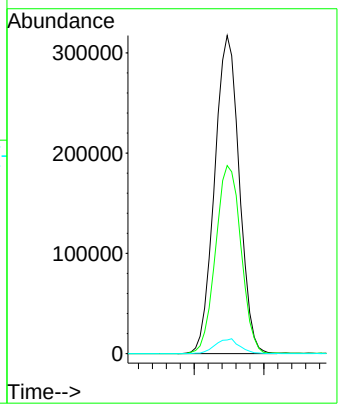




#68
1-Bromo-4-Fluorobenzene
Concen: 9.983 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 95 Resp: 389935

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.6	3.8	5.6



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	173372	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	499360	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	473077	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	387777	9.981	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	358962	14.023	ppbv		99
3) Chlorodifluoromethane	1.473	51	366164	14.002	ppbv		98
4) Chloromethane	1.531	50	148133	14.160	ppbv		98
5) Vinyl Chloride	1.576	62	141938	13.304	ppbv		97
6) Bromomethane	1.667	94	65113	13.734	ppbv		99
7) Chloroethane	1.703	64	58820	14.007	ppbv		99
8) Dichlorotetrafluoroethane	1.550	85	314834	14.442	ppbv		98
9) Propene	1.482	41	163799	13.902	ppbv		95
10) Heptane	4.972	43	446949	14.019	ppbv		99
11) Trichlorofluoromethane	1.874	101	349967	14.050	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.136	101	295217	14.419	ppbv		99
13) Ethanol	1.719	45	7382	8.001	ppbv		92
14) Bromoethene	1.780	108	106436	13.571	ppbv		98
15) Acetone	1.832	43	296254	12.218	ppbv		98
16) 1,3-Butadiene	1.605	39	150122	13.766	ppbv		100
17) tert-Butyl alcohol	2.039	59	416362	13.787	ppbv		99
18) 1,1-Dichloroethene	2.029	96	131720	13.762	ppbv		99
19) Isopropyl Alcohol	1.884	45	179117	13.093	ppbv		100
20) Methylene Chloride	2.059	84	113183	12.533	ppbv		95
21) Allyl Chloride	2.094	41	239440	14.002	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	149455	13.362	ppbv		98
23) Vinyl Acetate	2.460	43	138419	13.736	ppbv	#	96
24) 1,1-Dichloroethane	2.405	63	298760	14.570	ppbv		99
25) Ethyl Acetate	2.832	43	871882	13.855	ppbv		100
26) Hexane	2.822	57	344636	14.178	ppbv		98
27) Carbon Disulfide	2.146	76	370022	14.196	ppbv		97
28) Methyl tert-Butyl Ether	2.437	73	216463	14.303	ppbv		95
29) Chloroform	2.845	83	508614	14.297	ppbv		100
30) Cyclohexane	3.852	84	296458	14.040	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	351945	14.262	ppbv		97
32) 1,1,1-Trichloroethane	3.363	97	547329	13.448	ppbv		99
34) 2-Butanone	2.554	43	497020	13.726	ppbv		99
35) Carbon Tetrachloride	3.758	117	543385	14.140	ppbv		100
36) Benzene	3.651	78	699549	14.131	ppbv		98
37) 1,2-Dichloroethane	3.214	62	416544	14.697	ppbv		99
38) Trichloroethene	4.541	130	283430	13.715	ppbv		98
39) 1,2-Dichloropropane	4.308	63	257891	14.304	ppbv		99
40) 1,4-Dioxane	4.577	88	124925	13.354	ppbv	#	91
41) Tetrahydrofuran	3.049	42	294634	14.301	ppbv		100
42) Bromodichloromethane	4.483	83	587772	15.043	ppbv		99
43) Methyl Methacrylate	4.874	69	295300	14.130	ppbv		99
44) 2,2,4-Trimethylpentane	4.635	57	1180275	14.108	ppbv		99
45) t-1,3-Dichloropropene	6.405	75	329360	14.649	ppbv		96

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	400813	14.542	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	273137	14.331	ppbv		98
48) Dibromochloromethane	7.383	129	482431	14.936	ppbv		100
49) Bromoform	9.480	173	427143	14.730	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	755146	13.155	ppbv		99
51) 2-Hexanone	7.431	43	619419	13.005	ppbv	#	99
52) Tetrachloroethene	8.221	164	258356	13.159	ppbv		95
53) Toluene	6.926	91	829648	14.137	ppbv		100
54) 1,2-Dibromoethane	7.645	107	381823	14.359	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.920	131	365410	14.032	ppbv		99
57) Chlorobenzene	8.917	112	618201	13.777	ppbv		100
58) Ethyl Benzene	9.351	91	1167096	13.889	ppbv		97
59) m/p-Xylene	9.548	91	1857561m	27.651	ppbv		
60) o-Xylene	9.962	91	913234	13.577	ppbv		99
61) Styrene	9.865	104	474195	14.250	ppbv		99
62) Isopropylbenzene	10.535	105	1362416	13.544	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	551386	13.491	ppbv		99
64) n-propylbenzene	10.985	120	356118	13.753	ppbv		94
65) tert-Butylbenzene	11.529	119	1200149	12.901	ppbv		98
66) Benzyl Chloride	11.613	91	134397	13.615	ppbv		100
67) sec-Butylbenzene	11.765	105	1643629	12.711	ppbv		99
69) p-Isopropyltoluene	11.924	119	1437016	12.906	ppbv		98
70) n-Butylbenzene	12.280	91	1477443	12.975	ppbv		99
71) 2-Chlorotoluene	10.898	91	1071432	13.724	ppbv		99
72) 4-Ethyltoluene	11.121	105	1136415	13.569	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	979783	13.395	ppbv		99
74) 1,2,4-Trimethylbenzene	11.535	105	1048874	12.447	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	626015	13.545	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	628694	13.668	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	602844	13.396	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	556392	12.147	ppbv		99
79) Naphthalene	13.513	128	1258479	13.653	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	718900	16.018	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	598416	14.075	ppbv		99

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

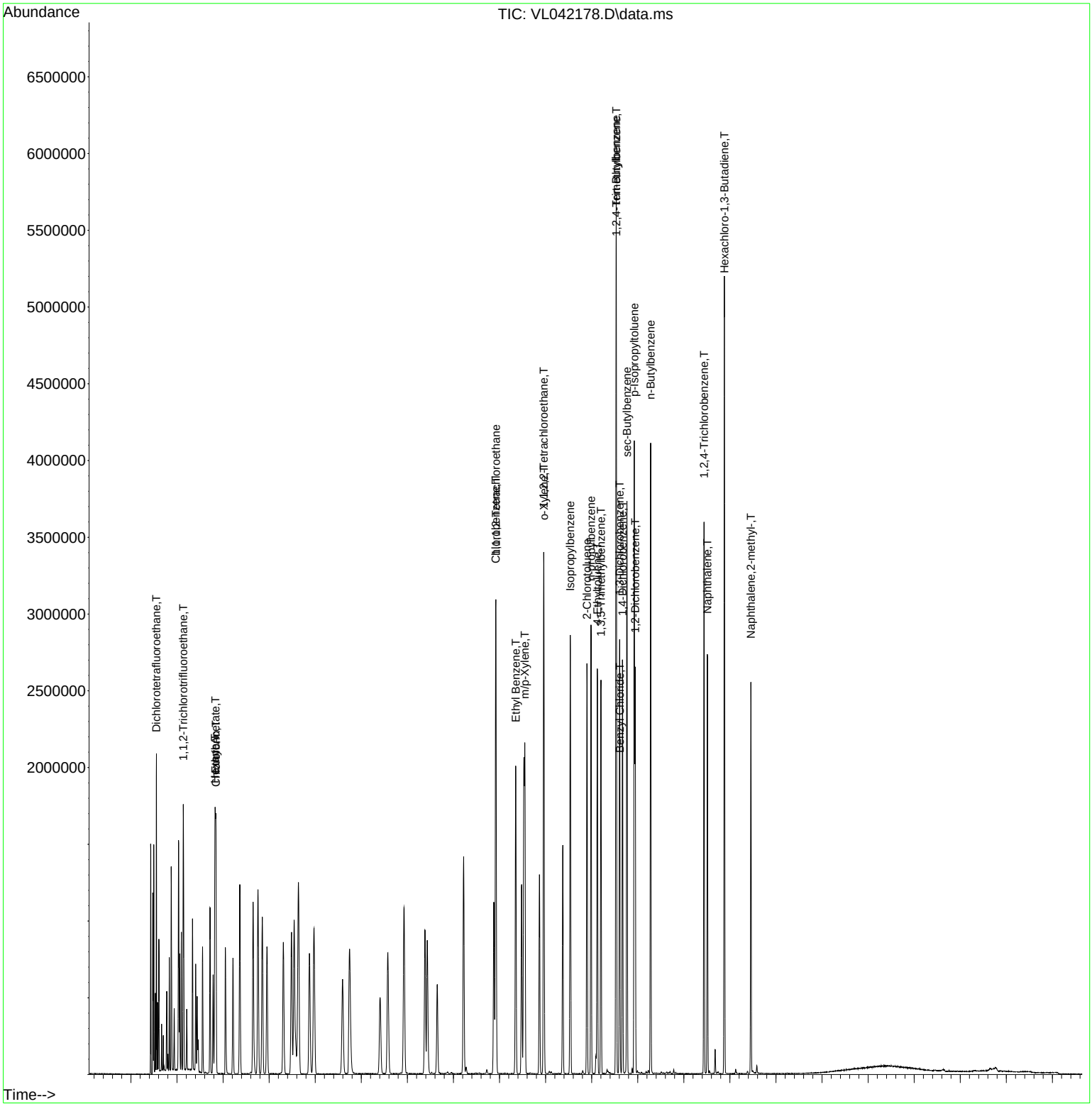
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

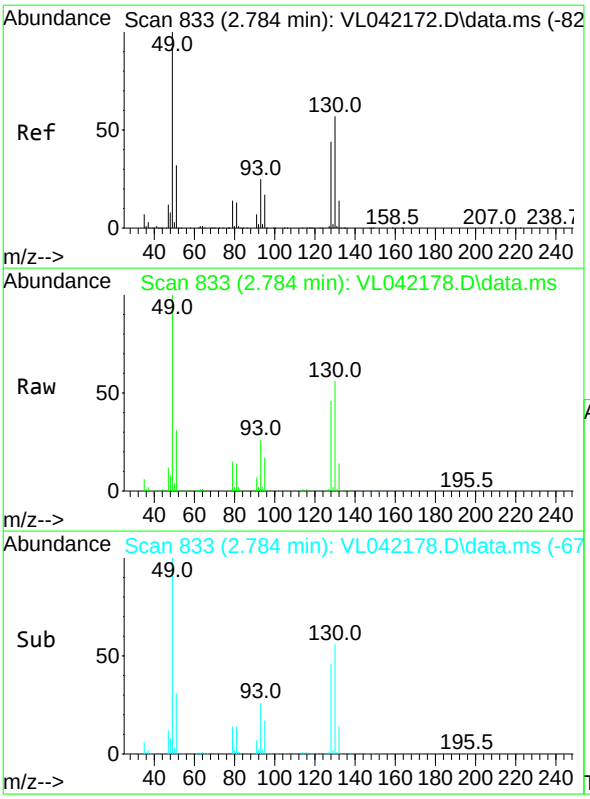
Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

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

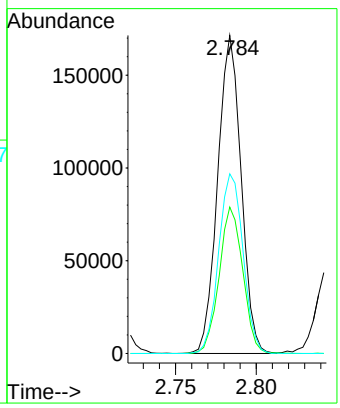




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 49 Resp: 173372

Ion	Ratio	Lower	Upper
49	100		
128	46.4	22.9	68.5
130	58.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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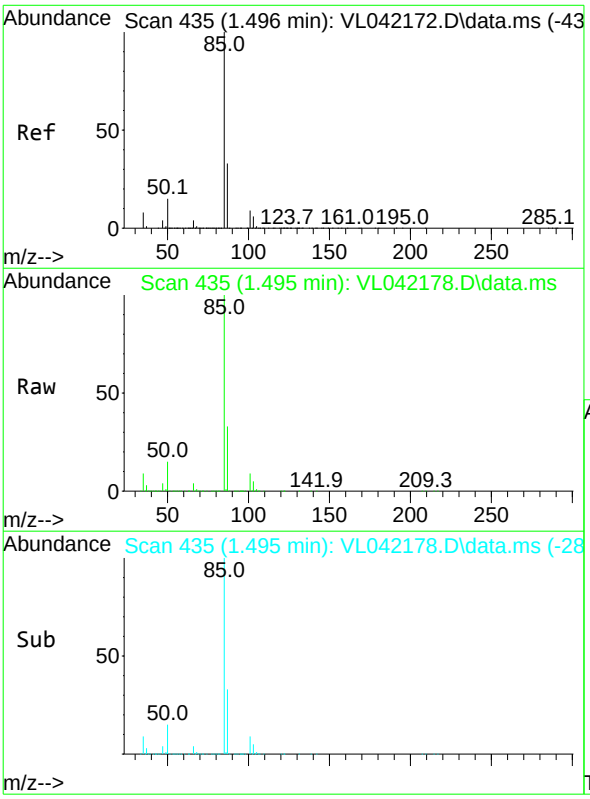
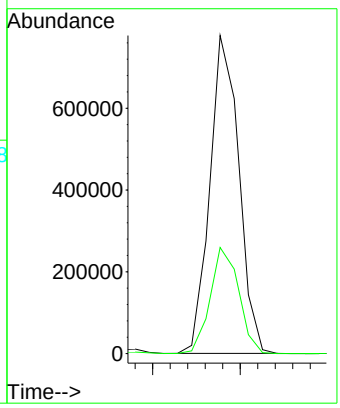
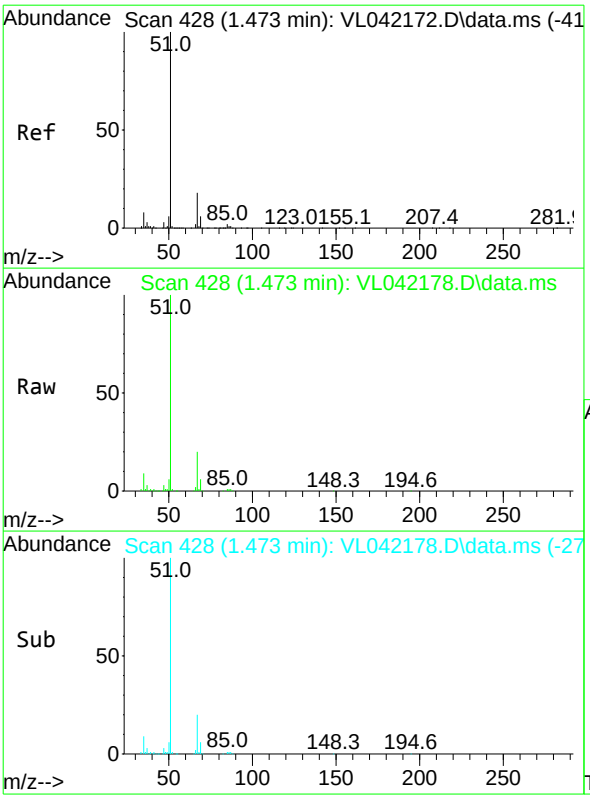


#2
Dichlorodifluoromethane
Concen: 14.023 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 358962

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1

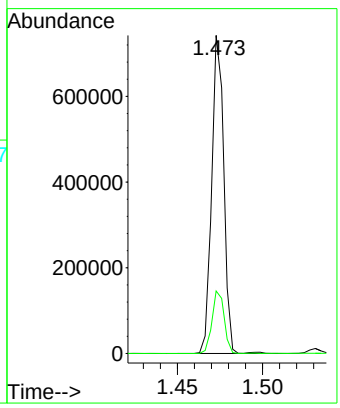




#3
Chlorodifluoromethane
Concen: 14.002 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 51 Resp: 366164

Ion	Ratio	Lower	Upper
51	100		
67	19.8	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
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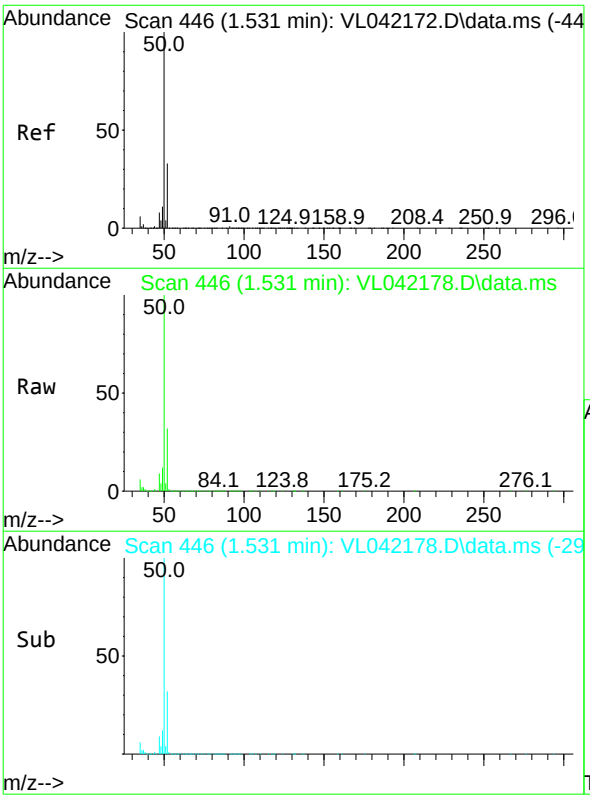
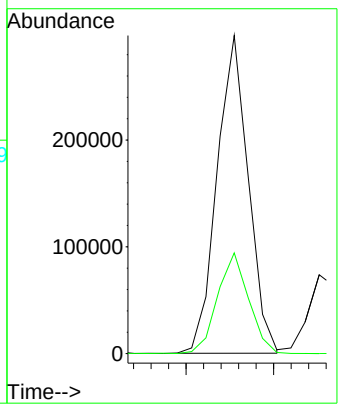
Supervised By :Mahesh Dadoda 04/03/2025

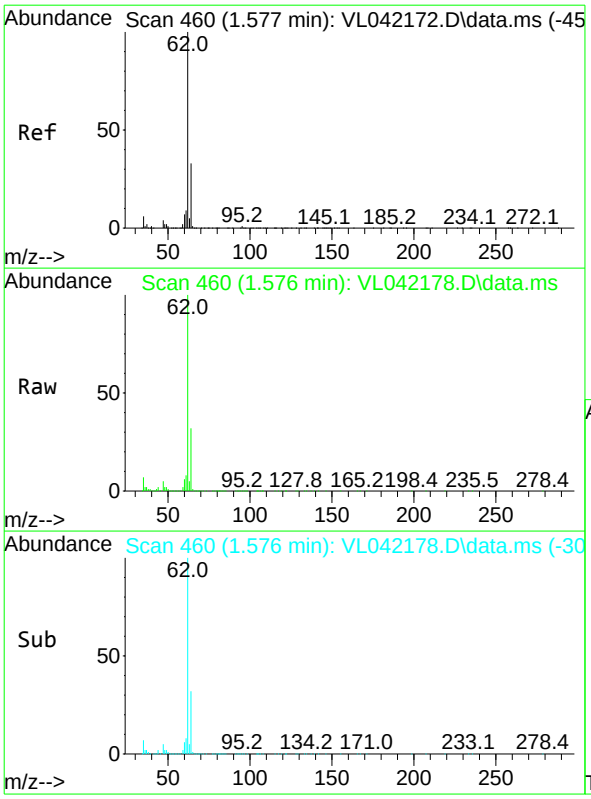


#4
Chloromethane
Concen: 14.160 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 50 Resp: 148133

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1

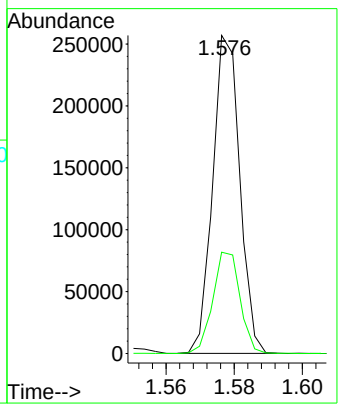




#5
Vinyl Chloride
Concen: 13.304 ppbv
RT: 1.576 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 62 Resp: 141938

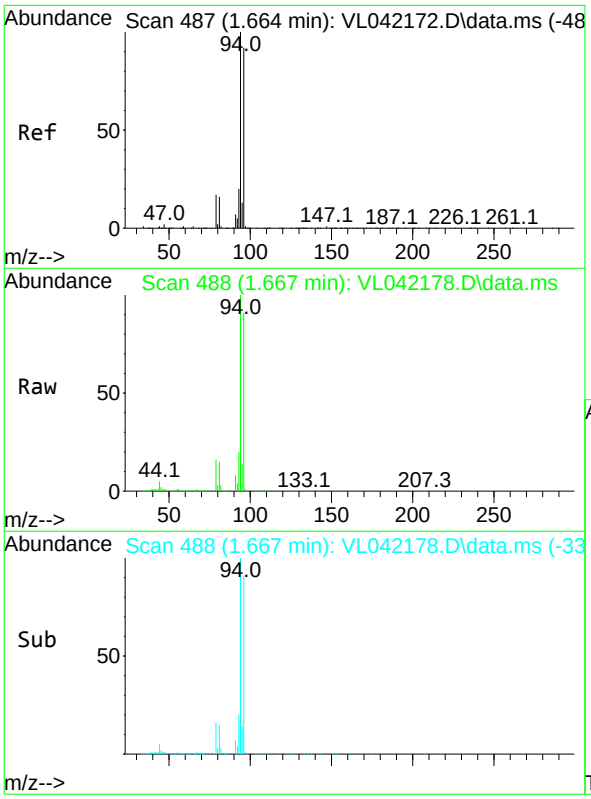
Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

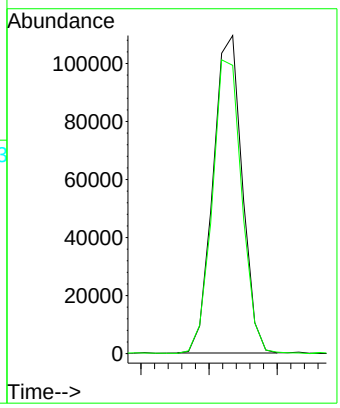
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

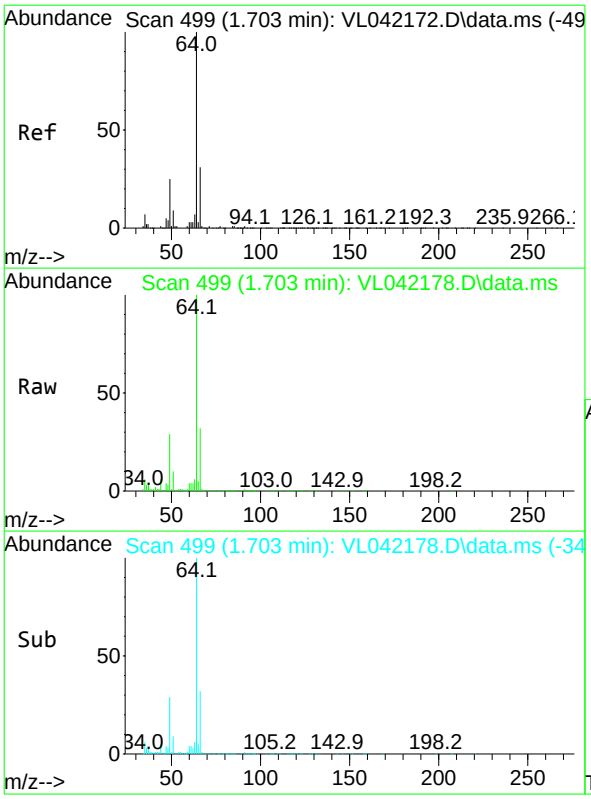


#6
Bromomethane
Concen: 13.734 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 94 Resp: 65113

Ion	Ratio	Lower	Upper
94	100		
96	90.7	73.1	109.7

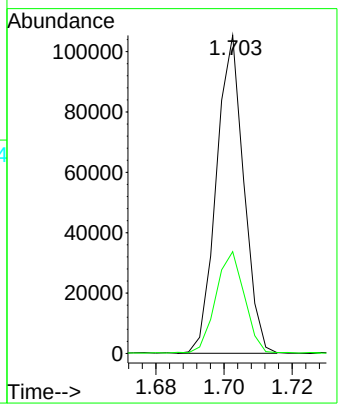




#7
Chloroethane
Concen: 14.007 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 64 Resp: 58820

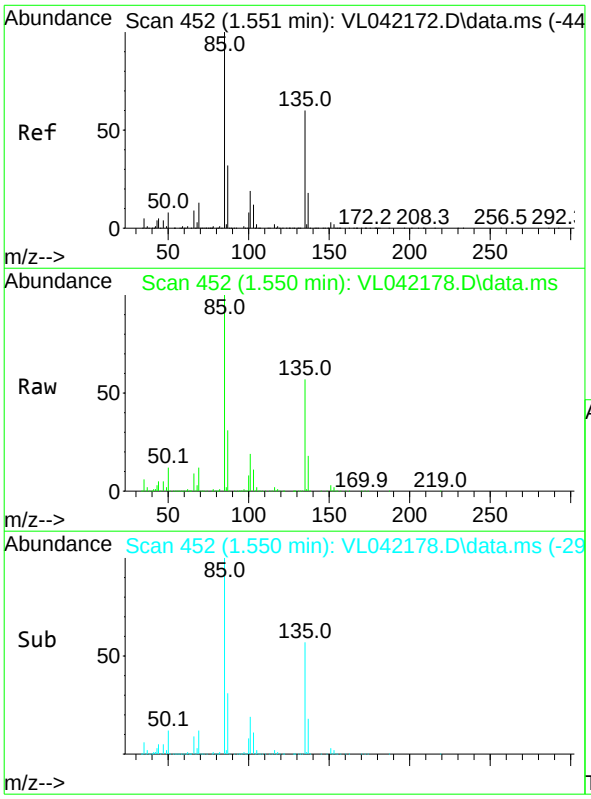
Ion	Ratio	Lower	Upper
64	100		
66	32.0	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

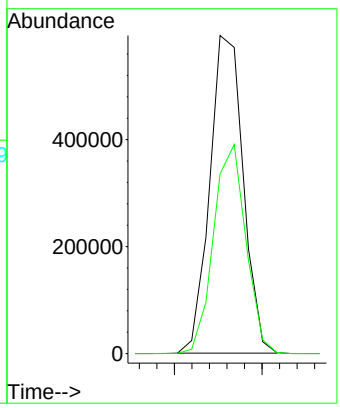
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

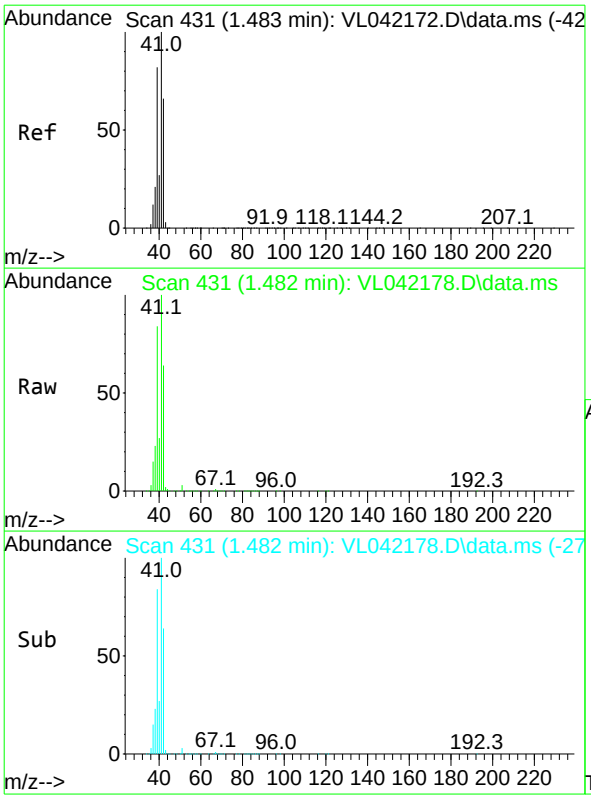


#8
Dichlorotetrafluoroethane
Concen: 14.442 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 314834

Ion	Ratio	Lower	Upper
85	100		
135	63.8	52.4	78.6

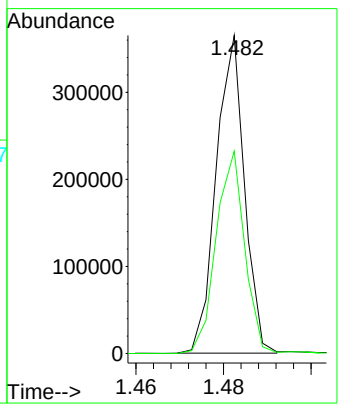




#9
Propene
Concen: 13.902 ppbv
RT: 1.482 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 41 Resp: 163799

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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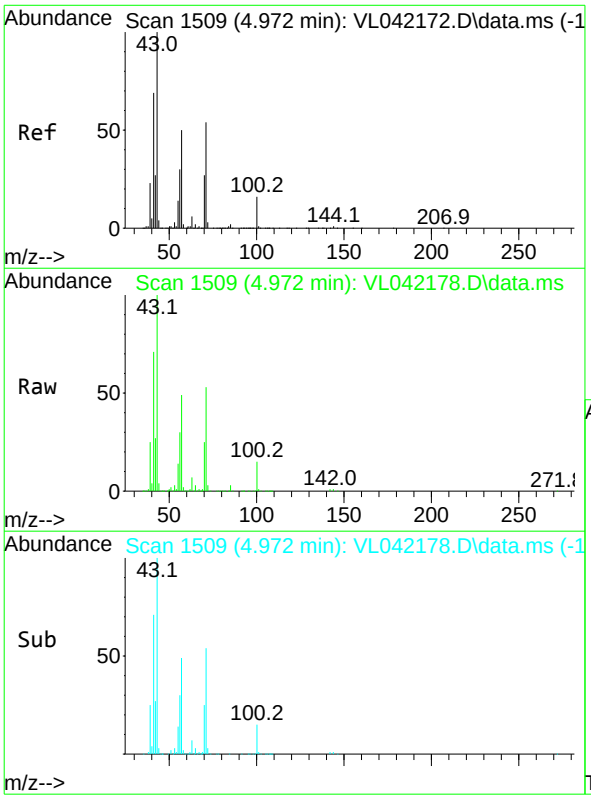
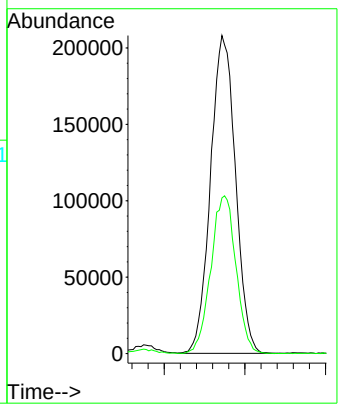
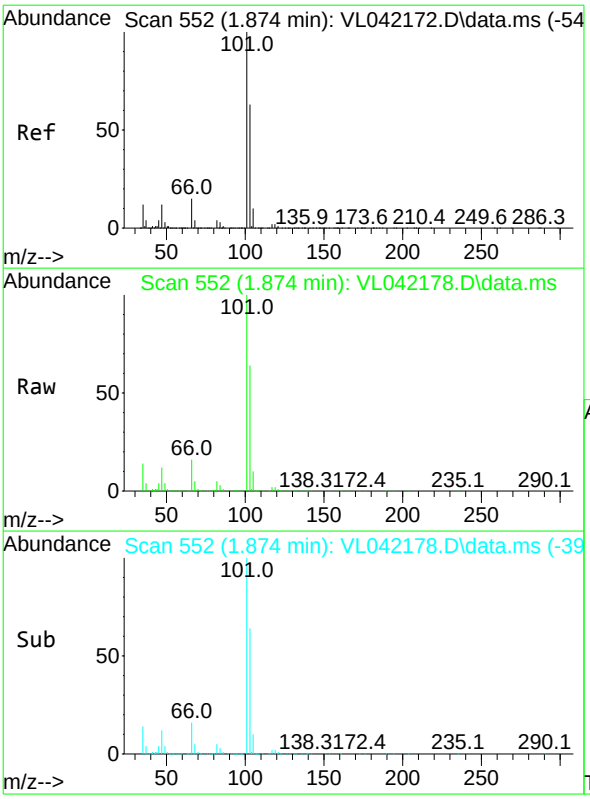


#10
Heptane
Concen: 14.019 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 446949

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.4	59.2

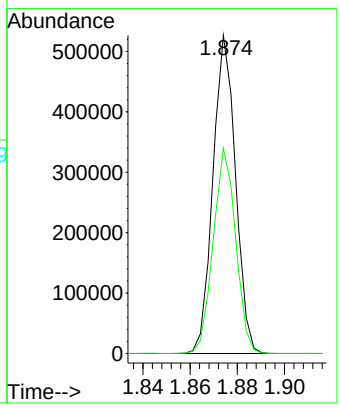




#11
Trichlorofluoromethane
Concen: 14.050 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 349967

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2



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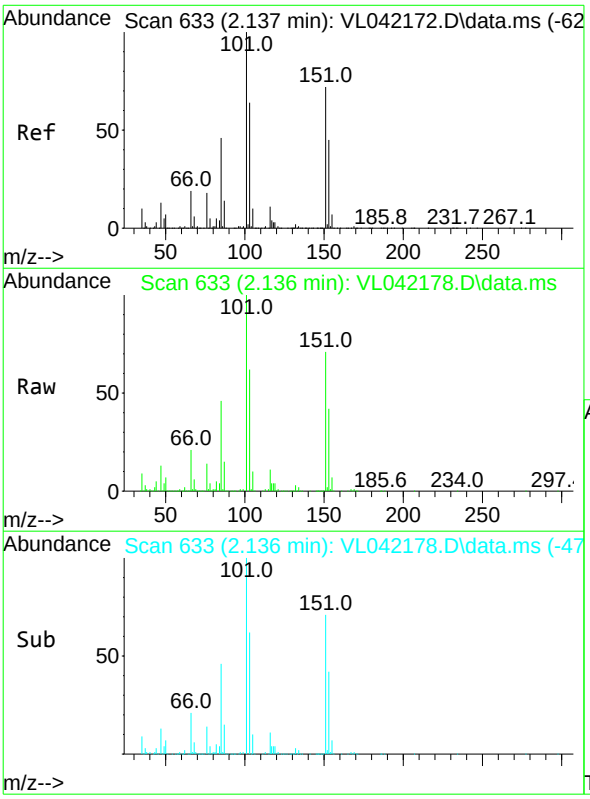
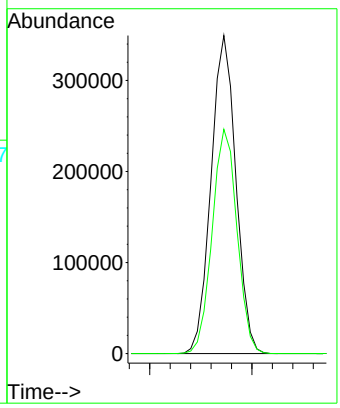
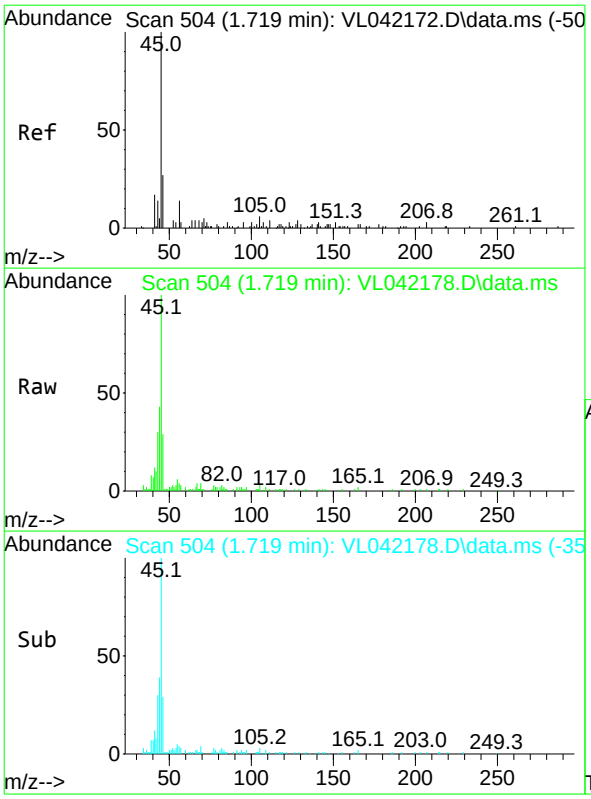


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.419 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 295217

Ion	Ratio	Lower	Upper
101	100		
151	70.4	57.1	85.7

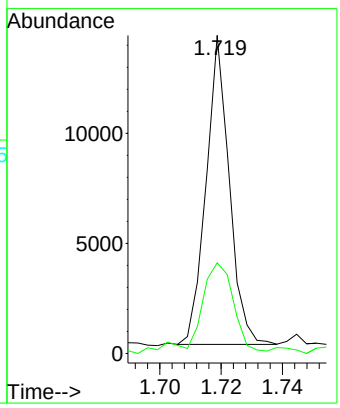




#13
Ethanol
Concen: 8.001 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 45 Resp: 7382

Ion	Ratio	Lower	Upper
45	100		
46	44.6	20.2	80.8



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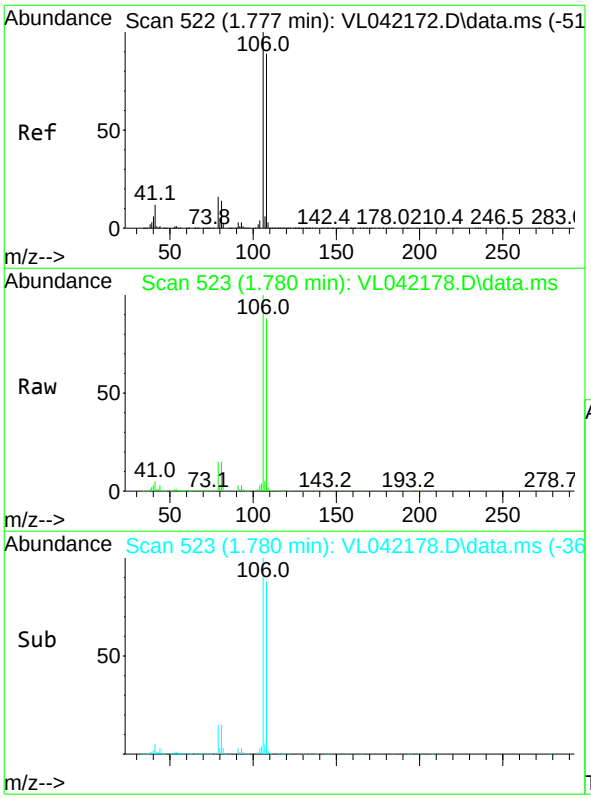
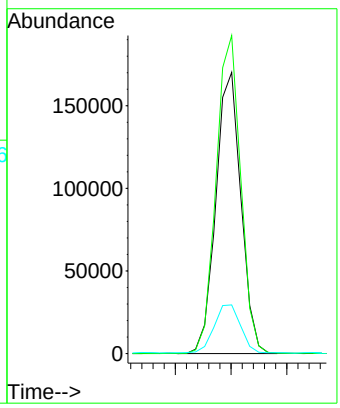
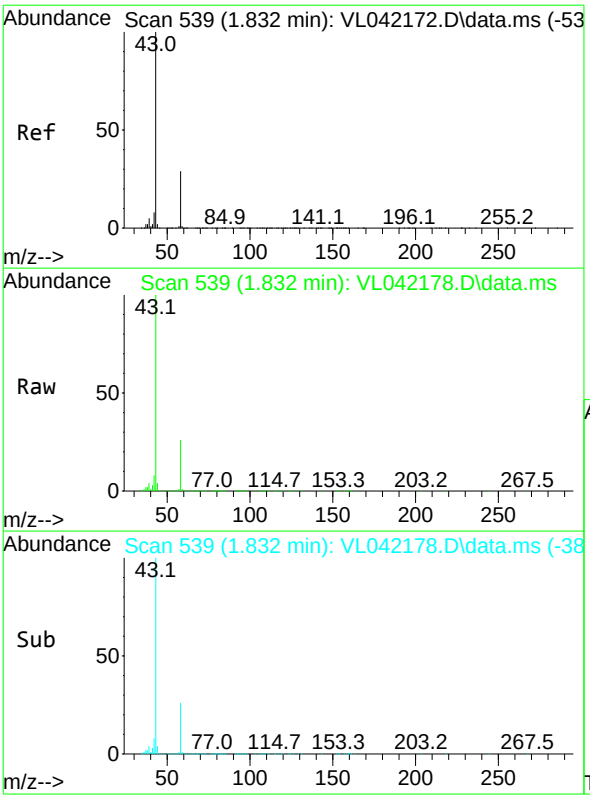


#14
Bromoethene
Concen: 13.571 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:108 Resp: 106436

Ion	Ratio	Lower	Upper
108	100		
106	110.9	86.8	130.2
79	18.8	15.0	22.6

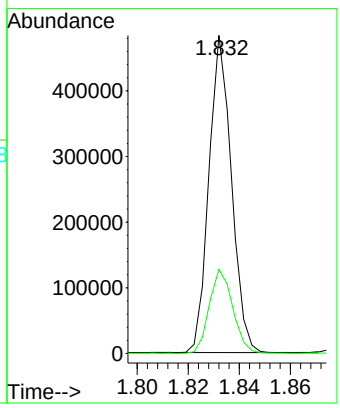




#15
Acetone
Concen: 12.218 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 296254

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8



Instrument :
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ClientSampleId :
VSTDICC015

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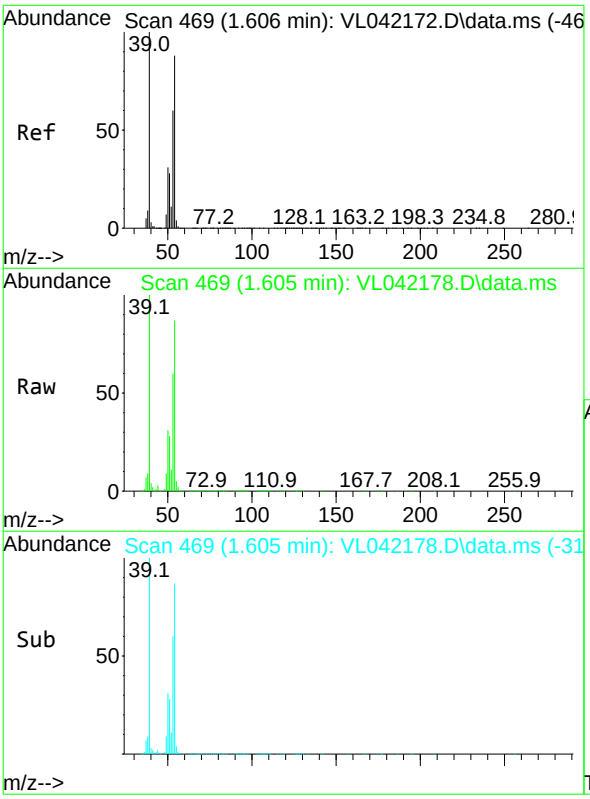
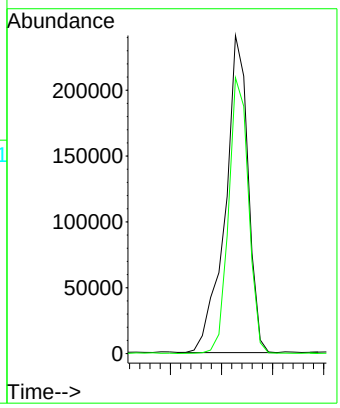
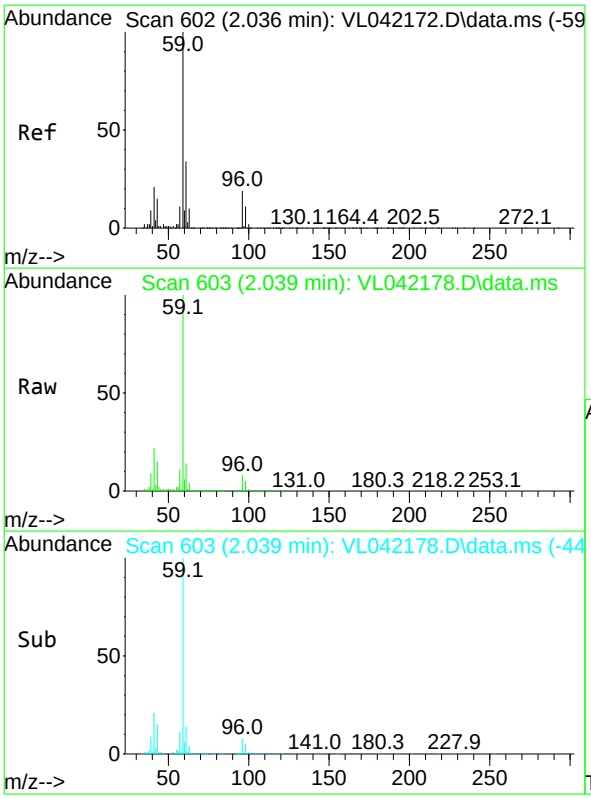


#16
1,3-Butadiene
Concen: 13.766 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 39 Resp: 150122

Ion	Ratio	Lower	Upper
39	100		
54	76.3	60.7	91.1

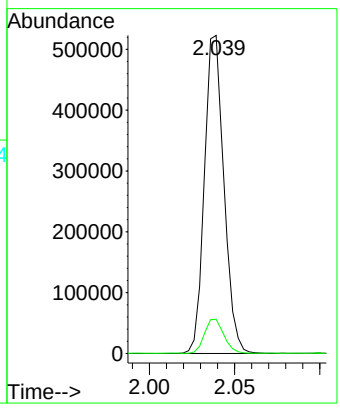




#17
tert-Butyl alcohol
Concen: 13.787 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 59 Resp: 416362

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3



Instrument :
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ClientSampleId :
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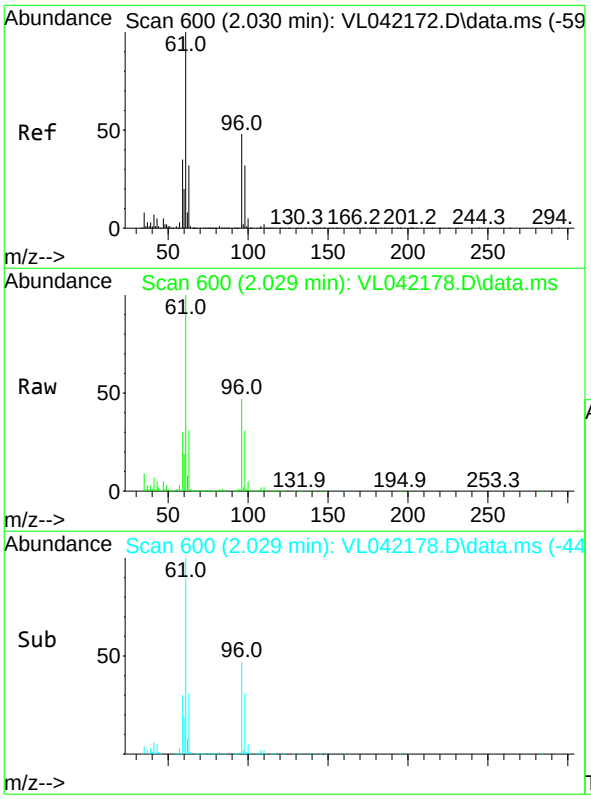
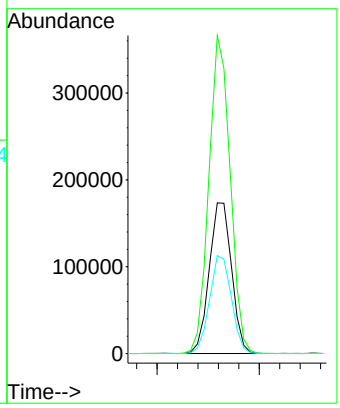
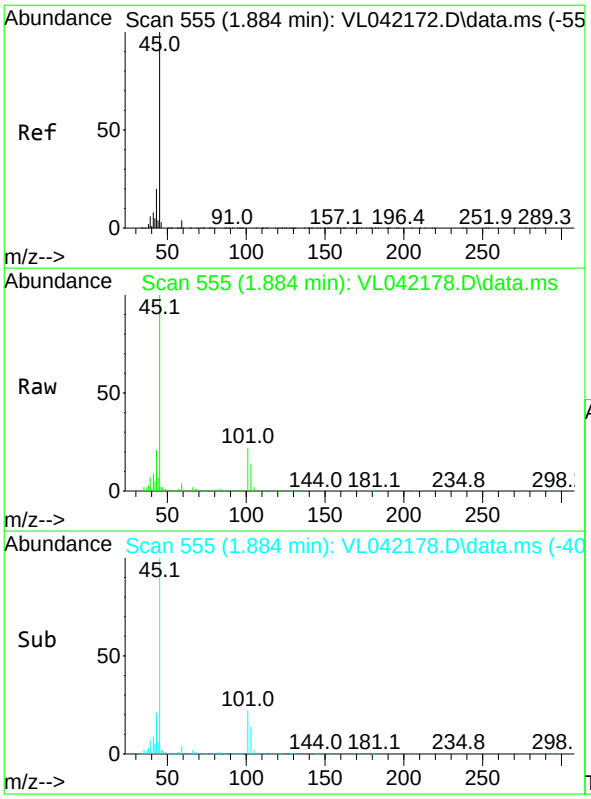


#18
1,1-Dichloroethene
Concen: 13.762 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 131720

Ion	Ratio	Lower	Upper
96	100		
61	211.1	167.6	251.4
98	64.9	53.5	80.3

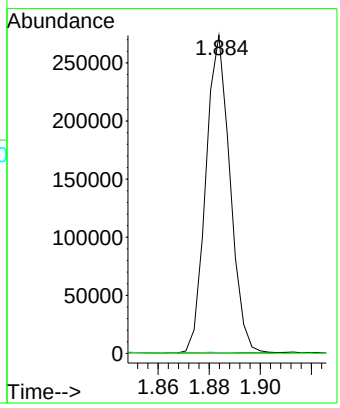




#19
Isopropyl Alcohol
Concen: 13.093 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 45 Resp: 179117

Ion	Ratio	Lower	Upper
45	100		
58	46.4	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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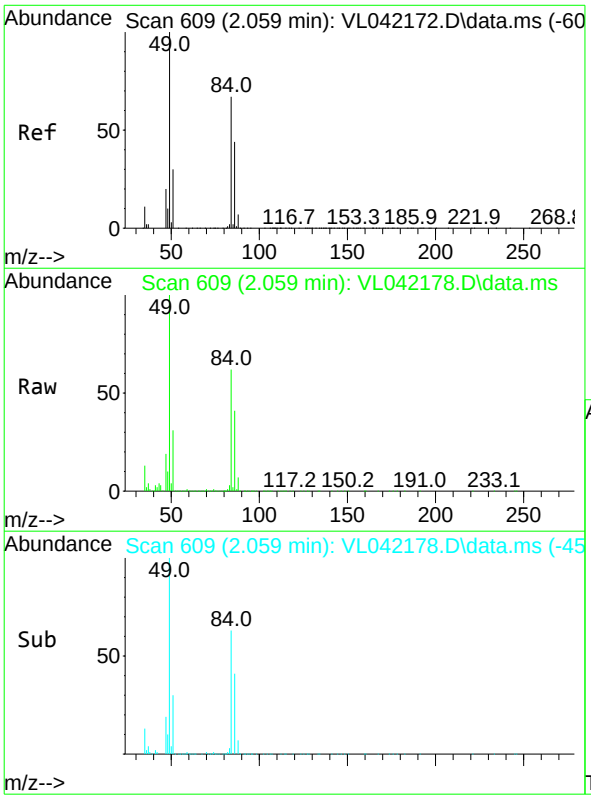
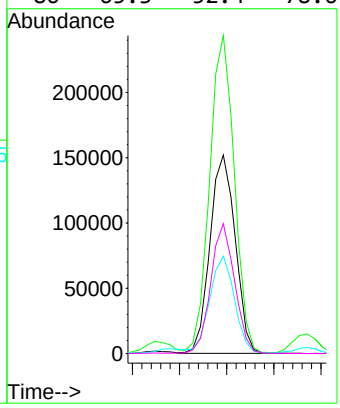
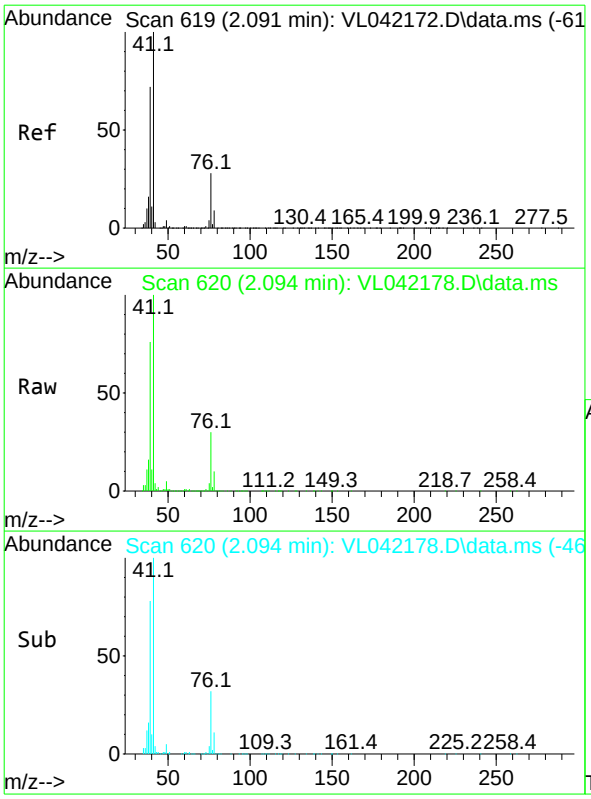


#20
Methylene Chloride
Concen: 12.533 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 113183

Ion	Ratio	Lower	Upper
84	100		
49	159.7	120.2	180.4
51	48.7	37.4	56.0
86	65.3	52.4	78.6





#21
Allyl Chloride
Concen: 14.002 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 41 Resp: 239440

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.1	36.1
39	76.1	61.1	91.7

Instrument :
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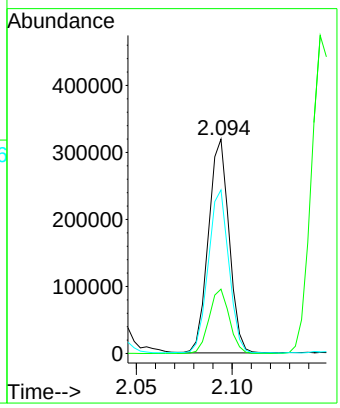
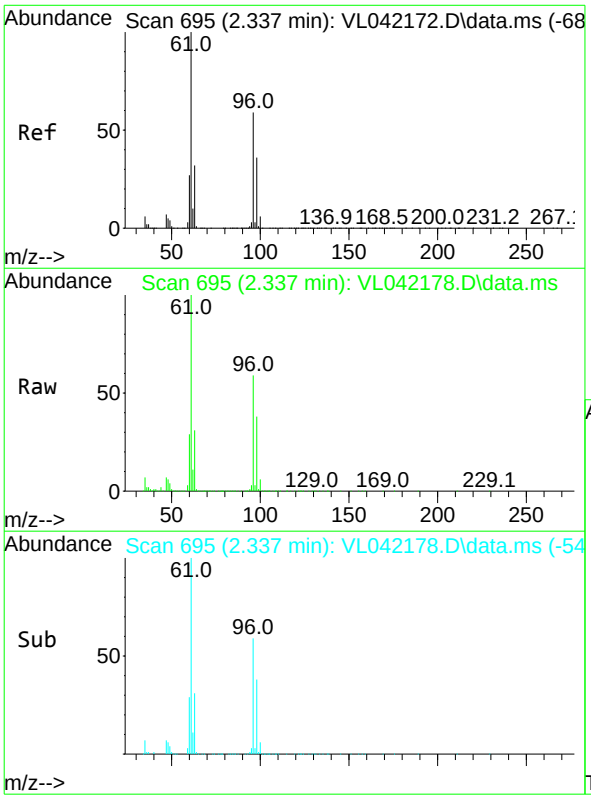
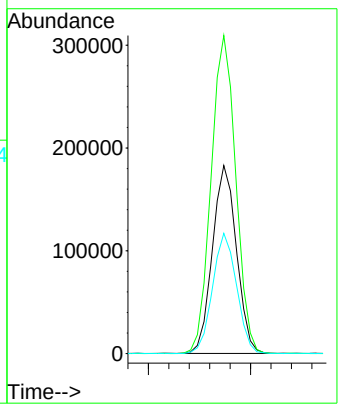


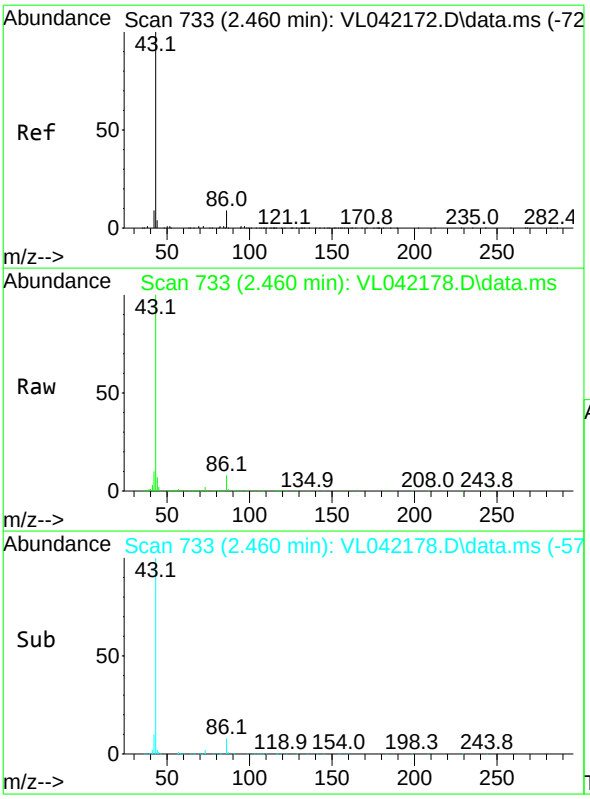


#22
trans-1,2-Dichloroethene
Concen: 13.362 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 149455

Ion	Ratio	Lower	Upper
96	100		
61	169.2	136.6	204.8
98	63.9	49.4	74.2

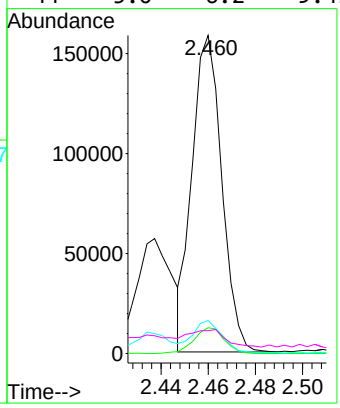




#23
Vinyl Acetate
Concen: 13.736 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 138419

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.1	8.6	13.0
44	5.0	6.2	9.4#



Instrument :
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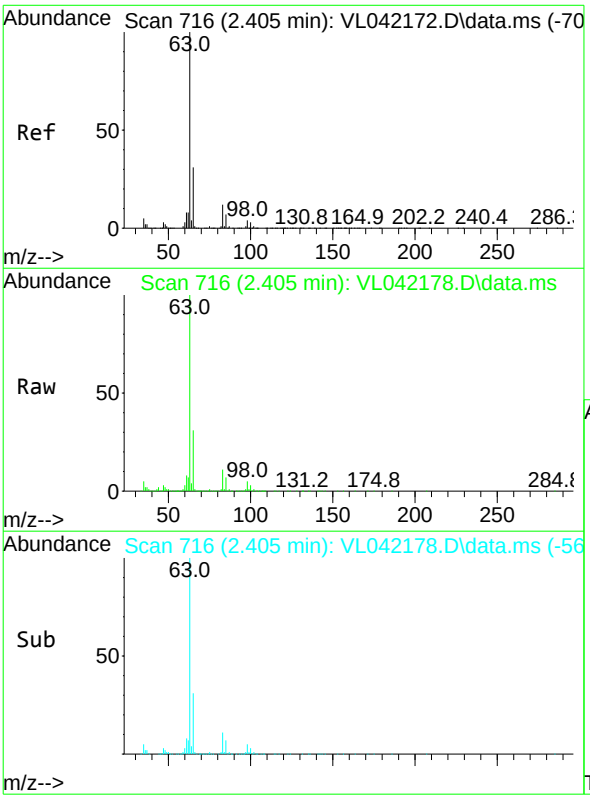
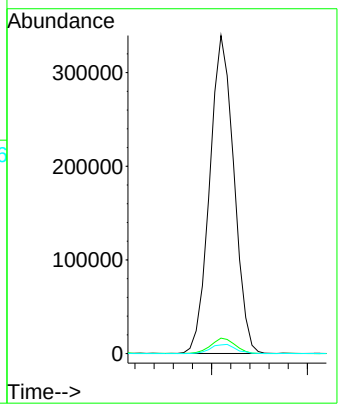
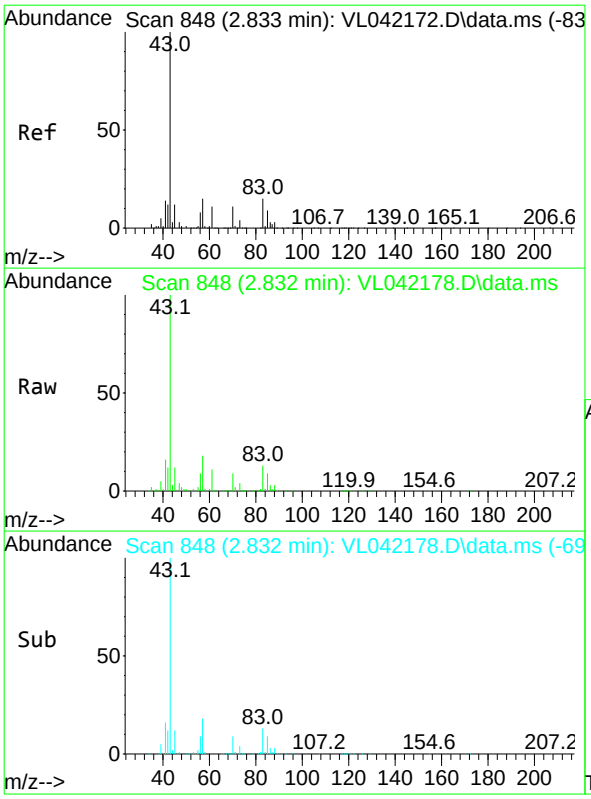


#24
1,1-Dichloroethane
Concen: 14.570 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 298760

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	2.7	1.6	4.7

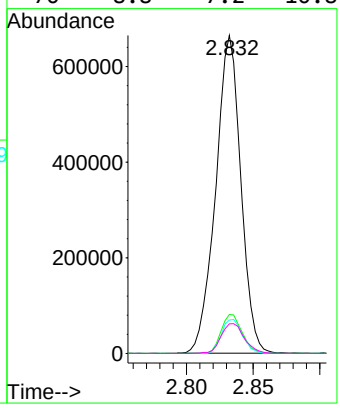




#25
Ethyl Acetate
Concen: 13.855 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 871882

Ion	Ratio	Lower	Upper
43	100		
45	10.3	8.2	12.2
61	9.0	7.3	10.9
70	8.8	7.2	10.8



Instrument :
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ClientSampleId :
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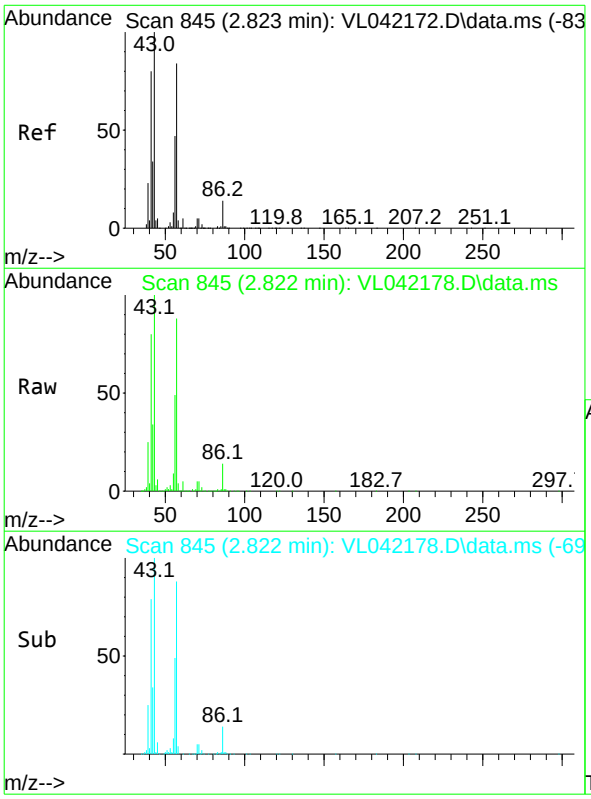
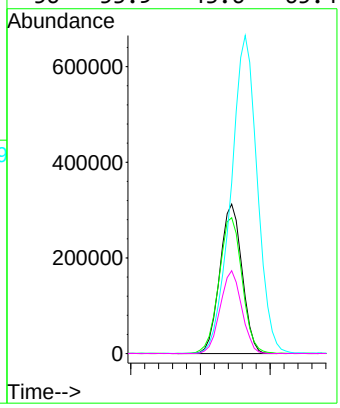
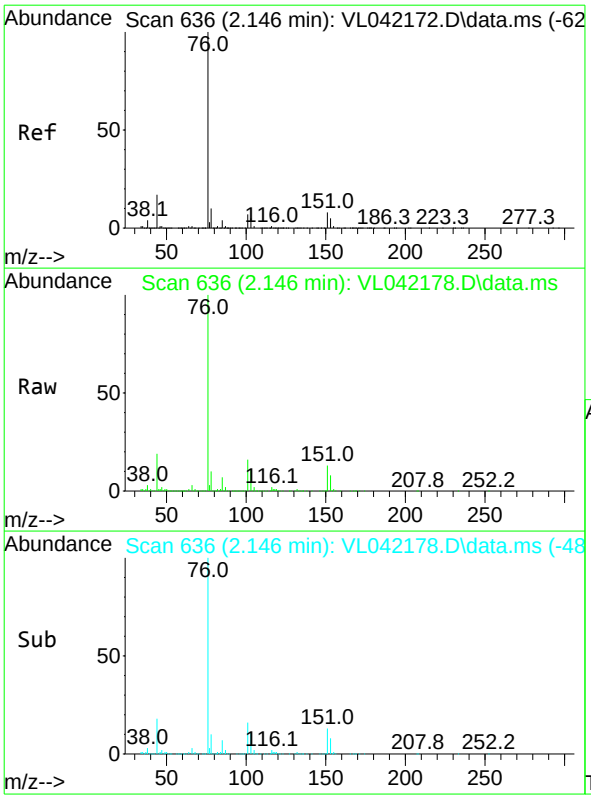


#26
Hexane
Concen: 14.178 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 344636

Ion	Ratio	Lower	Upper
57	100		
41	96.1	76.6	114.8
43	254.0	207.8	311.8
56	53.9	43.6	65.4

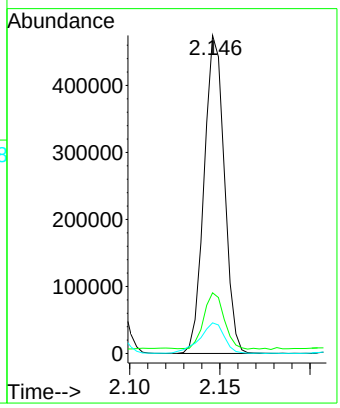




#27
Carbon Disulfide
Concen: 14.196 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 76 Resp: 370022

Ion	Ratio	Lower	Upper
76	100		
44	20.3	14.7	22.1
78	11.7	9.3	13.9



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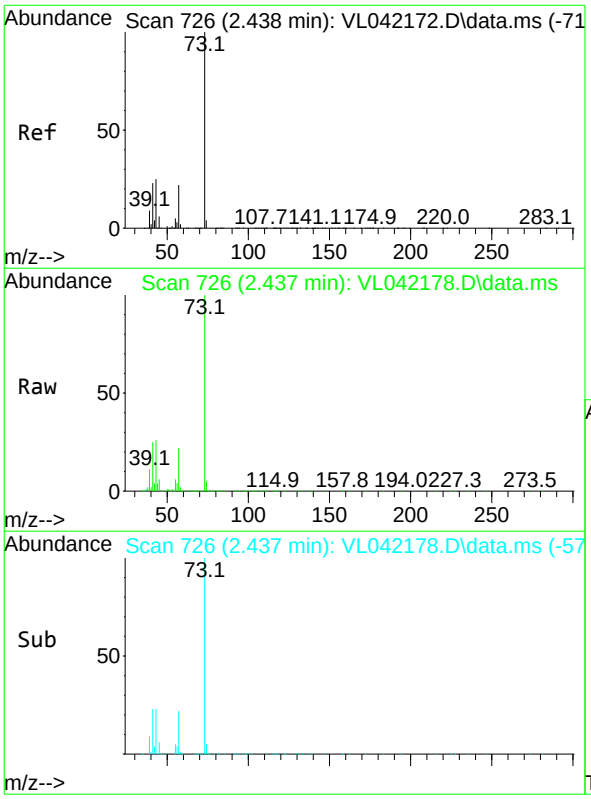
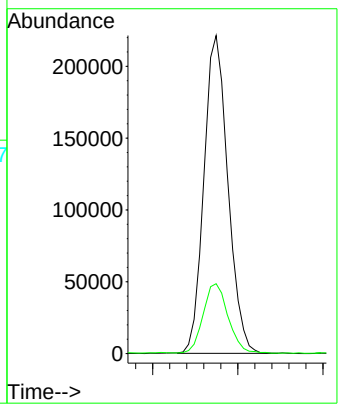
Supervised By :Mahesh Dadoda 04/03/2025

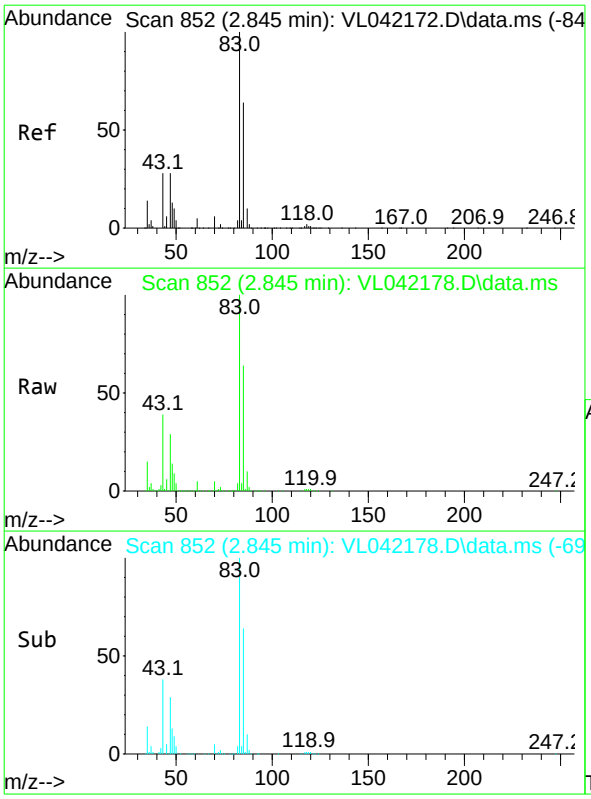


#28
Methyl tert-Butyl Ether
Concen: 14.303 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 73 Resp: 216463

Ion	Ratio	Lower	Upper
73	100		
57	23.2	20.5	30.7

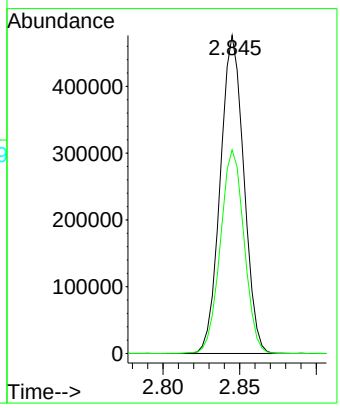




#29
Chloroform
Concen: 14.297 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 508614

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2



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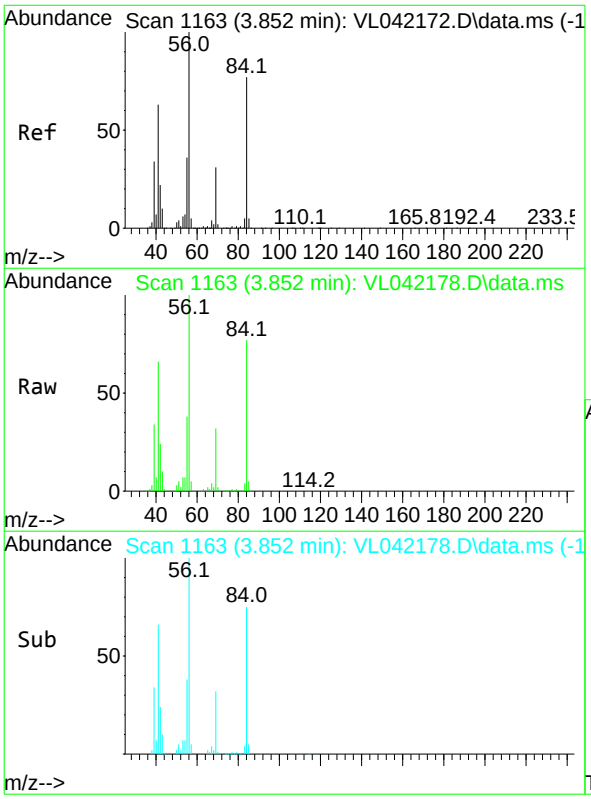
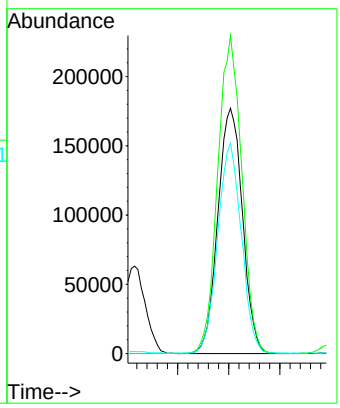
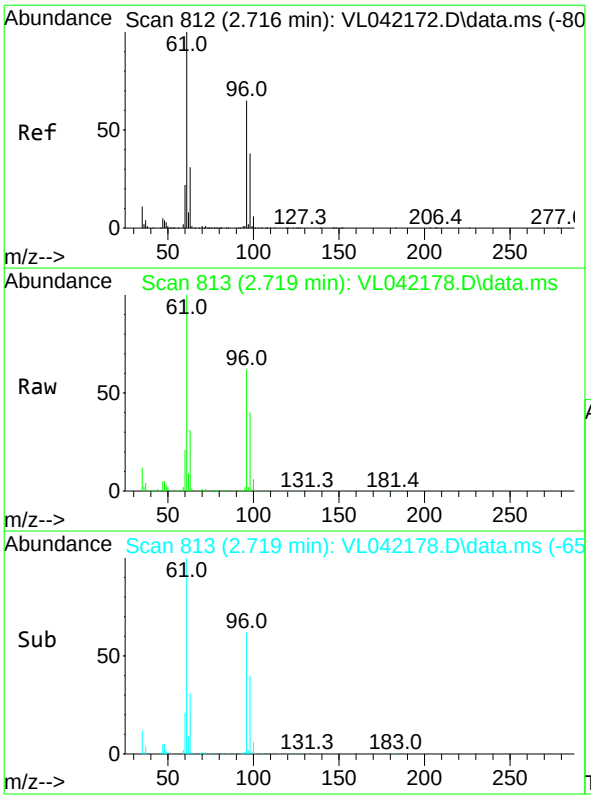


#30
Cyclohexane
Concen: 14.040 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 296458

Ion	Ratio	Lower	Upper
84	100		
56	126.7	102.8	154.2
41	82.6	66.5	99.7

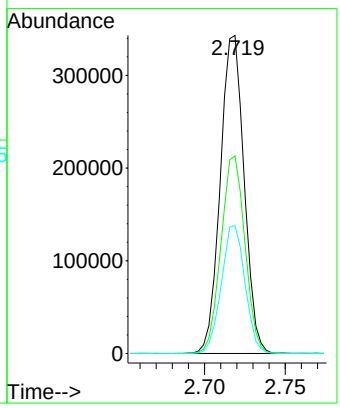




#31
cis-1,2-Dichloroethene
Concen: 14.262 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 61 Resp: 351945

Ion	Ratio	Lower	Upper
61	100		
96	62.1	51.8	77.8
98	40.2	30.6	46.0



Instrument :
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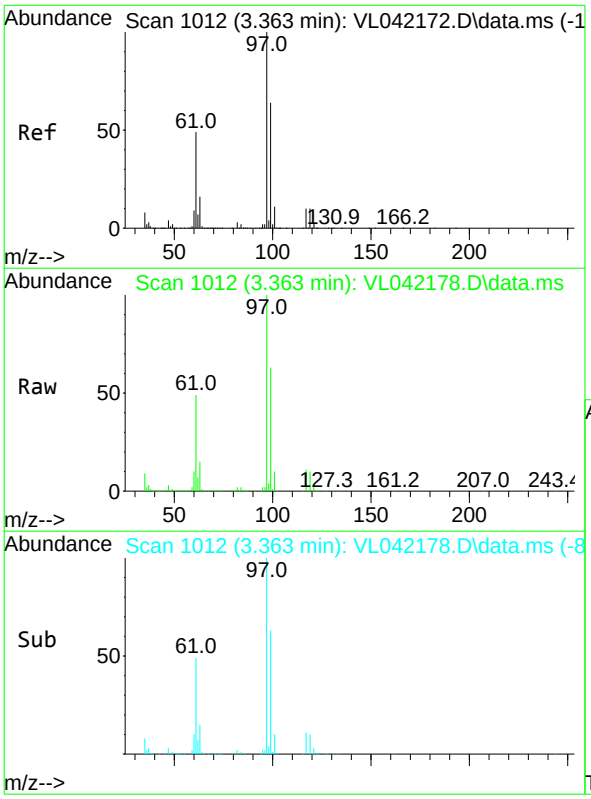
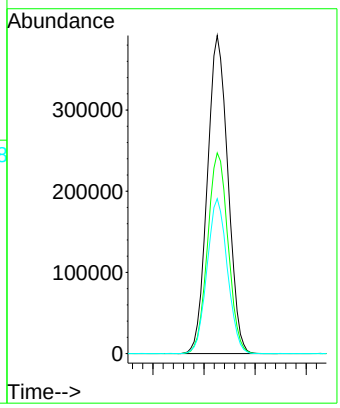
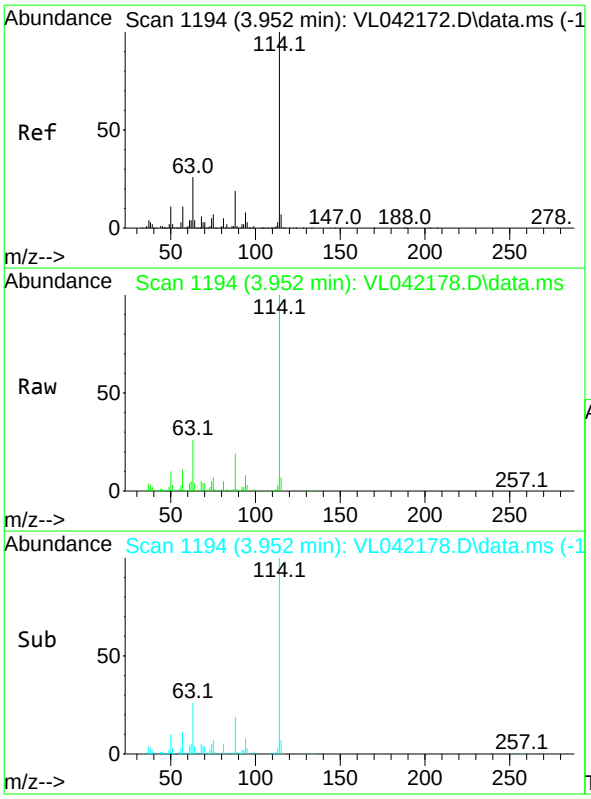


#32
1,1,1-Trichloroethane
Concen: 13.448 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 547329

Ion	Ratio	Lower	Upper
97	100		
99	62.8	51.5	77.3
61	48.4	38.7	58.1

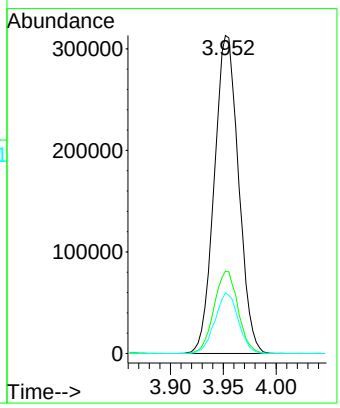




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:114 Resp: 499360

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.4	15.0	22.4



Instrument :
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ClientSampleId :
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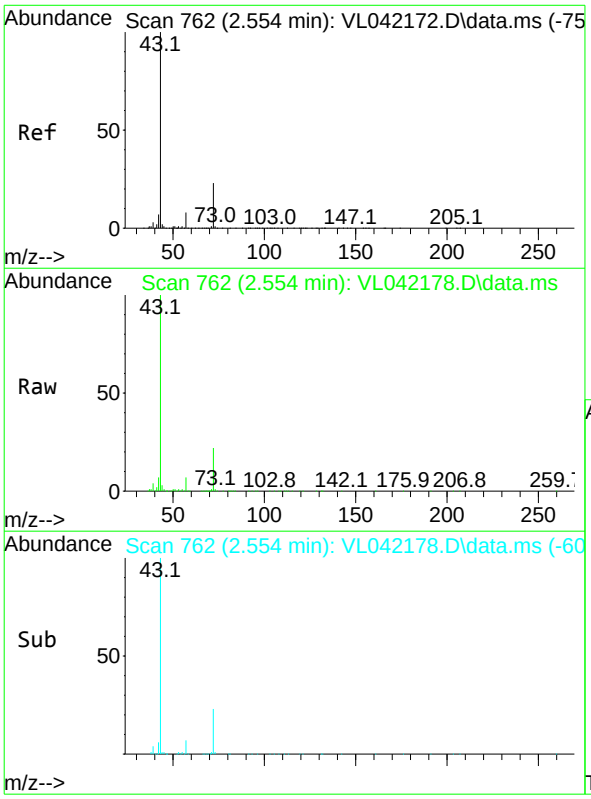
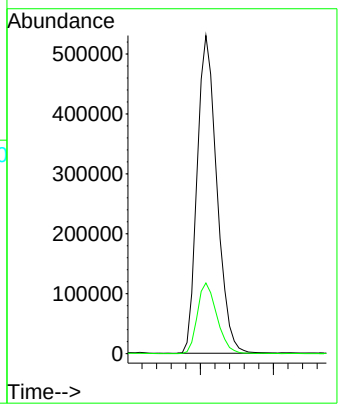
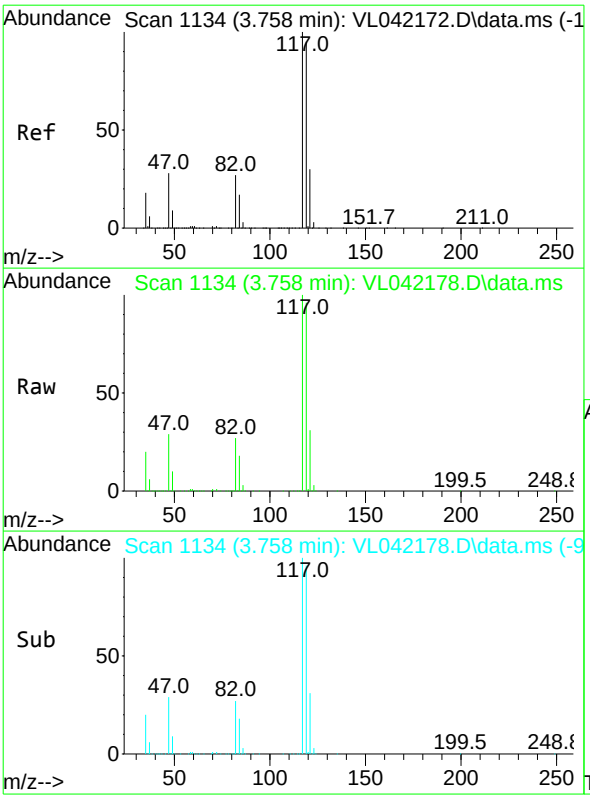


#34
2-Butanone
Concen: 13.726 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 497020

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2

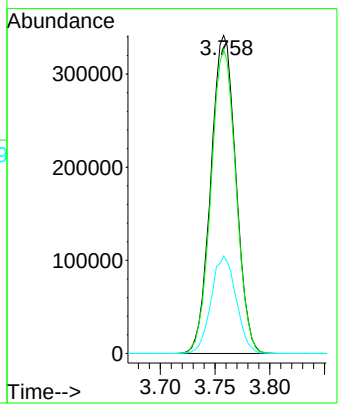




#35
Carbon Tetrachloride
Concen: 14.140 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:117 Resp: 543385

Ion	Ratio	Lower	Upper
117	100		
119	95.5	76.2	114.2
121	30.6	24.2	36.4



Instrument :
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ClientSampleId :
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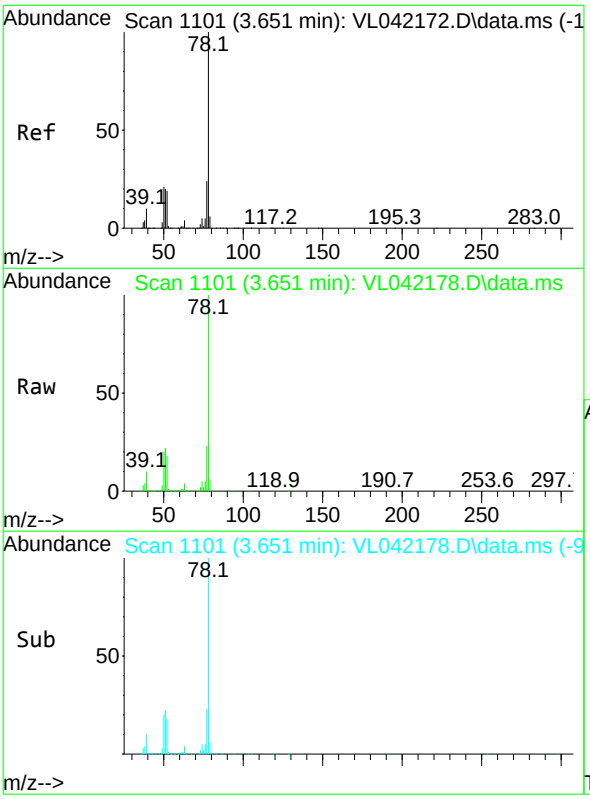
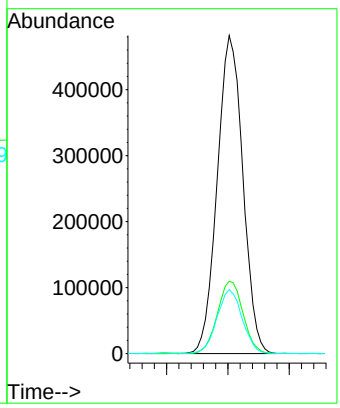
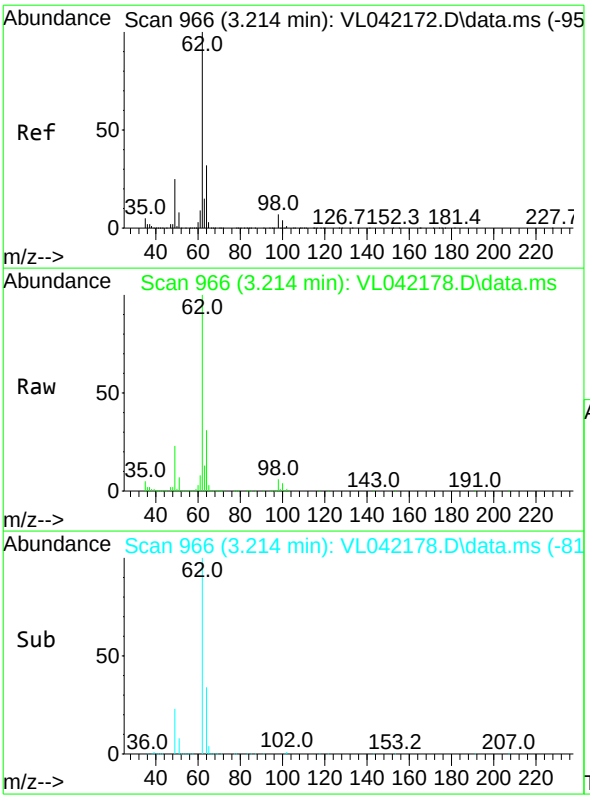


#36
Benzene
Concen: 14.131 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 78 Resp: 699549

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	20.1	16.6	24.8





#37
1,2-Dichloroethane
Concen: 14.697 ppbv
RT: 3.214 min Scan# 96
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 62 Resp: 416544

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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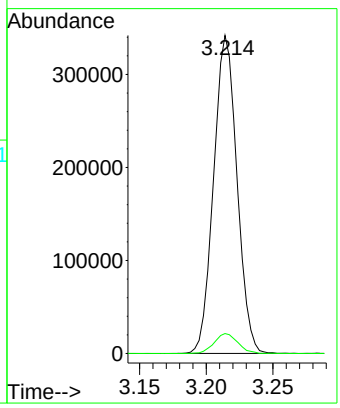
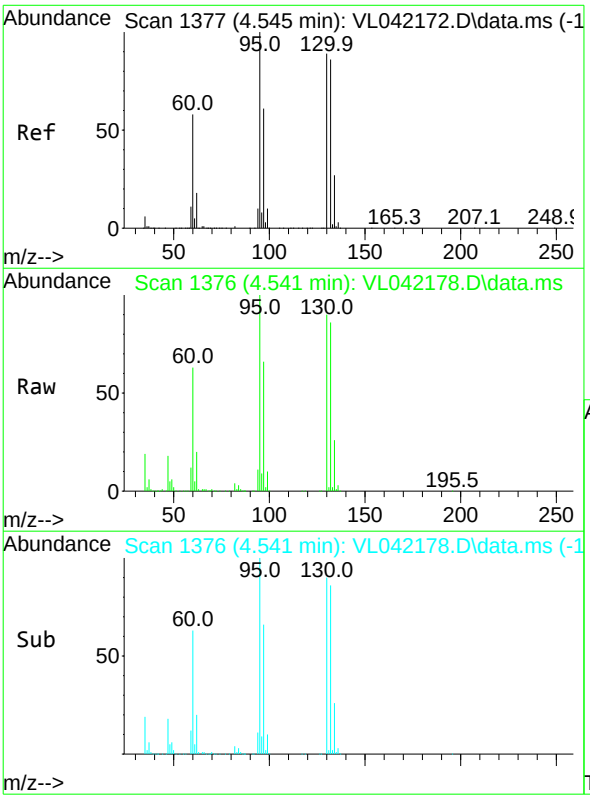
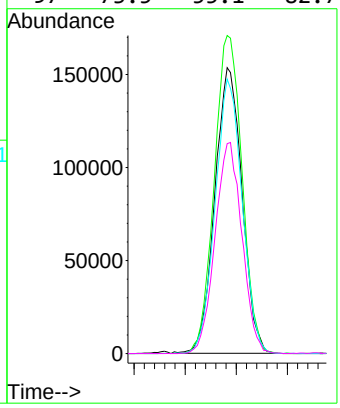


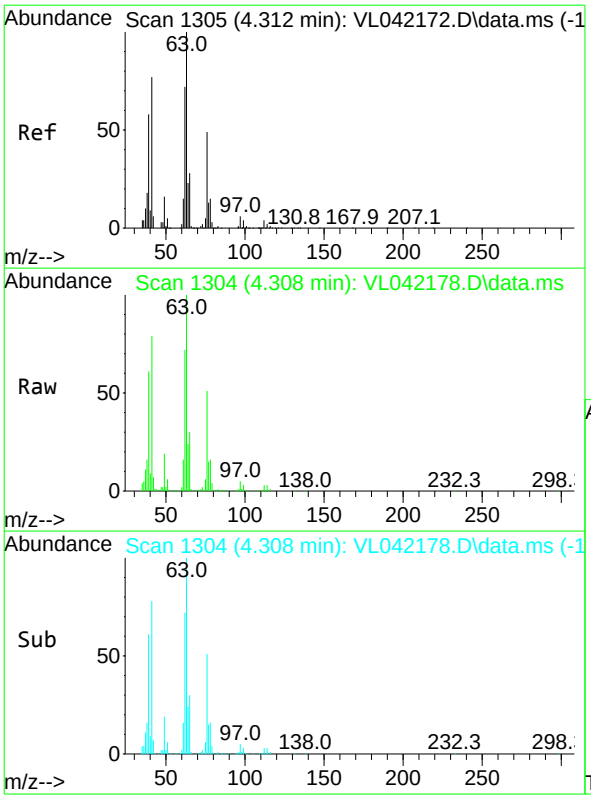


#38
Trichloroethene
Concen: 13.715 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:130 Resp: 283430

Ion	Ratio	Lower	Upper
130	100		
95	111.3	89.8	134.8
132	96.0	77.4	116.2
97	73.5	55.1	82.7

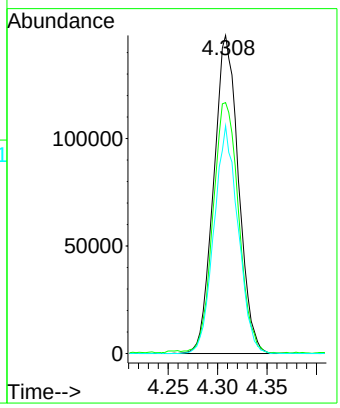




#39
1,2-Dichloropropane
Concen: 14.304 ppbv
RT: 4.308 min Scan# 13
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 257891

Ion	Ratio	Lower	Upper
63	100		
41	78.7	61.7	92.5
62	71.6	57.6	86.4



Instrument :
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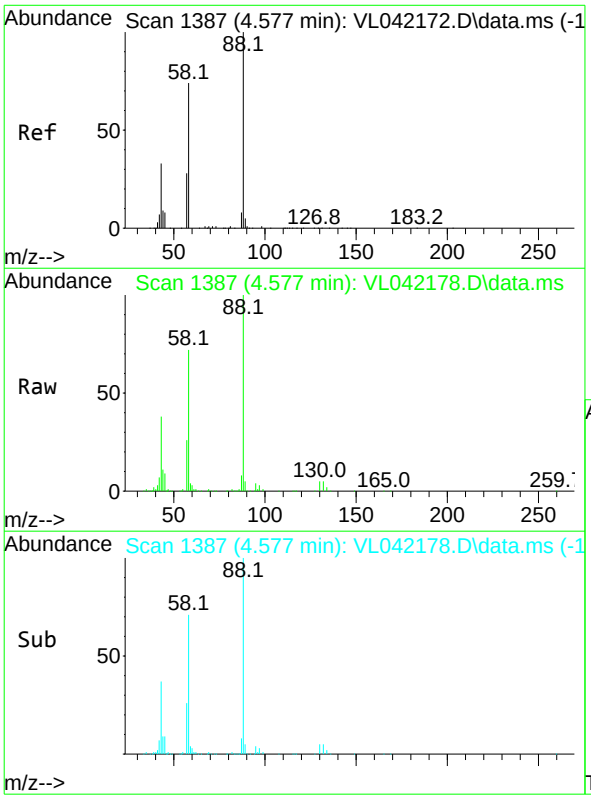
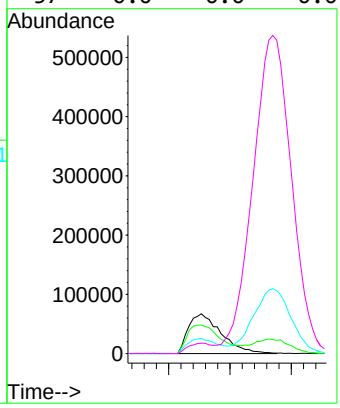
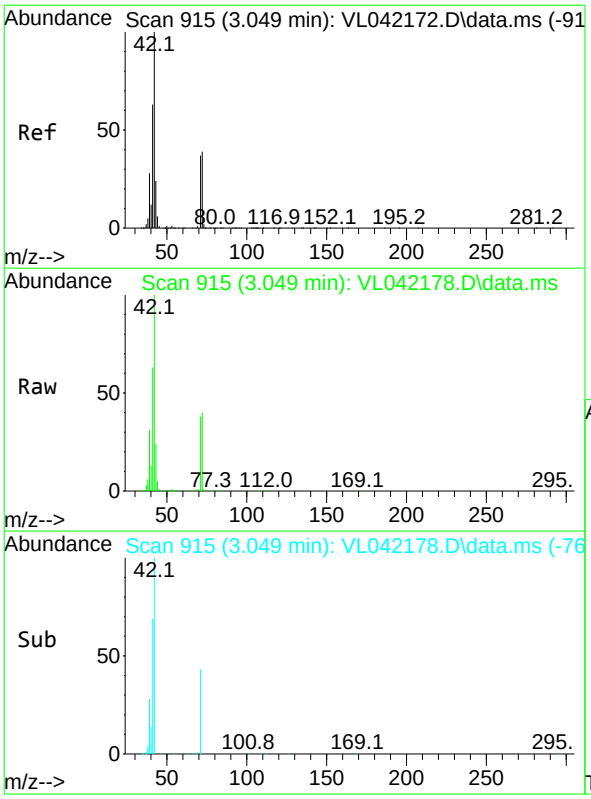


#40
1,4-Dioxane
Concen: 13.354 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 88 Resp: 124925

Ion	Ratio	Lower	Upper
88	100		
58	69.6	62.7	94.1
43	31.6	23.0	34.4
57	0.0	0.0	0.0

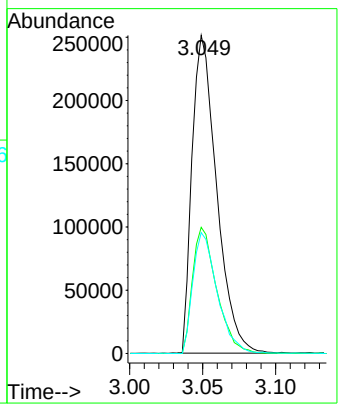




#41
Tetrahydrofuran
Concen: 14.301 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 42 Resp: 294634

Ion	Ratio	Lower	Upper
42	100		
72	39.0	31.4	47.0
71	37.9	30.2	45.4



Instrument :
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ClientSampleId :
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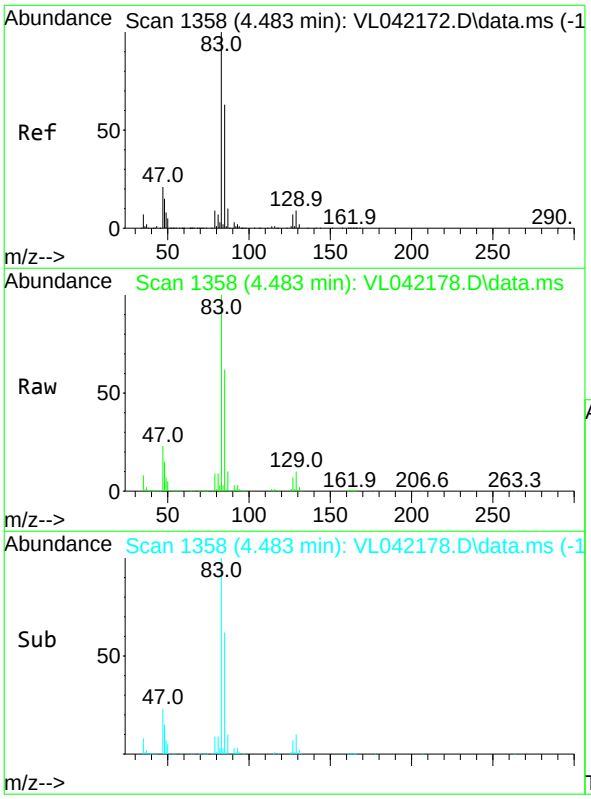
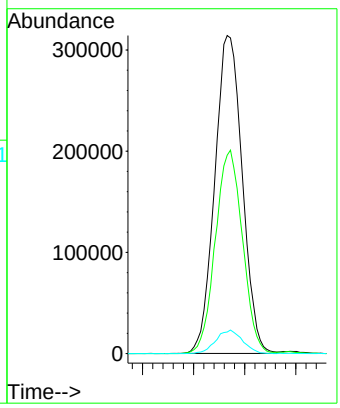
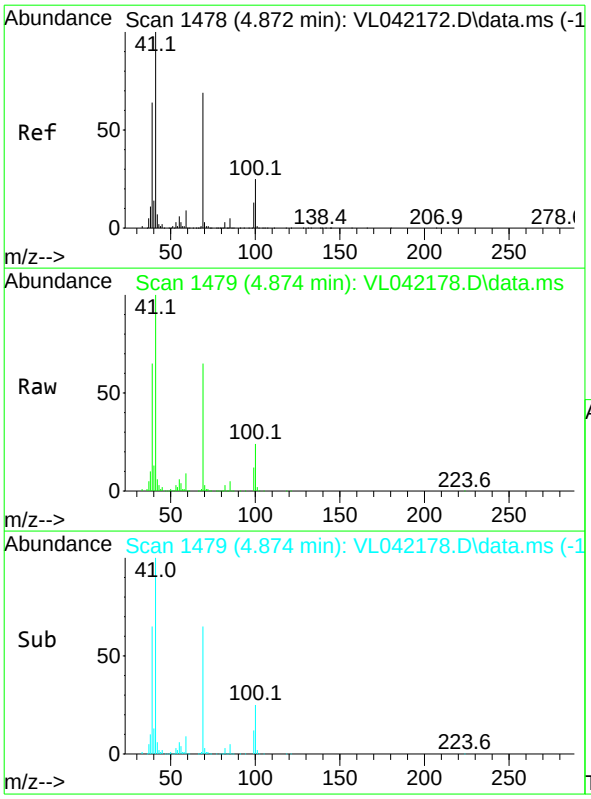


#42
Bromodichloromethane
Concen: 15.043 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 587772

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	6.8	5.9	8.9

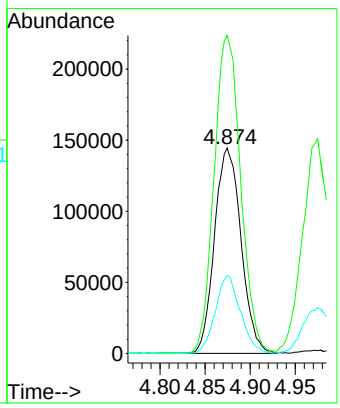




#43
Methyl Methacrylate
Concen: 14.130 ppbv
RT: 4.874 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 69 Resp: 295300

Ion	Ratio	Lower	Upper
69	100		
41	155.4	123.8	185.6
100	36.0	28.4	42.6



Instrument :
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ClientSampleId :
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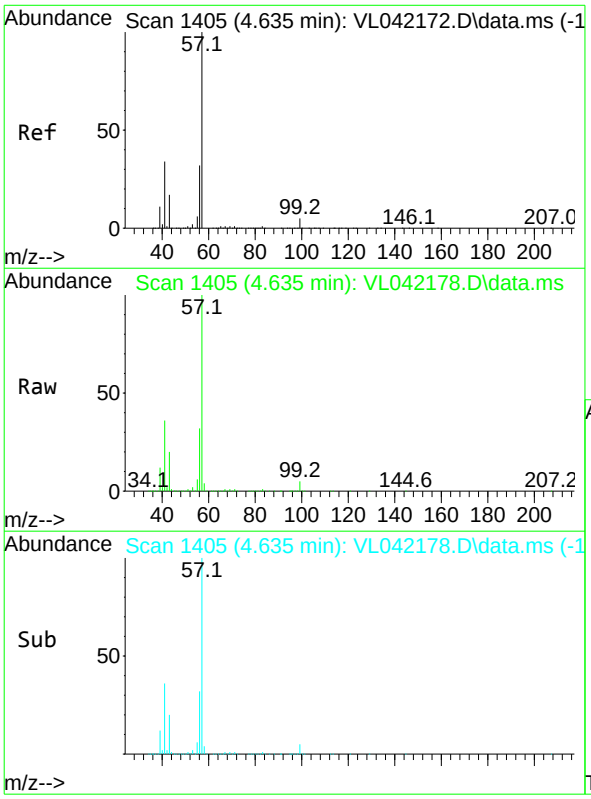
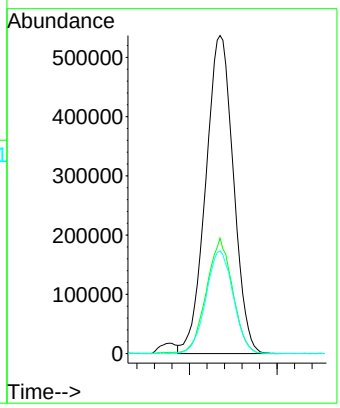
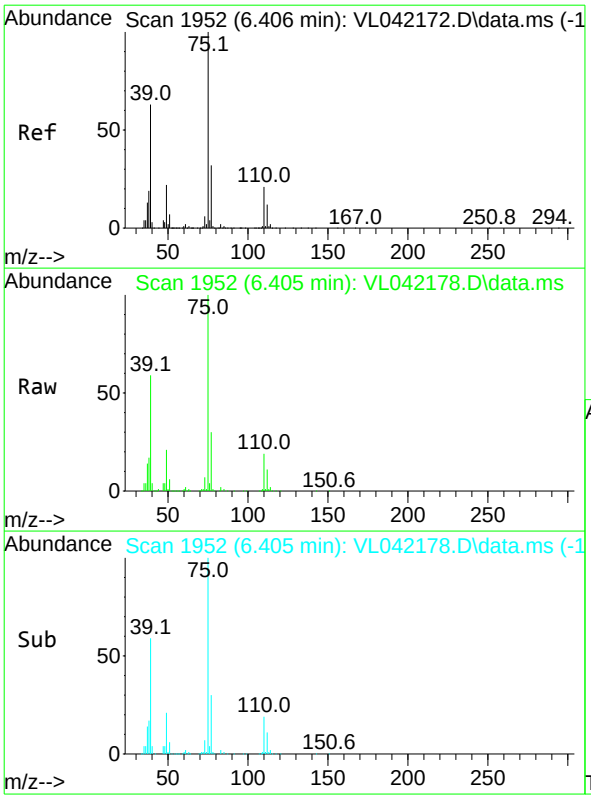


#44
2,2,4-Trimethylpentane
Concen: 14.108 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 1180275

Ion	Ratio	Lower	Upper
57	100		
41	34.2	26.8	40.2
56	31.9	25.6	38.4

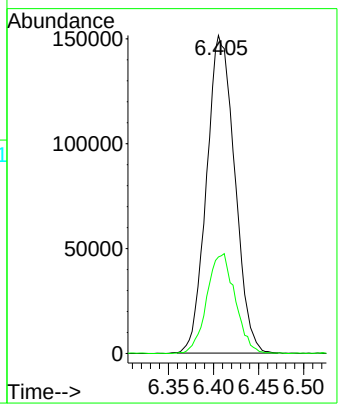




#45
t-1,3-Dichloropropene
Concen: 14.649 ppbv
RT: 6.405 min Scan# 19
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 329360

Ion	Ratio	Lower	Upper
75	100		
77	30.4	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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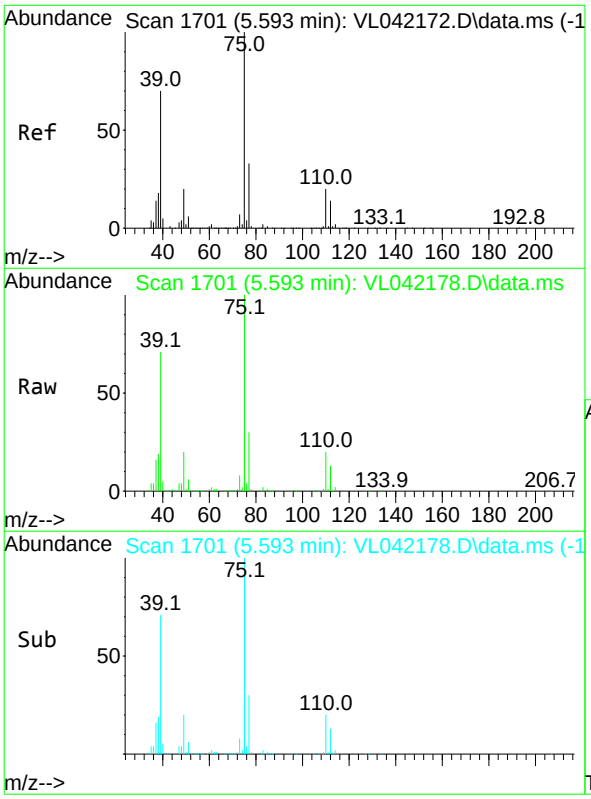
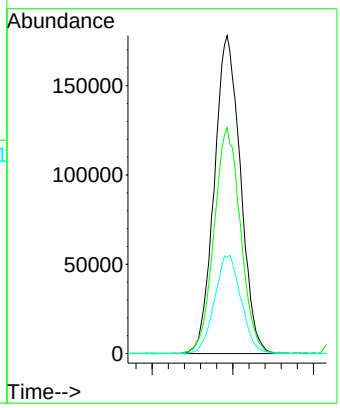
Supervised By :Mahesh Dadoda 04/03/2025

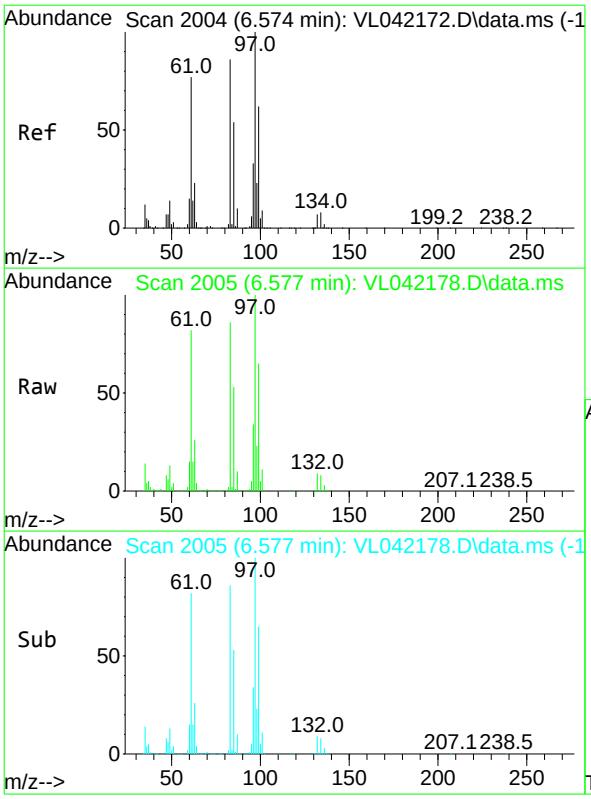


#46
cis-1,3-Dichloropropene
Concen: 14.542 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 400813

Ion	Ratio	Lower	Upper
75	100		
39	70.9	55.8	83.6
77	30.2	26.0	39.0

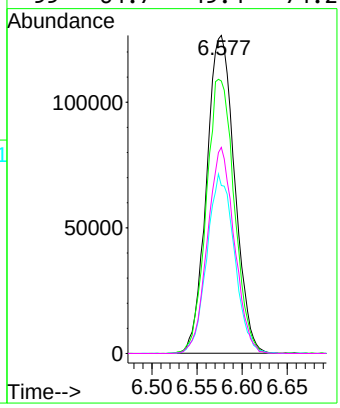




#47
1,1,2-Trichloroethane
Concen: 14.331 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 273137

Ion	Ratio	Lower	Upper
97	100		
83	85.7	69.2	103.8
85	52.7	43.1	64.7
99	64.7	49.4	74.2



Instrument :
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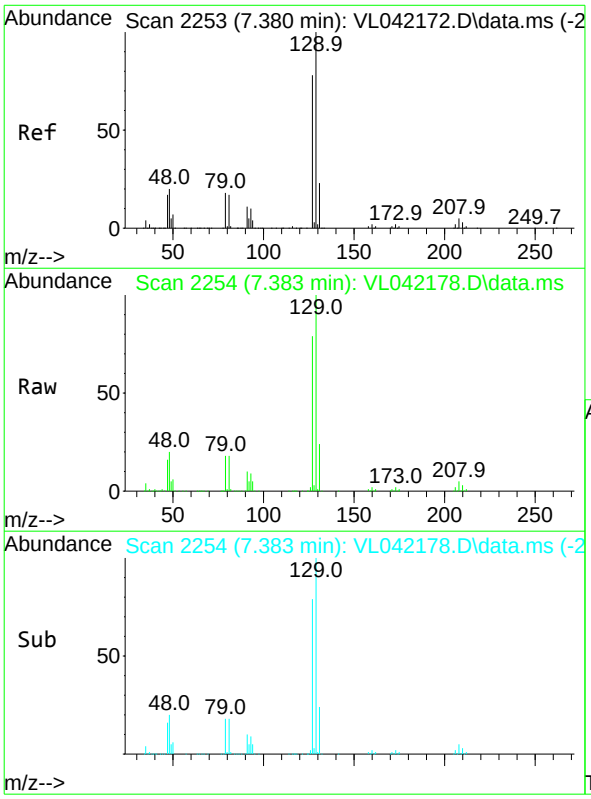
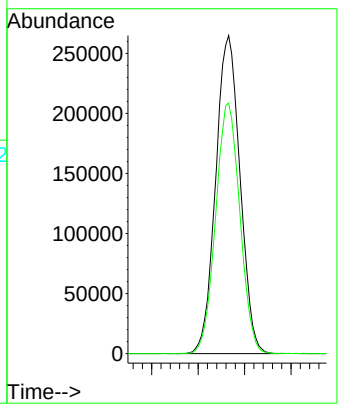
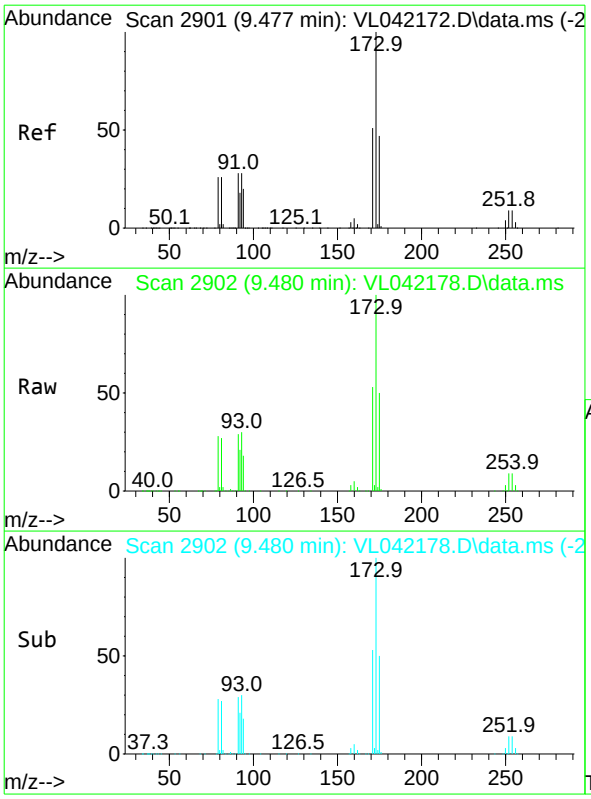


#48
Dibromochloromethane
Concen: 14.936 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:129 Resp: 482431

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2

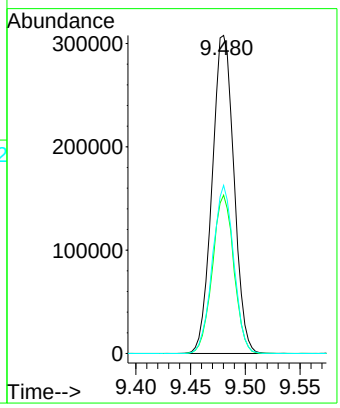




#49
Bromoform
Concen: 14.730 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:173 Resp: 427143

Ion	Ratio	Lower	Upper
173	100		
175	48.9	38.6	57.8
171	51.5	41.8	62.6



Instrument :
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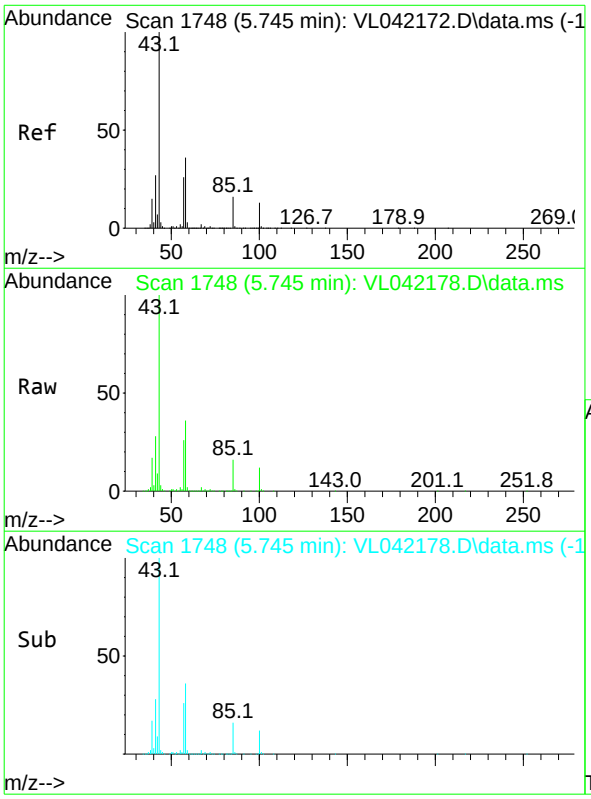
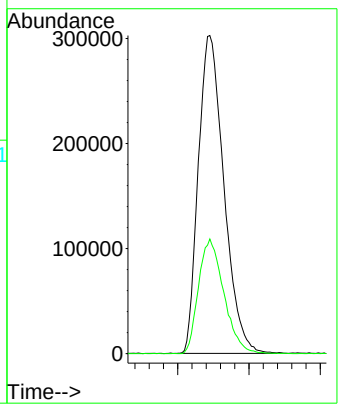
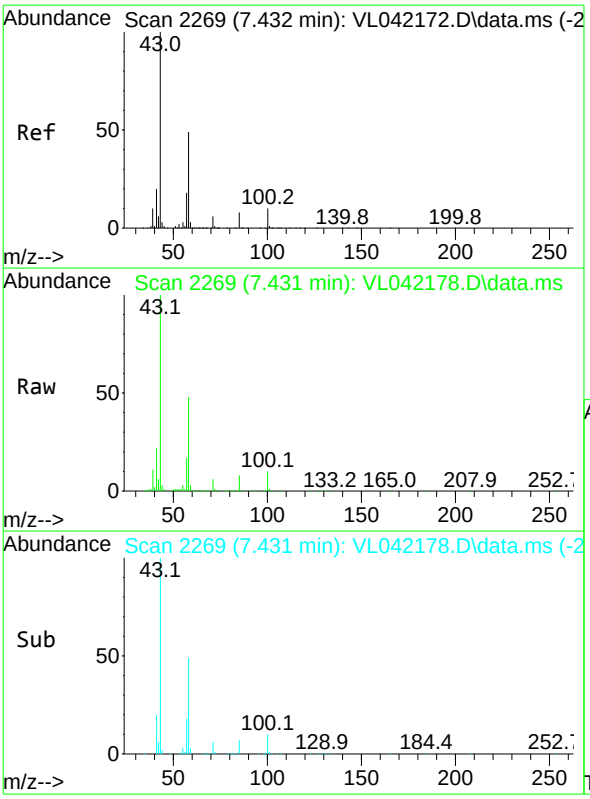


#50
4-Methyl-2-Pentanone
Concen: 13.155 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 755146

Ion	Ratio	Lower	Upper
43	100		
58	35.5	29.0	43.6

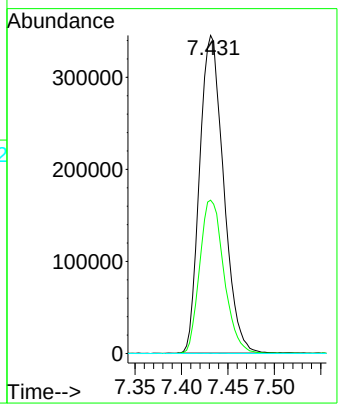




#51
2-Hexanone
Concen: 13.005 ppbv
RT: 7.431 min Scan# 22
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 619419

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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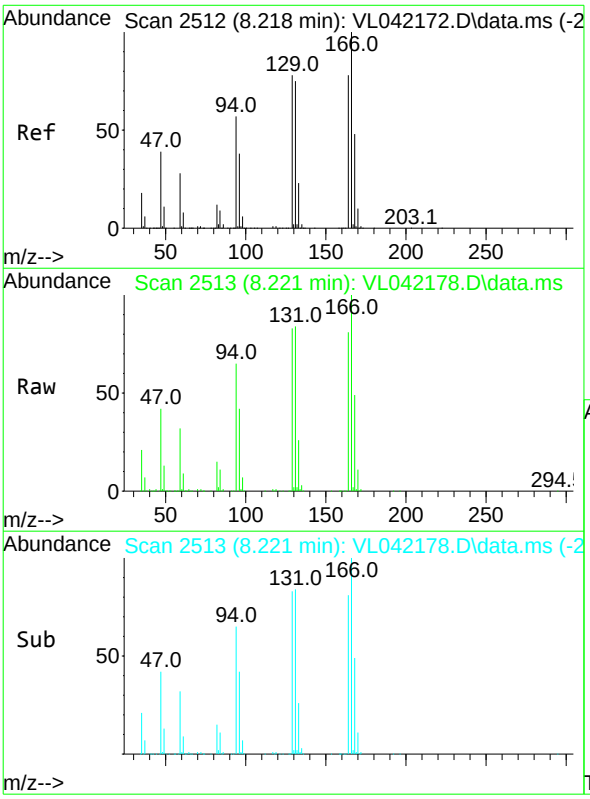
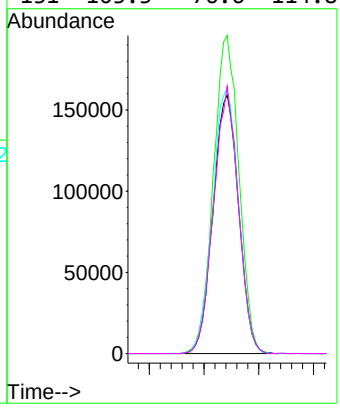
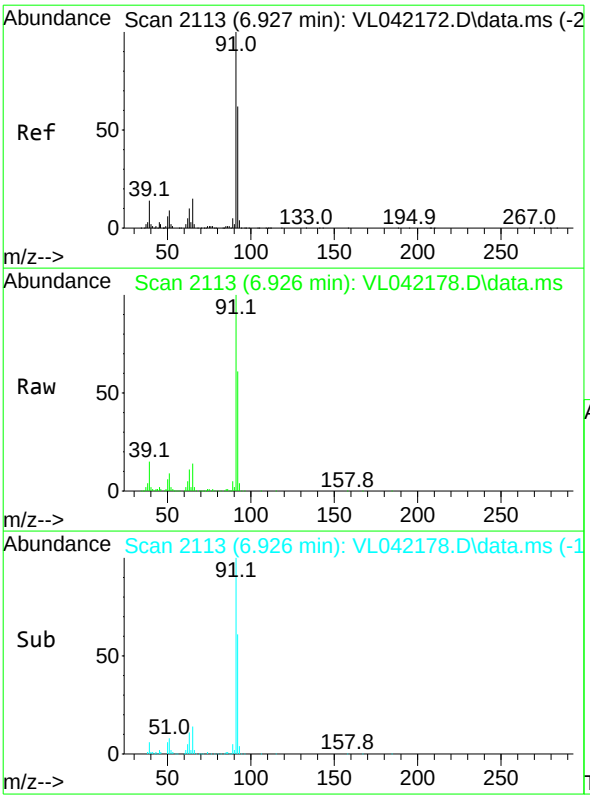


#52
Tetrachloroethene
Concen: 13.159 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:164 Resp: 258356

Ion	Ratio	Lower	Upper
164	100		
166	123.0	102.5	153.7
129	102.5	79.8	119.8
131	103.3	76.6	114.8

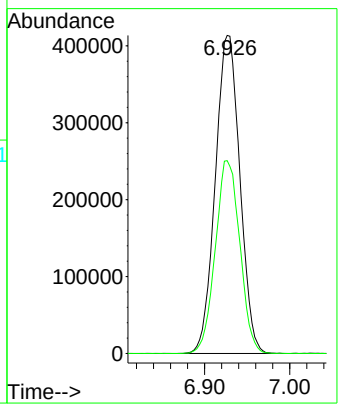




#53
Toluene
Concen: 14.137 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 829648

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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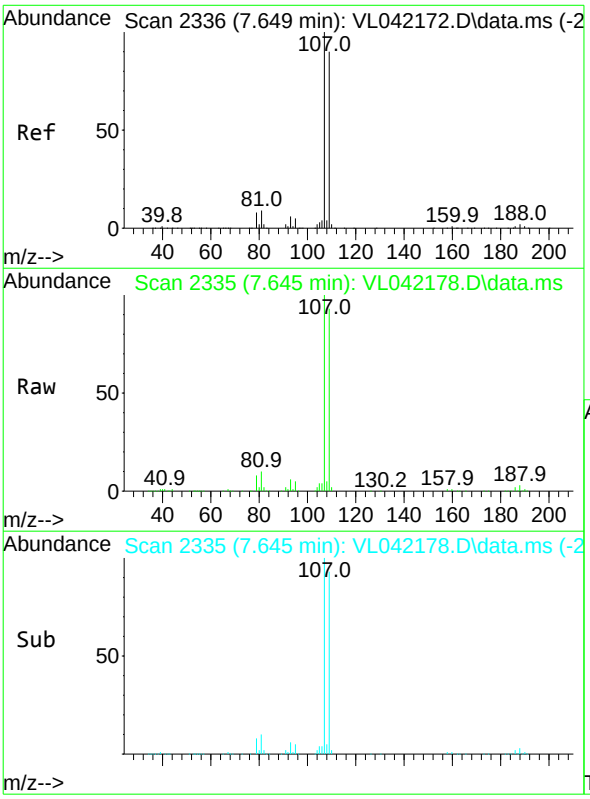
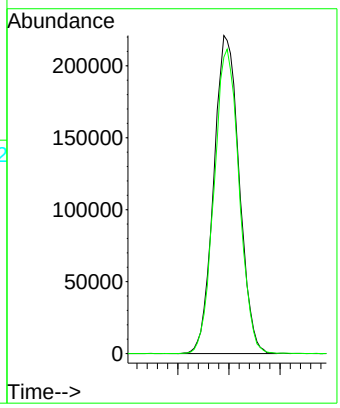
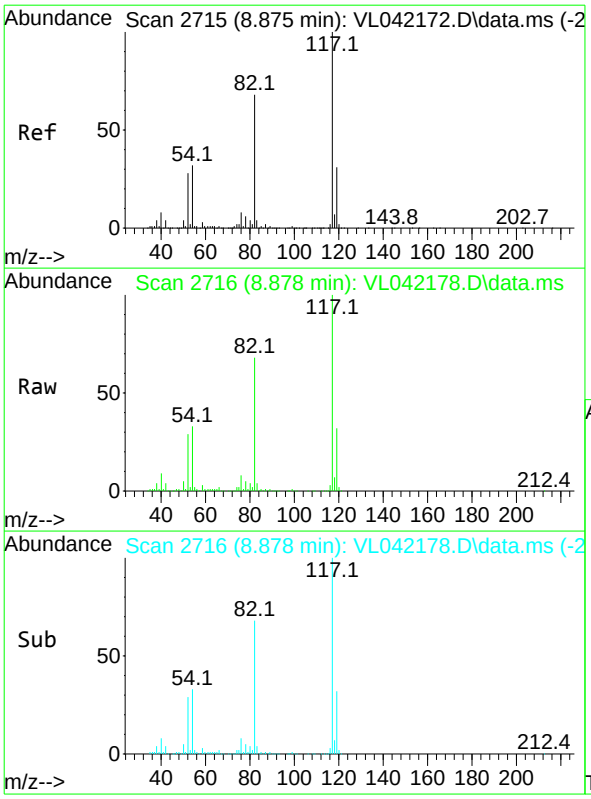


#54
1,2-Dibromoethane
Concen: 14.359 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:107 Resp: 381823

Ion	Ratio	Lower	Upper
107	100		
109	93.2	72.2	108.4

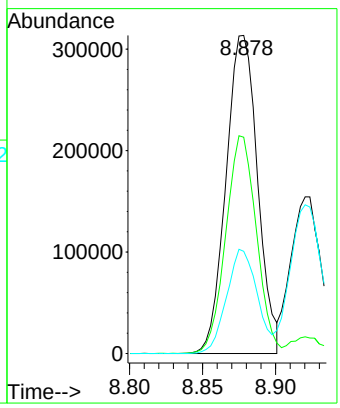




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:117 Resp: 473077

Ion	Ratio	Lower	Upper
117	100		
82	71.4	55.8	83.6
119	31.7	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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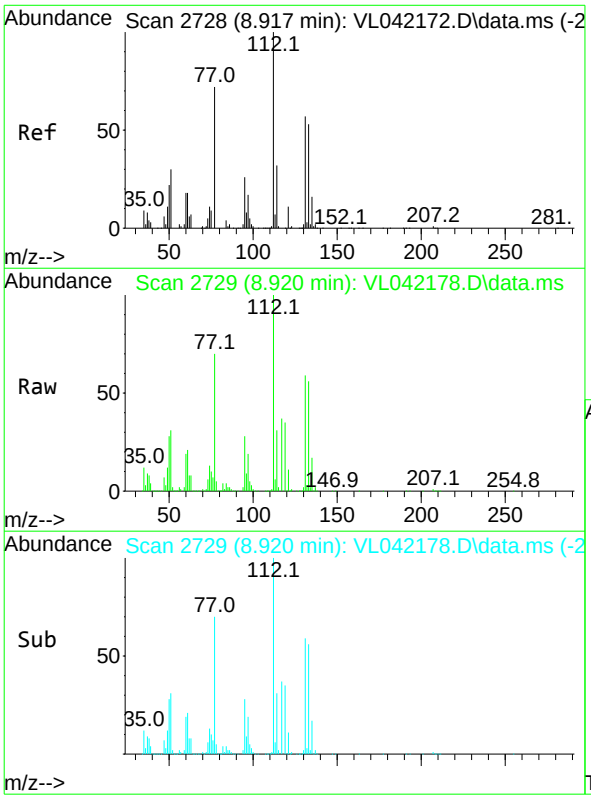
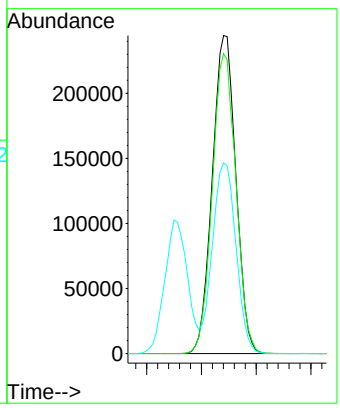
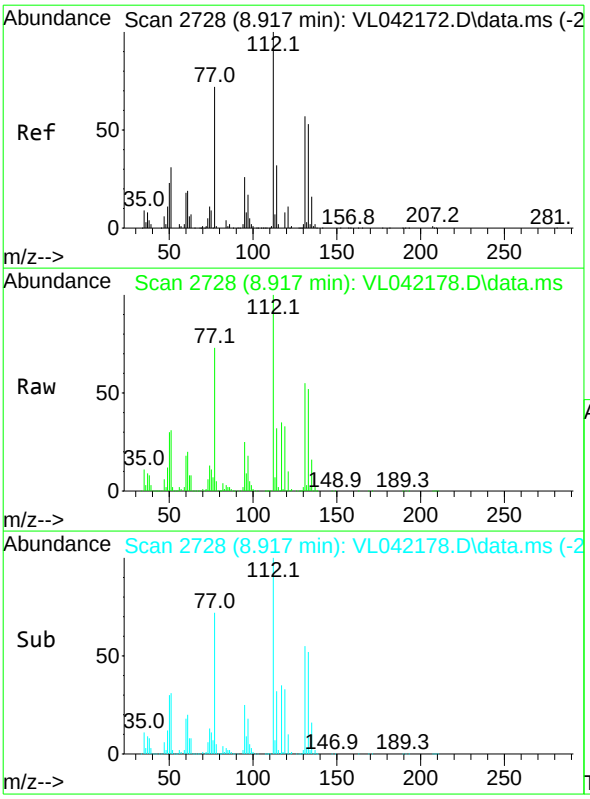


#56
1,1,1,2-Tetrachloroethane
Concen: 14.032 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:131 Resp: 365410

Ion	Ratio	Lower	Upper
131	100		
133	94.5	76.6	114.8
119	61.2	49.8	74.6

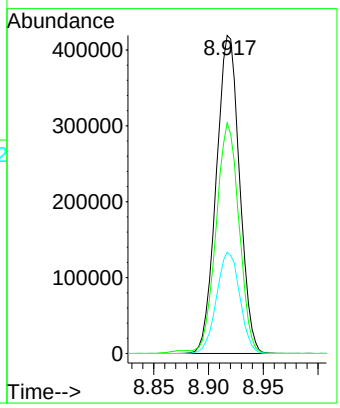




#57
Chlorobenzene
Concen: 13.777 ppbv
RT: 8.917 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:112 Resp: 618201

Ion	Ratio	Lower	Upper
112	100		
77	72.5	58.2	87.2
114	31.8	29.1	35.5



Instrument :
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ClientSampleId :
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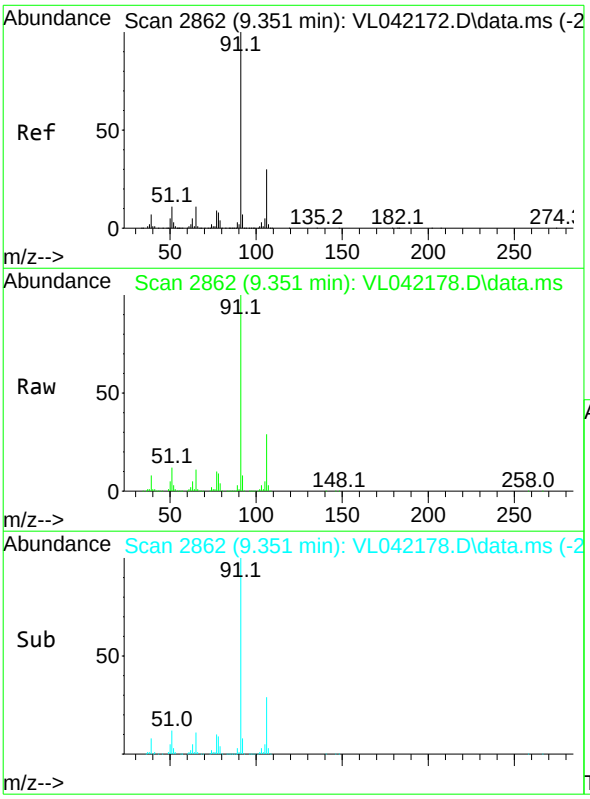
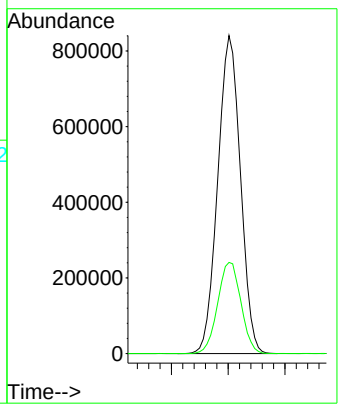
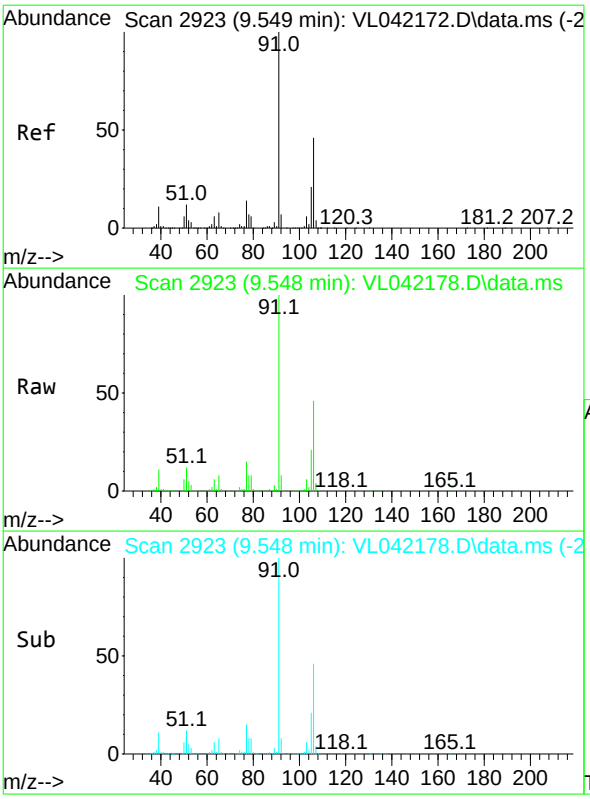


#58
Ethyl Benzene
Concen: 13.889 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1167096

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2

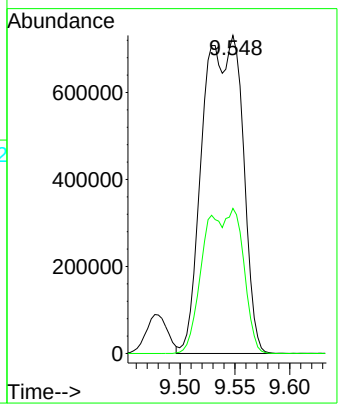




#59
m/p-Xylene
Concen: 27.651 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1857561

Ion	Ratio	Lower	Upper
91	100		
106	45.2	36.4	54.6



Instrument :
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ClientSampleId :
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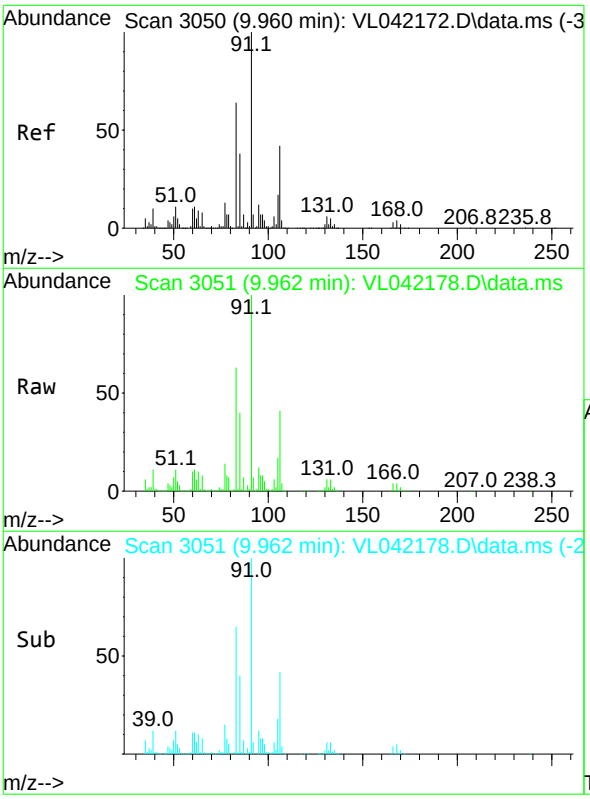
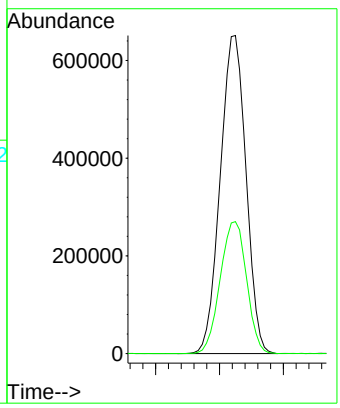
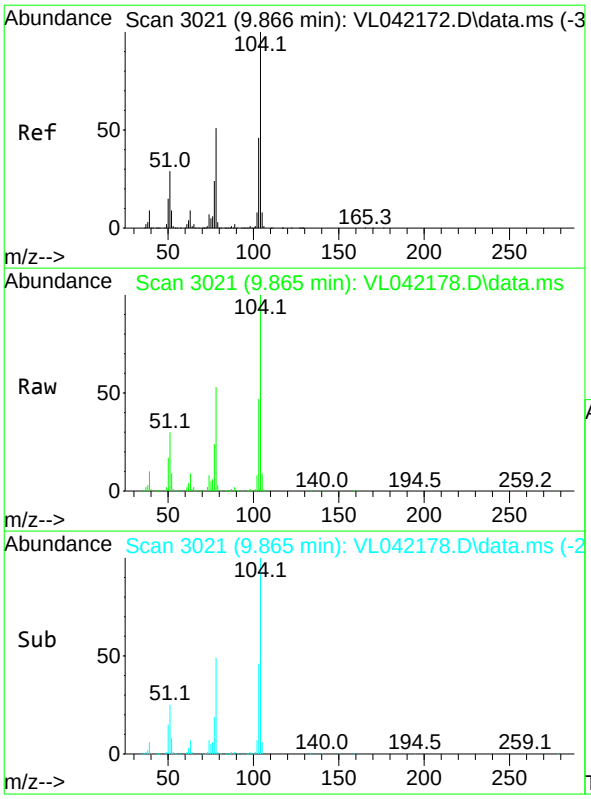


#60
o-Xylene
Concen: 13.577 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 913234

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5

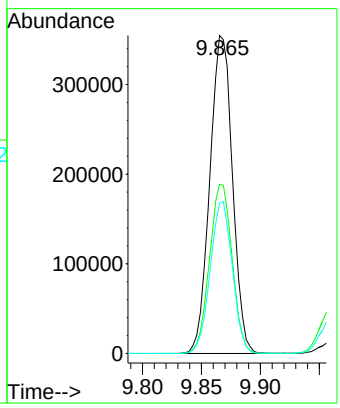




#61
Styrene
Concen: 14.250 ppbv
RT: 9.865 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:104 Resp: 474195

Ion	Ratio	Lower	Upper
104	100		
78	53.0	41.8	62.6
103	46.7	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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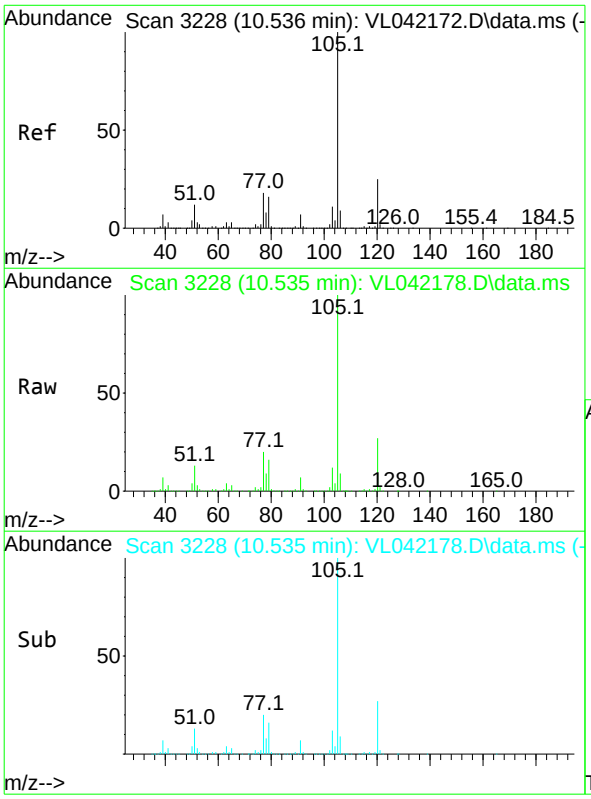
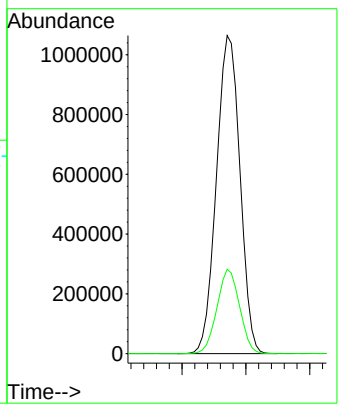
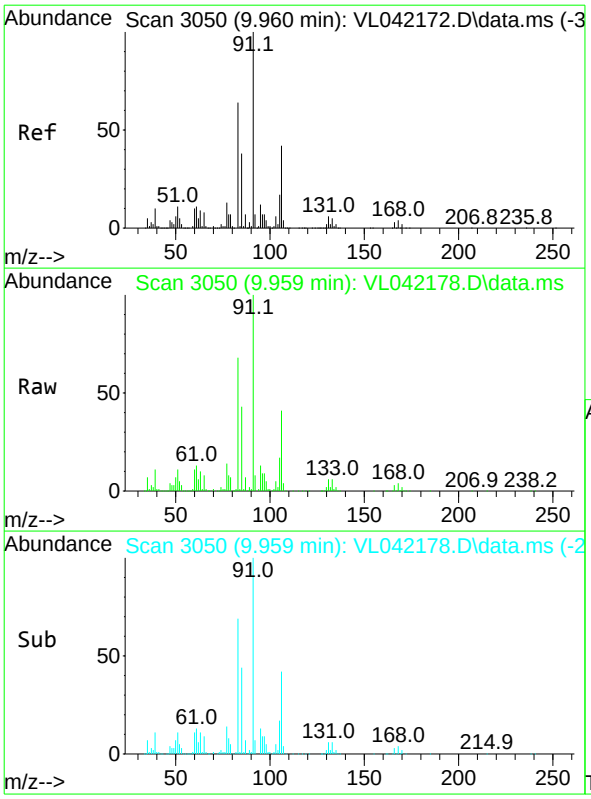


#62
Isopropylbenzene
Concen: 13.544 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1362416

Ion	Ratio	Lower	Upper
105	100		
120	25.3	19.9	29.9

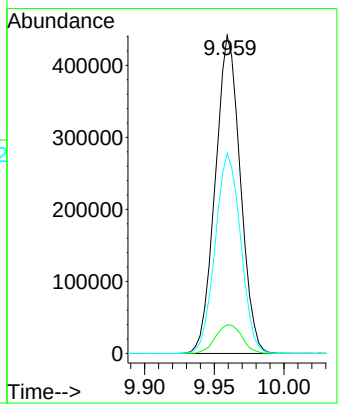




#63
1,1,2,2-Tetrachloroethane
Concen: 13.491 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 551386

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.2	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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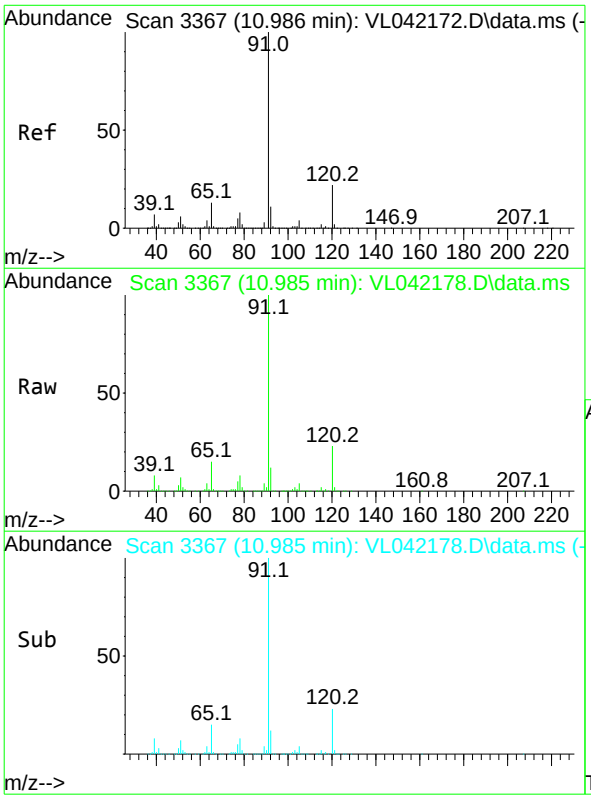
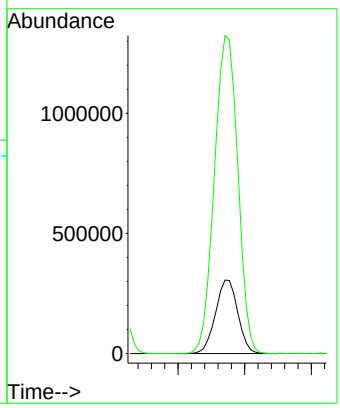
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

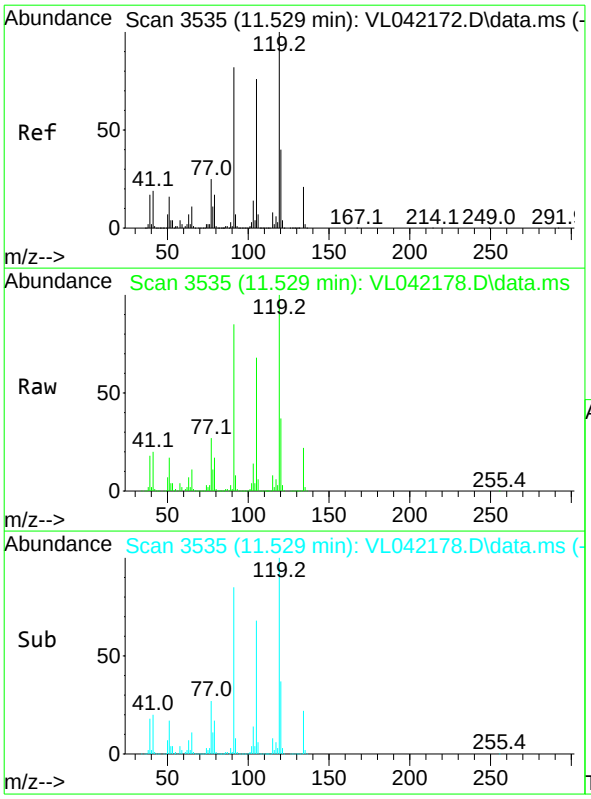


#64
n-propylbenzene
Concen: 13.753 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:120 Resp: 356118

Ion	Ratio	Lower	Upper
120	100		
91	455.4	376.9	565.3

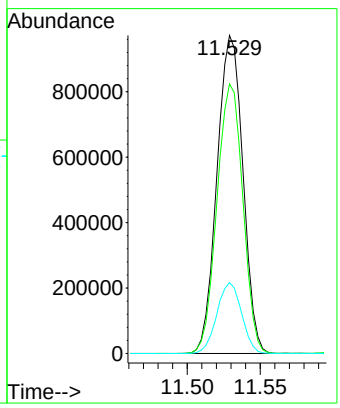




#65
tert-Butylbenzene
Concen: 12.901 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:119 Resp: 1200149

Ion	Ratio	Lower	Upper
119	100		
91	84.6	66.0	99.0
134	21.2	16.7	25.1



Instrument :
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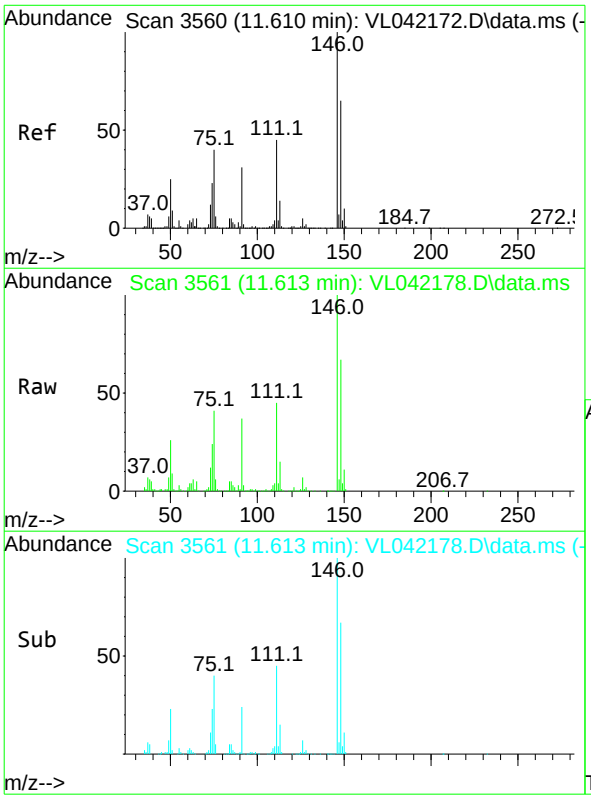
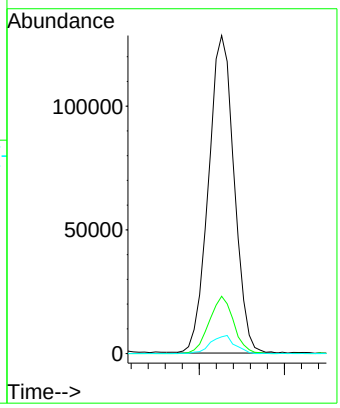
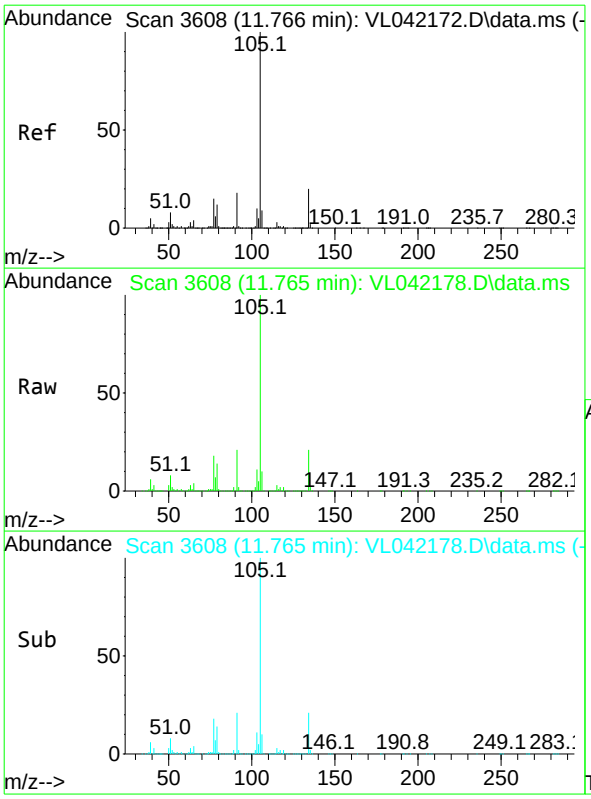


#66
Benzyl Chloride
Concen: 13.615 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 134397

Ion	Ratio	Lower	Upper
91	100		
126	17.3	13.8	20.6
128	5.4	4.5	6.7

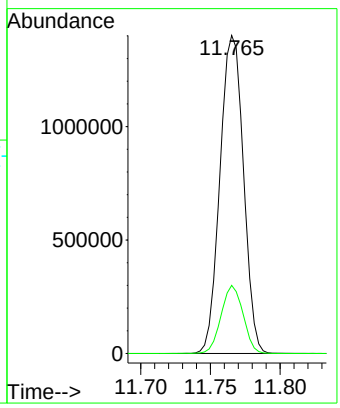




#67
sec-Butylbenzene
Concen: 12.711 ppbv
RT: 11.765 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1643629

Ion	Ratio	Lower	Upper
105	100		
134	20.0	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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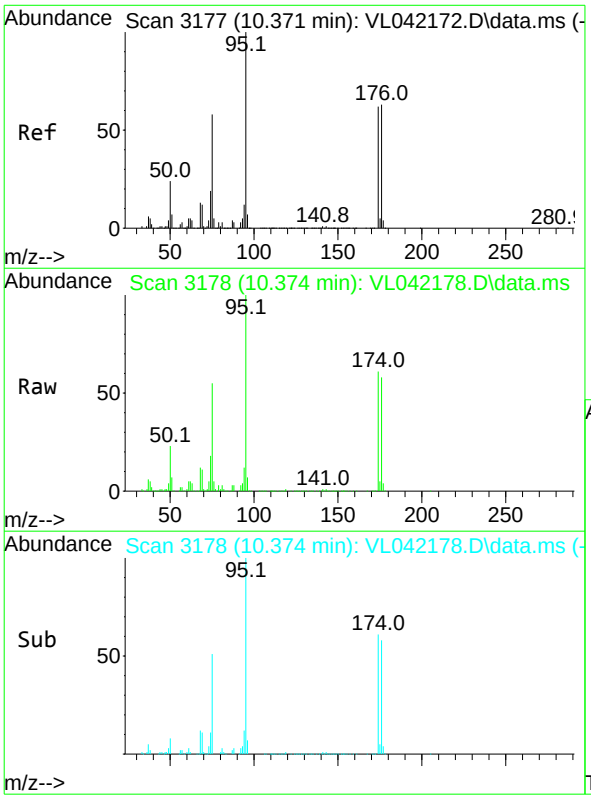
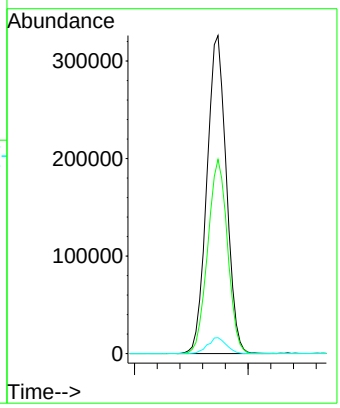
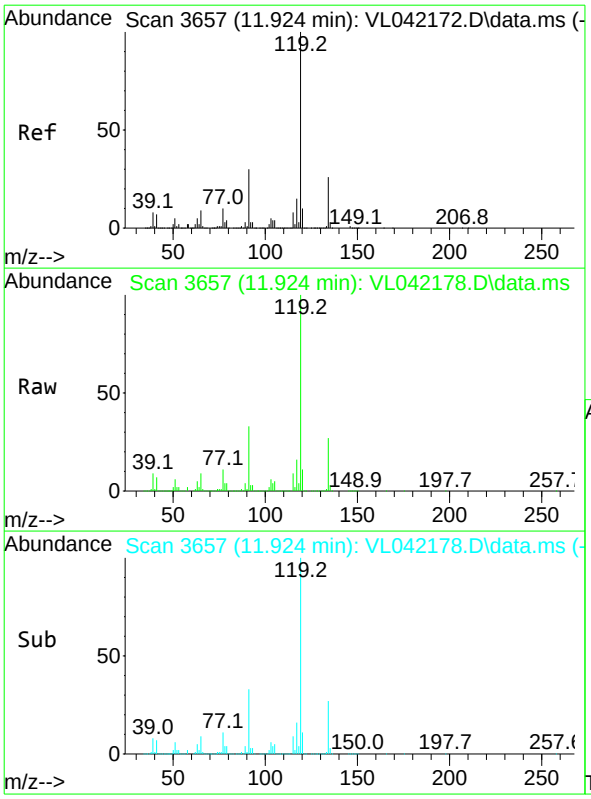


#68
1-Bromo-4-Fluorobenzene
Concen: 9.981 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 95 Resp: 387777

Ion	Ratio	Lower	Upper
95	100		
174	62.1	50.6	76.0
175	4.8	3.8	5.6





#69
p-Isopropyltoluene
Concen: 12.906 ppbv
RT: 11.924 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:119 Resp: 1437016

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	31.2	23.7	35.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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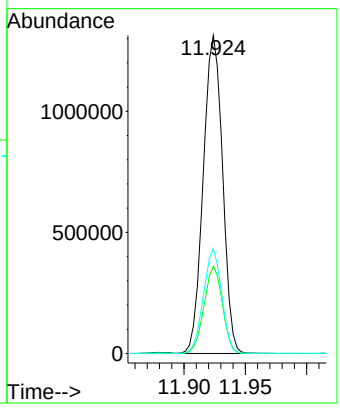
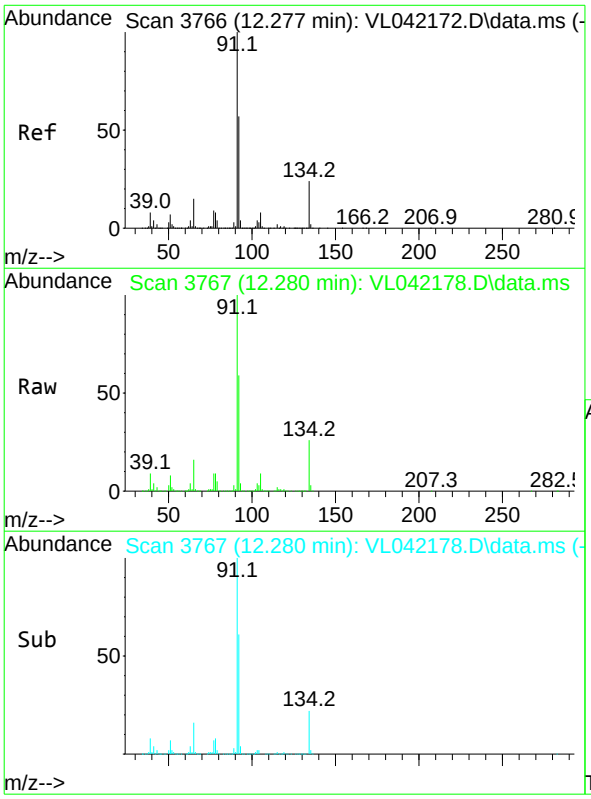
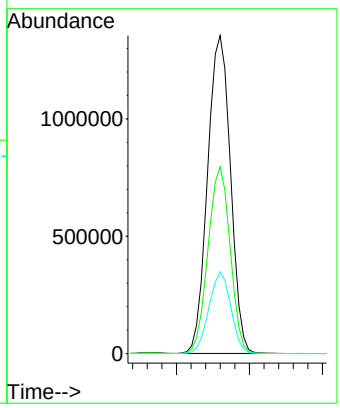


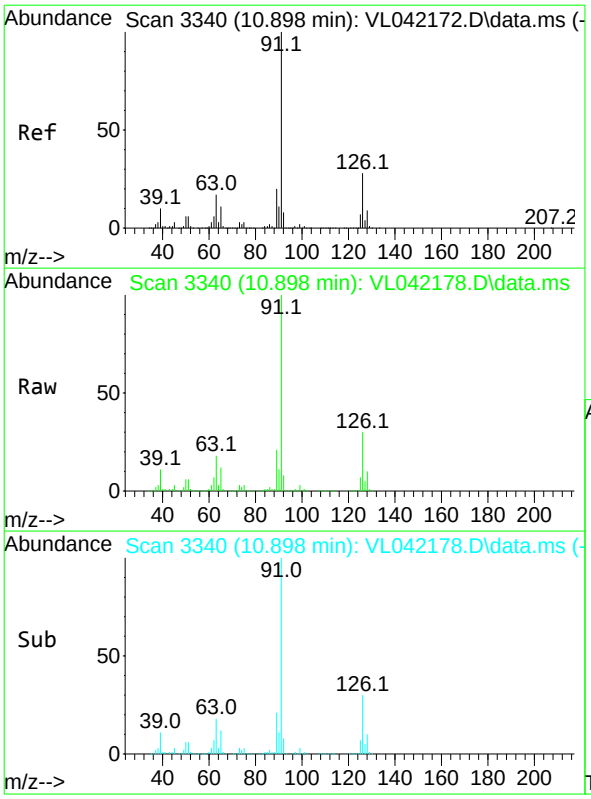


#70
n-Butylbenzene
Concen: 12.975 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1477443

Ion	Ratio	Lower	Upper
91	100		
92	57.0	44.9	67.3
134	24.6	19.2	28.8

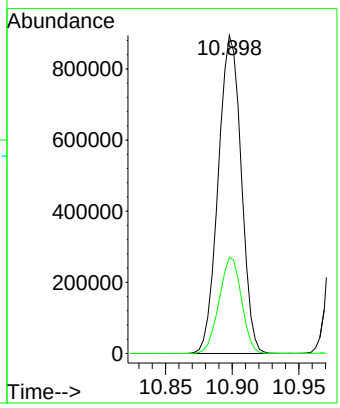




#71
2-Chlorotoluene
Concen: 13.724 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1071432

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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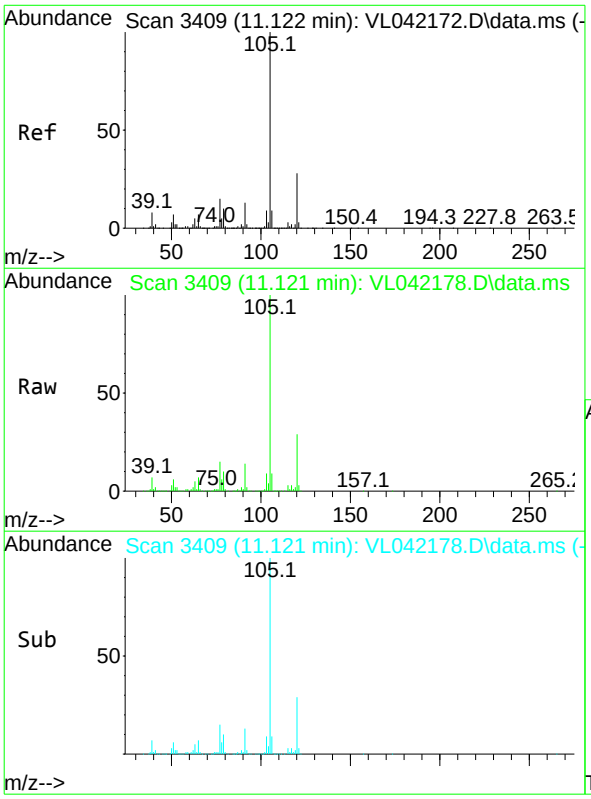
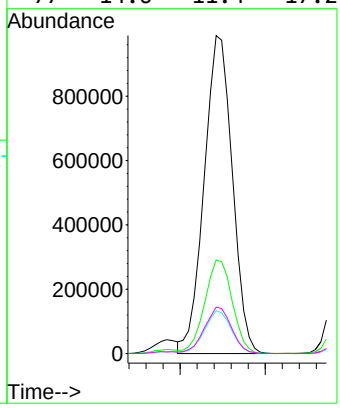
Supervised By :Mahesh Dadoda 04/03/2025

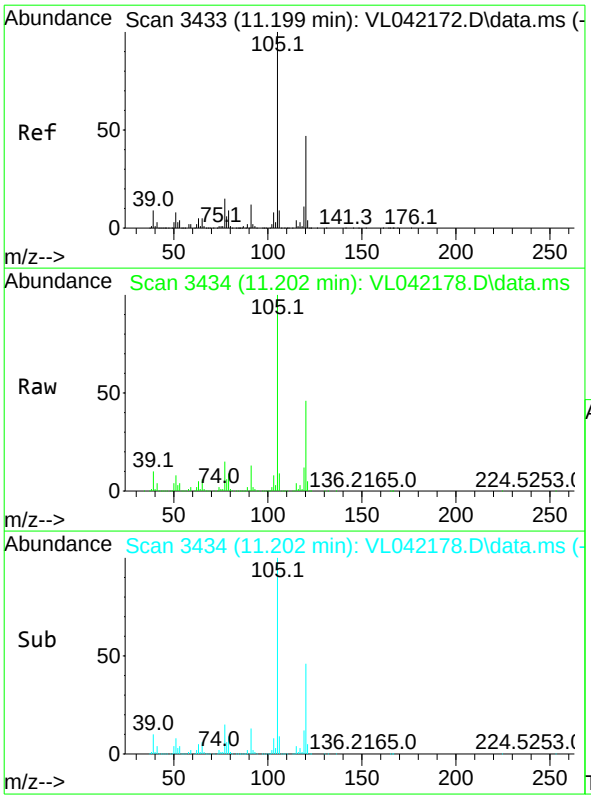


#72
4-Ethyltoluene
Concen: 13.569 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1136415

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	13.5	10.3	15.5
77	14.6	11.4	17.2

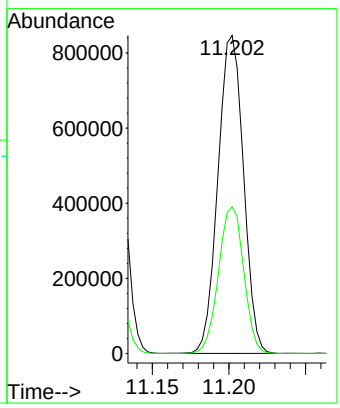




#73
1,3,5-Trimethylbenzene
Concen: 13.395 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 979783

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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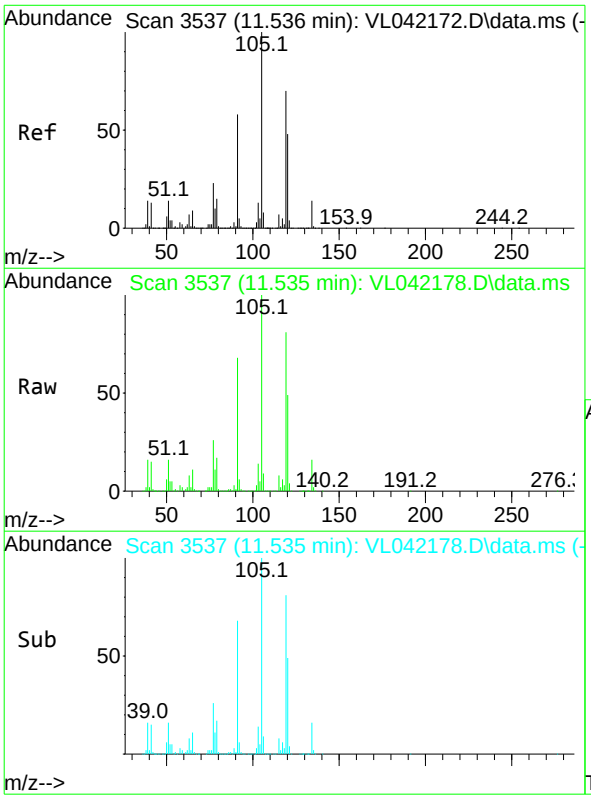
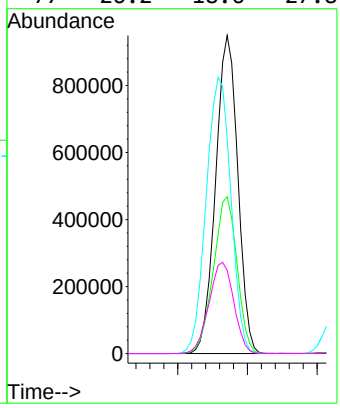
Supervised By :Mahesh Dadoda 04/03/2025

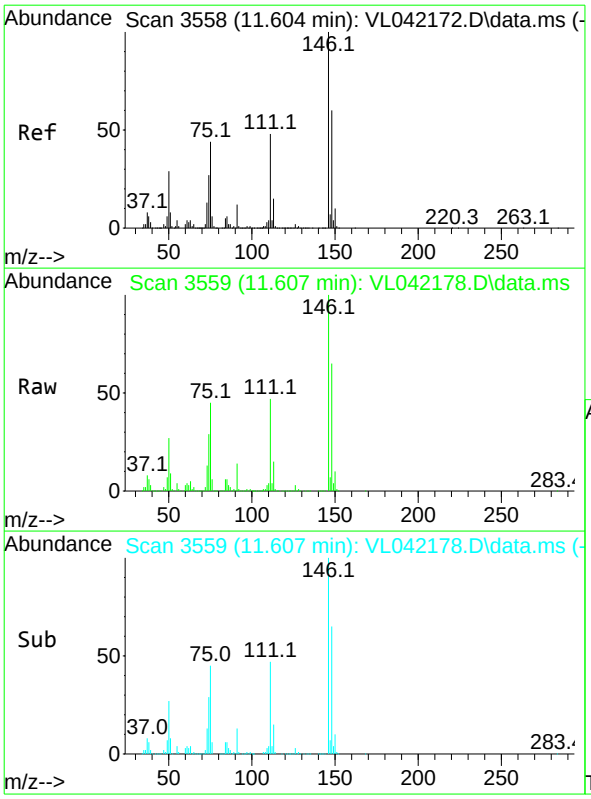


#74
1,2,4-Trimethylbenzene
Concen: 12.447 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1048874

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	67.8	46.2	69.2
77	26.2	18.6	27.8

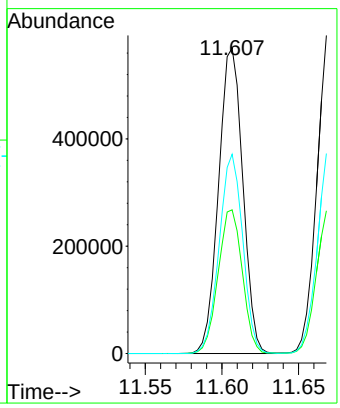




#75
1,3-Dichlorobenzene
Concen: 13.545 ppbv
RT: 11.607 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 626015

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.8	71.2
148	63.5	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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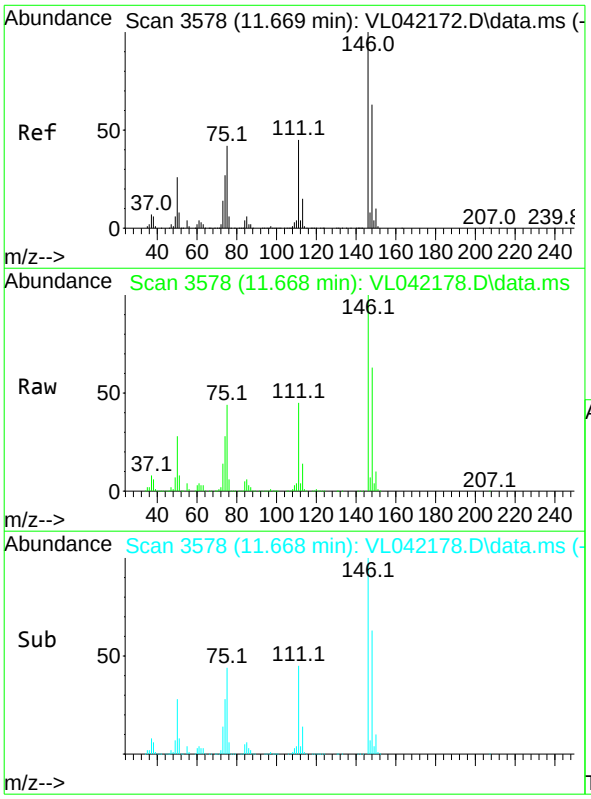
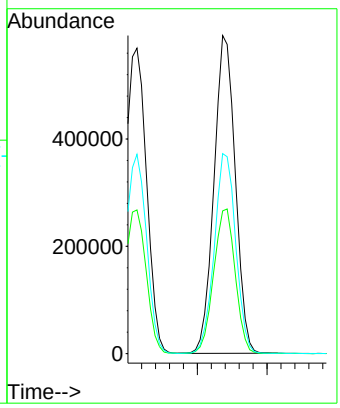
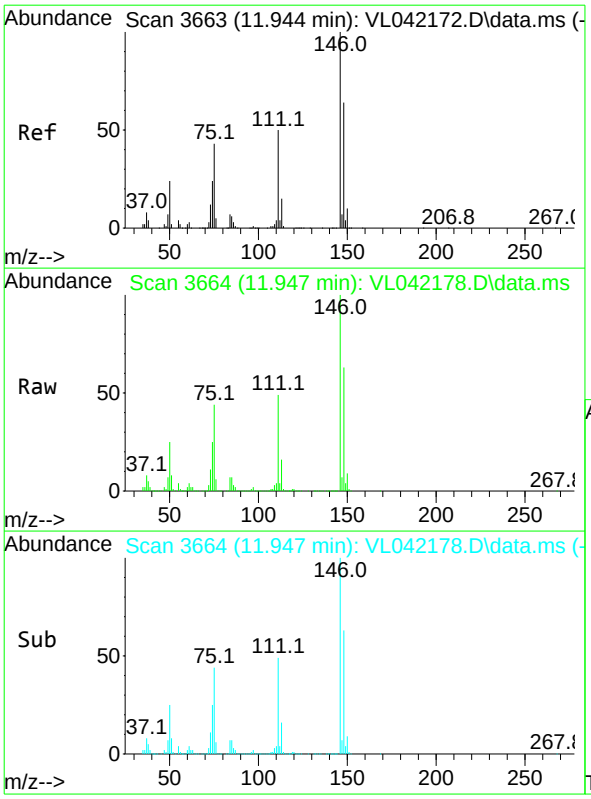


#76
1,4-Dichlorobenzene
Concen: 13.668 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 628694

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.0	69.0
148	63.6	31.9	95.7

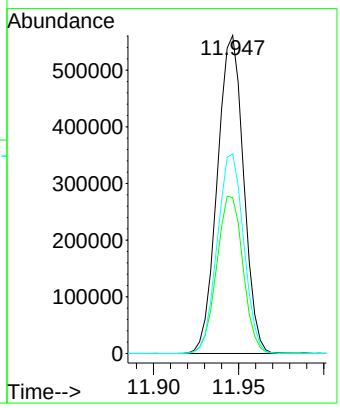




#77
1,2-Dichlorobenzene
Concen: 13.396 ppbv
RT: 11.947 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 602844

Ion	Ratio	Lower	Upper
146	100		
111	49.7	24.8	74.3
148	63.3	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
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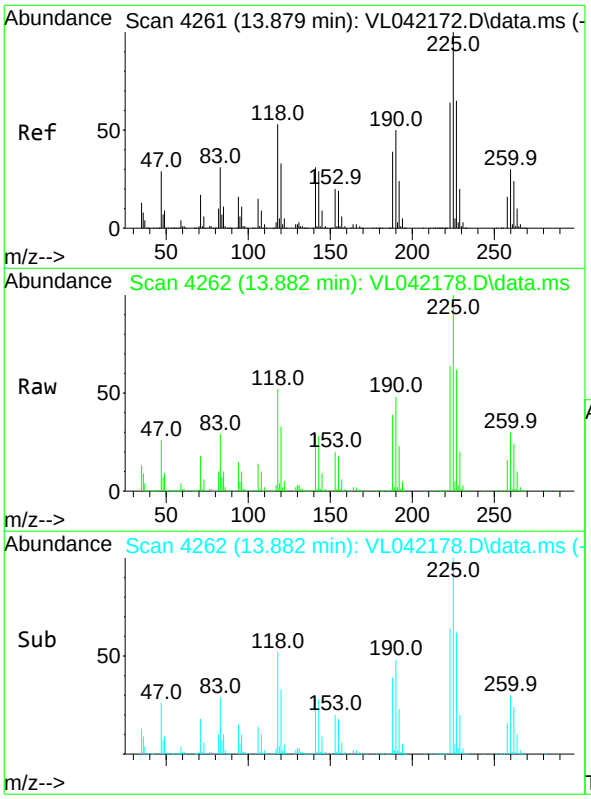
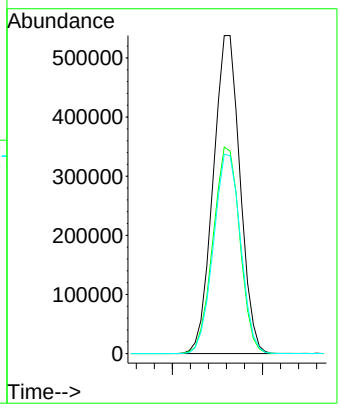
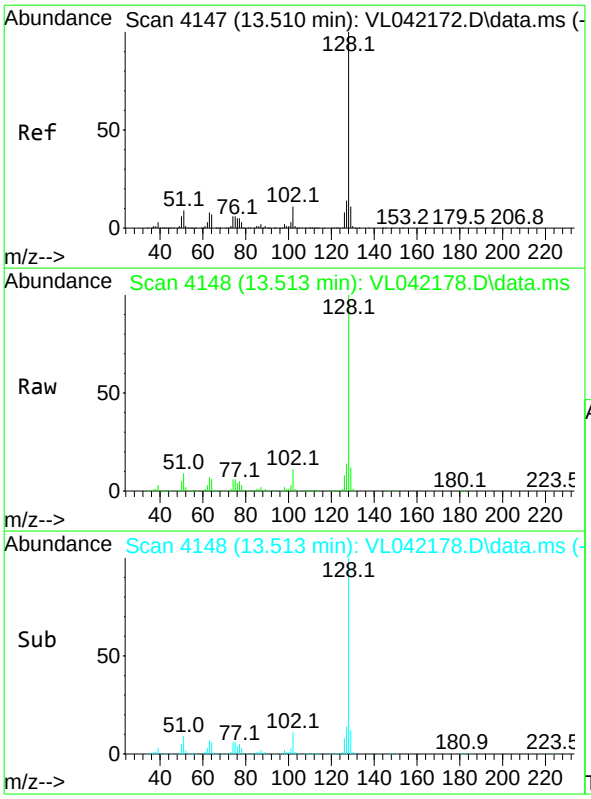


#78
Hexachloro-1,3-Butadiene
Concen: 12.147 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:225 Resp: 556392

Ion	Ratio	Lower	Upper
225	100		
223	64.7	50.6	76.0
227	63.3	51.2	76.8





#79
Naphthalene
Concen: 13.653 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:128 Resp: 1258479

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.8	16.2
129	12.2	9.0	13.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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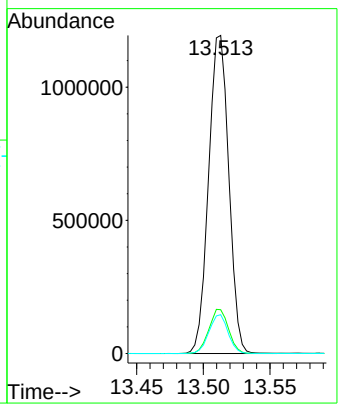
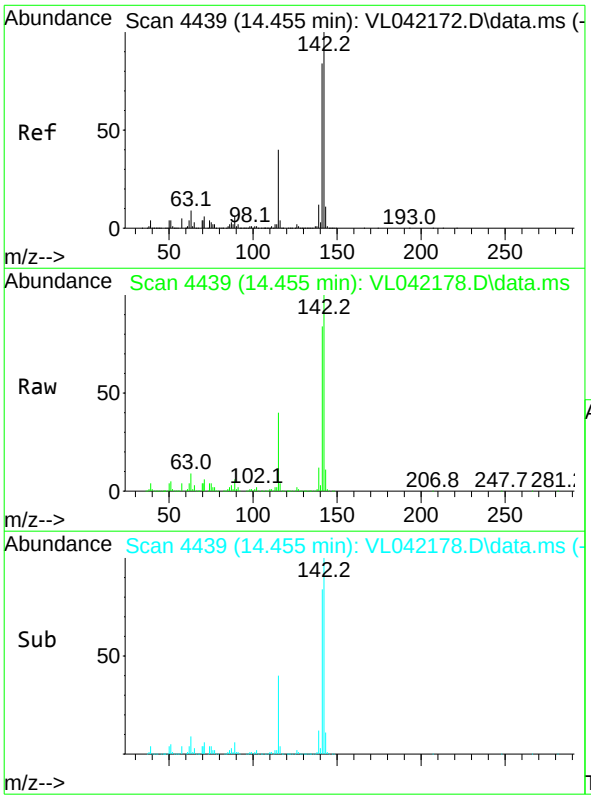
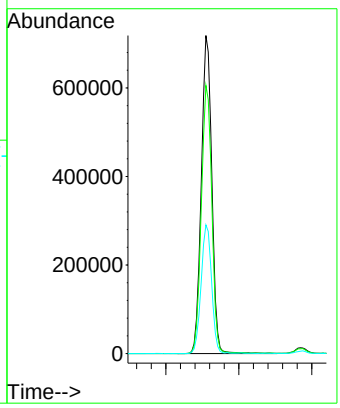


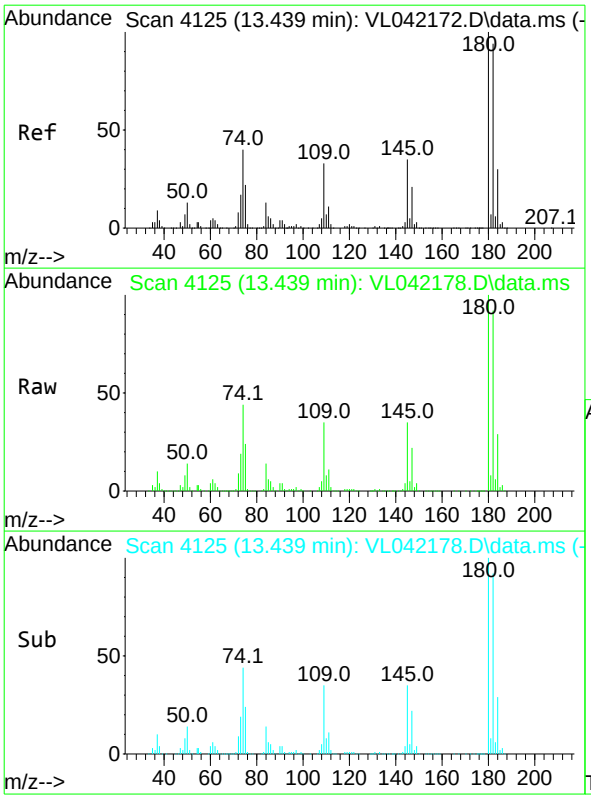


#80
Naphthalene,2-methyl-
Concen: 16.018 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:142 Resp: 718900

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.3	99.5
115	40.6	31.6	47.4

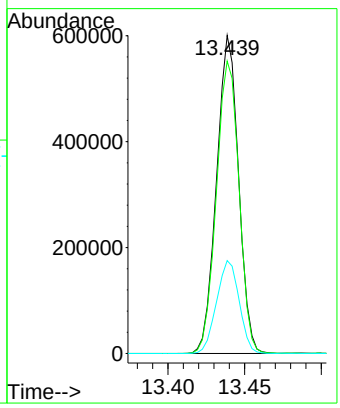




#81
1,2,4-Trichlorobenzene
Concen: 14.075 ppbv
RT: 13.439 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:180 Resp: 598416

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	174350	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	498105	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	473357	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	379929	9.774	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	245714	9.545	ppbv	100
3) Chlorodifluoromethane	1.473	51	247046	9.394	ppbv	97
4) Chloromethane	1.531	50	98527	9.365	ppbv	98
5) Vinyl Chloride	1.577	62	95578	8.573	ppbv	97
6) Bromomethane	1.667	94	41950	8.799	ppbv	97
7) Chloroethane	1.703	64	37400	8.856	ppbv	94
8) Dichlorotetrafluoroethane	1.551	85	213819	9.753	ppbv	95
9) Propene	1.483	41	105338	8.739	ppbv	99
10) Heptane	4.972	43	298768	9.318	ppbv	100
11) Trichlorofluoromethane	1.874	101	236793	9.453	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.136	101	193965	9.421	ppbv	98
13) Ethanol	1.719	45	5773	5.066	ppbv	97
14) Bromoethene	1.780	108	73572	9.328	ppbv	97
15) Acetone	1.832	43	198300	8.132	ppbv	98
16) 1,3-Butadiene	1.606	39	97840	8.216	ppbv	99
17) tert-Butyl alcohol	2.039	59	276195	9.094	ppbv	99
18) 1,1-Dichloroethene	2.033	96	87137	9.053	ppbv	89
19) Isopropyl Alcohol	1.884	45	122768	8.923	ppbv	98
20) Methylene Chloride	2.059	84	72813	8.018	ppbv	97
21) Allyl Chloride	2.094	41	157418	9.154	ppbv	99
22) trans-1,2-Dichloroethene	2.337	96	101141	9.092	ppbv	93
23) Vinyl Acetate	2.460	43	90260	8.553	ppbv #	97
24) 1,1-Dichloroethane	2.405	63	197968	9.600	ppbv	99
25) Ethyl Acetate	2.832	43	592585	9.364	ppbv	99
26) Hexane	2.823	57	231125	9.455	ppbv	99
27) Carbon Disulfide	2.146	76	248834	9.493	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	146470	9.624	ppbv	95
29) Chloroform	2.845	83	344106	9.619	ppbv	100
30) Cyclohexane	3.852	84	197897	9.323	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	234487	9.449	ppbv	96
32) 1,1,1-Trichloroethane	3.363	97	365364	8.921	ppbv	99
34) 2-Butanone	2.554	43	331236	9.171	ppbv	99
35) Carbon Tetrachloride	3.758	117	363392	9.339	ppbv	98
36) Benzene	3.651	78	461261	9.341	ppbv	99
37) 1,2-Dichloroethane	3.217	62	273559	9.676	ppbv	99
38) Trichloroethene	4.541	130	191746	9.306	ppbv	97
39) 1,2-Dichloropropane	4.311	63	170839	9.500	ppbv	95
40) 1,4-Dioxane	4.577	88	80592	8.443	ppbv #	97
41) Tetrahydrofuran	3.052	42	196163	9.431	ppbv	99
42) Bromodichloromethane	4.486	83	384006	9.853	ppbv	100
43) Methyl Methacrylate	4.878	69	195339	9.344	ppbv	99
44) 2,2,4-Trimethylpentane	4.635	57	787400	9.436	ppbv	99
45) t-1,3-Dichloropropene	6.409	75	212335	9.467	ppbv	99

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

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

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	265101	9.643	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	183228	9.638	ppbv		98
48) Dibromochloromethane	7.383	129	322766	10.018	ppbv		100
49) Bromoform	9.480	173	285149	9.858	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	500791	8.749	ppbv		99
51) 2-Hexanone	7.432	43	410889	8.741	ppbv	#	99
52) Tetrachloroethene	8.221	164	173420	8.855	ppbv		93
53) Toluene	6.927	91	556897	9.514	ppbv		99
54) 1,2-Dibromoethane	7.645	107	256930	9.695	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	249270	9.567	ppbv		99
57) Chlorobenzene	8.917	112	422531	9.411	ppbv		98
58) Ethyl Benzene	9.351	91	791360	9.412	ppbv		98
59) m/p-Xylene	9.548	91	1260340m	18.772	ppbv		
60) o-Xylene	9.959	91	632918	9.404	ppbv		99
61) Styrene	9.866	104	315910	9.488	ppbv		99
62) Isopropylbenzene	10.539	105	944938	9.388	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	382635	9.357	ppbv		99
64) n-propylbenzene	10.985	120	244547	9.439	ppbv		98
65) tert-Butylbenzene	11.529	119	843828	9.065	ppbv		98
66) Benzyl Chloride	11.613	91	86804	8.789	ppbv		97
67) sec-Butylbenzene	11.765	105	1172636	9.063	ppbv		100
69) p-Isopropyltoluene	11.924	119	1019694	9.153	ppbv		100
70) n-Butylbenzene	12.280	91	1038548	9.115	ppbv		100
71) 2-Chlorotoluene	10.898	91	732874	9.382	ppbv		100
72) 4-Ethyltoluene	11.125	105	785185	9.370	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	673541	9.203	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	729155	8.648	ppbv		94
75) 1,3-Dichlorobenzene	11.607	146	426573	9.224	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	426318	9.263	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	412180	9.154	ppbv		99
78) Hexachloro-1,3-Butadiene	13.882	225	356386	7.776	ppbv		100
79) Naphthalene	13.513	128	773311	8.385	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	323443	7.151	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	363863	8.553	ppbv		98

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

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Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

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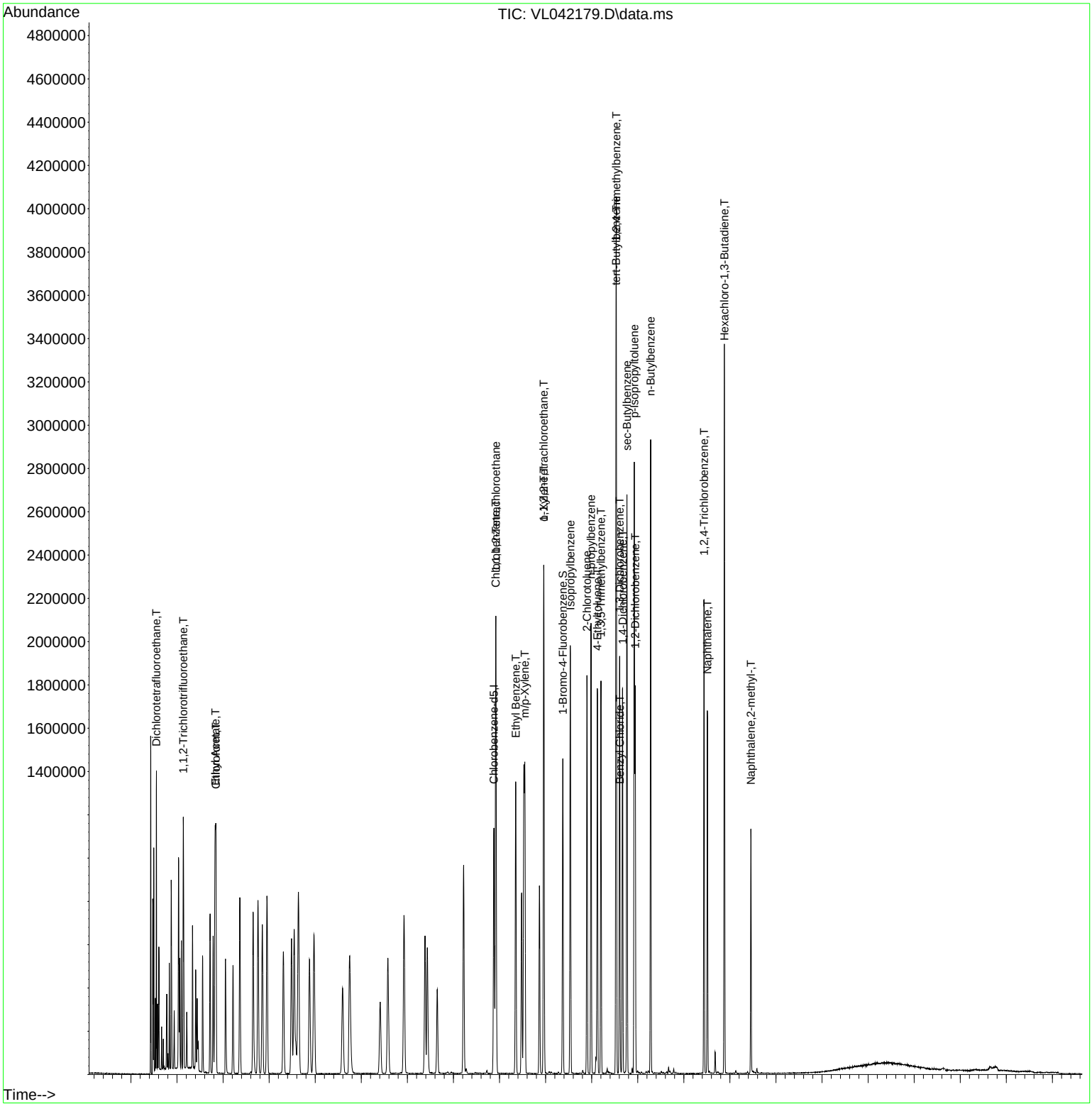
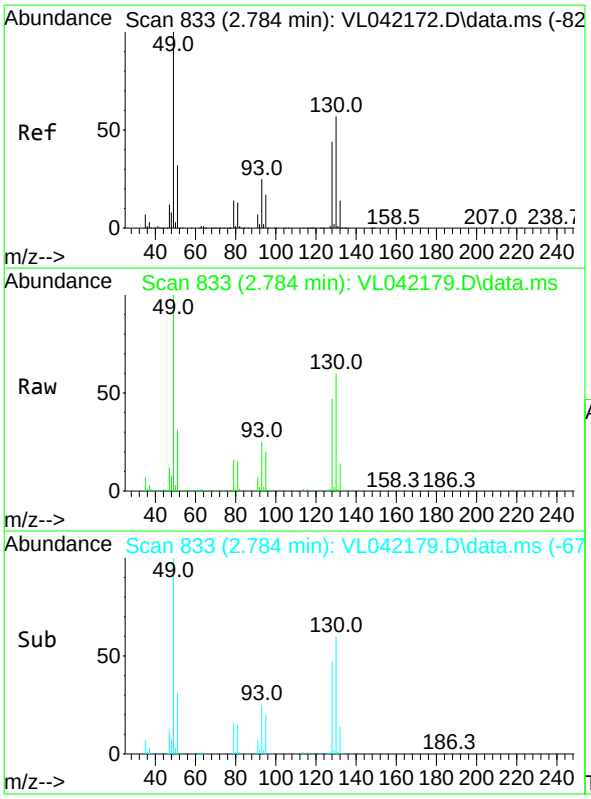
Supervised By :Mahesh Dadoda 04/03/2025

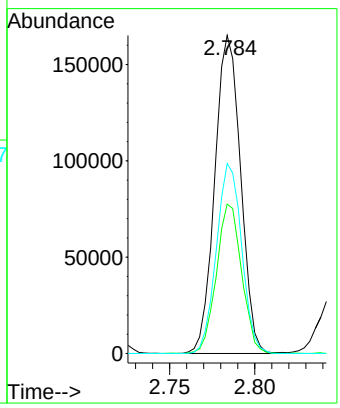




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 83
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 49 Resp: 174350

Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.9	68.5
130	58.4	28.8	86.4



Instrument :
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ClientSampleId :
ICVVL032725

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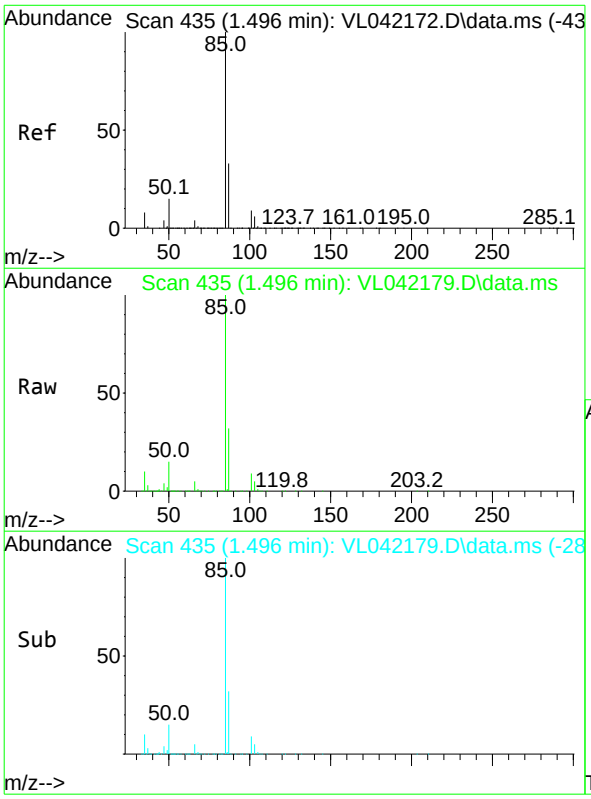
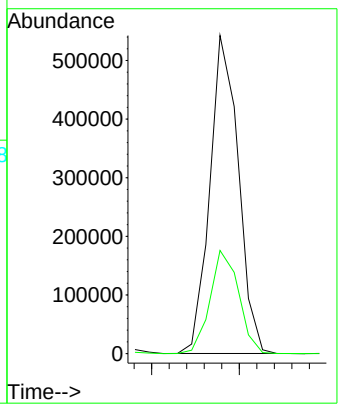
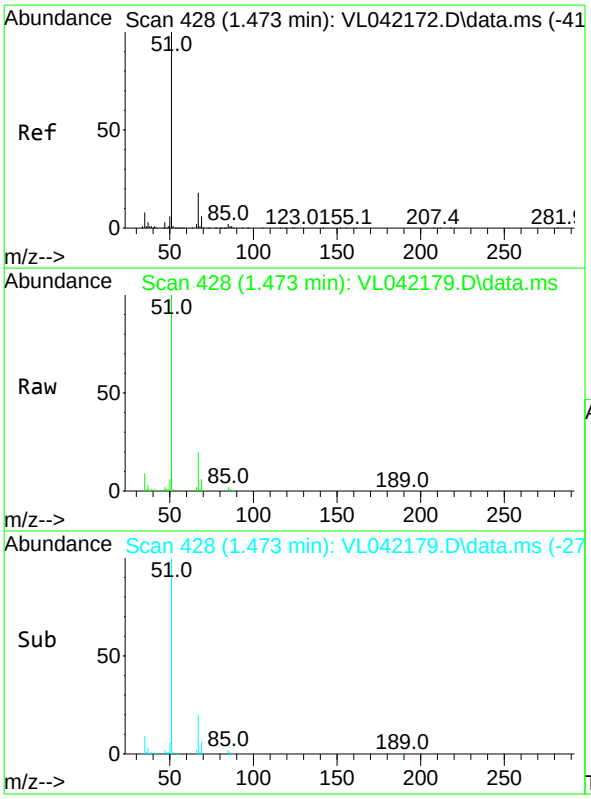


#2
Dichlorodifluoromethane
Concen: 9.545 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 245714

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1

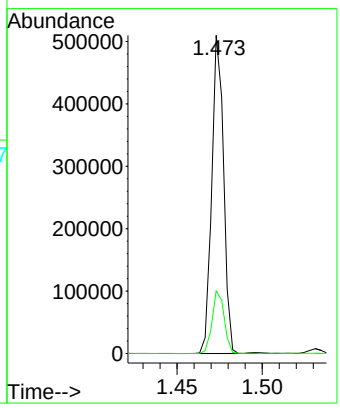




#3
Chlorodifluoromethane
Concen: 9.394 ppbv
RT: 1.473 min Scan# 42
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 51 Resp: 247046

Ion	Ratio	Lower	Upper
51	100		
67	20.1	15.0	22.6



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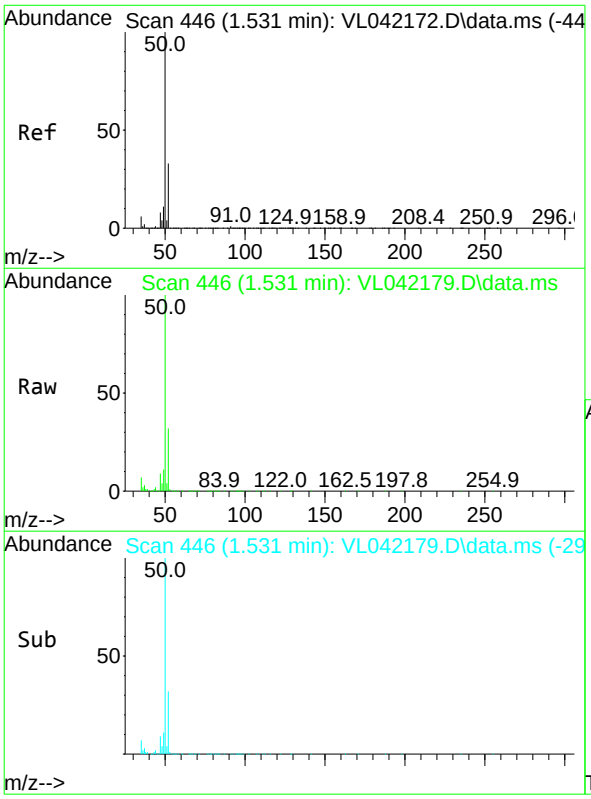
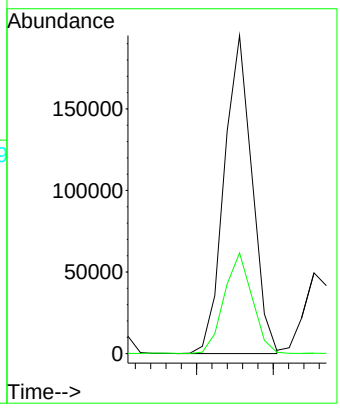
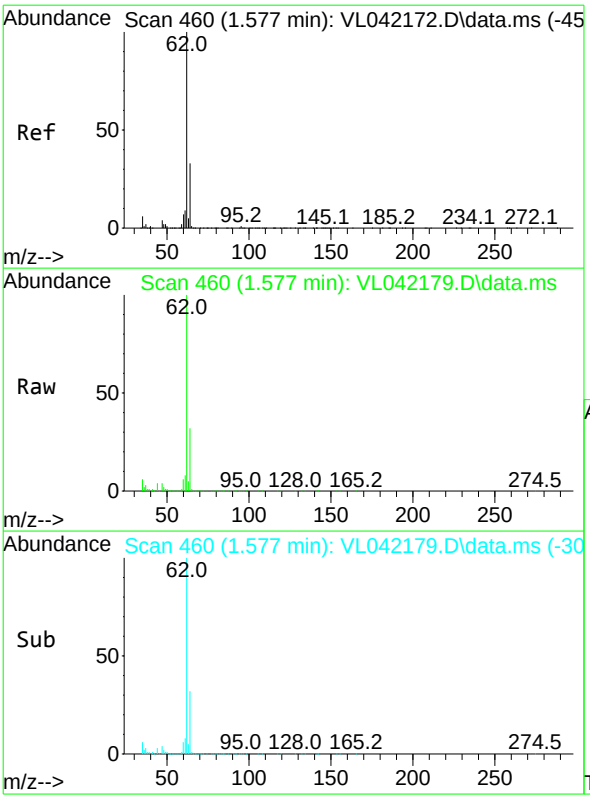


#4
Chloromethane
Concen: 9.365 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 50 Resp: 98527

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1

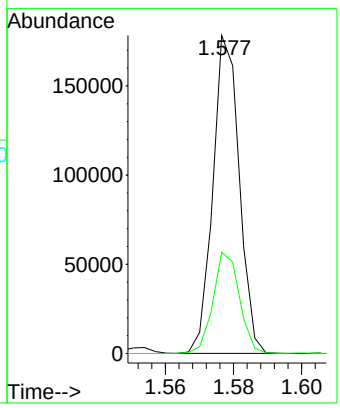




#5
Vinyl Chloride
Concen: 8.573 ppbv
RT: 1.577 min Scan# 46
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 62 Resp: 95578

Ion	Ratio	Lower	Upper
62	100		
64	31.8	26.6	40.0



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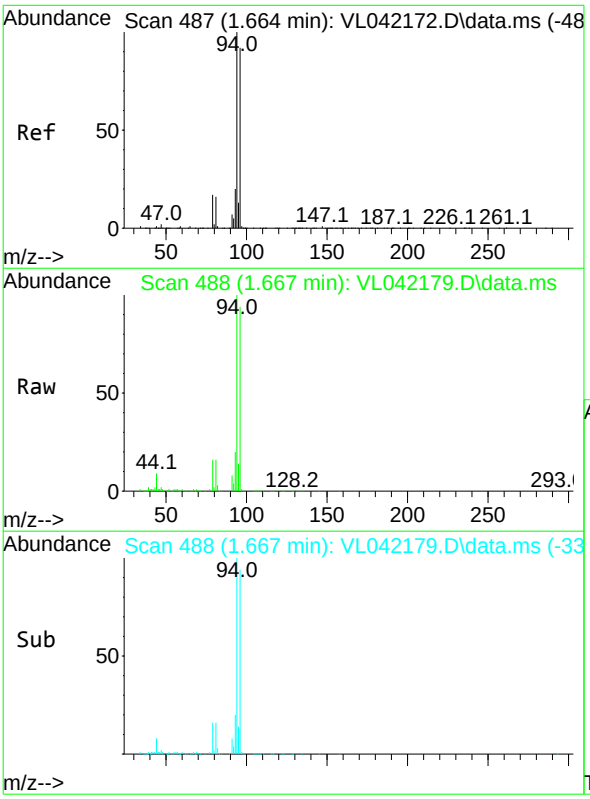
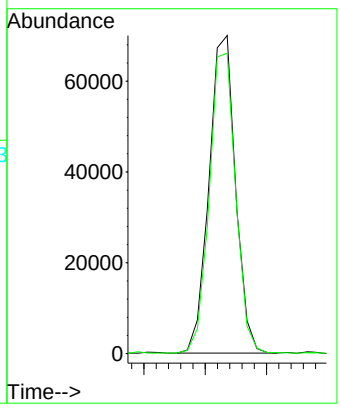
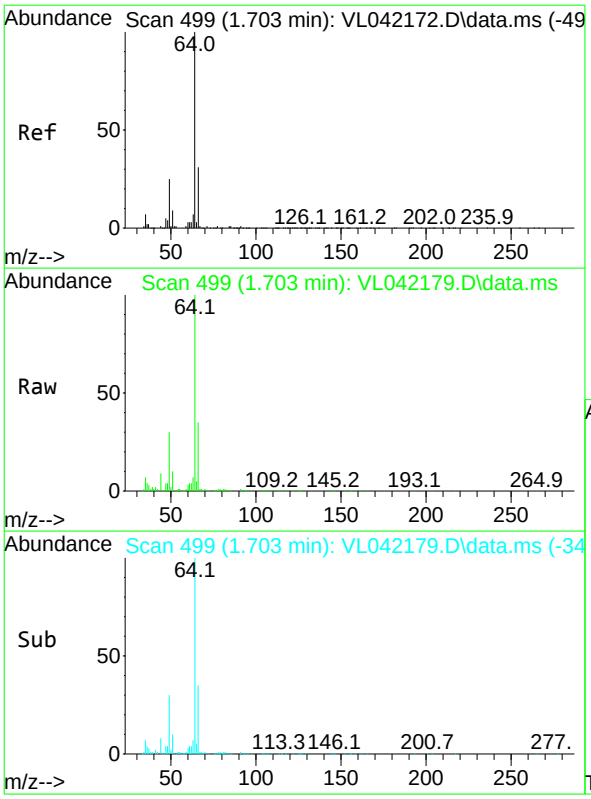


#6
Bromomethane
Concen: 8.799 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 94 Resp: 41950

Ion	Ratio	Lower	Upper
94	100		
96	94.4	73.1	109.7

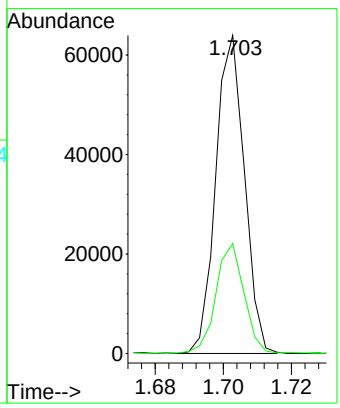




#7
Chloroethane
Concen: 8.856 ppbv
RT: 1.703 min Scan# 49
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 64 Resp: 37400

Ion	Ratio	Lower	Upper
64	100		
66	34.5	25.2	37.8



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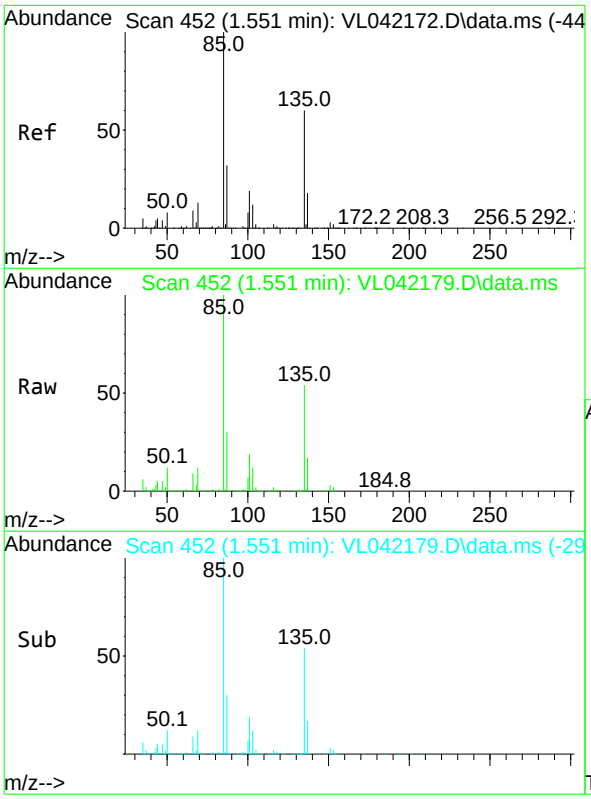
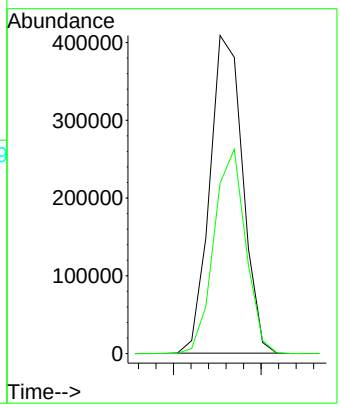
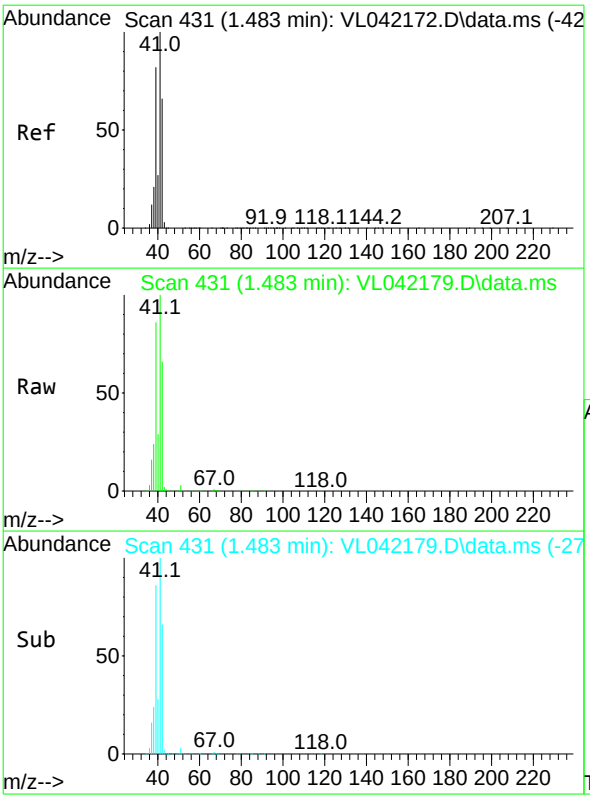


#8
Dichlorotetrafluoroethane
Concen: 9.753 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 213819

Ion	Ratio	Lower	Upper
85	100		
135	61.9	52.4	78.6

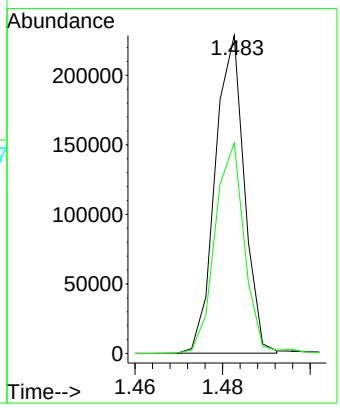




#9
Propene
Concen: 8.739 ppbv
RT: 1.483 min Scan# 43
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 41 Resp: 105338

Ion	Ratio	Lower	Upper
41	100		
42	68.1	55.4	83.2



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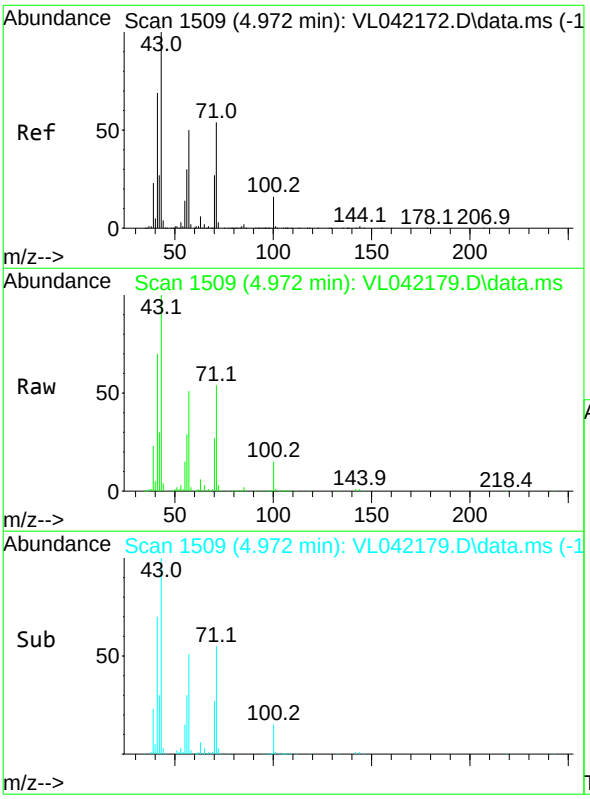
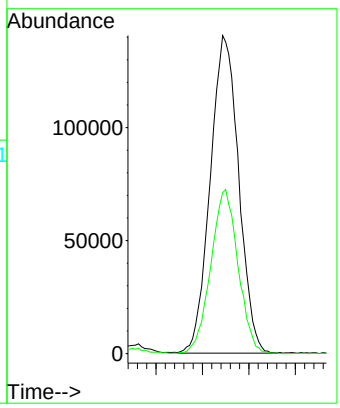
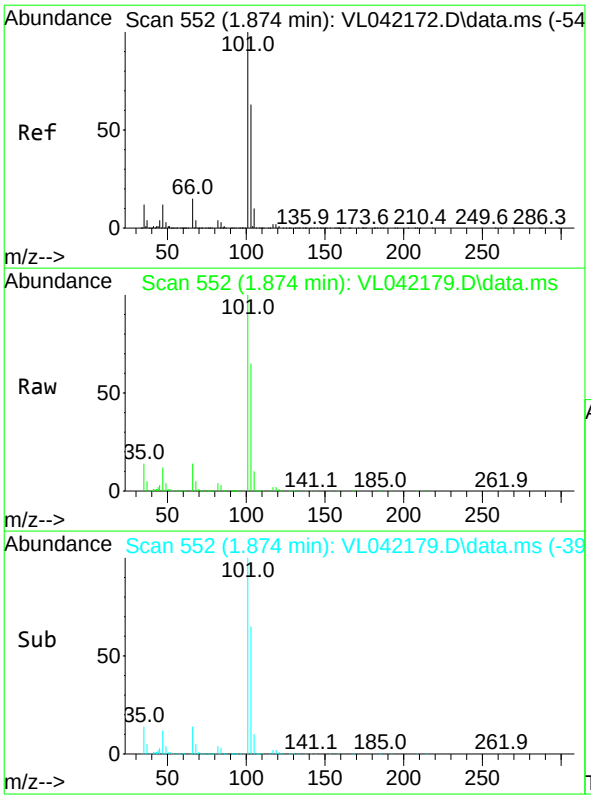


#10
Heptane
Concen: 9.318 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 298768

Ion	Ratio	Lower	Upper
43	100		
57	49.5	39.4	59.2

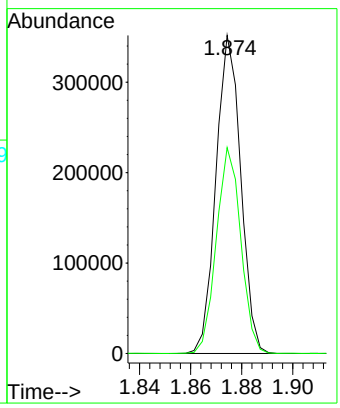




#11
Trichlorofluoromethane
Concen: 9.453 ppbv
RT: 1.874 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 236793

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2



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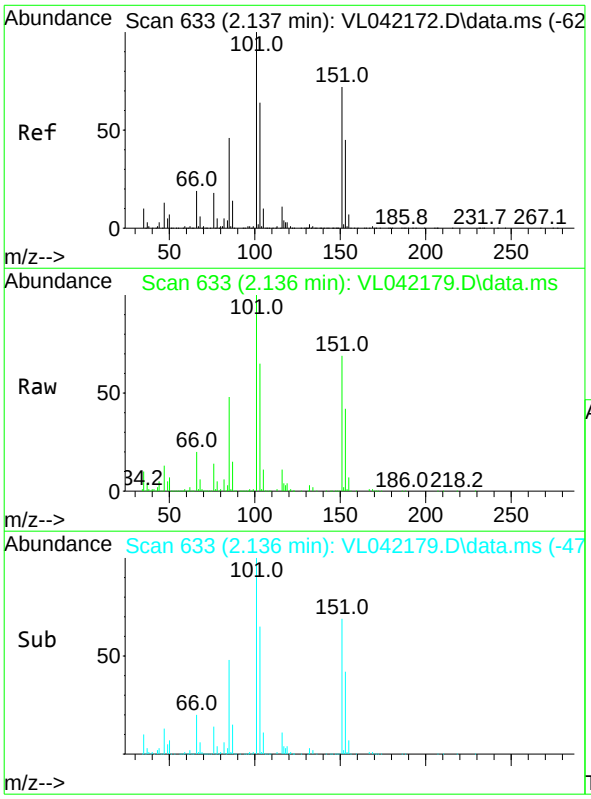
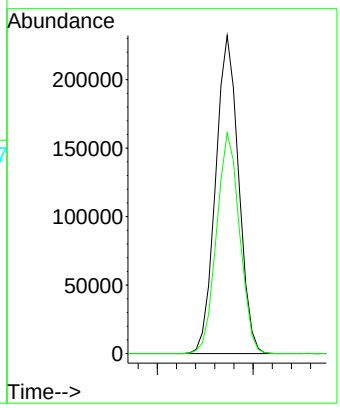
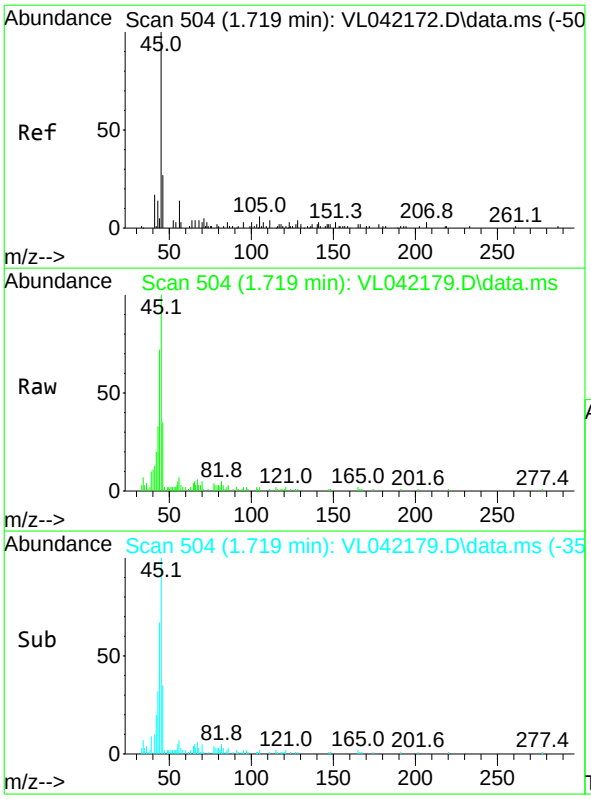


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.421 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 193965

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7

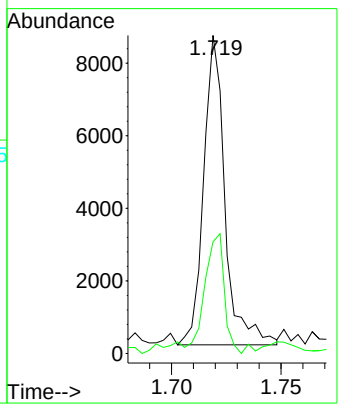




#13
Ethanol
Concen: 5.066 ppbv
RT: 1.719 min Scan# 50
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 45 Resp: 5773

Ion	Ratio	Lower	Upper
45	100		
46	48.5	20.2	80.8



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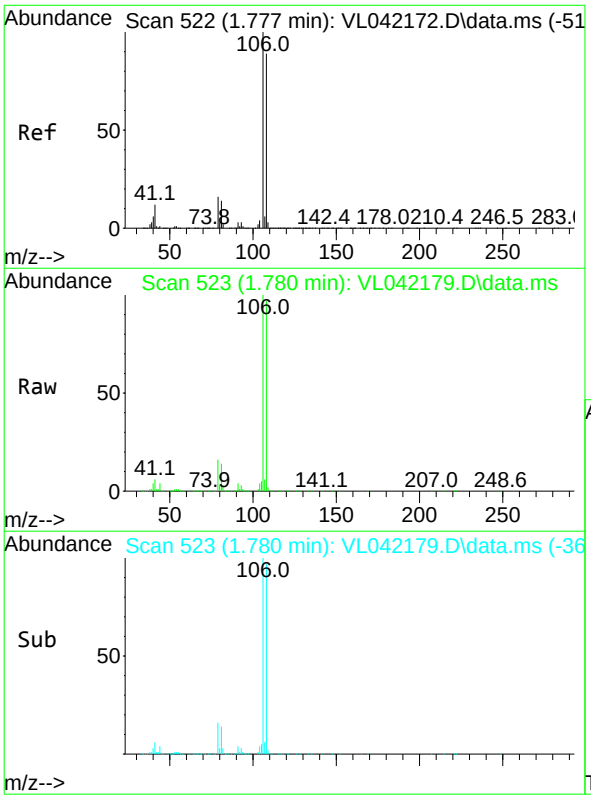
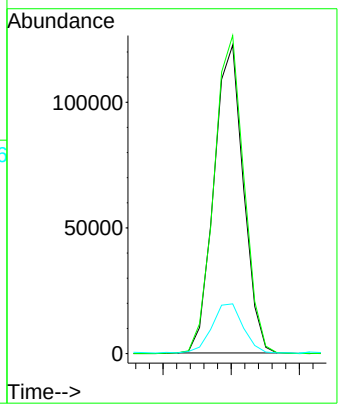
Supervised By :Mahesh Dadoda 04/03/2025

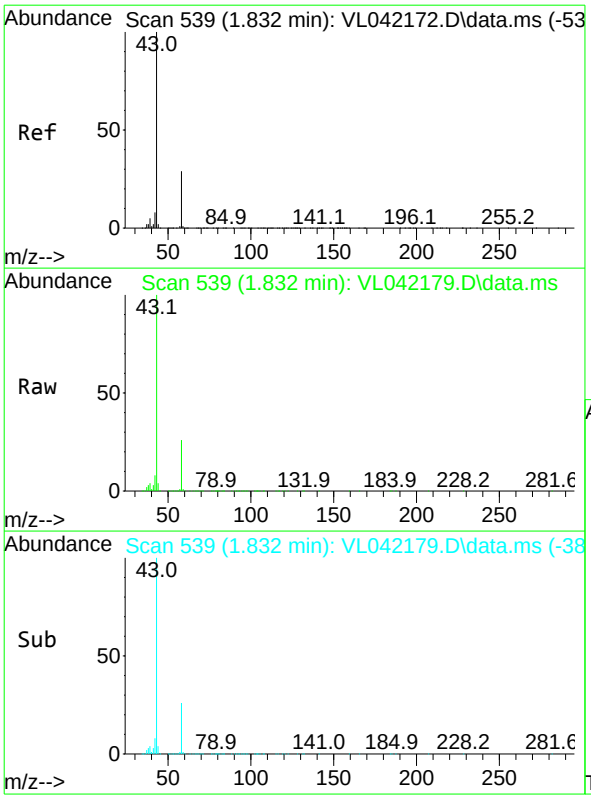


#14
Bromoethene
Concen: 9.328 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:108 Resp: 73572

Ion	Ratio	Lower	Upper
108	100		
106	105.0	86.8	130.2
79	18.8	15.0	22.6

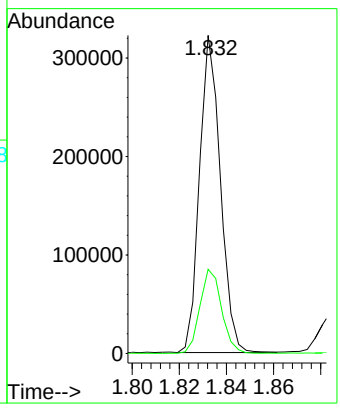




#15
Acetone
Concen: 8.132 ppbv
RT: 1.832 min Scan# 53
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 198300

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8



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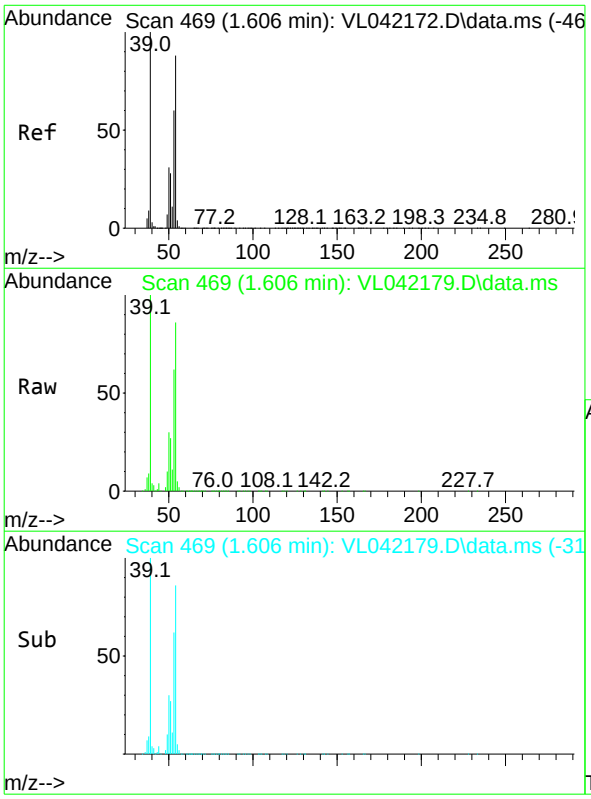
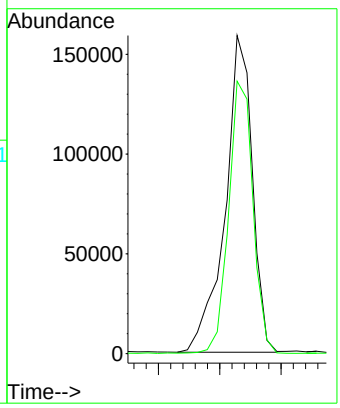
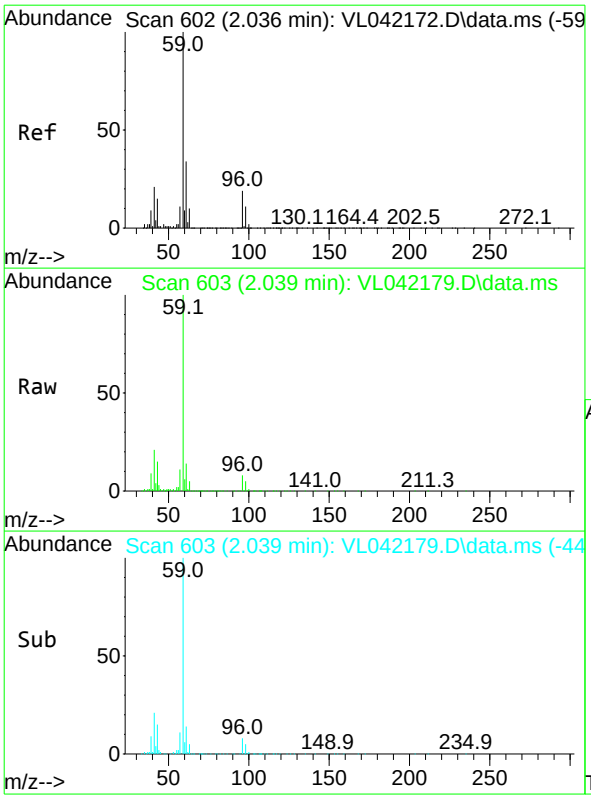


#16
1,3-Butadiene
Concen: 8.216 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 39 Resp: 97840

Ion	Ratio	Lower	Upper
39	100		
54	76.9	60.7	91.1

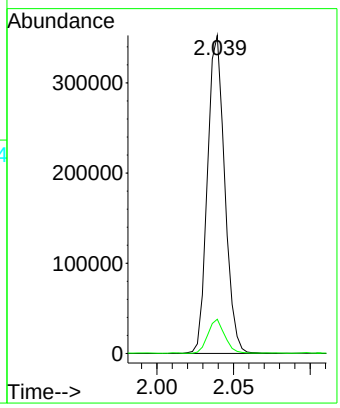




#17
tert-Butyl alcohol
Concen: 9.094 ppbv
RT: 2.039 min Scan# 60
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 59 Resp: 276195

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3



Instrument :
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ClientSampleId :
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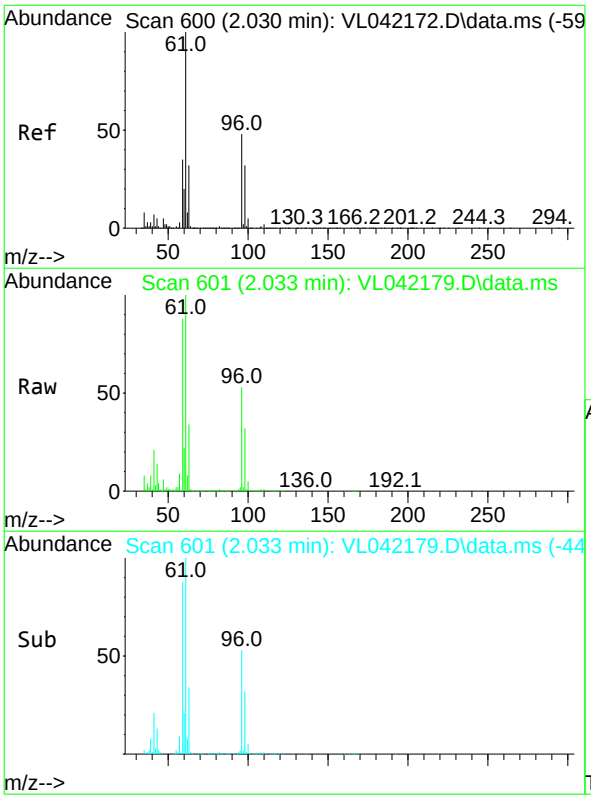
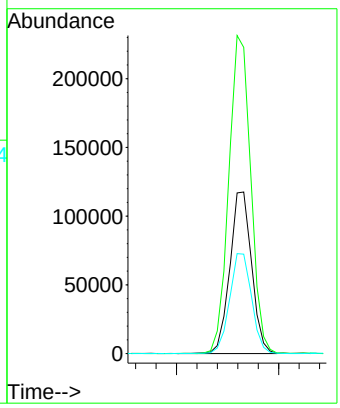
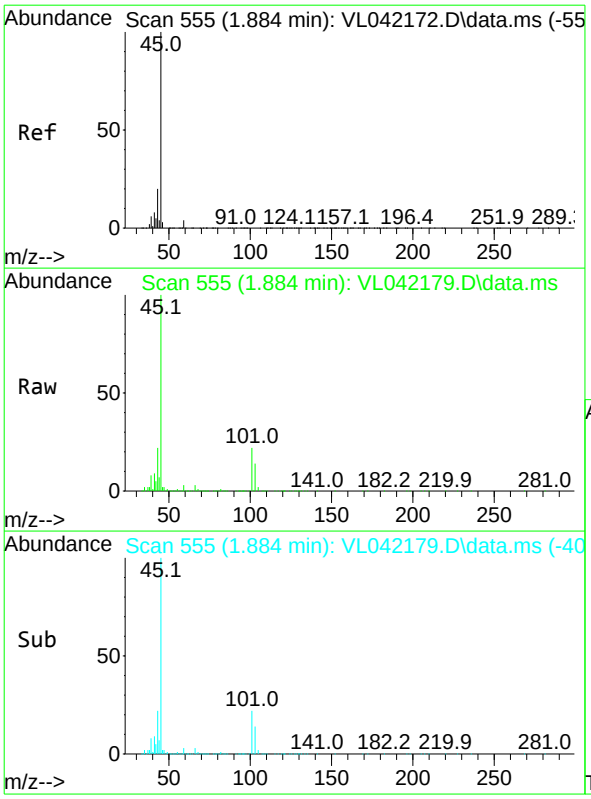


#18
1,1-Dichloroethene
Concen: 9.053 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 87137

Ion	Ratio	Lower	Upper
96	100		
61	189.6	167.6	251.4
98	61.5	53.5	80.3

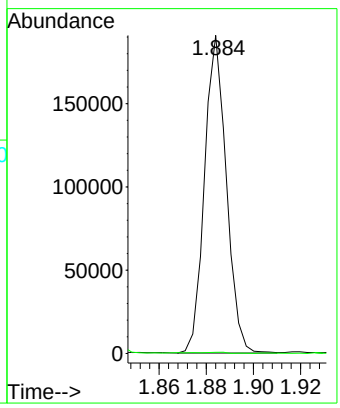




#19
Isopropyl Alcohol
Concen: 8.923 ppbv
RT: 1.884 min Scan# 55
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 45 Resp: 122768

Ion	Ratio	Lower	Upper
45	100		
58	44.9	36.9	55.3



Instrument :
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ClientSampleId :
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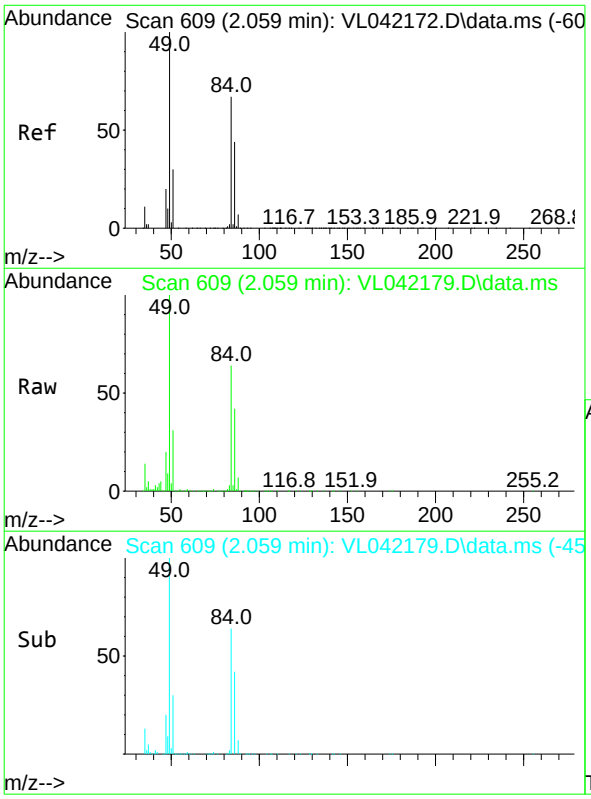
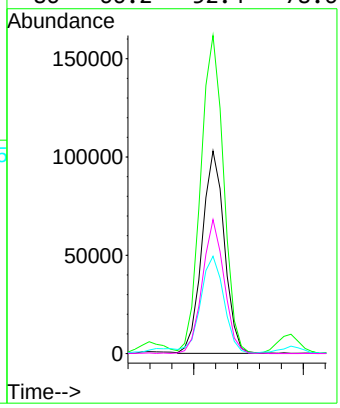
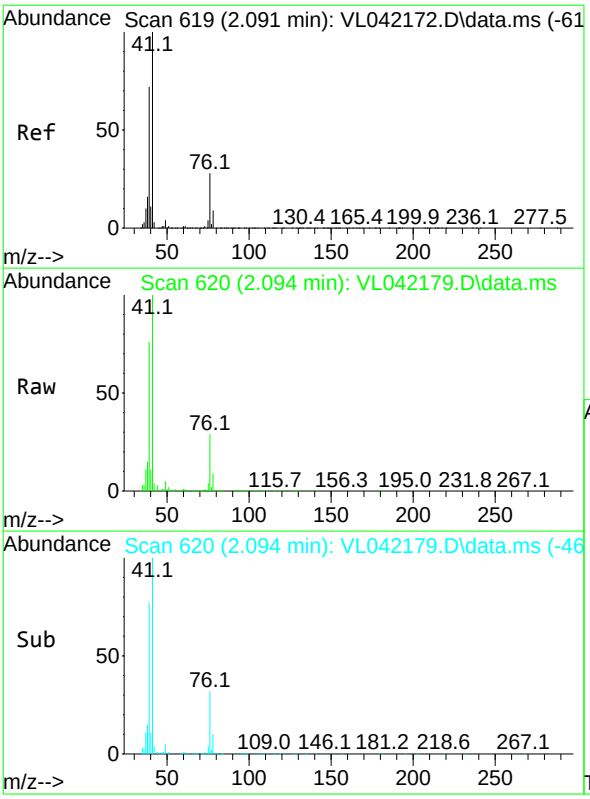


#20
Methylene Chloride
Concen: 8.018 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 72813

Ion	Ratio	Lower	Upper
84	100		
49	155.8	120.2	180.4
51	46.4	37.4	56.0
86	66.2	52.4	78.6

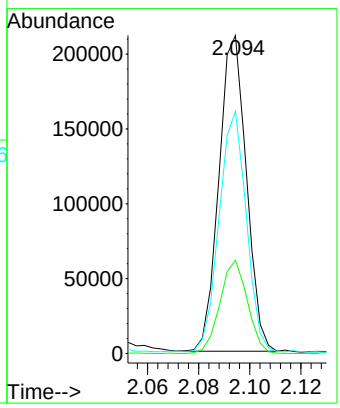




#21
Allyl Chloride
Concen: 9.154 ppbv
RT: 2.094 min Scan# 62
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 41 Resp: 157418

Ion	Ratio	Lower	Upper
41	100		
76	29.6	24.1	36.1
39	75.5	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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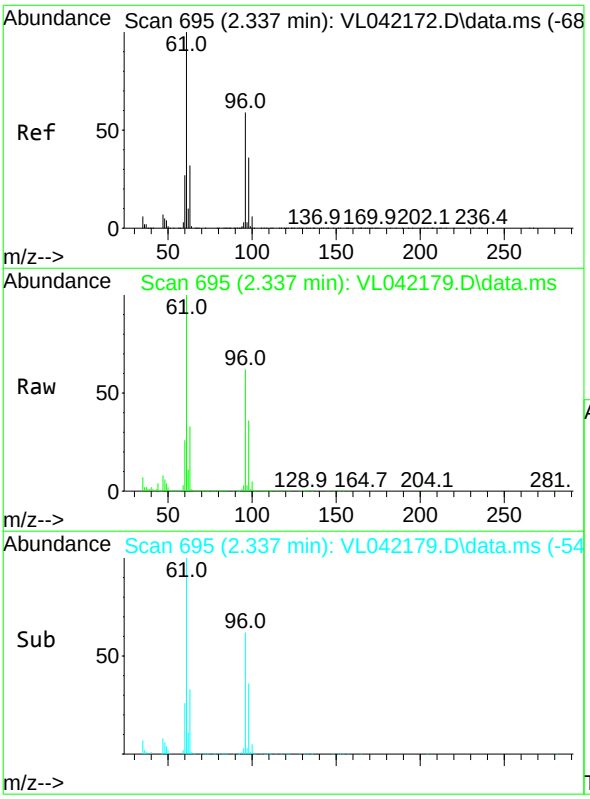
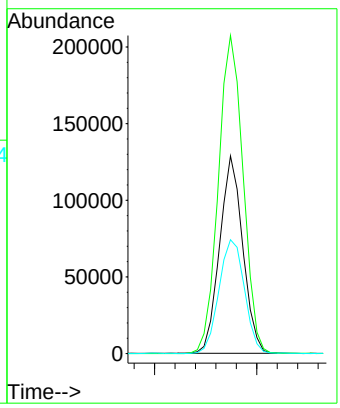
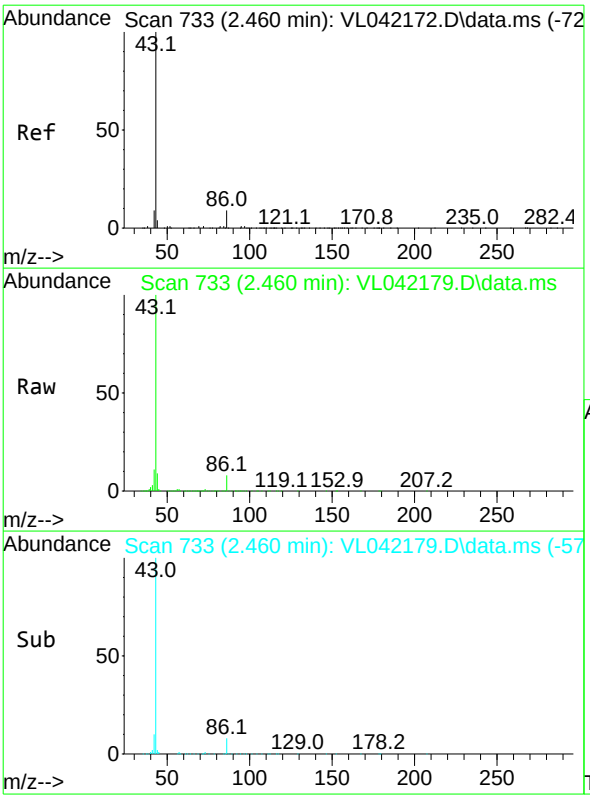


#22
trans-1,2-Dichloroethene
Concen: 9.092 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 101141

Ion	Ratio	Lower	Upper
96	100		
61	161.2	136.6	204.8
98	57.7	49.4	74.2

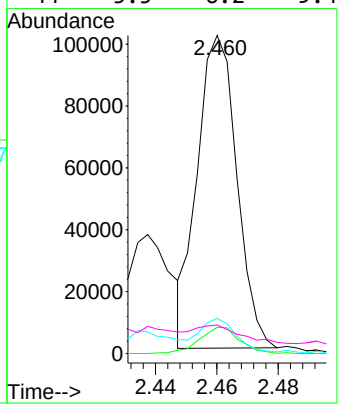




#23
Vinyl Acetate
Concen: 8.553 ppbv
RT: 2.460 min Scan# 73
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 90260

Ion	Ratio	Lower	Upper
43	100		
86	8.3	5.5	8.3#
42	10.7	8.6	13.0
44	5.5	6.2	9.4#



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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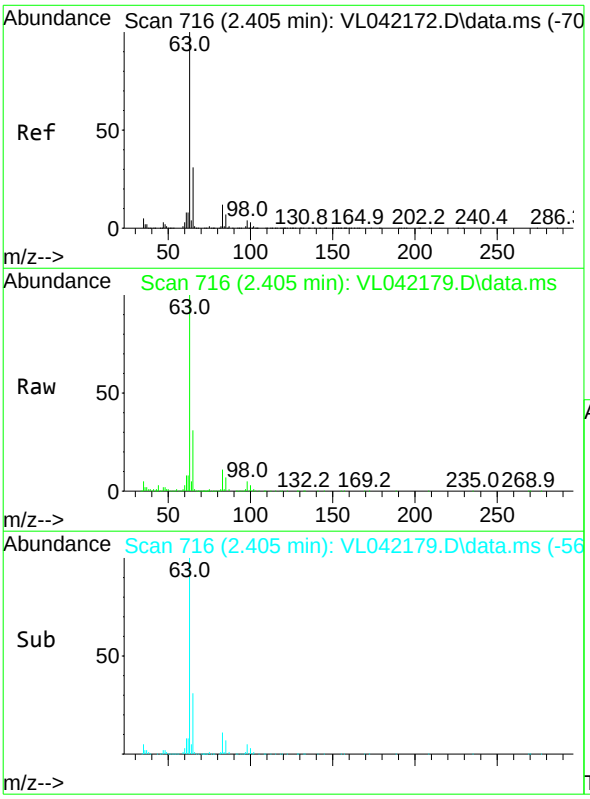
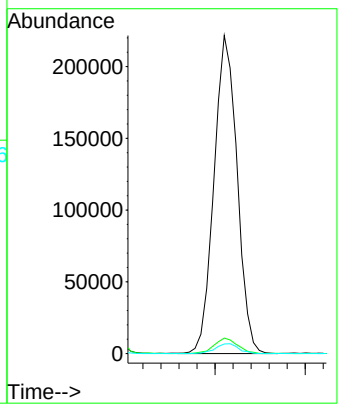
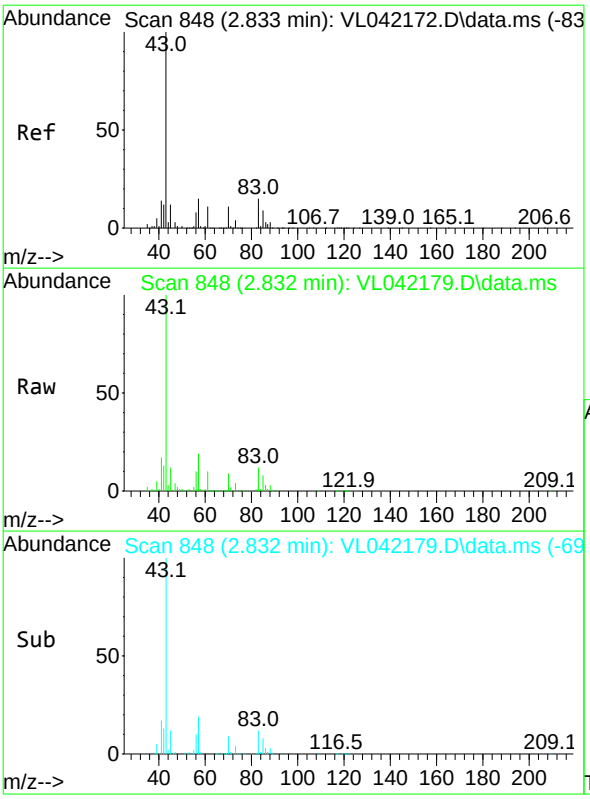


#24
1,1-Dichloroethane
Concen: 9.600 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 197968

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	3.0	1.6	4.7

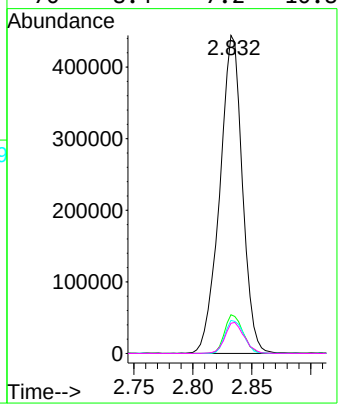




#25
Ethyl Acetate
Concen: 9.364 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 592585

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.7	7.3	10.9
70	8.4	7.2	10.8



Instrument :
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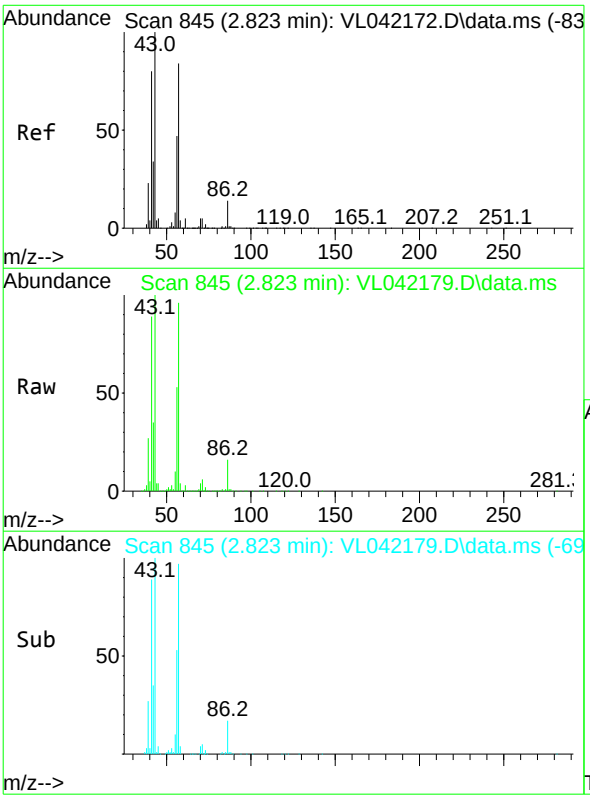
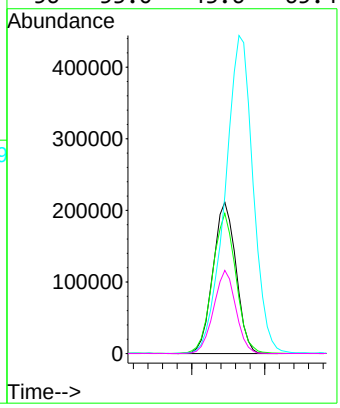
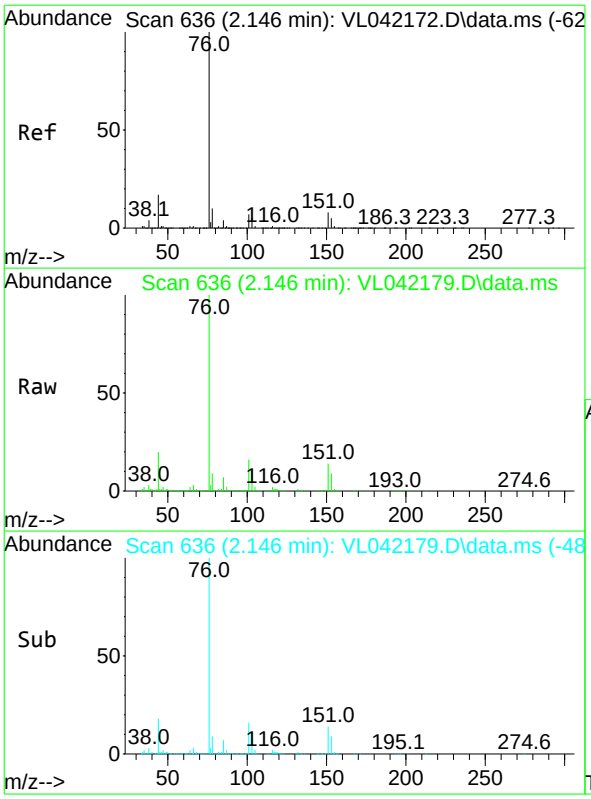


#26
Hexane
Concen: 9.455 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 231125

Ion	Ratio	Lower	Upper
57	100		
41	95.2	76.6	114.8
43	256.8	207.8	311.8
56	53.0	43.6	65.4

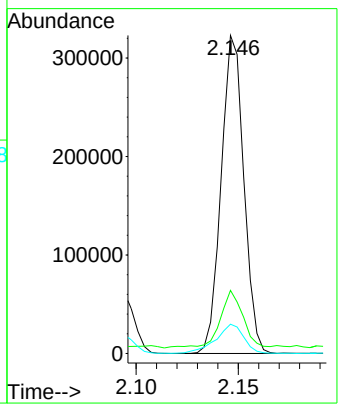




#27
Carbon Disulfide
Concen: 9.493 ppbv
RT: 2.146 min Scan# 63
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 76 Resp: 248834

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.3	9.3	13.9



Instrument :
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ClientSampleId :
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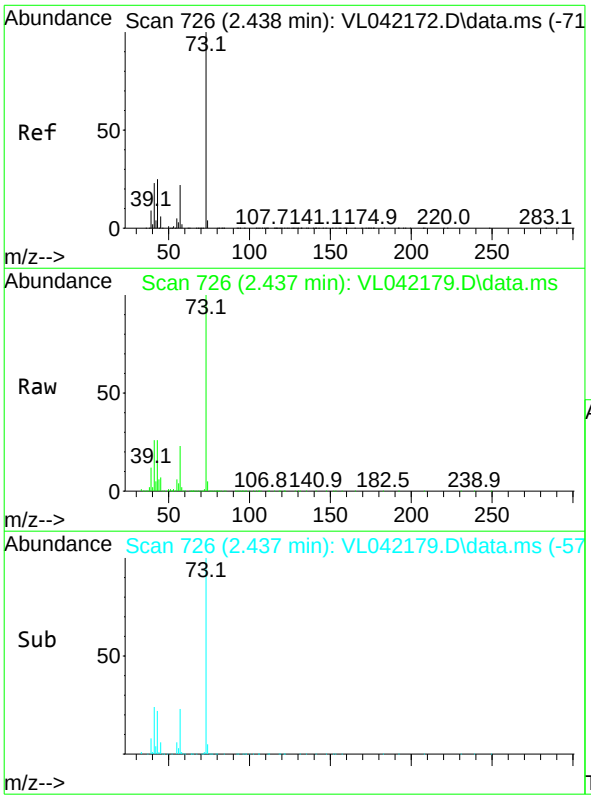
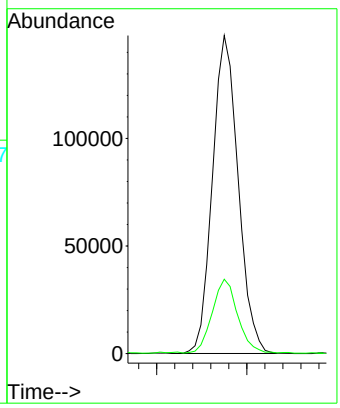
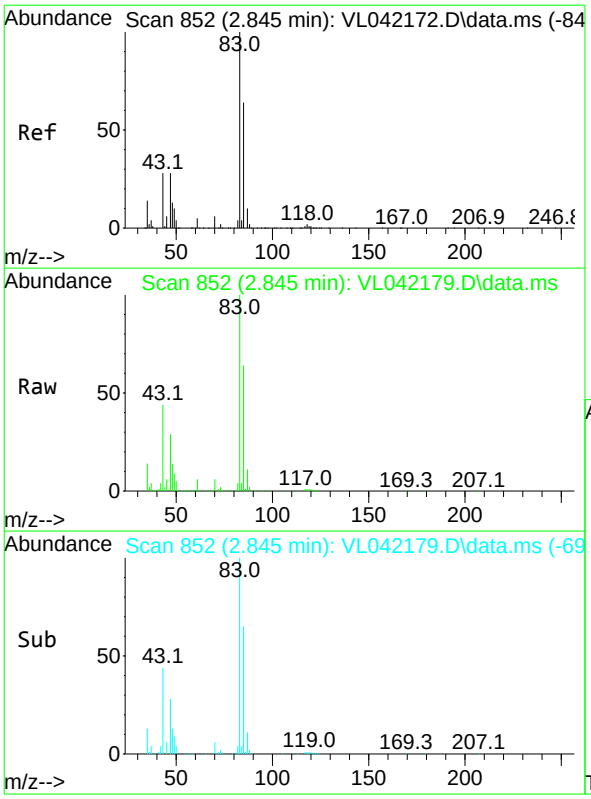


#28
Methyl tert-Butyl Ether
Concen: 9.624 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 73 Resp: 146470

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.5	30.7

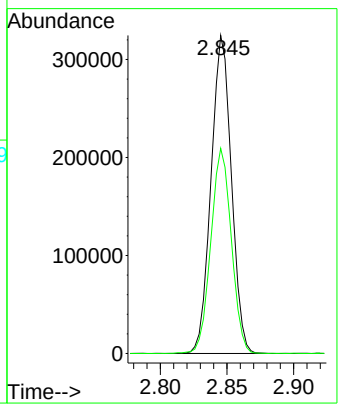




#29
Chloroform
Concen: 9.619 ppbv
RT: 2.845 min Scan# 85
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 344106

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2



Instrument :
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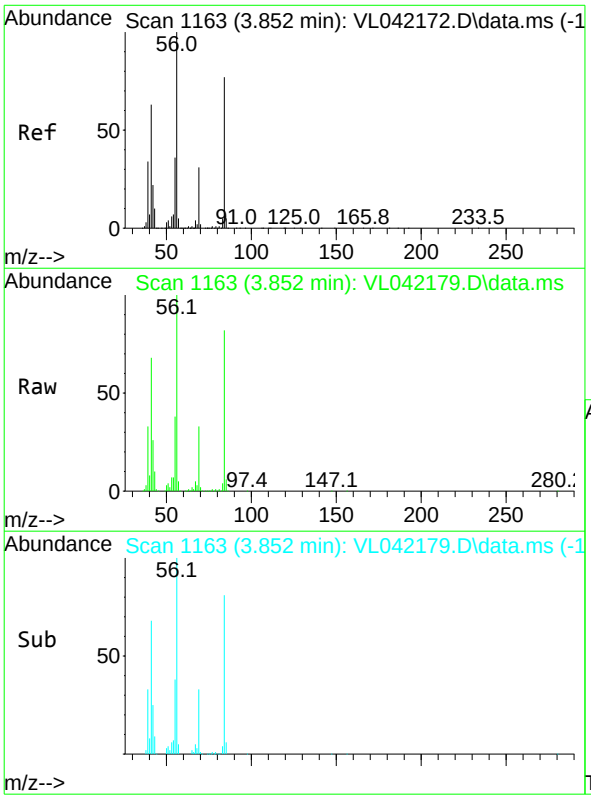
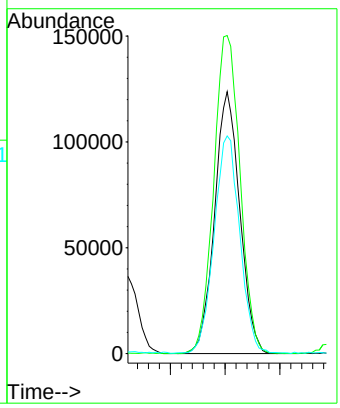
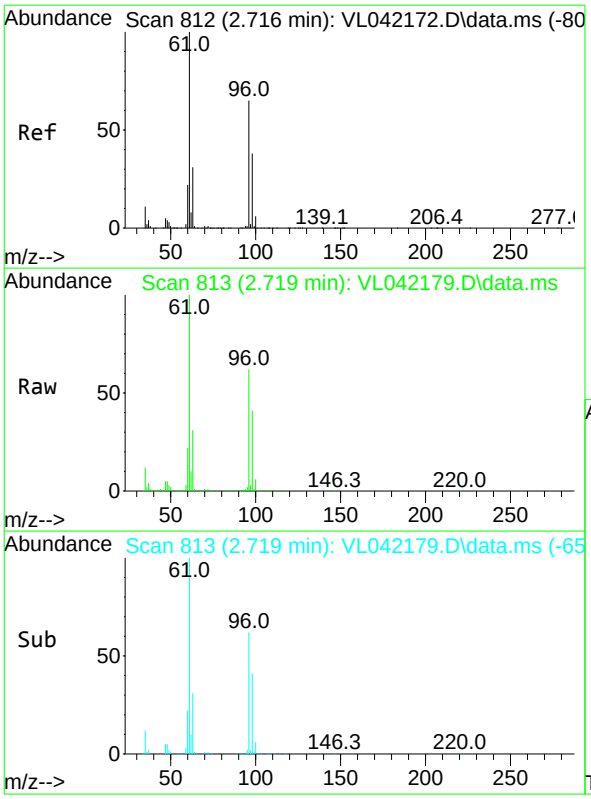


#30
Cyclohexane
Concen: 9.323 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 197897

Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	84.6	66.5	99.7

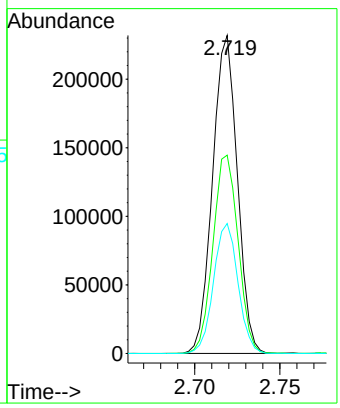




#31
cis-1,2-Dichloroethene
Concen: 9.449 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 61 Resp: 234487

Ion	Ratio	Lower	Upper
61	100		
96	62.3	51.8	77.8
98	40.9	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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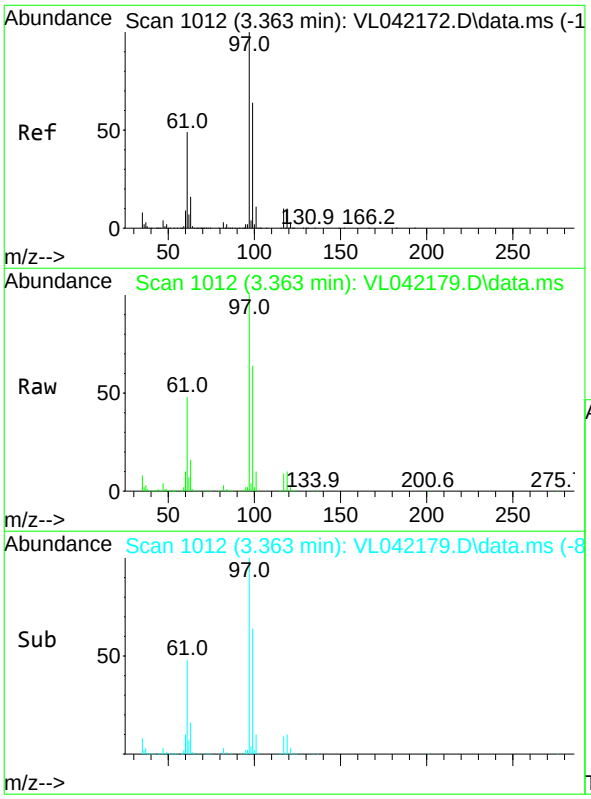
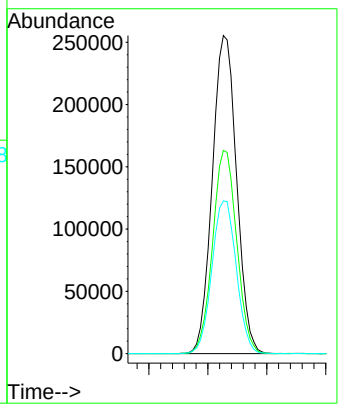
Supervised By :Mahesh Dadoda 04/03/2025

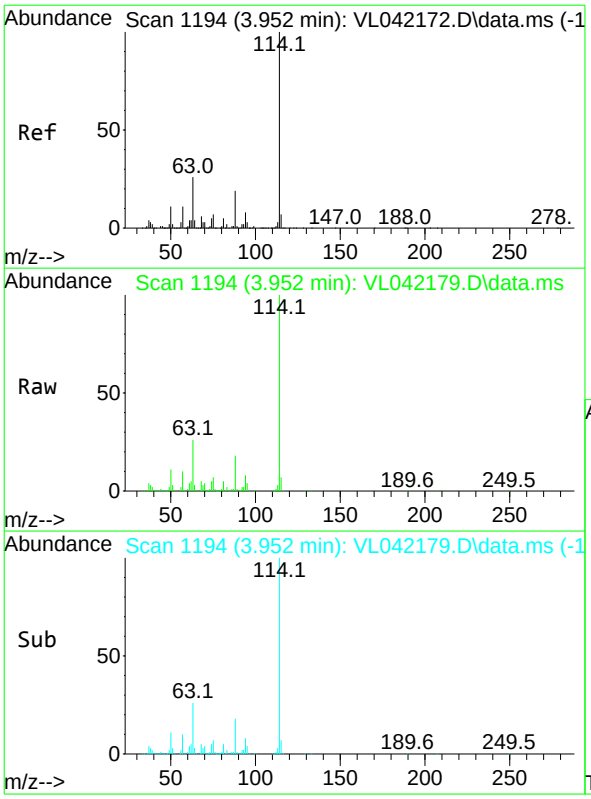


#32
1,1,1-Trichloroethane
Concen: 8.921 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 365364

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	48.4	38.7	58.1

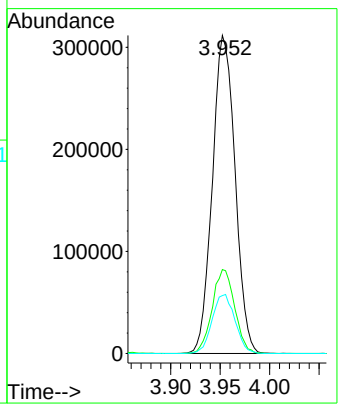




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:114 Resp: 498105

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.7	15.0	22.4



Instrument :
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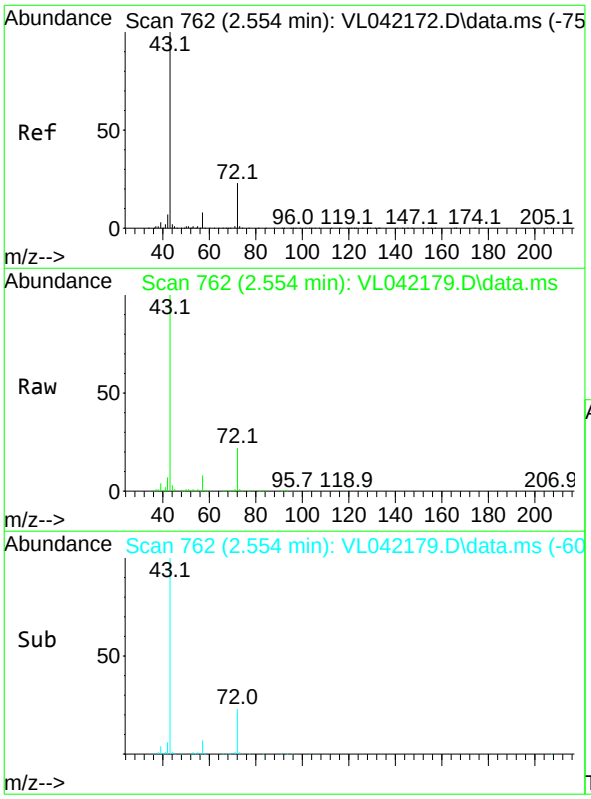
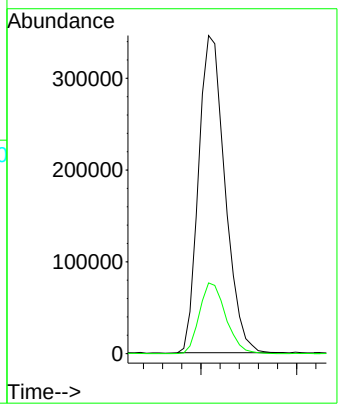
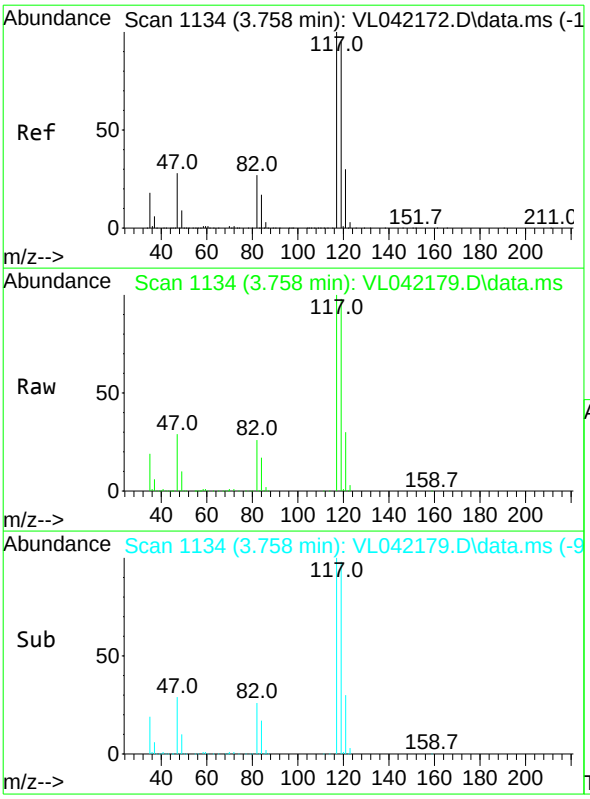


#34
2-Butanone
Concen: 9.171 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 331236

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2

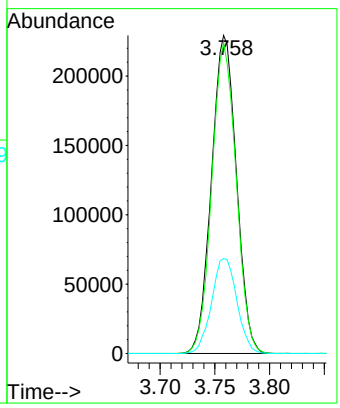




#35
Carbon Tetrachloride
Concen: 9.339 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:117 Resp: 363392

Ion	Ratio	Lower	Upper
117	100		
119	97.7	76.2	114.2
121	29.9	24.2	36.4



Instrument :
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ClientSampleId :
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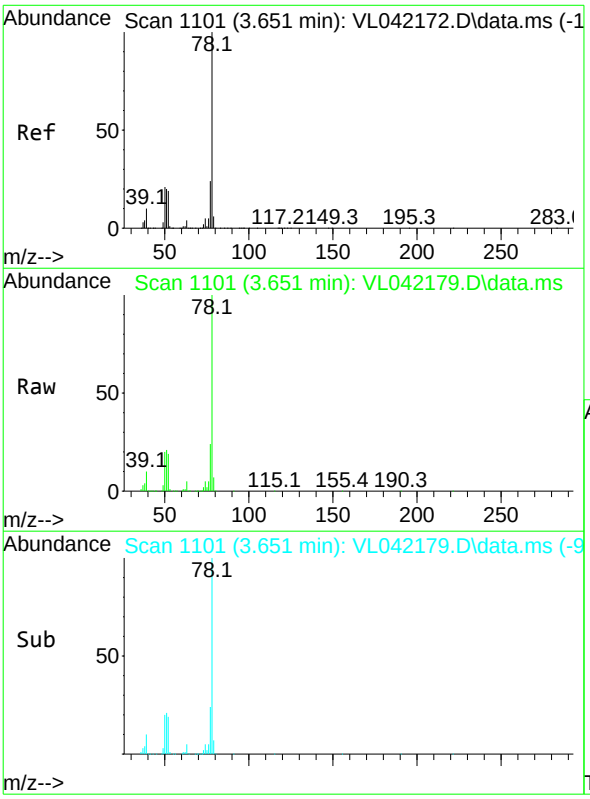
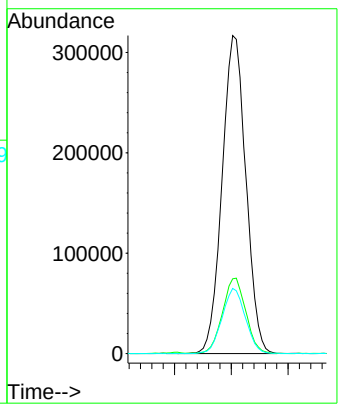
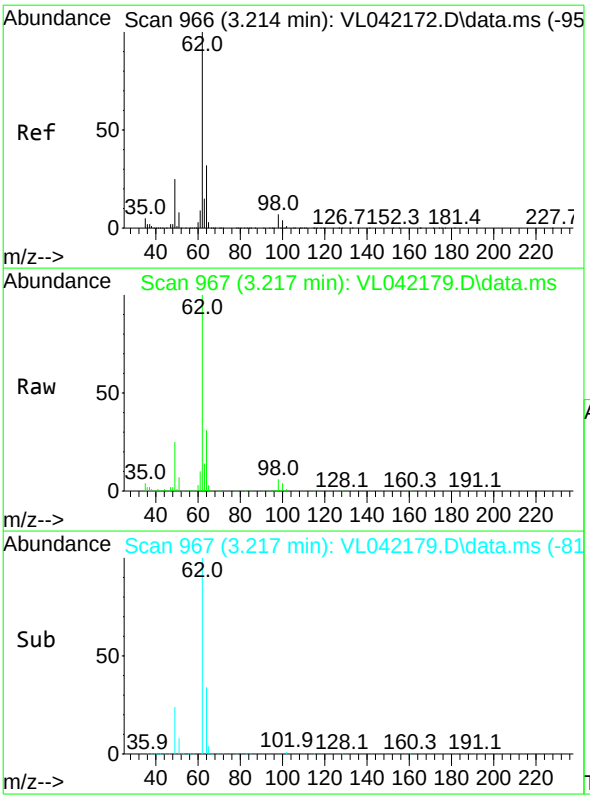


#36
Benzene
Concen: 9.341 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 78 Resp: 461261

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.4	16.6	24.8

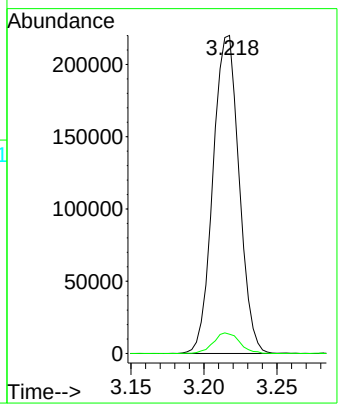




#37
1,2-Dichloroethane
Concen: 9.676 ppbv
RT: 3.217 min Scan# 96
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 62 Resp: 273559

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2



Instrument :
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ClientSampleId :
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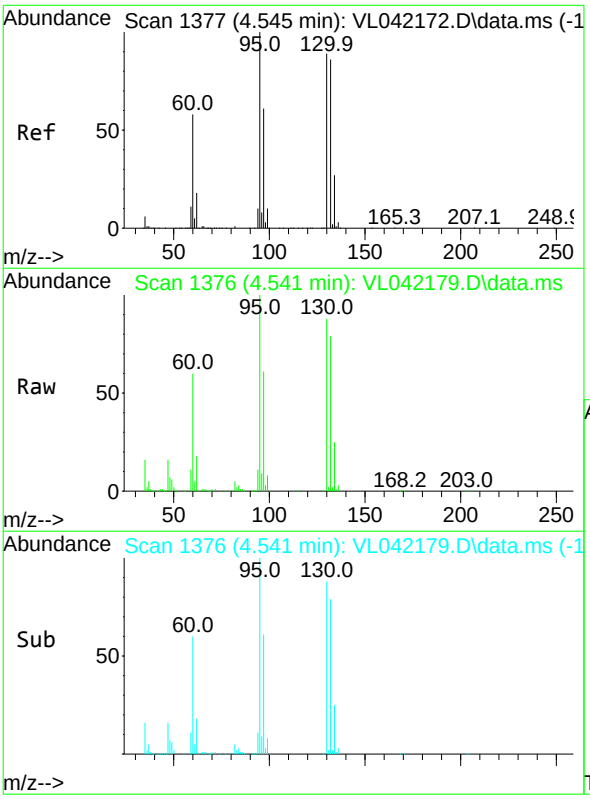
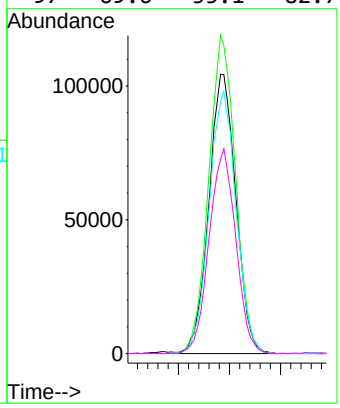
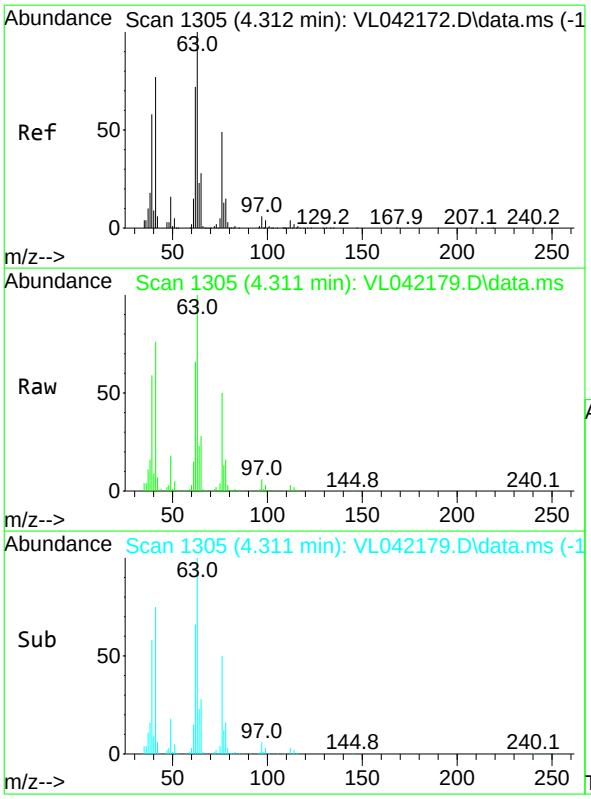


#38
Trichloroethene
Concen: 9.306 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:130 Resp: 191746

Ion	Ratio	Lower	Upper
130	100		
95	113.9	89.8	134.8
132	90.3	77.4	116.2
97	69.6	55.1	82.7

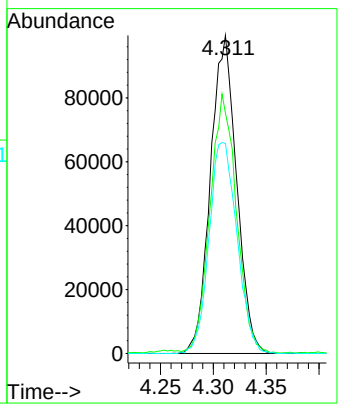




#39
1,2-Dichloropropane
Concen: 9.500 ppbv
RT: 4.311 min Scan# 13
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 170839

Ion	Ratio	Lower	Upper
63	100		
41	75.3	61.7	92.5
62	66.0	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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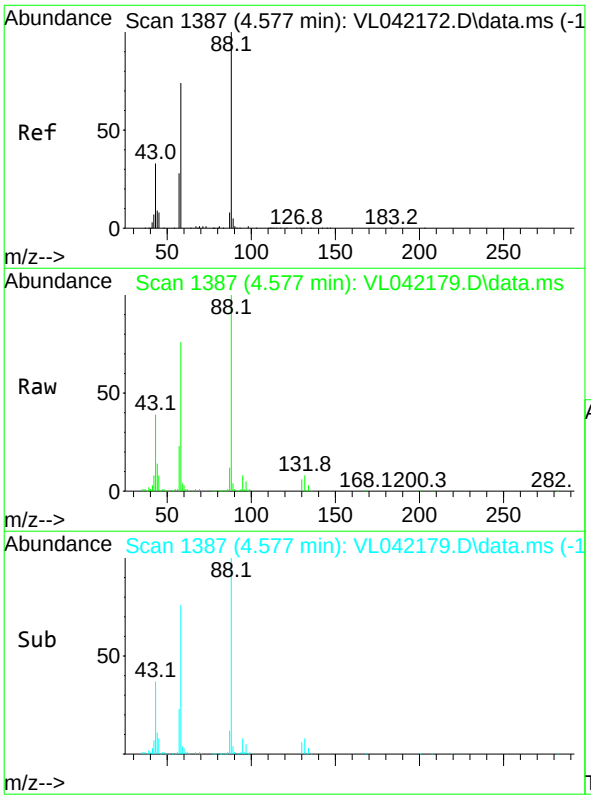
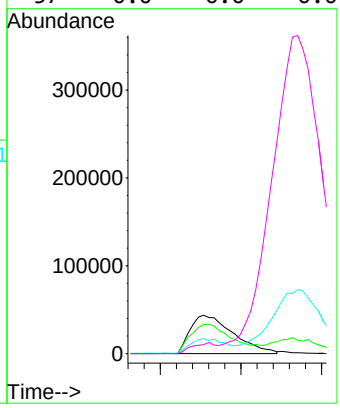
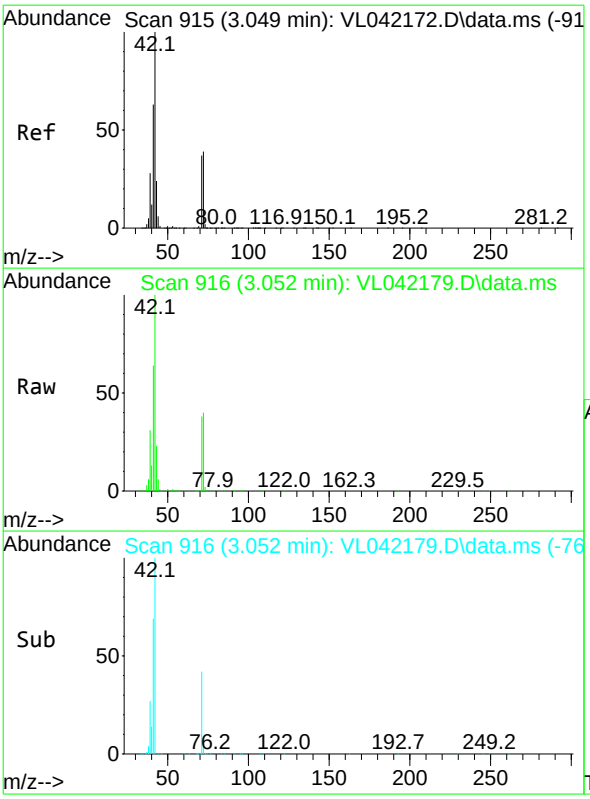


#40
1,4-Dioxane
Concen: 8.443 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 88 Resp: 80592

Ion	Ratio	Lower	Upper
88	100		
58	76.2	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0

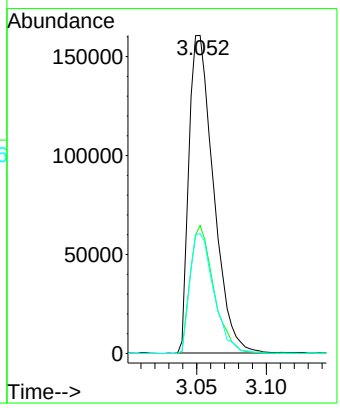




#41
Tetrahydrofuran
Concen: 9.431 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 42 Resp: 196163

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.2	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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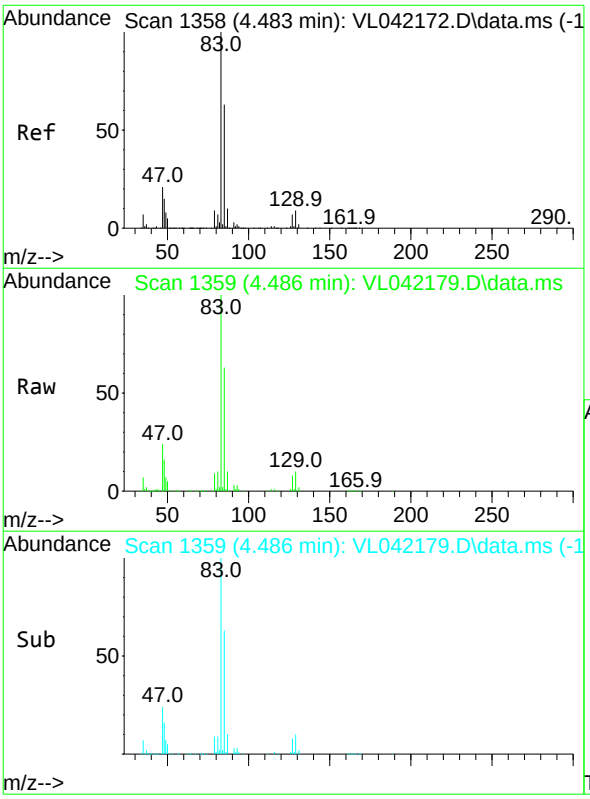
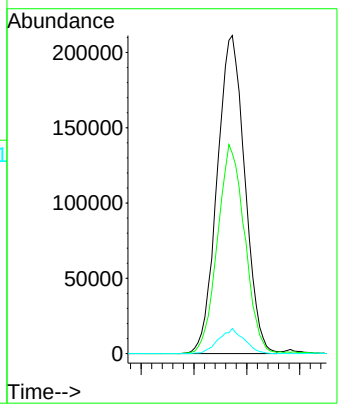
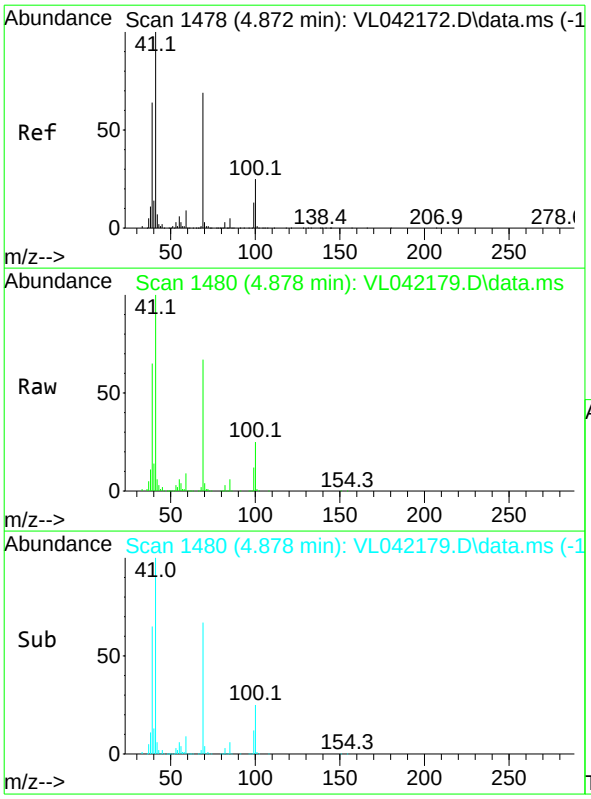


#42
Bromodichloromethane
Concen: 9.853 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 384006

Ion	Ratio	Lower	Upper
83	100		
85	63.0	50.5	75.7
127	7.9	5.9	8.9

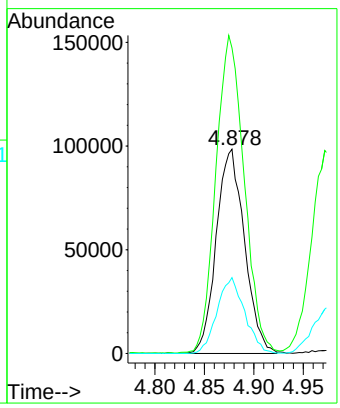




#43
Methyl Methacrylate
Concen: 9.344 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 69 Resp: 195339

Ion	Ratio	Lower	Upper
69	100		
41	156.4	123.8	185.6
100	36.4	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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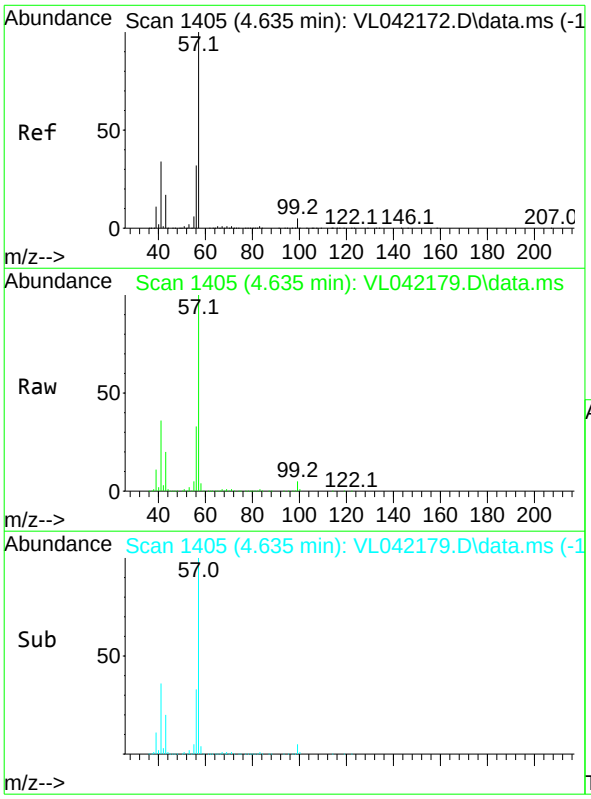
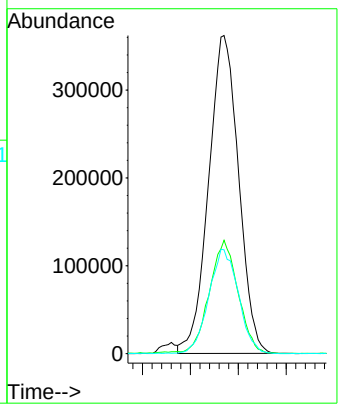
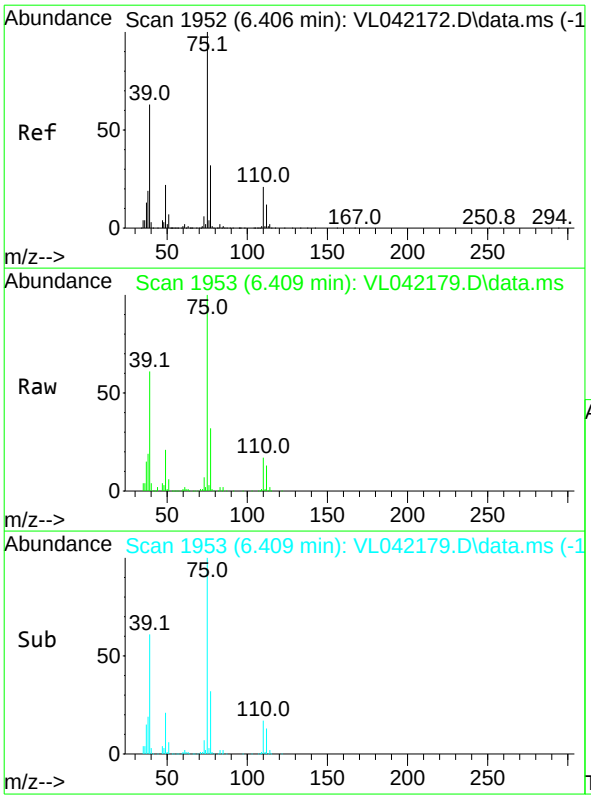


#44
2,2,4-Trimethylpentane
Concen: 9.436 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 787400

Ion	Ratio	Lower	Upper
57	100		
41	34.3	26.8	40.2
56	32.5	25.6	38.4

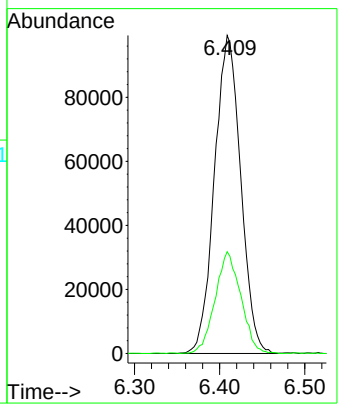




#45
t-1,3-Dichloropropene
Concen: 9.467 ppbv
RT: 6.409 min Scan# 19
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 212335

Ion	Ratio	Lower	Upper
75	100		
77	32.0	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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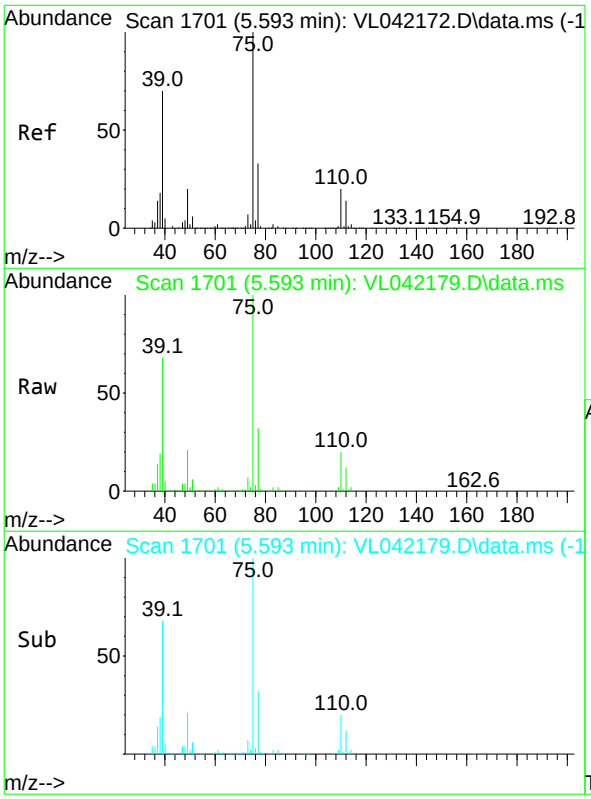
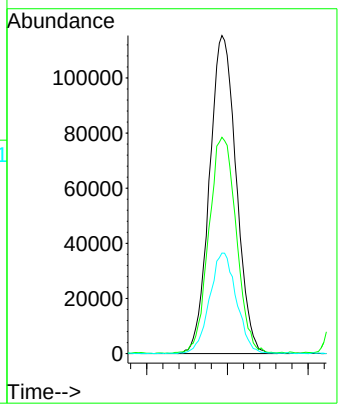
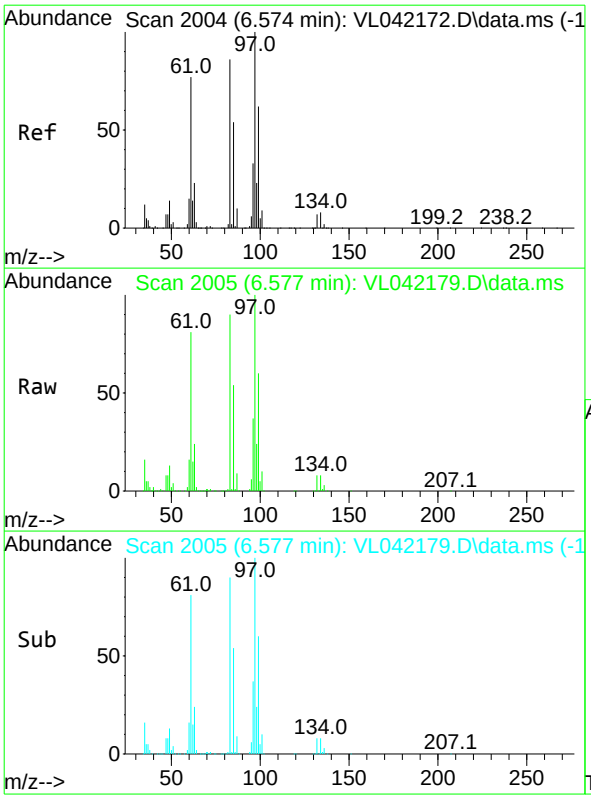


#46
cis-1,3-Dichloropropene
Concen: 9.643 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 265101

Ion	Ratio	Lower	Upper
75	100		
39	67.8	55.8	83.6
77	31.6	26.0	39.0

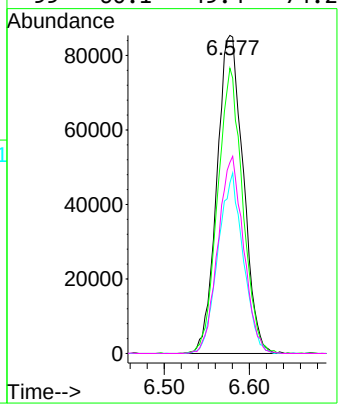




#47
1,1,2-Trichloroethane
Concen: 9.638 ppbv
RT: 6.577 min Scan# 20
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 183228

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	53.6	43.1	64.7
99	60.1	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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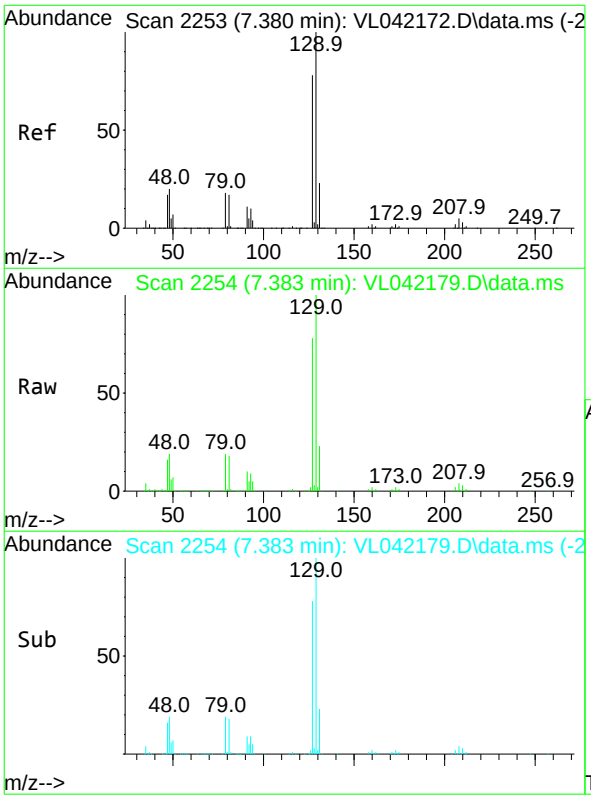
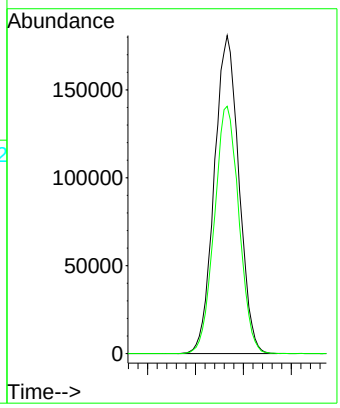
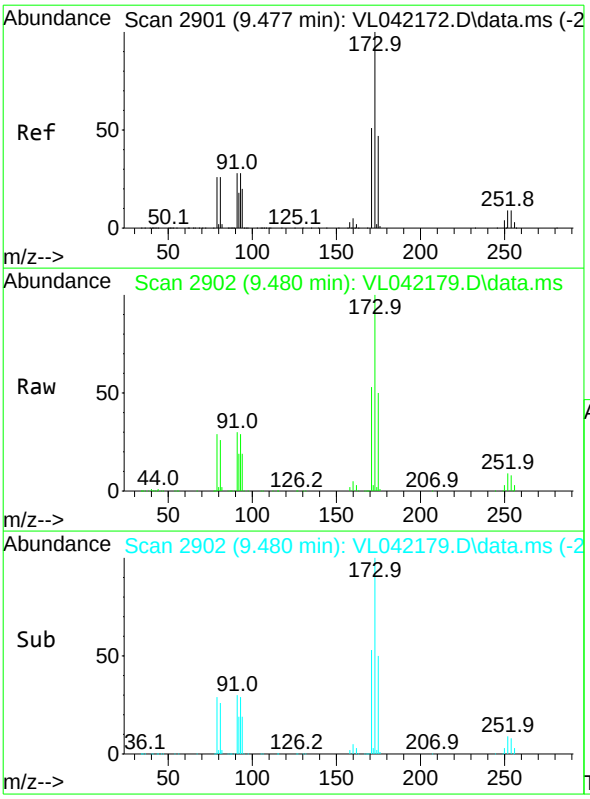


#48
Dibromochloromethane
Concen: 10.018 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:129 Resp: 322766

Ion	Ratio	Lower	Upper
129	100		
127	77.7	39.1	117.2

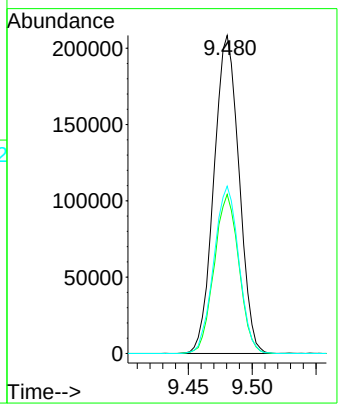




#49
Bromoform
Concen: 9.858 ppbv
RT: 9.480 min Scan# 29
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:173 Resp: 285149

Ion	Ratio	Lower	Upper
173	100		
175	49.2	38.6	57.8
171	52.4	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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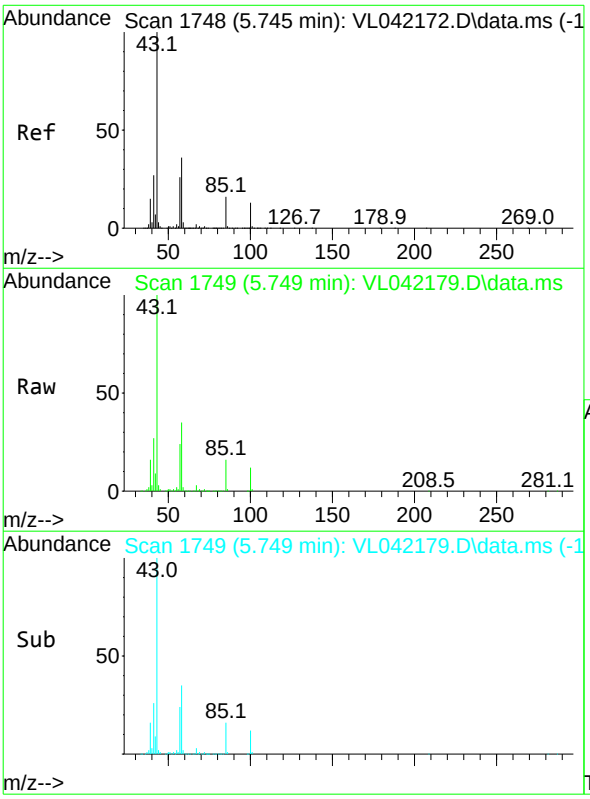
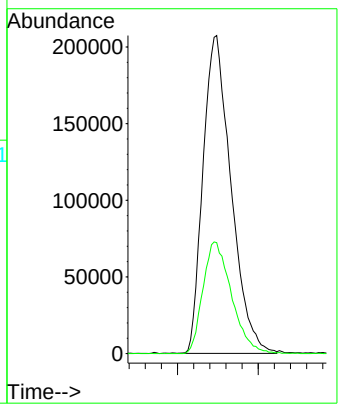
Supervised By :Mahesh Dadoda 04/03/2025

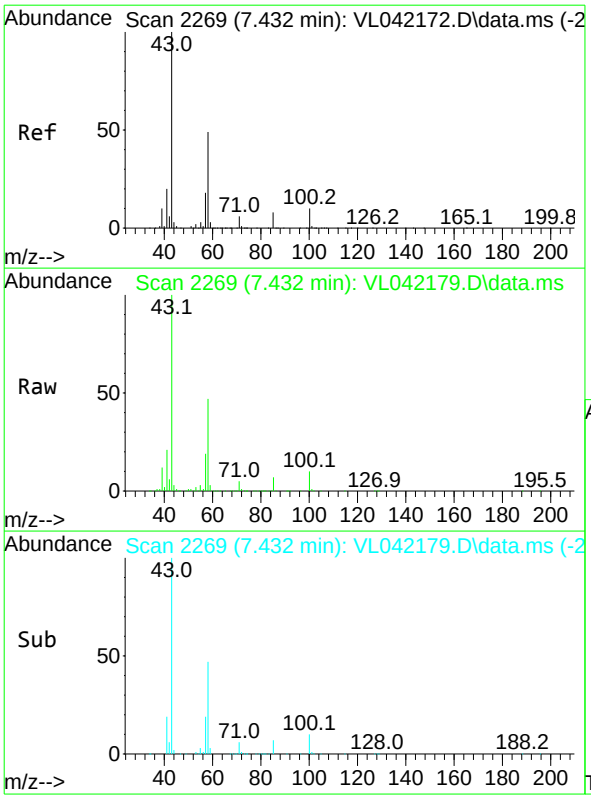


#50
4-Methyl-2-Pentanone
Concen: 8.749 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 500791

Ion	Ratio	Lower	Upper
43	100		
58	35.8	29.0	43.6

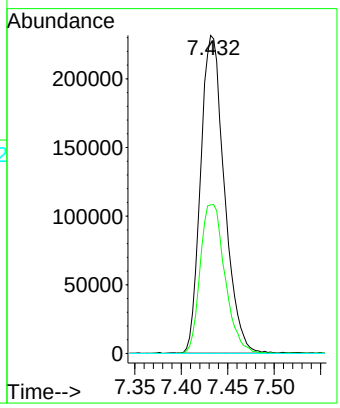




#51
2-Hexanone
Concen: 8.741 ppbv
RT: 7.432 min Scan# 22
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 410889

Ion	Ratio	Lower	Upper
43	100		
58	48.9	39.7	59.5
98	0.0	0.1	0.1#



Instrument :
MSVOA_L
ClientSampleId :
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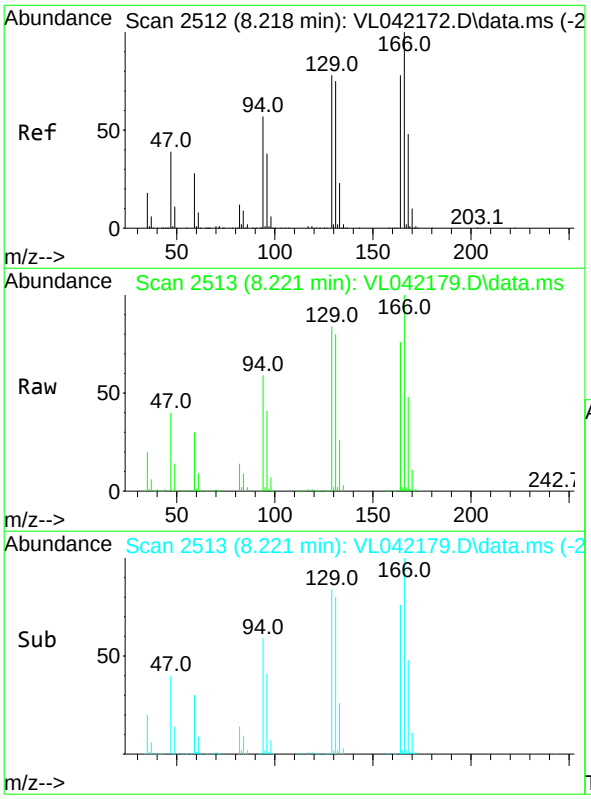
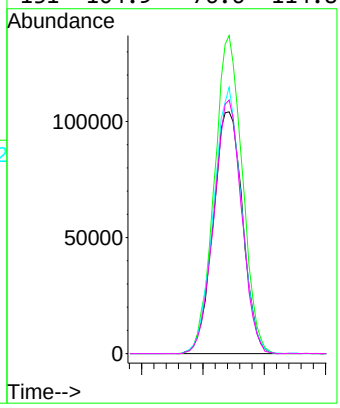
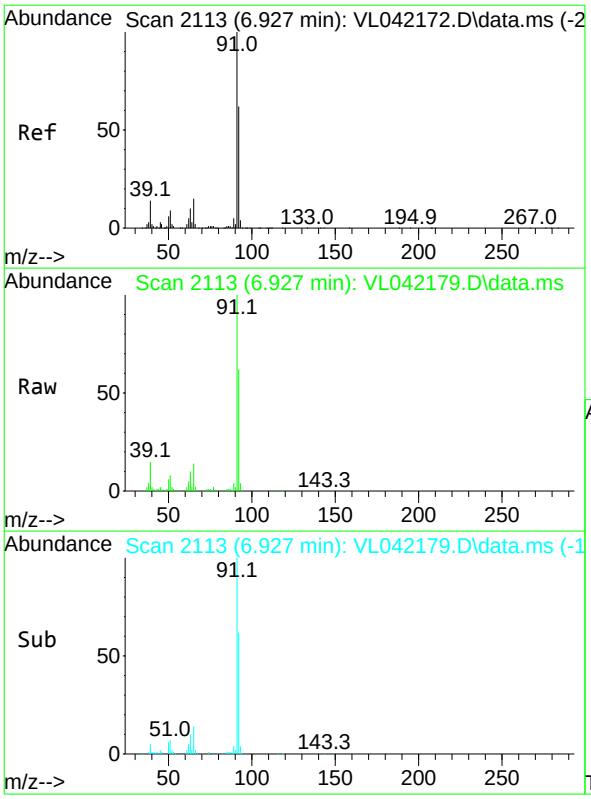


#52
Tetrachloroethene
Concen: 8.855 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:164 Resp: 173420

Ion	Ratio	Lower	Upper
164	100		
166	131.6	102.5	153.7
129	110.1	79.8	119.8
131	104.9	76.6	114.8

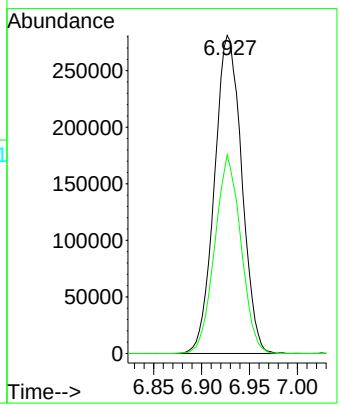




#53
Toluene
Concen: 9.514 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 556897

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.4	72.6



Instrument :
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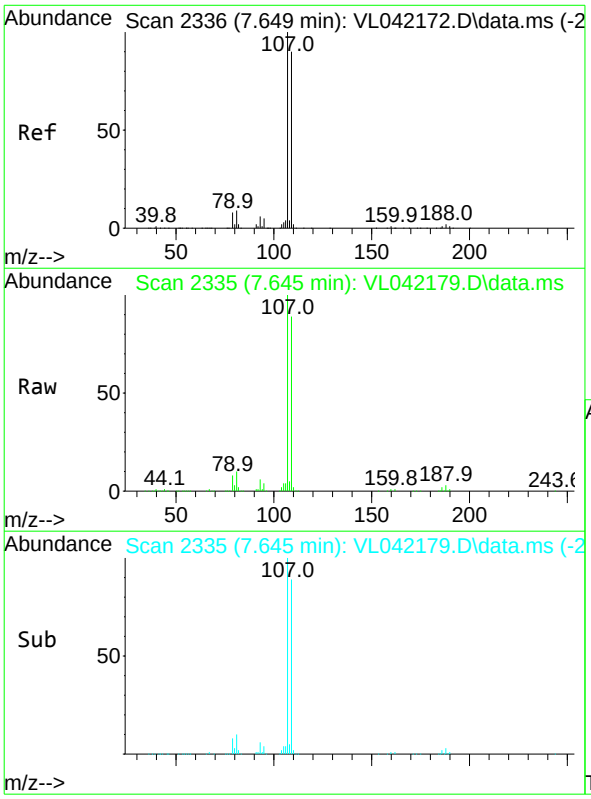
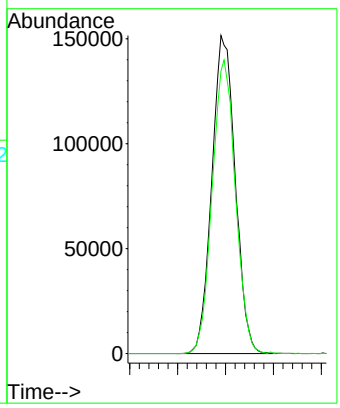
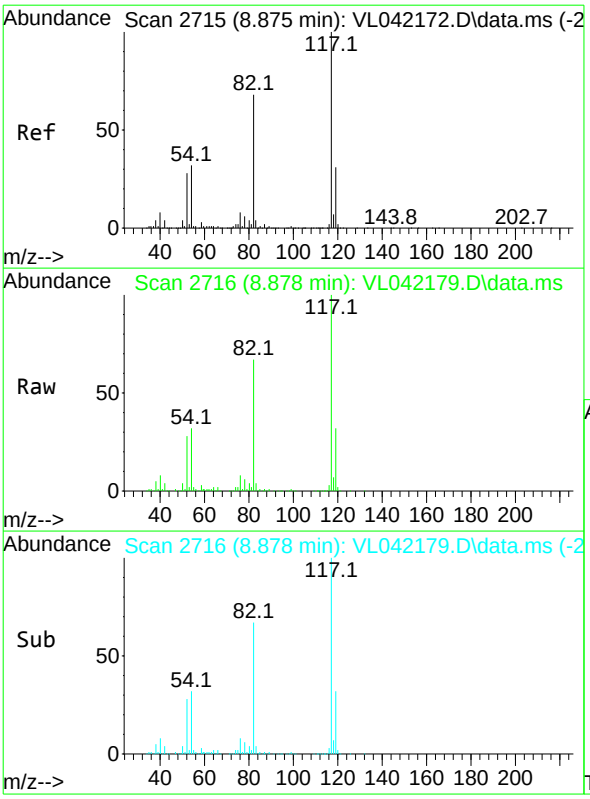


#54
1,2-Dibromoethane
Concen: 9.695 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:107 Resp: 256930

Ion	Ratio	Lower	Upper
107	100		
109	88.9	72.2	108.4

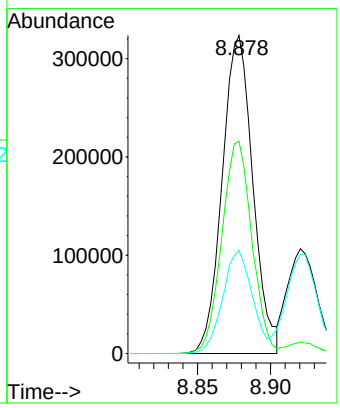




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 27
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:117 Resp: 473357

Ion	Ratio	Lower	Upper
117	100		
82	68.7	55.8	83.6
119	31.2	25.5	38.3



Instrument :
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ClientSampleId :
ICVVL032725

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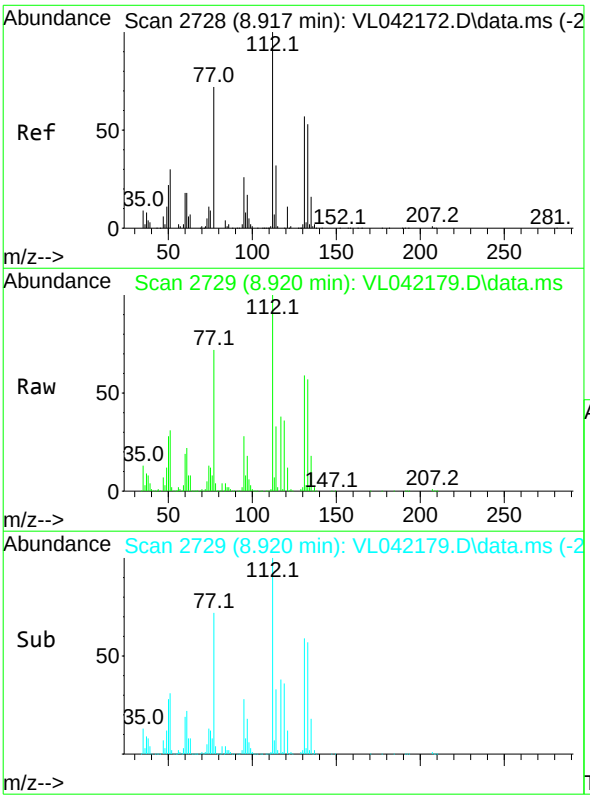
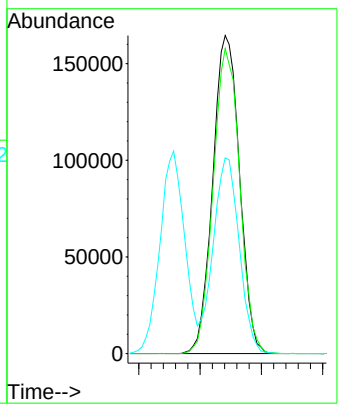
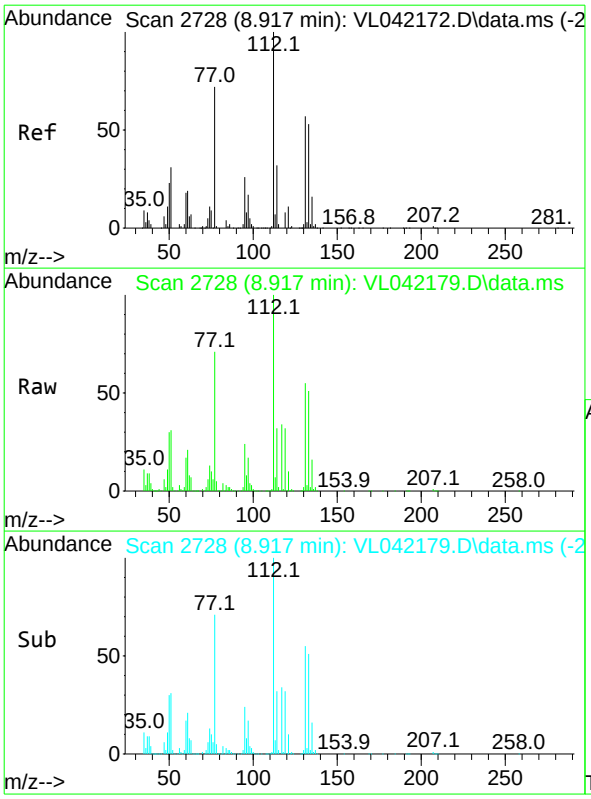


#56
1,1,1,2-Tetrachloroethane
Concen: 9.567 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:131 Resp: 249270

Ion	Ratio	Lower	Upper
131	100		
133	95.0	76.6	114.8
119	61.3	49.8	74.6

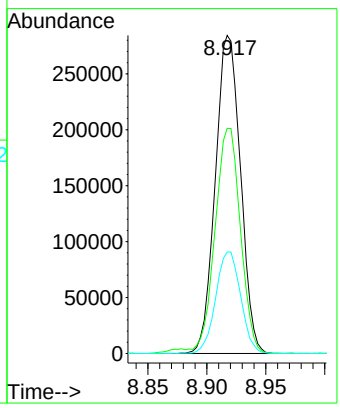




#57
Chlorobenzene
Concen: 9.411 ppbv
RT: 8.917 min Scan# 27
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:112 Resp: 422531

Ion	Ratio	Lower	Upper
112	100		
77	70.6	58.2	87.2
114	31.9	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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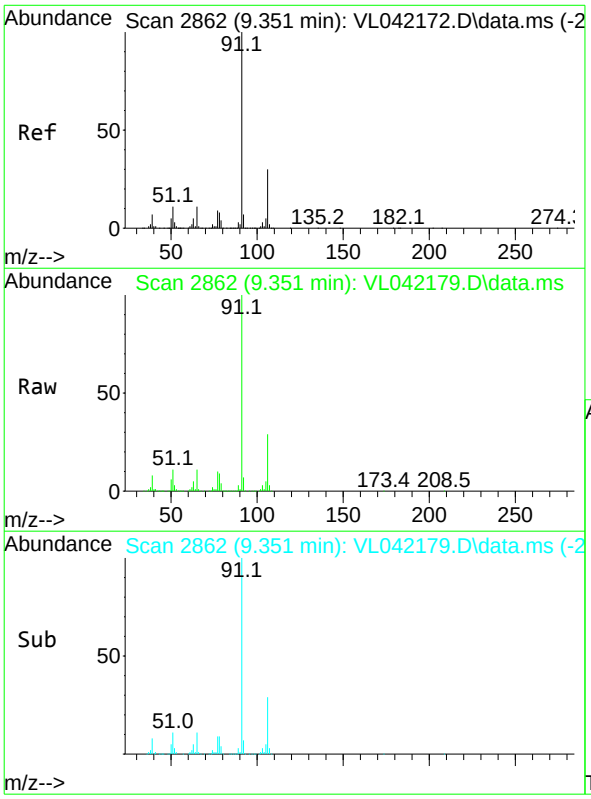
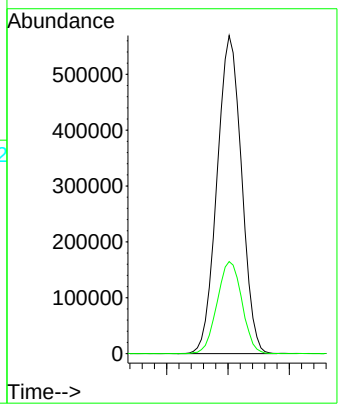
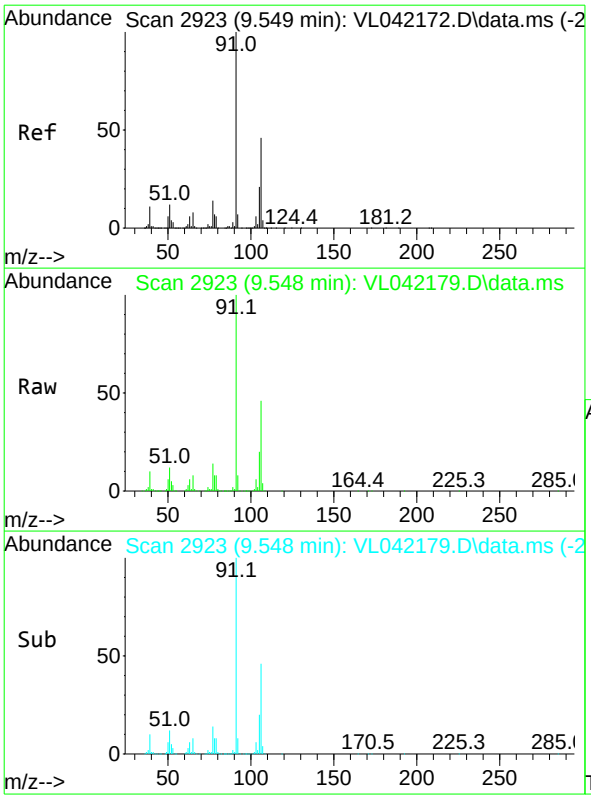


#58
Ethyl Benzene
Concen: 9.412 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 791360

Ion	Ratio	Lower	Upper
91	100		
106	28.9	24.2	36.2

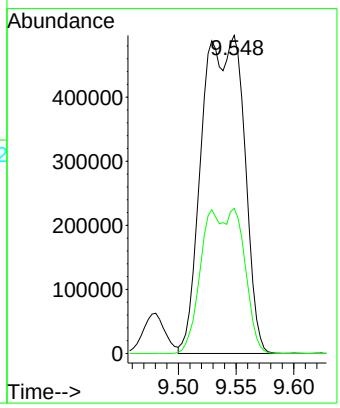




#59
m/p-Xylene
Concen: 18.772 ppbv m
RT: 9.548 min Scan# 29
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1260340

Ion	Ratio	Lower	Upper
91	100		
106	45.3	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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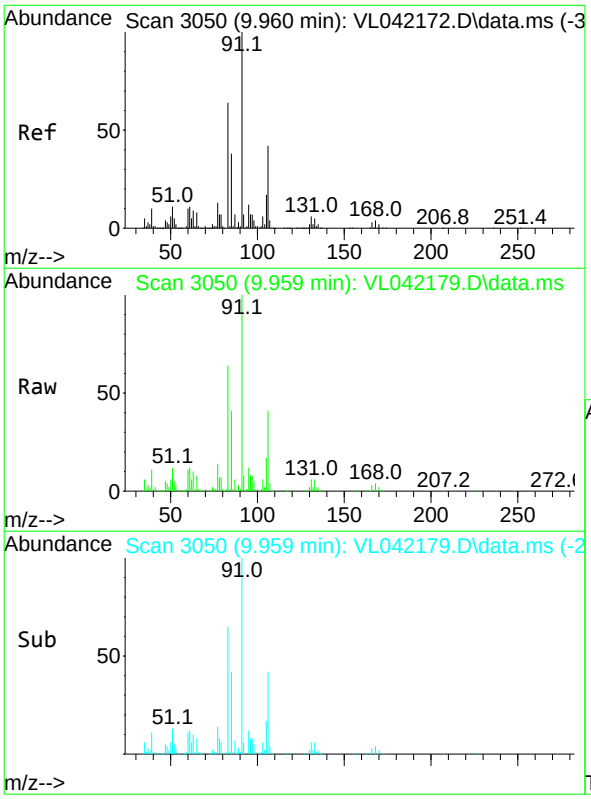
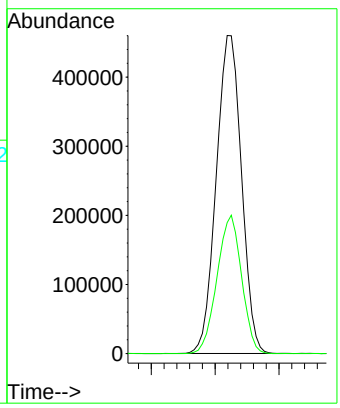
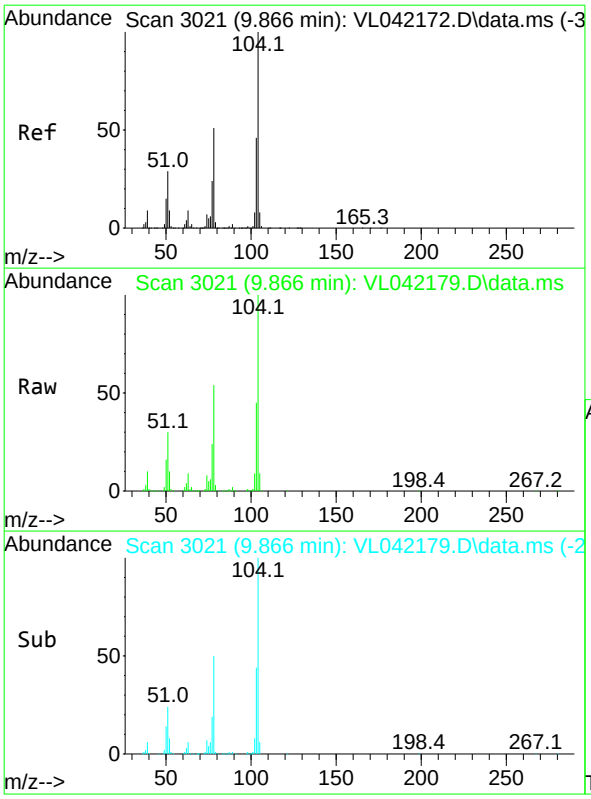


#60
o-Xylene
Concen: 9.404 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 632918

Ion	Ratio	Lower	Upper
91	100		
106	42.2	20.8	62.5

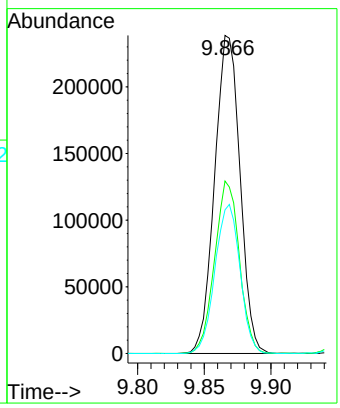




#61
Styrene
Concen: 9.488 ppbv
RT: 9.866 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:104 Resp: 315910

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	46.3	37.0	55.4



Instrument :
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ClientSampleId :
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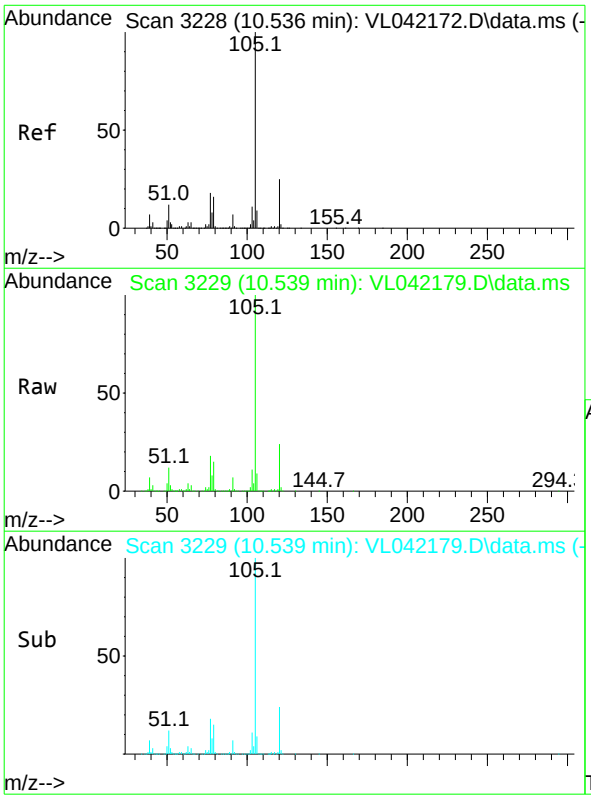
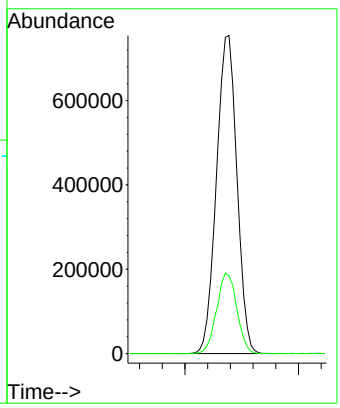
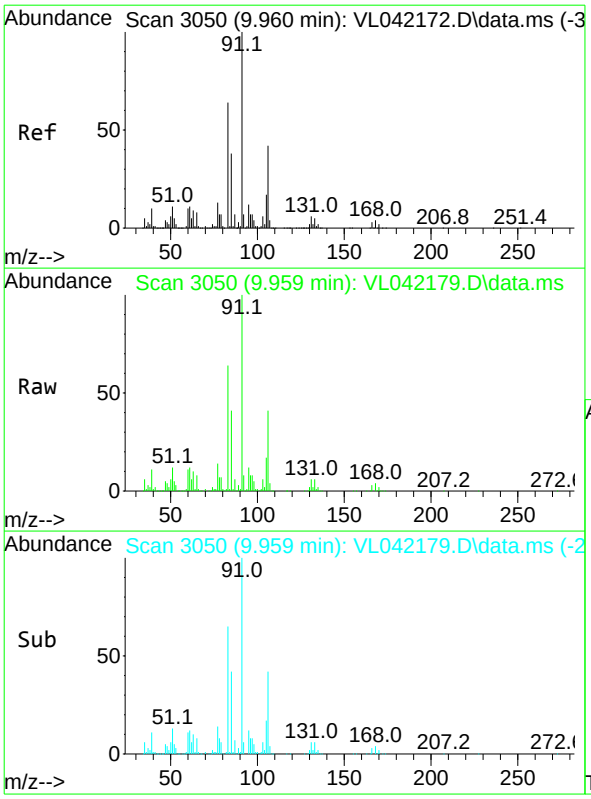


#62
Isopropylbenzene
Concen: 9.388 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 944938

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9

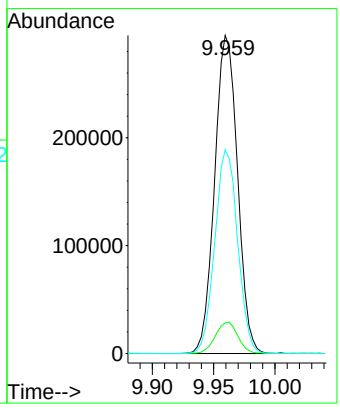




#63
1,1,2,2-Tetrachloroethane
Concen: 9.357 ppbv
RT: 9.959 min Scan# 30
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 382635

Ion	Ratio	Lower	Upper
83	100		
131	9.7	4.8	14.4
85	63.9	32.5	97.5



Instrument :
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ClientSampleId :
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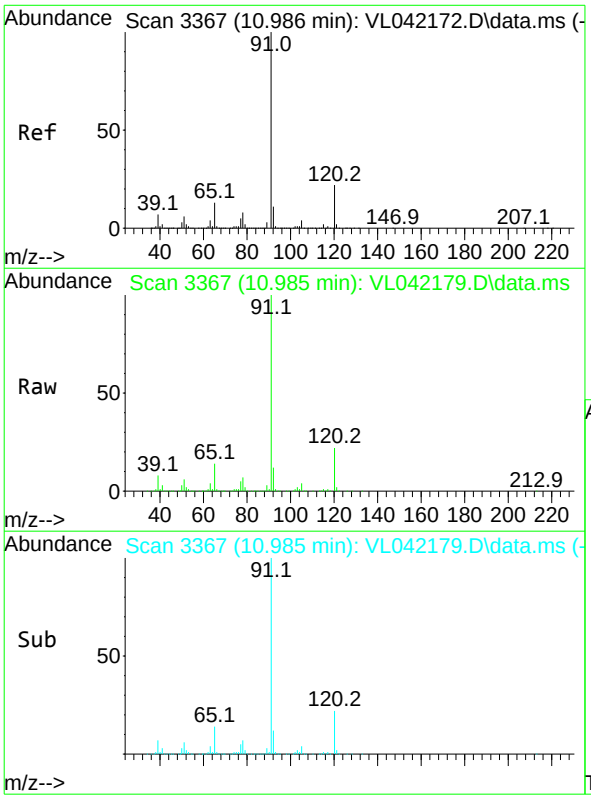
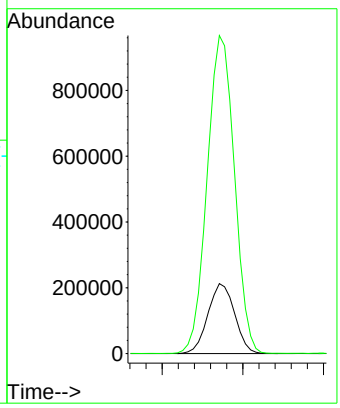
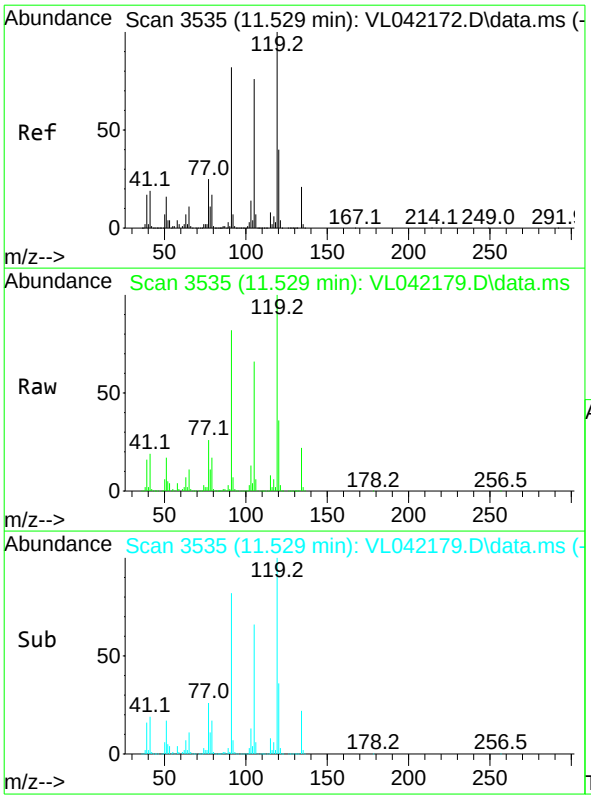


#64
n-propylbenzene
Concen: 9.439 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:120 Resp: 244547

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3

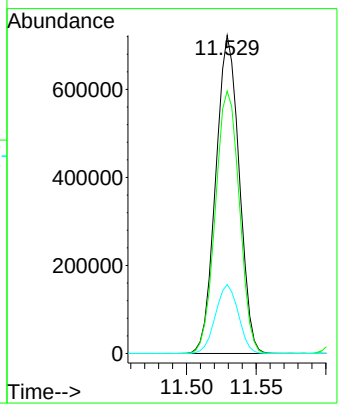




#65
tert-Butylbenzene
Concen: 9.065 ppbv
RT: 11.529 min Scan# 35
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:119 Resp: 843828

Ion	Ratio	Lower	Upper
119	100		
91	84.3	66.0	99.0
134	21.2	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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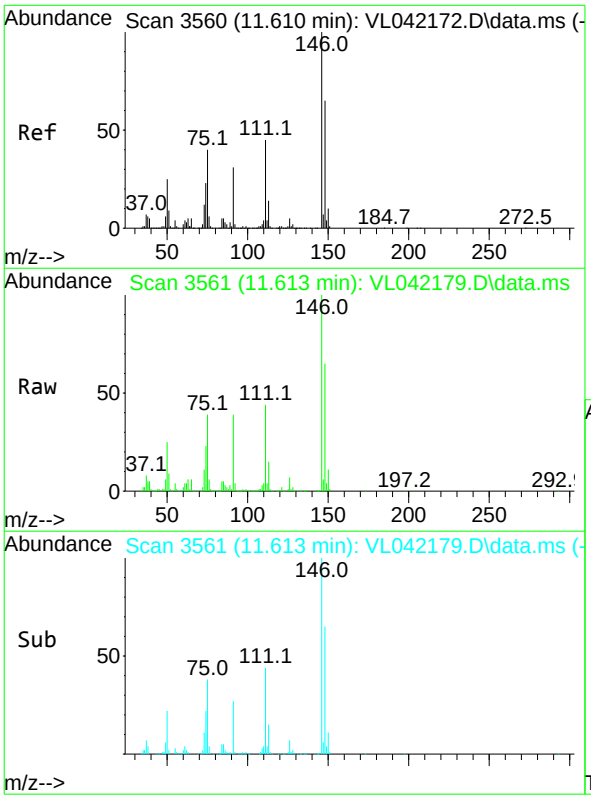
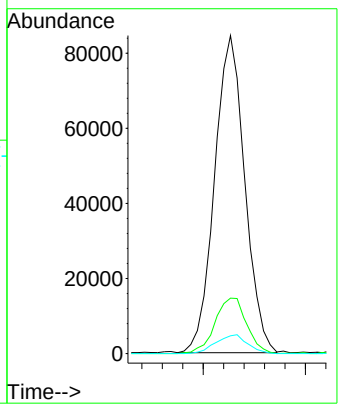
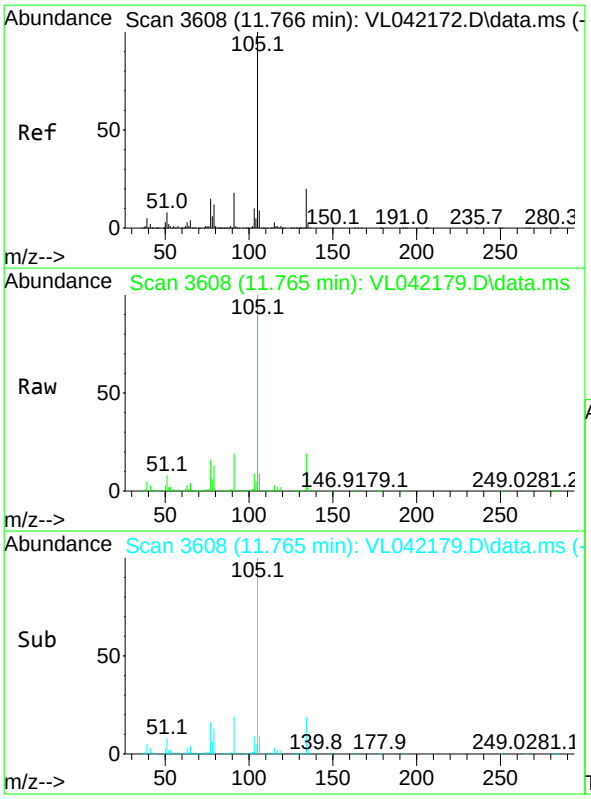


#66
Benzyl Chloride
Concen: 8.789 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 86804

Ion	Ratio	Lower	Upper
91	100		
126	18.5	13.8	20.6
128	6.2	4.5	6.7

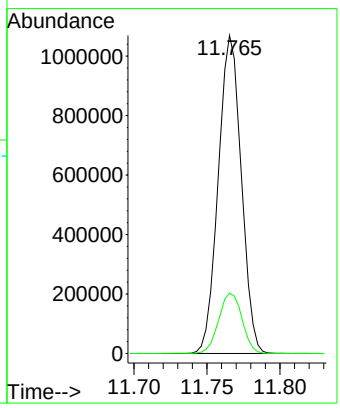




#67
sec-Butylbenzene
Concen: 9.063 ppbv
RT: 11.765 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 1172636

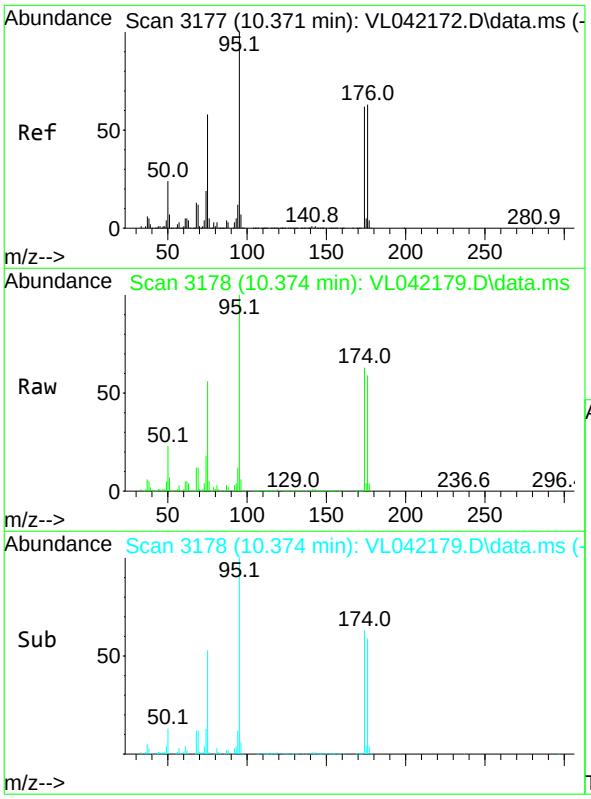
Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
APPROVED

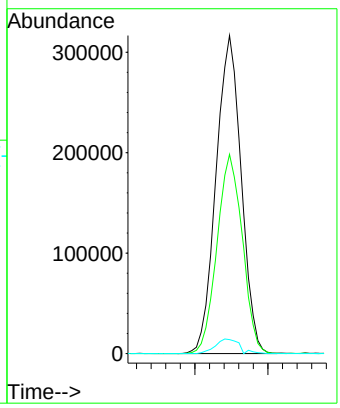
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

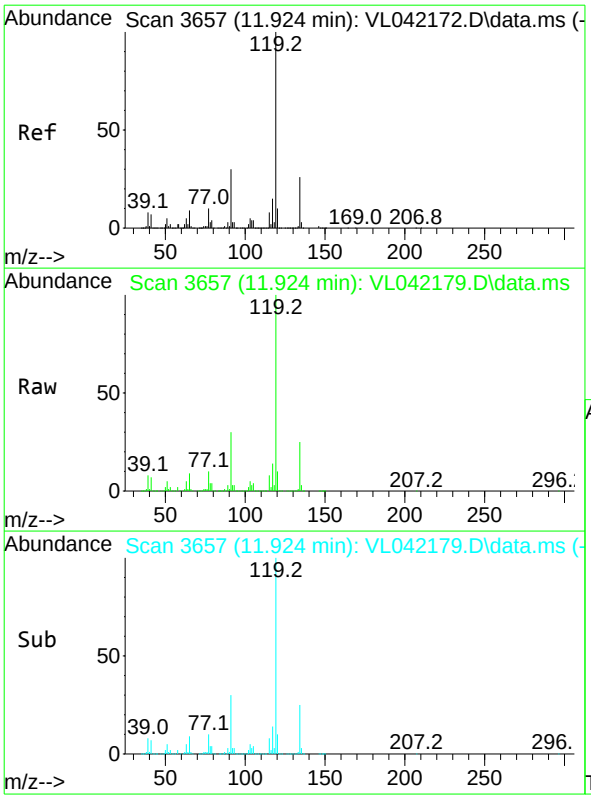


#68
1-Bromo-4-Fluorobenzene
Concen: 9.774 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 95 Resp: 379929

Ion	Ratio	Lower	Upper
95	100		
174	63.0	50.6	76.0
175	4.4	3.8	5.6

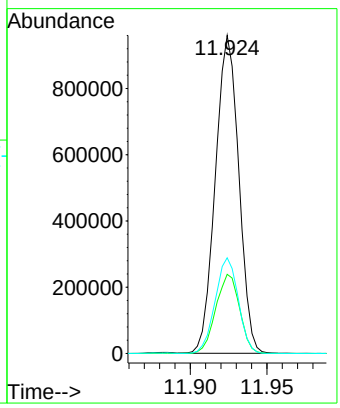




#69
p-Isopropyltoluene
Concen: 9.153 ppbv
RT: 11.924 min Scan# 36
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:119 Resp: 1019694

Ion	Ratio	Lower	Upper
119	100		
134	25.3	20.4	30.6
91	29.9	23.7	35.5



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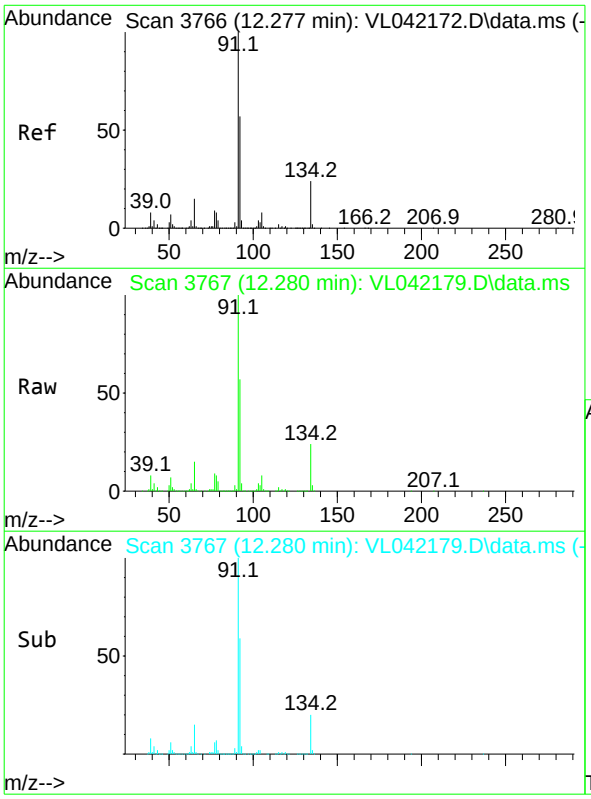
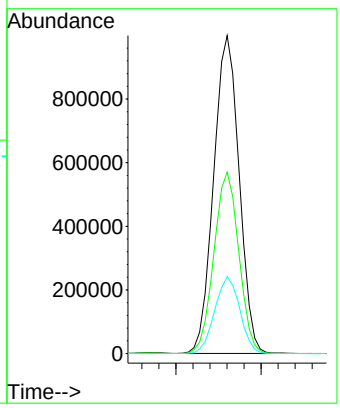
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

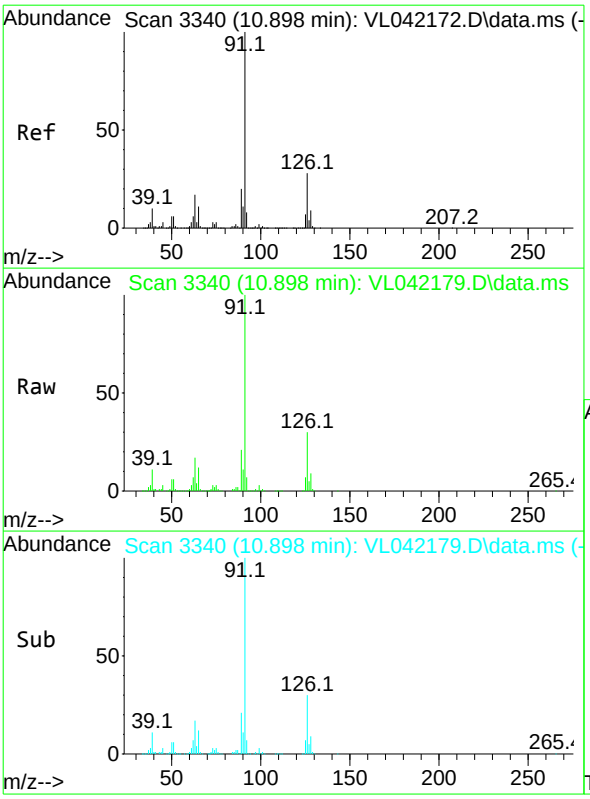


#70
n-Butylbenzene
Concen: 9.115 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1038548

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.9	67.3
134	23.8	19.2	28.8

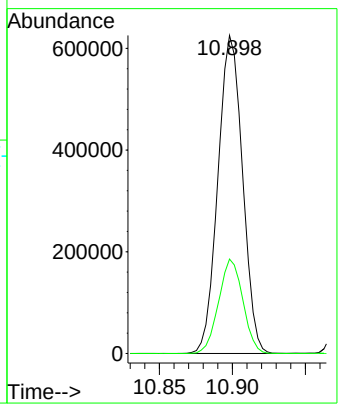




#71
2-Chlorotoluene
Concen: 9.382 ppbv
RT: 10.898 min Scan# 33
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 732874

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
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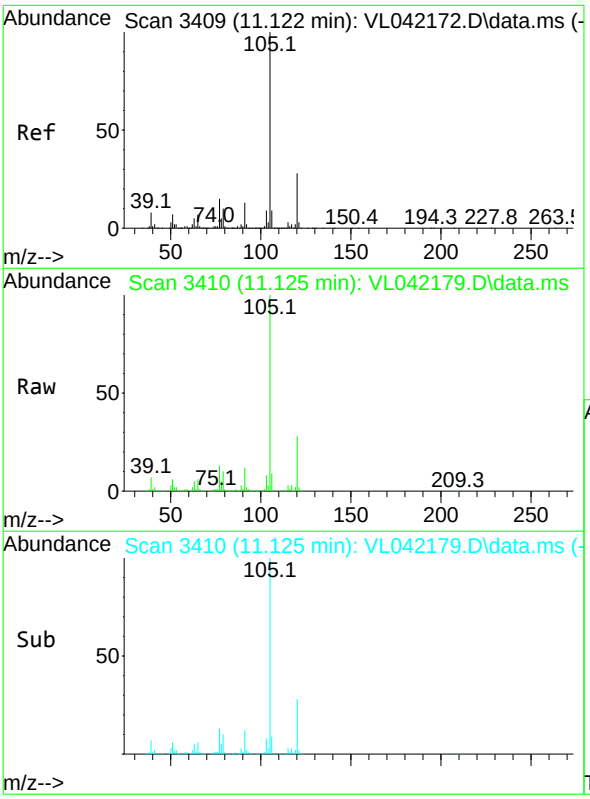
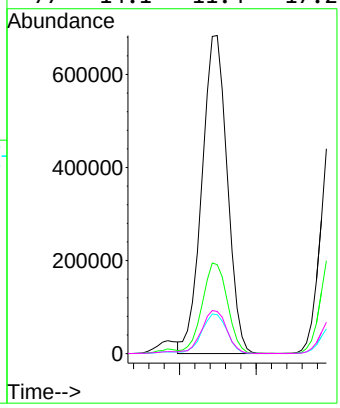
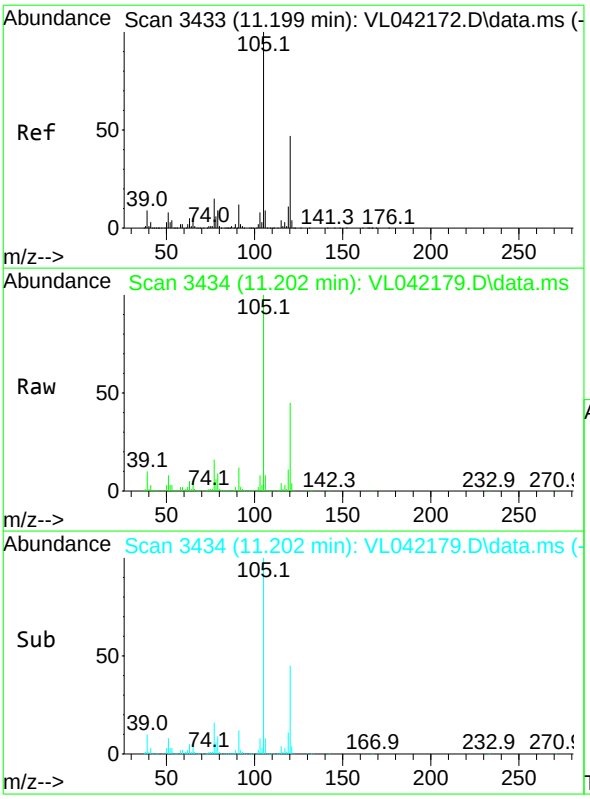


#72
4-Ethyltoluene
Concen: 9.370 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 785185

Ion	Ratio	Lower	Upper
105	100		
120	29.6	23.4	35.0
91	12.9	10.3	15.5
77	14.1	11.4	17.2

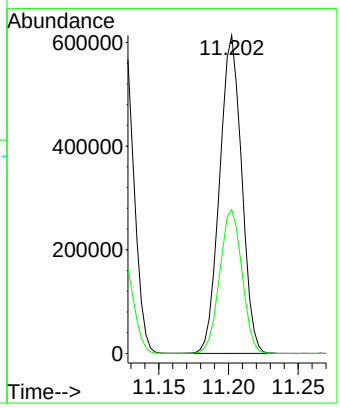




#73
1,3,5-Trimethylbenzene
Concen: 9.203 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 673541

Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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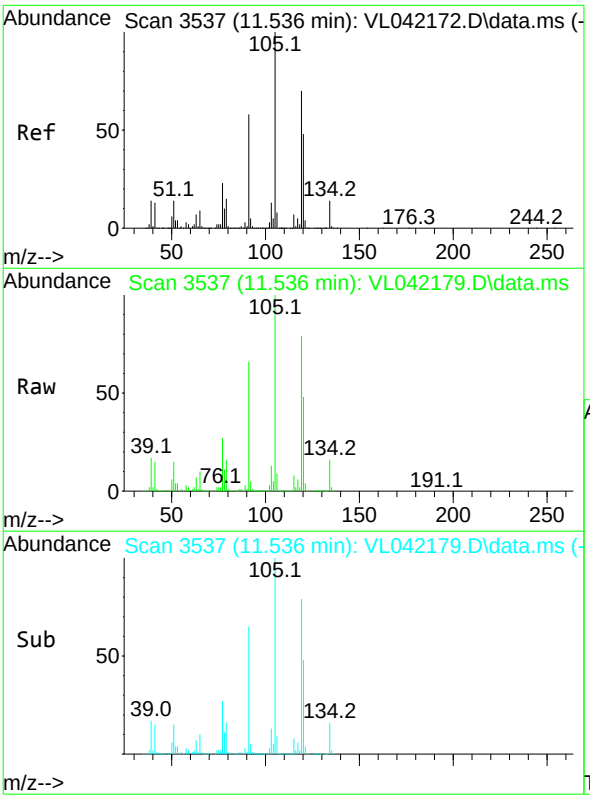
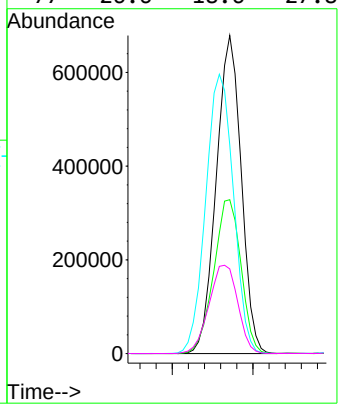
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

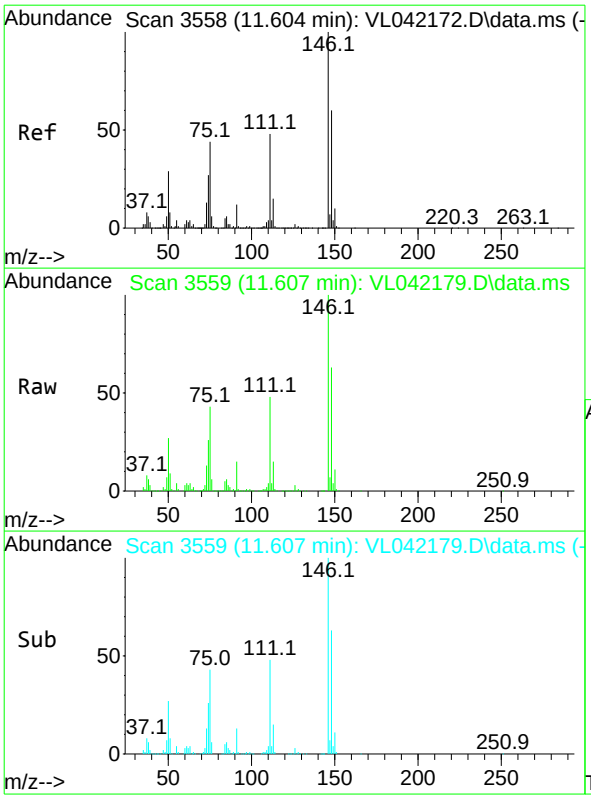


#74
1,2,4-Trimethylbenzene
Concen: 8.648 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 729155

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	65.6	46.2	69.2
77	26.6	18.6	27.8

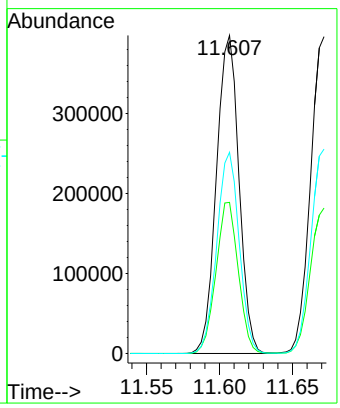




#75
1,3-Dichlorobenzene
Concen: 9.224 ppbv
RT: 11.607 min Scan# 35
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426573

Ion	Ratio	Lower	Upper
146	100		
111	47.2	23.8	71.2
148	62.9	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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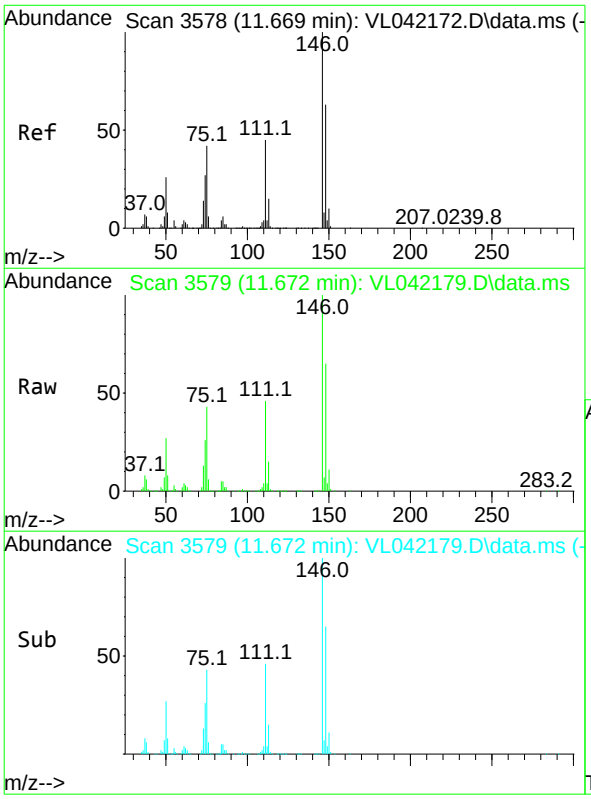
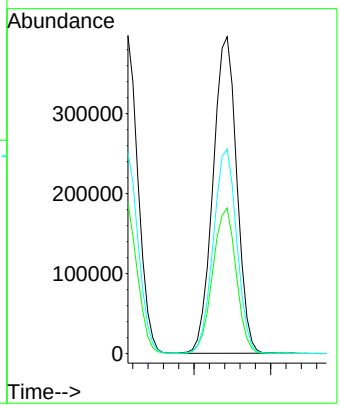
Reviewed By :Semsettin Yesilyurt 03/31/2025
Supervised By :Mahesh Dadoda 04/03/2025

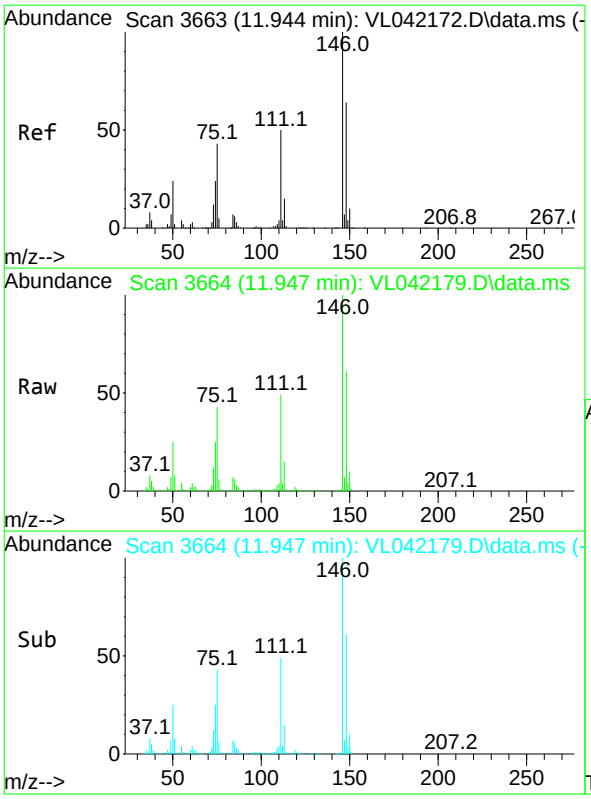


#76
1,4-Dichlorobenzene
Concen: 9.263 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426318

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.0	69.0
148	64.1	31.9	95.7

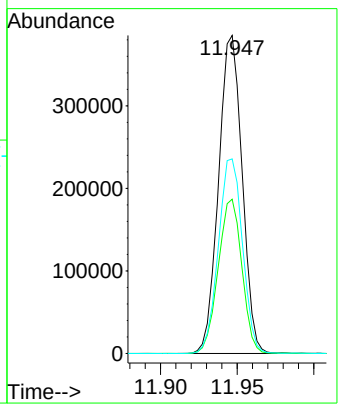




#77
1,2-Dichlorobenzene
Concen: 9.154 ppbv
RT: 11.947 min Scan# 36
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 412180

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	62.8	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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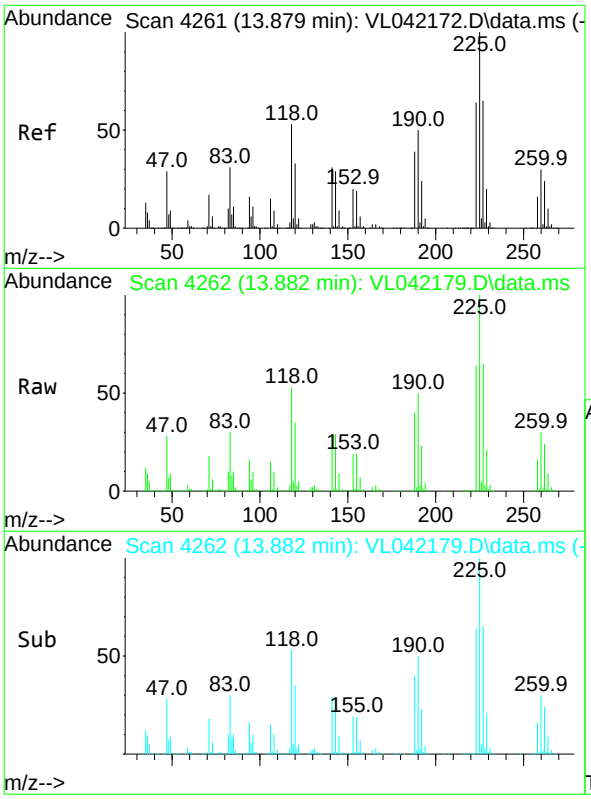
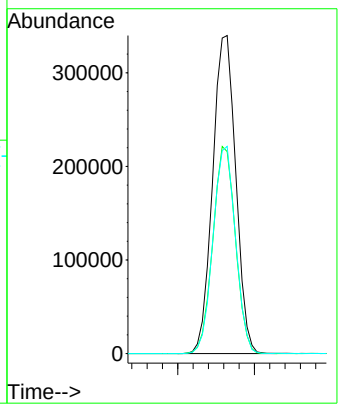
Supervised By :Mahesh Dadoda 04/03/2025

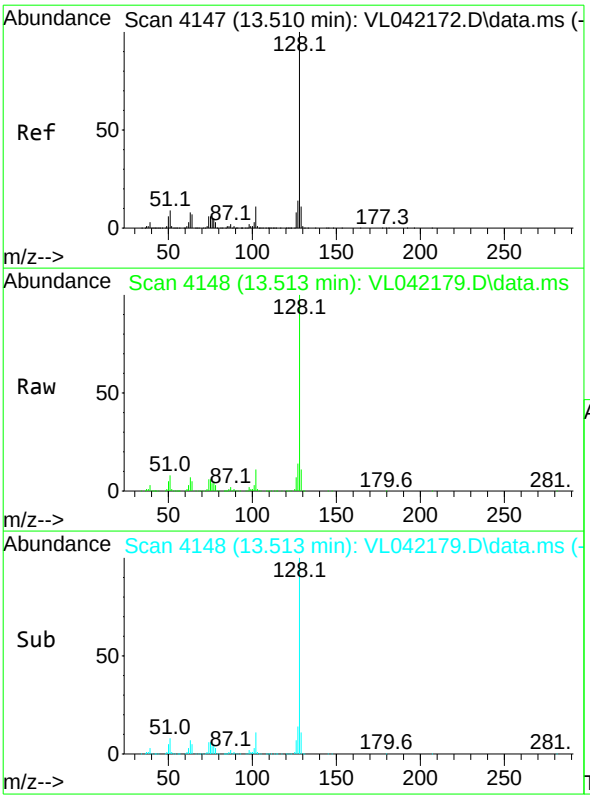


#78
Hexachloro-1,3-Butadiene
Concen: 7.776 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:225 Resp: 356386

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	63.4	51.2	76.8

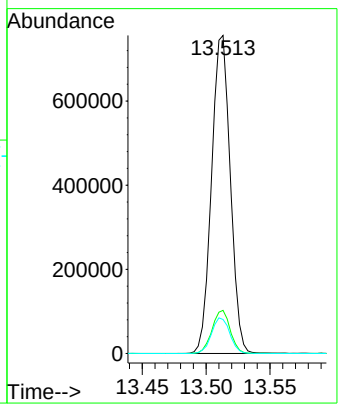




#79
Naphthalene
Concen: 8.385 ppbv
RT: 13.513 min Scan# 41
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:128 Resp: 773311

Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	10.7	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Manual Integrations
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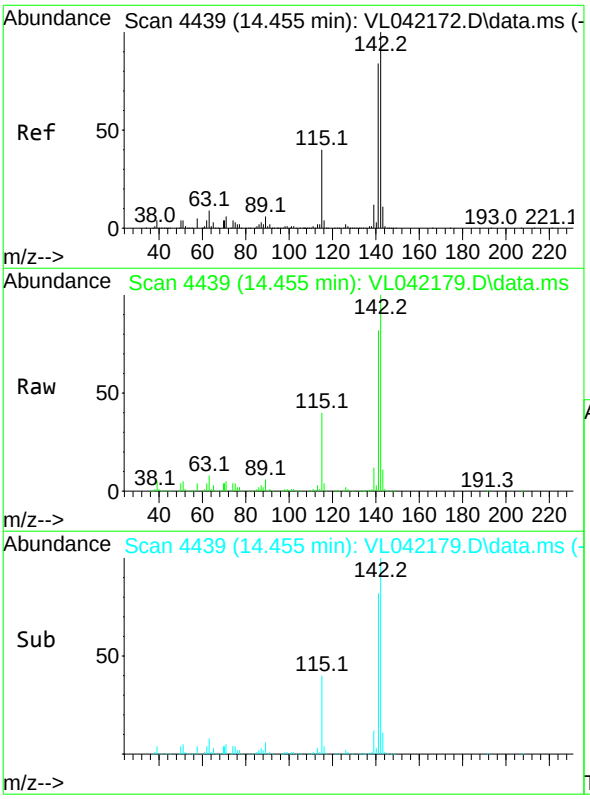
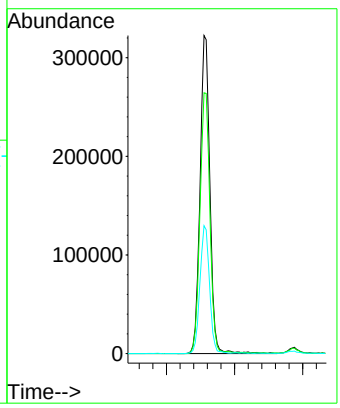
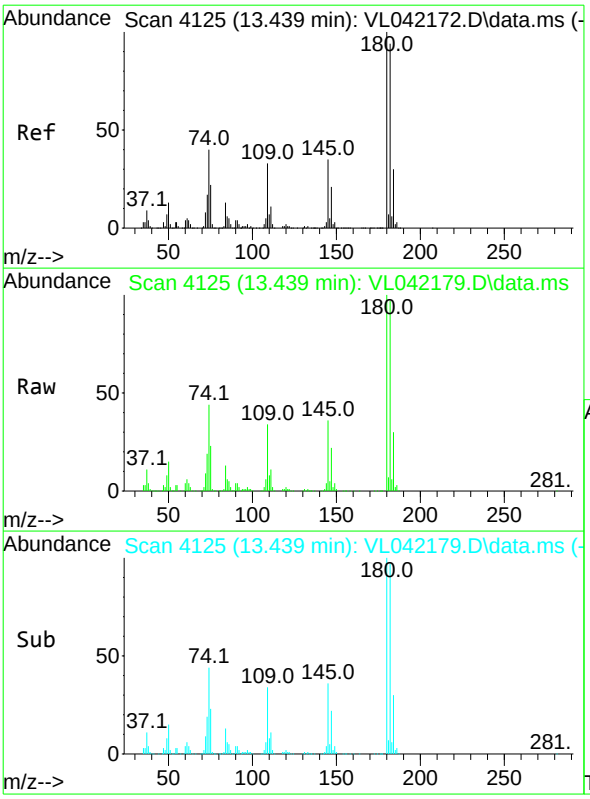


#80
Naphthalene,2-methyl-
Concen: 7.151 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:142 Resp: 323443

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	39.8	31.6	47.4

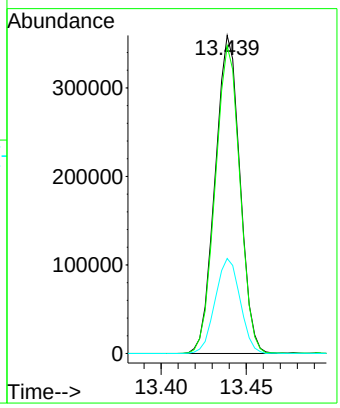




#81
1,2,4-Trichlorobenzene
Concen: 8.553 ppbv
RT: 13.439 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:180 Resp: 363863

Ion	Ratio	Lower	Upper
180	100		
182	96.2	75.1	112.7
184	30.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

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

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	1.476	1.409	4.5	94	0.00
3		Chlorodifluoromethane	1.508	1.417	6.0	91	0.00
4		Chloromethane	0.603	0.565	6.3	92	0.00
5	T	Vinyl Chloride	0.639	0.548	14.2	93	0.00
6	T	Bromomethane	0.273	0.241	11.7	87	0.00
7		Chloroethane	0.242	0.215	11.2	88	0.00
8	T	Dichlorotetrafluoroethane	1.257	1.226	2.5	94	0.00
9	T	Propene	0.691	0.604	12.6	85	0.00
10	T	Heptane	1.839	1.714	6.8	89	0.00
11	T	Trichlorofluoromethane	1.437	1.358	5.5	95	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.181	1.113	5.8	93	0.00
13		Ethanol	0.065	0.033#	49.2#	108	0.00
14	T	Bromoethene	0.452	0.422	6.6	94	0.00
15	T	Acetone	1.399	1.137	18.7	95	0.00
16	T	1,3-Butadiene	0.683	0.561	17.9	91	0.00
17		tert-Butyl alcohol	1.742	1.584	9.1	91	0.00
18	T	1,1-Dichloroethene	0.552	0.500	9.4	92	0.00
19	T	Isopropyl Alcohol	0.789	0.704	10.8	93	0.00
20	T	Methylene Chloride	0.521	0.418	19.8	89	0.00
21	T	Allyl Chloride	0.986	0.903	8.4	93	0.00
22	T	trans-1,2-Dichloroethene	0.638	0.580	9.1	92	0.00
23	T	Vinyl Acetate	0.605	0.518	14.4	97	0.00
24	T	1,1-Dichloroethane	1.183	1.135	4.1	94	0.00
25	T	Ethyl Acetate	3.630	3.399	6.4	92	0.00
26	T	Hexane	1.402	1.326	5.4	93	0.00
27	T	Carbon Disulfide	1.503	1.427	5.1	93	0.00
28	T	Methyl tert-Butyl Ether	0.873	0.840	3.8	94	0.00
29	T	Chloroform	2.052	1.974	3.8	95	0.00
30	T	Cyclohexane	1.217	1.135	6.7	91	0.00
31	T	cis-1,2-Dichloroethene	1.423	1.345	5.5	91	0.00
32	T	1,1,1-Trichloroethane	2.349	2.096	10.8	95	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	91	0.00
34	T	2-Butanone	0.725	0.665	8.3	91	0.00
35	T	Carbon Tetrachloride	0.781	0.730	6.5	95	0.00
36	T	Benzene	0.991	0.926	6.6	91	0.00
37	T	1,2-Dichloroethane	0.568	0.549	3.3	93	0.00
38	T	Trichloroethene	0.414	0.385	7.0	94	0.00
39	T	1,2-Dichloropropane	0.361	0.343	5.0	93	0.00
40	T	1,4-Dioxane	0.192	0.162	15.6	87	0.00
41	T	Tetrahydrofuran	0.418	0.394	5.7	90	0.00
42	T	Bromodichloromethane	0.782	0.771	1.4	92	0.00
43		Methyl Methacrylate	0.420	0.392	6.7	89	0.00
44	T	2,2,4-Trimethylpentane	1.675	1.581	5.6	90	0.00
45	T	t-1,3-Dichloropropene	0.450	0.426	5.3	89	0.00
46	T	cis-1,3-Dichloropropene	0.552	0.532	3.6	88	0.00
47	T	1,1,2-Trichloroethane	0.382	0.368	3.7	92	0.00
48	T	Dibromochloromethane	0.647	0.648	-0.2	93	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.581	0.572	1.5	90	0.00
50	T	4-Methyl-2-Pentanone	1.149	1.005	12.5	89	0.00
51	T	2-Hexanone	0.944	0.825	12.6	89	0.00
52	T	Tetrachloroethene	0.393	0.348	11.5	93	0.00
53	T	Toluene	1.175	1.118	4.9	91	0.00
54	T	1,2-Dibromoethane	0.532	0.516	3.0	93	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00
56		1,1,1,2-Tetrachloroethane	0.550	0.527	4.2	94	0.00
57	T	Chlorobenzene	0.949	0.893	5.9	93	0.00
58	T	Ethyl Benzene	1.776	1.672	5.9	91	0.00
59	T	m/p-Xylene	1.418	1.331	6.1	92	0.00
60	T	o-Xylene	1.422	1.337	6.0	92	0.00
61	T	Styrene	0.703	0.667	5.1	89	0.00
62		Isopropylbenzene	2.126	1.996	6.1	93	0.00
63	T	1,1,2,2-Tetrachloroethane	0.864	0.808	6.5	93	0.00
64		n-propylbenzene	0.547	0.517	5.5	94	0.00
65		tert-Butylbenzene	1.966	1.783	9.3	94	0.00
66	T	Benzyl Chloride	0.209	0.183	12.4	82	0.00
67		sec-Butylbenzene	2.733	2.477	9.4	94	0.00
68	S	1-Bromo-4-Fluorobenzene	0.821	0.803	2.2	90	0.00
69		p-Isopropyltoluene	2.354	2.154	8.5	94	0.00
70		n-Butylbenzene	2.407	2.194	8.8	94	0.00
71		2-Chlorotoluene	1.650	1.548	6.2	92	0.00
72	T	4-Ethyltoluene	1.770	1.659	6.3	93	0.00
73	T	1,3,5-Trimethylbenzene	1.546	1.423	8.0	93	0.00
74	T	1,2,4-Trimethylbenzene	1.781	1.540	13.5	93	0.00
75	T	1,3-Dichlorobenzene	0.977	0.901	7.8	93	0.00
76	T	1,4-Dichlorobenzene	0.972	0.901	7.3	92	0.00
77	T	1,2-Dichlorobenzene	0.951	0.871	8.4	93	0.00
78	T	Hexachloro-1,3-Butadiene	0.968	0.753	22.2	86	0.00
79	T	Naphthalene	1.948	1.634	16.1	82	0.00
80	T	Naphthalene,2-methyl-	0.955	0.683	28.5	63	0.00
81	T	1,2,4-Trichlorobenzene	0.899	0.769	14.5	82	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Apr 18 02:14:00 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042354.D 0.1 =VL042353.D 0.5 =VL042352.D 1 =VL042351.D 2 =VL042350.D 10 =VL042349.D 15 =VL042355.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.831	1.837	1.827	1.658	1.682	1.767	5.05
3)		Chlorodifluoro...			1.876	1.657	1.698	1.573	1.608	1.682	7.01
4)		Chloromethane			0.752	0.725	0.701	0.652	0.665	0.699	5.93
5)	T	Vinyl Chloride	1.002	0.911	0.731	0.709	0.689	0.638	0.647	0.761	18.39
6)	T	Bromomethane			0.397	0.330	0.300	0.304	0.303	0.327	12.56
7)		Chloroethane			0.303	0.287	0.280	0.253	0.255	0.275	7.76
8)	T	Dichlorotetraf...			1.556	1.550	1.581	1.432	1.465	1.517	4.25
9)	T	Propene			0.880	0.797	0.758	0.690	0.707	0.766	9.95
10)	T	Heptane			2.444	2.296	2.209	1.884	1.931	2.153	11.14
11)	T	Trichlorofluor...			1.684	1.806	1.746	1.567	1.597	1.680	5.95
12)	T	1,1,2-Trichlor...			1.389	1.439	1.437	1.281	1.323	1.374	5.11
13)		Ethanol			0.275	0.139	0.123	0.035	0.036	0.122	80.54
14)	T	Bromoethene			0.537	0.545	0.530	0.490	0.487	0.518	5.24
15)	T	Acetone			1.968	1.895	1.743	1.263	1.316	1.637	20.03
16)	T	1,3-Butadiene			1.015	0.836	0.735	0.651	0.678	0.783	18.90
17)		tert-Butyl alc...			2.263	2.132	2.103	1.804	1.841	2.029	9.76
18)	T	1,1-Dichloroet...			0.735	0.635	0.637	0.583	0.618	0.642	8.79
19)	T	Isopropyl Alcohol			1.050	0.980	0.897	0.821	0.798	0.909	11.66
20)	T	Methylene Chlo...			0.875	0.728	0.582	0.498	0.523	0.641	24.71
21)	T	Allyl Chloride			1.276	1.213	1.110	0.973	1.080	1.130	10.44
22)	T	trans-1,2-Dich...			0.814	0.759	0.736	0.664	0.681	0.731	8.32
23)	T	Vinyl Acetate			0.656	0.744	0.749	0.555	0.610	0.663	12.72
24)	T	1,1-Dichloroet...			1.452	1.469	1.383	1.284	1.352	1.388	5.43
25)	T	Ethyl Acetate			4.428	4.147	4.118	3.677	3.812	4.036	7.34
26)	T	Hexane			1.899	1.719	1.625	1.424	1.499	1.633	11.45
27)	T	Carbon Disulfide			1.903	1.670	1.785	1.668	1.718	1.749	5.63
28)	T	Methyl tert-Bu...			1.134	1.141	1.132	0.940	1.004	1.070	8.64
29)	T	Chloroform			2.458	2.333	2.392	2.145	2.215	2.309	5.54
30)	T	Cyclohexane			1.422	1.333	1.347	1.252	1.249	1.320	5.50
31)	T	cis-1,2-Dichlo...			1.588	1.603	1.593	1.459	1.522	1.553	3.95
32)	T	1,1,1-Trichlor...	3.110	2.840	2.557	2.549	2.493	2.274	2.369	2.599	11.03
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.886	0.826	0.818	0.687	0.737	0.791	9.94
35)	T	Carbon Tetrach...	1.319	0.914	0.832	0.830	0.847	0.770	0.823	0.905	20.70
36)	T	Benzene			1.146	1.075	1.121	1.002	1.048	1.079	5.31
37)	T	1,2-Dichloroet...			0.691	0.647	0.666	0.592	0.641	0.647	5.63
38)	T	Trichloroethene	0.643	0.505	0.443	0.448	0.447	0.395	0.419	0.471	17.59
39)	T	1,2-Dichloropr...			0.441	0.413	0.405	0.370	0.381	0.402	6.97

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL041725AIR.M

40)	T	1,4-Dioxane			0.263	0.243	0.232	0.182	0.185	0.221	16.27
41)	T	Tetrahydrofuran			0.518	0.480	0.468	0.409	0.432	0.461	9.20
42)	T	Bromodichlorom...			0.943	0.909	0.912	0.852	0.889	0.901	3.71
43)		Methyl Methacr...			0.545	0.520	0.495	0.430	0.441	0.486	10.21
44)	T	2,2,4-Trimethy...			1.935	1.916	1.962	1.708	1.794	1.863	5.79
45)	T	t-1,3-Dichloro...			0.514	0.510	0.509	0.459	0.491	0.497	4.60
46)	T	cis-1,3-Dichlo...			0.613	0.617	0.637	0.570	0.603	0.608	4.05
47)	T	1,1,2-Trichlor...			0.423	0.429	0.420	0.376	0.399	0.410	5.32
48)	T	Dibromochlorom...			0.743	0.721	0.746	0.679	0.729	0.723	3.70
49)	T	Bromoform			0.622	0.623	0.675	0.616	0.627	0.633	3.82
50)	T	4-Methyl-2-Pen...			1.541	1.382	1.435	1.082	1.132	1.314	15.12
51)	T	2-Hexanone			1.341	1.311	1.411	0.893	0.938	1.179	20.69
52)	T	Tetrachloroethene	0.543	0.452	0.420	0.393	0.391	0.357	0.363	0.417	15.46
53)	T	Toluene			1.371	1.295	1.370	1.193	1.244	1.294	6.03
54)	T	1,2-Dibromoethane		0.621	0.582	0.605	0.606	0.539	0.562	0.586	5.27
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.621	0.640	0.635	0.550	0.581	0.605	6.37
57)	T	Chlorobenzene			1.129	1.067	1.068	0.956	0.981	1.040	6.79
58)	T	Ethyl Benzene			2.029	2.088	2.068	1.832	1.890	1.981	5.73
59)	T	m/p-Xylene			1.685	1.682	1.658	1.456	1.500	1.596	6.86
60)	T	o-Xylene			1.740	1.697	1.668	1.442	1.490	1.607	8.25
61)	T	Styrene			0.792	0.776	0.808	0.726	0.734	0.767	4.68
62)		Isopropylbenzene			2.517	2.470	2.439	2.170	2.202	2.360	6.83
63)	T	1,1,2,2-Tetrac...	1.407	1.176	0.990	0.985	0.968	0.873	0.892	1.042	18.12
64)		n-propylbenzene			0.645	0.605	0.610	0.542	0.564	0.593	6.81
65)		tert-Butylbenzene			2.319	2.358	2.315	1.907	1.945	2.169	10.27
66)	T	Benzyl Chloride			0.241	0.239	0.258	0.246	0.208	0.238	7.84
67)		sec-Butylbenzene			3.242	3.219	3.253	2.662	2.709	3.017	10.05
68)	S	1-Bromo-4-Fluo...	0.819	0.814	0.824	0.818	0.822	0.831	0.825	0.822	0.69
69)		p-Isopropyltol...			2.834	2.818	2.811	2.304	2.338	2.621	10.46
70)		n-Butylbenzene			2.985	2.926	2.953	2.370	2.414	2.730	11.33
71)		2-Chlorotoluene			1.972	1.924	1.920	1.695	1.744	1.851	6.65
72)	T	4-Ethyltoluene			2.055	2.118	2.054	1.765	1.833	1.965	7.92
73)	T	1,3,5-Trimethy...			1.894	1.851	1.841	1.517	1.570	1.735	10.19
74)	T	1,2,4-Trimethy...			2.348	2.245	2.168	1.671	1.698	2.026	15.71
75)	T	1,3-Dichlorobe...			1.119	1.121	1.119	0.948	0.960	1.053	8.64
76)	T	1,4-Dichlorobe...			1.138	1.115	1.122	0.944	0.974	1.059	8.69
77)	T	1,2-Dichlorobe...			1.085	1.093	1.114	0.904	0.924	1.024	9.88
78)	T	Hexachloro-1,3...			1.163	1.136	1.135	0.863	0.874	1.034	14.66
79)	T	Naphthalene		2.433	2.395	2.756	2.909	2.004	2.040	2.423	15.11
80)	T	Naphthalene,2-...			1.311	1.534	1.777	1.115	1.168	1.381	19.88
81)	T	1,2,4-Trichlor...			1.026	1.117	1.224	0.905	0.929	1.040	12.75

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	125455	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	366544	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	338126	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	281013	10.114	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	207962	9.382	ppbv	100
3) Chlorodifluoromethane	1.476	51	197334	9.350	ppbv	100
4) Chloromethane	1.531	50	81843	9.330	ppbv	100
5) Vinyl Chloride	1.580	62	80068	8.385	ppbv	100
6) Bromomethane	1.667	94	38128	9.219	ppbv	100
7) Chloroethane	1.703	64	31705	9.182	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	179696	9.442	ppbv	100
9) Propene	1.483	41	86530	9.002	ppbv	100
10) Heptane	4.978	43	236341	9.138	ppbv	100
11) Trichlorofluoromethane	1.877	101	196596	9.327	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.136	101	160682	9.323	ppbv	100
13) Ethanol	1.719	45	4439	5.651	ppbv	100
14) Bromoethene	1.780	108	61493	9.466	ppbv	100
15) Acetone	1.835	43	158490	7.717	ppbv	100
16) 1,3-Butadiene	1.609	39	81688	8.470	ppbv	100
17) tert-Butyl alcohol	2.039	59	226280	8.891	ppbv	100
18) 1,1-Dichloroethene	2.033	96	73186	8.833	ppbv	100
19) Isopropyl Alcohol	1.884	45	103029	9.031	ppbv	100
20) Methylene Chloride	2.062	84	62414	7.760	ppbv	100
21) Allyl Chloride	2.094	41	122115	8.611	ppbv	100
22) trans-1,2-Dichloroethene	2.340	96	83278	9.084	ppbv	100
23) Vinyl Acetate	2.460	43	69649	8.378	ppbv	100
24) 1,1-Dichloroethane	2.408	63	161102	9.251	ppbv	100
25) Ethyl Acetate	2.836	43	461315	9.110	ppbv	100
26) Hexane	2.826	57	178691	8.720	ppbv	100
27) Carbon Disulfide	2.149	76	209297	9.539	ppbv	100
28) Methyl tert-Butyl Ether	2.441	73	117924	8.783	ppbv	100
29) Chloroform	2.848	83	269088	9.290	ppbv	100
30) Cyclohexane	3.855	84	157035	9.517	ppbv	100
31) cis-1,2-Dichloroethene	2.719	61	183082	9.397	ppbv	100
32) 1,1,1-Trichloroethane	3.366	97	285336	9.187	ppbv	100
34) 2-Butanone	2.557	43	251704	8.683	ppbv	100
35) Carbon Tetrachloride	3.761	117	282402	8.513	ppbv	100
36) Benzene	3.654	78	367355	9.292	ppbv	100
37) 1,2-Dichloroethane	3.217	62	216999	9.145	ppbv	100
38) Trichloroethene	4.548	130	144767	8.352	ppbv	100
39) 1,2-Dichloropropane	4.311	63	135605	9.197	ppbv	100
40) 1,4-Dioxane	4.580	88	66662	8.348	ppbv #	100
41) Tetrahydrofuran	3.052	42	149905	8.950	ppbv	100
42) Bromodichloromethane	4.489	83	312268	9.456	ppbv	100
43) Methyl Methacrylate	4.881	69	157501	8.876	ppbv	100
44) 2,2,4-Trimethylpentane	4.642	57	626085	9.157	ppbv	100
45) t-1,3-Dichloropropene	6.415	75	168223	9.233	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	208811	9.377	ppbv	100
47) 1,1,2-Trichloroethane	6.580	97	137898	9.181	ppbv	100
48) Dibromochloromethane	7.386	129	248954	9.388	ppbv	100
49) Bromoform	9.480	173	225706	9.734	ppbv	100
50) 4-Methyl-2-Pentanone	5.752	43	396548	8.215	ppbv	100
51) 2-Hexanone	7.435	43	327165	7.511	ppbv	100
52) Tetrachloroethene	8.225	164	130720	8.553	ppbv	100
53) Toluene	6.933	91	437258	9.216	ppbv	100
54) 1,2-Dibromoethane	7.652	107	197665	9.235	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.927	131	186041	9.091	ppbv	100
57) Chlorobenzene	8.920	112	323084	9.187	ppbv	100
58) Ethyl Benzene	9.354	91	619581	9.248	ppbv	100
59) m/p-Xylene	9.552	91	984458m	18.187	ppbv	
60) o-Xylene	9.963	91	487616	8.972	ppbv	100
61) Styrene	9.869	104	245487	9.464	ppbv	100
62) Isopropylbenzene	10.539	105	733788	9.197	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.963	83	295041	8.355	ppbv	100
64) n-propylbenzene	10.989	120	183390	9.144	ppbv	100
65) tert-Butylbenzene	11.532	119	644953	8.795	ppbv	100
66) Benzyl Chloride	11.617	91	83269	10.333	ppbv	100
67) sec-Butylbenzene	11.769	105	900074	8.824	ppbv	100
69) p-Isopropyltoluene	11.927	119	778987	8.790	ppbv	100
70) n-Butylbenzene	12.283	91	801364	8.682	ppbv	100
71) 2-Chlorotoluene	10.901	91	573039	9.157	ppbv	100
72) 4-Ethyltoluene	11.125	105	596757	8.982	ppbv	100
73) 1,3,5-Trimethylbenzene	11.205	105	512855	8.743	ppbv	100
74) 1,2,4-Trimethylbenzene	11.539	105	565064	8.248	ppbv	100
75) 1,3-Dichlorobenzene	11.607	146	320380	8.997	ppbv	100
76) 1,4-Dichlorobenzene	11.672	146	319089	8.915	ppbv	100
77) 1,2-Dichlorobenzene	11.947	146	305822	8.832	ppbv	100
78) Hexachloro-1,3-Butadiene	13.882	225	291833	8.346	ppbv	100
79) Naphthalene	13.513	128	677578	8.271	ppbv	100
80) Naphthalene,2-methyl-	14.458	142	376995	8.074	ppbv	100
81) 1,2,4-Trichlorobenzene	13.442	180	306119	8.702	ppbv	100

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

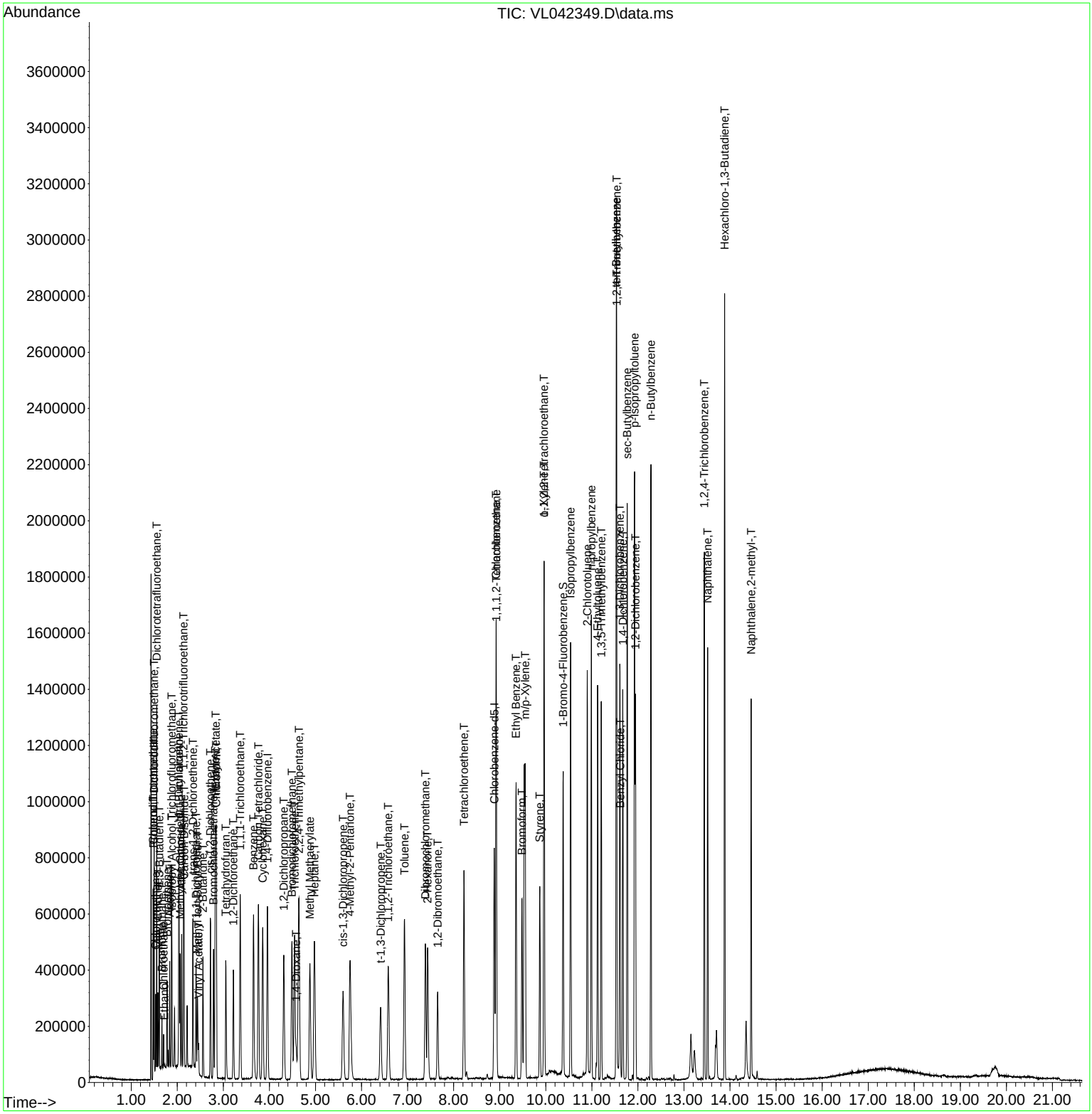
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

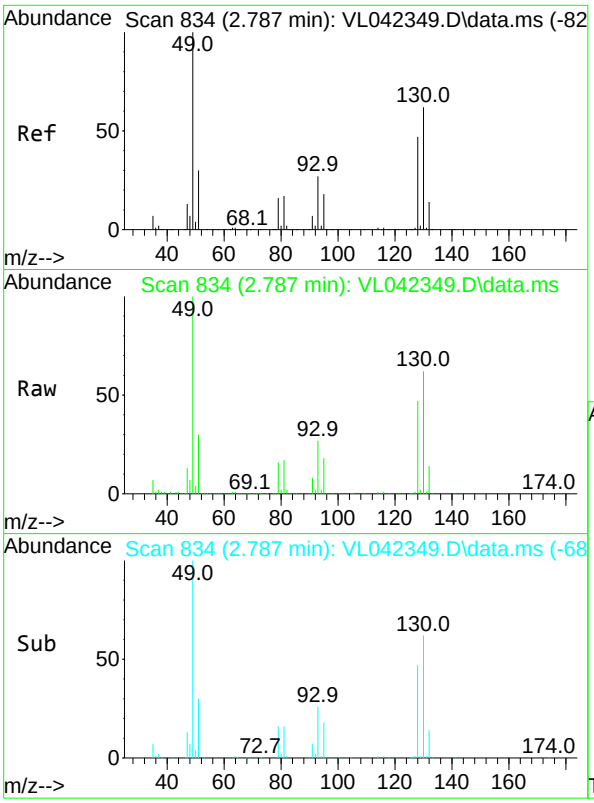
Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

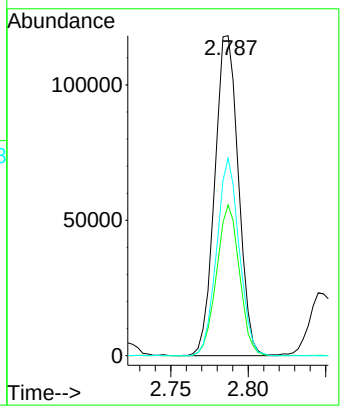




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 49 Resp: 12545

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.8	68.4
130	58.7	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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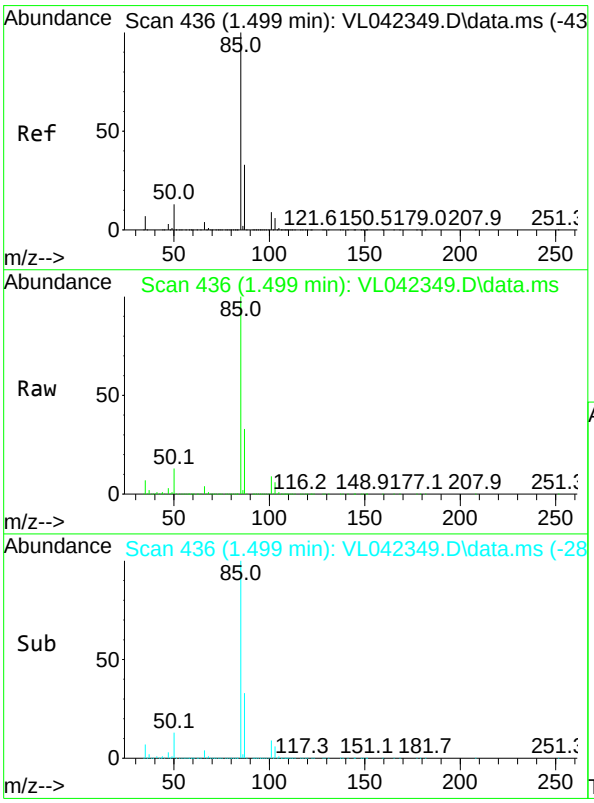
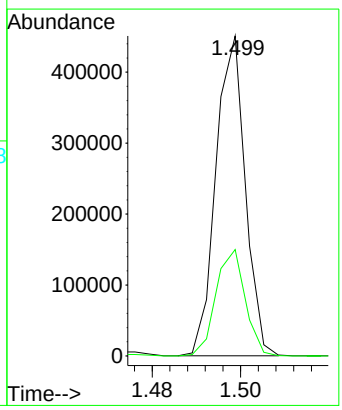
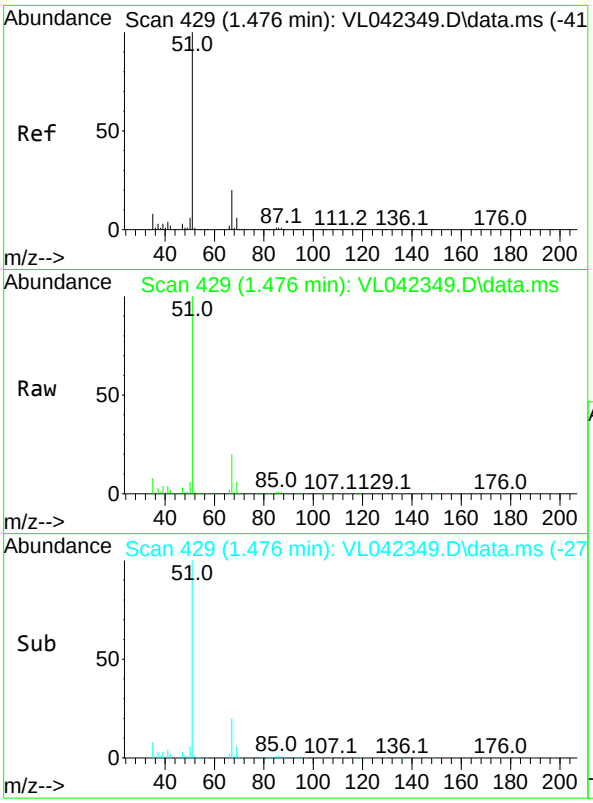


#2
Dichlorodifluoromethane
Concen: 9.382 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 85 Resp: 207962

Ion	Ratio	Lower	Upper
85	100		
87	33.2	26.6	39.8

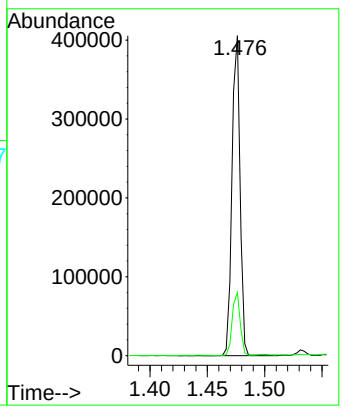




#3
Chlorodifluoromethane
Concen: 9.350 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 51 Resp: 19733

Ion	Ratio	Lower	Upper
51	100		
67	20.3	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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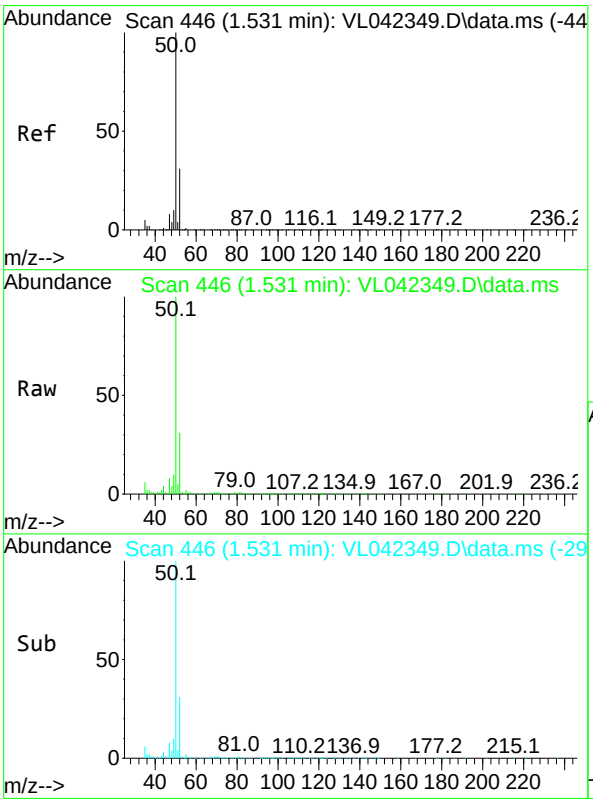
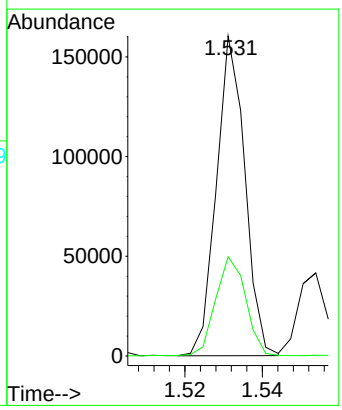
Supervised By :Mahesh Dadoda 04/18/2025

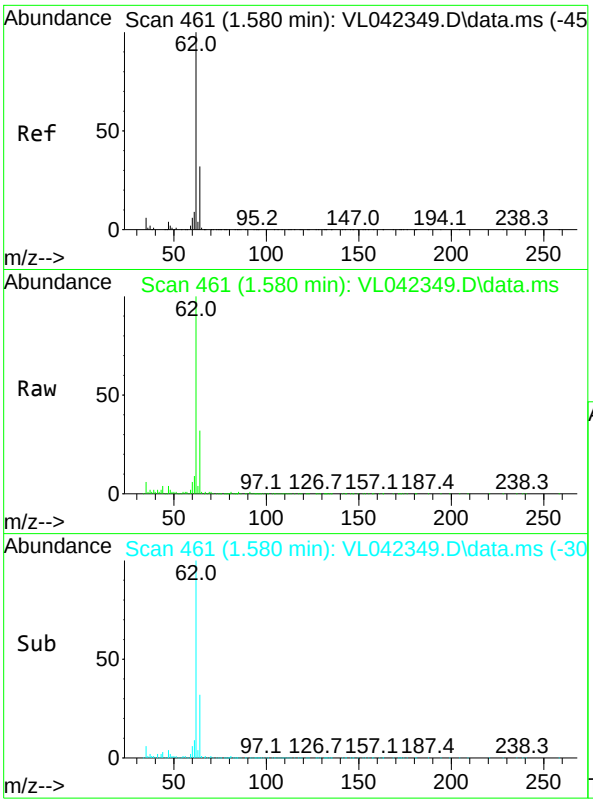


#4
Chloromethane
Concen: 9.330 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 50 Resp: 81843

Ion	Ratio	Lower	Upper
50	100		
52	30.9	24.7	37.1

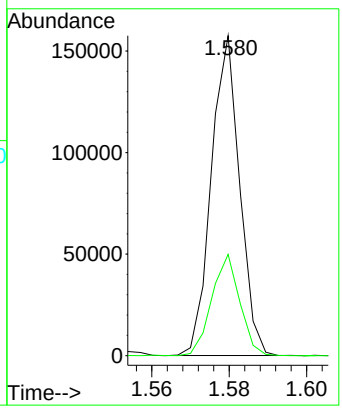




#5
Vinyl Chloride
Concen: 8.385 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 62 Resp: 8006

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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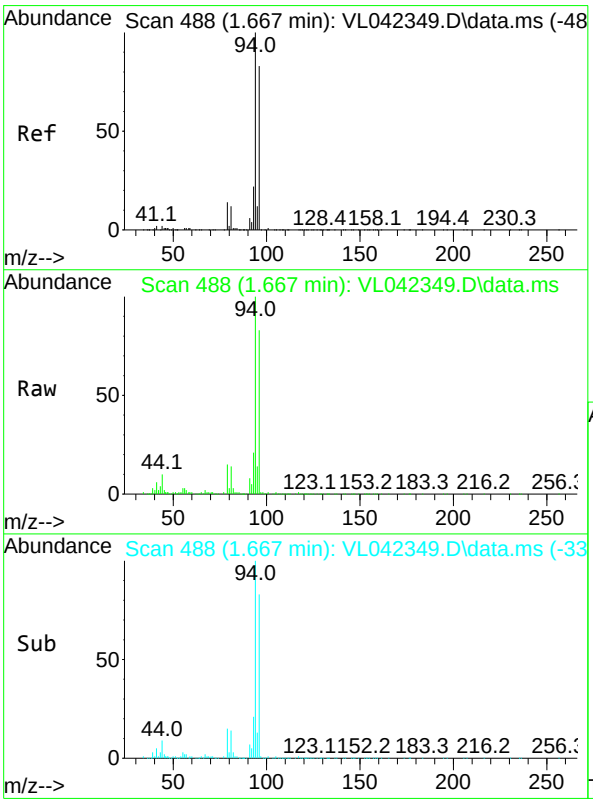
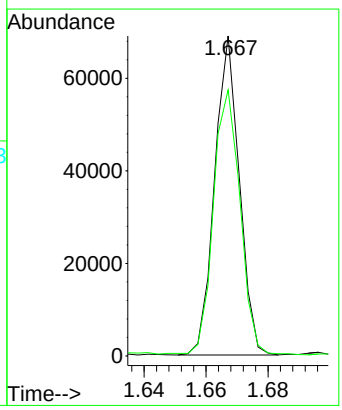
Supervised By :Mahesh Dadoda 04/18/2025

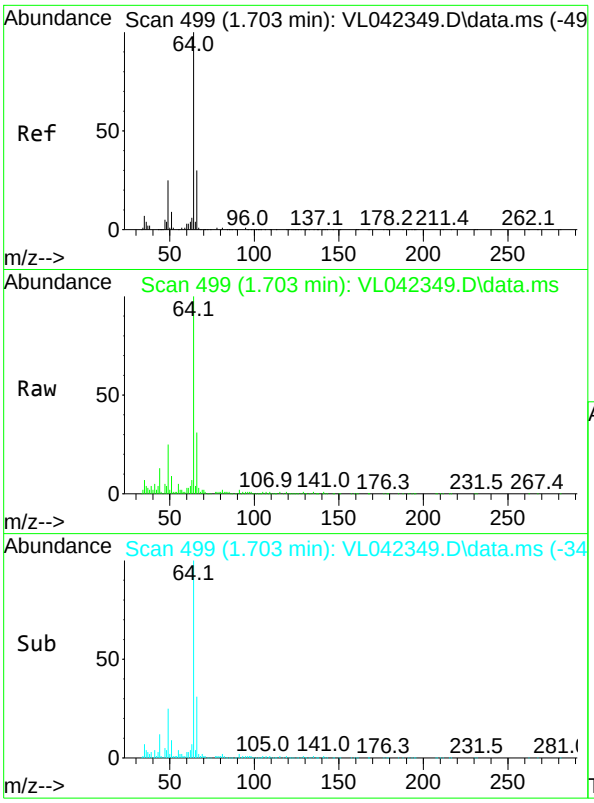


#6
Bromomethane
Concen: 9.219 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 94 Resp: 38128

Ion	Ratio	Lower	Upper
94	100		
96	82.7	66.2	99.2

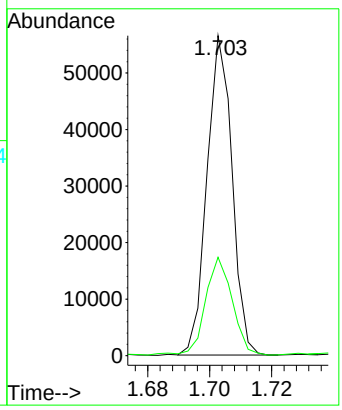




#7
Chloroethane
Concen: 9.182 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 64 Resp: 3170

Ion	Ratio	Lower	Upper
64	100		
66	30.8	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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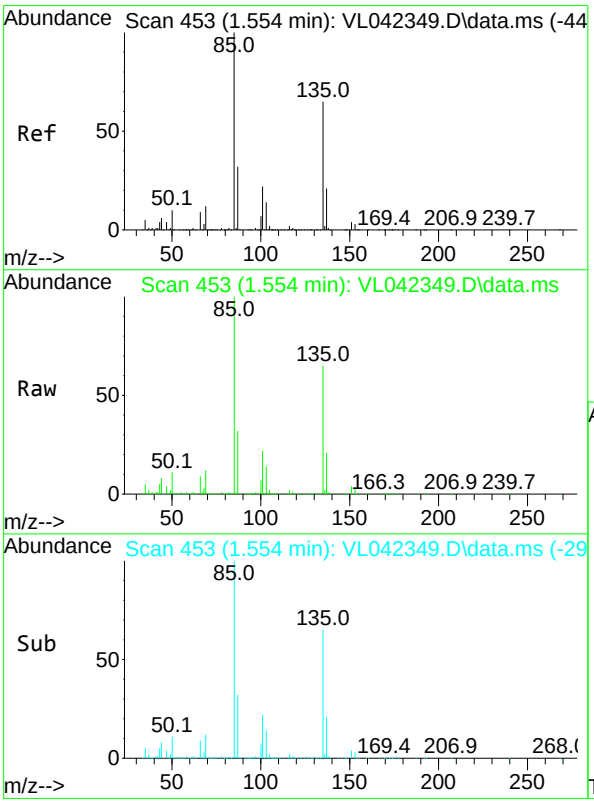
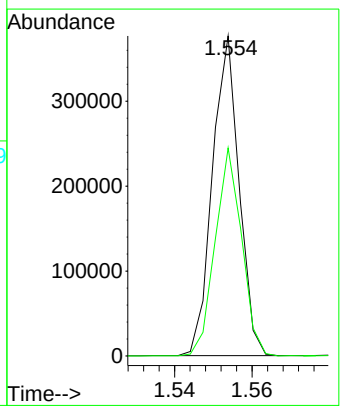
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

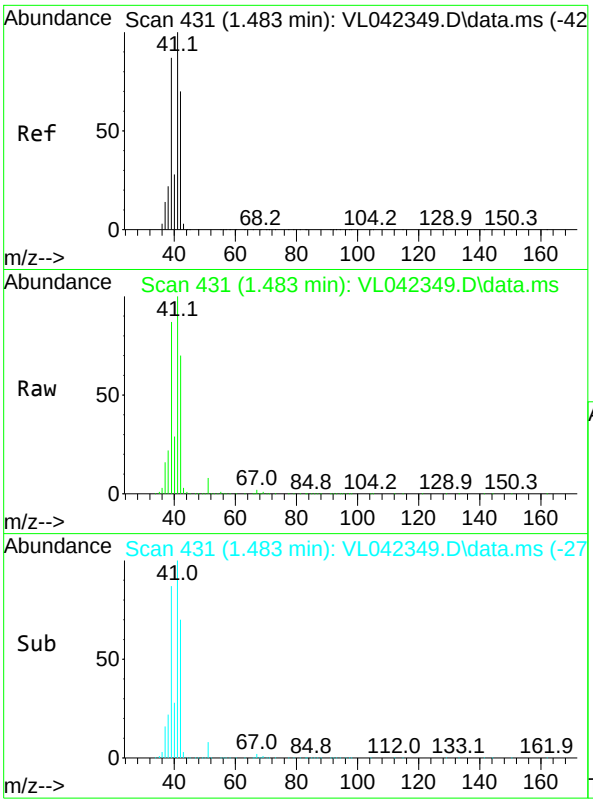


#8
Dichlorotetrafluoroethane
Concen: 9.442 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 85 Resp: 179696

Ion	Ratio	Lower	Upper
85	100		
135	65.2	52.2	78.2

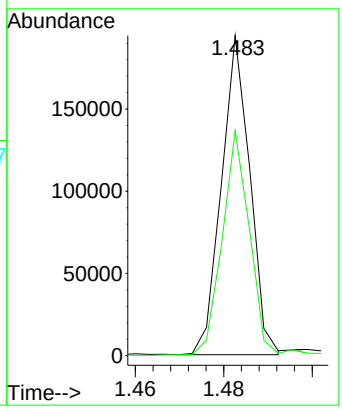




#9
Propene
Concen: 9.002 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 41 Resp: 8653

Ion	Ratio	Lower	Upper
41	100		
42	70.3	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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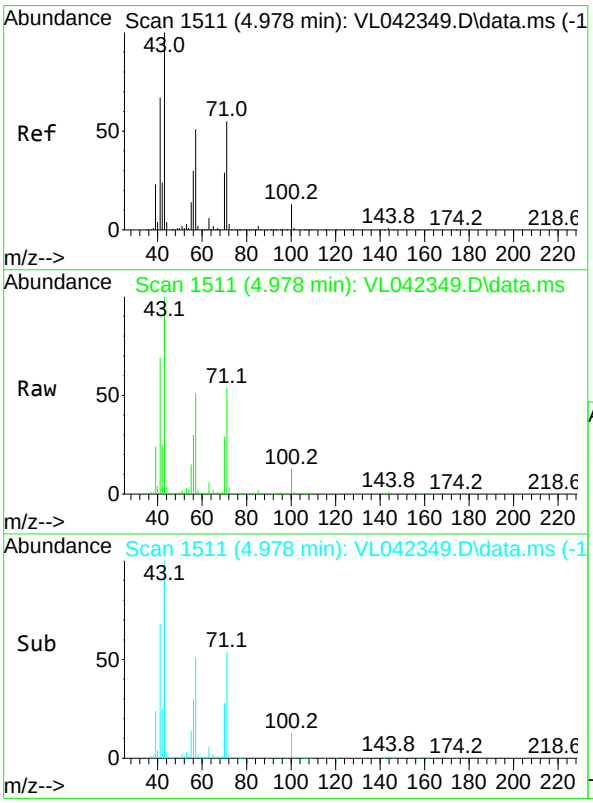
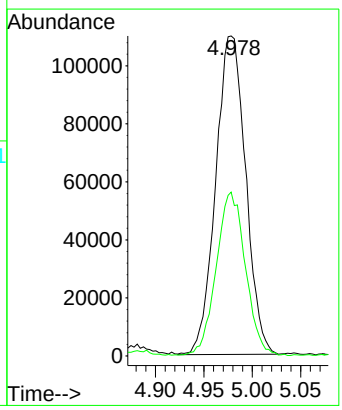
Supervised By :Mahesh Dadoda 04/18/2025

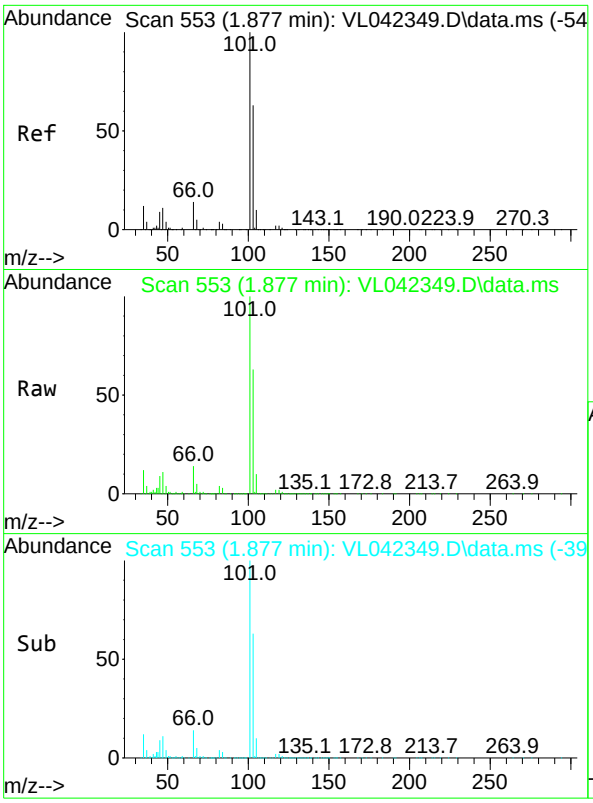


#10
Heptane
Concen: 9.138 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 236341

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.9	59.9

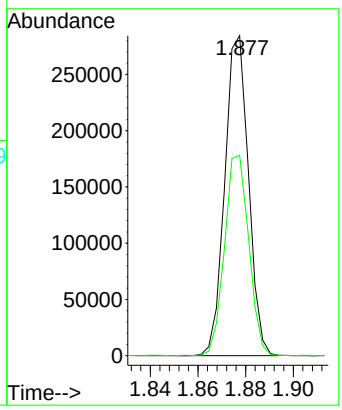




#11
Trichlorofluoromethane
Concen: 9.327 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:101 Resp: 19659

Ion	Ratio	Lower	Upper
101	100		
103	62.6	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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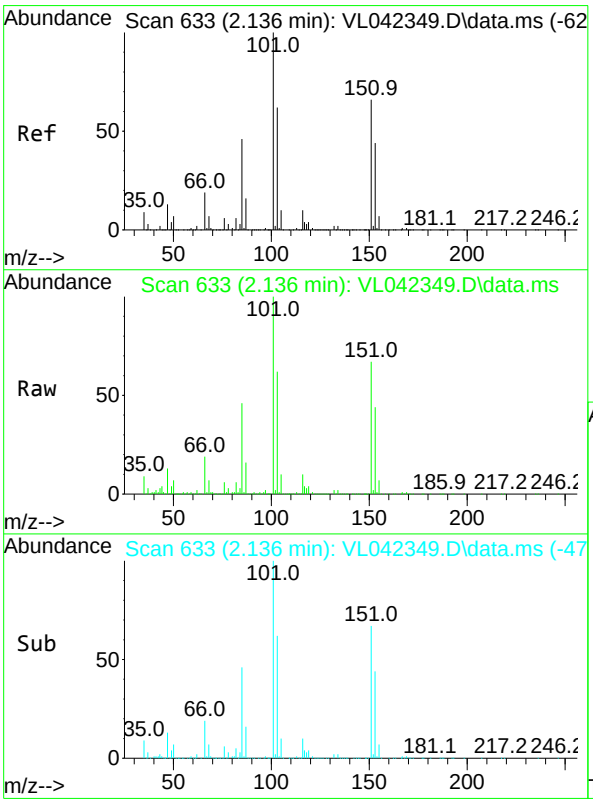
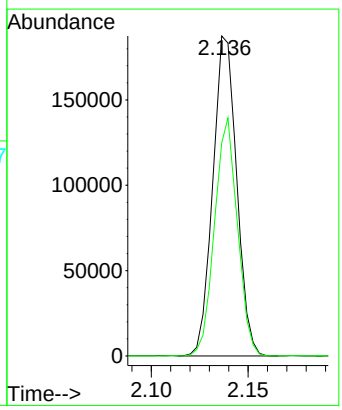
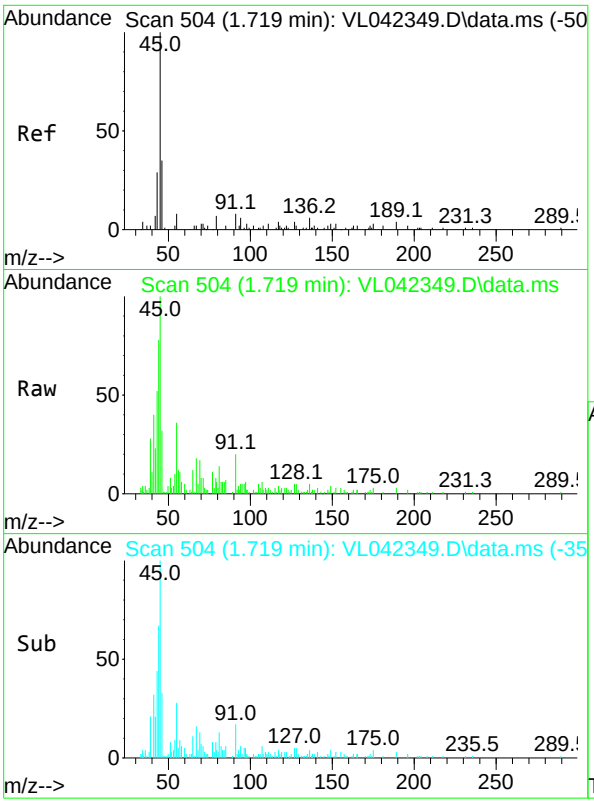


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.323 ppbv
RT: 2.136 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:101 Resp: 160682

Ion	Ratio	Lower	Upper
101	100		
151	71.3	57.0	85.6

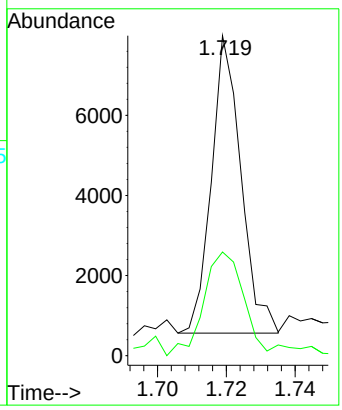




#13
Ethanol
Concen: 5.651 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 45 Resp: 443

Ion	Ratio	Lower	Upper
45	100		
46	54.8	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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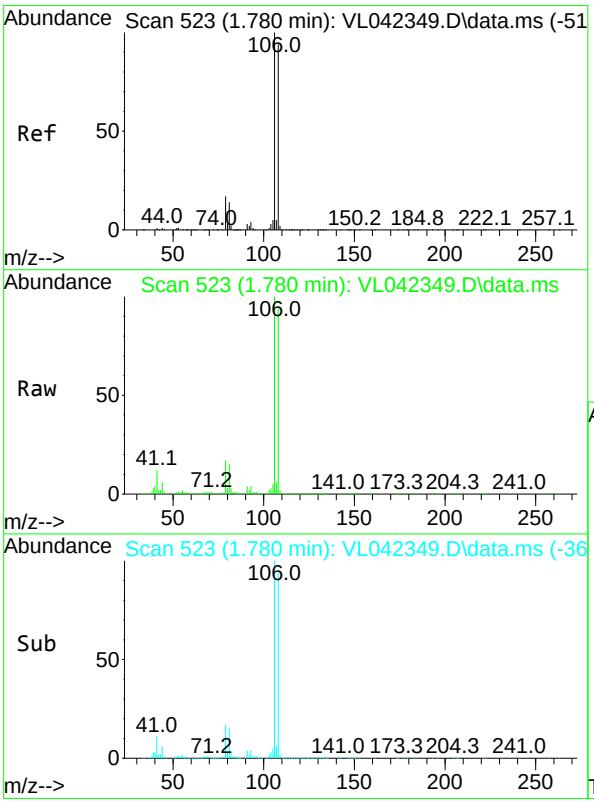
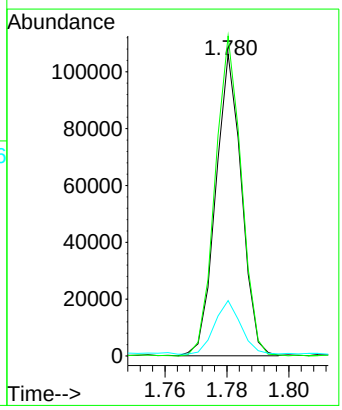
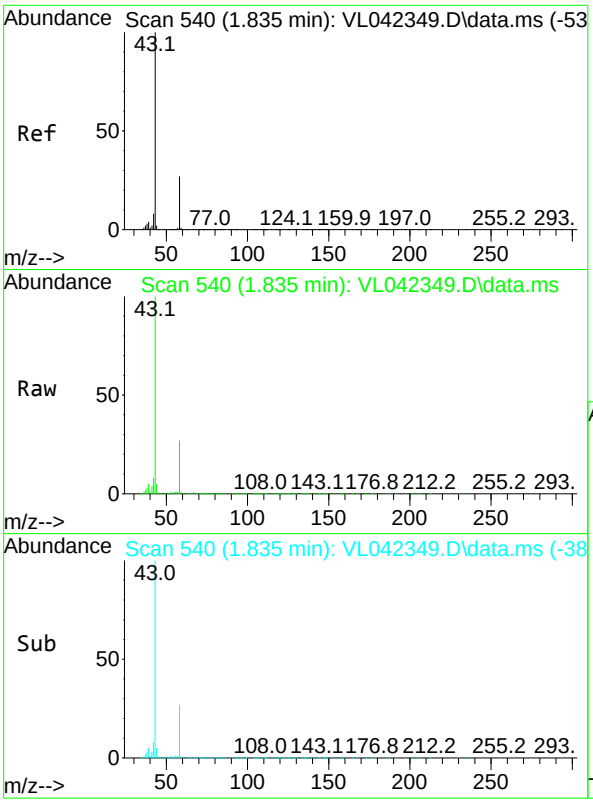


#14
Bromoethene
Concen: 9.466 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:108 Resp: 61493

Ion	Ratio	Lower	Upper
108	100		
106	107.4	85.9	128.9
79	17.4	13.9	20.9

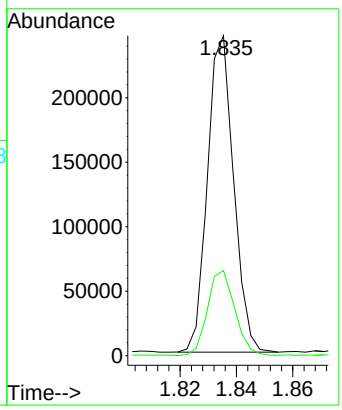




#15
Acetone
Concen: 7.717 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 15849

Ion	Ratio	Lower	Upper
43	100		
58	28.0	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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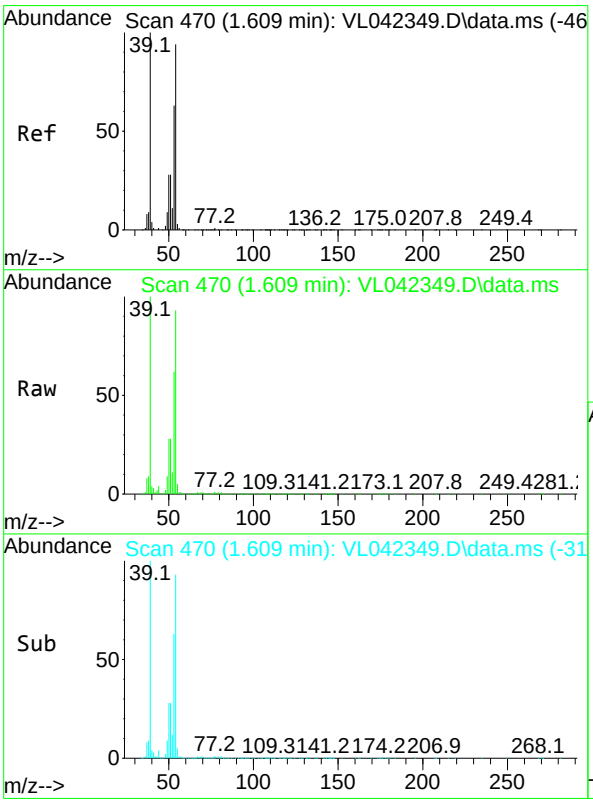
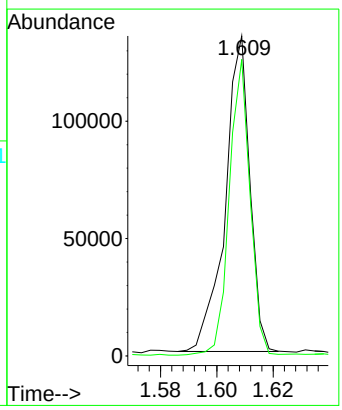
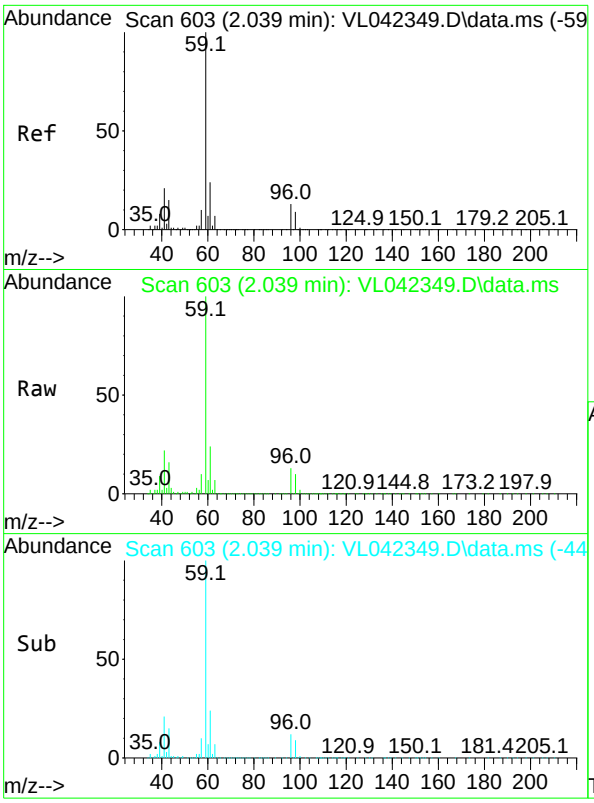


#16
1,3-Butadiene
Concen: 8.470 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 39 Resp: 81688

Ion	Ratio	Lower	Upper
39	100		
54	81.1	64.9	97.3

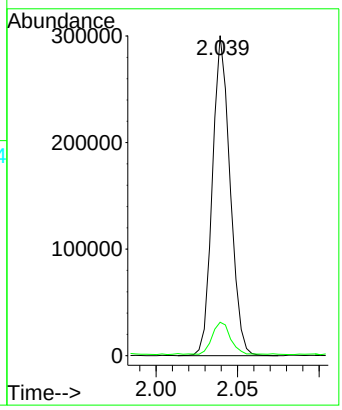




#17
tert-Butyl alcohol
Concen: 8.891 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 59 Resp: 22628

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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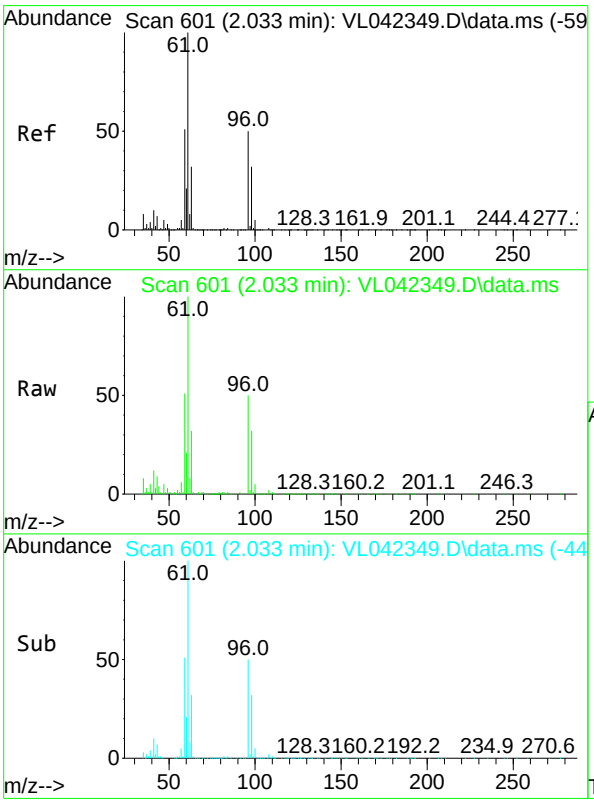
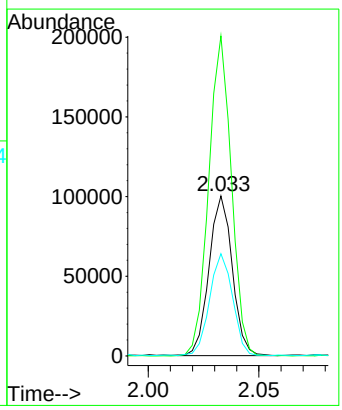
Supervised By :Mahesh Dadoda 04/18/2025

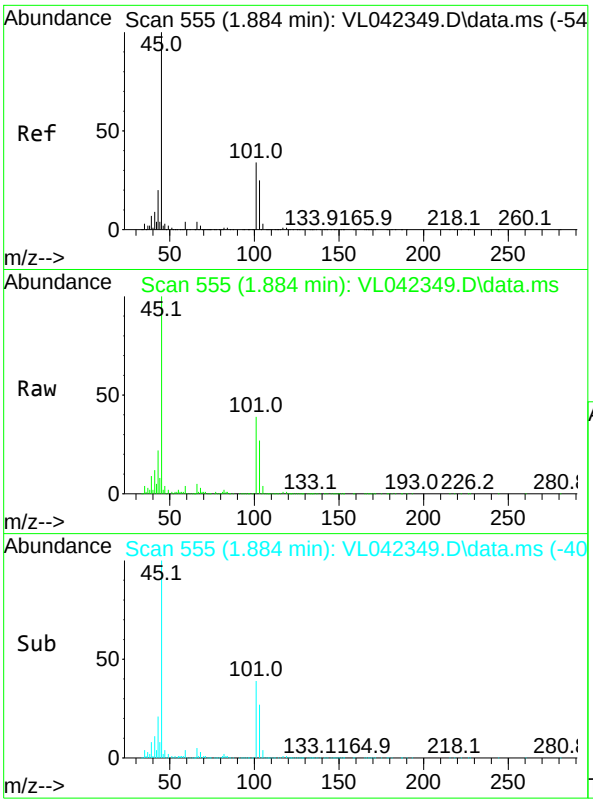


#18
1,1-Dichloroethene
Concen: 8.833 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 96 Resp: 73186

Ion	Ratio	Lower	Upper
96	100		
61	200.2	160.2	240.2
98	63.7	51.0	76.4

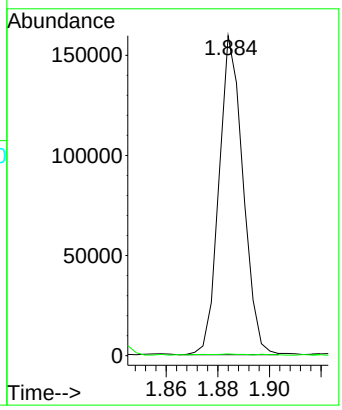




#19
Isopropyl Alcohol
Concen: 9.031 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 45 Resp: 10302

Ion	Ratio	Lower	Upper
45	100		
58	43.1	34.5	51.7



Instrument :
MSVOA_L
ClientSampleId :
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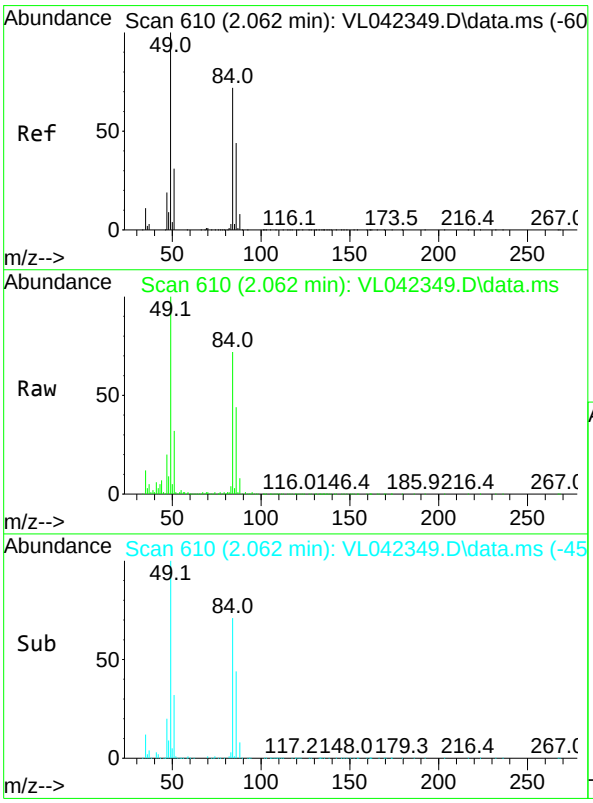
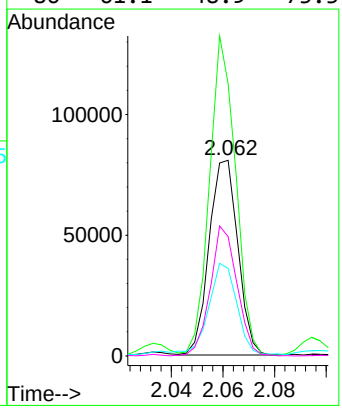
Supervised By :Mahesh Dadoda 04/18/2025

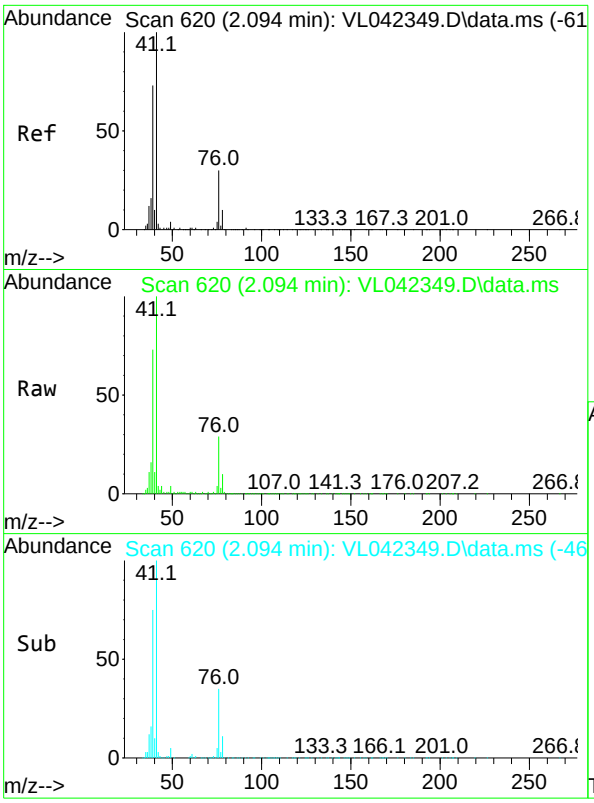


#20
Methylene Chloride
Concen: 7.760 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 84 Resp: 62414

Ion	Ratio	Lower	Upper
84	100		
49	139.5	111.6	167.4
51	43.9	35.1	52.7
86	61.1	48.9	73.3

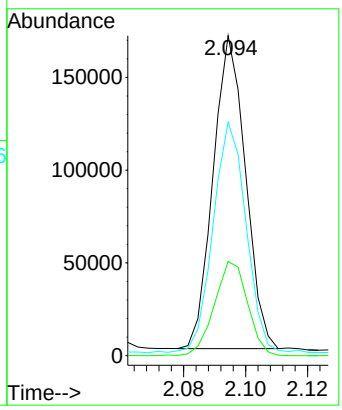




#21
Allyl Chloride
Concen: 8.611 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 41 Resp: 12211

Ion	Ratio	Lower	Upper
41	100		
76	31.0	24.8	37.2
39	75.7	60.6	90.8



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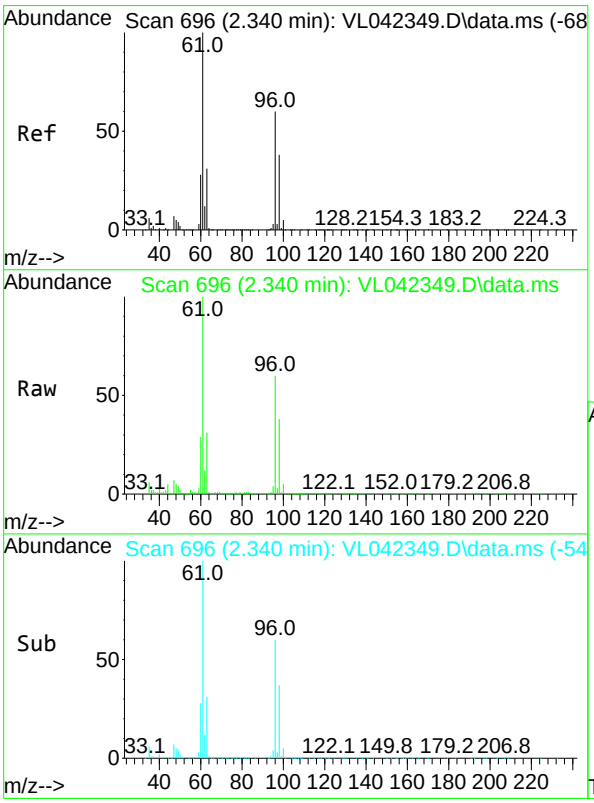
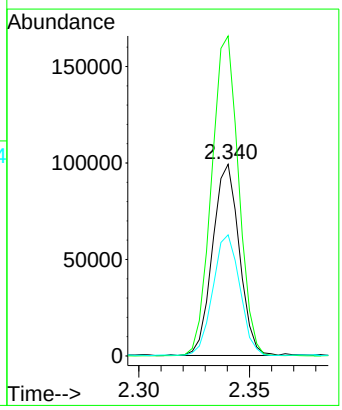
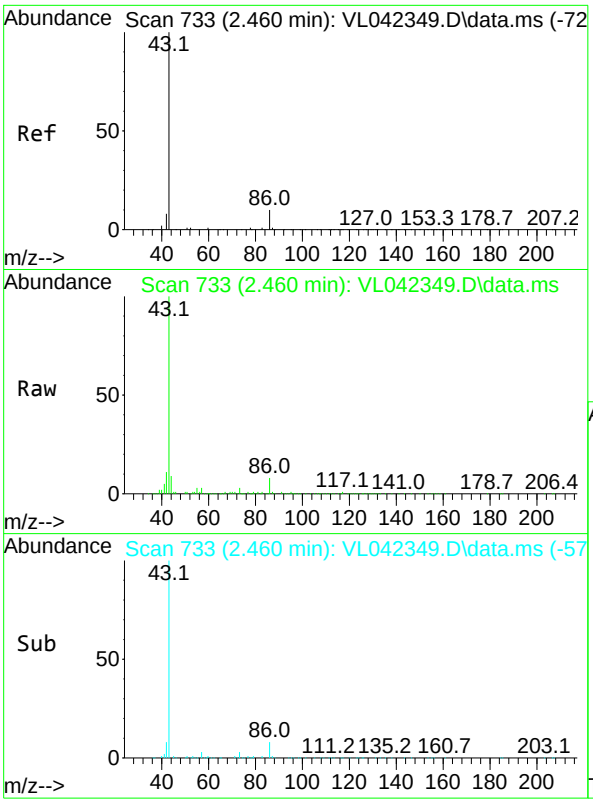


#22
trans-1,2-Dichloroethene
Concen: 9.084 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 96 Resp: 83278

Ion	Ratio	Lower	Upper
96	100		
61	167.1	133.7	200.5
98	62.9	50.3	75.5

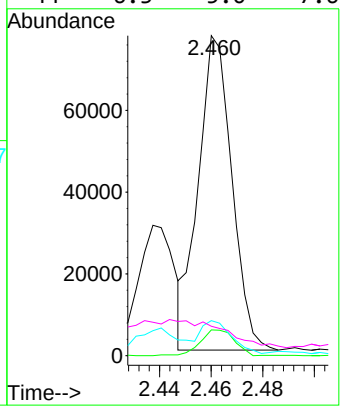




#23
Vinyl Acetate
Concen: 8.378 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 6964

Ion	Ratio	Lower	Upper
43	100		
86	8.1	6.5	9.7
42	9.8	7.8	11.8
44	6.3	5.0	7.6



Instrument :
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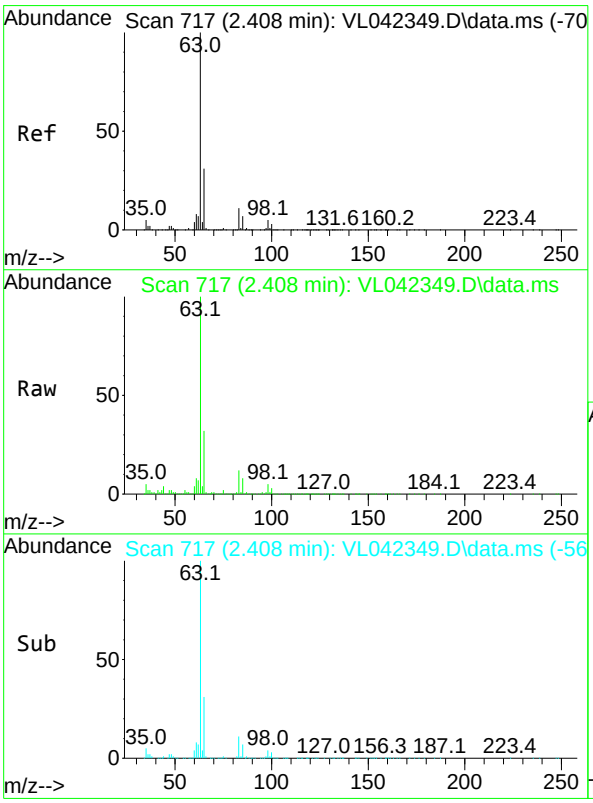
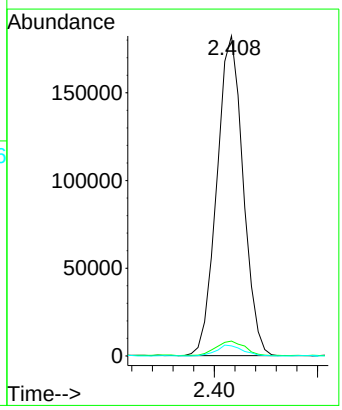
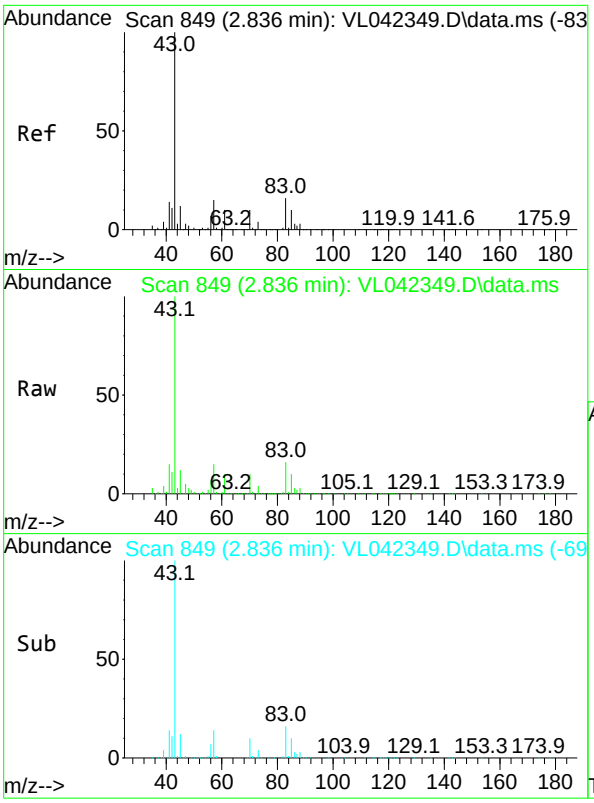


#24
1,1-Dichloroethane
Concen: 9.251 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 63 Resp: 161102

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.2	1.6	4.8

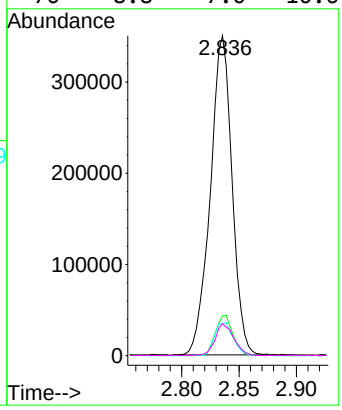




#25
Ethyl Acetate
Concen: 9.110 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 46131

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.1	7.3	10.9
70	8.8	7.0	10.6



Instrument :
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ClientSampleId :
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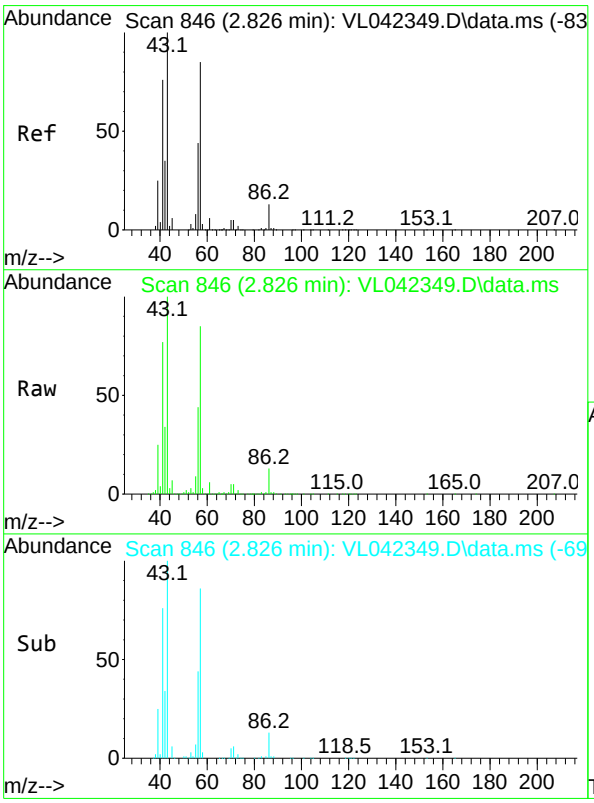
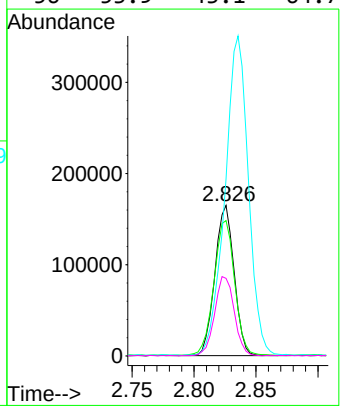
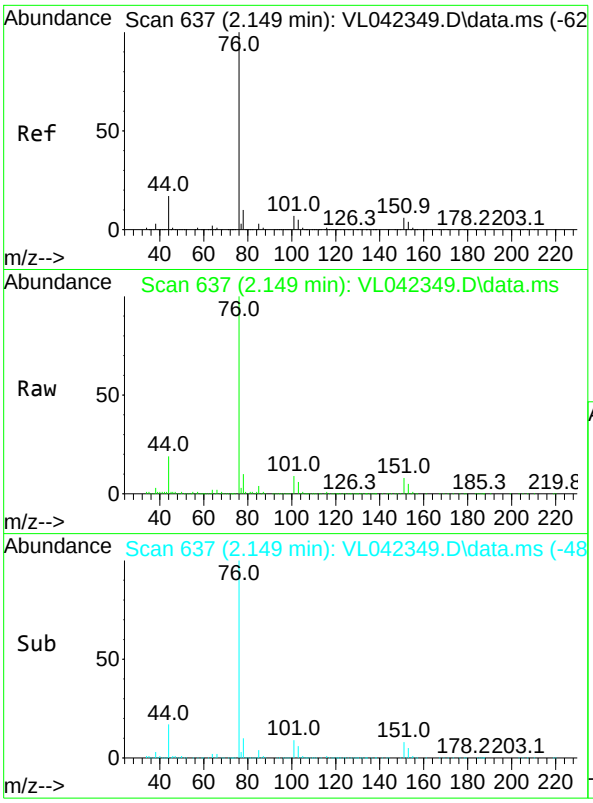


#26
Hexane
Concen: 8.720 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 57 Resp: 178691

Ion	Ratio	Lower	Upper
57	100		
41	97.4	77.9	116.9
43	260.5	208.4	312.6
56	53.9	43.1	64.7

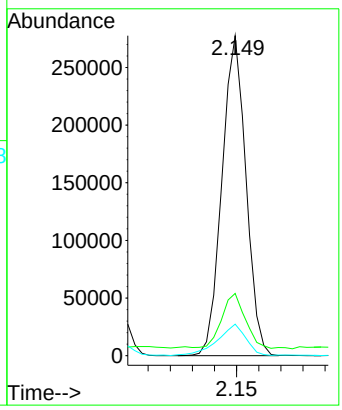




#27
Carbon Disulfide
Concen: 9.539 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 76 Resp: 20929

Ion	Ratio	Lower	Upper
76	100		
44	19.4	15.5	23.3
78	11.6	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
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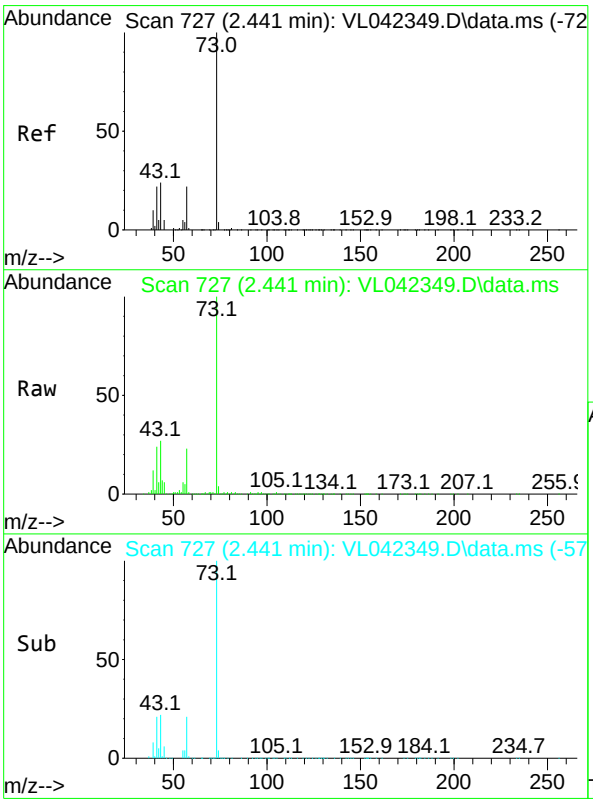
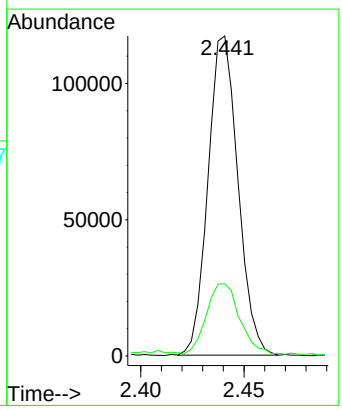
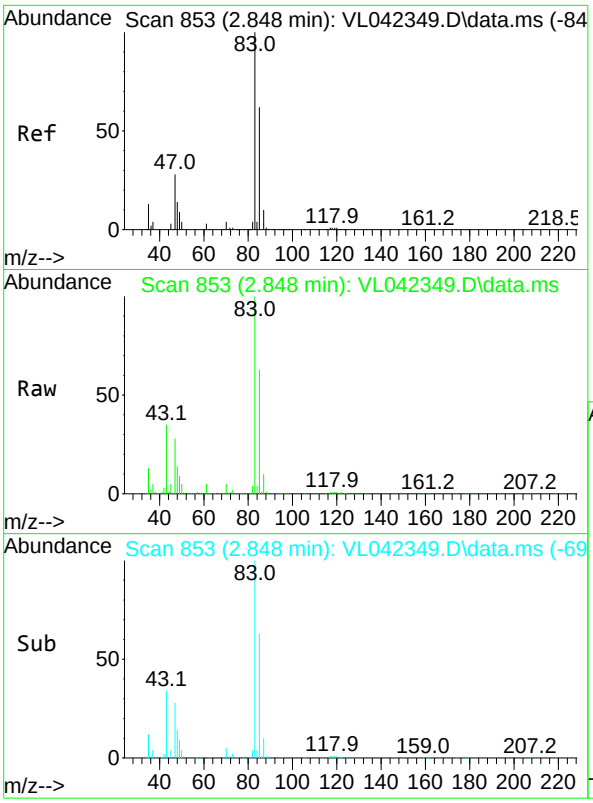


#28
Methyl tert-Butyl Ether
Concen: 8.783 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 73 Resp: 117924

Ion	Ratio	Lower	Upper
73	100		
57	26.6	21.3	31.9

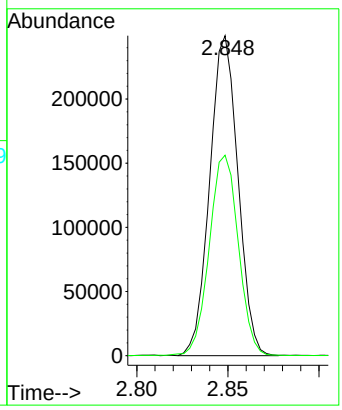




#29
Chloroform
Concen: 9.290 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 83 Resp: 26908

Ion	Ratio	Lower	Upper
83	100		
85	62.5	50.0	75.0



Instrument :
MSVOA_L
ClientSampleId :
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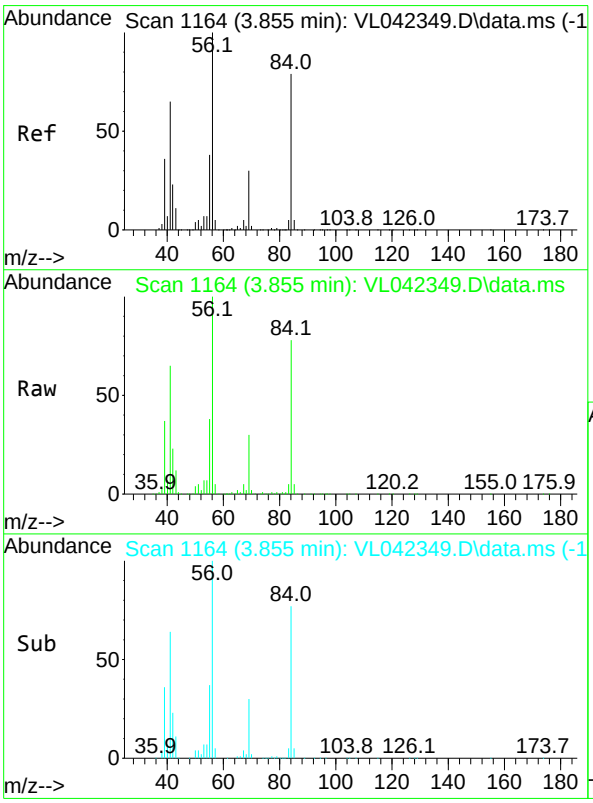
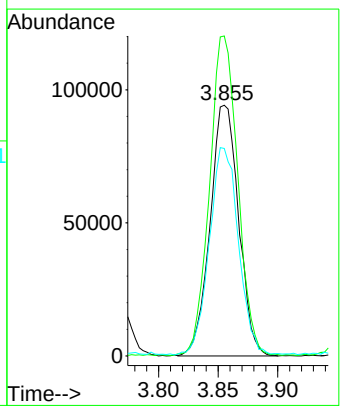
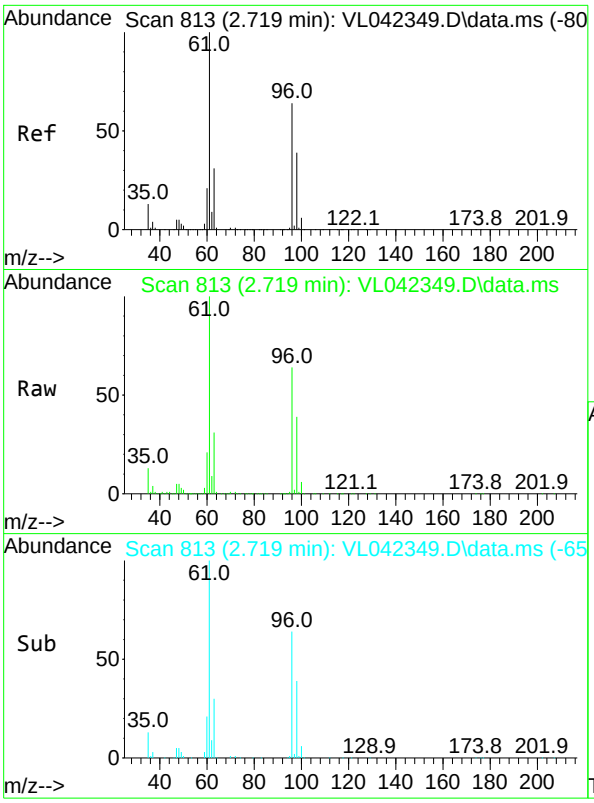


#30
Cyclohexane
Concen: 9.517 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 84 Resp: 157035

Ion	Ratio	Lower	Upper
84	100		
56	126.2	101.0	151.4
41	84.2	67.4	101.0

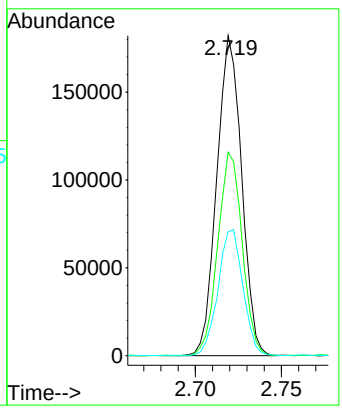




#31
cis-1,2-Dichloroethene
Concen: 9.397 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 61 Resp: 18308

Ion	Ratio	Lower	Upper
61	100		
96	63.5	50.8	76.2
98	38.6	30.9	46.3



Instrument :
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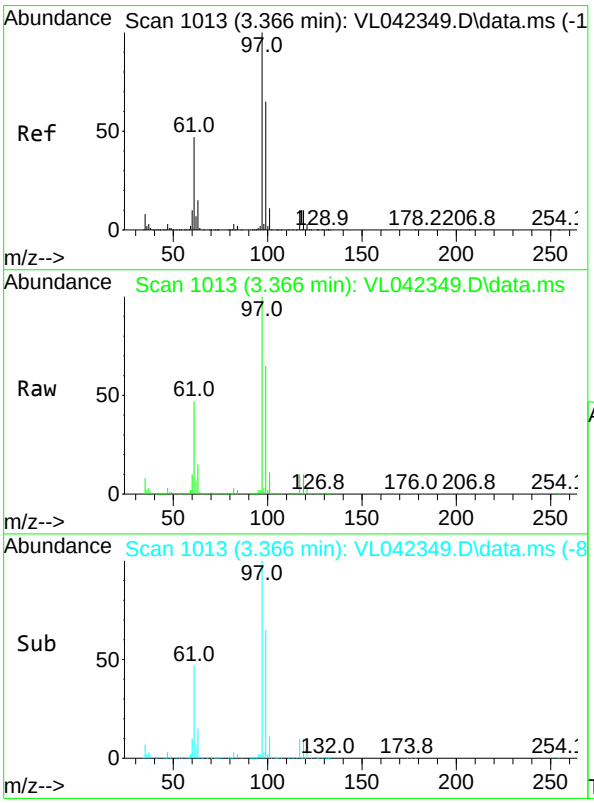
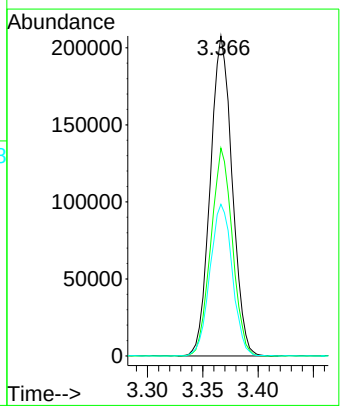
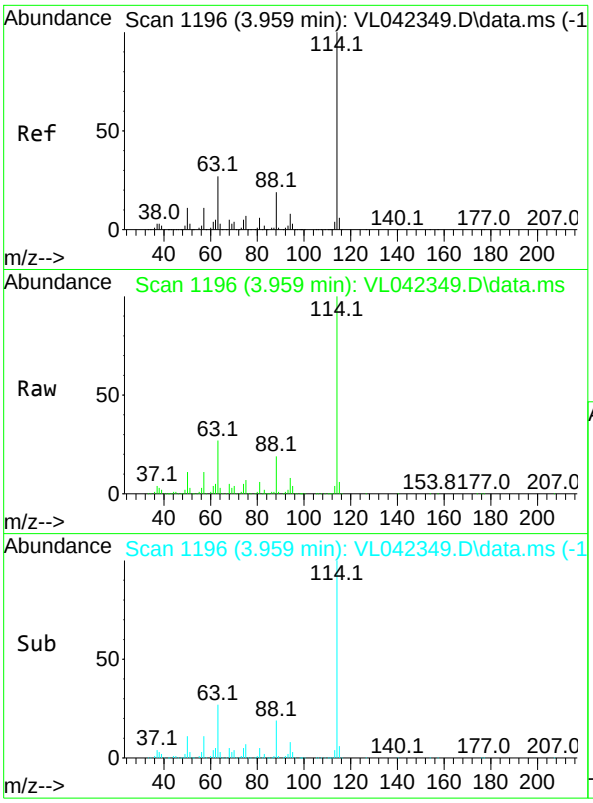


#32
1,1,1-Trichloroethane
Concen: 9.187 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 97 Resp: 285336

Ion	Ratio	Lower	Upper
97	100		
99	63.7	51.0	76.4
61	48.5	38.8	58.2

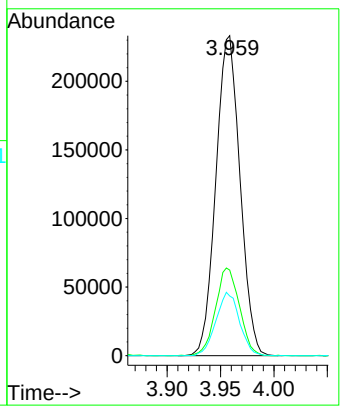




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:114 Resp: 36654

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.4	15.5	23.3



Instrument :
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ClientSampleId :
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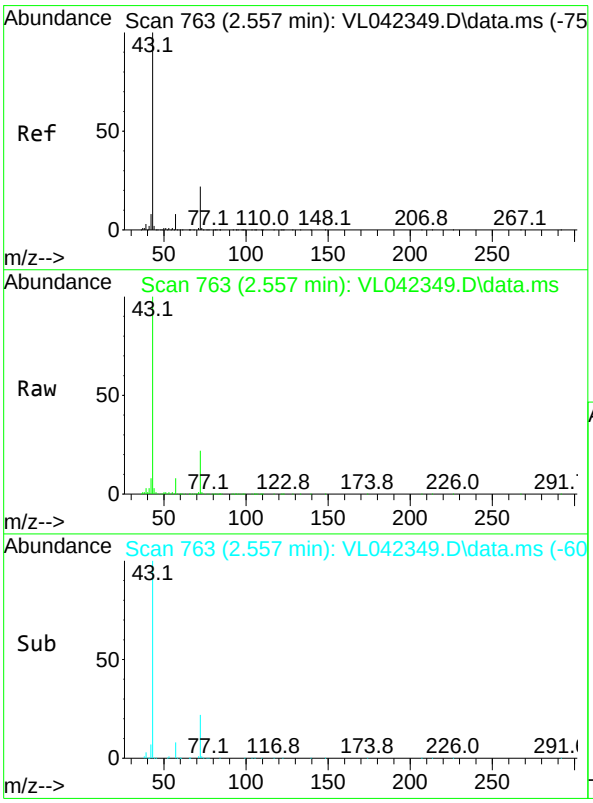
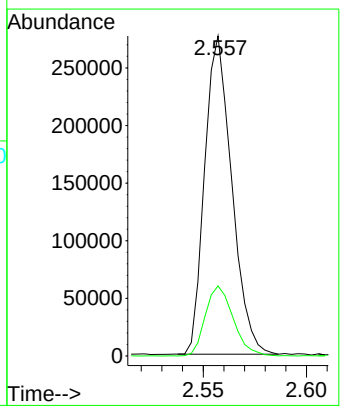
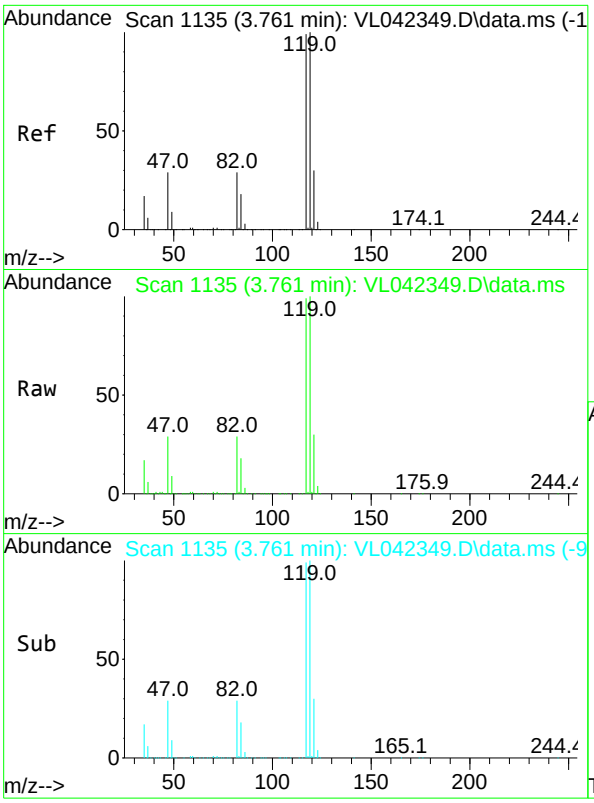


#34
2-Butanone
Concen: 8.683 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 251704

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2

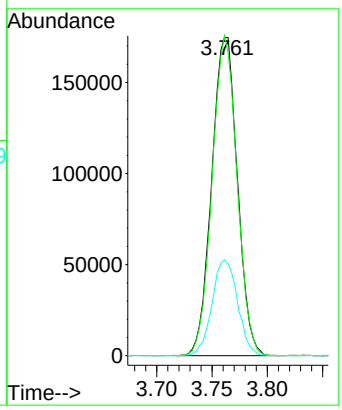




#35
Carbon Tetrachloride
Concen: 8.513 ppbv
RT: 3.761 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:117 Resp: 28240

Ion	Ratio	Lower	Upper
117	100		
119	100.6	80.5	120.7
121	30.2	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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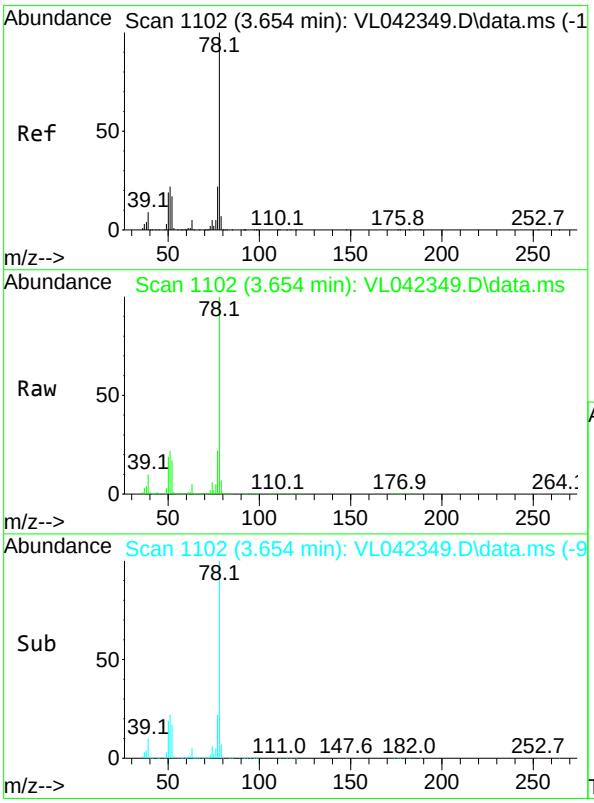
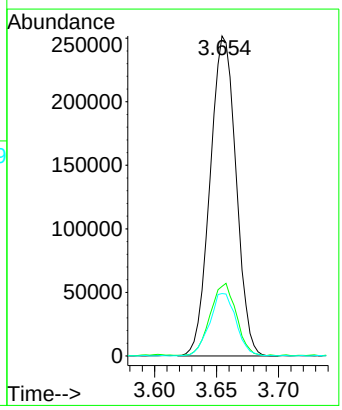
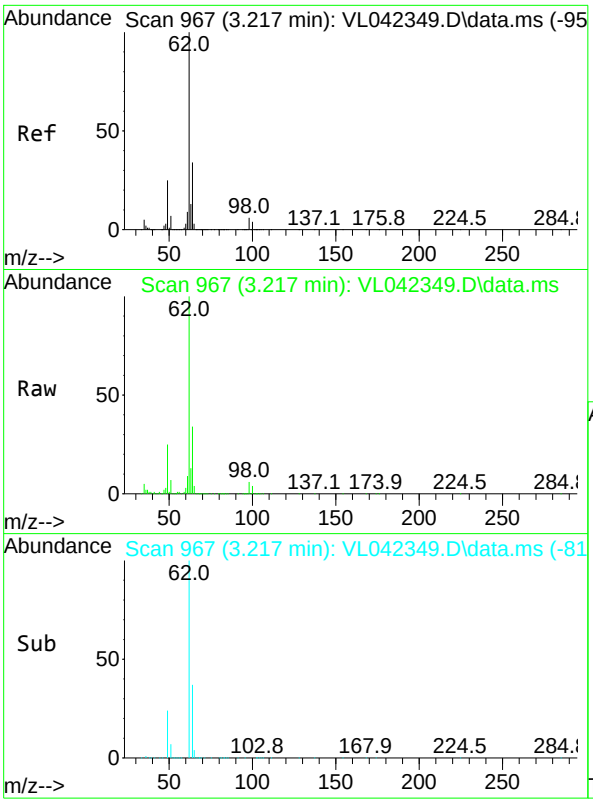


#36
Benzene
Concen: 9.292 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 78 Resp: 367355

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	19.4	15.5	23.3

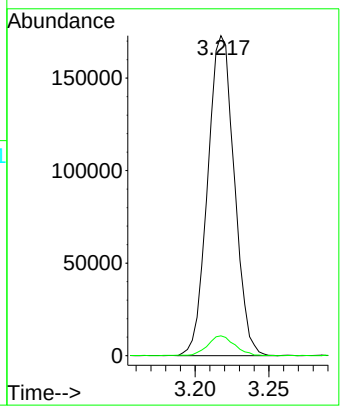




#37
1,2-Dichloroethane
Concen: 9.145 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 62 Resp: 21699

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.1	7.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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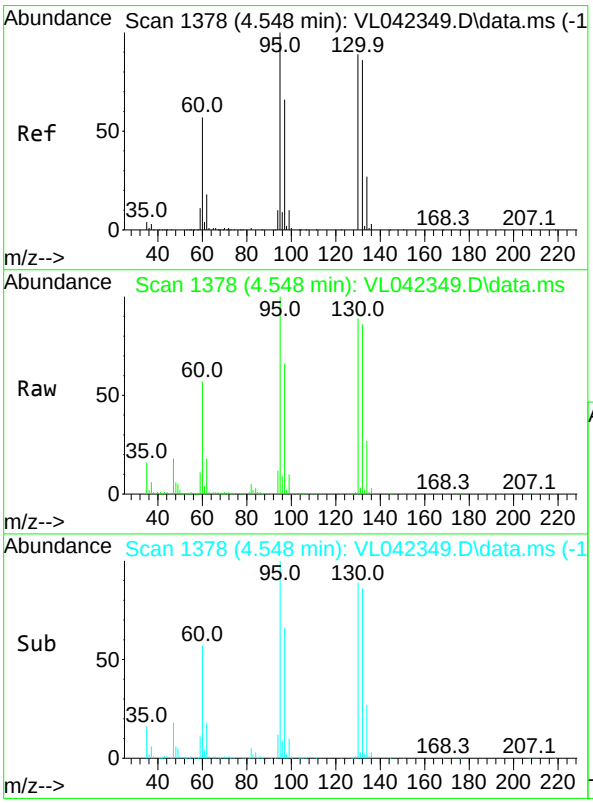
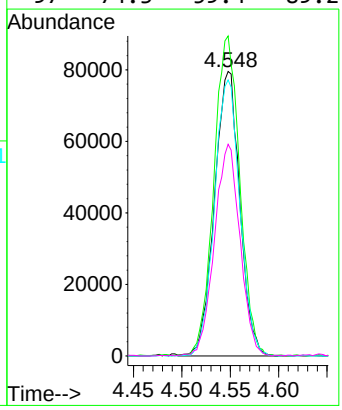
Supervised By :Mahesh Dadoda 04/18/2025

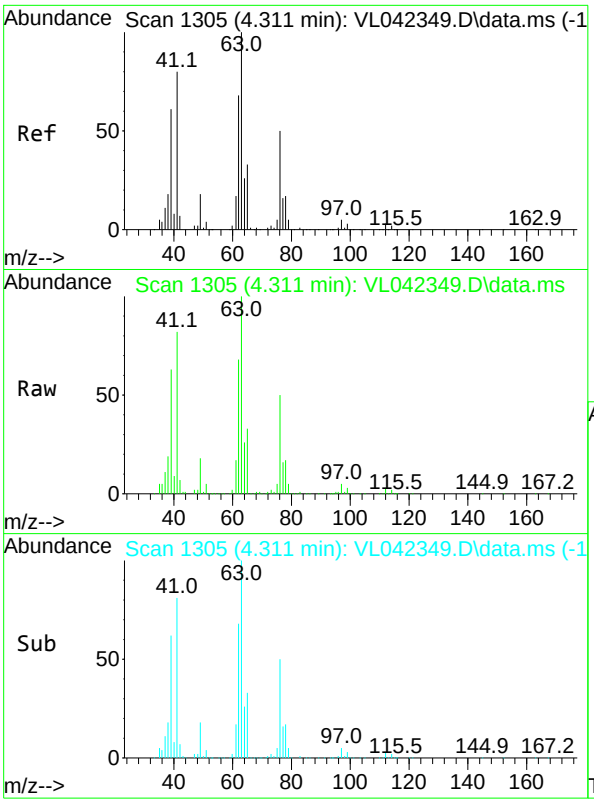


#38
Trichloroethene
Concen: 8.352 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:130 Resp: 144767

Ion	Ratio	Lower	Upper
130	100		
95	112.2	89.8	134.6
132	97.1	77.7	116.5
97	74.3	59.4	89.2

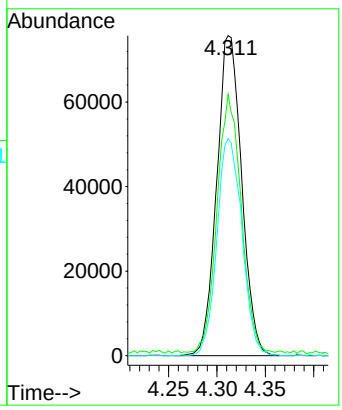




#39
1,2-Dichloropropane
Concen: 9.197 ppbv
RT: 4.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 63 Resp: 13560

Ion	Ratio	Lower	Upper
63	100		
41	80.2	64.2	96.2
62	67.9	54.3	81.5



Instrument :
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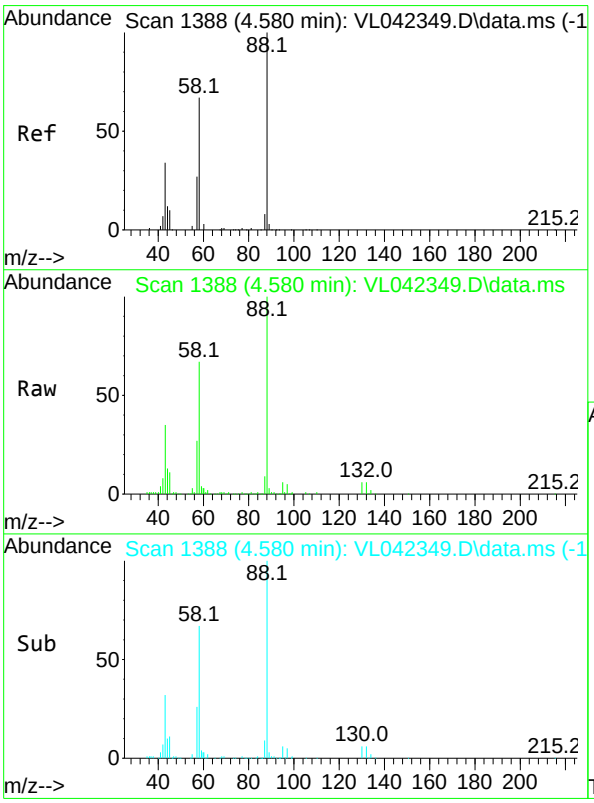
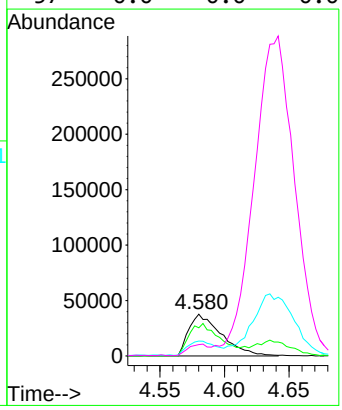
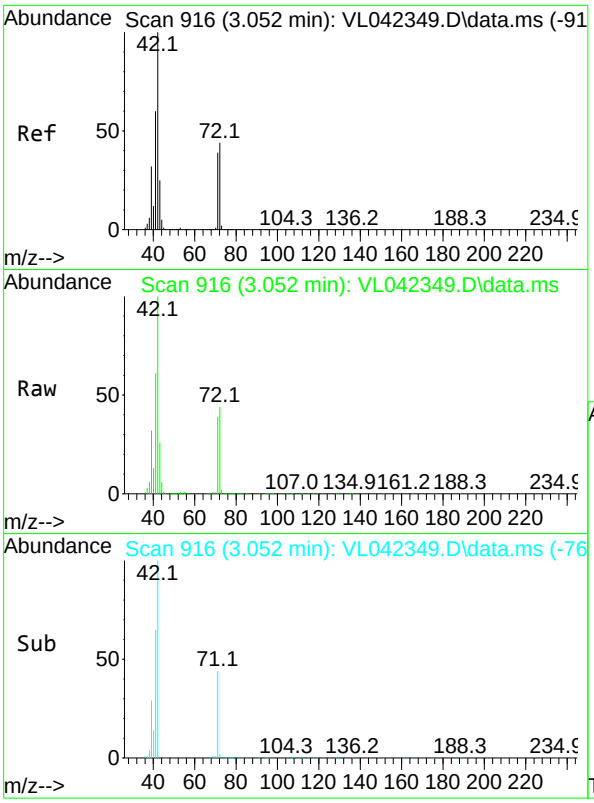


#40
1,4-Dioxane
Concen: 8.348 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 88 Resp: 66662

Ion	Ratio	Lower	Upper
88	100		
58	76.7	61.4	92.0
43	29.0	23.2	34.8
57	0.0	0.0	0.0

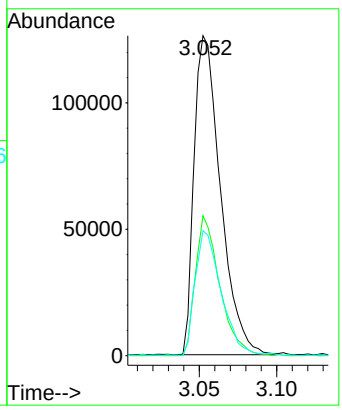




#41
Tetrahydrofuran
Concen: 8.950 ppbv
RT: 3.052 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 42 Resp: 14990

Ion	Ratio	Lower	Upper
42	100		
72	40.4	32.3	48.5
71	39.3	31.4	47.2



Instrument :
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ClientSampleId :
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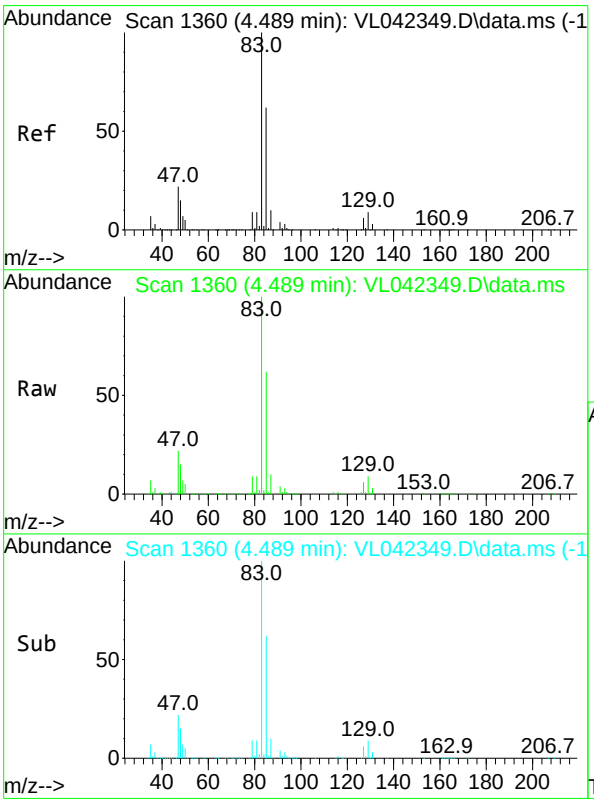
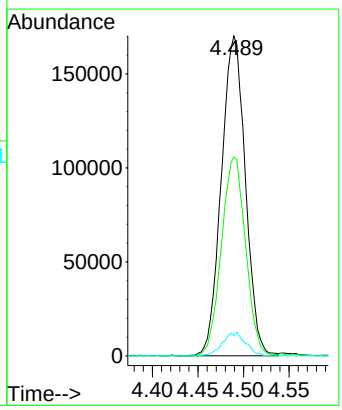
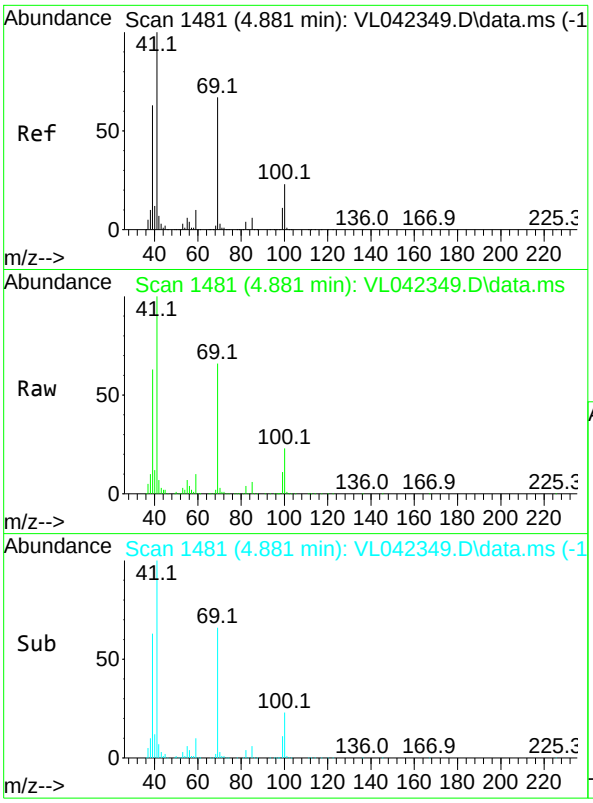


#42
Bromodichloromethane
Concen: 9.456 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 83 Resp: 312268

Ion	Ratio	Lower	Upper
83	100		
85	62.1	49.7	74.5
127	6.4	5.1	7.7

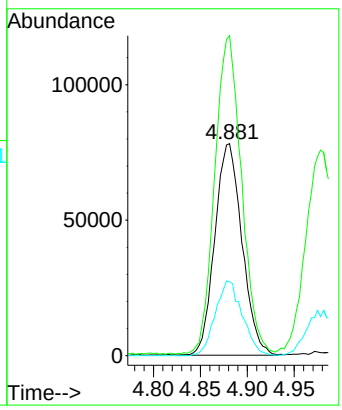




#43
Methyl Methacrylate
Concen: 8.876 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 69 Resp: 15750

Ion	Ratio	Lower	Upper
69	100		
41	148.2	118.6	177.8
100	35.2	28.2	42.2



Instrument :
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ClientSampleId :
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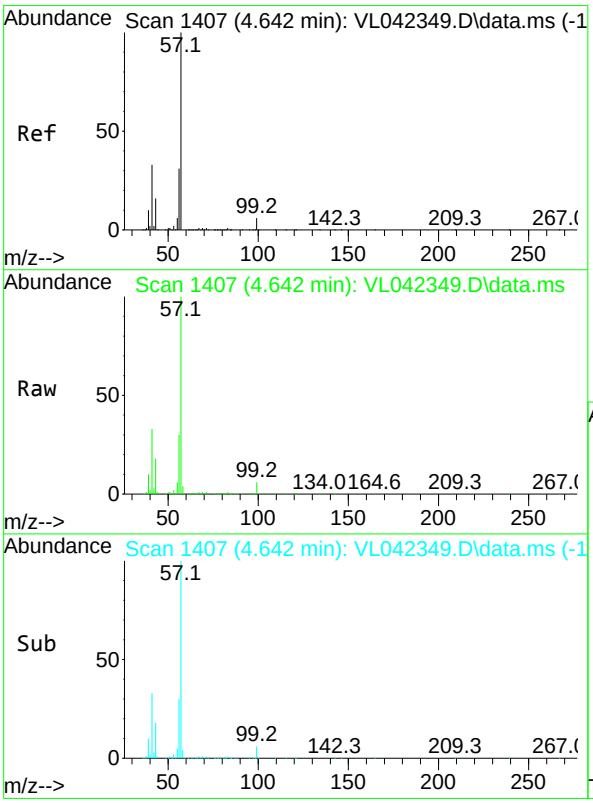
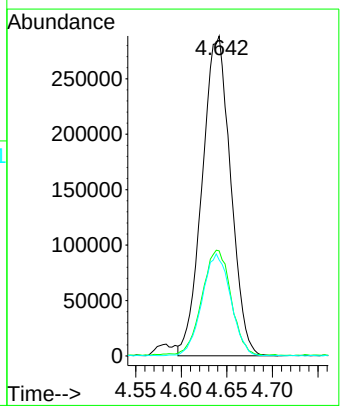
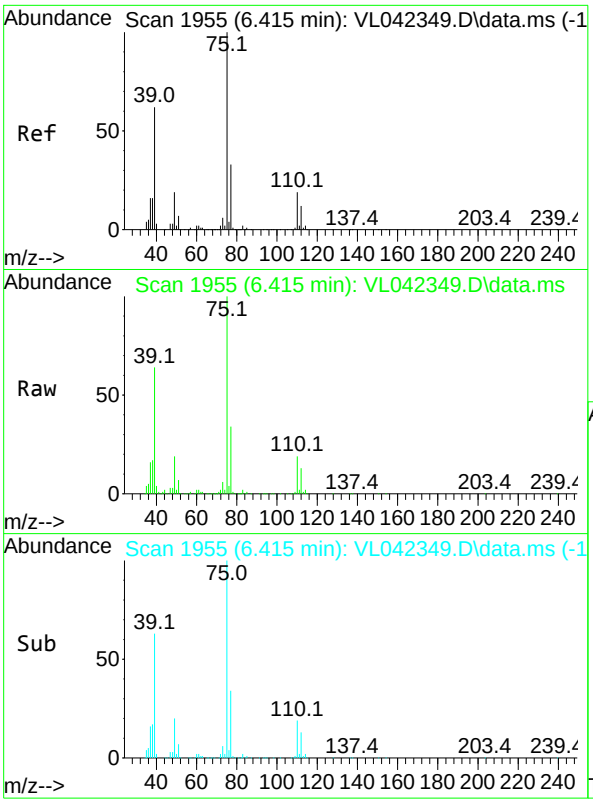


#44
2,2,4-Trimethylpentane
Concen: 9.157 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 57 Resp: 626085

Ion	Ratio	Lower	Upper
57	100		
41	34.0	27.2	40.8
56	32.1	25.7	38.5

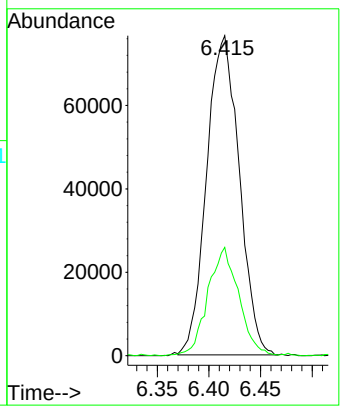




#45
t-1,3-Dichloropropene
Concen: 9.233 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 75 Resp: 16822

Ion	Ratio	Lower	Upper
75	100		
77	33.8	27.0	40.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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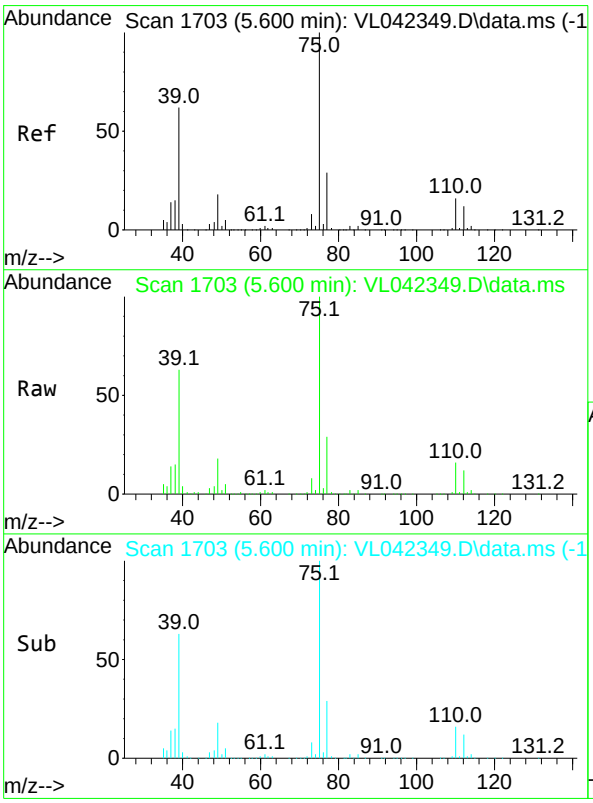
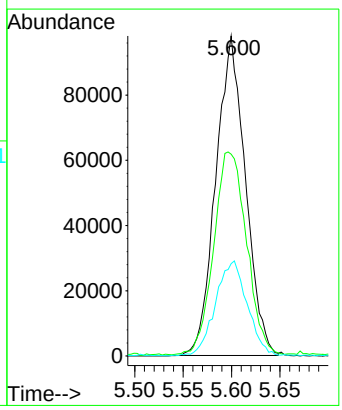
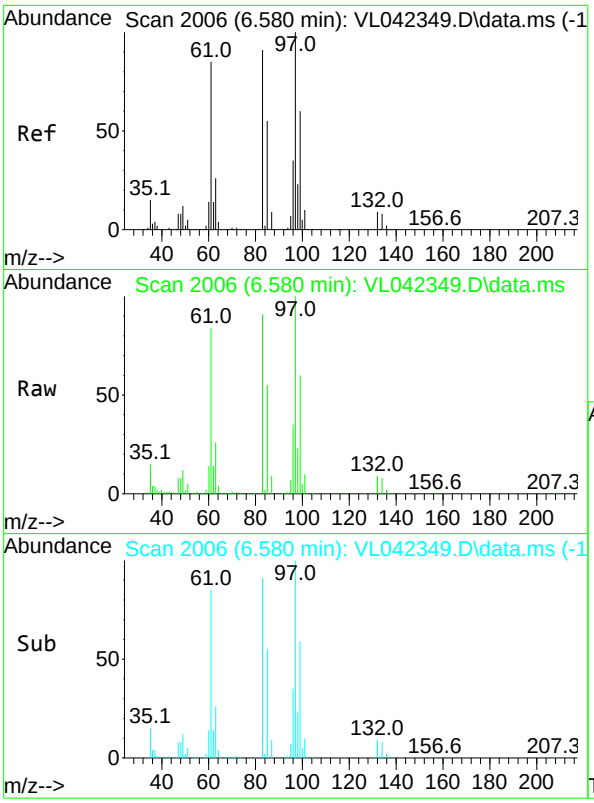


#46
cis-1,3-Dichloropropene
Concen: 9.377 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 75 Resp: 208811

Ion	Ratio	Lower	Upper
75	100		
39	62.5	50.0	75.0
77	28.8	23.0	34.6

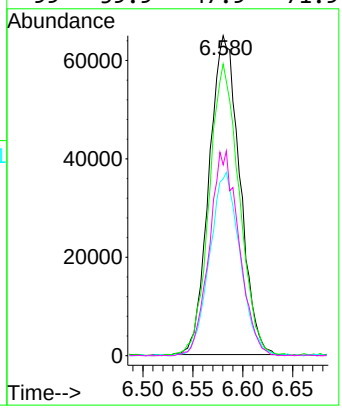




#47
1,1,2-Trichloroethane
Concen: 9.181 ppbv
RT: 6.580 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 97 Resp: 13789

Ion	Ratio	Lower	Upper
97	100		
83	91.0	72.8	109.2
85	55.3	44.2	66.4
99	59.9	47.9	71.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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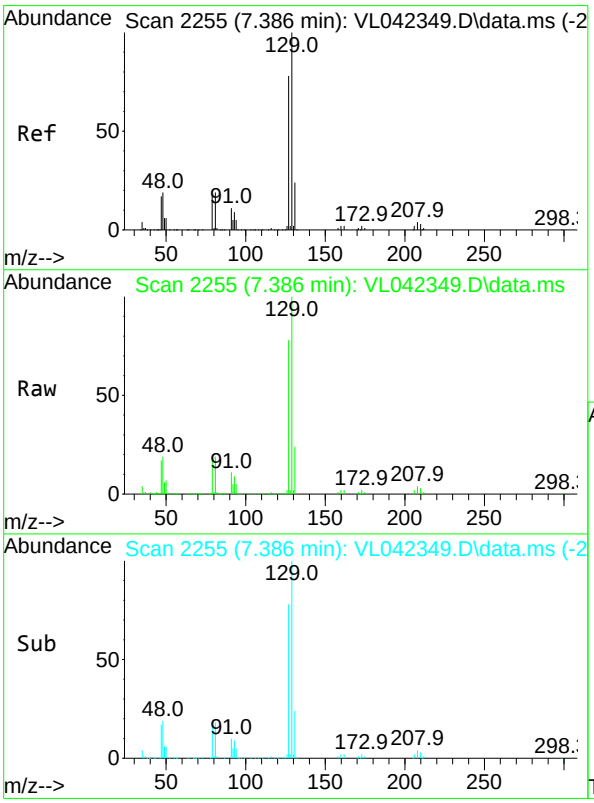
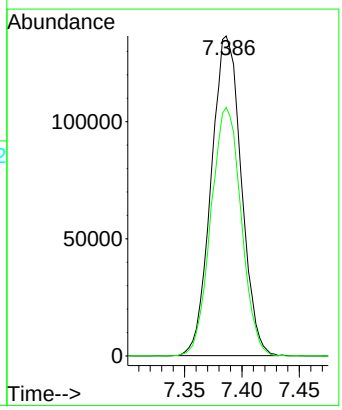
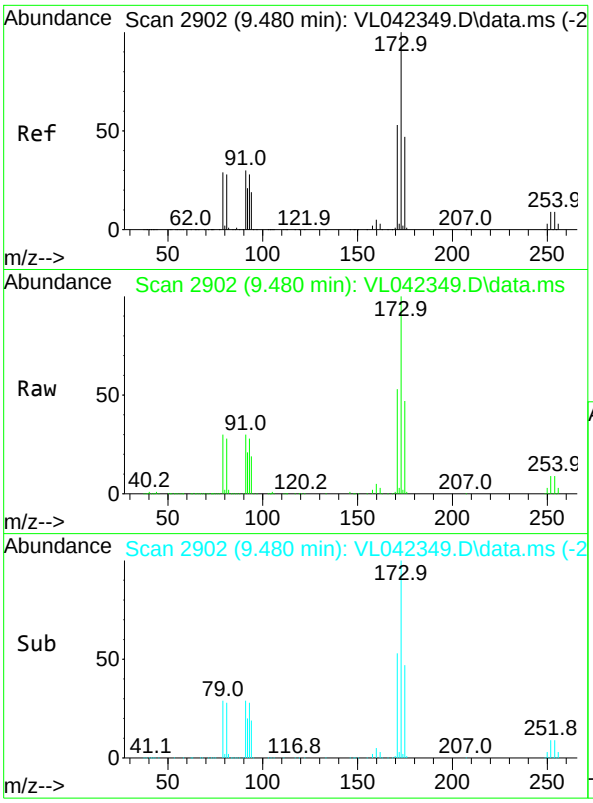


#48
Dibromochloromethane
Concen: 9.388 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:129 Resp: 248954

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.3

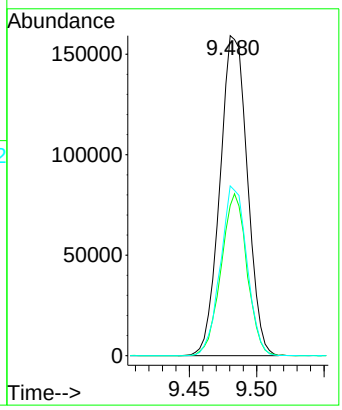




#49
Bromoform
Concen: 9.734 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:173 Resp: 22570

Ion	Ratio	Lower	Upper
173	100		
175	47.7	38.2	57.2
171	51.1	40.9	61.3



Instrument :
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ClientSampleId :
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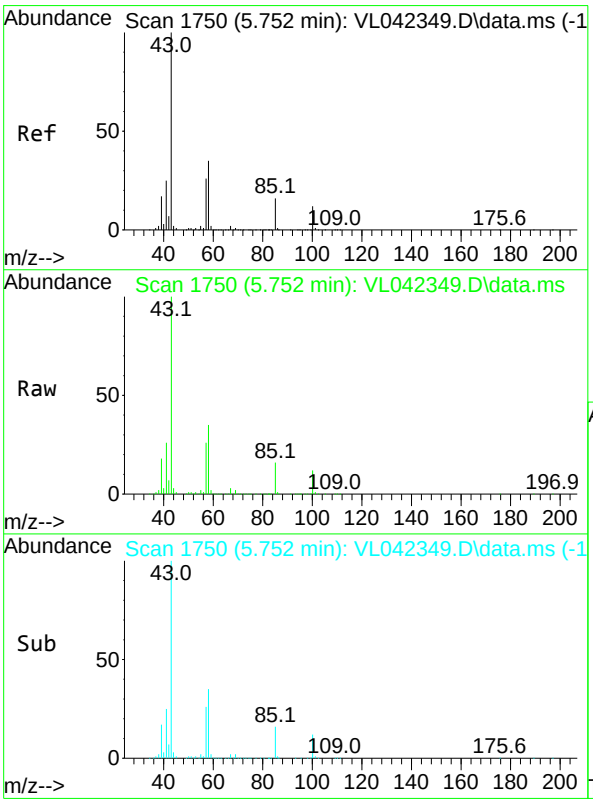
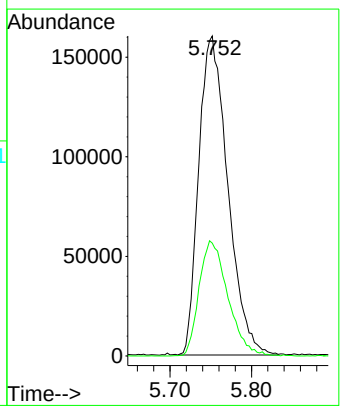
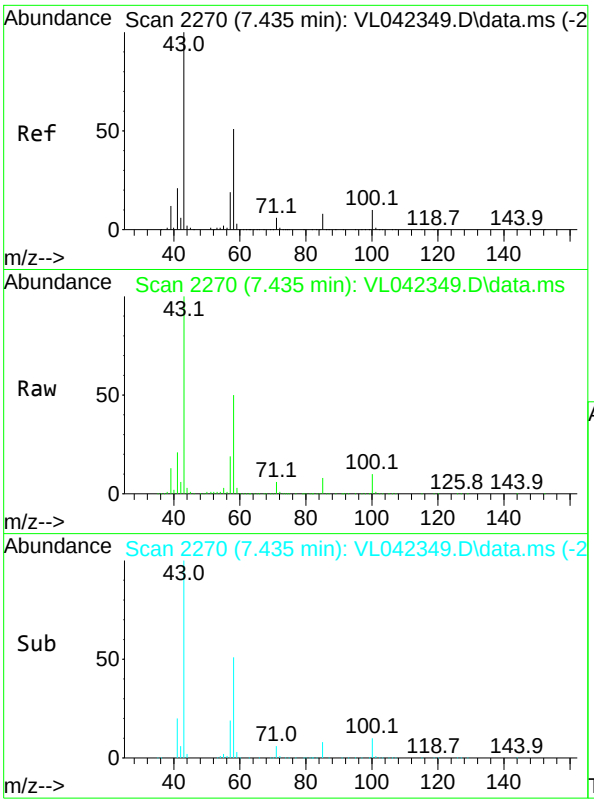


#50
4-Methyl-2-Pentanone
Concen: 8.215 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 396548

Ion	Ratio	Lower	Upper
43	100		
58	35.8	28.6	43.0

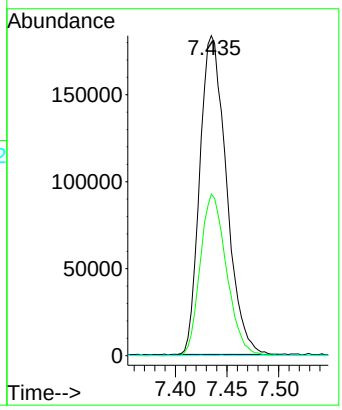




#51
2-Hexanone
Concen: 7.511 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 32716

Ion	Ratio	Lower	Upper
43	100		
58	50.3	40.2	60.4
98	0.1	0.1	0.1



Instrument :
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ClientSampleId :
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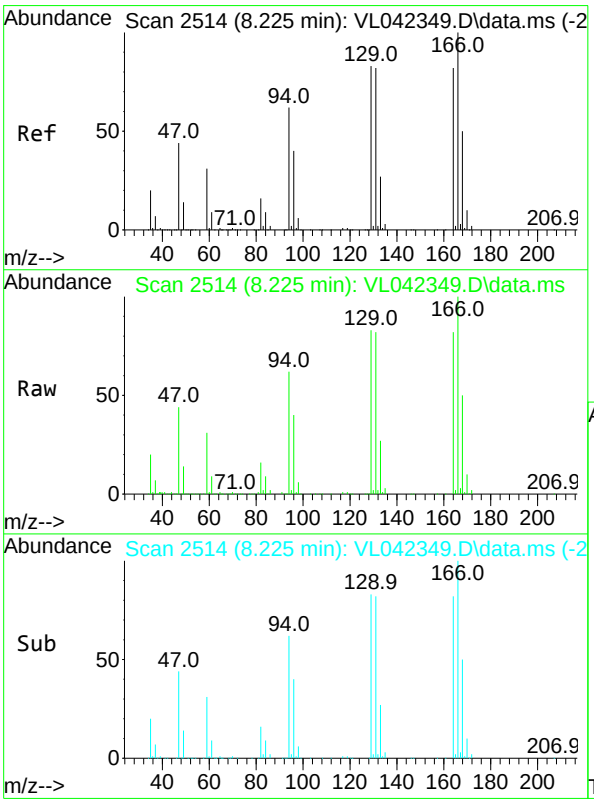
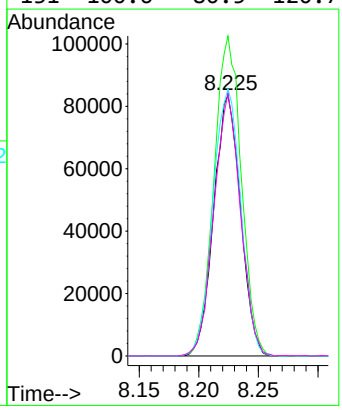
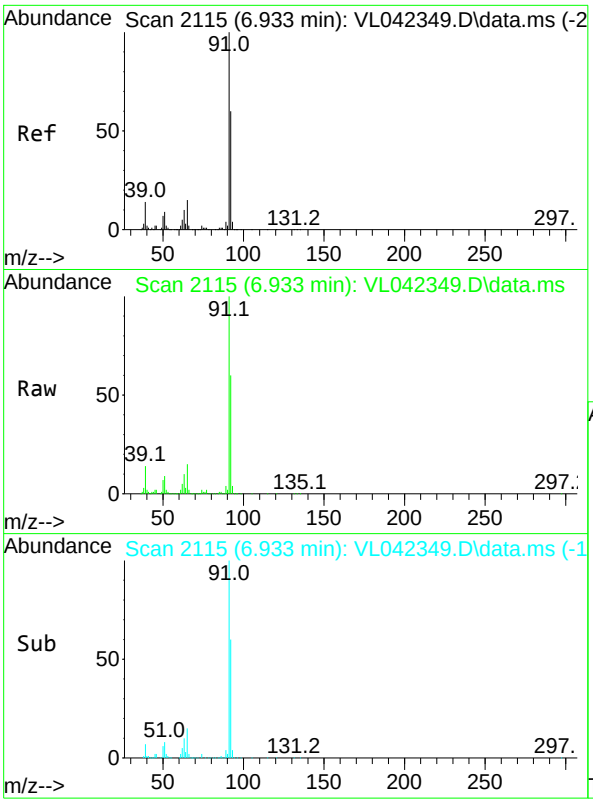


#52
Tetrachloroethene
Concen: 8.553 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:164 Resp: 130720

Ion	Ratio	Lower	Upper
164	100		
166	122.7	98.2	147.2
129	102.3	81.8	122.8
131	100.6	80.5	120.7

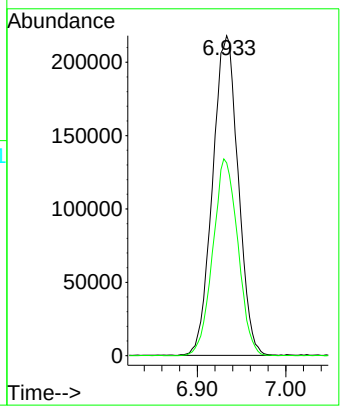




#53
Toluene
Concen: 9.216 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 43725

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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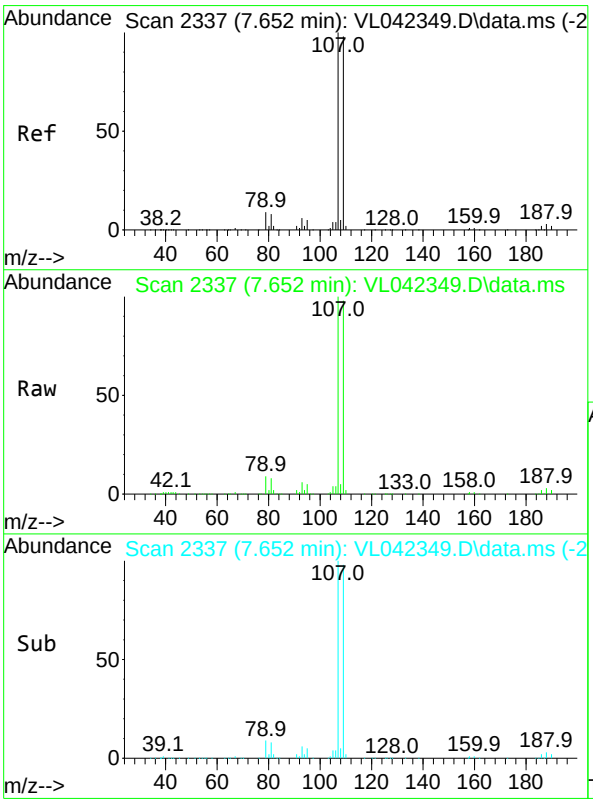
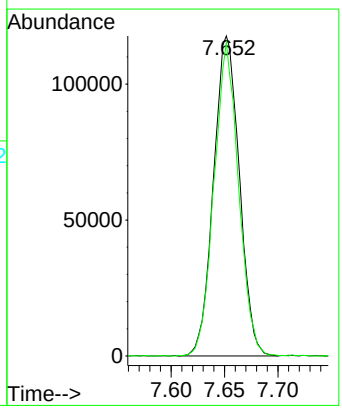
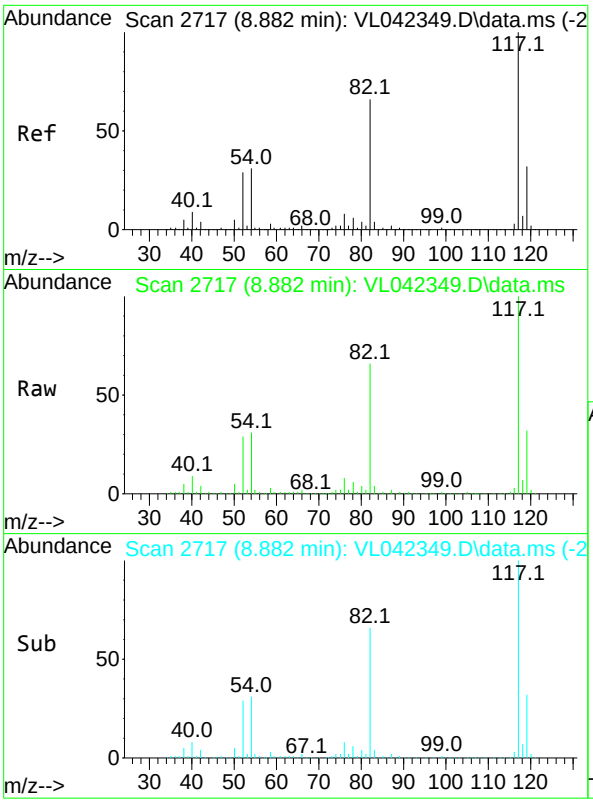


#54
1,2-Dibromoethane
Concen: 9.235 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:107 Resp: 197665

Ion	Ratio	Lower	Upper
107	100		
109	97.8	78.2	117.4

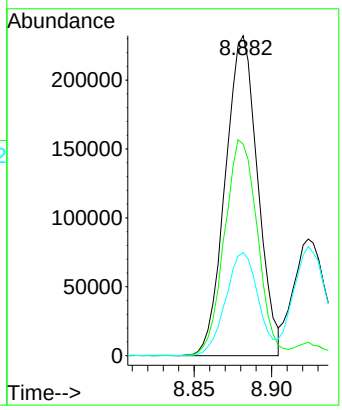




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:117 Resp: 33812

Ion	Ratio	Lower	Upper
117	100		
82	72.2	57.8	86.6
119	31.5	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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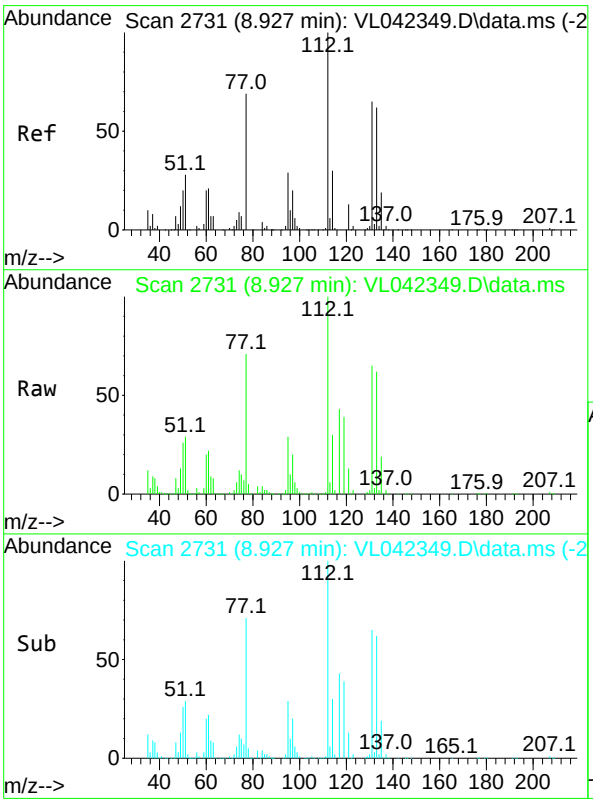
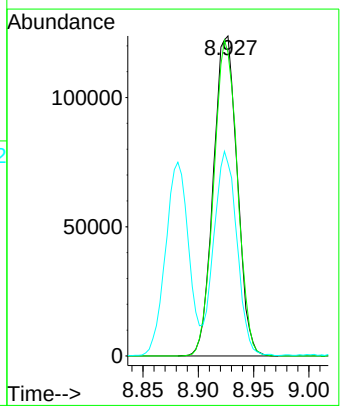
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

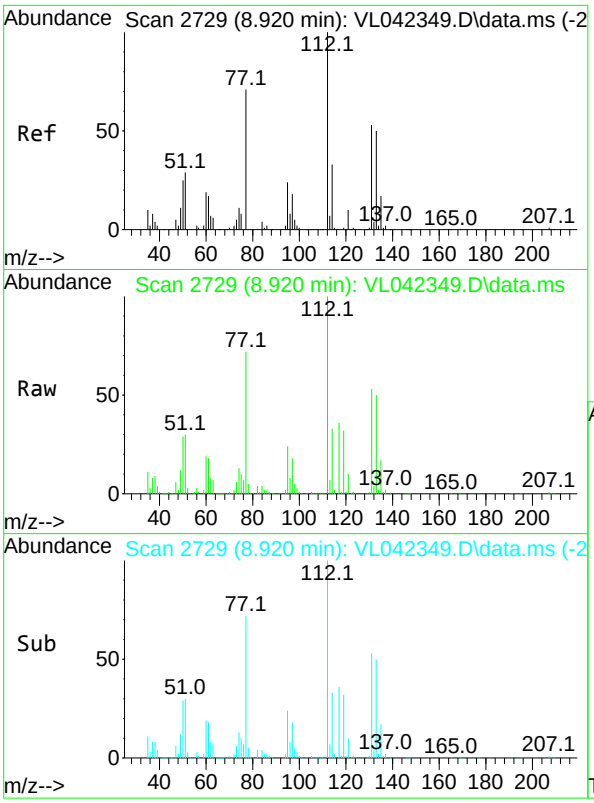


#56
1,1,1,2-Tetrachloroethane
Concen: 9.091 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:131 Resp: 186041

Ion	Ratio	Lower	Upper
131	100		
133	97.9	78.3	117.5
119	60.9	48.7	73.1

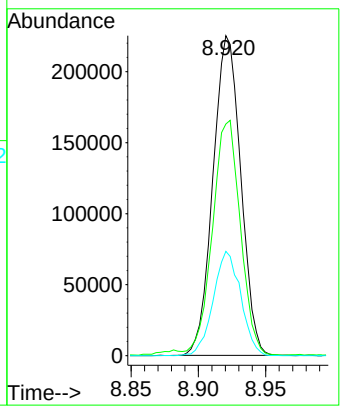




#57
Chlorobenzene
Concen: 9.187 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:112 Resp: 32308

Ion	Ratio	Lower	Upper
112	100		
77	72.2	57.8	86.6
114	32.6	29.3	35.9



Instrument :
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ClientSampleId :
VSTDICCC010

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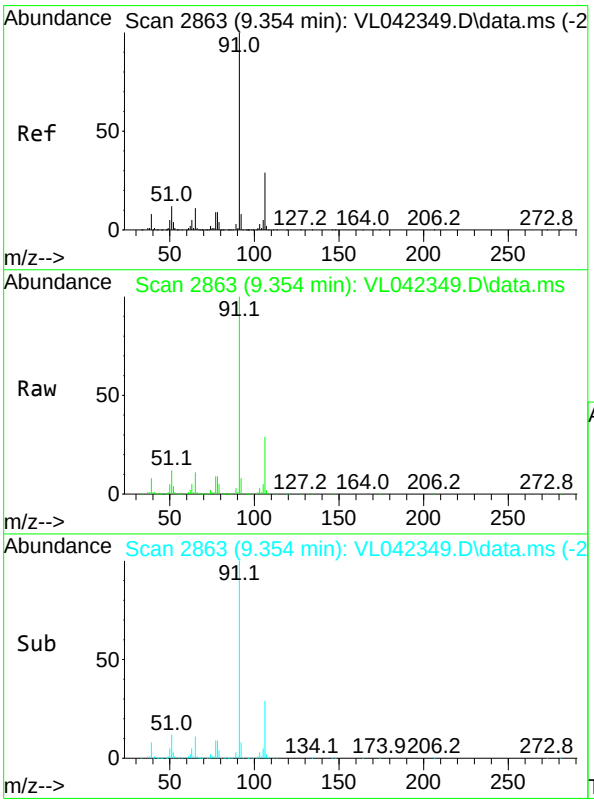
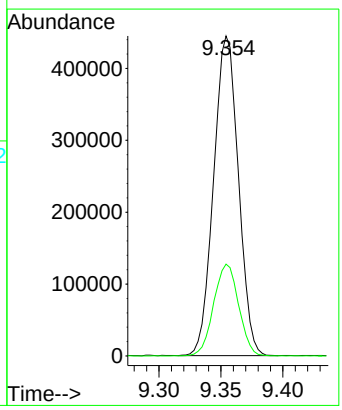
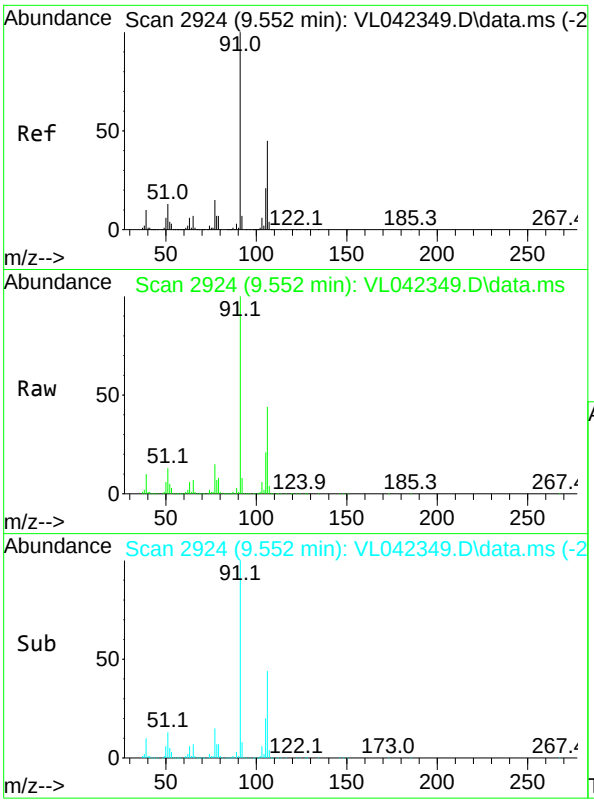


#58
Ethyl Benzene
Concen: 9.248 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 619581

Ion	Ratio	Lower	Upper
91	100		
106	28.7	23.0	34.4

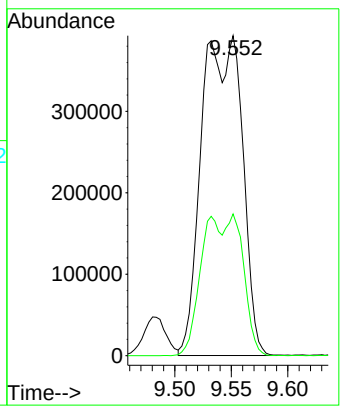




#59
m/p-Xylene
Concen: 18.187 ppbv m
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 98445

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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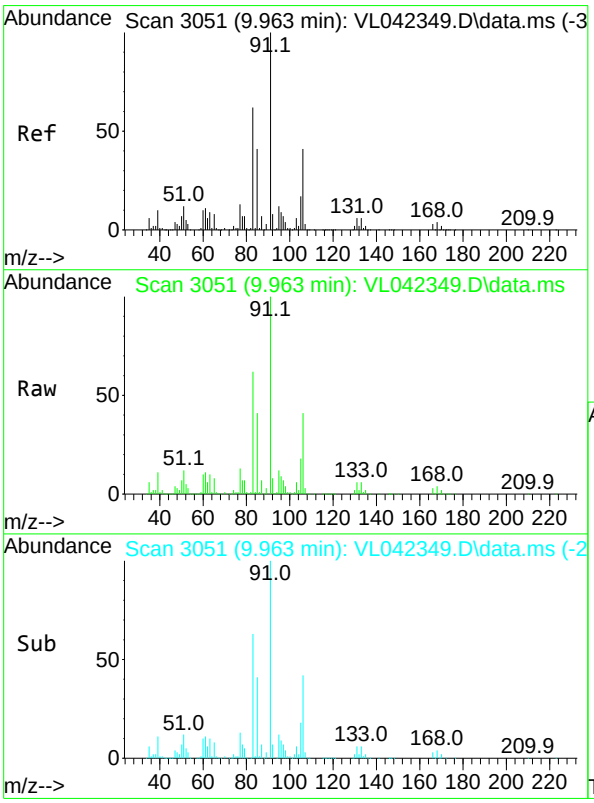
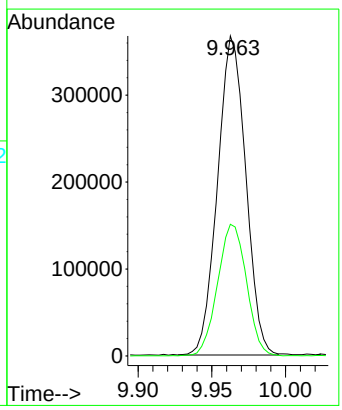
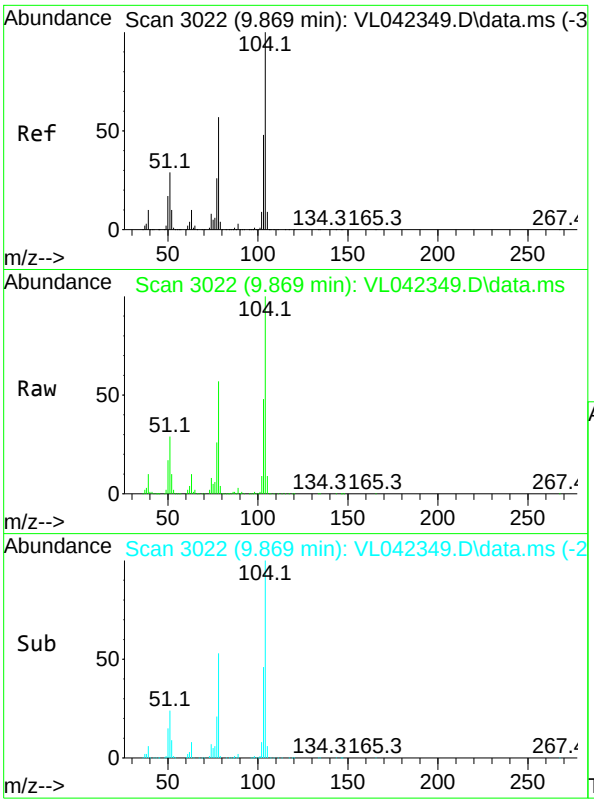


#60
o-Xylene
Concen: 8.972 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 487616

Ion	Ratio	Lower	Upper
91	100		
106	42.3	21.1	63.4

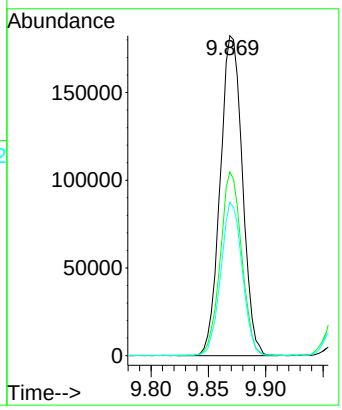




#61
Styrene
Concen: 9.464 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:104 Resp: 24548

Ion	Ratio	Lower	Upper
104	100		
78	55.7	44.6	66.8
103	46.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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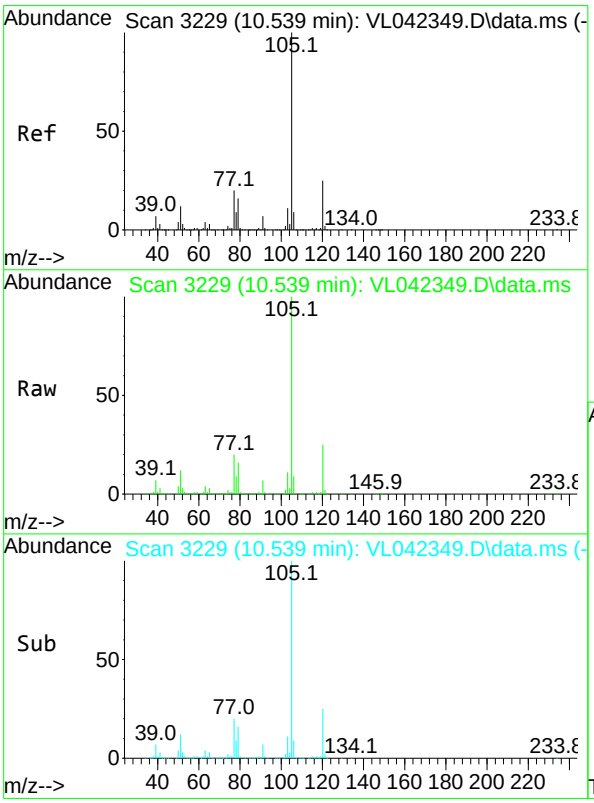
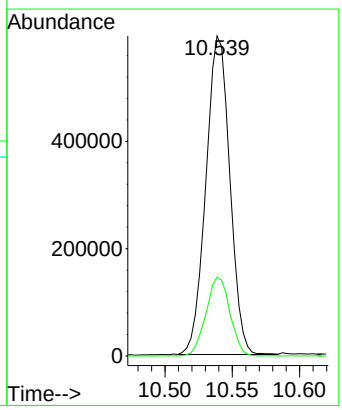
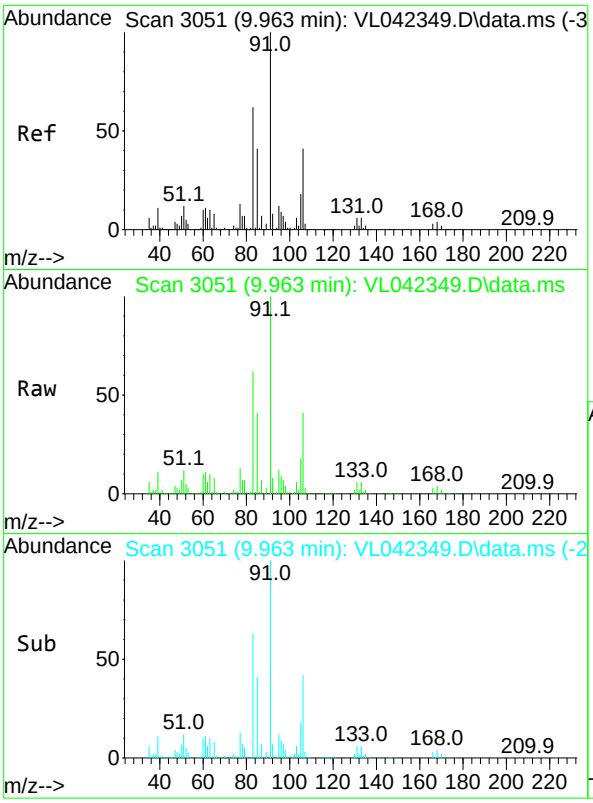


#62
Isopropylbenzene
Concen: 9.197 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 733788

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.8	29.8

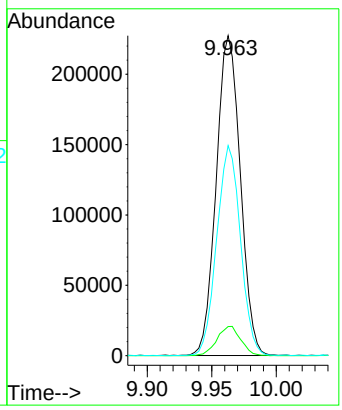




#63
1,1,2,2-Tetrachloroethane
Concen: 8.355 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 83 Resp: 29504

Ion	Ratio	Lower	Upper
83	100		
131	9.1	4.5	13.7
85	64.7	32.4	97.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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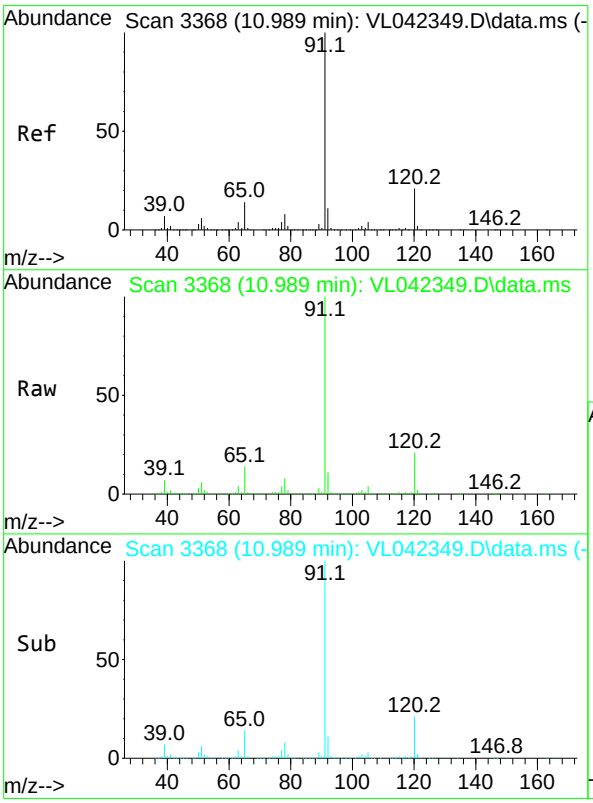
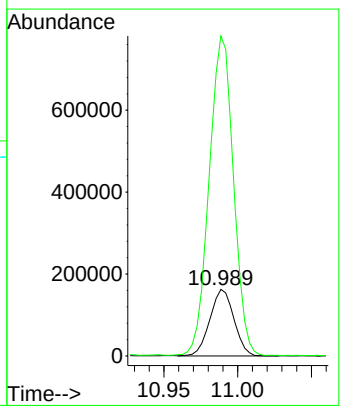
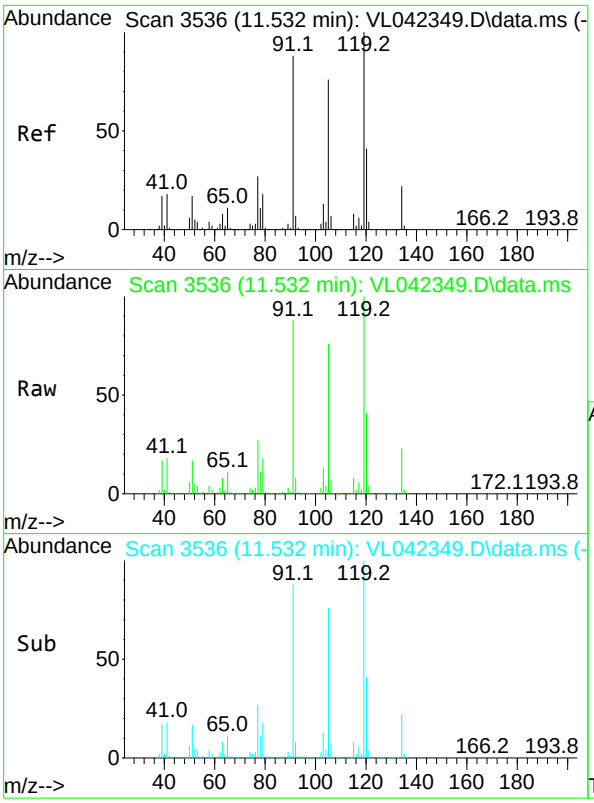


#64
n-propylbenzene
Concen: 9.144 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:120 Resp: 183390

Ion	Ratio	Lower	Upper
120	100		
91	490.5	392.4	588.6





#65
tert-Butylbenzene
Concen: 8.795 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:119 Resp: 64495

Ion	Ratio	Lower	Upper
119	100		
91	93.2	74.6	111.8
134	23.5	18.8	28.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
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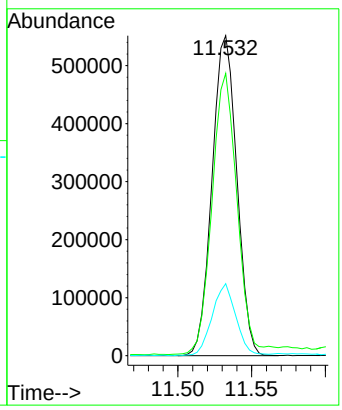
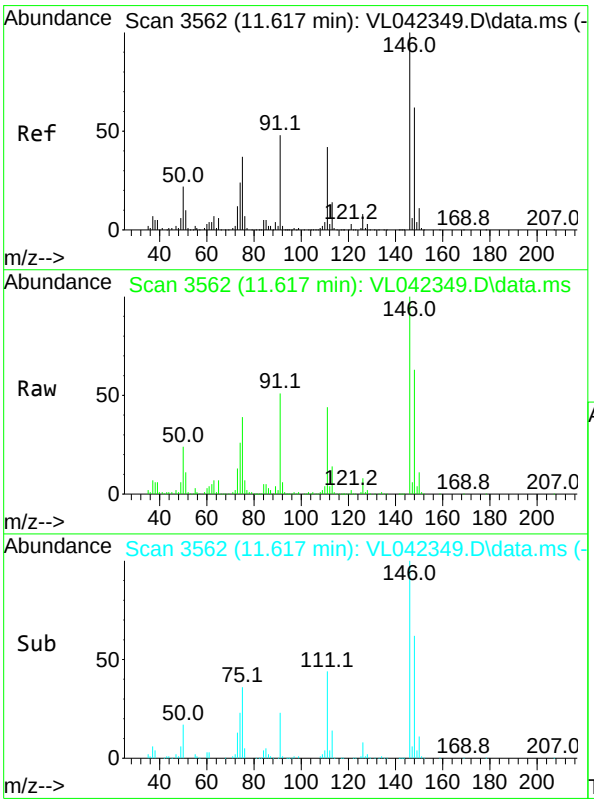
Supervised By :Mahesh Dadoda 04/18/2025

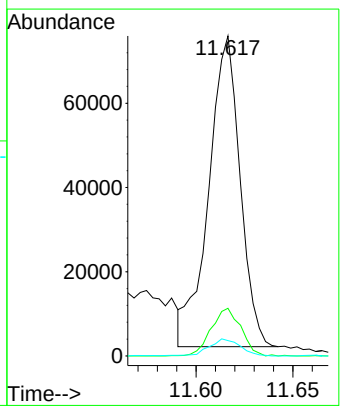


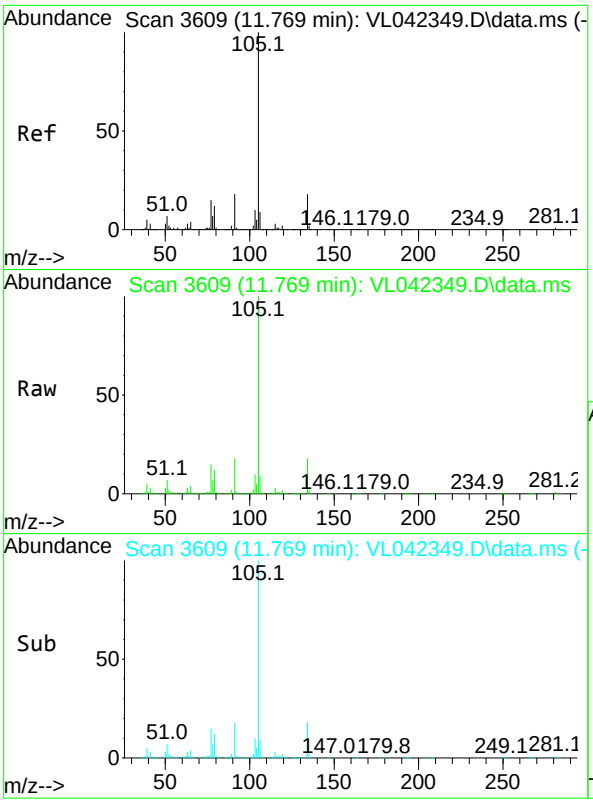


#66
Benzyl Chloride
Concen: 10.333 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 83269

Ion	Ratio	Lower	Upper
91	100		
126	14.7	11.8	17.6
128	5.6	4.5	6.7

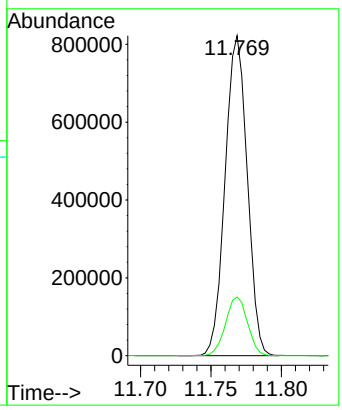




#67
sec-Butylbenzene
Concen: 8.824 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 90007

Ion	Ratio	Lower	Upper
105	100		
134	18.2	14.6	21.8



Instrument :
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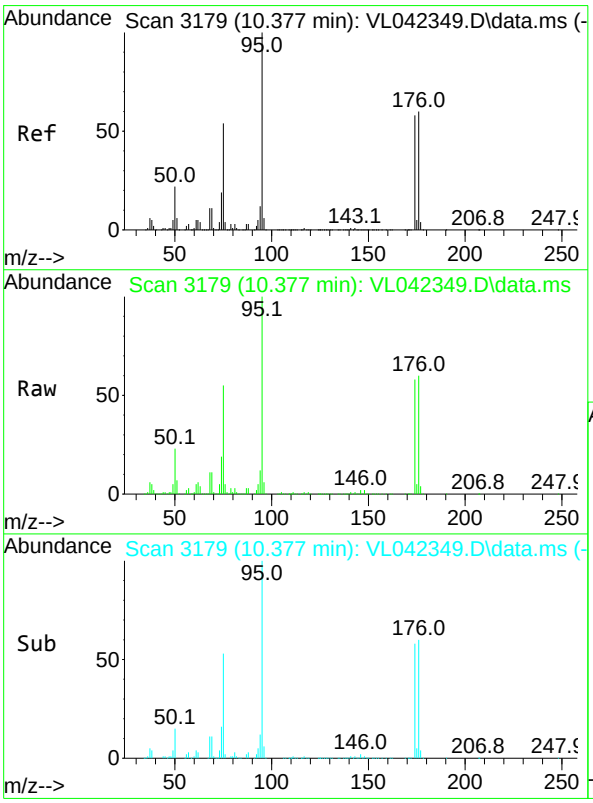
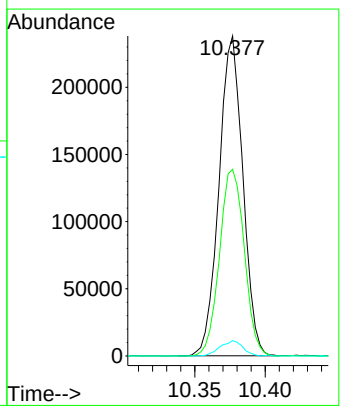
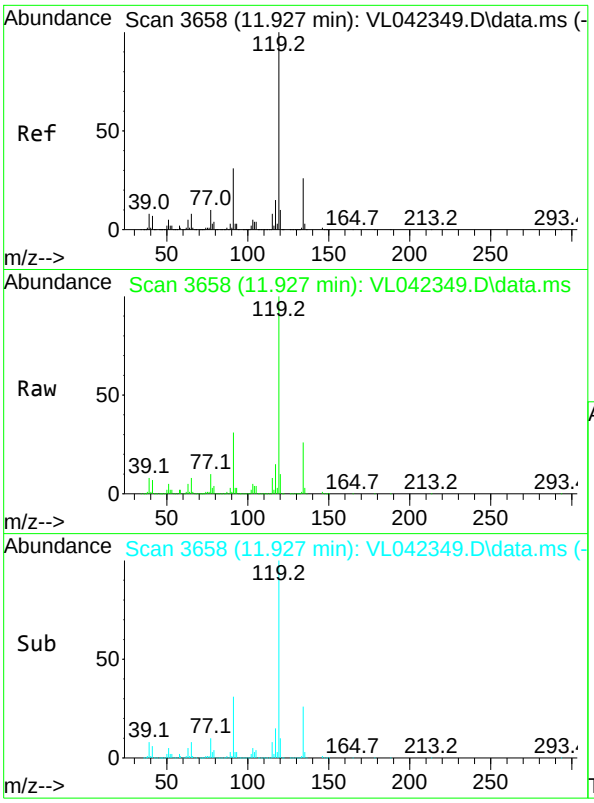


#68
1-Bromo-4-Fluorobenzene
Concen: 10.114 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 95 Resp: 281013

Ion	Ratio	Lower	Upper
95	100		
174	60.6	48.5	72.7
175	4.6	3.7	5.5

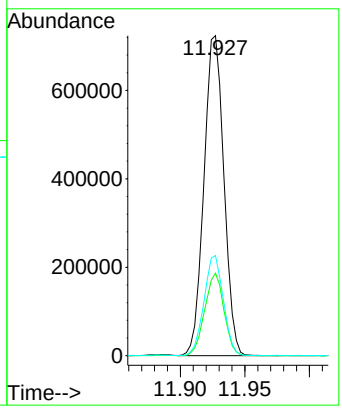




#69
p-Isopropyltoluene
Concen: 8.790 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:119 Resp: 77898

Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.0	30.0
91	30.5	24.4	36.6



Instrument :
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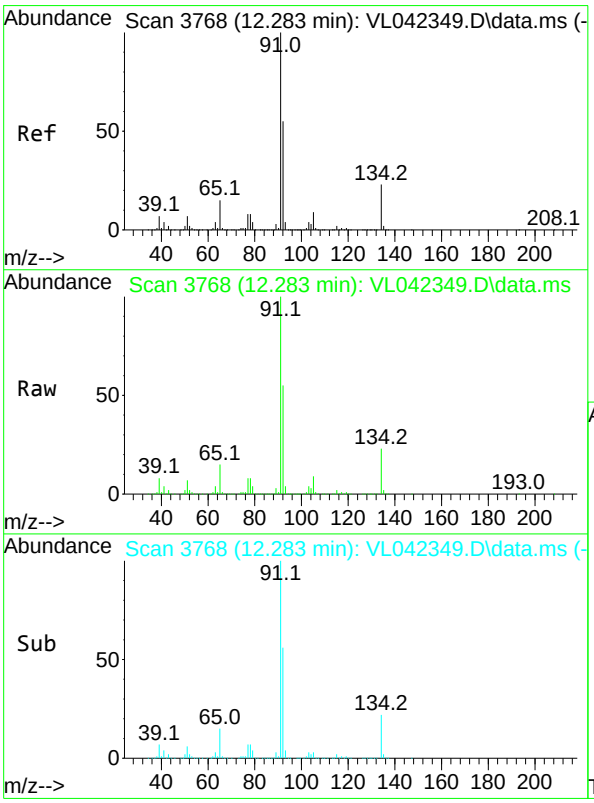
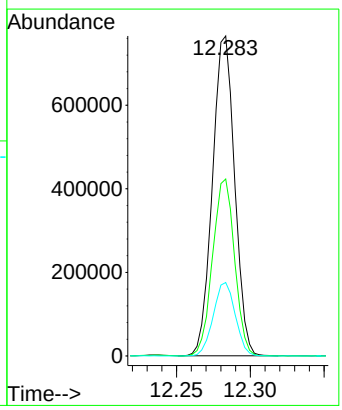
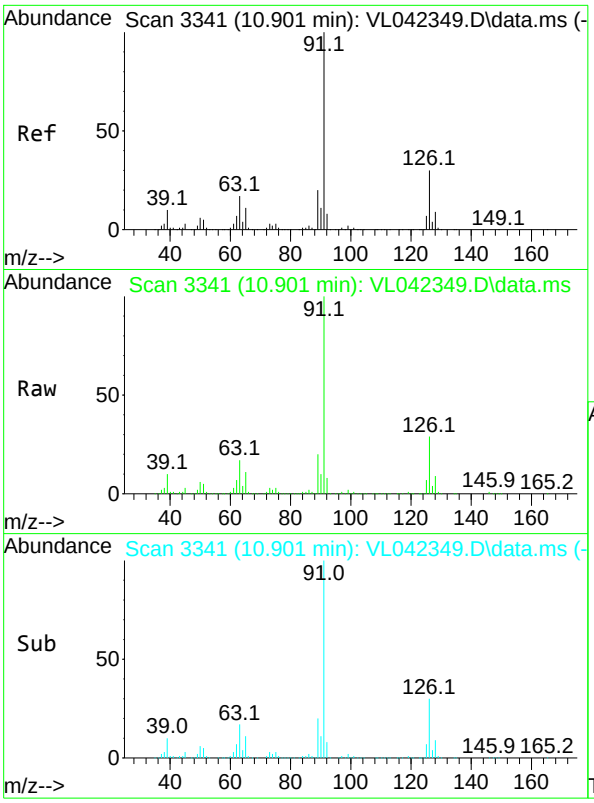


#70
n-Butylbenzene
Concen: 8.682 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 801364

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.2	66.4
134	22.8	18.2	27.4

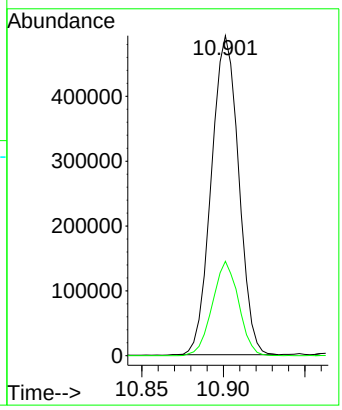




#71
2-Chlorotoluene
Concen: 9.157 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 57303

Ion	Ratio	Lower	Upper
91	100		
126	28.4	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

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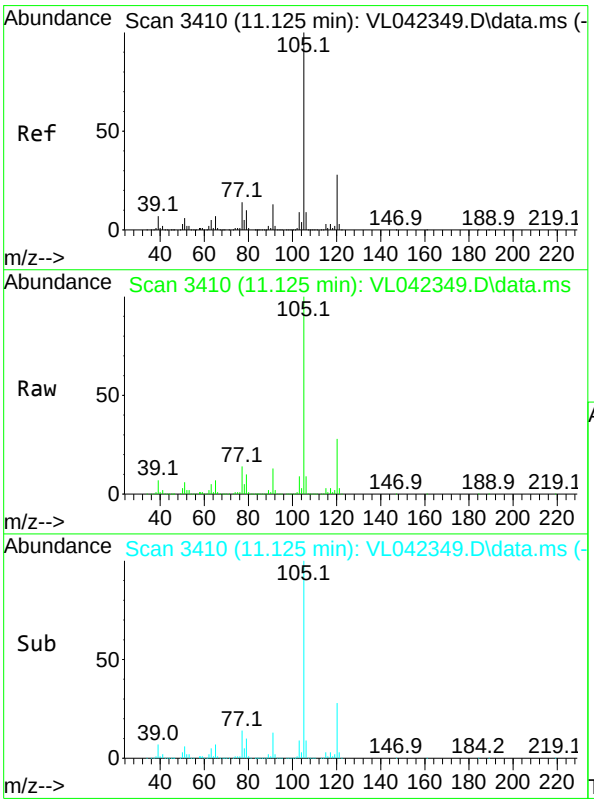
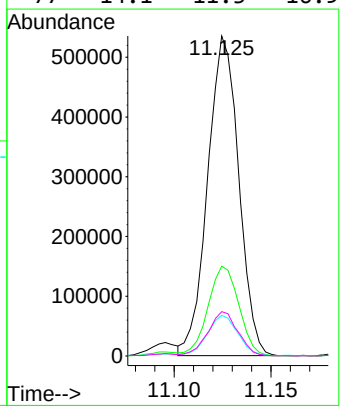
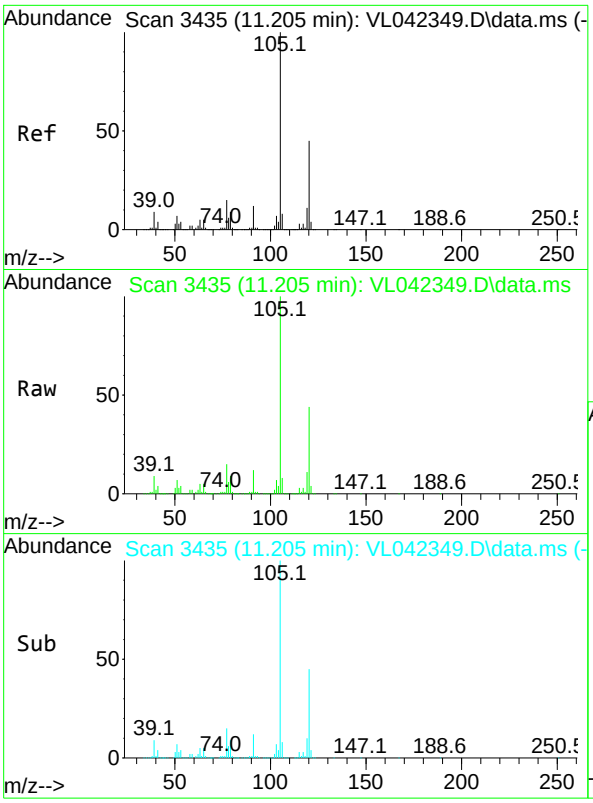


#72
4-Ethyltoluene
Concen: 8.982 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 596757

Ion	Ratio	Lower	Upper
105	100		
120	29.0	23.2	34.8
91	13.0	10.4	15.6
77	14.1	11.3	16.9

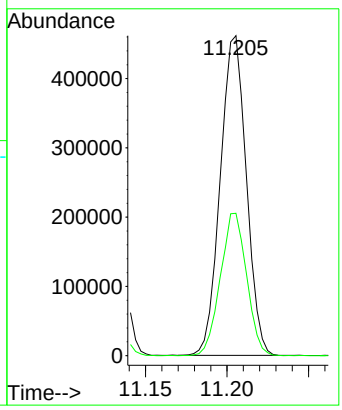




#73
1,3,5-Trimethylbenzene
Concen: 8.743 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 51285

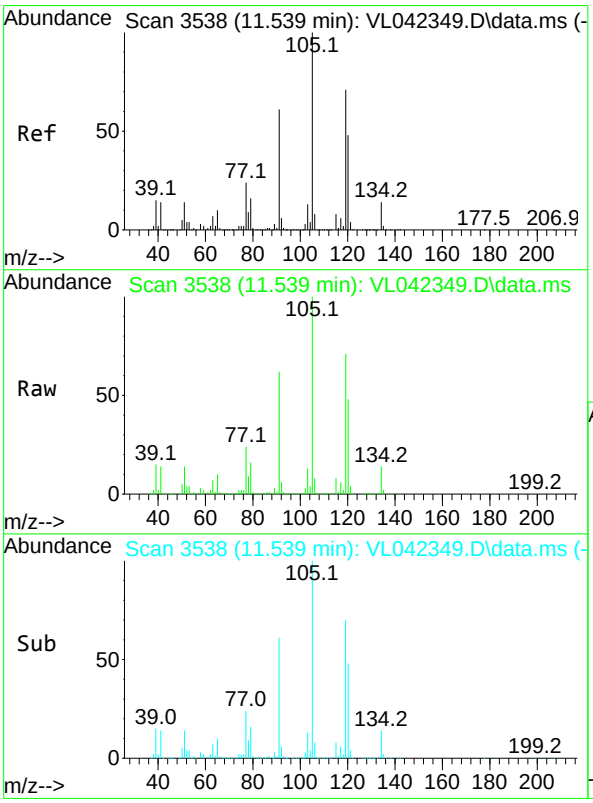
Ion	Ratio	Lower	Upper
105	100		
120	44.5	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

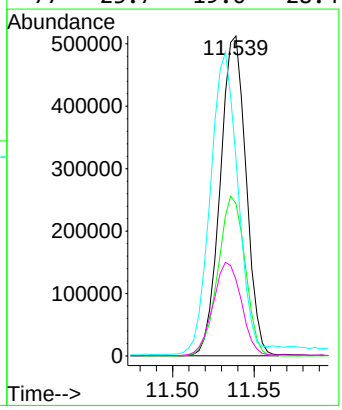
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

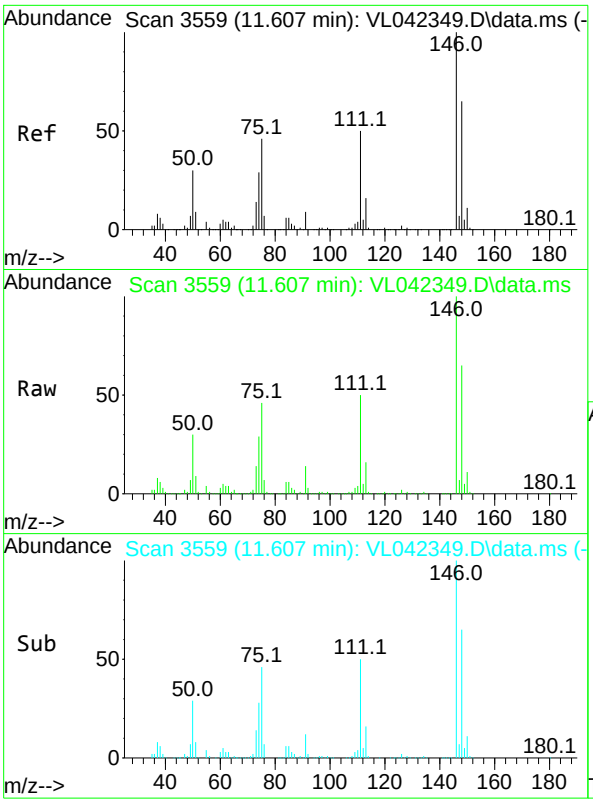


#74
1,2,4-Trimethylbenzene
Concen: 8.248 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 565064

Ion	Ratio	Lower	Upper
105	100		
120	47.6	38.1	57.1
91	61.0	48.8	73.2
77	23.7	19.0	28.4

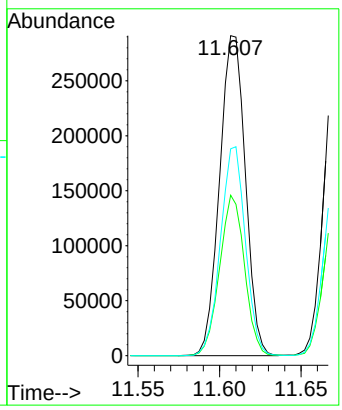




#75
1,3-Dichlorobenzene
Concen: 8.997 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:146 Resp: 32038

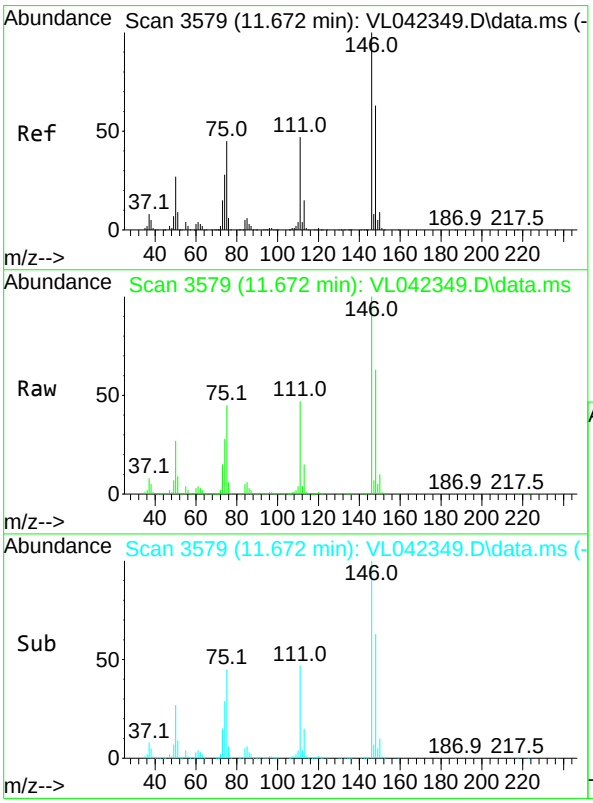
Ion	Ratio	Lower	Upper
146	100		
111	48.5	24.3	72.8
148	63.2	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

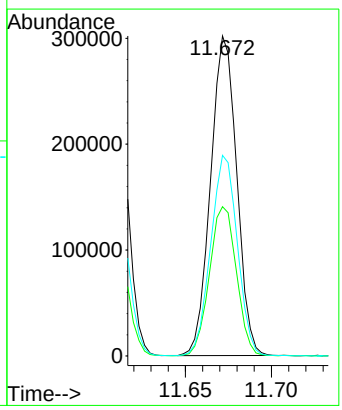
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

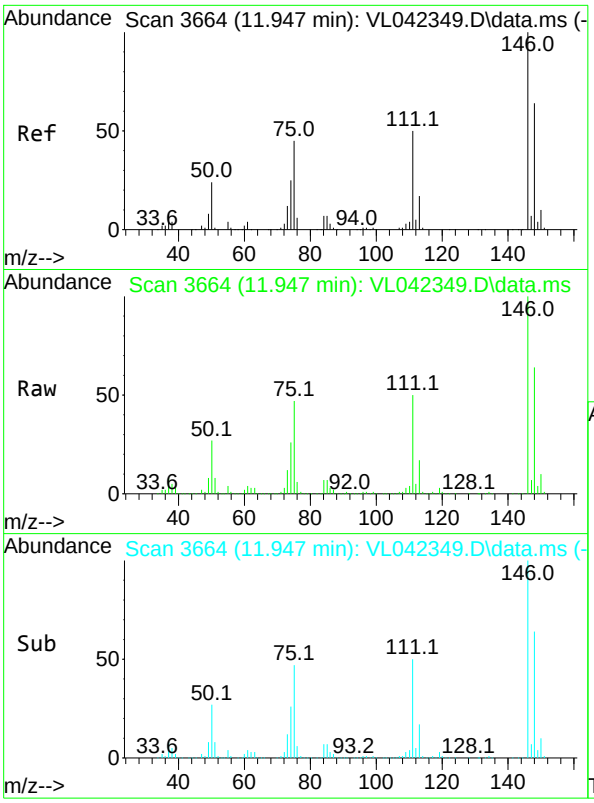


#76
1,4-Dichlorobenzene
Concen: 8.915 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:146 Resp: 319089

Ion	Ratio	Lower	Upper
146	100		
111	48.4	24.2	72.6
148	64.3	32.1	96.5

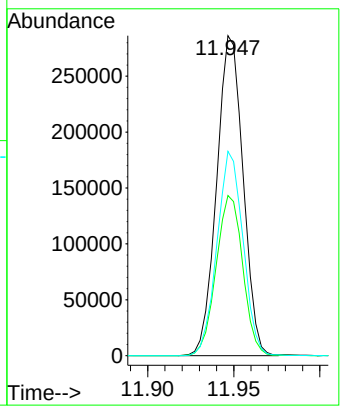




#77
1,2-Dichlorobenzene
Concen: 8.832 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:146 Resp: 30582

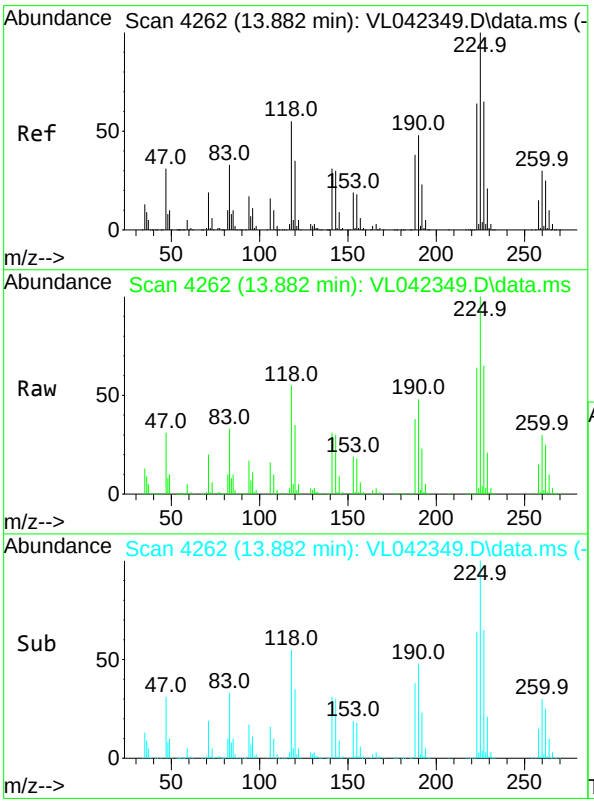
Ion	Ratio	Lower	Upper
146	100		
111	50.6	25.3	75.9
148	63.0	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

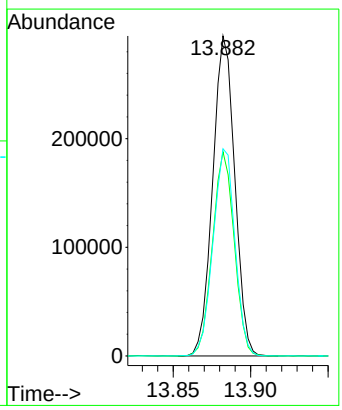
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

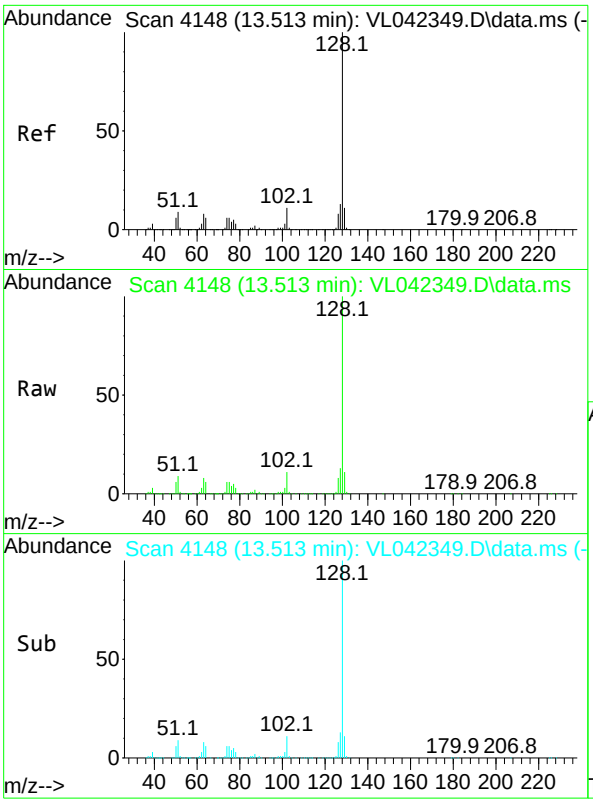


#78
Hexachloro-1,3-Butadiene
Concen: 8.346 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:225 Resp: 291833

Ion	Ratio	Lower	Upper
225	100		
223	62.9	50.3	75.5
227	64.4	51.5	77.3

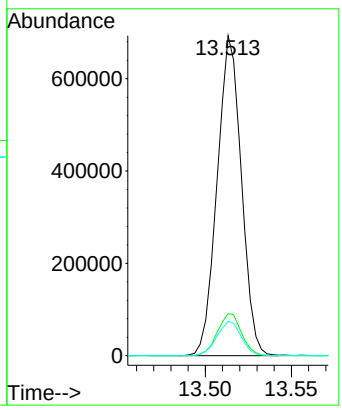




#79
Naphthalene
Concen: 8.271 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:128 Resp: 67757

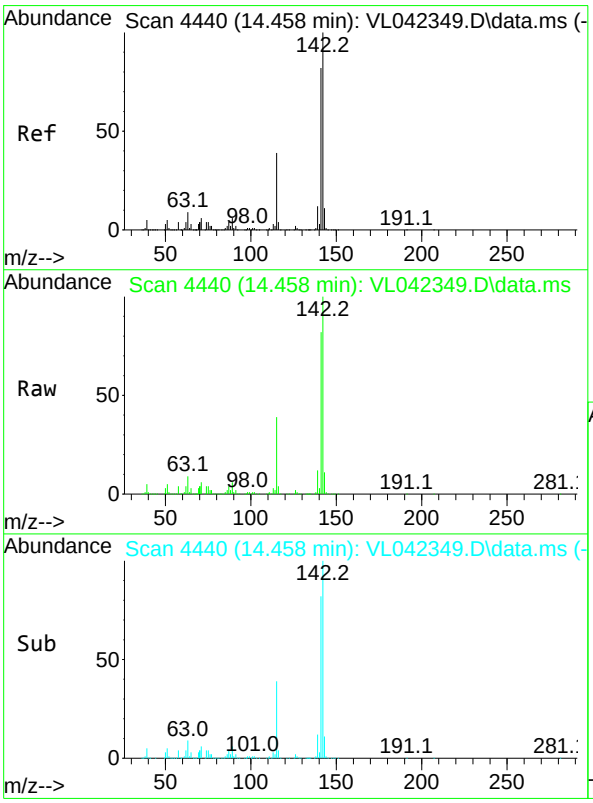
Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	10.7	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

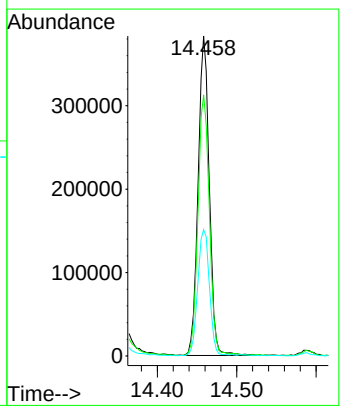
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

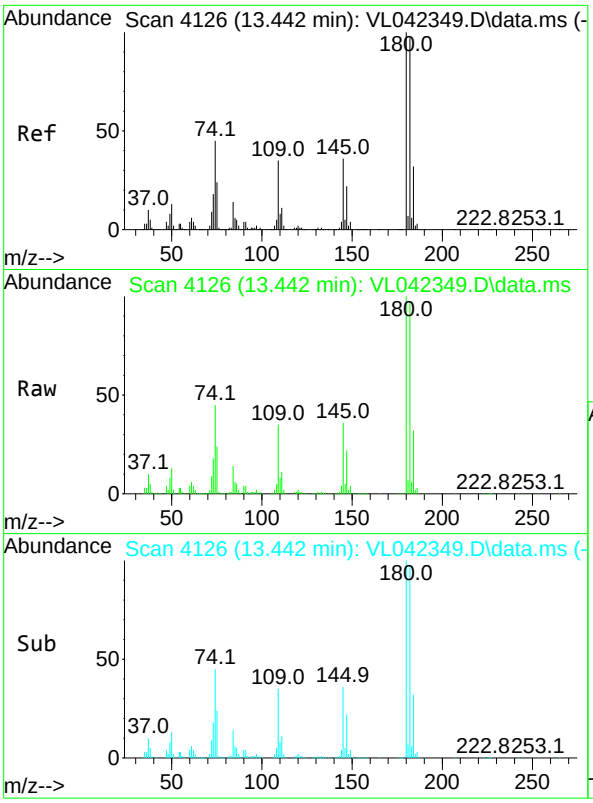


#80
Naphthalene,2-methyl-
Concen: 8.074 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:142 Resp: 376995

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.8	100.2
115	41.8	33.4	50.2

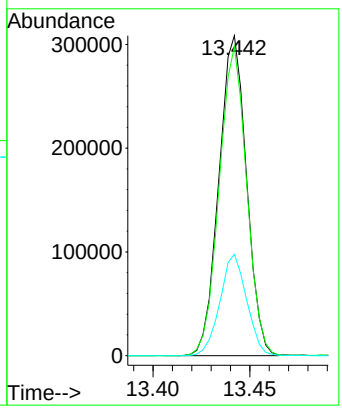




#81
1,2,4-Trichlorobenzene
Concen: 8.702 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:180 Resp: 30611

Ion	Ratio	Lower	Upper
180	100		
182	96.0	76.8	115.2
184	30.7	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	123206	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	355918	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	335603	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	275715	9.998	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	45008	2.068	ppbv		95
3) Chlorodifluoromethane	1.476	51	41853	2.019	ppbv		97
4) Chloromethane	1.534	50	17272	2.005	ppbv		93
5) Vinyl Chloride	1.580	62	16979	1.811	ppbv		92
6) Bromomethane	1.667	94	7398	1.821	ppbv	#	80
7) Chloroethane	1.706	64	6889	2.031	ppbv		98
8) Dichlorotetrafluoroethane	1.554	85	38955	2.084	ppbv		98
9) Propene	1.483	41	18671	1.978	ppbv		97
10) Heptane	4.978	43	54438m	2.143	ppbv		
11) Trichlorofluoromethane	1.877	101	43035	2.079	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	35415	2.092	ppbv		100
13) Ethanol	1.722	45	3034m	3.933	ppbv		
14) Bromoethene	1.780	108	13049	2.045	ppbv	#	92
15) Acetone	1.835	43	42949	2.129	ppbv		93
16) 1,3-Butadiene	1.609	39	18110	1.912	ppbv		96
17) tert-Butyl alcohol	2.042	59	51829	2.074	ppbv	#	94
18) 1,1-Dichloroethene	2.036	96	15690	1.928	ppbv		87
19) Isopropyl Alcohol	1.887	45	22106	1.973	ppbv	#	38
20) Methylene Chloride	2.062	84	14329	1.814	ppbv	#	82
21) Allyl Chloride	2.098	41	27340	1.963	ppbv		95
22) trans-1,2-Dichloroethene	2.340	96	18142	2.015	ppbv		97
23) Vinyl Acetate	2.463	43	18454	2.260	ppbv	#	91
24) 1,1-Dichloroethane	2.411	63	34077	1.993	ppbv		96
25) Ethyl Acetate	2.835	43	101467	2.040	ppbv		99
26) Hexane	2.826	57	40046	1.990	ppbv		99
27) Carbon Disulfide	2.149	76	43975	2.041	ppbv	#	64
28) Methyl tert-Butyl Ether	2.441	73	27905	2.116	ppbv		97
29) Chloroform	2.848	83	58946	2.072	ppbv		100
30) Cyclohexane	3.858	84	33195	2.048	ppbv		94
31) cis-1,2-Dichloroethene	2.722	61	39249	2.051	ppbv		98
32) 1,1,1-Trichloroethane	3.366	97	61442	2.014	ppbv		99
34) 2-Butanone	2.560	43	58249	2.069	ppbv		100
35) Carbon Tetrachloride	3.761	117	60291	1.872	ppbv		88
36) Benzene	3.658	78	79814	2.079	ppbv		98
37) 1,2-Dichloroethane	3.217	62	47398	2.057	ppbv		100
38) Trichloroethene	4.544	130	31826m	1.891	ppbv		
39) 1,2-Dichloropropane	4.315	63	28806	2.012	ppbv		96
40) 1,4-Dioxane	4.593	88	16536m	2.133	ppbv		
41) Tetrahydrofuran	3.059	42	33298	2.047	ppbv		98
42) Bromodichloromethane	4.489	83	64941	2.025	ppbv		97
43) Methyl Methacrylate	4.881	69	35256	2.046	ppbv		97
44) 2,2,4-Trimethylpentane	4.645	57	139641	2.103	ppbv		99
45) t-1,3-Dichloropropene	6.415	75	36265	2.050	ppbv		94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	45327m	2.096	ppbv	
47) 1,1,2-Trichloroethane	6.590	97	29879	2.049	ppbv	88
48) Dibromochloromethane	7.389	129	53069	2.061	ppbv	100
49) Bromoform	9.483	173	48069	2.135	ppbv	97
50) 4-Methyl-2-Pentanone	5.758	43	102182	2.180	ppbv	99
51) 2-Hexanone	7.441	43	100443	2.375	ppbv	98
52) Tetrachloroethene	8.228	164	27854	1.877	ppbv	96
53) Toluene	6.933	91	97493	2.116	ppbv	98
54) 1,2-Dibromoethane	7.655	107	43153	2.076	ppbv	87
56) 1,1,1,2-Tetrachloroethane	8.924	131	42601	2.097	ppbv	95
57) Chlorobenzene	8.924	112	71685	2.054	ppbv	98
58) Ethyl Benzene	9.357	91	138810	2.088	ppbv	98
59) m/p-Xylene	9.532	91	222542m	4.142	ppbv	
60) o-Xylene	9.963	91	111972	2.076	ppbv	98
61) Styrene	9.872	104	54229	2.106	ppbv	98
62) Isopropylbenzene	10.539	105	163716	2.067	ppbv	100
63) 1,1,2,2-Tetrachloroethane	9.963	83	64952	1.853	ppbv	99
64) n-propylbenzene	10.989	120	40956	2.058	ppbv	96
65) tert-Butylbenzene	11.532	119	155401	2.135	ppbv	92
66) Benzyl Chloride	11.616	91	17300	2.163	ppbv	98
67) sec-Butylbenzene	11.769	105	218327	2.156	ppbv	100
69) p-Isopropyltoluene	11.927	119	188657	2.145	ppbv	99
70) n-Butylbenzene	12.283	91	198221	2.164	ppbv	99
71) 2-Chlorotoluene	10.901	91	128858	2.075	ppbv	98
72) 4-Ethyltoluene	11.124	105	137872	2.091	ppbv	97
73) 1,3,5-Trimethylbenzene	11.205	105	123580	2.123	ppbv	98
74) 1,2,4-Trimethylbenzene	11.539	105	145510	2.140	ppbv	92
75) 1,3-Dichlorobenzene	11.607	146	75082	2.124	ppbv	98
76) 1,4-Dichlorobenzene	11.671	146	75323	2.120	ppbv	99
77) 1,2-Dichlorobenzene	11.947	146	74786	2.176	ppbv	98
78) Hexachloro-1,3-Butadiene	13.882	225	76158	2.194	ppbv	100
79) Naphthalene	13.513	128	195233	2.401	ppbv	99
80) Naphthalene,2-methyl-	14.458	142	119262	2.574	ppbv	99
81) 1,2,4-Trichlorobenzene	13.442	180	82156	2.353	ppbv	99

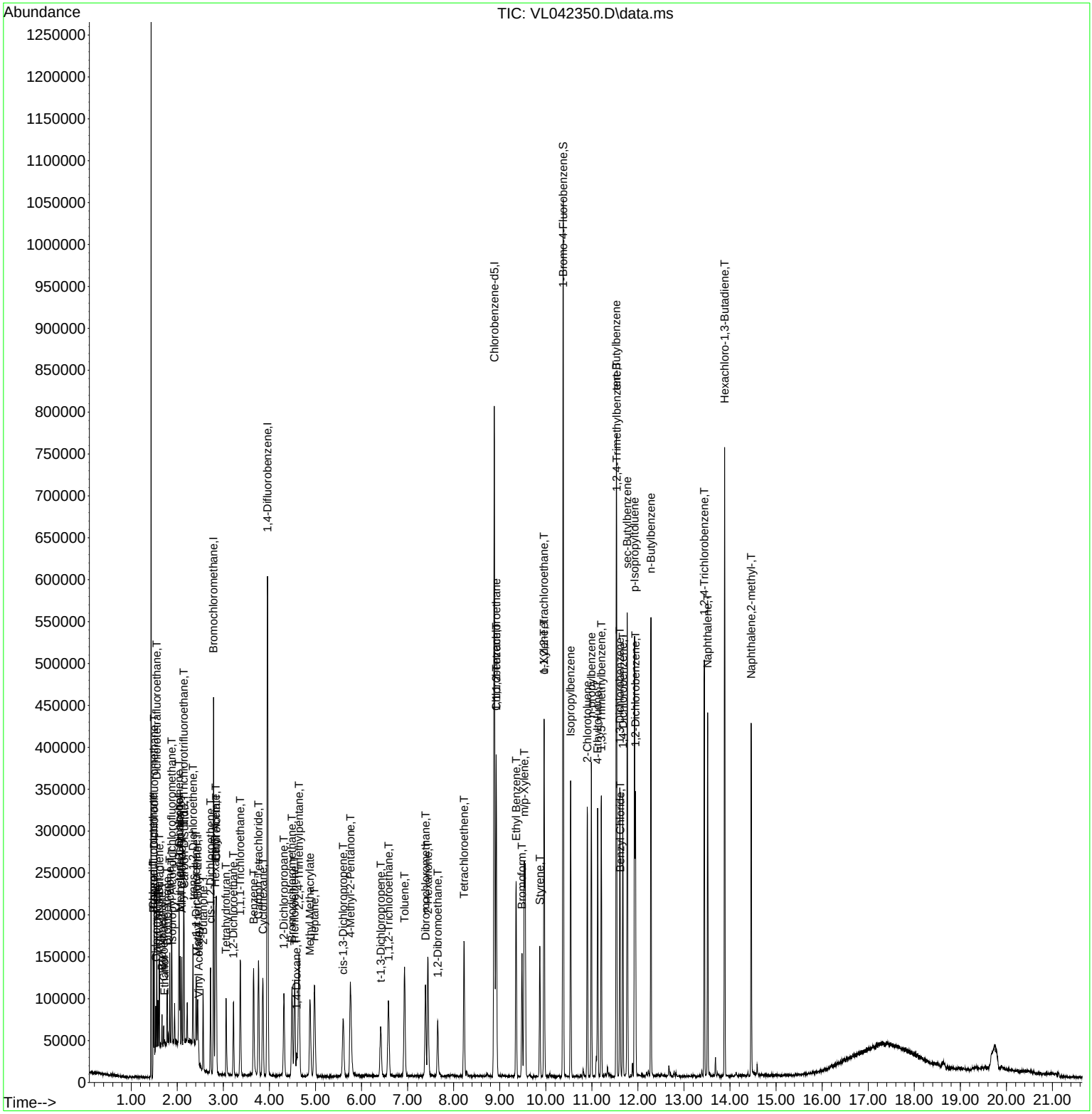
(#) = qualifier out of range (m) = manual integration (+) = signals summed

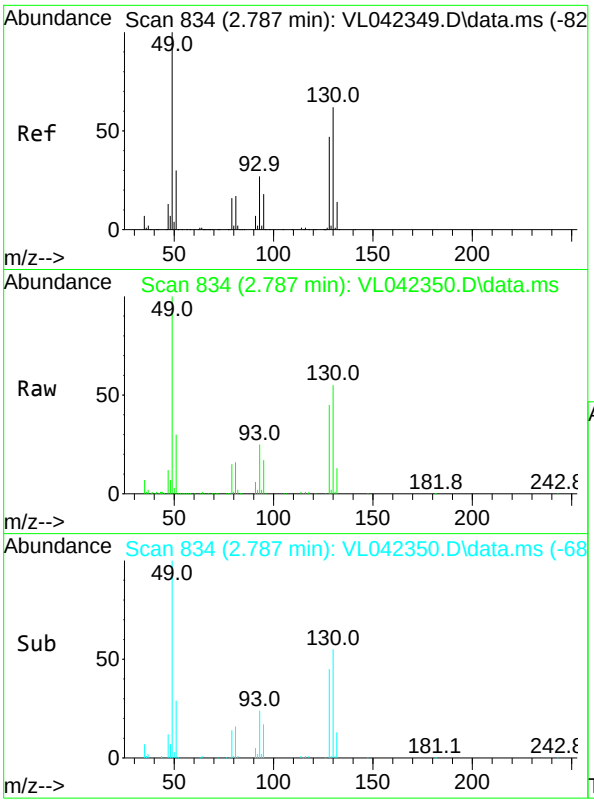
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

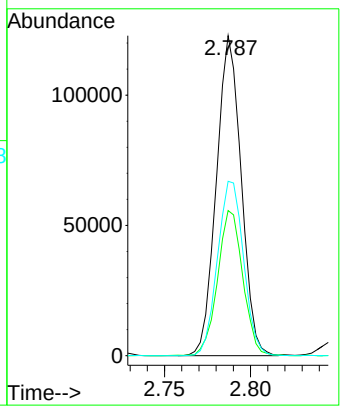




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 49 Resp: 12320

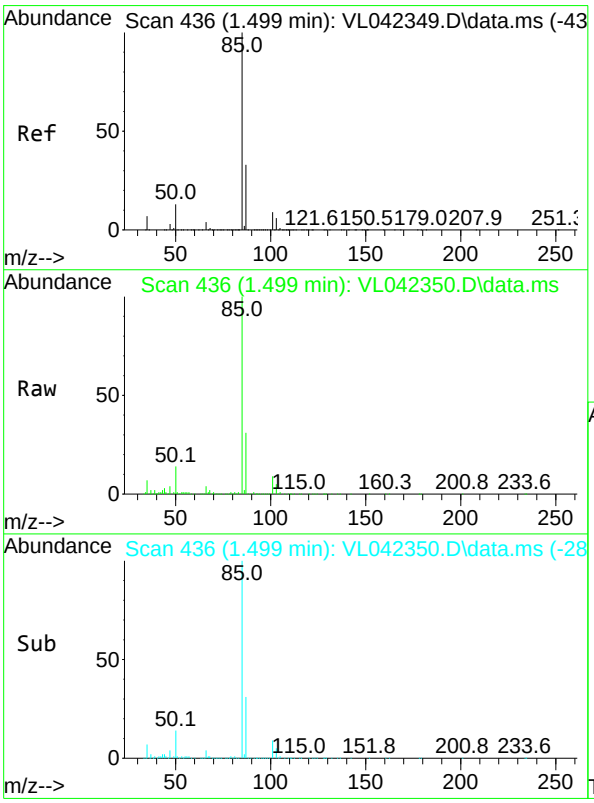
Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.8	68.4
130	57.3	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

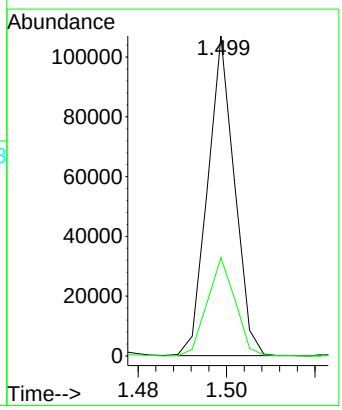
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

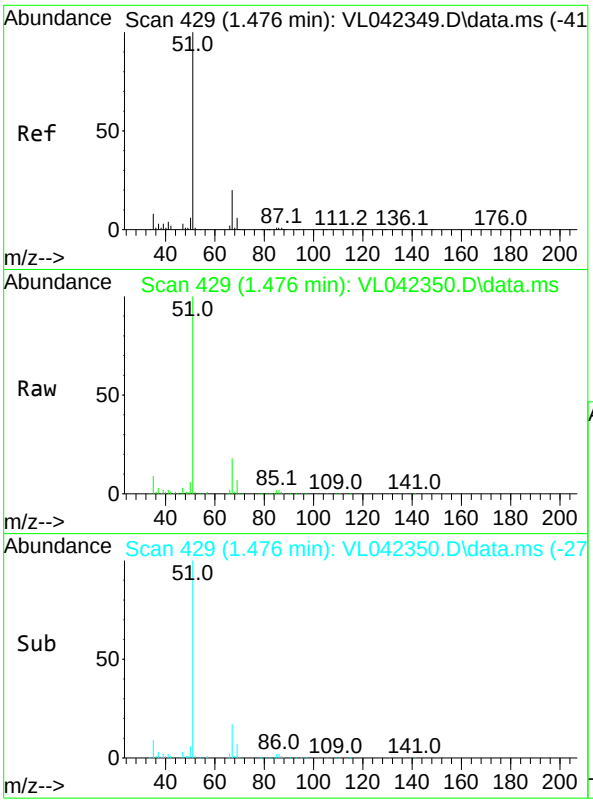


#2
Dichlorodifluoromethane
Concen: 2.068 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 85 Resp: 45008

Ion	Ratio	Lower	Upper
85	100		
87	30.6	26.6	39.8

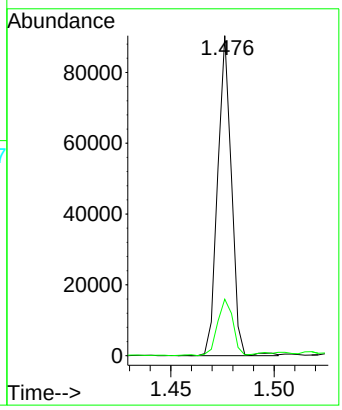




#3
Chlorodifluoromethane
Concen: 2.019 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 51 Resp: 4185

Ion	Ratio	Lower	Upper
51	100		
67	21.7	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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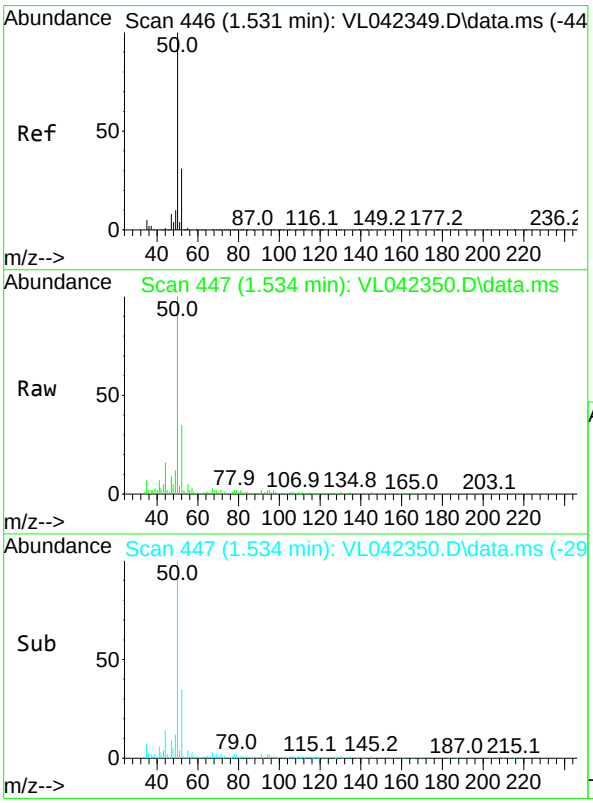
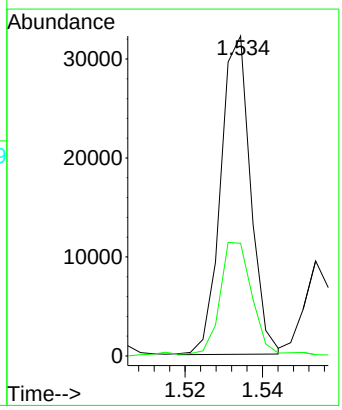
Supervised By :Mahesh Dadoda 04/18/2025

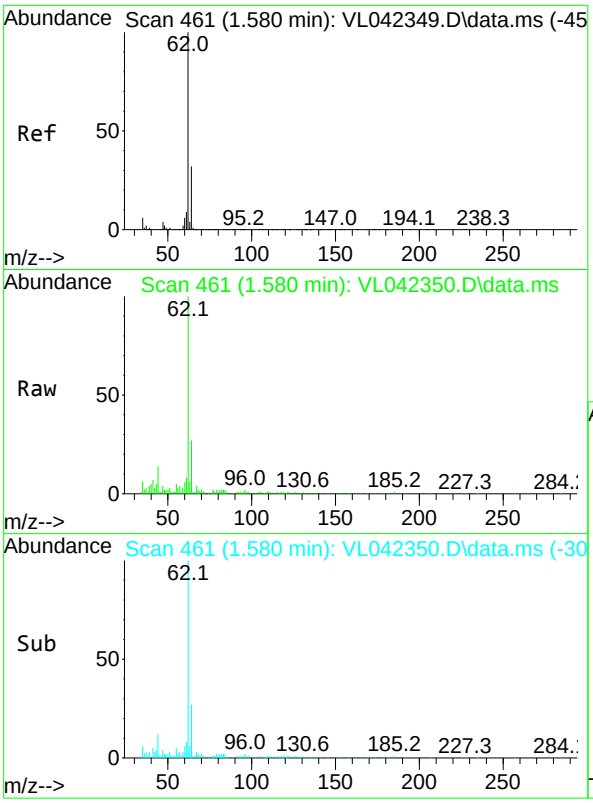


#4
Chloromethane
Concen: 2.005 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 50 Resp: 17272

Ion	Ratio	Lower	Upper
50	100		
52	34.9	24.7	37.1

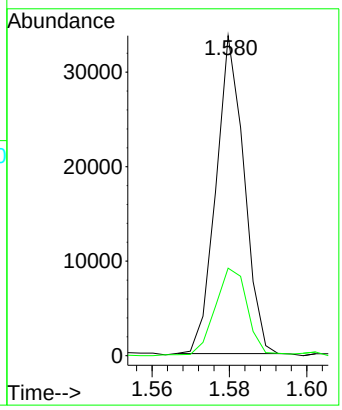




#5
Vinyl Chloride
Concen: 1.811 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 62 Resp: 1697

Ion	Ratio	Lower	Upper
62	100		
64	27.2	25.4	38.0



Instrument :
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ClientSampleId :
VSTDICC002

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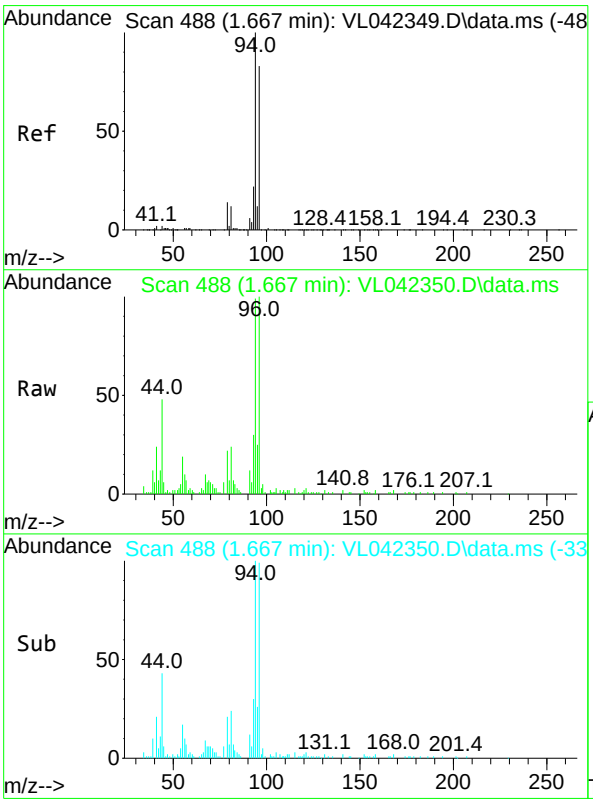
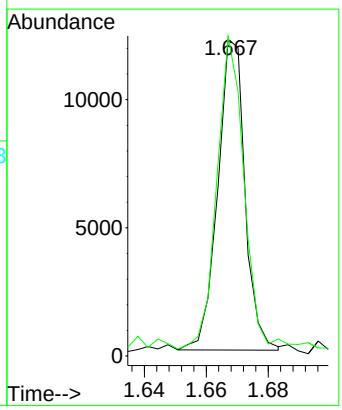
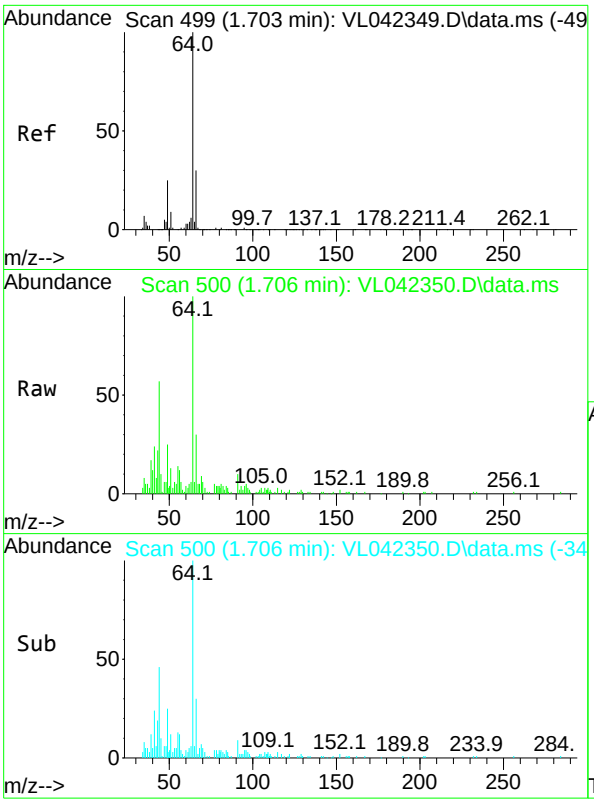


#6
Bromomethane
Concen: 1.821 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 94 Resp: 7398

Ion	Ratio	Lower	Upper
94	100		
96	100.8	66.2	99.2#

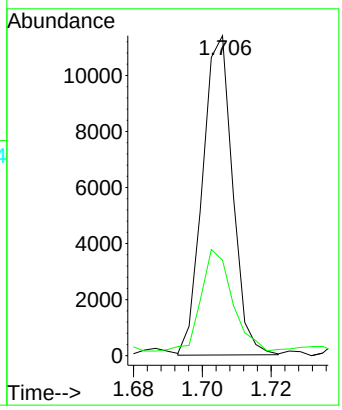




#7
Chloroethane
Concen: 2.031 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 64 Resp: 688

Ion	Ratio	Lower	Upper
64	100		
66	29.8	24.6	37.0



Instrument :
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ClientSampleId :
VSTDICC002

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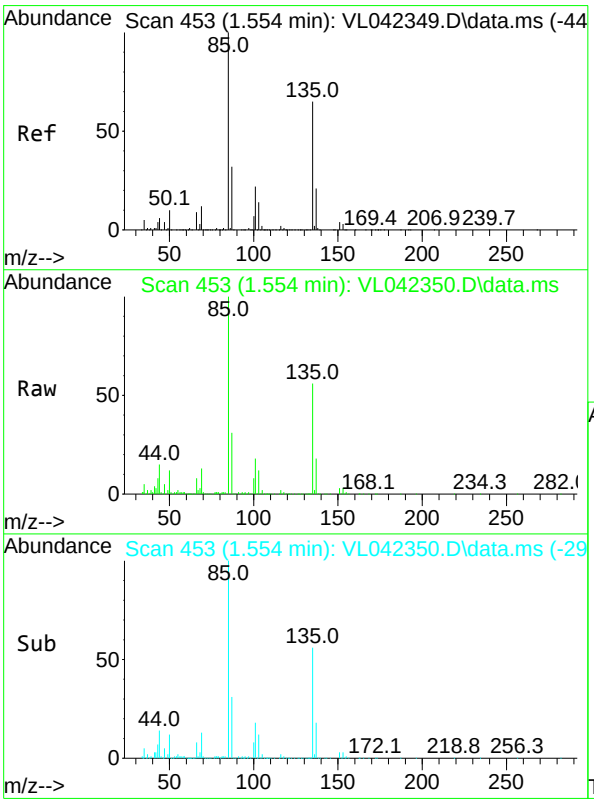
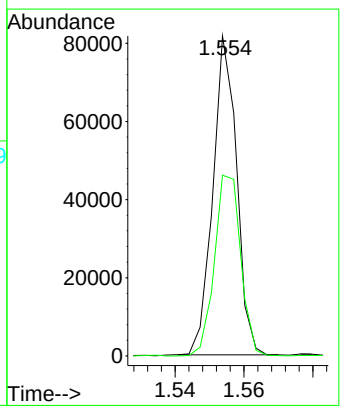
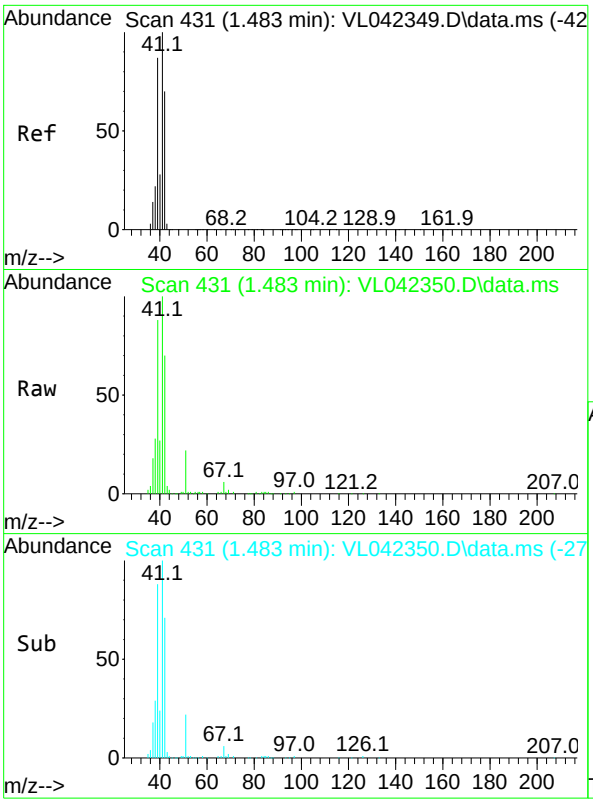


#8
Dichlorotetrafluoroethane
Concen: 2.084 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 85 Resp: 38955

Ion	Ratio	Lower	Upper
85	100		
135	63.3	52.2	78.2

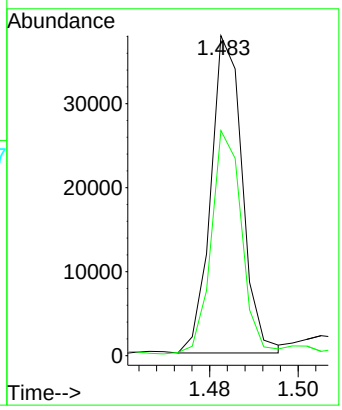




#9
Propene
Concen: 1.978 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 41 Resp: 1867

Ion	Ratio	Lower	Upper
41	100		
42	72.7	56.2	84.4



Instrument :
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ClientSampleId :
VSTDICC002

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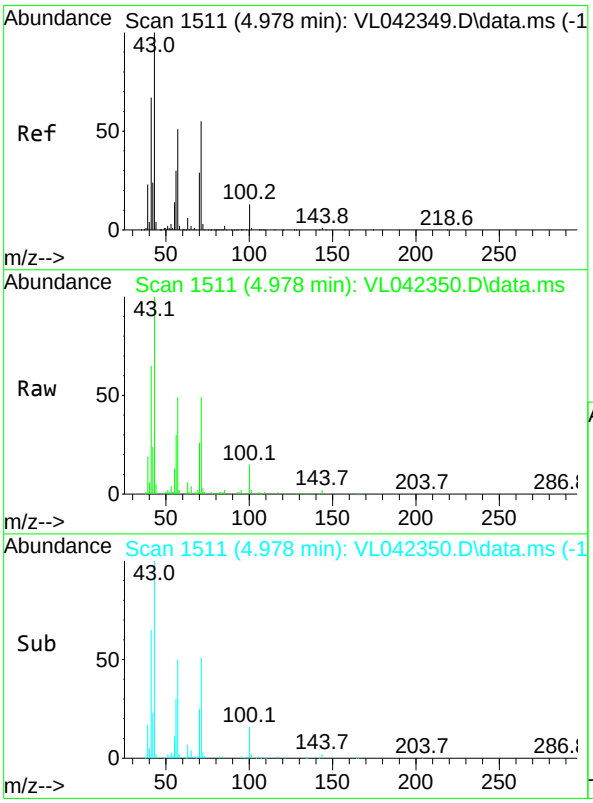
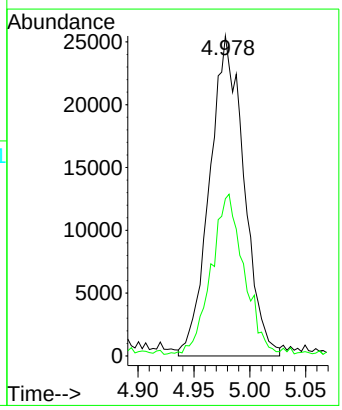
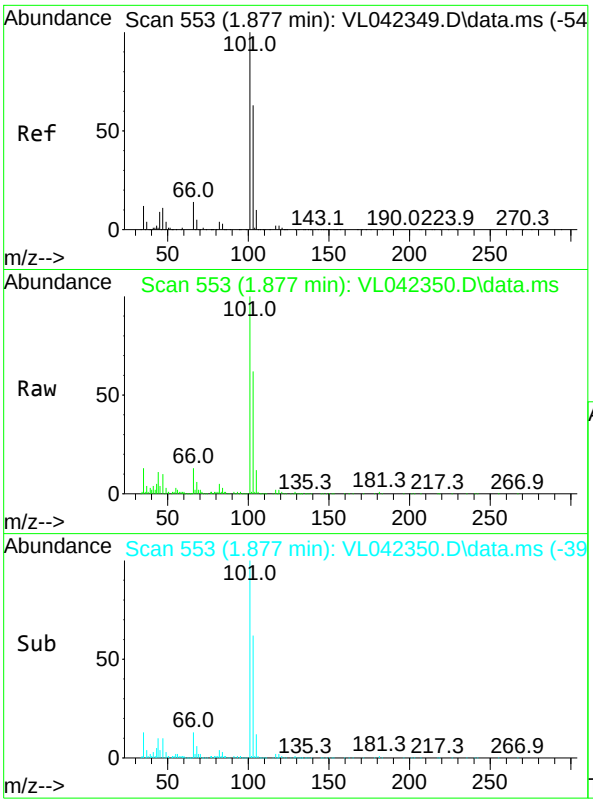


#10
Heptane
Concen: 2.143 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 54438

Ion	Ratio	Lower	Upper
43	100		
57	48.3	39.9	59.9

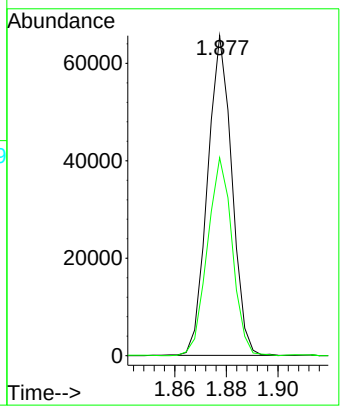




#11
Trichlorofluoromethane
Concen: 2.079 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:101 Resp: 4303

Ion	Ratio	Lower	Upper
101	100		
103	61.9	50.1	75.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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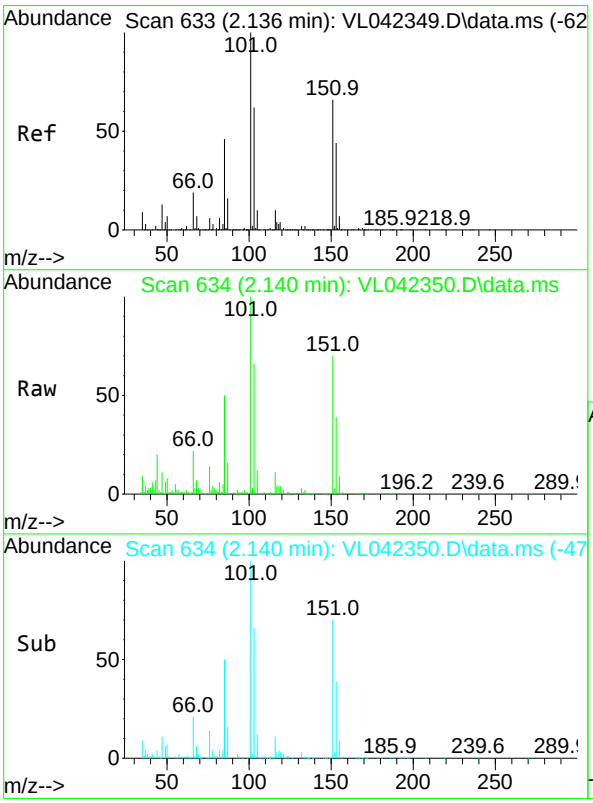
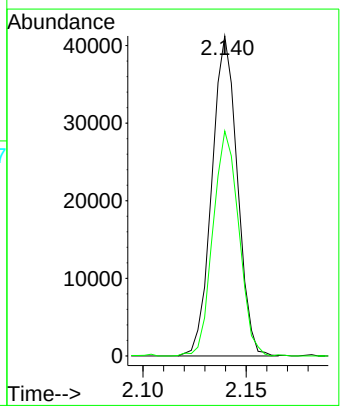
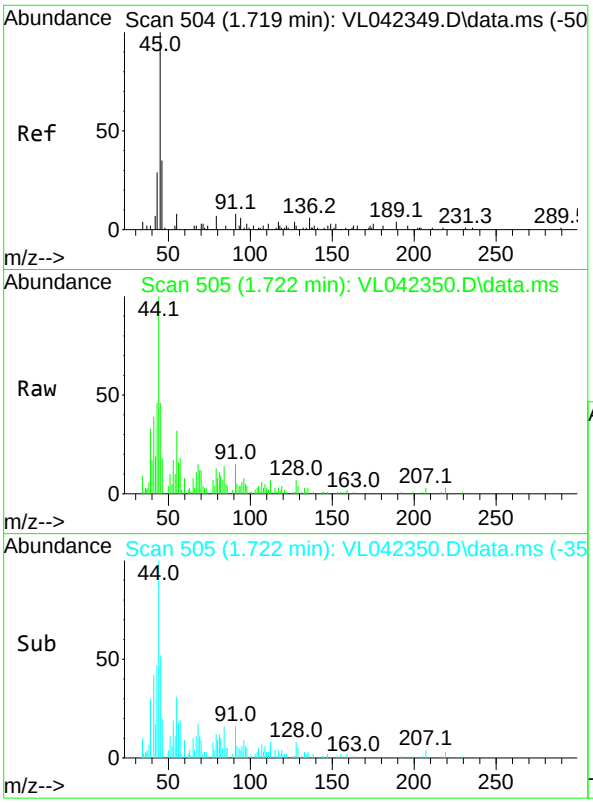


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.092 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:101 Resp: 35415

Ion	Ratio	Lower	Upper
101	100		
151	71.5	57.0	85.6

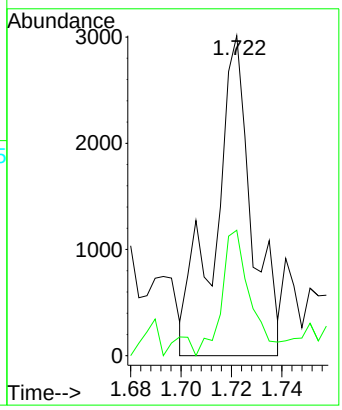




#13
Ethanol
Concen: 3.933 ppbv m
RT: 1.722 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 45 Resp: 303

Ion	Ratio	Lower	Upper
45	100		
46	39.3	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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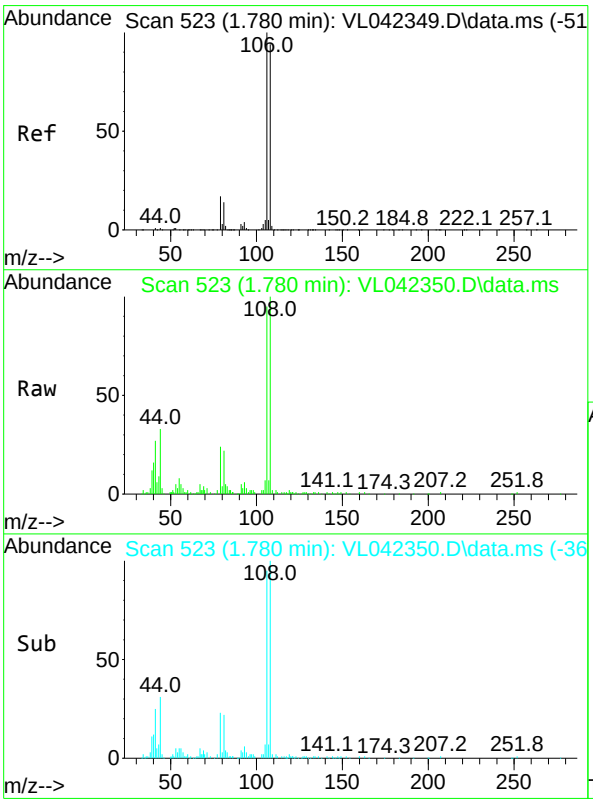
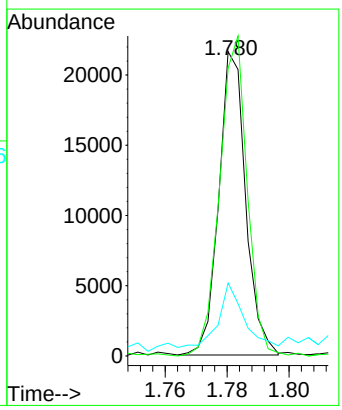
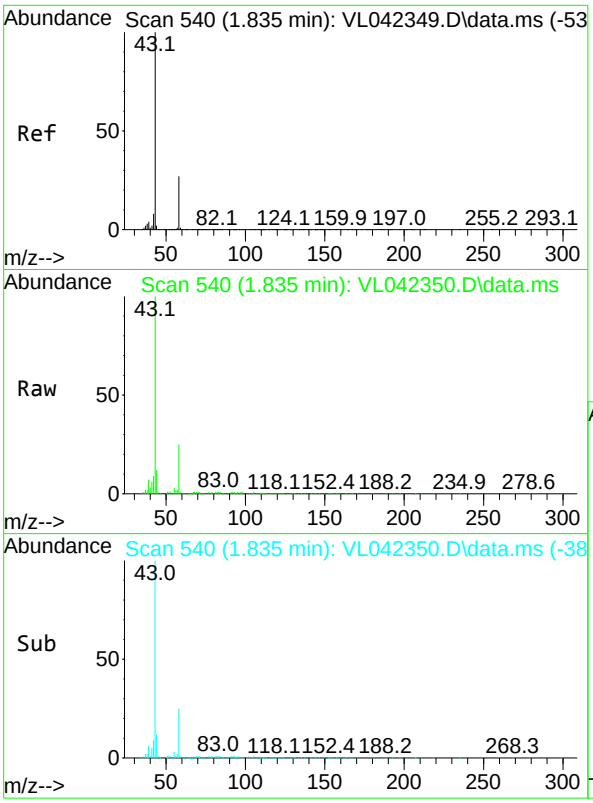


#14
Bromoethene
Concen: 2.045 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:108 Resp: 13049

Ion	Ratio	Lower	Upper
108	100		
106	110.2	85.9	128.9
79	34.0	13.9	20.9#

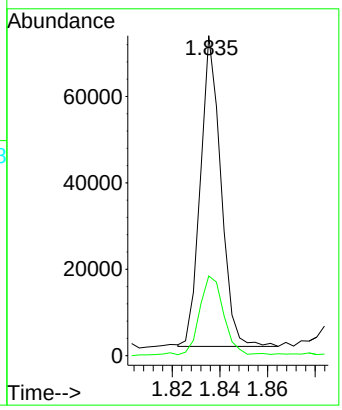




#15
Acetone
Concen: 2.129 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 4294

Ion	Ratio	Lower	Upper
43	100		
58	31.4	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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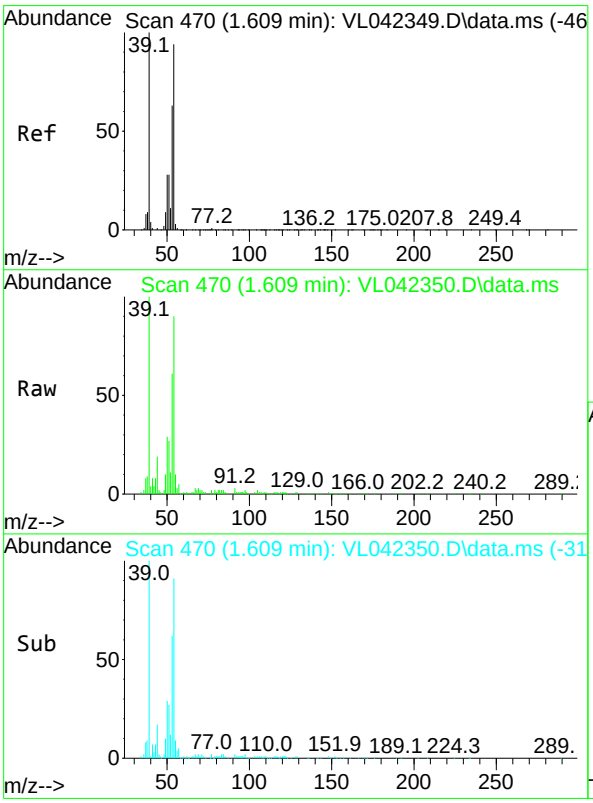
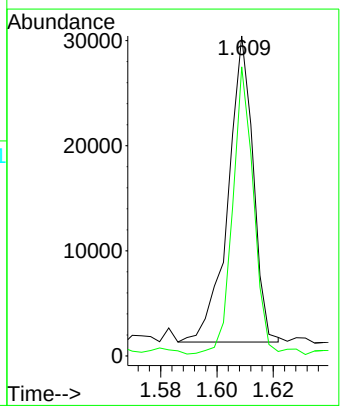
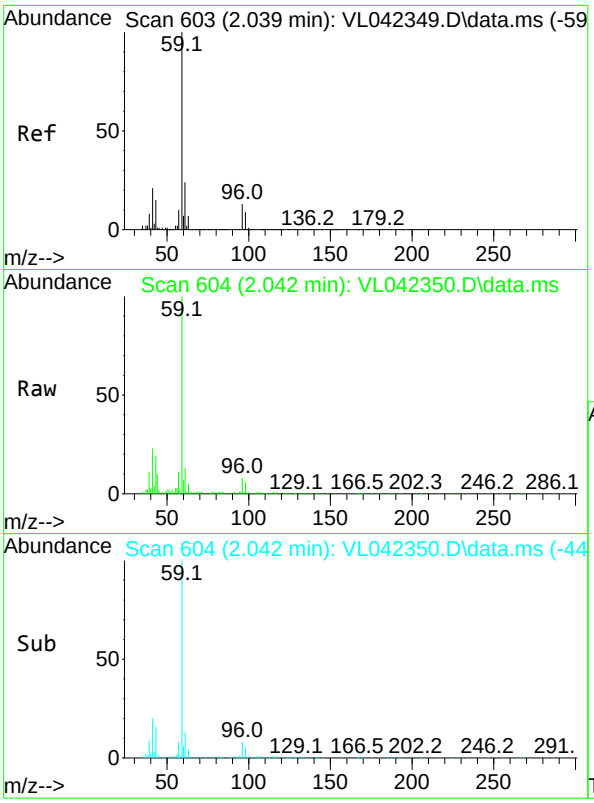


#16
1,3-Butadiene
Concen: 1.912 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 39 Resp: 18110

Ion	Ratio	Lower	Upper
39	100		
54	77.2	64.9	97.3

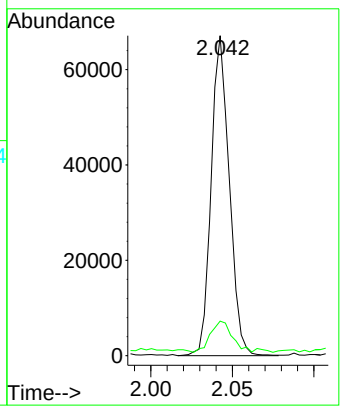




#17
tert-Butyl alcohol
Concen: 2.074 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 59 Resp: 5182

Ion	Ratio	Lower	Upper
59	100		
57	13.2	8.7	13.1



Instrument :
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ClientSampleId :
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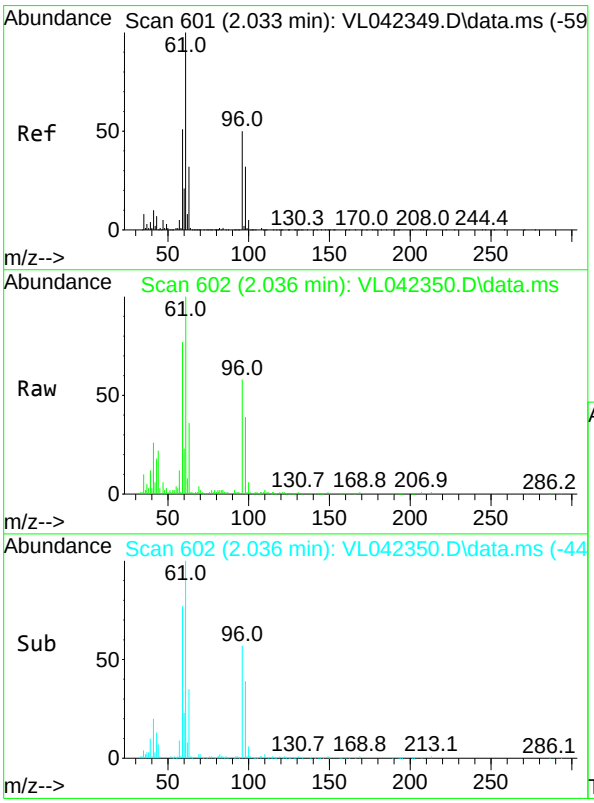
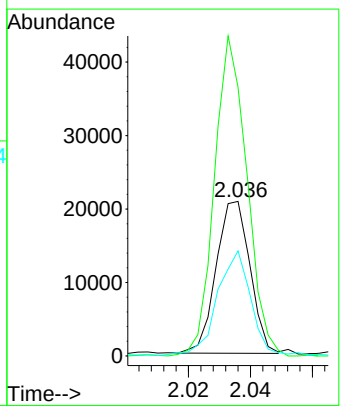
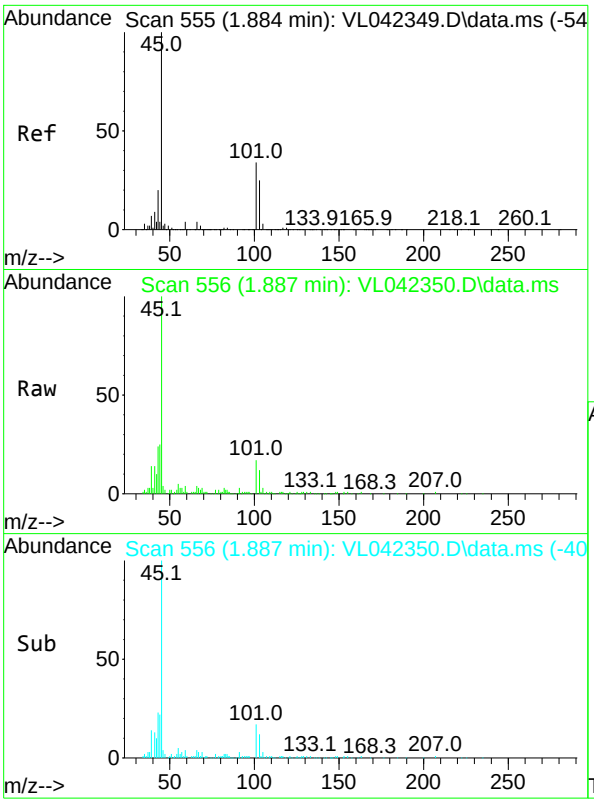


#18
1,1-Dichloroethene
Concen: 1.928 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 96 Resp: 15690

Ion	Ratio	Lower	Upper
96	100		
61	176.1	160.2	240.2
98	67.2	51.0	76.4





#19
Isopropyl Alcohol
Concen: 1.973 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 45 Resp: 2210

Ion	Ratio	Lower	Upper
45	100		
58	3.6	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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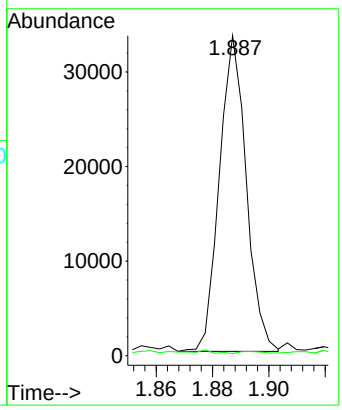
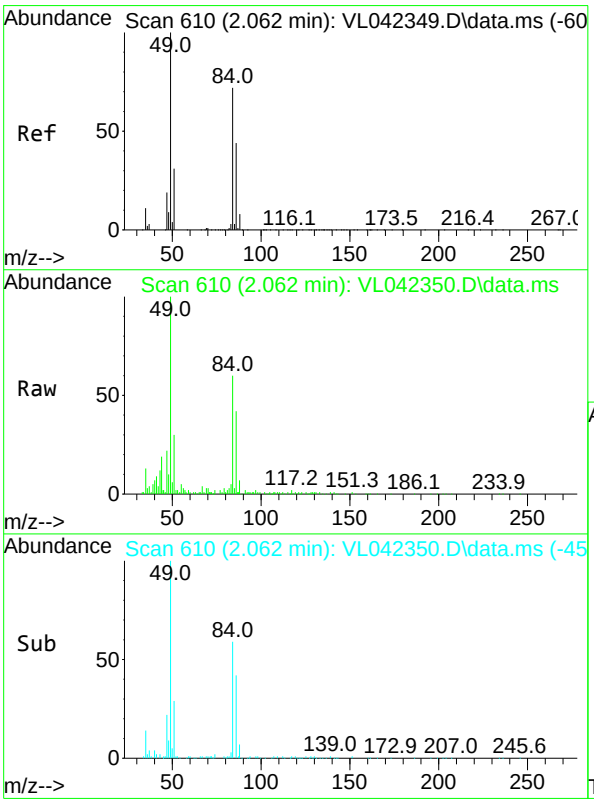
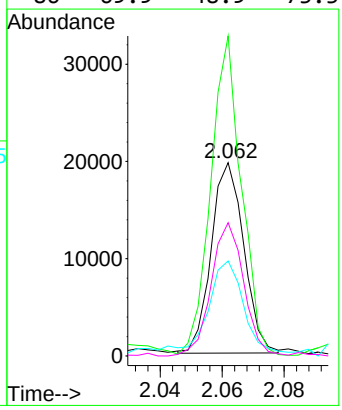


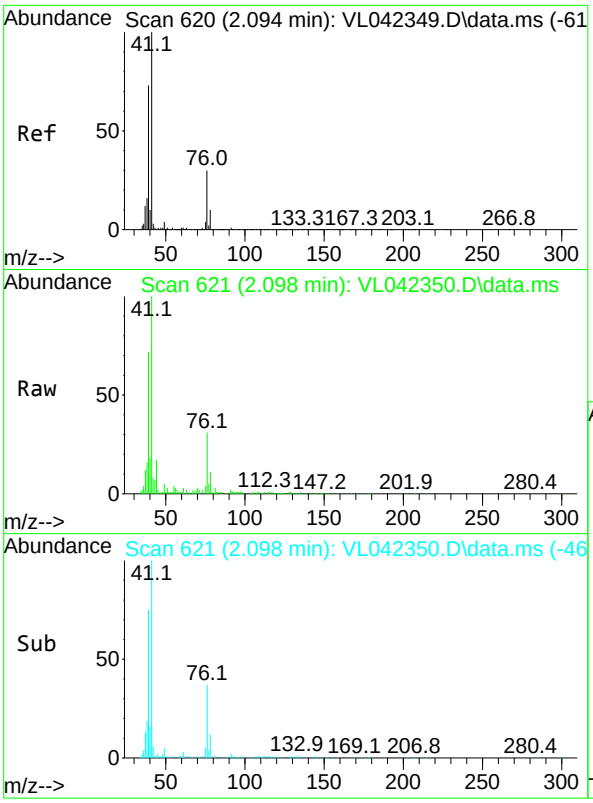


#20
Methylene Chloride
Concen: 1.814 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 84 Resp: 14329

Ion	Ratio	Lower	Upper
84	100		
49	169.1	111.6	167.4#
51	47.9	35.1	52.7
86	69.9	48.9	73.3

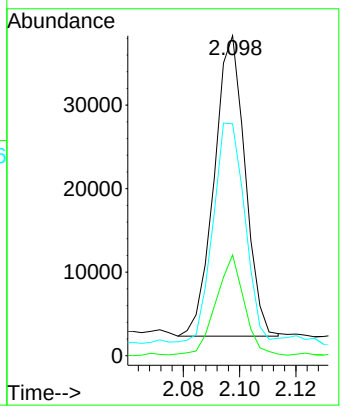




#21
Allyl Chloride
Concen: 1.963 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 41 Resp: 2734

Ion	Ratio	Lower	Upper
41	100		
76	31.9	24.8	37.2
39	81.2	60.6	90.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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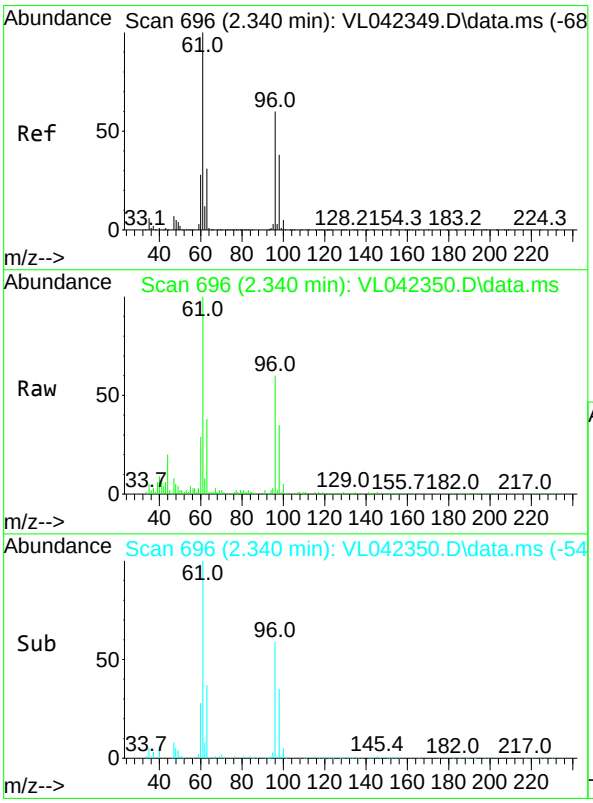
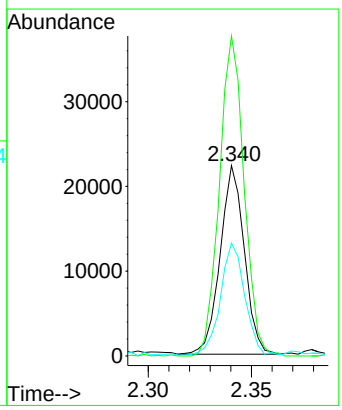
Supervised By :Mahesh Dadoda 04/18/2025

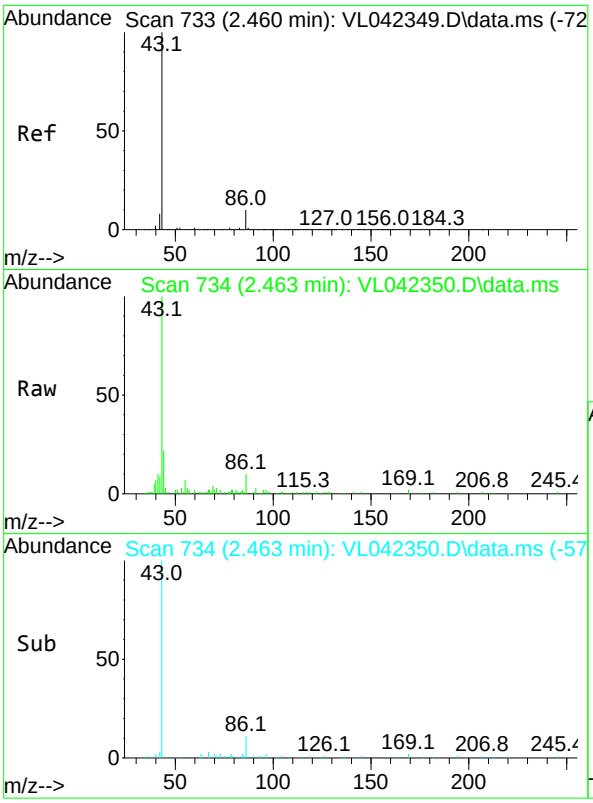


#22
trans-1,2-Dichloroethene
Concen: 2.015 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 96 Resp: 18142

Ion	Ratio	Lower	Upper
96	100		
61	169.6	133.7	200.5
98	59.3	50.3	75.5

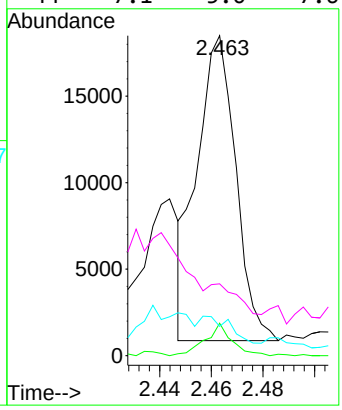




#23
Vinyl Acetate
Concen: 2.260 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 1845

Ion	Ratio	Lower	Upper
43	100		
86	10.2	6.5	9.7#
42	3.7	7.8	11.8#
44	7.1	5.0	7.6



Instrument :
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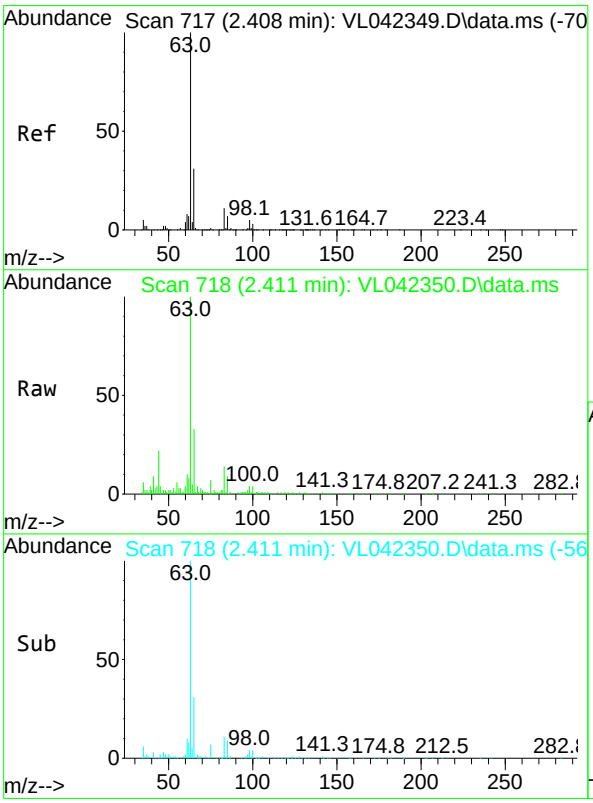
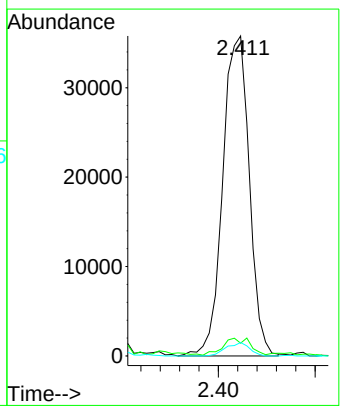
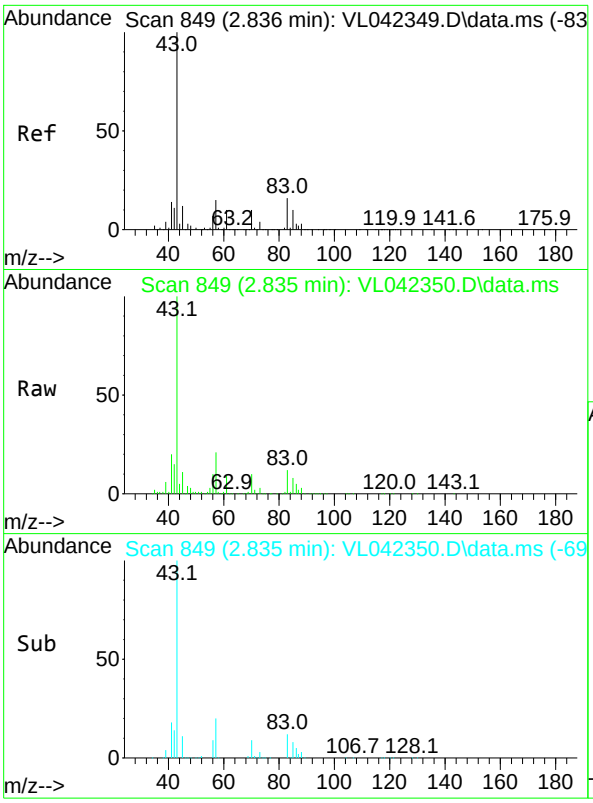


#24
1,1-Dichloroethane
Concen: 1.993 ppbv
RT: 2.411 min Scan# 718
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 63 Resp: 34077

Ion	Ratio	Lower	Upper
63	100		
98	3.1	2.3	6.8
100	4.2	1.6	4.8

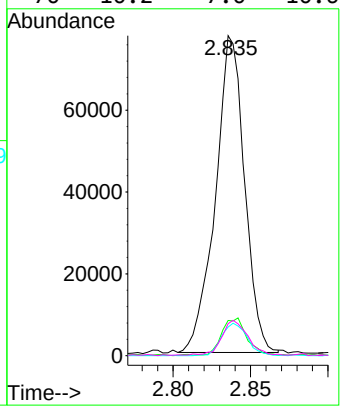




#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 10146

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.2	7.3	10.9
70	10.2	7.0	10.6



Instrument :
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ClientSampleId :
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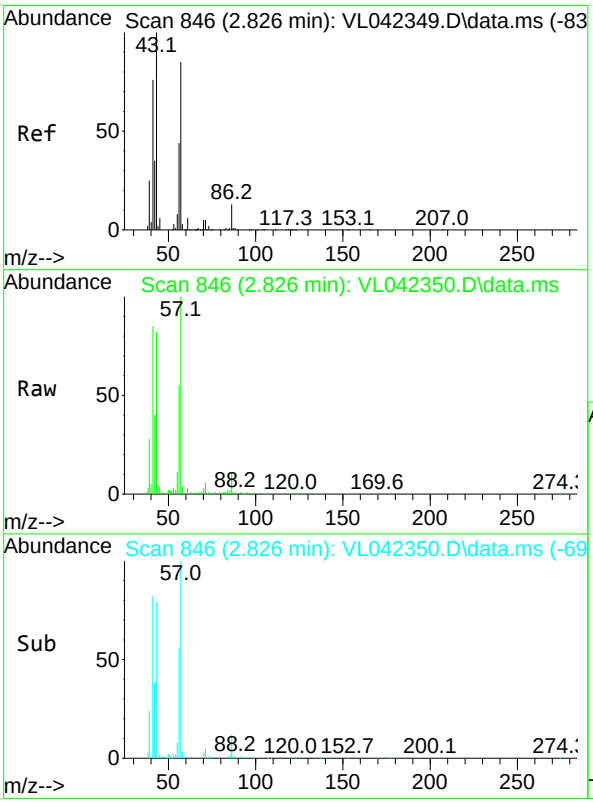
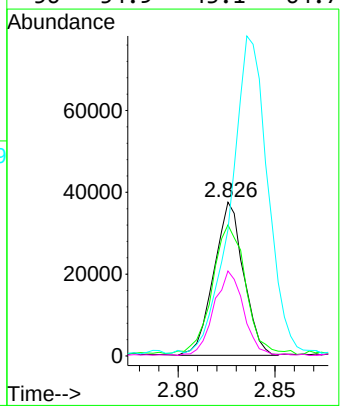
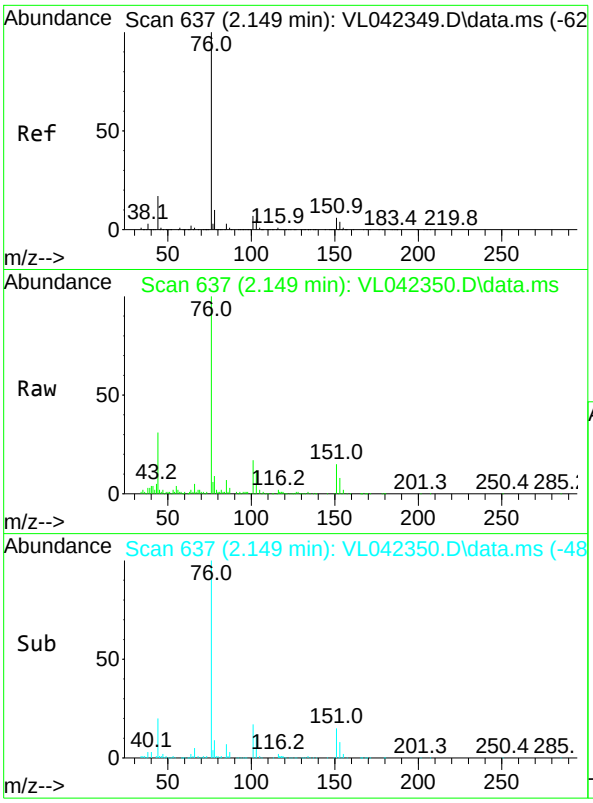


#26
Hexane
Concen: 1.990 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 57 Resp: 40046

Ion	Ratio	Lower	Upper
57	100		
41	94.1	77.9	116.9
43	260.7	208.4	312.6
56	54.9	43.1	64.7

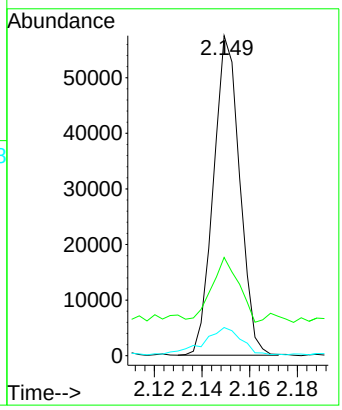




#27
Carbon Disulfide
Concen: 2.041 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 76 Resp: 4397

Ion	Ratio	Lower	Upper
76	100		
44	44.3	15.5	23.3#
78	13.6	9.3	13.9



Instrument :
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ClientSampleId :
VSTDICC002

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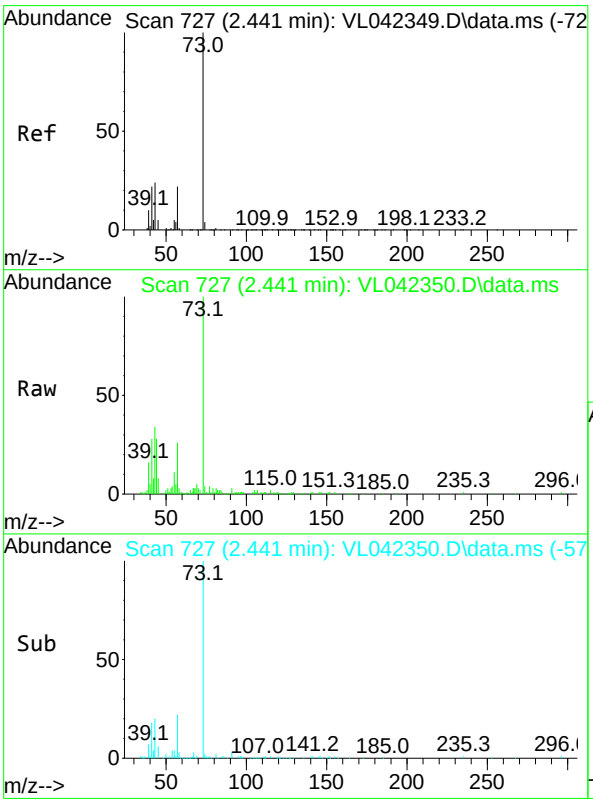
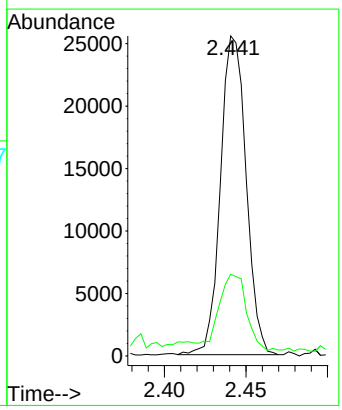
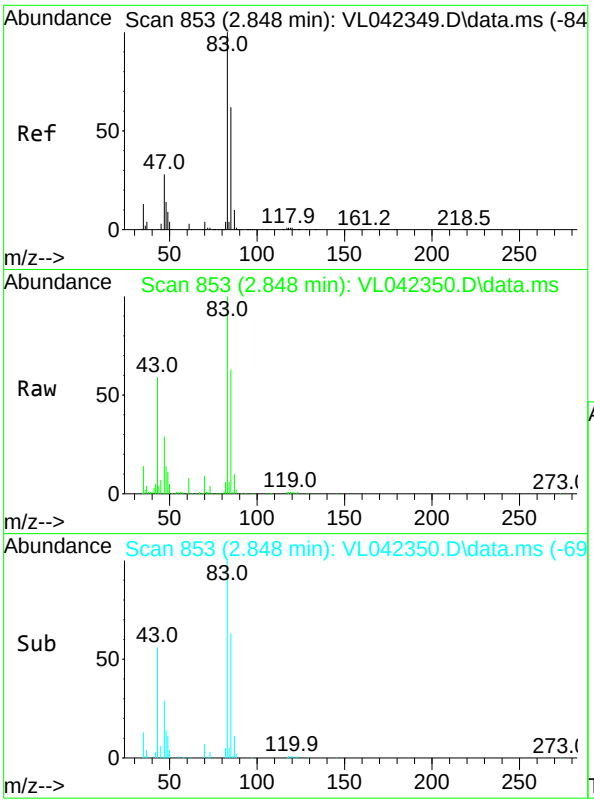


#28
Methyl tert-Butyl Ether
Concen: 2.116 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 73 Resp: 27905

Ion	Ratio	Lower	Upper
73	100		
57	28.1	21.3	31.9

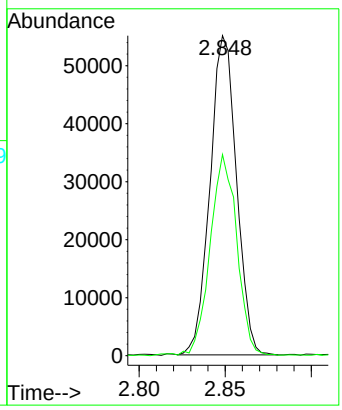




#29
Chloroform
Concen: 2.072 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 83 Resp: 5894

Ion	Ratio	Lower	Upper
83	100		
85	62.9	50.0	75.0



Instrument :
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ClientSampleId :
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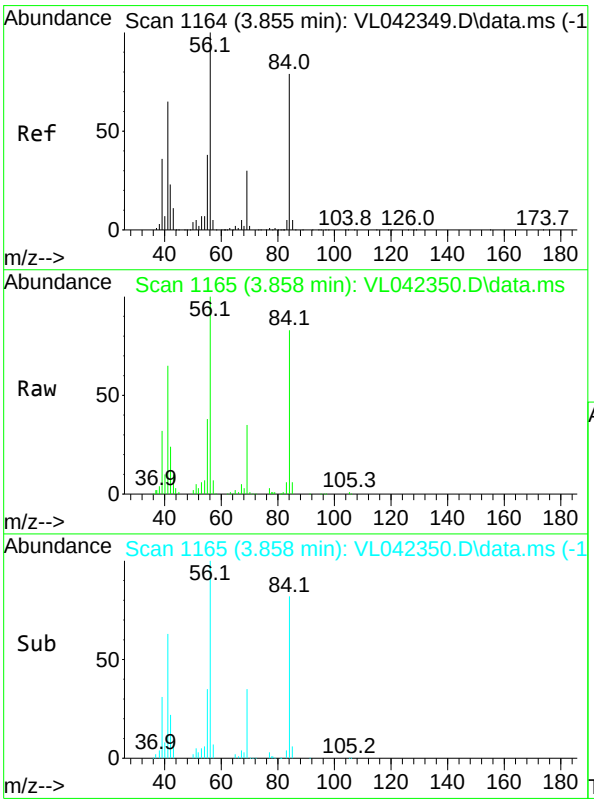
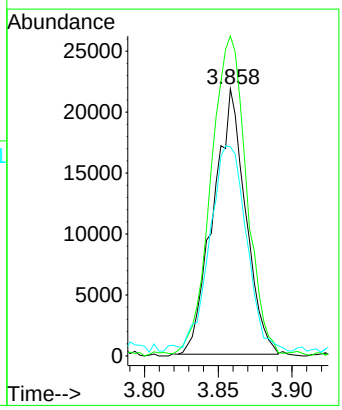
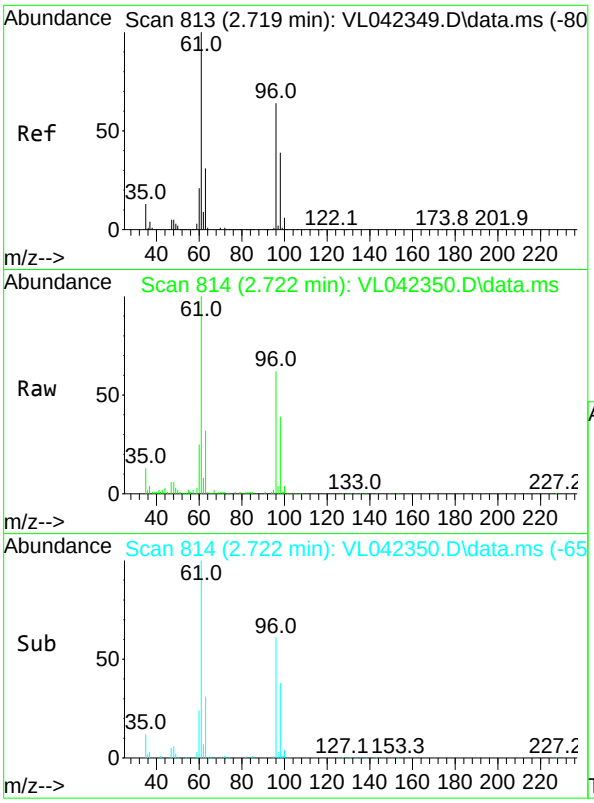


#30
Cyclohexane
Concen: 2.048 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 84 Resp: 33195

Ion	Ratio	Lower	Upper
84	100		
56	134.5	101.0	151.4
41	88.1	67.4	101.0

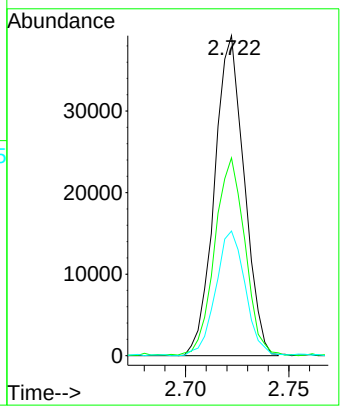




#31
cis-1,2-Dichloroethene
Concen: 2.051 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 61 Resp: 3924

Ion	Ratio	Lower	Upper
61	100		
96	61.6	50.8	76.2
98	39.0	30.9	46.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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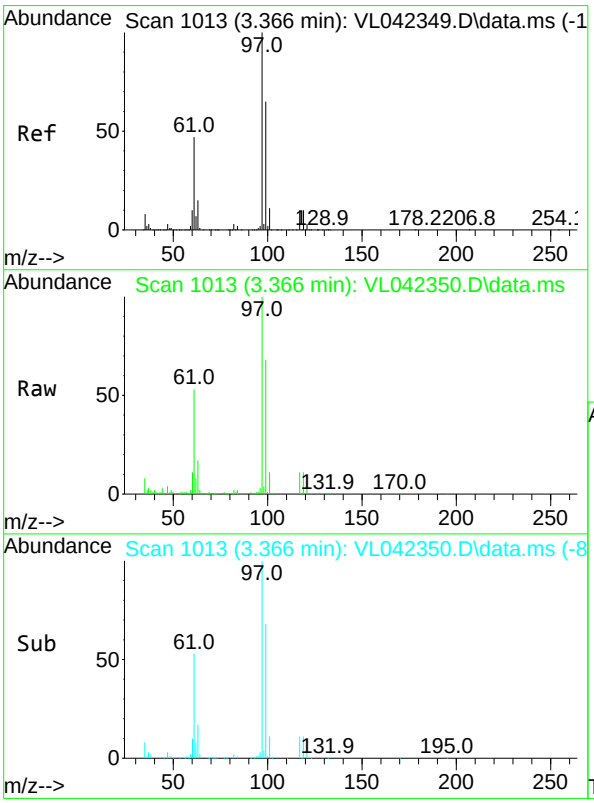
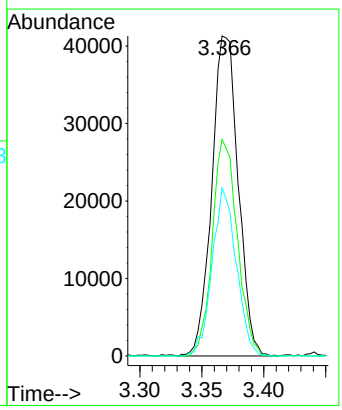
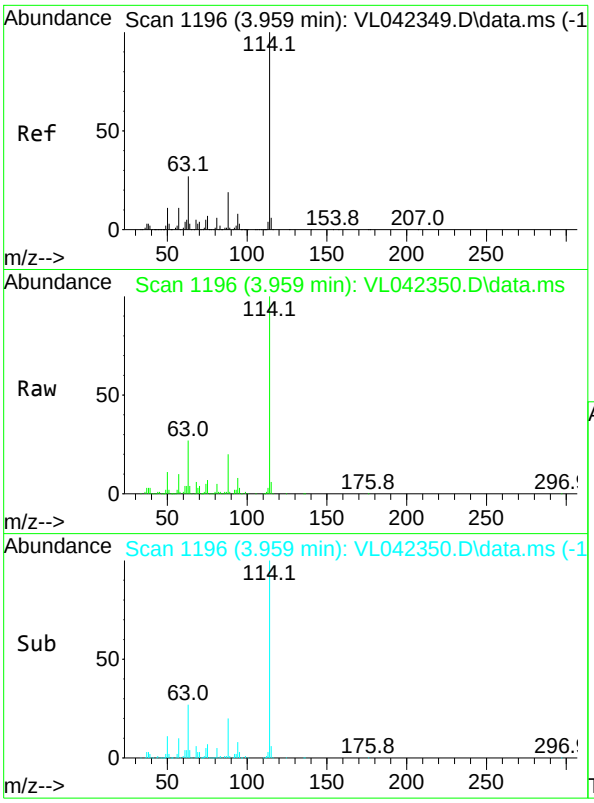


#32
1,1,1-Trichloroethane
Concen: 2.014 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 97 Resp: 61442

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.0	76.4
61	48.0	38.8	58.2

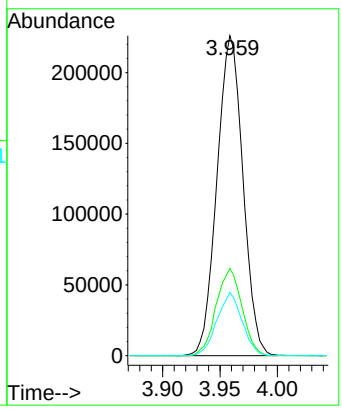




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:114 Resp: 35591

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.0	15.5	23.3



Instrument :
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ClientSampleId :
VSTDICC002

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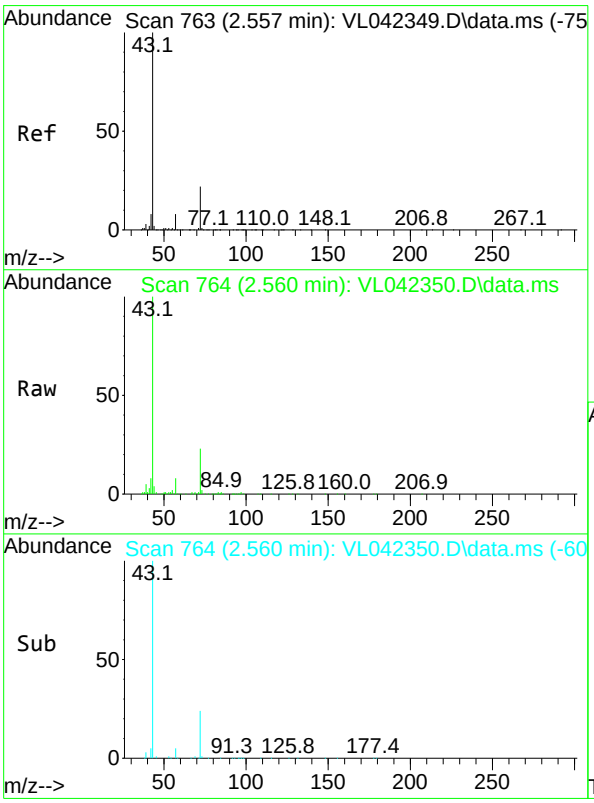
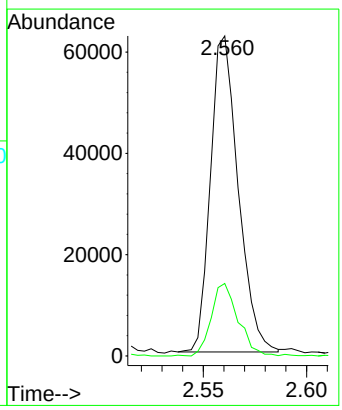
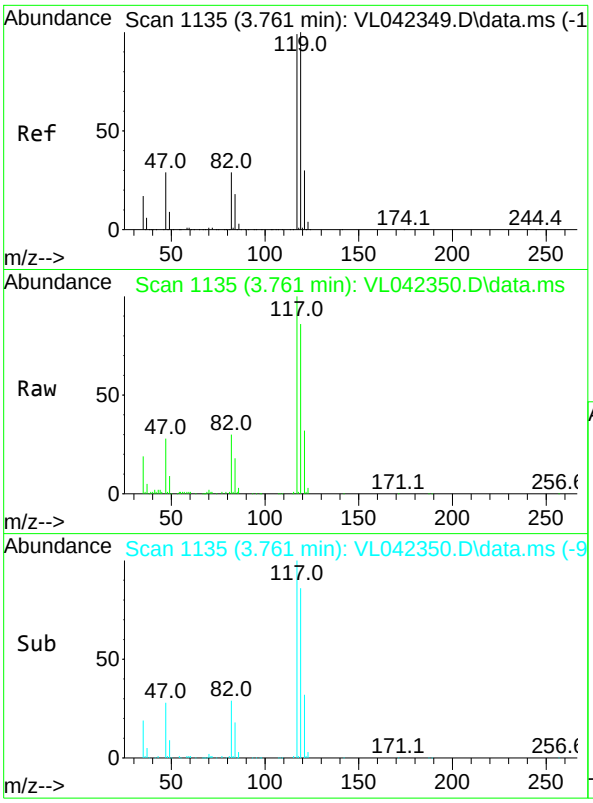


#34
2-Butanone
Concen: 2.069 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 58249

Ion	Ratio	Lower	Upper
43	100		
72	22.5	18.2	27.2

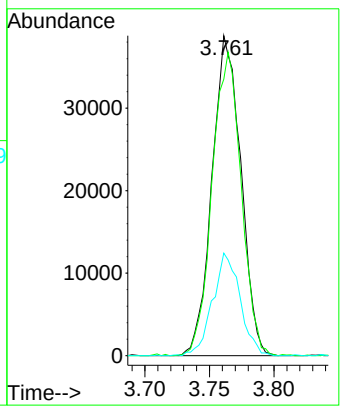




#35
Carbon Tetrachloride
Concen: 1.872 ppbv
RT: 3.761 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:117 Resp: 6029

Ion	Ratio	Lower	Upper
117	100		
119	86.4	80.5	120.7
121	32.1	24.2	36.2



Instrument :
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ClientSampleId :
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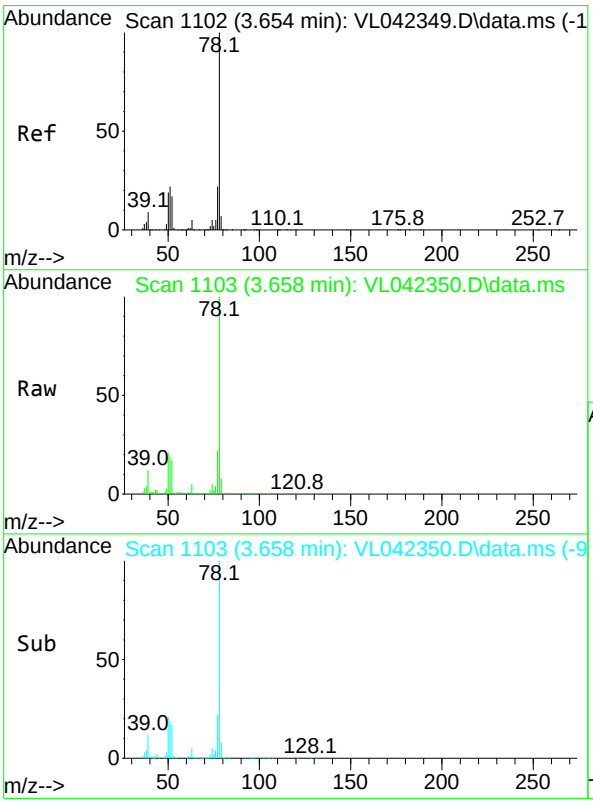
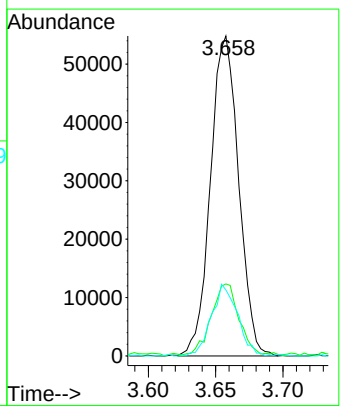
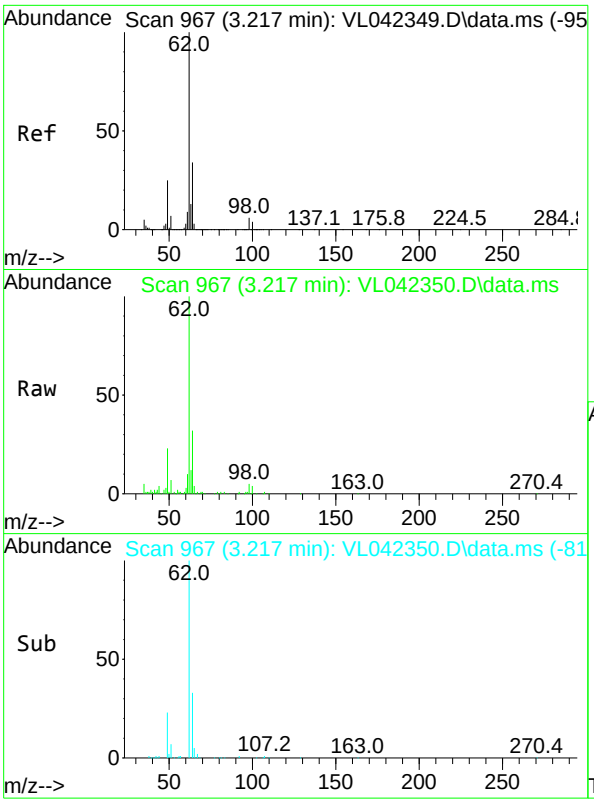


#36
Benzene
Concen: 2.079 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 78 Resp: 79814

Ion	Ratio	Lower	Upper
78	100		
77	22.0	17.4	26.0
50	20.6	15.5	23.3





#37
1,2-Dichloroethane
Concen: 2.057 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 62 Resp: 4739

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.1	7.7

Instrument :
MSVOA_L
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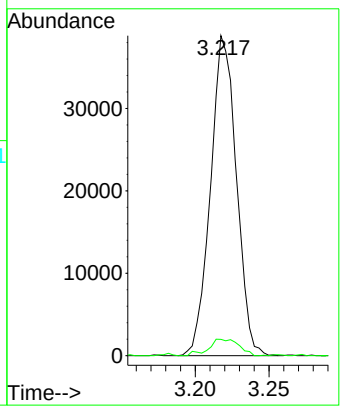
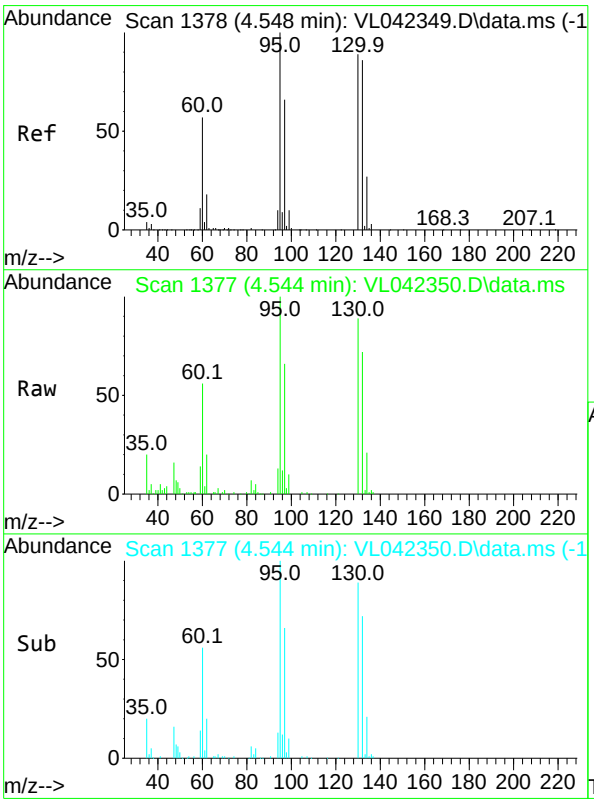
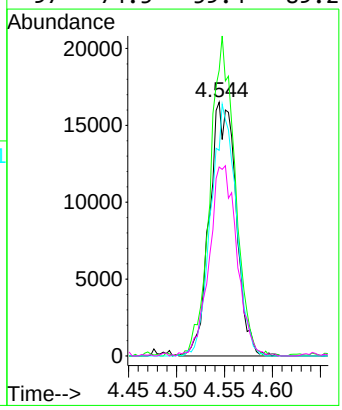


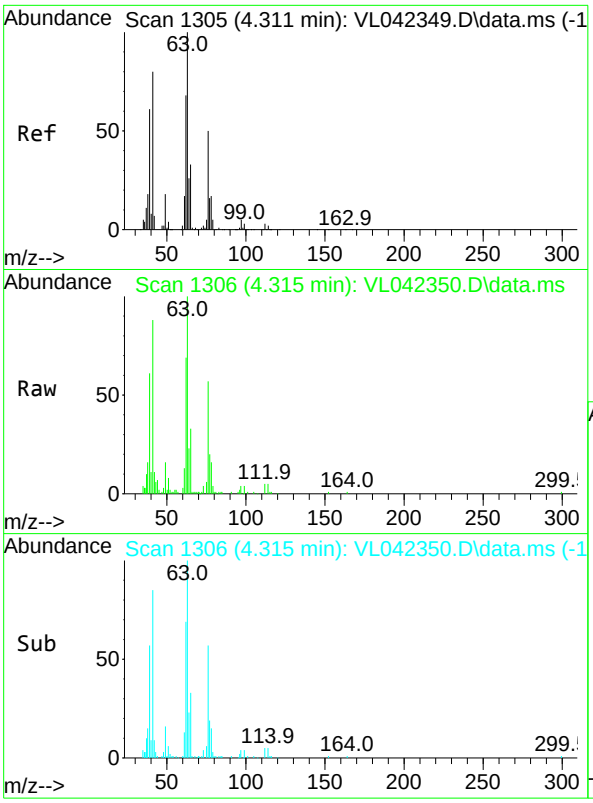


#38
Trichloroethene
Concen: 1.891 ppbv m
RT: 4.544 min Scan# 1377
Delta R.T. -0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:130 Resp: 31826

Ion	Ratio	Lower	Upper
130	100		
95	112.6	89.8	134.6
132	81.1	77.7	116.5
97	74.5	59.4	89.2

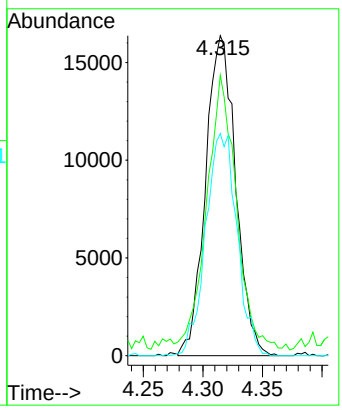




#39
1,2-Dichloropropane
Concen: 2.012 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 63 Resp: 2880

Ion	Ratio	Lower	Upper
63	100		
41	85.2	64.2	96.2
62	69.4	54.3	81.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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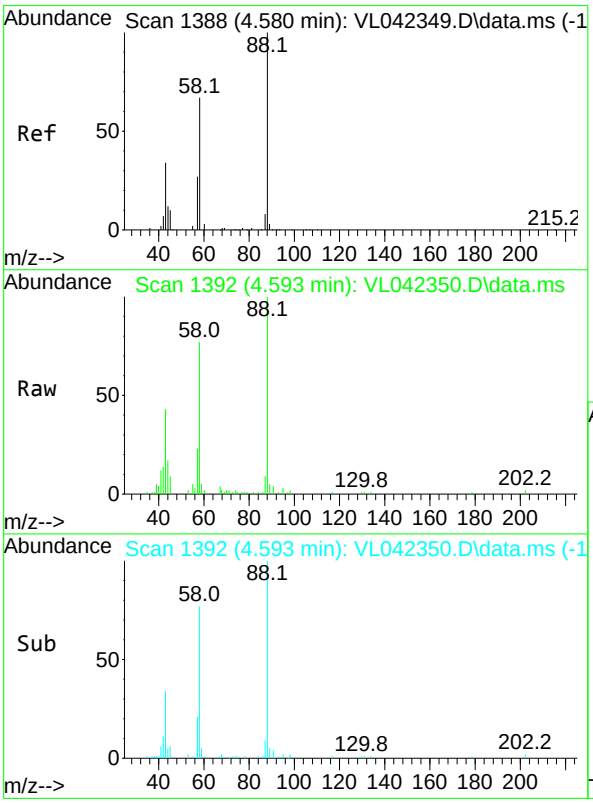
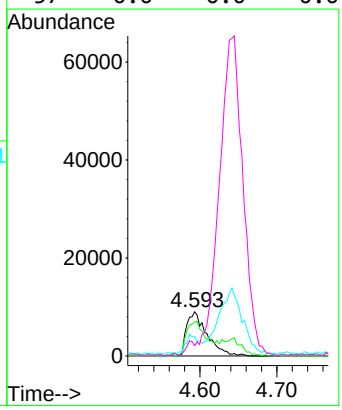
Supervised By :Mahesh Dadoda 04/18/2025

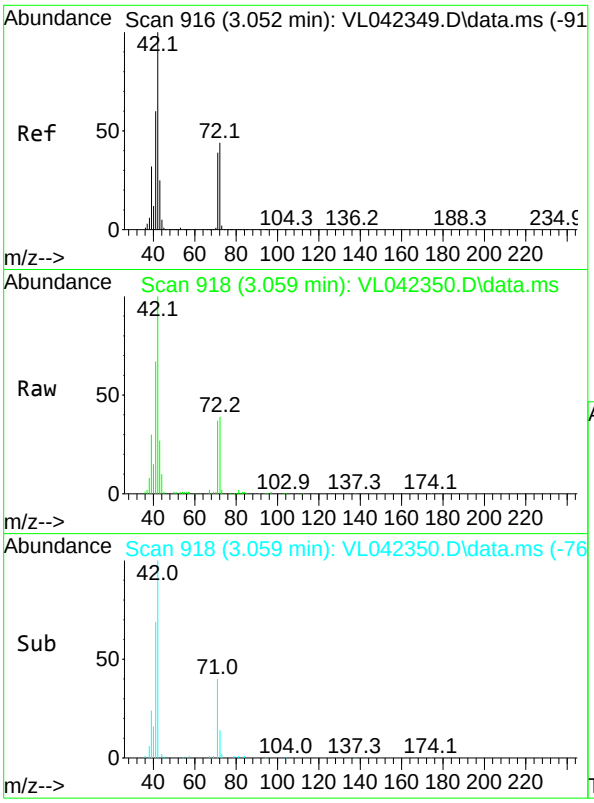


#40
1,4-Dioxane
Concen: 2.133 ppbv m
RT: 4.593 min Scan# 1392
Delta R.T. 0.013 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 88 Resp: 16536

Ion	Ratio	Lower	Upper
88	100		
58	82.3	61.4	92.0
43	6.1	23.2	34.8#
57	0.0	0.0	0.0

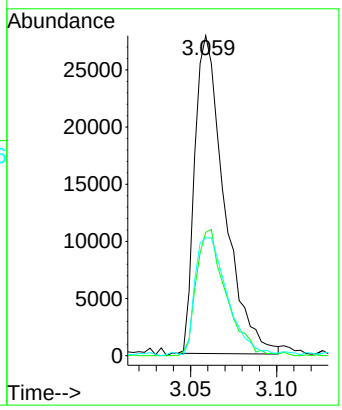




#41
Tetrahydrofuran
Concen: 2.047 ppbv
RT: 3.059 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 42 Resp: 3329

Ion	Ratio	Lower	Upper
42	100		
72	39.9	32.3	48.5
71	41.5	31.4	47.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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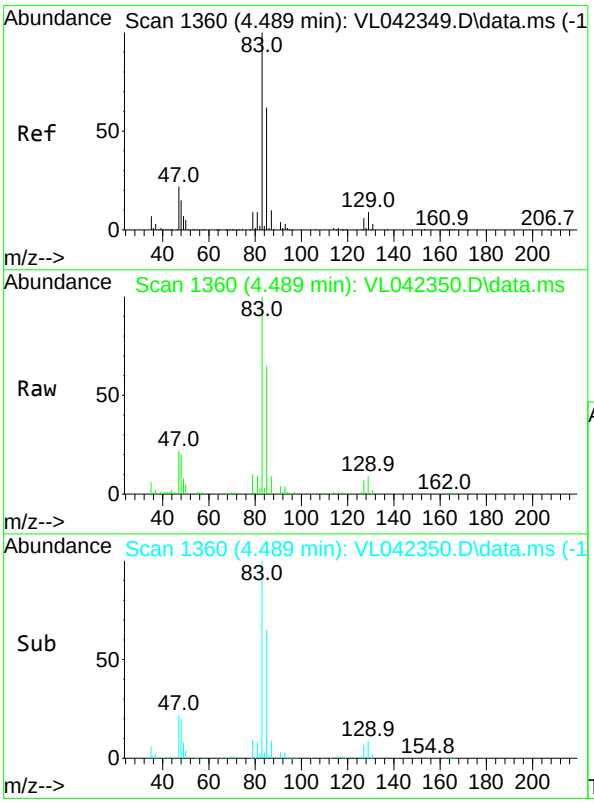
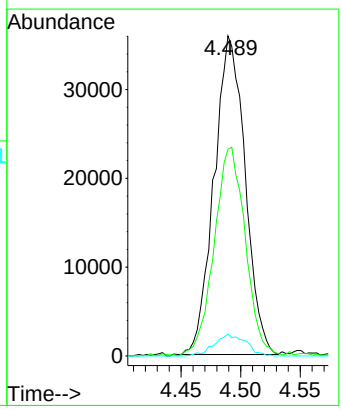
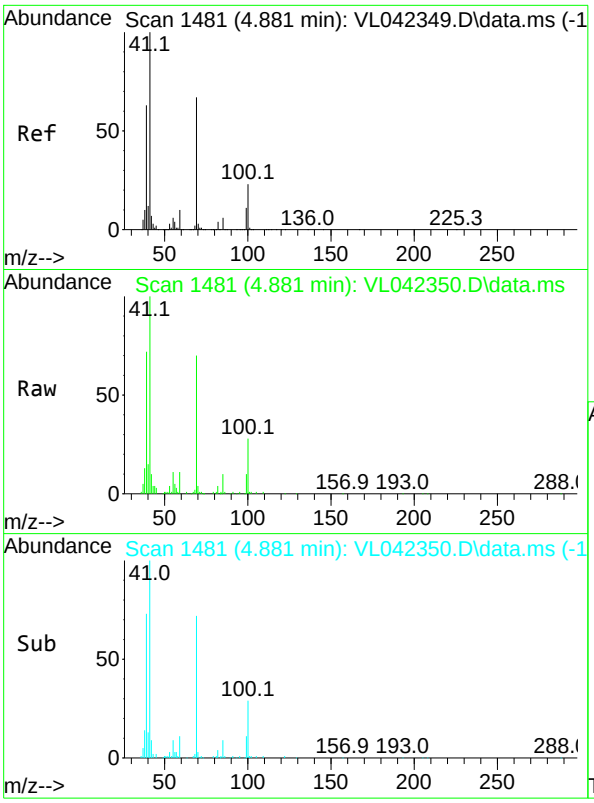


#42
Bromodichloromethane
Concen: 2.025 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 83 Resp: 64941

Ion	Ratio	Lower	Upper
83	100		
85	64.9	49.7	74.5
127	6.9	5.1	7.7

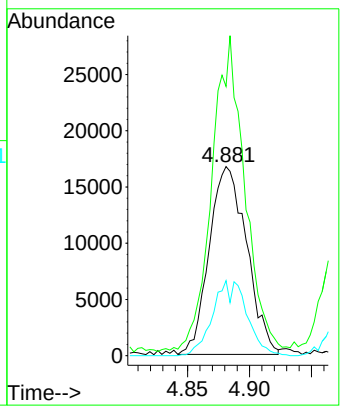




#43
Methyl Methacrylate
Concen: 2.046 ppbv
RT: 4.881 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 69 Resp: 3525(

Ion	Ratio	Lower	Upper
69	100		
41	144.4	118.6	177.8
100	36.5	28.2	42.2



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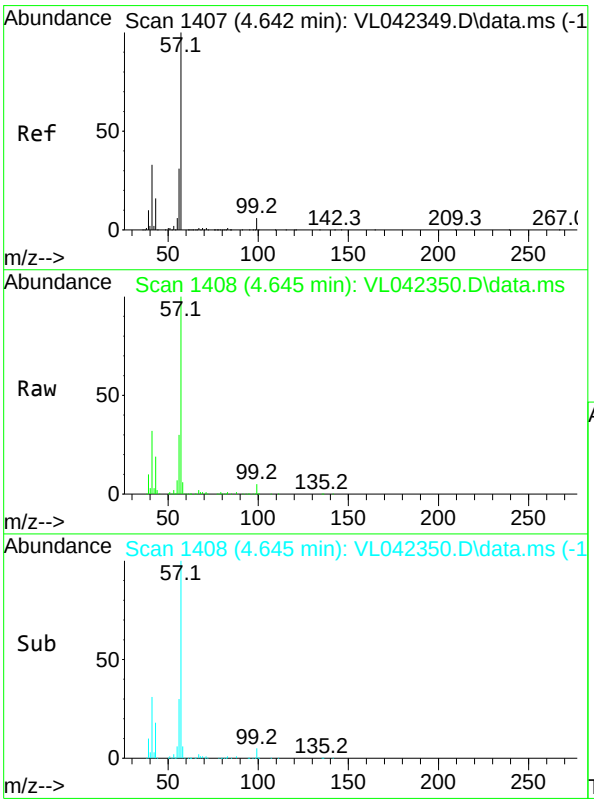
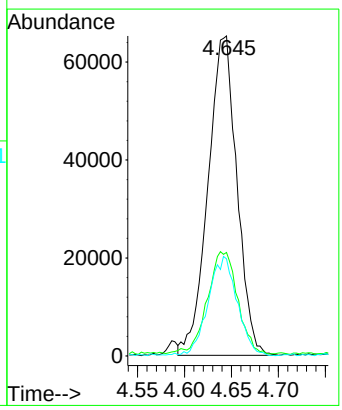
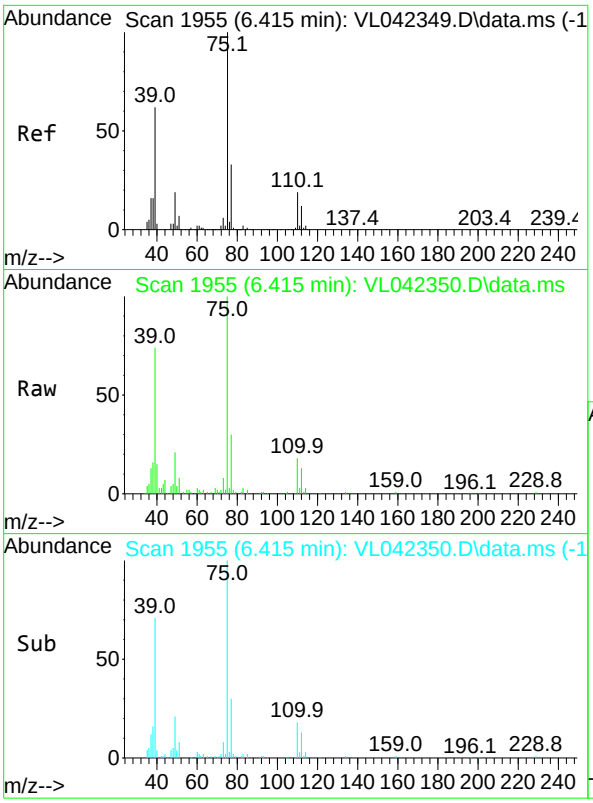


#44
2,2,4-Trimethylpentane
Concen: 2.103 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 57 Resp: 139641

Ion	Ratio	Lower	Upper
57	100		
41	34.4	27.2	40.8
56	31.3	25.7	38.5

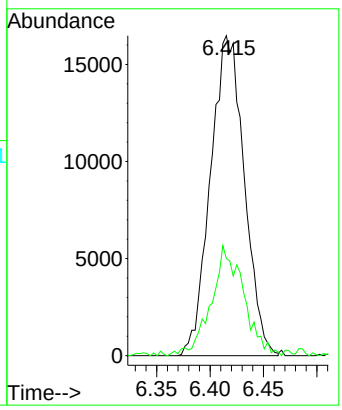




#45
t-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 6.415 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 75 Resp: 3626

Ion	Ratio	Lower	Upper
75	100		
77	30.4	27.0	40.6



Instrument :
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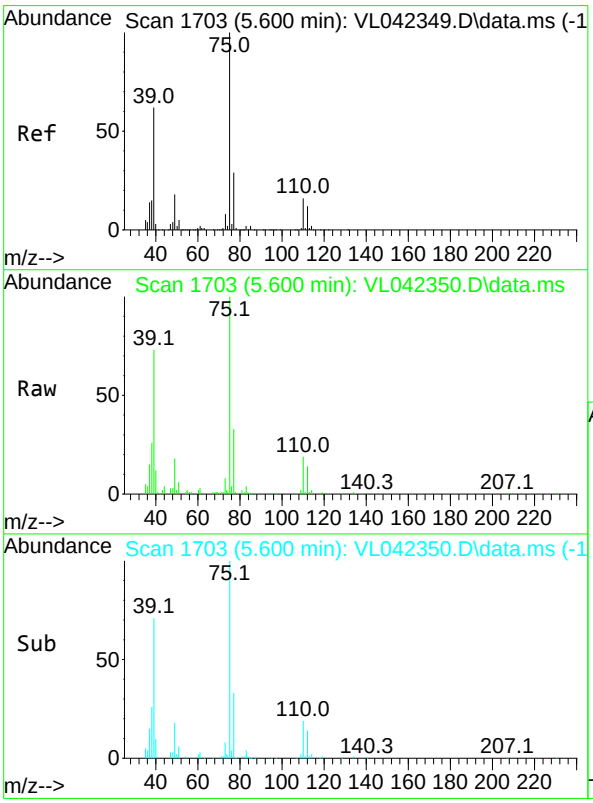
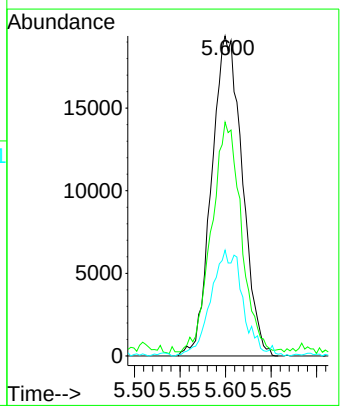
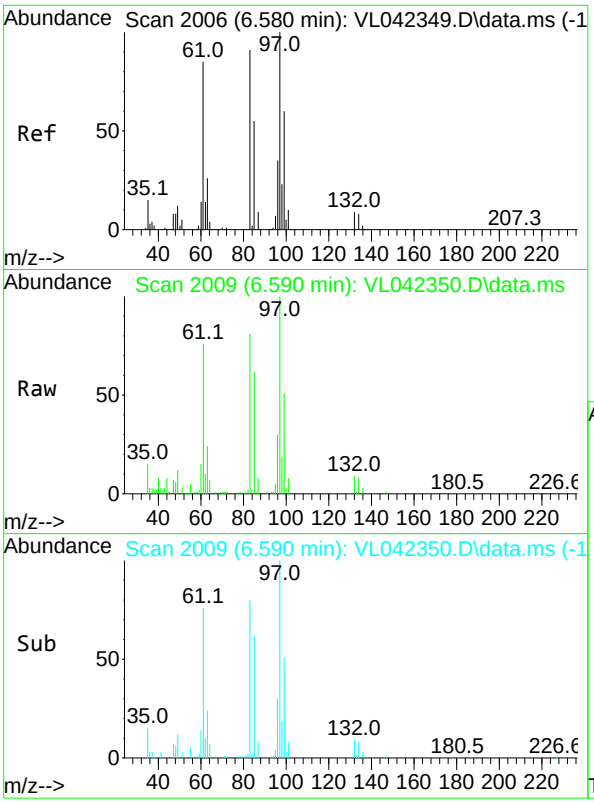


#46
cis-1,3-Dichloropropene
Concen: 2.096 ppbv m
RT: 5.600 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 75 Resp: 45327

Ion	Ratio	Lower	Upper
75	100		
39	73.0	50.0	75.0
77	33.1	23.0	34.6

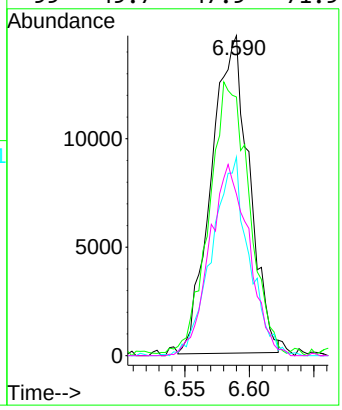




#47
1,1,2-Trichloroethane
Concen: 2.049 ppbv
RT: 6.590 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 97 Resp: 2987

Ion	Ratio	Lower	Upper
97	100		
83	78.8	72.8	109.2
85	61.7	44.2	66.4
99	49.7	47.9	71.9



Instrument :
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ClientSampleId :
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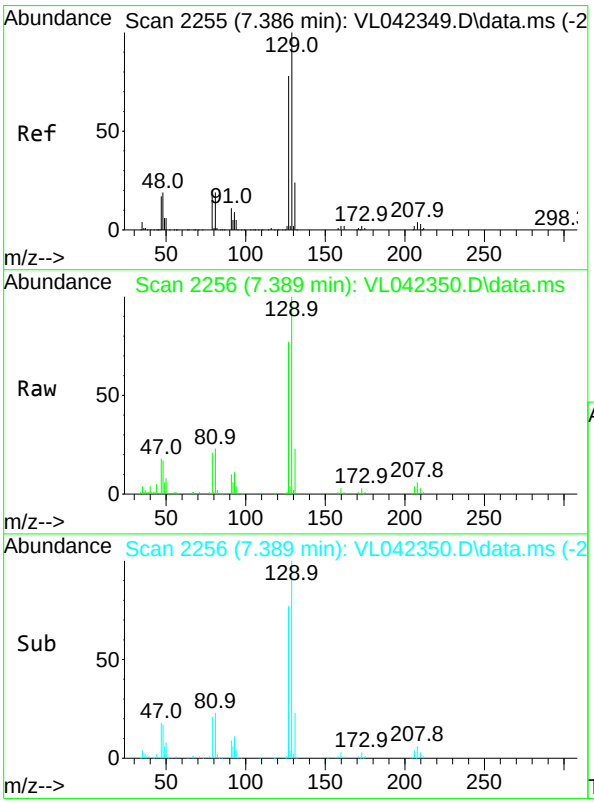
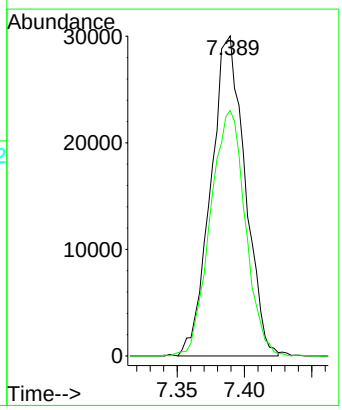
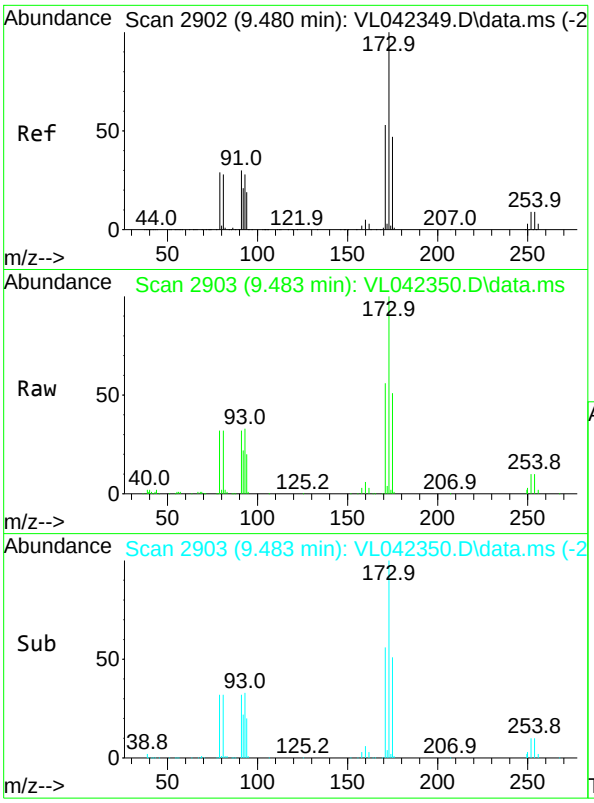


#48
Dibromochloromethane
Concen: 2.061 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:129 Resp: 53069

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3

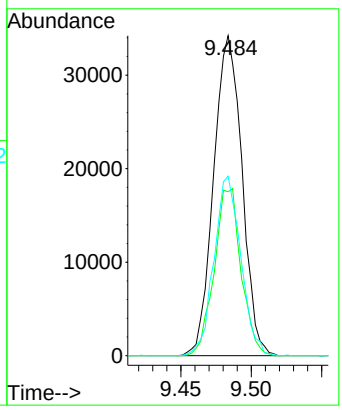




#49
Bromoform
Concen: 2.135 ppbv
RT: 9.483 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:173 Resp: 4806

Ion	Ratio	Lower	Upper
173	100		
175	49.4	38.2	57.2
171	53.0	40.9	61.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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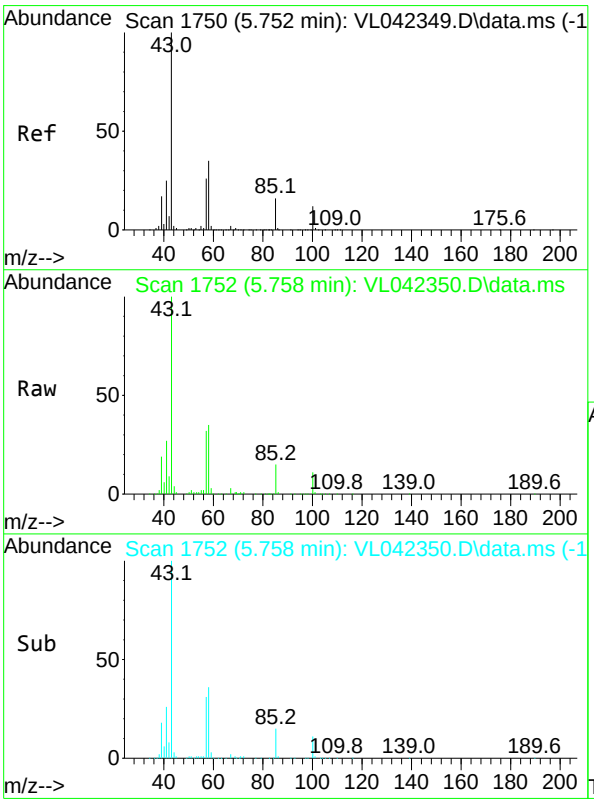
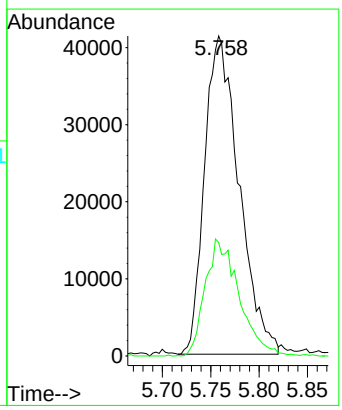
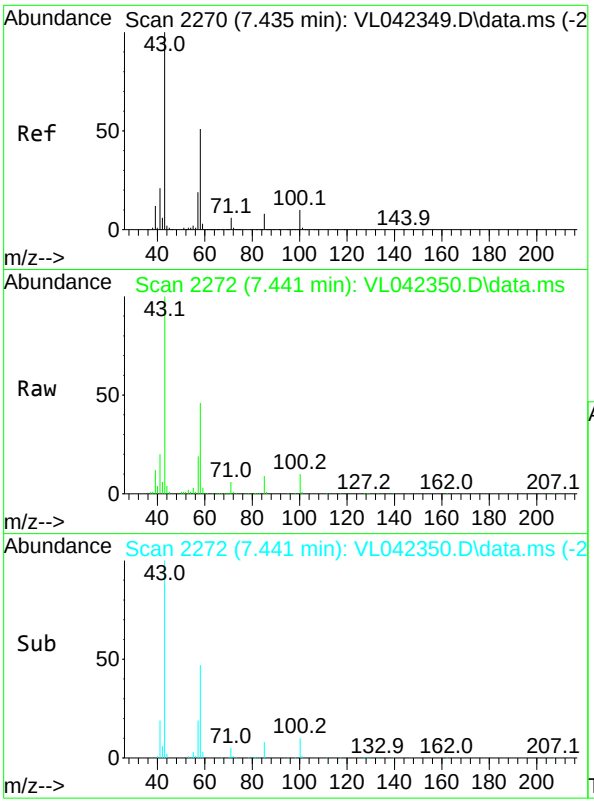


#50
4-Methyl-2-Pentanone
Concen: 2.180 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 102182

Ion	Ratio	Lower	Upper
43	100		
58	36.3	28.6	43.0

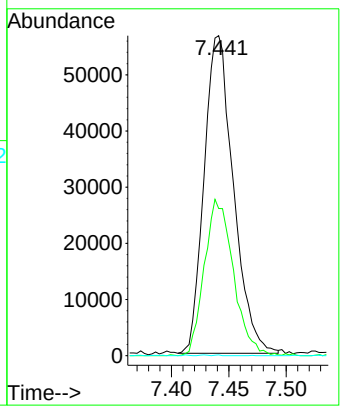




#51
2-Hexanone
Concen: 2.375 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 10044

Ion	Ratio	Lower	Upper
43	100		
58	49.0	40.2	60.4
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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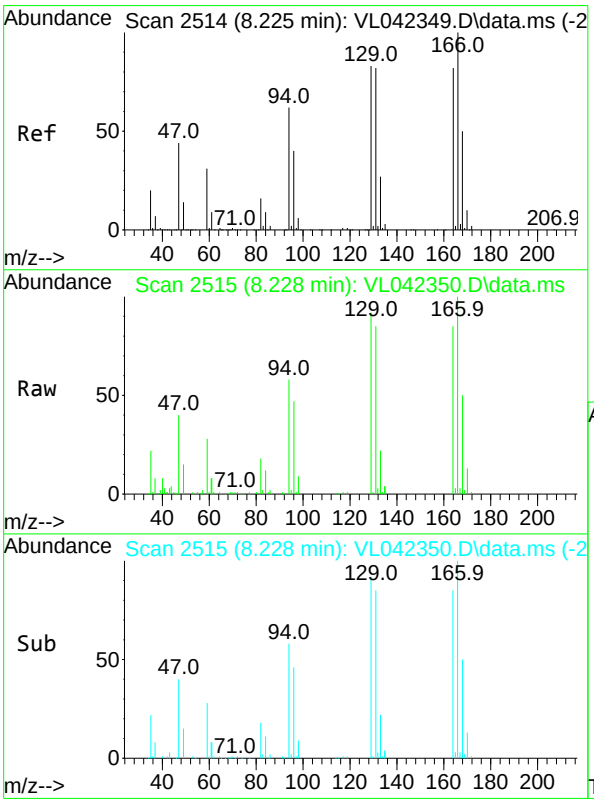
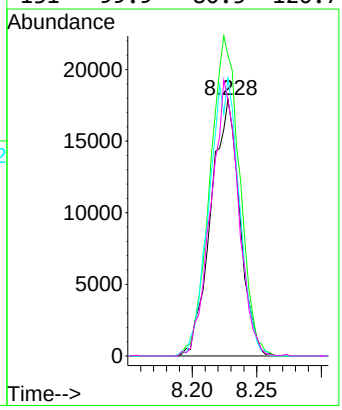
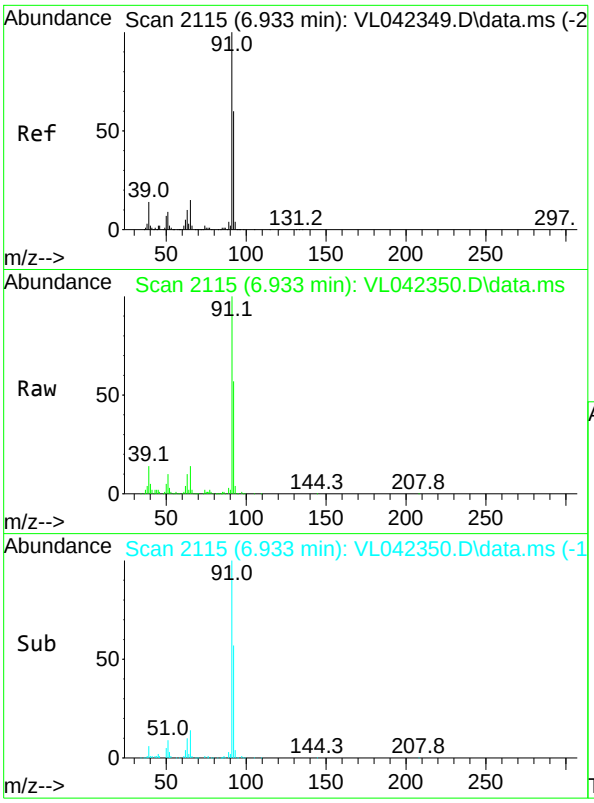


#52
Tetrachloroethene
Concen: 1.877 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:164 Resp: 27854

Ion	Ratio	Lower	Upper
164	100		
166	117.2	98.2	147.2
129	108.2	81.8	122.8
131	99.9	80.5	120.7

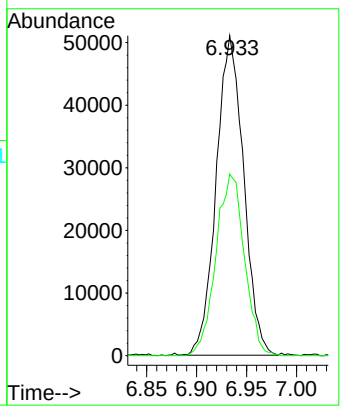




#53
Toluene
Concen: 2.116 ppbv
RT: 6.933 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 9749

Ion	Ratio	Lower	Upper
91	100		
92	59.1	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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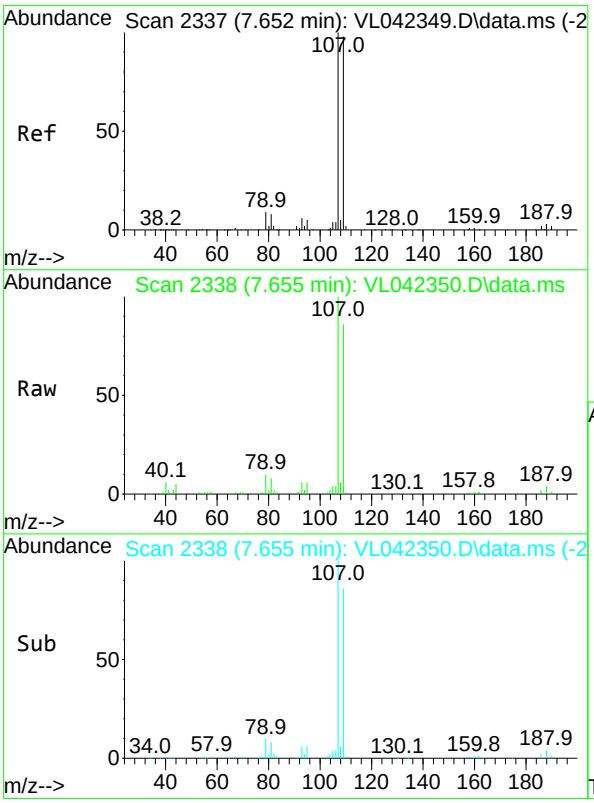
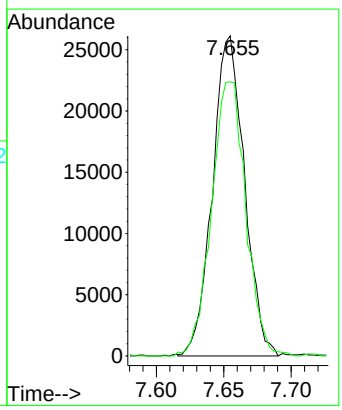
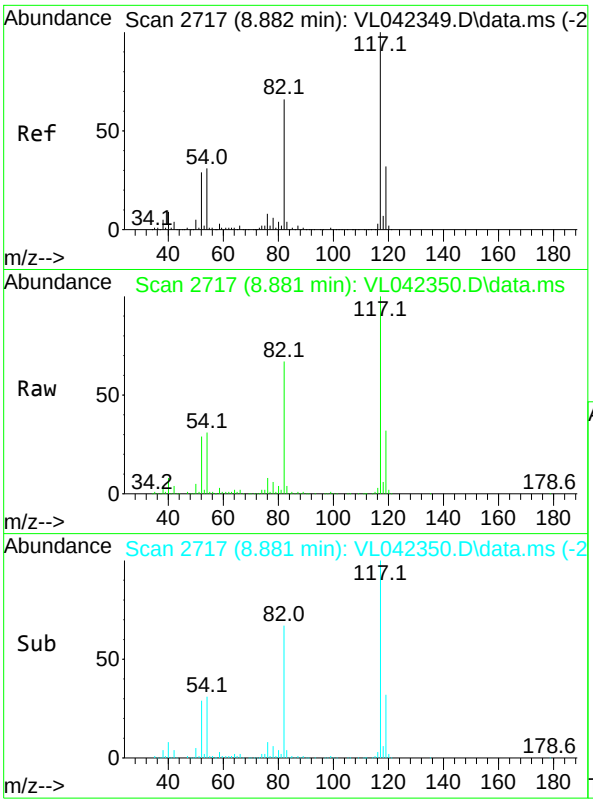


#54
1,2-Dibromoethane
Concen: 2.076 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:107 Resp: 43153

Ion	Ratio	Lower	Upper
107	100		
109	84.5	78.2	117.4

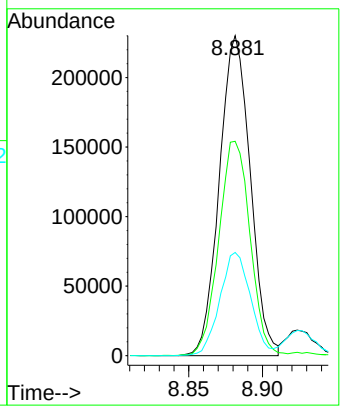




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:117 Resp: 33560

Ion	Ratio	Lower	Upper
117	100		
82	68.8	57.8	86.6
119	32.2	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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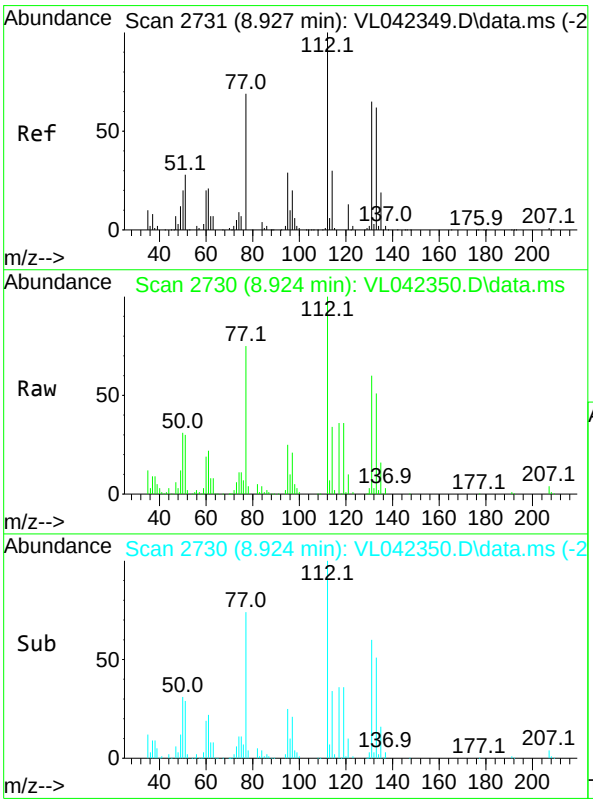
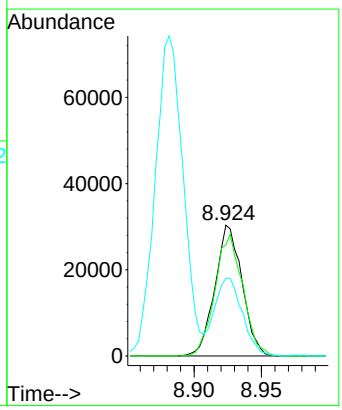
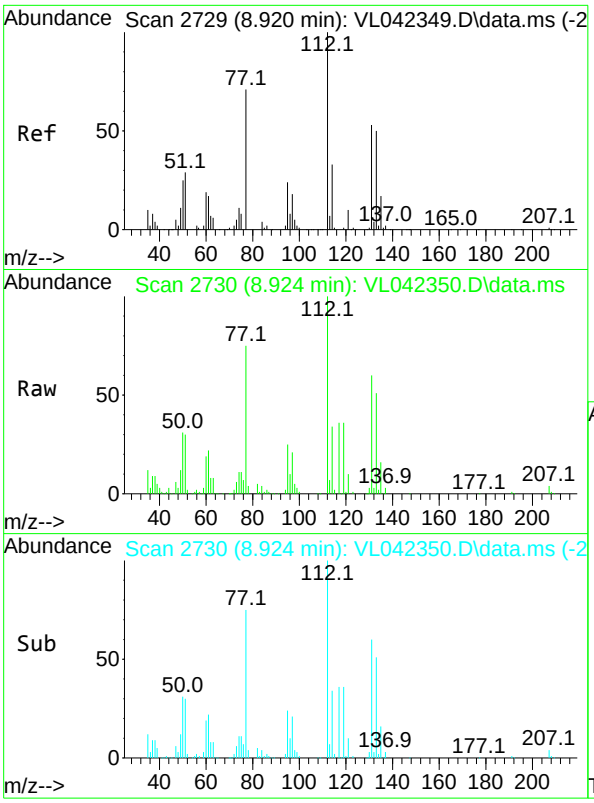


#56
1,1,1,2-Tetrachloroethane
Concen: 2.097 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. -0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:131 Resp: 42601

Ion	Ratio	Lower	Upper
131	100		
133	95.3	78.3	117.5
119	53.8	48.7	73.1

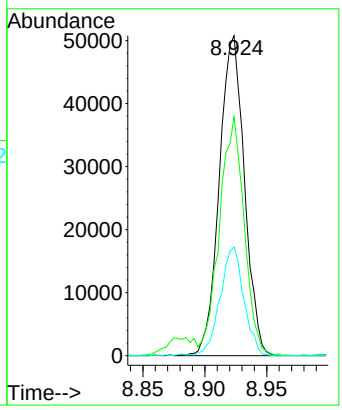




#57
Chlorobenzene
Concen: 2.054 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:112 Resp: 7168

Ion	Ratio	Lower	Upper
112	100		
77	74.0	57.8	86.6
114	34.0	29.3	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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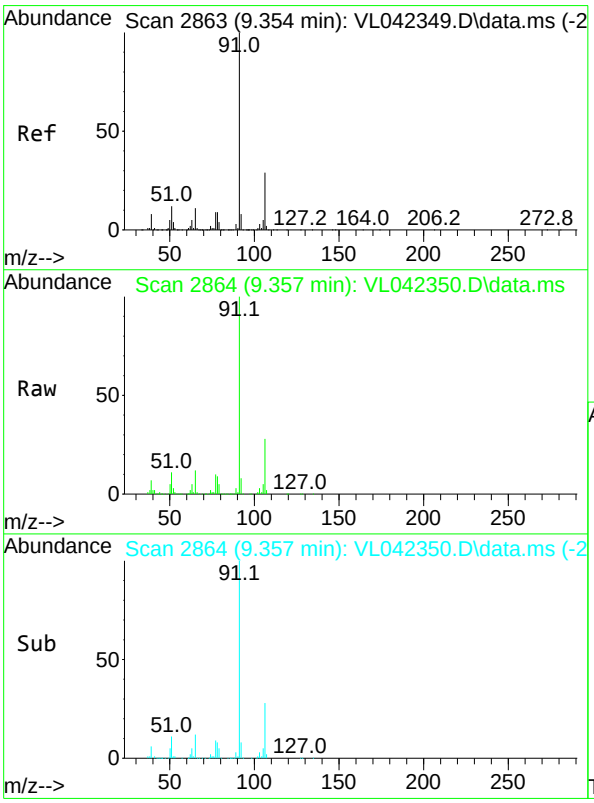
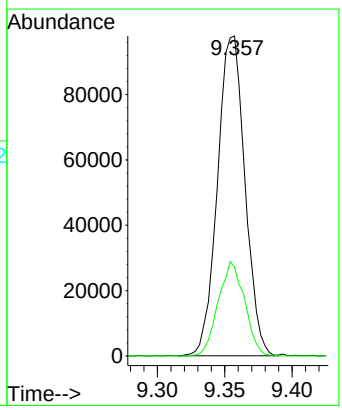
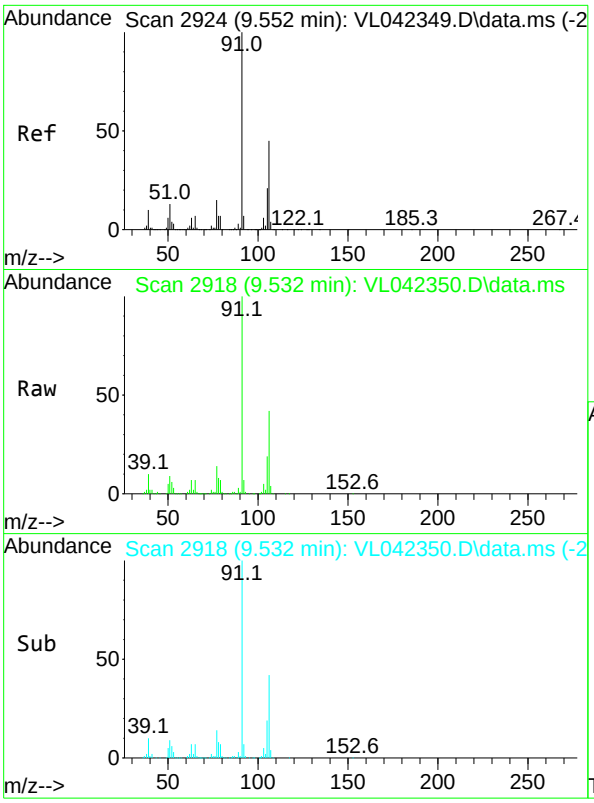


#58
Ethyl Benzene
Concen: 2.088 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 138810

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.0	34.4





#59
m/p-Xylene
Concen: 4.142 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. -0.019 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 22254

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
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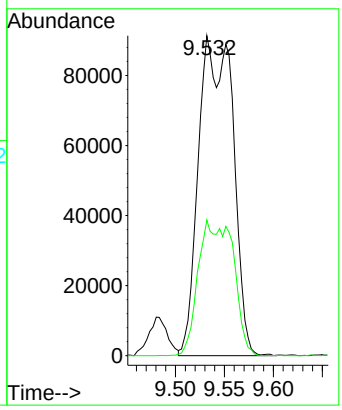
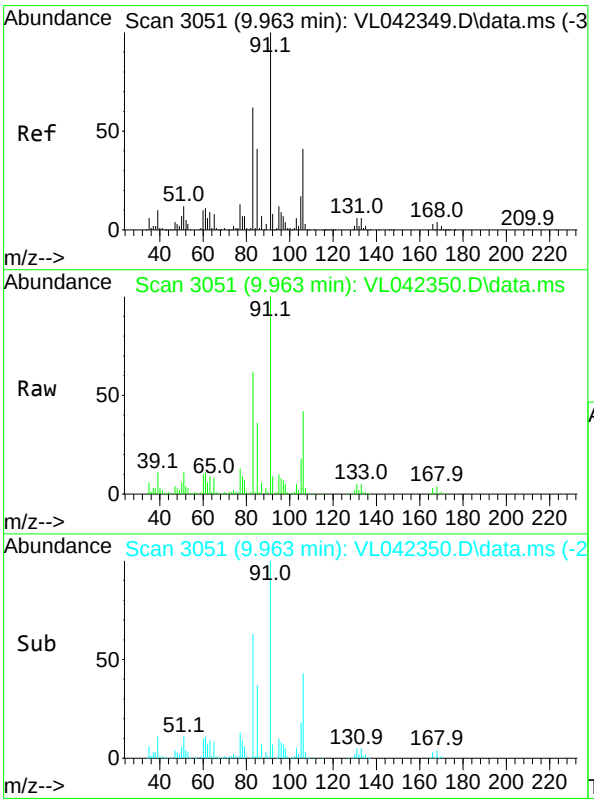
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

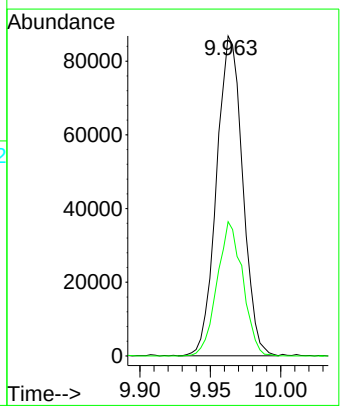


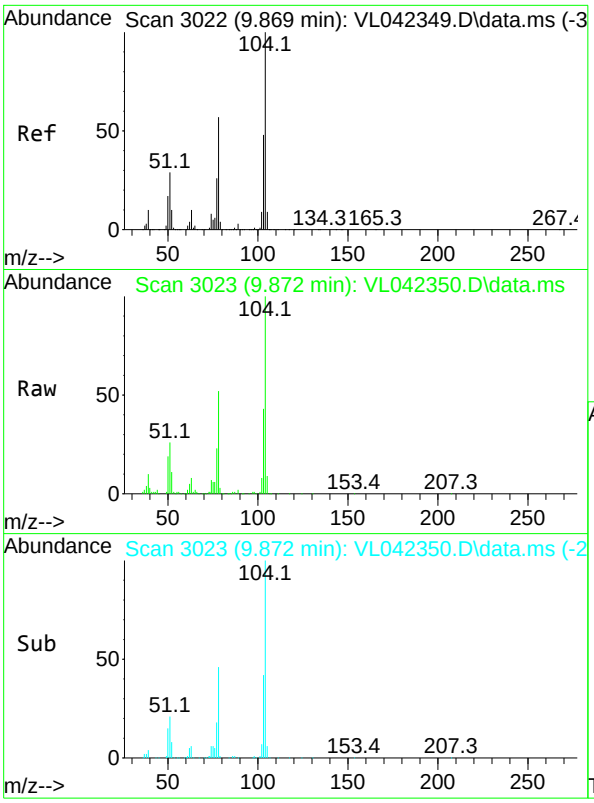


#60
o-Xylene
Concen: 2.076 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 111972

Ion	Ratio	Lower	Upper
91	100		
106	41.2	21.1	63.4

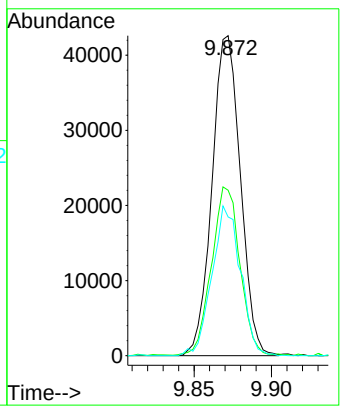




#61
Styrene
Concen: 2.106 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:104 Resp: 5422

Ion	Ratio	Lower	Upper
104	100		
78	53.4	44.6	66.8
103	47.1	37.4	56.0



Instrument :
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ClientSampleId :
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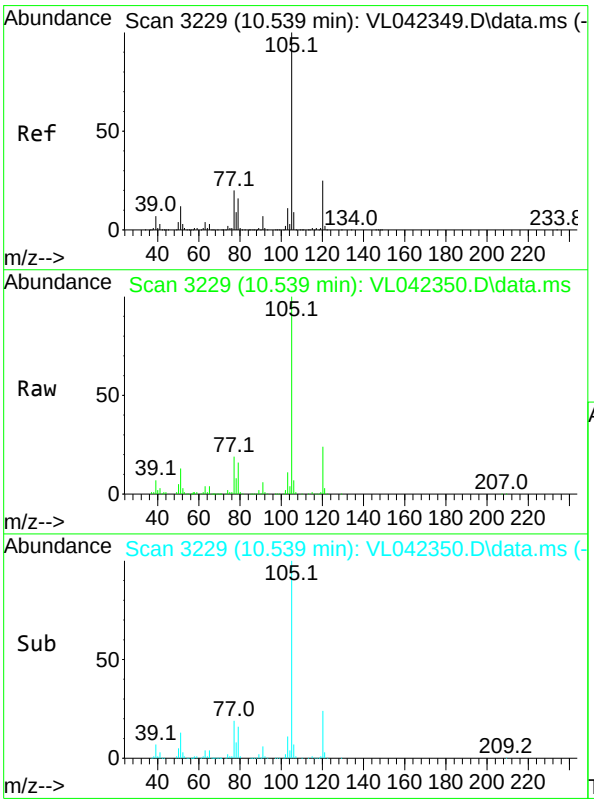
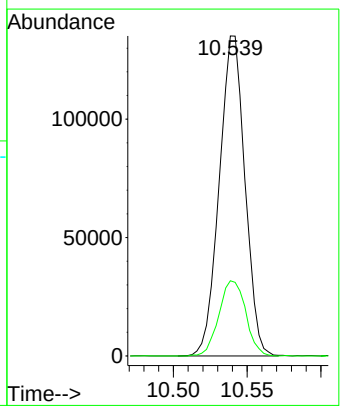
Supervised By :Mahesh Dadoda 04/18/2025

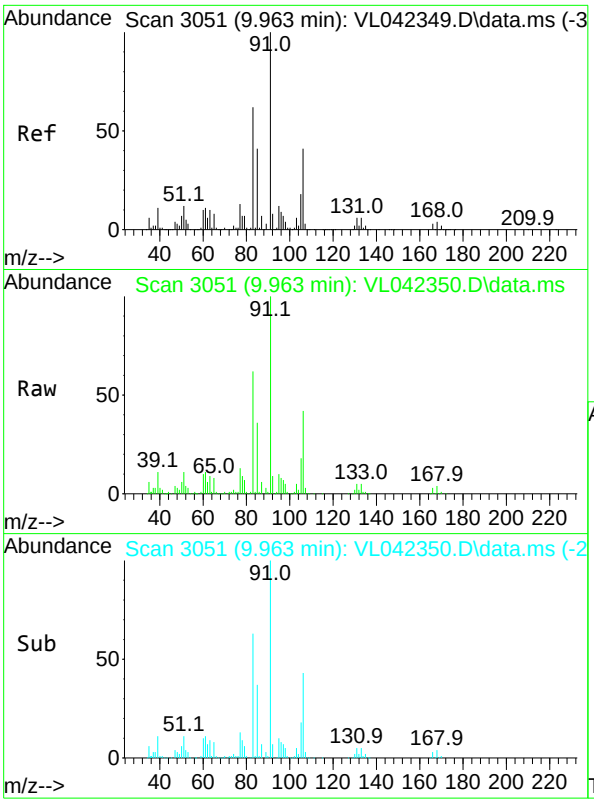


#62
Isopropylbenzene
Concen: 2.067 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 163716

Ion	Ratio	Lower	Upper
105	100		
120	24.6	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 1.853 ppbv
RT: 9.963 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 83 Resp: 6495

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	65.4	32.4	97.0

Instrument :
MSVOA_L
ClientSampleId :
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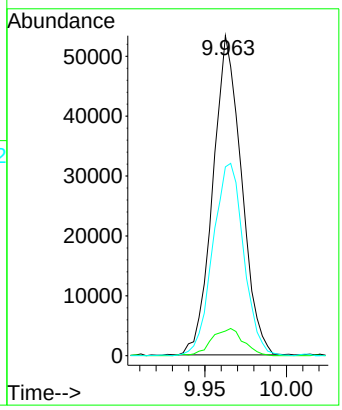
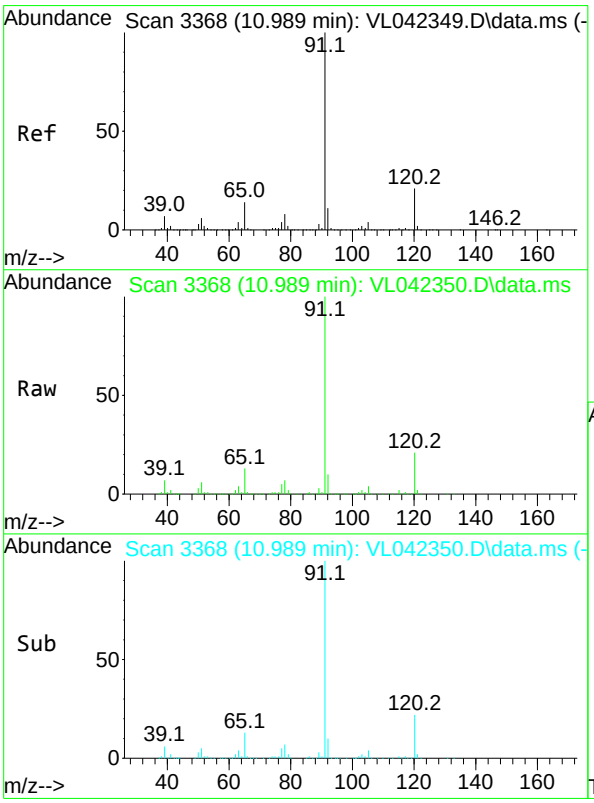
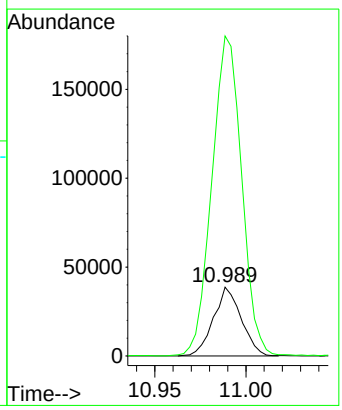


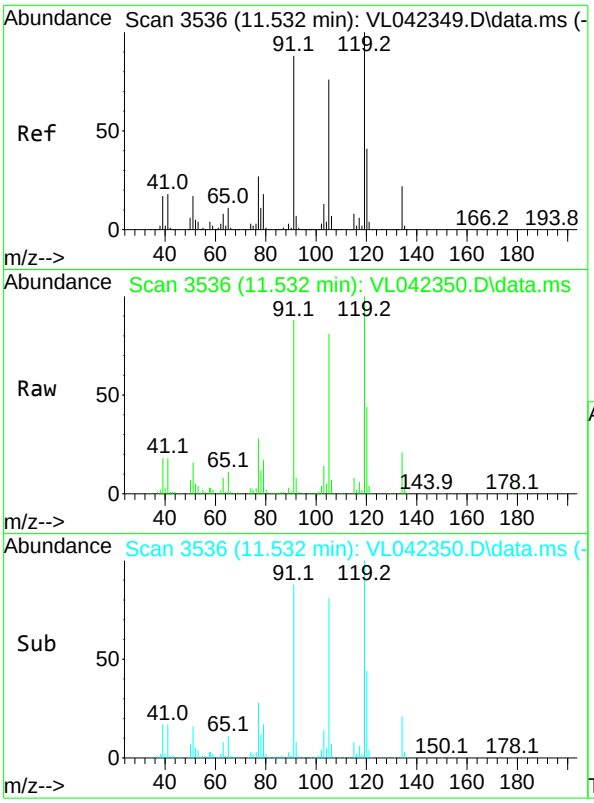


#64
n-propylbenzene
Concen: 2.058 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:120 Resp: 40956

Ion	Ratio	Lower	Upper
120	100		
91	502.0	392.4	588.6

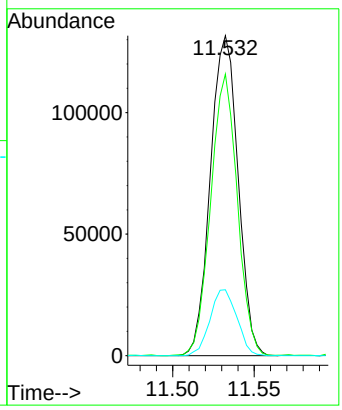




#65
tert-Butylbenzene
Concen: 2.135 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:119 Resp: 15540

Ion	Ratio	Lower	Upper
119	100		
91	85.0	74.6	111.8
134	20.1	18.8	28.2



Instrument :
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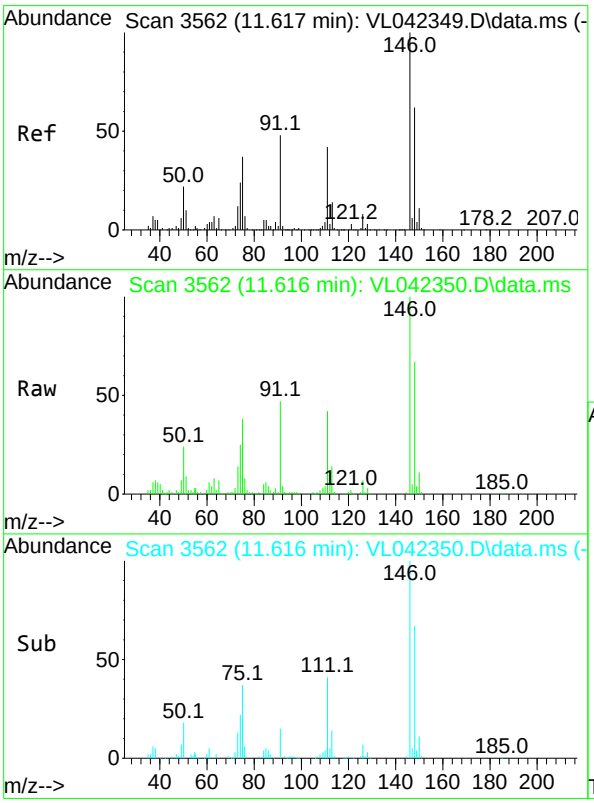
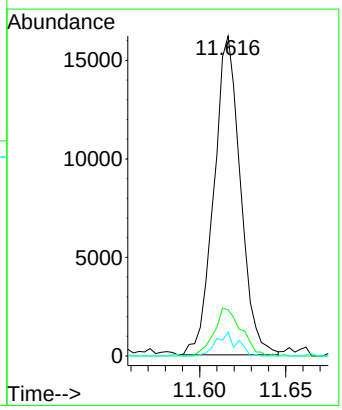
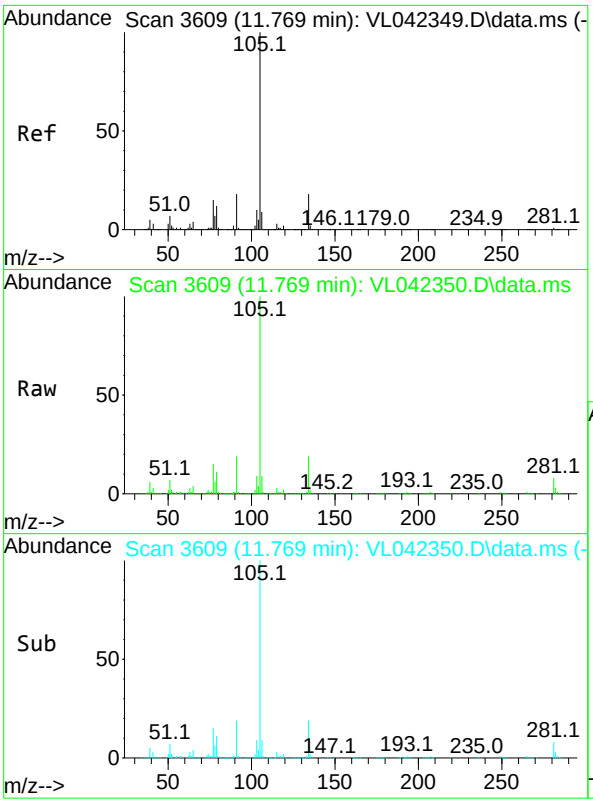


#66
Benzyl Chloride
Concen: 2.163 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 17300

Ion	Ratio	Lower	Upper
91	100		
126	15.6	11.8	17.6
128	6.1	4.5	6.7

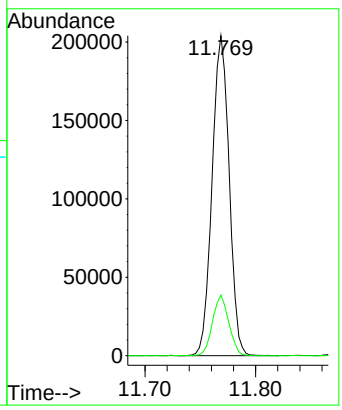




#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.769 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 21832

Ion	Ratio	Lower	Upper
105	100		
134	18.1	14.6	21.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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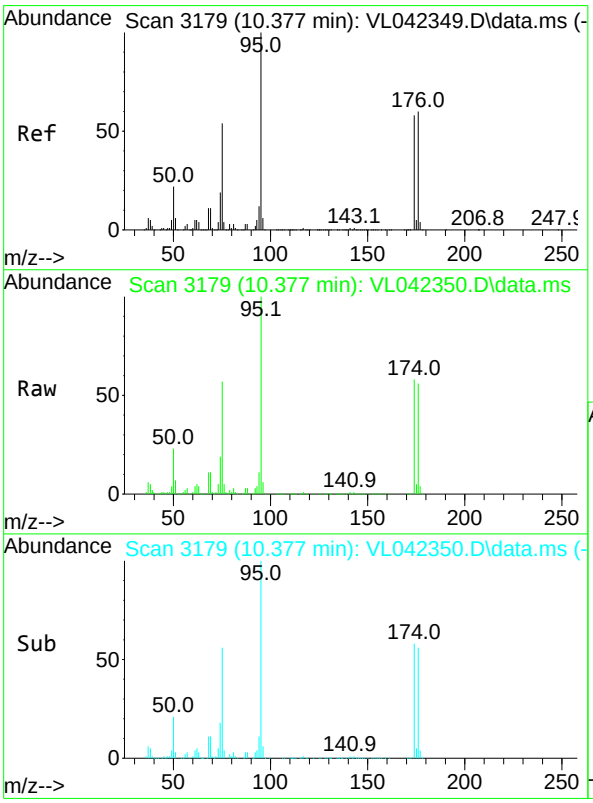
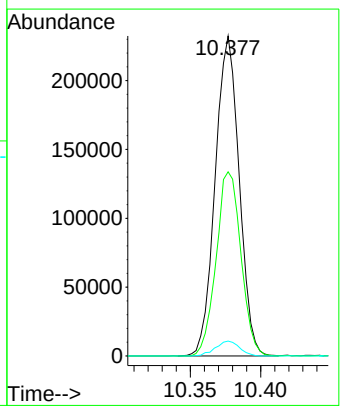
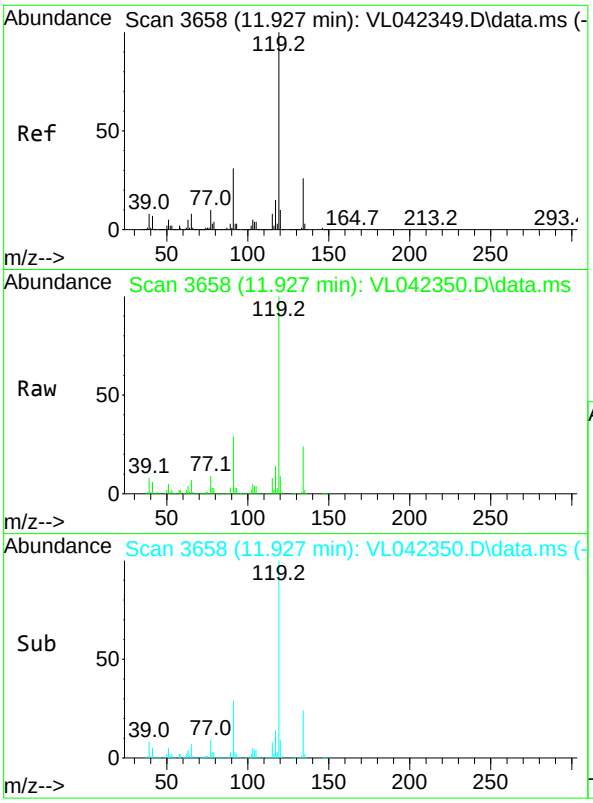


#68
1-Bromo-4-Fluorobenzene
Concen: 9.998 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 95 Resp: 275715

Ion	Ratio	Lower	Upper
95	100		
174	59.6	48.5	72.7
175	4.7	3.7	5.5

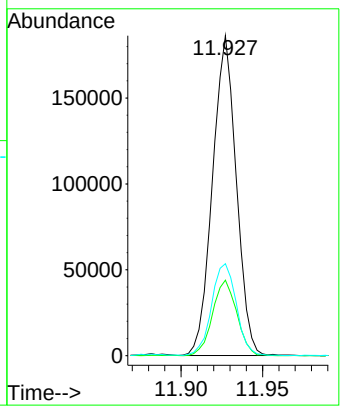




#69
p-Isopropyltoluene
Concen: 2.145 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:119 Resp: 18865

Ion	Ratio	Lower	Upper
119	100		
134	24.2	20.0	30.0
91	30.8	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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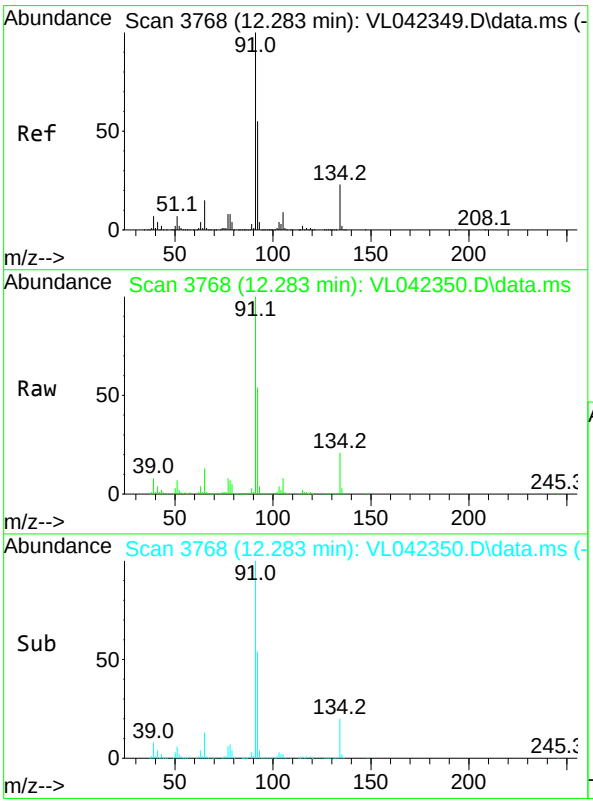
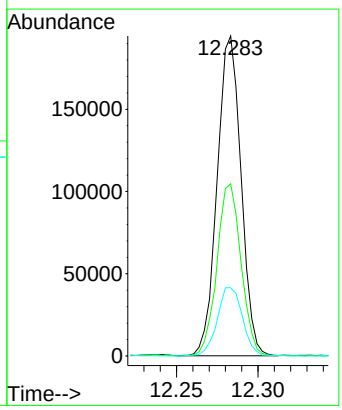
Supervised By :Mahesh Dadoda 04/18/2025

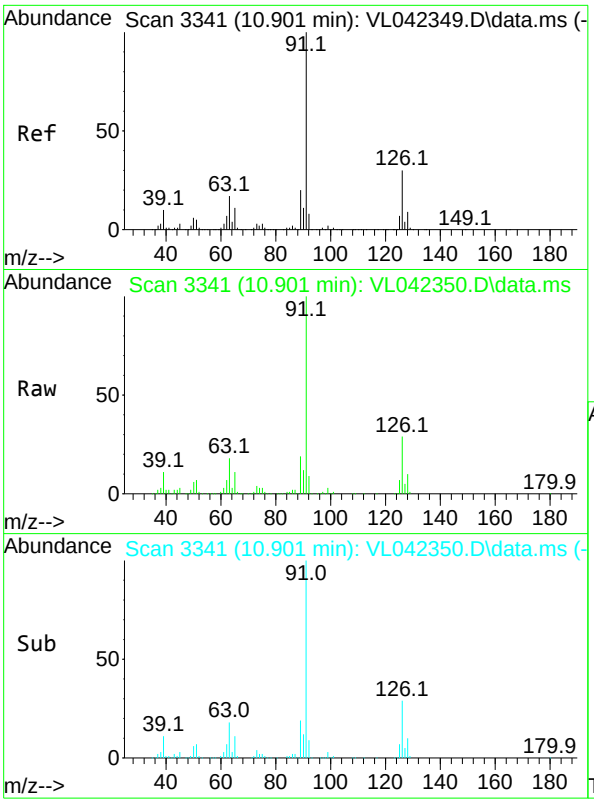


#70
n-Butylbenzene
Concen: 2.164 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 198221

Ion	Ratio	Lower	Upper
91	100		
92	54.4	44.2	66.4
134	22.6	18.2	27.4

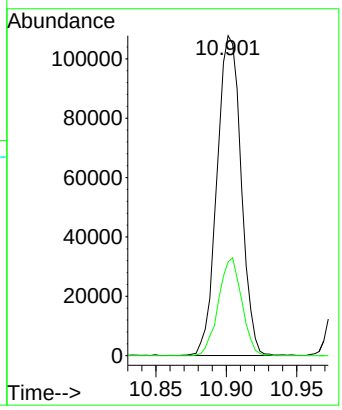




#71
2-Chlorotoluene
Concen: 2.075 ppbv
RT: 10.901 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 12885

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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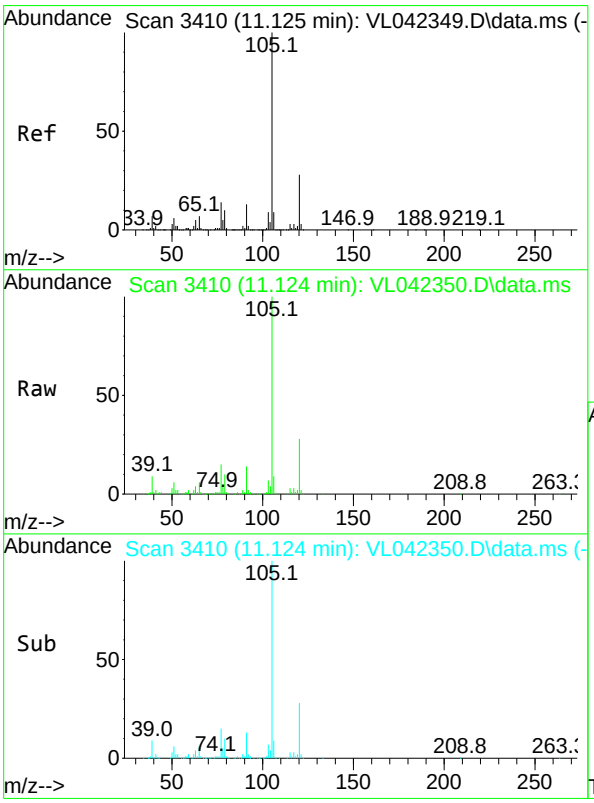
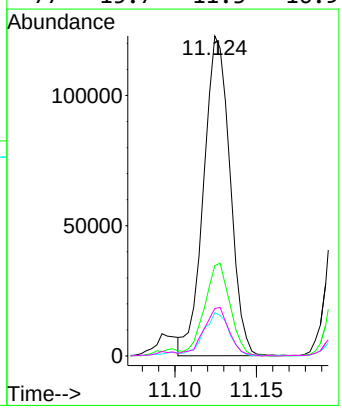
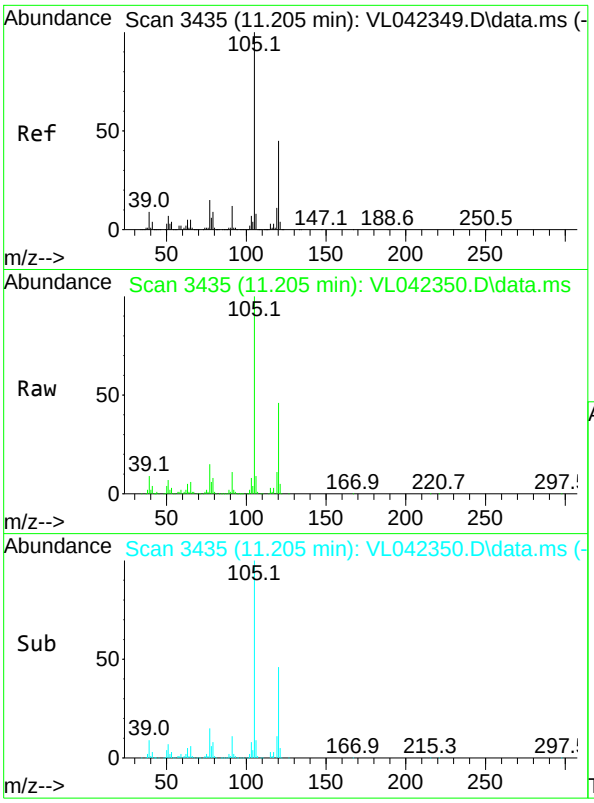


#72
4-Ethyltoluene
Concen: 2.091 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 137872

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.2	34.8
91	14.4	10.4	15.6
77	15.7	11.3	16.9

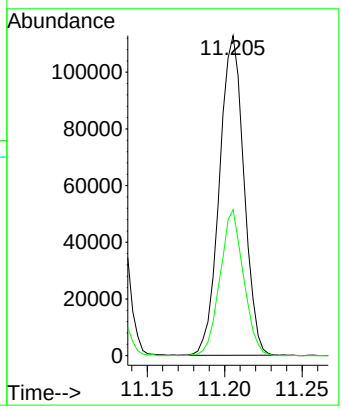




#73
1,3,5-Trimethylbenzene
Concen: 2.123 ppbv
RT: 11.205 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 12358

Ion	Ratio	Lower	Upper
105	100		
120	45.7	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
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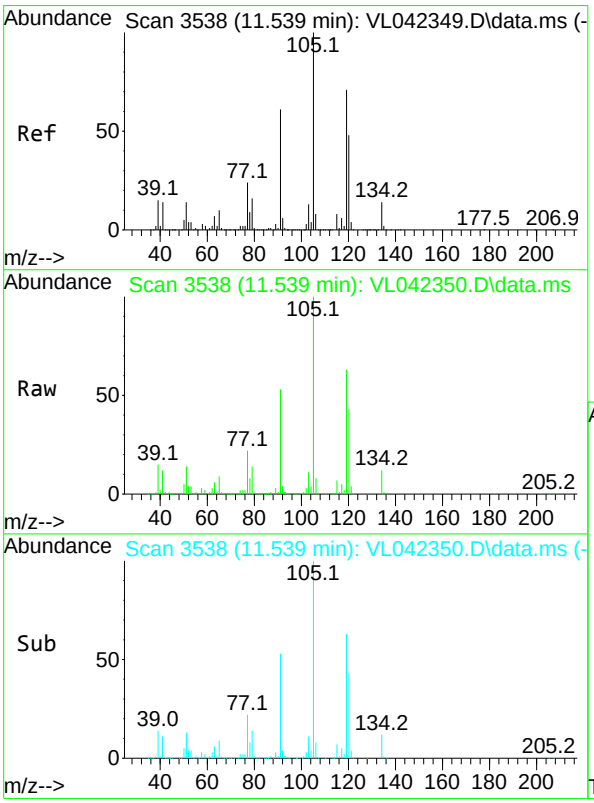
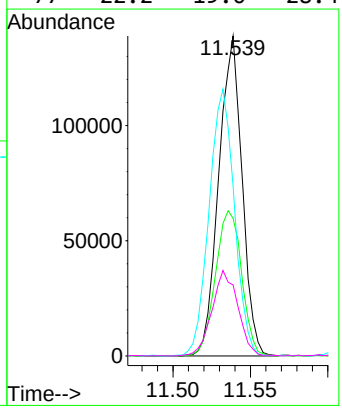
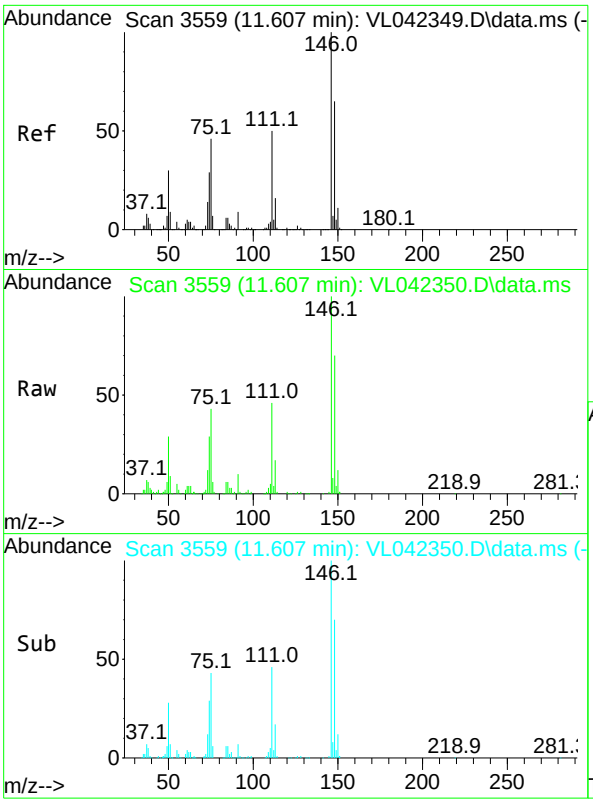


#74
1,2,4-Trimethylbenzene
Concen: 2.140 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 145510

Ion	Ratio	Lower	Upper
105	100		
120	43.0	38.1	57.1
91	53.1	48.8	73.2
77	22.2	19.0	28.4

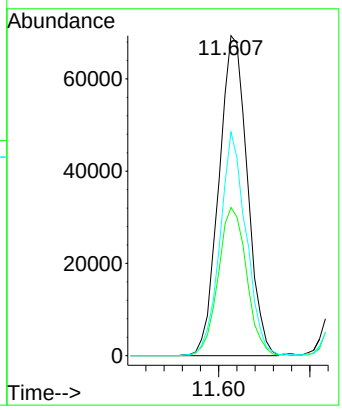




#75
1,3-Dichlorobenzene
Concen: 2.124 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:146 Resp: 7508

Ion	Ratio	Lower	Upper
146	100		
111	46.3	24.3	72.8
148	64.3	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

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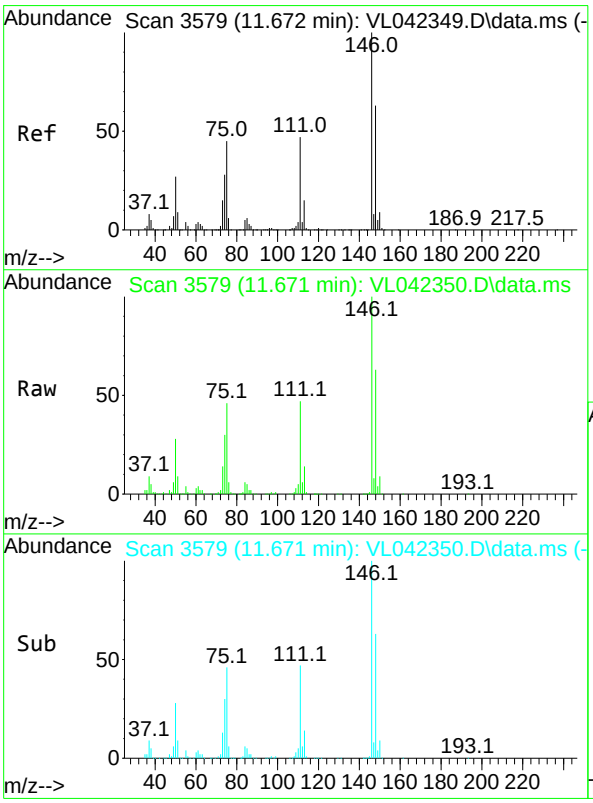
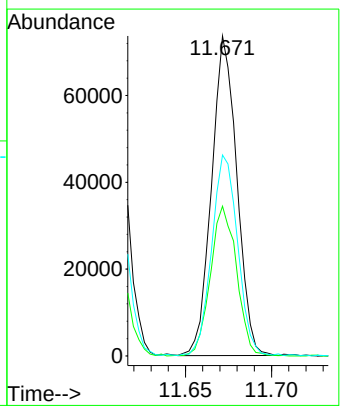
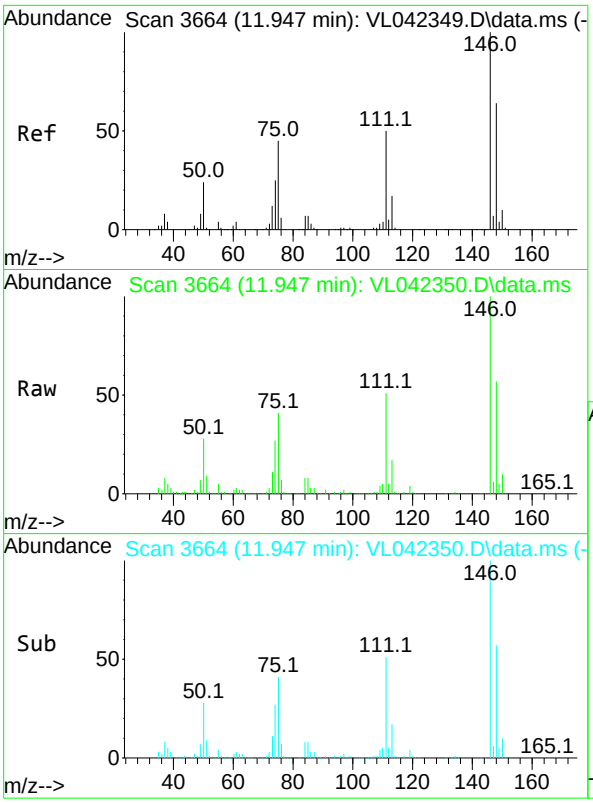


#76
1,4-Dichlorobenzene
Concen: 2.120 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:146 Resp: 75323

Ion	Ratio	Lower	Upper
146	100		
111	48.4	24.2	72.6
148	65.1	32.1	96.5

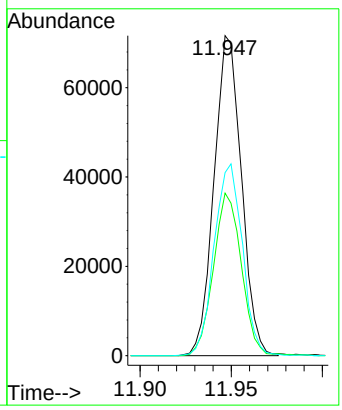




#77
1,2-Dichlorobenzene
Concen: 2.176 ppbv
RT: 11.947 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:146 Resp: 7478

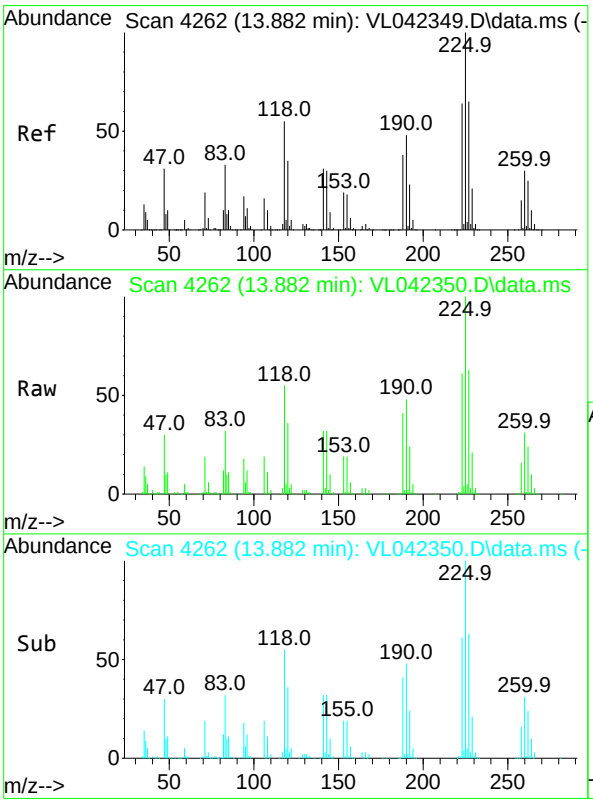
Ion	Ratio	Lower	Upper
146	100		
111	52.0	25.3	75.9
148	61.8	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

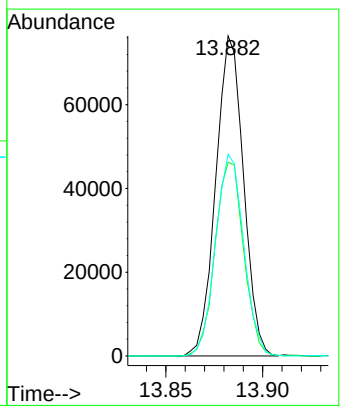
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

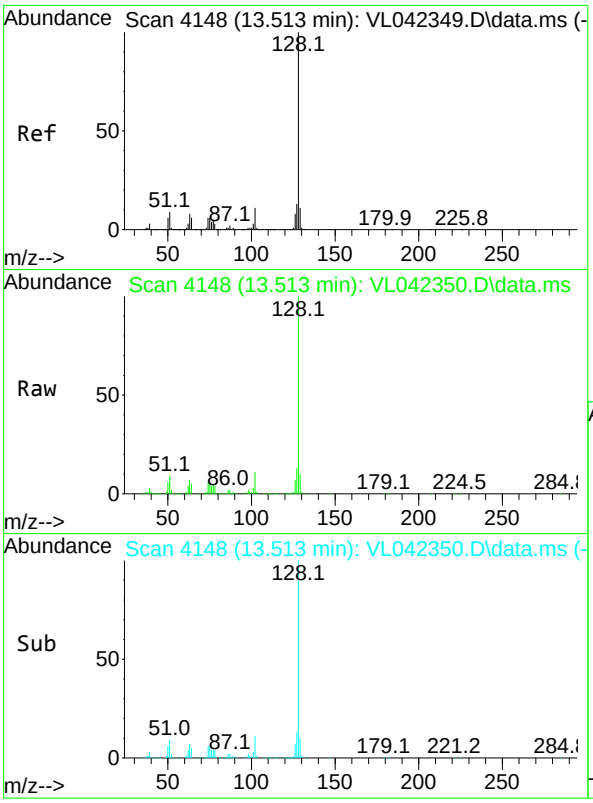


#78
Hexachloro-1,3-Butadiene
Concen: 2.194 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:225 Resp: 76158

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.3	75.5
227	64.1	51.5	77.3





#79
Naphthalene
Concen: 2.401 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

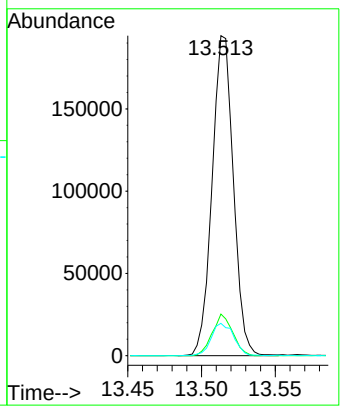
Tgt Ion:128 Resp: 19523

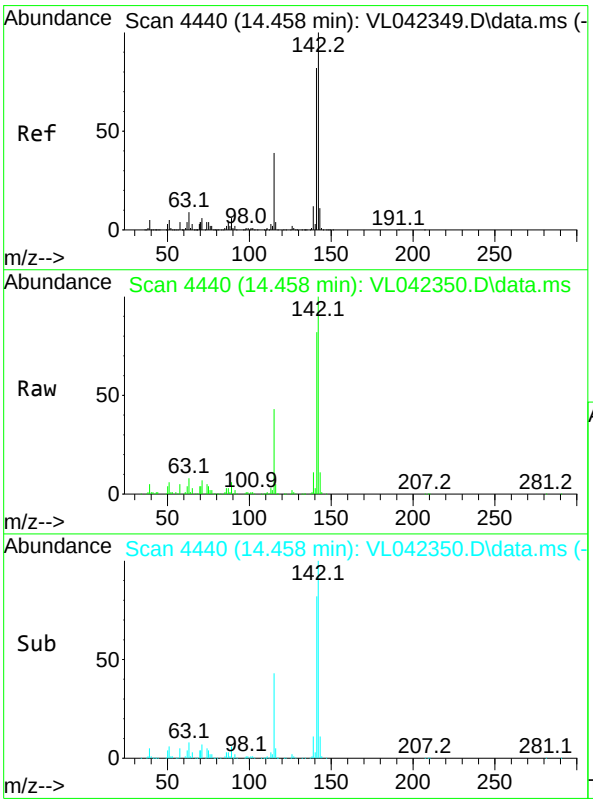
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	15.8
129	10.1	8.6	12.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

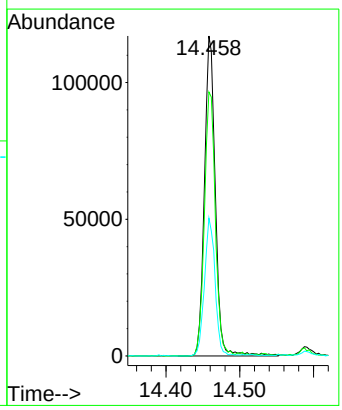


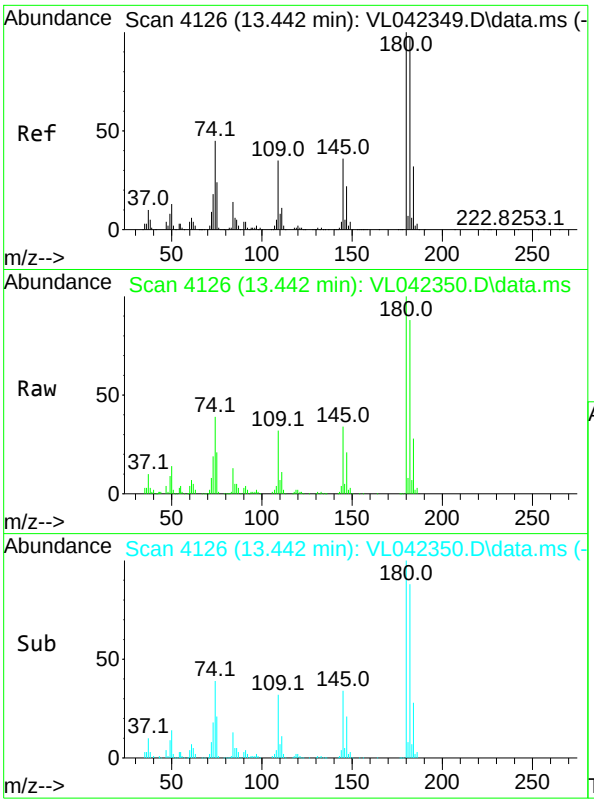


#80
Naphthalene,2-methyl-
Concen: 2.574 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:142 Resp: 119262

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.8	100.2
115	42.2	33.4	50.2

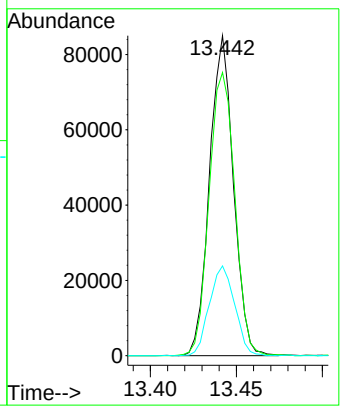




#81
1,2,4-Trichlorobenzene
Concen: 2.353 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:180 Resp: 8215

Ion	Ratio	Lower	Upper
180	100		
182	95.1	76.8	115.2
184	29.8	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	124177	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	359907	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	329090	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	269087	9.950	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	22816	1.040	ppbv	93
3) Chlorodifluoromethane	1.476	51	20573	0.985	ppbv	97
4) Chloromethane	1.535	50	9008	1.038	ppbv	99
5) Vinyl Chloride	1.580	62	8807	0.932	ppbv	98
6) Bromomethane	1.671	94	4099	1.001	ppbv	91
7) Chloroethane	1.706	64	3559	1.041	ppbv	90
8) Dichlorotetrafluoroethane	1.554	85	19251	1.022	ppbv	100
9) Propene	1.486	41	9892	1.040	ppbv	92
10) Heptane	4.982	43	28507m	1.114	ppbv	
11) Trichlorofluoromethane	1.878	101	22428	1.075	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	17865	1.047	ppbv	98
13) Ethanol	1.722	45	1730m	2.225	ppbv	
14) Bromoethene	1.784	108	6766	1.052	ppbv #	89
15) Acetone	1.839	43	23537	1.158	ppbv	97
16) 1,3-Butadiene	1.609	39	10377m	1.087	ppbv	
17) tert-Butyl alcohol	2.043	59	26477	1.051	ppbv #	90
18) 1,1-Dichloroethene	2.036	96	7890	0.962	ppbv	94
19) Isopropyl Alcohol	1.888	45	12175	1.078	ppbv #	39
20) Methylene Chloride	2.062	84	9046	1.136	ppbv	87
21) Allyl Chloride	2.098	41	15057	1.073	ppbv	91
22) trans-1,2-Dichloroethene	2.344	96	9421	1.038	ppbv	96
23) Vinyl Acetate	2.467	43	9234	1.122	ppbv #	90
24) 1,1-Dichloroethane	2.409	63	18236	1.058	ppbv	99
25) Ethyl Acetate	2.842	43	51494	1.027	ppbv #	97
26) Hexane	2.826	57	21350	1.053	ppbv	95
27) Carbon Disulfide	2.153	76	20739	0.955	ppbv #	1
28) Methyl tert-Butyl Ether	2.444	73	14164	1.066	ppbv #	85
29) Chloroform	2.852	83	28973	1.011	ppbv	100
30) Cyclohexane	3.862	84	16547m	1.013	ppbv	
31) cis-1,2-Dichloroethene	2.723	61	19904	1.032	ppbv	97
32) 1,1,1-Trichloroethane	3.376	97	31653	1.030	ppbv	98
34) 2-Butanone	2.564	43	29735	1.045	ppbv	99
35) Carbon Tetrachloride	3.768	117	29875	0.917	ppbv	94
36) Benzene	3.661	78	38707	0.997	ppbv	95
37) 1,2-Dichloroethane	3.224	62	23284	0.999	ppbv	97
38) Trichloroethene	4.551	130	16119	0.947	ppbv	96
39) 1,2-Dichloropropane	4.318	63	14866	1.027	ppbv	96
40) 1,4-Dioxane	4.597	88	8737m	1.114	ppbv	
41) Tetrahydrofuran	3.062	42	17259	1.049	ppbv	96
42) Bromodichloromethane	4.490	83	32721	1.009	ppbv #	98
43) Methyl Methacrylate	4.885	69	18699m	1.073	ppbv	
44) 2,2,4-Trimethylpentane	4.642	57	68946m	1.027	ppbv	
45) t-1,3-Dichloropropene	6.416	75	18347m	1.026	ppbv	

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	22189m	1.015	ppbv		
47) 1,1,2-Trichloroethane	6.587	97	15457m	1.048	ppbv		
48) Dibromochloromethane	7.390	129	25948	0.997	ppbv		100
49) Bromoform	9.484	173	22413	0.984	ppbv		98
50) 4-Methyl-2-Pentanone	5.765	43	49725	1.049	ppbv		97
51) 2-Hexanone	7.445	43	47178	1.103	ppbv		99
52) Tetrachloroethene	8.228	164	14154	0.943	ppbv		93
53) Toluene	6.940	91	46611	1.001	ppbv		100
54) 1,2-Dibromoethane	7.658	107	21780	1.036	ppbv		93
56) 1,1,1,2-Tetrachloroethane	8.927	131	21052	1.057	ppbv		95
57) Chlorobenzene	8.921	112	35113	1.026	ppbv	#	95
58) Ethyl Benzene	9.354	91	68703	1.054	ppbv		96
59) m/p-Xylene	9.552	91	110702m	2.101	ppbv		
60) o-Xylene	9.966	91	55831	1.056	ppbv		99
61) Styrene	9.872	104	25544	1.012	ppbv		100
62) Isopropylbenzene	10.542	105	81286	1.047	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.966	83	32410	0.943	ppbv		99
64) n-propylbenzene	10.989	120	19898	1.019	ppbv		90
65) tert-Butylbenzene	11.533	119	77598	1.087	ppbv		92
66) Benzyl Chloride	11.617	91	7864	1.003	ppbv	#	91
67) sec-Butylbenzene	11.769	105	105919	1.067	ppbv		97
69) p-Isopropyltoluene	11.928	119	92733	1.075	ppbv		97
70) n-Butylbenzene	12.284	91	96306	1.072	ppbv		99
71) 2-Chlorotoluene	10.905	91	63321	1.040	ppbv		99
72) 4-Ethyltoluene	11.128	105	69698	1.078	ppbv		99
73) 1,3,5-Trimethylbenzene	11.206	105	60927	1.067	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	73888	1.108	ppbv		95
75) 1,3-Dichlorobenzene	11.610	146	36877	1.064	ppbv		98
76) 1,4-Dichlorobenzene	11.675	146	36692	1.053	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	35977	1.068	ppbv		97
78) Hexachloro-1,3-Butadiene	13.886	225	37377	1.098	ppbv		99
79) Naphthalene	13.517	128	90710	1.138	ppbv		99
80) Naphthalene,2-methyl-	14.462	142	50487	1.111	ppbv		98
81) 1,2,4-Trichlorobenzene	13.442	180	36764	1.074	ppbv		99

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

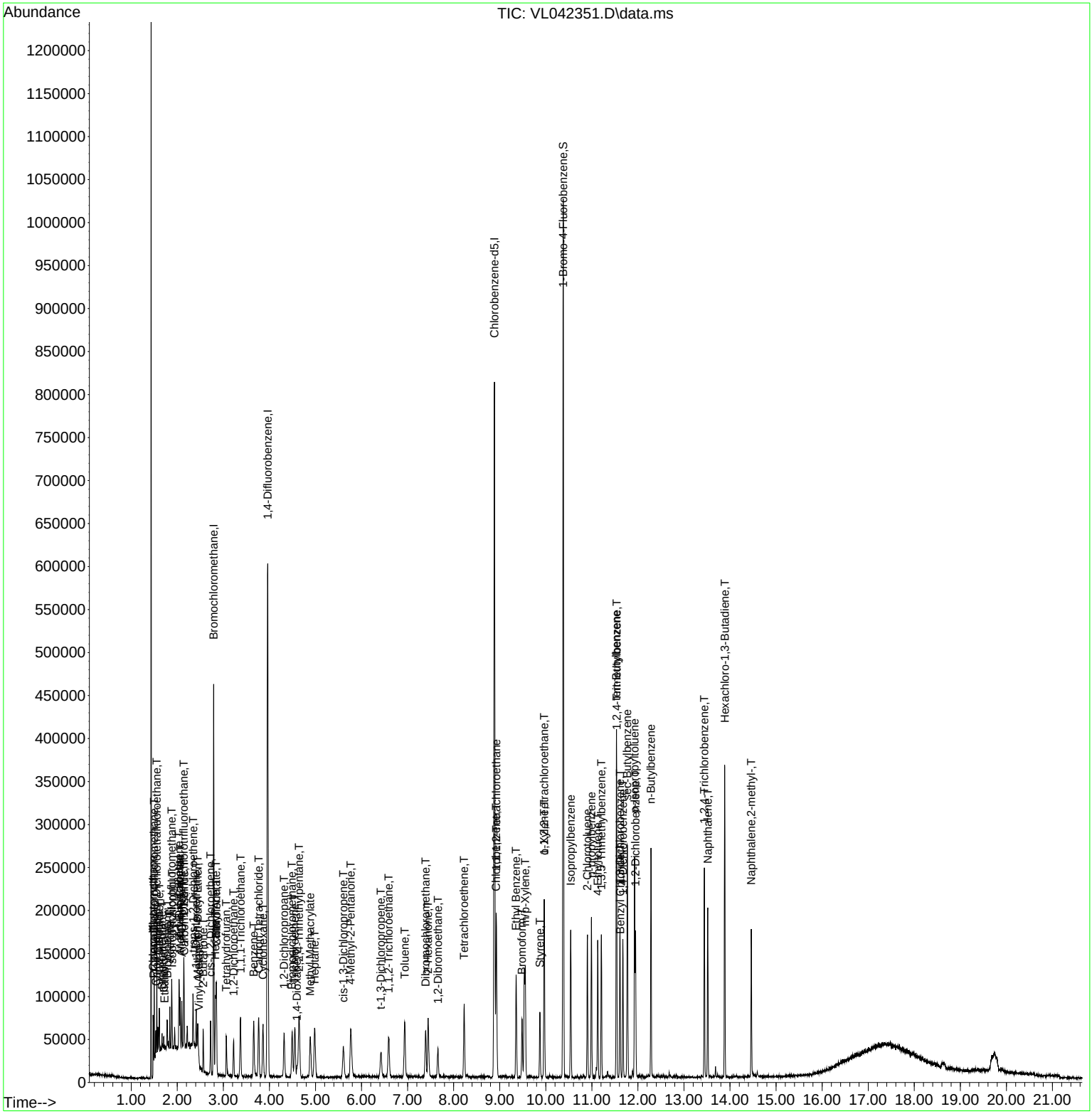
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

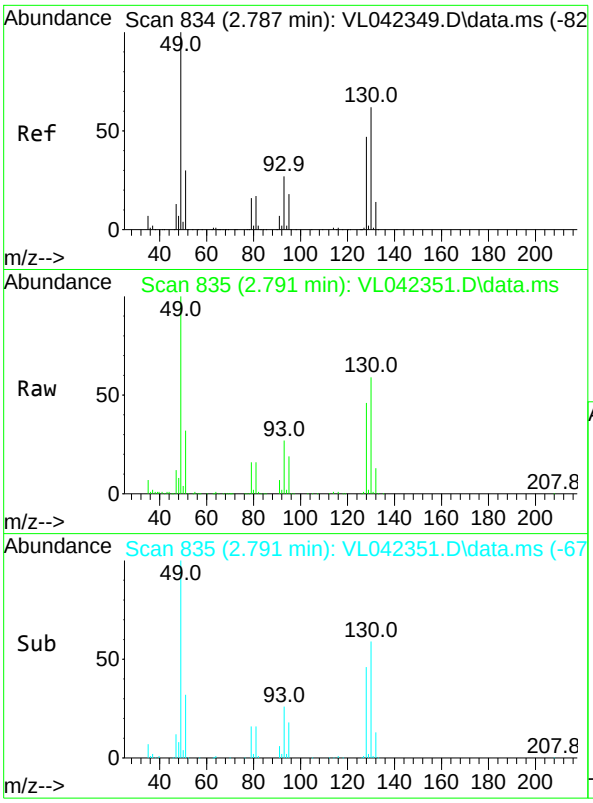
Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

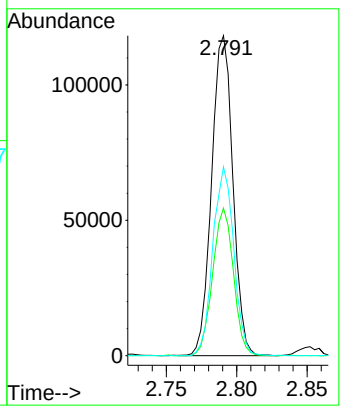




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 49 Resp: 12417

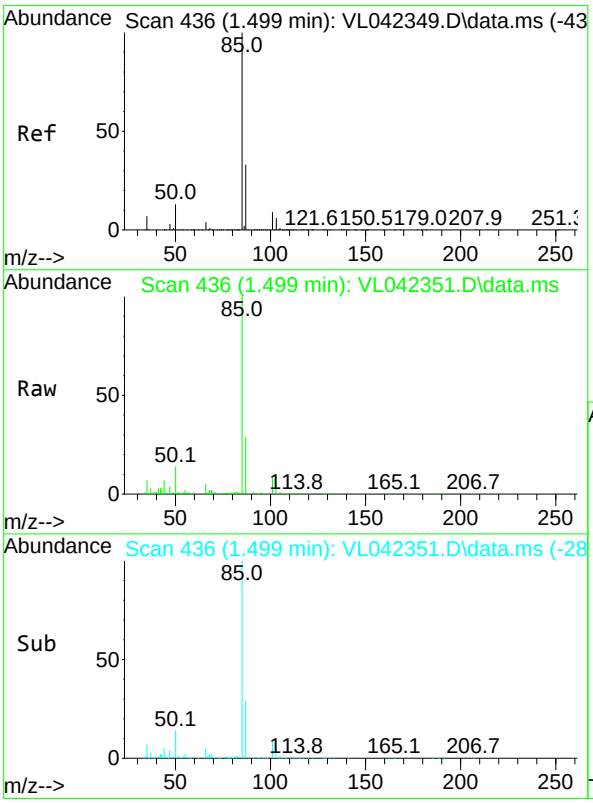
Ion	Ratio	Lower	Upper
49	100		
128	45.2	22.8	68.4
130	58.1	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

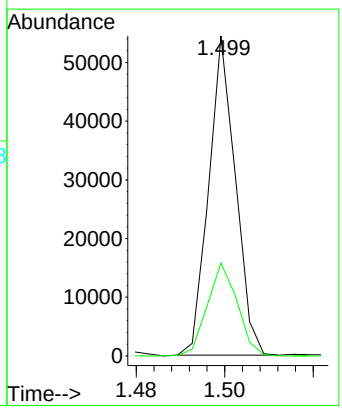
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

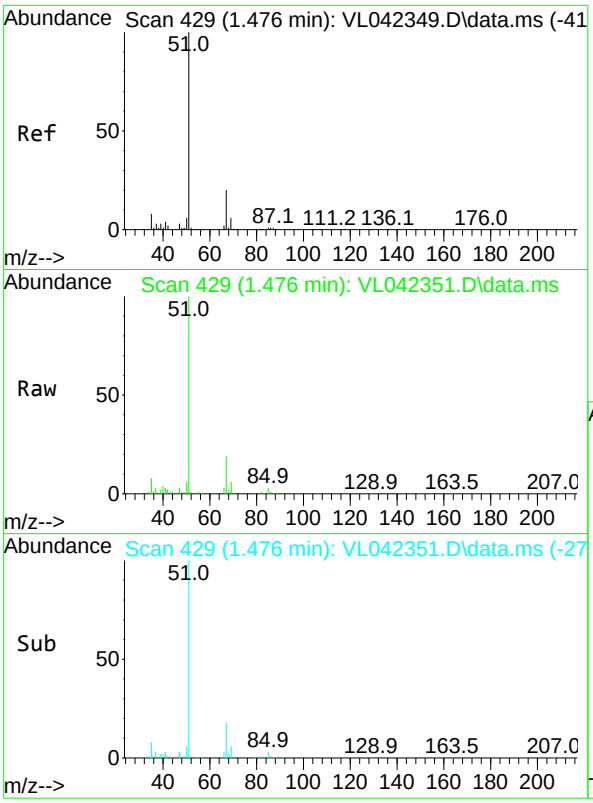


#2
Dichlorodifluoromethane
Concen: 1.040 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 85 Resp: 22816

Ion	Ratio	Lower	Upper
85	100		
87	29.1	26.6	39.8

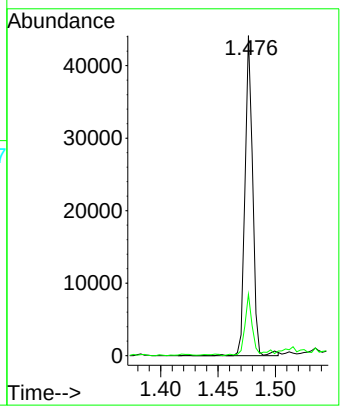




#3
Chlorodifluoromethane
Concen: 0.985 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 51 Resp: 2057

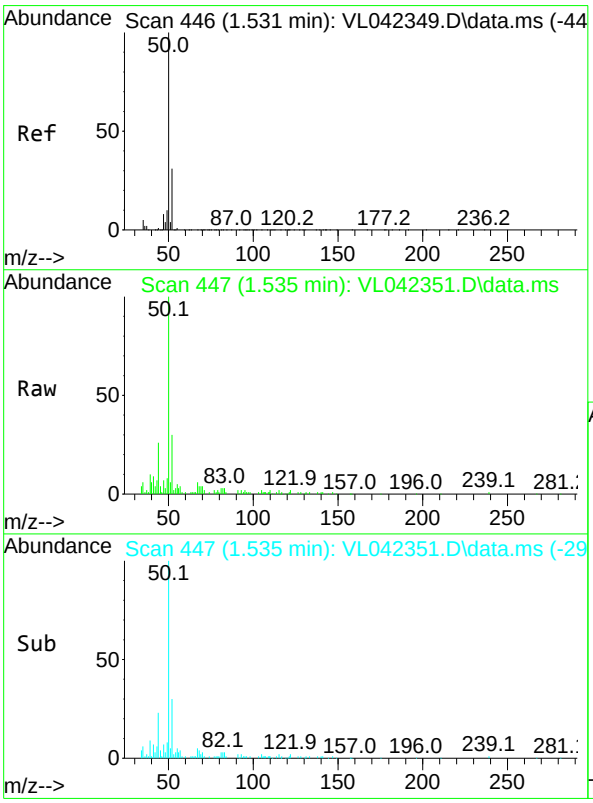
Ion	Ratio	Lower	Upper
51	100		
67	19.1	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

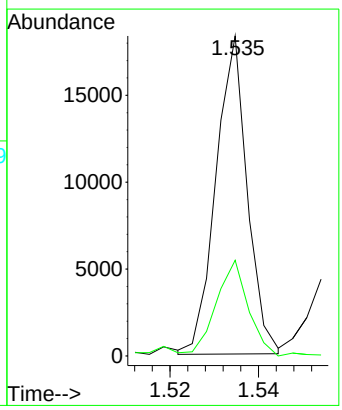
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

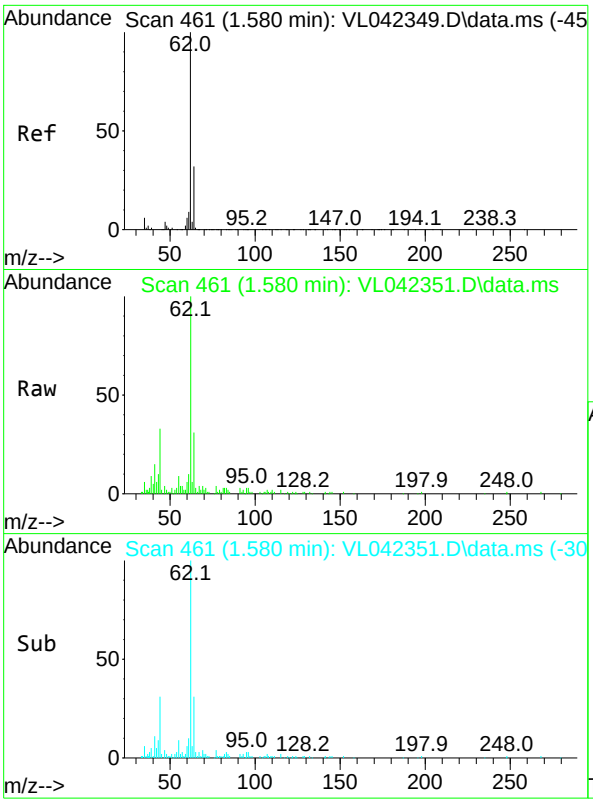


#4
Chloromethane
Concen: 1.038 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 50 Resp: 9008

Ion	Ratio	Lower	Upper
50	100		
52	30.4	24.7	37.1

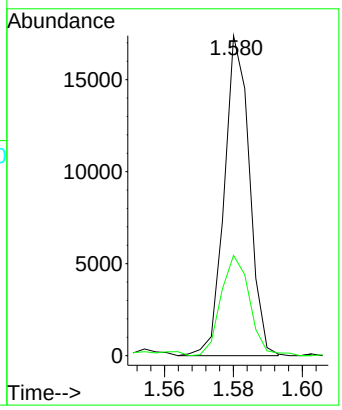




#5
Vinyl Chloride
Concen: 0.932 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 62 Resp: 880

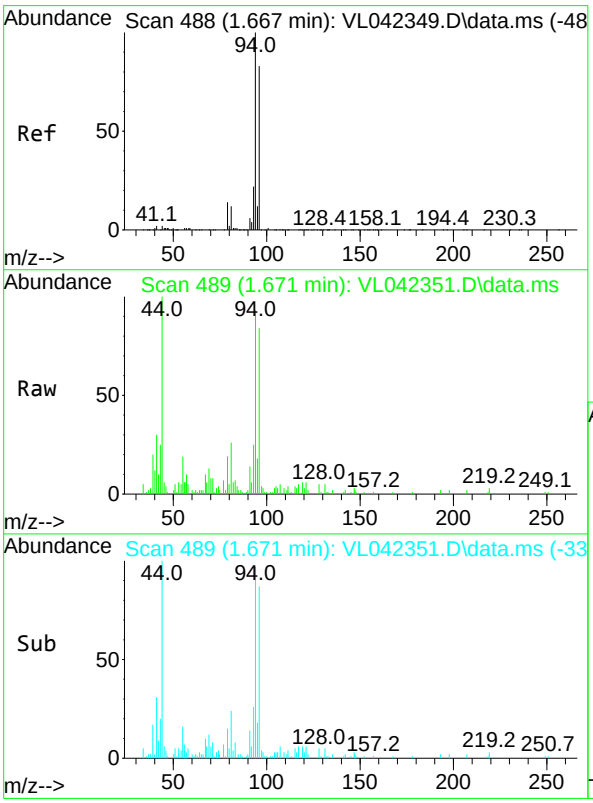
Ion	Ratio	Lower	Upper
62	100		
64	30.5	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

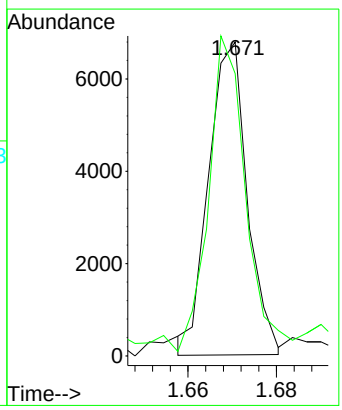
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

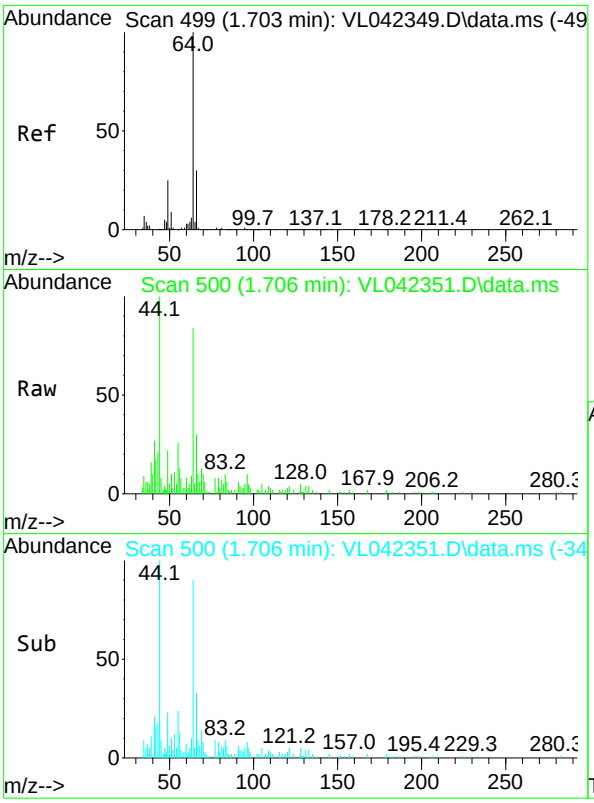


#6
Bromomethane
Concen: 1.001 ppbv
RT: 1.671 min Scan# 489
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 94 Resp: 4099

Ion	Ratio	Lower	Upper
94	100		
96	91.0	66.2	99.2

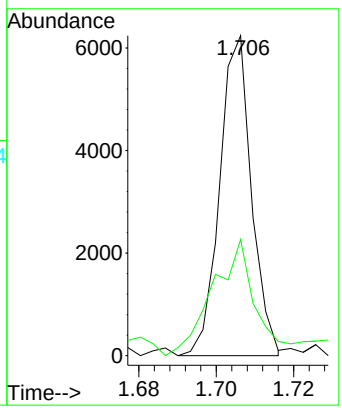




#7
Chloroethane
Concen: 1.041 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 64 Resp: 355

Ion	Ratio	Lower	Upper
64	100		
66	36.3	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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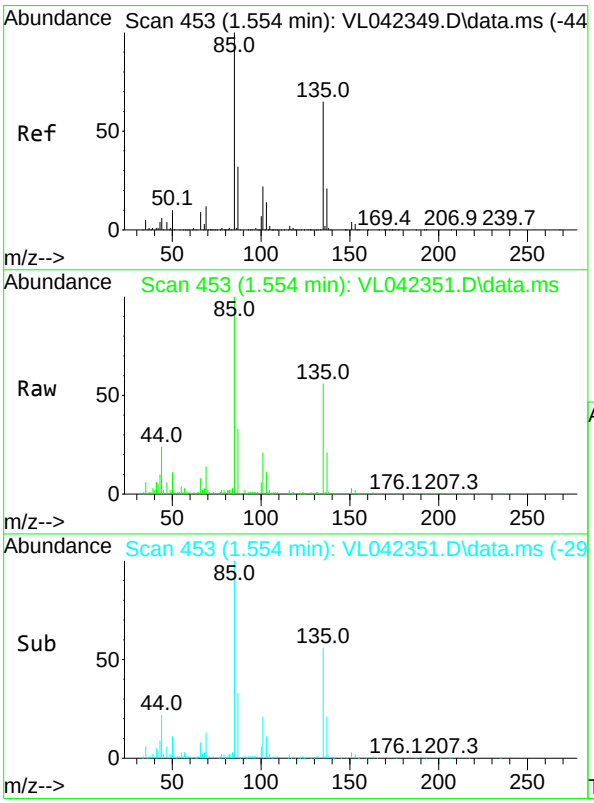
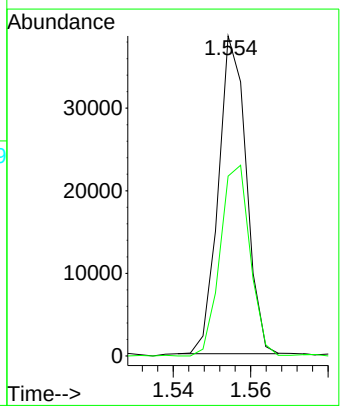
Supervised By :Mahesh Dadoda 04/18/2025

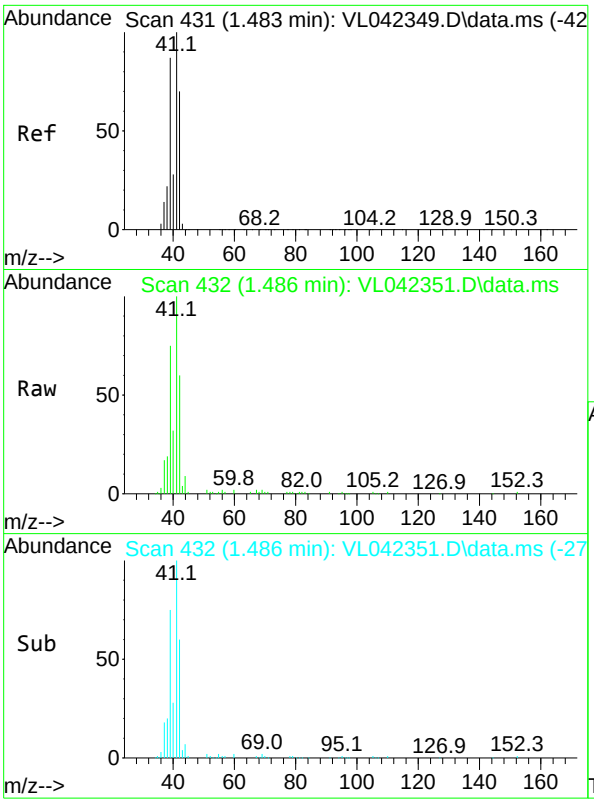


#8
Dichlorotetrafluoroethane
Concen: 1.022 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 85 Resp: 19251

Ion	Ratio	Lower	Upper
85	100		
135	65.2	52.2	78.2

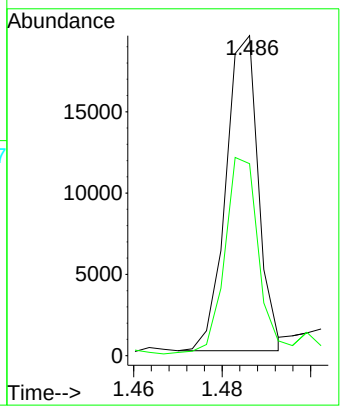




#9
Propene
Concen: 1.040 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 41 Resp: 989

Ion	Ratio	Lower	Upper
41	100		
42	77.2	56.2	84.4



Instrument :
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ClientSampleId :
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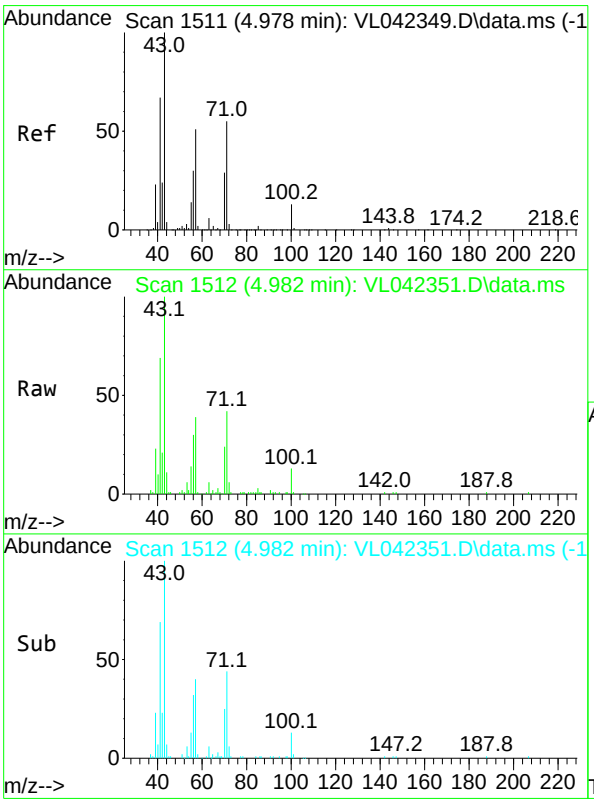
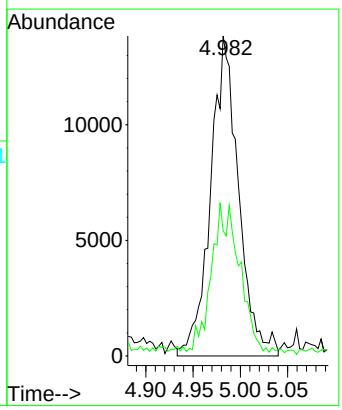
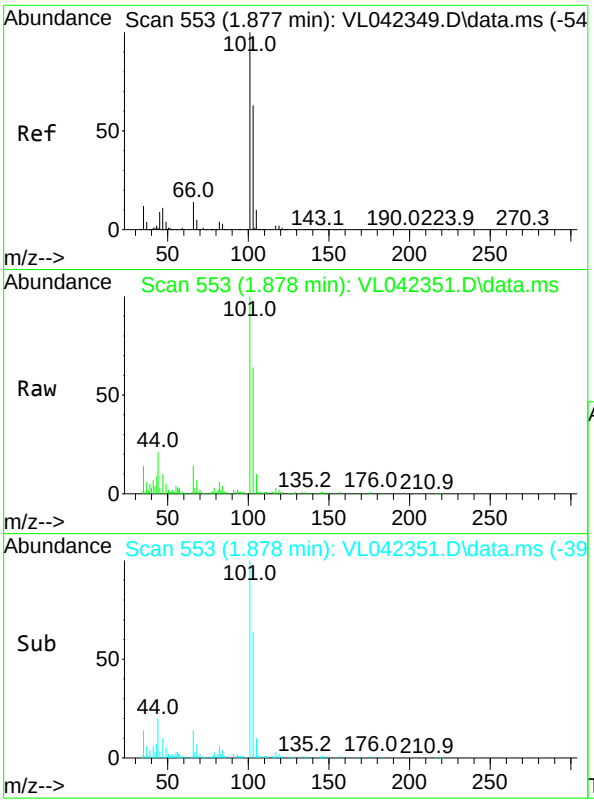


#10
Heptane
Concen: 1.114 ppbv m
RT: 4.982 min Scan# 1512
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 28507

Ion	Ratio	Lower	Upper
43	100		
57	48.1	39.9	59.9





#11
Trichlorofluoromethane
Concen: 1.075 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:101 Resp: 2242

Ion	Ratio	Lower	Upper
101	100		
103	63.6	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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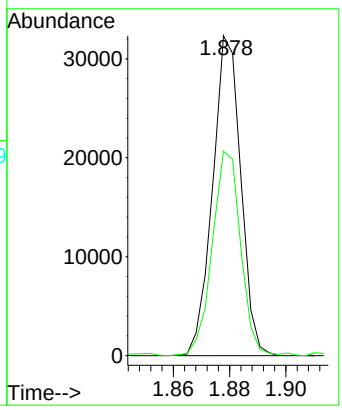
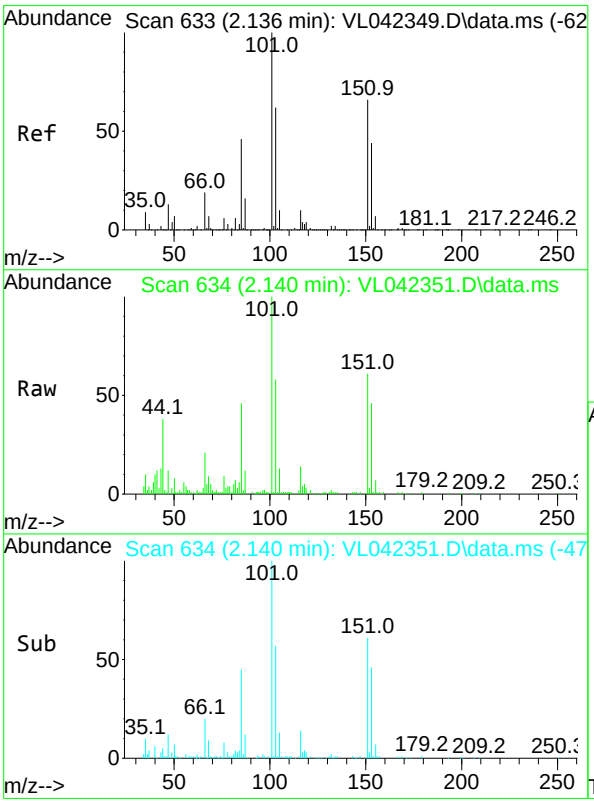
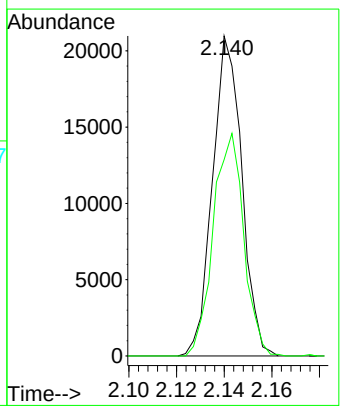


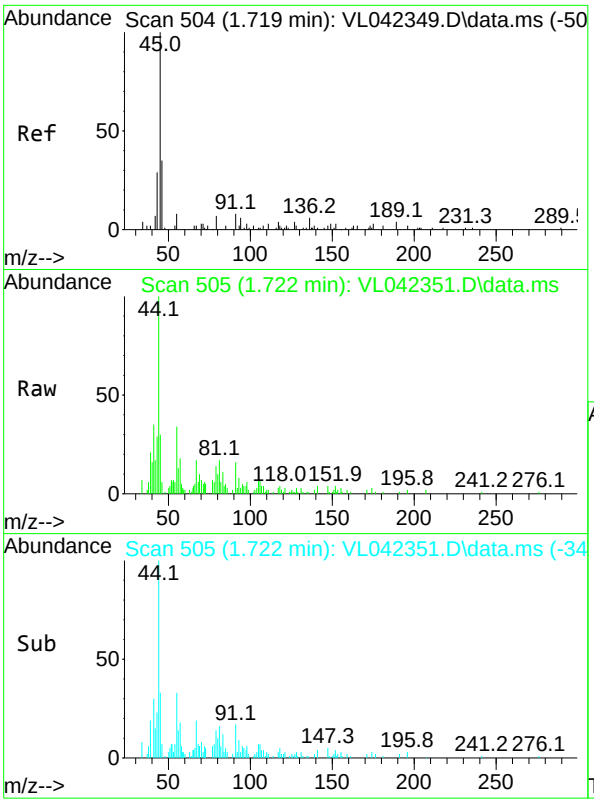


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.047 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:101 Resp: 17865

Ion	Ratio	Lower	Upper
101	100		
151	72.6	57.0	85.6

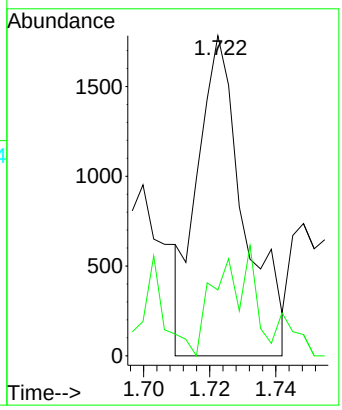




#13
Ethanol
Concen: 2.225 ppbv m
RT: 1.722 min Scan# 5(
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 45 Resp: 173(

Ion	Ratio	Lower	Upper
45	100		
46	44.9	21.9	87.7



Instrument :
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ClientSampleId :
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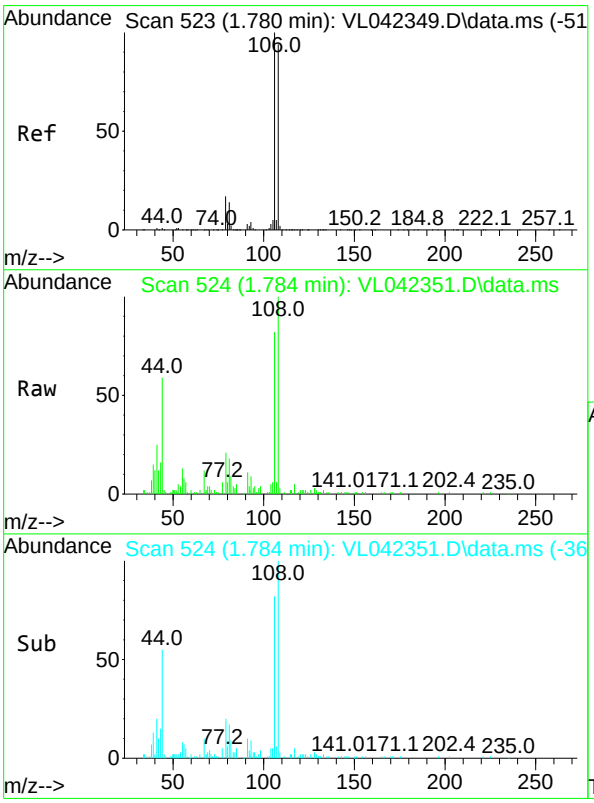
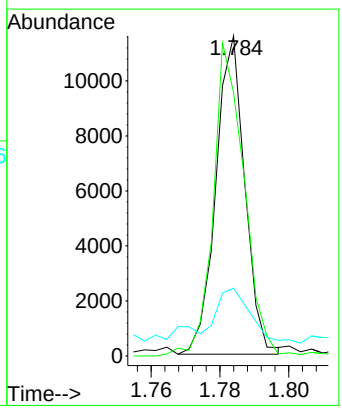
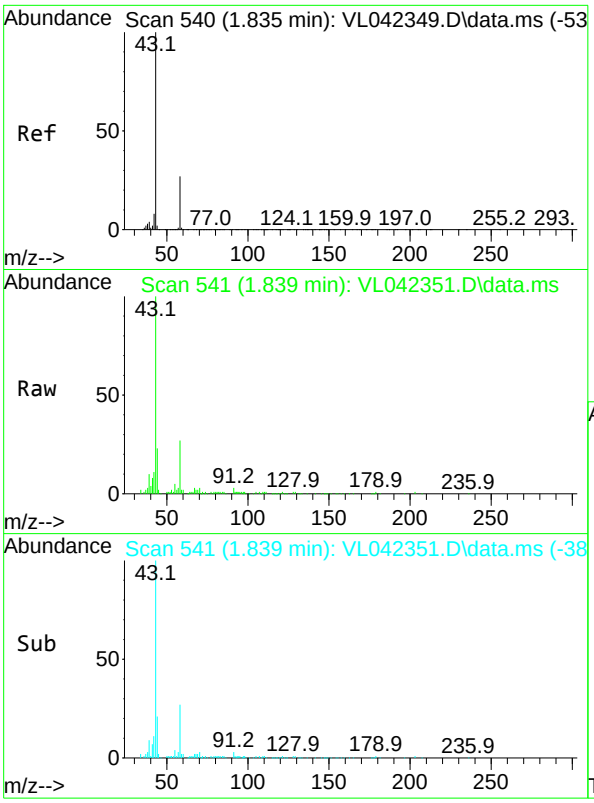


#14
Bromoethene
Concen: 1.052 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:108 Resp: 6766

Ion	Ratio	Lower	Upper
108	100		
106	104.7	85.9	128.9
79	45.4	13.9	20.9#

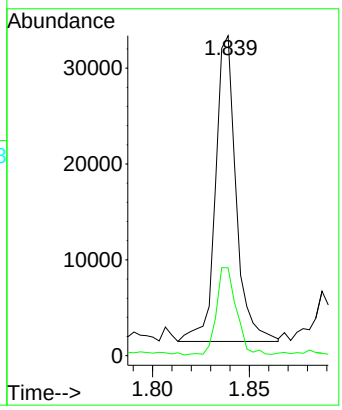




#15
Acetone
Concen: 1.158 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 2353

Ion	Ratio	Lower	Upper
43	100		
58	29.4	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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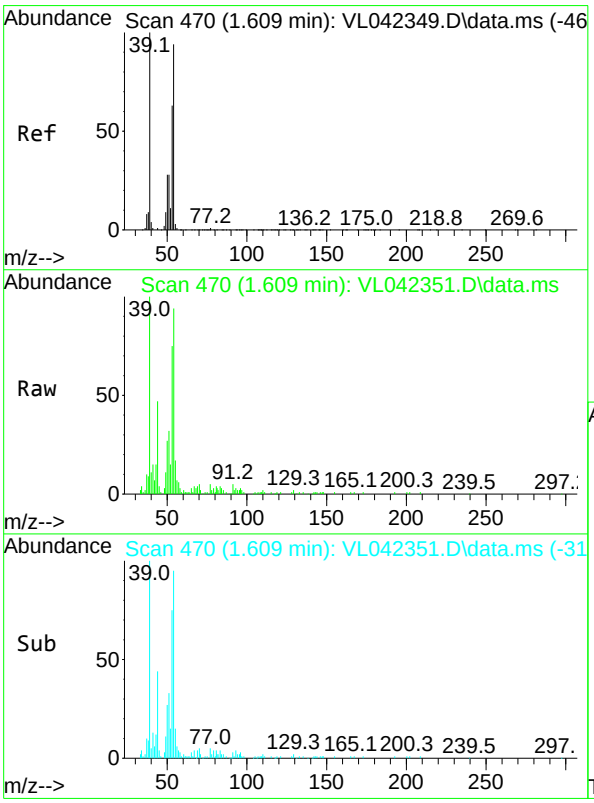
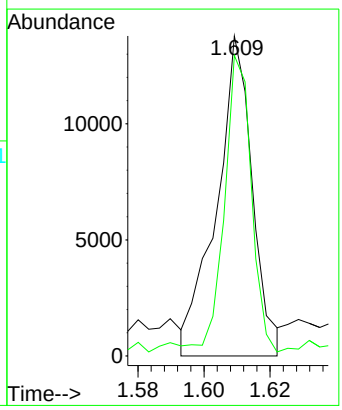
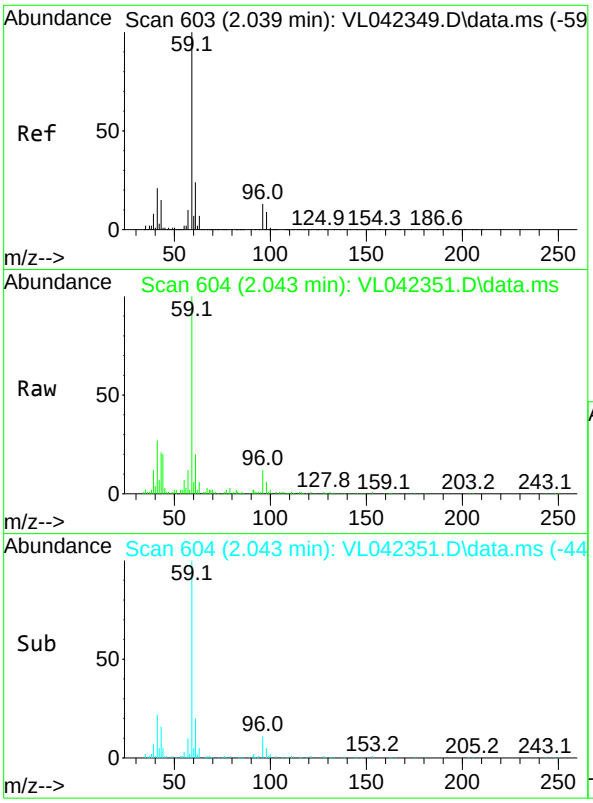


#16
1,3-Butadiene
Concen: 1.087 ppbv m
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 39 Resp: 10377

Ion	Ratio	Lower	Upper
39	100		
54	71.0	64.9	97.3





#17
tert-Butyl alcohol
Concen: 1.051 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 59 Resp: 2647

Ion	Ratio	Lower	Upper
59	100		
57	14.6	8.7	13.1#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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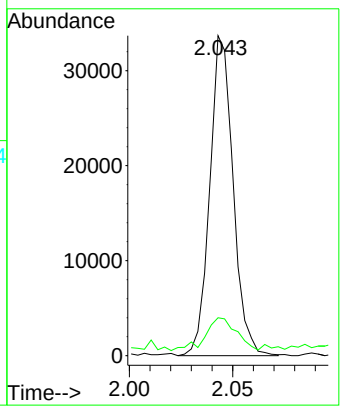
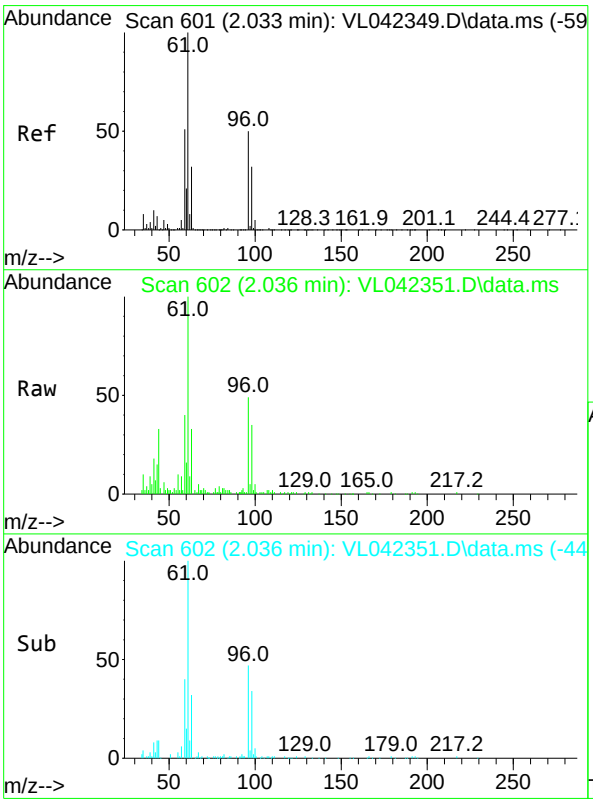
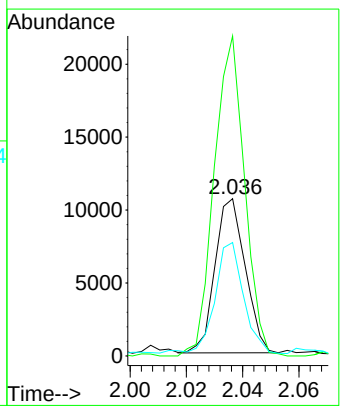


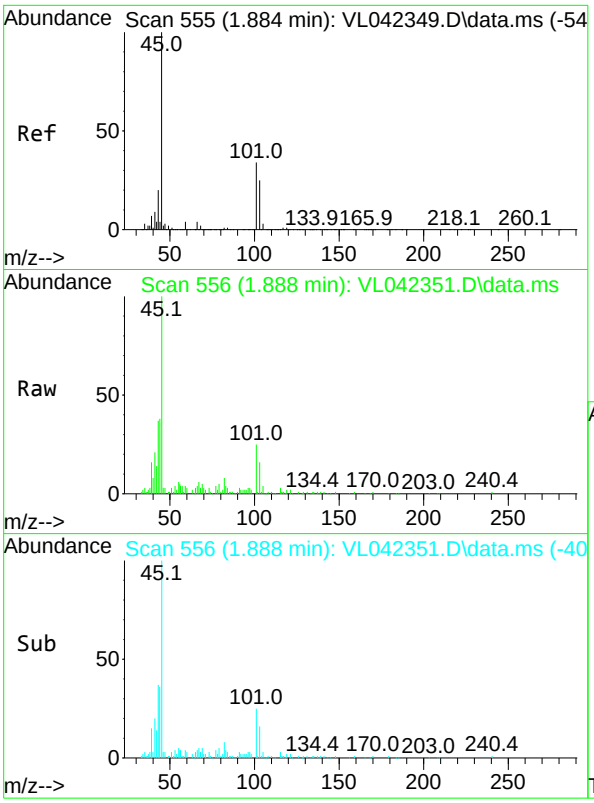


#18
1,1-Dichloroethene
Concen: 0.962 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 96 Resp: 7890

Ion	Ratio	Lower	Upper
96	100		
61	207.8	160.2	240.2
98	71.9	51.0	76.4





#19
Isopropyl Alcohol
Concen: 1.078 ppbv
RT: 1.888 min Scan# 5
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 45 Resp: 1217

Ion	Ratio	Lower	Upper
45	100		
58	3.8	34.5	51.7

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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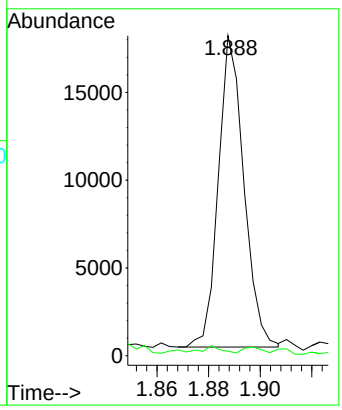
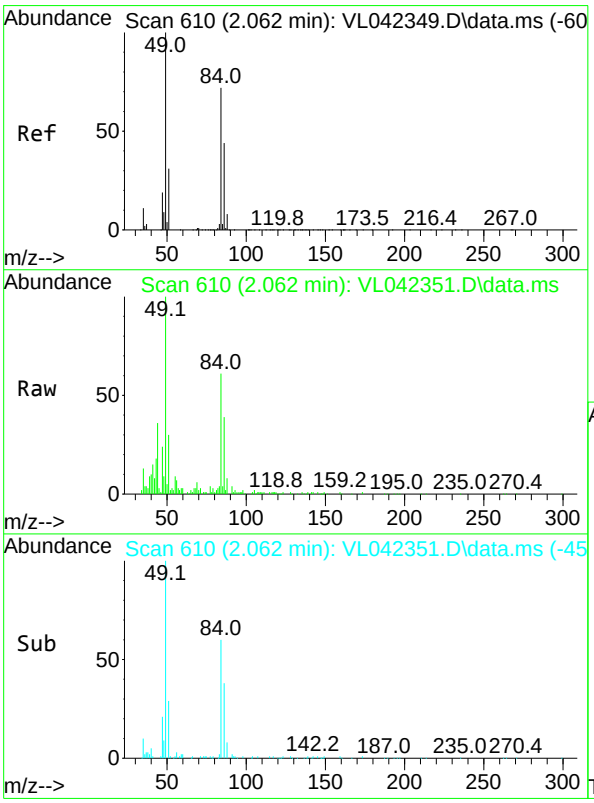
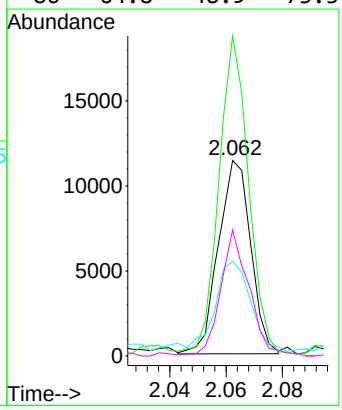


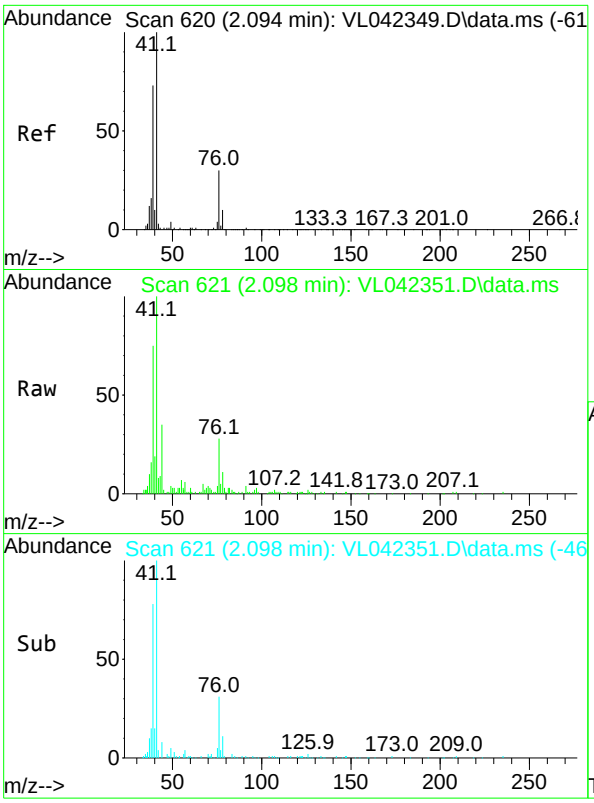


#20
Methylene Chloride
Concen: 1.136 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 84 Resp: 9046

Ion	Ratio	Lower	Upper
84	100		
49	164.4	111.6	167.4
51	44.4	35.1	52.7
86	64.8	48.9	73.3

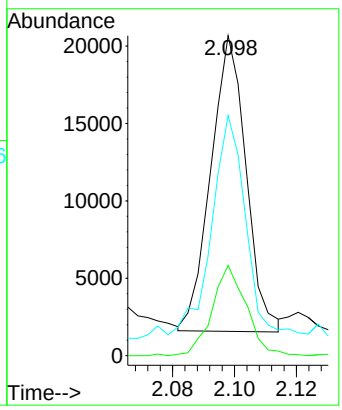




#21
Allyl Chloride
Concen: 1.073 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 41 Resp: 1505

Ion	Ratio	Lower	Upper
41	100		
76	29.8	24.8	37.2
39	86.1	60.6	90.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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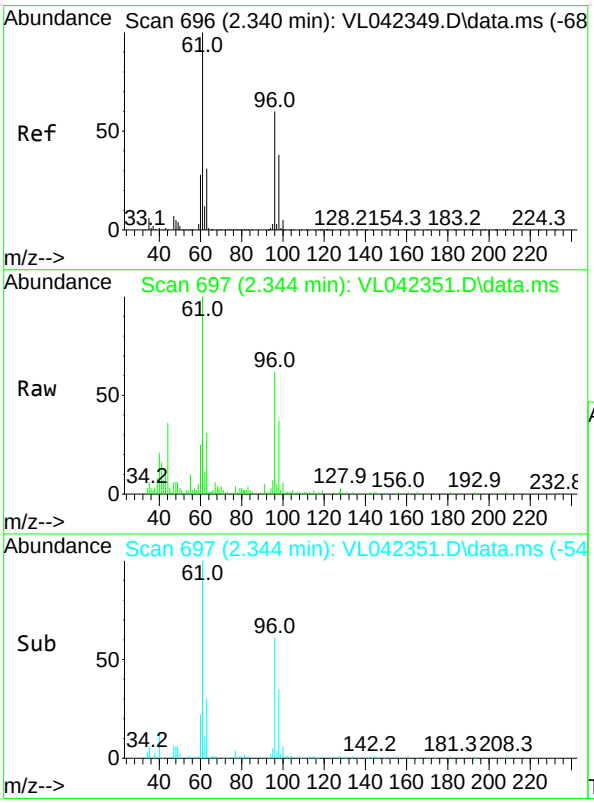
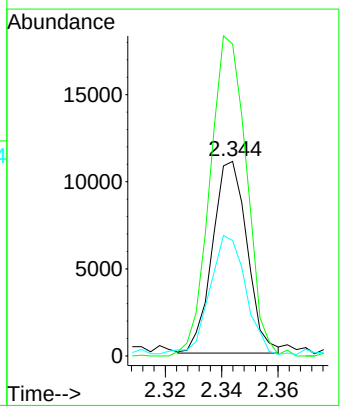
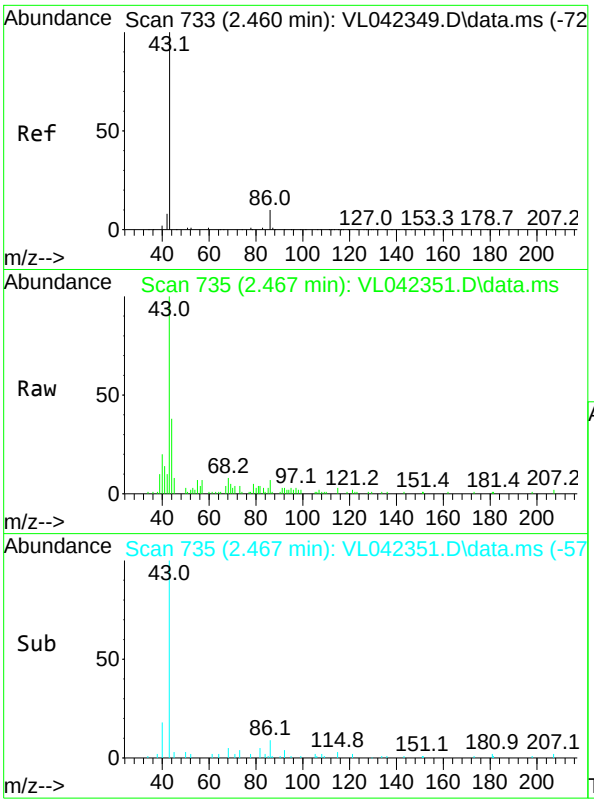


#22
trans-1,2-Dichloroethene
Concen: 1.038 ppbv
RT: 2.344 min Scan# 697
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 96 Resp: 9421

Ion	Ratio	Lower	Upper
96	100		
61	161.7	133.7	200.5
98	59.8	50.3	75.5

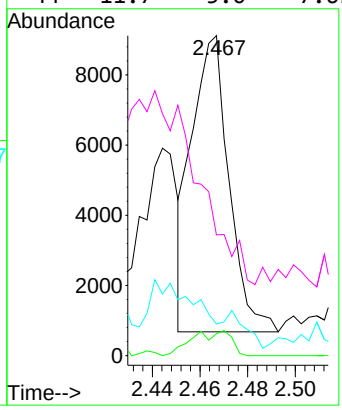




#23
Vinyl Acetate
Concen: 1.122 ppbv
RT: 2.467 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 923

Ion	Ratio	Lower	Upper
43	100		
86	7.4	6.5	9.7
42	4.6	7.8	11.8#
44	11.7	5.0	7.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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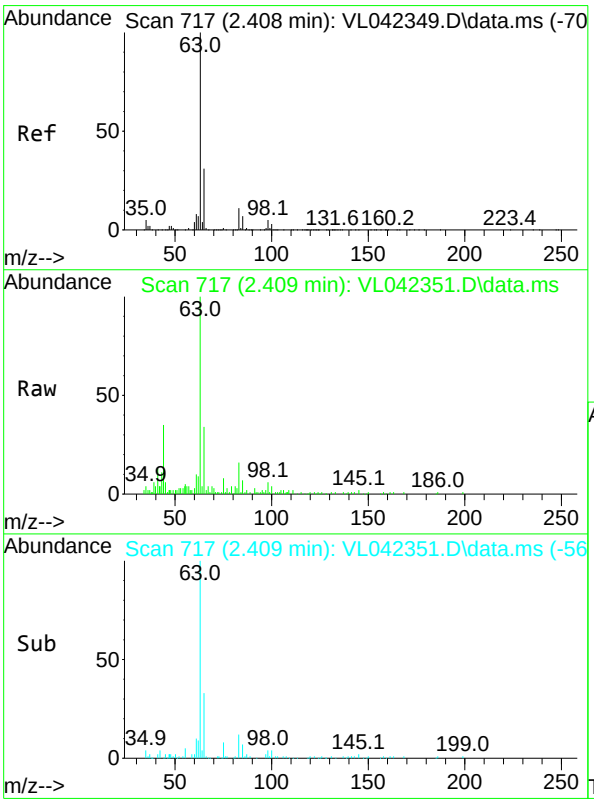
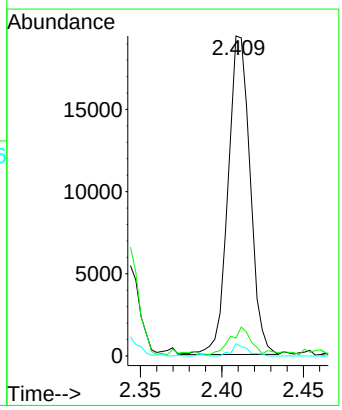
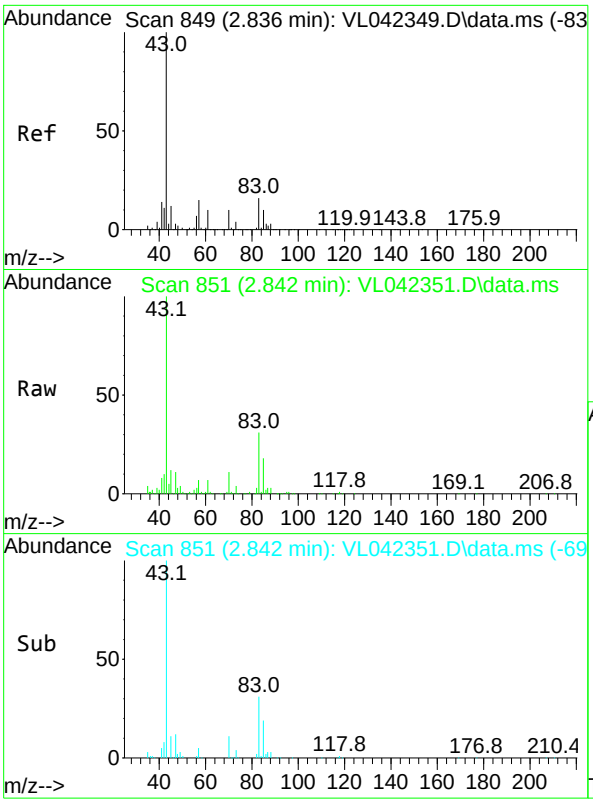


#24
1,1-Dichloroethane
Concen: 1.058 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 63 Resp: 18236

Ion	Ratio	Lower	Upper
63	100		
98	4.7	2.3	6.8
100	3.9	1.6	4.8

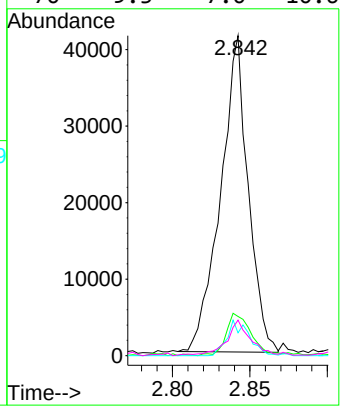




#25
Ethyl Acetate
Concen: 1.027 ppbv
RT: 2.842 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 5149

Ion	Ratio	Lower	Upper
43	100		
45	13.1	8.3	12.5
61	9.0	7.3	10.9
70	9.3	7.0	10.6



Instrument :
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ClientSampleId :
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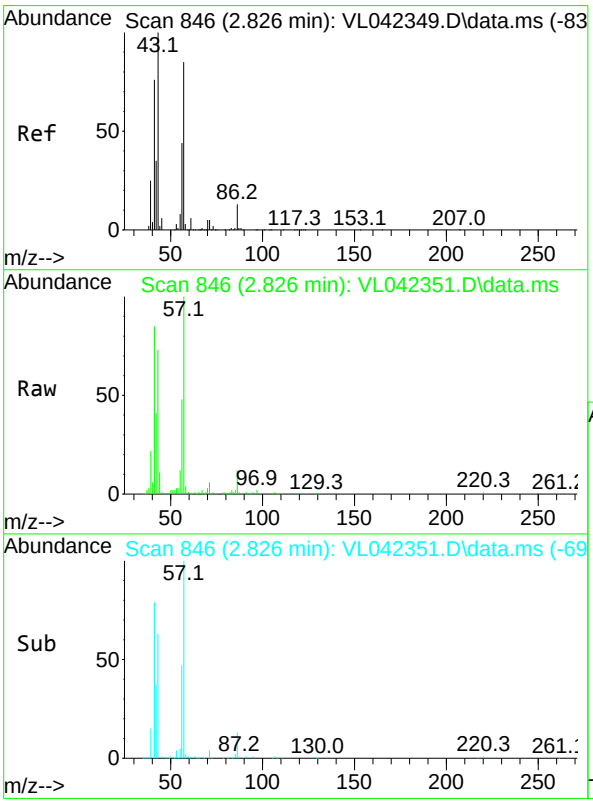
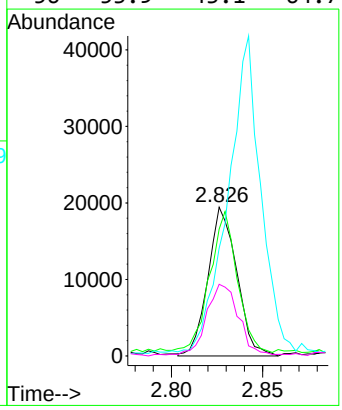
Supervised By :Mahesh Dadoda 04/18/2025

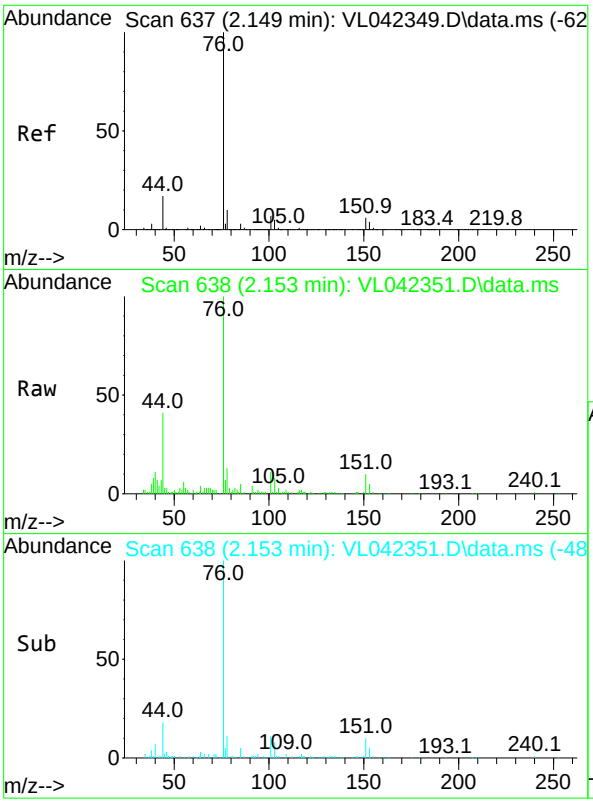


#26
Hexane
Concen: 1.053 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 57 Resp: 21350

Ion	Ratio	Lower	Upper
57	100		
41	95.3	77.9	116.9
43	247.5	208.4	312.6
56	53.9	43.1	64.7





#27
Carbon Disulfide
Concen: 0.955 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 76 Resp: 2073

Ion	Ratio	Lower	Upper
76	100		
44	93.1	15.5	23.3#
78	19.8	9.3	13.9#

Instrument :
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ClientSampleId :
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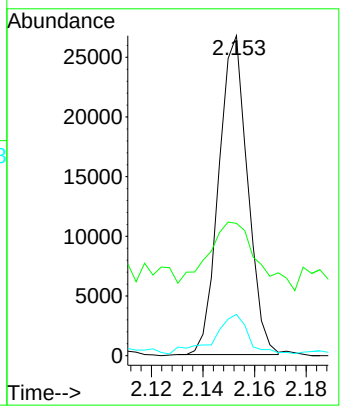
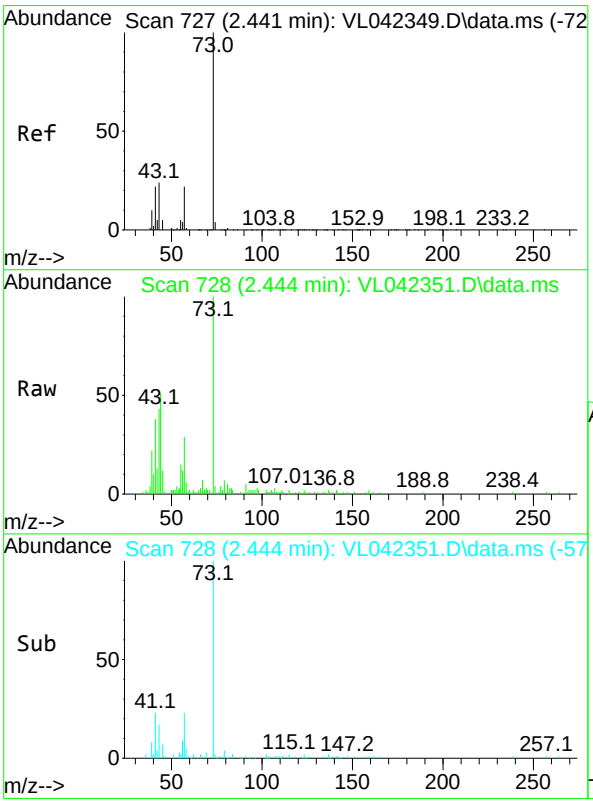
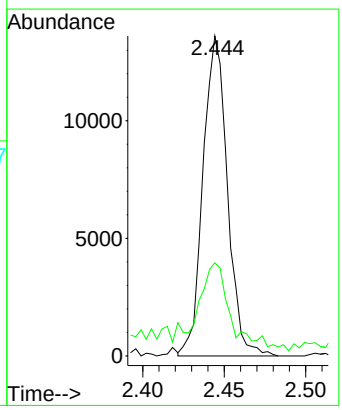


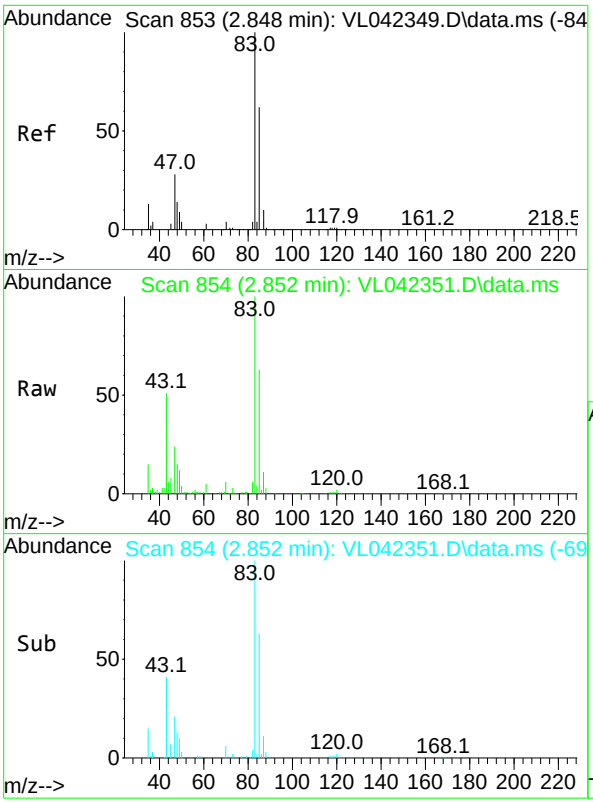


#28
Methyl tert-Butyl Ether
Concen: 1.066 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 73 Resp: 14164

Ion	Ratio	Lower	Upper
73	100		
57	34.2	21.3	31.9#

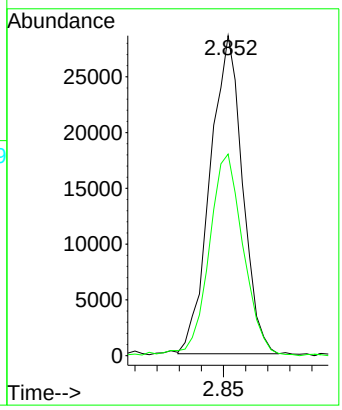




#29
Chloroform
Concen: 1.011 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 83 Resp: 2897

Ion	Ratio	Lower	Upper
83	100		
85	62.6	50.0	75.0



Instrument :
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ClientSampleId :
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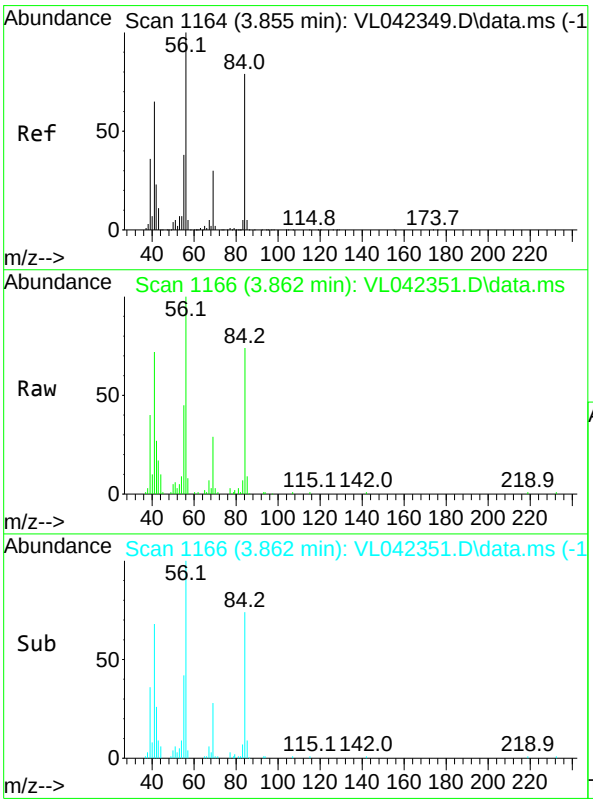
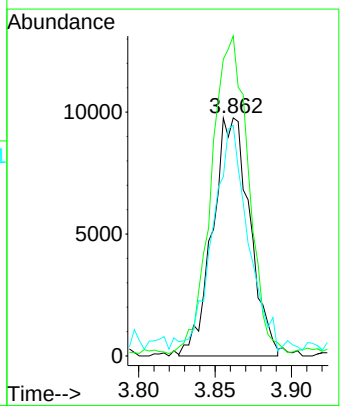
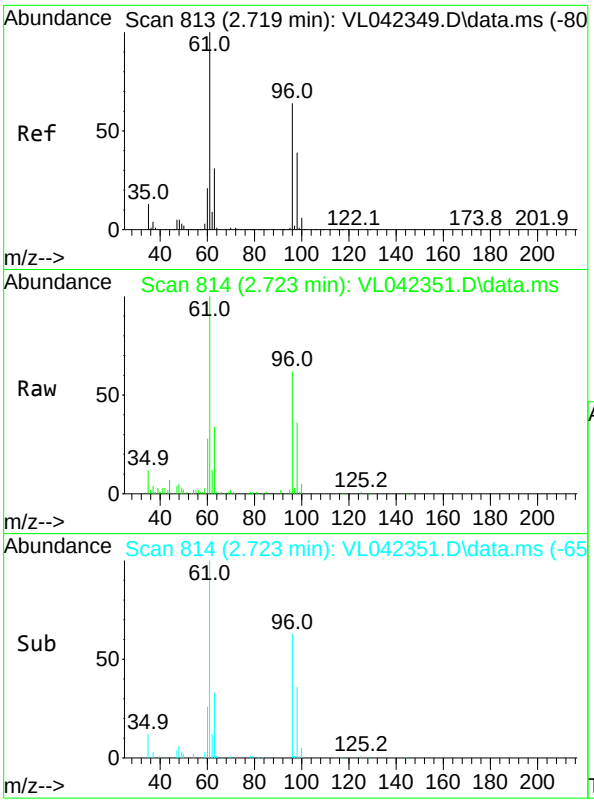


#30
Cyclohexane
Concen: 1.013 ppbv m
RT: 3.862 min Scan# 1166
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 84 Resp: 16547

Ion	Ratio	Lower	Upper
84	100		
56	134.2	101.0	151.4
41	85.1	67.4	101.0

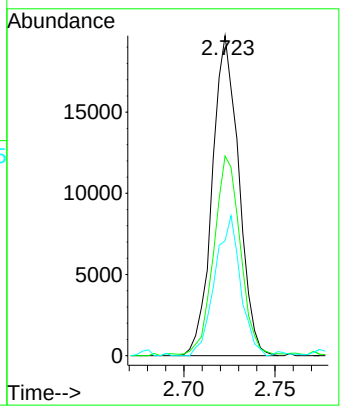




#31
cis-1,2-Dichloroethene
Concen: 1.032 ppbv
RT: 2.723 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 61 Resp: 1990

Ion	Ratio	Lower	Upper
61	100		
96	61.9	50.8	76.2
98	35.9	30.9	46.3



Instrument :
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ClientSampleId :
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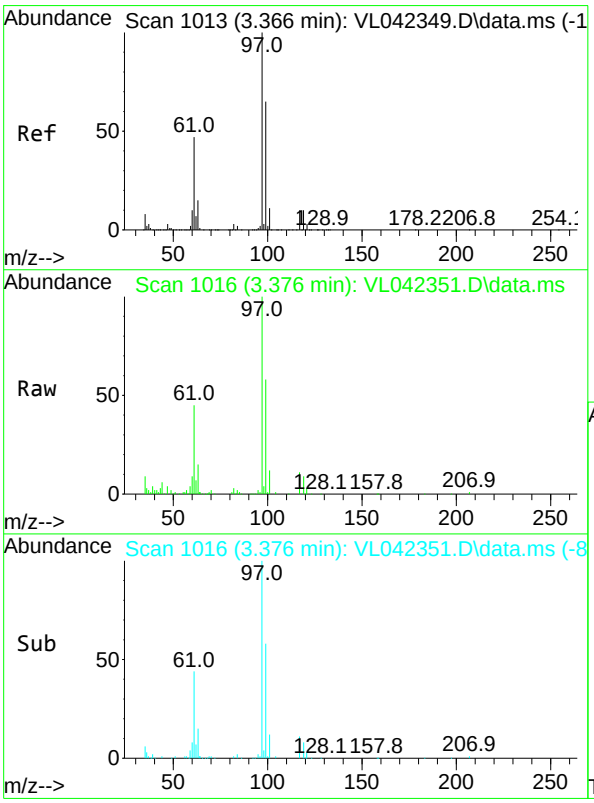
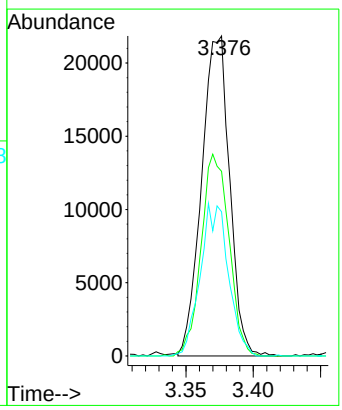
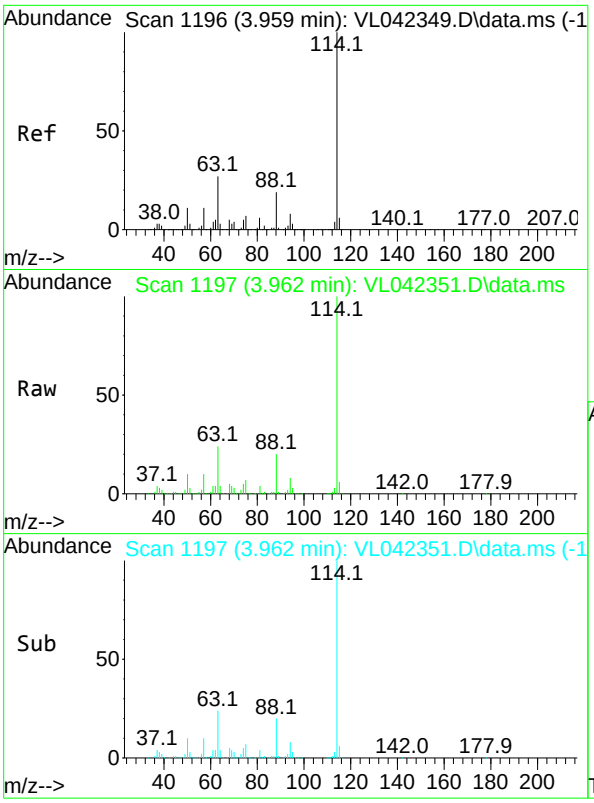


#32
1,1,1-Trichloroethane
Concen: 1.030 ppbv
RT: 3.376 min Scan# 1016
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 97 Resp: 31653

Ion	Ratio	Lower	Upper
97	100		
99	62.4	51.0	76.4
61	47.6	38.8	58.2

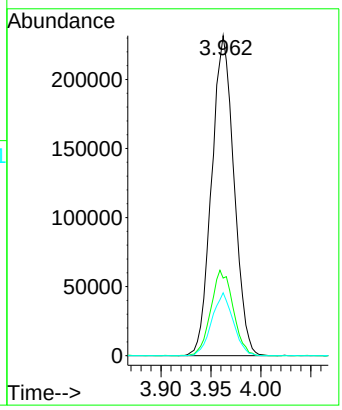




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:114 Resp: 35990

Ion	Ratio	Lower	Upper
114	100		
63	26.7	21.8	32.6
88	18.8	15.5	23.3



Instrument :
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ClientSampleId :
VSTDICC001

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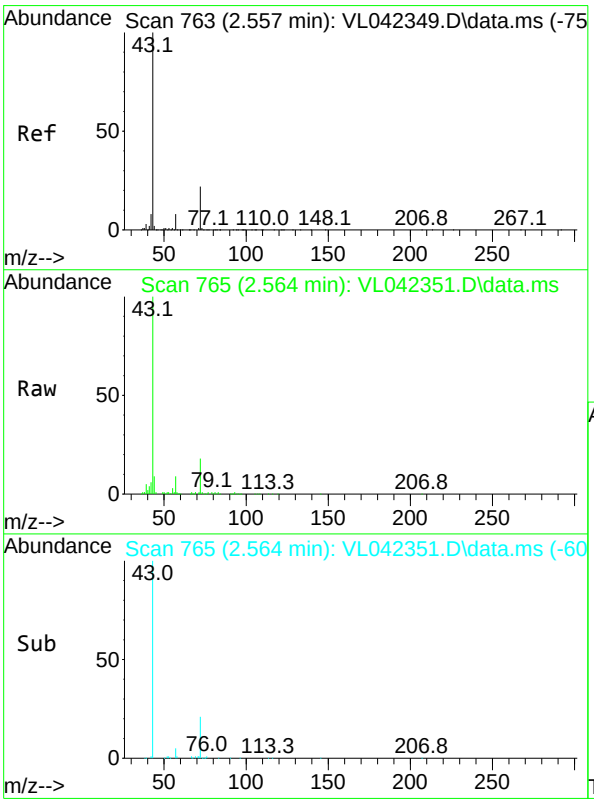
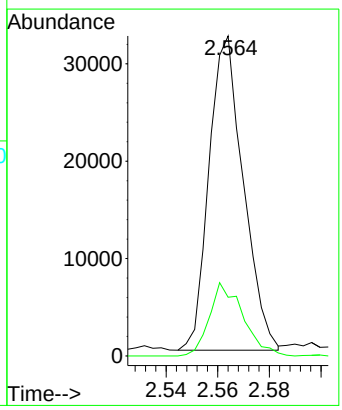
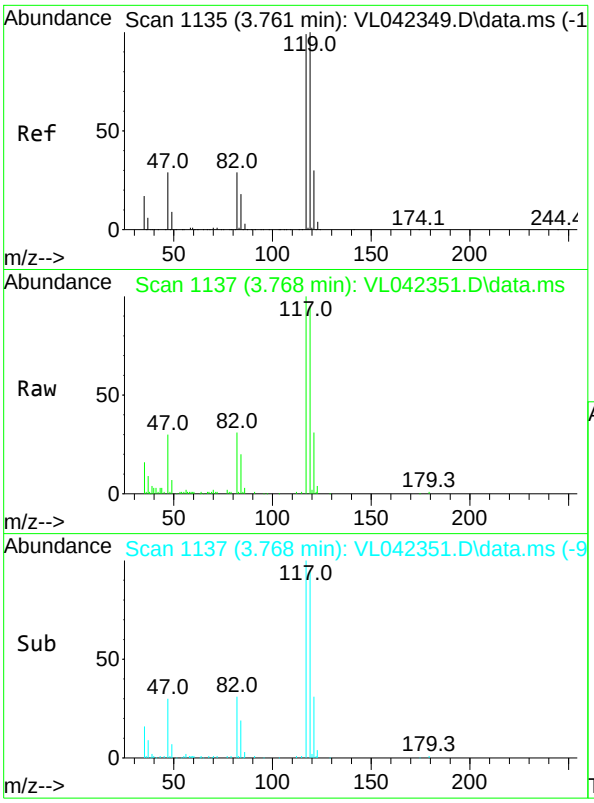


#34
2-Butanone
Concen: 1.045 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 29735

Ion	Ratio	Lower	Upper
43	100		
72	23.1	18.2	27.2

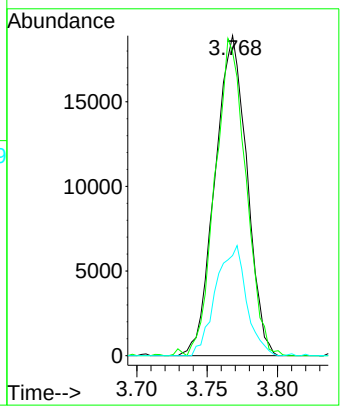




#35
Carbon Tetrachloride
Concen: 0.917 ppbv
RT: 3.768 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:117 Resp: 2987

Ion	Ratio	Lower	Upper
117	100		
119	93.3	80.5	120.7
121	31.3	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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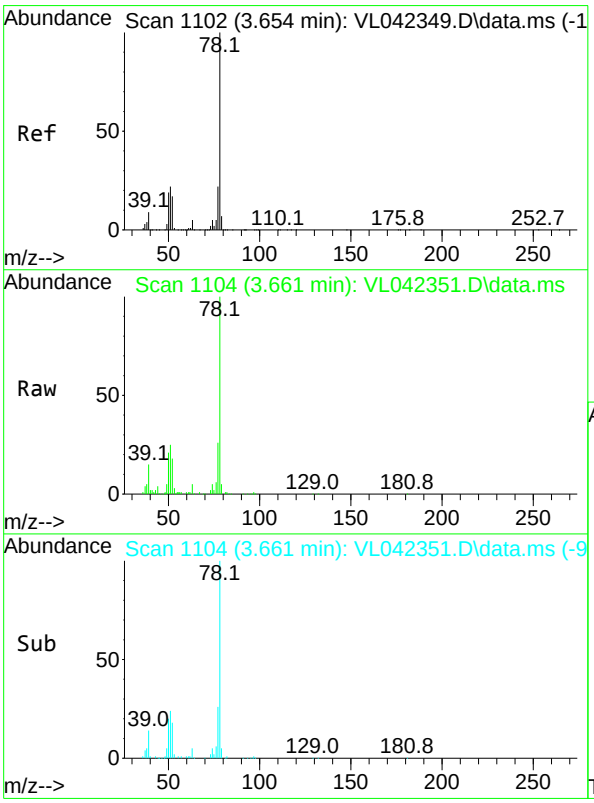
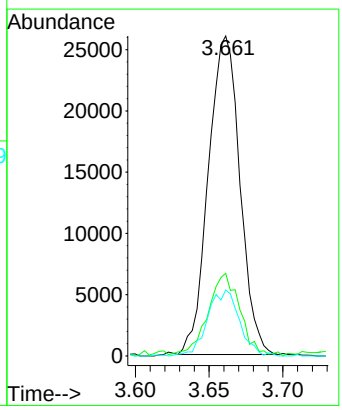
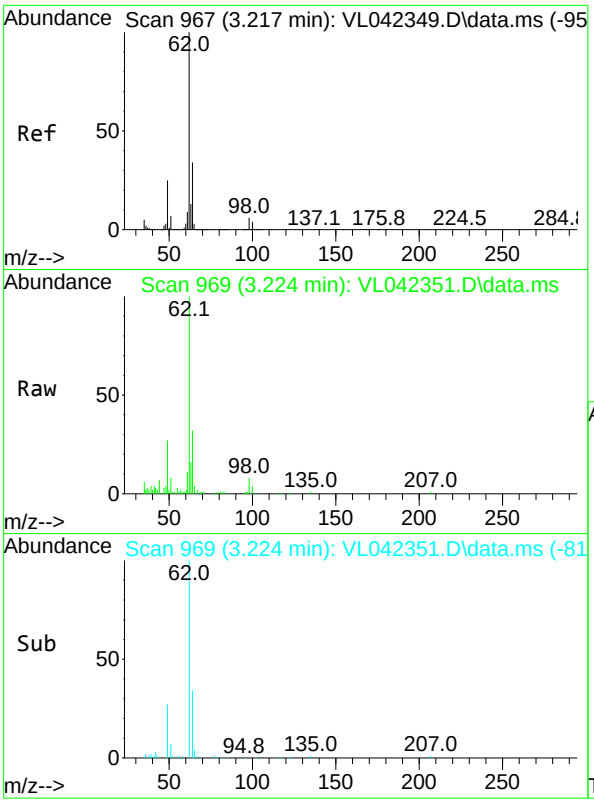


#36
Benzene
Concen: 0.997 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 78 Resp: 38707

Ion	Ratio	Lower	Upper
78	100		
77	24.7	17.4	26.0
50	20.7	15.5	23.3

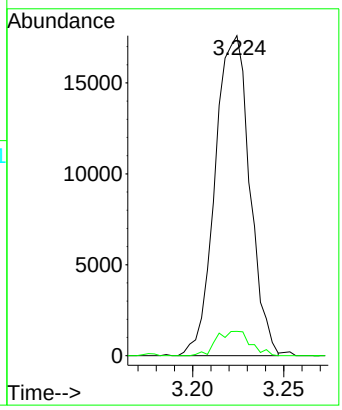




#37
1,2-Dichloroethane
Concen: 0.999 ppbv
RT: 3.224 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 62 Resp: 2328

Ion	Ratio	Lower	Upper
62	100		
98	7.5	5.1	7.7



Instrument :
MSVOA_L
ClientSampleId :
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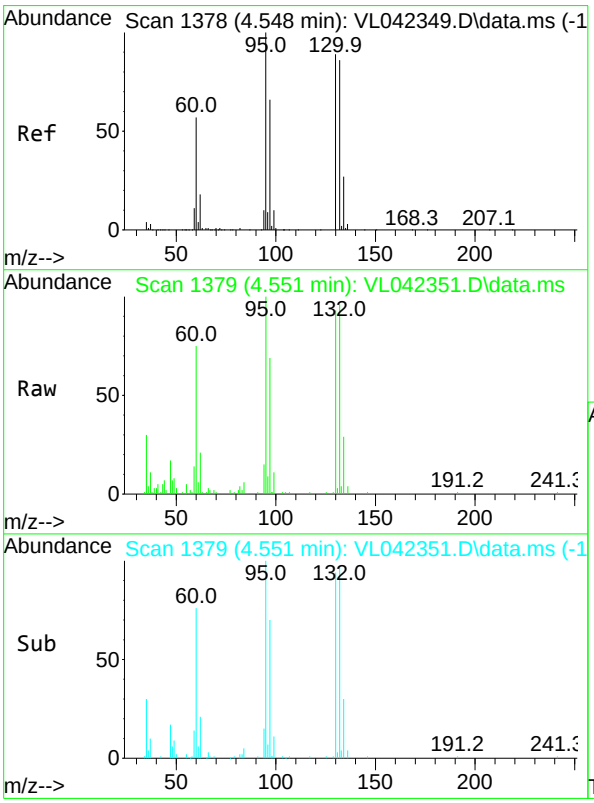
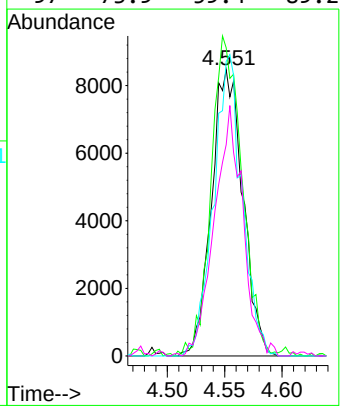
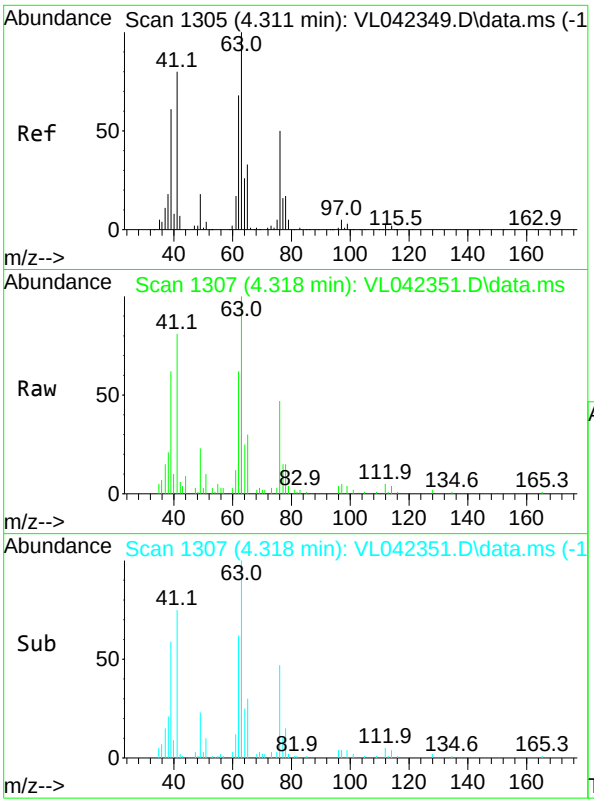


#38
Trichloroethene
Concen: 0.947 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:130 Resp: 16119

Ion	Ratio	Lower	Upper
130	100		
95	106.6	89.8	134.6
132	102.9	77.7	116.5
97	73.9	59.4	89.2

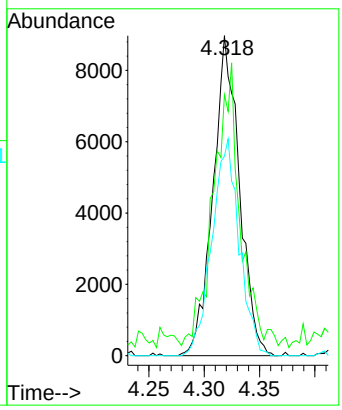




#39
1,2-Dichloropropane
Concen: 1.027 ppbv
RT: 4.318 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 63 Resp: 1486

Ion	Ratio	Lower	Upper
63	100		
41	78.3	64.2	96.2
62	62.3	54.3	81.5



Instrument :
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ClientSampleId :
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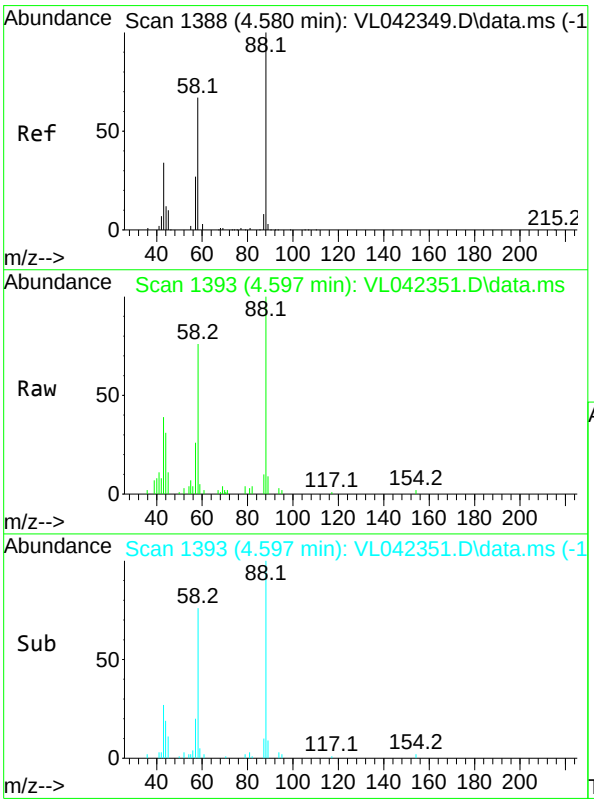
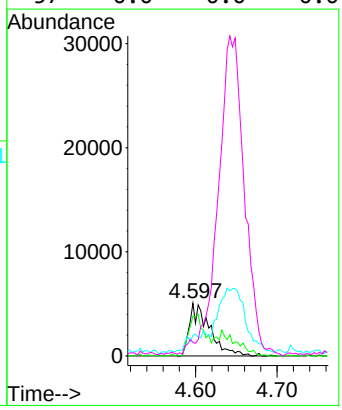
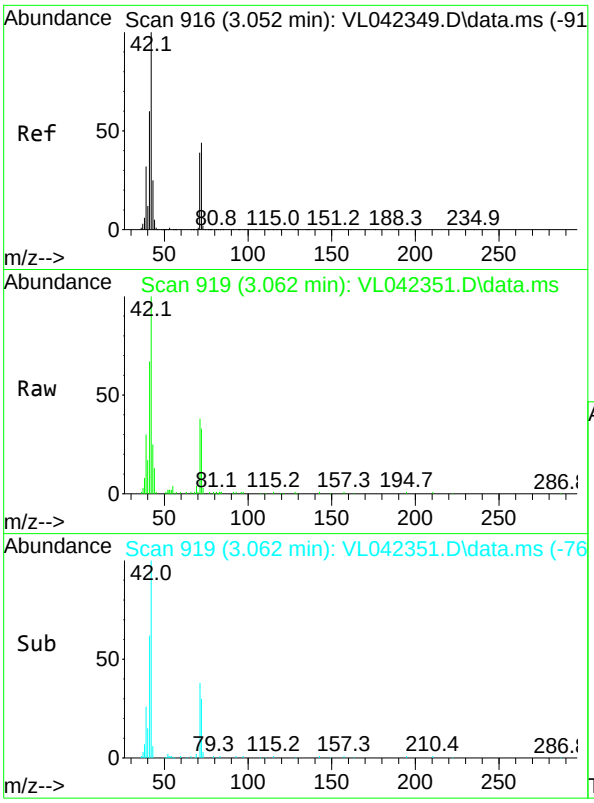


#40
1,4-Dioxane
Concen: 1.114 ppbv m
RT: 4.597 min Scan# 1393
Delta R.T. 0.017 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 88 Resp: 8737

Ion	Ratio	Lower	Upper
88	100		
58	110.6	61.4	92.0#
43	0.0	23.2	34.8#
57	0.0	0.0	0.0

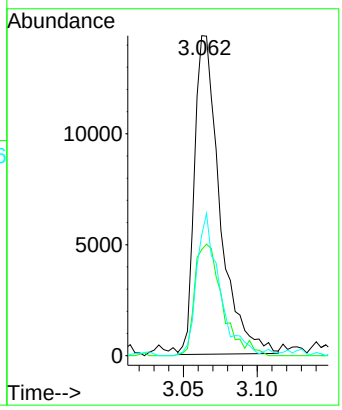




#41
Tetrahydrofuran
Concen: 1.049 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 42 Resp: 1725

Ion	Ratio	Lower	Upper
42	100		
72	38.1	32.3	48.5
71	42.3	31.4	47.2



Instrument :
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ClientSampleId :
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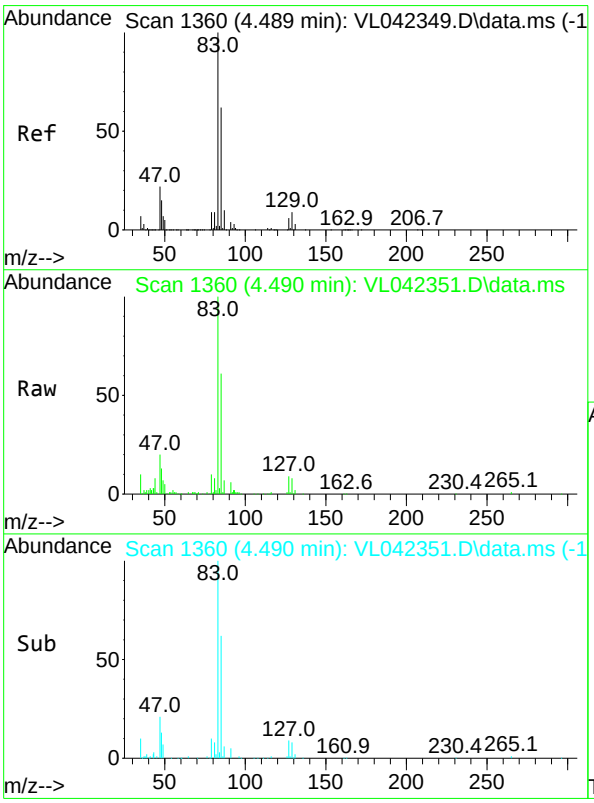
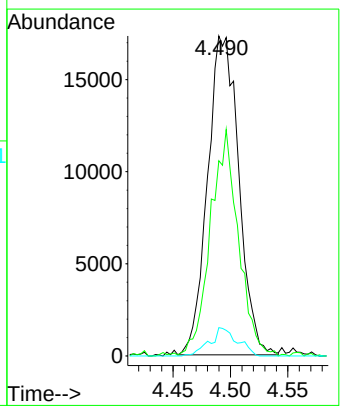
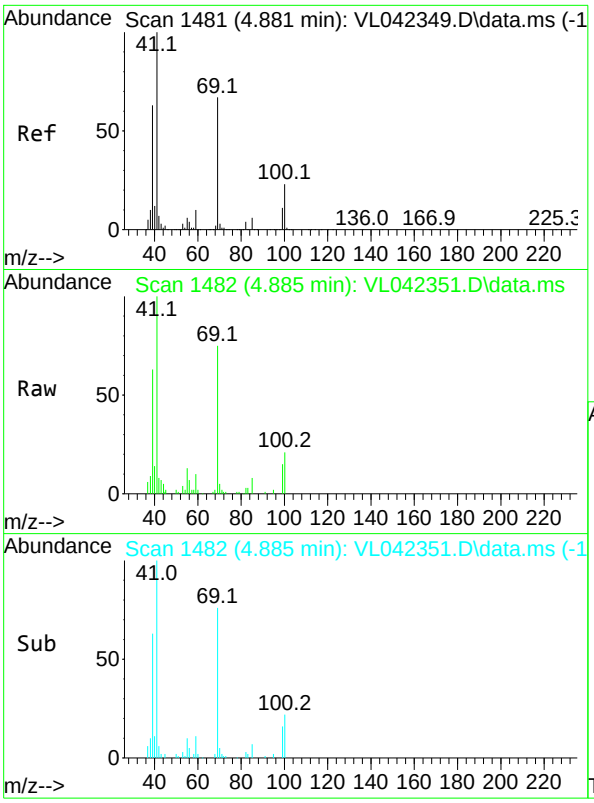


#42
Bromodichloromethane
Concen: 1.009 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 83 Resp: 32721

Ion	Ratio	Lower	Upper
83	100		
85	61.2	49.7	74.5
127	8.9	5.1	7.7#

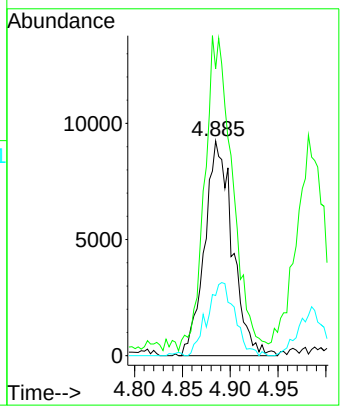




#43
Methyl Methacrylate
Concen: 1.073 ppbv m
RT: 4.885 min Scan# 14
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 69 Resp: 1869

Ion	Ratio	Lower	Upper
69	100		
41	149.3	118.6	177.8
100	0.0	28.2	42.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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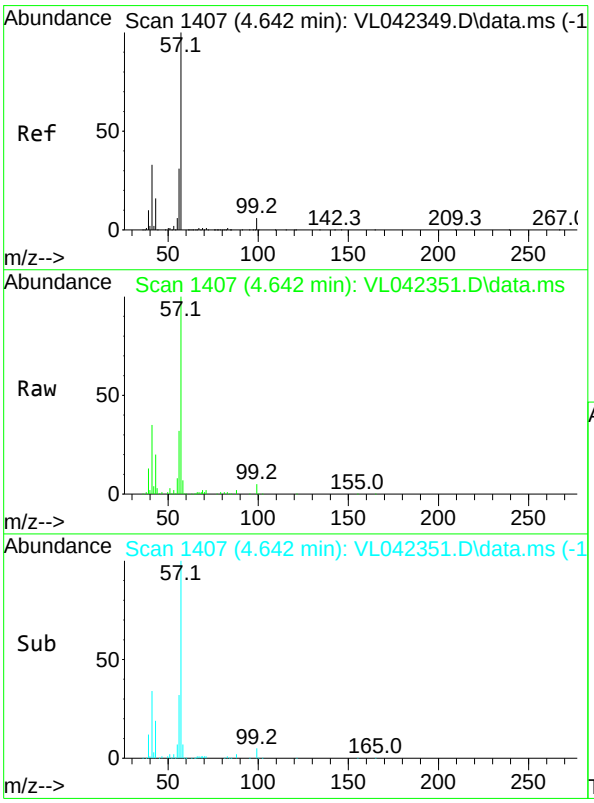
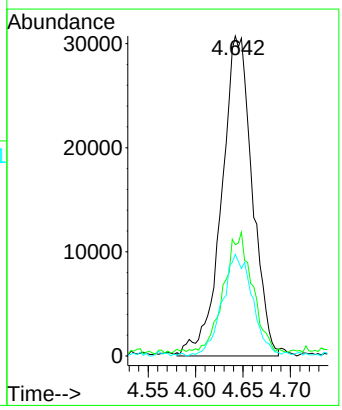
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

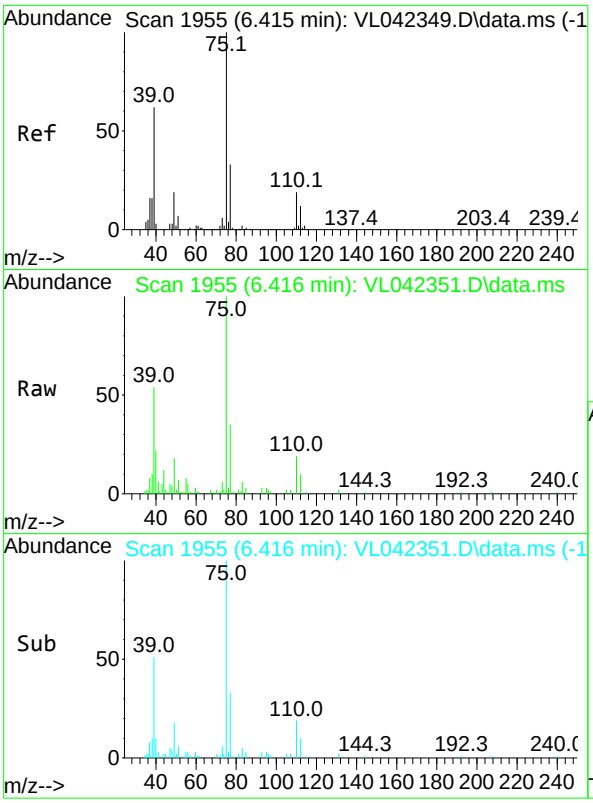


#44
2,2,4-Trimethylpentane
Concen: 1.027 ppbv m
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 57 Resp: 68946

Ion	Ratio	Lower	Upper
57	100		
41	37.9	27.2	40.8
56	0.0	25.7	38.5#

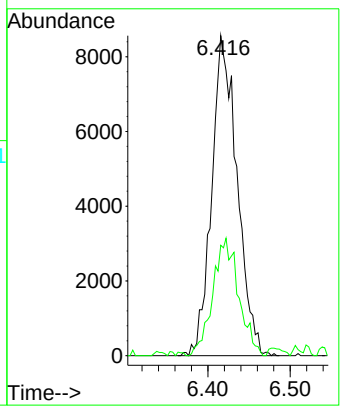




#45
t-1,3-Dichloropropene
Concen: 1.026 ppbv m
RT: 6.416 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 75 Resp: 1834

Ion	Ratio	Lower	Upper
75	100		
77	34.5	27.0	40.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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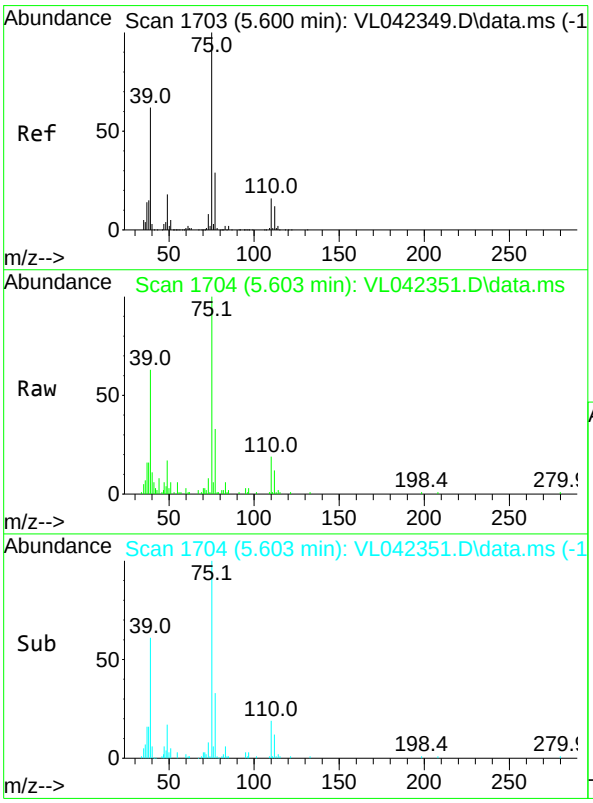
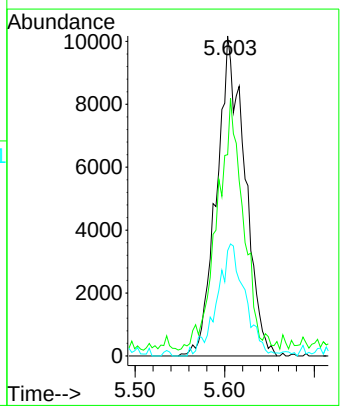
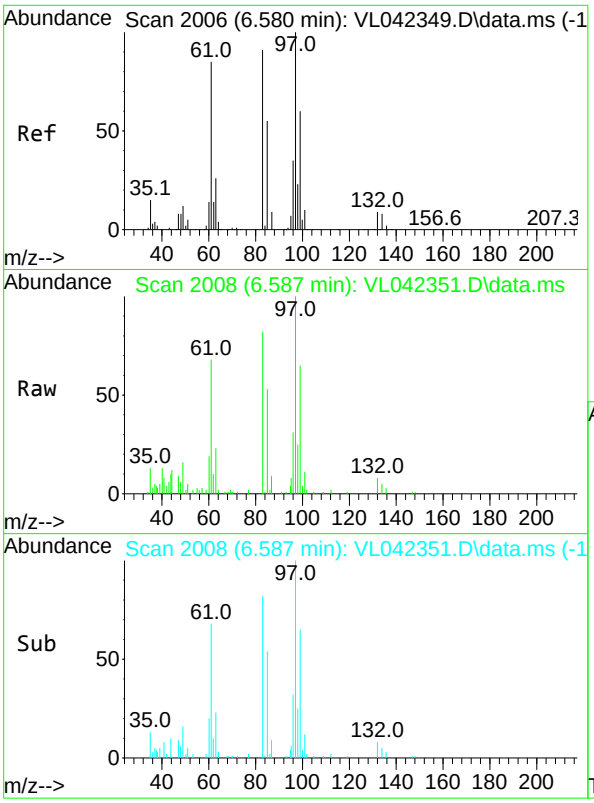


#46
cis-1,3-Dichloropropene
Concen: 1.015 ppbv m
RT: 5.603 min Scan# 1704
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 75 Resp: 22189

Ion	Ratio	Lower	Upper
75	100		
39	62.9	50.0	75.0
77	32.9	23.0	34.6

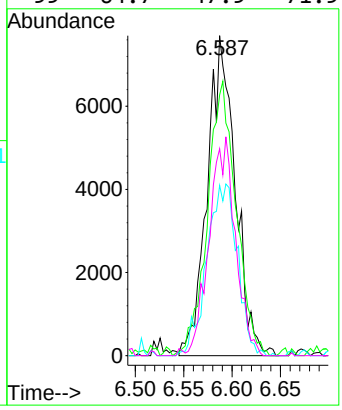




#47
1,1,2-Trichloroethane
Concen: 1.048 ppbv m
RT: 6.587 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 97 Resp: 1545

Ion	Ratio	Lower	Upper
97	100		
83	81.5	72.8	109.2
85	53.2	44.2	66.4
99	64.7	47.9	71.9



Instrument :
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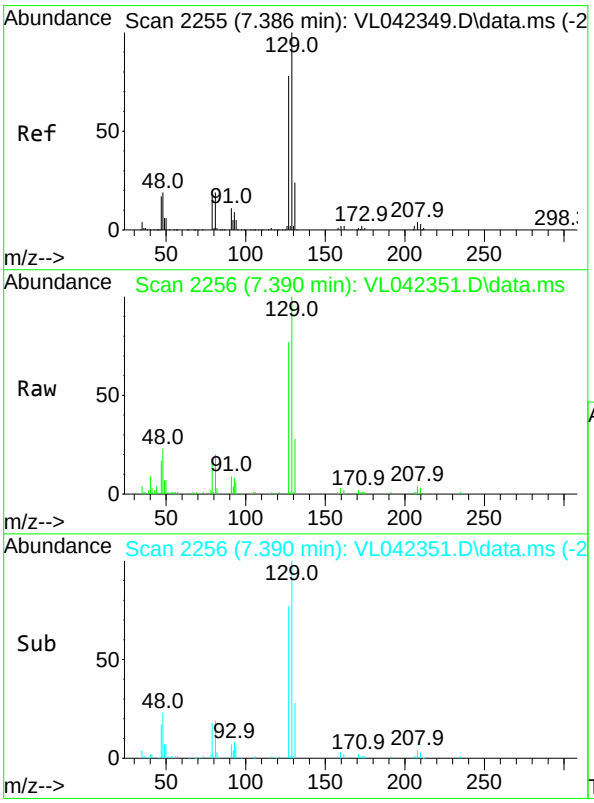
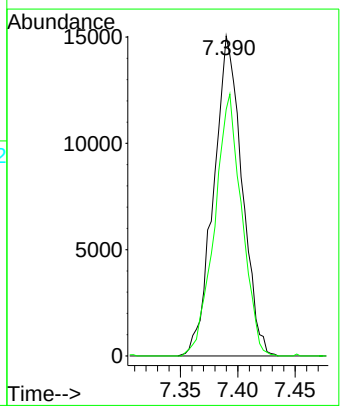
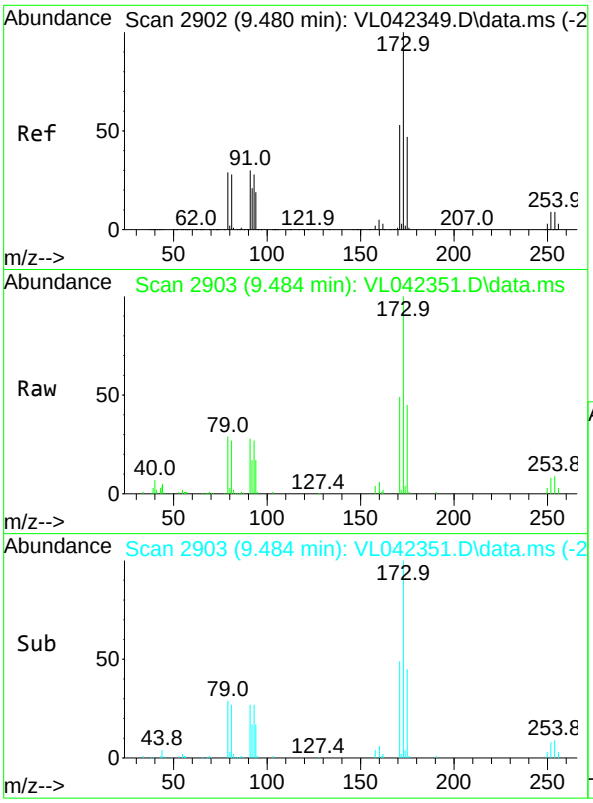


#48
Dibromochloromethane
Concen: 0.997 ppbv
RT: 7.390 min Scan# 2256
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:129 Resp: 25948

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3

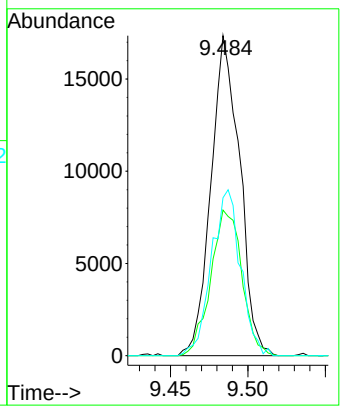




#49
Bromoform
Concen: 0.984 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:173 Resp: 2241

Ion	Ratio	Lower	Upper
173	100		
175	49.3	38.2	57.2
171	52.7	40.9	61.3



Instrument :
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ClientSampleId :
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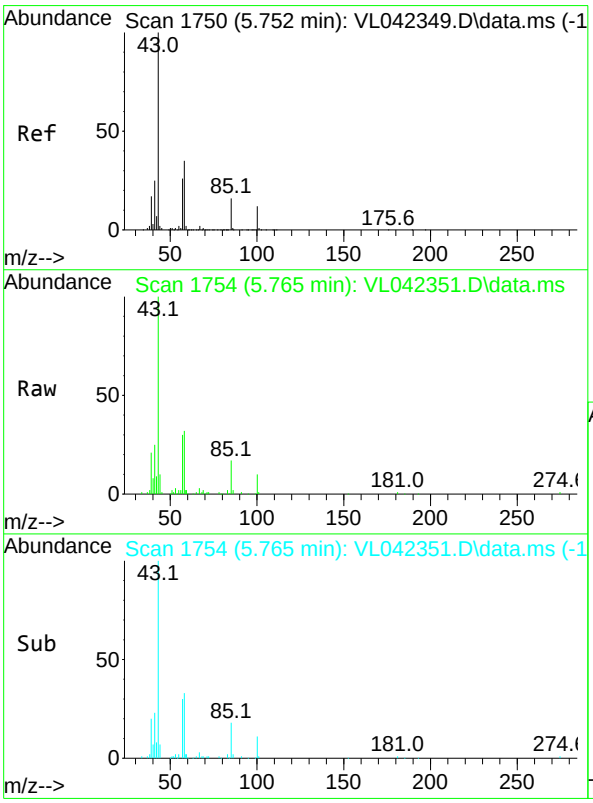
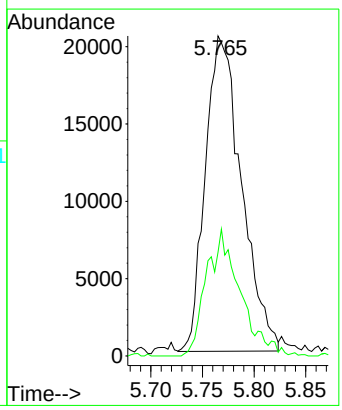
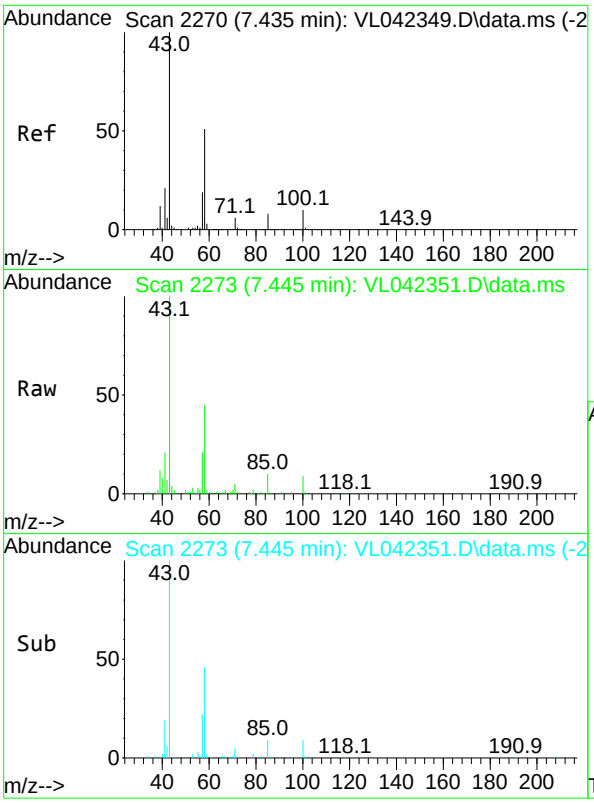


#50
4-Methyl-2-Pentanone
Concen: 1.049 ppbv
RT: 5.765 min Scan# 1754
Delta R.T. 0.013 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 49725

Ion	Ratio	Lower	Upper
43	100		
58	37.7	28.6	43.0

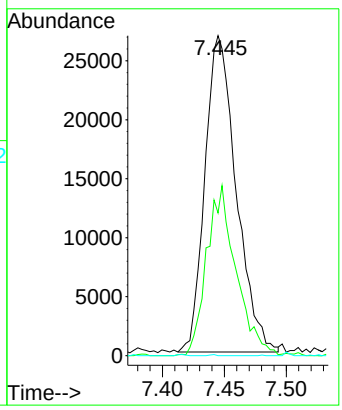




#51
2-Hexanone
Concen: 1.103 ppbv
RT: 7.445 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 4717

Ion	Ratio	Lower	Upper
43	100		
58	50.8	40.2	60.4
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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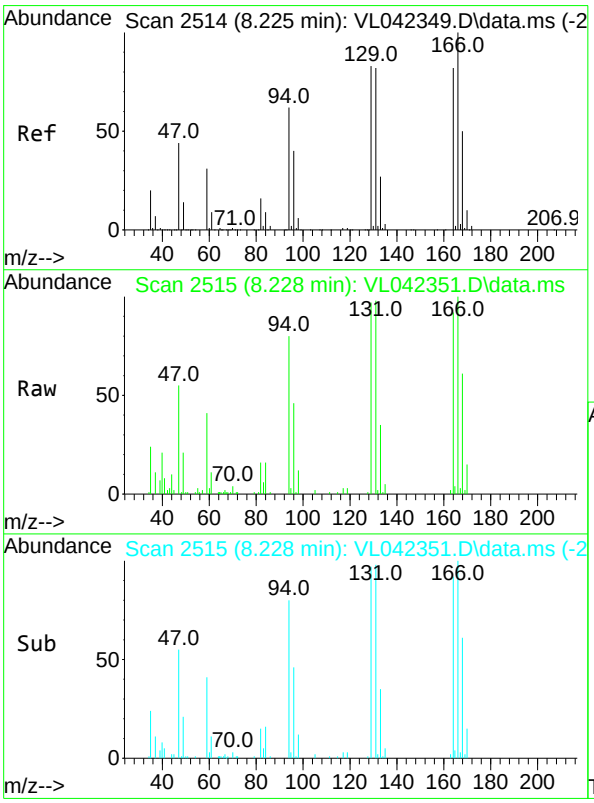
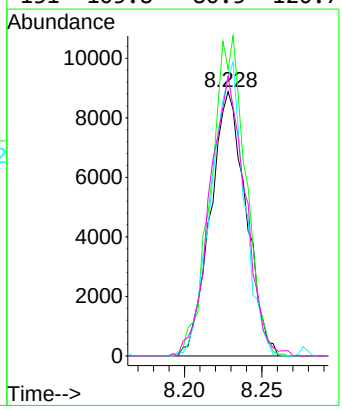
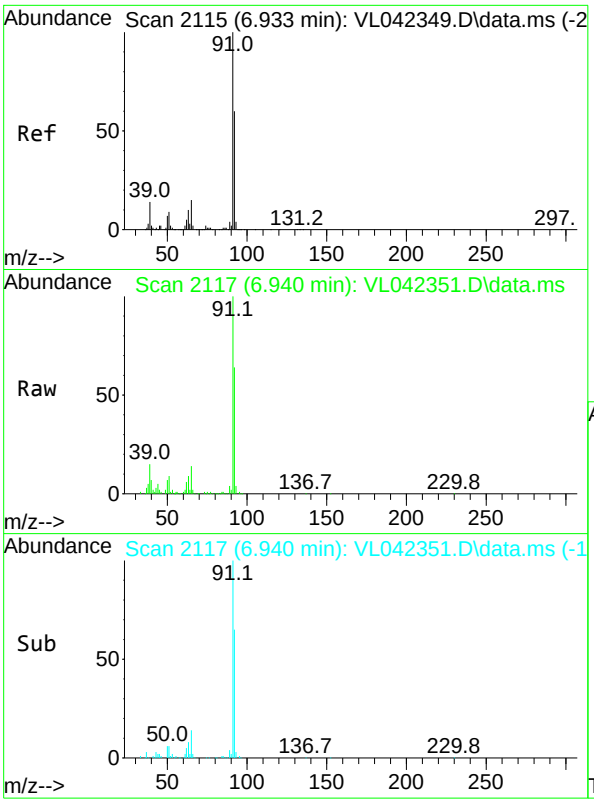


#52
Tetrachloroethene
Concen: 0.943 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:164 Resp: 14154

Ion	Ratio	Lower	Upper
164	100		
166	107.7	98.2	147.2
129	104.2	81.8	122.8
131	105.8	80.5	120.7

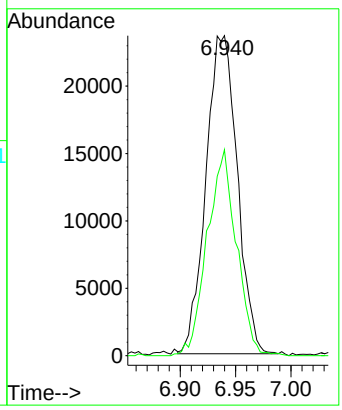




#53
Toluene
Concen: 1.001 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 4661

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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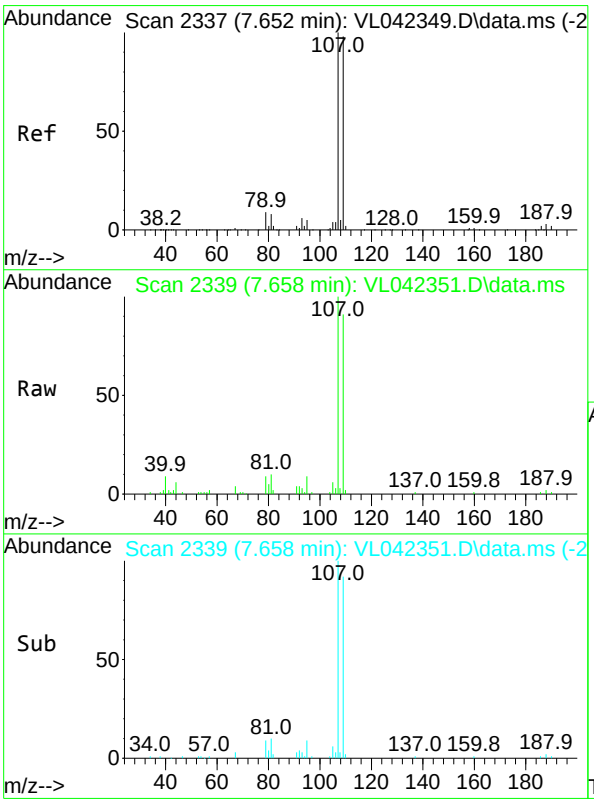
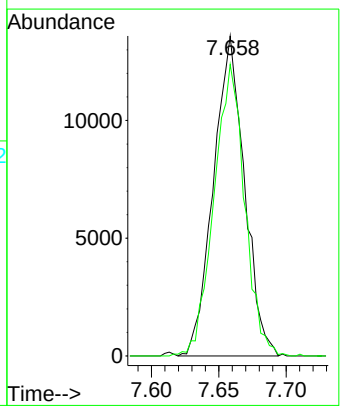
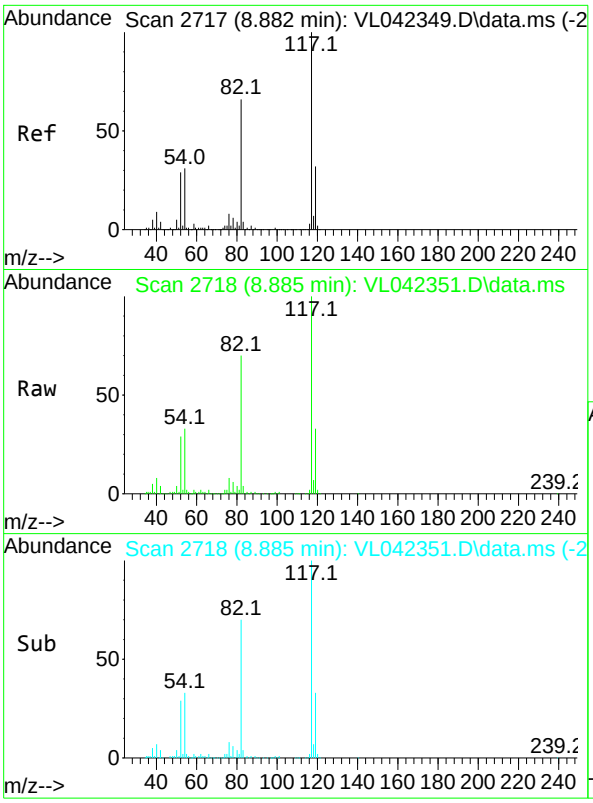


#54
1,2-Dibromoethane
Concen: 1.036 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:107 Resp: 21780

Ion	Ratio	Lower	Upper
107	100		
109	90.7	78.2	117.4

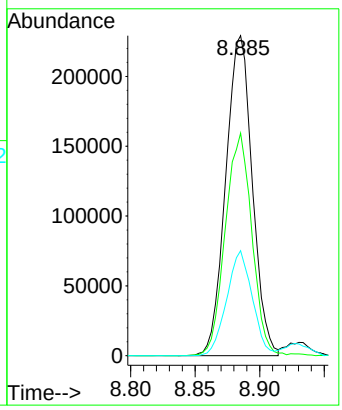




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:117 Resp: 32909

Ion	Ratio	Lower	Upper
117	100		
82	69.7	57.8	86.6
119	31.8	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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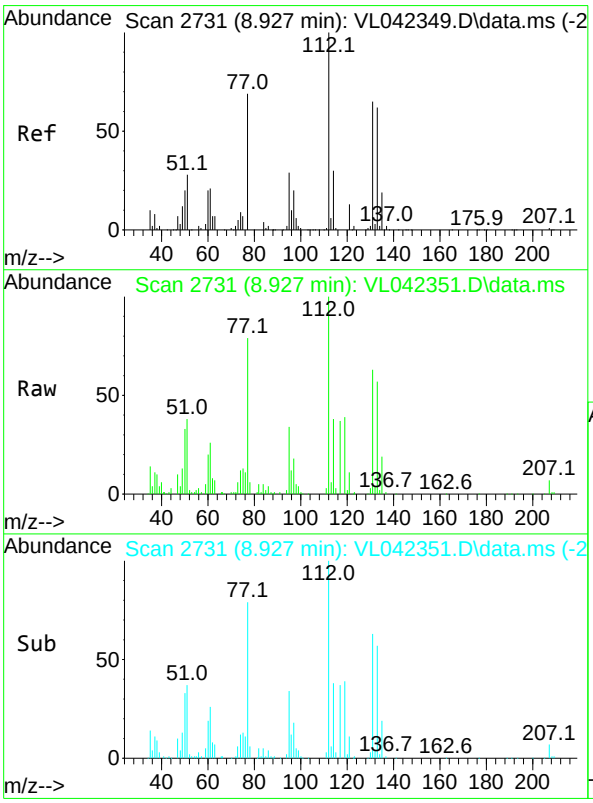
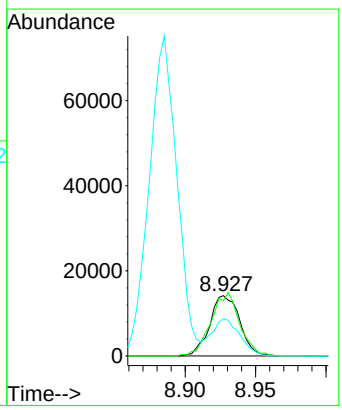
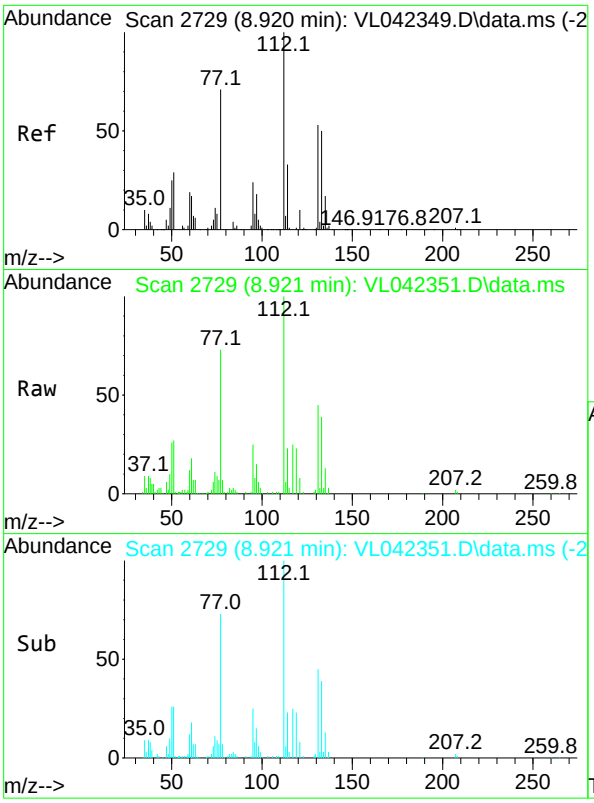


#56
1,1,1,2-Tetrachloroethane
Concen: 1.057 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:131 Resp: 21052

Ion	Ratio	Lower	Upper
131	100		
133	100.5	78.3	117.5
119	55.1	48.7	73.1





#57
Chlorobenzene
Concen: 1.026 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:112 Resp: 3511

Ion	Ratio	Lower	Upper
112	100		
77	72.4	57.8	86.6
114	23.3	29.3	35.9#

Instrument :
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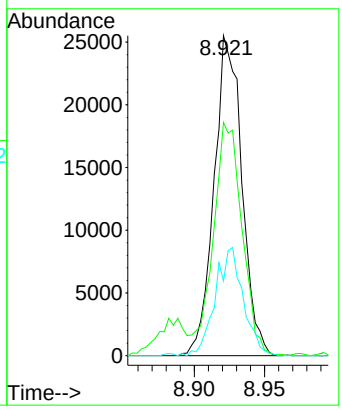
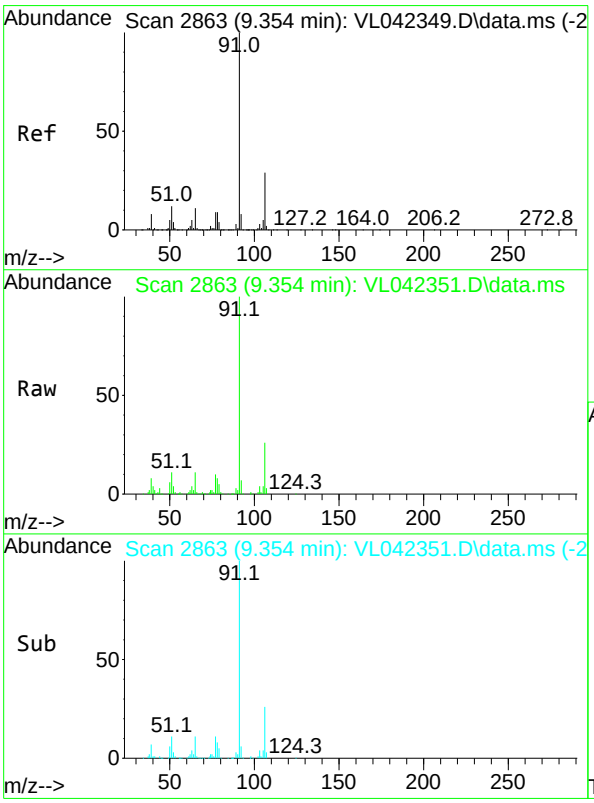
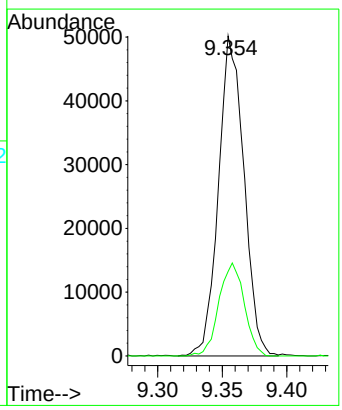


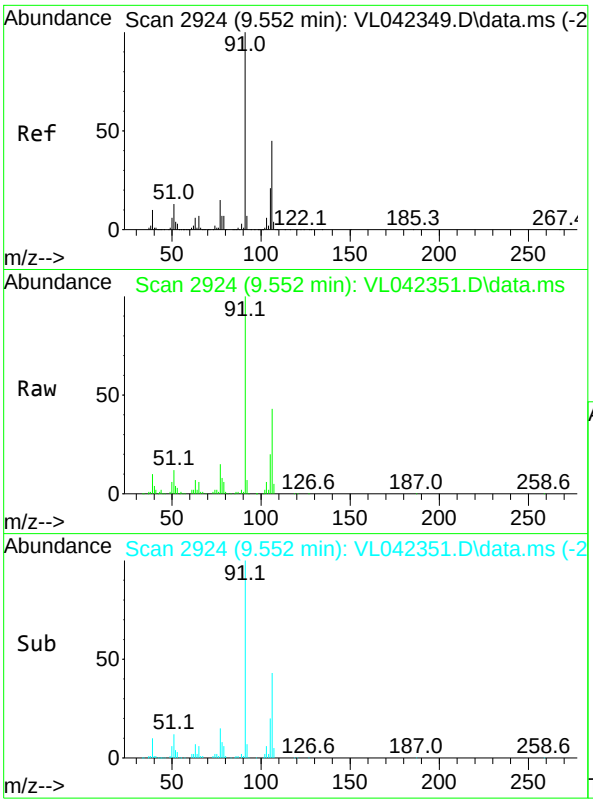


#58
Ethyl Benzene
Concen: 1.054 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 68703

Ion	Ratio	Lower	Upper
91	100		
106	26.5	23.0	34.4

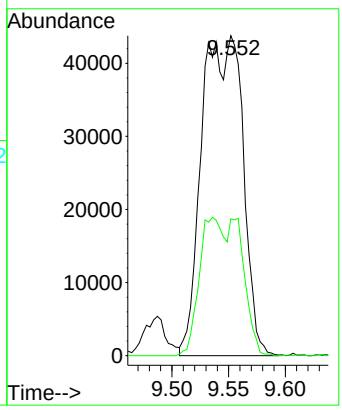




#59
m/p-Xylene
Concen: 2.101 ppbv m
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 11070

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2



Instrument :
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ClientSampleId :
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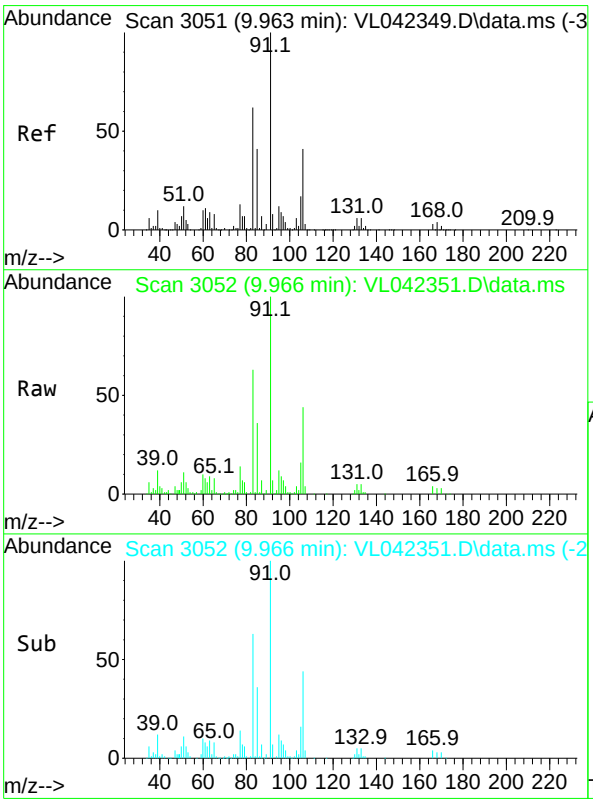
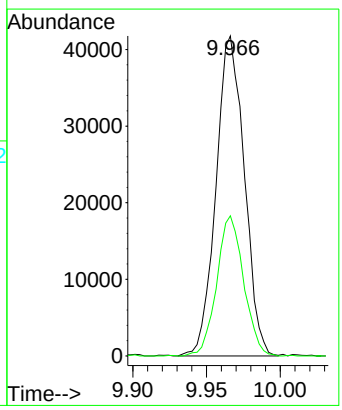
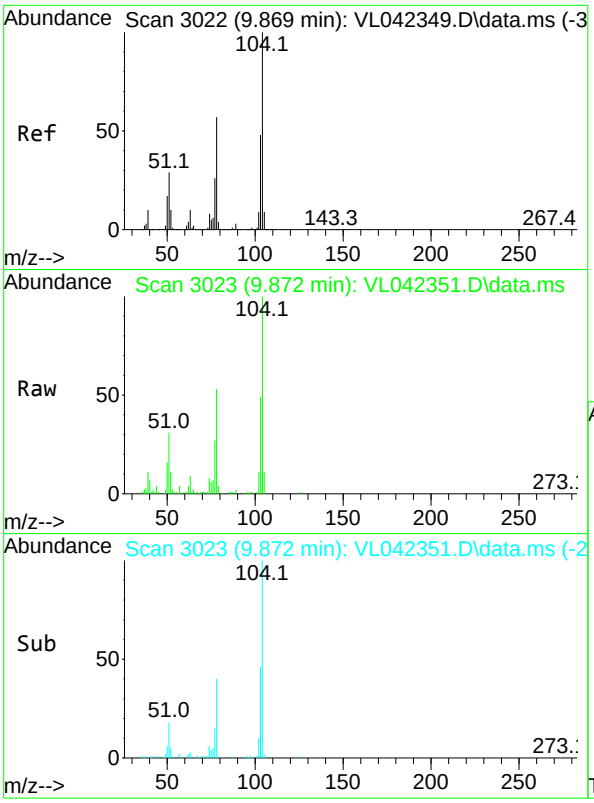


#60
o-Xylene
Concen: 1.056 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 55831

Ion	Ratio	Lower	Upper
91	100		
106	41.6	21.1	63.4

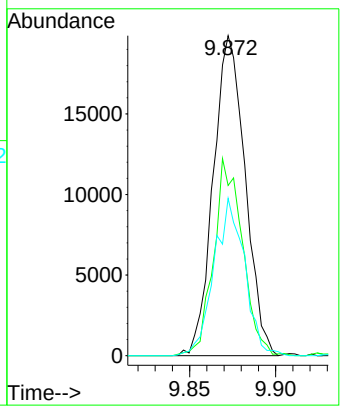




#61
Styrene
Concen: 1.012 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:104 Resp: 2554

Ion	Ratio	Lower	Upper
104	100		
78	55.7	44.6	66.8
103	47.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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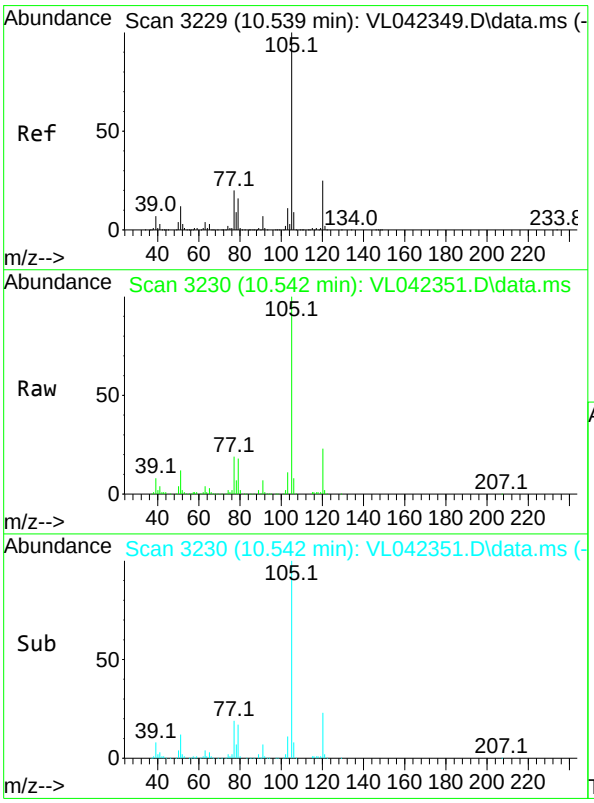
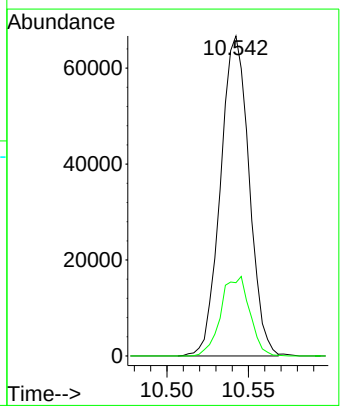
Supervised By :Mahesh Dadoda 04/18/2025

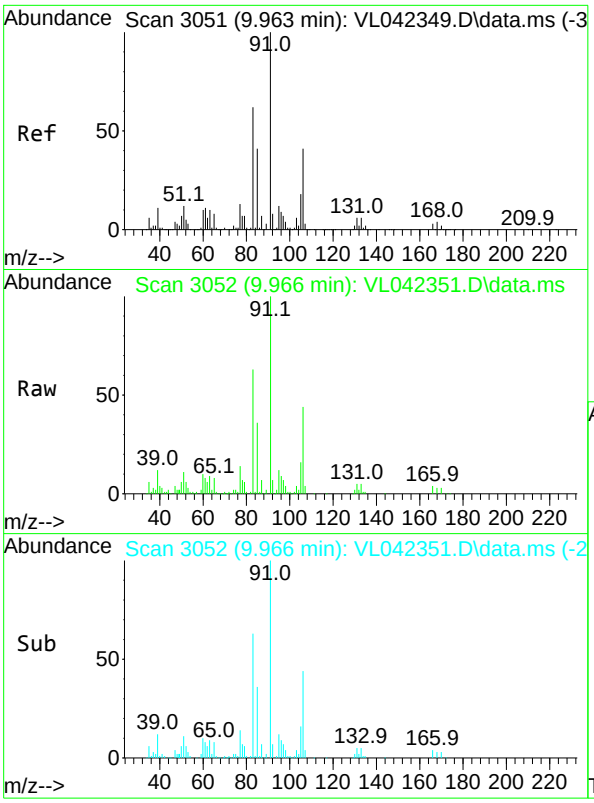


#62
Isopropylbenzene
Concen: 1.047 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 81286

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.8	29.8

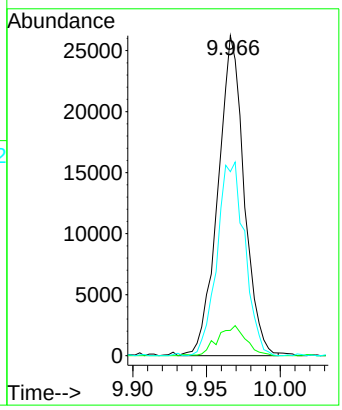




#63
1,1,2,2-Tetrachloroethane
Concen: 0.943 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 83 Resp: 3241

Ion	Ratio	Lower	Upper
83	100		
131	10.2	4.5	13.7
85	64.4	32.4	97.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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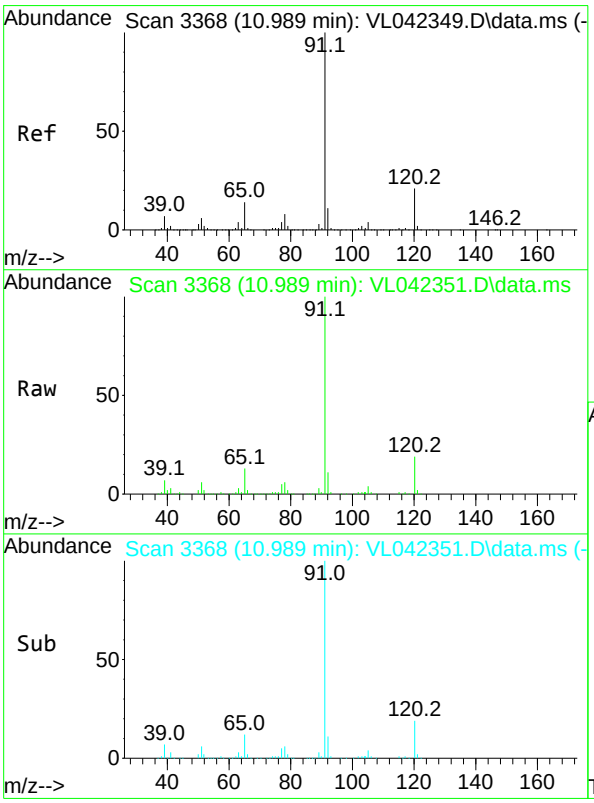
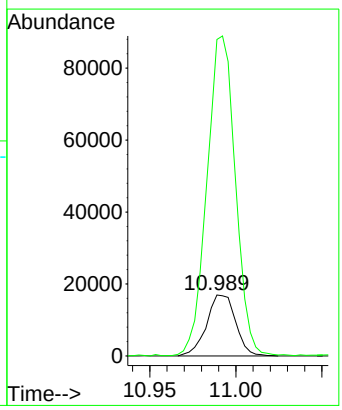
Supervised By :Mahesh Dadoda 04/18/2025

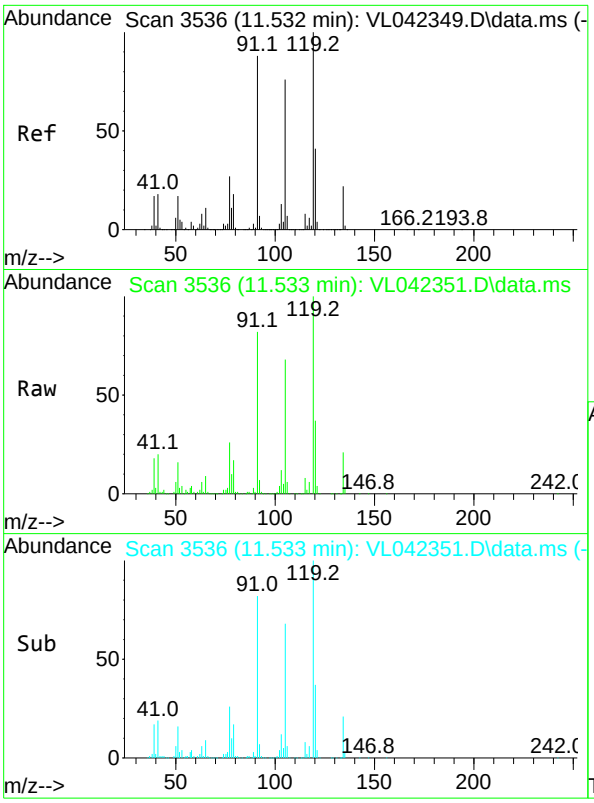


#64
n-propylbenzene
Concen: 1.019 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:120 Resp: 19898

Ion	Ratio	Lower	Upper
120	100		
91	517.6	392.4	588.6

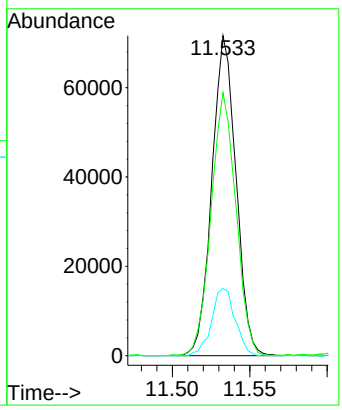




#65
tert-Butylbenzene
Concen: 1.087 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:119 Resp: 7759

Ion	Ratio	Lower	Upper
119	100		
91	85.0	74.6	111.8
134	20.5	18.8	28.2



Instrument :
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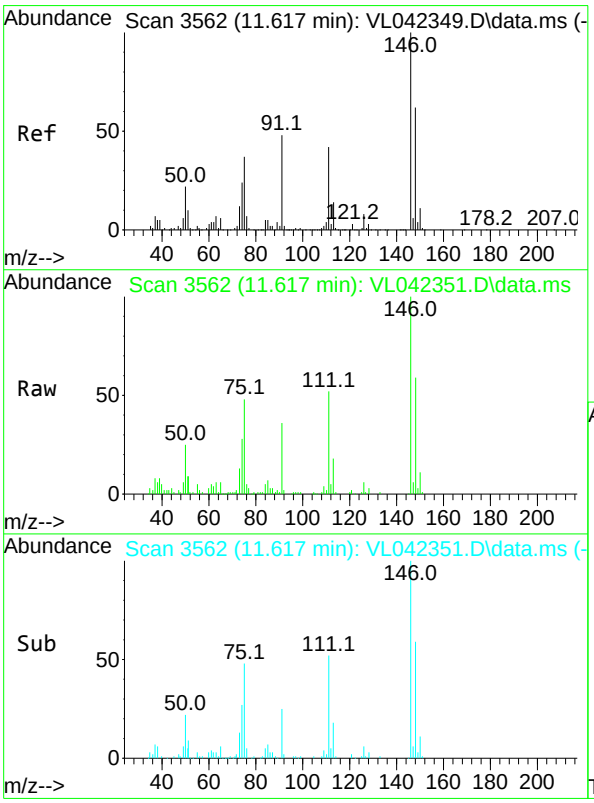
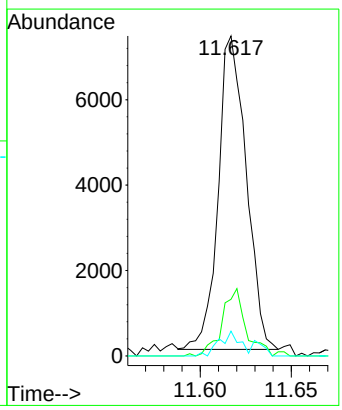
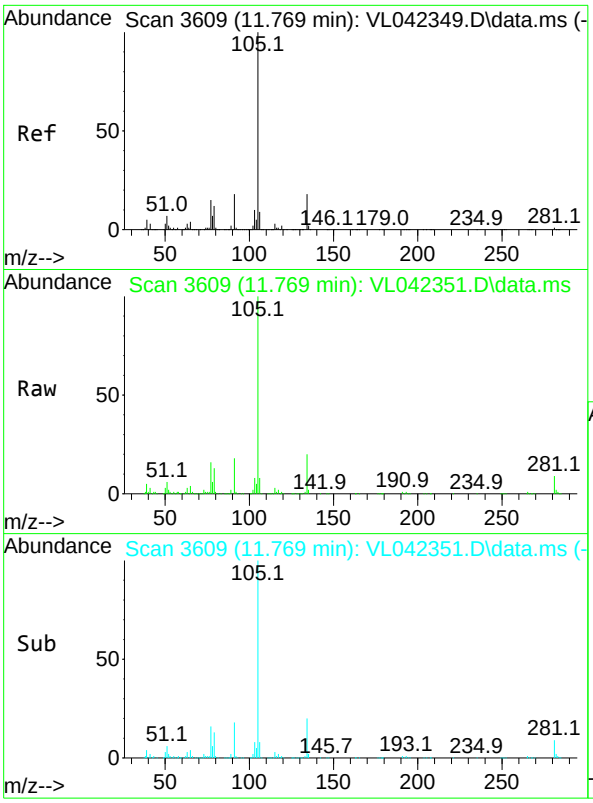


#66
Benzyl Chloride
Concen: 1.003 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 7864

Ion	Ratio	Lower	Upper
91	100		
126	18.6	11.8	17.6#
128	7.7	4.5	6.7#

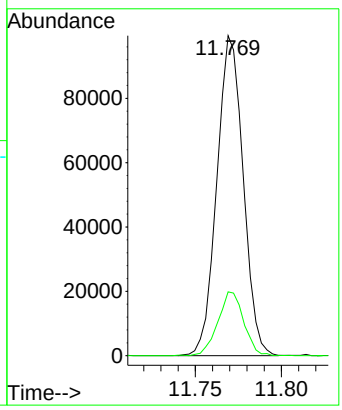




#67
sec-Butylbenzene
Concen: 1.067 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 10591

Ion	Ratio	Lower	Upper
105	100		
134	19.6	14.6	21.8



Instrument :
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ClientSampleId :
VSTDICC001

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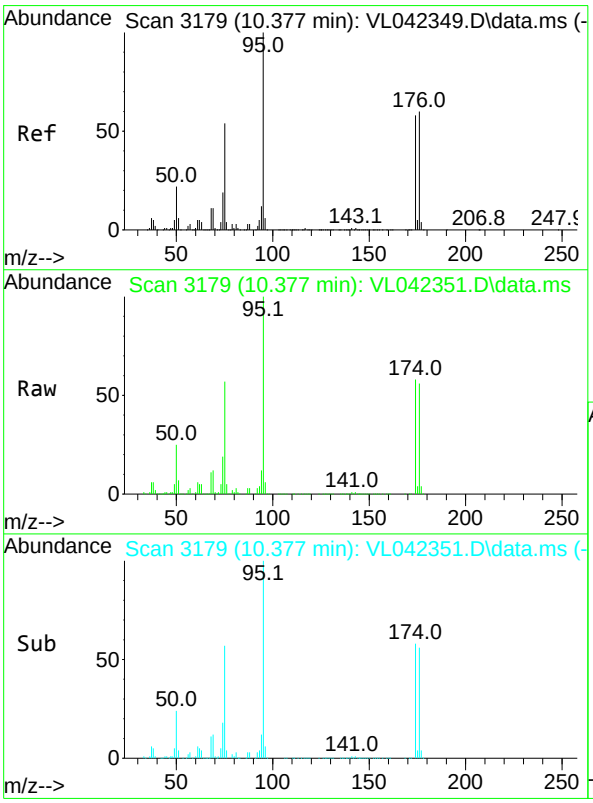
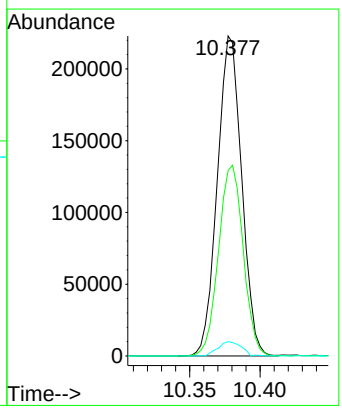
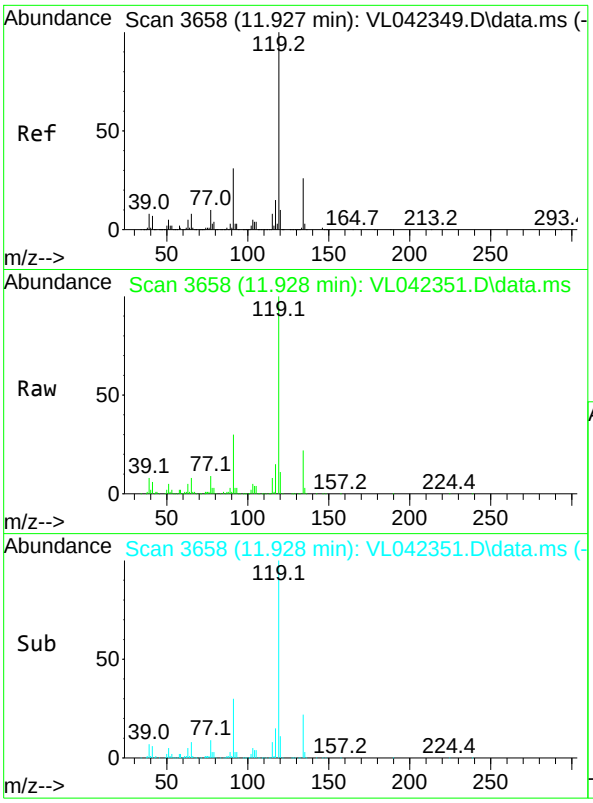


#68
1-Bromo-4-Fluorobenzene
Concen: 9.950 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 95 Resp: 269087

Ion	Ratio	Lower	Upper
95	100		
174	60.4	48.5	72.7
175	4.3	3.7	5.5

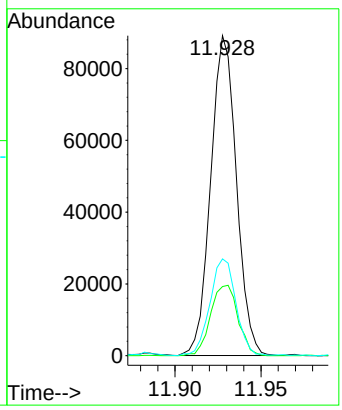




#69
p-Isopropyltoluene
Concen: 1.075 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:119 Resp: 9273

Ion	Ratio	Lower	Upper
119	100		
134	23.5	20.0	30.0
91	32.1	24.4	36.6



Instrument :
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ClientSampleId :
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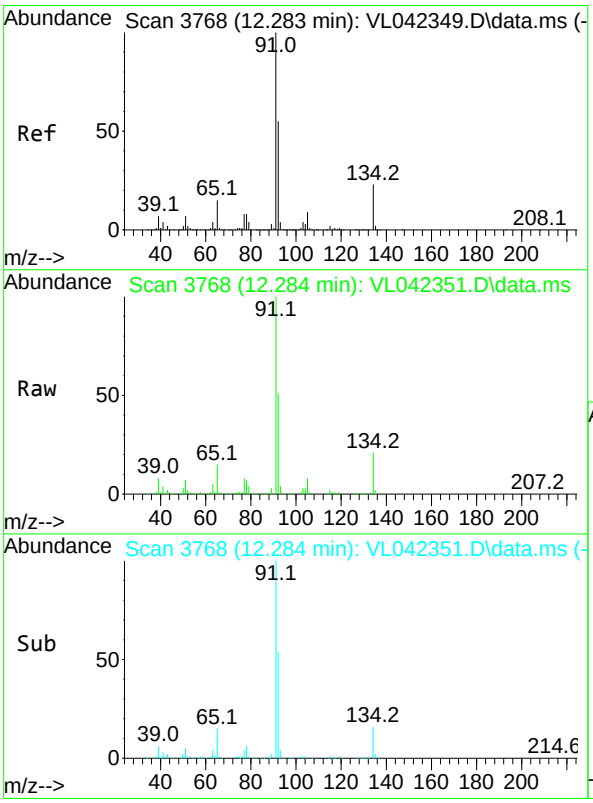
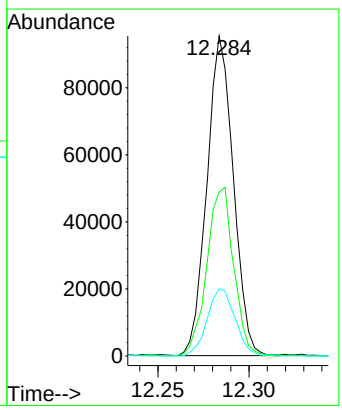
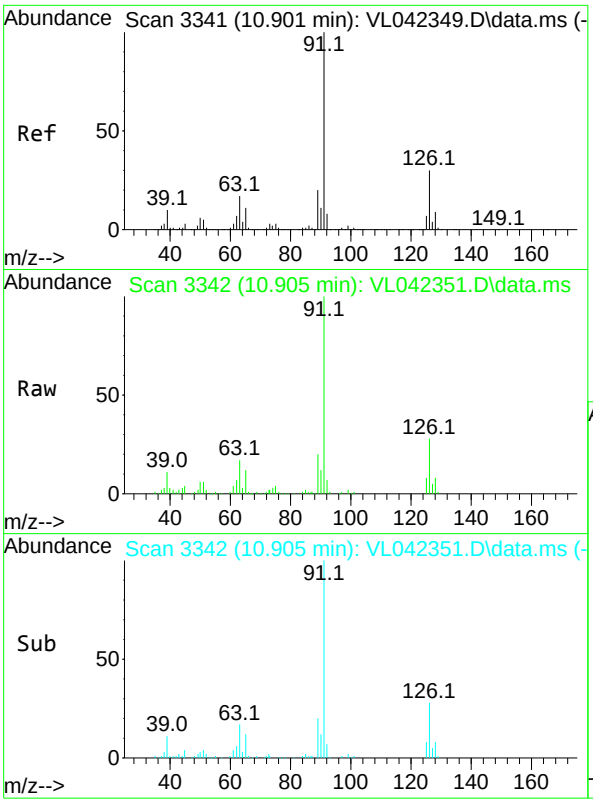


#70
n-Butylbenzene
Concen: 1.072 ppbv
RT: 12.284 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 96306

Ion	Ratio	Lower	Upper
91	100		
92	54.2	44.2	66.4
134	22.1	18.2	27.4

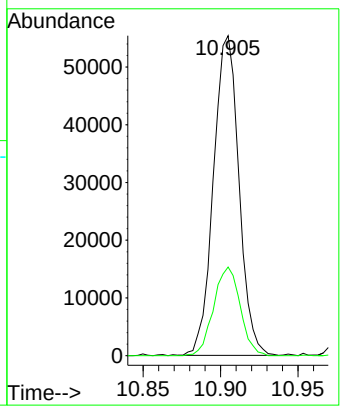




#71
2-Chlorotoluene
Concen: 1.040 ppbv
RT: 10.905 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 6332

Ion	Ratio	Lower	Upper
91	100		
126	28.9	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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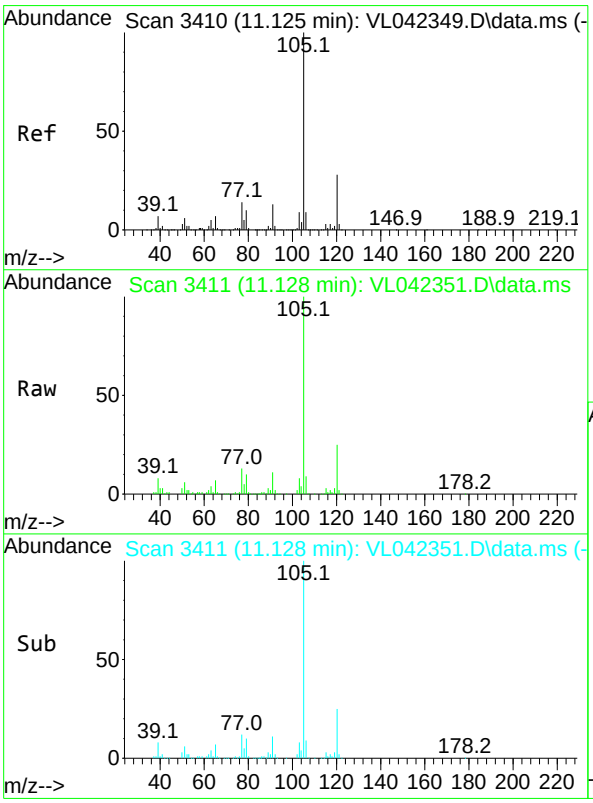
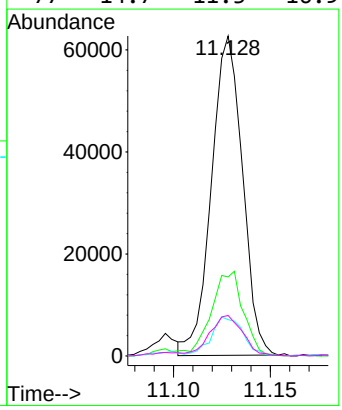
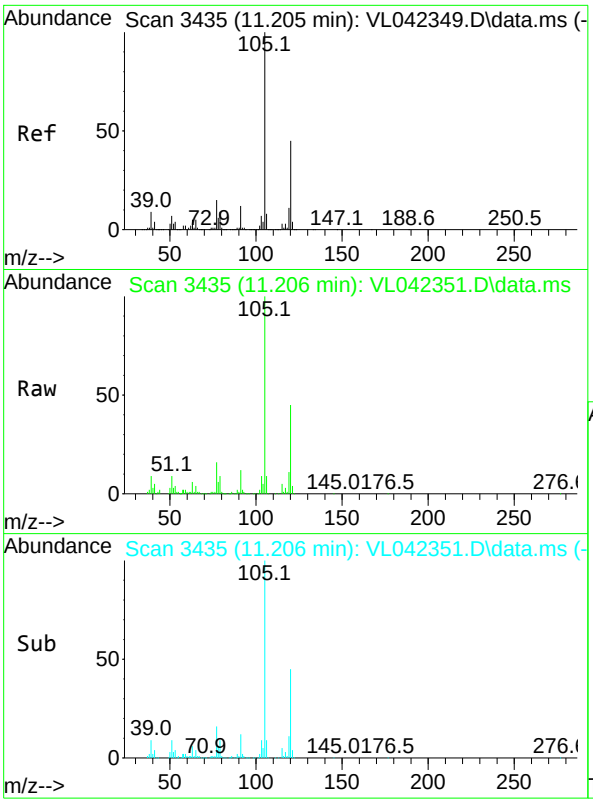


#72
4-Ethyltoluene
Concen: 1.078 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 69698

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.2	34.8
91	13.5	10.4	15.6
77	14.7	11.3	16.9

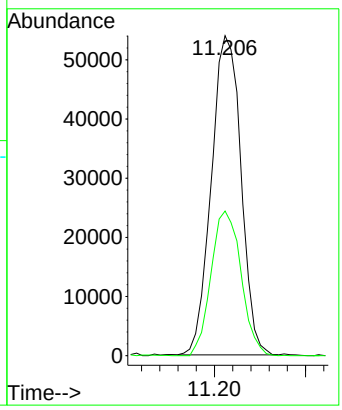




#73
1,3,5-Trimethylbenzene
Concen: 1.067 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 6092

Ion	Ratio	Lower	Upper
105	100		
120	45.3	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

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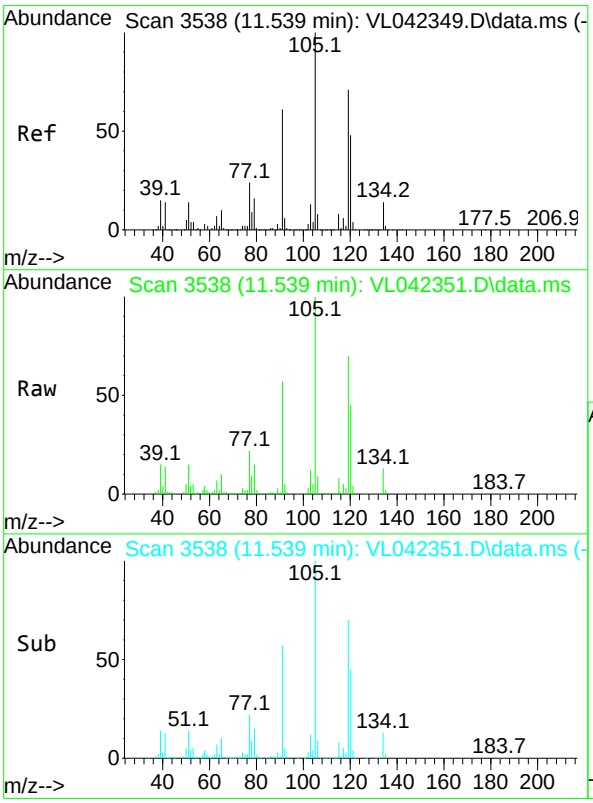
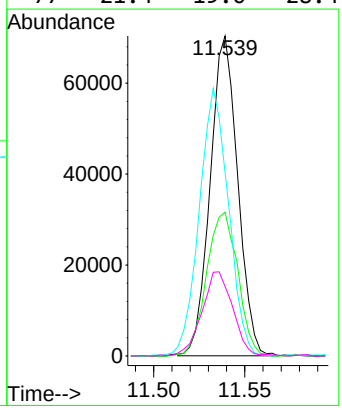
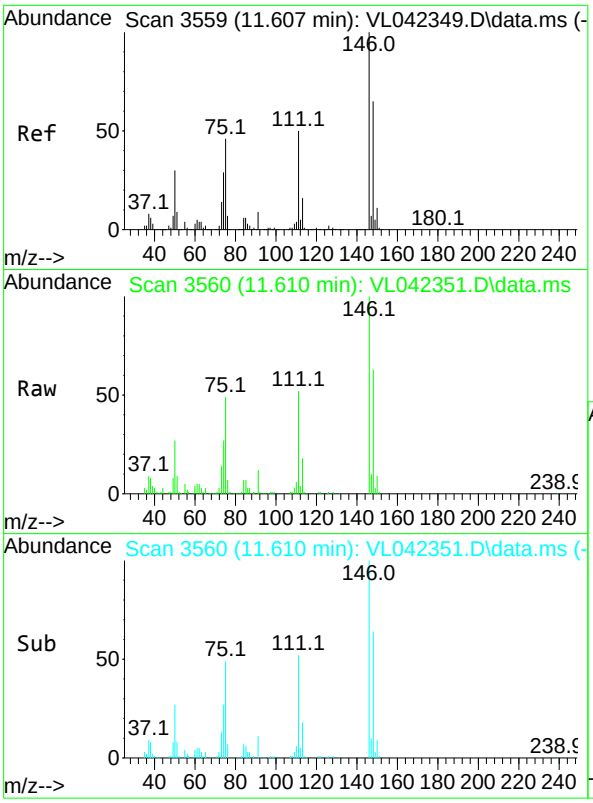


#74
1,2,4-Trimethylbenzene
Concen: 1.108 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 73888

Ion	Ratio	Lower	Upper
105	100		
120	45.0	38.1	57.1
91	57.0	48.8	73.2
77	21.4	19.0	28.4

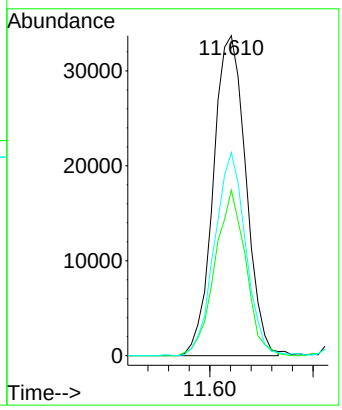




#75
1,3-Dichlorobenzene
Concen: 1.064 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:146 Resp: 3687

Ion	Ratio	Lower	Upper
146	100		
111	48.9	24.3	72.8
148	60.8	31.6	94.8



Instrument :
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ClientSampleId :
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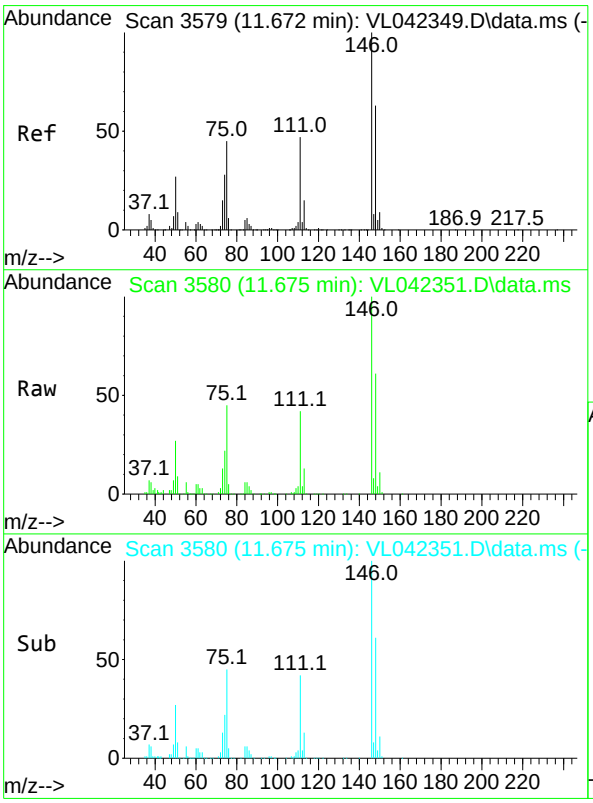
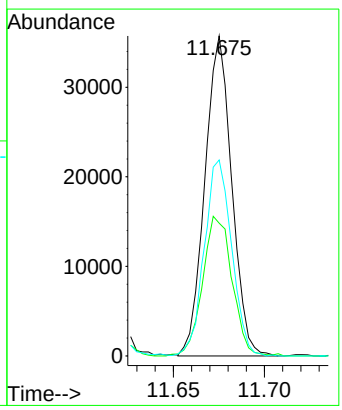
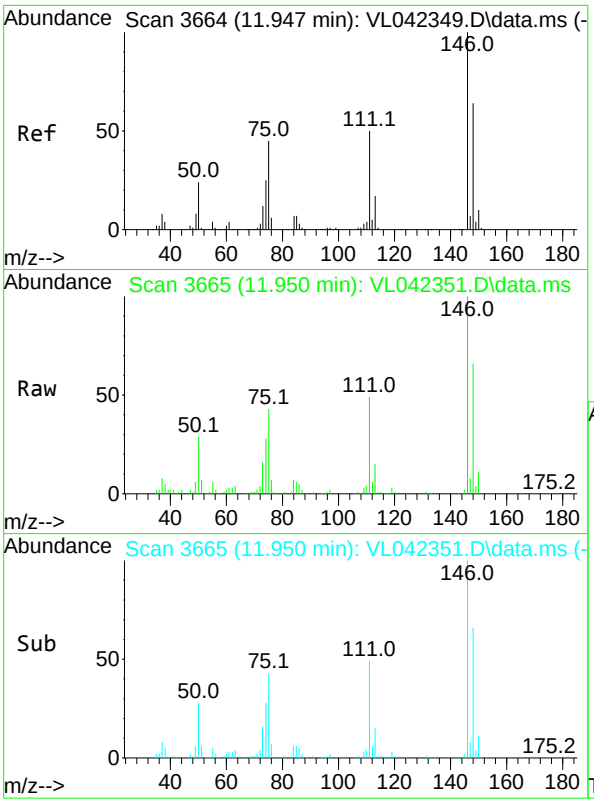


#76
1,4-Dichlorobenzene
Concen: 1.053 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:146 Resp: 36692

Ion	Ratio	Lower	Upper
146	100		
111	47.7	24.2	72.6
148	62.3	32.1	96.5

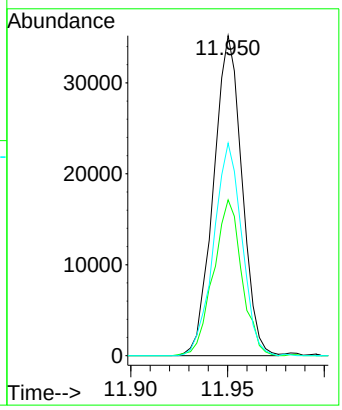




#77
1,2-Dichlorobenzene
Concen: 1.068 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:146 Resp: 3597

Ion	Ratio	Lower	Upper
146	100		
111	48.7	25.3	75.9
148	65.9	31.5	94.5



Instrument :
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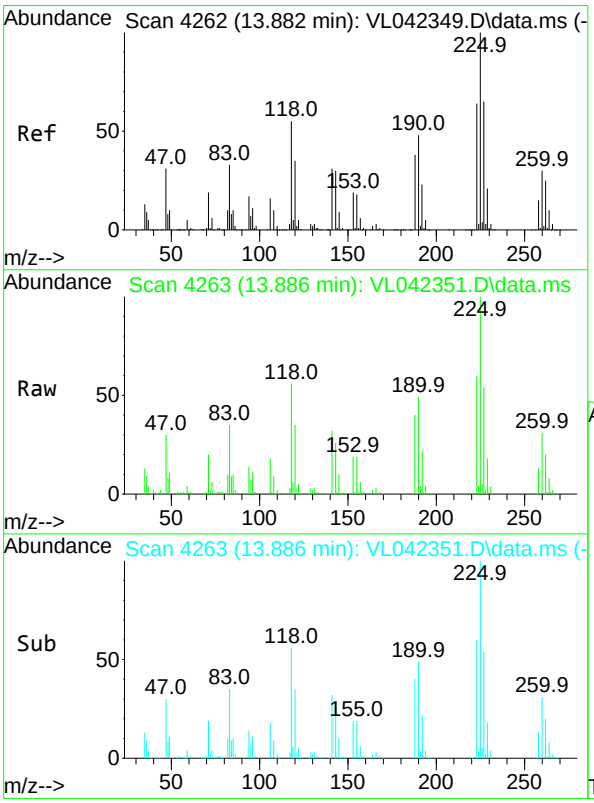
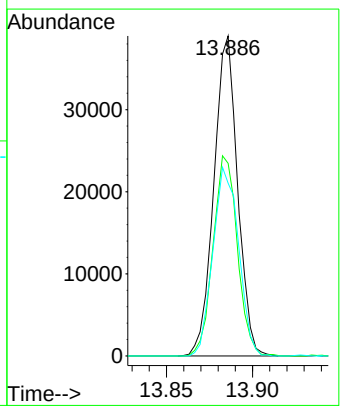
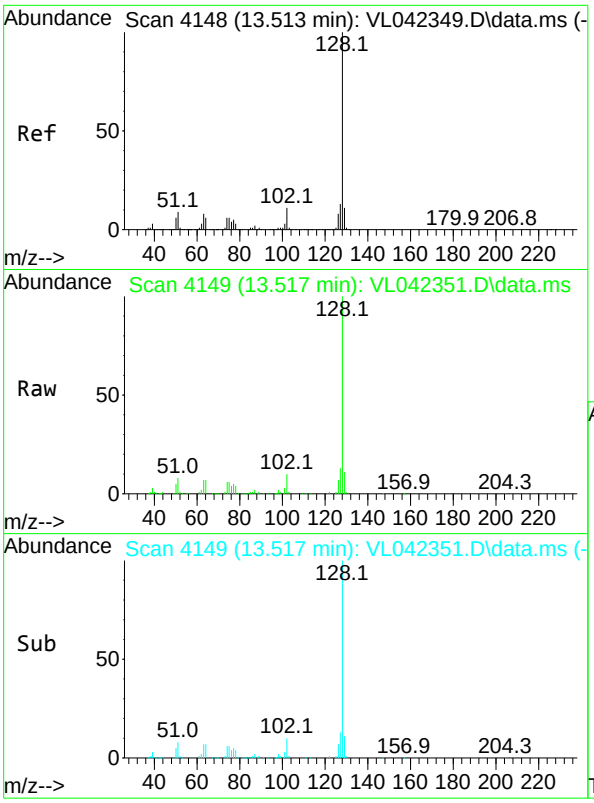


#78
Hexachloro-1,3-Butadiene
Concen: 1.098 ppbv
RT: 13.886 min Scan# 4263
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:225 Resp: 37377

Ion	Ratio	Lower	Upper
225	100		
223	64.1	50.3	75.5
227	63.6	51.5	77.3

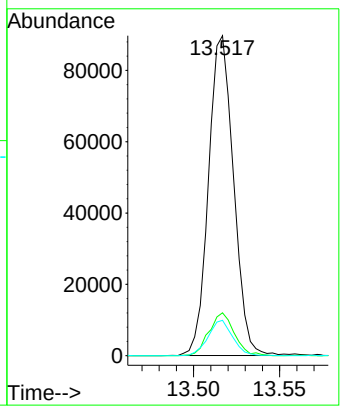




#79
Naphthalene
Concen: 1.138 ppbv
RT: 13.517 min Scan# 4
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:128 Resp: 9071

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	15.8
129	11.1	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
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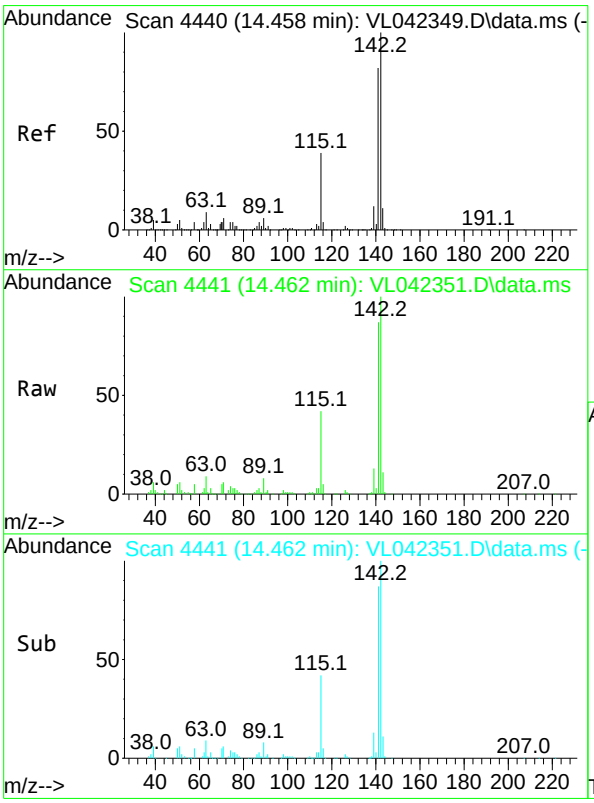
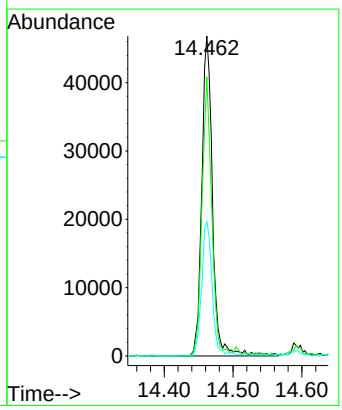
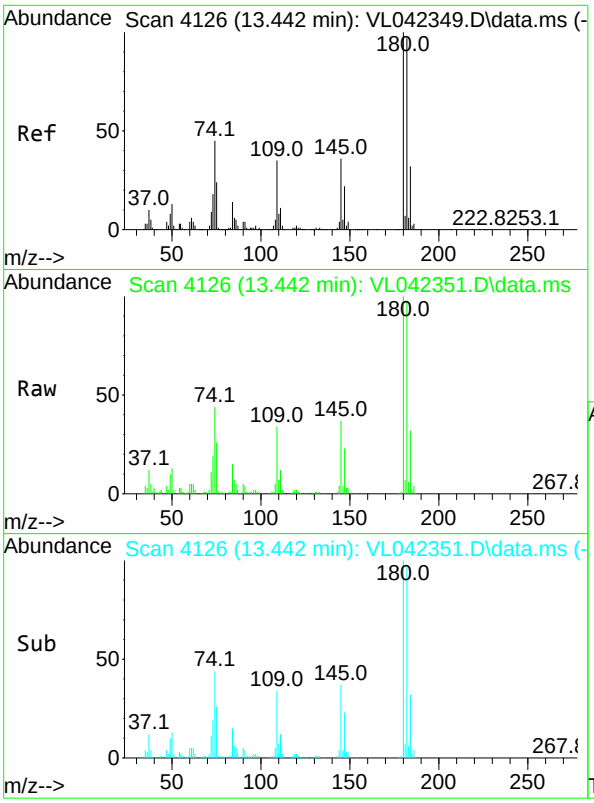


#80
Naphthalene,2-methyl-
Concen: 1.111 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:142 Resp: 50487

Ion	Ratio	Lower	Upper
142	100		
141	80.9	66.8	100.2
115	41.2	33.4	50.2

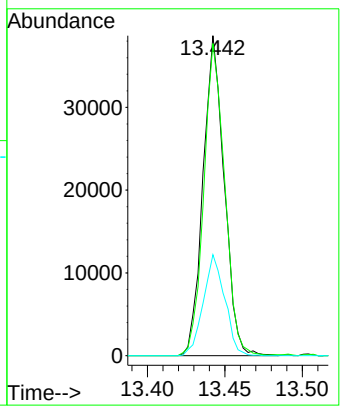




#81
1,2,4-Trichlorobenzene
Concen: 1.074 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:180 Resp: 3676

Ion	Ratio	Lower	Upper
180	100		
182	97.0	76.8	115.2
184	32.0	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	120542	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	353137	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	321644	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	265161	10.032	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11036	0.518	ppbv		92
3) Chlorodifluoromethane	1.476	51	11304	0.557	ppbv	#	84
4) Chloromethane	1.531	50	4534	0.538	ppbv		97
5) Vinyl Chloride	1.580	62	4406	0.480	ppbv		97
6) Bromomethane	1.667	94	2394	0.602	ppbv		95
7) Chloroethane	1.703	64	1824	0.550	ppbv	#	87
8) Dichlorotetrafluoroethane	1.554	85	9381	0.513	ppbv		99
9) Propene	1.483	41	5303	0.574	ppbv		93
10) Heptane	4.978	43	14728m	0.593	ppbv		
11) Trichlorofluoromethane	1.877	101	10150	0.501	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.136	101	8371	0.506	ppbv		93
13) Ethanol	1.719	45	1656m	2.194	ppbv		
14) Bromoethene	1.780	108	3238	0.519	ppbv	#	93
15) Acetone	1.835	43	11859	0.601	ppbv	#	74
16) 1,3-Butadiene	1.609	39	6120	0.660	ppbv	#	82
17) tert-Butyl alcohol	2.043	59	13640	0.558	ppbv	#	85
18) 1,1-Dichloroethene	2.033	96	4430	0.556	ppbv	#	87
19) Isopropyl Alcohol	1.884	45	6327	0.577	ppbv	#	39
20) Methylene Chloride	2.059	84	5273	0.682	ppbv		93
21) Allyl Chloride	2.094	41	7692	0.565	ppbv	#	81
22) trans-1,2-Dichloroethene	2.340	96	4908	0.557	ppbv		92
23) Vinyl Acetate	2.460	43	3953	0.495	ppbv	#	57
24) 1,1-Dichloroethane	2.408	63	8753	0.523	ppbv	#	94
25) Ethyl Acetate	2.835	43	26686	0.548	ppbv	#	93
26) Hexane	2.823	57	11448	0.581	ppbv		91
27) Carbon Disulfide	2.149	76	11472	0.544	ppbv	#	1
28) Methyl tert-Butyl Ether	2.441	73	6833	0.530	ppbv	#	32
29) Chloroform	2.848	83	14815	0.532	ppbv		93
30) Cyclohexane	3.852	84	8572	0.541	ppbv		94
31) cis-1,2-Dichloroethene	2.722	61	9571	0.511	ppbv		96
32) 1,1,1-Trichloroethane	3.370	97	15413	0.516	ppbv		97
34) 2-Butanone	2.560	43	15640	0.560	ppbv		97
35) Carbon Tetrachloride	3.761	117	14683	0.459	ppbv		87
36) Benzene	3.651	78	20233	0.531	ppbv		97
37) 1,2-Dichloroethane	3.217	62	12194	0.533	ppbv	#	95
38) Trichloroethene	4.551	130	7819	0.468	ppbv	#	78
39) 1,2-Dichloropropane	4.308	63	7790m	0.548	ppbv		
40) 1,4-Dioxane	4.599	88	4637m	0.603	ppbv		
41) Tetrahydrofuran	3.062	42	9144m	0.567	ppbv		
42) Bromodichloromethane	4.489	83	16642	0.523	ppbv	#	91
43) Methyl Methacrylate	4.881	69	9620m	0.563	ppbv		
44) 2,2,4-Trimethylpentane	4.635	57	34170	0.519	ppbv		91
45) t-1,3-Dichloropropene	6.415	75	9073m	0.517	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	10827m	0.505	ppbv		
47) 1,1,2-Trichloroethane	6.577	97	7466m	0.516	ppbv		
48) Dibromochloromethane	7.386	129	13122	0.514	ppbv		97
49) Bromoform	9.477	173	10988	0.492	ppbv		99
50) 4-Methyl-2-Pentanone	5.761	43	27206m	0.585	ppbv		
51) 2-Hexanone	7.441	43	23684	0.564	ppbv		98
52) Tetrachloroethene	8.221	164	7412	0.503	ppbv	#	88
53) Toluene	6.927	91	24200	0.529	ppbv		97
54) 1,2-Dibromoethane	7.645	107	10282	0.499	ppbv		84
56) 1,1,1,2-Tetrachloroethane	8.930	131	9987	0.513	ppbv	#	1
57) Chlorobenzene	8.917	112	18149m	0.543	ppbv		
58) Ethyl Benzene	9.351	91	32624	0.512	ppbv		97
59) m/p-Xylene	9.532	91	54197m	1.053	ppbv		
60) o-Xylene	9.963	91	27983	0.541	ppbv		99
61) Styrene	9.869	104	12736	0.516	ppbv		96
62) Isopropylbenzene	10.539	105	40481	0.533	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	15920	0.474	ppbv		99
64) n-propylbenzene	10.985	120	10369	0.544	ppbv		97
65) tert-Butylbenzene	11.529	119	37294	0.535	ppbv		93
66) Benzyl Chloride	11.613	91	3878	0.506	ppbv	#	91
67) sec-Butylbenzene	11.765	105	52139	0.537	ppbv		97
69) p-Isopropyltoluene	11.924	119	45574	0.541	ppbv		98
70) n-Butylbenzene	12.280	91	48004	0.547	ppbv		99
71) 2-Chlorotoluene	10.898	91	31709	0.533	ppbv		100
72) 4-Ethyltoluene	11.125	105	33048	0.523	ppbv	#	95
73) 1,3,5-Trimethylbenzene	11.202	105	30464	0.546	ppbv		99
74) 1,2,4-Trimethylbenzene	11.536	105	37765	0.579	ppbv	#	90
75) 1,3-Dichlorobenzene	11.607	146	18003	0.531	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	18300	0.537	ppbv		96
77) 1,2-Dichlorobenzene	11.947	146	17446	0.530	ppbv		95
78) Hexachloro-1,3-Butadiene	13.879	225	18705	0.562	ppbv		98
79) Naphthalene	13.513	128	38521	0.494	ppbv	#	92
80) Naphthalene,2-methyl-	14.458	142	21076	0.475	ppbv		96
81) 1,2,4-Trichlorobenzene	13.442	180	16504	0.493	ppbv		97

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

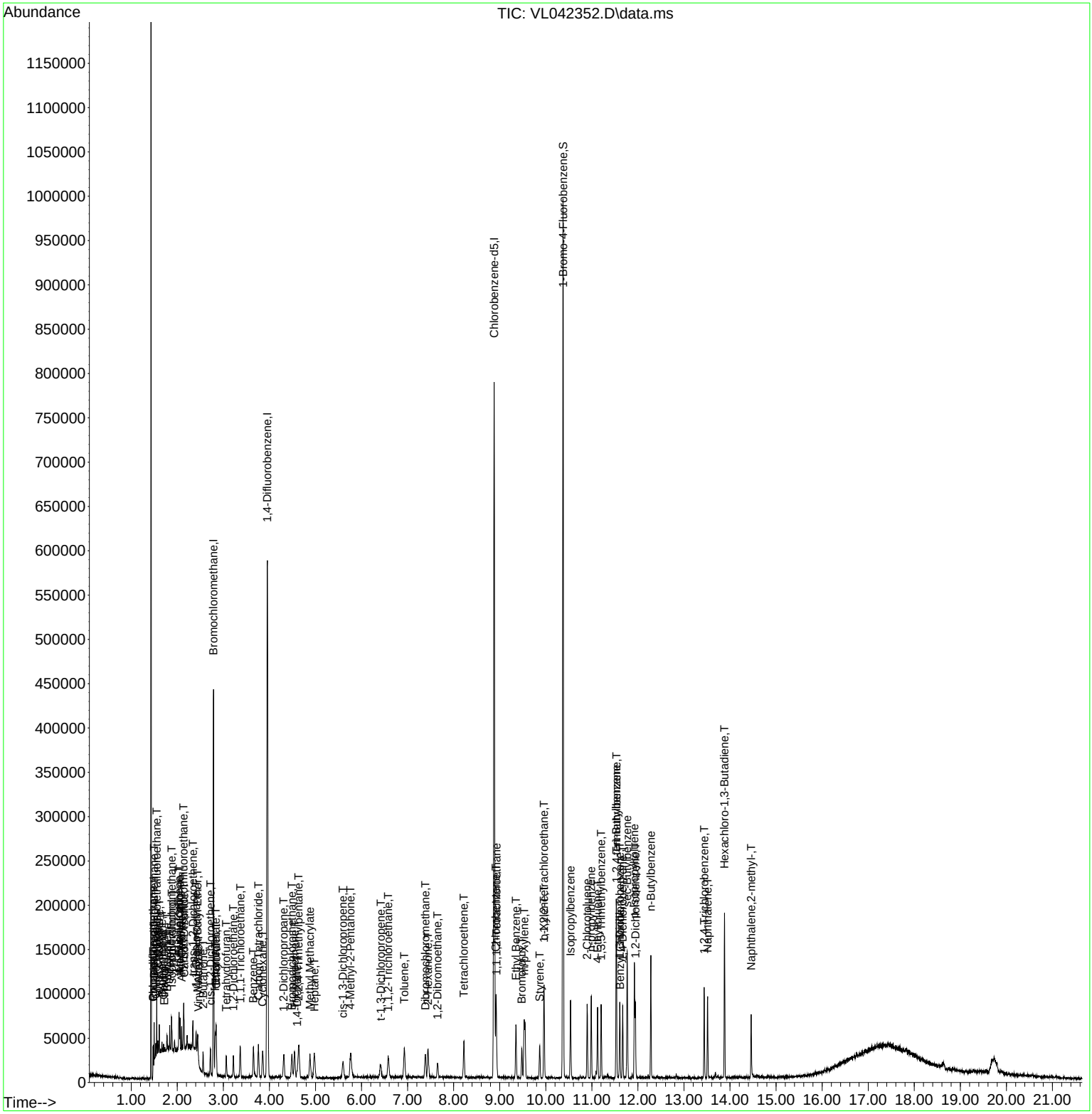
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

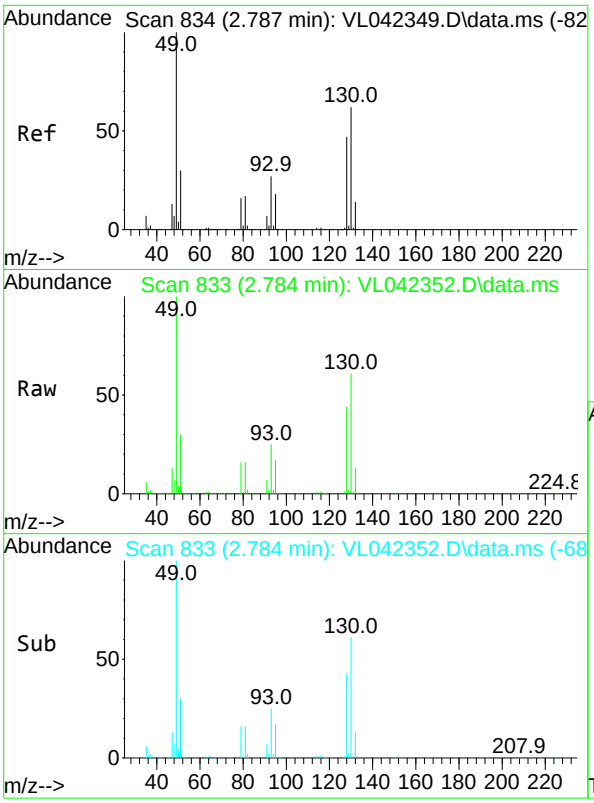
Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

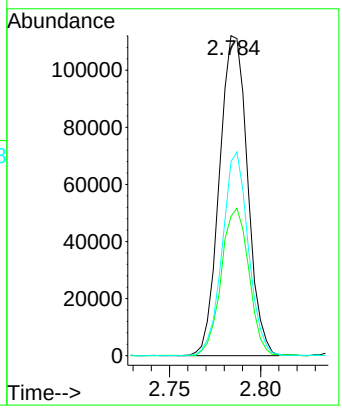
Tgt Ion: 49 Resp: 12054

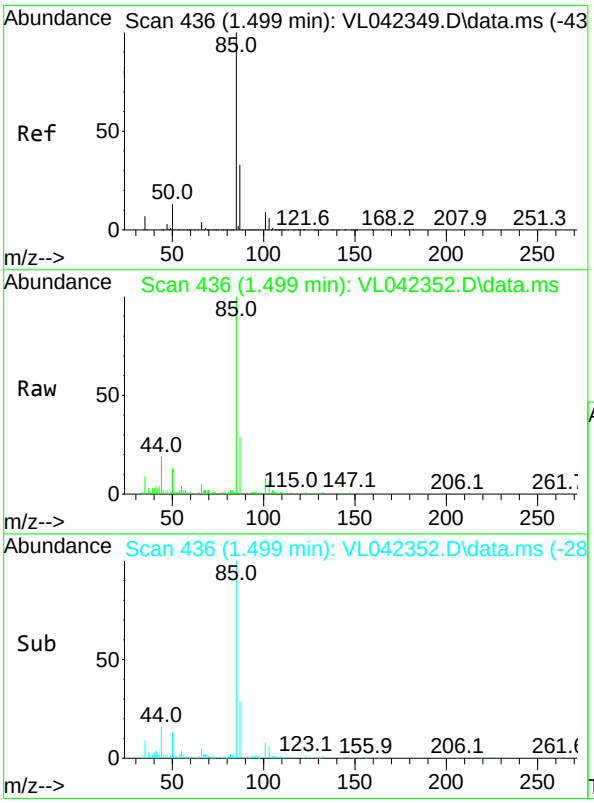
Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	59.0	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

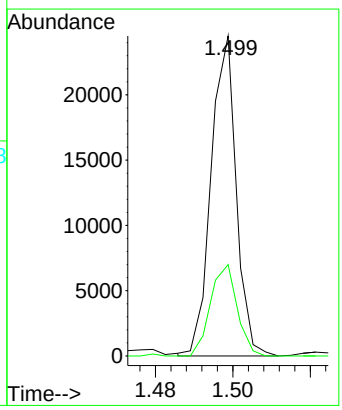


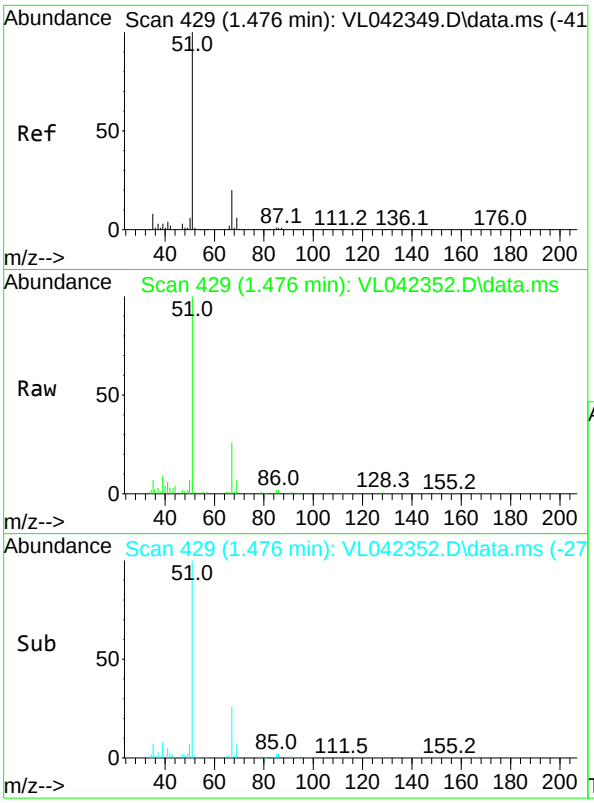


#2
Dichlorodifluoromethane
Concen: 0.518 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 85 Resp: 11036

Ion	Ratio	Lower	Upper
85	100		
87	28.6	26.6	39.8

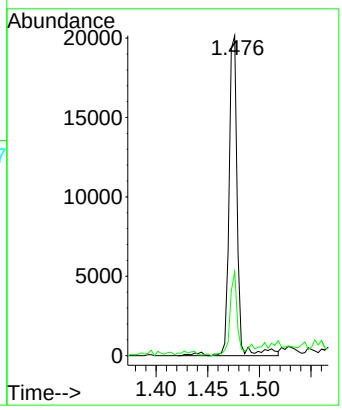




#3
Chlorodifluoromethane
Concen: 0.557 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 51 Resp: 1130

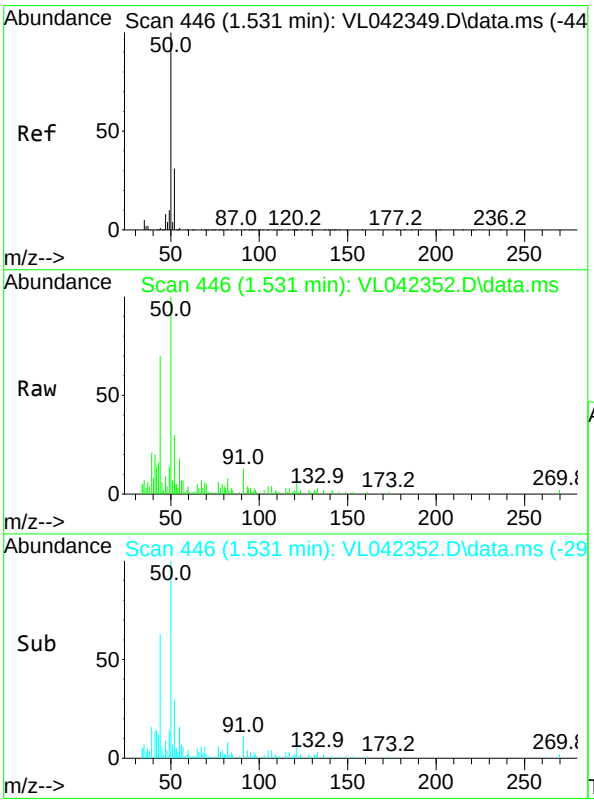
Ion	Ratio	Lower	Upper
51	100		
67	27.8	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

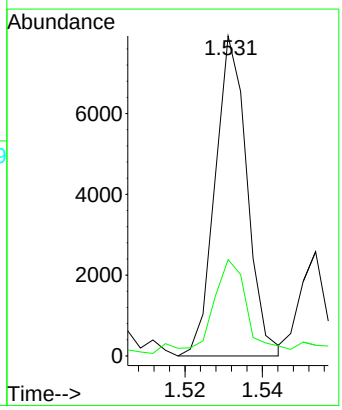
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

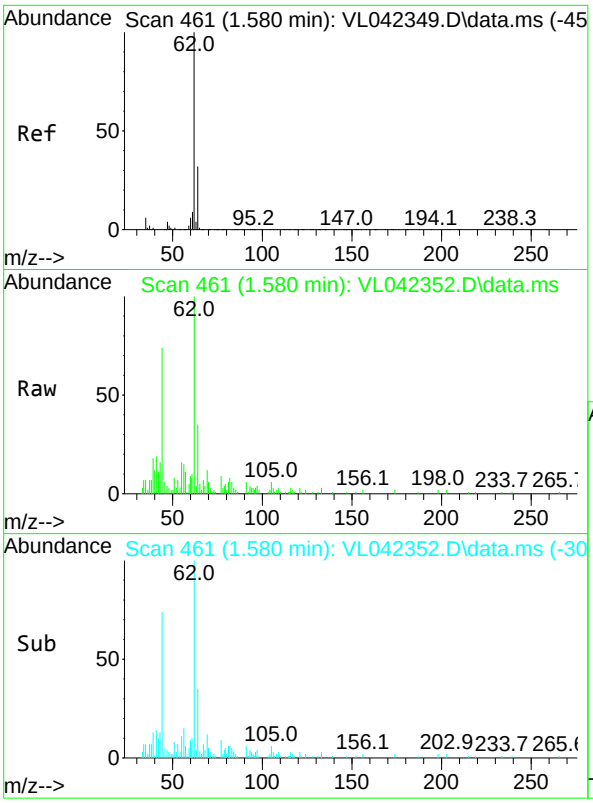


#4
Chloromethane
Concen: 0.538 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 50 Resp: 4534

Ion	Ratio	Lower	Upper
50	100		
52	32.8	24.7	37.1

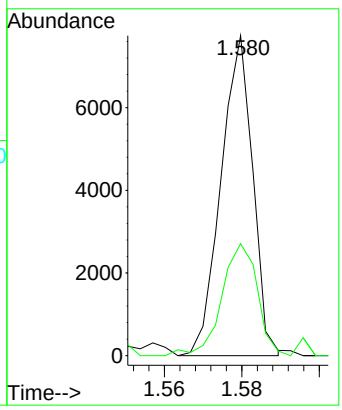




#5
Vinyl Chloride
Concen: 0.480 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 62 Resp: 440

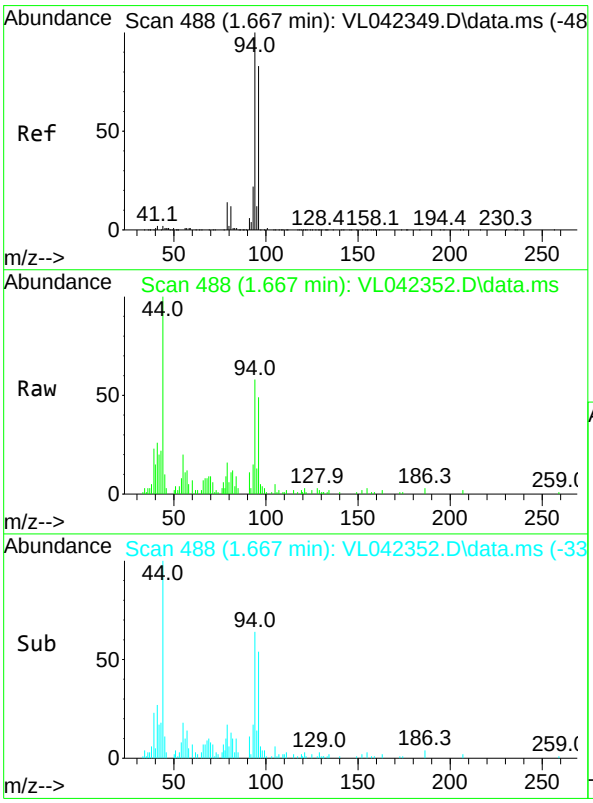
Ion	Ratio	Lower	Upper
62	100		
64	33.5	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

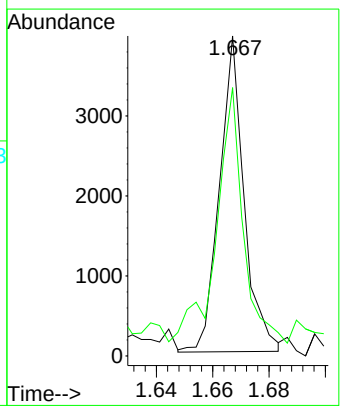
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

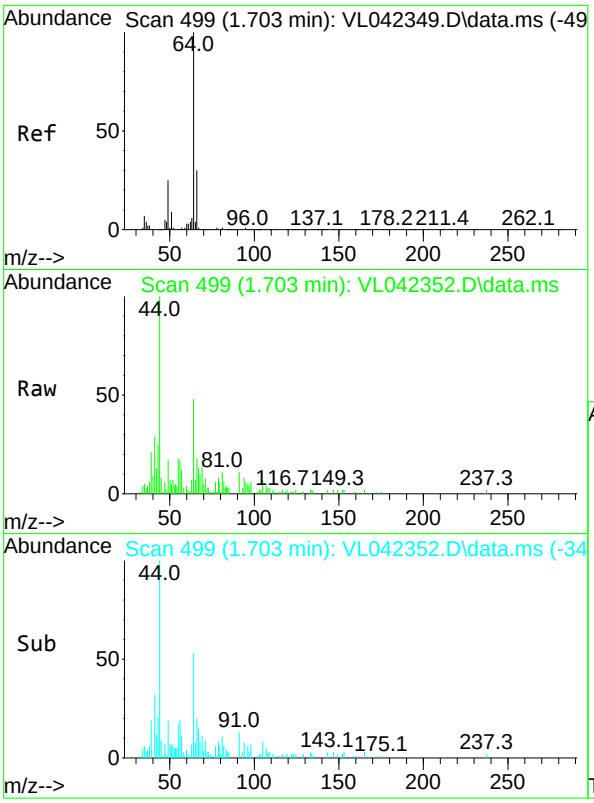


#6
Bromomethane
Concen: 0.602 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 94 Resp: 2394

Ion	Ratio	Lower	Upper
94	100		
96	78.1	66.2	99.2

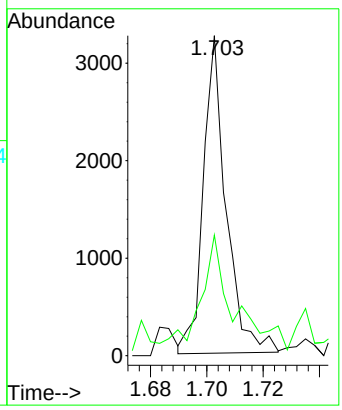




#7
Chloroethane
Concen: 0.550 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 64 Resp: 182

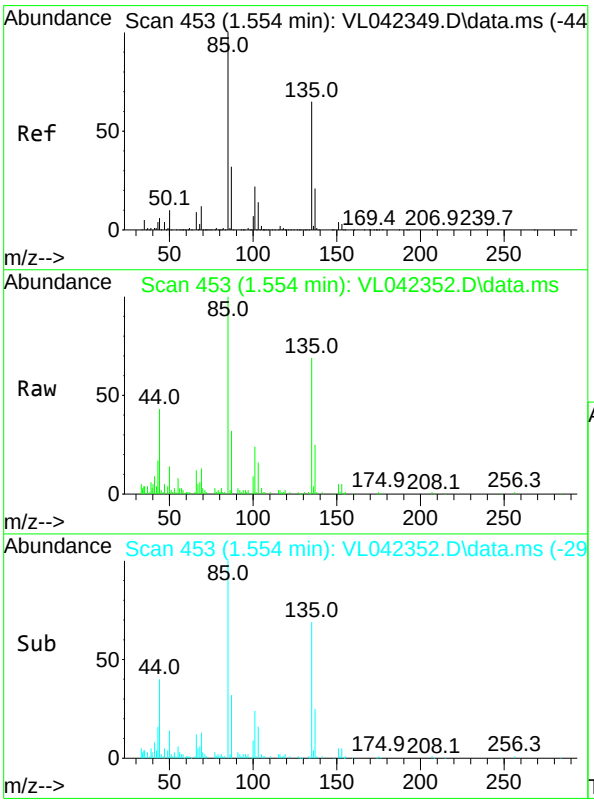
Ion	Ratio	Lower	Upper
64	100		
66	37.7	24.6	37.0#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

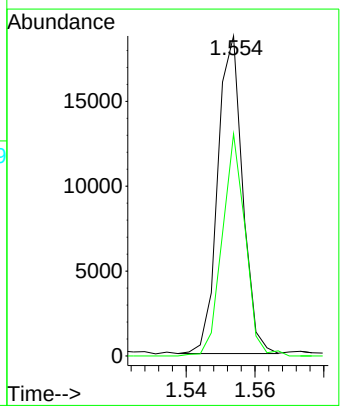
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

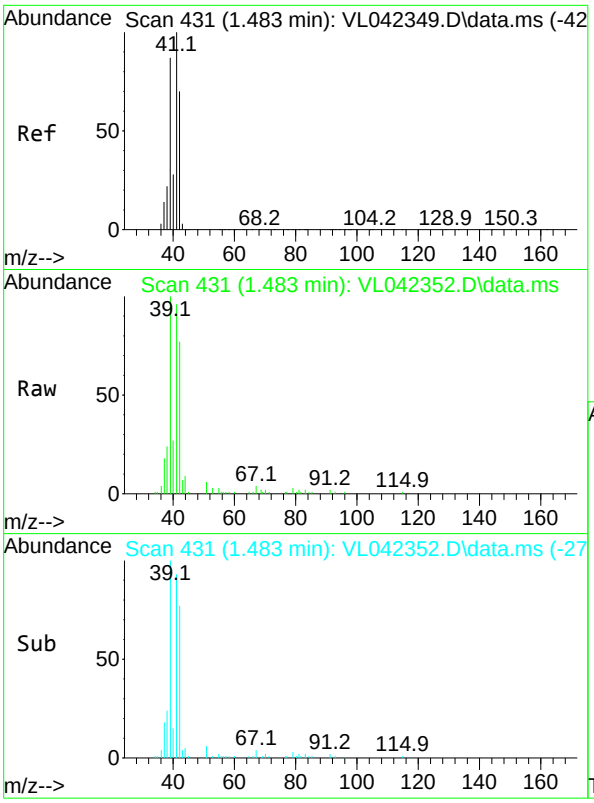


#8
Dichlorotetrafluoroethane
Concen: 0.513 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 85 Resp: 9381

Ion	Ratio	Lower	Upper
85	100		
135	66.2	52.2	78.2

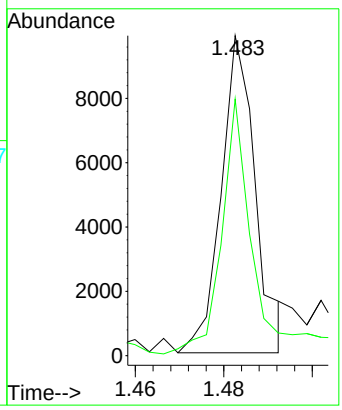




#9
Propene
Concen: 0.574 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 41 Resp: 530

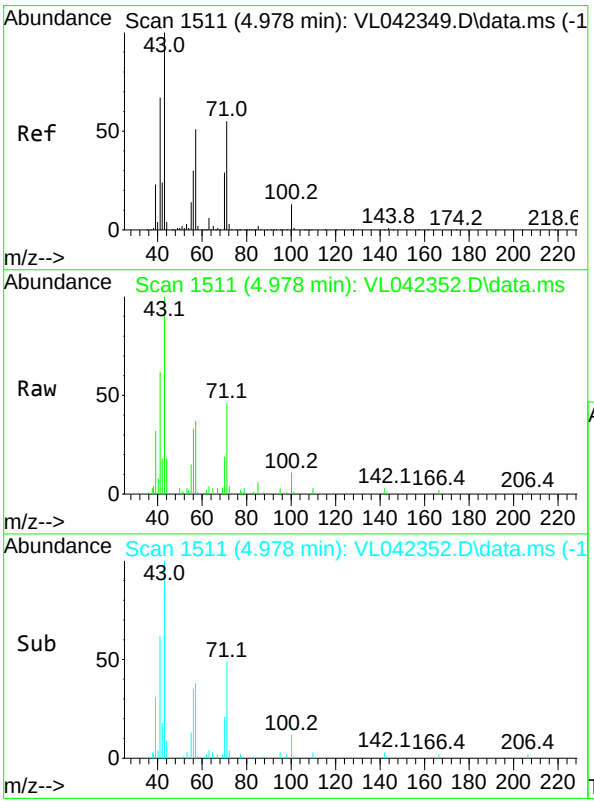
Ion	Ratio	Lower	Upper
41	100		
42	64.8	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

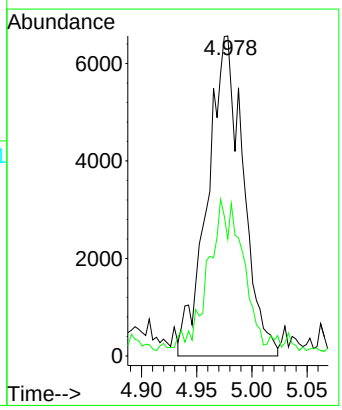
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

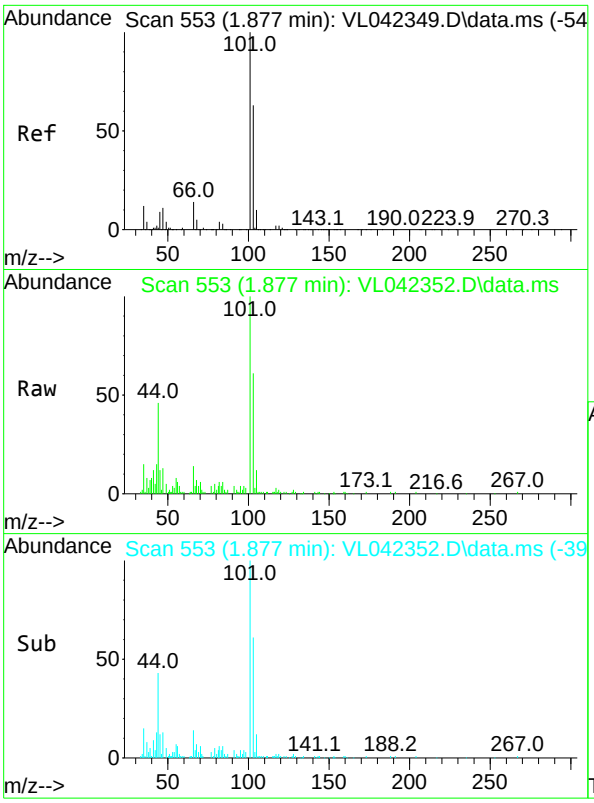


#10
Heptane
Concen: 0.593 ppbv m
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 14728

Ion	Ratio	Lower	Upper
43	100		
57	51.1	39.9	59.9





#11
Trichlorofluoromethane
Concen: 0.501 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:101 Resp: 1015

Ion	Ratio	Lower	Upper
101	100		
103	60.6	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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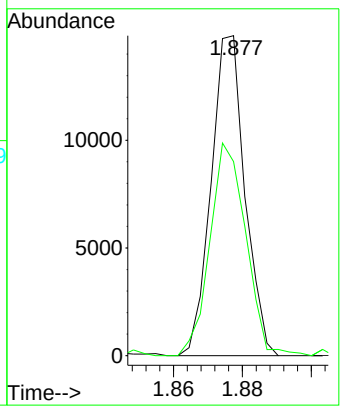
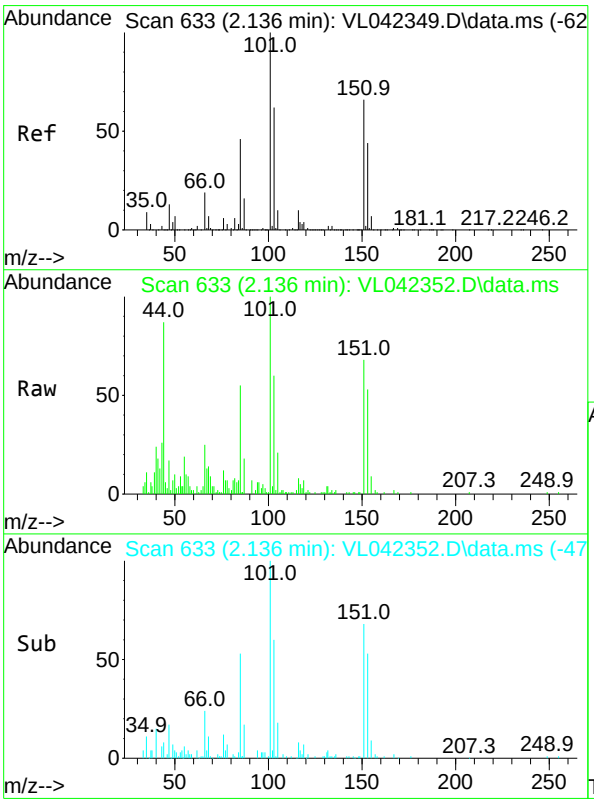
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

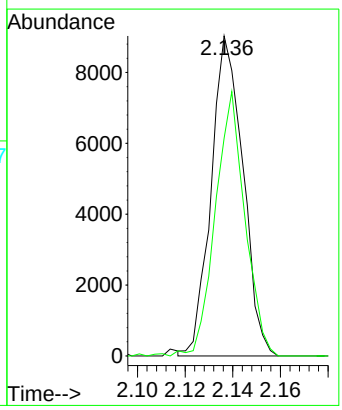


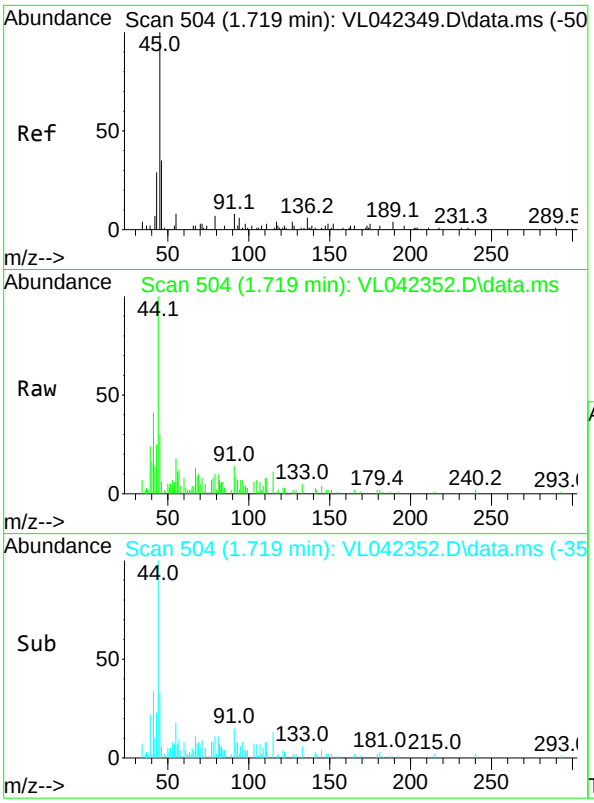


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.506 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:101 Resp: 8371

Ion	Ratio	Lower	Upper
101	100		
151	77.4	57.0	85.6

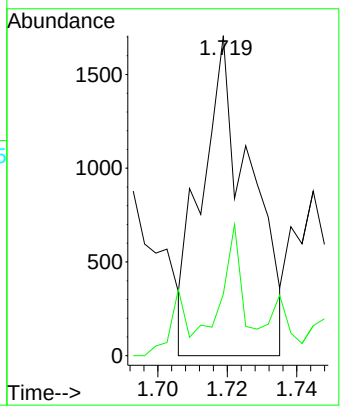




#13
Ethanol
Concen: 2.194 ppbv m
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 45 Resp: 165(

Ion	Ratio	Lower	Upper
45	100		
46	0.0	21.9	87.7#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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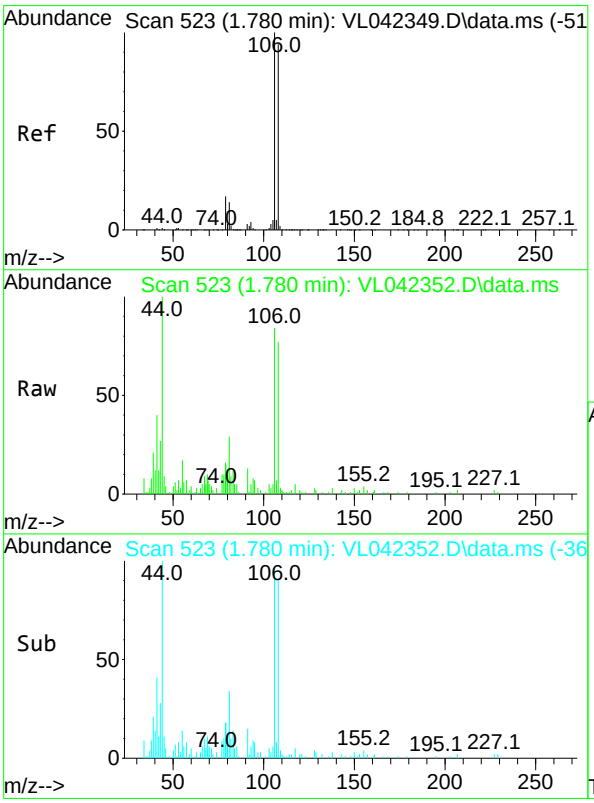
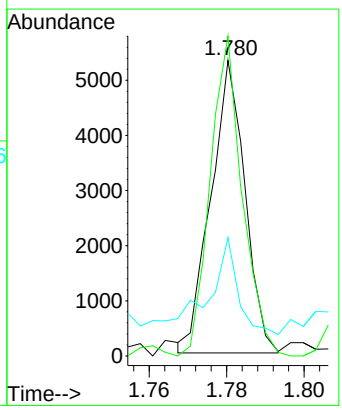
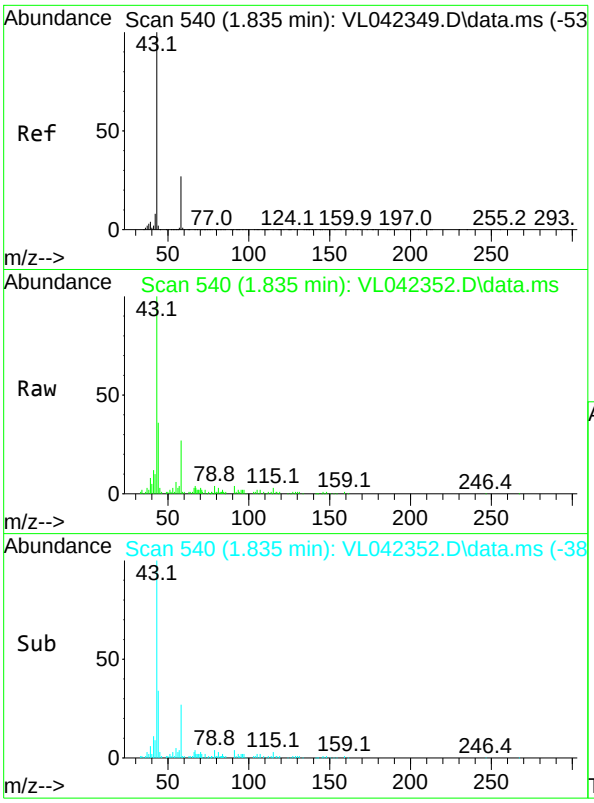


#14
Bromoethene
Concen: 0.519 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:108 Resp: 3238

Ion	Ratio	Lower	Upper
108	100		
106	110.3	85.9	128.9
79	33.0	13.9	20.9#





#15
Acetone
Concen: 0.601 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 1185

Ion	Ratio	Lower	Upper
43	100		
58	41.7	22.4	33.6#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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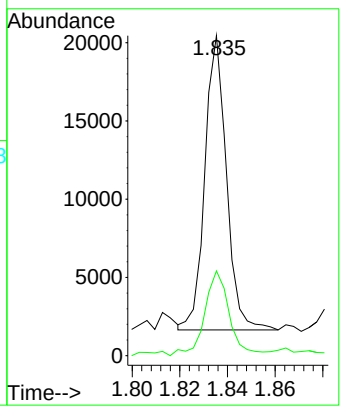
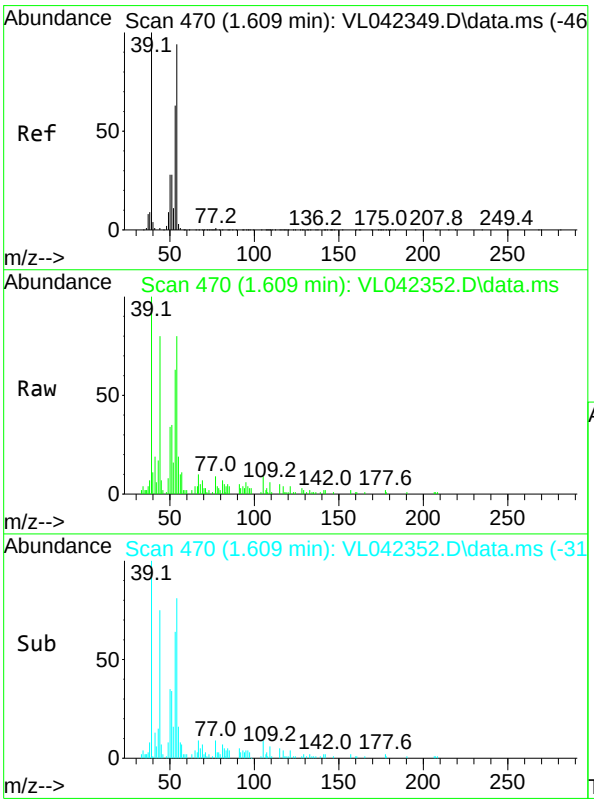
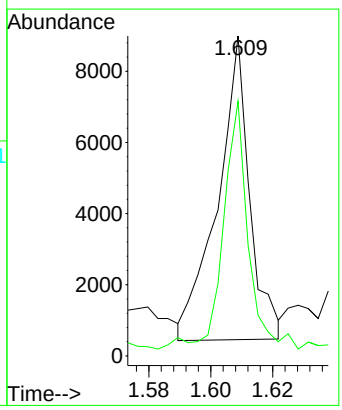


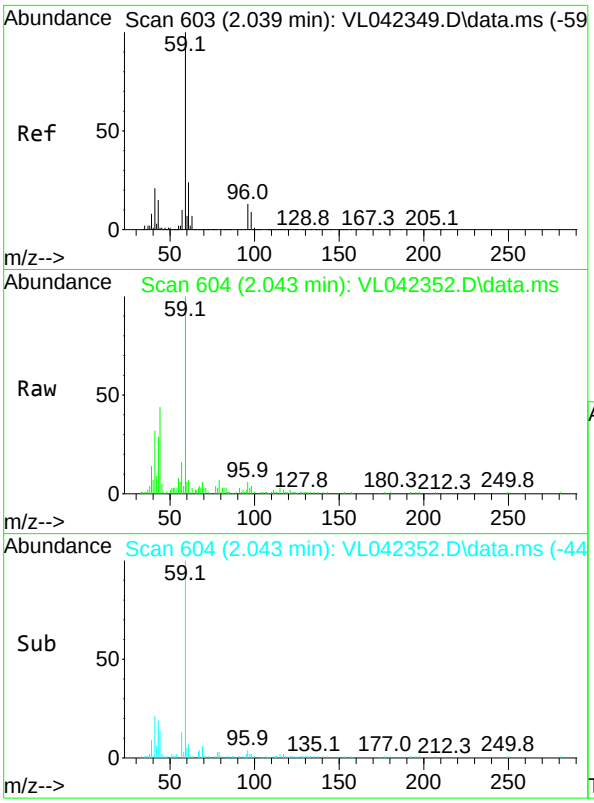


#16
1,3-Butadiene
Concen: 0.660 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 39 Resp: 6120

Ion	Ratio	Lower	Upper
39	100		
54	64.7	64.9	97.3#





#17
tert-Butyl alcohol
Concen: 0.558 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 59 Resp: 1364

Ion	Ratio	Lower	Upper
59	100		
57	16.5	8.7	13.1#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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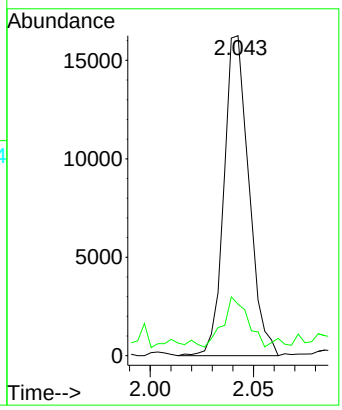
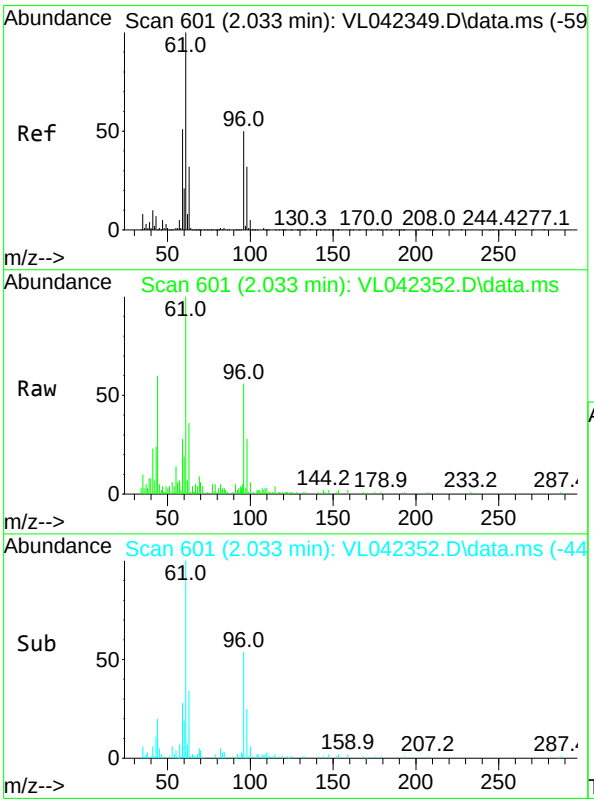
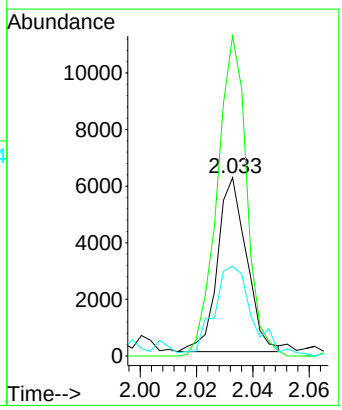


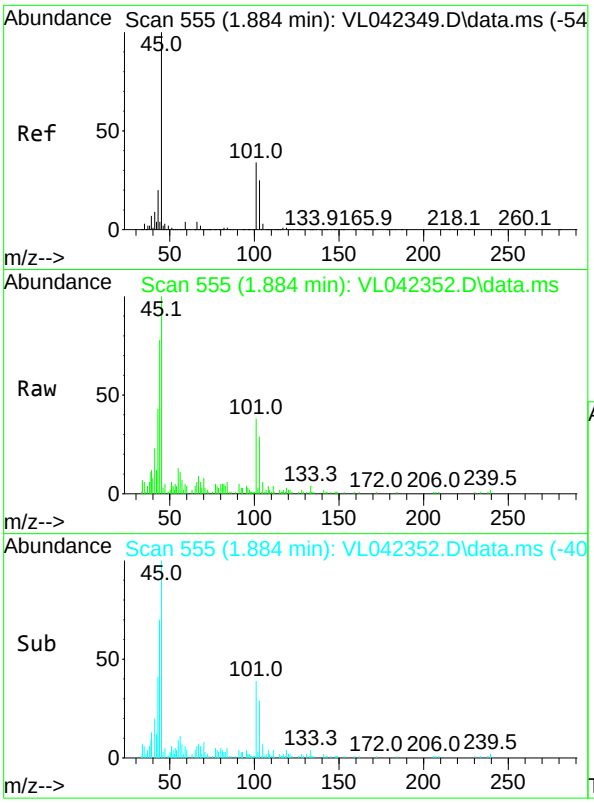


#18
1,1-Dichloroethene
Concen: 0.556 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 96 Resp: 4430

Ion	Ratio	Lower	Upper
96	100		
61	183.9	160.2	240.2
98	49.7	51.0	76.4#





#19
Isopropyl Alcohol
Concen: 0.577 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 45 Resp: 632

Ion	Ratio	Lower	Upper
45	100		
58	3.8	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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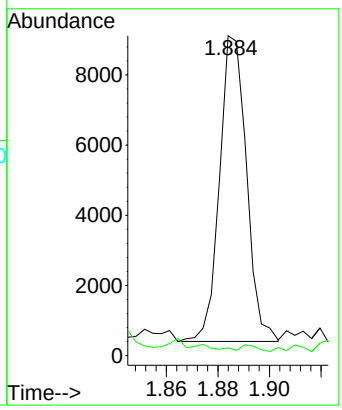
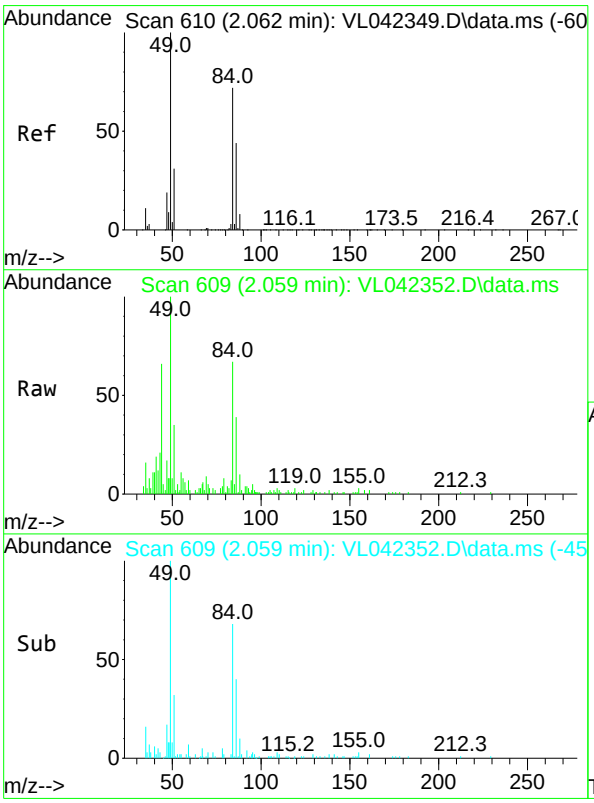
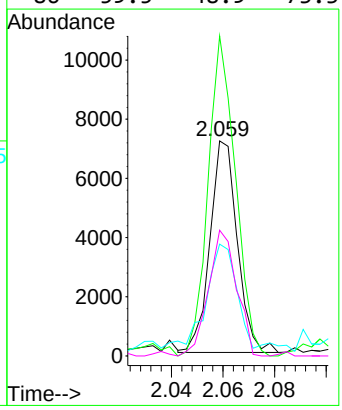


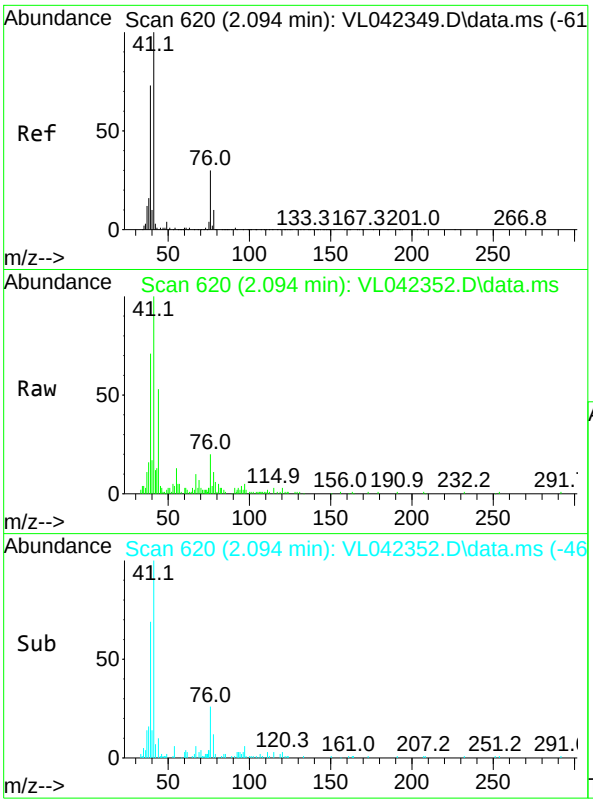


#20
Methylene Chloride
Concen: 0.682 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 84 Resp: 5273

Ion	Ratio	Lower	Upper
84	100		
49	151.3	111.6	167.4
51	48.1	35.1	52.7
86	59.5	48.9	73.3

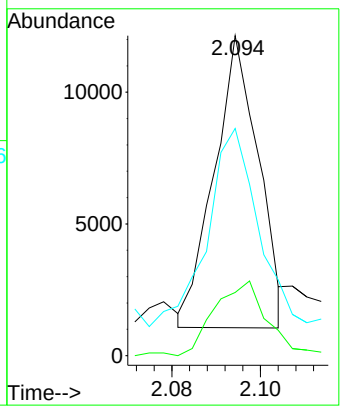




#21
Allyl Chloride
Concen: 0.565 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 41 Resp: 769

Ion	Ratio	Lower	Upper
41	100		
76	31.1	24.8	37.2
39	98.8	60.6	90.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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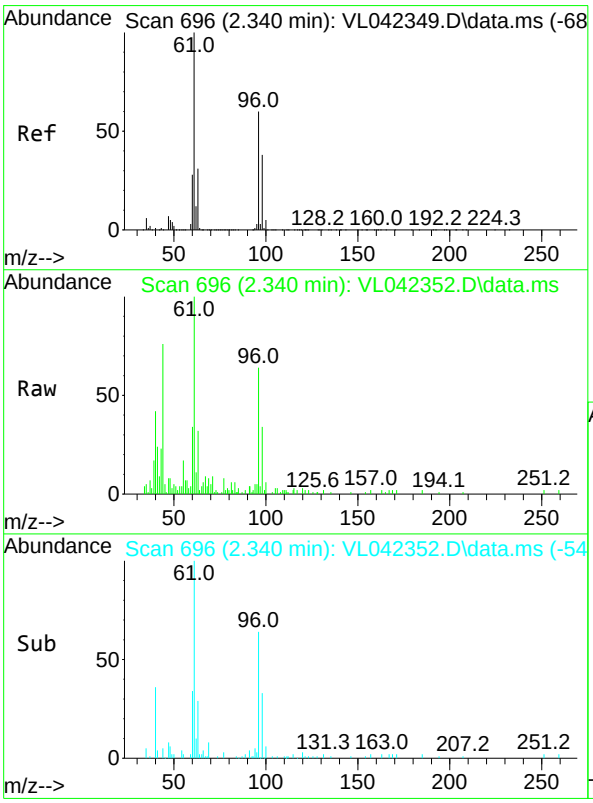
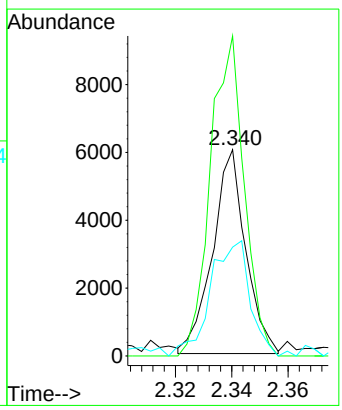
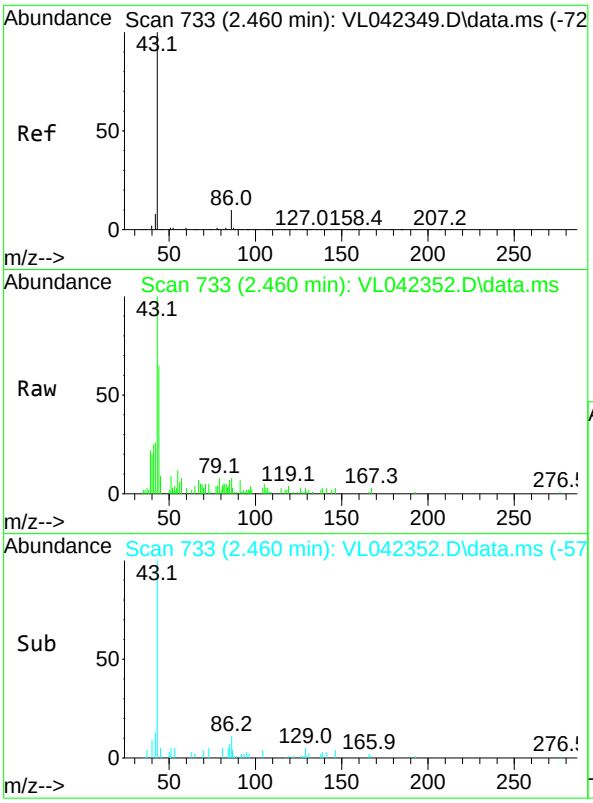


#22
trans-1,2-Dichloroethene
Concen: 0.557 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 96 Resp: 4908

Ion	Ratio	Lower	Upper
96	100		
61	158.7	133.7	200.5
98	54.0	50.3	75.5

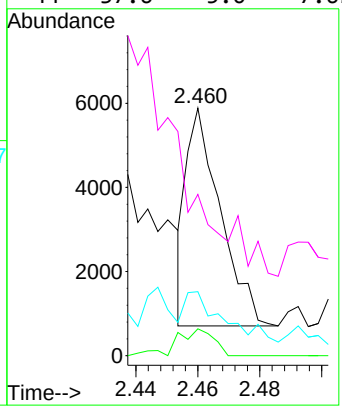




#23
Vinyl Acetate
Concen: 0.495 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 395

Ion	Ratio	Lower	Upper
43	100		
86	12.4	6.5	9.7#
42	23.2	7.8	11.8#
44	37.6	5.0	7.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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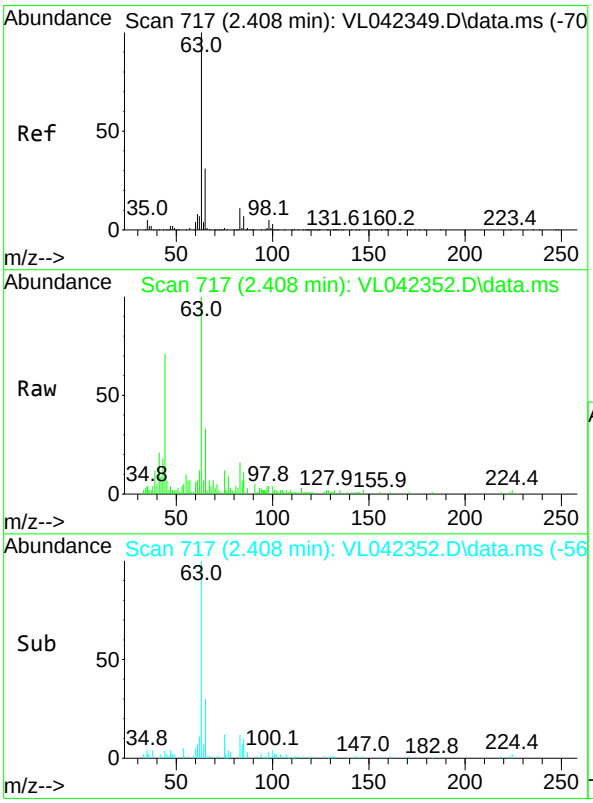
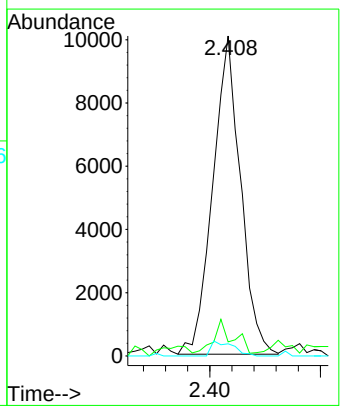
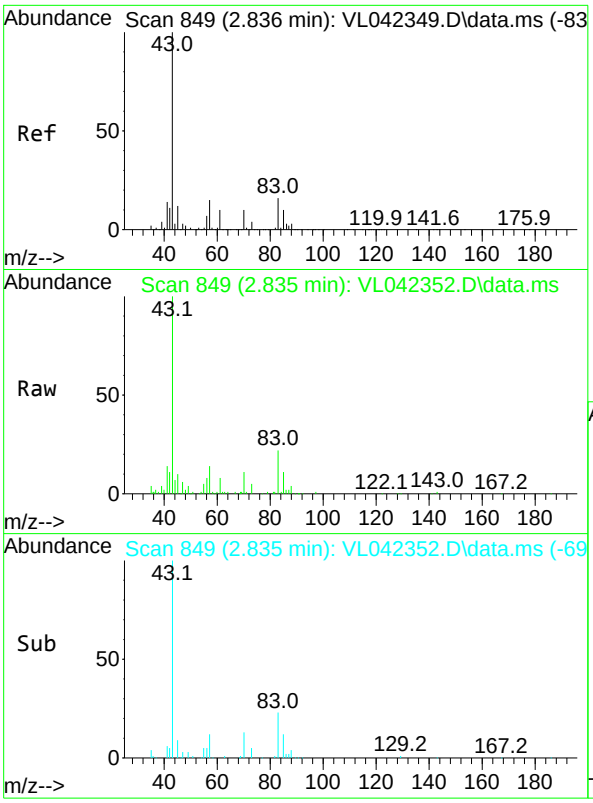


#24
1,1-Dichloroethane
Concen: 0.523 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 63 Resp: 8753

Ion	Ratio	Lower	Upper
63	100		
98	1.4	2.3	6.8#
100	3.8	1.6	4.8

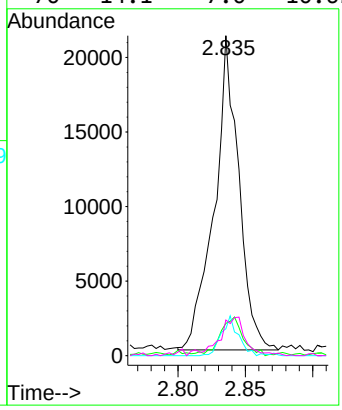




#25
Ethyl Acetate
Concen: 0.548 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 2668

Ion	Ratio	Lower	Upper
43	100		
45	13.3	8.3	12.5#
61	9.0	7.3	10.9
70	14.1	7.0	10.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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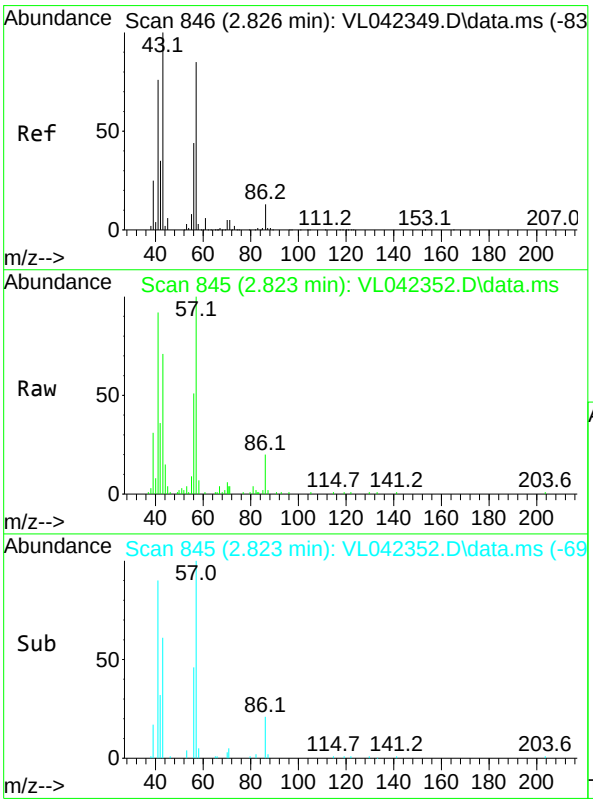
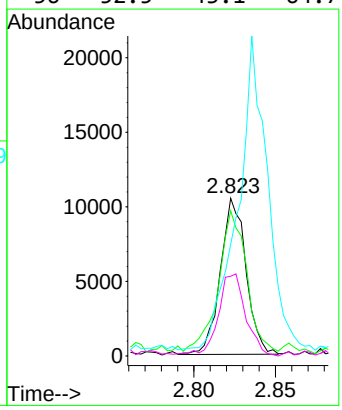
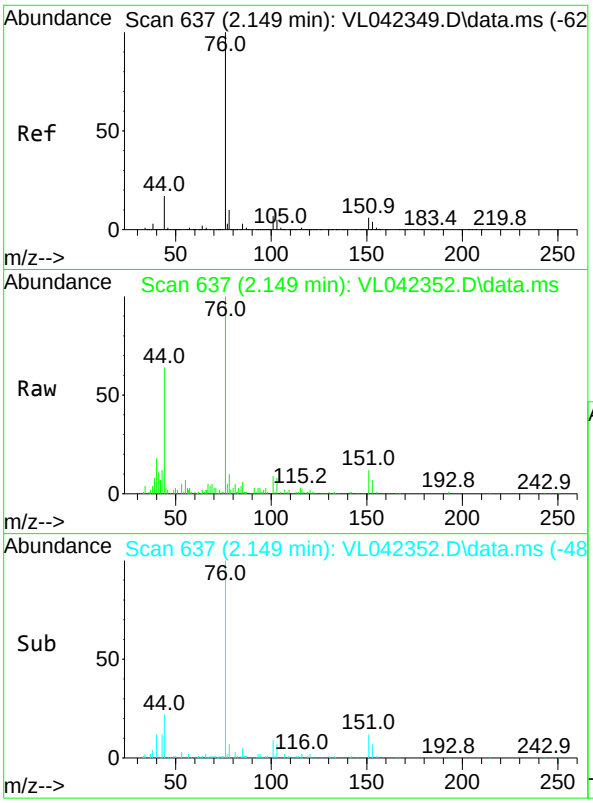


#26
Hexane
Concen: 0.581 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 57 Resp: 11448

Ion	Ratio	Lower	Upper
57	100		
41	103.5	77.9	116.9
43	240.0	208.4	312.6
56	52.5	43.1	64.7

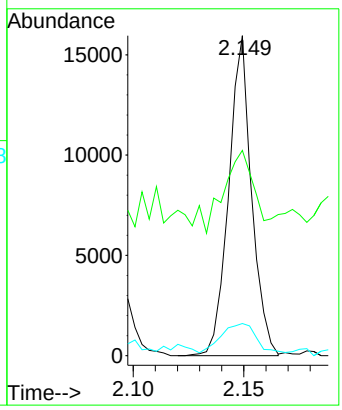




#27
Carbon Disulfide
Concen: 0.544 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 76 Resp: 1147

Ion	Ratio	Lower	Upper
76	100		
44	123.7	15.5	23.3#
78	18.8	9.3	13.9#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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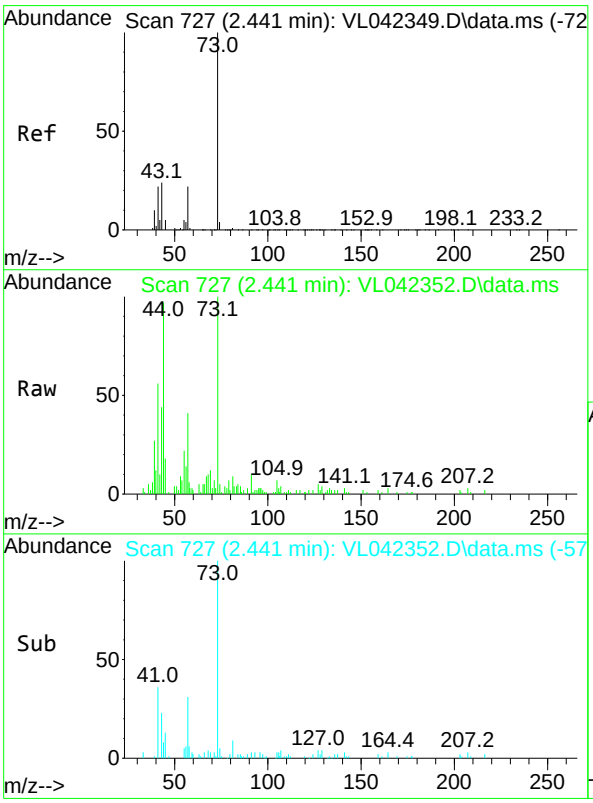
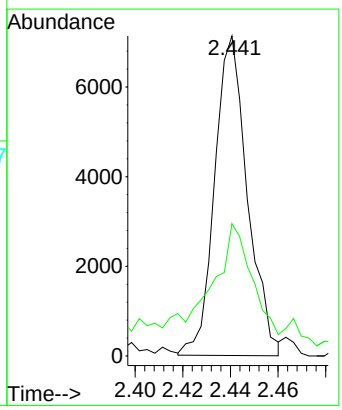
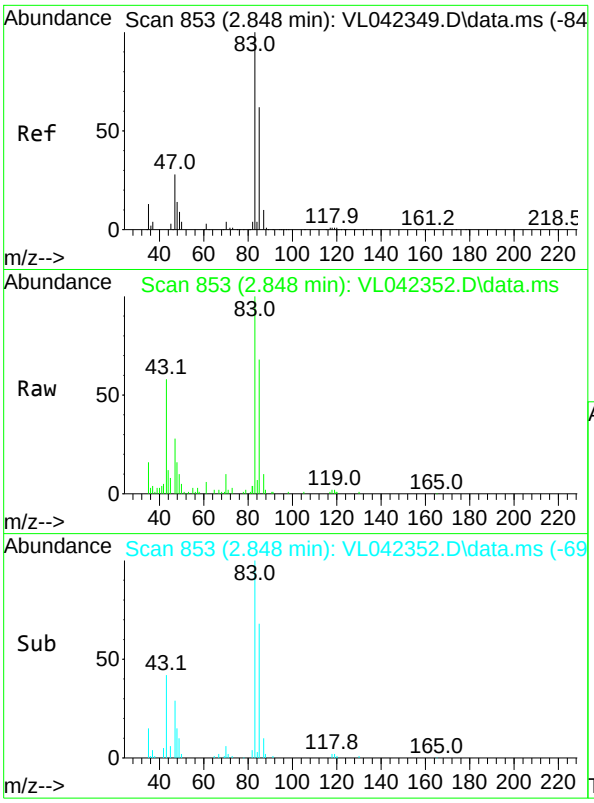


#28
Methyl tert-Butyl Ether
Concen: 0.530 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 73 Resp: 6833

Ion	Ratio	Lower	Upper
73	100		
57	61.8	21.3	31.9#





#29
Chloroform
Concen: 0.532 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 83 Resp: 1481

Ion	Ratio	Lower	Upper
83	100		
85	68.0	50.0	75.0

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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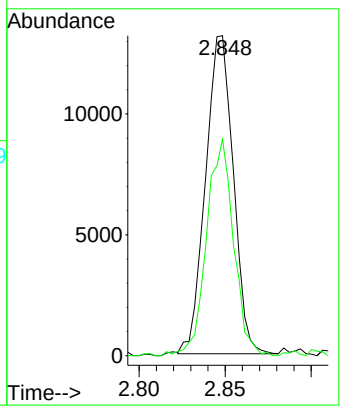
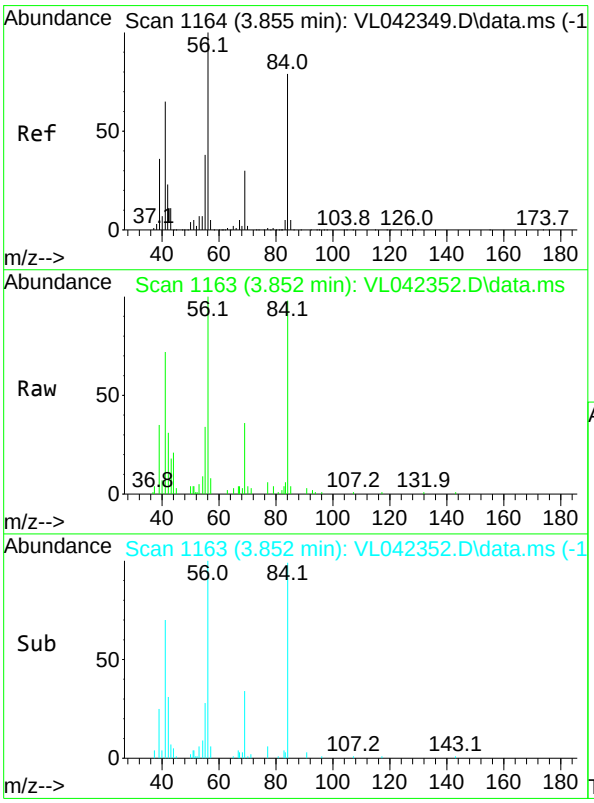
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

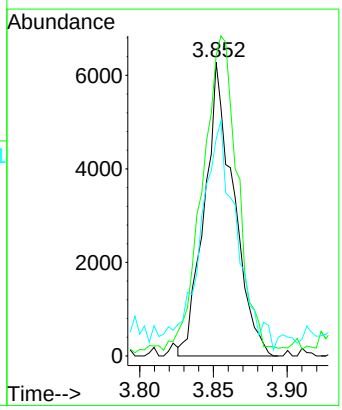


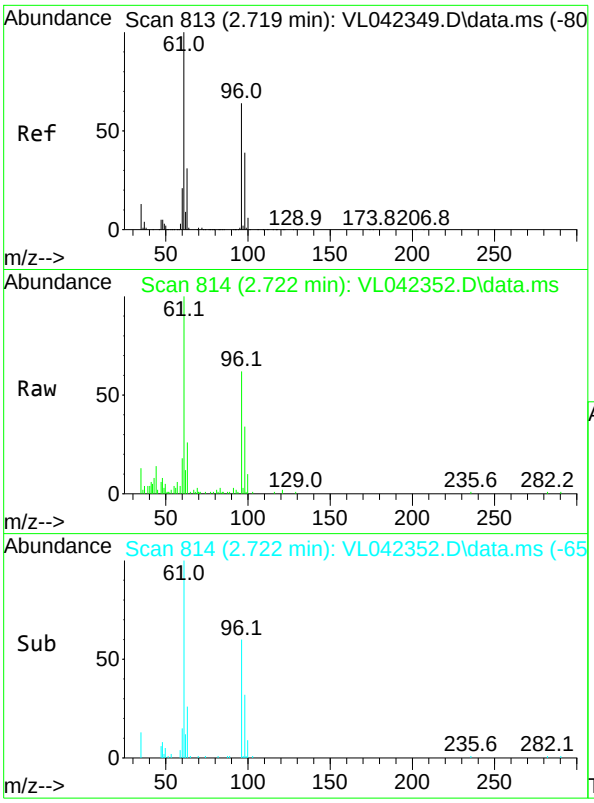


#30
Cyclohexane
Concen: 0.541 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 84 Resp: 8572

Ion	Ratio	Lower	Upper
84	100		
56	132.8	101.0	151.4
41	89.8	67.4	101.0

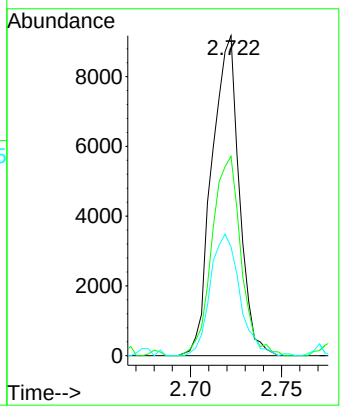




#31
cis-1,2-Dichloroethene
Concen: 0.511 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 61 Resp: 957

Ion	Ratio	Lower	Upper
61	100		
96	62.3	50.8	76.2
98	34.0	30.9	46.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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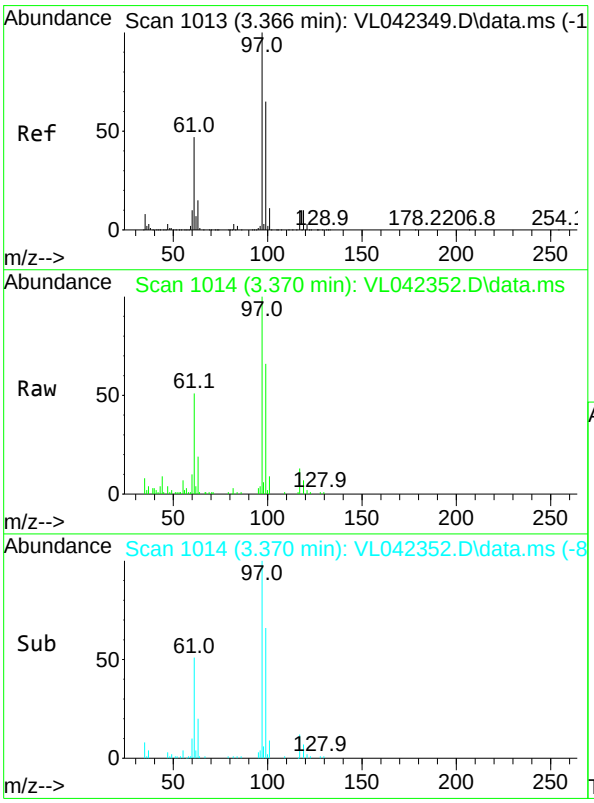
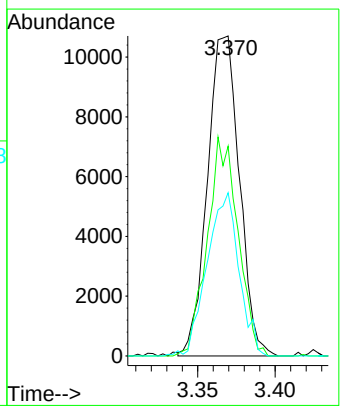
Supervised By :Mahesh Dadoda 04/18/2025

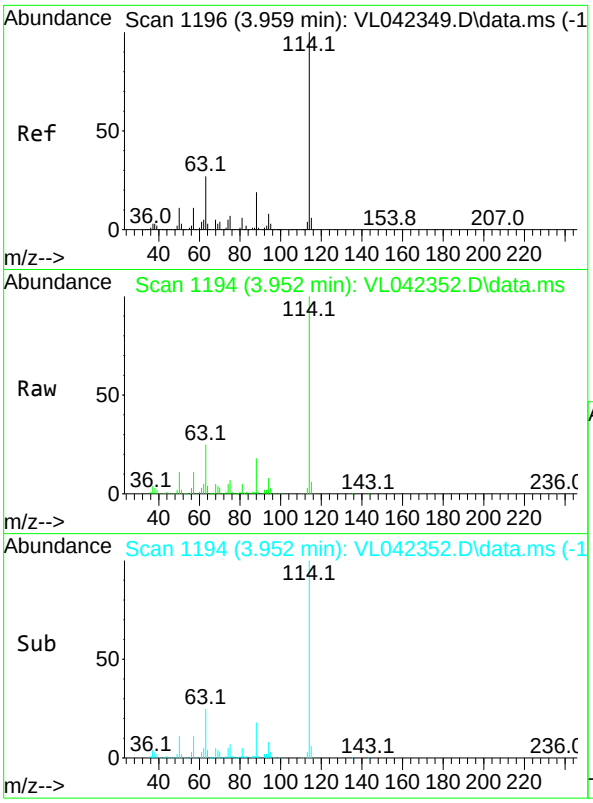


#32
1,1,1-Trichloroethane
Concen: 0.516 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 97 Resp: 15413

Ion	Ratio	Lower	Upper
97	100		
99	65.6	51.0	76.4
61	50.8	38.8	58.2

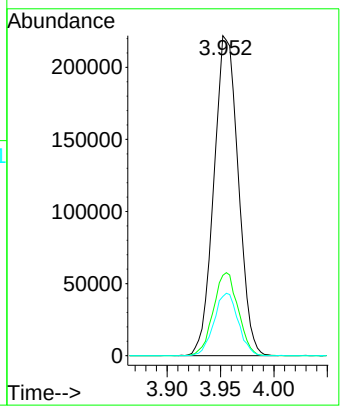




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:114 Resp: 35313

Ion	Ratio	Lower	Upper
114	100		
63	26.3	21.8	32.6
88	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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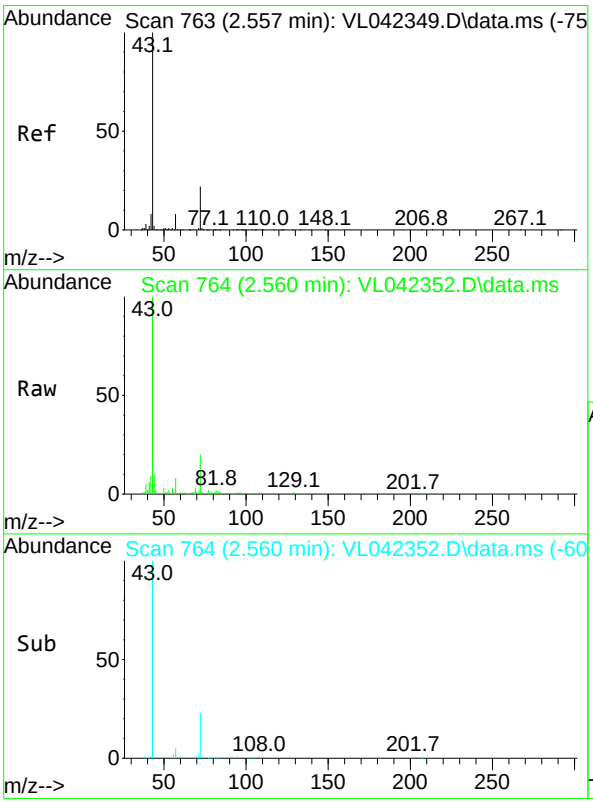
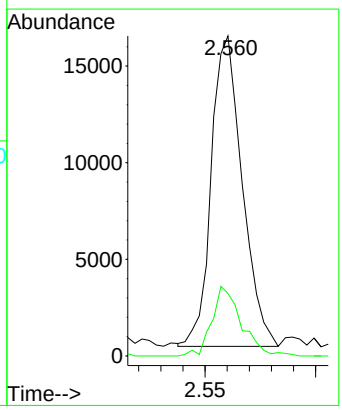
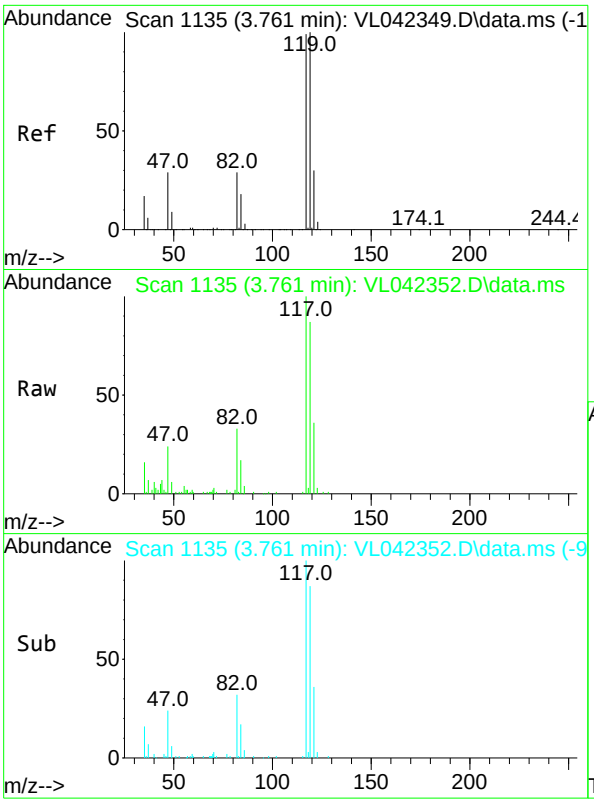


#34
2-Butanone
Concen: 0.560 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 15640

Ion	Ratio	Lower	Upper
43	100		
72	21.3	18.2	27.2

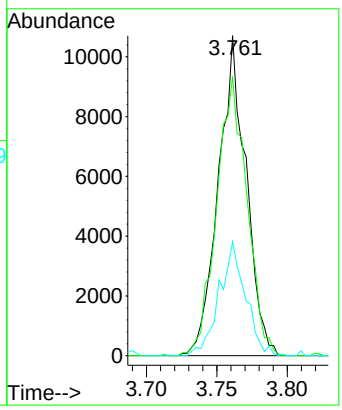




#35
Carbon Tetrachloride
Concen: 0.459 ppbv
RT: 3.761 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:117 Resp: 1468

Ion	Ratio	Lower	Upper
117	100		
119	87.2	80.5	120.7
121	35.6	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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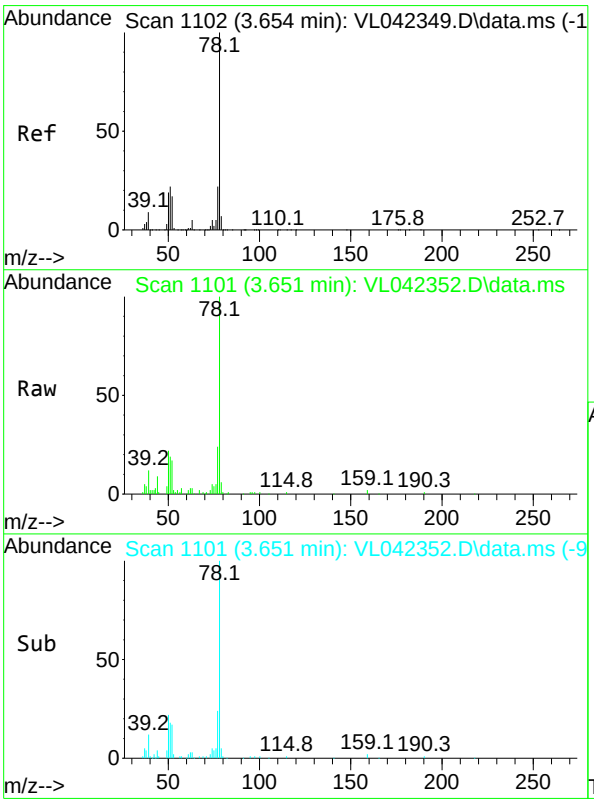
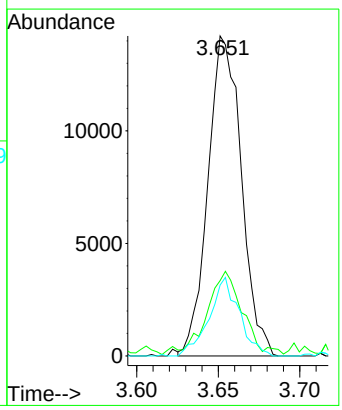
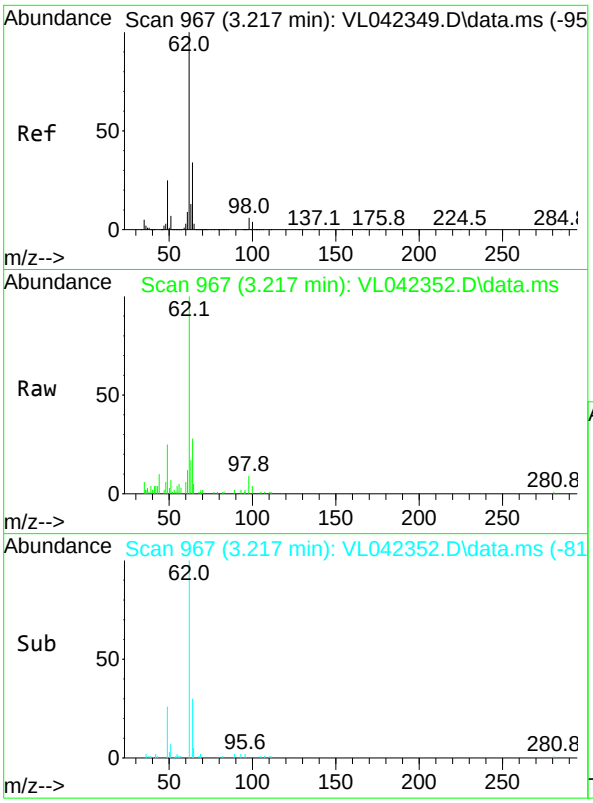


#36
Benzene
Concen: 0.531 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 78 Resp: 20233

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	22.1	15.5	23.3

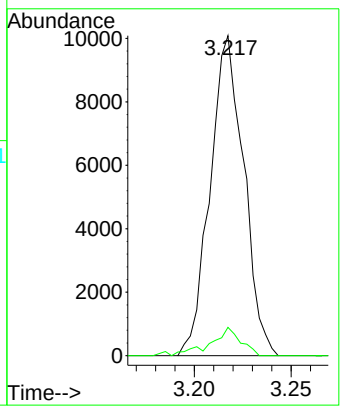




#37
1,2-Dichloroethane
Concen: 0.533 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 62 Resp: 1219

Ion	Ratio	Lower	Upper
62	100		
98	8.1	5.1	7.7#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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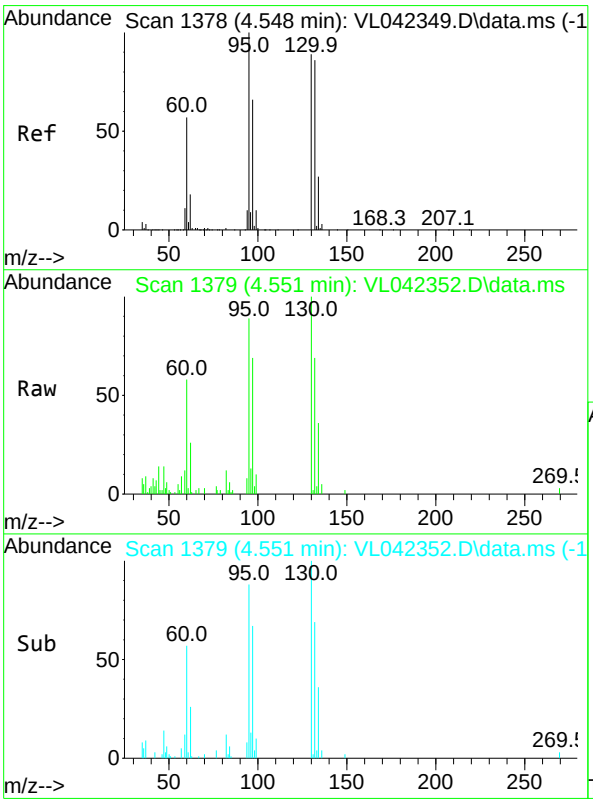
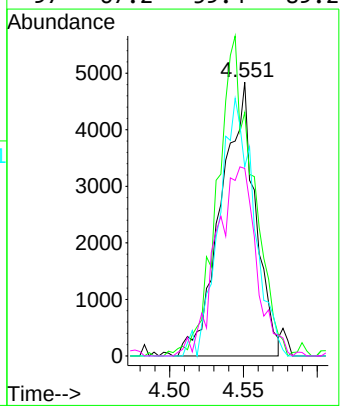
Supervised By :Mahesh Dadoda 04/18/2025

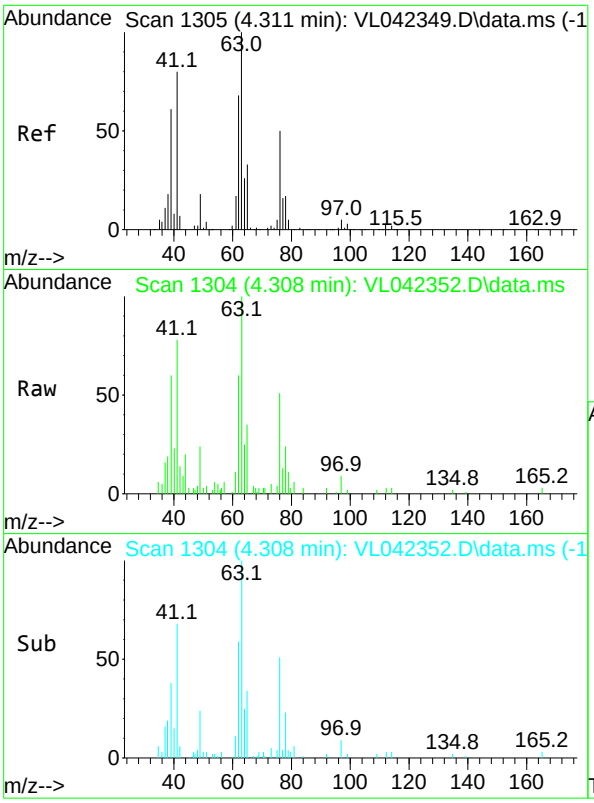


#38
Trichloroethene
Concen: 0.468 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:130 Resp: 7819

Ion	Ratio	Lower	Upper
130	100		
95	86.2	89.8	134.6#
132	69.1	77.7	116.5#
97	67.2	59.4	89.2

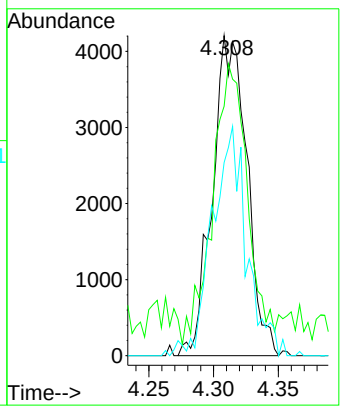




#39
1,2-Dichloropropane
Concen: 0.548 ppbv m
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 63 Resp: 779

Ion	Ratio	Lower	Upper
63	100		
41	78.0	64.2	96.2
62	60.4	54.3	81.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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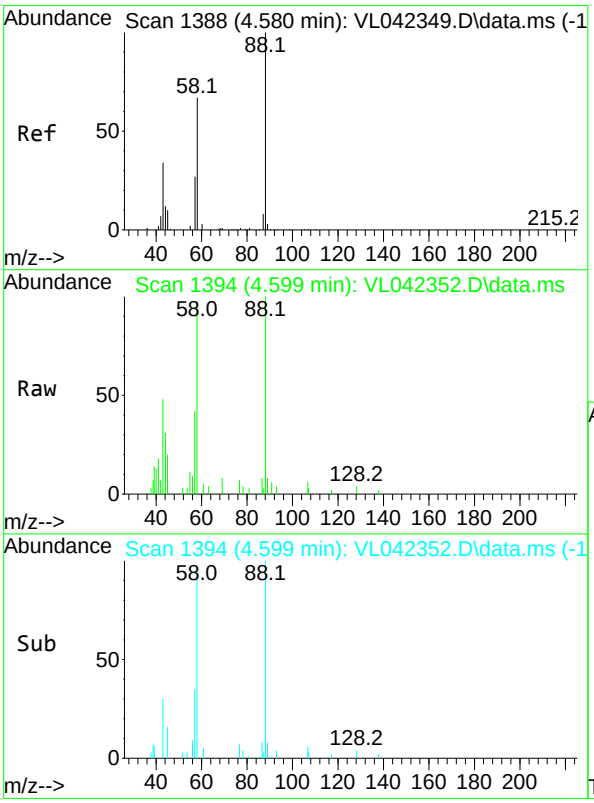
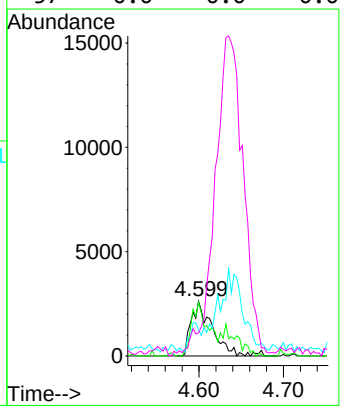
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

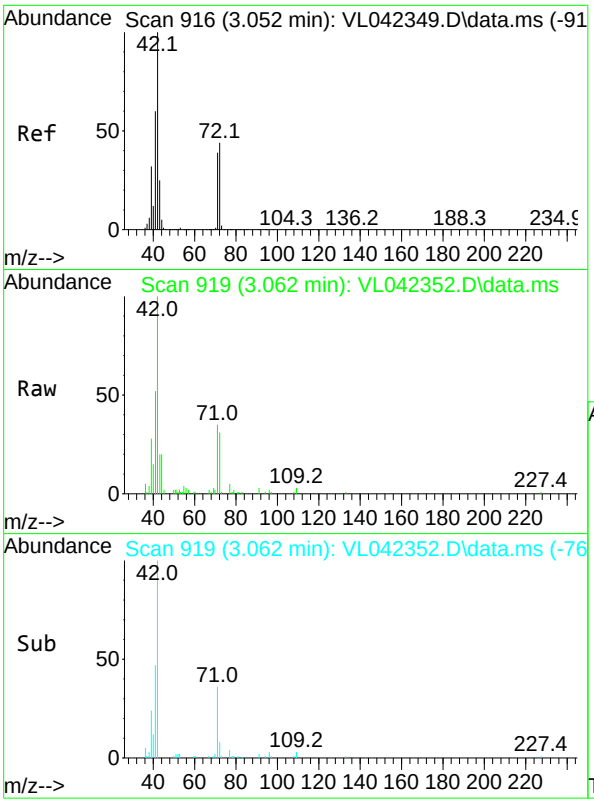


#40
1,4-Dioxane
Concen: 0.603 ppbv m
RT: 4.599 min Scan# 1394
Delta R.T. 0.019 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 88 Resp: 4637

Ion	Ratio	Lower	Upper
88	100		
58	118.1	61.4	92.0#
43	0.0	23.2	34.8#
57	0.0	0.0	0.0

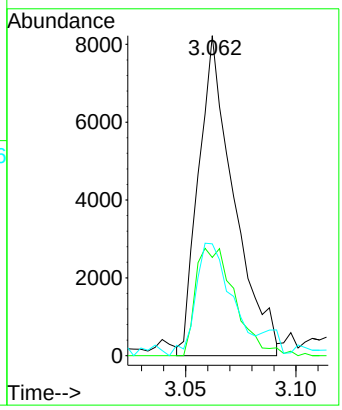




#41
Tetrahydrofuran
Concen: 0.567 ppbv m
RT: 3.062 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 42 Resp: 9144

Ion	Ratio	Lower	Upper
42	100		
72	37.7	32.3	48.5
71	43.1	31.4	47.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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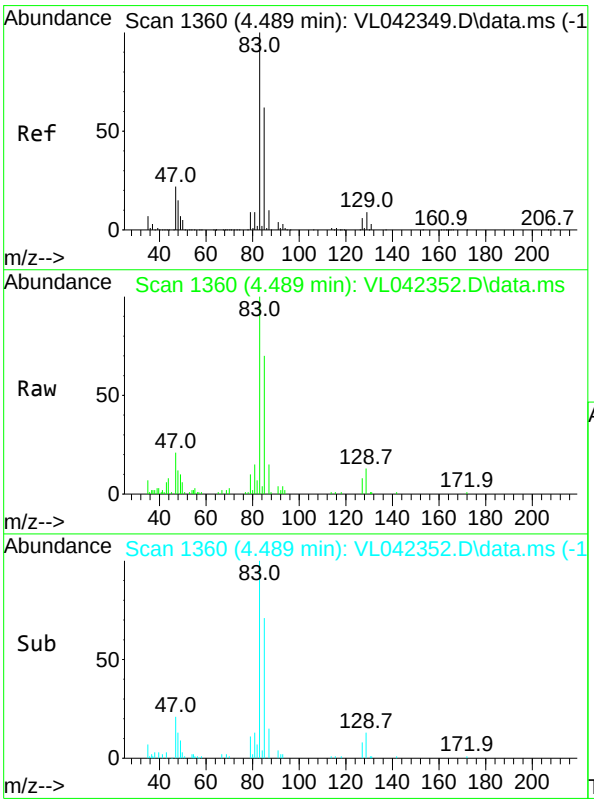
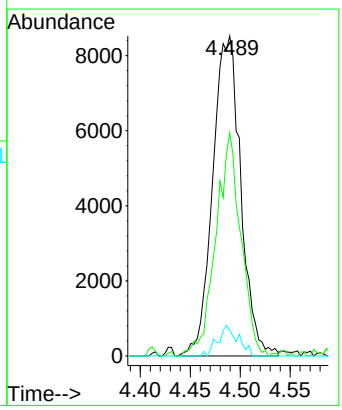
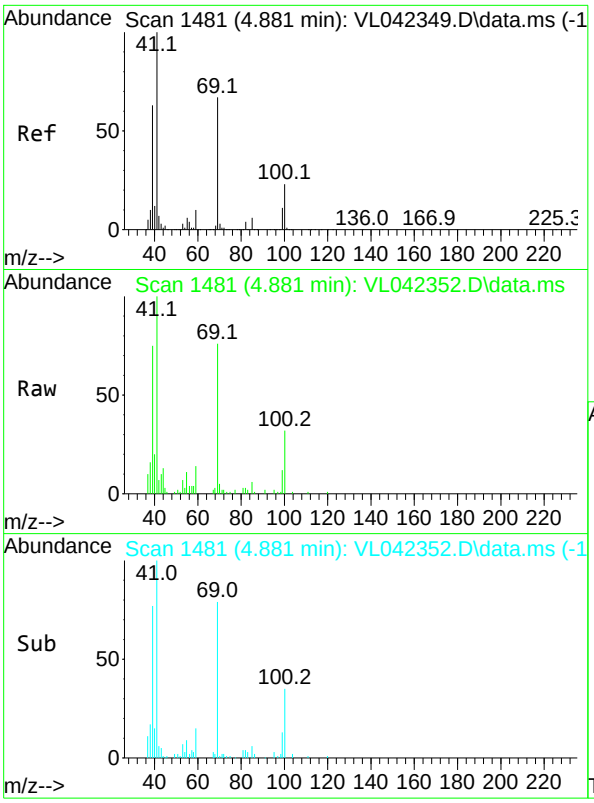


#42
Bromodichloromethane
Concen: 0.523 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 83 Resp: 16642

Ion	Ratio	Lower	Upper
83	100		
85	69.6	49.7	74.5
127	8.2	5.1	7.7#

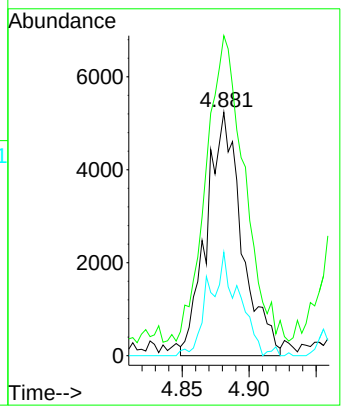




#43
Methyl Methacrylate
Concen: 0.563 ppbv m
RT: 4.881 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 69 Resp: 962(

Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.6	177.8#
100	0.0	28.2	42.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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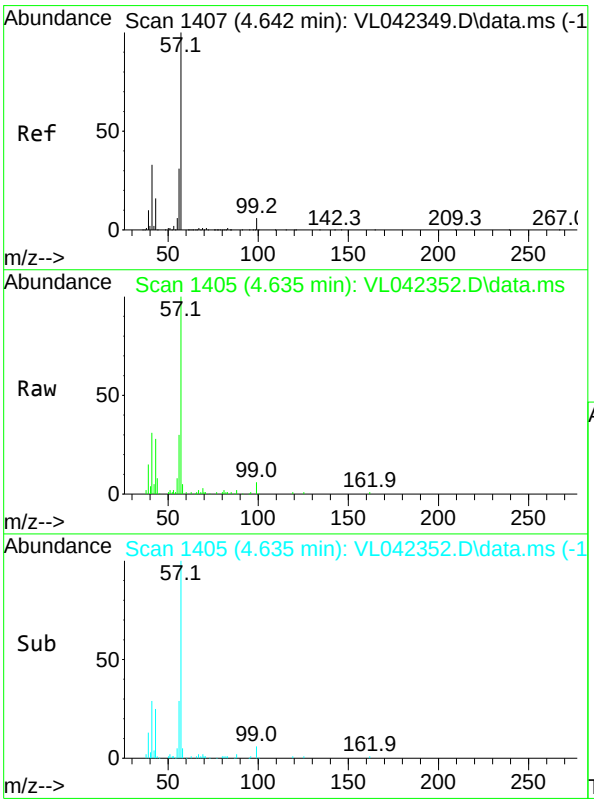
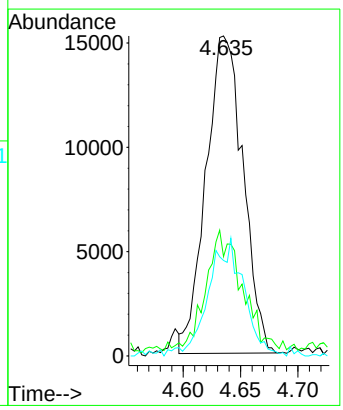
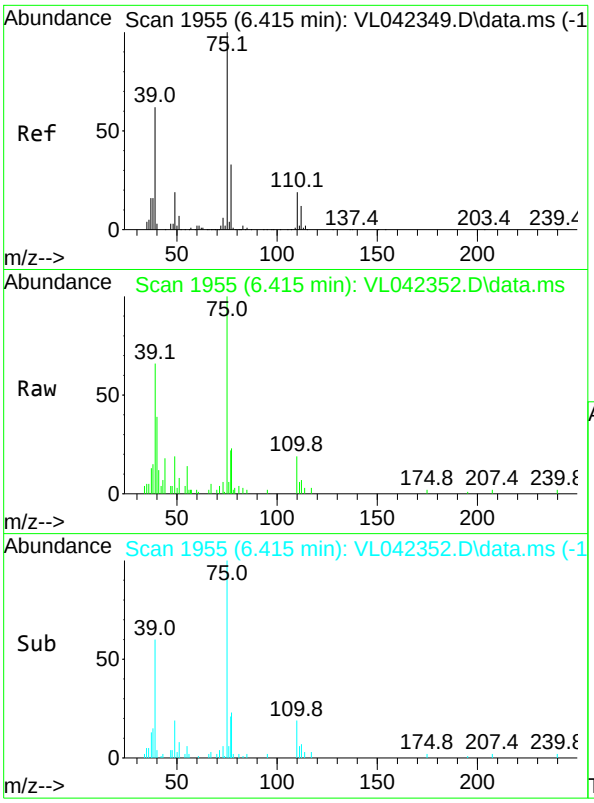


#44
2,2,4-Trimethylpentane
Concen: 0.519 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 57 Resp: 34170

Ion	Ratio	Lower	Upper
57	100		
41	39.1	27.2	40.8
56	37.1	25.7	38.5

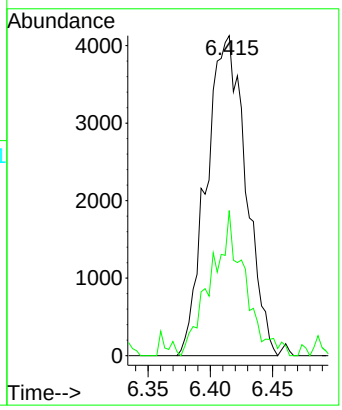




#45
t-1,3-Dichloropropene
Concen: 0.517 ppbv m
RT: 6.415 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 75 Resp: 907

Ion	Ratio	Lower	Upper
75	100		
77	23.1	27.0	40.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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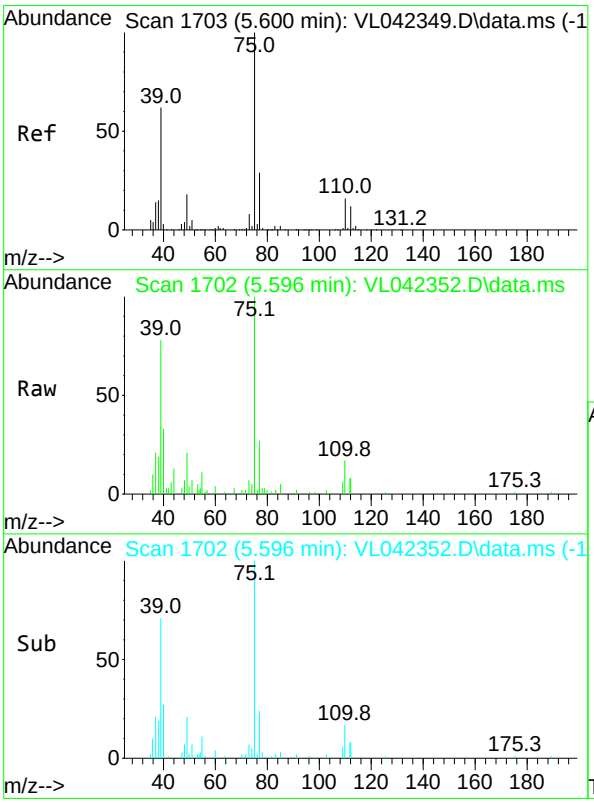
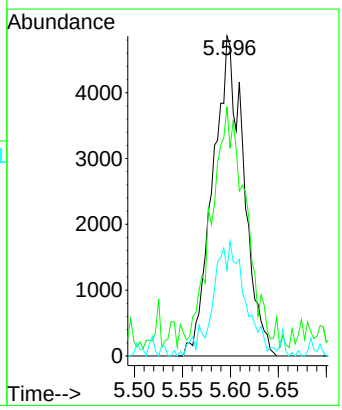
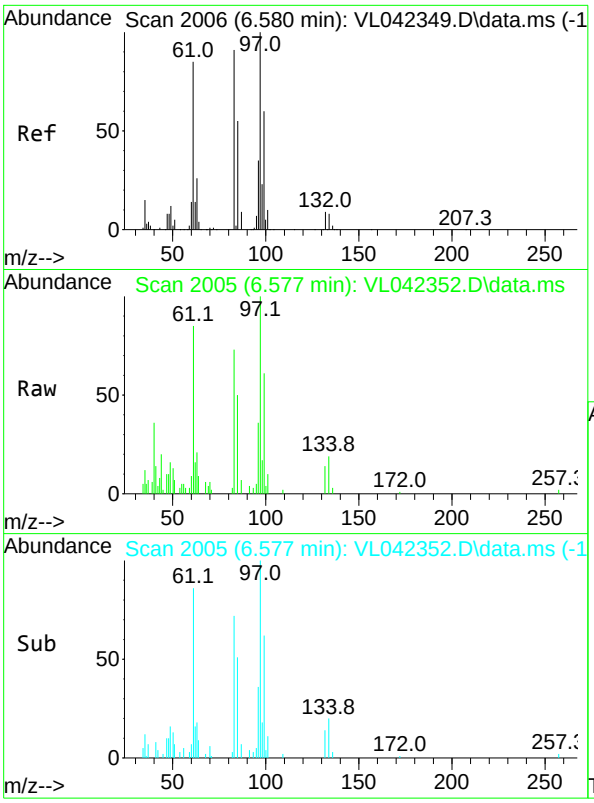


#46
cis-1,3-Dichloropropene
Concen: 0.505 ppbv m
RT: 5.596 min Scan# 1702
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 75 Resp: 10827

Ion	Ratio	Lower	Upper
75	100		
39	77.9	50.0	75.0#
77	26.9	23.0	34.6

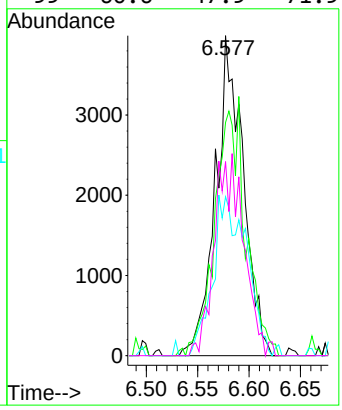




#47
1,1,2-Trichloroethane
Concen: 0.516 ppbv m
RT: 6.577 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 97 Resp: 746

Ion	Ratio	Lower	Upper
97	100		
83	72.9	72.8	109.2
85	49.6	44.2	66.4
99	60.6	47.9	71.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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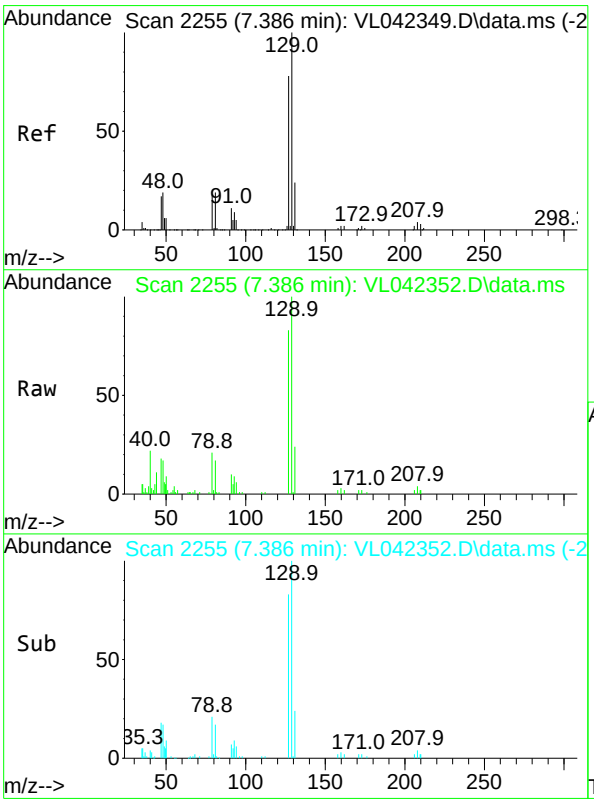
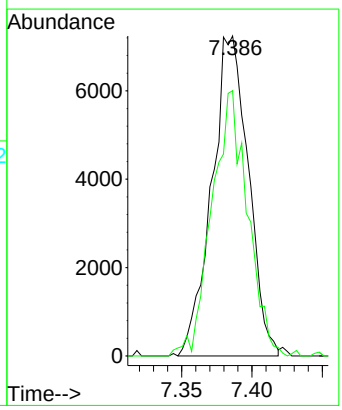
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

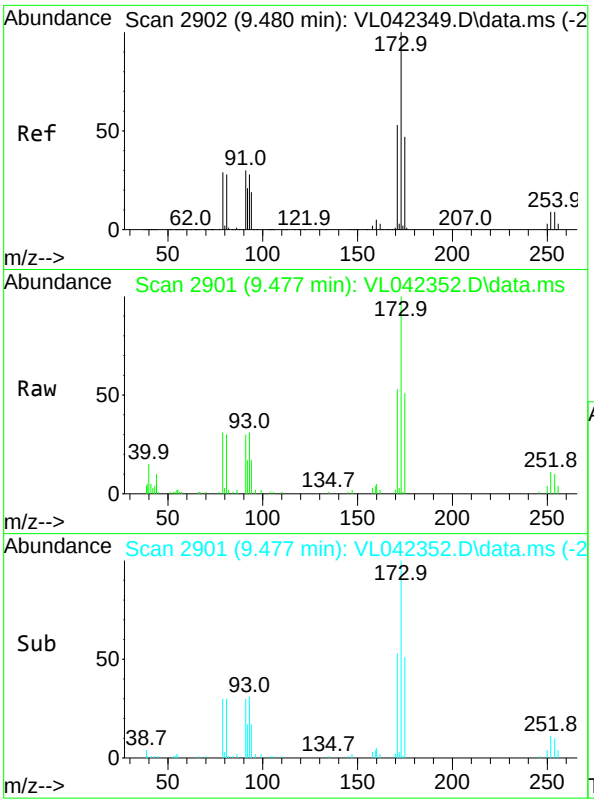


#48
Dibromochloromethane
Concen: 0.514 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:129 Resp: 13122

Ion	Ratio	Lower	Upper
129	100		
127	80.9	39.1	117.3

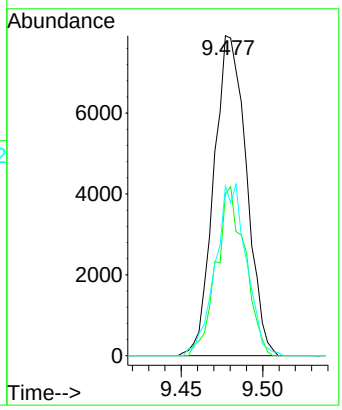




#49
Bromoform
Concen: 0.492 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:173 Resp: 1098

Ion	Ratio	Lower	Upper
173	100		
175	46.8	38.2	57.2
171	51.2	40.9	61.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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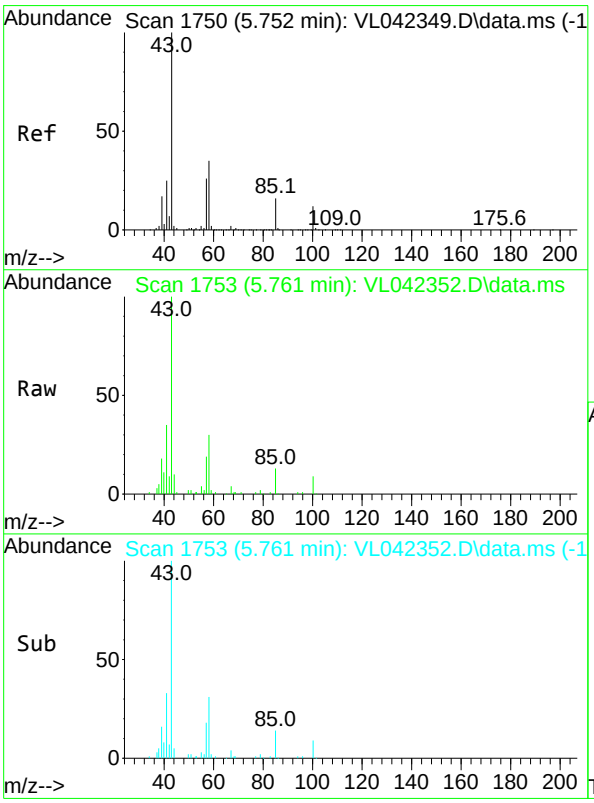
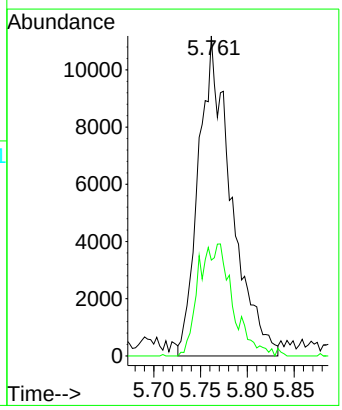
Supervised By :Mahesh Dadoda 04/18/2025

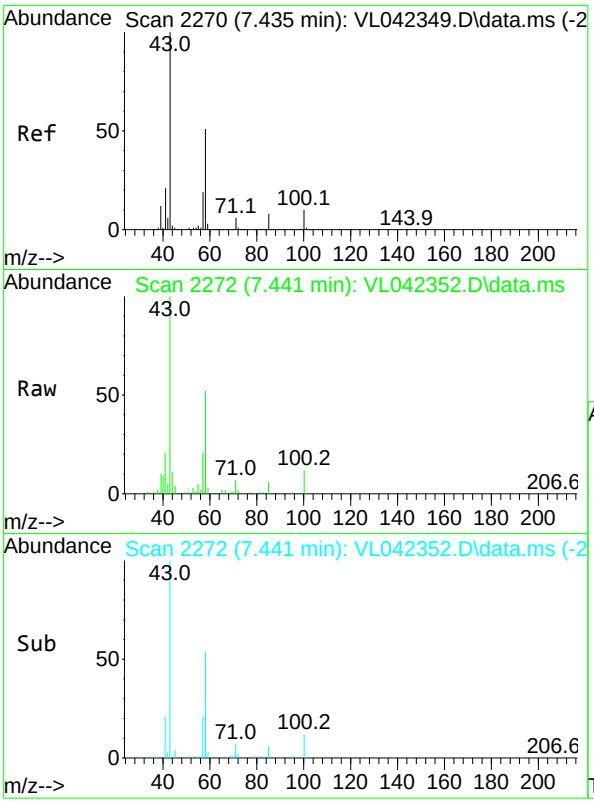


#50
4-Methyl-2-Pentanone
Concen: 0.585 ppbv m
RT: 5.761 min Scan# 1753
Delta R.T. 0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 27206

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.6	43.0#

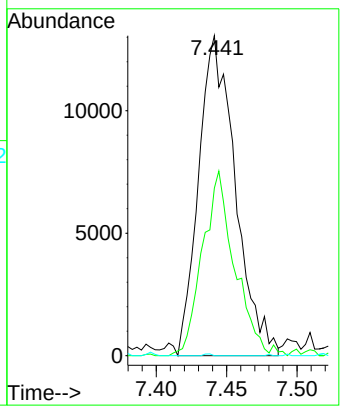




#51
2-Hexanone
Concen: 0.564 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 2368

Ion	Ratio	Lower	Upper
43	100		
58	51.7	40.2	60.4
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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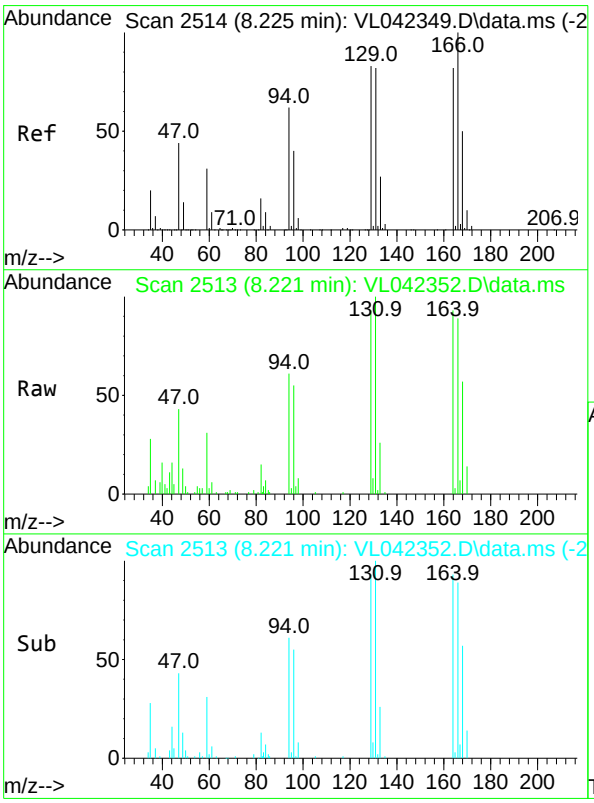
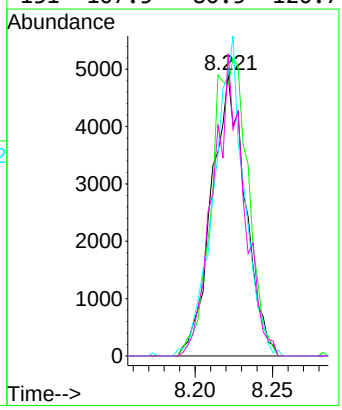
Supervised By :Mahesh Dadoda 04/18/2025

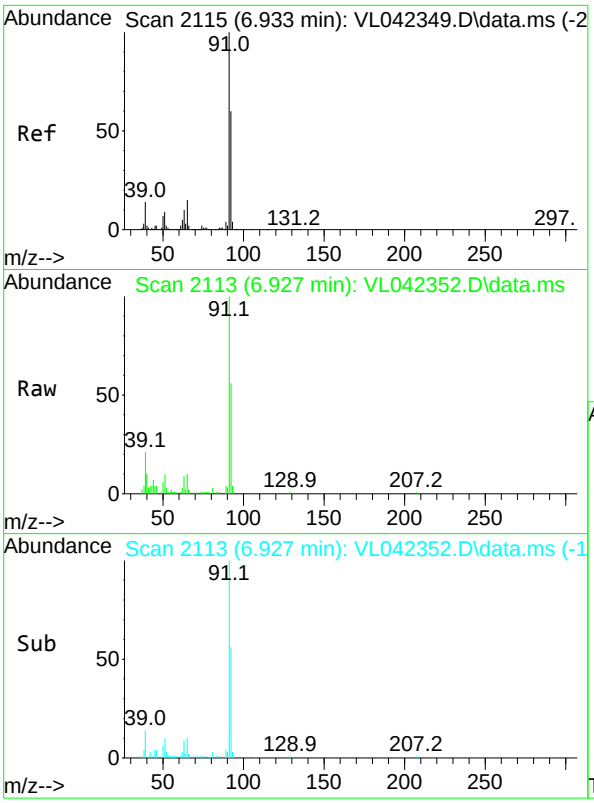


#52
Tetrachloroethene
Concen: 0.503 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:164 Resp: 7412

Ion	Ratio	Lower	Upper
164	100		
166	96.1	98.2	147.2#
129	97.8	81.8	122.8
131	107.5	80.5	120.7

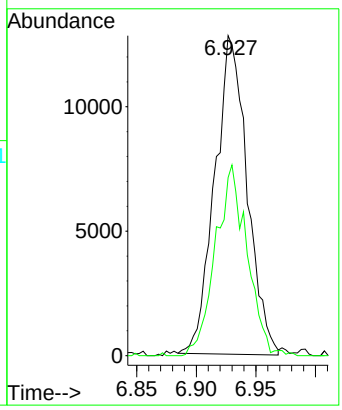




#53
Toluene
Concen: 0.529 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 2420

Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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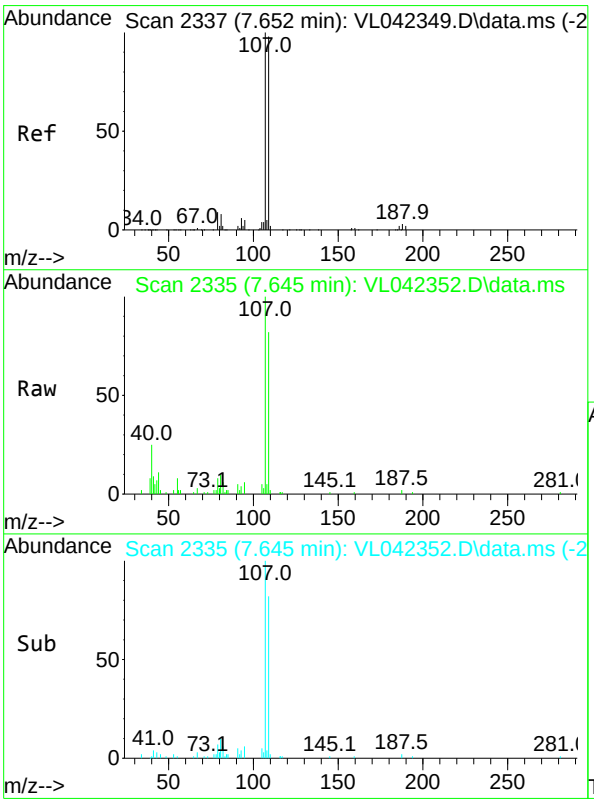
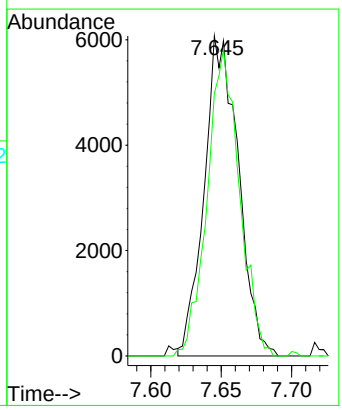
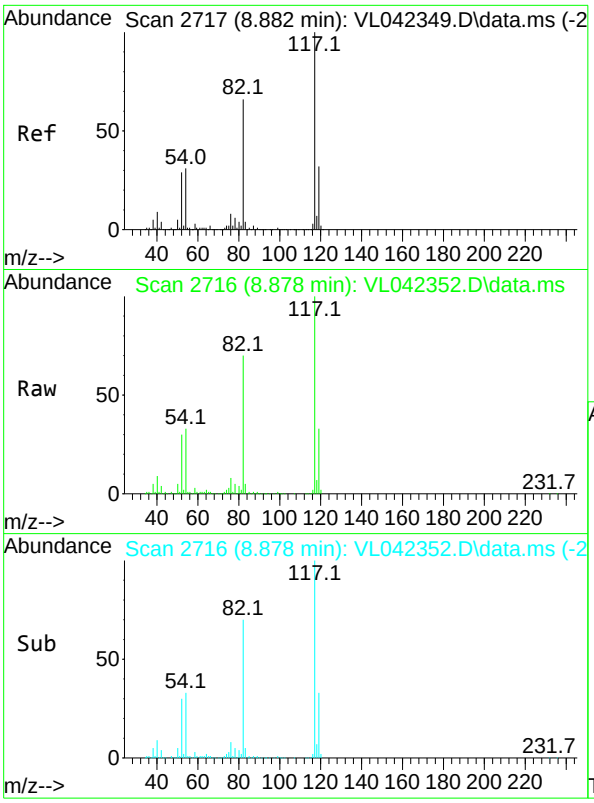


#54
1,2-Dibromoethane
Concen: 0.499 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:107 Resp: 10282

Ion	Ratio	Lower	Upper
107	100		
109	82.1	78.2	117.4

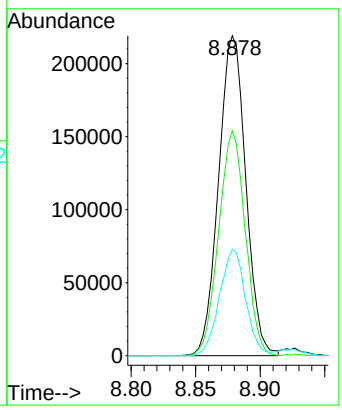




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:117 Resp: 32164

Ion	Ratio	Lower	Upper
117	100		
82	69.0	57.8	86.6
119	33.8	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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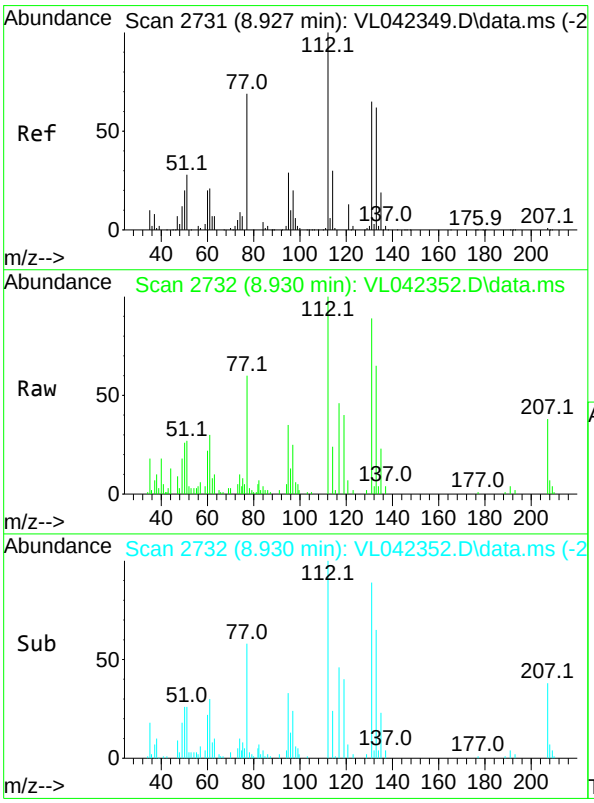
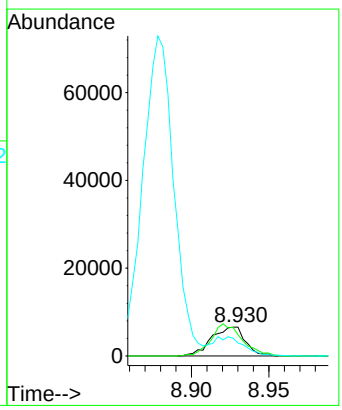
Supervised By :Mahesh Dadoda 04/18/2025

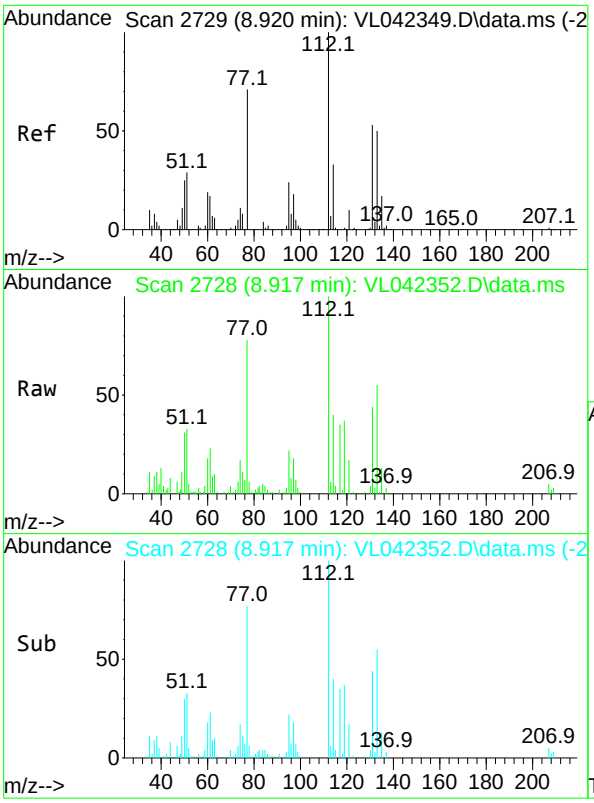


#56
1,1,1,2-Tetrachloroethane
Concen: 0.513 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:131 Resp: 9987

Ion	Ratio	Lower	Upper
131	100		
133	102.0	78.3	117.5
119	1087.9	48.7	73.1#

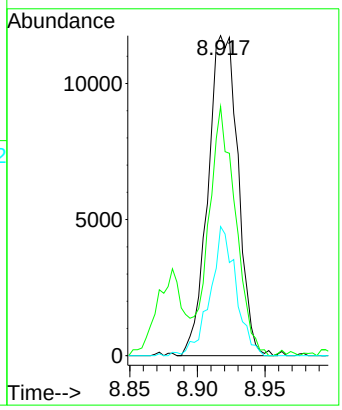




#57
Chlorobenzene
Concen: 0.543 ppbv m
RT: 8.917 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:112 Resp: 1814

Ion	Ratio	Lower	Upper
112	100		
77	77.8	57.8	86.6
114	40.4	29.3	35.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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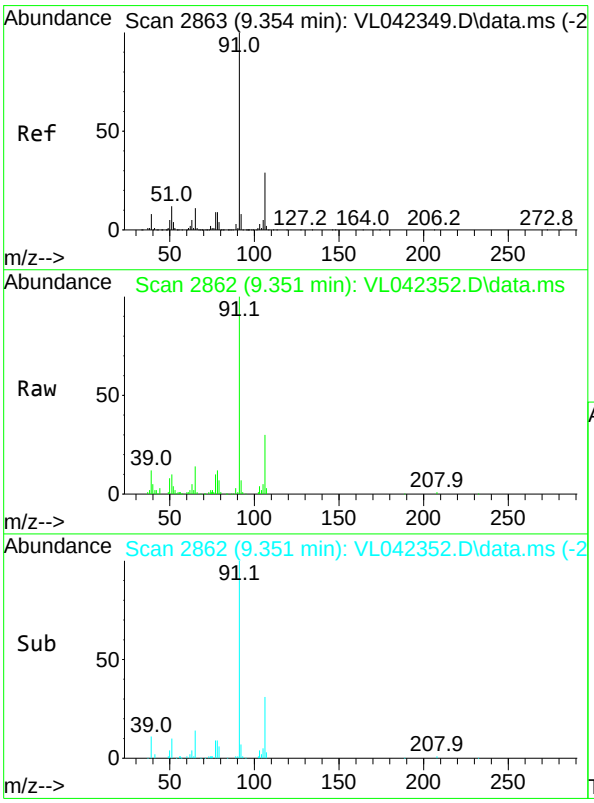
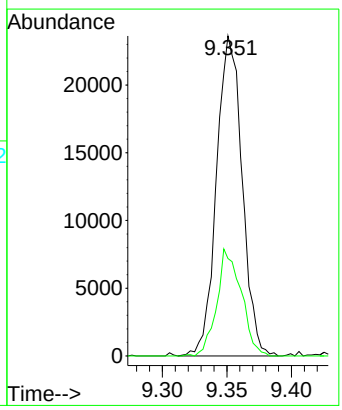
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

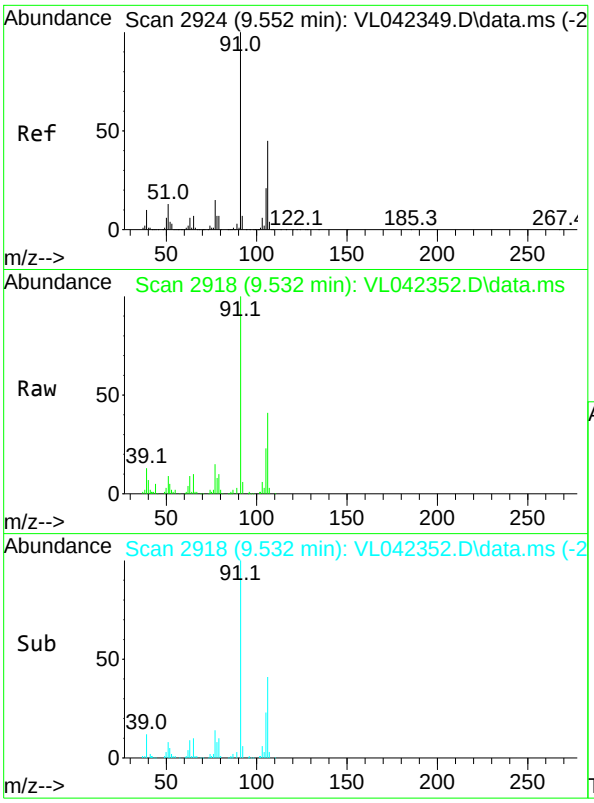


#58
Ethyl Benzene
Concen: 0.512 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 32624

Ion	Ratio	Lower	Upper
91	100		
106	30.5	23.0	34.4

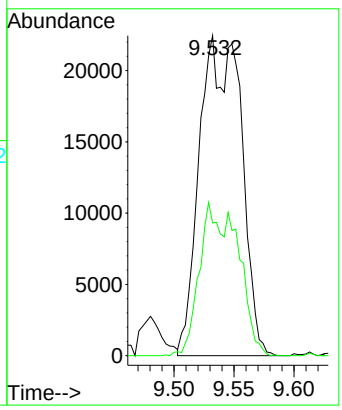




#59
m/p-Xylene
Concen: 1.053 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. -0.019 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 5419

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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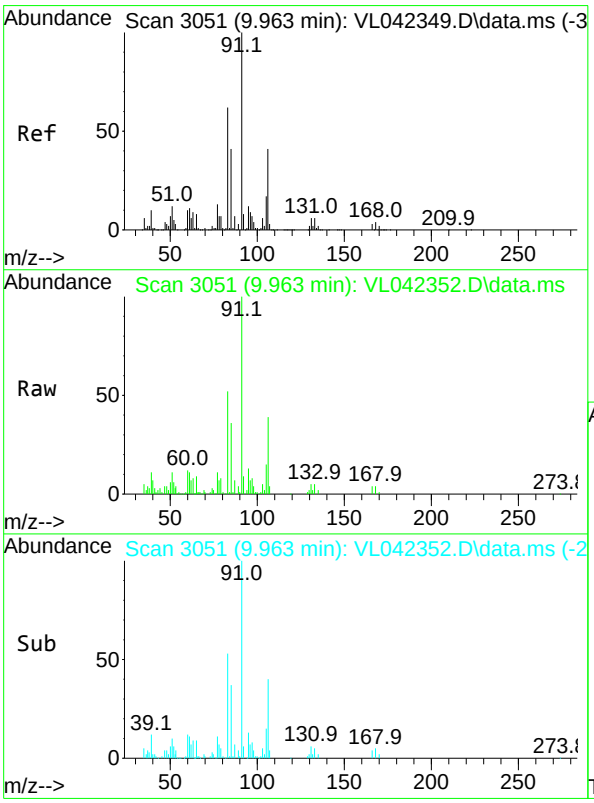
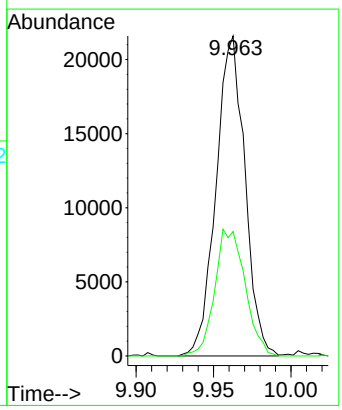
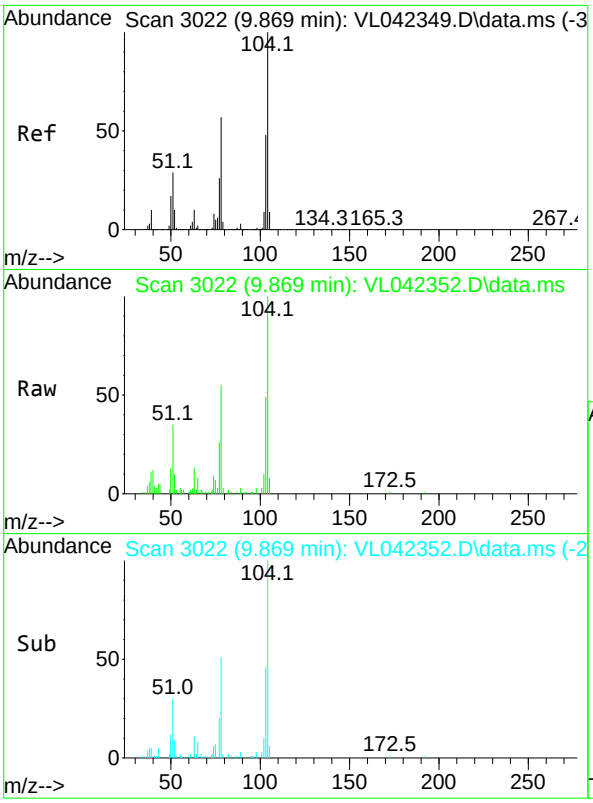


#60
o-Xylene
Concen: 0.541 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 27983

Ion	Ratio	Lower	Upper
91	100		
106	41.6	21.1	63.4

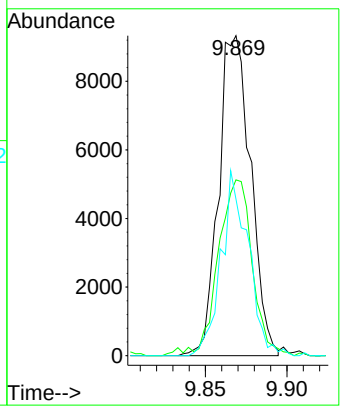




#61
Styrene
Concen: 0.516 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:104 Resp: 1273

Ion	Ratio	Lower	Upper
104	100		
78	58.6	44.6	66.8
103	49.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

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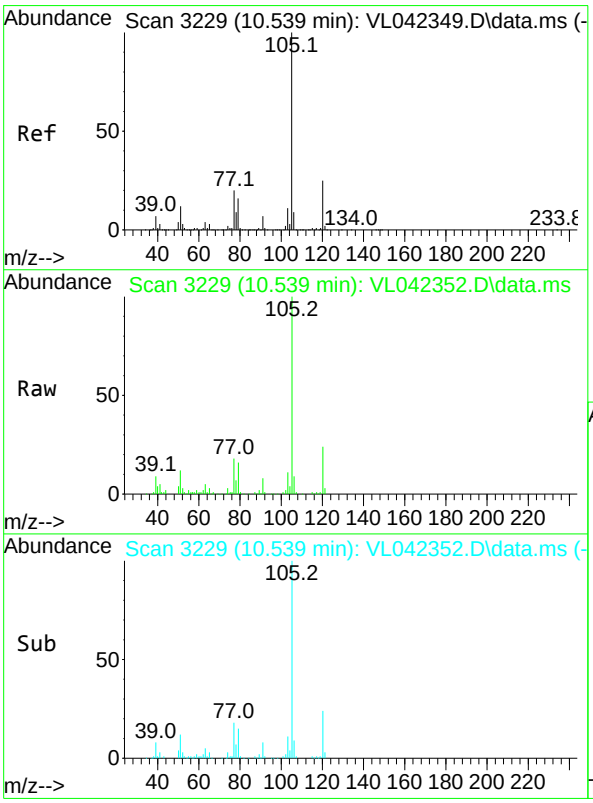
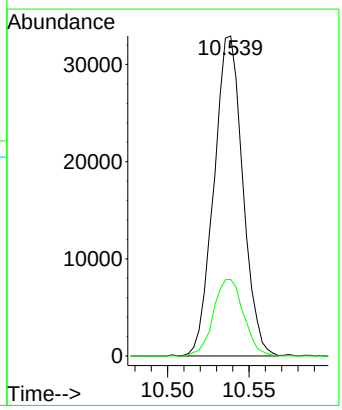
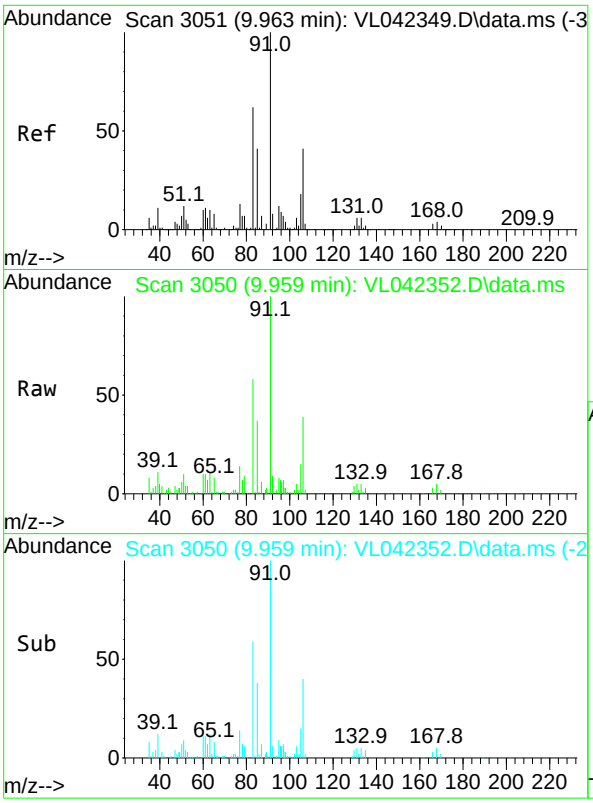


#62
Isopropylbenzene
Concen: 0.533 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 40481

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.8	29.8

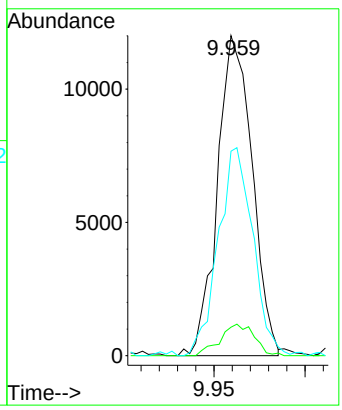




#63
1,1,2,2-Tetrachloroethane
Concen: 0.474 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 83 Resp: 1592

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	65.6	32.4	97.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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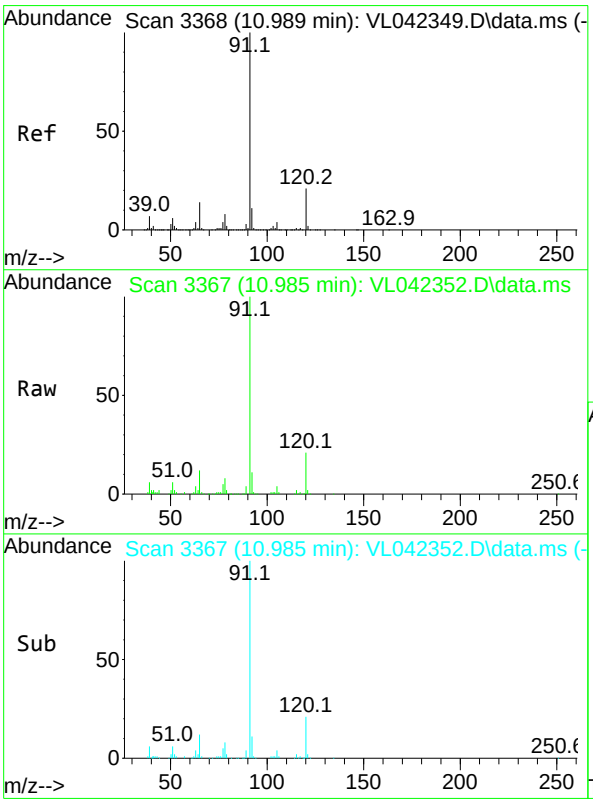
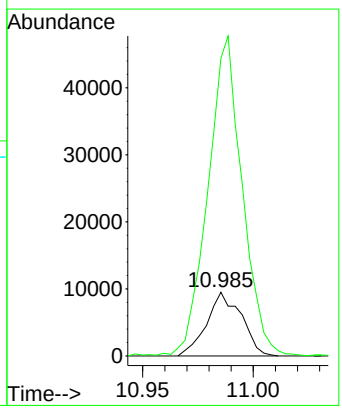
Supervised By :Mahesh Dadoda 04/18/2025

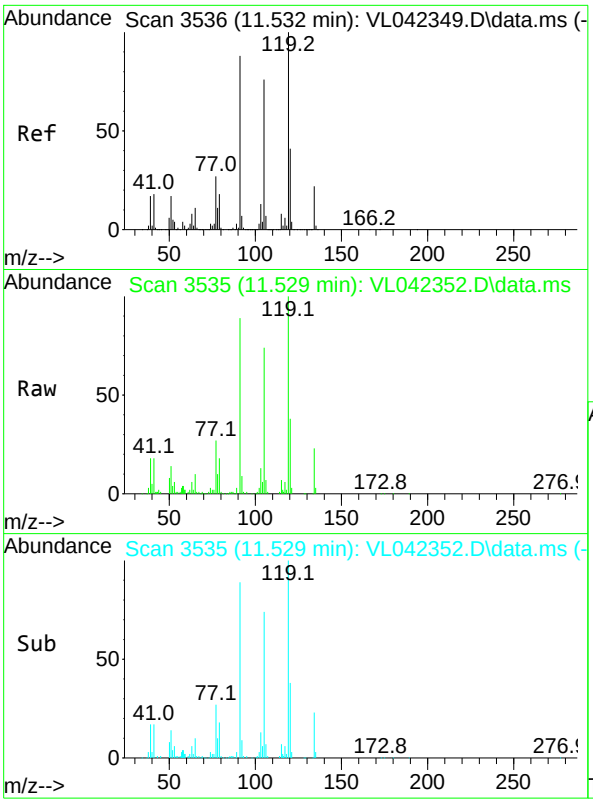


#64
n-propylbenzene
Concen: 0.544 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:120 Resp: 10369

Ion	Ratio	Lower	Upper
120	100		
91	499.6	392.4	588.6

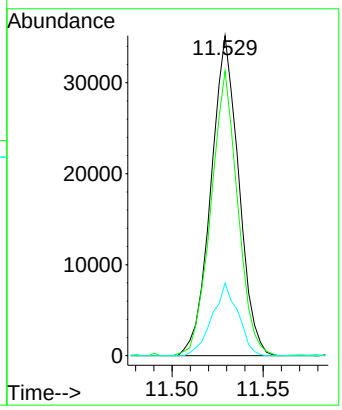




#65
tert-Butylbenzene
Concen: 0.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:119 Resp: 3729

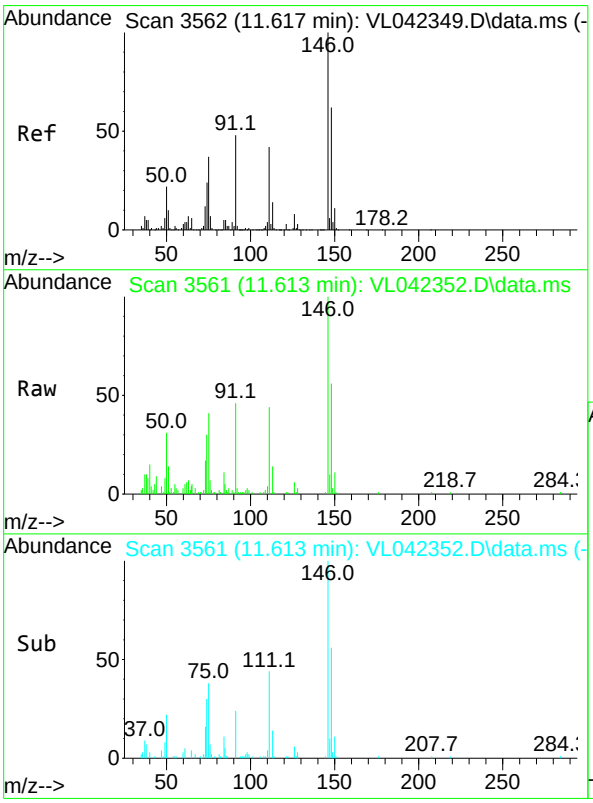
Ion	Ratio	Lower	Upper
119	100		
91	85.8	74.6	111.8
134	21.1	18.8	28.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

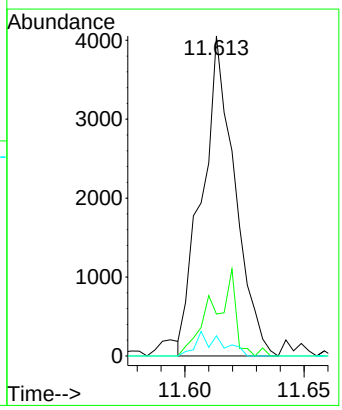
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

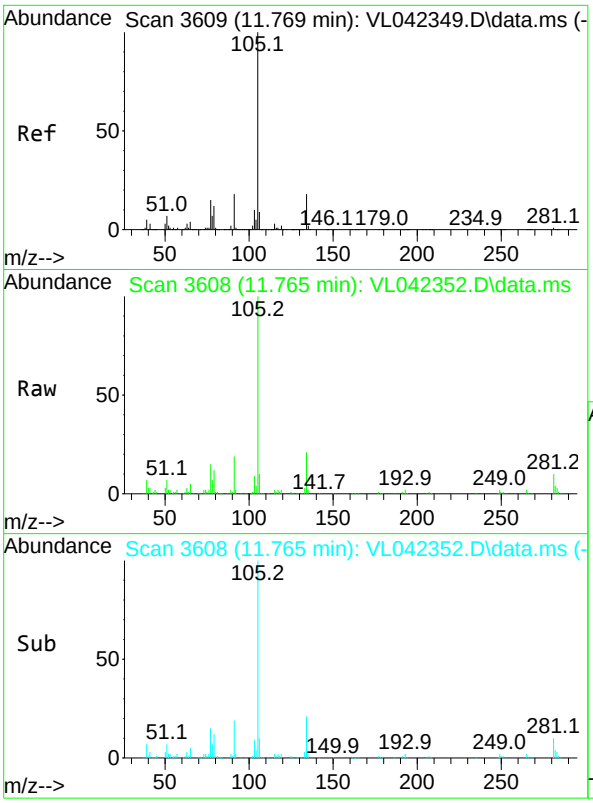


#66
Benzyl Chloride
Concen: 0.506 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 3878

Ion	Ratio	Lower	Upper
91	100		
126	19.8	11.8	17.6#
128	5.8	4.5	6.7

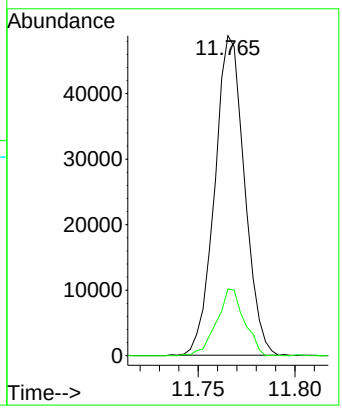




#67
sec-Butylbenzene
Concen: 0.537 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 5213

Ion	Ratio	Lower	Upper
105	100		
134	19.5	14.6	21.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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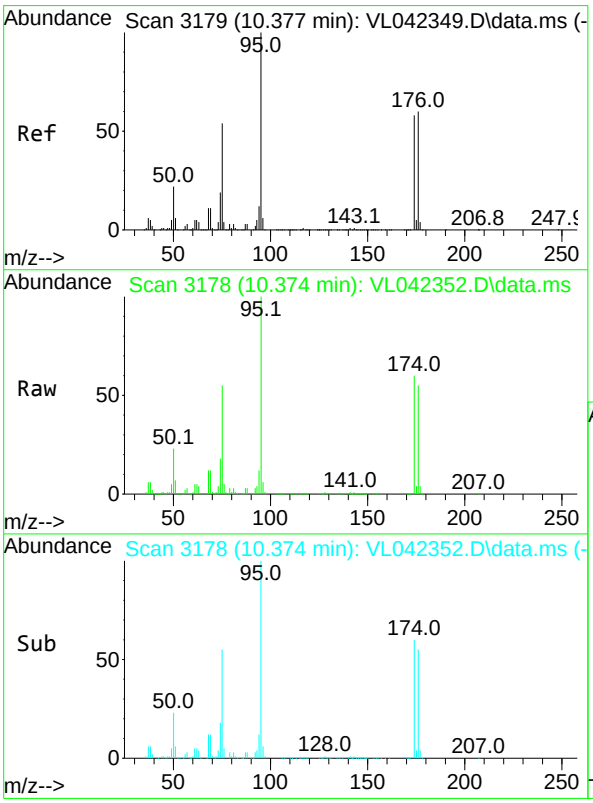
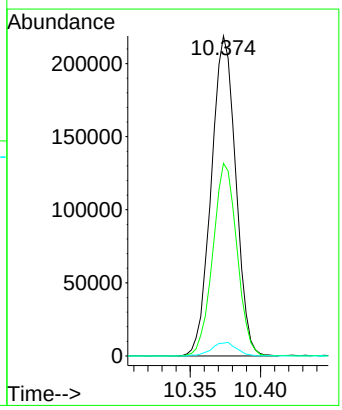
Supervised By :Mahesh Dadoda 04/18/2025

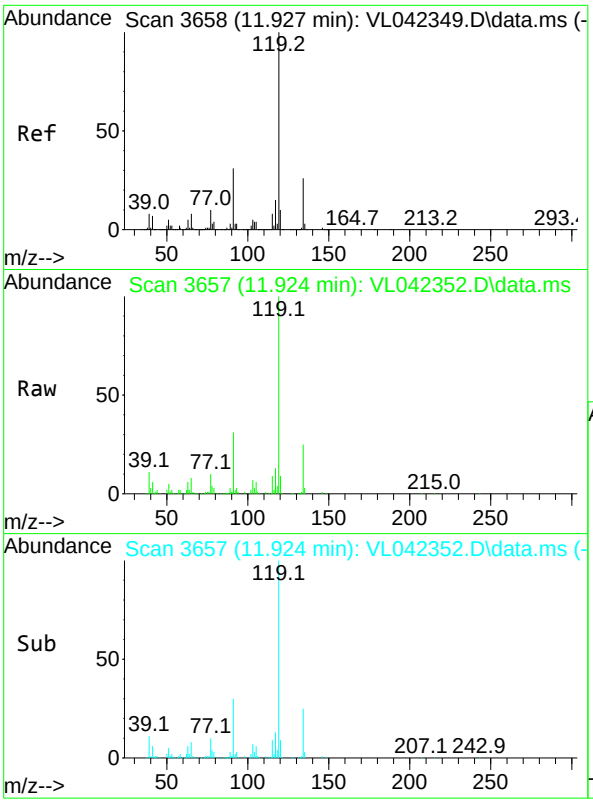


#68
1-Bromo-4-Fluorobenzene
Concen: 10.032 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 95 Resp: 265161

Ion	Ratio	Lower	Upper
95	100		
174	59.4	48.5	72.7
175	4.3	3.7	5.5

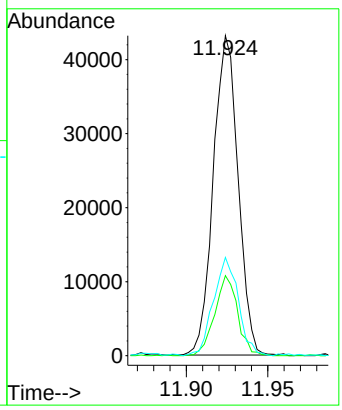




#69
p-Isopropyltoluene
Concen: 0.541 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:119 Resp: 4557

Ion	Ratio	Lower	Upper
119	100		
134	23.3	20.0	30.0
91	31.4	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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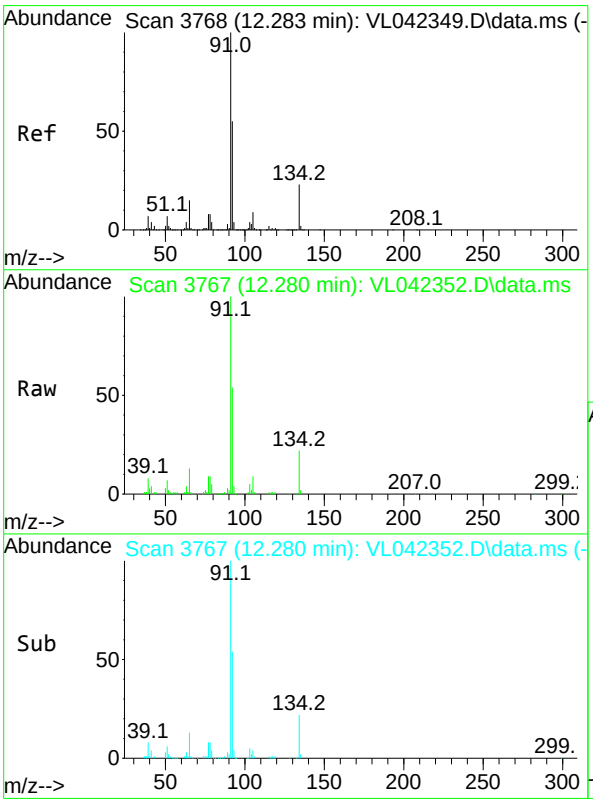
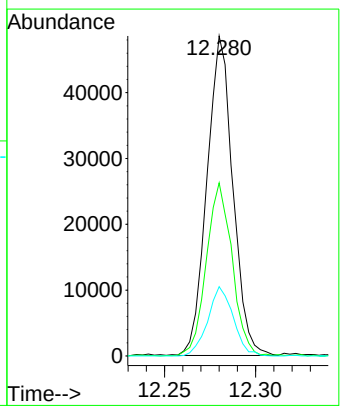
Supervised By :Mahesh Dadoda 04/18/2025

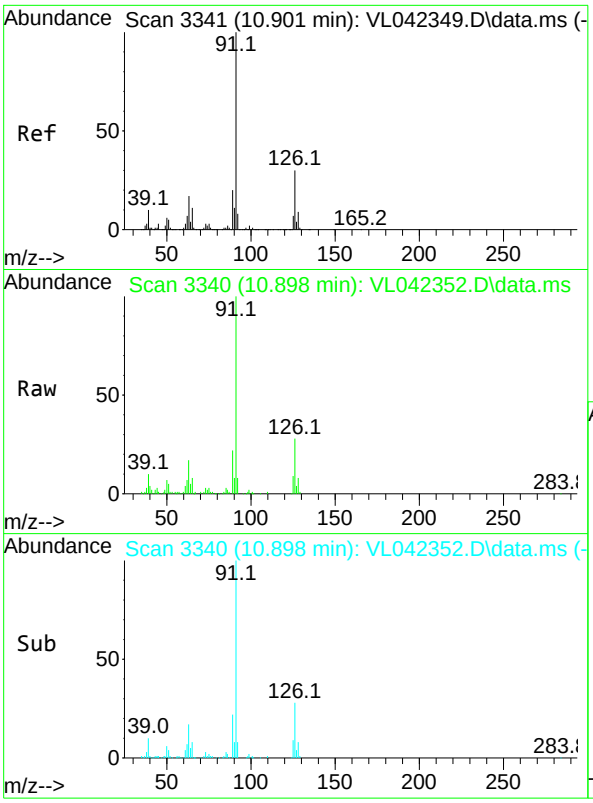


#70
n-Butylbenzene
Concen: 0.547 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 48004

Ion	Ratio	Lower	Upper
91	100		
92	54.7	44.2	66.4
134	21.4	18.2	27.4

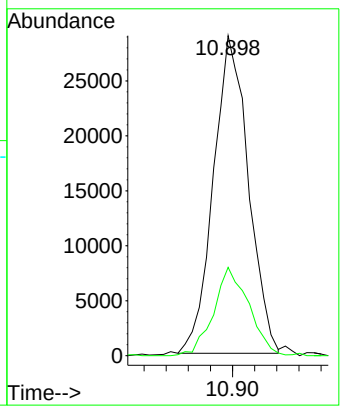




#71
2-Chlorotoluene
Concen: 0.533 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 3170

Ion	Ratio	Lower	Upper
91	100		
126	28.3	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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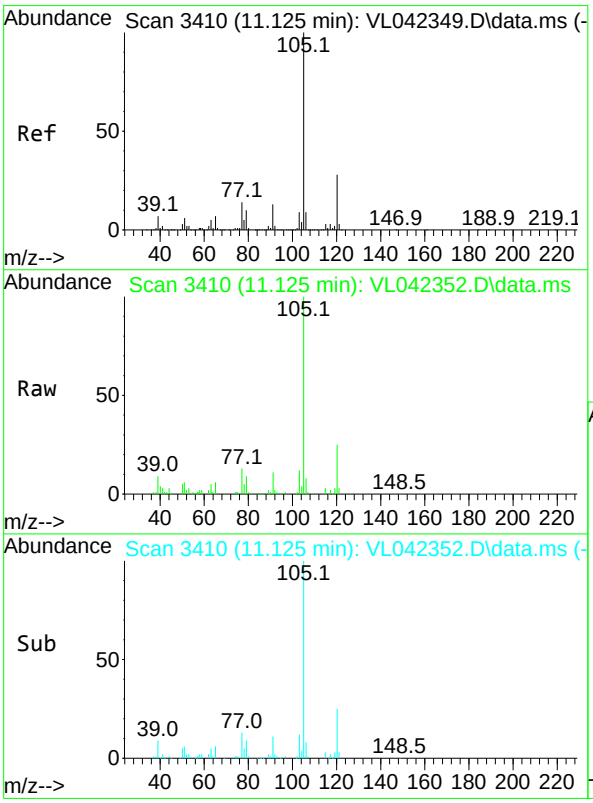
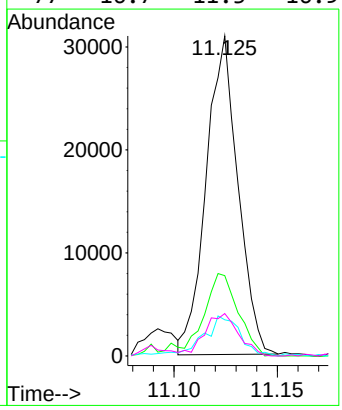
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

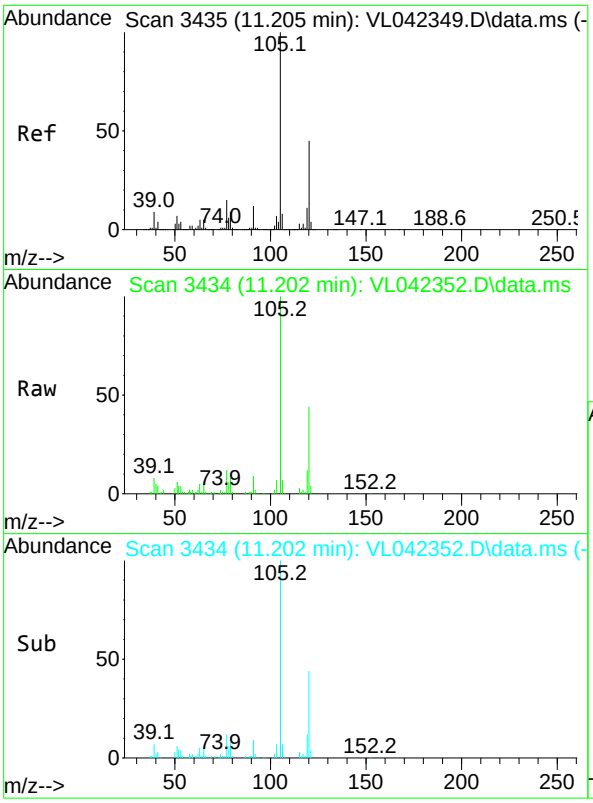


#72
4-Ethyltoluene
Concen: 0.523 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 33048

Ion	Ratio	Lower	Upper
105	100		
120	30.5	23.2	34.8
91	15.7	10.4	15.6#
77	16.7	11.3	16.9

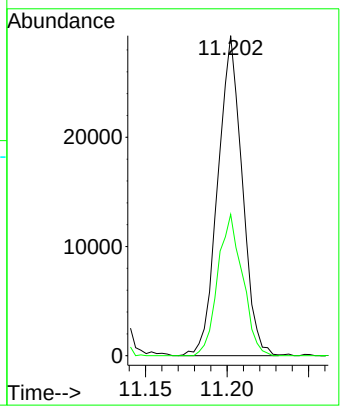




#73
1,3,5-Trimethylbenzene
Concen: 0.546 ppbv
RT: 11.202 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 3046

Ion	Ratio	Lower	Upper
105	100		
120	44.1	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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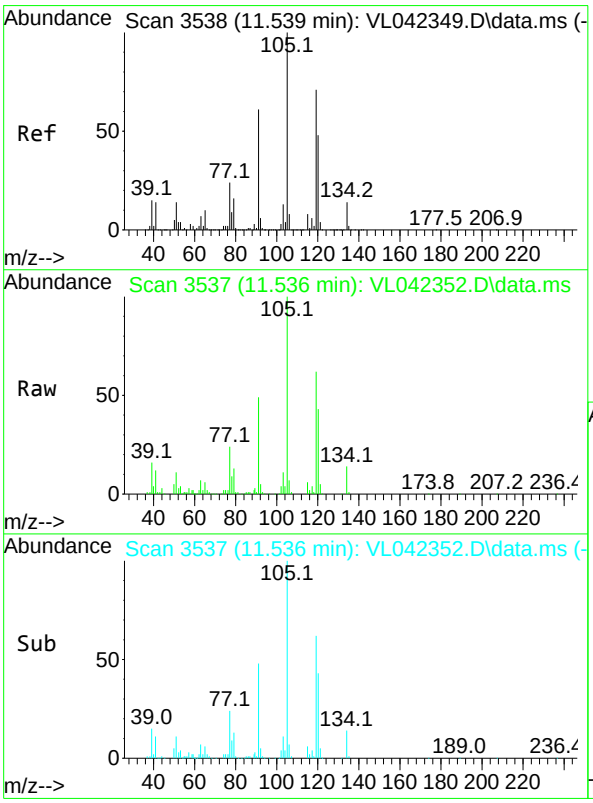
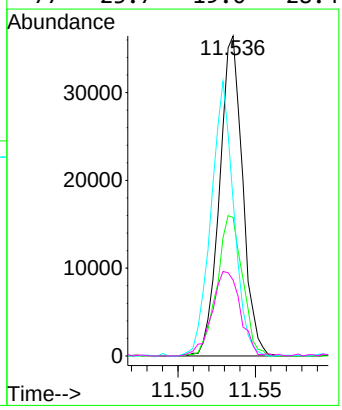
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

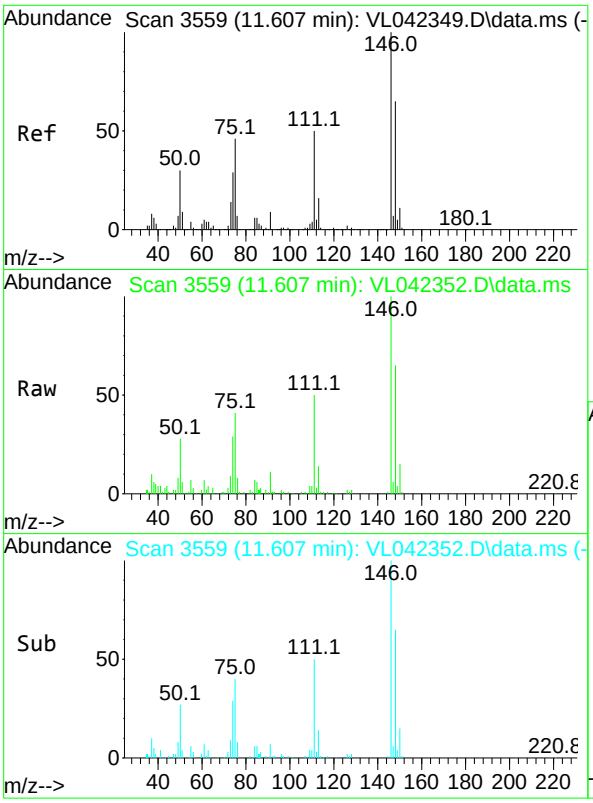


#74
1,2,4-Trimethylbenzene
Concen: 0.579 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 37765

Ion	Ratio	Lower	Upper
105	100		
120	43.3	38.1	57.1
91	48.7	48.8	73.2#
77	23.7	19.0	28.4

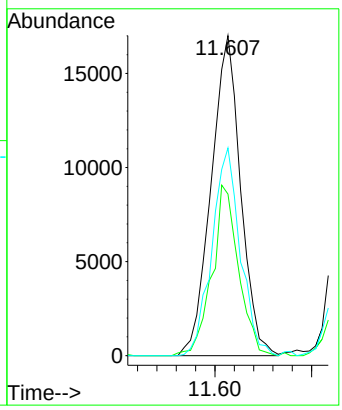




#75
1,3-Dichlorobenzene
Concen: 0.531 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:146 Resp: 1800

Ion	Ratio	Lower	Upper
146	100		
111	47.9	24.3	72.8
148	62.9	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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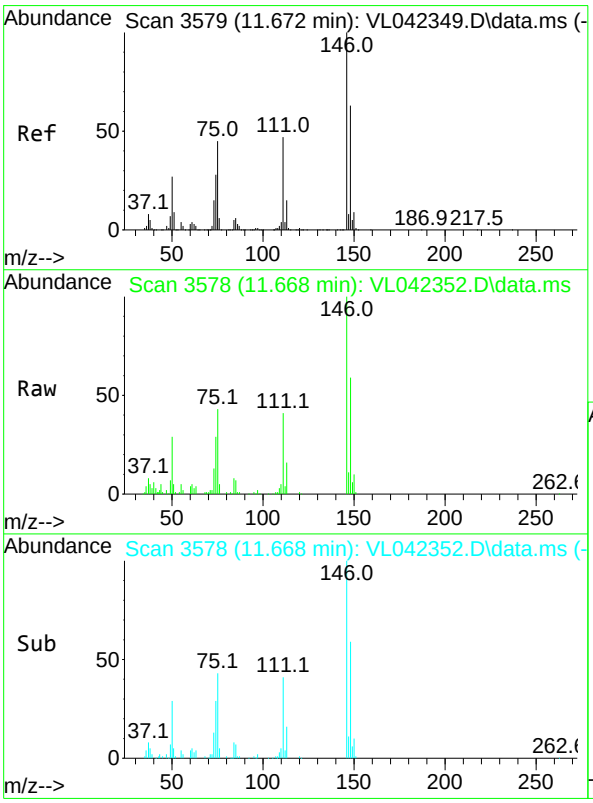
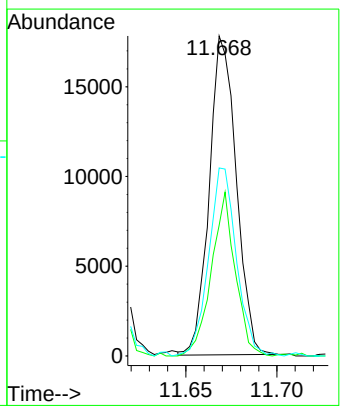
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

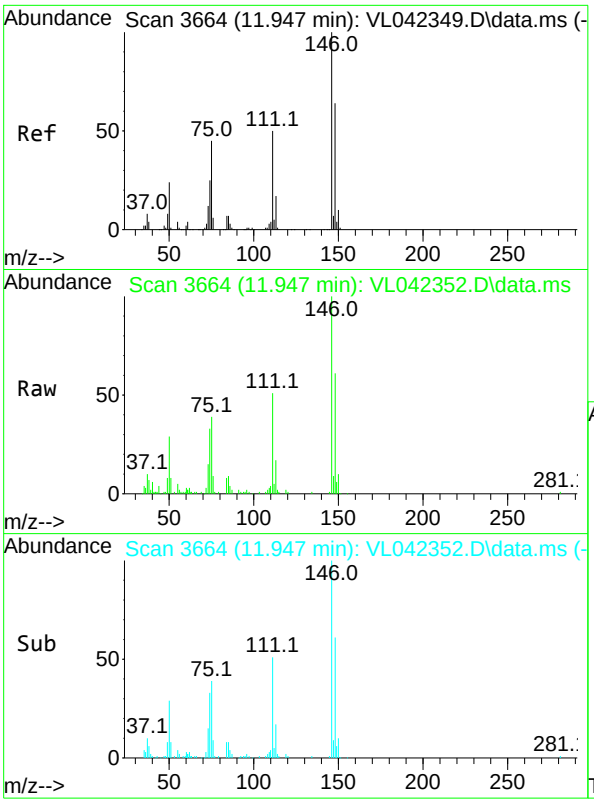


#76
1,4-Dichlorobenzene
Concen: 0.537 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:146 Resp: 18300

Ion	Ratio	Lower	Upper
146	100		
111	45.9	24.2	72.6
148	61.2	32.1	96.5

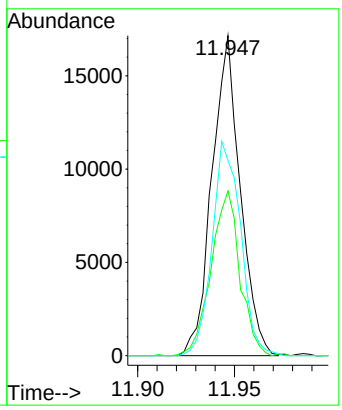




#77
1,2-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.947 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:146 Resp: 1744

Ion	Ratio	Lower	Upper
146	100		
111	52.6	25.3	75.9
148	67.5	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/18/2025
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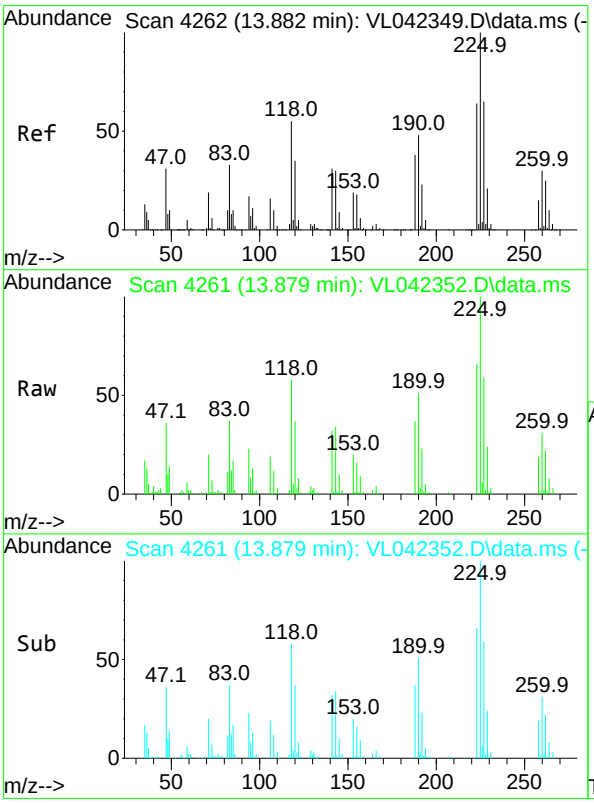
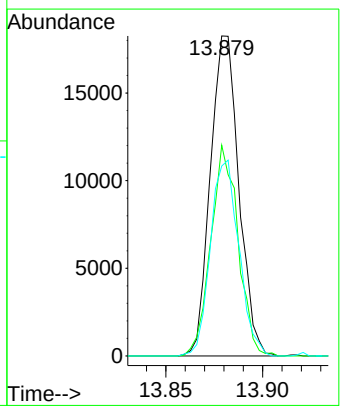
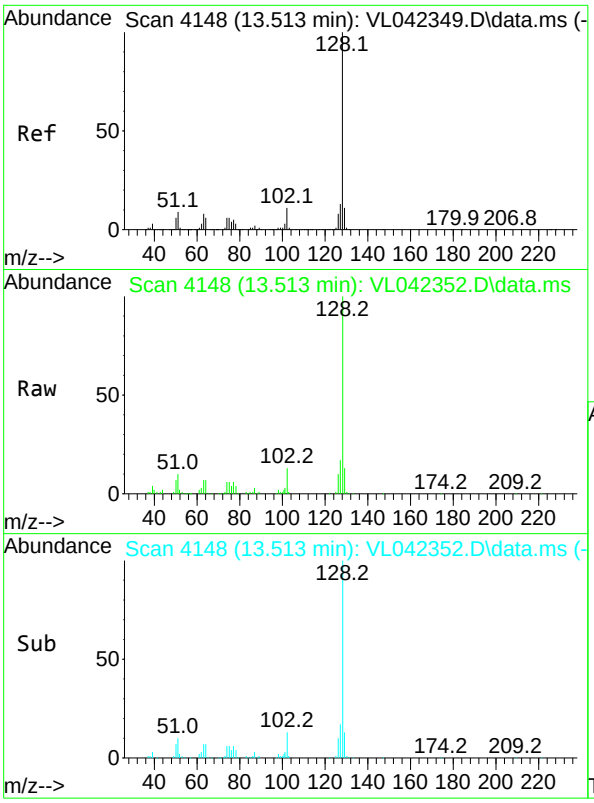


#78
Hexachloro-1,3-Butadiene
Concen: 0.562 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:225 Resp: 18705

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	61.1	51.5	77.3

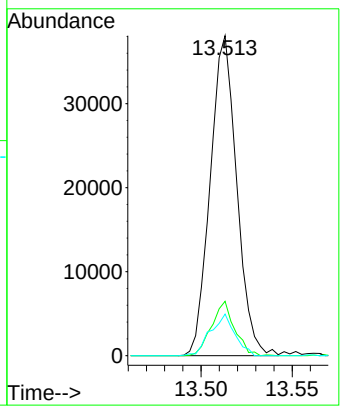




#79
Naphthalene
Concen: 0.494 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:128 Resp: 3852

Ion	Ratio	Lower	Upper
128	100		
127	17.0	10.6	15.8#
129	13.0	8.6	12.8#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
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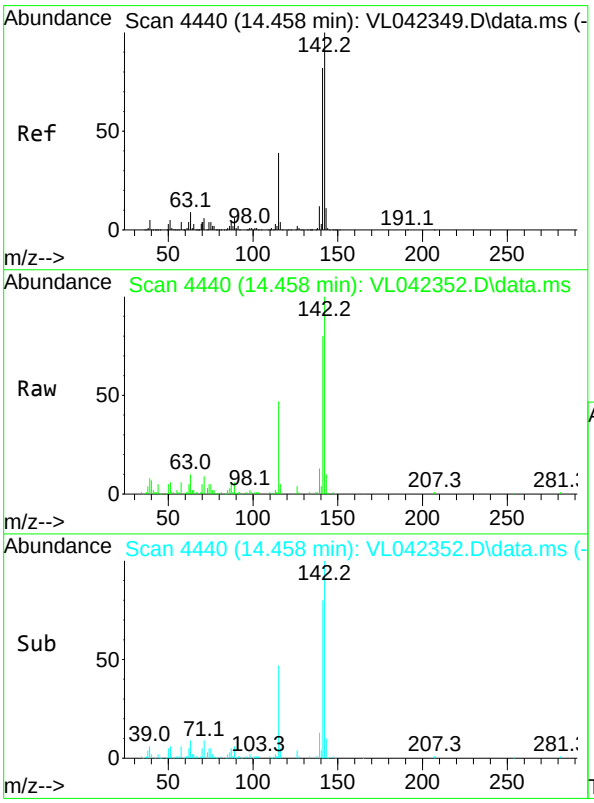
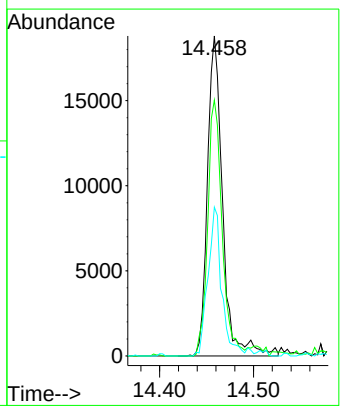
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

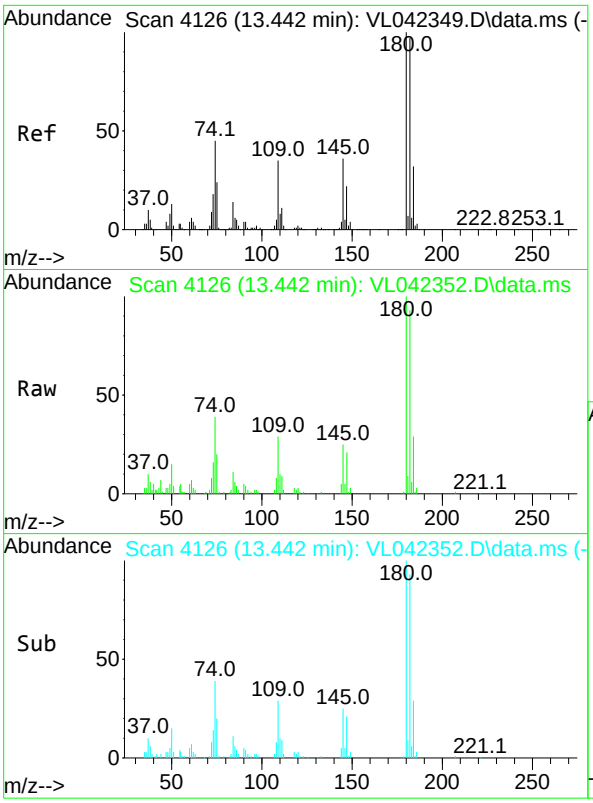


#80
Naphthalene,2-methyl-
Concen: 0.475 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:142 Resp: 21076

Ion	Ratio	Lower	Upper
142	100		
141	79.2	66.8	100.2
115	44.1	33.4	50.2

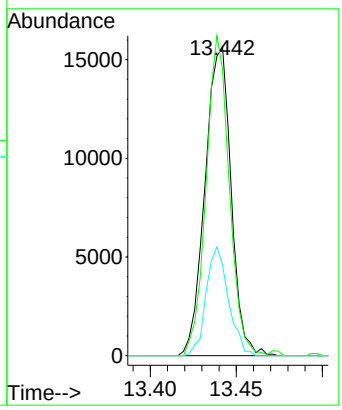




#81
1,2,4-Trichlorobenzene
Concen: 0.493 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:180 Resp: 1650

Ion	Ratio	Lower	Upper
180	100		
182	92.4	76.8	115.2
184	30.2	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042353.D
Acq On : 17 Apr 2025 11:50
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:29:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	119461	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	350484	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	315004	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.381	95	256417	9.906	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.580	62	1088	0.120	ppbv	# 74
32) 1,1,1-Trichloroethane	3.367	97	3393m	0.115	ppbv	
35) Carbon Tetrachloride	3.771	117	3204	0.101	ppbv	# 94
38) Trichloroethene	4.551	130	1771m	0.107	ppbv	
52) Tetrachloroethene	8.222	164	1583m	0.108	ppbv	
54) 1,2-Dibromoethane	7.662	107	2177m	0.106	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.966	83	3706m	0.113	ppbv	
79) Naphthalene	13.517	128	7664	0.100	ppbv	# 92

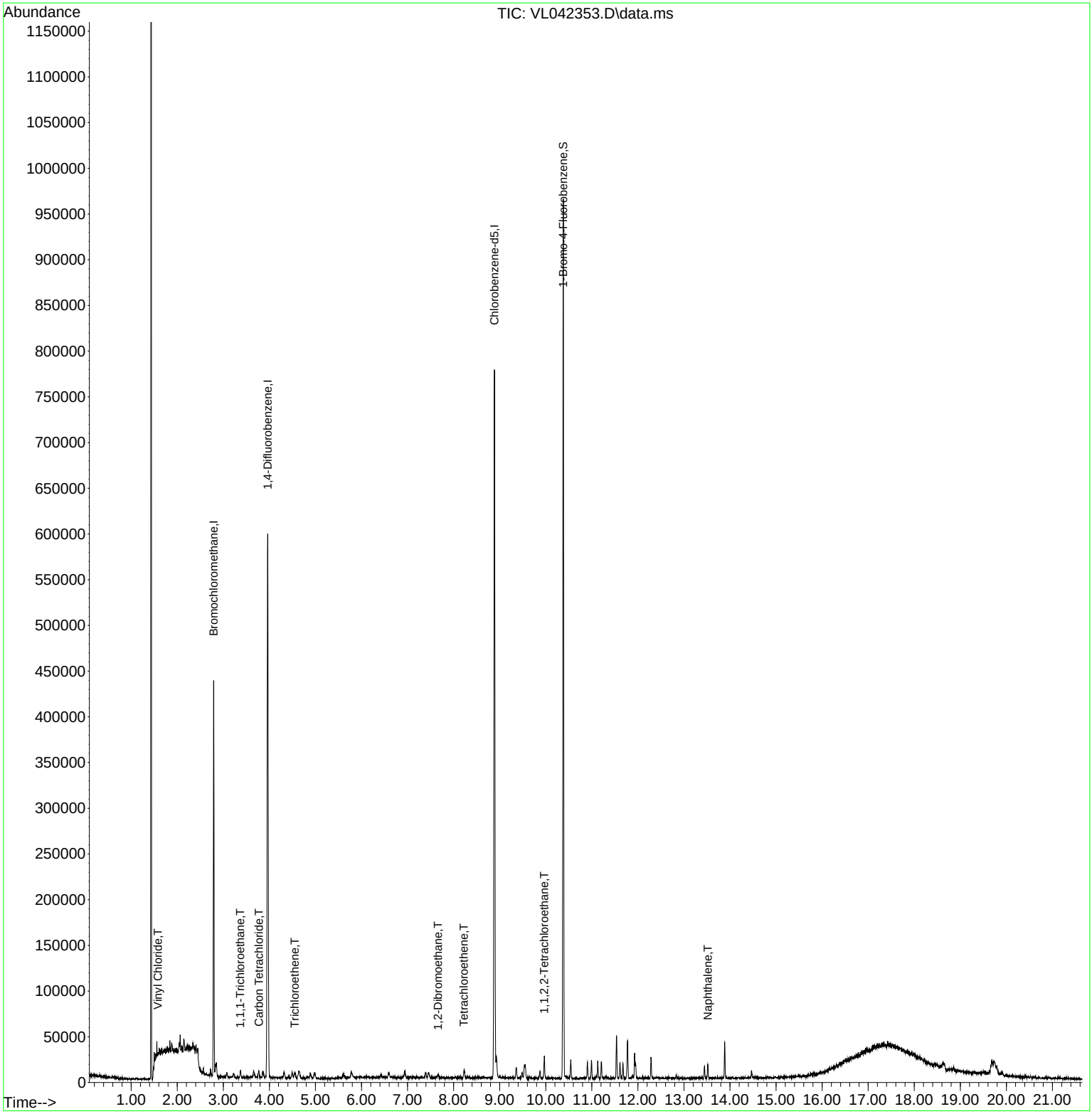
(#) = qualifier out of range (m) = manual integration (+) = signals summed

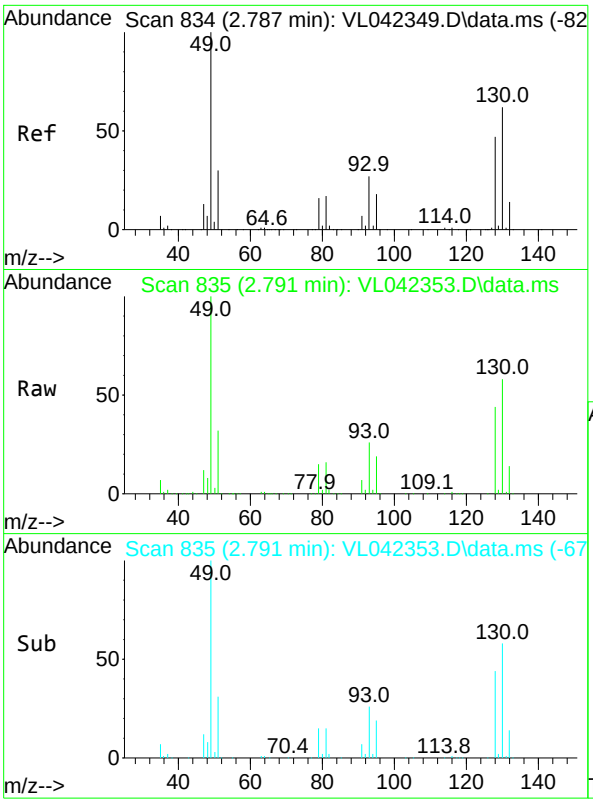
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042353.D
Acq On : 17 Apr 2025 11:50
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:29:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

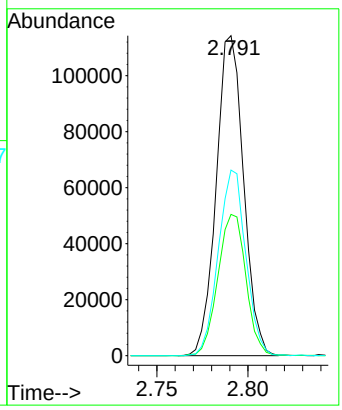




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 49 Resp: 11946

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	58.3	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
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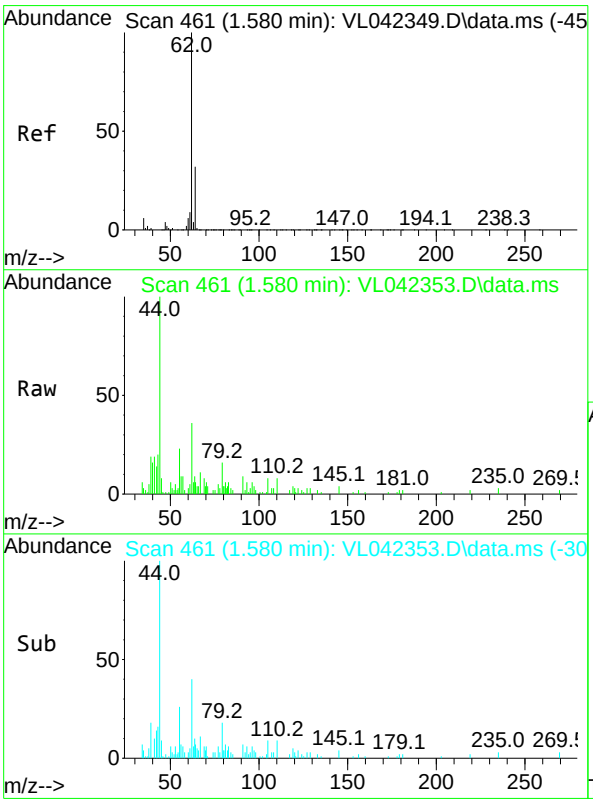
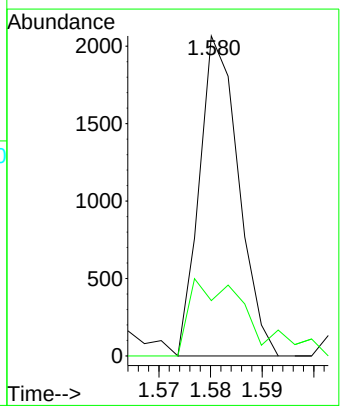
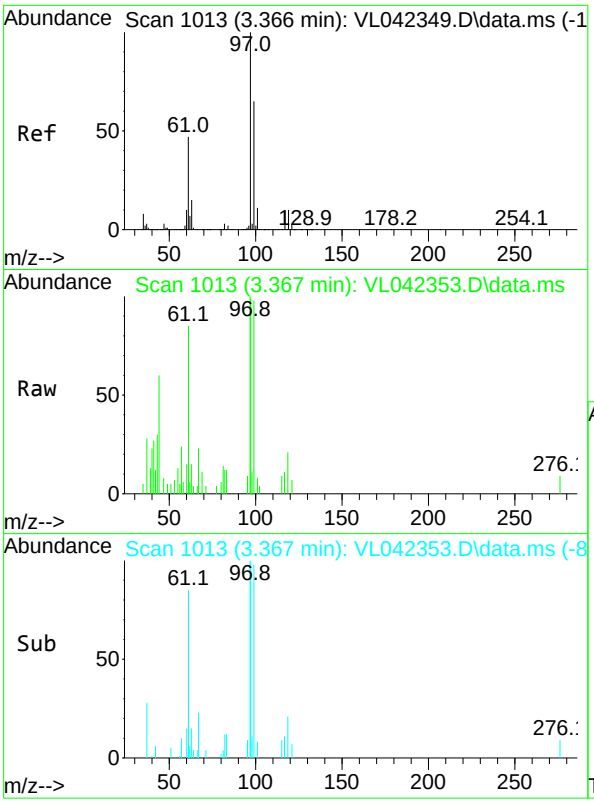


#5
Vinyl Chloride
Concen: 0.120 ppbv
RT: 1.580 min Scan# 461
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 62 Resp: 1088

Ion	Ratio	Lower	Upper
62	100		
64	17.3	25.4	38.0#

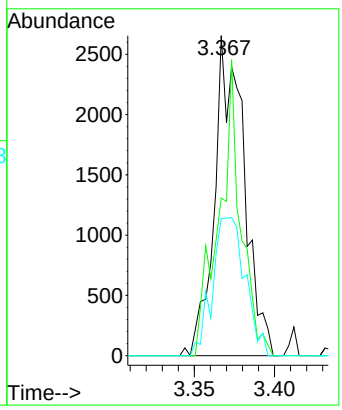




#32
1,1,1-Trichloroethane
Concen: 0.115 ppbv m
RT: 3.367 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 97 Resp: 339

Ion	Ratio	Lower	Upper
97	100		
99	68.2	51.0	76.4
61	47.9	38.8	58.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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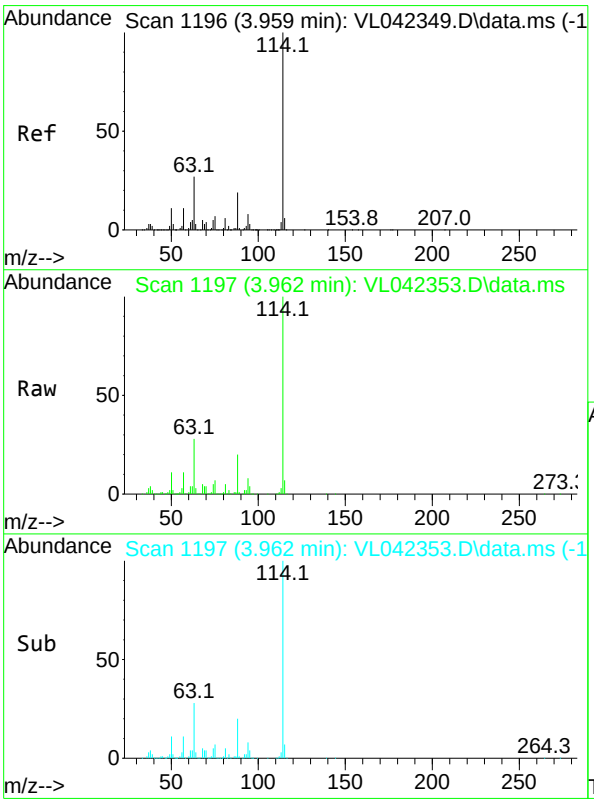
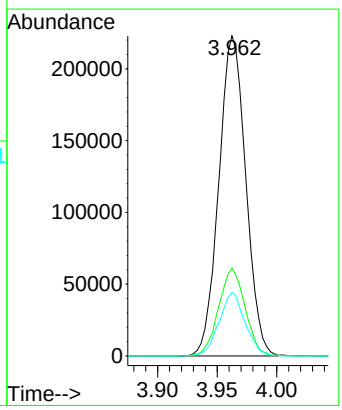
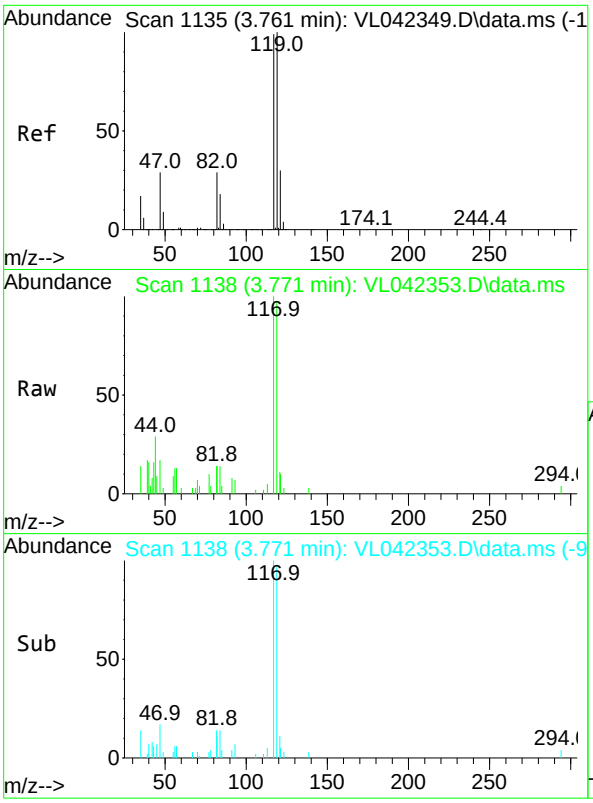


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:114 Resp: 350484

Ion	Ratio	Lower	Upper
114	100		
63	26.9	21.8	32.6
88	19.1	15.5	23.3

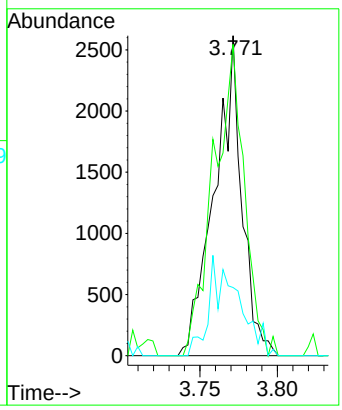




#35
Carbon Tetrachloride
Concen: 0.101 ppbv
RT: 3.771 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:117 Resp: 320

Ion	Ratio	Lower	Upper
117	100		
119	97.3	80.5	120.7
121	21.3	24.2	36.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

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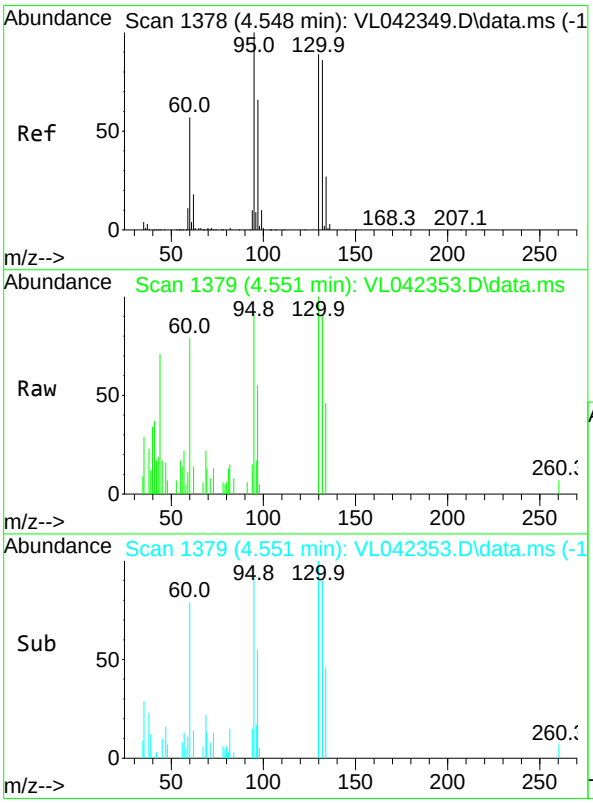
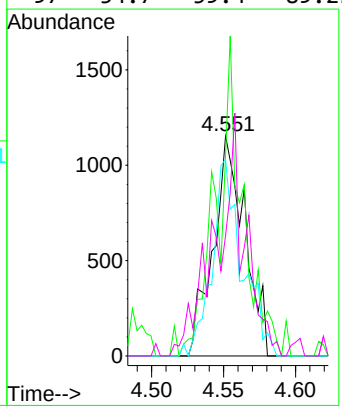
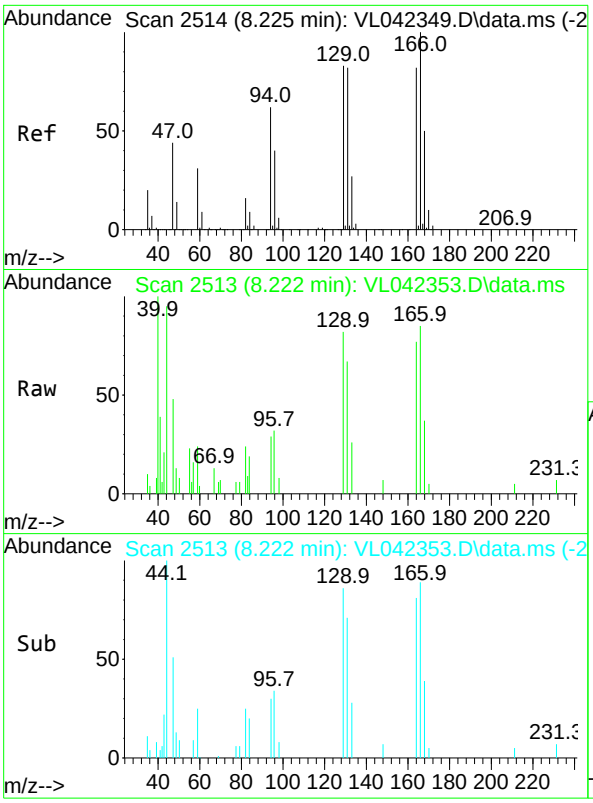


#38
Trichloroethene
Concen: 0.107 ppbv m
RT: 4.551 min Scan# 1379
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:130 Resp: 1771

Ion	Ratio	Lower	Upper
130	100		
95	90.9	89.8	134.6
132	89.6	77.7	116.5
97	54.7	59.4	89.2#

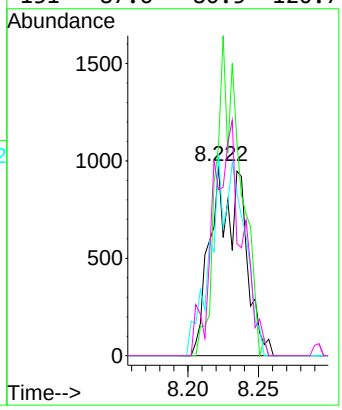




#52
Tetrachloroethene
Concen: 0.108 ppbv m
RT: 8.222 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:164 Resp: 158

Ion	Ratio	Lower	Upper
164	100		
166	110.6	98.2	147.2
129	106.5	81.8	122.8
131	87.6	80.5	120.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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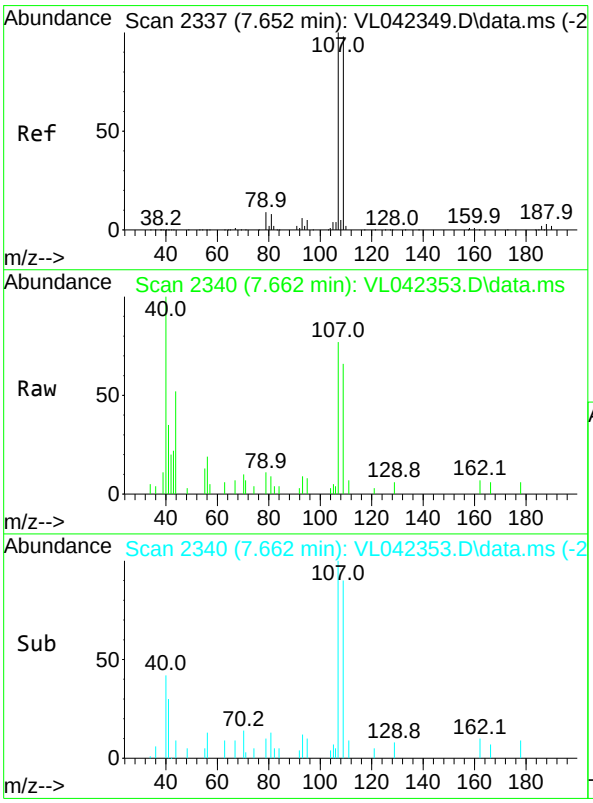
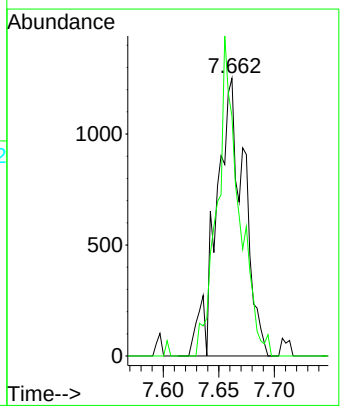
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

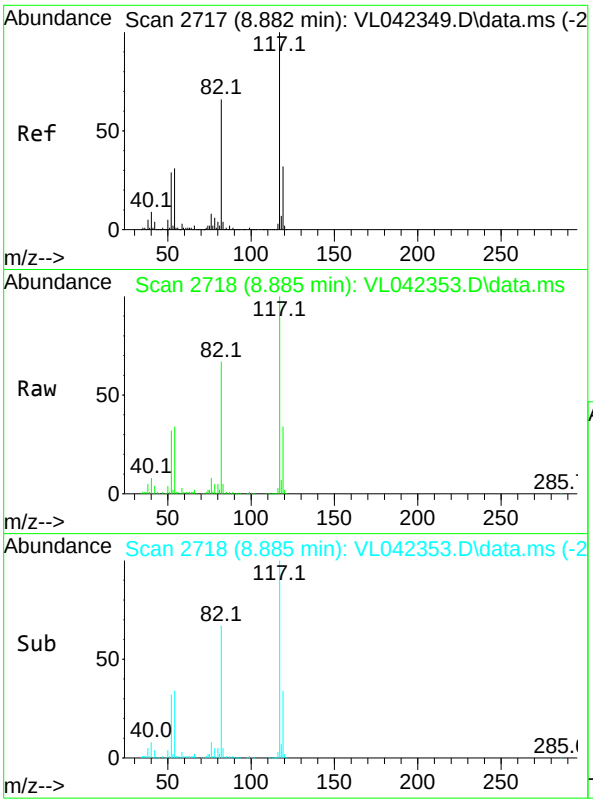


#54
1,2-Dibromoethane
Concen: 0.106 ppbv m
RT: 7.662 min Scan# 2340
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:107 Resp: 2177

Ion	Ratio	Lower	Upper
107	100		
109	86.3	78.2	117.4

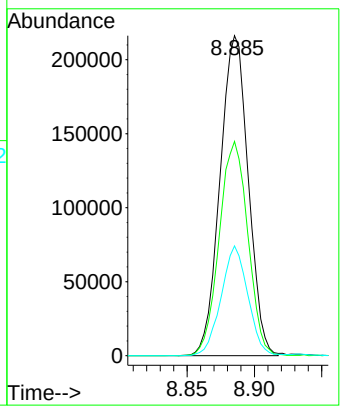




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:117 Resp: 31500

Ion	Ratio	Lower	Upper
117	100		
82	68.1	57.8	86.6
119	33.0	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

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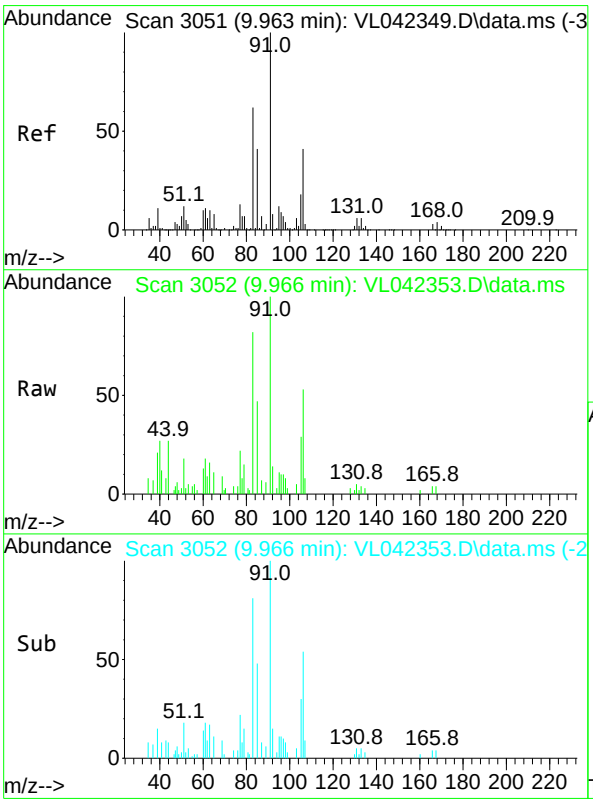
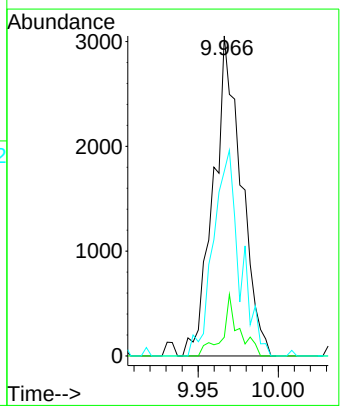
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

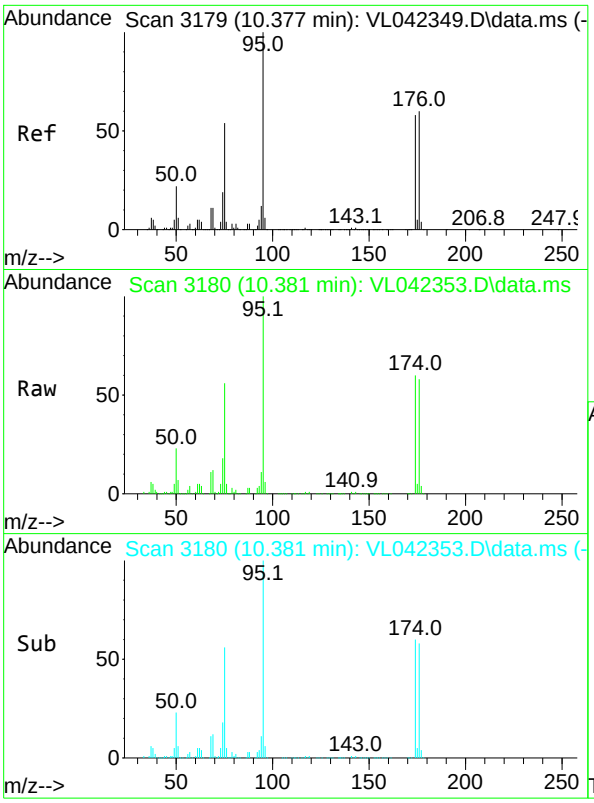


#63
1,1,2,2-Tetrachloroethane
Concen: 0.113 ppbv m
RT: 9.966 min Scan# 3052
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 83 Resp: 3706

Ion	Ratio	Lower	Upper
83	100		
131	11.2	4.5	13.7
85	61.7	32.4	97.0

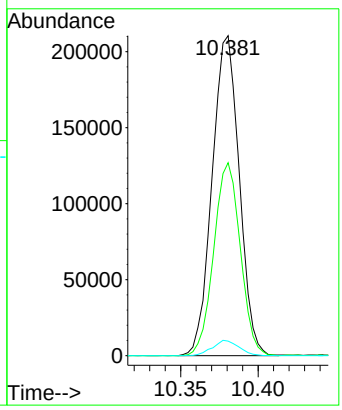




#68
1-Bromo-4-Fluorobenzene
Concen: 9.906 ppbv
RT: 10.381 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 95 Resp: 25641

Ion	Ratio	Lower	Upper
95	100		
174	59.3	48.5	72.7
175	4.7	3.7	5.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations
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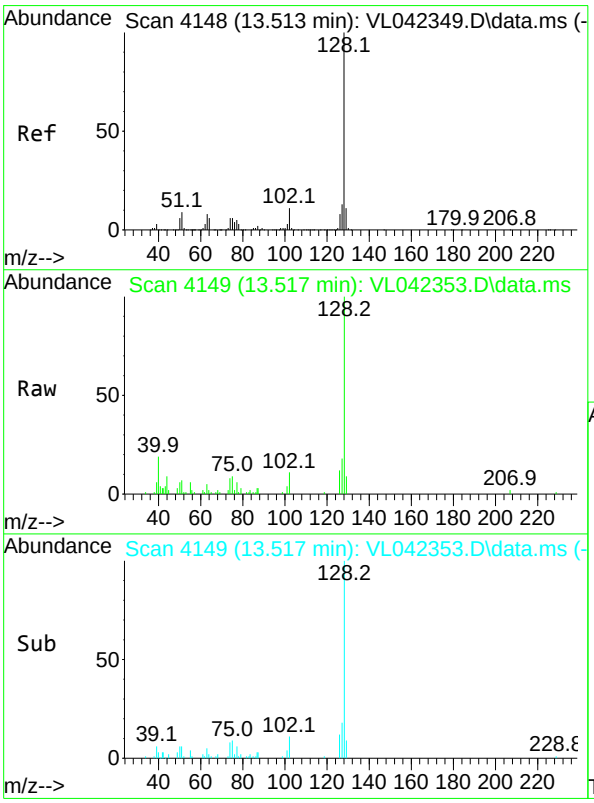
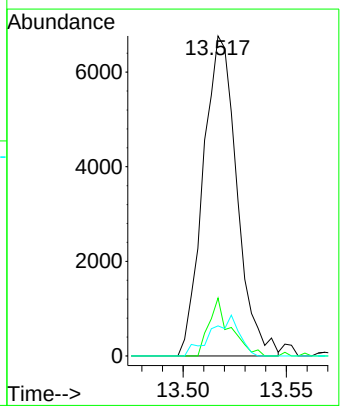
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025



#79
Naphthalene
Concen: 0.100 ppbv
RT: 13.517 min Scan# 4149
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:128 Resp: 7664

Ion	Ratio	Lower	Upper
128	100		
127	18.1	10.6	15.8#
129	9.4	8.6	12.8



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042354.D
Acq On : 17 Apr 2025 12:22
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:07:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	120042	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	349264	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	312999	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	256230	9.962	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.583	62	361	0.040	ppbv	# 76
32) 1,1,1-Trichloroethane	3.373	97	1120m	0.038	ppbv	
35) Carbon Tetrachloride	3.768	117	1382m	0.044	ppbv	
38) Trichloroethene	4.538	130	674m	0.041	ppbv	
52) Tetrachloroethene	8.228	164	569m	0.039	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.972	83	1321m	0.040	ppbv	

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042354.D
Acq On : 17 Apr 2025 12:22
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:07:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
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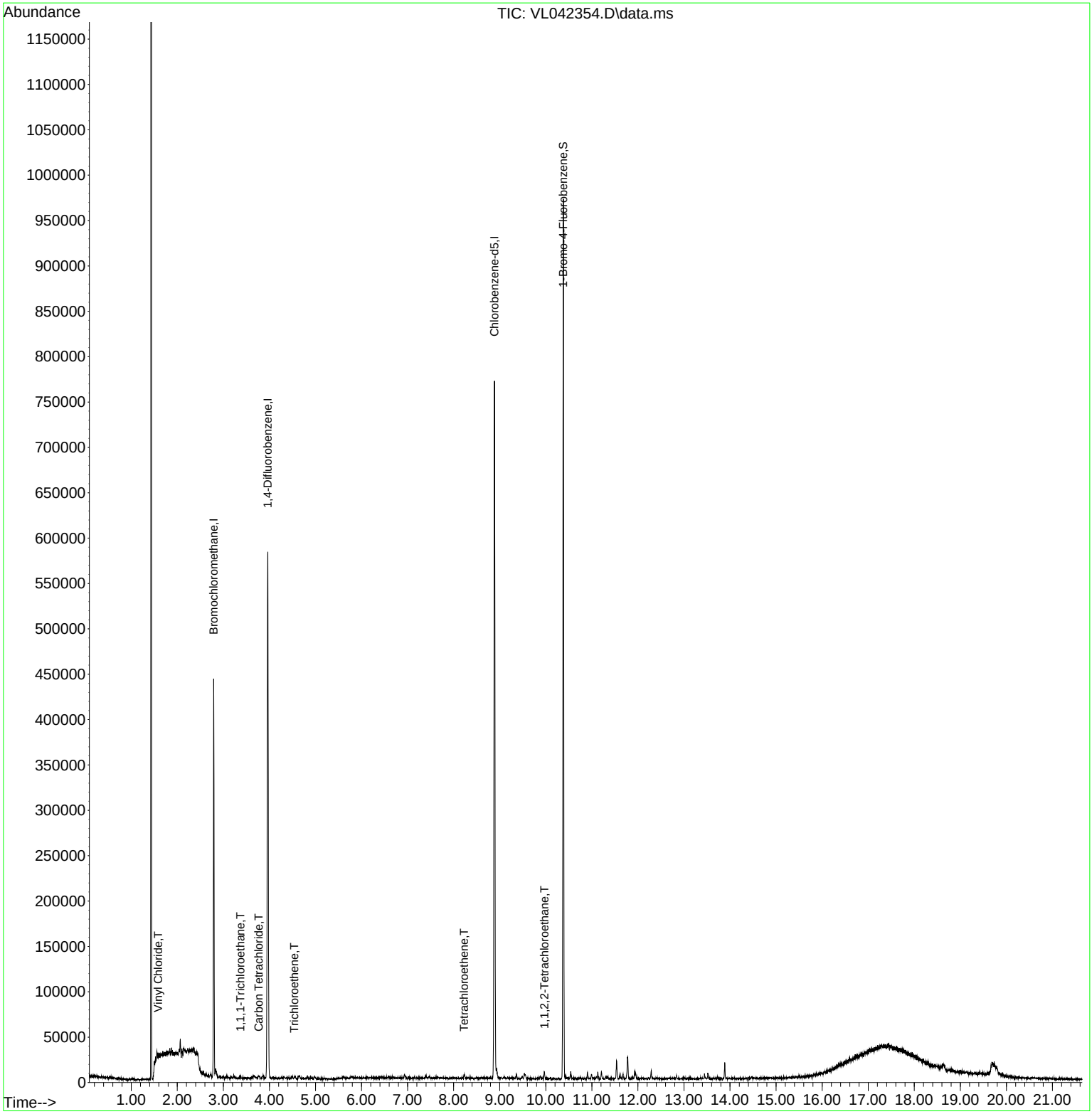
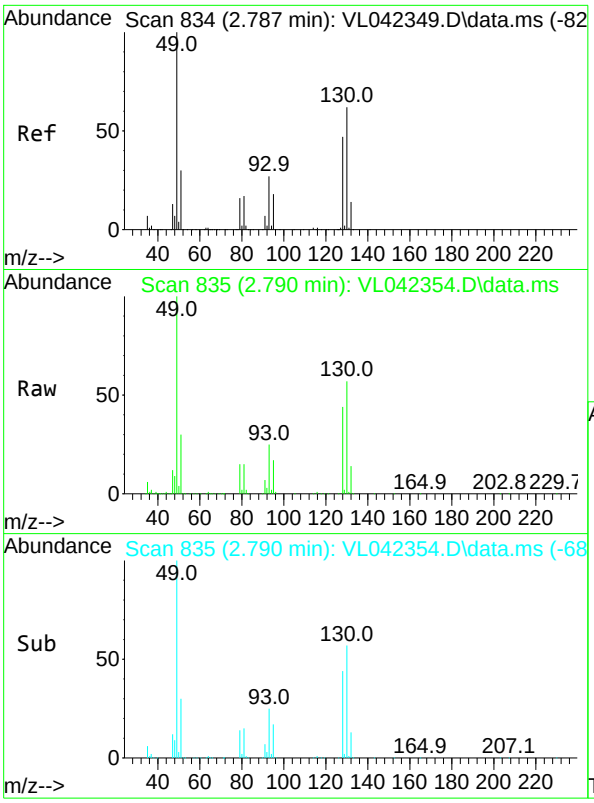
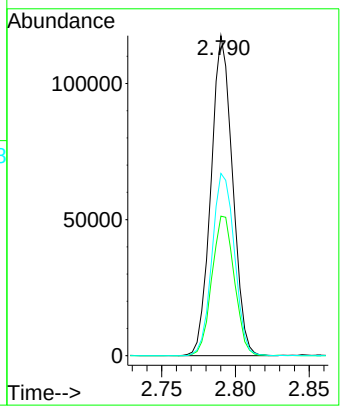




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 49 Resp: 12004

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	59.0	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

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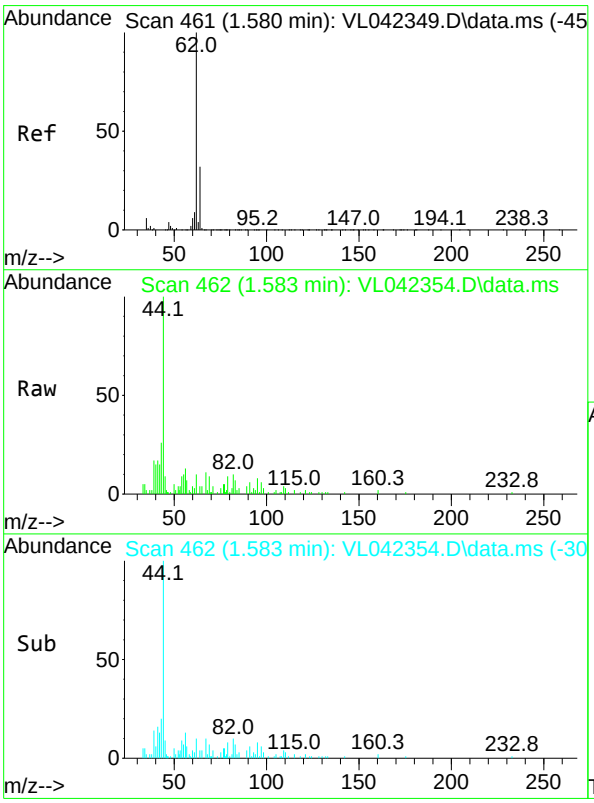
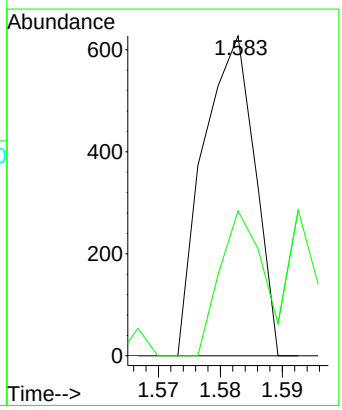
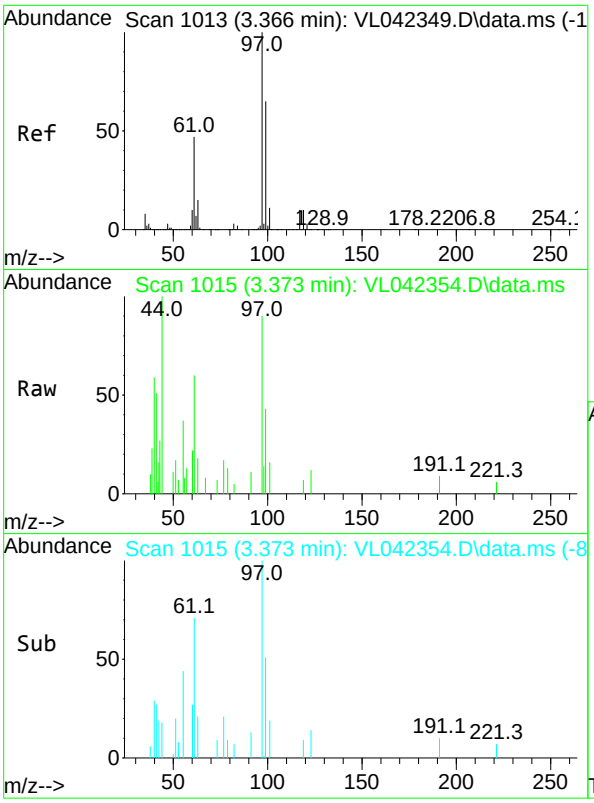


#5
Vinyl Chloride
Concen: 0.040 ppbv
RT: 1.583 min Scan# 462
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 62 Resp: 361

Ion	Ratio	Lower	Upper
62	100		
64	45.3	25.4	38.0#

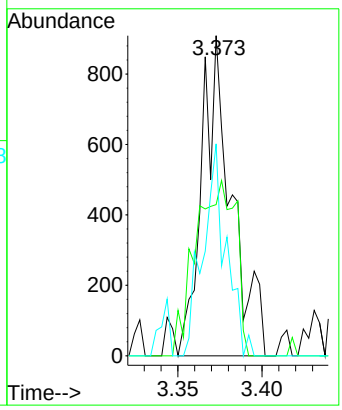




#32
1,1,1-Trichloroethane
Concen: 0.038 ppbv m
RT: 3.373 min Scan# 1(
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 97 Resp: 112(

Ion	Ratio	Lower	Upper
97	100		
99	74.4	51.0	76.4
61	56.9	38.8	58.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
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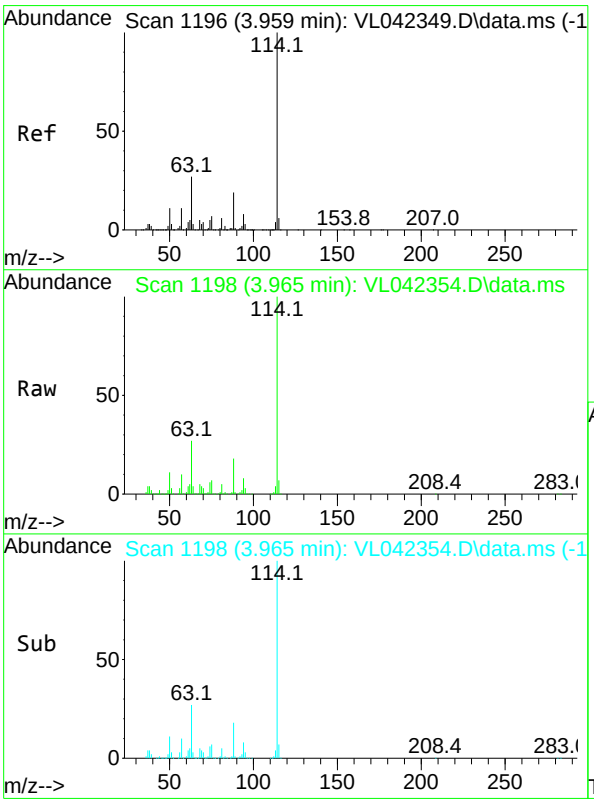
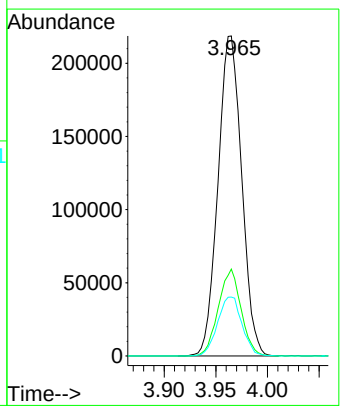
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

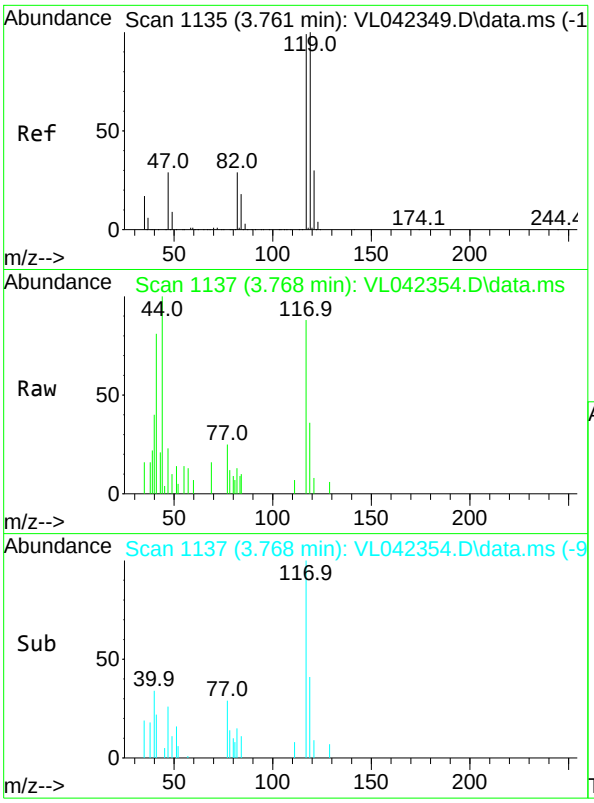


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:114 Resp: 349264

Ion	Ratio	Lower	Upper
114	100		
63	26.0	21.8	32.6
88	19.0	15.5	23.3

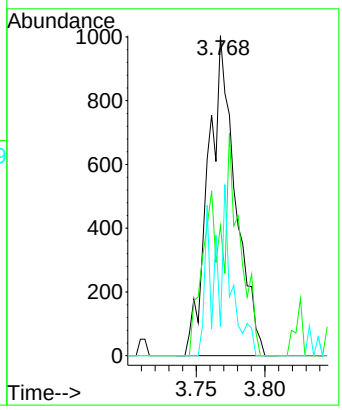




#35
Carbon Tetrachloride
Concen: 0.044 ppbv m
RT: 3.768 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:117 Resp: 138

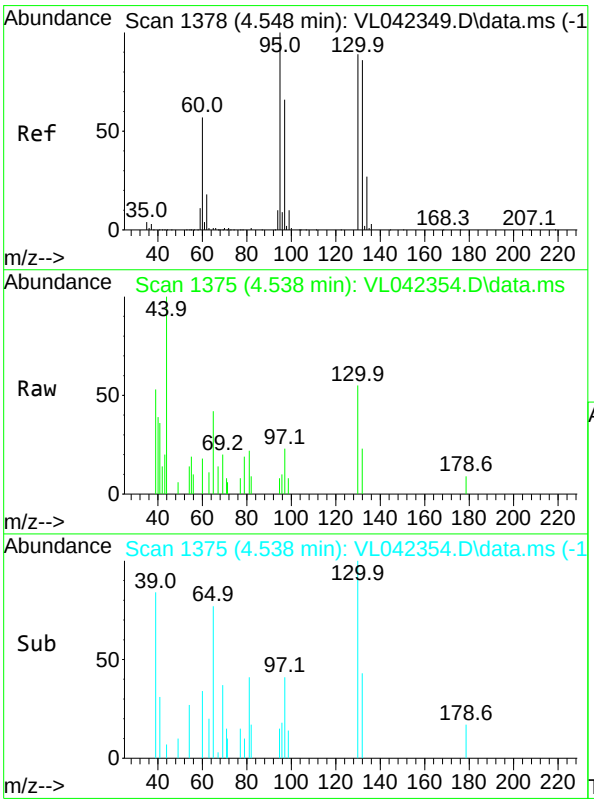
Ion	Ratio	Lower	Upper
117	100		
119	40.6	80.5	120.7#
121	9.0	24.2	36.2#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

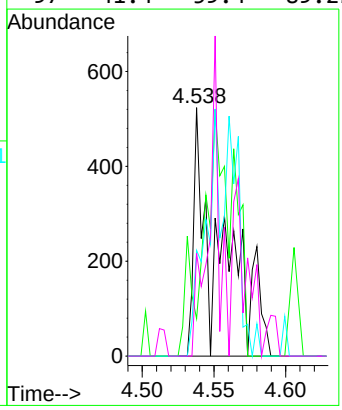
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

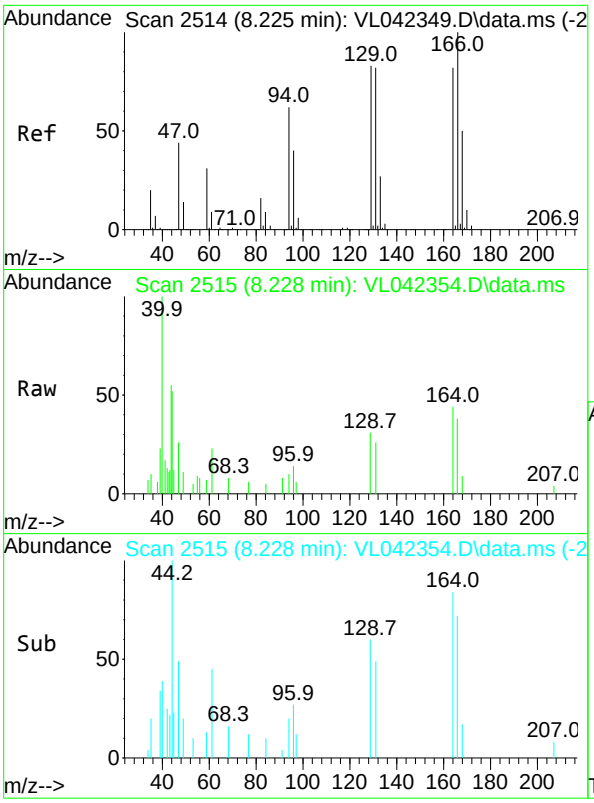


#38
Trichloroethene
Concen: 0.041 ppbv m
RT: 4.538 min Scan# 1375
Delta R.T. -0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:130 Resp: 674

Ion	Ratio	Lower	Upper
130	100		
95	15.1	89.8	134.6#
132	42.6	77.7	116.5#
97	41.4	59.4	89.2#

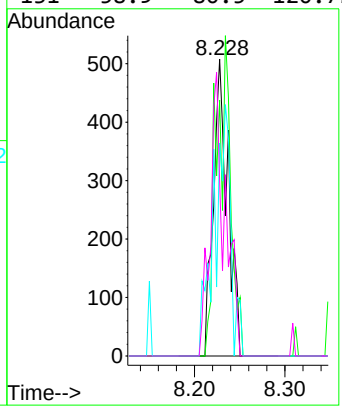




#52
Tetrachloroethene
Concen: 0.039 ppbv m
RT: 8.228 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:164 Resp: 56

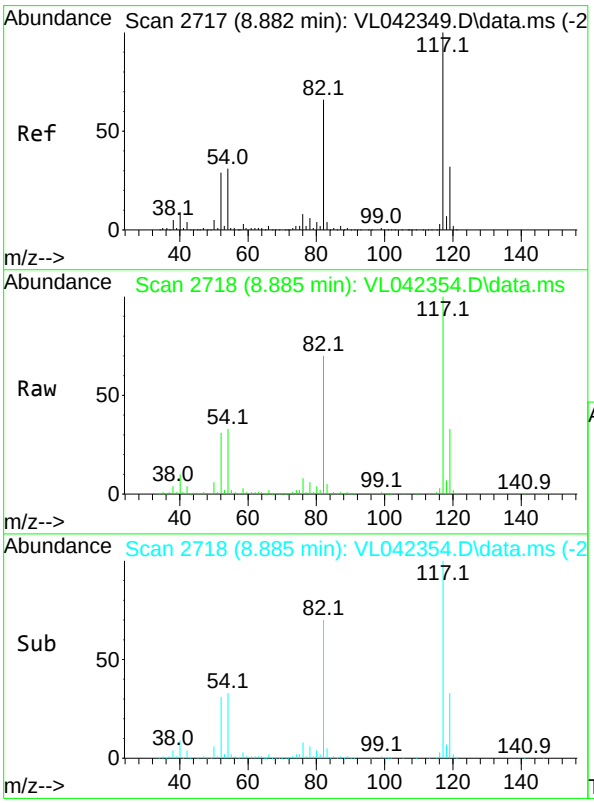
Ion	Ratio	Lower	Upper
164	100		
166	86.2	98.2	147.2#
129	71.7	81.8	122.8#
131	58.9	80.5	120.7#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

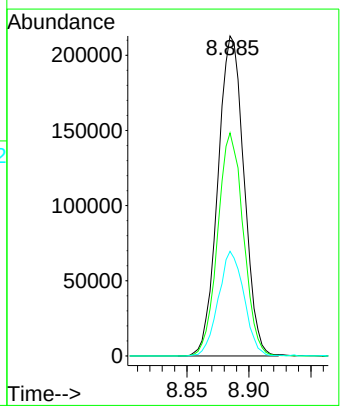
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

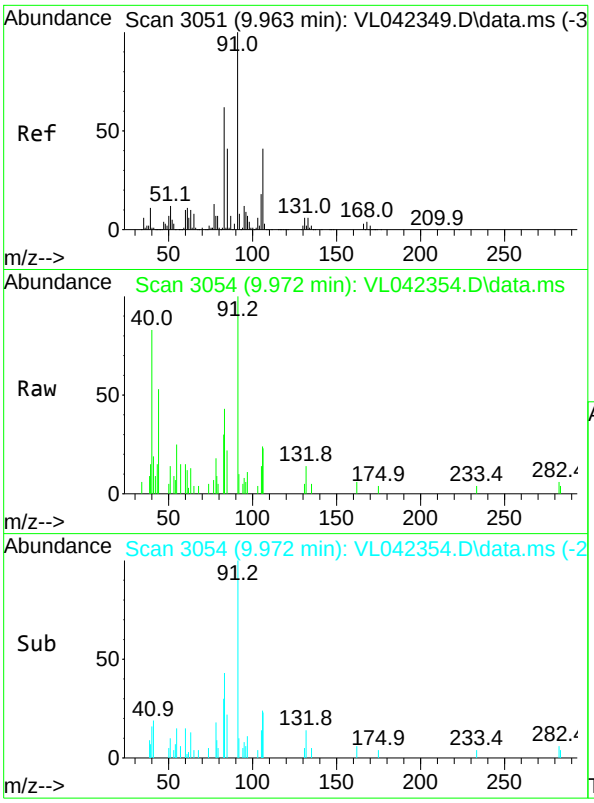


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2718
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:117 Resp: 312999

Ion	Ratio	Lower	Upper
117	100		
82	68.5	57.8	86.6
119	32.2	25.2	37.8

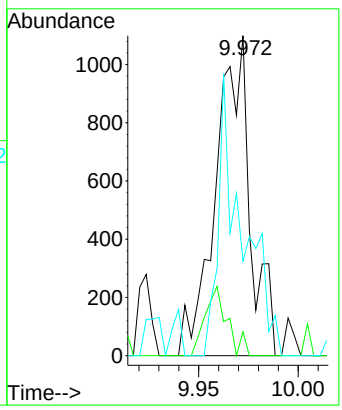




#63
1,1,2,2-Tetrachloroethane
Concen: 0.040 ppbv m
RT: 9.972 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 83 Resp: 132

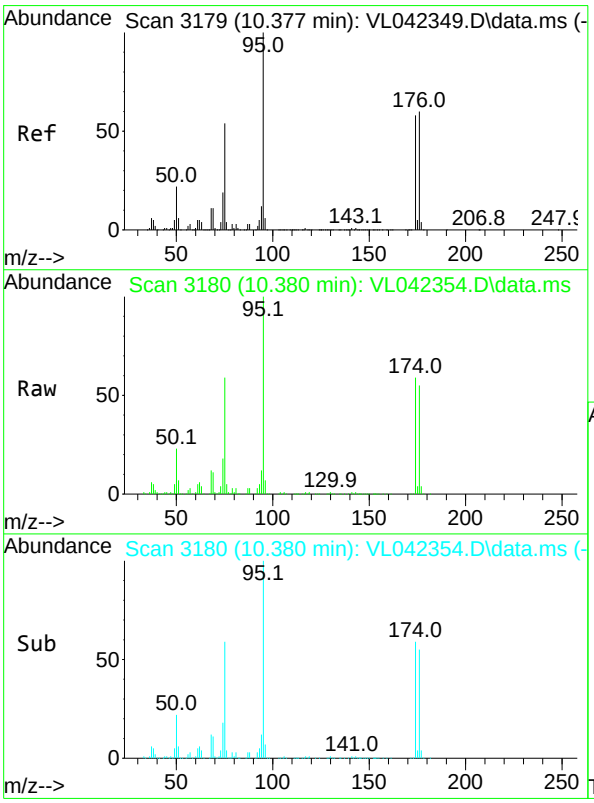
Ion	Ratio	Lower	Upper
83	100		
131	13.9	4.5	13.7#
85	61.4	32.4	97.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations
APPROVED

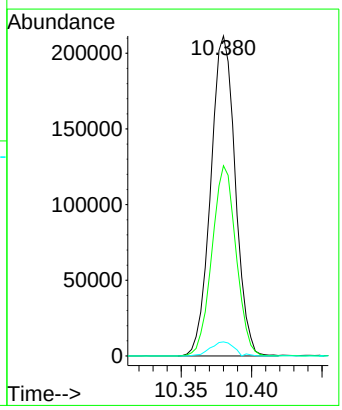
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025



#68
1-Bromo-4-Fluorobenzene
Concen: 9.962 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 95 Resp: 256230

Ion	Ratio	Lower	Upper
95	100		
174	58.6	48.5	72.7
175	4.3	3.7	5.5



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	116071	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	332080	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	308463	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	254437	10.038	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	292784	14.277	ppbv	99
3) Chlorodifluoromethane	1.477	51	280042	14.341	ppbv	98
4) Chloromethane	1.532	50	115775	14.266	ppbv	99
5) Vinyl Chloride	1.580	62	112650	12.752	ppbv	100
6) Bromomethane	1.667	94	52805	13.800	ppbv	88
7) Chloroethane	1.703	64	44347	13.881	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	255029	14.484	ppbv	98
9) Propene	1.483	41	123102	13.842	ppbv	95
10) Heptane	4.979	43	336134	14.047	ppbv	100
11) Trichlorofluoromethane	1.875	101	278059	14.258	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.137	101	230366	14.447	ppbv	99
13) Ethanol	1.719	45	6324	8.702	ppbv	76
14) Bromoethene	1.781	108	84851	14.117	ppbv	99
15) Acetone	1.833	43	229086	12.056	ppbv	99
16) 1,3-Butadiene	1.609	39	117997	13.224	ppbv	96
17) tert-Butyl alcohol	2.040	59	320605	13.615	ppbv	99
18) 1,1-Dichloroethene	2.033	96	107666	14.045	ppbv	99
19) Isopropyl Alcohol	1.884	45	139004	13.169	ppbv	94
20) Methylene Chloride	2.059	84	91093	12.241	ppbv	90
21) Allyl Chloride	2.095	41	187995	14.329	ppbv	99
22) trans-1,2-Dichloroethene	2.341	96	118492	13.970	ppbv	94
23) Vinyl Acetate	2.460	43	106135	13.799	ppbv #	98
24) 1,1-Dichloroethane	2.409	63	235466	14.615	ppbv	99
25) Ethyl Acetate	2.836	43	663644	14.166	ppbv	100
26) Hexane	2.826	57	260975	13.765	ppbv	97
27) Carbon Disulfide	2.150	76	299098	14.734	ppbv	97
28) Methyl tert-Butyl Ether	2.438	73	174855	14.076	ppbv	95
29) Chloroform	2.849	83	385686	14.393	ppbv	99
30) Cyclohexane	3.855	84	217375	14.238	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	264972	14.700	ppbv	98
32) 1,1,1-Trichloroethane	3.367	97	412537	14.357	ppbv	99
34) 2-Butanone	2.558	43	367315	13.986	ppbv	100
35) Carbon Tetrachloride	3.762	117	409916	13.639	ppbv	94
36) Benzene	3.655	78	522156	14.578	ppbv	97
37) 1,2-Dichloroethane	3.218	62	319517	14.863	ppbv	100
38) Trichloroethene	4.548	130	208508	13.278	ppbv	98
39) 1,2-Dichloropropane	4.312	63	189697	14.201	ppbv	97
40) 1,4-Dioxane	4.580	88	92114	12.733	ppbv #	95
41) Tetrahydrofuran	3.053	42	214949	14.166	ppbv	98
42) Bromodichloromethane	4.490	83	442735	14.798	ppbv	95
43) Methyl Methacrylate	4.878	69	219757	13.670	ppbv	95
44) 2,2,4-Trimethylpentane	4.642	57	893529	14.425	ppbv	99
45) t-1,3-Dichloropropene	6.412	75	244470	14.810	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	300145	14.878	ppbv		90
47) 1,1,2-Trichloroethane	6.581	97	198874	14.615	ppbv		98
48) Dibromochloromethane	7.390	129	362887	15.105	ppbv		98
49) Bromoform	9.484	173	312282	14.865	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	563658	12.889	ppbv		99
51) 2-Hexanone	7.435	43	467001	11.834	ppbv	#	98
52) Tetrachloroethene	8.225	164	180631	13.046	ppbv		97
53) Toluene	6.933	91	619420	14.411	ppbv		99
54) 1,2-Dibromoethane	7.652	107	280071	14.442	ppbv		92
56) 1,1,1,2-Tetrachloroethane	8.927	131	268626	14.389	ppbv		97
57) Chlorobenzene	8.921	112	454017	14.151	ppbv		97
58) Ethyl Benzene	9.354	91	874424	14.308	ppbv		100
59) m/p-Xylene	9.552	91	1388086m	28.109	ppbv		
60) o-Xylene	9.963	91	689246	13.902	ppbv		99
61) Styrene	9.872	104	339508	14.347	ppbv		99
62) Isopropylbenzene	10.539	105	1018968	13.999	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.963	83	412898	12.816	ppbv		100
64) n-propylbenzene	10.989	120	260812	14.255	ppbv		94
65) tert-Butylbenzene	11.533	119	899720	13.449	ppbv		93
66) Benzyl Chloride	11.617	91	96016	13.061	ppbv		96
67) sec-Butylbenzene	11.769	105	1253263	13.468	ppbv		100
69) p-Isopropyltoluene	11.928	119	1081850	13.382	ppbv		99
70) n-Butylbenzene	12.284	91	1117042	13.266	ppbv		100
71) 2-Chlorotoluene	10.902	91	806728	14.131	ppbv		100
72) 4-Ethyltoluene	11.125	105	848077	13.992	ppbv		99
73) 1,3,5-Trimethylbenzene	11.206	105	726558	13.578	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	785772	12.572	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	444086	13.670	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	450662	13.802	ppbv		98
77) 1,2-Dichlorobenzene	11.947	146	427372	13.529	ppbv		99
78) Hexachloro-1,3-Butadiene	13.883	225	404441	12.679	ppbv		100
79) Naphthalene	13.514	128	944085	12.632	ppbv		98
80) Naphthalene,2-methyl-	14.459	142	540339	12.686	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	429982	13.398	ppbv		98

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

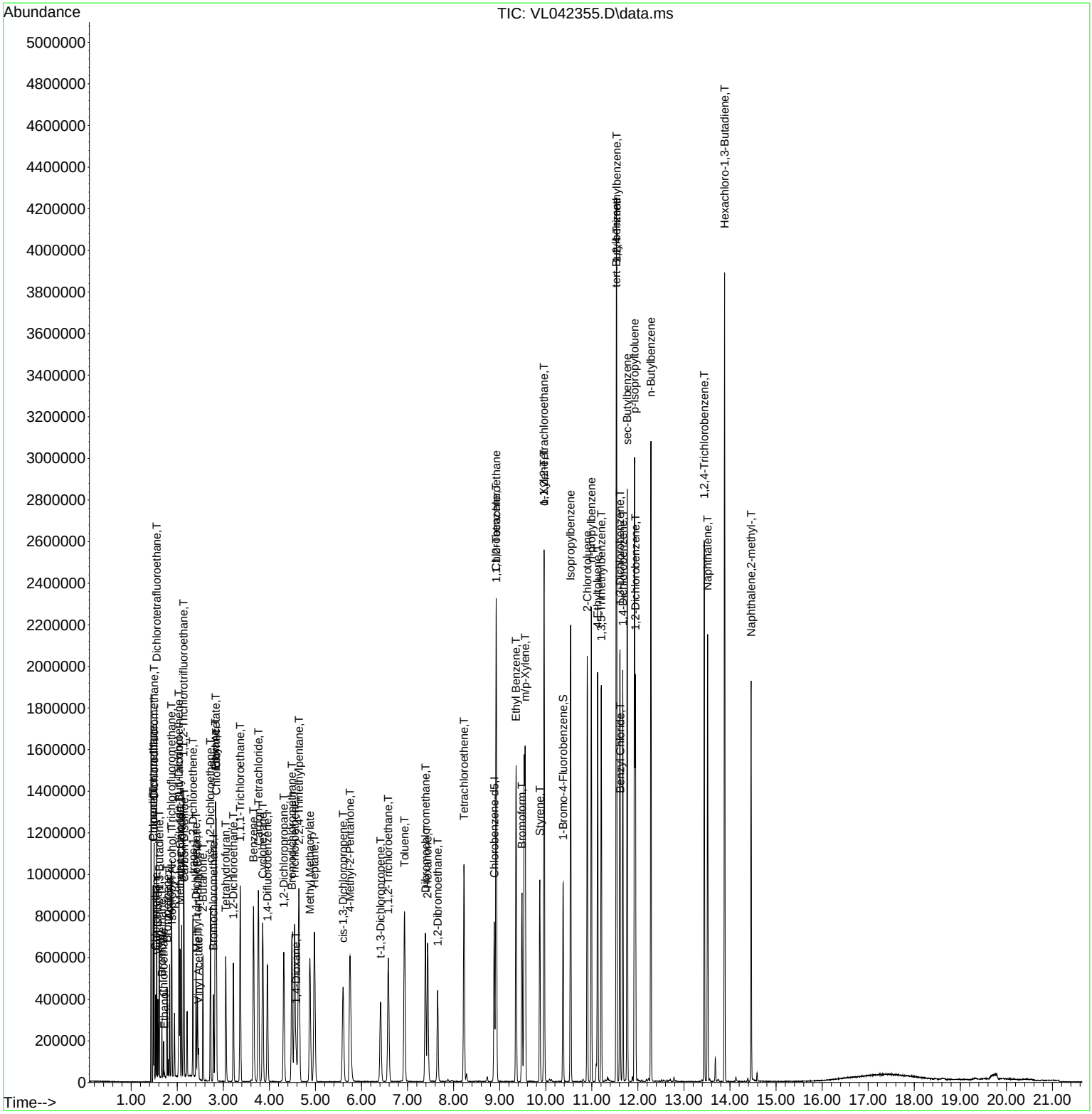
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

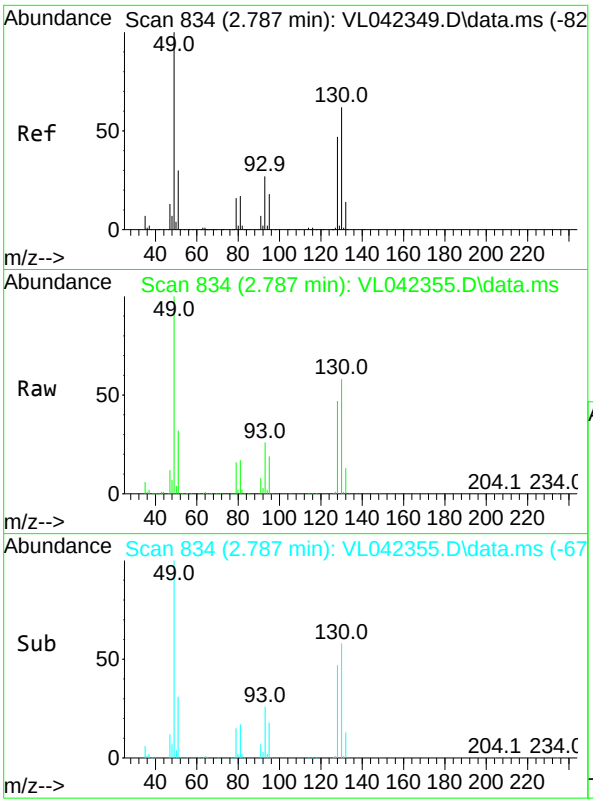
Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

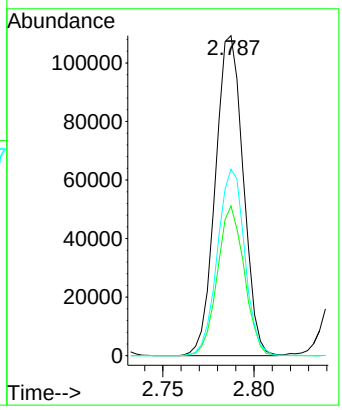




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 49 Resp: 11607

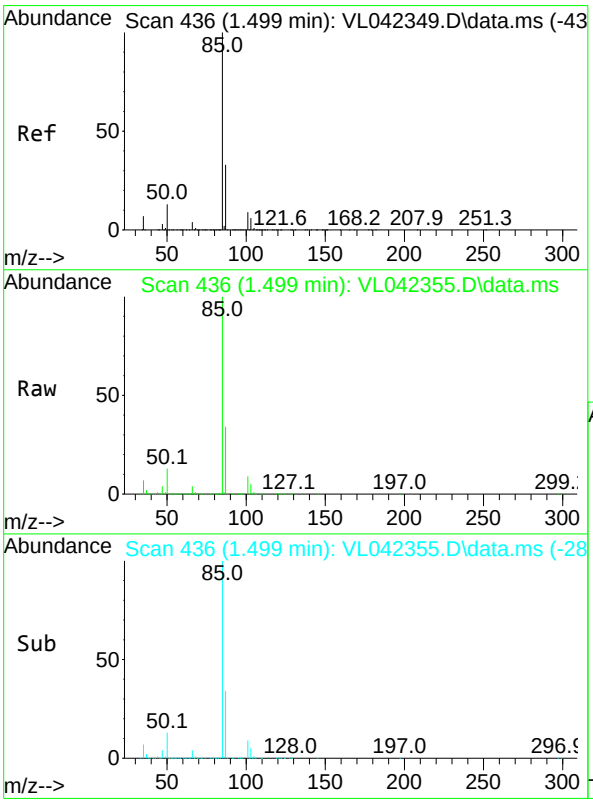
Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.8	68.4
130	57.1	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

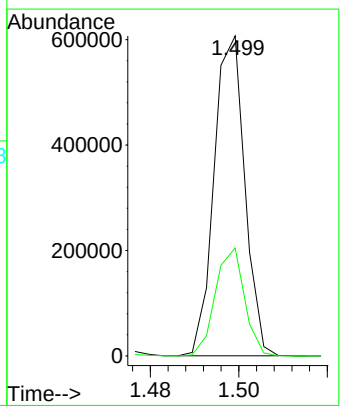
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

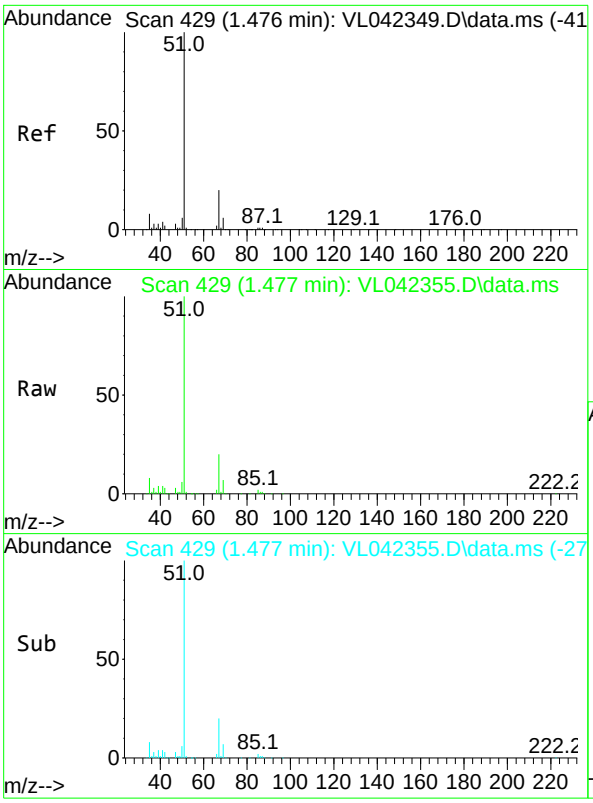


#2
Dichlorodifluoromethane
Concen: 14.277 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 85 Resp: 292784

Ion	Ratio	Lower	Upper
85	100		
87	33.8	26.6	39.8

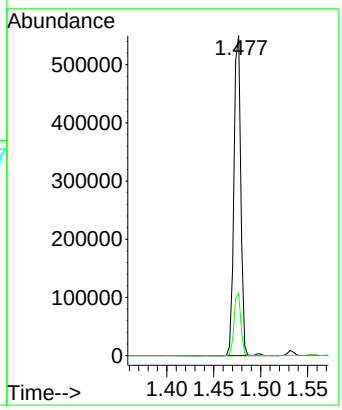




#3
Chlorodifluoromethane
Concen: 14.341 ppbv
RT: 1.477 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 51 Resp: 28004

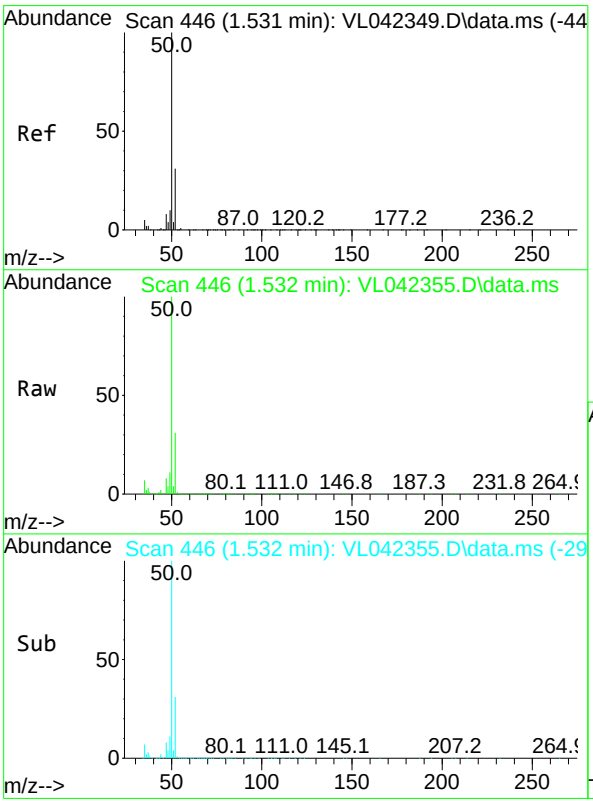
Ion	Ratio	Lower	Upper
51	100		
67	19.5	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

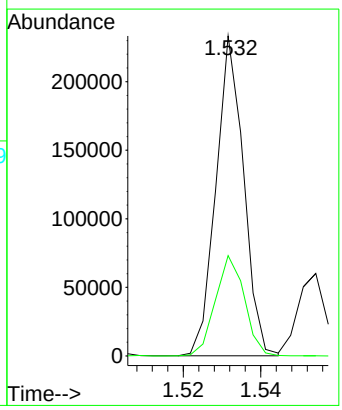
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

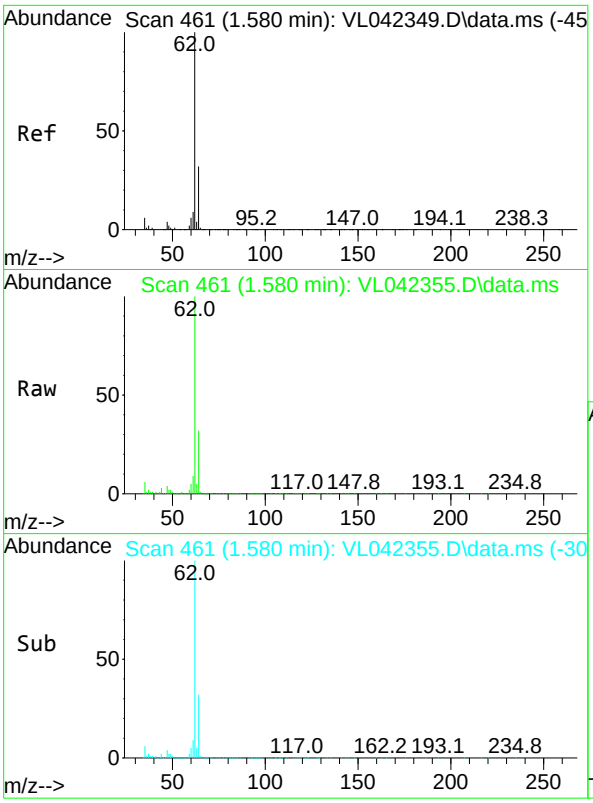


#4
Chloromethane
Concen: 14.266 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 50 Resp: 115775

Ion	Ratio	Lower	Upper
50	100		
52	31.3	24.7	37.1

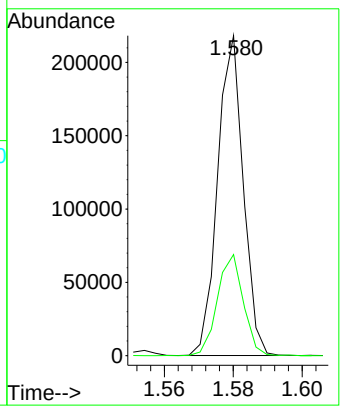




#5
Vinyl Chloride
Concen: 12.752 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 62 Resp: 11265

Ion	Ratio	Lower	Upper
62	100		
64	31.6	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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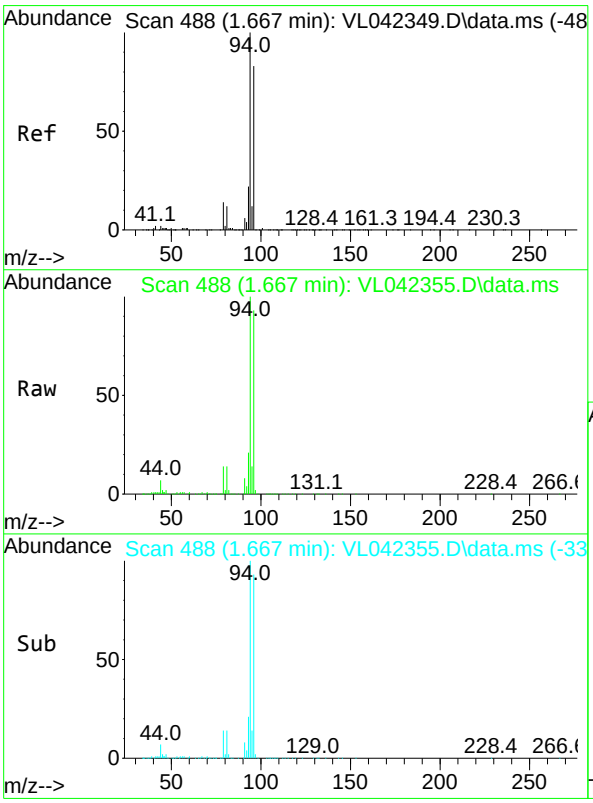
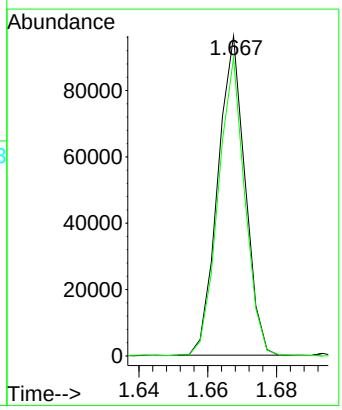
Supervised By :Mahesh Dadoda 04/18/2025

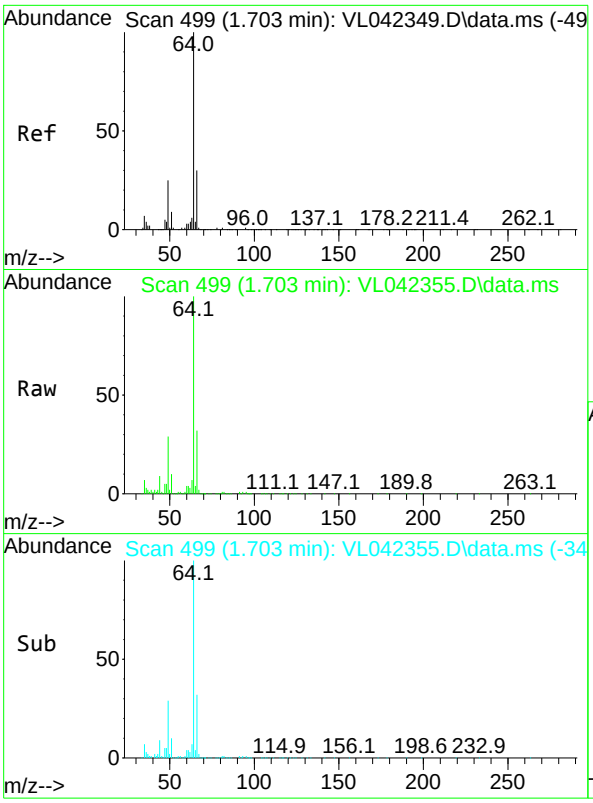


#6
Bromomethane
Concen: 13.800 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 94 Resp: 52805

Ion	Ratio	Lower	Upper
94	100		
96	93.1	66.2	99.2

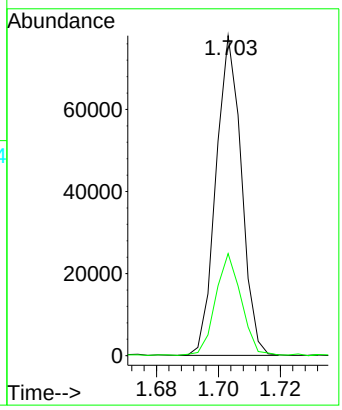




#7
Chloroethane
Concen: 13.881 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 64 Resp: 4434

Ion	Ratio	Lower	Upper
64	100		
66	31.9	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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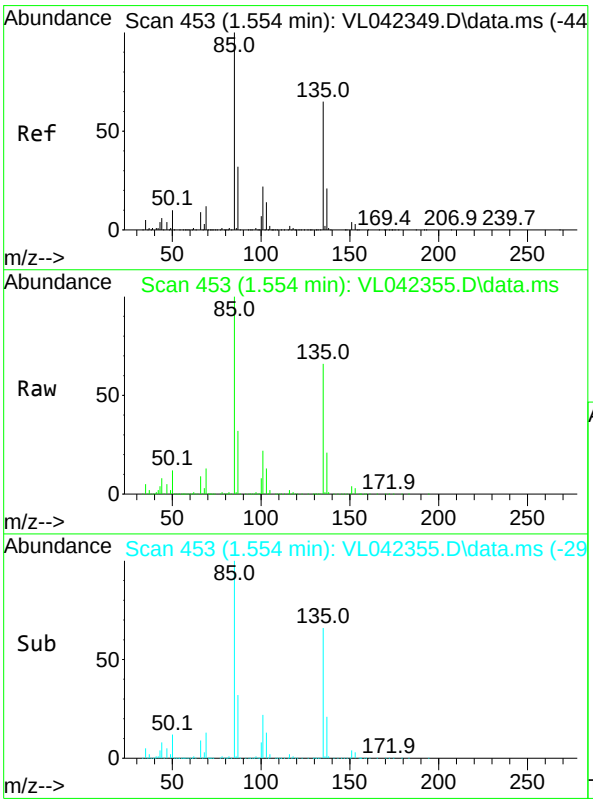
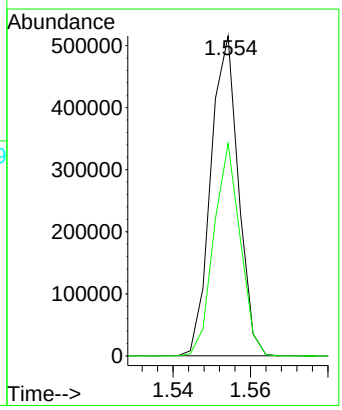
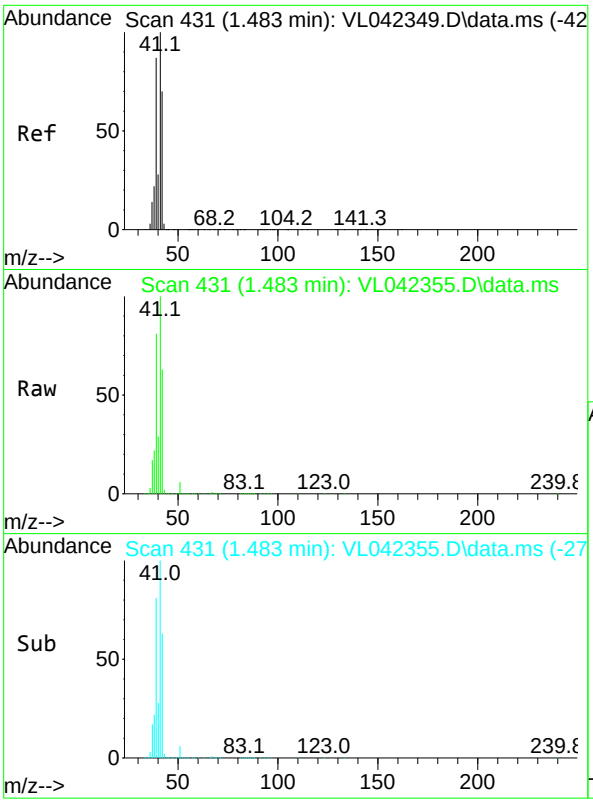


#8
Dichlorotetrafluoroethane
Concen: 14.484 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 85 Resp: 255029

Ion	Ratio	Lower	Upper
85	100		
135	63.6	52.2	78.2

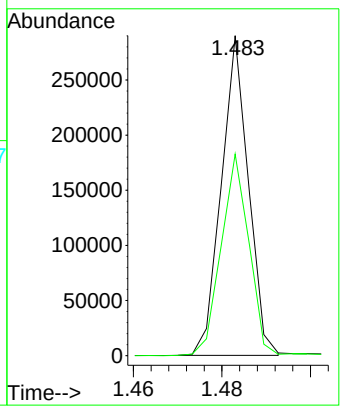




#9
Propene
Concen: 13.842 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 41 Resp: 12310

Ion	Ratio	Lower	Upper
41	100		
42	66.0	56.2	84.4



Instrument :
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ClientSampleId :
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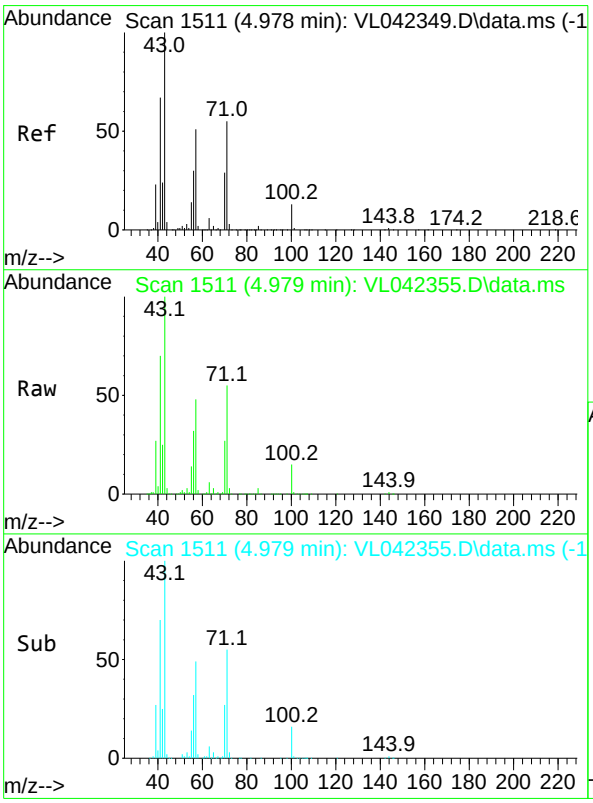
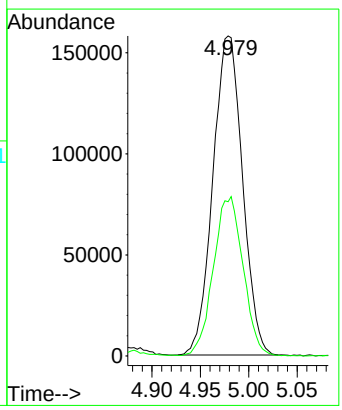
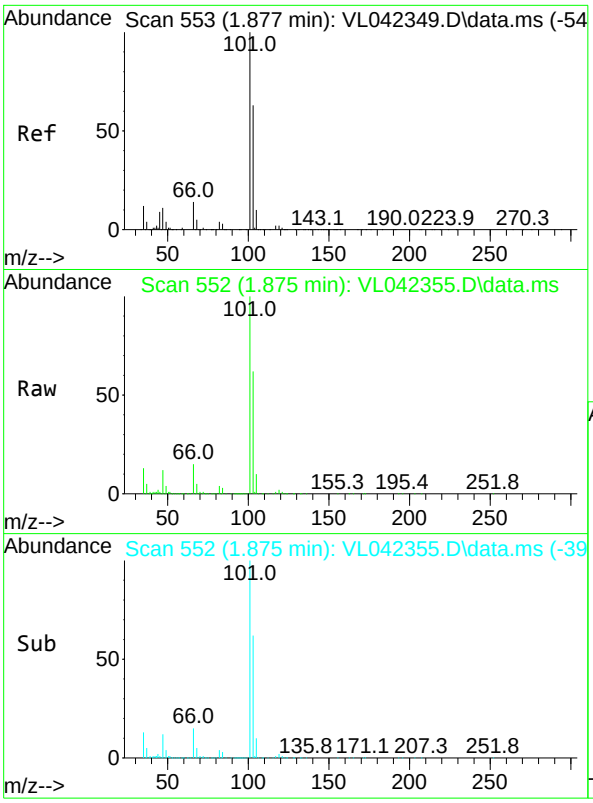


#10
Heptane
Concen: 14.047 ppbv
RT: 4.979 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 336134

Ion	Ratio	Lower	Upper
43	100		
57	50.0	39.9	59.9





#11
Trichlorofluoromethane
Concen: 14.258 ppbv
RT: 1.875 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:101 Resp: 27805

Ion	Ratio	Lower	Upper
101	100		
103	61.6	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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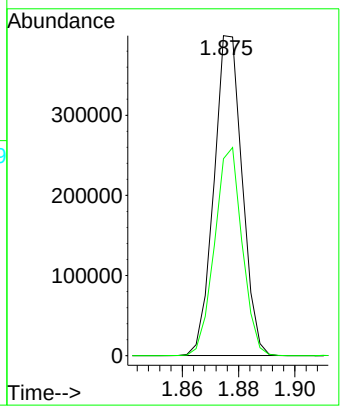
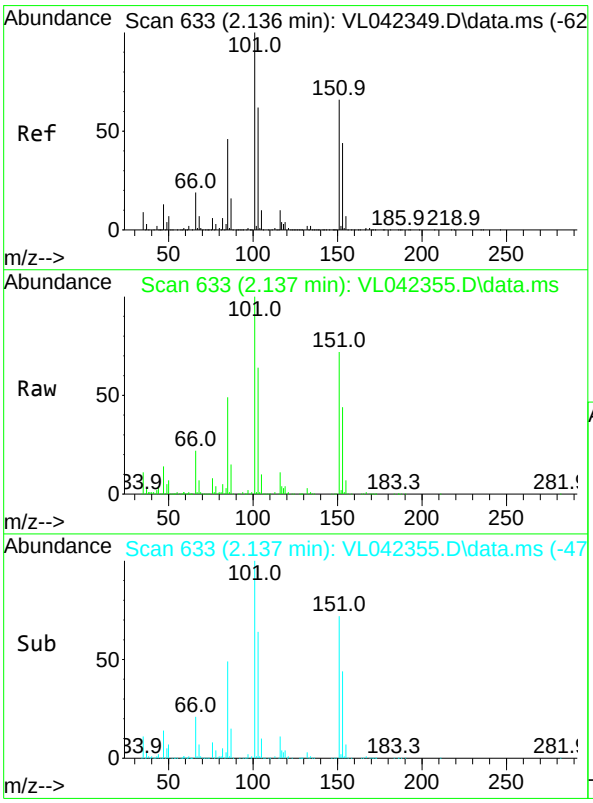
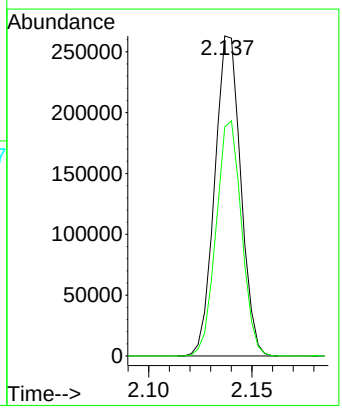


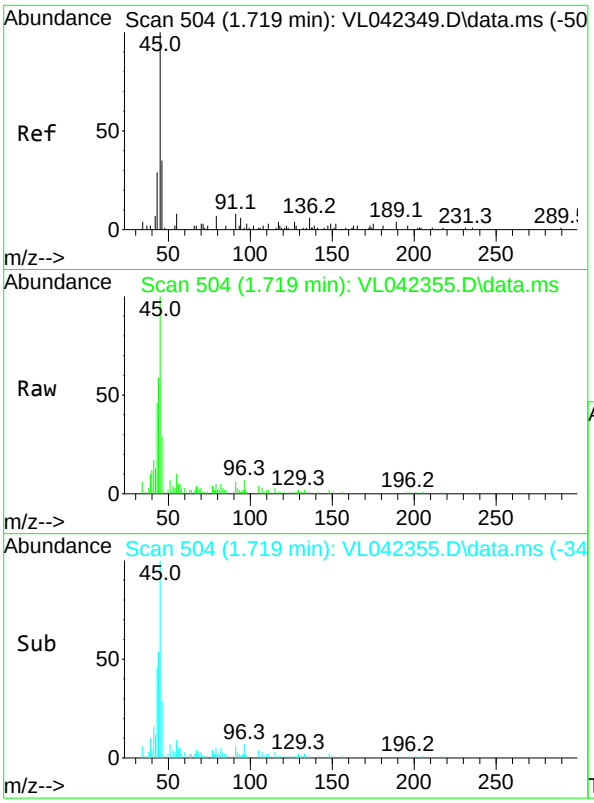


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.447 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:101 Resp: 230366

Ion	Ratio	Lower	Upper
101	100		
151	71.8	57.0	85.6

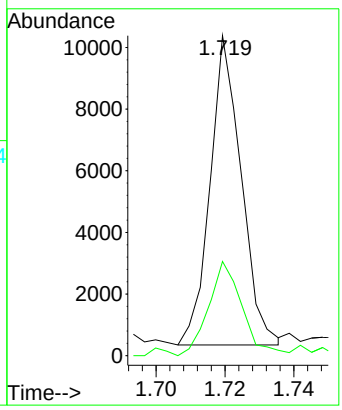




#13
Ethanol
Concen: 8.702 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 45 Resp: 632

Ion	Ratio	Lower	Upper
45	100		
46	37.6	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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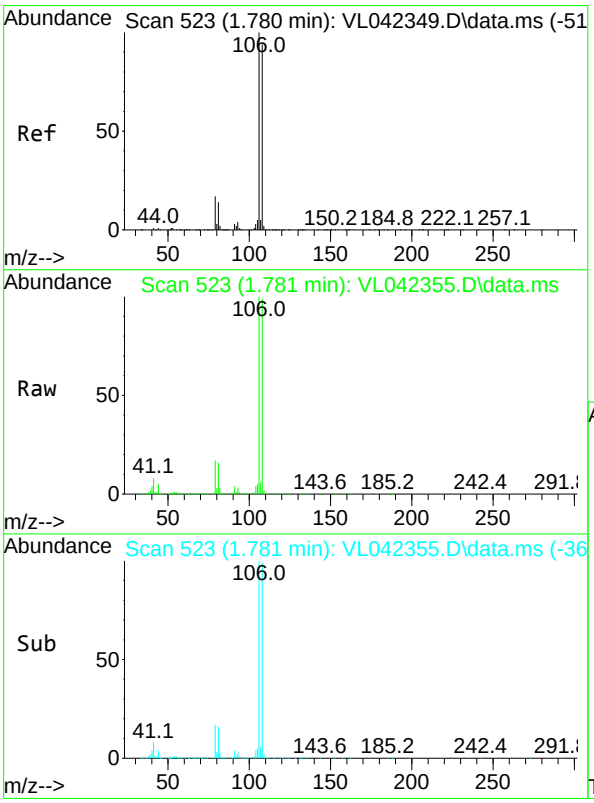
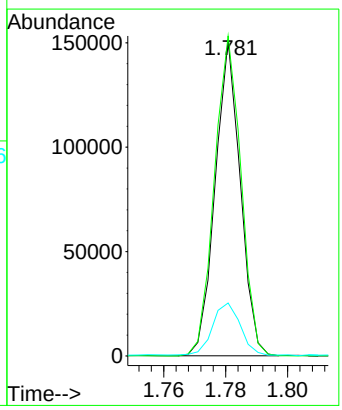
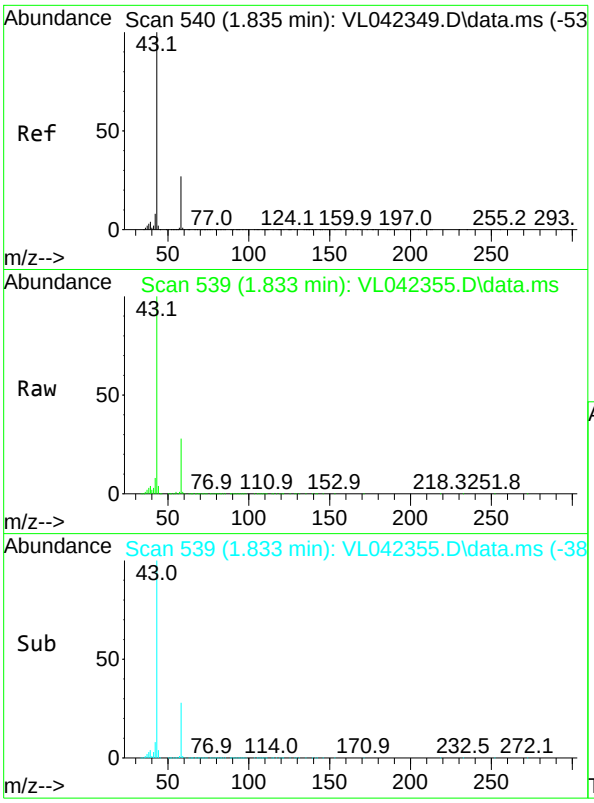


#14
Bromoethene
Concen: 14.117 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:108 Resp: 84851

Ion	Ratio	Lower	Upper
108	100		
106	107.5	85.9	128.9
79	19.3	13.9	20.9

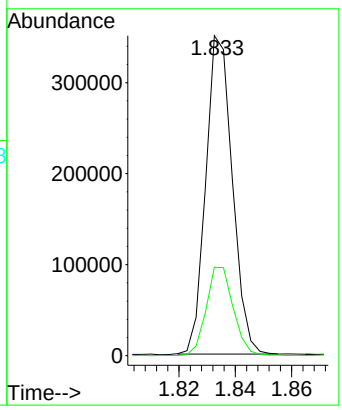




#15
Acetone
Concen: 12.056 ppbv
RT: 1.833 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 22908

Ion	Ratio	Lower	Upper
43	100		
58	28.4	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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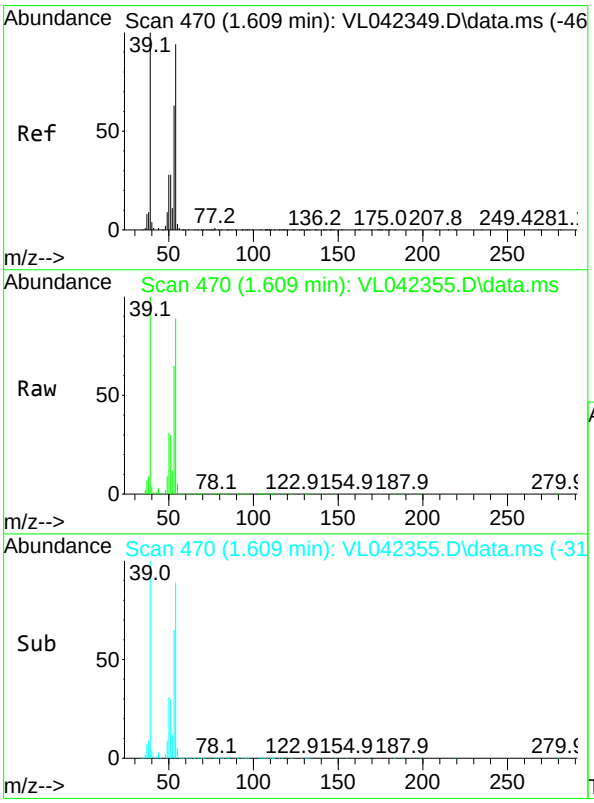
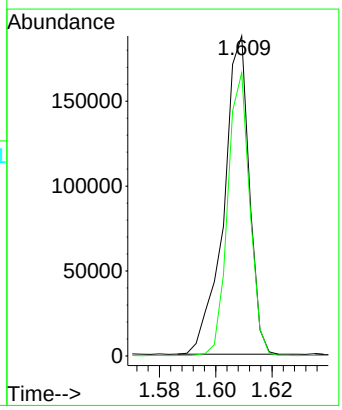
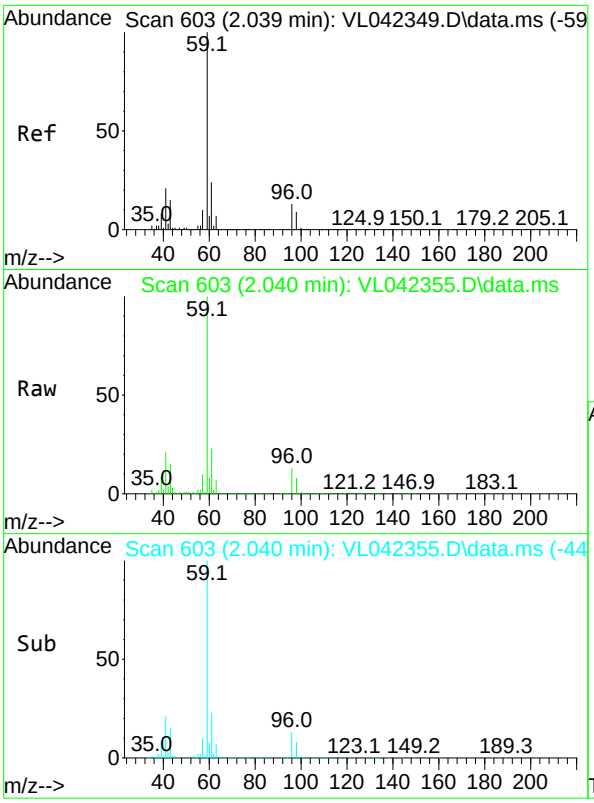


#16
1,3-Butadiene
Concen: 13.224 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 39 Resp: 117997

Ion	Ratio	Lower	Upper
39	100		
54	77.2	64.9	97.3

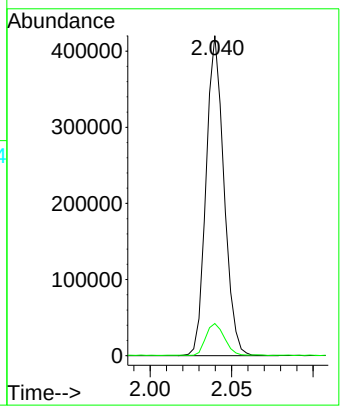




#17
tert-Butyl alcohol
Concen: 13.615 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 59 Resp: 32060

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.7	13.1



Instrument :
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ClientSampleId :
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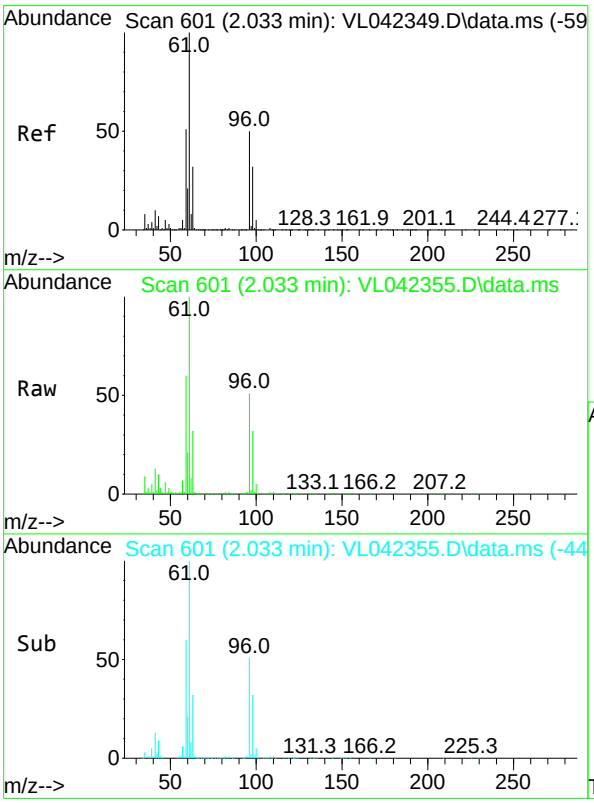
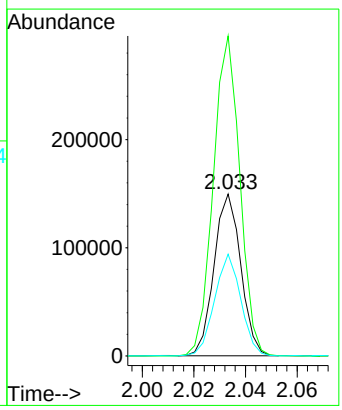
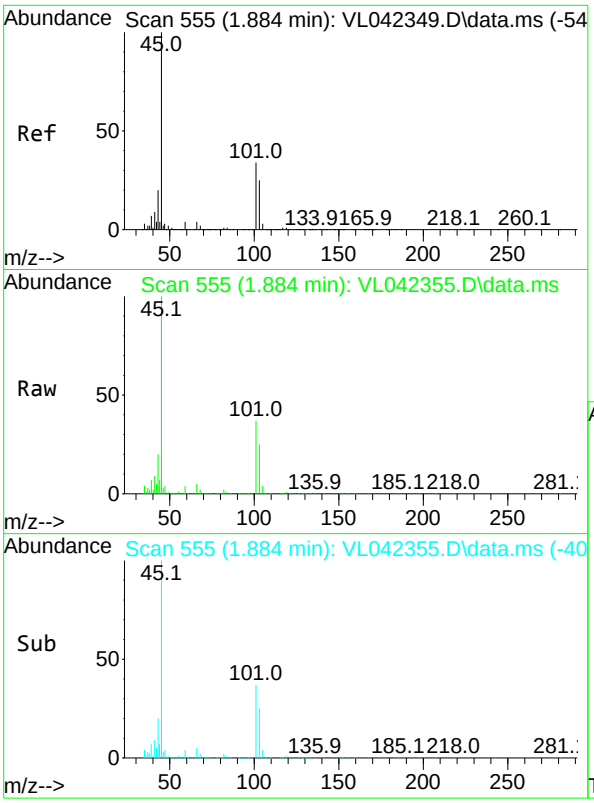


#18
1,1-Dichloroethene
Concen: 14.045 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 96 Resp: 107666

Ion	Ratio	Lower	Upper
96	100		
61	197.8	160.2	240.2
98	62.9	51.0	76.4

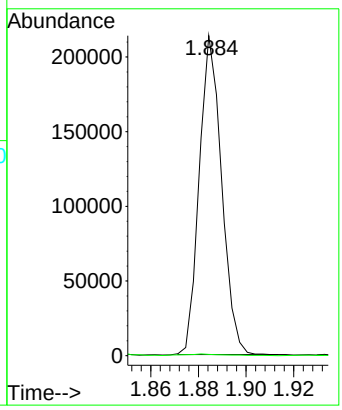




#19
Isopropyl Alcohol
Concen: 13.169 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 45 Resp: 13900

Ion	Ratio	Lower	Upper
45	100		
58	46.9	34.5	51.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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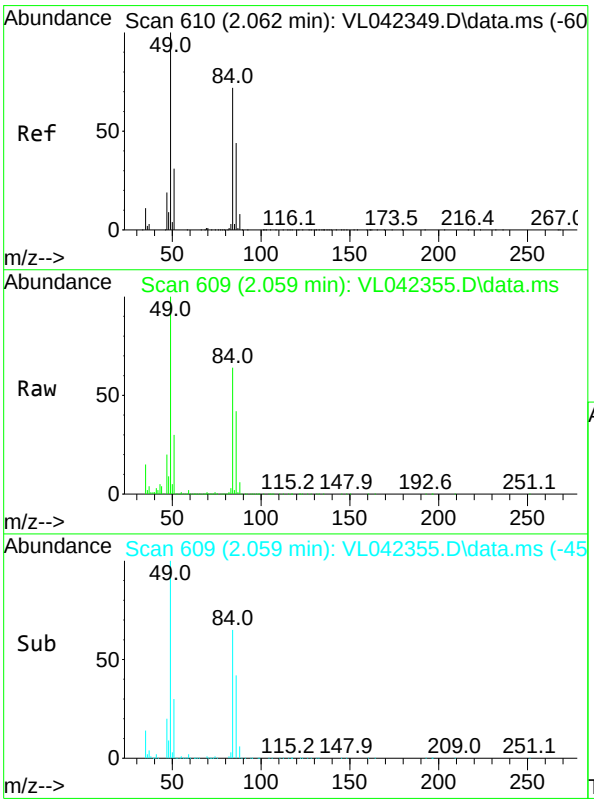
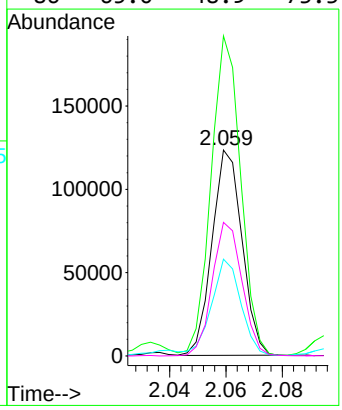
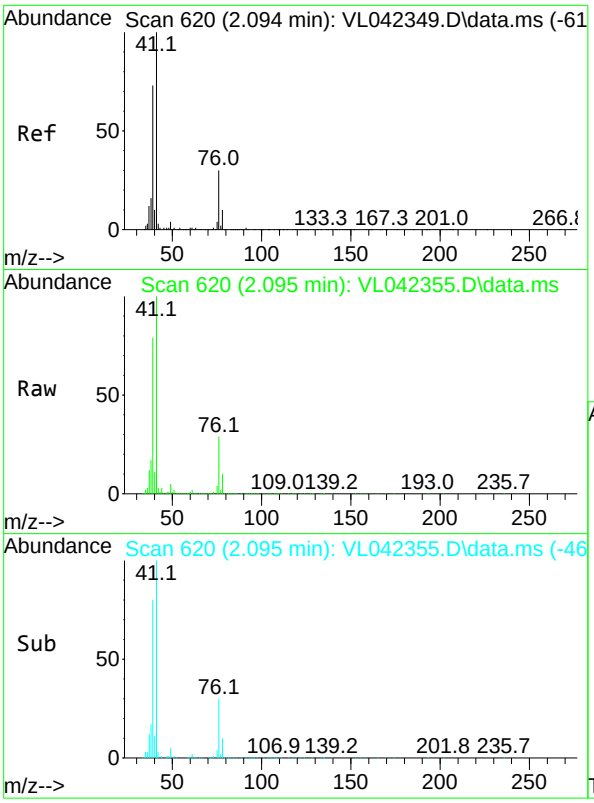


#20
Methylene Chloride
Concen: 12.241 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 84 Resp: 91093

Ion	Ratio	Lower	Upper
84	100		
49	155.7	111.6	167.4
51	46.8	35.1	52.7
86	65.0	48.9	73.3





#21
Allyl Chloride
Concen: 14.329 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 41 Resp: 18799

Ion	Ratio	Lower	Upper
41	100		
76	29.3	24.8	37.2
39	75.2	60.6	90.8

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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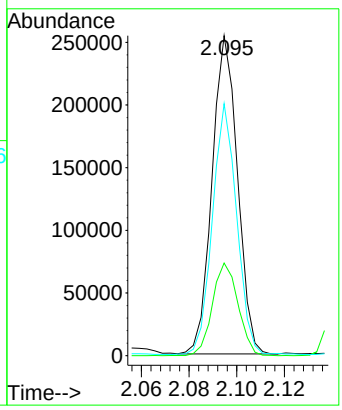
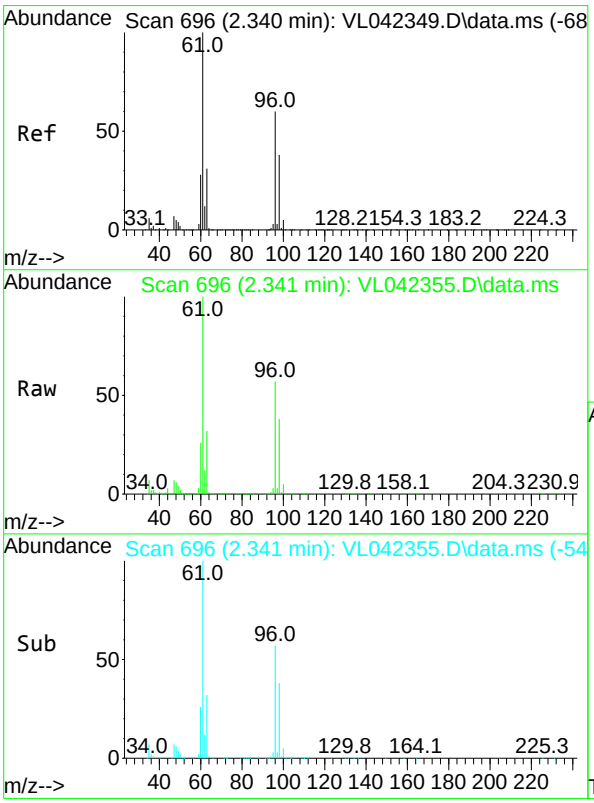
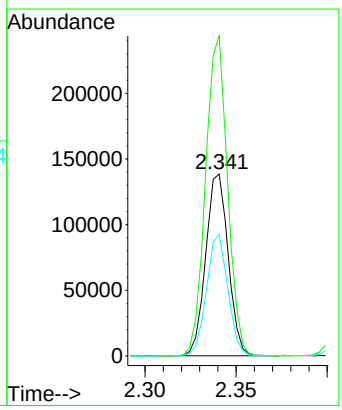


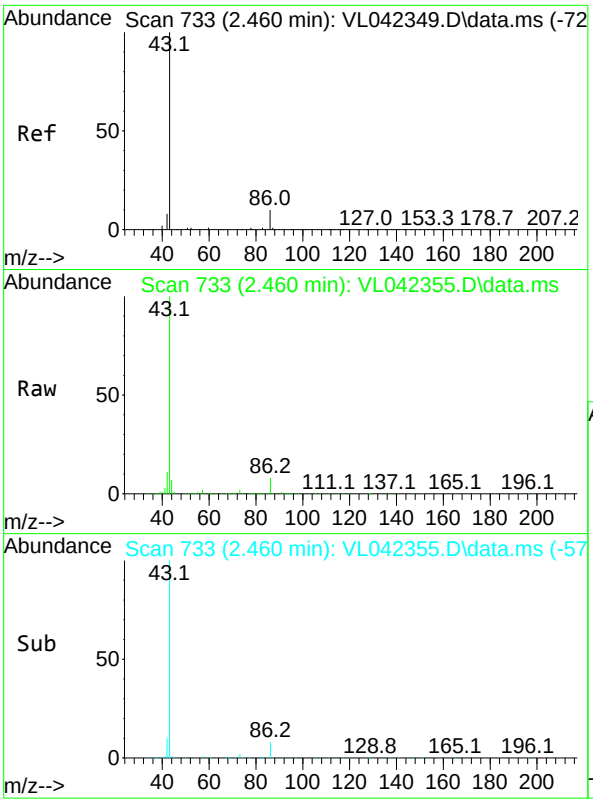


#22
trans-1,2-Dichloroethene
Concen: 13.970 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 96 Resp: 118492

Ion	Ratio	Lower	Upper
96	100		
61	176.1	133.7	200.5
98	66.8	50.3	75.5

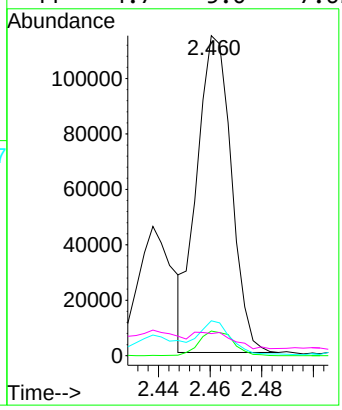




#23
Vinyl Acetate
Concen: 13.799 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 10613

Ion	Ratio	Lower	Upper
43	100		
86	7.8	6.5	9.7
42	10.4	7.8	11.8
44	4.7	5.0	7.6#



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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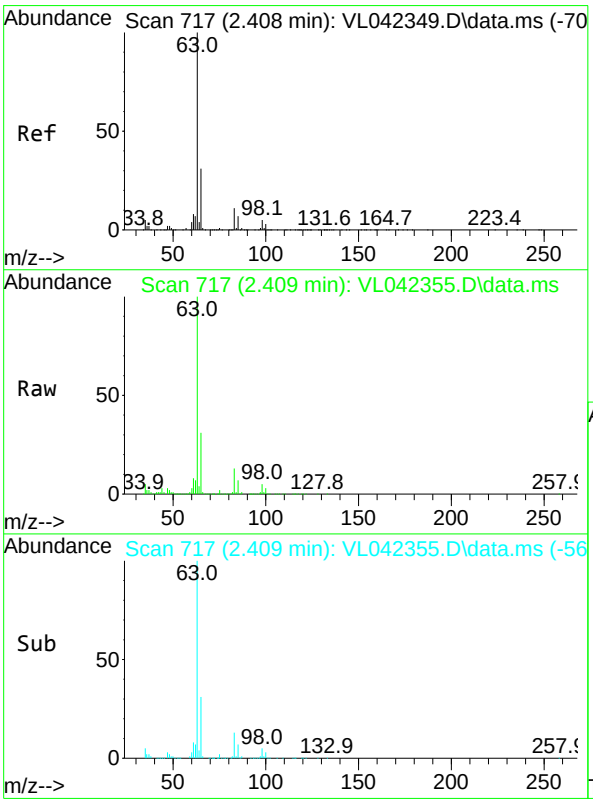
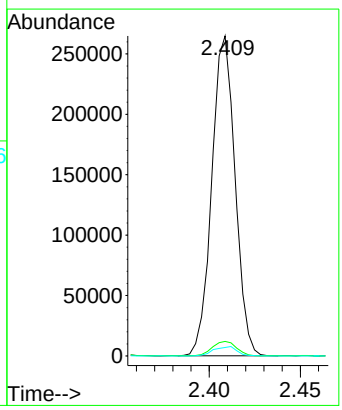
Supervised By :Mahesh Dadoda 04/18/2025

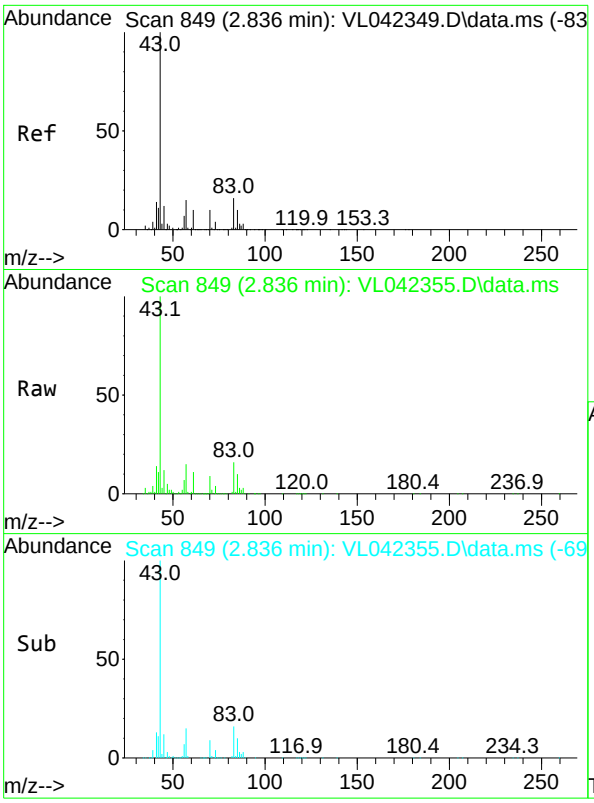


#24
1,1-Dichloroethane
Concen: 14.615 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 63 Resp: 235466

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	2.6	1.6	4.8

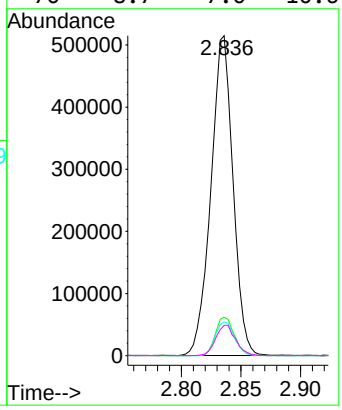




#25
Ethyl Acetate
Concen: 14.166 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 66364

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.2	7.3	10.9
70	8.7	7.0	10.6



Instrument :
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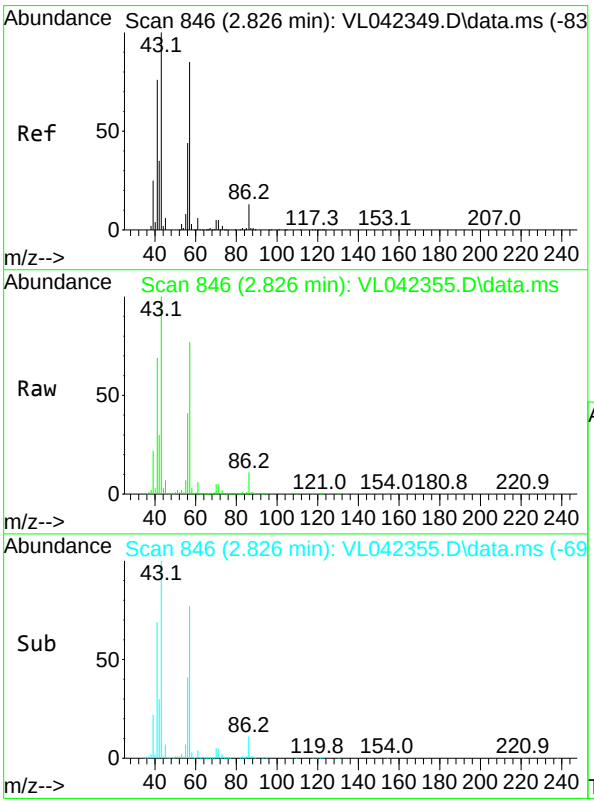
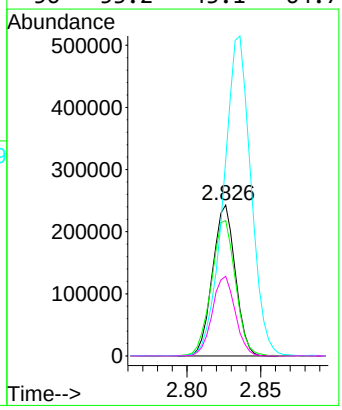
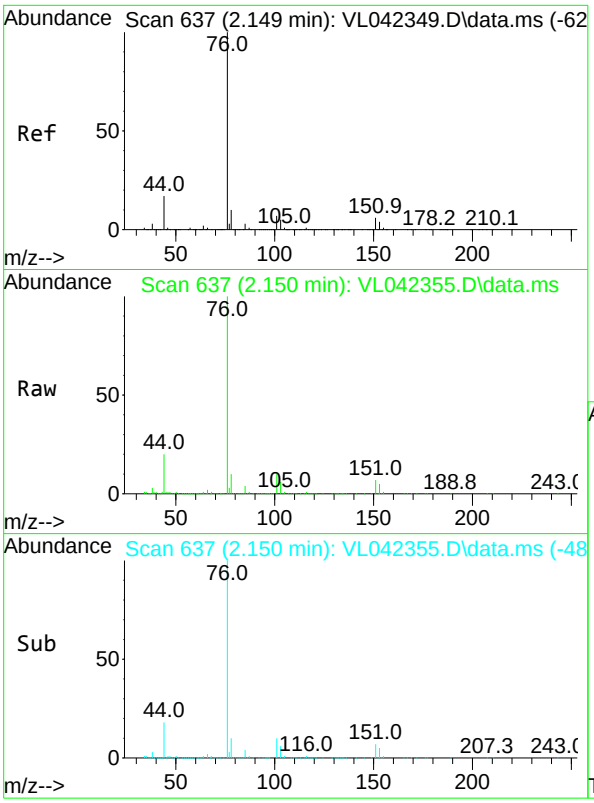


#26
Hexane
Concen: 13.765 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 57 Resp: 260975

Ion	Ratio	Lower	Upper
57	100		
41	95.3	77.9	116.9
43	254.5	208.4	312.6
56	53.2	43.1	64.7

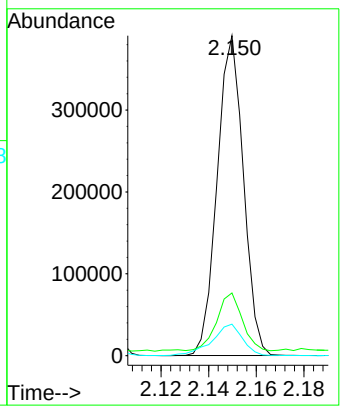




#27
Carbon Disulfide
Concen: 14.734 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 76 Resp: 29909

Ion	Ratio	Lower	Upper
76	100		
44	17.3	15.5	23.3
78	11.4	9.3	13.9



Instrument :
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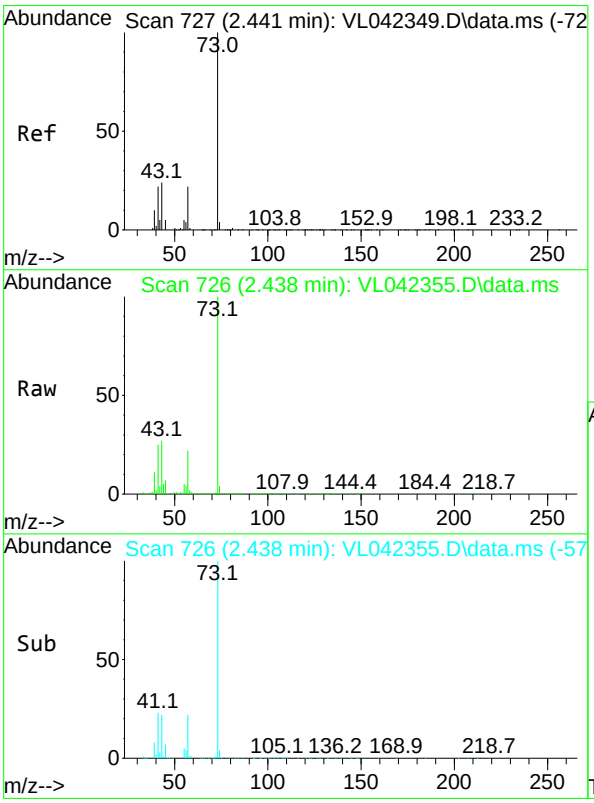
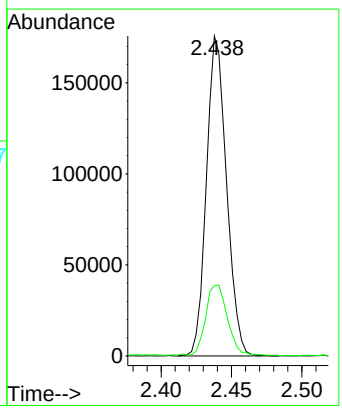
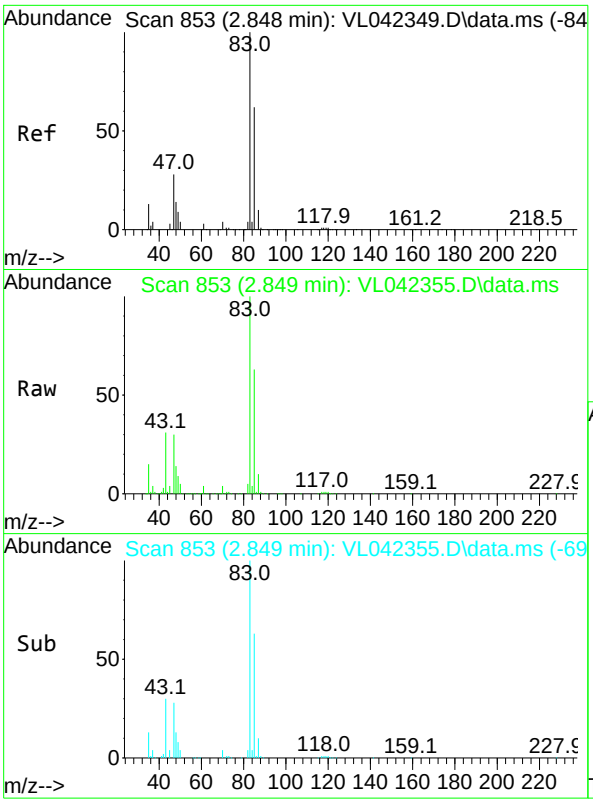


#28
Methyl tert-Butyl Ether
Concen: 14.076 ppbv
RT: 2.438 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 73 Resp: 174855

Ion	Ratio	Lower	Upper
73	100		
57	24.3	21.3	31.9

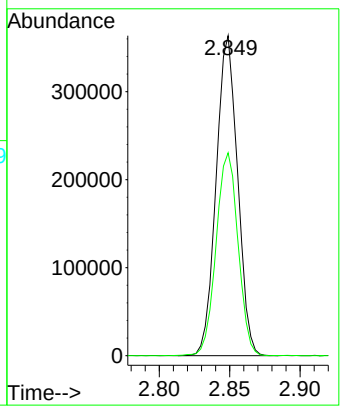




#29
Chloroform
Concen: 14.393 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 83 Resp: 38568

Ion	Ratio	Lower	Upper
83	100		
85	63.4	50.0	75.0



Instrument :
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ClientSampleId :
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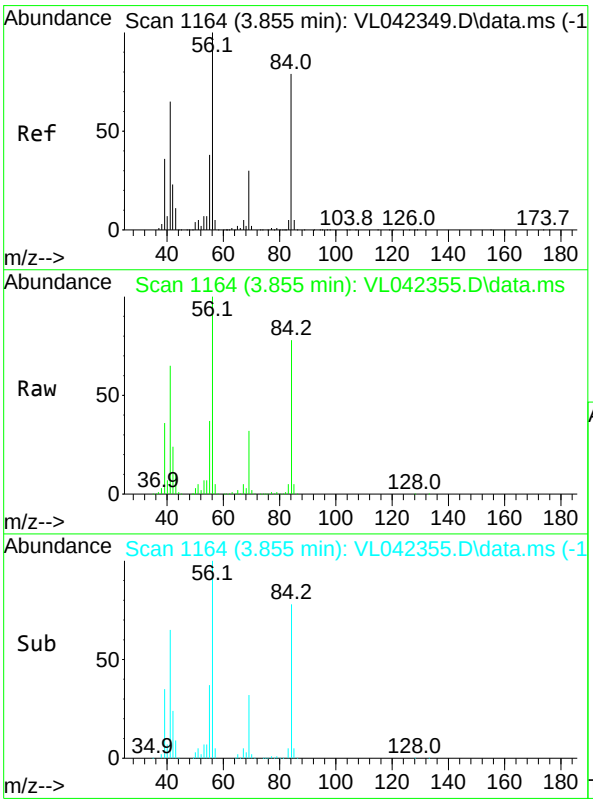
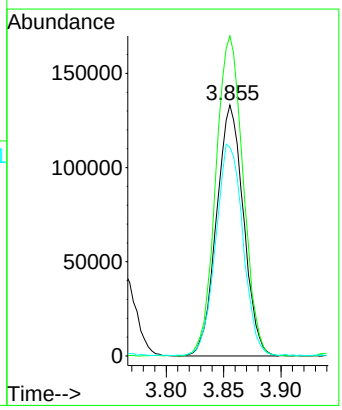
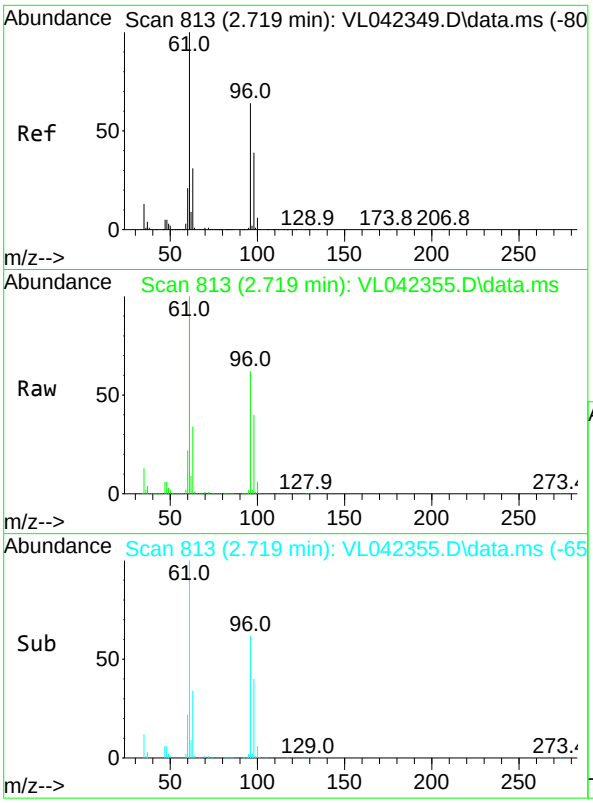


#30
Cyclohexane
Concen: 14.238 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 84 Resp: 217375

Ion	Ratio	Lower	Upper
84	100		
56	129.4	101.0	151.4
41	85.3	67.4	101.0

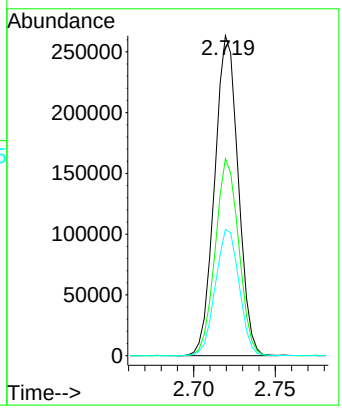




#31
cis-1,2-Dichloroethene
Concen: 14.700 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 61 Resp: 26497

Ion	Ratio	Lower	Upper
61	100		
96	61.6	50.8	76.2
98	39.5	30.9	46.3



Instrument :
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ClientSampleId :
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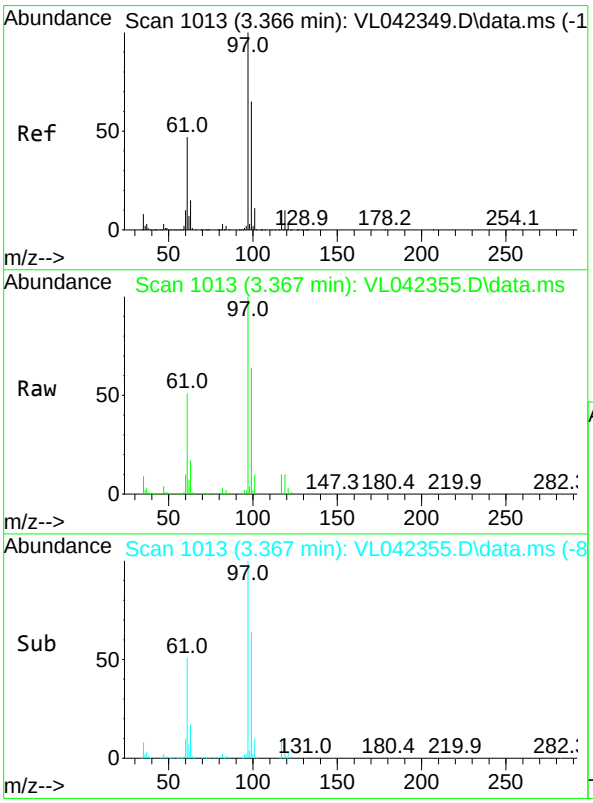
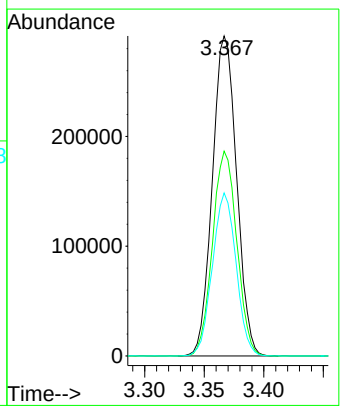
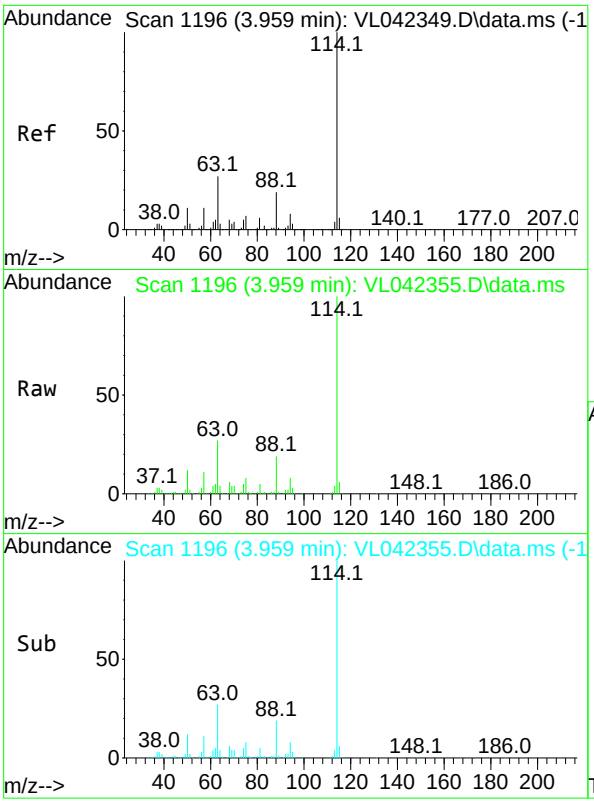


#32
1,1,1-Trichloroethane
Concen: 14.357 ppbv
RT: 3.367 min Scan# 1013
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 97 Resp: 412537

Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.0	76.4
61	49.8	38.8	58.2

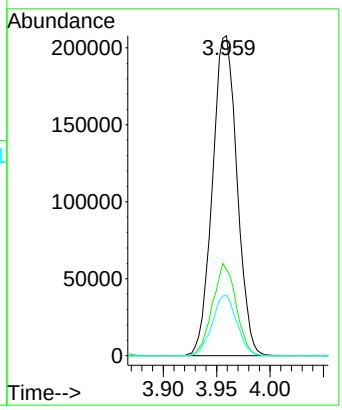




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:114 Resp: 33208

Ion	Ratio	Lower	Upper
114	100		
63	27.7	21.8	32.6
88	18.9	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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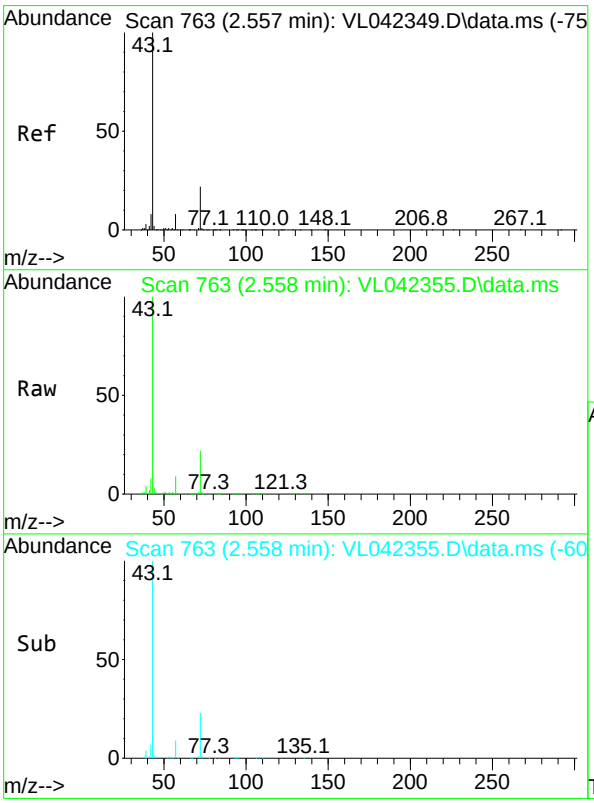
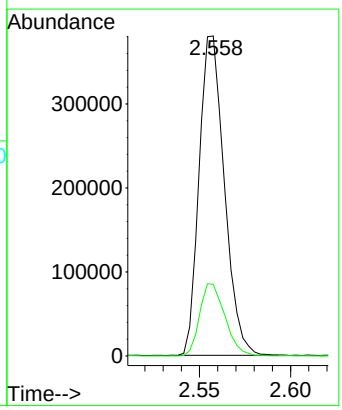
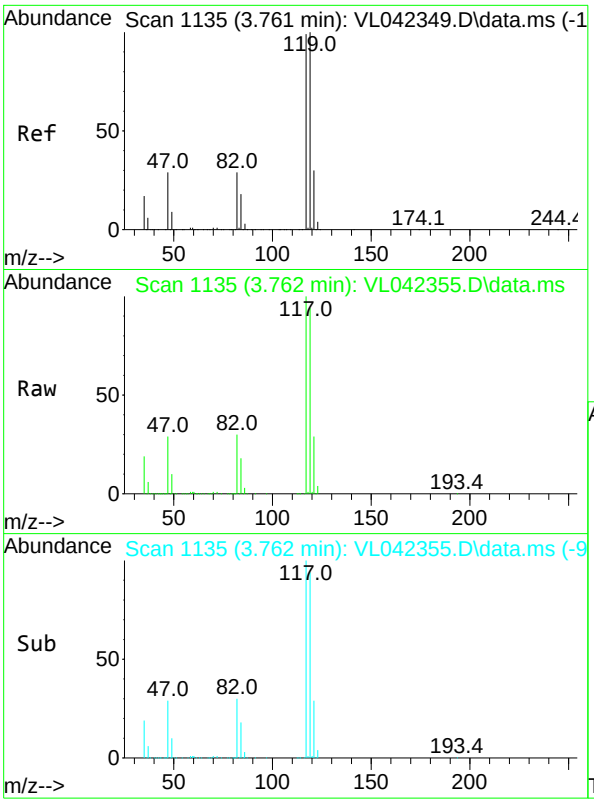


#34
2-Butanone
Concen: 13.986 ppbv
RT: 2.558 min Scan# 763
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 367315

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2

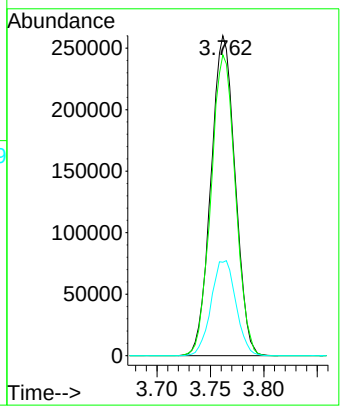




#35
Carbon Tetrachloride
Concen: 13.639 ppbv
RT: 3.762 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:117 Resp: 40991

Ion	Ratio	Lower	Upper
117	100		
119	94.0	80.5	120.7
121	29.2	24.2	36.2



Instrument :
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ClientSampleId :
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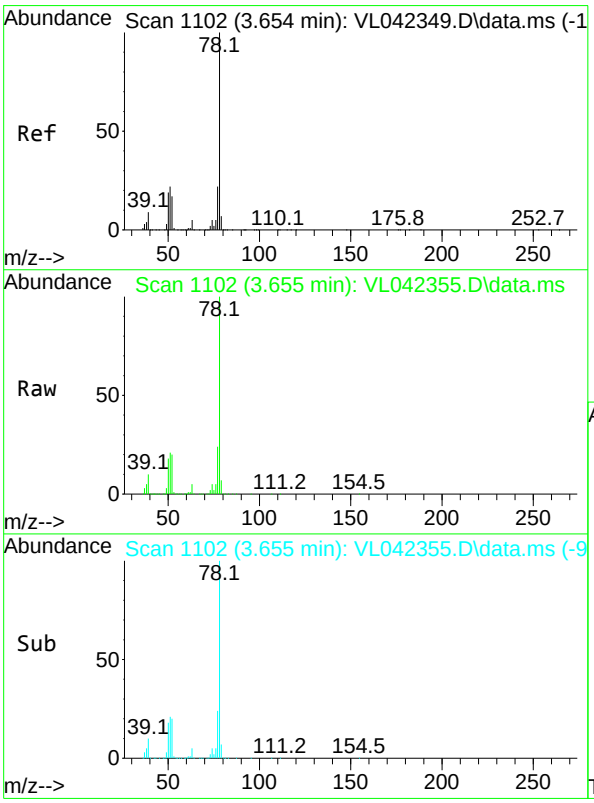
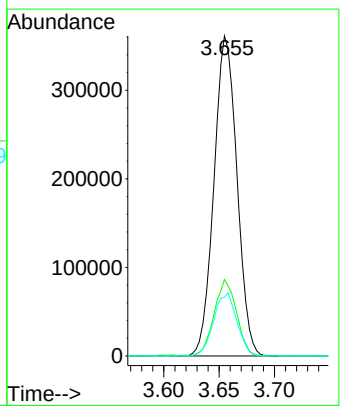
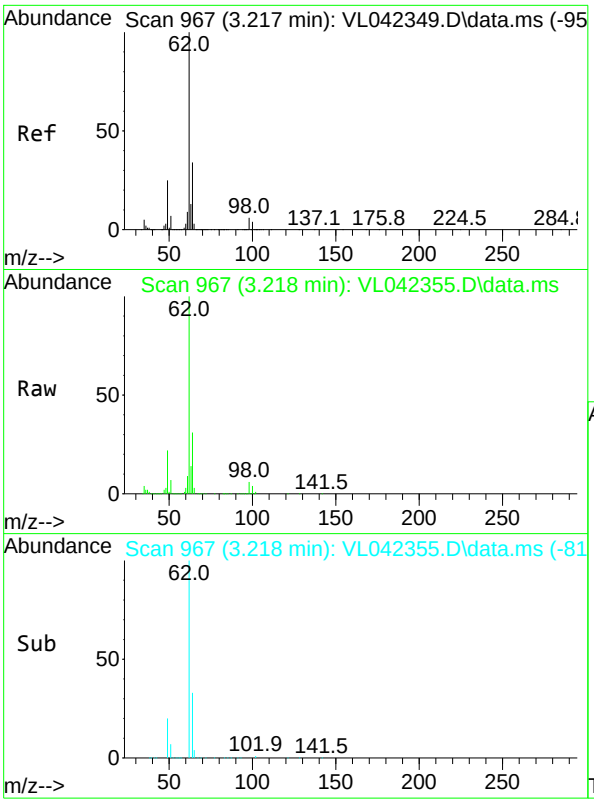


#36
Benzene
Concen: 14.578 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 78 Resp: 522156

Ion	Ratio	Lower	Upper
78	100		
77	23.8	17.4	26.0
50	18.3	15.5	23.3

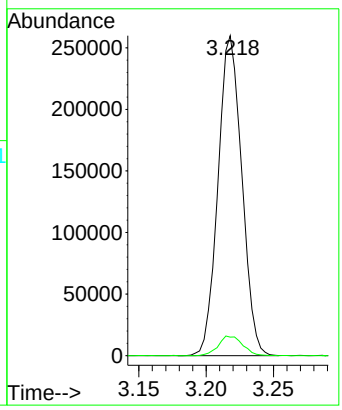




#37
1,2-Dichloroethane
Concen: 14.863 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 62 Resp: 31951

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.1	7.7



Instrument :
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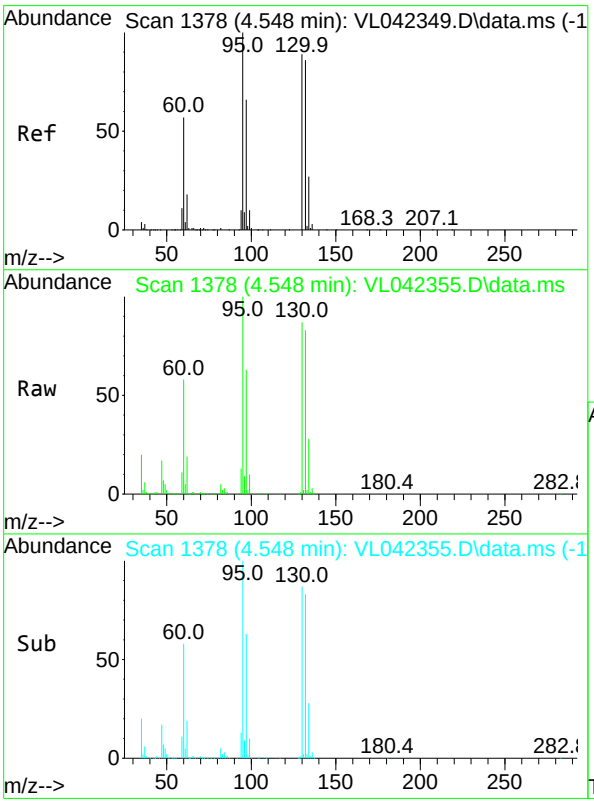
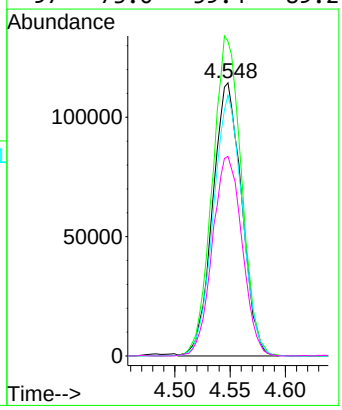
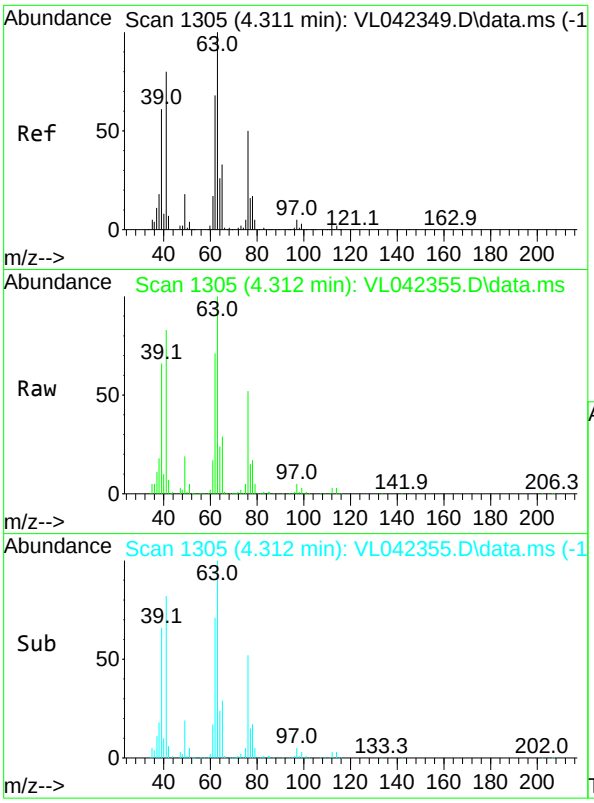


#38
Trichloroethene
Concen: 13.278 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:130 Resp: 208508

Ion	Ratio	Lower	Upper
130	100		
95	115.0	89.8	134.6
132	95.3	77.7	116.5
97	73.0	59.4	89.2

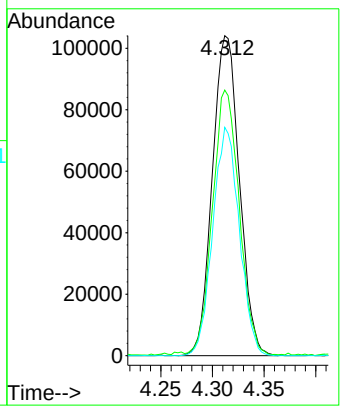




#39
1,2-Dichloropropane
Concen: 14.201 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 63 Resp: 18969

Ion	Ratio	Lower	Upper
63	100		
41	82.7	64.2	96.2
62	71.4	54.3	81.5



Instrument :
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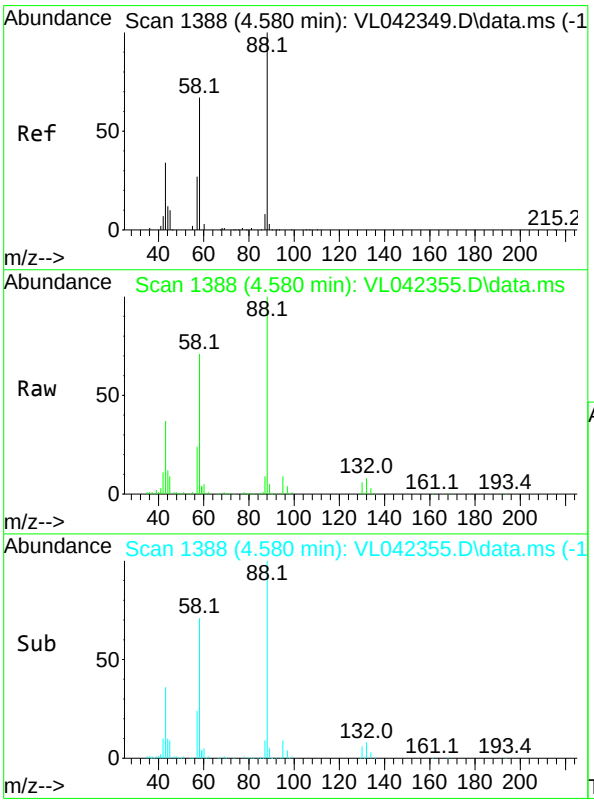
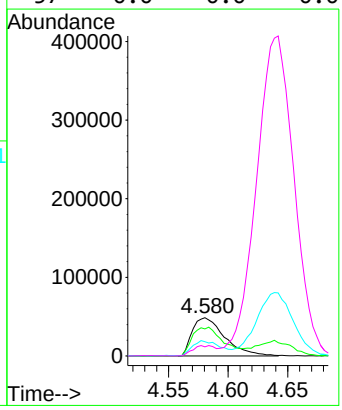
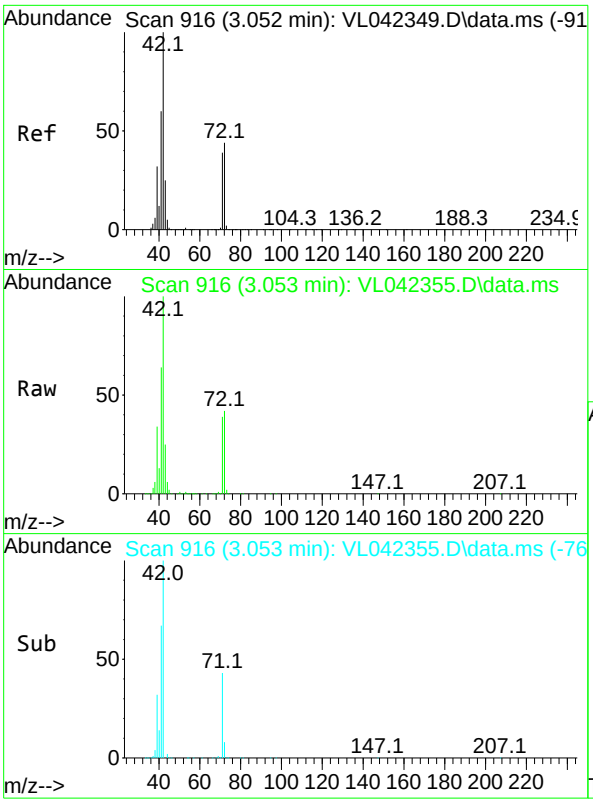


#40
1,4-Dioxane
Concen: 12.733 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 88 Resp: 92114

Ion	Ratio	Lower	Upper
88	100		
58	75.2	61.4	92.0
43	36.8	23.2	34.8#
57	0.0	0.0	0.0

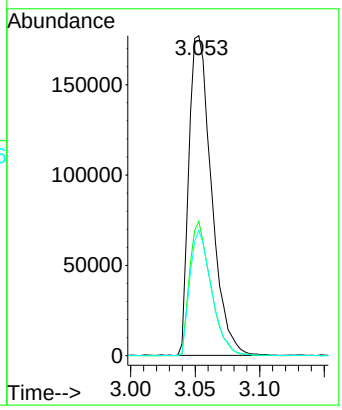




#41
Tetrahydrofuran
Concen: 14.166 ppbv
RT: 3.053 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 42 Resp: 21494

Ion	Ratio	Lower	Upper
42	100		
72	39.7	32.3	48.5
71	37.9	31.4	47.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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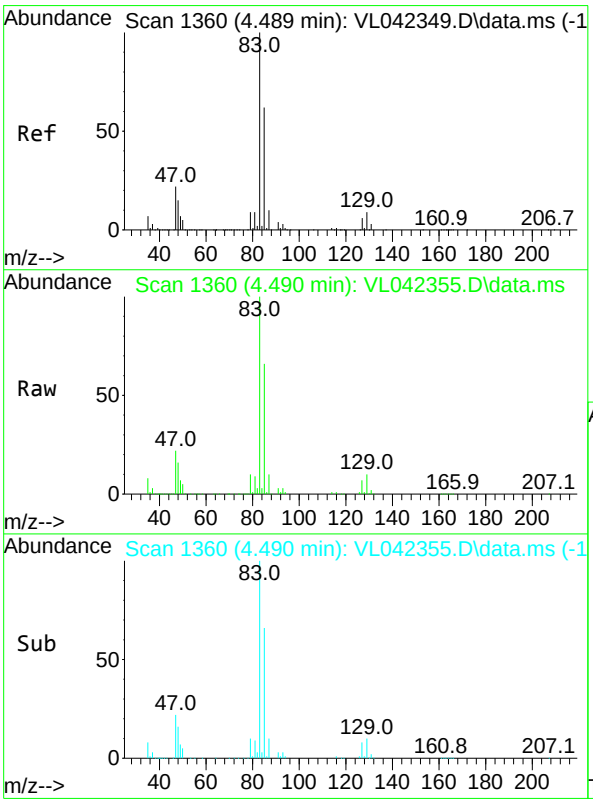
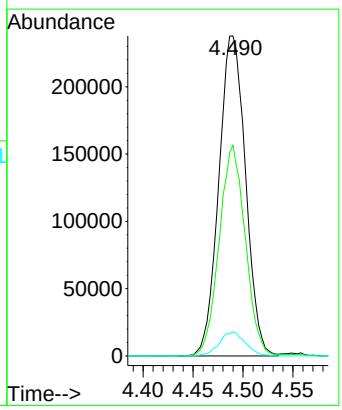
Supervised By :Mahesh Dadoda 04/18/2025

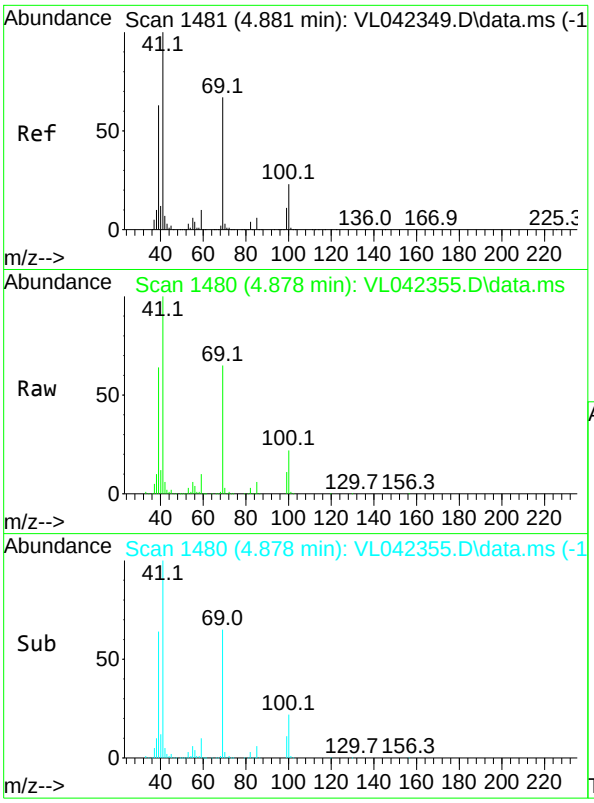


#42
Bromodichloromethane
Concen: 14.798 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 83 Resp: 442735

Ion	Ratio	Lower	Upper
83	100		
85	65.9	49.7	74.5
127	7.5	5.1	7.7

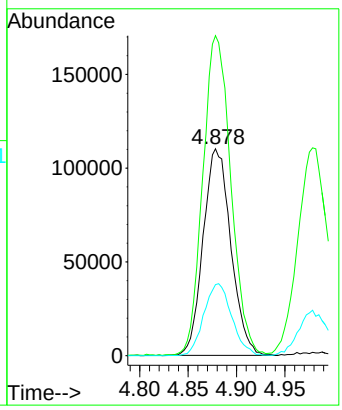




#43
Methyl Methacrylate
Concen: 13.670 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 69 Resp: 21975

Ion	Ratio	Lower	Upper
69	100		
41	156.6	118.6	177.8
100	35.2	28.2	42.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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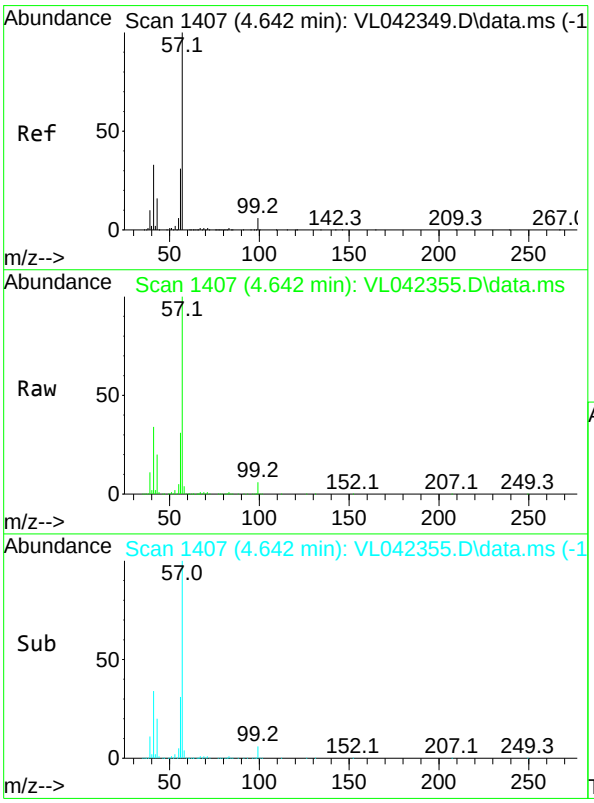
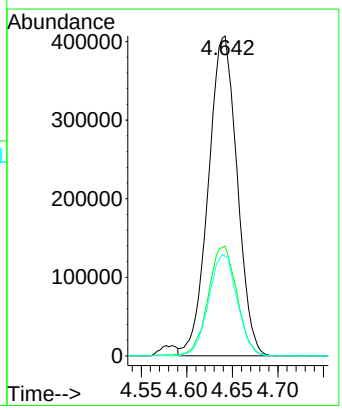
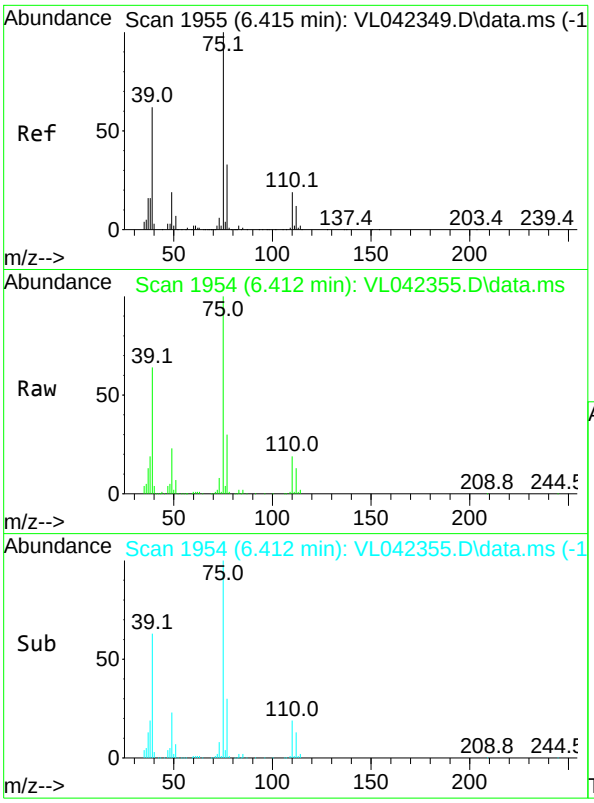


#44
2,2,4-Trimethylpentane
Concen: 14.425 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 57 Resp: 893529

Ion	Ratio	Lower	Upper
57	100		
41	34.4	27.2	40.8
56	31.6	25.7	38.5

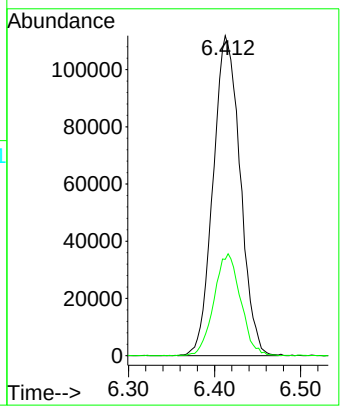




#45
t-1,3-Dichloropropene
Concen: 14.810 ppbv
RT: 6.412 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 75 Resp: 24447

Ion	Ratio	Lower	Upper
75	100		
77	30.1	27.0	40.6



Instrument :
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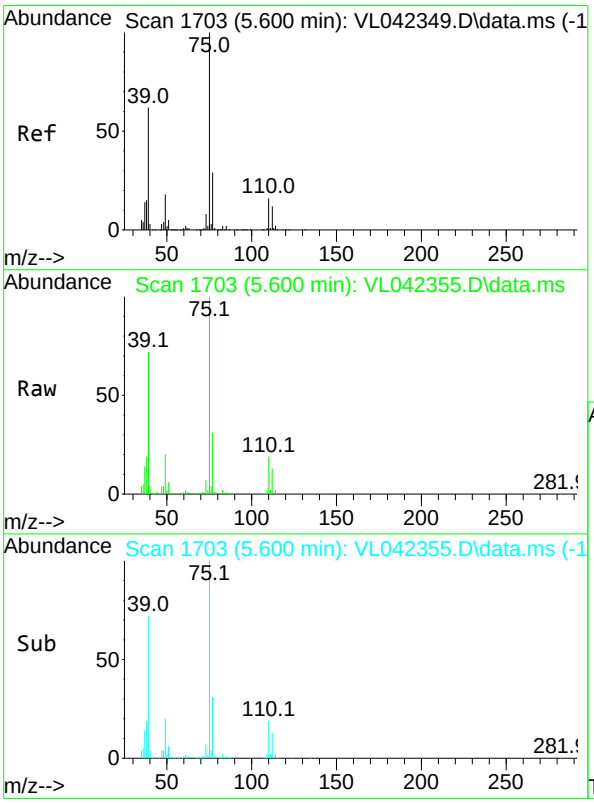
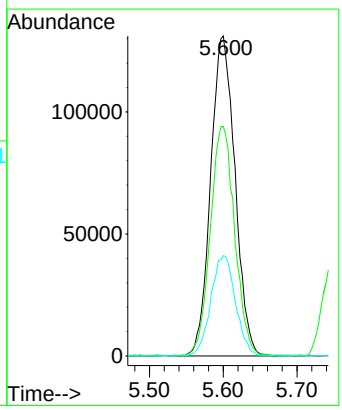
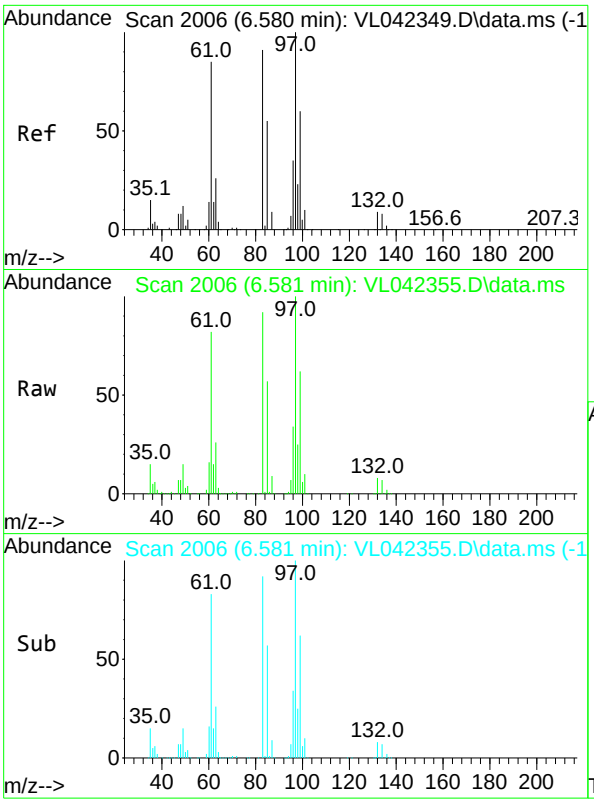


#46
cis-1,3-Dichloropropene
Concen: 14.878 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 75 Resp: 300145

Ion	Ratio	Lower	Upper
75	100		
39	71.6	50.0	75.0
77	31.3	23.0	34.6

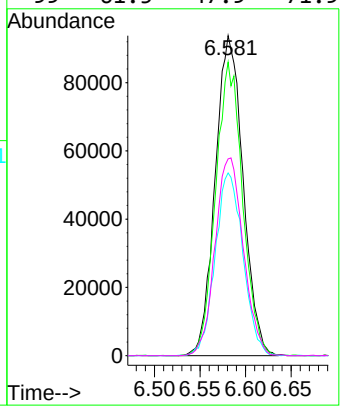




#47
1,1,2-Trichloroethane
Concen: 14.615 ppbv
RT: 6.581 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 97 Resp: 19887

Ion	Ratio	Lower	Upper
97	100		
83	91.7	72.8	109.2
85	57.0	44.2	66.4
99	61.5	47.9	71.9



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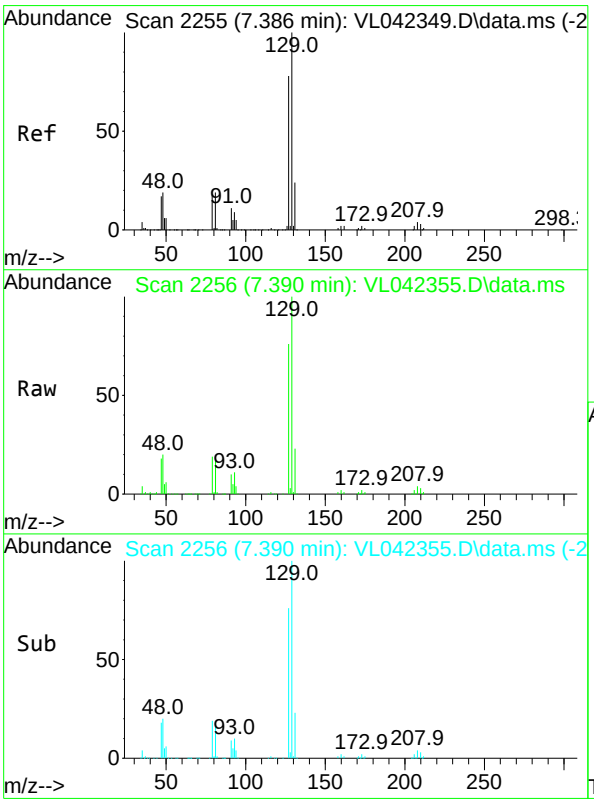
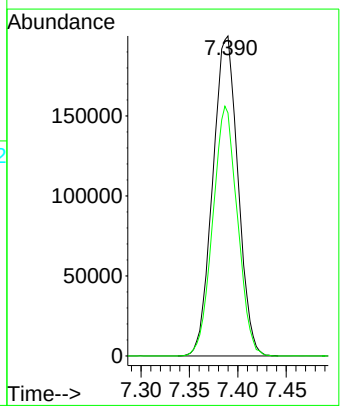
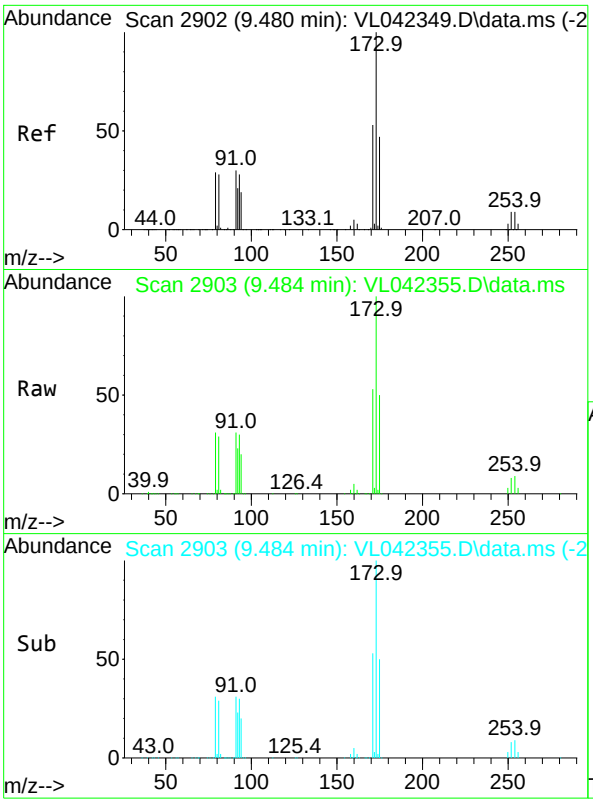


#48
Dibromochloromethane
Concen: 15.105 ppbv
RT: 7.390 min Scan# 2256
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:129 Resp: 362887

Ion	Ratio	Lower	Upper
129	100		
127	76.3	39.1	117.3

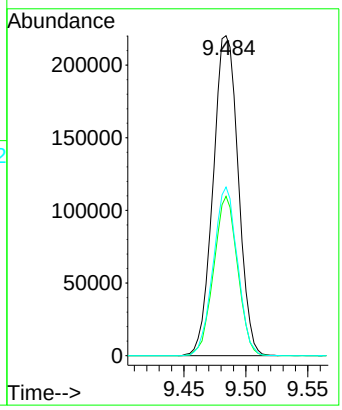




#49
Bromoform
Concen: 14.865 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:173 Resp: 31228

Ion	Ratio	Lower	Upper
173	100		
175	47.3	38.2	57.2
171	50.6	40.9	61.3



Instrument :
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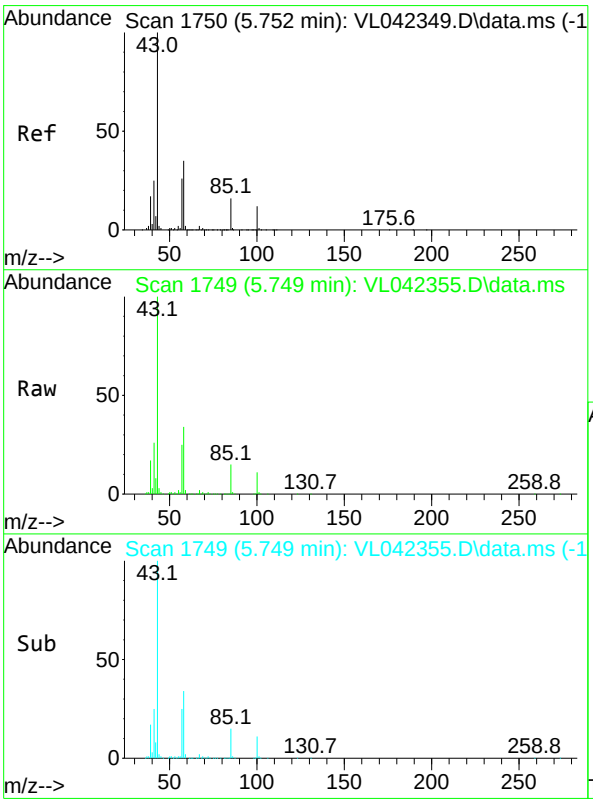
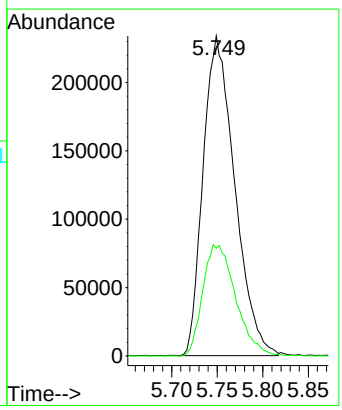
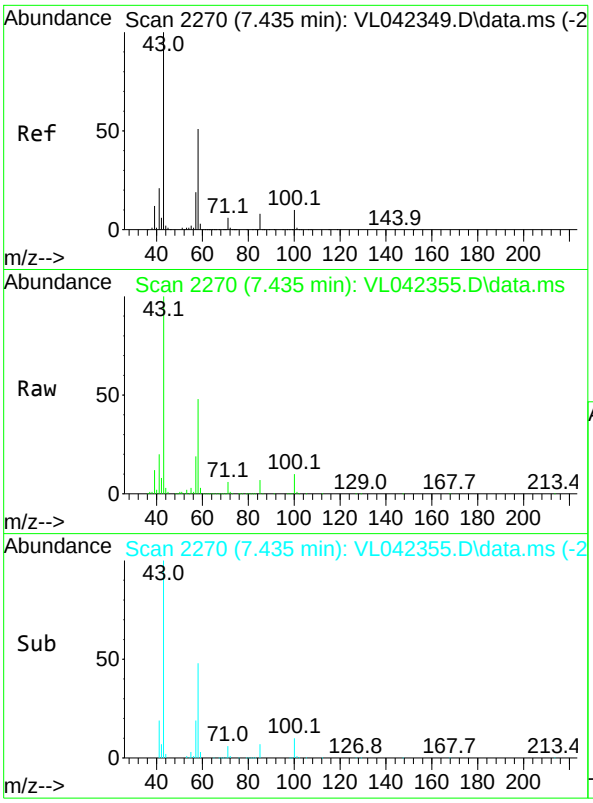


#50
4-Methyl-2-Pentanone
Concen: 12.889 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 563658

Ion	Ratio	Lower	Upper
43	100		
58	36.3	28.6	43.0

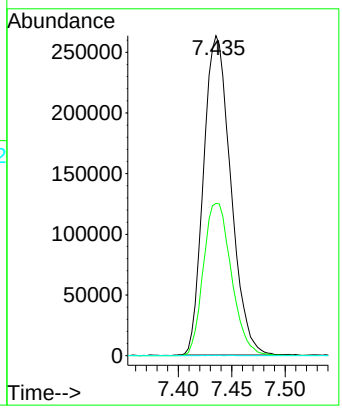




#51
2-Hexanone
Concen: 11.834 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 46700

Ion	Ratio	Lower	Upper
43	100		
58	49.2	40.2	60.4
98	0.0	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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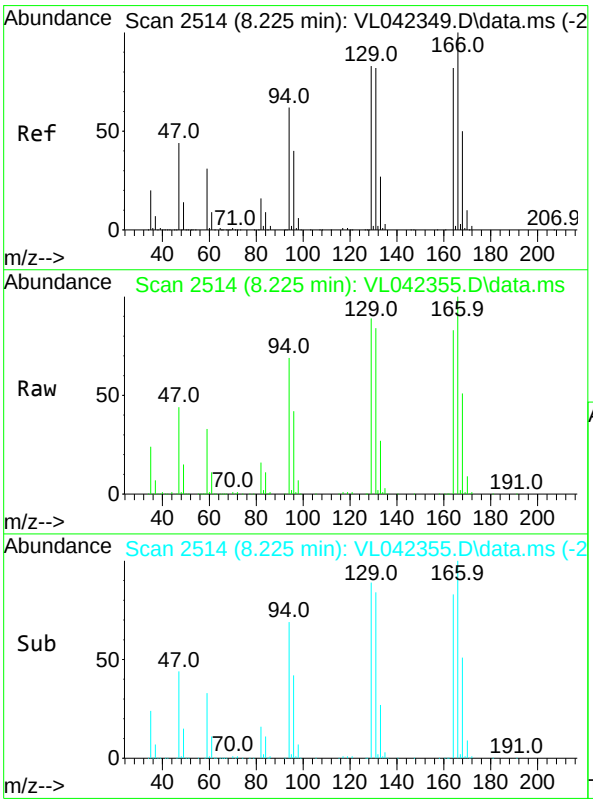
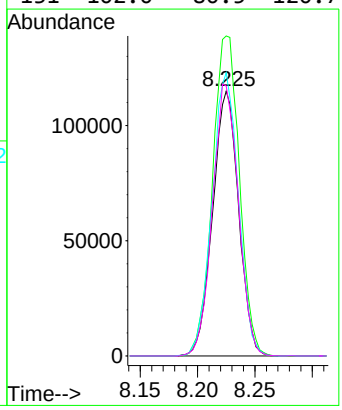
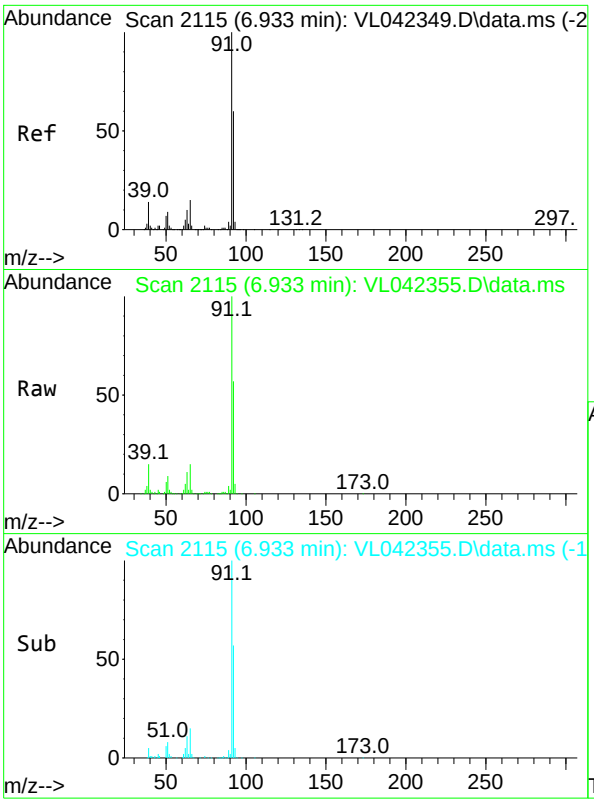


#52
Tetrachloroethene
Concen: 13.046 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:164 Resp: 180631

Ion	Ratio	Lower	Upper
164	100		
166	120.8	98.2	147.2
129	107.0	81.8	122.8
131	102.0	80.5	120.7

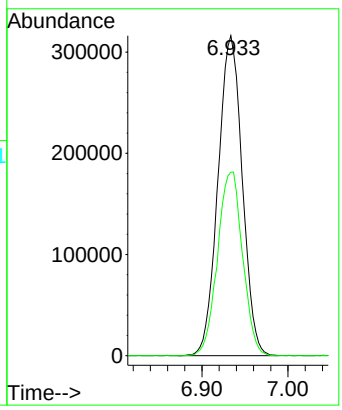




#53
Toluene
Concen: 14.411 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 61942

Ion	Ratio	Lower	Upper
91	100		
92	59.3	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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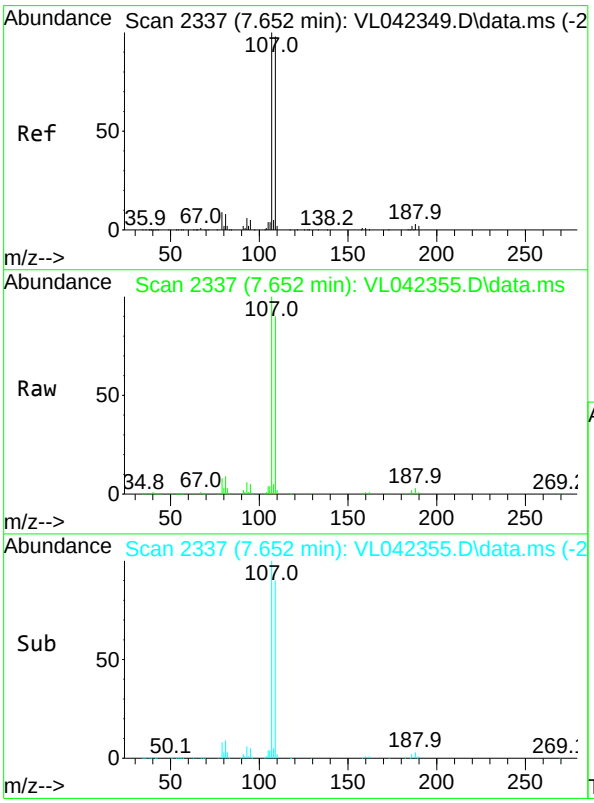
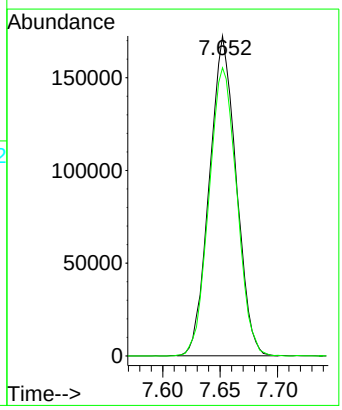
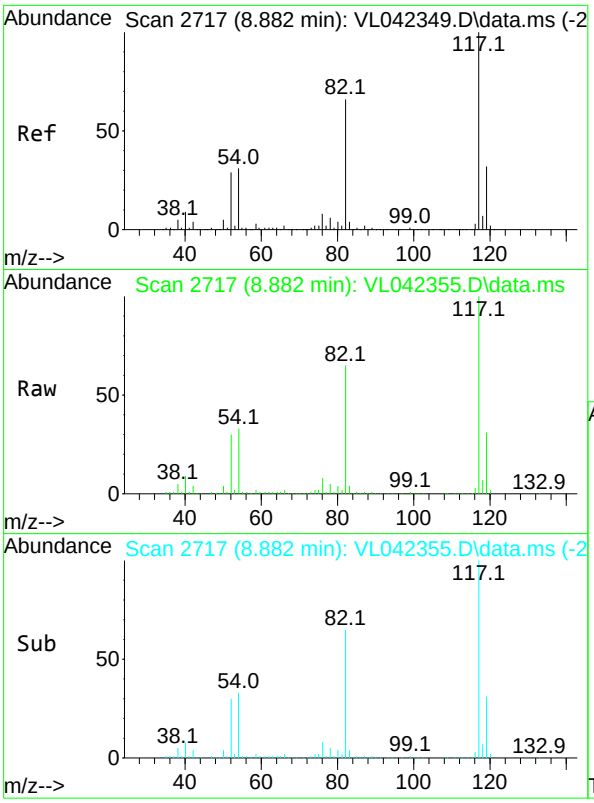


#54
1,2-Dibromoethane
Concen: 14.442 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:107 Resp: 280071

Ion	Ratio	Lower	Upper
107	100		
109	89.9	78.2	117.4

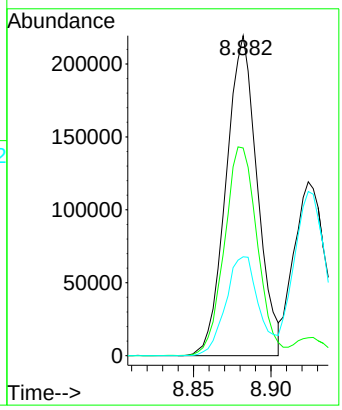




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:117 Resp: 30846

Ion	Ratio	Lower	Upper
117	100		
82	74.2	57.8	86.6
119	31.4	25.2	37.8



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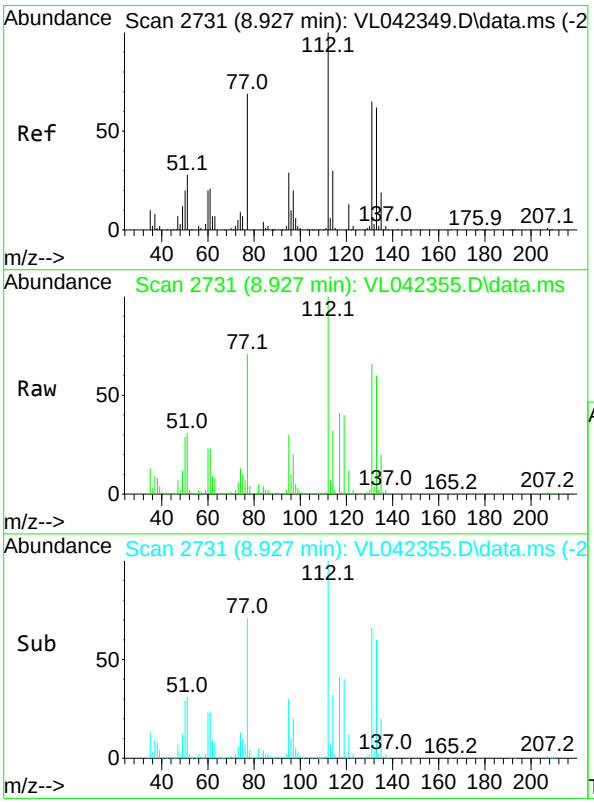
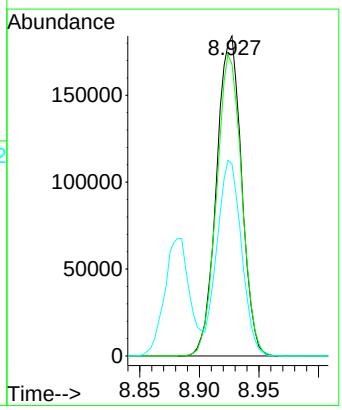
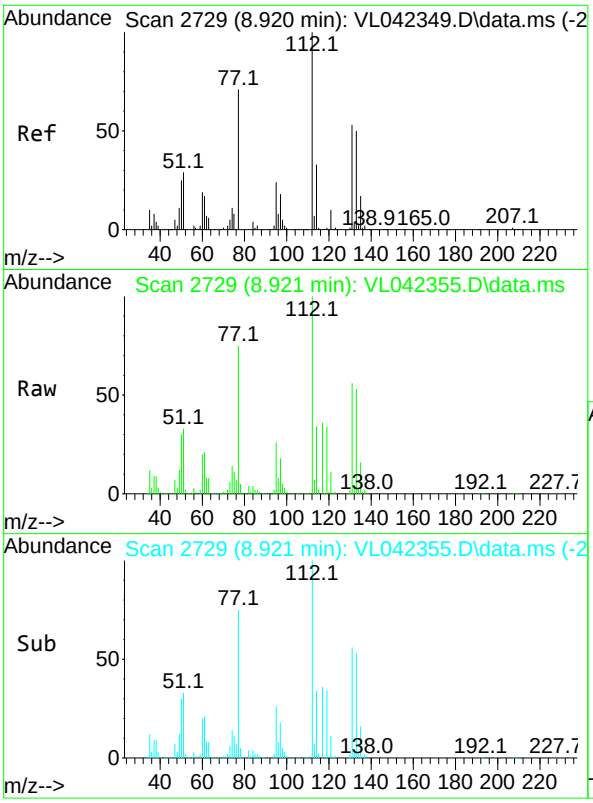


#56
1,1,1,2-Tetrachloroethane
Concen: 14.389 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:131 Resp: 268626

Ion	Ratio	Lower	Upper
131	100		
133	94.6	78.3	117.5
119	59.4	48.7	73.1





#57
Chlorobenzene
Concen: 14.151 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:112 Resp: 45401

Ion	Ratio	Lower	Upper
112	100		
77	75.3	57.8	86.6
114	33.9	29.3	35.9

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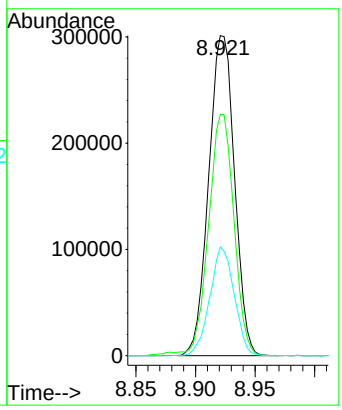
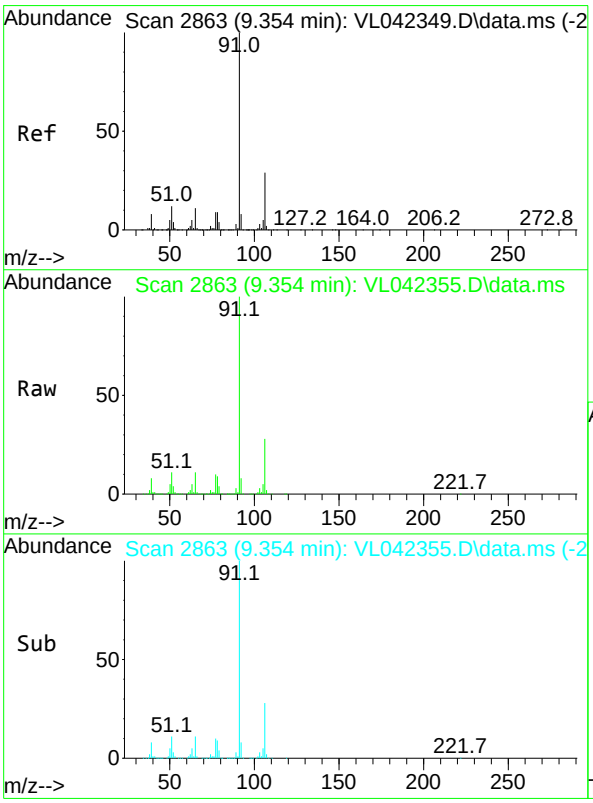
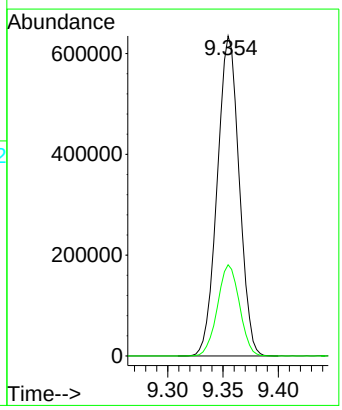


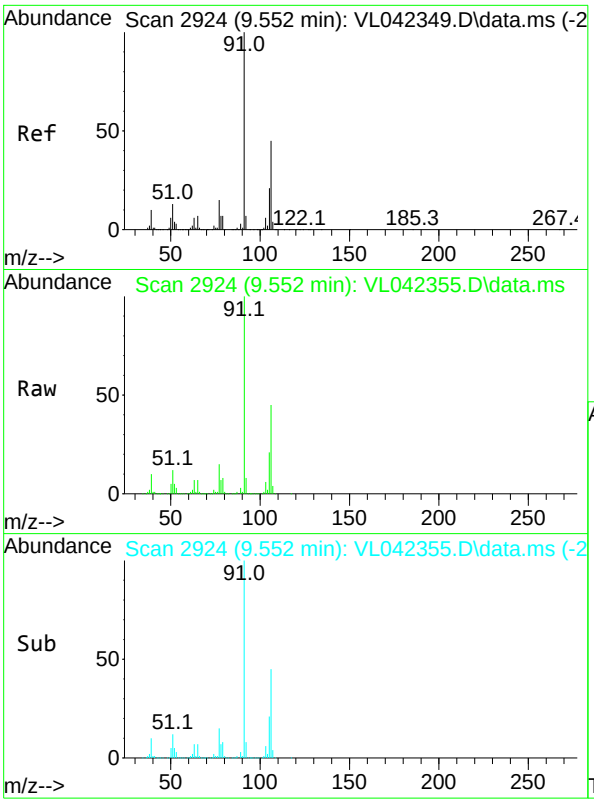


#58
Ethyl Benzene
Concen: 14.308 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 874424

Ion	Ratio	Lower	Upper
91	100		
106	28.5	23.0	34.4

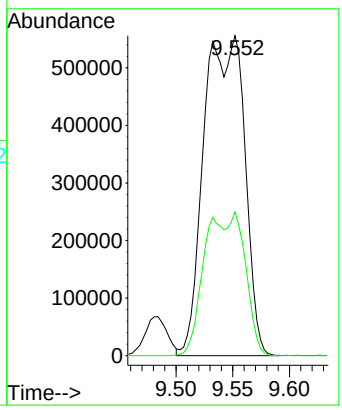




#59
m/p-Xylene
Concen: 28.109 ppbv m
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 138808

Ion	Ratio	Lower	Upper
91	100		
106	44.5	35.4	53.2



Instrument :
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ClientSampleId :
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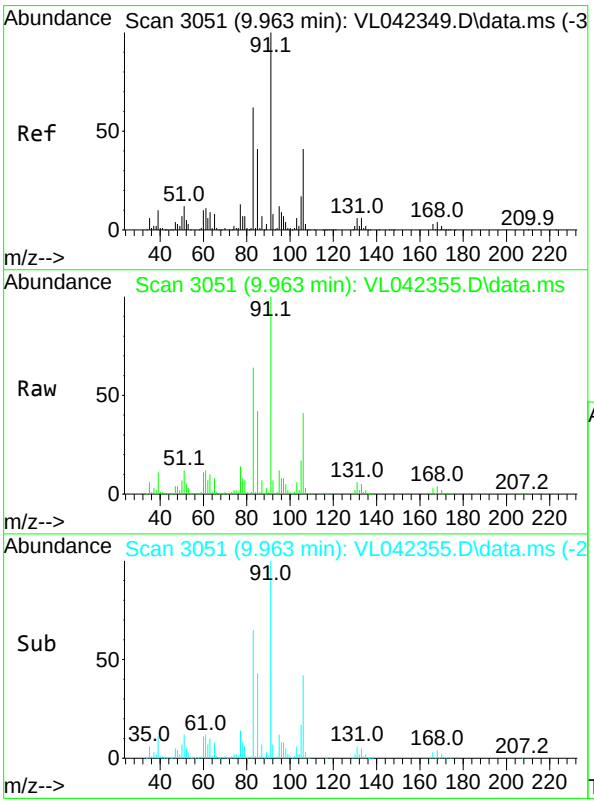
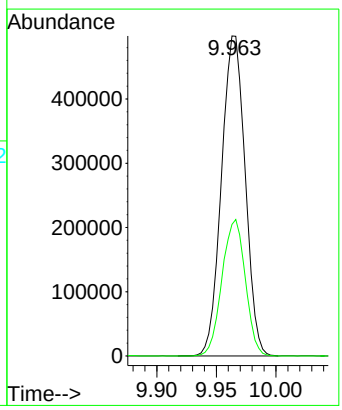
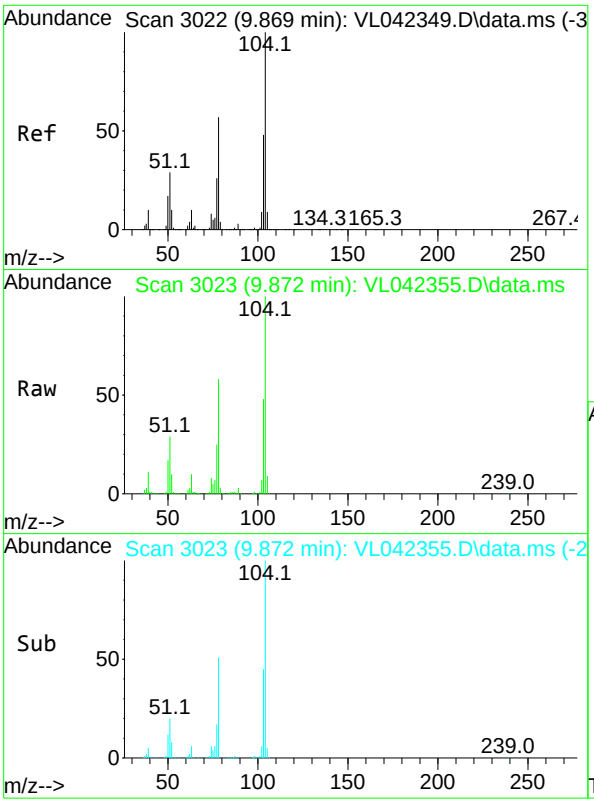


#60
o-Xylene
Concen: 13.902 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 689246

Ion	Ratio	Lower	Upper
91	100		
106	41.9	21.1	63.4

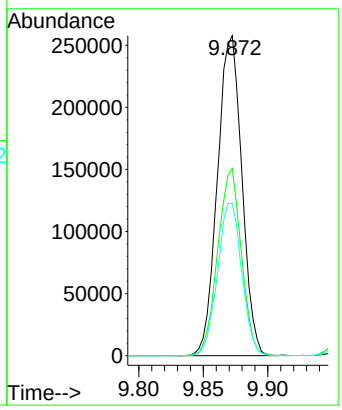




#61
Styrene
Concen: 14.347 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:104 Resp: 33950

Ion	Ratio	Lower	Upper
104	100		
78	56.4	44.6	66.8
103	47.3	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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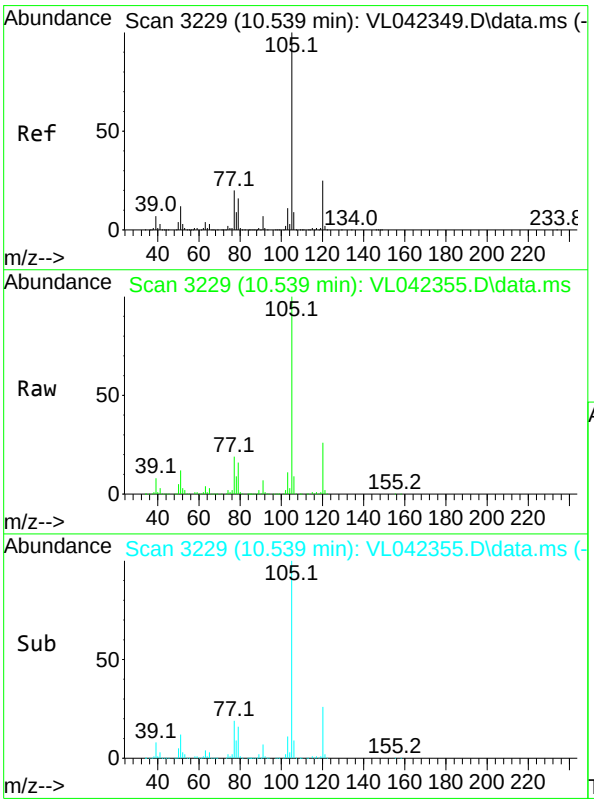
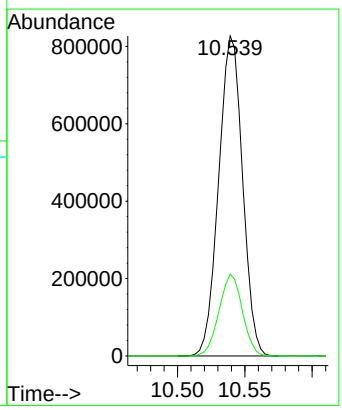
Supervised By :Mahesh Dadoda 04/18/2025

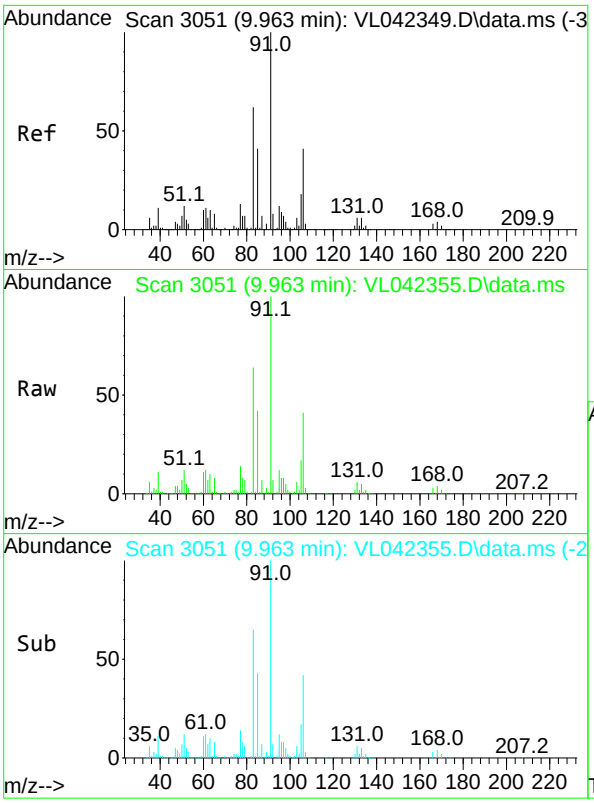


#62
Isopropylbenzene
Concen: 13.999 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 1018968

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.8	29.8

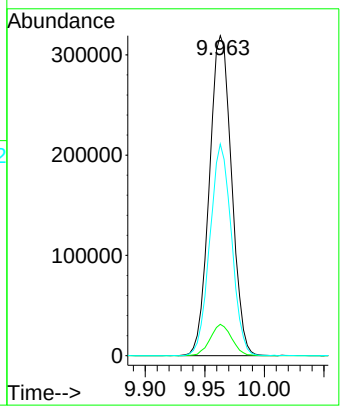




#63
1,1,2,2-Tetrachloroethane
Concen: 12.816 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 83 Resp: 41289

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.5	13.7
85	64.5	32.4	97.0



Instrument :
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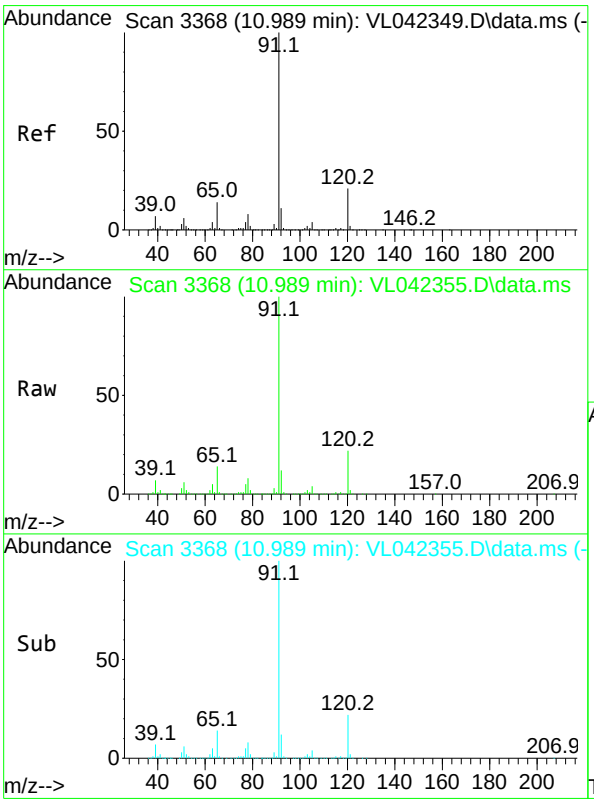
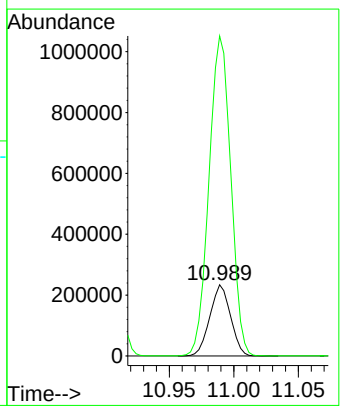
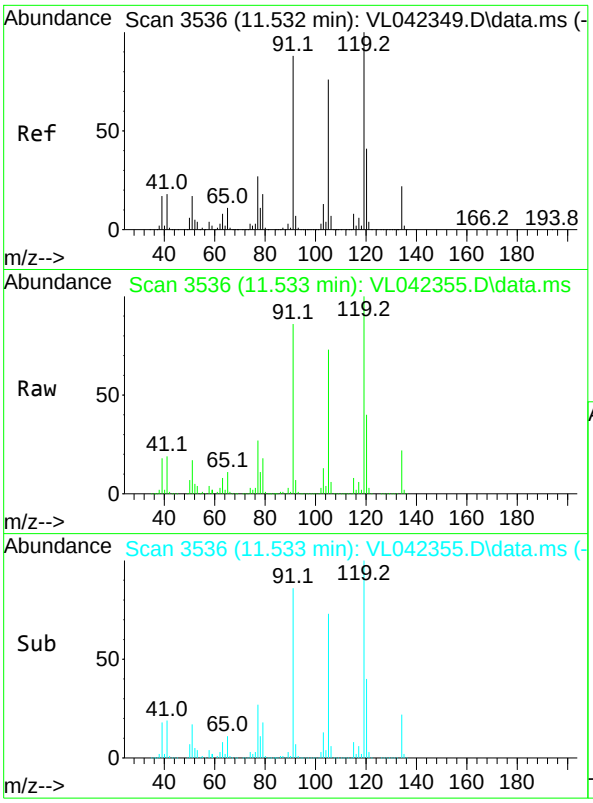


#64
n-propylbenzene
Concen: 14.255 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:120 Resp: 260812

Ion	Ratio	Lower	Upper
120	100		
91	473.2	392.4	588.6

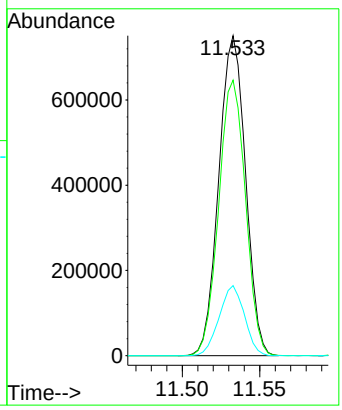




#65
tert-Butylbenzene
Concen: 13.449 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:119 Resp: 89972

Ion	Ratio	Lower	Upper
119	100		
91	86.2	74.6	111.8
134	20.8	18.8	28.2



Instrument :
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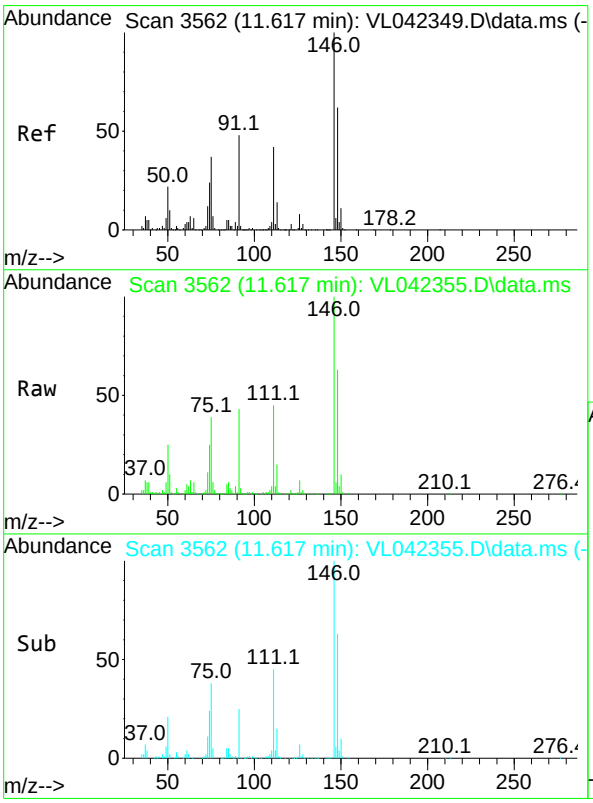
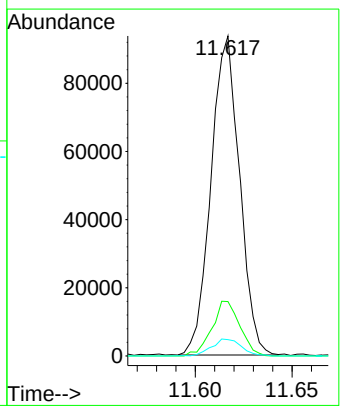
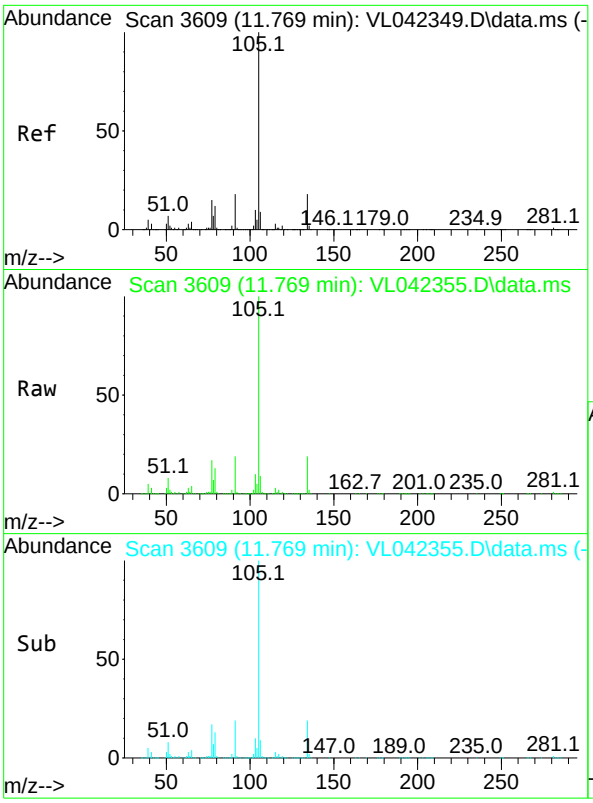


#66
Benzyl Chloride
Concen: 13.061 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 96016

Ion	Ratio	Lower	Upper
91	100		
126	16.8	11.8	17.6
128	5.5	4.5	6.7

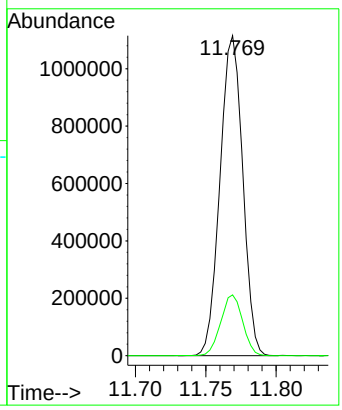




#67
sec-Butylbenzene
Concen: 13.468 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 125326

Ion	Ratio	Lower	Upper
105	100		
134	18.4	14.6	21.8



Instrument :
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ClientSampleId :
VSTDICC015

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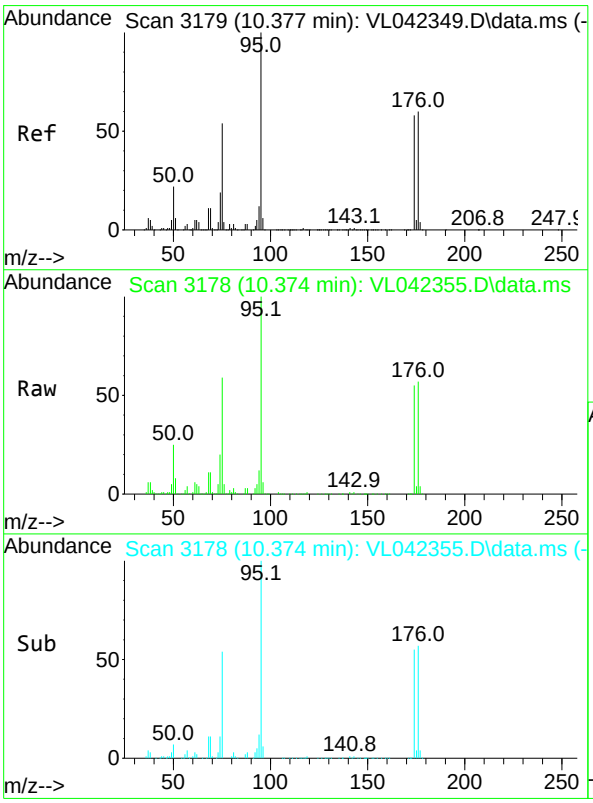
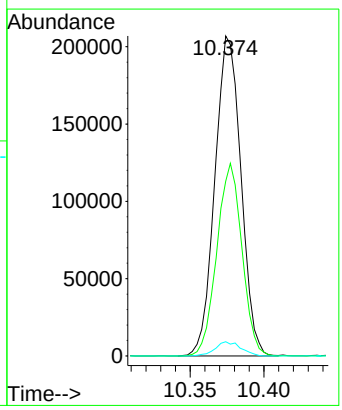
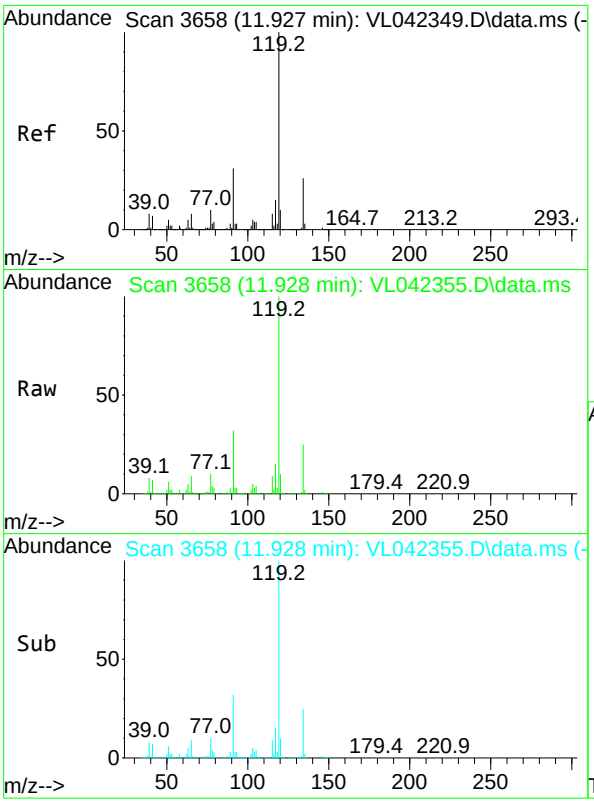


#68
1-Bromo-4-Fluorobenzene
Concen: 10.038 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 95 Resp: 254437

Ion	Ratio	Lower	Upper
95	100		
174	58.1	48.5	72.7
175	4.4	3.7	5.5

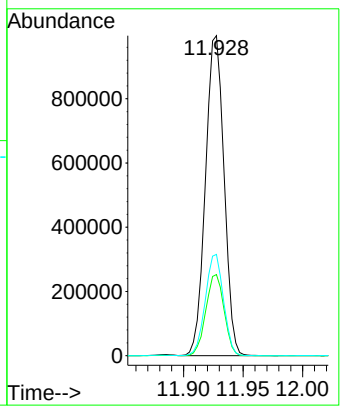




#69
p-Isopropyltoluene
Concen: 13.382 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:119 Resp: 108185

Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.0	30.0
91	31.1	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
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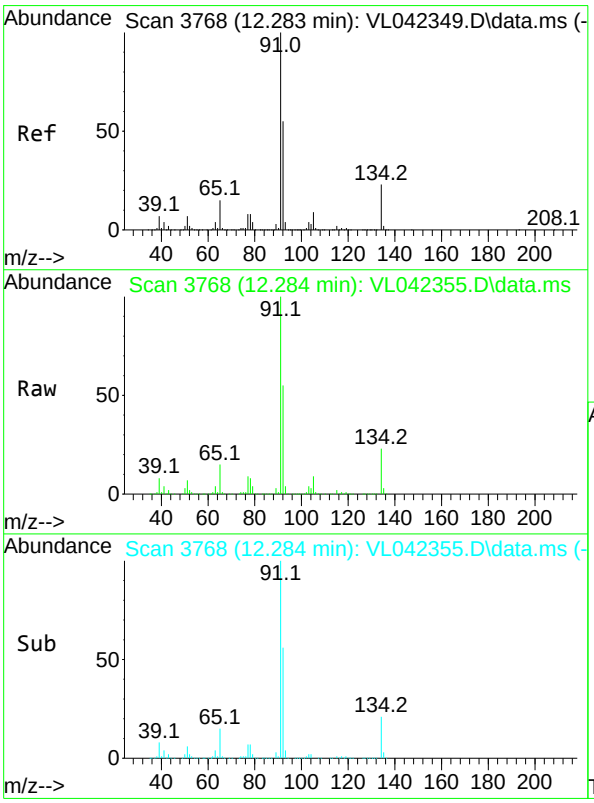
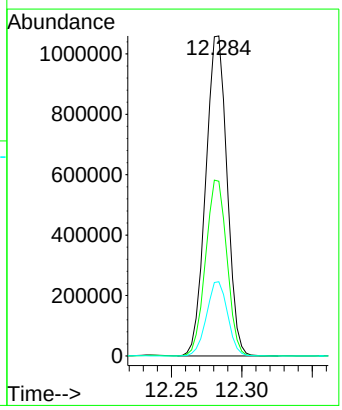
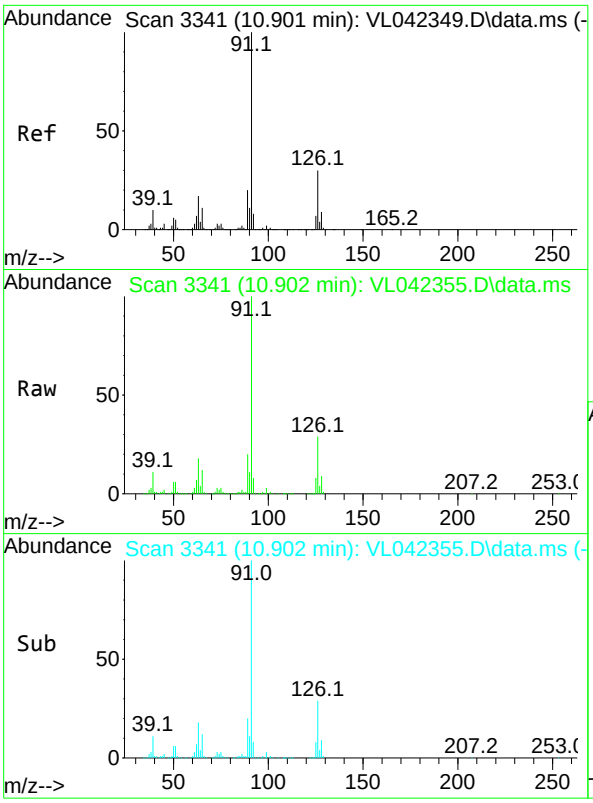


#70
n-Butylbenzene
Concen: 13.266 ppbv
RT: 12.284 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 1117042

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.2	66.4
134	23.0	18.2	27.4

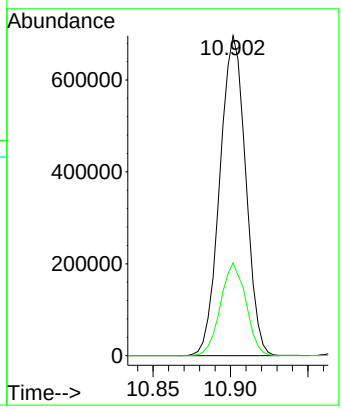




#71
2-Chlorotoluene
Concen: 14.131 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 80672

Ion	Ratio	Lower	Upper
91	100		
126	28.4	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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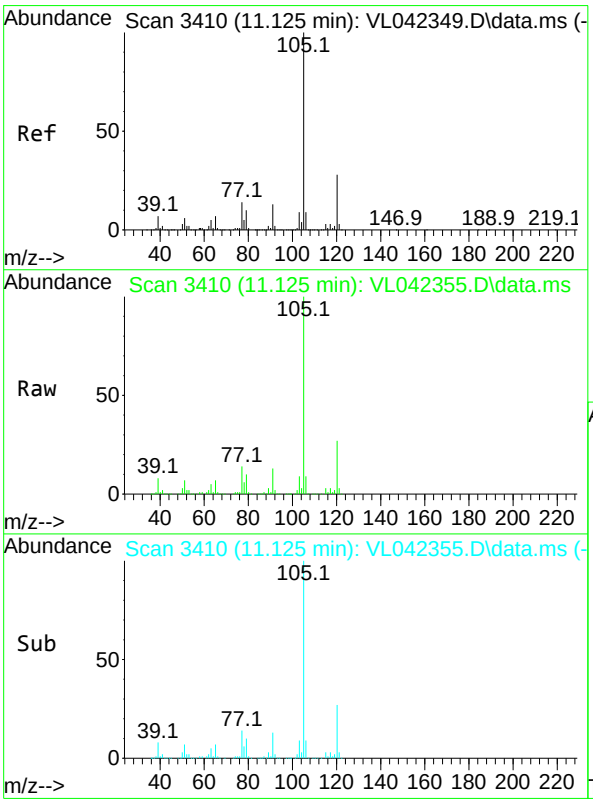
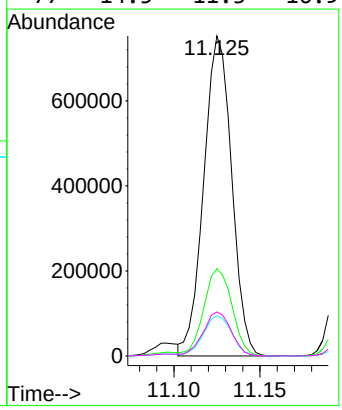
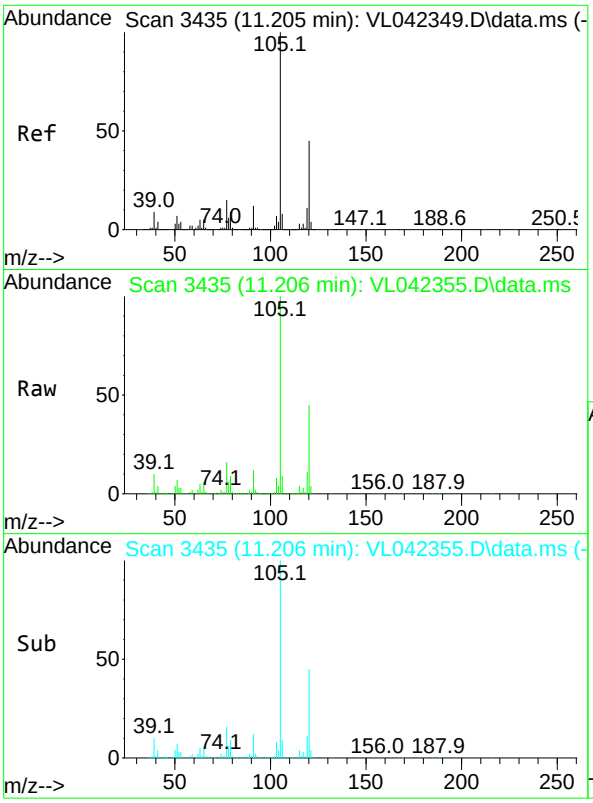


#72
4-Ethyltoluene
Concen: 13.992 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 848077

Ion	Ratio	Lower	Upper
105	100		
120	28.7	23.2	34.8
91	13.5	10.4	15.6
77	14.5	11.3	16.9

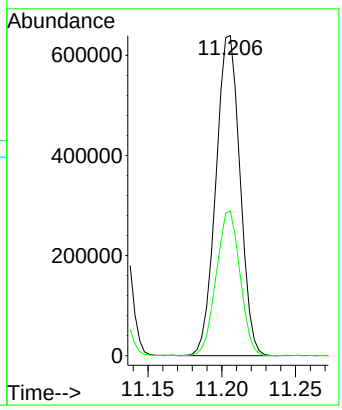




#73
1,3,5-Trimethylbenzene
Concen: 13.578 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 72655

Ion	Ratio	Lower	Upper
105	100		
120	45.1	35.6	53.4



Instrument :
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ClientSampleId :
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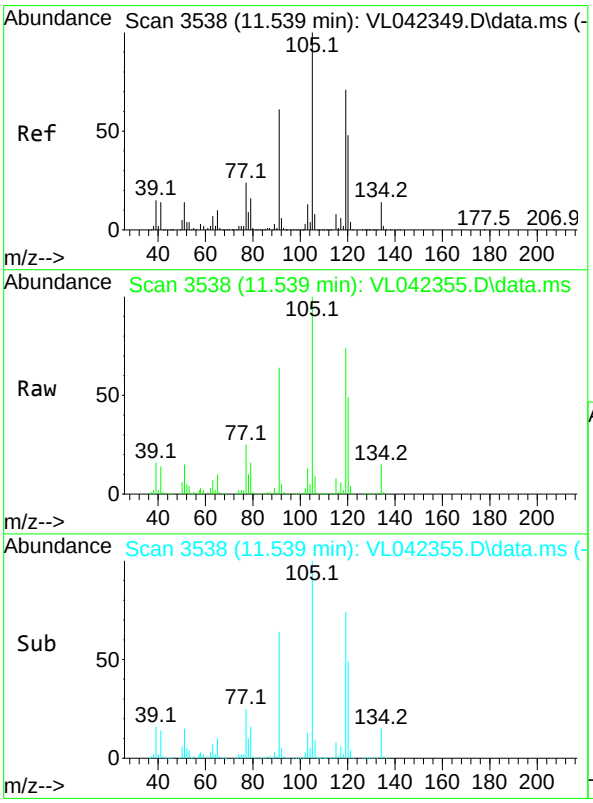
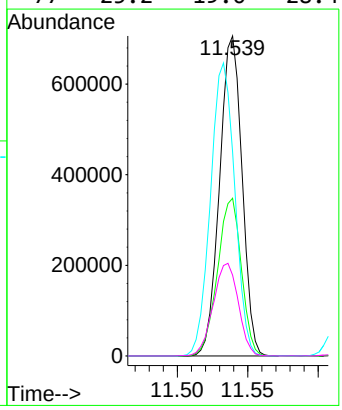
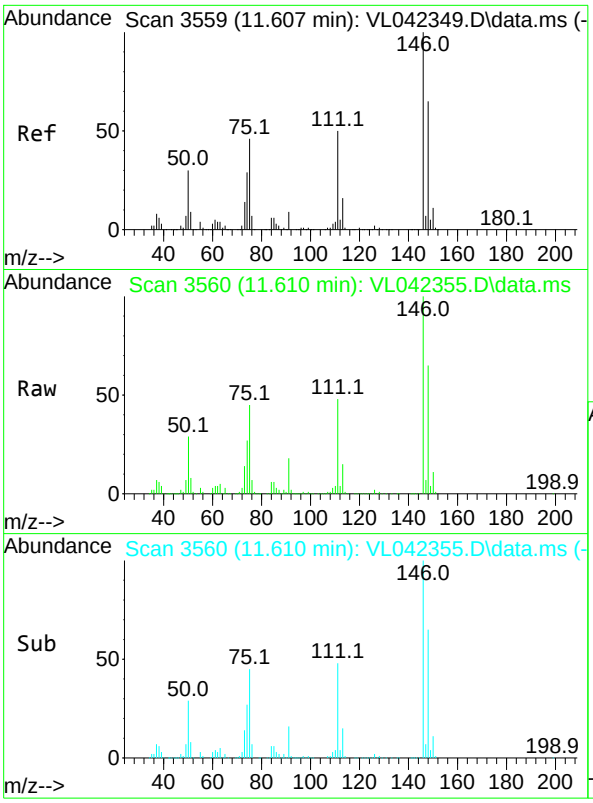


#74
1,2,4-Trimethylbenzene
Concen: 12.572 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 785772

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.1	57.1
91	63.7	48.8	73.2
77	25.2	19.0	28.4

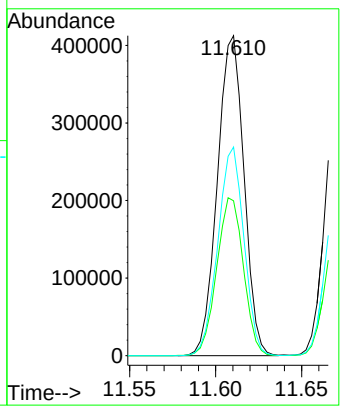




#75
1,3-Dichlorobenzene
Concen: 13.670 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:146 Resp: 44408

Ion	Ratio	Lower	Upper
146	100		
111	49.6	24.3	72.8
148	63.9	31.6	94.8



Instrument :
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ClientSampleId :
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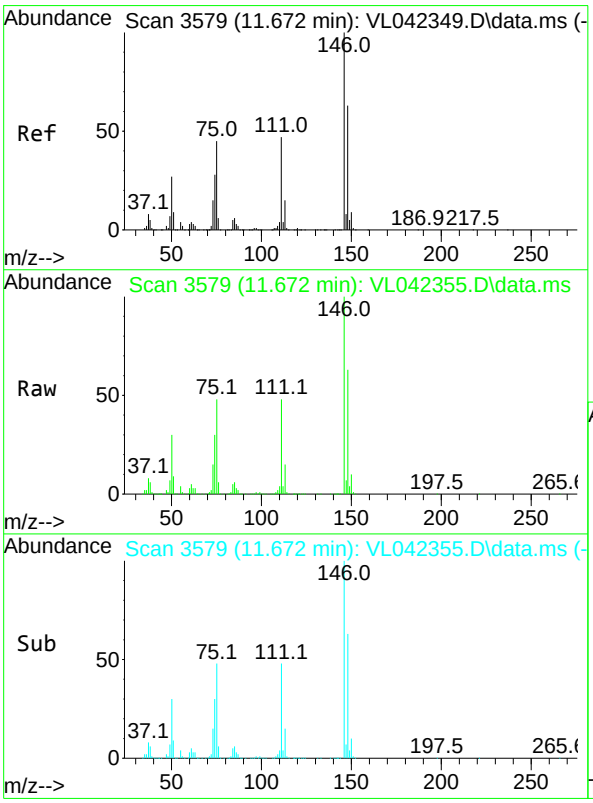
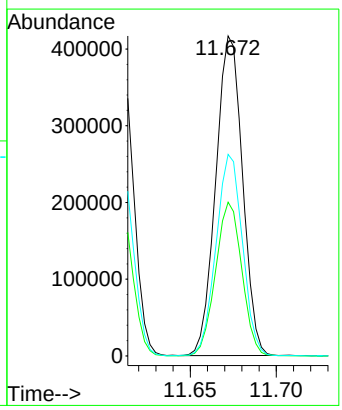
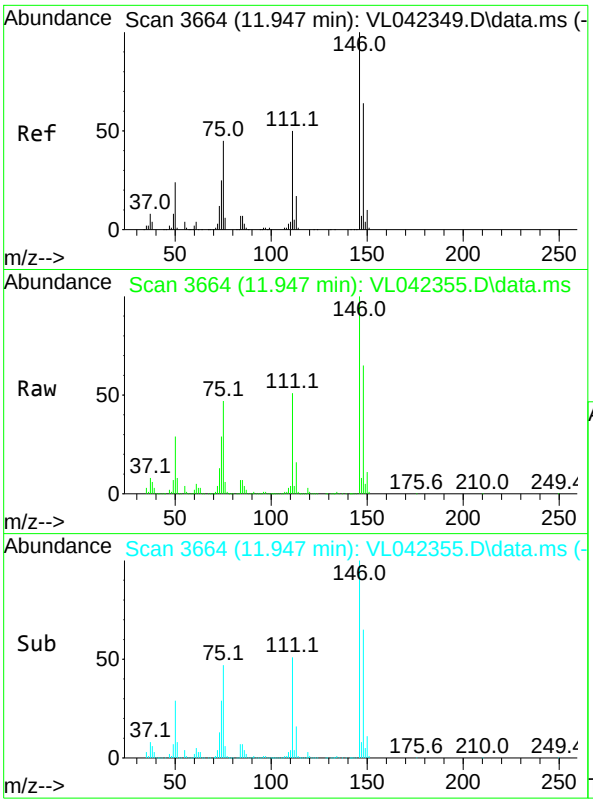


#76
1,4-Dichlorobenzene
Concen: 13.802 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:146 Resp: 450662

Ion	Ratio	Lower	Upper
146	100		
111	47.4	24.2	72.6
148	62.6	32.1	96.5

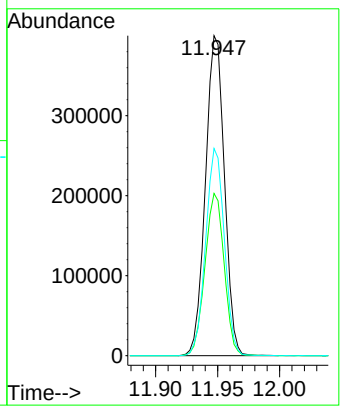




#77
1,2-Dichlorobenzene
Concen: 13.529 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:146 Resp: 42737

Ion	Ratio	Lower	Upper
146	100		
111	51.3	25.3	75.9
148	63.8	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

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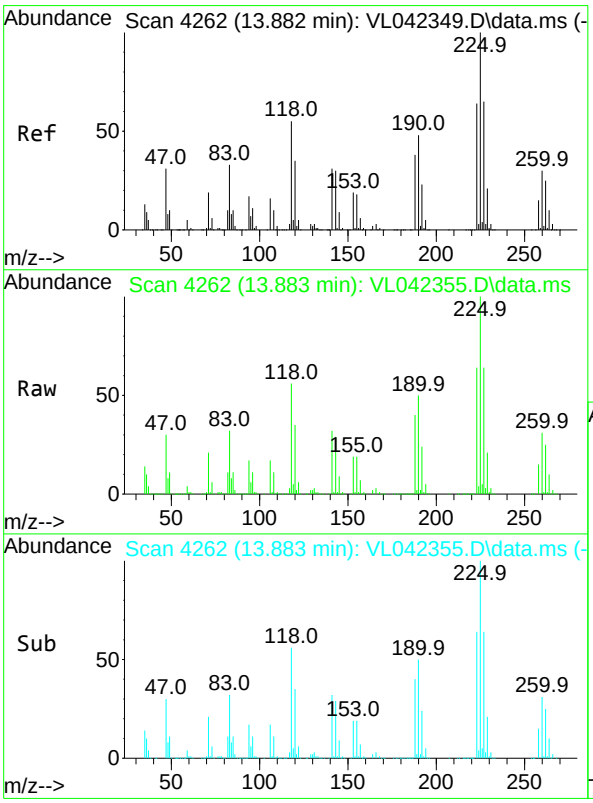
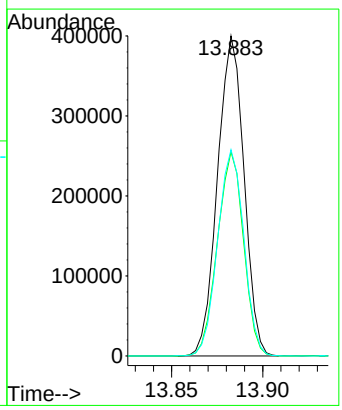
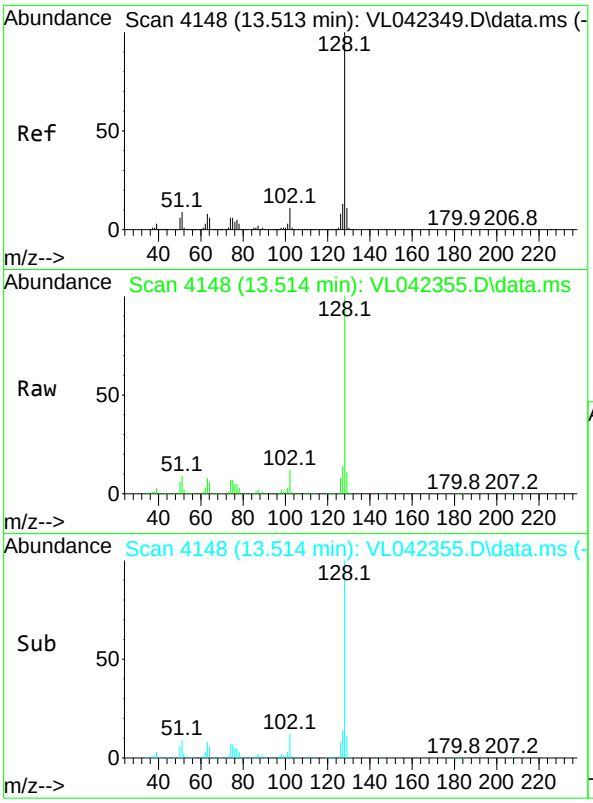


#78
Hexachloro-1,3-Butadiene
Concen: 12.679 ppbv
RT: 13.883 min Scan# 4262
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:225 Resp: 404441

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	63.8	51.5	77.3

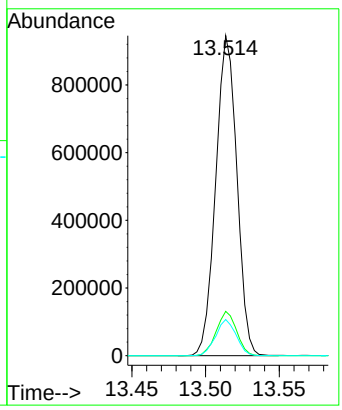




#79
Naphthalene
Concen: 12.632 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:128 Resp: 94408

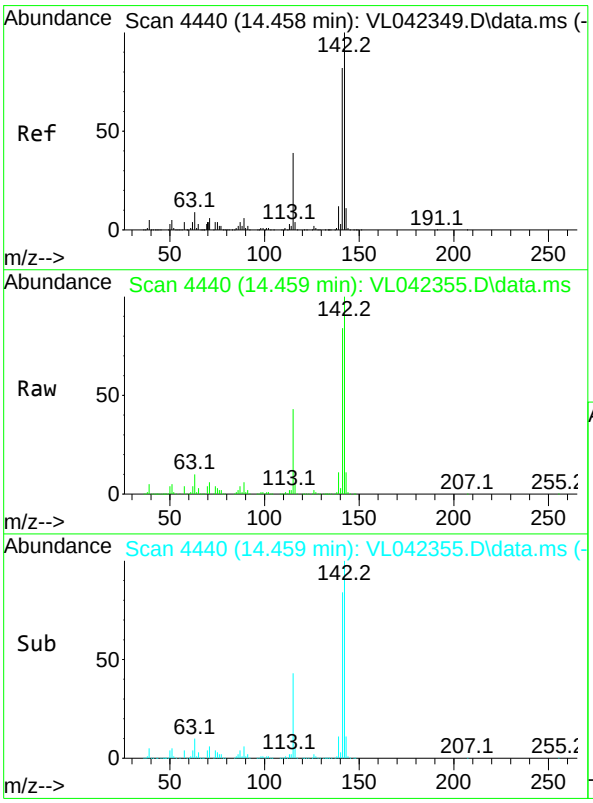
Ion	Ratio	Lower	Upper
128	100		
127	13.9	10.6	15.8
129	11.3	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

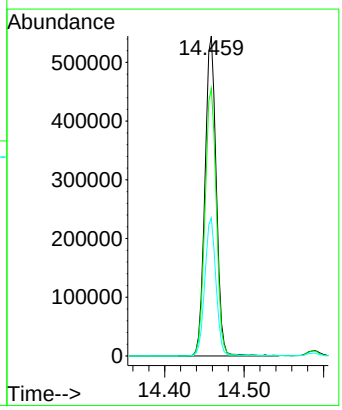
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

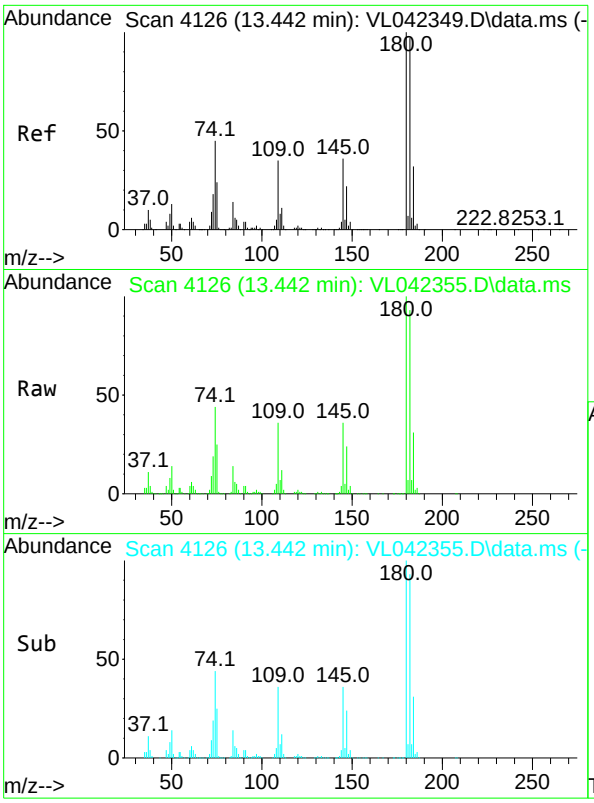


#80
Naphthalene,2-methyl-
Concen: 12.686 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:142 Resp: 540339

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.8	100.2
115	43.0	33.4	50.2

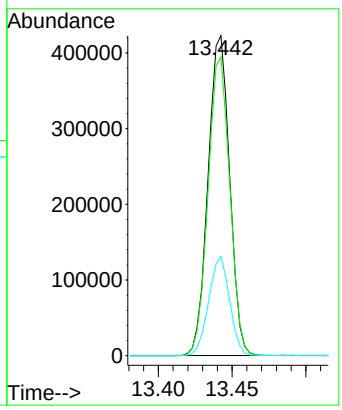




#81
1,2,4-Trichlorobenzene
Concen: 13.398 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:180 Resp: 42998

Ion	Ratio	Lower	Upper
180	100		
182	94.3	76.8	115.2
184	30.2	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	113992	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.958	114	324528	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	305357	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	250149	9.969	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	197623	9.812	ppbv	100
3) Chlorodifluoromethane	1.476	51	191010	9.960	ppbv	99
4) Chloromethane	1.531	50	78080	9.796	ppbv	98
5) Vinyl Chloride	1.580	62	75628	8.717	ppbv	97
6) Bromomethane	1.667	94	35115	9.422	ppbv	84
7) Chloroethane	1.703	64	30158	9.612	ppbv	99
8) Dichlorotetrafluoroethane	1.554	85	172863	9.997	ppbv	98
9) Propene	1.482	41	84636	9.690	ppbv	95
10) Heptane	4.978	43	221840	9.041	ppbv	98
11) Trichlorofluoromethane	1.877	101	187827	9.807	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	148485	9.482	ppbv	100
13) Ethanol	1.722	45	4171	3.005	ppbv	97
14) Bromoethene	1.780	108	58320	9.880	ppbv	99
15) Acetone	1.835	43	158708	8.505	ppbv	100
16) 1,3-Butadiene	1.609	39	78804	8.829	ppbv	95
17) tert-Butyl alcohol	2.039	59	218954	9.468	ppbv	99
18) 1,1-Dichloroethene	2.033	96	67940	9.287	ppbv	94
19) Isopropyl Alcohol	1.887	45	96365	9.296	ppbv	95
20) Methylene Chloride	2.062	84	59203	8.101	ppbv	91
21) Allyl Chloride	2.094	41	120704	9.368	ppbv	98
22) trans-1,2-Dichloroethene	2.340	96	78070	9.373	ppbv	99
23) Vinyl Acetate	2.463	43	73373	9.714	ppbv	99
24) 1,1-Dichloroethane	2.408	63	155571	9.832	ppbv	100
25) Ethyl Acetate	2.835	43	449014	9.759	ppbv	99
26) Hexane	2.826	57	175752	9.439	ppbv	98
27) Carbon Disulfide	2.149	76	191117	9.587	ppbv	100
28) Methyl tert-Butyl Ether	2.441	73	115190	9.442	ppbv	94
29) Chloroform	2.848	83	260855	9.912	ppbv	98
30) Cyclohexane	3.855	84	148246	9.849	ppbv	99
31) cis-1,2-Dichloroethene	2.719	61	179993	10.167	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	276599	9.336	ppbv	98
34) 2-Butanone	2.557	43	248969	9.700	ppbv	99
35) Carbon Tetrachloride	3.764	117	271862	9.256	ppbv	98
36) Benzene	3.657	78	350545	10.014	ppbv	99
37) 1,2-Dichloroethane	3.217	62	211790	10.081	ppbv	99
38) Trichloroethene	4.551	130	139872	9.143	ppbv	96
39) 1,2-Dichloropropane	4.315	63	129239	9.908	ppbv	99
40) 1,4-Dioxane	4.583	88	61587	8.591	ppbv #	96
41) Tetrahydrofuran	3.052	42	141861	9.479	ppbv	99
42) Bromodichloromethane	4.489	83	296946	10.156	ppbv	96
43) Methyl Methacrylate	4.878	69	149209	9.458	ppbv	96
44) 2,2,4-Trimethylpentane	4.641	57	606376	10.030	ppbv	99
45) t-1,3-Dichloropropene	6.412	75	160750	9.975	ppbv	99

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.599	75	200144	10.148	ppbv		88
47) 1,1,2-Trichloroethane	6.583	97	135575	10.202	ppbv		95
48) Dibromochloromethane	7.389	129	237206	10.103	ppbv		100
49) Bromoform	9.483	173	205630	10.016	ppbv		99
50) 4-Methyl-2-Pentanone	5.748	43	376145	8.819	ppbv		99
51) 2-Hexanone	7.435	43	310521	8.118	ppbv	#	99
52) Tetrachloroethene	8.224	164	119424	8.827	ppbv		94
53) Toluene	6.933	91	419462	9.986	ppbv		99
54) 1,2-Dibromoethane	7.652	107	186231	9.792	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.927	131	182712	9.886	ppbv		97
57) Chlorobenzene	8.920	112	304533	9.589	ppbv		96
58) Ethyl Benzene	9.354	91	583515	9.645	ppbv		99
59) m/p-Xylene	9.532	91	932801m	19.139	ppbv		
60) o-Xylene	9.966	91	464522	9.465	ppbv		99
61) Styrene	9.872	104	229869	9.813	ppbv		98
62) Isopropylbenzene	10.539	105	685965	9.520	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.962	83	279007	8.773	ppbv		100
64) n-propylbenzene	10.992	120	172654	9.533	ppbv		99
65) tert-Butylbenzene	11.532	119	609500	9.203	ppbv		93
66) Benzyl Chloride	11.613	91	63051	8.664	ppbv		95
67) sec-Butylbenzene	11.769	105	853807	9.268	ppbv		99
69) p-Isopropyltoluene	11.927	119	737861	9.220	ppbv		99
70) n-Butylbenzene	12.283	91	771461	9.255	ppbv		100
71) 2-Chlorotoluene	10.901	91	543794	9.622	ppbv		98
72) 4-Ethyltoluene	11.124	105	563136	9.385	ppbv		100
73) 1,3,5-Trimethylbenzene	11.205	105	486583	9.186	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	531576	8.592	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	297157	9.240	ppbv		99
76) 1,4-Dichlorobenzene	11.671	146	297697	9.210	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	289284	9.251	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	276960	8.771	ppbv		100
79) Naphthalene	13.513	128	647349	8.750	ppbv		99
80) Naphthalene,2-methyl-	14.458	142	350259	8.307	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	290260	9.136	ppbv		99

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

Quantitation Report (QT Reviewed)

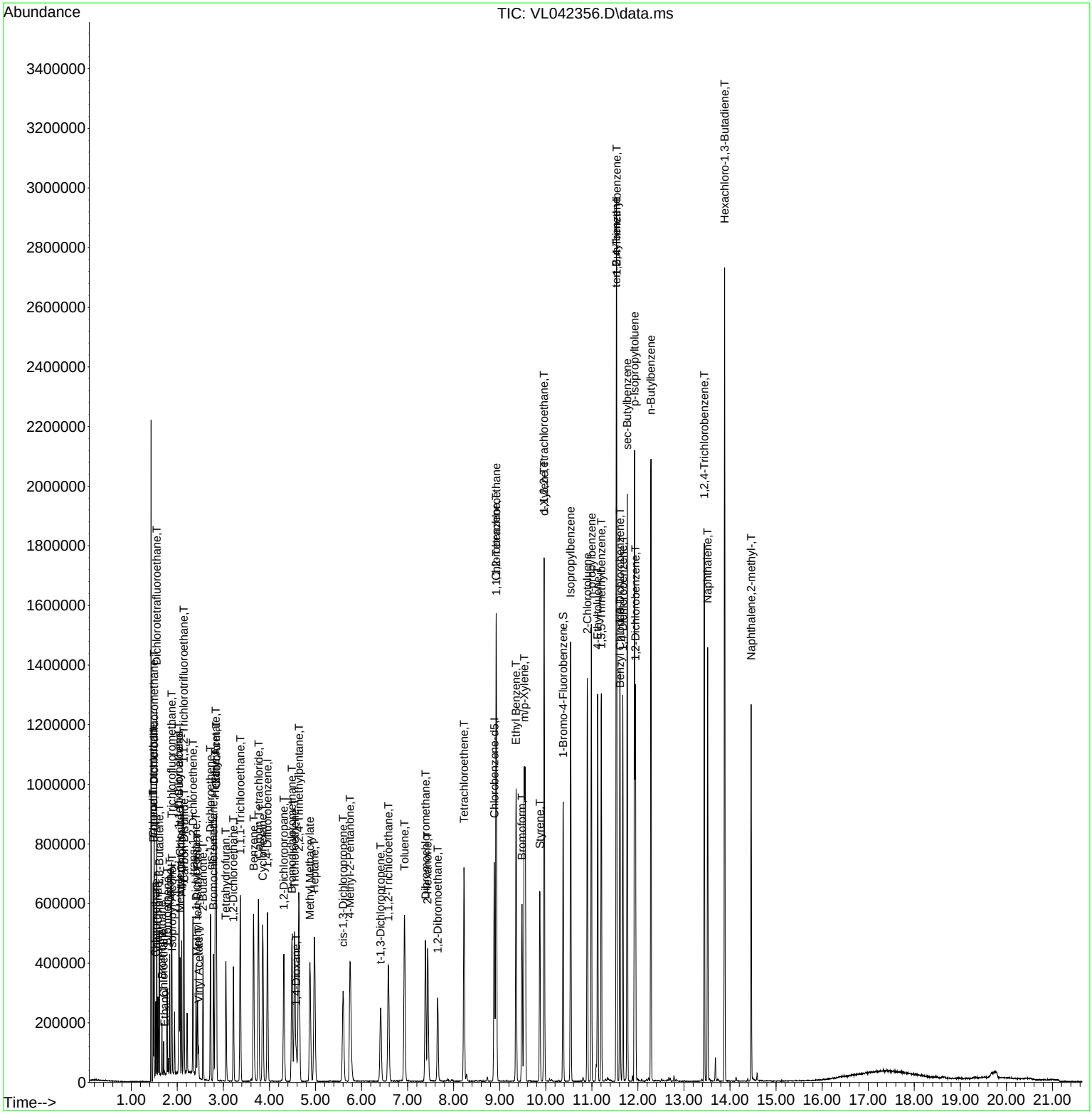
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

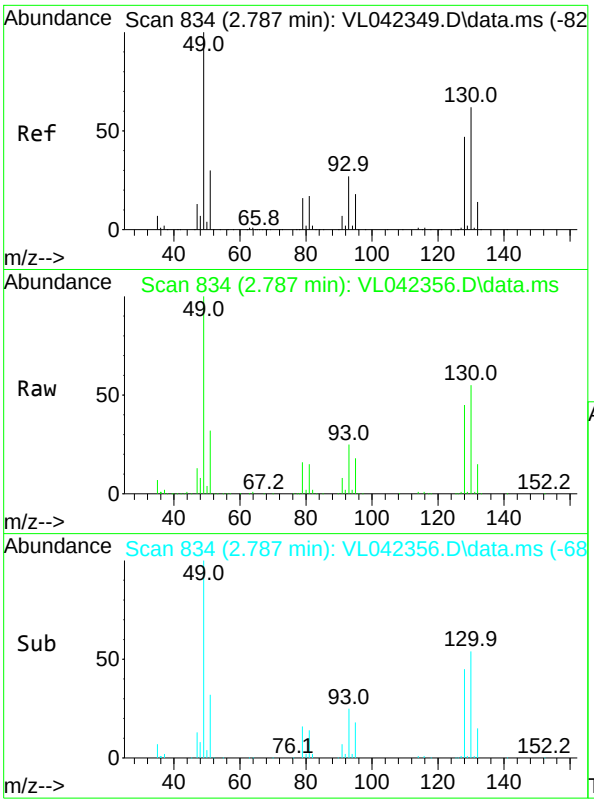
Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

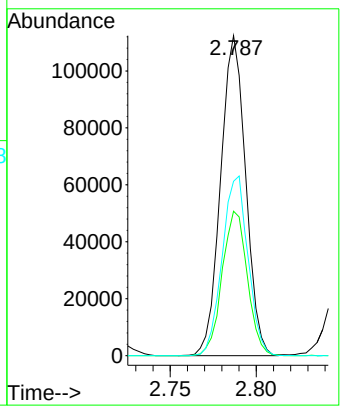




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 49 Resp: 11399

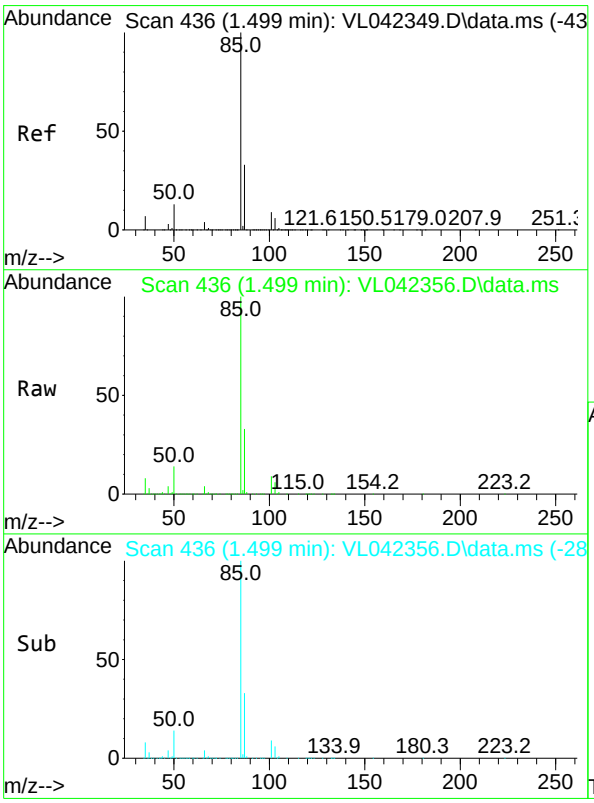
Ion	Ratio	Lower	Upper
49	100		
128	45.5	22.8	68.4
130	57.8	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
APPROVED

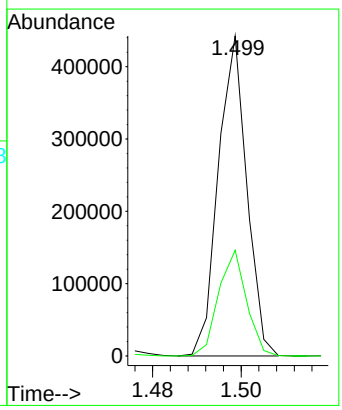
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

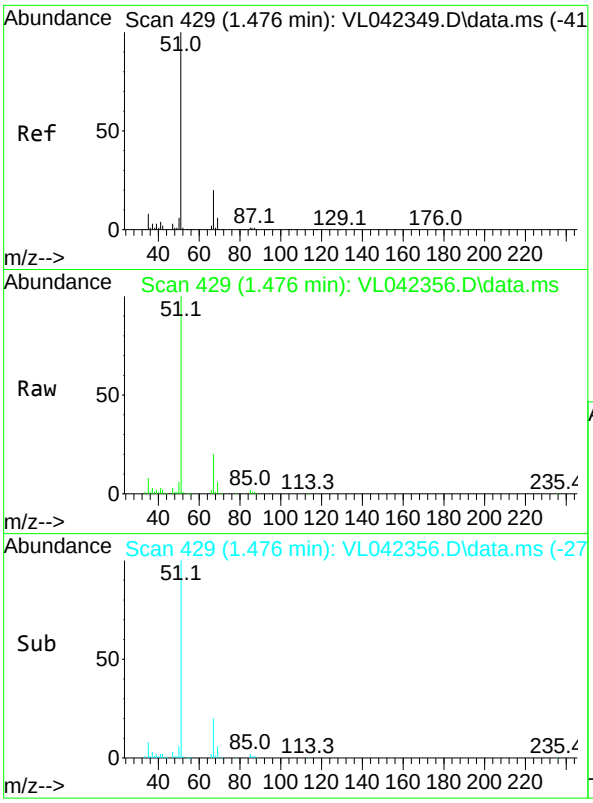


#2
Dichlorodifluoromethane
Concen: 9.812 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 85 Resp: 197623

Ion	Ratio	Lower	Upper
85	100		
87	33.1	26.6	39.8

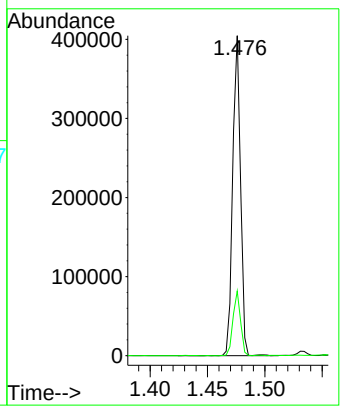




#3
Chlorodifluoromethane
Concen: 9.960 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 51 Resp: 19101

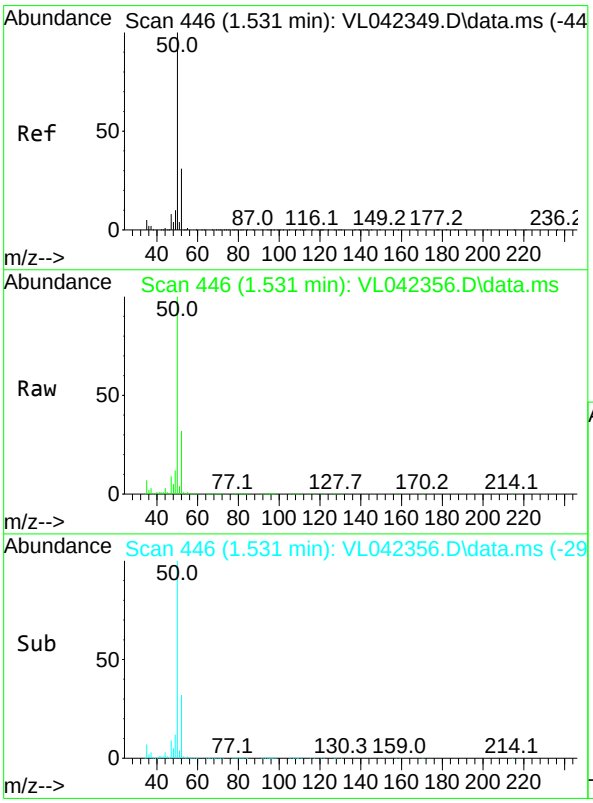
Ion	Ratio	Lower	Upper
51	100		
67	19.6	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
APPROVED

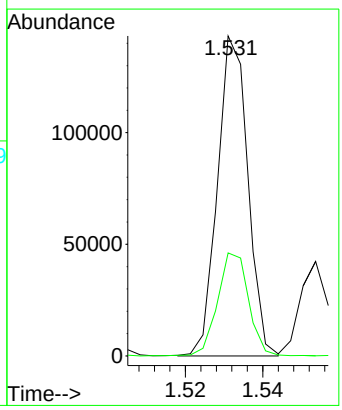
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

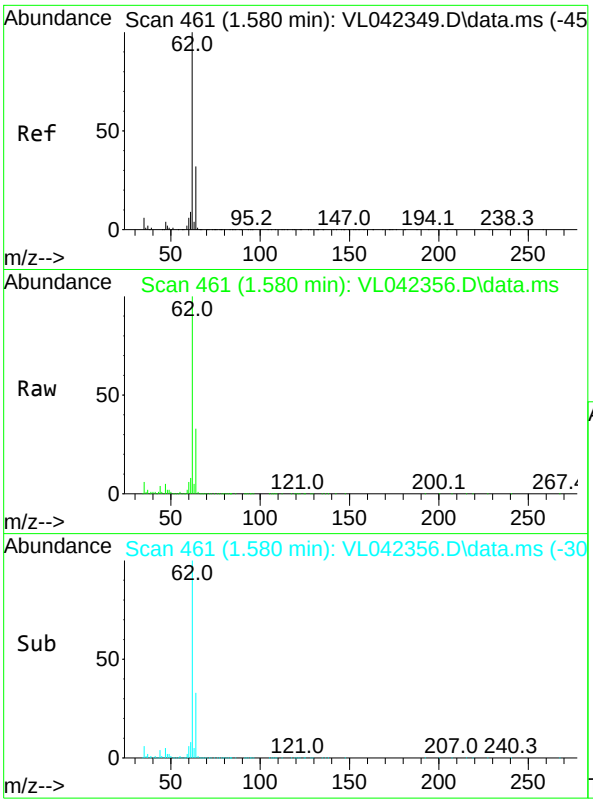


#4
Chloromethane
Concen: 9.796 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 50 Resp: 78080

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1

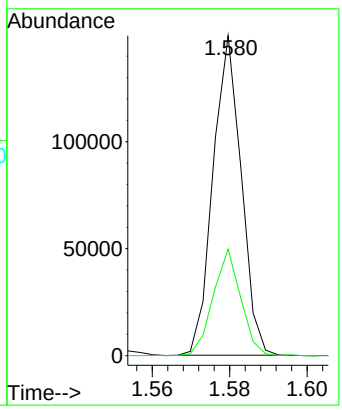




#5
Vinyl Chloride
Concen: 8.717 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 62 Resp: 7562

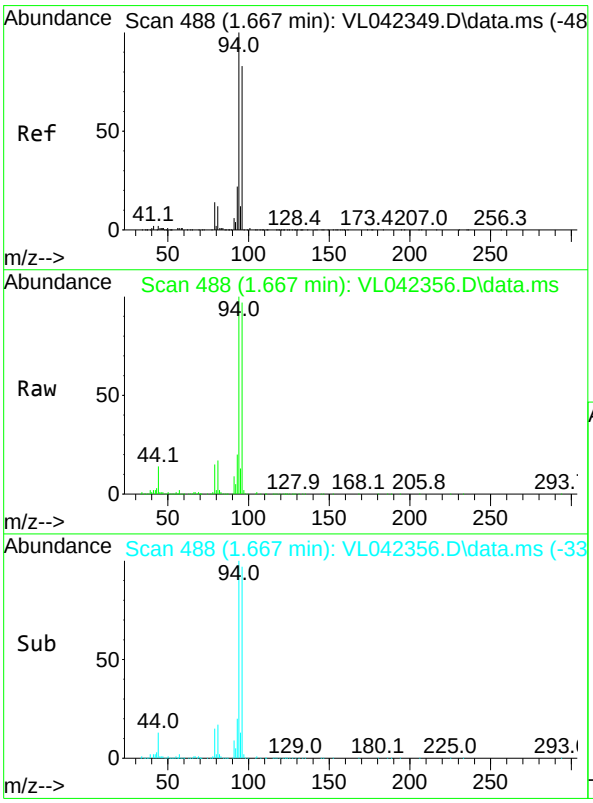
Ion	Ratio	Lower	Upper
62	100		
64	33.3	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
APPROVED

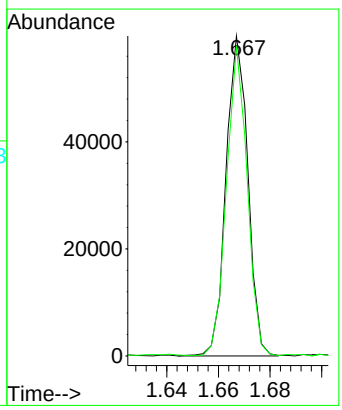
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

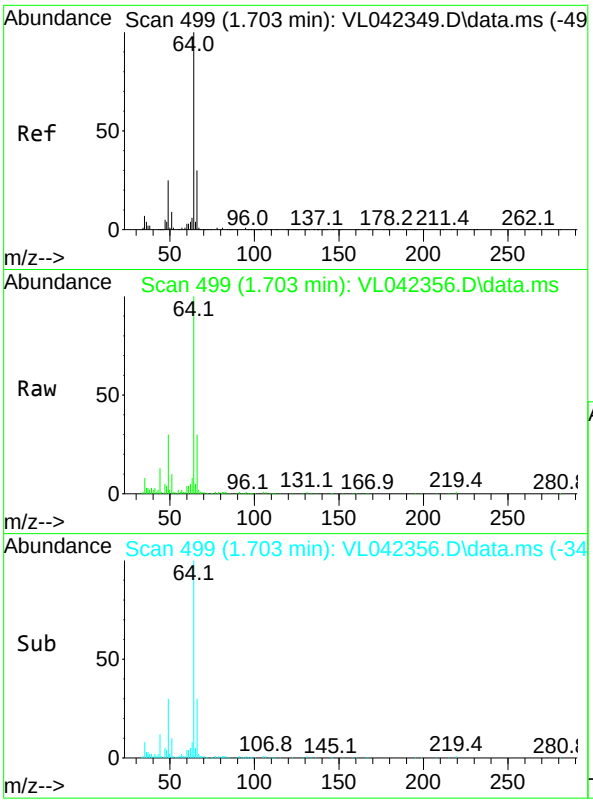


#6
Bromomethane
Concen: 9.422 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 94 Resp: 35115

Ion	Ratio	Lower	Upper
94	100		
96	96.8	66.2	99.2

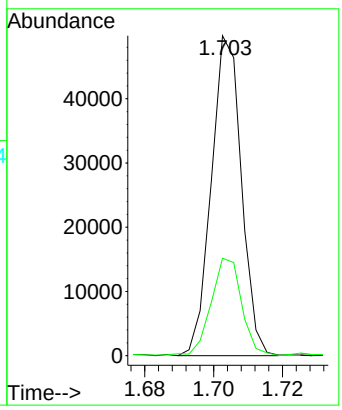




#7
Chloroethane
Concen: 9.612 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 64 Resp: 3015

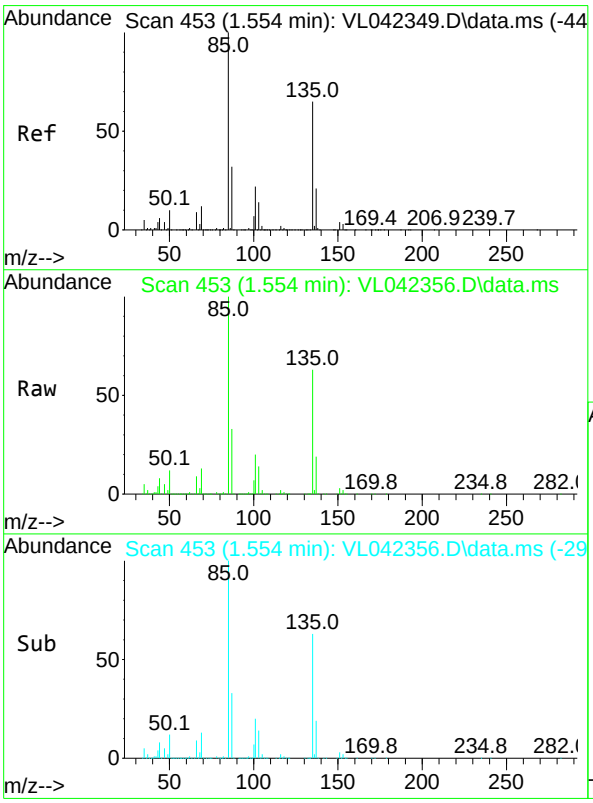
Ion	Ratio	Lower	Upper
64	100		
66	30.4	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
APPROVED

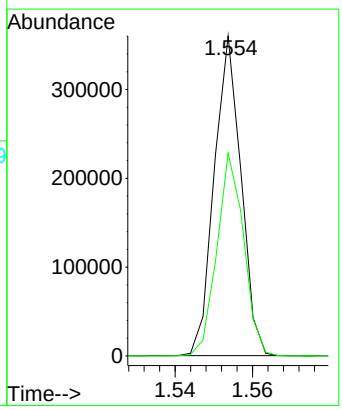
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

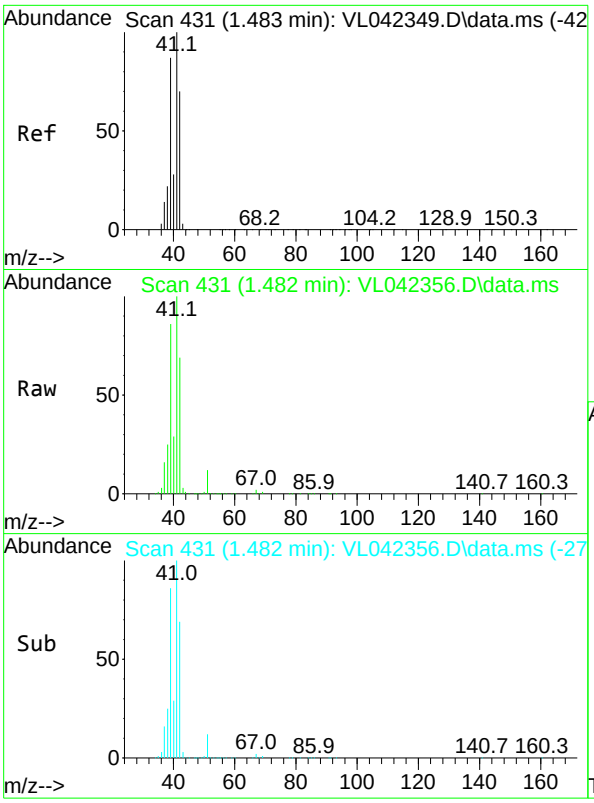


#8
Dichlorotetrafluoroethane
Concen: 9.997 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 85 Resp: 172863

Ion	Ratio	Lower	Upper
85	100		
135	63.5	52.2	78.2

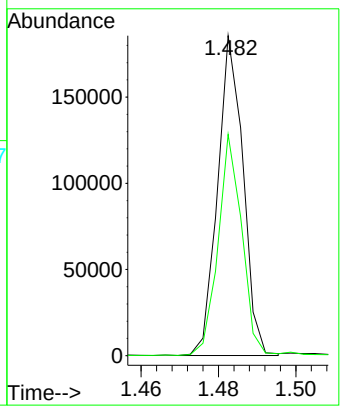




#9
Propene
Concen: 9.690 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 41 Resp: 8463

Ion	Ratio	Lower	Upper
41	100		
42	65.8	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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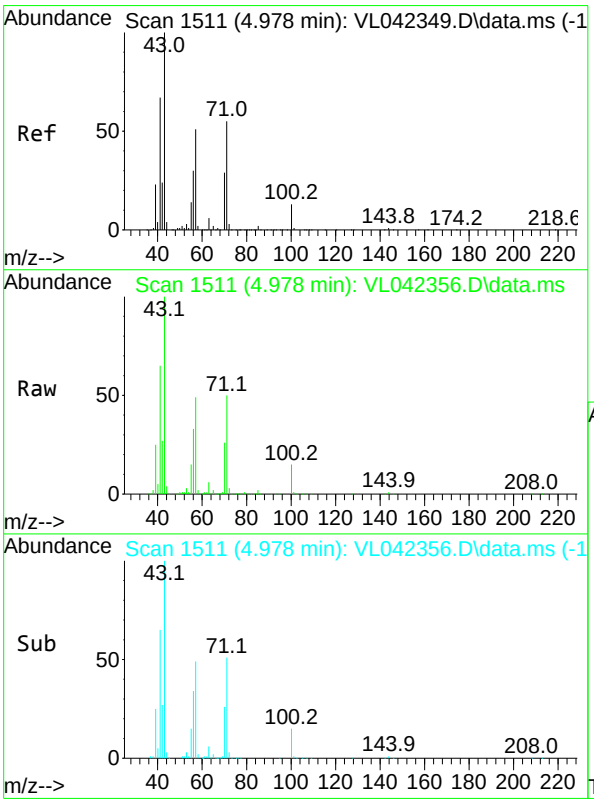
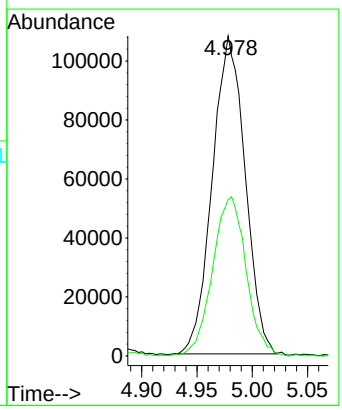
Supervised By :Mahesh Dadoda 04/18/2025

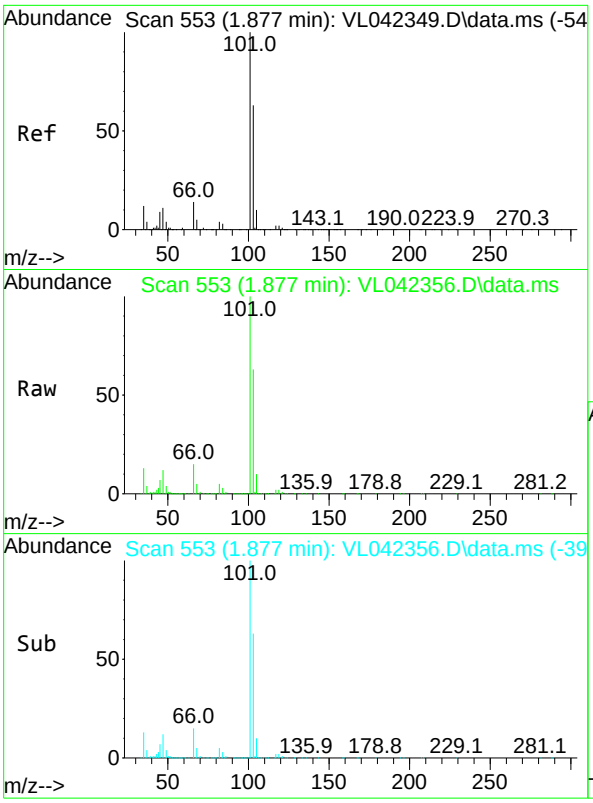


#10
Heptane
Concen: 9.041 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 221840

Ion	Ratio	Lower	Upper
43	100		
57	51.4	39.9	59.9





#11
Trichlorofluoromethane
Concen: 9.807 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:101 Resp: 18782

Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.1	75.1

Instrument :
MSVOA_L
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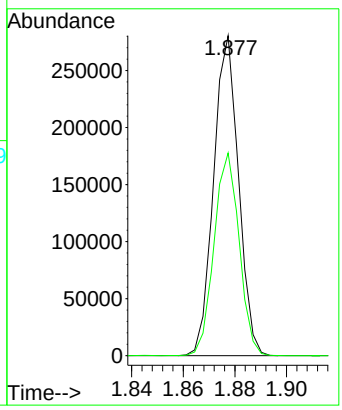
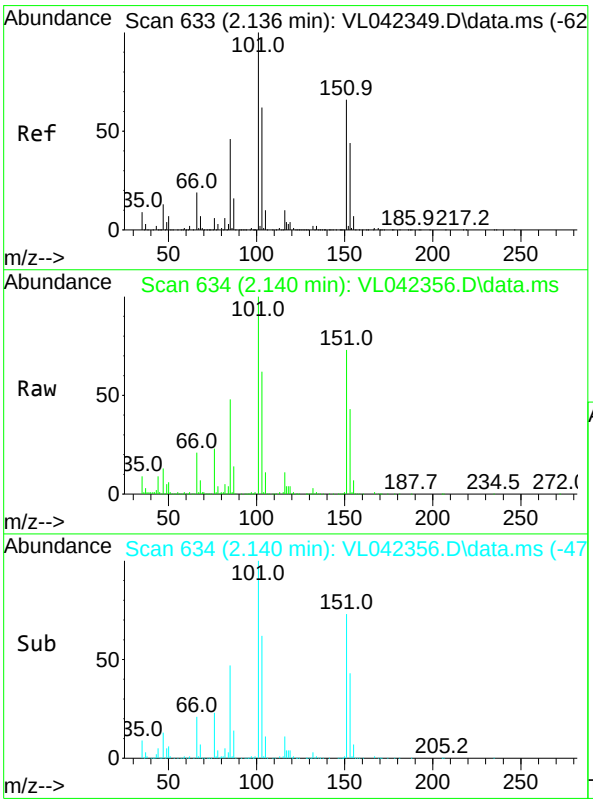
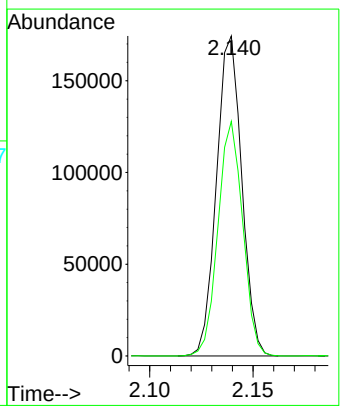


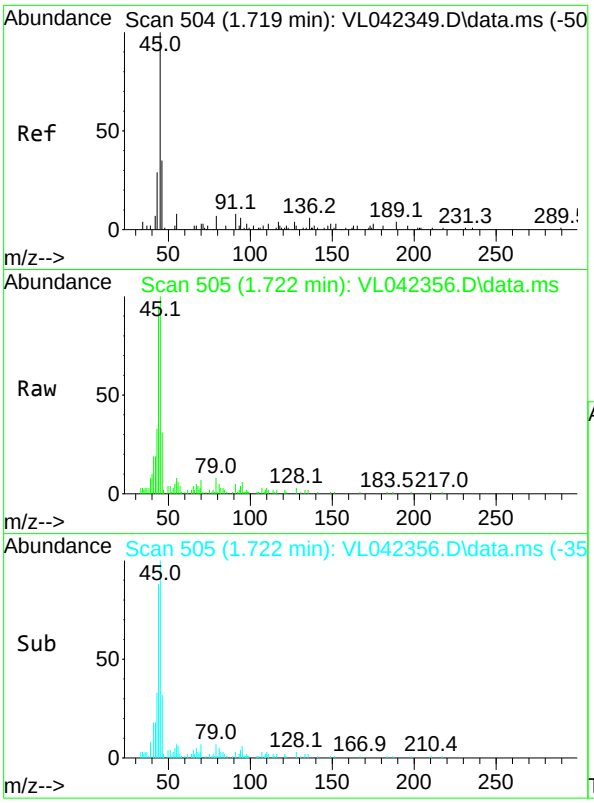


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.482 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:101 Resp: 148485

Ion	Ratio	Lower	Upper
101	100		
151	71.7	57.0	85.6

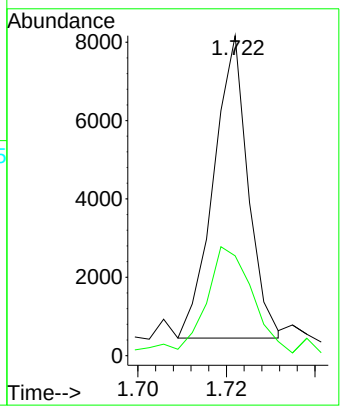




#13
Ethanol
Concen: 3.005 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 45 Resp: 417

Ion	Ratio	Lower	Upper
45	100		
46	57.0	21.9	87.7



Instrument :
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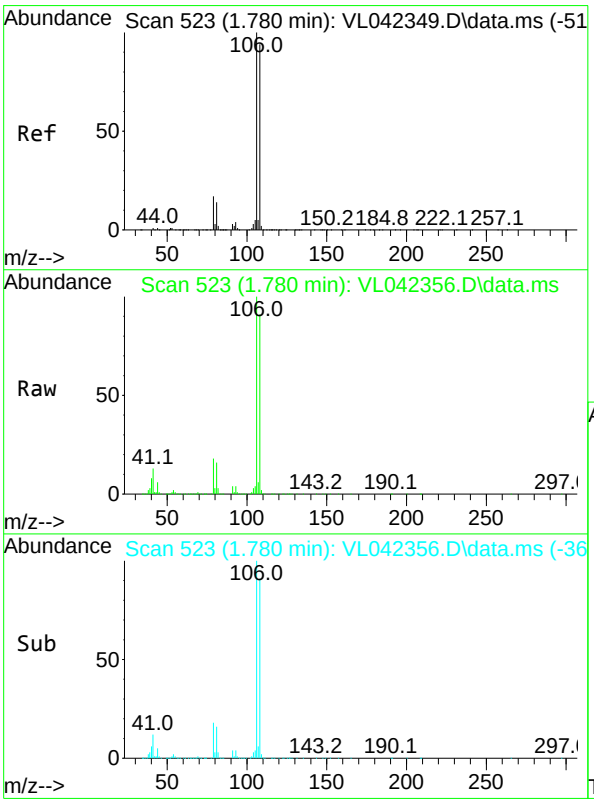
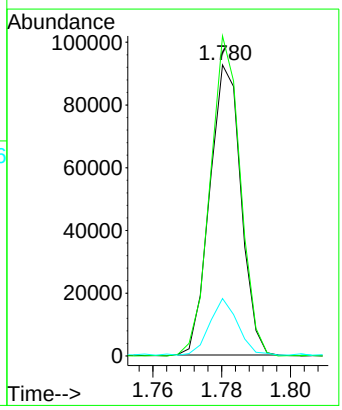
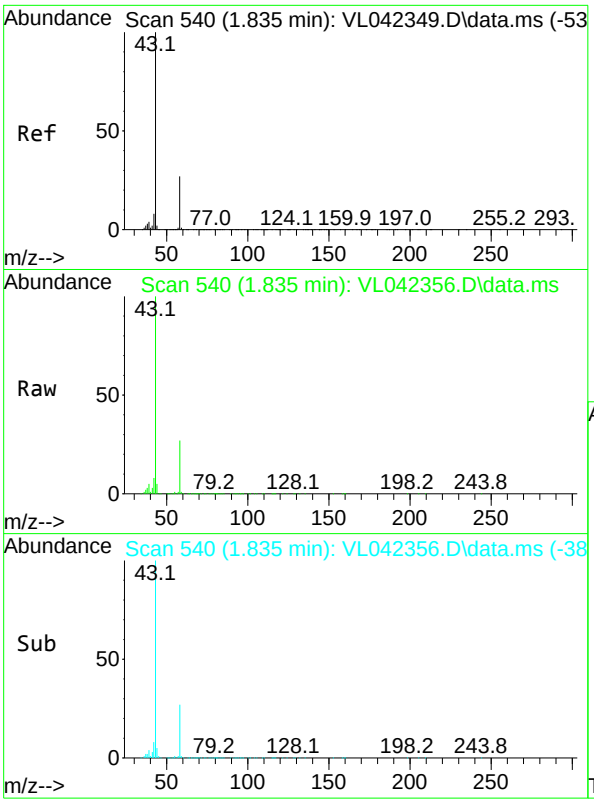


#14
Bromoethene
Concen: 9.880 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:108 Resp: 58320

Ion	Ratio	Lower	Upper
108	100		
106	107.1	85.9	128.9
79	18.4	13.9	20.9

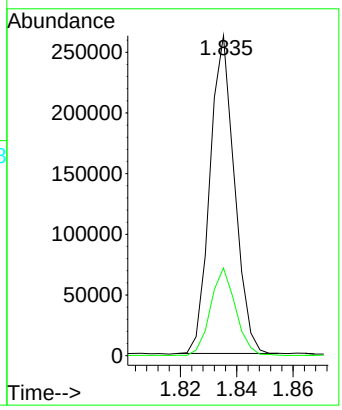




#15
Acetone
Concen: 8.505 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 15870

Ion	Ratio	Lower	Upper
43	100		
58	28.0	22.4	33.6



Instrument :
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ClientSampleId :
ICVVL041725

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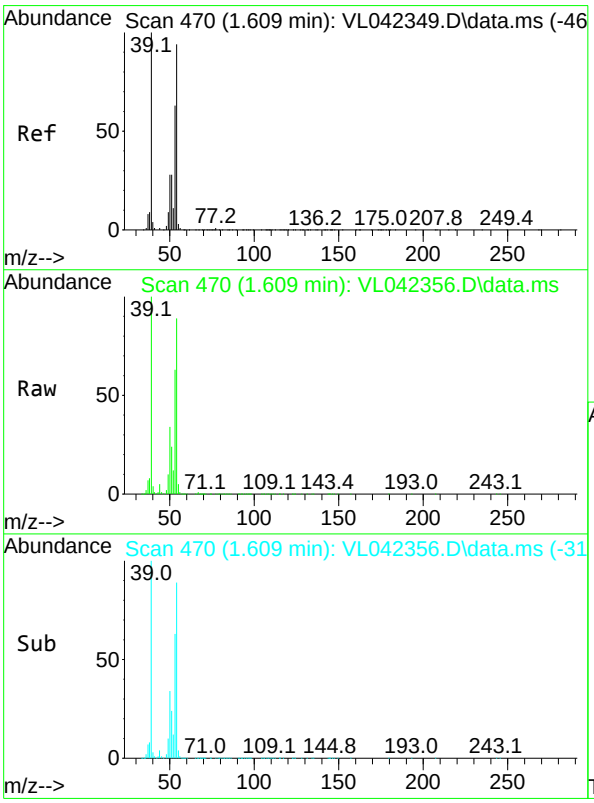
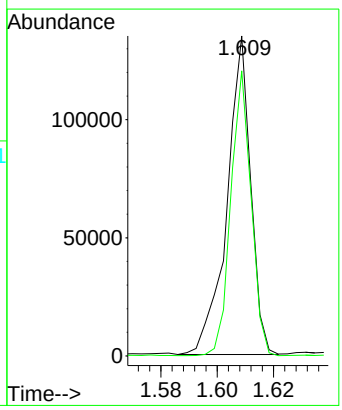
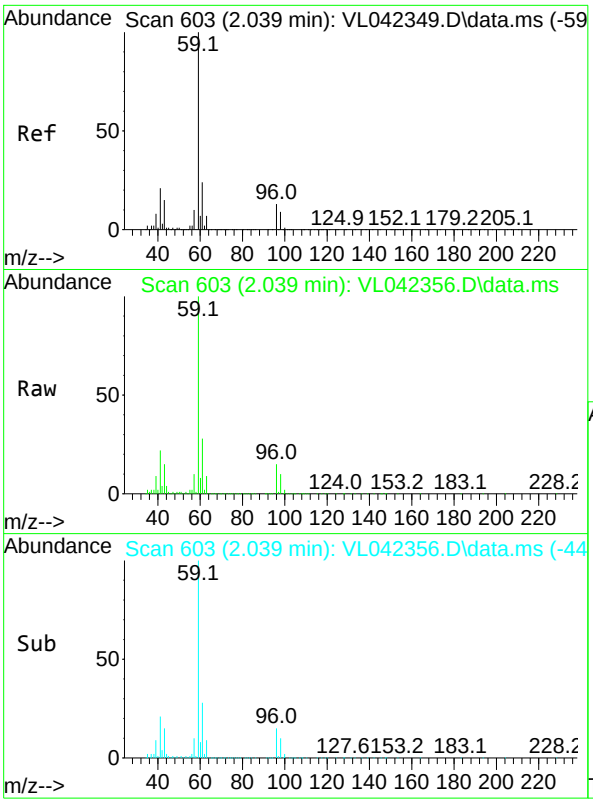


#16
1,3-Butadiene
Concen: 8.829 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 39 Resp: 78804

Ion	Ratio	Lower	Upper
39	100		
54	77.1	64.9	97.3

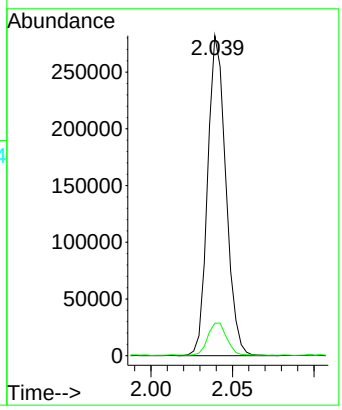




#17
tert-Butyl alcohol
Concen: 9.468 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 59 Resp: 21895

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.7	13.1



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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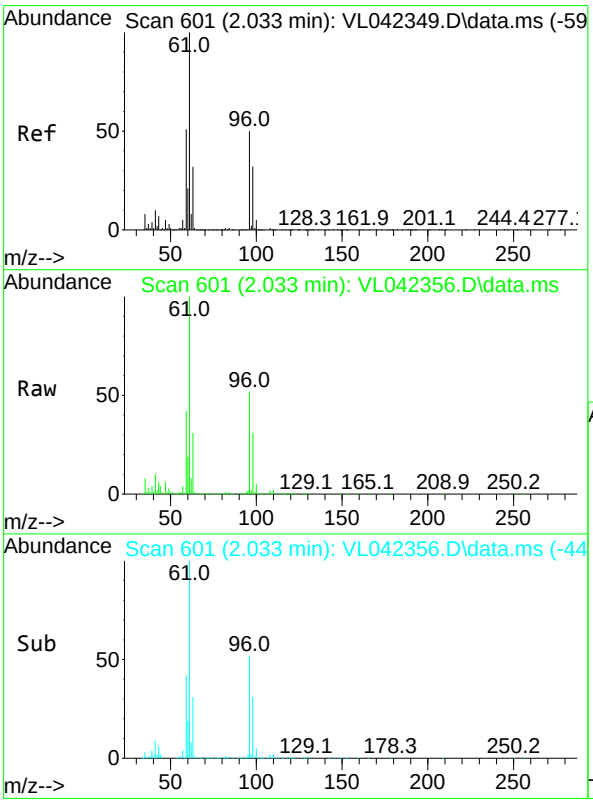
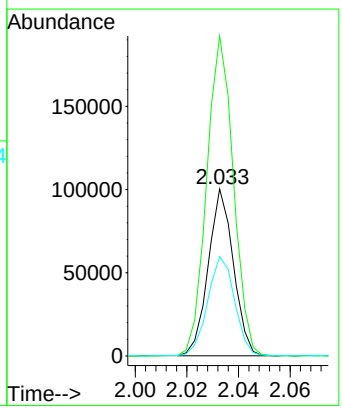
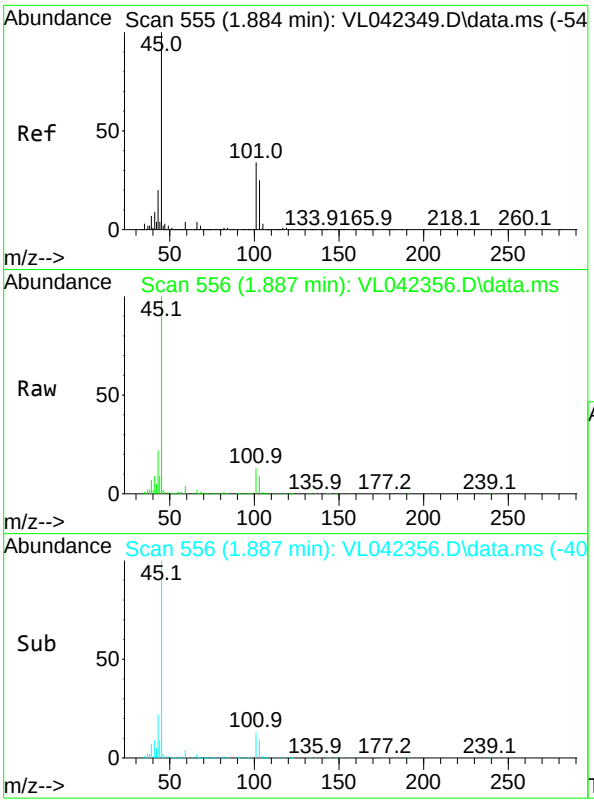


#18
1,1-Dichloroethene
Concen: 9.287 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 96 Resp: 67940

Ion	Ratio	Lower	Upper
96	100		
61	191.6	160.2	240.2
98	59.4	51.0	76.4

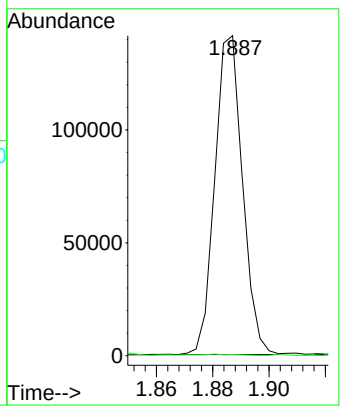




#19
Isopropyl Alcohol
Concen: 9.296 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 45 Resp: 9636

Ion	Ratio	Lower	Upper
45	100		
58	46.1	34.5	51.7



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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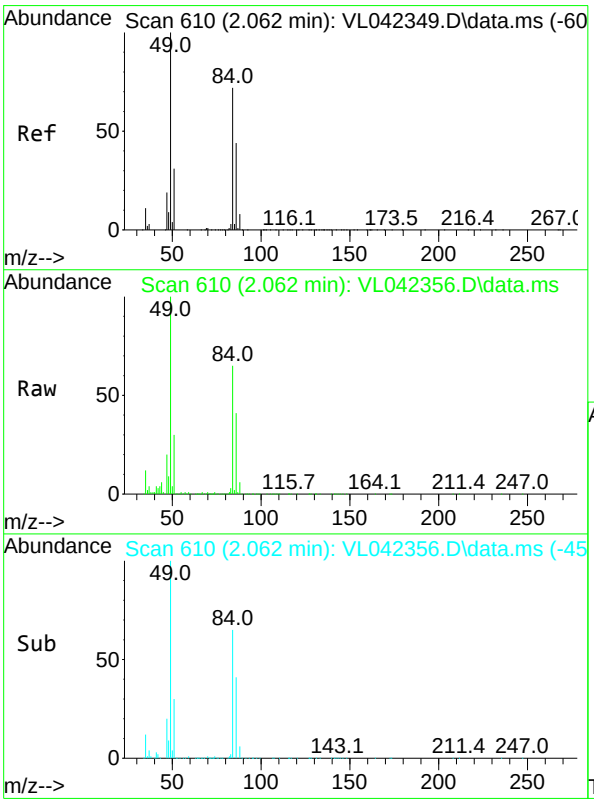
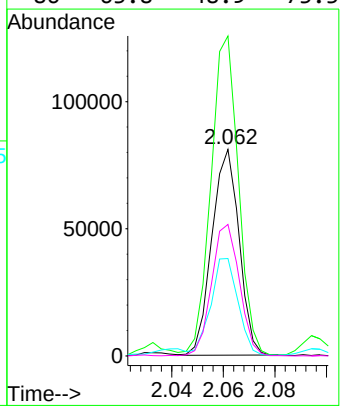
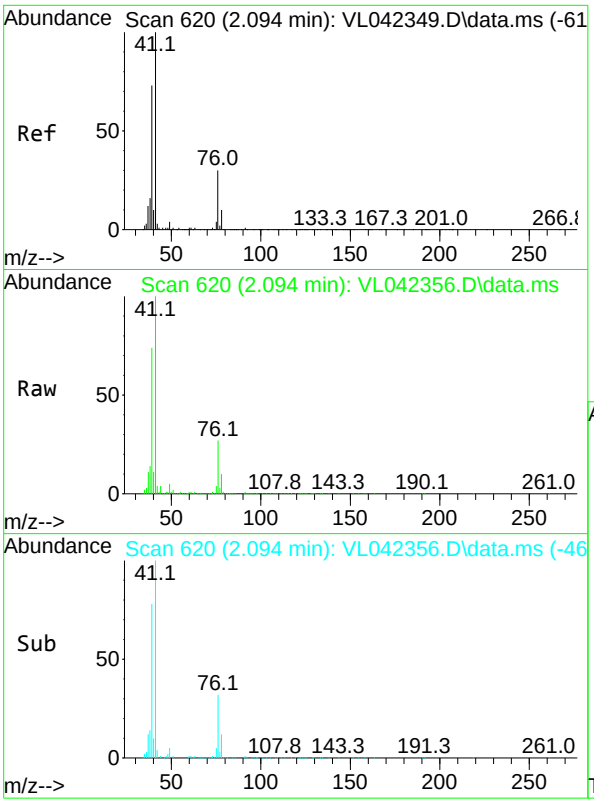


#20
Methylene Chloride
Concen: 8.101 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 84 Resp: 59203

Ion	Ratio	Lower	Upper
84	100		
49	155.3	111.6	167.4
51	47.0	35.1	52.7
86	63.8	48.9	73.3

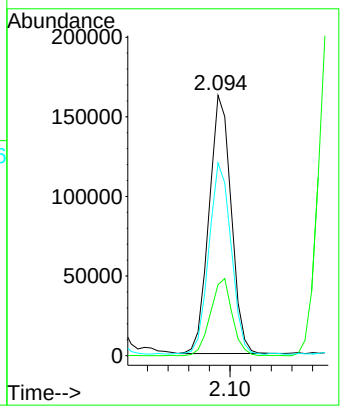




#21
Allyl Chloride
Concen: 9.368 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 41 Resp: 12070

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.8	37.2
39	74.5	60.6	90.8



Instrument :
MSVOA_L
ClientSampleId :
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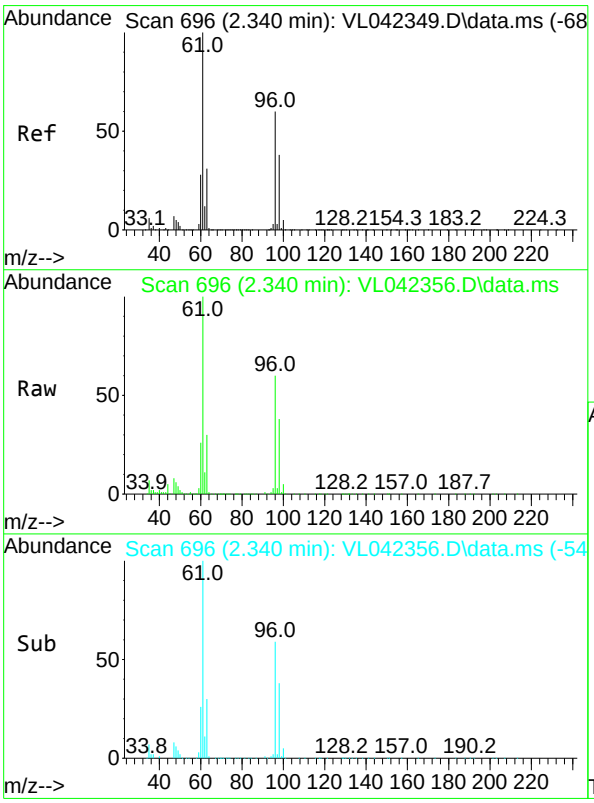
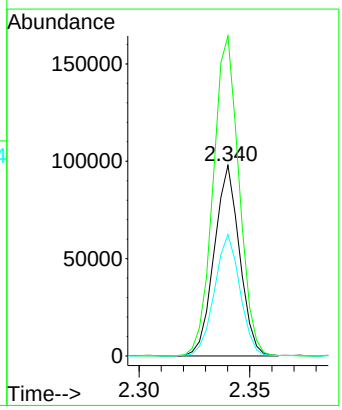
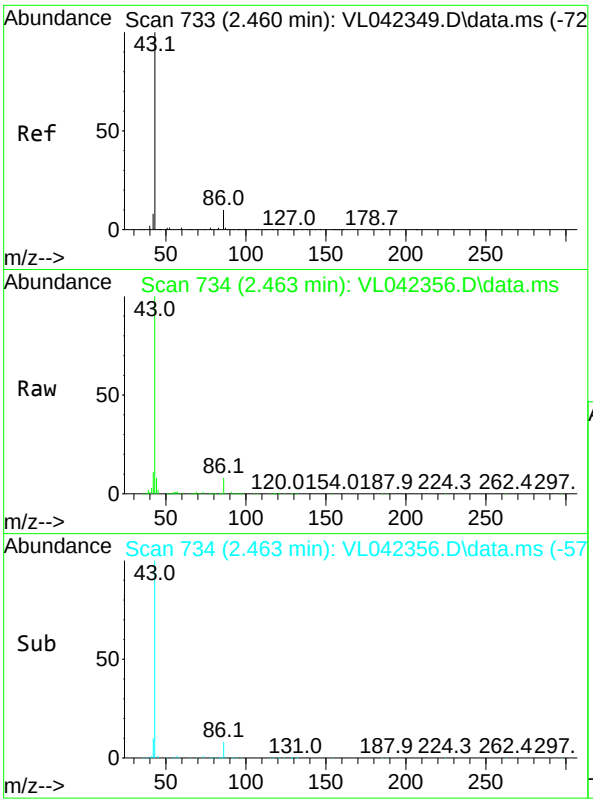


#22
trans-1,2-Dichloroethene
Concen: 9.373 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 96 Resp: 78070

Ion	Ratio	Lower	Upper
96	100		
61	167.7	133.7	200.5
98	63.5	50.3	75.5

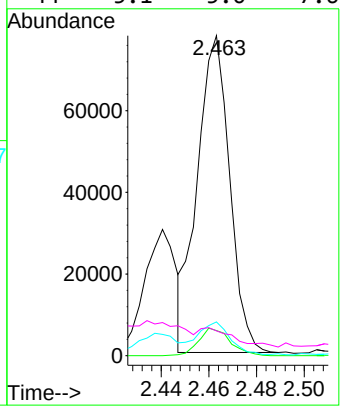




#23
Vinyl Acetate
Concen: 9.714 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 7337

Ion	Ratio	Lower	Upper
43	100		
86	8.0	6.5	9.7
42	10.0	7.8	11.8
44	5.1	5.0	7.6



Instrument :
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ClientSampleId :
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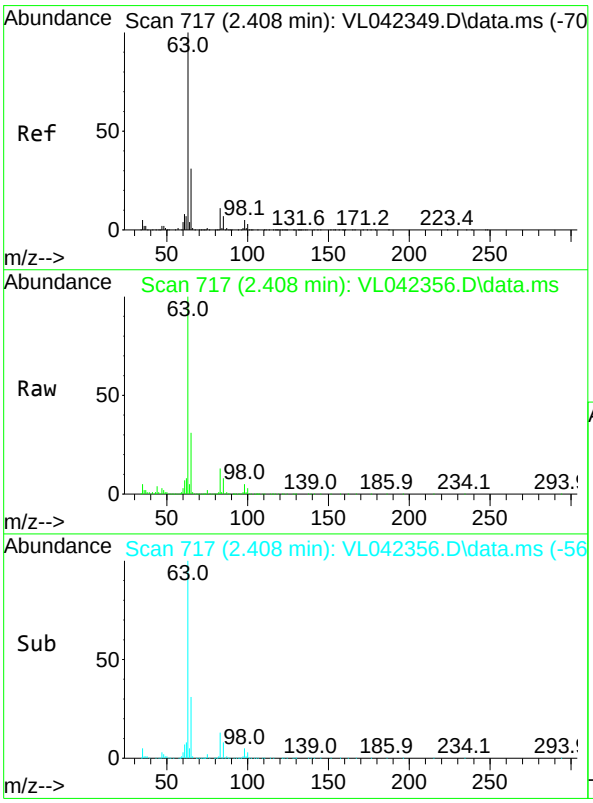
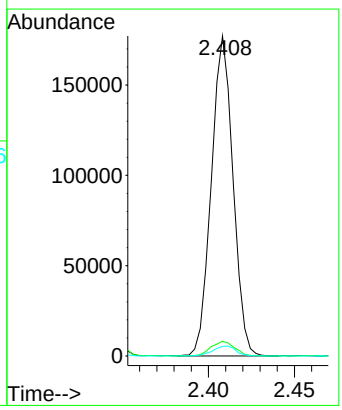
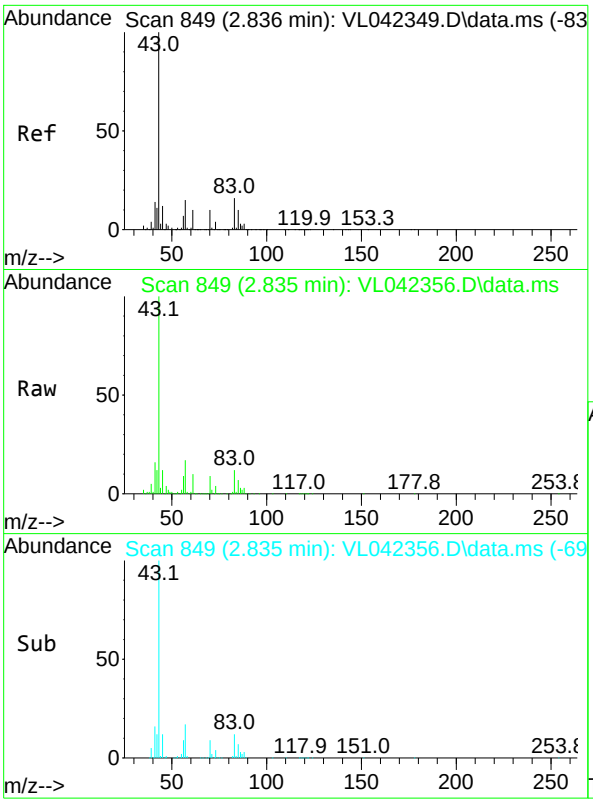


#24
1,1-Dichloroethane
Concen: 9.832 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 63 Resp: 155571

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.0	1.6	4.8

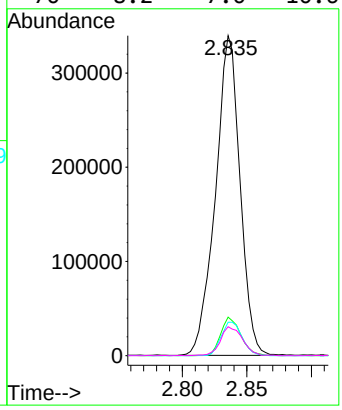




#25
Ethyl Acetate
Concen: 9.759 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 449014

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.3	12.5
61	9.0	7.3	10.9
70	8.2	7.0	10.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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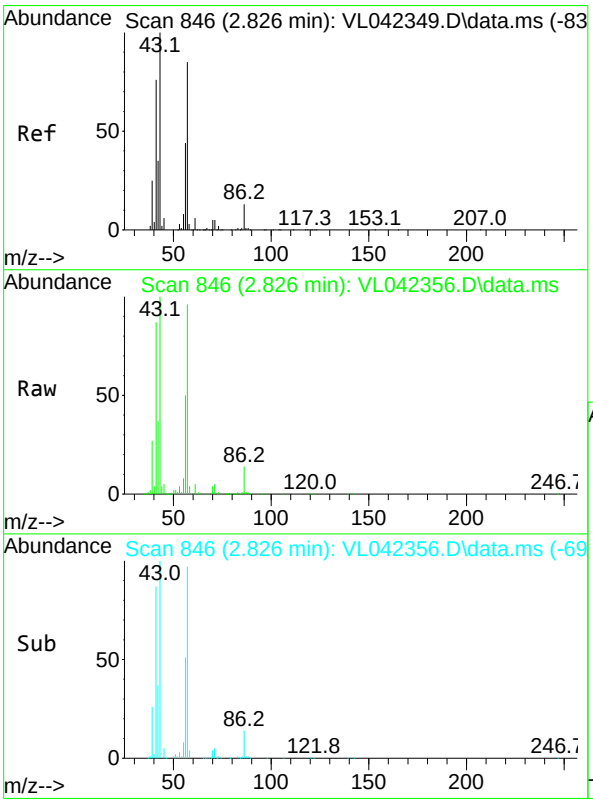
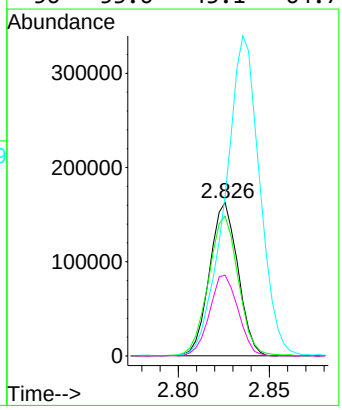
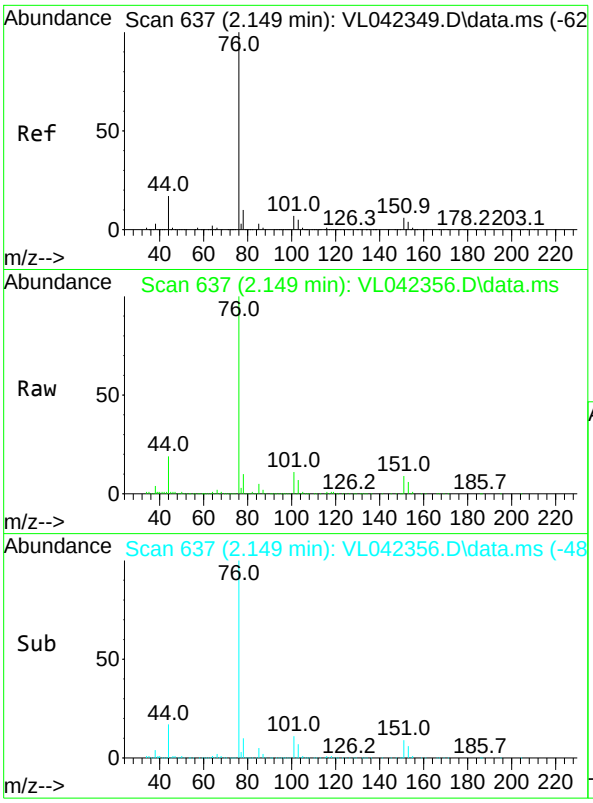


#26
Hexane
Concen: 9.439 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 57 Resp: 175752

Ion	Ratio	Lower	Upper
57	100		
41	96.6	77.9	116.9
43	256.0	208.4	312.6
56	53.6	43.1	64.7

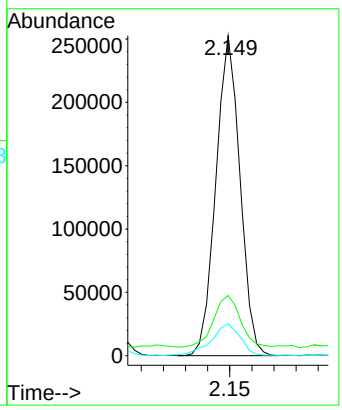




#27
Carbon Disulfide
Concen: 9.587 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 76 Resp: 19111

Ion	Ratio	Lower	Upper
76	100		
44	19.3	15.5	23.3
78	11.9	9.3	13.9



Instrument :
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ClientSampleId :
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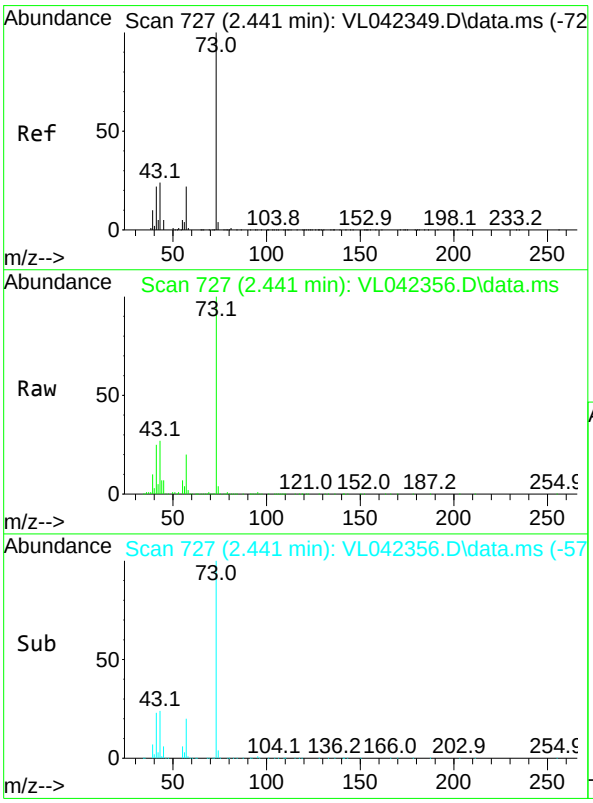
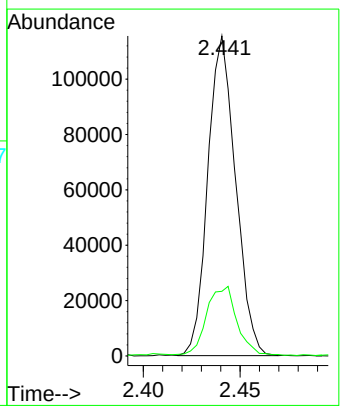
Supervised By :Mahesh Dadoda 04/18/2025

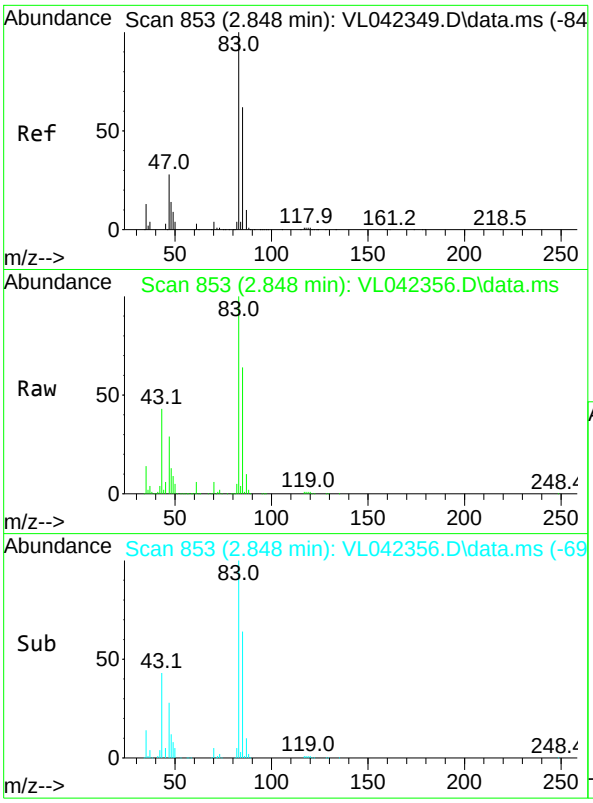


#28
Methyl tert-Butyl Ether
Concen: 9.442 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 73 Resp: 115190

Ion	Ratio	Lower	Upper
73	100		
57	23.4	21.3	31.9

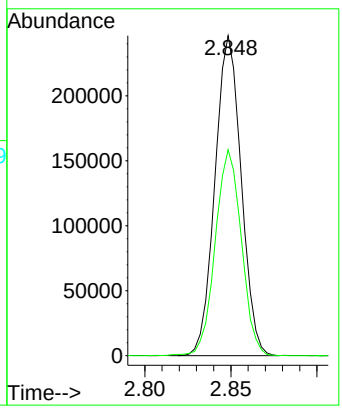




#29
Chloroform
Concen: 9.912 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 83 Resp: 26085

Ion	Ratio	Lower	Upper
83	100		
85	64.3	50.0	75.0



Instrument :
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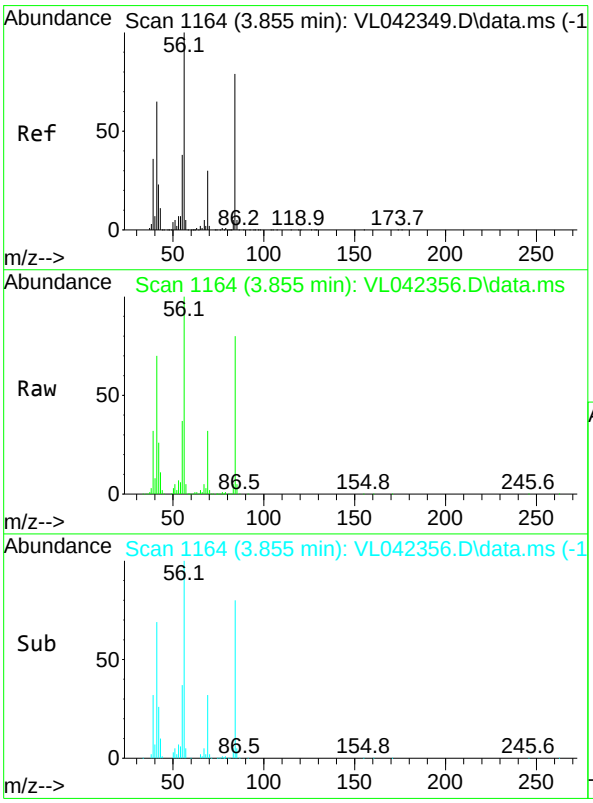
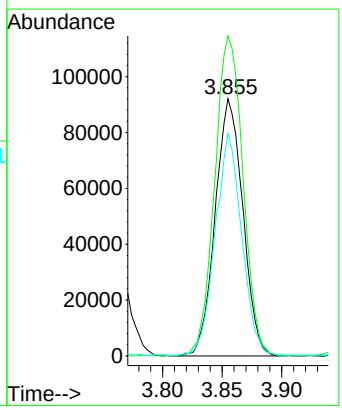
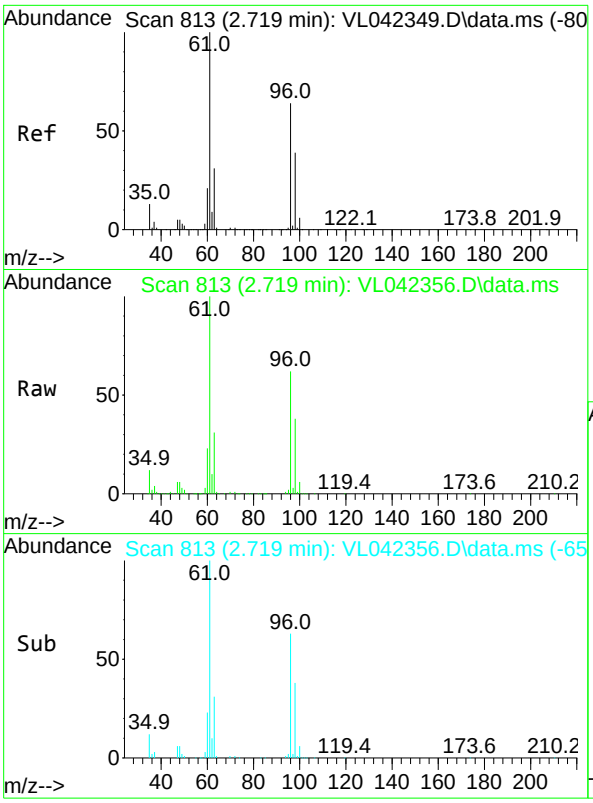


#30
Cyclohexane
Concen: 9.849 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 84 Resp: 148246

Ion	Ratio	Lower	Upper
84	100		
56	127.7	101.0	151.4
41	83.2	67.4	101.0

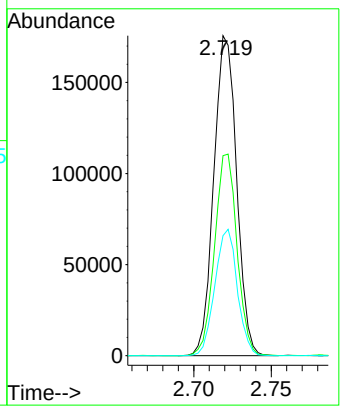




#31
cis-1,2-Dichloroethene
Concen: 10.167 ppbv
RT: 2.719 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 61 Resp: 17999

Ion	Ratio	Lower	Upper
61	100		
96	62.5	50.8	76.2
98	37.5	30.9	46.3



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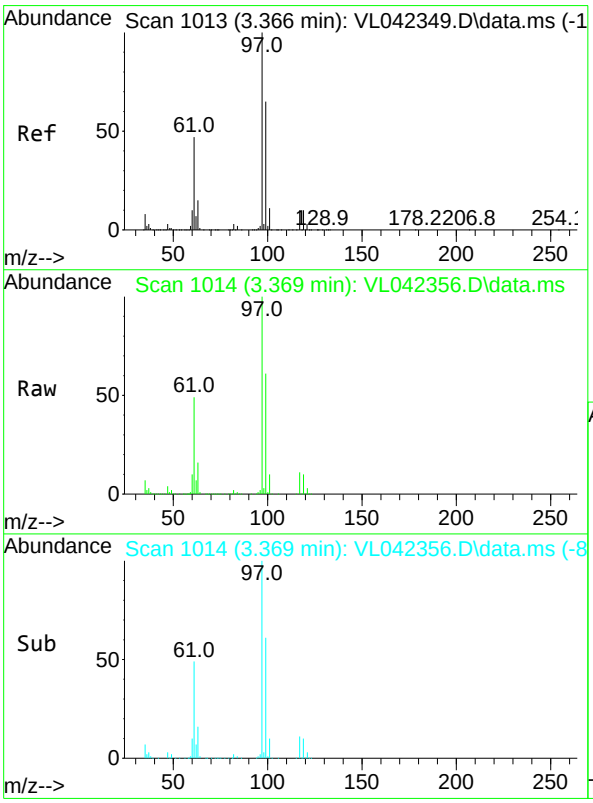
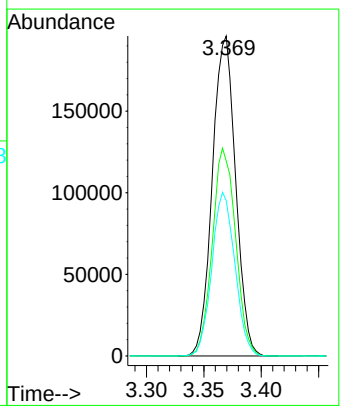
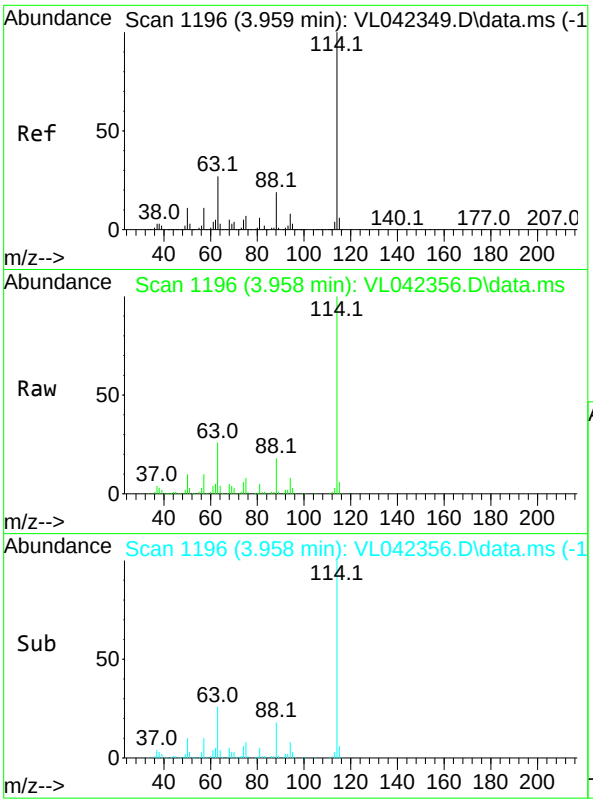


#32
1,1,1-Trichloroethane
Concen: 9.336 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 97 Resp: 276599

Ion	Ratio	Lower	Upper
97	100		
99	65.0	51.0	76.4
61	50.7	38.8	58.2

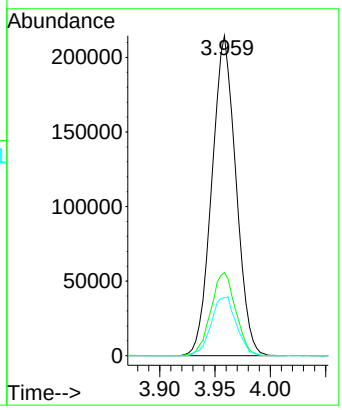




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.958 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:114 Resp: 32452

Ion	Ratio	Lower	Upper
114	100		
63	26.8	21.8	32.6
88	19.2	15.5	23.3



Instrument :
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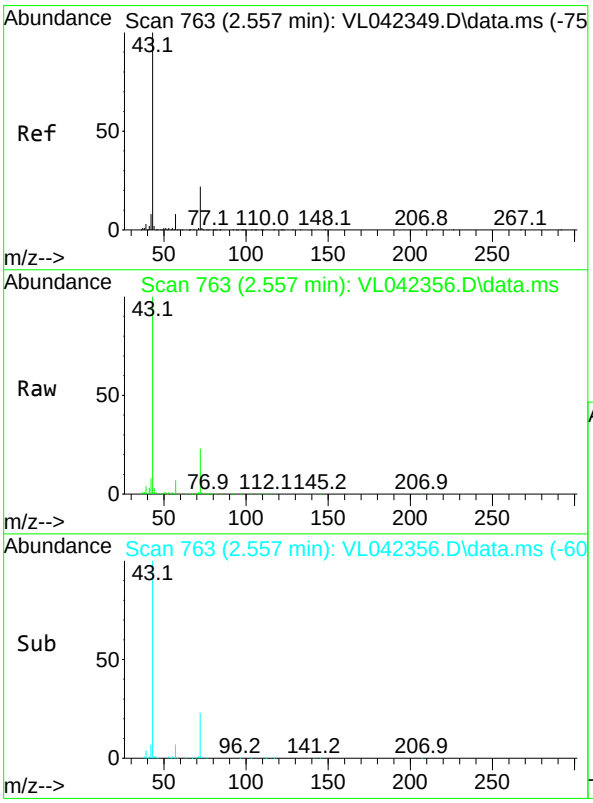
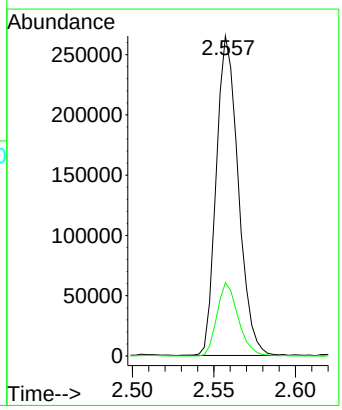
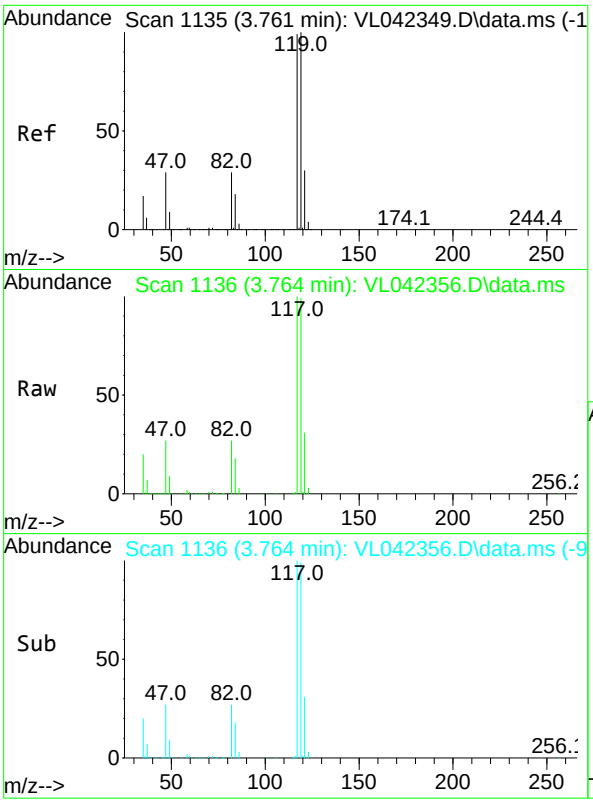


#34
2-Butanone
Concen: 9.700 ppbv
RT: 2.557 min Scan# 763
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 248969

Ion	Ratio	Lower	Upper
43	100		
72	22.1	18.2	27.2

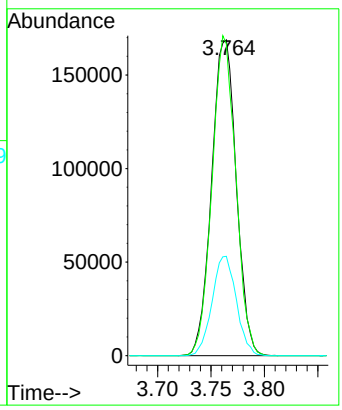




#35
Carbon Tetrachloride
Concen: 9.256 ppbv
RT: 3.764 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:117 Resp: 27186

Ion	Ratio	Lower	Upper
117	100		
119	98.7	80.5	120.7
121	31.5	24.2	36.2



Instrument :
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ClientSampleId :
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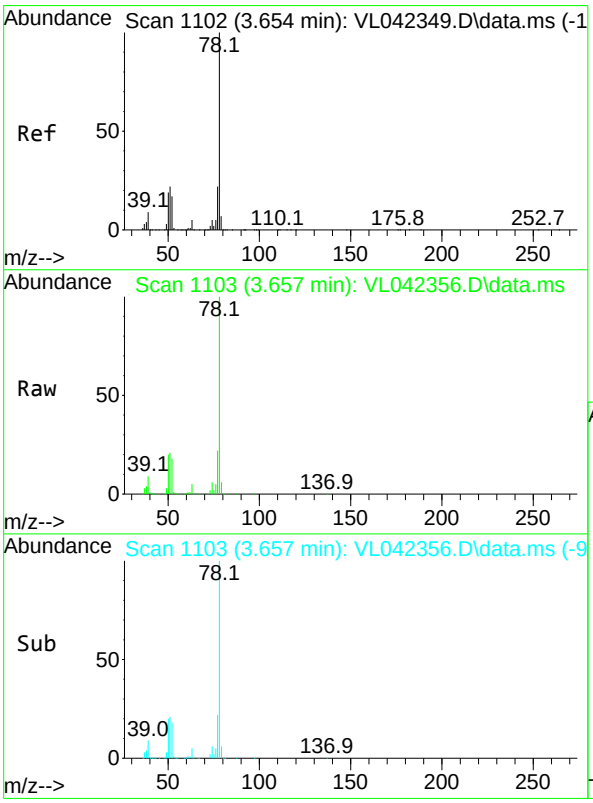
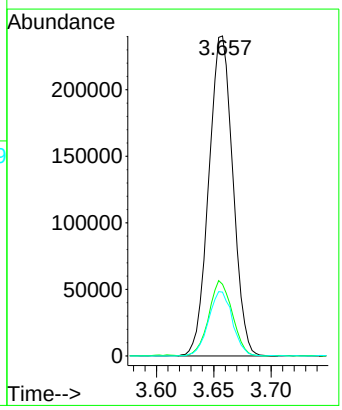
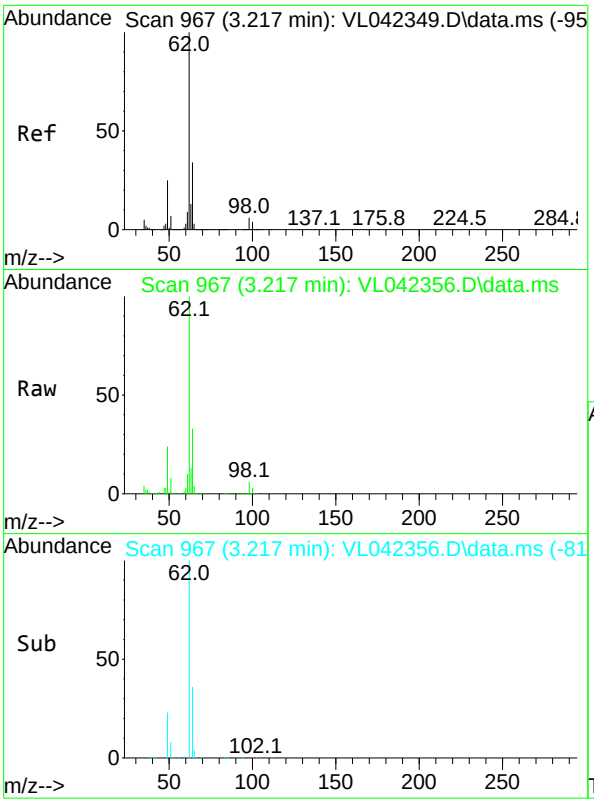


#36
Benzene
Concen: 10.014 ppbv
RT: 3.657 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 78 Resp: 350545

Ion	Ratio	Lower	Upper
78	100		
77	22.3	17.4	26.0
50	19.9	15.5	23.3

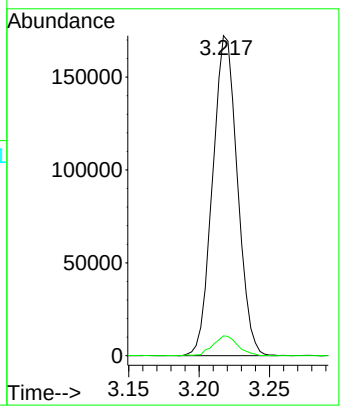




#37
1,2-Dichloroethane
Concen: 10.081 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 62 Resp: 21179

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.1	7.7



Instrument :
MSVOA_L
ClientSampleId :
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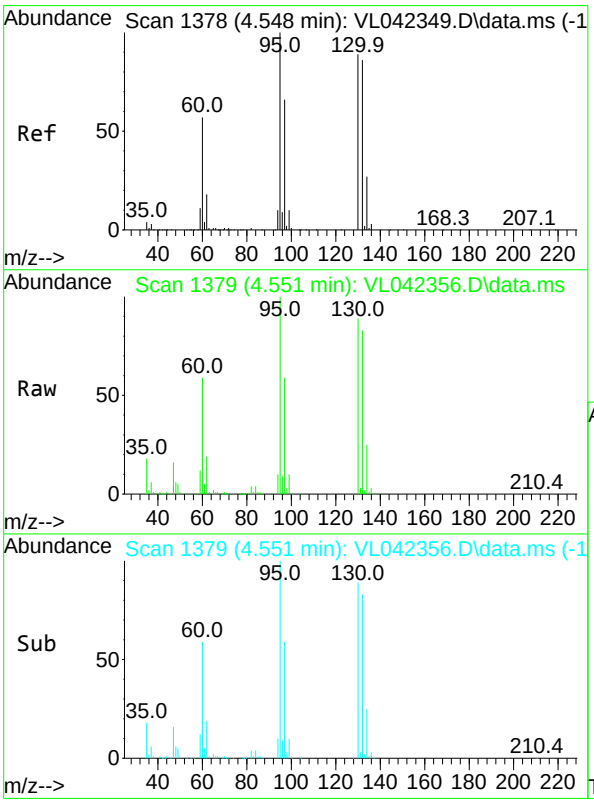
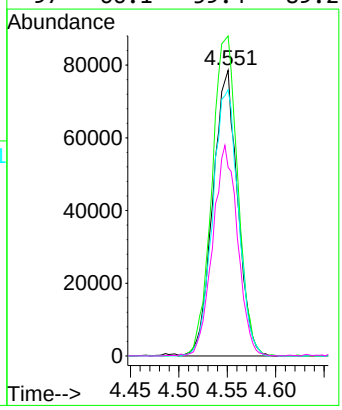
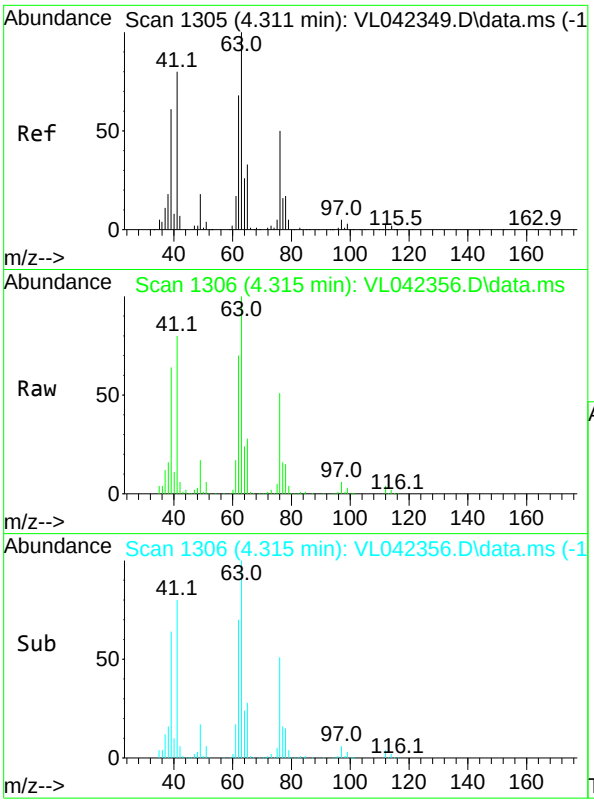


#38
Trichloroethene
Concen: 9.143 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:130 Resp: 139872

Ion	Ratio	Lower	Upper
130	100		
95	112.0	89.8	134.6
132	93.2	77.7	116.5
97	66.1	59.4	89.2

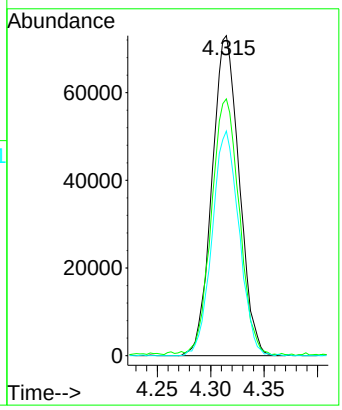




#39
1,2-Dichloropropane
Concen: 9.908 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 63 Resp: 12923

Ion	Ratio	Lower	Upper
63	100		
41	79.9	64.2	96.2
62	70.2	54.3	81.5



Instrument :
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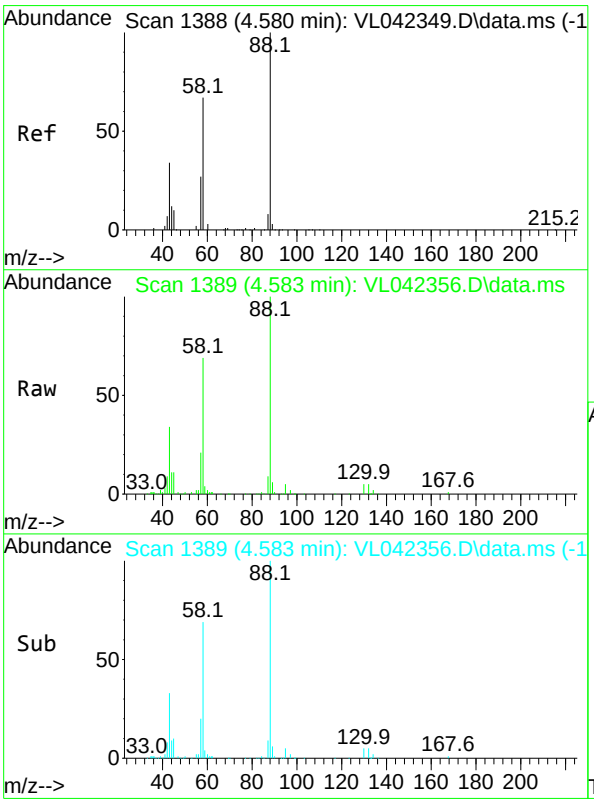
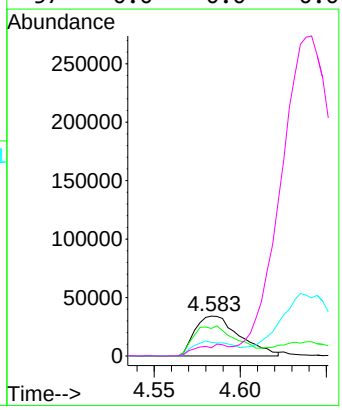
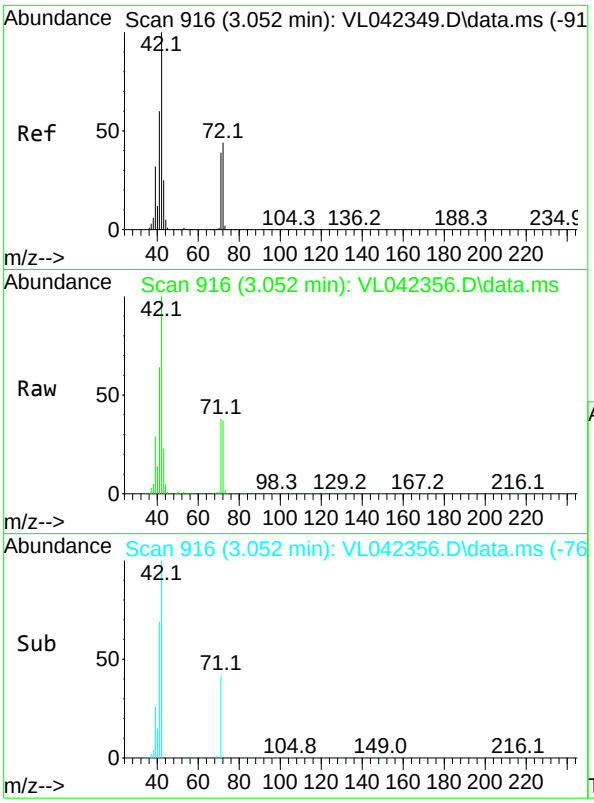


#40
1,4-Dioxane
Concen: 8.591 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 88 Resp: 61587

Ion	Ratio	Lower	Upper
88	100		
58	76.1	61.4	92.0
43	35.9	23.2	34.8#
57	0.0	0.0	0.0

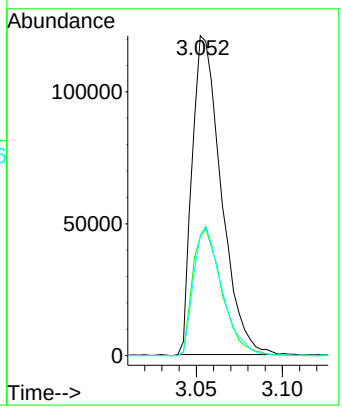




#41
Tetrahydrofuran
Concen: 9.479 ppbv
RT: 3.052 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 42 Resp: 14186

Ion	Ratio	Lower	Upper
42	100		
72	40.2	32.3	48.5
71	39.8	31.4	47.2



Instrument :
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ClientSampleId :
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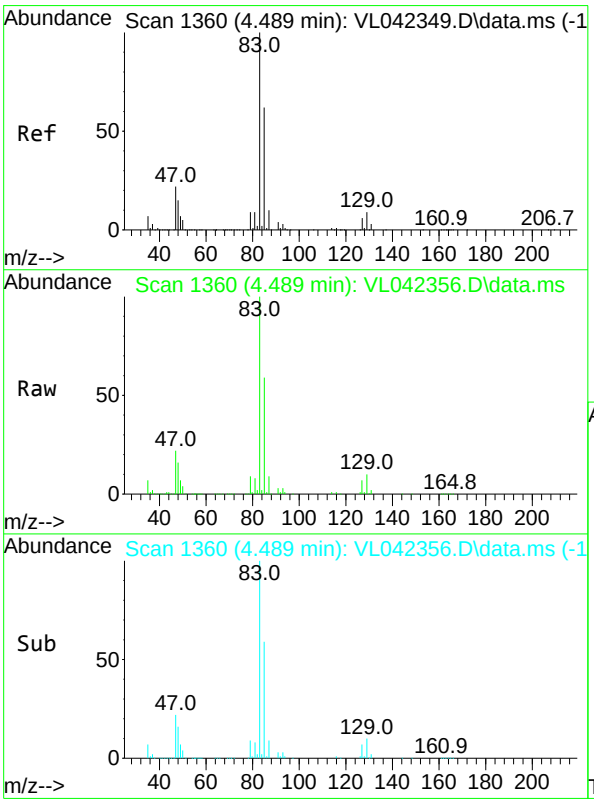
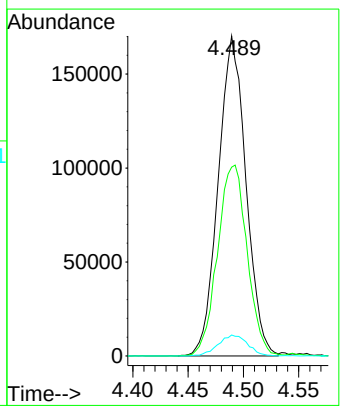
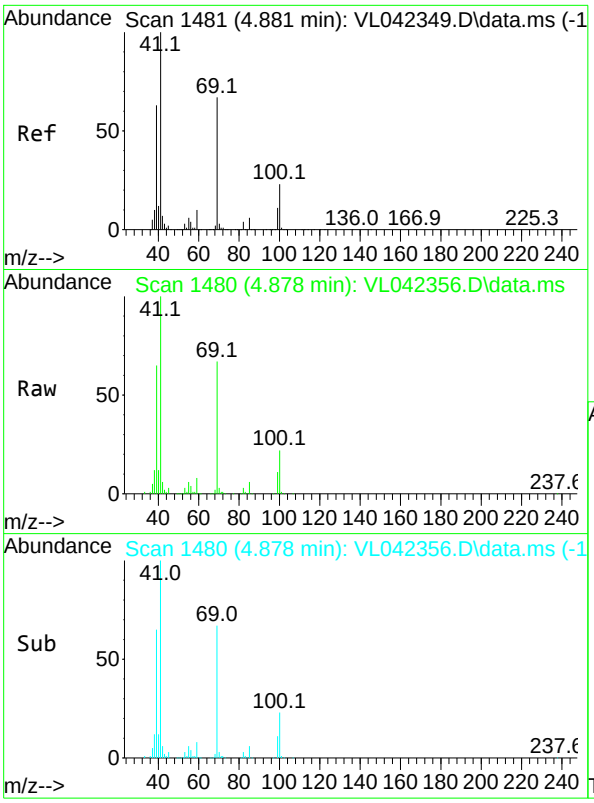


#42
Bromodichloromethane
Concen: 10.156 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 83 Resp: 296946

Ion	Ratio	Lower	Upper
83	100		
85	59.0	49.7	74.5
127	6.6	5.1	7.7

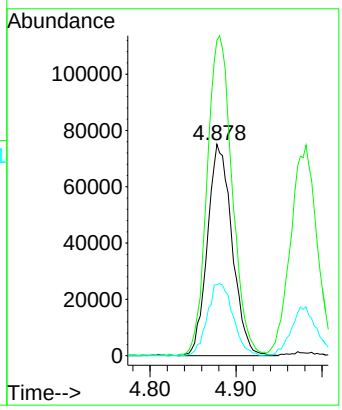




#43
Methyl Methacrylate
Concen: 9.458 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 69 Resp: 14920

Ion	Ratio	Lower	Upper
69	100		
41	154.1	118.6	177.8
100	35.5	28.2	42.2



Instrument :
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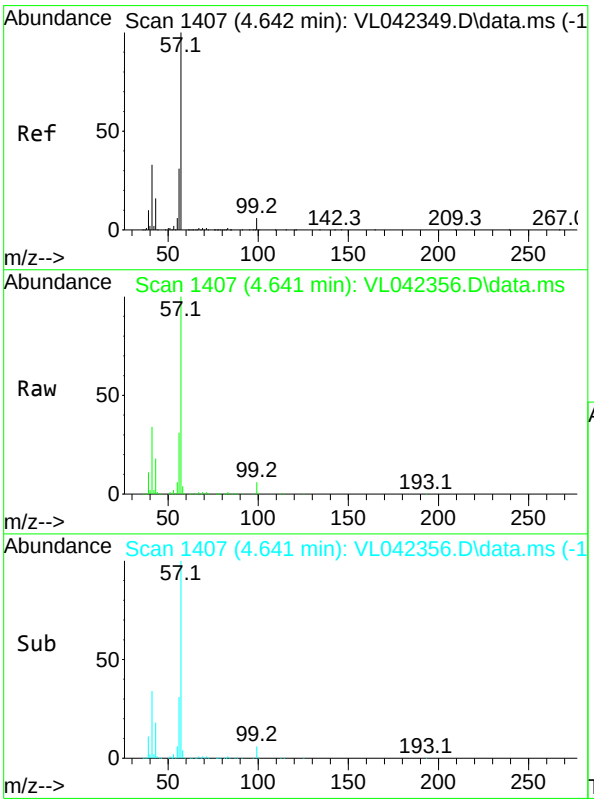
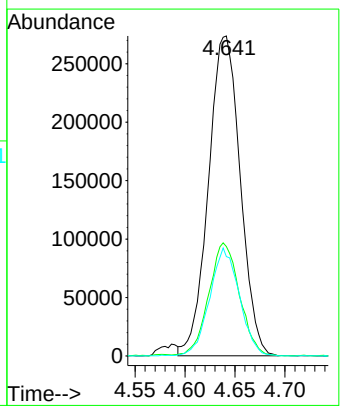
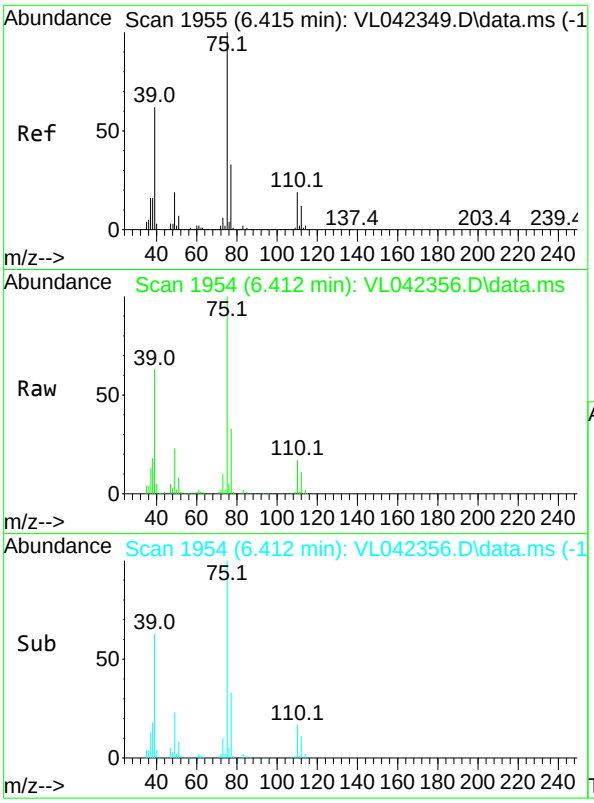


#44
2,2,4-Trimethylpentane
Concen: 10.030 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 57 Resp: 606376

Ion	Ratio	Lower	Upper
57	100		
41	34.3	27.2	40.8
56	31.6	25.7	38.5

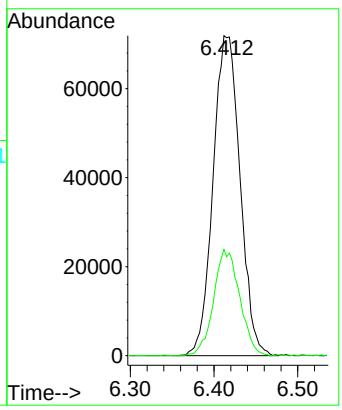




#45
t-1,3-Dichloropropene
Concen: 9.975 ppbv
RT: 6.412 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 75 Resp: 16075

Ion	Ratio	Lower	Upper
75	100		
77	33.2	27.0	40.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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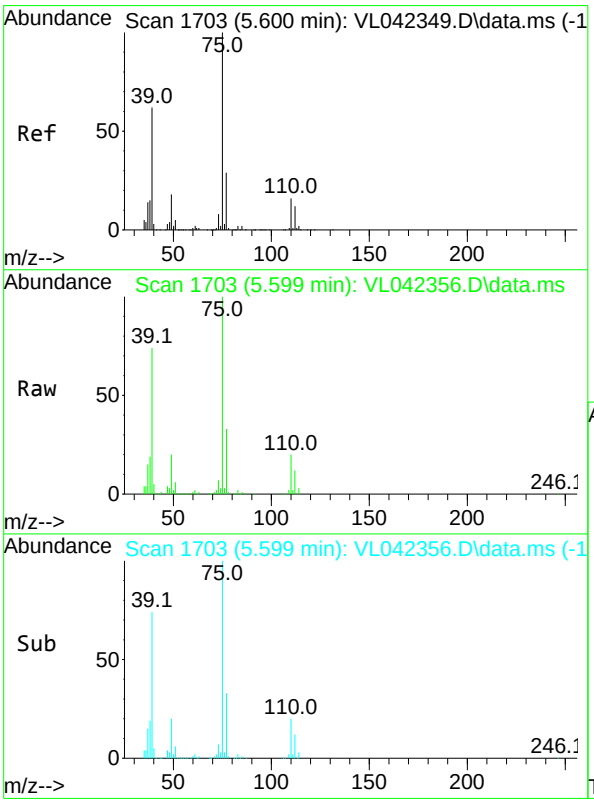
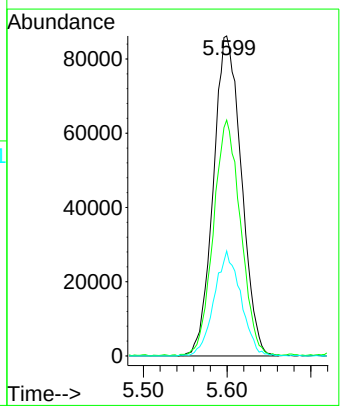
Supervised By :Mahesh Dadoda 04/18/2025

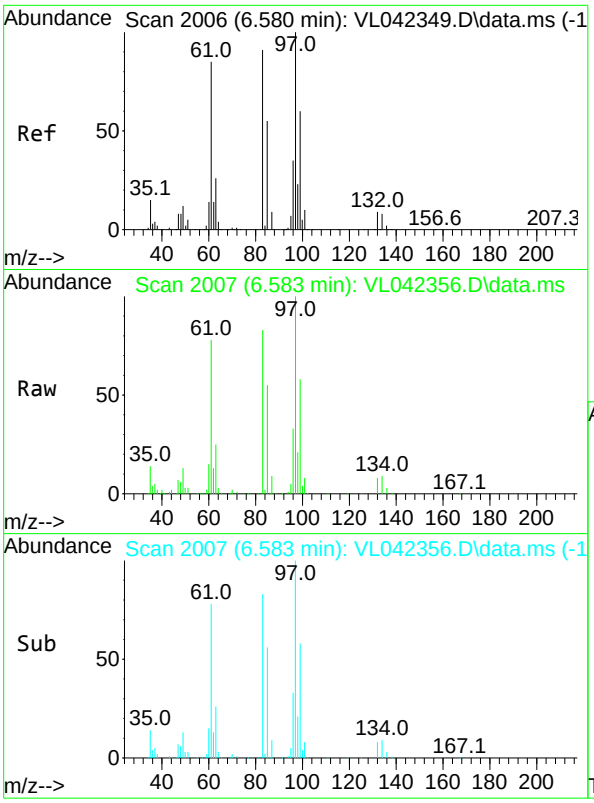


#46
cis-1,3-Dichloropropene
Concen: 10.148 ppbv
RT: 5.599 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 75 Resp: 200144

Ion	Ratio	Lower	Upper
75	100		
39	73.7	50.0	75.0
77	32.7	23.0	34.6

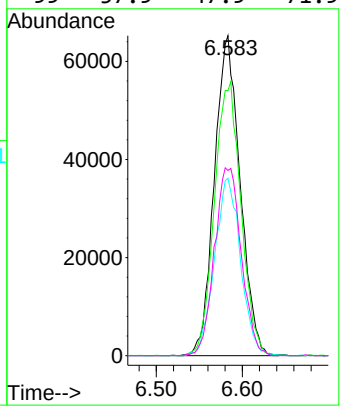




#47
1,1,2-Trichloroethane
Concen: 10.202 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 97 Resp: 13557

Ion	Ratio	Lower	Upper
97	100		
83	82.8	72.8	109.2
85	55.5	44.2	66.4
99	57.9	47.9	71.9



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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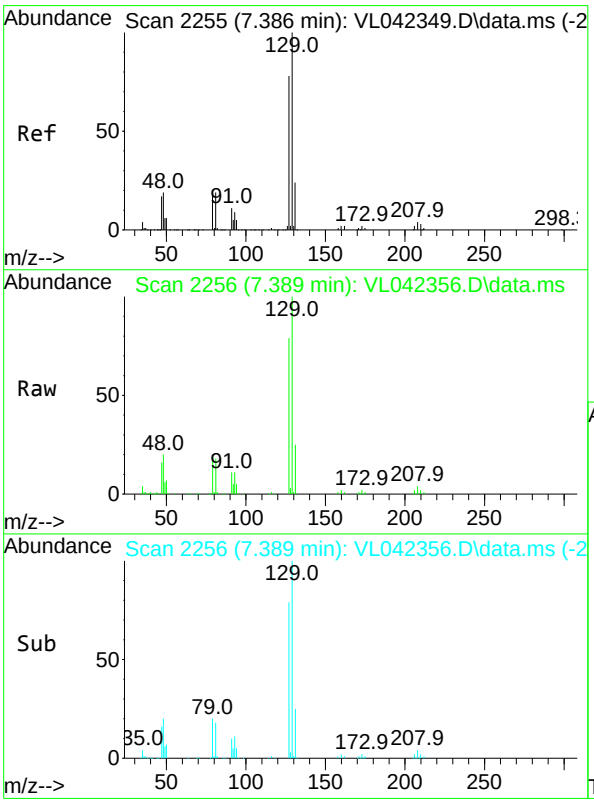
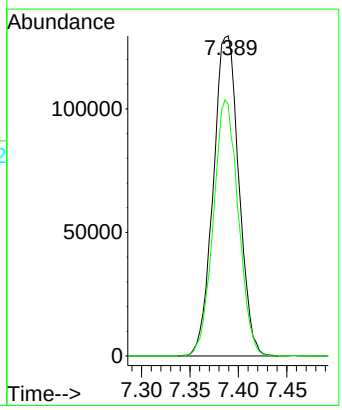
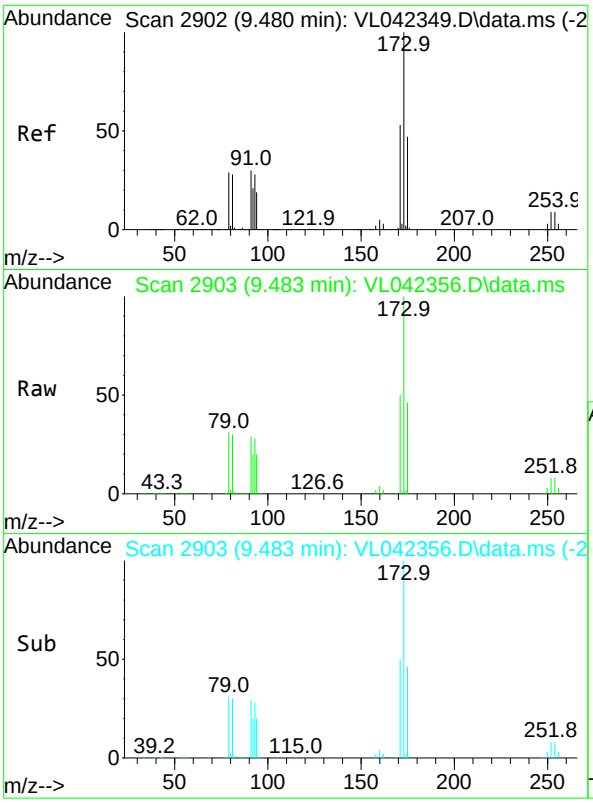


#48
Dibromochloromethane
Concen: 10.103 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:129 Resp: 237206

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3

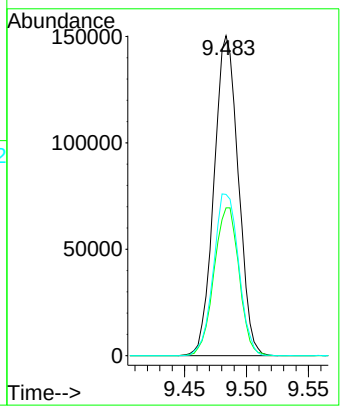




#49
Bromoform
Concen: 10.016 ppbv
RT: 9.483 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:173 Resp: 20563

Ion	Ratio	Lower	Upper
173	100		
175	47.6	38.2	57.2
171	52.5	40.9	61.3



Instrument :
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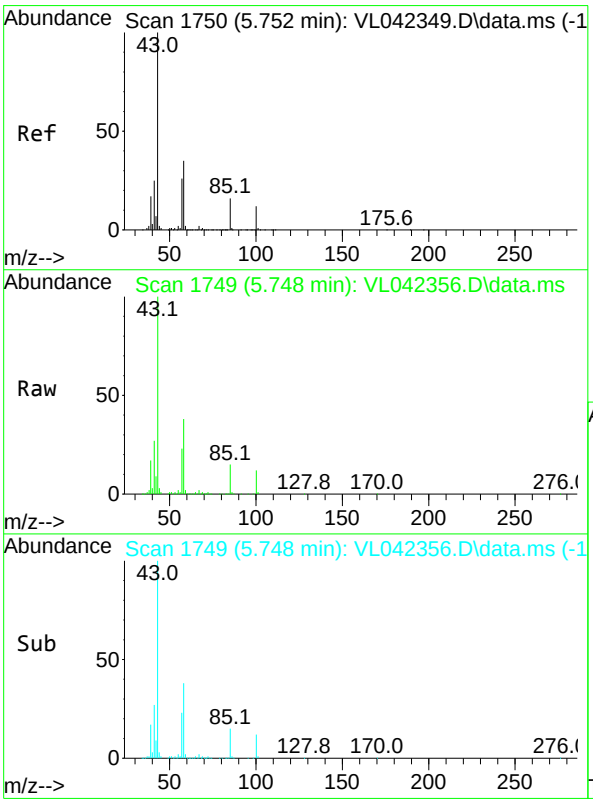
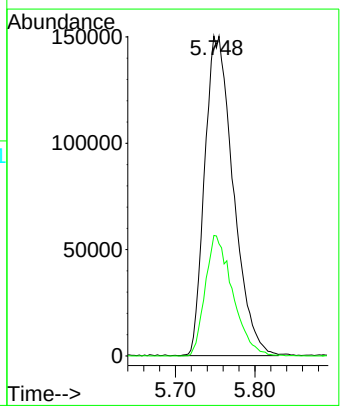
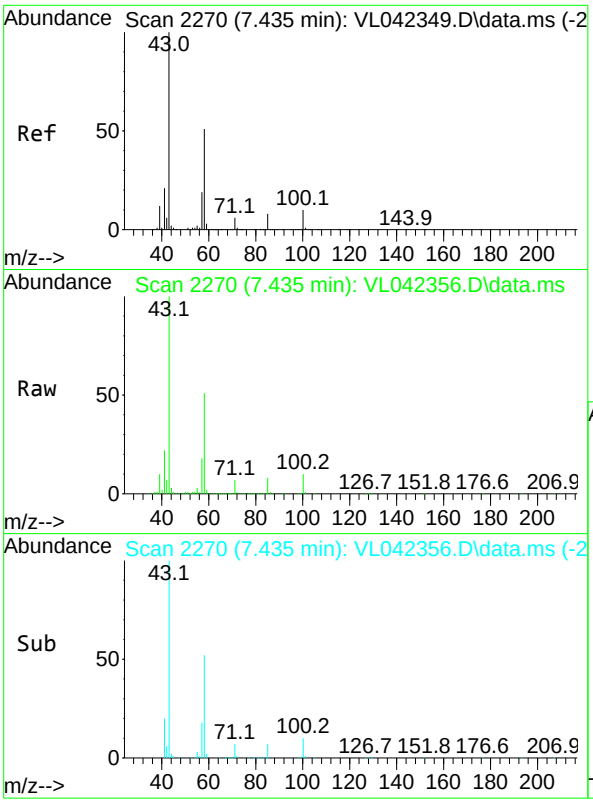


#50
4-Methyl-2-Pentanone
Concen: 8.819 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 376145

Ion	Ratio	Lower	Upper
43	100		
58	36.2	28.6	43.0





#51
2-Hexanone
Concen: 8.118 ppbv
RT: 7.435 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 31052

Ion	Ratio	Lower	Upper
43	100		
58	49.3	40.2	60.4
98	0.0	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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Reviewed By :Semsettin Yesilyurt 04/18/2025
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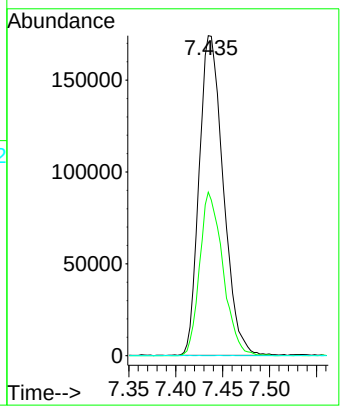
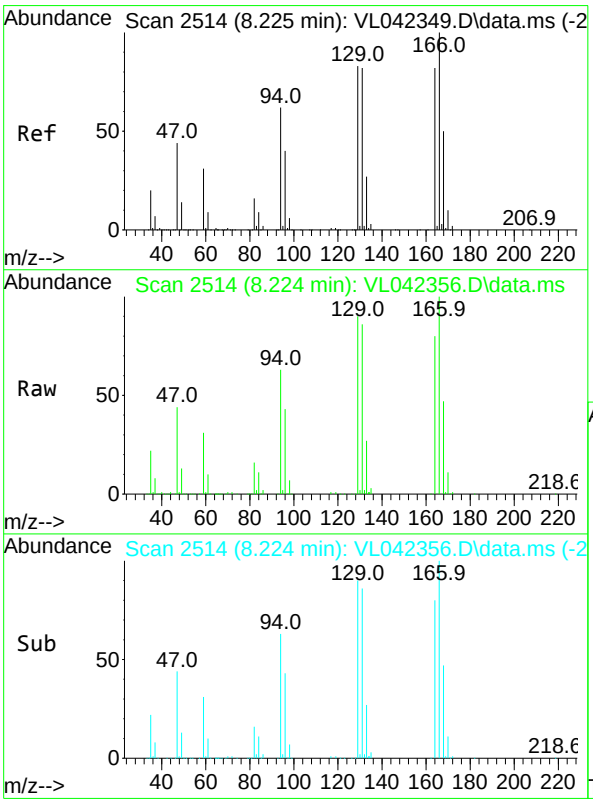
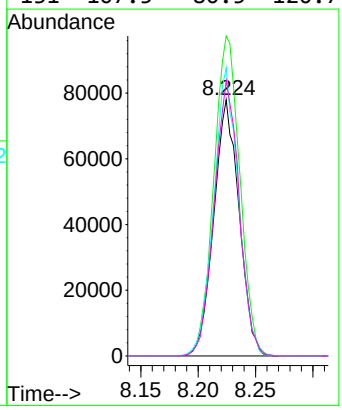


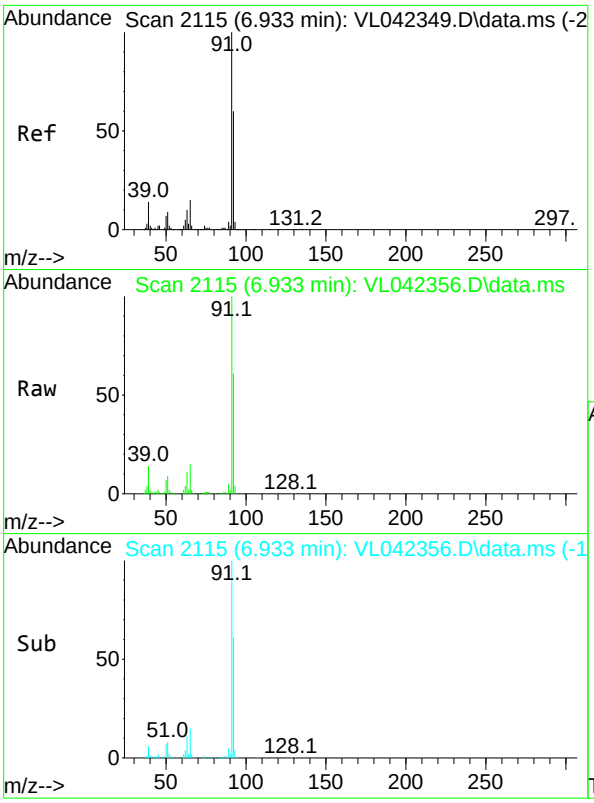


#52
Tetrachloroethene
Concen: 8.827 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:164 Resp: 119424

Ion	Ratio	Lower	Upper
164	100		
166	124.9	98.2	147.2
129	112.5	81.8	122.8
131	107.5	80.5	120.7

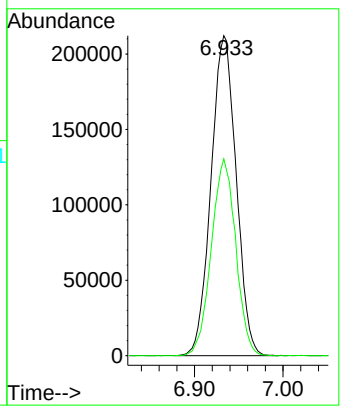




#53
Toluene
Concen: 9.986 ppbv
RT: 6.933 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 41946

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4



Instrument :
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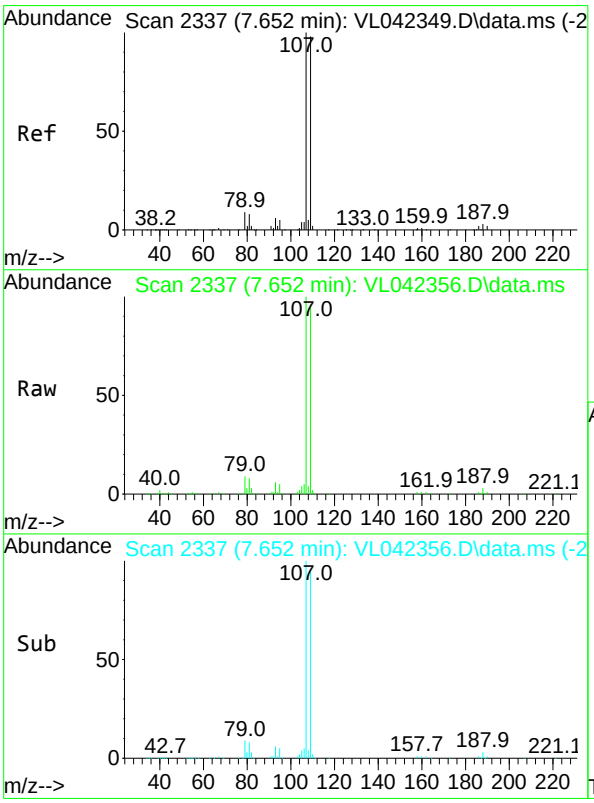
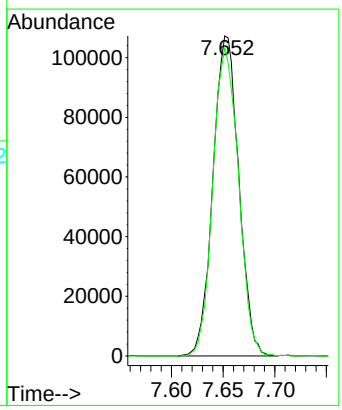
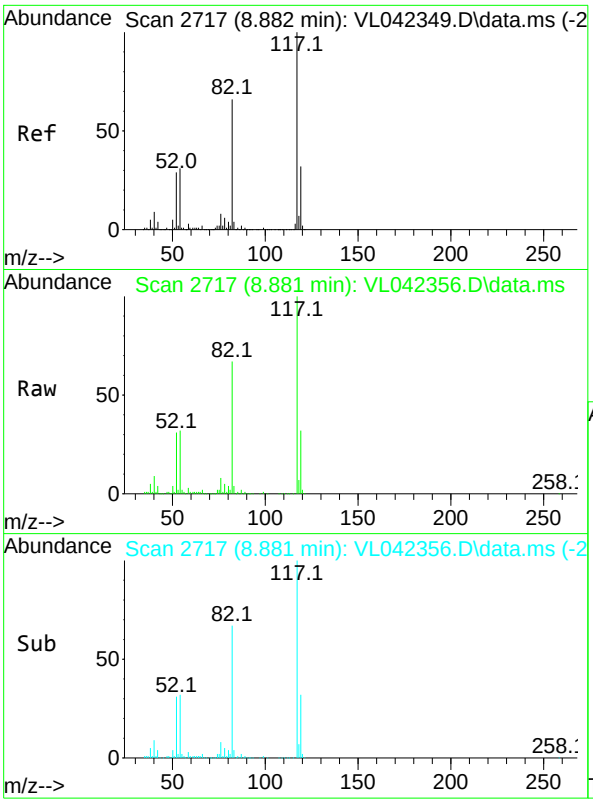


#54
1,2-Dibromoethane
Concen: 9.792 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:107 Resp: 186231

Ion	Ratio	Lower	Upper
107	100		
109	96.3	78.2	117.4

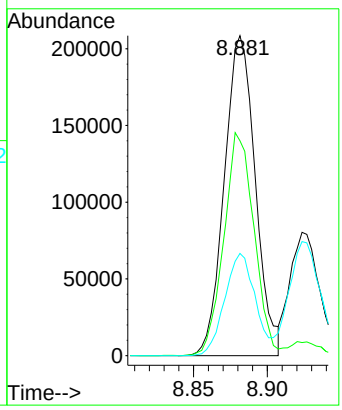




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:117 Resp: 30535

Ion	Ratio	Lower	Upper
117	100		
82	68.3	57.8	86.6
119	31.8	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
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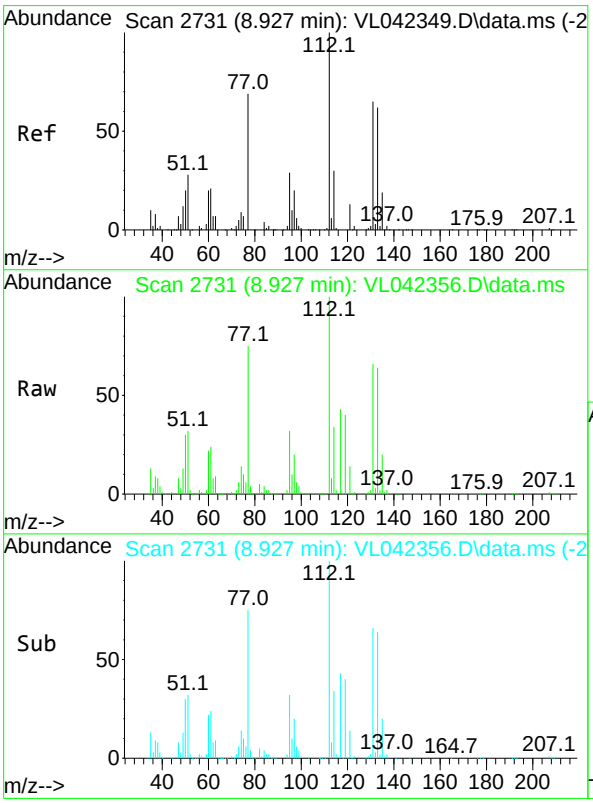
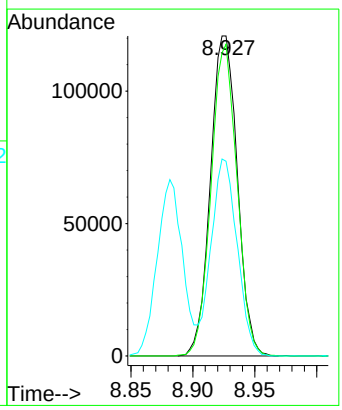
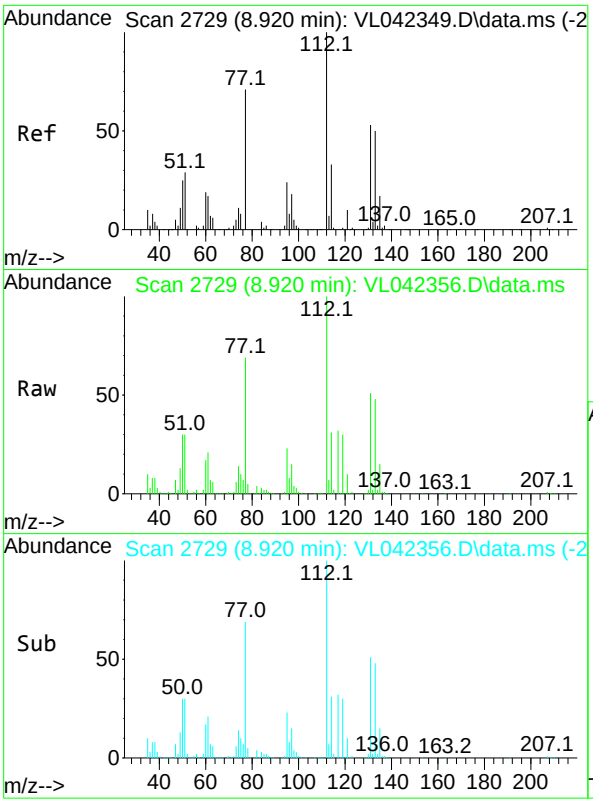


#56
1,1,1,2-Tetrachloroethane
Concen: 9.886 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:131 Resp: 182712

Ion	Ratio	Lower	Upper
131	100		
133	93.9	78.3	117.5
119	59.4	48.7	73.1

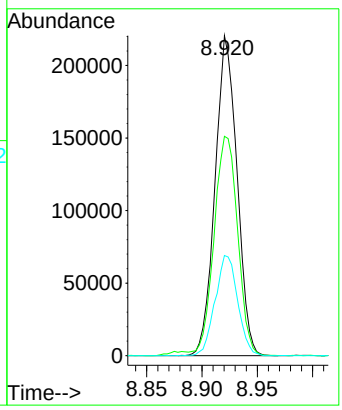




#57
Chlorobenzene
Concen: 9.589 ppbv
RT: 8.920 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:112 Resp: 30453

Ion	Ratio	Lower	Upper
112	100		
77	68.5	57.8	86.6
114	31.3	29.3	35.9



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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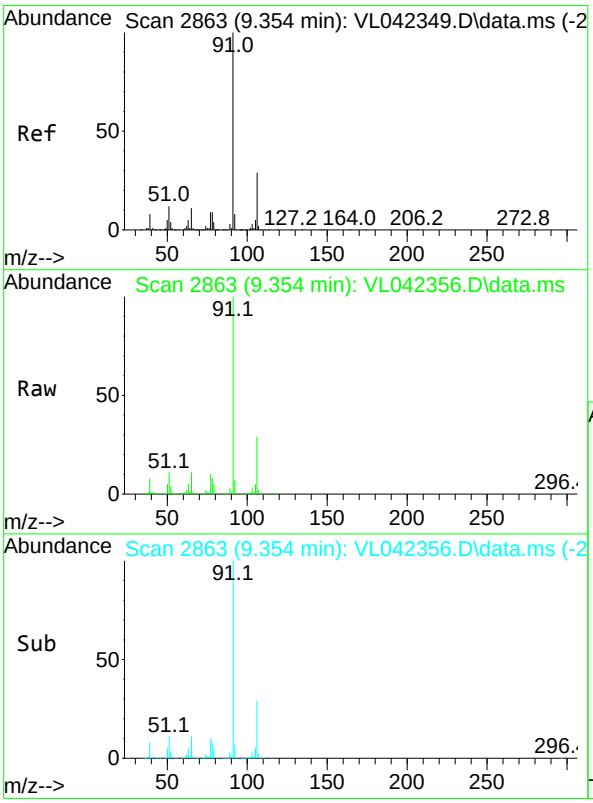
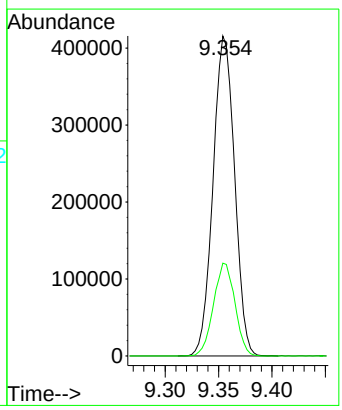
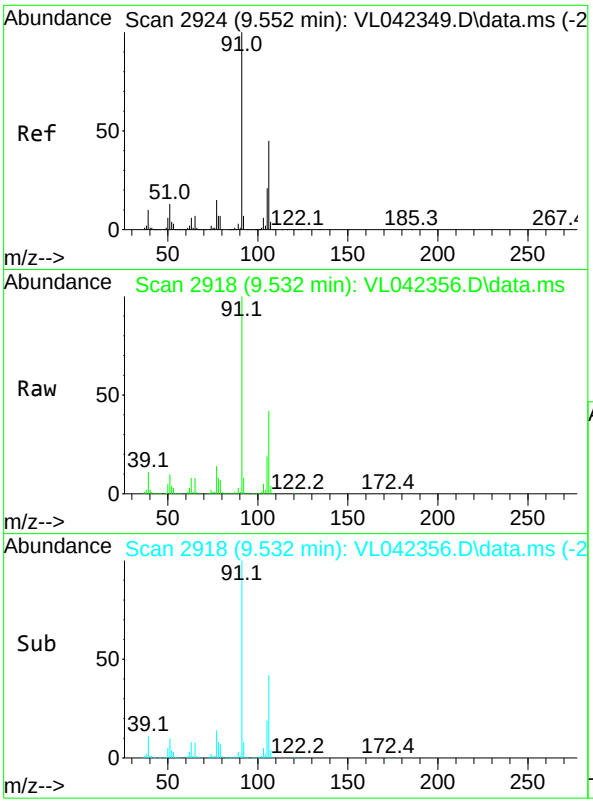


#58
Ethyl Benzene
Concen: 9.645 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 583515

Ion	Ratio	Lower	Upper
91	100		
106	29.0	23.0	34.4

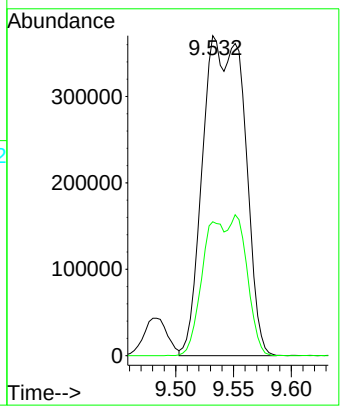




#59
m/p-Xylene
Concen: 19.139 ppbv m
RT: 9.532 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 93280

Ion	Ratio	Lower	Upper
91	100		
106	43.7	35.4	53.2



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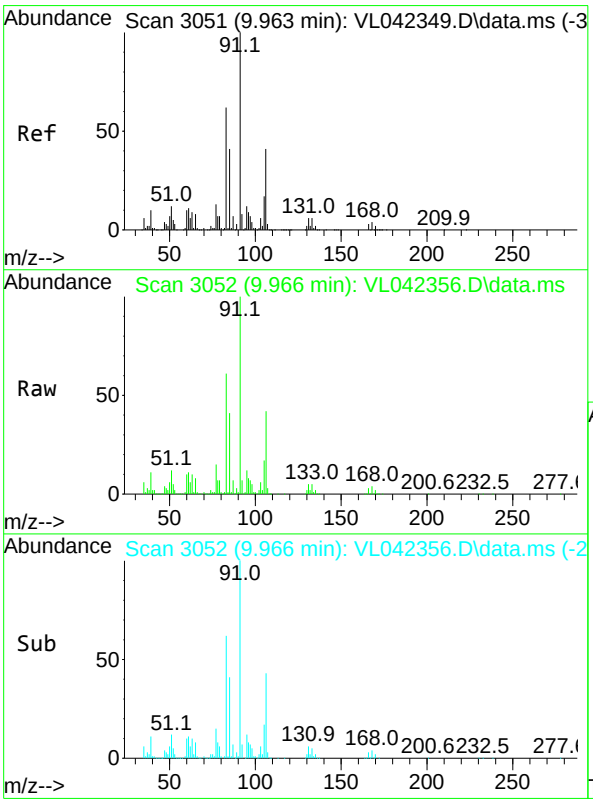
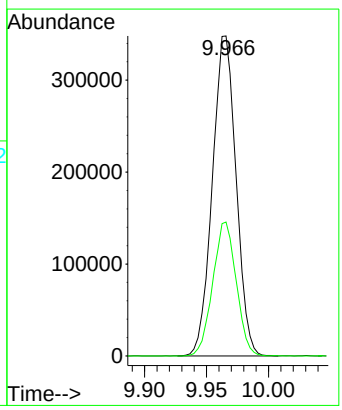
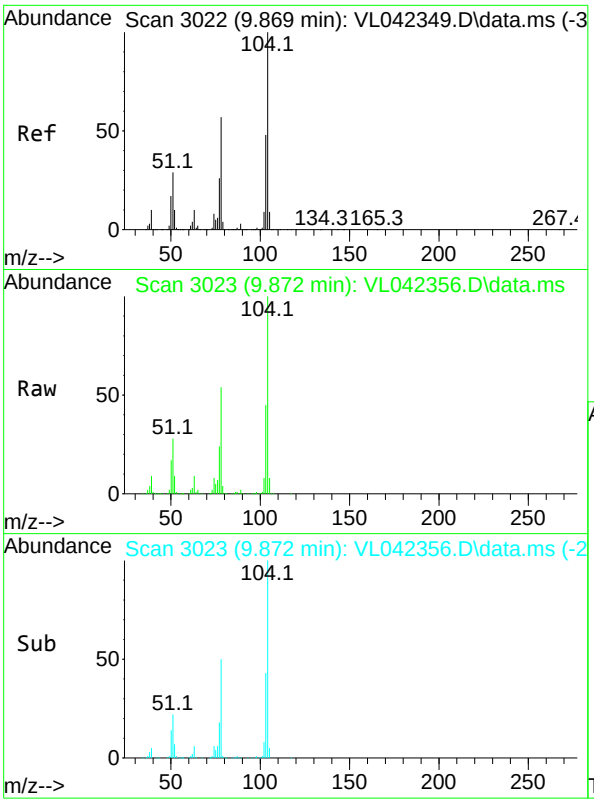


#60
o-Xylene
Concen: 9.465 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 464522

Ion	Ratio	Lower	Upper
91	100		
106	41.4	21.1	63.4

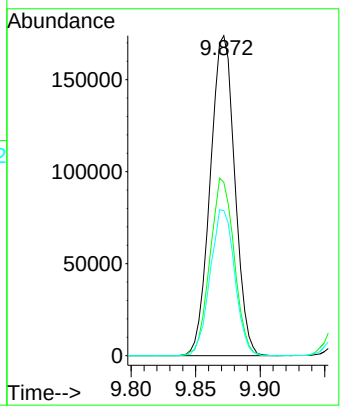




#61
Styrene
Concen: 9.813 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:104 Resp: 22986

Ion	Ratio	Lower	Upper
104	100		
78	54.5	44.6	66.8
103	45.7	37.4	56.0



Instrument :
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ClientSampleId :
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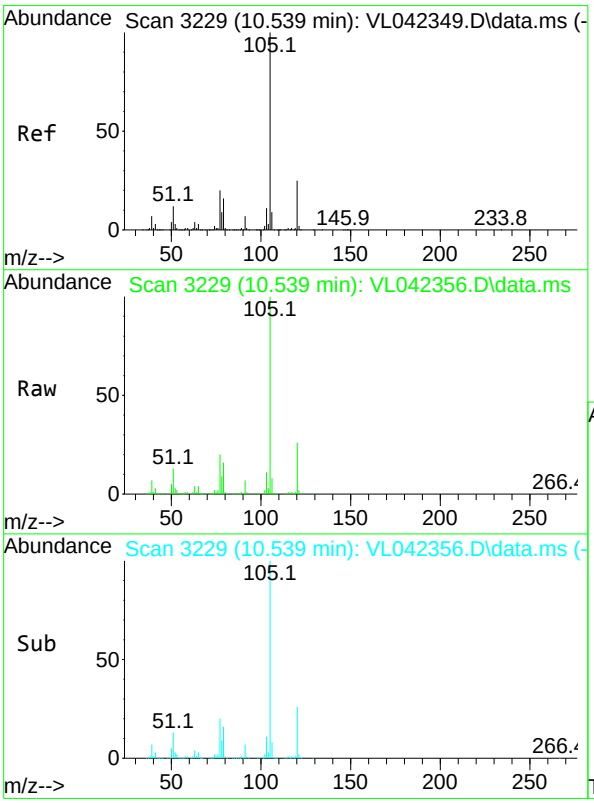
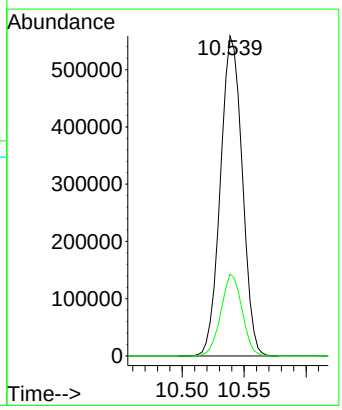
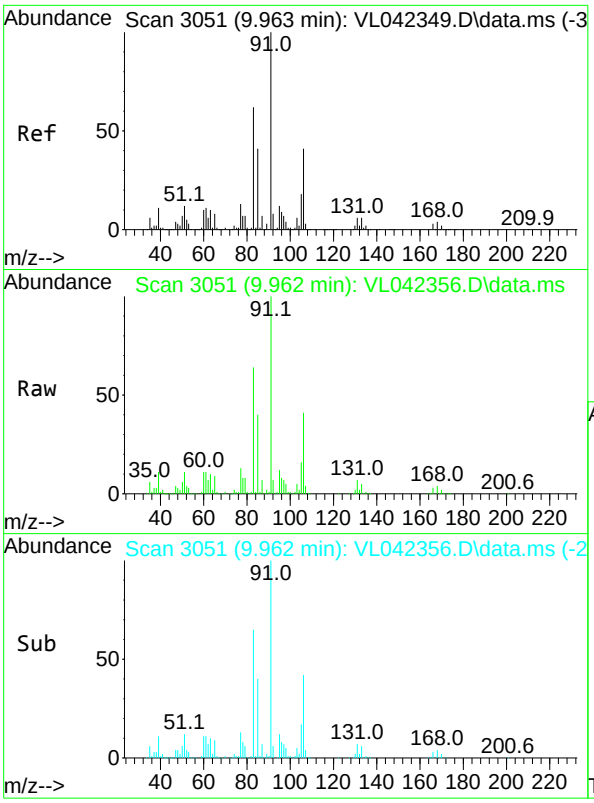


#62
Isopropylbenzene
Concen: 9.520 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 685965

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.773 ppbv
RT: 9.962 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 83 Resp: 27900

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	64.6	32.4	97.0

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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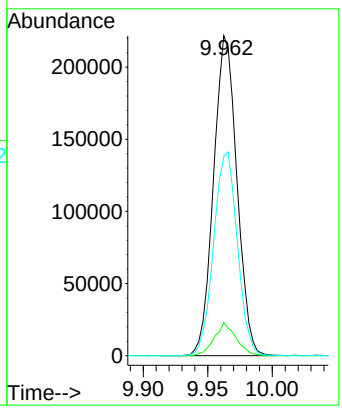
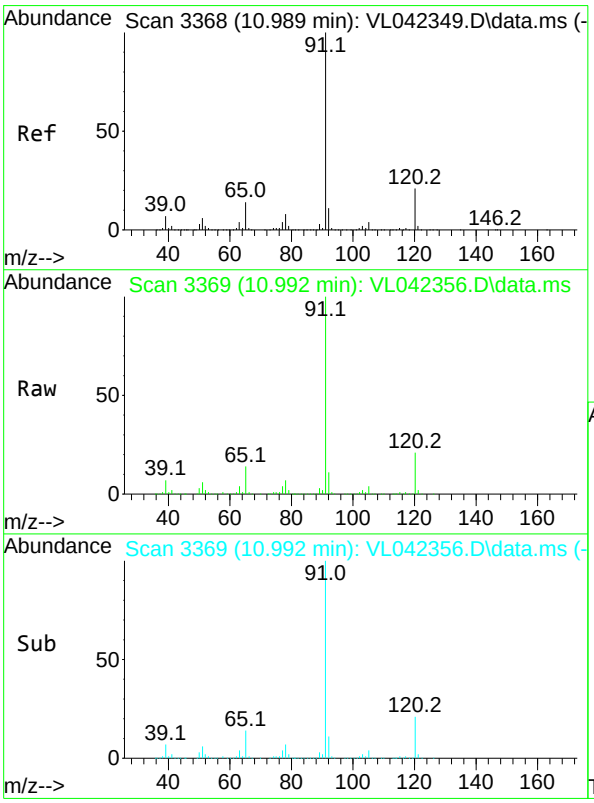
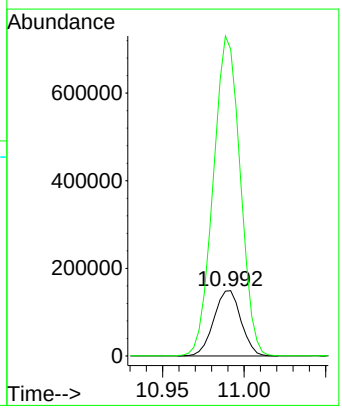


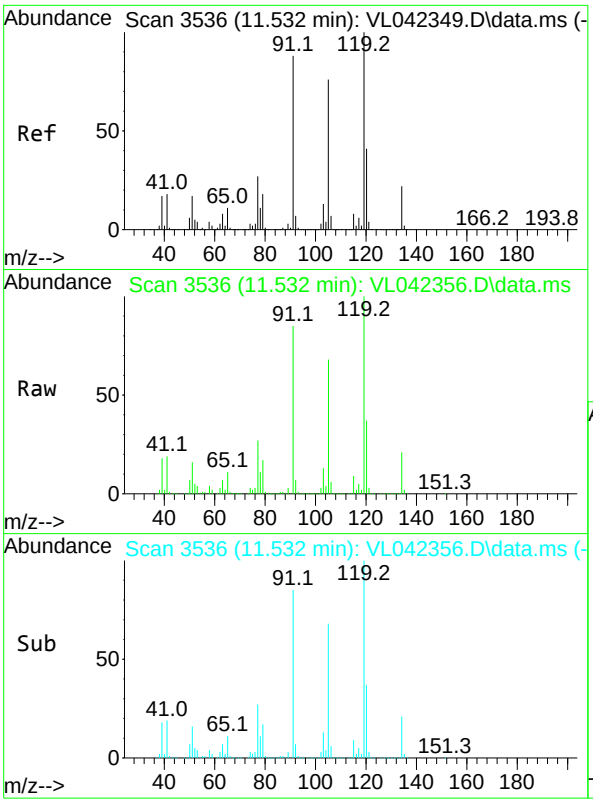


#64
n-propylbenzene
Concen: 9.533 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:120 Resp: 172654

Ion	Ratio	Lower	Upper
120	100		
91	487.7	392.4	588.6

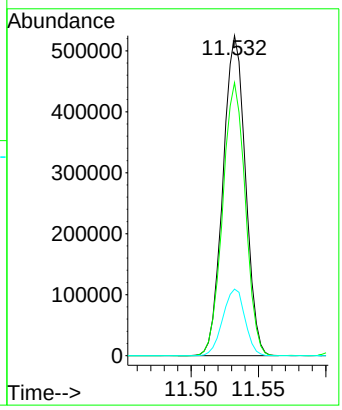




#65
tert-Butylbenzene
Concen: 9.203 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:119 Resp: 60950

Ion	Ratio	Lower	Upper
119	100		
91	85.8	74.6	111.8
134	20.5	18.8	28.2



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
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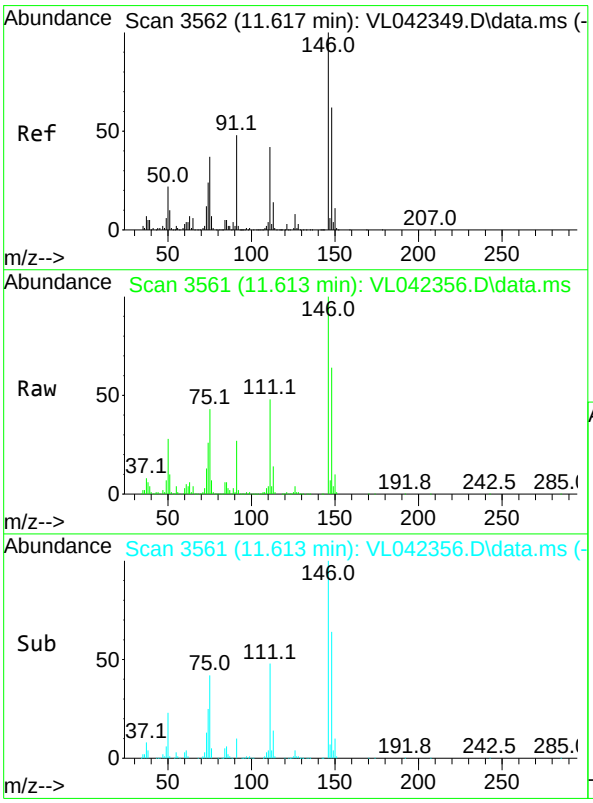
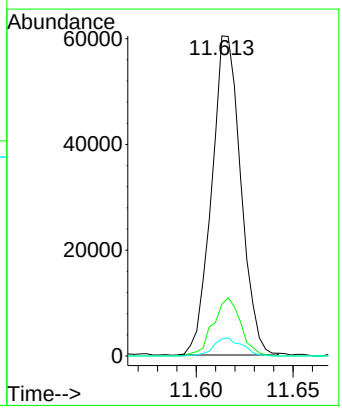
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

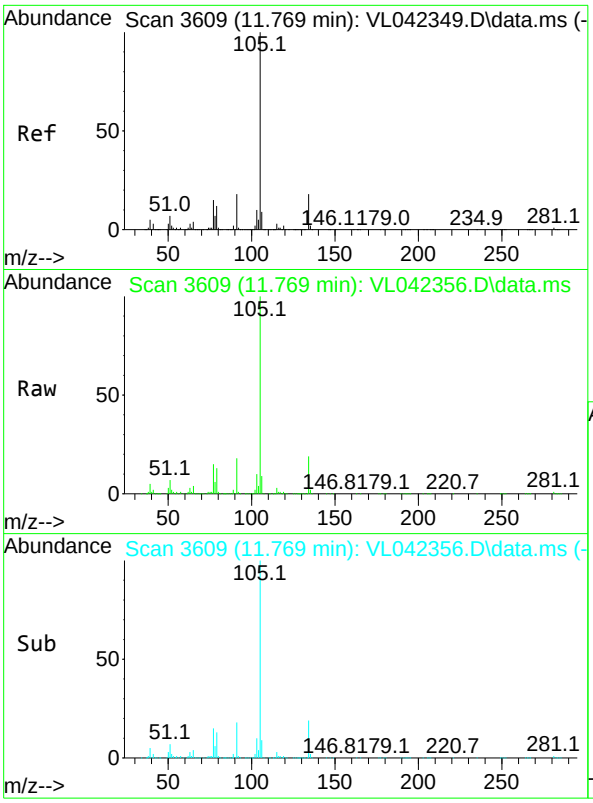


#66
Benzyl Chloride
Concen: 8.664 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 63051

Ion	Ratio	Lower	Upper
91	100		
126	17.3	11.8	17.6
128	5.6	4.5	6.7

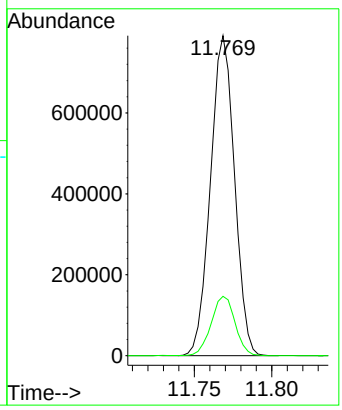




#67
sec-Butylbenzene
Concen: 9.268 ppbv
RT: 11.769 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 85380

Ion	Ratio	Lower	Upper
105	100		
134	18.5	14.6	21.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
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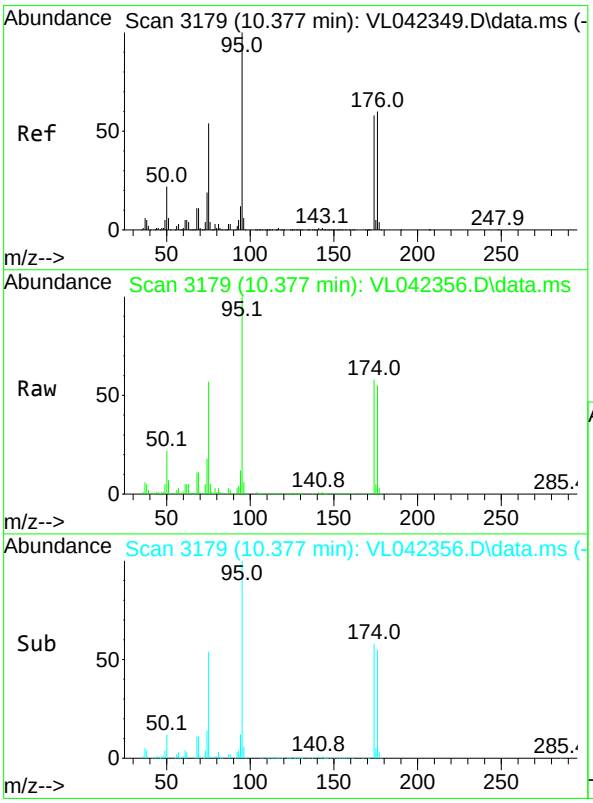
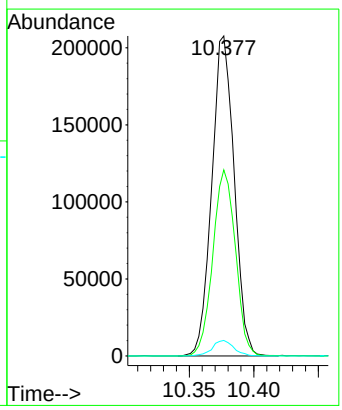
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

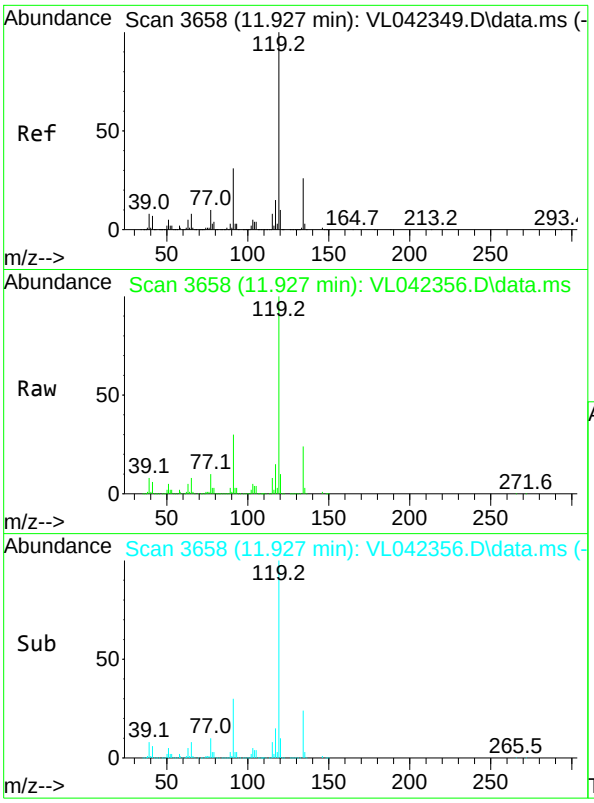


#68
1-Bromo-4-Fluorobenzene
Concen: 9.969 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 95 Resp: 250149

Ion	Ratio	Lower	Upper
95	100		
174	58.7	48.5	72.7
175	4.7	3.7	5.5

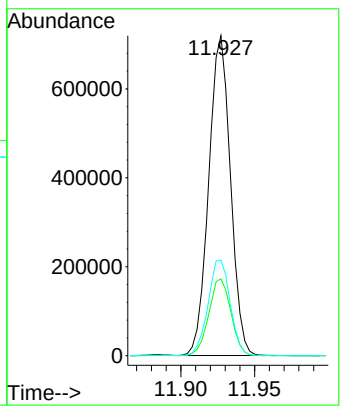




#69
p-Isopropyltoluene
Concen: 9.220 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:119 Resp: 73786

Ion	Ratio	Lower	Upper
119	100		
134	24.5	20.0	30.0
91	30.6	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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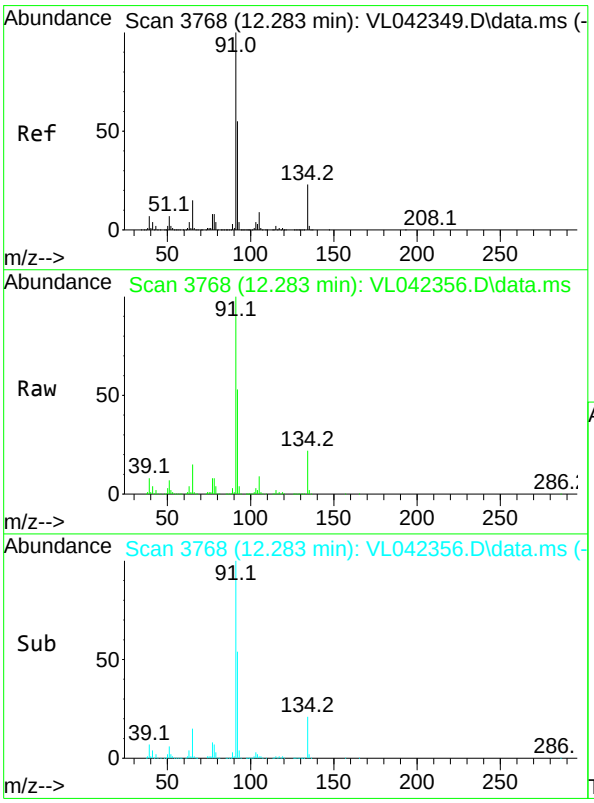
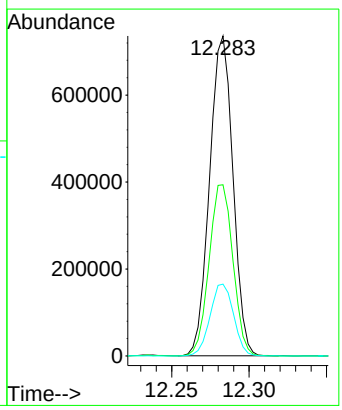
Supervised By :Mahesh Dadoda 04/18/2025

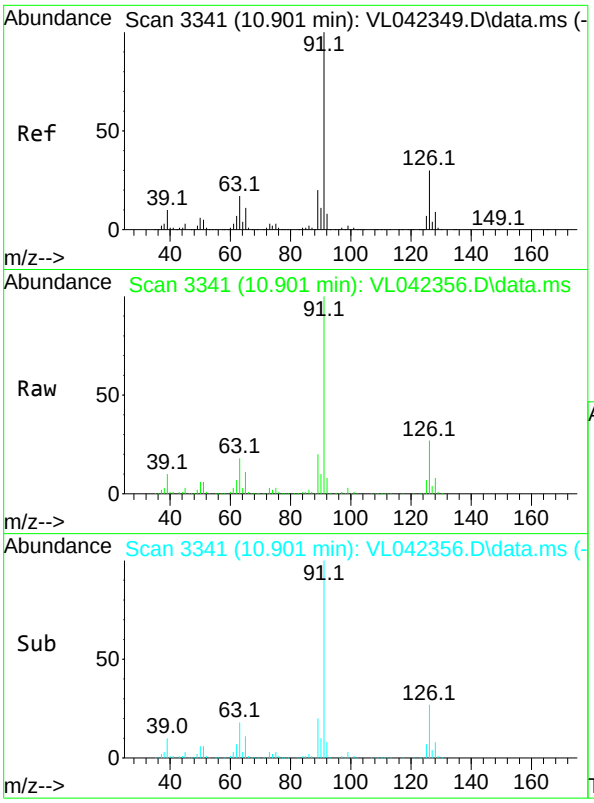


#70
n-Butylbenzene
Concen: 9.255 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 771461

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.2	66.4
134	22.7	18.2	27.4

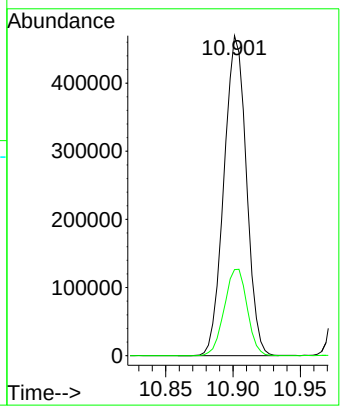




#71
2-Chlorotoluene
Concen: 9.622 ppbv
RT: 10.901 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 54379

Ion	Ratio	Lower	Upper
91	100		
126	27.5	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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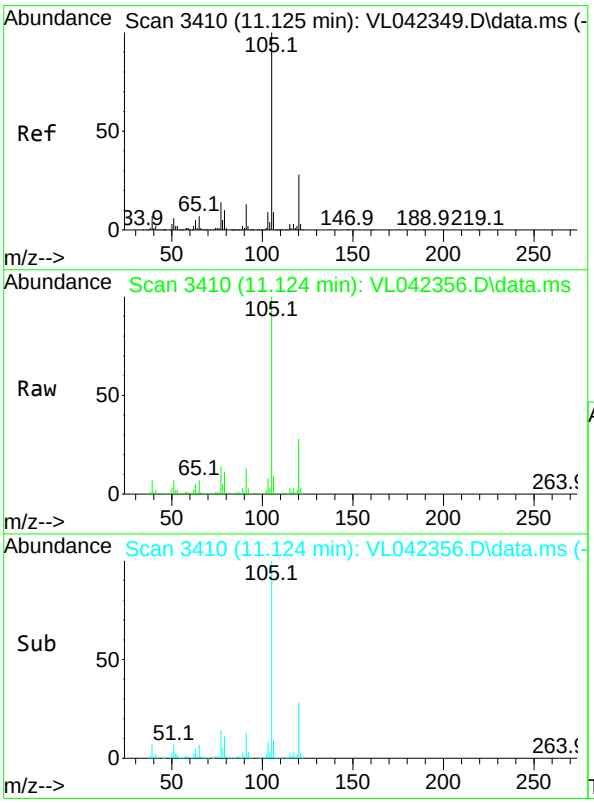
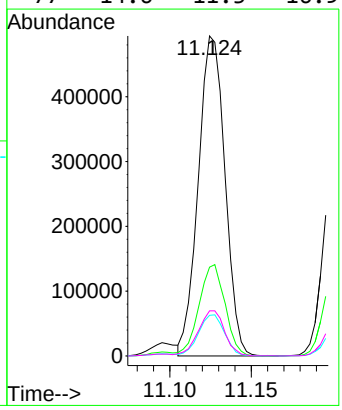
Supervised By :Mahesh Dadoda 04/18/2025

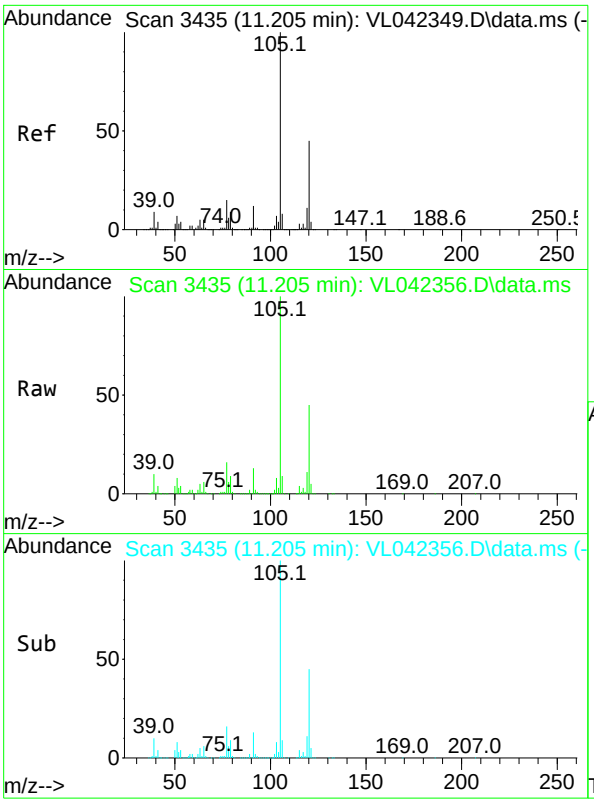


#72
4-Ethyltoluene
Concen: 9.385 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 563136

Ion	Ratio	Lower	Upper
105	100		
120	28.9	23.2	34.8
91	13.2	10.4	15.6
77	14.6	11.3	16.9

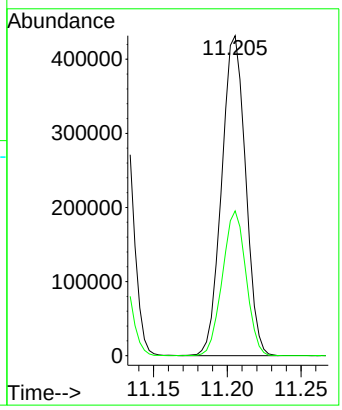




#73
1,3,5-Trimethylbenzene
Concen: 9.186 ppbv
RT: 11.205 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 48658

Ion	Ratio	Lower	Upper
105	100		
120	45.2	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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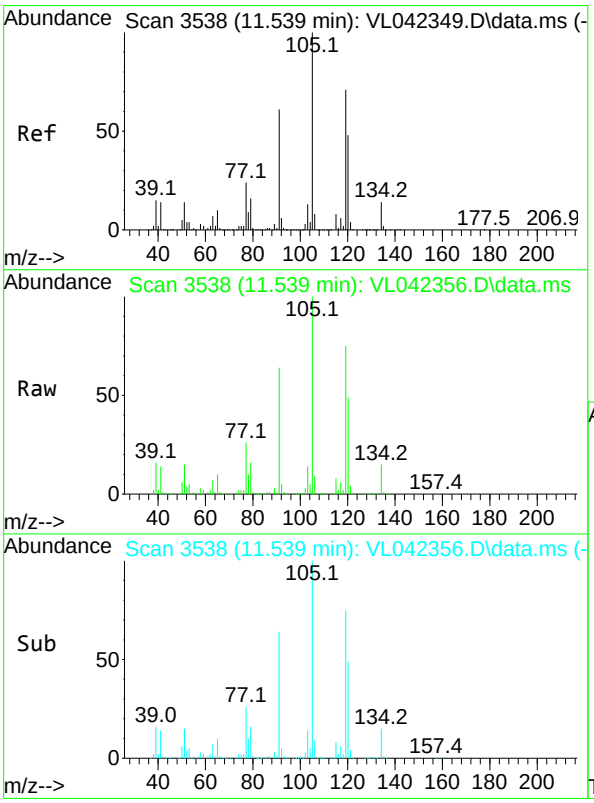
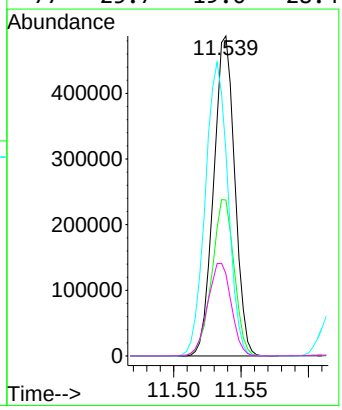
Supervised By :Mahesh Dadoda 04/18/2025

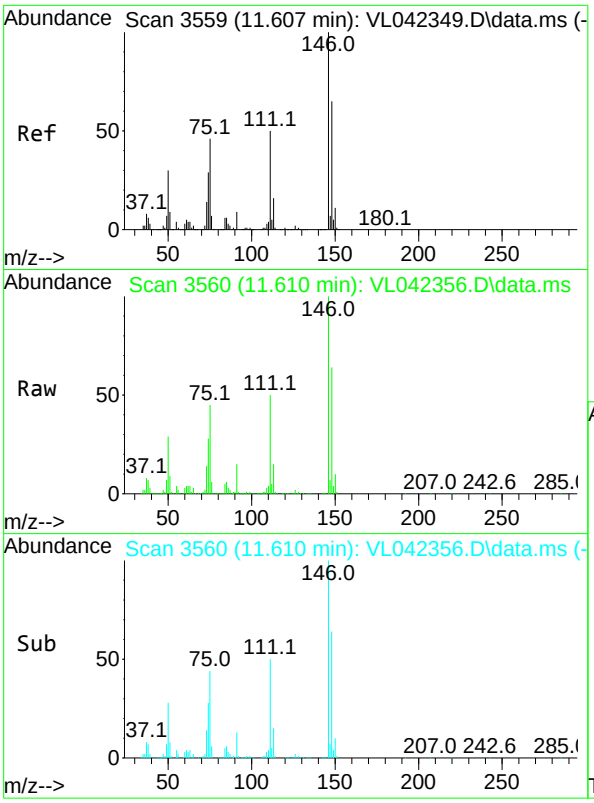


#74
1,2,4-Trimethylbenzene
Concen: 8.592 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 531576

Ion	Ratio	Lower	Upper
105	100		
120	48.7	38.1	57.1
91	64.0	48.8	73.2
77	25.7	19.0	28.4

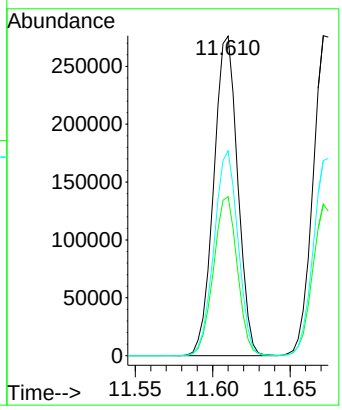




#75
1,3-Dichlorobenzene
Concen: 9.240 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:146 Resp: 29715

Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.3	72.8
148	64.1	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
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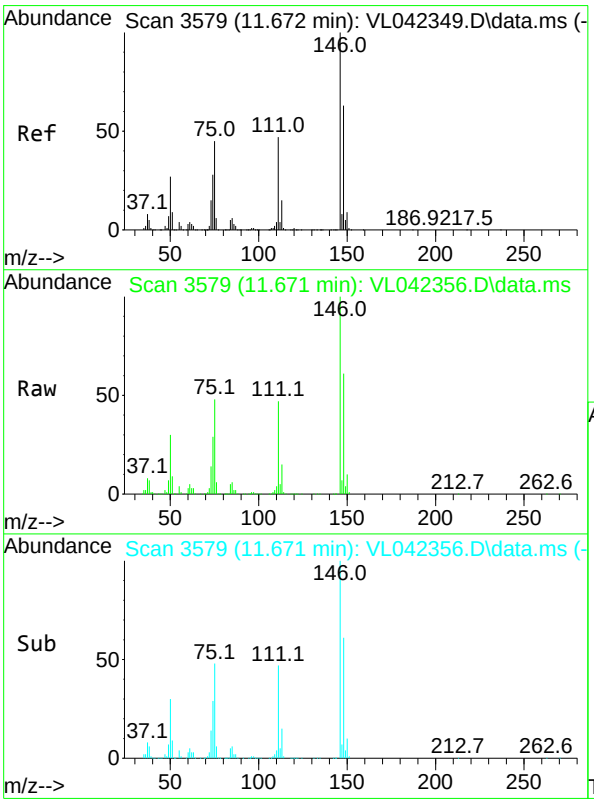
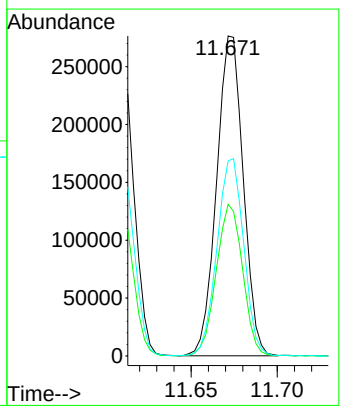
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

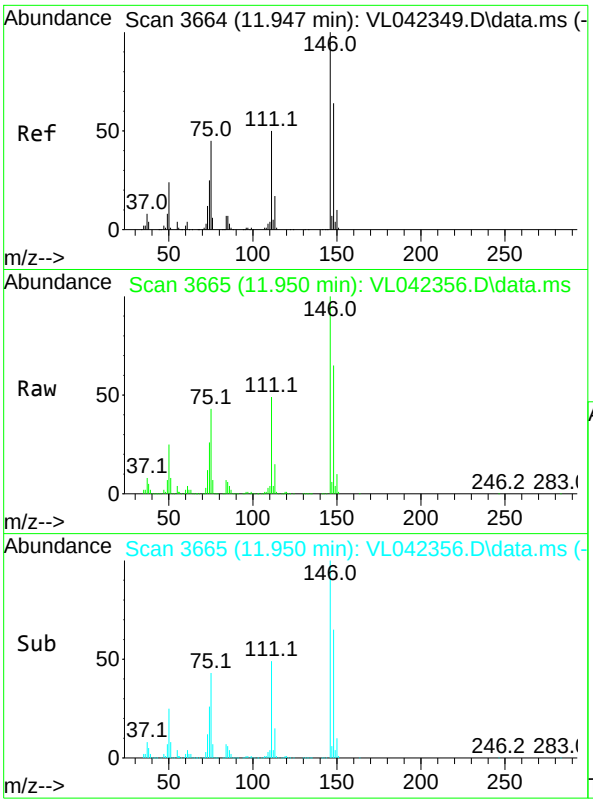


#76
1,4-Dichlorobenzene
Concen: 9.210 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:146 Resp: 297697

Ion	Ratio	Lower	Upper
146	100		
111	47.1	24.2	72.6
148	62.3	32.1	96.5

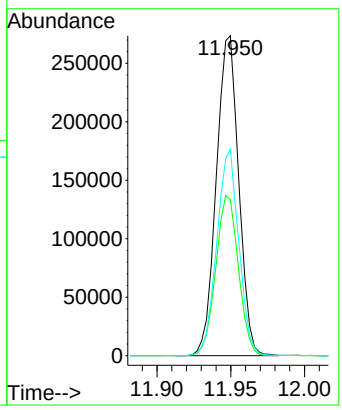




#77
1,2-Dichlorobenzene
Concen: 9.251 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:146 Resp: 28928

Ion	Ratio	Lower	Upper
146	100		
111	50.8	25.3	75.9
148	63.4	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

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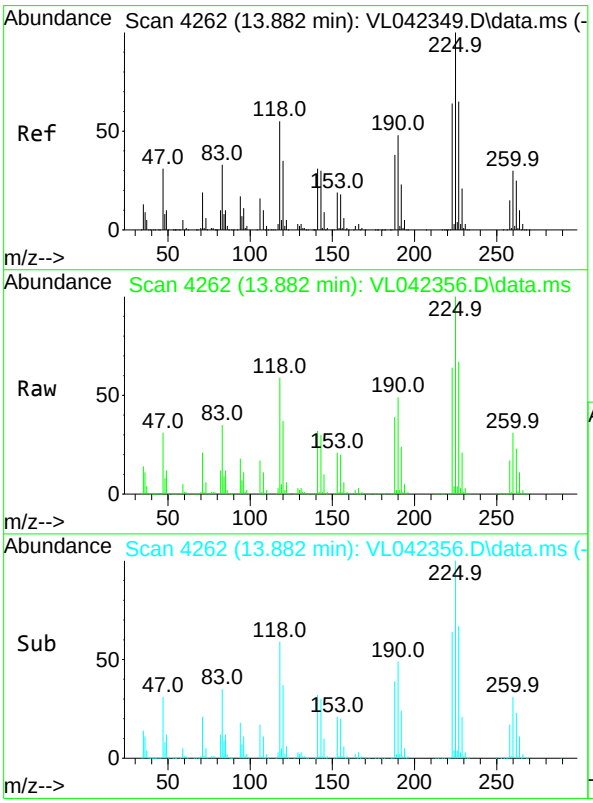
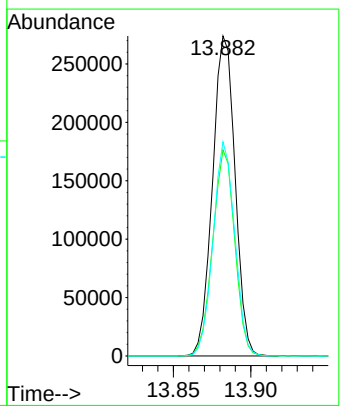
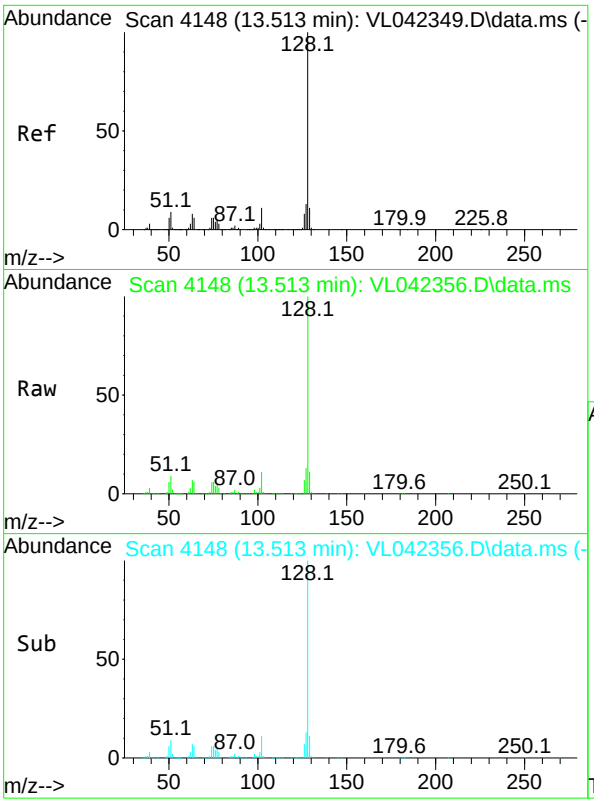


#78
Hexachloro-1,3-Butadiene
Concen: 8.771 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:225 Resp: 276960

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.3	75.5
227	64.5	51.5	77.3

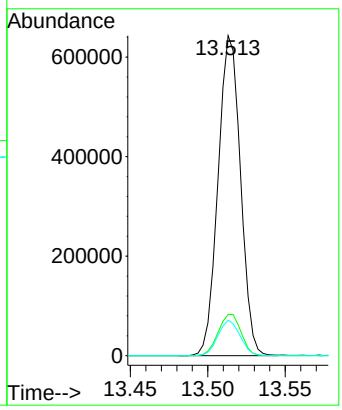




#79
Naphthalene
Concen: 8.750 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:128 Resp: 64734

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	15.8
129	11.1	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
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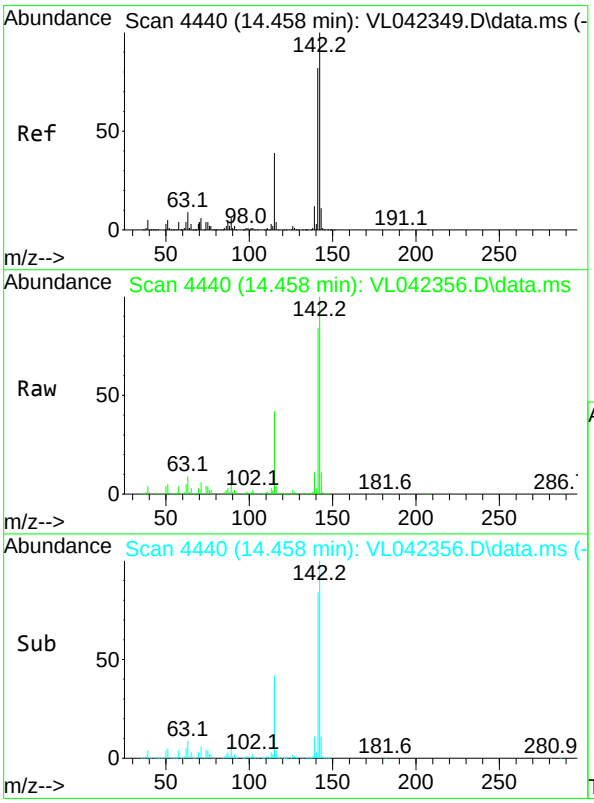
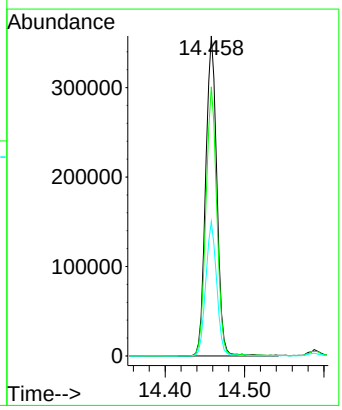
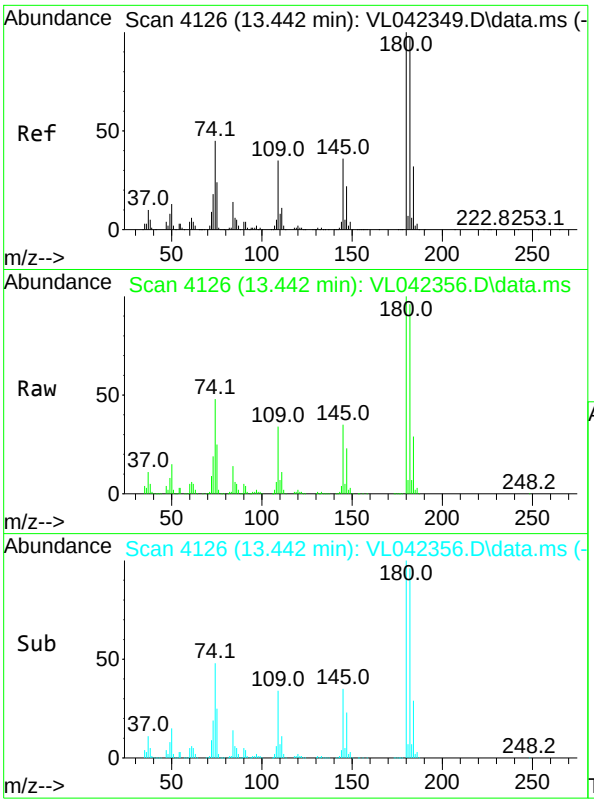


#80
Naphthalene,2-methyl-
Concen: 8.307 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:142 Resp: 350259

Ion	Ratio	Lower	Upper
142	100		
141	83.0	66.8	100.2
115	41.4	33.4	50.2

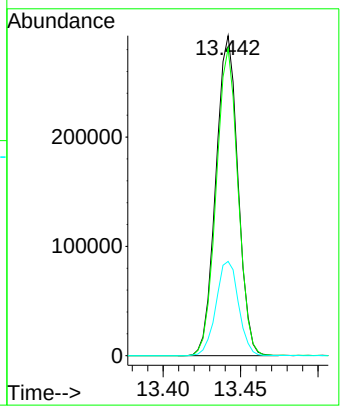




#81
1,2,4-Trichlorobenzene
Concen: 9.136 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:180 Resp: 29026

Ion	Ratio	Lower	Upper
180	100		
182	94.7	76.8	115.2
184	30.1	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	91	0.00
2	T	Dichlorodifluoromethane	1.767	1.734	1.9	95	0.00
3		Chlorodifluoromethane	1.682	1.676	0.4	97	0.00
4		Chloromethane	0.699	0.685	2.0	95	0.00
5	T	Vinyl Chloride	0.761	0.663	12.9	94	0.00
6	T	Bromomethane	0.327	0.308	5.8	92	0.00
7		Chloroethane	0.275	0.265	3.6	95	0.00
8	T	Dichlorotetrafluoroethane	1.517	1.516	0.1	96	0.00
9	T	Propene	0.766	0.742	3.1	98	0.00
10	T	Heptane	2.153	1.946	9.6	94	0.00
11	T	Trichlorofluoromethane	1.680	1.648	1.9	96	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.374	1.303	5.2	92	0.00
13		Ethanol	0.122	0.037#	69.7#	94	0.00
14	T	Bromoethene	0.518	0.512	1.2	95	0.00
15	T	Acetone	1.637	1.392	15.0	100	0.00
16	T	1,3-Butadiene	0.783	0.691	11.7	96	0.00
17		tert-Butyl alcohol	2.029	1.921	5.3	97	0.00
18	T	1,1-Dichloroethene	0.642	0.596	7.2	93	0.00
19	T	Isopropyl Alcohol	0.909	0.845	7.0	94	0.00
20	T	Methylene Chloride	0.641	0.519	19.0	95	0.00
21	T	Allyl Chloride	1.130	1.059	6.3	99	0.00
22	T	trans-1,2-Dichloroethene	0.731	0.685	6.3	94	0.00
23	T	Vinyl Acetate	0.663	0.644	2.9	105	0.00
24	T	1,1-Dichloroethane	1.388	1.365	1.7	97	0.00
25	T	Ethyl Acetate	4.036	3.939	2.4	97	0.00
26	T	Hexane	1.633	1.542	5.6	98	0.00
27	T	Carbon Disulfide	1.749	1.677	4.1	91	0.00
28	T	Methyl tert-Butyl Ether	1.070	1.011	5.5	98	0.00
29	T	Chloroform	2.309	2.288	0.9	97	0.00
30	T	Cyclohexane	1.320	1.300	1.5	94	0.00
31	T	cis-1,2-Dichloroethene	1.553	1.579	-1.7	98	0.00
32	T	1,1,1-Trichloroethane	2.599	2.426	6.7	97	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	89	0.00
34	T	2-Butanone	0.791	0.767	3.0	99	0.00
35	T	Carbon Tetrachloride	0.905	0.838	7.4	96	0.00
36	T	Benzene	1.079	1.080	-0.1	95	0.00
37	T	1,2-Dichloroethane	0.647	0.653	-0.9	98	0.00
38	T	Trichloroethene	0.471	0.431	8.5	97	0.00
39	T	1,2-Dichloropropane	0.402	0.398	1.0	95	0.00
40	T	1,4-Dioxane	0.221	0.190	14.0	92	0.00
41	T	Tetrahydrofuran	0.461	0.437	5.2	95	0.00
42	T	Bromodichloromethane	0.901	0.915	-1.6	95	0.00
43		Methyl Methacrylate	0.486	0.460	5.3	95	0.00
44	T	2,2,4-Trimethylpentane	1.863	1.868	-0.3	97	0.00
45	T	t-1,3-Dichloropropene	0.497	0.495	0.4	96	0.00
46	T	cis-1,3-Dichloropropene	0.608	0.617	-1.5	96	0.00
47	T	1,1,2-Trichloroethane	0.410	0.418	-2.0	98	0.00
48	T	Dibromochloromethane	0.723	0.731	-1.1	95	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.633	0.634	-0.2	91	0.00
50	T	4-Methyl-2-Pentanone	1.314	1.159	11.8	95	0.00
51	T	2-Hexanone	1.179	0.957	18.8	95	0.00
52	T	Tetrachloroethene	0.417	0.368	11.8	91	0.00
53	T	Toluene	1.294	1.293	0.1	96	0.00
54	T	1,2-Dibromoethane	0.586	0.574	2.0	94	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
56		1,1,1,2-Tetrachloroethane	0.605	0.598	1.2	98	0.00
57	T	Chlorobenzene	1.040	0.997	4.1	94	0.00
58	T	Ethyl Benzene	1.981	1.911	3.5	94	0.00
59	T	m/p-Xylene	1.596	1.527	4.3	95	-0.02
60	T	o-Xylene	1.607	1.521	5.4	95	0.00
61	T	Styrene	0.767	0.753	1.8	94	0.00
62		Isopropylbenzene	2.360	2.246	4.8	93	0.00
63	T	1,1,2,2-Tetrachloroethane	1.042	0.914	12.3	95	0.00
64		n-propylbenzene	0.593	0.565	4.7	94	0.00
65		tert-Butylbenzene	2.169	1.996	8.0	95	0.00
66	T	Benzyl Chloride	0.238	0.206	13.4	76	0.00
67		sec-Butylbenzene	3.017	2.796	7.3	95	0.00
68	S	1-Bromo-4-Fluorobenzene	0.822	0.819	0.4	89	0.00
69		p-Isopropyltoluene	2.621	2.416	7.8	95	0.00
70		n-Butylbenzene	2.730	2.526	7.5	96	0.00
71		2-Chlorotoluene	1.851	1.781	3.8	95	0.00
72	T	4-Ethyltoluene	1.965	1.844	6.2	94	0.00
73	T	1,3,5-Trimethylbenzene	1.735	1.593	8.2	95	0.00
74	T	1,2,4-Trimethylbenzene	2.026	1.741	14.1	94	0.00
75	T	1,3-Dichlorobenzene	1.053	0.973	7.6	93	0.00
76	T	1,4-Dichlorobenzene	1.059	0.975	7.9	93	0.00
77	T	1,2-Dichlorobenzene	1.024	0.947	7.5	95	0.00
78	T	Hexachloro-1,3-Butadiene	1.034	0.907	12.3	95	0.00
79	T	Naphthalene	2.423	2.120	12.5	96	0.00
80	T	Naphthalene,2-methyl-	1.381	1.147	16.9	93	0.00
81	T	1,2,4-Trichlorobenzene	1.040	0.951	8.6	95	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/09/2025 10:20

Lab File ID: VL042286.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.476	1.444		-2.17	30
Ethanol	0.065	0.030		-53.85	30
Chloromethane	0.603	0.607		0.66	30
Vinyl Chloride	0.639	0.560		-12.36	30
Bromomethane	0.273	0.250		-8.43	30
Chloroethane	0.242	0.225		-7.03	30
Tetrahydrofuran	0.418	0.441		5.5	30
Trichlorofluoromethane	1.437	1.405		-2.23	30
1,1,2-Trichlorotrifluoroethane	1.181	1.149		-2.71	30
Dichlorotetrafluoroethane	1.257	1.243		-1.11	30
Bromoethene	0.452	0.393		-13.05	30
tert-Butyl alcohol	1.742	1.415		-18.77	30
Heptane	1.839	1.800		-2.12	30
Isopropyl Alcohol	0.789	0.664		-15.84	30
1,1-Dichloroethene	0.552	0.499		-9.6	30
Acetone	1.399	1.260		-9.94	30
Carbon Disulfide	1.503	1.391		-7.45	30
Methyl tert-Butyl Ether	0.873	0.705		-19.24	30
Methylene Chloride	0.521	0.441		-15.35	30
trans-1,2-Dichloroethene	0.638	0.568		-10.97	30
1,1-Dichloroethane	1.183	1.159		-2.03	30
Cyclohexane	1.217	1.095		-10.02	30
2-Butanone	0.725	0.789		8.83	30
Carbon Tetrachloride	0.781	0.879		12.55	30
cis-1,2-Dichloroethene	1.423	1.297		-8.85	30
Chloroform	2.052	2.190		6.72	30
1,1,1-Trichloroethane	2.349	2.135		-9.11	30
2,2,4-Trimethylpentane	1.675	1.869		11.58	30
Benzene	0.991	1.071		8.07	30
1,2-Dichloroethane	0.568	0.647		13.91	30
Trichloroethene	0.414	0.429		3.62	30
1,2-Dichloropropane	0.361	0.387		7.2	30
Bromodichloromethane	0.782	0.904		15.6	30
4-Methyl-2-Pentanone	1.149	1.122		-2.35	30
Toluene	1.175	1.171		-0.34	30
t-1,3-Dichloropropene	0.450	0.371		-17.56	30
cis-1,3-Dichloropropene	0.552	0.493		-10.69	30
1,1,2-Trichloroethane	0.382	0.434		13.61	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/09/2025 10:20

Lab File ID: VL042286.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dibromochloromethane	0.647	0.705		8.96	30
1,2-Dibromoethane	0.532	0.578		8.65	30
Tetrachloroethene	0.393	0.357		-9.16	30
Chlorobenzene	0.949	1.140		20.13	30
Ethyl Benzene	1.776	1.924		8.33	30
m/p-Xylene	1.418	1.658		16.92	30
o-Xylene	1.422	1.659		16.67	30
Styrene	0.703	0.718		2.13	30
Bromoform	0.581	0.630		8.43	30
1,1,2,2-Tetrachloroethane	0.864	1.091		26.27	30
2-Chlorotoluene	1.650	1.869		13.27	30
1,3,5-Trimethylbenzene	1.546	1.772		14.62	30
1,2,4-Trimethylbenzene	1.781	2.025		13.7	30
1,3-Dichlorobenzene	0.977	1.218		24.67	30
1,4-Dichlorobenzene	0.972	1.210		24.49	30
1,2-Dichlorobenzene	0.951	1.197		25.87	30
1,2,4-Trichlorobenzene	0.899	1.016		13.01	30
Hexachloro-1,3-Butadiene	0.968	0.955		-1.34	30
1,3-Butadiene	0.683	0.610		-10.69	30
Naphthalene	1.948	2.309		18.53	30
4-Ethyltoluene	1.770	2.081		17.57	30
1-Bromo-4-Fluorobenzene	0.821	0.815		-0.73	30
Hexane	1.402	1.381		-1.5	30
Allyl Chloride	0.986	0.899		-8.82	30
1,4-Dioxane	191.626	182.801		-4.61	30
Methyl Methacrylate	0.420	0.390		-7.14	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	155631	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	397176	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	350140	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	285515	9.930	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	224739	9.780	ppbv	99
3) Chlorodifluoromethane	1.473	51	242368	10.325	ppbv	99
4) Chloromethane	1.531	50	94421	10.054	ppbv	99
5) Vinyl Chloride	1.580	62	87077	8.750	ppbv	96
6) Bromomethane	1.667	94	38883	9.136	ppbv	95
7) Chloroethane	1.703	64	35019	9.290	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	193376	9.882	ppbv	92
9) Propene	1.483	41	92247	8.573	ppbv	98
10) Heptane	4.972	43	280156	9.789	ppbv	99
11) Trichlorofluoromethane	1.874	101	218729	9.783	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.137	101	178752	9.726	ppbv	98
13) Ethanol	1.719	45	4608	4.530	ppbv	92
14) Bromoethene	1.781	108	61204	8.693	ppbv	97
15) Acetone	1.832	43	196063	9.008	ppbv	96
16) 1,3-Butadiene	1.606	39	94932	8.931	ppbv	98
17) tert-Butyl alcohol	2.040	59	220187	8.122	ppbv	98
18) 1,1-Dichloroethene	2.033	96	77686	9.042	ppbv	98
19) Isopropyl Alcohol	1.884	45	103348	8.415	ppbv	93
20) Methylene Chloride	2.059	84	68588	8.461	ppbv	95
21) Allyl Chloride	2.095	41	139965	9.118	ppbv	96
22) trans-1,2-Dichloroethene	2.337	96	88334	8.896	ppbv	94
23) Vinyl Acetate	2.460	43	73162	7.766	ppbv #	96
24) 1,1-Dichloroethane	2.405	63	180404	9.801	ppbv	99
25) Ethyl Acetate	2.833	43	567125	10.039	ppbv	98
26) Hexane	2.823	57	214891	9.848	ppbv	97
27) Carbon Disulfide	2.146	76	216499	9.253	ppbv	97
28) Methyl tert-Butyl Ether	2.438	73	109726	8.077	ppbv	94
29) Chloroform	2.845	83	340889	10.675	ppbv	99
30) Cyclohexane	3.852	84	170359	8.991	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	201796	9.110	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	332252	9.088	ppbv	98
34) 2-Butanone	2.554	43	313515	10.886	ppbv	98
35) Carbon Tetrachloride	3.758	117	349240	11.256	ppbv	100
36) Benzene	3.651	78	425324	10.802	ppbv	97
37) 1,2-Dichloroethane	3.214	62	256791	11.391	ppbv	99
38) Trichloroethene	4.541	130	170362	10.370	ppbv	97
39) 1,2-Dichloropropane	4.312	63	153583	10.710	ppbv	95
40) 1,4-Dioxane	4.577	88	72604	9.539	ppbv #	95
41) Tetrahydrofuran	3.053	42	175060	10.556	ppbv	95
42) Bromodichloromethane	4.483	83	358962	11.551	ppbv	100
43) Methyl Methacrylate	4.875	69	154975	9.297	ppbv	97
44) 2,2,4-Trimethylpentane	4.635	57	742388	11.157	ppbv	96
45) t-1,3-Dichloropropene	6.412	75	147204	8.231	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	195802	8.932	ppbv		98
47) 1,1,2-Trichloroethane	6.574	97	172343	11.369	ppbv		97
48) Dibromochloromethane	7.380	129	280199	10.907	ppbv		100
49) Bromoform	9.481	173	250227	10.849	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	445454	9.760	ppbv		95
51) 2-Hexanone	7.432	43	353706	9.437	ppbv	#	94
52) Tetrachloroethene	8.222	164	141976	9.092	ppbv		95
53) Toluene	6.927	91	464948	9.961	ppbv		99
54) 1,2-Dibromoethane	7.649	107	229720	10.871	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.921	131	231041	11.987	ppbv		98
57) Chlorobenzene	8.917	112	399227	12.021	ppbv		93
58) Ethyl Benzene	9.351	91	673801	10.834	ppbv		98
59) m/p-Xylene	9.549	91	1161067m	23.379	ppbv		
60) o-Xylene	9.960	91	581045	11.671	ppbv		97
61) Styrene	9.869	104	251525	10.212	ppbv		98
62) Isopropylbenzene	10.536	105	859013	11.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.960	83	381841	12.623	ppbv		99
64) n-propylbenzene	10.986	120	228532	11.925	ppbv		100
65) tert-Butylbenzene	11.529	119	784483	11.393	ppbv		100
66) Benzyl Chloride	11.614	91	57966	7.934	ppbv		100
67) sec-Butylbenzene	11.766	105	1128106	11.787	ppbv		100
69) p-Isopropyltoluene	11.924	119	961623	11.669	ppbv		99
70) n-Butylbenzene	12.280	91	998455	11.847	ppbv		99
71) 2-Chlorotoluene	10.898	91	654276	11.323	ppbv		98
72) 4-Ethyltoluene	11.122	105	728517	11.753	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	620415	11.460	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	709204	11.371	ppbv		97
75) 1,3-Dichlorobenzene	11.607	146	426300	12.462	ppbv		98
76) 1,4-Dichlorobenzene	11.669	146	423561	12.442	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	419286	12.589	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	334414	9.864	ppbv		99
79) Naphthalene	13.513	128	808459	11.851	ppbv		99
80) Naphthalene,2-methyl-	14.459	142	373298	11.158	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	355741	11.305	ppbv		100

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

Quantitation Report (QT Reviewed)

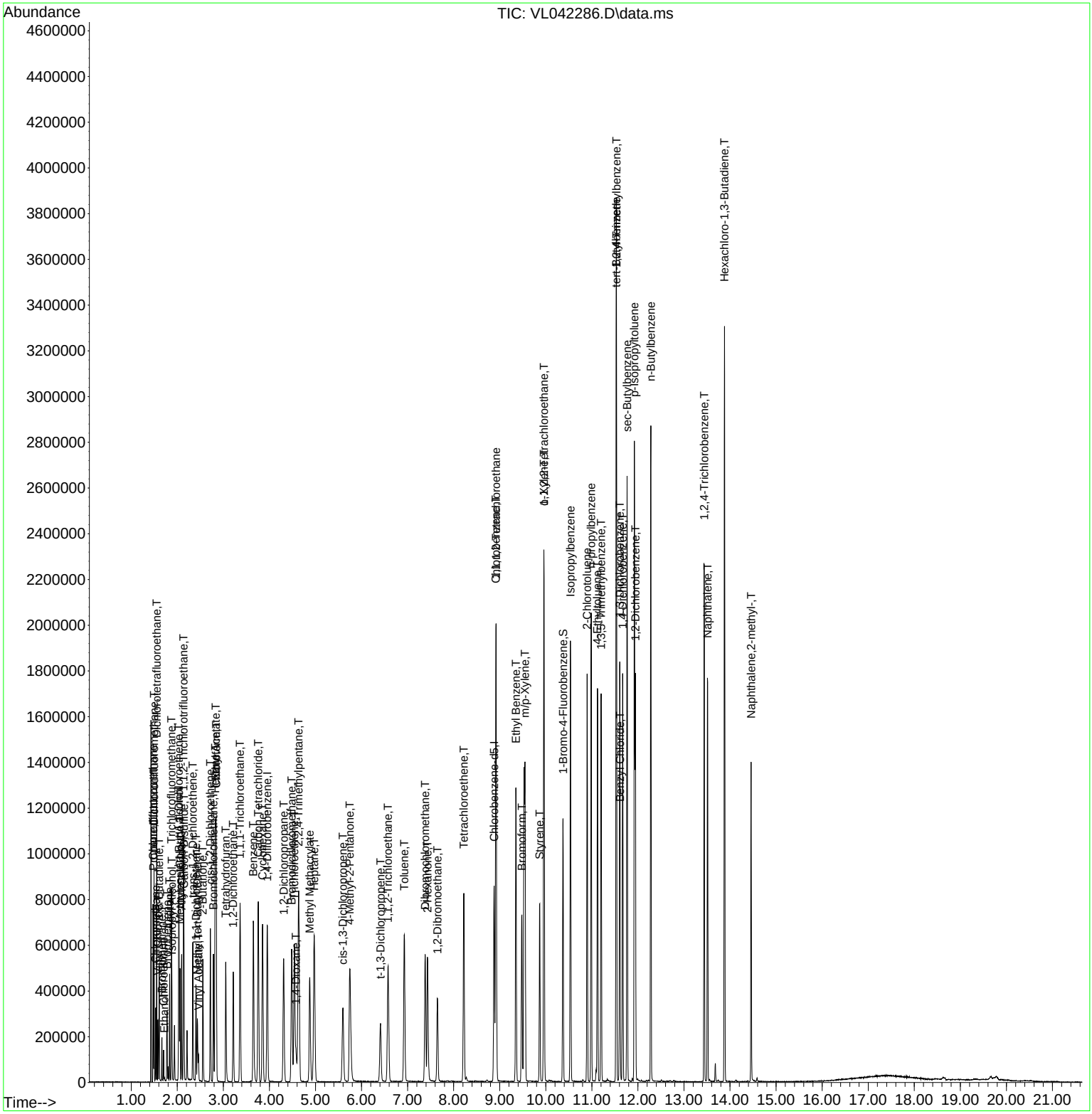
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

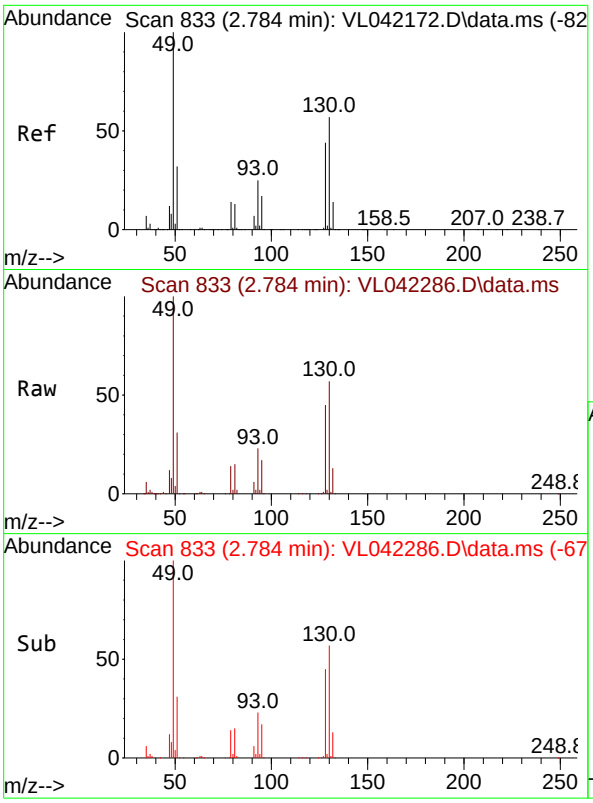
Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

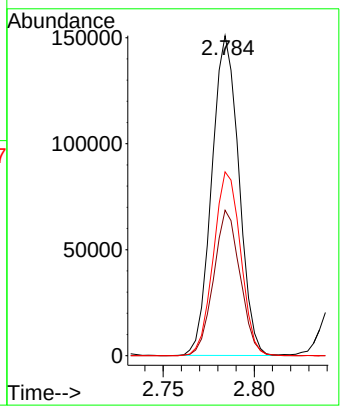




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 49 Resp: 15563

Ion	Ratio	Lower	Upper
49	100		
128	44.6	22.9	68.5
130	57.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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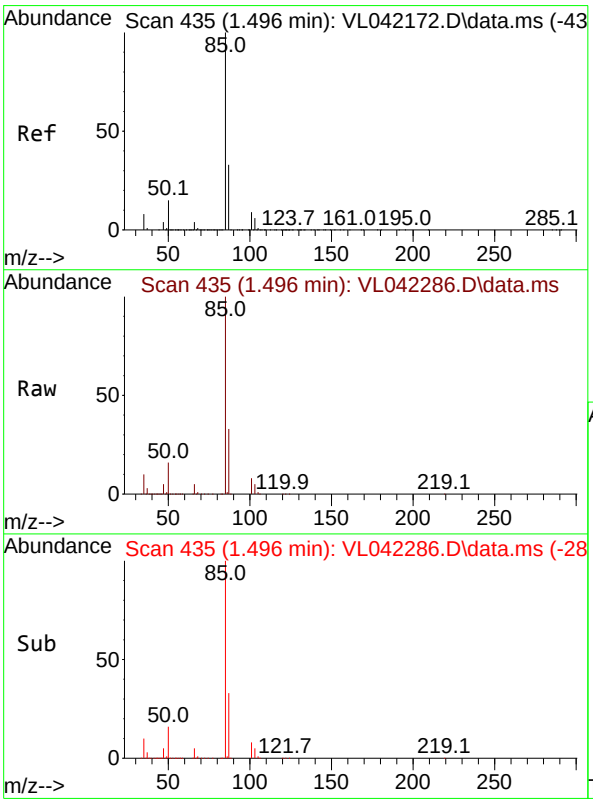
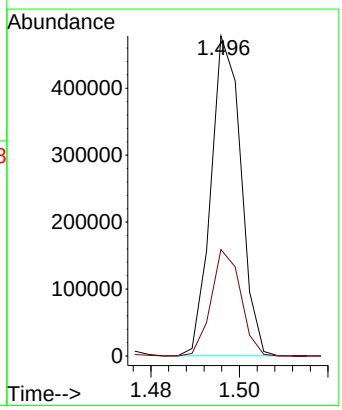
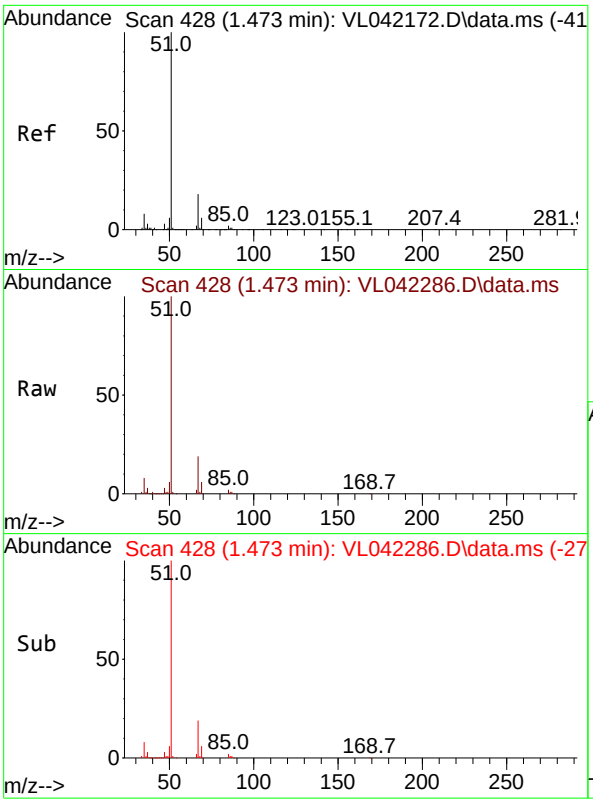


#2
Dichlorodifluoromethane
Concen: 9.780 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 85 Resp: 224739

Ion	Ratio	Lower	Upper
85	100		
87	33.3	26.1	39.1

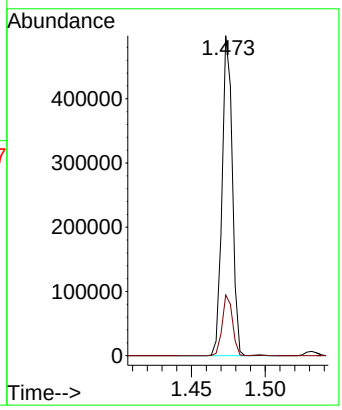




#3
Chlorodifluoromethane
Concen: 10.325 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 51 Resp: 24236

Ion	Ratio	Lower	Upper
51	100		
67	19.0	15.0	22.6



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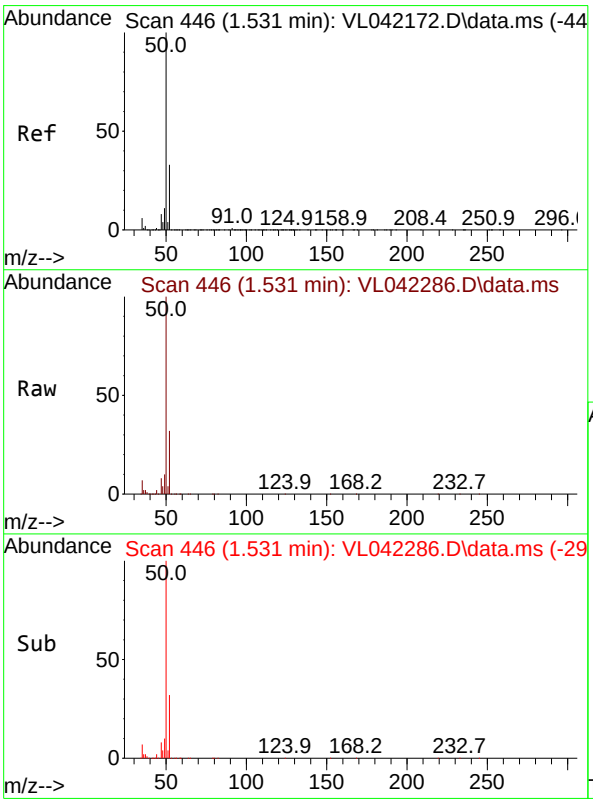
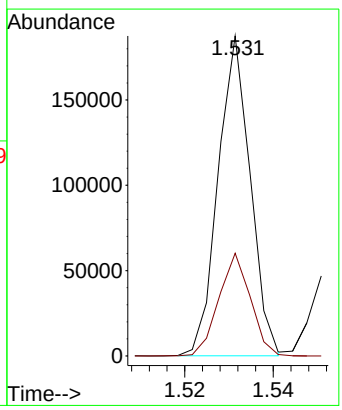
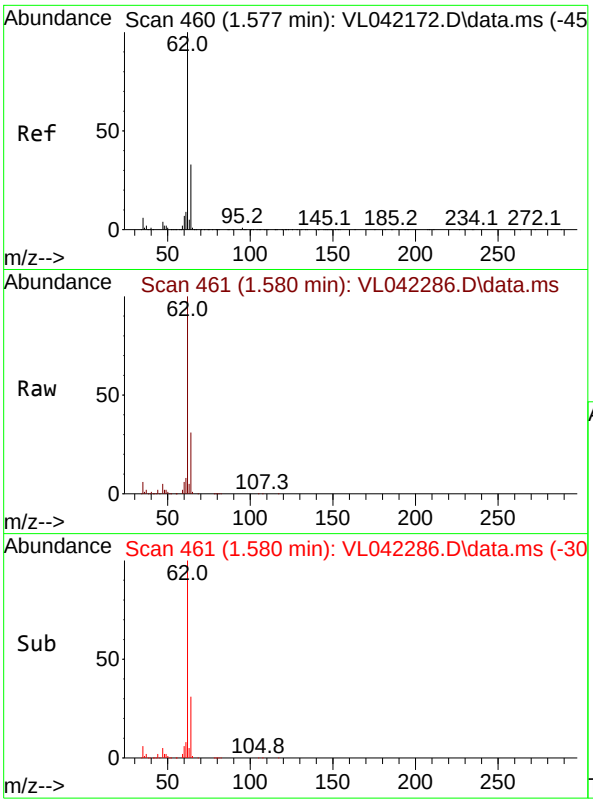


#4
Chloromethane
Concen: 10.054 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 50 Resp: 94421

Ion	Ratio	Lower	Upper
50	100		
52	32.1	26.1	39.1

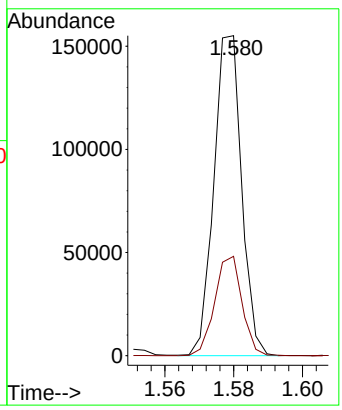




#5
Vinyl Chloride
Concen: 8.750 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 62 Resp: 8707

Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.6	40.0



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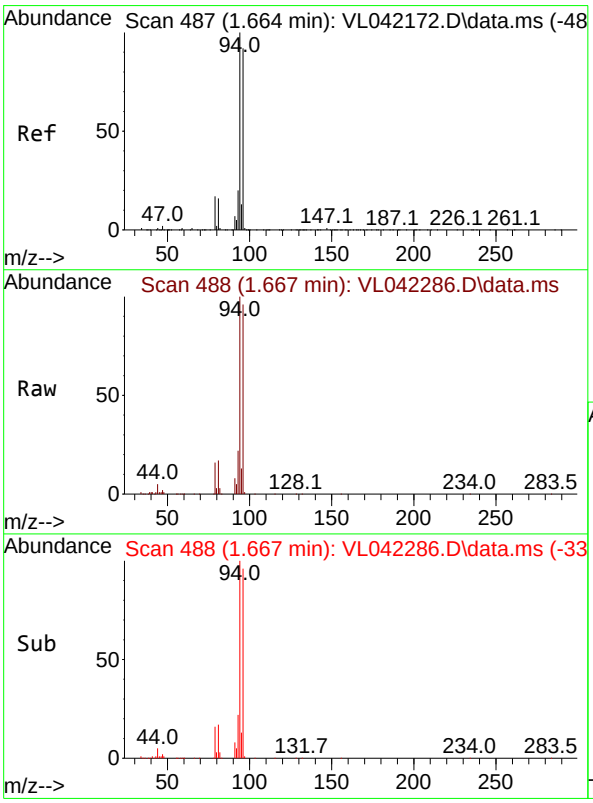
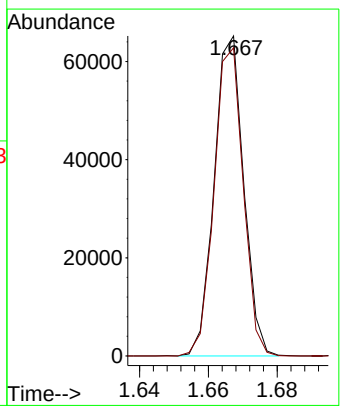
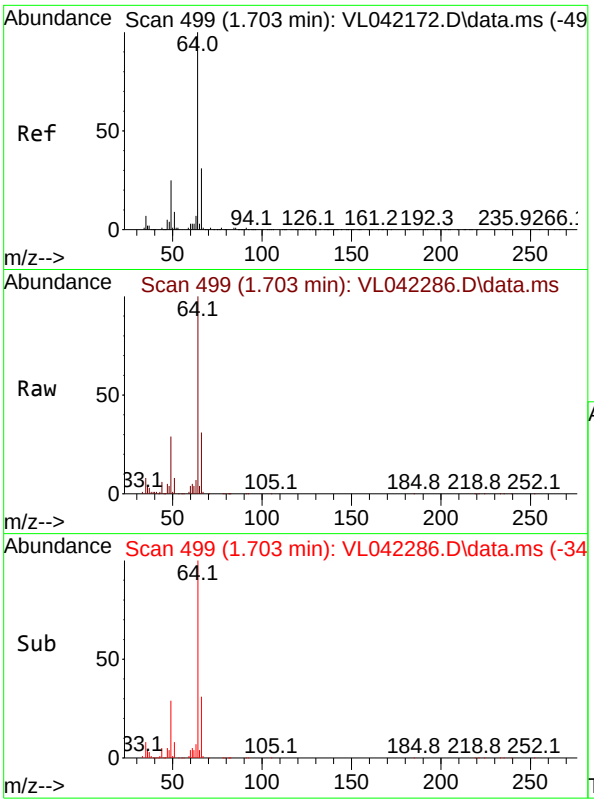


#6
Bromomethane
Concen: 9.136 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 94 Resp: 38883

Ion	Ratio	Lower	Upper
94	100		
96	96.3	73.1	109.7

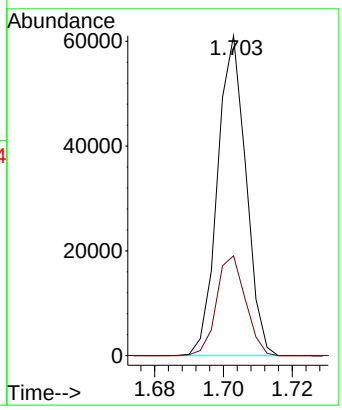




#7
Chloroethane
Concen: 9.290 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 64 Resp: 3501

Ion	Ratio	Lower	Upper
64	100		
66	31.2	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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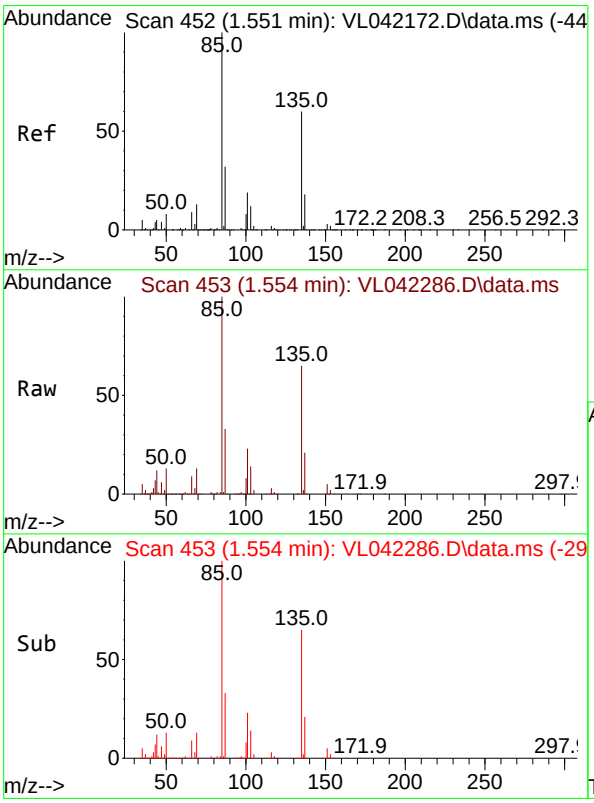
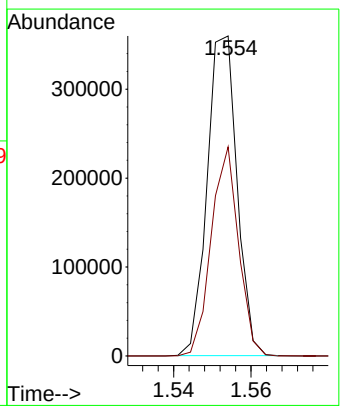
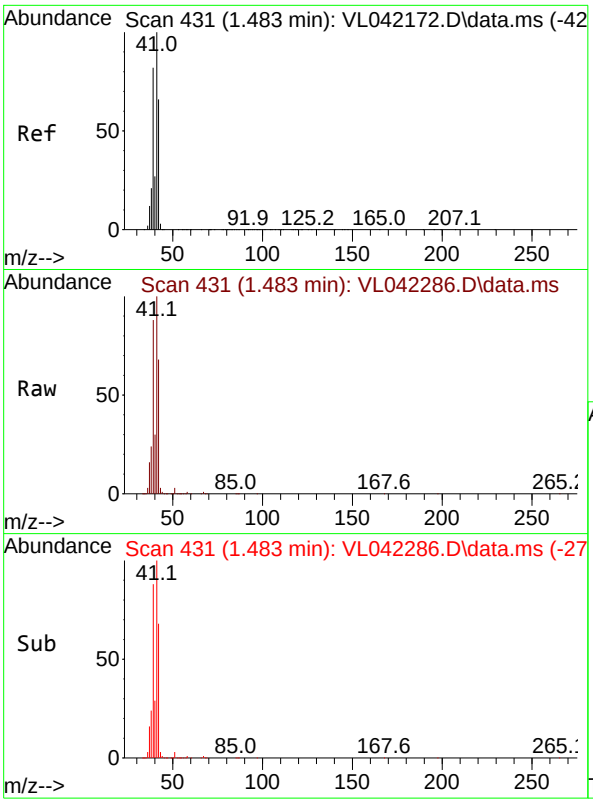


#8
Dichlorotetrafluoroethane
Concen: 9.882 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 85 Resp: 193376

Ion	Ratio	Lower	Upper
85	100		
135	59.6	52.4	78.6

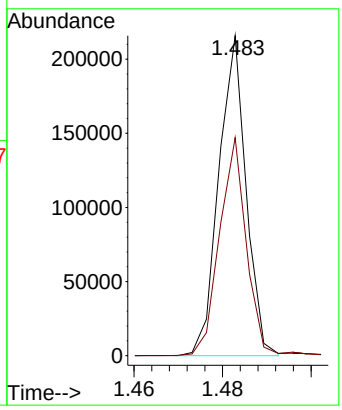




#9
Propene
Concen: 8.573 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 41 Resp: 9224

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2



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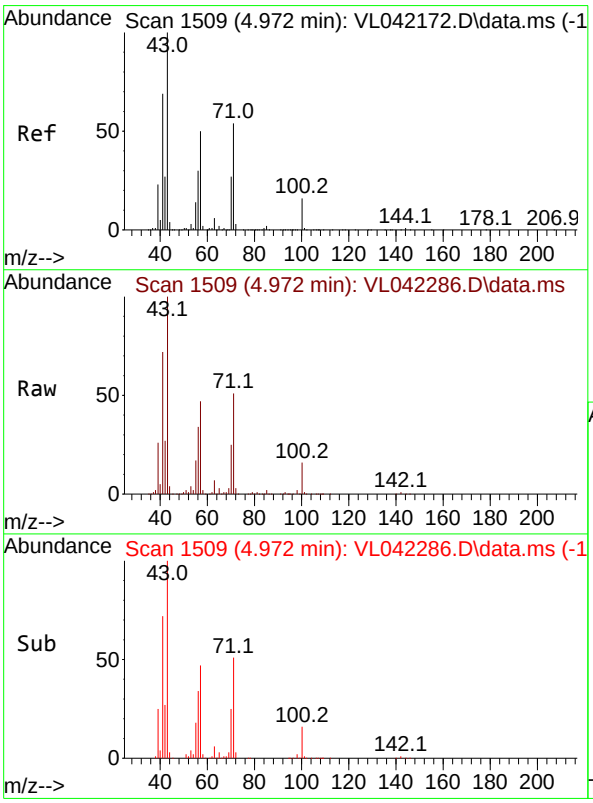
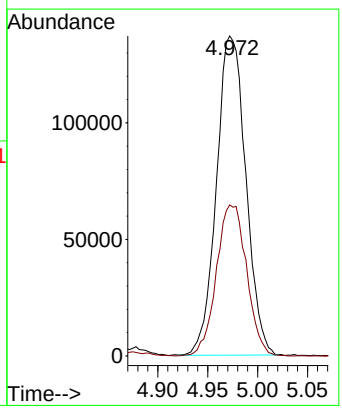
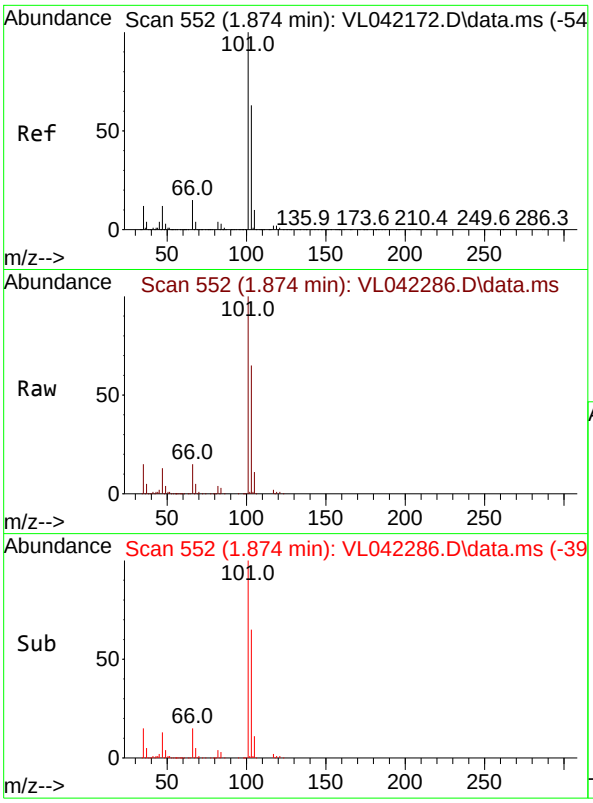


#10
Heptane
Concen: 9.789 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 280156

Ion	Ratio	Lower	Upper
43	100		
57	48.8	39.4	59.2

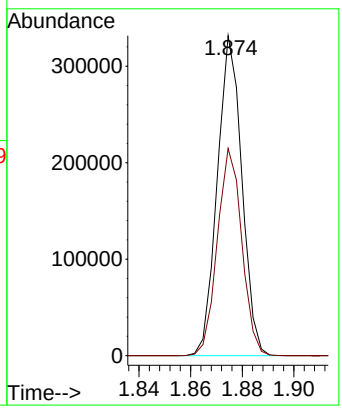




#11
Trichlorofluoromethane
Concen: 9.783 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:101 Resp: 21872

Ion	Ratio	Lower	Upper
101	100		
103	64.8	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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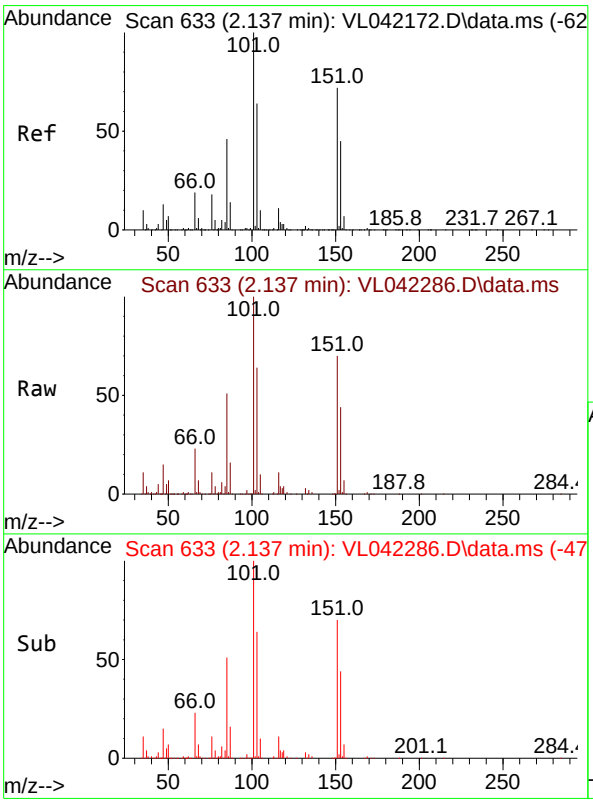
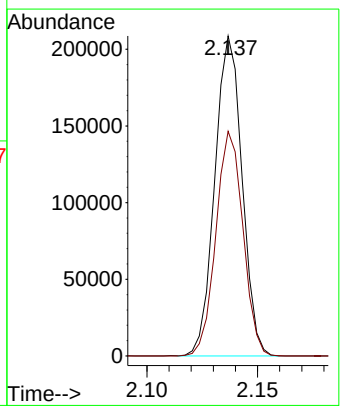
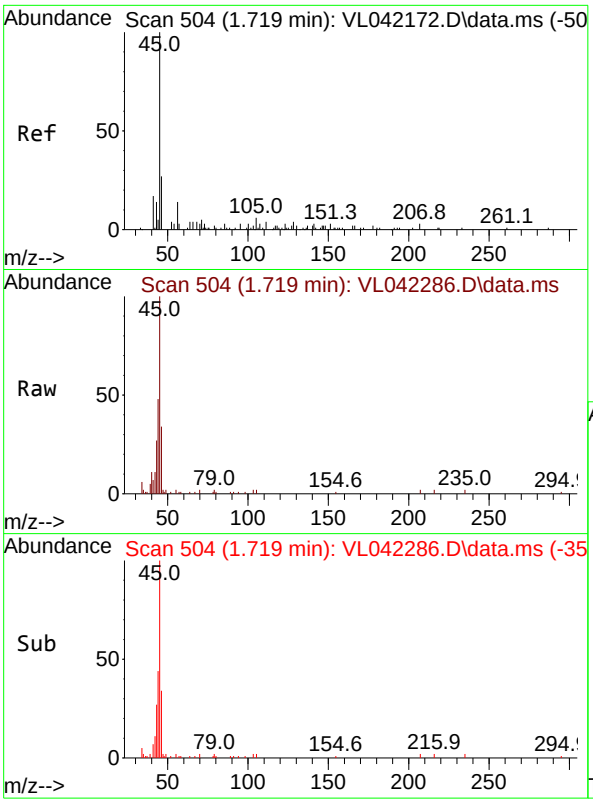


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.726 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:101 Resp: 178752

Ion	Ratio	Lower	Upper
101	100		
151	69.7	57.1	85.7

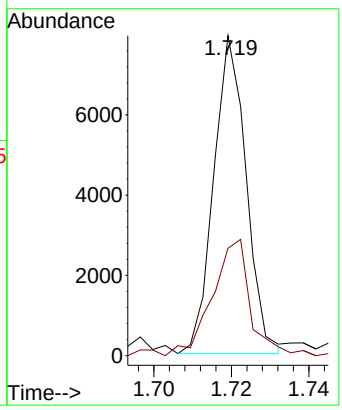




#13
Ethanol
Concen: 4.530 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 45 Resp: 460

Ion	Ratio	Lower	Upper
45	100		
46	44.9	20.2	80.8



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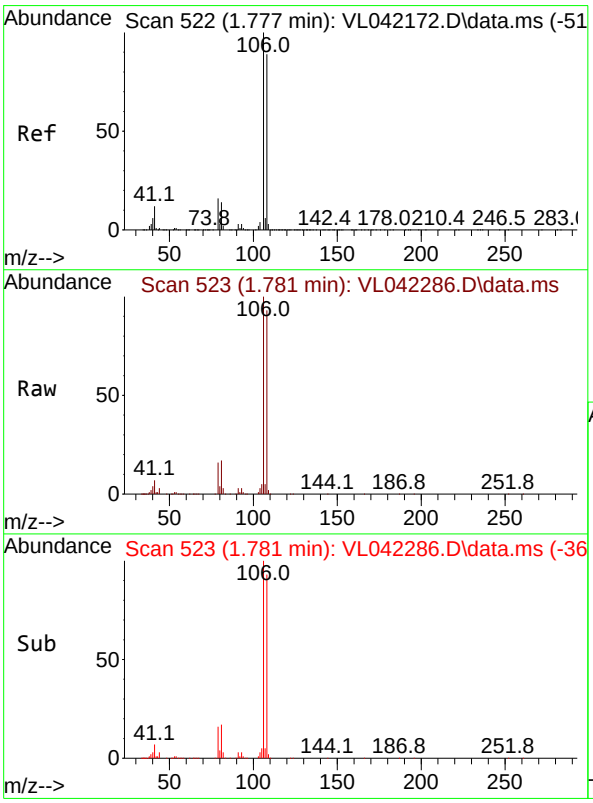
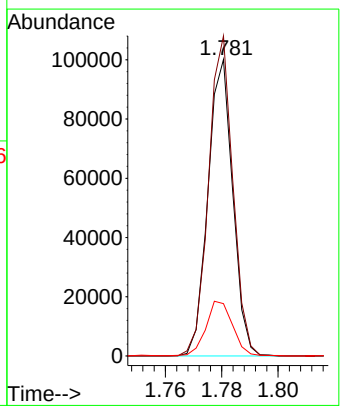
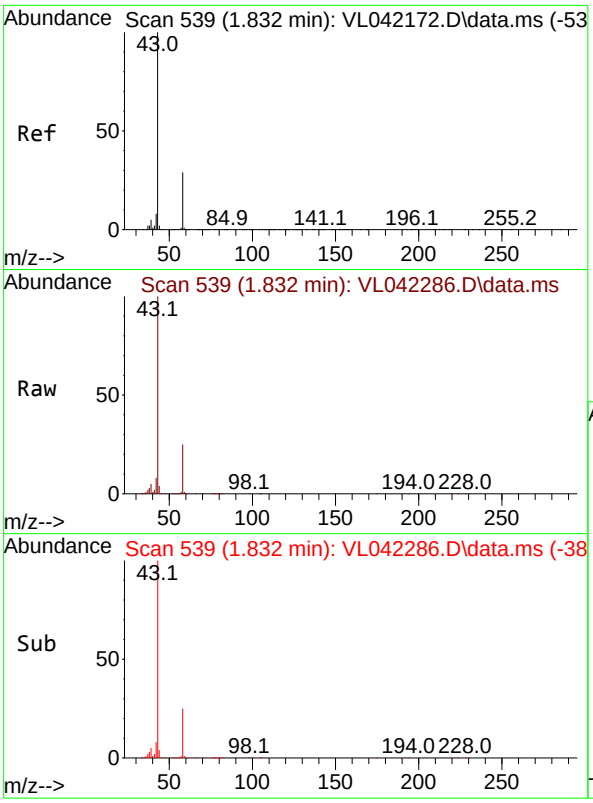


#14
Bromoethene
Concen: 8.693 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:108 Resp: 61204

Ion	Ratio	Lower	Upper
108	100		
106	105.7	86.8	130.2
79	20.3	15.0	22.6

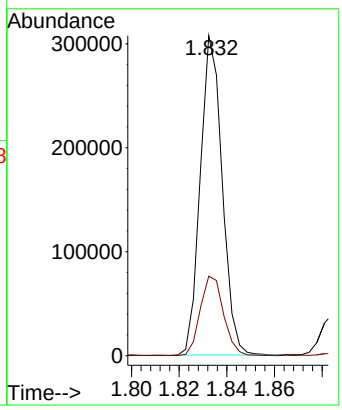




#15
Acetone
Concen: 9.008 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 19606

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8



Instrument :
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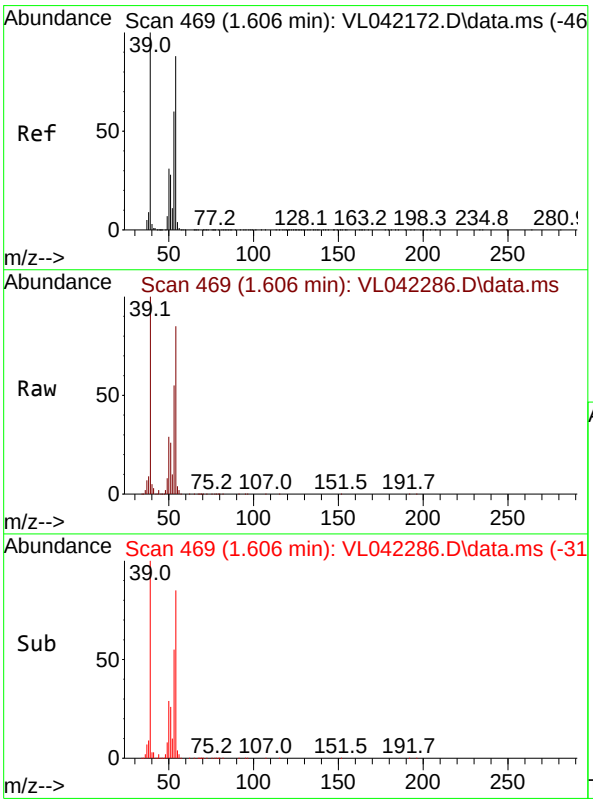
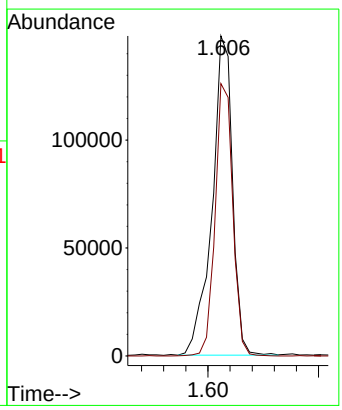
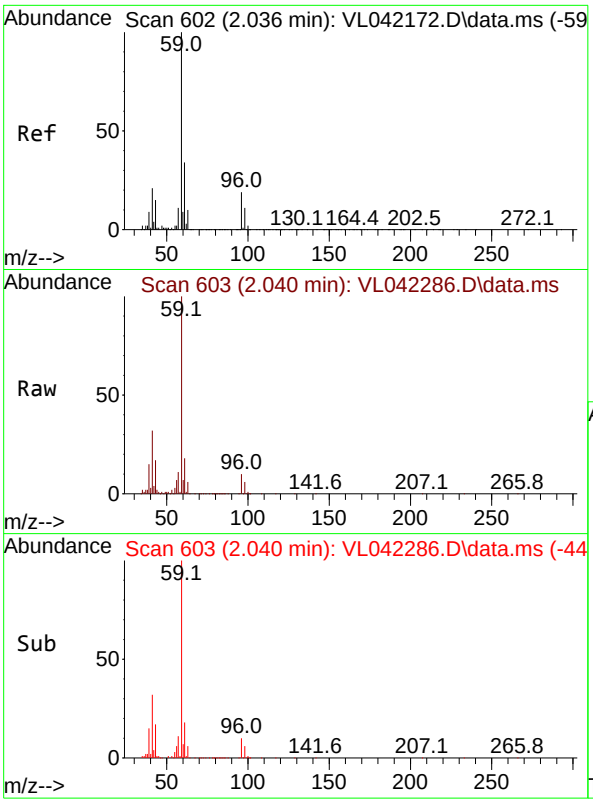


#16
1,3-Butadiene
Concen: 8.931 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 39 Resp: 94932

Ion	Ratio	Lower	Upper
39	100		
54	73.9	60.7	91.1

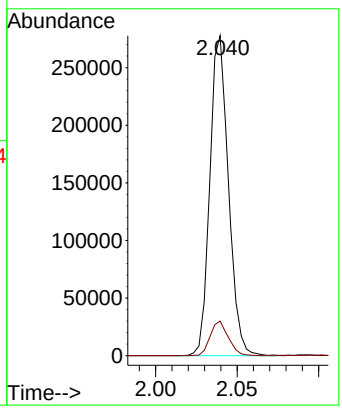




#17
tert-Butyl alcohol
Concen: 8.122 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 59 Resp: 22018

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.9	13.3



Instrument :
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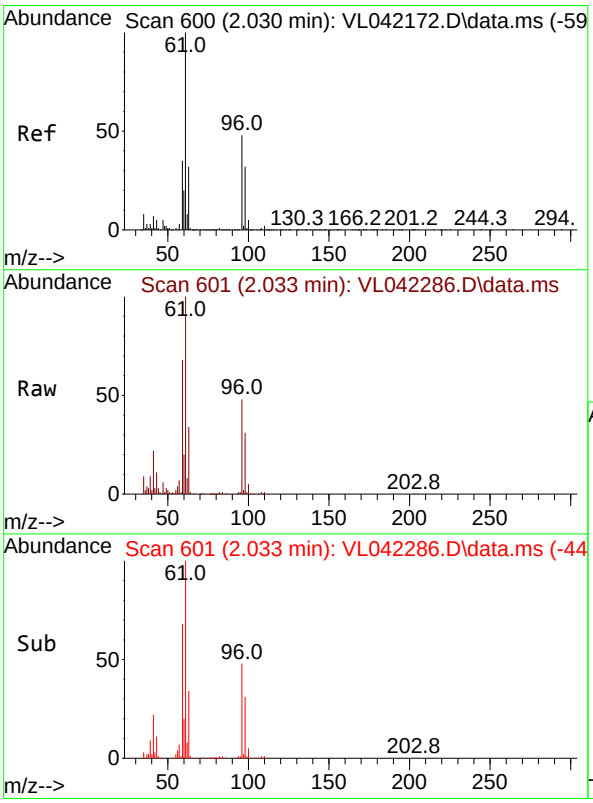
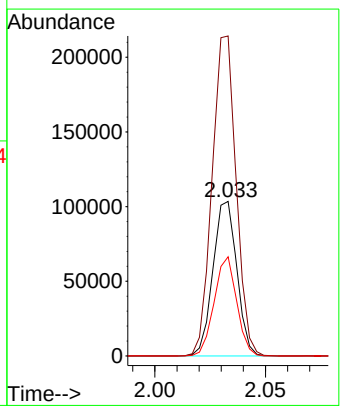
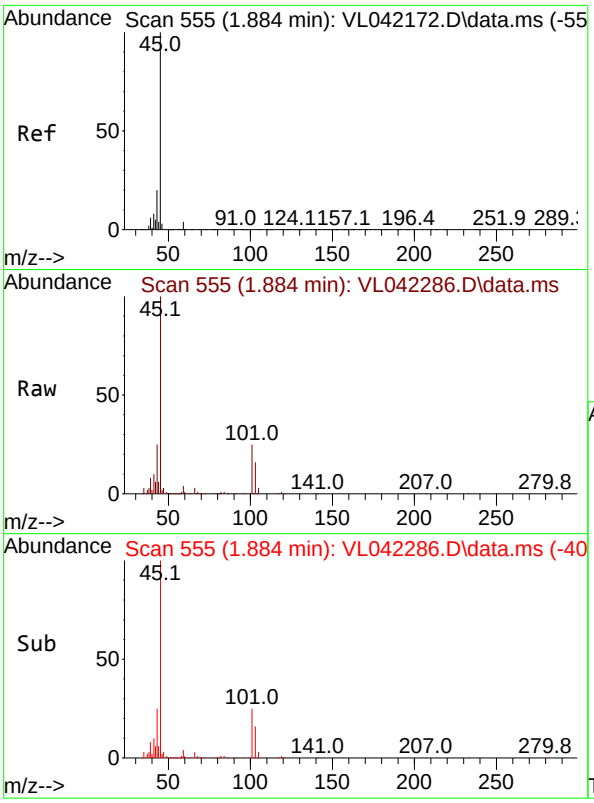


#18
1,1-Dichloroethene
Concen: 9.042 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 96 Resp: 77686

Ion	Ratio	Lower	Upper
96	100		
61	207.1	167.6	251.4
98	64.2	53.5	80.3

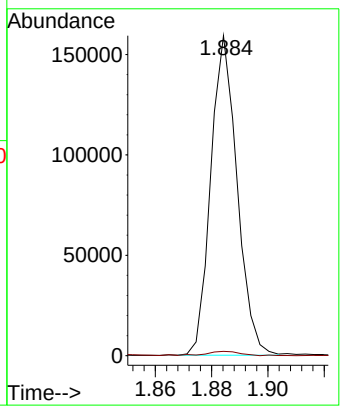




#19
Isopropyl Alcohol
Concen: 8.415 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 45 Resp: 10334

Ion	Ratio	Lower	Upper
45	100		
58	50.7	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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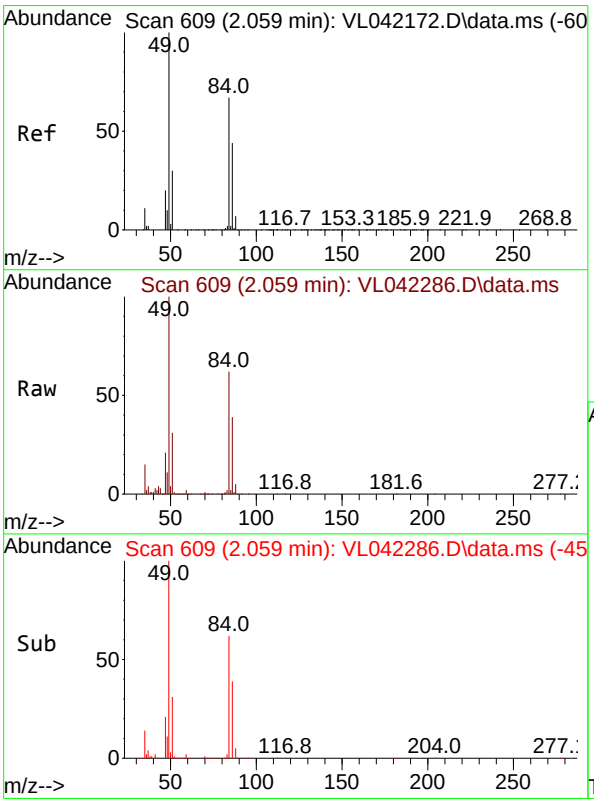
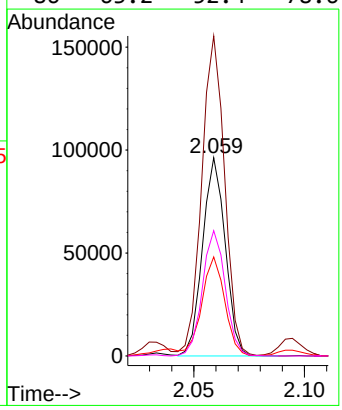
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

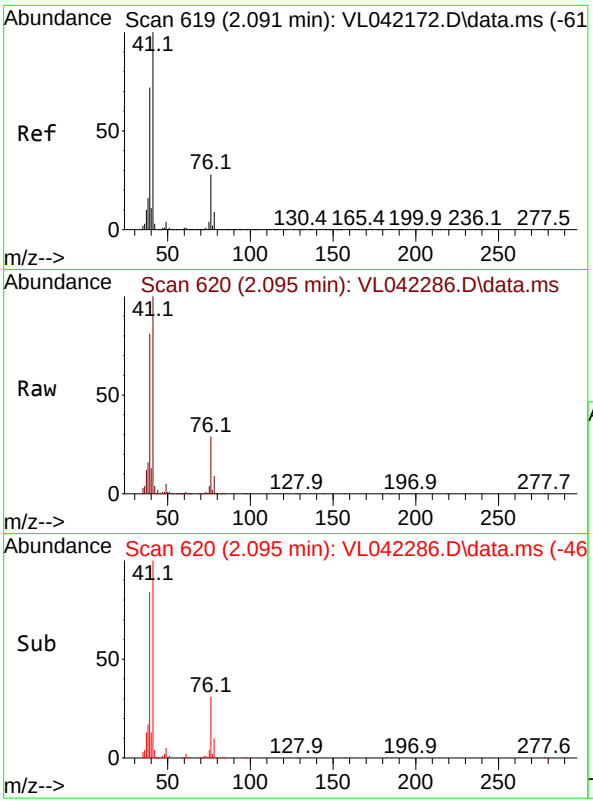


#20
Methylene Chloride
Concen: 8.461 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 84 Resp: 68588

Ion	Ratio	Lower	Upper
84	100		
49	159.3	120.2	180.4
51	48.1	37.4	56.0
86	63.2	52.4	78.6





#21
Allyl Chloride
Concen: 9.118 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 41 Resp: 13996

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	79.7	61.1	91.7

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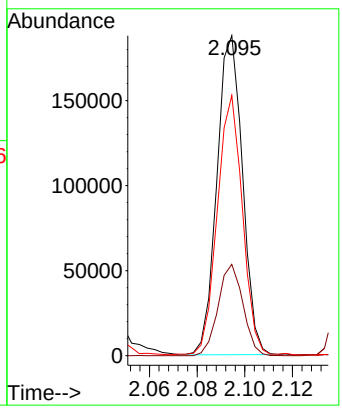
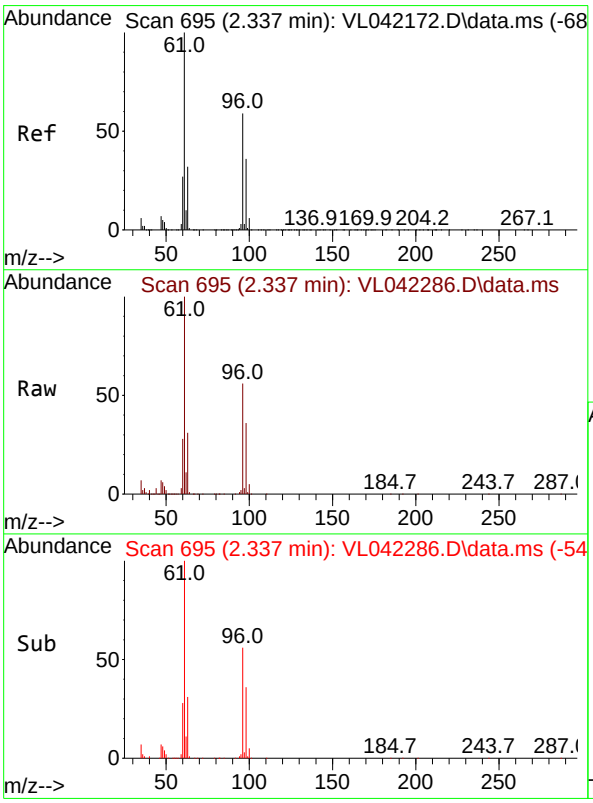
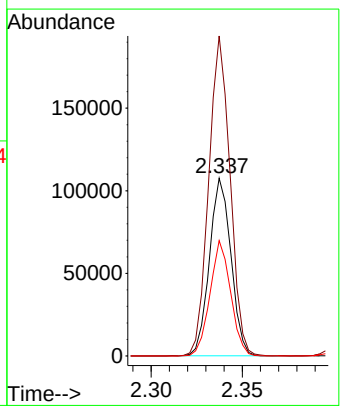


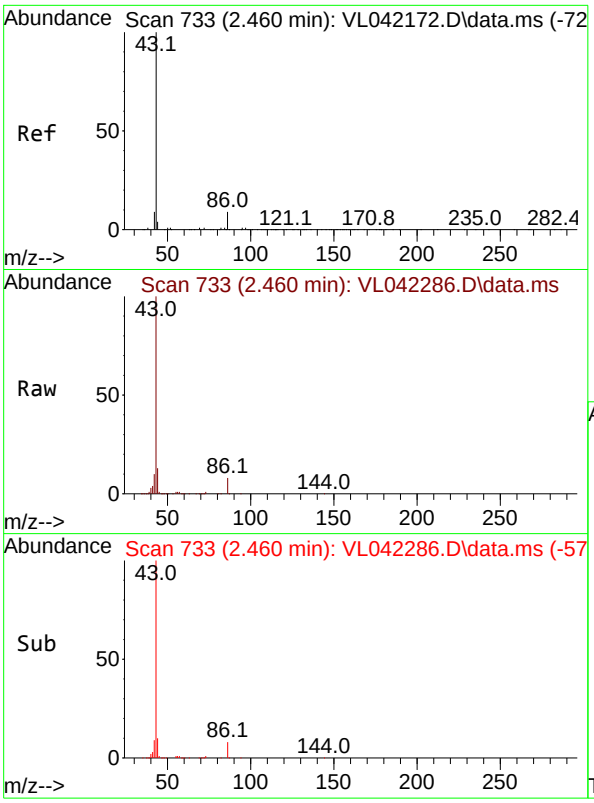


#22
trans-1,2-Dichloroethene
Concen: 8.896 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 96 Resp: 88334

Ion	Ratio	Lower	Upper
96	100		
61	180.1	136.6	204.8
98	64.9	49.4	74.2

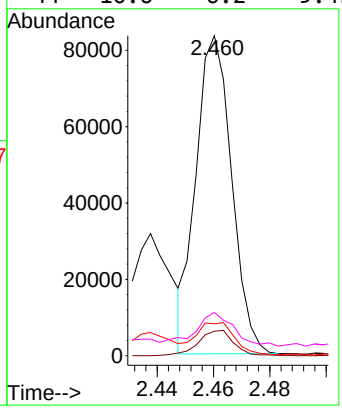




#23
Vinyl Acetate
Concen: 7.766 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 7316

Ion	Ratio	Lower	Upper
43	100		
86	7.6	5.5	8.3
42	9.7	8.6	13.0
44	10.6	6.2	9.4#



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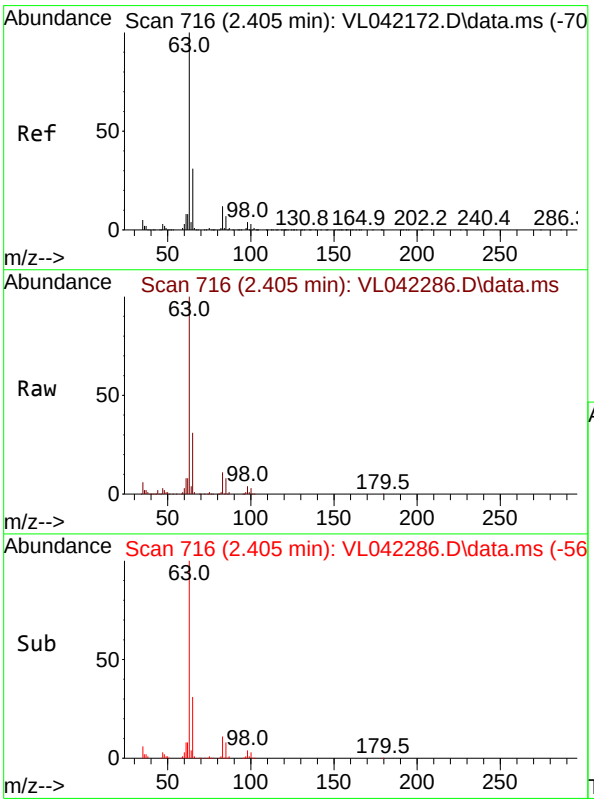
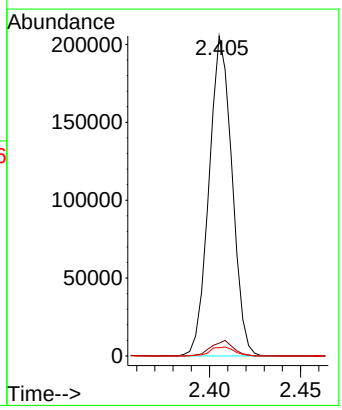
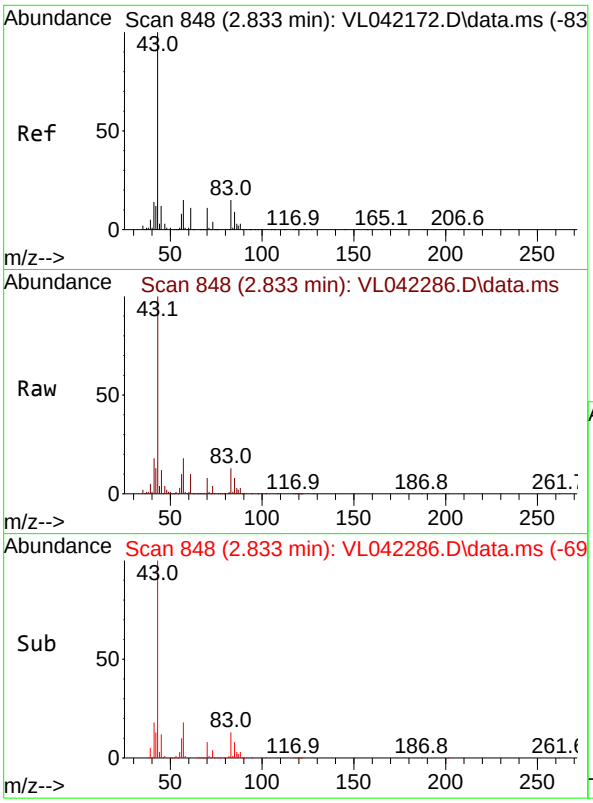


#24
1,1-Dichloroethane
Concen: 9.801 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 63 Resp: 180404

Ion	Ratio	Lower	Upper
63	100		
98	4.0	2.3	6.8
100	2.6	1.6	4.7

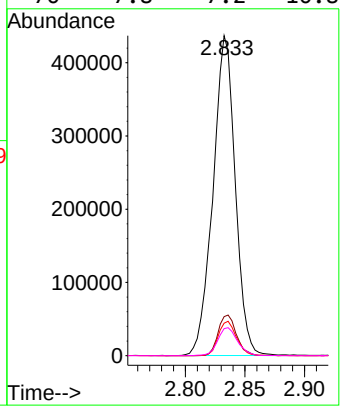




#25
Ethyl Acetate
Concen: 10.039 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 56712

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	8.9	7.3	10.9
70	7.8	7.2	10.8



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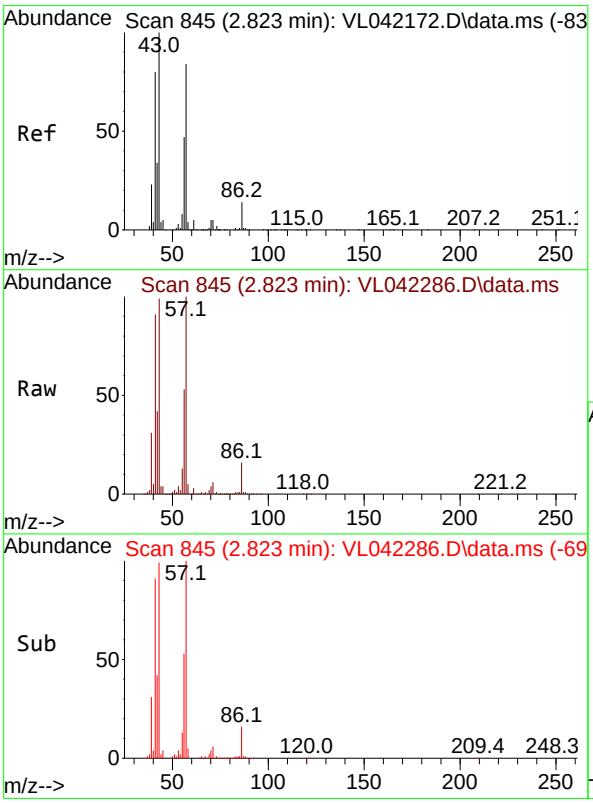
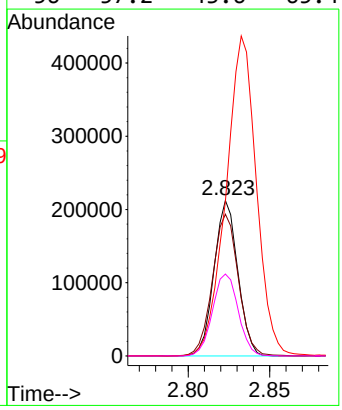
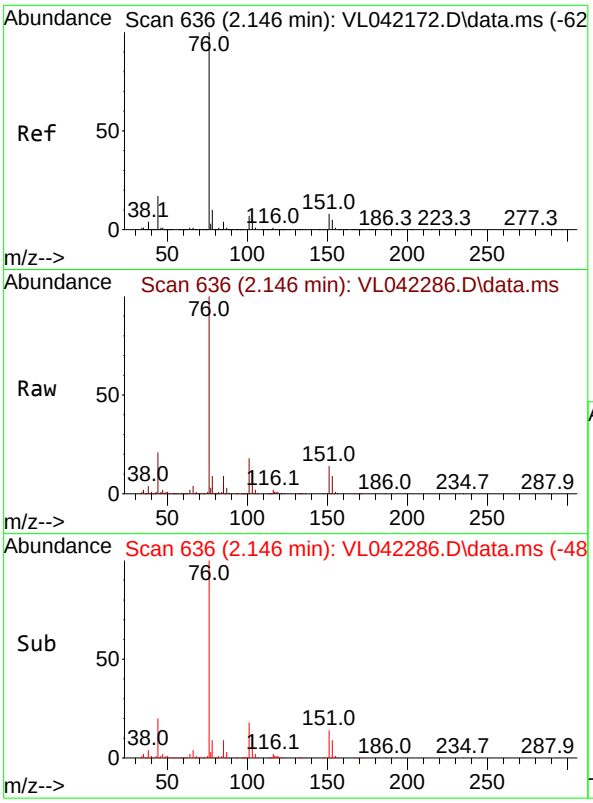


#26
Hexane
Concen: 9.848 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 57 Resp: 214891

Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.6	114.8
43	264.9	207.8	311.8
56	57.2	43.6	65.4





#27
Carbon Disulfide
Concen: 9.253 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 76 Resp: 21649

Ion	Ratio	Lower	Upper
76	100		
44	20.6	14.7	22.1
78	11.8	9.3	13.9

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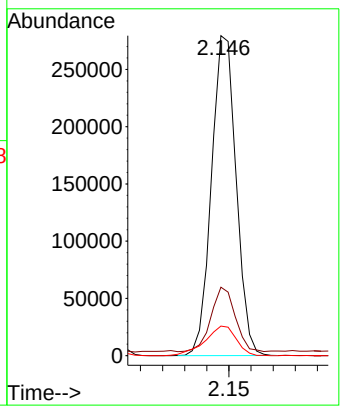
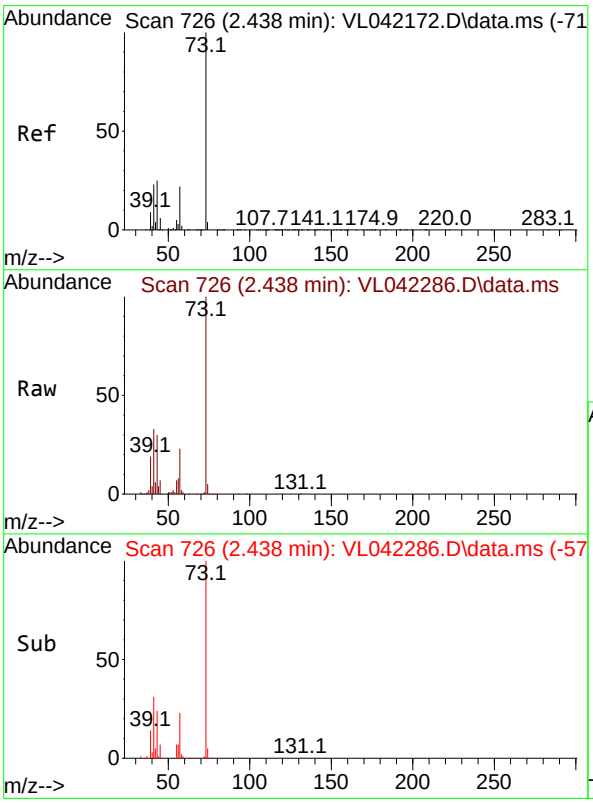
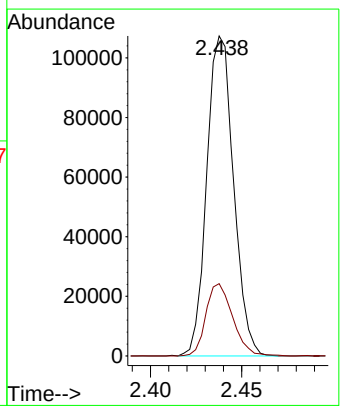


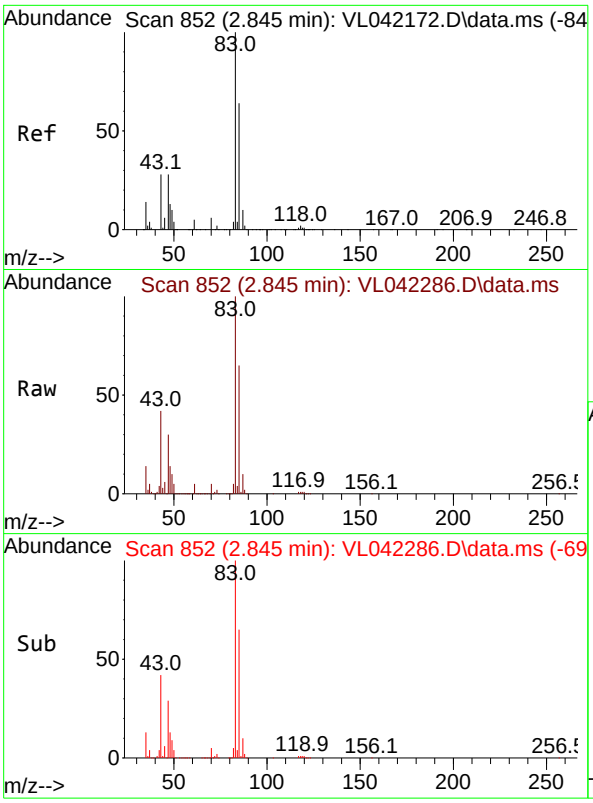


#28
Methyl tert-Butyl Ether
Concen: 8.077 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 73 Resp: 109726

Ion	Ratio	Lower	Upper
73	100		
57	22.6	20.5	30.7

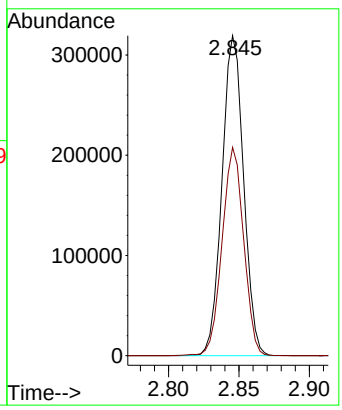




#29
Chloroform
Concen: 10.675 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 83 Resp: 34088

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.4	77.2



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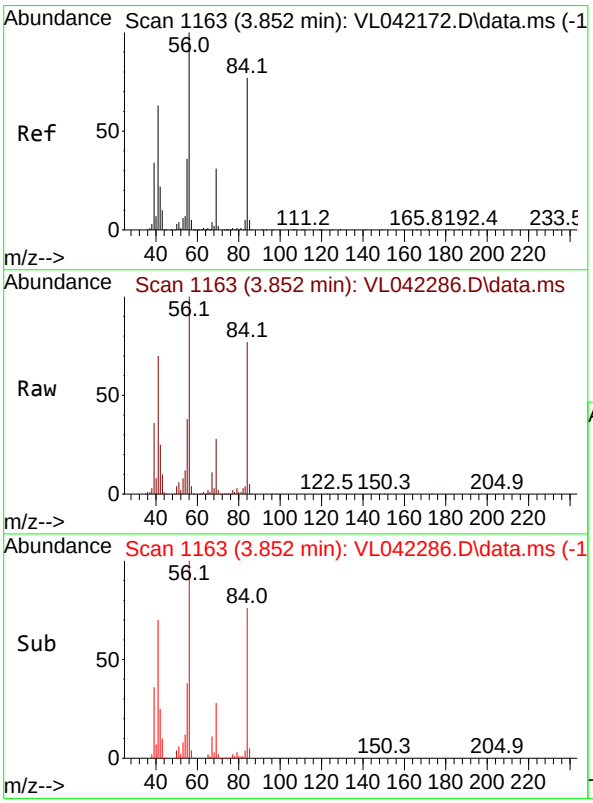
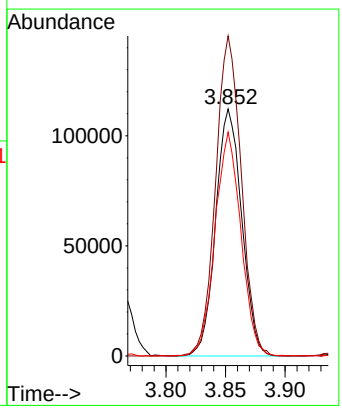
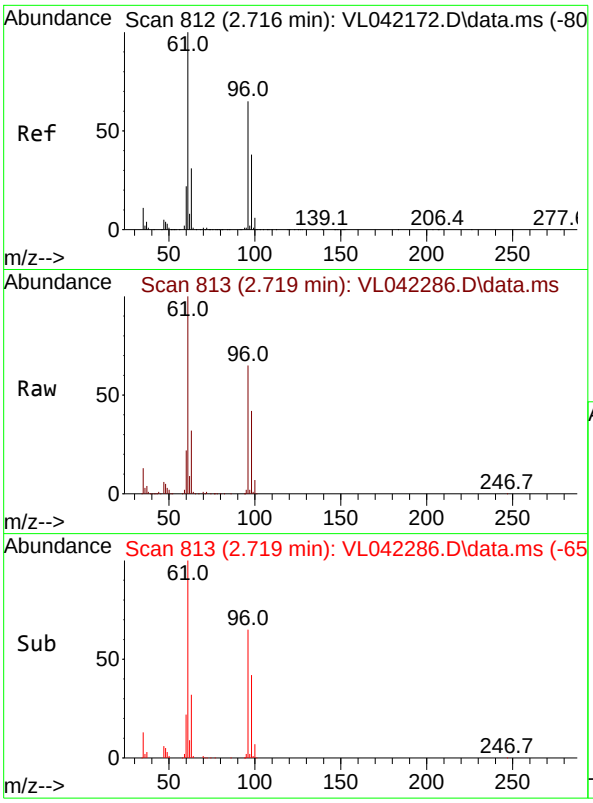


#30
Cyclohexane
Concen: 8.991 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 84 Resp: 170359

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	90.1	66.5	99.7

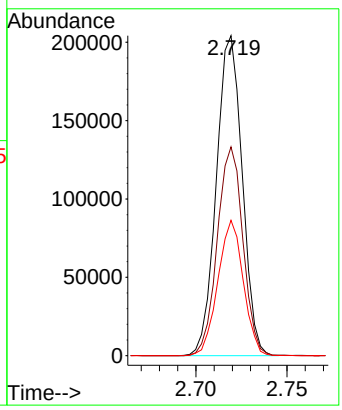




#31
cis-1,2-Dichloroethene
Concen: 9.110 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 61 Resp: 20179

Ion	Ratio	Lower	Upper
61	100		
96	65.3	51.8	77.8
98	42.3	30.6	46.0



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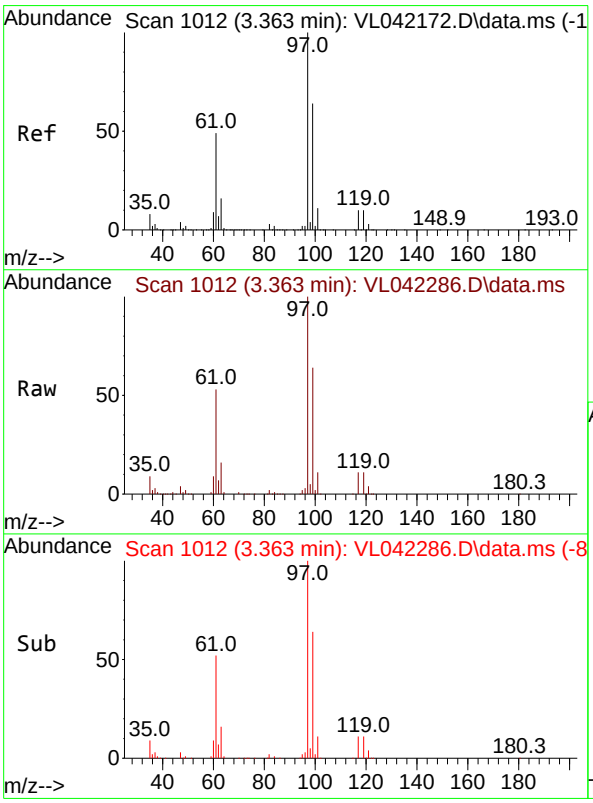
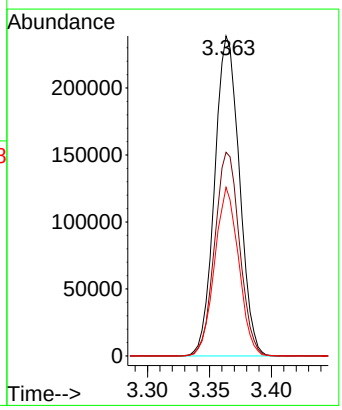
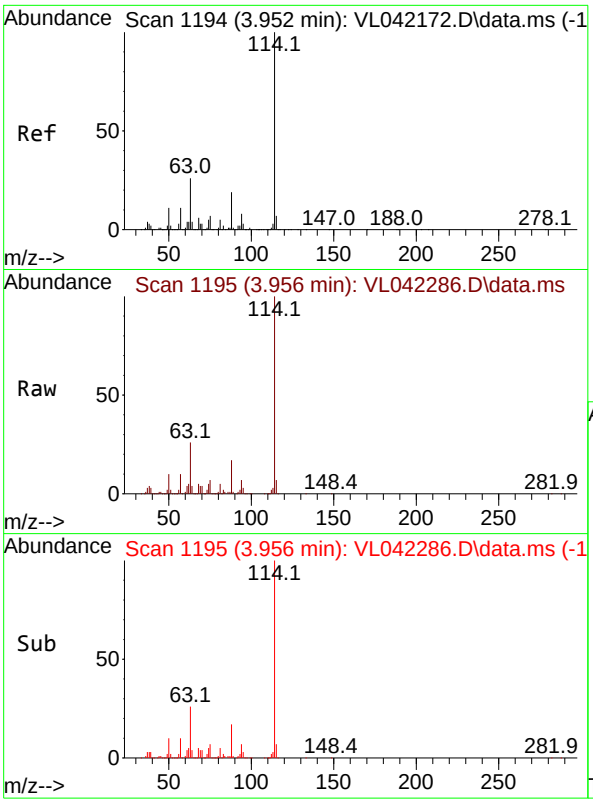


#32
1,1,1-Trichloroethane
Concen: 9.088 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 97 Resp: 332252

Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.5	77.3
61	51.3	38.7	58.1

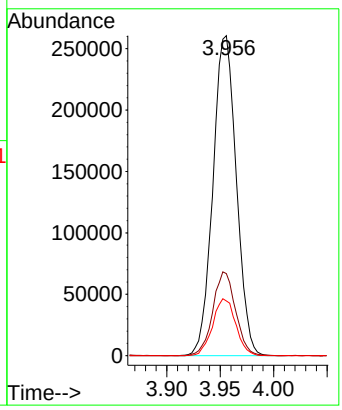




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:114 Resp: 39717

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.6	15.0	22.4



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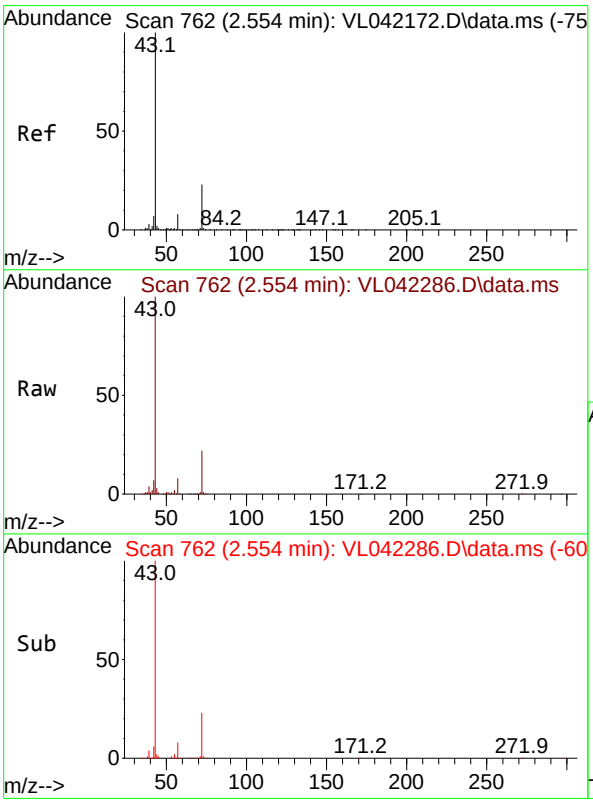
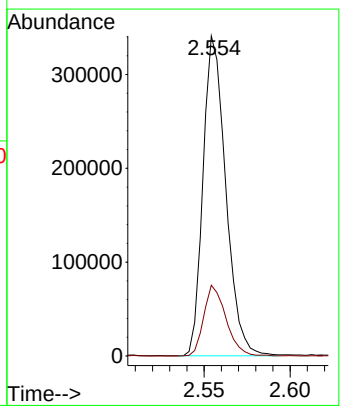
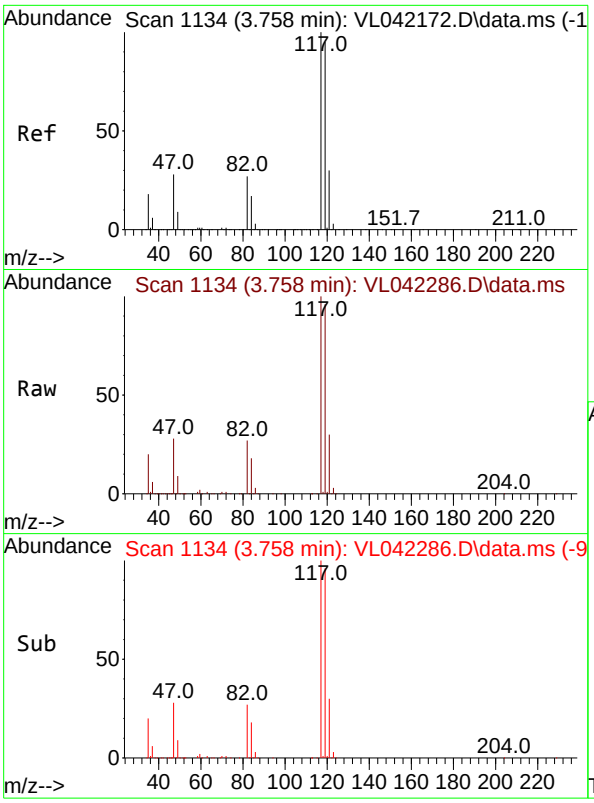


#34
2-Butanone
Concen: 10.886 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 313515

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2

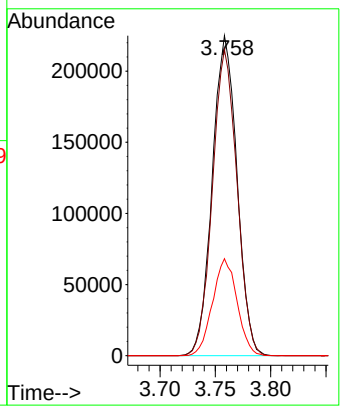




#35
Carbon Tetrachloride
Concen: 11.256 ppbv
RT: 3.758 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:117 Resp: 34924

Ion	Ratio	Lower	Upper
117	100		
119	95.6	76.2	114.2
121	30.3	24.2	36.4



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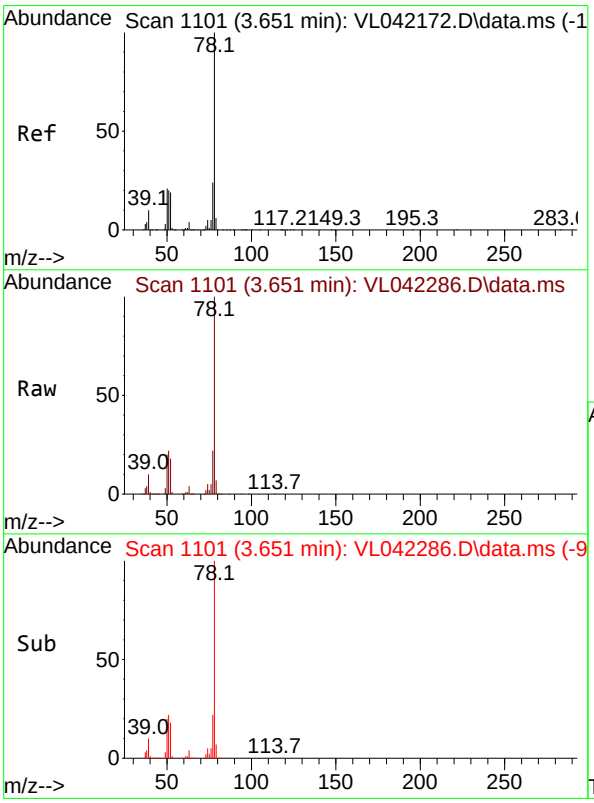
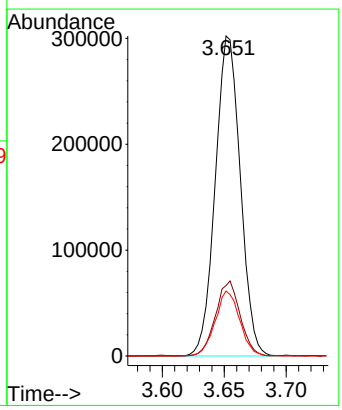
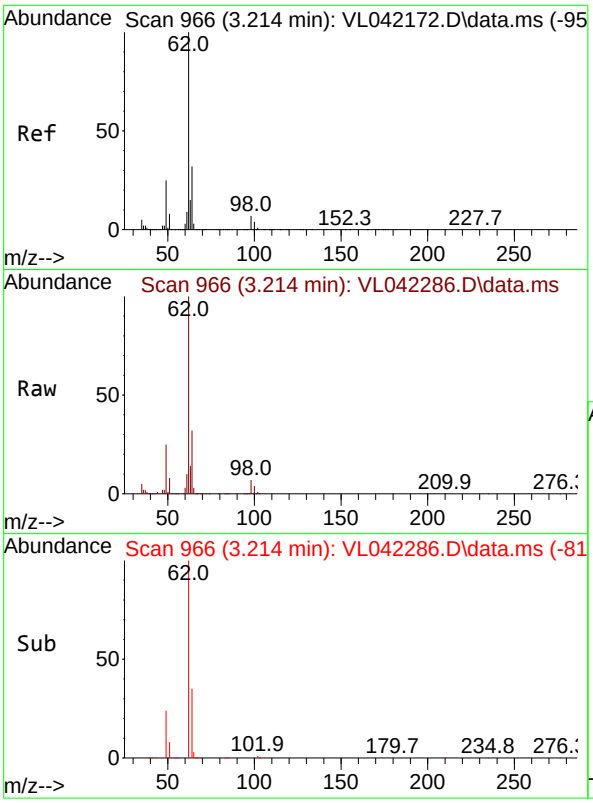


#36
Benzene
Concen: 10.802 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 78 Resp: 425324

Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	20.3	16.6	24.8

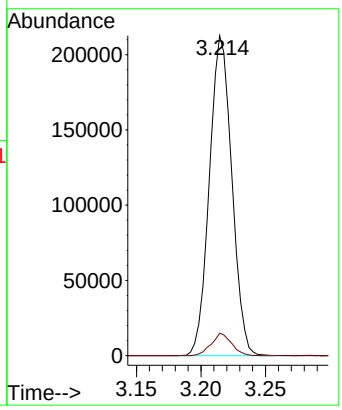




#37
1,2-Dichloroethane
Concen: 11.391 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 62 Resp: 25679

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
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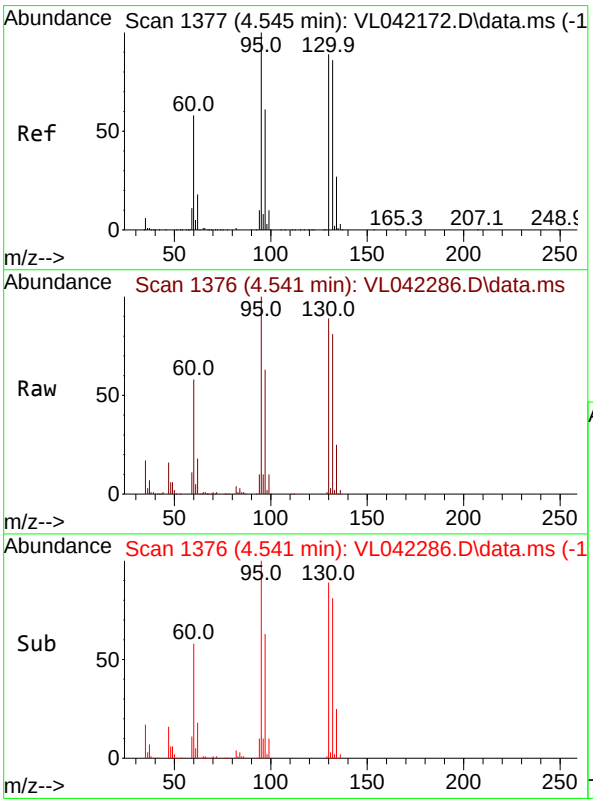
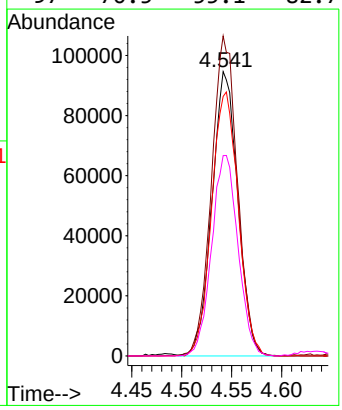
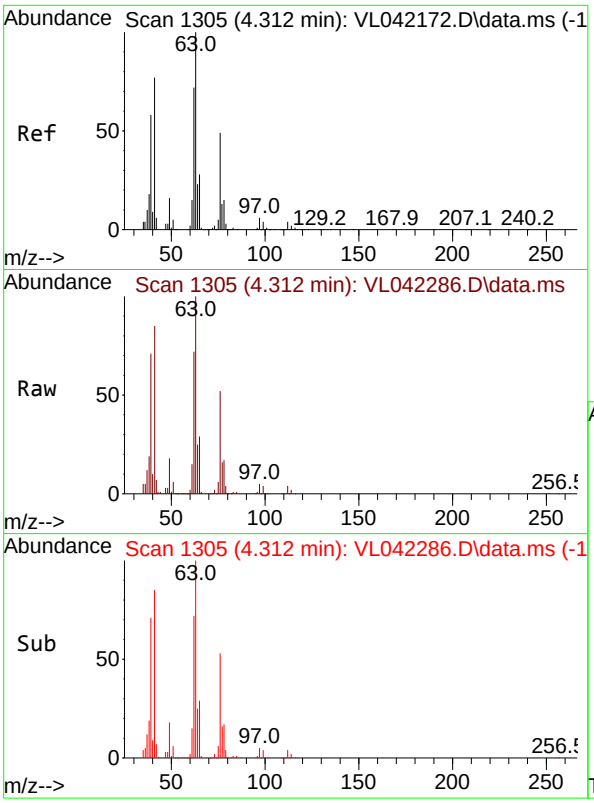


#38
Trichloroethene
Concen: 10.370 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:130 Resp: 170362

Ion	Ratio	Lower	Upper
130	100		
95	112.5	89.8	134.8
132	91.3	77.4	116.2
97	70.5	55.1	82.7

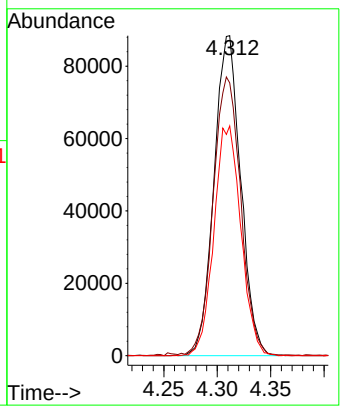




#39
1,2-Dichloropropane
Concen: 10.710 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 63 Resp: 15358

Ion	Ratio	Lower	Upper
63	100		
41	85.0	61.7	92.5
62	71.8	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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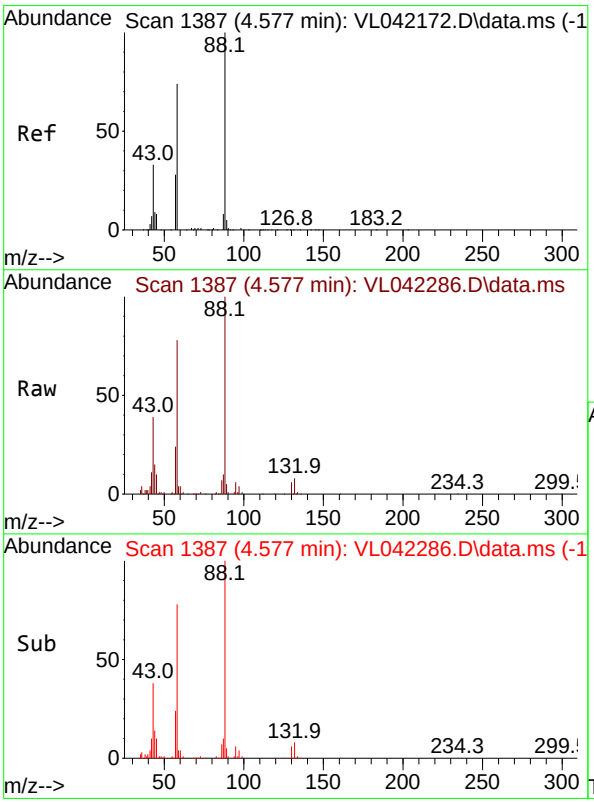
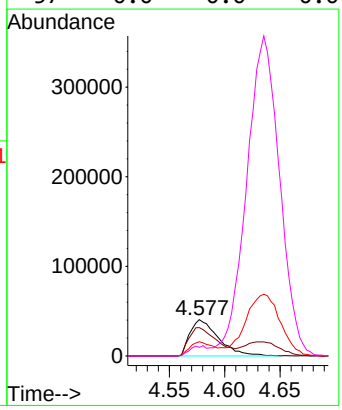
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

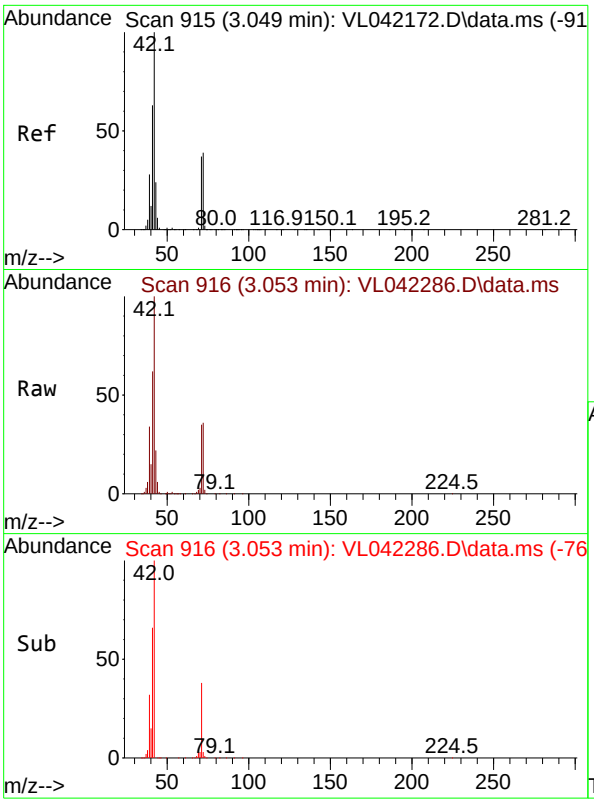


#40
1,4-Dioxane
Concen: 9.539 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 88 Resp: 72604

Ion	Ratio	Lower	Upper
88	100		
58	75.1	62.7	94.1
43	33.8	23.0	34.4
57	0.0	0.0	0.0

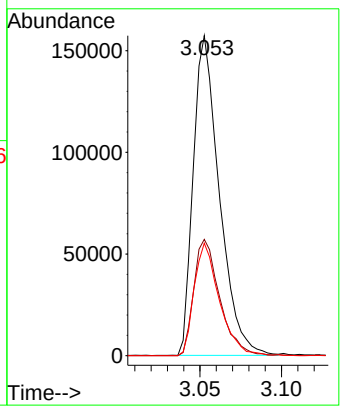




#41
Tetrahydrofuran
Concen: 10.556 ppbv
RT: 3.053 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 42 Resp: 17506

Ion	Ratio	Lower	Upper
42	100		
72	36.2	31.4	47.0
71	34.2	30.2	45.4



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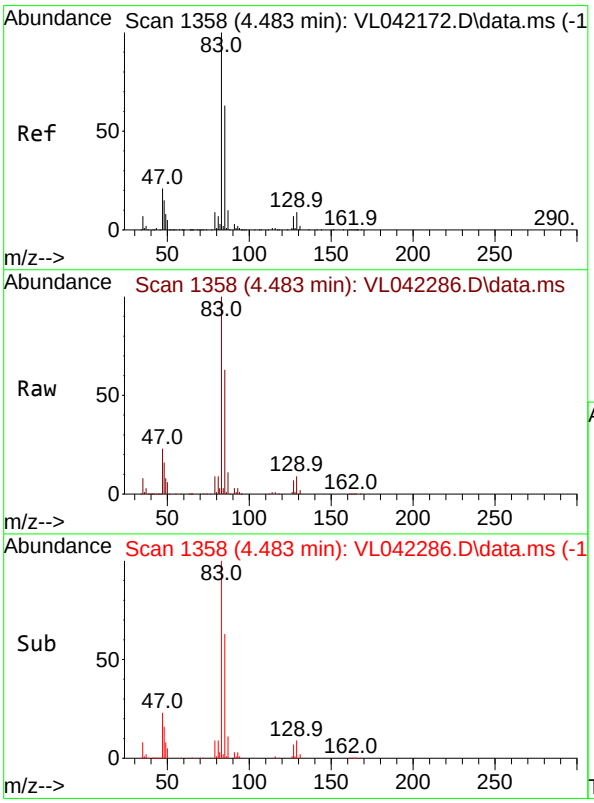
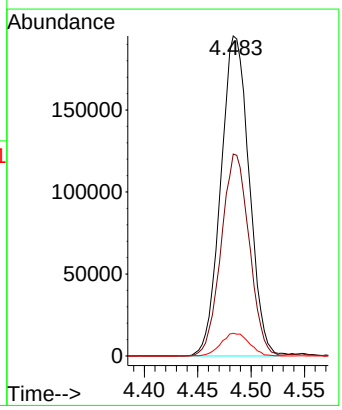
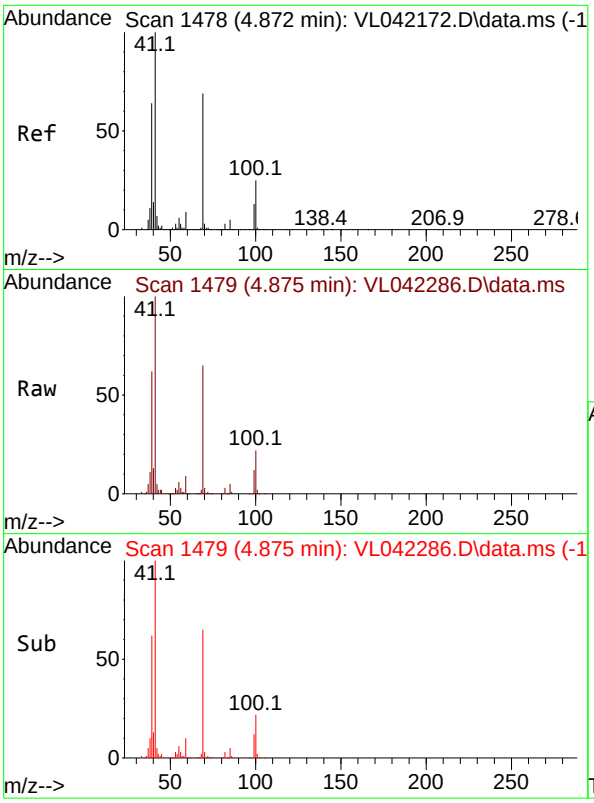


#42
Bromodichloromethane
Concen: 11.551 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 83 Resp: 358962

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.1	5.9	8.9

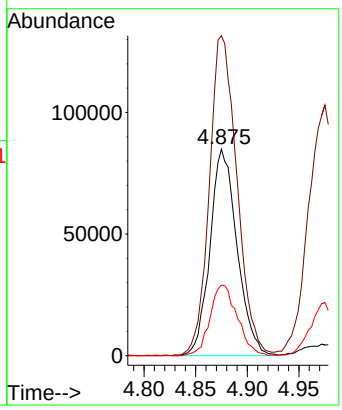




#43
Methyl Methacrylate
Concen: 9.297 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 69 Resp: 15497

Ion	Ratio	Lower	Upper
69	100		
41	158.4	123.8	185.6
100	34.5	28.4	42.6



Instrument :
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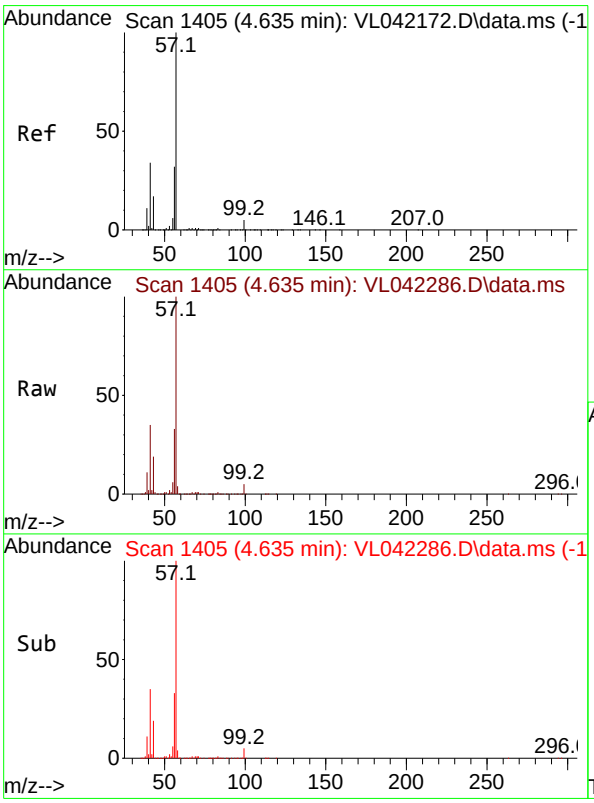
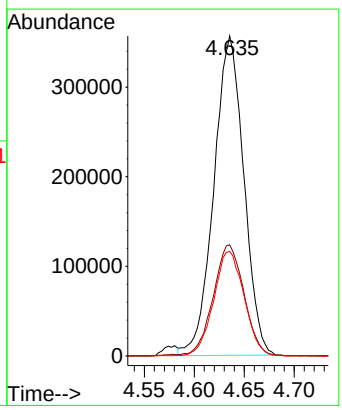
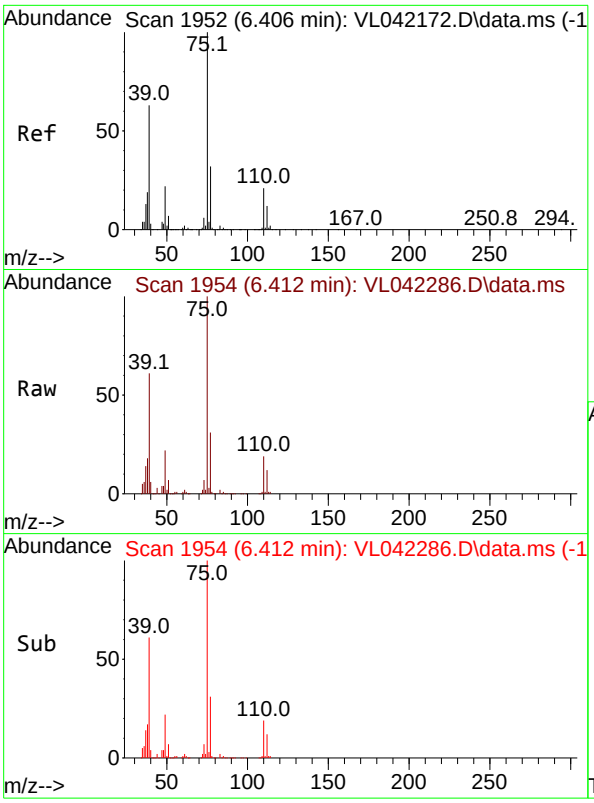


#44
2,2,4-Trimethylpentane
Concen: 11.157 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 57 Resp: 742388

Ion	Ratio	Lower	Upper
57	100		
41	36.2	26.8	40.2
56	33.5	25.6	38.4

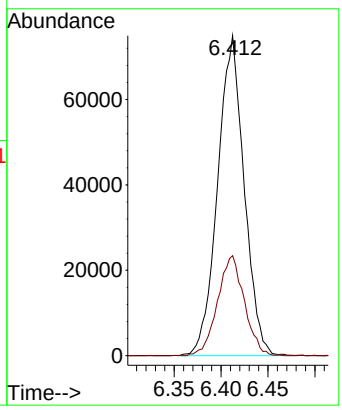




#45
t-1,3-Dichloropropene
Concen: 8.231 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 75 Resp: 14720

Ion	Ratio	Lower	Upper
75	100		
77	31.2	26.0	39.0



Instrument :
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ClientSampleId :
VSTDCCC010

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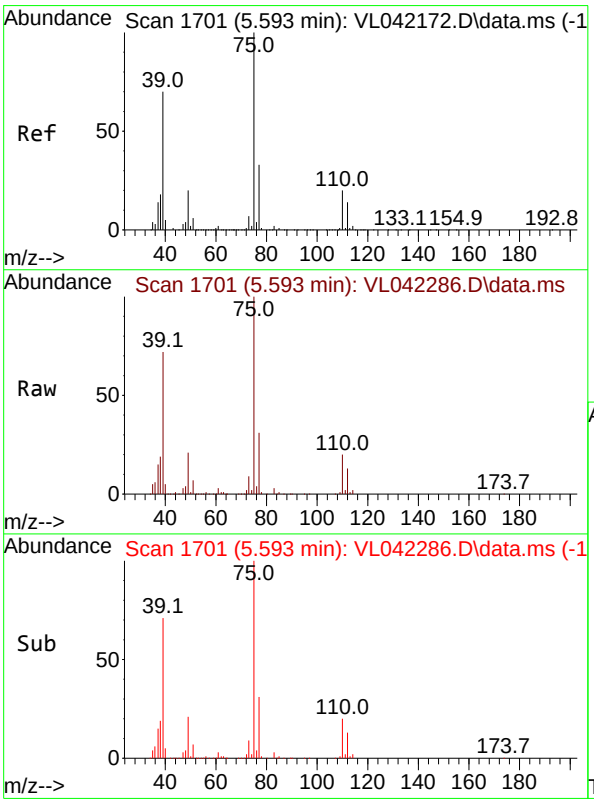
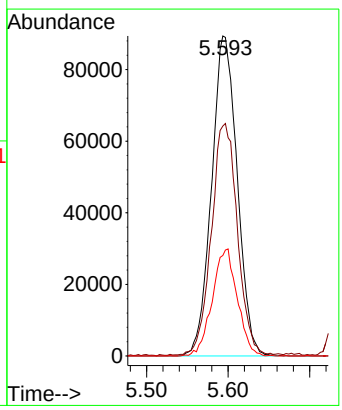
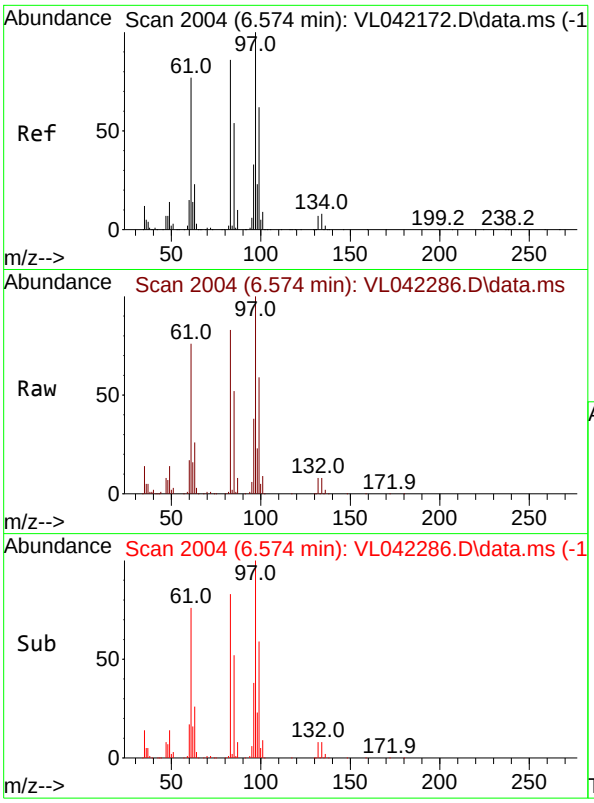


#46
cis-1,3-Dichloropropene
Concen: 8.932 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 75 Resp: 195802

Ion	Ratio	Lower	Upper
75	100		
39	71.5	55.8	83.6
77	31.4	26.0	39.0

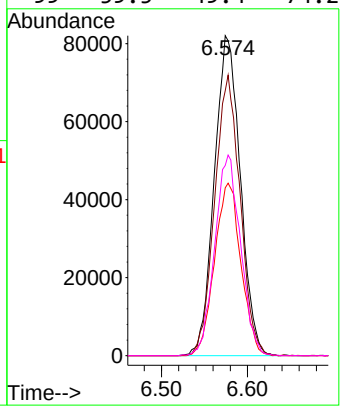




#47
1,1,2-Trichloroethane
Concen: 11.369 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 97 Resp: 17234

Ion	Ratio	Lower	Upper
97	100		
83	82.8	69.2	103.8
85	52.5	43.1	64.7
99	59.5	49.4	74.2



Instrument :
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ClientSampleId :
VSTDCCC010

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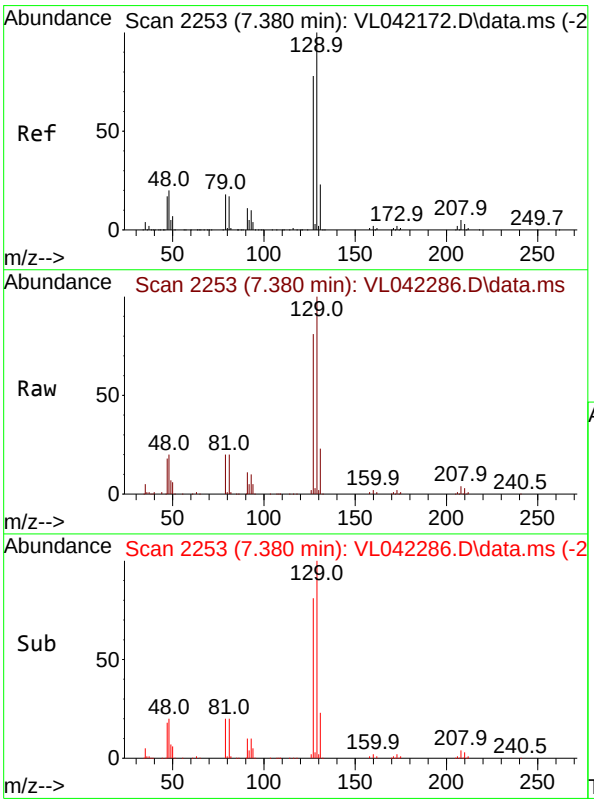
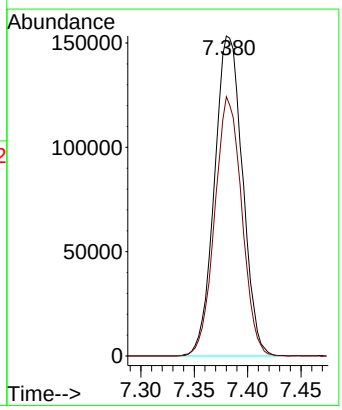
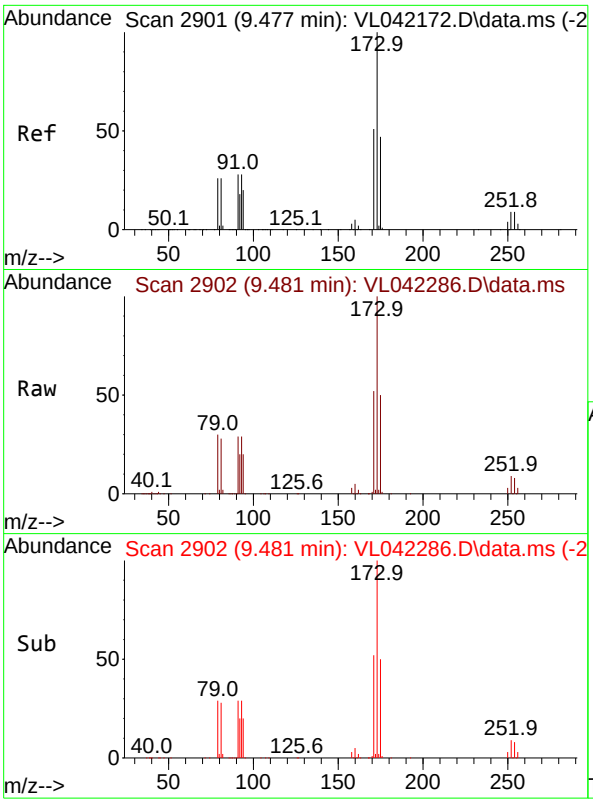


#48
Dibromochloromethane
Concen: 10.907 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:129 Resp: 280199

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.2

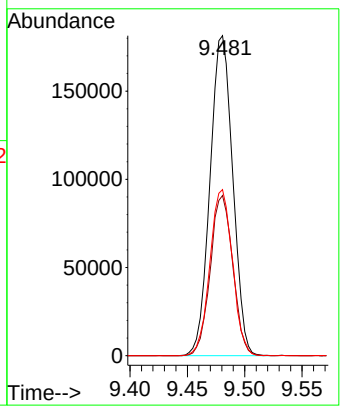




#49
Bromoform
Concen: 10.849 ppbv
RT: 9.481 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:173 Resp: 25022

Ion	Ratio	Lower	Upper
173	100		
175	49.5	38.6	57.8
171	51.5	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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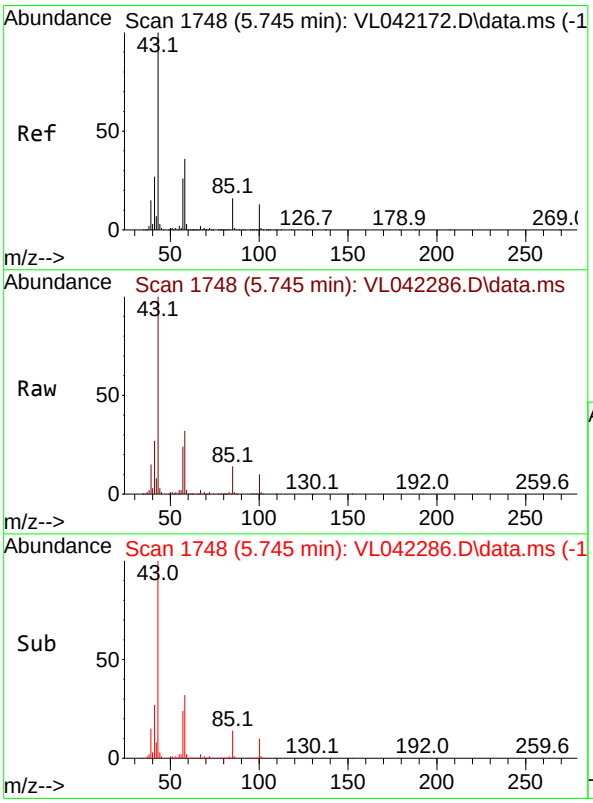
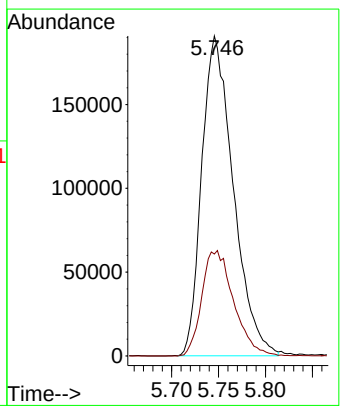
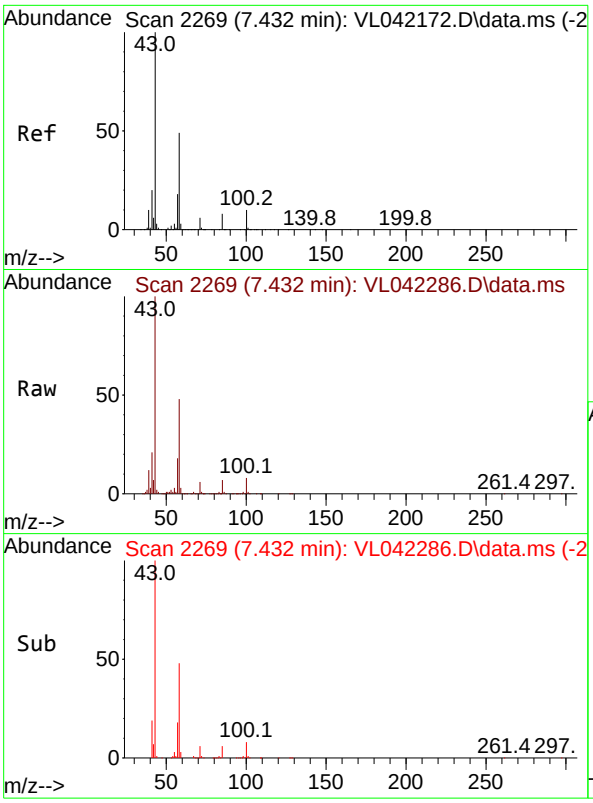


#50
4-Methyl-2-Pentanone
Concen: 9.760 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 445454

Ion	Ratio	Lower	Upper
43	100		
58	33.4	29.0	43.6





#51
2-Hexanone
Concen: 9.437 ppbv
RT: 7.432 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 35370

Ion	Ratio	Lower	Upper
43	100		
58	45.8	39.7	59.5
98	0.9	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
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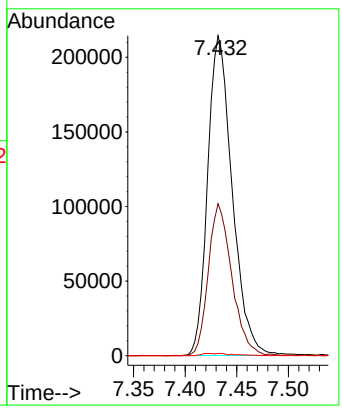
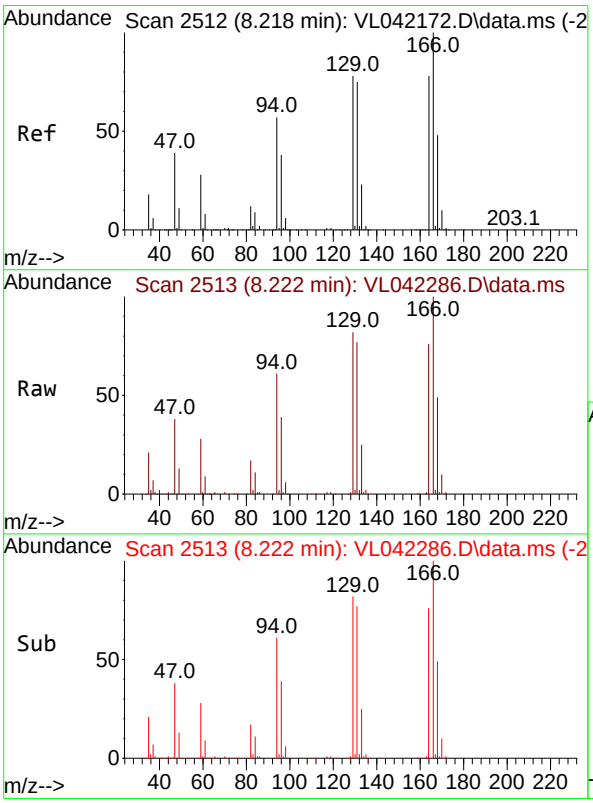
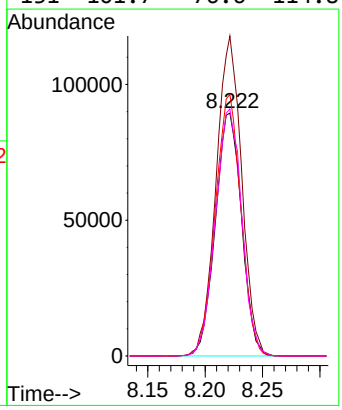


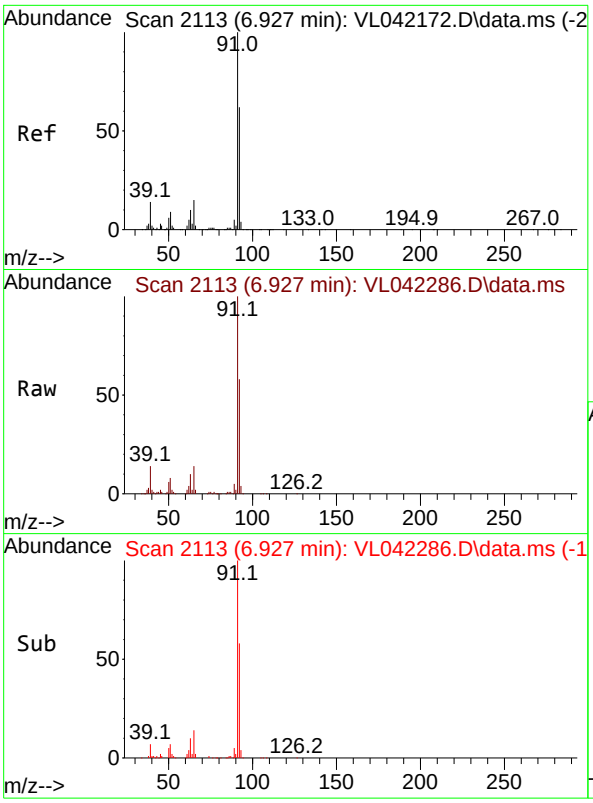


#52
Tetrachloroethene
Concen: 9.092 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:164 Resp: 141976

Ion	Ratio	Lower	Upper
164	100		
166	131.7	102.5	153.7
129	107.7	79.8	119.8
131	101.7	76.6	114.8

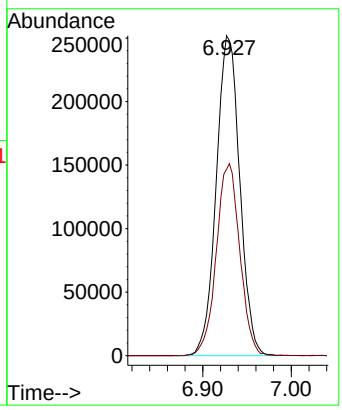




#53
Toluene
Concen: 9.961 ppbv
RT: 6.927 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 46494

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6



Instrument :
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ClientSampleId :
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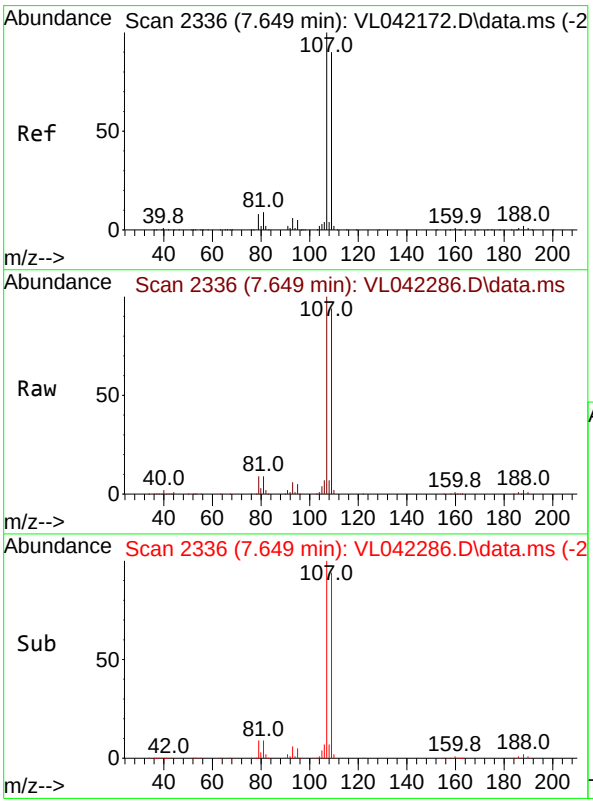
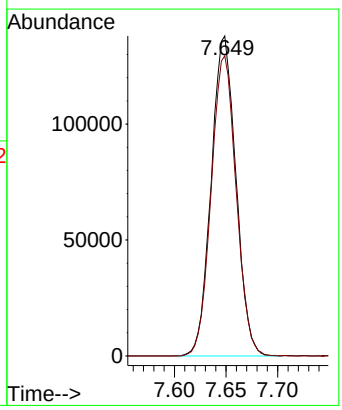
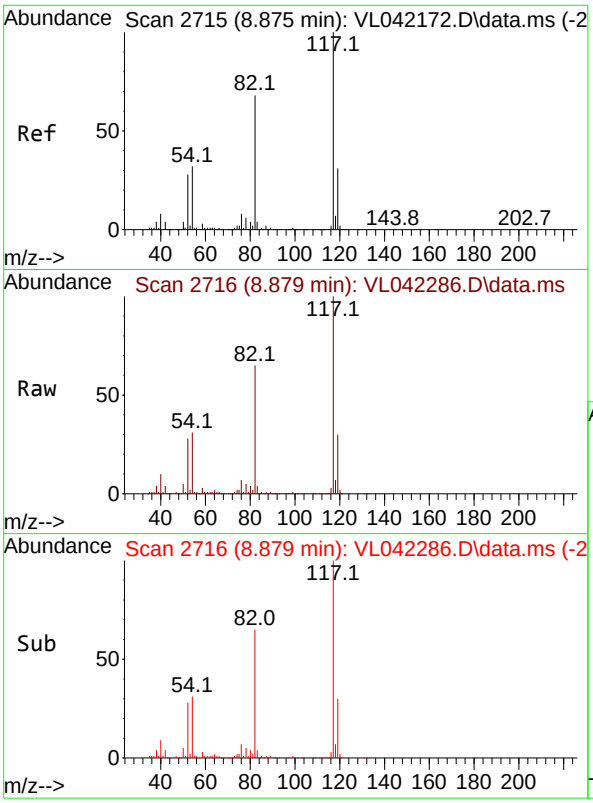


#54
1,2-Dibromoethane
Concen: 10.871 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:107 Resp: 229720

Ion	Ratio	Lower	Upper
107	100		
109	93.8	72.2	108.4

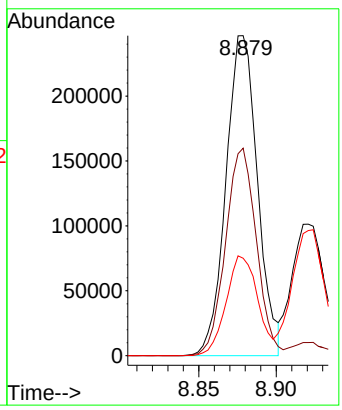




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:117 Resp: 350140

Ion	Ratio	Lower	Upper
117	100		
82	67.4	55.8	83.6
119	31.2	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
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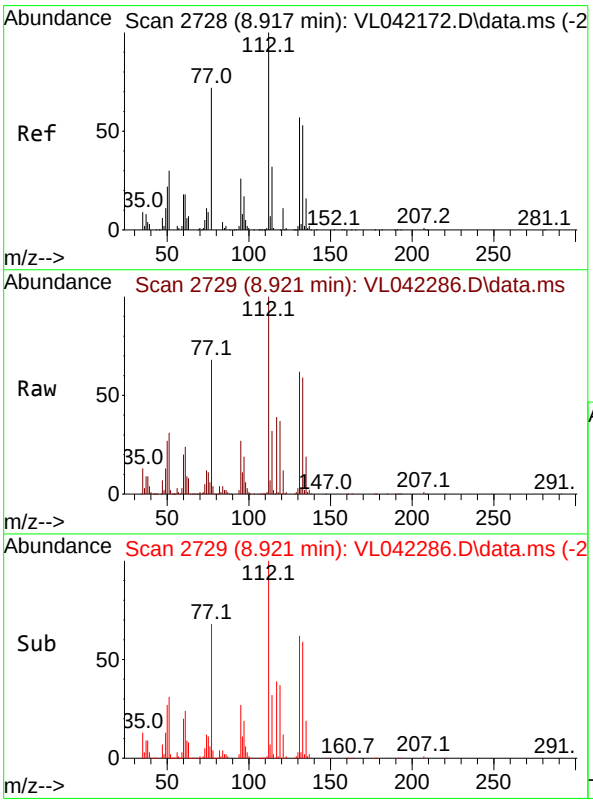
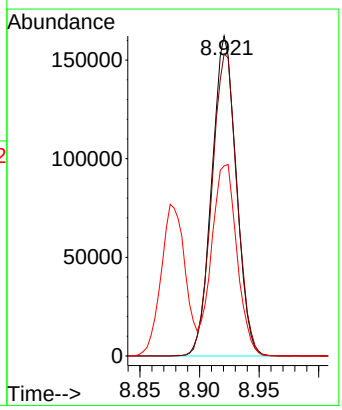
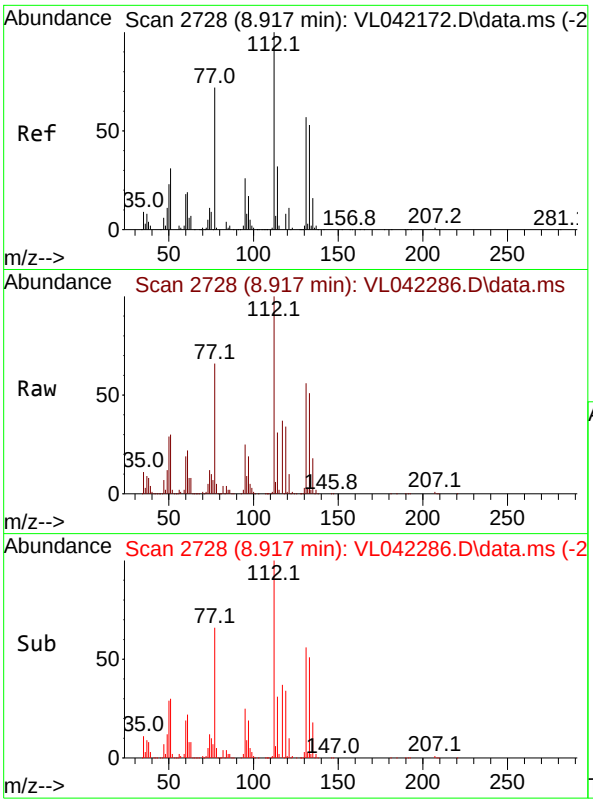


#56
1,1,1,2-Tetrachloroethane
Concen: 11.987 ppbv
RT: 8.921 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:131 Resp: 231041

Ion	Ratio	Lower	Upper
131	100		
133	97.4	76.6	114.8
119	63.2	49.8	74.6

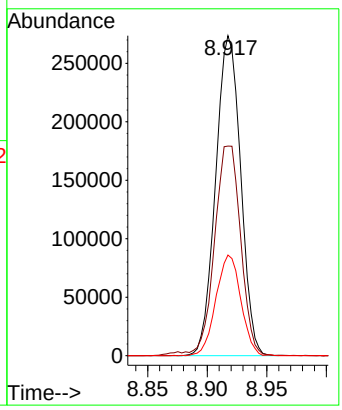




#57
Chlorobenzene
Concen: 12.021 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:112 Resp: 39922

Ion	Ratio	Lower	Upper
112	100		
77	65.3	58.2	87.2
114	31.4	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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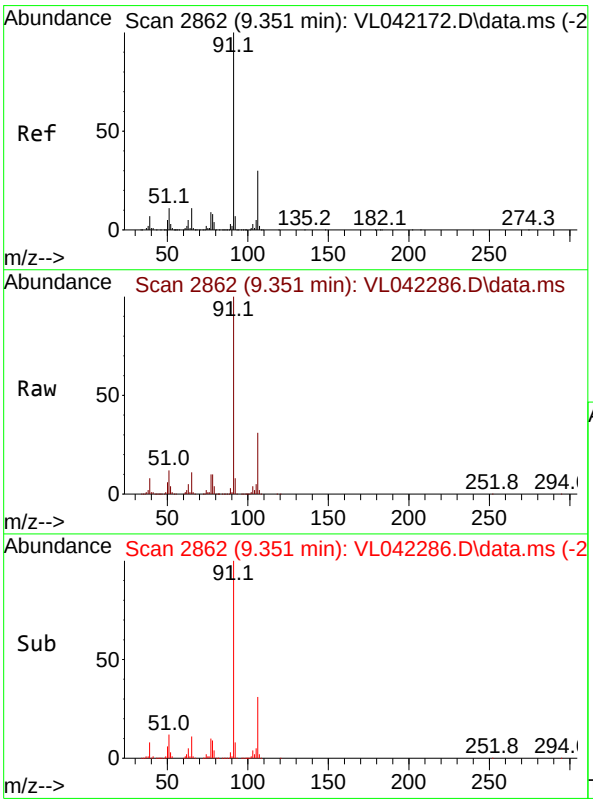
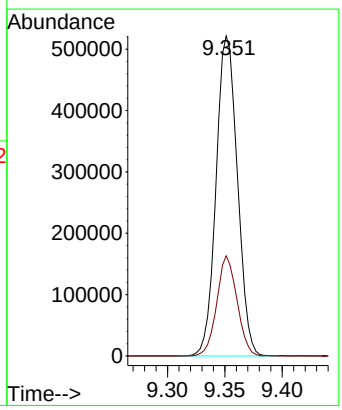
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

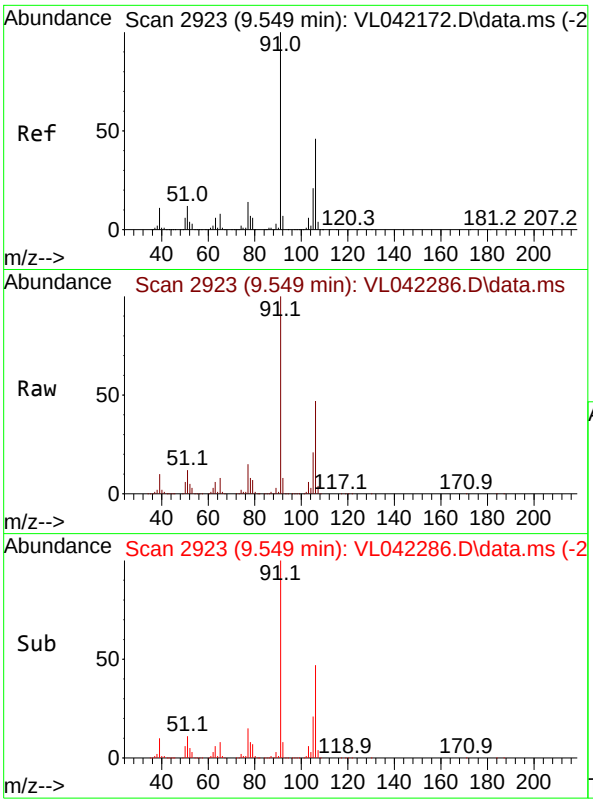


#58
Ethyl Benzene
Concen: 10.834 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 673801

Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.2	36.2





#59
m/p-Xylene
Concen: 23.379 ppbv m
RT: 9.549 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 116106

Ion	Ratio	Lower	Upper
91	100		
106	46.5	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
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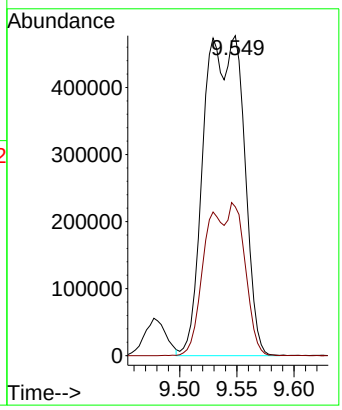
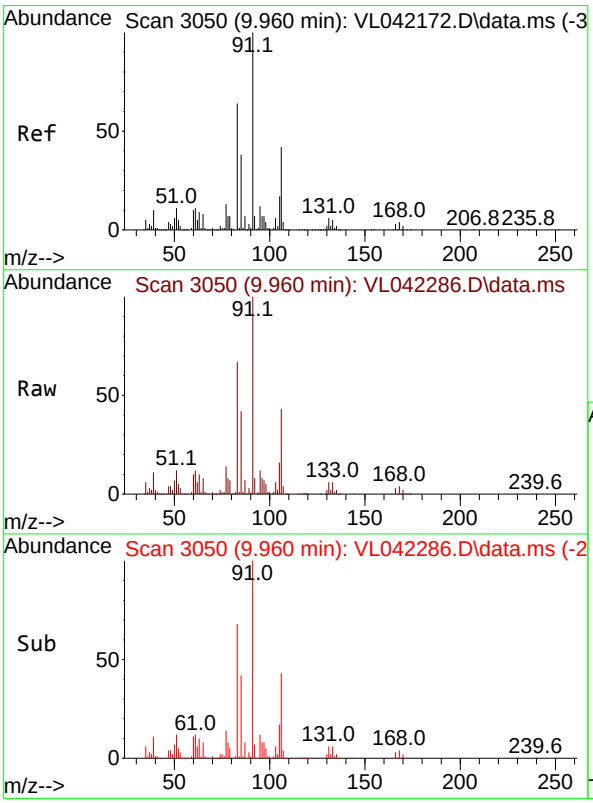
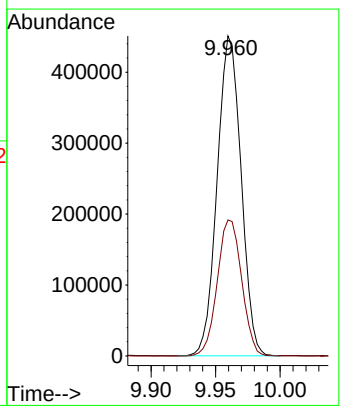


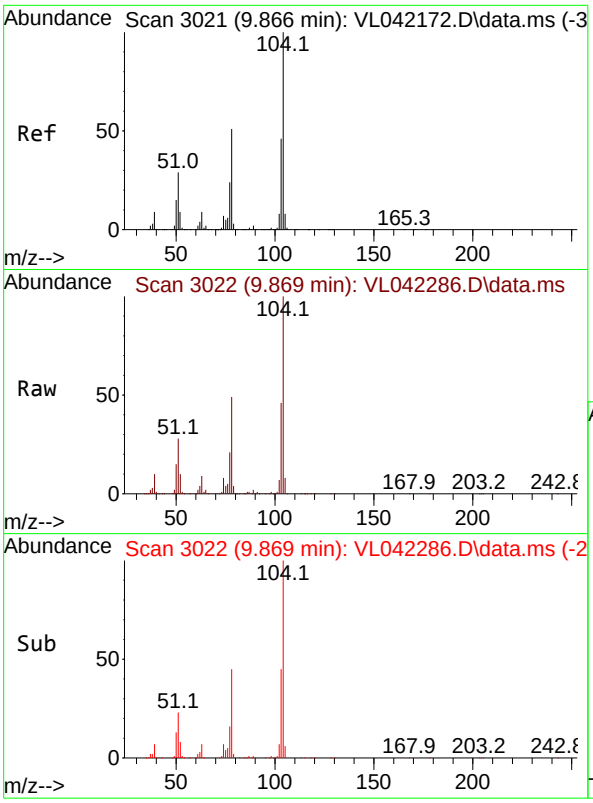


#60
o-Xylene
Concen: 11.671 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 581045

Ion	Ratio	Lower	Upper
91	100		
106	43.4	20.8	62.5

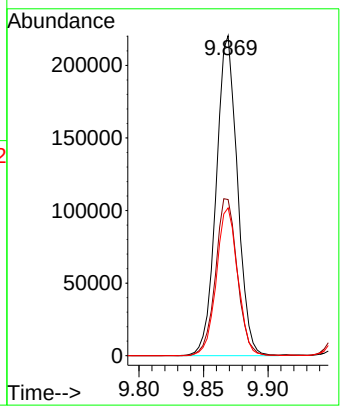




#61
Styrene
Concen: 10.212 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:104 Resp: 25152

Ion	Ratio	Lower	Upper
104	100		
78	50.4	41.8	62.6
103	46.7	37.0	55.4



Instrument :
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ClientSampleId :
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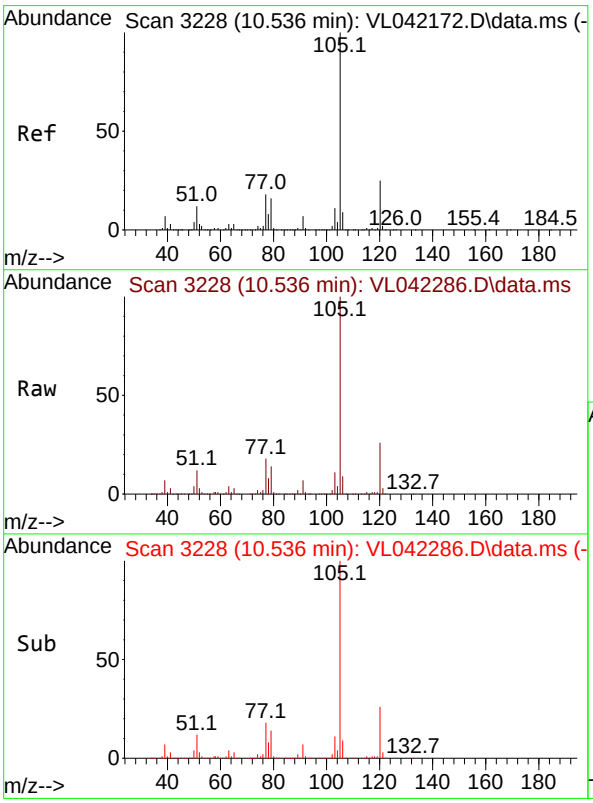
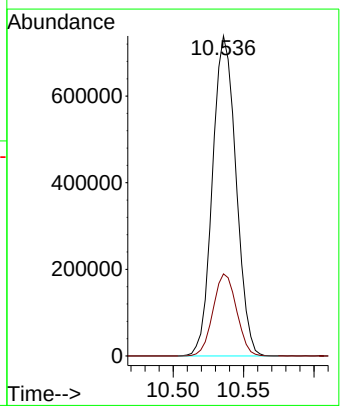
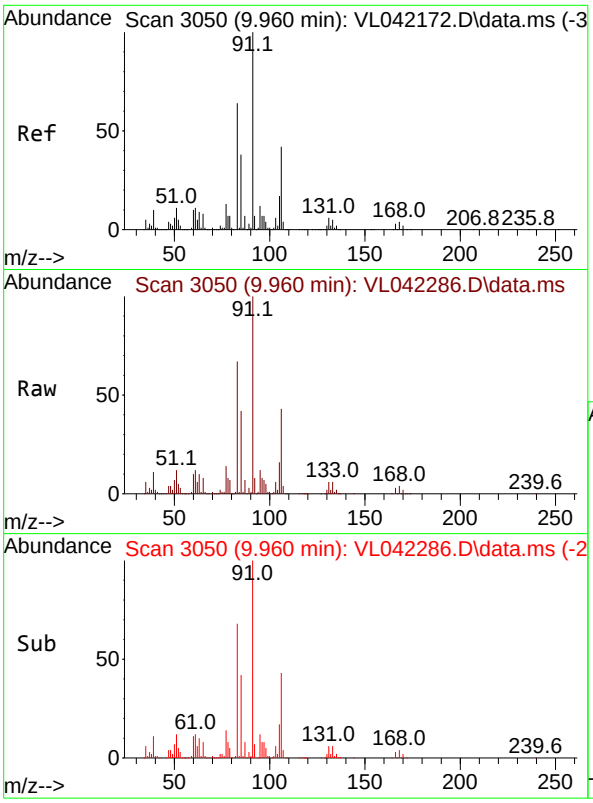


#62
Isopropylbenzene
Concen: 11.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 859013

Ion	Ratio	Lower	Upper
105	100		
120	25.6	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 12.623 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 83 Resp: 38184

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	63.7	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
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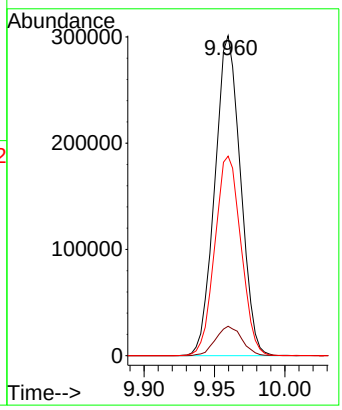
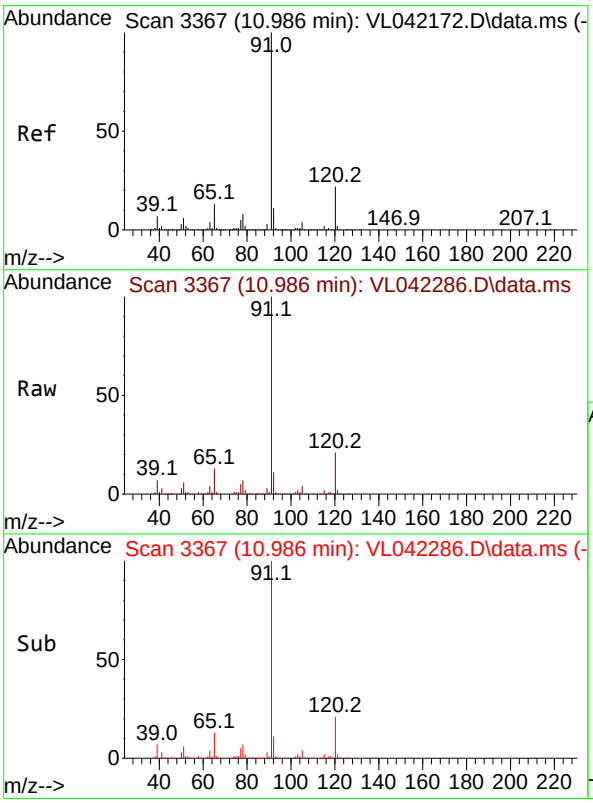
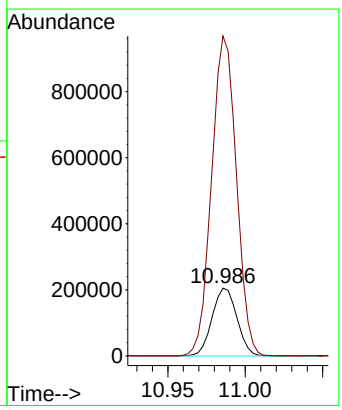


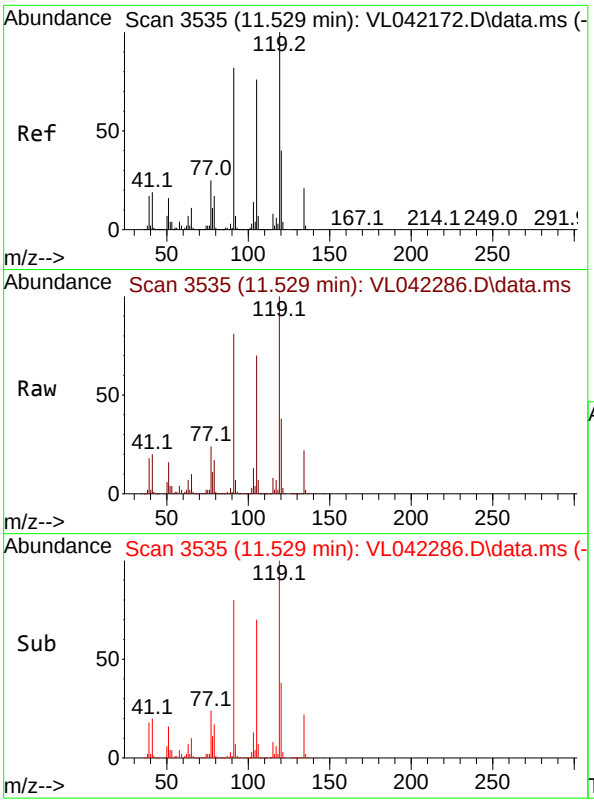


#64
n-propylbenzene
Concen: 11.925 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:120 Resp: 228532

Ion	Ratio	Lower	Upper
120	100		
91	472.2	376.9	565.3

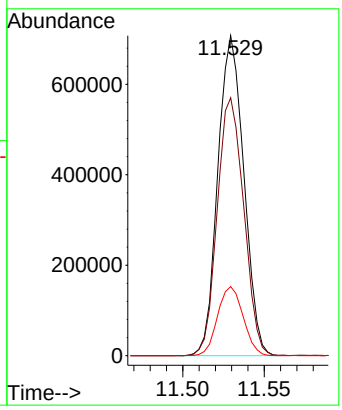




#65
tert-Butylbenzene
Concen: 11.393 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:119 Resp: 78448

Ion	Ratio	Lower	Upper
119	100		
91	82.1	66.0	99.0
134	21.2	16.7	25.1



Instrument :
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ClientSampleId :
VSTDCCC010

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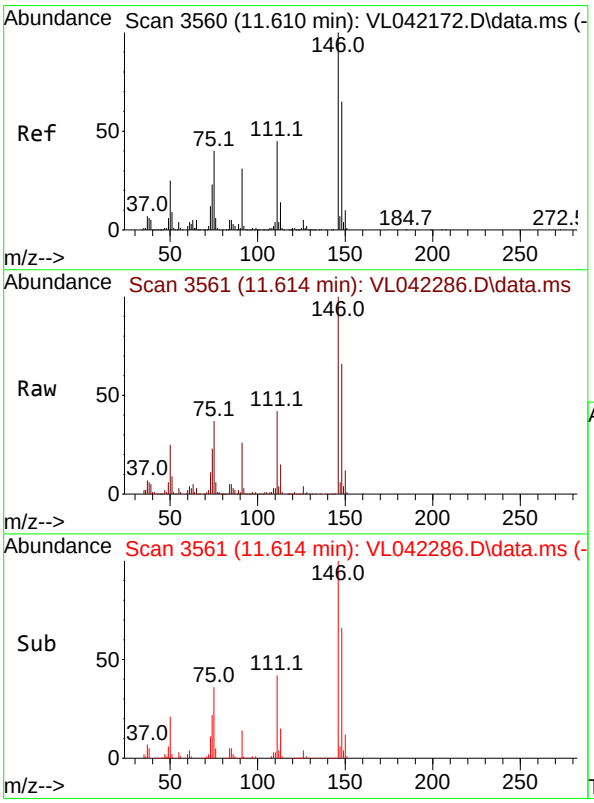
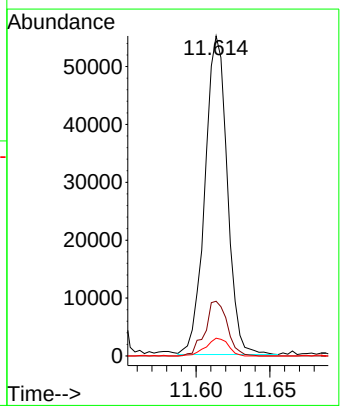
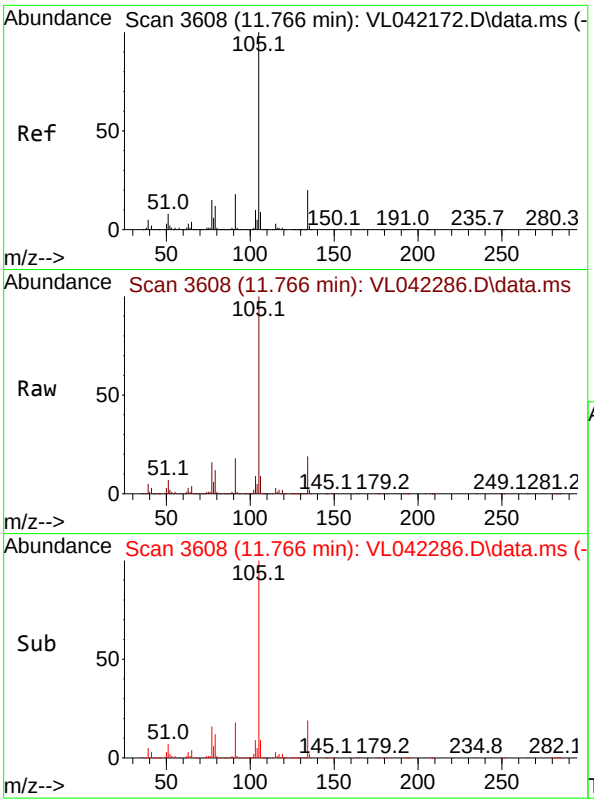


#66
Benzyl Chloride
Concen: 7.934 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 57966

Ion	Ratio	Lower	Upper
91	100		
126	17.0	13.8	20.6
128	5.7	4.5	6.7





#67
sec-Butylbenzene
Concen: 11.787 ppbv
RT: 11.766 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 112810

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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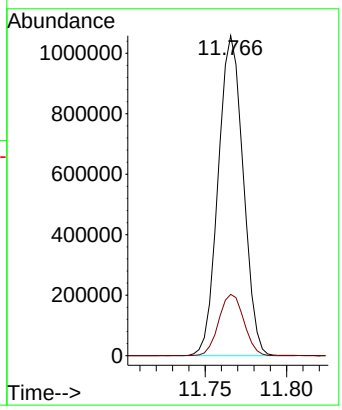
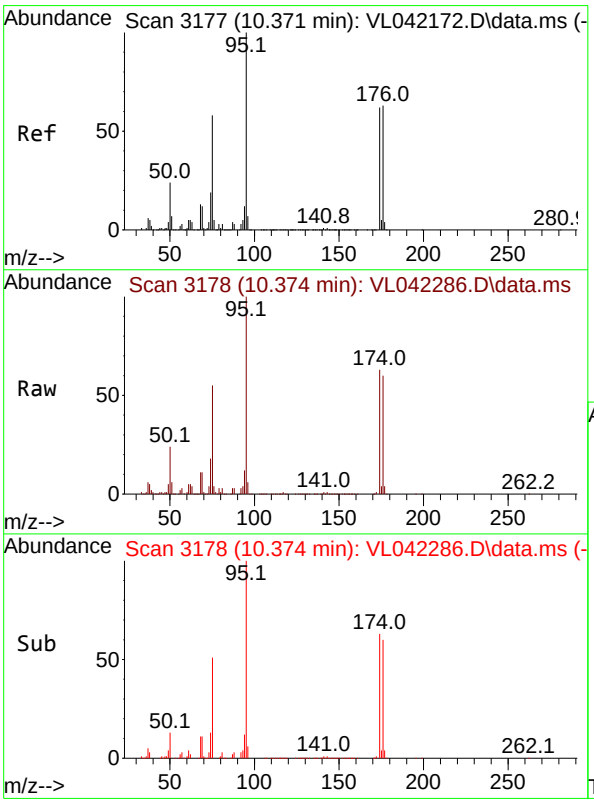
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

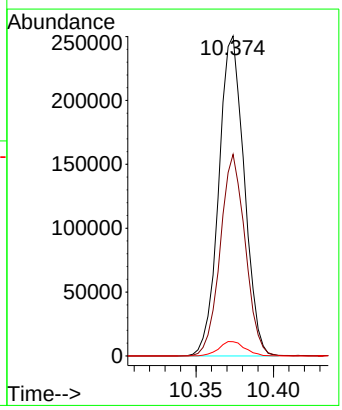


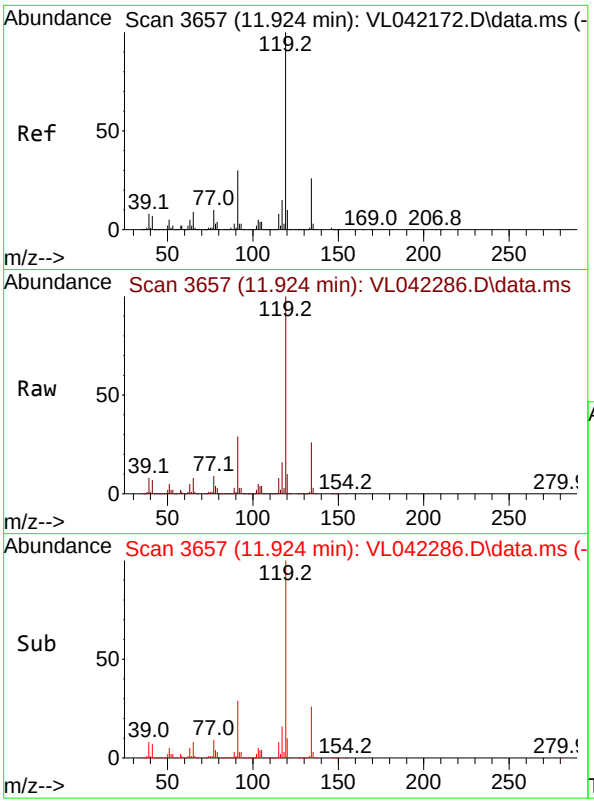


#68
1-Bromo-4-Fluorobenzene
Concen: 9.930 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 95 Resp: 285515

Ion	Ratio	Lower	Upper
95	100		
174	61.9	50.6	76.0
175	4.7	3.8	5.6

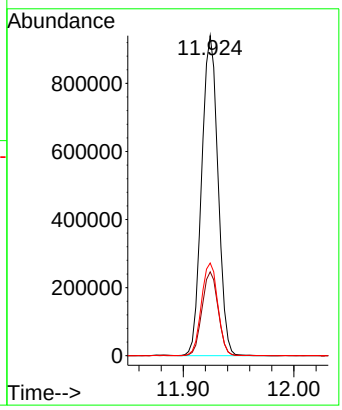




#69
p-Isopropyltoluene
Concen: 11.669 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:119 Resp: 96162

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.2	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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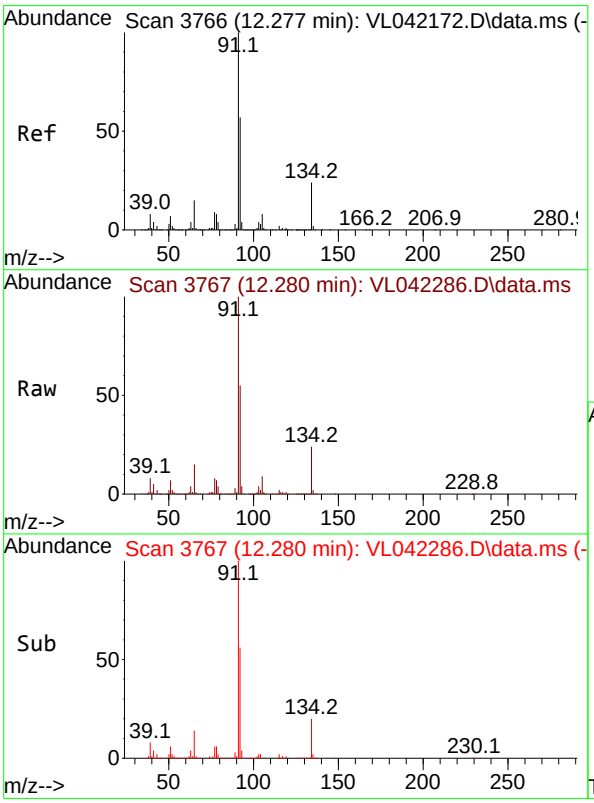
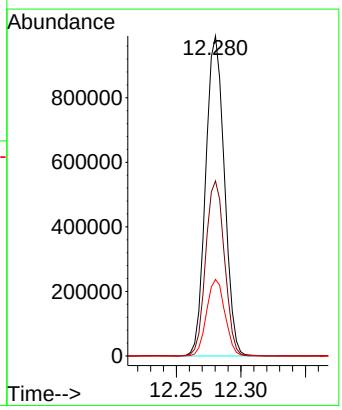
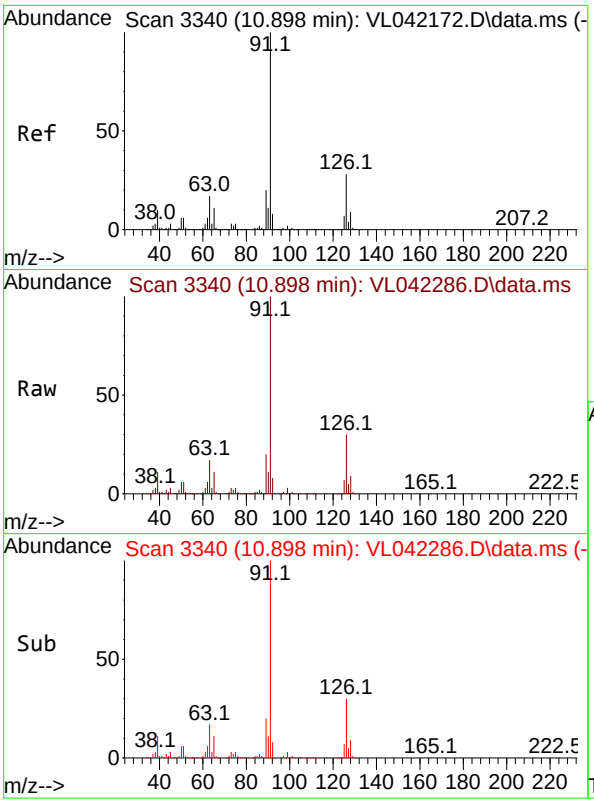


#70
n-Butylbenzene
Concen: 11.847 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 998455

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.9	67.3
134	23.6	19.2	28.8

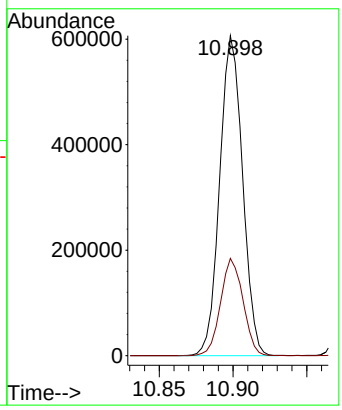




#71
2-Chlorotoluene
Concen: 11.323 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 65427

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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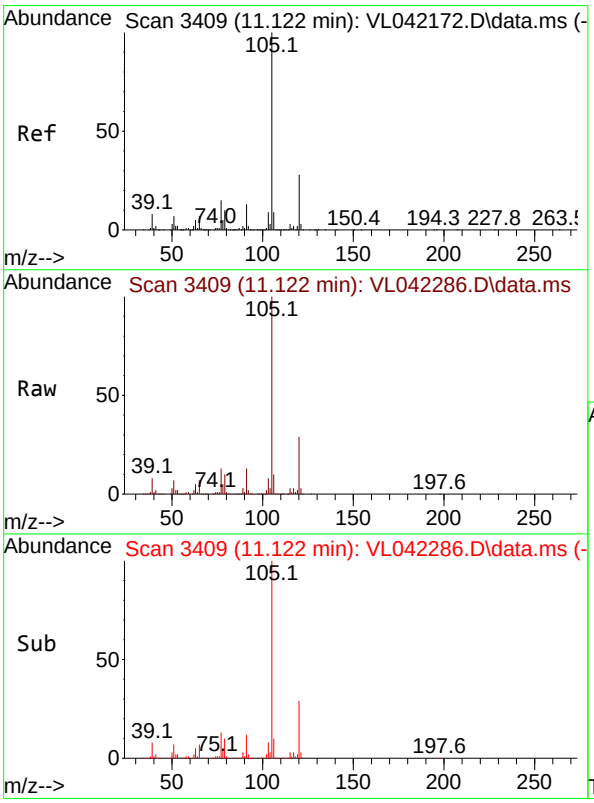
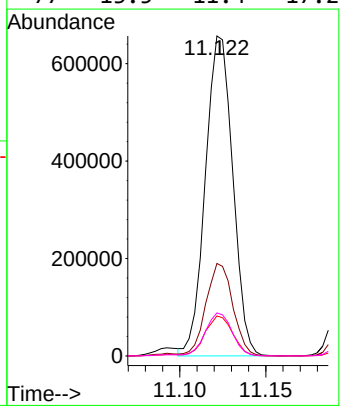
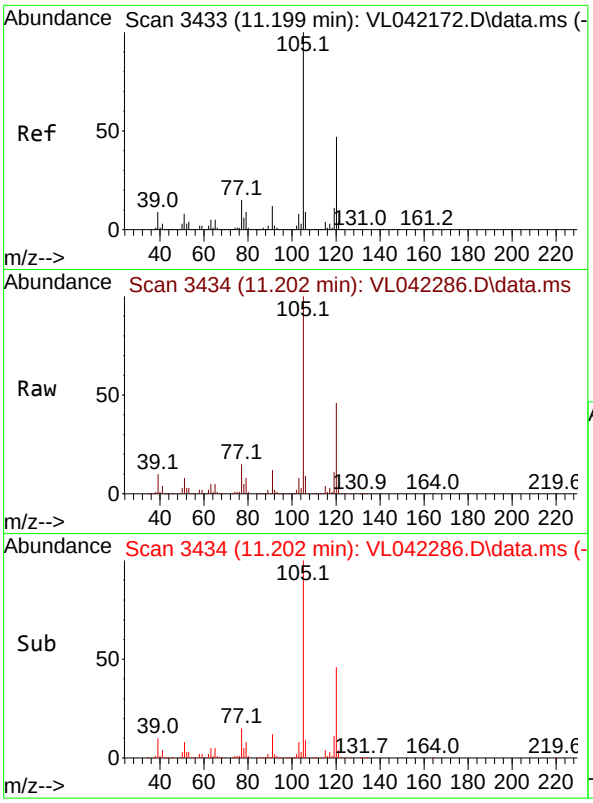


#72
4-Ethyltoluene
Concen: 11.753 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 728517

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	12.8	10.3	15.5
77	13.5	11.4	17.2

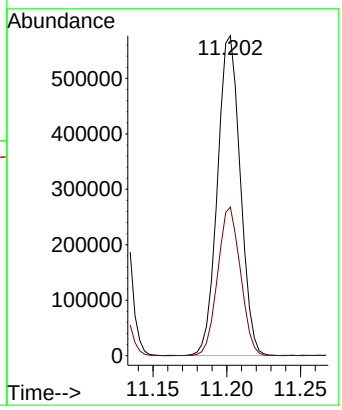




#73
1,3,5-Trimethylbenzene
Concen: 11.460 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 62041

Ion	Ratio	Lower	Upper
105	100		
120	46.4	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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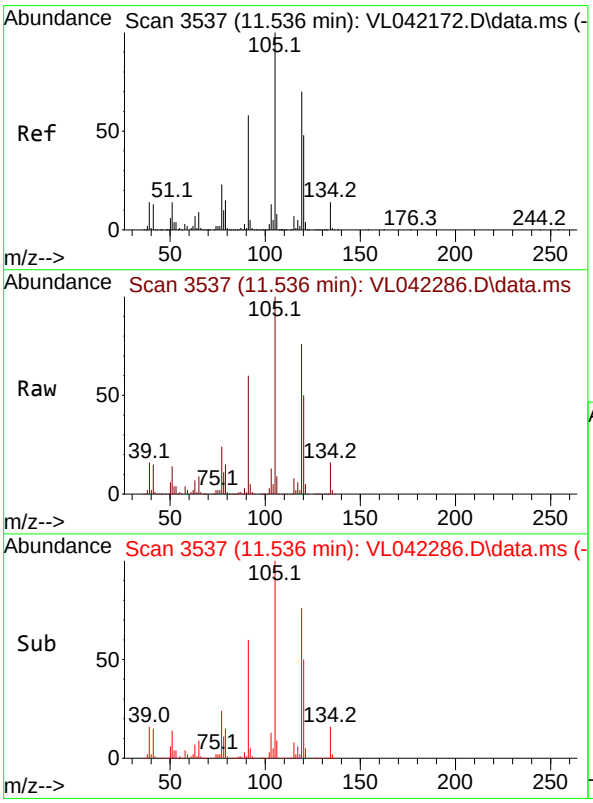
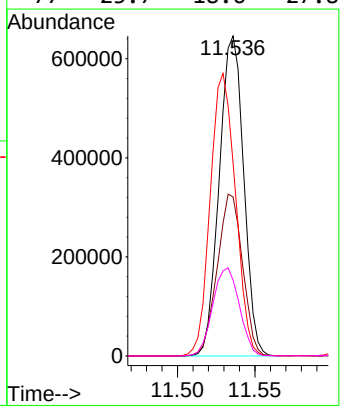
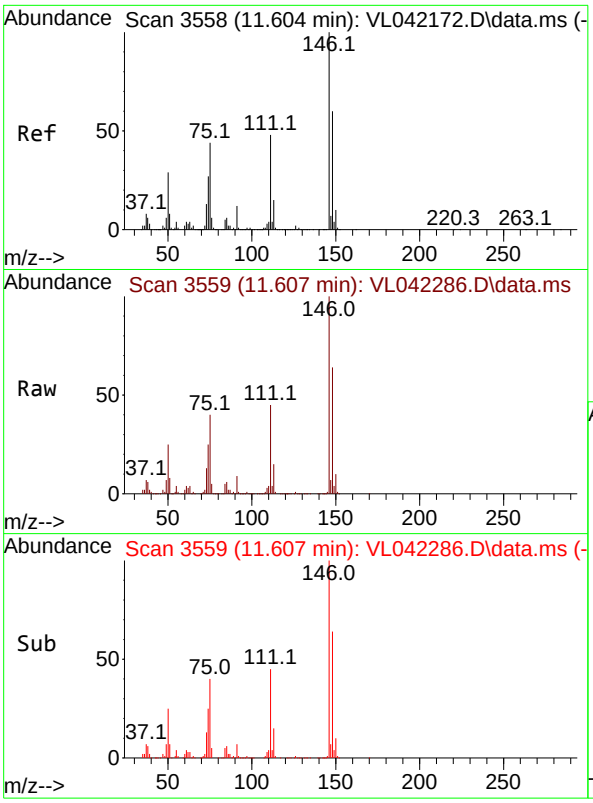


#74
1,2,4-Trimethylbenzene
Concen: 11.371 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 709204

Ion	Ratio	Lower	Upper
105	100		
120	49.7	38.6	58.0
91	60.3	46.2	69.2
77	23.7	18.6	27.8

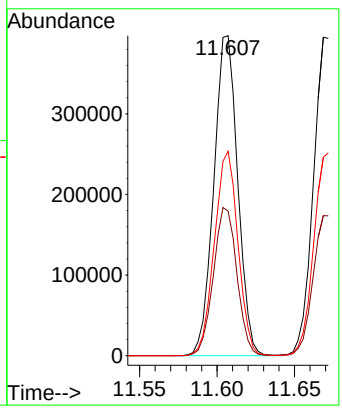




#75
1,3-Dichlorobenzene
Concen: 12.462 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:146 Resp: 42630

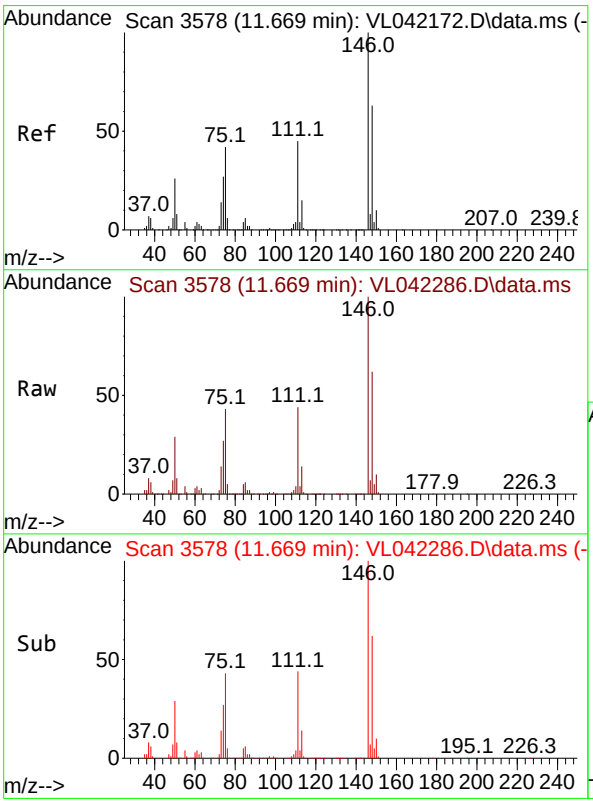
Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.8	71.2
148	63.0	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

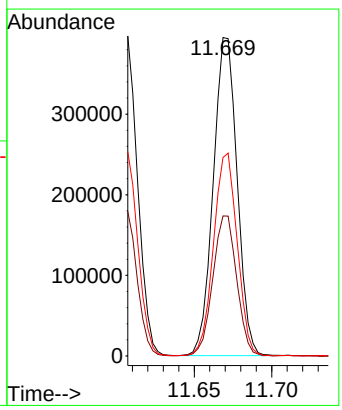
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

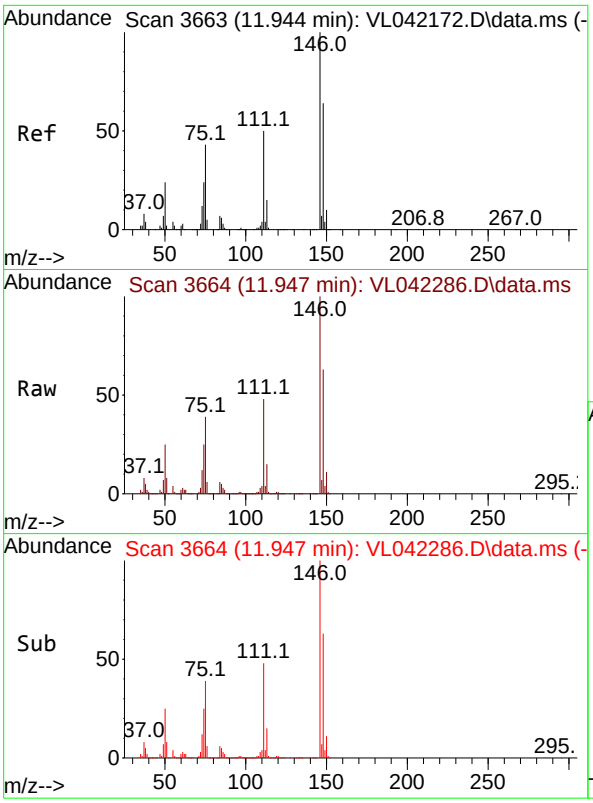


#76
1,4-Dichlorobenzene
Concen: 12.442 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:146 Resp: 423561

Ion	Ratio	Lower	Upper
146	100		
111	44.2	23.0	69.0
148	63.4	31.9	95.7

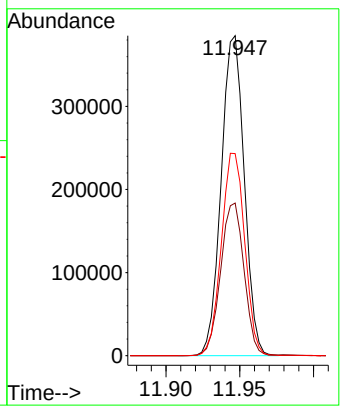




#77
1,2-Dichlorobenzene
Concen: 12.589 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:146 Resp: 41928

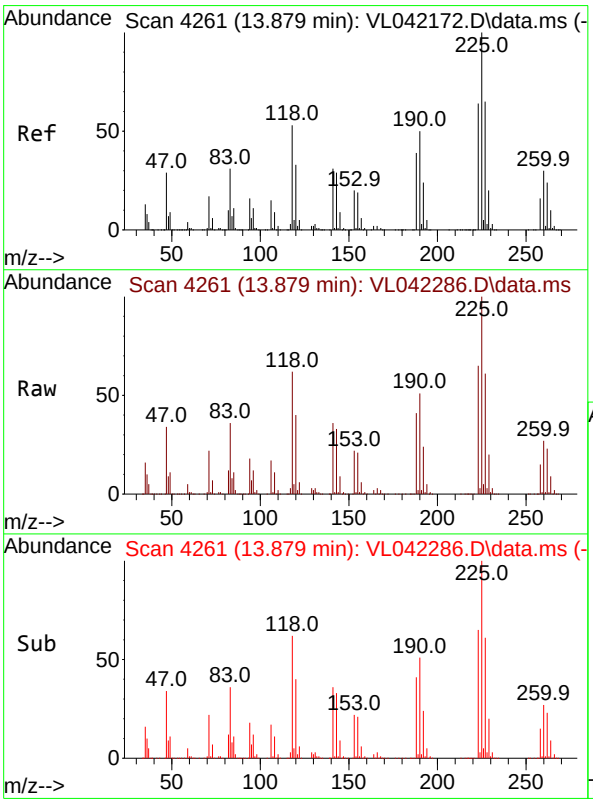
Ion	Ratio	Lower	Upper
146	100		
111	48.5	24.8	74.3
148	64.3	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

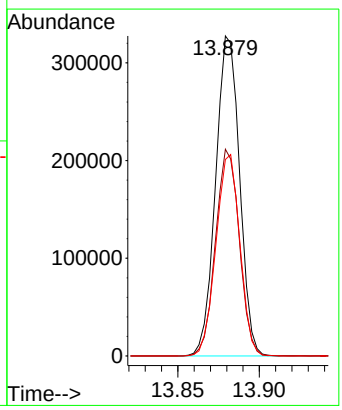
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

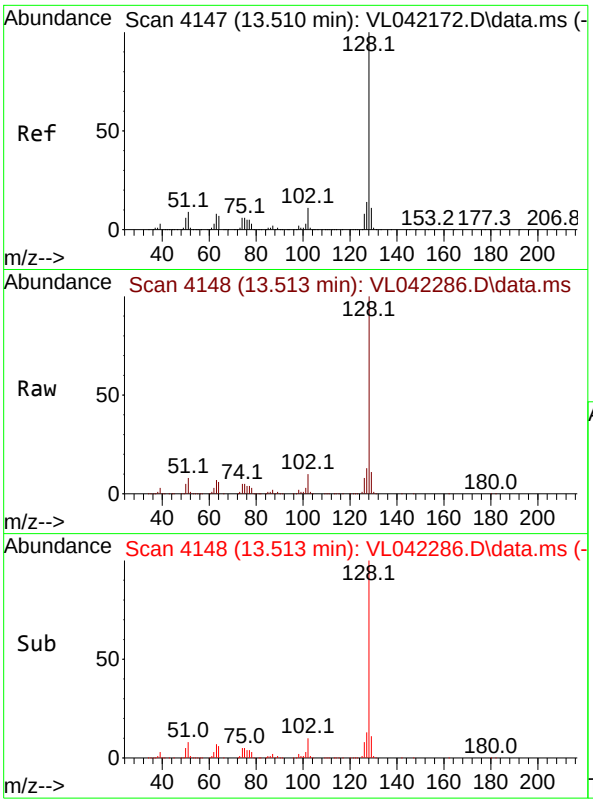


#78
Hexachloro-1,3-Butadiene
Concen: 9.864 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:225 Resp: 334414

Ion	Ratio	Lower	Upper
225	100		
223	63.9	50.6	76.0
227	62.8	51.2	76.8





#79
Naphthalene
Concen: 11.851 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

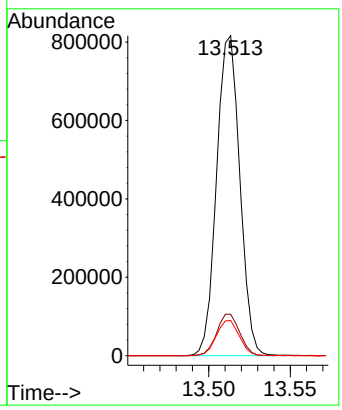
Tgt Ion:128 Resp: 80845

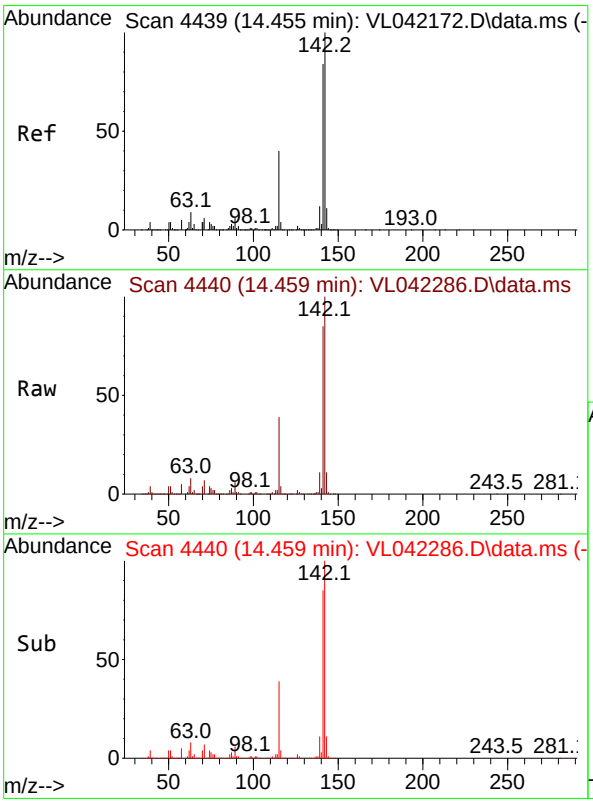
Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.8	16.2
129	11.0	9.0	13.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

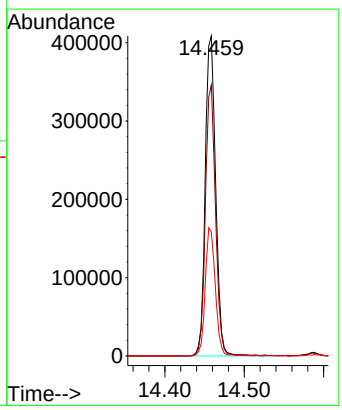


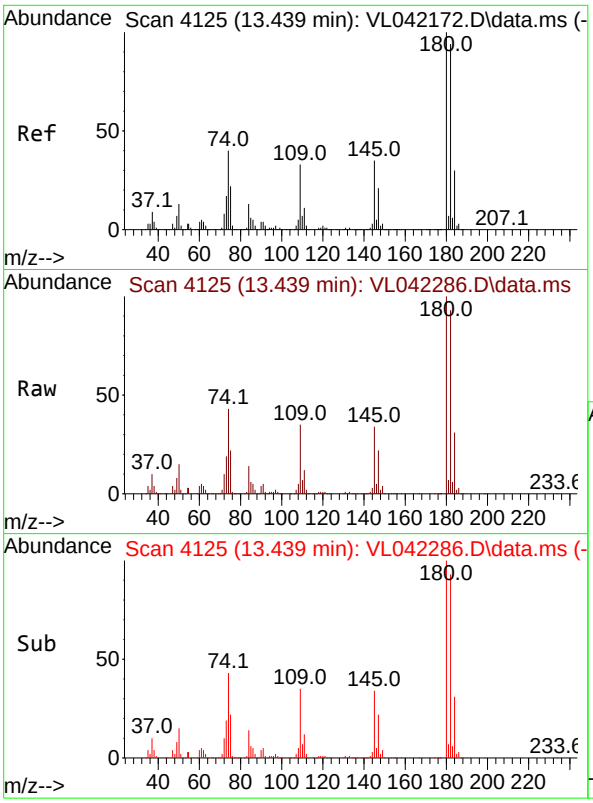


#80
Naphthalene,2-methyl-
Concen: 11.158 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:142 Resp: 373298

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.2	31.6	47.4

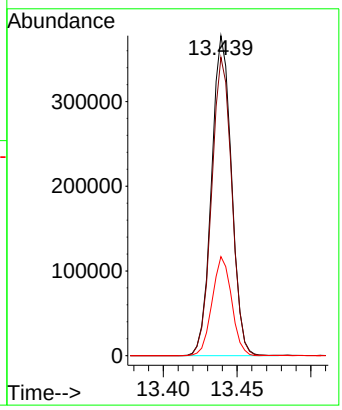




#81
1,2,4-Trichlorobenzene
Concen: 11.305 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:180 Resp: 35574

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.3	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	83	0.00
2	T	Dichlorodifluoromethane	1.476	1.444	2.2	86	0.00
3		Chlorodifluoromethane	1.508	1.557	-3.2	89	0.00
4		Chloromethane	0.603	0.607	-0.7	88	0.00
5	T	Vinyl Chloride	0.639	0.560	12.4	85	0.00
6	T	Bromomethane	0.273	0.250	8.4	81	0.00
7		Chloroethane	0.242	0.225	7.0	82	0.00
8	T	Dichlorotetrafluoroethane	1.257	1.243	1.1	85	0.00
9	T	Propene	0.691	0.593	14.2	75	0.00
10	T	Heptane	1.839	1.800	2.1	84	0.00
11	T	Trichlorofluoromethane	1.437	1.405	2.2	87	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.181	1.149	2.7	85	0.00
13		Ethanol	0.065	0.030#	53.8#	86	0.00
14	T	Bromoethene	0.452	0.393	13.1	78	0.00
15	T	Acetone	1.399	1.260	9.9	94	0.00
16	T	1,3-Butadiene	0.683	0.610	10.7	89	0.00
17		tert-Butyl alcohol	1.742	1.415	18.8	73	0.00
18	T	1,1-Dichloroethene	0.552	0.499	9.6	82	0.00
19	T	Isopropyl Alcohol	0.789	0.664	15.8	79	0.00
20	T	Methylene Chloride	0.521	0.441	15.4	84	0.00
21	T	Allyl Chloride	0.986	0.899	8.8	83	0.00
22	T	trans-1,2-Dichloroethene	0.638	0.568	11.0	80	0.00
23	T	Vinyl Acetate	0.605	0.470	22.3	79	0.00
24	T	1,1-Dichloroethane	1.183	1.159	2.0	86	0.00
25	T	Ethyl Acetate	3.630	3.644	-0.4	88	0.00
26	T	Hexane	1.402	1.381	1.5	86	0.00
27	T	Carbon Disulfide	1.503	1.391	7.5	81	0.00
28	T	Methyl tert-Butyl Ether	0.873	0.705	19.2	71	0.00
29	T	Chloroform	2.052	2.190	-6.7	94	0.00
30	T	Cyclohexane	1.217	1.095	10.0	78	0.00
31	T	cis-1,2-Dichloroethene	1.423	1.297	8.9	79	0.00
32	T	1,1,1-Trichloroethane	2.349	2.135	9.1	86	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	73	0.00
34	T	2-Butanone	0.725	0.789	-8.8	86	0.00
35	T	Carbon Tetrachloride	0.781	0.879	-12.5	91	0.00
36	T	Benzene	0.991	1.071	-8.1	84	0.00
37	T	1,2-Dichloroethane	0.568	0.647	-13.9	88	0.00
38	T	Trichloroethene	0.414	0.429	-3.6	83	0.00
39	T	1,2-Dichloropropane	0.361	0.387	-7.2	84	0.00
40	T	1,4-Dioxane	0.192	0.183	4.7	79	0.00
41	T	Tetrahydrofuran	0.418	0.441	-5.5	81	0.00
42	T	Bromodichloromethane	0.782	0.904	-15.6	86	0.00
43		Methyl Methacrylate	0.420	0.390	7.1	71	0.00
44	T	2,2,4-Trimethylpentane	1.675	1.869	-11.6	85	0.00
45	T	t-1,3-Dichloropropene	0.450	0.371	17.6	62	0.00
46	T	cis-1,3-Dichloropropene	0.552	0.493	10.7	65	0.00
47	T	1,1,2-Trichloroethane	0.382	0.434	-13.6	87	0.00
48	T	Dibromochloromethane	0.647	0.705	-9.0	81	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.581	0.630	-8.4	79	0.00
50	T	4-Methyl-2-Pentanone	1.149	1.122	2.3	80	0.00
51	T	2-Hexanone	0.944	0.891	5.6	77	0.00
52	T	Tetrachloroethene	0.393	0.357	9.2	76	0.00
53	T	Toluene	1.175	1.171	0.3	76	0.00
54	T	1,2-Dibromoethane	0.532	0.578	-8.6	83	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	67	0.00
56		1,1,1,2-Tetrachloroethane	0.550	0.660	-20.0	87	0.00
57	T	Chlorobenzene	0.949	1.140	-20.1	88	0.00
58	T	Ethyl Benzene	1.776	1.924	-8.3	78	0.00
59	T	m/p-Xylene	1.418	1.658	-16.9	85	0.00
60	T	o-Xylene	1.422	1.659	-16.7	84	0.00
61	T	Styrene	0.703	0.718	-2.1	71	0.00
62		Isopropylbenzene	2.126	2.453	-15.4	84	0.00
63	T	1,1,2,2-Tetrachloroethane	0.864	1.091	-26.3	92	0.00
64		n-propylbenzene	0.547	0.653	-19.4	88	0.00
65		tert-Butylbenzene	1.966	2.240	-13.9	87	0.00
66	T	Benzyl Chloride	0.209	0.166	20.6	55	0.00
67		sec-Butylbenzene	2.733	3.222	-17.9	90	0.00
68	S	1-Bromo-4-Fluorobenzene	0.821	0.815	0.7	68	0.00
69		p-Isopropyltoluene	2.354	2.746	-16.7	89	0.00
70		n-Butylbenzene	2.407	2.852	-18.5	90	0.00
71		2-Chlorotoluene	1.650	1.869	-13.3	82	0.00
72	T	4-Ethyltoluene	1.770	2.081	-17.6	86	0.00
73	T	1,3,5-Trimethylbenzene	1.546	1.772	-14.6	86	0.00
74	T	1,2,4-Trimethylbenzene	1.781	2.025	-13.7	90	0.00
75	T	1,3-Dichlorobenzene	0.977	1.218	-24.7	93	0.00
76	T	1,4-Dichlorobenzene	0.972	1.210	-24.5	92	0.00
77	T	1,2-Dichlorobenzene	0.951	1.197	-25.9	95	0.00
78	T	Hexachloro-1,3-Butadiene	0.968	0.955	1.3	80	0.00
79	T	Naphthalene	1.948	2.309	-18.5	86	0.00
80	T	Naphthalene,2-methyl-	0.955	1.066	-11.6	73	0.00
81	T	1,2,4-Trichlorobenzene	0.899	1.016	-13.0	80	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/11/2025 09:50

Lab File ID: VL042312.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.476	1.441		-2.37	30
Ethanol	0.065	0.032		-50.77	30
Chloromethane	0.603	0.609		1	30
Vinyl Chloride	0.639	0.557		-12.83	30
Bromomethane	0.273	0.234		-14.29	30
Chloroethane	0.242	0.228		-5.78	30
Tetrahydrofuran	0.418	0.467		11.72	30
Trichlorofluoromethane	1.437	1.362		-5.22	30
1,1,2-Trichlorotrifluoroethane	1.181	1.053		-10.84	30
Dichlorotetrafluoroethane	1.257	1.222		-2.78	30
Bromoethene	0.452	0.399		-11.73	30
tert-Butyl alcohol	1.742	1.391		-20.15	30
Heptane	1.839	1.822		-0.92	30
Isopropyl Alcohol	0.789	0.682		-13.56	30
1,1-Dichloroethene	0.552	0.487		-11.77	30
Acetone	1.399	1.261		-9.86	30
Carbon Disulfide	1.503	1.325		-11.84	30
Methyl tert-Butyl Ether	0.873	0.703		-19.47	30
Methylene Chloride	0.521	0.419		-19.58	30
trans-1,2-Dichloroethene	0.638	0.555		-13.01	30
1,1-Dichloroethane	1.183	1.132		-4.31	30
Cyclohexane	1.217	1.108		-8.96	30
2-Butanone	0.725	0.821		13.24	30
Carbon Tetrachloride	0.781	0.841		7.68	30
cis-1,2-Dichloroethene	1.423	1.346		-5.41	30
Chloroform	2.052	2.143		4.43	30
1,1,1-Trichloroethane	2.349	2.070		-11.88	30
2,2,4-Trimethylpentane	1.675	1.882		12.36	30
Benzene	0.991	1.092		10.19	30
1,2-Dichloroethane	0.568	0.630		10.91	30
Trichloroethene	0.414	0.438		5.8	30
1,2-Dichloropropane	0.361	0.400		10.8	30
Bromodichloromethane	0.782	0.891		13.94	30
4-Methyl-2-Pentanone	1.149	1.147		-0.17	30
Toluene	1.175	1.181		0.51	30
t-1,3-Dichloropropene	0.450	0.381		-15.33	30
cis-1,3-Dichloropropene	0.552	0.509		-7.79	30
1,1,2-Trichloroethane	0.382	0.438		14.66	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/11/2025 09:50

Lab File ID: VL042312.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dibromochloromethane	0.647	0.718		10.97	30
1,2-Dibromoethane	0.532	0.576		8.27	30
Tetrachloroethene	0.393	0.369		-6.11	30
Chlorobenzene	0.949	1.148		20.97	30
Ethyl Benzene	1.776	1.942		9.35	30
m/p-Xylene	1.418	1.649		16.29	30
o-Xylene	1.422	1.645		15.68	30
Styrene	0.703	0.726		3.27	30
Bromoform	0.581	0.635		9.29	30
1,1,2,2-Tetrachloroethane	0.864	1.112		28.7	30
2-Chlorotoluene	1.650	1.885		14.24	30
1,3,5-Trimethylbenzene	1.546	1.819		17.66	30
1,2,4-Trimethylbenzene	1.781	2.042		14.65	30
1,3-Dichlorobenzene	0.977	1.227		25.59	30
1,4-Dichlorobenzene	0.972	1.218		25.31	30
1,2-Dichlorobenzene	0.951	1.233		29.65	30
1,2,4-Trichlorobenzene	0.899	0.934		3.89	30
Hexachloro-1,3-Butadiene	0.968	0.929		-4.03	30
1,3-Butadiene	0.683	0.611		-10.54	30
Naphthalene	1.948	2.055		5.49	30
4-Ethyltoluene	1.770	2.112		19.32	30
1-Bromo-4-Fluorobenzene	0.821	0.793		-3.41	30
Hexane	1.402	1.398		-0.28	30
Allyl Chloride	0.986	0.887		-10.04	30
1,4-Dioxane	191.626	177.632		-7.3	30
Methyl Methacrylate	0.420	0.398		-5.24	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	183700	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	463746	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	401340	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	318204	9.655	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	264775	9.762	ppbv	100
3) Chlorodifluoromethane	1.476	51	287991	10.394	ppbv	97
4) Chloromethane	1.531	50	111786	10.085	ppbv	98
5) Vinyl Chloride	1.580	62	102342	8.713	ppbv	95
6) Bromomethane	1.667	94	43054	8.571	ppbv	99
7) Chloroethane	1.703	64	41946	9.427	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	224489	9.719	ppbv	94
9) Propene	1.483	41	117677	9.266	ppbv	99
10) Heptane	4.981	43	334707	9.908	ppbv	100
11) Trichlorofluoromethane	1.877	101	250122	9.477	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	193510	8.920	ppbv	97
13) Ethanol	1.722	45	5849	4.872	ppbv	89
14) Bromoethene	1.780	108	73294	8.820	ppbv	100
15) Acetone	1.835	43	231724	9.019	ppbv	97
16) 1,3-Butadiene	1.609	39	112297	8.950	ppbv	97
17) tert-Butyl alcohol	2.039	59	255575	7.987	ppbv	99
18) 1,1-Dichloroethene	2.033	96	89512	8.827	ppbv	98
19) Isopropyl Alcohol	1.887	45	125233	8.639	ppbv	92
20) Methylene Chloride	2.062	84	76968	8.044	ppbv	93
21) Allyl Chloride	2.098	41	162998	8.996	ppbv	97
22) trans-1,2-Dichloroethene	2.340	96	101974	8.700	ppbv	95
23) Vinyl Acetate	2.463	43	95152	8.557	ppbv	99
24) 1,1-Dichloroethane	2.408	63	207862	9.567	ppbv	99
25) Ethyl Acetate	2.835	43	678920	10.182	ppbv	99
26) Hexane	2.826	57	256866	9.973	ppbv	98
27) Carbon Disulfide	2.149	76	243367	8.812	ppbv	98
28) Methyl tert-Butyl Ether	2.441	73	129141	8.053	ppbv	96
29) Chloroform	2.848	83	393638	10.443	ppbv	98
30) Cyclohexane	3.858	84	203526	9.100	ppbv	97
31) cis-1,2-Dichloroethene	2.722	61	247194	9.454	ppbv	97
32) 1,1,1-Trichloroethane	3.370	97	380312	8.813	ppbv	98
34) 2-Butanone	2.557	43	380682	11.321	ppbv	98
35) Carbon Tetrachloride	3.764	117	390140	10.769	ppbv	98
36) Benzene	3.658	78	506278	11.012	ppbv	97
37) 1,2-Dichloroethane	3.221	62	292183	11.101	ppbv	99
38) Trichloroethene	4.551	130	203156	10.591	ppbv	96
39) 1,2-Dichloropropane	4.315	63	185497	11.079	ppbv	97
40) 1,4-Dioxane	4.583	88	82376	9.270	ppbv #	98
41) Tetrahydrofuran	3.056	42	216646	11.188	ppbv	93
42) Bromodichloromethane	4.493	83	413250	11.389	ppbv	99
43) Methyl Methacrylate	4.884	69	184472	9.478	ppbv	96
44) 2,2,4-Trimethylpentane	4.642	57	872871	11.235	ppbv	98
45) t-1,3-Dichloropropene	6.422	75	176804	8.467	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	236039	9.222	ppbv		99
47) 1,1,2-Trichloroethane	6.583	97	202891	11.463	ppbv		98
48) Dibromochloromethane	7.389	129	333128	11.106	ppbv		99
49) Bromoform	9.484	173	294489	10.935	ppbv		100
50) 4-Methyl-2-Pentanone	5.755	43	531851	9.980	ppbv		95
51) 2-Hexanone	7.438	43	424035	9.689	ppbv	#	94
52) Tetrachloroethene	8.224	164	170989	9.378	ppbv		97
53) Toluene	6.936	91	547579	10.048	ppbv		99
54) 1,2-Dibromoethane	7.655	107	267225	10.831	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.927	131	271350	12.283	ppbv		100
57) Chlorobenzene	8.924	112	460598	12.099	ppbv		98
58) Ethyl Benzene	9.357	91	779227	10.931	ppbv		98
59) m/p-Xylene	9.552	91	1323463m	23.249	ppbv		
60) o-Xylene	9.966	91	660065	11.567	ppbv		96
61) Styrene	9.872	104	291355	10.320	ppbv		99
62) Isopropylbenzene	10.542	105	988337	11.582	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.966	83	446341	12.873	ppbv		99
64) n-propylbenzene	10.992	120	268681	12.231	ppbv		97
65) tert-Butylbenzene	11.532	119	932850	11.820	ppbv		98
66) Benzyl Chloride	11.616	91	68675	8.201	ppbv		99
67) sec-Butylbenzene	11.769	105	1310042	11.942	ppbv		100
69) p-Isopropyltoluene	11.927	119	1107045	11.720	ppbv		99
70) n-Butylbenzene	12.283	91	1144571	11.848	ppbv		99
71) 2-Chlorotoluene	10.904	91	756562	11.423	ppbv		98
72) 4-Ethyltoluene	11.128	105	847821	11.932	ppbv		99
73) 1,3,5-Trimethylbenzene	11.205	105	729887	11.762	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	819490	11.463	ppbv		92
75) 1,3-Dichlorobenzene	11.610	146	492549	12.562	ppbv		99
76) 1,4-Dichlorobenzene	11.675	146	488636	12.522	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	494739	12.959	ppbv		98
78) Hexachloro-1,3-Butadiene	13.882	225	373025	9.599	ppbv		99
79) Naphthalene	13.516	128	824947	10.550	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	276556	7.212	ppbv		98
81) 1,2,4-Trichlorobenzene	13.442	180	374714	10.389	ppbv		99

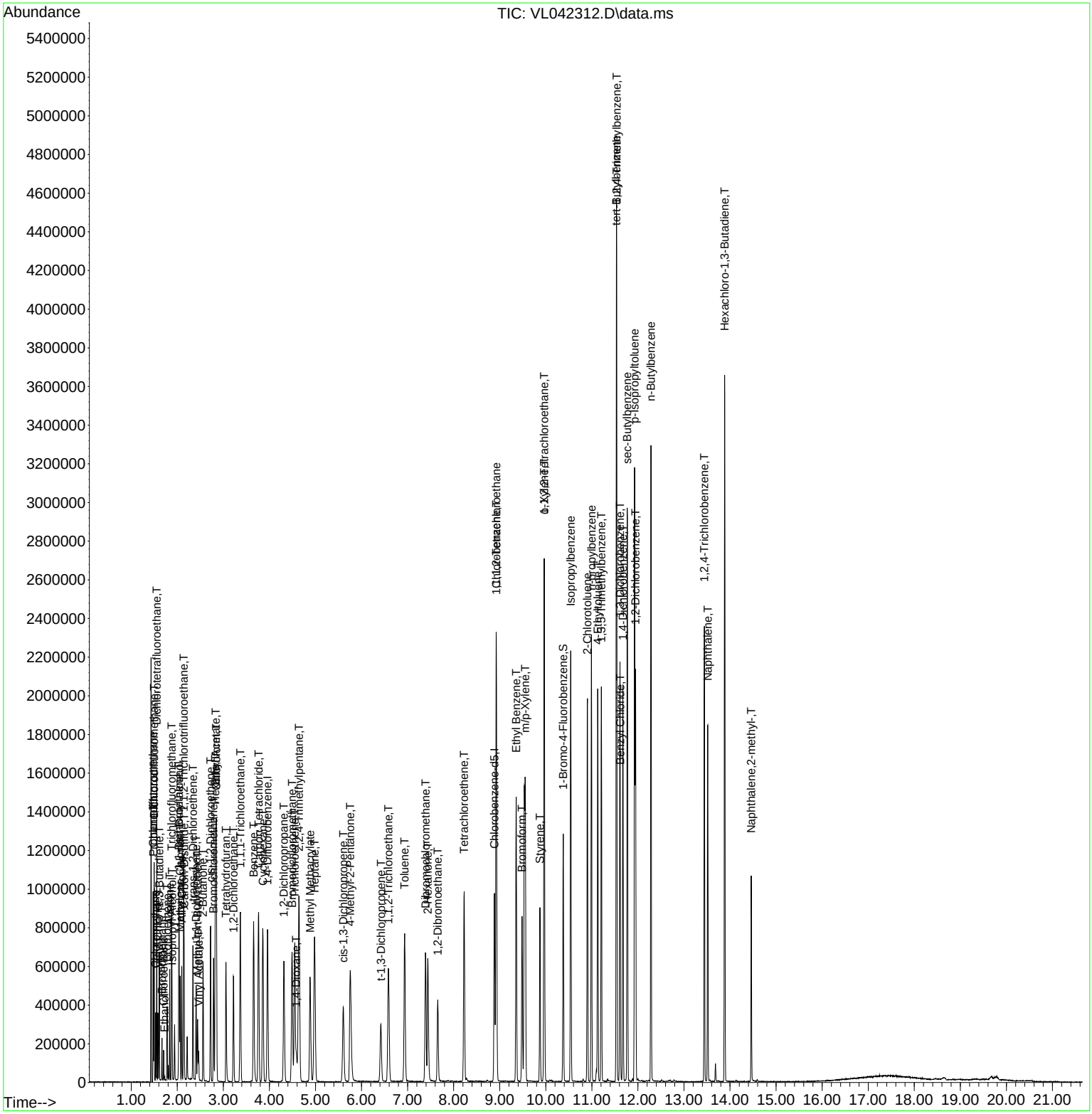
(#) = qualifier out of range (m) = manual integration (+) = signals summed

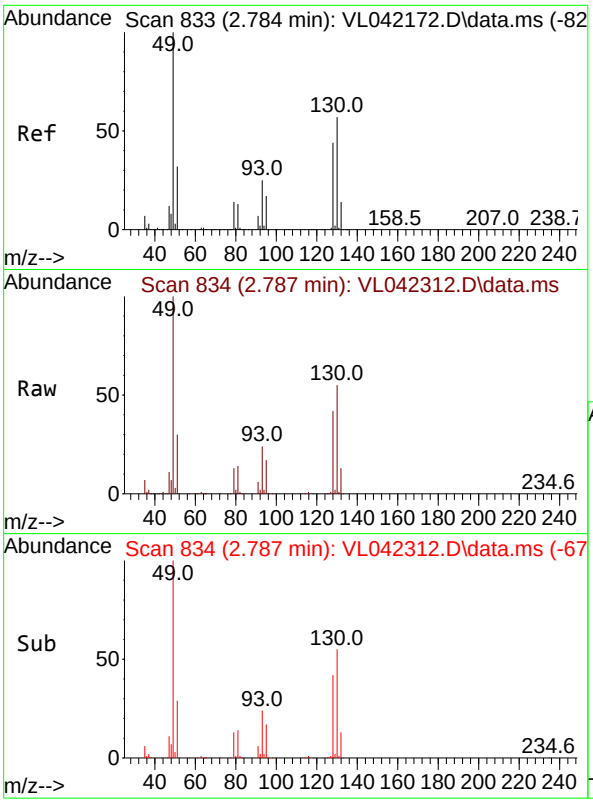
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

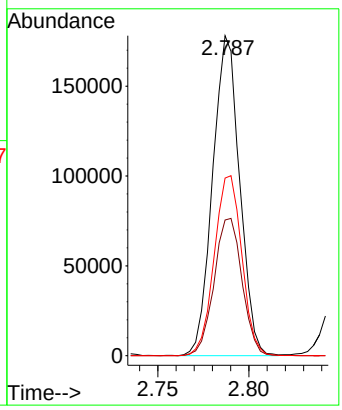




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 49 Resp: 18370

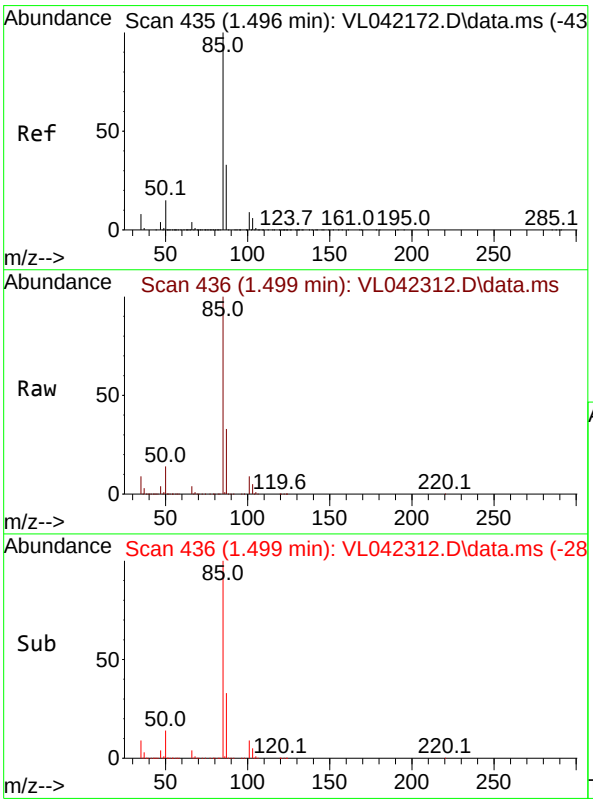
Ion	Ratio	Lower	Upper
49	100		
128	44.4	22.9	68.5
130	57.3	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

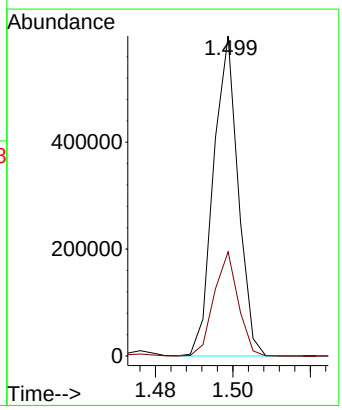
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

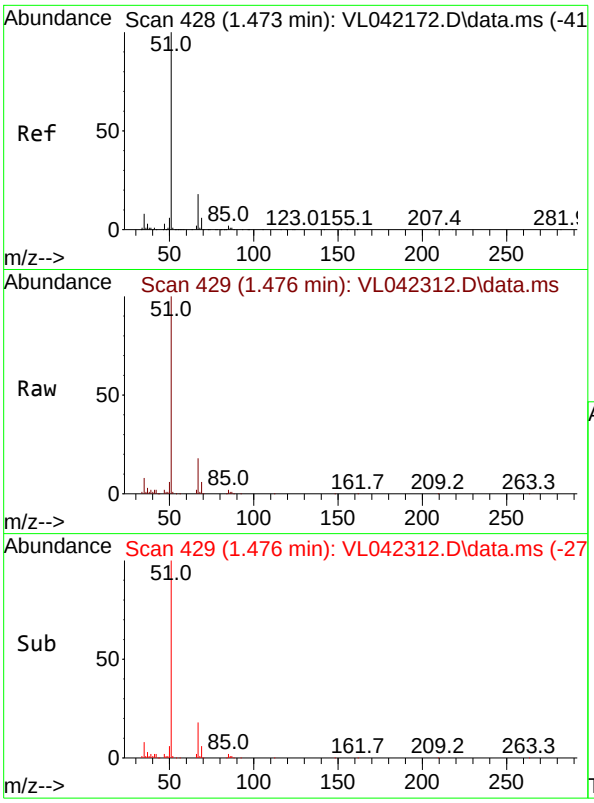


#2
Dichlorodifluoromethane
Concen: 9.762 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 85 Resp: 264775

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1

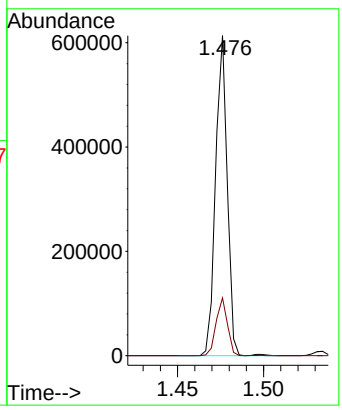




#3
Chlorodifluoromethane
Concen: 10.394 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 51 Resp: 28799

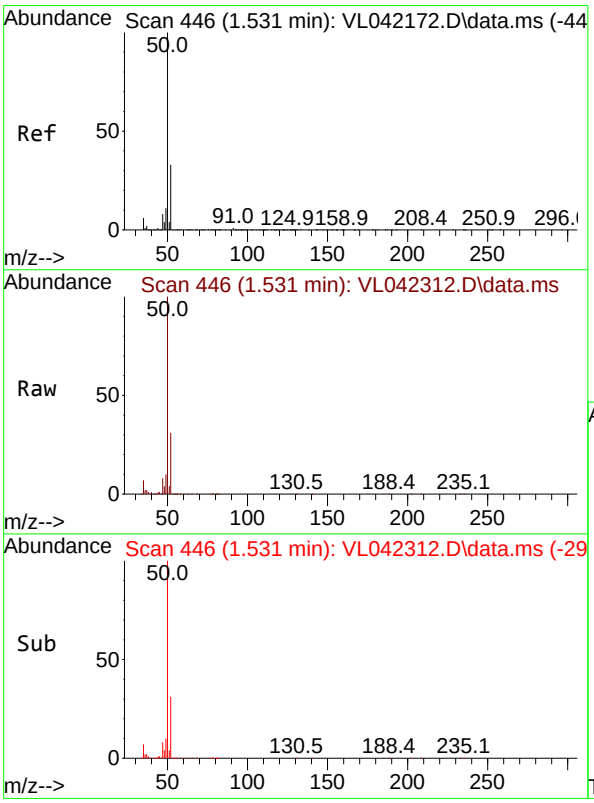
Ion	Ratio	Lower	Upper
51	100		
67	17.6	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

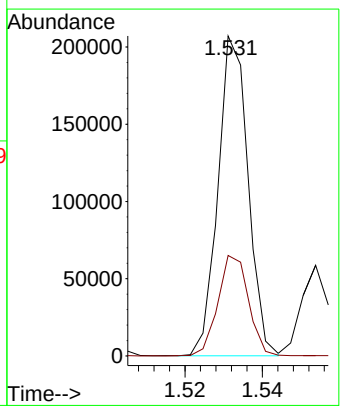
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

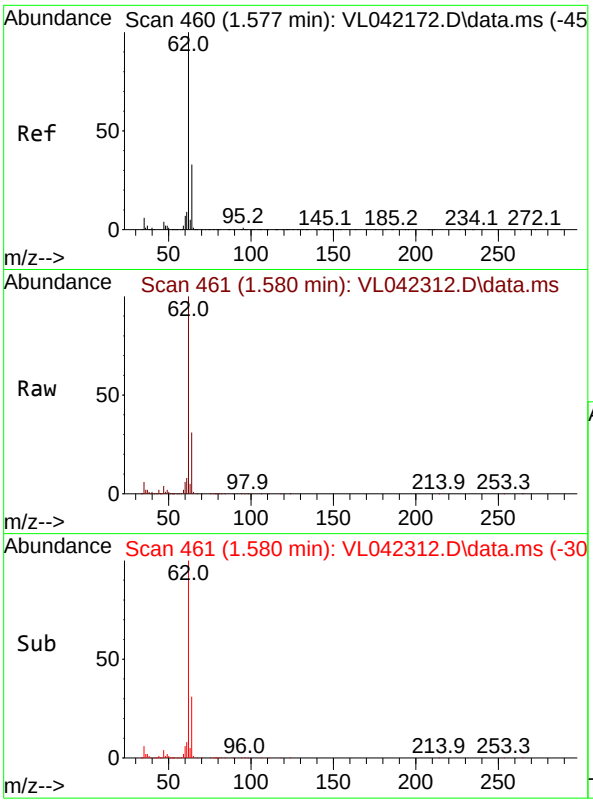


#4
Chloromethane
Concen: 10.085 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 50 Resp: 111786

Ion	Ratio	Lower	Upper
50	100		
52	31.3	26.1	39.1

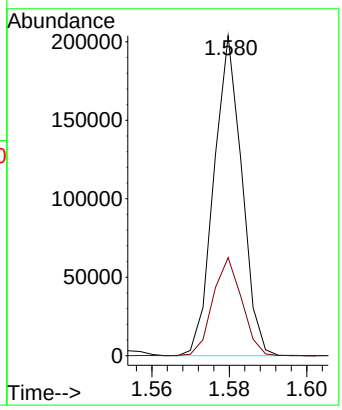




#5
Vinyl Chloride
Concen: 8.713 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 62 Resp: 10234

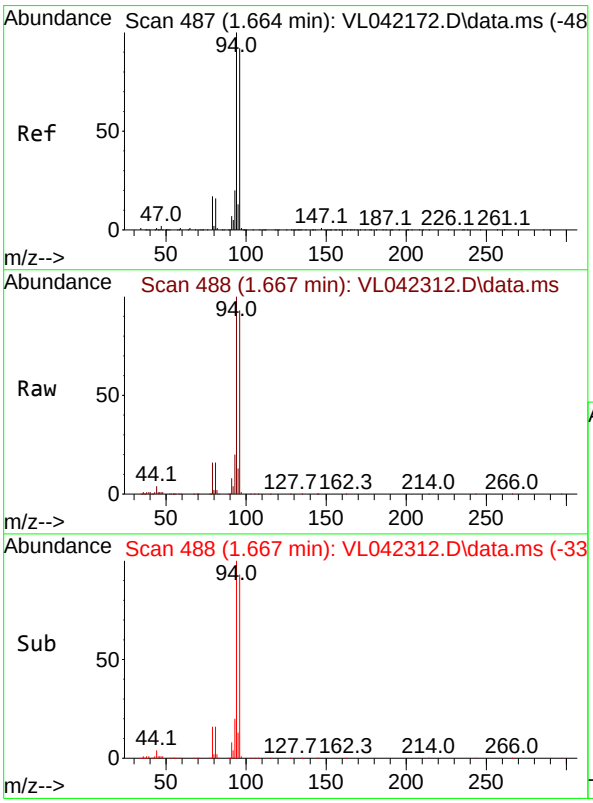
Ion	Ratio	Lower	Upper
62	100		
64	30.6	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

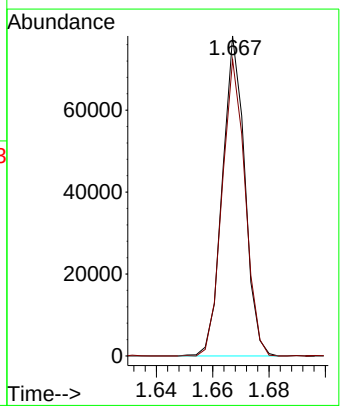
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

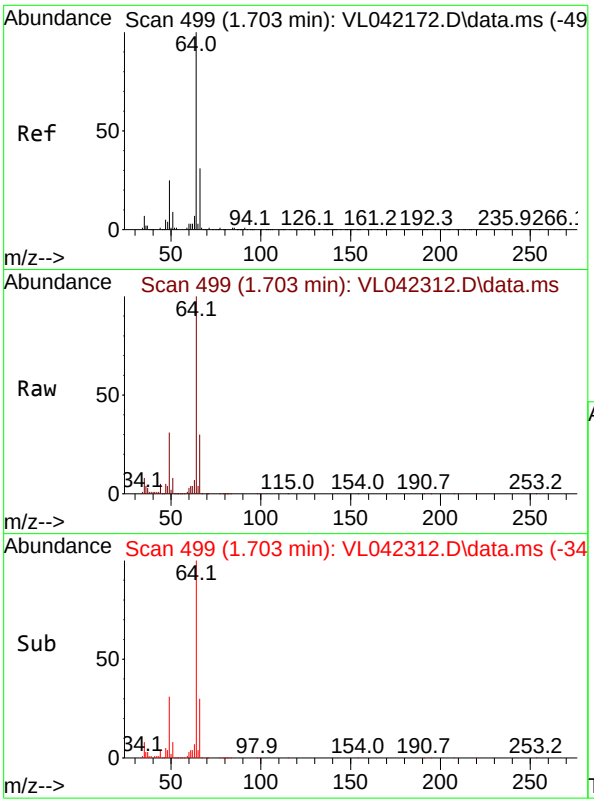


#6
Bromomethane
Concen: 8.571 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 94 Resp: 43054

Ion	Ratio	Lower	Upper
94	100		
96	92.7	73.1	109.7

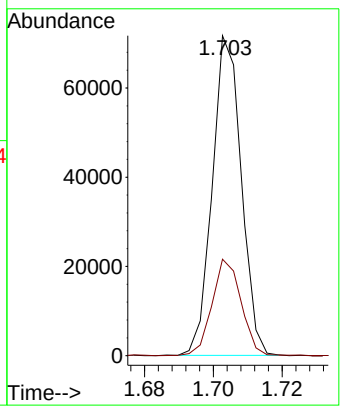




#7
Chloroethane
Concen: 9.427 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 64 Resp: 4194

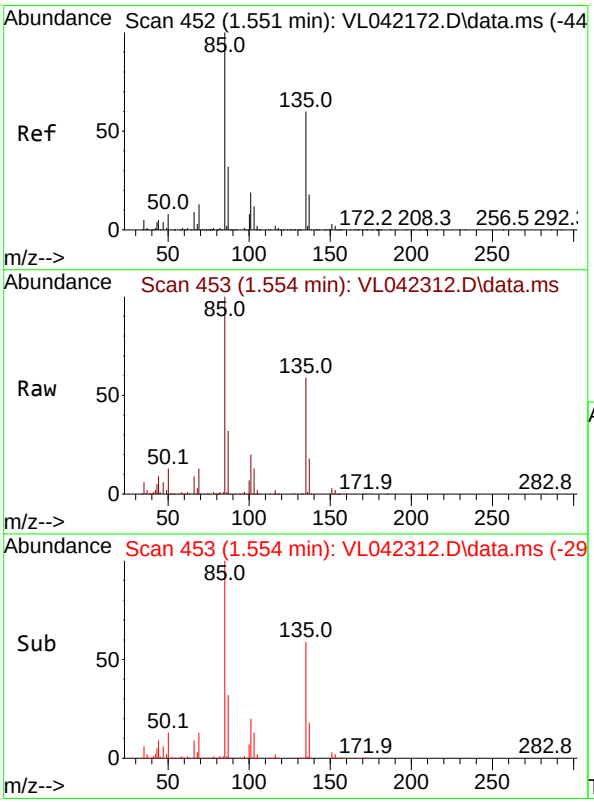
Ion	Ratio	Lower	Upper
64	100		
66	30.1	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

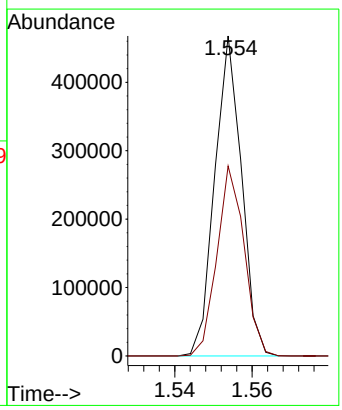
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

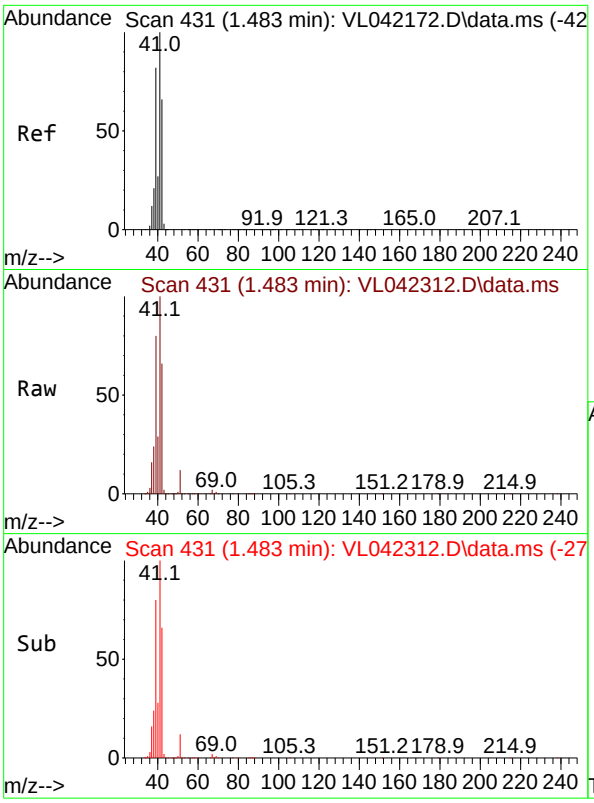


#8
Dichlorotetrafluoroethane
Concen: 9.719 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 85 Resp: 224489

Ion	Ratio	Lower	Upper
85	100		
135	60.5	52.4	78.6

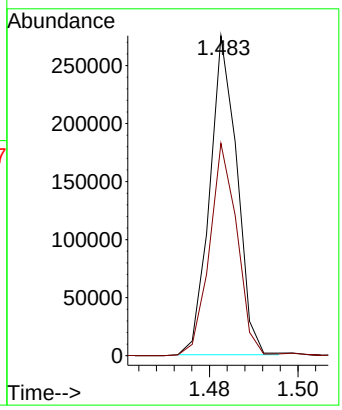




#9
Propene
Concen: 9.266 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 41 Resp: 11767

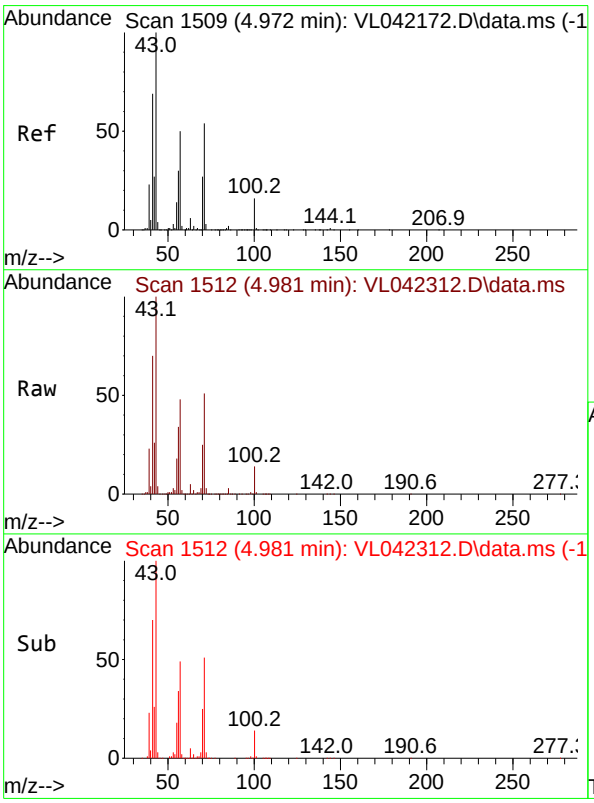
Ion	Ratio	Lower	Upper
41	100		
42	68.3	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

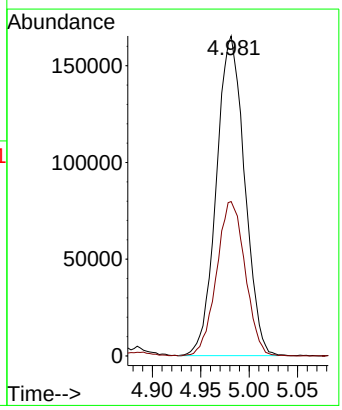
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

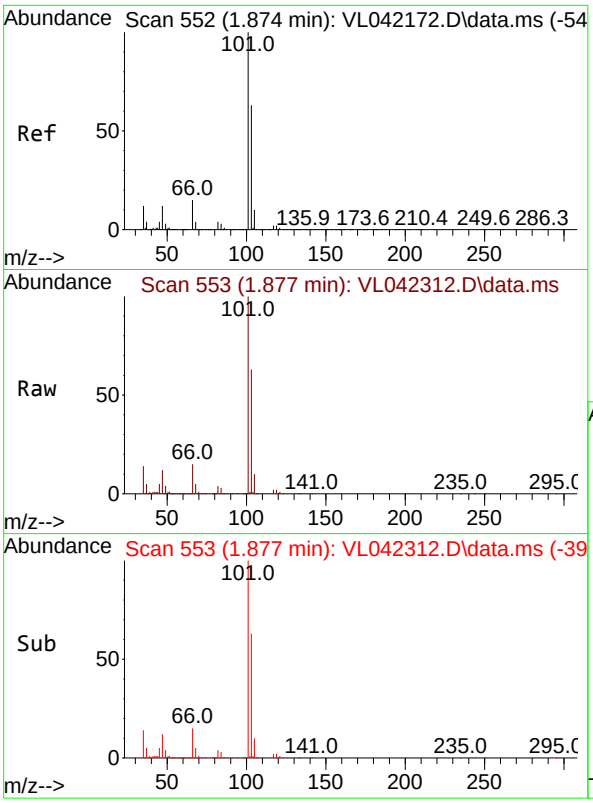


#10
Heptane
Concen: 9.908 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 334707

Ion	Ratio	Lower	Upper
43	100		
57	49.0	39.4	59.2

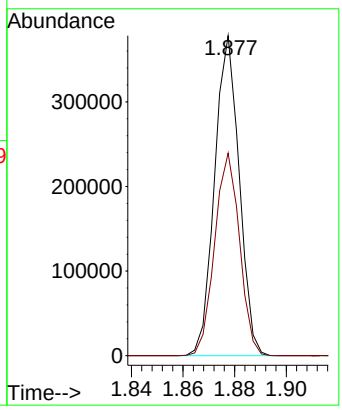




#11
Trichlorofluoromethane
Concen: 9.477 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:101 Resp: 25012

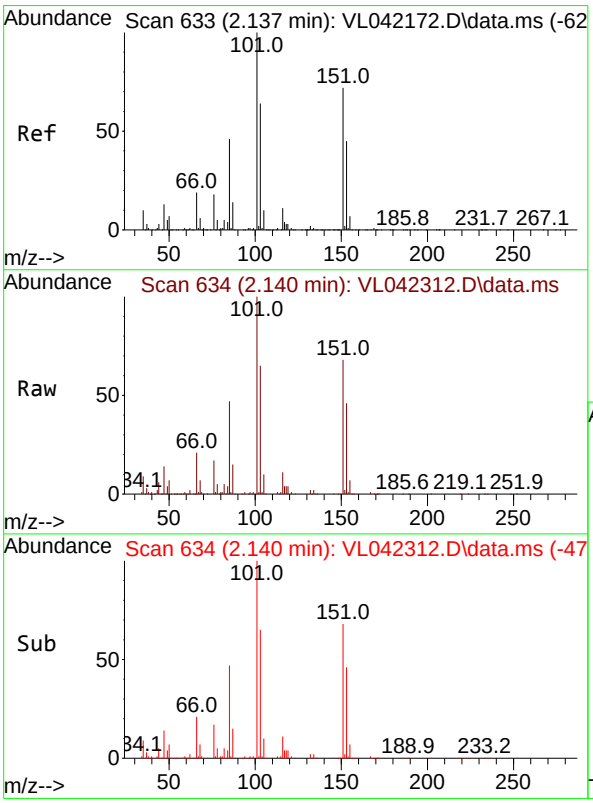
Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

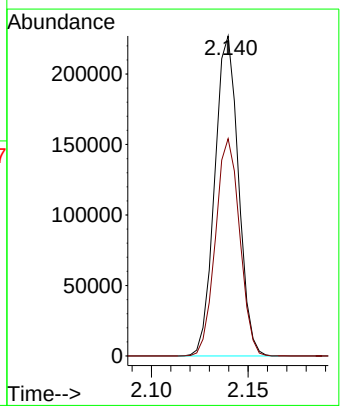
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

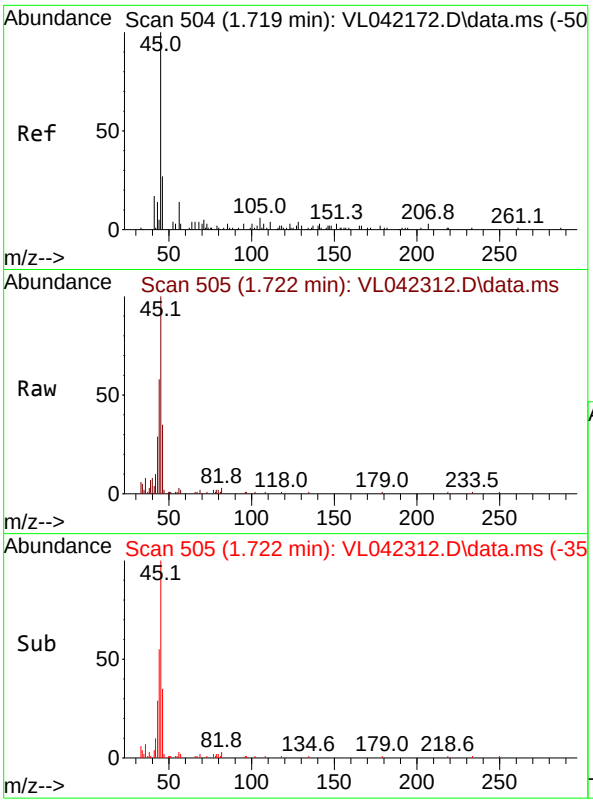


#12
1,1,2-Trichlorotrifluoroethane
Concen: 8.920 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:101 Resp: 193510

Ion	Ratio	Lower	Upper
101	100		
151	69.2	57.1	85.7

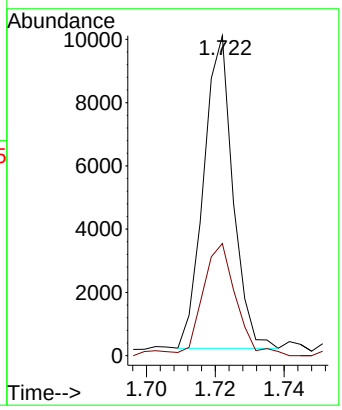




#13
Ethanol
Concen: 4.872 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 45 Resp: 584

Ion	Ratio	Lower	Upper
45	100		
46	43.0	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
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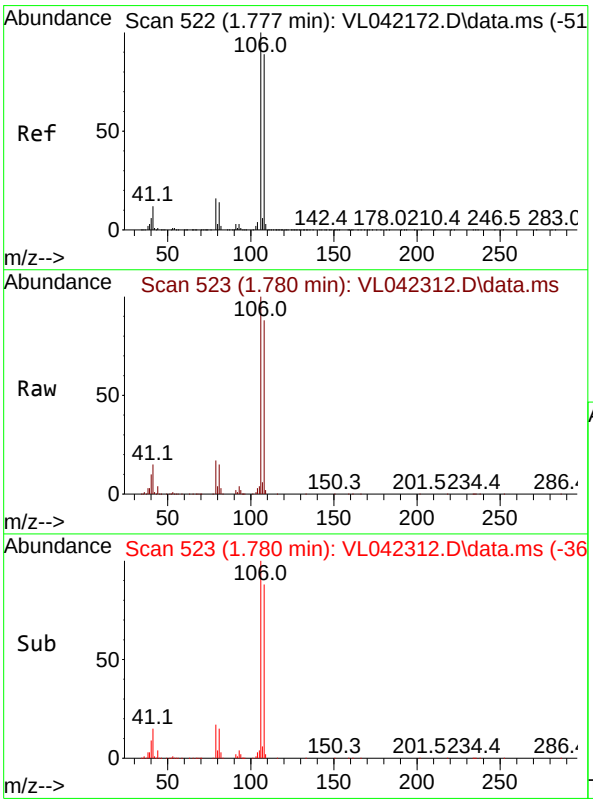
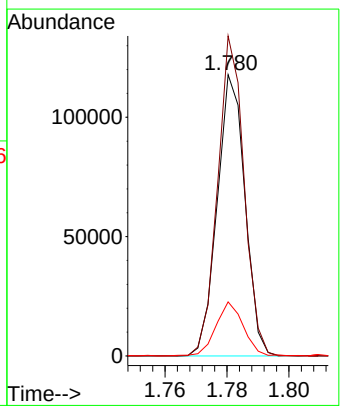
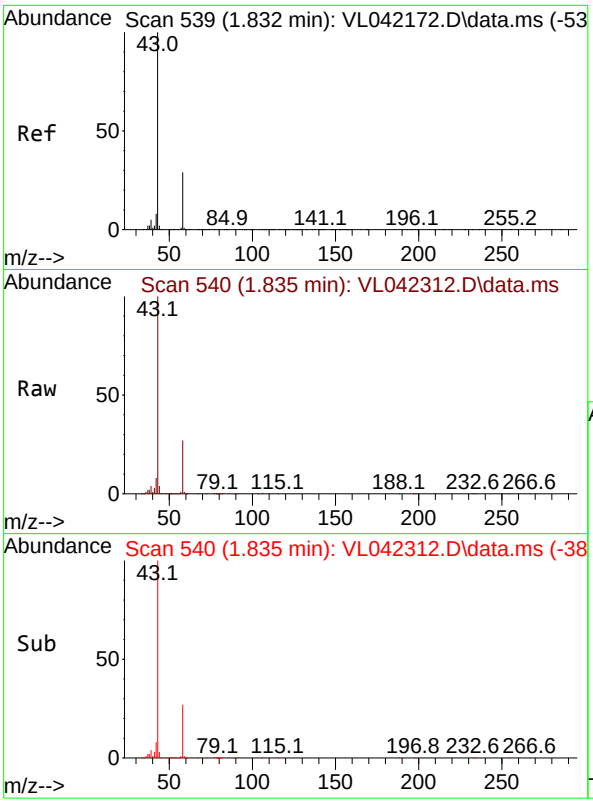


#14
Bromoethene
Concen: 8.820 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:108 Resp: 73294

Ion	Ratio	Lower	Upper
108	100		
106	108.4	86.8	130.2
79	19.5	15.0	22.6

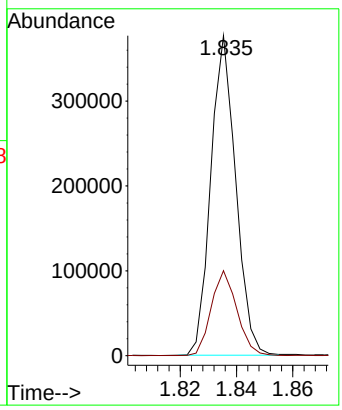




#15
Acetone
Concen: 9.019 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 23172

Ion	Ratio	Lower	Upper
43	100		
58	27.5	23.2	34.8



Instrument :
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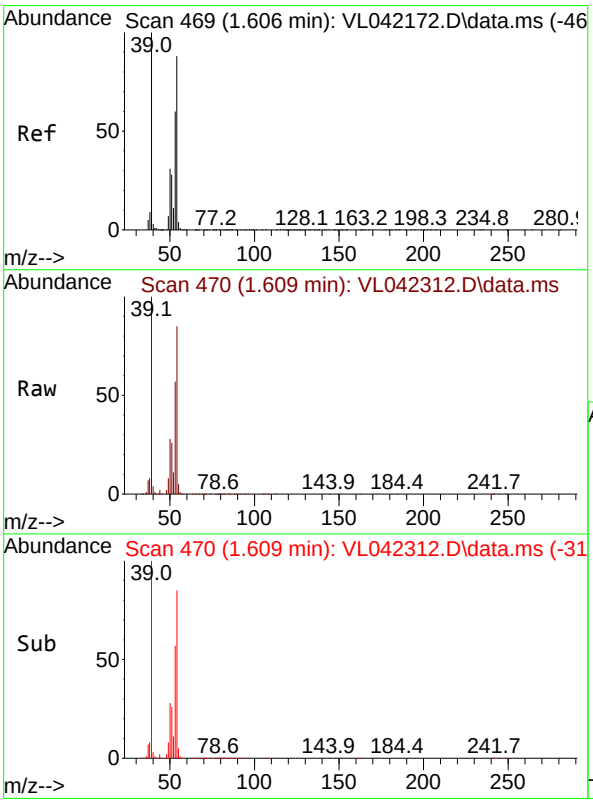
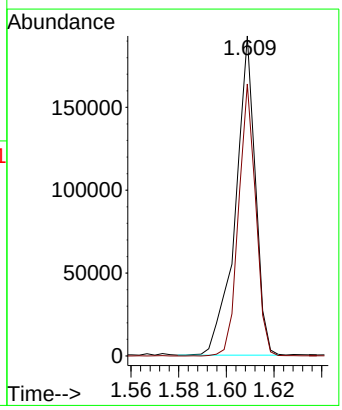
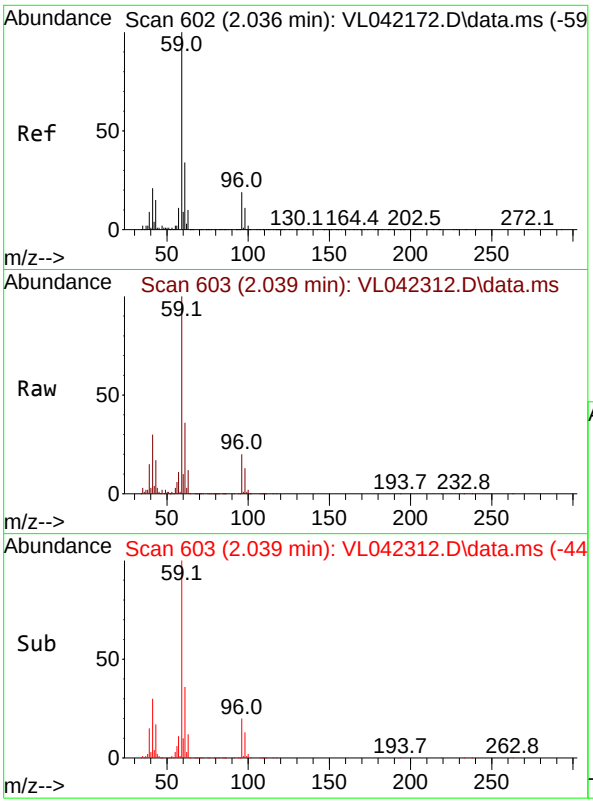


#16
1,3-Butadiene
Concen: 8.950 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 39 Resp: 112297

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1

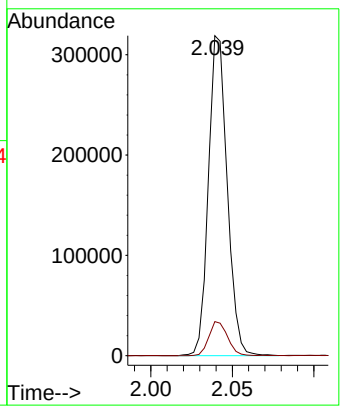




#17
tert-Butyl alcohol
Concen: 7.987 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 59 Resp: 25557

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3



Instrument :
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ClientSampleId :
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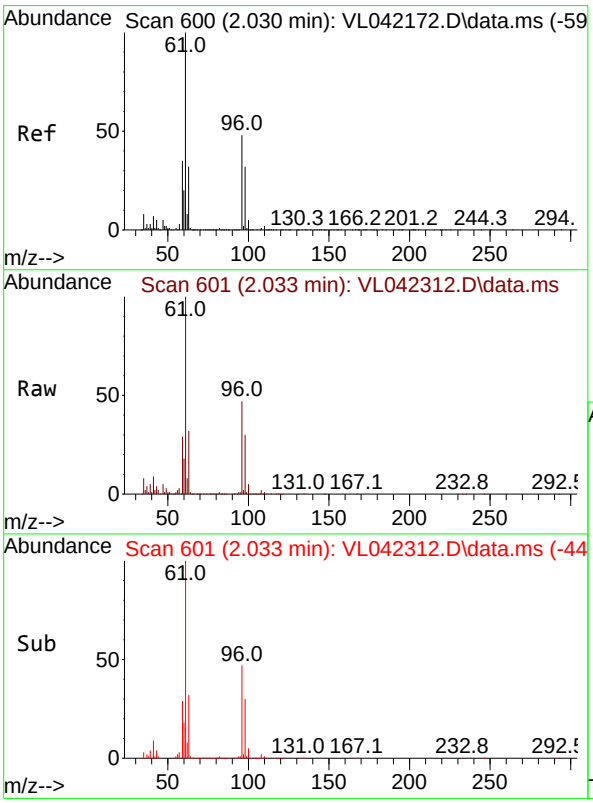
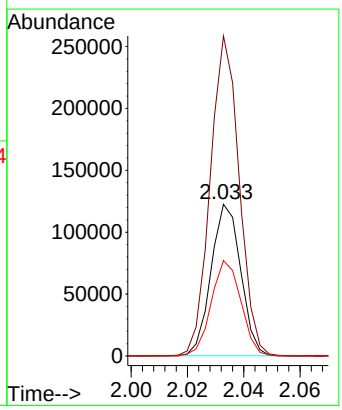
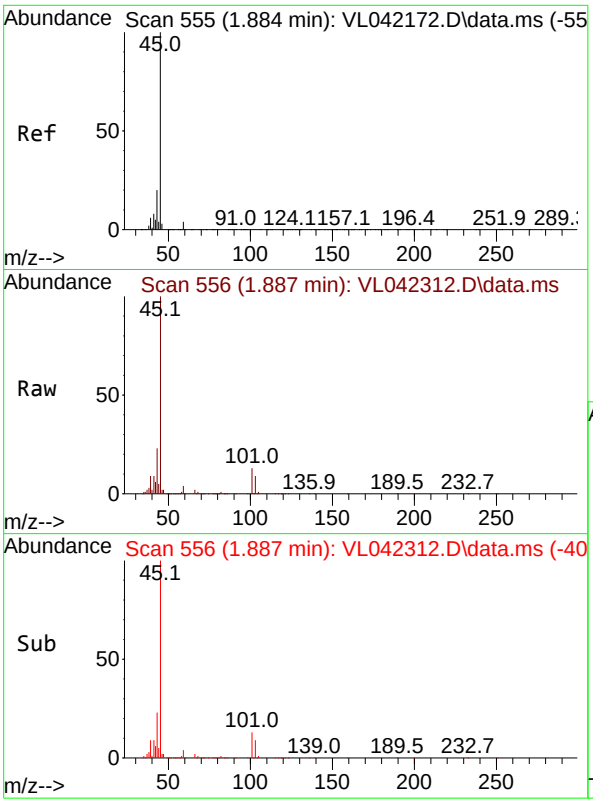


#18
1,1-Dichloroethene
Concen: 8.827 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 96 Resp: 89512

Ion	Ratio	Lower	Upper
96	100		
61	210.8	167.6	251.4
98	62.9	53.5	80.3





#19
Isopropyl Alcohol
Concen: 8.639 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 45 Resp: 12523

Ion	Ratio	Lower	Upper
45	100		
58	51.2	36.9	55.3

Instrument :
MSVOA_L
ClientSampleId :
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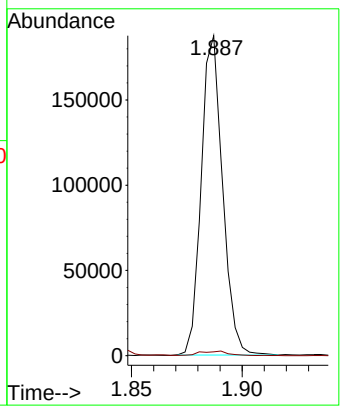
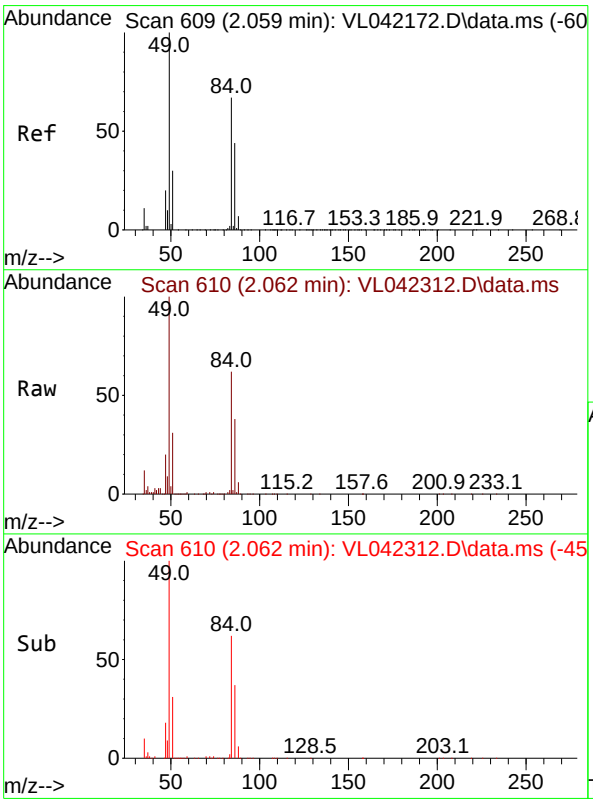
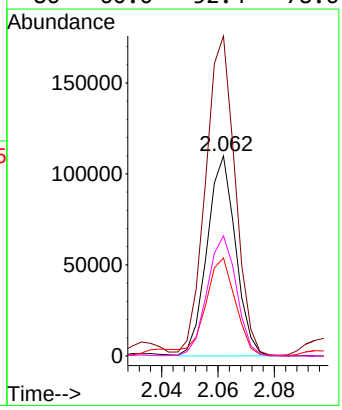


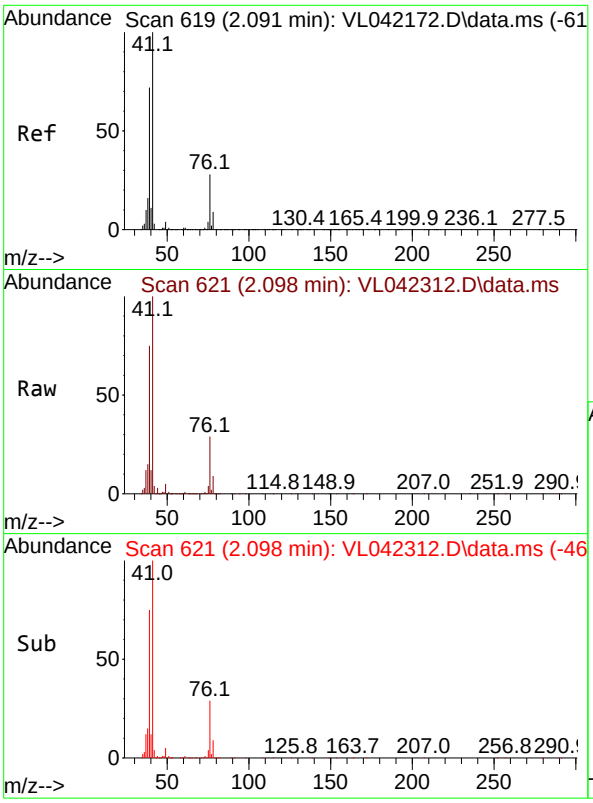


#20
Methylene Chloride
Concen: 8.044 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 84 Resp: 76968

Ion	Ratio	Lower	Upper
84	100		
49	159.9	120.2	180.4
51	48.8	37.4	56.0
86	60.0	52.4	78.6





#21
Allyl Chloride
Concen: 8.996 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 41 Resp: 16299

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	74.5	61.1	91.7

Instrument :
MSVOA_L
ClientSampleId :
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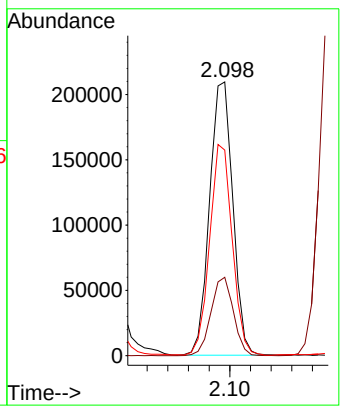
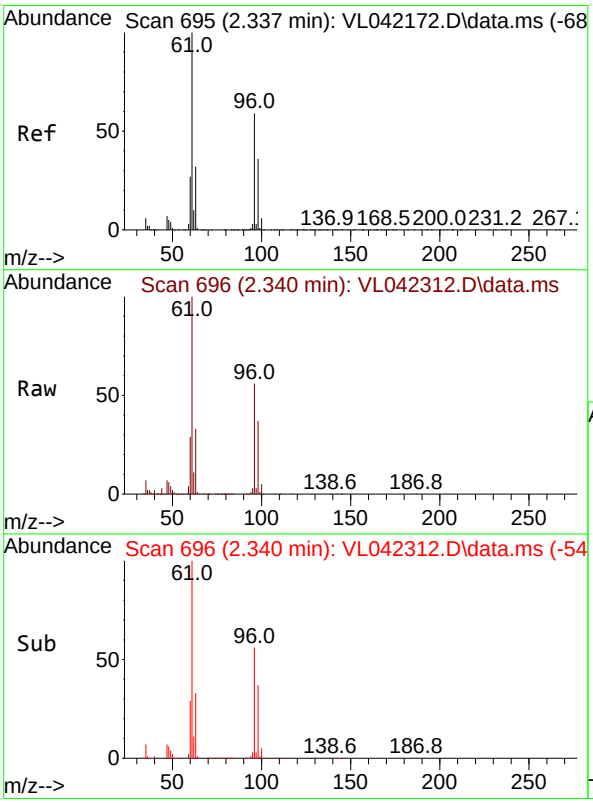
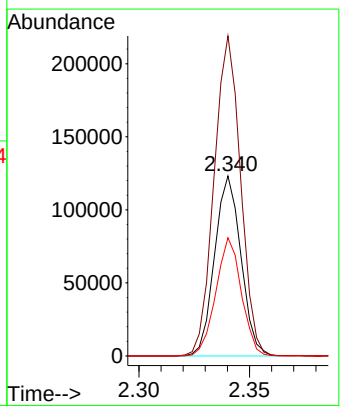


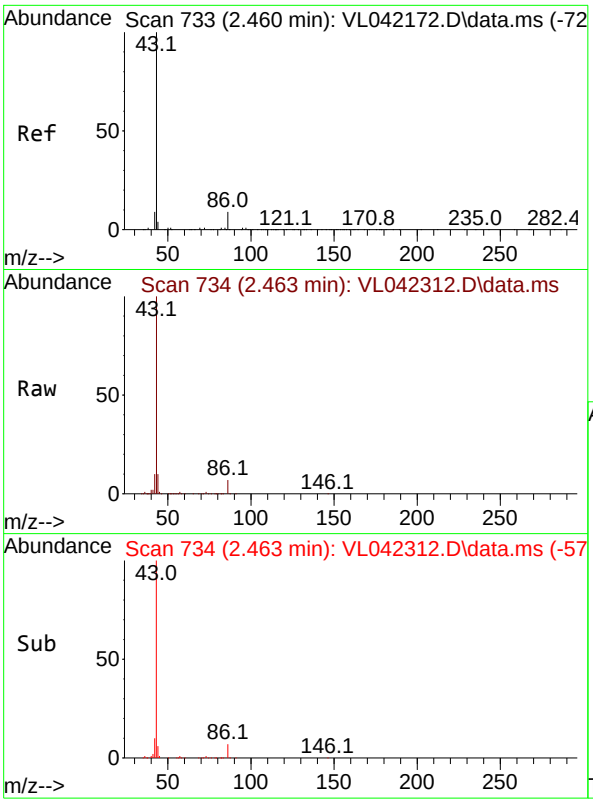


#22
trans-1,2-Dichloroethene
Concen: 8.700 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 96 Resp: 101974

Ion	Ratio	Lower	Upper
96	100		
61	177.7	136.6	204.8
98	65.6	49.4	74.2

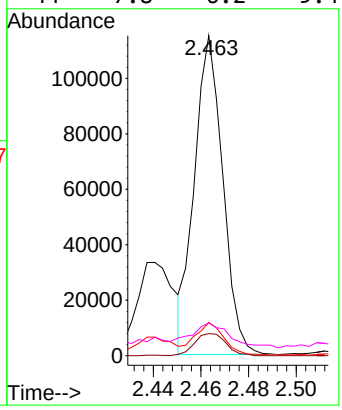




#23
Vinyl Acetate
Concen: 8.557 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 9515

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.1	8.6	13.0
44	7.8	6.2	9.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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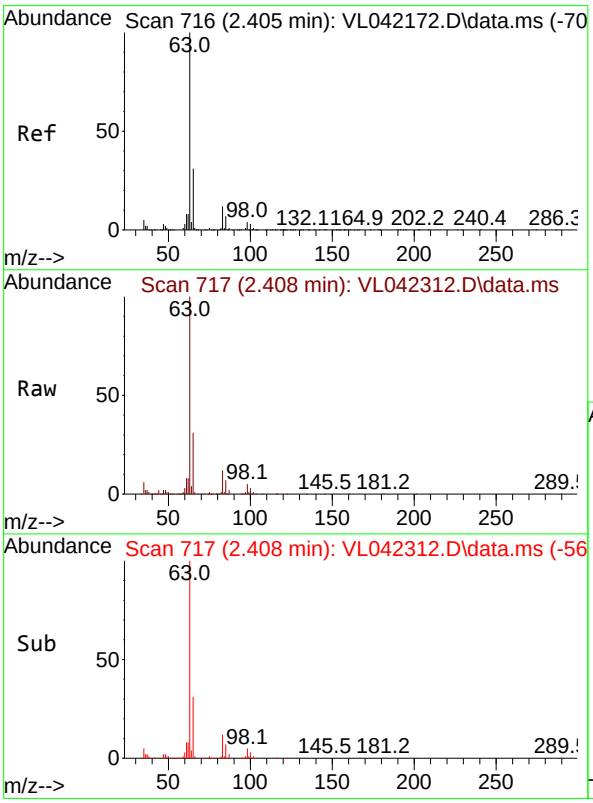
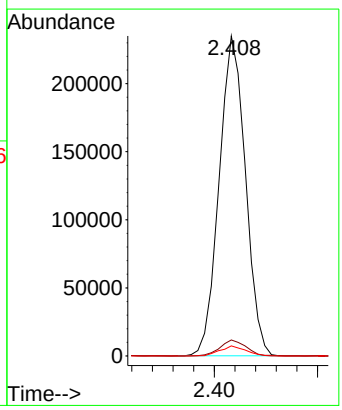
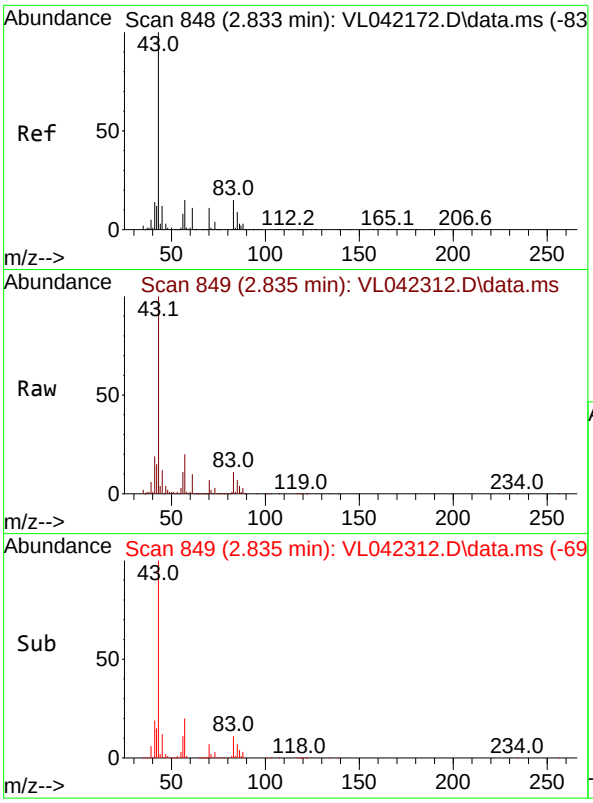


#24
1,1-Dichloroethane
Concen: 9.567 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 63 Resp: 207862

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	3.2	1.6	4.7

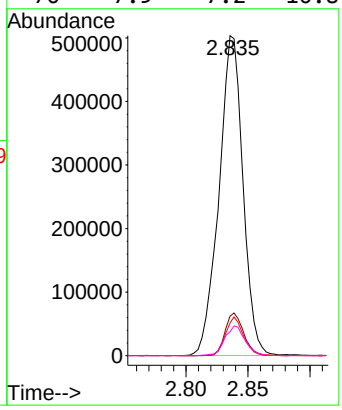




#25
Ethyl Acetate
Concen: 10.182 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 67892

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	9.1	7.3	10.9
70	7.9	7.2	10.8



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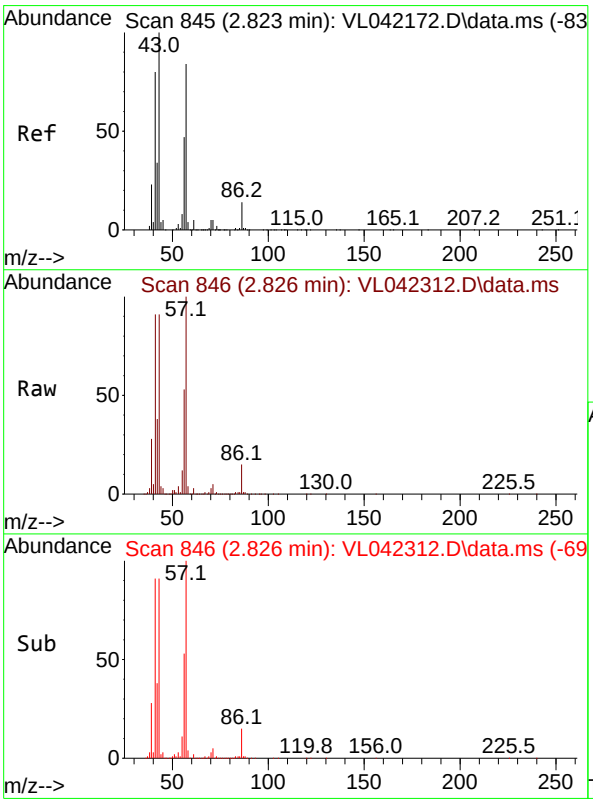
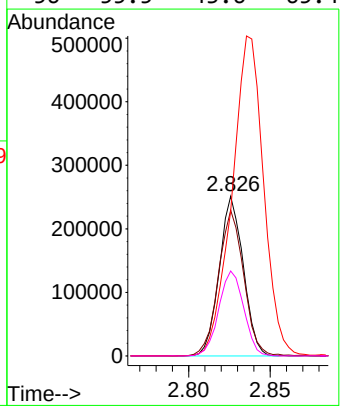
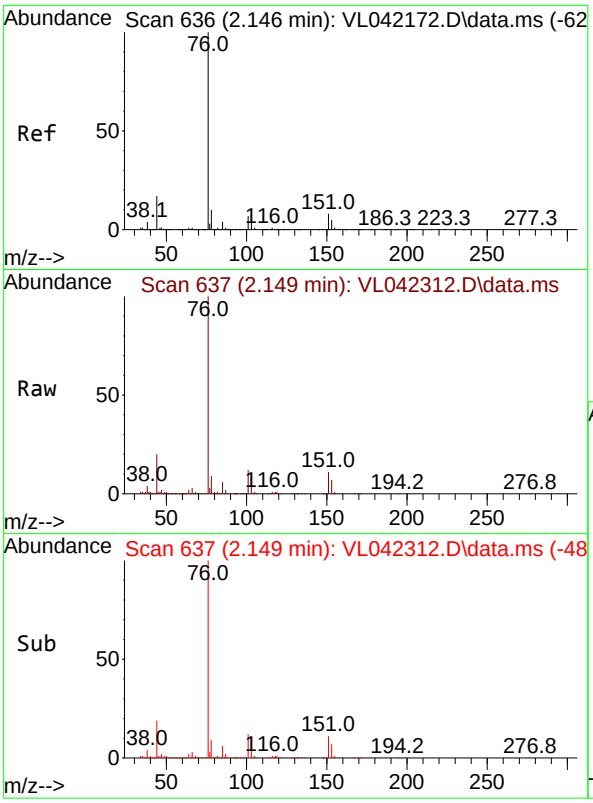


#26
Hexane
Concen: 9.973 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 57 Resp: 256866

Ion	Ratio	Lower	Upper
57	100		
41	96.5	76.6	114.8
43	265.7	207.8	311.8
56	55.5	43.6	65.4





#27
Carbon Disulfide
Concen: 8.812 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 76 Resp: 24336

Ion	Ratio	Lower	Upper
76	100		
44	19.5	14.7	22.1
78	11.6	9.3	13.9

Instrument :
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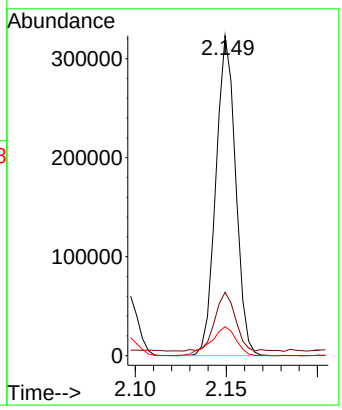
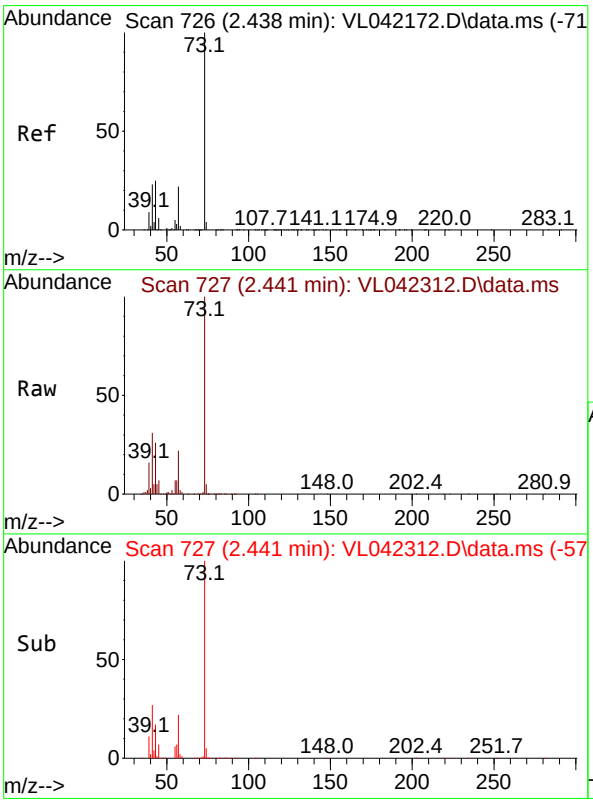
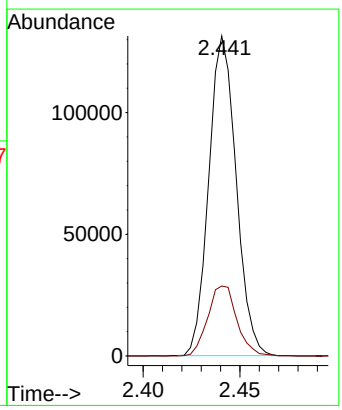


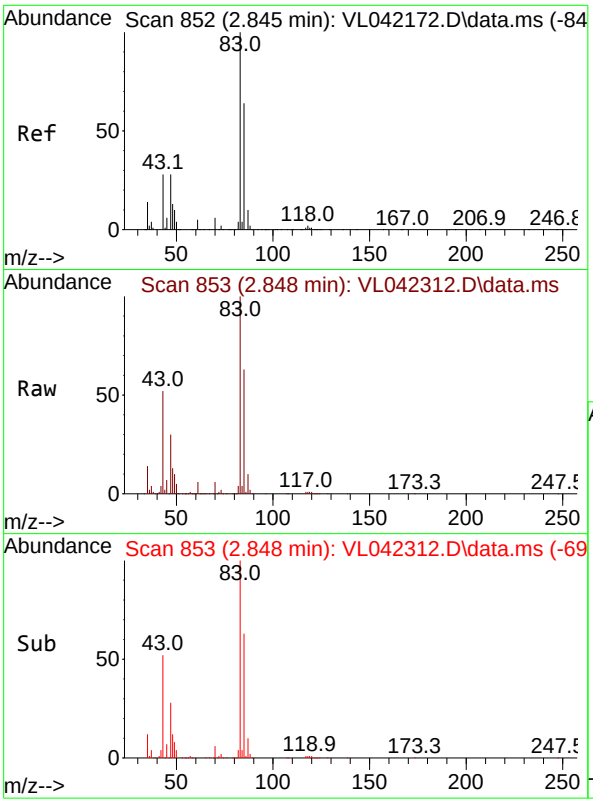


#28
Methyl tert-Butyl Ether
Concen: 8.053 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 73 Resp: 129141

Ion	Ratio	Lower	Upper
73	100		
57	23.4	20.5	30.7

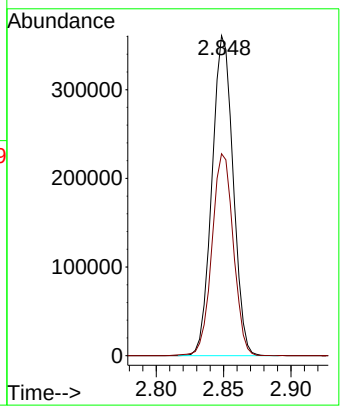




#29
Chloroform
Concen: 10.443 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 83 Resp: 39363

Ion	Ratio	Lower	Upper
83	100		
85	63.1	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
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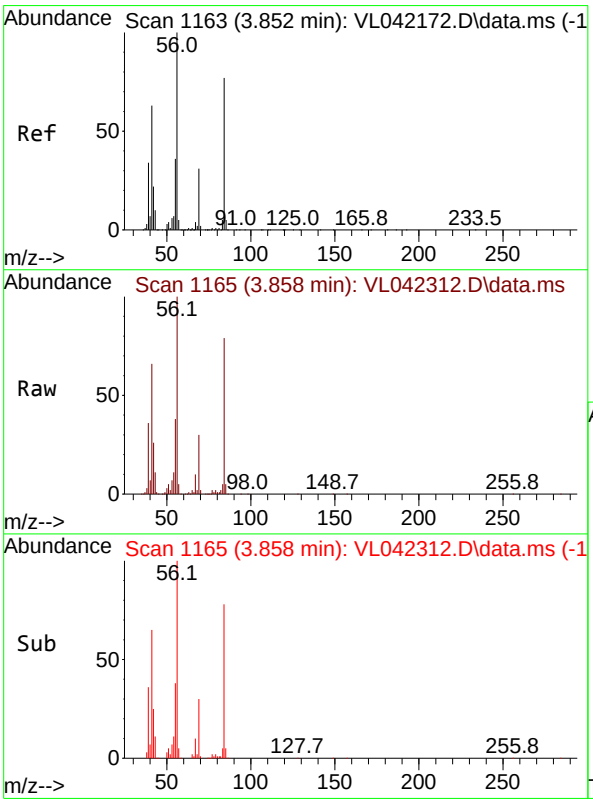
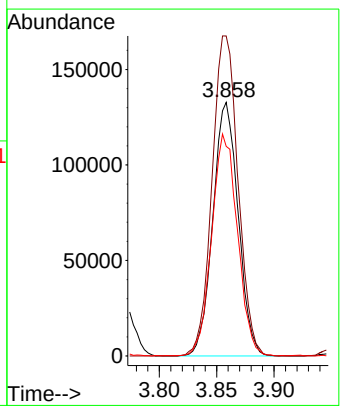
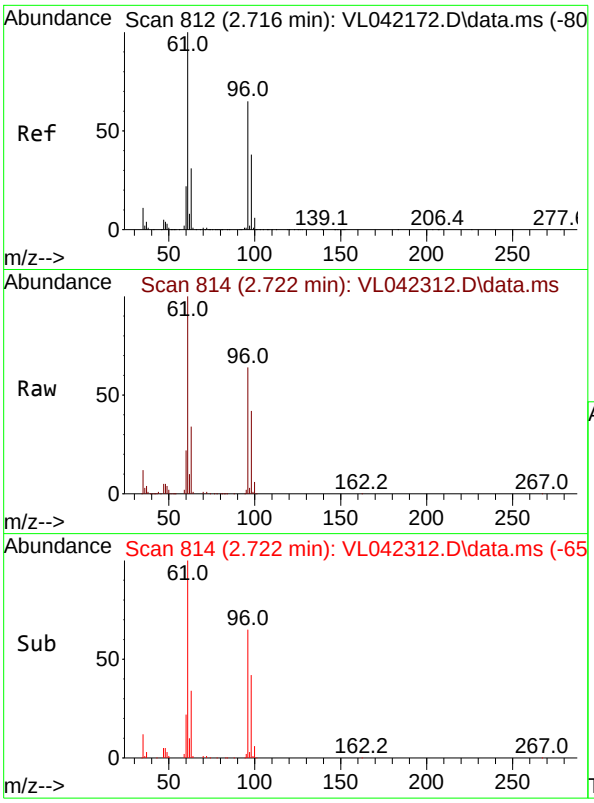


#30
Cyclohexane
Concen: 9.100 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 84 Resp: 203526

Ion	Ratio	Lower	Upper
84	100		
56	129.8	102.8	154.2
41	89.4	66.5	99.7

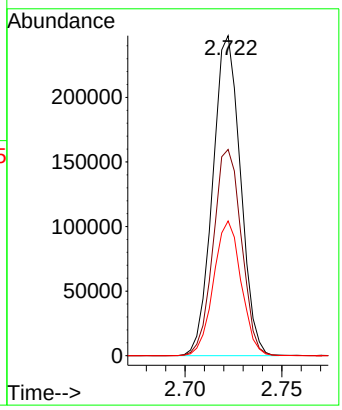




#31
cis-1,2-Dichloroethene
Concen: 9.454 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 61 Resp: 24719

Ion	Ratio	Lower	Upper
61	100		
96	64.4	51.8	77.8
98	42.0	30.6	46.0



Instrument :
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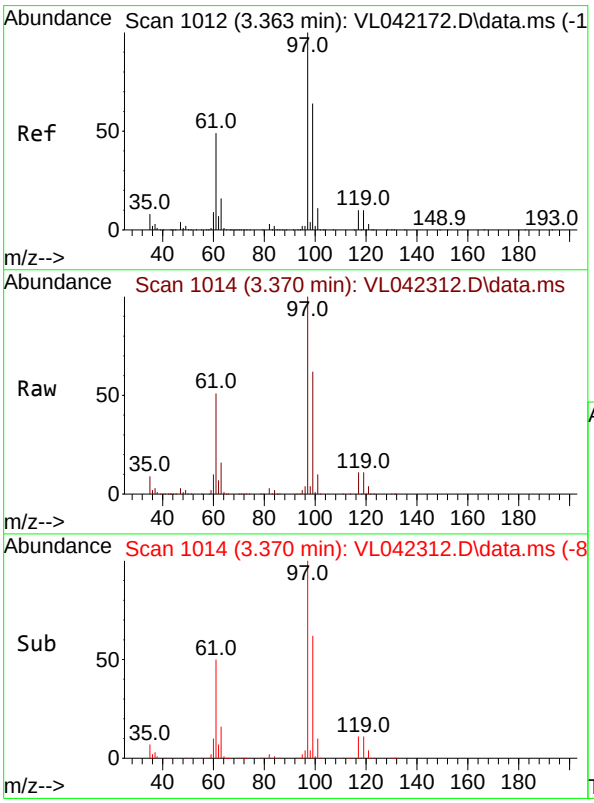
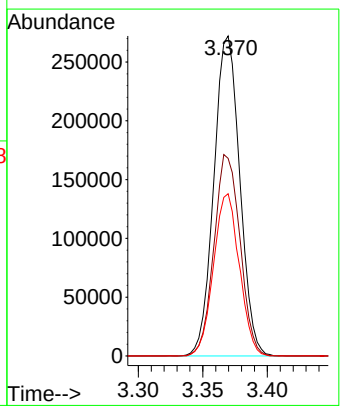
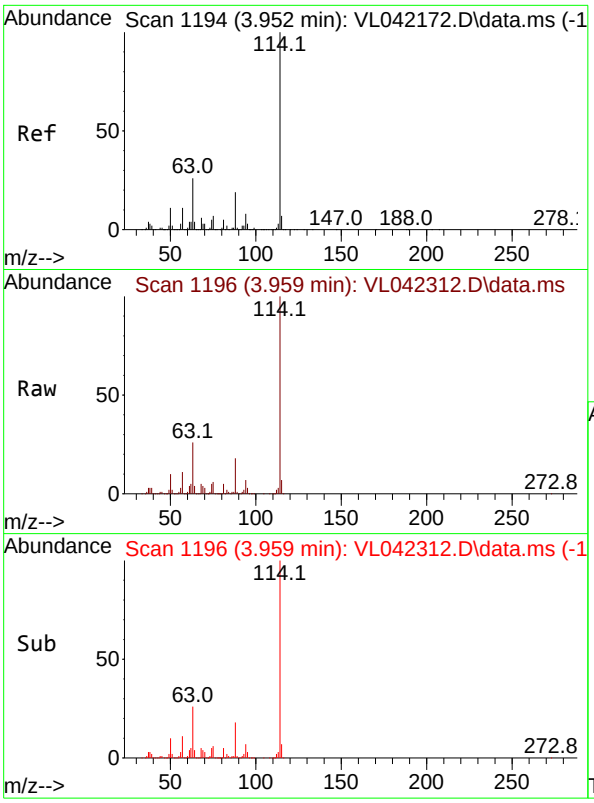


#32
1,1,1-Trichloroethane
Concen: 8.813 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 97 Resp: 380312

Ion	Ratio	Lower	Upper
97	100		
99	63.2	51.5	77.3
61	50.6	38.7	58.1

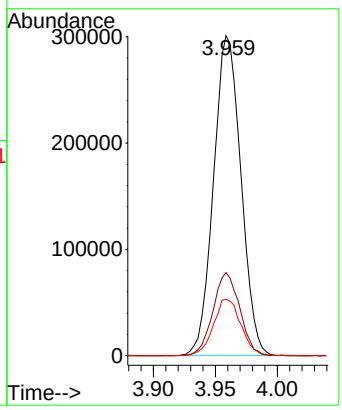




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:114 Resp: 46374

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.7	15.0	22.4



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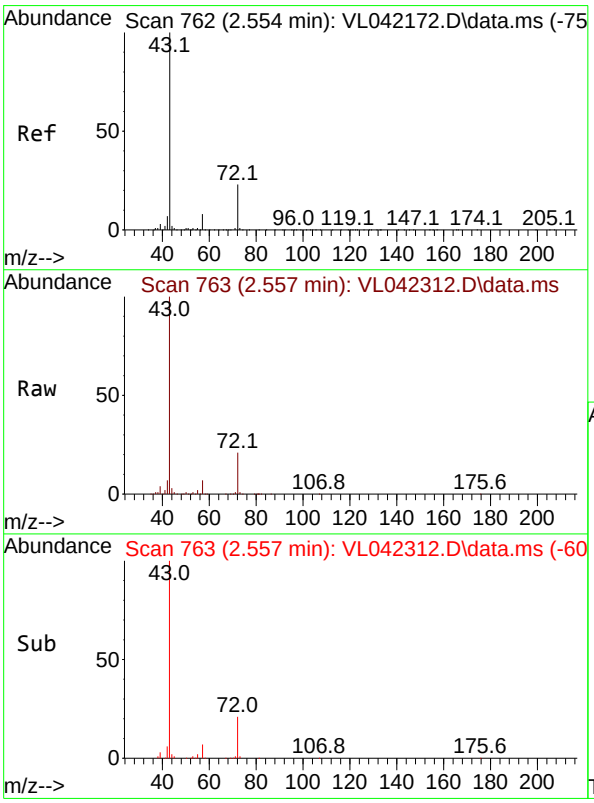
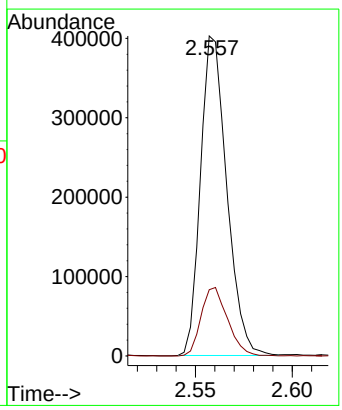
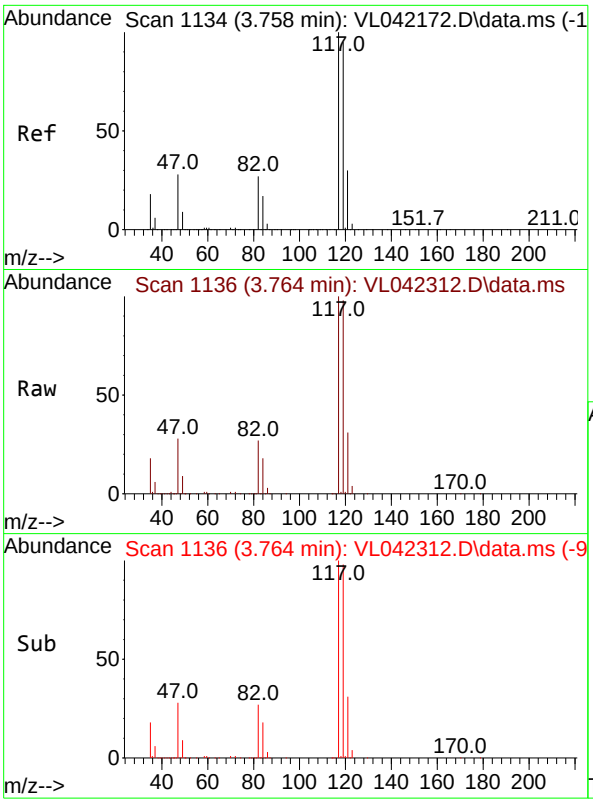


#34
2-Butanone
Concen: 11.321 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 380682

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2

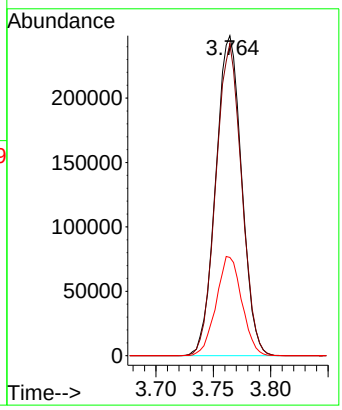




#35
Carbon Tetrachloride
Concen: 10.769 ppbv
RT: 3.764 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:117 Resp: 39014

Ion	Ratio	Lower	Upper
117	100		
119	97.6	76.2	114.2
121	30.7	24.2	36.4



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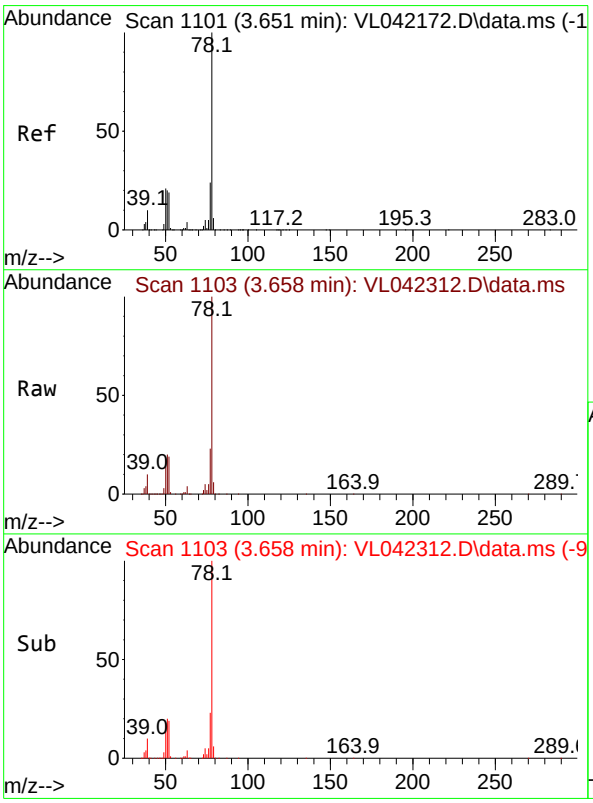
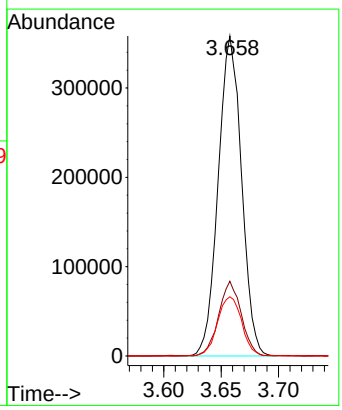
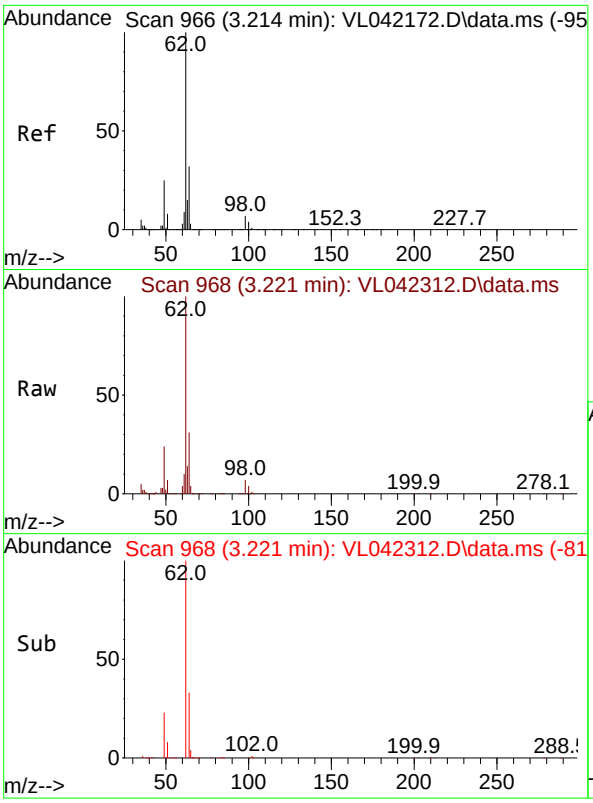


#36
Benzene
Concen: 11.012 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 78 Resp: 506278

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	18.5	16.6	24.8





#37
1,2-Dichloroethane
Concen: 11.101 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 62 Resp: 29218

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
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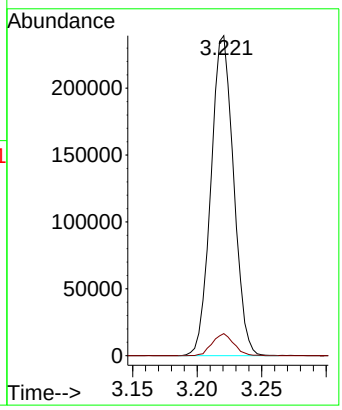
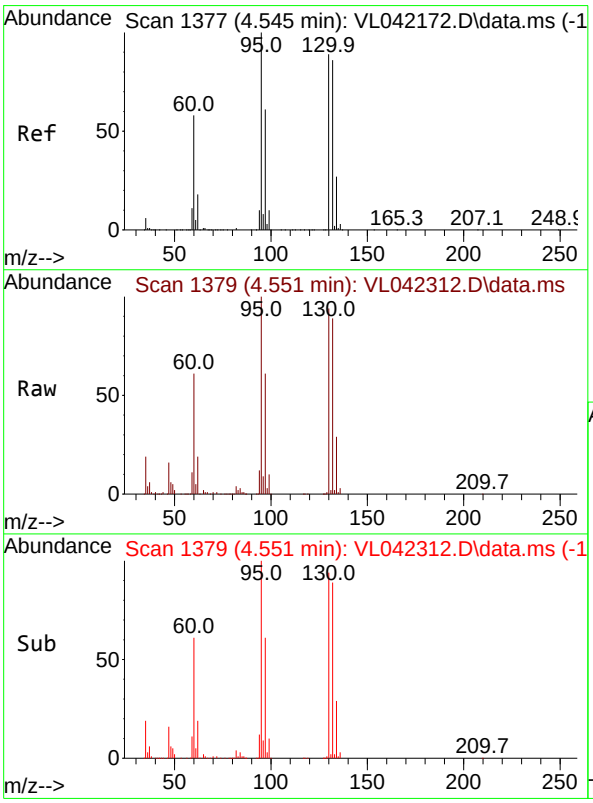
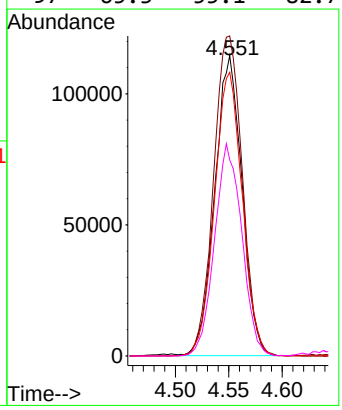


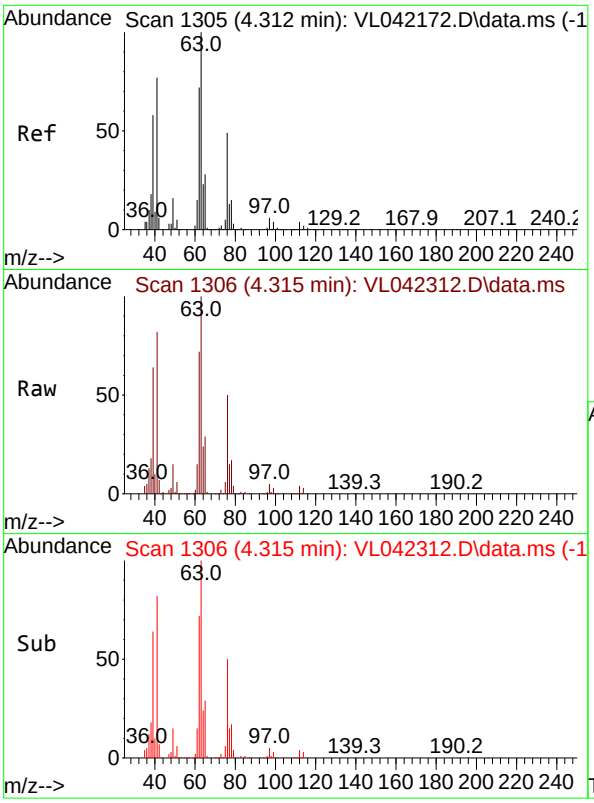


#38
Trichloroethene
Concen: 10.591 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:130 Resp: 203156

Ion	Ratio	Lower	Upper
130	100		
95	106.6	89.8	134.8
132	94.5	77.4	116.2
97	65.3	55.1	82.7

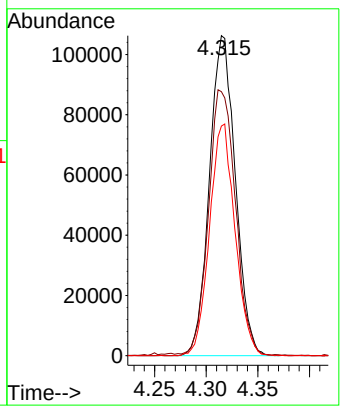




#39
1,2-Dichloropropane
Concen: 11.079 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 63 Resp: 18549

Ion	Ratio	Lower	Upper
63	100		
41	82.2	61.7	92.5
62	71.8	57.6	86.4



Instrument :
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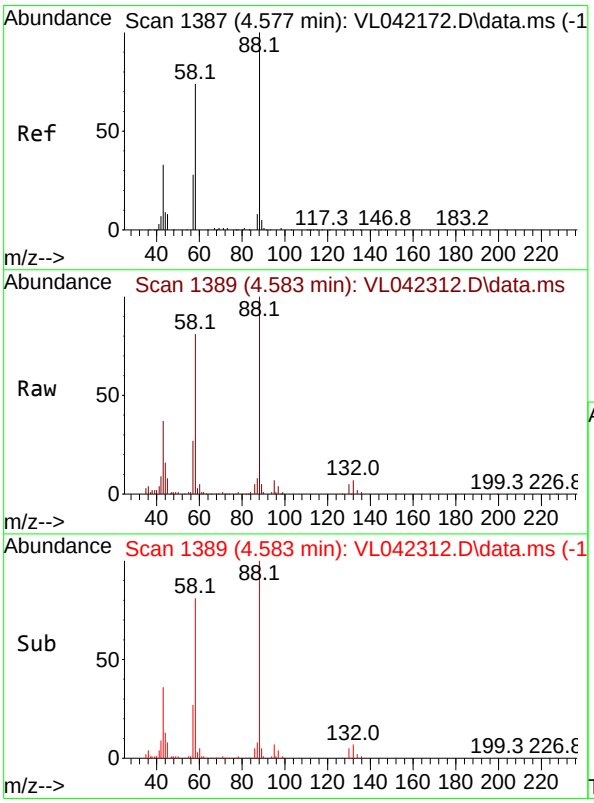
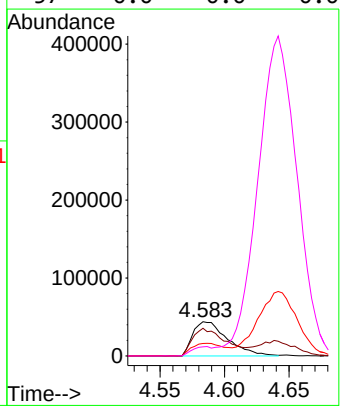
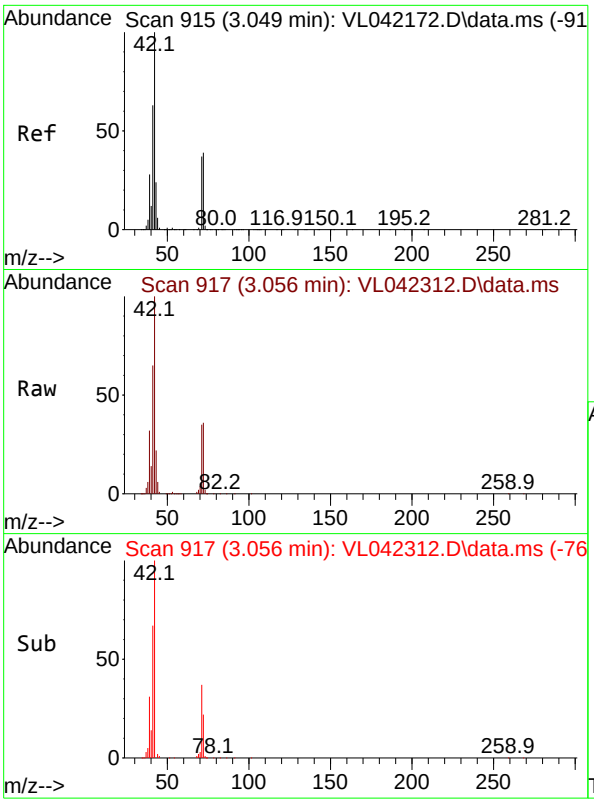


#40
1,4-Dioxane
Concen: 9.270 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 88 Resp: 82376

Ion	Ratio	Lower	Upper
88	100		
58	79.1	62.7	94.1
43	30.6	23.0	34.4
57	0.0	0.0	0.0

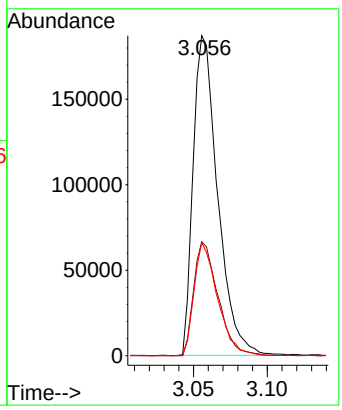




#41
Tetrahydrofuran
Concen: 11.188 ppbv
RT: 3.056 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 42 Resp: 21664

Ion	Ratio	Lower	Upper
42	100		
72	35.3	31.4	47.0
71	33.8	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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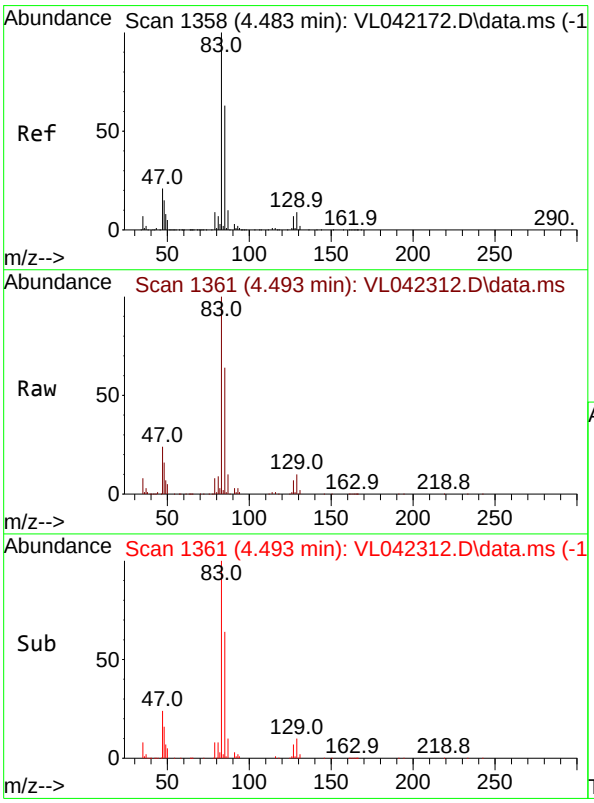
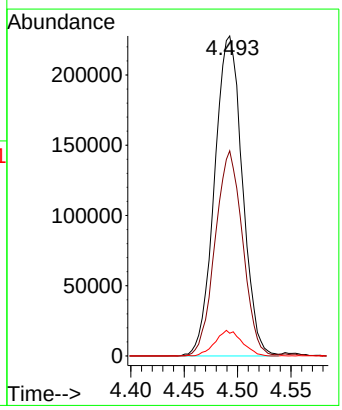
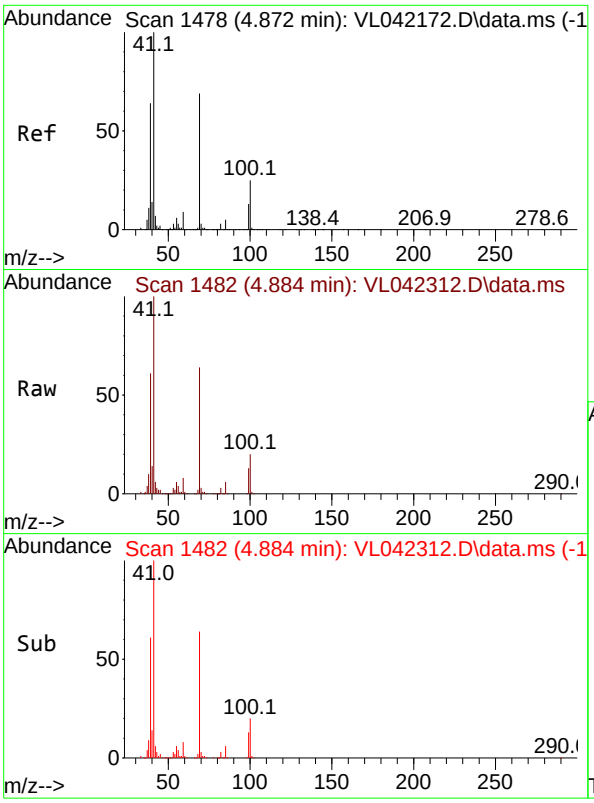


#42
Bromodichloromethane
Concen: 11.389 ppbv
RT: 4.493 min Scan# 1361
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 83 Resp: 413250

Ion	Ratio	Lower	Upper
83	100		
85	64.1	50.5	75.7
127	7.1	5.9	8.9

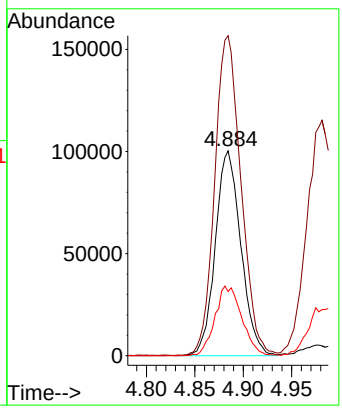




#43
Methyl Methacrylate
Concen: 9.478 ppbv
RT: 4.884 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 69 Resp: 18447

Ion	Ratio	Lower	Upper
69	100		
41	160.3	123.8	185.6
100	35.6	28.4	42.6



Instrument :
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ClientSampleId :
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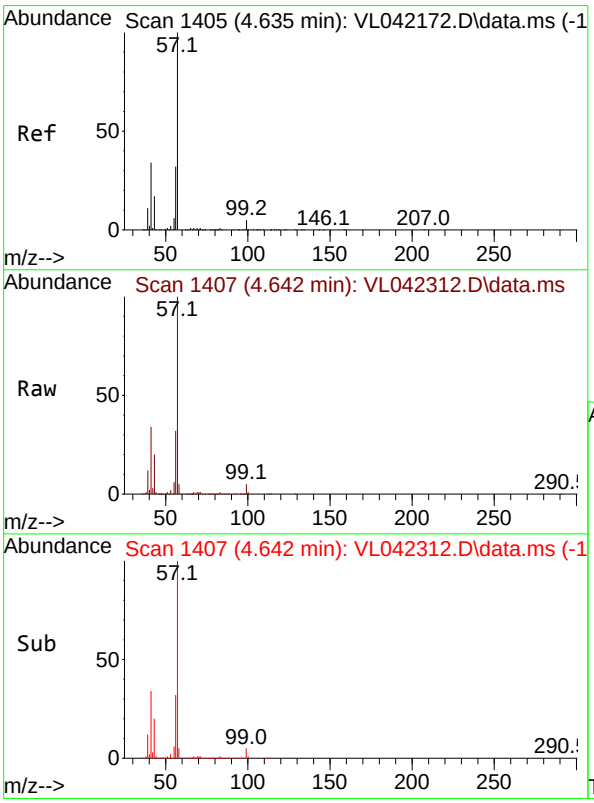
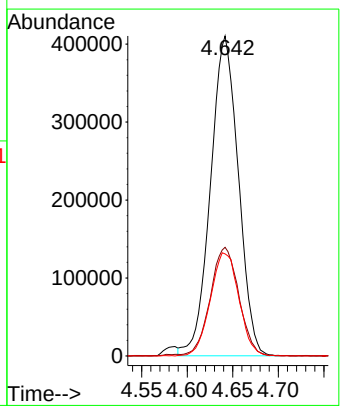
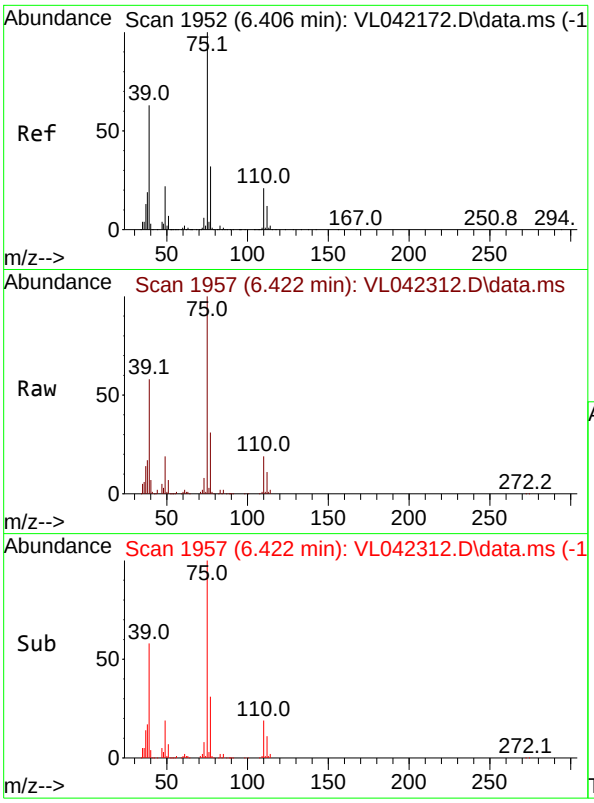


#44
2,2,4-Trimethylpentane
Concen: 11.235 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 57 Resp: 872871

Ion	Ratio	Lower	Upper
57	100		
41	35.1	26.8	40.2
56	33.1	25.6	38.4

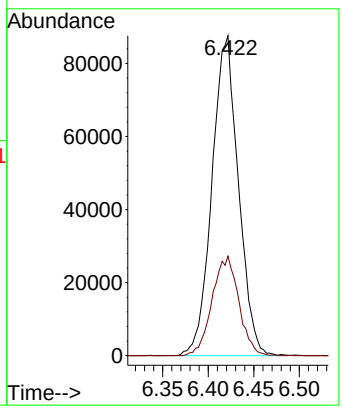




#45
t-1,3-Dichloropropene
Concen: 8.467 ppbv
RT: 6.422 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 75 Resp: 17680

Ion	Ratio	Lower	Upper
75	100		
77	31.1	26.0	39.0



Instrument :
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ClientSampleId :
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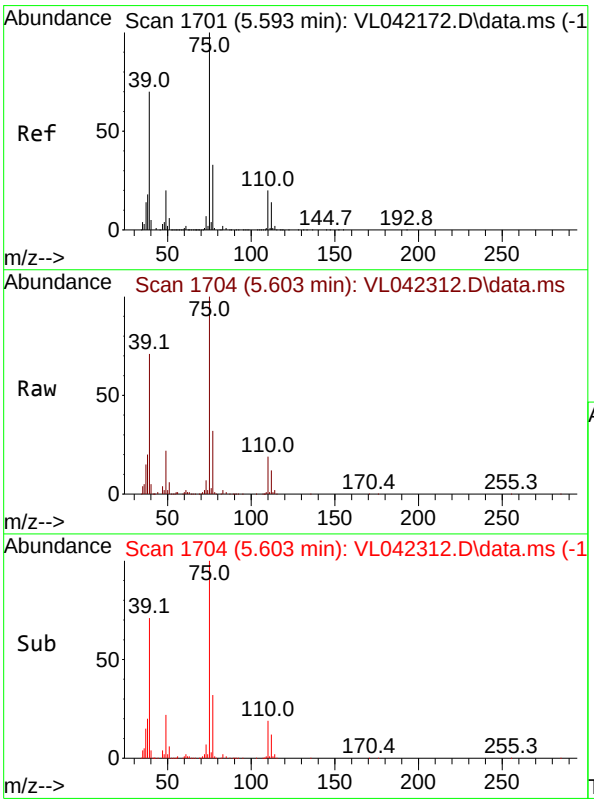
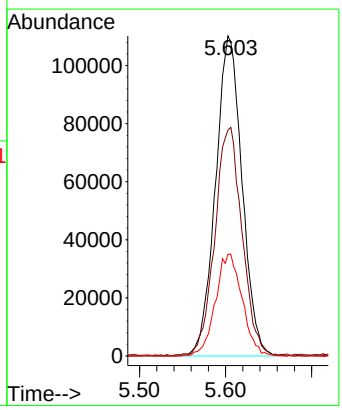
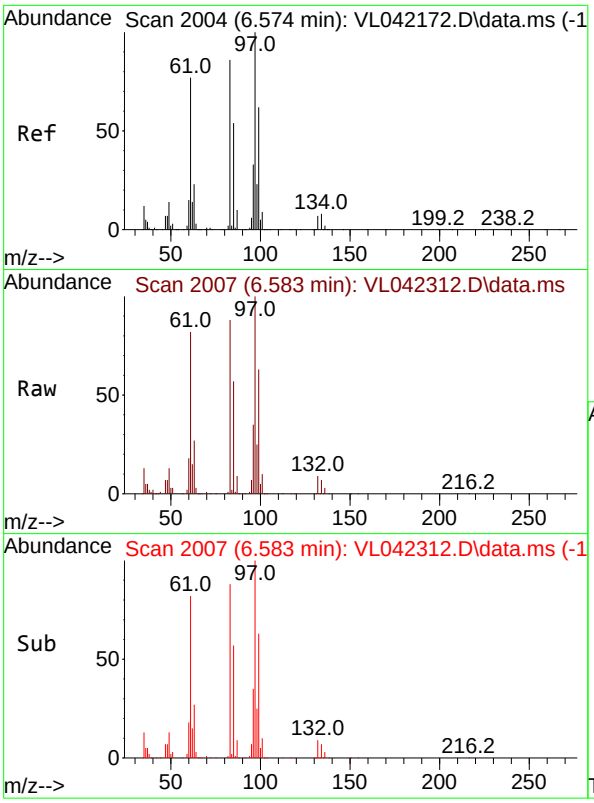


#46
cis-1,3-Dichloropropene
Concen: 9.222 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 75 Resp: 236039

Ion	Ratio	Lower	Upper
75	100		
39	70.2	55.8	83.6
77	31.7	26.0	39.0

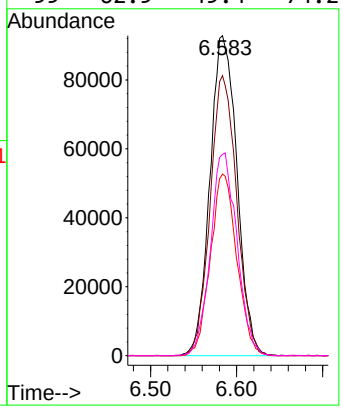




#47
1,1,2-Trichloroethane
Concen: 11.463 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 97 Resp: 20289

Ion	Ratio	Lower	Upper
97	100		
83	87.5	69.2	103.8
85	56.7	43.1	64.7
99	62.9	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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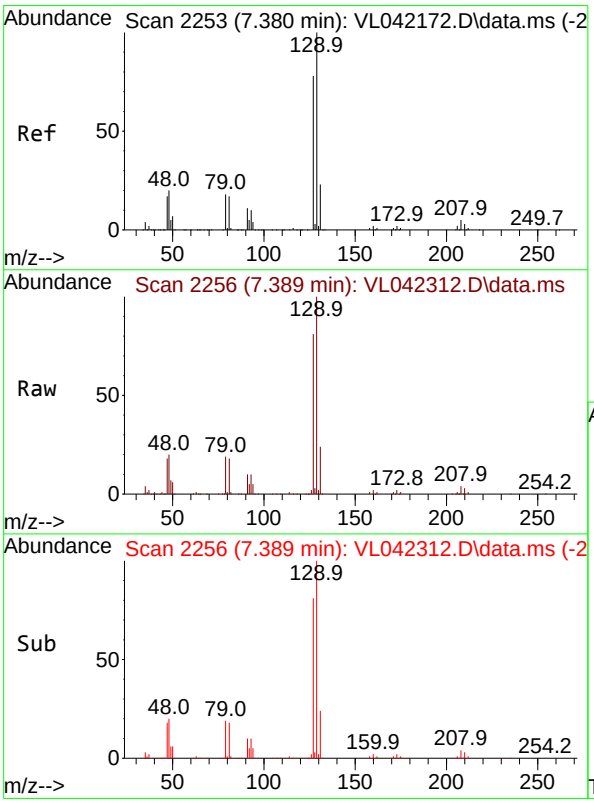
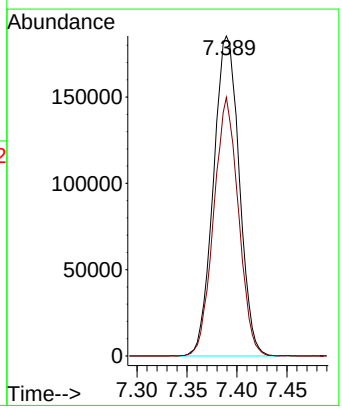
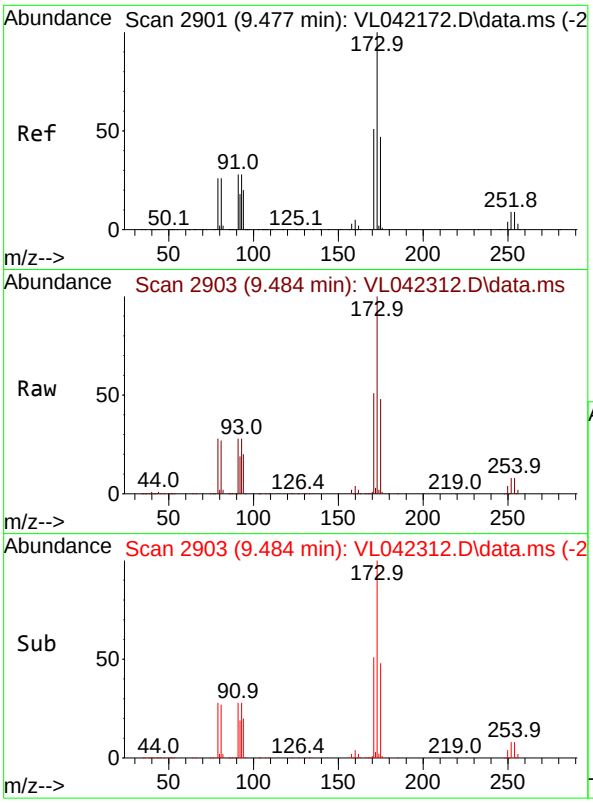


#48
Dibromochloromethane
Concen: 11.106 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:129 Resp: 333128

Ion	Ratio	Lower	Upper
129	100		
127	77.4	39.1	117.2

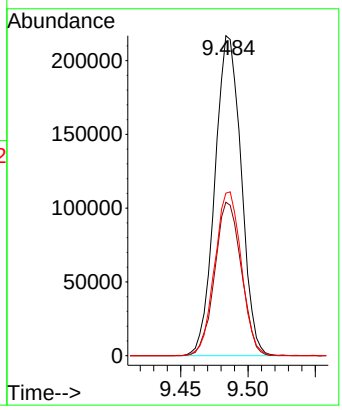




#49
Bromoform
Concen: 10.935 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:173 Resp: 29448

Ion	Ratio	Lower	Upper
173	100		
175	48.5	38.6	57.8
171	51.8	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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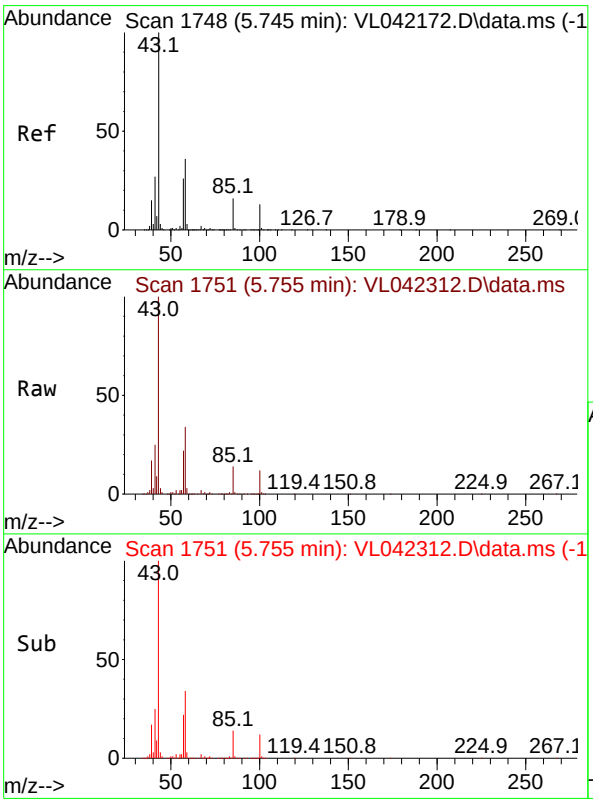
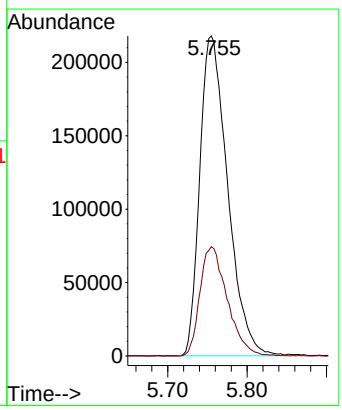
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

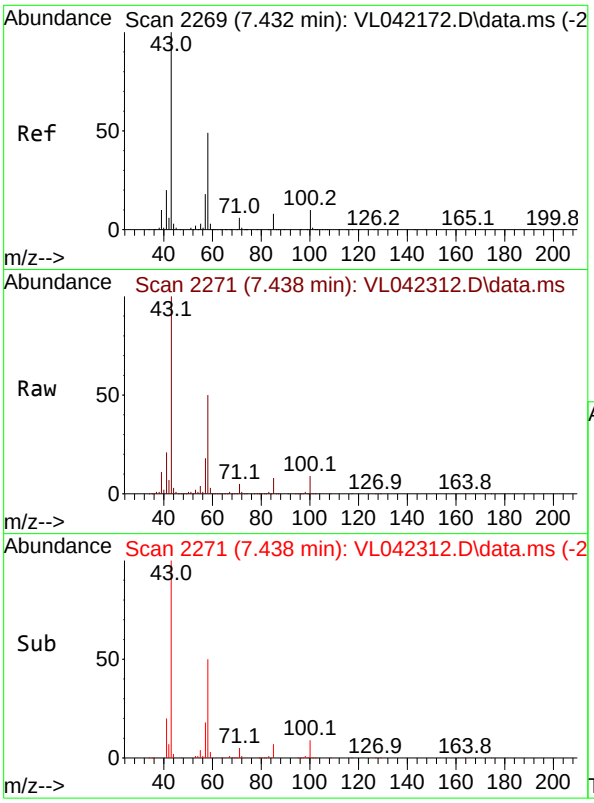


#50
4-Methyl-2-Pentanone
Concen: 9.980 ppbv
RT: 5.755 min Scan# 1751
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 531851

Ion	Ratio	Lower	Upper
43	100		
58	33.5	29.0	43.6





#51
2-Hexanone
Concen: 9.689 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 42403

Ion	Ratio	Lower	Upper
43	100		
58	45.7	39.7	59.5
98	0.9	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
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Manual Integrations
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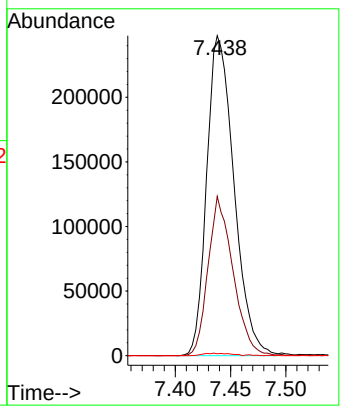
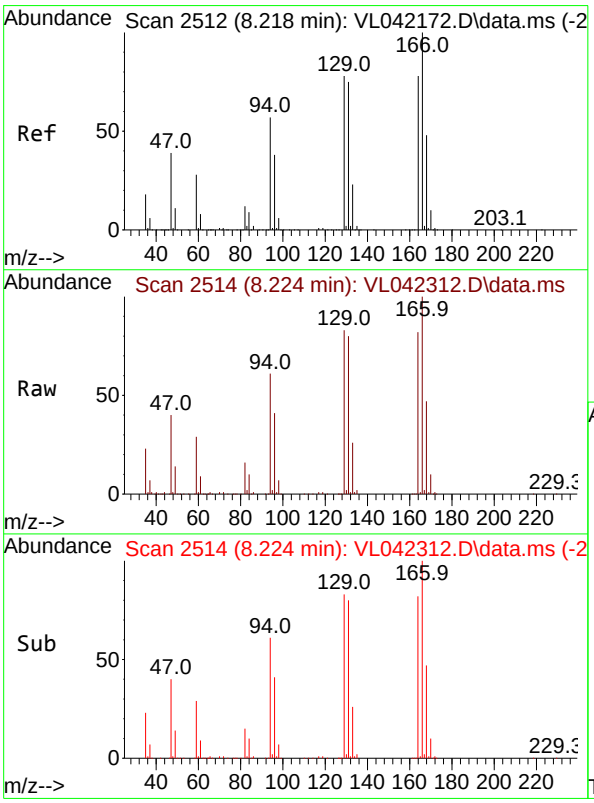
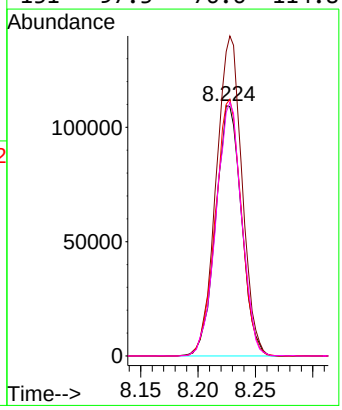


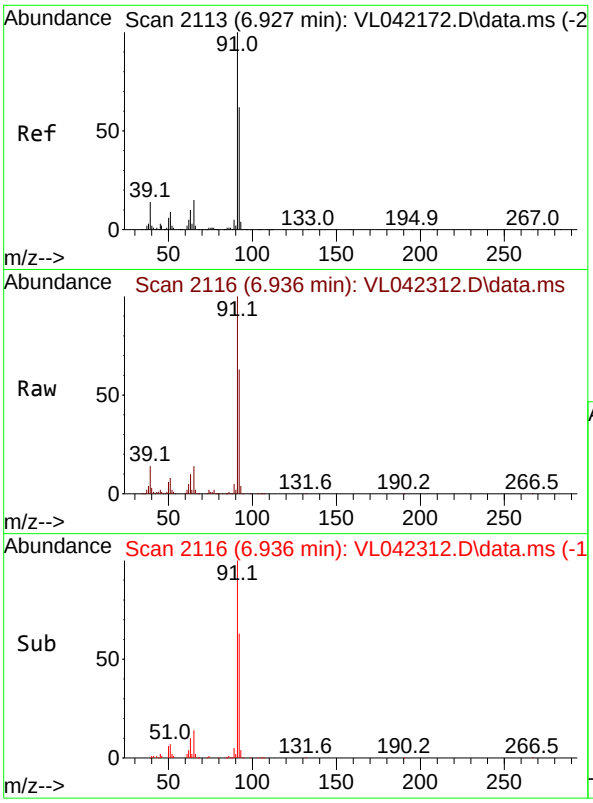


#52
Tetrachloroethene
Concen: 9.378 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:164 Resp: 170989

Ion	Ratio	Lower	Upper
164	100		
166	121.6	102.5	153.7
129	100.6	79.8	119.8
131	97.3	76.6	114.8

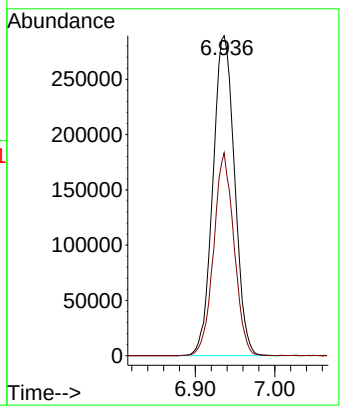




#53
Toluene
Concen: 10.048 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 54757

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6



Instrument :
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ClientSampleId :
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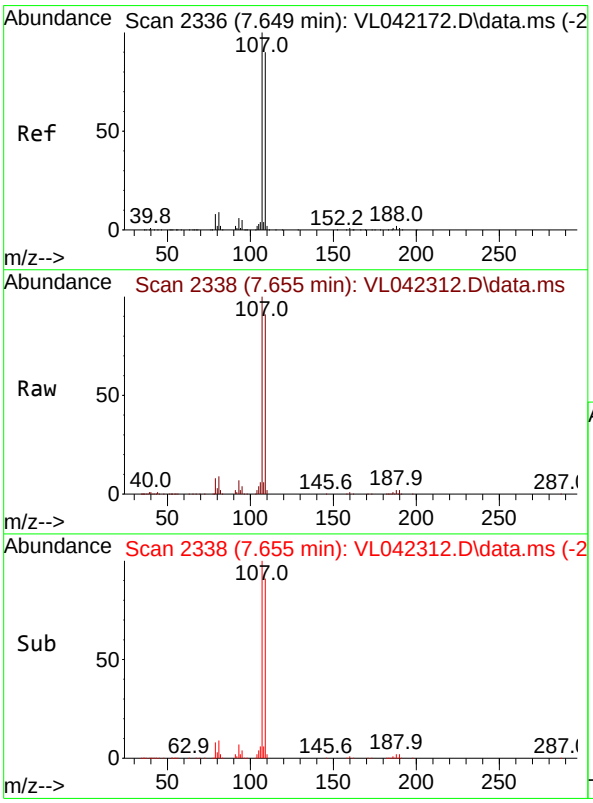
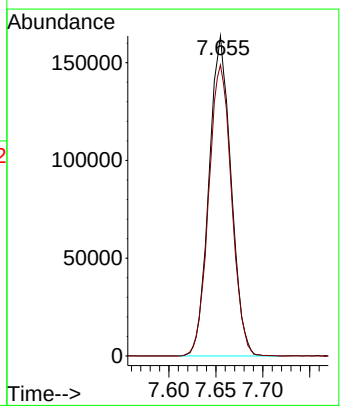
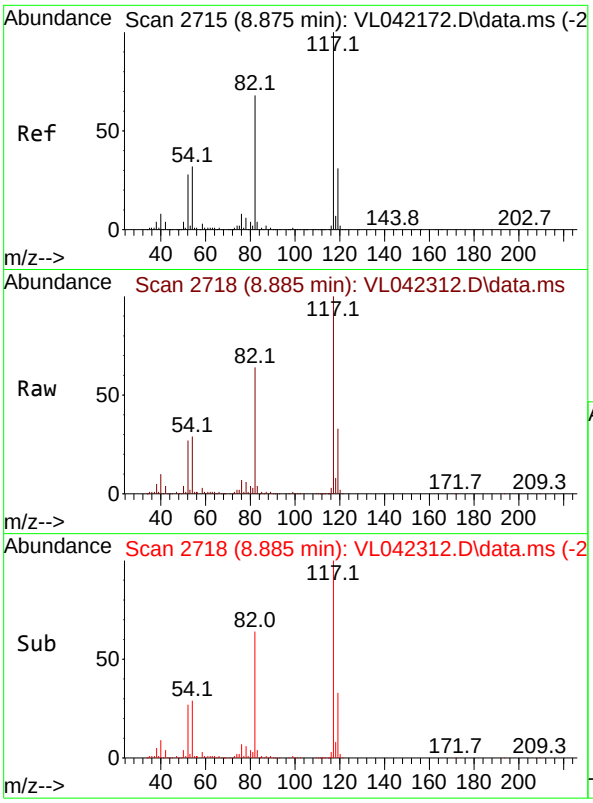


#54
1,2-Dibromoethane
Concen: 10.831 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:107 Resp: 267225

Ion	Ratio	Lower	Upper
107	100		
109	91.0	72.2	108.4

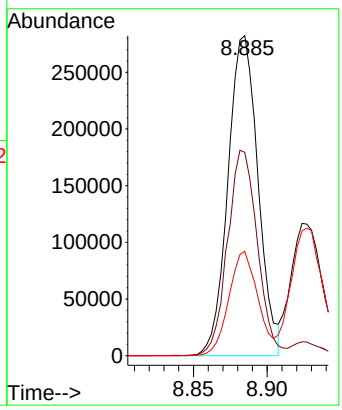




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:117 Resp: 401340

Ion	Ratio	Lower	Upper
117	100		
82	67.7	55.8	83.6
119	31.5	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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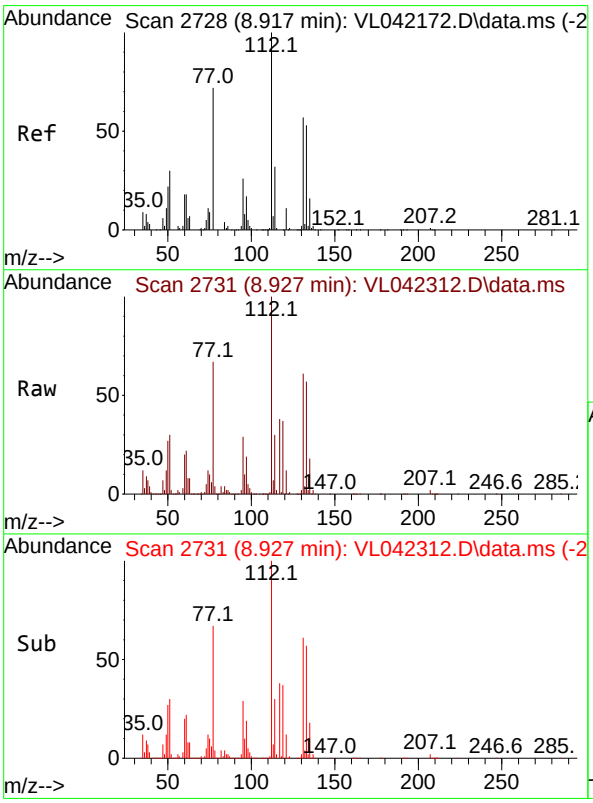
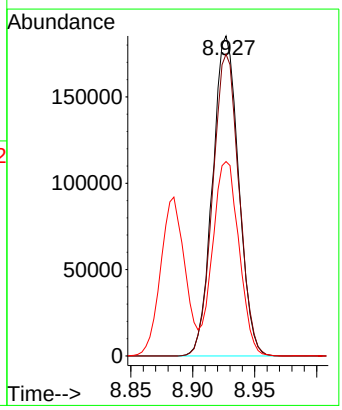
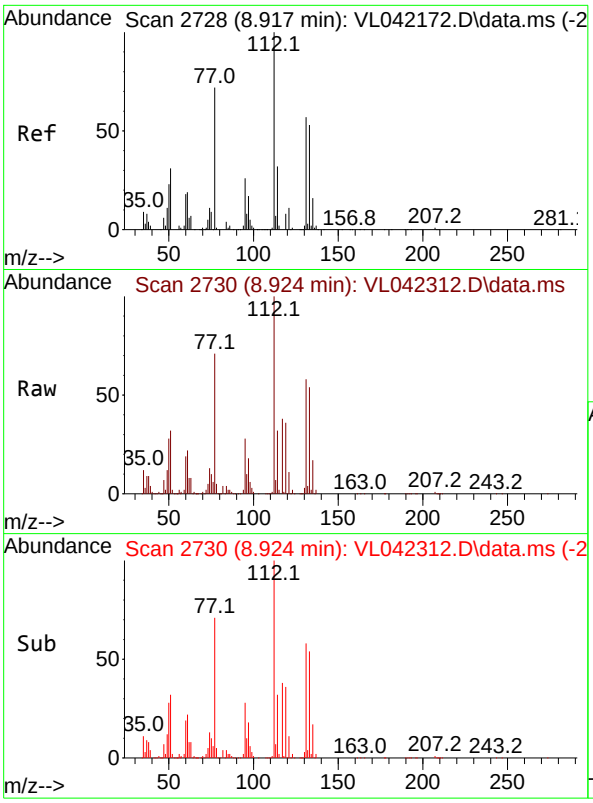


#56
1,1,1,2-Tetrachloroethane
Concen: 12.283 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:131 Resp: 271350

Ion	Ratio	Lower	Upper
131	100		
133	95.3	76.6	114.8
119	62.7	49.8	74.6

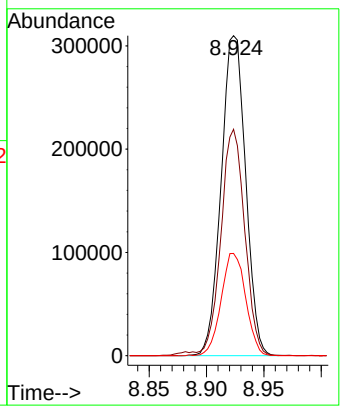




#57
Chlorobenzene
Concen: 12.099 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:112 Resp: 46059

Ion	Ratio	Lower	Upper
112	100		
77	70.7	58.2	87.2
114	32.0	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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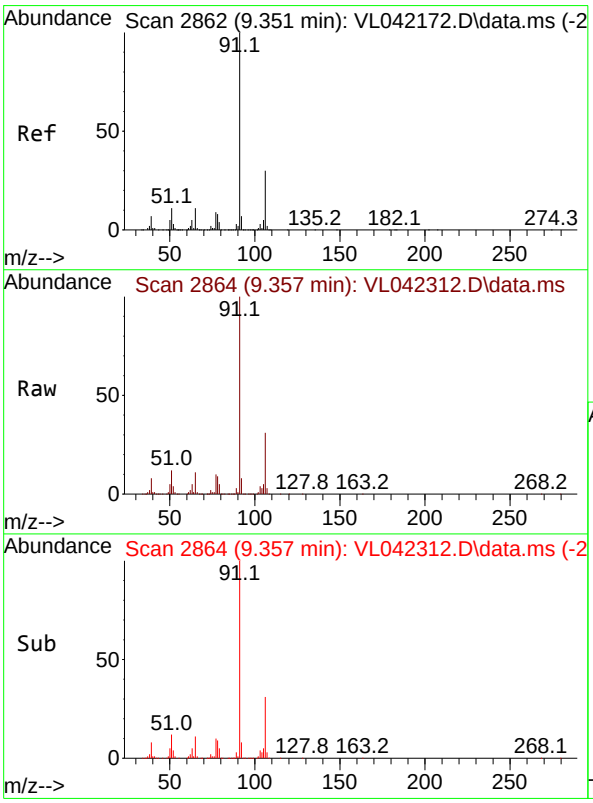
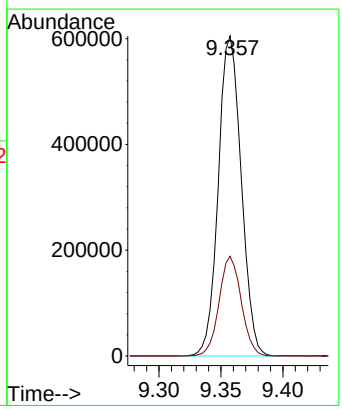
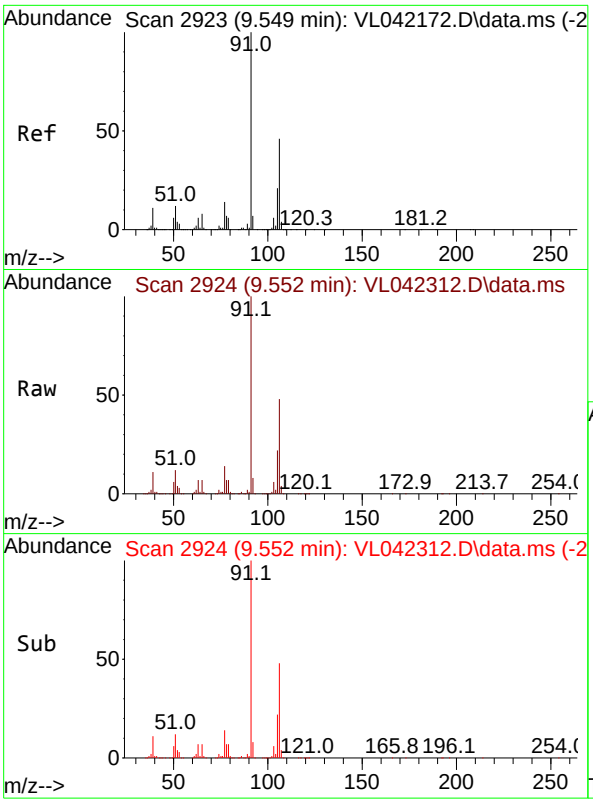


#58
Ethyl Benzene
Concen: 10.931 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 779227

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.2	36.2

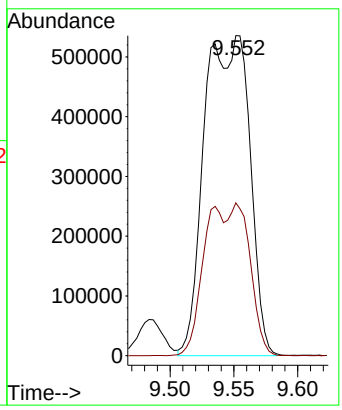




#59
m/p-Xylene
Concen: 23.249 ppbv m
RT: 9.552 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 132346

Ion	Ratio	Lower	Upper
91	100		
106	47.1	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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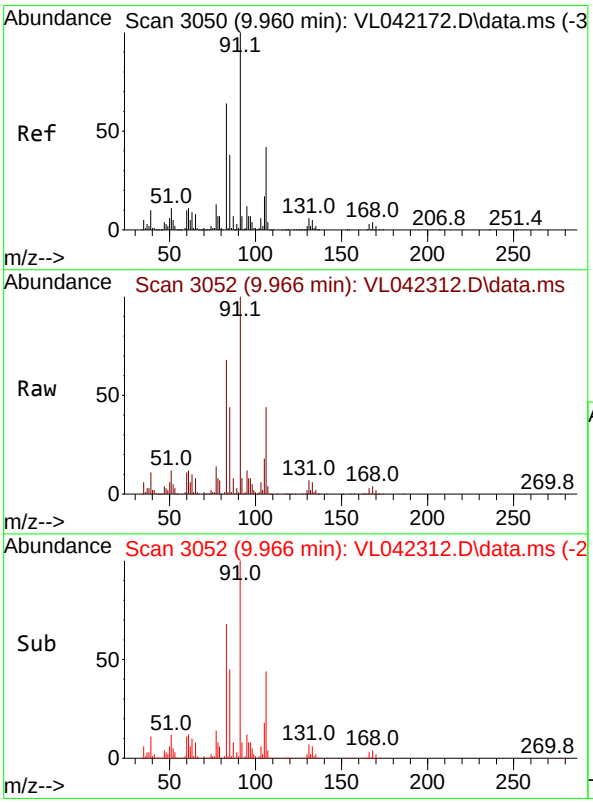
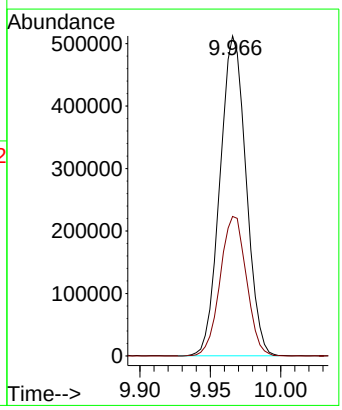
Supervised By :Mahesh Dadoda 04/17/2025

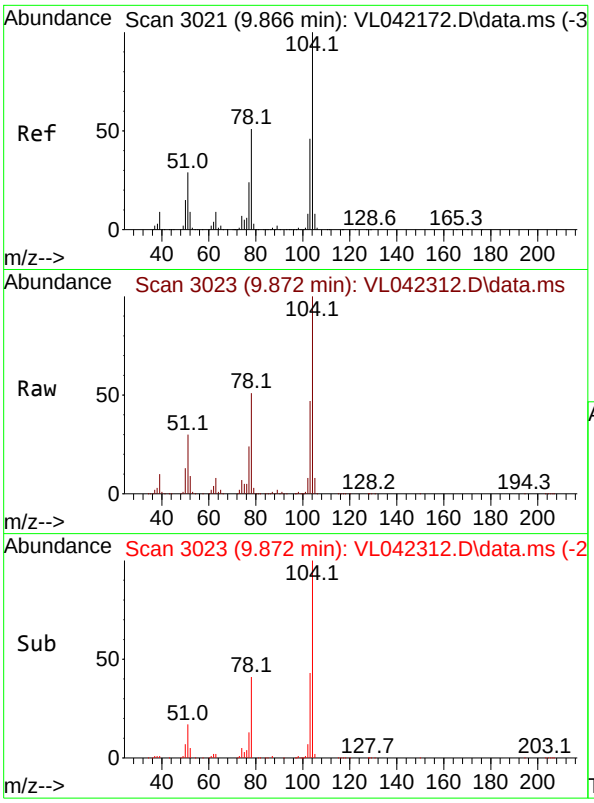


#60
o-Xylene
Concen: 11.567 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 660065

Ion	Ratio	Lower	Upper
91	100		
106	44.0	20.8	62.5





#61
Styrene
Concen: 10.320 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:104 Resp: 29135

Ion	Ratio	Lower	Upper
104	100		
78	50.6	41.8	62.6
103	46.3	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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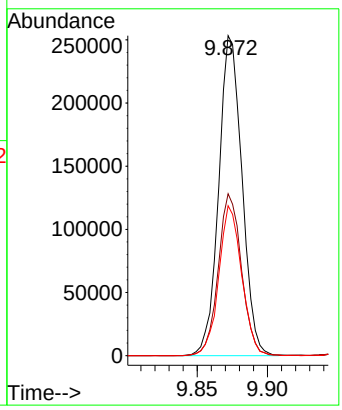
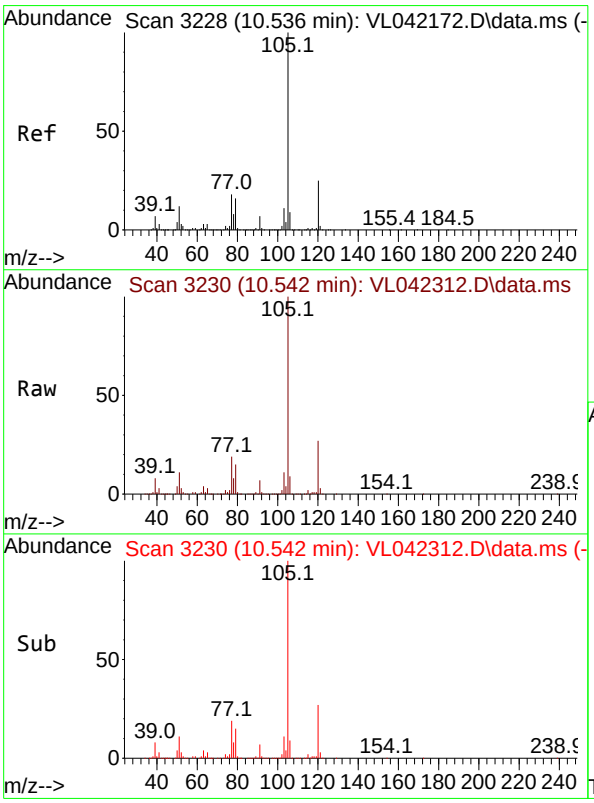
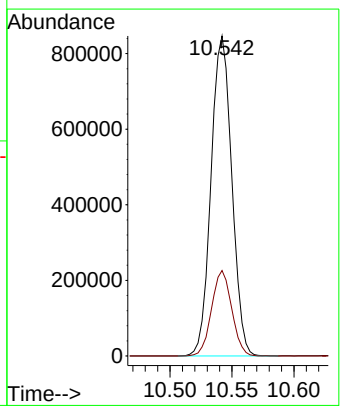


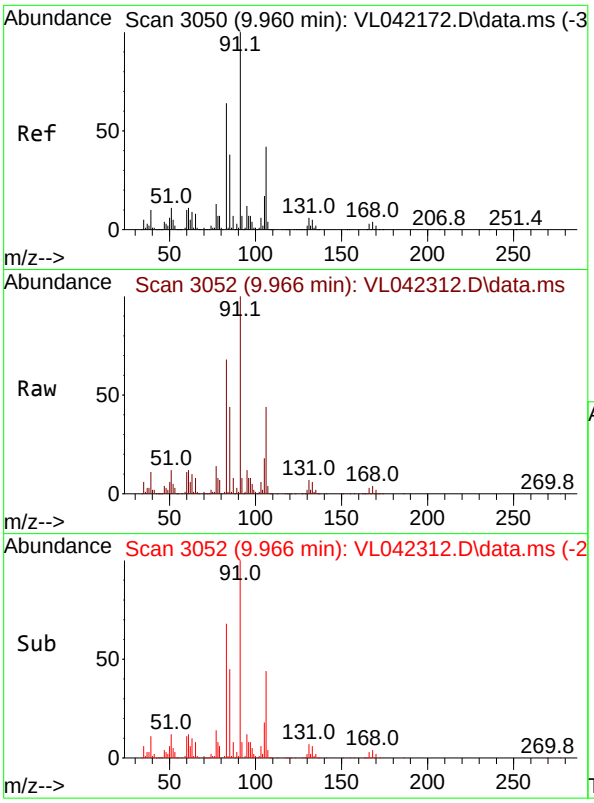


#62
Isopropylbenzene
Concen: 11.582 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 988337

Ion	Ratio	Lower	Upper
105	100		
120	25.9	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 12.873 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 83 Resp: 44634

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.0	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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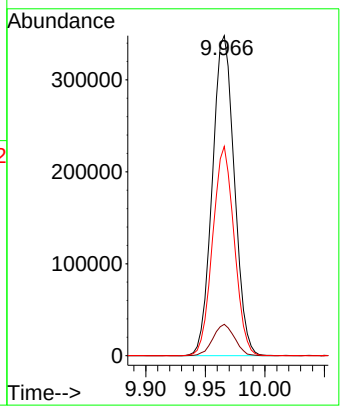
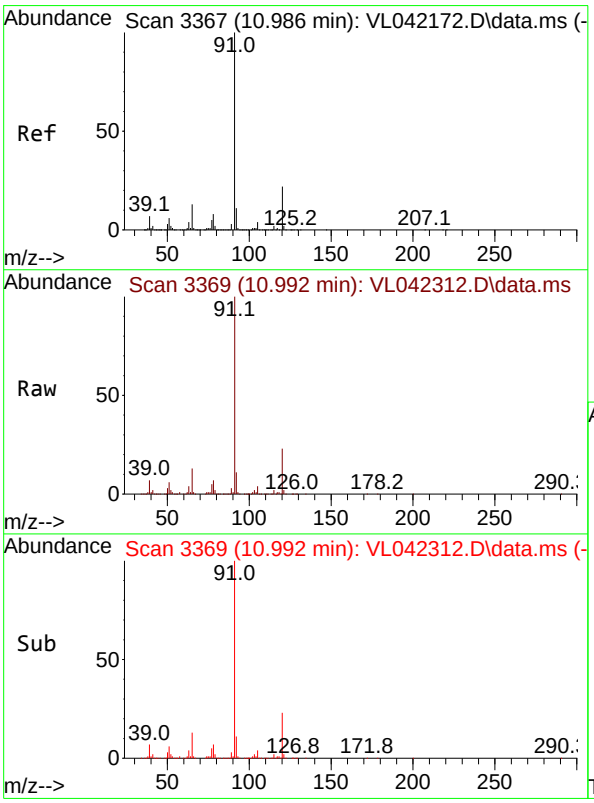
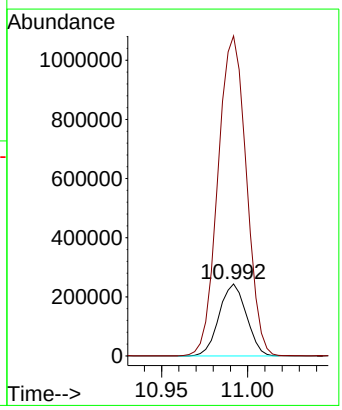


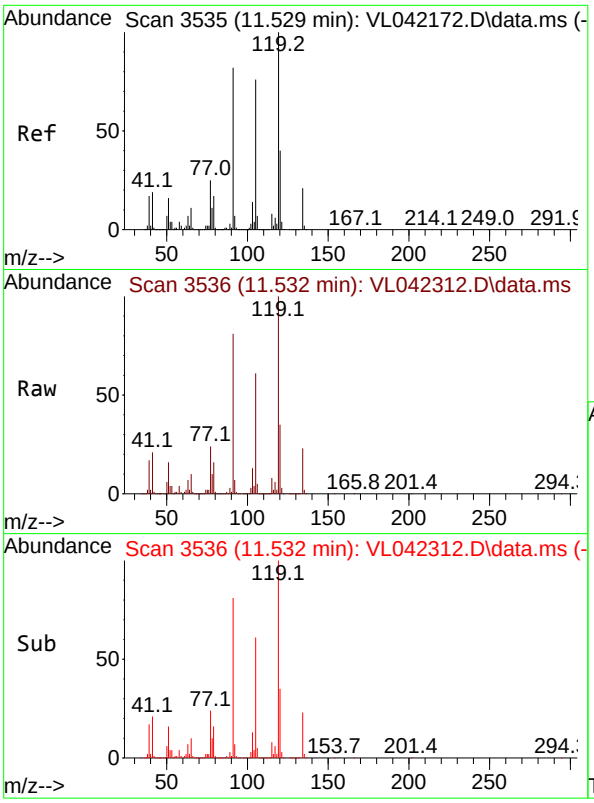


#64
n-propylbenzene
Concen: 12.231 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:120 Resp: 268681

Ion	Ratio	Lower	Upper
120	100		
91	463.6	376.9	565.3

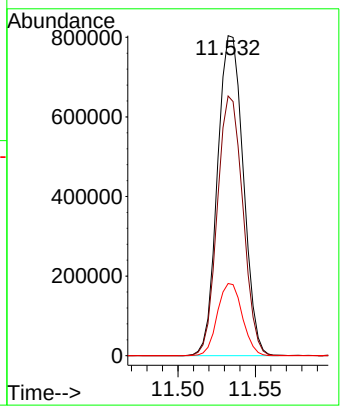




#65
tert-Butylbenzene
Concen: 11.820 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:119 Resp: 93285

Ion	Ratio	Lower	Upper
119	100		
91	80.3	66.0	99.0
134	21.7	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
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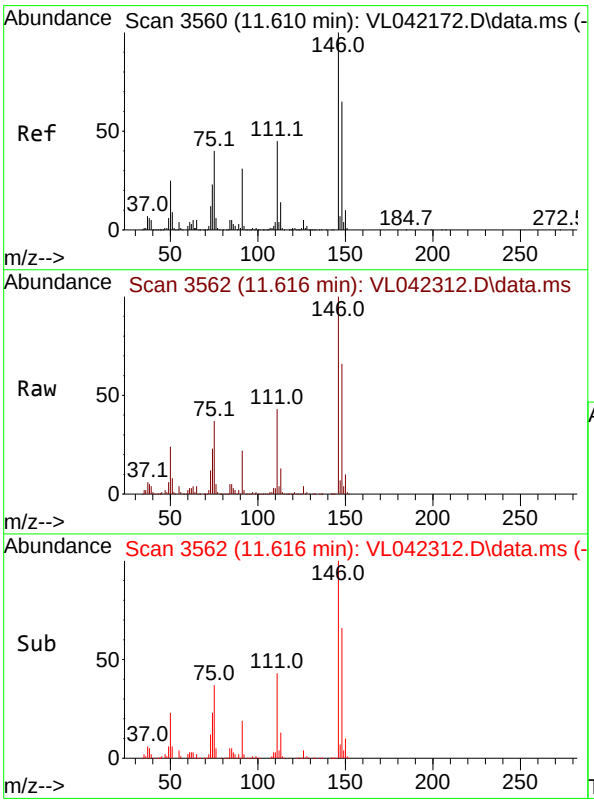
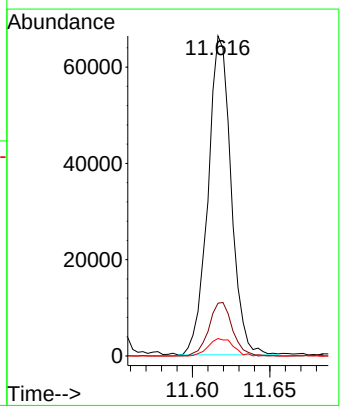
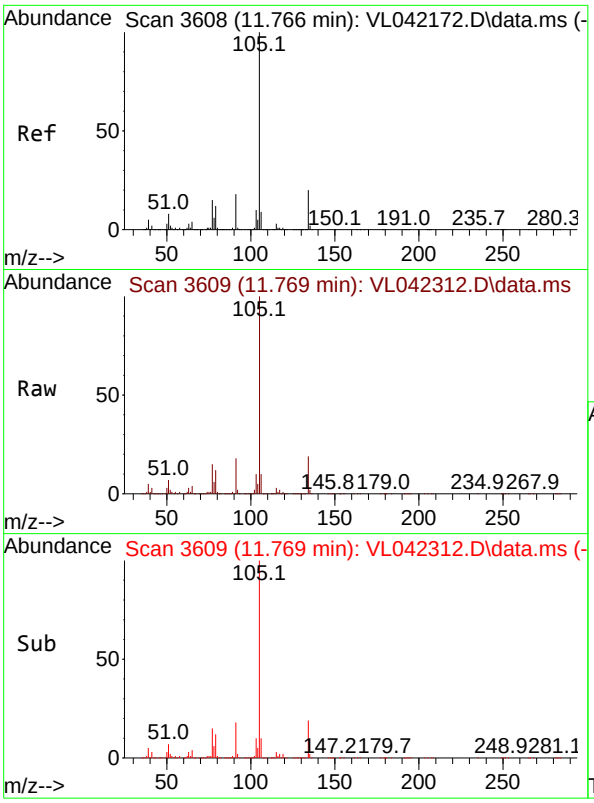


#66
Benzyl Chloride
Concen: 8.201 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 68675

Ion	Ratio	Lower	Upper
91	100		
126	16.9	13.8	20.6
128	6.2	4.5	6.7

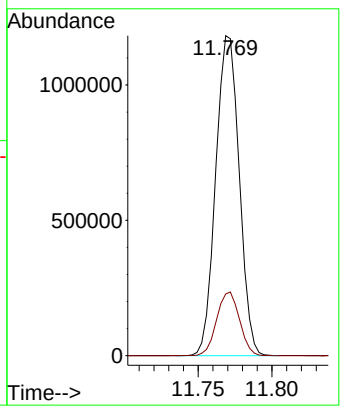




#67
sec-Butylbenzene
Concen: 11.942 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 131004

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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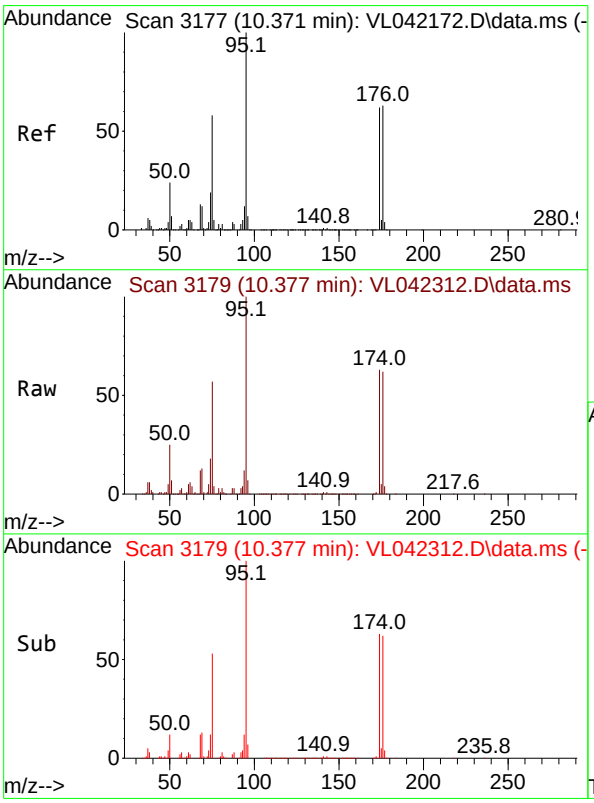
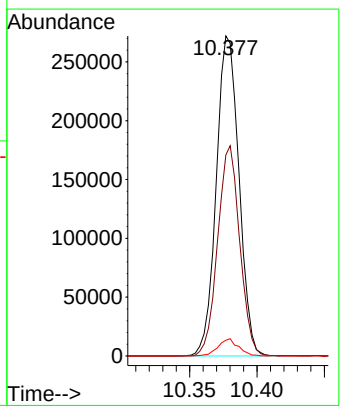
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

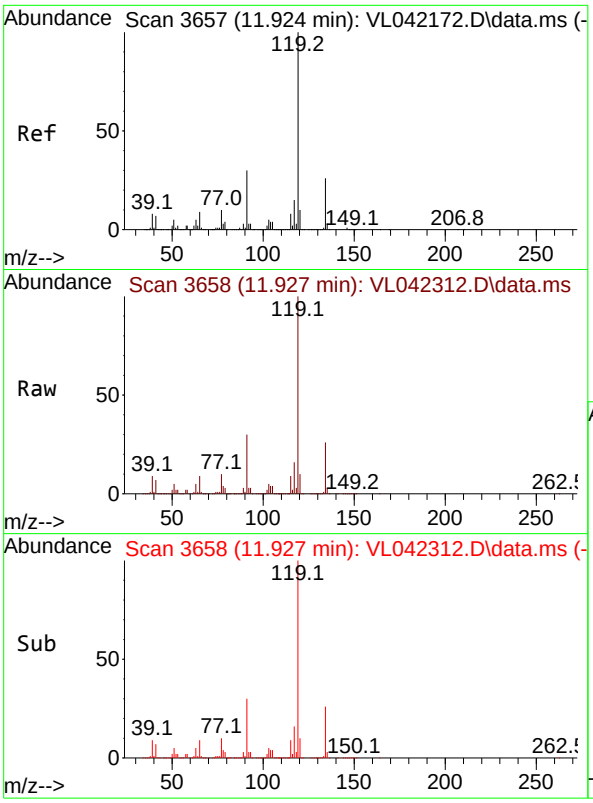


#68
1-Bromo-4-Fluorobenzene
Concen: 9.655 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 95 Resp: 318204

Ion	Ratio	Lower	Upper
95	100		
174	64.0	50.6	76.0
175	4.9	3.8	5.6

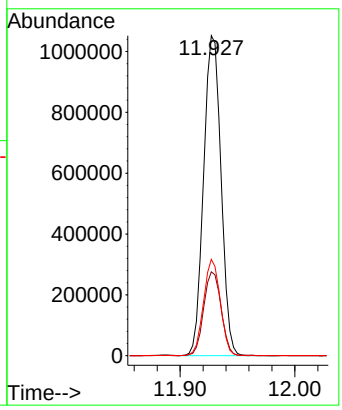




#69
p-Isopropyltoluene
Concen: 11.720 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:119 Resp: 110704

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	29.0	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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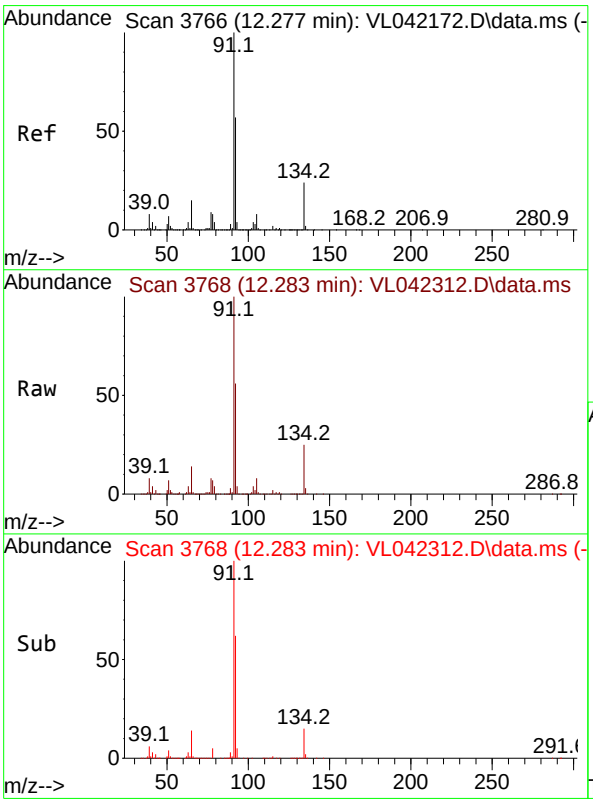
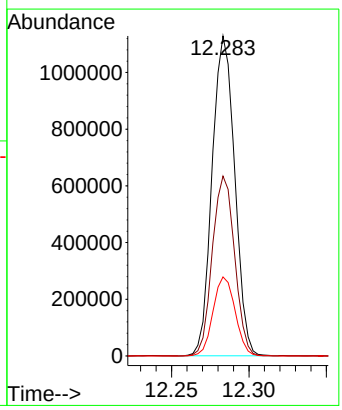
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

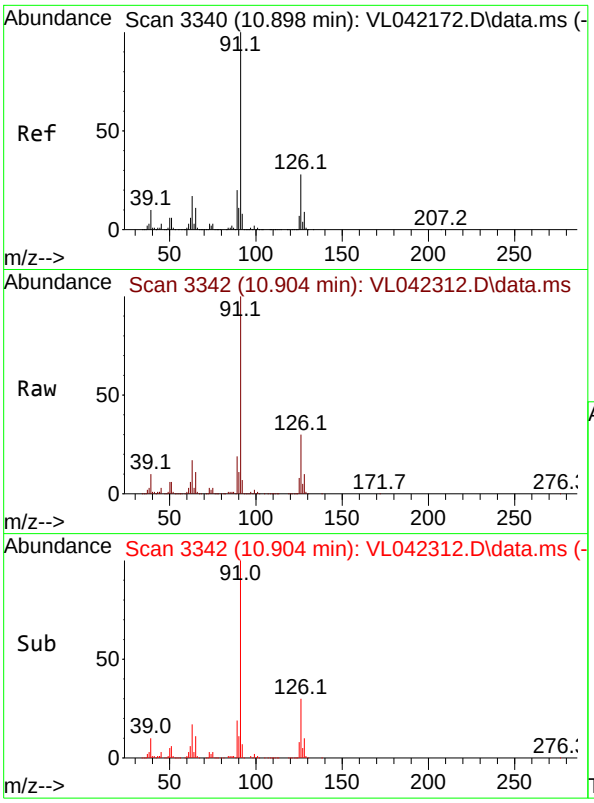


#70
n-Butylbenzene
Concen: 11.848 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 1144571

Ion	Ratio	Lower	Upper
91	100		
92	55.6	44.9	67.3
134	24.2	19.2	28.8

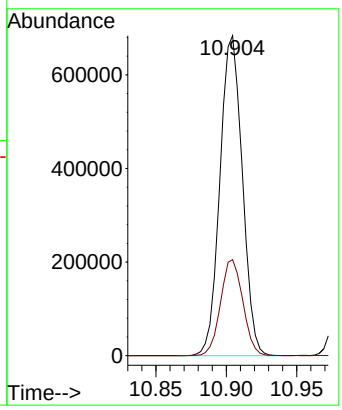




#71
2-Chlorotoluene
Concen: 11.423 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 75656

Ion	Ratio	Lower	Upper
91	100		
126	29.9	11.6	46.4



Instrument :
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ClientSampleId :
VSTDCCC010

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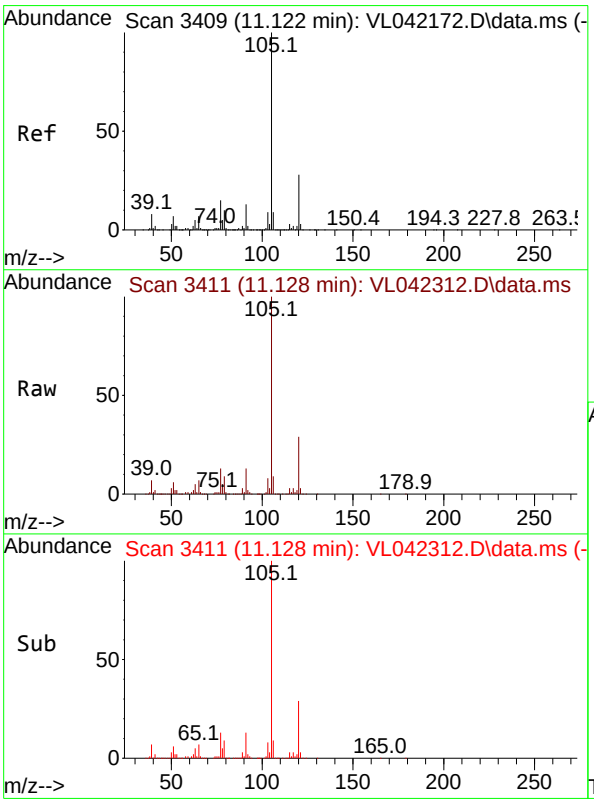
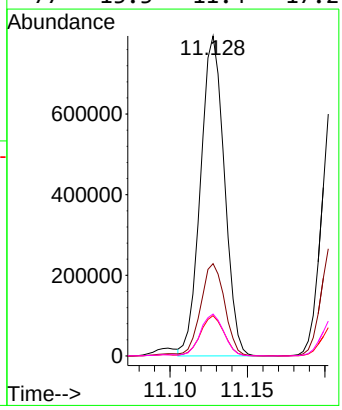
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

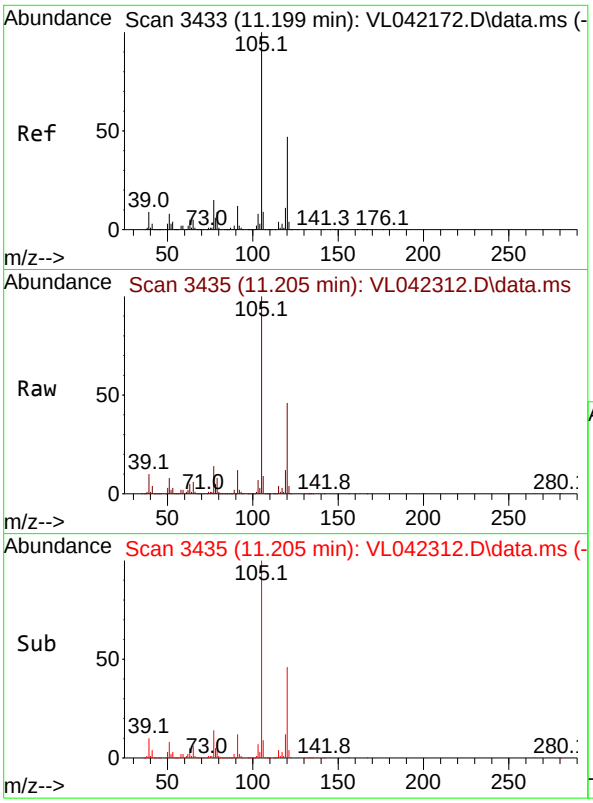


#72
4-Ethyltoluene
Concen: 11.932 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 847821

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2

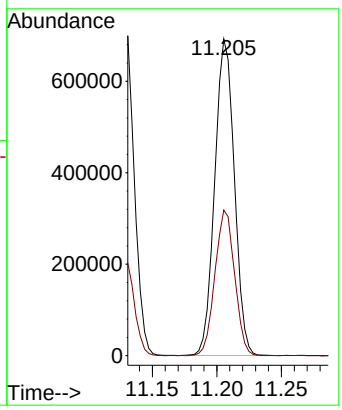




#73
1,3,5-Trimethylbenzene
Concen: 11.762 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 72988

Ion	Ratio	Lower	Upper
105	100		
120	46.0	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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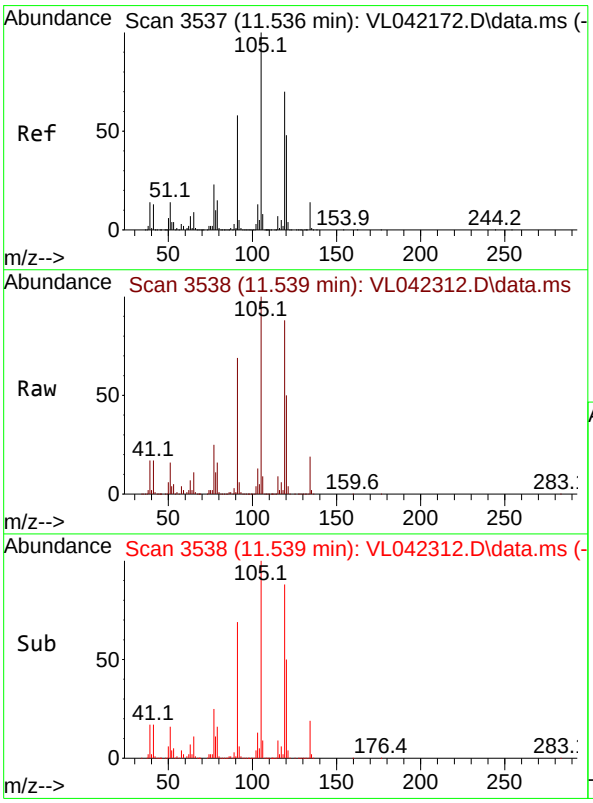
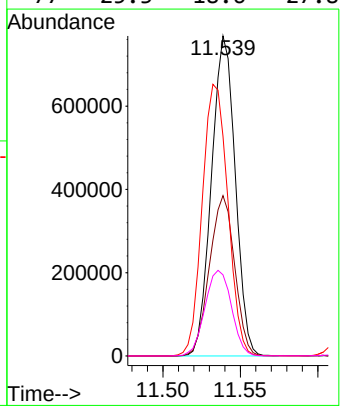
Supervised By :Mahesh Dadoda 04/17/2025

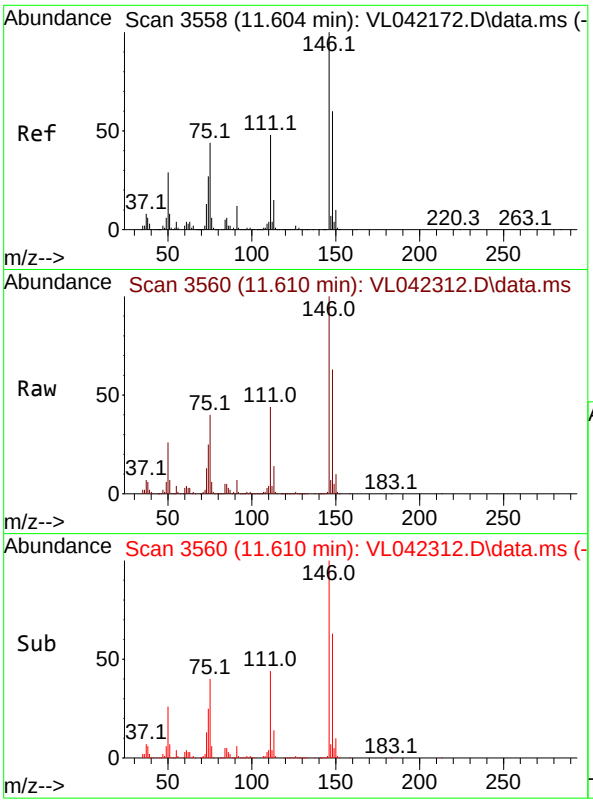


#74
1,2,4-Trimethylbenzene
Concen: 11.463 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 819490

Ion	Ratio	Lower	Upper
105	100		
120	50.1	38.6	58.0
91	68.5	46.2	69.2
77	25.3	18.6	27.8

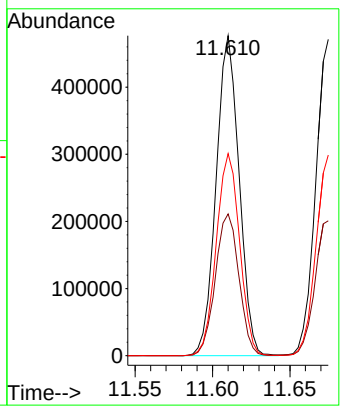




#75
1,3-Dichlorobenzene
Concen: 12.562 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:146 Resp: 49254

Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	64.0	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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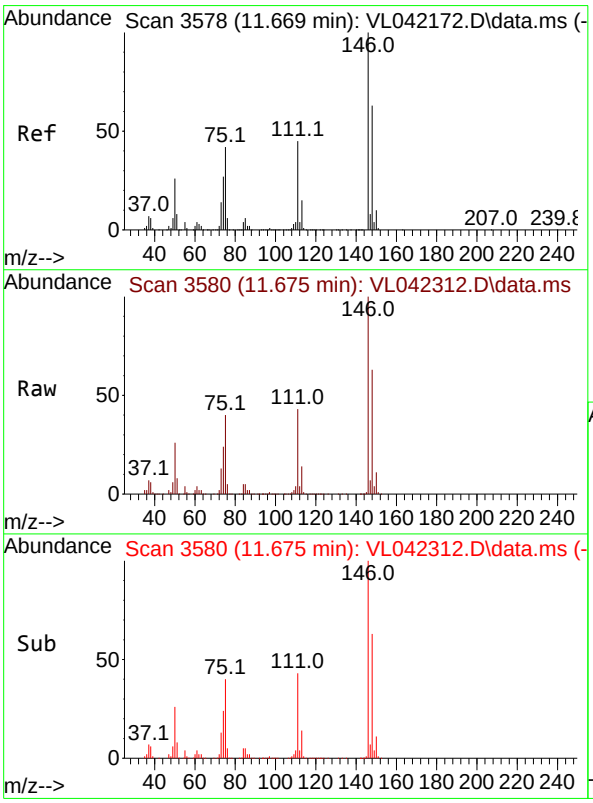
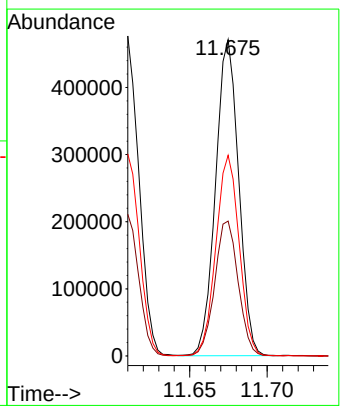
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

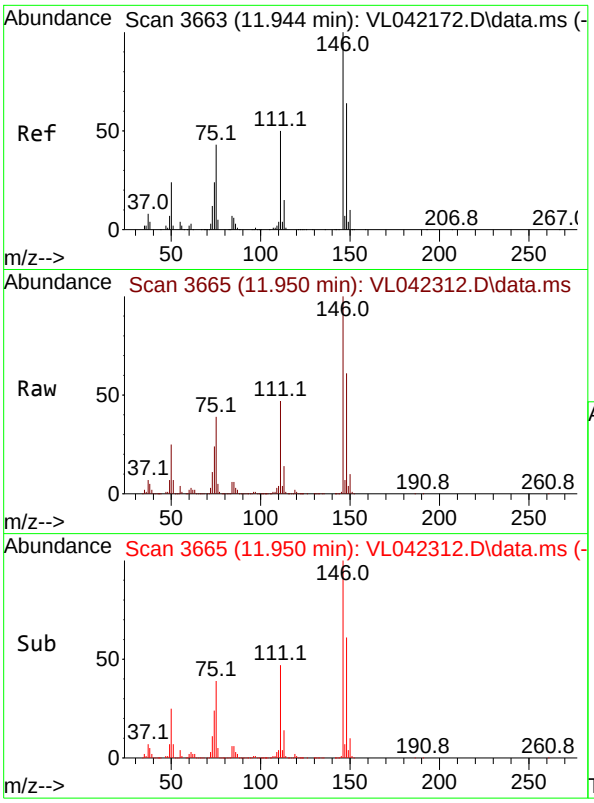


#76
1,4-Dichlorobenzene
Concen: 12.522 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:146 Resp: 488636

Ion	Ratio	Lower	Upper
146	100		
111	43.7	23.0	69.0
148	64.0	31.9	95.7

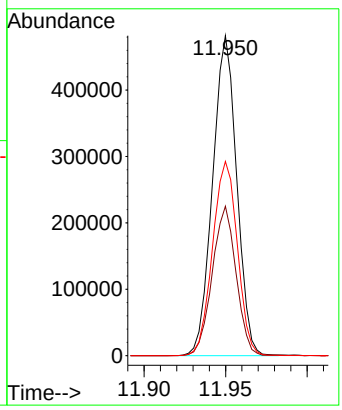




#77
1,2-Dichlorobenzene
Concen: 12.959 ppbv
RT: 11.950 min Scan# 3(
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:146 Resp: 49473(

Ion	Ratio	Lower	Upper
146	100		
111	46.4	24.8	74.3
148	62.7	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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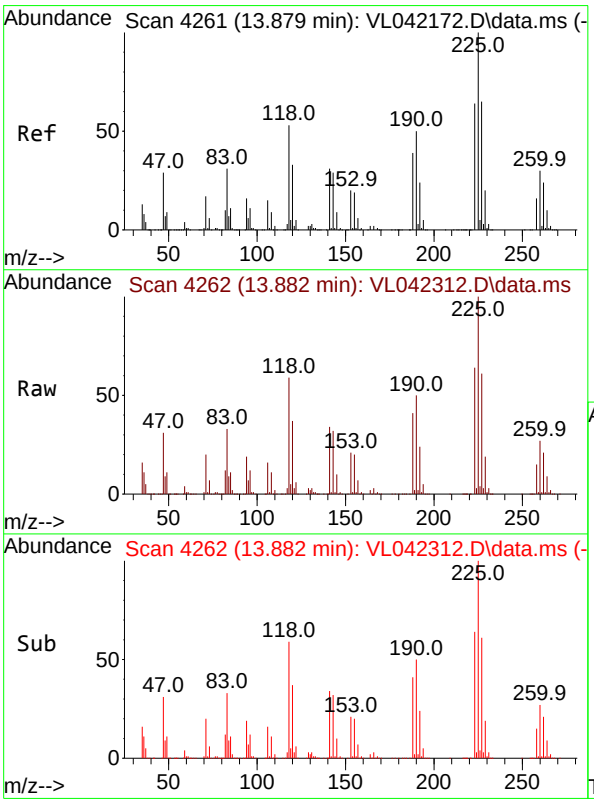
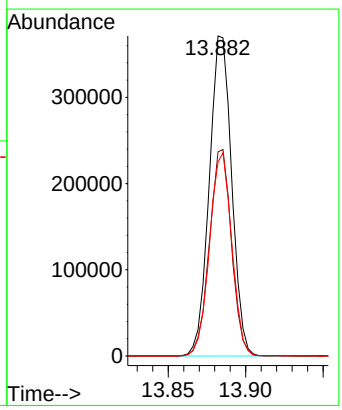
Supervised By :Mahesh Dadoda 04/17/2025

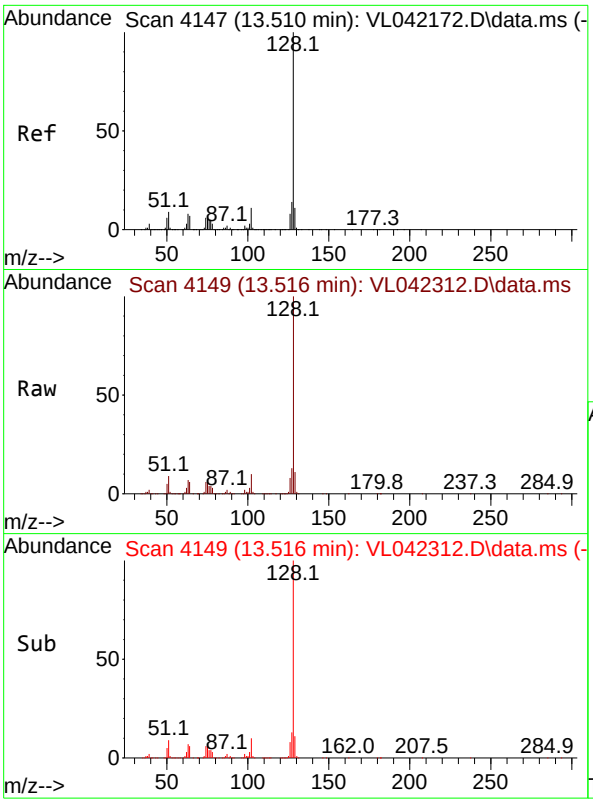


#78
Hexachloro-1,3-Butadiene
Concen: 9.599 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:225 Resp: 373025

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	62.8	51.2	76.8

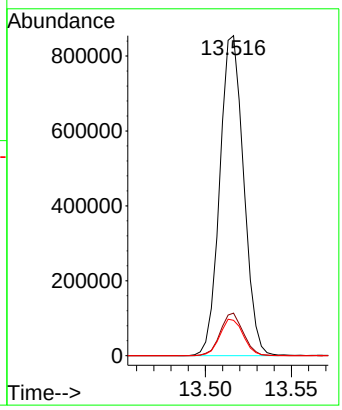




#79
Naphthalene
Concen: 10.550 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:128 Resp: 82494

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.1	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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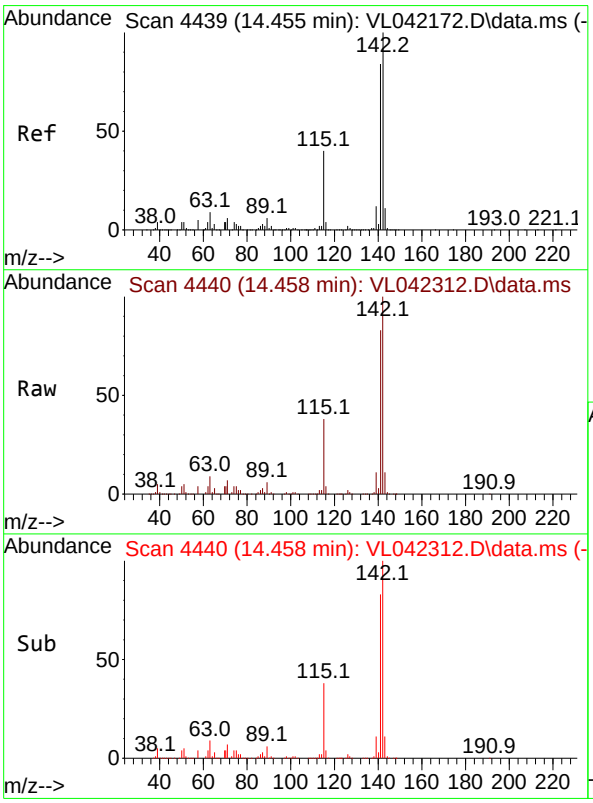
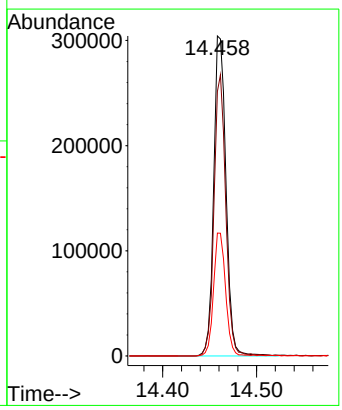
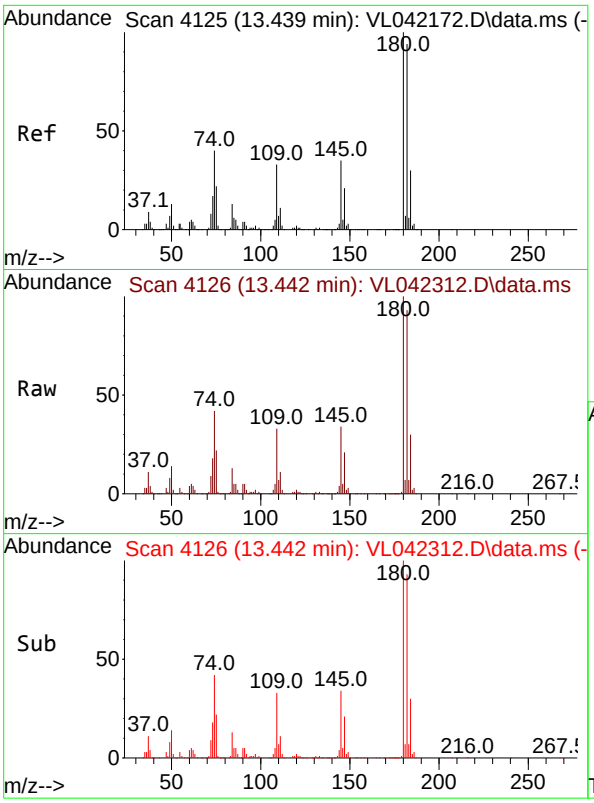


#80
Naphthalene,2-methyl-
Concen: 7.212 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:142 Resp: 276556

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.3	99.5
115	38.0	31.6	47.4

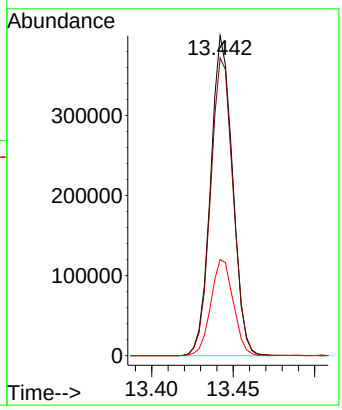




#81
1,2,4-Trichlorobenzene
Concen: 10.389 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:180 Resp: 37471

Ion	Ratio	Lower	Upper
180	100		
182	95.6	75.1	112.7
184	30.8	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	1.476	1.441	2.4	101	0.00
3		Chlorodifluoromethane	1.508	1.568	-4.0	106	0.00
4		Chloromethane	0.603	0.609	-1.0	104	0.00
5	T	Vinyl Chloride	0.639	0.557	12.8	100	0.00
6	T	Bromomethane	0.273	0.234	14.3	90	0.00
7		Chloroethane	0.242	0.228	5.8	99	0.00
8	T	Dichlorotetrafluoroethane	1.257	1.222	2.8	99	0.00
9	T	Propene	0.691	0.641	7.2	95	0.00
10	T	Heptane	1.839	1.822	0.9	100	0.00
11	T	Trichlorofluoromethane	1.437	1.362	5.2	100	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.181	1.053	10.8	92	0.00
13		Ethanol	0.065	0.032#	50.8#	110	0.00
14	T	Bromoethene	0.452	0.399	11.7	94	0.00
15	T	Acetone	1.399	1.261	9.9	111	0.00
16	T	1,3-Butadiene	0.683	0.611	10.5	105	0.00
17		tert-Butyl alcohol	1.742	1.391	20.1	84	0.00
18	T	1,1-Dichloroethene	0.552	0.487	11.8	95	0.00
19	T	Isopropyl Alcohol	0.789	0.682	13.6	95	0.00
20	T	Methylene Chloride	0.521	0.419	19.6	94	0.00
21	T	Allyl Chloride	0.986	0.887	10.0	97	0.00
22	T	trans-1,2-Dichloroethene	0.638	0.555	13.0	92	0.00
23	T	Vinyl Acetate	0.605	0.518	14.4	102	0.00
24	T	1,1-Dichloroethane	1.183	1.132	4.3	99	0.00
25	T	Ethyl Acetate	3.630	3.696	-1.8	105	0.00
26	T	Hexane	1.402	1.398	0.3	103	0.00
27	T	Carbon Disulfide	1.503	1.325	11.8	91	0.00
28	T	Methyl tert-Butyl Ether	0.873	0.703	19.5	83	0.00
29	T	Chloroform	2.052	2.143	-4.4	109	0.00
30	T	Cyclohexane	1.217	1.108	9.0	94	0.00
31	T	cis-1,2-Dichloroethene	1.423	1.346	5.4	96	0.00
32	T	1,1,1-Trichloroethane	2.349	2.070	11.9	99	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	85	0.00
34	T	2-Butanone	0.725	0.821	-13.2	105	0.00
35	T	Carbon Tetrachloride	0.781	0.841	-7.7	102	0.00
36	T	Benzene	0.991	1.092	-10.2	99	0.00
37	T	1,2-Dichloroethane	0.568	0.630	-10.9	100	0.00
38	T	Trichloroethene	0.414	0.438	-5.8	100	0.00
39	T	1,2-Dichloropropane	0.361	0.400	-10.8	101	0.00
40	T	1,4-Dioxane	0.192	0.178	7.3	89	0.00
41	T	Tetrahydrofuran	0.418	0.467	-11.7	100	0.00
42	T	Bromodichloromethane	0.782	0.891	-13.9	99	0.00
43		Methyl Methacrylate	0.420	0.398	5.2	84	0.01
44	T	2,2,4-Trimethylpentane	1.675	1.882	-12.4	100	0.00
45	T	t-1,3-Dichloropropene	0.450	0.381	15.3	74	0.02
46	T	cis-1,3-Dichloropropene	0.552	0.509	7.8	79	0.00
47	T	1,1,2-Trichloroethane	0.382	0.438	-14.7	102	0.00
48	T	Dibromochloromethane	0.647	0.718	-11.0	96	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.581	0.635	-9.3	93	0.00
50	T	4-Methyl-2-Pentanone	1.149	1.147	0.2	95	0.00
51	T	2-Hexanone	0.944	0.914	3.2	92	0.00
52	T	Tetrachloroethene	0.393	0.369	6.1	91	0.00
53	T	Toluene	1.175	1.181	-0.5	89	0.00
54	T	1,2-Dibromoethane	0.532	0.576	-8.3	97	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	77	0.00
56		1,1,1,2-Tetrachloroethane	0.550	0.676	-22.9	102	0.00
57	T	Chlorobenzene	0.949	1.148	-21.0	101	0.00
58	T	Ethyl Benzene	1.776	1.942	-9.3	90	0.00
59	T	m/p-Xylene	1.418	1.649	-16.3	96	0.00
60	T	o-Xylene	1.422	1.645	-15.7	96	0.00
61	T	Styrene	0.703	0.726	-3.3	82	0.00
62		Isopropylbenzene	2.126	2.463	-15.9	97	0.00
63	T	1,1,2,2-Tetrachloroethane	0.864	1.112	-28.7	108	0.00
64		n-propylbenzene	0.547	0.669	-22.3	104	0.00
65		tert-Butylbenzene	1.966	2.324	-18.2	103	0.00
66	T	Benzyl Chloride	0.209	0.171	18.2	65	0.00
67		sec-Butylbenzene	2.733	3.264	-19.4	105	0.00
68	S	1-Bromo-4-Fluorobenzene	0.821	0.793	3.4	75	0.00
69		p-Isopropyltoluene	2.354	2.758	-17.2	103	0.00
70		n-Butylbenzene	2.407	2.852	-18.5	103	0.00
71		2-Chlorotoluene	1.650	1.885	-14.2	95	0.00
72	T	4-Ethyltoluene	1.770	2.112	-19.3	100	0.00
73	T	1,3,5-Trimethylbenzene	1.546	1.819	-17.7	101	0.00
74	T	1,2,4-Trimethylbenzene	1.781	2.042	-14.7	104	0.00
75	T	1,3-Dichlorobenzene	0.977	1.227	-25.6	107	0.00
76	T	1,4-Dichlorobenzene	0.972	1.218	-25.3	106	0.00
77	T	1,2-Dichlorobenzene	0.951	1.233	-29.7	112	0.00
78	T	Hexachloro-1,3-Butadiene	0.968	0.929	4.0	90	0.00
79	T	Naphthalene	1.948	2.055	-5.5	88	0.00
80	T	Naphthalene,2-methyl-	0.955	0.689	27.9	54	0.00
81	T	1,2,4-Trichlorobenzene	0.899	0.934	-3.9	84	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/15/2025 11:30

Lab File ID: VL042326.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.476	1.245		-15.65	30
Ethanol	0.065	0.026		-60	30
Chloromethane	0.603	0.520		-13.77	30
Vinyl Chloride	0.639	0.483		-24.41	30
Bromomethane	0.273	0.211		-22.71	30
Chloroethane	0.242	0.187		-22.73	30
Tetrahydrofuran	0.418	0.397		-5.02	30
Trichlorofluoromethane	1.437	1.175		-18.23	30
1,1,2-Trichlorotrifluoroethane	1.181	0.912		-22.78	30
Dichlorotetrafluoroethane	1.257	1.062		-15.51	30
Bromoethene	0.452	0.346		-23.45	30
tert-Butyl alcohol	1.742	1.218		-30.08	30
Heptane	1.839	1.607		-12.62	30
Isopropyl Alcohol	0.789	0.606		-23.19	30
1,1-Dichloroethene	0.552	0.420		-23.91	30
Acetone	1.399	1.065		-23.87	30
Carbon Disulfide	1.503	1.135		-24.48	30
Methyl tert-Butyl Ether	0.873	0.675		-22.68	30
Methylene Chloride	0.521	0.350		-32.82	30
trans-1,2-Dichloroethene	0.638	0.474		-25.7	30
1,1-Dichloroethane	1.183	0.983		-16.91	30
Cyclohexane	1.217	1.006		-17.34	30
2-Butanone	0.725	0.694		-4.28	30
Carbon Tetrachloride	0.781	0.695		-11.01	30
cis-1,2-Dichloroethene	1.423	1.208		-15.11	30
Chloroform	2.052	1.824		-11.11	30
1,1,1-Trichloroethane	2.349	1.810		-22.95	30
2,2,4-Trimethylpentane	1.675	1.593		-4.9	30
Benzene	0.991	0.928		-6.36	30
1,2-Dichloroethane	0.568	0.524		-7.75	30
Trichloroethene	0.414	0.377		-8.94	30
1,2-Dichloropropane	0.361	0.332		-8.03	30
Bromodichloromethane	0.782	0.729		-6.78	30
4-Methyl-2-Pentanone	1.149	0.969		-15.67	30
Toluene	1.175	1.010		-14.04	30
t-1,3-Dichloropropene	0.450	0.330		-26.67	30
cis-1,3-Dichloropropene	0.552	0.447		-19.02	30
1,1,2-Trichloroethane	0.382	0.357		-6.55	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/15/2025 11:30

Lab File ID: VL042326.D Init. Calib. Date(s): 03/27/2025 03/27/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 08:26 11:36

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dibromochloromethane	0.647	0.596		-7.88	30
1,2-Dibromoethane	0.532	0.481		-9.59	30
Tetrachloroethene	0.393	0.316		-19.59	30
Chlorobenzene	0.949	0.912		-3.9	30
Ethyl Benzene	1.776	1.555		-12.44	30
m/p-Xylene	1.418	1.292		-8.89	30
o-Xylene	1.422	1.285		-9.63	30
Styrene	0.703	0.596		-15.22	30
Bromoform	0.581	0.522		-10.15	30
1,1,2,2-Tetrachloroethane	0.864	0.835		-3.36	30
2-Chlorotoluene	1.650	1.457		-11.7	30
1,3,5-Trimethylbenzene	1.546	1.355		-12.35	30
1,2,4-Trimethylbenzene	1.781	1.515		-14.94	30
1,3-Dichlorobenzene	0.977	0.927		-5.12	30
1,4-Dichlorobenzene	0.972	0.924		-4.94	30
1,2-Dichlorobenzene	0.951	0.923		-2.94	30
1,2,4-Trichlorobenzene	0.899	0.819		-8.9	30
Hexachloro-1,3-Butadiene	0.968	0.758		-21.69	30
1,3-Butadiene	0.683	0.528		-22.69	30
Naphthalene	1.948	1.849		-5.08	30
4-Ethyltoluene	1.770	1.598		-9.72	30
1-Bromo-4-Fluorobenzene	0.821	0.792		-3.53	30
Hexane	1.402	1.241		-11.48	30
Allyl Chloride	0.986	0.772		-21.7	30
1,4-Dioxane	191.626	157.635		-17.74	30
Methyl Methacrylate	0.420	0.340		-19.05	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.806	49	172263	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.988	114	457227	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.911	117	411493	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.403	95	325960	9.646	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	214541	8.435	ppbv	99
3) Chlorodifluoromethane	1.483	51	235250	9.054	ppbv	98
4) Chloromethane	1.541	50	89653	8.625	ppbv	98
5) Vinyl Chloride	1.589	62	83204	7.554	ppbv	96
6) Bromomethane	1.677	94	36297	7.705	ppbv	99
7) Chloroethane	1.716	64	32145	7.704	ppbv	97
8) Dichlorotetrafluoroethane	1.564	85	182884	8.443	ppbv	94
9) Propene	1.492	41	101034	8.483	ppbv	98
10) Heptane	5.020	43	276748	8.736	ppbv	98
11) Trichlorofluoromethane	1.887	101	202387	8.178	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.153	101	157030	7.719	ppbv	98
13) Ethanol	1.732	45	4440	3.944	ppbv	93
14) Bromoethene	1.793	108	59588	7.646	ppbv	99
15) Acetone	1.845	43	183439	7.614	ppbv	96
16) 1,3-Butadiene	1.619	39	90954	7.731	ppbv	100
17) tert-Butyl alcohol	2.052	59	209737	6.990	ppbv	100
18) 1,1-Dichloroethene	2.046	96	72322	7.605	ppbv	96
19) Isopropyl Alcohol	1.897	45	104424	7.682	ppbv	98
20) Methylene Chloride	2.075	84	60337	6.725	ppbv	90
21) Allyl Chloride	2.111	41	132956	7.825	ppbv	98
22) trans-1,2-Dichloroethene	2.357	96	81572	7.422	ppbv	96
23) Vinyl Acetate	2.480	43	72160	6.920	ppbv	97
24) 1,1-Dichloroethane	2.425	63	169411	8.315	ppbv	100
25) Ethyl Acetate	2.855	43	564611	9.030	ppbv	99
26) Hexane	2.845	57	213782	8.851	ppbv	98
27) Carbon Disulfide	2.166	76	195452	7.547	ppbv	97
28) Methyl tert-Butyl Ether	2.457	73	116301	7.734	ppbv	96
29) Chloroform	2.868	83	314164	8.888	ppbv	100
30) Cyclohexane	3.884	84	173360	8.266	ppbv	98
31) cis-1,2-Dichloroethene	2.739	61	208160	8.490	ppbv	96
32) 1,1,1-Trichloroethane	3.392	97	311758	7.704	ppbv	98
34) 2-Butanone	2.577	43	317117	9.565	ppbv	97
35) Carbon Tetrachloride	3.790	117	317942	8.902	ppbv	99
36) Benzene	3.684	78	424254	9.360	ppbv	94
37) 1,2-Dichloroethane	3.243	62	239556	9.231	ppbv	100
38) Trichloroethene	4.583	130	172146	9.102	ppbv	96
39) 1,2-Dichloropropane	4.350	63	151707	9.190	ppbv	96
40) 1,4-Dioxane	4.622	88	72075	8.226	ppbv #	98
41) Tetrahydrofuran	3.075	42	181471	9.505	ppbv	95
42) Bromodichloromethane	4.525	83	333167	9.313	ppbv	97
43) Methyl Methacrylate	4.923	69	155399	8.098	ppbv	96
44) 2,2,4-Trimethylpentane	4.677	57	728571	9.511	ppbv	99
45) t-1,3-Dichloropropene	6.461	75	151063	7.338	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.648	75	204339	8.097	ppbv		98
47) 1,1,2-Trichloroethane	6.626	97	163132	9.348	ppbv		97
48) Dibromochloromethane	7.425	129	272592	9.217	ppbv		99
49) Bromoform	9.513	173	238880	8.997	ppbv		100
50) 4-Methyl-2-Pentanone	5.800	43	442851	8.428	ppbv		97
51) 2-Hexanone	7.474	43	353471	8.192	ppbv	#	97
52) Tetrachloroethene	8.260	164	144481	8.037	ppbv		98
53) Toluene	6.975	91	461854	8.595	ppbv		100
54) 1,2-Dibromoethane	7.687	107	220075	9.047	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.956	131	214175	9.455	ppbv		99
57) Chlorobenzene	8.953	112	375357	9.617	ppbv		97
58) Ethyl Benzene	9.383	91	639857	8.754	ppbv		99
59) m/p-Xylene	9.581	91	1063509m	18.222	ppbv		
60) o-Xylene	9.992	91	528896	9.040	ppbv		95
61) Styrene	9.898	104	245300	8.474	ppbv		97
62) Isopropylbenzene	10.565	105	794408	9.079	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.992	83	343786	9.671	ppbv		100
64) n-propylbenzene	11.015	120	212879	9.452	ppbv		95
65) tert-Butylbenzene	11.555	119	721078	8.911	ppbv		97
66) Benzyl Chloride	11.639	91	54427	6.339	ppbv		98
67) sec-Butylbenzene	11.791	105	1026079	9.123	ppbv		99
69) p-Isopropyltoluene	11.947	119	865385	8.935	ppbv		99
70) n-Butylbenzene	12.303	91	884265	8.928	ppbv		99
71) 2-Chlorotoluene	10.927	91	599592	8.830	ppbv		98
72) 4-Ethyltoluene	11.147	105	657765	9.029	ppbv		99
73) 1,3,5-Trimethylbenzene	11.228	105	557593	8.764	ppbv		99
74) 1,2,4-Trimethylbenzene	11.558	105	623563	8.507	ppbv	#	86
75) 1,3-Dichlorobenzene	11.630	146	381572	9.492	ppbv		98
76) 1,4-Dichlorobenzene	11.694	146	380035	9.499	ppbv		98
77) 1,2-Dichlorobenzene	11.969	146	379896	9.706	ppbv		97
78) Hexachloro-1,3-Butadiene	13.902	225	311900	7.828	ppbv		99
79) Naphthalene	13.533	128	760876	9.490	ppbv		99
80) Naphthalene,2-methyl-	14.478	142	365398	9.294	ppbv		98
81) 1,2,4-Trichlorobenzene	13.461	180	337032	9.114	ppbv		99

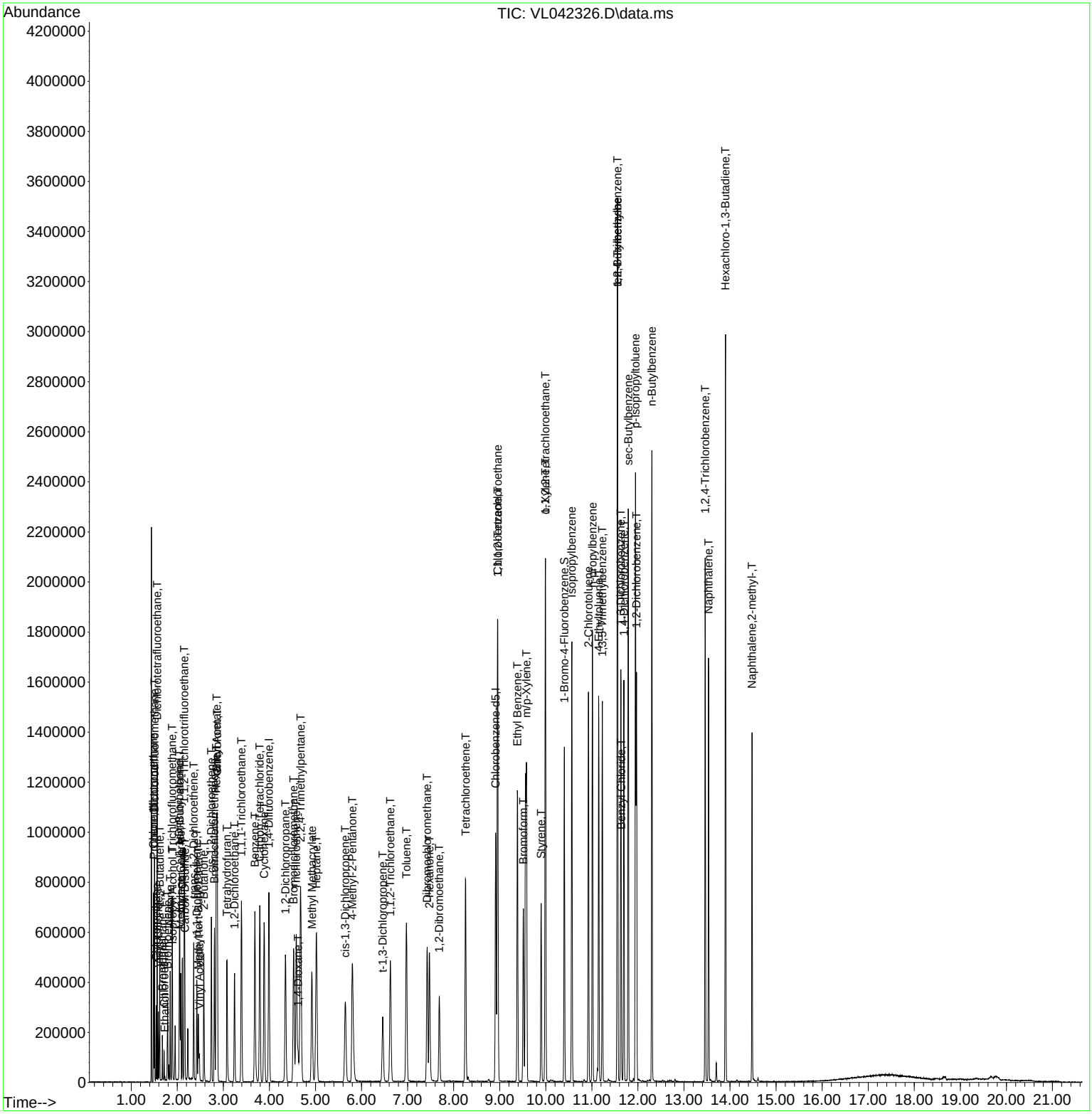
(#) = qualifier out of range (m) = manual integration (+) = signals summed

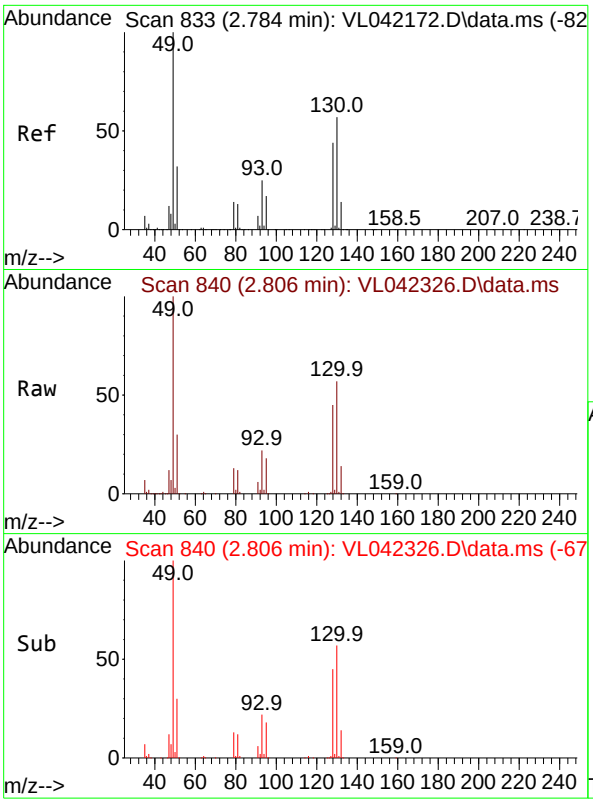
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

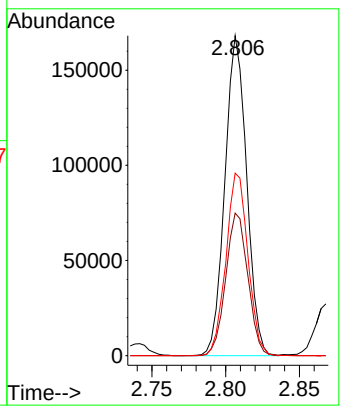




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.806 min Scan# 84
Delta R.T. 0.022 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 49 Resp: 17226

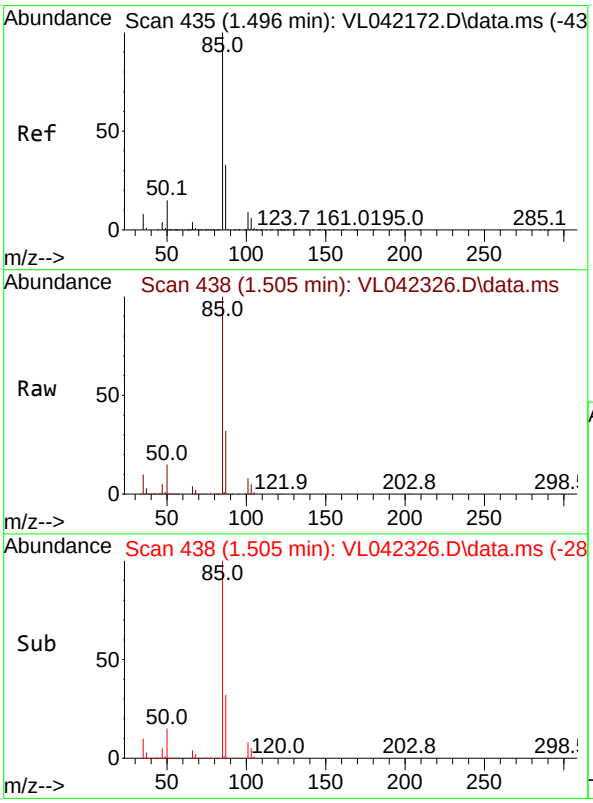
Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.9	68.5
130	57.8	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

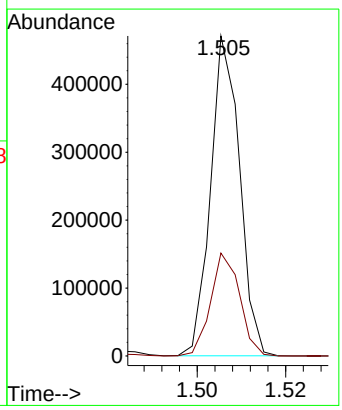
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

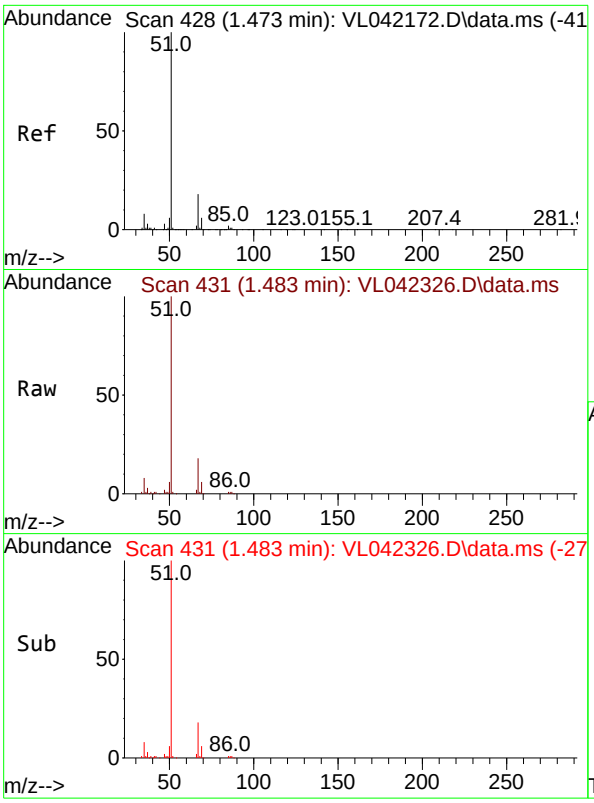


#2
Dichlorodifluoromethane
Concen: 8.435 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 85 Resp: 214541

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1

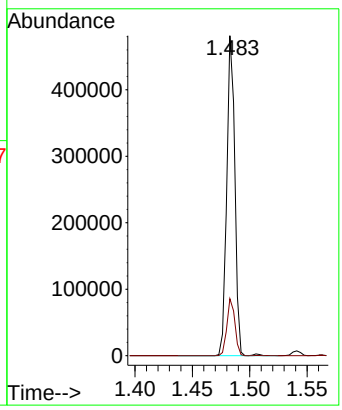




#3
Chlorodifluoromethane
Concen: 9.054 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 51 Resp: 23525

Ion	Ratio	Lower	Upper
51	100		
67	17.7	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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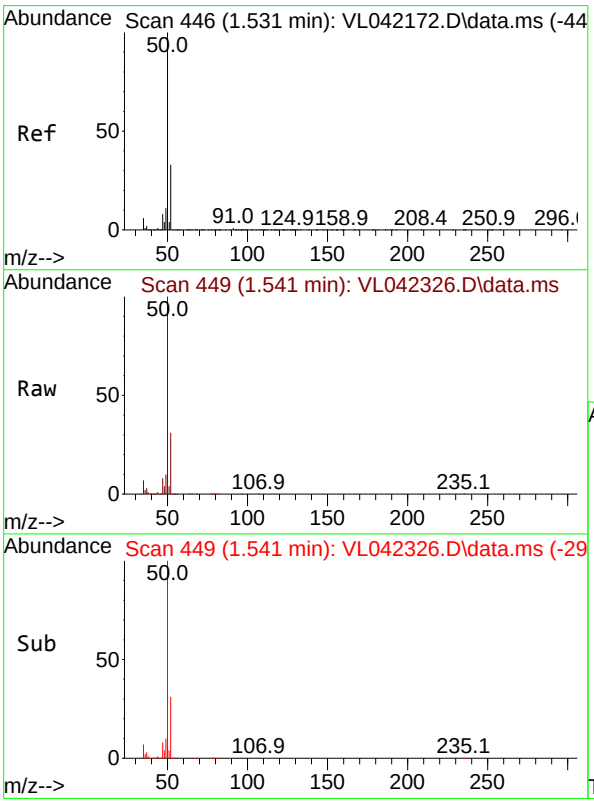
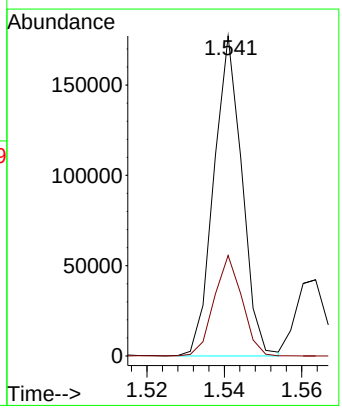
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

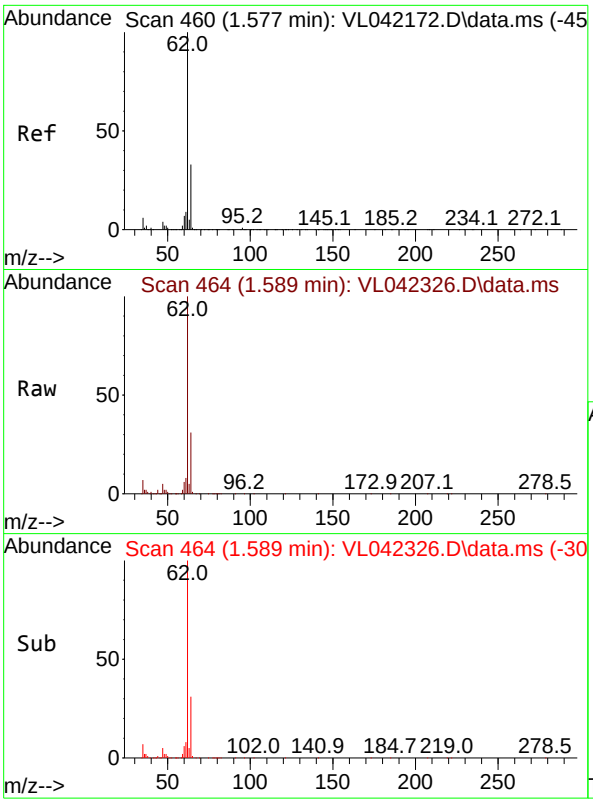


#4
Chloromethane
Concen: 8.625 ppbv
RT: 1.541 min Scan# 449
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 50 Resp: 89653

Ion	Ratio	Lower	Upper
50	100		
52	31.4	26.1	39.1

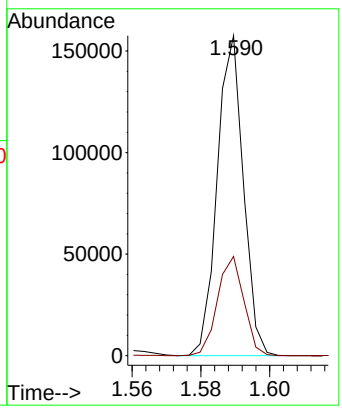




#5
Vinyl Chloride
Concen: 7.554 ppbv
RT: 1.589 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 62 Resp: 8320

Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.6	40.0



Instrument :
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ClientSampleId :
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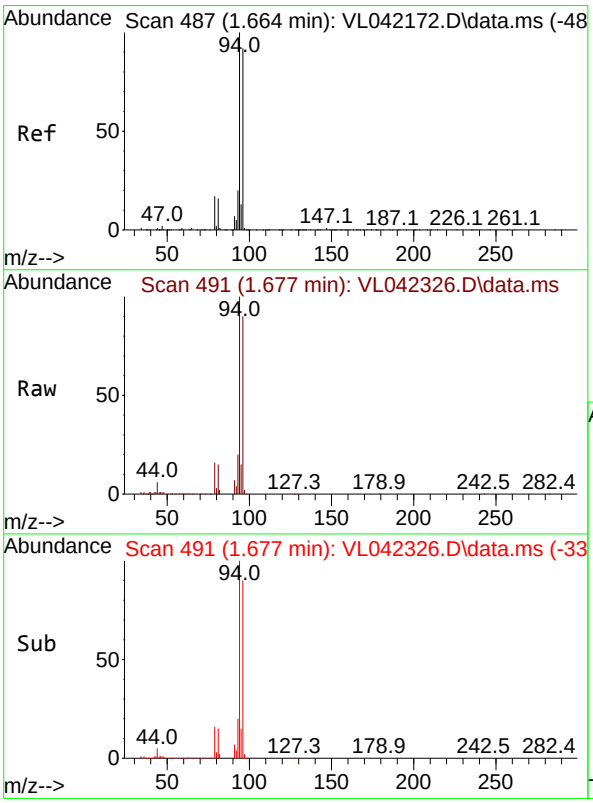
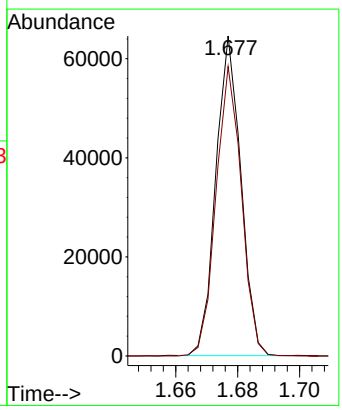
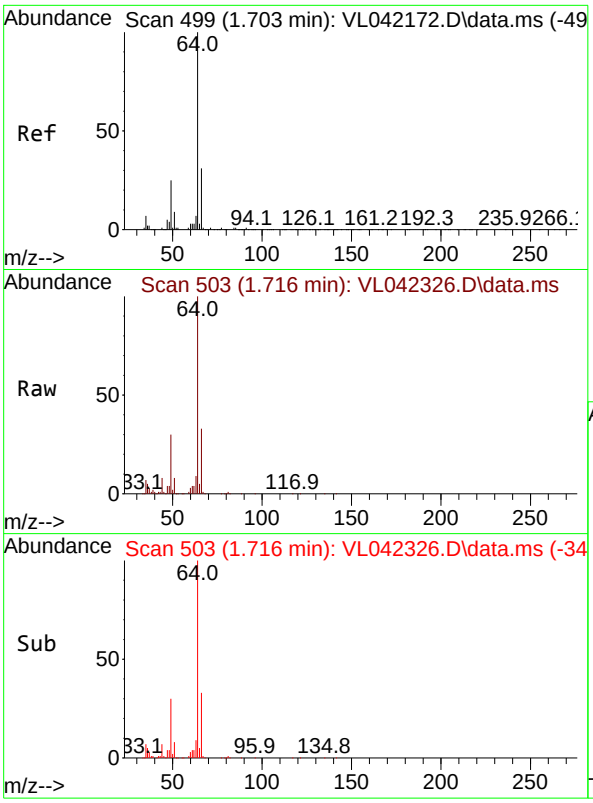


#6
Bromomethane
Concen: 7.705 ppbv
RT: 1.677 min Scan# 491
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 94 Resp: 36297

Ion	Ratio	Lower	Upper
94	100		
96	90.5	73.1	109.7

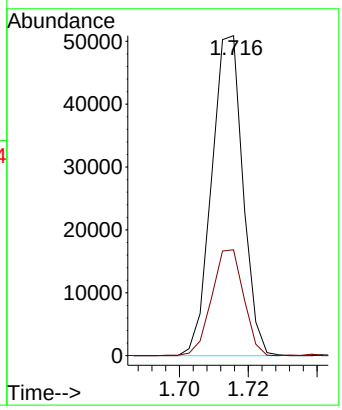




#7
Chloroethane
Concen: 7.704 ppbv
RT: 1.716 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 64 Resp: 3214

Ion	Ratio	Lower	Upper
64	100		
66	33.1	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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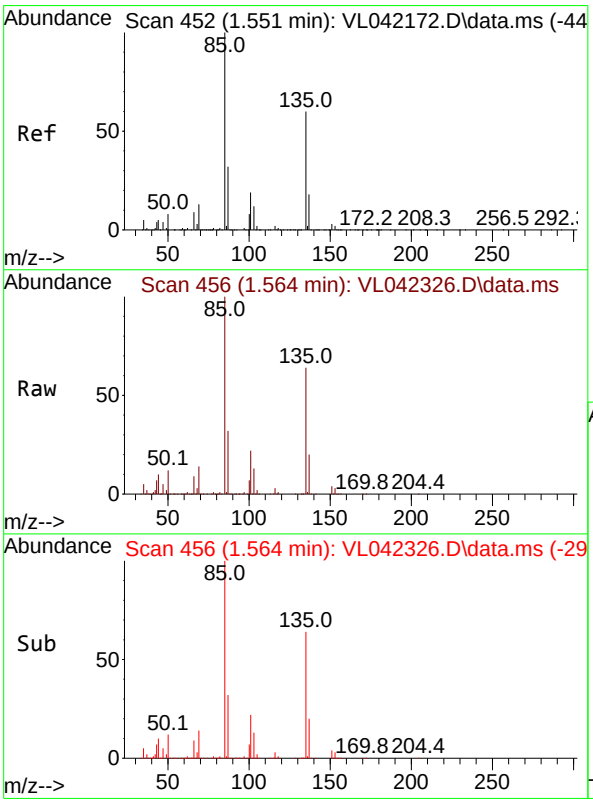
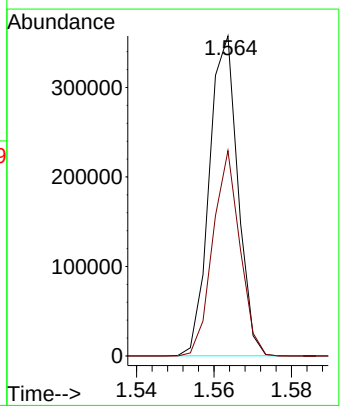
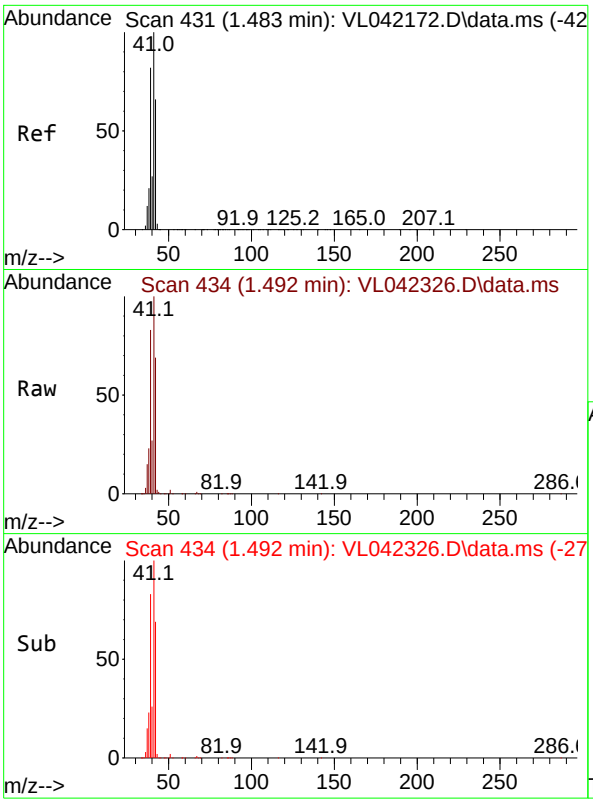


#8
Dichlorotetrafluoroethane
Concen: 8.443 ppbv
RT: 1.564 min Scan# 456
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 85 Resp: 182884

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.4	78.6

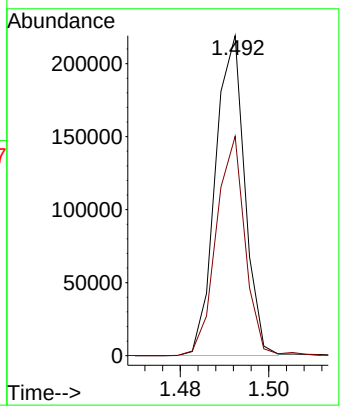




#9
Propene
Concen: 8.483 ppbv
RT: 1.492 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 41 Resp: 10103

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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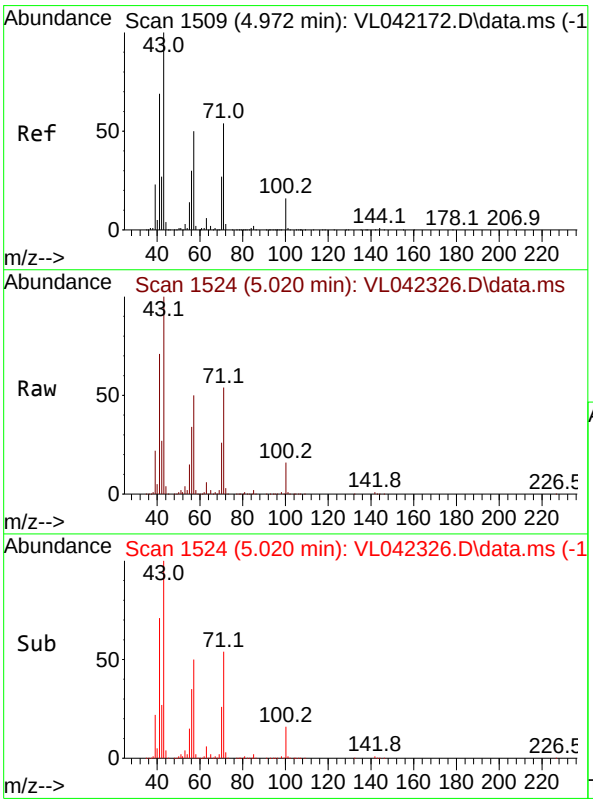
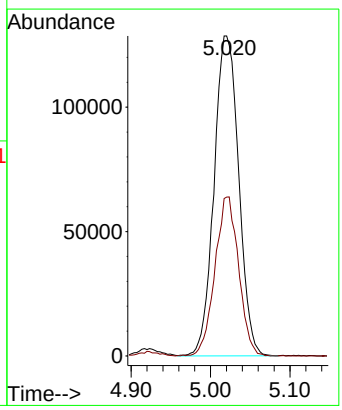
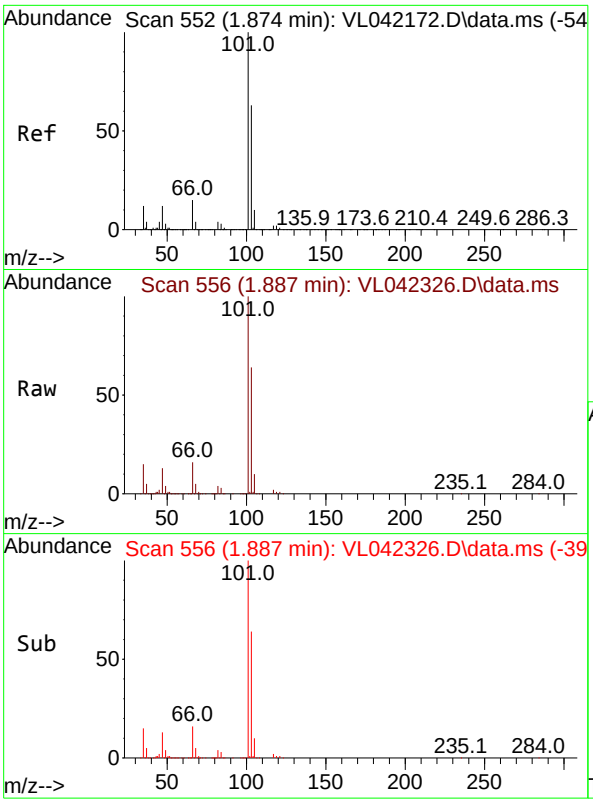


#10
Heptane
Concen: 8.736 ppbv
RT: 5.020 min Scan# 1524
Delta R.T. 0.048 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 276748

Ion	Ratio	Lower	Upper
43	100		
57	47.8	39.4	59.2

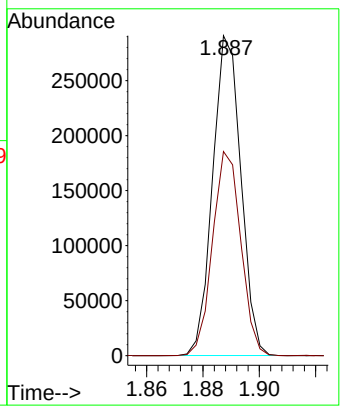




#11
Trichlorofluoromethane
Concen: 8.178 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:101 Resp: 20238

Ion	Ratio	Lower	Upper
101	100		
103	63.8	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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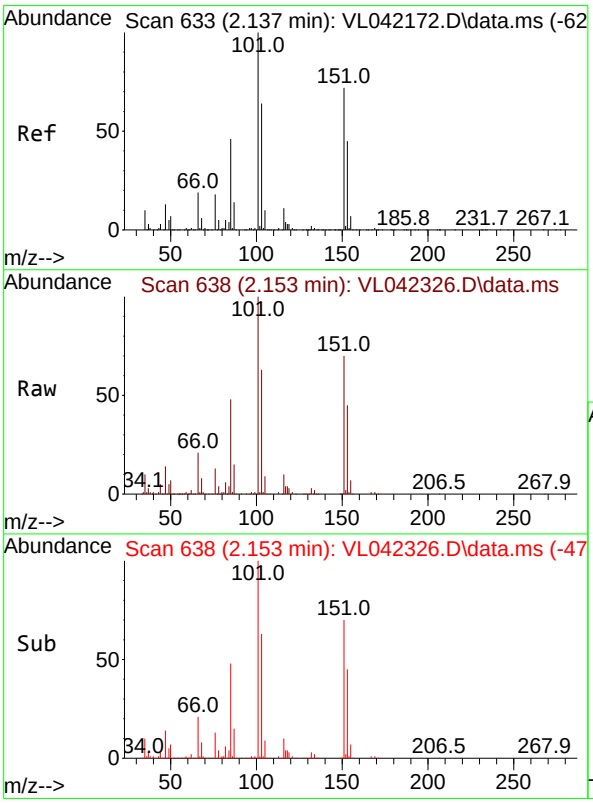
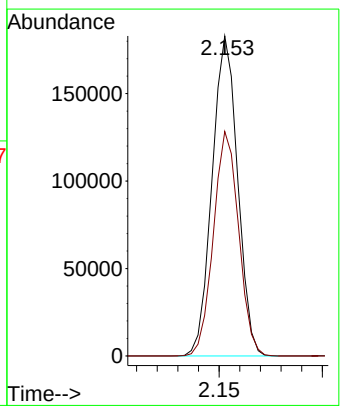
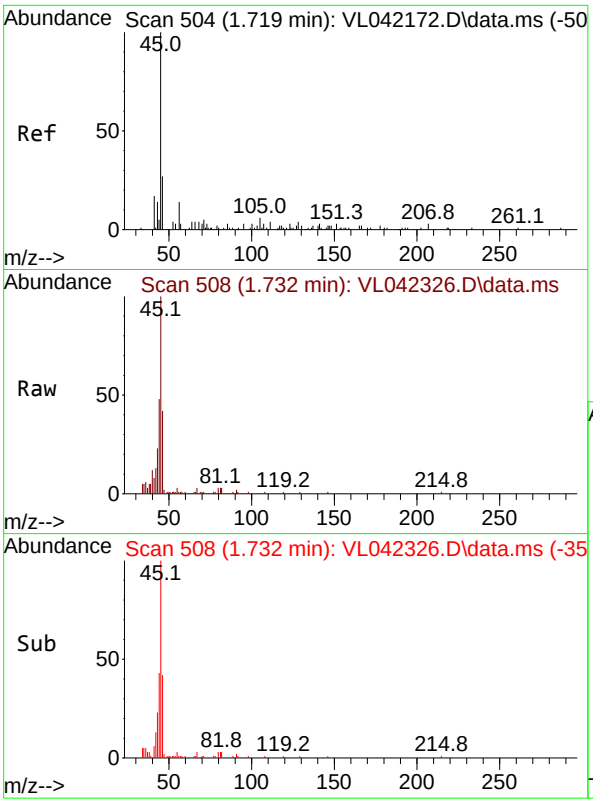


#12
1,1,2-Trichlorotrifluoroethane
Concen: 7.719 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:101 Resp: 157030

Ion	Ratio	Lower	Upper
101	100		
151	69.5	57.1	85.7

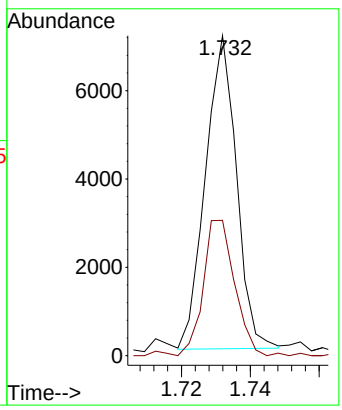




#13
Ethanol
Concen: 3.944 ppbv
RT: 1.732 min Scan# 5(
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 45 Resp: 444(

Ion	Ratio	Lower	Upper
45	100		
46	45.7	20.2	80.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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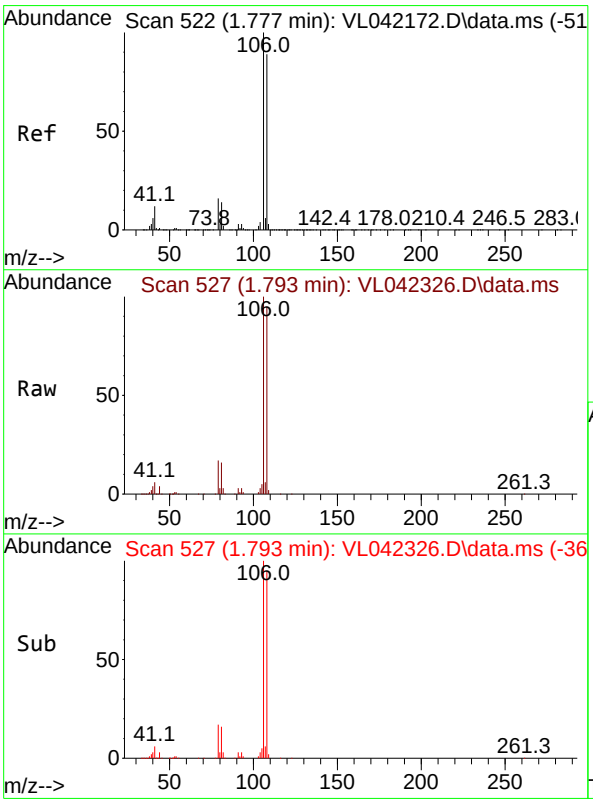
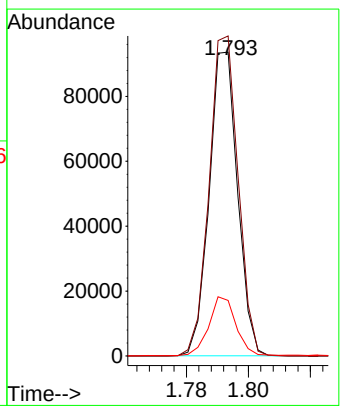
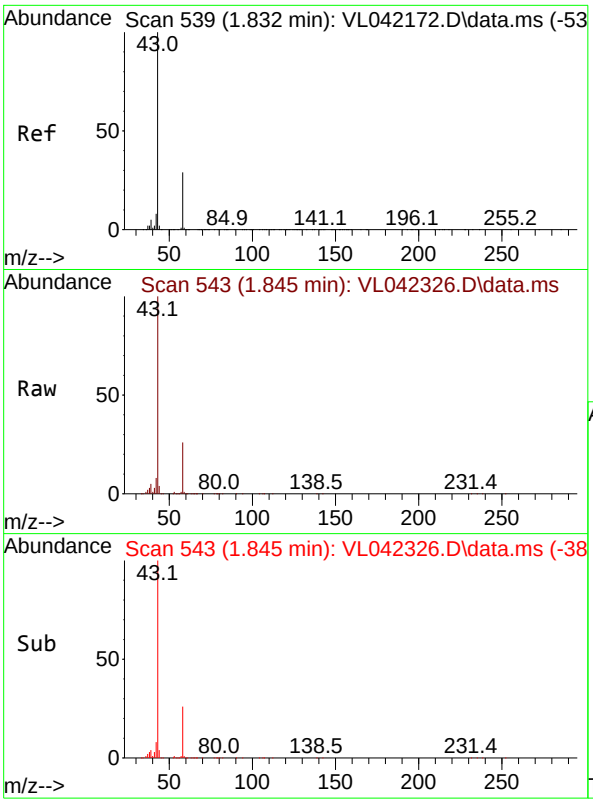


#14
Bromoethene
Concen: 7.646 ppbv
RT: 1.793 min Scan# 527
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:108 Resp: 59588

Ion	Ratio	Lower	Upper
108	100		
106	107.3	86.8	130.2
79	19.2	15.0	22.6

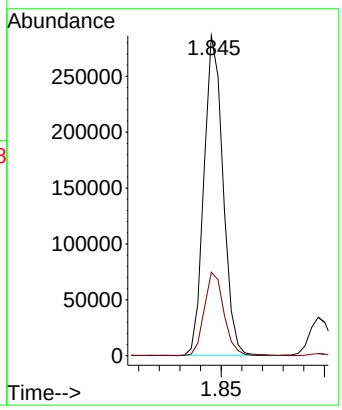




#15
Acetone
Concen: 7.614 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 18343

Ion	Ratio	Lower	Upper
43	100		
58	27.0	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
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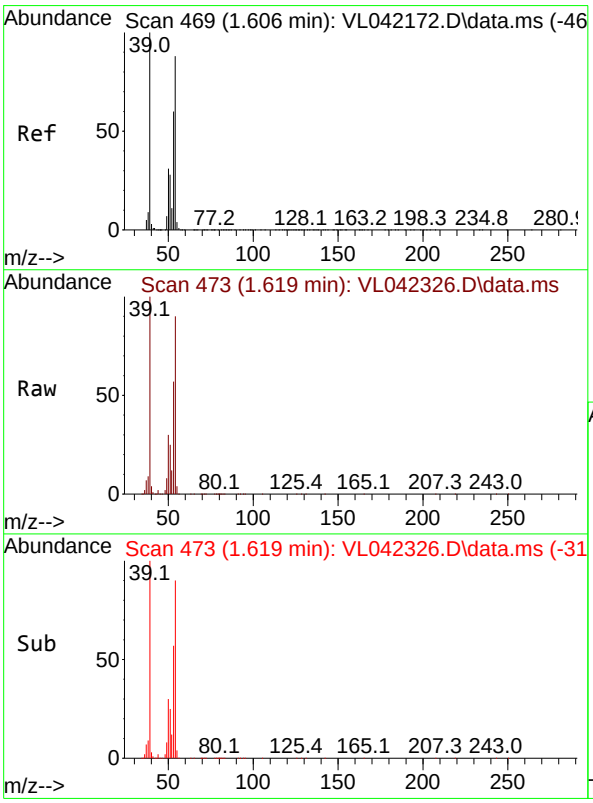
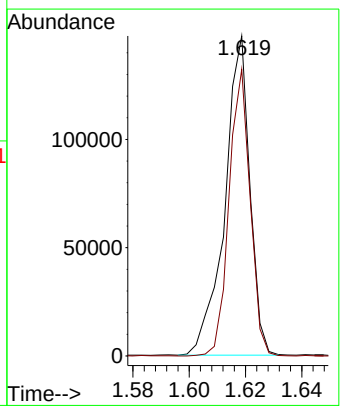
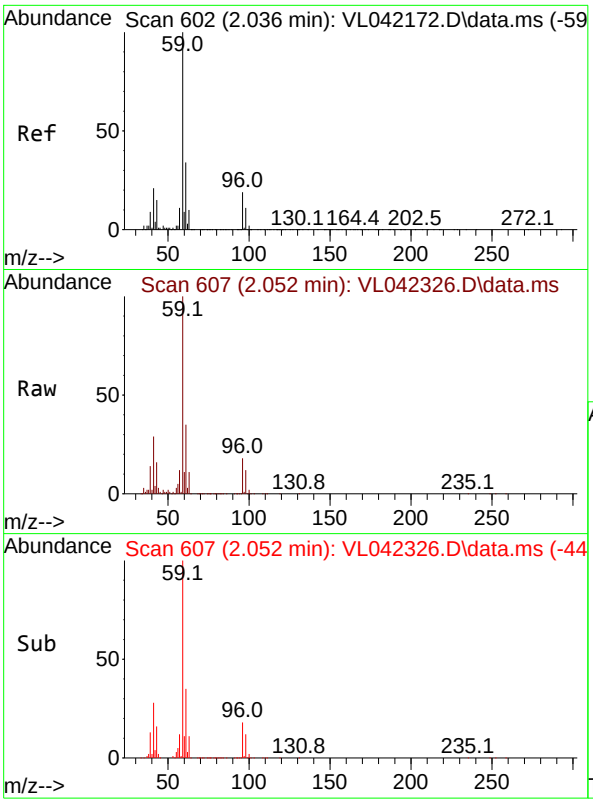


#16
1,3-Butadiene
Concen: 7.731 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 39 Resp: 90954

Ion	Ratio	Lower	Upper
39	100		
54	75.6	60.7	91.1

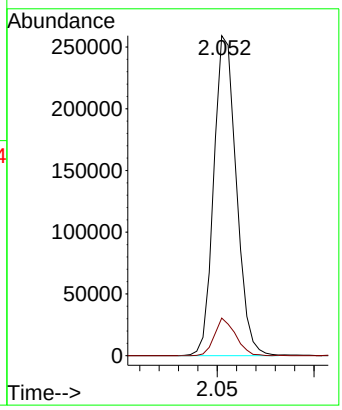




#17
tert-Butyl alcohol
Concen: 6.990 ppbv
RT: 2.052 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 59 Resp: 20973

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3



Instrument :
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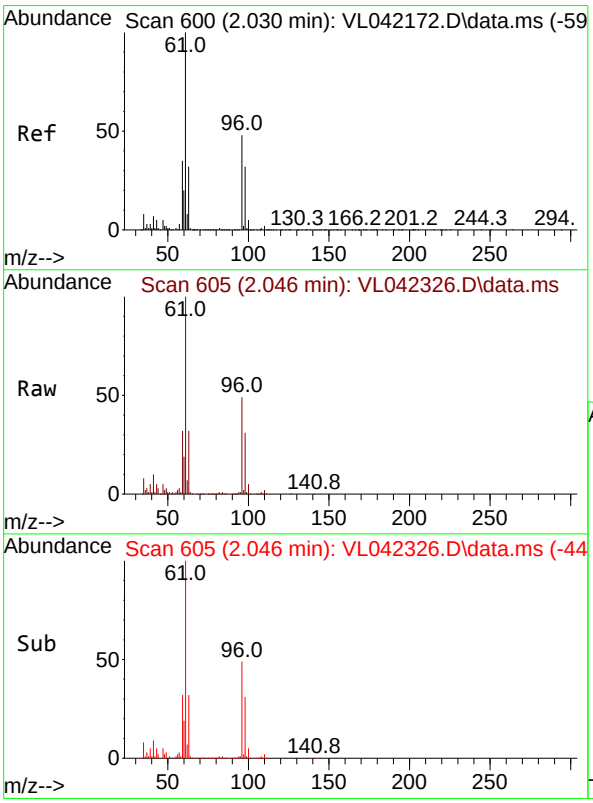
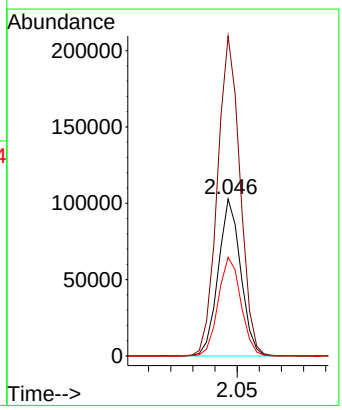
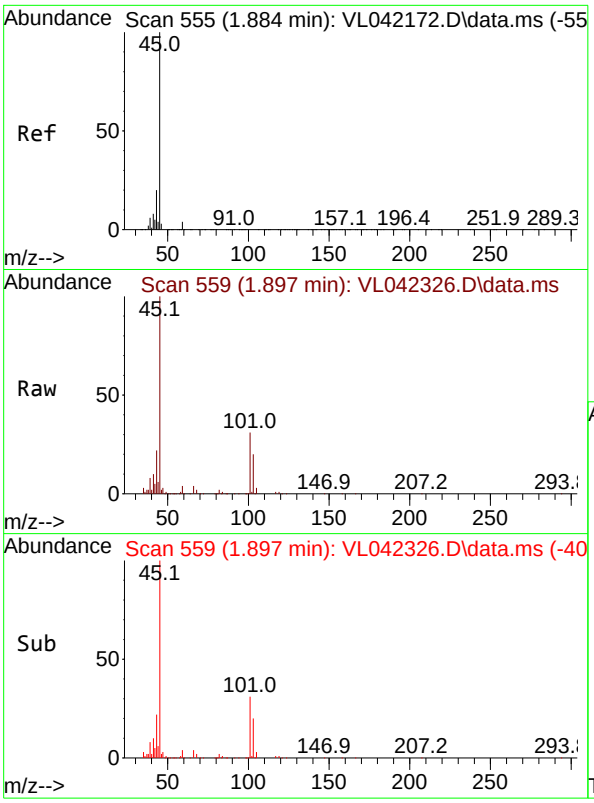


#18
1,1-Dichloroethene
Concen: 7.605 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 96 Resp: 72322

Ion	Ratio	Lower	Upper
96	100		
61	203.8	167.6	251.4
98	62.9	53.5	80.3

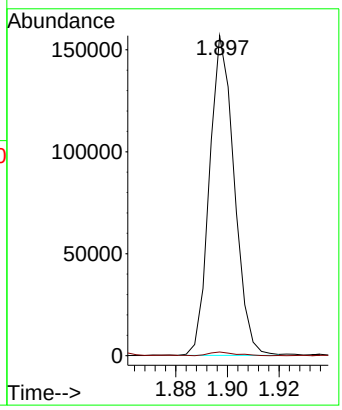




#19
Isopropyl Alcohol
Concen: 7.682 ppbv
RT: 1.897 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 45 Resp: 10442

Ion	Ratio	Lower	Upper
45	100		
58	47.5	36.9	55.3



Instrument :
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ClientSampleId :
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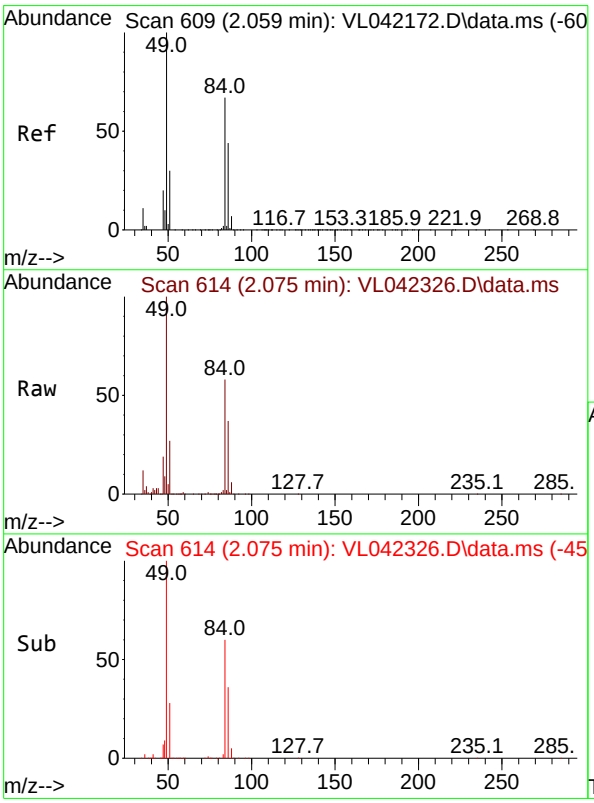
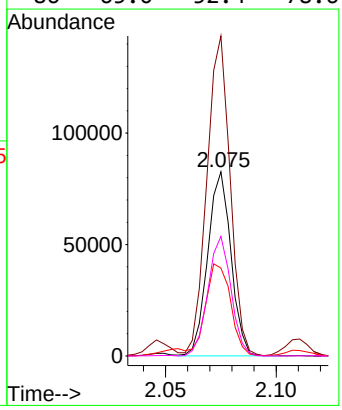
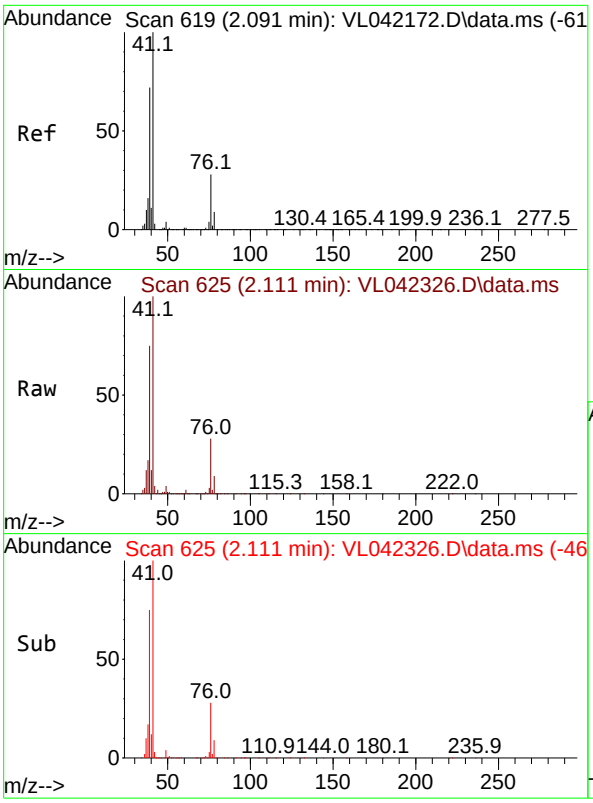


#20
Methylene Chloride
Concen: 6.725 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 84 Resp: 60337

Ion	Ratio	Lower	Upper
84	100		
49	172.1	120.2	180.4
51	47.0	37.4	56.0
86	65.0	52.4	78.6

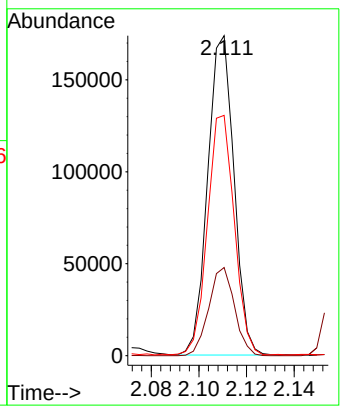




#21
Allyl Chloride
Concen: 7.825 ppbv
RT: 2.111 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 41 Resp: 13295

Ion	Ratio	Lower	Upper
41	100		
76	27.1	24.1	36.1
39	76.9	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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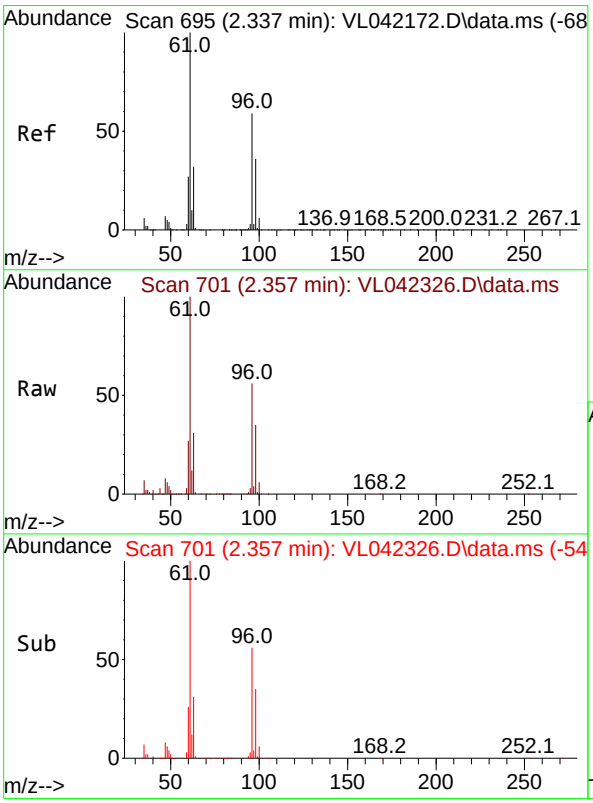
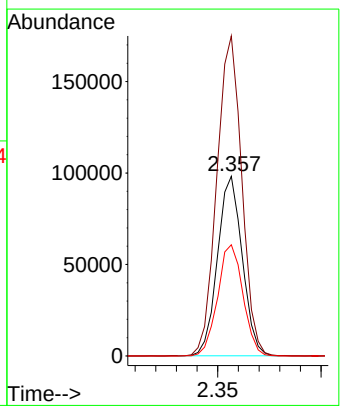
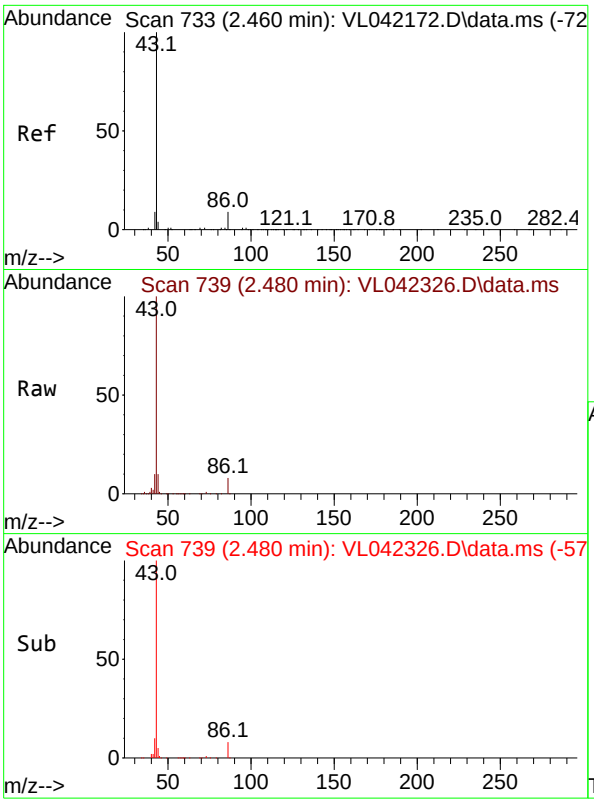


#22
trans-1,2-Dichloroethene
Concen: 7.422 ppbv
RT: 2.357 min Scan# 701
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 96 Resp: 81572

Ion	Ratio	Lower	Upper
96	100		
61	178.1	136.6	204.8
98	61.9	49.4	74.2

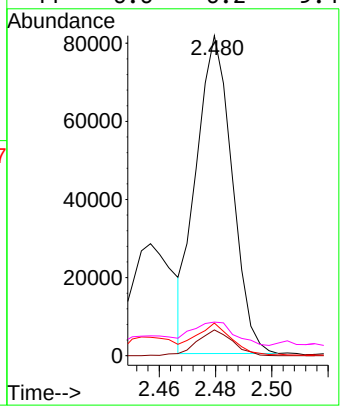




#23
Vinyl Acetate
Concen: 6.920 ppbv
RT: 2.480 min Scan# 7
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 7216

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	9.8	8.6	13.0
44	6.6	6.2	9.4



Instrument :
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ClientSampleId :
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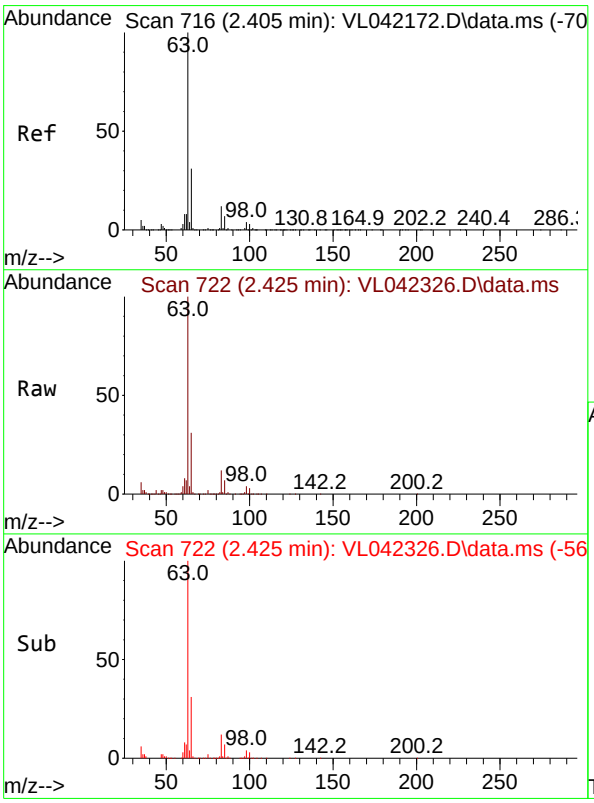
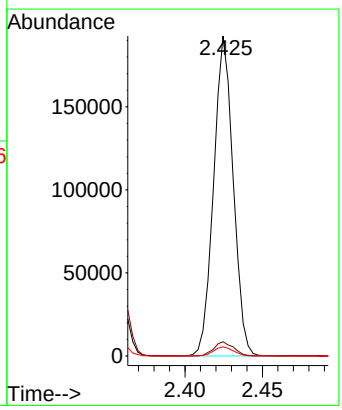
Supervised By :Mahesh Dadoda 04/16/2025

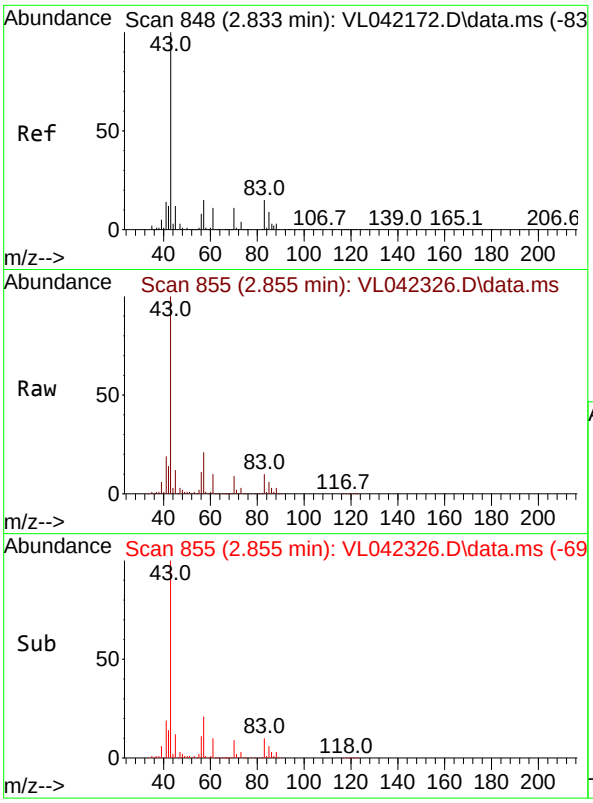


#24
1,1-Dichloroethane
Concen: 8.315 ppbv
RT: 2.425 min Scan# 722
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 63 Resp: 169411

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.3	6.8
100	2.8	1.6	4.7

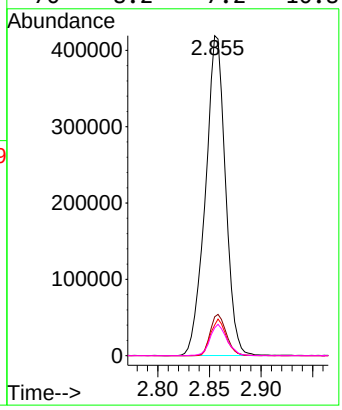




#25
Ethyl Acetate
Concen: 9.030 ppbv
RT: 2.855 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 56461

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.2	12.2
61	9.0	7.3	10.9
70	8.2	7.2	10.8



Instrument :
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ClientSampleId :
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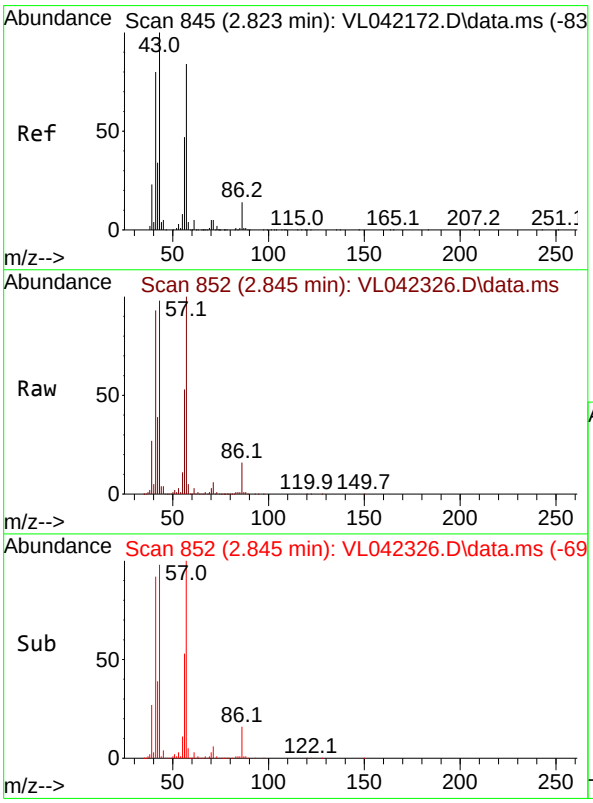
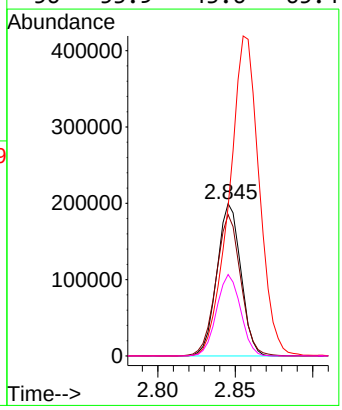
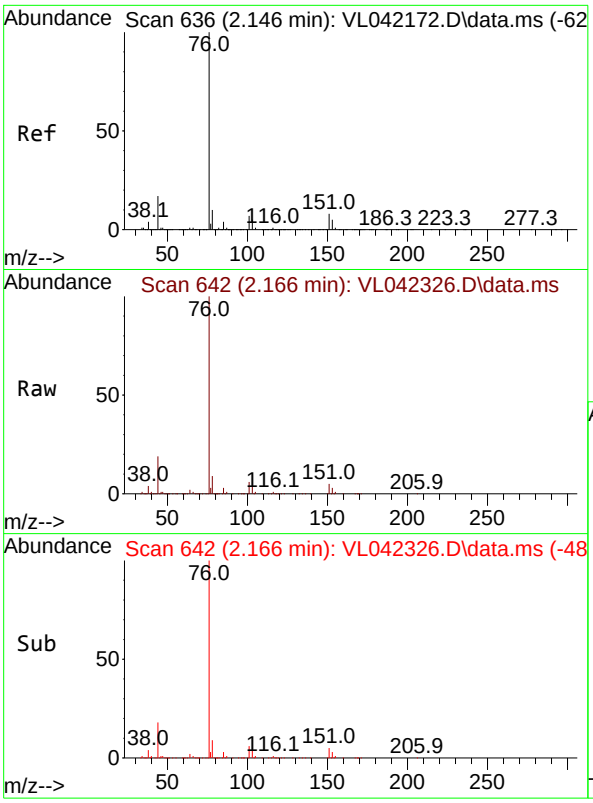


#26
Hexane
Concen: 8.851 ppbv
RT: 2.845 min Scan# 852
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 57 Resp: 213782

Ion	Ratio	Lower	Upper
57	100		
41	95.9	76.6	114.8
43	264.9	207.8	311.8
56	53.9	43.6	65.4





#27
Carbon Disulfide
Concen: 7.547 ppbv
RT: 2.166 min Scan# 64
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 76 Resp: 19545

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.2	9.3	13.9

Instrument :
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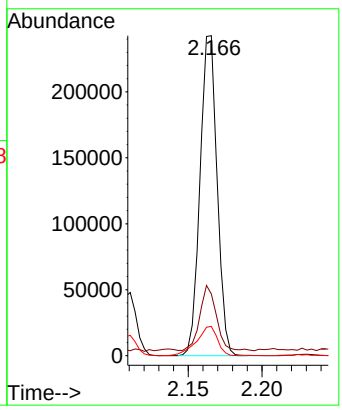
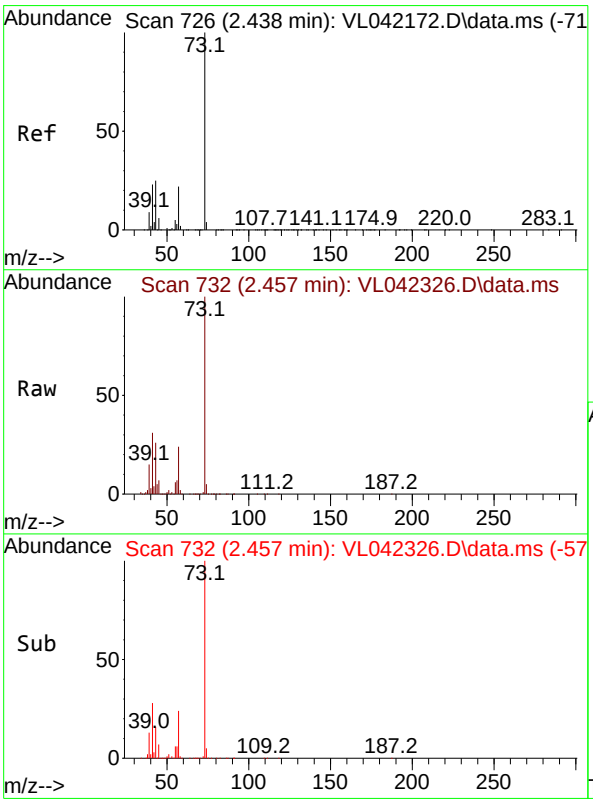
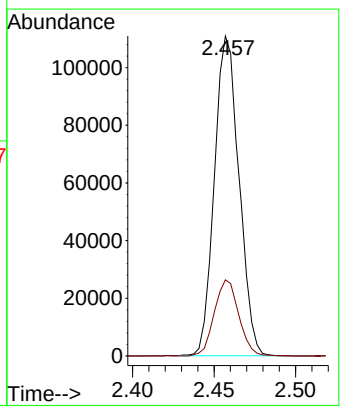


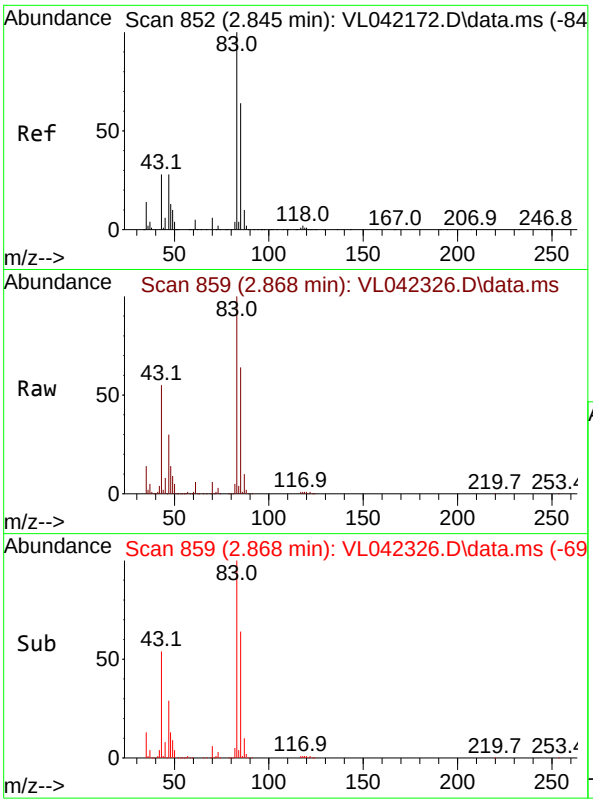


#28
Methyl tert-Butyl Ether
Concen: 7.734 ppbv
RT: 2.457 min Scan# 732
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 73 Resp: 116301

Ion	Ratio	Lower	Upper
73	100		
57	23.7	20.5	30.7





#29
Chloroform
Concen: 8.888 ppbv
RT: 2.868 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 83 Resp: 31416

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.4	77.2

Instrument :
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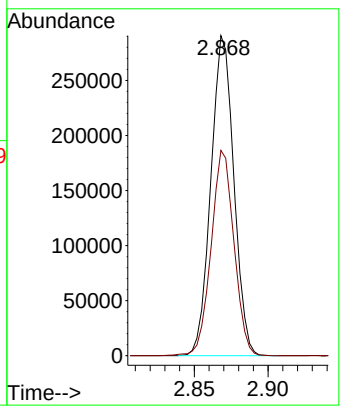
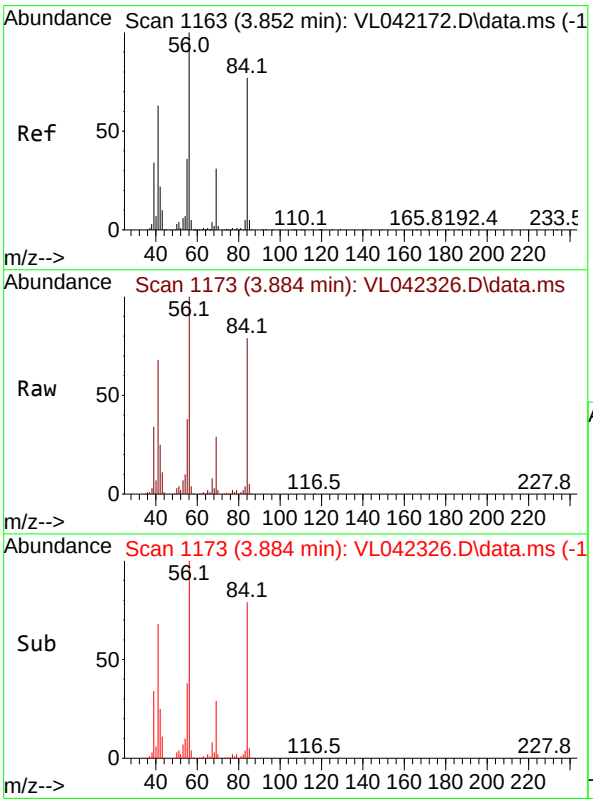
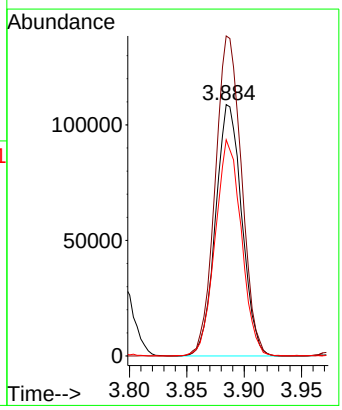


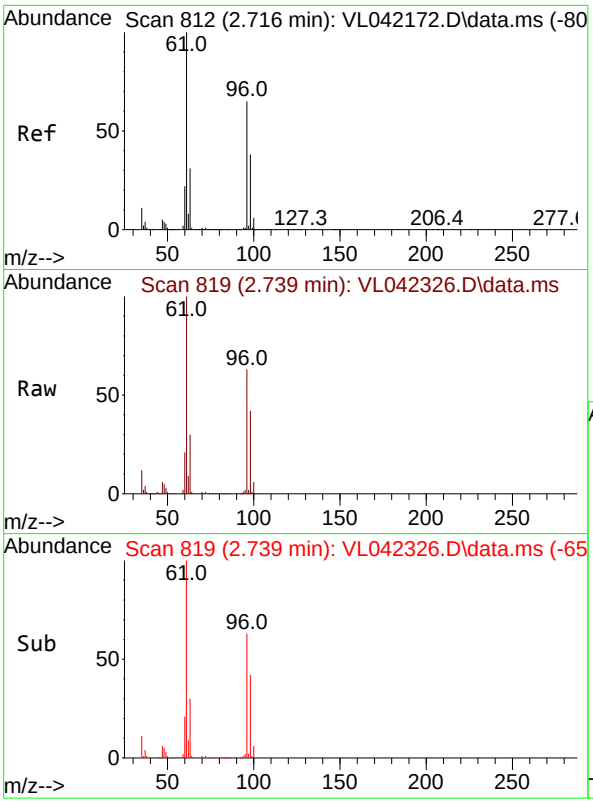


#30
Cyclohexane
Concen: 8.266 ppbv
RT: 3.884 min Scan# 1173
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 84 Resp: 173360

Ion	Ratio	Lower	Upper
84	100		
56	127.7	102.8	154.2
41	85.6	66.5	99.7

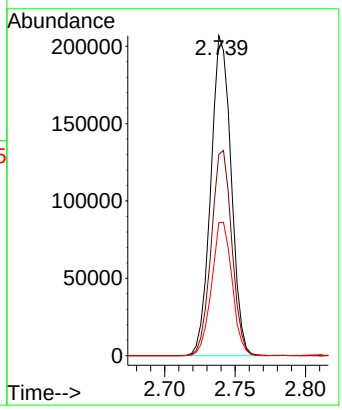




#31
cis-1,2-Dichloroethene
Concen: 8.490 ppbv
RT: 2.739 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 61 Resp: 20816

Ion	Ratio	Lower	Upper
61	100		
96	62.9	51.8	77.8
98	41.5	30.6	46.0



Instrument :
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ClientSampleId :
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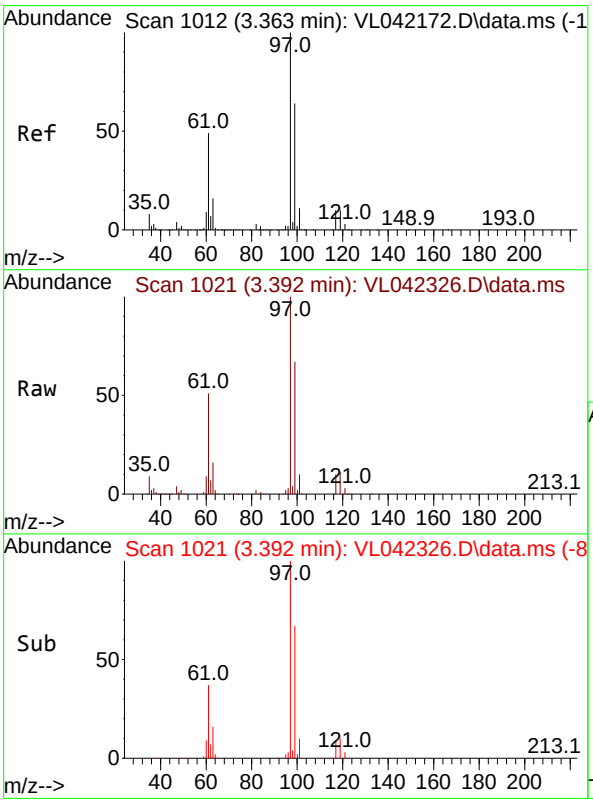
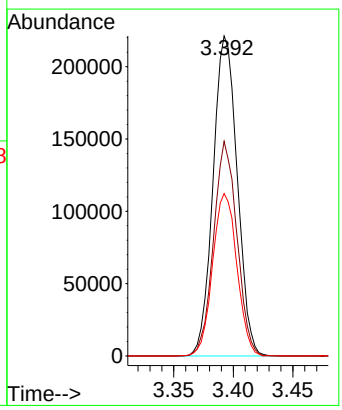
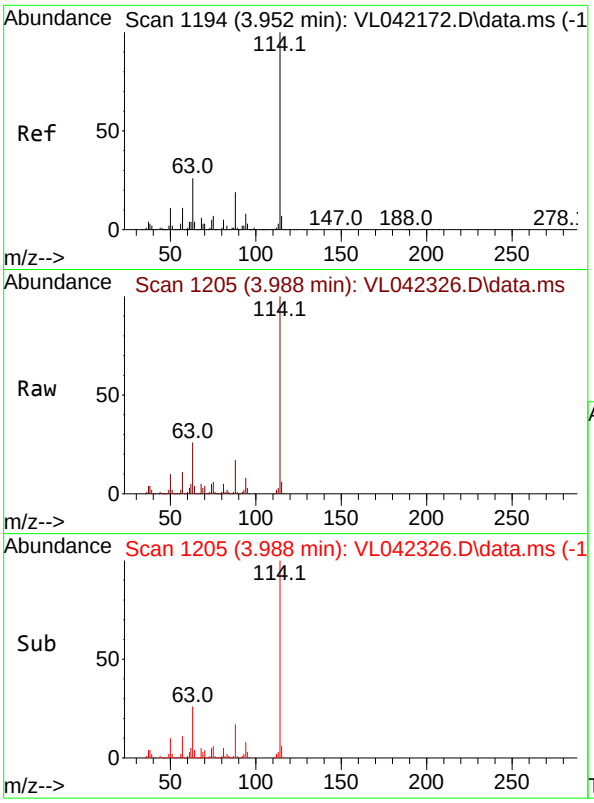


#32
1,1,1-Trichloroethane
Concen: 7.704 ppbv
RT: 3.392 min Scan# 1021
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 97 Resp: 311758

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	51.1	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.988 min Scan# 1
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:114 Resp: 45722

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.7	15.0	22.4

Instrument :
MSVOA_L
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VSTDCCC010

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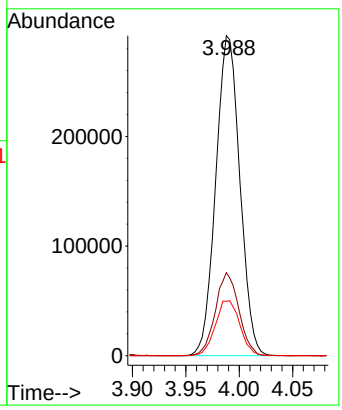
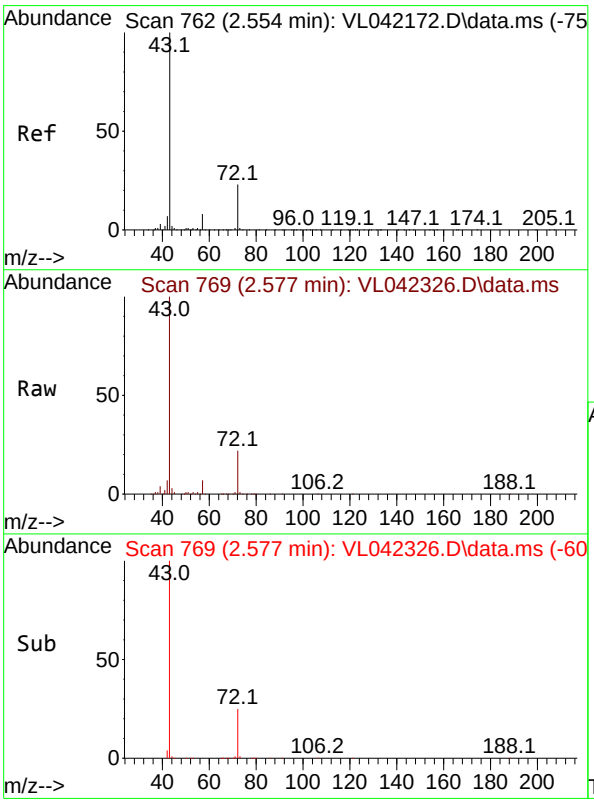
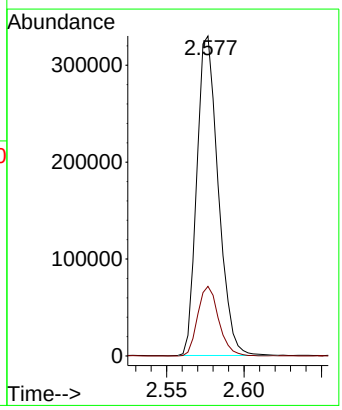


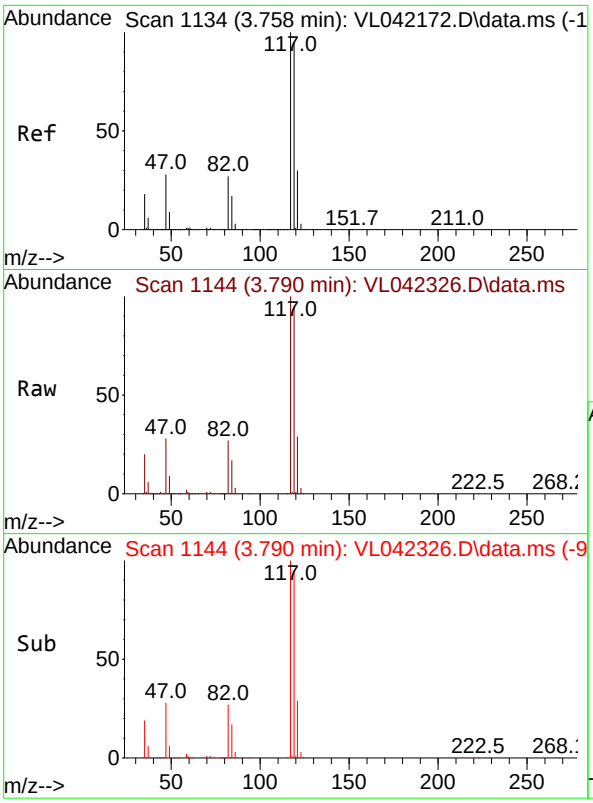


#34
2-Butanone
Concen: 9.565 ppbv
RT: 2.577 min Scan# 769
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 317117

Ion	Ratio	Lower	Upper
43	100		
72	21.5	18.2	27.2





#35
Carbon Tetrachloride
Concen: 8.902 ppbv
RT: 3.790 min Scan# 1
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:117 Resp: 31794

Ion	Ratio	Lower	Upper
117	100		
119	94.9	76.2	114.2
121	29.3	24.2	36.4

Instrument :
MSVOA_L
ClientSampleId :
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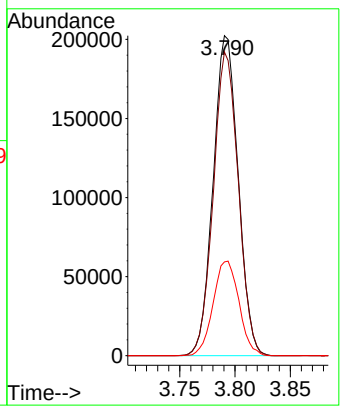
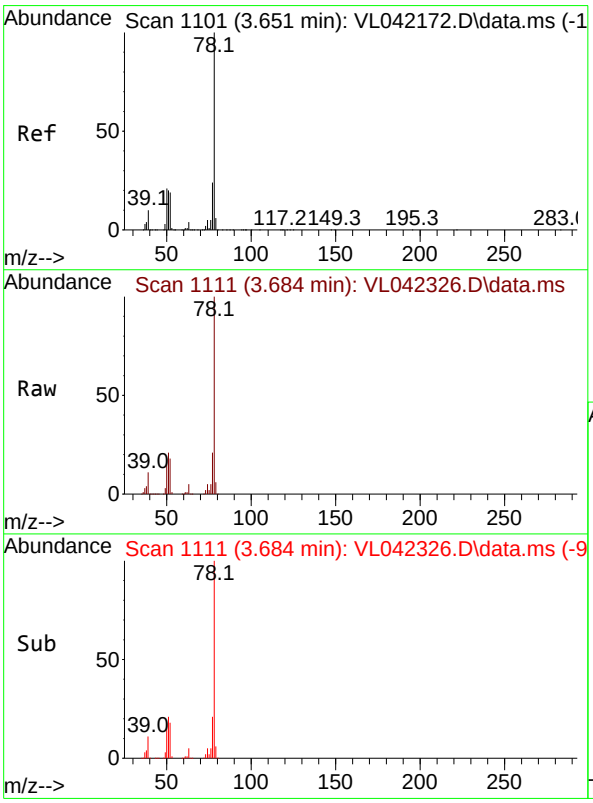
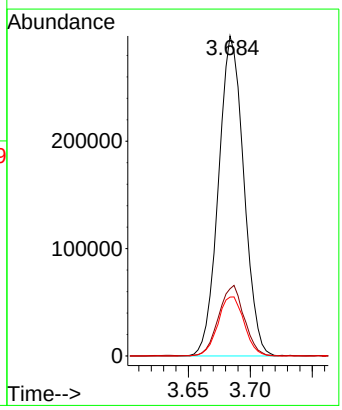


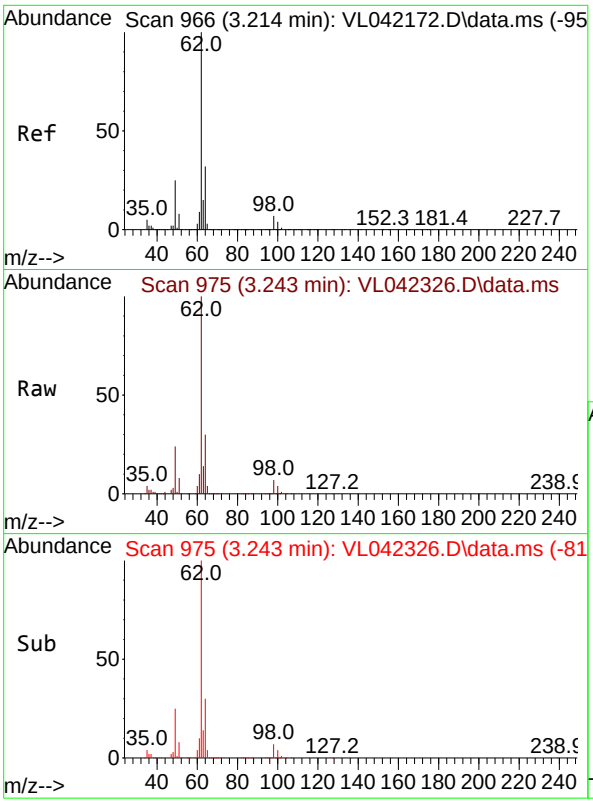


#36
Benzene
Concen: 9.360 ppbv
RT: 3.684 min Scan# 1111
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 78 Resp: 424254

Ion	Ratio	Lower	Upper
78	100		
77	20.9	19.1	28.7
50	18.4	16.6	24.8

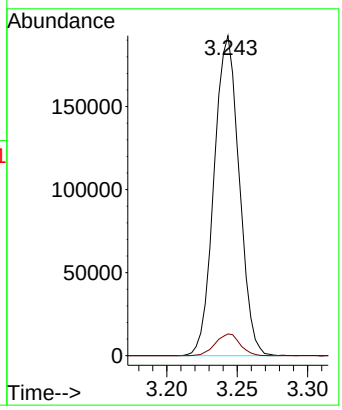




#37
1,2-Dichloroethane
Concen: 9.231 ppbv
RT: 3.243 min Scan# 9
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 62 Resp: 23955

Ion	Ratio	Lower	Upper
62	100		
98	6.7	5.4	8.2



Instrument :
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ClientSampleId :
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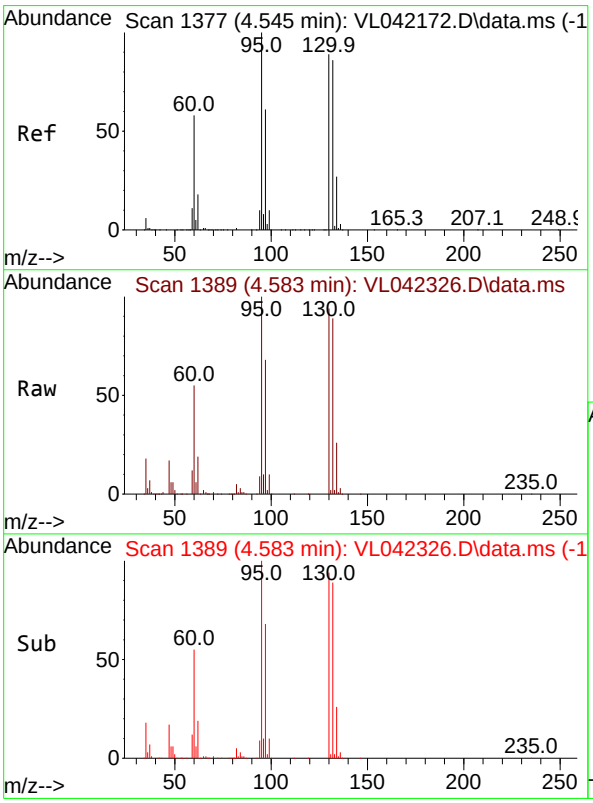
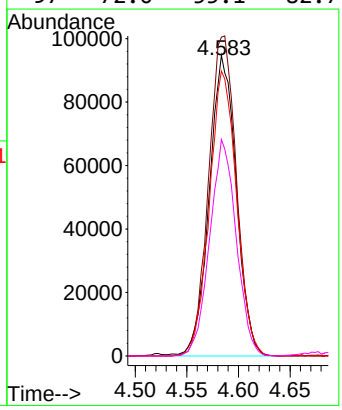
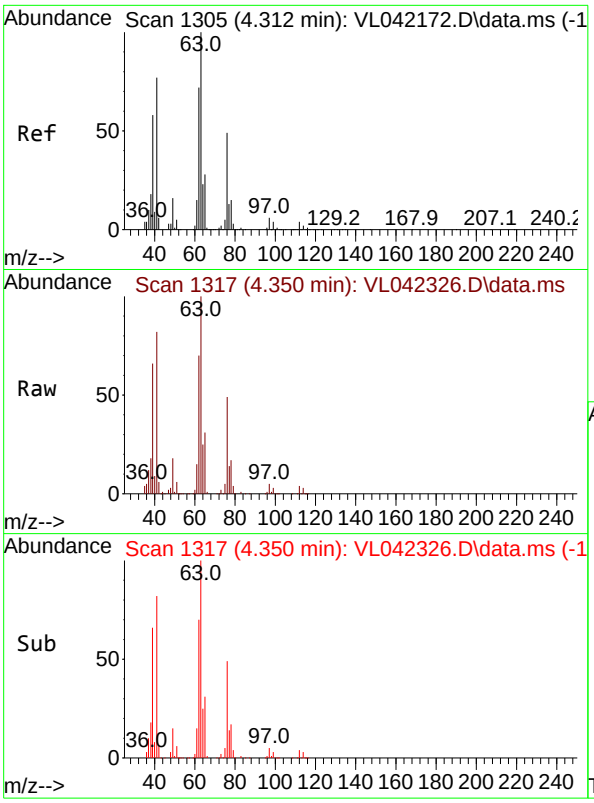


#38
Trichloroethene
Concen: 9.102 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:130 Resp: 172146

Ion	Ratio	Lower	Upper
130	100		
95	106.1	89.8	134.8
132	94.8	77.4	116.2
97	72.0	55.1	82.7

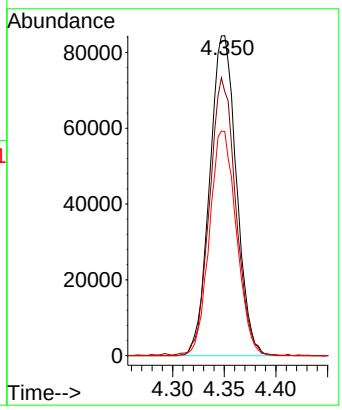




#39
1,2-Dichloropropane
Concen: 9.190 ppbv
RT: 4.350 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 63 Resp: 15170

Ion	Ratio	Lower	Upper
63	100		
41	82.3	61.7	92.5
62	70.1	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
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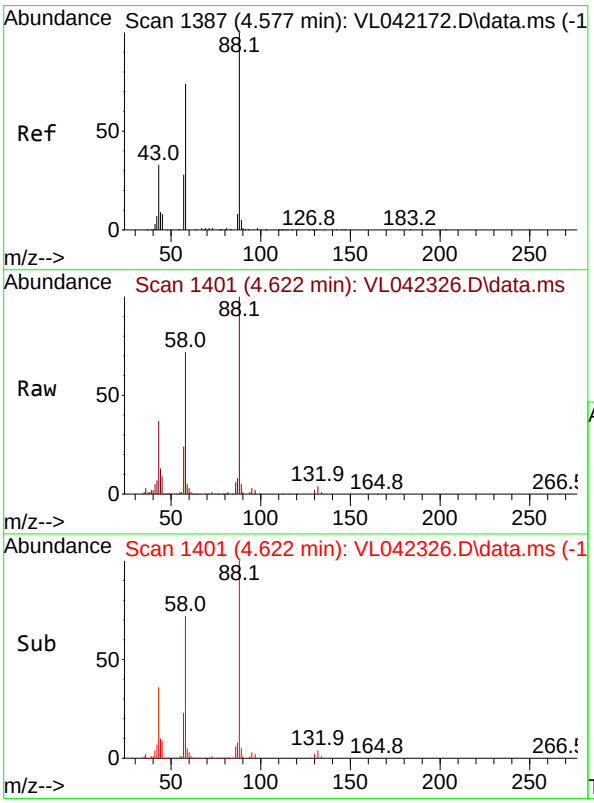
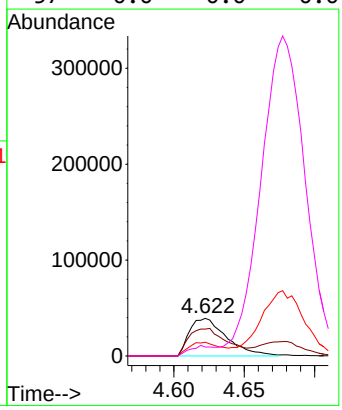
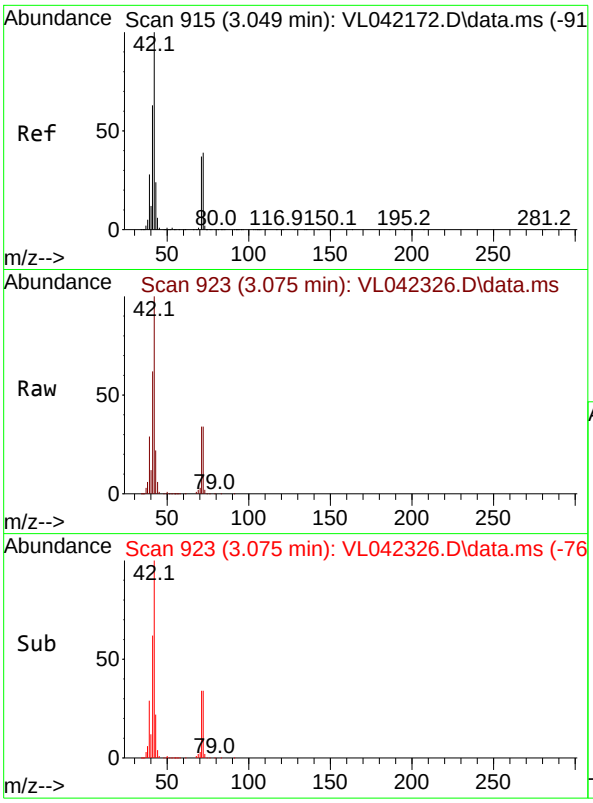


#40
1,4-Dioxane
Concen: 8.226 ppbv
RT: 4.622 min Scan# 1401
Delta R.T. 0.045 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 88 Resp: 72075

Ion	Ratio	Lower	Upper
88	100		
58	79.6	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0

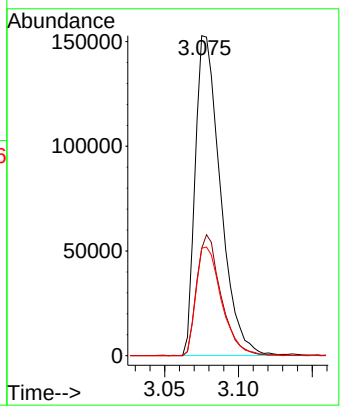




#41
Tetrahydrofuran
Concen: 9.505 ppbv
RT: 3.075 min Scan# 9
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 42 Resp: 18147

Ion	Ratio	Lower	Upper
42	100		
72	36.5	31.4	47.0
71	34.6	30.2	45.4



Instrument :
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ClientSampleId :
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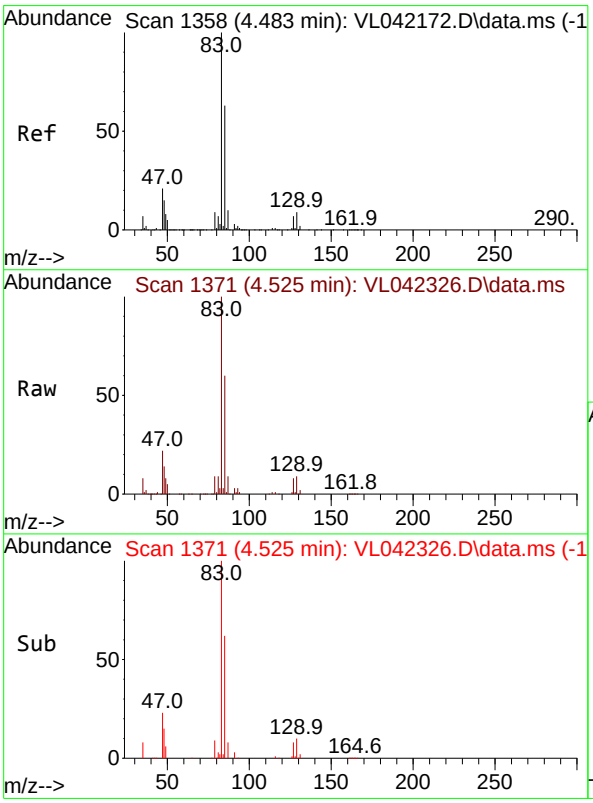
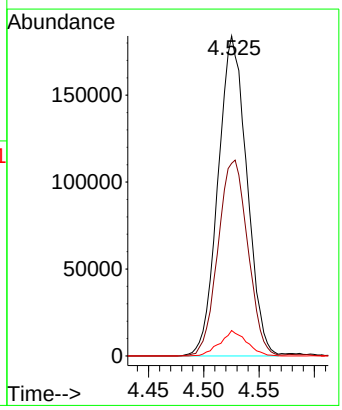
Supervised By :Mahesh Dadoda 04/16/2025

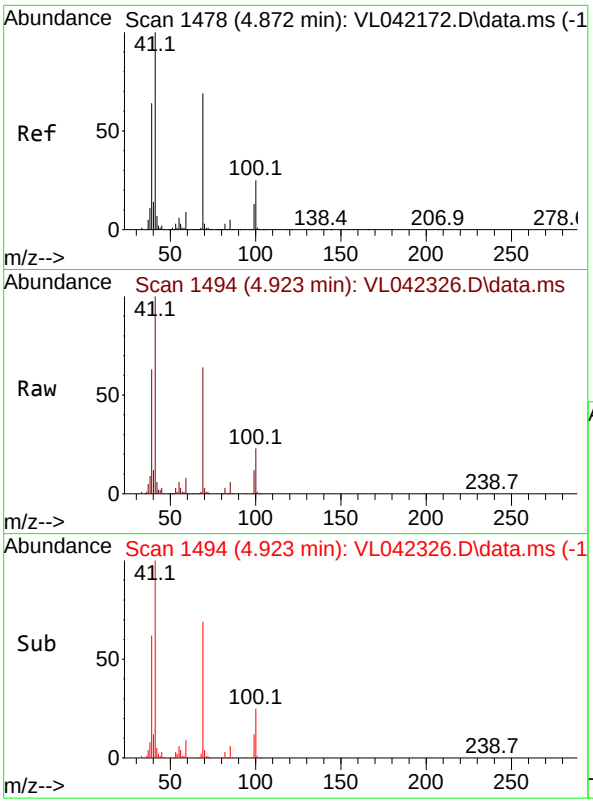


#42
Bromodichloromethane
Concen: 9.313 ppbv
RT: 4.525 min Scan# 1371
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 83 Resp: 333167

Ion	Ratio	Lower	Upper
83	100		
85	60.2	50.5	75.7
127	7.9	5.9	8.9





#43
Methyl Methacrylate
Concen: 8.098 ppbv
RT: 4.923 min Scan# 14
Delta R.T. 0.052 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 69 Resp: 15539

Ion	Ratio	Lower	Upper
69	100		
41	160.2	123.8	185.6
100	35.9	28.4	42.6

Instrument :
MSVOA_L
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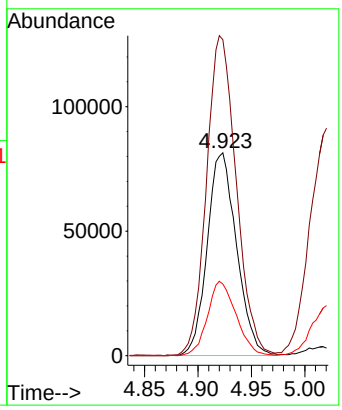
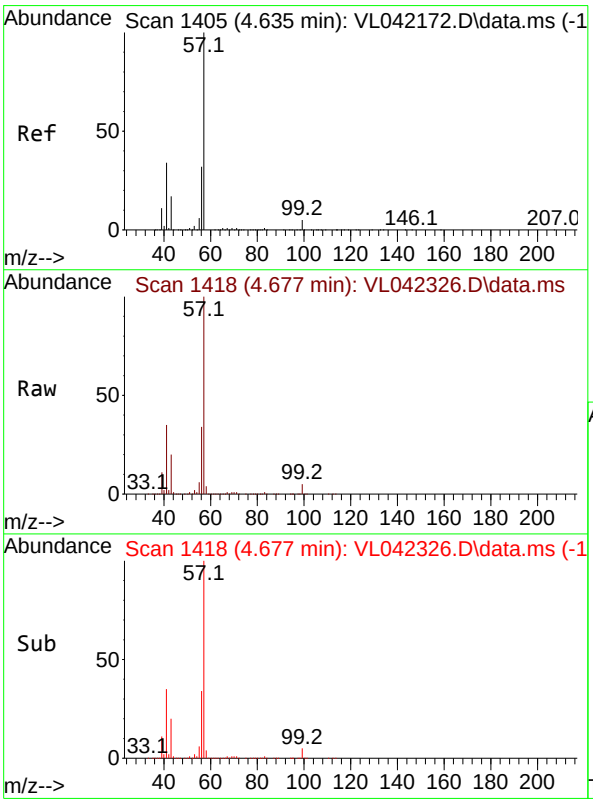
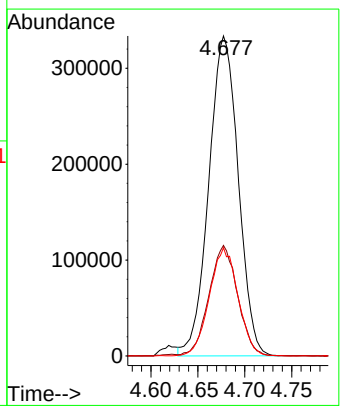


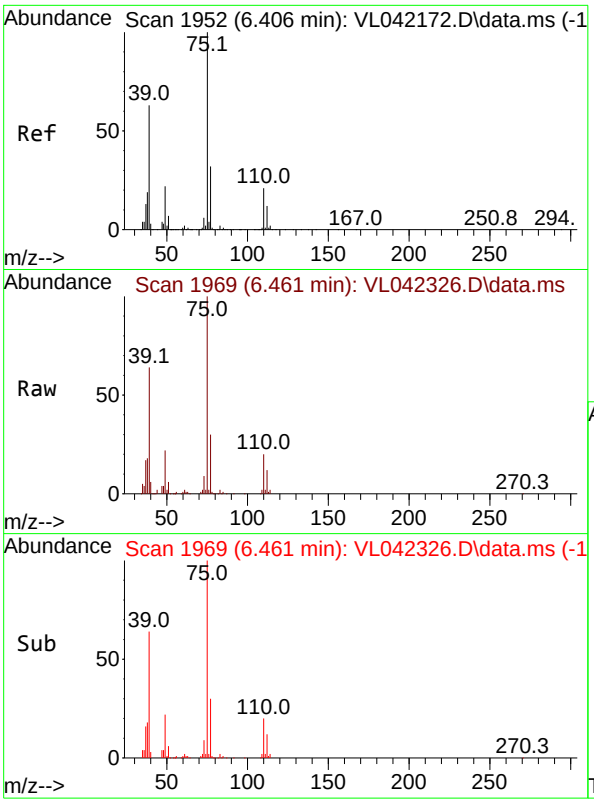


#44
2,2,4-Trimethylpentane
Concen: 9.511 ppbv
RT: 4.677 min Scan# 1418
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 57 Resp: 728571

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	32.8	25.6	38.4

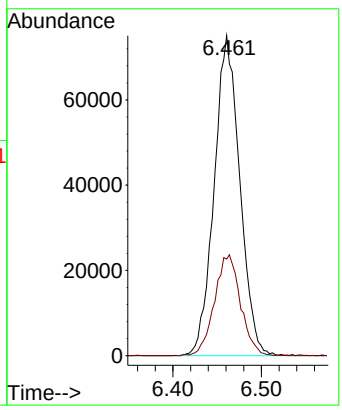




#45
t-1,3-Dichloropropene
Concen: 7.338 ppbv
RT: 6.461 min Scan# 1
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 75 Resp: 15106

Ion	Ratio	Lower	Upper
75	100		
77	30.2	26.0	39.0



Instrument :
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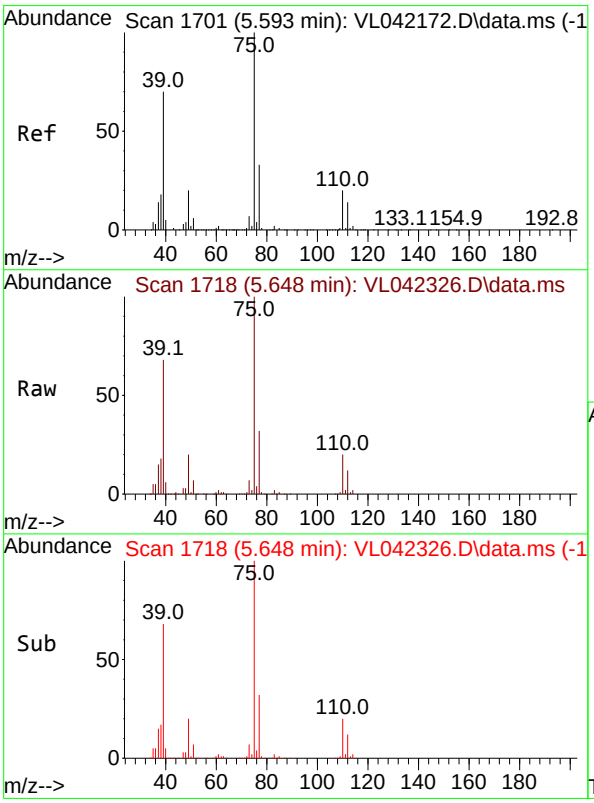
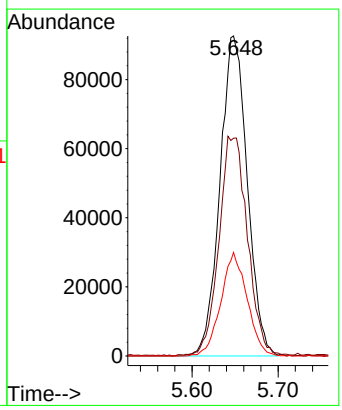
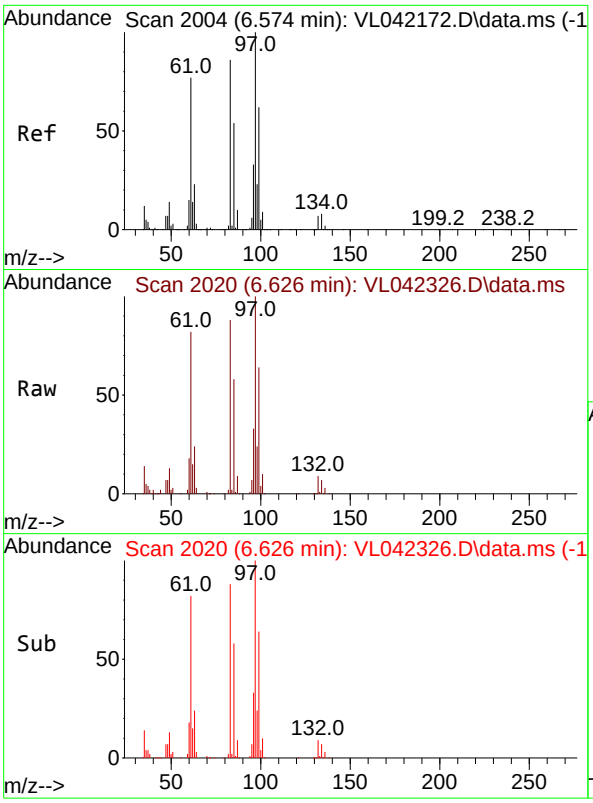


#46
cis-1,3-Dichloropropene
Concen: 8.097 ppbv
RT: 5.648 min Scan# 1718
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 75 Resp: 204339

Ion	Ratio	Lower	Upper
75	100		
39	67.6	55.8	83.6
77	32.3	26.0	39.0

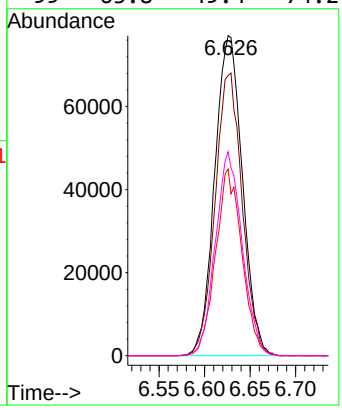




#47
1,1,2-Trichloroethane
Concen: 9.348 ppbv
RT: 6.626 min Scan# 2
Delta R.T. 0.052 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 97 Resp: 16313

Ion	Ratio	Lower	Upper
97	100		
83	87.6	69.2	103.8
85	58.3	43.1	64.7
99	63.8	49.4	74.2



Instrument :
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ClientSampleId :
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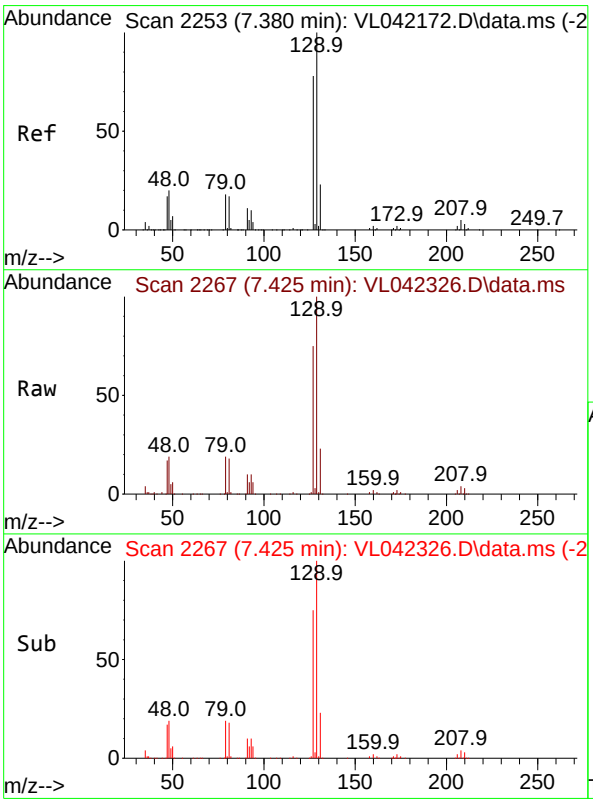
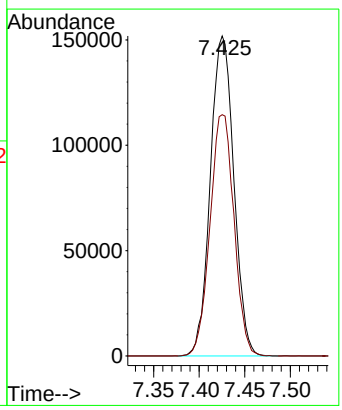
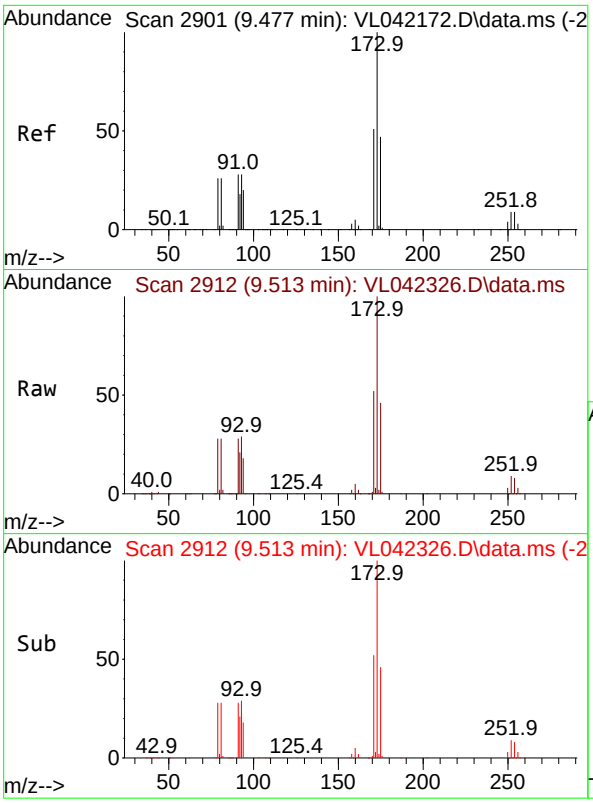


#48
Dibromochloromethane
Concen: 9.217 ppbv
RT: 7.425 min Scan# 2267
Delta R.T. 0.045 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:129 Resp: 272592

Ion	Ratio	Lower	Upper
129	100		
127	77.0	39.1	117.2





#49
Bromoform
Concen: 8.997 ppbv
RT: 9.513 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:173 Resp: 23888

Ion	Ratio	Lower	Upper
173	100		
175	48.1	38.6	57.8
171	51.7	41.8	62.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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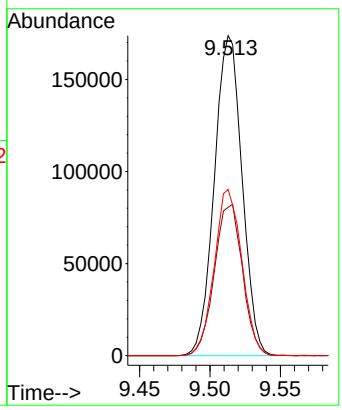
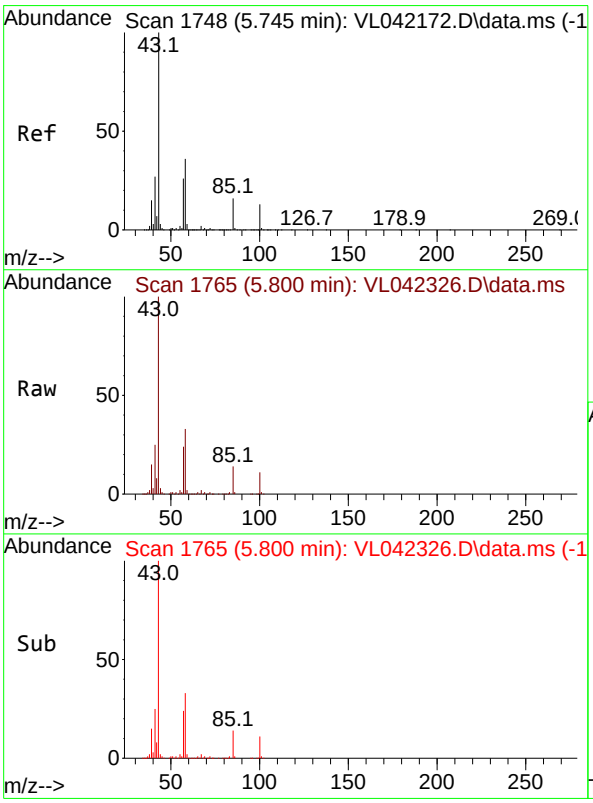
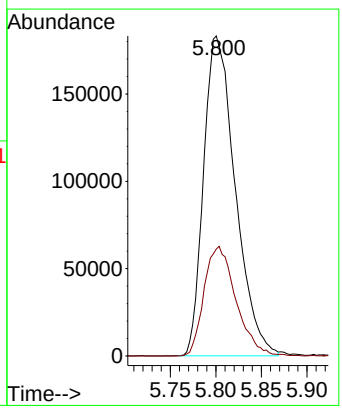


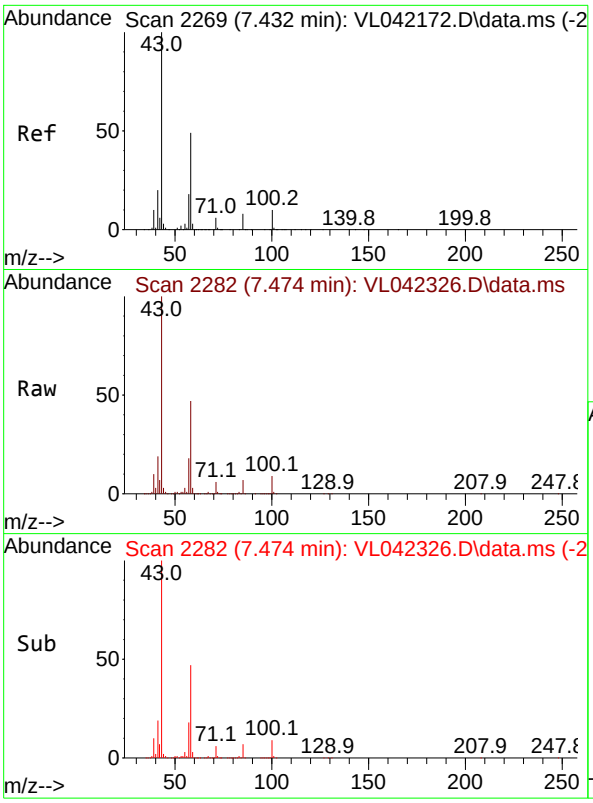


#50
4-Methyl-2-Pentanone
Concen: 8.428 ppbv
RT: 5.800 min Scan# 1765
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 442851

Ion	Ratio	Lower	Upper
43	100		
58	34.6	29.0	43.6





#51
2-Hexanone
Concen: 8.192 ppbv
RT: 7.474 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 35347

Ion	Ratio	Lower	Upper
43	100		
58	47.5	39.7	59.5
98	0.6	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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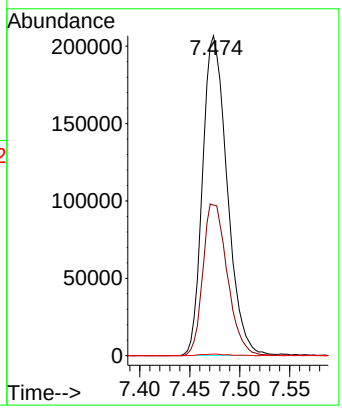
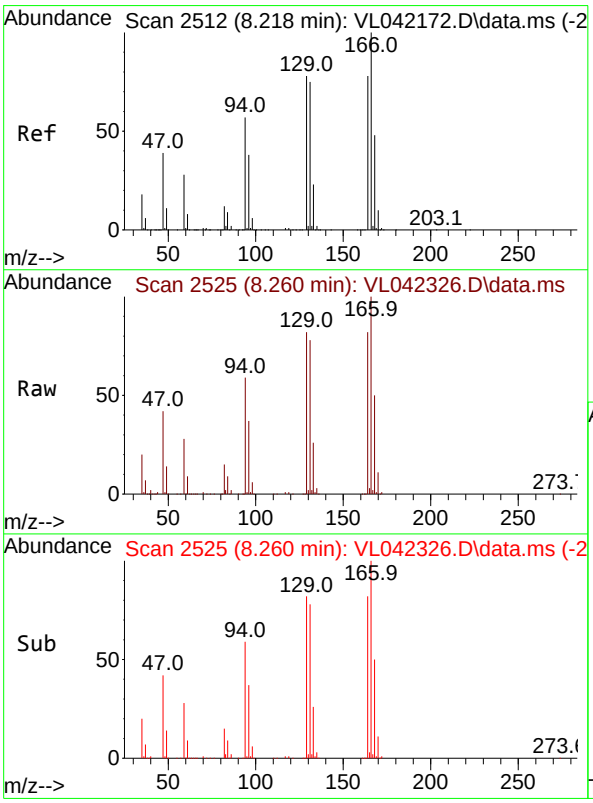
Supervised By :Mahesh Dadoda 04/16/2025

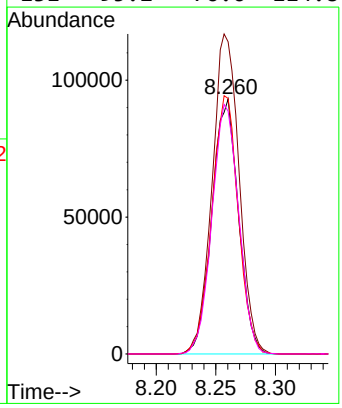


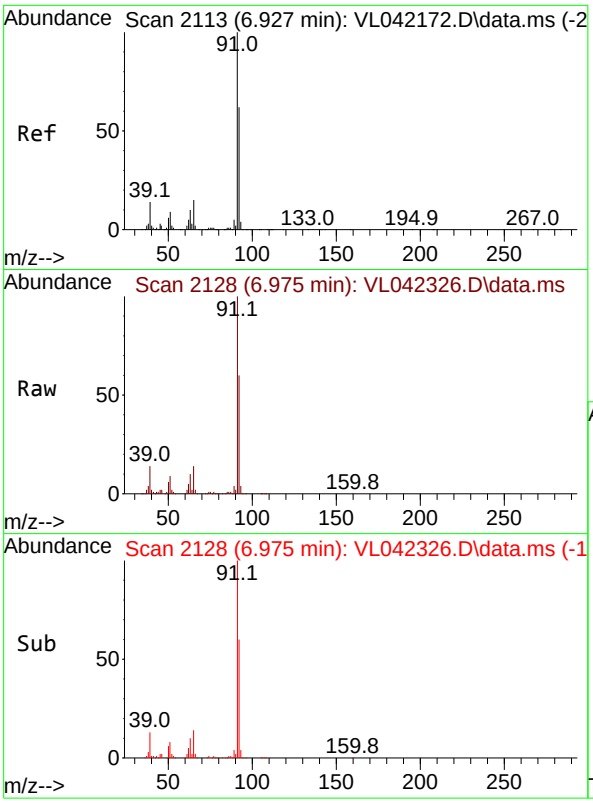


#52
Tetrachloroethene
Concen: 8.037 ppbv
RT: 8.260 min Scan# 2525
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:164 Resp: 144481

Ion	Ratio	Lower	Upper
164	100		
166	122.4	102.5	153.7
129	100.2	79.8	119.8
131	95.2	76.6	114.8

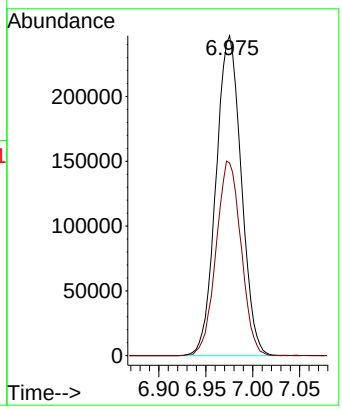




#53
Toluene
Concen: 8.595 ppbv
RT: 6.975 min Scan# 21
Delta R.T. 0.048 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 46185

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.4	72.6



Instrument :
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ClientSampleId :
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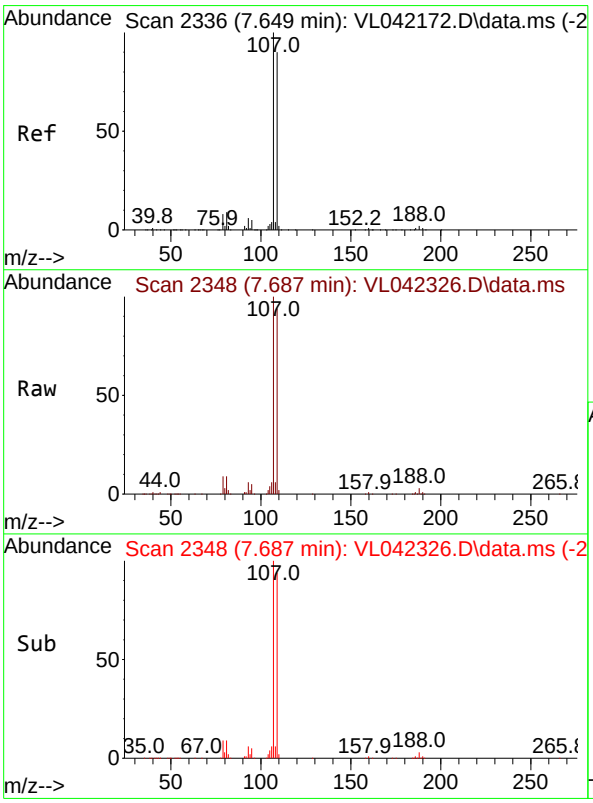
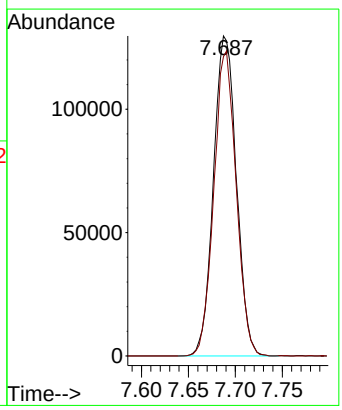
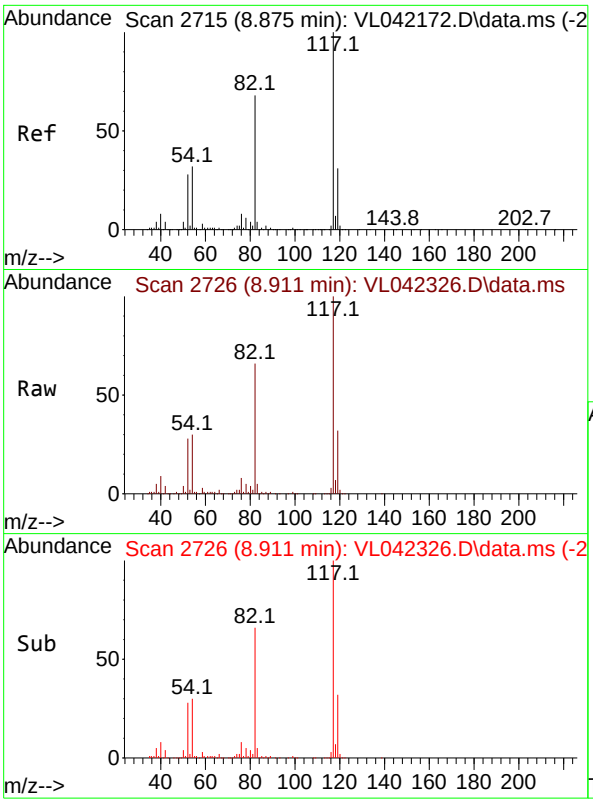


#54
1,2-Dibromoethane
Concen: 9.047 ppbv
RT: 7.687 min Scan# 2348
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:107 Resp: 220075

Ion	Ratio	Lower	Upper
107	100		
109	93.6	72.2	108.4

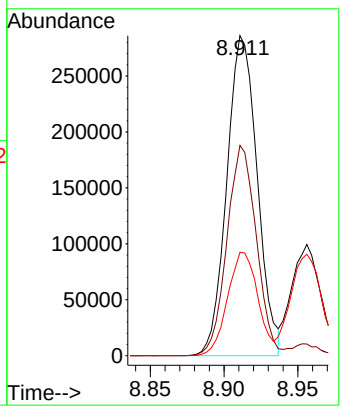




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.911 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:117 Resp: 41149

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.0	25.5	38.3



Instrument :
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ClientSampleId :
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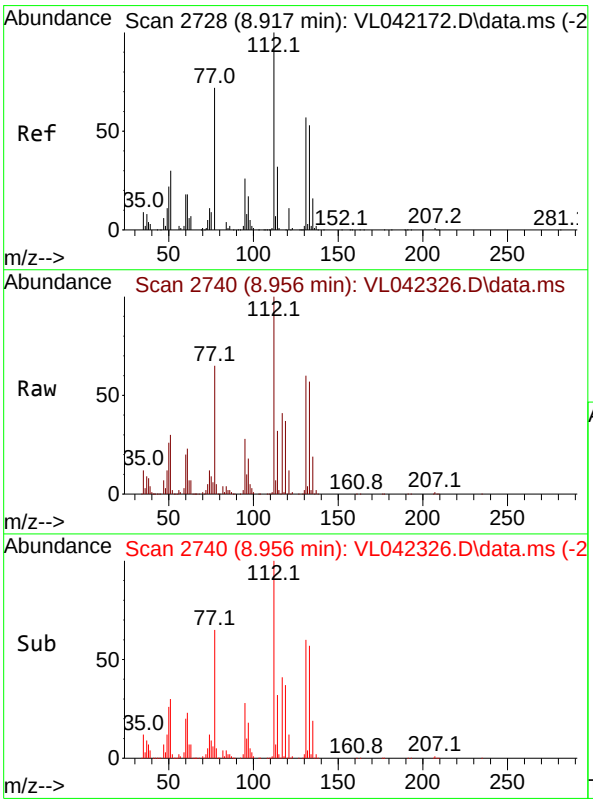
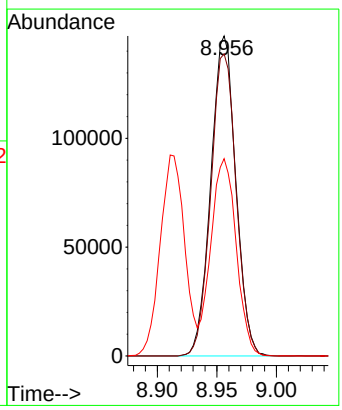
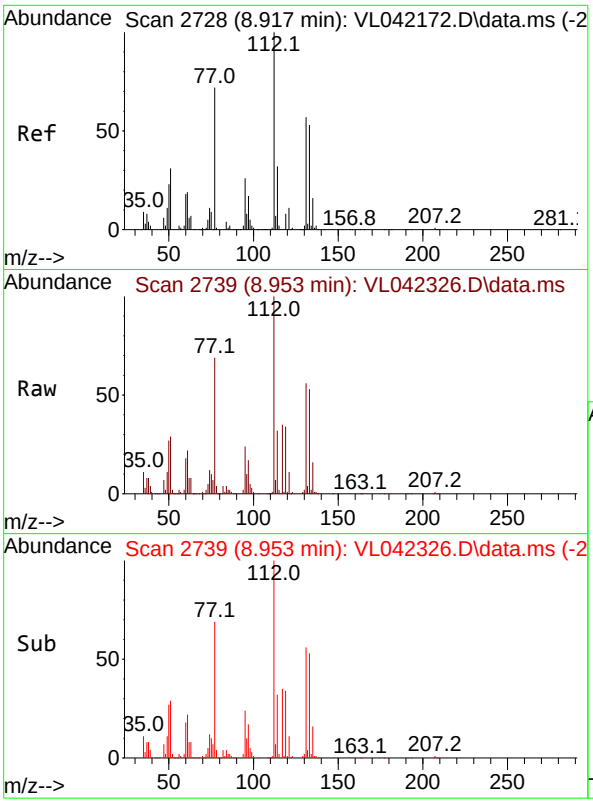


#56
1,1,1,2-Tetrachloroethane
Concen: 9.455 ppbv
RT: 8.956 min Scan# 2740
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:131 Resp: 214175

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.6	114.8
119	61.1	49.8	74.6

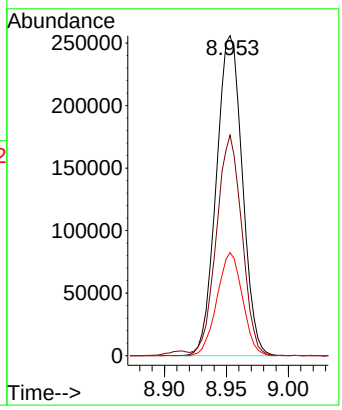




#57
Chlorobenzene
Concen: 9.617 ppbv
RT: 8.953 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:112 Resp: 37535

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	32.2	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
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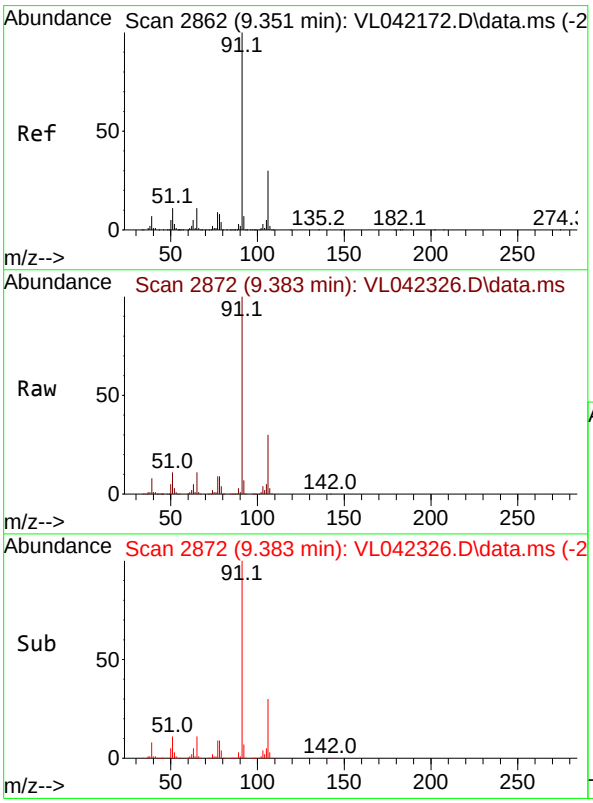
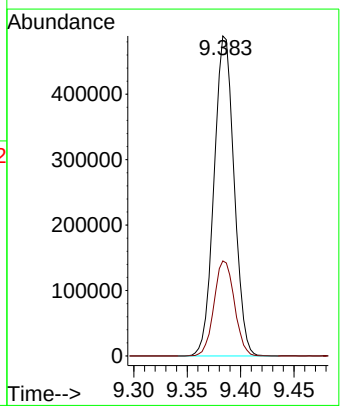
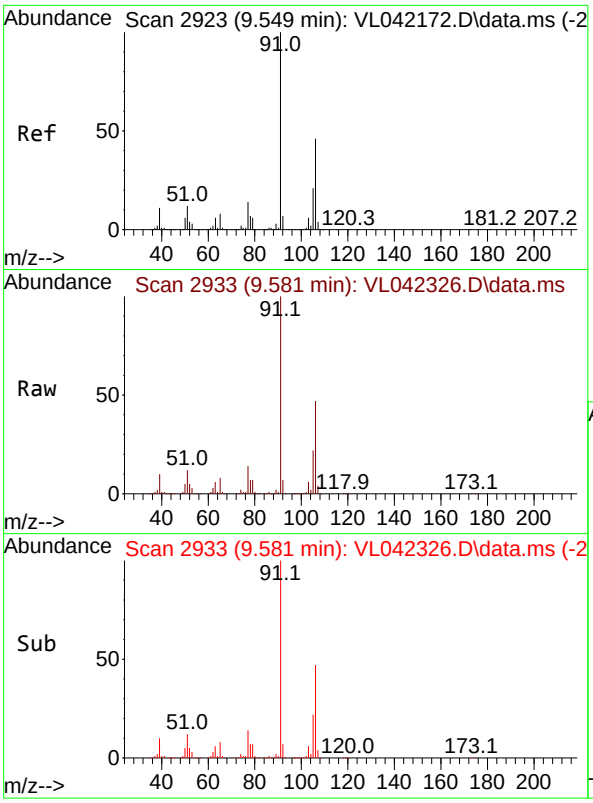


#58
Ethyl Benzene
Concen: 8.754 ppbv
RT: 9.383 min Scan# 2872
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 639857

Ion	Ratio	Lower	Upper
91	100		
106	29.7	24.2	36.2





#59
m/p-Xylene
Concen: 18.222 ppbv m
RT: 9.581 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 106350

Ion	Ratio	Lower	Upper
91	100		
106	47.1	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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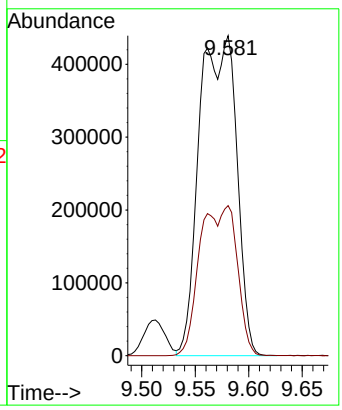
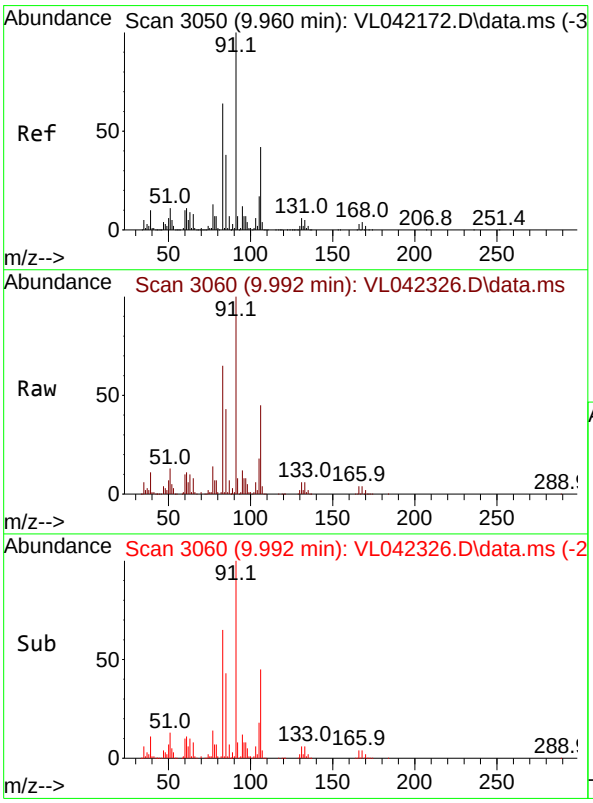
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

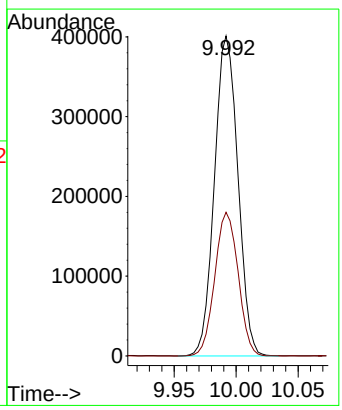


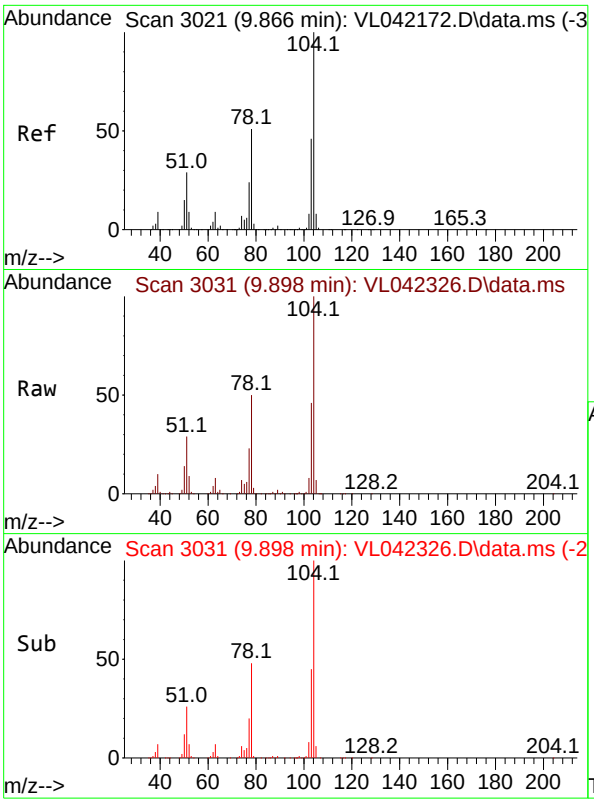


#60
o-Xylene
Concen: 9.040 ppbv
RT: 9.992 min Scan# 3060
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 528896

Ion	Ratio	Lower	Upper
91	100		
106	44.8	20.8	62.5

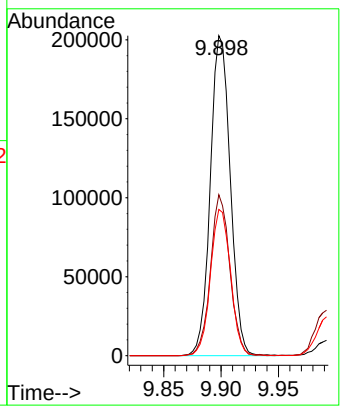




#61
Styrene
Concen: 8.474 ppbv
RT: 9.898 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:104 Resp: 24530

Ion	Ratio	Lower	Upper
104	100		
78	49.0	41.8	62.6
103	46.0	37.0	55.4



Instrument :
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ClientSampleId :
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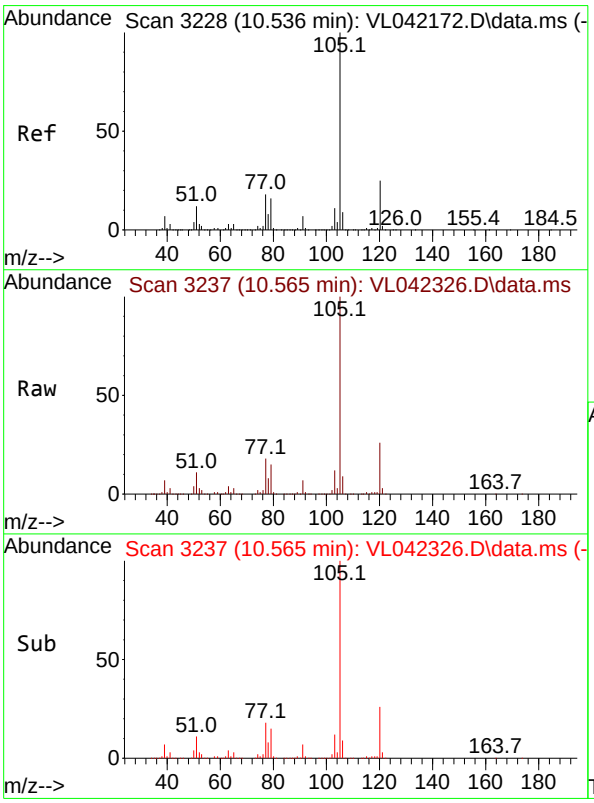
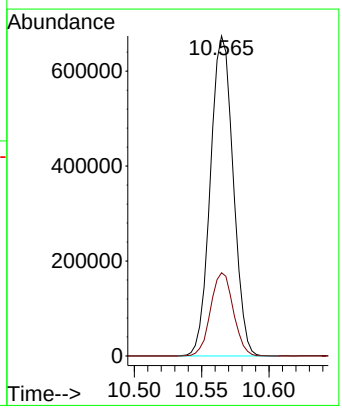
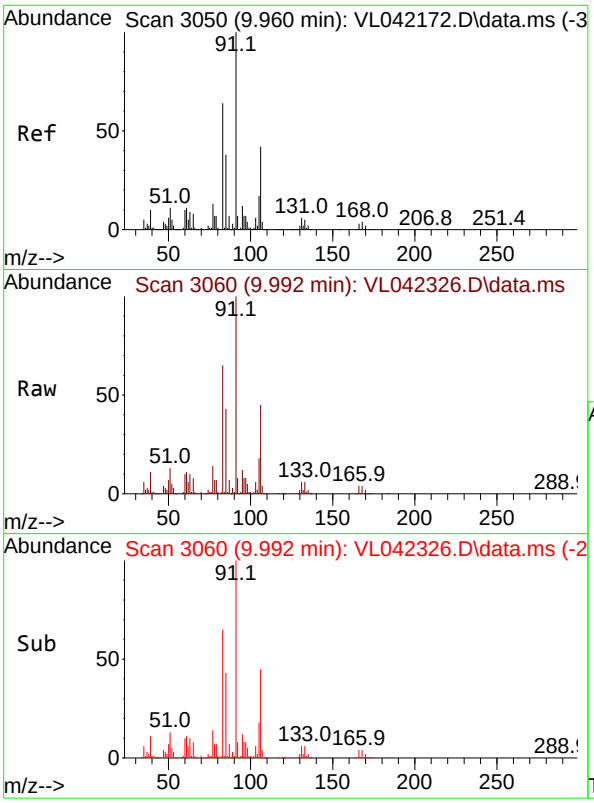


#62
Isopropylbenzene
Concen: 9.079 ppbv
RT: 10.565 min Scan# 3237
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 794408

Ion	Ratio	Lower	Upper
105	100		
120	25.9	19.9	29.9





#63
1,1,2,2-Tetrachloroethane
Concen: 9.671 ppbv
RT: 9.992 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 83 Resp: 34378

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.8	32.5	97.5

Instrument :
MSVOA_L
ClientSampleId :
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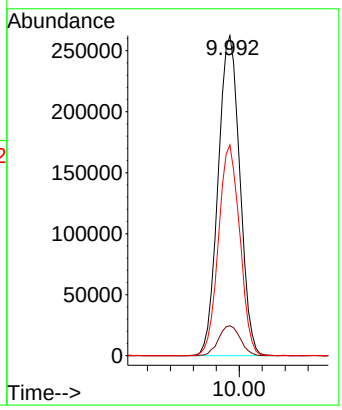
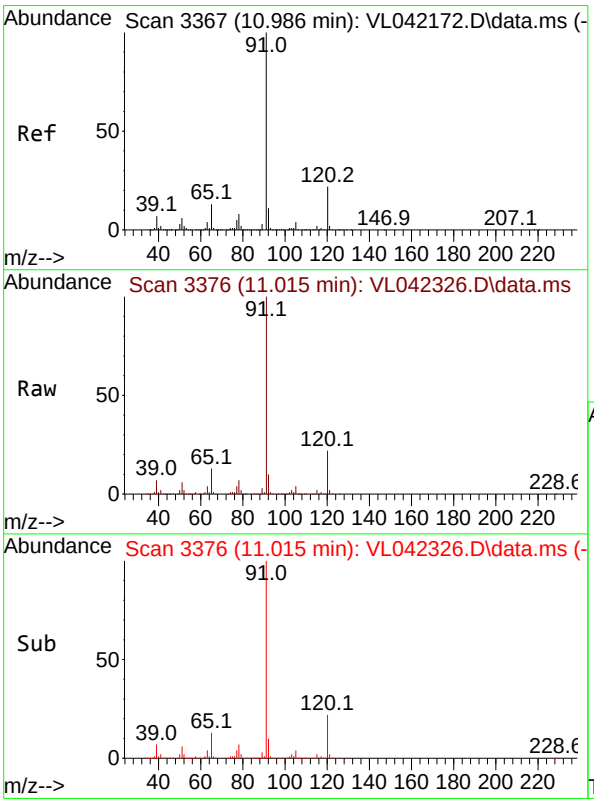
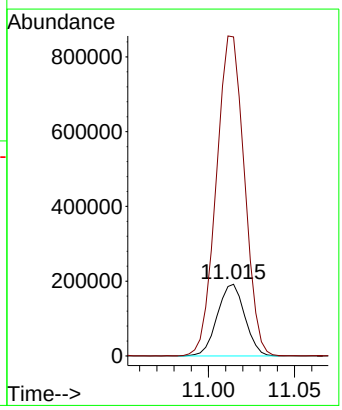


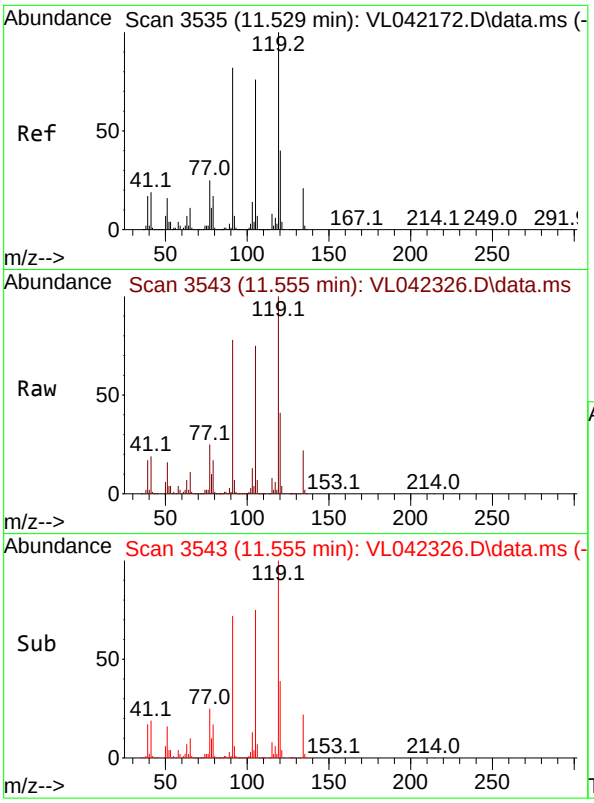


#64
n-propylbenzene
Concen: 9.452 ppbv
RT: 11.015 min Scan# 3376
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:120 Resp: 212879

Ion	Ratio	Lower	Upper
120	100		
91	456.6	376.9	565.3





#65
tert-Butylbenzene
Concen: 8.911 ppbv
RT: 11.555 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:119 Resp: 72107

Ion	Ratio	Lower	Upper
119	100		
91	79.7	66.0	99.0
134	21.1	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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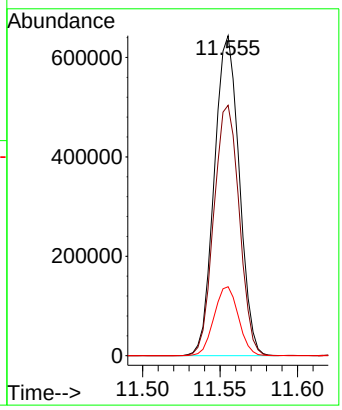
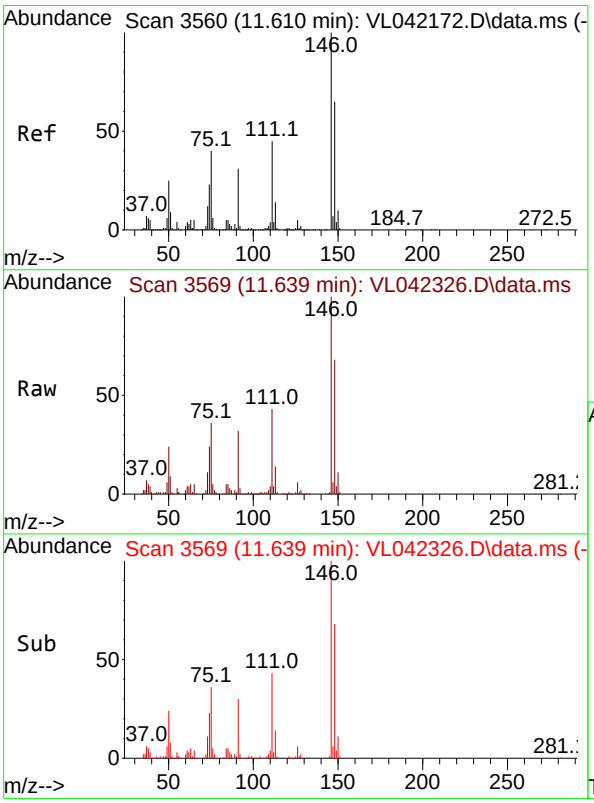
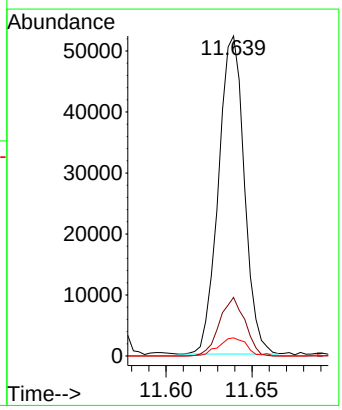


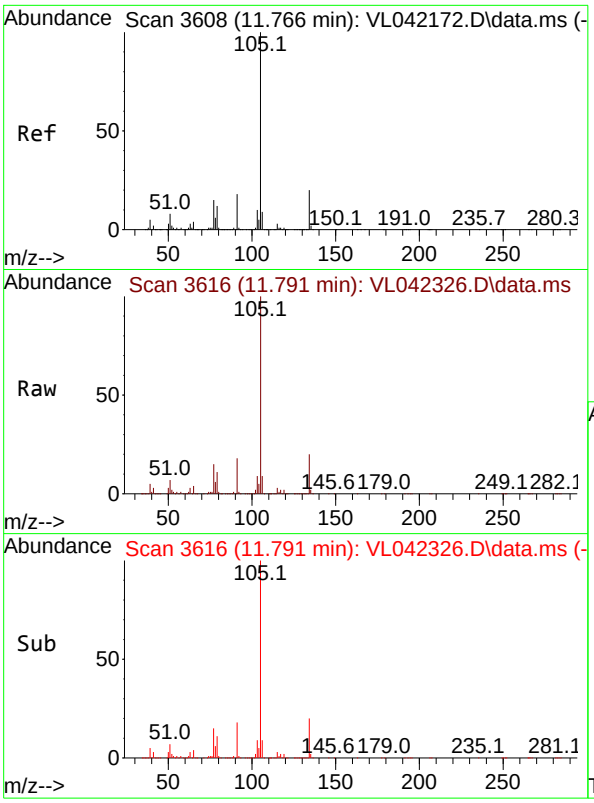


#66
Benzyl Chloride
Concen: 6.339 ppbv
RT: 11.639 min Scan# 3569
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 54427

Ion	Ratio	Lower	Upper
91	100		
126	18.2	13.8	20.6
128	6.3	4.5	6.7





#67
sec-Butylbenzene
Concen: 9.123 ppbv
RT: 11.791 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 102607

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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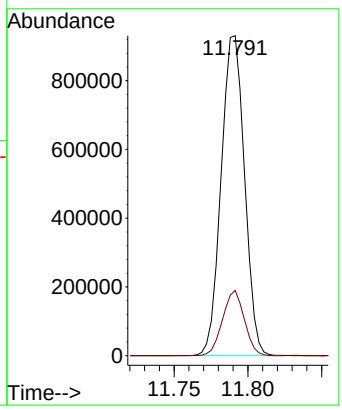
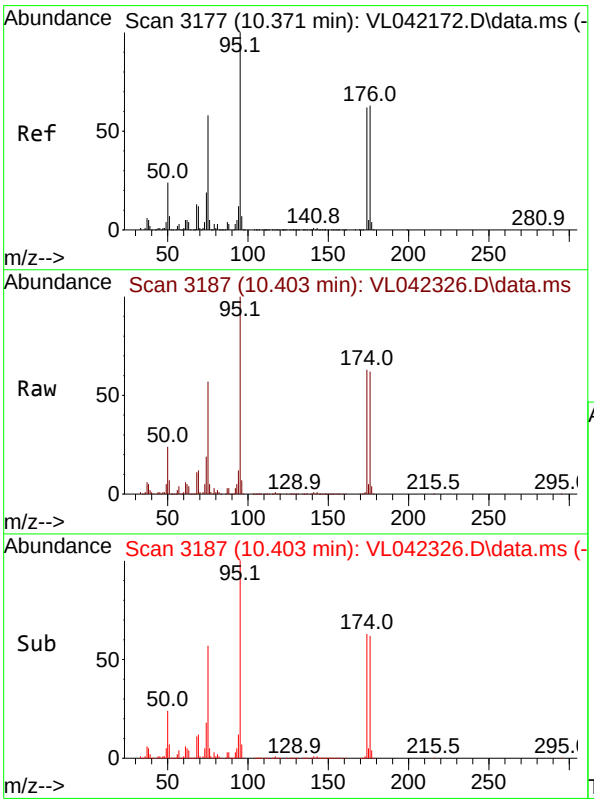
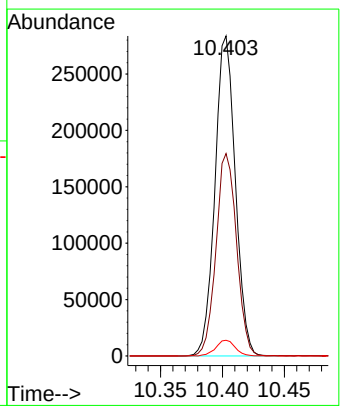


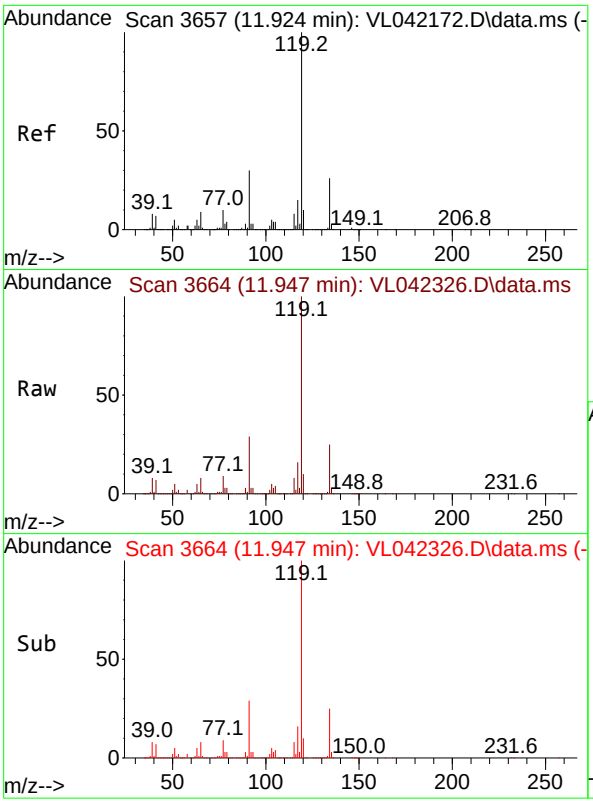


#68
1-Bromo-4-Fluorobenzene
Concen: 9.646 ppbv
RT: 10.403 min Scan# 3187
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 95 Resp: 325960

Ion	Ratio	Lower	Upper
95	100		
174	63.6	50.6	76.0
175	4.7	3.8	5.6

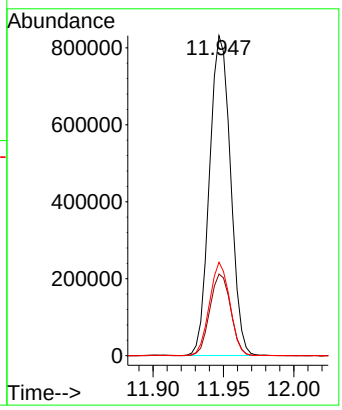




#69
p-Isopropyltoluene
Concen: 8.935 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:119 Resp: 86538

Ion	Ratio	Lower	Upper
119	100		
134	25.4	20.4	30.6
91	28.4	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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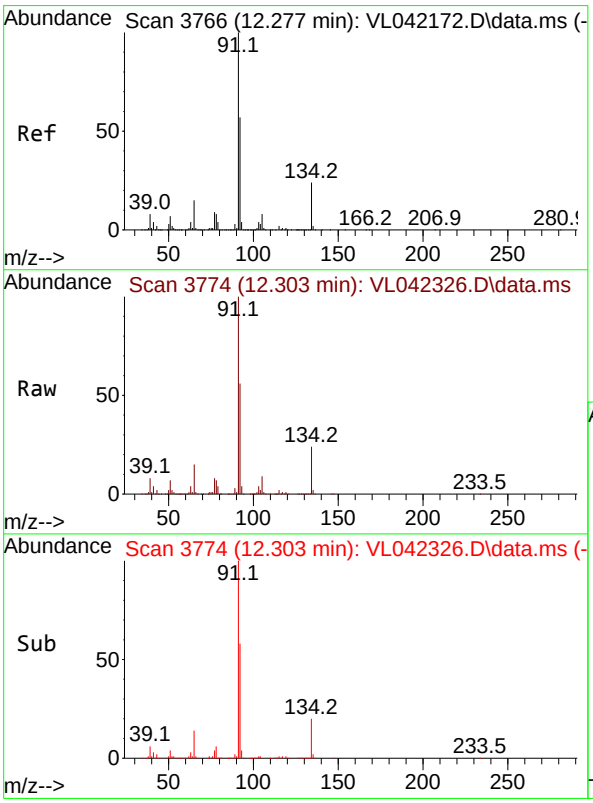
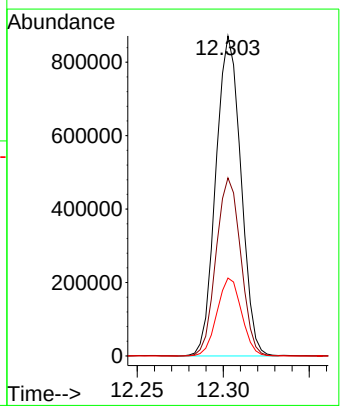
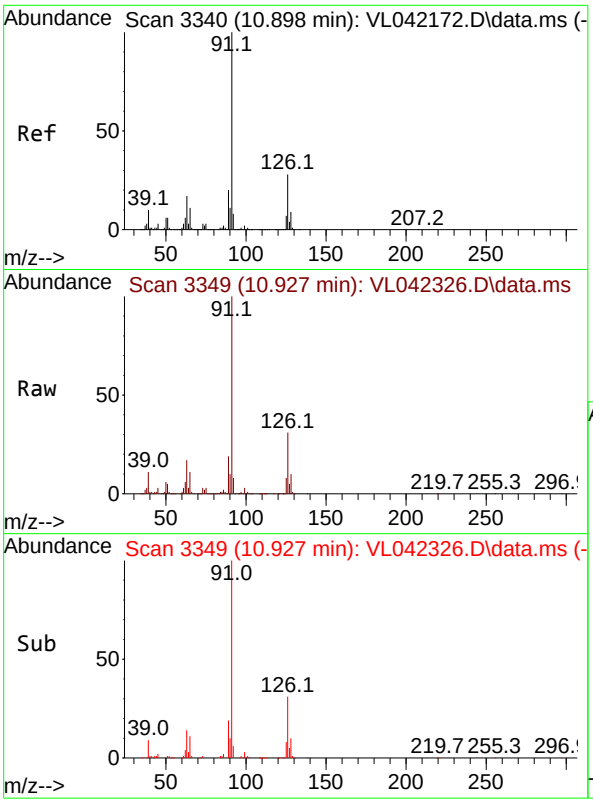


#70
n-Butylbenzene
Concen: 8.928 ppbv
RT: 12.303 min Scan# 3774
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 884265

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.9	67.3
134	23.8	19.2	28.8

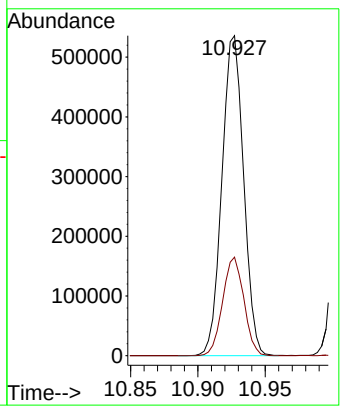




#71
2-Chlorotoluene
Concen: 8.830 ppbv
RT: 10.927 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 59959

Ion	Ratio	Lower	Upper
91	100		
126	30.1	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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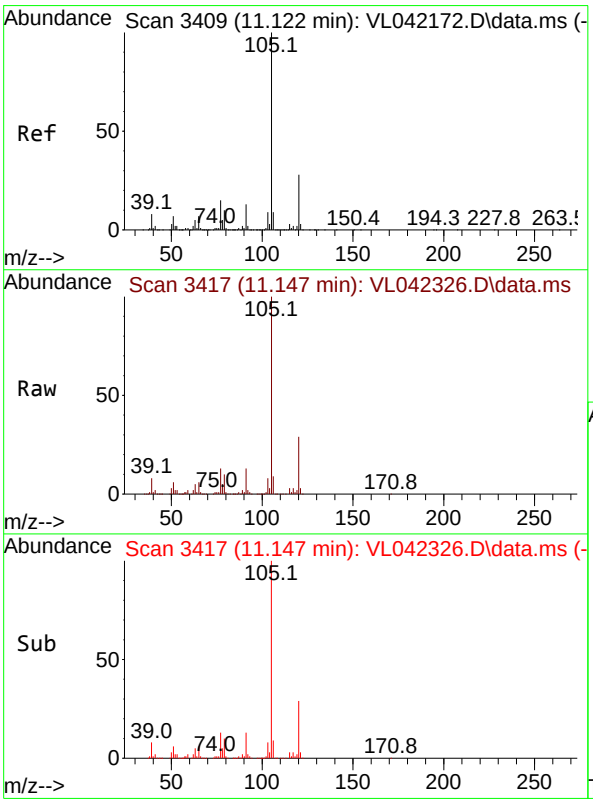
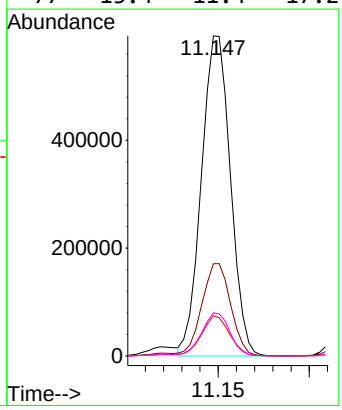
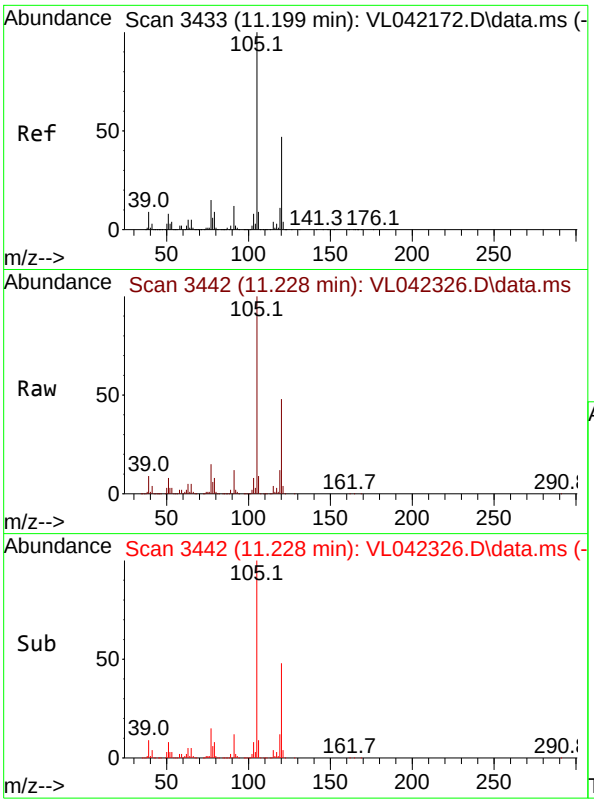


#72
4-Ethyltoluene
Concen: 9.029 ppbv
RT: 11.147 min Scan# 3417
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 657765

Ion	Ratio	Lower	Upper
105	100		
120	29.5	23.4	35.0
91	12.6	10.3	15.5
77	13.4	11.4	17.2

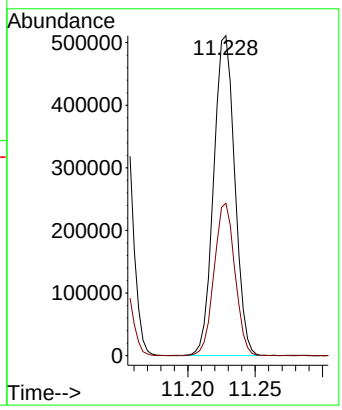




#73
1,3,5-Trimethylbenzene
Concen: 8.764 ppbv
RT: 11.228 min Scan# 34
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 55759

Ion	Ratio	Lower	Upper
105	100		
120	47.7	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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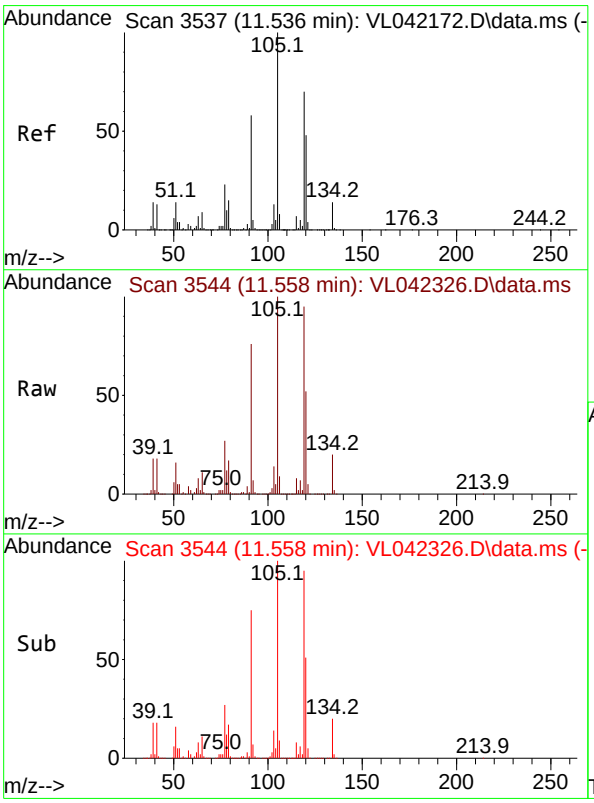
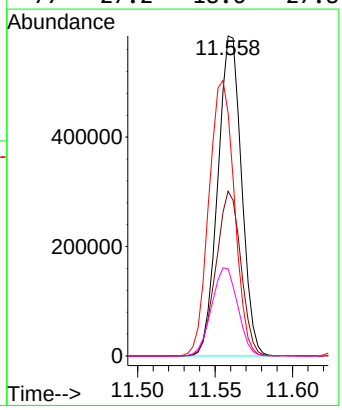
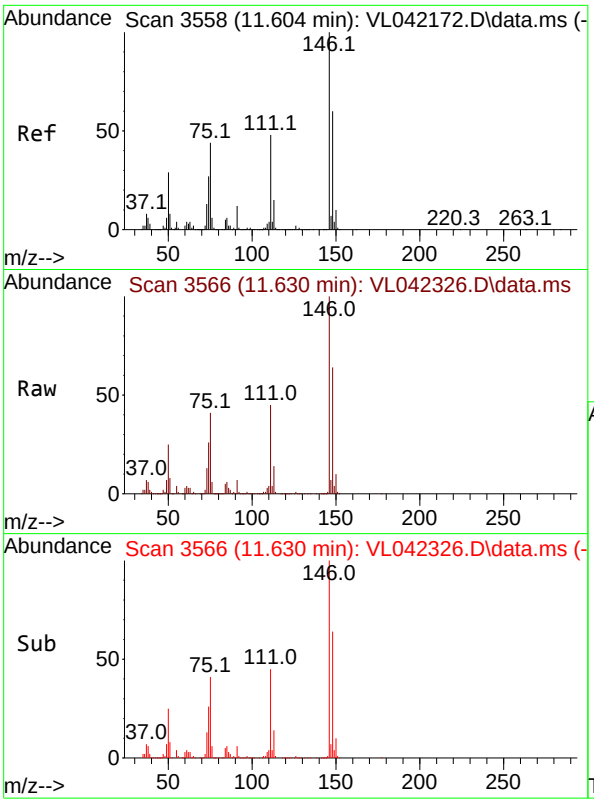


#74
1,2,4-Trimethylbenzene
Concen: 8.507 ppbv
RT: 11.558 min Scan# 3544
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 623563

Ion	Ratio	Lower	Upper
105	100		
120	51.5	38.6	58.0
91	75.8	46.2	69.2#
77	27.2	18.6	27.8

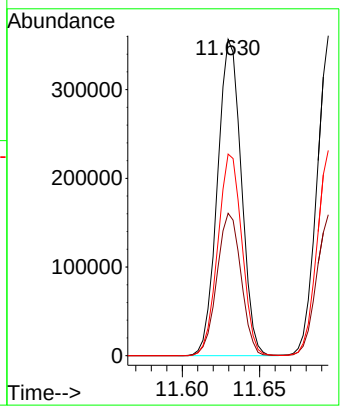




#75
1,3-Dichlorobenzene
Concen: 9.492 ppbv
RT: 11.630 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:146 Resp: 38157

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.8	71.2
148	64.4	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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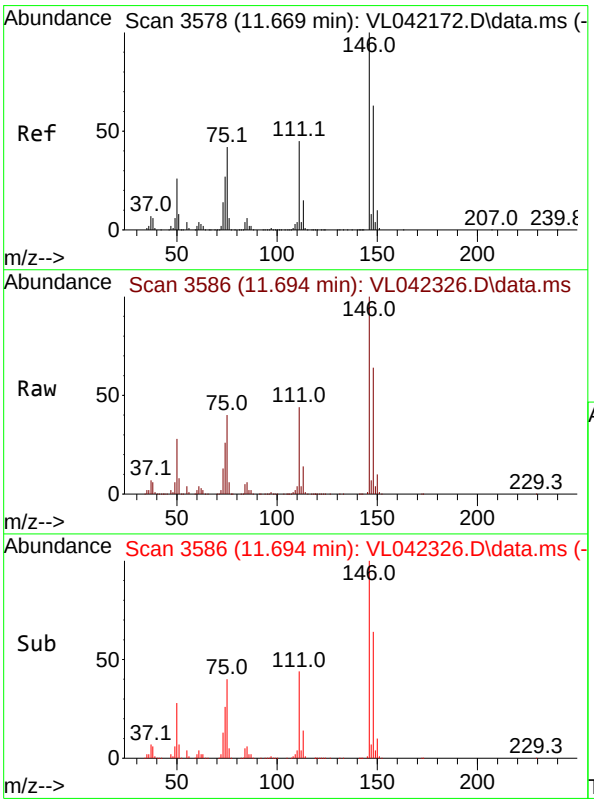
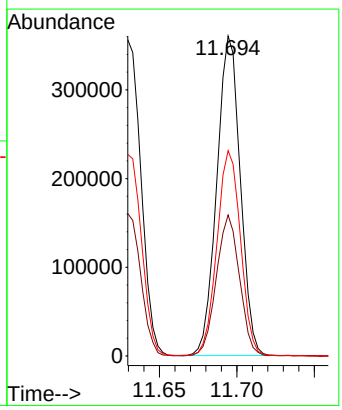
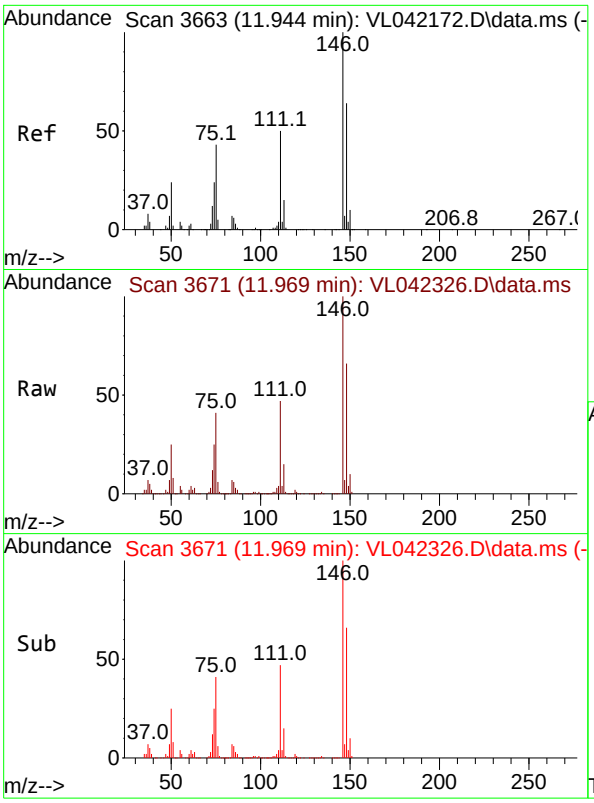


#76
1,4-Dichlorobenzene
Concen: 9.499 ppbv
RT: 11.694 min Scan# 3586
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:146 Resp: 380035

Ion	Ratio	Lower	Upper
146	100		
111	43.7	23.0	69.0
148	64.7	31.9	95.7

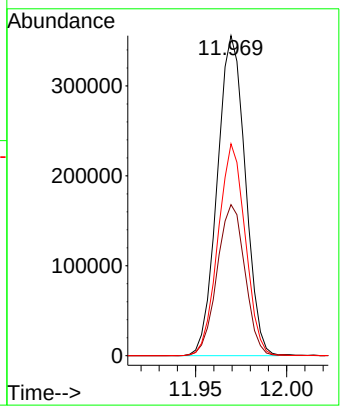




#77
1,2-Dichlorobenzene
Concen: 9.706 ppbv
RT: 11.969 min Scan# 3(
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:146 Resp: 37989(

Ion	Ratio	Lower	Upper
146	100		
111	47.0	24.8	74.3
148	64.5	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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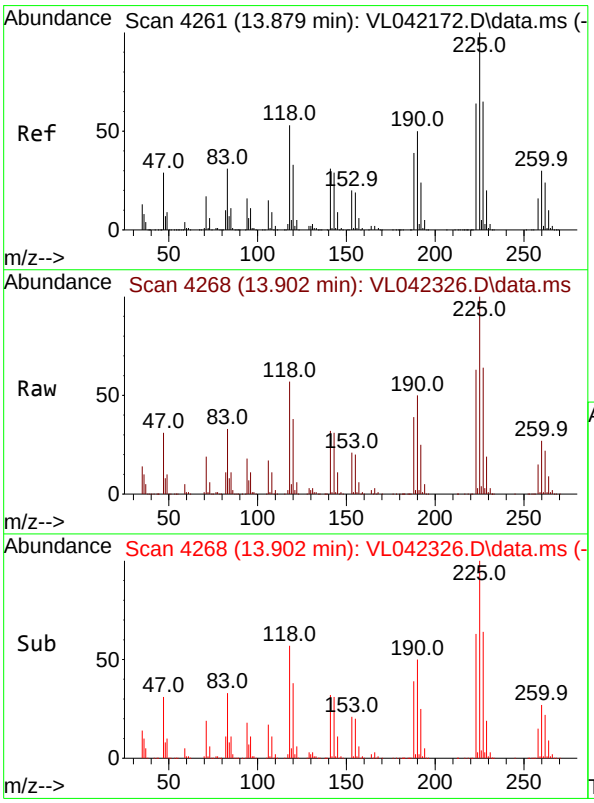
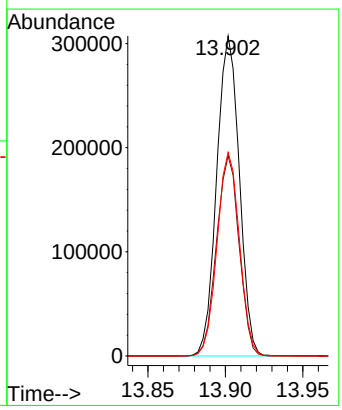
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

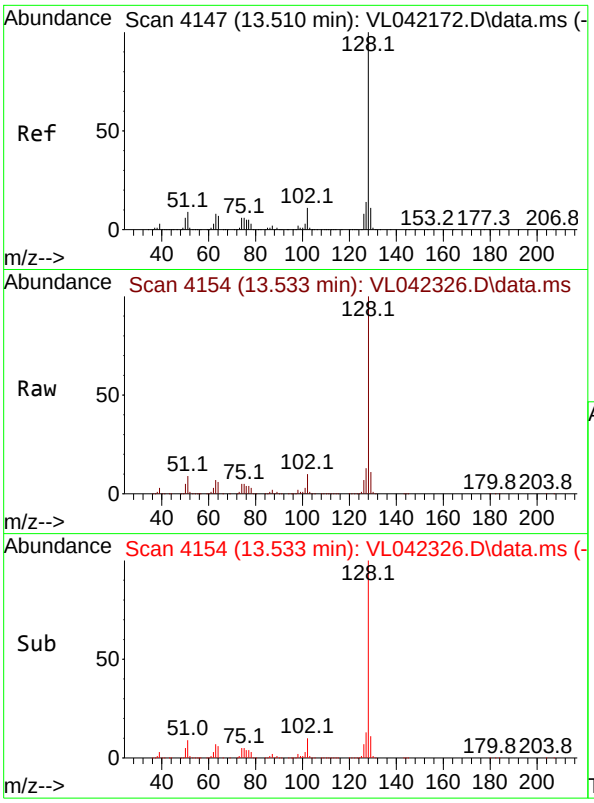


#78
Hexachloro-1,3-Butadiene
Concen: 7.828 ppbv
RT: 13.902 min Scan# 4268
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:225 Resp: 311900

Ion	Ratio	Lower	Upper
225	100		
223	62.4	50.6	76.0
227	63.0	51.2	76.8

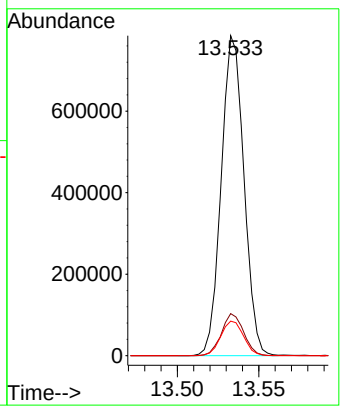




#79
Naphthalene
Concen: 9.490 ppbv
RT: 13.533 min Scan# 4
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:128 Resp: 76087

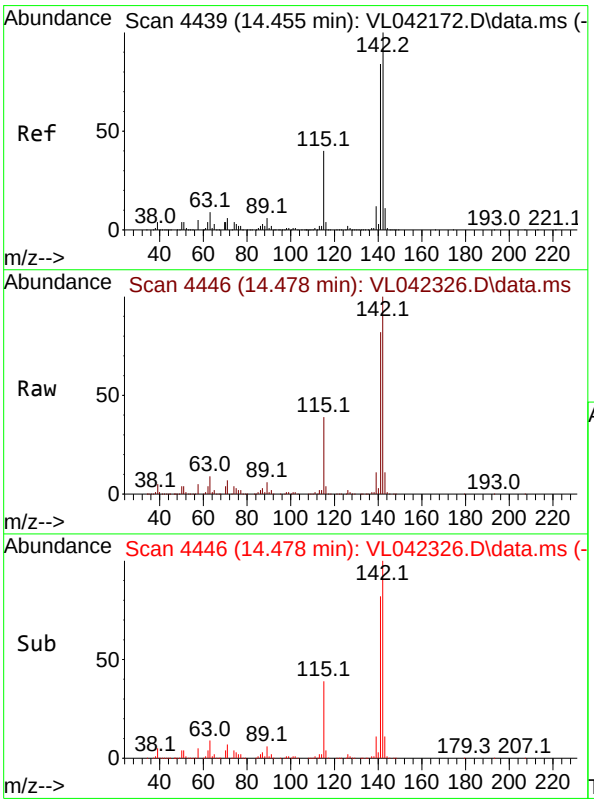
Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	10.8	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

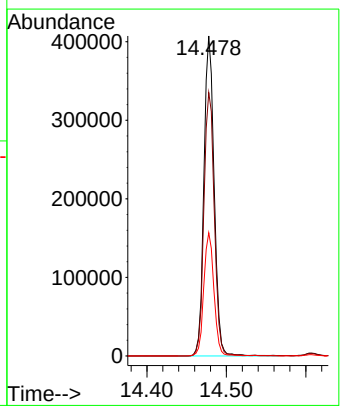
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

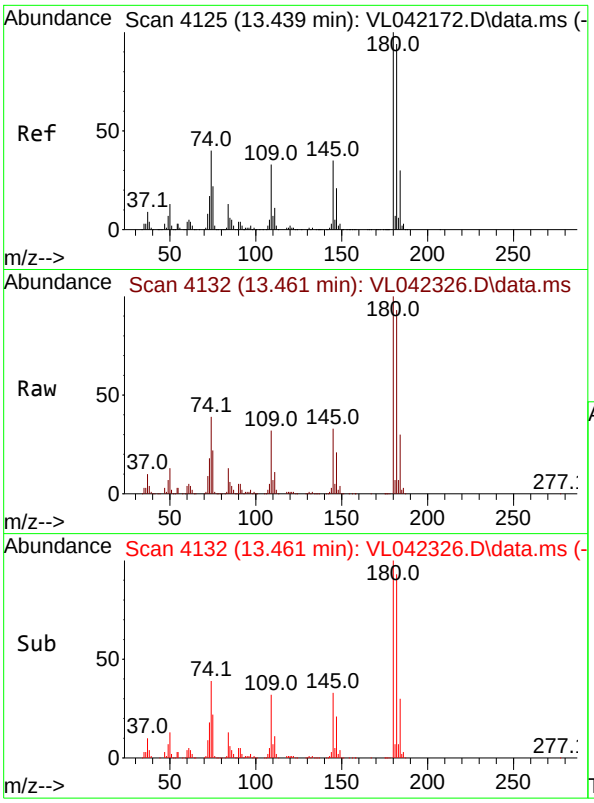


#80
Naphthalene,2-methyl-
Concen: 9.294 ppbv
RT: 14.478 min Scan# 4446
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:142 Resp: 365398

Ion	Ratio	Lower	Upper
142	100		
141	84.6	66.3	99.5
115	38.5	31.6	47.4

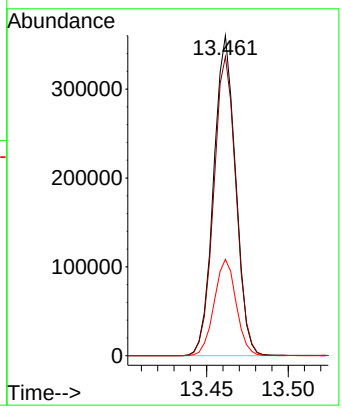




#81
1,2,4-Trichlorobenzene
Concen: 9.114 ppbv
RT: 13.461 min Scan# 4
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:180 Resp: 33703

Ion	Ratio	Lower	Upper
180	100		
182	95.1	75.1	112.7
184	30.2	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	92	0.02
2	T	Dichlorodifluoromethane	1.476	1.245	15.7	82	0.00
3		Chlorodifluoromethane	1.508	1.366	9.4	86	0.00
4		Chloromethane	0.603	0.520	13.8	84	0.00
5	T	Vinyl Chloride	0.639	0.483	24.4	81	0.01
6	T	Bromomethane	0.273	0.211	22.7	76	0.01
7		Chloroethane	0.242	0.187	22.7	76	0.01
8	T	Dichlorotetrafluoroethane	1.257	1.062	15.5	81	0.01
9	T	Propene	0.691	0.587	15.1	82	0.00
10	T	Heptane	1.839	1.607	12.6	83	0.05
11	T	Trichlorofluoromethane	1.437	1.175	18.2	81	0.01
12	T	1,1,2-Trichlorotrifluoroeth	1.181	0.912	22.8	75	0.02
13		Ethanol	0.065	0.026#	60.0#	83	0.01
14	T	Bromoethene	0.452	0.346	23.5	76	0.02
15	T	Acetone	1.399	1.065	23.9	88	0.01
16	T	1,3-Butadiene	0.683	0.528	22.7	85	0.01
17		tert-Butyl alcohol	1.742	1.218	30.1#	69	0.02
18	T	1,1-Dichloroethene	0.552	0.420	23.9	77	0.02
19	T	Isopropyl Alcohol	0.789	0.606	23.2	79	0.01
20	T	Methylene Chloride	0.521	0.350	32.8#	74	0.02
21	T	Allyl Chloride	0.986	0.772	21.7	79	0.02
22	T	trans-1,2-Dichloroethene	0.638	0.474	25.7	74	0.02
23	T	Vinyl Acetate	0.605	0.419	30.7#	78	0.02
24	T	1,1-Dichloroethane	1.183	0.983	16.9	81	0.02
25	T	Ethyl Acetate	3.630	3.278	9.7	87	0.02
26	T	Hexane	1.402	1.241	11.5	86	0.02
27	T	Carbon Disulfide	1.503	1.135	24.5	73	0.02
28	T	Methyl tert-Butyl Ether	0.873	0.675	22.7	75	0.02
29	T	Chloroform	2.052	1.824	11.1	87	0.02
30	T	Cyclohexane	1.217	1.006	17.3	80	0.03
31	T	cis-1,2-Dichloroethene	1.423	1.208	15.1	81	0.02
32	T	1,1,1-Trichloroethane	2.349	1.810	22.9	81	0.03
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	84	0.04
34	T	2-Butanone	0.725	0.694	4.3	87	0.02
35	T	Carbon Tetrachloride	0.781	0.695	11.0	83	0.03
36	T	Benzene	0.991	0.928	6.4	83	0.03
37	T	1,2-Dichloroethane	0.568	0.524	7.7	82	0.03
38	T	Trichloroethene	0.414	0.377	8.9	84	0.04
39	T	1,2-Dichloropropane	0.361	0.332	8.0	83	0.04
40	T	1,4-Dioxane	0.192	0.158	17.7	78	0.05
41	T	Tetrahydrofuran	0.418	0.397	5.0	84	0.03
42	T	Bromodichloromethane	0.782	0.729	6.8	80	0.04
43		Methyl Methacrylate	0.420	0.340	19.0	71	0.05
44	T	2,2,4-Trimethylpentane	1.675	1.593	4.9	83	0.04
45	T	t-1,3-Dichloropropene	0.450	0.330	26.7	63	0.05
46	T	cis-1,3-Dichloropropene	0.552	0.447	19.0	68	0.05
47	T	1,1,2-Trichloroethane	0.382	0.357	6.5	82	0.05
48	T	Dibromochloromethane	0.647	0.596	7.9	79	0.05

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.581	0.522	10.2	75	0.04
50	T	4-Methyl-2-Pentanone	1.149	0.969	15.7	79	0.05
51	T	2-Hexanone	0.944	0.773	18.1	77	0.04
52	T	Tetrachloroethene	0.393	0.316	19.6	77	0.04
53	T	Toluene	1.175	1.010	14.0	75	0.05
54	T	1,2-Dibromoethane	0.532	0.481	9.6	80	0.04
55	I	Chlorobenzene-d5	1.000	1.000	0.0	79	0.04
56		1,1,1,2-Tetrachloroethane	0.550	0.520	5.5	81	0.04
57	T	Chlorobenzene	0.949	0.912	3.9	83	0.04
58	T	Ethyl Benzene	1.776	1.555	12.4	74	0.03
59	T	m/p-Xylene	1.418	1.292	8.9	77	0.03
60	T	o-Xylene	1.422	1.285	9.6	77	0.03
61	T	Styrene	0.703	0.596	15.2	69	0.03
62		Isopropylbenzene	2.126	1.931	9.2	78	0.03
63	T	1,1,2,2-Tetrachloroethane	0.864	0.835	3.4	83	0.03
64		n-propylbenzene	0.547	0.517	5.5	82	0.03
65		tert-Butylbenzene	1.966	1.752	10.9	80	0.03
66	T	Benzyl Chloride	0.209	0.132	36.8#	52	0.03
67		sec-Butylbenzene	2.733	2.494	8.7	82	0.03
68	S	1-Bromo-4-Fluorobenzene	0.821	0.792	3.5	77	0.03
69		p-Isopropyltoluene	2.354	2.103	10.7	80	0.02
70		n-Butylbenzene	2.407	2.149	10.7	80	0.03
71		2-Chlorotoluene	1.650	1.457	11.7	75	0.03
72	T	4-Ethyltoluene	1.770	1.598	9.7	78	0.03
73	T	1,3,5-Trimethylbenzene	1.546	1.355	12.4	77	0.03
74	T	1,2,4-Trimethylbenzene	1.781	1.515	14.9	79	0.02
75	T	1,3-Dichlorobenzene	0.977	0.927	5.1	83	0.03
76	T	1,4-Dichlorobenzene	0.972	0.924	4.9	82	0.03
77	T	1,2-Dichlorobenzene	0.951	0.923	2.9	86	0.03
78	T	Hexachloro-1,3-Butadiene	0.968	0.758	21.7	75	0.02
79	T	Naphthalene	1.948	1.849	5.1	81	0.02
80	T	Naphthalene,2-methyl-	0.955	0.888	7.0	71	0.02
81	T	1,2,4-Trichlorobenzene	0.899	0.819	8.9	75	0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/28/2025 08:44

Lab File ID: VL042416.D Init. Calib. Date(s): 04/17/2025 04/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:44 12:54

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.767	1.796		1.64	30
Ethanol	0.122	0.038		-68.85	30
Chloromethane	0.699	0.698		-0.14	30
Vinyl Chloride	0.761	0.679		-10.77	30
Bromomethane	0.327	0.307		-6.12	30
Chloroethane	0.275	0.264		-4	30
Tetrahydrofuran	0.461	0.386		-16.27	30
Trichlorofluoromethane	1.680	1.728		2.86	30
1,1,2-Trichlorotrifluoroethane	1.374	1.337		-2.69	30
Dichlorotetrafluoroethane	1.517	1.551		2.24	30
Bromoethene	0.518	0.518		0	30
tert-Butyl alcohol	2.029	1.859		-8.38	30
Heptane	2.153	1.687		-21.64	30
Isopropyl Alcohol	0.909	0.828		-8.91	30
1,1-Dichloroethene	0.642	0.605		-5.76	30
Acetone	1.637	1.412		-13.74	30
Carbon Disulfide	1.749	1.685		-3.66	30
Methyl tert-Butyl Ether	1.070	0.955		-10.75	30
Methylene Chloride	0.641	0.512		-20.13	30
trans-1,2-Dichloroethene	0.731	0.669		-8.48	30
1,1-Dichloroethane	1.388	1.337		-3.67	30
Cyclohexane	1.320	1.168		-11.52	30
2-Butanone	0.791	0.699		-11.63	30
Carbon Tetrachloride	0.905	0.885		-2.21	30
cis-1,2-Dichloroethene	1.553	1.488		-4.18	30
Chloroform	2.309	2.303		-0.26	30
1,1,1-Trichloroethane	2.599	2.470		-4.96	30
2,2,4-Trimethylpentane	1.863	1.630		-12.51	30
Benzene	1.079	0.982		-8.99	30
1,2-Dichloroethane	0.647	0.684		5.72	30
Trichloroethene	0.471	0.396		-15.92	30
1,2-Dichloropropane	0.402	0.354		-11.94	30
Bromodichloromethane	0.901	0.901		0	30
4-Methyl-2-Pentanone	1.314	1.032		-21.46	30
Toluene	1.294	1.154		-10.82	30
t-1,3-Dichloropropene	0.497	0.456		-8.25	30
cis-1,3-Dichloropropene	0.608	0.554		-8.88	30
1,1,2-Trichloroethane	0.410	0.388		-5.37	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/28/2025 08:44

Lab File ID: VL042416.D Init. Calib. Date(s): 04/17/2025 04/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:44 12:54

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dibromochloromethane	0.723	0.711		-1.66	30
1,2-Dibromoethane	0.586	0.550		-6.14	30
Tetrachloroethene	0.417	0.331		-20.62	30
Chlorobenzene	1.040	0.985		-5.29	30
Ethyl Benzene	1.981	1.861		-6.06	30
m/p-Xylene	1.596	1.522		-4.64	30
o-Xylene	1.607	1.528		-4.92	30
Styrene	0.767	0.698		-9	30
Bromoform	0.633	0.577		-8.85	30
1,1,2,2-Tetrachloroethane	1.042	0.900		-13.63	30
2-Chlorotoluene	1.851	1.752		-5.35	30
1,3,5-Trimethylbenzene	1.735	1.596		-8.01	30
1,2,4-Trimethylbenzene	2.026	1.775		-12.39	30
1,3-Dichlorobenzene	1.053	0.941		-10.64	30
1,4-Dichlorobenzene	1.059	0.952		-10.1	30
1,2-Dichlorobenzene	1.024	0.917		-10.45	30
1,2,4-Trichlorobenzene	1.040	0.884		-15	30
Hexachloro-1,3-Butadiene	1.034	0.871		-15.76	30
1,3-Butadiene	0.783	0.695		-11.24	30
Naphthalene	2.423	2.040		-15.81	30
4-Ethyltoluene	1.965	1.823		-7.23	30
1-Bromo-4-Fluorobenzene	0.822	0.866		5.35	30
Hexane	1.633	1.367		-16.29	30
Allyl Chloride	1.130	1.026		-9.2	30
1,4-Dioxane	220.893	170.527		-22.8	30
Methyl Methacrylate	0.486	0.400		-17.69	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	121989	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	345031	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	305240	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	264197	10.533	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	219089	10.165	ppbv	98
3) Chlorodifluoromethane	1.476	51	192111	9.360	ppbv	99
4) Chloromethane	1.531	50	85195	9.988	ppbv	98
5) Vinyl Chloride	1.580	62	82863	8.925	ppbv	100
6) Bromomethane	1.667	94	37396	9.376	ppbv	83
7) Chloroethane	1.703	64	32235	9.600	ppbv	99
8) Dichlorotetrafluoroethane	1.554	85	189174	10.223	ppbv	95
9) Propene	1.483	41	75996	8.131	ppbv	98
10) Heptane	4.975	43	205785	7.837	ppbv	98
11) Trichlorofluoromethane	1.874	101	210830	10.286	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.136	101	163109	9.733	ppbv	97
13) Ethanol	1.719	45	4612	3.104	ppbv	98
14) Bromoethene	1.780	108	63235	10.010	ppbv	97
15) Acetone	1.832	43	172207	8.623	ppbv	100
16) 1,3-Butadiene	1.609	39	84816	8.880	ppbv	98
17) tert-Butyl alcohol	2.039	59	226804	9.164	ppbv	100
18) 1,1-Dichloroethene	2.033	96	73751	9.420	ppbv	96
19) Isopropyl Alcohol	1.884	45	101011	9.105	ppbv	93
20) Methylene Chloride	2.059	84	62506	7.992	ppbv	90
21) Allyl Chloride	2.094	41	125215	9.081	ppbv	97
22) trans-1,2-Dichloroethene	2.337	96	81589	9.153	ppbv	94
23) Vinyl Acetate	2.460	43	64907	8.030	ppbv	97
24) 1,1-Dichloroethane	2.405	63	163124	9.634	ppbv	99
25) Ethyl Acetate	2.835	43	425121	8.634	ppbv	99
26) Hexane	2.823	57	166789	8.370	ppbv	98
27) Carbon Disulfide	2.146	76	205605	9.637	ppbv	96
28) Methyl tert-Butyl Ether	2.437	73	116474	8.922	ppbv	93
29) Chloroform	2.845	83	280938	9.975	ppbv	99
30) Cyclohexane	3.852	84	142532	8.849	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	181514	9.581	ppbv	96
32) 1,1,1-Trichloroethane	3.363	97	301259	9.501	ppbv	99
34) 2-Butanone	2.554	43	241047	8.834	ppbv	99
35) Carbon Tetrachloride	3.758	117	305477	9.783	ppbv	96
36) Benzene	3.654	78	338736	9.102	ppbv	97
37) 1,2-Dichloroethane	3.214	62	235966	10.564	ppbv	97
38) Trichloroethene	4.541	130	136731	8.406	ppbv	95
39) 1,2-Dichloropropane	4.308	63	122213	8.813	ppbv	97
40) 1,4-Dioxane	4.577	88	58837	7.720	ppbv #	95
41) Tetrahydrofuran	3.052	42	133063	8.363	ppbv	99
42) Bromodichloromethane	4.483	83	310726	9.996	ppbv #	96
43) Methyl Methacrylate	4.878	69	138030	8.230	ppbv	94
44) 2,2,4-Trimethylpentane	4.635	57	562403	8.750	ppbv	96
45) t-1,3-Dichloropropene	6.409	75	157191	9.175	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	191165	9.117	ppbv #	88
47) 1,1,2-Trichloroethane	6.574	97	133821	9.471	ppbv	96
48) Dibromochloromethane	7.383	129	245439	9.832	ppbv	99
49) Bromoform	9.480	173	198991	9.117	ppbv	100
50) 4-Methyl-2-Pentanone	5.748	43	356129	7.854	ppbv	99
51) 2-Hexanone	7.431	43	287045	7.058	ppbv	98
52) Tetrachloroethene	8.221	164	114038	7.928	ppbv	91
53) Toluene	6.927	91	398162	8.916	ppbv	100
54) 1,2-Dibromoethane	7.648	107	189639	9.378	ppbv	92
56) 1,1,1,2-Tetrachloroethane	8.920	131	184161	9.969	ppbv	97
57) Chlorobenzene	8.917	112	300677	9.471	ppbv	98
58) Ethyl Benzene	9.354	91	568129	9.394	ppbv	98
59) m/p-Xylene	9.548	91	929203m	19.073	ppbv	
60) o-Xylene	9.963	91	466411	9.507	ppbv	97
61) Styrene	9.865	104	213119	9.101	ppbv	98
62) Isopropylbenzene	10.535	105	680837	9.452	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.959	83	274653	8.639	ppbv	99
64) n-propylbenzene	10.989	120	166984	9.223	ppbv	98
65) tert-Butylbenzene	11.529	119	610304	9.219	ppbv	95
66) Benzyl Chloride	11.613	91	59187	8.136	ppbv	99
67) sec-Butylbenzene	11.765	105	854169	9.276	ppbv	99
69) p-Isopropyltoluene	11.924	119	732365	9.155	ppbv	97
70) n-Butylbenzene	12.280	91	765539	9.188	ppbv	99
71) 2-Chlorotoluene	10.898	91	534834	9.467	ppbv	98
72) 4-Ethyltoluene	11.121	105	556591	9.280	ppbv	97
73) 1,3,5-Trimethylbenzene	11.202	105	487223	9.201	ppbv	98
74) 1,2,4-Trimethylbenzene	11.536	105	541720	8.759	ppbv	94
75) 1,3-Dichlorobenzene	11.607	146	287285	8.936	ppbv	97
76) 1,4-Dichlorobenzene	11.671	146	290512	8.991	ppbv	98
77) 1,2-Dichlorobenzene	11.943	146	279962	8.956	ppbv	98
78) Hexachloro-1,3-Butadiene	13.879	225	265745	8.419	ppbv	100
79) Naphthalene	13.513	128	622606	8.418	ppbv	99
80) Naphthalene,2-methyl-	14.455	142	328047	7.783	ppbv	95
81) 1,2,4-Trichlorobenzene	13.439	180	269711	8.493	ppbv	99

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

Quantitation Report (QT Reviewed)

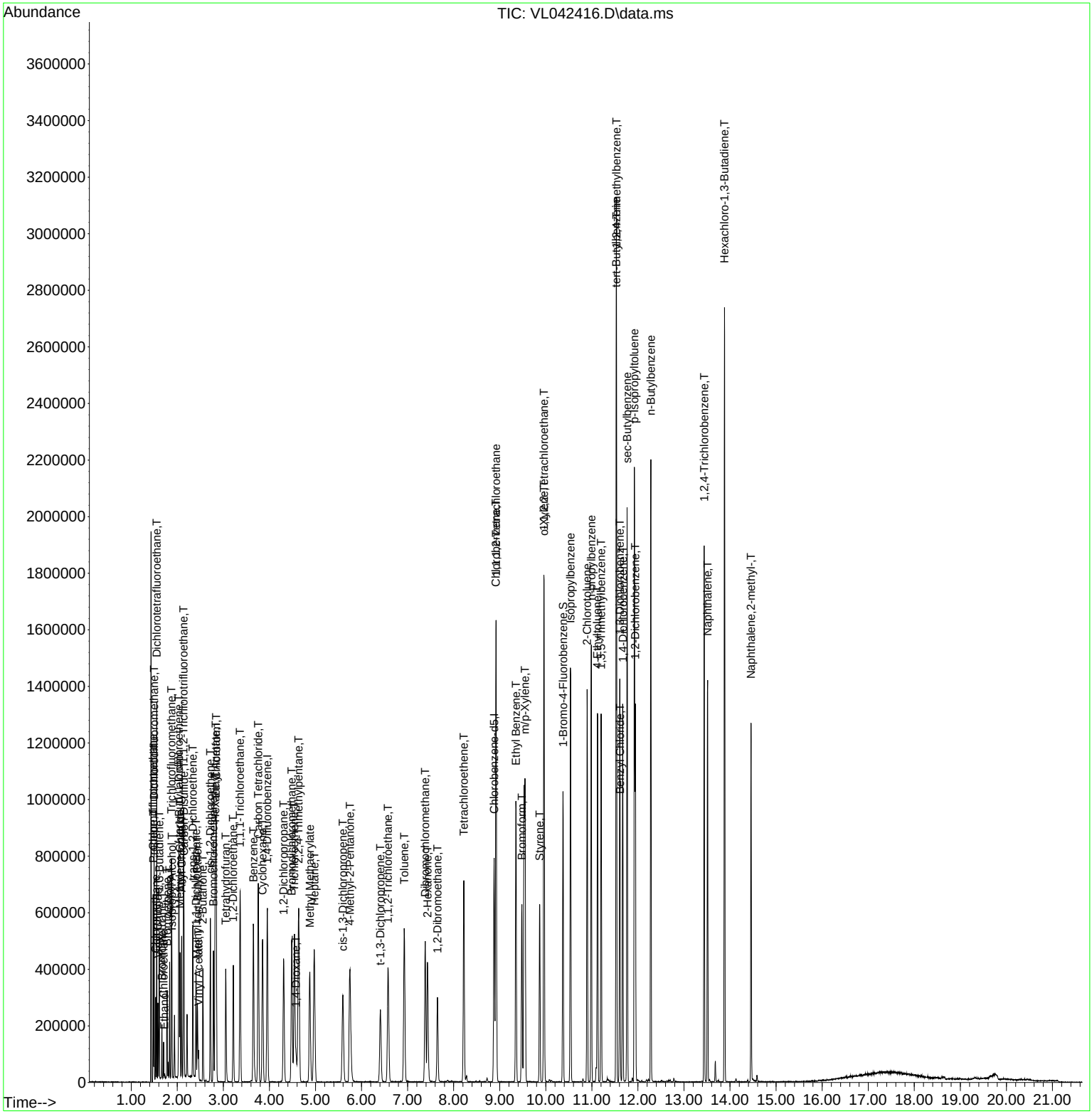
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

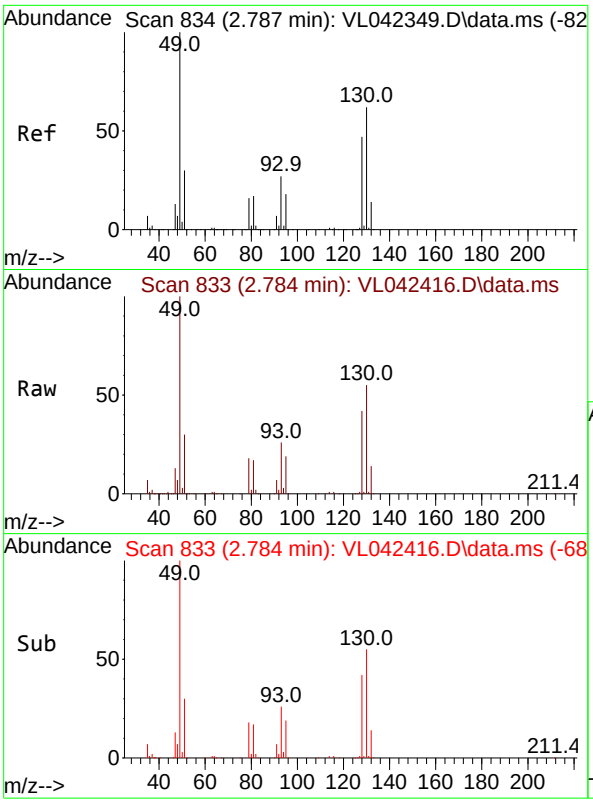
Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

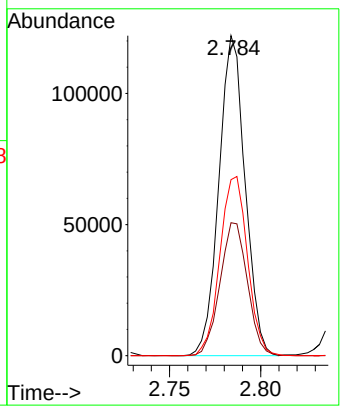




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 49 Resp: 12198

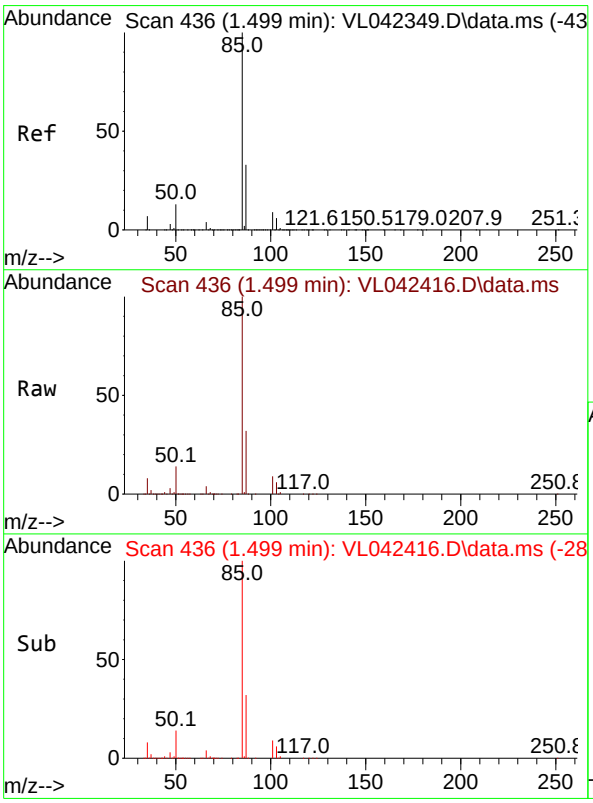
Ion	Ratio	Lower	Upper
49	100		
128	43.6	22.8	68.4
130	59.0	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

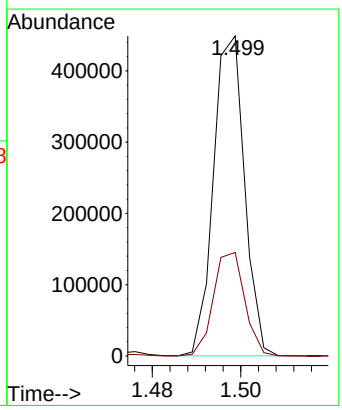
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

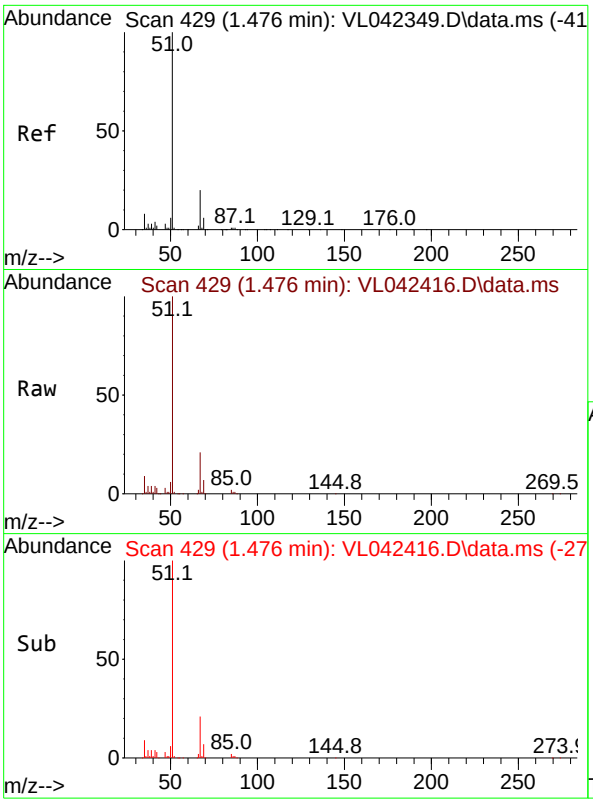


#2
Dichlorodifluoromethane
Concen: 10.165 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 85 Resp: 219089

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.6	39.8

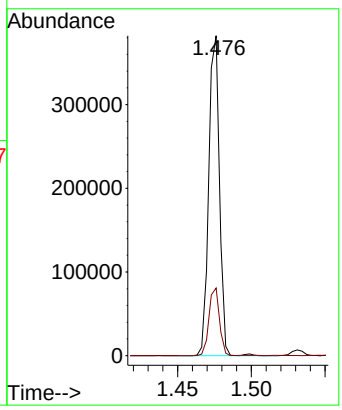




#3
Chlorodifluoromethane
Concen: 9.360 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 51 Resp: 19211

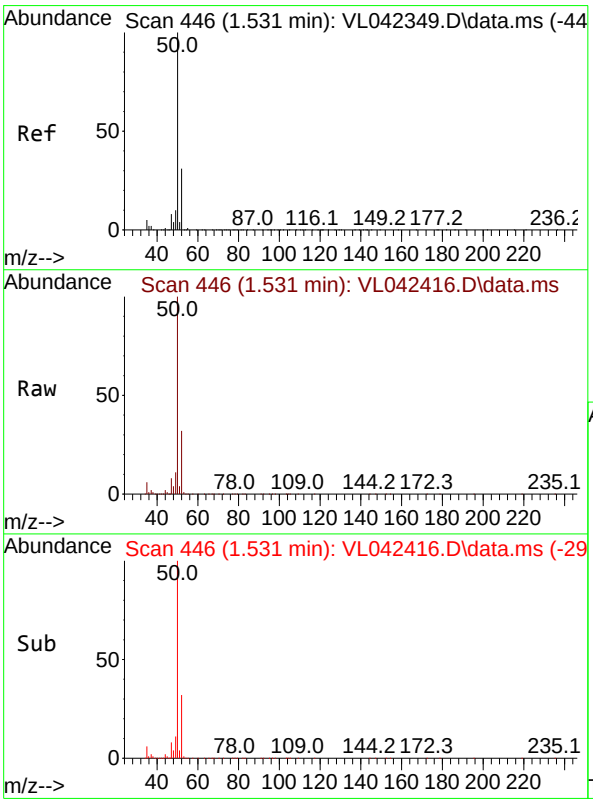
Ion	Ratio	Lower	Upper
51	100		
67	21.0	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

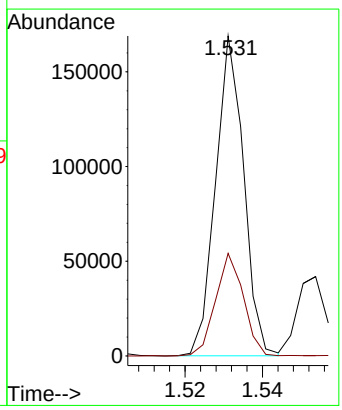
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

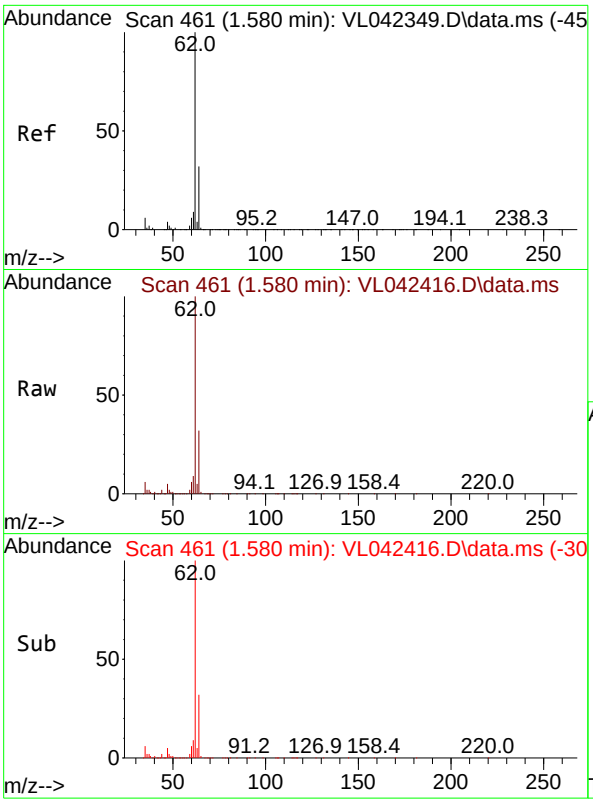


#4
Chloromethane
Concen: 9.988 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 50 Resp: 85195

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1

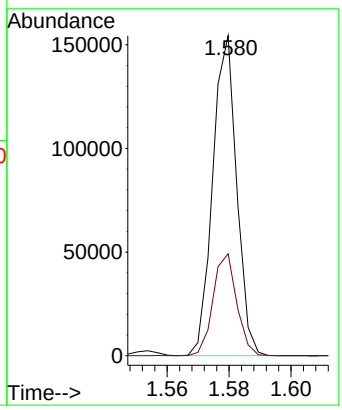




#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 62 Resp: 8286

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/29/2025
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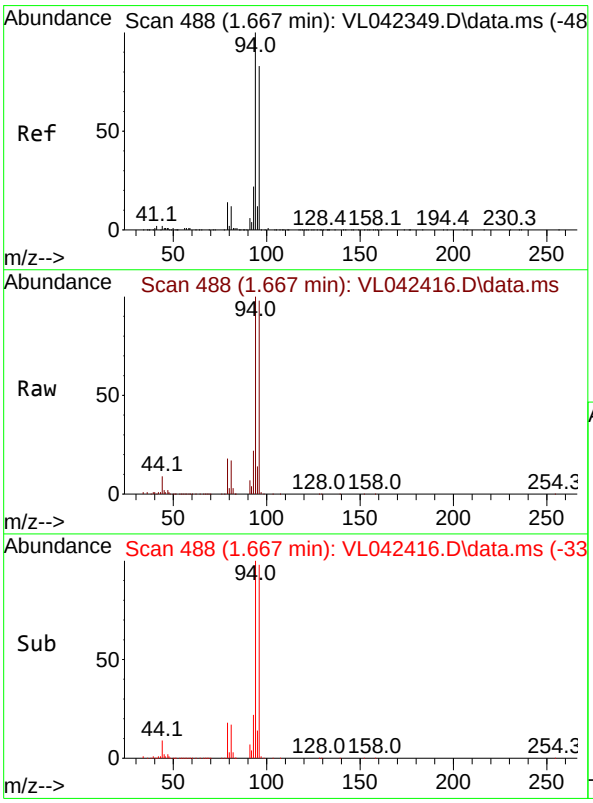
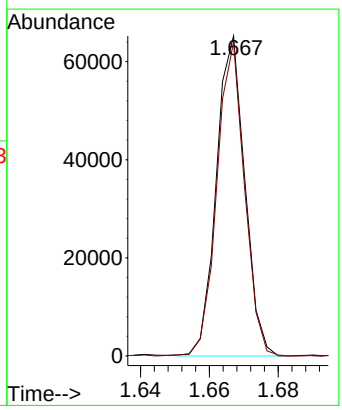
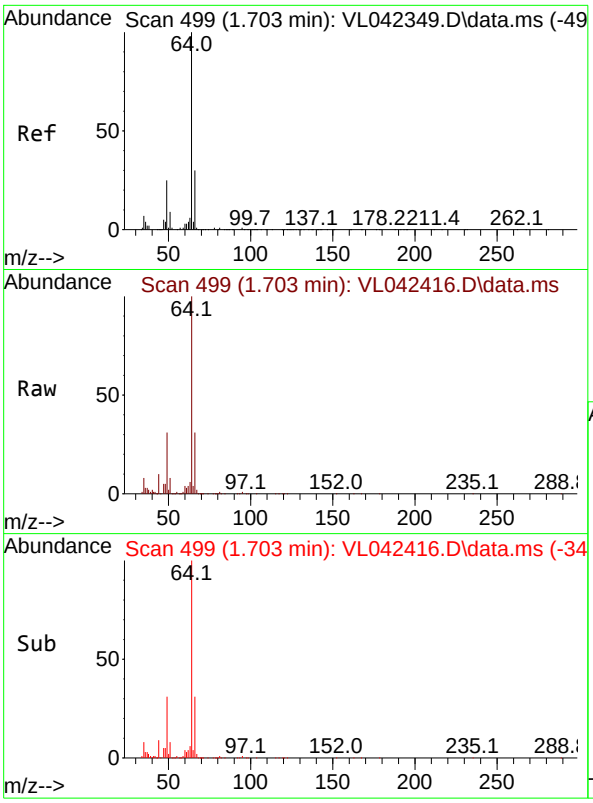


#6
Bromomethane
Concen: 9.376 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 94 Resp: 37396

Ion	Ratio	Lower	Upper
94	100		
96	97.7	66.2	99.2

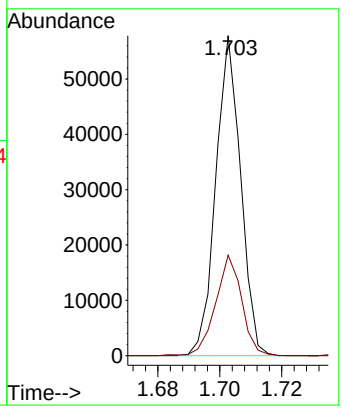




#7
Chloroethane
Concen: 9.600 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 64 Resp: 3223

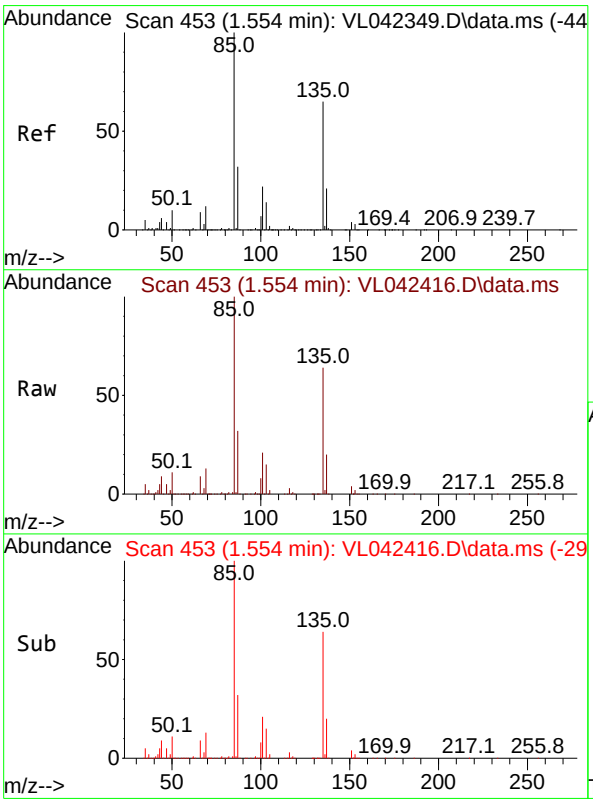
Ion	Ratio	Lower	Upper
64	100		
66	31.4	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

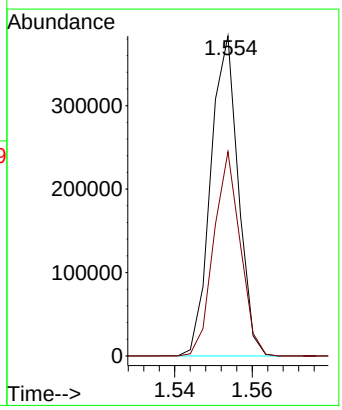
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

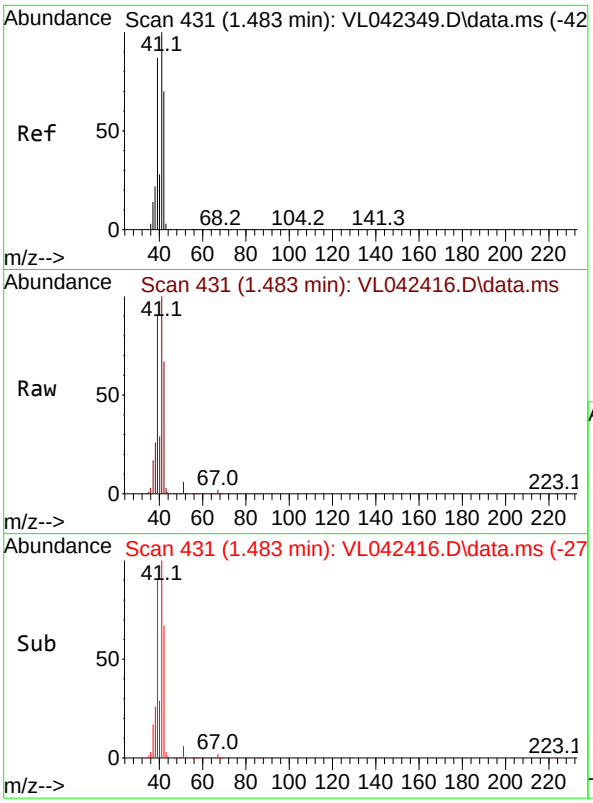


#8
Dichlorotetrafluoroethane
Concen: 10.223 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 85 Resp: 189174

Ion	Ratio	Lower	Upper
85	100		
135	61.6	52.2	78.2

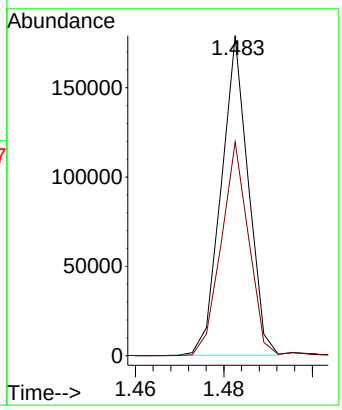




#9
Propene
Concen: 8.131 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 41 Resp: 7599

Ion	Ratio	Lower	Upper
41	100		
42	69.0	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

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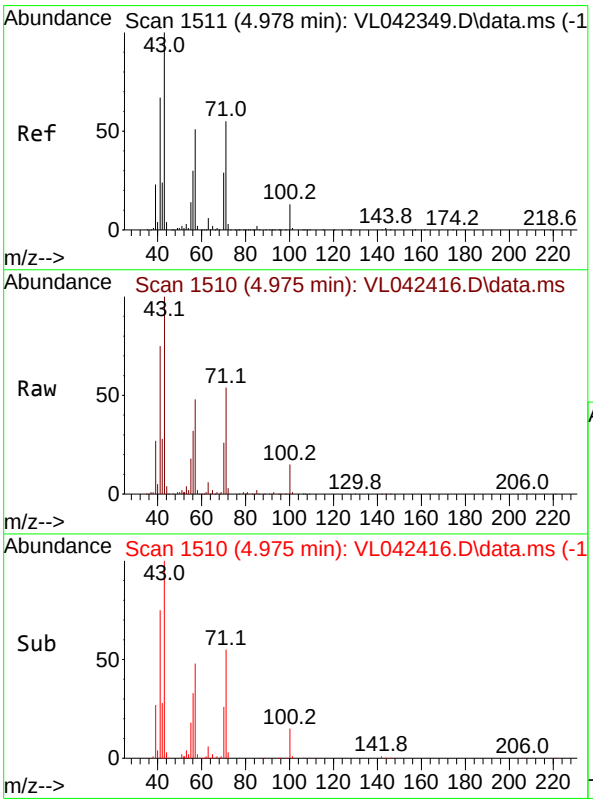
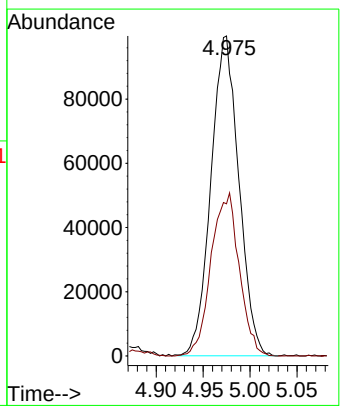
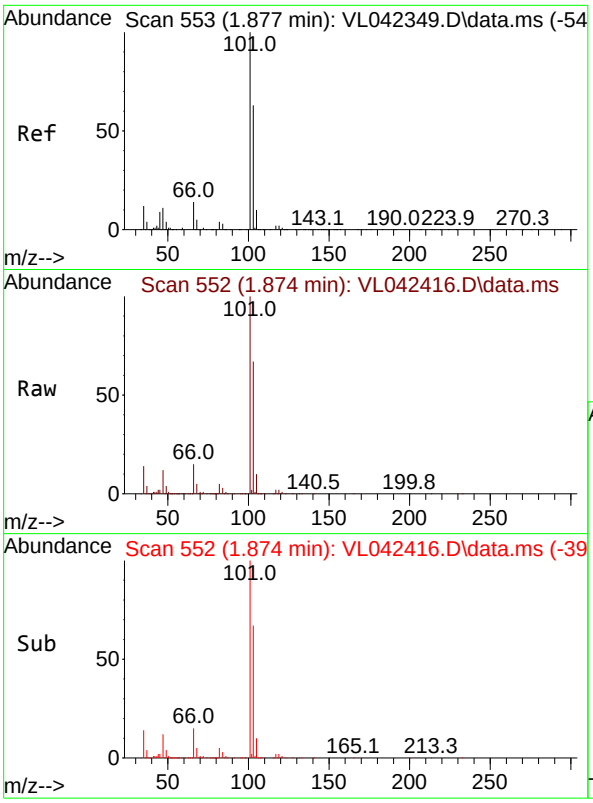


#10
Heptane
Concen: 7.837 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 205785

Ion	Ratio	Lower	Upper
43	100		
57	51.3	39.9	59.9





#11
Trichlorofluoromethane
Concen: 10.286 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

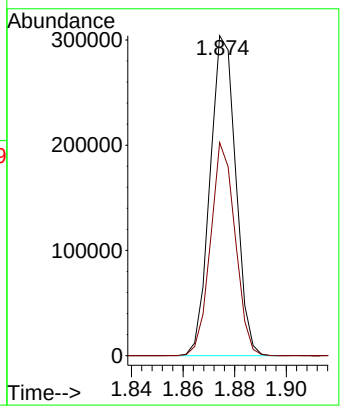
Tgt Ion:101 Resp: 21083

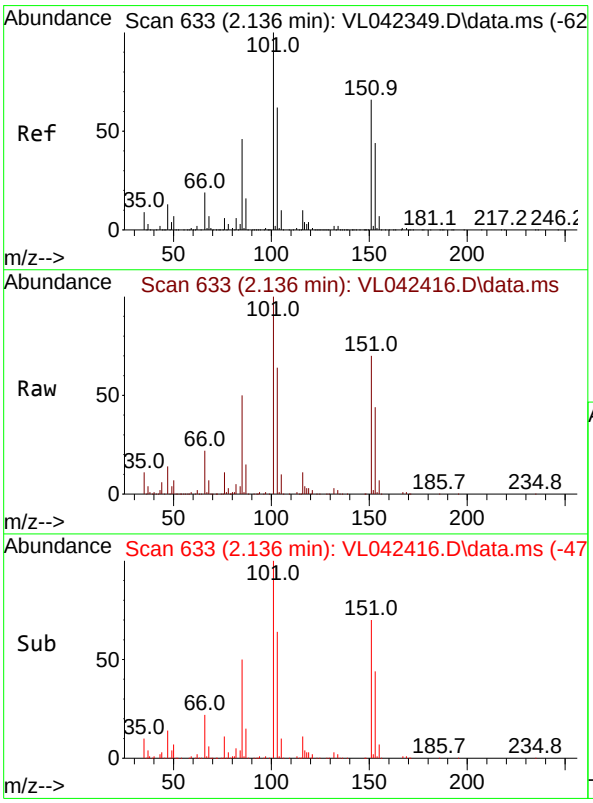
Ion	Ratio	Lower	Upper
101	100		
103	66.6	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

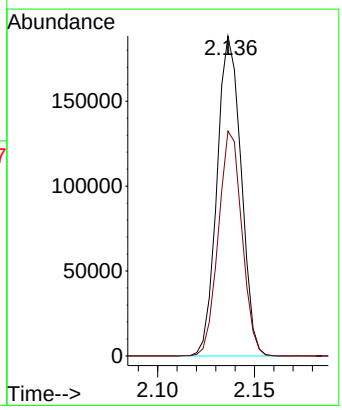


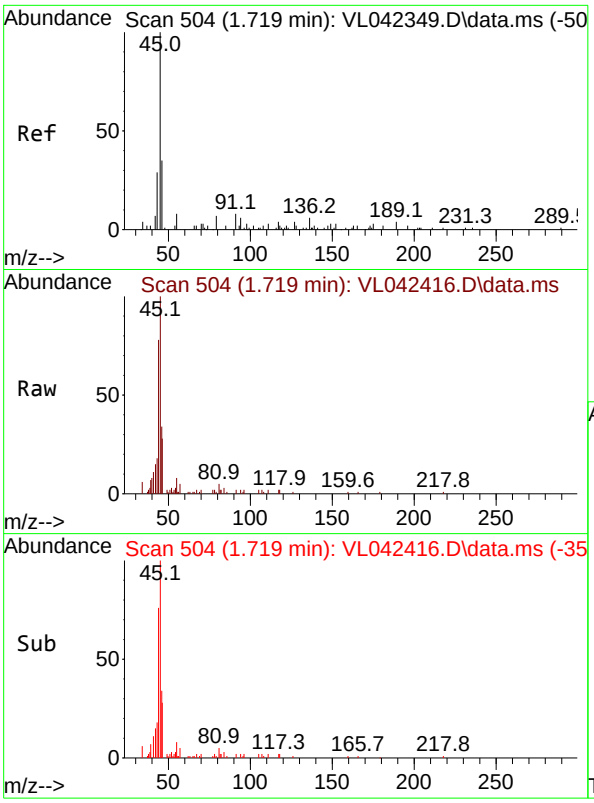


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.733 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:101 Resp: 163109

Ion	Ratio	Lower	Upper
101	100		
151	68.6	57.0	85.6

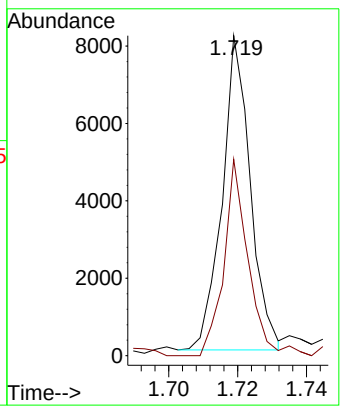




#13
Ethanol
Concen: 3.104 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 45 Resp: 461

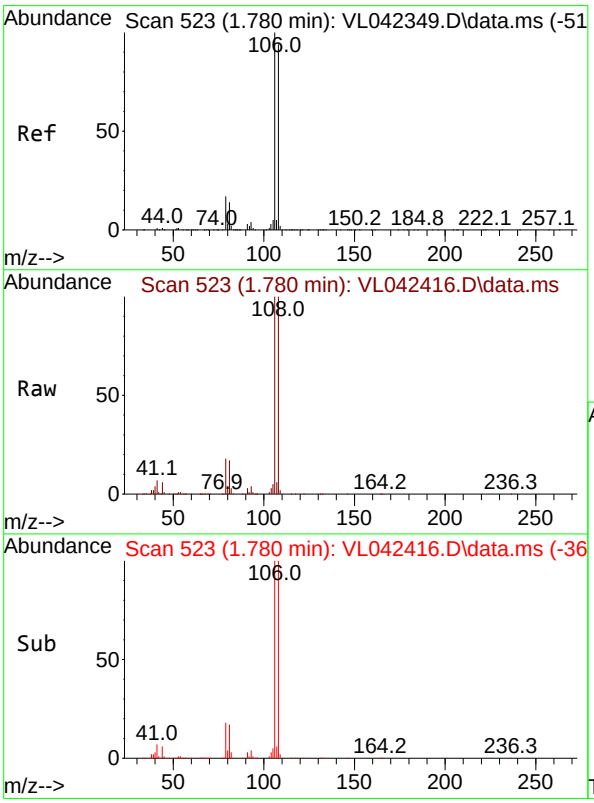
Ion	Ratio	Lower	Upper
45	100		
46	56.4	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

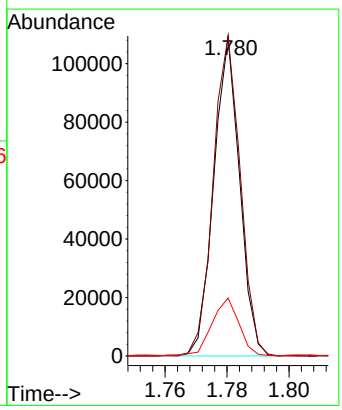
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

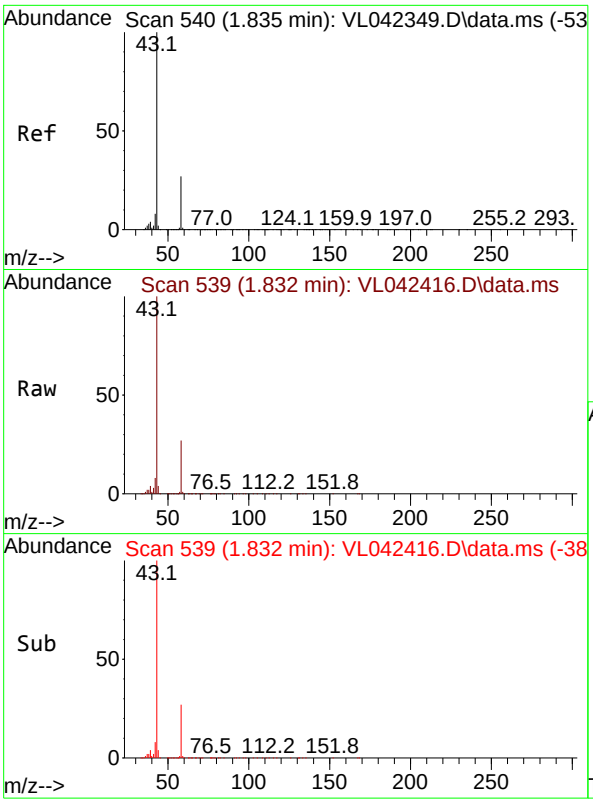


#14
Bromoethene
Concen: 10.010 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:108 Resp: 63235

Ion	Ratio	Lower	Upper
108	100		
106	105.2	85.9	128.9
79	20.7	13.9	20.9

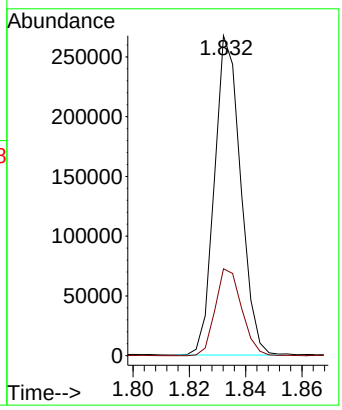




#15
Acetone
Concen: 8.623 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 17220

Ion	Ratio	Lower	Upper
43	100		
58	27.7	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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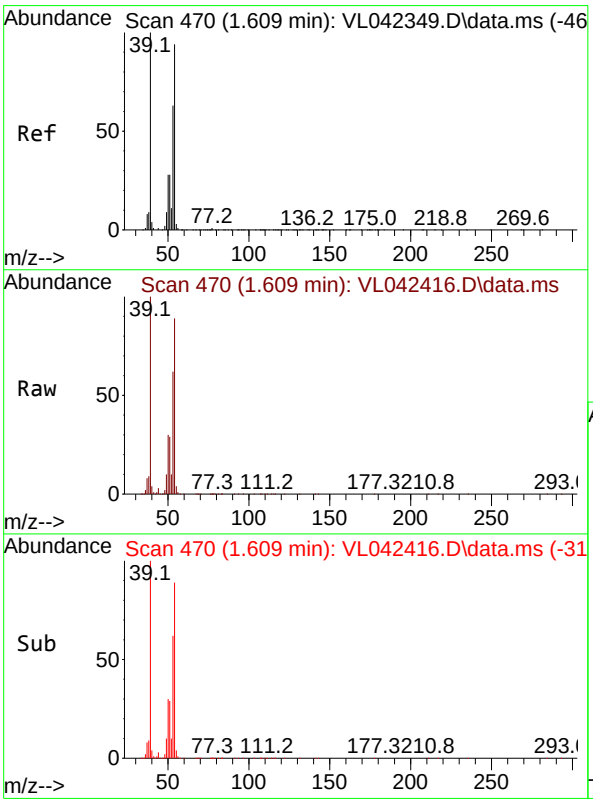
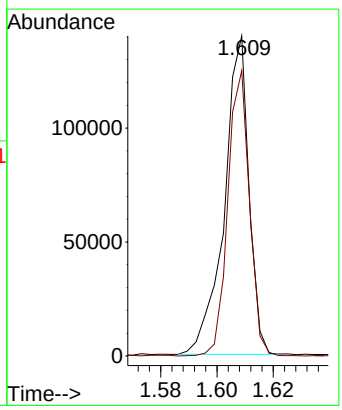
Supervised By :Mahesh Dadoda 04/30/2025

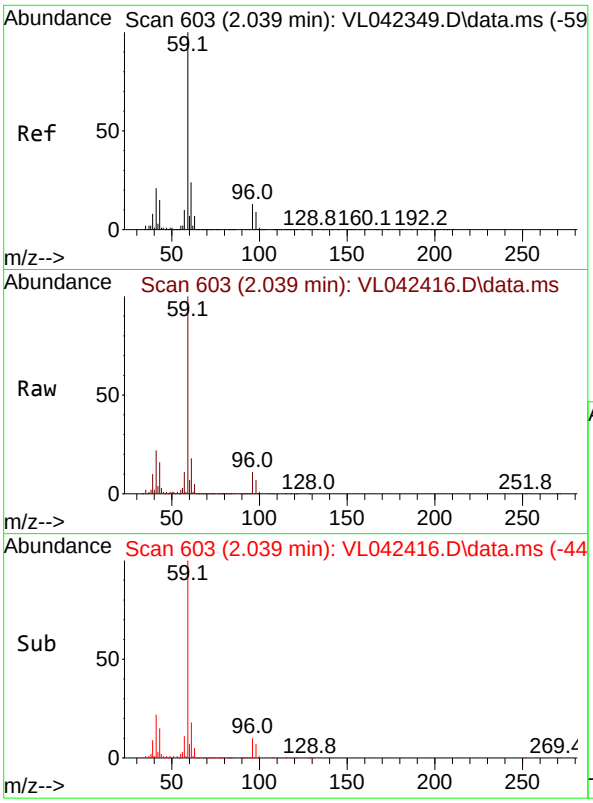


#16
1,3-Butadiene
Concen: 8.880 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 39 Resp: 84816

Ion	Ratio	Lower	Upper
39	100		
54	79.2	64.9	97.3

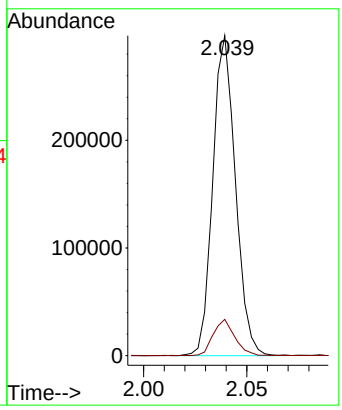




#17
tert-Butyl alcohol
Concen: 9.164 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 59 Resp: 22680

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.7	13.1



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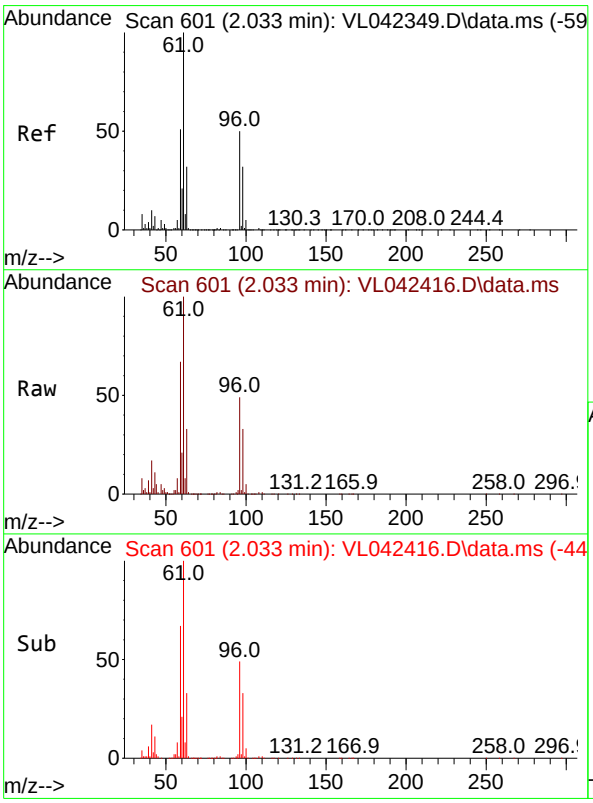
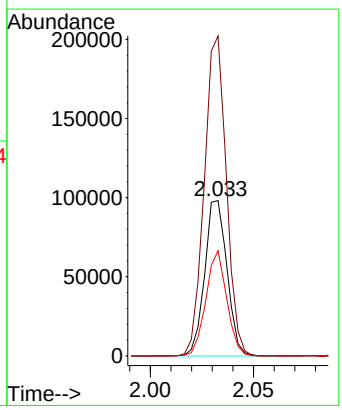
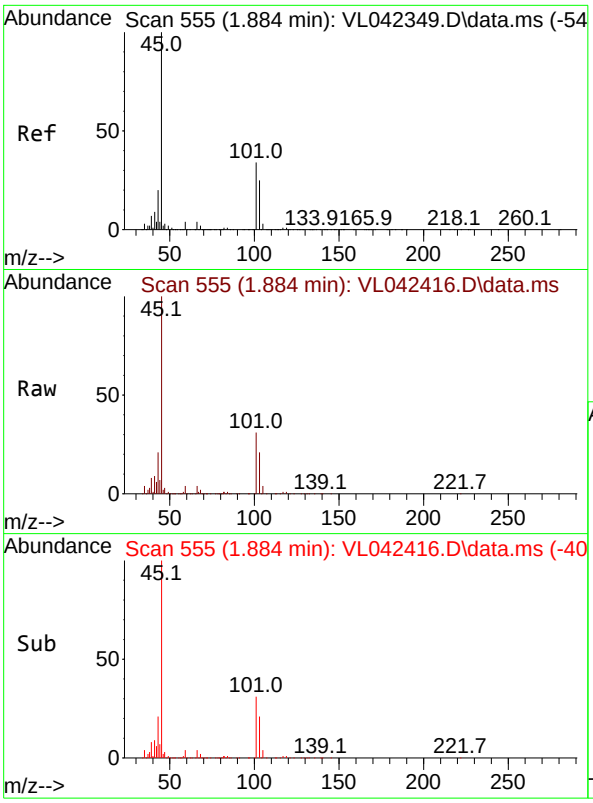


#18
1,1-Dichloroethene
Concen: 9.420 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 96 Resp: 73751

Ion	Ratio	Lower	Upper
96	100		
61	205.9	160.2	240.2
98	67.8	51.0	76.4

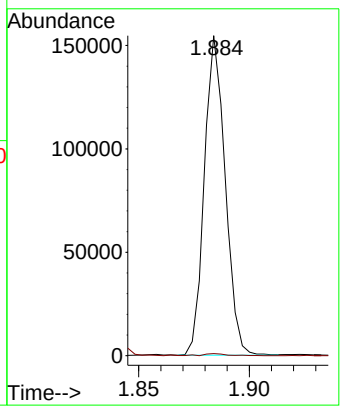




#19
Isopropyl Alcohol
Concen: 9.105 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 45 Resp: 10101

Ion	Ratio	Lower	Upper
45	100		
58	47.3	34.5	51.7



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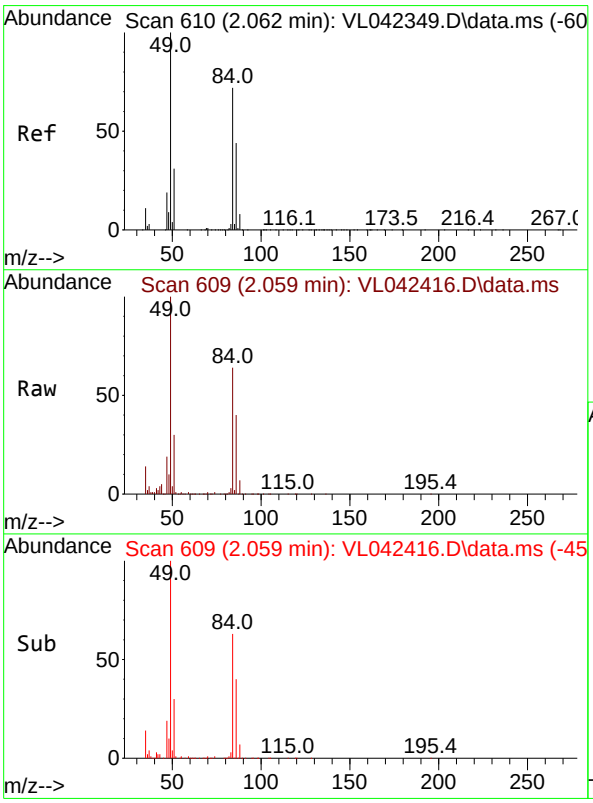
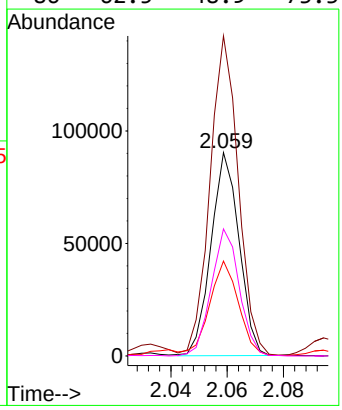
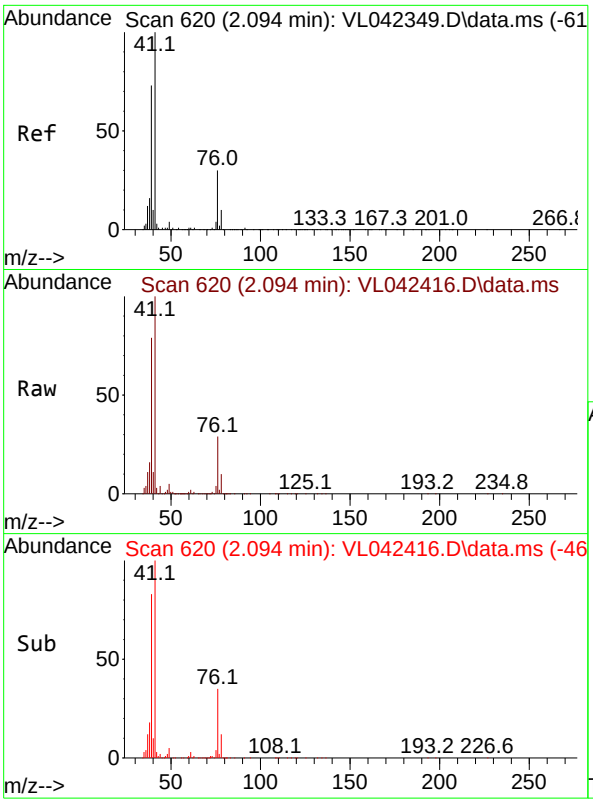


#20
Methylene Chloride
Concen: 7.992 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 84 Resp: 62506

Ion	Ratio	Lower	Upper
84	100		
49	157.3	111.6	167.4
51	46.5	35.1	52.7
86	62.5	48.9	73.3

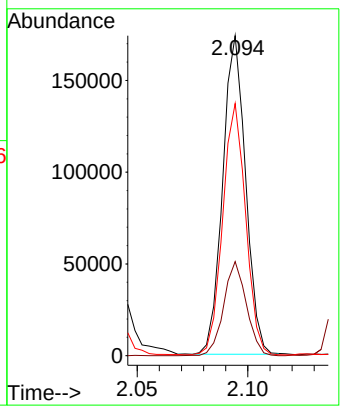




#21
Allyl Chloride
Concen: 9.081 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 41 Resp: 12521

Ion	Ratio	Lower	Upper
41	100		
76	29.2	24.8	37.2
39	78.4	60.6	90.8



Instrument :
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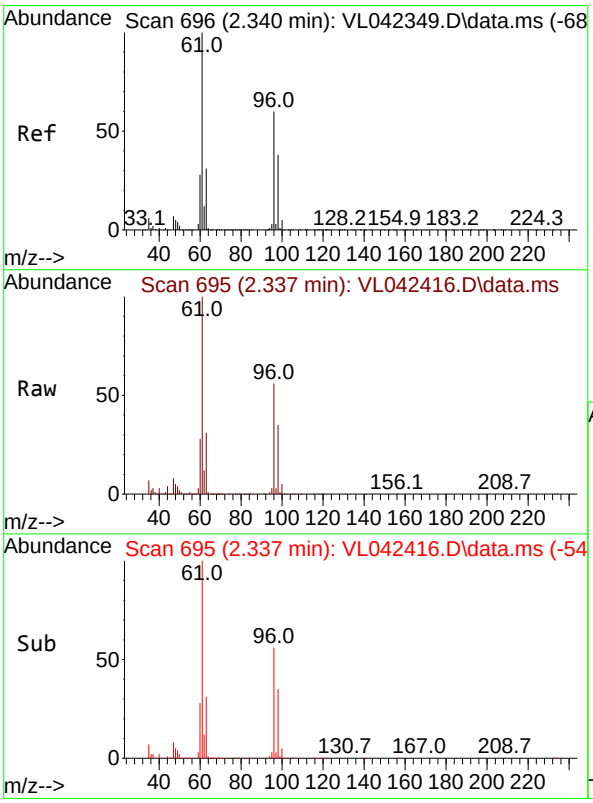
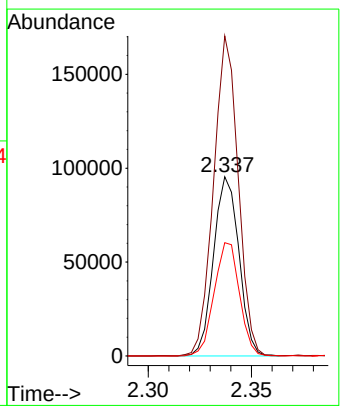
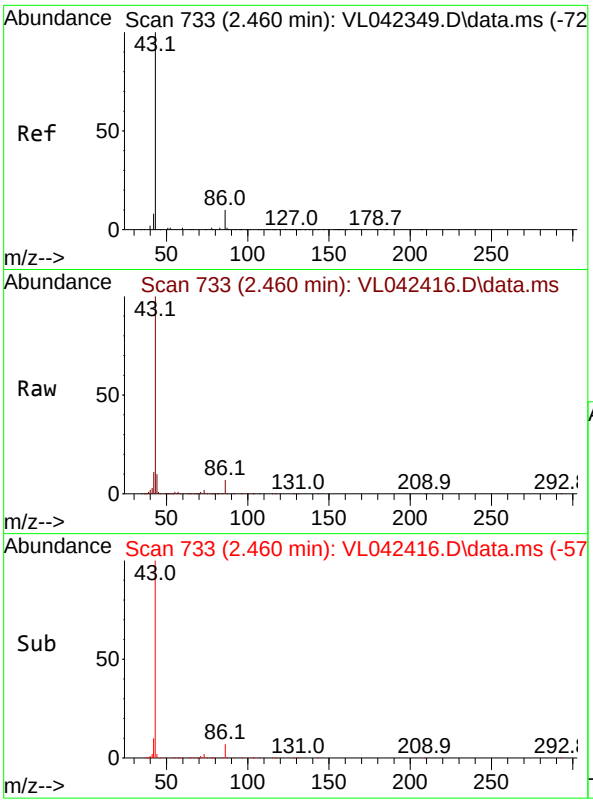


#22
trans-1,2-Dichloroethene
Concen: 9.153 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 96 Resp: 81589

Ion	Ratio	Lower	Upper
96	100		
61	178.4	133.7	200.5
98	63.2	50.3	75.5

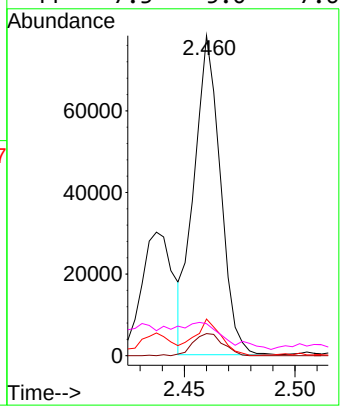




#23
Vinyl Acetate
Concen: 8.030 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 6490

Ion	Ratio	Lower	Upper
43	100		
86	6.9	6.5	9.7
42	11.1	7.8	11.8
44	7.3	5.0	7.6



Instrument :
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ClientSampleId :
VSTDCCC010

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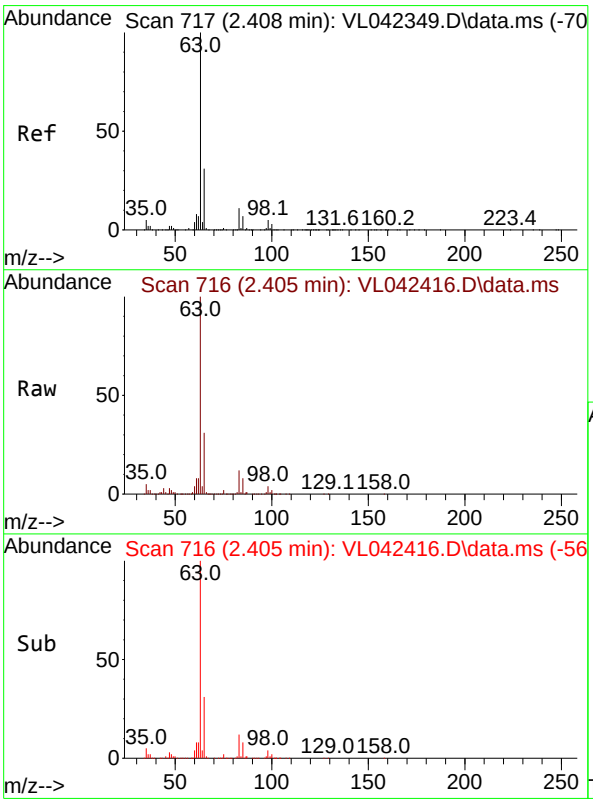
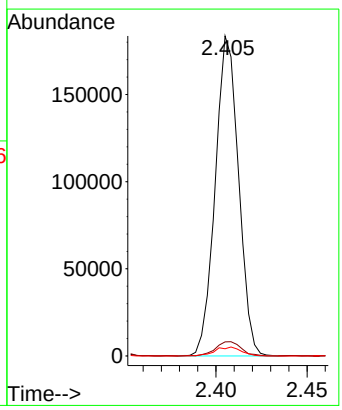
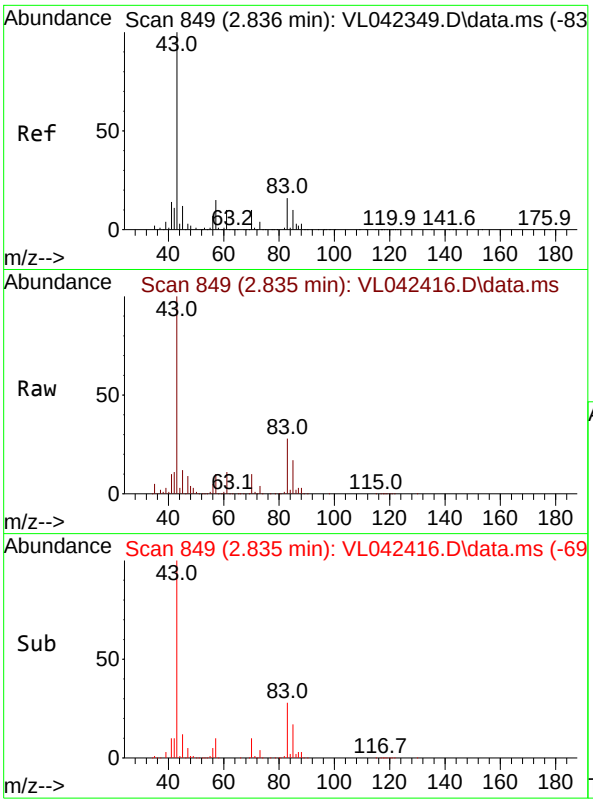


#24
1,1-Dichloroethane
Concen: 9.634 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 63 Resp: 163124

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.3	6.8
100	2.2	1.6	4.8

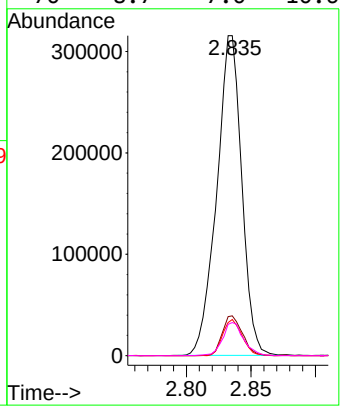




#25
Ethyl Acetate
Concen: 8.634 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 42512

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.3	12.5
61	8.9	7.3	10.9
70	8.7	7.0	10.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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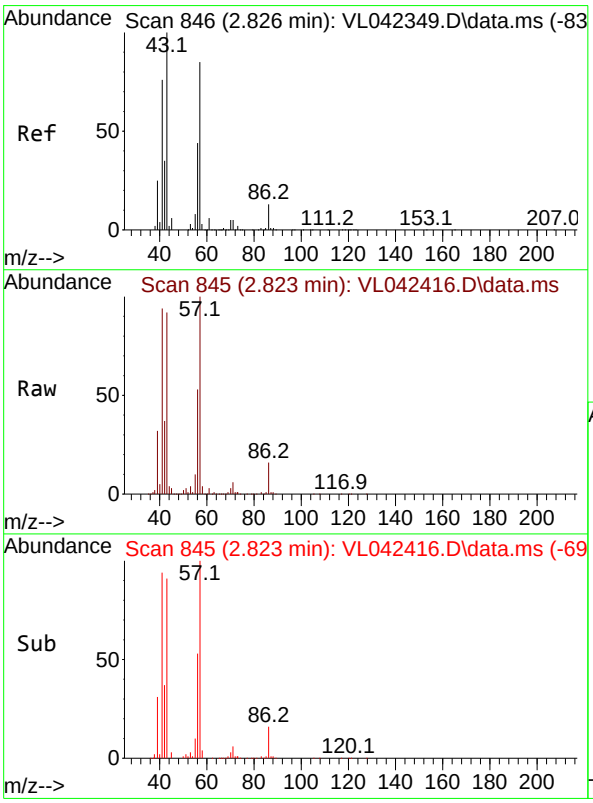
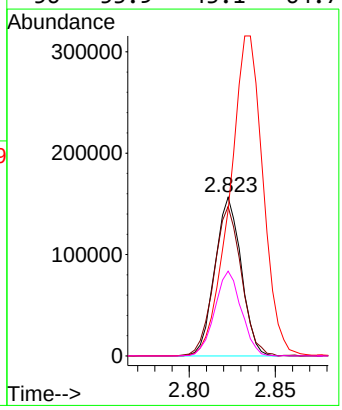
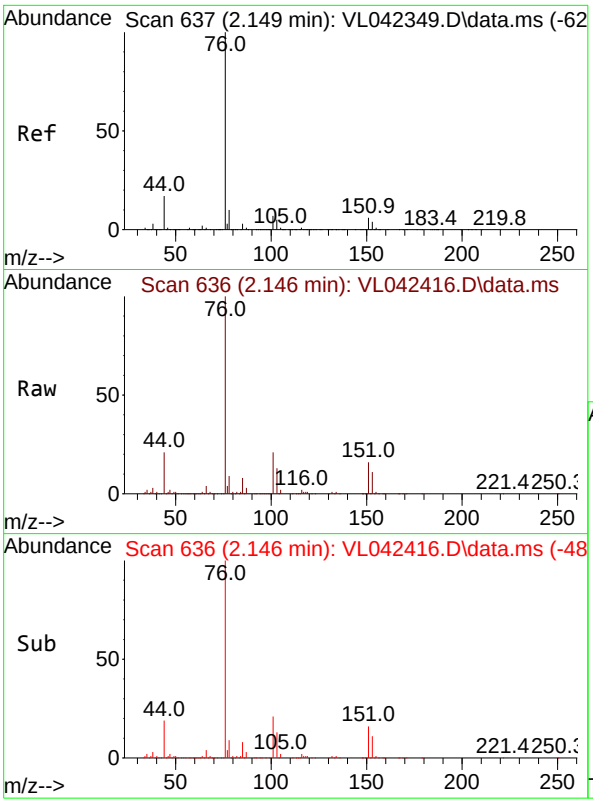


#26
Hexane
Concen: 8.370 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 57 Resp: 166789

Ion	Ratio	Lower	Upper
57	100		
41	98.4	77.9	116.9
43	256.1	208.4	312.6
56	53.9	43.1	64.7

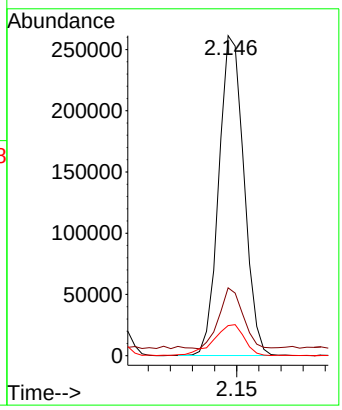




#27
Carbon Disulfide
Concen: 9.637 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 76 Resp: 20560

Ion	Ratio	Lower	Upper
76	100		
44	22.2	15.5	23.3
78	12.1	9.3	13.9



Instrument :
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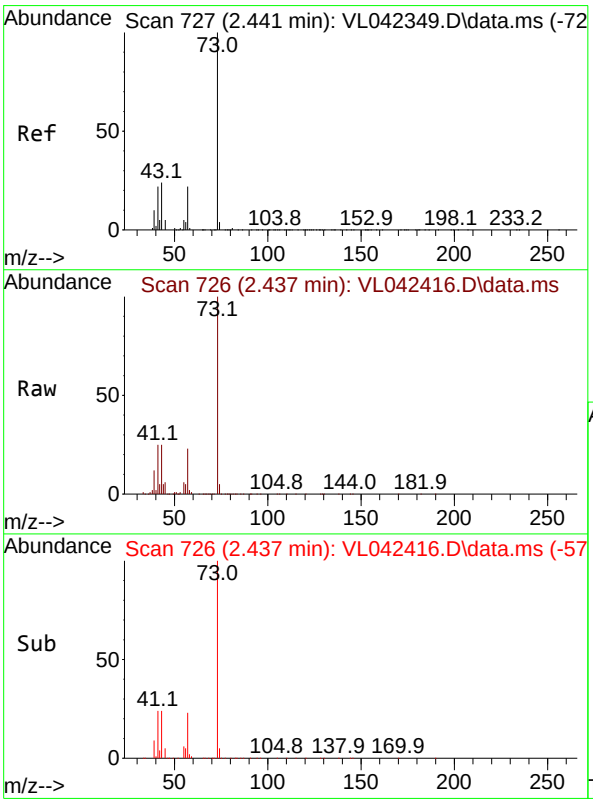
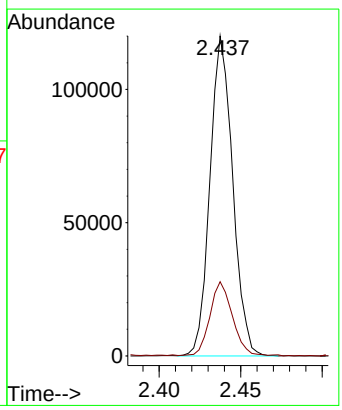
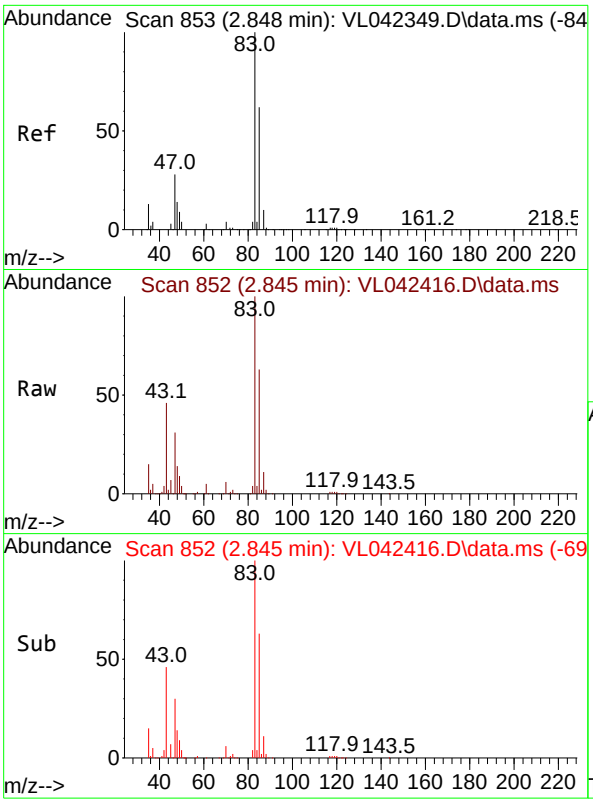


#28
Methyl tert-Butyl Ether
Concen: 8.922 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 73 Resp: 116474

Ion	Ratio	Lower	Upper
73	100		
57	23.1	21.3	31.9





#29
Chloroform
Concen: 9.975 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 83 Resp: 28093

Ion	Ratio	Lower	Upper
83	100		
85	63.3	50.0	75.0

Instrument :
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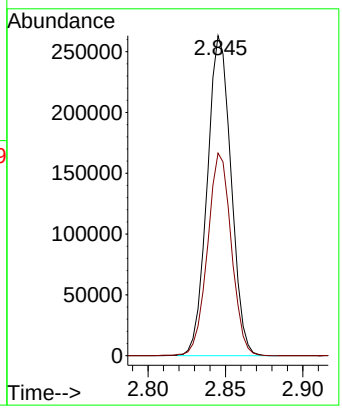
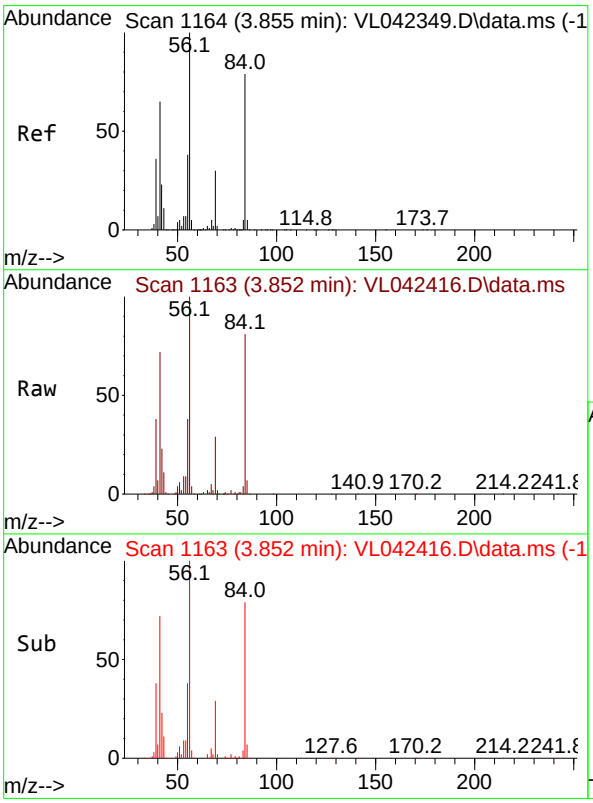
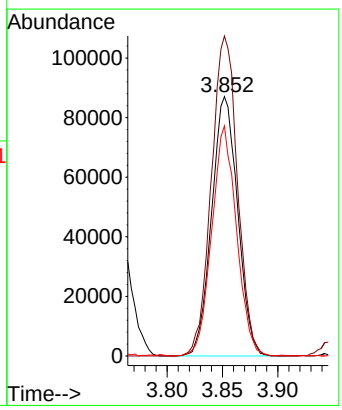


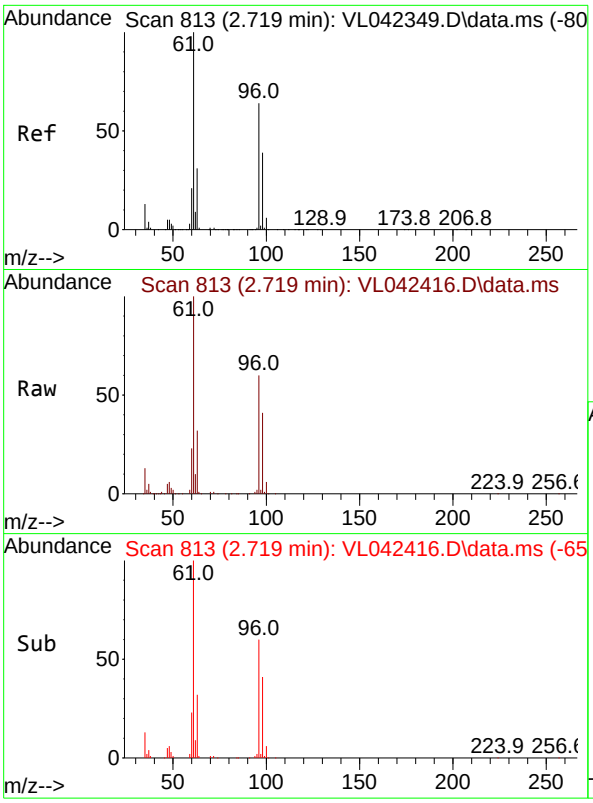


#30
Cyclohexane
Concen: 8.849 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 84 Resp: 142532

Ion	Ratio	Lower	Upper
84	100		
56	123.7	101.0	151.4
41	84.7	67.4	101.0

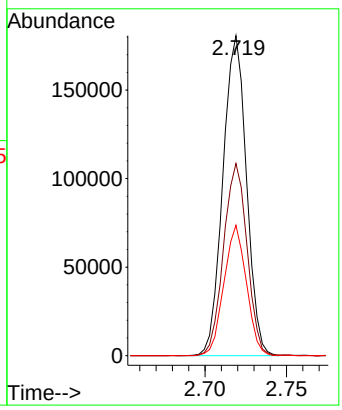




#31
cis-1,2-Dichloroethene
Concen: 9.581 ppbv
RT: 2.719 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 61 Resp: 18151

Ion	Ratio	Lower	Upper
61	100		
96	60.1	50.8	76.2
98	40.8	30.9	46.3



Instrument :
MSVOA_L
ClientSampleId :
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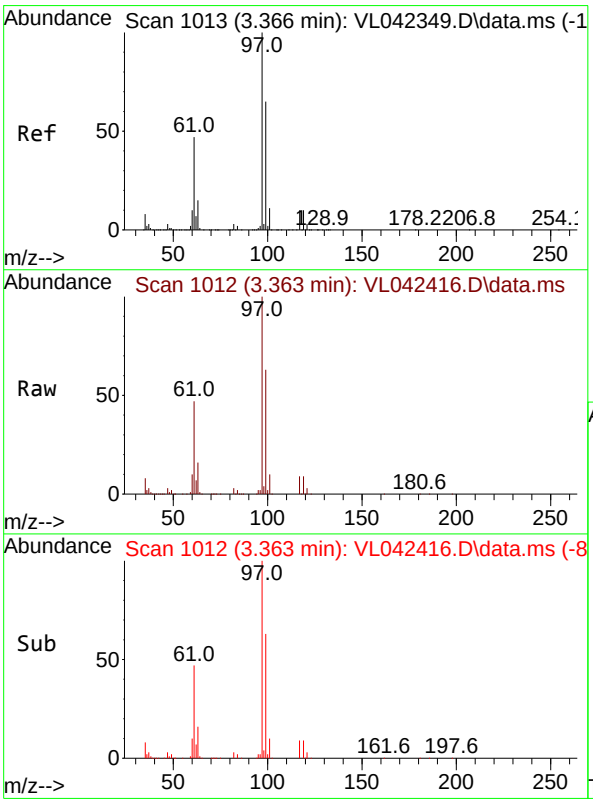
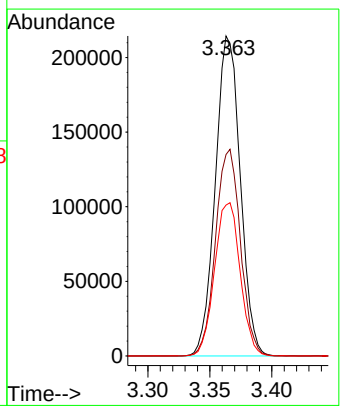
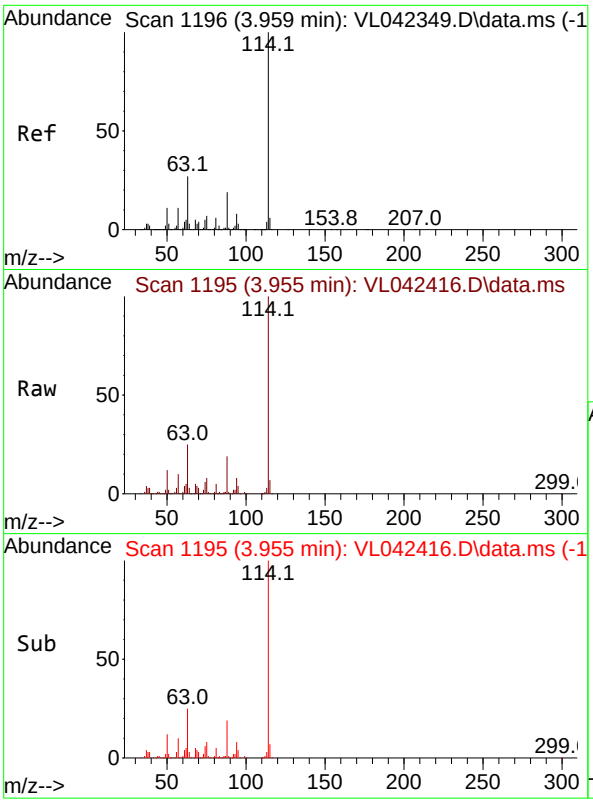


#32
1,1,1-Trichloroethane
Concen: 9.501 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 97 Resp: 301259

Ion	Ratio	Lower	Upper
97	100		
99	64.6	51.0	76.4
61	49.3	38.8	58.2

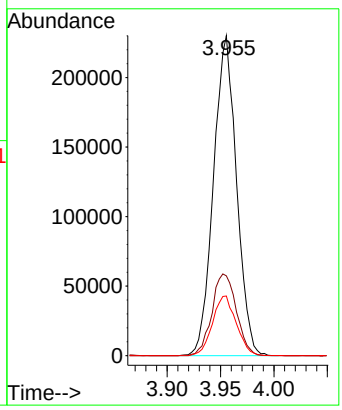




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:114 Resp: 34503

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.2	15.5	23.3



Instrument :
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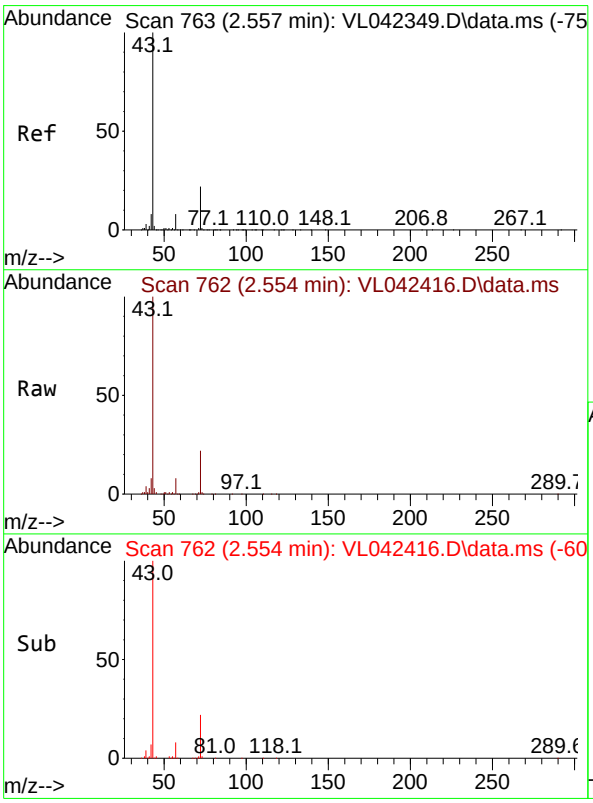
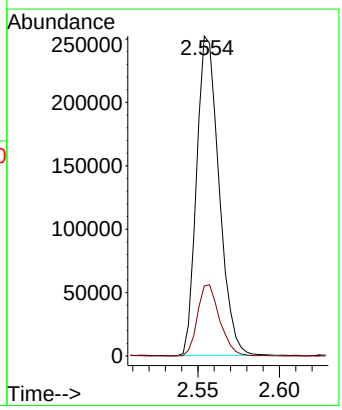
Supervised By :Mahesh Dadoda 04/30/2025

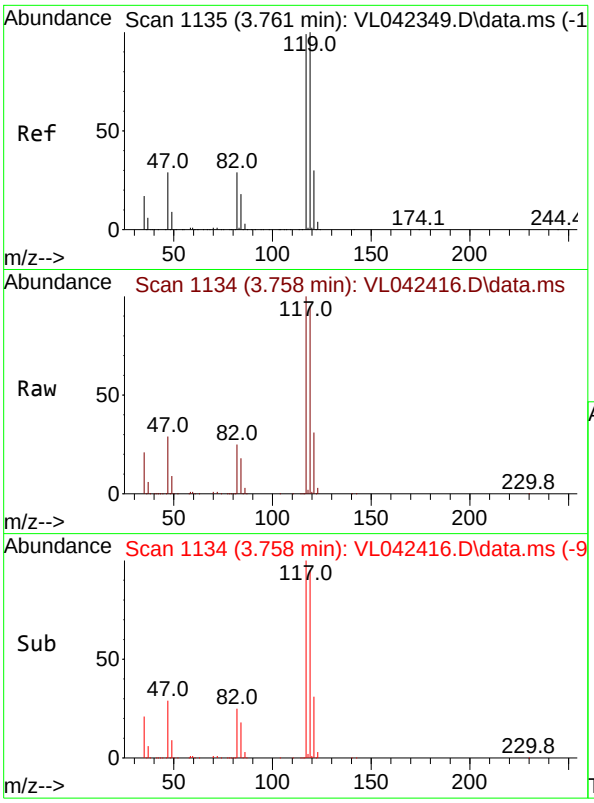


#34
2-Butanone
Concen: 8.834 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 241047

Ion	Ratio	Lower	Upper
43	100		
72	22.1	18.2	27.2





#35
Carbon Tetrachloride
Concen: 9.783 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:117 Resp: 30547

Ion	Ratio	Lower	Upper
117	100		
119	95.4	80.5	120.7
121	31.3	24.2	36.2

Instrument :
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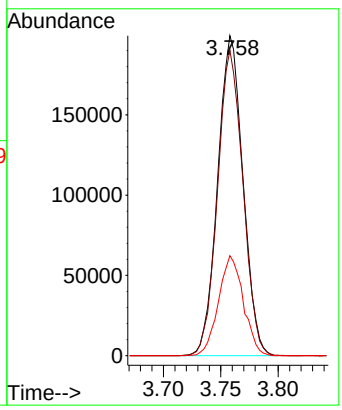
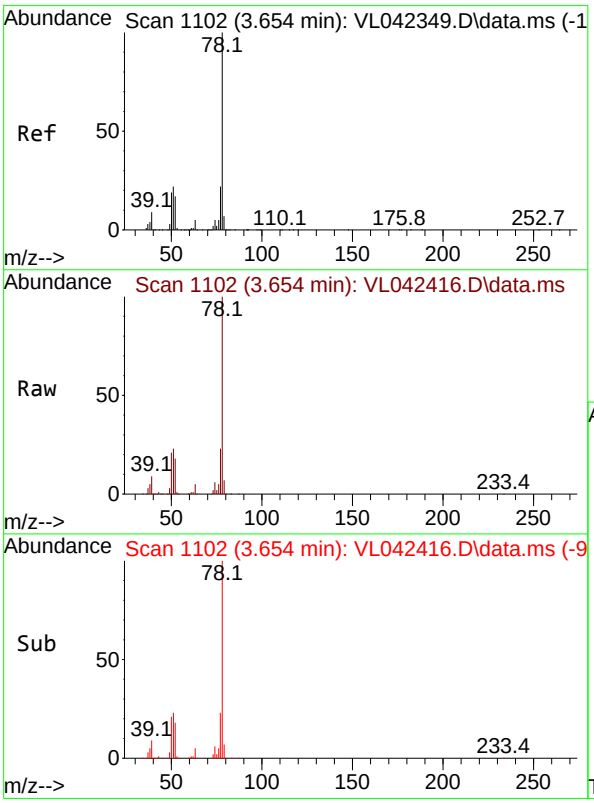
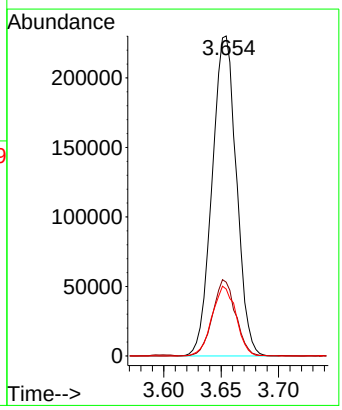


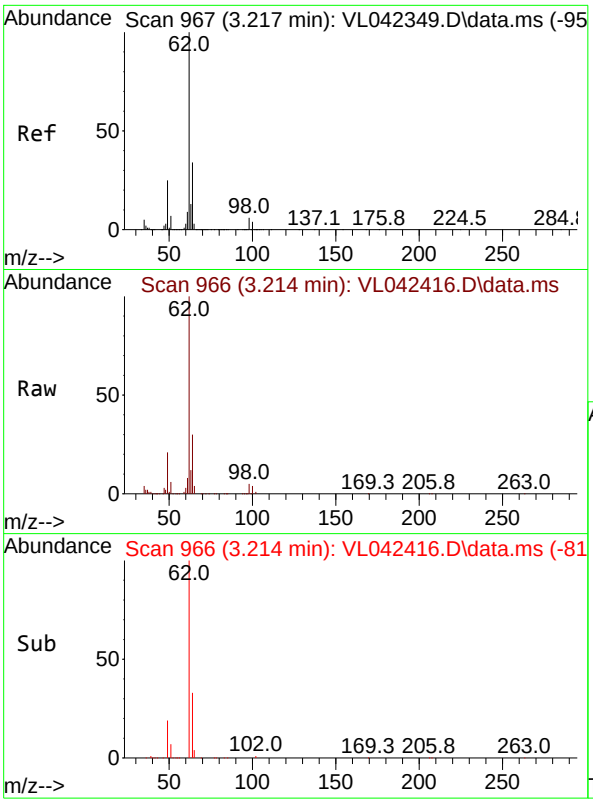


#36
Benzene
Concen: 9.102 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 78 Resp: 338736

Ion	Ratio	Lower	Upper
78	100		
77	23.0	17.4	26.0
50	20.9	15.5	23.3





#37
1,2-Dichloroethane
Concen: 10.564 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 62 Resp: 23596

Ion	Ratio	Lower	Upper
62	100		
98	5.3	5.1	7.7

Instrument :
MSVOA_L
ClientSampleId :
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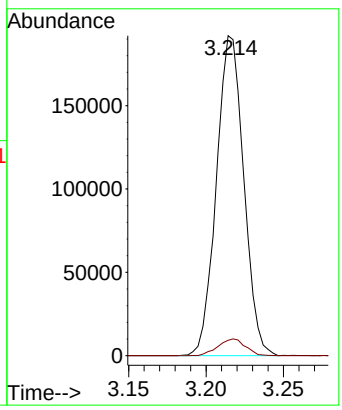
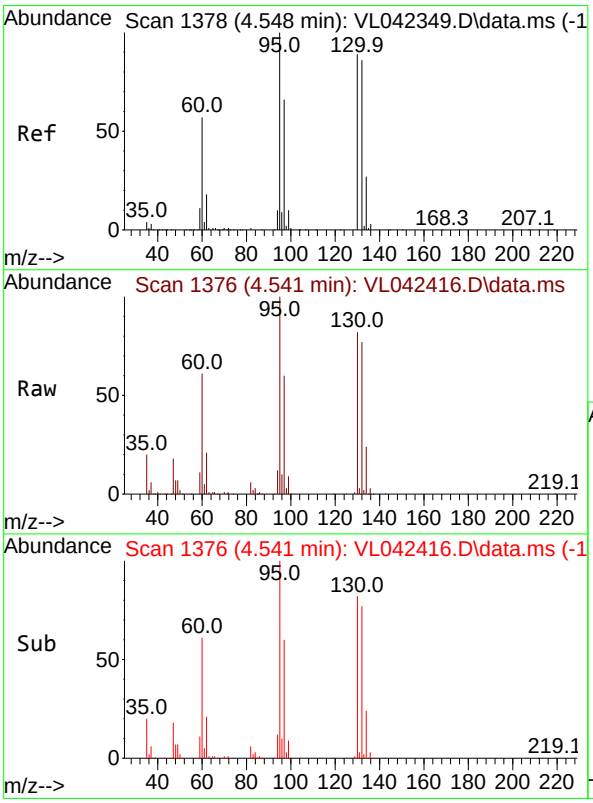
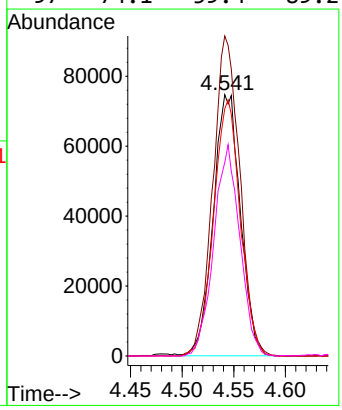


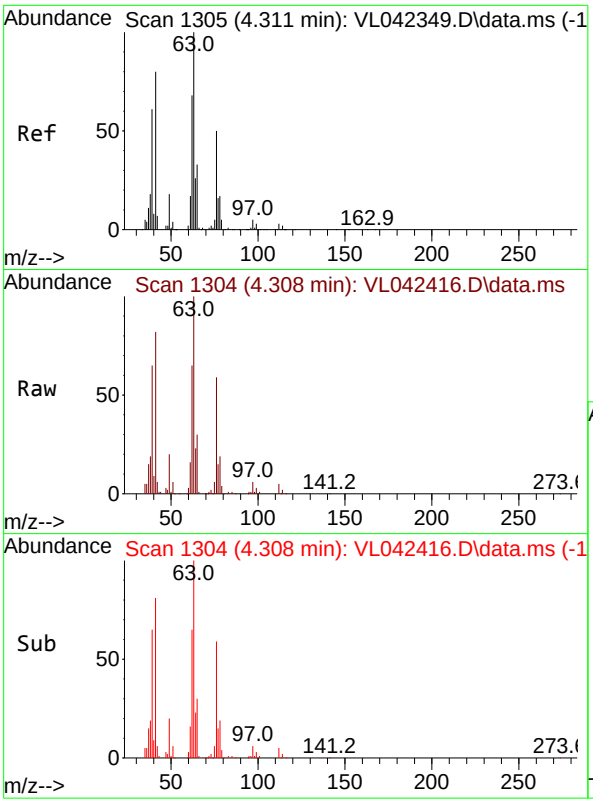


#38
Trichloroethene
Concen: 8.406 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:130 Resp: 136731

Ion	Ratio	Lower	Upper
130	100		
95	122.5	89.8	134.6
132	94.7	77.7	116.5
97	74.1	59.4	89.2

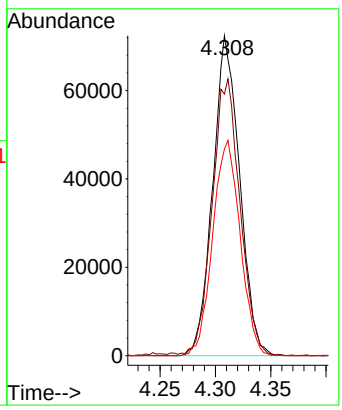




#39
1,2-Dichloropropane
Concen: 8.813 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 63 Resp: 12221

Ion	Ratio	Lower	Upper
63	100		
41	81.2	64.2	96.2
62	64.6	54.3	81.5



Instrument :
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ClientSampleId :
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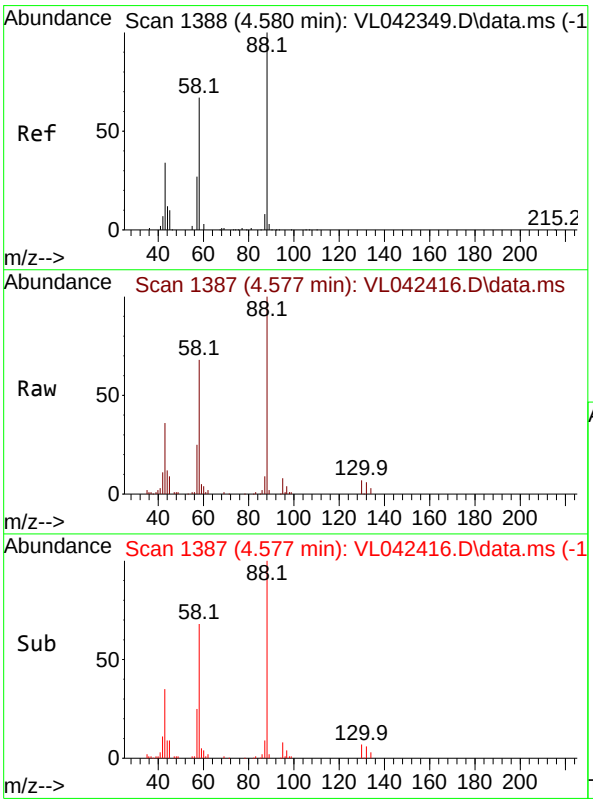
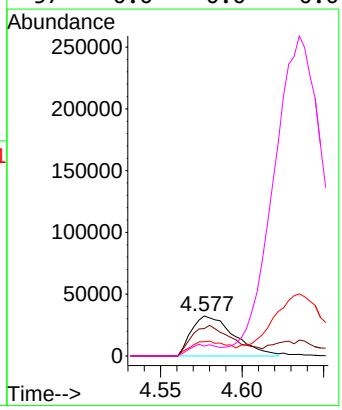
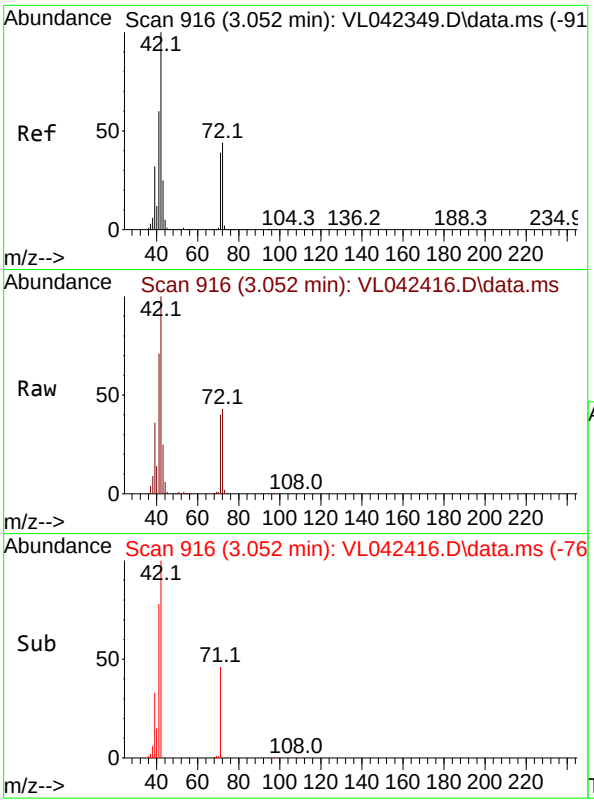


#40
1,4-Dioxane
Concen: 7.720 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 88 Resp: 58837

Ion	Ratio	Lower	Upper
88	100		
58	74.2	61.4	92.0
43	35.3	23.2	34.8#
57	0.0	0.0	0.0





#41
Tetrahydrofuran
Concen: 8.363 ppbv
RT: 3.052 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 42 Resp: 13306

Ion	Ratio	Lower	Upper
42	100		
72	41.2	32.3	48.5
71	38.8	31.4	47.2

Instrument :
MSVOA_L
ClientSampleId :
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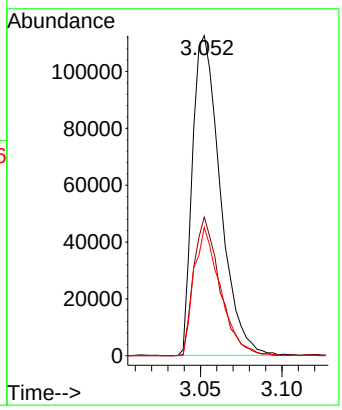
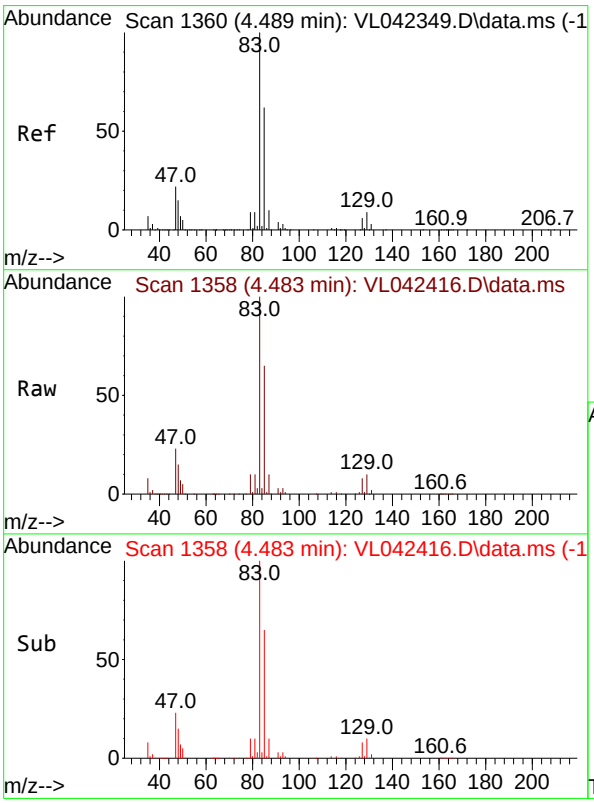
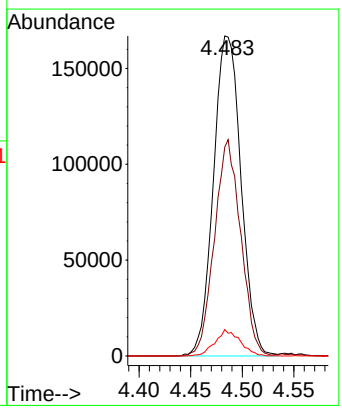


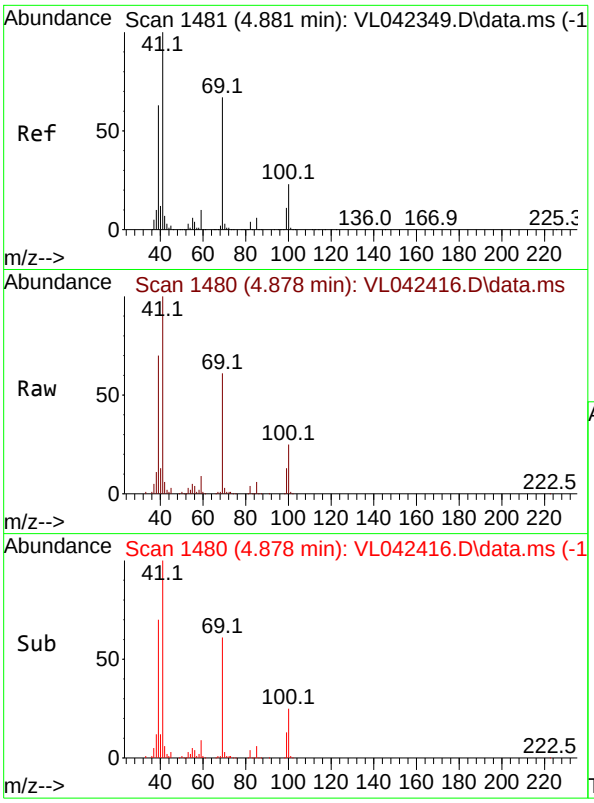


#42
Bromodichloromethane
Concen: 9.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 83 Resp: 310726

Ion	Ratio	Lower	Upper
83	100		
85	65.3	49.7	74.5
127	8.3	5.1	7.7#

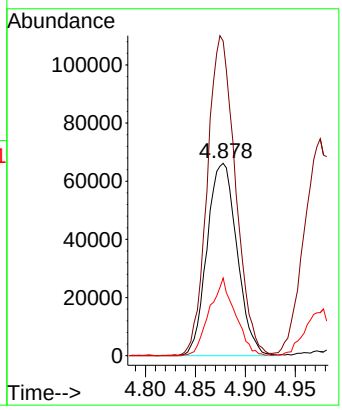




#43
Methyl Methacrylate
Concen: 8.230 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 69 Resp: 13803

Ion	Ratio	Lower	Upper
69	100		
41	156.8	118.6	177.8
100	34.8	28.2	42.2



Instrument :
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ClientSampleId :
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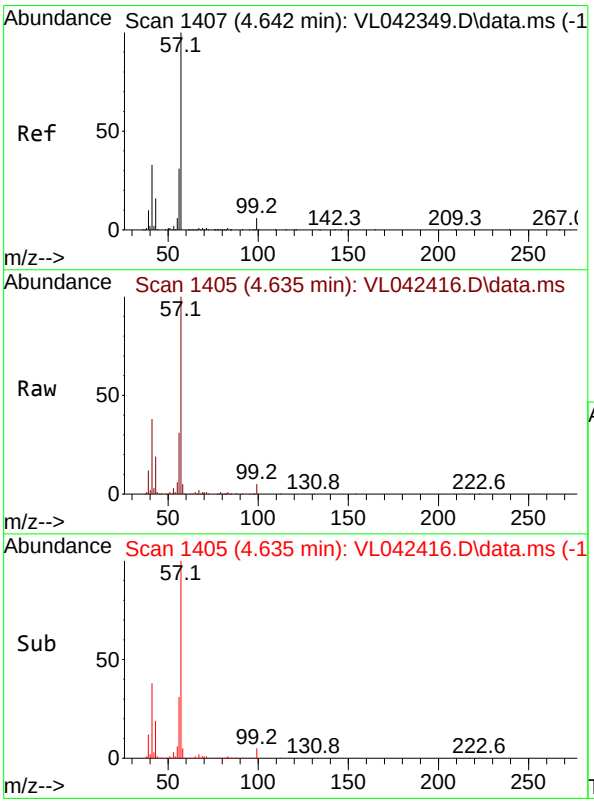
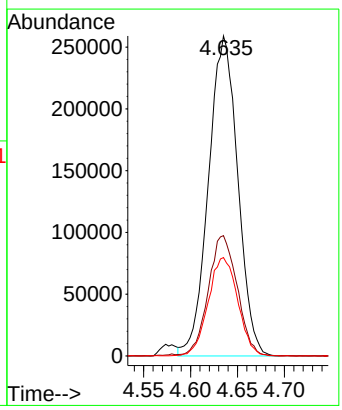
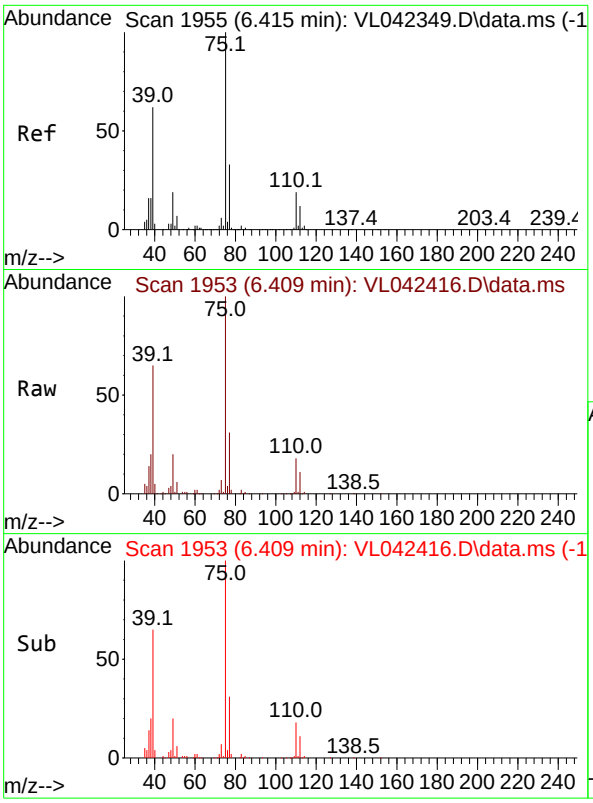


#44
2,2,4-Trimethylpentane
Concen: 8.750 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 57 Resp: 562403

Ion	Ratio	Lower	Upper
57	100		
41	37.4	27.2	40.8
56	31.1	25.7	38.5

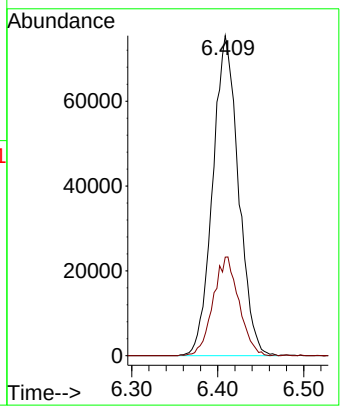




#45
t-1,3-Dichloropropene
Concen: 9.175 ppbv
RT: 6.409 min Scan# 1
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 75 Resp: 15719

Ion	Ratio	Lower	Upper
75	100		
77	30.8	27.0	40.6



Instrument :
MSVOA_L
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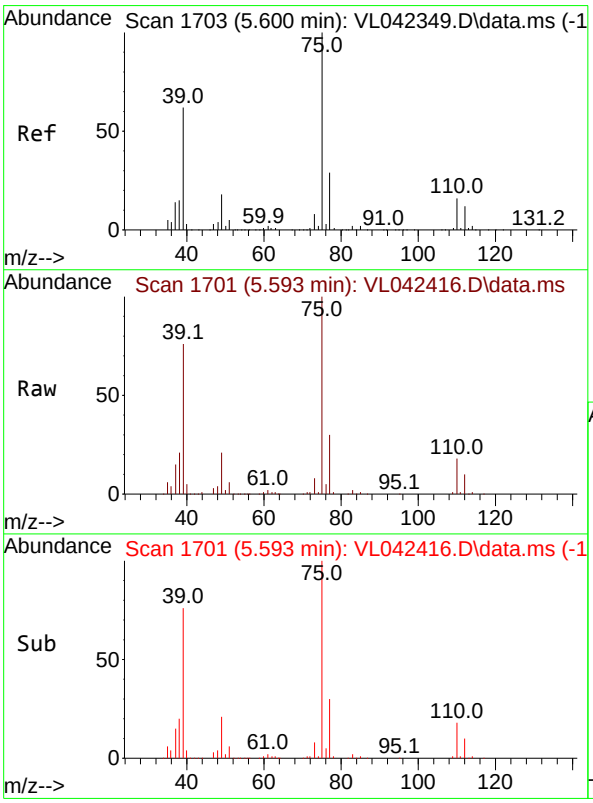
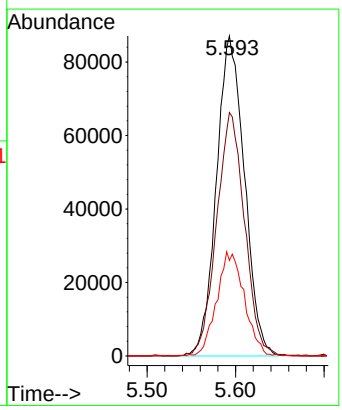
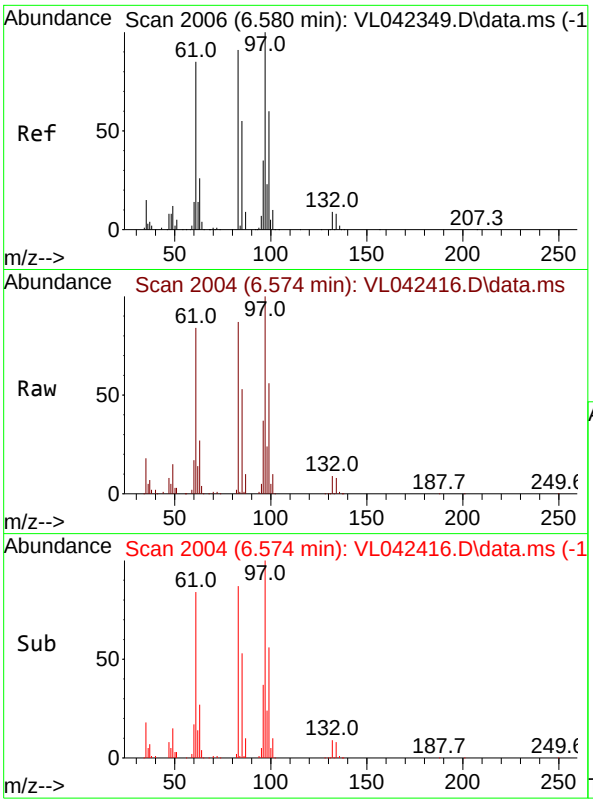


#46
cis-1,3-Dichloropropene
Concen: 9.117 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 75 Resp: 191165

Ion	Ratio	Lower	Upper
75	100		
39	75.9	50.0	75.0#
77	29.8	23.0	34.6

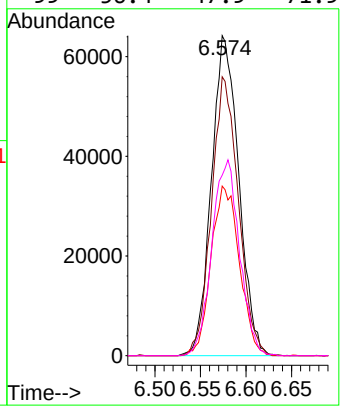




#47
1,1,2-Trichloroethane
Concen: 9.471 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 97 Resp: 13382

Ion	Ratio	Lower	Upper
97	100		
83	87.2	72.8	109.2
85	53.0	44.2	66.4
99	56.4	47.9	71.9



Instrument :
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ClientSampleId :
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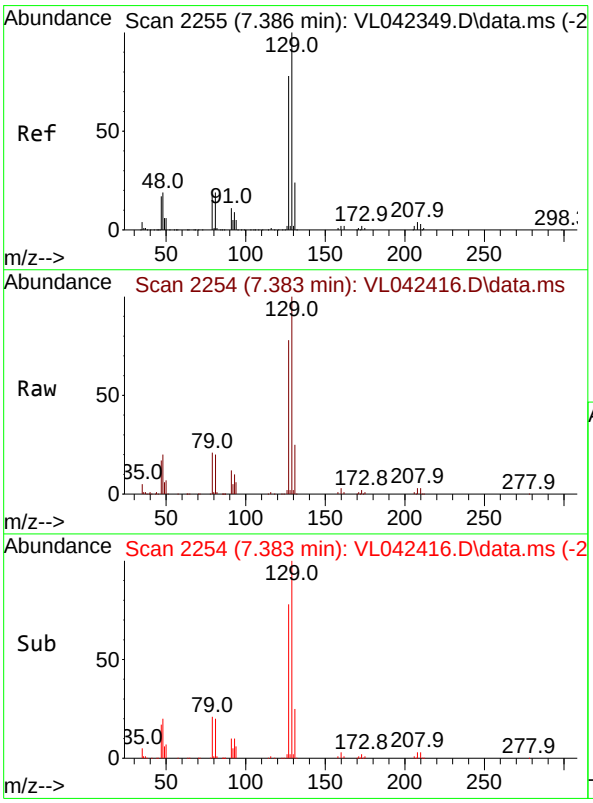
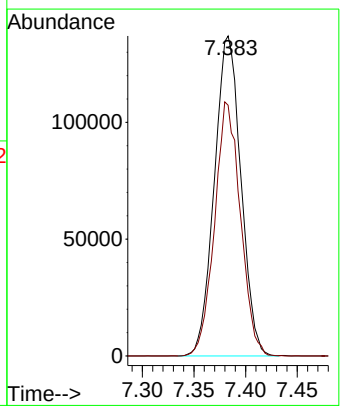
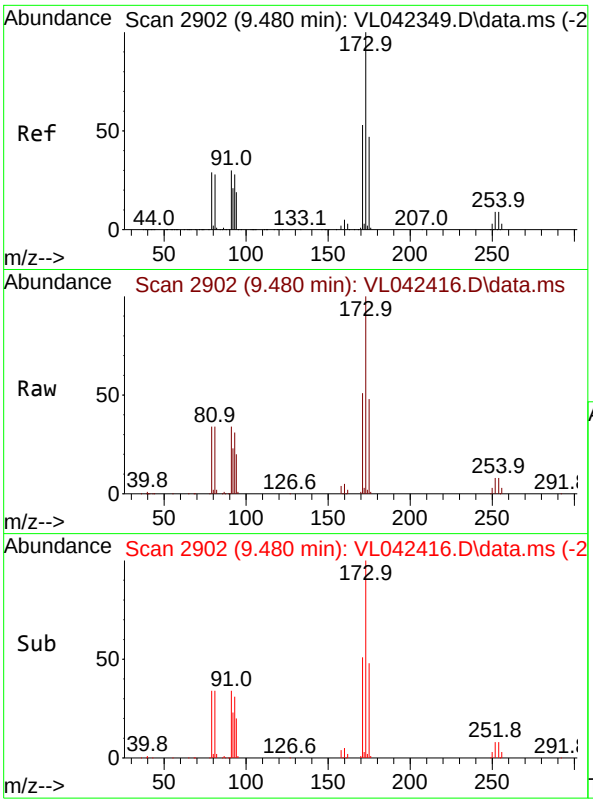


#48
Dibromochloromethane
Concen: 9.832 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:129 Resp: 245439

Ion	Ratio	Lower	Upper
129	100		
127	77.0	39.1	117.3

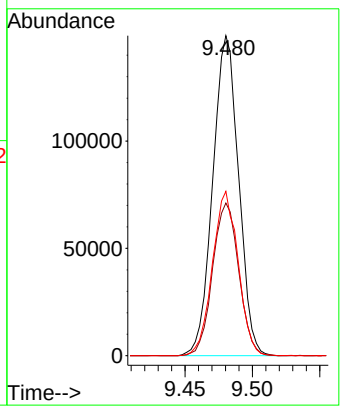




#49
Bromoform
Concen: 9.117 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:173 Resp: 19899

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.2	57.2
171	51.0	40.9	61.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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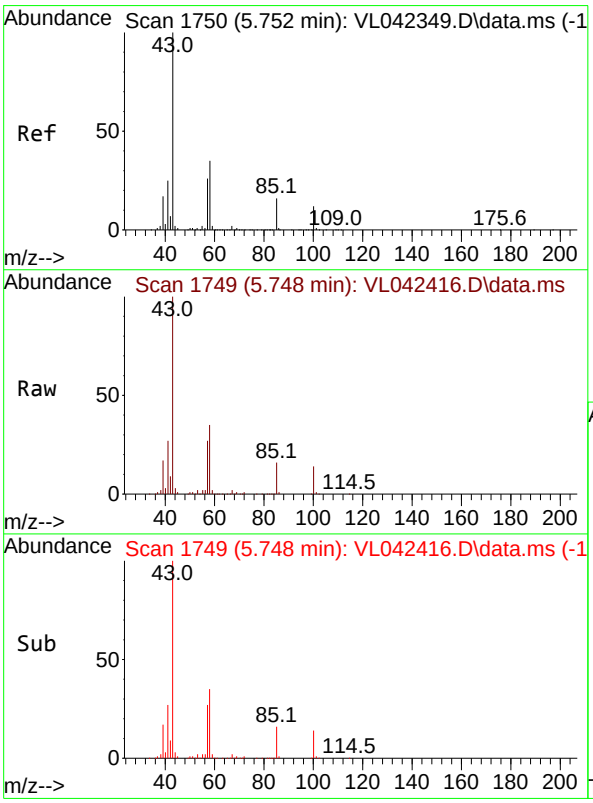
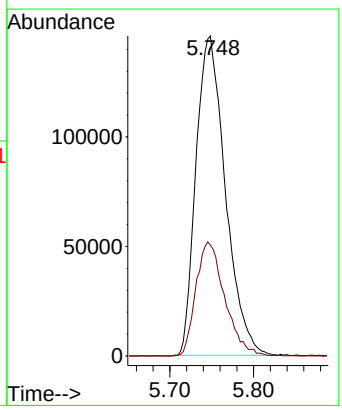
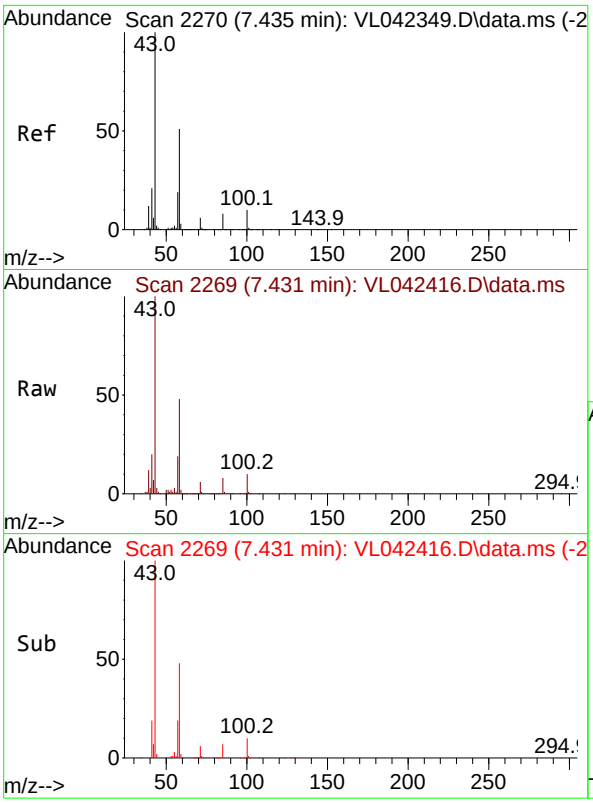


#50
4-Methyl-2-Pentanone
Concen: 7.854 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 356129

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.6	43.0

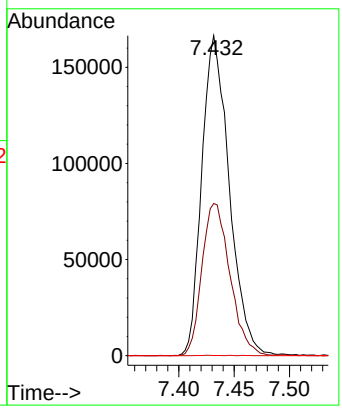




#51
2-Hexanone
Concen: 7.058 ppbv
RT: 7.431 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 28704

Ion	Ratio	Lower	Upper
43	100		
58	48.8	40.2	60.4
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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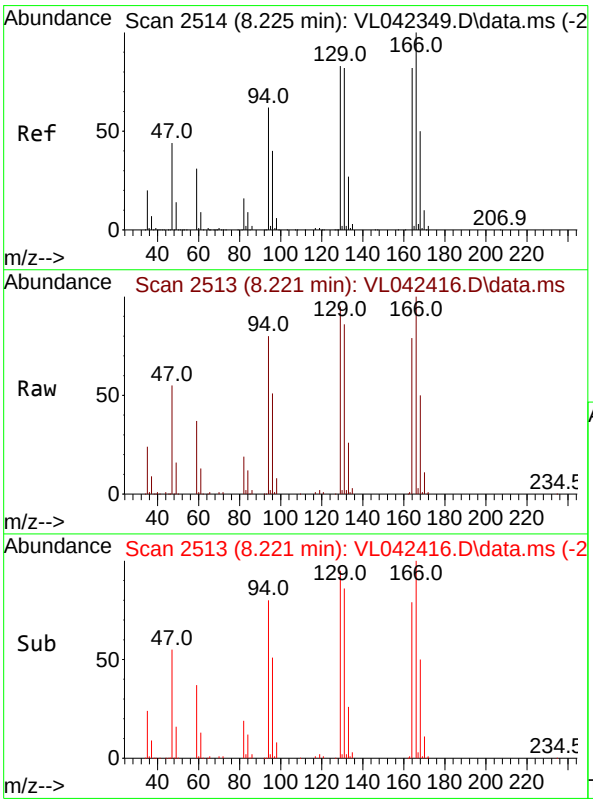
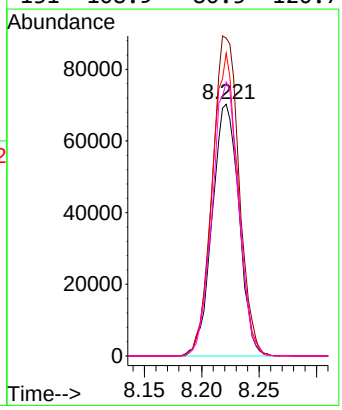
Supervised By :Mahesh Dadoda 04/30/2025

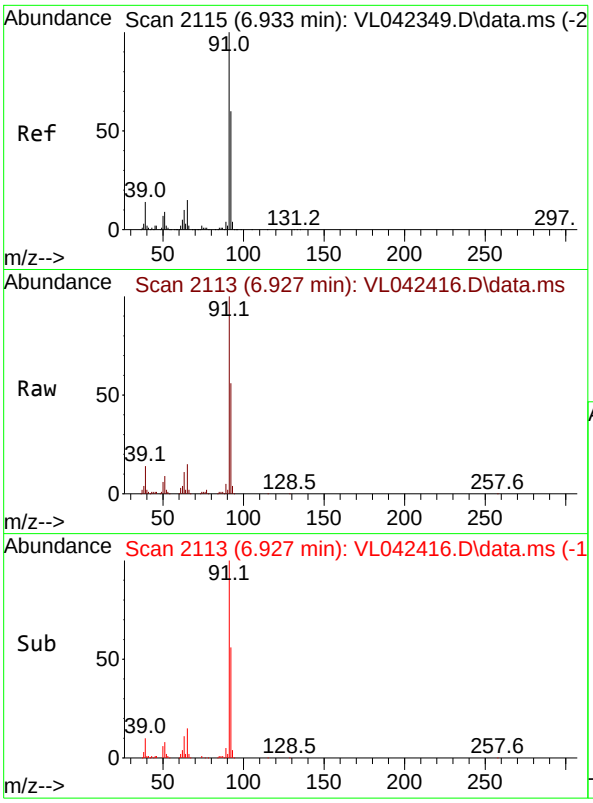


#52
Tetrachloroethene
Concen: 7.928 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:164 Resp: 114038

Ion	Ratio	Lower	Upper
164	100		
166	126.3	98.2	147.2
129	120.3	81.8	122.8
131	108.9	80.5	120.7

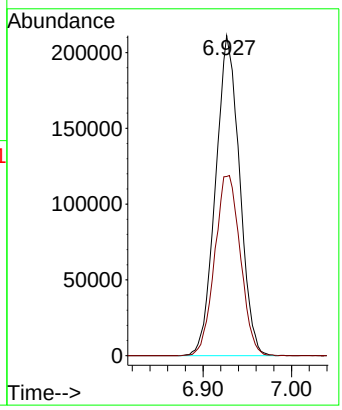




#53
Toluene
Concen: 8.916 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 39816

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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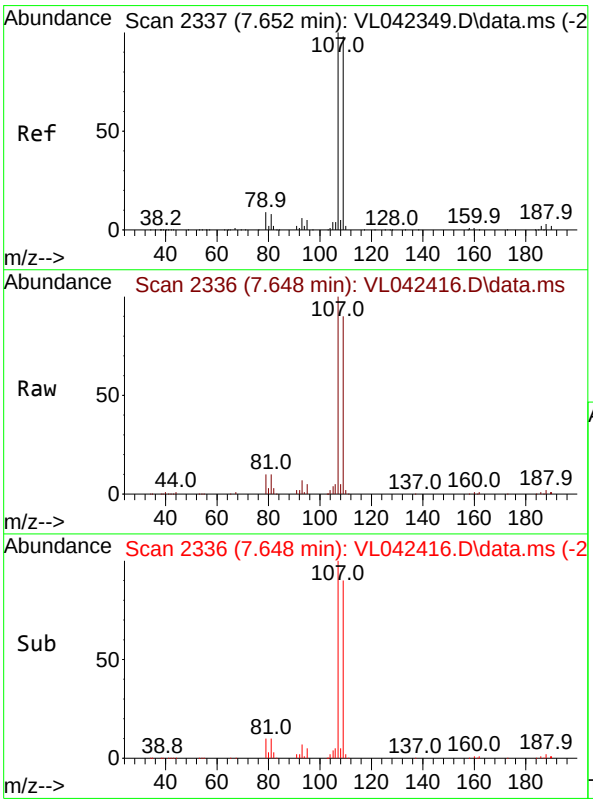
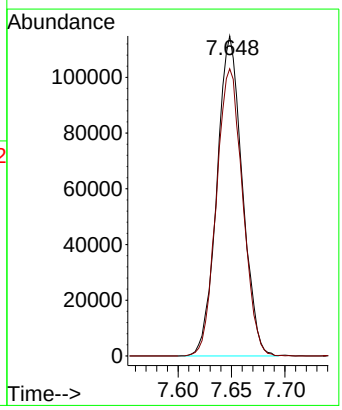
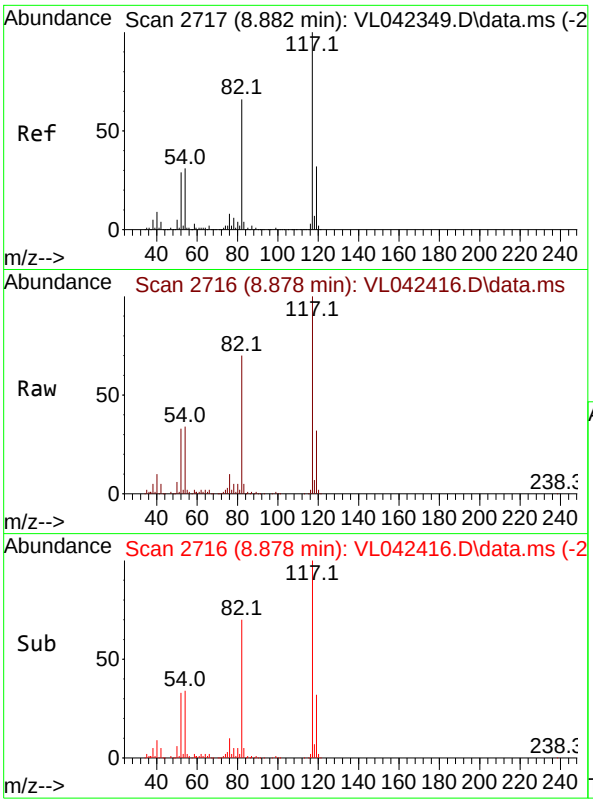


#54
1,2-Dibromoethane
Concen: 9.378 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:107 Resp: 189639

Ion	Ratio	Lower	Upper
107	100		
109	89.8	78.2	117.4

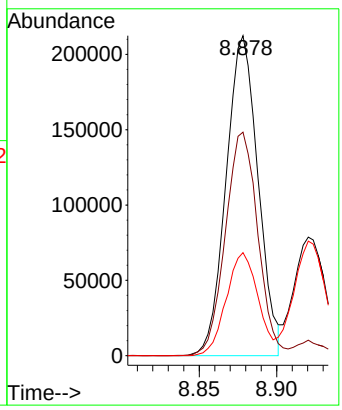




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:117 Resp: 30524

Ion	Ratio	Lower	Upper
117	100		
82	75.0	57.8	86.6
119	31.9	25.2	37.8



Instrument :
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ClientSampleId :
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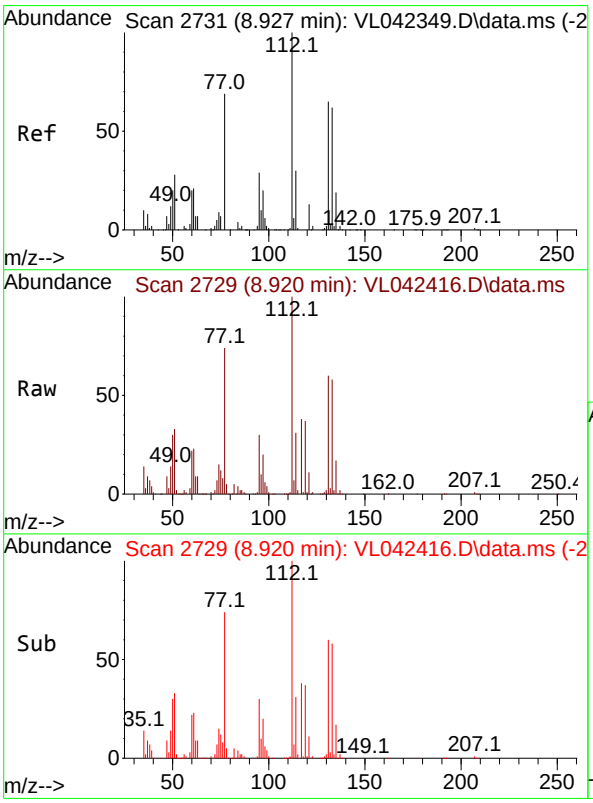
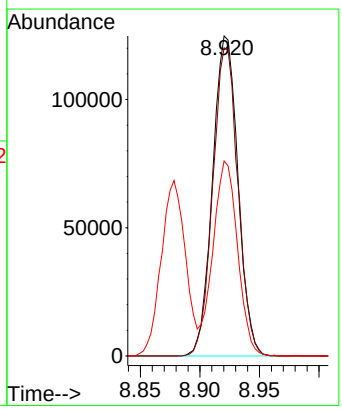
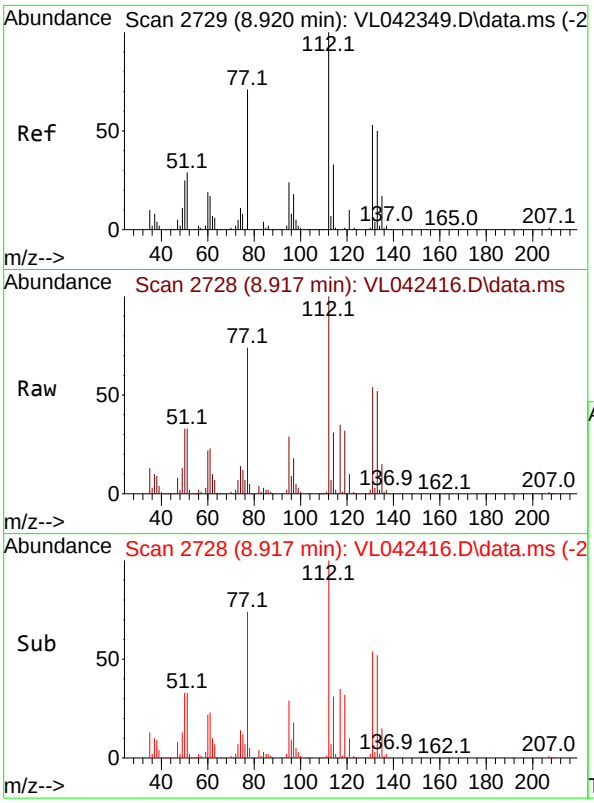


#56
1,1,1,2-Tetrachloroethane
Concen: 9.969 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:131 Resp: 184161

Ion	Ratio	Lower	Upper
131	100		
133	95.8	78.3	117.5
119	58.3	48.7	73.1

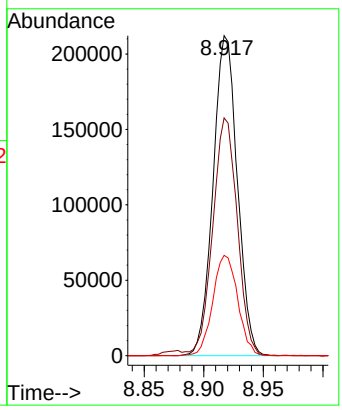




#57
Chlorobenzene
Concen: 9.471 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:112 Resp: 30067

Ion	Ratio	Lower	Upper
112	100		
77	74.3	57.8	86.6
114	31.4	29.3	35.9



Instrument :
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ClientSampleId :
VSTDCCC010

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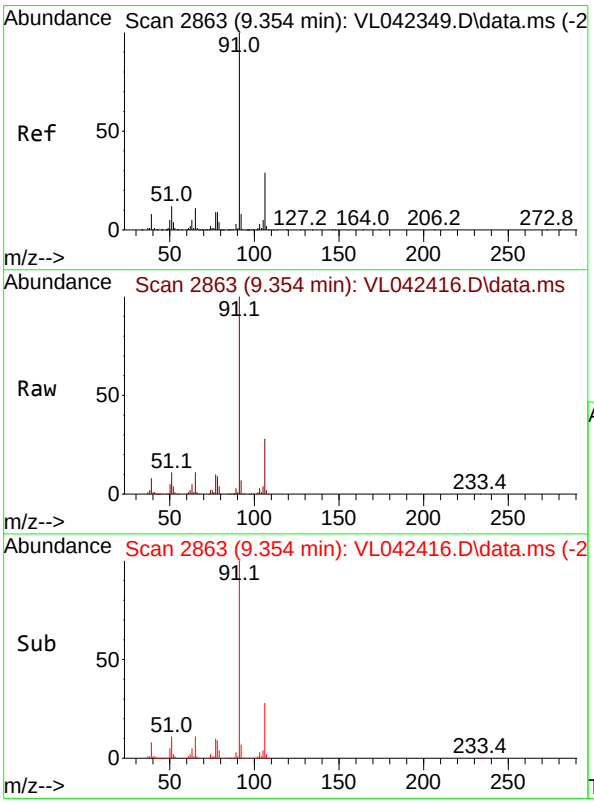
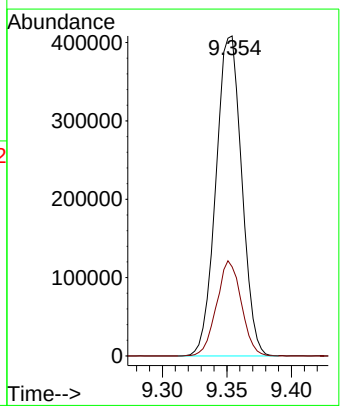
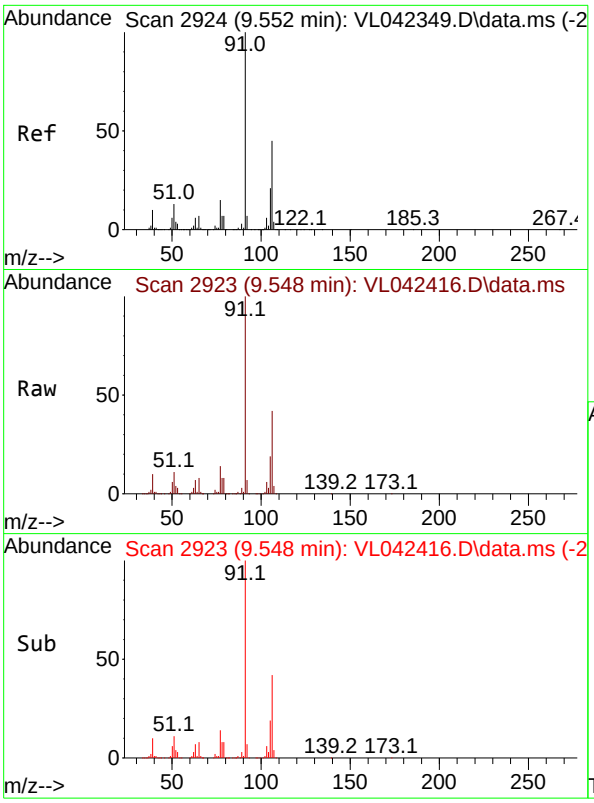


#58
Ethyl Benzene
Concen: 9.394 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 568129

Ion	Ratio	Lower	Upper
91	100		
106	27.8	23.0	34.4

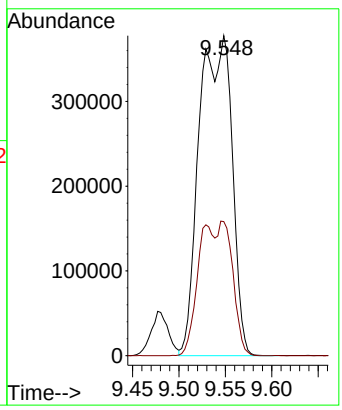




#59
m/p-Xylene
Concen: 19.073 ppbv m
RT: 9.548 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 92920

Ion	Ratio	Lower	Upper
91	100		
106	42.7	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
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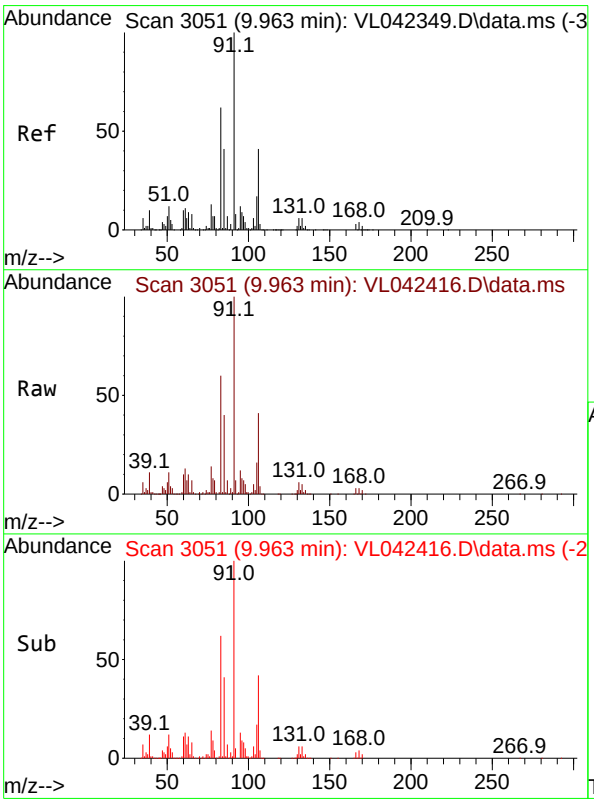
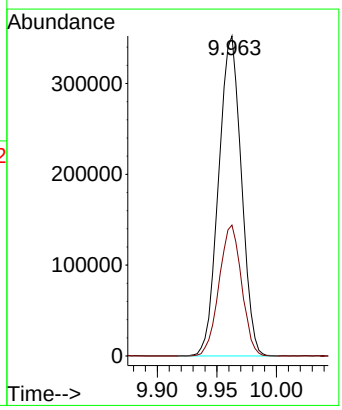
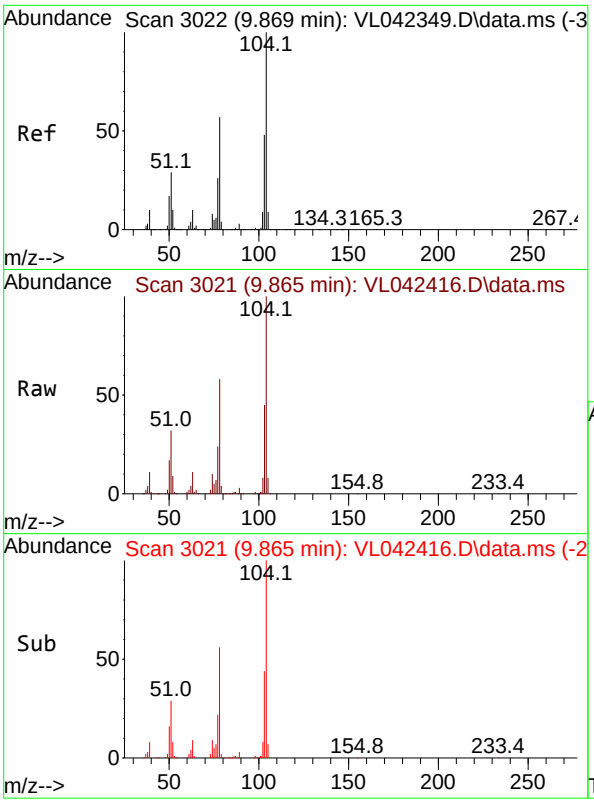


#60
o-Xylene
Concen: 9.507 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 466411

Ion	Ratio	Lower	Upper
91	100		
106	40.6	21.1	63.4

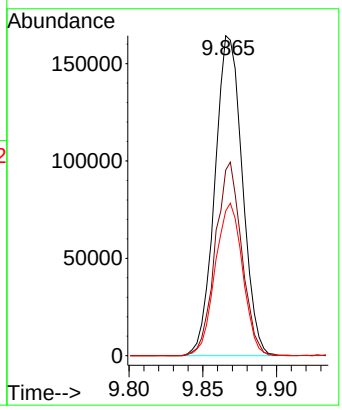




#61
Styrene
Concen: 9.101 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:104 Resp: 21311

Ion	Ratio	Lower	Upper
104	100		
78	57.9	44.6	66.8
103	47.6	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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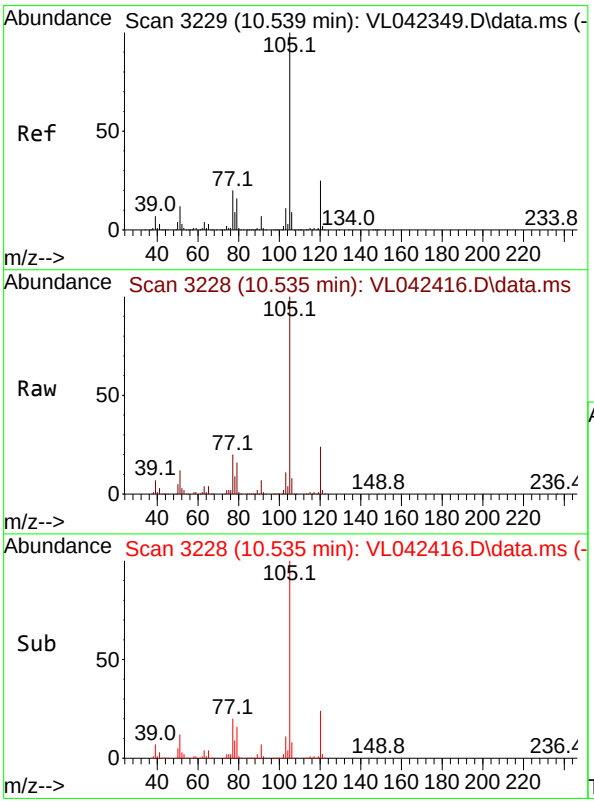
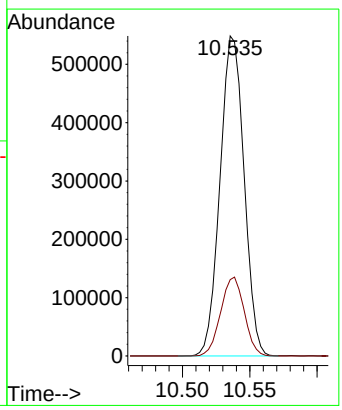
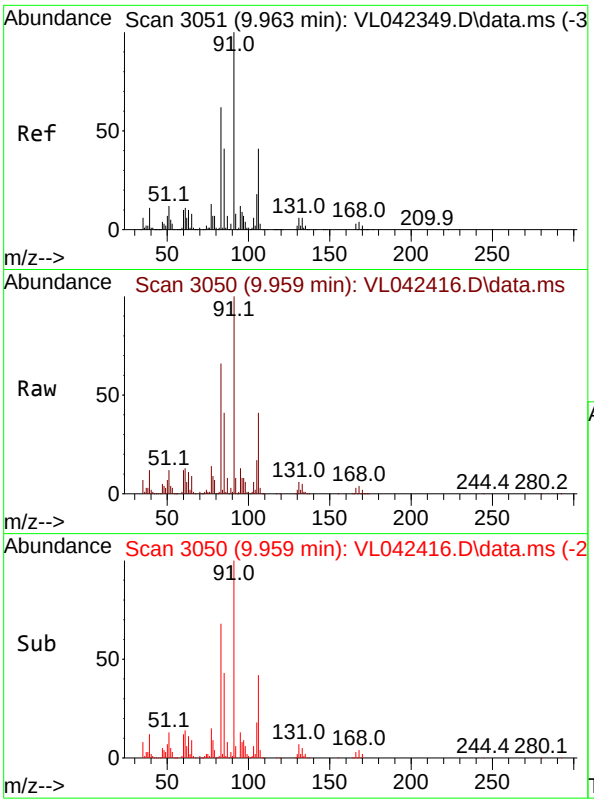


#62
Isopropylbenzene
Concen: 9.452 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 680837

Ion	Ratio	Lower	Upper
105	100		
120	24.1	19.8	29.8

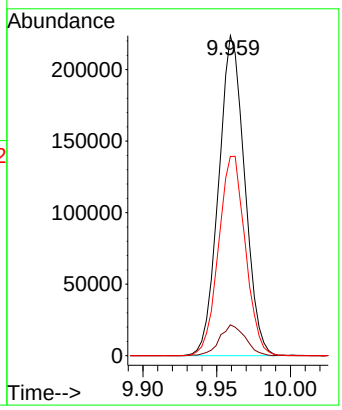




#63
1,1,2,2-Tetrachloroethane
Concen: 8.639 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 83 Resp: 27465

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	64.2	32.4	97.0



Instrument :
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ClientSampleId :
VSTDCCC010

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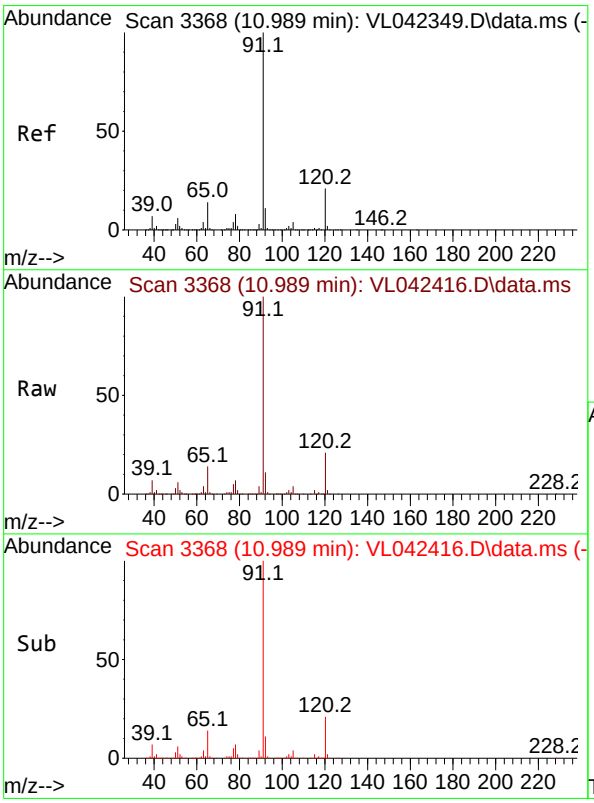
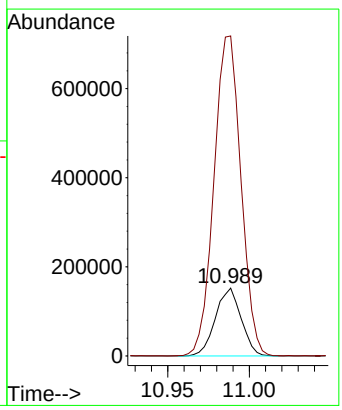
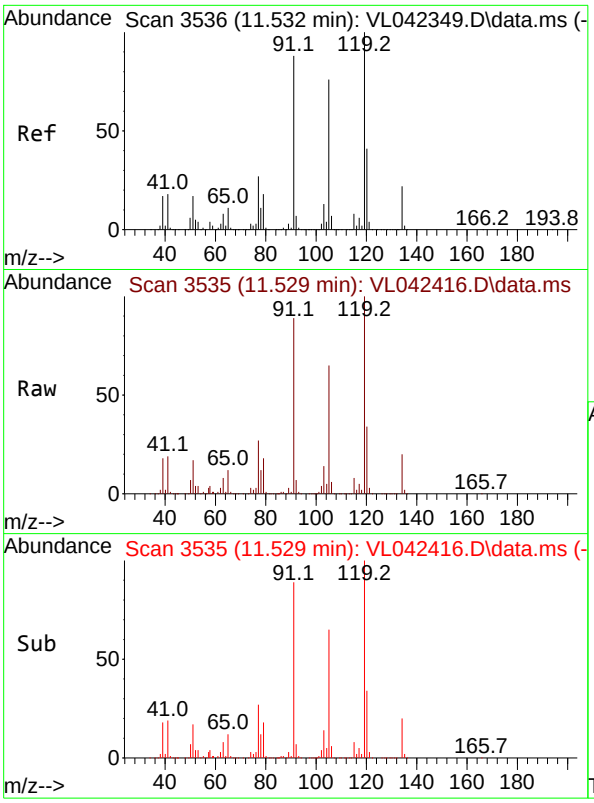


#64
n-propylbenzene
Concen: 9.223 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:120 Resp: 166984

Ion	Ratio	Lower	Upper
120	100		
91	495.0	392.4	588.6

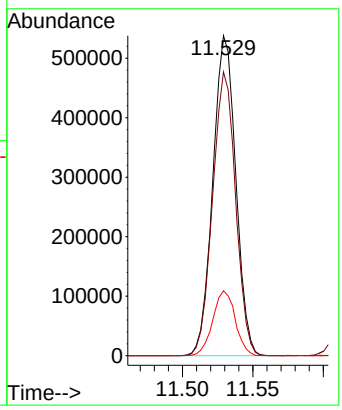




#65
tert-Butylbenzene
Concen: 9.219 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:119 Resp: 61030

Ion	Ratio	Lower	Upper
119	100		
91	88.8	74.6	111.8
134	19.9	18.8	28.2



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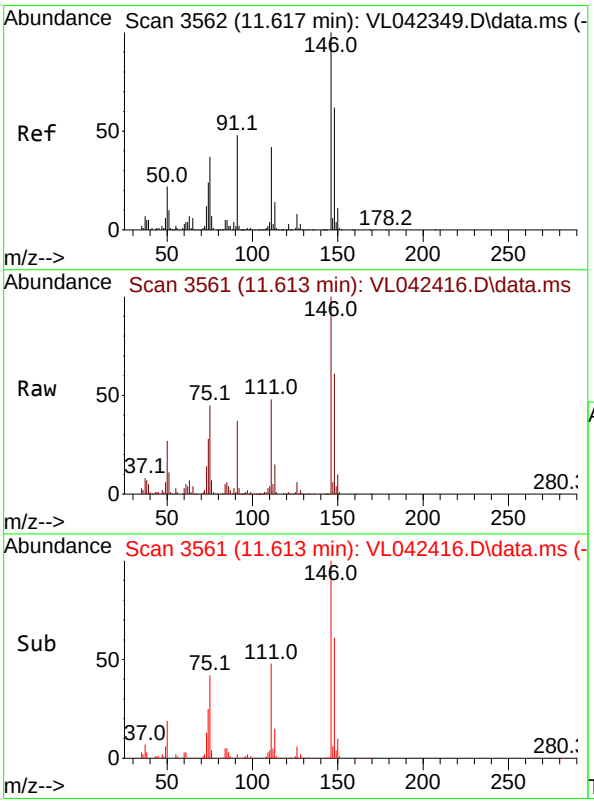
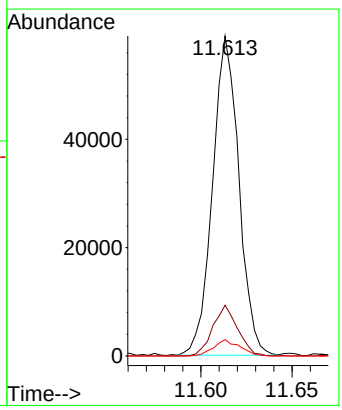
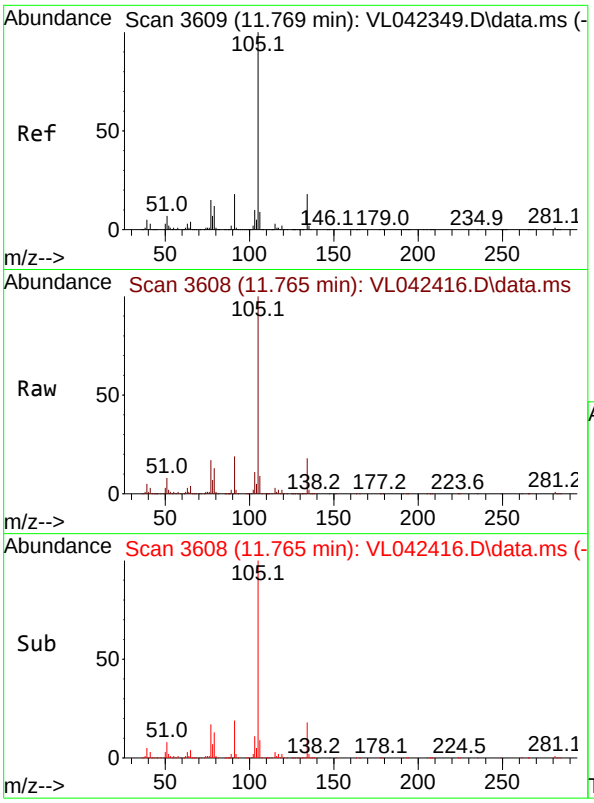


#66
Benzyl Chloride
Concen: 8.136 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 59187

Ion	Ratio	Lower	Upper
91	100		
126	15.1	11.8	17.6
128	5.1	4.5	6.7

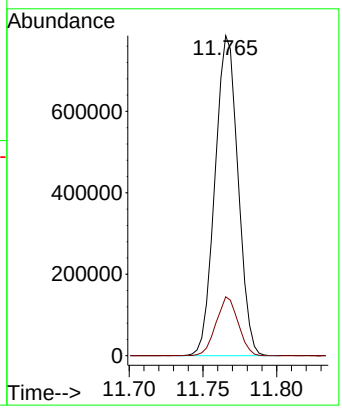




#67
sec-Butylbenzene
Concen: 9.276 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 85416

Ion	Ratio	Lower	Upper
105	100		
134	17.7	14.6	21.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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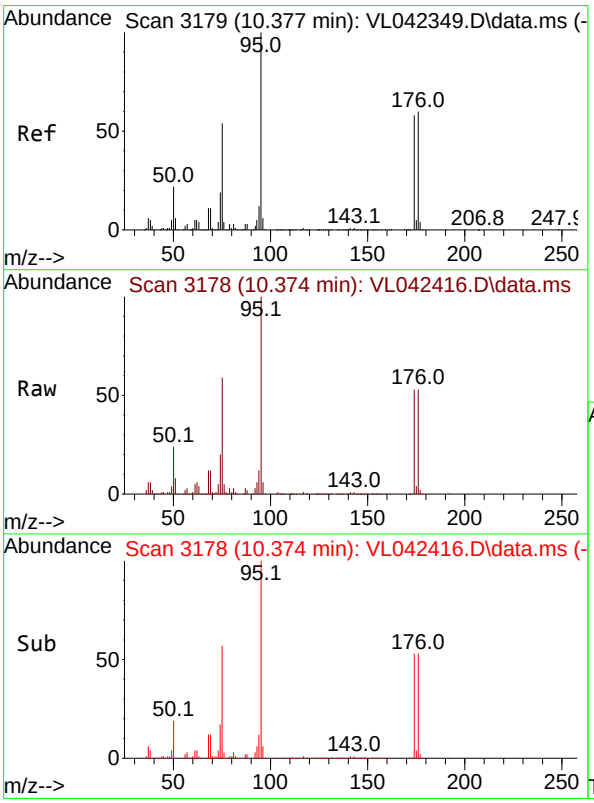
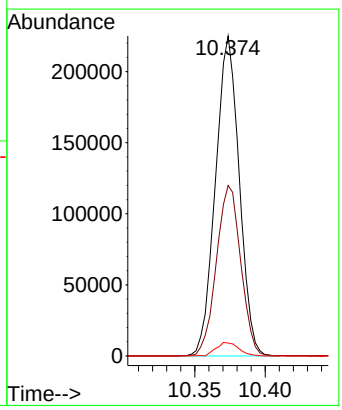
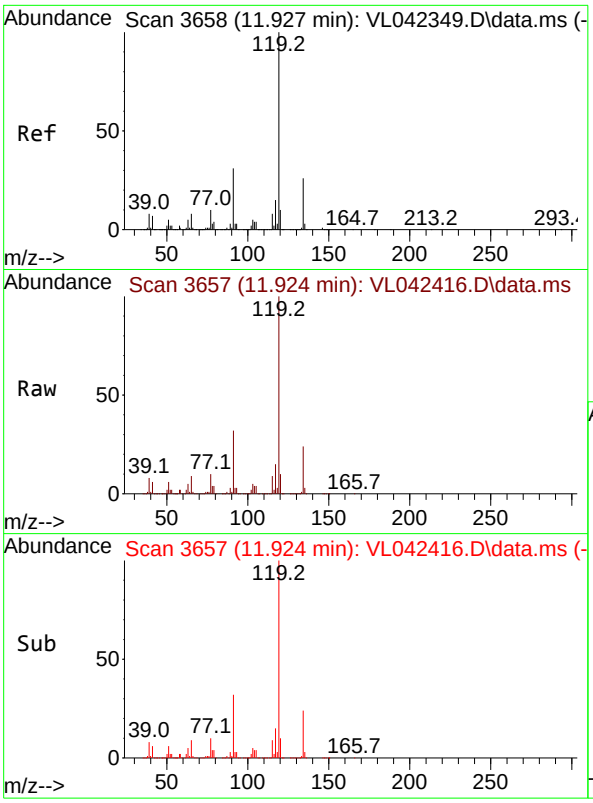


#68
1-Bromo-4-Fluorobenzene
Concen: 10.533 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 95 Resp: 264197

Ion	Ratio	Lower	Upper
95	100		
174	54.7	48.5	72.7
175	4.0	3.7	5.5

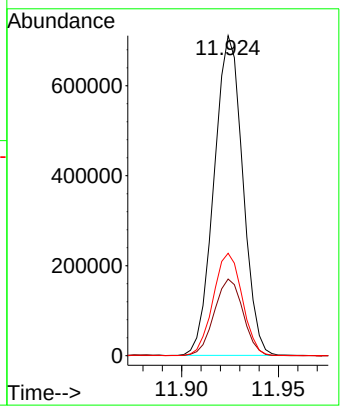




#69
p-Isopropyltoluene
Concen: 9.155 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:119 Resp: 73236

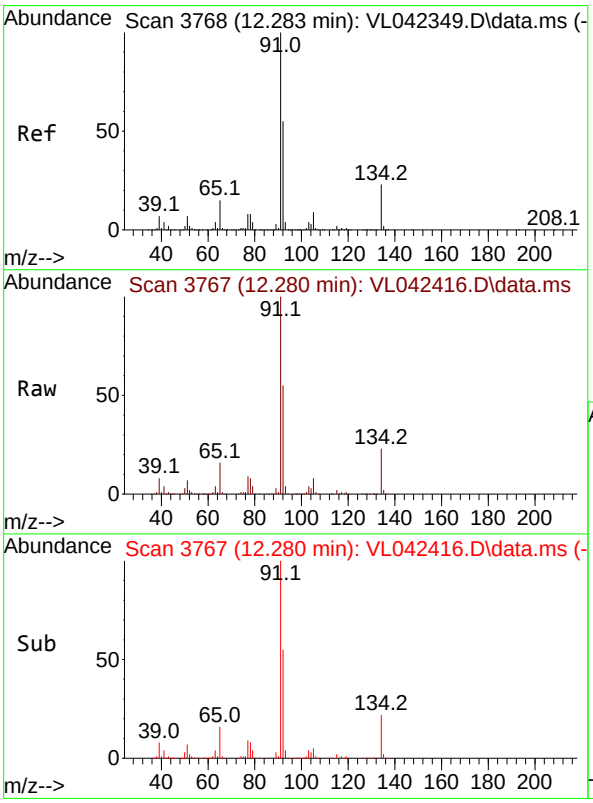
Ion	Ratio	Lower	Upper
119	100		
134	24.2	20.0	30.0
91	32.7	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

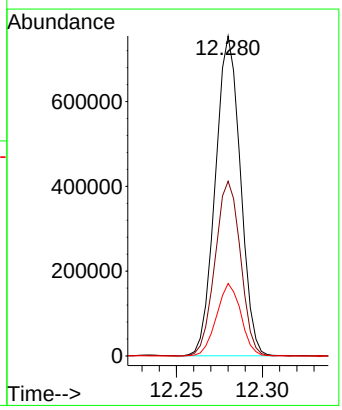
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

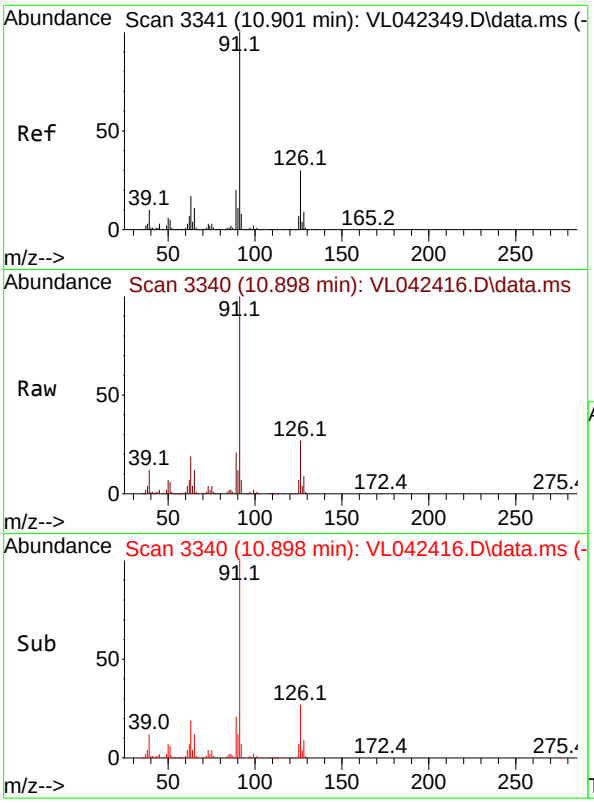


#70
n-Butylbenzene
Concen: 9.188 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 765539

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.2	66.4
134	22.1	18.2	27.4

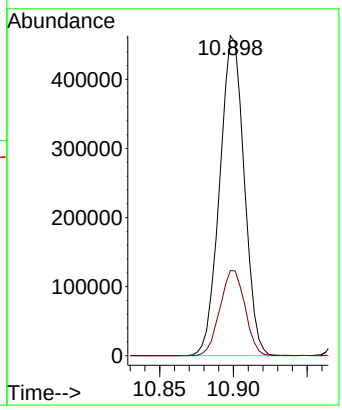




#71
2-Chlorotoluene
Concen: 9.467 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 53483

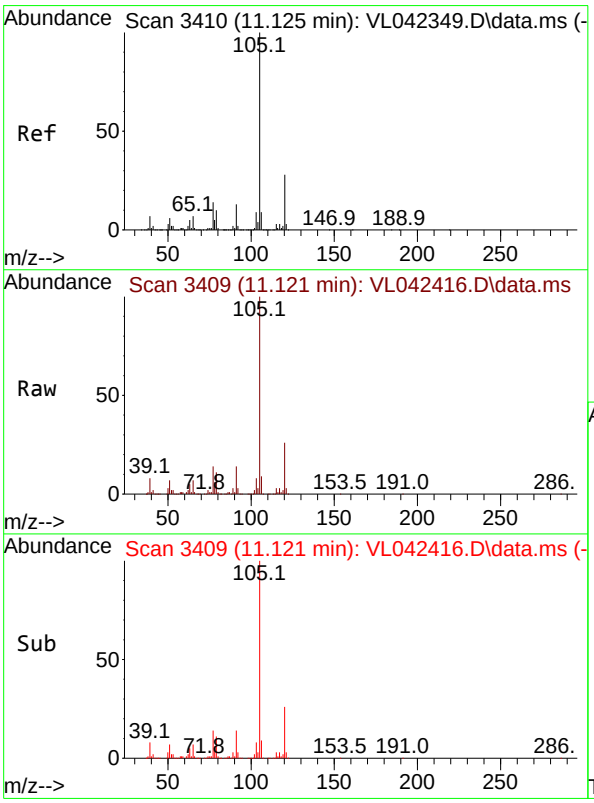
Ion	Ratio	Lower	Upper
91	100		
126	27.2	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

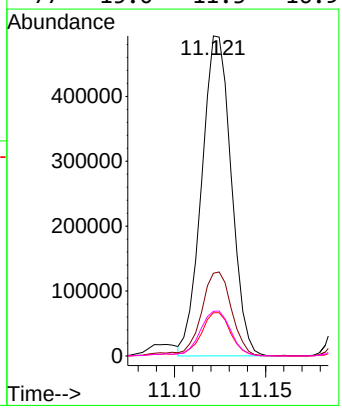
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

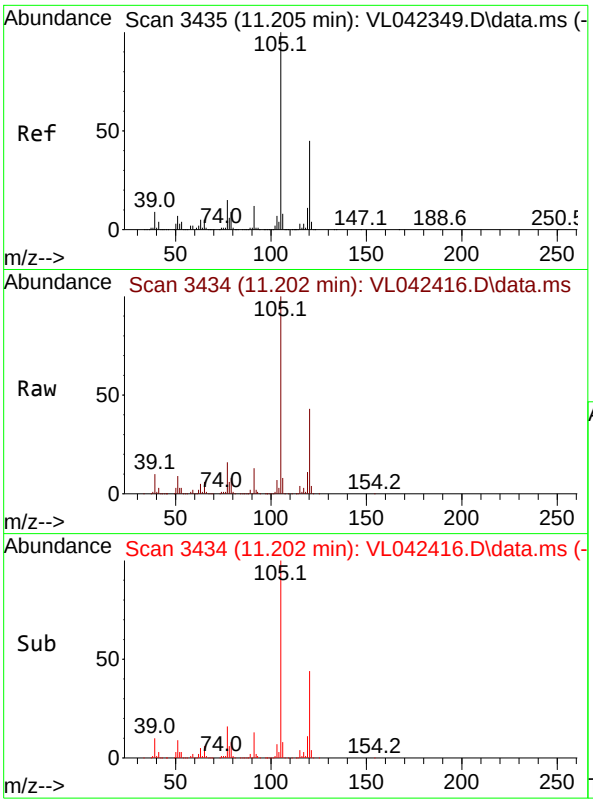


#72
4-Ethyltoluene
Concen: 9.280 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 556591

Ion	Ratio	Lower	Upper
105	100		
120	27.4	23.2	34.8
91	13.9	10.4	15.6
77	15.0	11.3	16.9

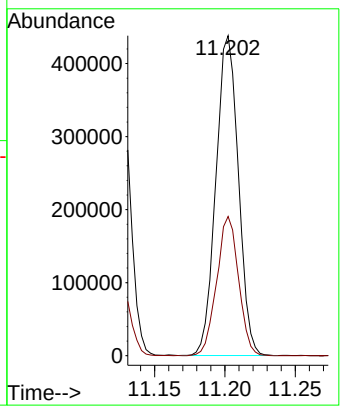




#73
1,3,5-Trimethylbenzene
Concen: 9.201 ppbv
RT: 11.202 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 48722

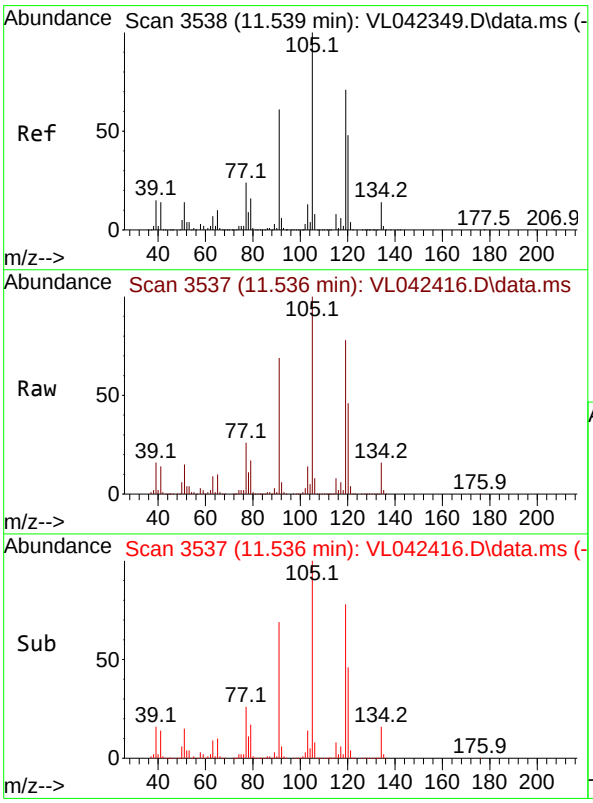
Ion	Ratio	Lower	Upper
105	100		
120	43.5	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

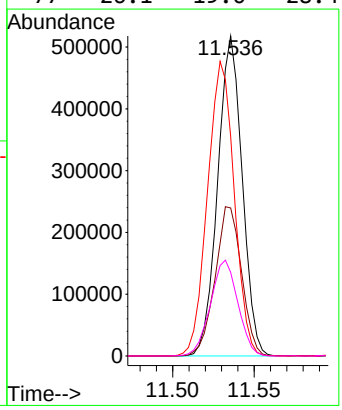
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

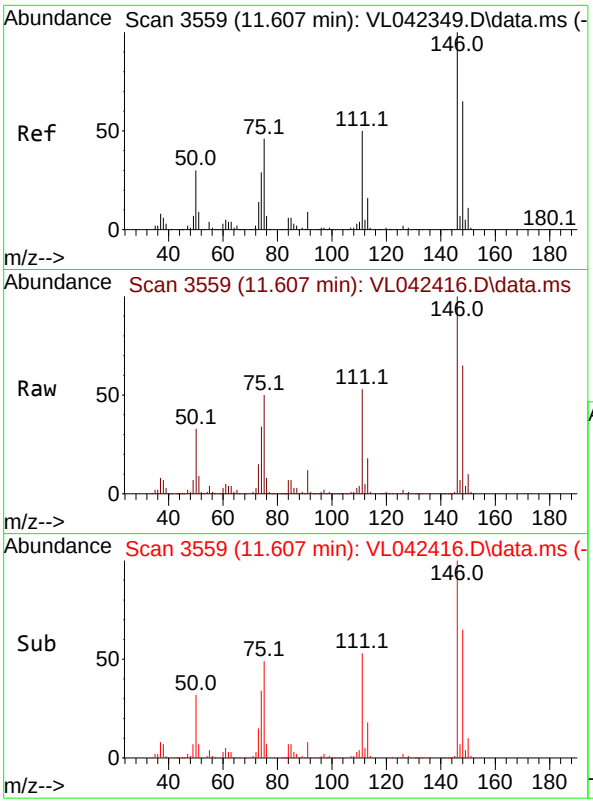


#74
1,2,4-Trimethylbenzene
Concen: 8.759 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 541720

Ion	Ratio	Lower	Upper
105	100		
120	46.2	38.1	57.1
91	68.6	48.8	73.2
77	26.1	19.0	28.4

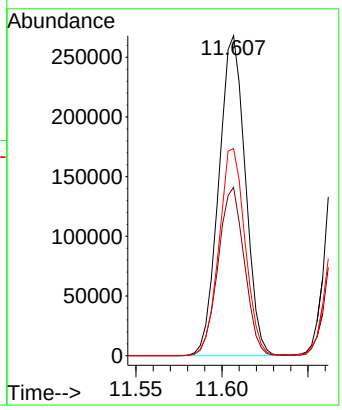




#75
1,3-Dichlorobenzene
Concen: 8.936 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:146 Resp: 28728

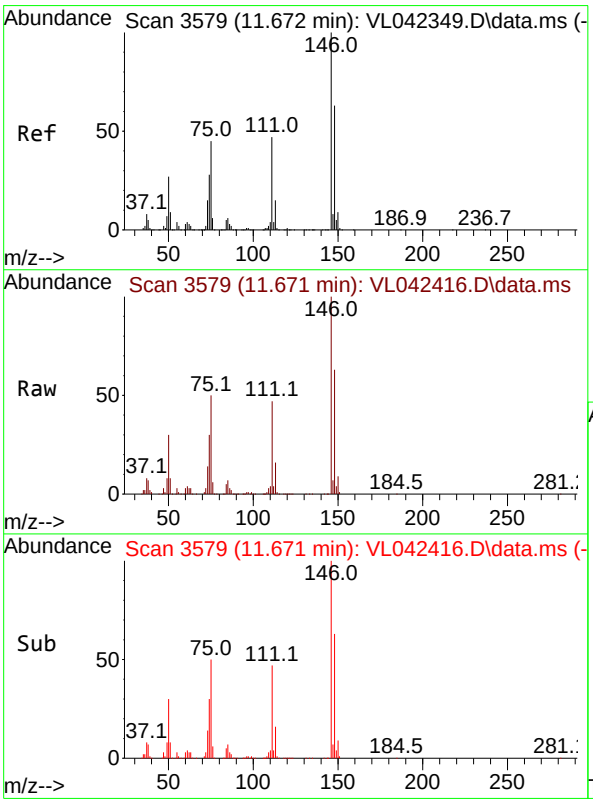
Ion	Ratio	Lower	Upper
146	100		
111	52.1	24.3	72.8
148	63.9	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

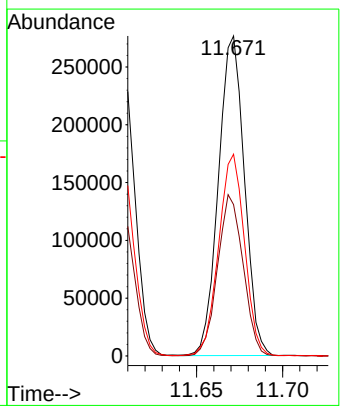
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

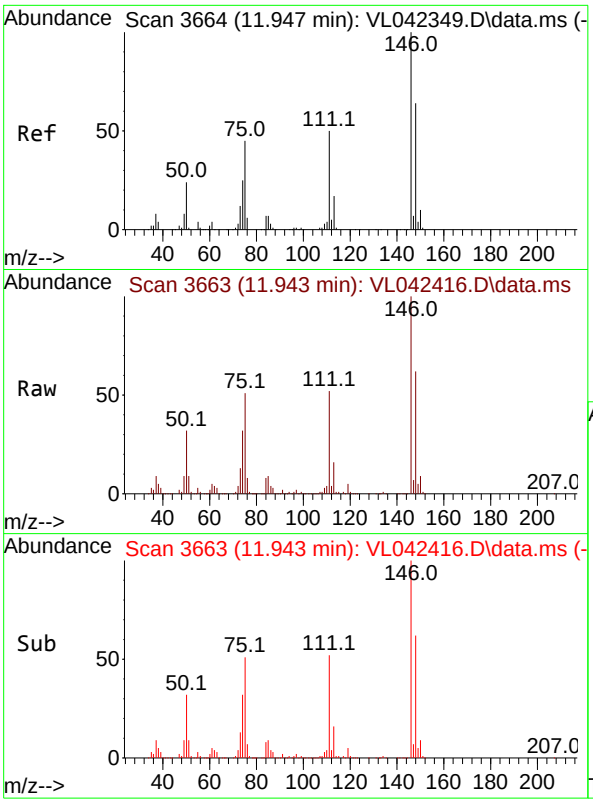


#76
1,4-Dichlorobenzene
Concen: 8.991 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:146 Resp: 290512

Ion	Ratio	Lower	Upper
146	100		
111	49.8	24.2	72.6
148	63.2	32.1	96.5

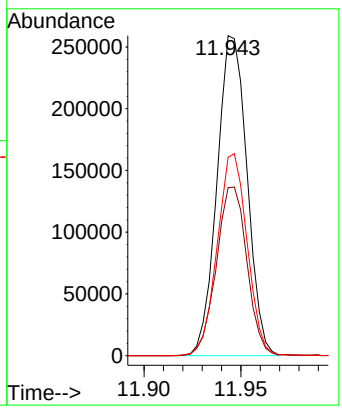




#77
1,2-Dichlorobenzene
Concen: 8.956 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:146 Resp: 27996

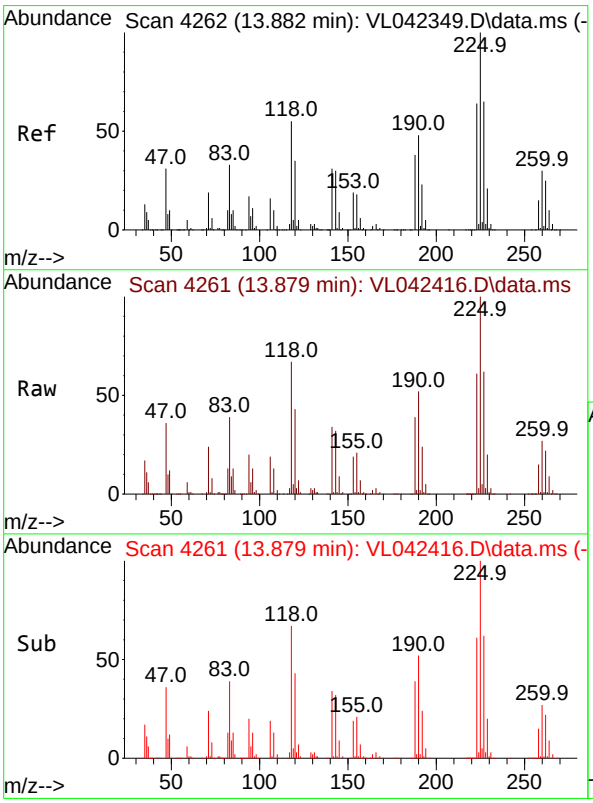
Ion	Ratio	Lower	Upper
146	100		
111	53.8	25.3	75.9
148	62.9	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

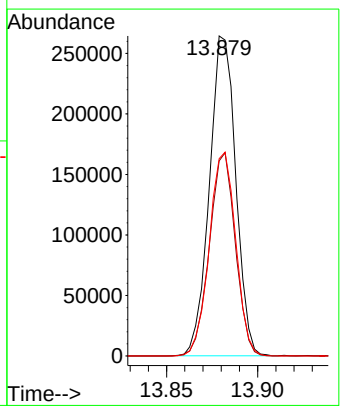
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

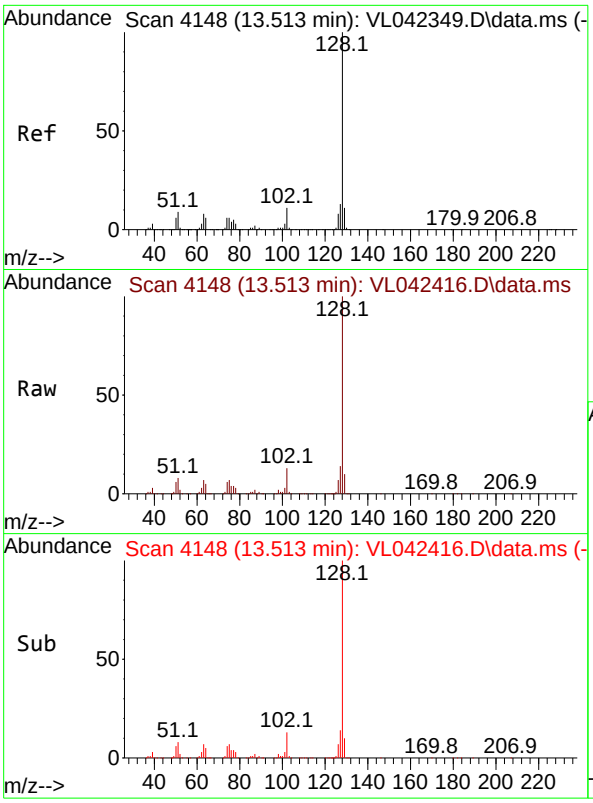


#78
Hexachloro-1,3-Butadiene
Concen: 8.419 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:225 Resp: 265745

Ion	Ratio	Lower	Upper
225	100		
223	62.5	50.3	75.5
227	64.0	51.5	77.3

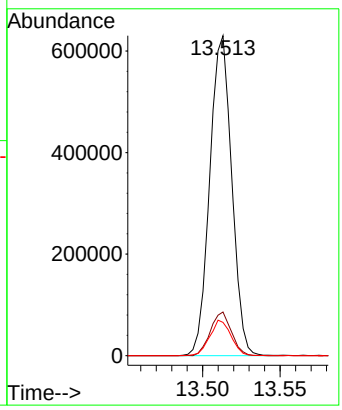




#79
Naphthalene
Concen: 8.418 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:128 Resp: 62260

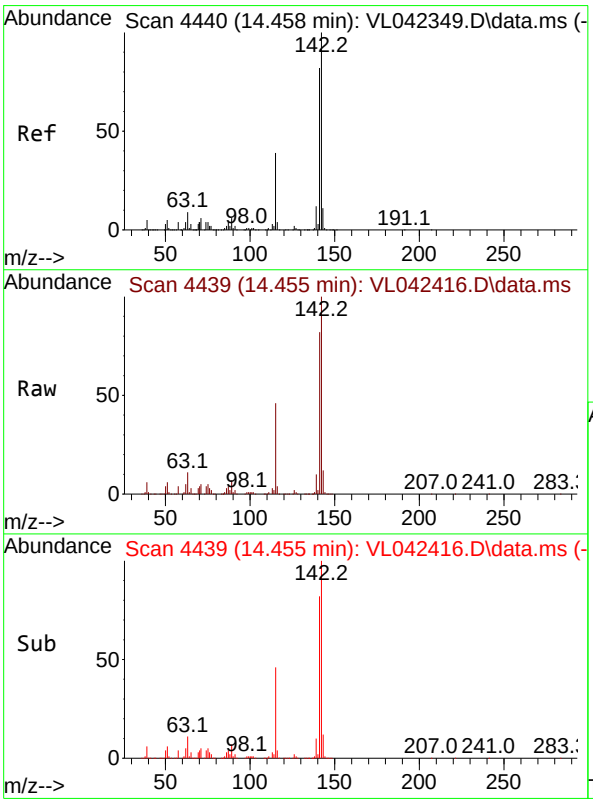
Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.6	15.8
129	10.4	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

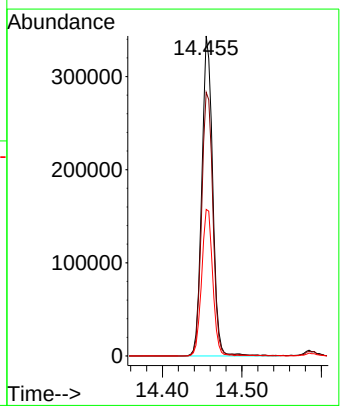
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

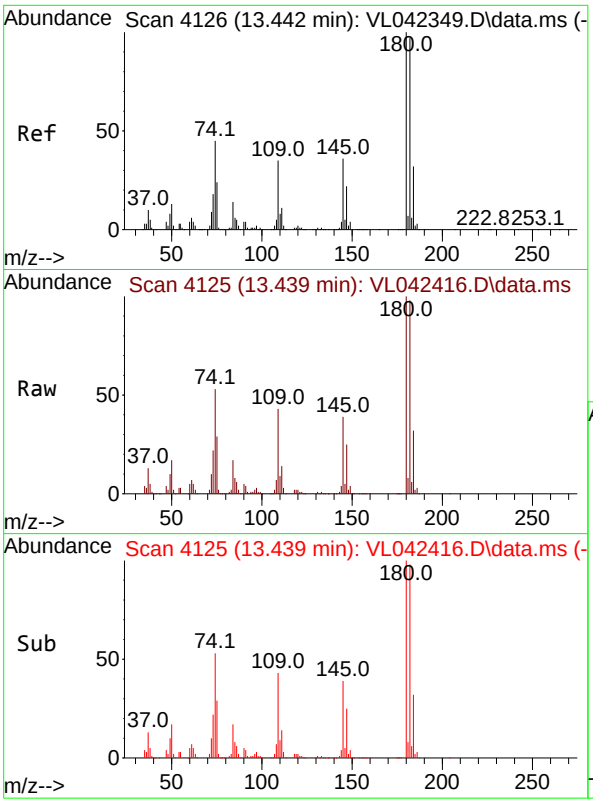


#80
Naphthalene,2-methyl-
Concen: 7.783 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:142 Resp: 328047

Ion	Ratio	Lower	Upper
142	100		
141	86.0	66.8	100.2
115	47.0	33.4	50.2

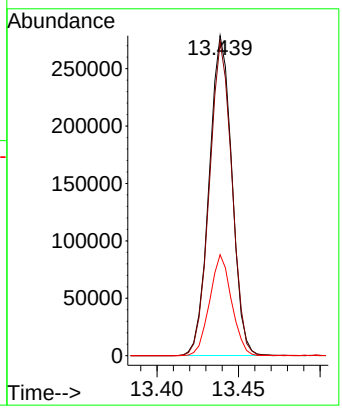




#81
1,2,4-Trichlorobenzene
Concen: 8.493 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:180 Resp: 26971

Ion	Ratio	Lower	Upper
180	100		
182	97.0	76.8	115.2
184	30.6	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	97	0.00
2	T	Dichlorodifluoromethane	1.767	1.796	-1.6	105	0.00
3		Chlorodifluoromethane	1.682	1.575	6.4	97	0.00
4		Chloromethane	0.699	0.698	0.1	104	0.00
5	T	Vinyl Chloride	0.761	0.679	10.8	103	0.00
6	T	Bromomethane	0.327	0.307	6.1	98	0.00
7		Chloroethane	0.275	0.264	4.0	102	0.00
8	T	Dichlorotetrafluoroethane	1.517	1.551	-2.2	105	0.00
9	T	Propene	0.766	0.623	18.7	88	0.00
10	T	Heptane	2.153	1.687	21.6	87	0.00
11	T	Trichlorofluoromethane	1.680	1.728	-2.9	107	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.374	1.337	2.7	102	0.00
13		Ethanol	0.122	0.038#	68.9#	104	0.00
14	T	Bromoethene	0.518	0.518	0.0	103	0.00
15	T	Acetone	1.637	1.412	13.7	109	0.00
16	T	1,3-Butadiene	0.783	0.695	11.2	104	0.00
17		tert-Butyl alcohol	2.029	1.859	8.4	100	0.00
18	T	1,1-Dichloroethene	0.642	0.605	5.8	101	0.00
19	T	Isopropyl Alcohol	0.909	0.828	8.9	98	0.00
20	T	Methylene Chloride	0.641	0.512	20.1	100	0.00
21	T	Allyl Chloride	1.130	1.026	9.2	103	0.00
22	T	trans-1,2-Dichloroethene	0.731	0.669	8.5	98	0.00
23	T	Vinyl Acetate	0.663	0.532	19.8	93	0.00
24	T	1,1-Dichloroethane	1.388	1.337	3.7	101	0.00
25	T	Ethyl Acetate	4.036	3.485	13.7	92	0.00
26	T	Hexane	1.633	1.367	16.3	93	0.00
27	T	Carbon Disulfide	1.749	1.685	3.7	98	0.00
28	T	Methyl tert-Butyl Ether	1.070	0.955	10.7	99	0.00
29	T	Chloroform	2.309	2.303	0.3	104	0.00
30	T	Cyclohexane	1.320	1.168	11.5	91	0.00
31	T	cis-1,2-Dichloroethene	1.553	1.488	4.2	99	0.00
32	T	1,1,1-Trichloroethane	2.599	2.470	5.0	106	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	94	0.00
34	T	2-Butanone	0.791	0.699	11.6	96	0.00
35	T	Carbon Tetrachloride	0.905	0.885	2.2	108	0.00
36	T	Benzene	1.079	0.982	9.0	92	0.00
37	T	1,2-Dichloroethane	0.647	0.684	-5.7	109	0.00
38	T	Trichloroethene	0.471	0.396	15.9	94	0.00
39	T	1,2-Dichloropropane	0.402	0.354	11.9	90	0.00
40	T	1,4-Dioxane	0.221	0.171	22.6	88	0.00
41	T	Tetrahydrofuran	0.461	0.386	16.3	89	0.00
42	T	Bromodichloromethane	0.901	0.901	0.0	100	0.00
43		Methyl Methacrylate	0.486	0.400	17.7	88	0.00
44	T	2,2,4-Trimethylpentane	1.863	1.630	12.5	90	0.00
45	T	t-1,3-Dichloropropene	0.497	0.456	8.2	93	0.00
46	T	cis-1,3-Dichloropropene	0.608	0.554	8.9	92	0.00
47	T	1,1,2-Trichloroethane	0.410	0.388	5.4	97	0.00
48	T	Dibromochloromethane	0.723	0.711	1.7	99	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.633	0.577	8.8	88	0.00
50	T	4-Methyl-2-Pentanone	1.314	1.032	21.5	90	0.00
51	T	2-Hexanone	1.179	0.832	29.4	88	0.00
52	T	Tetrachloroethene	0.417	0.331	20.6	87	0.00
53	T	Toluene	1.294	1.154	10.8	91	0.00
54	T	1,2-Dibromoethane	0.586	0.550	6.1	96	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
56		1,1,1,2-Tetrachloroethane	0.605	0.603	0.3	99	0.00
57	T	Chlorobenzene	1.040	0.985	5.3	93	0.00
58	T	Ethyl Benzene	1.981	1.861	6.1	92	0.00
59	T	m/p-Xylene	1.596	1.522	4.6	94	0.00
60	T	o-Xylene	1.607	1.528	4.9	96	0.00
61	T	Styrene	0.767	0.698	9.0	87	0.00
62		Isopropylbenzene	2.360	2.230	5.5	93	0.00
63	T	1,1,2,2-Tetrachloroethane	1.042	0.900	13.6	93	0.00
64		n-propylbenzene	0.593	0.547	7.8	91	0.00
65		tert-Butylbenzene	2.169	1.999	7.8	95	0.00
66	T	Benzyl Chloride	0.238	0.194	18.5	71	0.00
67		sec-Butylbenzene	3.017	2.798	7.3	95	0.00
68	S	1-Bromo-4-Fluorobenzene	0.822	0.866	-5.4	94	0.00
69		p-Isopropyltoluene	2.621	2.399	8.5	94	0.00
70		n-Butylbenzene	2.730	2.508	8.1	96	0.00
71		2-Chlorotoluene	1.851	1.752	5.3	93	0.00
72	T	4-Ethyltoluene	1.965	1.823	7.2	93	0.00
73	T	1,3,5-Trimethylbenzene	1.735	1.596	8.0	95	0.00
74	T	1,2,4-Trimethylbenzene	2.026	1.775	12.4	96	0.00
75	T	1,3-Dichlorobenzene	1.053	0.941	10.6	90	0.00
76	T	1,4-Dichlorobenzene	1.059	0.952	10.1	91	0.00
77	T	1,2-Dichlorobenzene	1.024	0.917	10.4	92	0.00
78	T	Hexachloro-1,3-Butadiene	1.034	0.871	15.8	91	0.00
79	T	Naphthalene	2.423	2.040	15.8	92	0.00
80	T	Naphthalene,2-methyl-	1.381	1.075	22.2	87	0.00
81	T	1,2,4-Trichlorobenzene	1.040	0.884	15.0	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/29/2025 08:39

Lab File ID: VL042436.D Init. Calib. Date(s): 04/17/2025 04/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:44 12:54

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dichlorodifluoromethane	1.767	2.050		16.02	30
Ethanol	0.122	0.038		-68.85	30
Chloromethane	0.699	0.788		12.73	30
Vinyl Chloride	0.761	0.756		-0.66	30
Bromomethane	0.327	0.358		9.48	30
Chloroethane	0.275	0.307		11.64	30
Tetrahydrofuran	0.461	0.391		-15.18	30
Trichlorofluoromethane	1.680	1.990		18.45	30
1,1,2-Trichlorotrifluoroethane	1.374	1.502		9.32	30
Dichlorotetrafluoroethane	1.517	1.746		15.1	30
Bromoethene	0.518	0.555		7.14	30
tert-Butyl alcohol	2.029	2.005		-1.18	30
Heptane	2.153	1.613		-25.08	30
Isopropyl Alcohol	0.909	0.890		-2.09	30
1,1-Dichloroethene	0.642	0.659		2.65	30
Acetone	1.637	1.614		-1.4	30
Carbon Disulfide	1.749	1.858		6.23	30
Methyl tert-Butyl Ether	1.070	0.996		-6.92	30
Methylene Chloride	0.641	0.587		-8.42	30
trans-1,2-Dichloroethene	0.731	0.756		3.42	30
1,1-Dichloroethane	1.388	1.506		8.5	30
Cyclohexane	1.320	1.140		-13.64	30
2-Butanone	0.791	0.745		-5.82	30
Carbon Tetrachloride	0.905	1.017		12.38	30
cis-1,2-Dichloroethene	1.553	1.525		-1.8	30
Chloroform	2.309	2.540		10	30
1,1,1-Trichloroethane	2.599	2.727		4.93	30
2,2,4-Trimethylpentane	1.863	1.678		-9.93	30
Benzene	1.079	1.010		-6.39	30
1,2-Dichloroethane	0.647	0.786		21.48	30
Trichloroethene	0.471	0.398		-15.5	30
1,2-Dichloropropane	0.402	0.354		-11.94	30
Bromodichloromethane	0.901	1.002		11.21	30
4-Methyl-2-Pentanone	1.314	1.047		-20.32	30
Toluene	1.294	1.161		-10.28	30
t-1,3-Dichloropropene	0.497	0.448		-9.86	30
cis-1,3-Dichloropropene	0.608	0.544		-10.53	30
1,1,2-Trichloroethane	0.410	0.415		1.22	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

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

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: WOOD06

Lab Code: CHEM Case No.: Q1665 SAS No.: Q1665 SDG No.: Q1665

Instrument ID: MSVOA_L Calibration Date/Time: 04/29/2025 08:39

Lab File ID: VL042436.D Init. Calib. Date(s): 04/17/2025 04/17/2025

Heated Purge: (Y/N) N Init. Calib. Time(s): 09:44 12:54

GC Column: RTX-1 ID: 0.32 (mm)

COMPOUND	RRF	RRF010	MIN RRF	%D	MAX%D
Dibromochloromethane	0.723	0.748		3.46	30
1,2-Dibromoethane	0.586	0.578		-1.37	30
Tetrachloroethene	0.417	0.327		-21.58	30
Chlorobenzene	1.040	1.049		0.87	30
Ethyl Benzene	1.981	1.988		0.35	30
m/p-Xylene	1.596	1.685		5.58	30
o-Xylene	1.607	1.718		6.91	30
Styrene	0.767	0.725		-5.48	30
Bromoform	0.633	0.607		-4.11	30
1,1,2,2-Tetrachloroethane	1.042	1.010		-3.07	30
2-Chlorotoluene	1.851	1.956		5.67	30
1,3,5-Trimethylbenzene	1.735	1.830		5.48	30
1,2,4-Trimethylbenzene	2.026	2.052		1.28	30
1,3-Dichlorobenzene	1.053	1.056		0.28	30
1,4-Dichlorobenzene	1.059	1.081		2.08	30
1,2-Dichlorobenzene	1.024	1.051		2.64	30
1,2,4-Trichlorobenzene	1.040	0.974		-6.35	30
Hexachloro-1,3-Butadiene	1.034	0.976		-5.61	30
1,3-Butadiene	0.783	0.776		-0.89	30
Naphthalene	2.423	2.279		-5.94	30
4-Ethyltoluene	1.965	2.072		5.45	30
1-Bromo-4-Fluorobenzene	0.822	0.938		14.11	30
Hexane	1.633	1.343		-17.76	30
Allyl Chloride	1.130	1.151		1.86	30
1,4-Dioxane	220.893	174.653		-20.93	30
Methyl Methacrylate	0.486	0.407		-16.25	30

All other compounds must meet a minimum RRF of 0.010.
RRF of 1,4-Dioxane = Value should be divide by 1000.

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.780	49	114553	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	311268	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	269987	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.373	95	253216	11.413	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 114.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	234841	11.603	ppbv	97
3) Chlorodifluoromethane	1.473	51	188007	9.755	ppbv	95
4) Chloromethane	1.531	50	90298	11.274	ppbv	100
5) Vinyl Chloride	1.576	62	86603	9.933	ppbv	96
6) Bromomethane	1.664	94	41020	10.952	ppbv	85
7) Chloroethane	1.703	64	35167	11.153	ppbv	95
8) Dichlorotetrafluoroethane	1.550	85	199977	11.508	ppbv	94
9) Propene	1.482	41	69189	7.883	ppbv	98
10) Heptane	4.968	43	184737	7.492	ppbv	99
11) Trichlorofluoromethane	1.874	101	227979	11.845	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.136	101	172070	10.934	ppbv	99
13) Ethanol	1.719	45	4336	3.108	ppbv	81
14) Bromoethene	1.777	108	63597	10.721	ppbv	97
15) Acetone	1.832	43	184887	9.859	ppbv	98
16) 1,3-Butadiene	1.605	39	88889	9.910	ppbv	95
17) tert-Butyl alcohol	2.036	59	229627	9.881	ppbv	99
18) 1,1-Dichloroethene	2.029	96	75451	10.263	ppbv	94
19) Isopropyl Alcohol	1.884	45	101987	9.790	ppbv	91
20) Methylene Chloride	2.059	84	67278	9.161	ppbv	95
21) Allyl Chloride	2.091	41	131864	10.184	ppbv	98
22) trans-1,2-Dichloroethene	2.337	96	86577	10.343	ppbv	95
23) Vinyl Acetate	2.460	43	61601	8.115	ppbv #	95
24) 1,1-Dichloroethane	2.405	63	172555	10.852	ppbv	98
25) Ethyl Acetate	2.832	43	408744	8.840	ppbv	100
26) Hexane	2.819	57	153801	8.220	ppbv	96
27) Carbon Disulfide	2.146	76	212793	10.622	ppbv	99
28) Methyl tert-Butyl Ether	2.437	73	114108	9.308	ppbv	93
29) Chloroform	2.845	83	290965	11.002	ppbv	100
30) Cyclohexane	3.848	84	130608	8.635	ppbv	97
31) cis-1,2-Dichloroethene	2.716	61	174659	9.818	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	312430	10.493	ppbv	99
34) 2-Butanone	2.554	43	232034	9.426	ppbv	98
35) Carbon Tetrachloride	3.755	117	316689	11.242	ppbv	94
36) Benzene	3.651	78	314493	9.367	ppbv	95
37) 1,2-Dichloroethane	3.214	62	244516	12.134	ppbv #	96
38) Trichloroethene	4.541	130	123997	8.450	ppbv #	88
39) 1,2-Dichloropropane	4.305	63	110315	8.817	ppbv #	84
40) 1,4-Dioxane	4.577	88	54364	7.907	ppbv #	90
41) Tetrahydrofuran	3.049	42	121700	8.479	ppbv	100
42) Bromodichloromethane	4.483	83	312029	11.127	ppbv	98
43) Methyl Methacrylate	4.874	69	126594	8.367	ppbv	94
44) 2,2,4-Trimethylpentane	4.632	57	522427	9.010	ppbv	94
45) t-1,3-Dichloropropene	6.409	75	139508	9.026	ppbv	89

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.587	75	169355	8.953	ppbv		90
47) 1,1,2-Trichloroethane	6.570	97	129223m	10.138	ppbv		
48) Dibromochloromethane	7.380	129	232818	10.339	ppbv		100
49) Bromoform	9.477	173	188896	9.593	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	325855	7.965	ppbv		99
51) 2-Hexanone	7.428	43	269915	7.357	ppbv	#	93
52) Tetrachloroethene	8.218	164	101642	7.833	ppbv	#	84
53) Toluene	6.926	91	361317	8.968	ppbv		100
54) 1,2-Dibromoethane	7.645	107	179895	9.861	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.917	131	182759	11.184	ppbv		95
57) Chlorobenzene	8.920	112	283210	10.086	ppbv		97
58) Ethyl Benzene	9.351	91	536634	10.032	ppbv		96
59) m/p-Xylene	9.529	91	909704m	21.110	ppbv		
60) o-Xylene	9.959	91	463713	10.686	ppbv		96
61) Styrene	9.869	104	195813	9.454	ppbv		98
62) Isopropylbenzene	10.535	105	672630	10.558	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.959	83	272746	9.699	ppbv		99
64) n-propylbenzene	10.985	120	160736	10.037	ppbv		90
65) tert-Butylbenzene	11.529	119	616872	10.535	ppbv		98
66) Benzyl Chloride	11.613	91	49841	7.746	ppbv		98
67) sec-Butylbenzene	11.765	105	869595	10.677	ppbv		99
69) p-Isopropyltoluene	11.924	119	738863	10.442	ppbv		96
70) n-Butylbenzene	12.280	91	787717	10.688	ppbv		98
71) 2-Chlorotoluene	10.898	91	528205	10.571	ppbv		96
72) 4-Ethyltoluene	11.121	105	559285	10.542	ppbv		96
73) 1,3,5-Trimethylbenzene	11.199	105	493949	10.546	ppbv		93
74) 1,2,4-Trimethylbenzene	11.535	105	554136	10.130	ppbv		96
75) 1,3-Dichlorobenzene	11.603	146	285025	10.024	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	291795	10.210	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	283700	10.261	ppbv		97
78) Hexachloro-1,3-Butadiene	13.879	225	263477	9.437	ppbv		99
79) Naphthalene	13.510	128	615408	9.408	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	316788	8.497	ppbv		96
81) 1,2,4-Trichlorobenzene	13.439	180	263006	9.363	ppbv		98

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

Quantitation Report (QT Reviewed)

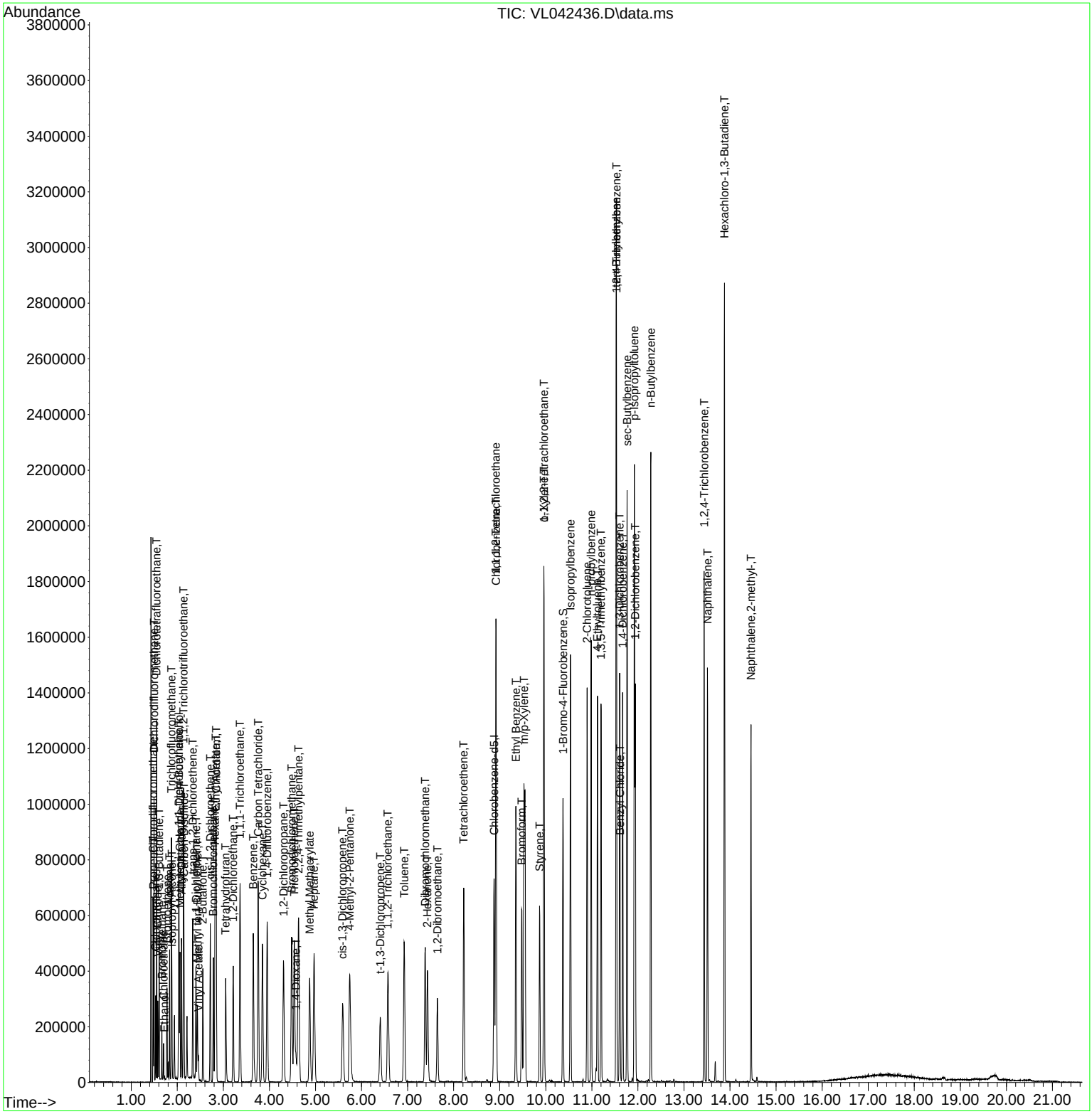
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

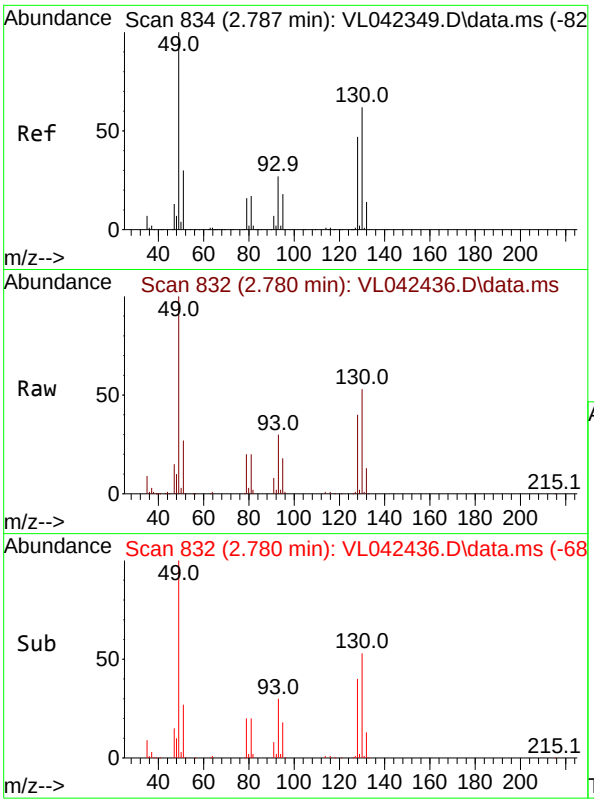
Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

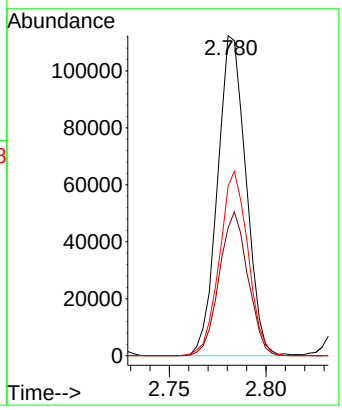




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 49 Resp: 11455

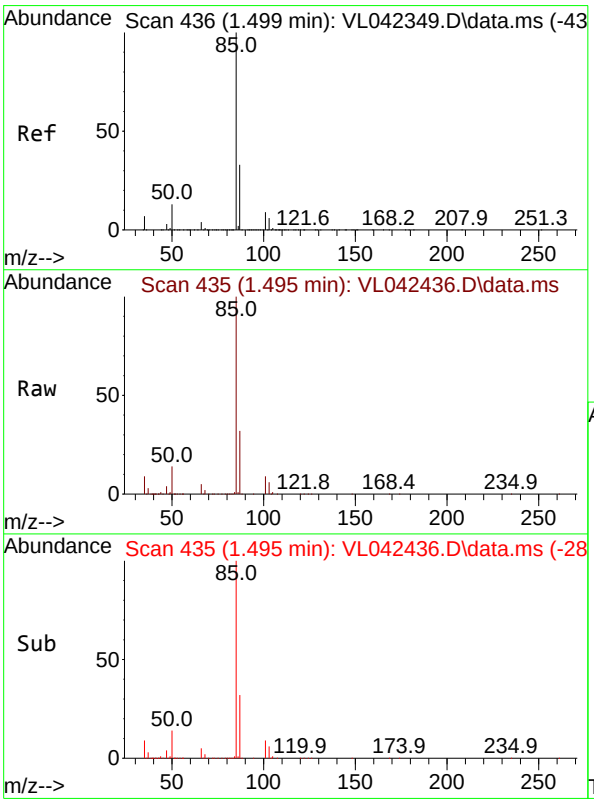
Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	57.8	29.3	88.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

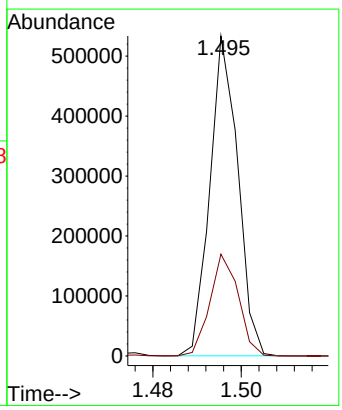
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

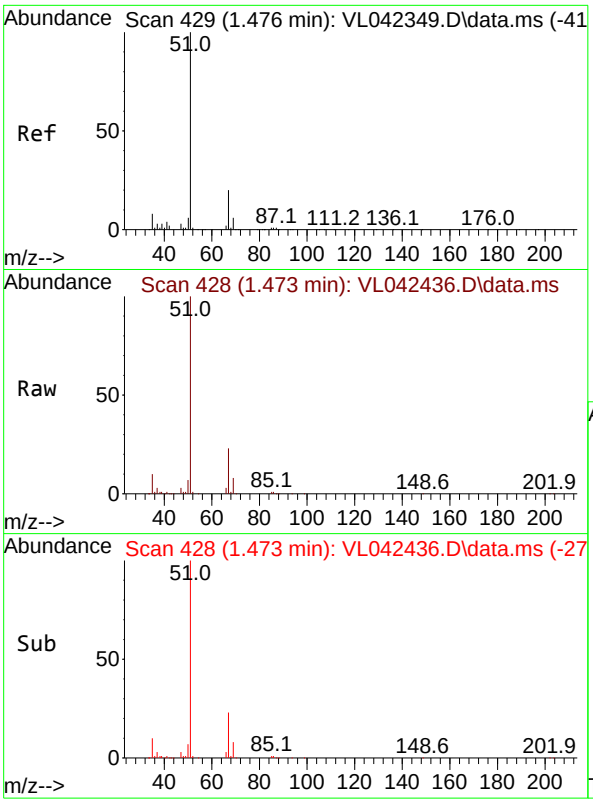


#2
Dichlorodifluoromethane
Concen: 11.603 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 85 Resp: 234841

Ion	Ratio	Lower	Upper
85	100		
87	31.8	26.6	39.8





#3
Chlorodifluoromethane
Concen: 9.755 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

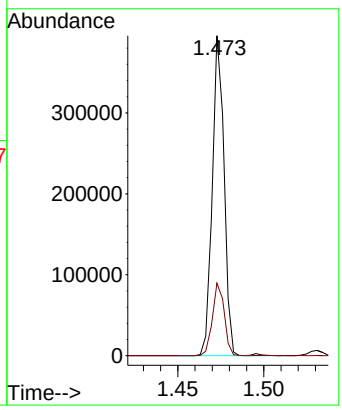
Tgt Ion: 51 Resp: 18800

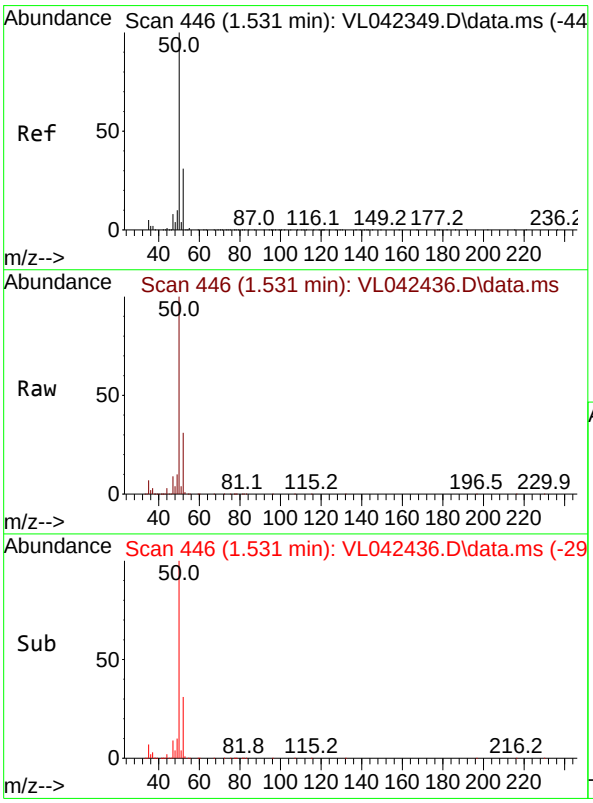
Ion	Ratio	Lower	Upper
51	100		
67	22.8	16.2	24.4

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

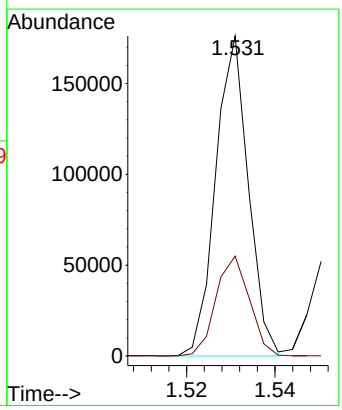


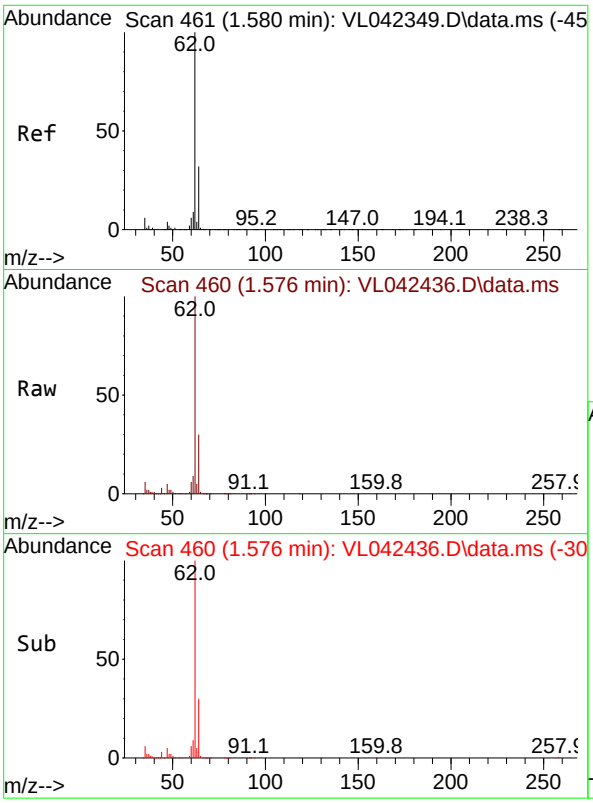


#4
Chloromethane
Concen: 11.274 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 50 Resp: 90298

Ion	Ratio	Lower	Upper
50	100		
52	31.2	24.7	37.1

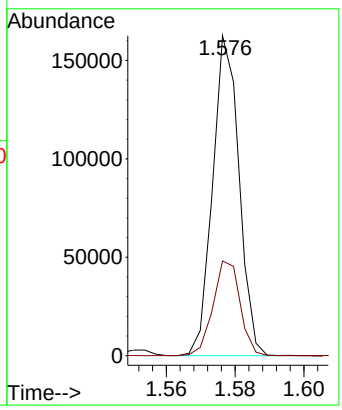




#5
Vinyl Chloride
Concen: 9.933 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 62 Resp: 8660

Ion	Ratio	Lower	Upper
62	100		
64	29.6	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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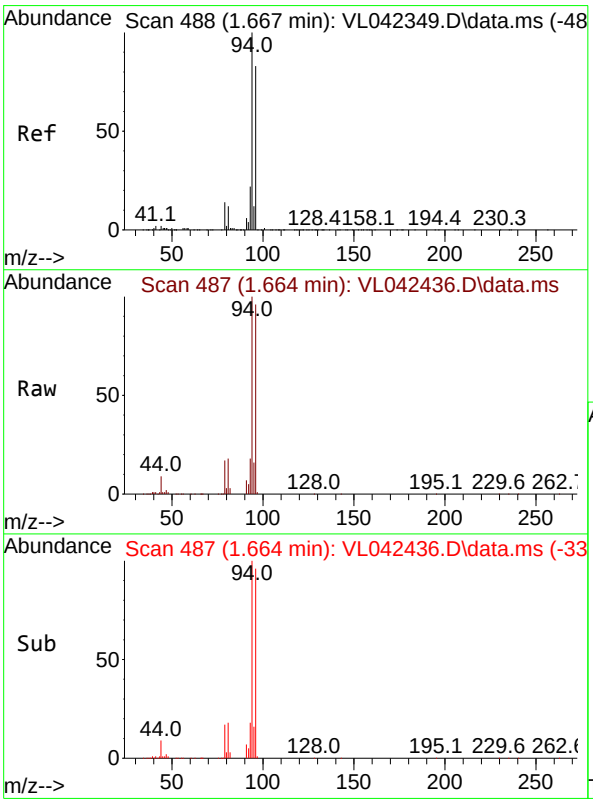
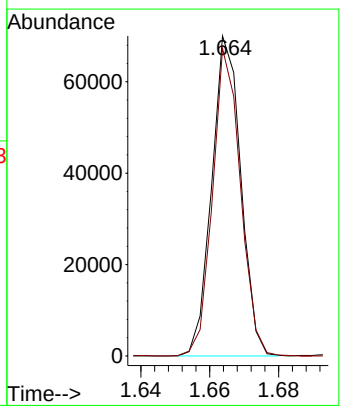
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

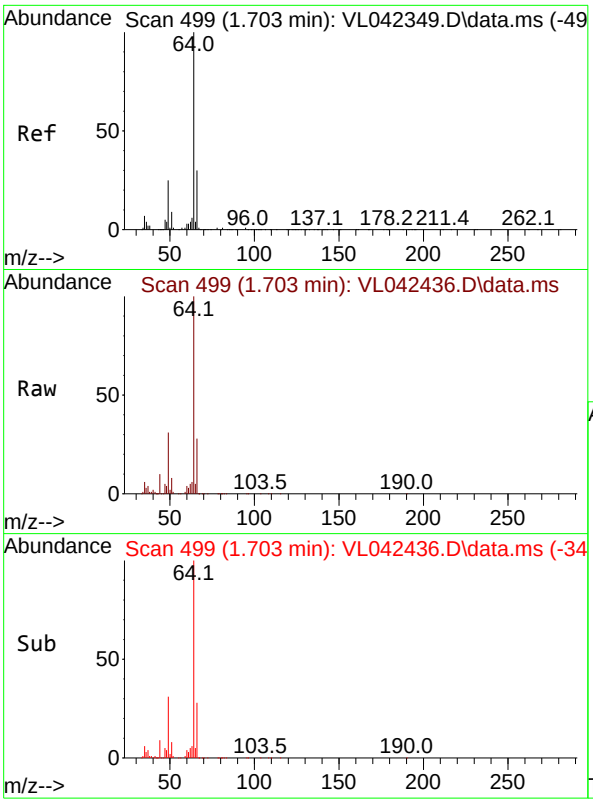


#6
Bromomethane
Concen: 10.952 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 94 Resp: 41020

Ion	Ratio	Lower	Upper
94	100		
96	95.9	66.2	99.2

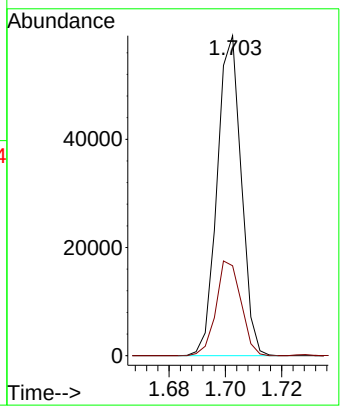




#7
Chloroethane
Concen: 11.153 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 64 Resp: 3516

Ion	Ratio	Lower	Upper
64	100		
66	28.1	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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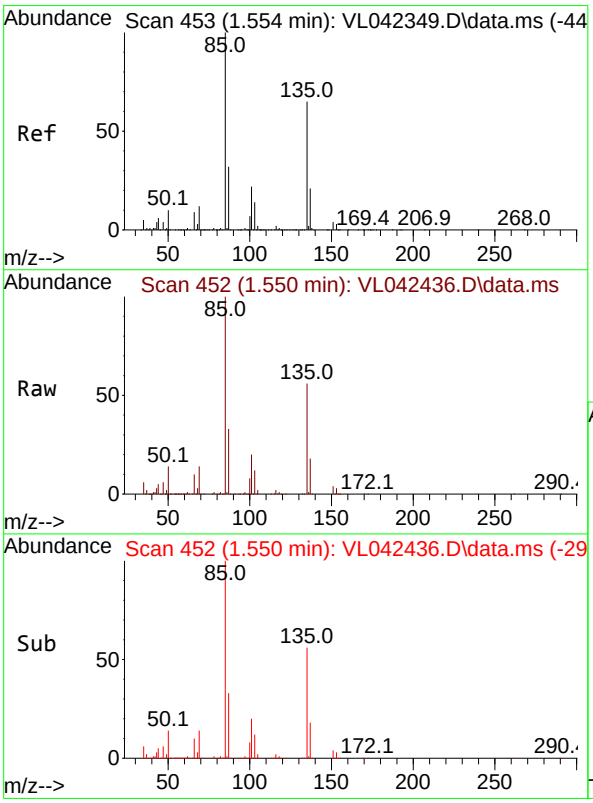
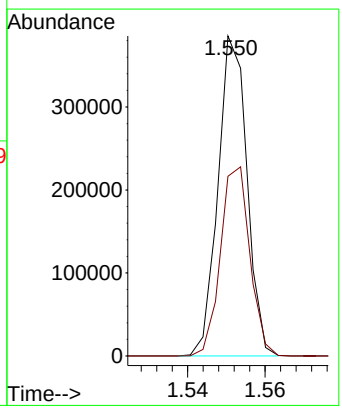
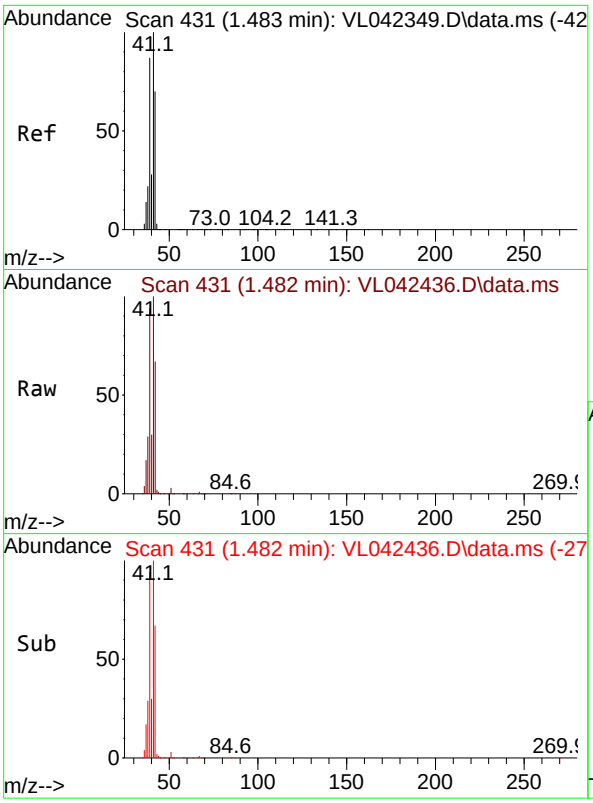


#8
Dichlorotetrafluoroethane
Concen: 11.508 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 85 Resp: 199977

Ion	Ratio	Lower	Upper
85	100		
135	60.1	52.2	78.2

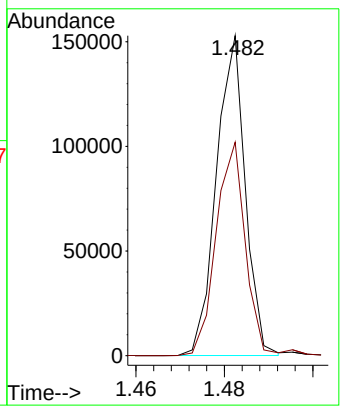




#9
Propene
Concen: 7.883 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 41 Resp: 6918

Ion	Ratio	Lower	Upper
41	100		
42	68.7	56.2	84.4



Instrument :
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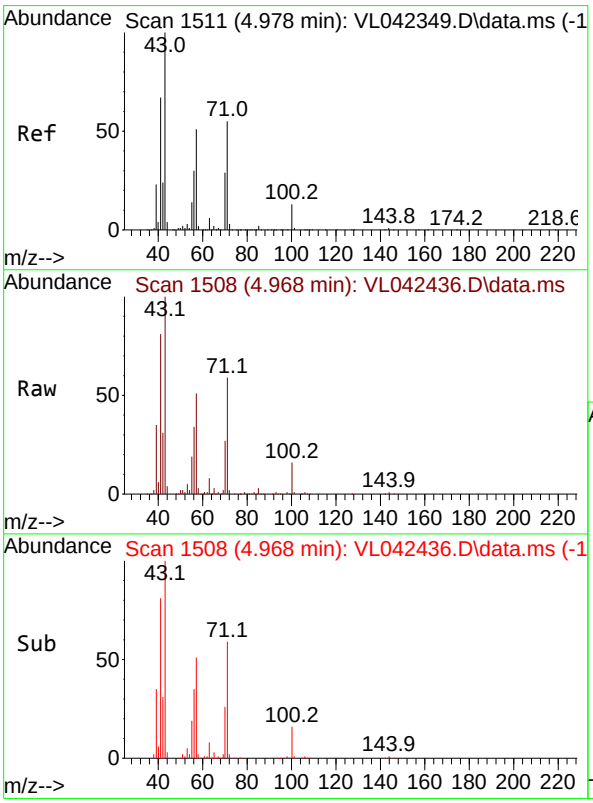
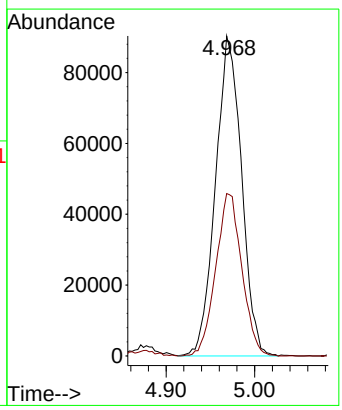
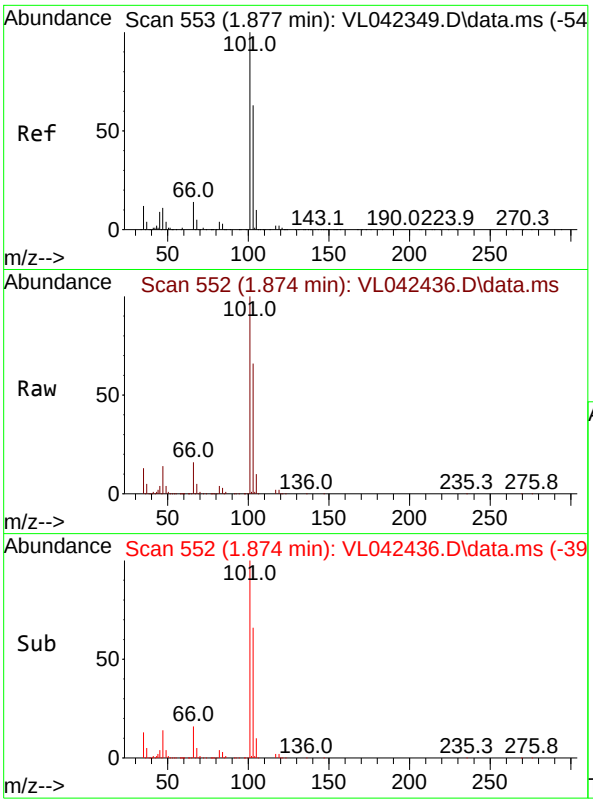


#10
Heptane
Concen: 7.492 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 184737

Ion	Ratio	Lower	Upper
43	100		
57	50.9	39.9	59.9





#11
Trichlorofluoromethane
Concen: 11.845 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:101 Resp: 22797

Ion	Ratio	Lower	Upper
101	100		
103	65.6	50.1	75.1

Instrument :
MSVOA_L
ClientSampleId :
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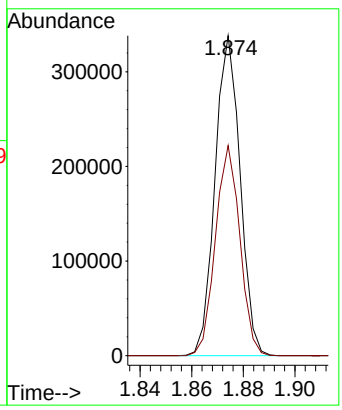
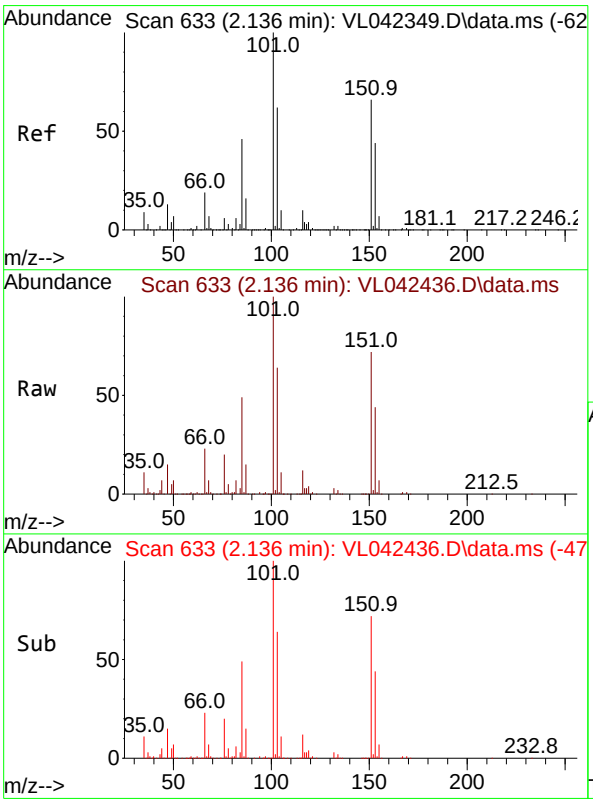
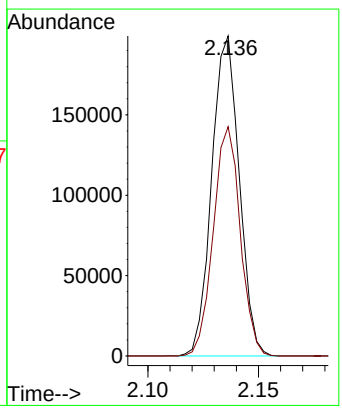


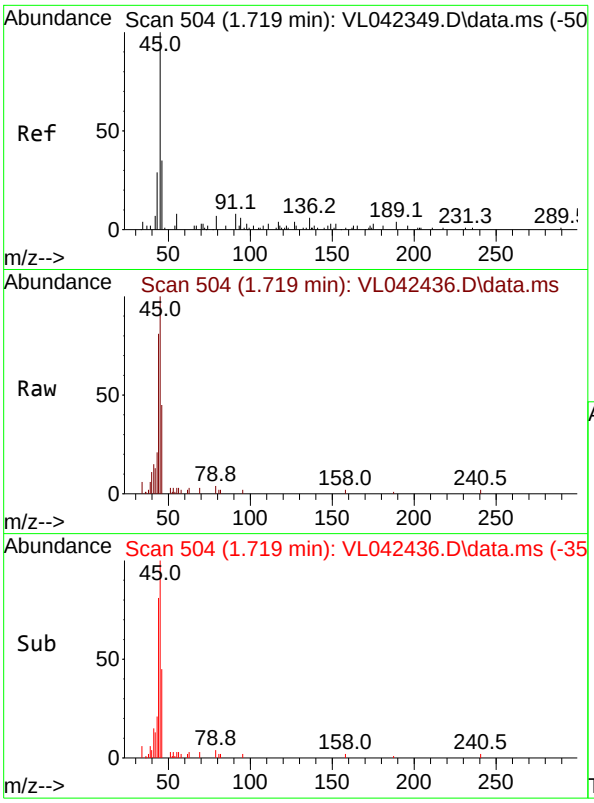


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.934 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:101 Resp: 172070

Ion	Ratio	Lower	Upper
101	100		
151	70.1	57.0	85.6

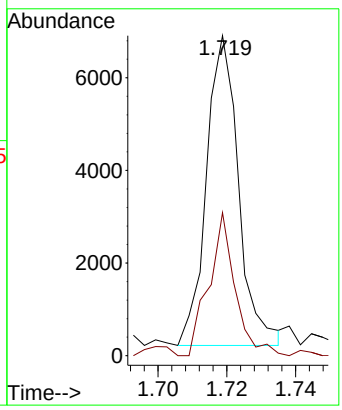




#13
Ethanol
Concen: 3.108 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 45 Resp: 433(

Ion	Ratio	Lower	Upper
45	100		
46	41.1	21.9	87.7



Instrument :
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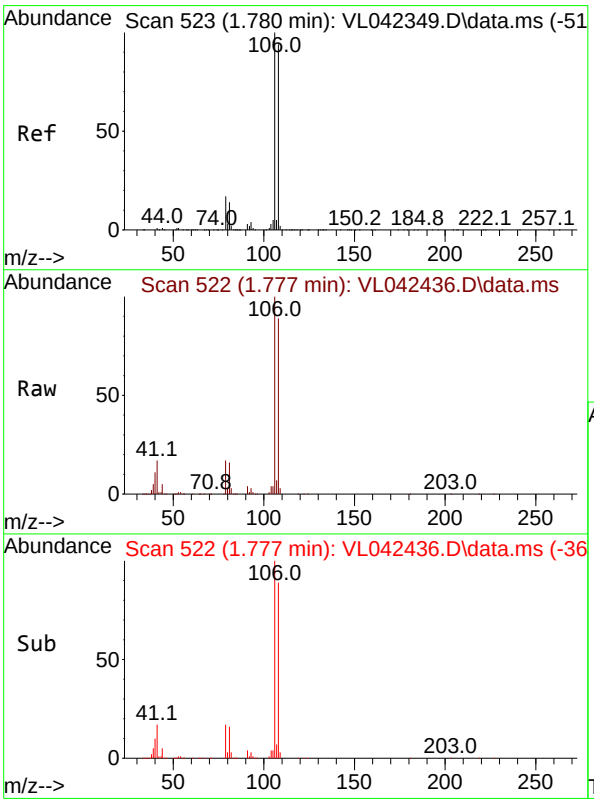
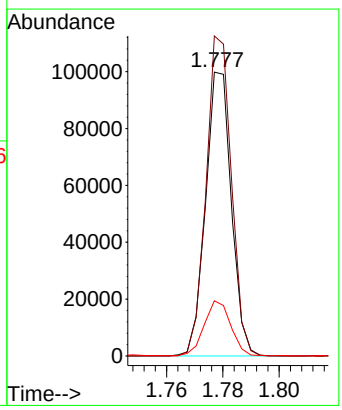
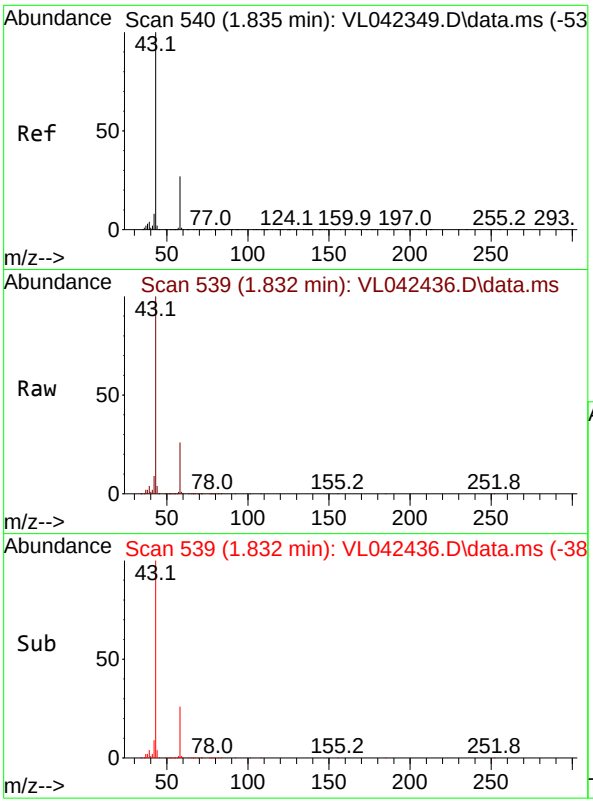


#14
Bromoethene
Concen: 10.721 ppbv
RT: 1.777 min Scan# 522
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:108 Resp: 63597

Ion	Ratio	Lower	Upper
108	100		
106	110.4	85.9	128.9
79	20.1	13.9	20.9

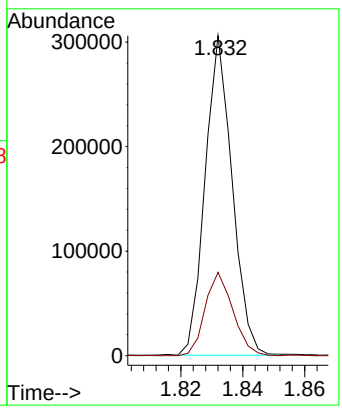




#15
Acetone
Concen: 9.859 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 18488

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.4	33.6



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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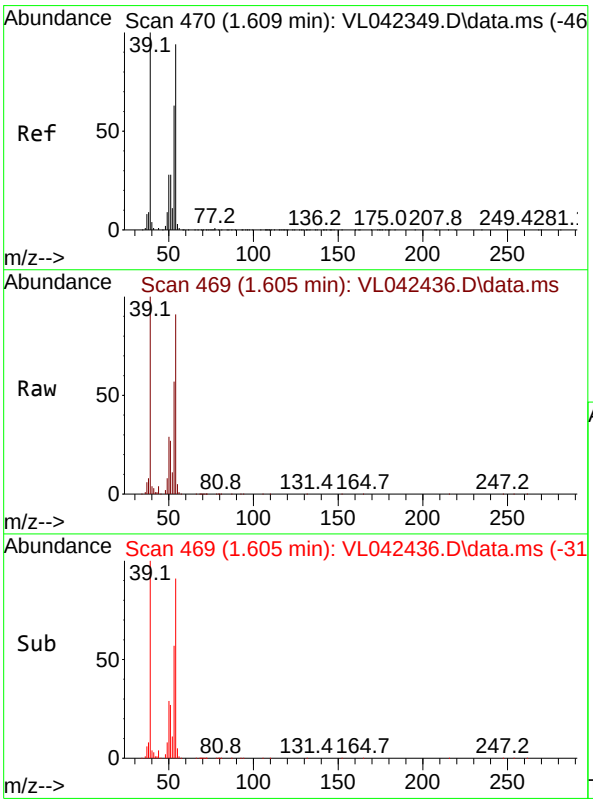
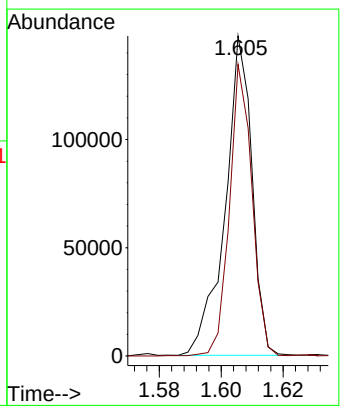
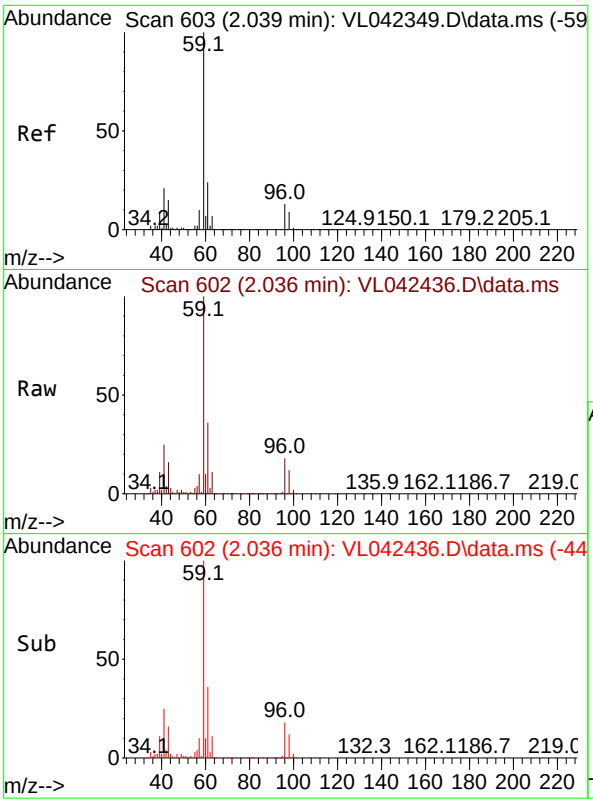


#16
1,3-Butadiene
Concen: 9.910 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 39 Resp: 88889

Ion	Ratio	Lower	Upper
39	100		
54	76.7	64.9	97.3





#17
tert-Butyl alcohol
Concen: 9.881 ppbv
RT: 2.036 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 59 Resp: 22962

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.7	13.1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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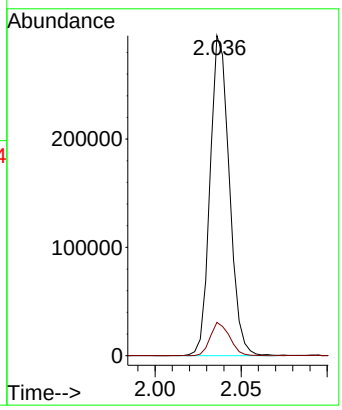
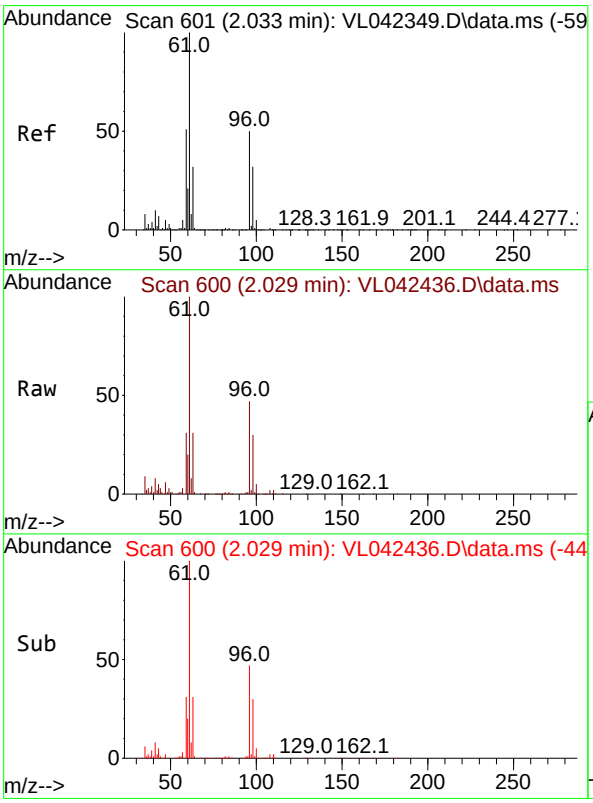
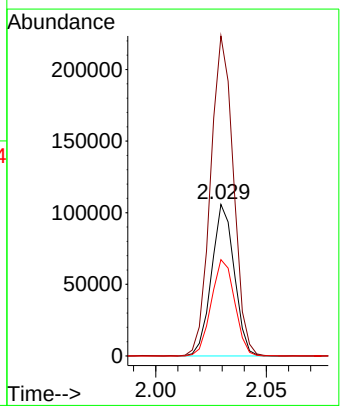


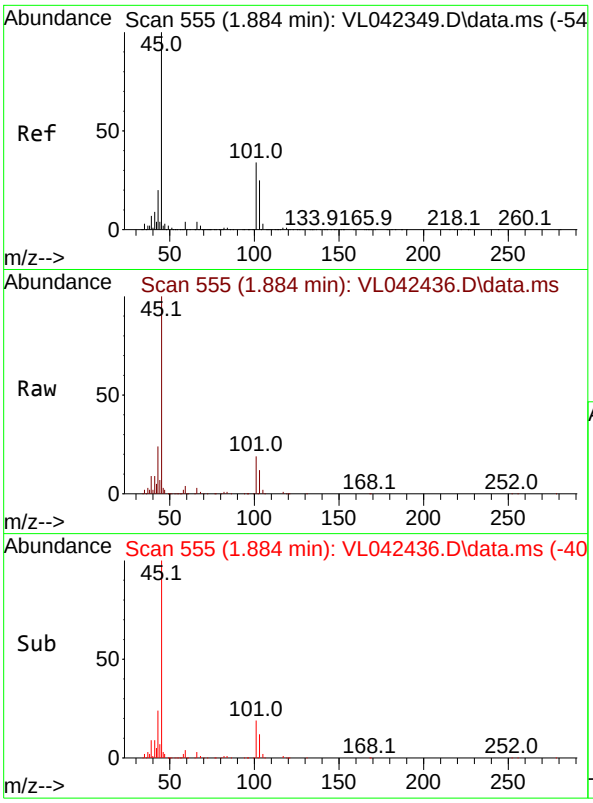


#18
1,1-Dichloroethene
Concen: 10.263 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 96 Resp: 75451

Ion	Ratio	Lower	Upper
96	100		
61	211.2	160.2	240.2
98	63.6	51.0	76.4

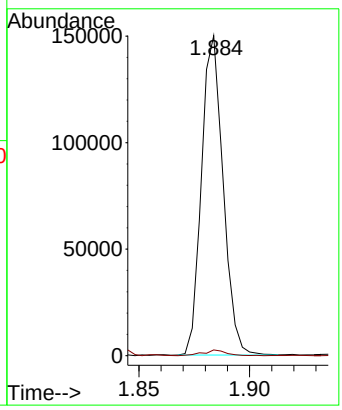




#19
Isopropyl Alcohol
Concen: 9.790 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 45 Resp: 10198

Ion	Ratio	Lower	Upper
45	100		
58	49.0	34.5	51.7



Instrument :
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ClientSampleId :
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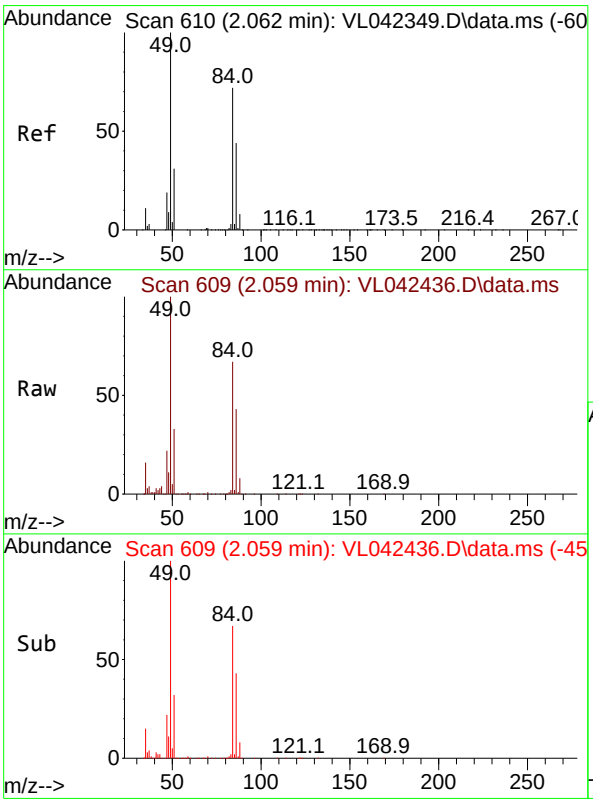
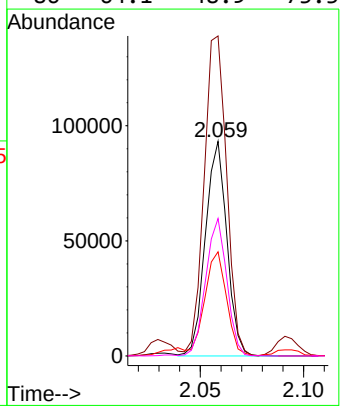
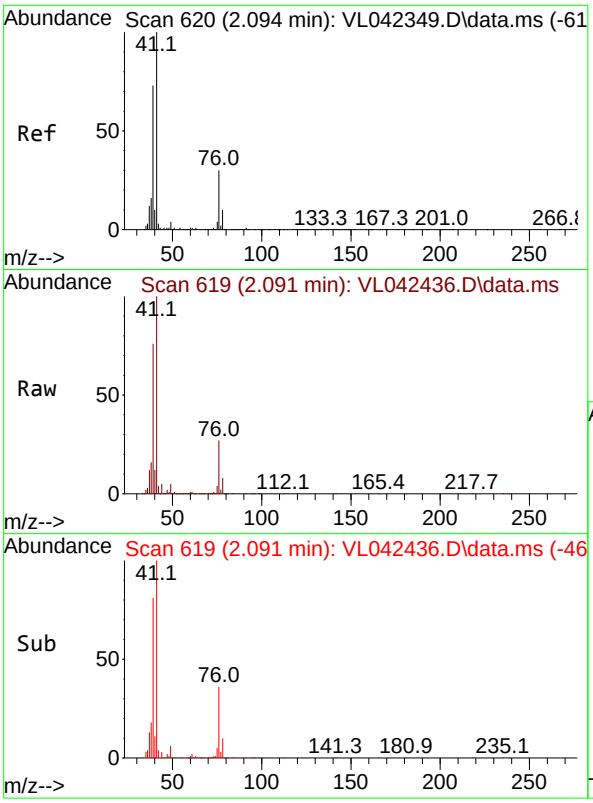


#20
Methylene Chloride
Concen: 9.161 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 84 Resp: 67278

Ion	Ratio	Lower	Upper
84	100		
49	146.9	111.6	167.4
51	45.9	35.1	52.7
86	64.1	48.9	73.3





#21
Allyl Chloride
Concen: 10.184 ppbv
RT: 2.091 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 41 Resp: 13186

Ion	Ratio	Lower	Upper
41	100		
76	29.4	24.8	37.2
39	77.4	60.6	90.8

Instrument :
MSVOA_L
ClientSampleId :
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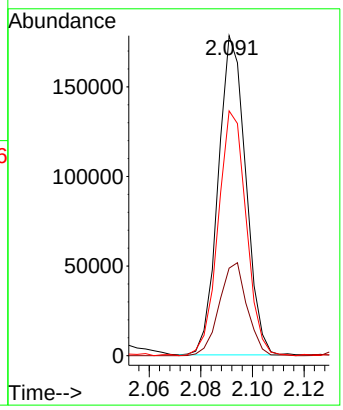
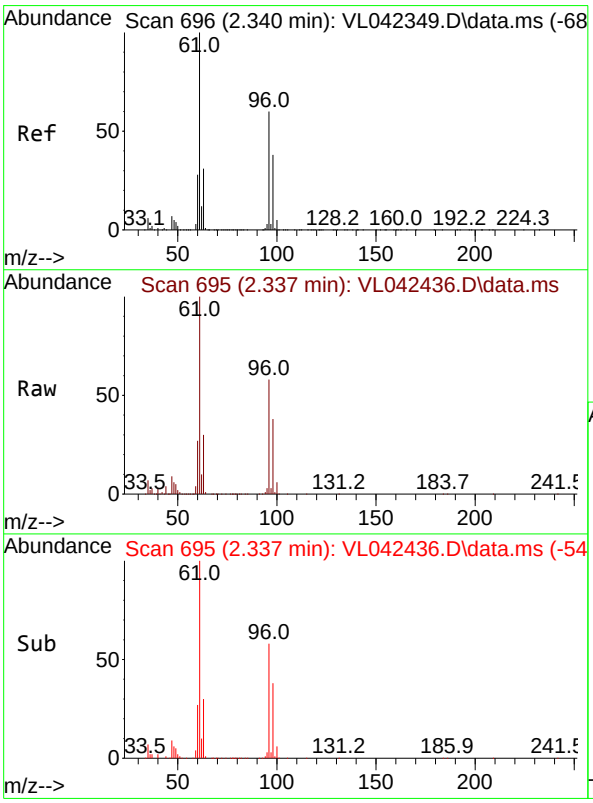
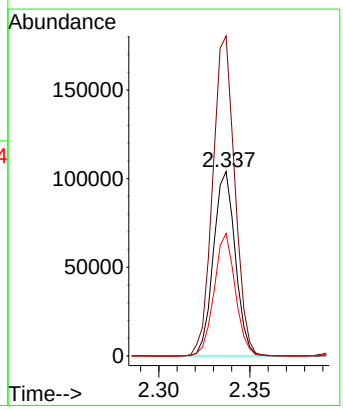


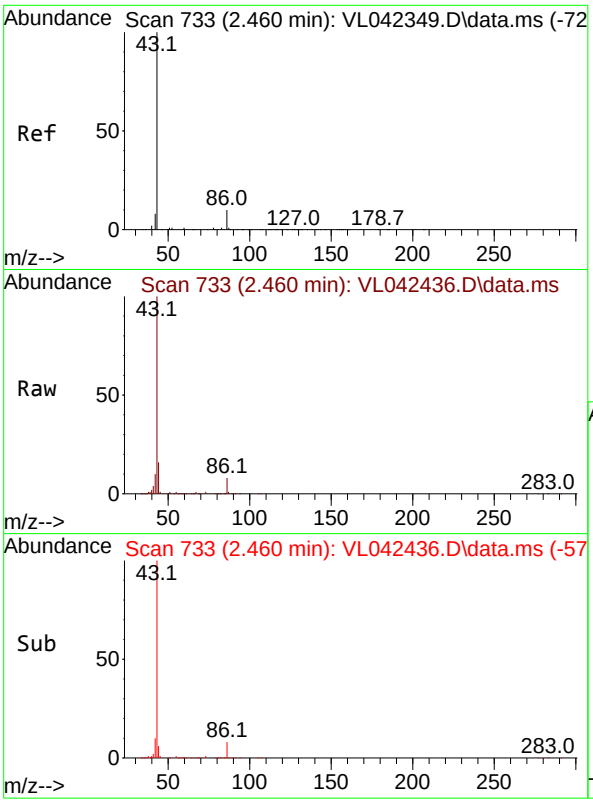


#22
trans-1,2-Dichloroethene
Concen: 10.343 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 96 Resp: 86577

Ion	Ratio	Lower	Upper
96	100		
61	173.4	133.7	200.5
98	66.4	50.3	75.5

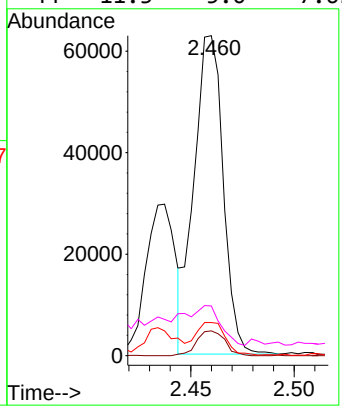




#23
Vinyl Acetate
Concen: 8.115 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 6160

Ion	Ratio	Lower	Upper
43	100		
86	7.6	6.5	9.7
42	10.2	7.8	11.8
44	11.3	5.0	7.6#



Instrument :
MSVOA_L
ClientSampleId :
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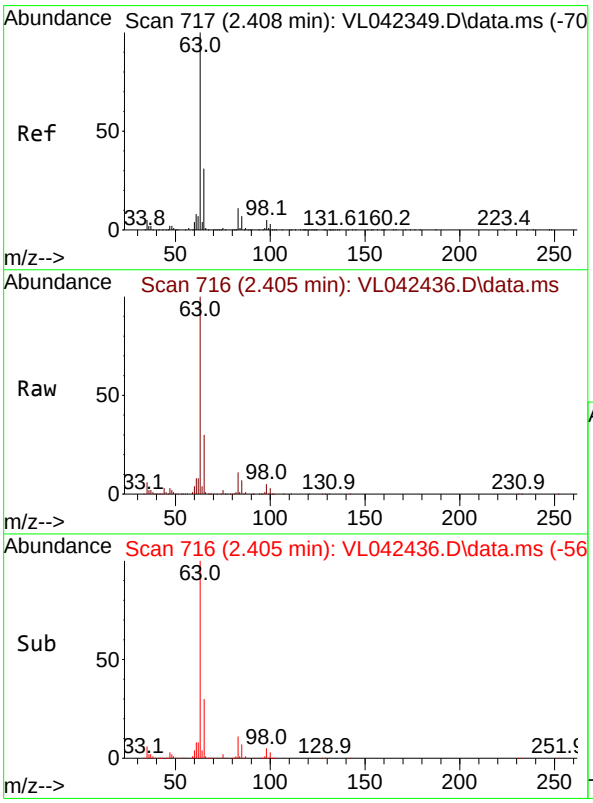
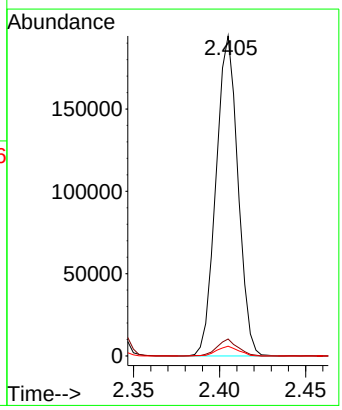
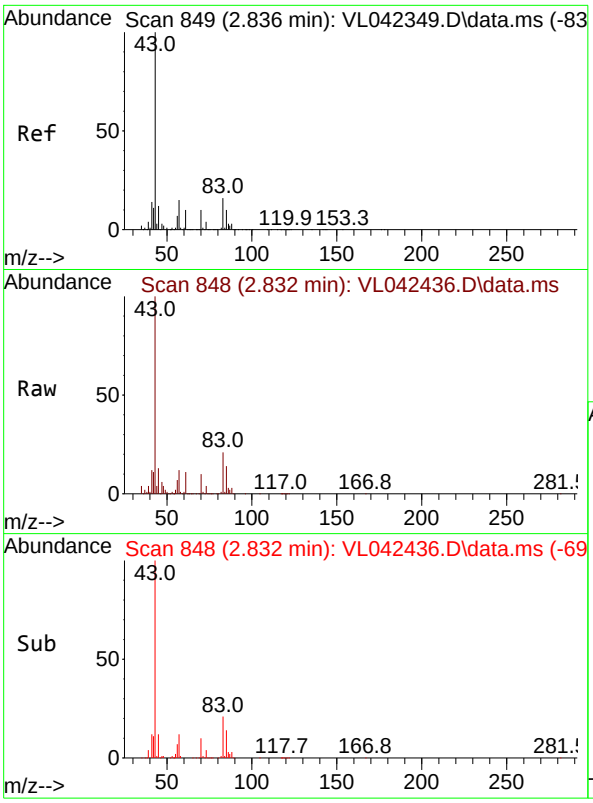


#24
1,1-Dichloroethane
Concen: 10.852 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 63 Resp: 172555

Ion	Ratio	Lower	Upper
63	100		
98	5.3	2.3	6.8
100	3.0	1.6	4.8

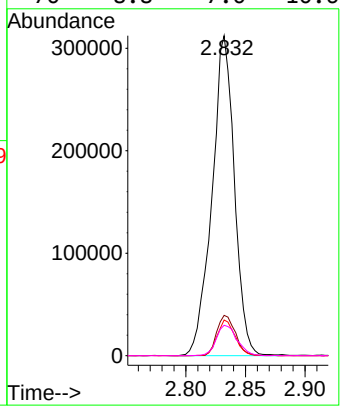




#25
Ethyl Acetate
Concen: 8.840 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 40874

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.3	12.5
61	8.9	7.3	10.9
70	8.8	7.0	10.6



Instrument :
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ClientSampleId :
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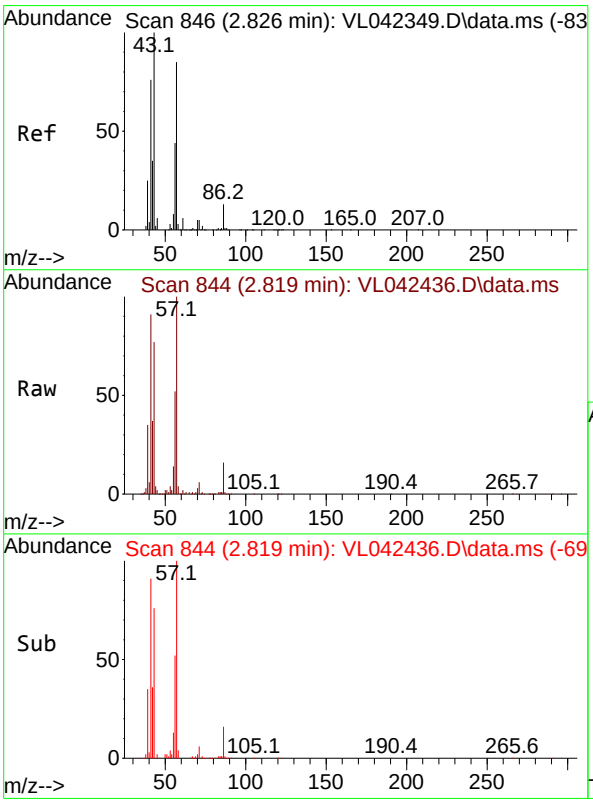
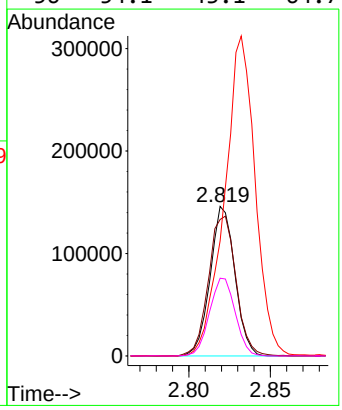
Supervised By :Mahesh Dadoda 04/30/2025

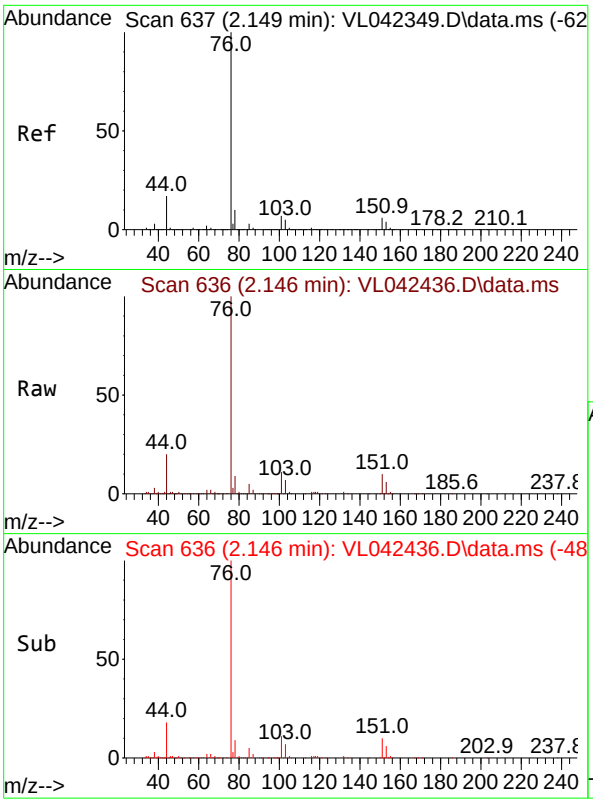


#26
Hexane
Concen: 8.220 ppbv
RT: 2.819 min Scan# 844
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 57 Resp: 153801

Ion	Ratio	Lower	Upper
57	100		
41	104.3	77.9	116.9
43	266.3	208.4	312.6
56	54.1	43.1	64.7

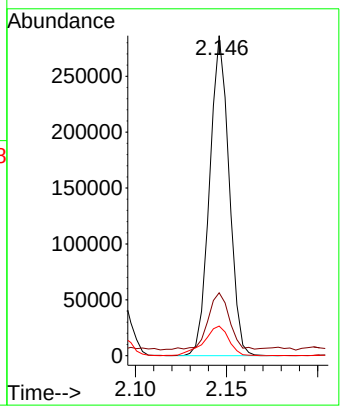




#27
Carbon Disulfide
Concen: 10.622 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 76 Resp: 21279

Ion	Ratio	Lower	Upper
76	100		
44	18.9	15.5	23.3
78	11.9	9.3	13.9



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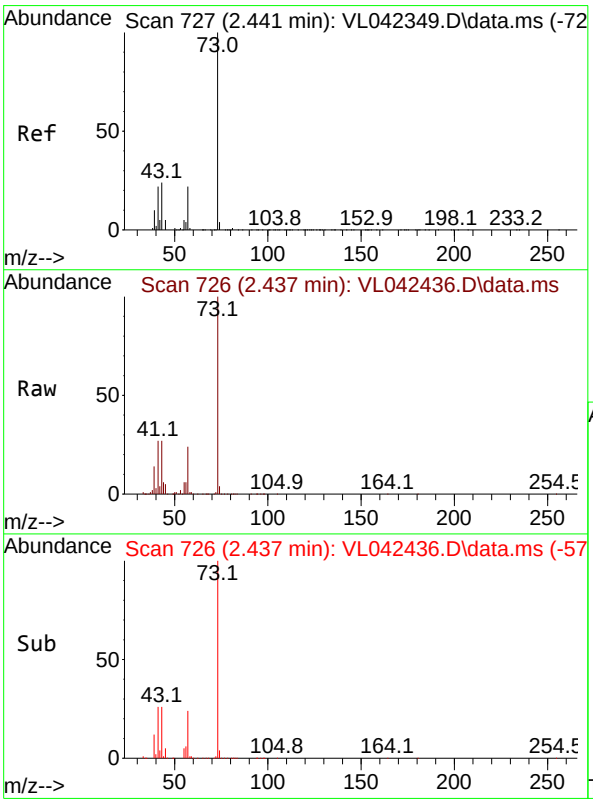
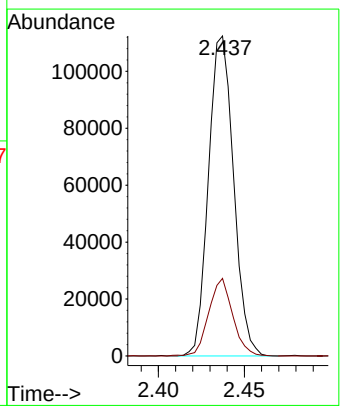
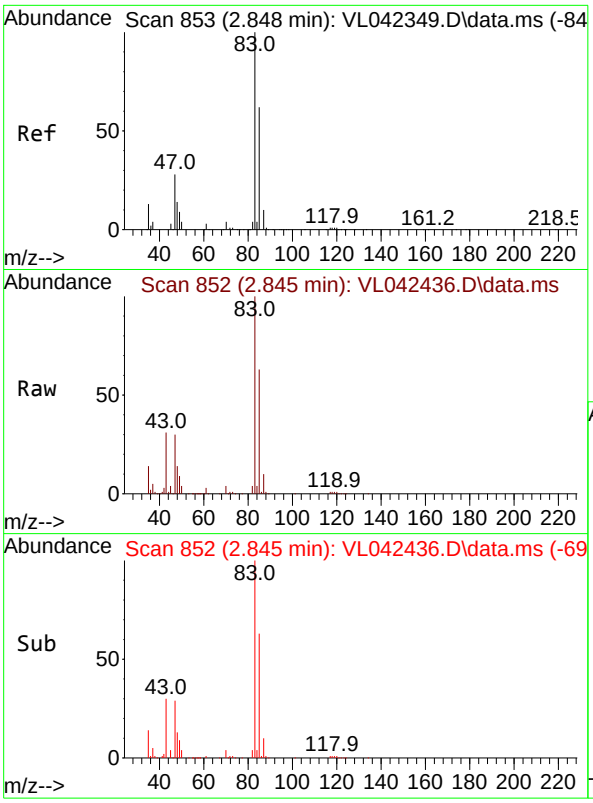


#28
Methyl tert-Butyl Ether
Concen: 9.308 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 73 Resp: 114108

Ion	Ratio	Lower	Upper
73	100		
57	23.1	21.3	31.9

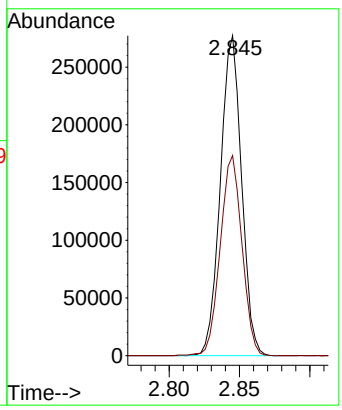




#29
Chloroform
Concen: 11.002 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 83 Resp: 29096

Ion	Ratio	Lower	Upper
83	100		
85	62.6	50.0	75.0



Instrument :
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ClientSampleId :
VSTDCCC010

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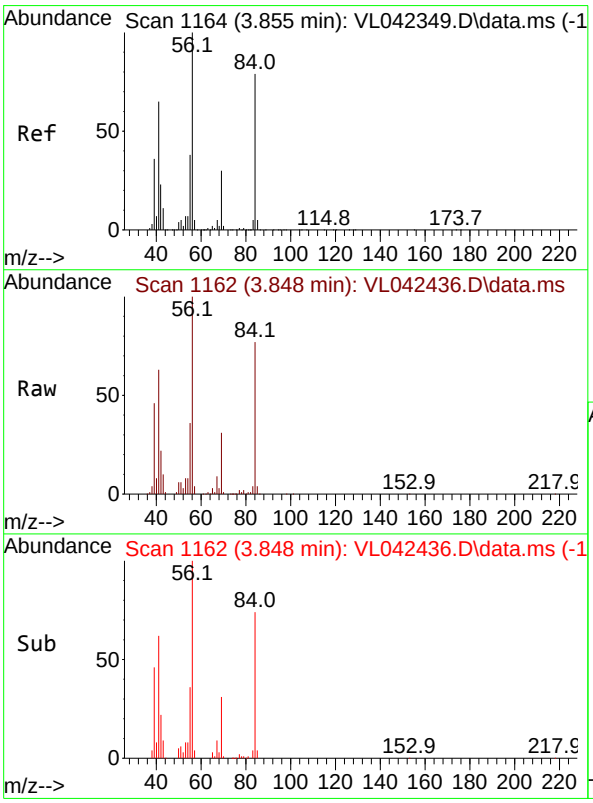
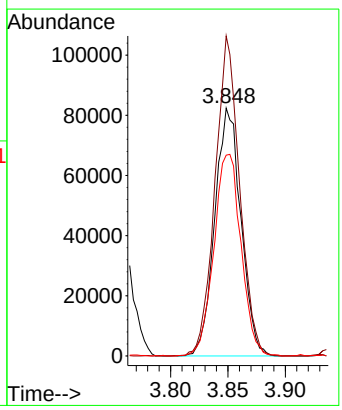
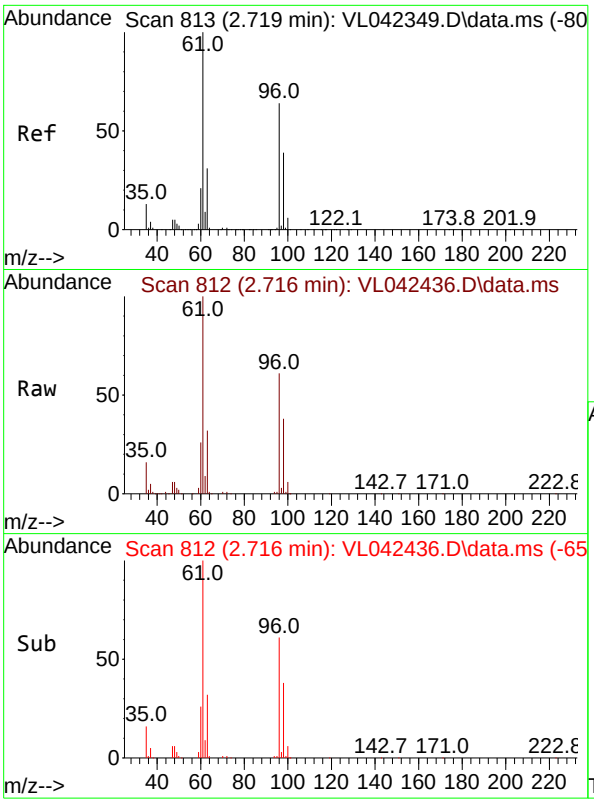


#30
Cyclohexane
Concen: 8.635 ppbv
RT: 3.848 min Scan# 1162
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 84 Resp: 130608

Ion	Ratio	Lower	Upper
84	100		
56	121.2	101.0	151.4
41	84.8	67.4	101.0

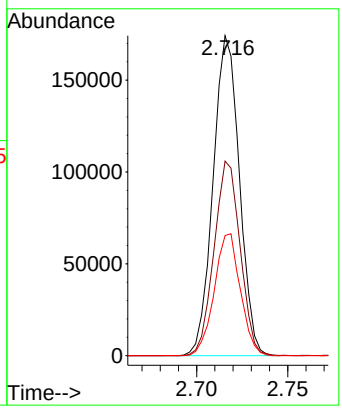




#31
cis-1,2-Dichloroethene
Concen: 9.818 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 61 Resp: 17465

Ion	Ratio	Lower	Upper
61	100		
96	60.8	50.8	76.2
98	37.6	30.9	46.3



Instrument :
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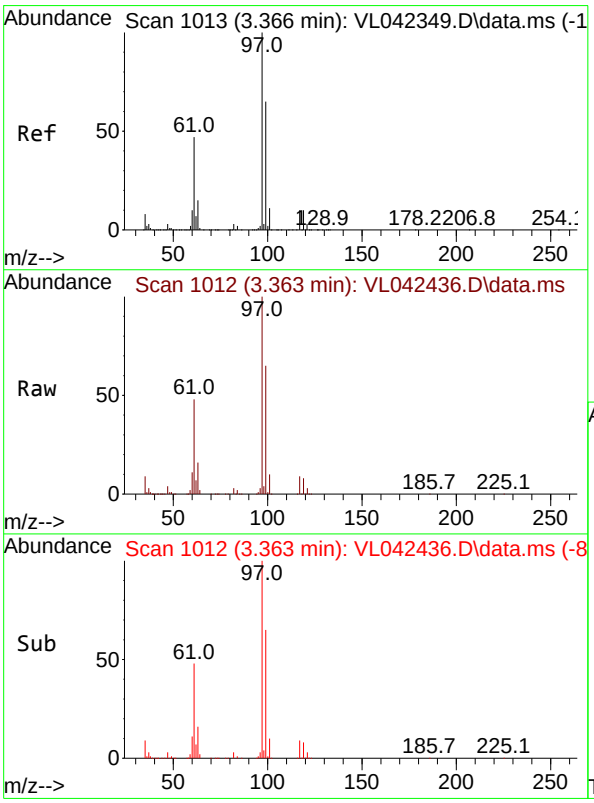
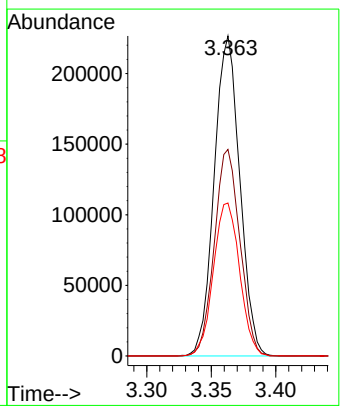
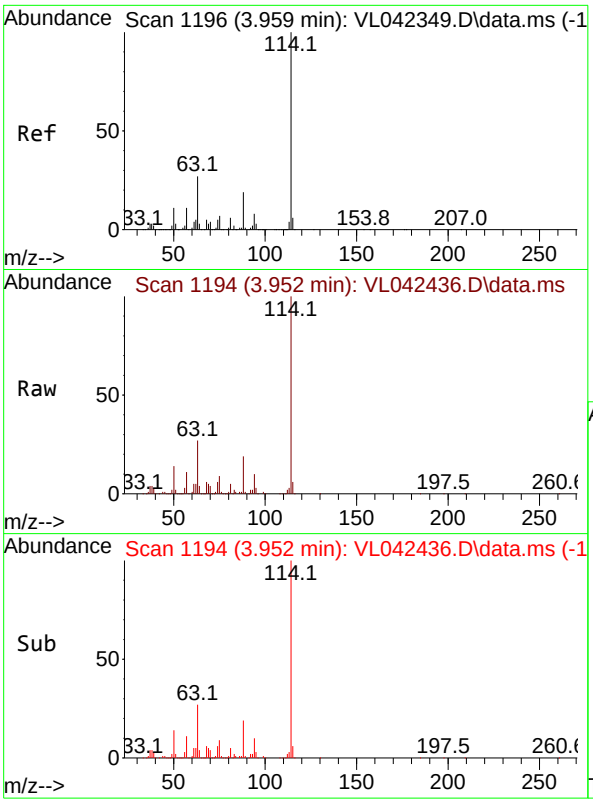


#32
1,1,1-Trichloroethane
Concen: 10.493 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 97 Resp: 312430

Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.0	76.4
61	49.1	38.8	58.2

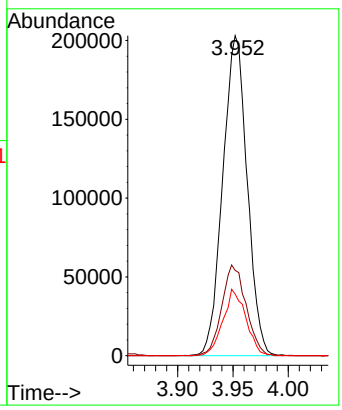




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:114 Resp: 31126

Ion	Ratio	Lower	Upper
114	100		
63	28.3	21.8	32.6
88	19.5	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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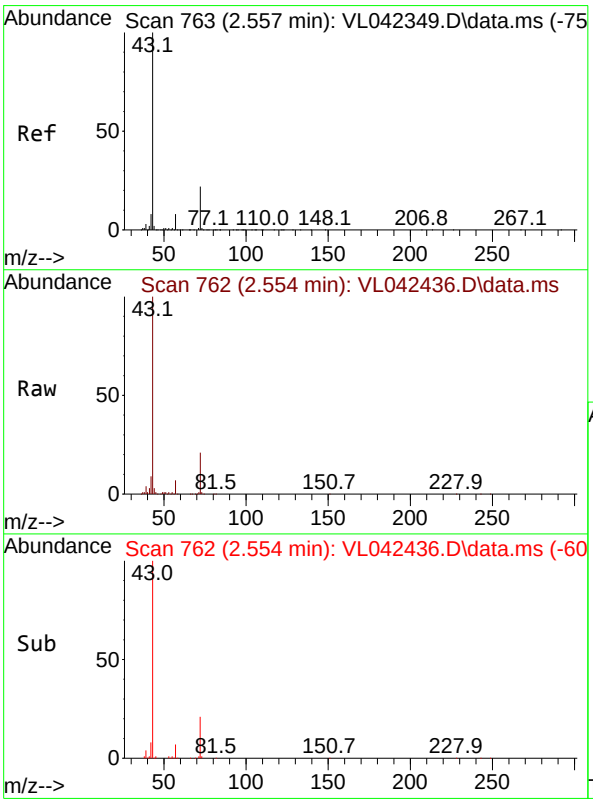
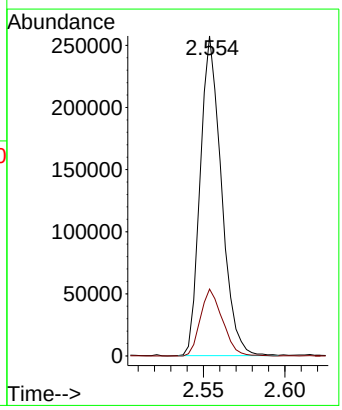
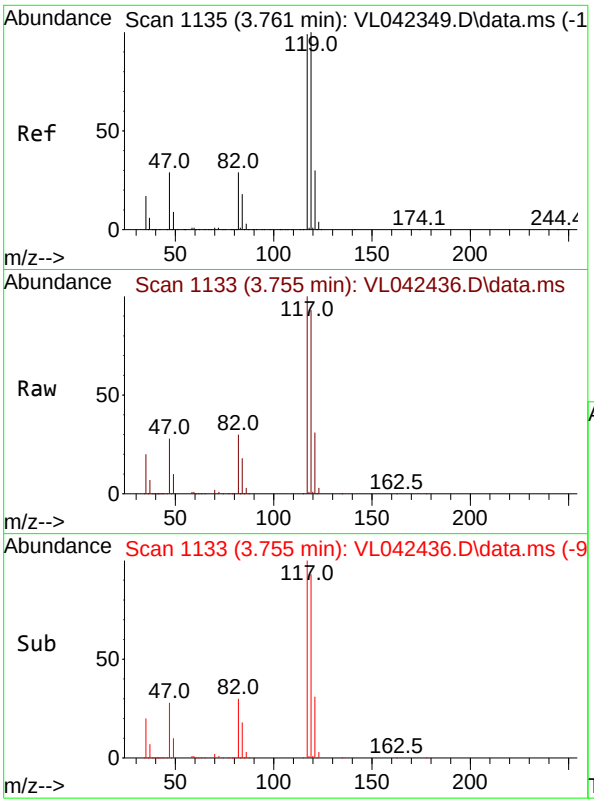


#34
2-Butanone
Concen: 9.426 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 232034

Ion	Ratio	Lower	Upper
43	100		
72	21.8	18.2	27.2





#35
Carbon Tetrachloride
Concen: 11.242 ppbv
RT: 3.755 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:117 Resp: 31668

Ion	Ratio	Lower	Upper
117	100		
119	93.1	80.5	120.7
121	30.9	24.2	36.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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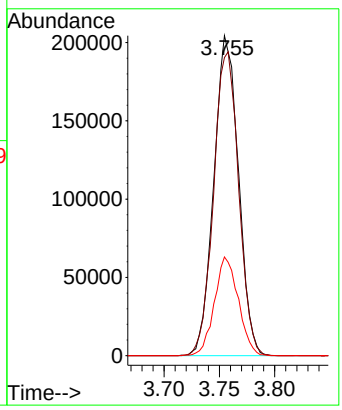
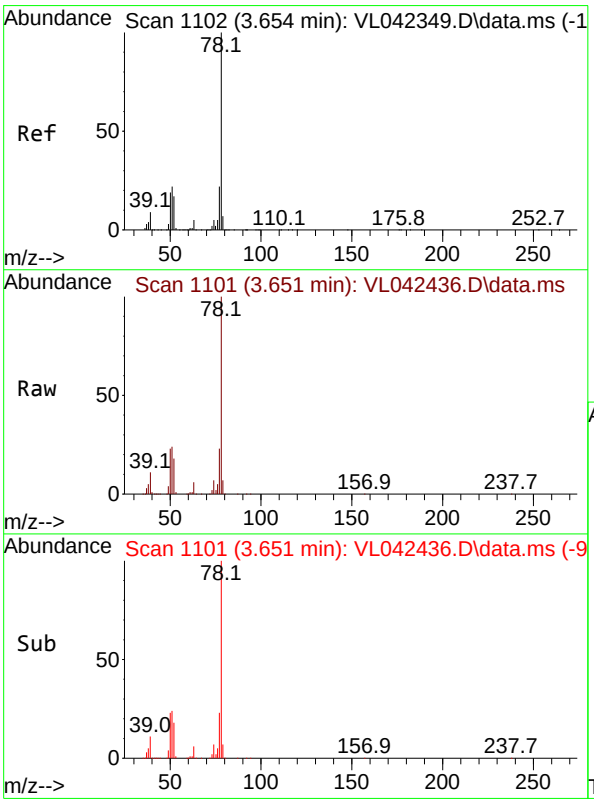
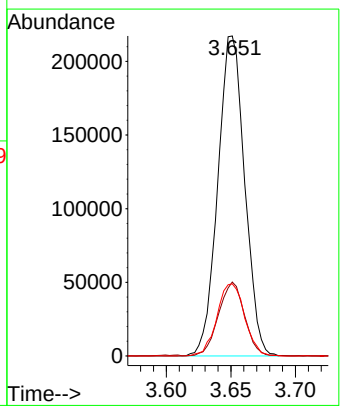


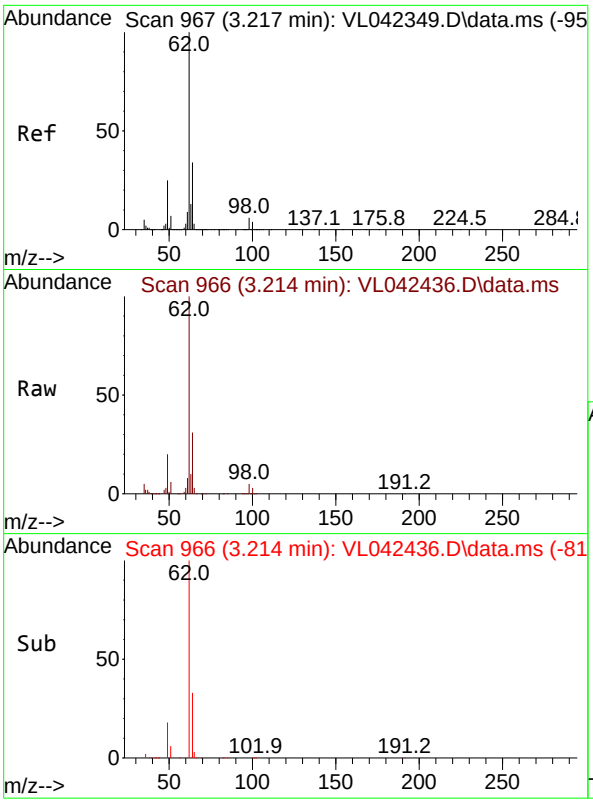


#36
Benzene
Concen: 9.367 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 78 Resp: 314493

Ion	Ratio	Lower	Upper
78	100		
77	23.1	17.4	26.0
50	22.6	15.5	23.3

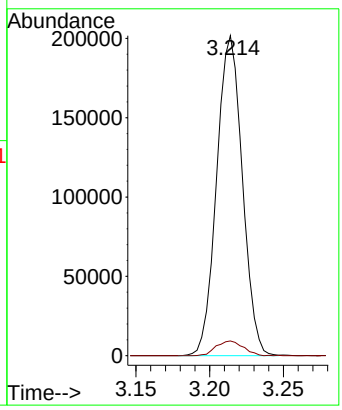




#37
1,2-Dichloroethane
Concen: 12.134 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 62 Resp: 24451

Ion	Ratio	Lower	Upper
62	100		
98	4.9	5.1	7.7#



Instrument :
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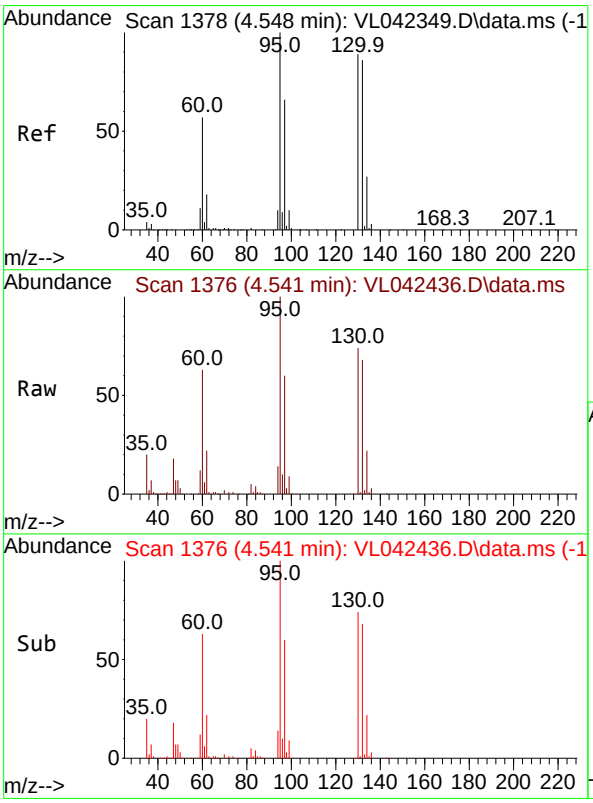
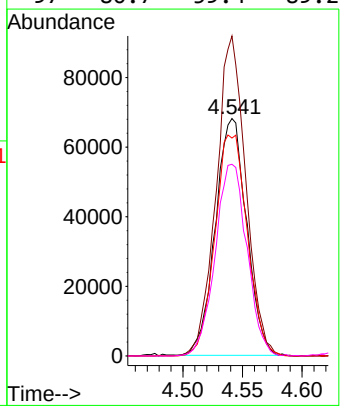
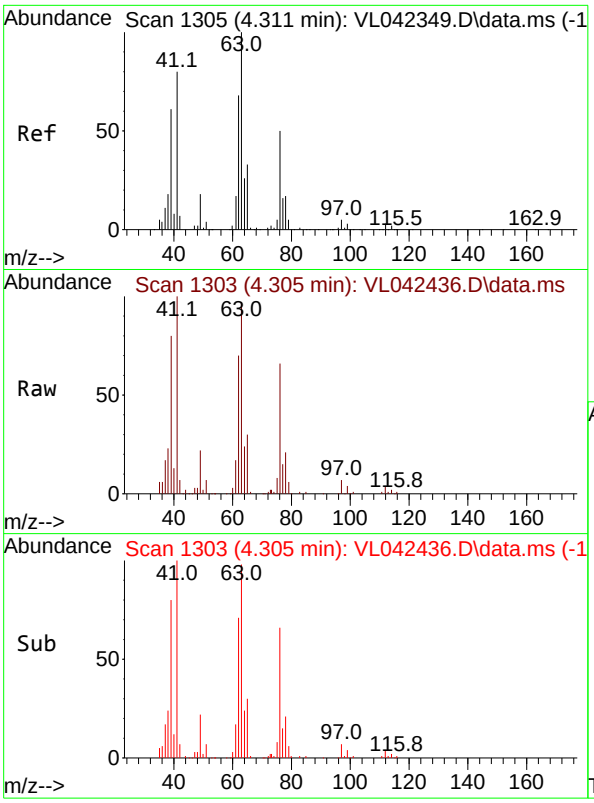


#38
Trichloroethene
Concen: 8.450 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:130 Resp: 123997

Ion	Ratio	Lower	Upper
130	100		
95	134.8	89.8	134.6#
132	92.0	77.7	116.5
97	80.7	59.4	89.2

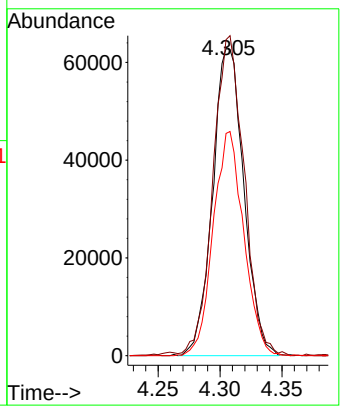




#39
1,2-Dichloropropane
Concen: 8.817 ppbv
RT: 4.305 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 63 Resp: 11031

Ion	Ratio	Lower	Upper
63	100		
41	102.2	64.2	96.2#
62	72.1	54.3	81.5



Instrument :
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ClientSampleId :
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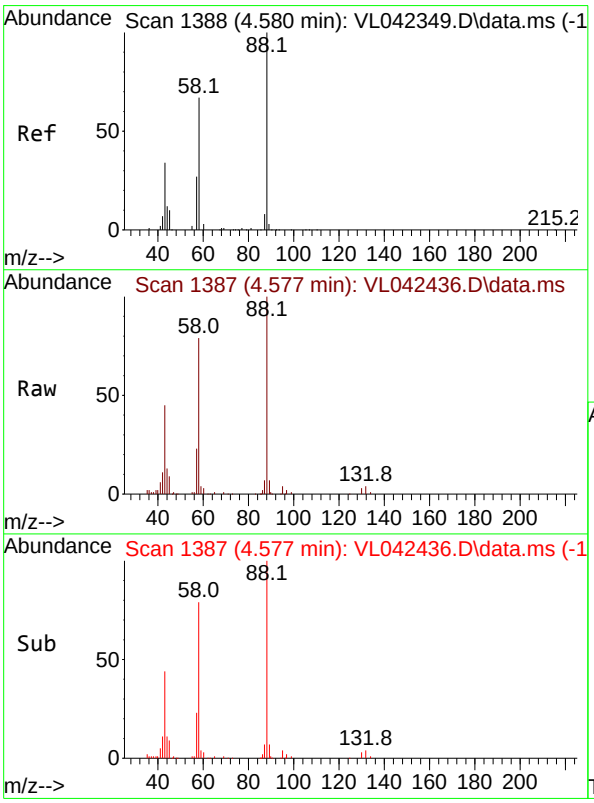
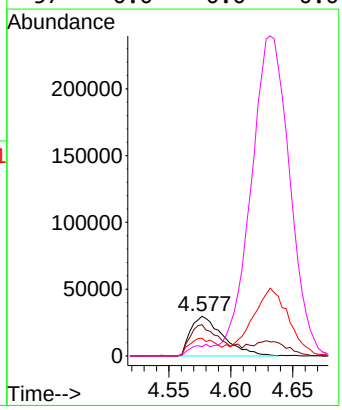
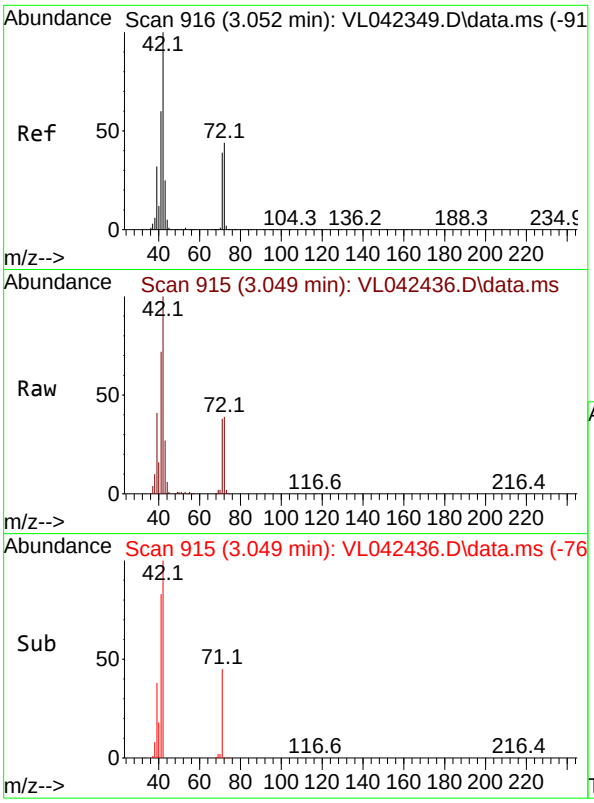


#40
1,4-Dioxane
Concen: 7.907 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 88 Resp: 54364

Ion	Ratio	Lower	Upper
88	100		
58	81.3	61.4	92.0
43	40.1	23.2	34.8#
57	0.0	0.0	0.0

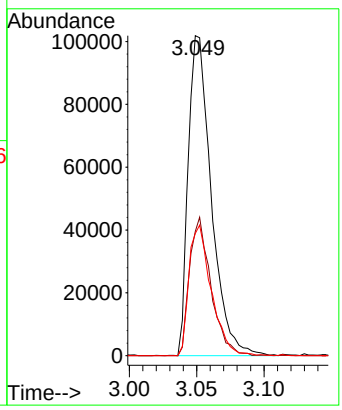




#41
Tetrahydrofuran
Concen: 8.479 ppbv
RT: 3.049 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 42 Resp: 12170

Ion	Ratio	Lower	Upper
42	100		
72	40.2	32.3	48.5
71	39.5	31.4	47.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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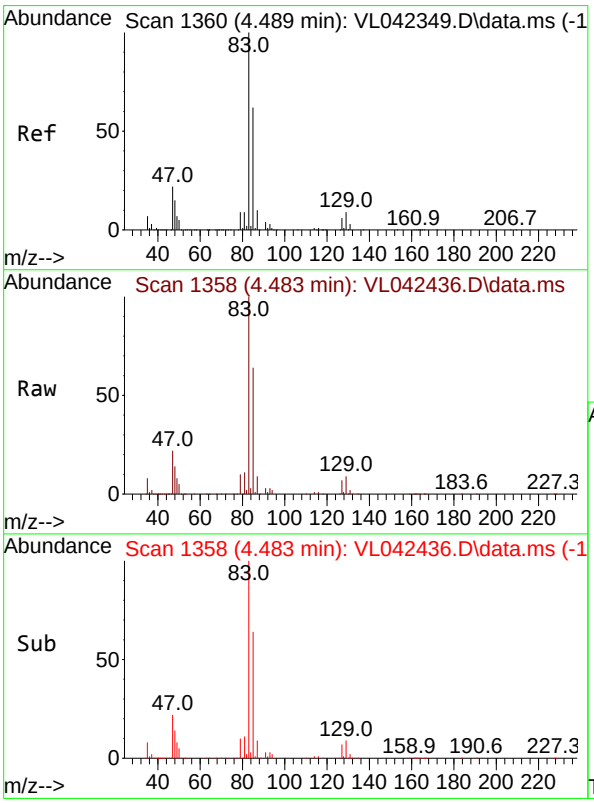
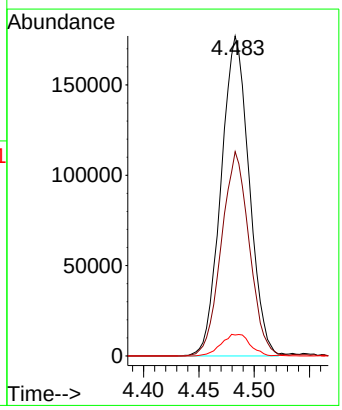
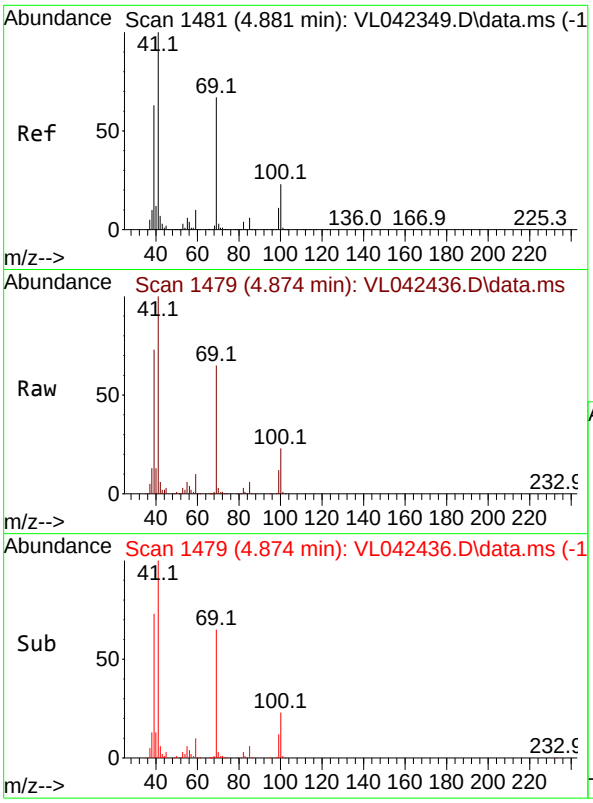


#42
Bromodichloromethane
Concen: 11.127 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 83 Resp: 312029

Ion	Ratio	Lower	Upper
83	100		
85	63.8	49.7	74.5
127	6.6	5.1	7.7

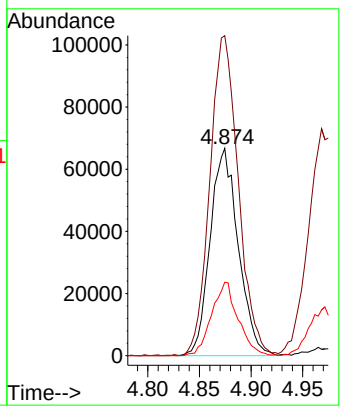




#43
Methyl Methacrylate
Concen: 8.367 ppbv
RT: 4.874 min Scan# 14
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 69 Resp: 12659

Ion	Ratio	Lower	Upper
69	100		
41	156.3	118.6	177.8
100	33.3	28.2	42.2



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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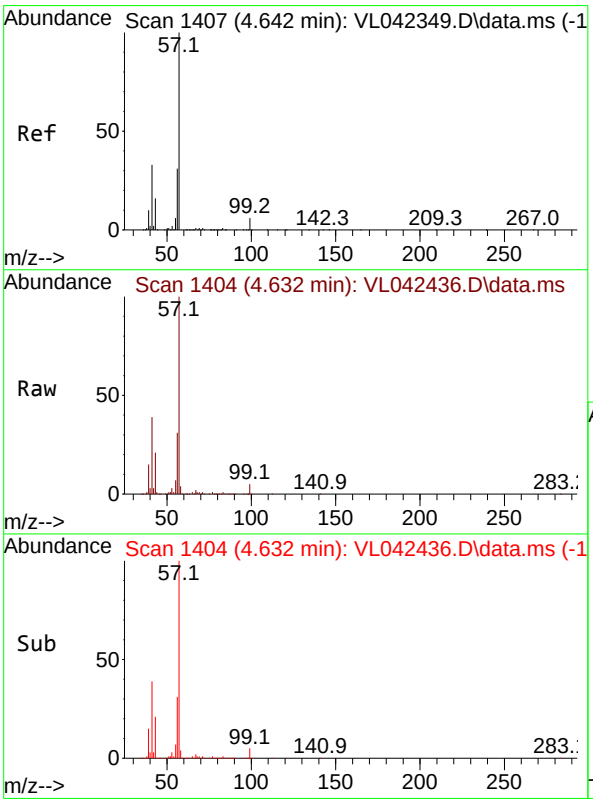
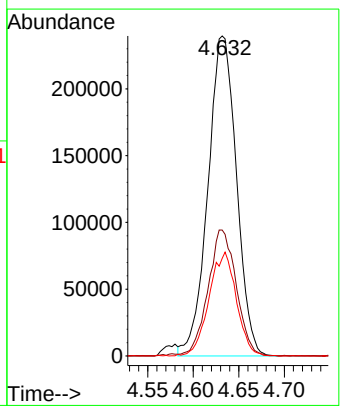
Supervised By :Mahesh Dadoda 04/30/2025

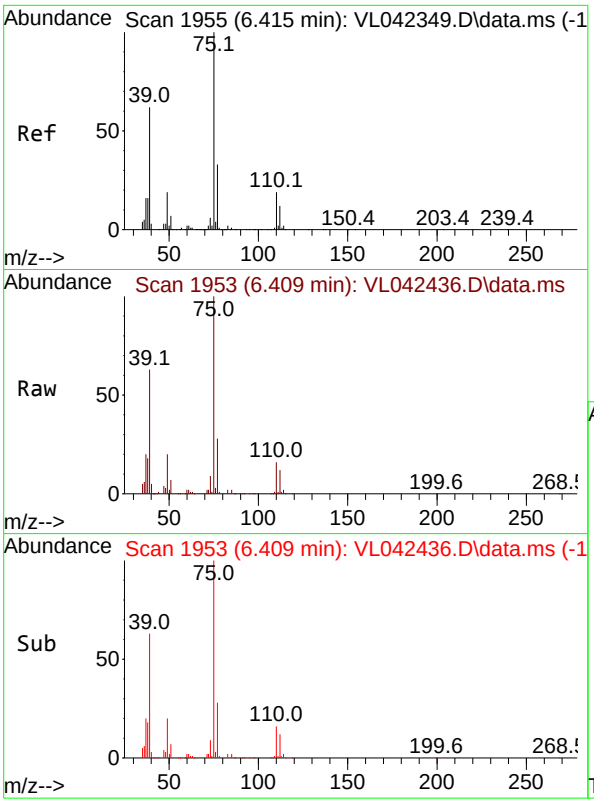


#44
2,2,4-Trimethylpentane
Concen: 9.010 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 57 Resp: 522427

Ion	Ratio	Lower	Upper
57	100		
41	39.2	27.2	40.8
56	31.1	25.7	38.5

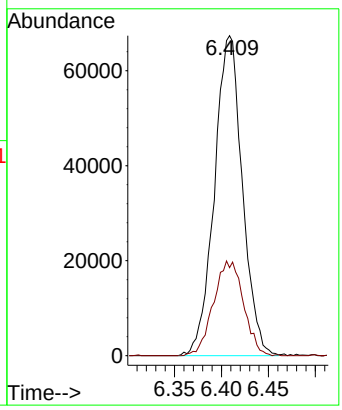




#45
t-1,3-Dichloropropene
Concen: 9.026 ppbv
RT: 6.409 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 75 Resp: 13950

Ion	Ratio	Lower	Upper
75	100		
77	27.5	27.0	40.6



Instrument :
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ClientSampleId :
VSTDCCC010

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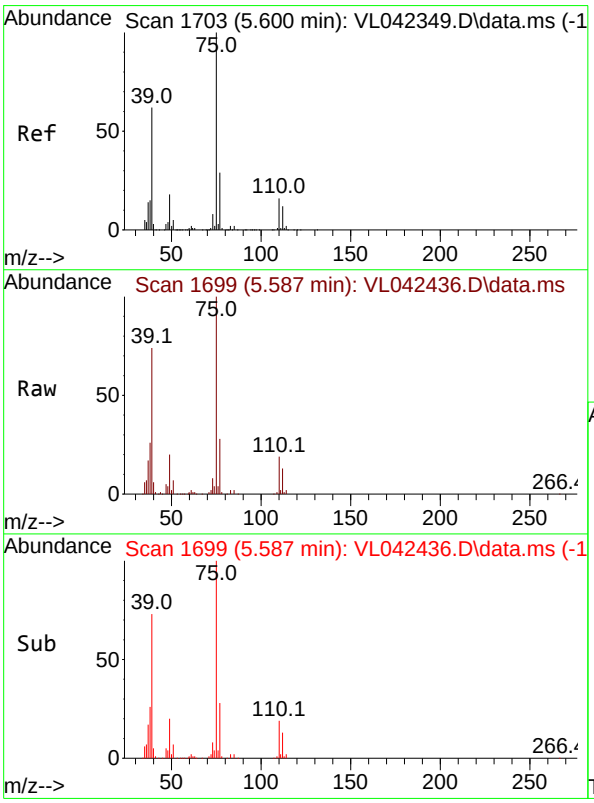
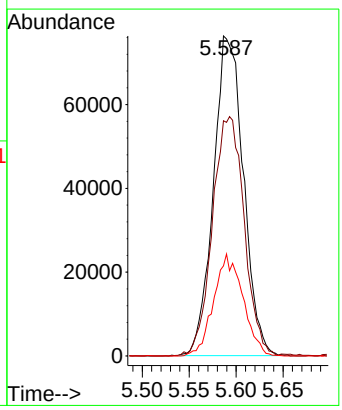
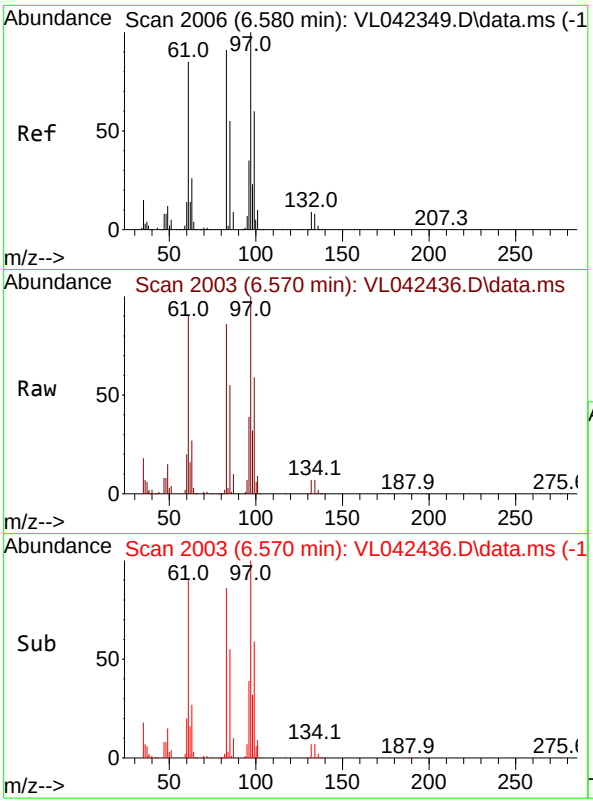


#46
cis-1,3-Dichloropropene
Concen: 8.953 ppbv
RT: 5.587 min Scan# 1699
Delta R.T. -0.013 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 75 Resp: 169355

Ion	Ratio	Lower	Upper
75	100		
39	73.4	50.0	75.0
77	28.2	23.0	34.6

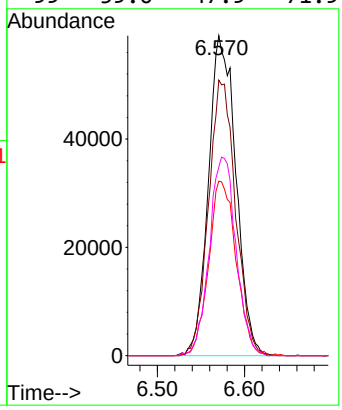




#47
1,1,2-Trichloroethane
Concen: 10.138 ppbv m
RT: 6.570 min Scan# 2
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 97 Resp: 12922

Ion	Ratio	Lower	Upper
97	100		
83	86.1	72.8	109.2
85	54.6	44.2	66.4
99	59.0	47.9	71.9



Instrument :
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ClientSampleId :
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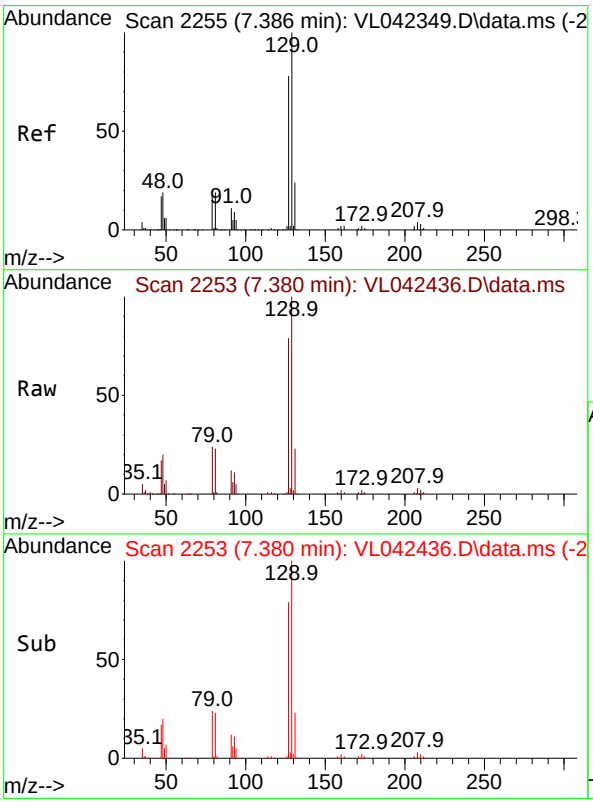
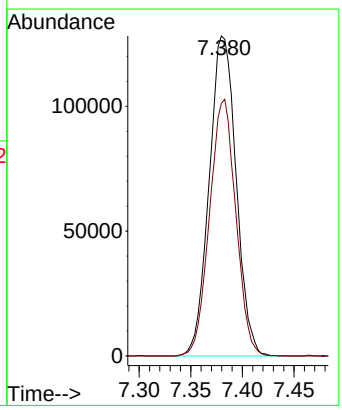
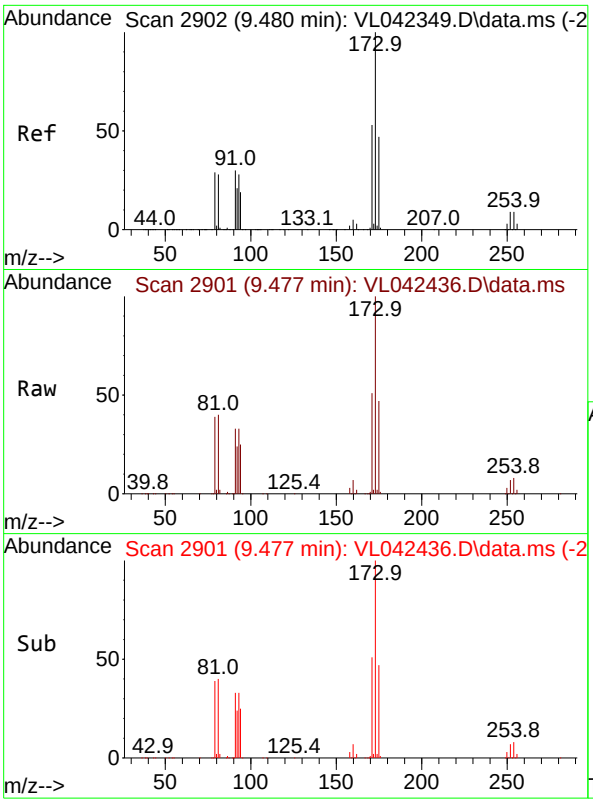


#48
Dibromochloromethane
Concen: 10.339 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:129 Resp: 232818

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3

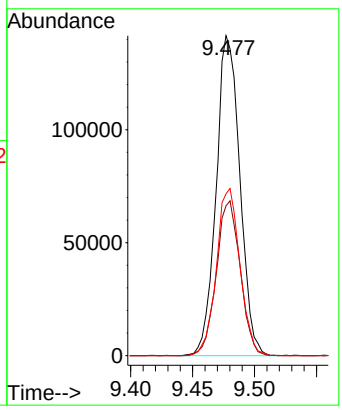




#49
Bromoform
Concen: 9.593 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:173 Resp: 18889

Ion	Ratio	Lower	Upper
173	100		
175	48.7	38.2	57.2
171	52.0	40.9	61.3



Instrument :
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ClientSampleId :
VSTDCCC010

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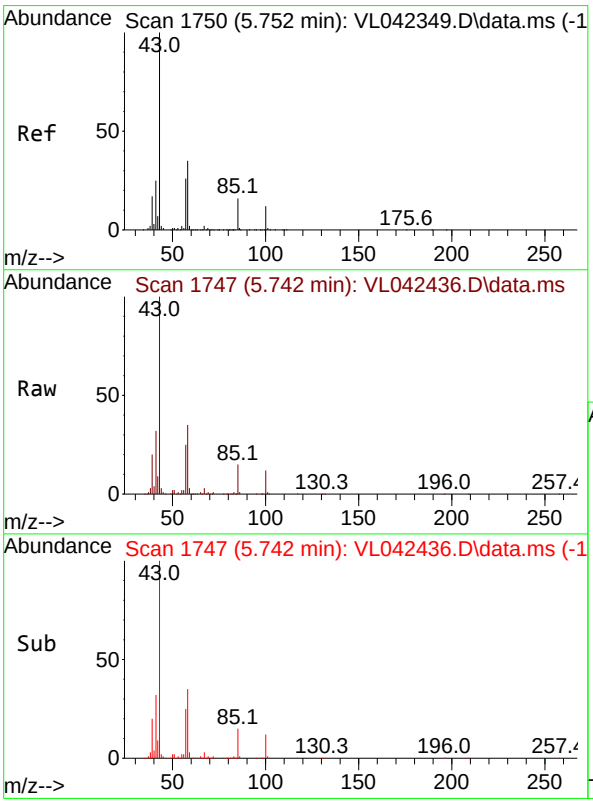
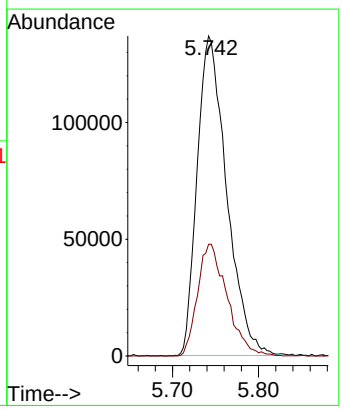
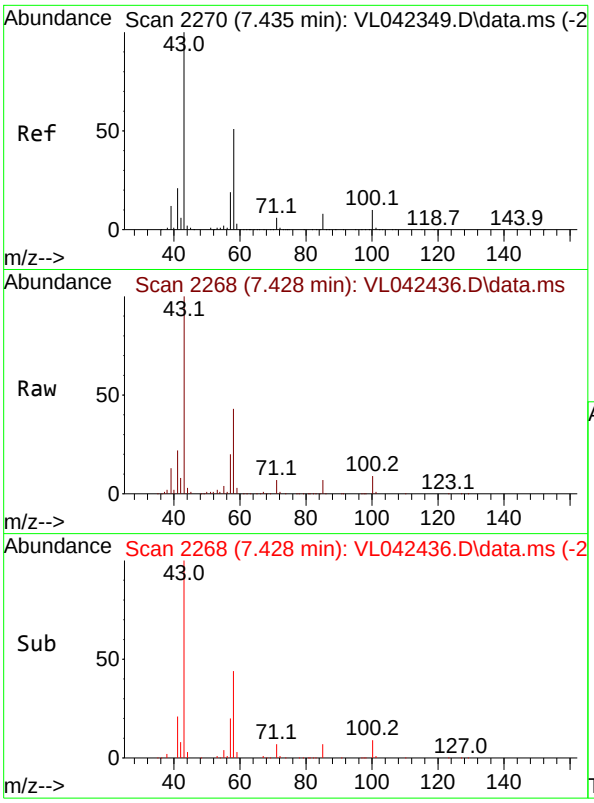


#50
4-Methyl-2-Pentanone
Concen: 7.965 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 325855

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.6	43.0





#51
2-Hexanone
Concen: 7.357 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 26991

Ion	Ratio	Lower	Upper
43	100		
58	45.8	40.2	60.4
98	0.4	0.1	0.1#

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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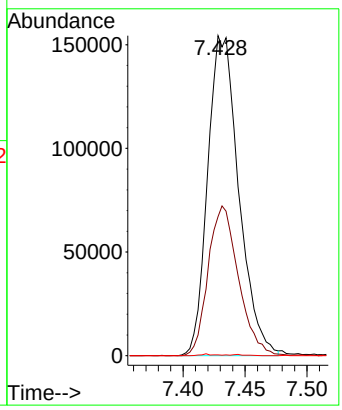
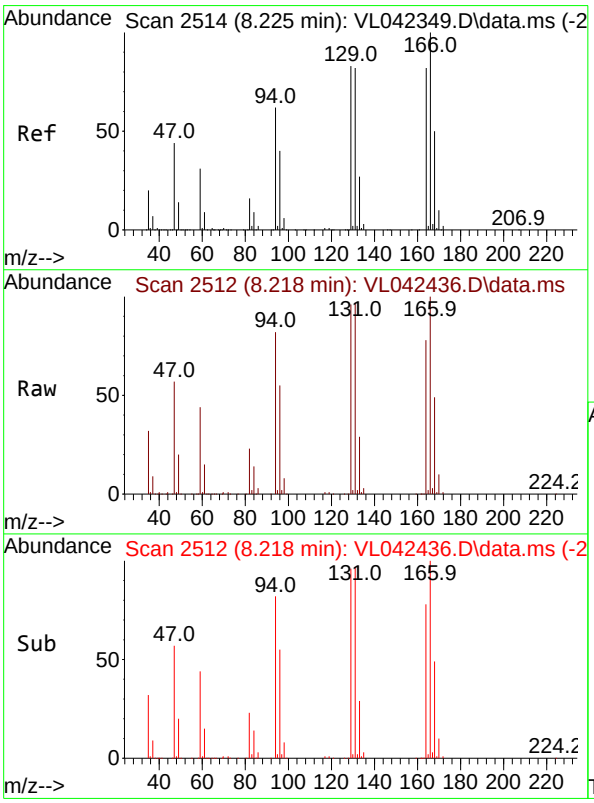
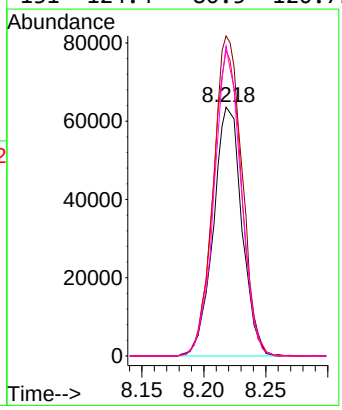


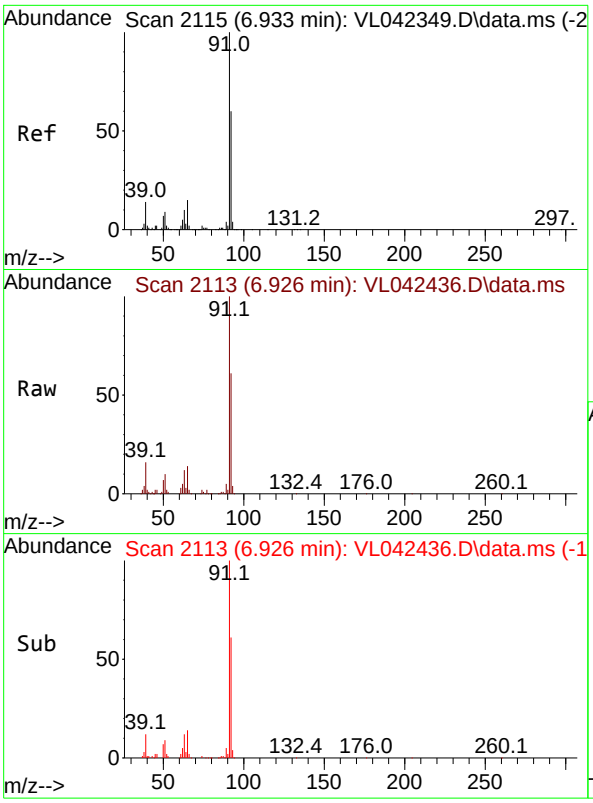


#52
Tetrachloroethene
Concen: 7.833 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:164 Resp: 101642

Ion	Ratio	Lower	Upper
164	100		
166	128.6	98.2	147.2
129	122.8	81.8	122.8#
131	124.4	80.5	120.7#

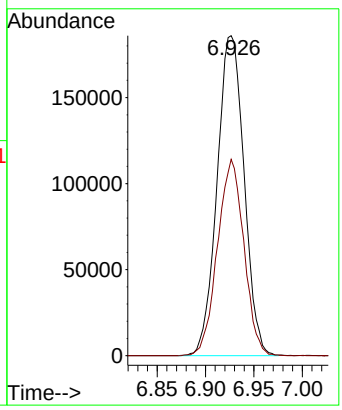




#53
Toluene
Concen: 8.968 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 36131

Ion	Ratio	Lower	Upper
91	100		
92	59.9	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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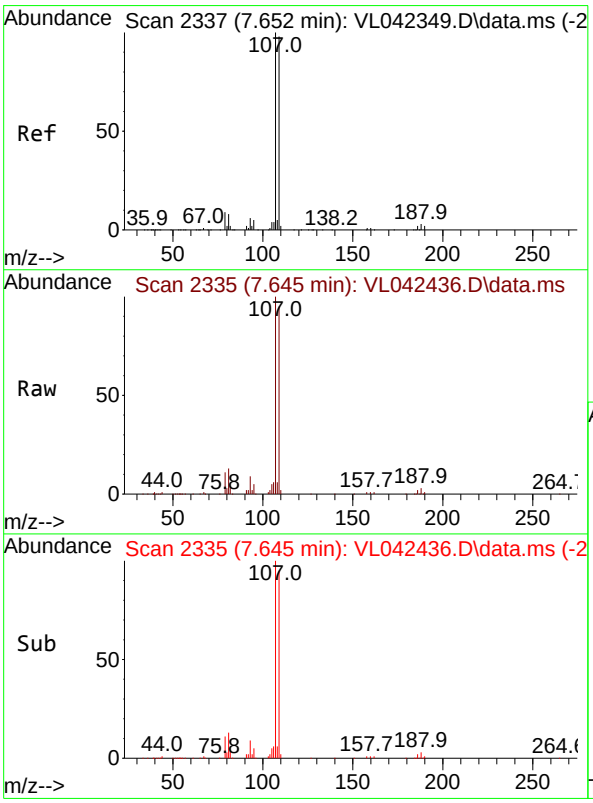
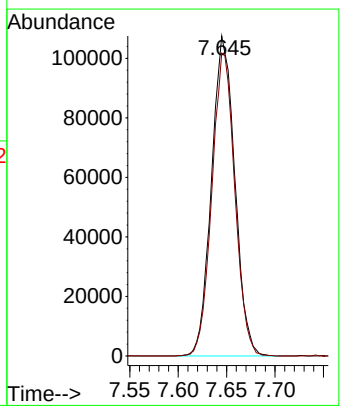
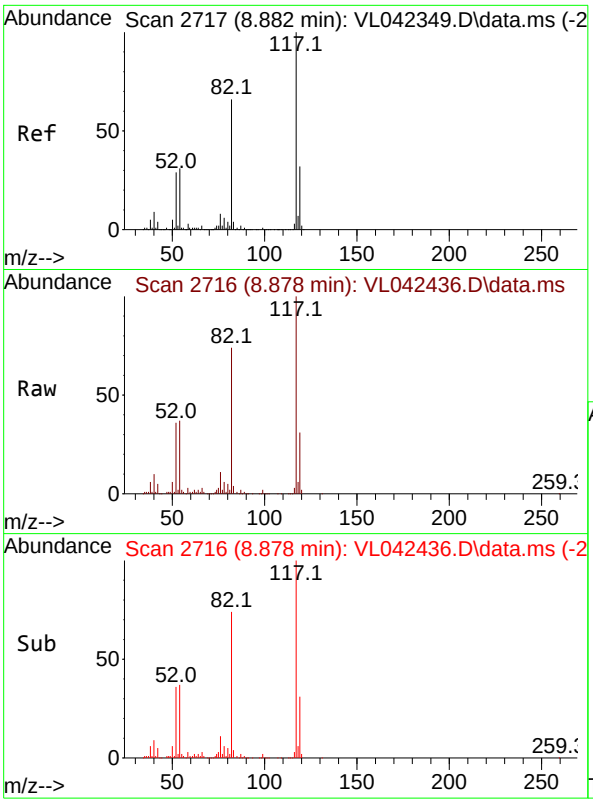


#54
1,2-Dibromoethane
Concen: 9.861 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:107 Resp: 179895

Ion	Ratio	Lower	Upper
107	100		
109	94.7	78.2	117.4

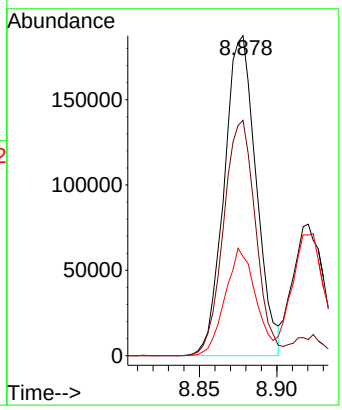




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:117 Resp: 26998

Ion	Ratio	Lower	Upper
117	100		
82	79.6	57.8	86.6
119	32.9	25.2	37.8



Instrument :
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ClientSampleId :
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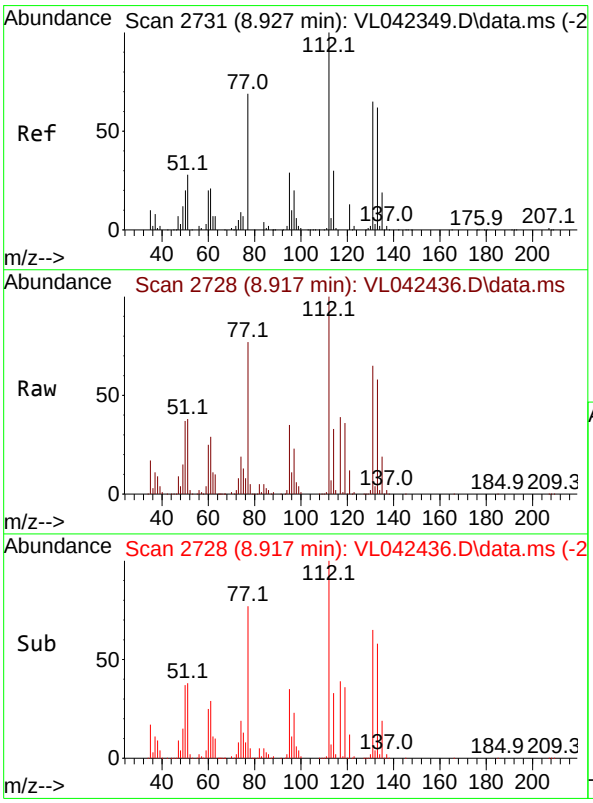
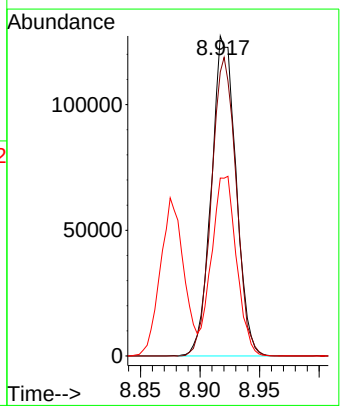
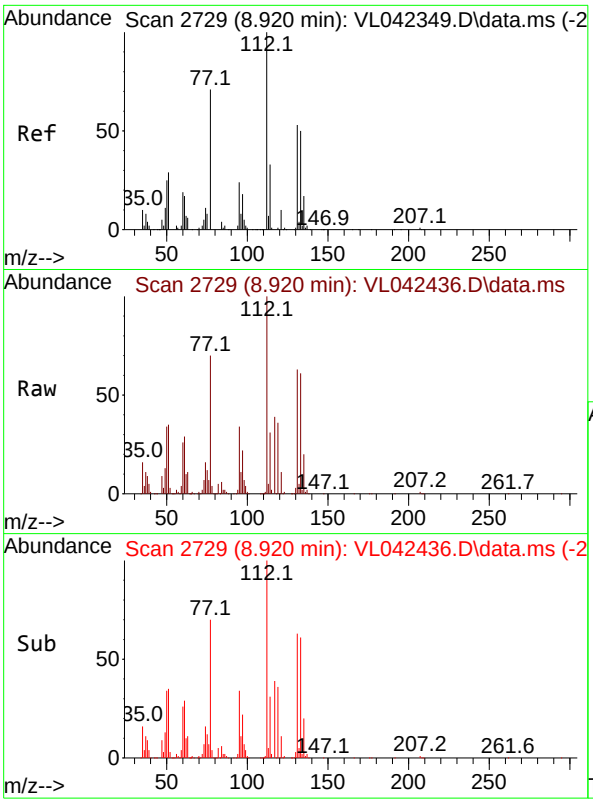


#56
1,1,1,2-Tetrachloroethane
Concen: 11.184 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:131 Resp: 182759

Ion	Ratio	Lower	Upper
131	100		
133	93.9	78.3	117.5
119	55.8	48.7	73.1

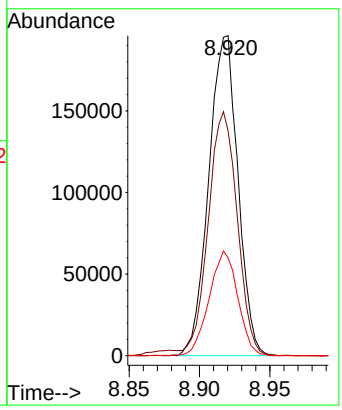




#57
Chlorobenzene
Concen: 10.086 ppbv
RT: 8.920 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:112 Resp: 28321

Ion	Ratio	Lower	Upper
112	100		
77	70.2	57.8	86.6
114	30.6	29.3	35.9



Instrument :
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ClientSampleId :
VSTDCCC010

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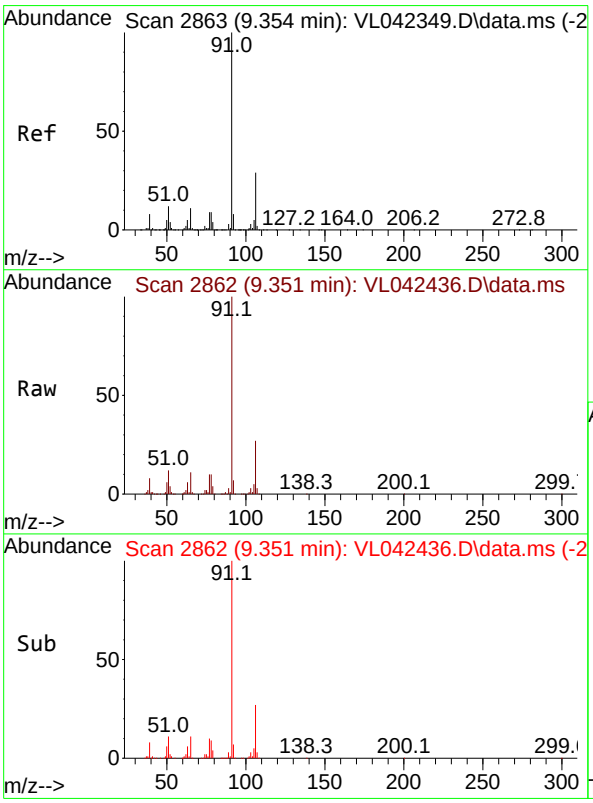
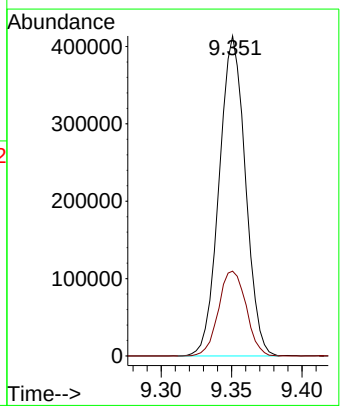
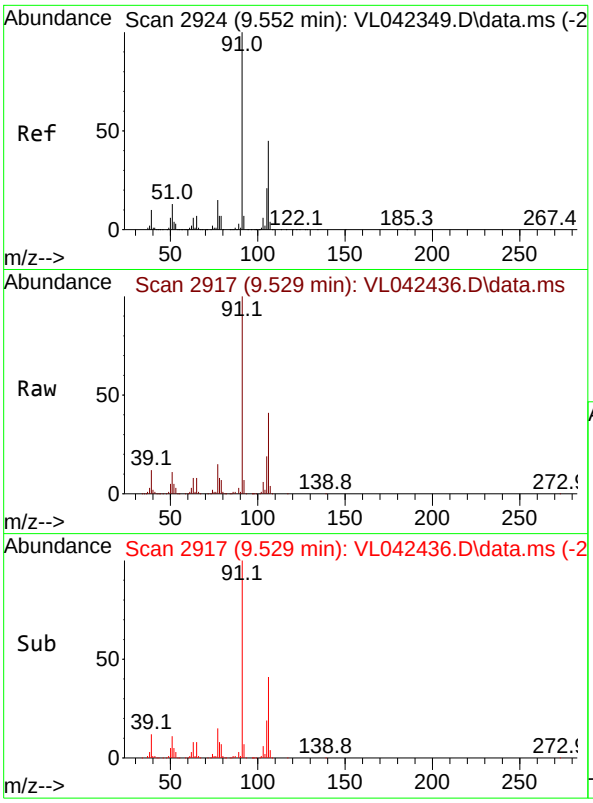


#58
Ethyl Benzene
Concen: 10.032 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 536634

Ion	Ratio	Lower	Upper
91	100		
106	26.5	23.0	34.4





#59
m/p-Xylene
Concen: 21.110 ppbv m
RT: 9.529 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 90970

Ion	Ratio	Lower	Upper
91	100		
106	41.9	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

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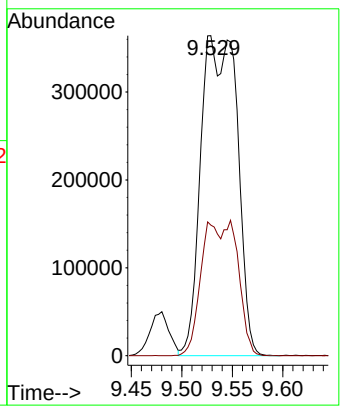
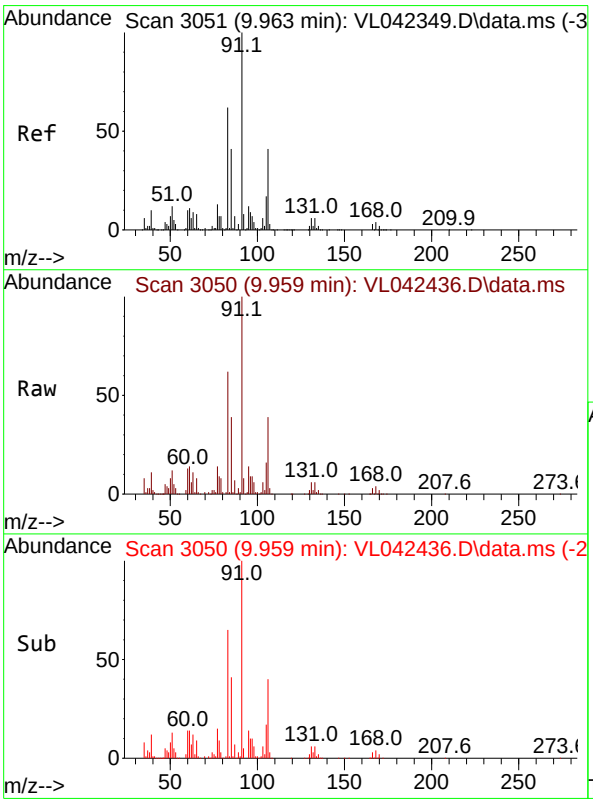
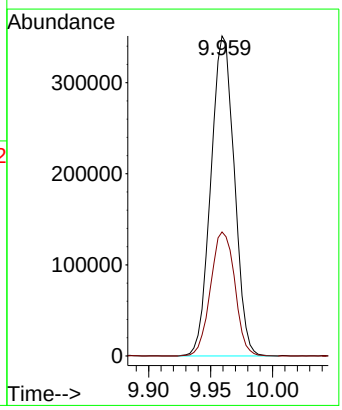


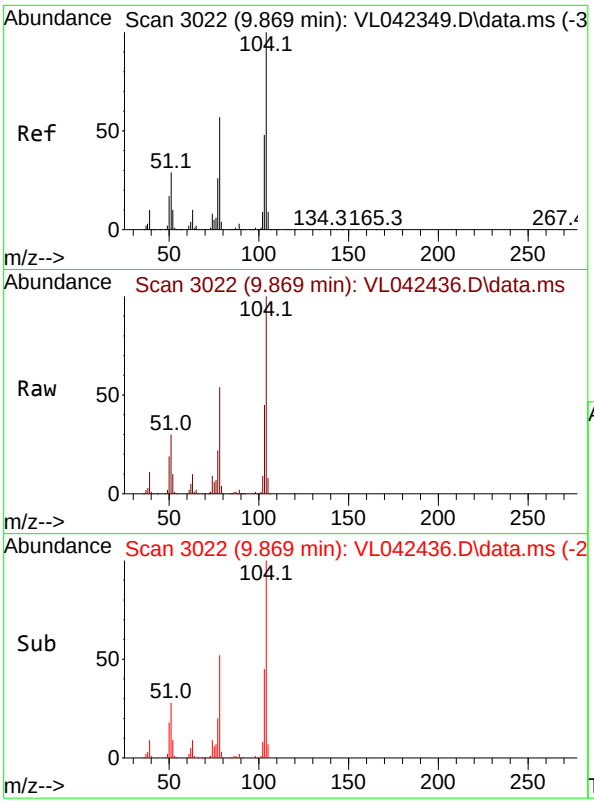


#60
o-Xylene
Concen: 10.686 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 463713

Ion	Ratio	Lower	Upper
91	100		
106	40.0	21.1	63.4

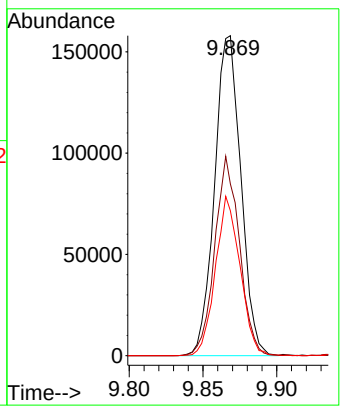




#61
Styrene
Concen: 9.454 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:104 Resp: 19581

Ion	Ratio	Lower	Upper
104	100		
78	58.5	44.6	66.8
103	46.7	37.4	56.0



Instrument :
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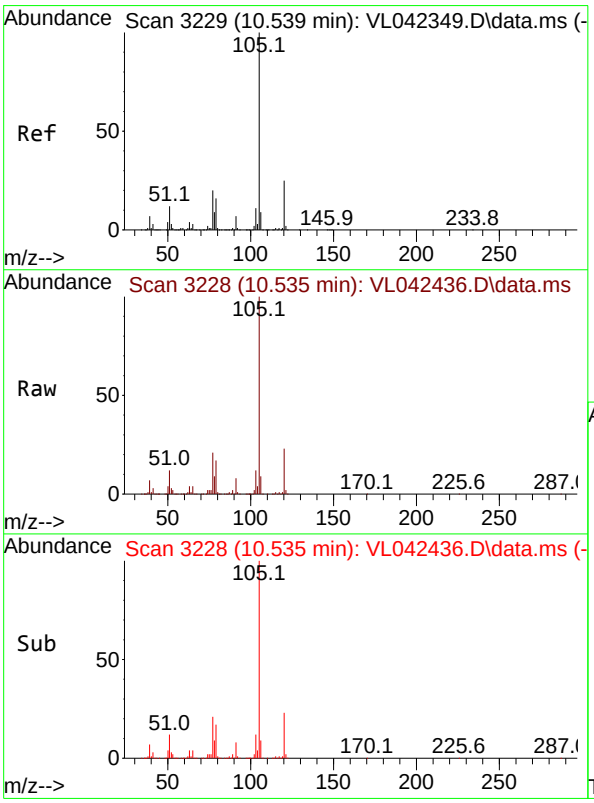
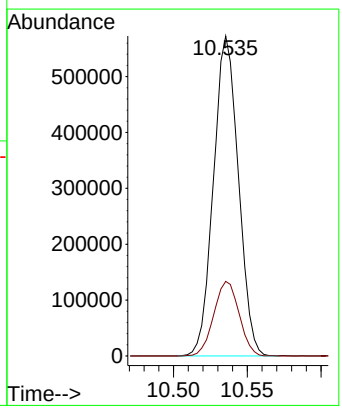
Supervised By :Mahesh Dadoda 04/30/2025

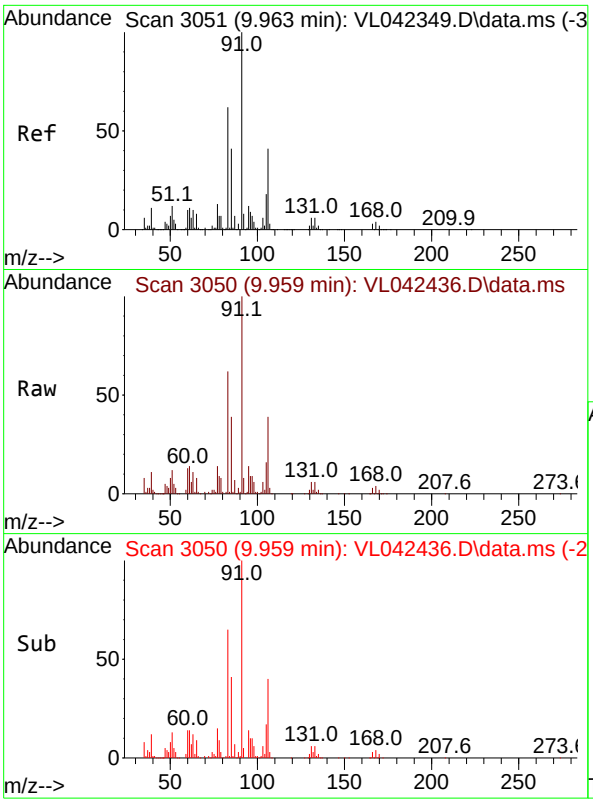


#62
Isopropylbenzene
Concen: 10.558 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 672630

Ion	Ratio	Lower	Upper
105	100		
120	23.7	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 9.699 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 83 Resp: 27274

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	65.0	32.4	97.0

Instrument :
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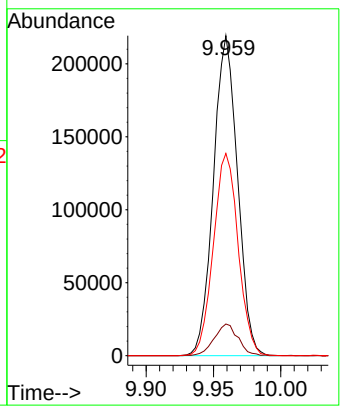
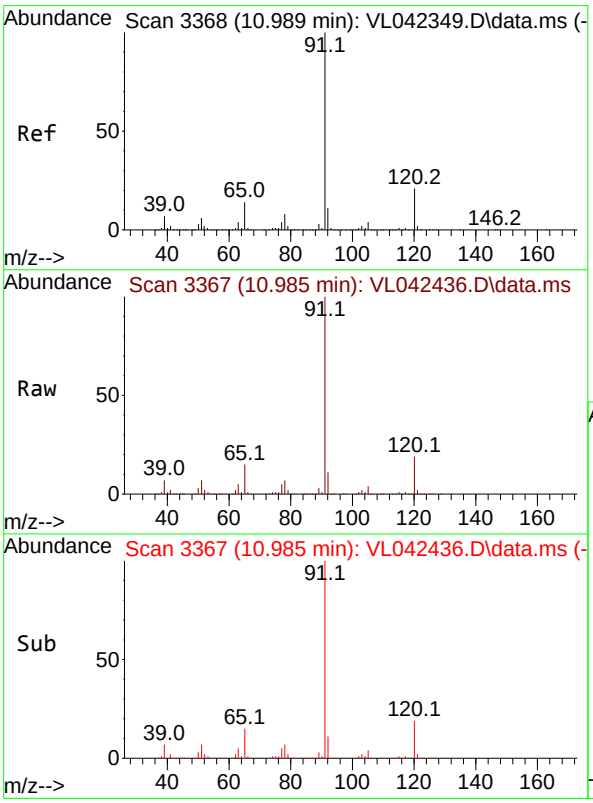
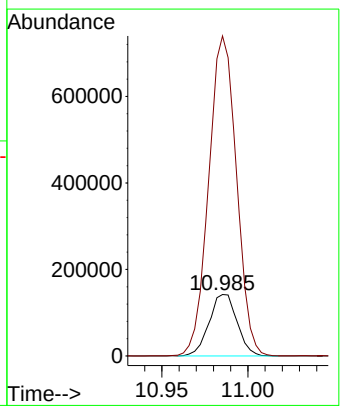


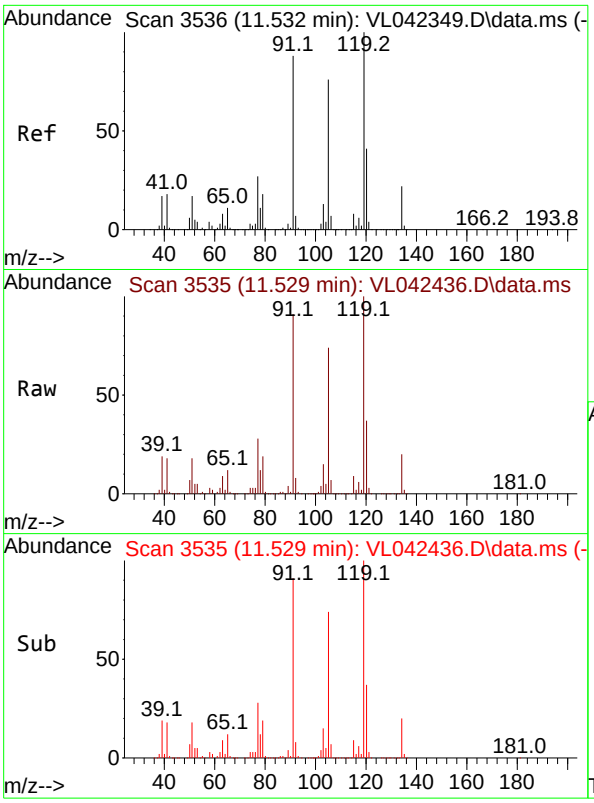


#64
n-propylbenzene
Concen: 10.037 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:120 Resp: 160736

Ion	Ratio	Lower	Upper
120	100		
91	518.7	392.4	588.6

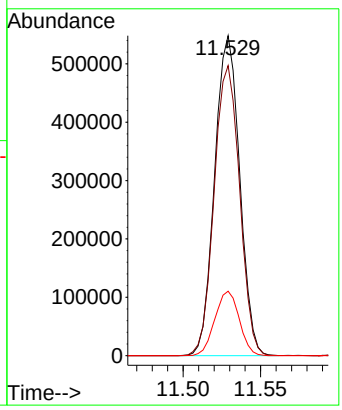




#65
tert-Butylbenzene
Concen: 10.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:119 Resp: 61687

Ion	Ratio	Lower	Upper
119	100		
91	92.2	74.6	111.8
134	19.6	18.8	28.2



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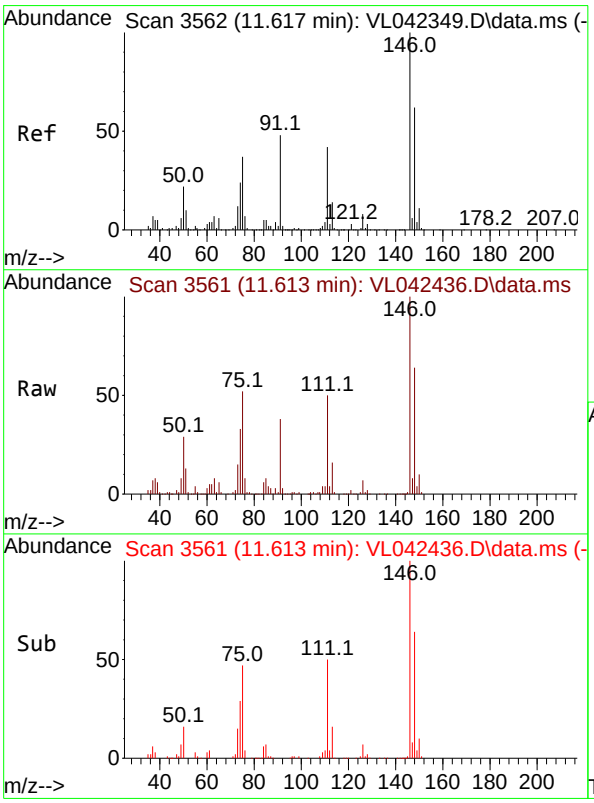
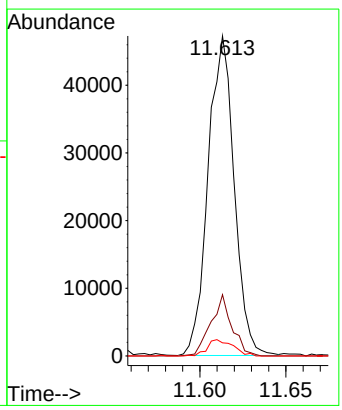
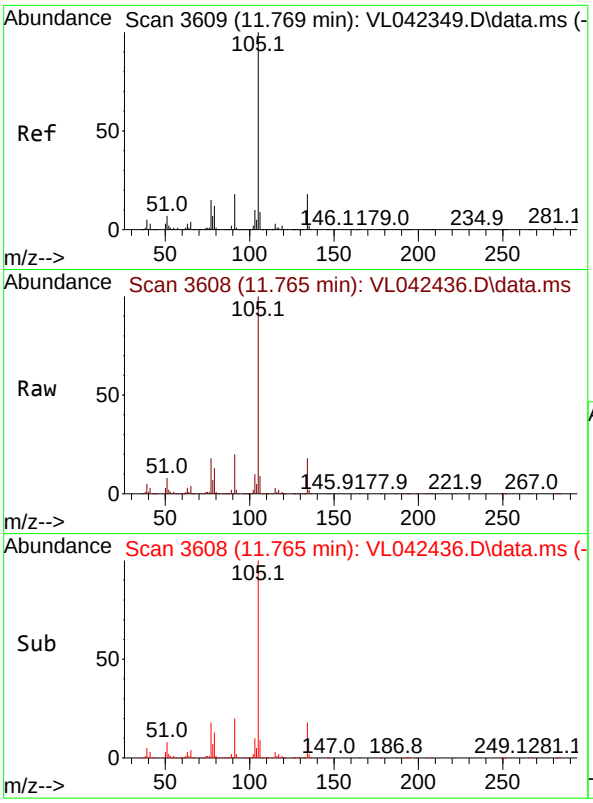


#66
Benzyl Chloride
Concen: 7.746 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 49841

Ion	Ratio	Lower	Upper
91	100		
126	15.4	11.8	17.6
128	5.1	4.5	6.7

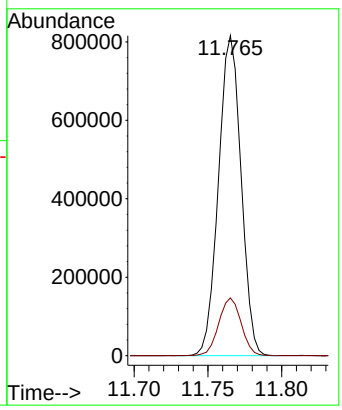




#67
sec-Butylbenzene
Concen: 10.677 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 86959

Ion	Ratio	Lower	Upper
105	100		
134	17.9	14.6	21.8



Instrument :
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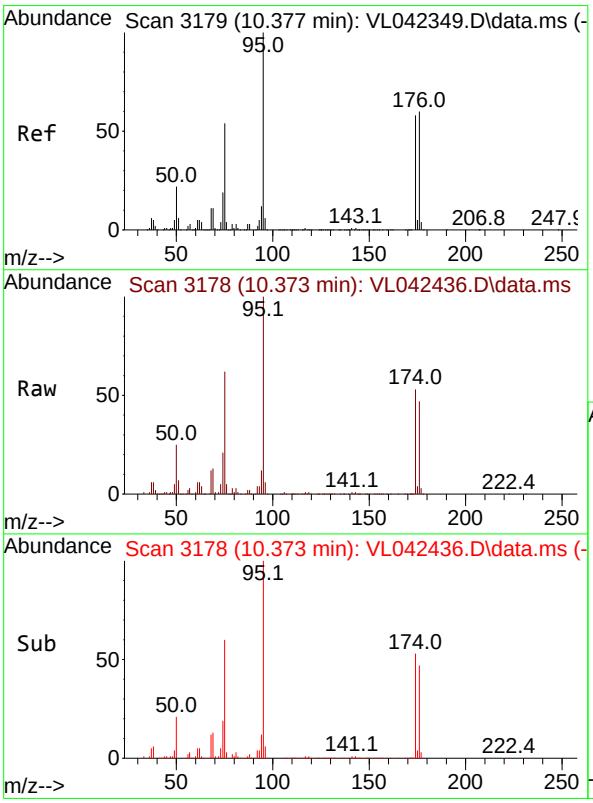
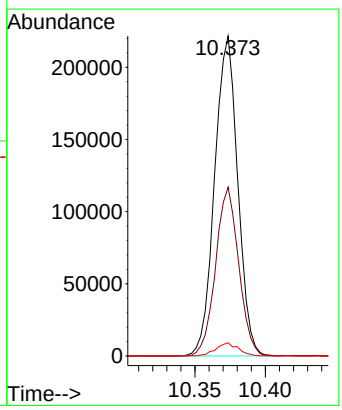
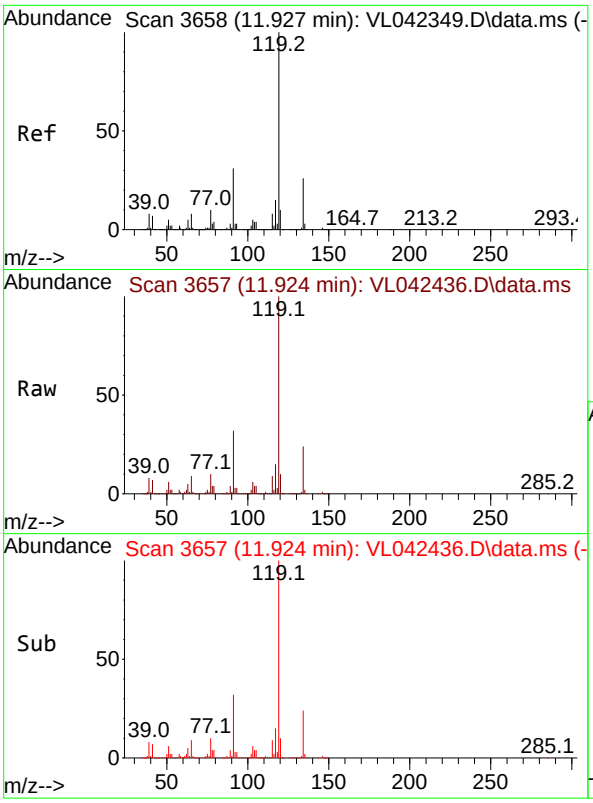


#68
1-Bromo-4-Fluorobenzene
Concen: 11.413 ppbv
RT: 10.373 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 95 Resp: 253216

Ion	Ratio	Lower	Upper
95	100		
174	52.8	48.5	72.7
175	4.0	3.7	5.5

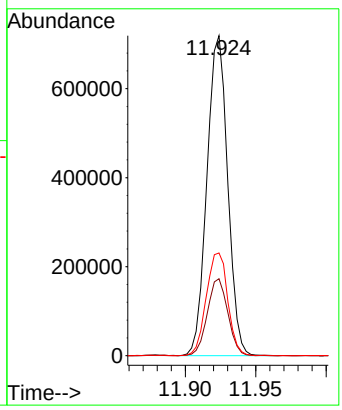




#69
p-Isopropyltoluene
Concen: 10.442 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:119 Resp: 73886

Ion	Ratio	Lower	Upper
119	100		
134	23.9	20.0	30.0
91	33.5	24.4	36.6



Instrument :
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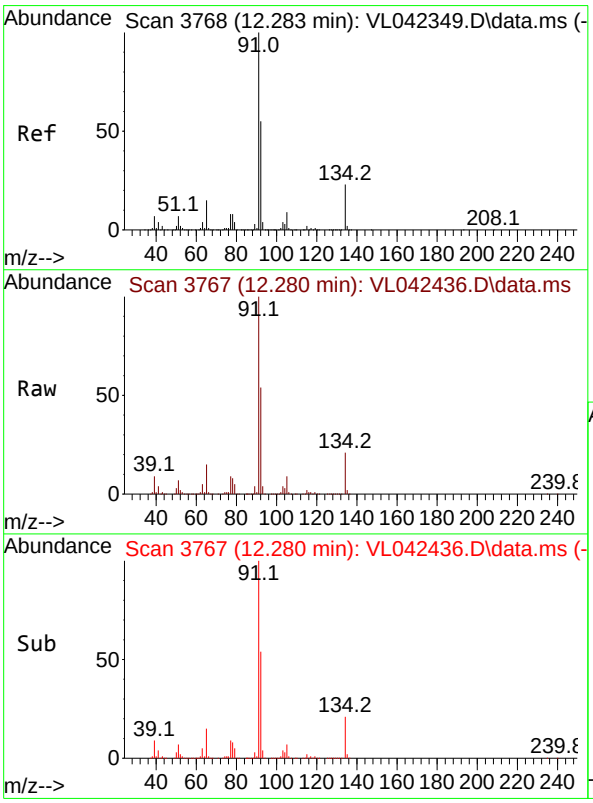
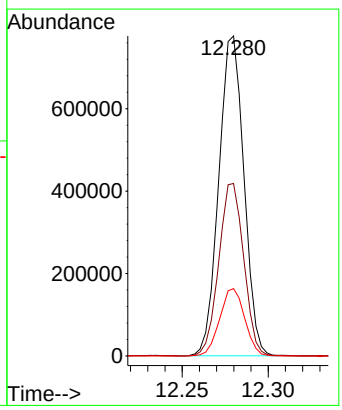
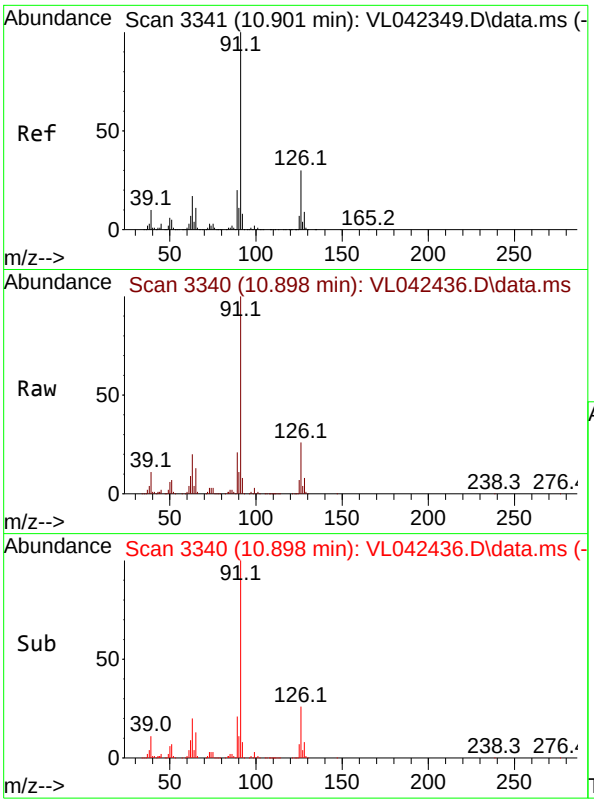


#70
n-Butylbenzene
Concen: 10.688 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 787717

Ion	Ratio	Lower	Upper
91	100		
92	53.9	44.2	66.4
134	21.0	18.2	27.4

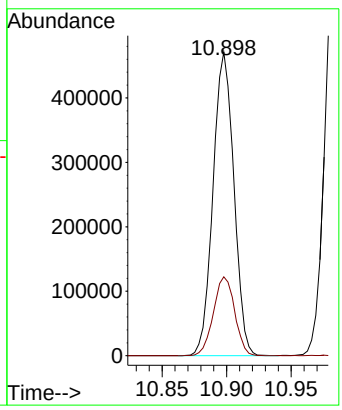




#71
2-Chlorotoluene
Concen: 10.571 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 52820

Ion	Ratio	Lower	Upper
91	100		
126	26.5	11.4	45.4



Instrument :
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ClientSampleId :
VSTDCCC010

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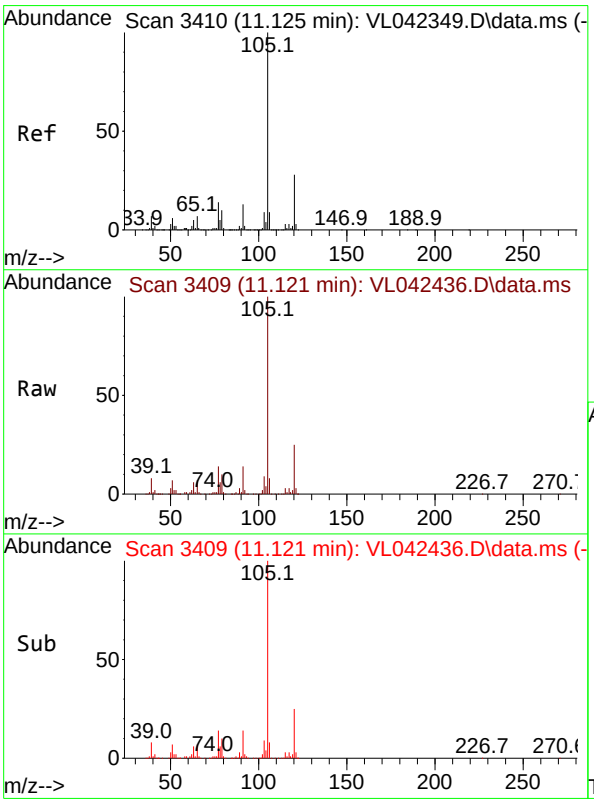
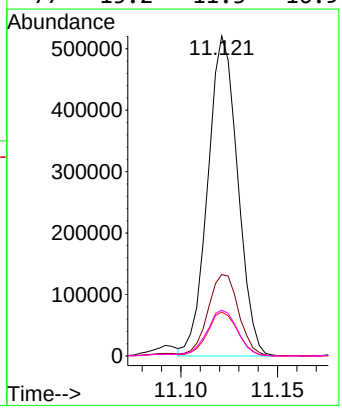
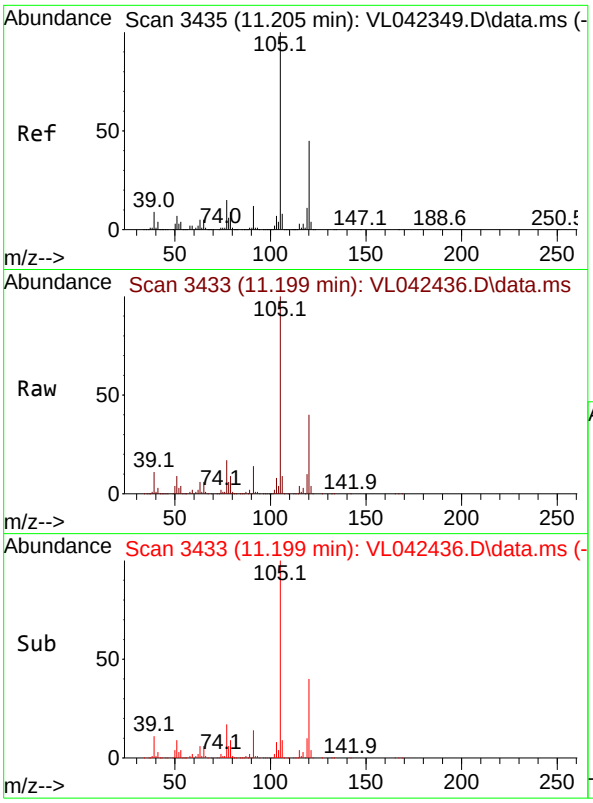


#72
4-Ethyltoluene
Concen: 10.542 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 559285

Ion	Ratio	Lower	Upper
105	100		
120	27.0	23.2	34.8
91	14.5	10.4	15.6
77	15.2	11.3	16.9

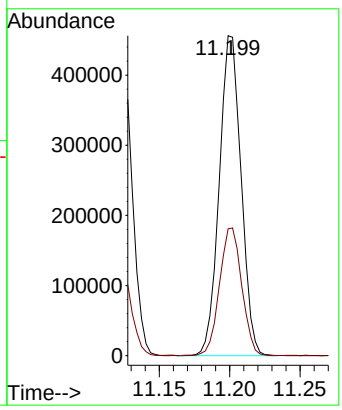




#73
1,3,5-Trimethylbenzene
Concen: 10.546 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 49394

Ion	Ratio	Lower	Upper
105	100		
120	39.6	35.6	53.4



Instrument :
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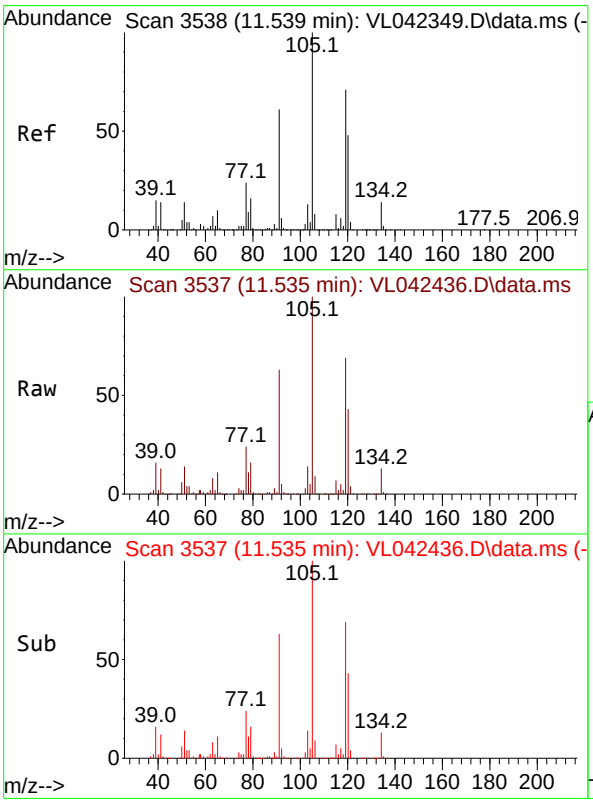
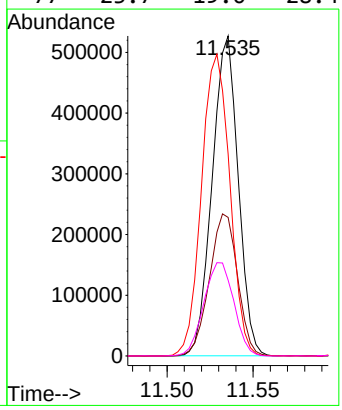
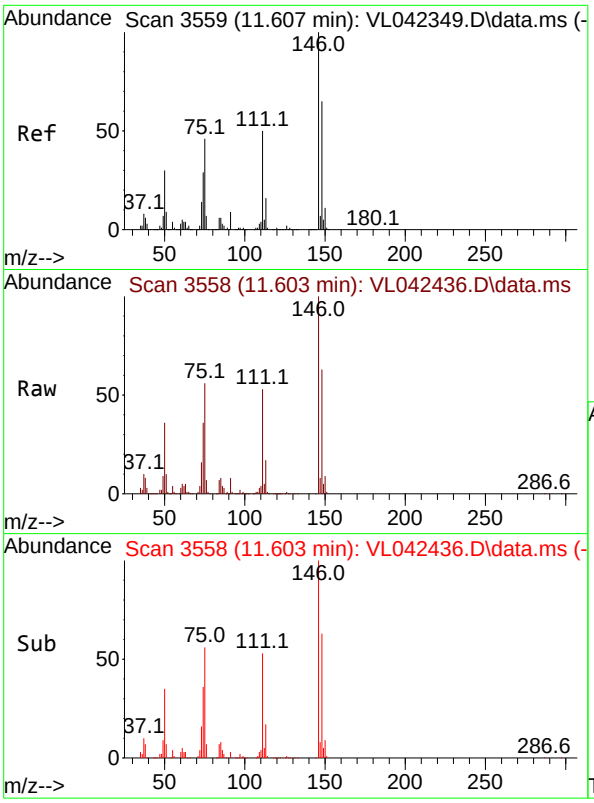


#74
1,2,4-Trimethylbenzene
Concen: 10.130 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 554136

Ion	Ratio	Lower	Upper
105	100		
120	43.3	38.1	57.1
91	63.1	48.8	73.2
77	23.7	19.0	28.4

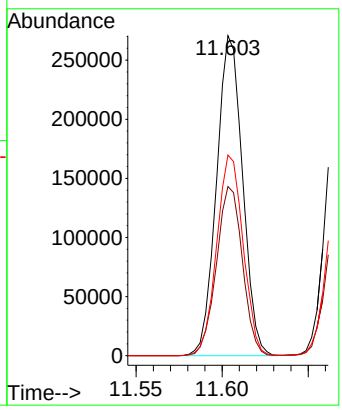




#75
1,3-Dichlorobenzene
Concen: 10.024 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:146 Resp: 28502

Ion	Ratio	Lower	Upper
146	100		
111	52.9	24.3	72.8
148	63.6	31.6	94.8



Instrument :
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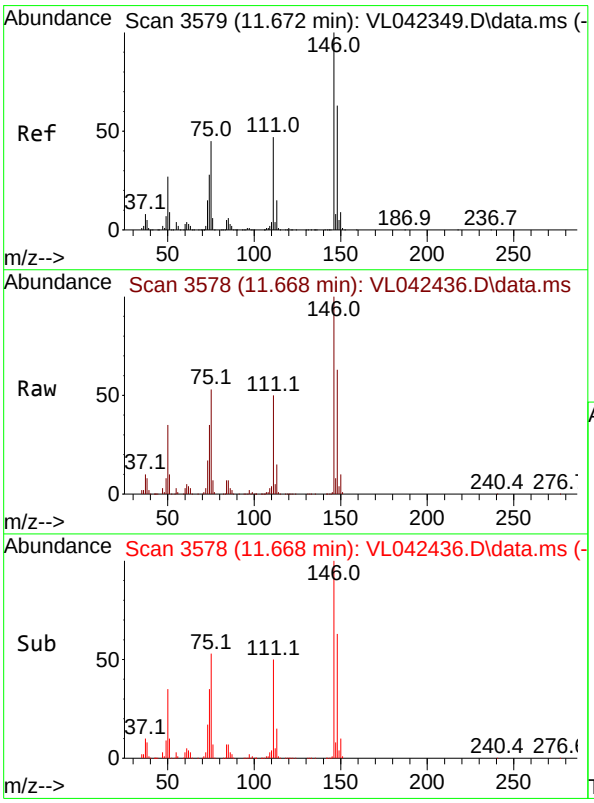
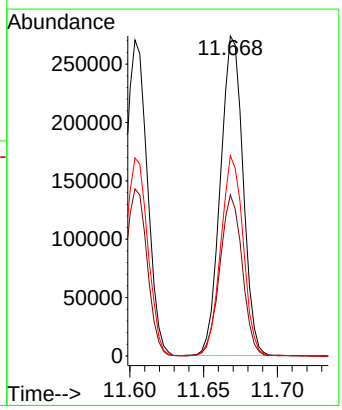
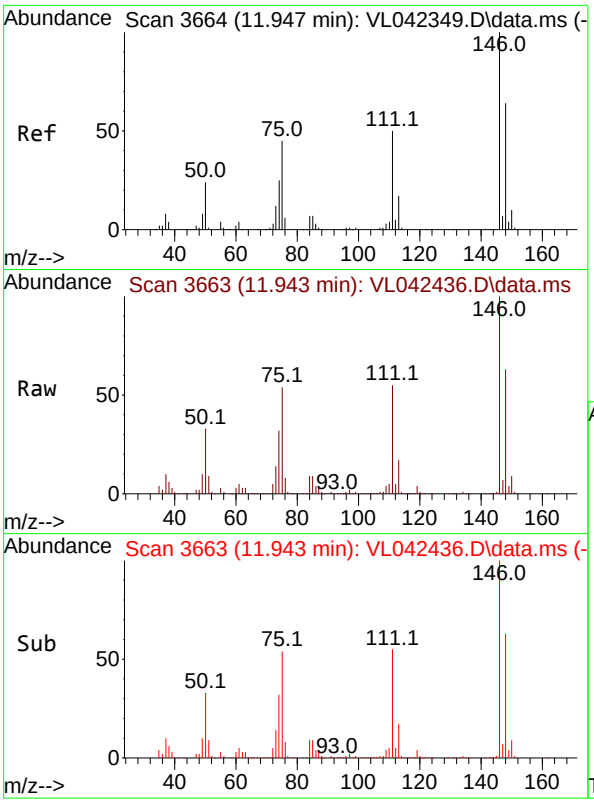


#76
1,4-Dichlorobenzene
Concen: 10.210 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:146 Resp: 291795

Ion	Ratio	Lower	Upper
146	100		
111	50.1	24.2	72.6
148	62.4	32.1	96.5

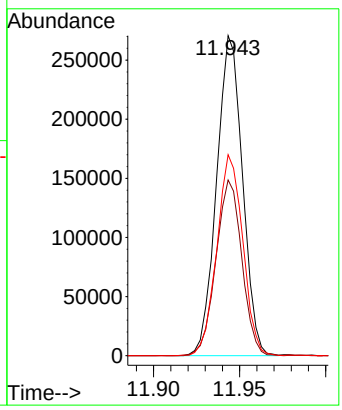




#77
1,2-Dichlorobenzene
Concen: 10.261 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:146 Resp: 28370

Ion	Ratio	Lower	Upper
146	100		
111	54.8	25.3	75.9
148	63.1	31.5	94.5



Instrument :
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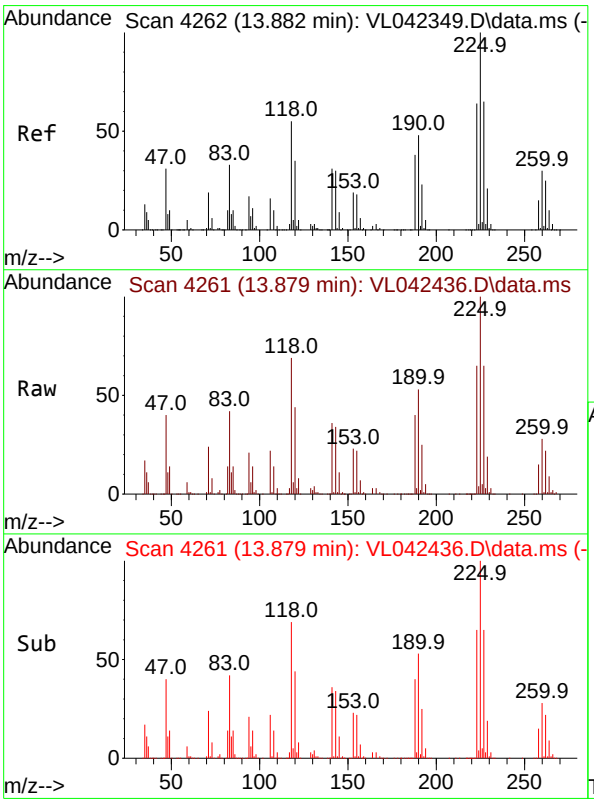
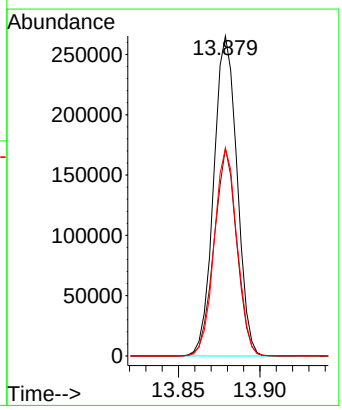
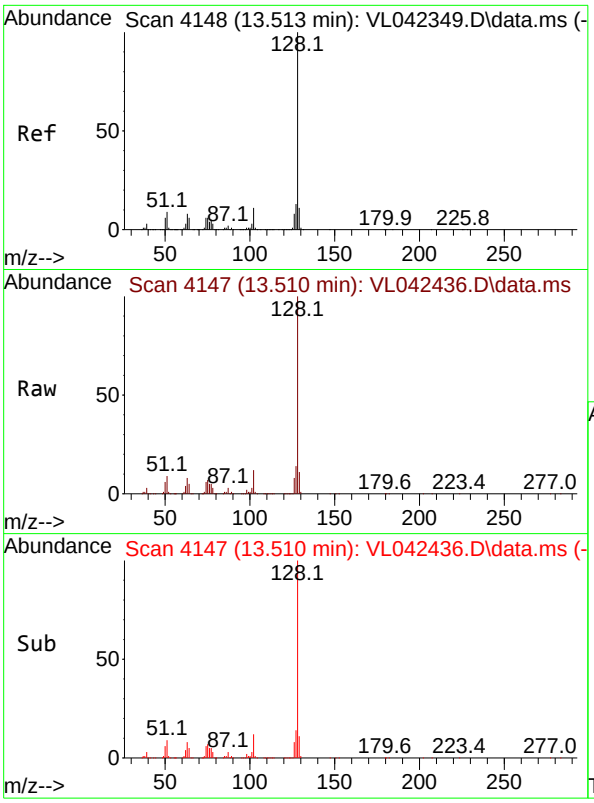


#78
Hexachloro-1,3-Butadiene
Concen: 9.437 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:225 Resp: 263477

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.3	75.5
227	63.6	51.5	77.3

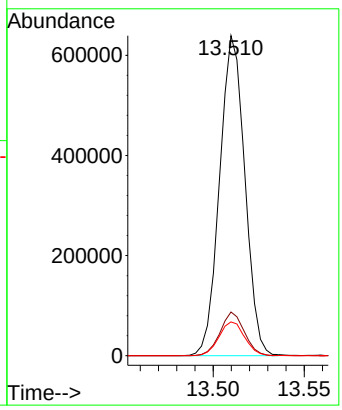




#79
Naphthalene
Concen: 9.408 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:128 Resp: 61540

Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.6	15.8
129	10.5	8.6	12.8



Instrument :
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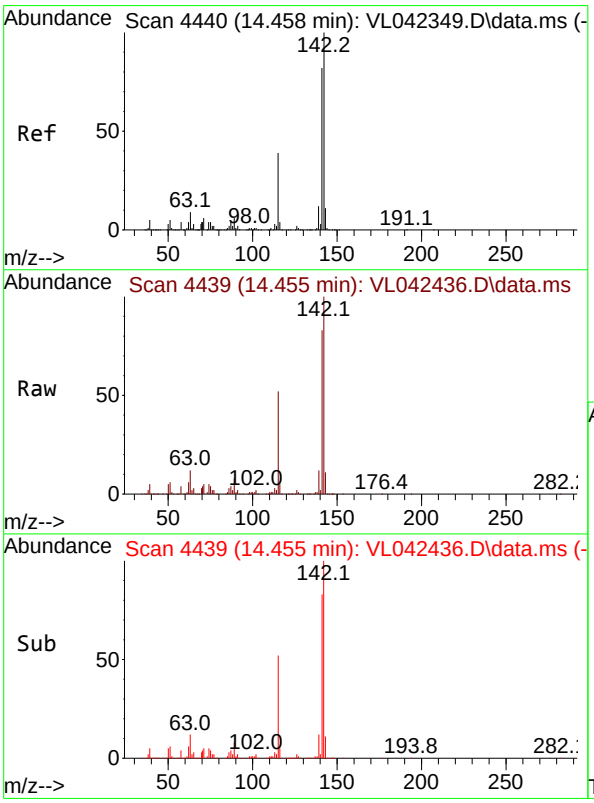
APPROVED

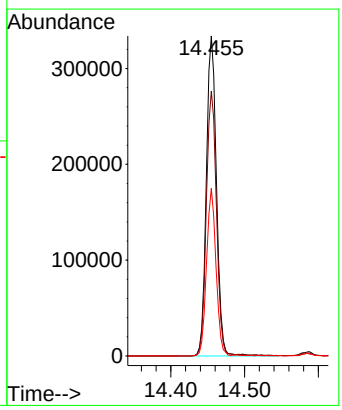
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

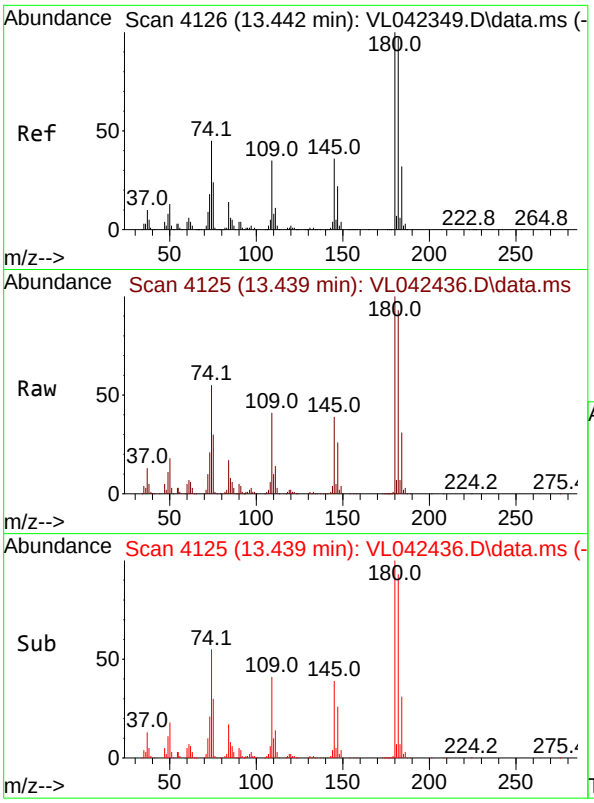


#80
Naphthalene,2-methyl-
Concen: 8.497 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:142 Resp: 316788

Ion	Ratio	Lower	Upper
142	100		
141	83.6	66.8	100.2
115	49.6	33.4	50.2

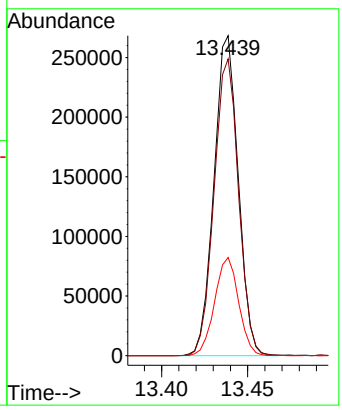




#81
1,2,4-Trichlorobenzene
Concen: 9.363 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:180 Resp: 26300

Ion	Ratio	Lower	Upper
180	100		
182	93.8	76.8	115.2
184	30.4	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	91	0.00
2	T	Dichlorodifluoromethane	1.767	2.050	-16.0	113	0.00
3		Chlorodifluoromethane	1.682	1.641	2.4	95	0.00
4		Chloromethane	0.699	0.788	-12.7	110	0.00
5	T	Vinyl Chloride	0.761	0.756	0.7	108	0.00
6	T	Bromomethane	0.327	0.358	-9.5	108	0.00
7		Chloroethane	0.275	0.307	-11.6	111	0.00
8	T	Dichlorotetrafluoroethane	1.517	1.746	-15.1	111	0.00
9	T	Propene	0.766	0.604	21.1	80	0.00
10	T	Heptane	2.153	1.613	25.1	78	0.00
11	T	Trichlorofluoromethane	1.680	1.990	-18.5	116	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.374	1.502	-9.3	107	0.00
13		Ethanol	0.122	0.038#	68.9#	98	0.00
14	T	Bromoethene	0.518	0.555	-7.1	103	0.00
15	T	Acetone	1.637	1.614	1.4	117	0.00
16	T	1,3-Butadiene	0.783	0.776	0.9	109	0.00
17		tert-Butyl alcohol	2.029	2.005	1.2	101	0.00
18	T	1,1-Dichloroethene	0.642	0.659	-2.6	103	0.00
19	T	Isopropyl Alcohol	0.909	0.890	2.1	99	0.00
20	T	Methylene Chloride	0.641	0.587	8.4	108	0.00
21	T	Allyl Chloride	1.130	1.151	-1.9	108	0.00
22	T	trans-1,2-Dichloroethene	0.731	0.756	-3.4	104	0.00
23	T	Vinyl Acetate	0.663	0.538	18.9	88	0.00
24	T	1,1-Dichloroethane	1.388	1.506	-8.5	107	0.00
25	T	Ethyl Acetate	4.036	3.568	11.6	89	0.00
26	T	Hexane	1.633	1.343	17.8	86	0.00
27	T	Carbon Disulfide	1.749	1.858	-6.2	102	0.00
28	T	Methyl tert-Butyl Ether	1.070	0.996	6.9	97	0.00
29	T	Chloroform	2.309	2.540	-10.0	108	0.00
30	T	Cyclohexane	1.320	1.140	13.6	83	0.00
31	T	cis-1,2-Dichloroethene	1.553	1.525	1.8	95	0.00
32	T	1,1,1-Trichloroethane	2.599	2.727	-4.9	109	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	85	0.00
34	T	2-Butanone	0.791	0.745	5.8	92	0.00
35	T	Carbon Tetrachloride	0.905	1.017	-12.4	112	0.00
36	T	Benzene	1.079	1.010	6.4	86	0.00
37	T	1,2-Dichloroethane	0.647	0.786	-21.5	113	0.00
38	T	Trichloroethene	0.471	0.398	15.5	86	0.00
39	T	1,2-Dichloropropane	0.402	0.354	11.9	81	0.00
40	T	1,4-Dioxane	0.221	0.175	20.8	82	0.00
41	T	Tetrahydrofuran	0.461	0.391	15.2	81	0.00
42	T	Bromodichloromethane	0.901	1.002	-11.2	100	0.00
43		Methyl Methacrylate	0.486	0.407	16.3	80	0.00
44	T	2,2,4-Trimethylpentane	1.863	1.678	9.9	83	0.00
45	T	t-1,3-Dichloropropene	0.497	0.448	9.9	83	0.00
46	T	cis-1,3-Dichloropropene	0.608	0.544	10.5	81	-0.01
47	T	1,1,2-Trichloroethane	0.410	0.415	-1.2	94	0.00
48	T	Dibromochloromethane	0.723	0.748	-3.5	94	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.633	0.607	4.1	84	0.00
50	T	4-Methyl-2-Pentanone	1.314	1.047	20.3	82	0.00
51	T	2-Hexanone	1.179	0.867	26.5	83	0.00
52	T	Tetrachloroethene	0.417	0.327	21.6	78	0.00
53	T	Toluene	1.294	1.161	10.3	83	0.00
54	T	1,2-Dibromoethane	0.586	0.578	1.4	91	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	80	0.00
56		1,1,1,2-Tetrachloroethane	0.605	0.677	-11.9	98	0.00
57	T	Chlorobenzene	1.040	1.049	-0.9	88	0.00
58	T	Ethyl Benzene	1.981	1.988	-0.4	87	0.00
59	T	m/p-Xylene	1.596	1.685	-5.6	92	-0.02
60	T	o-Xylene	1.607	1.718	-6.9	95	0.00
61	T	Styrene	0.767	0.725	5.5	80	0.00
62		Isopropylbenzene	2.360	2.491	-5.6	92	0.00
63	T	1,1,2,2-Tetrachloroethane	1.042	1.010	3.1	92	0.00
64		n-propylbenzene	0.593	0.595	-0.3	88	0.00
65		tert-Butylbenzene	2.169	2.285	-5.3	96	0.00
66	T	Benzyl Chloride	0.238	0.185	22.3	60	0.00
67		sec-Butylbenzene	3.017	3.221	-6.8	97	0.00
68	S	1-Bromo-4-Fluorobenzene	0.822	0.938	-14.1	90	0.00
69		p-Isopropyltoluene	2.621	2.737	-4.4	95	0.00
70		n-Butylbenzene	2.730	2.918	-6.9	98	0.00
71		2-Chlorotoluene	1.851	1.956	-5.7	92	0.00
72	T	4-Ethyltoluene	1.965	2.072	-5.4	94	0.00
73	T	1,3,5-Trimethylbenzene	1.735	1.830	-5.5	96	0.00
74	T	1,2,4-Trimethylbenzene	2.026	2.052	-1.3	98	0.00
75	T	1,3-Dichlorobenzene	1.053	1.056	-0.3	89	0.00
76	T	1,4-Dichlorobenzene	1.059	1.081	-2.1	91	0.00
77	T	1,2-Dichlorobenzene	1.024	1.051	-2.6	93	0.00
78	T	Hexachloro-1,3-Butadiene	1.034	0.976	5.6	90	0.00
79	T	Naphthalene	2.423	2.279	5.9	91	0.00
80	T	Naphthalene,2-methyl-	1.381	1.173	15.1	84	0.00
81	T	1,2,4-Trichlorobenzene	1.040	0.974	6.3	86	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

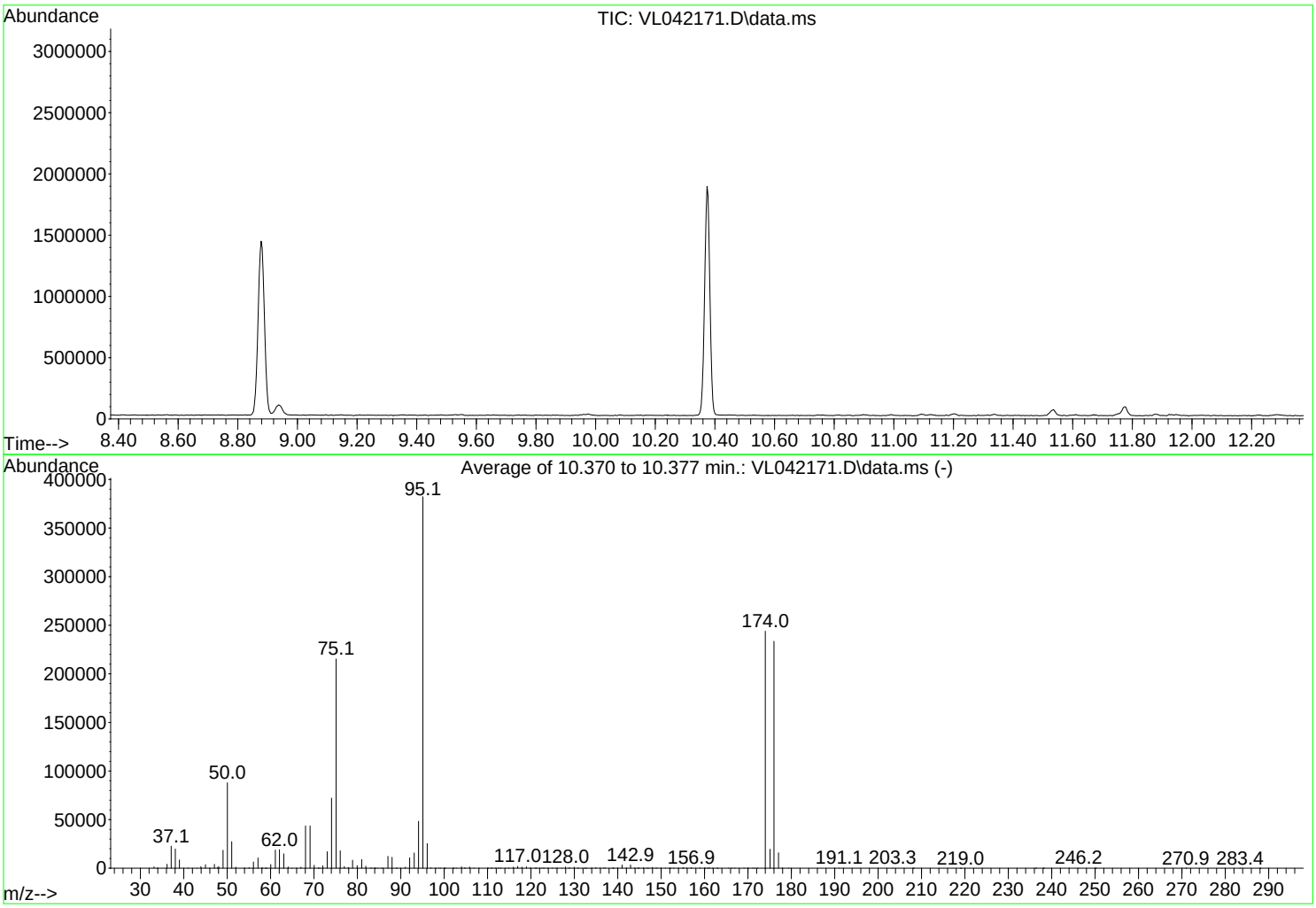
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042171.D
Acq On : 27 Mar 2025 07:44
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025



AutoFind: Scans 3177, 3178, 3179; Background Corrected with Scan 3150

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.0	87995	PASS
75	95	30	66	56.3	215296	PASS
95	95	100	100	100.0	382268	PASS
96	95	5	9	6.6	25383	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	63.8	243904	PASS
175	174	4	9	8.0	19539	PASS
176	174	93	101	95.7	233493	PASS
177	176	5	9	6.8	15877	PASS

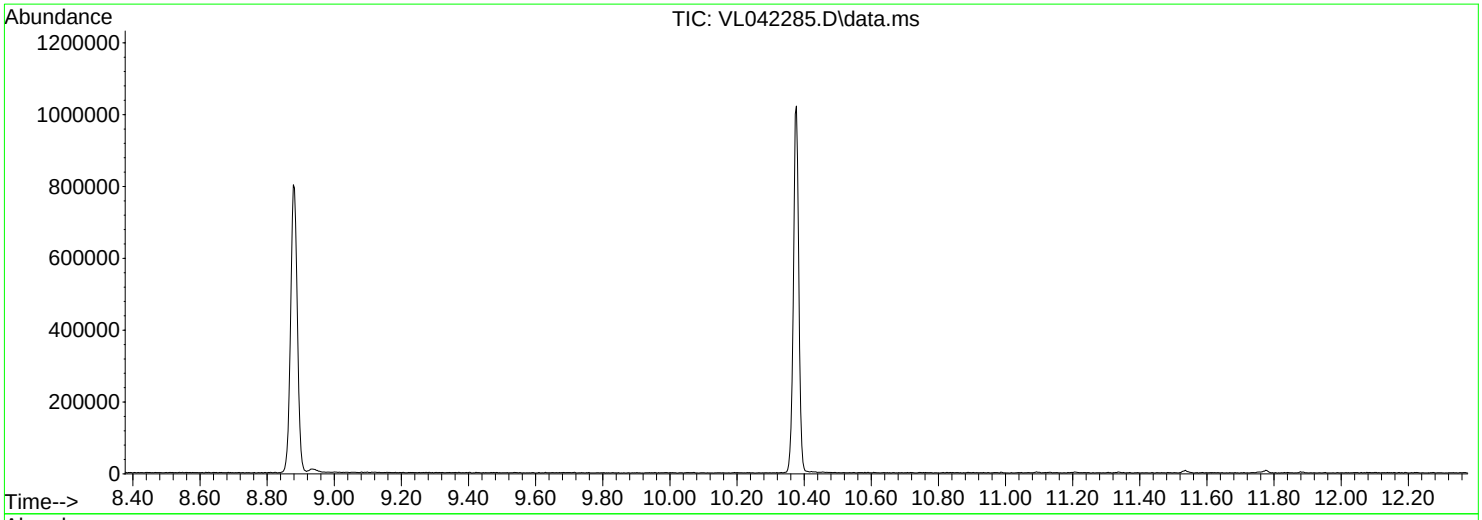
BFB

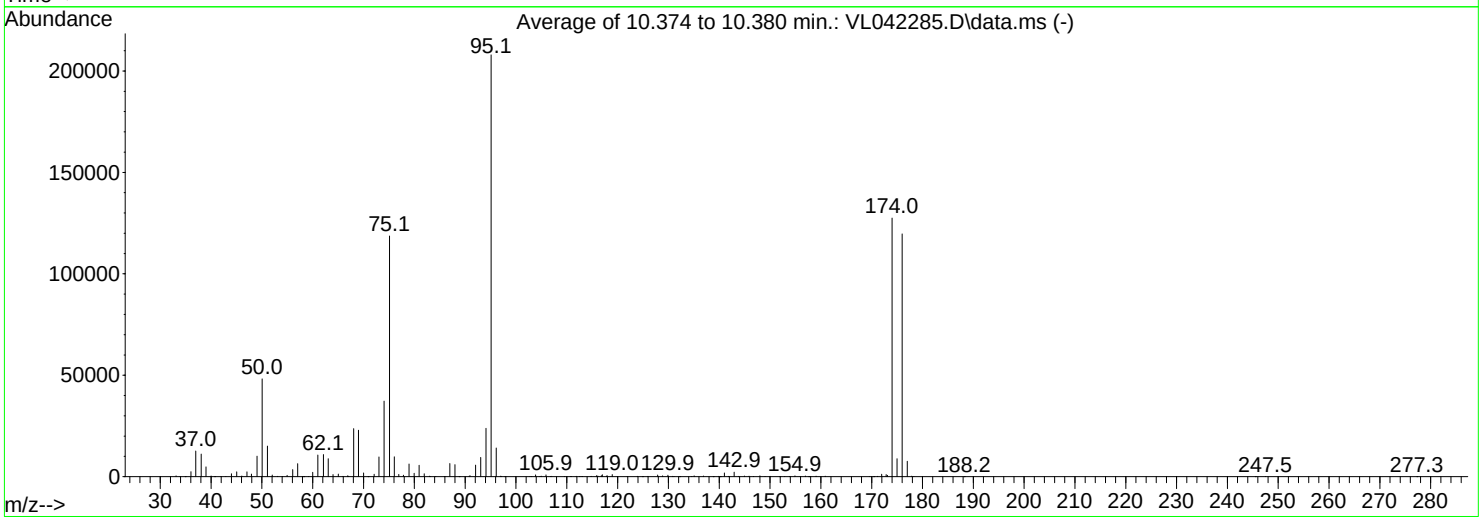
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042285.D
Acq On : 09 Apr 2025 09:38
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025





AutoFind: Scans 3178, 3179, 3180; Background Corrected with Scan 3162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.2	48216	PASS
75	95	30	66	57.1	118680	PASS
95	95	100	100	100.0	207979	PASS
96	95	5	9	6.8	14091	PASS
173	174	0.00	2	0.8	1054	PASS
174	95	50	120	61.3	127477	PASS
175	174	4	9	6.9	8833	PASS
176	174	93	101	93.9	119656	PASS
177	176	5	9	6.4	7607	PASS

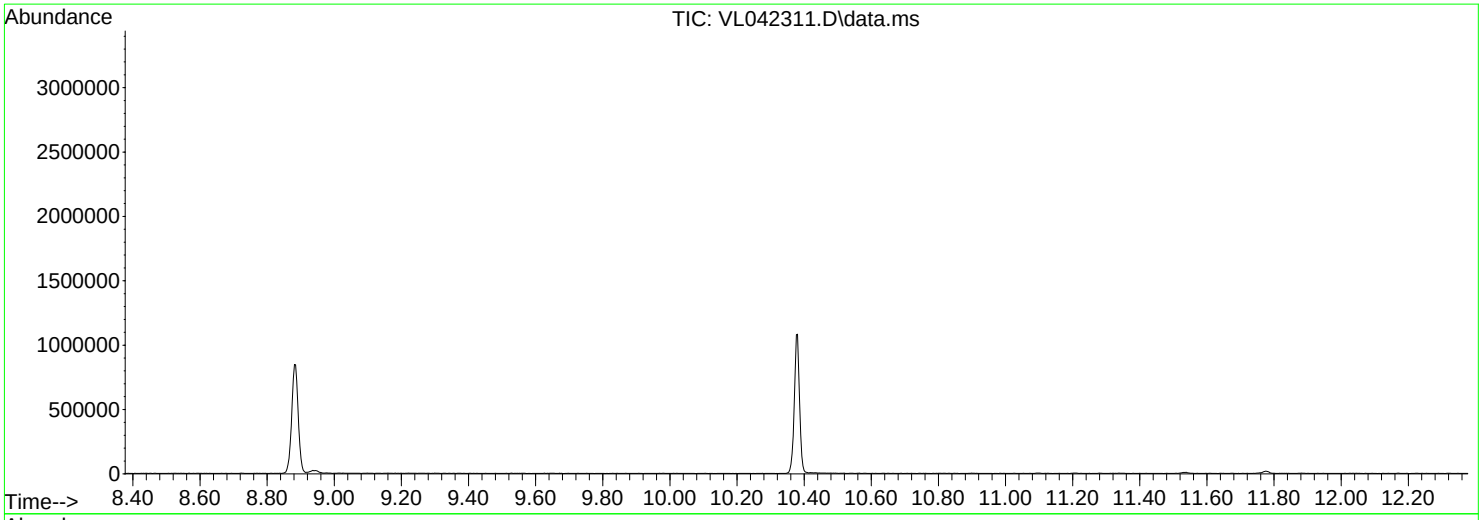
BFB

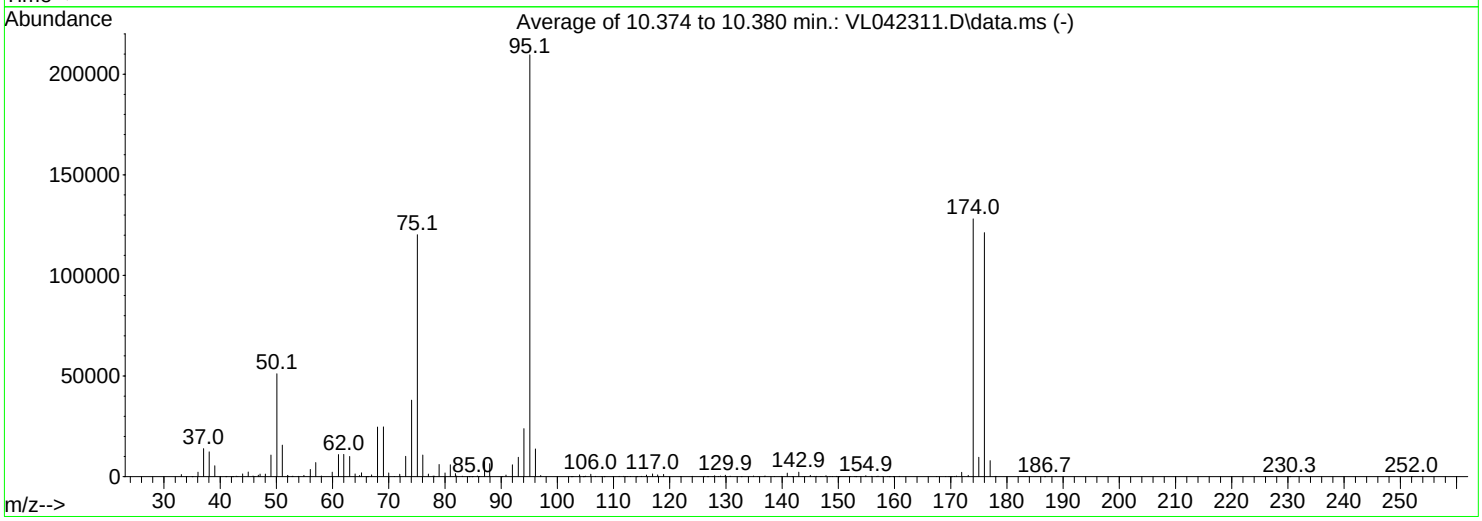
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042311.D
Acq On : 11 Apr 2025 08:18
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025





AutoFind: Scans 3178, 3179, 3180; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.4	51160	PASS
75	95	30	66	57.3	120195	PASS
95	95	100	100	100.0	209621	PASS
96	95	5	9	6.6	13755	PASS
173	174	0.00	2	0.5	631	PASS
174	95	50	120	61.1	128109	PASS
175	174	4	9	7.5	9591	PASS
176	174	93	101	94.7	121299	PASS
177	176	5	9	6.6	7977	PASS

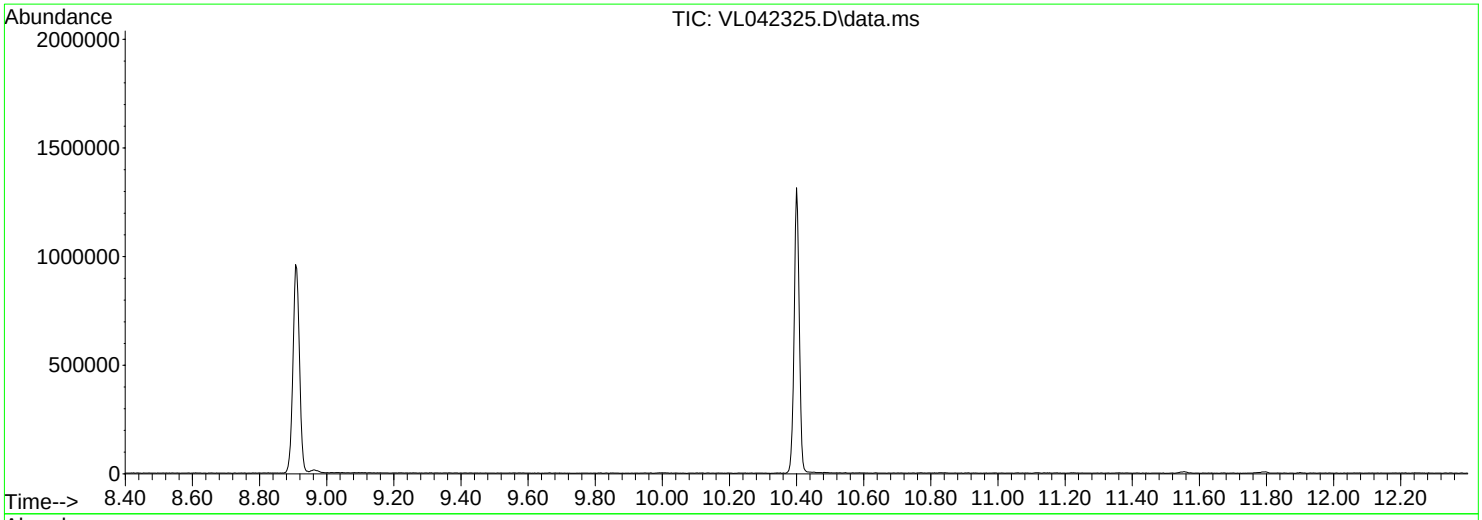
BFB

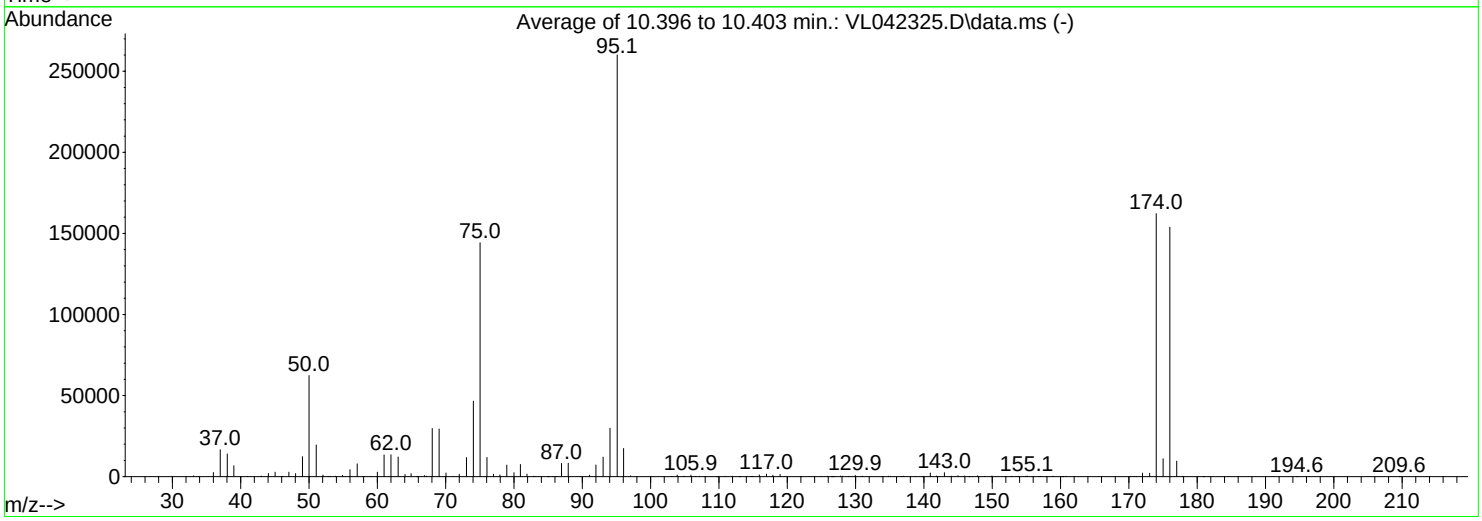
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042325.D
Acq On : 15 Apr 2025 07:45
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Mar 28 02:00:52 2025





AutoFind: Scans 3185, 3186, 3187; Background Corrected with Scan 3171

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.0	62363	PASS
75	95	30	66	55.5	144299	PASS
95	95	100	100	100.0	260117	PASS
96	95	5	9	6.7	17331	PASS
173	174	0.00	2	1.3	2038	PASS
174	95	50	120	62.4	162261	PASS
175	174	4	9	6.8	11092	PASS
176	174	93	101	94.8	153792	PASS
177	176	5	9	6.2	9603	PASS

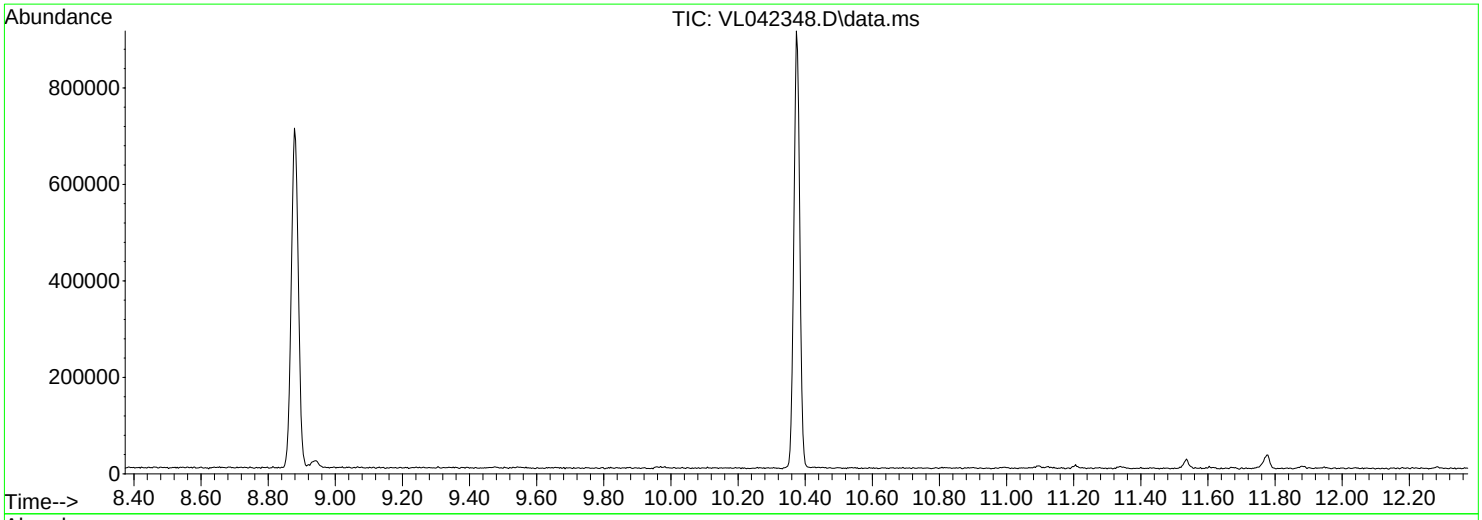
BFB

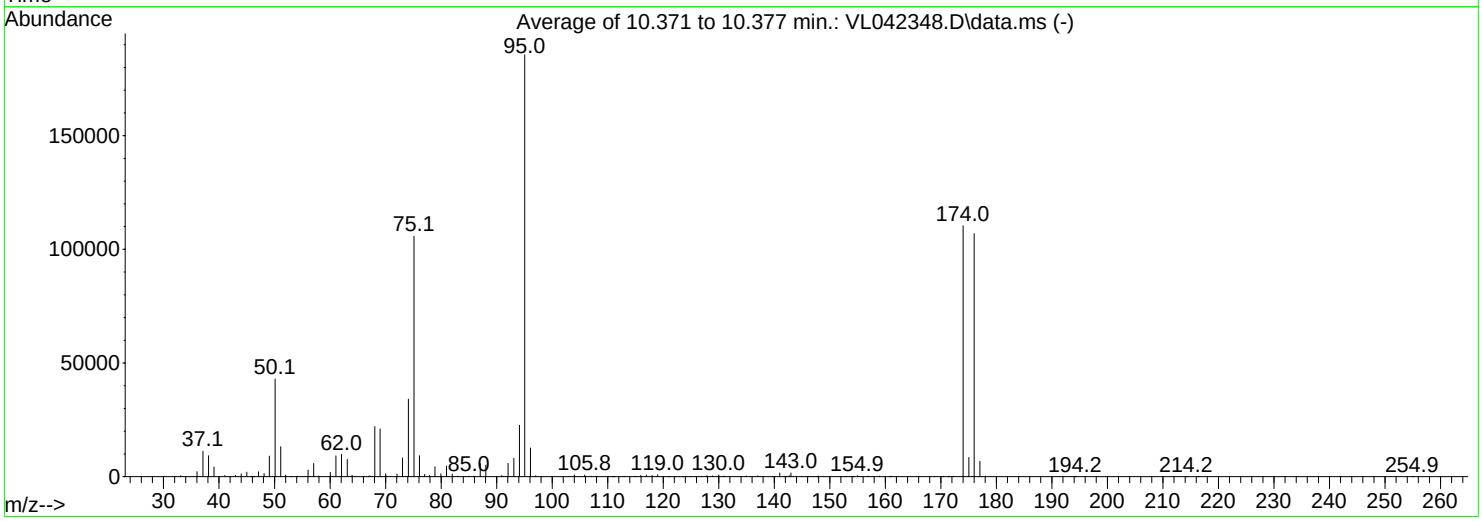
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042348.D
Acq On : 17 Apr 2025 07:50
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Apr 18 02:14:00 2025





AutoFind: Scans 3177, 3178, 3179; Background Corrected with Scan 3162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.1	42933	PASS
75	95	30	66	57.0	105781	PASS
95	95	100	100	100.0	185564	PASS
96	95	5	9	6.8	12627	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	59.5	110360	PASS
175	174	4	9	7.6	8420	PASS
176	174	93	101	96.9	106933	PASS
177	176	5	9	6.3	6744	PASS

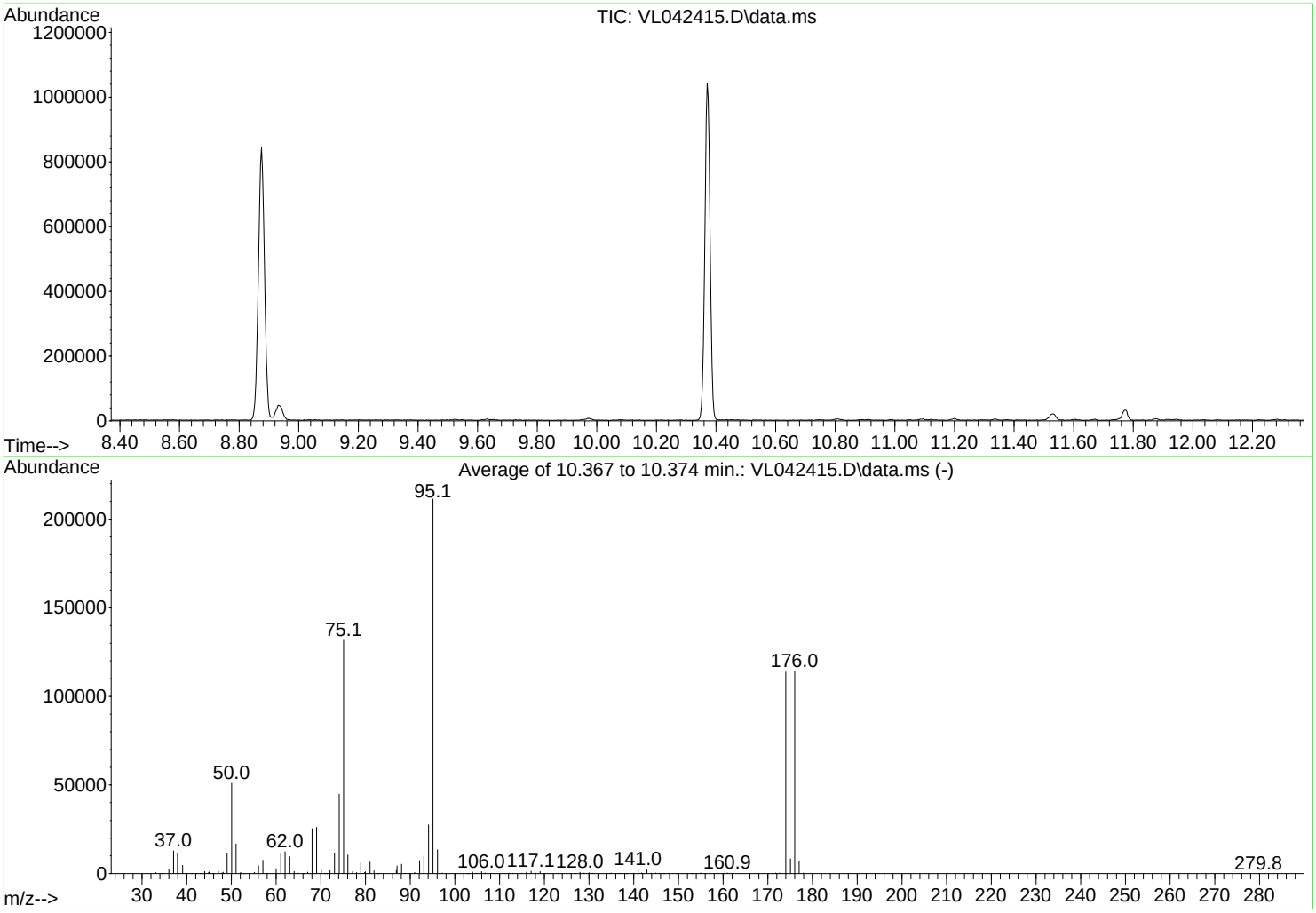
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042415.D
Acq On : 28 Apr 2025 07:59
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Apr 18 02:14:00 2025



AutoFind: Scans 3176, 3177, 3178; Background Corrected with Scan 3156

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	24.1	51000	PASS
75	95	30	66	62.3	131741	PASS
95	95	100	100	100.0	211371	PASS
96	95	5	9	6.4	13514	PASS
173	174	0.00	2	0.2	277	PASS
174	95	50	120	53.8	113779	PASS
175	174	4	9	7.3	8346	PASS
176	174	93	101	100.2	114021	PASS
177	176	5	9	6.1	6921	PASS

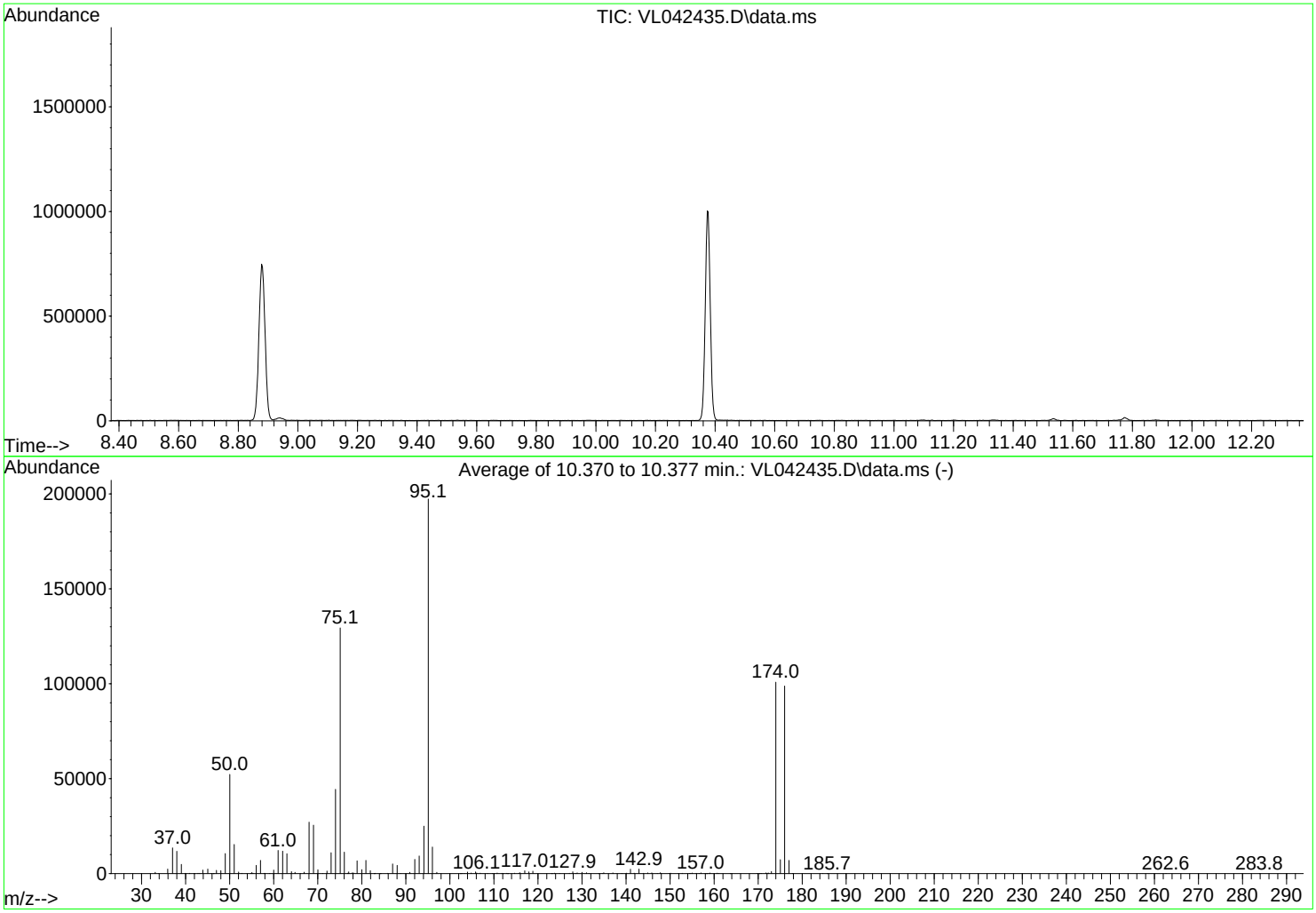
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042435.D
Acq On : 29 Apr 2025 07:55
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Fri Apr 18 02:14:00 2025



AutoFind: Scans 3177, 3178, 3179; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	26.5	52245	PASS
75	95	30	66	65.6	129440	PASS
95	95	100	100	100.0	197333	PASS
96	95	5	9	7.1	14000	PASS
173	174	0.00	2	1.1	1121	PASS
174	95	50	120	51.1	100867	PASS
175	174	4	9	7.3	7342	PASS
176	174	93	101	98.0	98848	PASS
177	176	5	9	7.0	6939	PASS

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0409ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042287.D	1		04/09/25 11:03	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0409ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042287.D	1		04/09/25 11:03	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	157000		2.784			
540-36-3	1,4-Difluorobenzene	392000		3.955			
3114-55-4	Chlorobenzene-d5	334000		8.878			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0409ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042287.D	1		04/09/25 11:03	VL040925

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

Quant Time: Apr 10 01:40:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

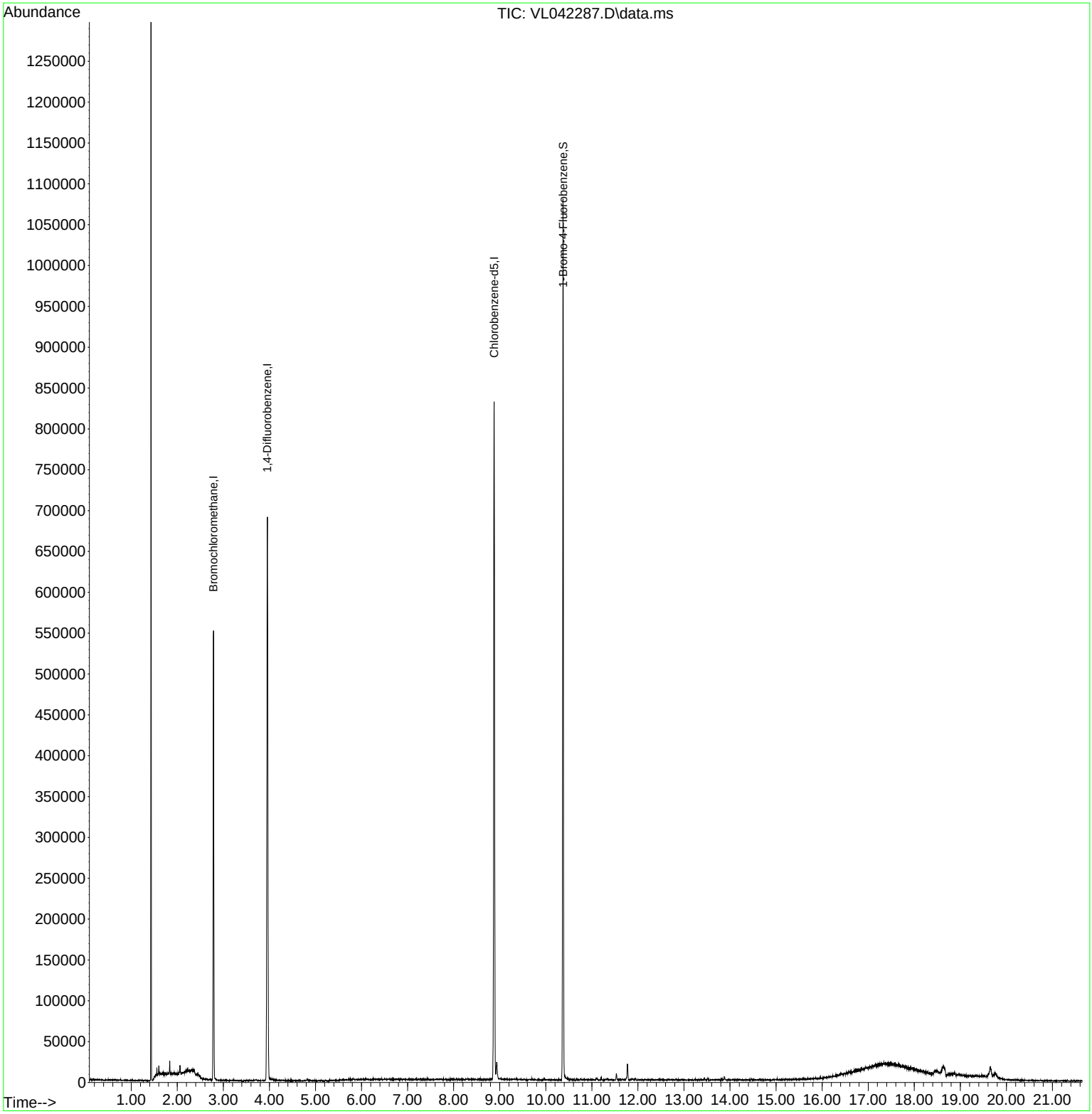
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	156784	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	391570	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	334054	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	250420	9.128	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.300%			
Target Compounds						Qvalue

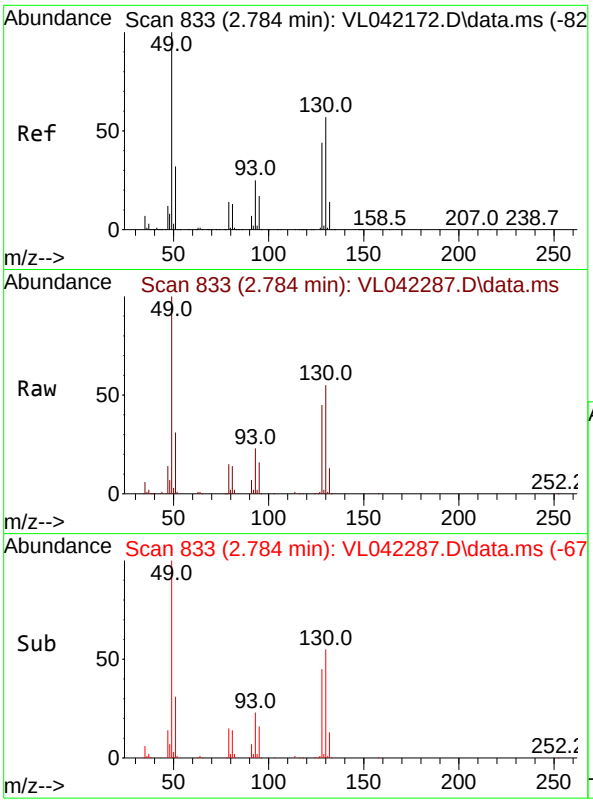
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

Quant Time: Apr 10 01:40:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



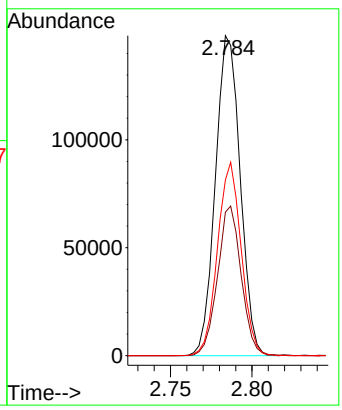


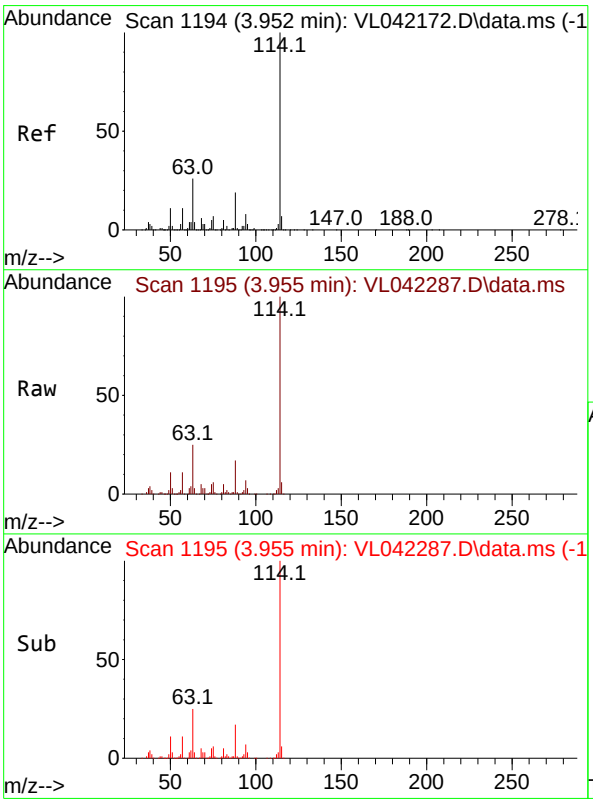
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042287.D
Acq: 09 Apr 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

Tgt Ion: 49 Resp: 156784

Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.9	68.5
130	57.7	28.8	86.4

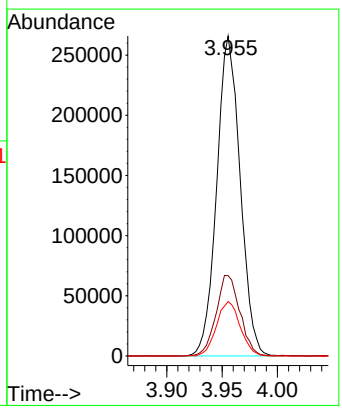


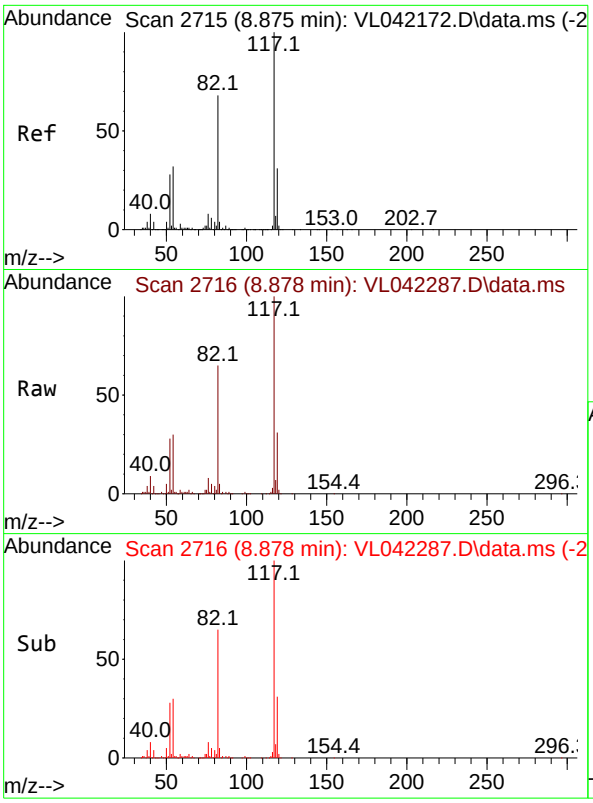


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042287.D
Acq: 09 Apr 2025 11:03

Tgt Ion:114 Resp: 391570

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.2	15.0	22.4



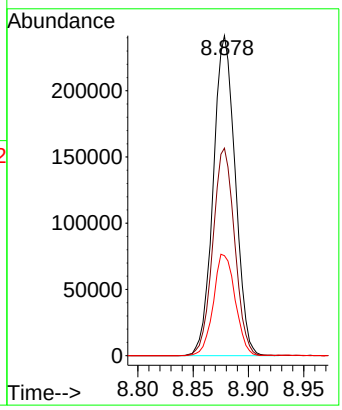


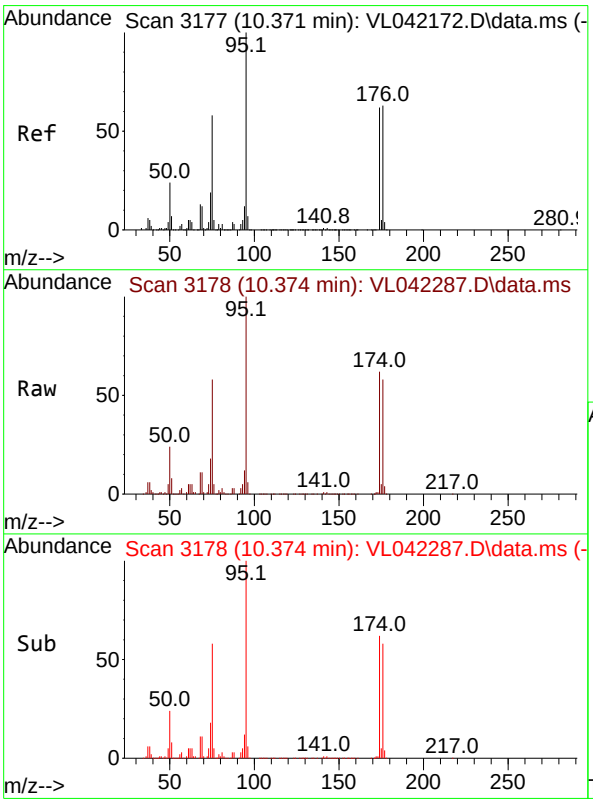
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042287.D
Acq: 09 Apr 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

Tgt Ion:117 Resp: 334054

Ion	Ratio	Lower	Upper
117	100		
82	64.5	55.8	83.6
119	31.5	25.5	38.3

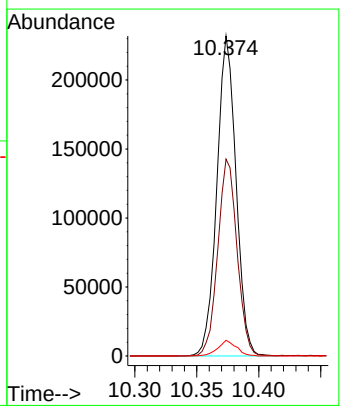




#68
1-Bromo-4-Fluorobenzene
Concen: 9.128 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042287.D
Acq: 09 Apr 2025 11:03

Tgt Ion: 95 Resp: 250420

Ion	Ratio	Lower	Upper
95	100		
174	62.0	50.6	76.0
175	4.7	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

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

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

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

Signal : TIC: VL042287.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	410	415	419	rBV	1536698	882097	74.58%	17.953%
2	2.787	825	834	843	rBV	550211	583696	49.35%	11.880%
3	3.955	1179	1195	1209	rBV	689815	1037158	87.68%	21.109%
4	8.878	2704	2716	2726	rBV	829493	1166426	98.61%	23.740%
5	8.933	2726	2733	2745	rVB3	20701	34755	2.94%	0.707%
6	10.374	3167	3178	3188	rBV	1079284	1182823	100.00%	24.074%
7	11.772	3598	3610	3618	rVB4	19739	26381	2.23%	0.537%

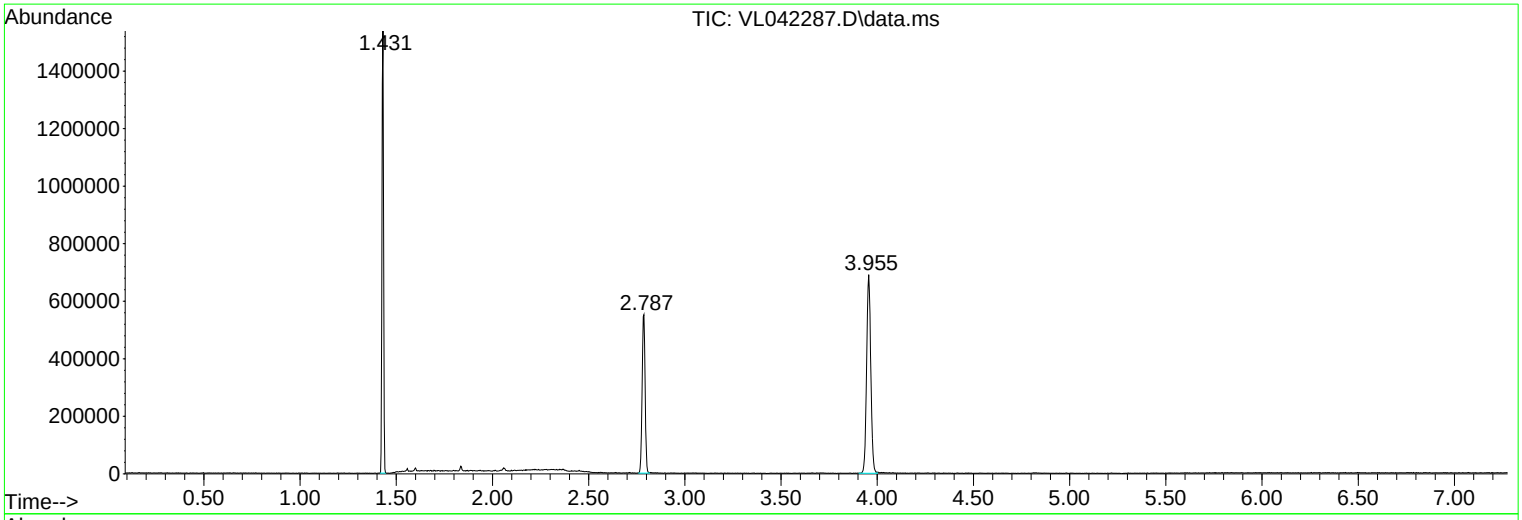
Sum of corrected areas: 4913336

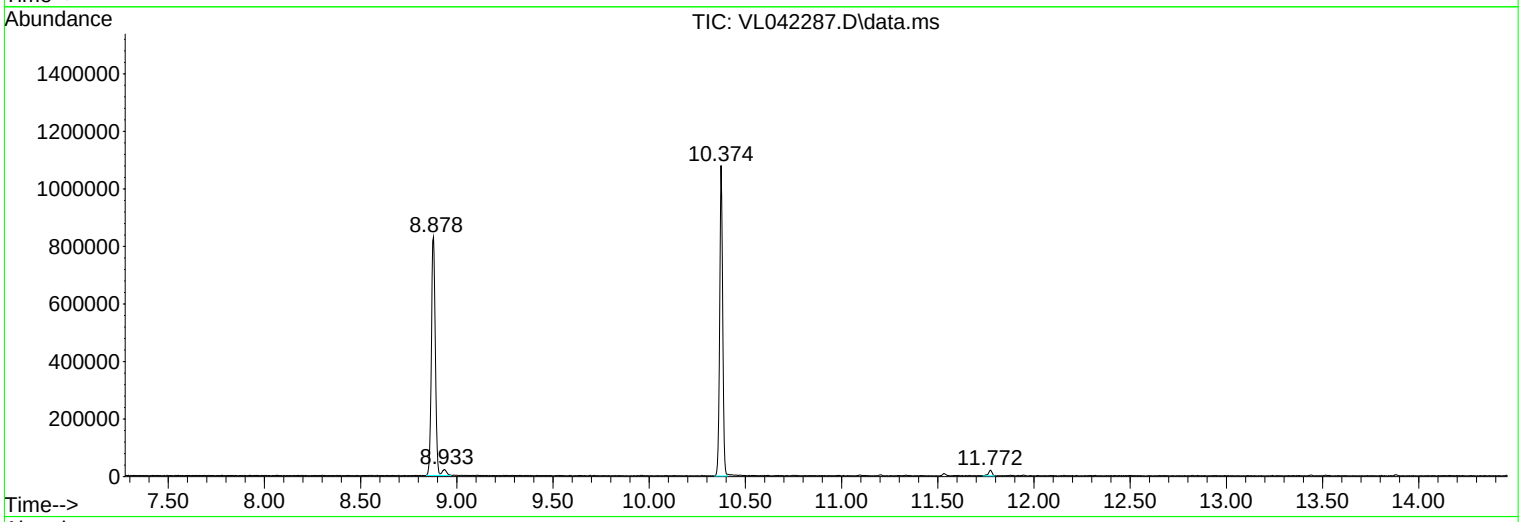
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

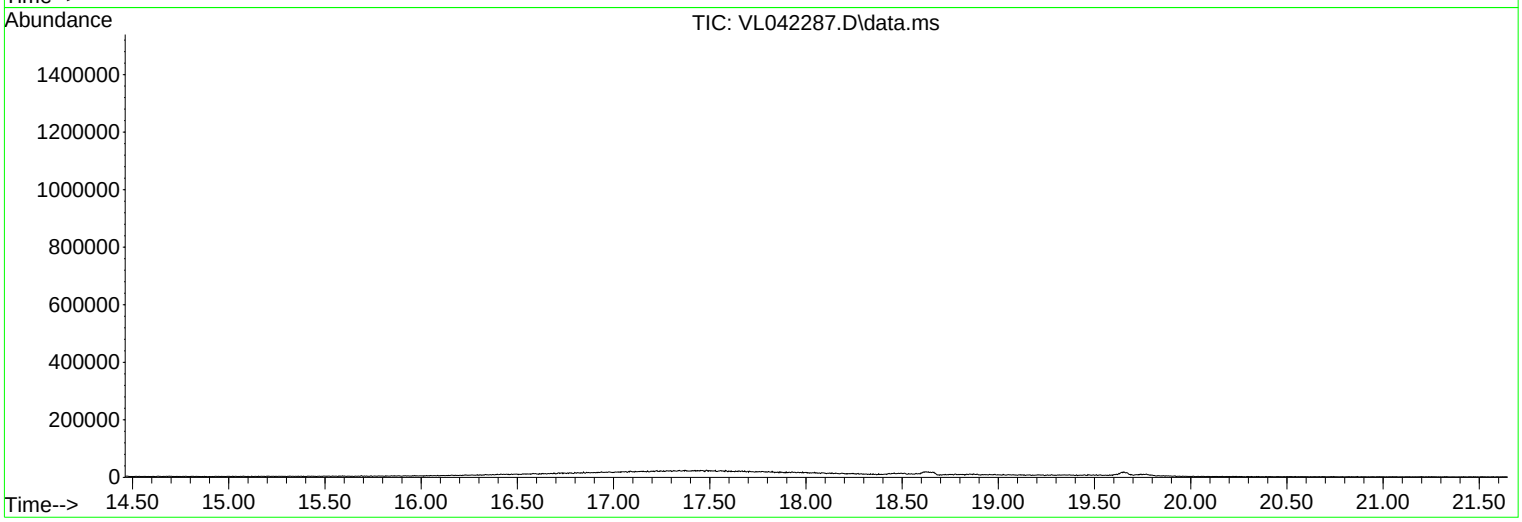
Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

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

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

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

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042287.D
Acq On : 09 Apr 2025 11:03
Operator : SY/MD
Sample : VL0409ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABL01

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042313.D	1		04/11/25 10:36	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042313.D	1		04/11/25 10:36	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.10			70 (65) - 130 (135)	91%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	180000		2.79			
540-36-3	1,4-Difluorobenzene	445000		3.962			
3114-55-4	Chlorobenzene-d5	374000		8.885			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042313.D	1		04/11/25 10:36	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

Quant Time: Apr 11 22:57:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

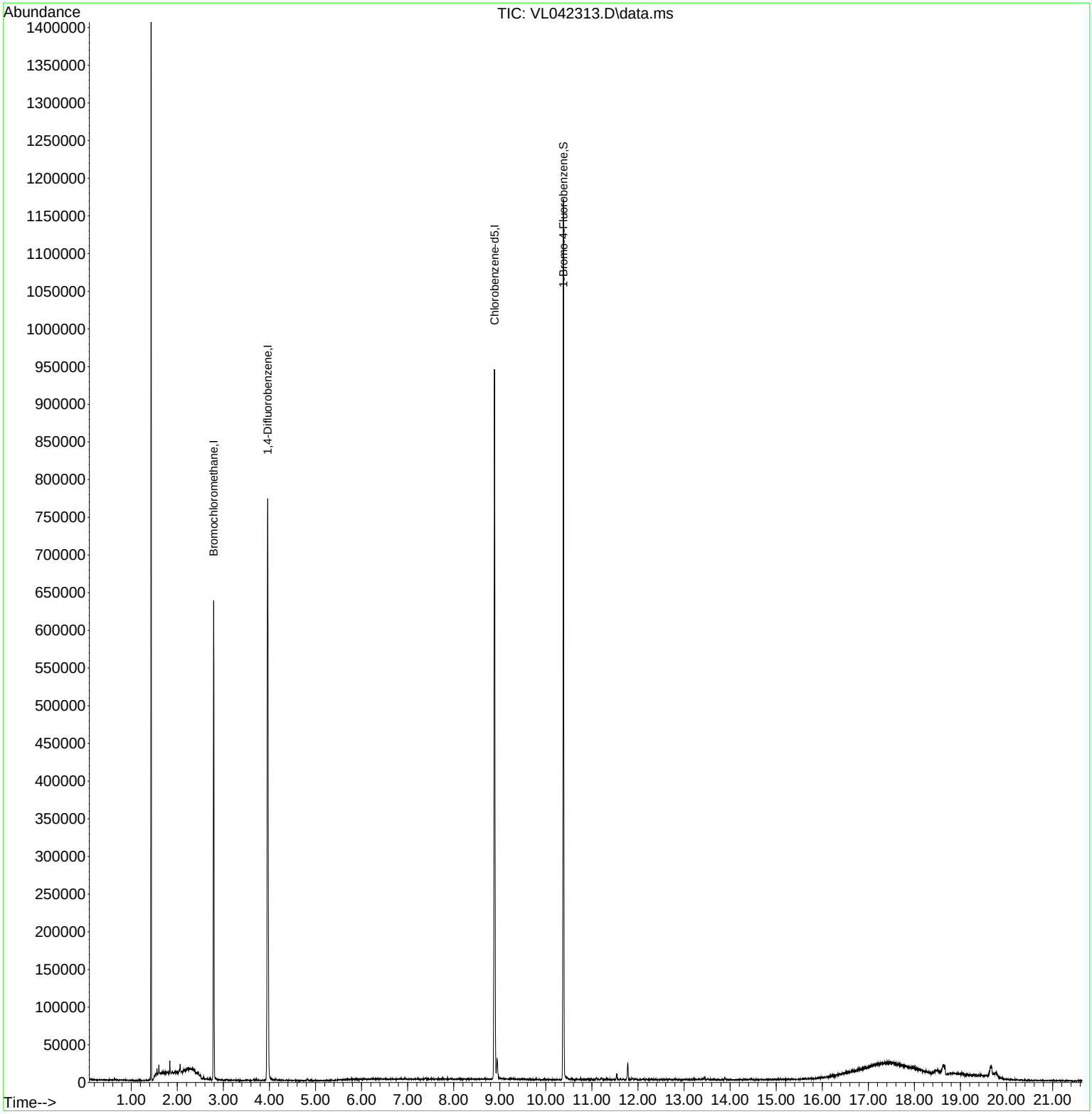
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	180225	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	445487	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	373548	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	277731	9.054	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 90.500%			
Target Compounds						Qvalue

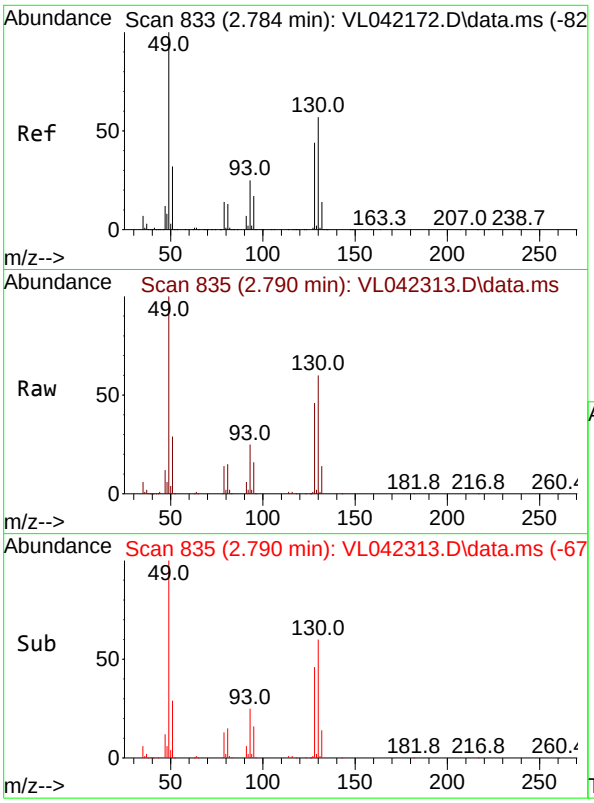
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

Quant Time: Apr 11 22:57:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



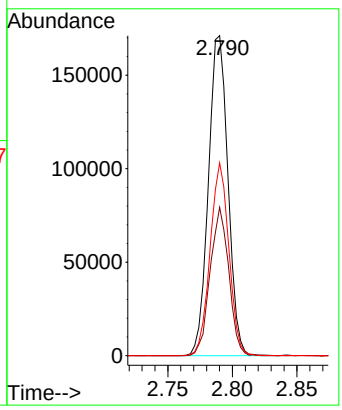


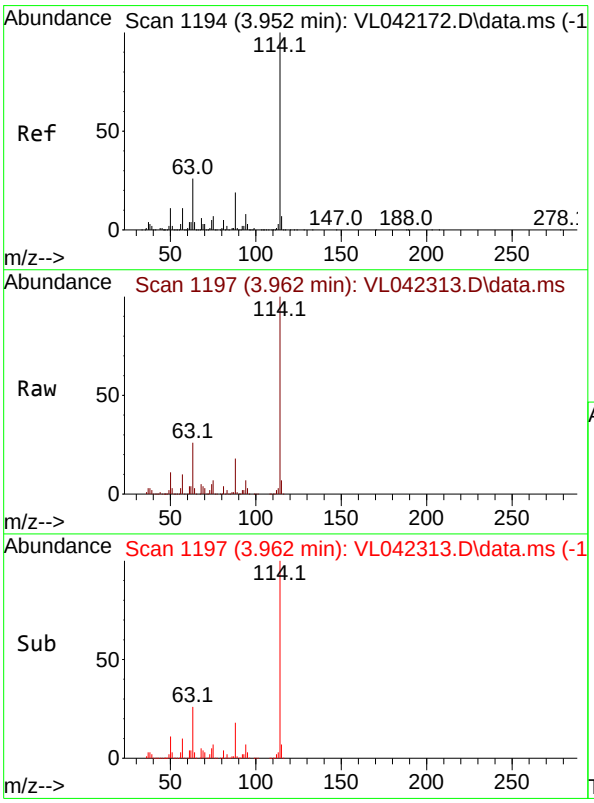
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042313.D
Acq: 11 Apr 2025 10:36

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

Tgt Ion: 49 Resp: 180225

Ion	Ratio	Lower	Upper
49	100		
128	44.2	22.9	68.5
130	57.8	28.8	86.4

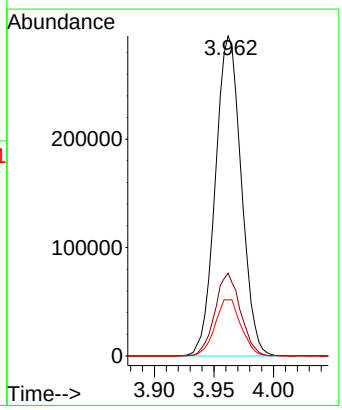


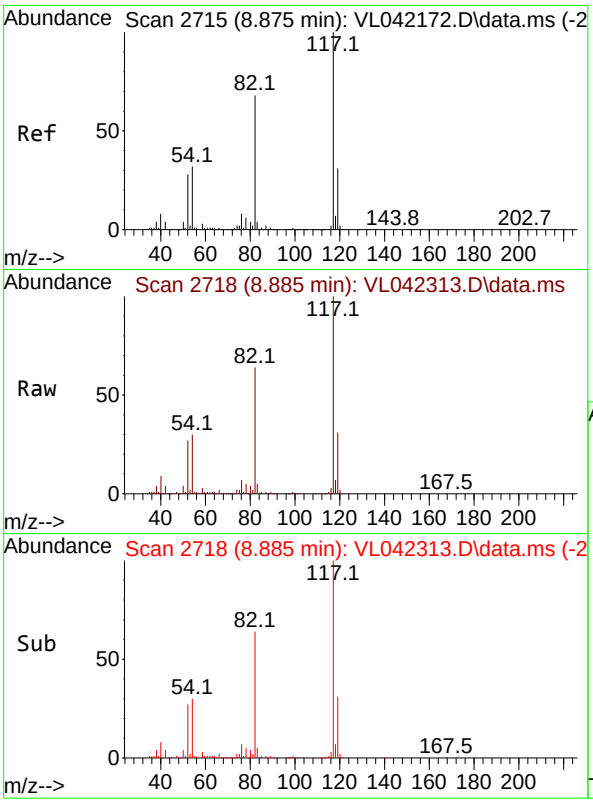


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.009 min
Lab File: VL042313.D
Acq: 11 Apr 2025 10:36

Tgt Ion:114 Resp: 445487

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.8	15.0	22.4



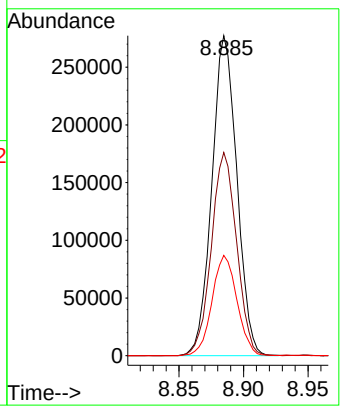


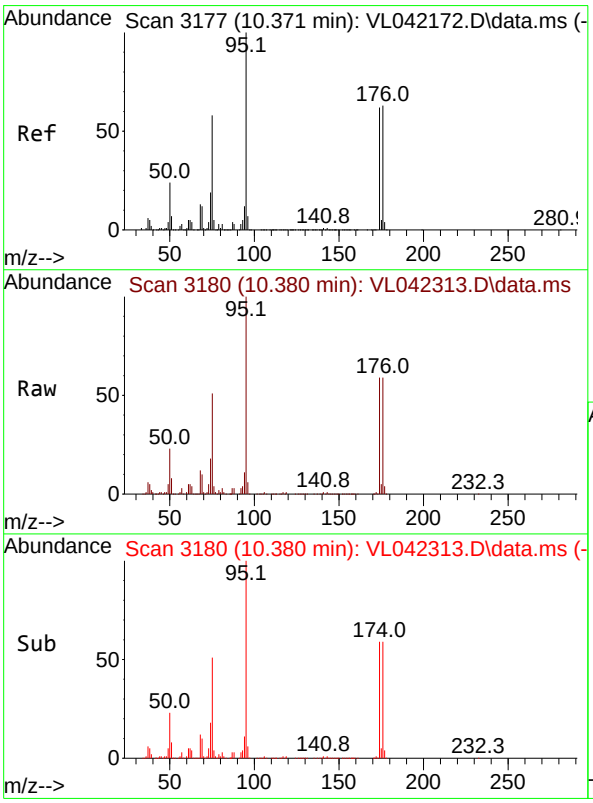
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042313.D
Acq: 11 Apr 2025 10:36

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

Tgt Ion:117 Resp: 373548

Ion	Ratio	Lower	Upper
117	100		
82	64.2	55.8	83.6
119	31.6	25.5	38.3

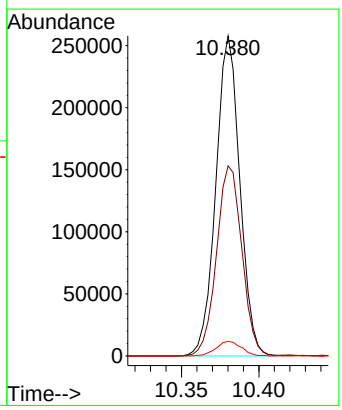




#68
1-Bromo-4-Fluorobenzene
Concen: 9.054 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.009 min
Lab File: VL042313.D
Acq: 11 Apr 2025 10:36

Tgt Ion: 95 Resp: 277731

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.9	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

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

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

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

Signal : TIC: VL042313.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	411	415	420	rVB	1990683	1197691	91.53%	20.924%
2	2.790	825	835	844	rBV	635966	666008	50.90%	11.636%
3	3.962	1181	1197	1213	rBV	772287	1184615	90.53%	20.696%
4	8.885	2706	2718	2730	rBV	941712	1299252	99.29%	22.699%
5	8.943	2730	2736	2744	rVB5	25149	38683	2.96%	0.676%
6	10.380	3169	3180	3193	rBV	1168757	1308486	100.00%	22.860%
7	11.778	3601	3612	3618	rVB4	22305	29140	2.23%	0.509%

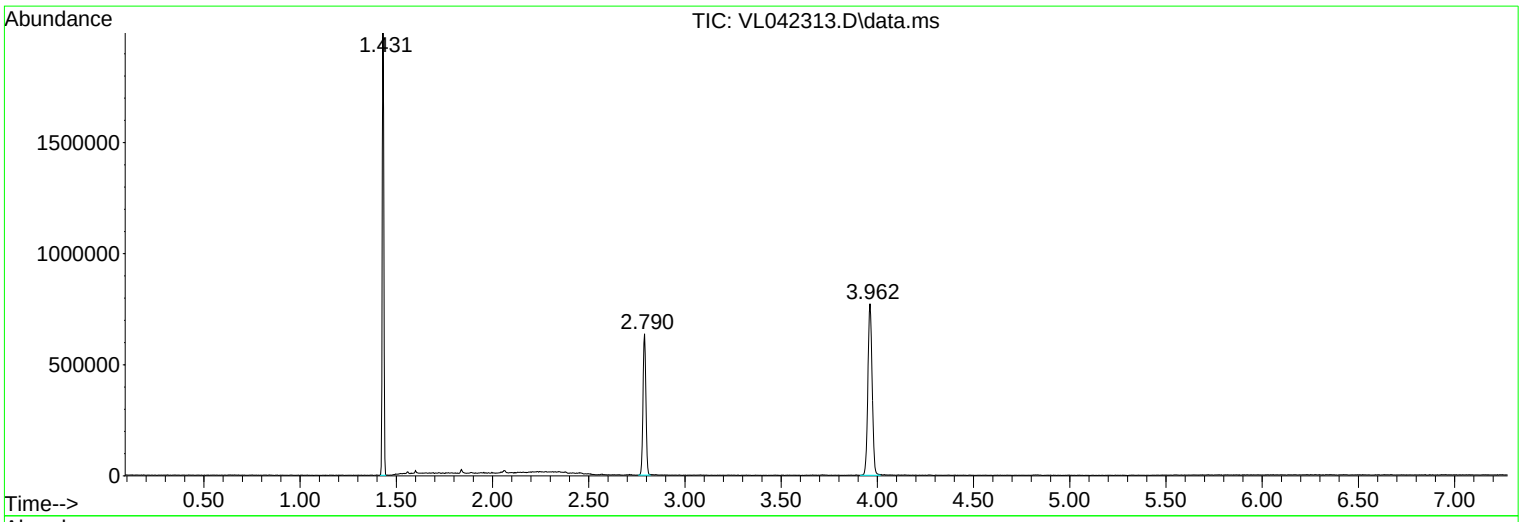
Sum of corrected areas: 5723875

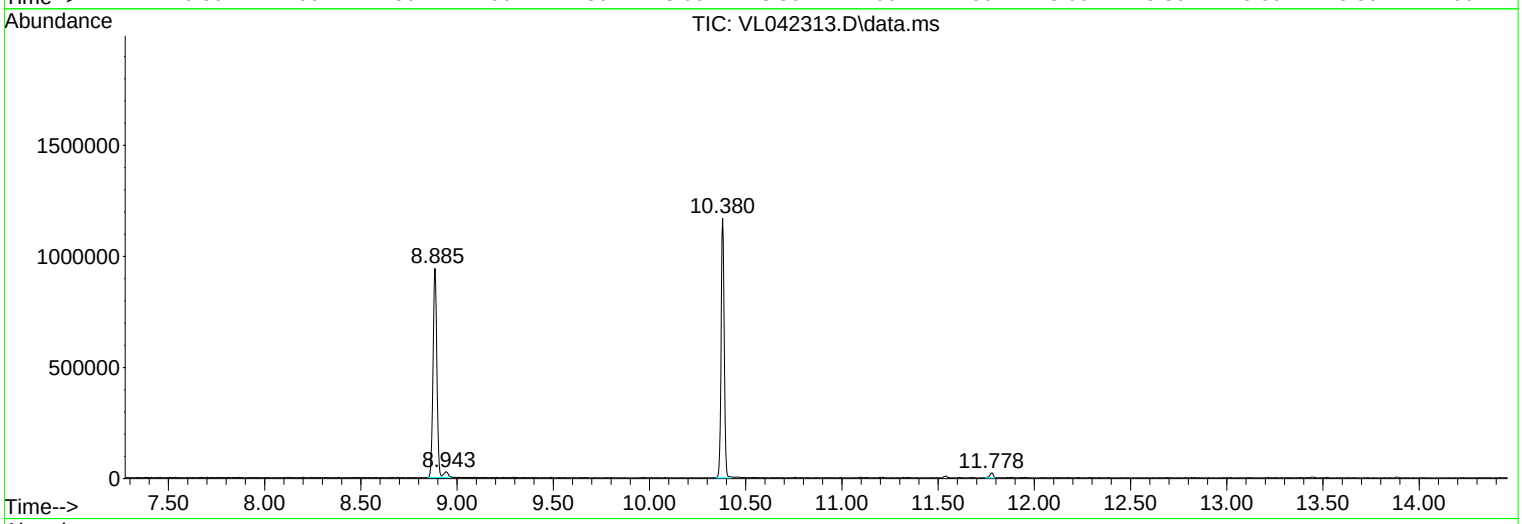
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

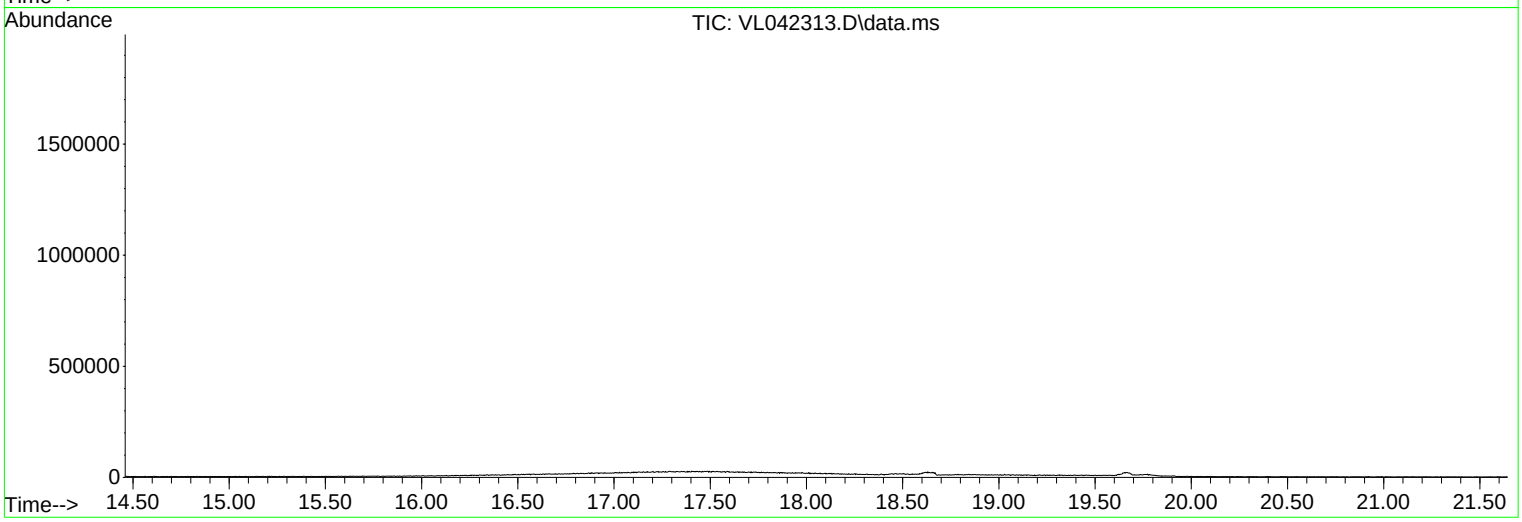
Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

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

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

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

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042313.D
Acq On : 11 Apr 2025 10:36
Operator : SY/MD
Sample : VL0411ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABL01

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

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042327.D	1		04/15/25 12:12	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042327.D	1		04/15/25 12:12	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.30			70 (65) - 130 (135)	93%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	174000		2.813			
540-36-3	1,4-Difluorobenzene	447000		3.994			
3114-55-4	Chlorobenzene-d5	385000		8.917			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042327.D	1		04/15/25 12:12	VL041525

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

Quant Time: Apr 16 01:30:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

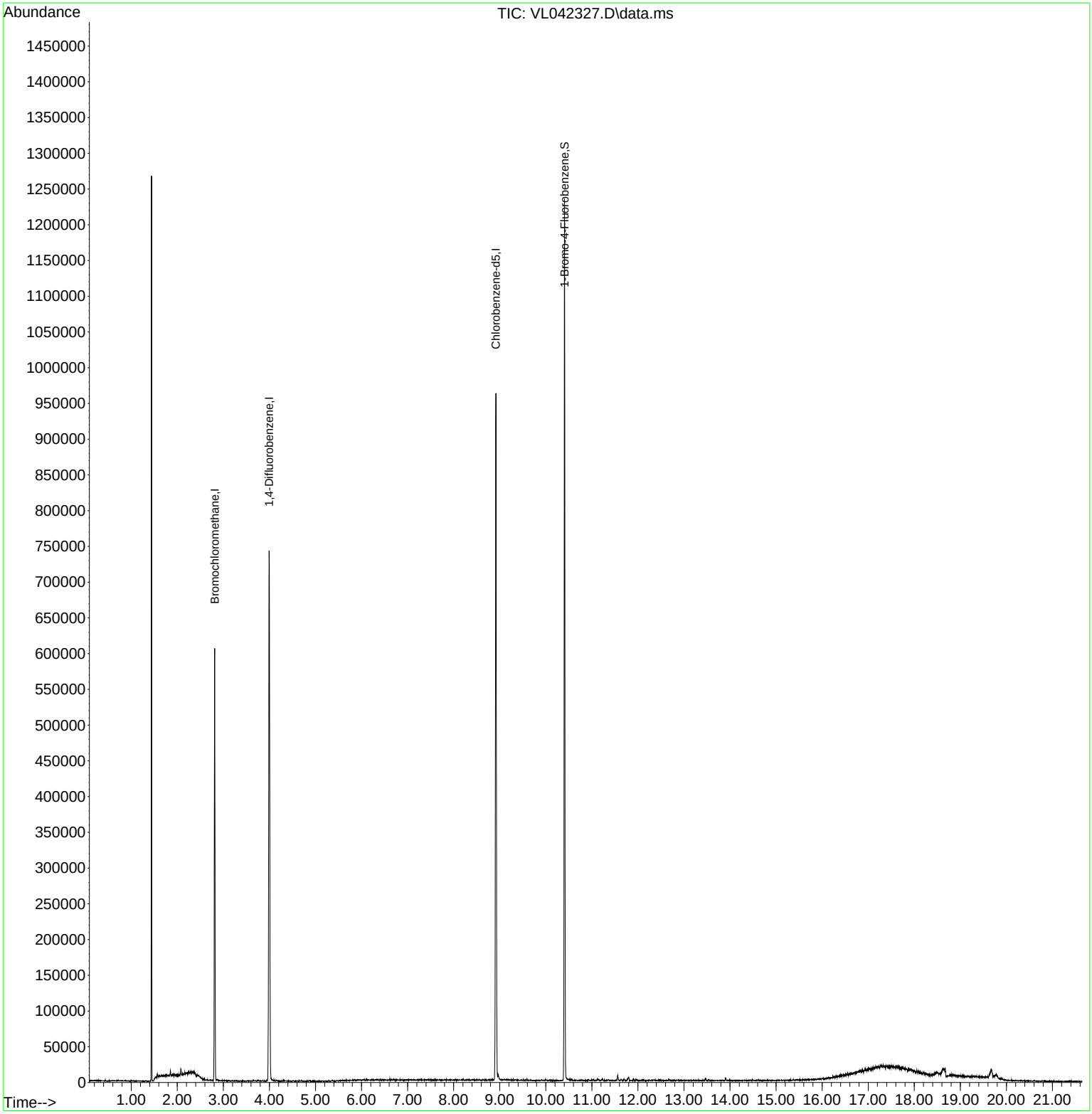
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.813	49	173729	10.000	ppbv	0.03
33) 1,4-Difluorobenzene	3.994	114	447320	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.917	117	385318	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.406	95	292759	9.252	ppbv	0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.500%			
Target Compounds						Qvalue

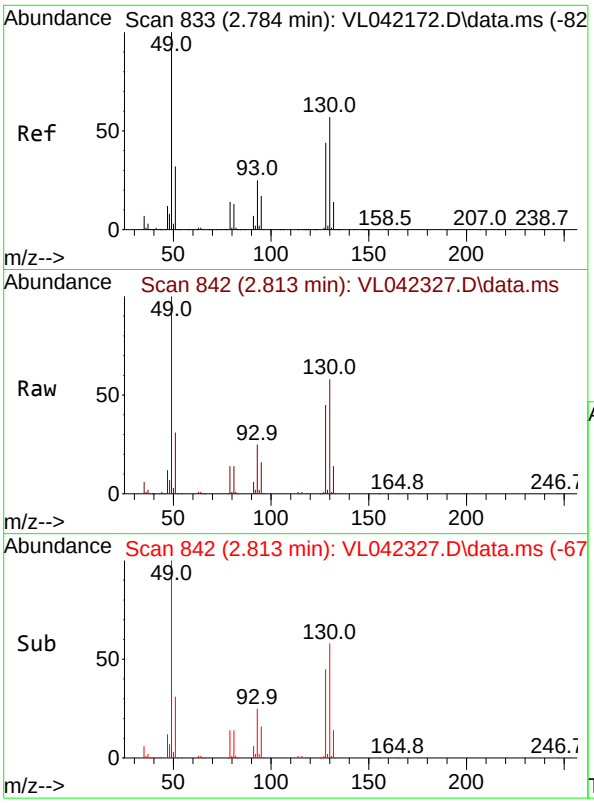
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

Quant Time: Apr 16 01:30:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



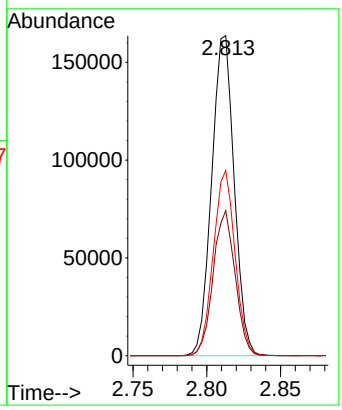


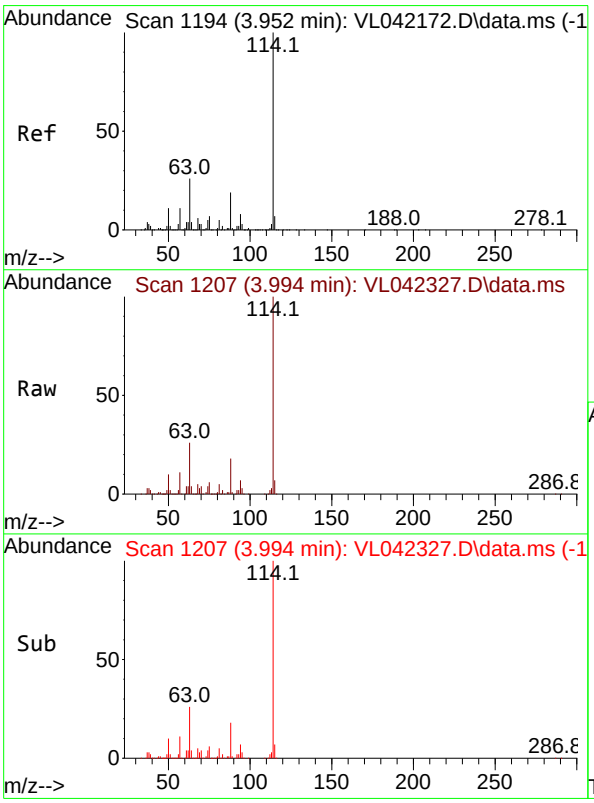
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.813 min Scan# 84
Delta R.T. 0.029 min
Lab File: VL042327.D
Acq: 15 Apr 2025 12:12

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

Tgt Ion: 49 Resp: 173729

Ion	Ratio	Lower	Upper
49	100		
128	44.3	22.9	68.5
130	56.2	28.8	86.4

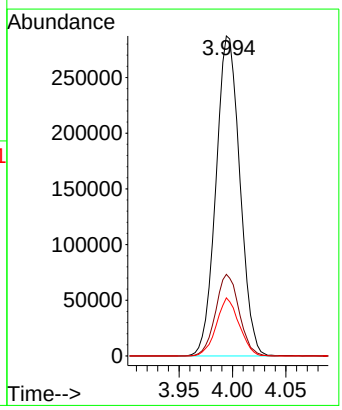


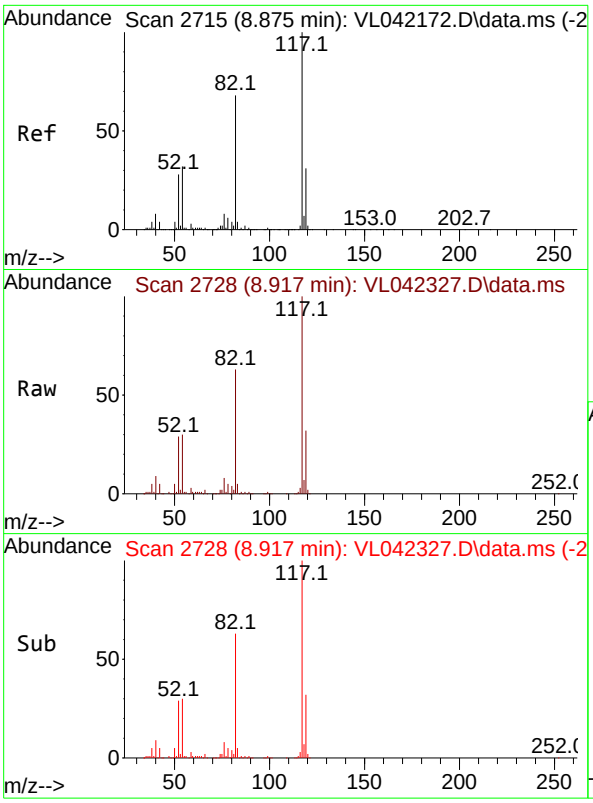


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.994 min Scan# 1207
Delta R.T. 0.042 min
Lab File: VL042327.D
Acq: 15 Apr 2025 12:12

Tgt Ion:114 Resp: 447320

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	17.3	15.0	22.4



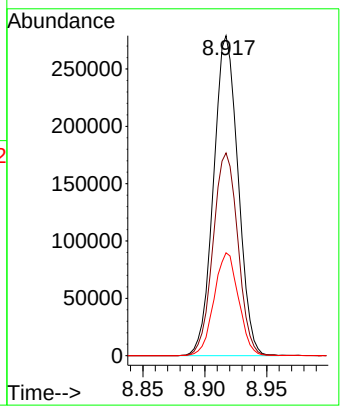


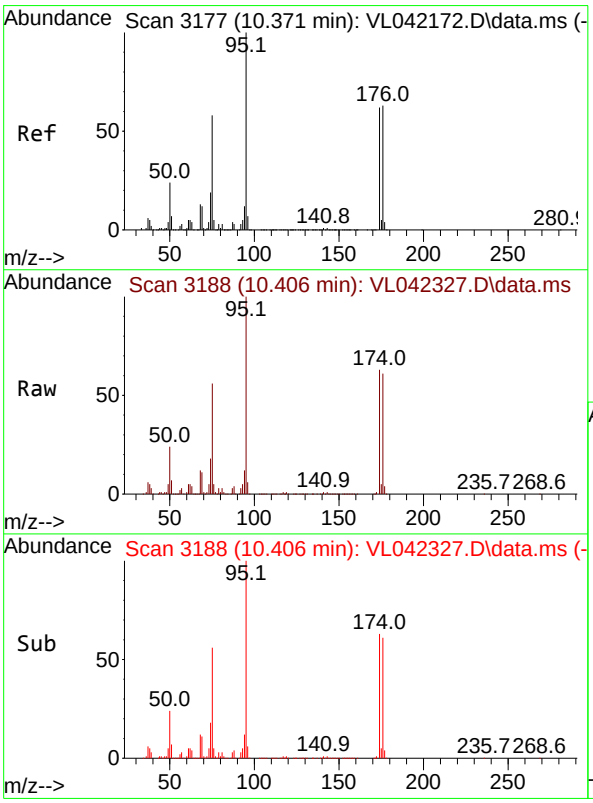
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042327.D
Acq: 15 Apr 2025 12:12

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

Tgt Ion:117 Resp: 385318

Ion	Ratio	Lower	Upper
117	100		
82	64.3	55.8	83.6
119	32.2	25.5	38.3

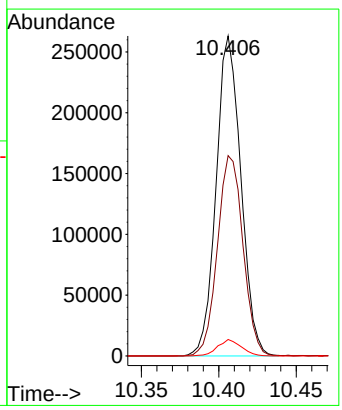




#68
1-Bromo-4-Fluorobenzene
Concen: 9.252 ppbv
RT: 10.406 min Scan# 3188
Delta R.T. 0.035 min
Lab File: VL042327.D
Acq: 15 Apr 2025 12:12

Tgt Ion: 95 Resp: 292759

Ion	Ratio	Lower	Upper
95	100		
174	64.8	50.6	76.0
175	4.9	3.8	5.6



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

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

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

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

Signal : TIC: VL042327.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.440	413	418	422	rBV	1265881	704065	50.36%	13.420%
2	2.813	832	842	850	rBV	605384	638413	45.66%	12.169%
3	3.994	1195	1207	1220	rBV	741875	1165038	83.32%	22.206%
4	8.917	2714	2728	2739	rBV	960985	1340727	95.89%	25.555%
5	10.406	3177	3188	3199	rBV	1233348	1398189	100.00%	26.650%

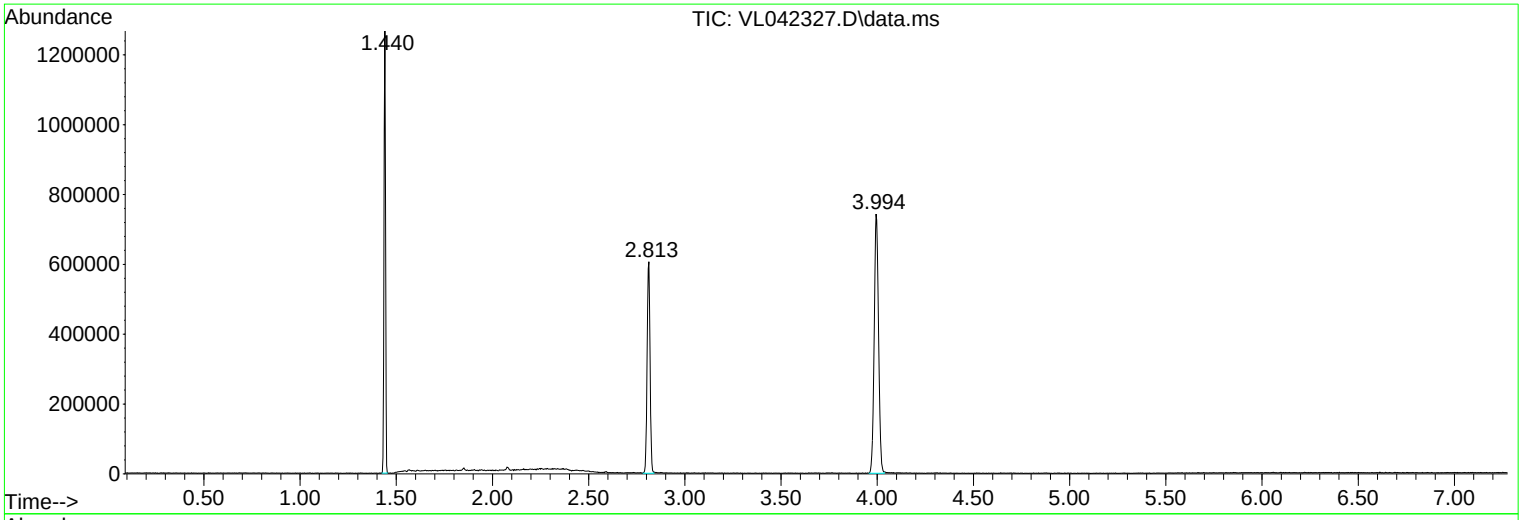
Sum of corrected areas: 5246432

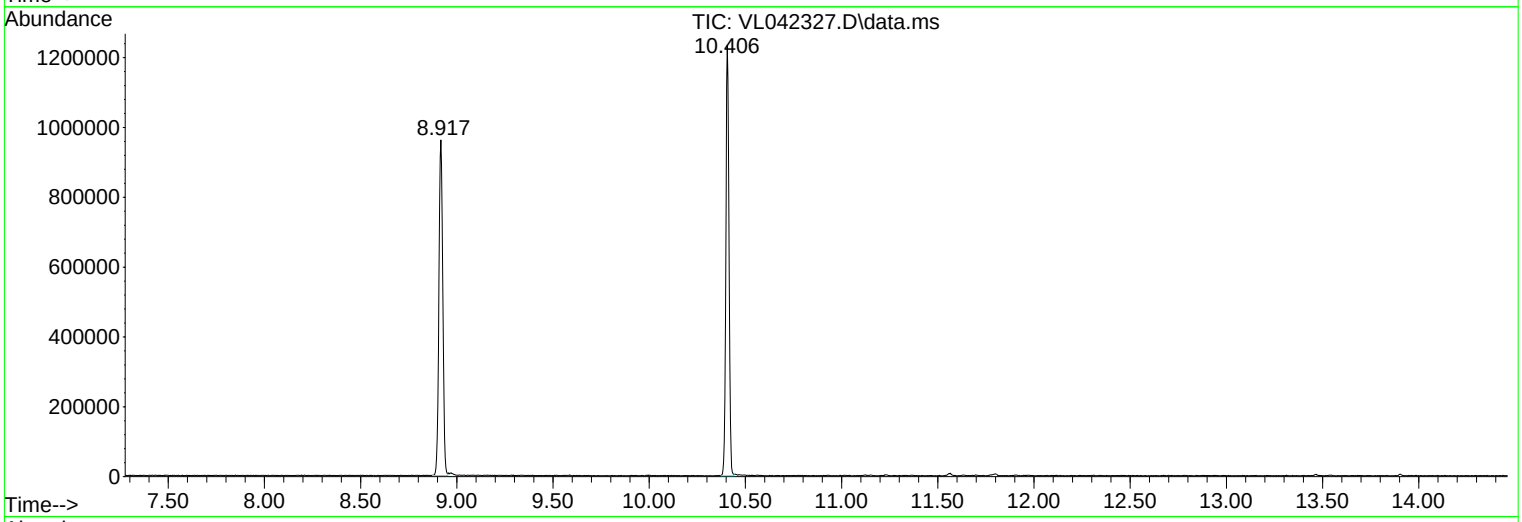
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

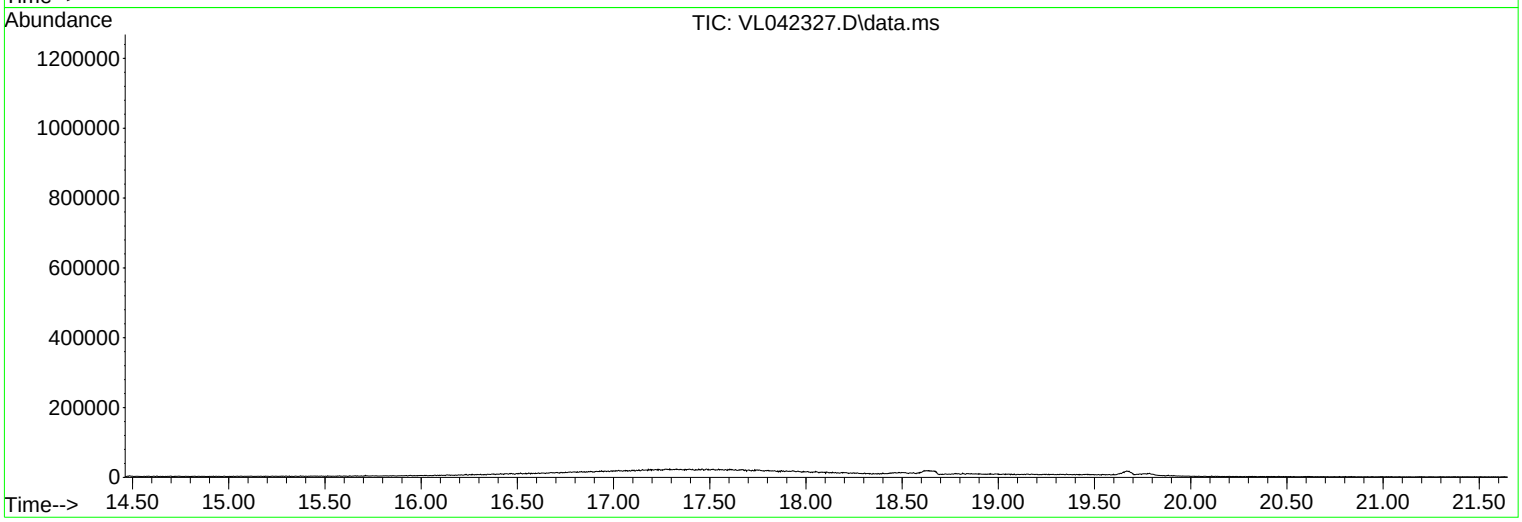
Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

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

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

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

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042327.D
Acq On : 15 Apr 2025 12:12
Operator : SY/MD
Sample : VL0415ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABL01

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

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042357.D	1		04/17/25 14:23	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042357.D	1		04/17/25 14:23	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	114000		2.79			
540-36-3	1,4-Difluorobenzene	329000		3.965			
3114-55-4	Chlorobenzene-d5	298000		8.885			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042357.D	1		04/17/25 14:23	VL041725

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Quant Time: Apr 18 02:36:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

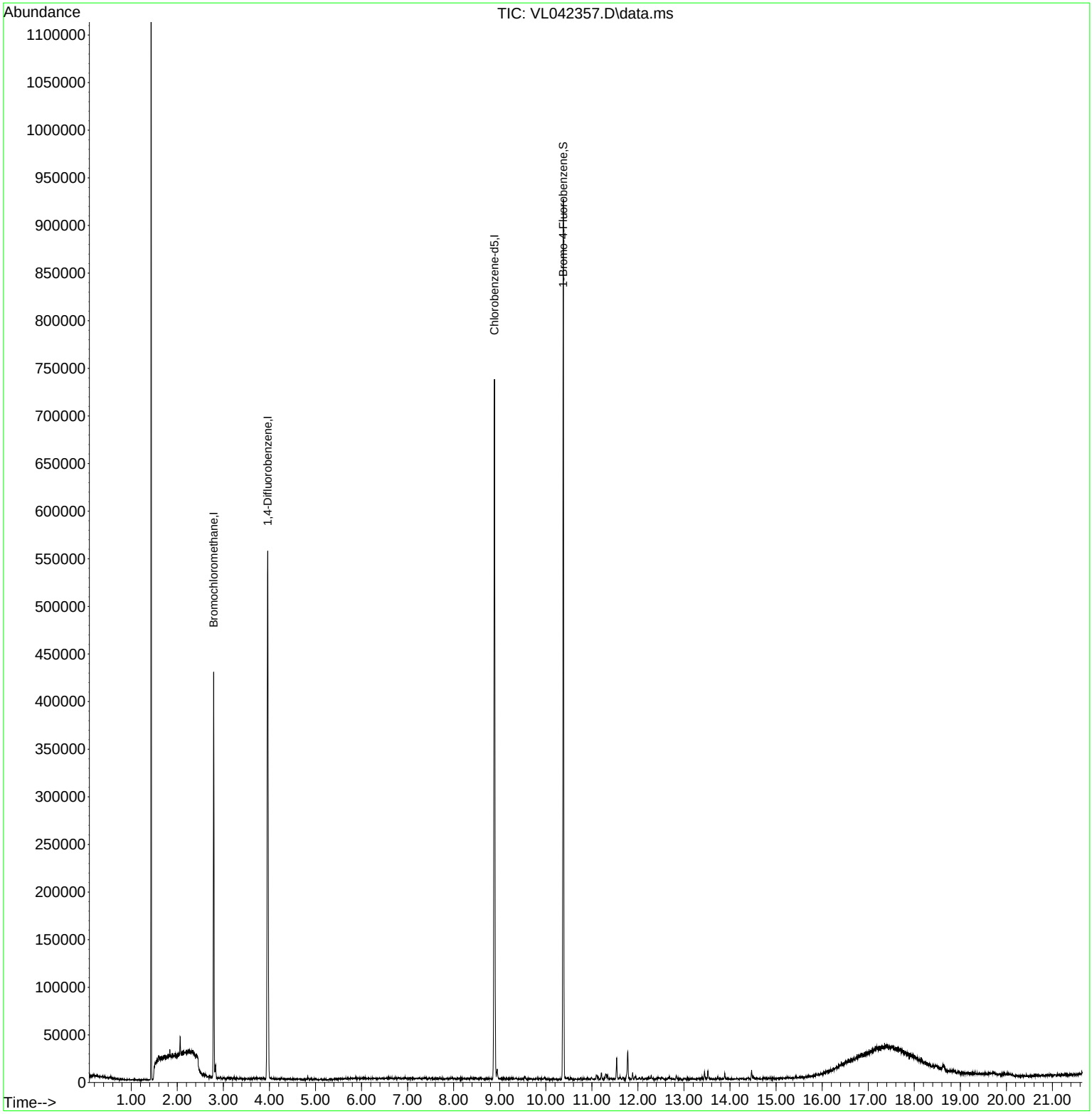
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	113566	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	328716	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	297633	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	247968	10.139	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.400%			
Target Compounds						Qvalue

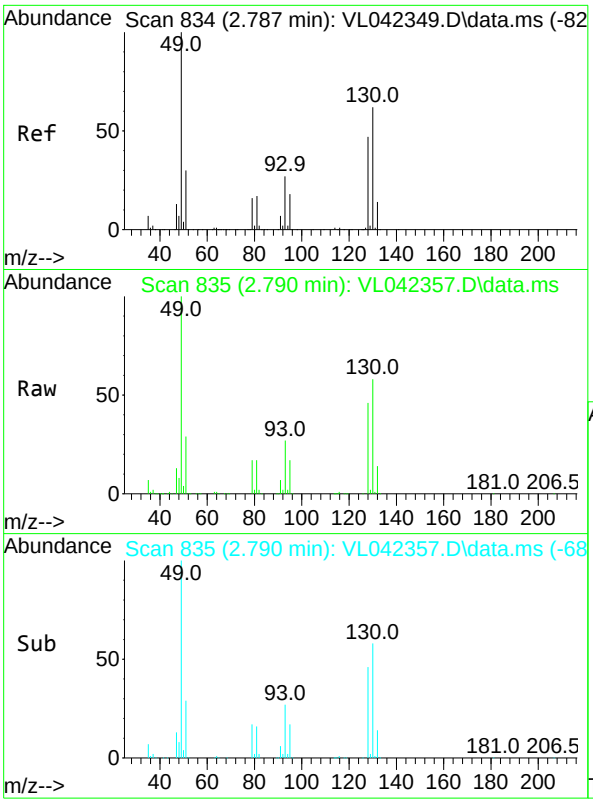
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Quant Time: Apr 18 02:36:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



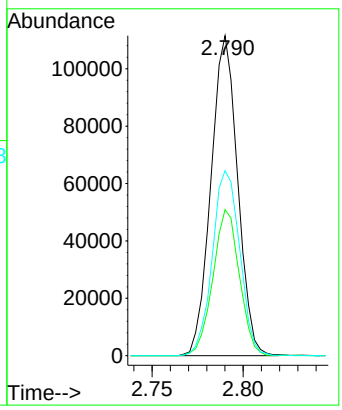


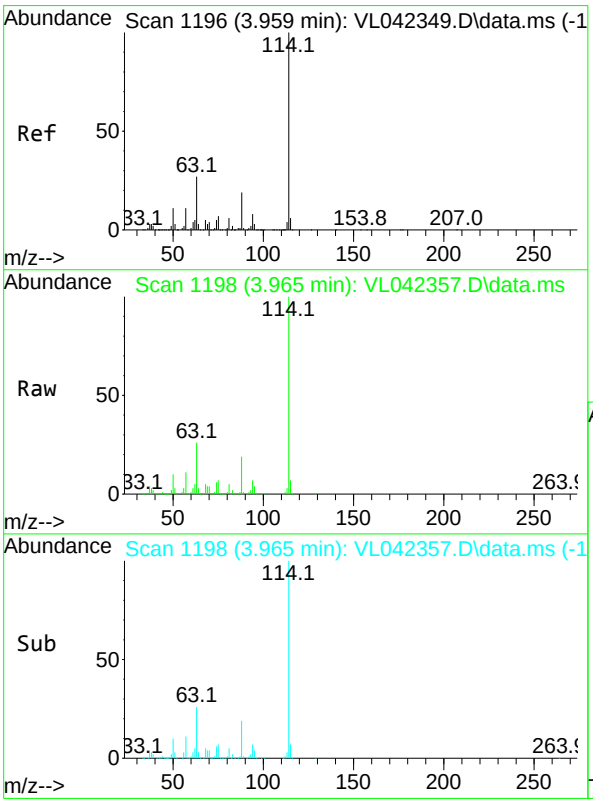
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042357.D
Acq: 17 Apr 2025 14:23

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Tgt Ion: 49 Resp: 113566

Ion	Ratio	Lower	Upper
49	100		
128	45.4	22.8	68.4
130	59.4	29.3	88.0

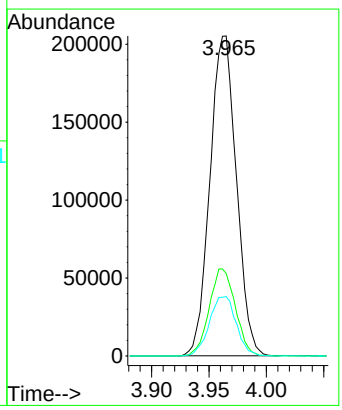


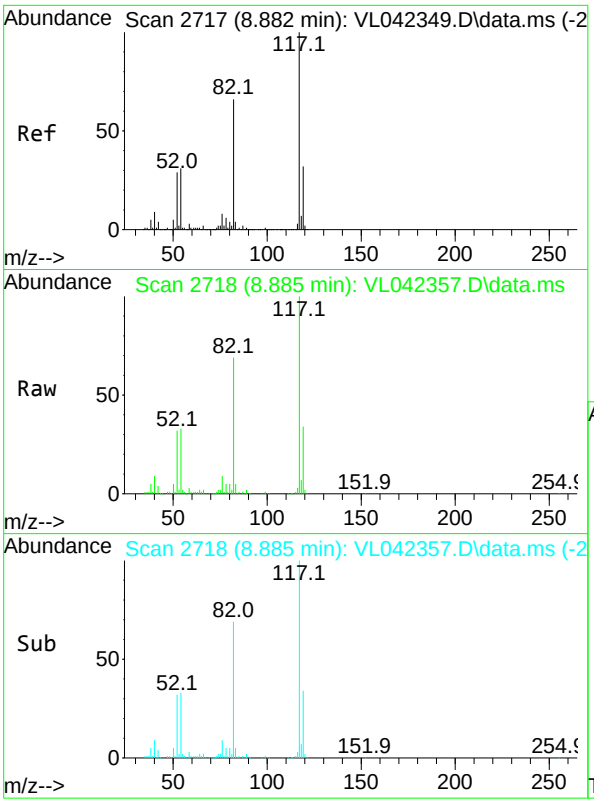


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.006 min
Lab File: VL042357.D
Acq: 17 Apr 2025 14:23

Tgt Ion:114 Resp: 328716

Ion	Ratio	Lower	Upper
114	100		
63	27.0	21.8	32.6
88	18.9	15.5	23.3



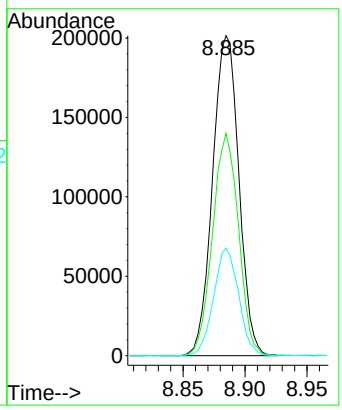


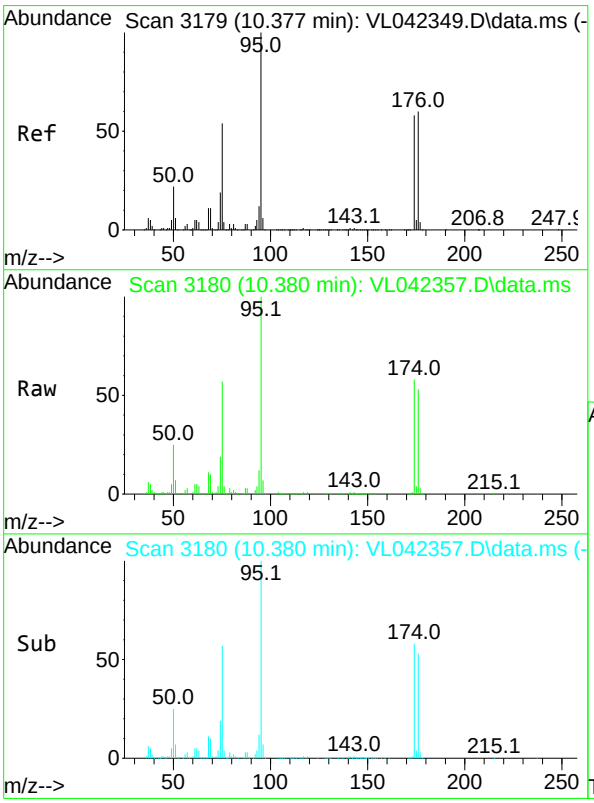
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042357.D
Acq: 17 Apr 2025 14:23

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Tgt Ion:117 Resp: 297633

Ion	Ratio	Lower	Upper
117	100		
82	68.6	57.8	86.6
119	32.2	25.2	37.8

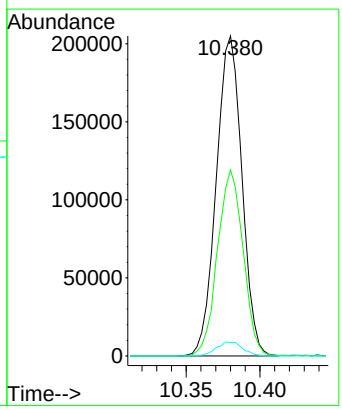




#68
1-Bromo-4-Fluorobenzene
Concen: 10.139 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042357.D
Acq: 17 Apr 2025 14:23

Tgt Ion: 95 Resp: 247968

Ion	Ratio	Lower	Upper
95	100		
174	58.2	48.5	72.7
175	4.5	3.7	5.5



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042357.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.431	411	415	420	rBV	1858765	1108891	96.98%	23.258%
2	1.515	427	441	442	rBV8	17527	27664	2.42%	0.580%
3	2.437	724	726	736	rVB6	14850	19624	1.72%	0.412%
4	2.790	826	835	842	rBV	426285	437188	38.23%	9.169%
5	3.962	1184	1197	1210	rBV2	554736	884344	77.34%	18.548%
6	8.885	2707	2718	2730	rBV	733994	1074923	94.01%	22.545%
7	10.380	3166	3180	3191	rBV	925373	1143427	100.00%	23.982%
8	11.539	3527	3538	3547	rBV3	22959	29990	2.62%	0.629%
9	11.778	3599	3612	3619	rBV4	29173	41816	3.66%	0.877%

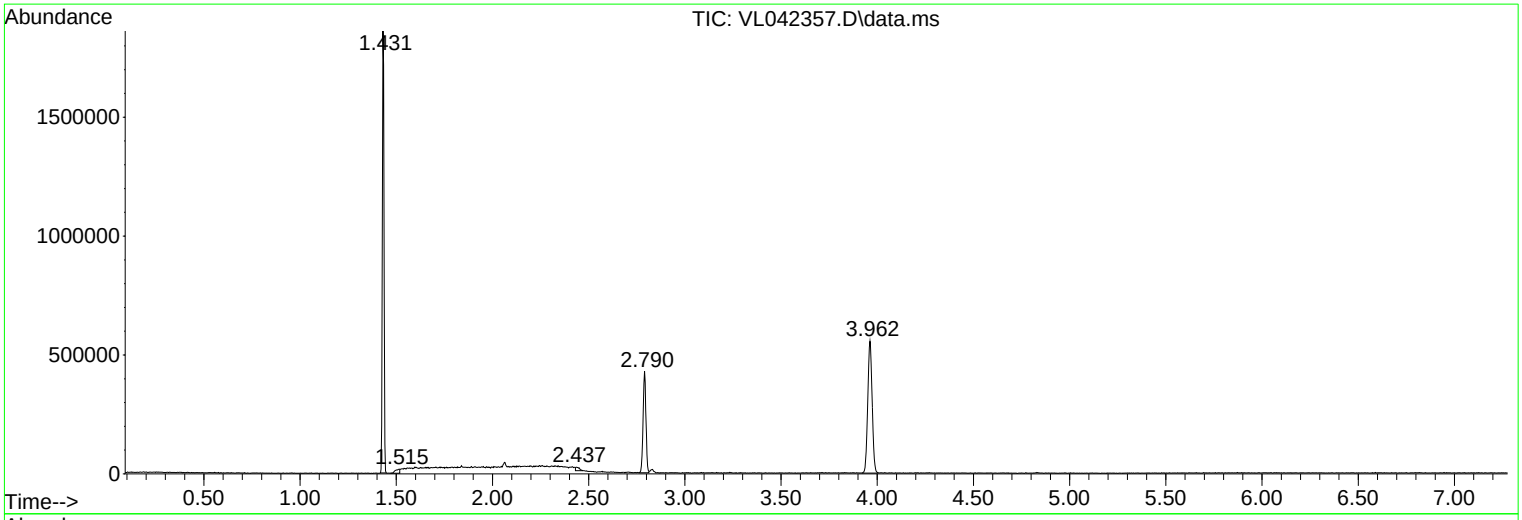
Sum of corrected areas: 4767867

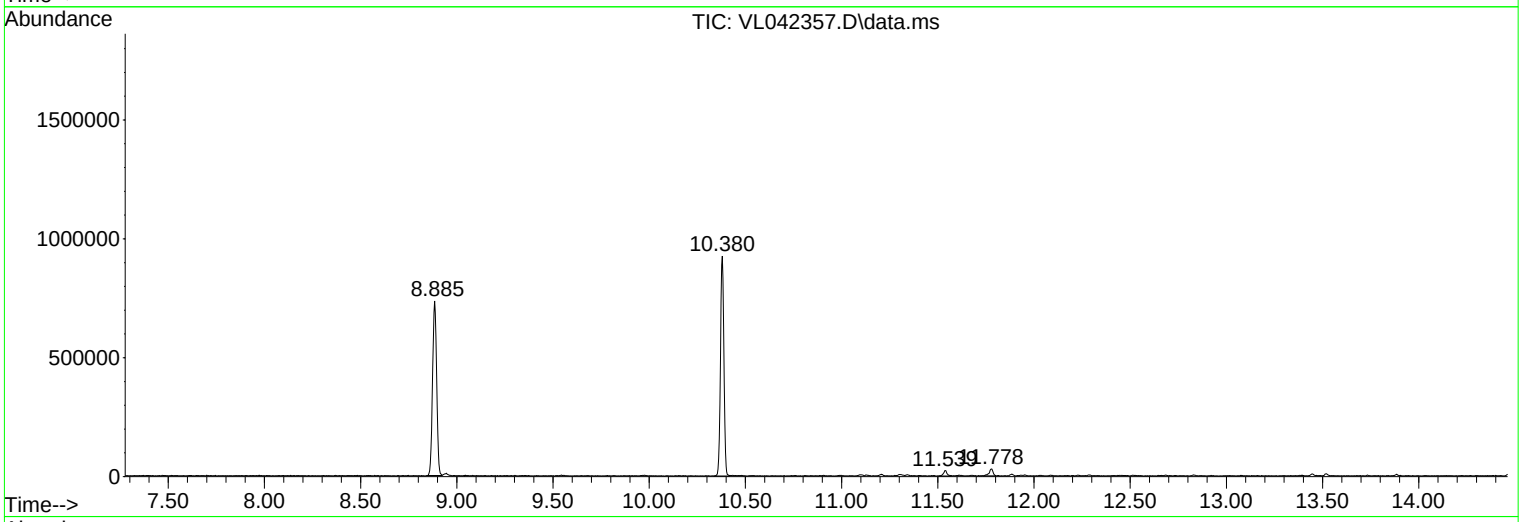
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

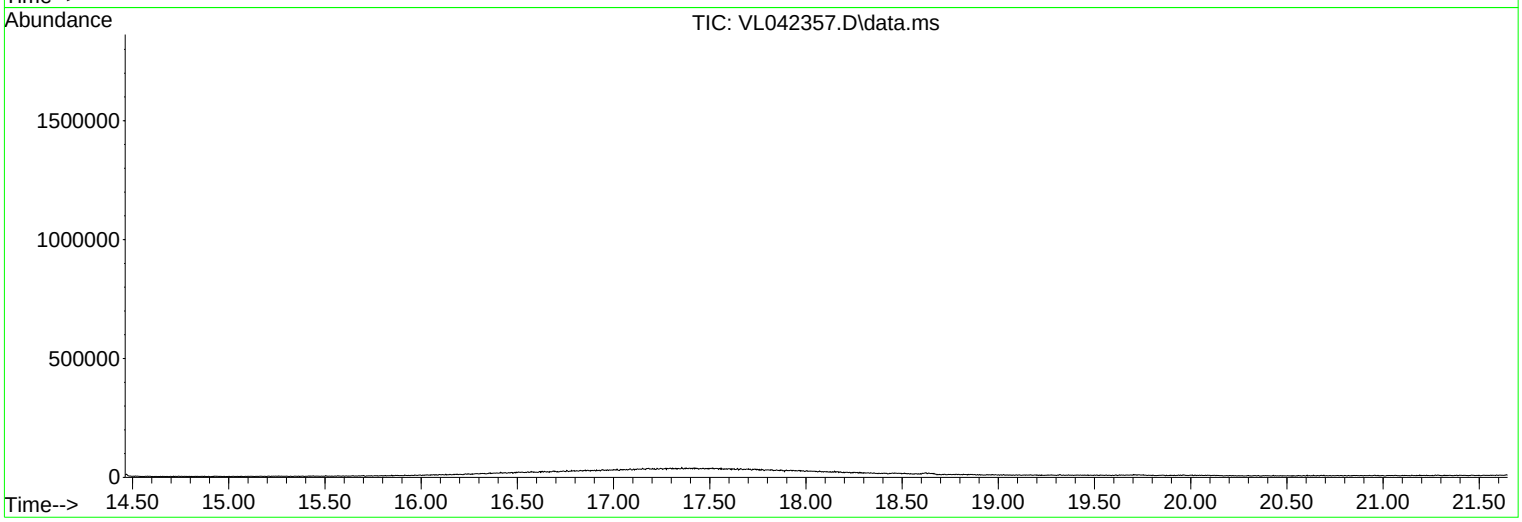
Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042357.D
Acq On : 17 Apr 2025 14:23
Operator : SY/MD
Sample : VL0417ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042417.D	1		04/28/25 09:27	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042417.D	1		04/28/25 09:27	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	121000		2.777			
540-36-3	1,4-Difluorobenzene	347000		3.946			
3114-55-4	Chlorobenzene-d5	302000		8.868			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042417.D	1		04/28/25 09:27	VL042825

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Quant Time: Apr 29 01:32:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

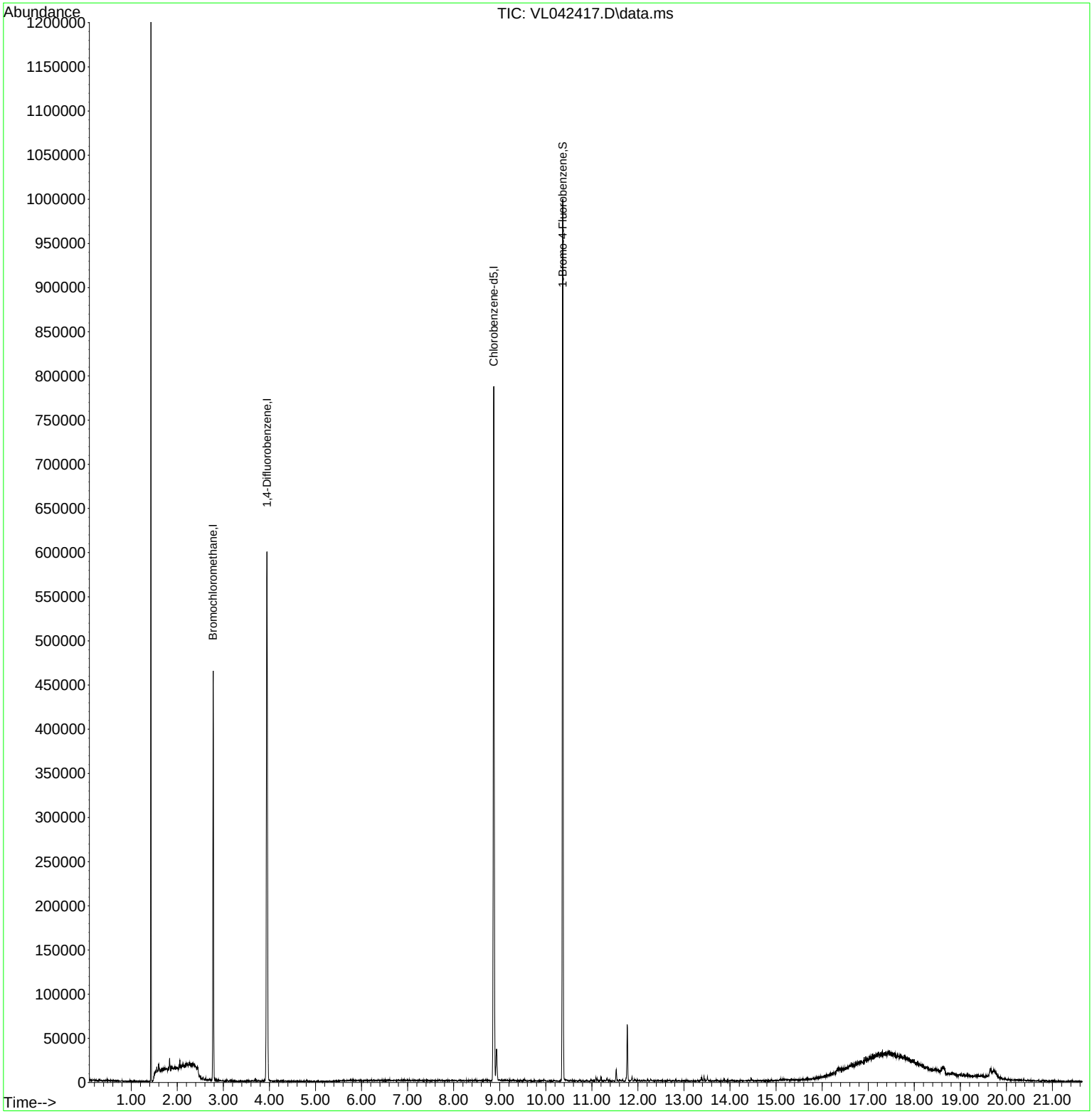
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.777	49	121027	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.946	114	346921	10.000	ppbv	-0.01
55) Chlorobenzene-d5	8.868	117	302157	10.000	ppbv	-0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.367	95	259490	10.451	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.500%			
Target Compounds						Qvalue

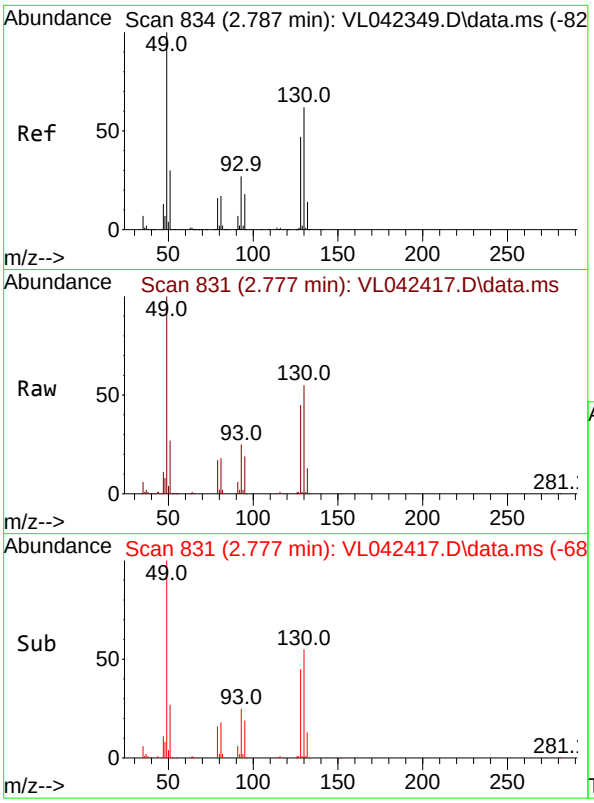
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Quant Time: Apr 29 01:32:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



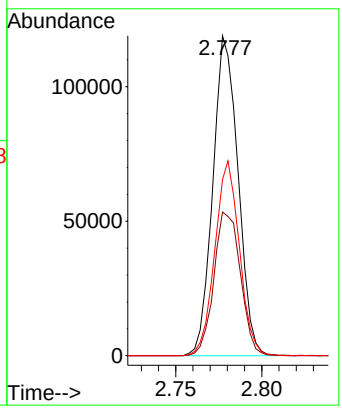


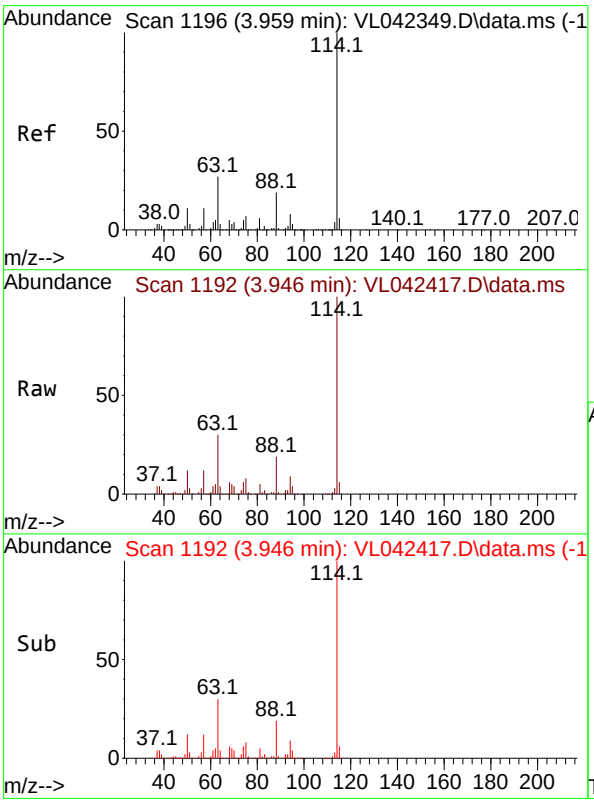
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.777 min Scan# 8
Delta R.T. -0.010 min
Lab File: VL042417.D
Acq: 28 Apr 2025 09:27

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Tgt Ion: 49 Resp: 121027

Ion	Ratio	Lower	Upper
49	100		
128	47.3	22.8	68.4
130	59.4	29.3	88.0

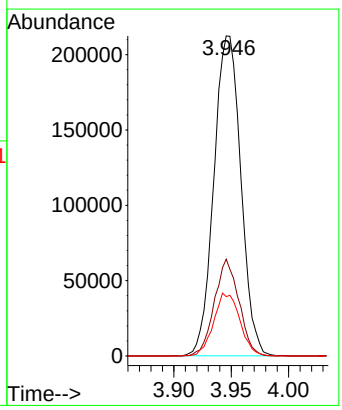


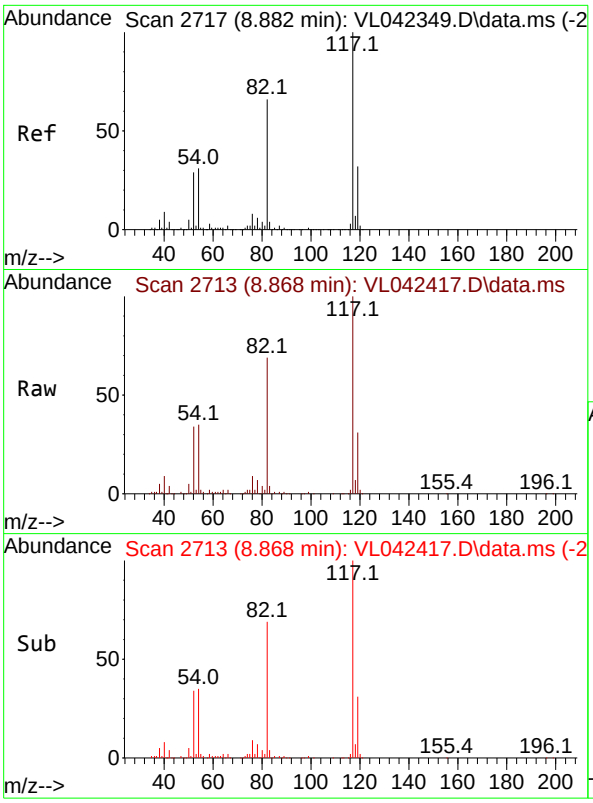


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.946 min Scan# 1192
Delta R.T. -0.013 min
Lab File: VL042417.D
Acq: 28 Apr 2025 09:27

Tgt Ion:114 Resp: 346921

Ion	Ratio	Lower	Upper
114	100		
63	27.6	21.8	32.6
88	19.1	15.5	23.3



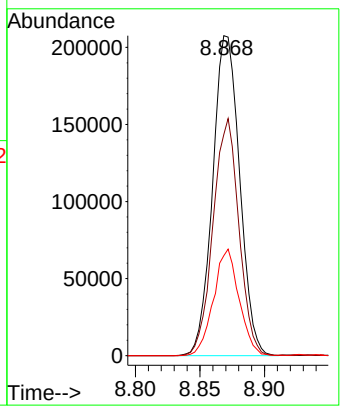


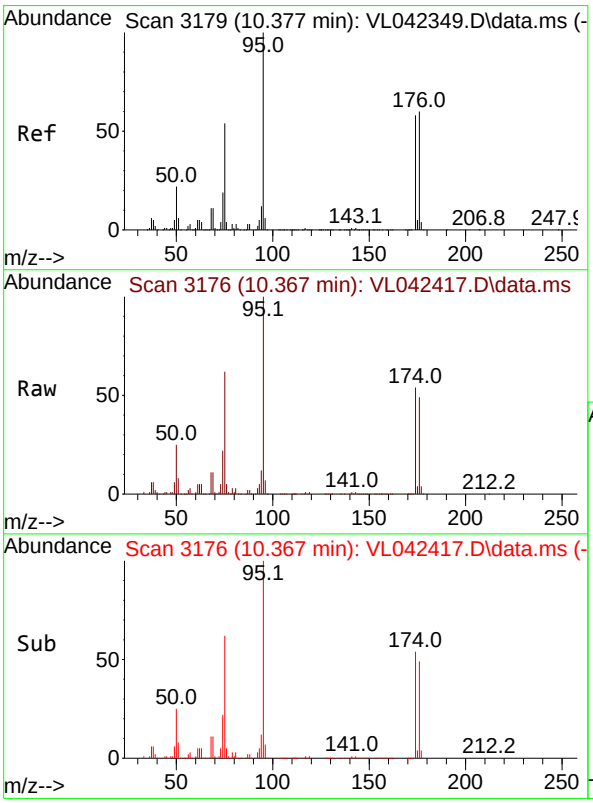
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.868 min Scan# 2
Delta R.T. -0.013 min
Lab File: VL042417.D
Acq: 28 Apr 2025 09:27

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Tgt Ion:117 Resp: 302157

Ion	Ratio	Lower	Upper
117	100		
82	71.0	57.8	86.6
119	31.7	25.2	37.8

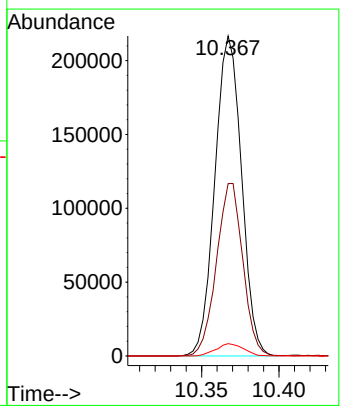




#68
1-Bromo-4-Fluorobenzene
Concen: 10.451 ppbv
RT: 10.367 min Scan# 3176
Delta R.T. -0.010 min
Lab File: VL042417.D
Acq: 28 Apr 2025 09:27

Tgt Ion: 95 Resp: 259490

Ion	Ratio	Lower	Upper
95	100		
174	53.3	48.5	72.7
175	4.0	3.7	5.5



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042417.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	corr. % max.	% of total
1	1.427	410	414	418	rBV	1506383	820060	68.09%	17.223%
2	2.780	822	832	844	rBV	464038	486824	40.42%	10.224%
3	3.946	1179	1192	1206	rBV2	599258	963835	80.03%	20.243%
4	8.872	2702	2714	2725	rBV	786095	1134293	94.18%	23.823%
5	8.930	2725	2732	2743	rVB3	35593	59136	4.91%	1.242%
6	10.367	3164	3176	3190	rBV	998699	1204332	100.00%	25.294%
7	11.529	3527	3535	3540	rBV5	13483	16218	1.35%	0.341%
8	11.769	3598	3609	3620	rVB3	63808	76660	6.37%	1.610%

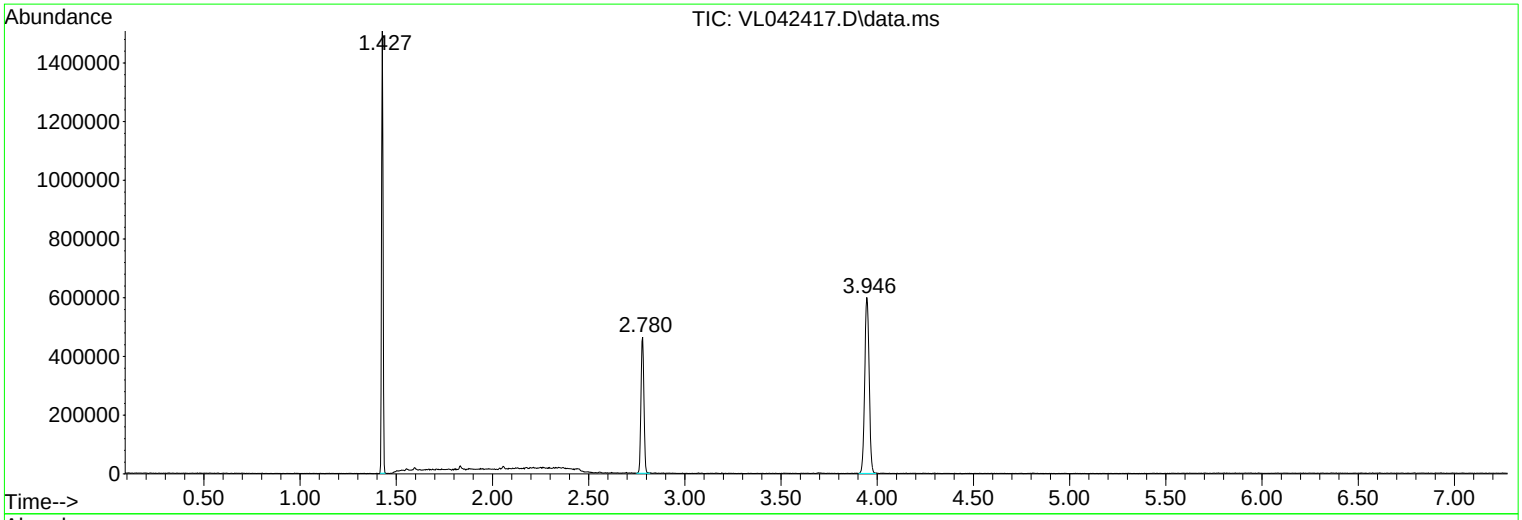
Sum of corrected areas: 4761358

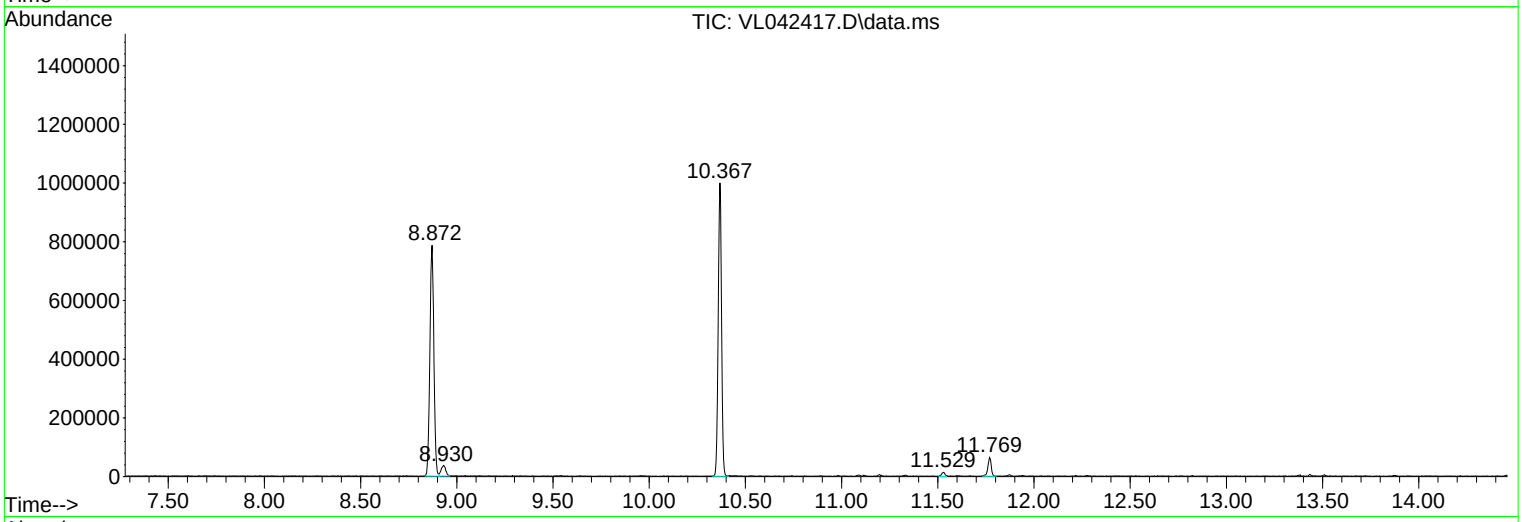
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

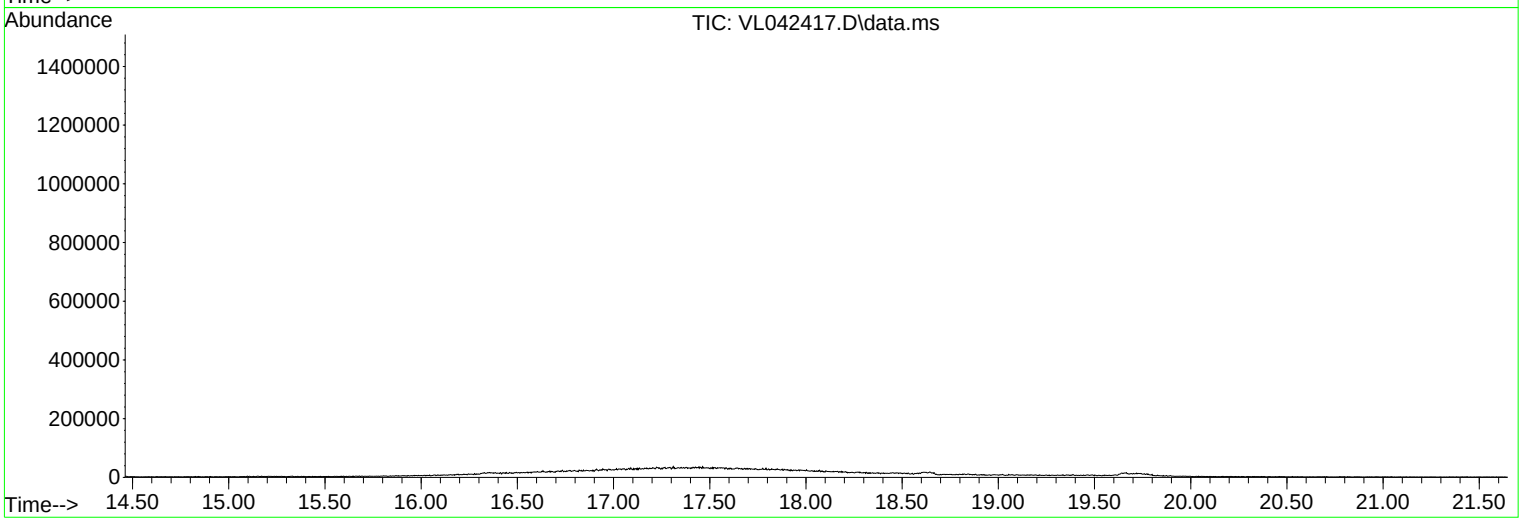
Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042417.D
Acq On : 28 Apr 2025 09:27
Operator : SY/MD
Sample : VL0428ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					--Internal Standard---			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042437.D	1		04/29/25 09:25	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.21	1.04	U	1.04	2.47	ug/m3
64-17-5	Ethanol	0.32	0.60	U	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.10	0.21	U	0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.16	0.90	U	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.11	0.45	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	0.070	0.17	U	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	0.24	0.57	U	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.19	0.66	U	0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.12	0.35	U	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.010	0.060	U	0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.090	0.29	U	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.11	0.41	U	0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042437.D	1		04/29/25 09:25	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.21	0.91	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	0.11	0.39	U	0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.6			70 (65) - 130 (135)	106%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	119000		2.787			
540-36-3	1,4-Difluorobenzene	329000		3.959			
3114-55-4	Chlorobenzene-d5	276000		8.885			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABL01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABL01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042437.D	1		04/29/25 09:25	VL042925

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT/LSC Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Quant Time: Apr 30 01:16:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

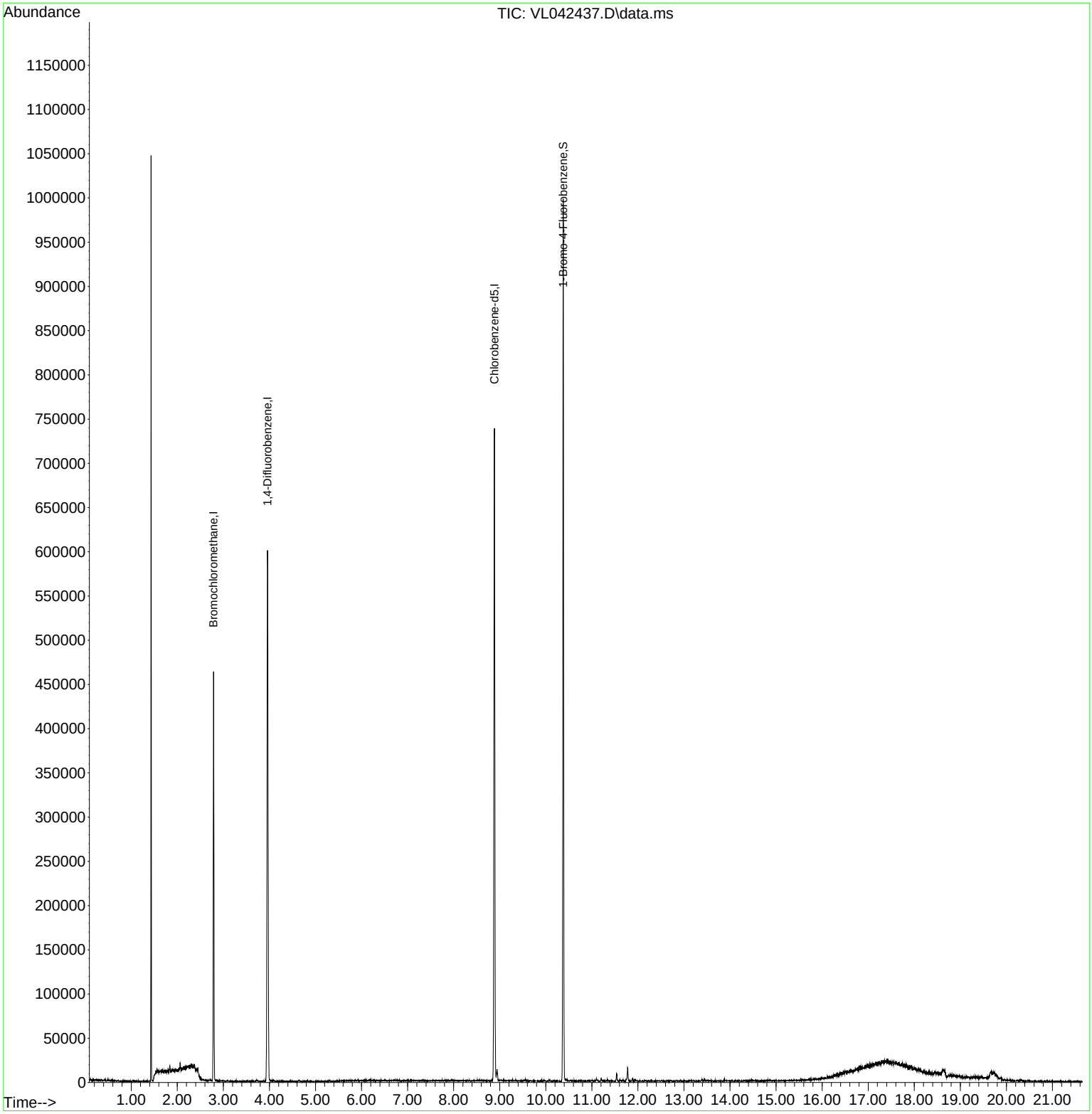
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	119014	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	328601	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	276498	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	239853	10.556	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.600%			
Target Compounds						Qvalue

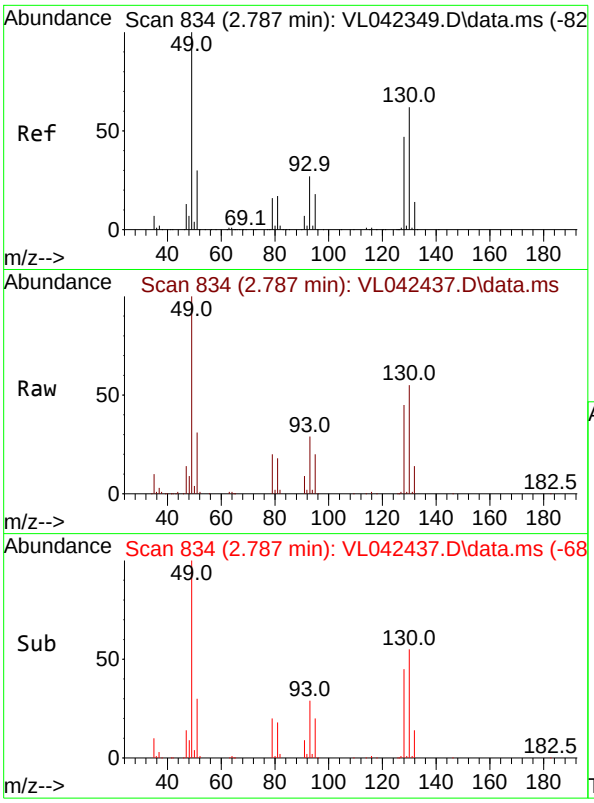
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Quant Time: Apr 30 01:16:50 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



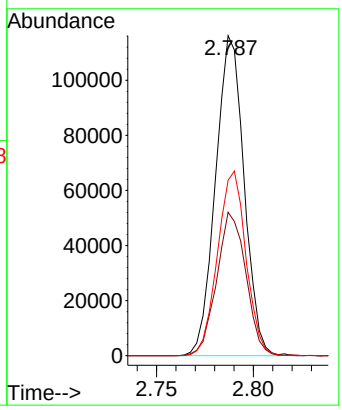


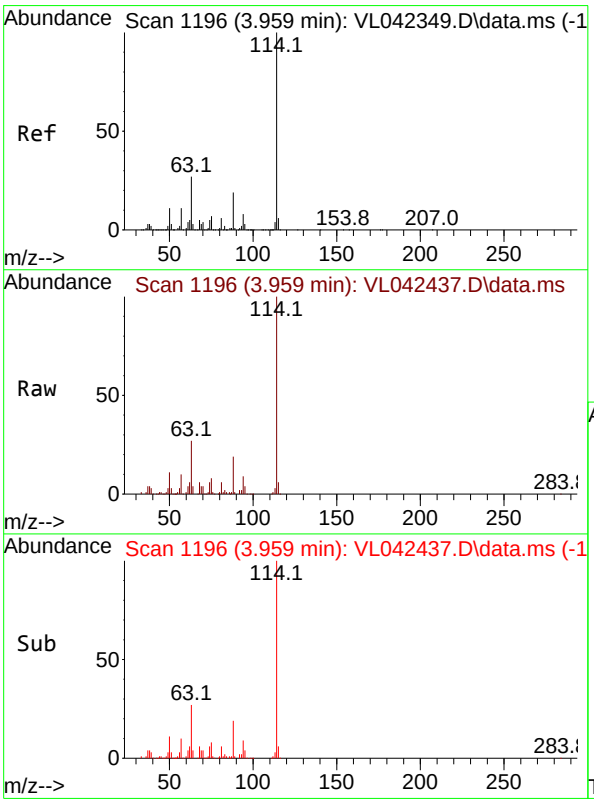
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042437.D
Acq: 29 Apr 2025 09:25

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Tgt Ion: 49 Resp: 119014

Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.8	68.4
130	57.6	29.3	88.0

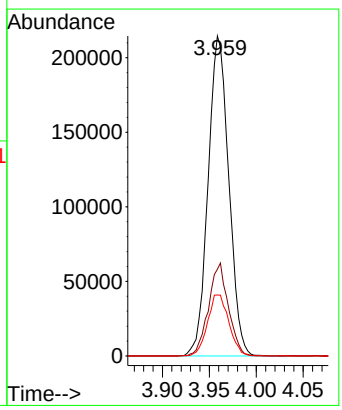


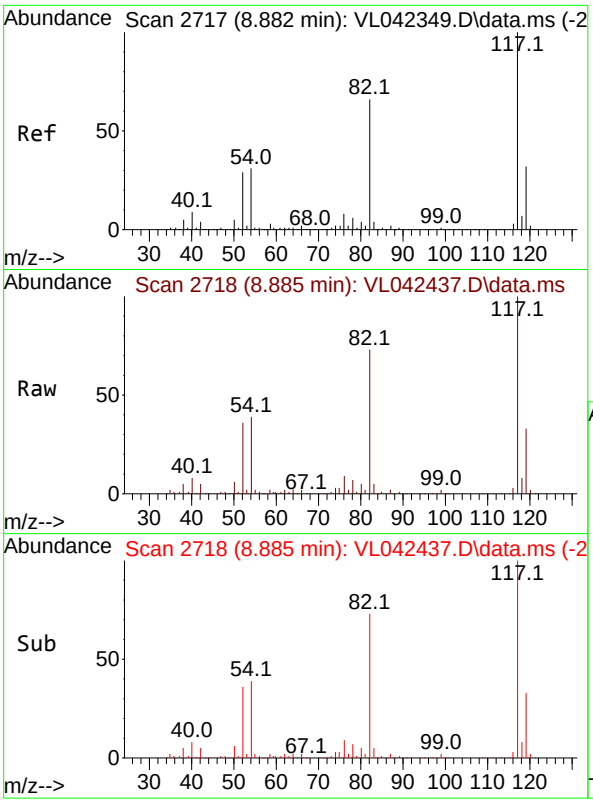


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.000 min
Lab File: VL042437.D
Acq: 29 Apr 2025 09:25

Tgt Ion:114 Resp: 328601

Ion	Ratio	Lower	Upper
114	100		
63	27.9	21.8	32.6
88	19.7	15.5	23.3



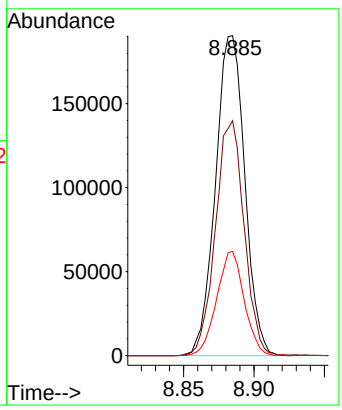


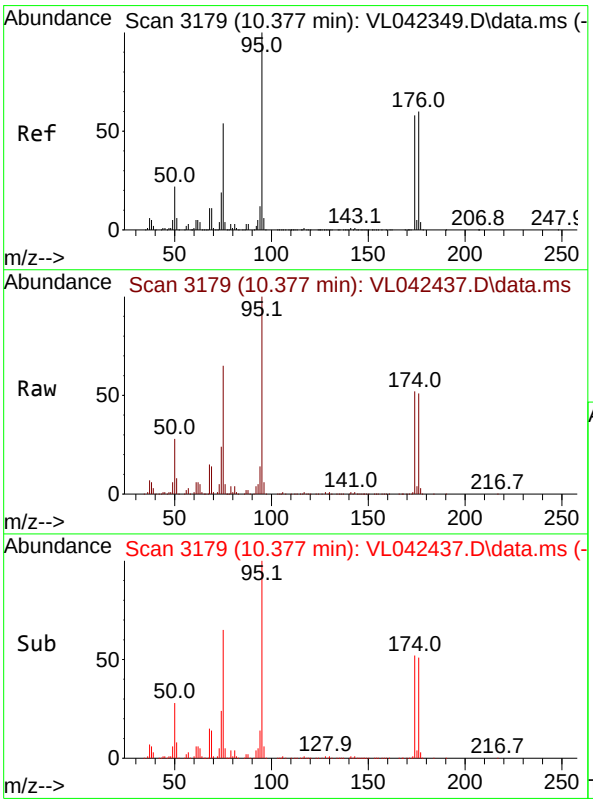
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042437.D
Acq: 29 Apr 2025 09:25

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Tgt Ion:117 Resp: 276498

Ion	Ratio	Lower	Upper
117	100		
82	71.6	57.8	86.6
119	30.6	25.2	37.8

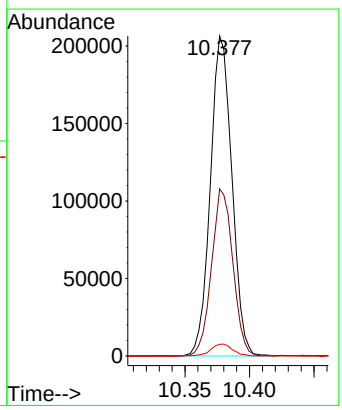




#68
1-Bromo-4-Fluorobenzene
Concen: 10.556 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.000 min
Lab File: VL042437.D
Acq: 29 Apr 2025 09:25

Tgt Ion: 95 Resp: 239853

Ion	Ratio	Lower	Upper
95	100		
174	51.8	48.5	72.7
175	3.8	3.7	5.5



LSC Area Percent Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

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

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

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

Signal : TIC: VL042437.D\data.ms

peak #	R.T. min	first scan	max scan	last scan	PK TY	peak height	corr. area	% max.	% of total
1	1.431	411	415	419	rBV	1045742	556107	48.51%	13.156%
2	2.787	824	834	843	rBV	463084	484133	42.23%	11.453%
3	3.959	1181	1196	1209	rBV2	600602	942047	82.18%	22.286%
4	8.885	2705	2718	2729	rBV	737482	1063646	92.78%	25.163%
5	8.943	2729	2736	2742	rVB4	12112	17135	1.49%	0.405%
6	10.377	3169	3179	3192	rBV	997620	1146364	100.00%	27.120%
7	11.775	3601	3611	3619	rVB5	14832	17593	1.53%	0.416%

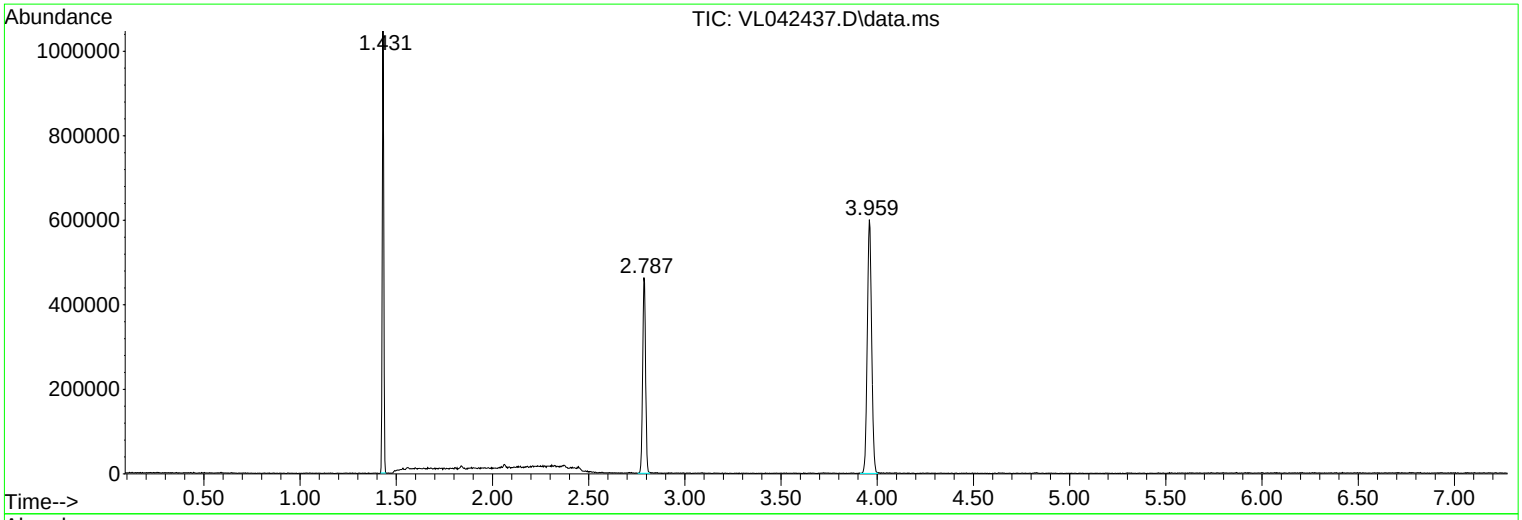
Sum of corrected areas: 4227025

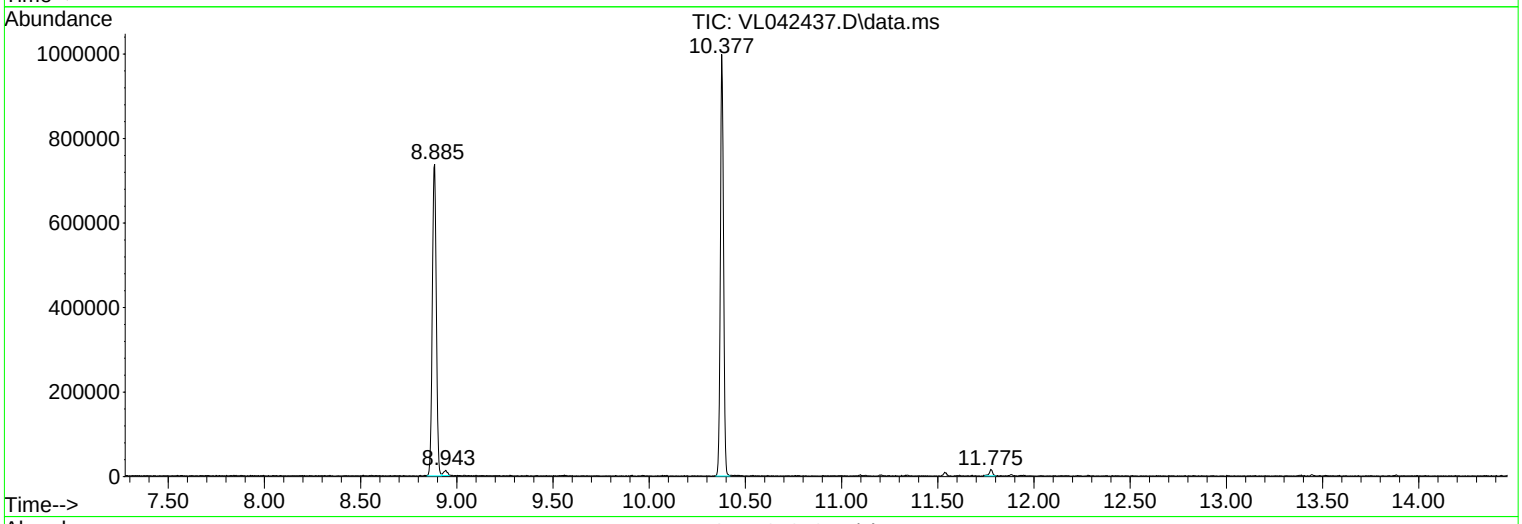
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

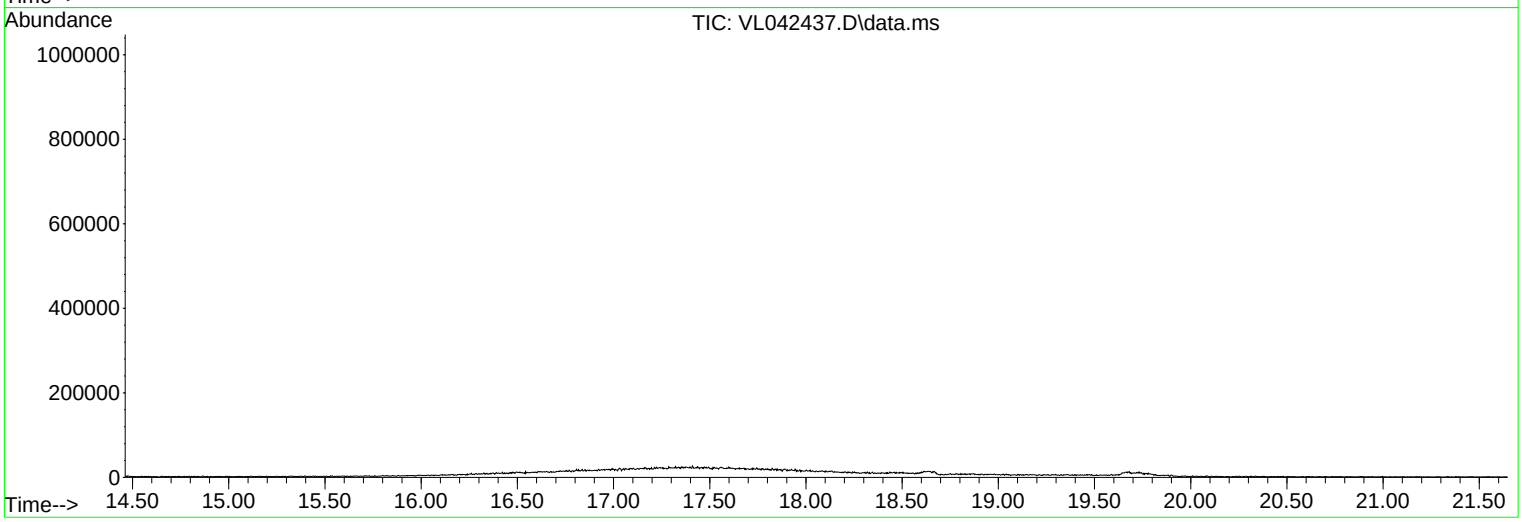
Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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







Library Search Compound Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

No Library Search Compounds Detected
****

Tentatively Identified Compound (LSC) summary

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042437.D
Acq On : 29 Apr 2025 09:25
Operator : SY/MD
Sample : VL0429ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABL01

Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022

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

					Internal Standard			
TIC Top Hit name	RT	EstConc	Units	Response	#	RT	Resp	Conc

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABS02	SDG No.:	Q1665
Lab Sample ID:	VL0409ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042289.D	1		04/09/25 12:31	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	9.60	47.5		1.04	2.47	ug/m3
64-17-5	Ethanol	4.50	8.48		0.60	0.94	ug/m3
74-87-3	Chloromethane	9.80	20.2		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	8.70	22.2		0.030	0.080	ug/m3
74-83-9	Bromomethane	9.00	35.0		0.54	1.94	ug/m3
75-00-3	Chloroethane	9.20	24.3		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	10.7	31.6		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	9.50	53.4		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	9.50	72.8		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	9.70	67.8		0.63	3.49	ug/m3
593-60-2	Bromoethene	8.80	38.5		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	8.30	25.2		0.58	1.52	ug/m3
142-82-5	Heptane	9.70	39.8		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	8.80	21.6		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	8.90	35.3		0.56	1.98	ug/m3
67-64-1	Acetone	8.90	21.1		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	9.30	29.0		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	8.50	30.6		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	8.40	29.2		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	8.80	34.9		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	9.70	39.3		0.53	2.02	ug/m3
110-82-7	Cyclohexane	9.40	32.4		0.76	1.72	ug/m3
78-93-3	2-Butanone	10.9	32.1		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	10.4	65.4		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	9.70	38.5		0.36	1.98	ug/m3
67-66-3	Chloroform	10.4	50.8		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	8.90	48.6		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	10.7	50.0		0.47	2.34	ug/m3
71-43-2	Benzene	10.6	33.9		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	11.0	44.5		0.36	2.02	ug/m3
79-01-6	Trichloroethene	10.1	54.3		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	10.6	49.0		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	10.9	73.0		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	9.60	39.3		0.37	2.05	ug/m3
108-88-3	Toluene	9.90	37.3		0.41	1.88	ug/m3

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABS02	SDG No.:	Q1665
Lab Sample ID:	VL0409ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042289.D	1		04/09/25 12:31	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	8.50	38.6		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	9.20	41.8		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	10.8	58.9		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	10.5	89.5		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	10.6	81.5		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.90	60.4		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	11.4	52.5		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	10.6	46.0		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	22.2	96.4		0.91	4.34	ug/m3
95-47-6	o-Xylene	11.0	47.8		0.52	2.17	ug/m3
100-42-5	Styrene	10.0	42.6		0.47	2.13	ug/m3
75-25-2	Bromoform	10.4	108		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	11.8	81.0		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	10.9	56.4		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	10.9	53.6		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	10.7	52.6		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	11.6	69.7		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	11.7	70.3		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	11.9	71.5		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	10.8	80.2		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	9.30	99.2		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	8.60	19.0		0.29	1.11	ug/m3
91-20-3	Naphthalene	11.3	59.2		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	11.1	54.6		0.59	2.46	ug/m3
110-54-3	Hexane	9.90	34.9		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	9.30	29.1		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	9.40	33.9		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	9.40	38.5		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.50			70 (65) - 130 (135)	95%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	161000		2.784			
540-36-3	1,4-Difluorobenzene	422000		3.952			
3114-55-4	Chlorobenzene-d5	368000		8.875			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0409ABS02	SDG No.:	Q1665
Lab Sample ID:	VL0409ABS02	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042289.D	1		04/09/25 12:31	VL040925

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	160536	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	421845	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	368487	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	288141	9.522	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	227351	9.592	ppbv	98
3) Chlorodifluoromethane	1.473	51	246719	10.189	ppbv	98
4) Chloromethane	1.531	50	94644	9.770	ppbv	99
5) Vinyl Chloride	1.577	62	89453	8.714	ppbv	95
6) Bromomethane	1.664	94	39433	8.983	ppbv	100
7) Chloroethane	1.703	64	35803	9.208	ppbv	97
8) Dichlorotetrafluoroethane	1.551	85	196779	9.748	ppbv	94
9) Propene	1.483	41	104428	9.409	ppbv	96
10) Heptane	4.972	43	285337	9.665	ppbv	99
11) Trichlorofluoromethane	1.874	101	219275	9.507	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	180430	9.518	ppbv	95
13) Ethanol	1.719	45	4753	4.530	ppbv	93
14) Bromoethene	1.780	108	64175	8.837	ppbv	98
15) Acetone	1.832	43	200151	8.915	ppbv	96
16) 1,3-Butadiene	1.606	39	93954	8.569	ppbv	99
17) tert-Butyl alcohol	2.039	59	231293	8.271	ppbv	98
18) 1,1-Dichloroethene	2.030	96	78979	8.912	ppbv	96
19) Isopropyl Alcohol	1.884	45	111918	8.835	ppbv	96
20) Methylene Chloride	2.059	84	70611	8.444	ppbv	95
21) Allyl Chloride	2.094	41	147389	9.308	ppbv	98
22) trans-1,2-Dichloroethene	2.337	96	89877	8.775	ppbv	94
23) Vinyl Acetate	2.460	43	85028	8.750	ppbv	97
24) 1,1-Dichloroethane	2.405	63	184801	9.733	ppbv	99
25) Ethyl Acetate	2.832	43	590692	10.137	ppbv	98
26) Hexane	2.823	57	223800	9.943	ppbv	98
27) Carbon Disulfide	2.146	76	223675	9.267	ppbv	98
28) Methyl tert-Butyl Ether	2.437	73	119034	8.494	ppbv	97
29) Chloroform	2.845	83	341042	10.353	ppbv	99
30) Cyclohexane	3.852	84	182880	9.357	ppbv	97
31) cis-1,2-Dichloroethene	2.716	61	221881	9.710	ppbv	98
32) 1,1,1-Trichloroethane	3.363	97	336493	8.923	ppbv	97
34) 2-Butanone	2.554	43	334636	10.940	ppbv	98
35) Carbon Tetrachloride	3.758	117	343376	10.420	ppbv	97
36) Benzene	3.651	78	442736	10.586	ppbv	98
37) 1,2-Dichloroethane	3.214	62	262528	10.965	ppbv	100
38) Trichloroethene	4.541	130	176435	10.111	ppbv	98
39) 1,2-Dichloropropane	4.308	63	161101	10.578	ppbv	97
40) 1,4-Dioxane	4.574	88	76321	9.441	ppbv #	97
41) Tetrahydrofuran	3.049	42	187790	10.661	ppbv	96
42) Bromodichloromethane	4.483	83	360662	10.927	ppbv	100
43) Methyl Methacrylate	4.875	69	165984	9.375	ppbv	98
44) 2,2,4-Trimethylpentane	4.632	57	757855	10.723	ppbv	98
45) t-1,3-Dichloropropene	6.406	75	161245	8.489	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	213566	9.172	ppbv		98
47) 1,1,2-Trichloroethane	6.574	97	173506	10.777	ppbv		99
48) Dibromochloromethane	7.380	129	286938	10.516	ppbv		100
49) Bromoform	9.477	173	254430	10.386	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	463069	9.552	ppbv		96
51) 2-Hexanone	7.428	43	364946	9.168	ppbv	#	96
52) Tetrachloroethene	8.218	164	148369	8.946	ppbv		94
53) Toluene	6.927	91	490916	9.903	ppbv		99
54) 1,2-Dibromoethane	7.648	107	238091	10.608	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	232553	11.465	ppbv		100
57) Chlorobenzene	8.914	112	397485	11.372	ppbv		93
58) Ethyl Benzene	9.351	91	695035	10.619	ppbv		98
59) m/p-Xylene	9.548	91	1162331m	22.239	ppbv		
60) o-Xylene	9.959	91	574256	10.960	ppbv		97
61) Styrene	9.866	104	258350	9.967	ppbv		99
62) Isopropylbenzene	10.536	105	864354	11.032	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	377007	11.843	ppbv		99
64) n-propylbenzene	10.985	120	228525	11.331	ppbv		99
65) tert-Butylbenzene	11.529	119	790461	10.909	ppbv		99
66) Benzyl Chloride	11.613	91	58131	7.561	ppbv		97
67) sec-Butylbenzene	11.765	105	1124096	11.161	ppbv		99
69) p-Isopropyltoluene	11.924	119	950025	10.954	ppbv		99
70) n-Butylbenzene	12.280	91	986632	11.124	ppbv		99
71) 2-Chlorotoluene	10.898	91	660346	10.859	ppbv		99
72) 4-Ethyltoluene	11.121	105	726883	11.142	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	618219	10.851	ppbv		99
74) 1,2,4-Trimethylbenzene	11.532	105	702287	10.699	ppbv	#	84
75) 1,3-Dichlorobenzene	11.604	146	419165	11.644	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	417746	11.660	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	415780	11.862	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	331886	9.302	ppbv		99
79) Naphthalene	13.510	128	810441	11.288	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	388095	11.023	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	357711	10.802	ppbv		99

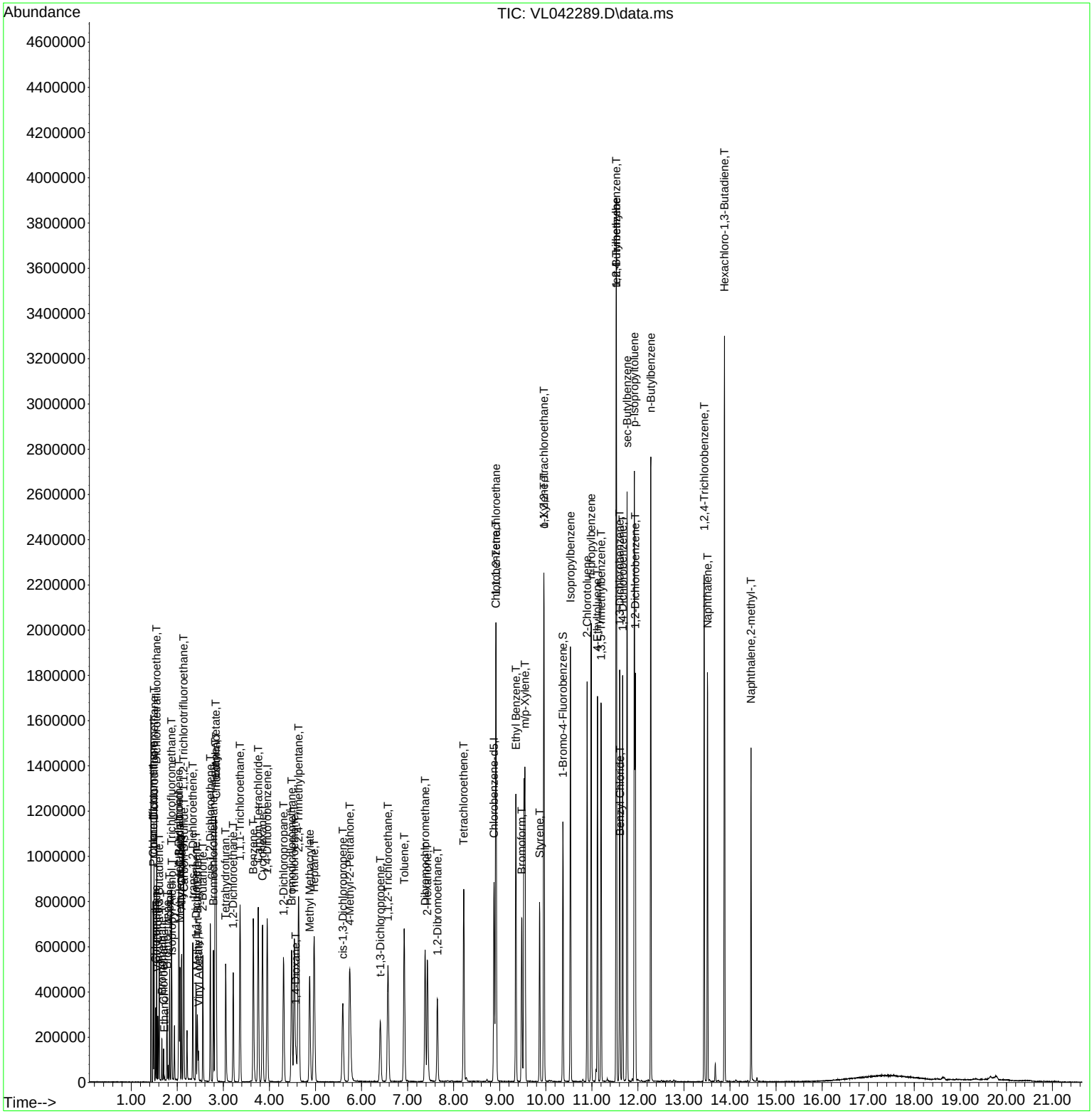
(#) = qualifier out of range (m) = manual integration (+) = signals summed

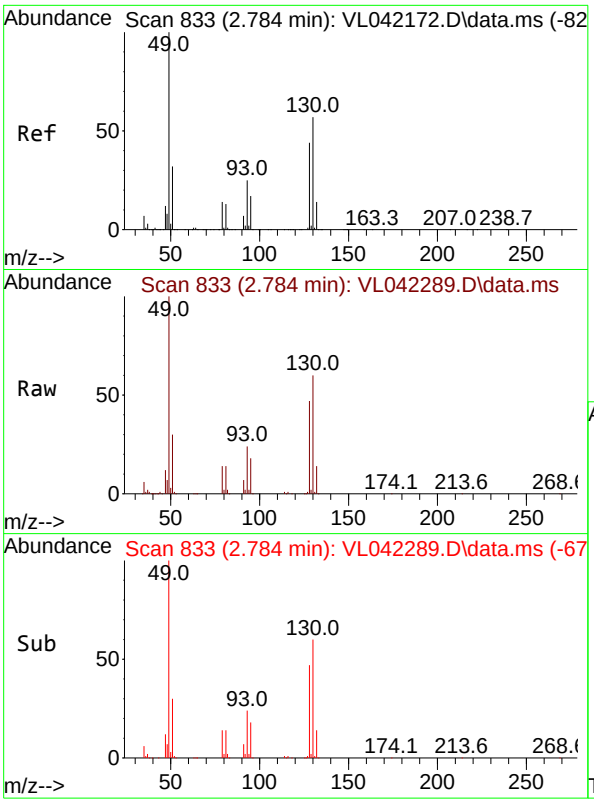
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

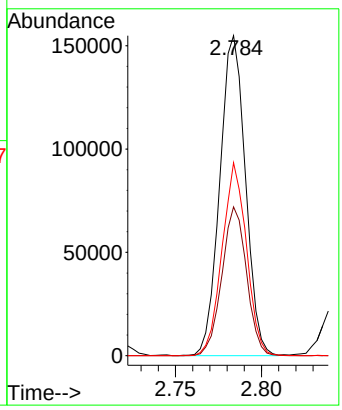




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 49 Resp: 16053

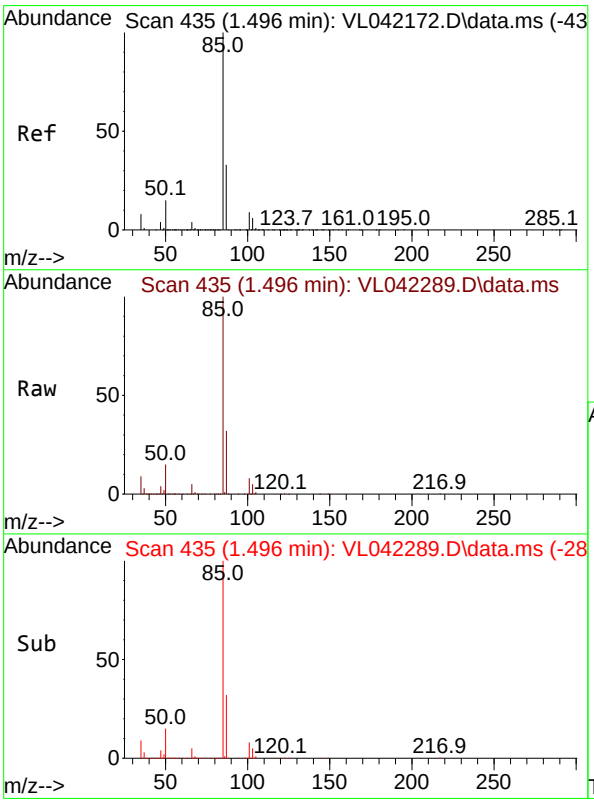
Ion	Ratio	Lower	Upper
49	100		
128	44.7	22.9	68.5
130	57.4	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
APPROVED

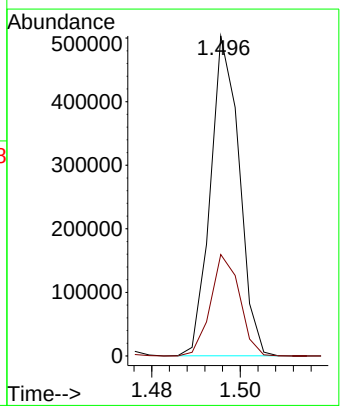
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

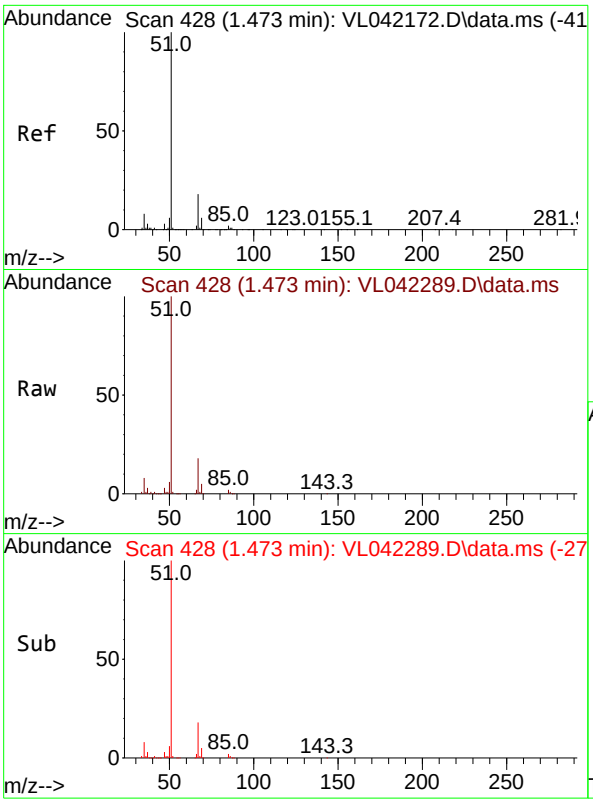


#2
Dichlorodifluoromethane
Concen: 9.592 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 85 Resp: 227351

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.1	39.1

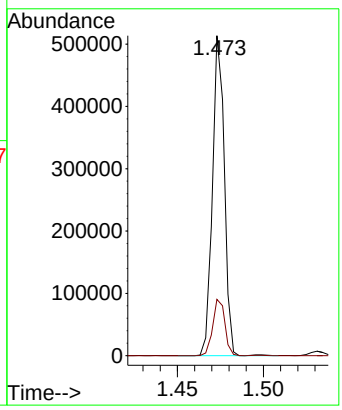




#3
Chlorodifluoromethane
Concen: 10.189 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 51 Resp: 24671

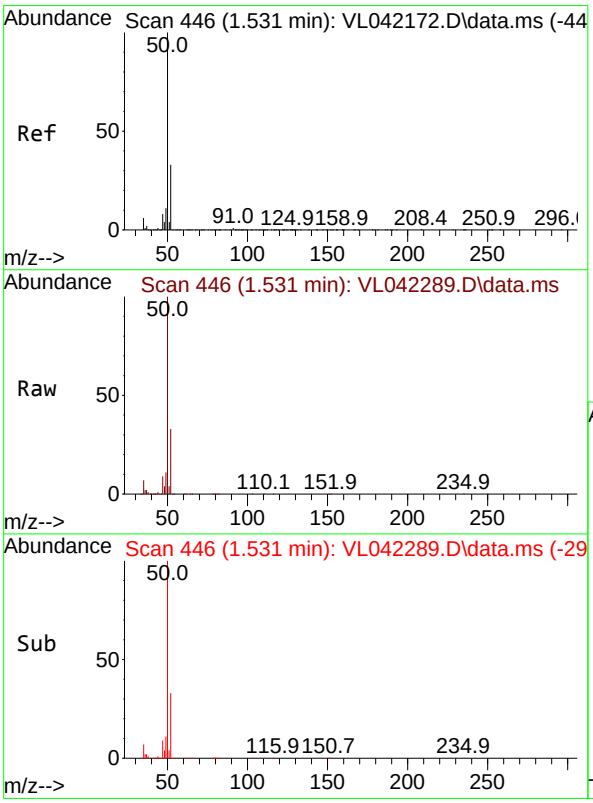
Ion	Ratio	Lower	Upper
51	100		
67	18.1	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
APPROVED

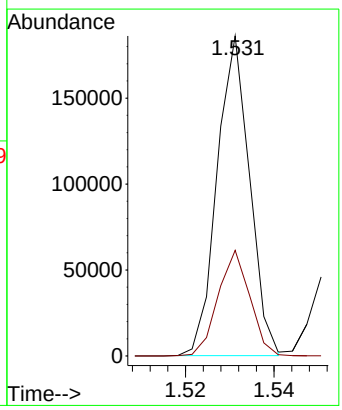
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

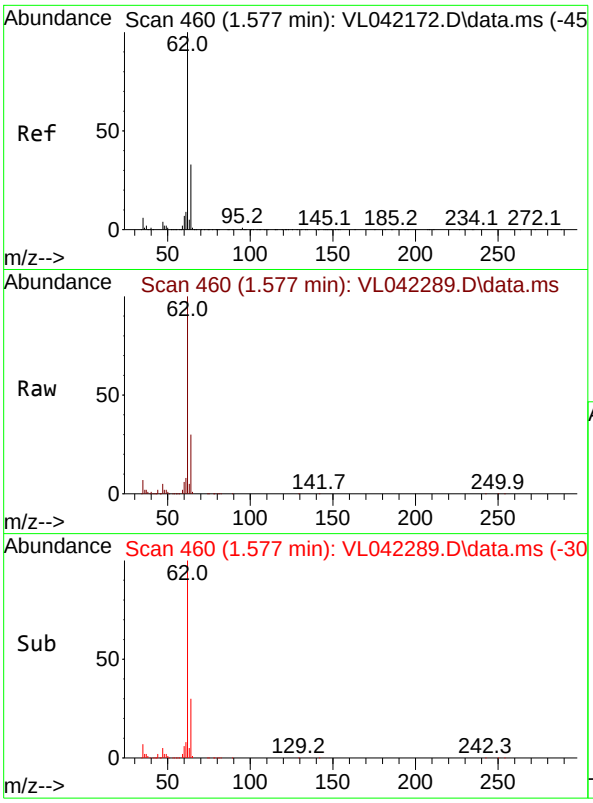


#4
Chloromethane
Concen: 9.770 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 50 Resp: 94644

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1

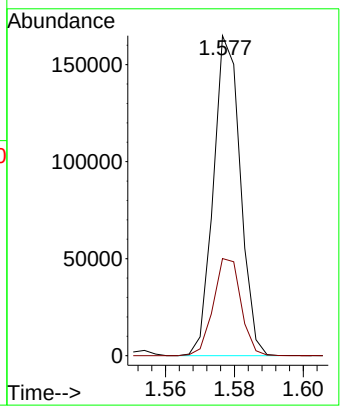




#5
Vinyl Chloride
Concen: 8.714 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 62 Resp: 8945

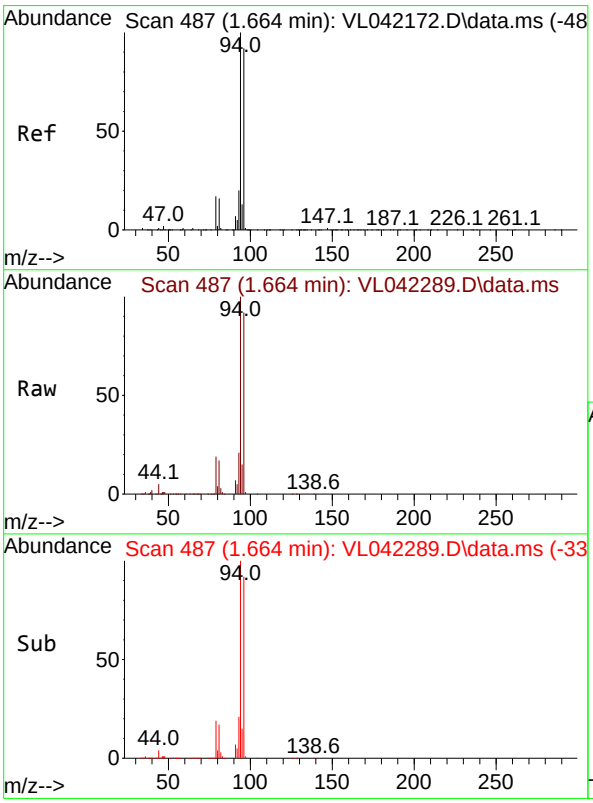
Ion	Ratio	Lower	Upper
62	100		
64	30.3	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
APPROVED

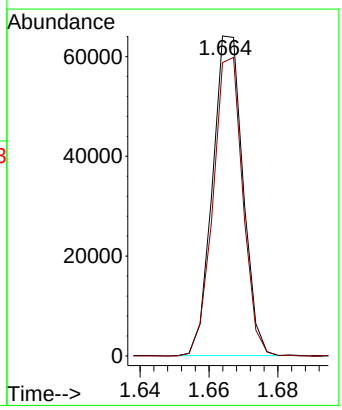
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

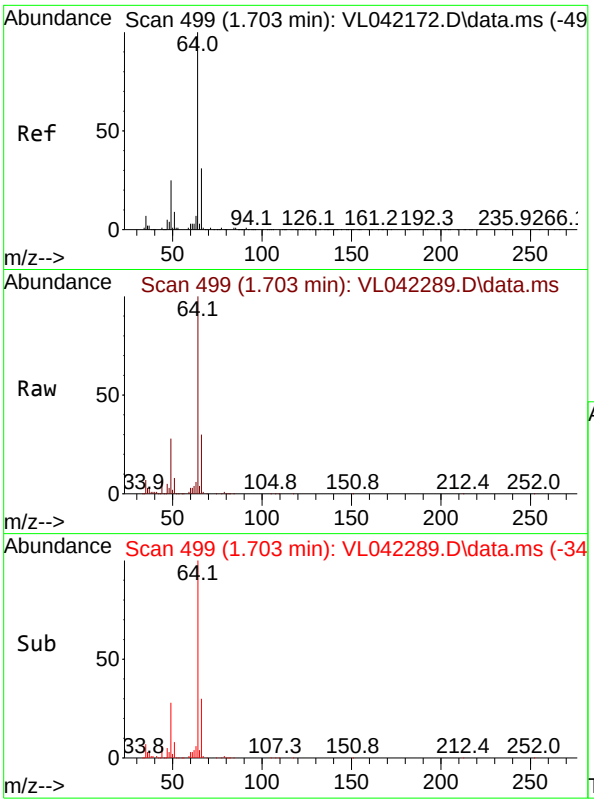


#6
Bromomethane
Concen: 8.983 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 94 Resp: 39433

Ion	Ratio	Lower	Upper
94	100		
96	91.7	73.1	109.7

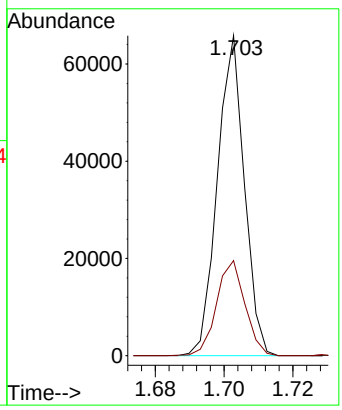




#7
Chloroethane
Concen: 9.208 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 64 Resp: 3580

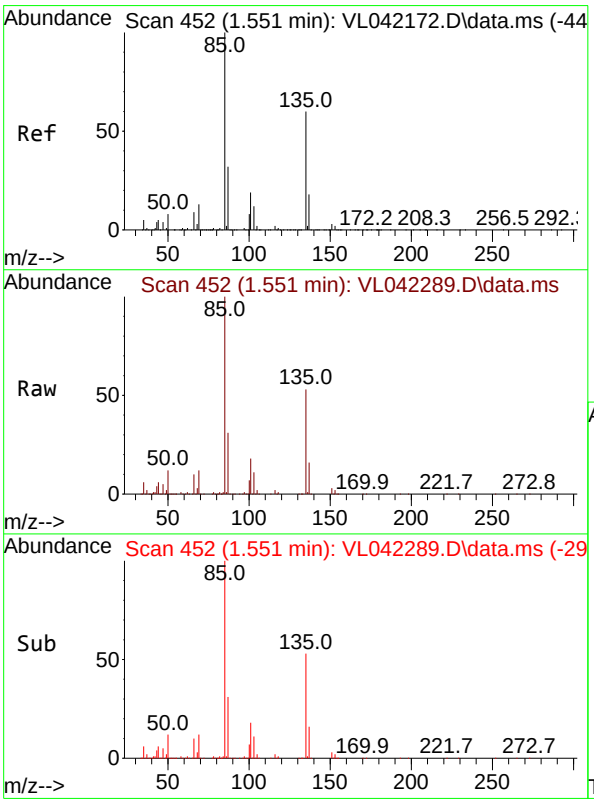
Ion	Ratio	Lower	Upper
64	100		
66	29.7	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
APPROVED

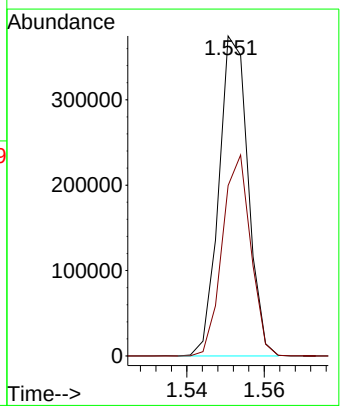
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

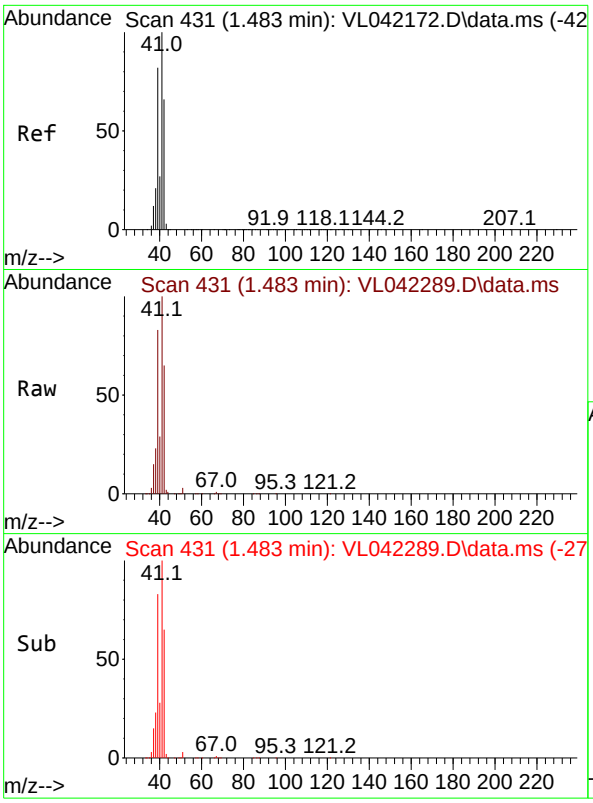


#8
Dichlorotetrafluoroethane
Concen: 9.748 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 85 Resp: 196779

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6

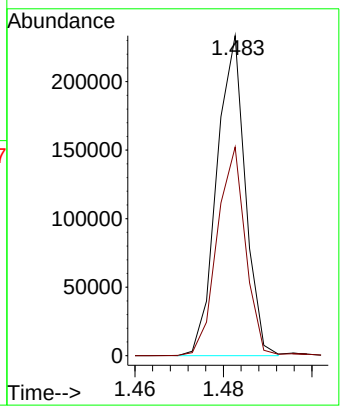




#9
Propene
Concen: 9.409 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 41 Resp: 10442

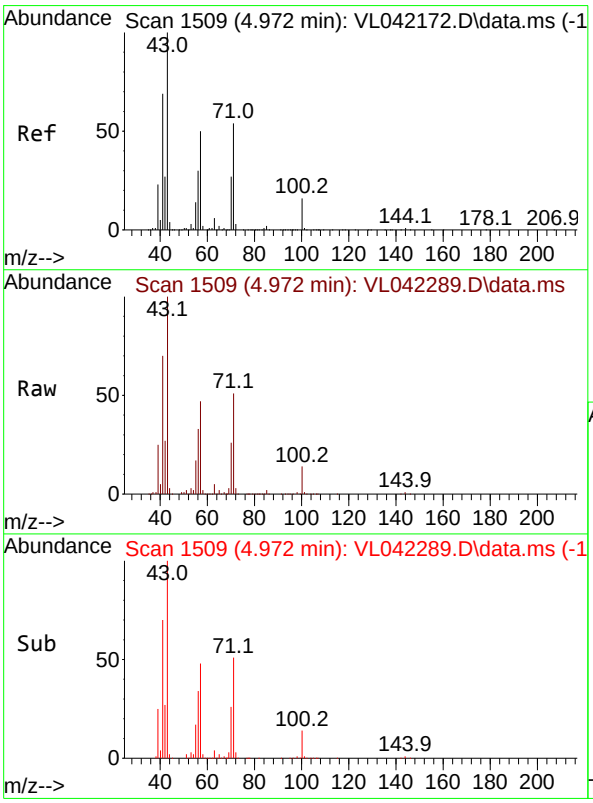
Ion	Ratio	Lower	Upper
41	100		
42	65.8	55.4	83.2



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
APPROVED

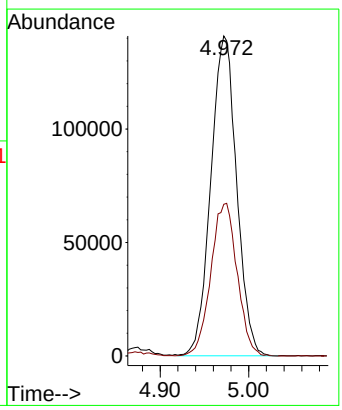
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

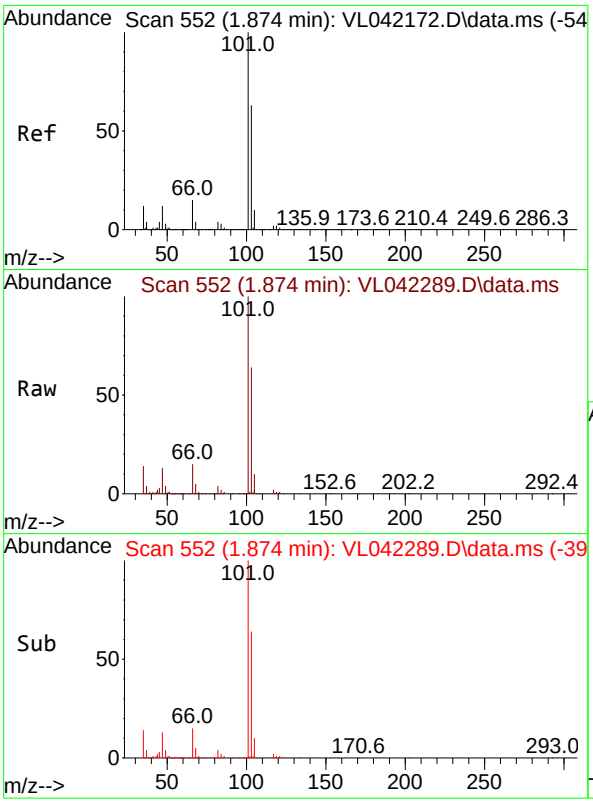


#10
Heptane
Concen: 9.665 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 285337

Ion	Ratio	Lower	Upper
43	100		
57	48.7	39.4	59.2

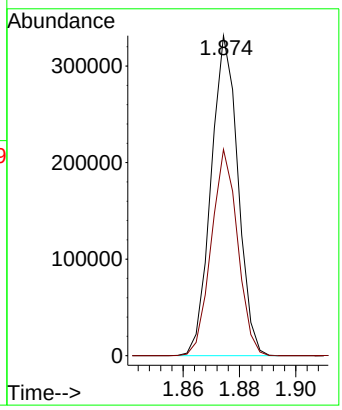




#11
Trichlorofluoromethane
Concen: 9.507 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:101 Resp: 21927

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
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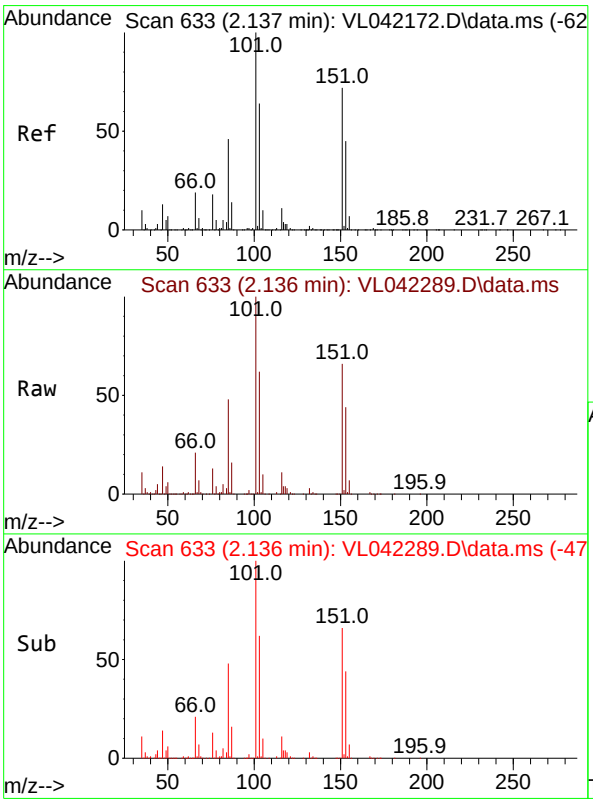
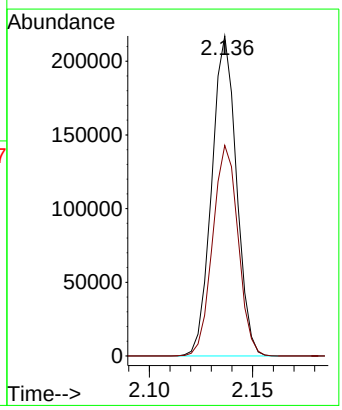
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

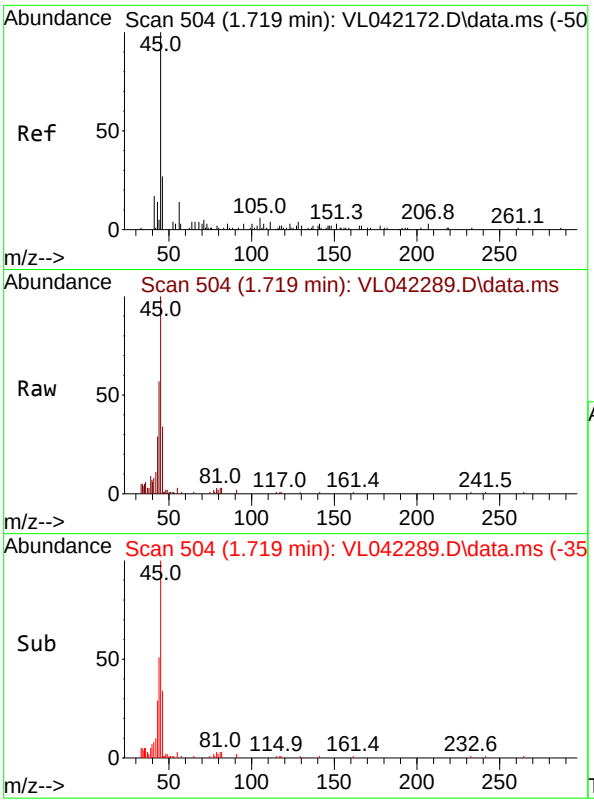


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.518 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:101 Resp: 180430

Ion	Ratio	Lower	Upper
101	100		
151	67.6	57.1	85.7





#13
Ethanol
Concen: 4.530 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 45 Resp: 475

Ion	Ratio	Lower	Upper
45	100		
46	45.9	20.2	80.8

Instrument :
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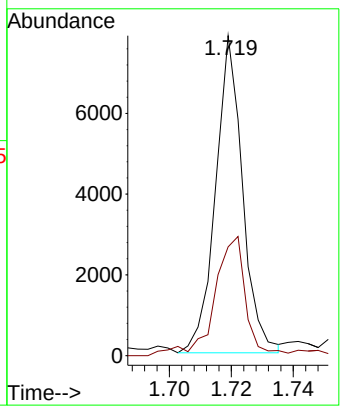
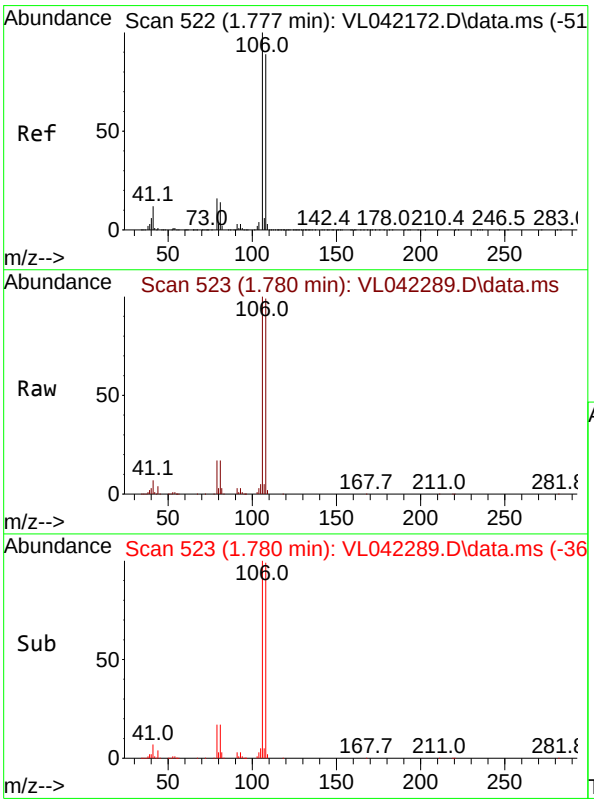
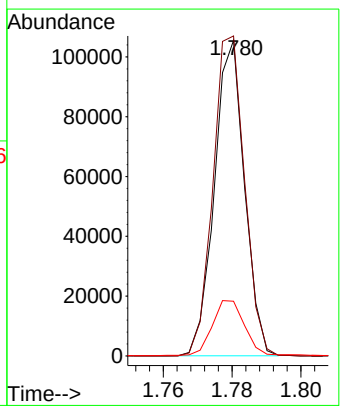


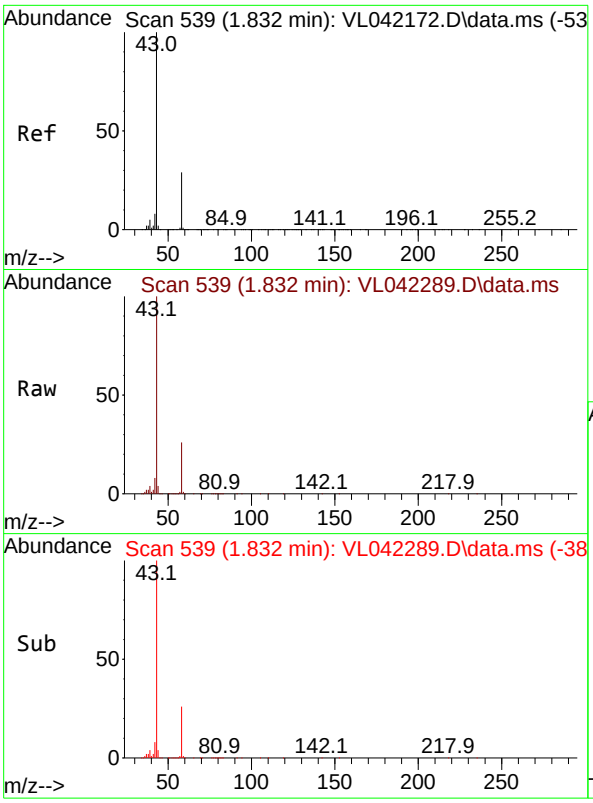


#14
Bromoethene
Concen: 8.837 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:108 Resp: 64175

Ion	Ratio	Lower	Upper
108	100		
106	106.5	86.8	130.2
79	20.4	15.0	22.6

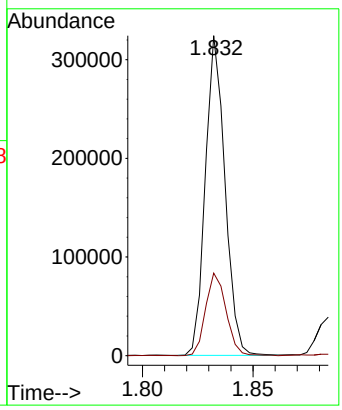




#15
Acetone
Concen: 8.915 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 20015

Ion	Ratio	Lower	Upper
43	100		
58	27.1	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
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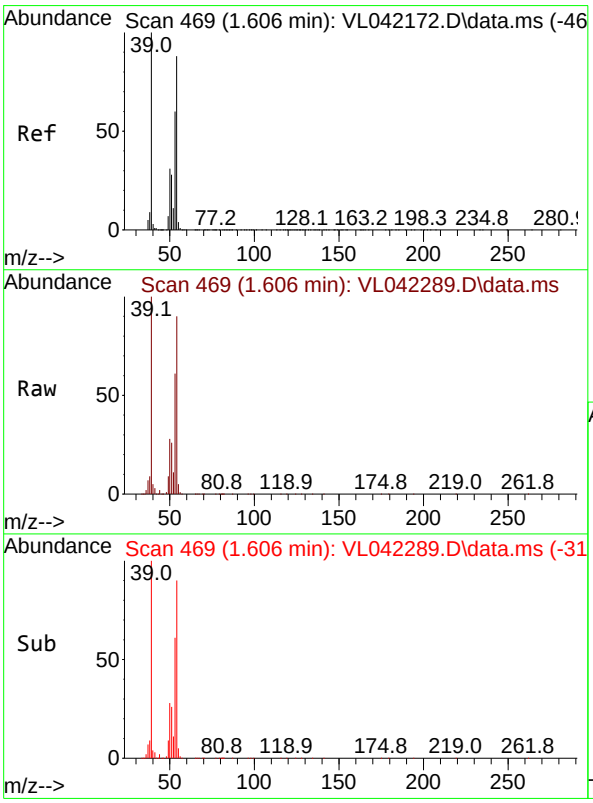
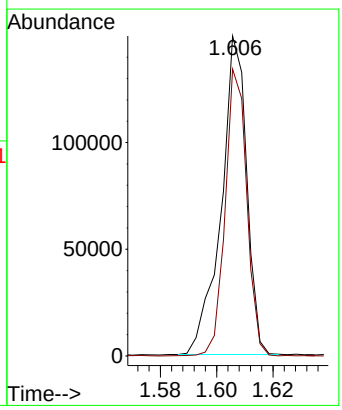
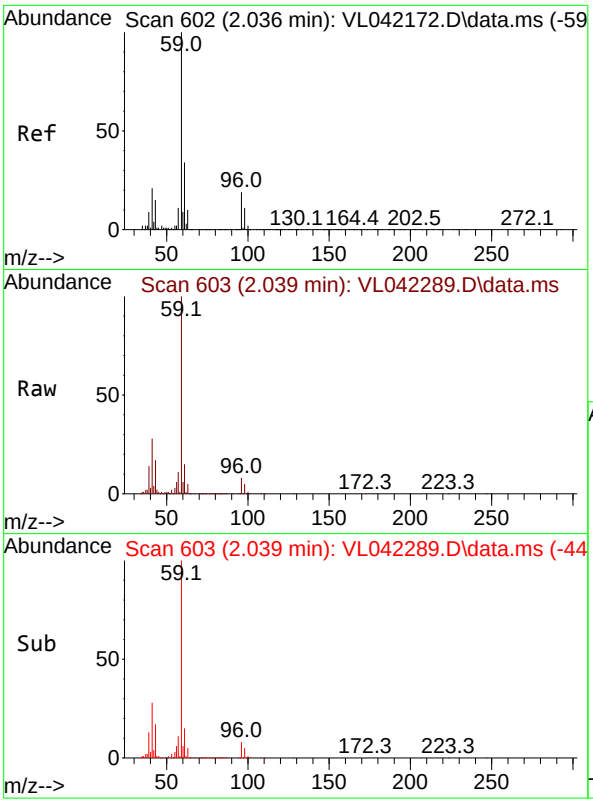


#16
1,3-Butadiene
Concen: 8.569 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 39 Resp: 93954

Ion	Ratio	Lower	Upper
39	100		
54	76.4	60.7	91.1

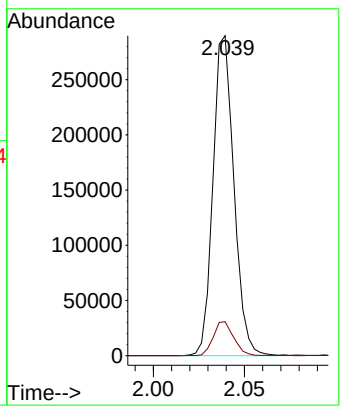




#17
tert-Butyl alcohol
Concen: 8.271 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 59 Resp: 23129

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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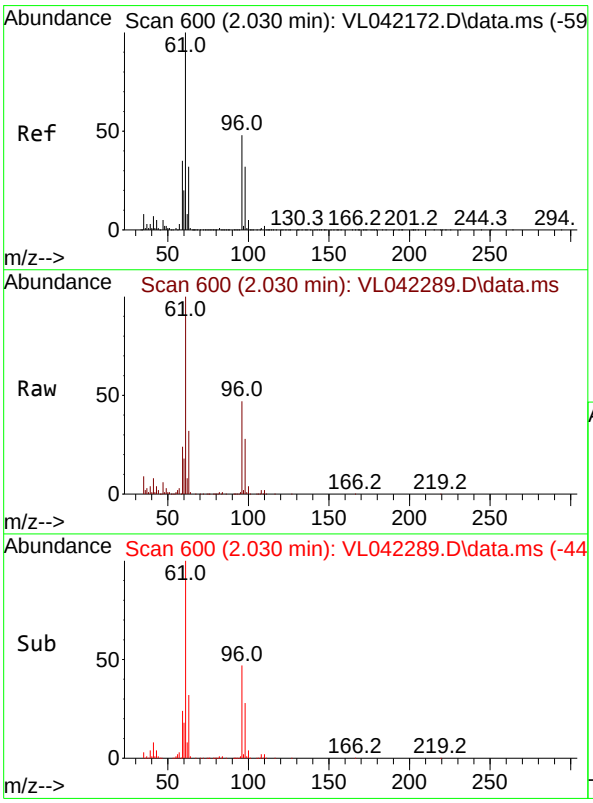
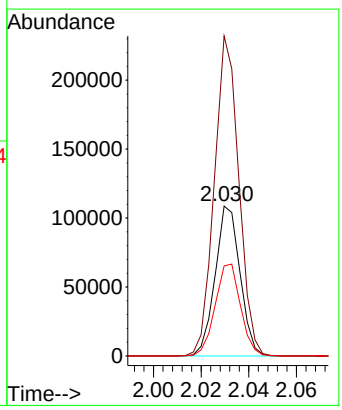
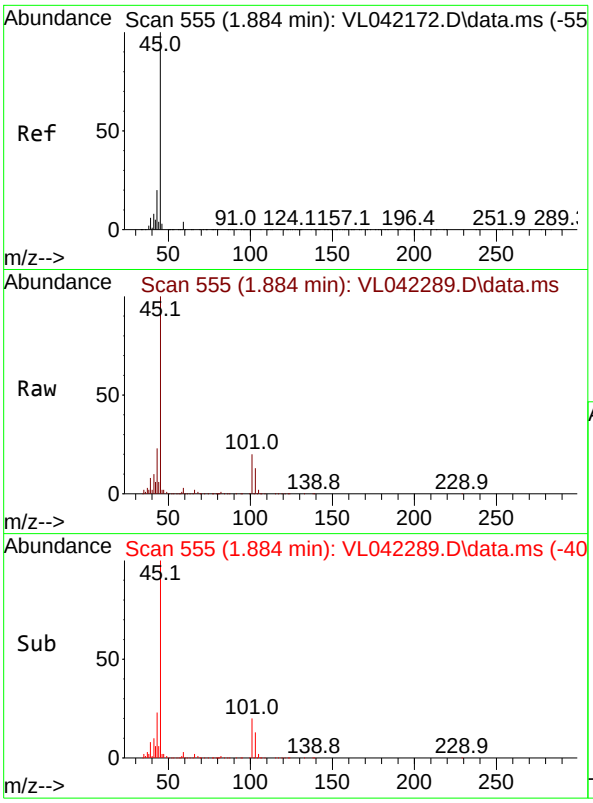


#18
1,1-Dichloroethene
Concen: 8.912 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 96 Resp: 78979

Ion	Ratio	Lower	Upper
96	100		
61	213.3	167.6	251.4
98	60.0	53.5	80.3

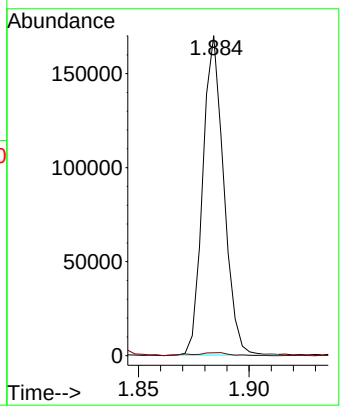




#19
Isopropyl Alcohol
Concen: 8.835 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 45 Resp: 11191

Ion	Ratio	Lower	Upper
45	100		
58	48.5	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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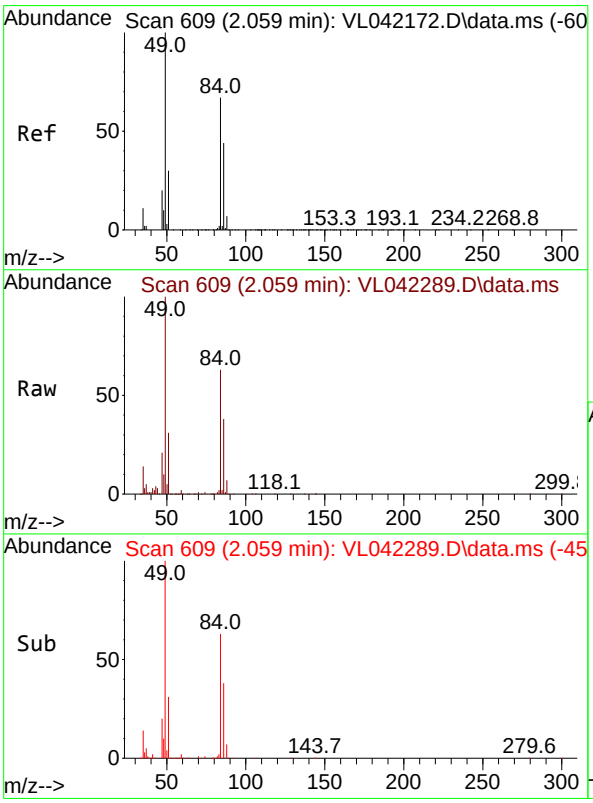
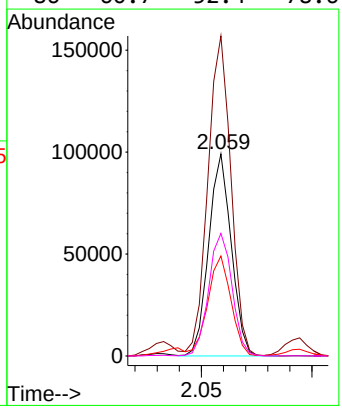
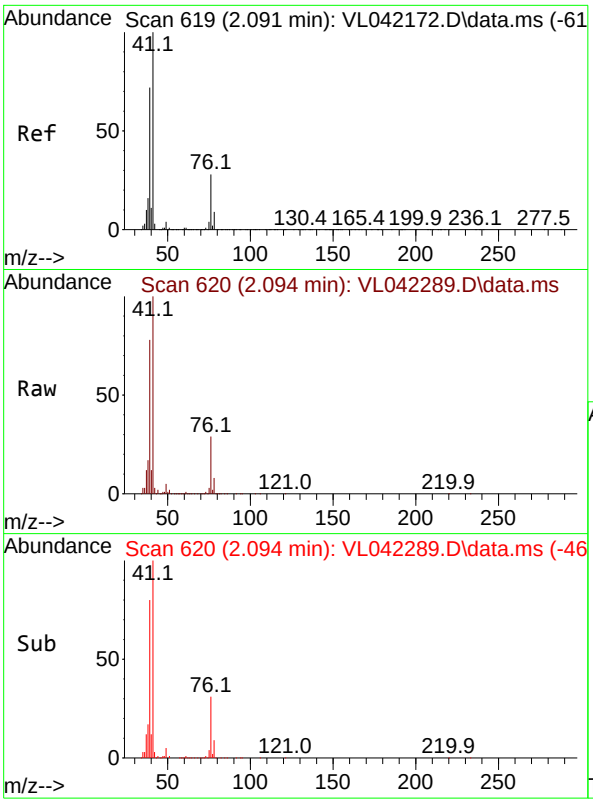


#20
Methylene Chloride
Concen: 8.444 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 84 Resp: 70611

Ion	Ratio	Lower	Upper
84	100		
49	156.0	120.2	180.4
51	48.6	37.4	56.0
86	60.7	52.4	78.6





#21
Allyl Chloride
Concen: 9.308 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 41 Resp: 14738

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	77.7	61.1	91.7

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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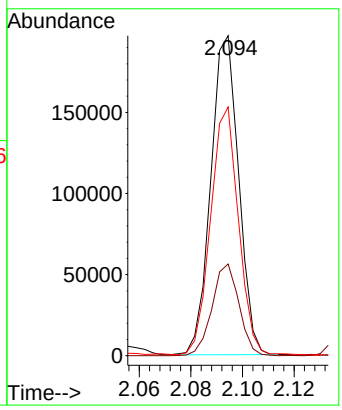
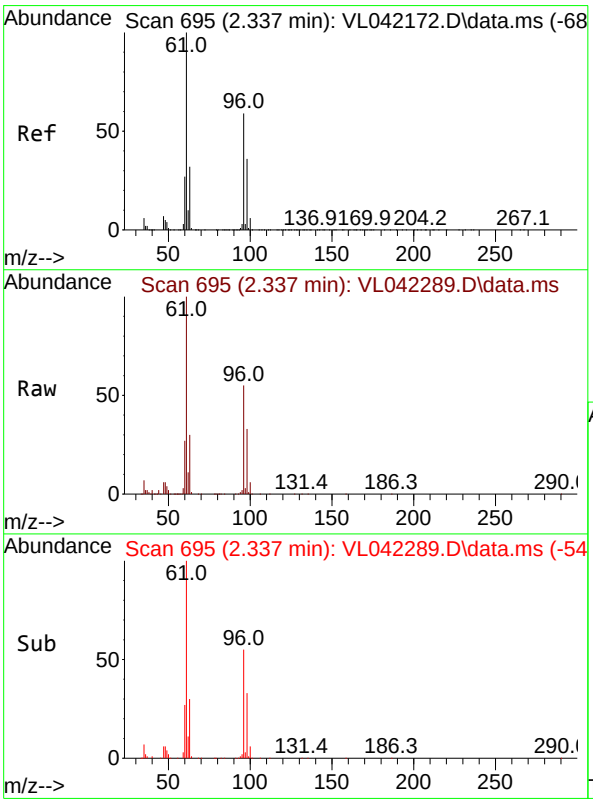
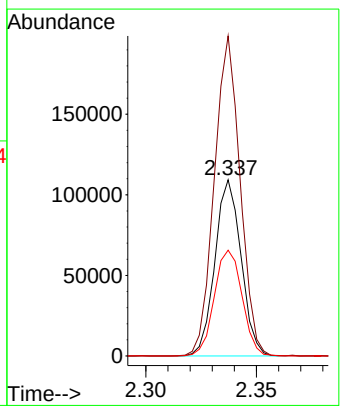


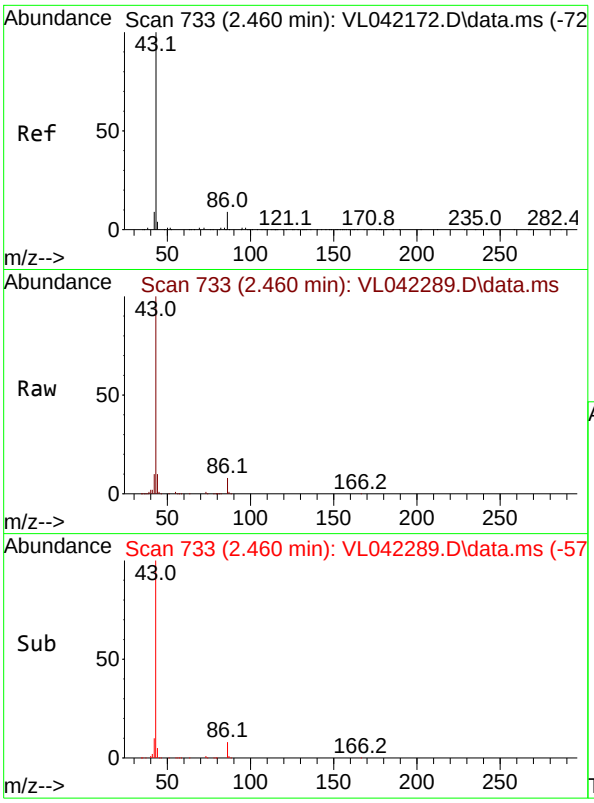


#22
trans-1,2-Dichloroethene
Concen: 8.775 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 96 Resp: 89877

Ion	Ratio	Lower	Upper
96	100		
61	181.6	136.6	204.8
98	60.0	49.4	74.2

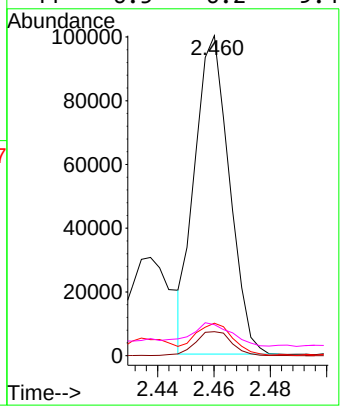




#23
Vinyl Acetate
Concen: 8.750 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 8502

Ion	Ratio	Lower	Upper
43	100		
86	7.5	5.5	8.3
42	9.9	8.6	13.0
44	6.5	6.2	9.4



Instrument :
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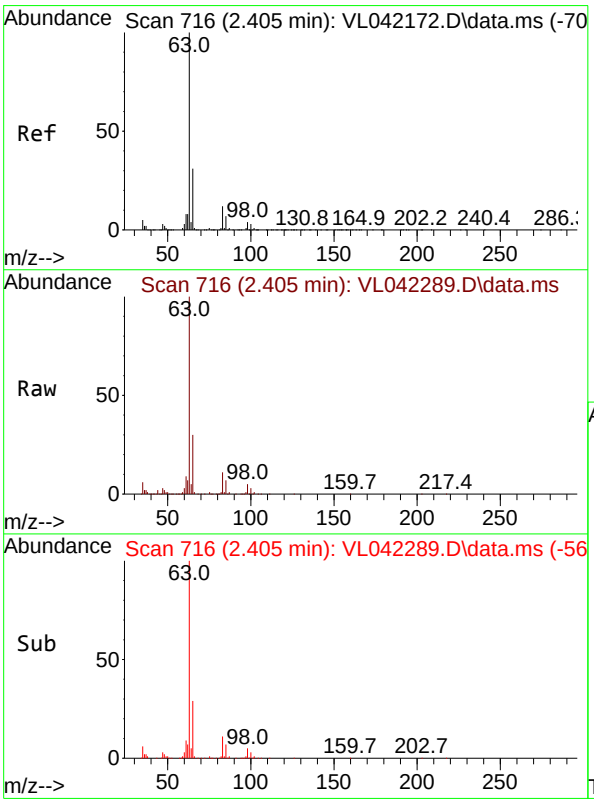
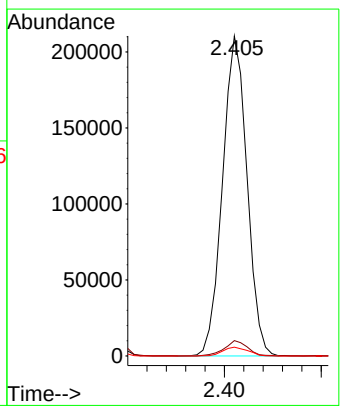
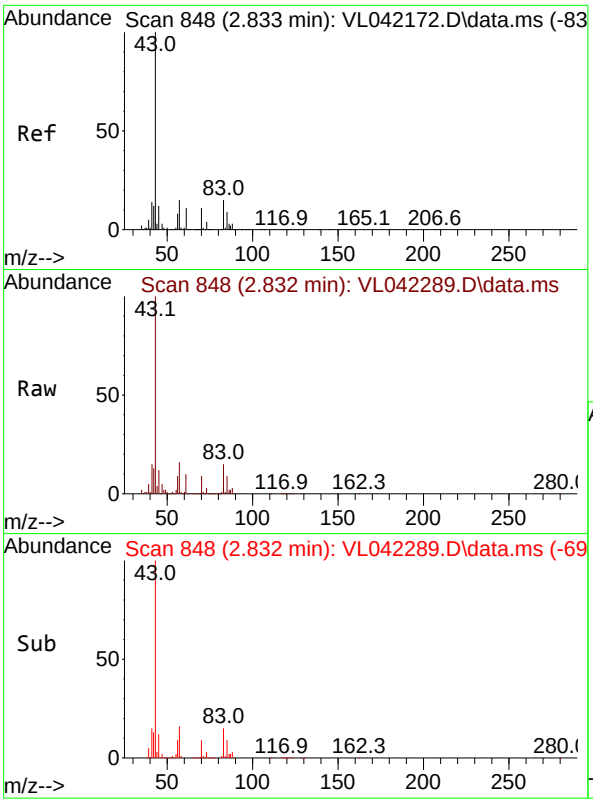


#24
1,1-Dichloroethane
Concen: 9.733 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 63 Resp: 184801

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	2.8	1.6	4.7

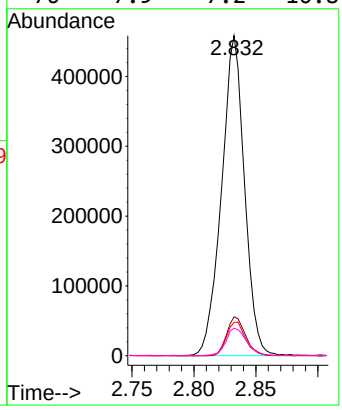




#25
Ethyl Acetate
Concen: 10.137 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 59069

Ion	Ratio	Lower	Upper
43	100		
45	10.0	8.2	12.2
61	8.7	7.3	10.9
70	7.9	7.2	10.8



Instrument :
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ClientSampleId :
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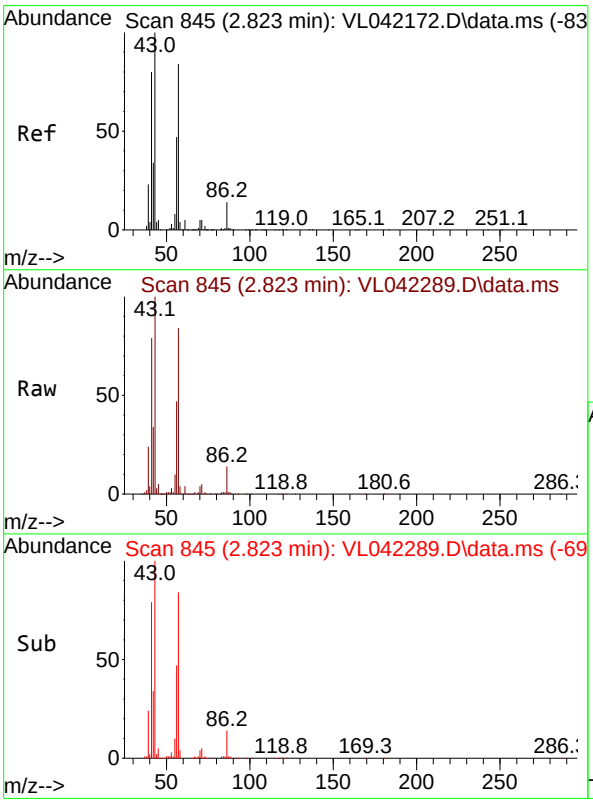
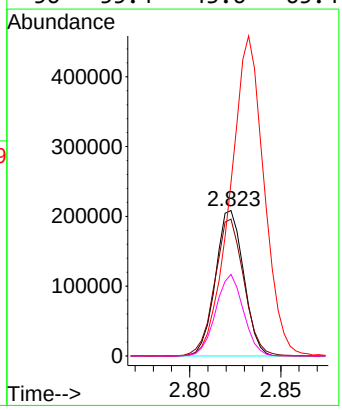
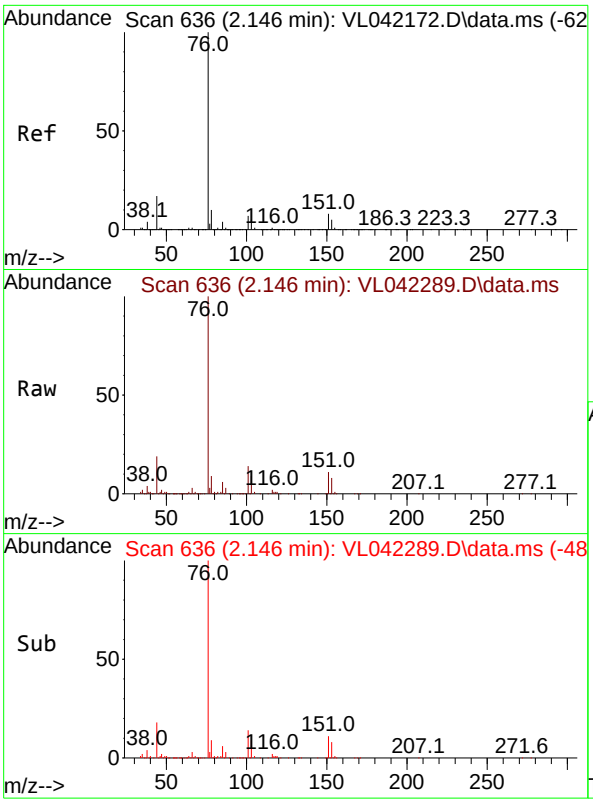


#26
Hexane
Concen: 9.943 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 57 Resp: 223800

Ion	Ratio	Lower	Upper
57	100		
41	97.7	76.6	114.8
43	264.7	207.8	311.8
56	55.4	43.6	65.4

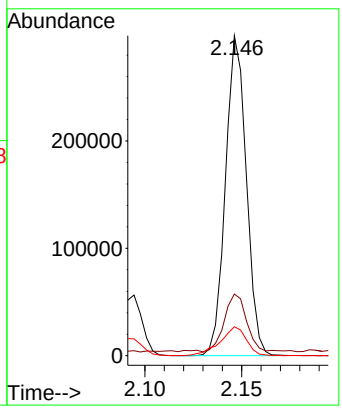




#27
Carbon Disulfide
Concen: 9.267 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 76 Resp: 22367

Ion	Ratio	Lower	Upper
76	100		
44	19.6	14.7	22.1
78	11.3	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
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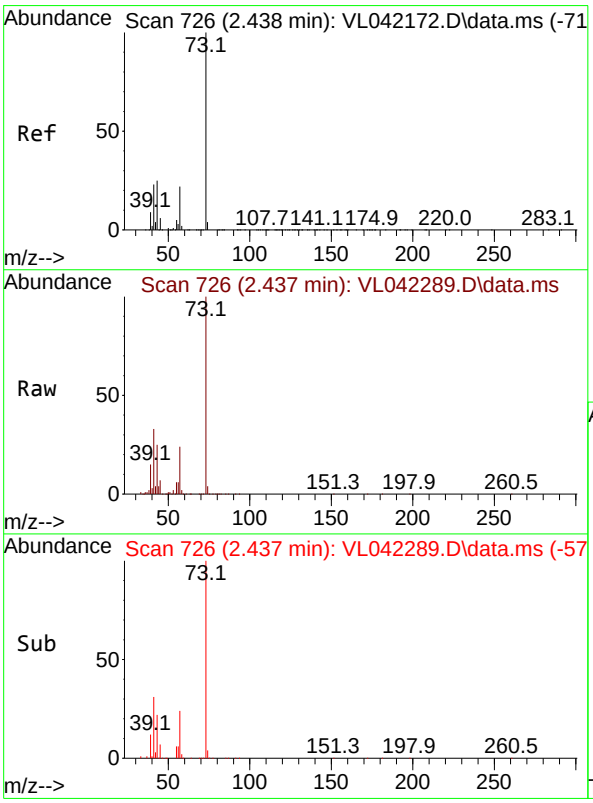
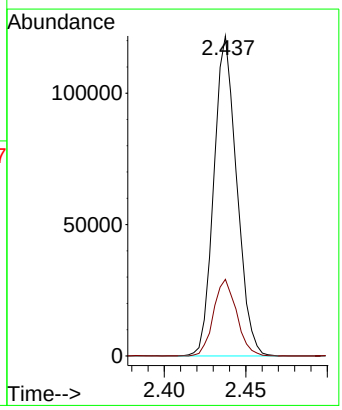
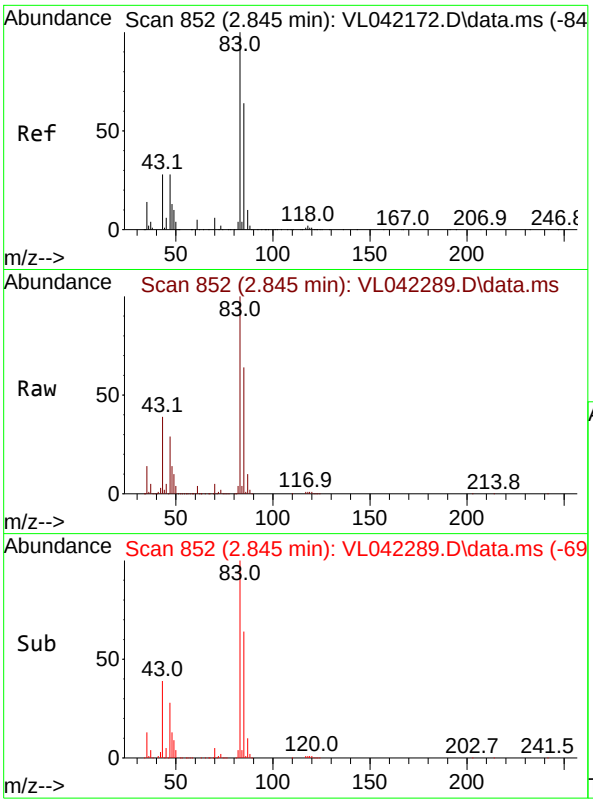


#28
Methyl tert-Butyl Ether
Concen: 8.494 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 73 Resp: 119034

Ion	Ratio	Lower	Upper
73	100		
57	24.2	20.5	30.7

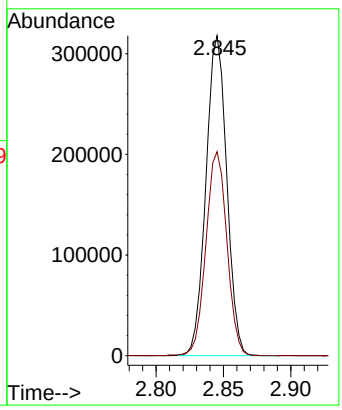




#29
Chloroform
Concen: 10.353 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 83 Resp: 34104

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.4	77.2



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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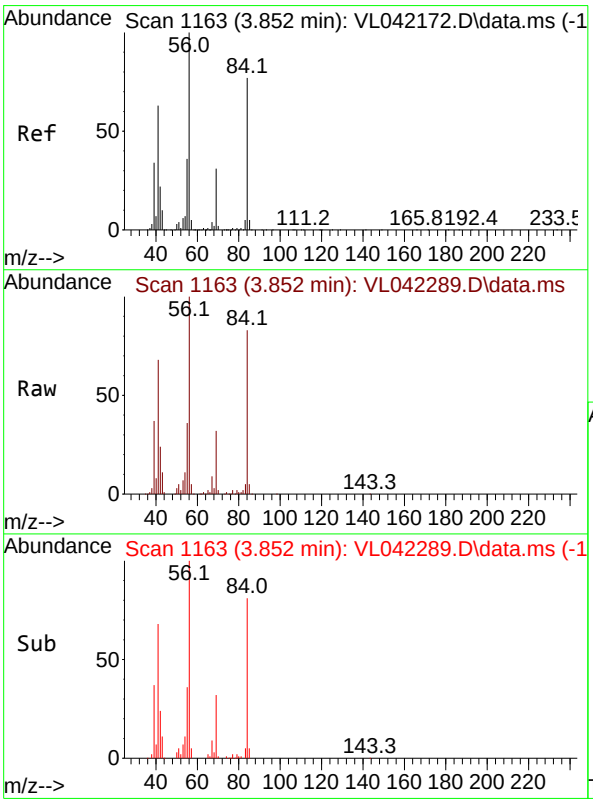
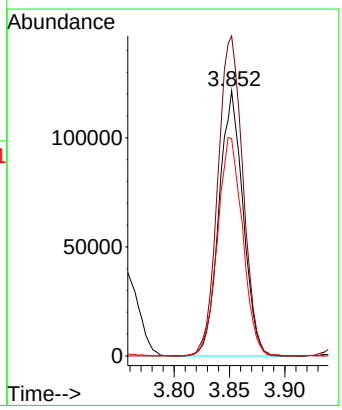
Supervised By :Mahesh Dadoda 04/10/2025

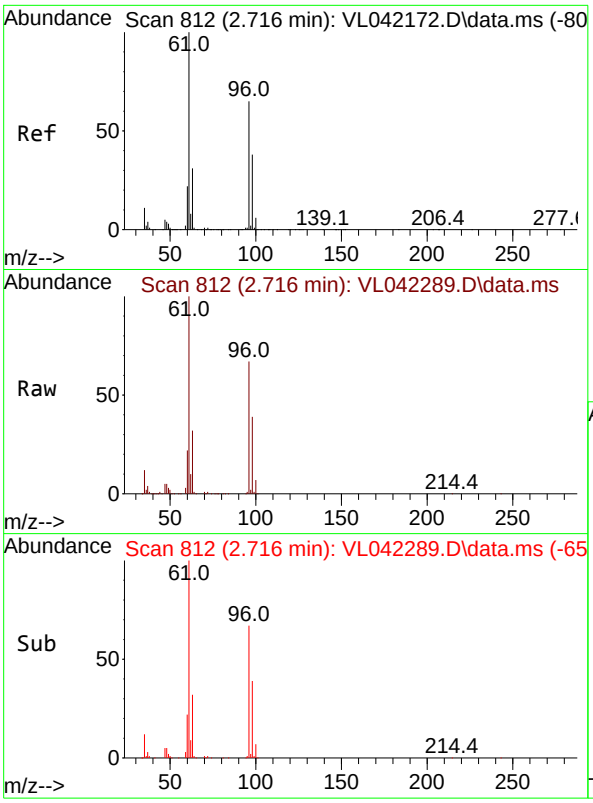


#30
Cyclohexane
Concen: 9.357 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 84 Resp: 182880

Ion	Ratio	Lower	Upper
84	100		
56	125.8	102.8	154.2
41	86.5	66.5	99.7

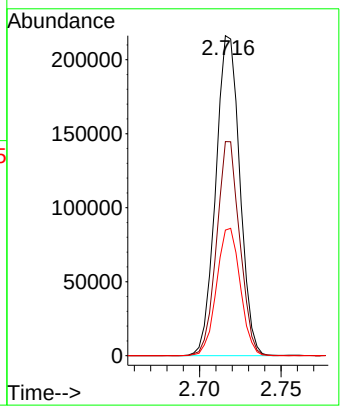




#31
cis-1,2-Dichloroethene
Concen: 9.710 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 61 Resp: 22188

Ion	Ratio	Lower	Upper
61	100		
96	66.9	51.8	77.8
98	39.2	30.6	46.0



Instrument :
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ClientSampleId :
VL0409ABS02

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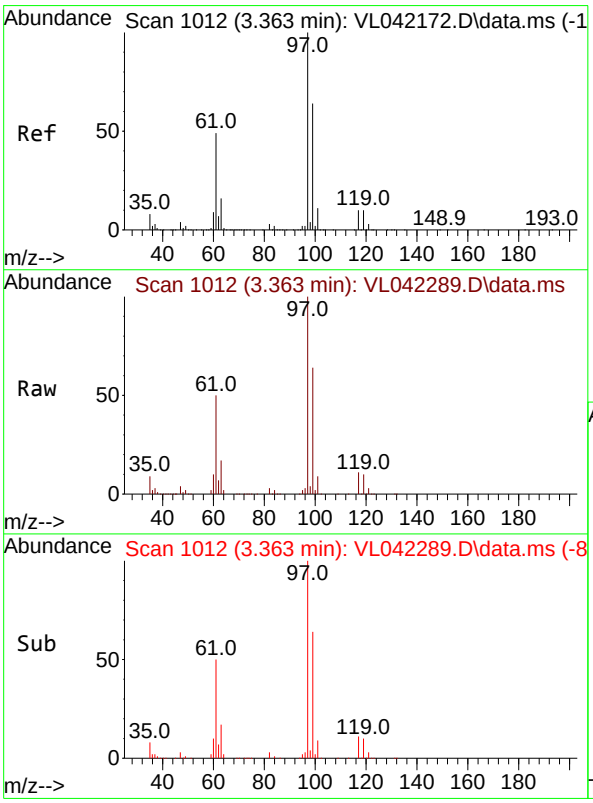
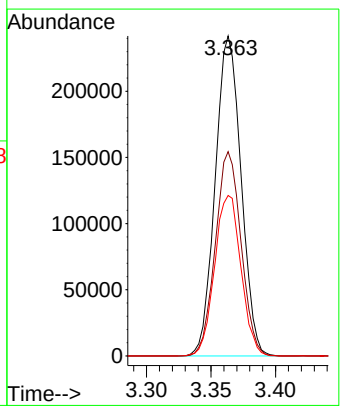
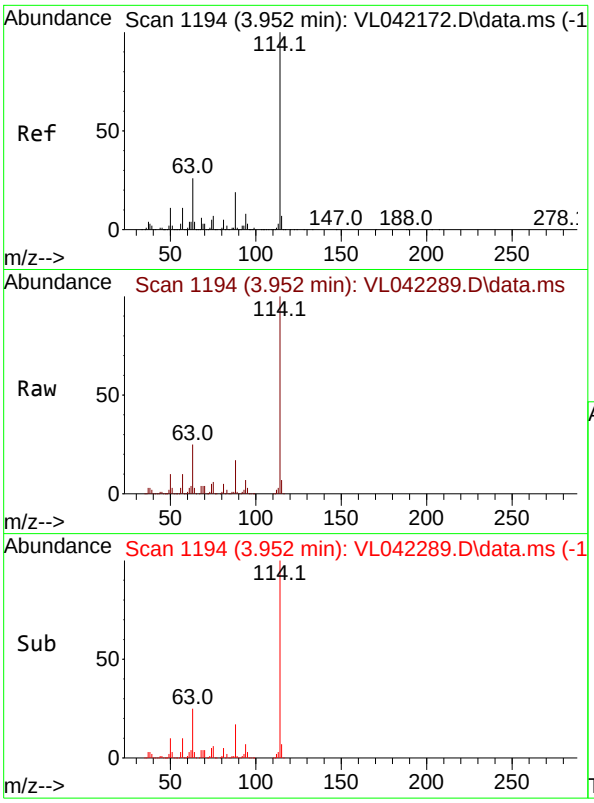


#32
1,1,1-Trichloroethane
Concen: 8.923 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 97 Resp: 336493

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	51.2	38.7	58.1





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:114 Resp: 42184

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	17.3	15.0	22.4

Instrument :
MSVOA_L
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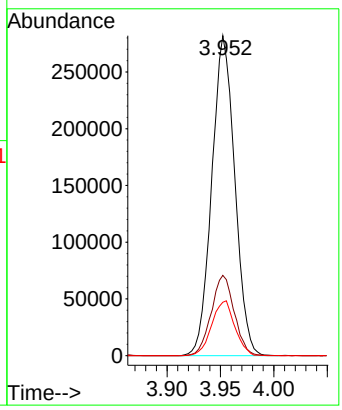
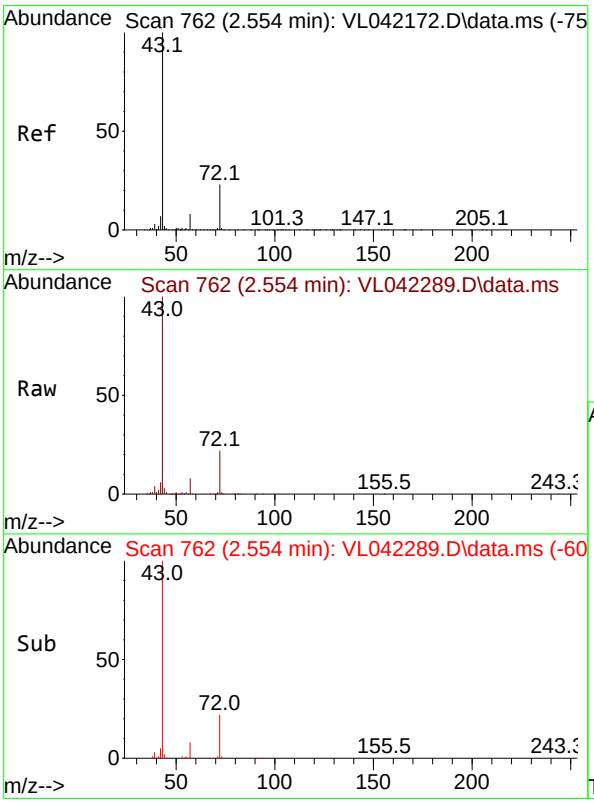
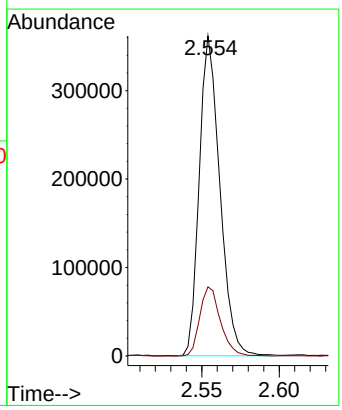


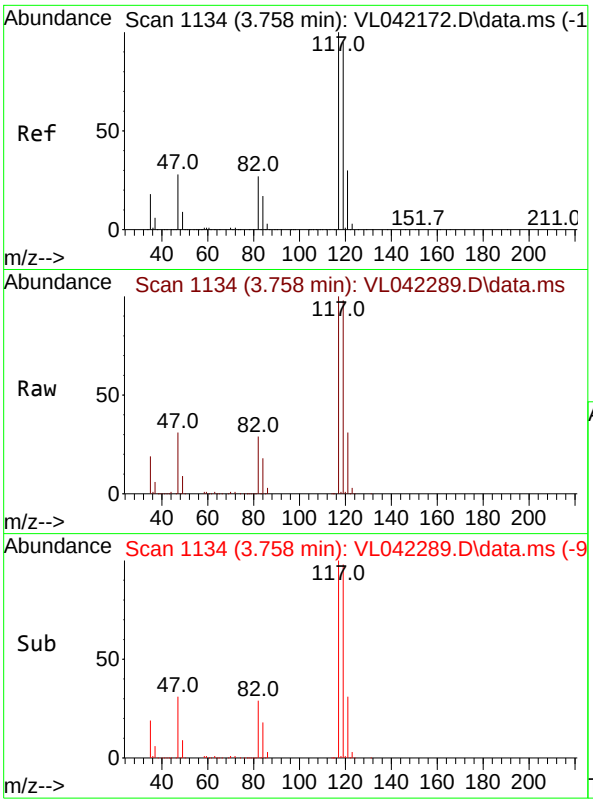


#34
2-Butanone
Concen: 10.940 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 334636

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2

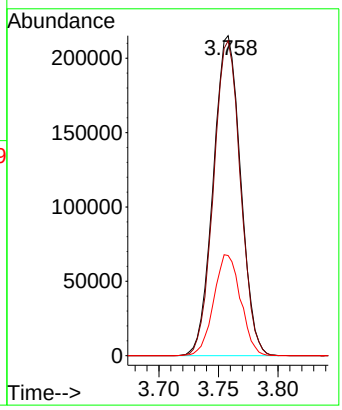




#35
Carbon Tetrachloride
Concen: 10.420 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:117 Resp: 34337

Ion	Ratio	Lower	Upper
117	100		
119	98.4	76.2	114.2
121	31.3	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
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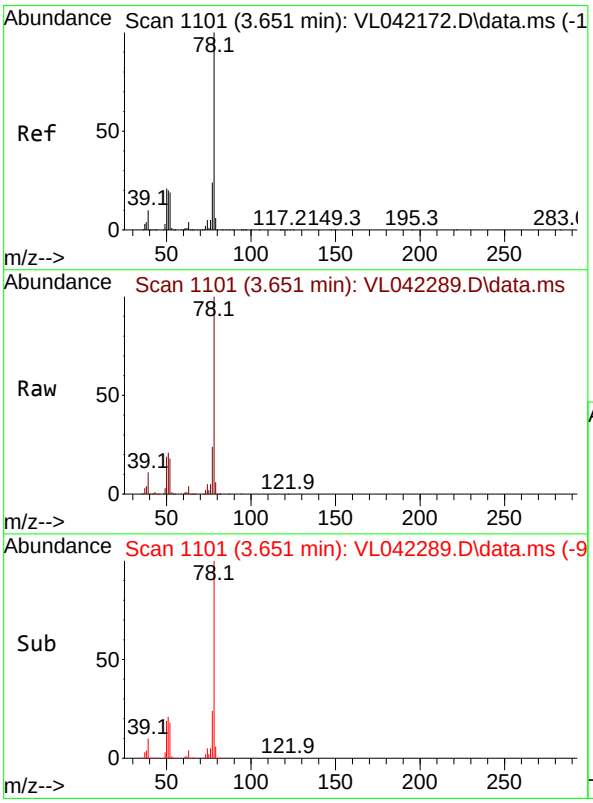
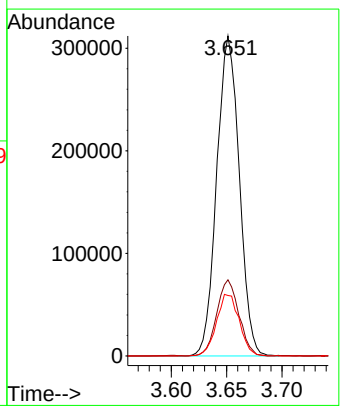
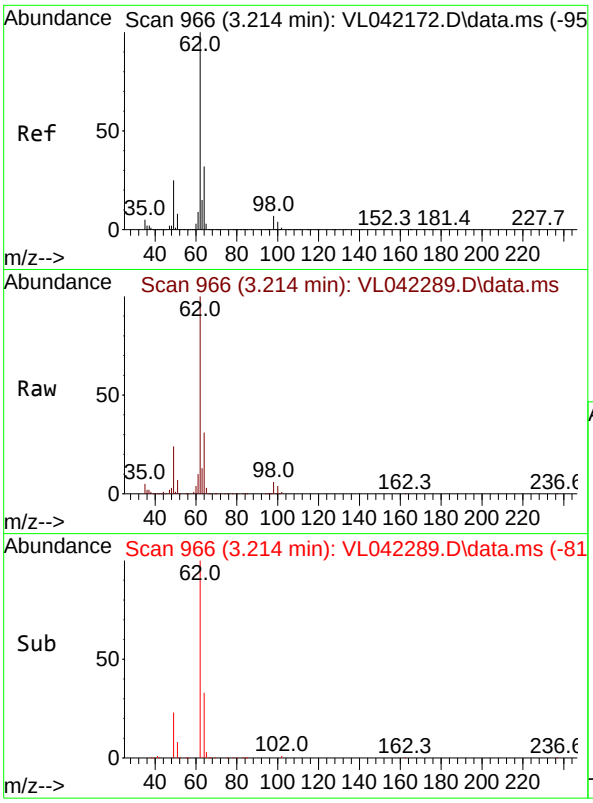


#36
Benzene
Concen: 10.586 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 78 Resp: 442736

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.1	28.7
50	18.9	16.6	24.8

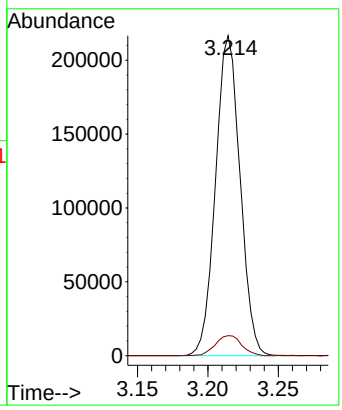




#37
1,2-Dichloroethane
Concen: 10.965 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 62 Resp: 26252

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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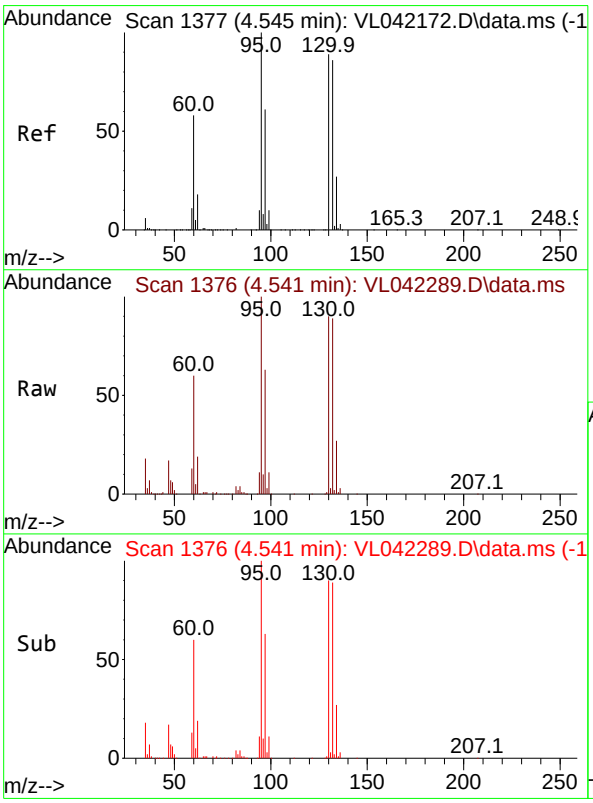
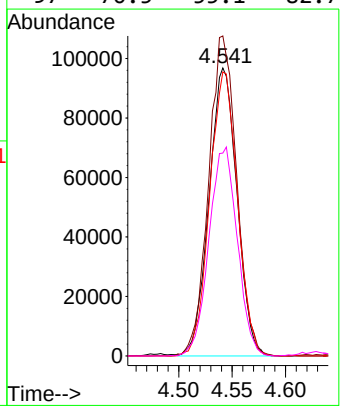
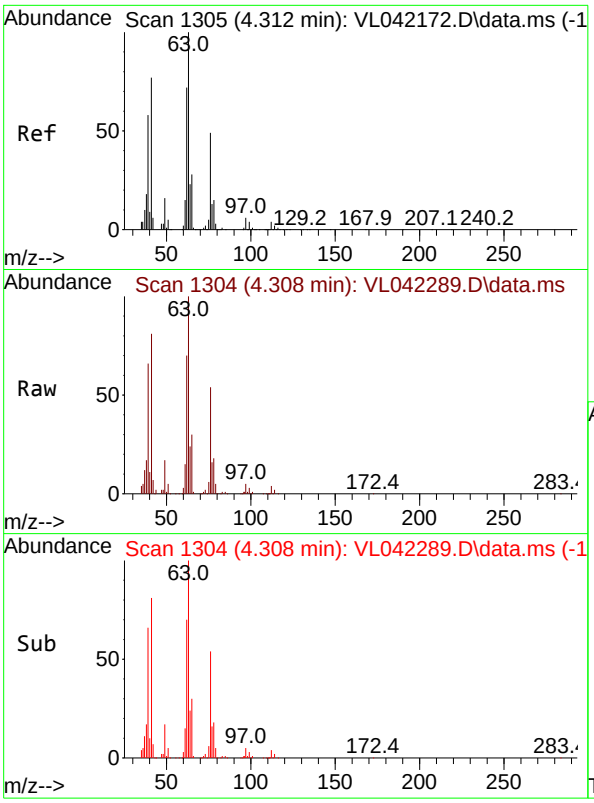


#38
Trichloroethene
Concen: 10.111 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:130 Resp: 176435

Ion	Ratio	Lower	Upper
130	100		
95	111.1	89.8	134.8
132	98.6	77.4	116.2
97	70.5	55.1	82.7

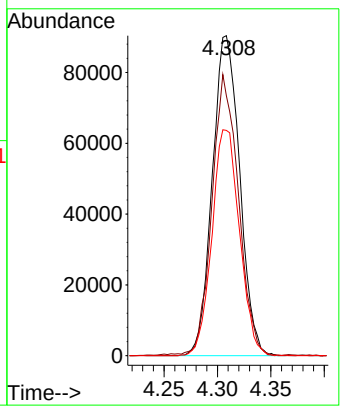




#39
1,2-Dichloropropane
Concen: 10.578 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 63 Resp: 16110

Ion	Ratio	Lower	Upper
63	100		
41	81.1	61.7	92.5
62	70.4	57.6	86.4



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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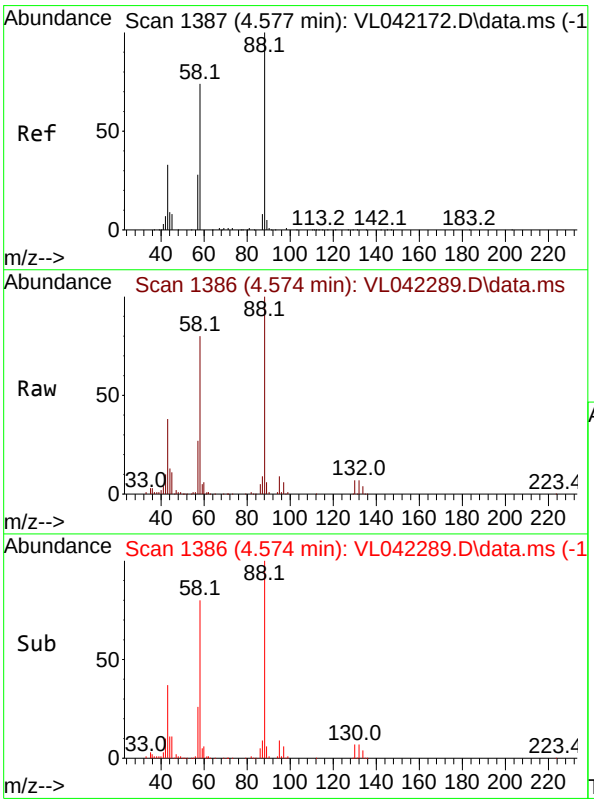
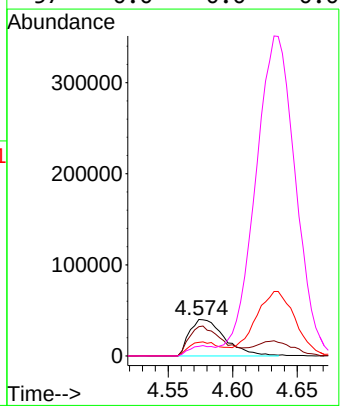
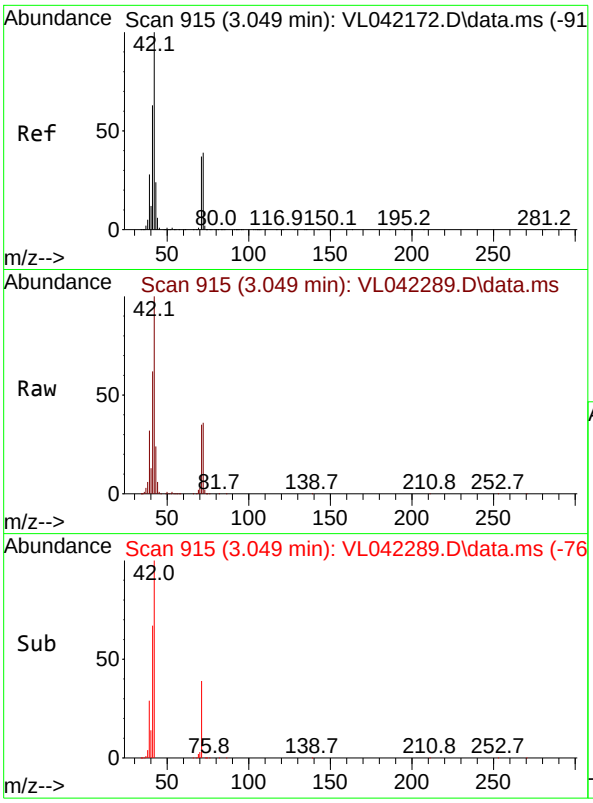


#40
1,4-Dioxane
Concen: 9.441 ppbv
RT: 4.574 min Scan# 1386
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 88 Resp: 76321

Ion	Ratio	Lower	Upper
88	100		
58	80.1	62.7	94.1
43	32.6	23.0	34.4
57	0.0	0.0	0.0

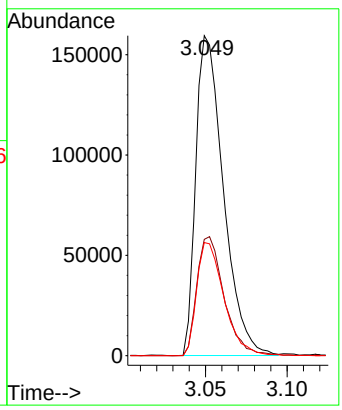




#41
Tetrahydrofuran
Concen: 10.661 ppbv
RT: 3.049 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 42 Resp: 18779

Ion	Ratio	Lower	Upper
42	100		
72	36.8	31.4	47.0
71	35.0	30.2	45.4



Instrument :
MSVOA_L
ClientSampleId :
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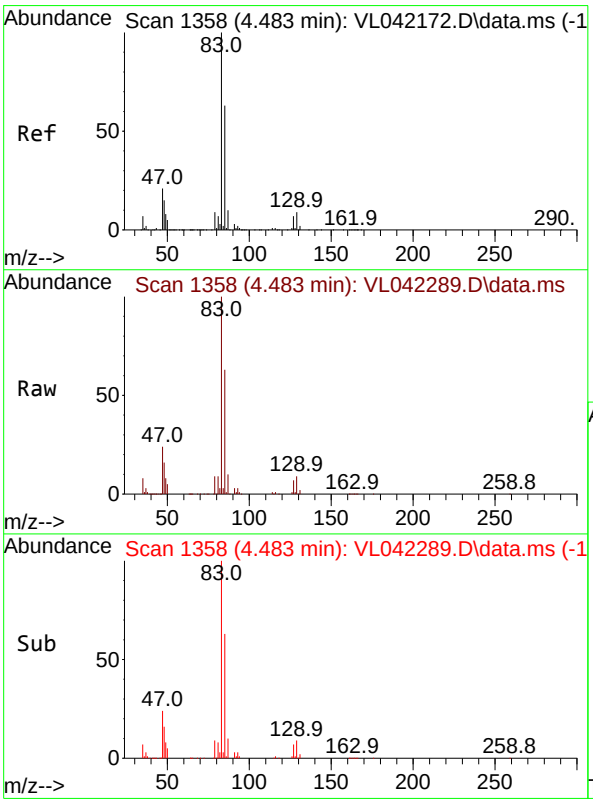
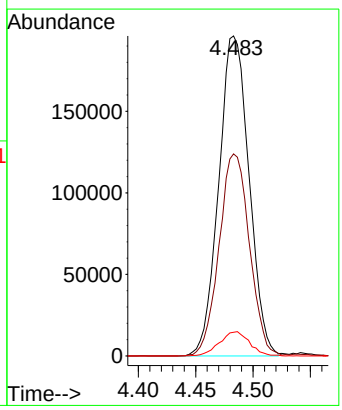
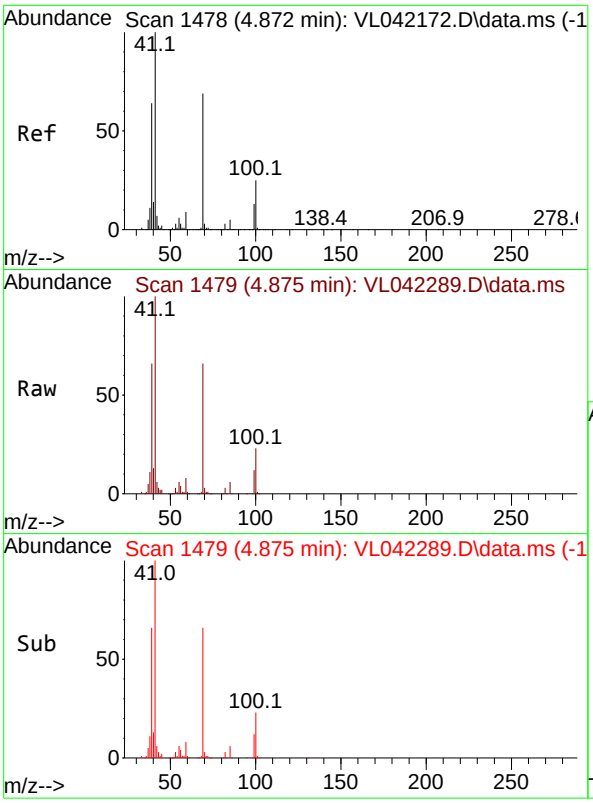


#42
Bromodichloromethane
Concen: 10.927 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 83 Resp: 360662

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9

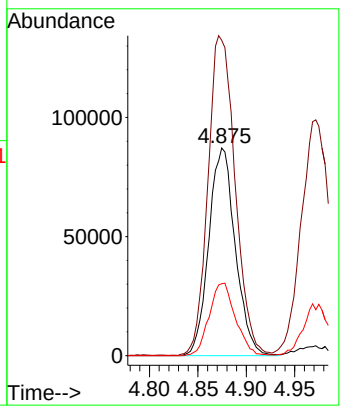




#43
Methyl Methacrylate
Concen: 9.375 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 69 Resp: 16598

Ion	Ratio	Lower	Upper
69	100		
41	157.7	123.8	185.6
100	34.7	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
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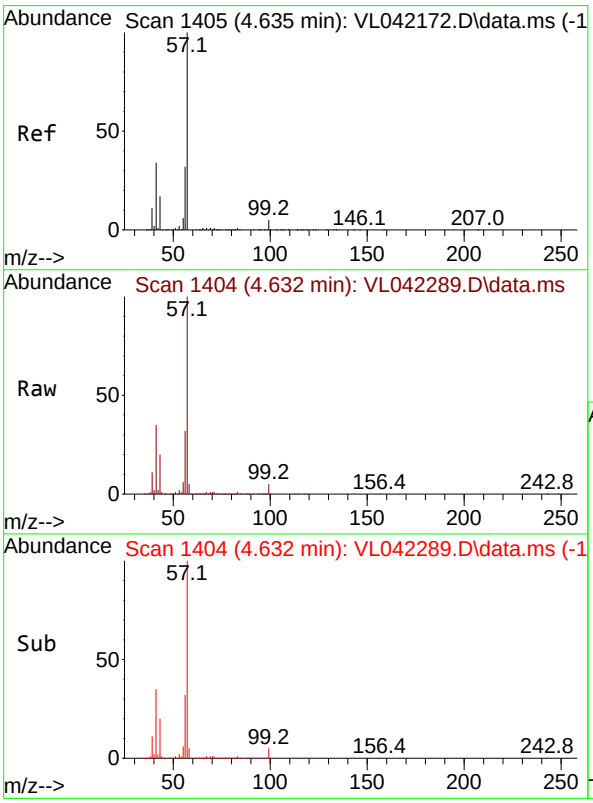
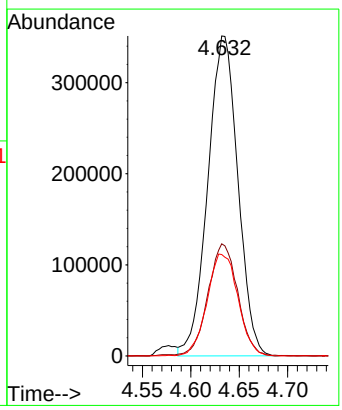
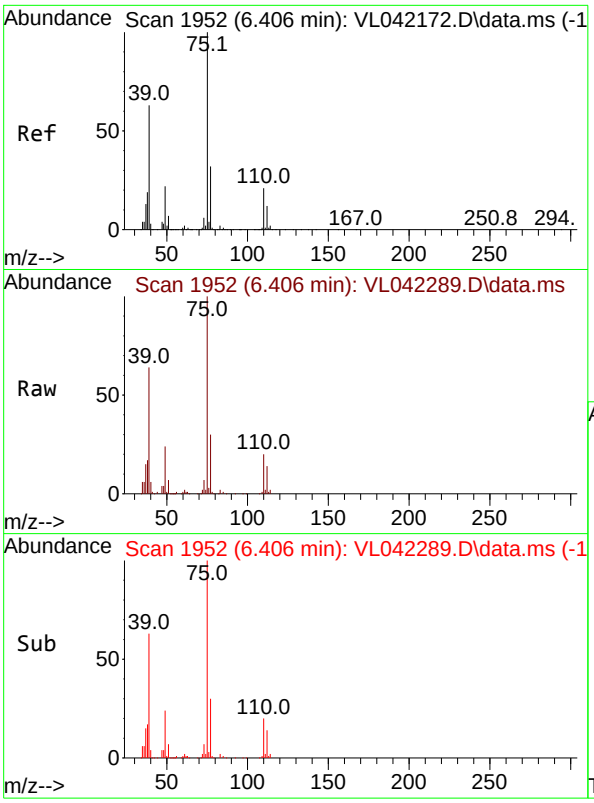


#44
2,2,4-Trimethylpentane
Concen: 10.723 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 57 Resp: 757855

Ion	Ratio	Lower	Upper
57	100		
41	35.2	26.8	40.2
56	32.9	25.6	38.4

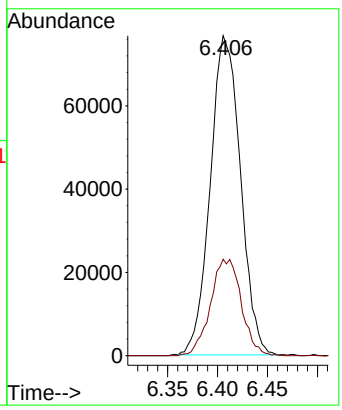




#45
t-1,3-Dichloropropene
Concen: 8.489 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 75 Resp: 16124

Ion	Ratio	Lower	Upper
75	100		
77	30.2	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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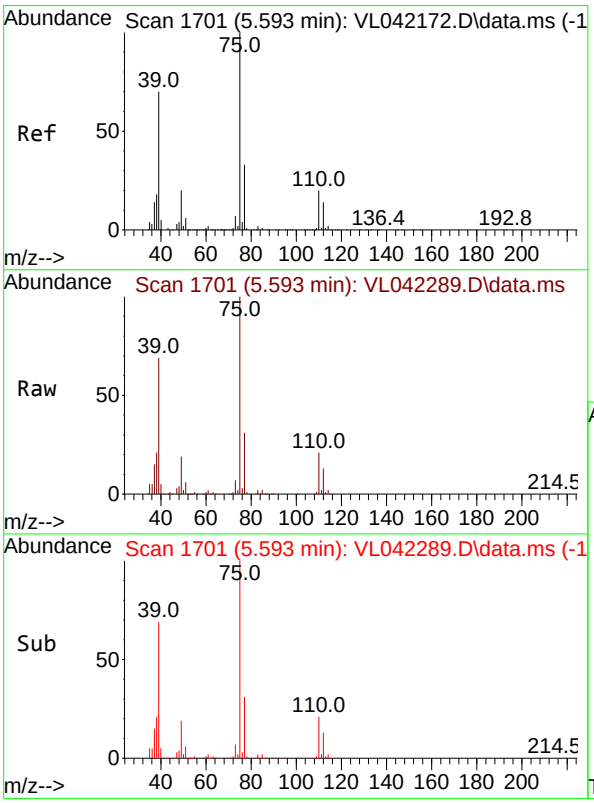
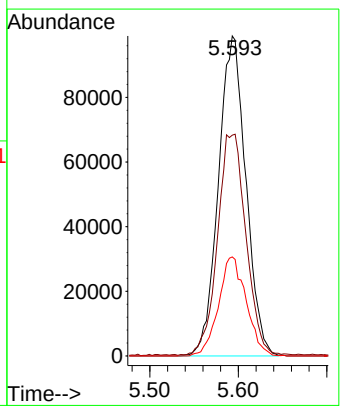
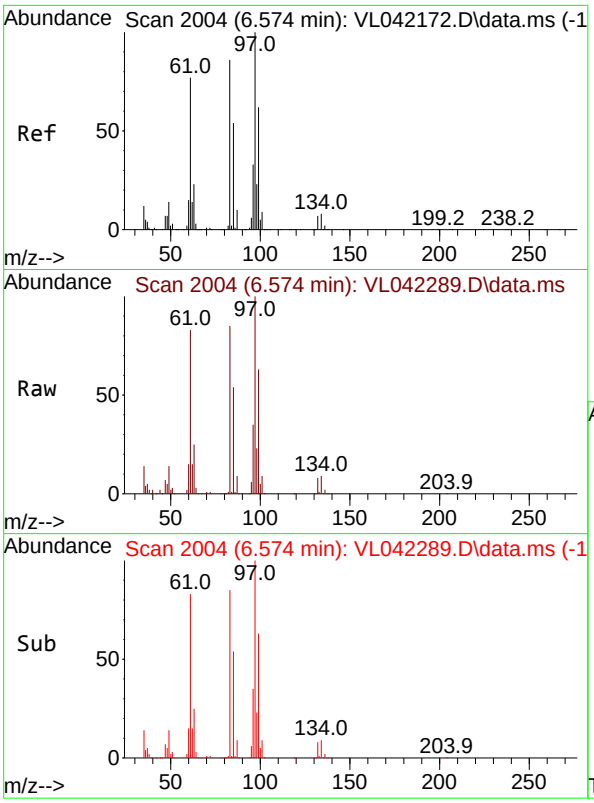


#46
cis-1,3-Dichloropropene
Concen: 9.172 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 75 Resp: 213566

Ion	Ratio	Lower	Upper
75	100		
39	68.8	55.8	83.6
77	30.9	26.0	39.0

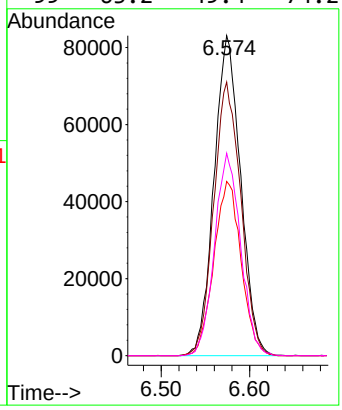




#47
1,1,2-Trichloroethane
Concen: 10.777 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 97 Resp: 17350

Ion	Ratio	Lower	Upper
97	100		
83	85.5	69.2	103.8
85	54.4	43.1	64.7
99	63.2	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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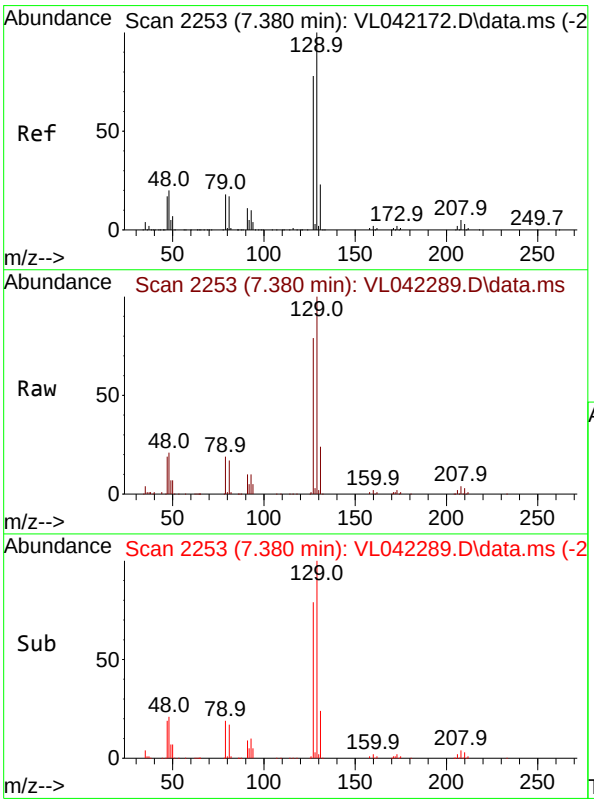
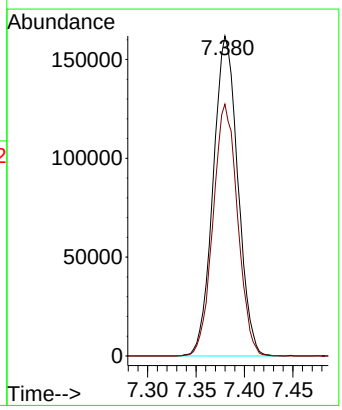
Supervised By :Mahesh Dadoda 04/10/2025

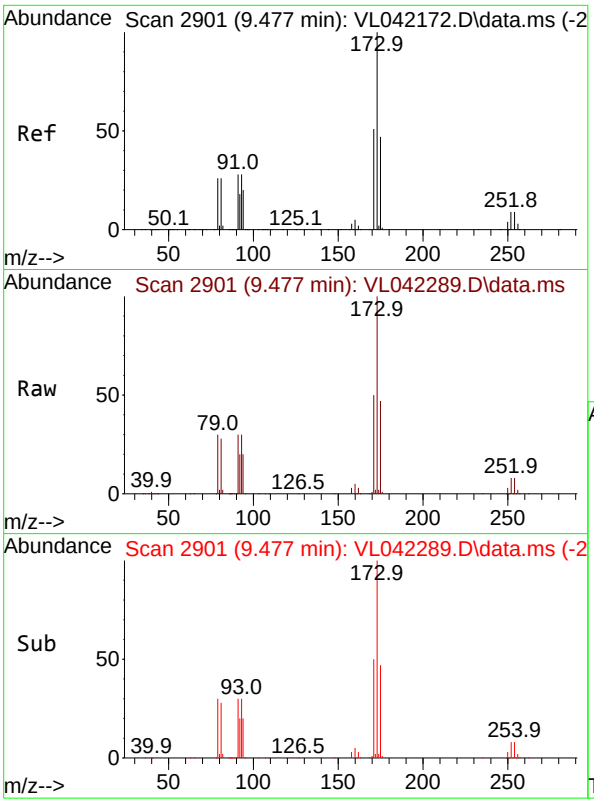


#48
Dibromochloromethane
Concen: 10.516 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:129 Resp: 286938

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.2

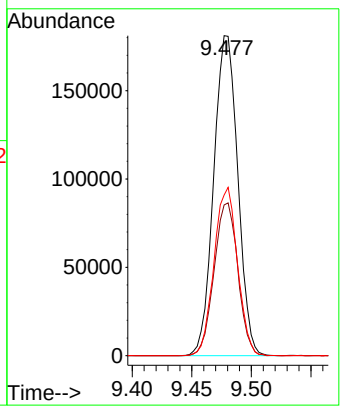




#49
Bromoform
Concen: 10.386 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:173 Resp: 25443

Ion	Ratio	Lower	Upper
173	100		
175	47.2	38.6	57.8
171	51.2	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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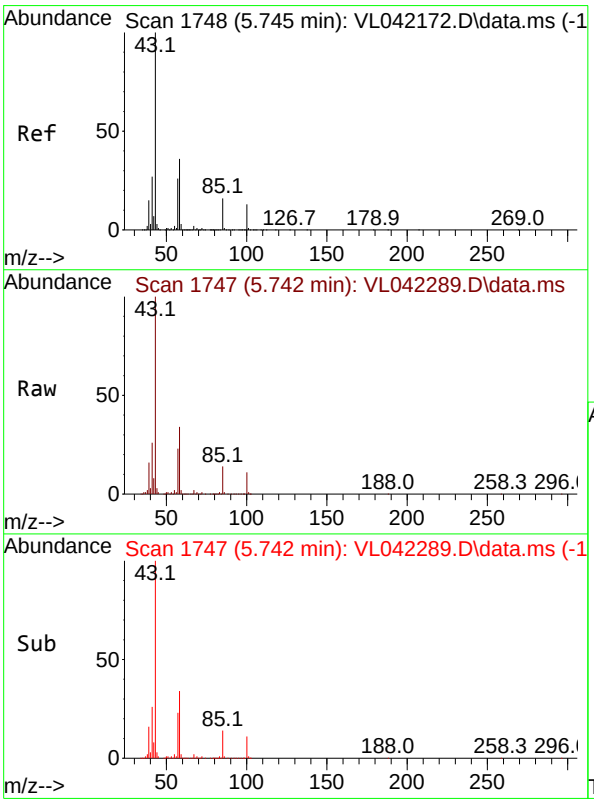
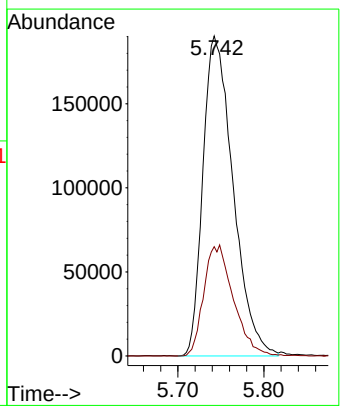
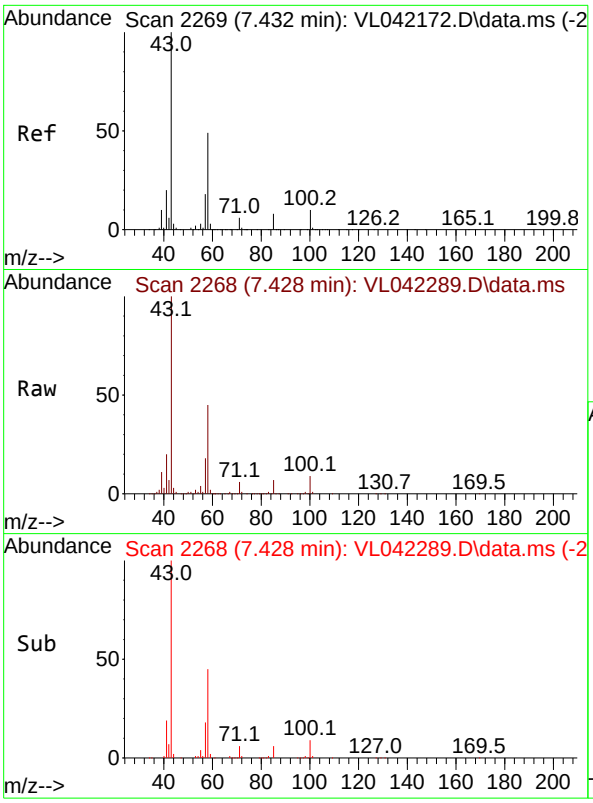


#50
4-Methyl-2-Pentanone
Concen: 9.552 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 463069

Ion	Ratio	Lower	Upper
43	100		
58	34.2	29.0	43.6





#51
2-Hexanone
Concen: 9.168 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 36494

Ion	Ratio	Lower	Upper
43	100		
58	46.5	39.7	59.5
98	0.8	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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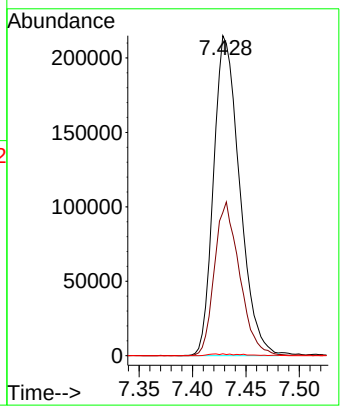
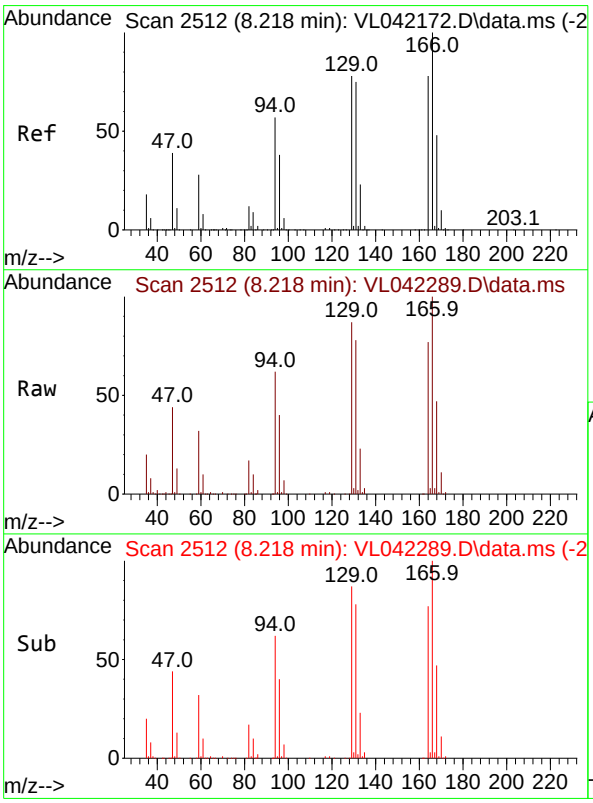
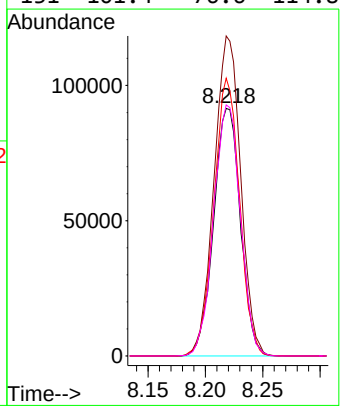


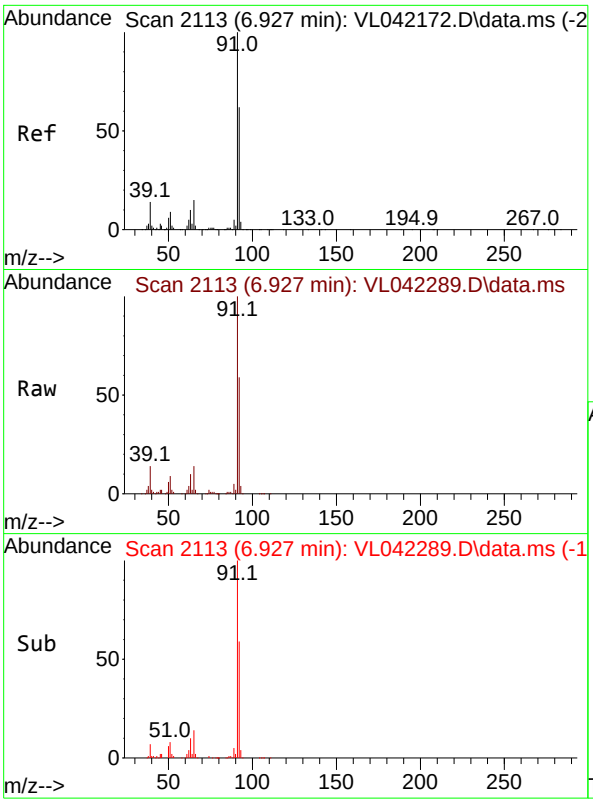


#52
Tetrachloroethene
Concen: 8.946 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:164 Resp: 148369

Ion	Ratio	Lower	Upper
164	100		
166	129.3	102.5	153.7
129	112.2	79.8	119.8
131	101.4	76.6	114.8

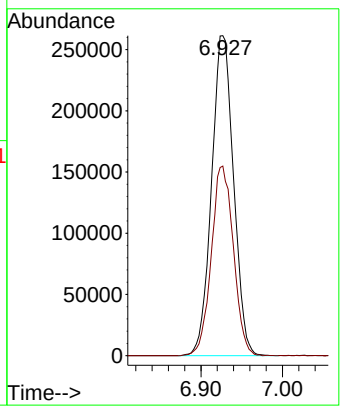




#53
Toluene
Concen: 9.903 ppbv
RT: 6.927 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 49091

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6



Instrument :
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ClientSampleId :
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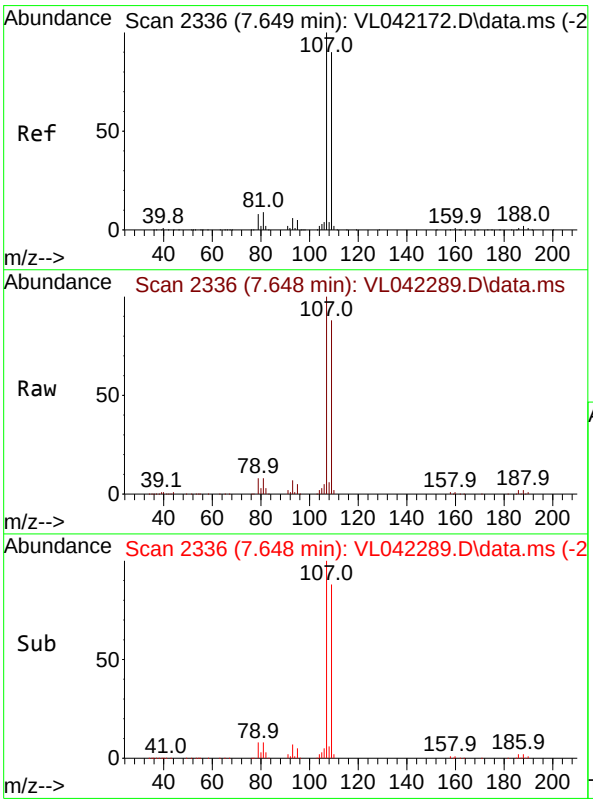
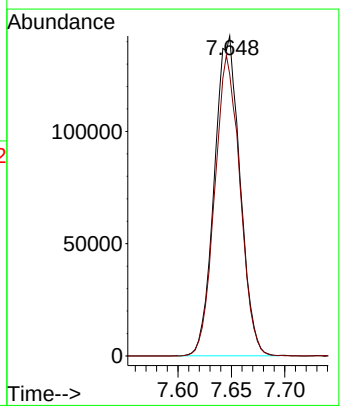
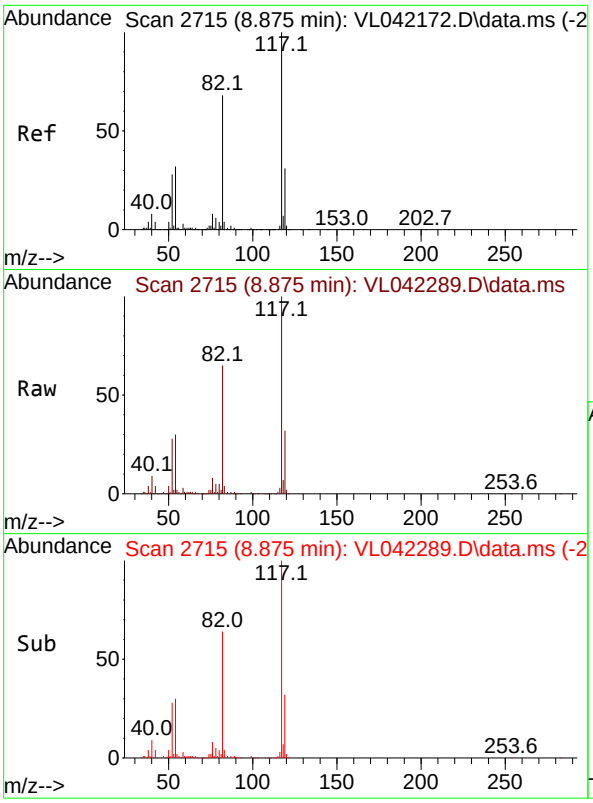


#54
1,2-Dibromoethane
Concen: 10.608 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:107 Resp: 238091

Ion	Ratio	Lower	Upper
107	100		
109	88.1	72.2	108.4

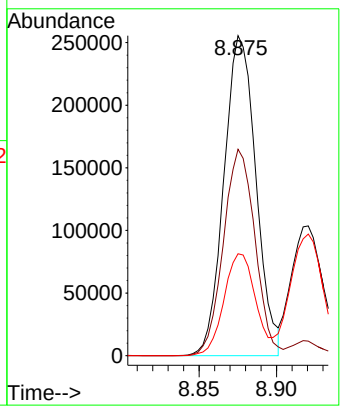




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:117 Resp: 36848

Ion	Ratio	Lower	Upper
117	100		
82	67.9	55.8	83.6
119	31.8	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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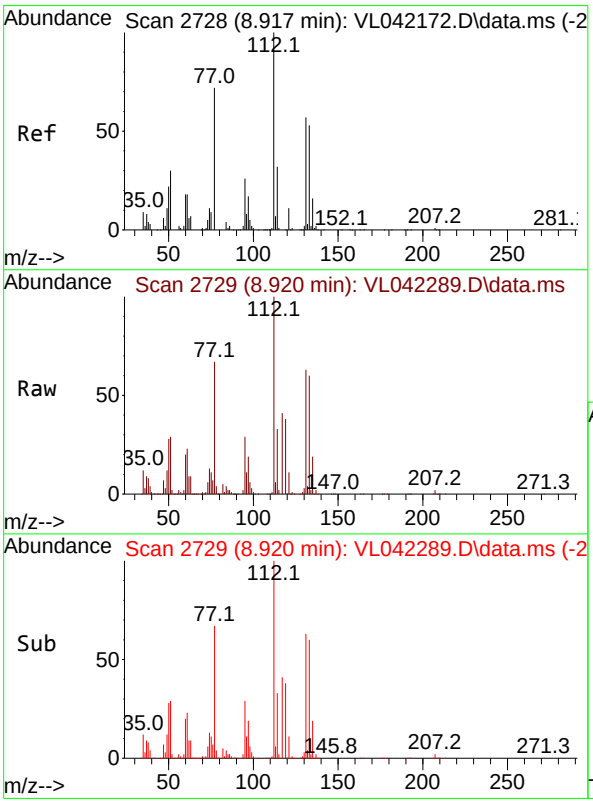
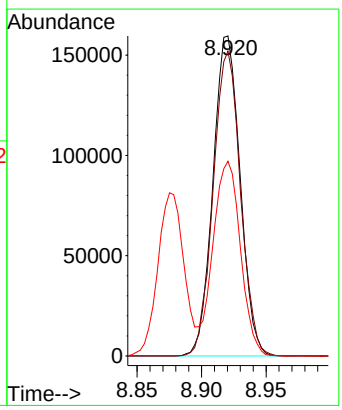
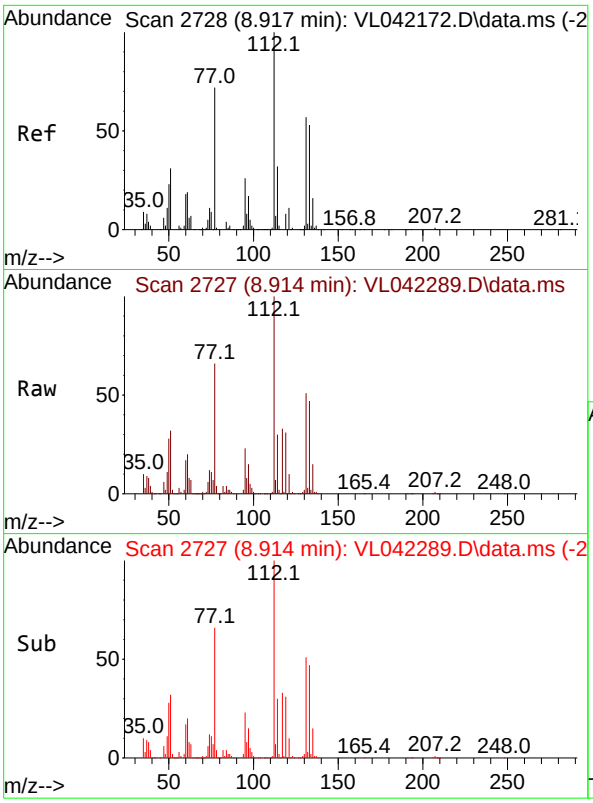


#56
1,1,1,2-Tetrachloroethane
Concen: 11.465 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:131 Resp: 232553

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.6	114.8
119	62.4	49.8	74.6

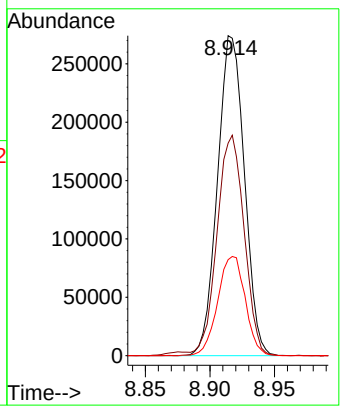




#57
Chlorobenzene
Concen: 11.372 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:112 Resp: 39748

Ion	Ratio	Lower	Upper
112	100		
77	66.3	58.2	87.2
114	30.0	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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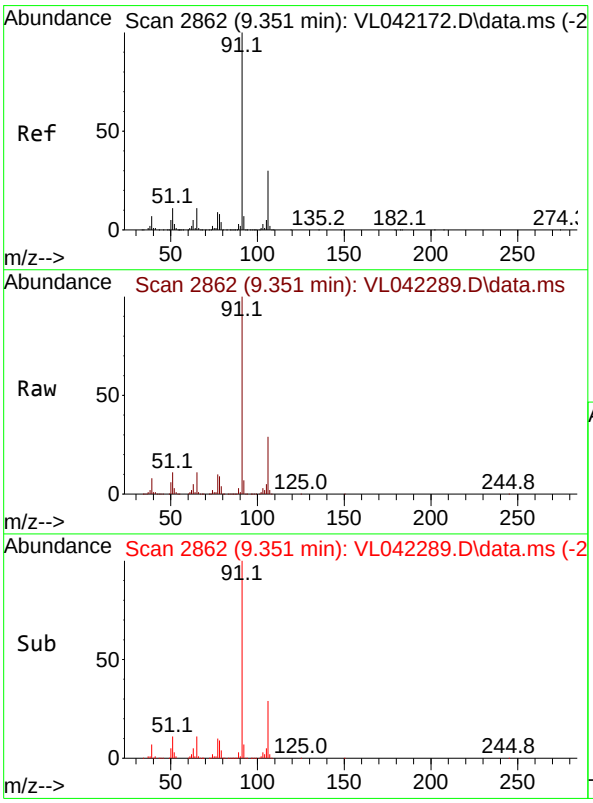
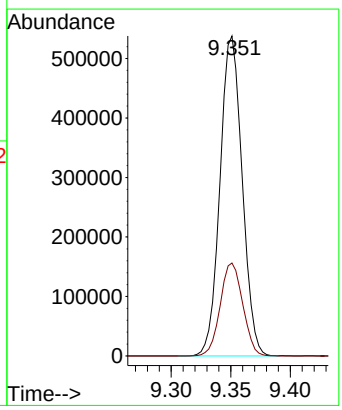
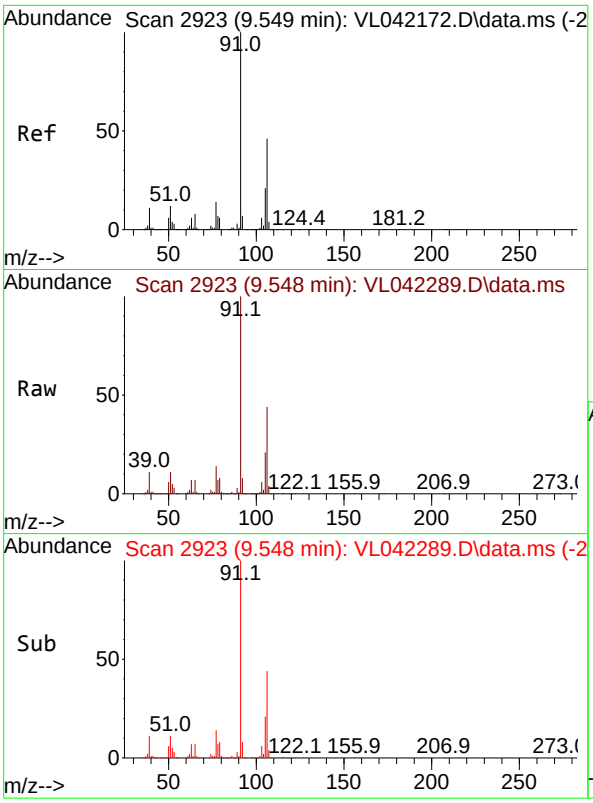


#58
Ethyl Benzene
Concen: 10.619 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 695035

Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.2	36.2





#59
m/p-Xylene
Concen: 22.239 ppbv m
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 116233

Ion	Ratio	Lower	Upper
91	100		
106	46.3	36.4	54.6

Instrument :
MSVOA_L
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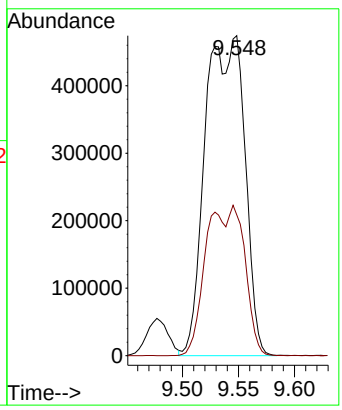
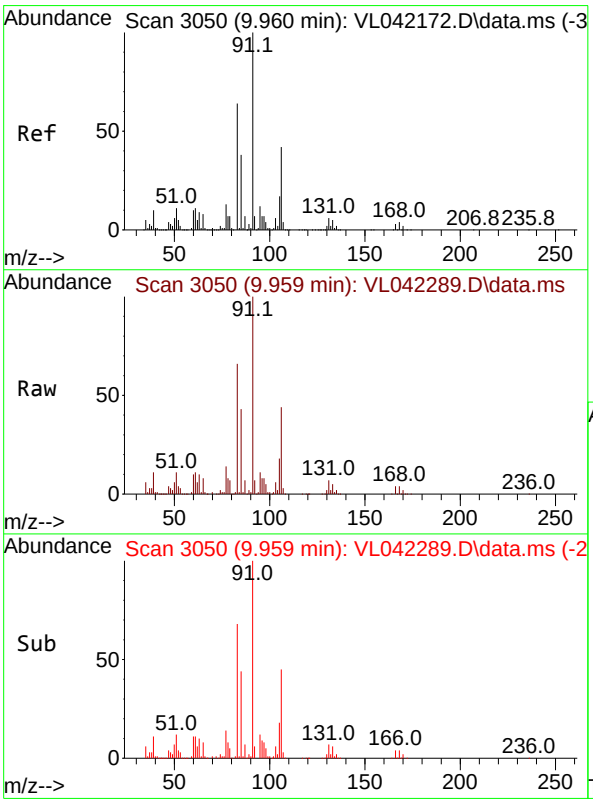
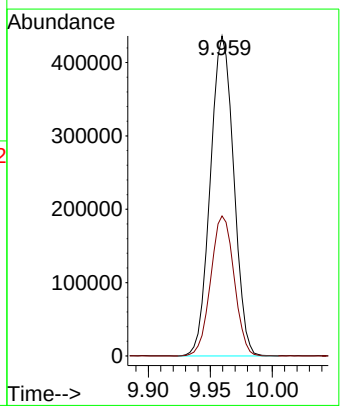


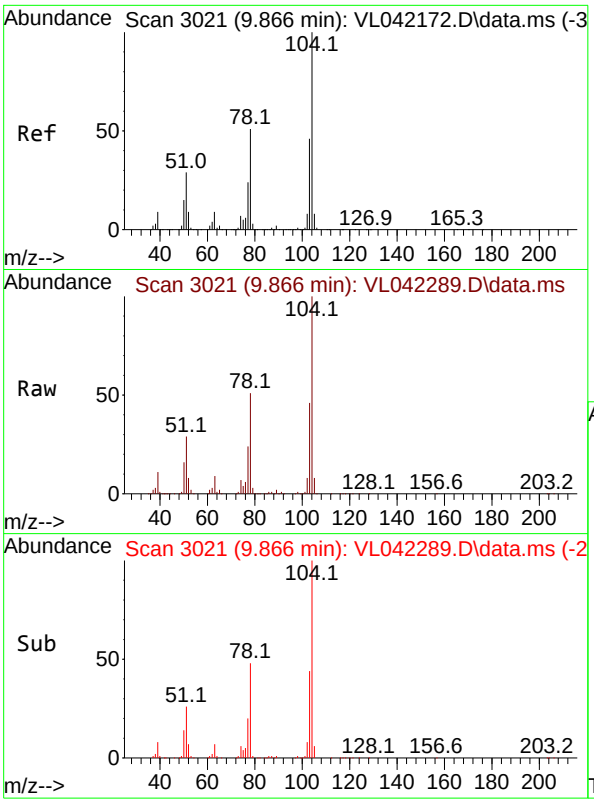


#60
o-Xylene
Concen: 10.960 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 574256

Ion	Ratio	Lower	Upper
91	100		
106	43.7	20.8	62.5





#61
Styrene
Concen: 9.967 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:104 Resp: 25835

Ion	Ratio	Lower	Upper
104	100		
78	51.6	41.8	62.6
103	45.9	37.0	55.4

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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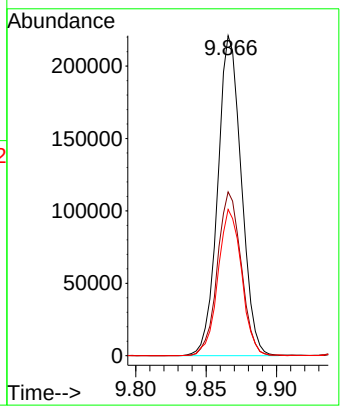
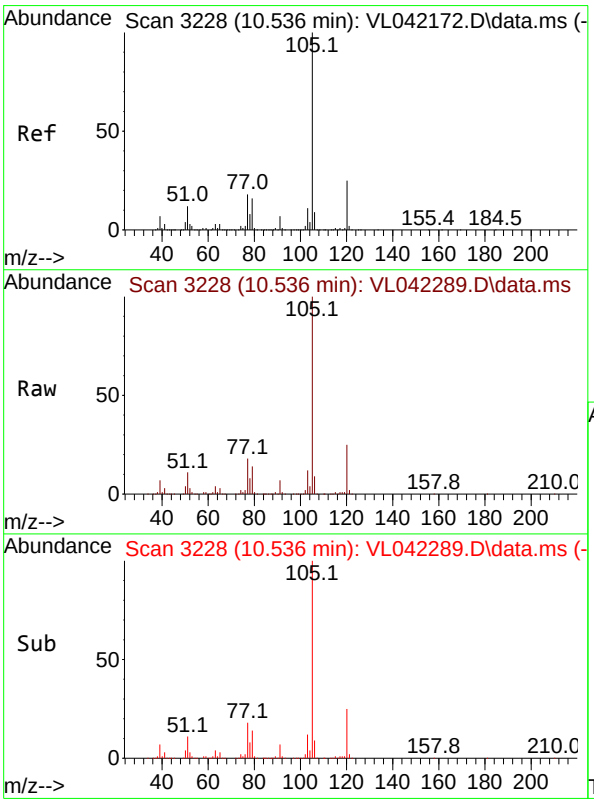
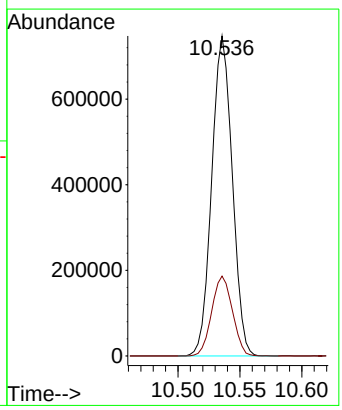


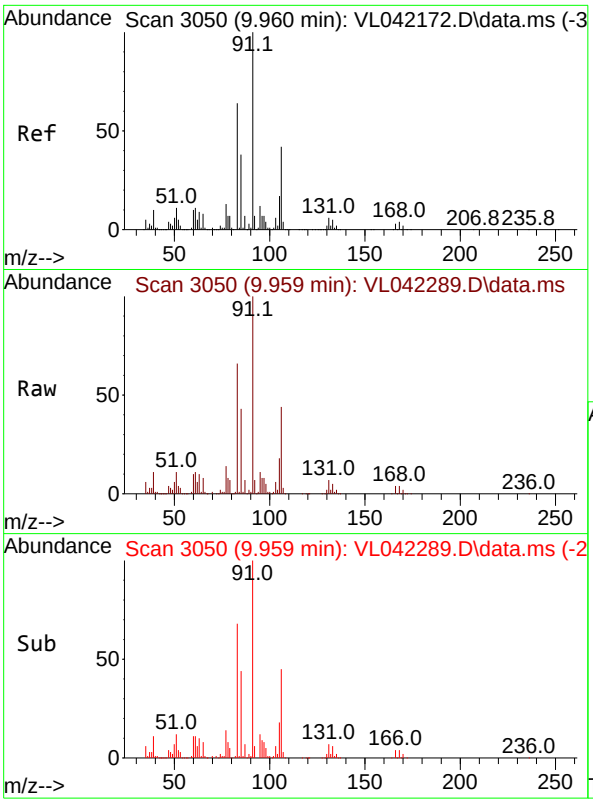


#62
Isopropylbenzene
Concen: 11.032 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 864354

Ion	Ratio	Lower	Upper
105	100		
120	25.1	19.9	29.9

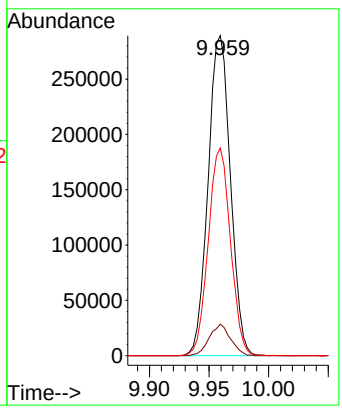




#63
1,1,2,2-Tetrachloroethane
Concen: 11.843 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 83 Resp: 37700

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.5	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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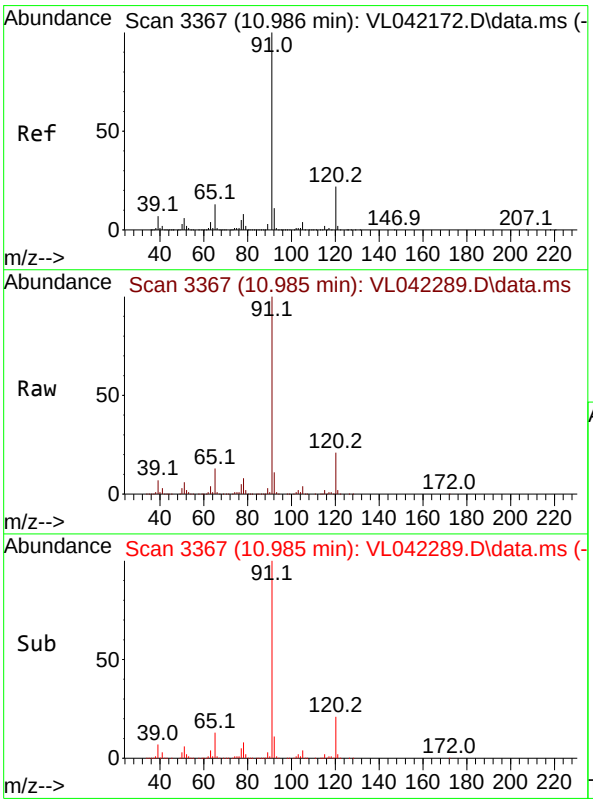
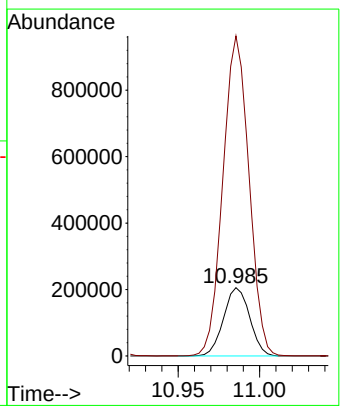
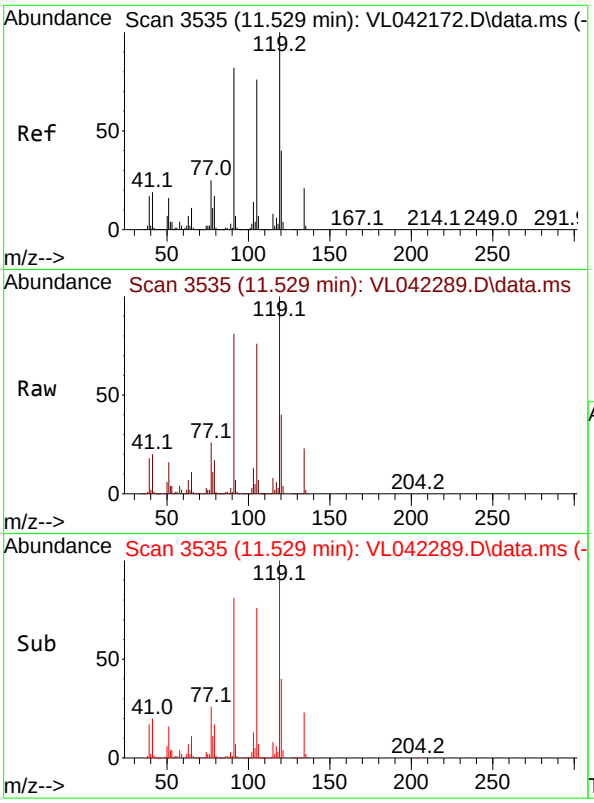


#64
n-propylbenzene
Concen: 11.331 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:120 Resp: 228525

Ion	Ratio	Lower	Upper
120	100		
91	468.7	376.9	565.3





#65
tert-Butylbenzene
Concen: 10.909 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:119 Resp: 79046

Ion	Ratio	Lower	Upper
119	100		
91	81.4	66.0	99.0
134	21.6	16.7	25.1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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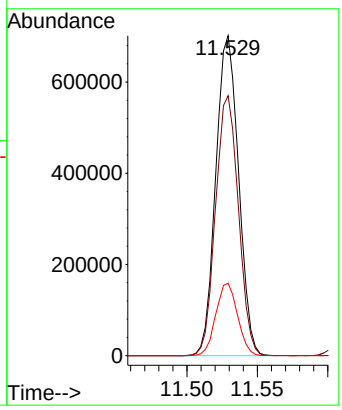
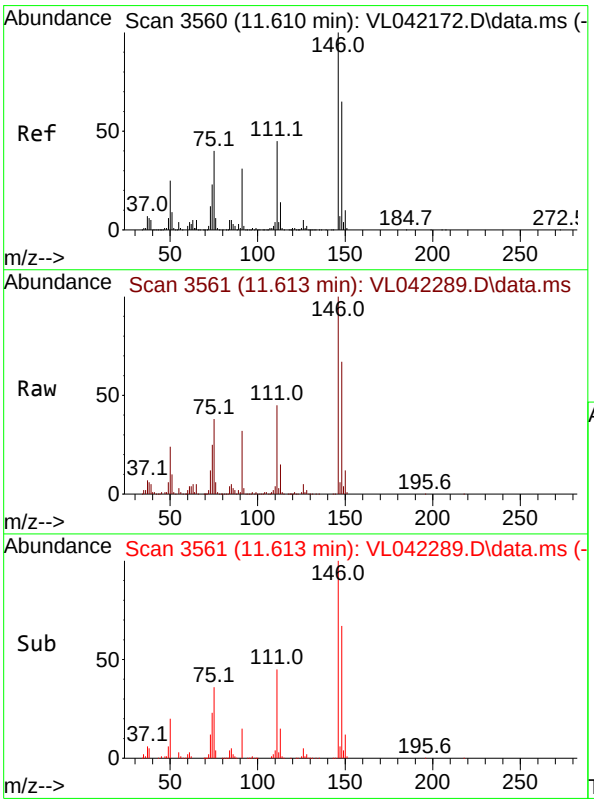
Supervised By :Mahesh Dadoda 04/10/2025

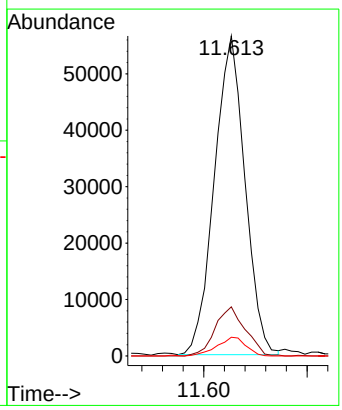


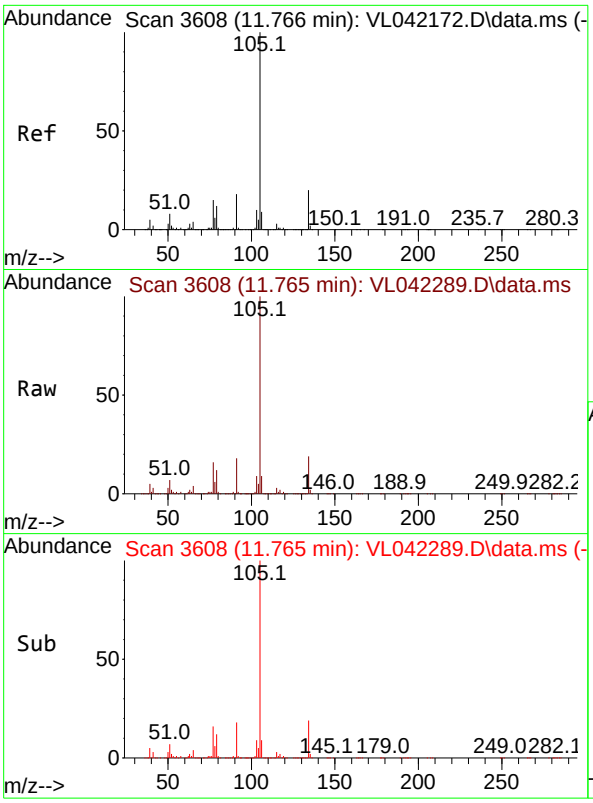


#66
Benzyl Chloride
Concen: 7.561 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 58131

Ion	Ratio	Lower	Upper
91	100		
126	15.2	13.8	20.6
128	5.6	4.5	6.7

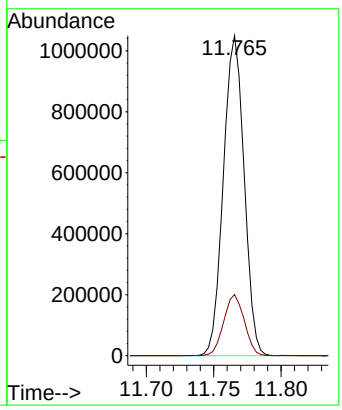




#67
sec-Butylbenzene
Concen: 11.161 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 112409

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
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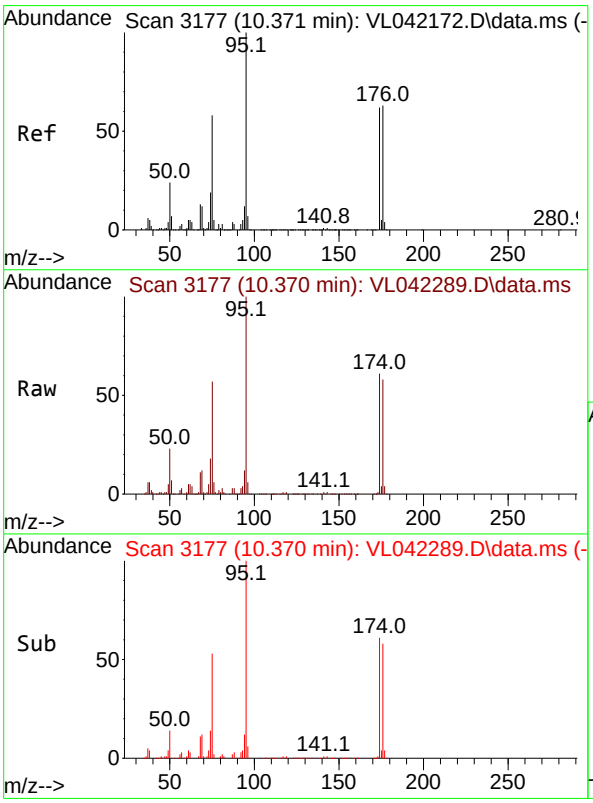
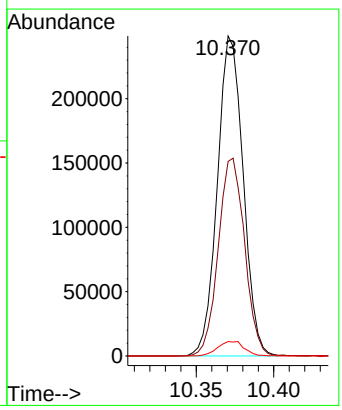
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

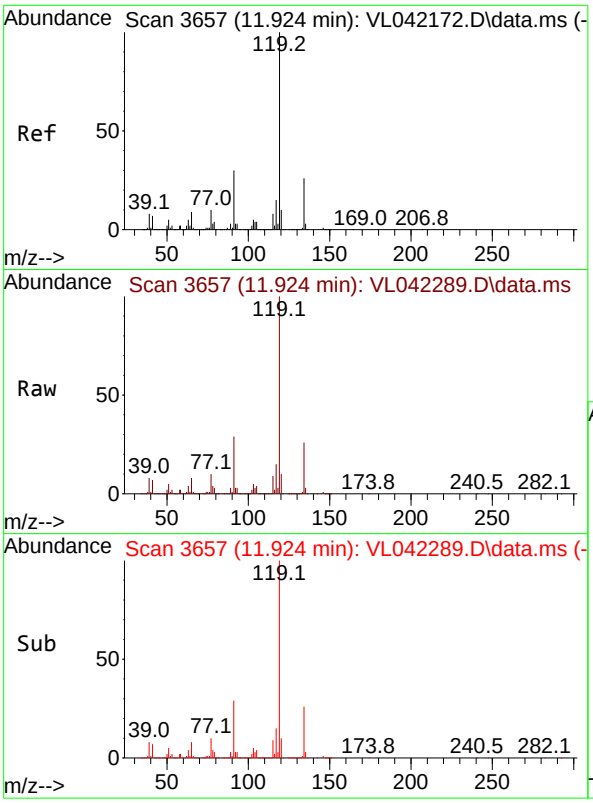


#68
1-Bromo-4-Fluorobenzene
Concen: 9.522 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 95 Resp: 288141

Ion	Ratio	Lower	Upper
95	100		
174	63.2	50.6	76.0
175	4.7	3.8	5.6

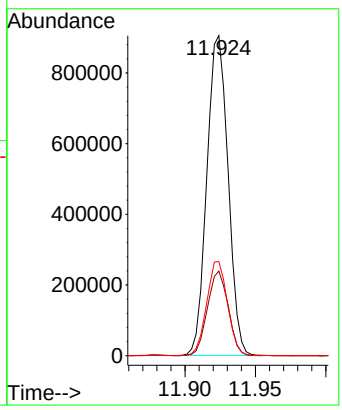




#69
p-Isopropyltoluene
Concen: 10.954 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:119 Resp: 95002

Ion	Ratio	Lower	Upper
119	100		
134	25.9	20.4	30.6
91	29.1	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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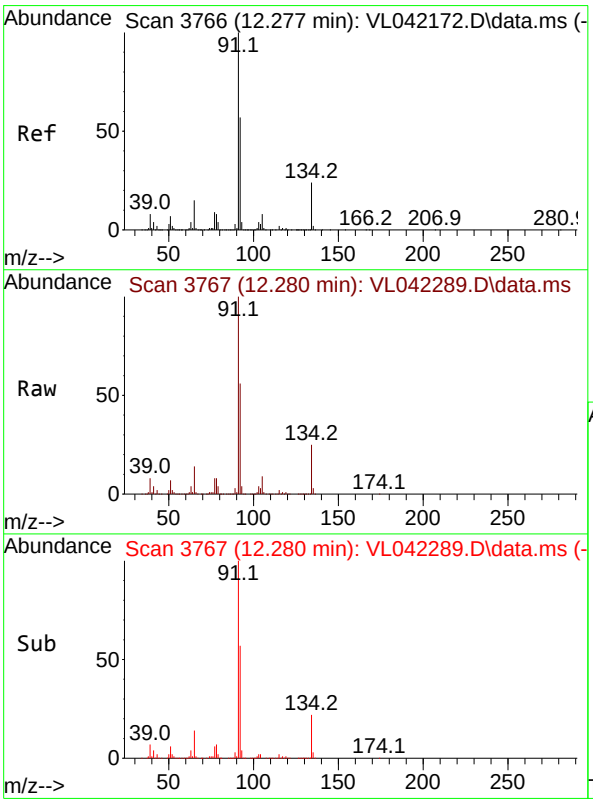
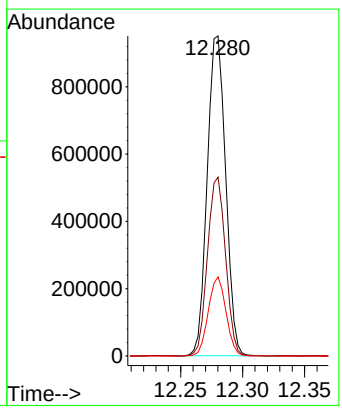
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

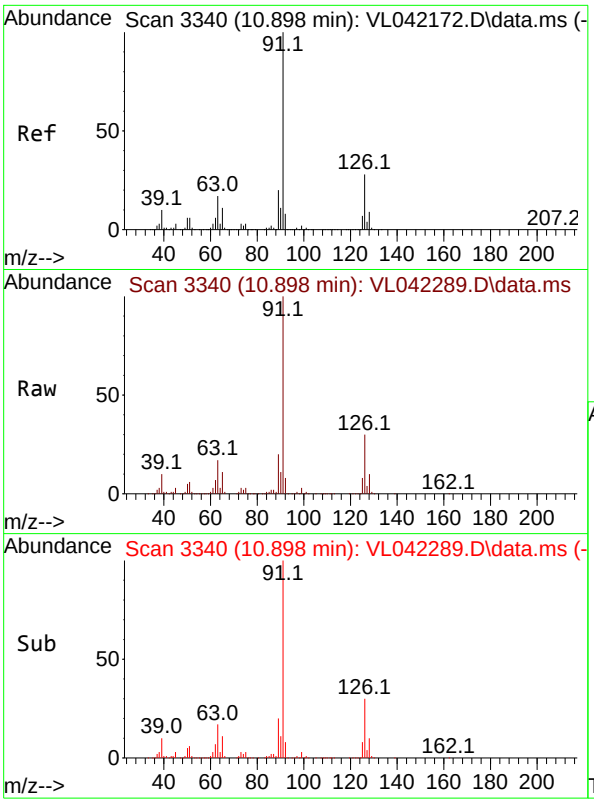


#70
n-Butylbenzene
Concen: 11.124 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 986632

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.9	67.3
134	23.8	19.2	28.8

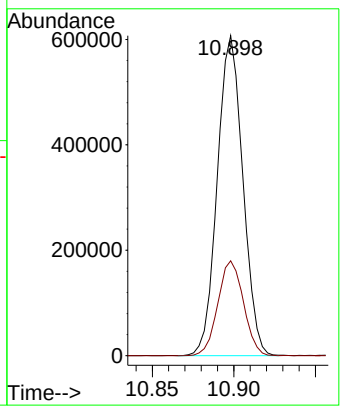




#71
2-Chlorotoluene
Concen: 10.859 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 66034

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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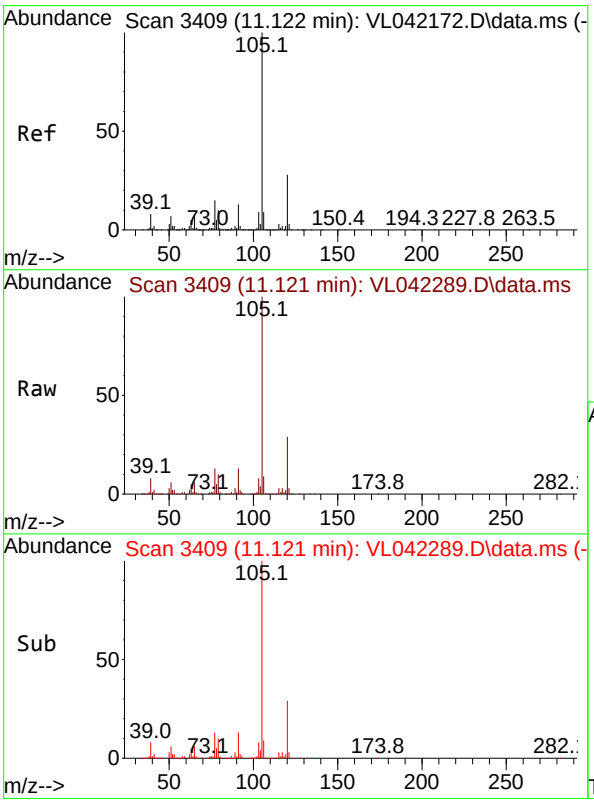
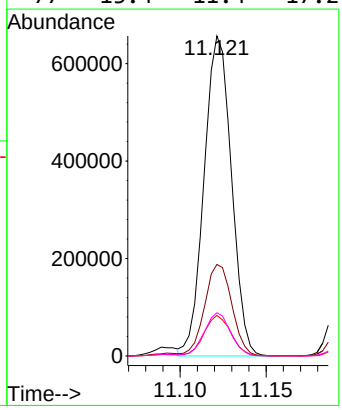
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

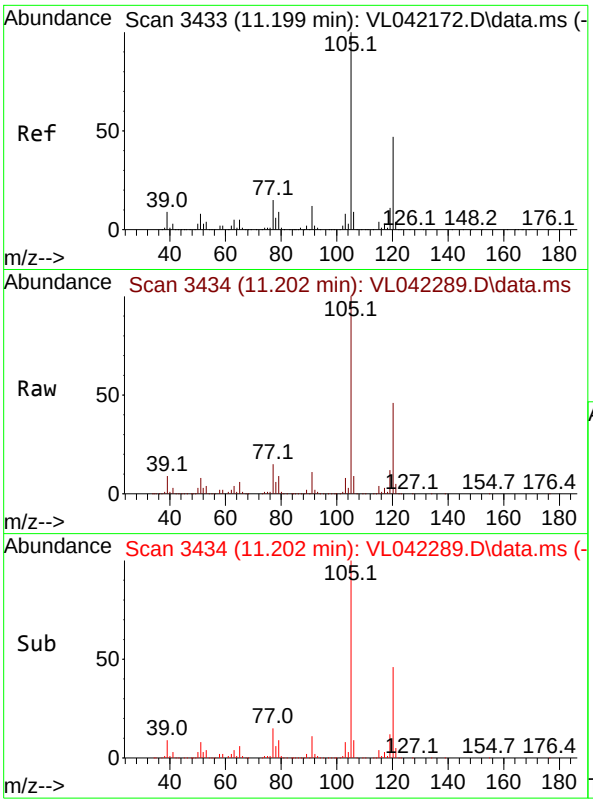


#72
4-Ethyltoluene
Concen: 11.142 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 726883

Ion	Ratio	Lower	Upper
105	100		
120	29.3	23.4	35.0
91	13.0	10.3	15.5
77	13.4	11.4	17.2

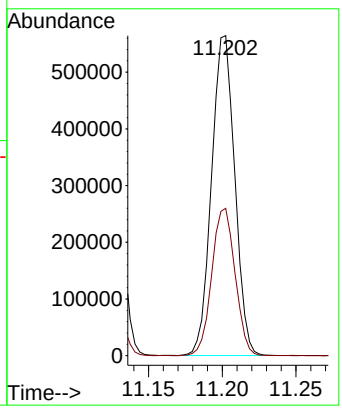




#73
1,3,5-Trimethylbenzene
Concen: 10.851 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 618219

Ion	Ratio	Lower	Upper
105	100		
120	46.0	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
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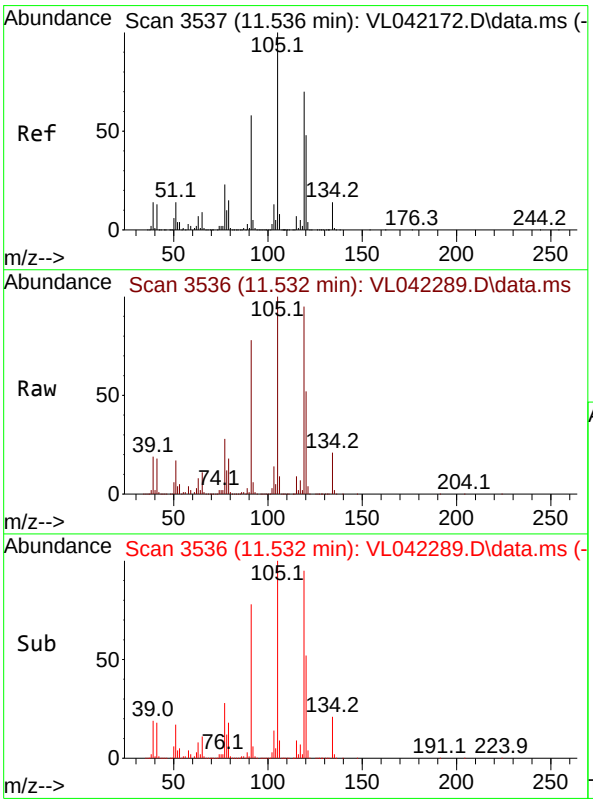
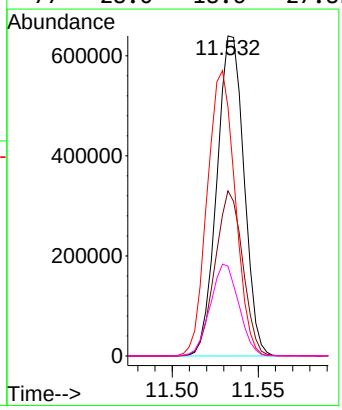
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

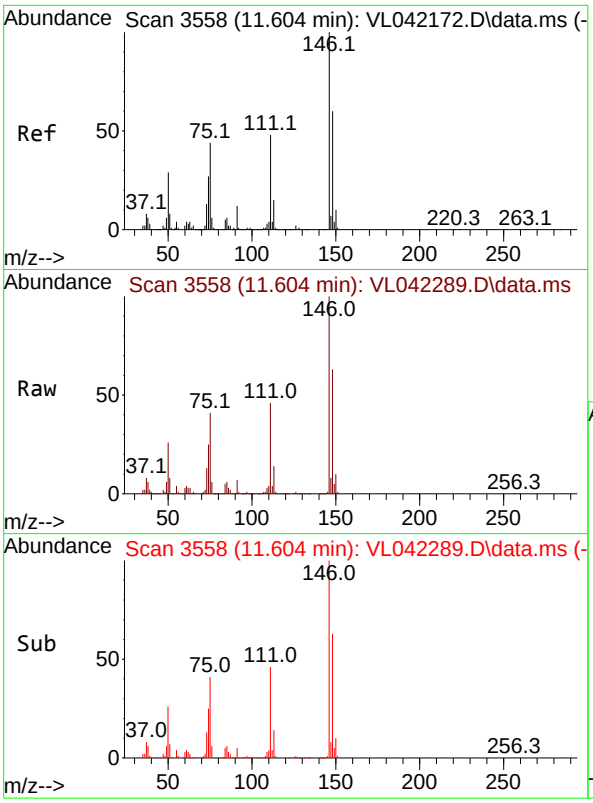


#74
1,2,4-Trimethylbenzene
Concen: 10.699 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 702287

Ion	Ratio	Lower	Upper
105	100		
120	51.6	38.6	58.0
91	77.8	46.2	69.2#
77	28.0	18.6	27.8#

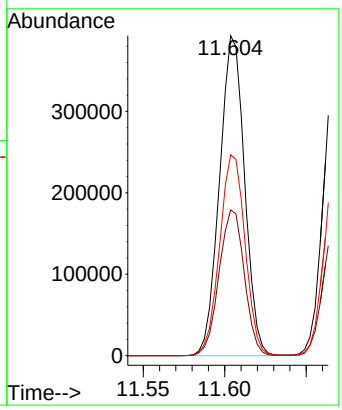




#75
1,3-Dichlorobenzene
Concen: 11.644 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:146 Resp: 41916

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.8	71.2
148	64.0	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

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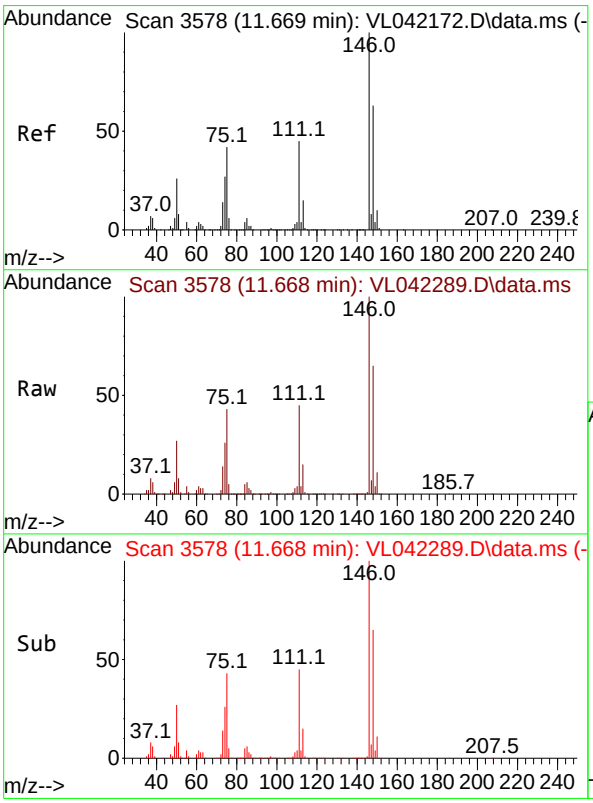
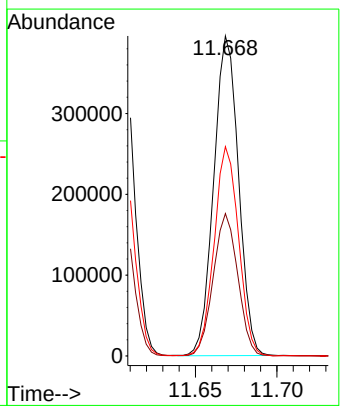
Supervised By :Mahesh Dadoda 04/10/2025

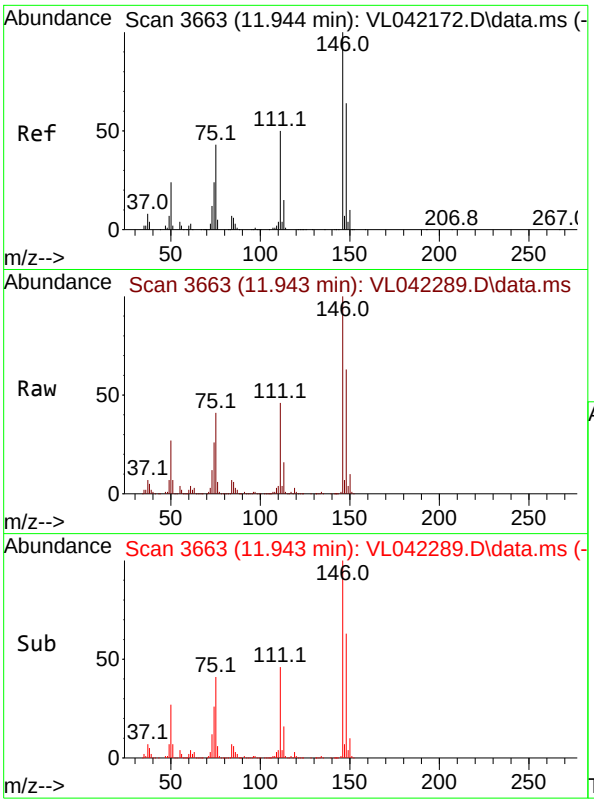


#76
1,4-Dichlorobenzene
Concen: 11.660 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:146 Resp: 417746

Ion	Ratio	Lower	Upper
146	100		
111	44.3	23.0	69.0
148	64.7	31.9	95.7

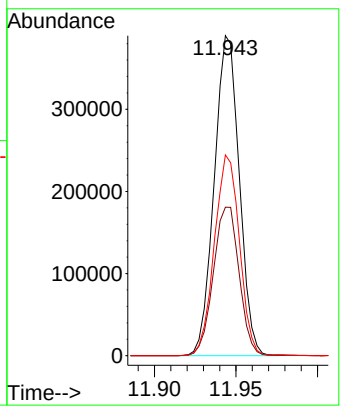




#77
1,2-Dichlorobenzene
Concen: 11.862 ppbv
RT: 11.943 min Scan# 3(
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:146 Resp: 41578(

Ion	Ratio	Lower	Upper
146	100		
111	47.9	24.8	74.3
148	62.8	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
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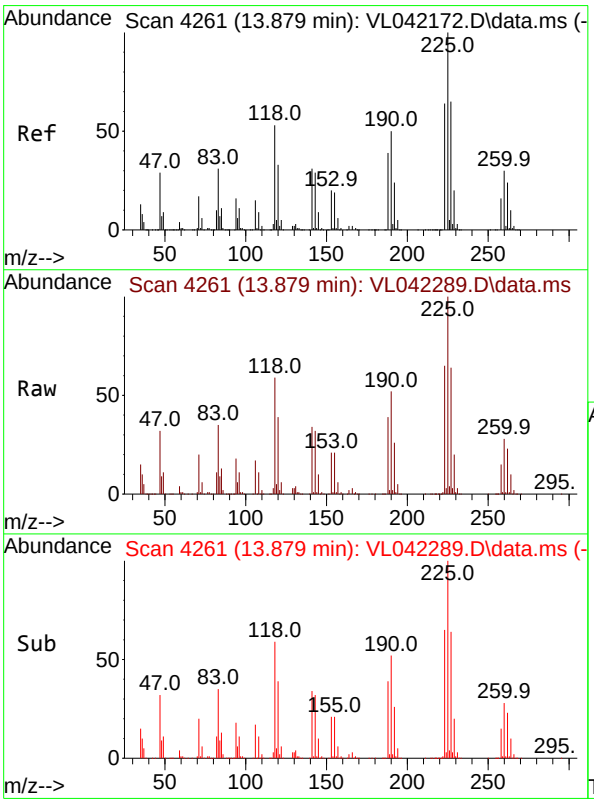
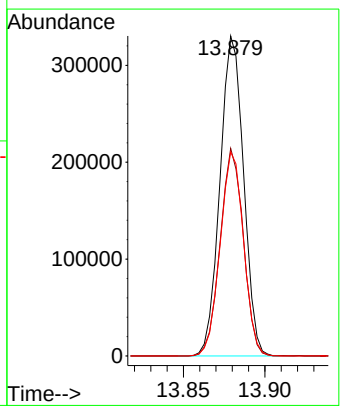
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

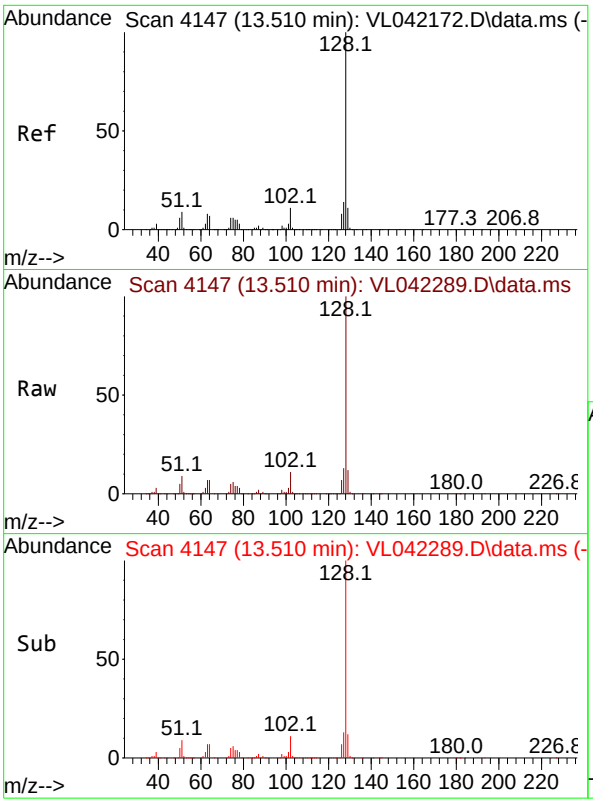


#78
Hexachloro-1,3-Butadiene
Concen: 9.302 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:225 Resp: 331886

Ion	Ratio	Lower	Upper
225	100		
223	63.6	50.6	76.0
227	63.3	51.2	76.8

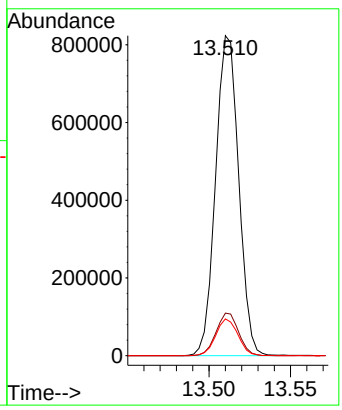




#79
Naphthalene
Concen: 11.288 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:128 Resp: 81044

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.5	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
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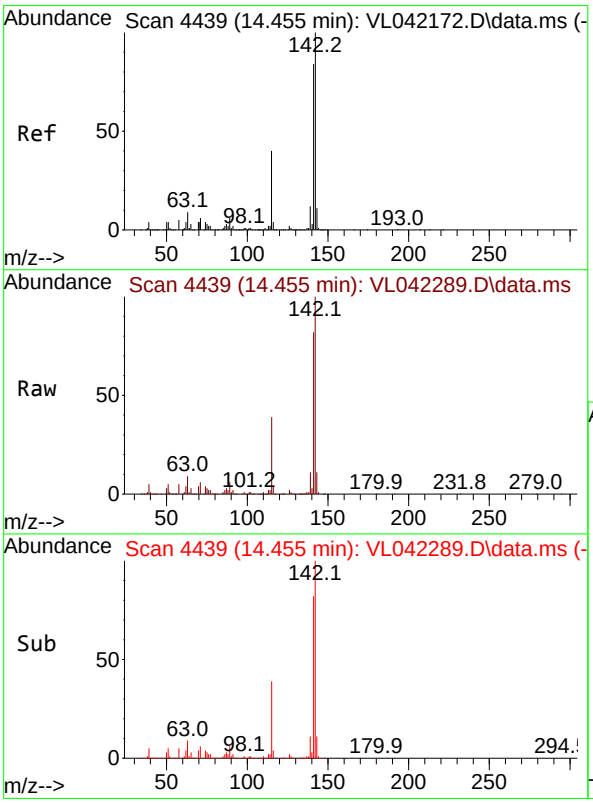
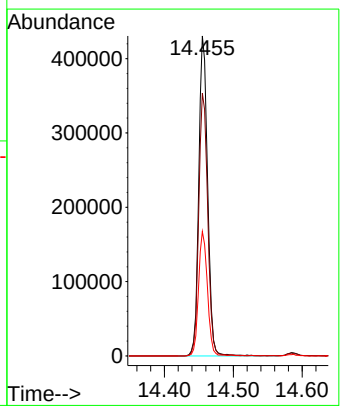
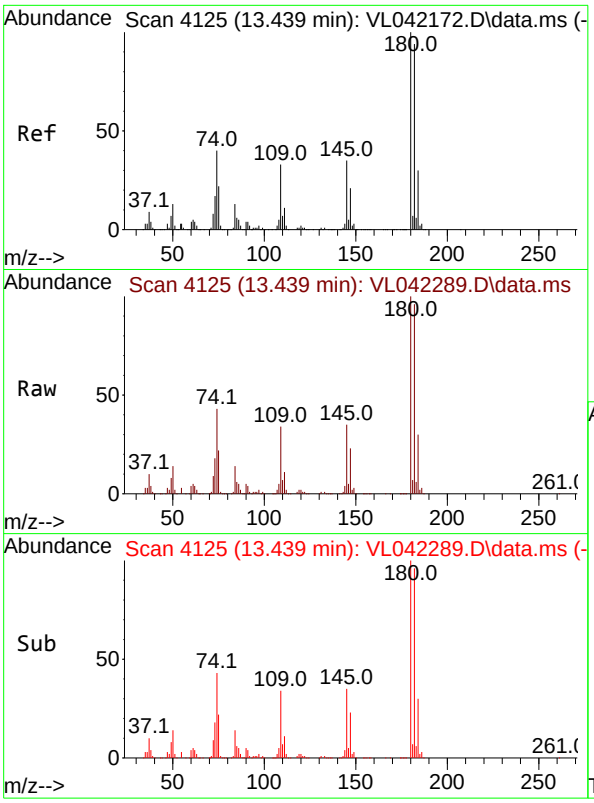


#80
Naphthalene,2-methyl-
Concen: 11.023 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:142 Resp: 388095

Ion	Ratio	Lower	Upper
142	100		
141	83.6	66.3	99.5
115	39.2	31.6	47.4

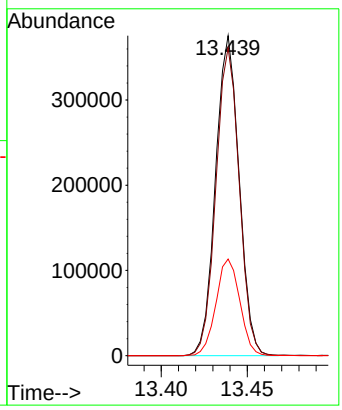




#81
1,2,4-Trichlorobenzene
Concen: 10.802 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:180 Resp: 35771

Ion	Ratio	Lower	Upper
180	100		
182	95.3	75.1	112.7
184	30.6	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Manual Integrations
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Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042314.D	1		04/11/25 11:23	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	9.90	49.0		1.04	2.47	ug/m3
64-17-5	Ethanol	4.20	7.91		0.60	0.94	ug/m3
74-87-3	Chloromethane	10.2	21.1		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	8.70	22.2		0.030	0.080	ug/m3
74-83-9	Bromomethane	8.90	34.6		0.54	1.94	ug/m3
75-00-3	Chloroethane	9.30	24.5		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	10.9	32.1		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	9.60	54.0		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	9.10	69.8		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	9.80	68.5		0.63	3.49	ug/m3
593-60-2	Bromoethene	8.80	38.5		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	7.80	23.6		0.58	1.52	ug/m3
142-82-5	Heptane	9.90	40.6		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	8.40	20.6		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	8.40	33.3		0.56	1.98	ug/m3
67-64-1	Acetone	9.20	21.9		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	8.80	27.4		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	7.90	28.5		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	8.10	28.1		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	8.70	34.5		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	9.80	39.7		0.53	2.02	ug/m3
110-82-7	Cyclohexane	9.00	31.0		0.76	1.72	ug/m3
78-93-3	2-Butanone	11.3	33.3		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	11.2	70.5		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	9.20	36.5		0.36	1.98	ug/m3
67-66-3	Chloroform	10.5	51.3		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	8.80	48.0		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	11.4	53.3		0.47	2.34	ug/m3
71-43-2	Benzene	11.1	35.5		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	11.5	46.5		0.36	2.02	ug/m3
79-01-6	Trichloroethene	10.6	57.0		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	11.2	51.8		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	11.7	78.4		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	10.1	41.4		0.37	2.05	ug/m3
108-88-3	Toluene	10.1	38.1		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042314.D	1		04/11/25 11:23	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	8.30	37.7		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	9.20	41.8		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	11.7	63.8		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	11.2	95.4		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	11.2	86.1		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	9.50	64.4		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	12.5	57.6		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	11.1	48.2		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	24.2	105		0.91	4.34	ug/m3
95-47-6	o-Xylene	11.9	51.7		0.52	2.17	ug/m3
100-42-5	Styrene	10.5	44.7		0.47	2.13	ug/m3
75-25-2	Bromoform	11.3	117		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	13.2	90.7		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	11.8	61.1		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	11.9	58.5		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	11.9	58.5		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	12.8	77.0		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	12.9	77.6		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	13.2	79.4		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	10.8	80.2		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	9.80	105		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	9.10	20.1		0.29	1.11	ug/m3
91-20-3	Naphthalene	10.9	57.1		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	12.1	59.5		0.59	2.46	ug/m3
110-54-3	Hexane	10.0	35.2		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	8.90	27.9		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	9.40	33.9		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	9.50	38.9		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.90			70 (65) - 130 (135)	99%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	178000		2.784			
540-36-3	1,4-Difluorobenzene	444000		3.955			
3114-55-4	Chlorobenzene-d5	386000		8.878			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0411ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0411ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042314.D	1		04/11/25 11:23	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	178456	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	444353	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	386060	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	314180	9.910	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	260154	9.873	ppbv	99
3) Chlorodifluoromethane	1.473	51	278310	10.339	ppbv	99
4) Chloromethane	1.531	50	109906	10.207	ppbv	97
5) Vinyl Chloride	1.577	62	99540	8.723	ppbv	96
6) Bromomethane	1.667	94	43354	8.884	ppbv	99
7) Chloroethane	1.703	64	40372	9.340	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	219210	9.769	ppbv	94
9) Propene	1.483	41	109077	8.841	ppbv	98
10) Heptane	4.975	43	325268	9.912	ppbv	98
11) Trichlorofluoromethane	1.874	101	247344	9.647	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	191456	9.085	ppbv	97
13) Ethanol	1.719	45	4928	4.225	ppbv	95
14) Bromoethene	1.780	108	70702	8.758	ppbv	99
15) Acetone	1.832	43	228988	9.175	ppbv	95
16) 1,3-Butadiene	1.606	39	110429	9.060	ppbv	97
17) tert-Butyl alcohol	2.039	59	243034	7.818	ppbv	100
18) 1,1-Dichloroethene	2.030	96	83233	8.449	ppbv	97
19) Isopropyl Alcohol	1.884	45	118345	8.404	ppbv #	34
20) Methylene Chloride	2.059	84	75264	8.097	ppbv	93
21) Allyl Chloride	2.094	41	157261	8.934	ppbv	98
22) trans-1,2-Dichloroethene	2.337	96	98769	8.674	ppbv	96
23) Vinyl Acetate	2.460	43	86563	8.014	ppbv	98
24) 1,1-Dichloroethane	2.405	63	206840	9.800	ppbv	99
25) Ethyl Acetate	2.836	43	656719	10.138	ppbv	99
26) Hexane	2.823	57	249860	9.986	ppbv	98
27) Carbon Disulfide	2.146	76	236998	8.833	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	122818	7.884	ppbv	97
29) Chloroform	2.845	83	384713	10.506	ppbv	100
30) Cyclohexane	3.852	84	196133	9.028	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	233371	9.187	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	370405	8.836	ppbv	98
34) 2-Butanone	2.554	43	362633	11.254	ppbv	98
35) Carbon Tetrachloride	3.758	117	389738	11.228	ppbv	99
36) Benzene	3.654	78	490339	11.131	ppbv	96
37) 1,2-Dichloroethane	3.214	62	290983	11.538	ppbv	100
38) Trichloroethene	4.545	130	195654	10.645	ppbv	99
39) 1,2-Dichloropropane	4.312	63	179954	11.217	ppbv	91
40) 1,4-Dioxane	4.580	88	80106	9.408	ppbv #	83
41) Tetrahydrofuran	3.052	42	202793	10.930	ppbv	94
42) Bromodichloromethane	4.486	83	405729	11.669	ppbv	97
43) Methyl Methacrylate	4.875	69	177423	9.514	ppbv	98
44) 2,2,4-Trimethylpentane	4.635	57	850971	11.431	ppbv	97
45) t-1,3-Dichloropropene	6.412	75	166246	8.309	ppbv	93

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	225952	9.213	ppbv		99
47) 1,1,2-Trichloroethane	6.580	97	198762	11.720	ppbv		97
48) Dibromochloromethane	7.383	129	321370	11.181	ppbv		100
49) Bromoform	9.480	173	291905	11.313	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	514910	10.084	ppbv		95
51) 2-Hexanone	7.435	43	414681	9.889	ppbv	#	94
52) Tetrachloroethene	8.221	164	165666	9.483	ppbv		96
53) Toluene	6.933	91	526341	10.079	ppbv		99
54) 1,2-Dibromoethane	7.649	107	264126	11.172	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.924	131	271061	12.755	ppbv		97
57) Chlorobenzene	8.921	112	457204	12.486	ppbv		96
58) Ethyl Benzene	9.354	91	761549	11.105	ppbv		98
59) m/p-Xylene	9.548	91	1323517m	24.171	ppbv		
60) o-Xylene	9.963	91	654791	11.929	ppbv		96
61) Styrene	9.869	104	284318	10.470	ppbv		98
62) Isopropylbenzene	10.539	105	975799	11.887	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.963	83	440972	13.222	ppbv		100
64) n-propylbenzene	10.989	120	264518	12.518	ppbv		96
65) tert-Butylbenzene	11.529	119	908946	11.973	ppbv		99
66) Benzyl Chloride	11.617	91	69548	8.634	ppbv		98
67) sec-Butylbenzene	11.765	105	1300090	12.320	ppbv		100
69) p-Isopropyltoluene	11.924	119	1095041	12.051	ppbv		98
70) n-Butylbenzene	12.280	91	1129853	12.159	ppbv		100
71) 2-Chlorotoluene	10.901	91	749737	11.768	ppbv		99
72) 4-Ethyltoluene	11.125	105	825037	12.071	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	711175	11.914	ppbv		99
74) 1,2,4-Trimethylbenzene	11.536	105	816505	11.873	ppbv		91
75) 1,3-Dichlorobenzene	11.607	146	484099	12.835	ppbv		98
76) 1,4-Dichlorobenzene	11.672	146	485460	12.933	ppbv		98
77) 1,2-Dichlorobenzene	11.947	146	485421	13.218	ppbv		98
78) Hexachloro-1,3-Butadiene	13.882	225	366850	9.814	ppbv		99
79) Naphthalene	13.513	128	820200	10.904	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	274227	7.434	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	373404	10.762	ppbv		99

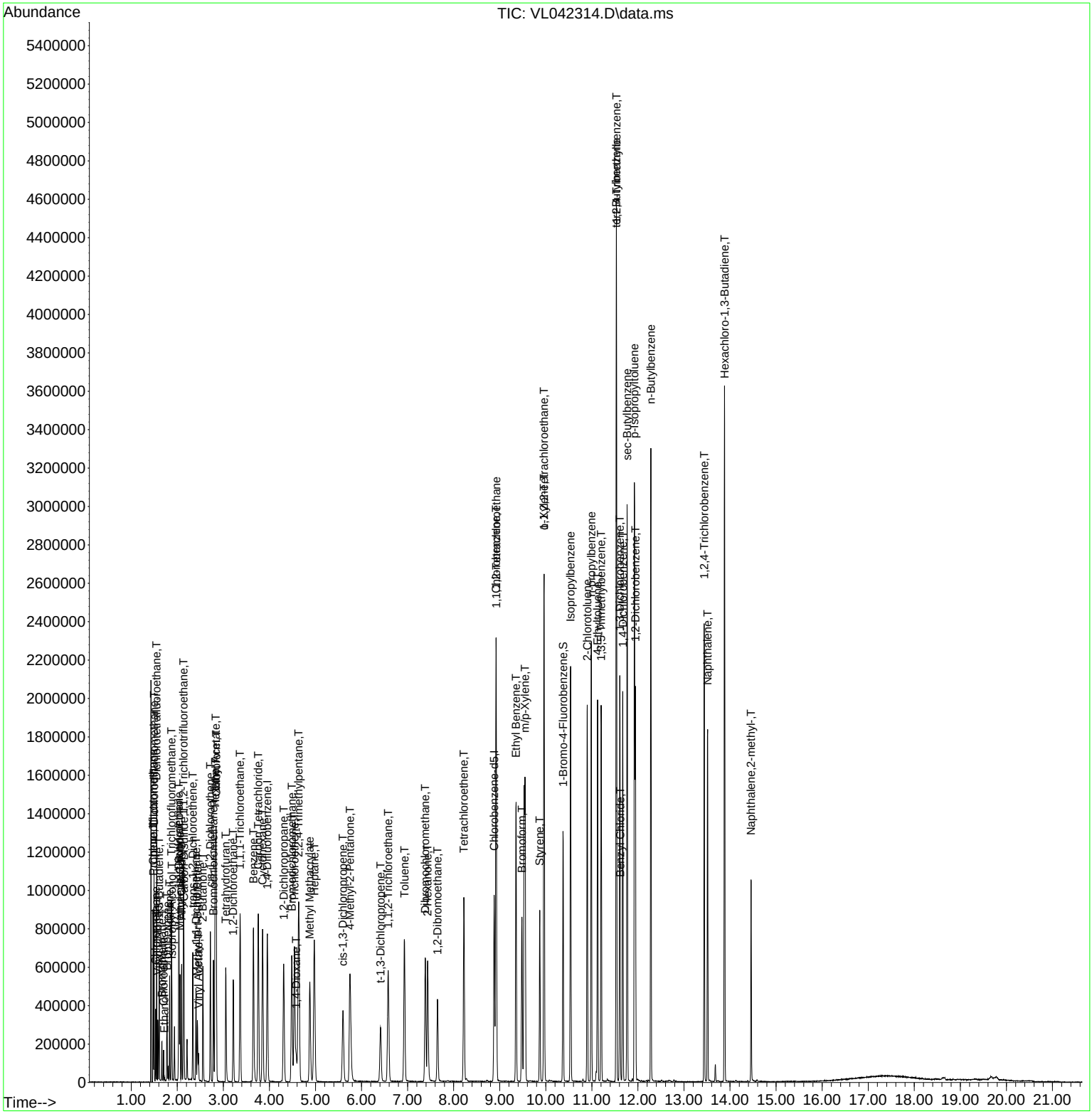
(#) = qualifier out of range (m) = manual integration (+) = signals summed

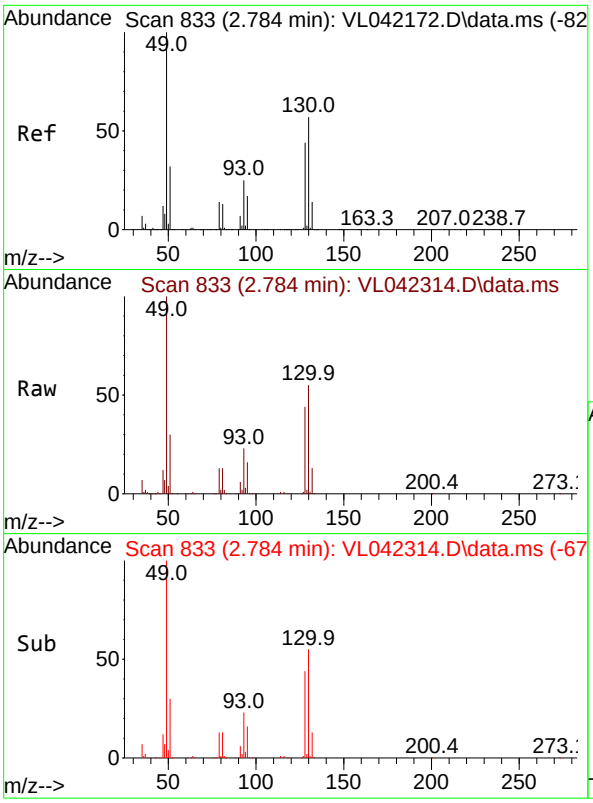
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

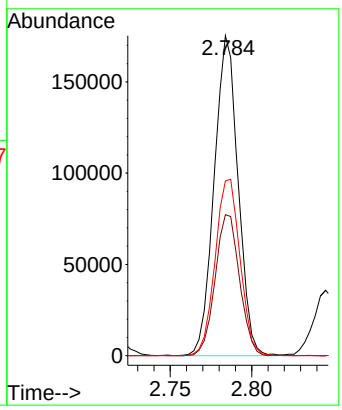




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 49 Resp: 17845

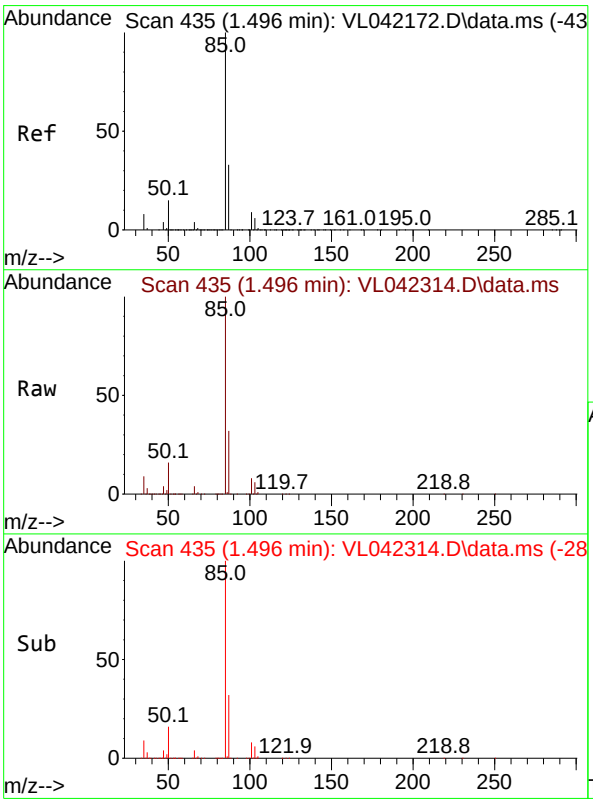
Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.9	68.5
130	57.3	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations
APPROVED

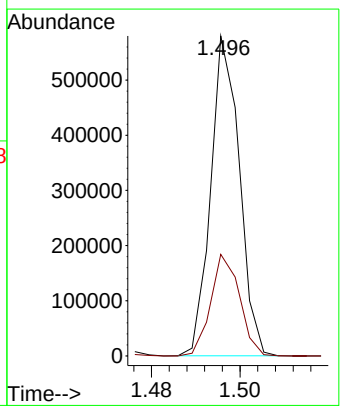
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

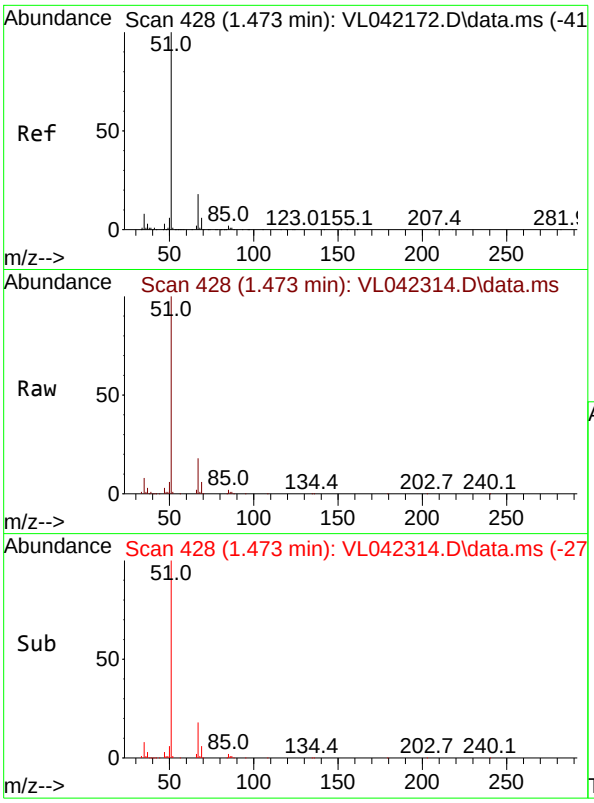


#2
Dichlorodifluoromethane
Concen: 9.873 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 85 Resp: 260154

Ion	Ratio	Lower	Upper
85	100		
87	31.8	26.1	39.1

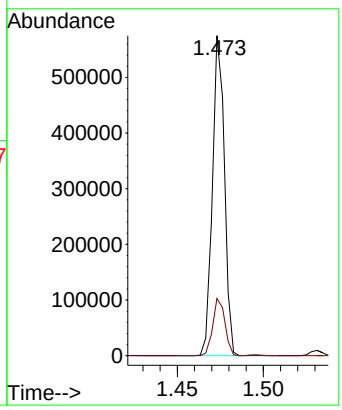




#3
Chlorodifluoromethane
Concen: 10.339 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 51 Resp: 27831

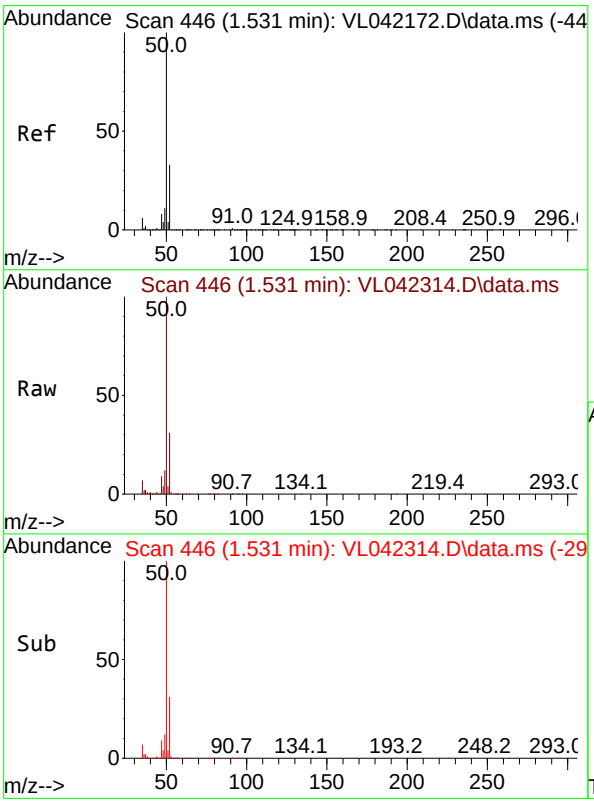
Ion	Ratio	Lower	Upper
51	100		
67	18.2	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations
APPROVED

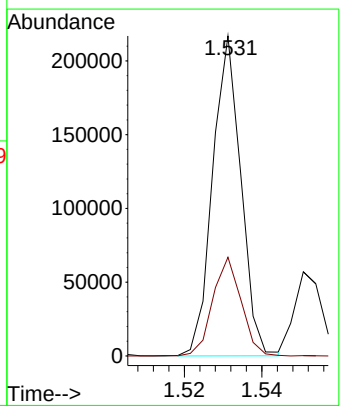
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

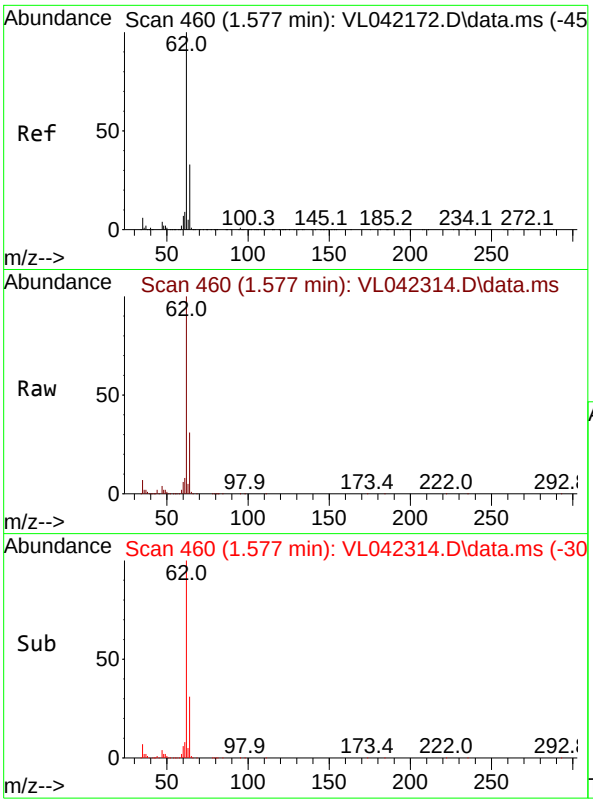


#4
Chloromethane
Concen: 10.207 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 50 Resp: 109906

Ion	Ratio	Lower	Upper
50	100		
52	30.8	26.1	39.1

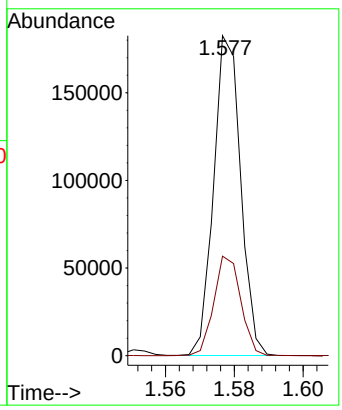




#5
Vinyl Chloride
Concen: 8.723 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 62 Resp: 9954

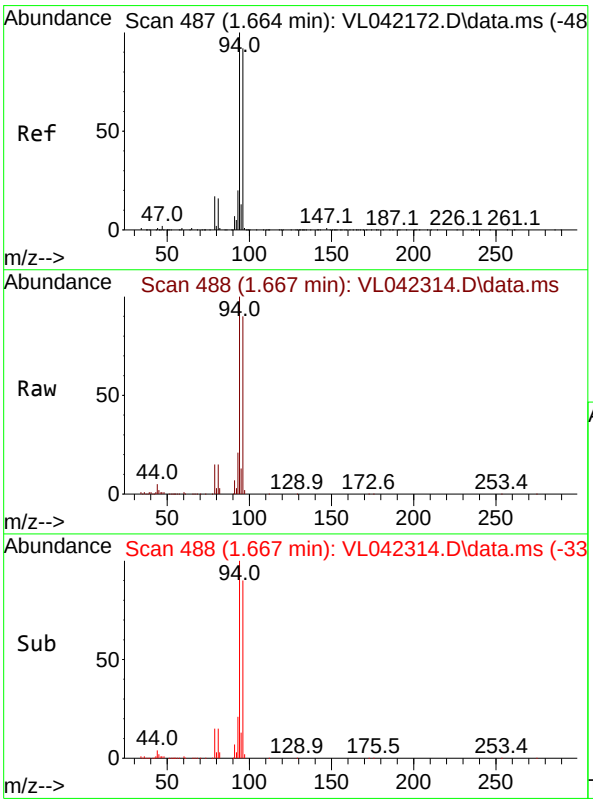
Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.6	40.0



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations
APPROVED

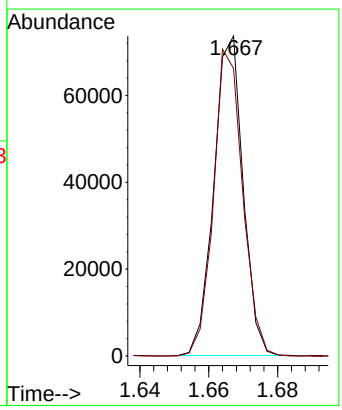
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

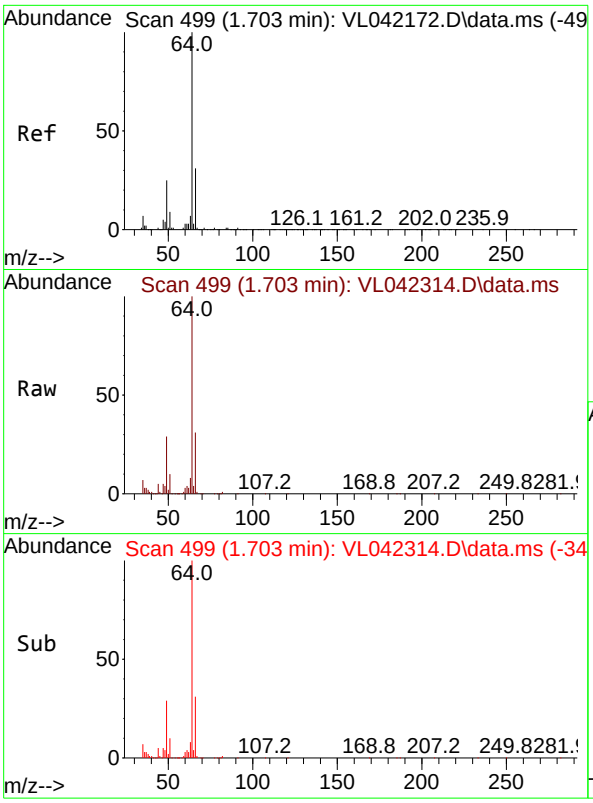


#6
Bromomethane
Concen: 8.884 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 94 Resp: 43354

Ion	Ratio	Lower	Upper
94	100		
96	90.0	73.1	109.7

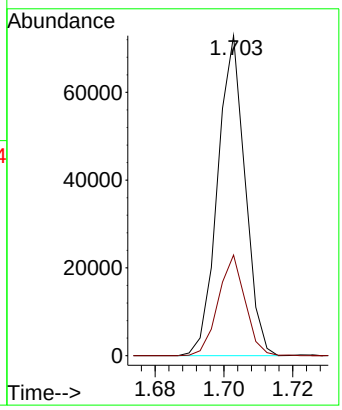




#7
Chloroethane
Concen: 9.340 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 64 Resp: 4037

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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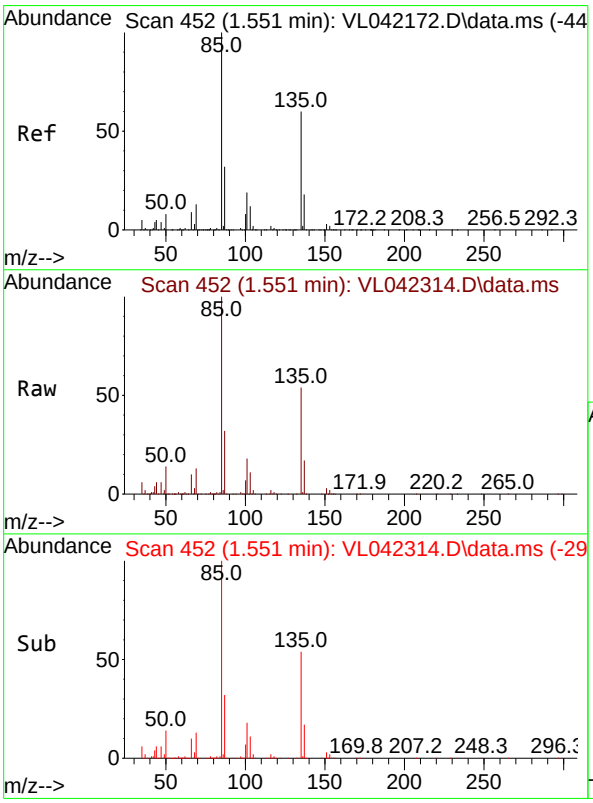
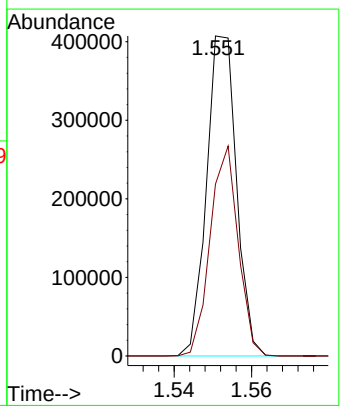
Supervised By :Mahesh Dadoda 04/17/2025

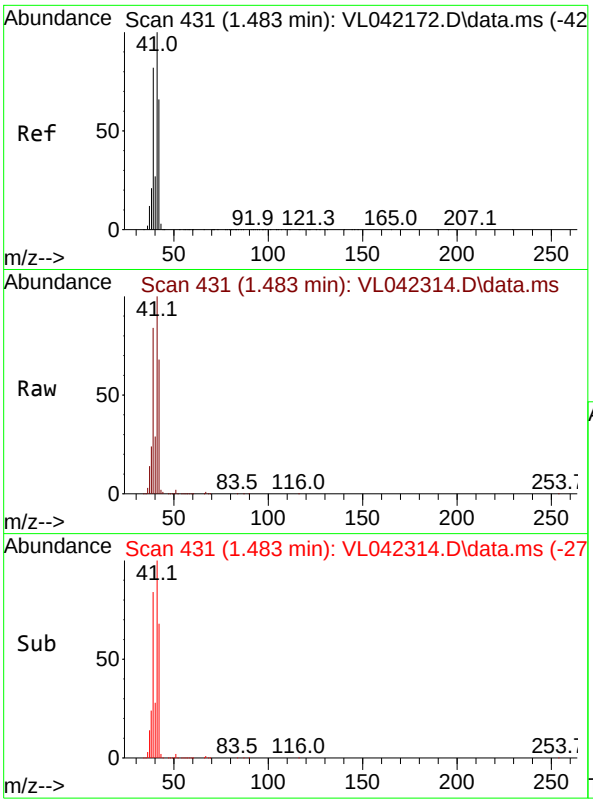


#8
Dichlorotetrafluoroethane
Concen: 9.769 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 85 Resp: 219210

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6

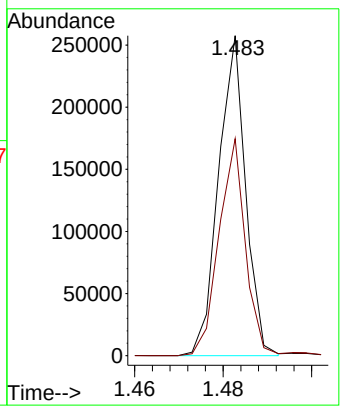




#9
Propene
Concen: 8.841 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 41 Resp: 10907

Ion	Ratio	Lower	Upper
41	100		
42	67.5	55.4	83.2



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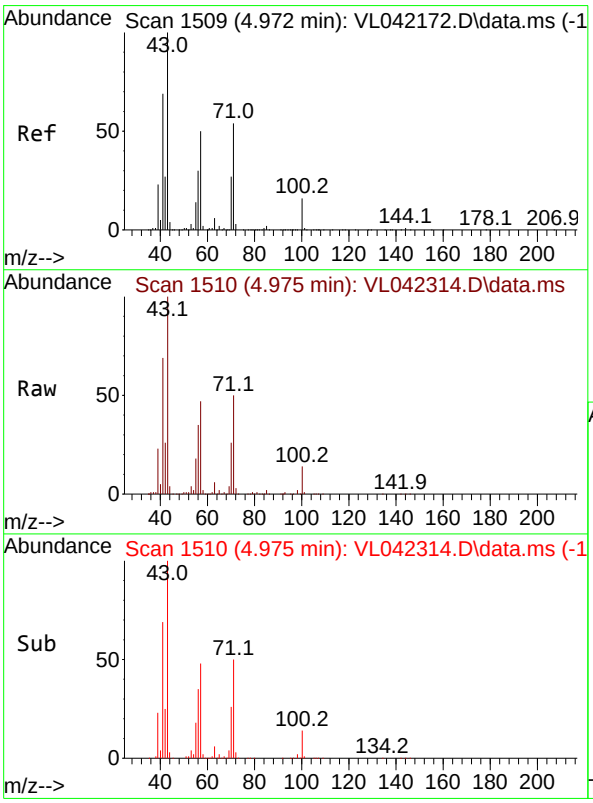
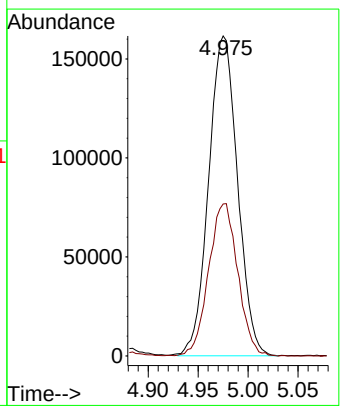
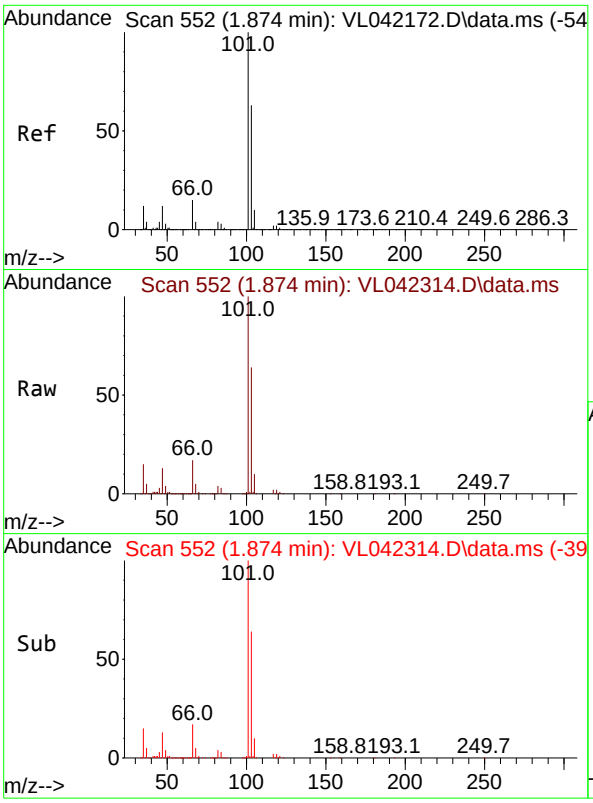


#10
Heptane
Concen: 9.912 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 325268

Ion	Ratio	Lower	Upper
43	100		
57	48.1	39.4	59.2

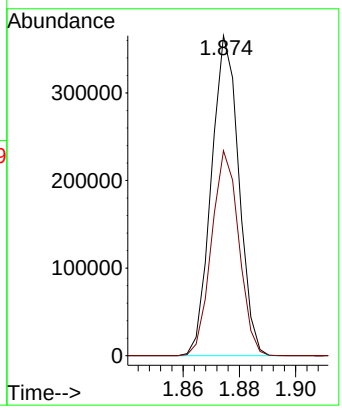




#11
Trichlorofluoromethane
Concen: 9.647 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:101 Resp: 24734

Ion	Ratio	Lower	Upper
101	100		
103	64.0	50.2	75.2



Instrument :
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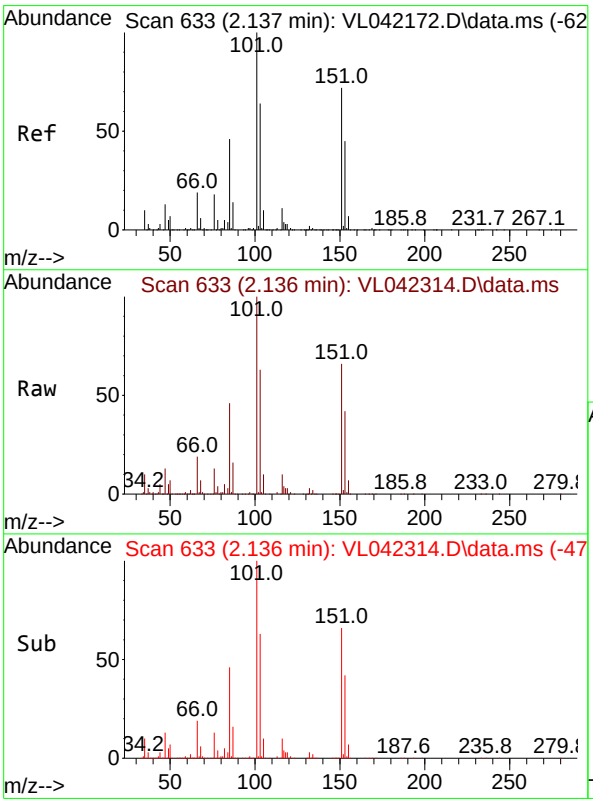
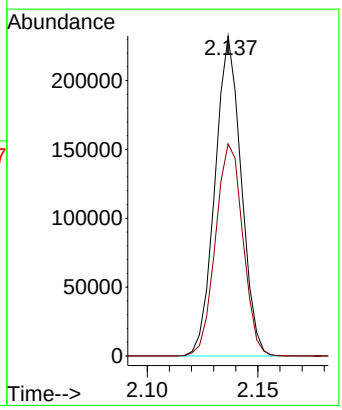
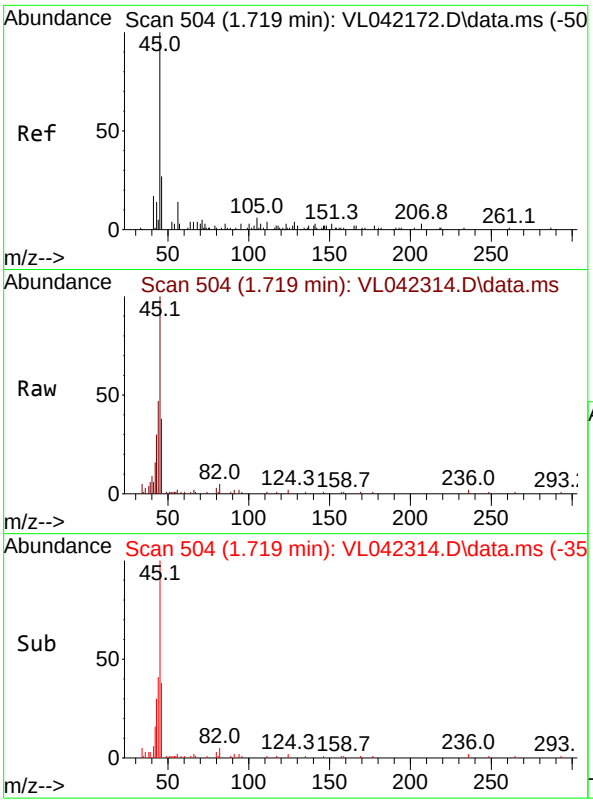


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.085 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:101 Resp: 191456

Ion	Ratio	Lower	Upper
101	100		
151	69.3	57.1	85.7

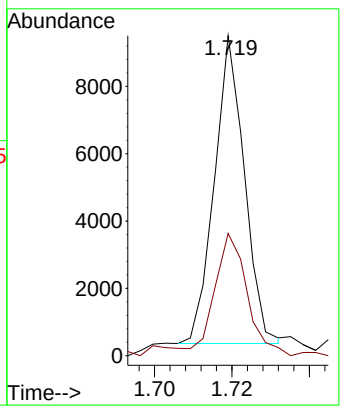




#13
Ethanol
Concen: 4.225 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 45 Resp: 492

Ion	Ratio	Lower	Upper
45	100		
46	46.9	20.2	80.8



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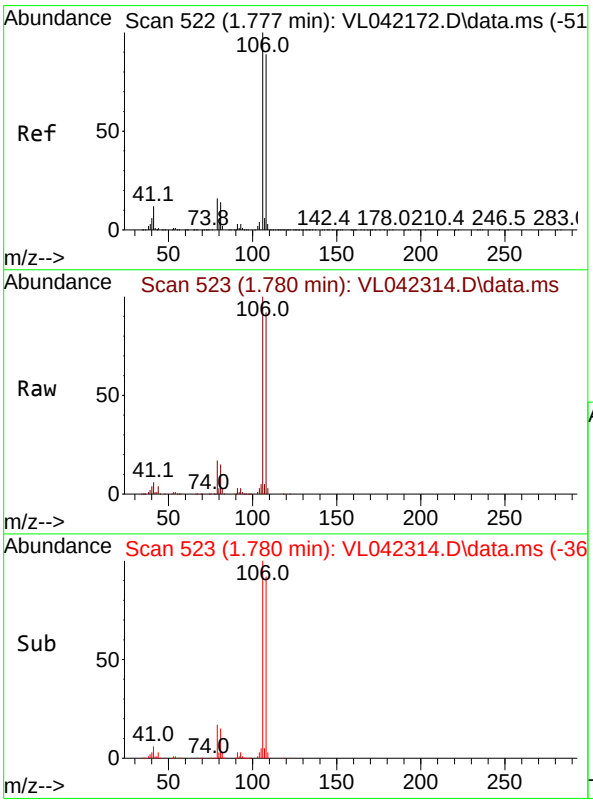
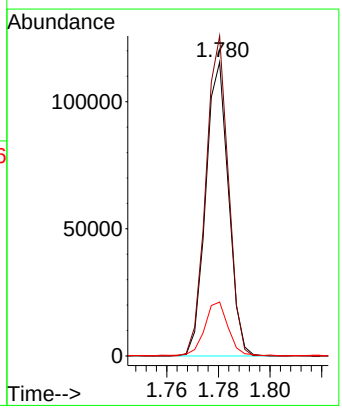
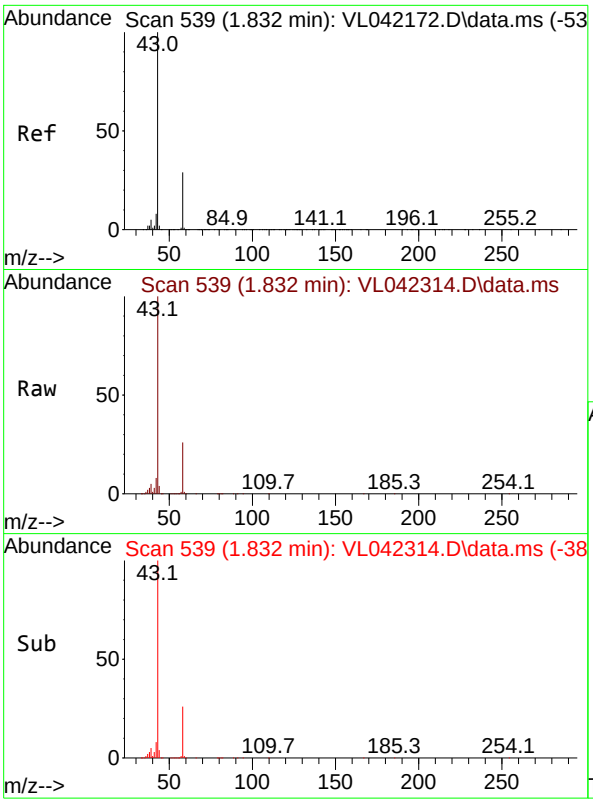


#14
Bromoethene
Concen: 8.758 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:108 Resp: 70702

Ion	Ratio	Lower	Upper
108	100		
106	107.1	86.8	130.2
79	19.5	15.0	22.6

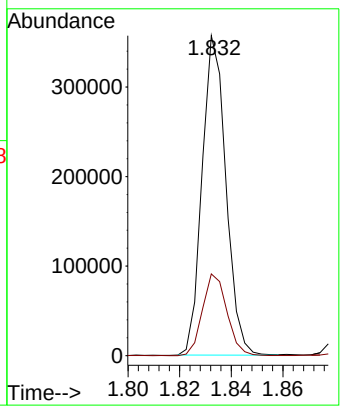




#15
Acetone
Concen: 9.175 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 22898

Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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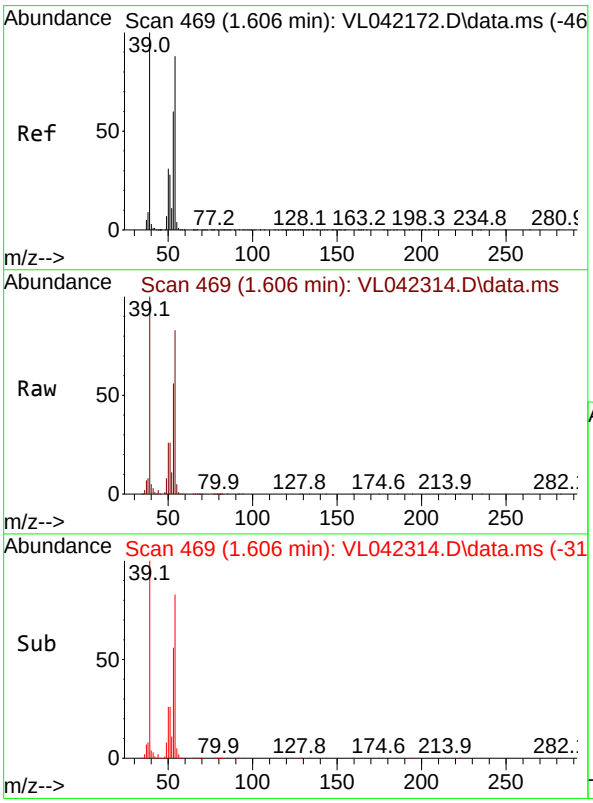
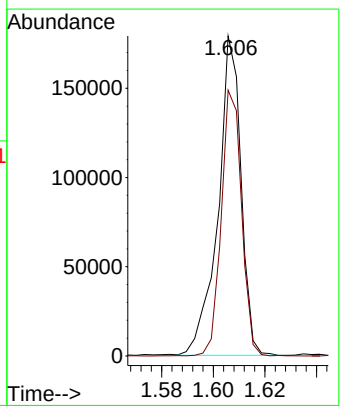
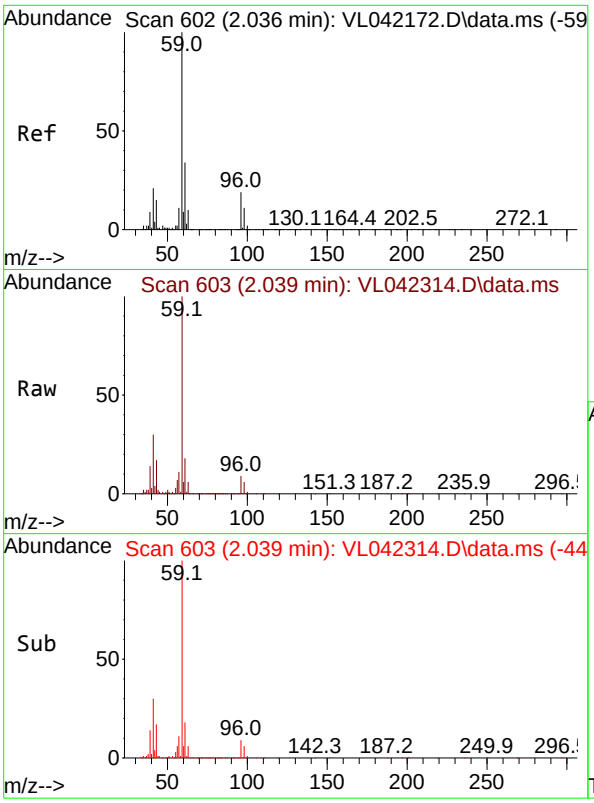


#16
1,3-Butadiene
Concen: 9.060 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 39 Resp: 110429

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1

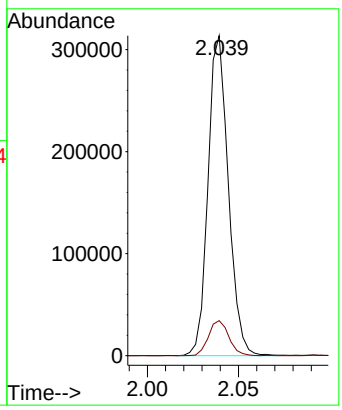




#17
tert-Butyl alcohol
Concen: 7.818 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 59 Resp: 24303

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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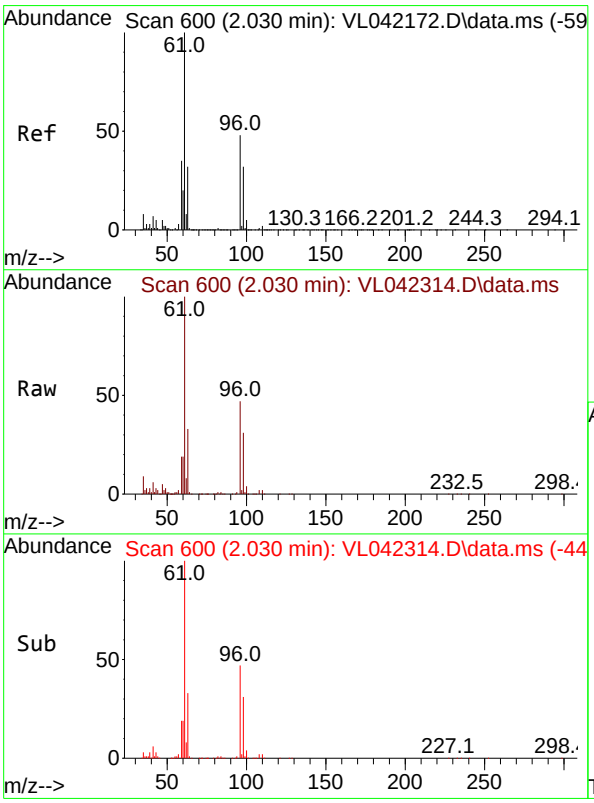
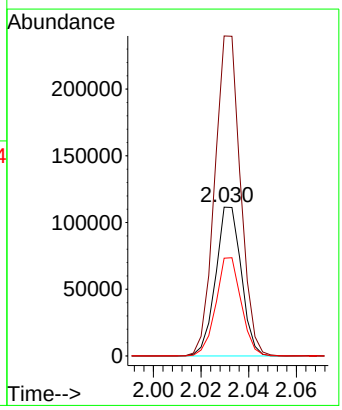
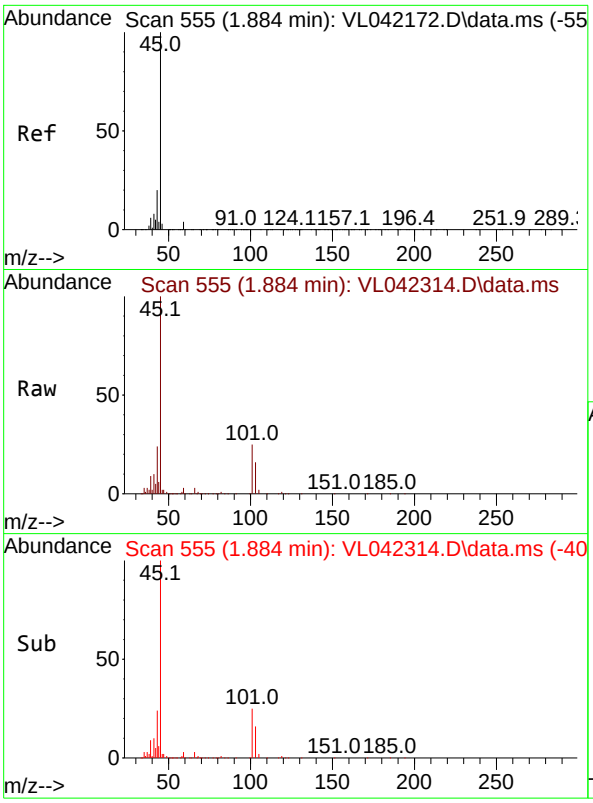


#18
1,1-Dichloroethene
Concen: 8.449 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 96 Resp: 83233

Ion	Ratio	Lower	Upper
96	100		
61	215.0	167.6	251.4
98	65.6	53.5	80.3

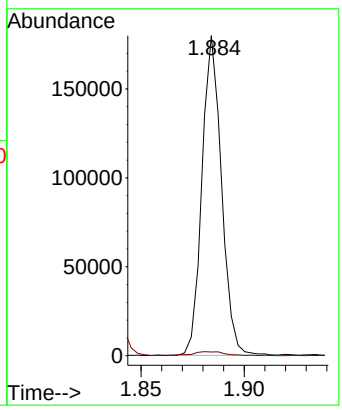




#19
Isopropyl Alcohol
Concen: 8.404 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 45 Resp: 11834

Ion	Ratio	Lower	Upper
45	100		
58	2.2	36.9	55.3#



Instrument :
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ClientSampleId :
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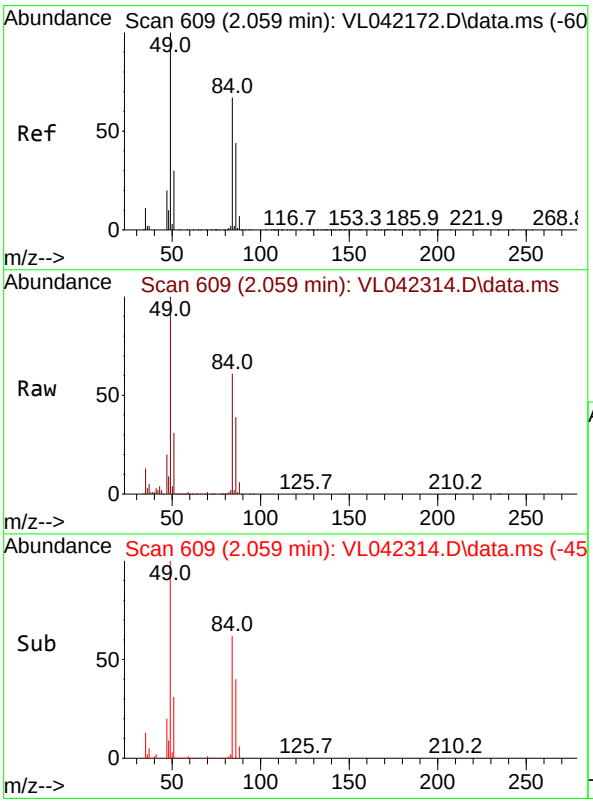
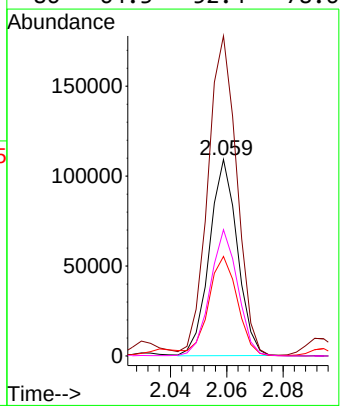
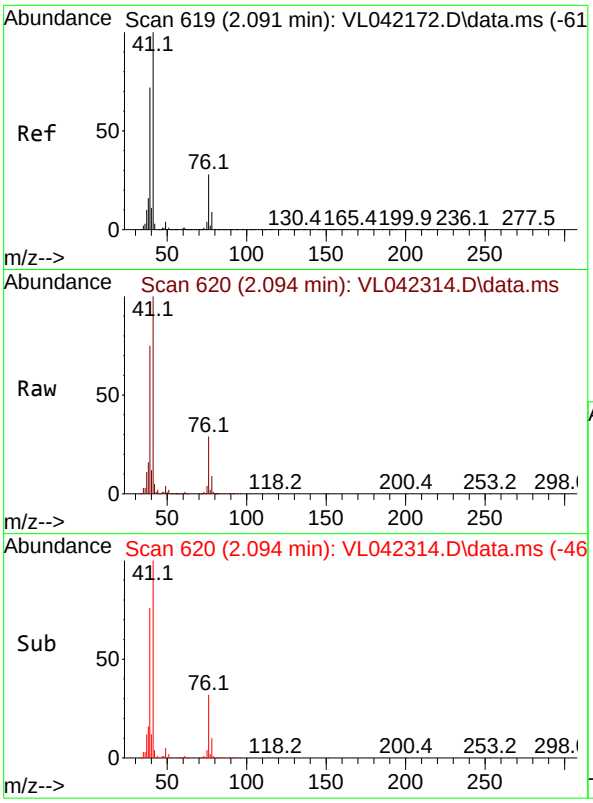


#20
Methylene Chloride
Concen: 8.097 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 84 Resp: 75264

Ion	Ratio	Lower	Upper
84	100		
49	162.8	120.2	180.4
51	50.6	37.4	56.0
86	64.3	52.4	78.6

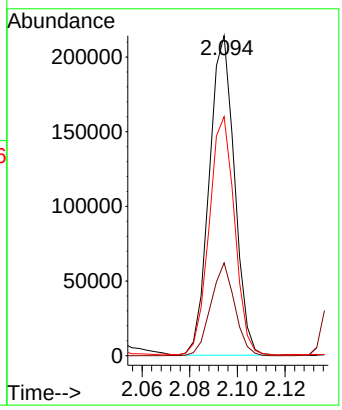




#21
Allyl Chloride
Concen: 8.934 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 41 Resp: 15726

Ion	Ratio	Lower	Upper
41	100		
76	27.5	24.1	36.1
39	75.1	61.1	91.7



Instrument :
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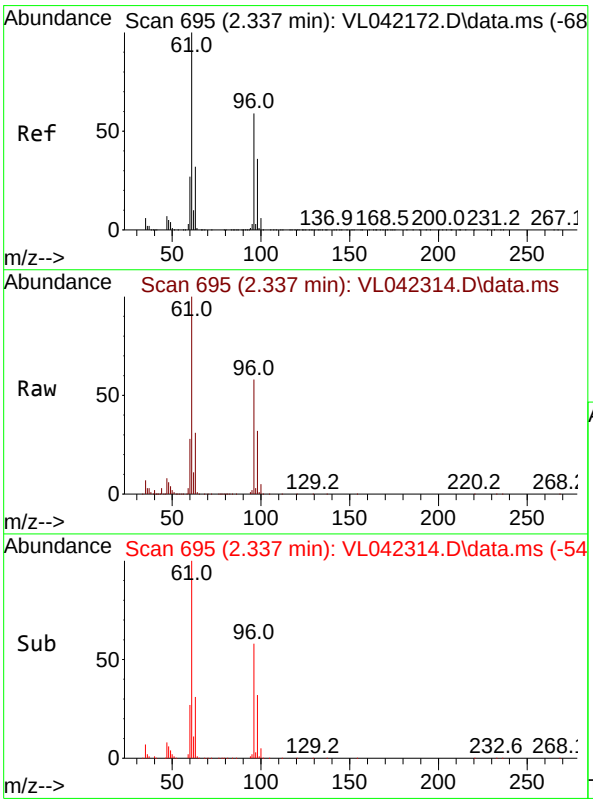
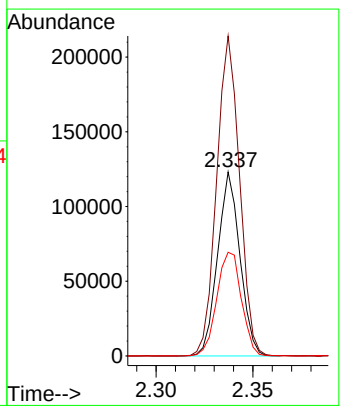
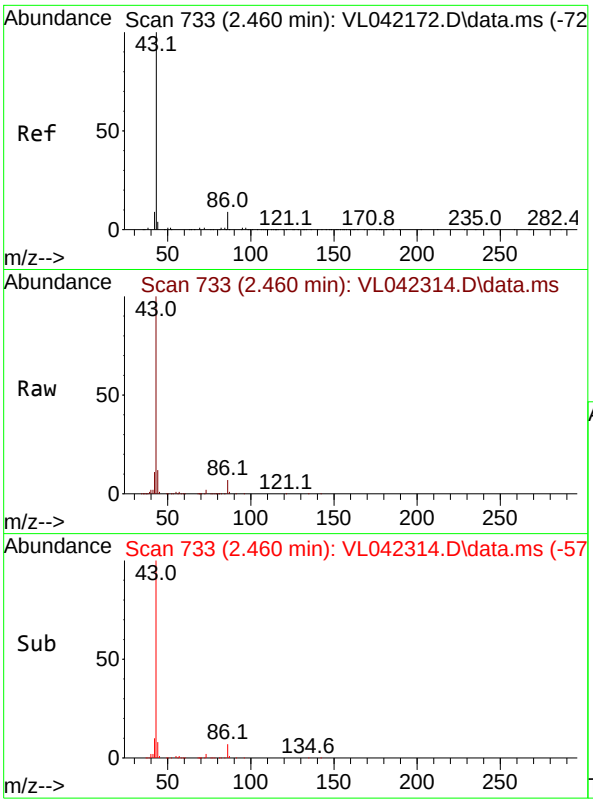


#22
trans-1,2-Dichloroethene
Concen: 8.674 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 96 Resp: 98769

Ion	Ratio	Lower	Upper
96	100		
61	173.9	136.6	204.8
98	56.3	49.4	74.2

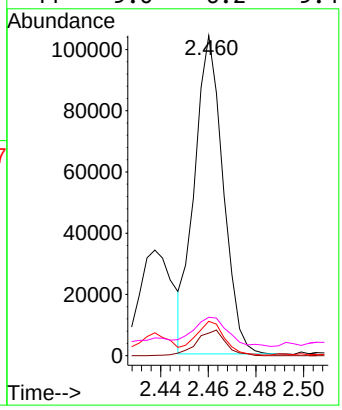




#23
Vinyl Acetate
Concen: 8.014 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 8656

Ion	Ratio	Lower	Upper
43	100		
86	7.1	5.5	8.3
42	9.9	8.6	13.0
44	9.0	6.2	9.4



Instrument :
MSVOA_L
ClientSampleId :
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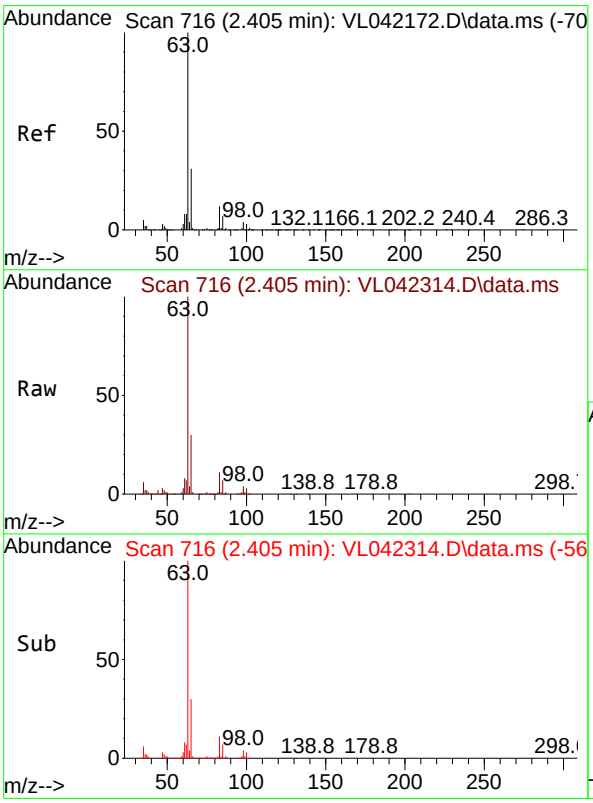
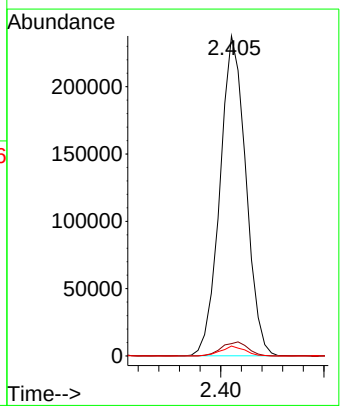
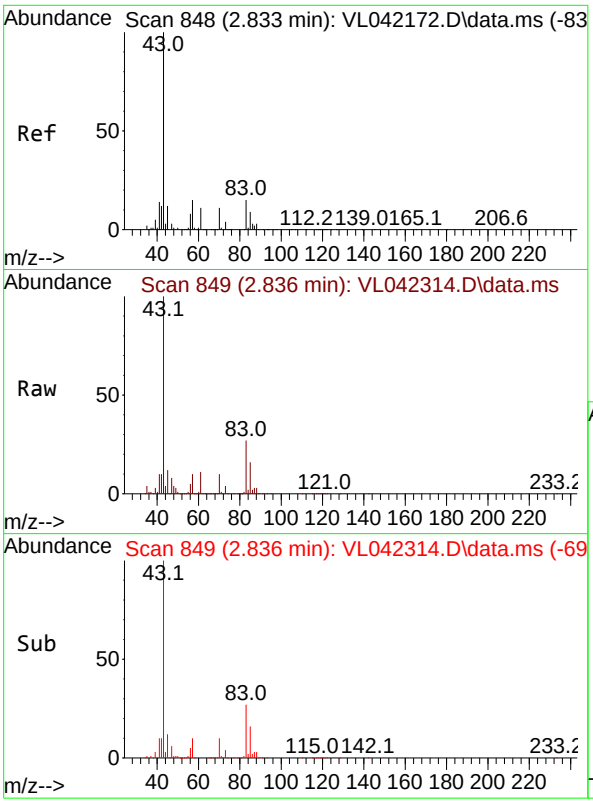


#24
1,1-Dichloroethane
Concen: 9.800 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 63 Resp: 206840

Ion	Ratio	Lower	Upper
63	100		
98	3.8	2.3	6.8
100	3.1	1.6	4.7

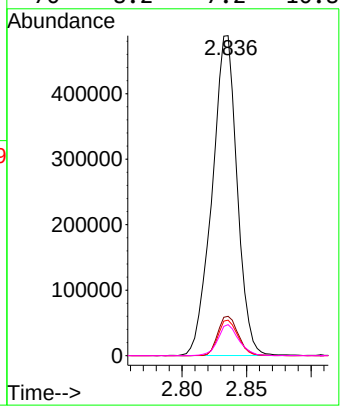




#25
Ethyl Acetate
Concen: 10.138 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 65671

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.0	7.3	10.9
70	8.2	7.2	10.8



Instrument :
MSVOA_L
ClientSampleId :
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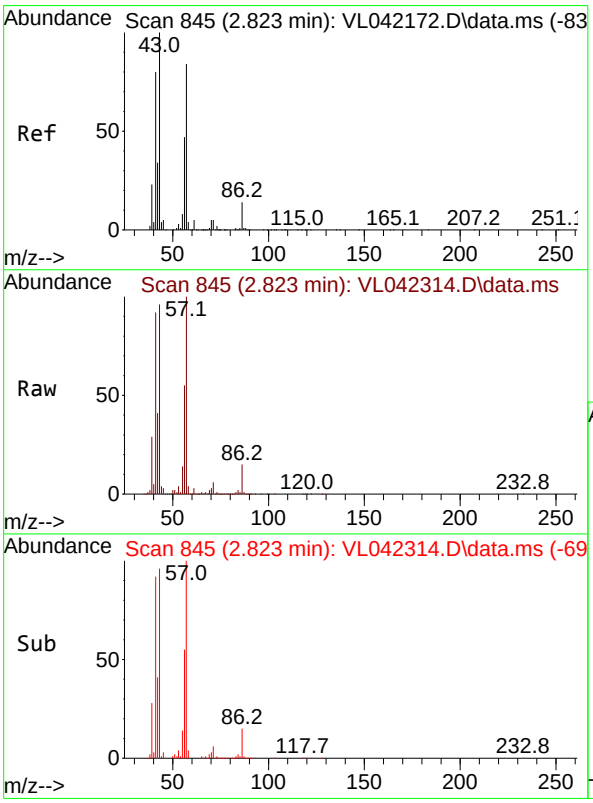
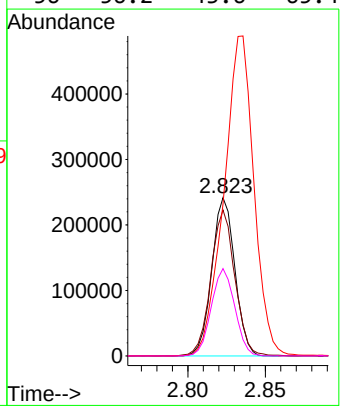
Supervised By :Mahesh Dadoda 04/17/2025

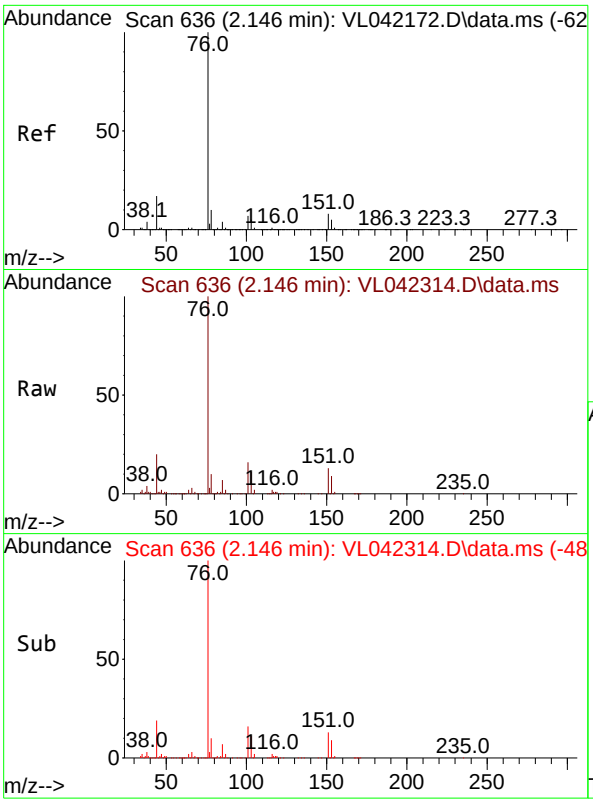


#26
Hexane
Concen: 9.986 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 57 Resp: 249860

Ion	Ratio	Lower	Upper
57	100		
41	97.2	76.6	114.8
43	264.3	207.8	311.8
56	56.2	43.6	65.4

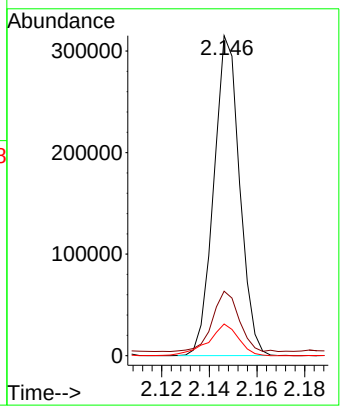




#27
Carbon Disulfide
Concen: 8.833 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 76 Resp: 23699

Ion	Ratio	Lower	Upper
76	100		
44	19.3	14.7	22.1
78	11.6	9.3	13.9



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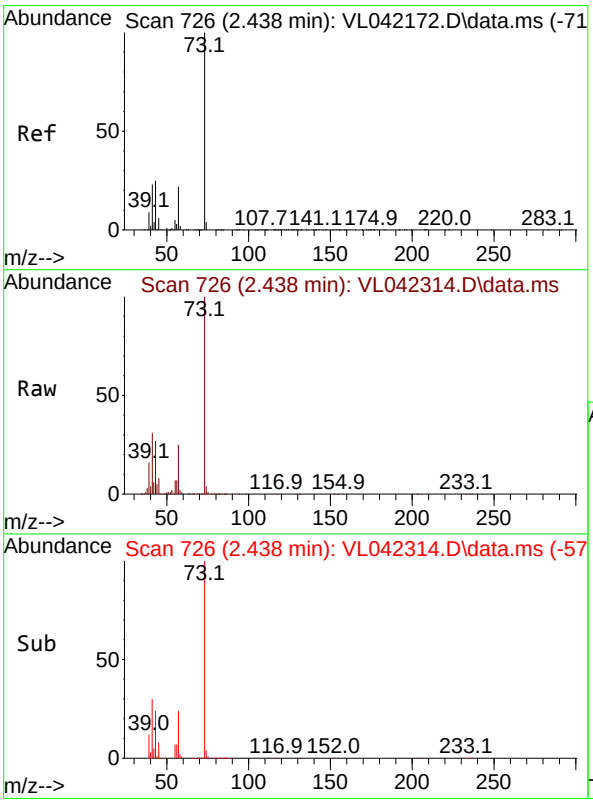
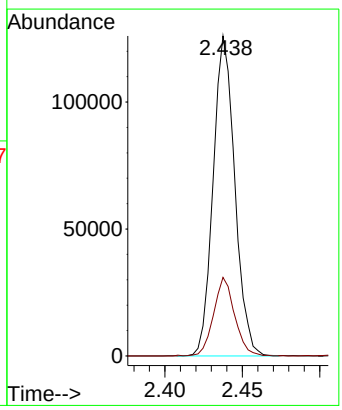
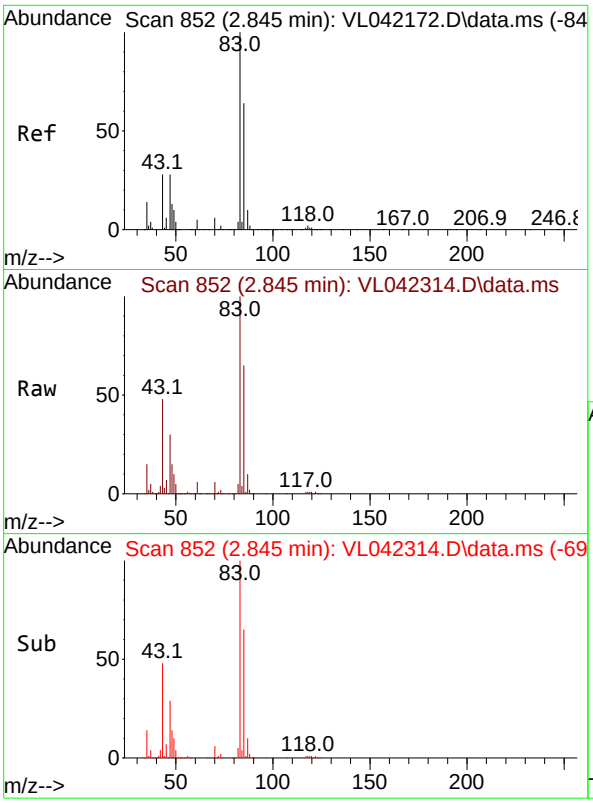


#28
Methyl tert-Butyl Ether
Concen: 7.884 ppbv
RT: 2.438 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 73 Resp: 122818

Ion	Ratio	Lower	Upper
73	100		
57	23.9	20.5	30.7





#29
Chloroform
Concen: 10.506 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 83 Resp: 38471

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
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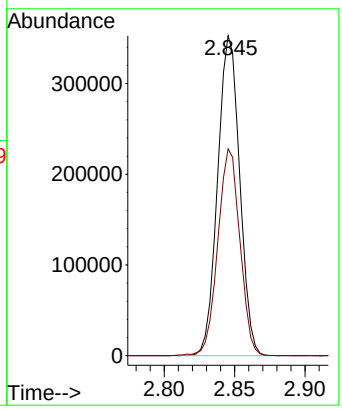
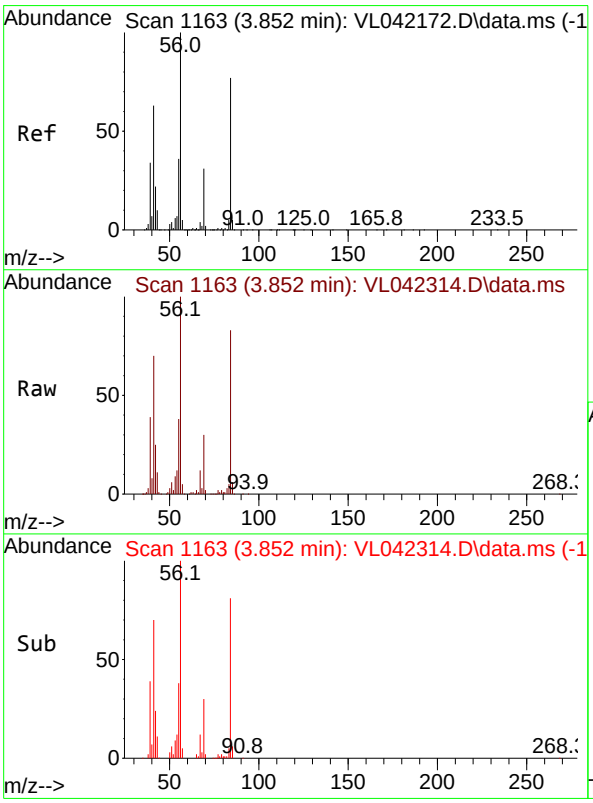
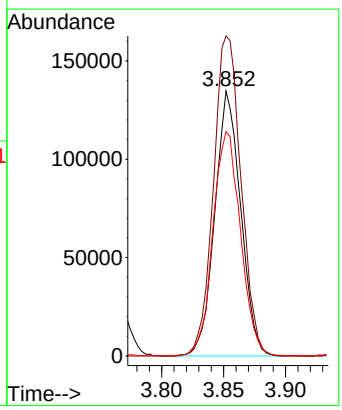


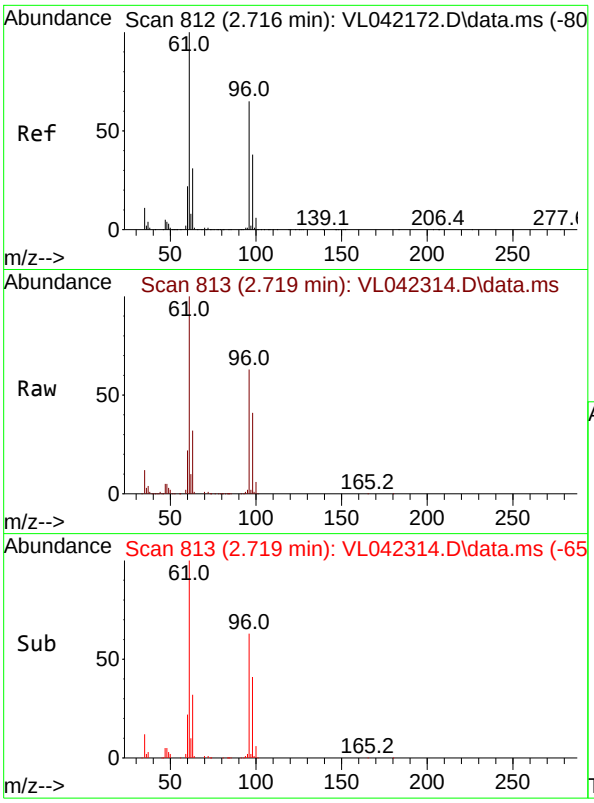


#30
Cyclohexane
Concen: 9.028 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 84 Resp: 196133

Ion	Ratio	Lower	Upper
84	100		
56	128.6	102.8	154.2
41	90.3	66.5	99.7

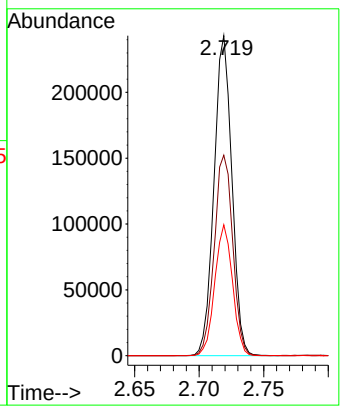




#31
cis-1,2-Dichloroethene
Concen: 9.187 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 61 Resp: 23337

Ion	Ratio	Lower	Upper
61	100		
96	62.7	51.8	77.8
98	40.9	30.6	46.0



Instrument :
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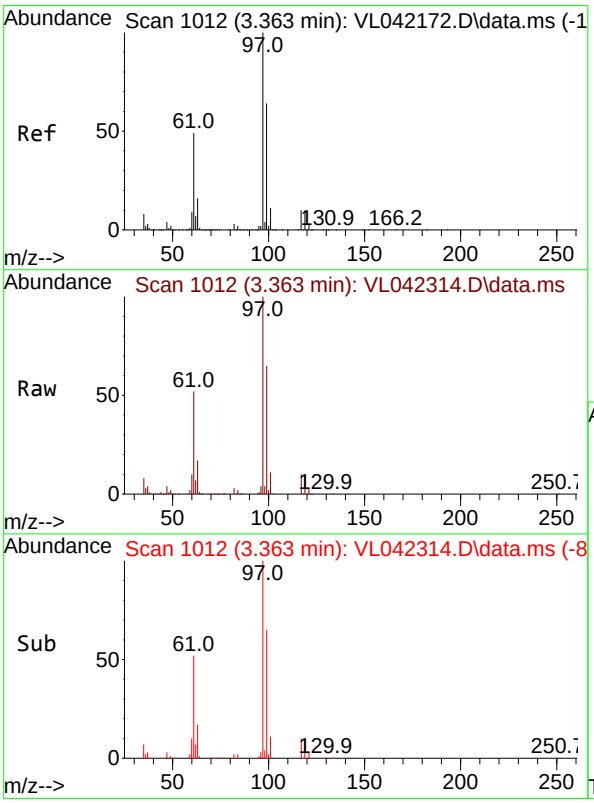
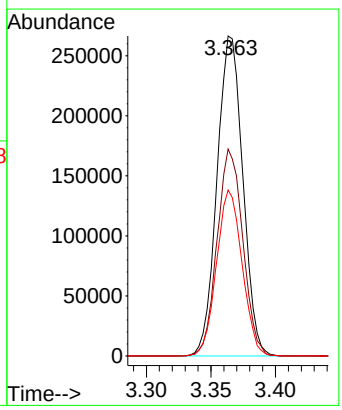
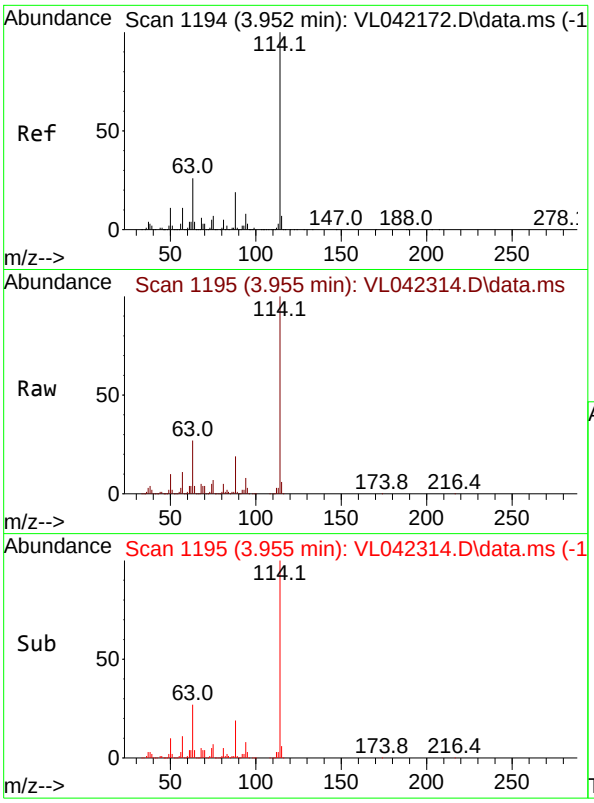


#32
1,1,1-Trichloroethane
Concen: 8.836 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 97 Resp: 370405

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.5	77.3
61	51.5	38.7	58.1

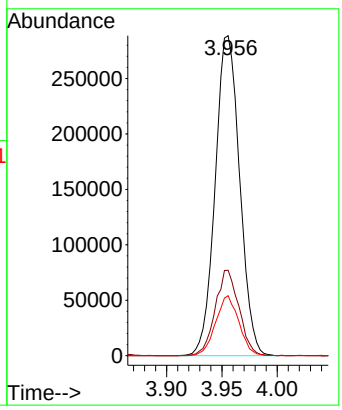




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:114 Resp: 44435

Ion	Ratio	Lower	Upper
114	100		
63	26.0	20.7	31.1
88	17.8	15.0	22.4



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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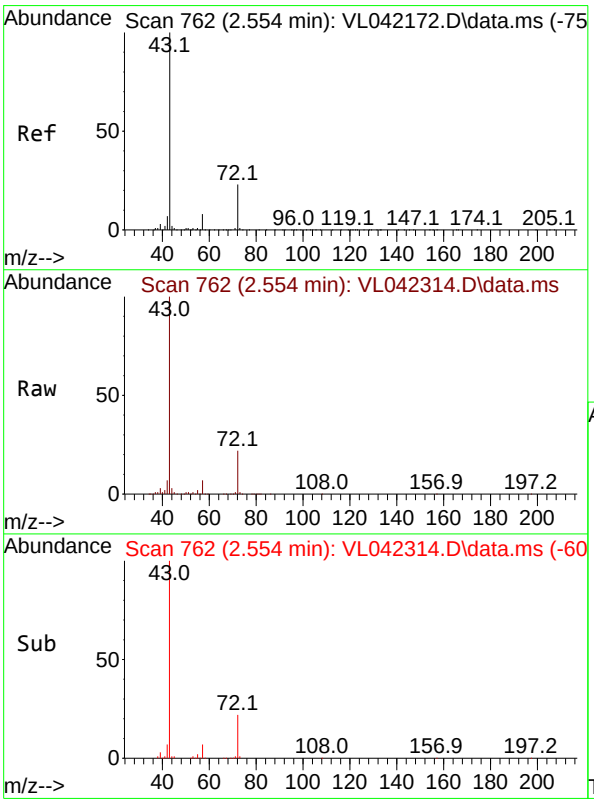
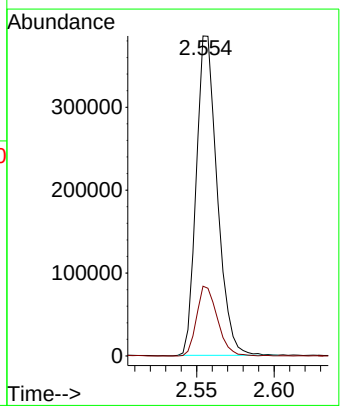
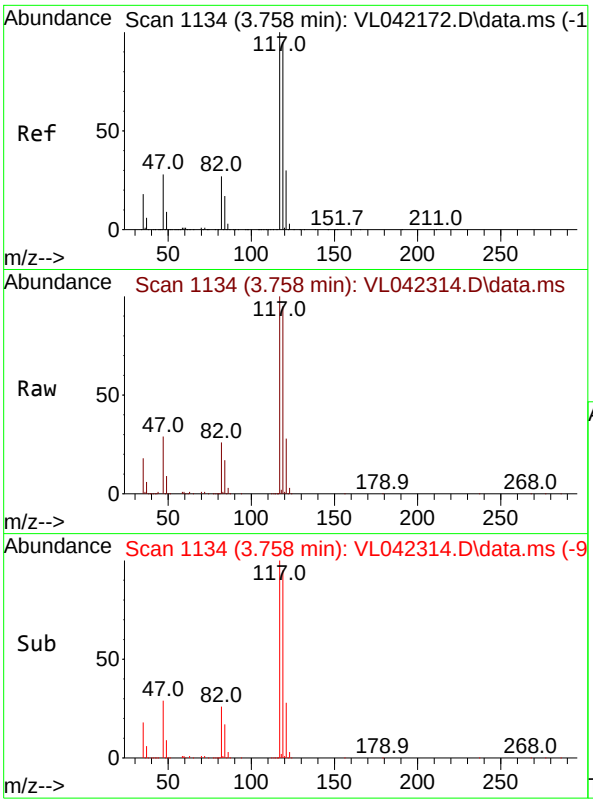


#34
2-Butanone
Concen: 11.254 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 362633

Ion	Ratio	Lower	Upper
43	100		
72	21.8	18.2	27.2

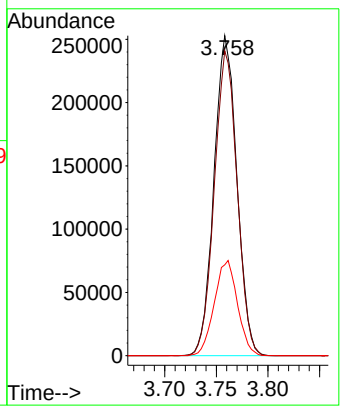




#35
Carbon Tetrachloride
Concen: 11.228 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:117 Resp: 38973

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	28.4	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
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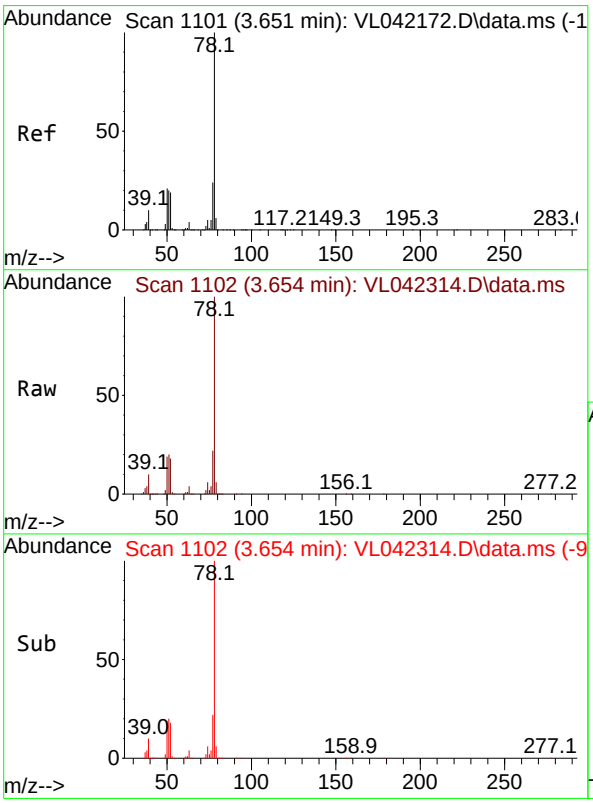
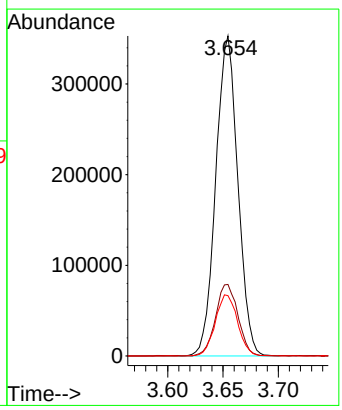
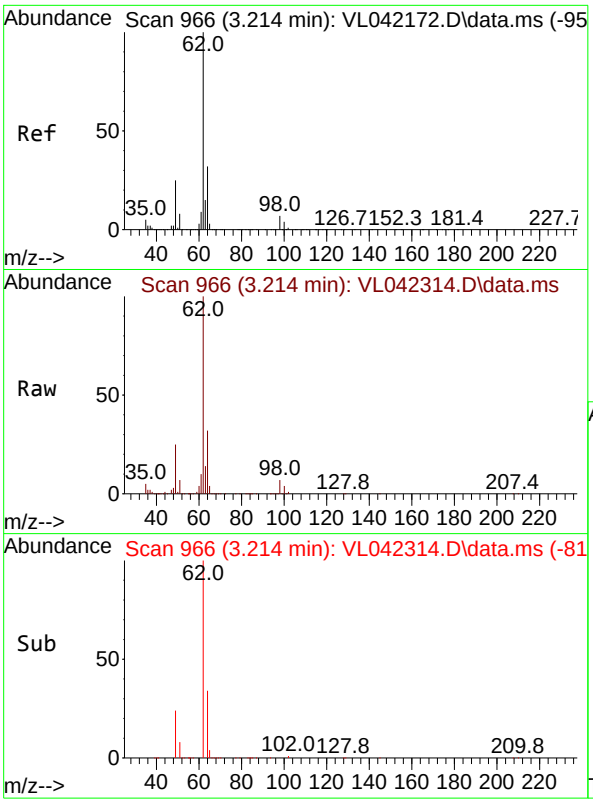


#36
Benzene
Concen: 11.131 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 78 Resp: 490339

Ion	Ratio	Lower	Upper
78	100		
77	22.3	19.1	28.7
50	18.8	16.6	24.8





#37
1,2-Dichloroethane
Concen: 11.538 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 62 Resp: 29098

Ion	Ratio	Lower	Upper
62	100		
98	6.9	5.4	8.2

Instrument :
MSVOA_L
ClientSampleId :
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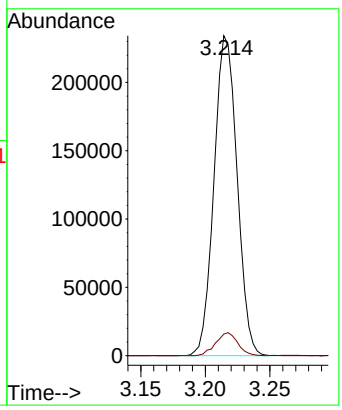
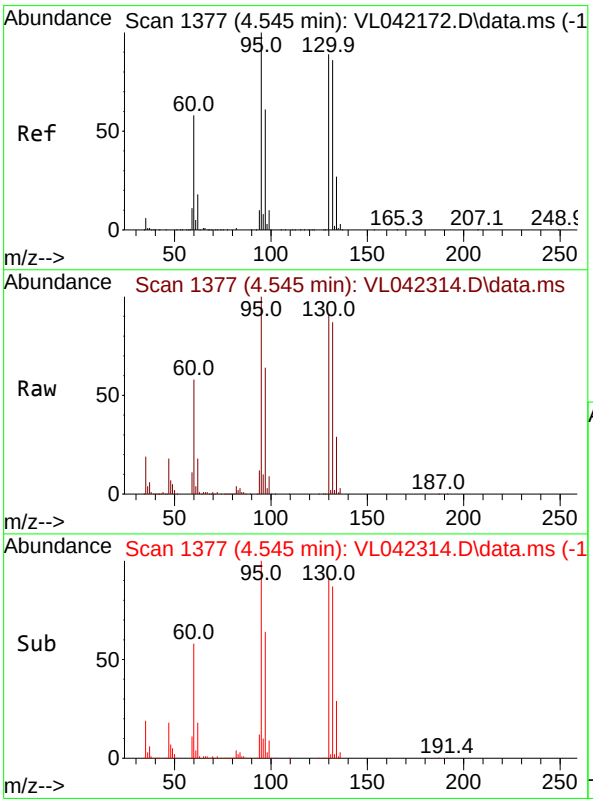
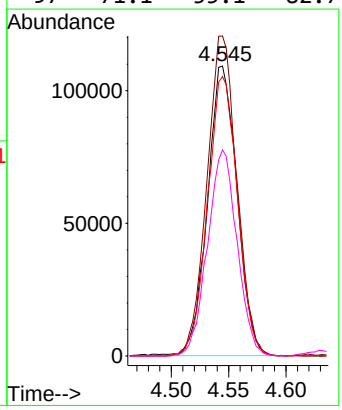


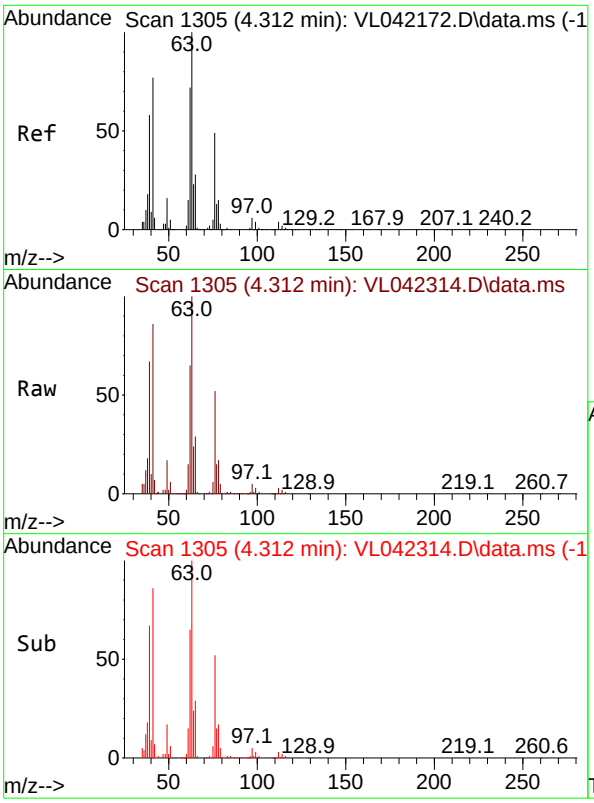


#38
Trichloroethene
Concen: 10.645 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:130 Resp: 195654

Ion	Ratio	Lower	Upper
130	100		
95	110.4	89.8	134.8
132	96.5	77.4	116.2
97	71.1	55.1	82.7

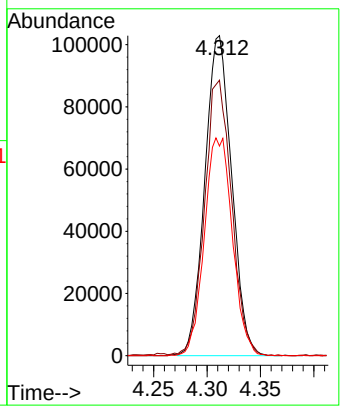




#39
1,2-Dichloropropane
Concen: 11.217 ppbv
RT: 4.312 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 63 Resp: 17995

Ion	Ratio	Lower	Upper
63	100		
41	85.9	61.7	92.5
62	65.3	57.6	86.4



Instrument :
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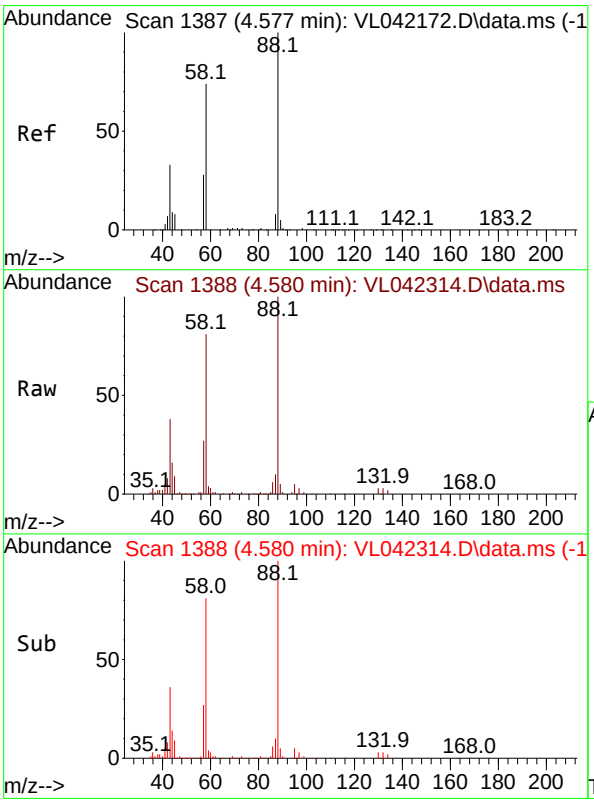
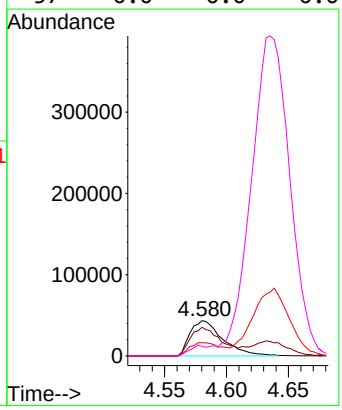
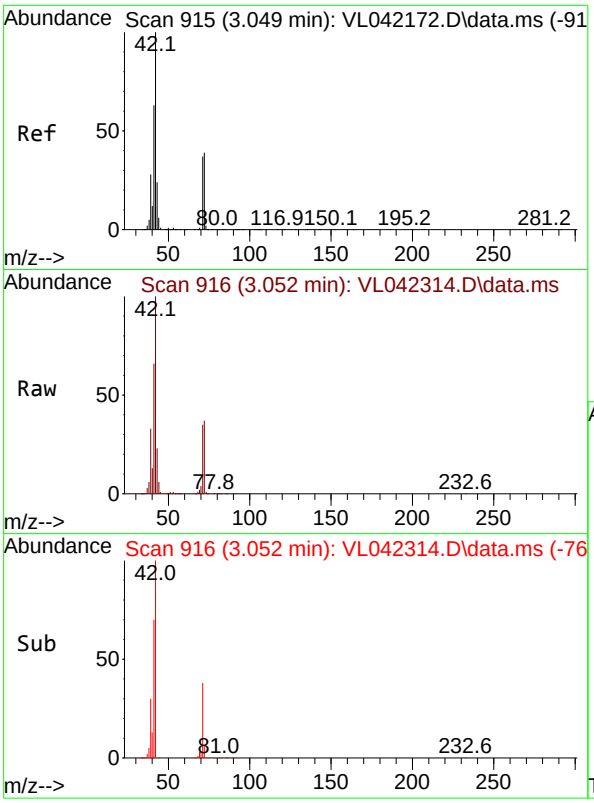


#40
1,4-Dioxane
Concen: 9.408 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 88 Resp: 80106

Ion	Ratio	Lower	Upper
88	100		
58	81.4	62.7	94.1
43	0.0	23.0	34.4#
57	0.0	0.0	0.0

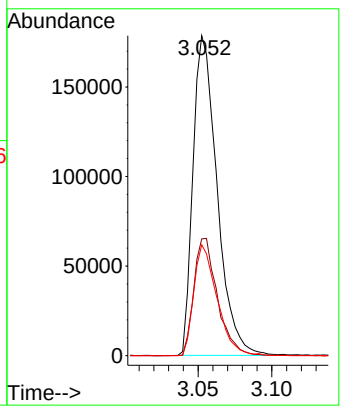




#41
Tetrahydrofuran
Concen: 10.930 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 42 Resp: 20279

Ion	Ratio	Lower	Upper
42	100		
72	36.0	31.4	47.0
71	33.5	30.2	45.4



Instrument :
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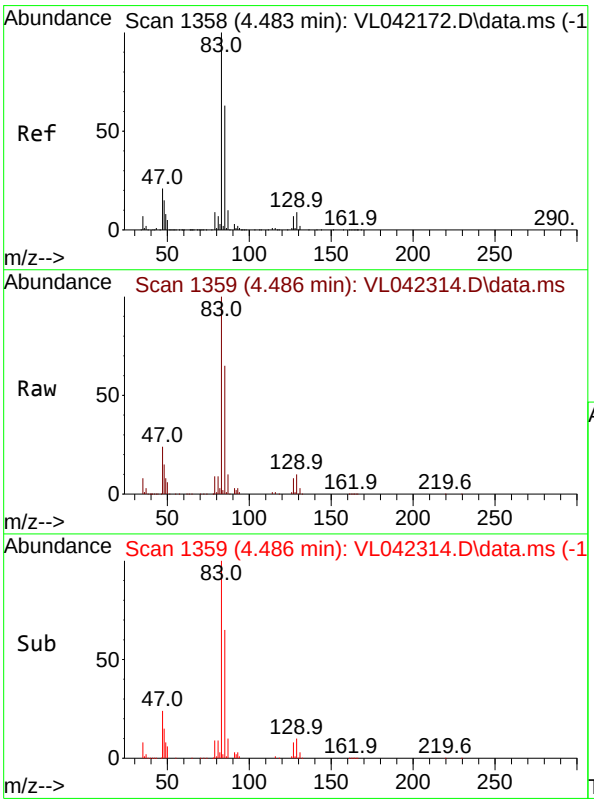
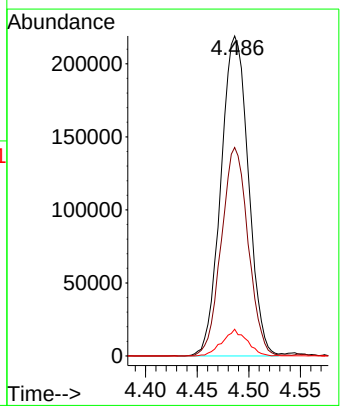
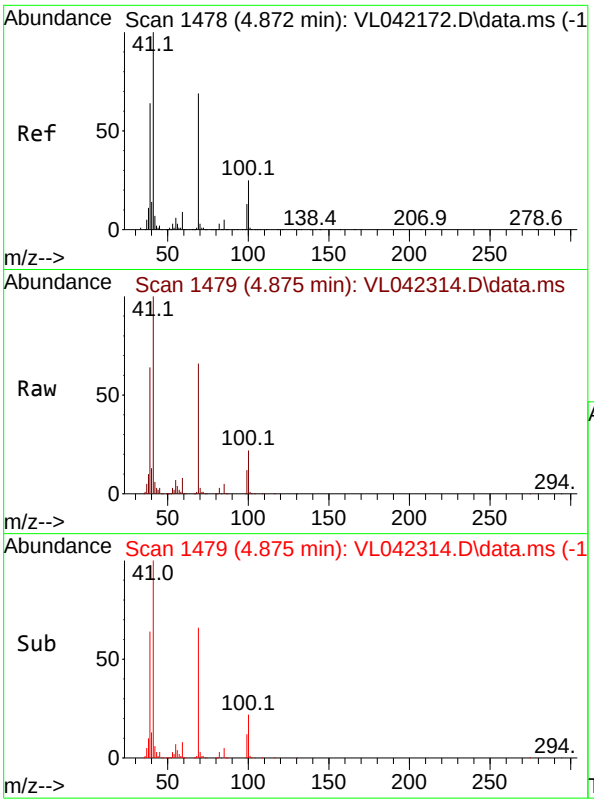


#42
Bromodichloromethane
Concen: 11.669 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 83 Resp: 405729

Ion	Ratio	Lower	Upper
83	100		
85	65.2	50.5	75.7
127	8.4	5.9	8.9





#43
Methyl Methacrylate
Concen: 9.514 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 69 Resp: 17742

Ion	Ratio	Lower	Upper
69	100		
41	158.3	123.8	185.6
100	35.3	28.4	42.6

Instrument :
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ClientSampleId :
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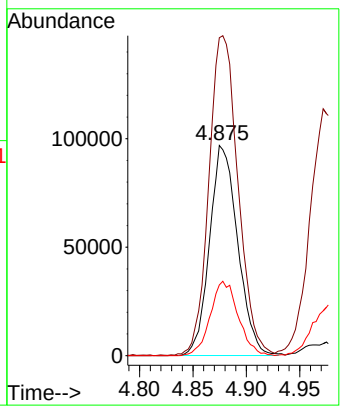
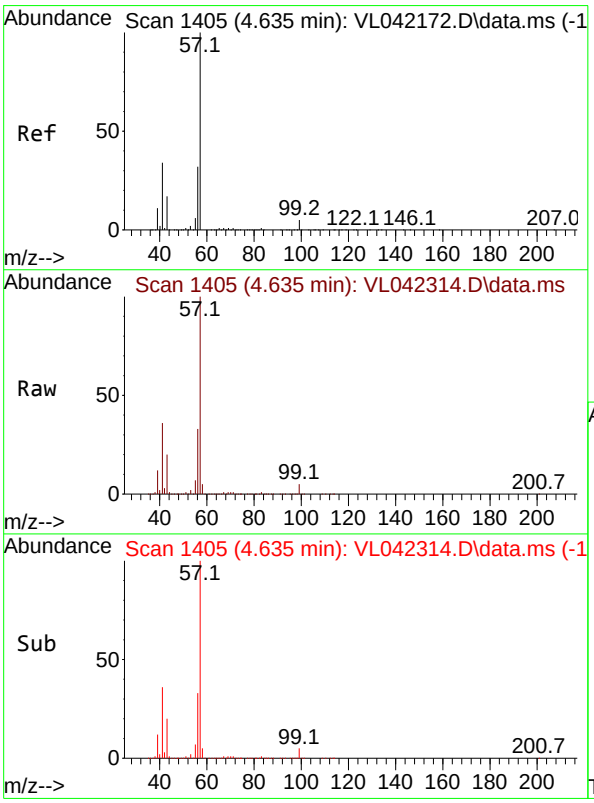
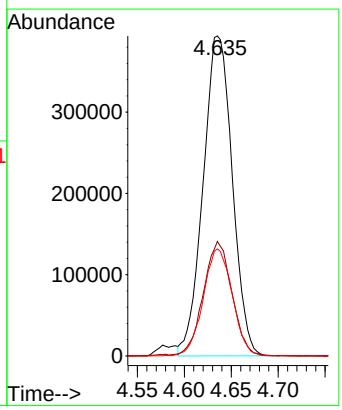


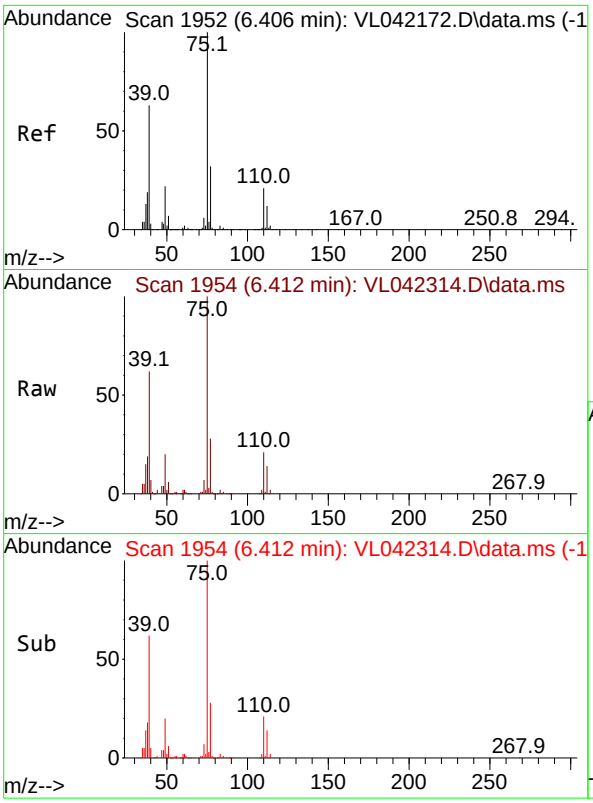


#44
2,2,4-Trimethylpentane
Concen: 11.431 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 57 Resp: 850971

Ion	Ratio	Lower	Upper
57	100		
41	35.3	26.8	40.2
56	33.4	25.6	38.4

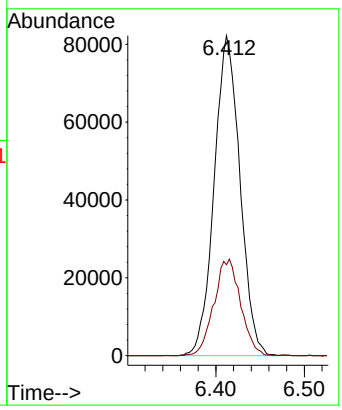




#45
t-1,3-Dichloropropene
Concen: 8.309 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 75 Resp: 16624

Ion	Ratio	Lower	Upper
75	100		
77	28.4	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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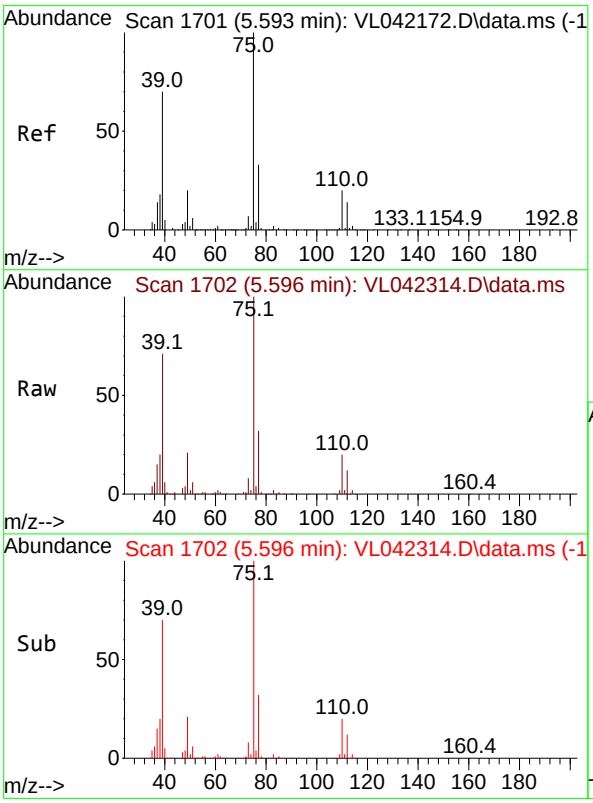
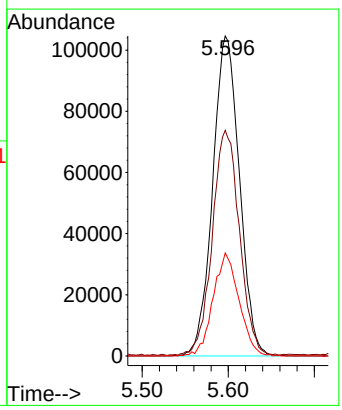
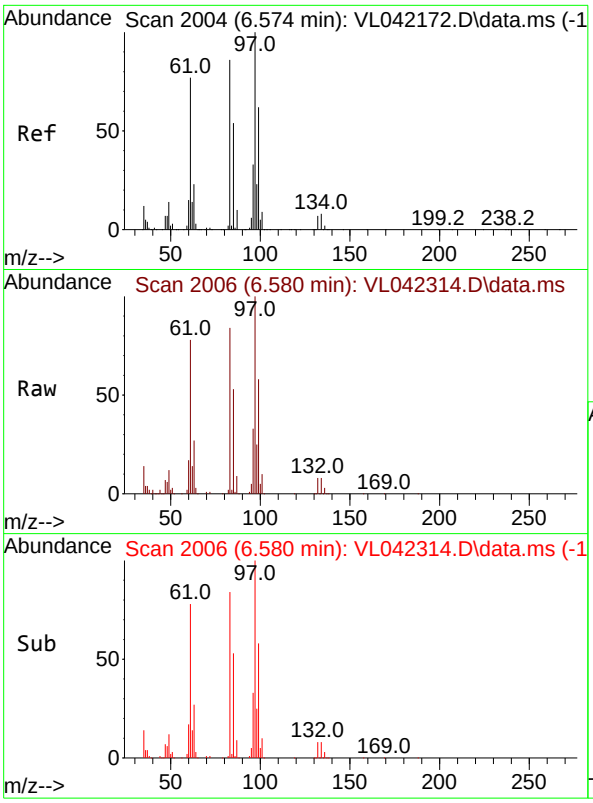


#46
cis-1,3-Dichloropropene
Concen: 9.213 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 75 Resp: 225952

Ion	Ratio	Lower	Upper
75	100		
39	70.2	55.8	83.6
77	32.1	26.0	39.0

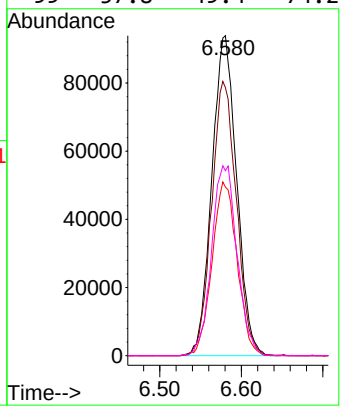




#47
1,1,2-Trichloroethane
Concen: 11.720 ppbv
RT: 6.580 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 97 Resp: 19876

Ion	Ratio	Lower	Upper
97	100		
83	83.8	69.2	103.8
85	52.7	43.1	64.7
99	57.8	49.4	74.2



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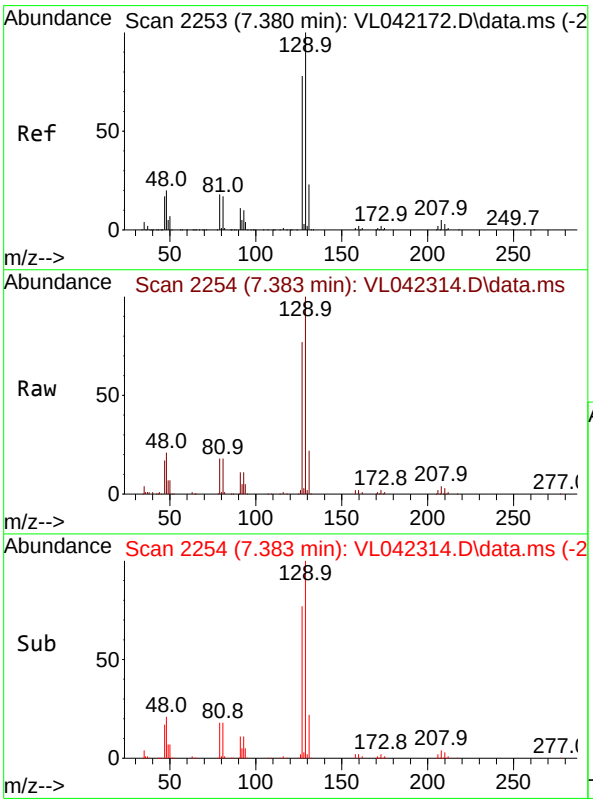
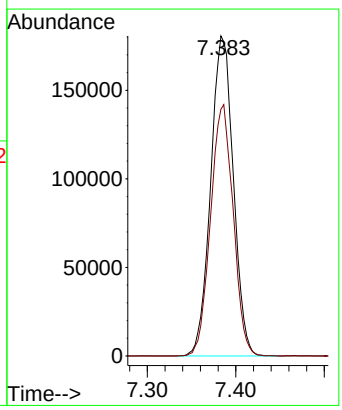
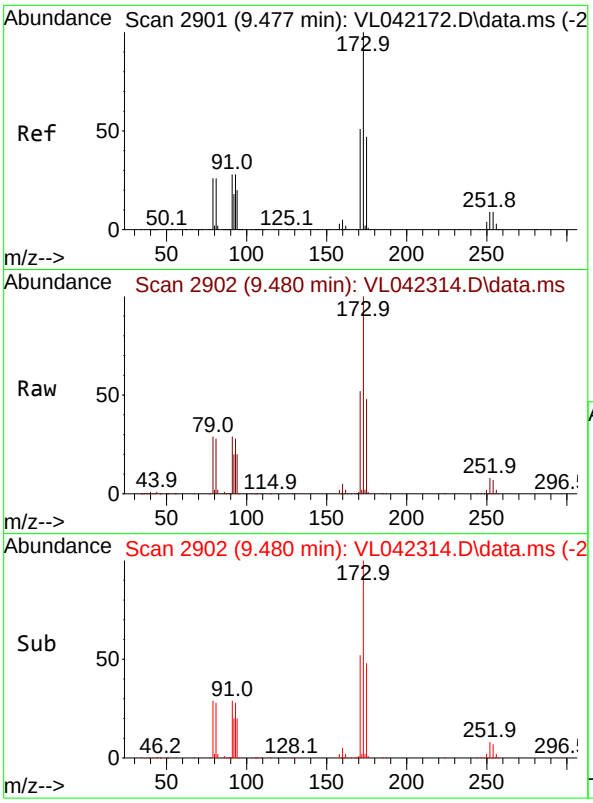


#48
Dibromochloromethane
Concen: 11.181 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:129 Resp: 321370

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2





#49
Bromoform
Concen: 11.313 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:173 Resp: 29190

Ion	Ratio	Lower	Upper
173	100		
175	49.1	38.6	57.8
171	51.7	41.8	62.6

Instrument :
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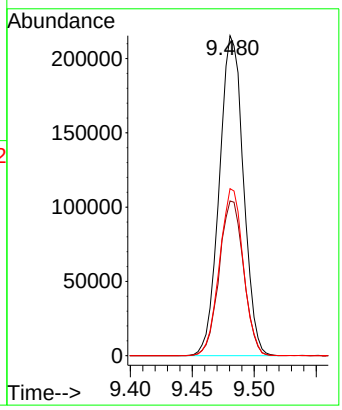
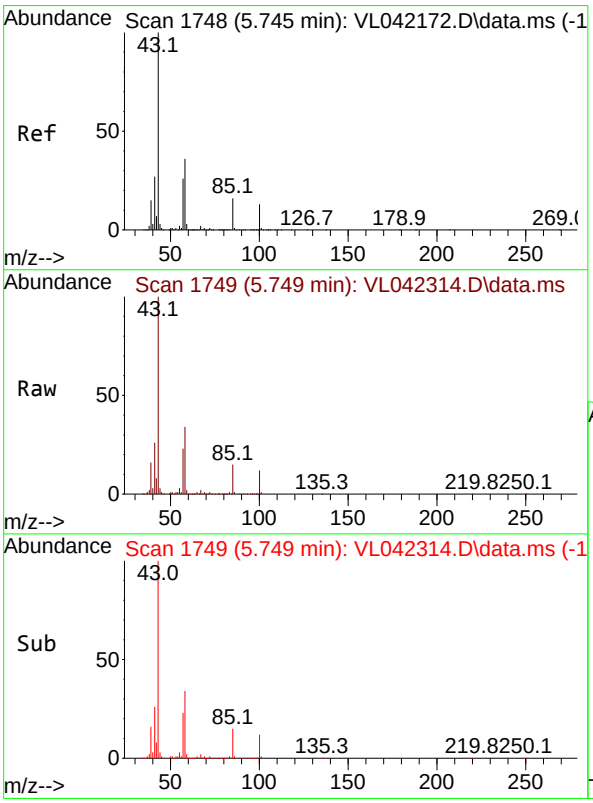
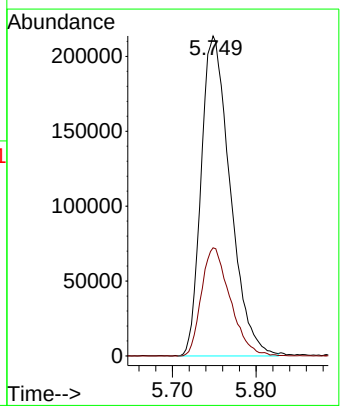


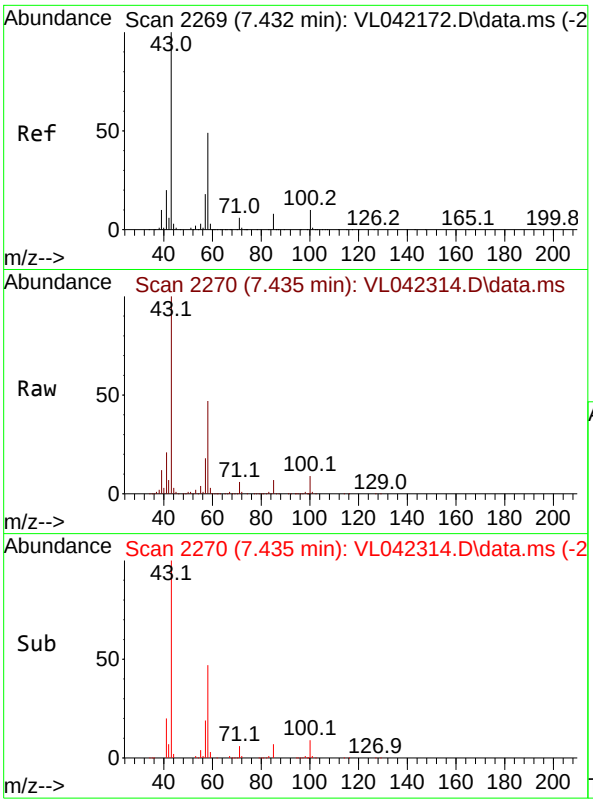


#50
4-Methyl-2-Pentanone
Concen: 10.084 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 514910

Ion	Ratio	Lower	Upper
43	100		
58	33.6	29.0	43.6

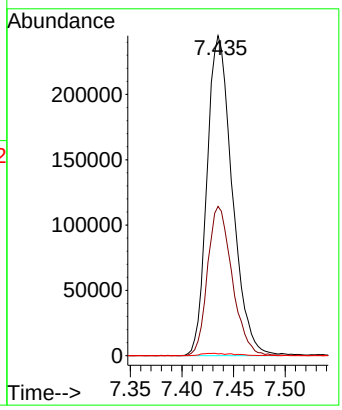




#51
2-Hexanone
Concen: 9.889 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 41468

Ion	Ratio	Lower	Upper
43	100		
58	45.6	39.7	59.5
98	1.0	0.1	0.1



Instrument :
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ClientSampleId :
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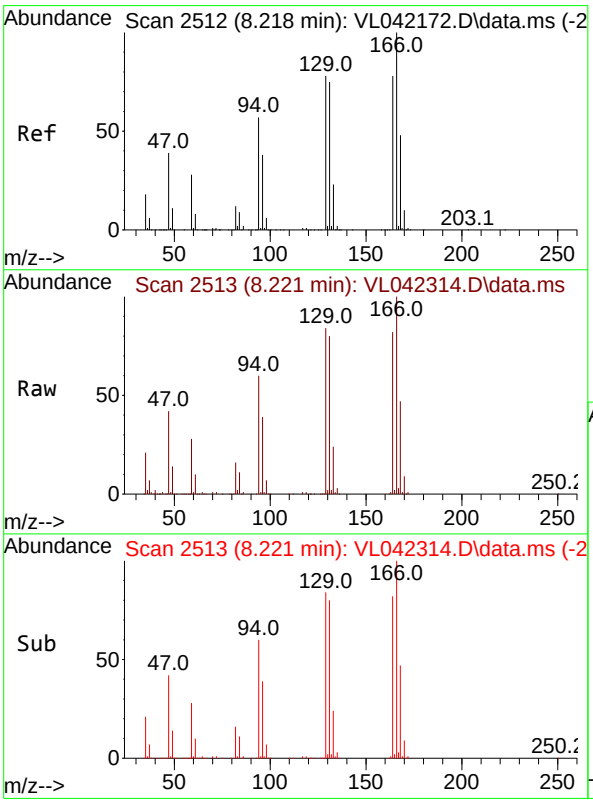
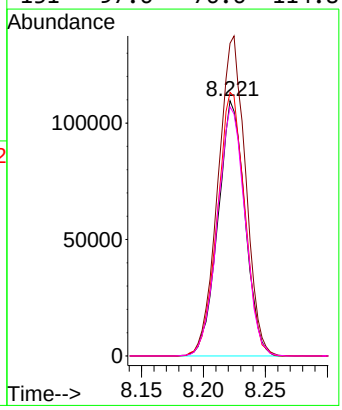
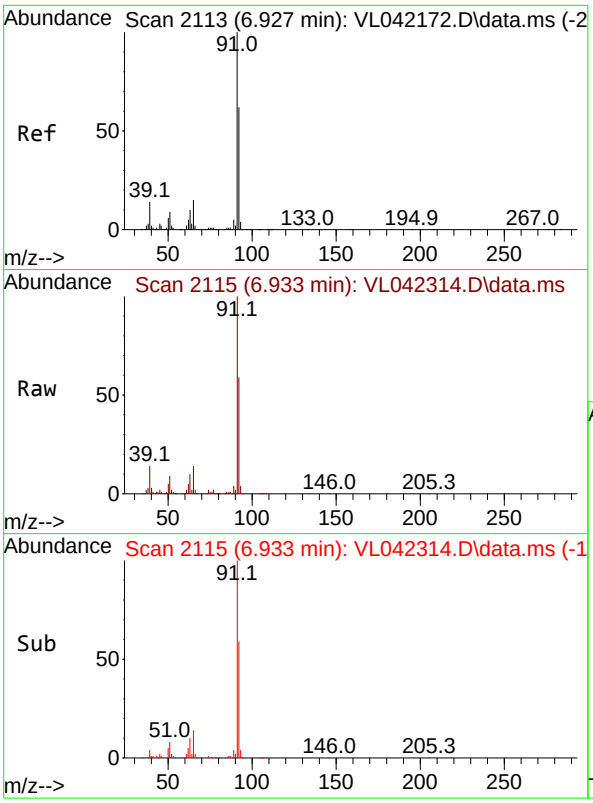


#52
Tetrachloroethene
Concen: 9.483 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:164 Resp: 165666

Ion	Ratio	Lower	Upper
164	100		
166	122.5	102.5	153.7
129	103.2	79.8	119.8
131	97.6	76.6	114.8

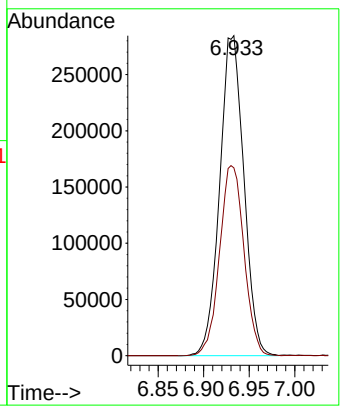




#53
Toluene
Concen: 10.079 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 52634

Ion	Ratio	Lower	Upper
91	100		
92	59.9	48.4	72.6



Instrument :
MSVOA_L
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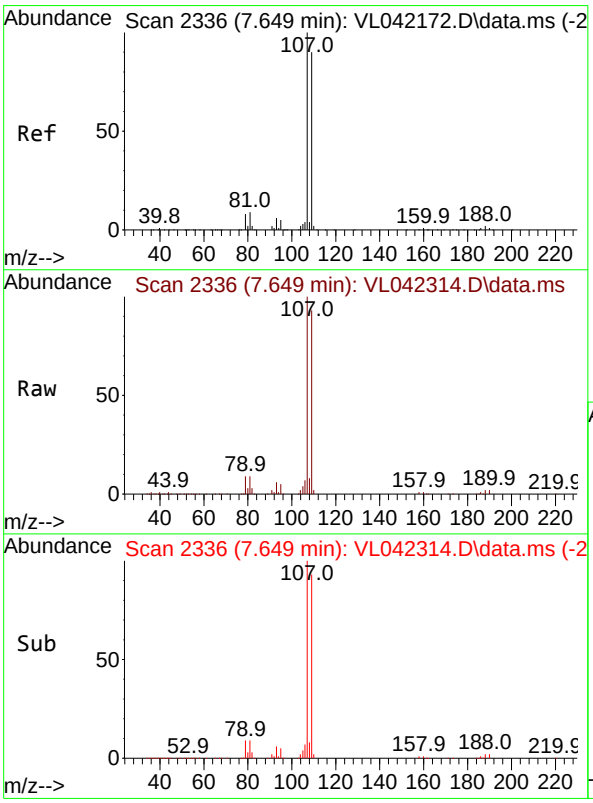
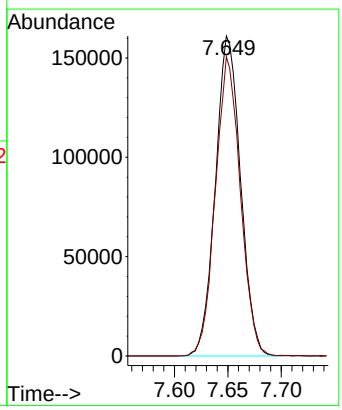
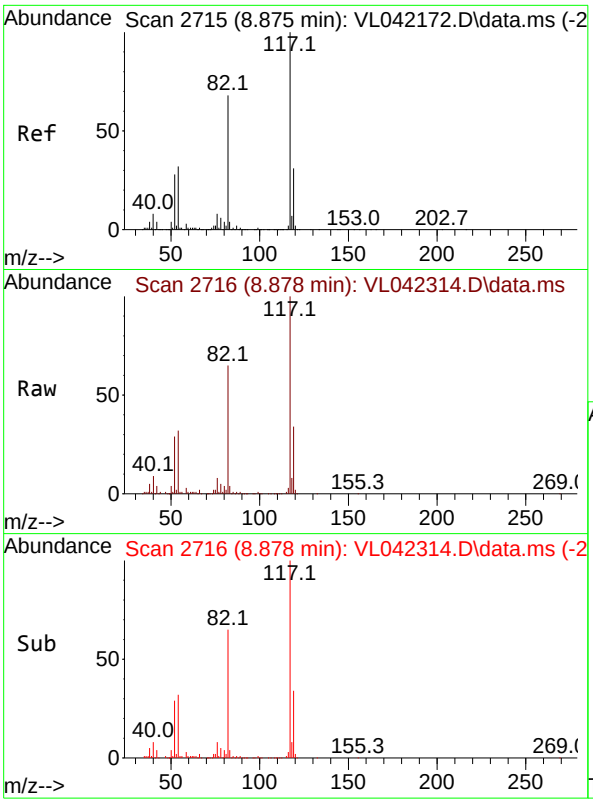


#54
1,2-Dibromoethane
Concen: 11.172 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:107 Resp: 264126

Ion	Ratio	Lower	Upper
107	100		
109	93.5	72.2	108.4

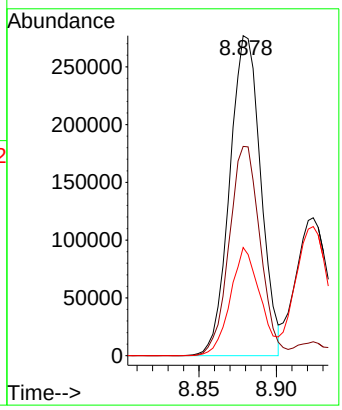




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:117 Resp: 38606

Ion	Ratio	Lower	Upper
117	100		
82	69.5	55.8	83.6
119	31.8	25.5	38.3



Instrument :
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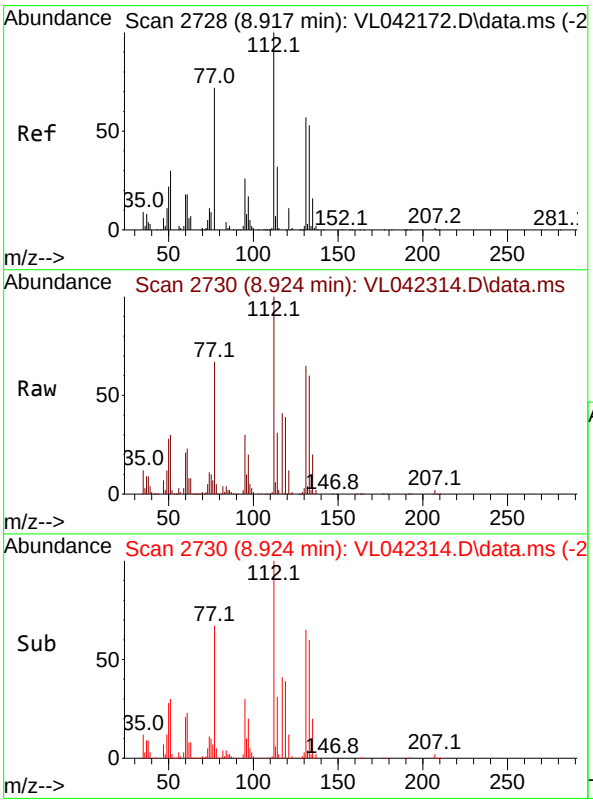
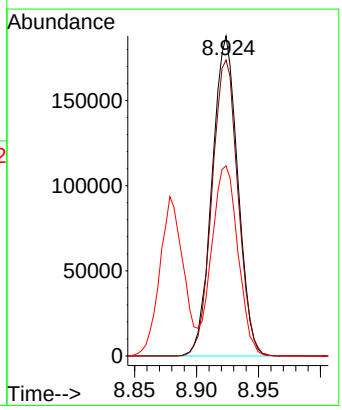
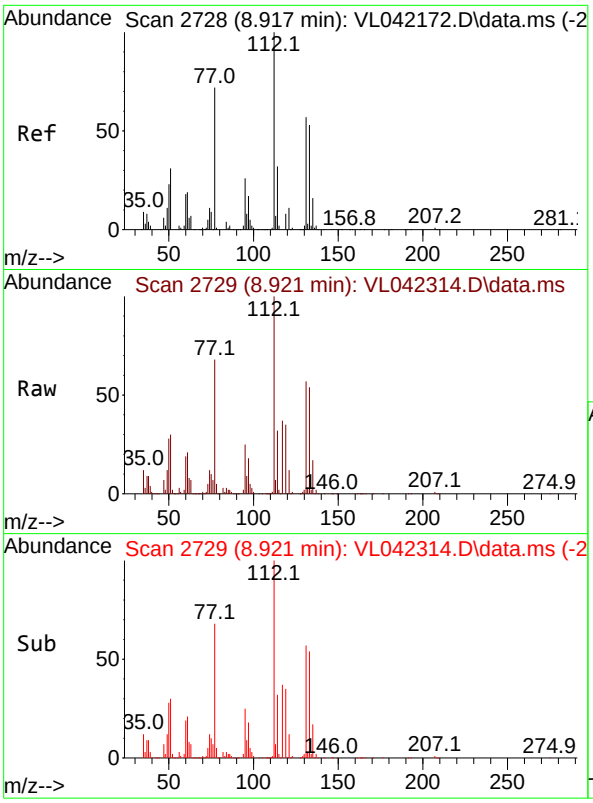


#56
1,1,1,2-Tetrachloroethane
Concen: 12.755 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:131 Resp: 271061

Ion	Ratio	Lower	Upper
131	100		
133	93.8	76.6	114.8
119	59.2	49.8	74.6

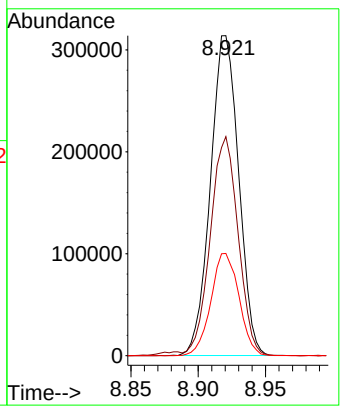




#57
Chlorobenzene
Concen: 12.486 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:112 Resp: 45720

Ion	Ratio	Lower	Upper
112	100		
77	68.4	58.2	87.2
114	31.9	29.1	35.5



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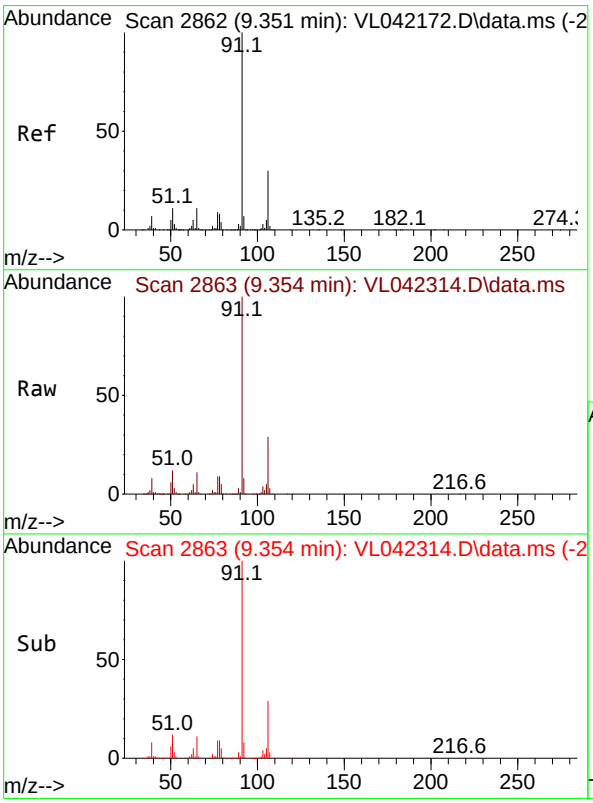
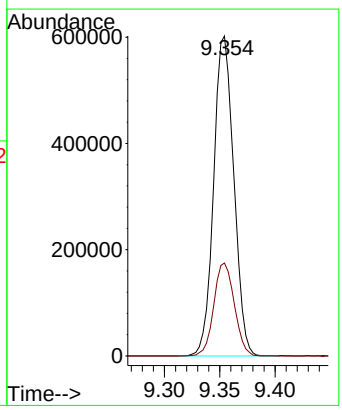
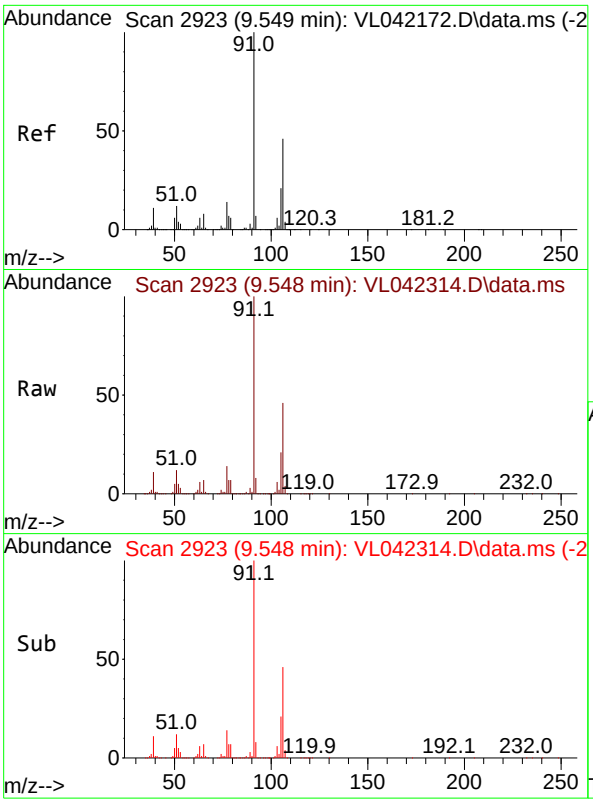


#58
Ethyl Benzene
Concen: 11.105 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 761549

Ion	Ratio	Lower	Upper
91	100		
106	29.1	24.2	36.2

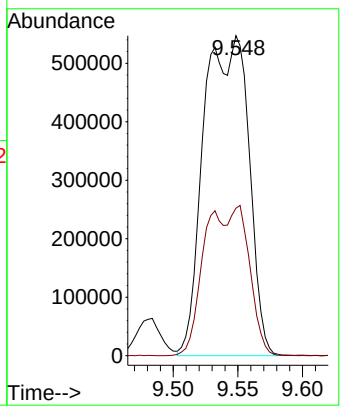




#59
m/p-Xylene
Concen: 24.171 ppbv m
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 132351

Ion	Ratio	Lower	Upper
91	100		
106	46.6	36.4	54.6



Instrument :
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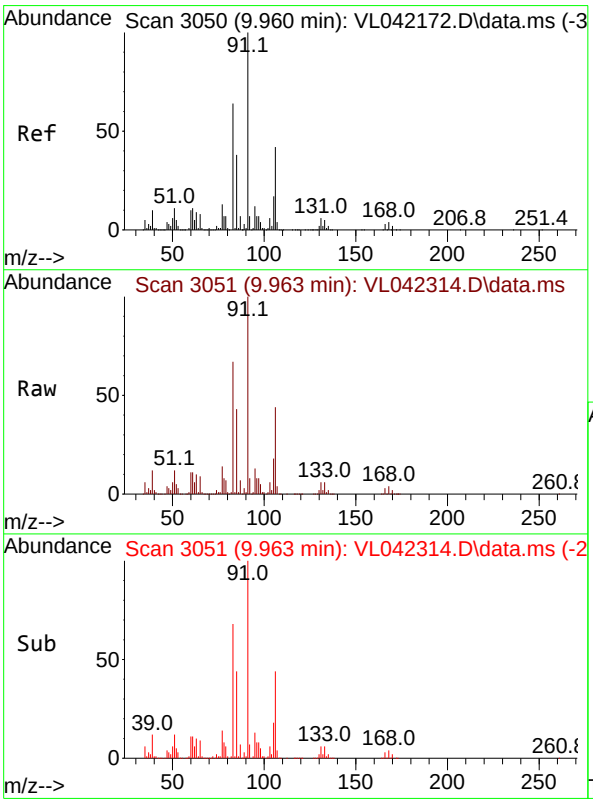
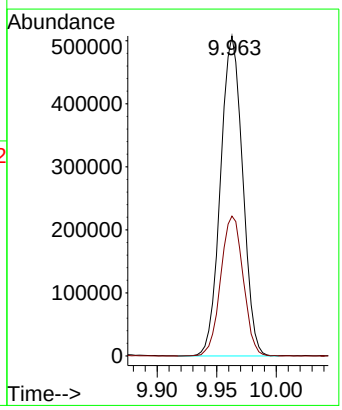
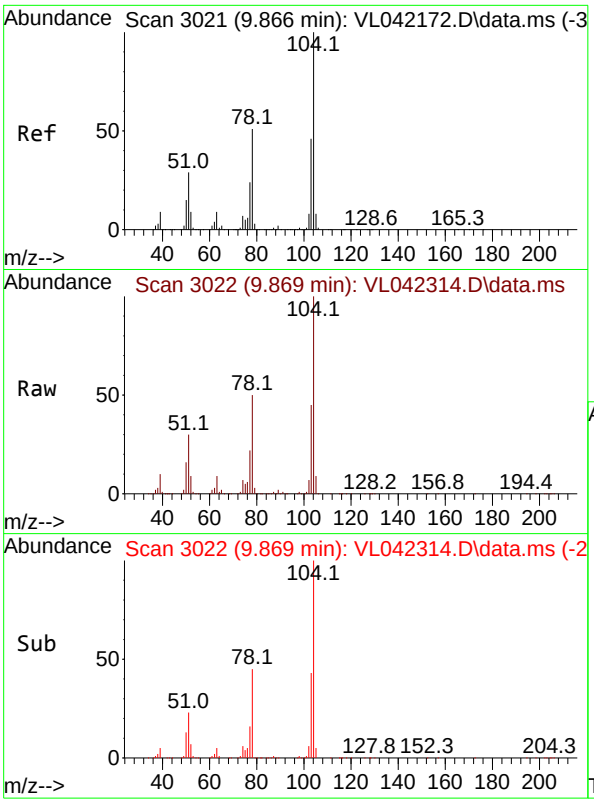


#60
o-Xylene
Concen: 11.929 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 654791

Ion	Ratio	Lower	Upper
91	100		
106	44.4	20.8	62.5

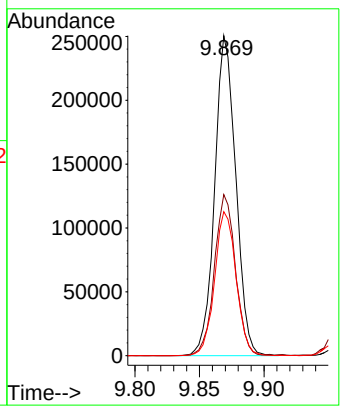




#61
Styrene
Concen: 10.470 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:104 Resp: 28431

Ion	Ratio	Lower	Upper
104	100		
78	50.5	41.8	62.6
103	45.9	37.0	55.4



Instrument :
MSVOA_L
ClientSampleId :
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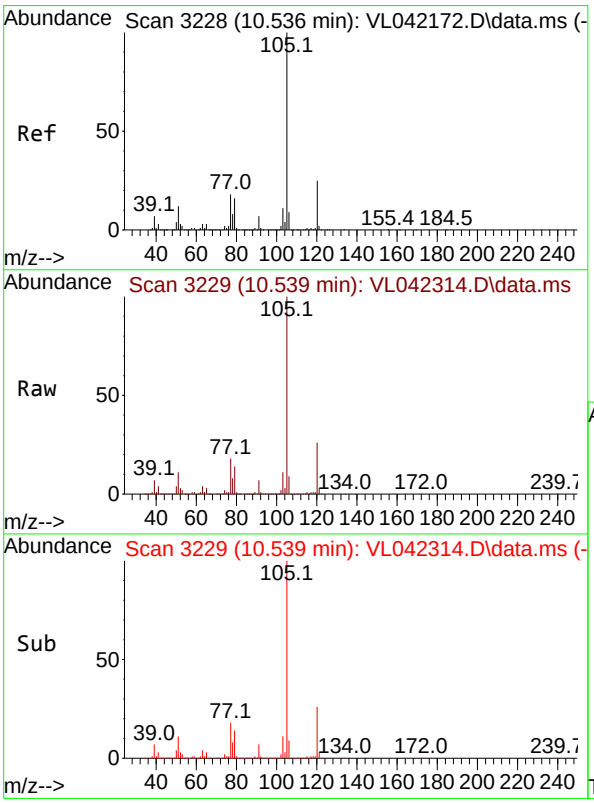
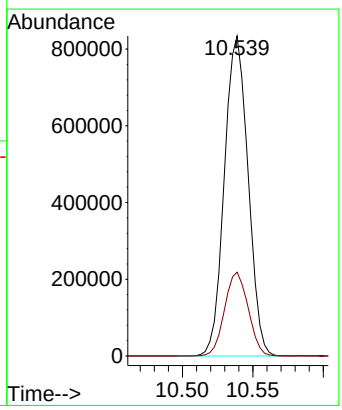
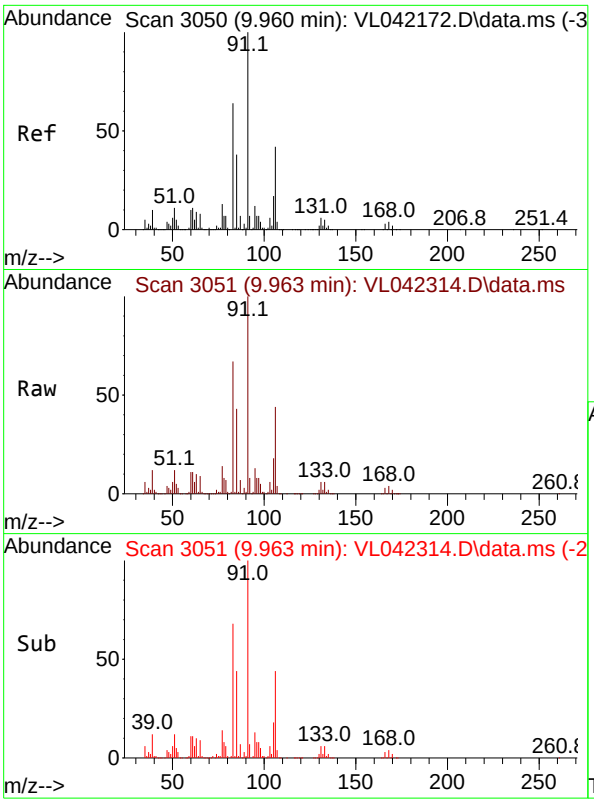


#62
Isopropylbenzene
Concen: 11.887 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 975799

Ion	Ratio	Lower	Upper
105	100		
120	26.1	19.9	29.9

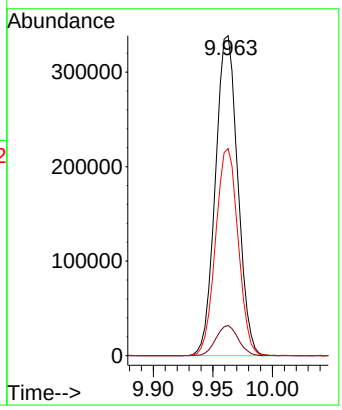




#63
1,1,2,2-Tetrachloroethane
Concen: 13.222 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 83 Resp: 44097

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	65.3	32.5	97.5



Instrument :
MSVOA_L
ClientSampleId :
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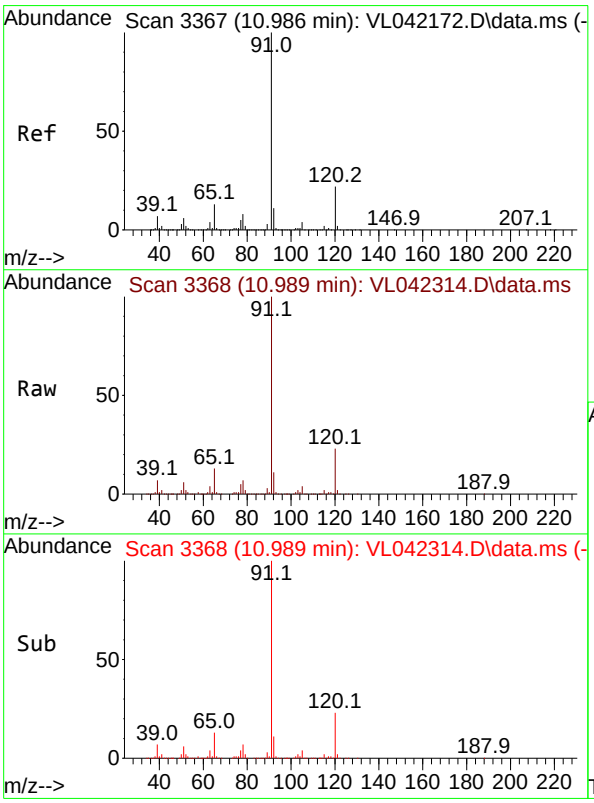
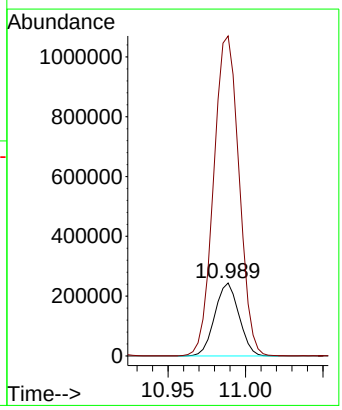
Supervised By :Mahesh Dadoda 04/17/2025

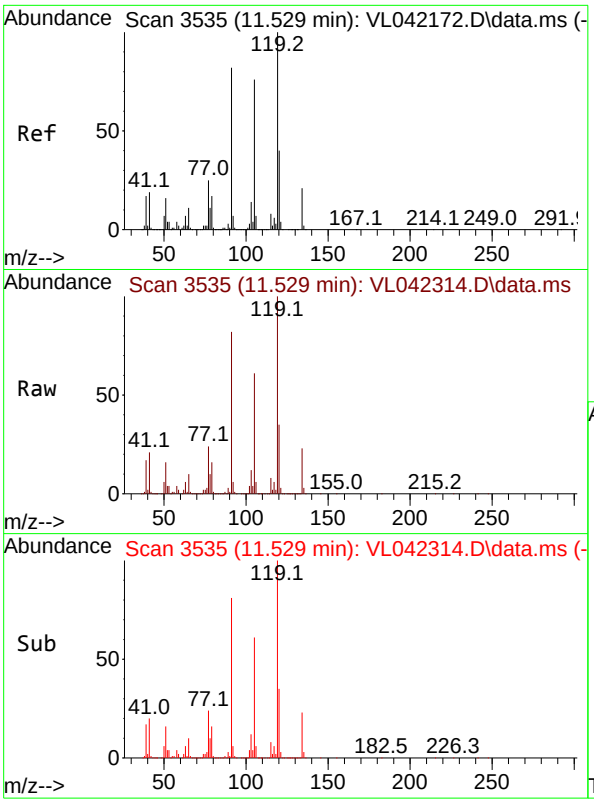


#64
n-propylbenzene
Concen: 12.518 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:120 Resp: 264518

Ion	Ratio	Lower	Upper
120	100		
91	461.4	376.9	565.3





#65
tert-Butylbenzene
Concen: 11.973 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:119 Resp: 90894

Ion	Ratio	Lower	Upper
119	100		
91	81.4	66.0	99.0
134	21.7	16.7	25.1

Instrument :
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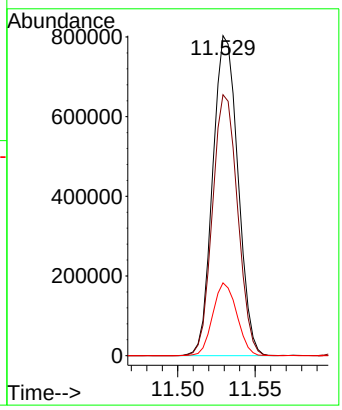
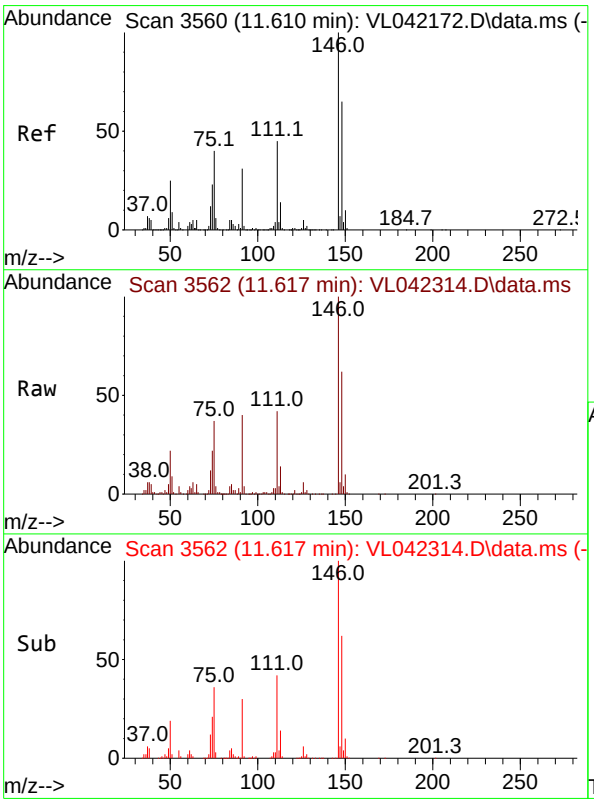
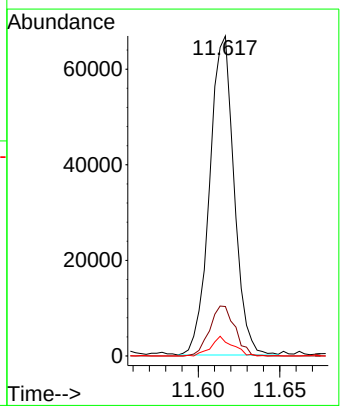


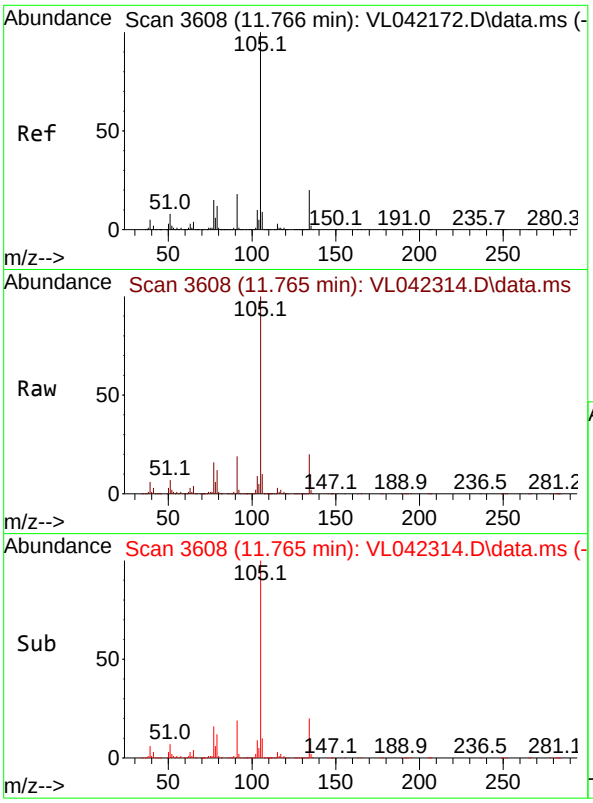


#66
Benzyl Chloride
Concen: 8.634 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 69548

Ion	Ratio	Lower	Upper
91	100		
126	16.1	13.8	20.6
128	5.5	4.5	6.7

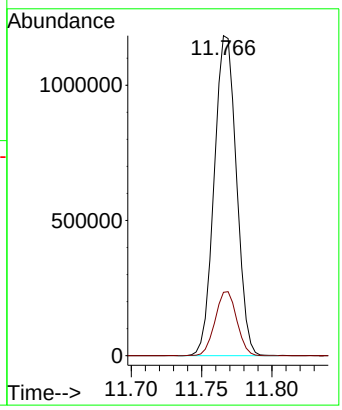




#67
sec-Butylbenzene
Concen: 12.320 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 130009

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.5	23.3



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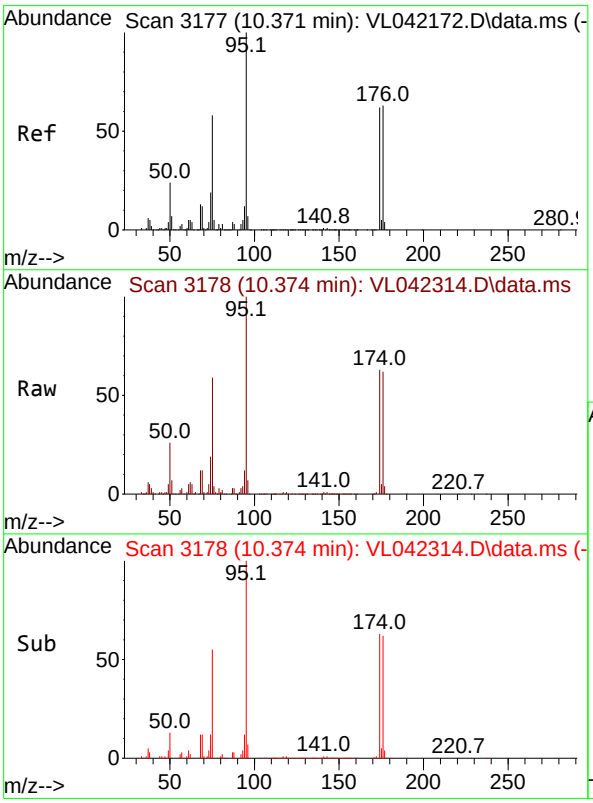
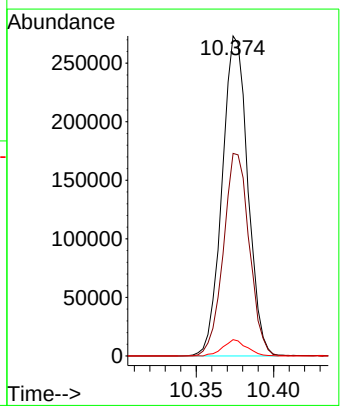
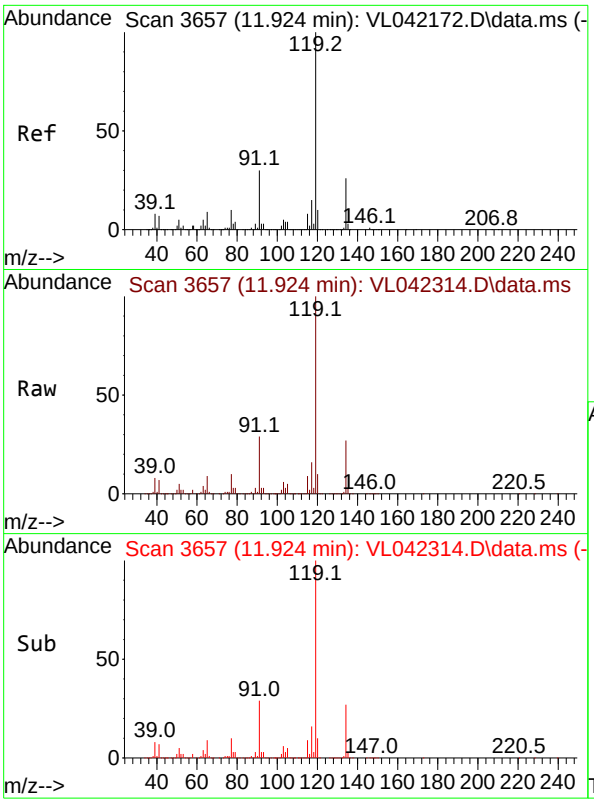


#68
1-Bromo-4-Fluorobenzene
Concen: 9.910 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 95 Resp: 314180

Ion	Ratio	Lower	Upper
95	100		
174	64.2	50.6	76.0
175	4.7	3.8	5.6

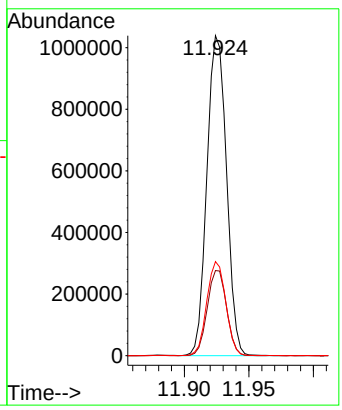




#69
p-Isopropyltoluene
Concen: 12.051 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:119 Resp: 109504

Ion	Ratio	Lower	Upper
119	100		
134	26.3	20.4	30.6
91	28.5	23.7	35.5



Instrument :
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ClientSampleId :
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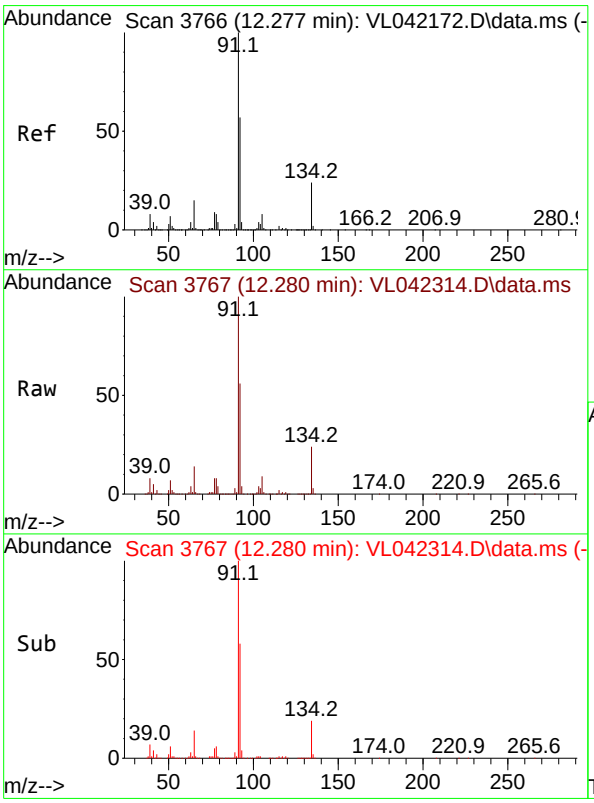
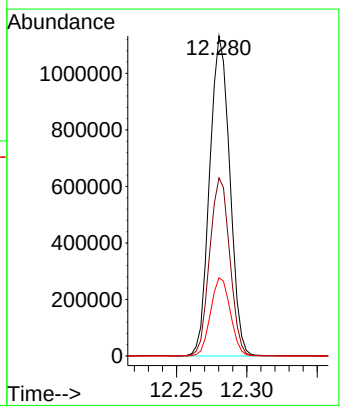
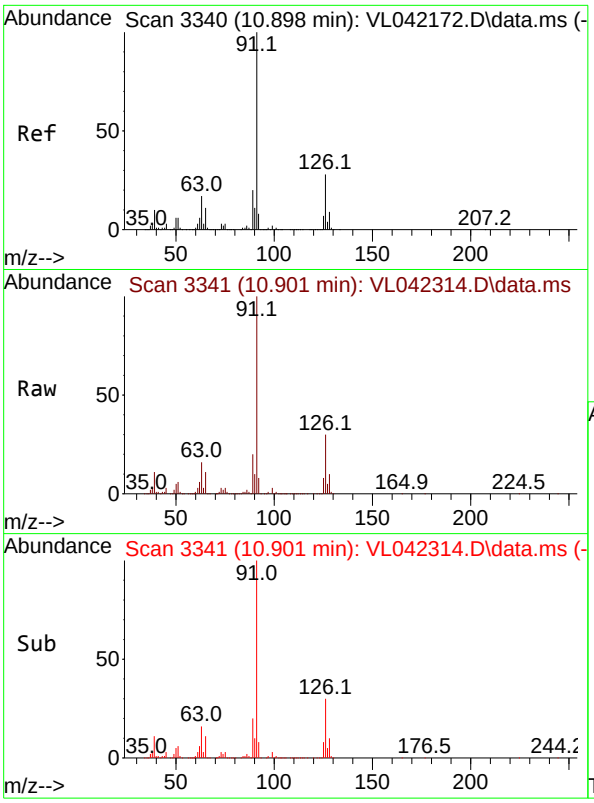


#70
n-Butylbenzene
Concen: 12.159 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 1129853

Ion	Ratio	Lower	Upper
91	100		
92	55.7	44.9	67.3
134	23.9	19.2	28.8

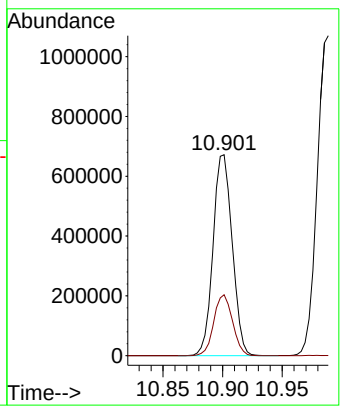




#71
2-Chlorotoluene
Concen: 11.768 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 74973

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4



Instrument :
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ClientSampleId :
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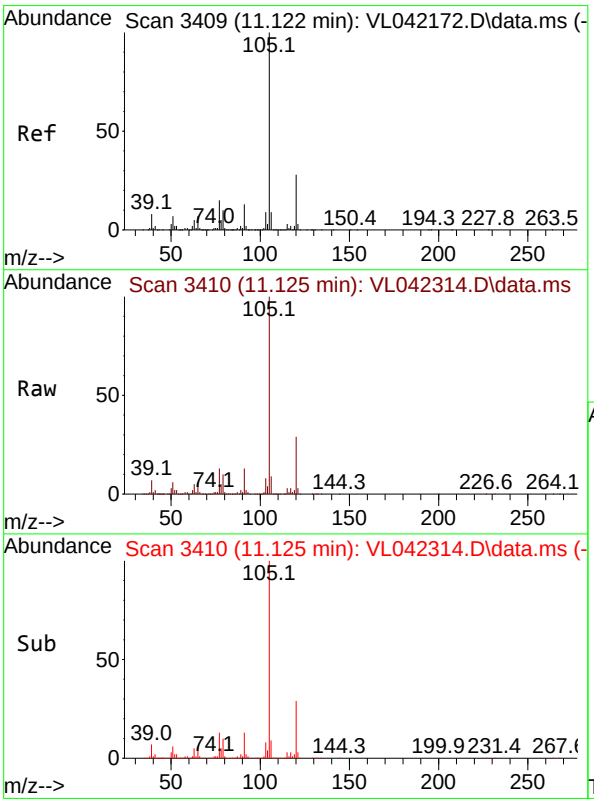
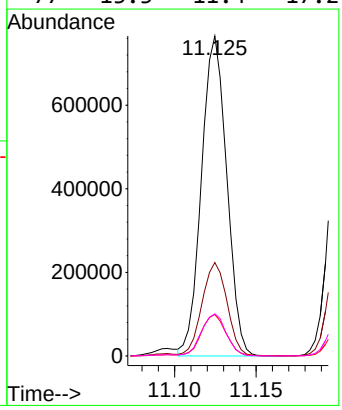
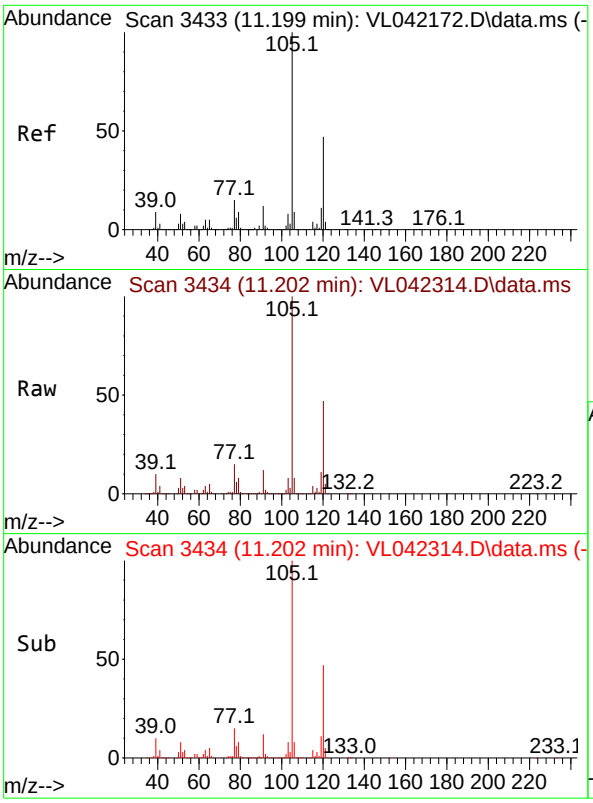


#72
4-Ethyltoluene
Concen: 12.071 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 825037

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2

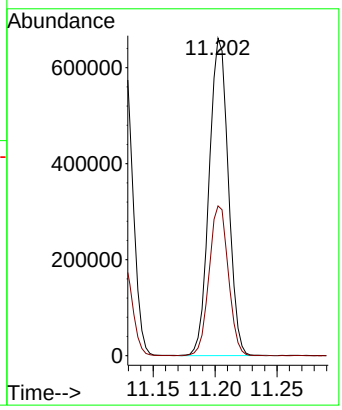




#73
1,3,5-Trimethylbenzene
Concen: 11.914 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 71117

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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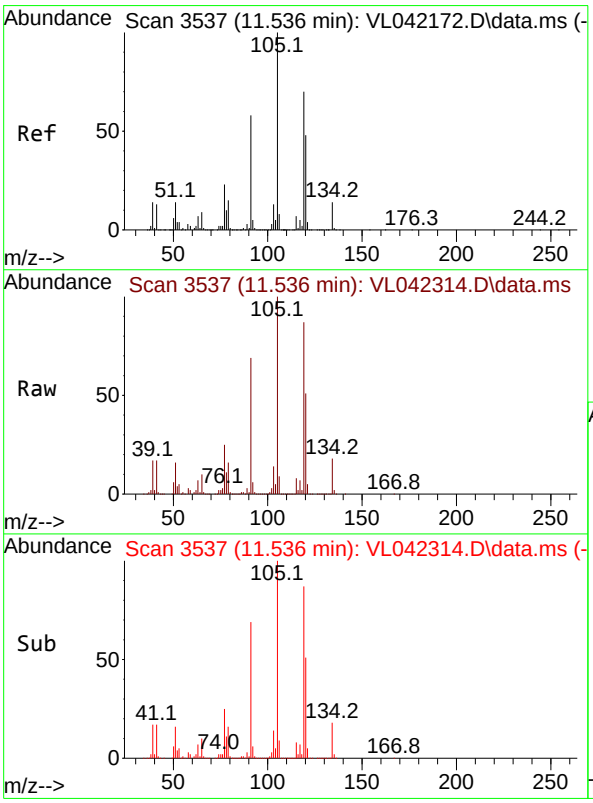
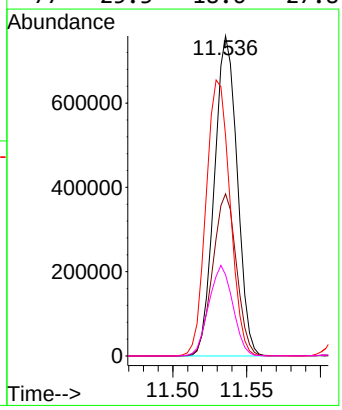
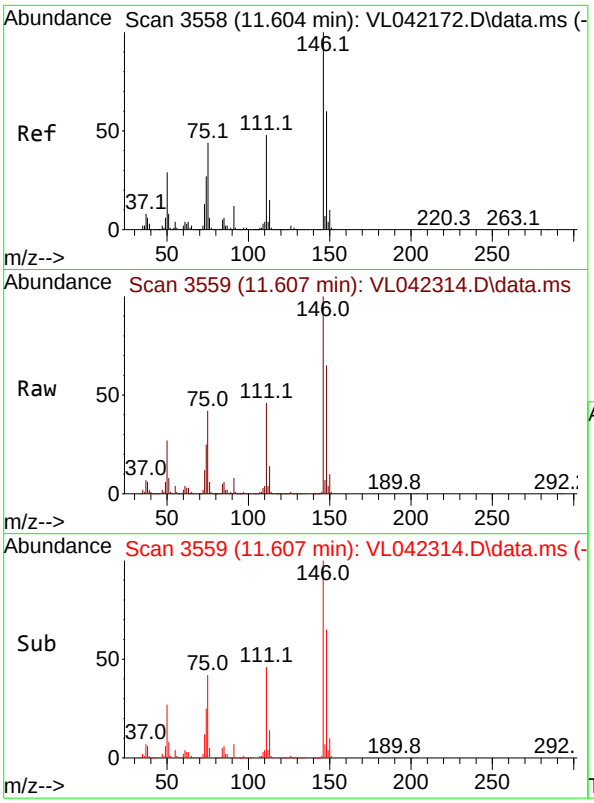


#74
1,2,4-Trimethylbenzene
Concen: 11.873 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 816505

Ion	Ratio	Lower	Upper
105	100		
120	50.6	38.6	58.0
91	68.8	46.2	69.2
77	25.3	18.6	27.8

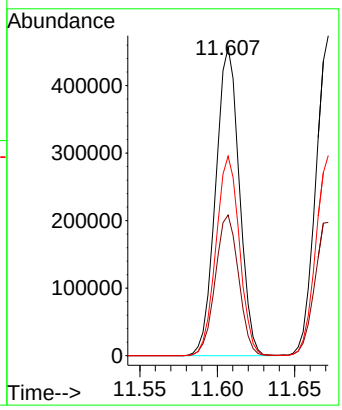




#75
1,3-Dichlorobenzene
Concen: 12.835 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:146 Resp: 48409

Ion	Ratio	Lower	Upper
146	100		
111	45.2	23.8	71.2
148	64.3	31.9	95.9



Instrument :
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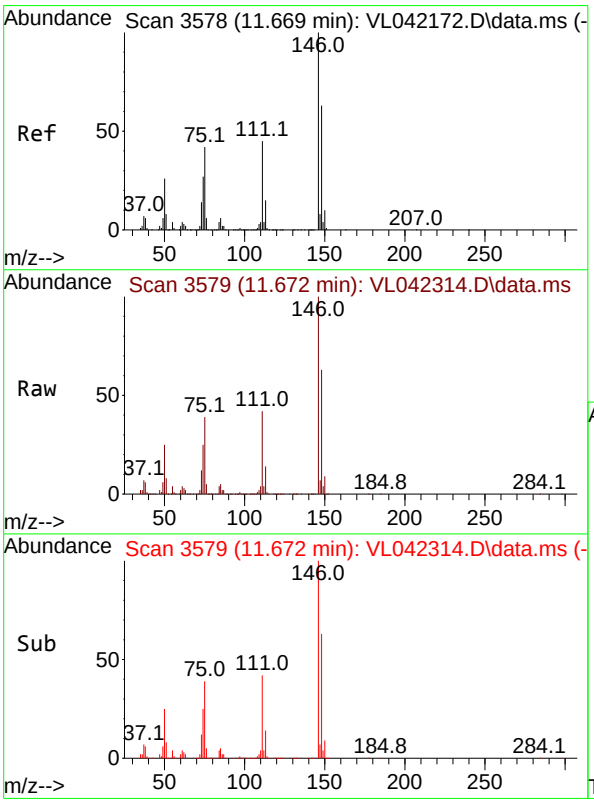
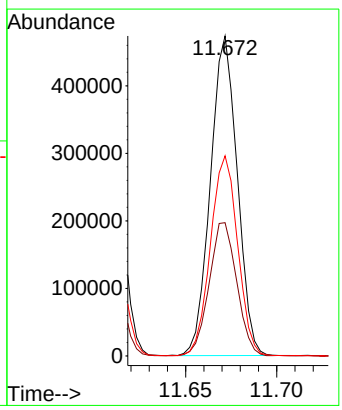
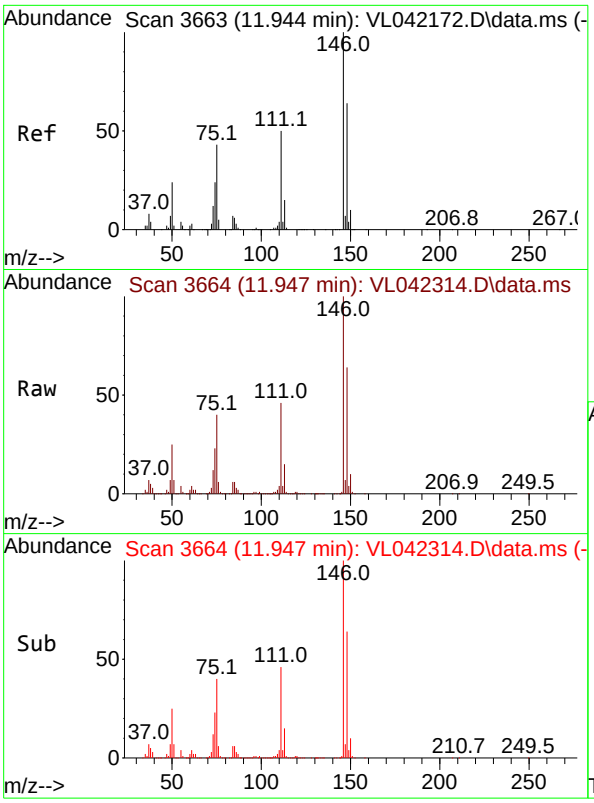


#76
1,4-Dichlorobenzene
Concen: 12.933 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:146 Resp: 485460

Ion	Ratio	Lower	Upper
146	100		
111	43.1	23.0	69.0
148	63.7	31.9	95.7

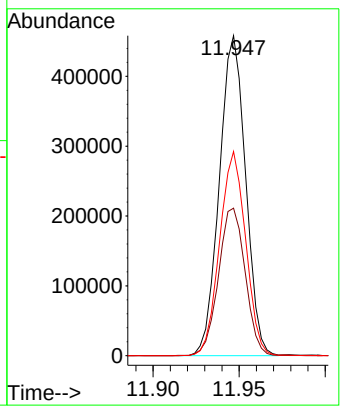




#77
1,2-Dichlorobenzene
Concen: 13.218 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:146 Resp: 48542

Ion	Ratio	Lower	Upper
146	100		
111	47.1	24.8	74.3
148	63.5	31.6	94.8



Instrument :
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ClientSampleId :
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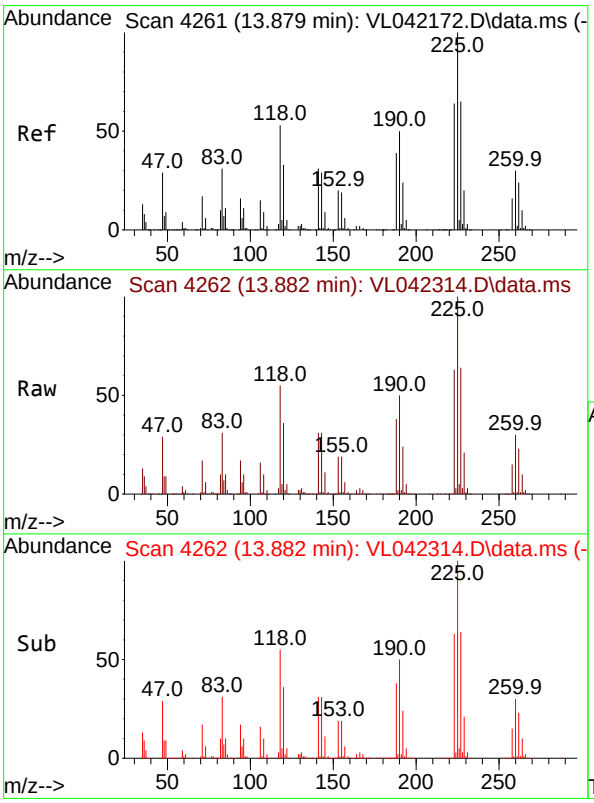
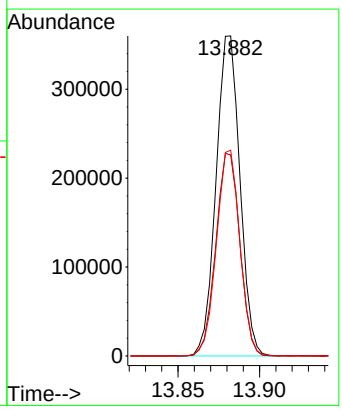
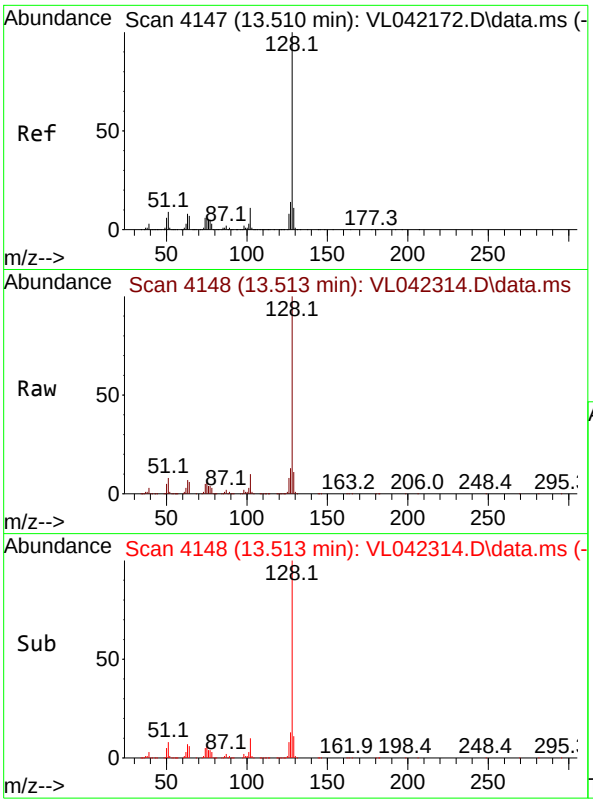


#78
Hexachloro-1,3-Butadiene
Concen: 9.814 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:225 Resp: 366850

Ion	Ratio	Lower	Upper
225	100		
223	63.5	50.6	76.0
227	63.2	51.2	76.8

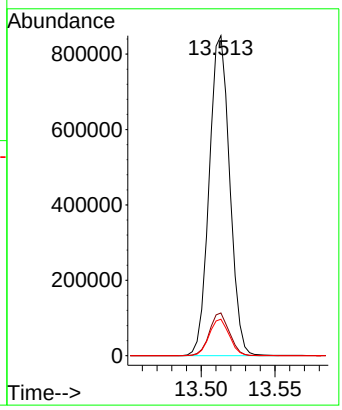




#79
Naphthalene
Concen: 10.904 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:128 Resp: 82020

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.4	9.0	13.4



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

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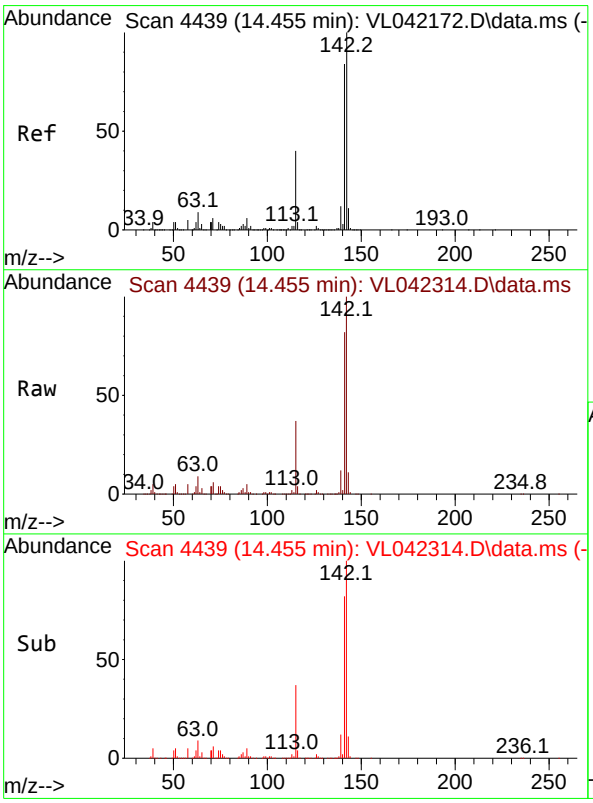
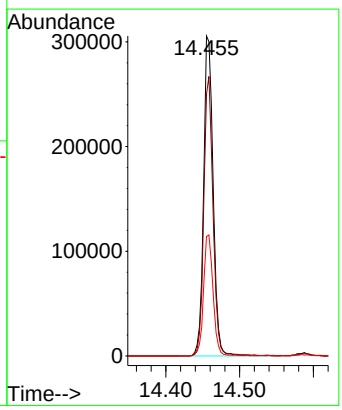
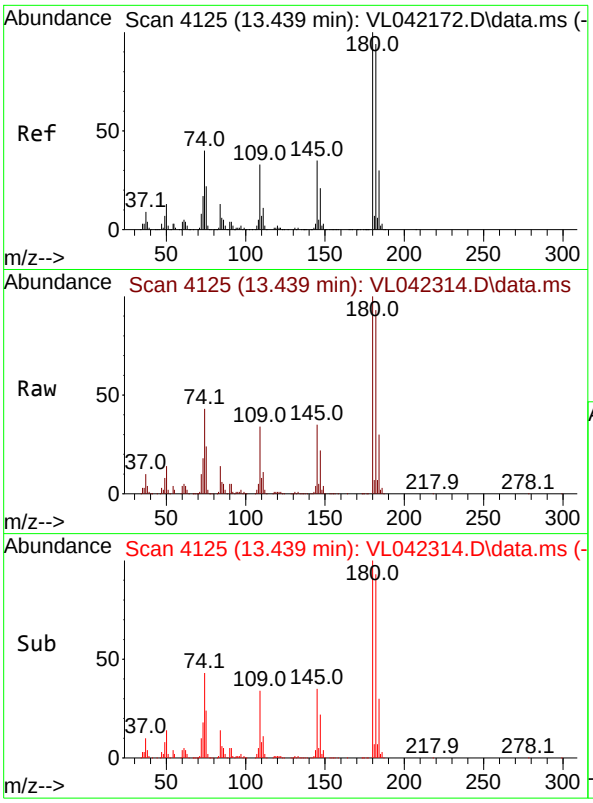


#80
Naphthalene,2-methyl-
Concen: 7.434 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:142 Resp: 274227

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.3	99.5
115	37.9	31.6	47.4

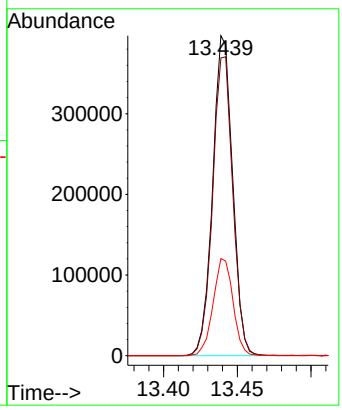




#81
1,2,4-Trichlorobenzene
Concen: 10.762 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:180 Resp: 37340

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.3	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042328.D	1		04/15/25 12:54	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	8.40	41.5		1.04	2.47	ug/m3
64-17-5	Ethanol	3.90	7.35		0.60	0.94	ug/m3
74-87-3	Chloromethane	8.50	17.6		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	7.50	19.2		0.030	0.080	ug/m3
74-83-9	Bromomethane	7.70	29.9		0.54	1.94	ug/m3
75-00-3	Chloroethane	7.90	20.9		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	9.40	27.7		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	8.20	46.1		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	7.60	58.3		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	8.20	57.3		0.63	3.49	ug/m3
593-60-2	Bromoethene	7.40	32.4		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	6.80	20.6		0.58	1.52	ug/m3
142-82-5	Heptane	8.50	34.8		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	7.40	18.2		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	7.30	28.9		0.56	1.98	ug/m3
67-64-1	Acetone	7.40	17.6		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	7.40	23.0		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	7.20	26.0		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	6.70	23.3		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	7.20	28.6		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	8.30	33.6		0.53	2.02	ug/m3
110-82-7	Cyclohexane	7.90	27.2		0.76	1.72	ug/m3
78-93-3	2-Butanone	9.30	27.4		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	9.10	57.2		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	8.10	32.1		0.36	1.98	ug/m3
67-66-3	Chloroform	8.80	43.0		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	7.50	40.9		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	9.50	44.4		0.47	2.34	ug/m3
71-43-2	Benzene	9.30	29.7		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	9.30	37.6		0.36	2.02	ug/m3
79-01-6	Trichloroethene	9.00	48.4		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	9.30	43.0		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	9.40	63.0		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	8.40	34.4		0.37	2.05	ug/m3
108-88-3	Toluene	8.60	32.4		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042328.D	1		04/15/25 12:54	VL041525

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	7.20	32.7		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	7.80	35.4		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	9.60	52.4		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	9.30	79.2		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	9.10	69.9		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.00	54.3		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	9.70	44.7		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	8.70	37.8		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	18.5	80.4		0.91	4.34	ug/m3
95-47-6	o-Xylene	9.10	39.5		0.52	2.17	ug/m3
100-42-5	Styrene	8.20	34.9		0.47	2.13	ug/m3
75-25-2	Bromoform	9.20	95.1		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	10.2	70.0		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	9.00	46.6		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	9.10	44.7		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	8.90	43.8		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	9.80	58.9		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	9.90	59.5		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	10.2	61.3		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	9.60	71.3		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	8.10	86.4		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	7.60	16.8		0.29	1.11	ug/m3
91-20-3	Naphthalene	10.0	52.4		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	9.20	45.2		0.59	2.46	ug/m3
110-54-3	Hexane	8.50	30.0		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	7.50	23.5		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	8.10	29.2		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	8.10	33.2		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.70			70 (65) - 130 (135)	97%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	172000		2.81			
540-36-3	1,4-Difluorobenzene	445000		3.994			
3114-55-4	Chlorobenzene-d5	400000		8.917			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0415ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0415ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042328.D	1		04/15/25 12:54	VL041525

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.810	49	171986	10.000	ppbv	0.03
33) 1,4-Difluorobenzene	3.994	114	444595	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.917	117	399604	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.406	95	318902	9.718	ppbv	0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.509	85	214241	8.437	ppbv	99
3) Chlorodifluoromethane	1.486	51	234966	9.058	ppbv	97
4) Chloromethane	1.541	50	88230	8.502	ppbv	98
5) Vinyl Chloride	1.589	62	82221	7.476	ppbv	94
6) Bromomethane	1.680	94	36050	7.665	ppbv	100
7) Chloroethane	1.716	64	33039	7.931	ppbv	97
8) Dichlorotetrafluoroethane	1.564	85	178173	8.239	ppbv	95
9) Propene	1.492	41	94136	7.917	ppbv	99
10) Heptane	5.027	43	267288	8.451	ppbv	99
11) Trichlorofluoromethane	1.890	101	201665	8.162	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.156	101	154306	7.598	ppbv	98
13) Ethanol	1.732	45	4407	3.921	ppbv	97
14) Bromoethene	1.793	108	57635	7.408	ppbv	99
15) Acetone	1.848	43	178724	7.430	ppbv	96
16) 1,3-Butadiene	1.619	39	89479	7.617	ppbv	96
17) tert-Butyl alcohol	2.055	59	202421	6.757	ppbv	99
18) 1,1-Dichloroethene	2.049	96	69013	7.269	ppbv	97
19) Isopropyl Alcohol	1.900	45	100289	7.390	ppbv	97
20) Methylene Chloride	2.075	84	60054	6.704	ppbv	88
21) Allyl Chloride	2.111	41	127800	7.534	ppbv	98
22) trans-1,2-Dichloroethene	2.360	96	78991	7.198	ppbv	98
23) Vinyl Acetate	2.483	43	64777	6.222	ppbv	98
24) 1,1-Dichloroethane	2.428	63	168373	8.277	ppbv	99
25) Ethyl Acetate	2.861	43	545140	8.732	ppbv	99
26) Hexane	2.848	57	205629	8.528	ppbv	97
27) Carbon Disulfide	2.166	76	191388	7.402	ppbv	99
28) Methyl tert-Butyl Ether	2.460	73	107667	7.172	ppbv	96
29) Chloroform	2.874	83	309262	8.763	ppbv	100
30) Cyclohexane	3.891	84	165914	7.924	ppbv	98
31) cis-1,2-Dichloroethene	2.742	61	197651	8.074	ppbv	99
32) 1,1,1-Trichloroethane	3.395	97	304143	7.528	ppbv	97
34) 2-Butanone	2.580	43	300576	9.323	ppbv	98
35) Carbon Tetrachloride	3.797	117	314849	9.065	ppbv	99
36) Benzene	3.690	78	407959	9.256	ppbv	98
37) 1,2-Dichloroethane	3.247	62	235609	9.337	ppbv	99
38) Trichloroethene	4.590	130	164664	8.954	ppbv	96
39) 1,2-Dichloropropane	4.354	63	149260	9.299	ppbv	97
40) 1,4-Dioxane	4.625	88	68773	8.072	ppbv #	95
41) Tetrahydrofuran	3.082	42	173776	9.361	ppbv	95
42) Bromodichloromethane	4.532	83	327497	9.414	ppbv	99
43) Methyl Methacrylate	4.930	69	151531	8.121	ppbv	98
44) 2,2,4-Trimethylpentane	4.680	57	707832	9.503	ppbv	98
45) t-1,3-Dichloropropene	6.470	75	143714	7.179	ppbv	91

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.658	75	192419	7.841	ppbv		96
47) 1,1,2-Trichloroethane	6.635	97	163251	9.621	ppbv		98
48) Dibromochloromethane	7.428	129	266192	9.256	ppbv		100
49) Bromoform	9.519	173	236686	9.168	ppbv		99
50) 4-Methyl-2-Pentanone	5.807	43	429988	8.416	ppbv		95
51) 2-Hexanone	7.480	43	344172	8.203	ppbv	#	96
52) Tetrachloroethene	8.263	164	139845	8.000	ppbv		95
53) Toluene	6.978	91	447178	8.559	ppbv		99
54) 1,2-Dibromoethane	7.694	107	214982	9.089	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.959	131	216770	9.855	ppbv		98
57) Chlorobenzene	8.956	112	369132	9.739	ppbv		95
58) Ethyl Benzene	9.390	91	618669	8.716	ppbv		100
59) m/p-Xylene	9.584	91	1049238m	18.512	ppbv		
60) o-Xylene	9.995	91	517471	9.107	ppbv		96
61) Styrene	9.904	104	229601	8.168	ppbv		97
62) Isopropylbenzene	10.568	105	785673	9.247	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.995	83	351308	10.176	ppbv		99
64) n-propylbenzene	11.018	120	210294	9.615	ppbv		98
65) tert-Butylbenzene	11.558	119	718948	9.149	ppbv		97
66) Benzyl Chloride	11.642	91	55150	6.614	ppbv		99
67) sec-Butylbenzene	11.795	105	1018861	9.328	ppbv		100
69) p-Isopropyltoluene	11.950	119	863264	9.179	ppbv		99
70) n-Butylbenzene	12.306	91	891883	9.273	ppbv		99
71) 2-Chlorotoluene	10.930	91	590408	8.953	ppbv		99
72) 4-Ethyltoluene	11.150	105	652962	9.230	ppbv		98
73) 1,3,5-Trimethylbenzene	11.231	105	559451	9.055	ppbv		100
74) 1,2,4-Trimethylbenzene	11.565	105	632271	8.883	ppbv		97
75) 1,3-Dichlorobenzene	11.633	146	381882	9.782	ppbv		98
76) 1,4-Dichlorobenzene	11.697	146	383116	9.861	ppbv		98
77) 1,2-Dichlorobenzene	11.973	146	386768	10.175	ppbv		98
78) Hexachloro-1,3-Butadiene	13.905	225	314860	8.138	ppbv		100
79) Naphthalene	13.539	128	777722	9.989	ppbv		99
80) Naphthalene,2-methyl-	14.481	142	375541	9.836	ppbv		98
81) 1,2,4-Trichlorobenzene	13.465	180	343011	9.551	ppbv		99

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

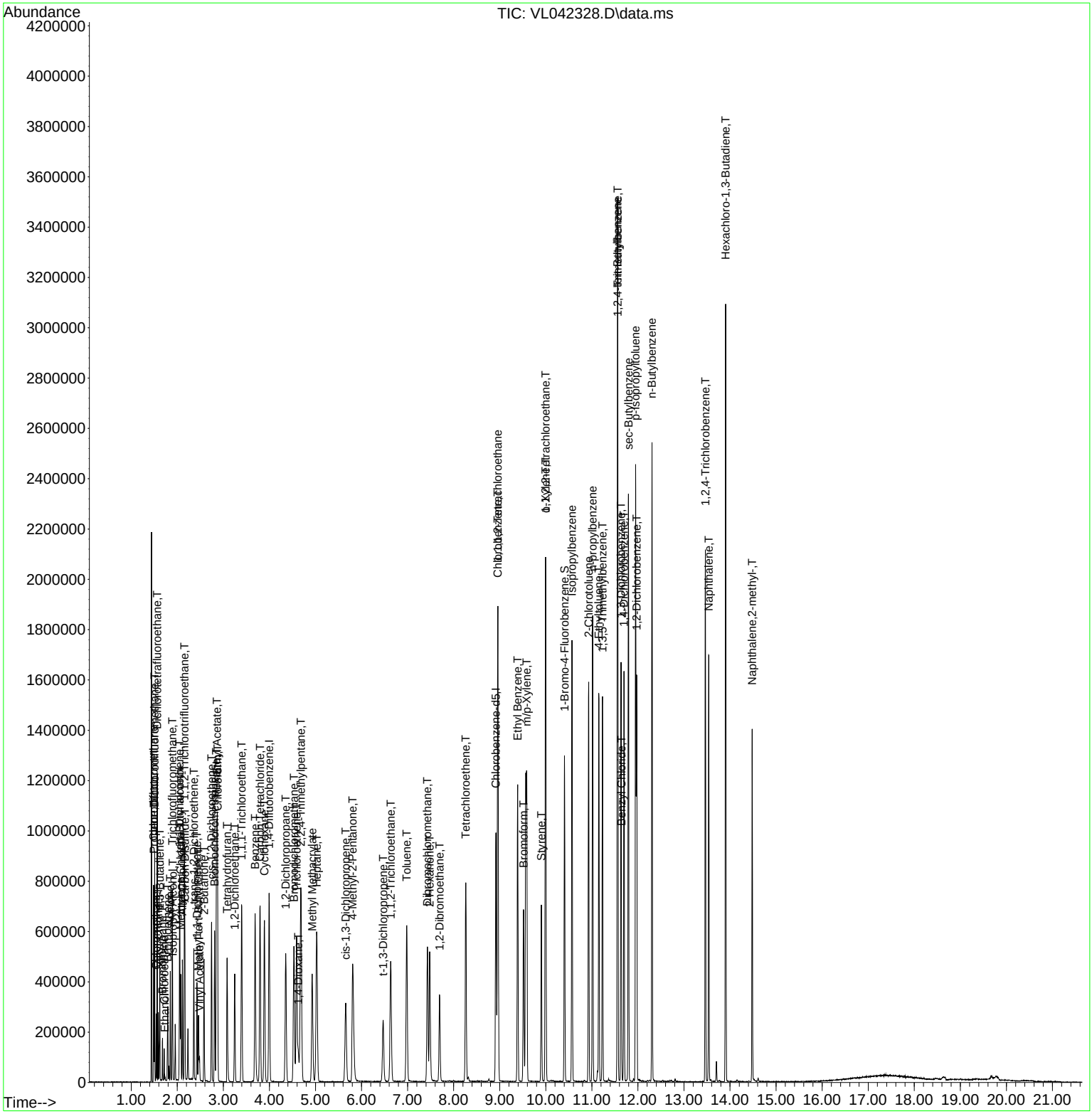
Quantitation Report (QT Reviewed)

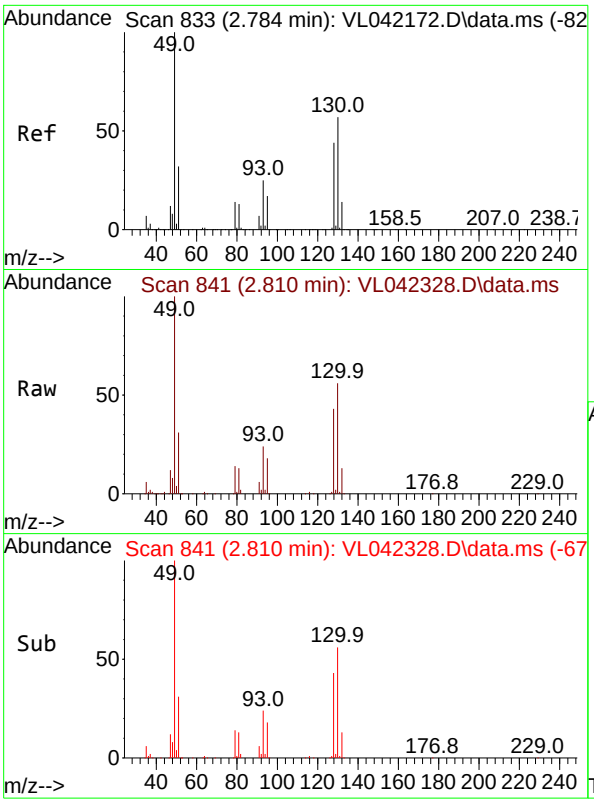
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025


Abundance
TIC: VL042328.D\data.ms
Time-->
Hexachloro-1,3-Butadiene,T
1,2,4-Trichlorobenzene,T
Naphthalene,T
Naphthalene,2-methyl-,T
n-Butylbenzene
p-Isopropyltoluene
sec-Butylbenzene
1,2-Dichlorobenzene,T
1-Bromo-4-Fluorobenzene,S
Isopropylbenzene
Styrene,T
Bromoform,T
Ethyl Benzene,T
m/p-Xylene,T
Chlorobenzene-d5,I
Tetrachloroethene,T
1,2-Dibromoethane,T
Toluene,T
1,1,2-Trichloroethane,T
t-1,3-Dichloropropene,T
cis-1,3-Dichloropropene,T
1,2-Dichloropropane,T
1,4-Dioxane,T
1,2-Dichloroethane,T
Benzene,T
Trichloroethene,T
Methyl Methacrylate
Heptane,T
Tetrahydrofuran,T
Bromodichloromethane,T
Cyclohexane,T
Carbon Tetrachloride,T
Benzene,T
1,2-Dichloroethane,T
1,1,1-Trichloroethane,T
Vinyl Acetate,T
Ethanol,T
Trichlorofluoromethane,T
Ethanol,T
Acetone,T
Isopropyl Alcohol,T
Ethanol,T
Trichlorotrifluoroethane,T
Acetone,T
Isopropyl Alcohol,T
Ethanol,T
Dichlorodifluoromethane,T
Propylene,T
Propylene,T
Dichlorotetrafluoroethane,T
Chloromethane



#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.810 min Scan# 84
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

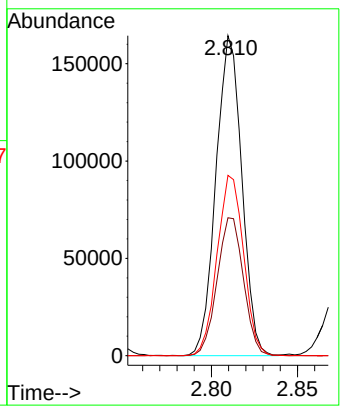
Tgt Ion: 49 Resp: 17198

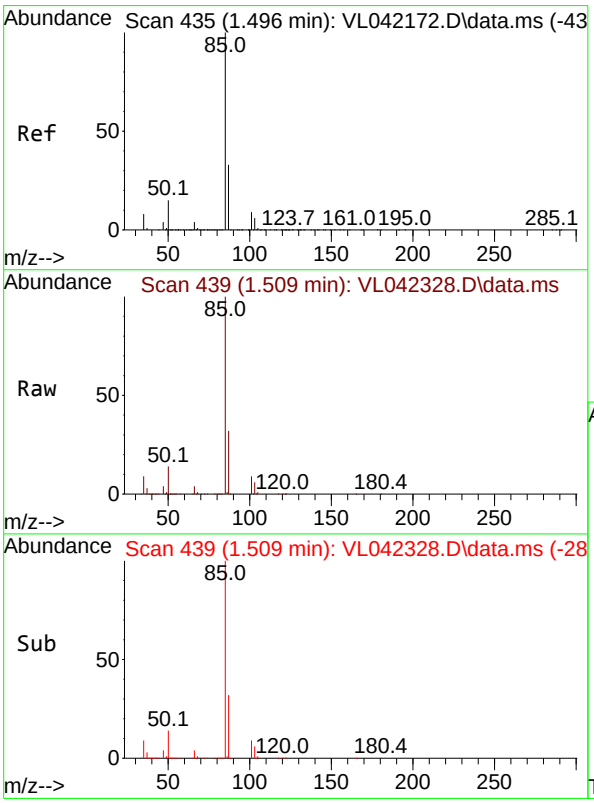
Ion	Ratio	Lower	Upper
49	100		
128	43.9	22.9	68.5
130	57.7	28.8	86.4

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

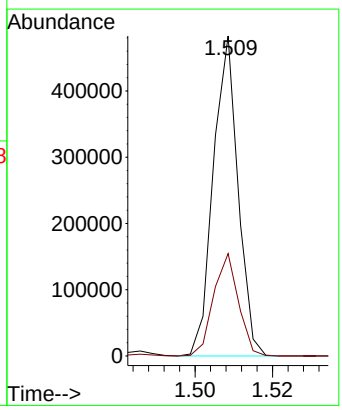


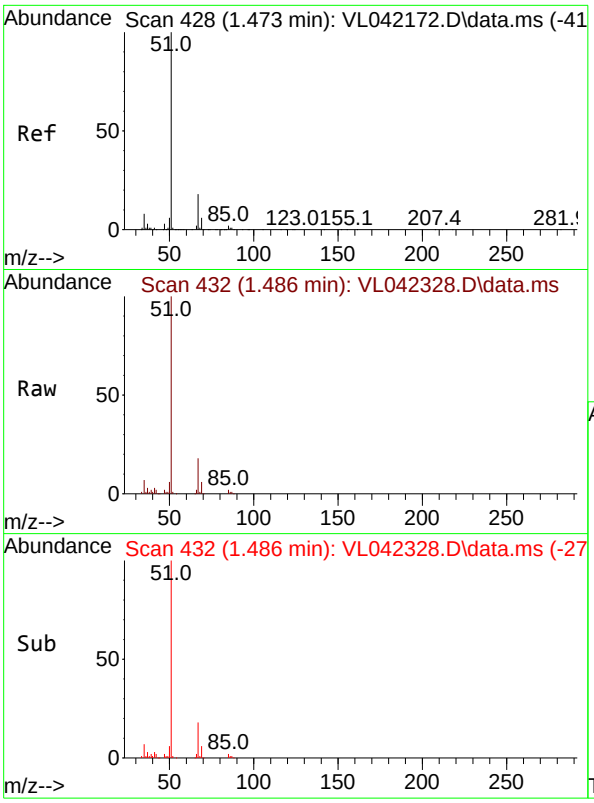


#2
Dichlorodifluoromethane
Concen: 8.437 ppbv
RT: 1.509 min Scan# 439
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 85 Resp: 214241

Ion	Ratio	Lower	Upper
85	100		
87	32.0	26.1	39.1

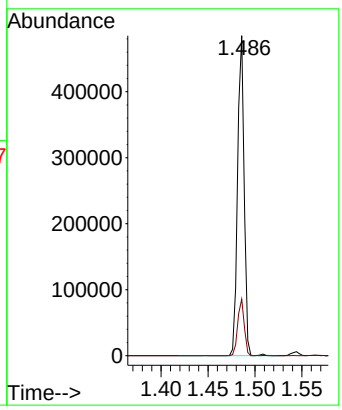




#3
Chlorodifluoromethane
Concen: 9.058 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 51 Resp: 23496

Ion	Ratio	Lower	Upper
51	100		
67	17.6	15.0	22.6



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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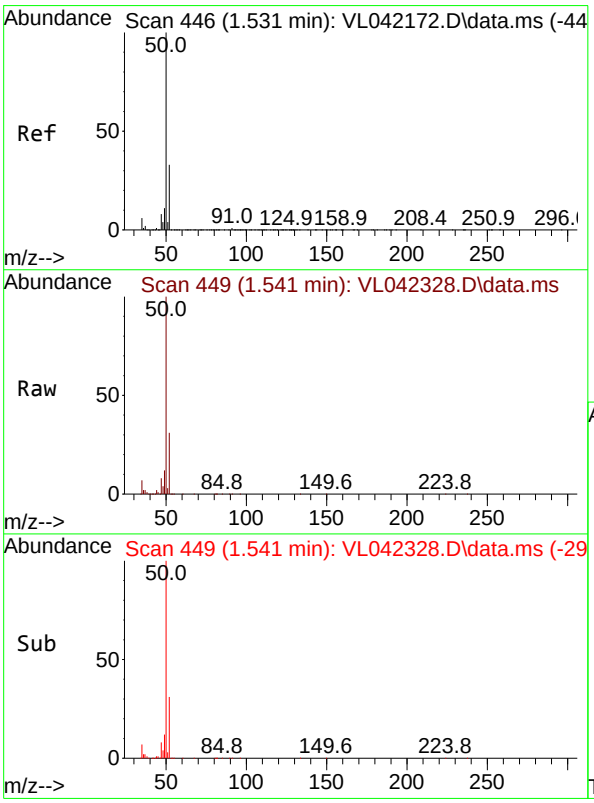
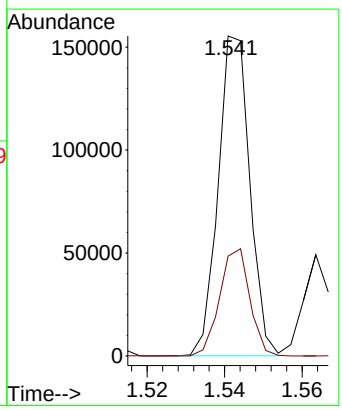
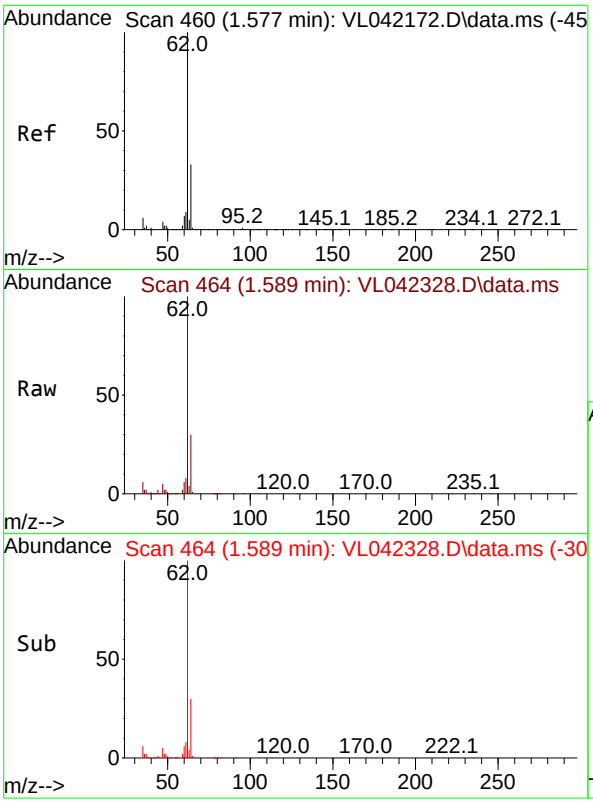


#4
Chloromethane
Concen: 8.502 ppbv
RT: 1.541 min Scan# 449
Delta R.T. 0.010 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 50 Resp: 88230

Ion	Ratio	Lower	Upper
50	100		
52	31.2	26.1	39.1

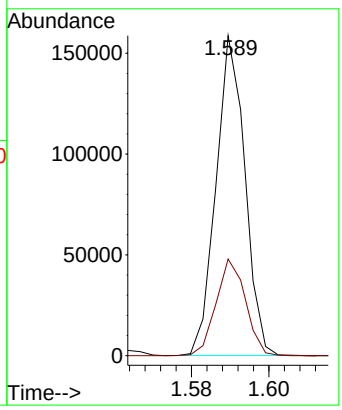




#5
Vinyl Chloride
Concen: 7.476 ppbv
RT: 1.589 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 62 Resp: 8222

Ion	Ratio	Lower	Upper
62	100		
64	30.2	26.6	40.0



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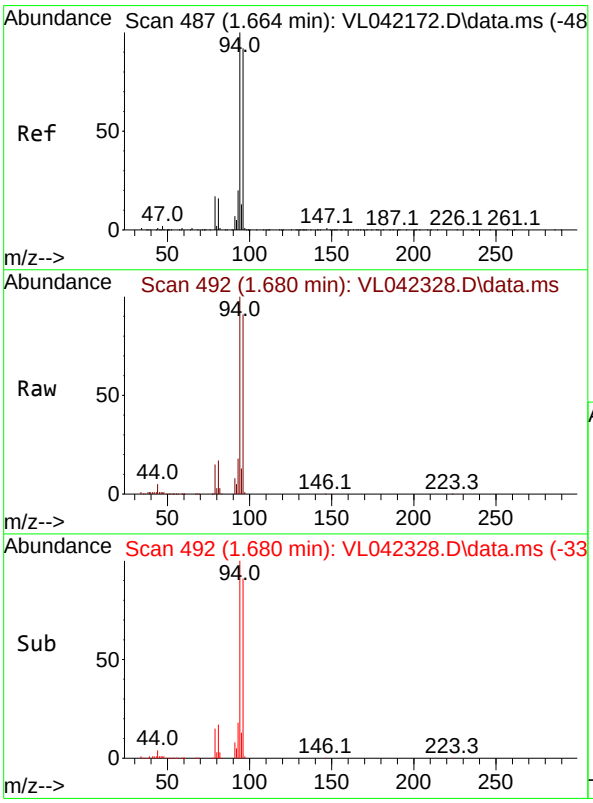
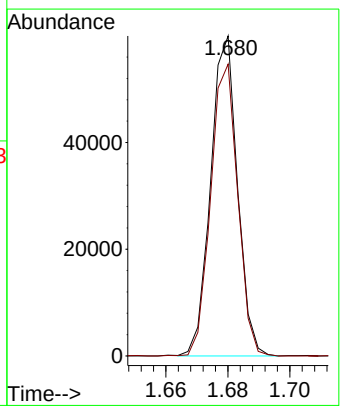
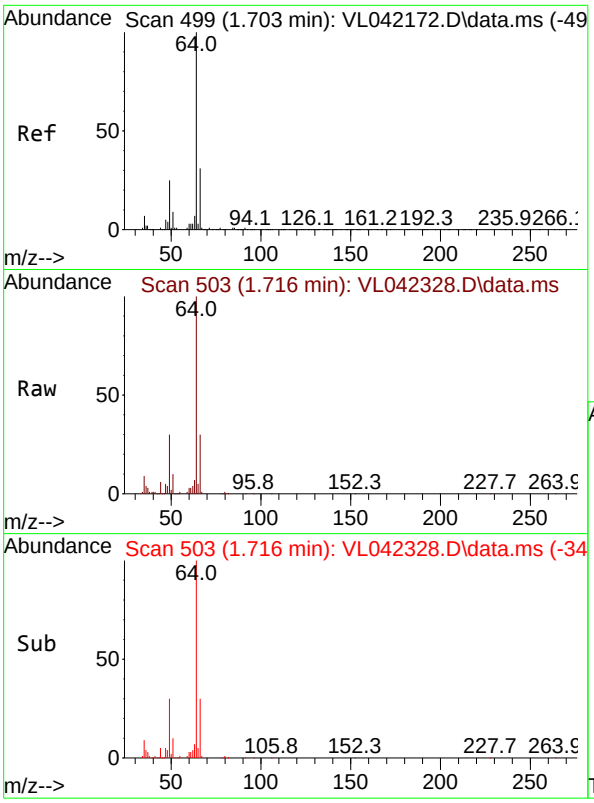


#6
Bromomethane
Concen: 7.665 ppbv
RT: 1.680 min Scan# 492
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 94 Resp: 36050

Ion	Ratio	Lower	Upper
94	100		
96	91.2	73.1	109.7

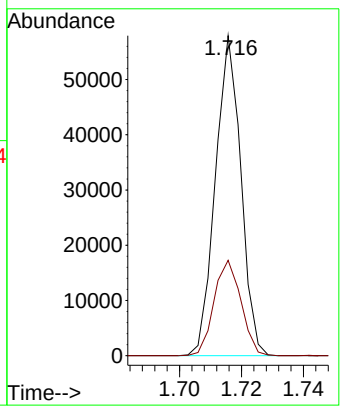




#7
Chloroethane
Concen: 7.931 ppbv
RT: 1.716 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 64 Resp: 3303

Ion	Ratio	Lower	Upper
64	100		
66	29.8	25.2	37.8



Instrument :
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ClientSampleId :
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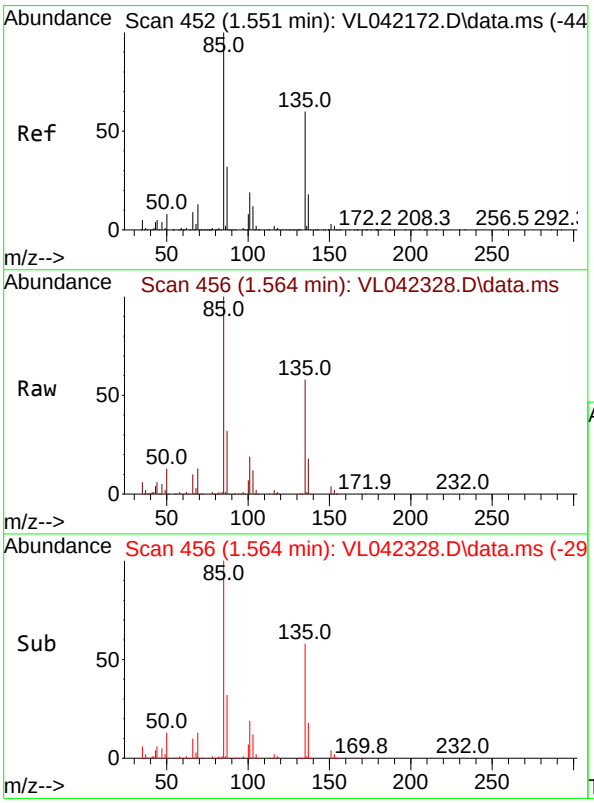
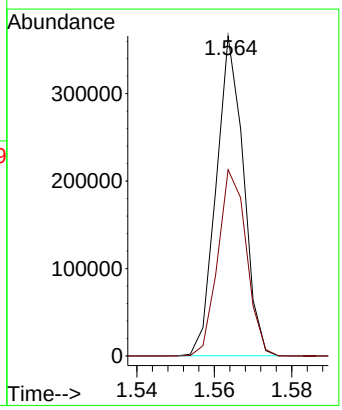
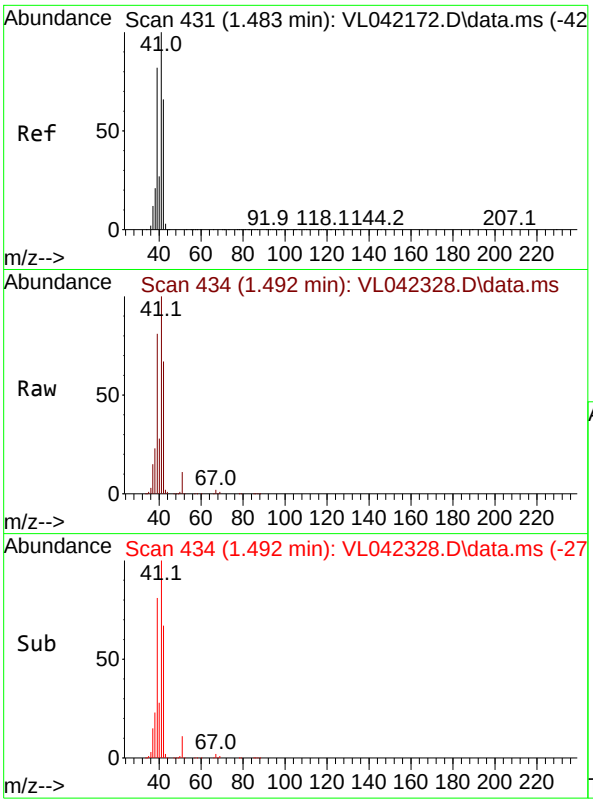


#8
Dichlorotetrafluoroethane
Concen: 8.239 ppbv
RT: 1.564 min Scan# 456
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 85 Resp: 178173

Ion	Ratio	Lower	Upper
85	100		
135	61.3	52.4	78.6

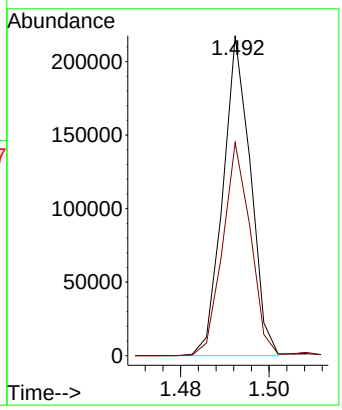




#9
Propene
Concen: 7.917 ppbv
RT: 1.492 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 41 Resp: 9413

Ion	Ratio	Lower	Upper
41	100		
42	68.2	55.4	83.2



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ClientSampleId :
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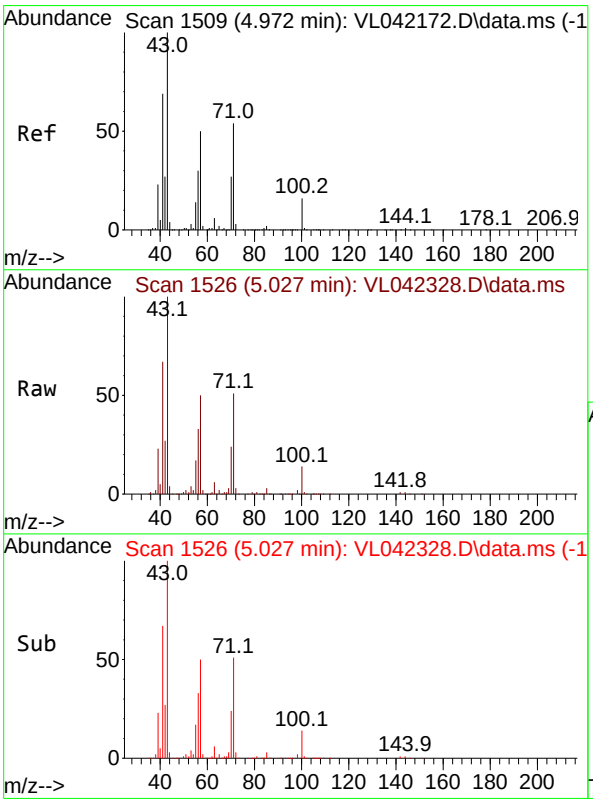
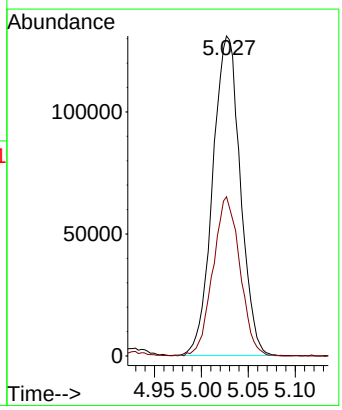
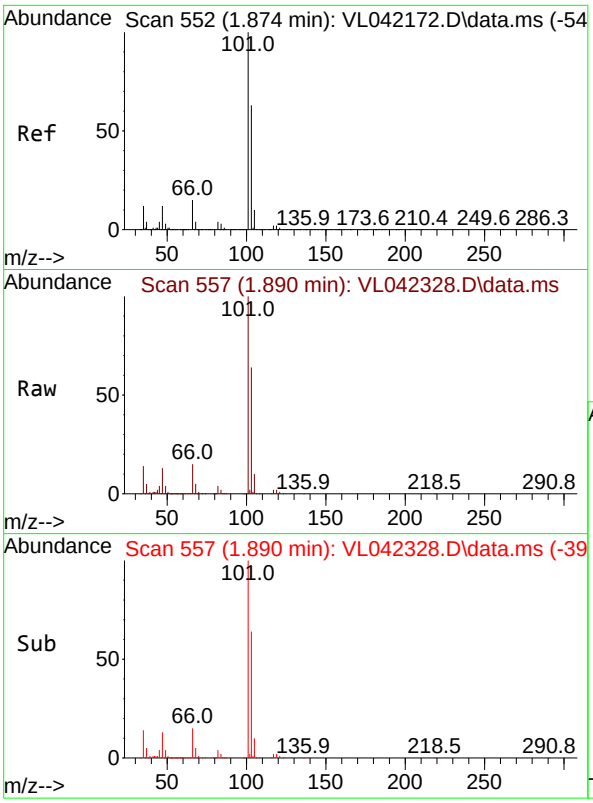


#10
Heptane
Concen: 8.451 ppbv
RT: 5.027 min Scan# 1526
Delta R.T. 0.055 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 267288

Ion	Ratio	Lower	Upper
43	100		
57	48.8	39.4	59.2

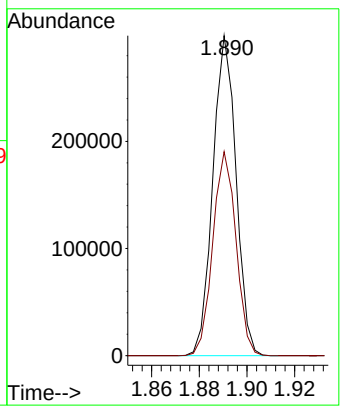




#11
Trichlorofluoromethane
Concen: 8.162 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:101 Resp: 20166

Ion	Ratio	Lower	Upper
101	100		
103	63.7	50.2	75.2



Instrument :
MSVOA_L
ClientSampleId :
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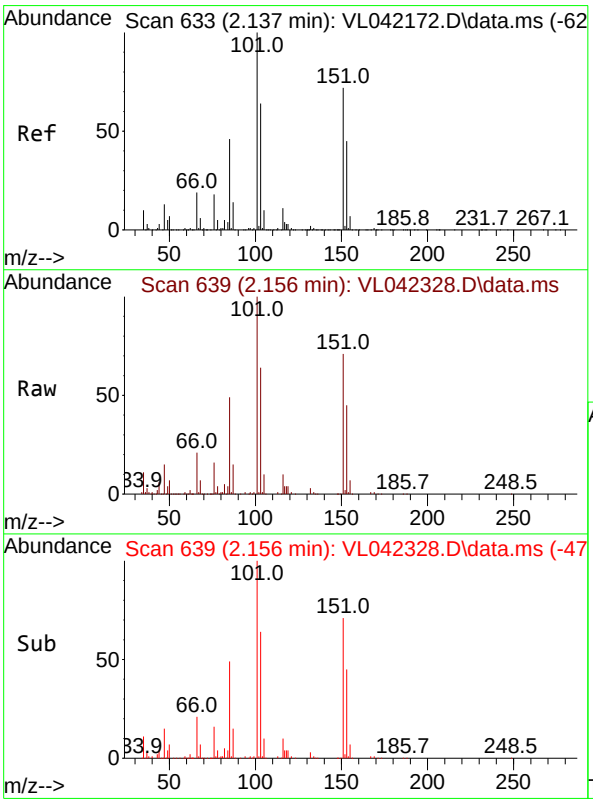
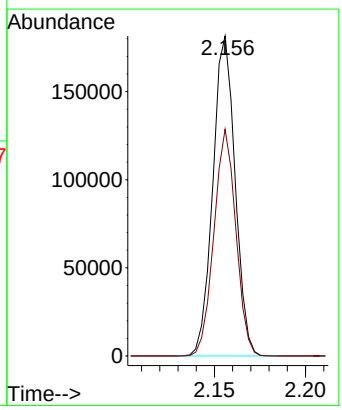
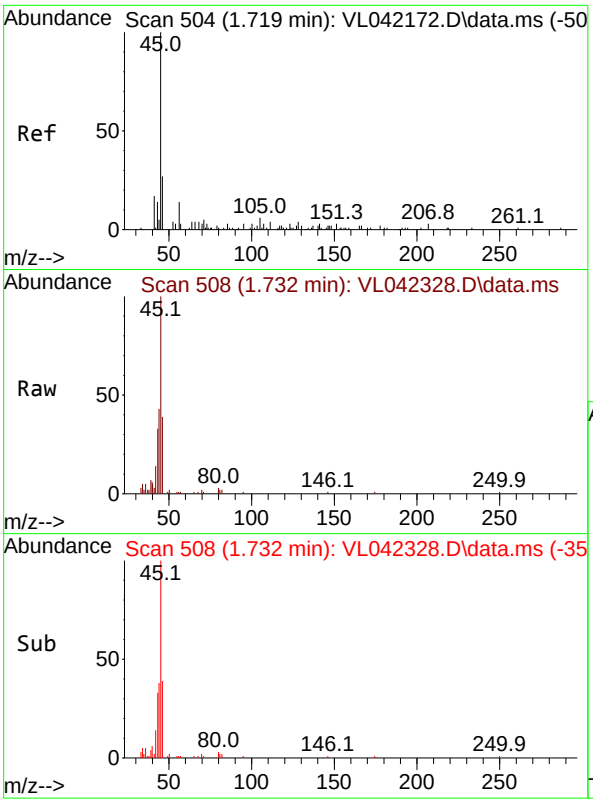


#12
1,1,2-Trichlorotrifluoroethane
Concen: 7.598 ppbv
RT: 2.156 min Scan# 639
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:101 Resp: 154306

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7

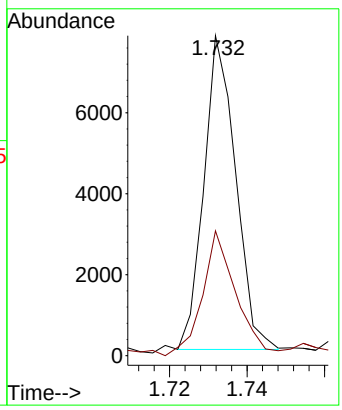




#13
Ethanol
Concen: 3.921 ppbv
RT: 1.732 min Scan# 5(
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 45 Resp: 440

Ion	Ratio	Lower	Upper
45	100		
46	48.1	20.2	80.8



Instrument :
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ClientSampleId :
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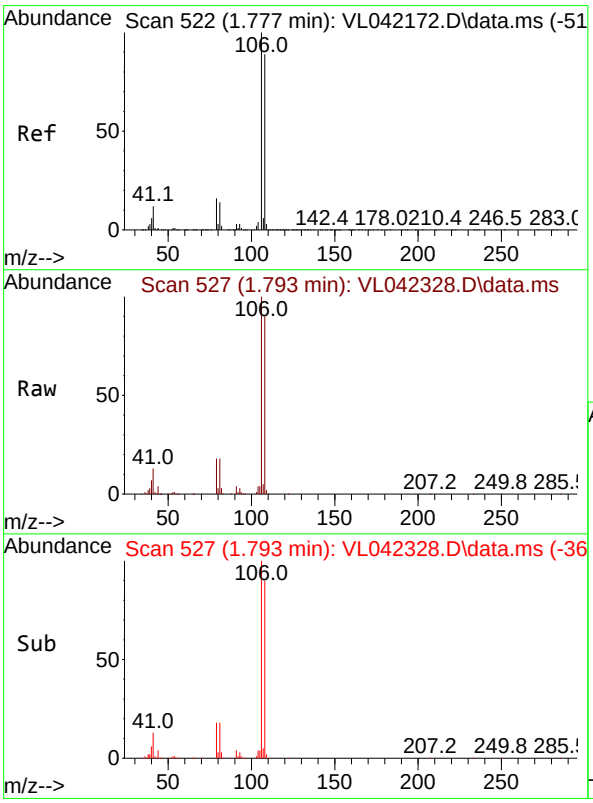
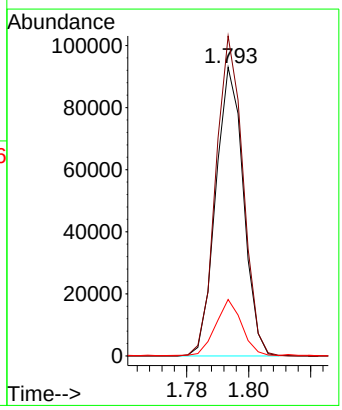
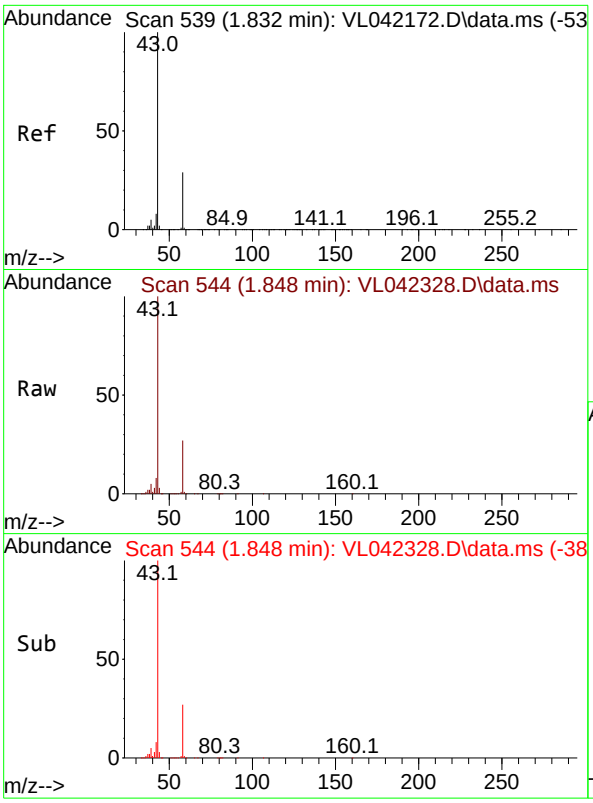


#14
Bromoethene
Concen: 7.408 ppbv
RT: 1.793 min Scan# 527
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:108 Resp: 57635

Ion	Ratio	Lower	Upper
108	100		
106	108.9	86.8	130.2
79	19.8	15.0	22.6

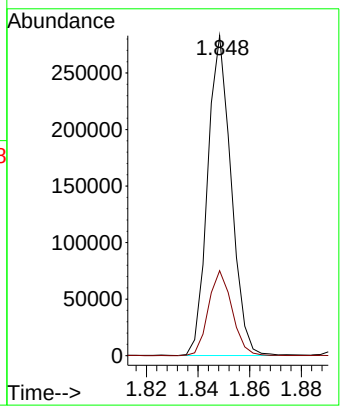




#15
Acetone
Concen: 7.430 ppbv
RT: 1.848 min Scan# 54
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 17872

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8



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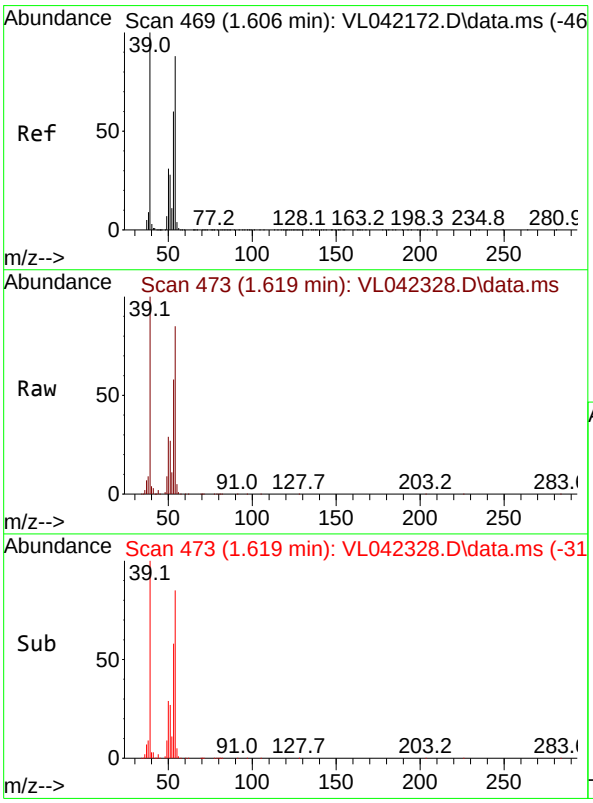
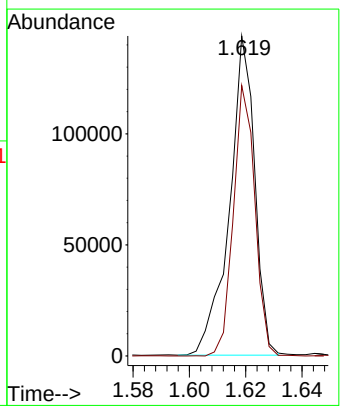
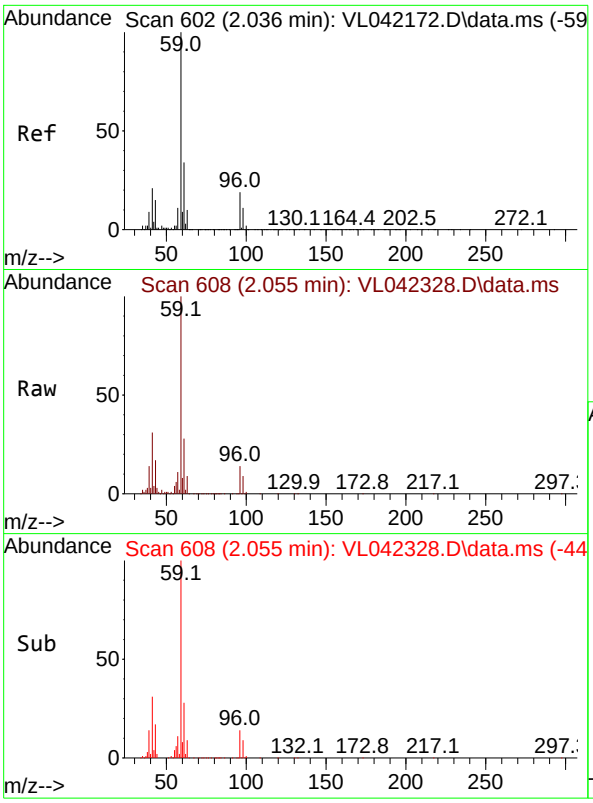


#16
1,3-Butadiene
Concen: 7.617 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 39 Resp: 89479

Ion	Ratio	Lower	Upper
39	100		
54	72.1	60.7	91.1

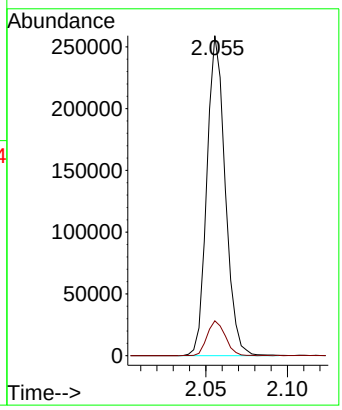




#17
tert-Butyl alcohol
Concen: 6.757 ppbv
RT: 2.055 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 59 Resp: 20242

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3



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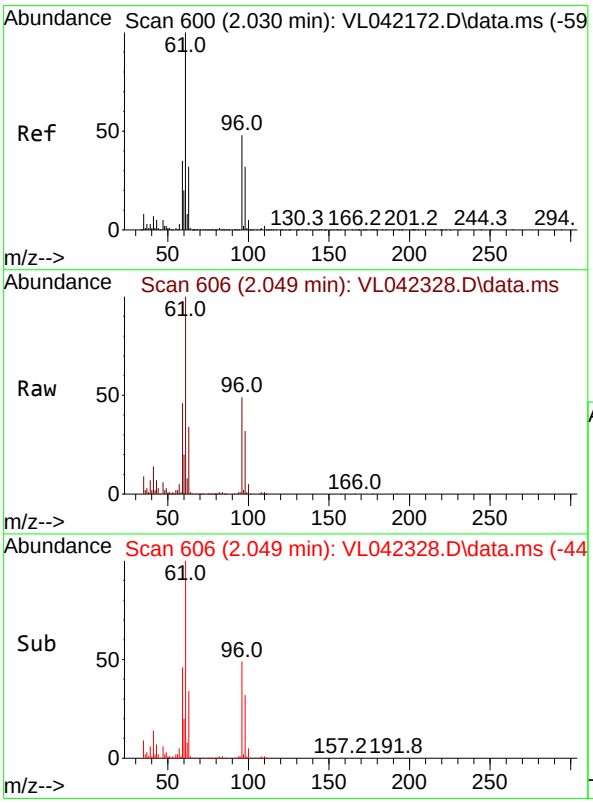
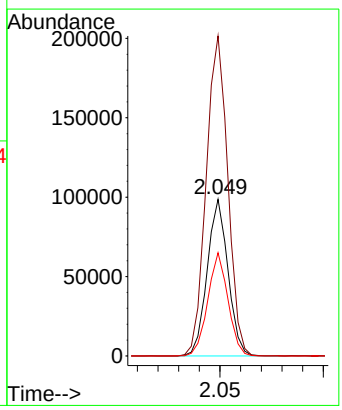
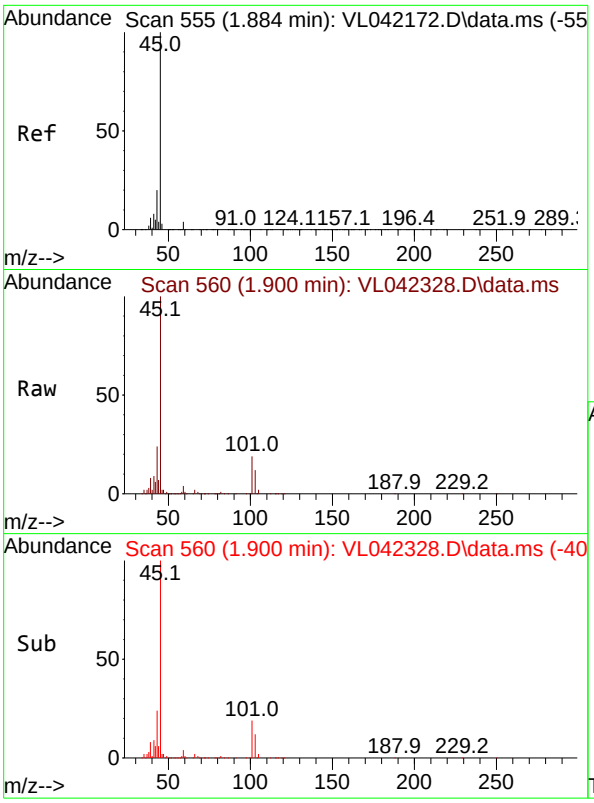


#18
1,1-Dichloroethene
Concen: 7.269 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 96 Resp: 69013

Ion	Ratio	Lower	Upper
96	100		
61	204.2	167.6	251.4
98	65.9	53.5	80.3

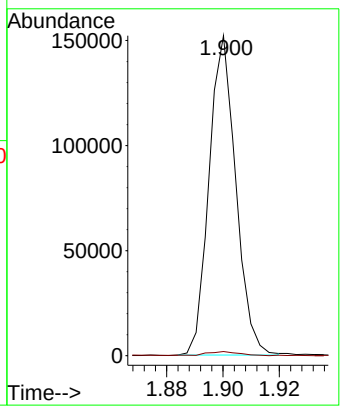




#19
Isopropyl Alcohol
Concen: 7.390 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 45 Resp: 10028

Ion	Ratio	Lower	Upper
45	100		
58	47.9	36.9	55.3



Instrument :
MSVOA_L
ClientSampleId :
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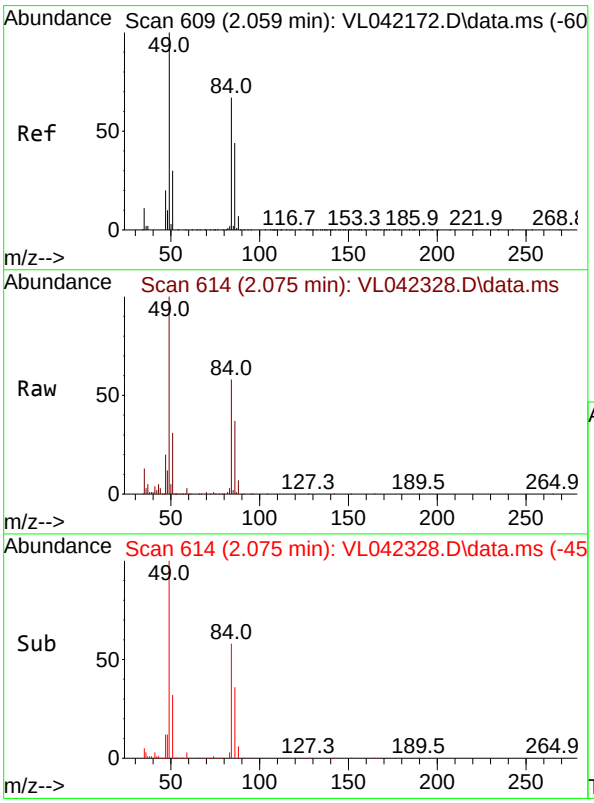
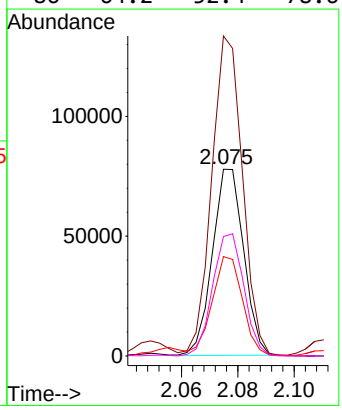
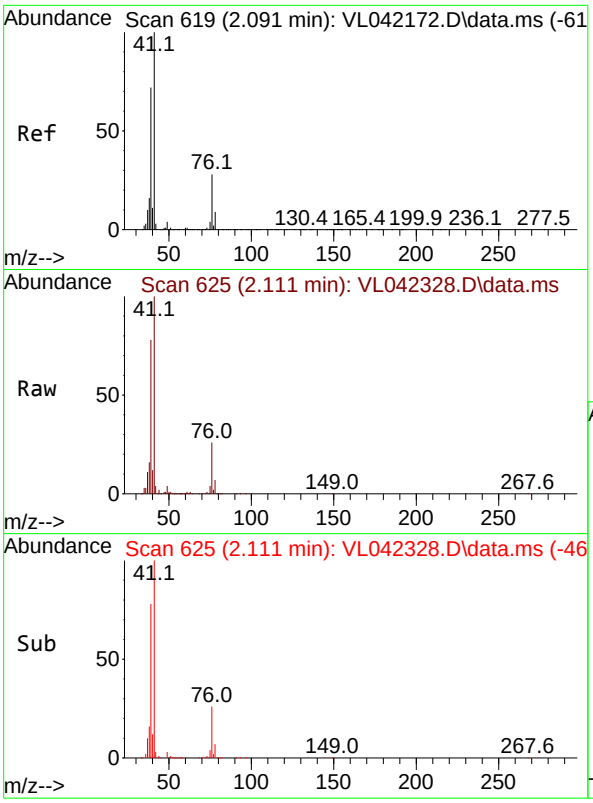


#20
Methylene Chloride
Concen: 6.704 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 84 Resp: 60054

Ion	Ratio	Lower	Upper
84	100		
49	171.6	120.2	180.4
51	53.0	37.4	56.0
86	64.2	52.4	78.6

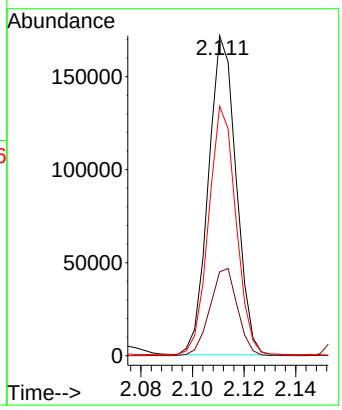




#21
Allyl Chloride
Concen: 7.534 ppbv
RT: 2.111 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 41 Resp: 12780

Ion	Ratio	Lower	Upper
41	100		
76	27.3	24.1	36.1
39	76.8	61.1	91.7



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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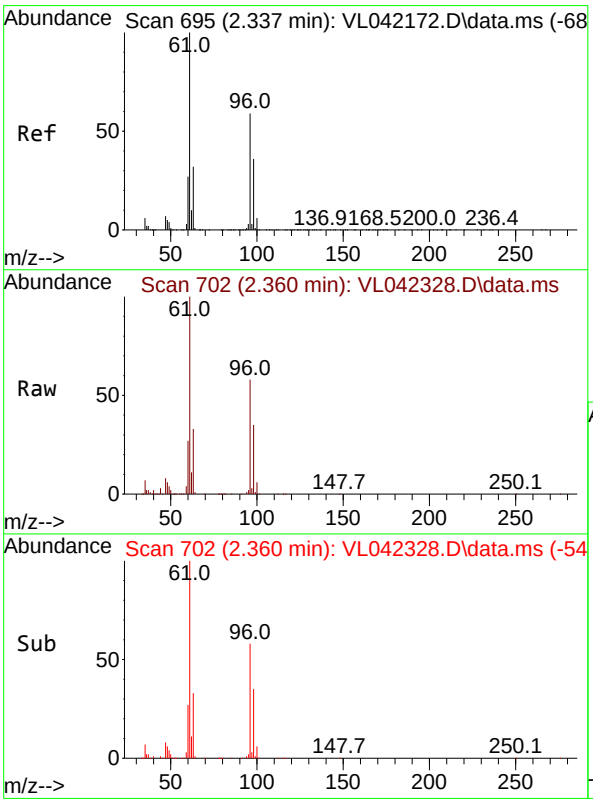
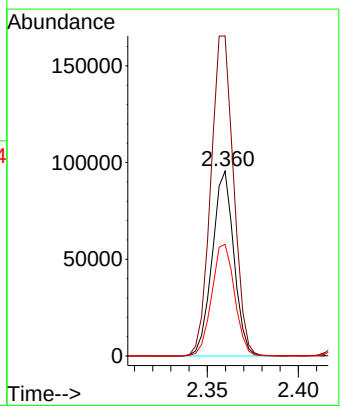
Supervised By :Mahesh Dadoda 04/16/2025

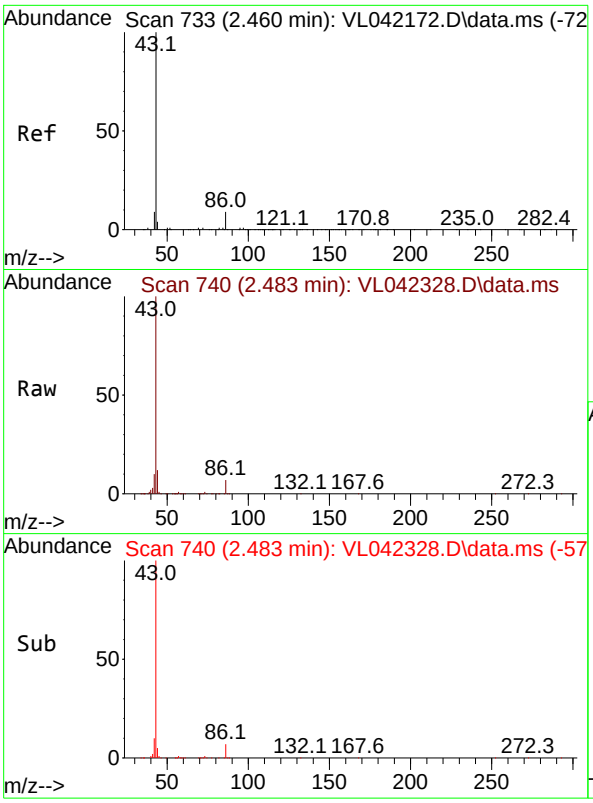


#22
trans-1,2-Dichloroethene
Concen: 7.198 ppbv
RT: 2.360 min Scan# 702
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 96 Resp: 78991

Ion	Ratio	Lower	Upper
96	100		
61	173.2	136.6	204.8
98	60.4	49.4	74.2

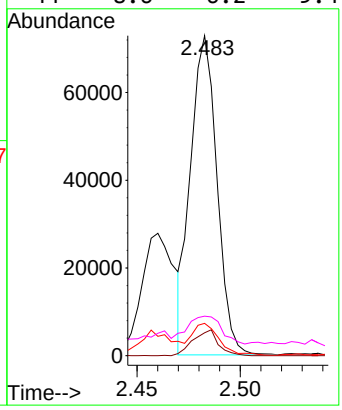




#23
Vinyl Acetate
Concen: 6.222 ppbv
RT: 2.483 min Scan# 7
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 6477

Ion	Ratio	Lower	Upper
43	100		
86	7.2	5.5	8.3
42	9.9	8.6	13.0
44	8.6	6.2	9.4



Instrument :
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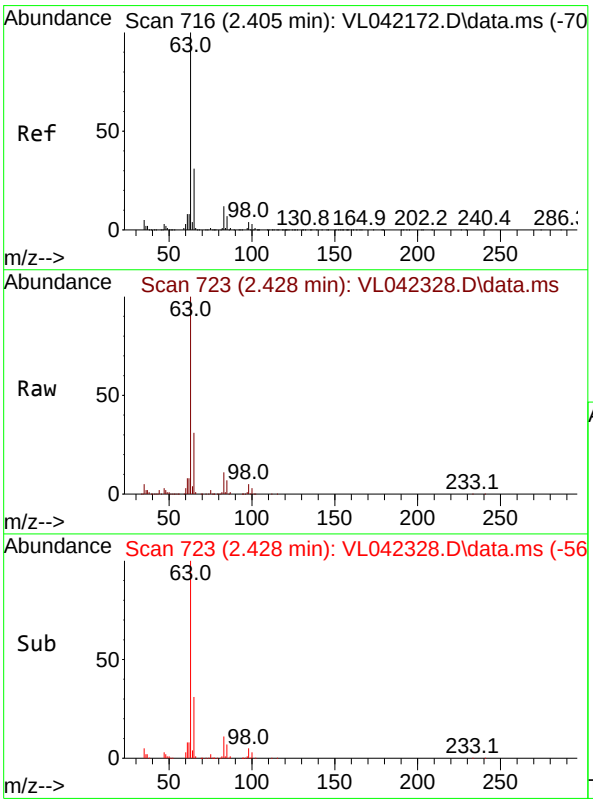
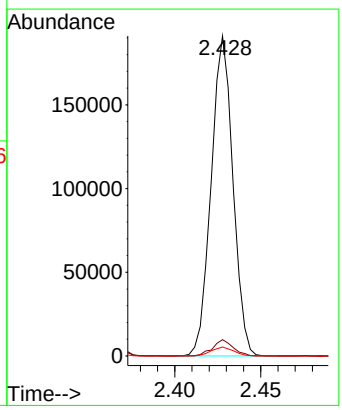
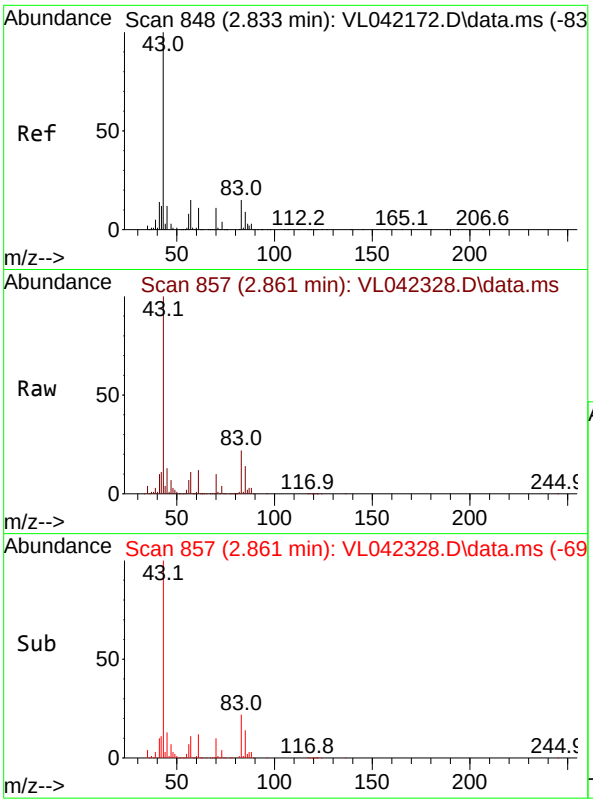


#24
1,1-Dichloroethane
Concen: 8.277 ppbv
RT: 2.428 min Scan# 723
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 63 Resp: 168373

Ion	Ratio	Lower	Upper
63	100		
98	5.1	2.3	6.8
100	2.8	1.6	4.7

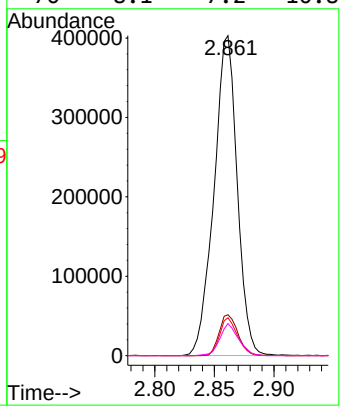




#25
Ethyl Acetate
Concen: 8.732 ppbv
RT: 2.861 min Scan# 8
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 54514

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	9.1	7.3	10.9
70	8.1	7.2	10.8



Instrument :
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ClientSampleId :
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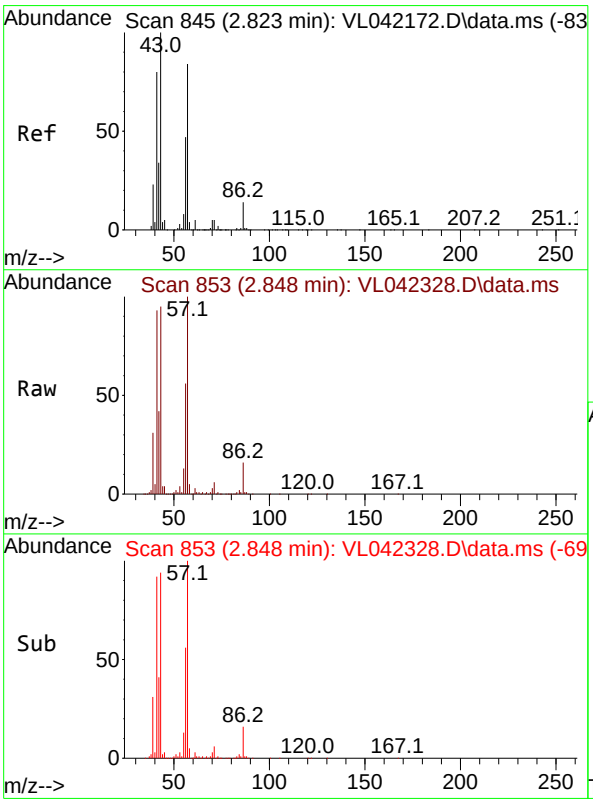
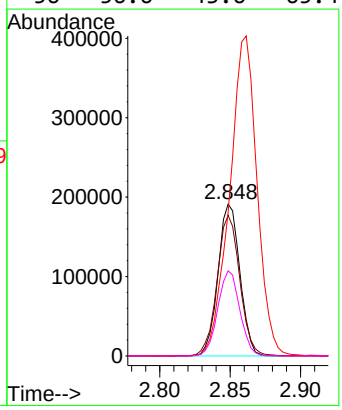
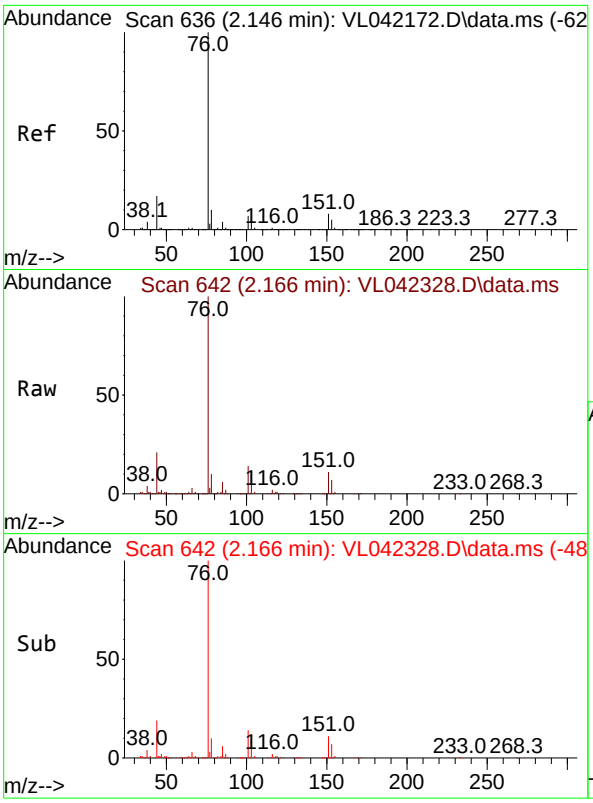


#26
Hexane
Concen: 8.528 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 57 Resp: 205629

Ion	Ratio	Lower	Upper
57	100		
41	97.2	76.6	114.8
43	265.7	207.8	311.8
56	56.6	43.6	65.4





#27
Carbon Disulfide
Concen: 7.402 ppbv
RT: 2.166 min Scan# 64
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 76 Resp: 19138

Ion	Ratio	Lower	Upper
76	100		
44	19.3	14.7	22.1
78	11.6	9.3	13.9

Instrument :
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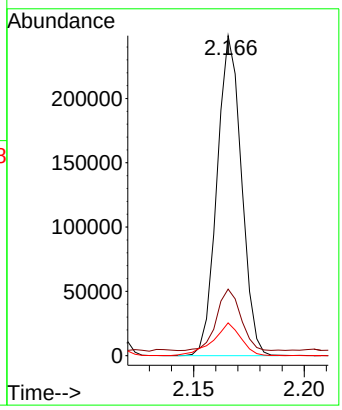
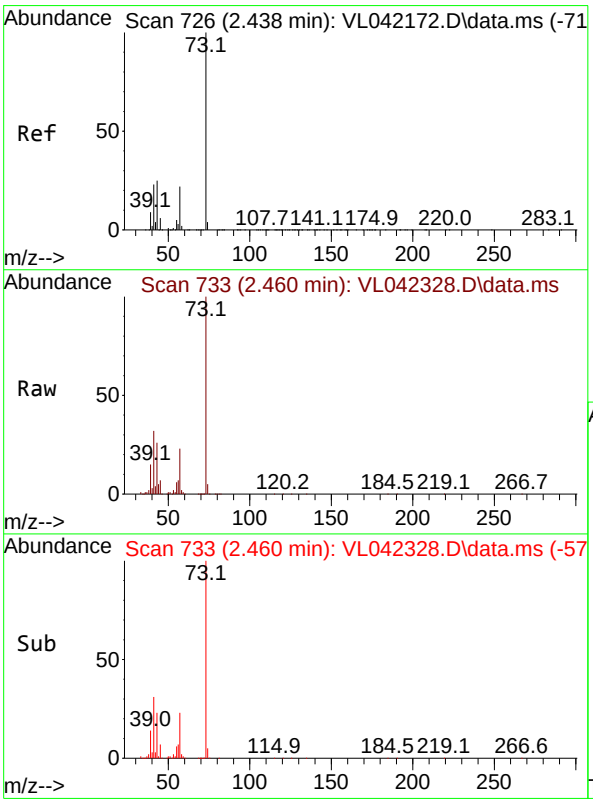
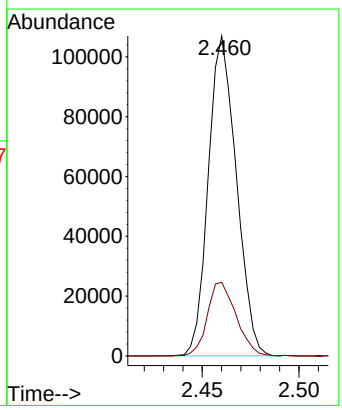


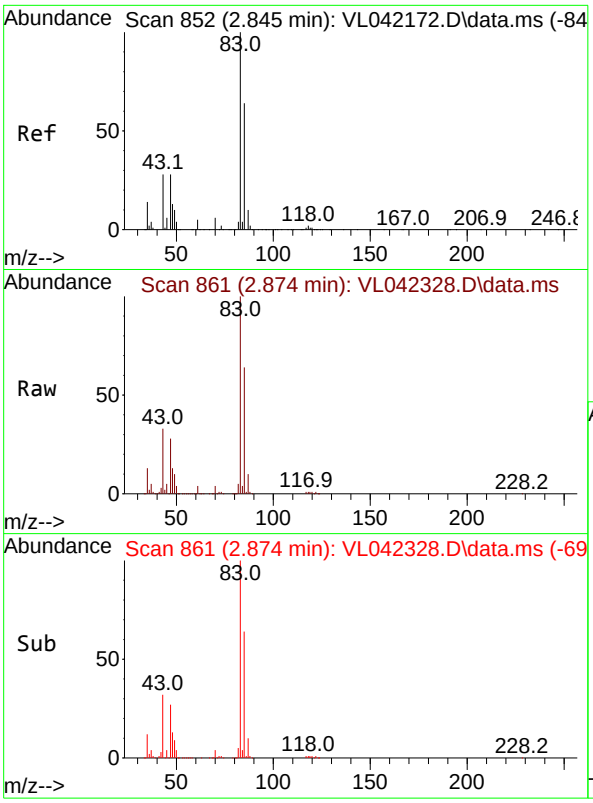


#28
Methyl tert-Butyl Ether
Concen: 7.172 ppbv
RT: 2.460 min Scan# 733
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 73 Resp: 107667

Ion	Ratio	Lower	Upper
73	100		
57	23.7	20.5	30.7





#29
Chloroform
Concen: 8.763 ppbv
RT: 2.874 min Scan# 8
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 83 Resp: 30926

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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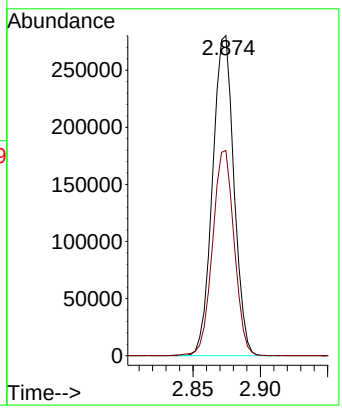
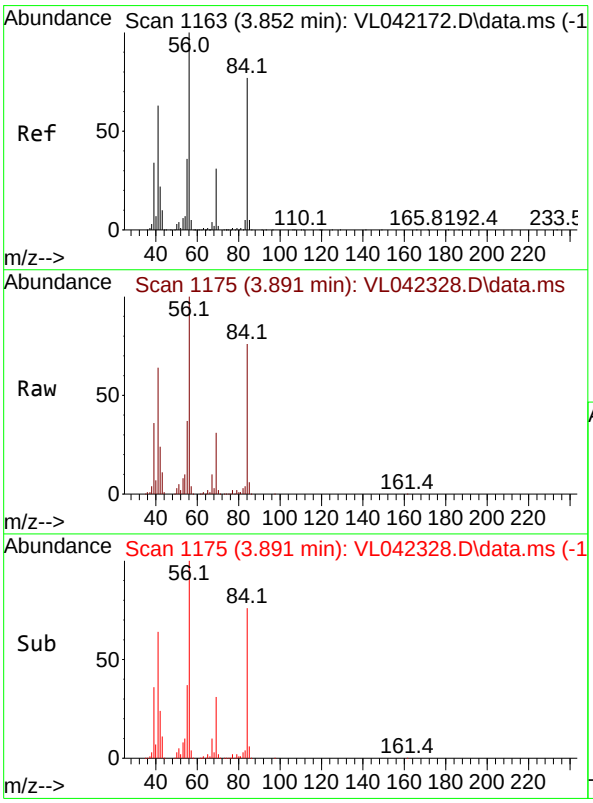
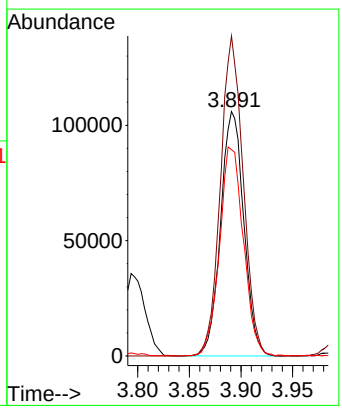


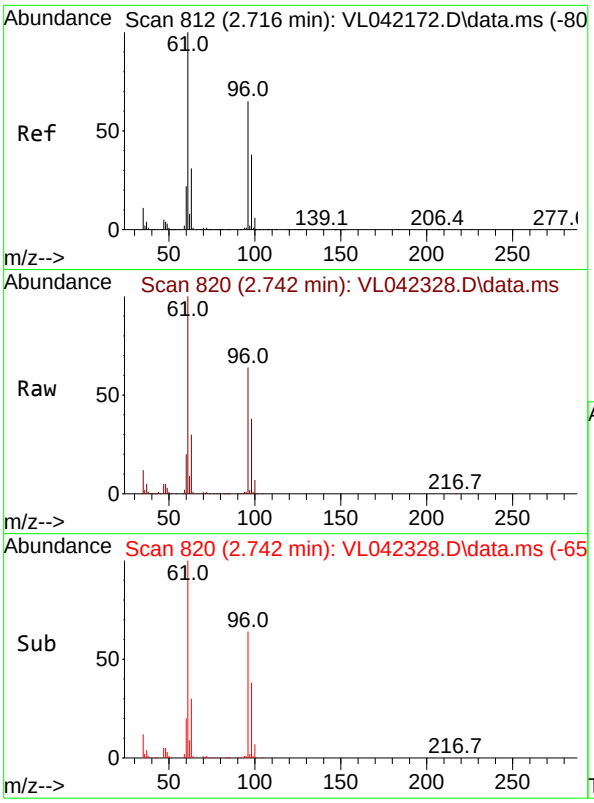


#30
Cyclohexane
Concen: 7.924 ppbv
RT: 3.891 min Scan# 1175
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 84 Resp: 165914

Ion	Ratio	Lower	Upper
84	100		
56	127.7	102.8	154.2
41	87.6	66.5	99.7

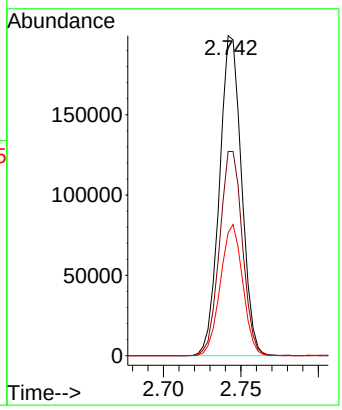




#31
cis-1,2-Dichloroethene
Concen: 8.074 ppbv
RT: 2.742 min Scan# 8
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 61 Resp: 19765

Ion	Ratio	Lower	Upper
61	100		
96	63.8	51.8	77.8
98	38.4	30.6	46.0



Instrument :
MSVOA_L
ClientSampleId :
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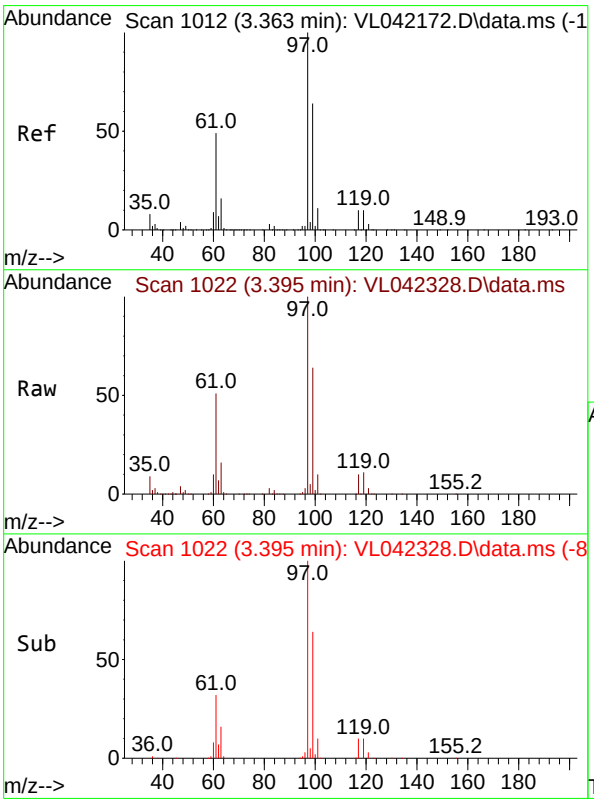
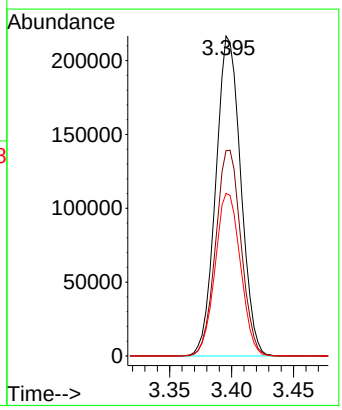
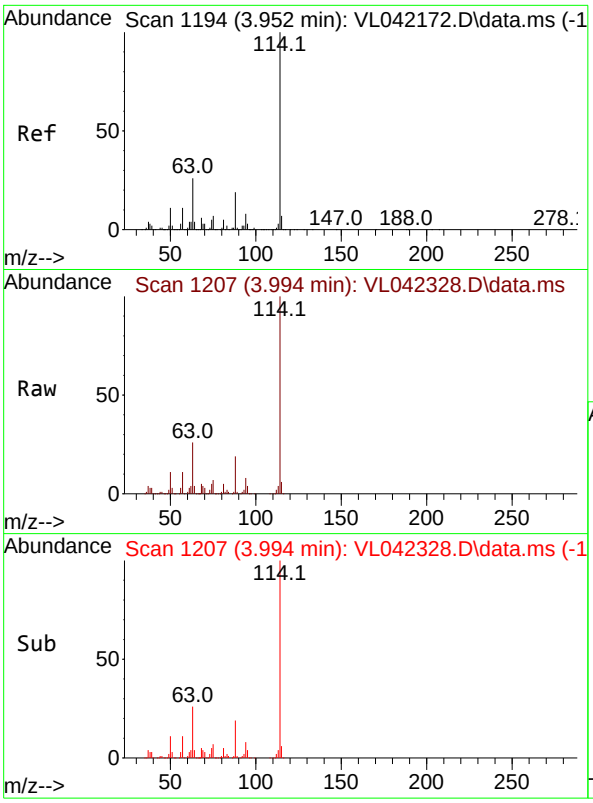


#32
1,1,1-Trichloroethane
Concen: 7.528 ppbv
RT: 3.395 min Scan# 1022
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 97 Resp: 304143

Ion	Ratio	Lower	Upper
97	100		
99	65.2	51.5	77.3
61	51.8	38.7	58.1

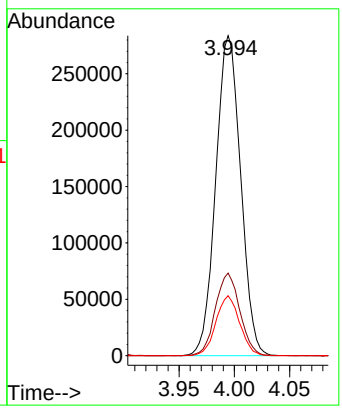




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.994 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:114 Resp: 44459

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.8	15.0	22.4



Instrument :
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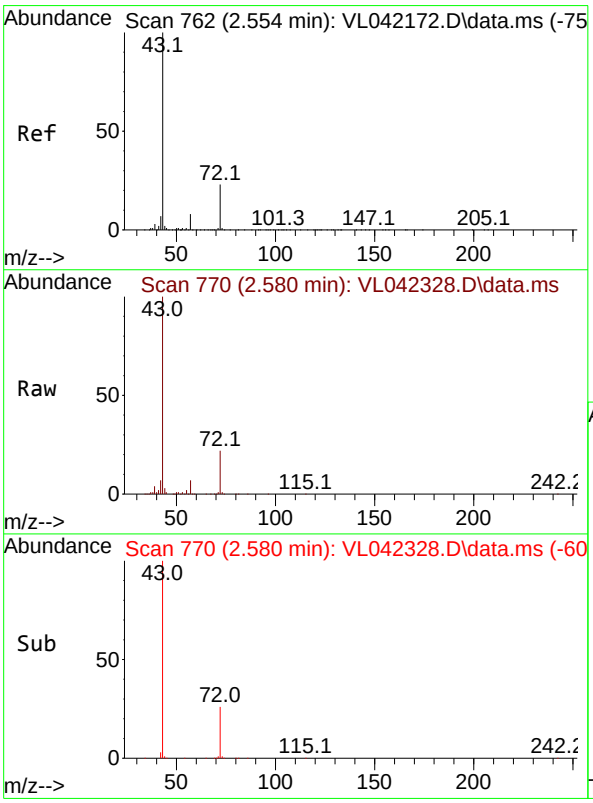
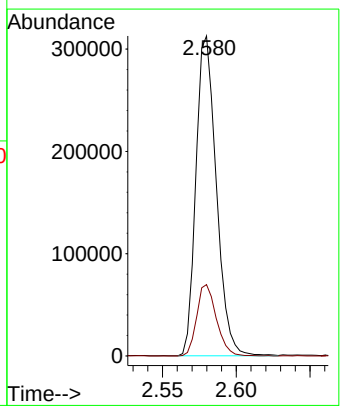
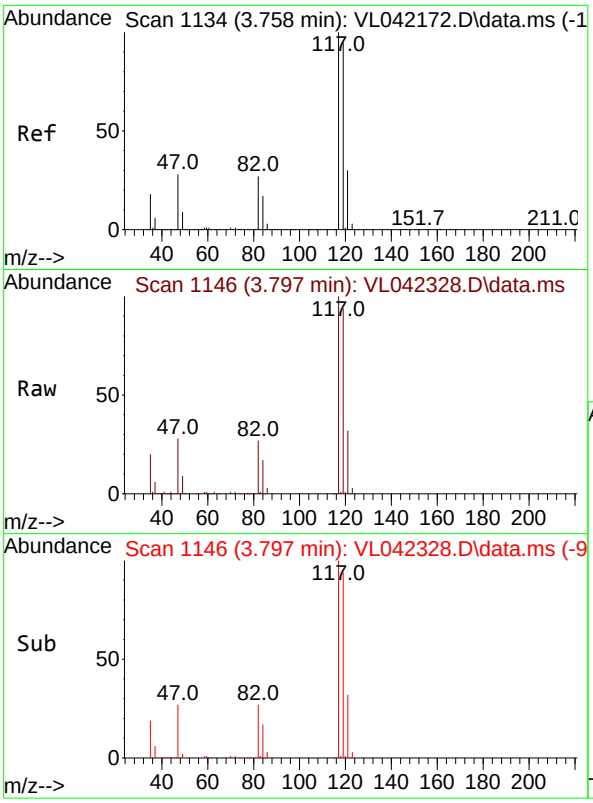


#34
2-Butanone
Concen: 9.323 ppbv
RT: 2.580 min Scan# 770
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 300576

Ion	Ratio	Lower	Upper
43	100		
72	21.6	18.2	27.2

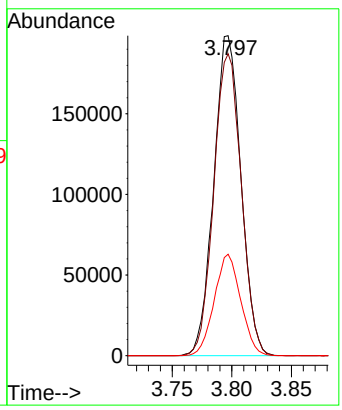




#35
Carbon Tetrachloride
Concen: 9.065 ppbv
RT: 3.797 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:117 Resp: 31484

Ion	Ratio	Lower	Upper
117	100		
119	94.3	76.2	114.2
121	31.7	24.2	36.4



Instrument :
MSVOA_L
ClientSampleId :
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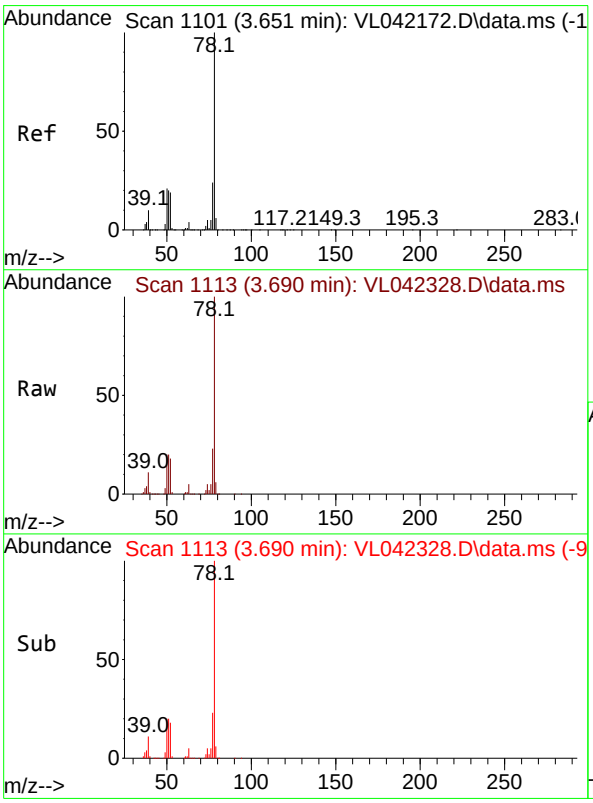
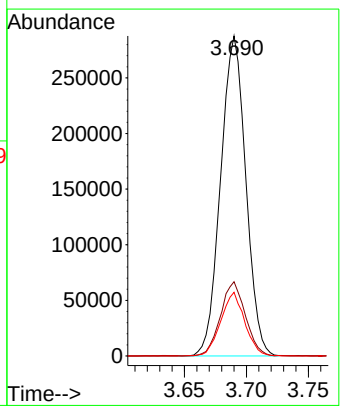
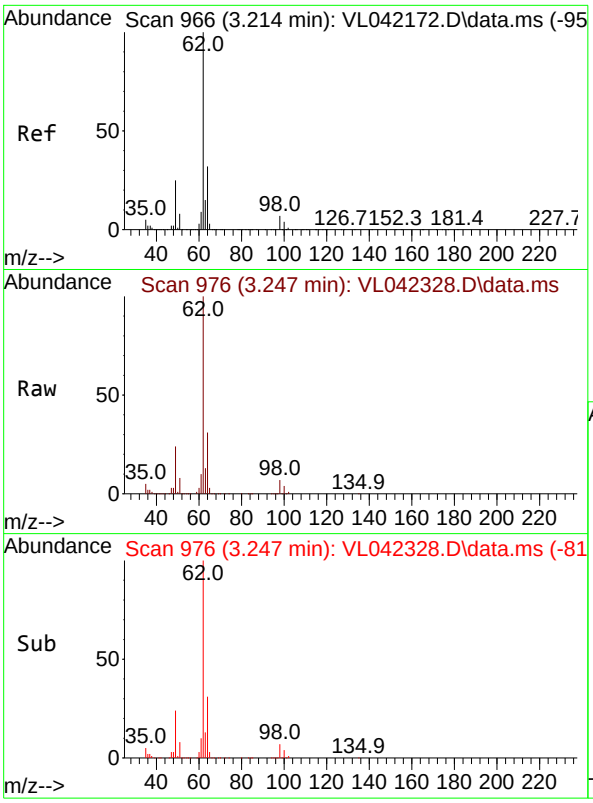


#36
Benzene
Concen: 9.256 ppbv
RT: 3.690 min Scan# 1113
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 78 Resp: 407959

Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.1	28.7
50	19.9	16.6	24.8

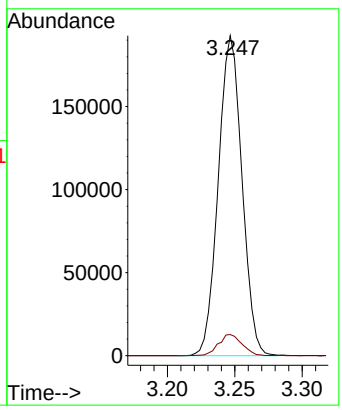




#37
1,2-Dichloroethane
Concen: 9.337 ppbv
RT: 3.247 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 62 Resp: 23560

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2



Instrument :
MSVOA_L
ClientSampleId :
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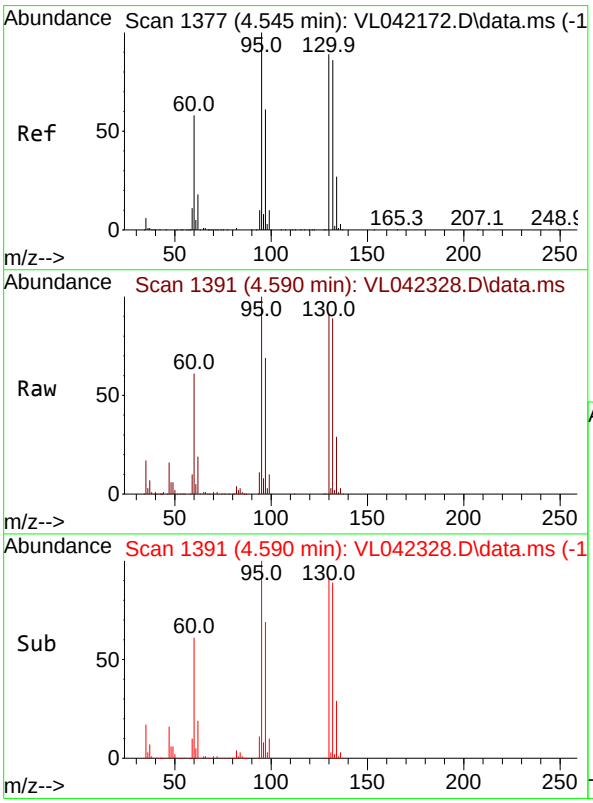
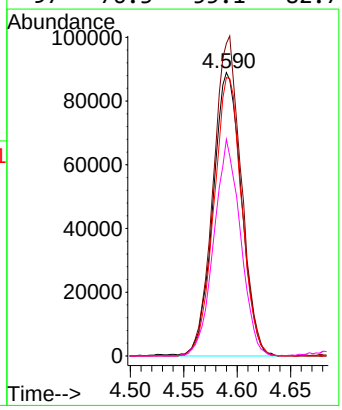
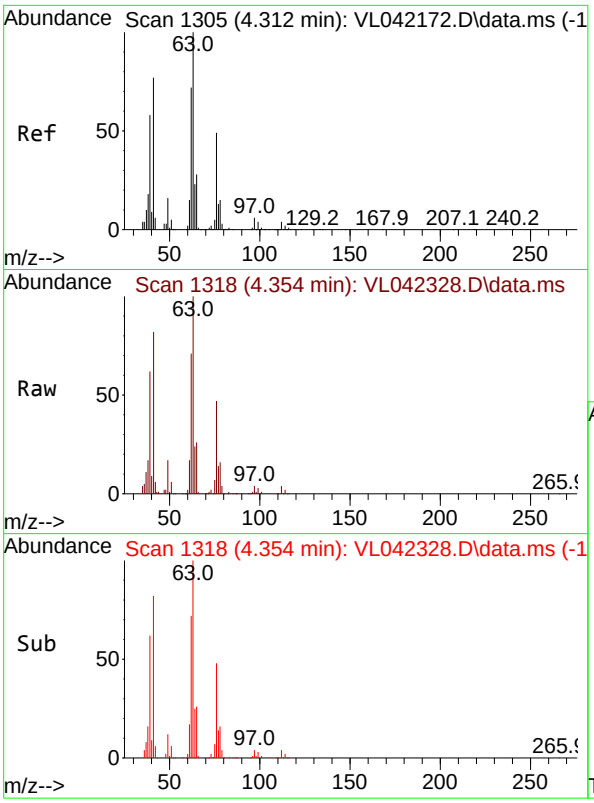


#38
Trichloroethene
Concen: 8.954 ppbv
RT: 4.590 min Scan# 1391
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:130 Resp: 164664

Ion	Ratio	Lower	Upper
130	100		
95	110.3	89.8	134.8
132	98.2	77.4	116.2
97	76.3	55.1	82.7





#39
1,2-Dichloropropane
Concen: 9.299 ppbv
RT: 4.354 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 63 Resp: 14926

Ion	Ratio	Lower	Upper
63	100		
41	81.2	61.7	92.5
62	71.5	57.6	86.4

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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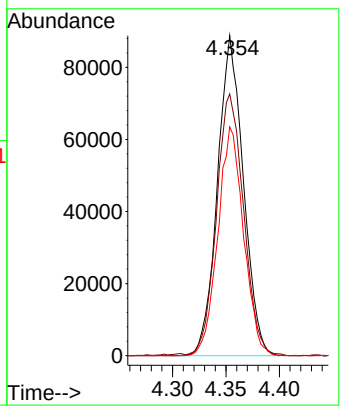
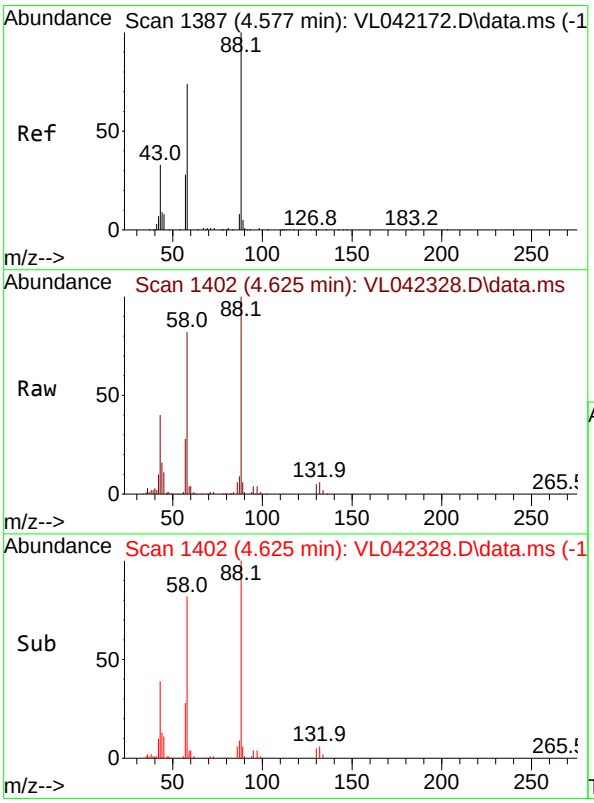
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

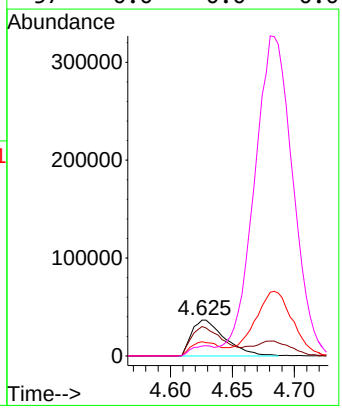


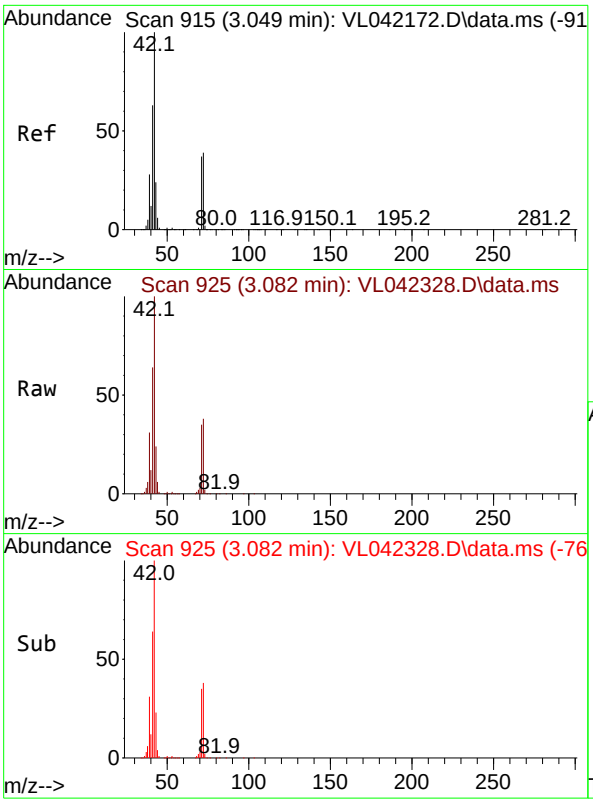


#40
1,4-Dioxane
Concen: 8.072 ppbv
RT: 4.625 min Scan# 1402
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 88 Resp: 68773

Ion	Ratio	Lower	Upper
88	100		
58	75.9	62.7	94.1
43	34.0	23.0	34.4
57	0.0	0.0	0.0





#41
Tetrahydrofuran
Concen: 9.361 ppbv
RT: 3.082 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 42 Resp: 17377

Ion	Ratio	Lower	Upper
42	100		
72	36.4	31.4	47.0
71	33.9	30.2	45.4

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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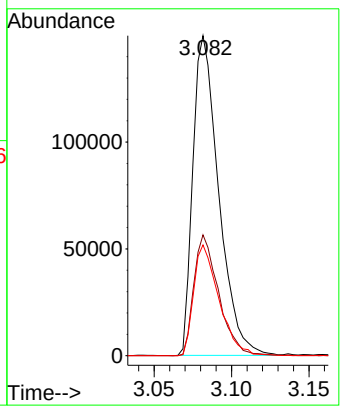
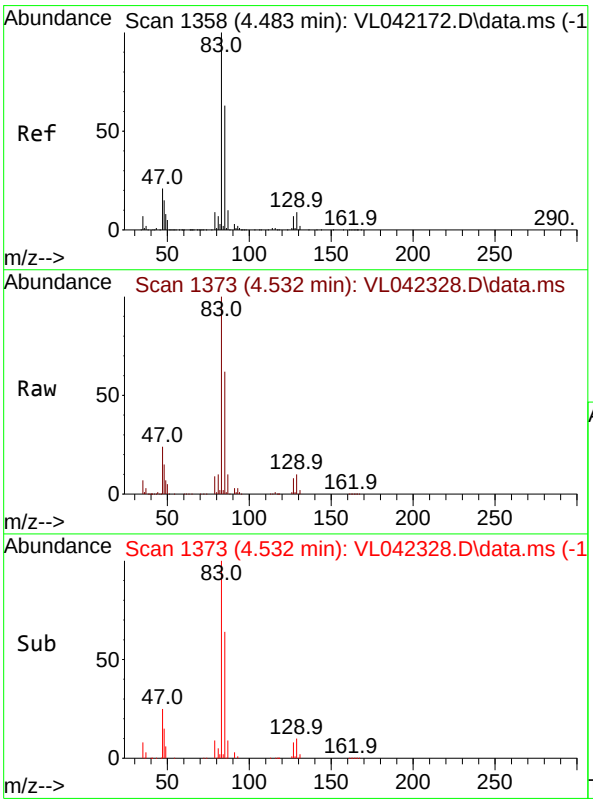
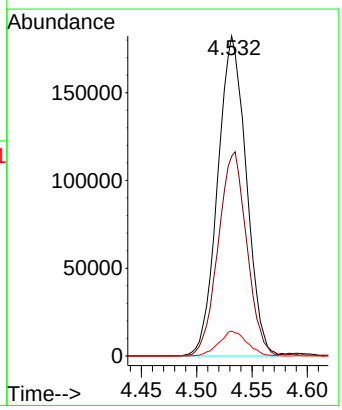


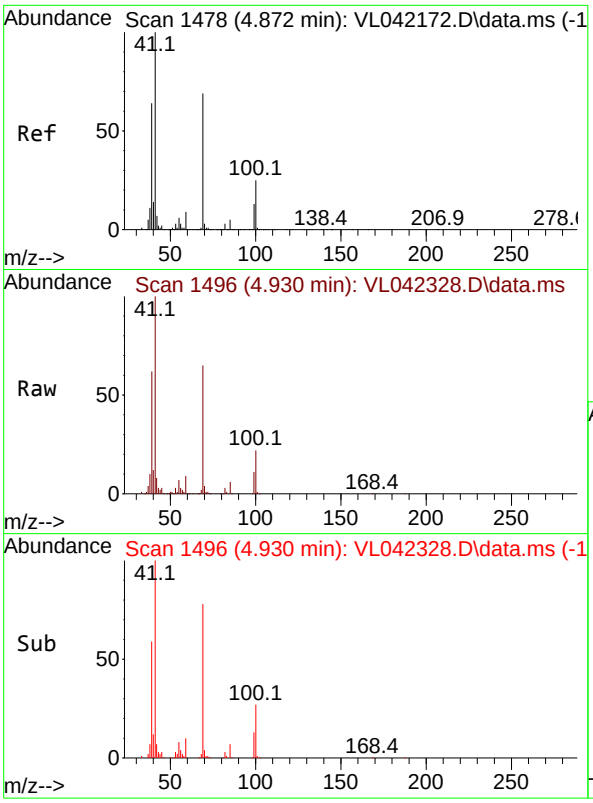


#42
Bromodichloromethane
Concen: 9.414 ppbv
RT: 4.532 min Scan# 1373
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 83 Resp: 327497

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	7.7	5.9	8.9

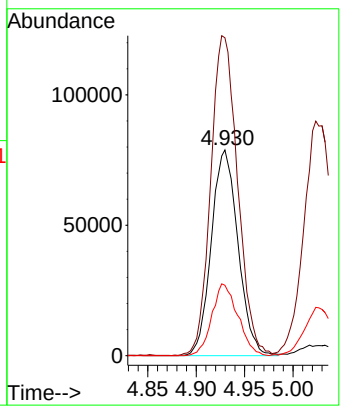




#43
Methyl Methacrylate
Concen: 8.121 ppbv
RT: 4.930 min Scan# 14
Delta R.T. 0.058 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 69 Resp: 15153

Ion	Ratio	Lower	Upper
69	100		
41	156.5	123.8	185.6
100	33.9	28.4	42.6



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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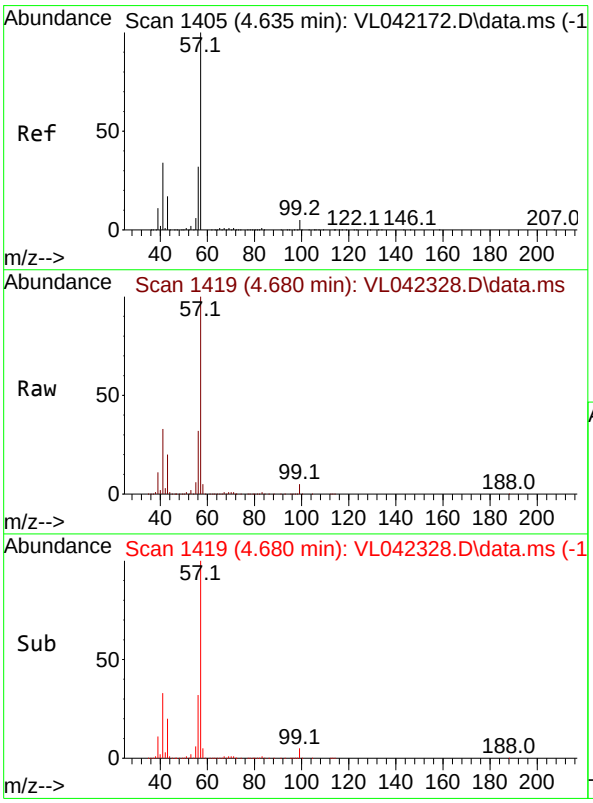
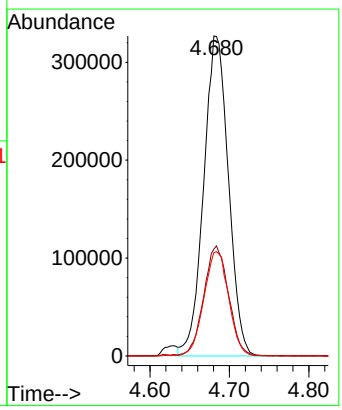
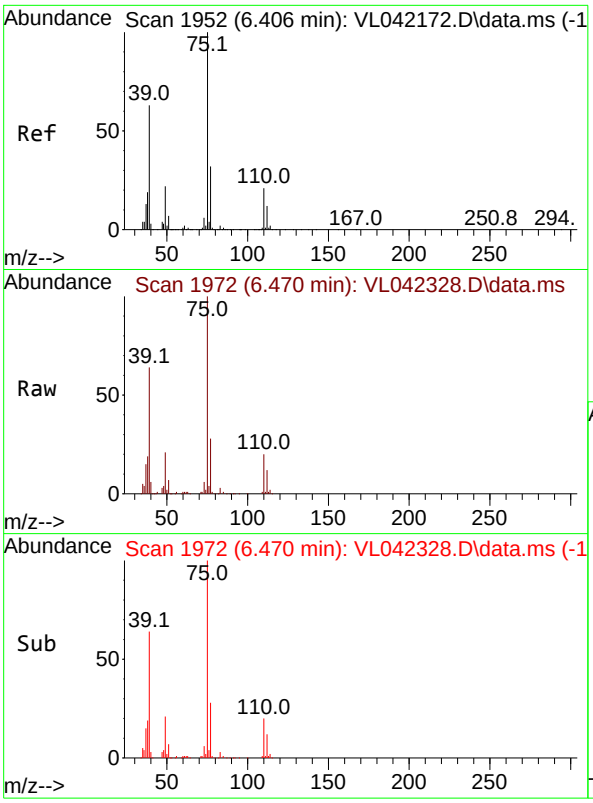


#44
2,2,4-Trimethylpentane
Concen: 9.503 ppbv
RT: 4.680 min Scan# 1419
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 57 Resp: 707832

Ion	Ratio	Lower	Upper
57	100		
41	34.7	26.8	40.2
56	32.7	25.6	38.4

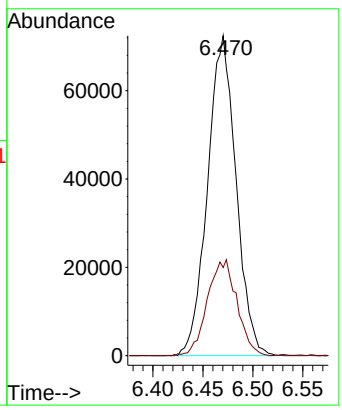




#45
t-1,3-Dichloropropene
Concen: 7.179 ppbv
RT: 6.470 min Scan# 1
Delta R.T. 0.065 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 75 Resp: 14371

Ion	Ratio	Lower	Upper
75	100		
77	27.5	26.0	39.0



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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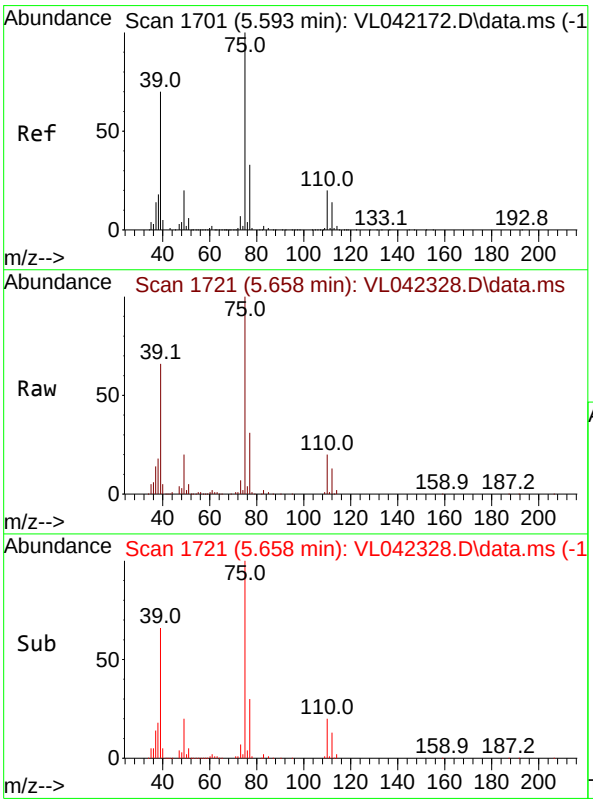
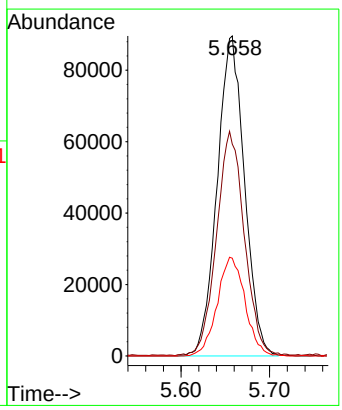
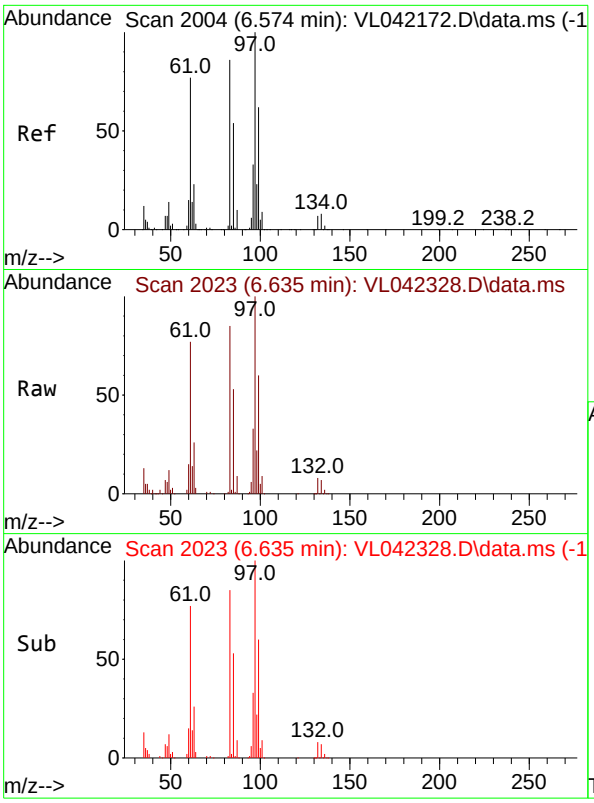


#46
cis-1,3-Dichloropropene
Concen: 7.841 ppbv
RT: 5.658 min Scan# 1721
Delta R.T. 0.065 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 75 Resp: 192419

Ion	Ratio	Lower	Upper
75	100		
39	65.8	55.8	83.6
77	30.6	26.0	39.0

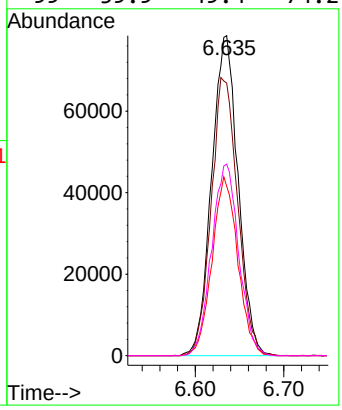




#47
1,1,2-Trichloroethane
Concen: 9.621 ppbv
RT: 6.635 min Scan# 2
Delta R.T. 0.061 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 97 Resp: 16325

Ion	Ratio	Lower	Upper
97	100		
83	85.2	69.2	103.8
85	52.9	43.1	64.7
99	59.9	49.4	74.2



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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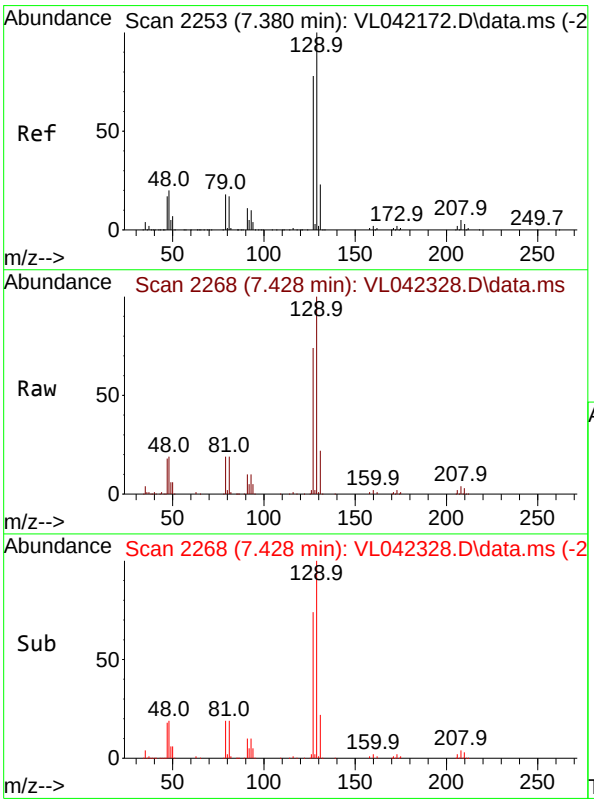
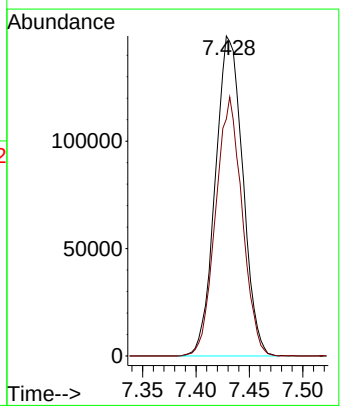
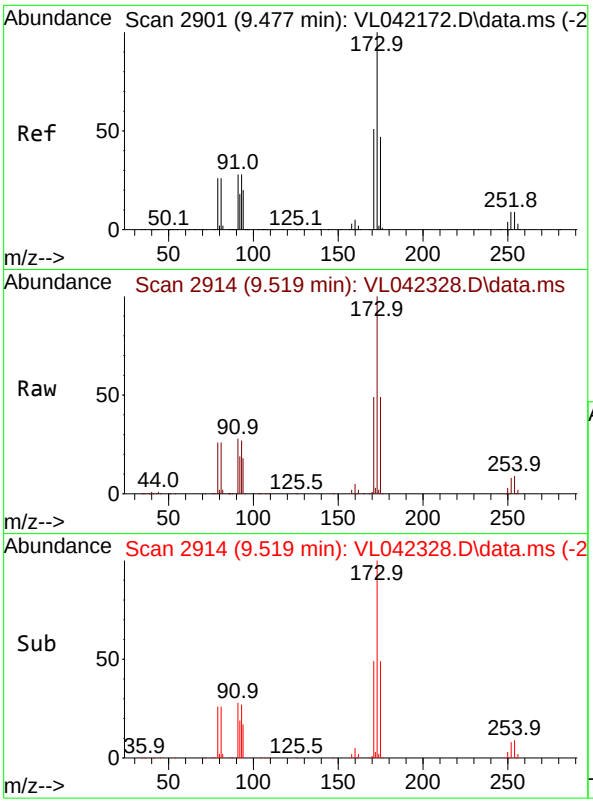


#48
Dibromochloromethane
Concen: 9.256 ppbv
RT: 7.428 min Scan# 2268
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:129 Resp: 266192

Ion	Ratio	Lower	Upper
129	100		
127	78.3	39.1	117.2

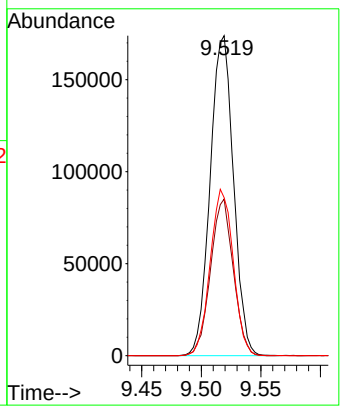




#49
Bromoform
Concen: 9.168 ppbv
RT: 9.519 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:173 Resp: 23668

Ion	Ratio	Lower	Upper
173	100		
175	47.8	38.6	57.8
171	51.4	41.8	62.6



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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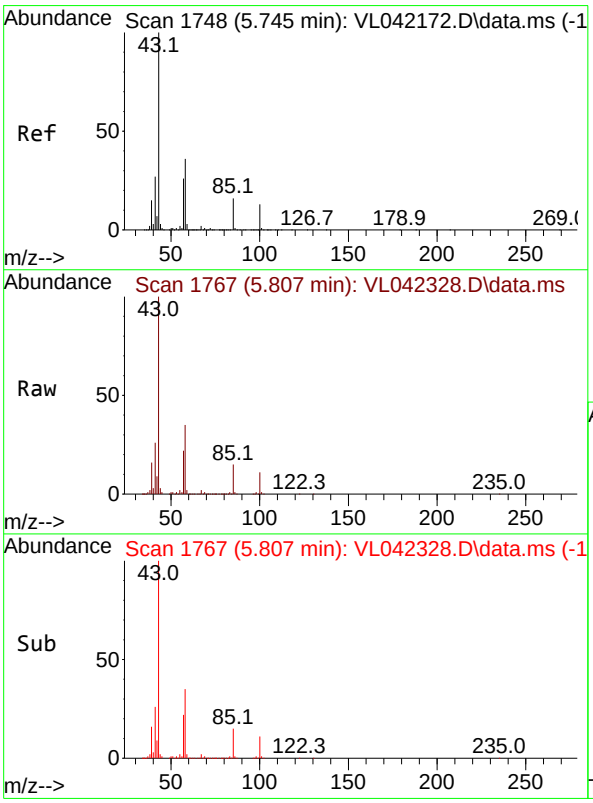
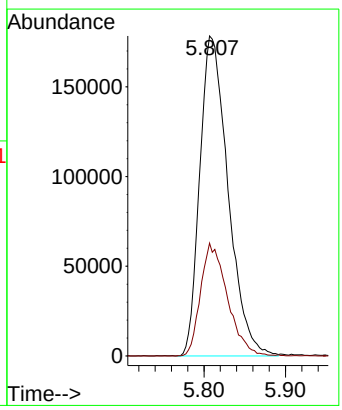
Supervised By :Mahesh Dadoda 04/16/2025

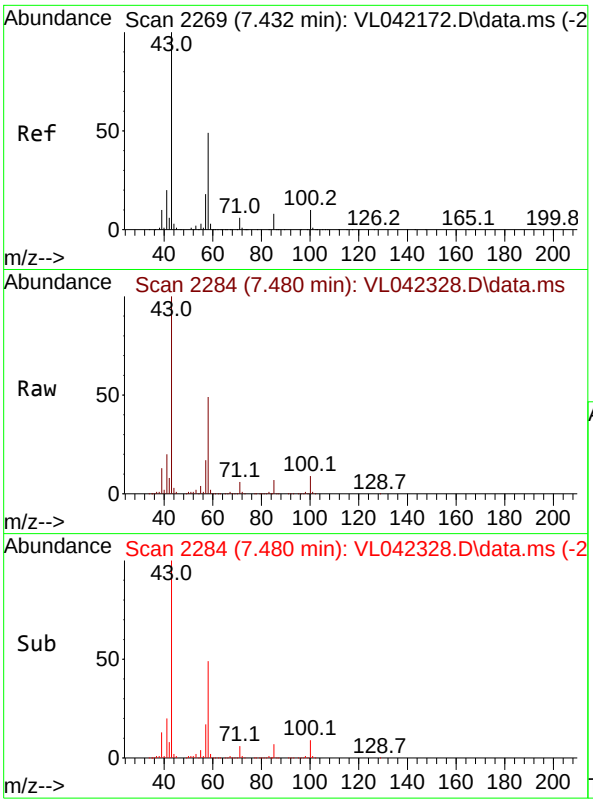


#50
4-Methyl-2-Pentanone
Concen: 8.416 ppbv
RT: 5.807 min Scan# 1767
Delta R.T. 0.061 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 429988

Ion	Ratio	Lower	Upper
43	100		
58	33.5	29.0	43.6

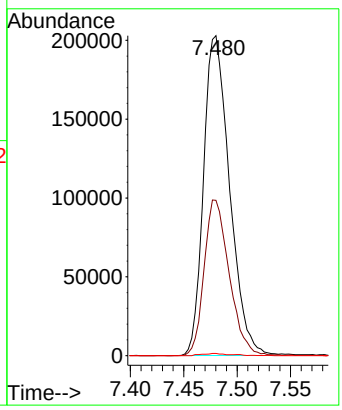




#51
2-Hexanone
Concen: 8.203 ppbv
RT: 7.480 min Scan# 2
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 34417

Ion	Ratio	Lower	Upper
43	100		
58	47.1	39.7	59.5
98	0.8	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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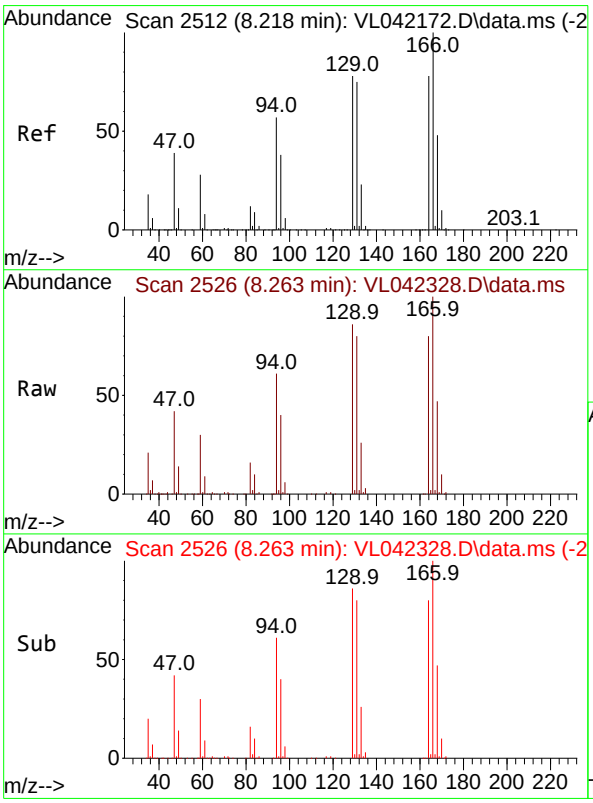
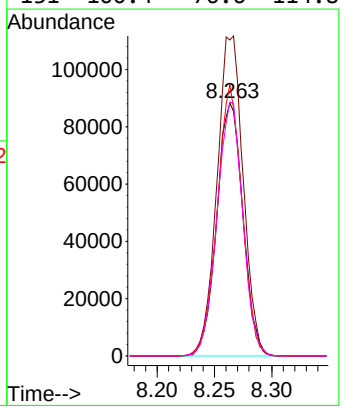
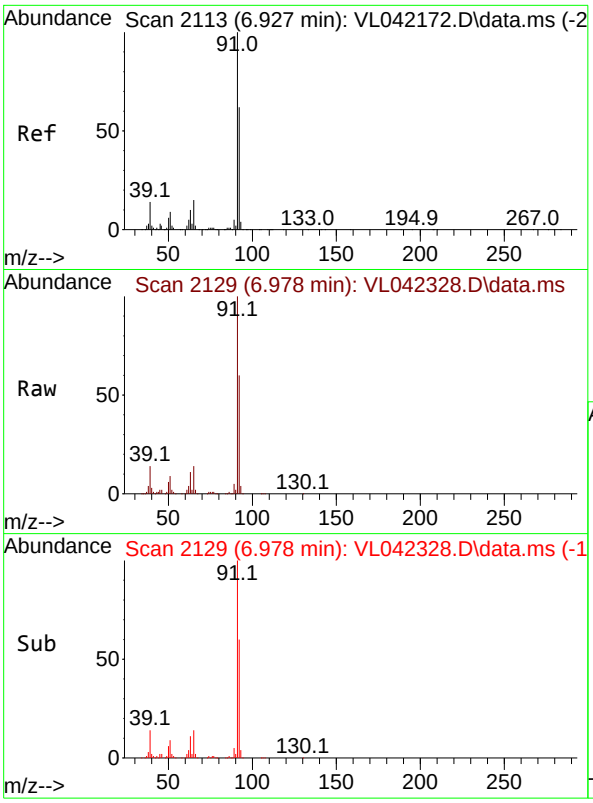


#52
Tetrachloroethene
Concen: 8.000 ppbv
RT: 8.263 min Scan# 2526
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:164 Resp: 139845

Ion	Ratio	Lower	Upper
164	100		
166	124.9	102.5	153.7
129	107.2	79.8	119.8
131	100.4	76.6	114.8

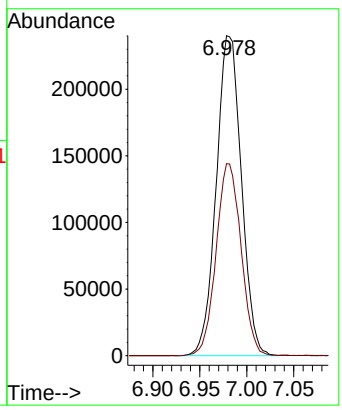




#53
Toluene
Concen: 8.559 ppbv
RT: 6.978 min Scan# 21
Delta R.T. 0.052 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 44717

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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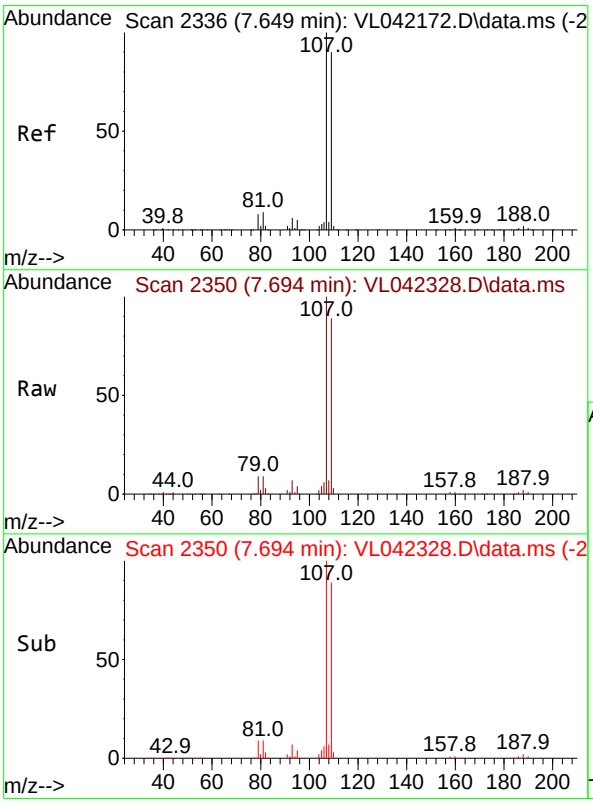
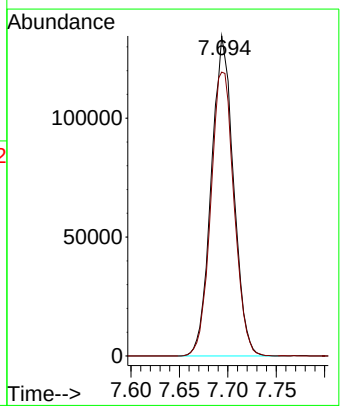
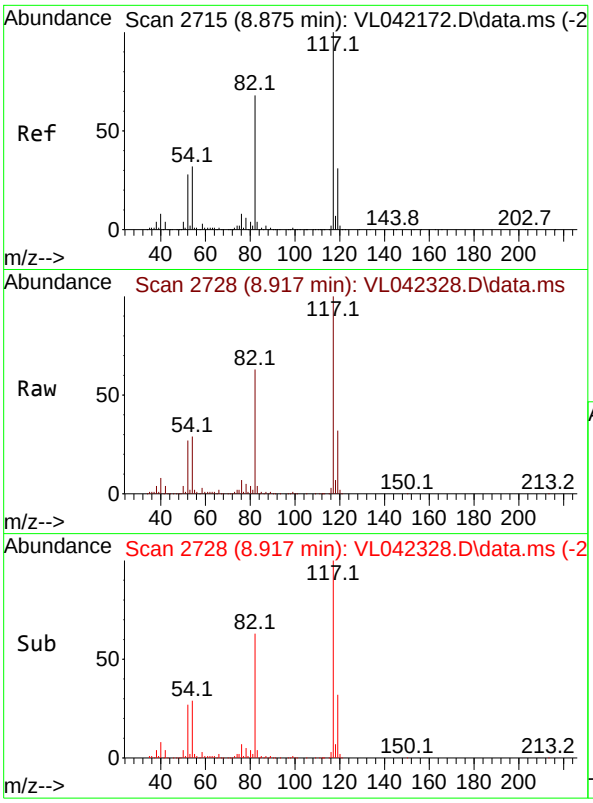


#54
1,2-Dibromoethane
Concen: 9.089 ppbv
RT: 7.694 min Scan# 2350
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:107 Resp: 214982

Ion	Ratio	Lower	Upper
107	100		
109	88.7	72.2	108.4

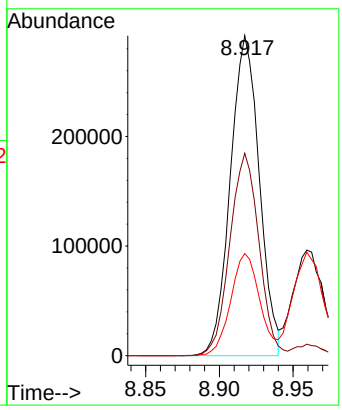




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:117 Resp: 39960

Ion	Ratio	Lower	Upper
117	100		
82	66.8	55.8	83.6
119	32.4	25.5	38.3



Instrument :
MSVOA_L
ClientSampleId :
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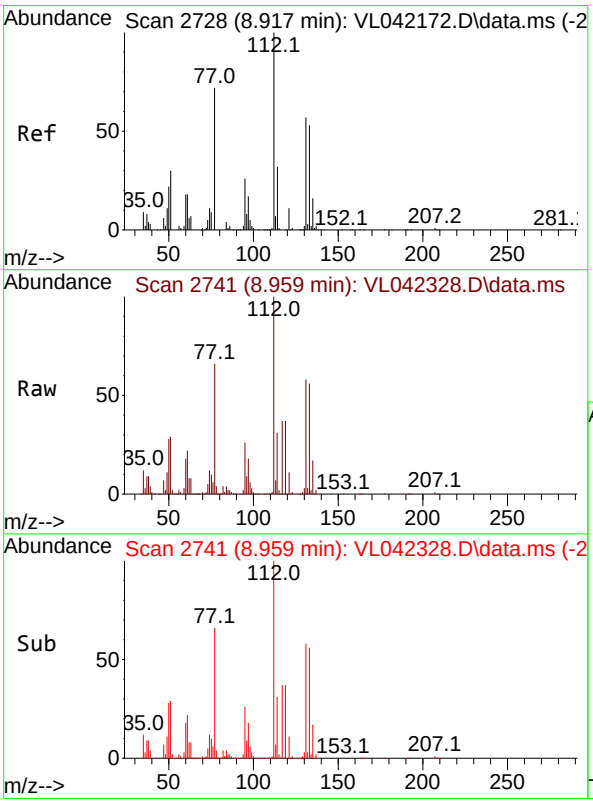
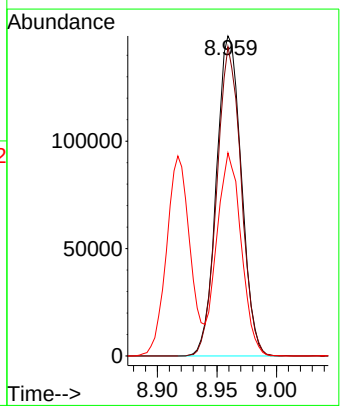
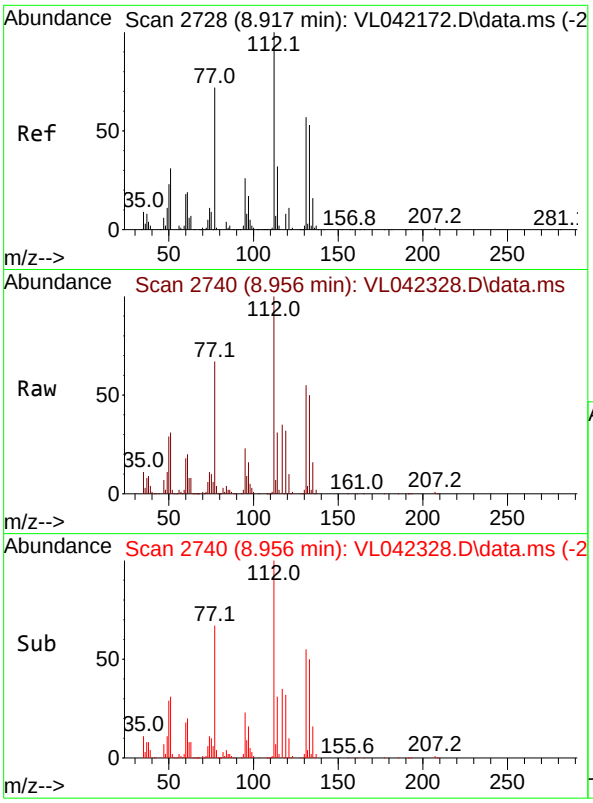


#56
1,1,1,2-Tetrachloroethane
Concen: 9.855 ppbv
RT: 8.959 min Scan# 2741
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:131 Resp: 216770

Ion	Ratio	Lower	Upper
131	100		
133	94.3	76.6	114.8
119	59.8	49.8	74.6

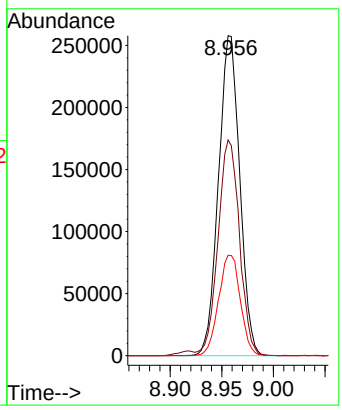




#57
Chlorobenzene
Concen: 9.739 ppbv
RT: 8.956 min Scan# 2
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:112 Resp: 36913

Ion	Ratio	Lower	Upper
112	100		
77	67.4	58.2	87.2
114	31.4	29.1	35.5



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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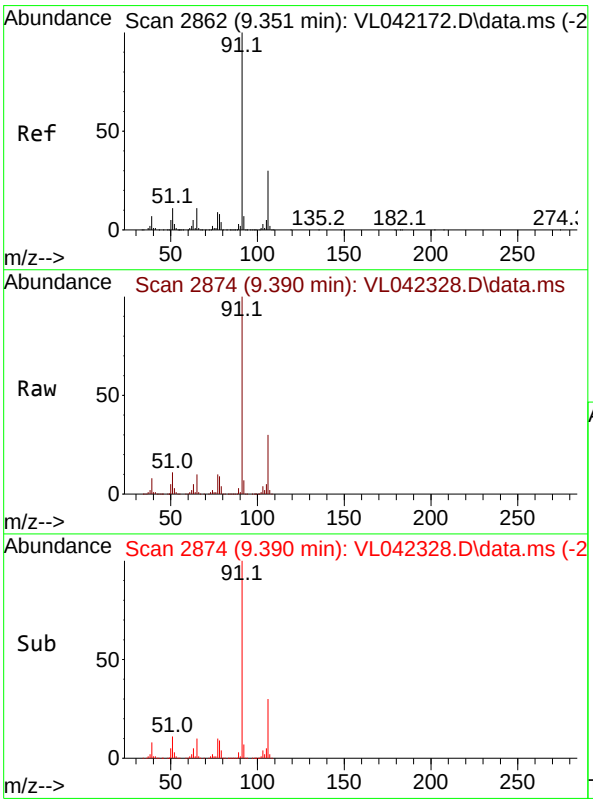
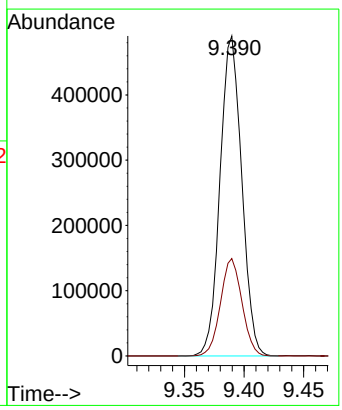
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

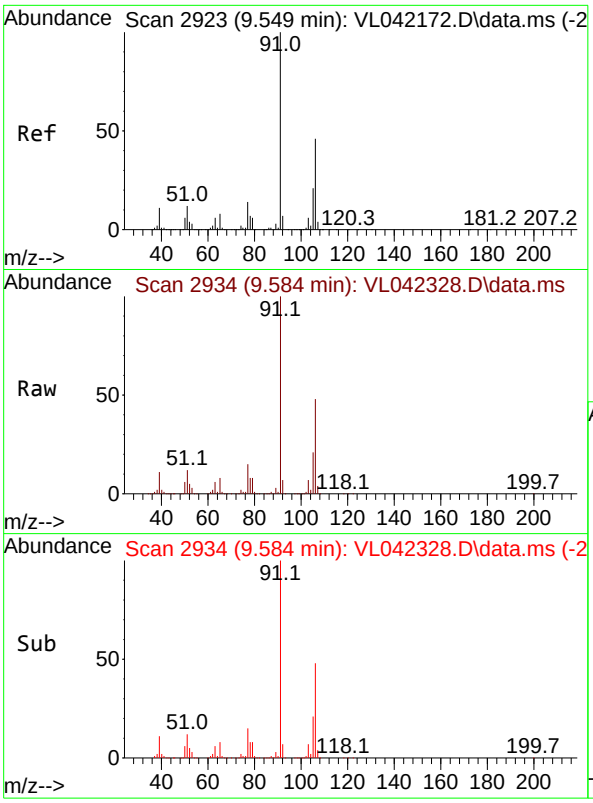


#58
Ethyl Benzene
Concen: 8.716 ppbv
RT: 9.390 min Scan# 2874
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 618669

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.2	36.2





#59
m/p-Xylene
Concen: 18.512 ppbv m
RT: 9.584 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 104923

Ion	Ratio	Lower	Upper
91	100		
106	47.2	36.4	54.6

Instrument :
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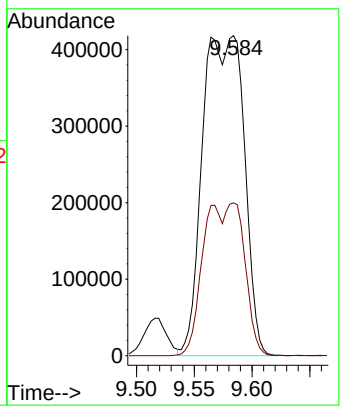
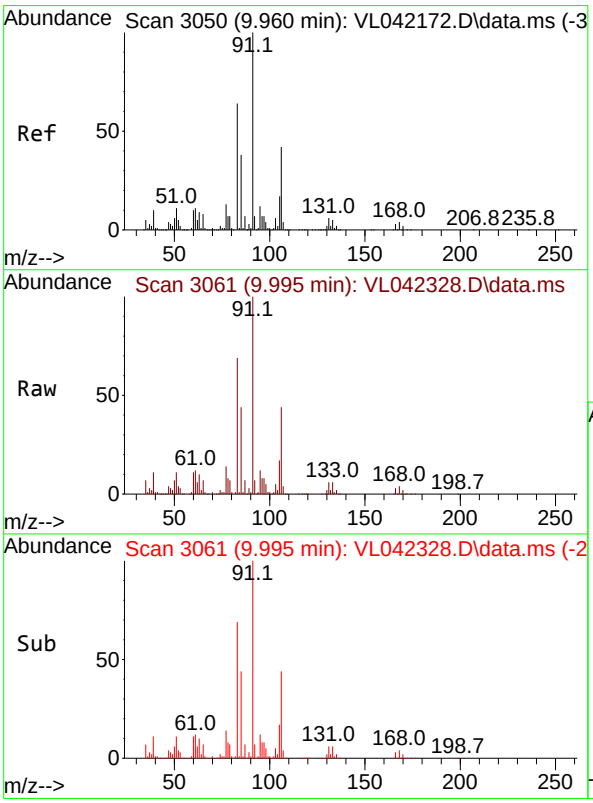
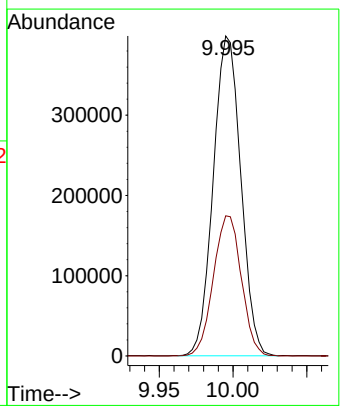


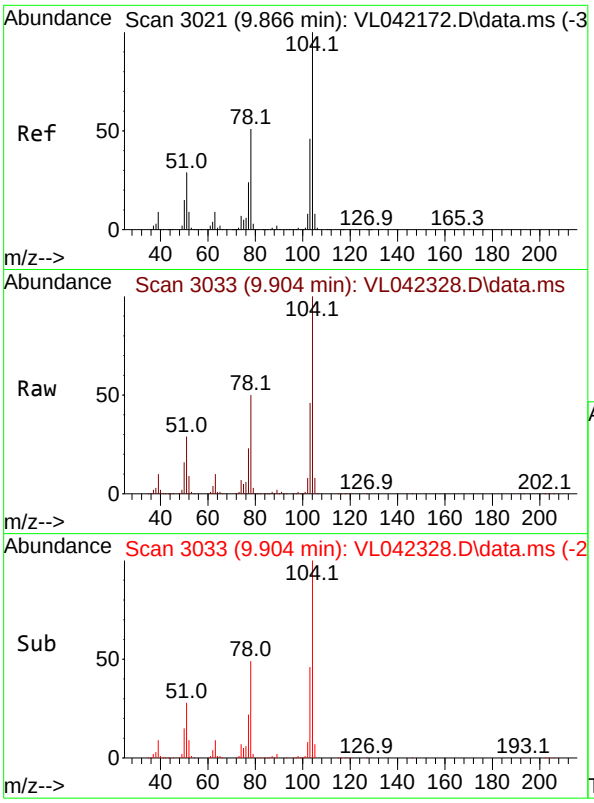


#60
o-Xylene
Concen: 9.107 ppbv
RT: 9.995 min Scan# 3061
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 517471

Ion	Ratio	Lower	Upper
91	100		
106	44.5	20.8	62.5

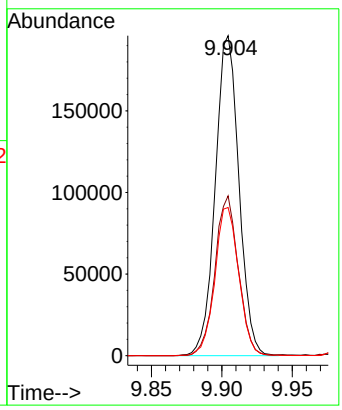




#61
Styrene
Concen: 8.168 ppbv
RT: 9.904 min Scan# 3
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:104 Resp: 22960

Ion	Ratio	Lower	Upper
104	100		
78	49.5	41.8	62.6
103	47.0	37.0	55.4



Instrument :
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ClientSampleId :
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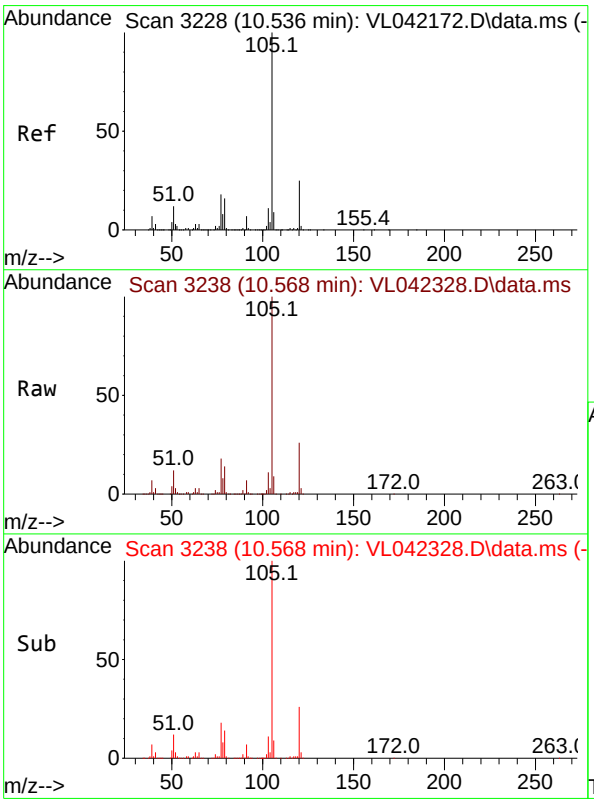
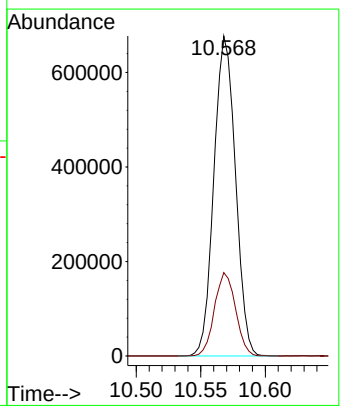
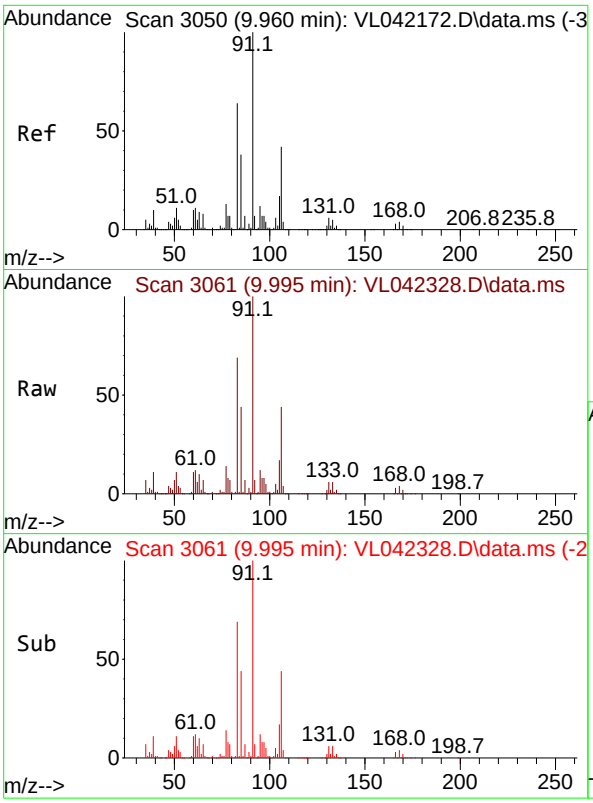


#62
Isopropylbenzene
Concen: 9.247 ppbv
RT: 10.568 min Scan# 3238
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 785673

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9

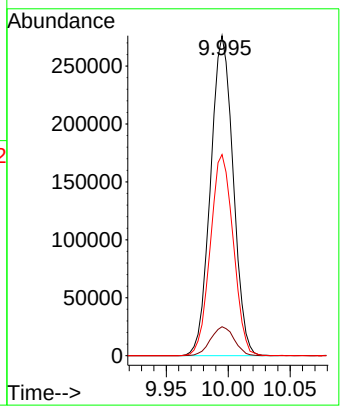




#63
1,1,2,2-Tetrachloroethane
Concen: 10.176 ppbv
RT: 9.995 min Scan# 3
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 83 Resp: 35130

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	63.9	32.5	97.5



Instrument :
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ClientSampleId :
VL0415ABS01

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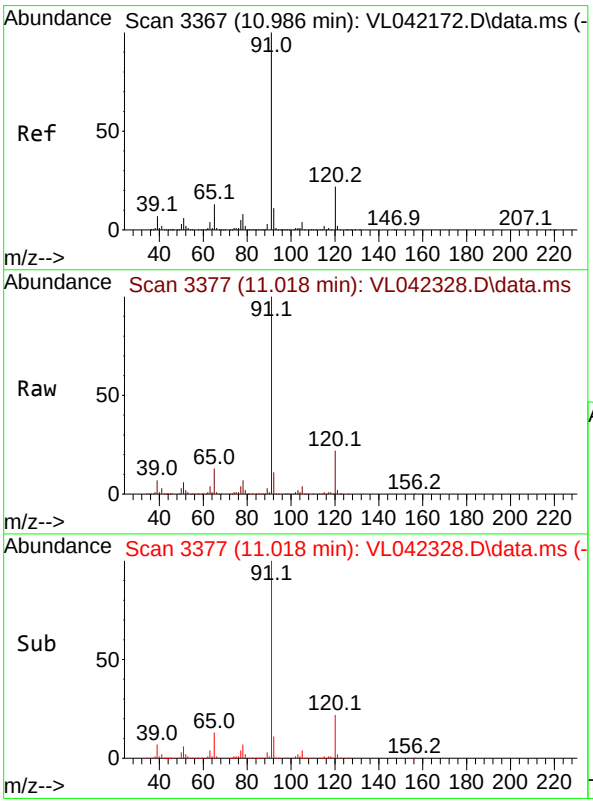
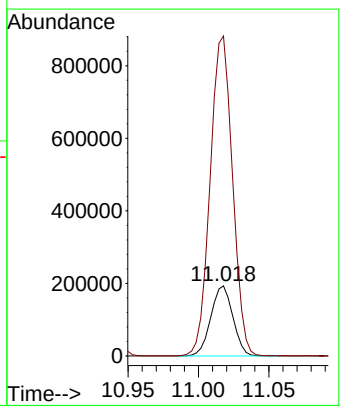
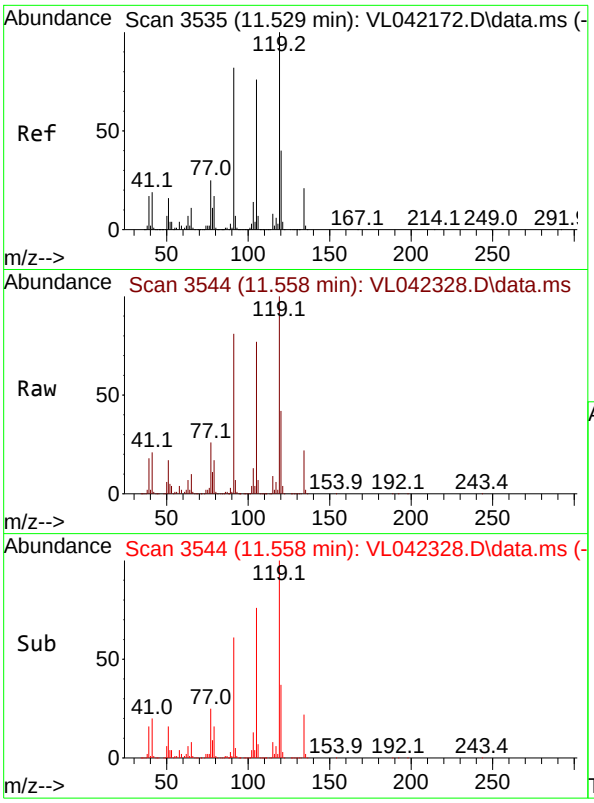


#64
n-propylbenzene
Concen: 9.615 ppbv
RT: 11.018 min Scan# 3377
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:120 Resp: 210294

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3

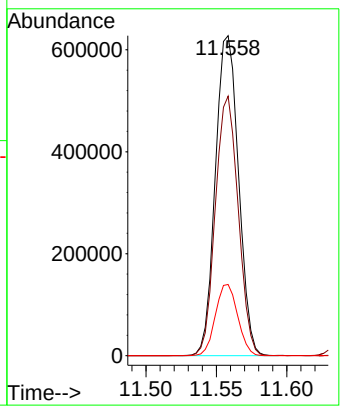




#65
tert-Butylbenzene
Concen: 9.149 ppbv
RT: 11.558 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:119 Resp: 71894

Ion	Ratio	Lower	Upper
119	100		
91	79.8	66.0	99.0
134	21.4	16.7	25.1



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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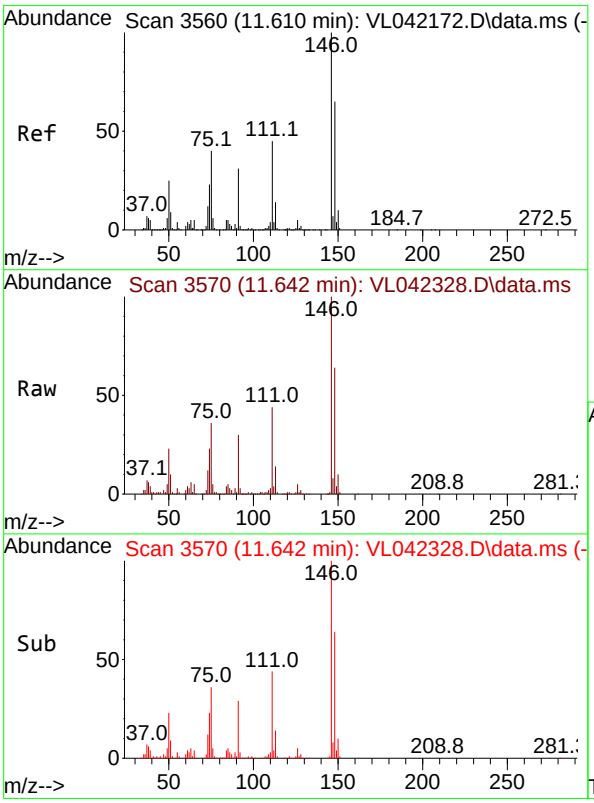
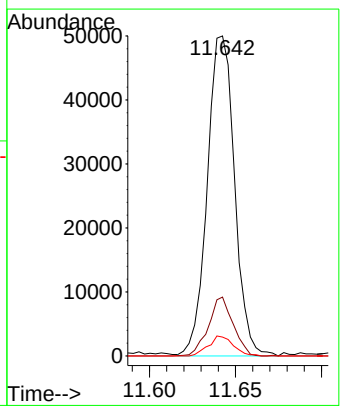
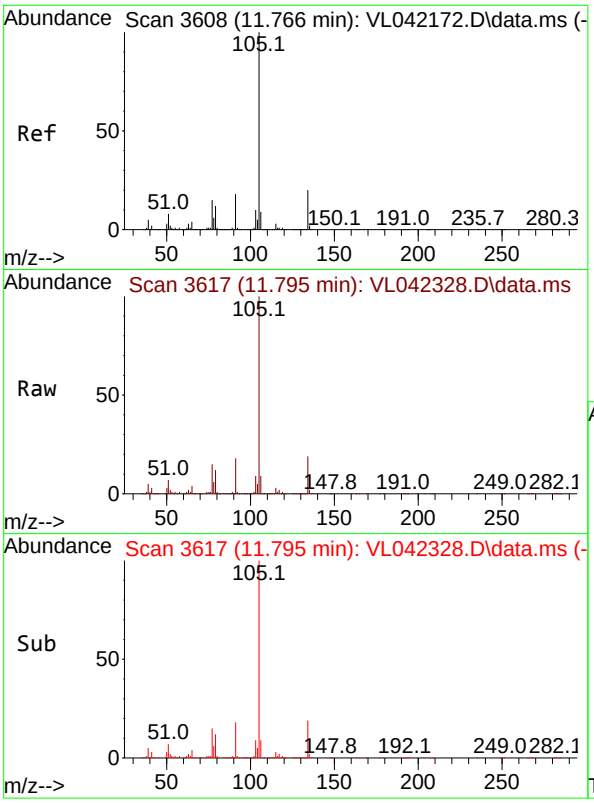


#66
Benzyl Chloride
Concen: 6.614 ppbv
RT: 11.642 min Scan# 3570
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 55150

Ion	Ratio	Lower	Upper
91	100		
126	16.6	13.8	20.6
128	5.7	4.5	6.7

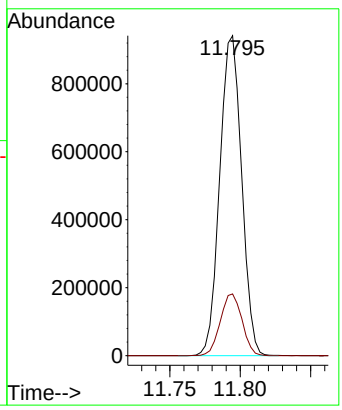




#67
sec-Butylbenzene
Concen: 9.328 ppbv
RT: 11.795 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 101886

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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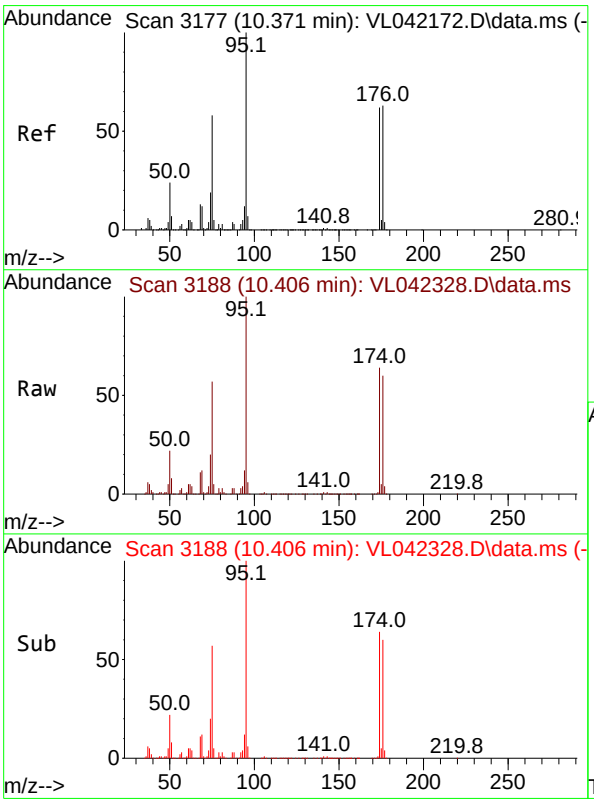
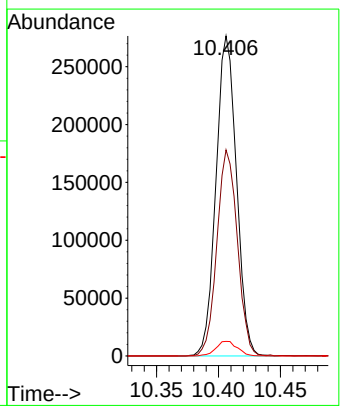
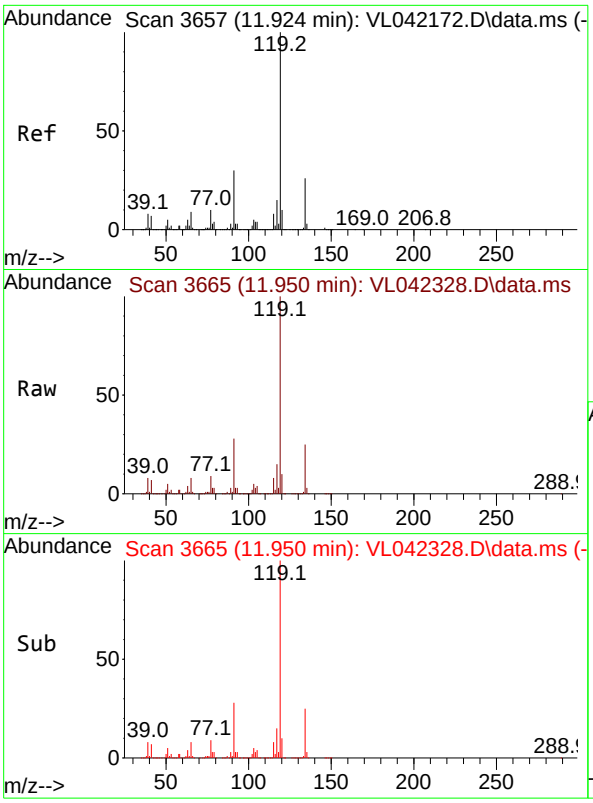


#68
1-Bromo-4-Fluorobenzene
Concen: 9.718 ppbv
RT: 10.406 min Scan# 3188
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 95 Resp: 318902

Ion	Ratio	Lower	Upper
95	100		
174	64.4	50.6	76.0
175	4.8	3.8	5.6

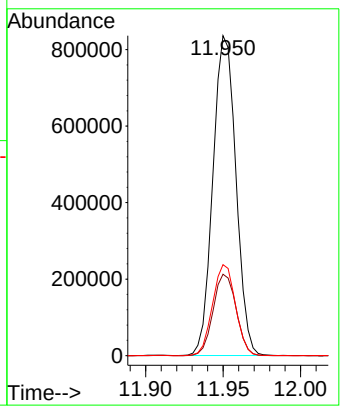




#69
p-Isopropyltoluene
Concen: 9.179 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:119 Resp: 86326

Ion	Ratio	Lower	Upper
119	100		
134	25.6	20.4	30.6
91	28.5	23.7	35.5



Instrument :
MSVOA_L
ClientSampleId :
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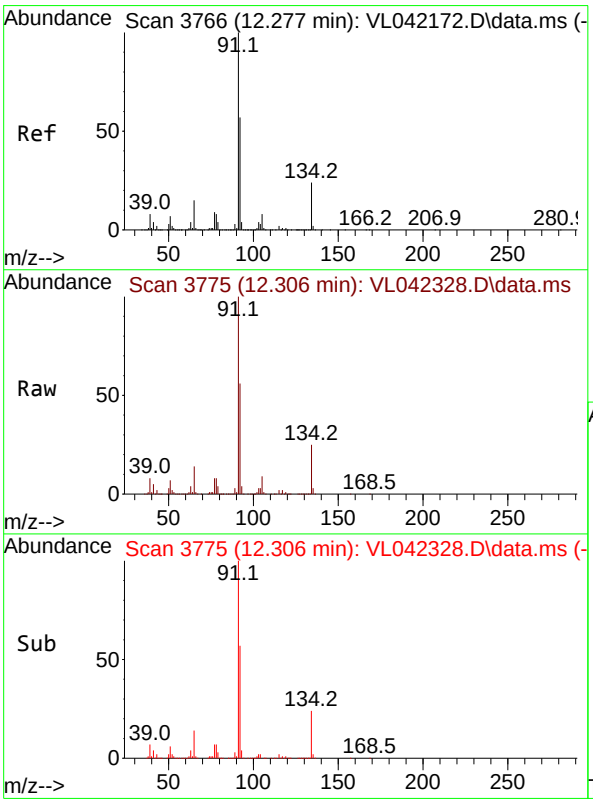
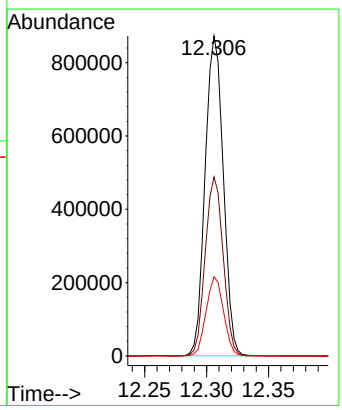
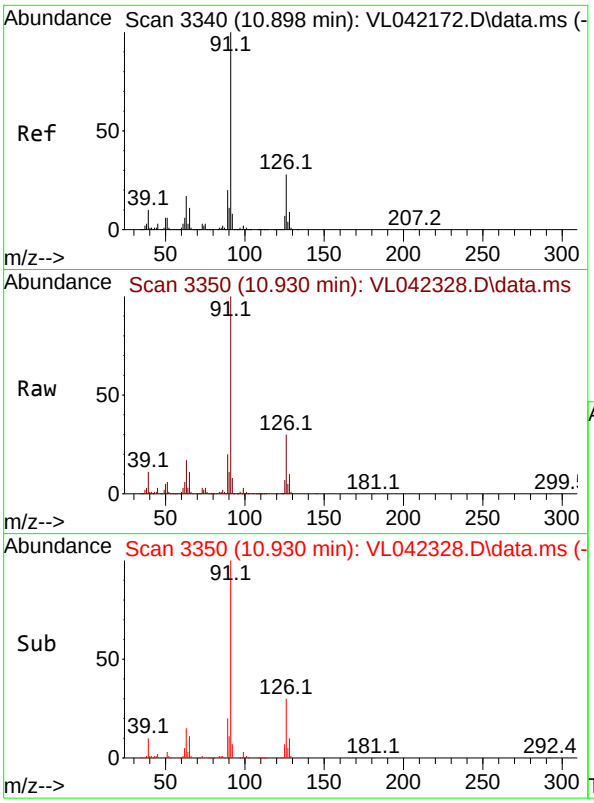


#70
n-Butylbenzene
Concen: 9.273 ppbv
RT: 12.306 min Scan# 3775
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 891883

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.8	19.2	28.8

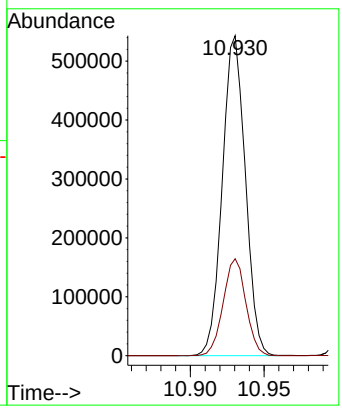




#71
2-Chlorotoluene
Concen: 8.953 ppbv
RT: 10.930 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 59040

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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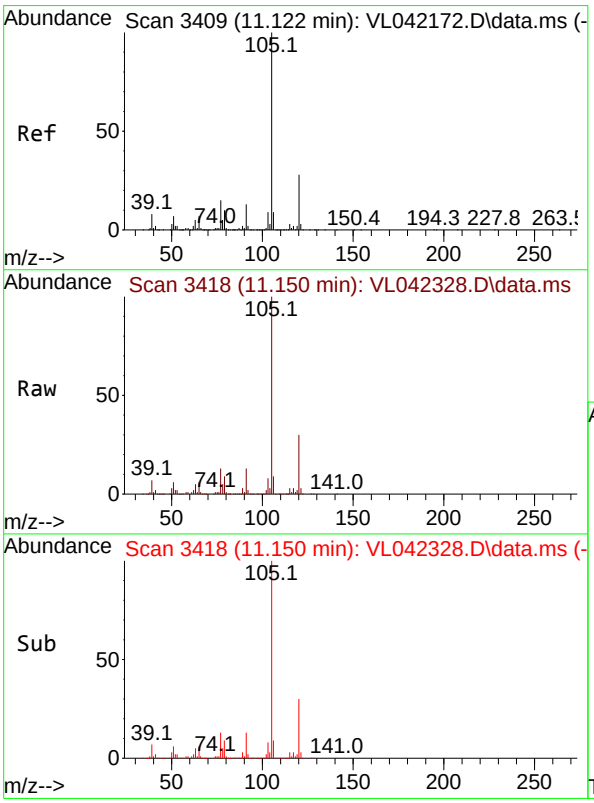
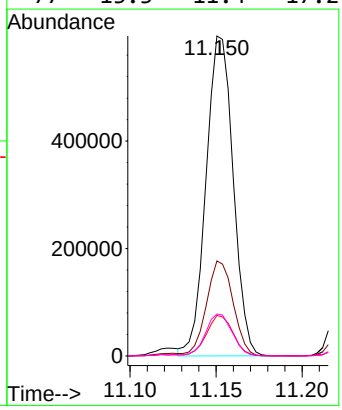
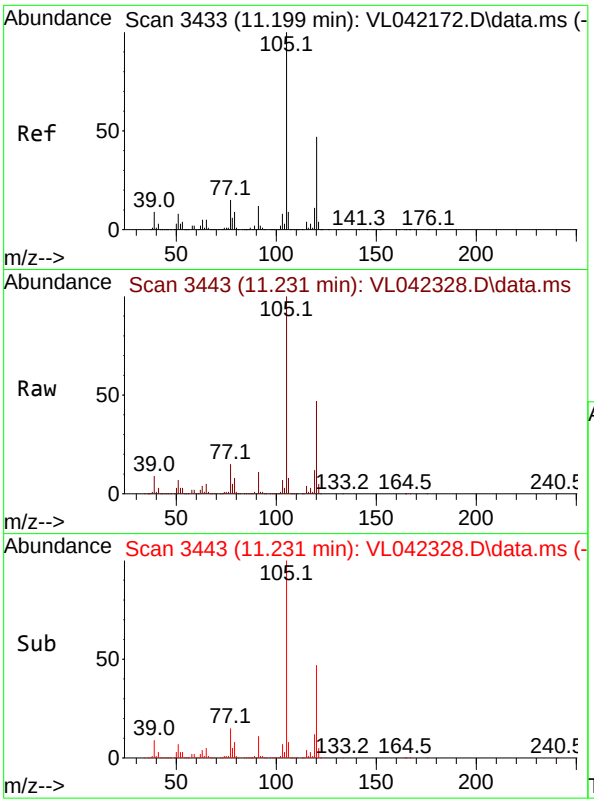


#72
4-Ethyltoluene
Concen: 9.230 ppbv
RT: 11.150 min Scan# 3418
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 652962

Ion	Ratio	Lower	Upper
105	100		
120	30.0	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2

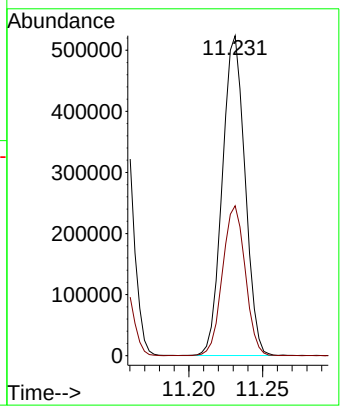




#73
1,3,5-Trimethylbenzene
Concen: 9.055 ppbv
RT: 11.231 min Scan# 34
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 55945

Ion	Ratio	Lower	Upper
105	100		
120	46.8	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

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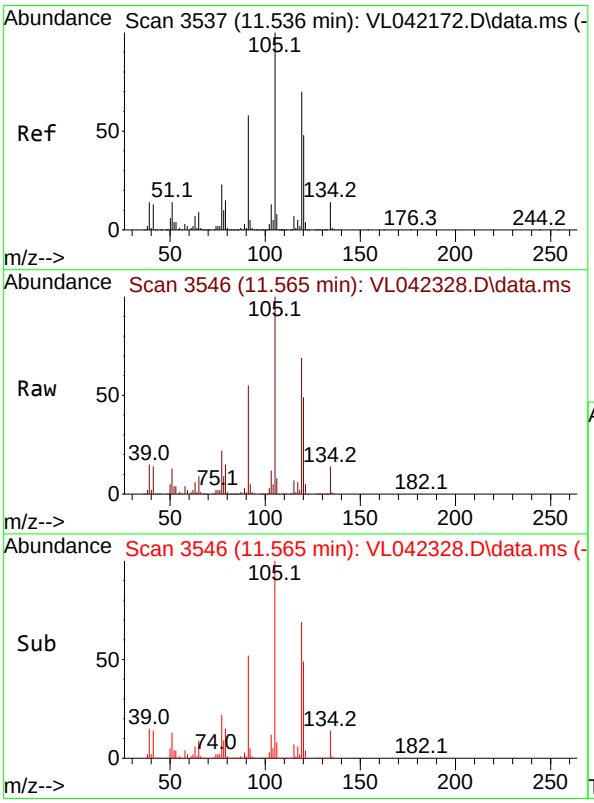
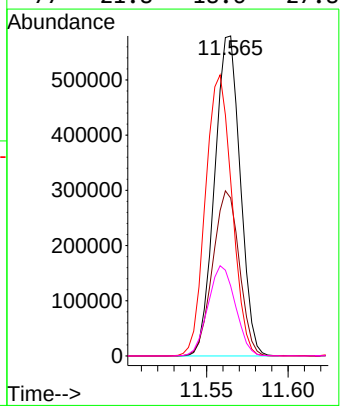
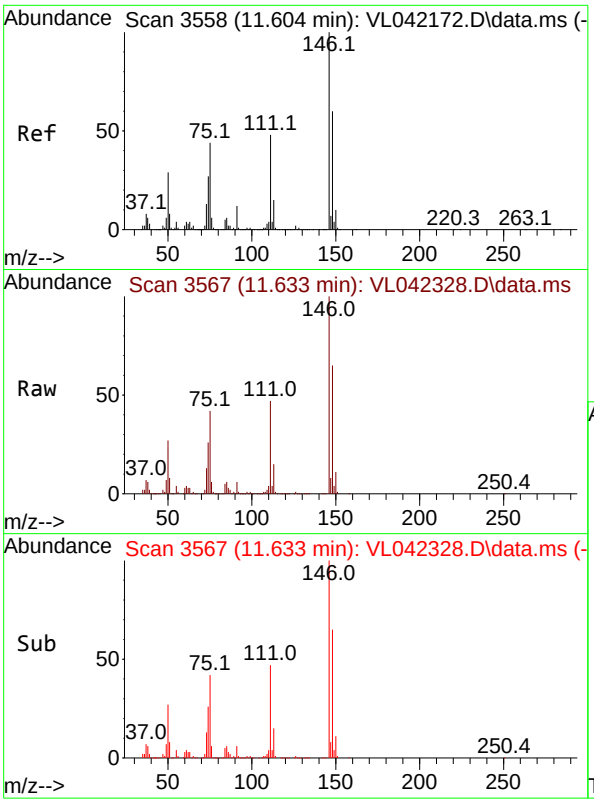


#74
1,2,4-Trimethylbenzene
Concen: 8.883 ppbv
RT: 11.565 min Scan# 3546
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 632271

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	54.7	46.2	69.2
77	21.8	18.6	27.8

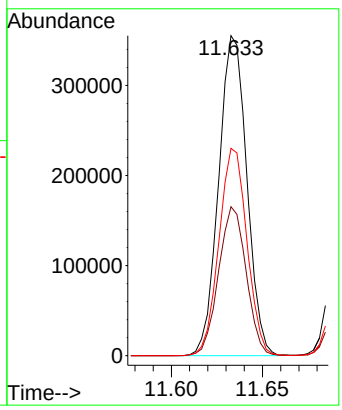




#75
1,3-Dichlorobenzene
Concen: 9.782 ppbv
RT: 11.633 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:146 Resp: 38188

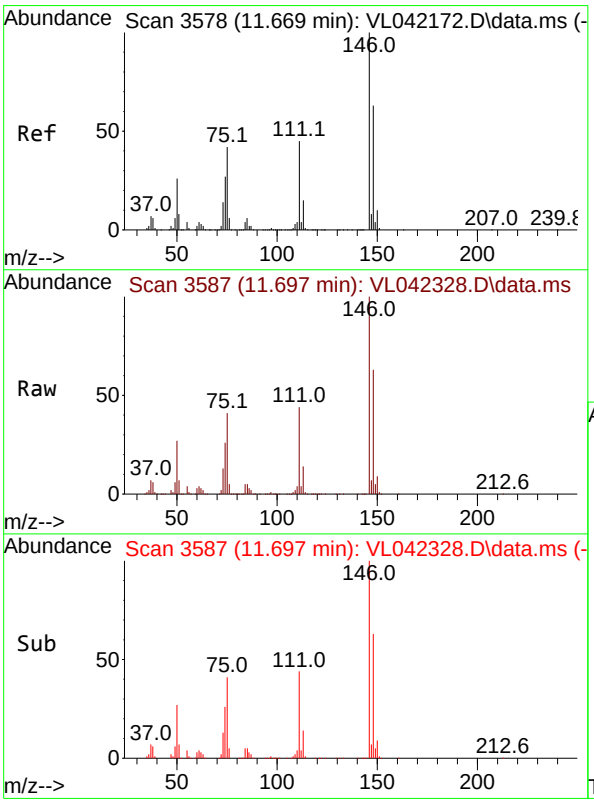
Ion	Ratio	Lower	Upper
146	100		
111	45.7	23.8	71.2
148	64.5	31.9	95.9



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations
APPROVED

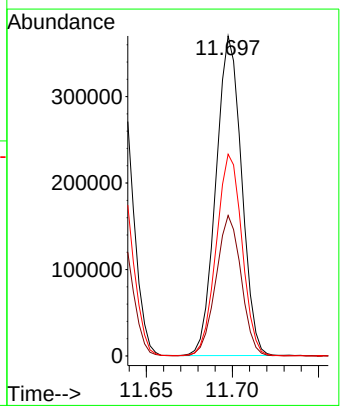
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

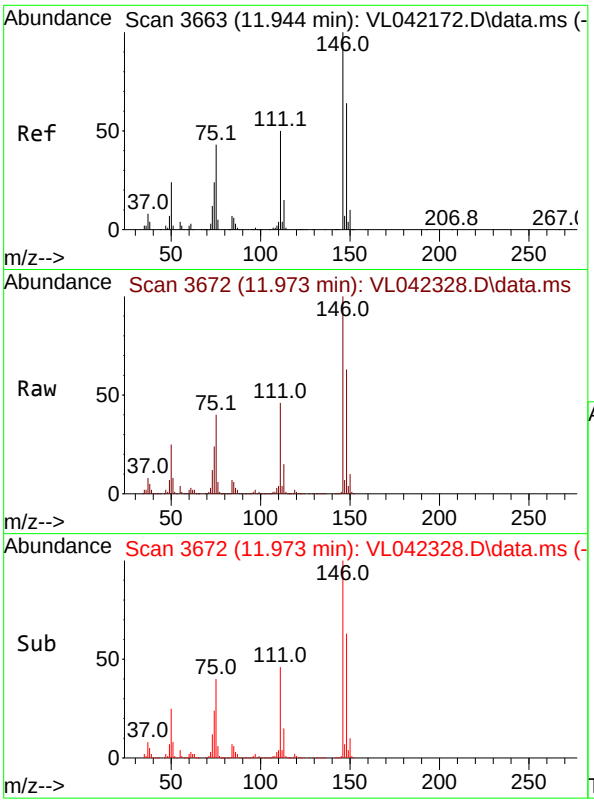


#76
1,4-Dichlorobenzene
Concen: 9.861 ppbv
RT: 11.697 min Scan# 3587
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:146 Resp: 383116

Ion	Ratio	Lower	Upper
146	100		
111	43.4	23.0	69.0
148	63.6	31.9	95.7

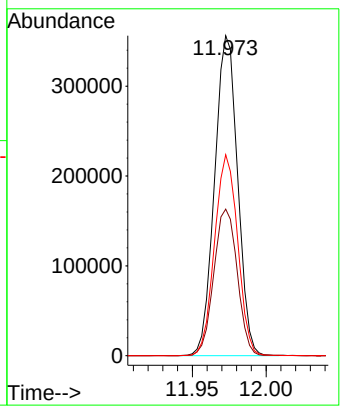




#77
1,2-Dichlorobenzene
Concen: 10.175 ppbv
RT: 11.973 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:146 Resp: 38676

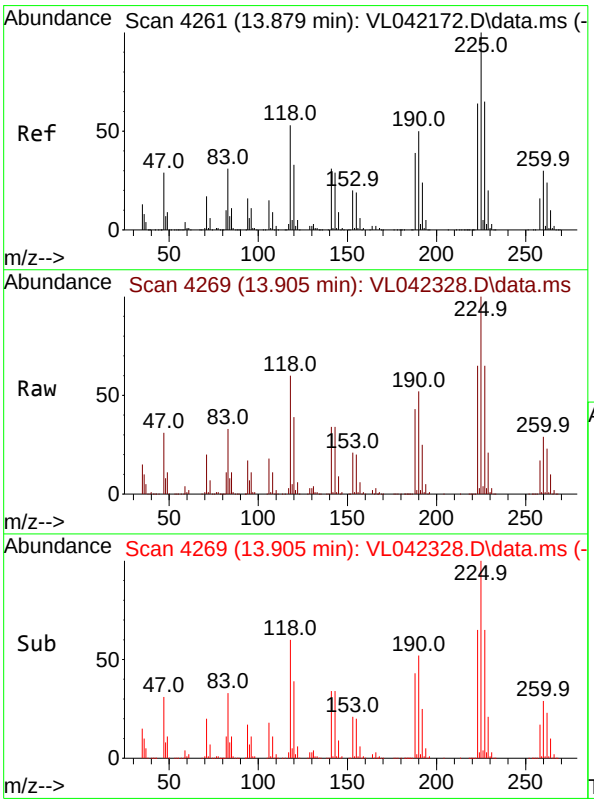
Ion	Ratio	Lower	Upper
146	100		
111	46.7	24.8	74.3
148	63.1	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations
APPROVED

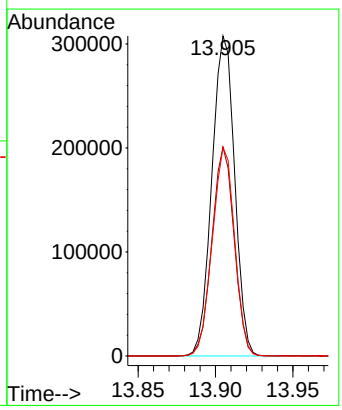
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

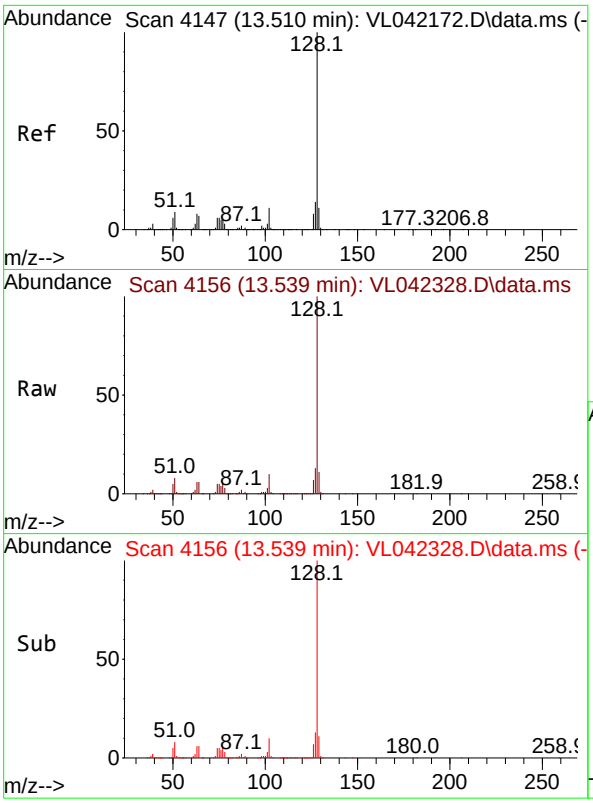


#78
Hexachloro-1,3-Butadiene
Concen: 8.138 ppbv
RT: 13.905 min Scan# 4269
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:225 Resp: 314860

Ion	Ratio	Lower	Upper
225	100		
223	63.7	50.6	76.0
227	64.0	51.2	76.8





#79
Naphthalene
Concen: 9.989 ppbv
RT: 13.539 min Scan# 4
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

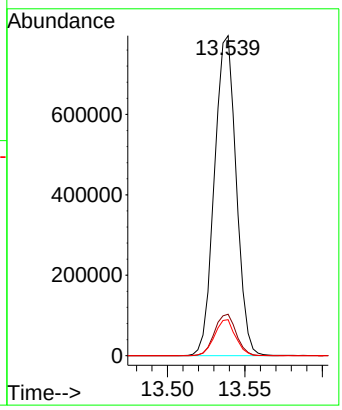
Tgt Ion:128 Resp: 77772

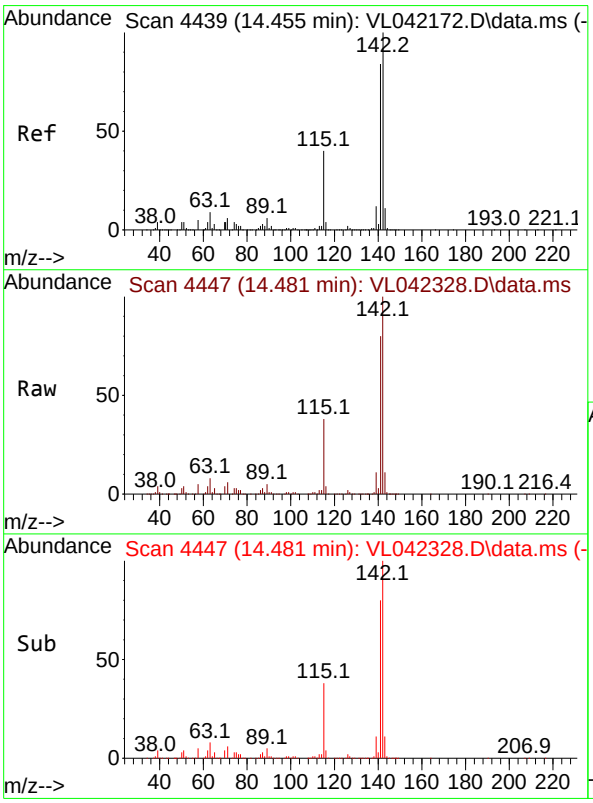
Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.8	16.2
129	11.2	9.0	13.4

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

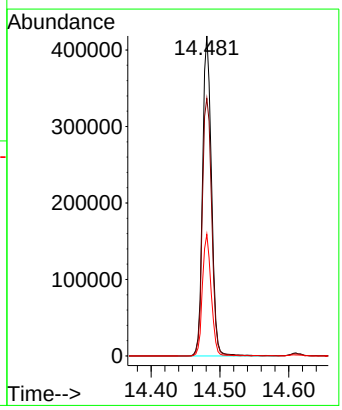


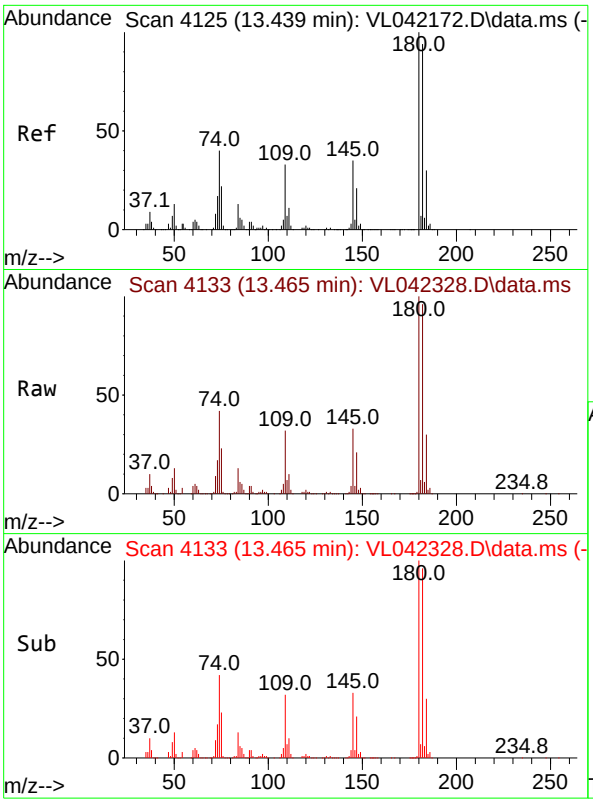


#80
Naphthalene,2-methyl-
Concen: 9.836 ppbv
RT: 14.481 min Scan# 4447
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:142 Resp: 375541

Ion	Ratio	Lower	Upper
142	100		
141	84.5	66.3	99.5
115	37.5	31.6	47.4

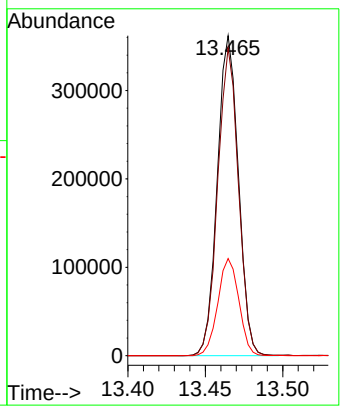




#81
1,2,4-Trichlorobenzene
Concen: 9.551 ppbv
RT: 13.465 min Scan# 4
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:180 Resp: 34301

Ion	Ratio	Lower	Upper
180	100		
182	94.8	75.1	112.7
184	30.3	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/16/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042358.D	1		04/17/25 15:39	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10.3	50.9		1.04	2.47	ug/m3
64-17-5	Ethanol	3.20	6.03		0.60	0.94	ug/m3
74-87-3	Chloromethane	10.1	20.9		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	9.00	23.0		0.030	0.080	ug/m3
74-83-9	Bromomethane	9.20	35.7		0.54	1.94	ug/m3
75-00-3	Chloroethane	10.1	26.6		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	9.70	28.6		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	10.1	56.8		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	10.1	77.4		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	10.2	71.3		0.63	3.49	ug/m3
593-60-2	Bromoethene	9.80	42.9		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	9.80	29.7		0.58	1.52	ug/m3
142-82-5	Heptane	9.20	37.7		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	9.40	23.1		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	9.80	38.9		0.56	1.98	ug/m3
67-64-1	Acetone	8.70	20.7		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	10.2	31.8		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	9.50	34.3		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	8.90	30.9		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	9.70	38.5		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	10.2	41.3		0.53	2.02	ug/m3
110-82-7	Cyclohexane	10.1	34.8		0.76	1.72	ug/m3
78-93-3	2-Butanone	9.80	28.9		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	9.60	60.4		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	10.4	41.2		0.36	1.98	ug/m3
67-66-3	Chloroform	10.2	49.8		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	9.70	52.9		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	10.0	46.7		0.47	2.34	ug/m3
71-43-2	Benzene	10.1	32.3		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	10.4	42.1		0.36	2.02	ug/m3
79-01-6	Trichloroethene	9.30	50.0		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	9.90	45.8		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	10.3	69.0		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	8.80	36.1		0.37	2.05	ug/m3
108-88-3	Toluene	9.80	36.9		0.41	1.88	ug/m3

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042358.D	1		04/17/25 15:39	VL041725

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	9.90	44.9		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	10.1	45.9		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	10.2	55.6		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	10.3	87.8		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	9.90	76.1		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.80	59.7		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	10.0	46.0		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	10.0	43.4		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	19.8	86.0		0.91	4.34	ug/m3
95-47-6	o-Xylene	9.80	42.6		0.52	2.17	ug/m3
100-42-5	Styrene	10.1	43.0		0.47	2.13	ug/m3
75-25-2	Bromoform	9.90	102		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	8.90	61.1		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	9.90	51.3		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	9.60	47.2		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	9.00	44.3		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	9.50	57.1		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	9.40	56.5		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	9.50	57.1		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	9.40	69.8		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	9.10	97.1		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	9.10	20.1		0.29	1.11	ug/m3
91-20-3	Naphthalene	9.00	47.2		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	9.60	47.2		0.59	2.46	ug/m3
110-54-3	Hexane	9.80	34.5		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	9.70	30.4		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	8.70	31.4		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	9.30	38.1		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.1			70 (65) - 130 (135)	101%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	122000		2.79			
540-36-3	1,4-Difluorobenzene	352000		3.965			
3114-55-4	Chlorobenzene-d5	322000		8.888			

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Fax : 908 789 8922

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0417ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0417ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042358.D	1		04/17/25 15:39	VL041725

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	122375	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	352201	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	321521	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	266757	10.096	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	223505	10.337	ppbv	97
3) Chlorodifluoromethane	1.476	51	206172	10.014	ppbv	100
4) Chloromethane	1.535	50	86675	10.130	ppbv	98
5) Vinyl Chloride	1.583	62	83419	8.956	ppbv	98
6) Bromomethane	1.670	94	36951	9.235	ppbv	83
7) Chloroethane	1.706	64	33936	10.075	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	189924	10.231	ppbv	95
9) Propene	1.486	41	88088	9.395	ppbv	98
10) Heptane	4.985	43	243501	9.244	ppbv	99
11) Trichlorofluoromethane	1.881	101	206645	10.050	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.140	101	169501	10.083	ppbv	98
13) Ethanol	1.722	45	4837	3.246	ppbv	88
14) Bromoethene	1.784	108	62214	9.818	ppbv	98
15) Acetone	1.836	43	175153	8.743	ppbv	100
16) 1,3-Butadiene	1.609	39	86965	9.076	ppbv	96
17) tert-Butyl alcohol	2.043	59	242154	9.754	ppbv	100
18) 1,1-Dichloroethene	2.036	96	77247	9.836	ppbv	99
19) Isopropyl Alcohol	1.887	45	104123	9.356	ppbv	94
20) Methylene Chloride	2.062	84	69548	8.865	ppbv	91
21) Allyl Chloride	2.098	41	134221	9.704	ppbv	99
22) trans-1,2-Dichloroethene	2.344	96	86323	9.653	ppbv	97
23) Vinyl Acetate	2.467	43	68337	8.427	ppbv #	97
24) 1,1-Dichloroethane	2.412	63	173238	10.199	ppbv	99
25) Ethyl Acetate	2.839	43	488686	9.894	ppbv	100
26) Hexane	2.829	57	195124	9.761	ppbv	97
27) Carbon Disulfide	2.153	76	218345	10.202	ppbv	97
28) Methyl tert-Butyl Ether	2.444	73	124554	9.510	ppbv	96
29) Chloroform	2.852	83	289294	10.239	ppbv	99
30) Cyclohexane	3.862	84	163017	10.088	ppbv	100
31) cis-1,2-Dichloroethene	2.726	61	198108	10.424	ppbv	98
32) 1,1,1-Trichloroethane	3.373	97	309460	9.729	ppbv	99
34) 2-Butanone	2.561	43	272600	9.787	ppbv	99
35) Carbon Tetrachloride	3.768	117	305245	9.576	ppbv	92
36) Benzene	3.661	78	383239	10.088	ppbv	98
37) 1,2-Dichloroethane	3.224	62	236611	10.377	ppbv	99
38) Trichloroethene	4.558	130	153596	9.251	ppbv	98
39) 1,2-Dichloropropane	4.321	63	139669	9.866	ppbv	95
40) 1,4-Dioxane	4.590	88	67808	8.716	ppbv #	95
41) Tetrahydrofuran	3.059	42	157777	9.715	ppbv	99
42) Bromodichloromethane	4.496	83	327652	10.326	ppbv	98
43) Methyl Methacrylate	4.888	69	159292	9.304	ppbv	95
44) 2,2,4-Trimethylpentane	4.648	57	657377	10.019	ppbv	99
45) t-1,3-Dichloropropene	6.422	75	172514	9.864	ppbv	91

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	216901	10.133	ppbv		91
47) 1,1,2-Trichloroethane	6.590	97	146547	10.161	ppbv		96
48) Dibromochloromethane	7.396	129	261470	10.261	ppbv		100
49) Bromoform	9.487	173	221372	9.936	ppbv		99
50) 4-Methyl-2-Pentanone	5.758	43	407804	8.810	ppbv		99
51) 2-Hexanone	7.441	43	332646	8.013	ppbv	#	98
52) Tetrachloroethene	8.231	164	128670	8.763	ppbv		96
53) Toluene	6.943	91	447581	9.818	ppbv		100
54) 1,2-Dibromoethane	7.658	107	204328	9.899	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.930	131	199945	10.275	ppbv		96
57) Chlorobenzene	8.927	112	335143	10.022	ppbv		99
58) Ethyl Benzene	9.361	91	635446	9.975	ppbv		97
59) m/p-Xylene	9.555	91	1016404m	19.806	ppbv		
60) o-Xylene	9.969	91	506535	9.802	ppbv		99
61) Styrene	9.875	104	248022	10.055	ppbv		99
62) Isopropylbenzene	10.545	105	745571	9.827	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.969	83	298581	8.916	ppbv		100
64) n-propylbenzene	10.995	120	188310	9.875	ppbv		95
65) tert-Butylbenzene	11.536	119	668687	9.589	ppbv		93
66) Benzyl Chloride	11.620	91	69058	9.012	ppbv		96
67) sec-Butylbenzene	11.772	105	930426	9.592	ppbv		100
69) p-Isopropyltoluene	11.931	119	795532	9.441	ppbv		99
70) n-Butylbenzene	12.287	91	846427	9.644	ppbv		100
71) 2-Chlorotoluene	10.905	91	591154	9.934	ppbv		99
72) 4-Ethyltoluene	11.131	105	606879	9.606	ppbv		99
73) 1,3,5-Trimethylbenzene	11.209	105	533060	9.557	ppbv		98
74) 1,2,4-Trimethylbenzene	11.542	105	584747	8.976	ppbv		96
75) 1,3-Dichlorobenzene	11.613	146	320811	9.474	ppbv		99
76) 1,4-Dichlorobenzene	11.675	146	319376	9.384	ppbv		100
77) 1,2-Dichlorobenzene	11.953	146	311460	9.459	ppbv		99
78) Hexachloro-1,3-Butadiene	13.886	225	303379	9.124	ppbv		99
79) Naphthalene	13.517	128	701010	8.999	ppbv		99
80) Naphthalene,2-methyl-	14.462	142	369891	8.331	ppbv		98
81) 1,2,4-Trichlorobenzene	13.445	180	315002	9.417	ppbv		99

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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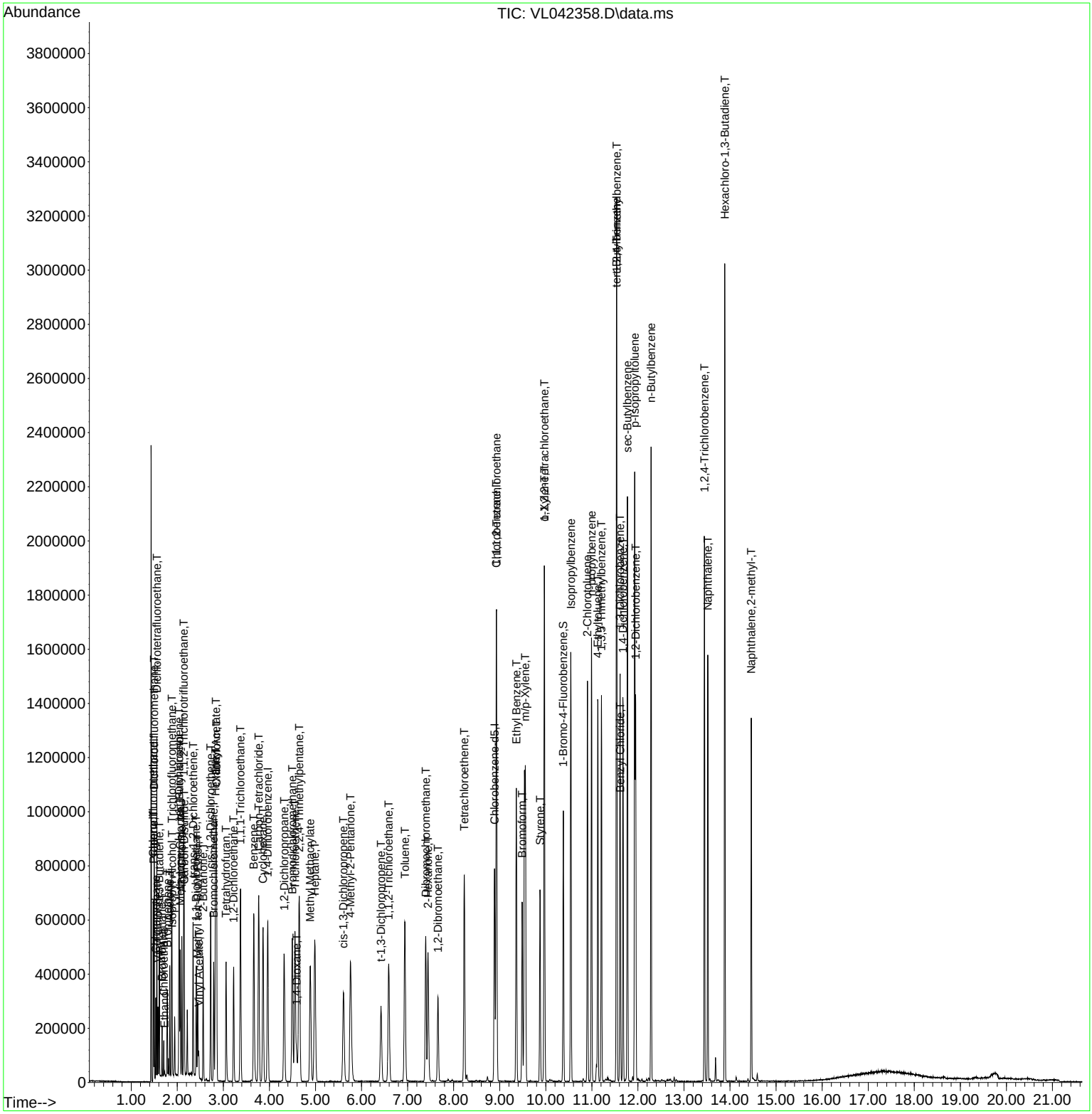
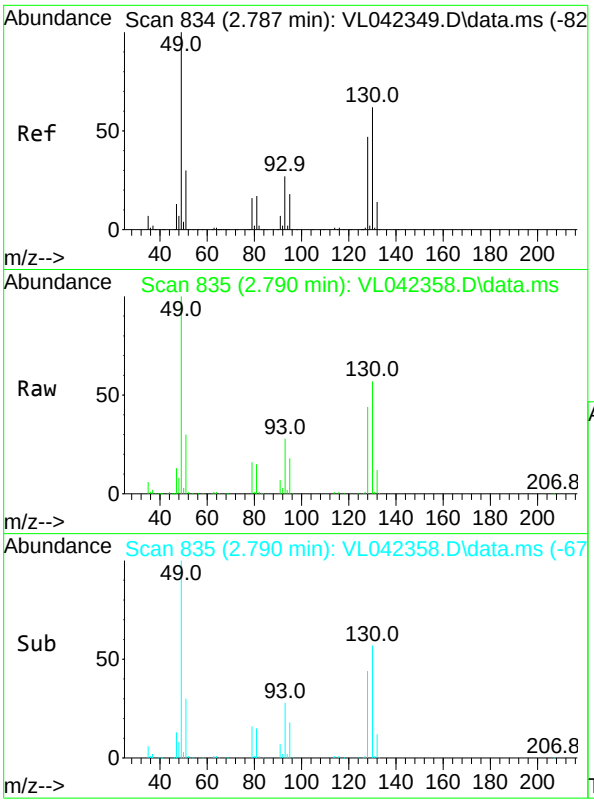
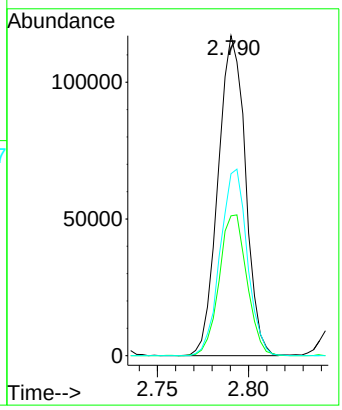




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 49 Resp: 12237

Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.8	68.4
130	57.6	29.3	88.0



Instrument :
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ClientSampleId :
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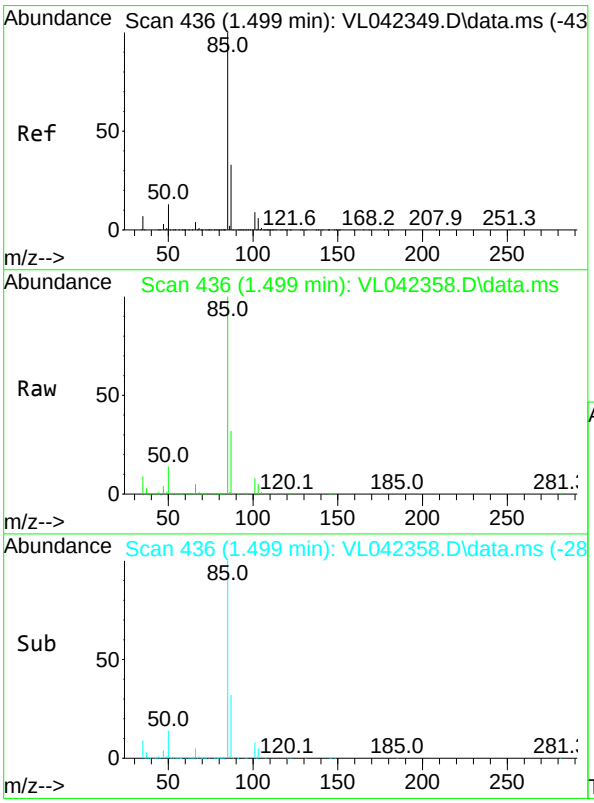
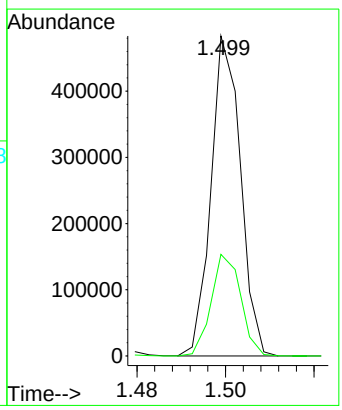
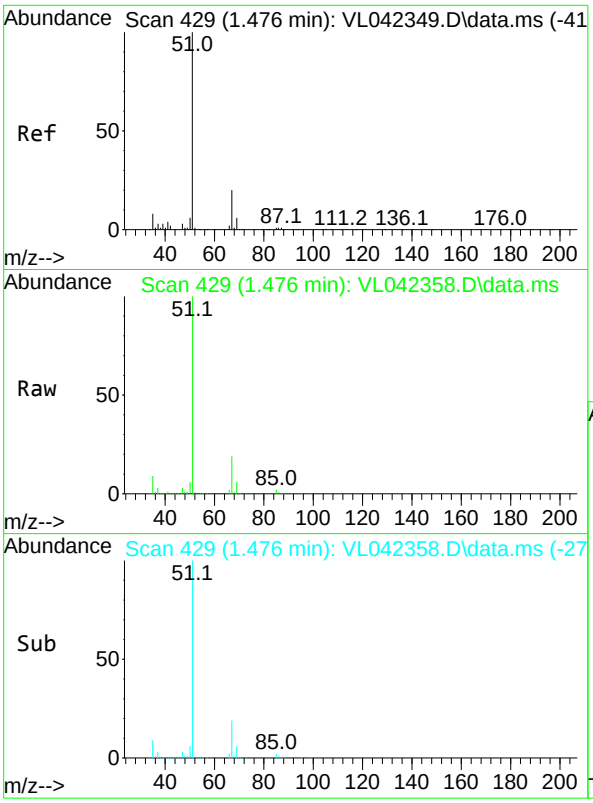


#2
Dichlorodifluoromethane
Concen: 10.337 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 85 Resp: 223505

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.6	39.8

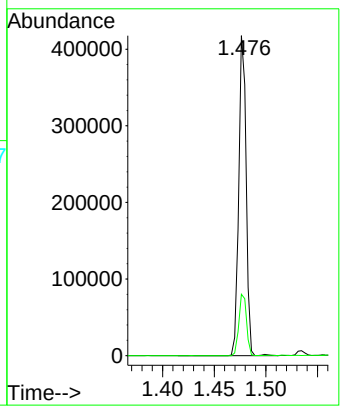




#3
Chlorodifluoromethane
Concen: 10.014 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 51 Resp: 20617

Ion	Ratio	Lower	Upper
51	100		
67	20.2	16.2	24.4



Instrument :
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ClientSampleId :
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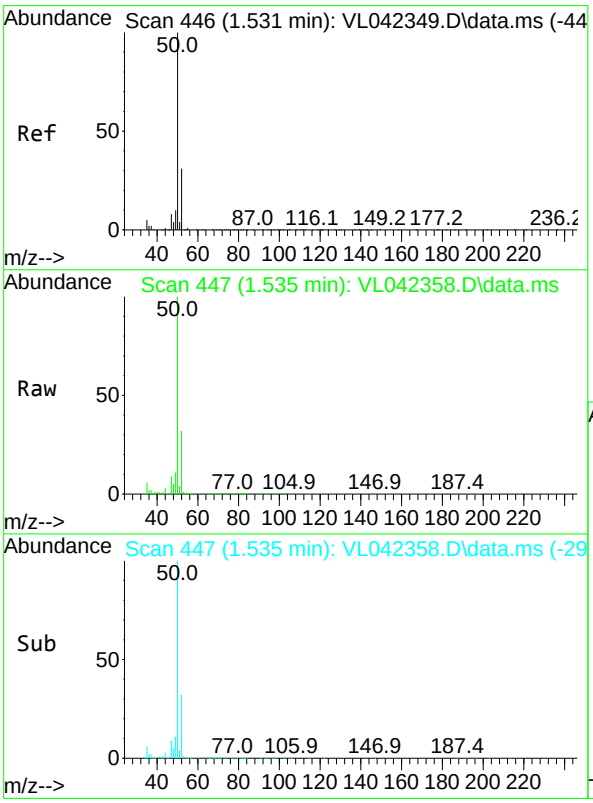
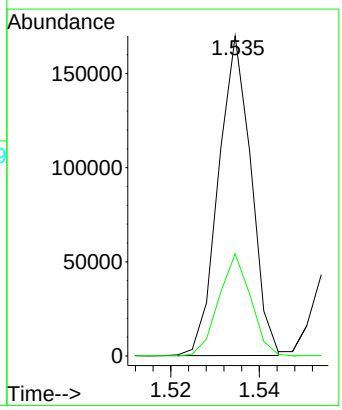
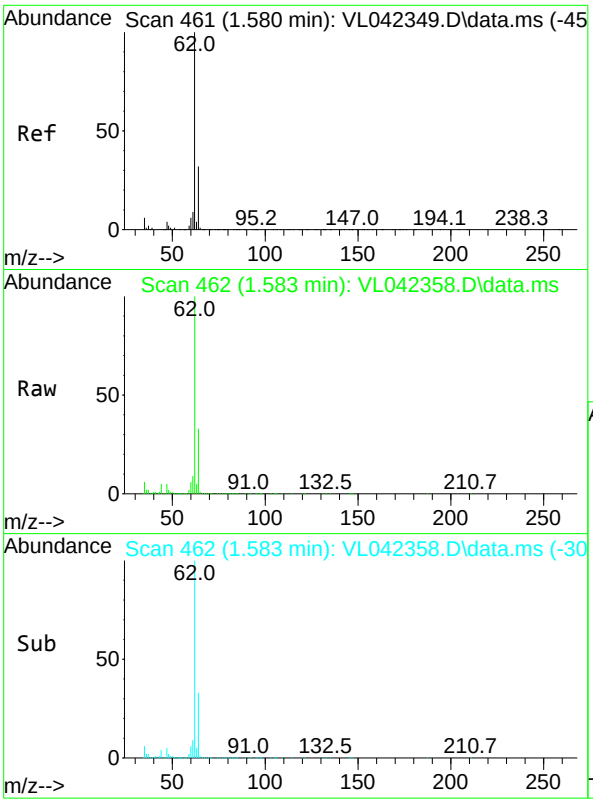


#4
Chloromethane
Concen: 10.130 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 50 Resp: 86675

Ion	Ratio	Lower	Upper
50	100		
52	32.1	24.7	37.1

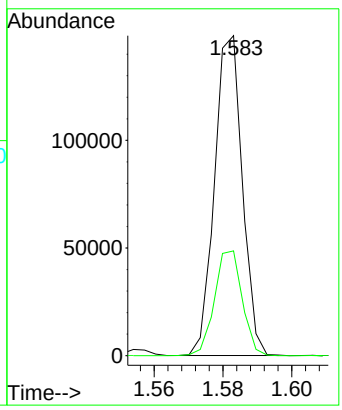




#5
Vinyl Chloride
Concen: 8.956 ppbv
RT: 1.583 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 62 Resp: 8341

Ion	Ratio	Lower	Upper
62	100		
64	32.8	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
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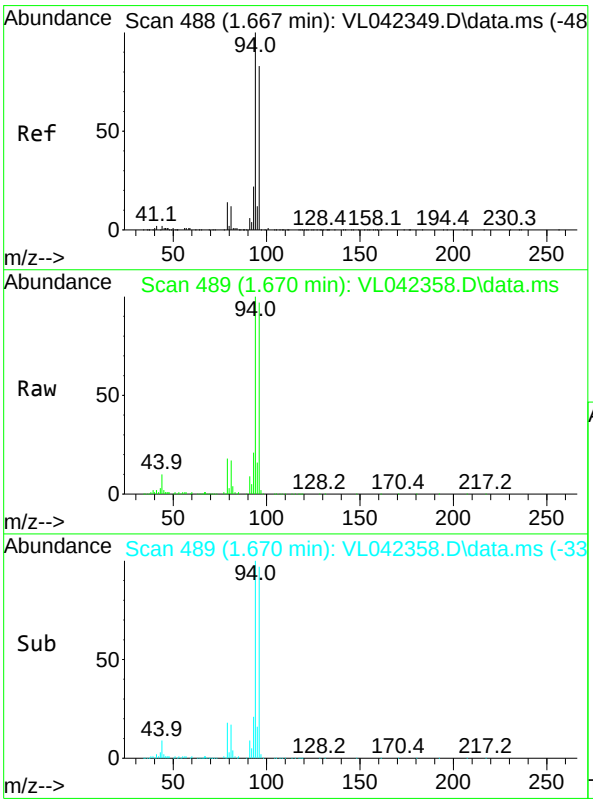
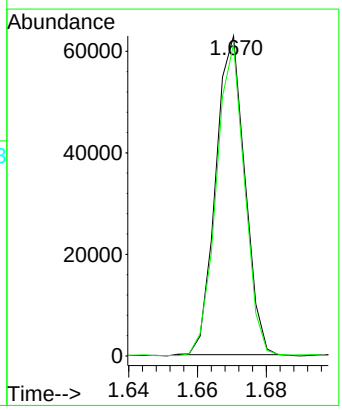
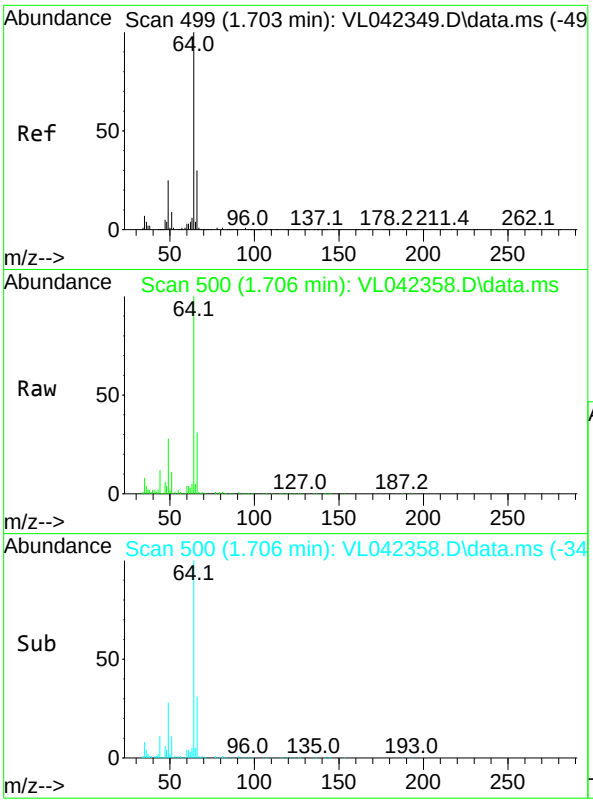


#6
Bromomethane
Concen: 9.235 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 94 Resp: 36951

Ion	Ratio	Lower	Upper
94	100		
96	97.7	66.2	99.2

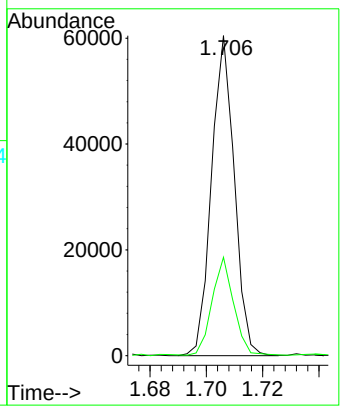




#7
Chloroethane
Concen: 10.075 ppbv
RT: 1.706 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 64 Resp: 3393(

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	37.0



Instrument :
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ClientSampleId :
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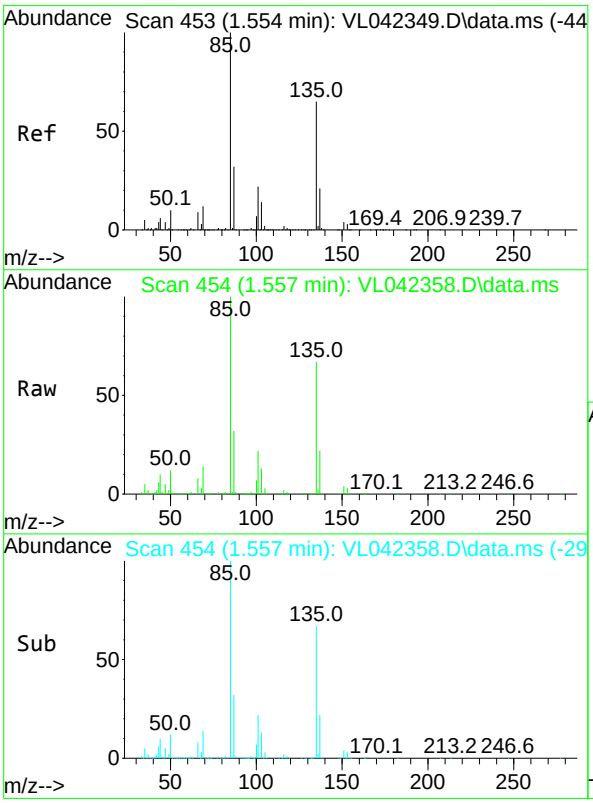
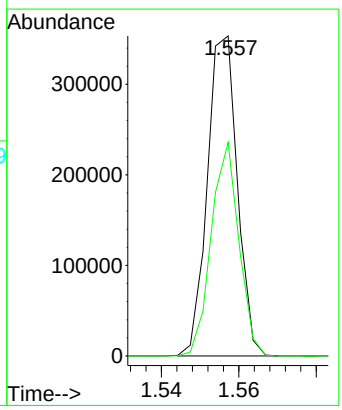
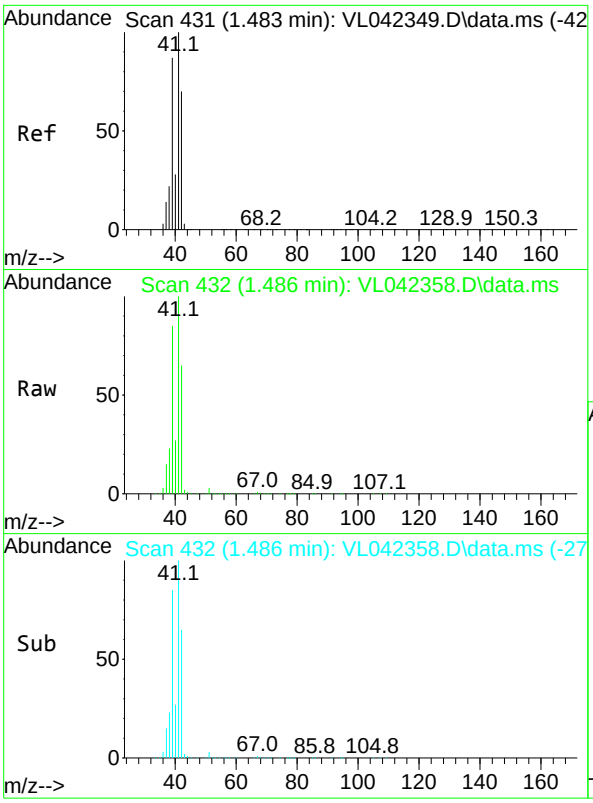


#8
Dichlorotetrafluoroethane
Concen: 10.231 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 85 Resp: 189924

Ion	Ratio	Lower	Upper
85	100		
135	61.4	52.2	78.2

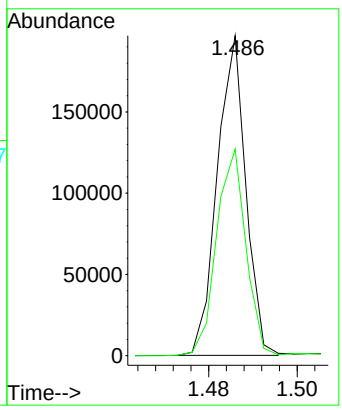




#9
Propene
Concen: 9.395 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 41 Resp: 8808

Ion	Ratio	Lower	Upper
41	100		
42	68.4	56.2	84.4



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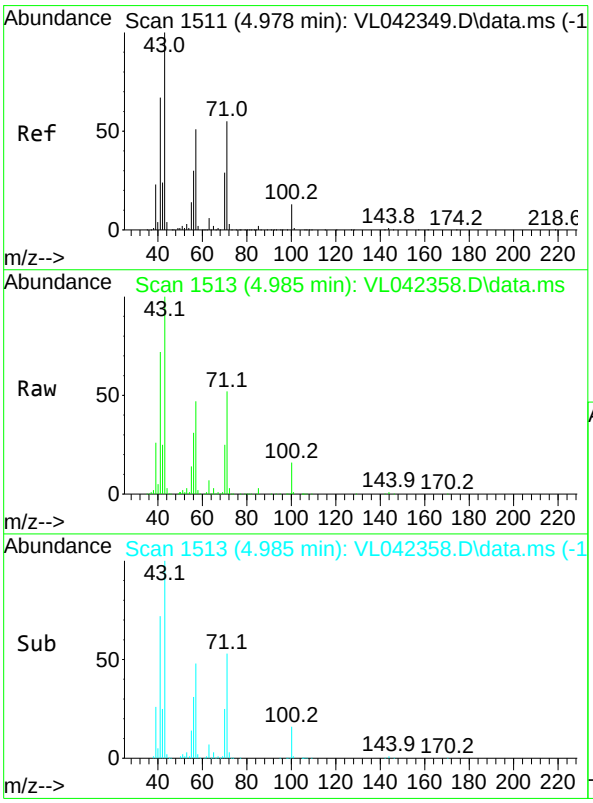
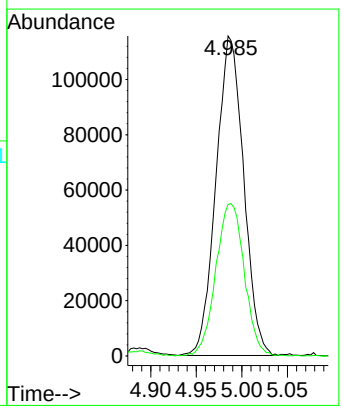
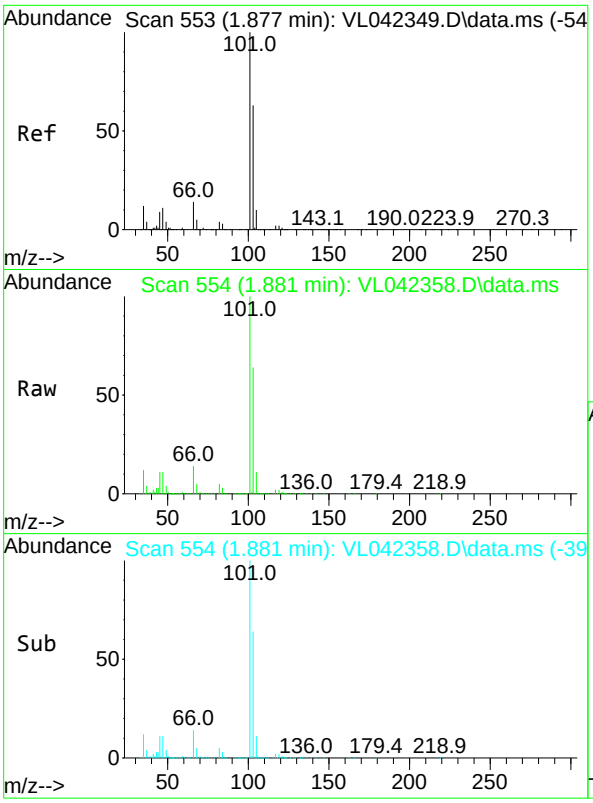


#10
Heptane
Concen: 9.244 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 243501

Ion	Ratio	Lower	Upper
43	100		
57	49.4	39.9	59.9

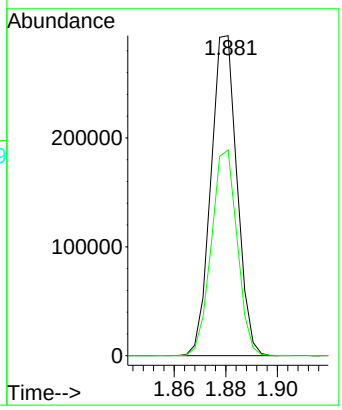




#11
Trichlorofluoromethane
Concen: 10.050 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:101 Resp: 20664

Ion	Ratio	Lower	Upper
101	100		
103	64.3	50.1	75.1



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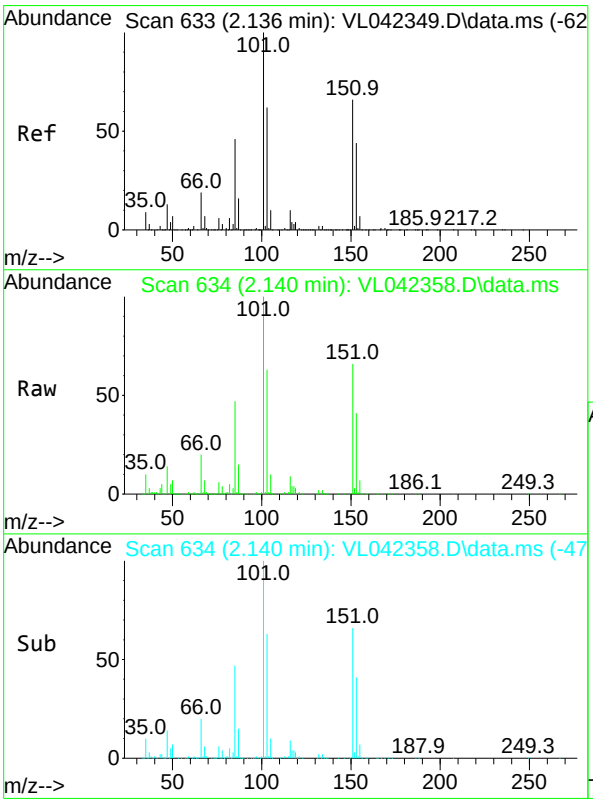
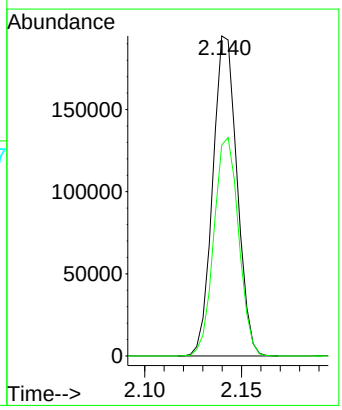
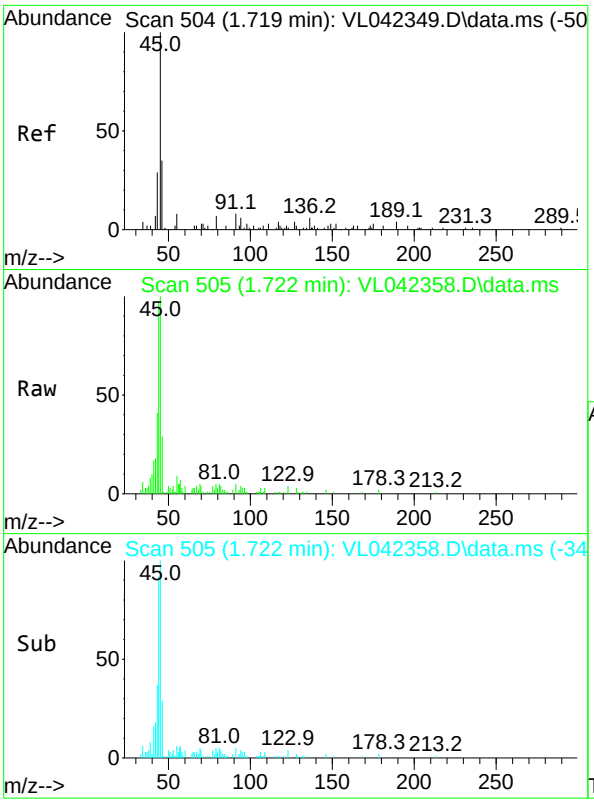


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.083 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:101 Resp: 169501

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.0	85.6





#13
Ethanol
Concen: 3.246 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 45 Resp: 483

Ion	Ratio	Lower	Upper
45	100		
46	45.8	21.9	87.7

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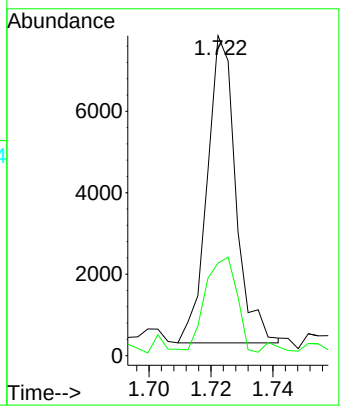
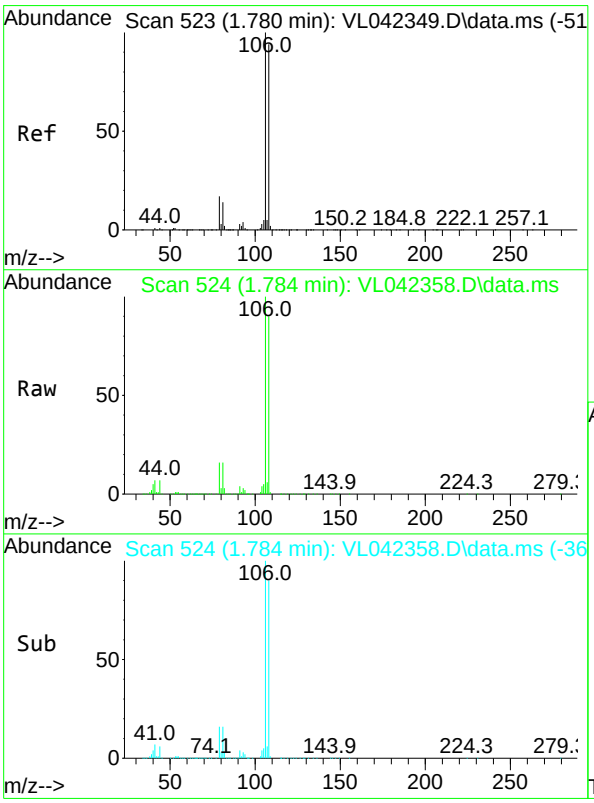
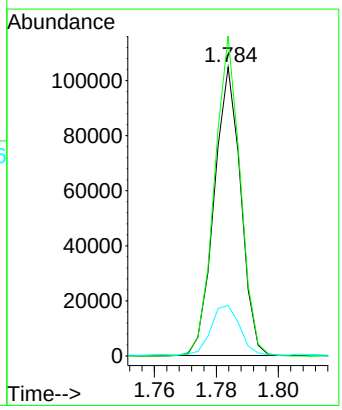


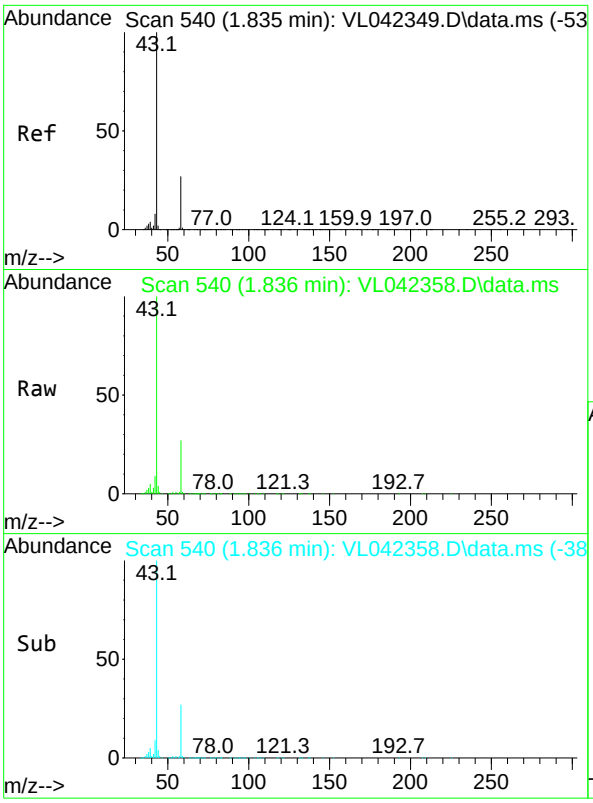


#14
Bromoethene
Concen: 9.818 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:108 Resp: 62214

Ion	Ratio	Lower	Upper
108	100		
106	108.2	85.9	128.9
79	20.6	13.9	20.9

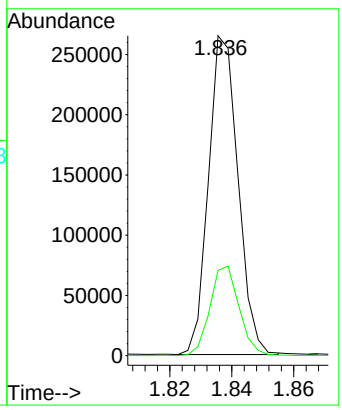




#15
Acetone
Concen: 8.743 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 17515

Ion	Ratio	Lower	Upper
43	100		
58	27.9	22.4	33.6



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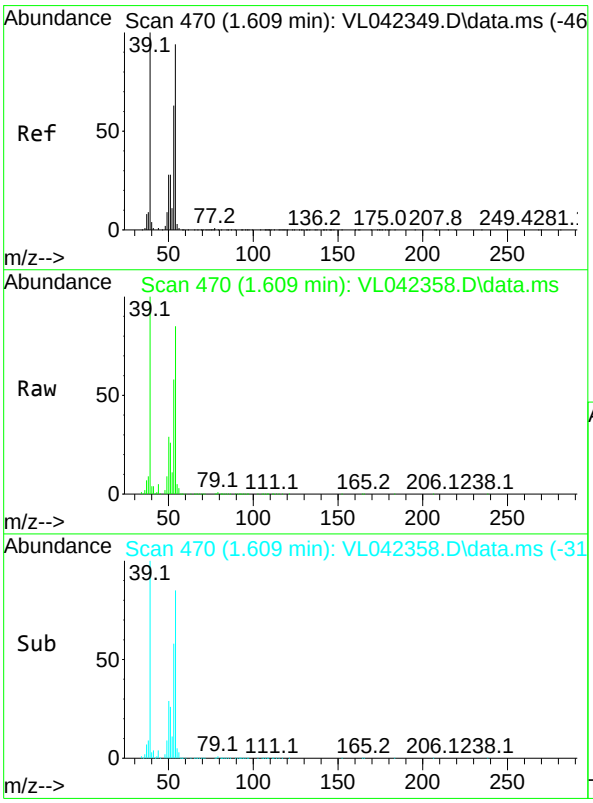
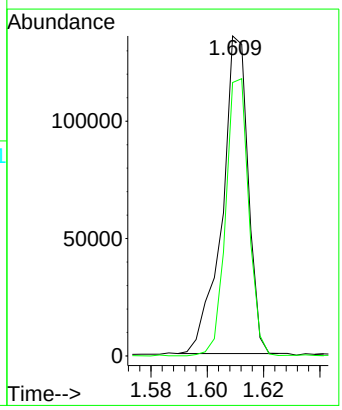
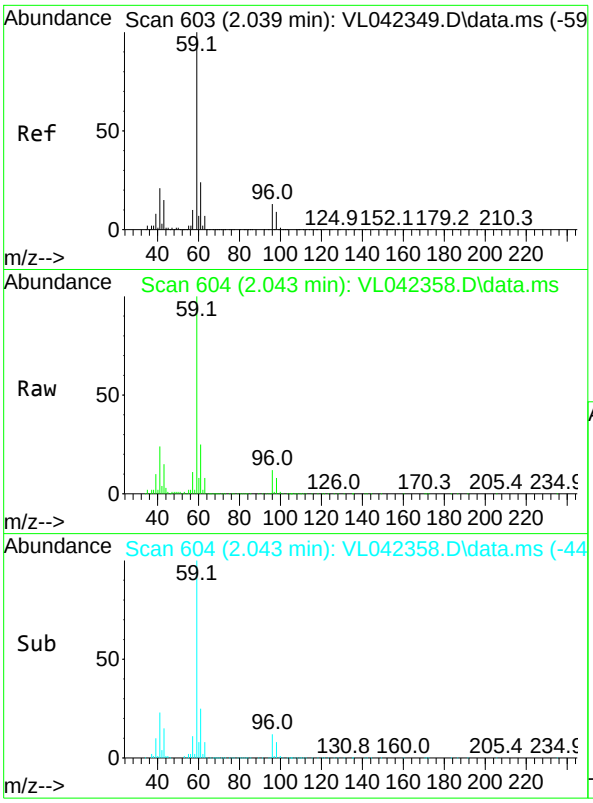


#16
1,3-Butadiene
Concen: 9.076 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 39 Resp: 86965

Ion	Ratio	Lower	Upper
39	100		
54	77.9	64.9	97.3

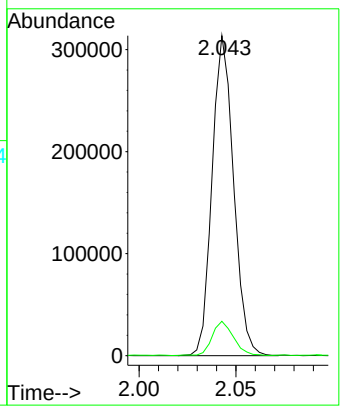




#17
tert-Butyl alcohol
Concen: 9.754 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 59 Resp: 24215

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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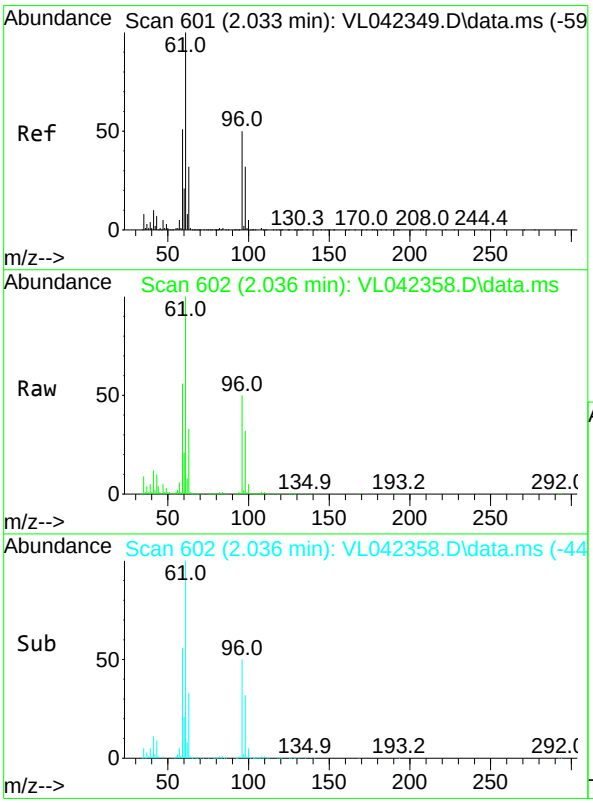
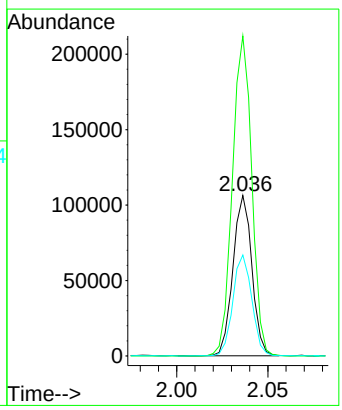
Supervised By :Mahesh Dadoda 04/18/2025

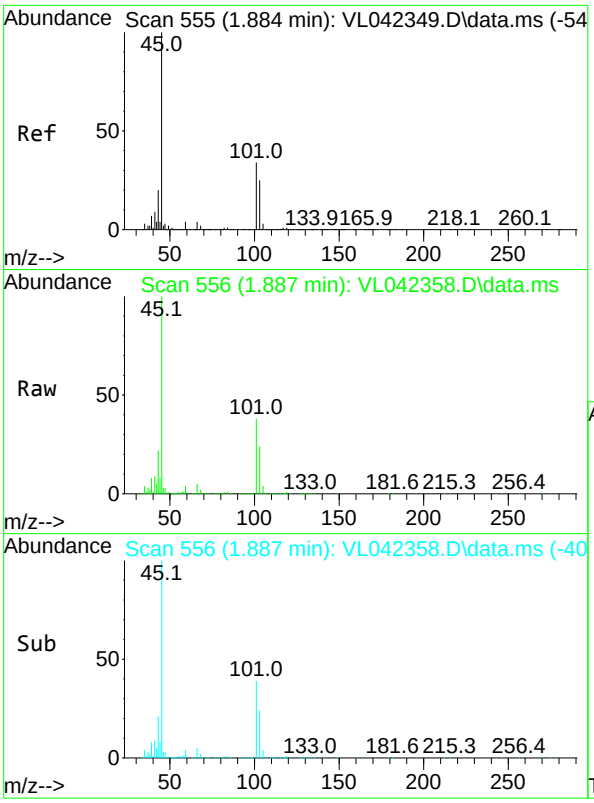


#18
1,1-Dichloroethene
Concen: 9.836 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 96 Resp: 77247

Ion	Ratio	Lower	Upper
96	100		
61	199.6	160.2	240.2
98	63.0	51.0	76.4

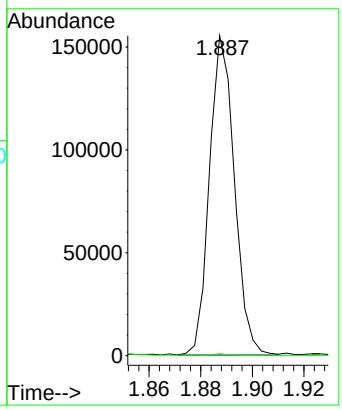




#19
Isopropyl Alcohol
Concen: 9.356 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 45 Resp: 10412

Ion	Ratio	Lower	Upper
45	100		
58	46.9	34.5	51.7



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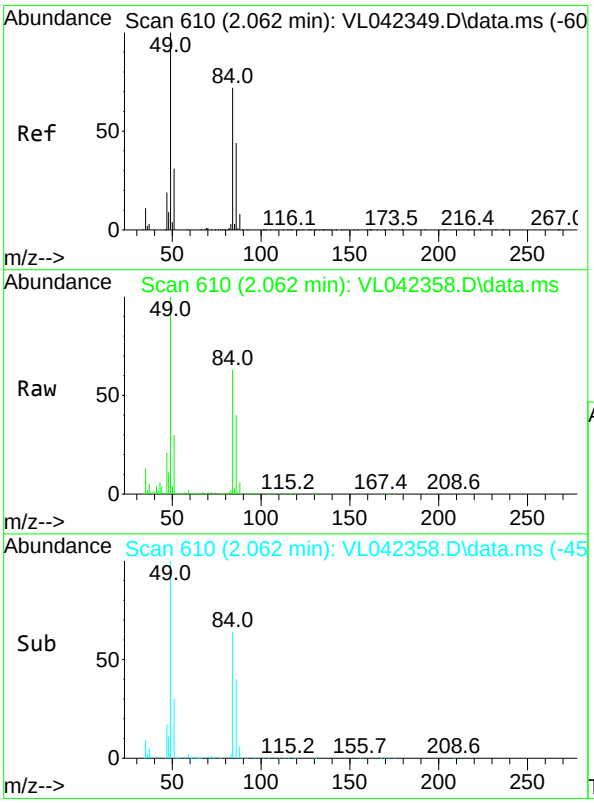
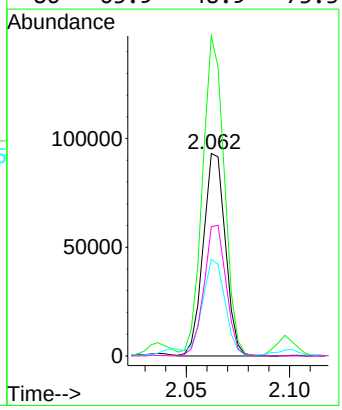
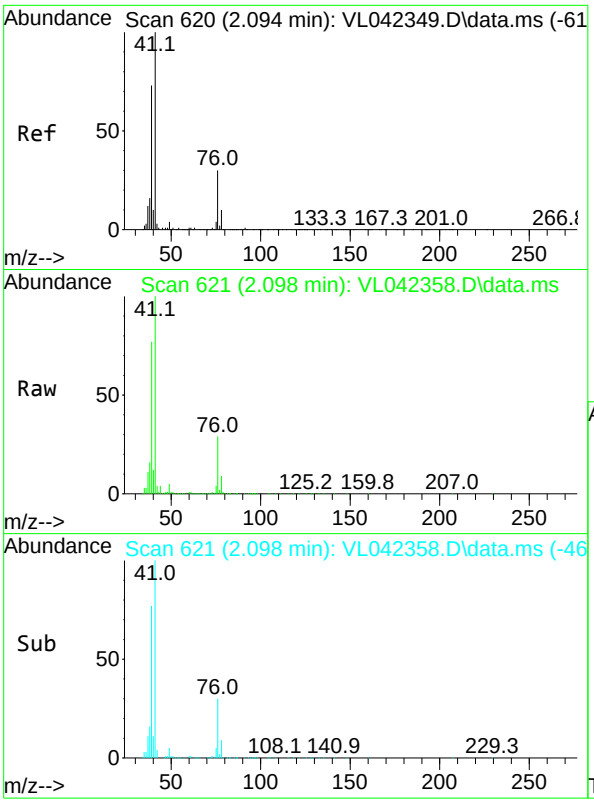


#20
Methylene Chloride
Concen: 8.865 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 84 Resp: 69548

Ion	Ratio	Lower	Upper
84	100		
49	156.3	111.6	167.4
51	45.9	35.1	52.7
86	63.9	48.9	73.3

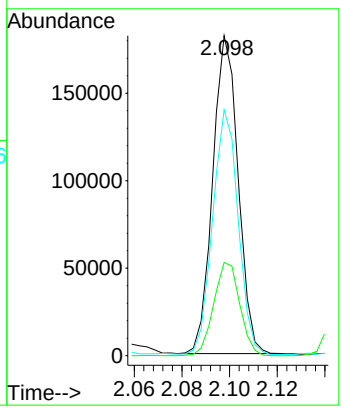




#21
Allyl Chloride
Concen: 9.704 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 41 Resp: 13422

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.8	37.2
39	76.8	60.6	90.8



Instrument :
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ClientSampleId :
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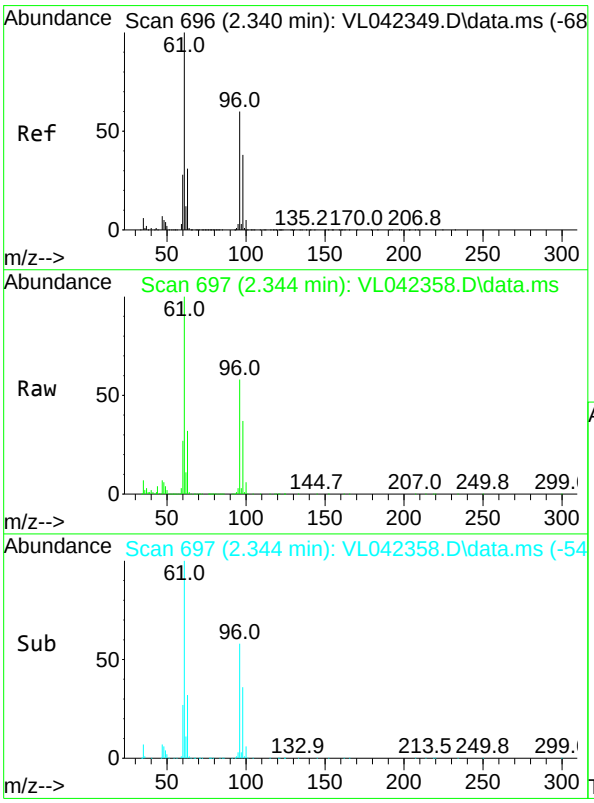
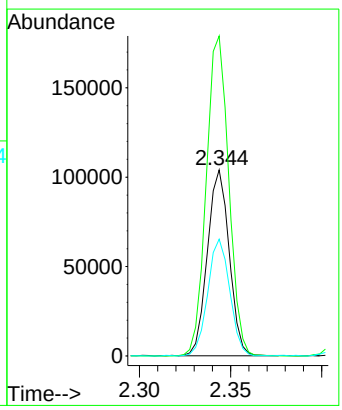
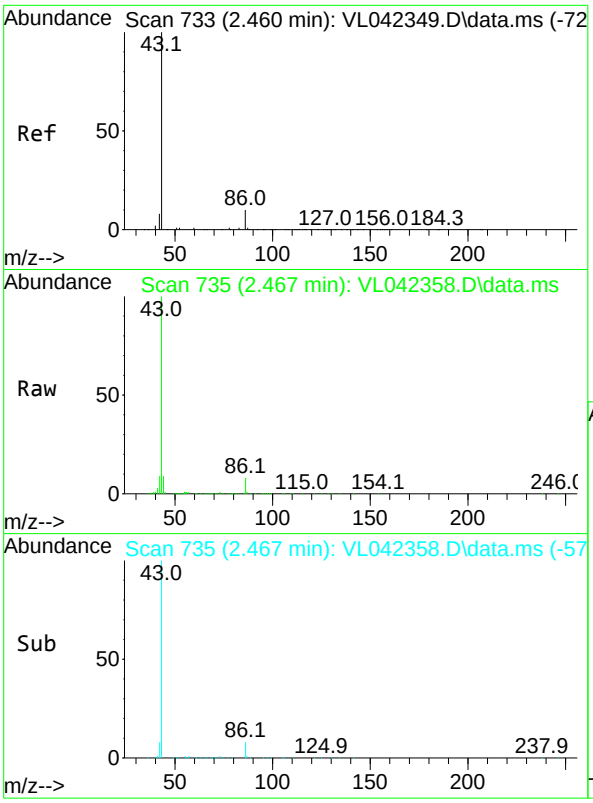


#22
trans-1,2-Dichloroethene
Concen: 9.653 ppbv
RT: 2.344 min Scan# 697
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 96 Resp: 86323

Ion	Ratio	Lower	Upper
96	100		
61	172.1	133.7	200.5
98	62.9	50.3	75.5

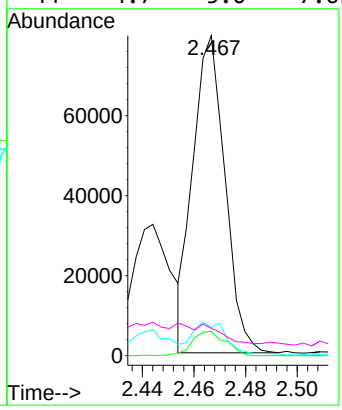




#23
Vinyl Acetate
Concen: 8.427 ppbv
RT: 2.467 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 6833

Ion	Ratio	Lower	Upper
43	100		
86	7.7	6.5	9.7
42	8.3	7.8	11.8
44	4.7	5.0	7.6#



Instrument :
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ClientSampleId :
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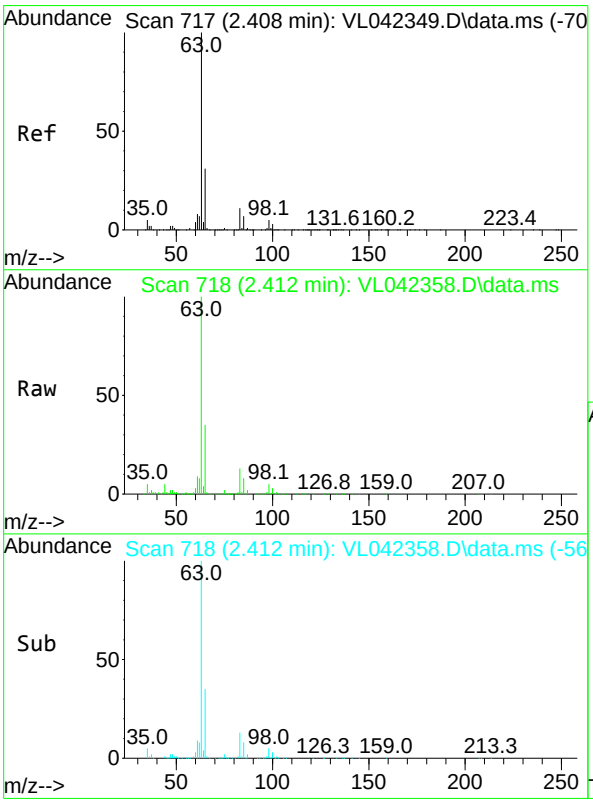
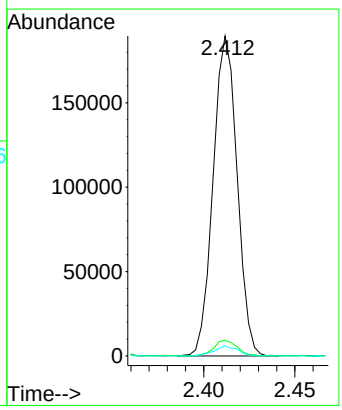
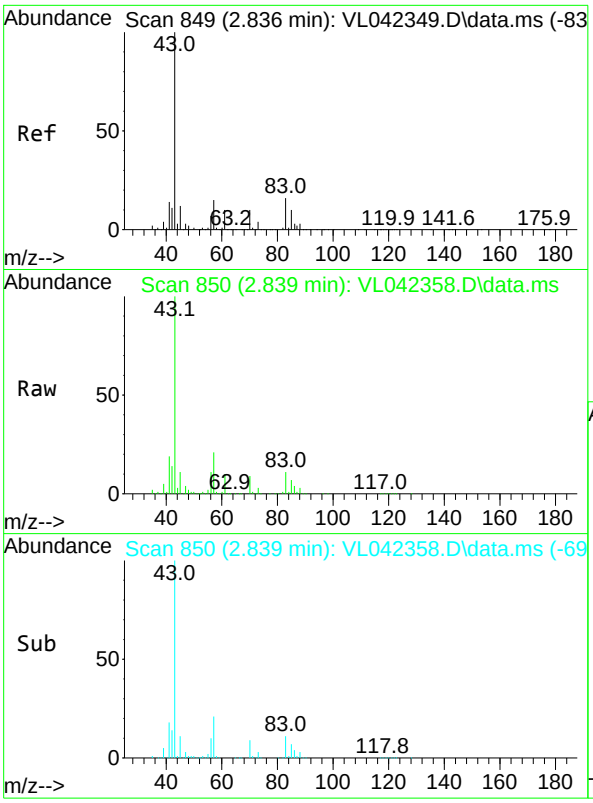


#24
1,1-Dichloroethane
Concen: 10.199 ppbv
RT: 2.412 min Scan# 718
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 63 Resp: 173238

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.1	1.6	4.8

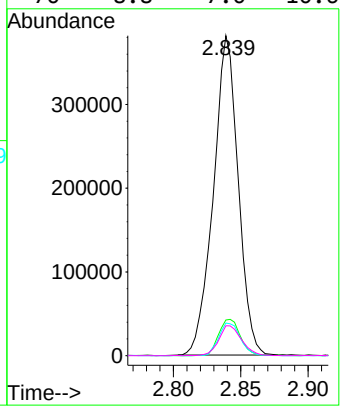




#25
Ethyl Acetate
Concen: 9.894 ppbv
RT: 2.839 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 48868

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.3	12.5
61	9.0	7.3	10.9
70	8.8	7.0	10.6



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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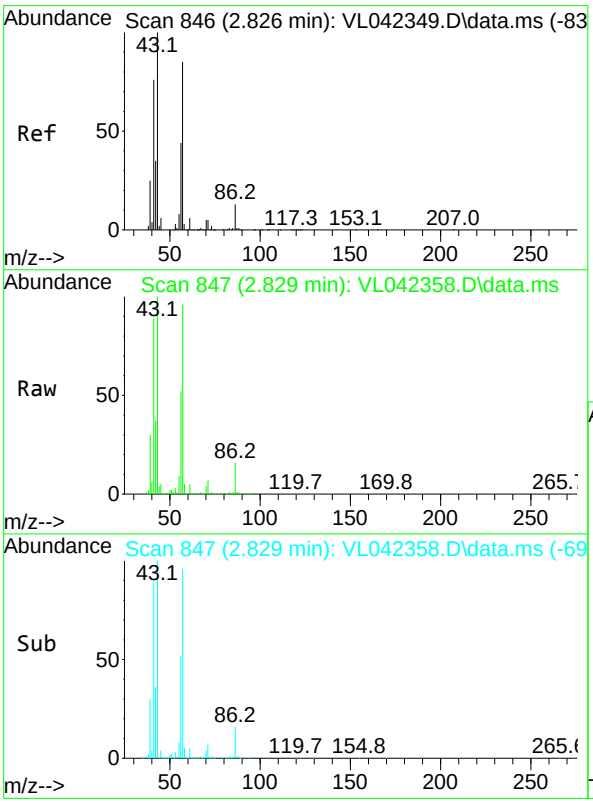
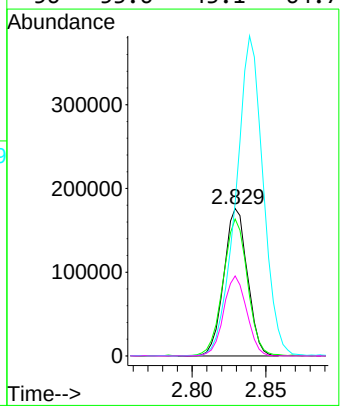
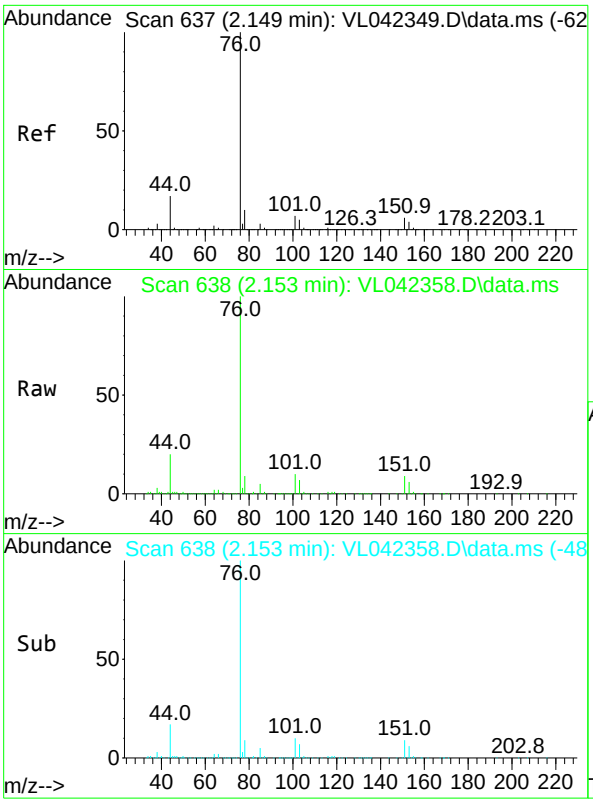


#26
Hexane
Concen: 9.761 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 57 Resp: 195124

Ion	Ratio	Lower	Upper
57	100		
41	96.9	77.9	116.9
43	251.9	208.4	312.6
56	53.6	43.1	64.7

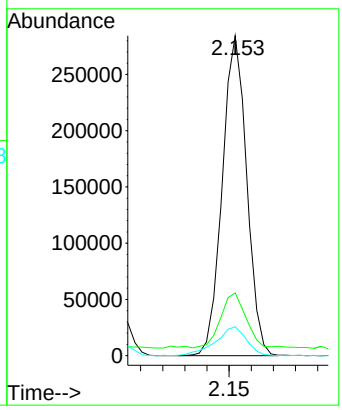




#27
Carbon Disulfide
Concen: 10.202 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 76 Resp: 21834

Ion	Ratio	Lower	Upper
76	100		
44	21.6	15.5	23.3
78	11.4	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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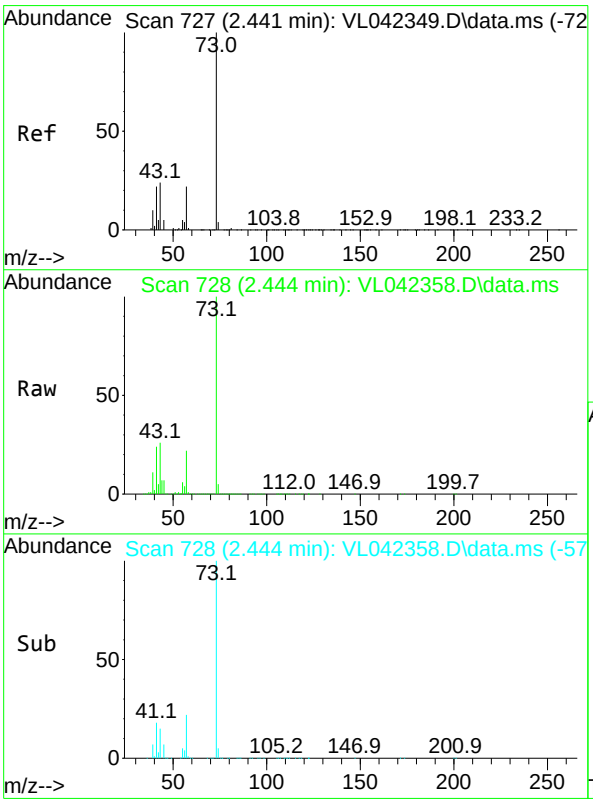
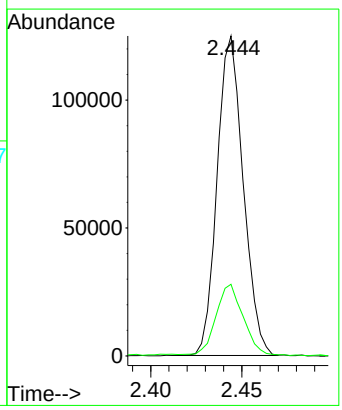
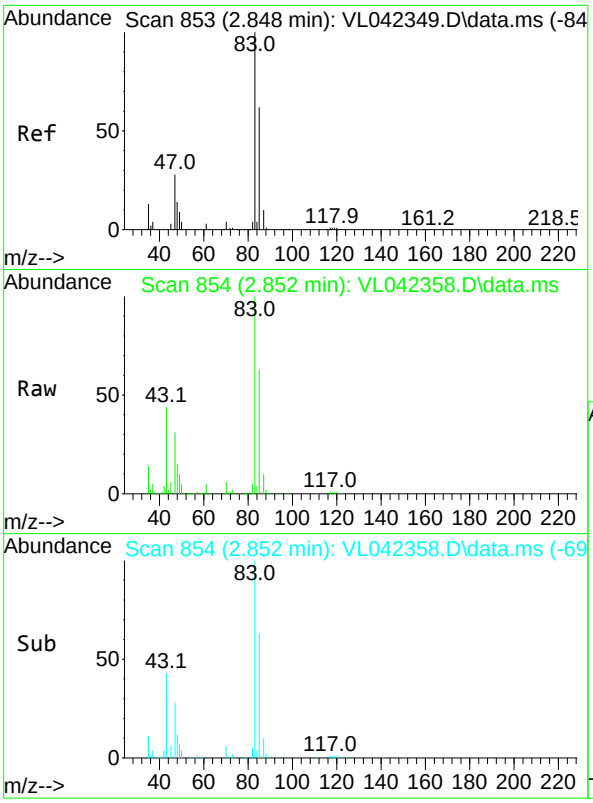


#28
Methyl tert-Butyl Ether
Concen: 9.510 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 73 Resp: 124554

Ion	Ratio	Lower	Upper
73	100		
57	24.5	21.3	31.9

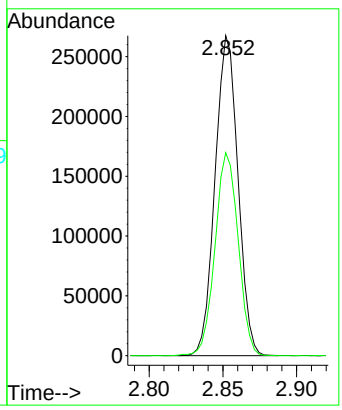




#29
Chloroform
Concen: 10.239 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 83 Resp: 28929

Ion	Ratio	Lower	Upper
83	100		
85	63.4	50.0	75.0



Instrument :
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ClientSampleId :
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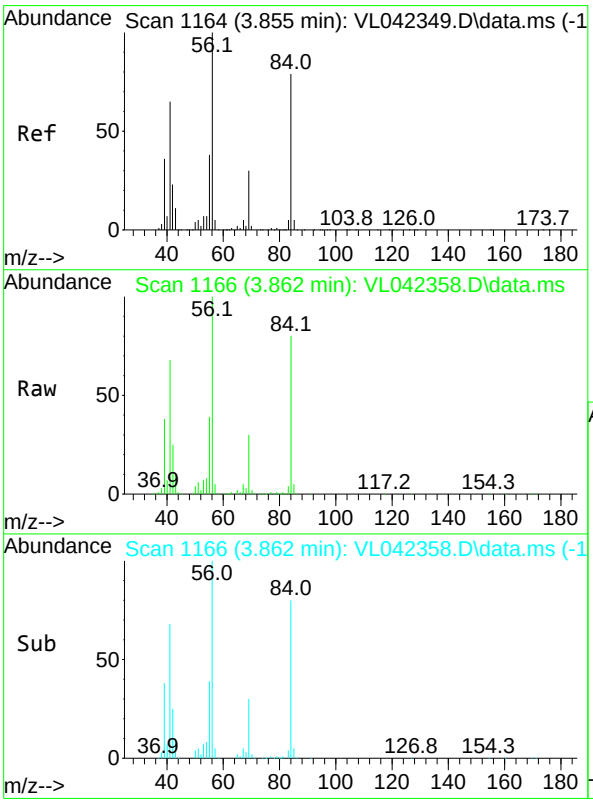
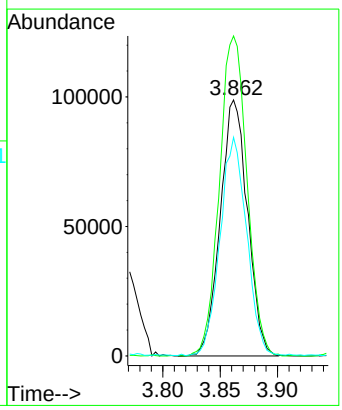
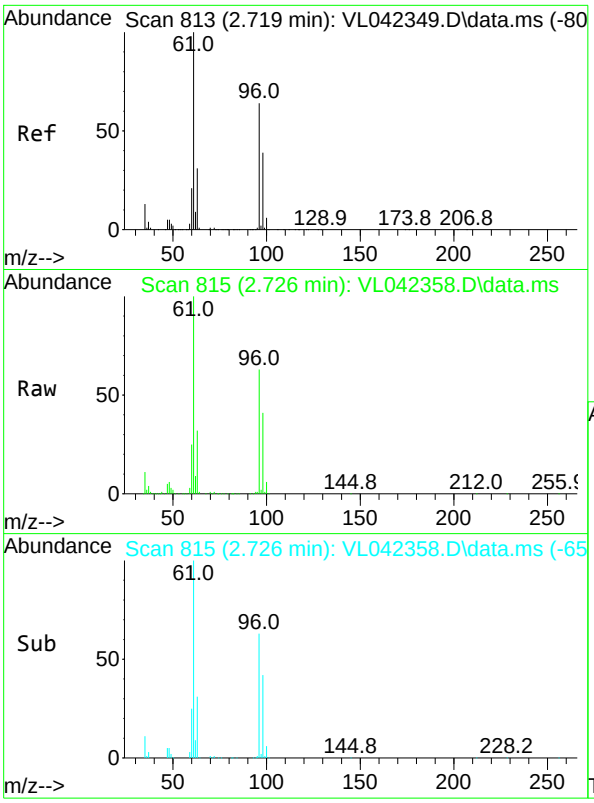


#30
Cyclohexane
Concen: 10.088 ppbv
RT: 3.862 min Scan# 1166
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 84 Resp: 163017

Ion	Ratio	Lower	Upper
84	100		
56	126.7	101.0	151.4
41	83.8	67.4	101.0

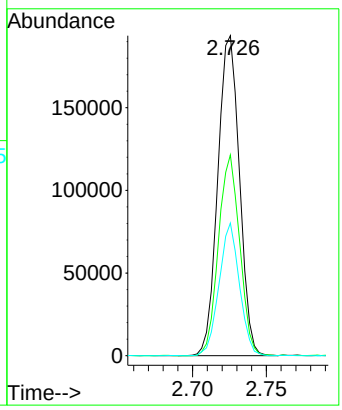




#31
cis-1,2-Dichloroethene
Concen: 10.424 ppbv
RT: 2.726 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 61 Resp: 19810

Ion	Ratio	Lower	Upper
61	100		
96	62.8	50.8	76.2
98	41.4	30.9	46.3



Instrument :
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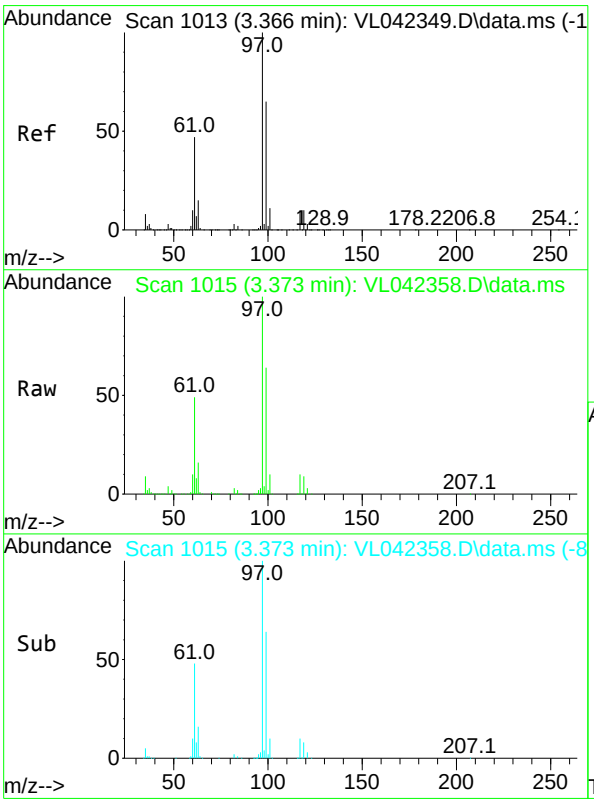
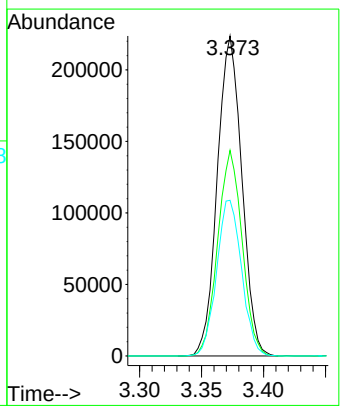
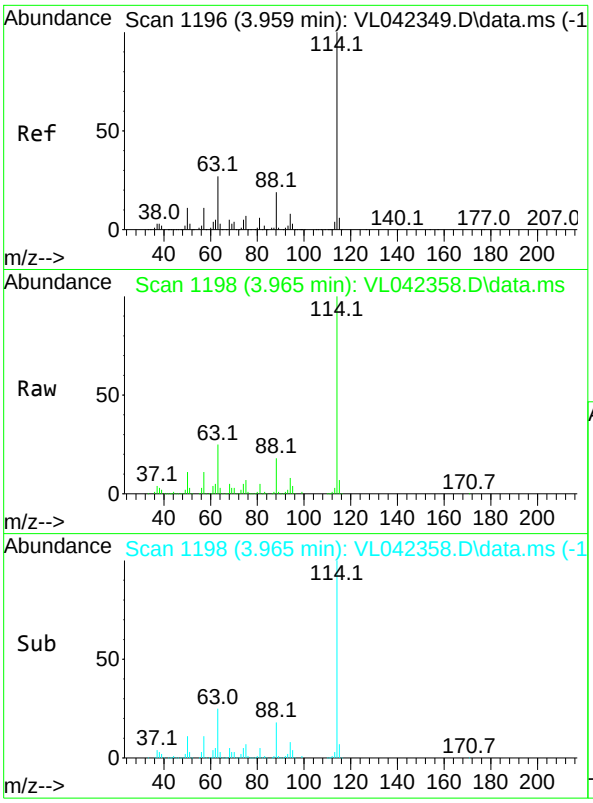


#32
1,1,1-Trichloroethane
Concen: 9.729 ppbv
RT: 3.373 min Scan# 1015
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 97 Resp: 309460

Ion	Ratio	Lower	Upper
97	100		
99	63.7	51.0	76.4
61	49.5	38.8	58.2

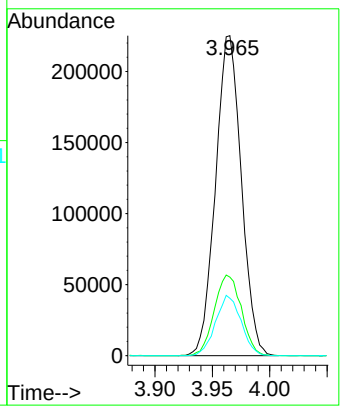




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:114 Resp: 35220

Ion	Ratio	Lower	Upper
114	100		
63	26.4	21.8	32.6
88	18.6	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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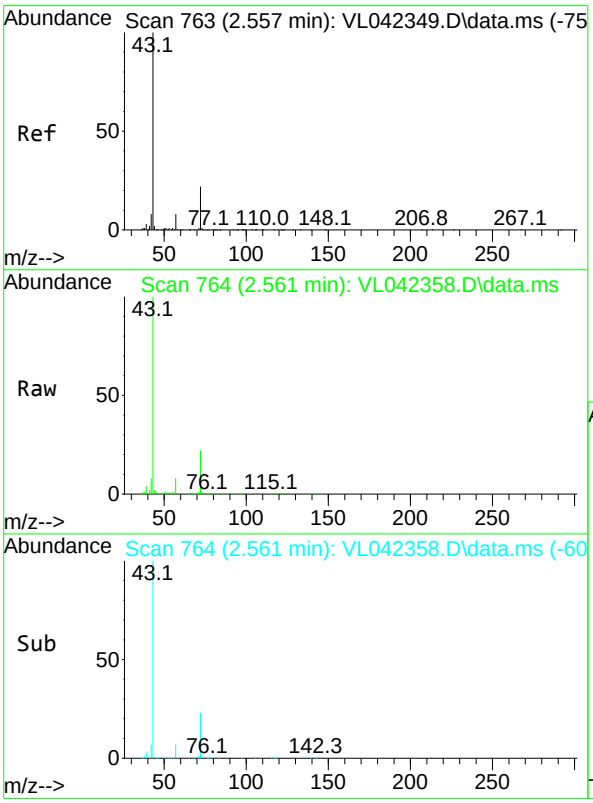
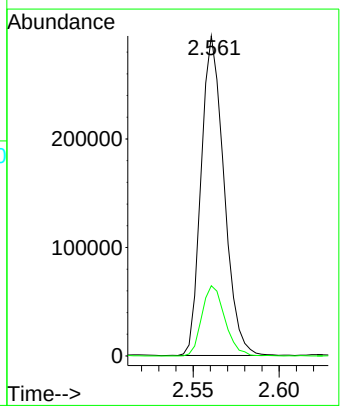
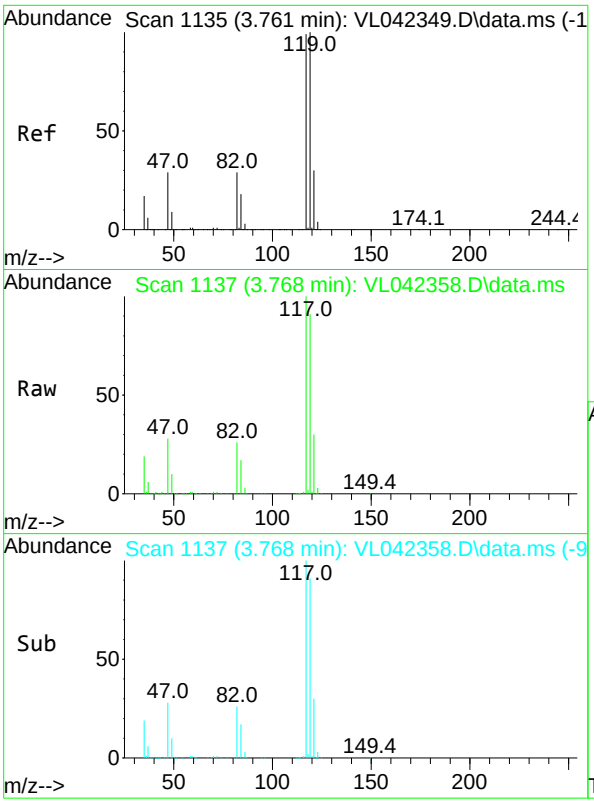


#34
2-Butanone
Concen: 9.787 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 272600

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2

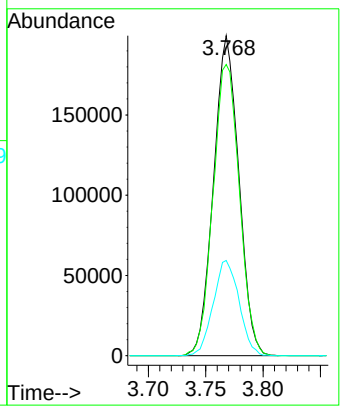




#35
Carbon Tetrachloride
Concen: 9.576 ppbv
RT: 3.768 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:117 Resp: 30524

Ion	Ratio	Lower	Upper
117	100		
119	91.0	80.5	120.7
121	29.8	24.2	36.2



Instrument :
MSVOA_L
ClientSampleId :
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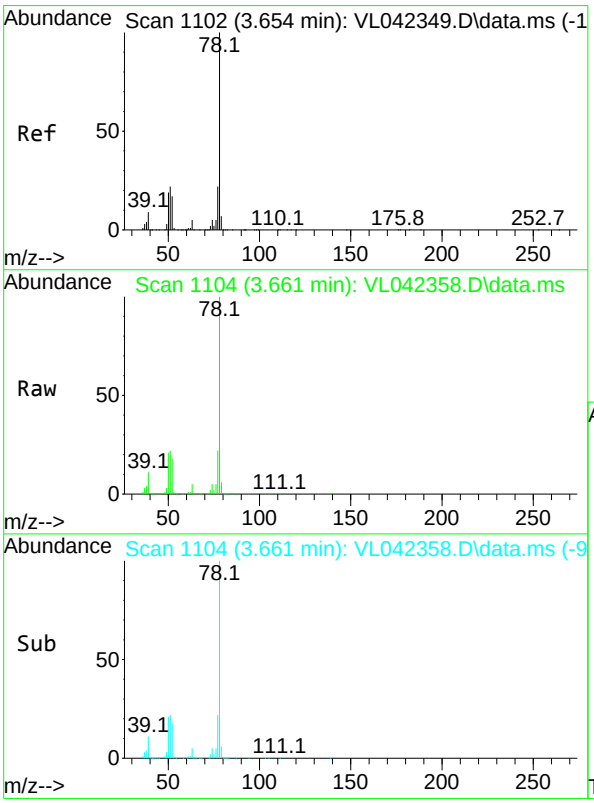
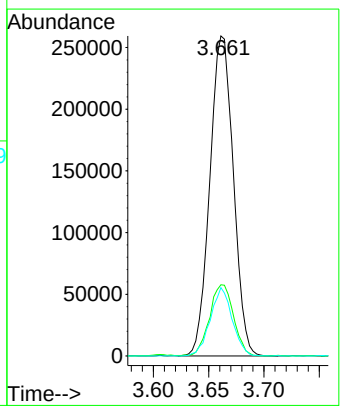
Supervised By :Mahesh Dadoda 04/18/2025

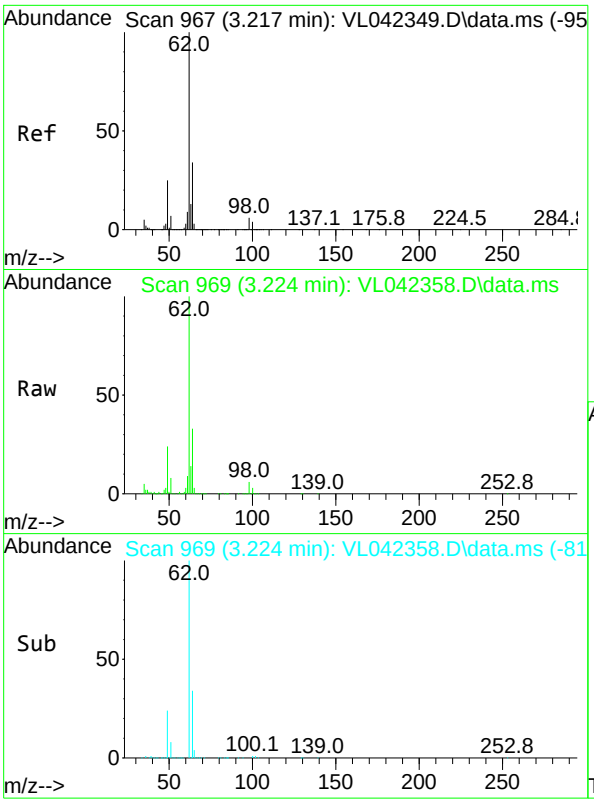


#36
Benzene
Concen: 10.088 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 78 Resp: 383239

Ion	Ratio	Lower	Upper
78	100		
77	22.1	17.4	26.0
50	21.3	15.5	23.3

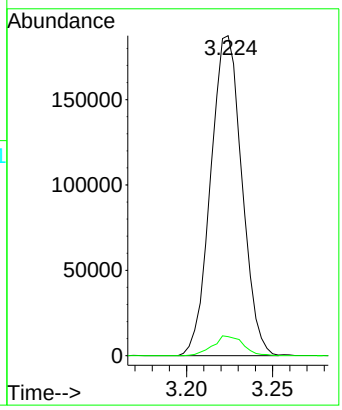




#37
1,2-Dichloroethane
Concen: 10.377 ppbv
RT: 3.224 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 62 Resp: 23661

Ion	Ratio	Lower	Upper
62	100		
98	6.0	5.1	7.7



Instrument :
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ClientSampleId :
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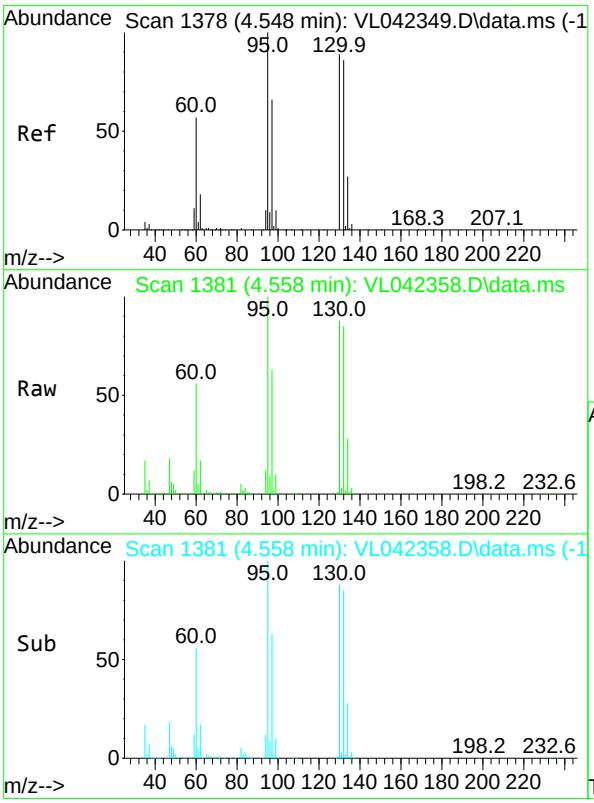
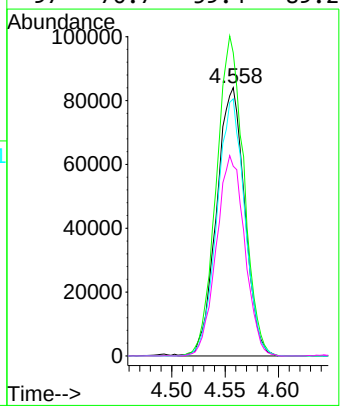
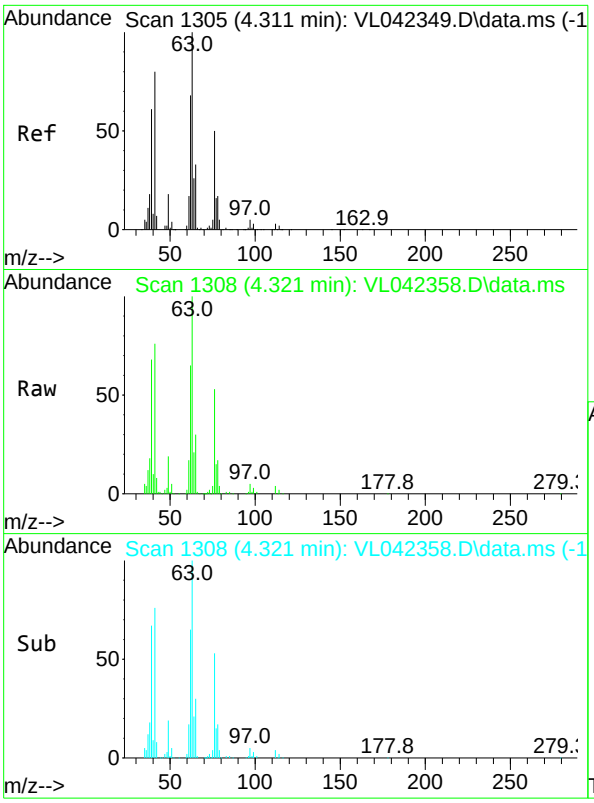


#38
Trichloroethene
Concen: 9.251 ppbv
RT: 4.558 min Scan# 1381
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:130 Resp: 153596

Ion	Ratio	Lower	Upper
130	100		
95	113.0	89.8	134.6
132	95.8	77.7	116.5
97	70.7	59.4	89.2

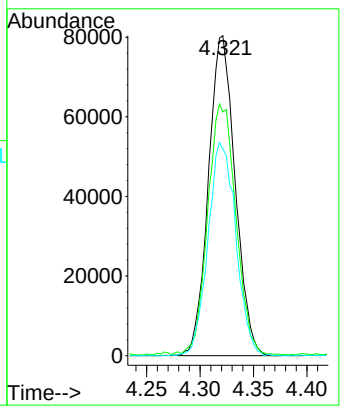




#39
1,2-Dichloropropane
Concen: 9.866 ppbv
RT: 4.321 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 63 Resp: 13966

Ion	Ratio	Lower	Upper
63	100		
41	75.7	64.2	96.2
62	64.6	54.3	81.5



Instrument :
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ClientSampleId :
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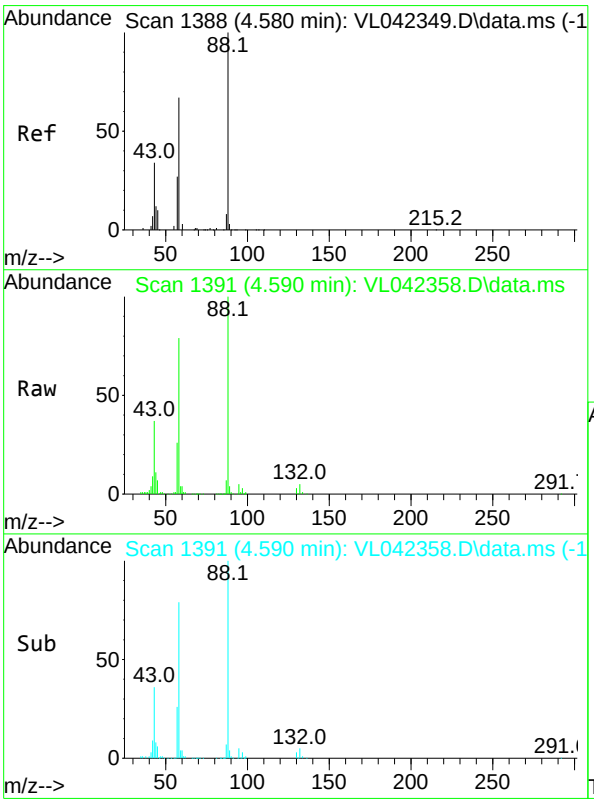
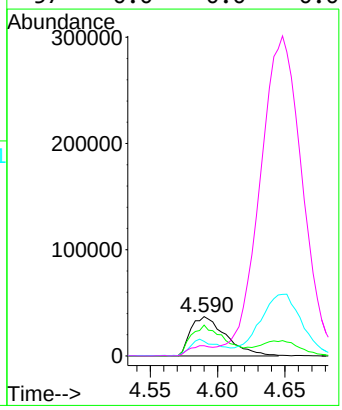
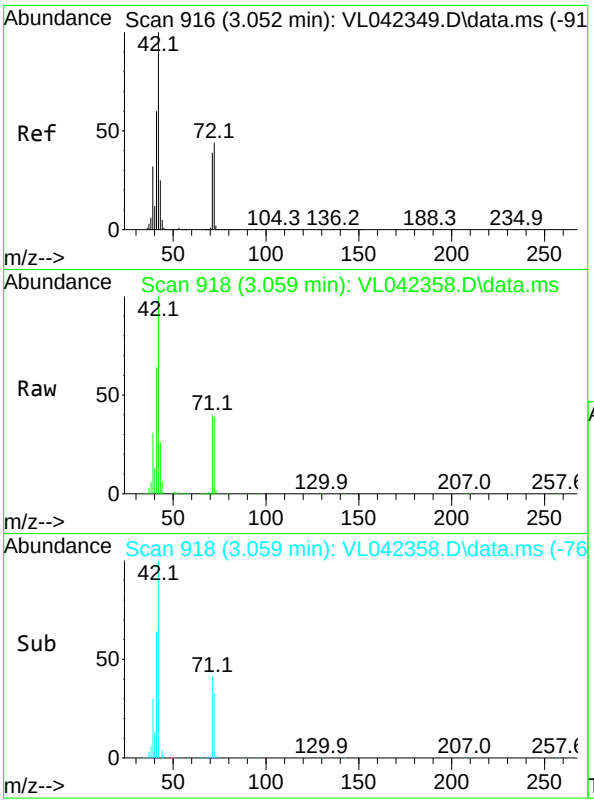


#40
1,4-Dioxane
Concen: 8.716 ppbv
RT: 4.590 min Scan# 1391
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 88 Resp: 67808

Ion	Ratio	Lower	Upper
88	100		
58	75.4	61.4	92.0
43	37.1	23.2	34.8#
57	0.0	0.0	0.0

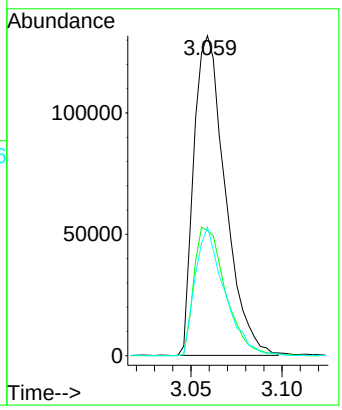




#41
Tetrahydrofuran
Concen: 9.715 ppbv
RT: 3.059 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 42 Resp: 15777

Ion	Ratio	Lower	Upper
42	100		
72	40.3	32.3	48.5
71	37.7	31.4	47.2



Instrument :
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ClientSampleId :
VL0417ABS01

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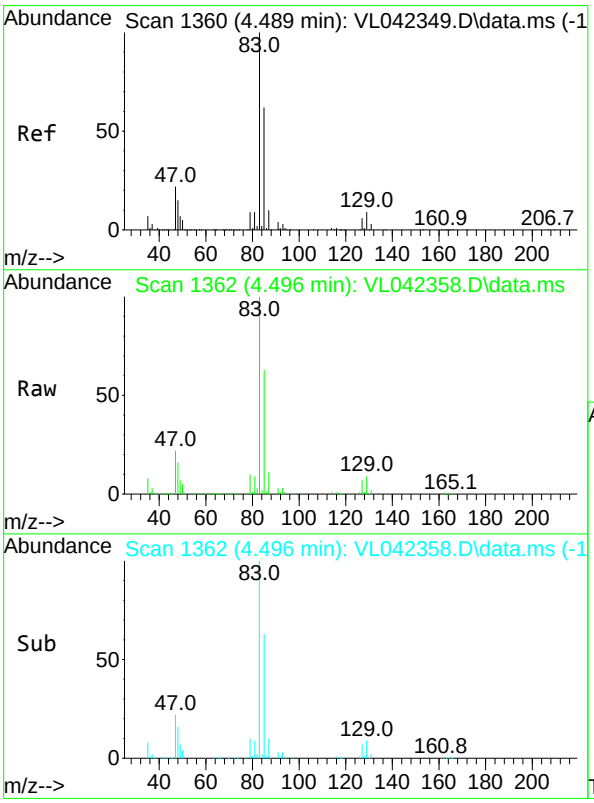
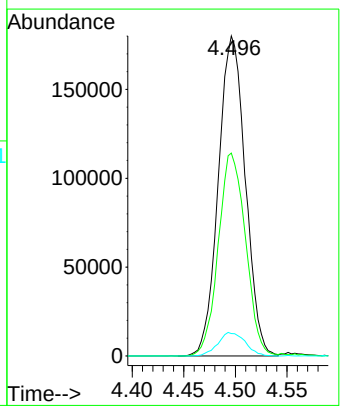
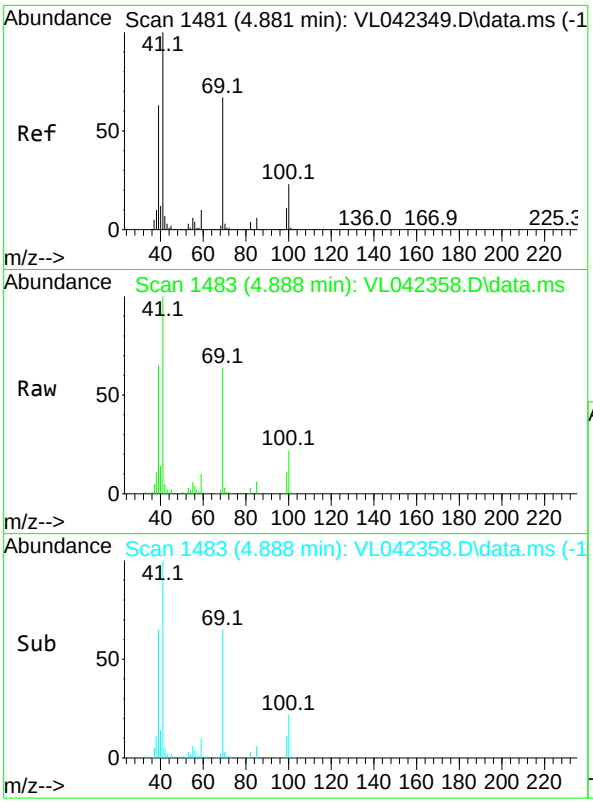


#42
Bromodichloromethane
Concen: 10.326 ppbv
RT: 4.496 min Scan# 1362
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 83 Resp: 327652

Ion	Ratio	Lower	Upper
83	100		
85	63.3	49.7	74.5
127	7.0	5.1	7.7





#43
Methyl Methacrylate
Concen: 9.304 ppbv
RT: 4.888 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 69 Resp: 15929

Ion	Ratio	Lower	Upper
69	100		
41	155.9	118.6	177.8
100	35.1	28.2	42.2

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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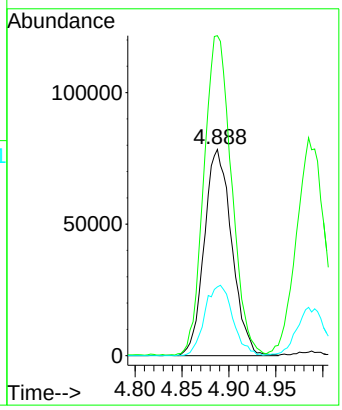
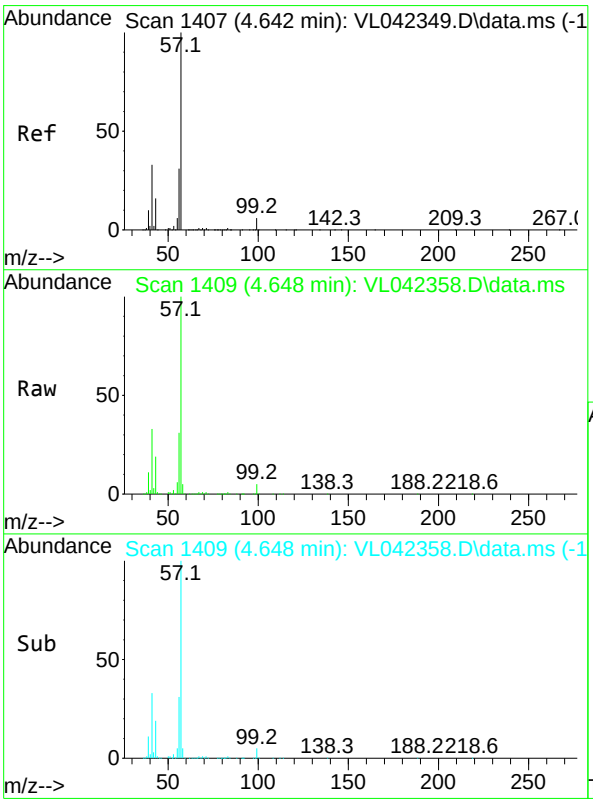
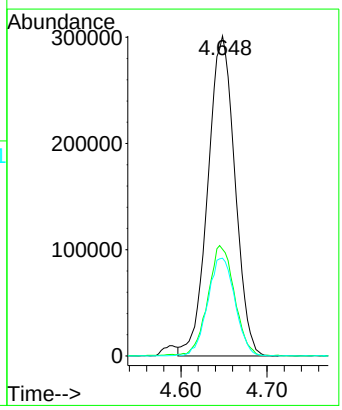


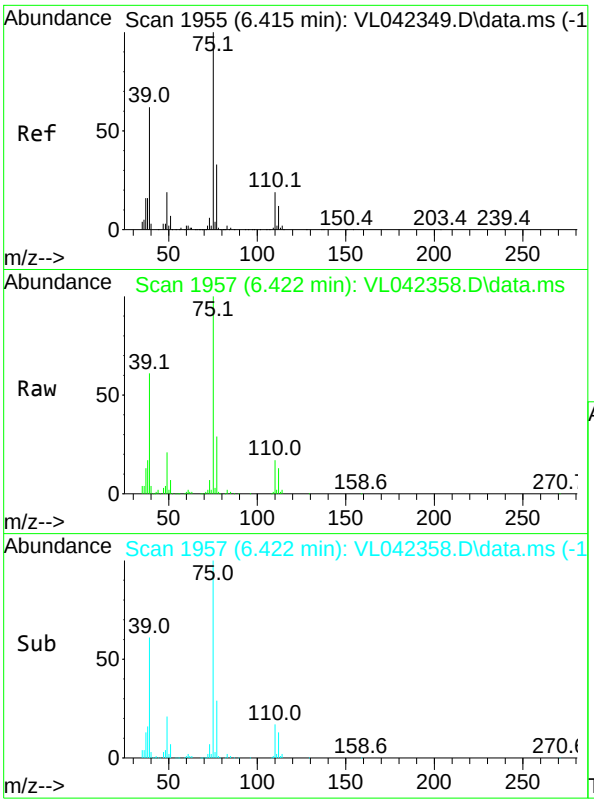


#44
2,2,4-Trimethylpentane
Concen: 10.019 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 57 Resp: 657377

Ion	Ratio	Lower	Upper
57	100		
41	34.2	27.2	40.8
56	31.1	25.7	38.5

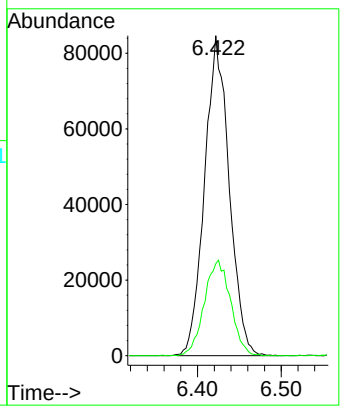




#45
t-1,3-Dichloropropene
Concen: 9.864 ppbv
RT: 6.422 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 75 Resp: 17251

Ion	Ratio	Lower	Upper
75	100		
77	28.7	27.0	40.6



Instrument :
MSVOA_L
ClientSampleId :
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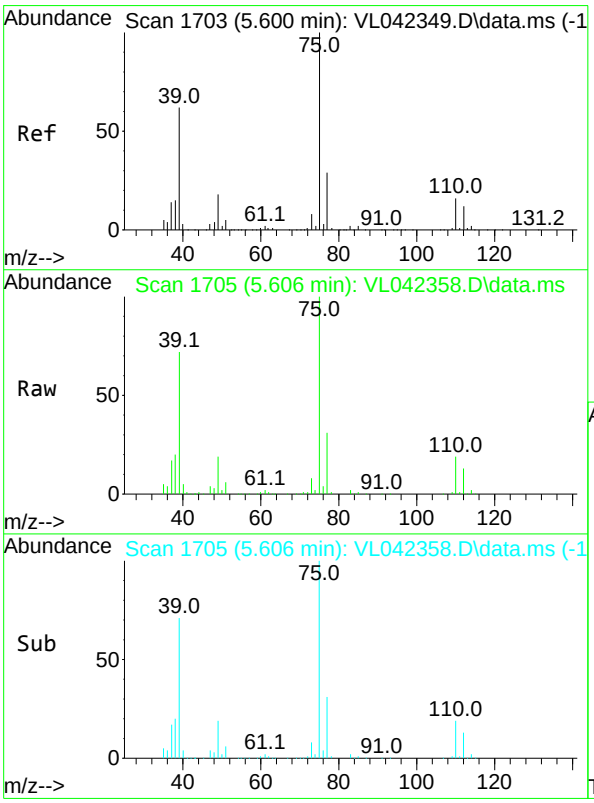
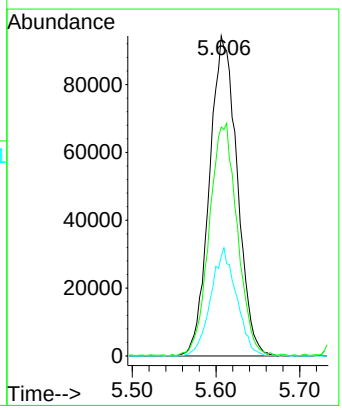
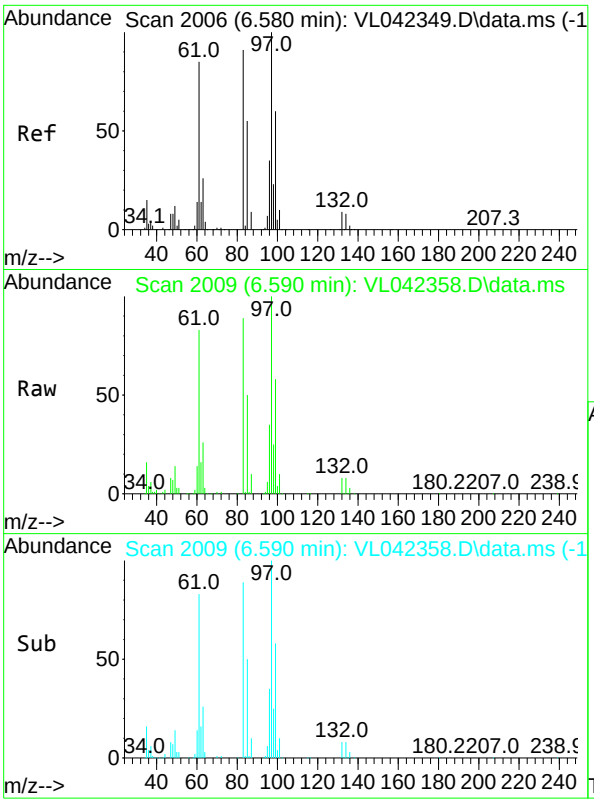


#46
cis-1,3-Dichloropropene
Concen: 10.133 ppbv
RT: 5.606 min Scan# 1705
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 75 Resp: 216901

Ion	Ratio	Lower	Upper
75	100		
39	71.3	50.0	75.0
77	31.1	23.0	34.6

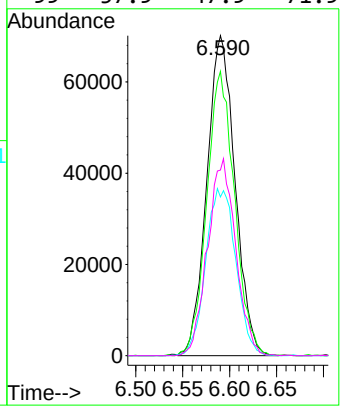




#47
1,1,2-Trichloroethane
Concen: 10.161 ppbv
RT: 6.590 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 97 Resp: 14654

Ion	Ratio	Lower	Upper
97	100		
83	88.7	72.8	109.2
85	49.6	44.2	66.4
99	57.9	47.9	71.9



Instrument :
MSVOA_L
ClientSampleId :
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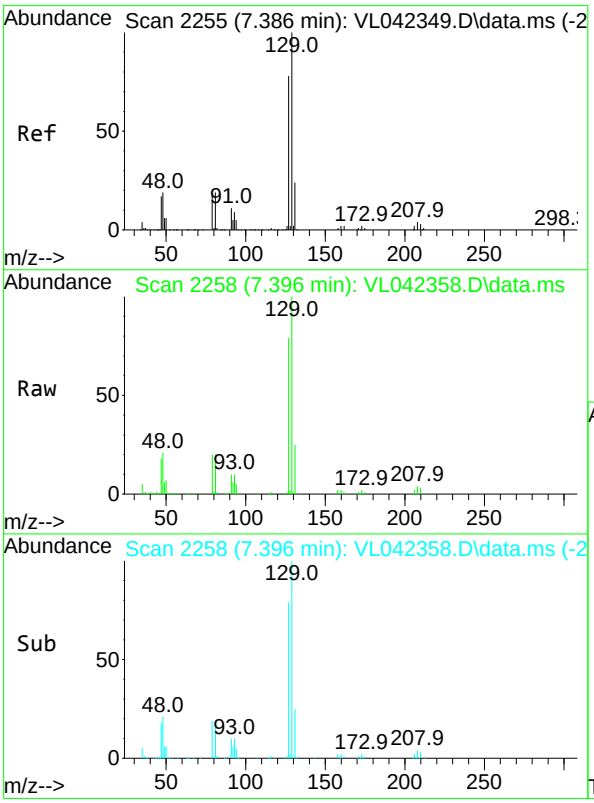
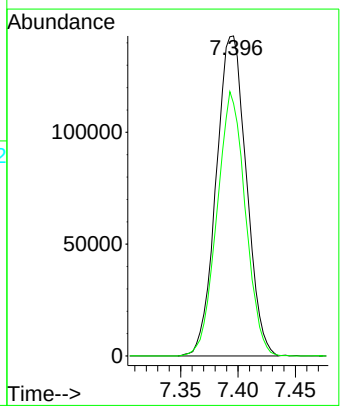
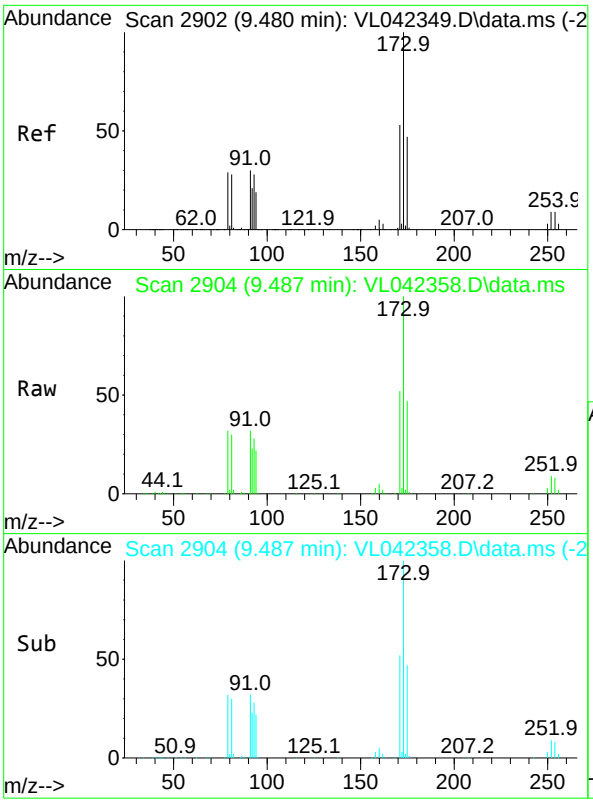


#48
Dibromochloromethane
Concen: 10.261 ppbv
RT: 7.396 min Scan# 2258
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:129 Resp: 261470

Ion	Ratio	Lower	Upper
129	100		
127	77.9	39.1	117.3

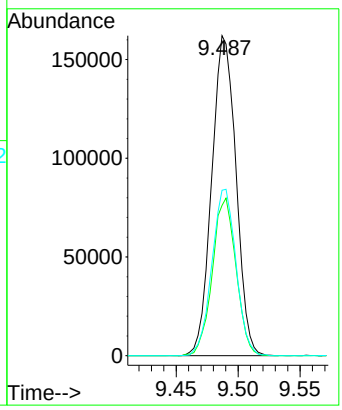




#49
Bromoform
Concen: 9.936 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:173 Resp: 22137

Ion	Ratio	Lower	Upper
173	100		
175	48.0	38.2	57.2
171	51.7	40.9	61.3



Instrument :
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ClientSampleId :
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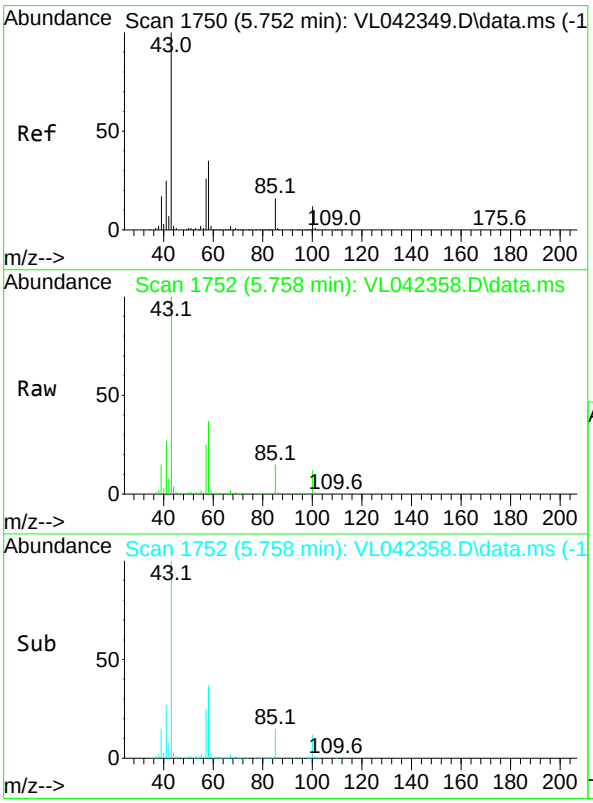
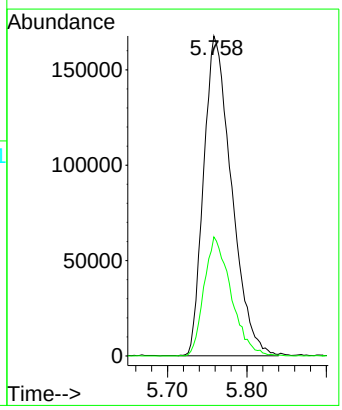
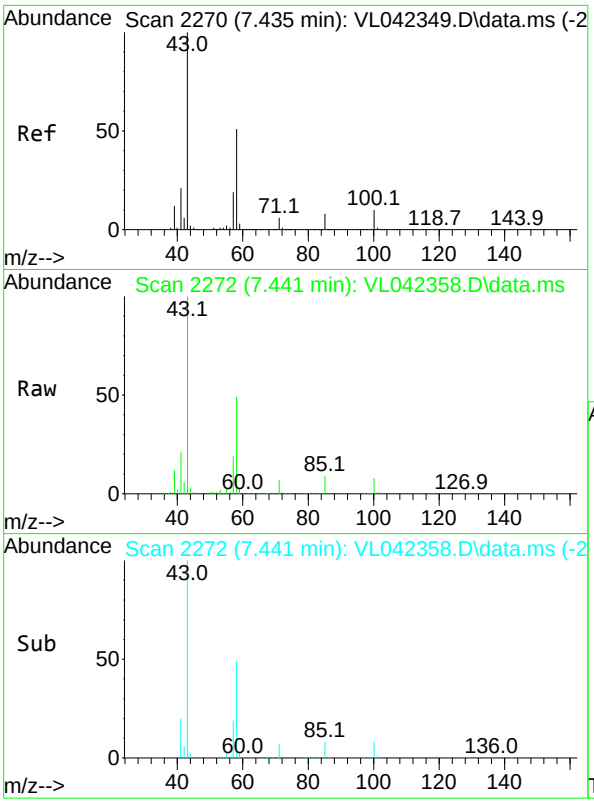


#50
4-Methyl-2-Pentanone
Concen: 8.810 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 407804

Ion	Ratio	Lower	Upper
43	100		
58	36.2	28.6	43.0

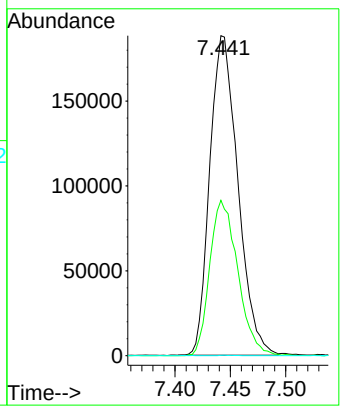




#51
2-Hexanone
Concen: 8.013 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 33264

Ion	Ratio	Lower	Upper
43	100		
58	48.6	40.2	60.4
98	0.1	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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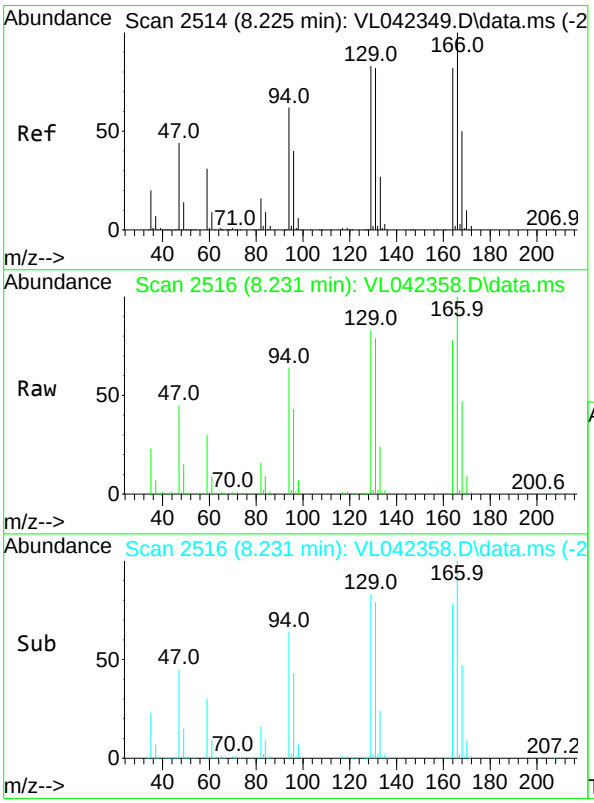
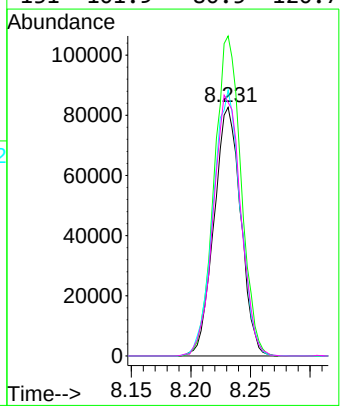
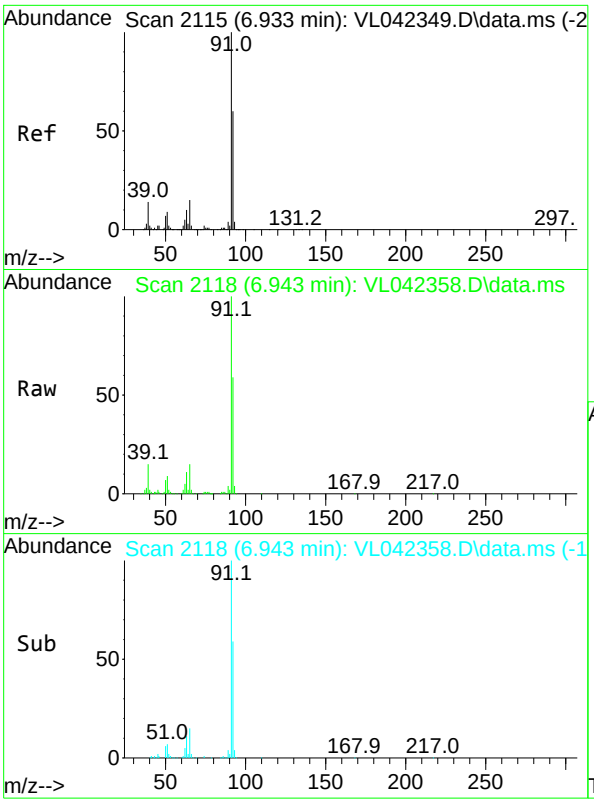


#52
Tetrachloroethene
Concen: 8.763 ppbv
RT: 8.231 min Scan# 2516
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:164 Resp: 128670

Ion	Ratio	Lower	Upper
164	100		
166	128.7	98.2	147.2
129	106.9	81.8	122.8
131	101.9	80.5	120.7

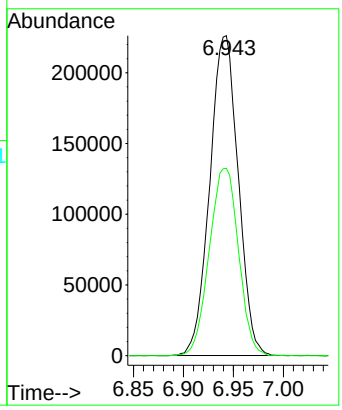




#53
Toluene
Concen: 9.818 ppbv
RT: 6.943 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 44758

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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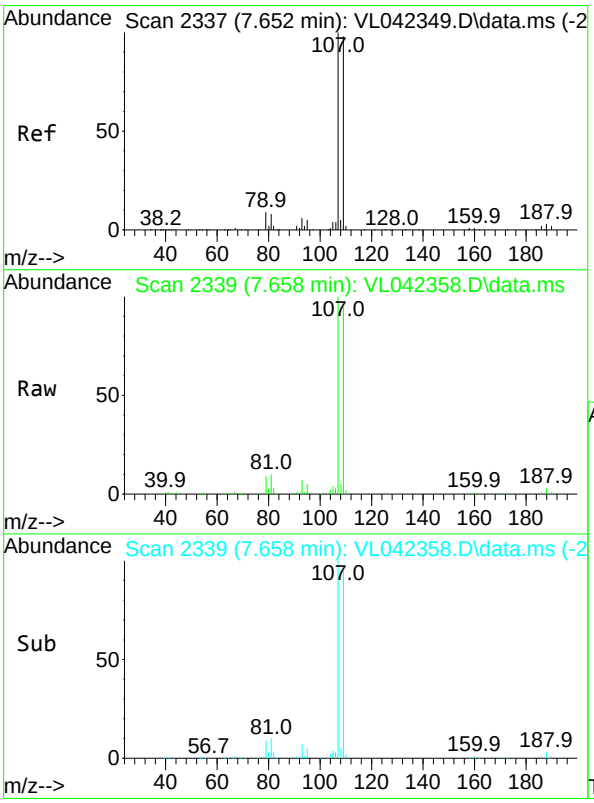
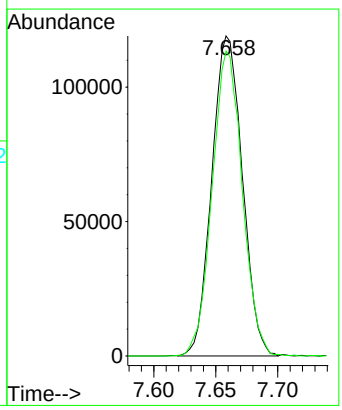
Supervised By :Mahesh Dadoda 04/18/2025

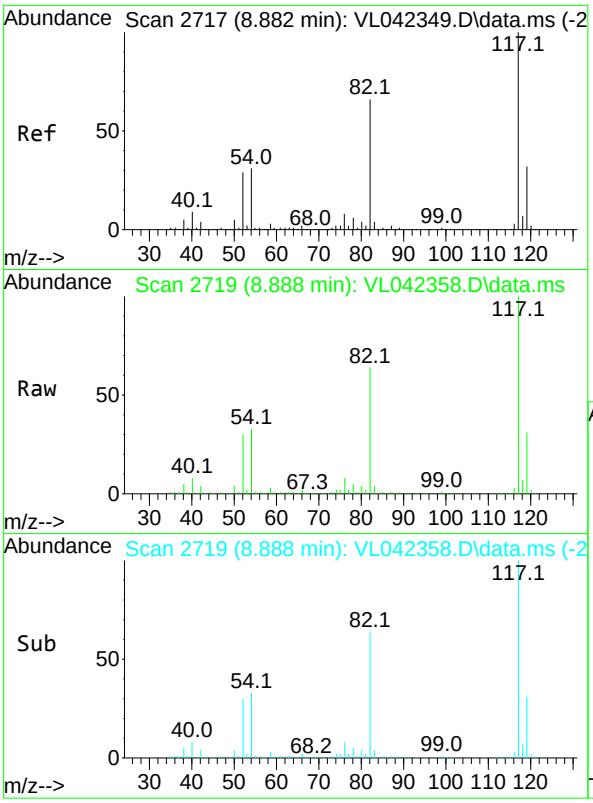


#54
1,2-Dibromoethane
Concen: 9.899 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:107 Resp: 204328

Ion	Ratio	Lower	Upper
107	100		
109	95.1	78.2	117.4

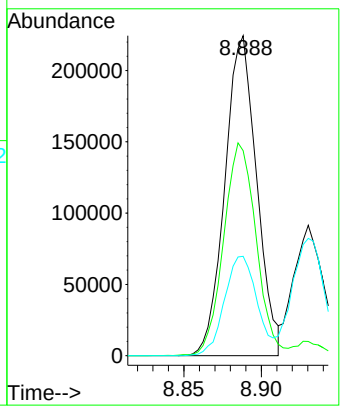




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:117 Resp: 32152

Ion	Ratio	Lower	Upper
117	100		
82	71.8	57.8	86.6
119	32.5	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
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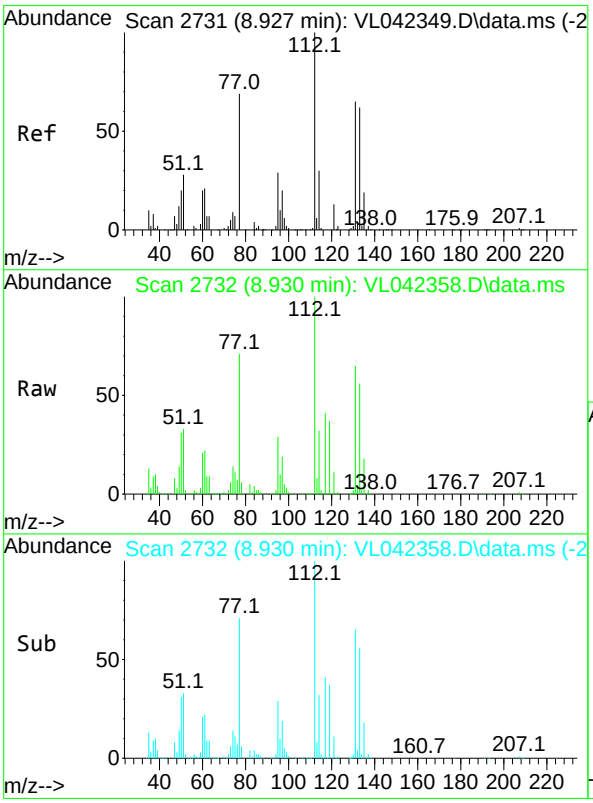
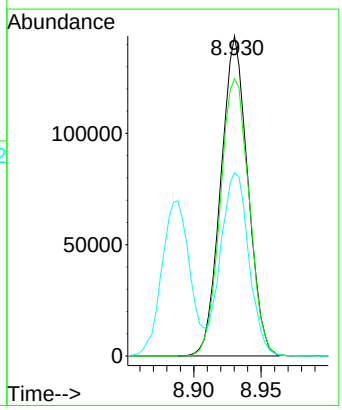
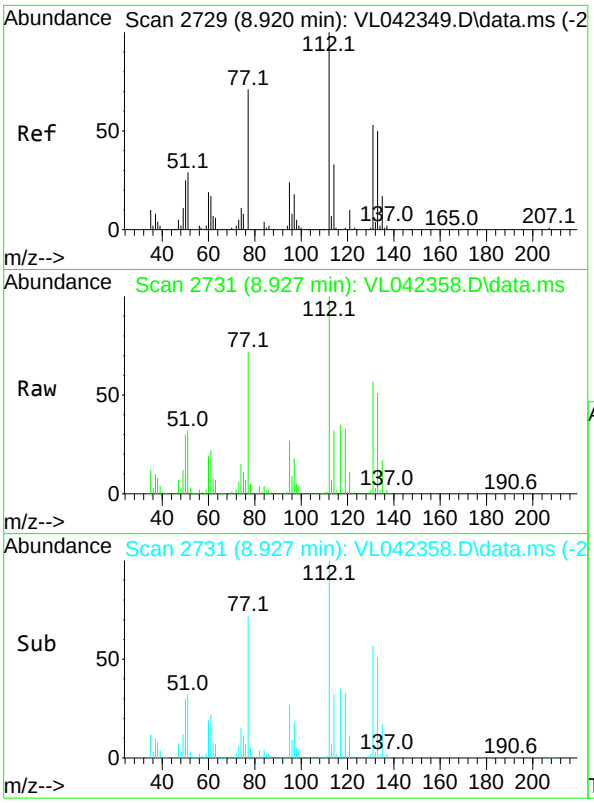


#56
1,1,1,2-Tetrachloroethane
Concen: 10.275 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:131 Resp: 199945

Ion	Ratio	Lower	Upper
131	100		
133	92.5	78.3	117.5
119	60.2	48.7	73.1

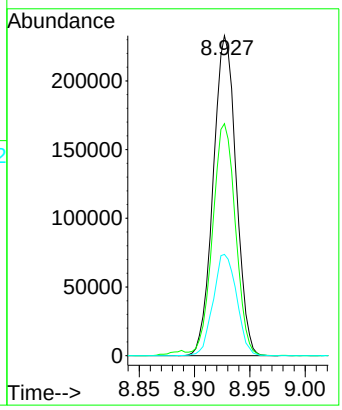




#57
Chlorobenzene
Concen: 10.022 ppbv
RT: 8.927 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:112 Resp: 33514

Ion	Ratio	Lower	Upper
112	100		
77	72.4	57.8	86.6
114	31.7	29.3	35.9



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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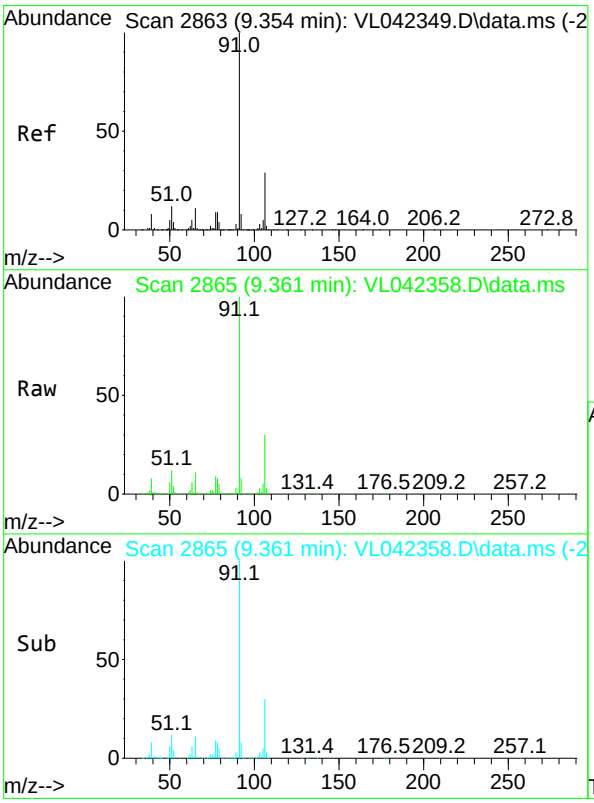
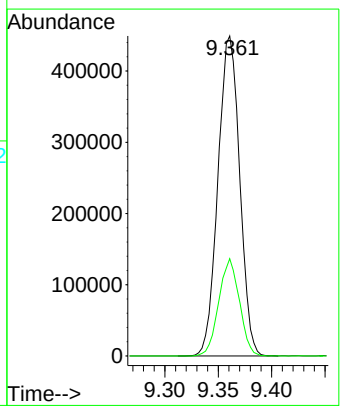
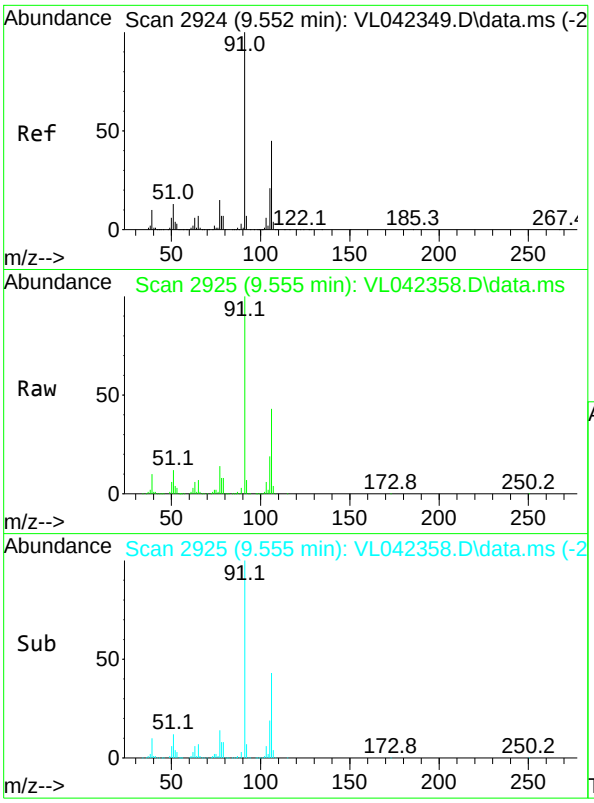


#58
Ethyl Benzene
Concen: 9.975 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 635446

Ion	Ratio	Lower	Upper
91	100		
106	30.4	23.0	34.4

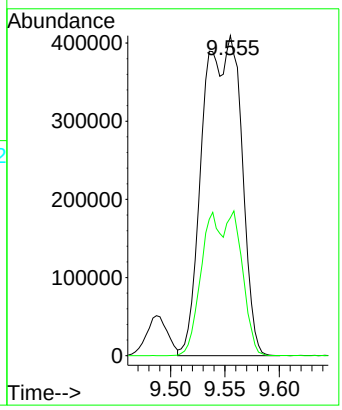




#59
m/p-Xylene
Concen: 19.806 ppbv m
RT: 9.555 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 101640

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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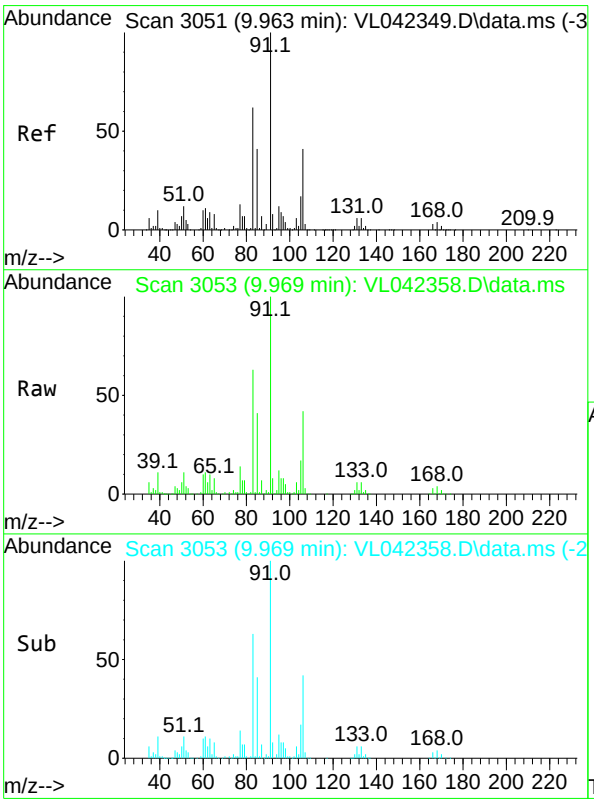
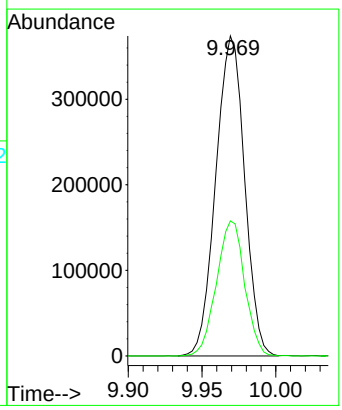
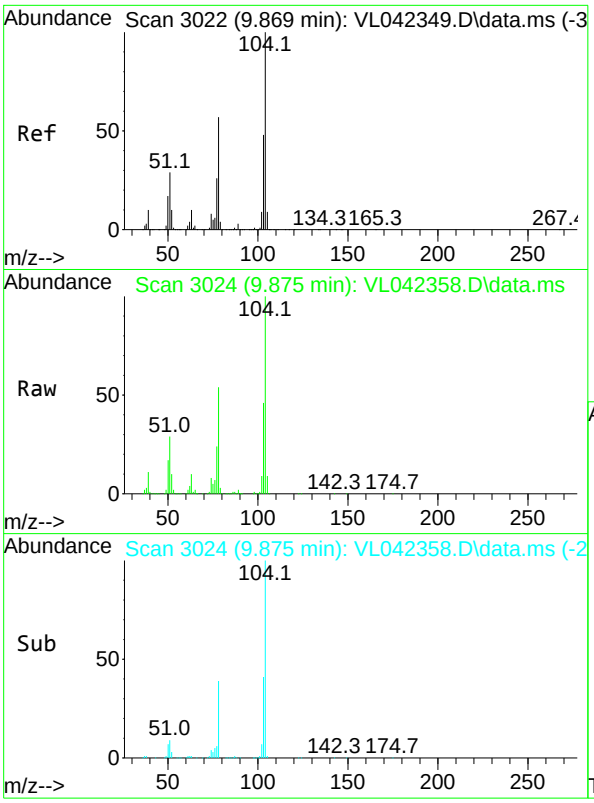


#60
o-Xylene
Concen: 9.802 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 506535

Ion	Ratio	Lower	Upper
91	100		
106	41.4	21.1	63.4

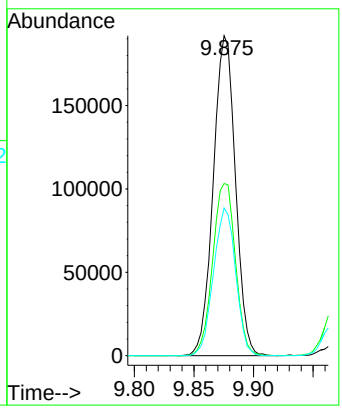




#61
Styrene
Concen: 10.055 ppbv
RT: 9.875 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:104 Resp: 24802

Ion	Ratio	Lower	Upper
104	100		
78	55.3	44.6	66.8
103	46.2	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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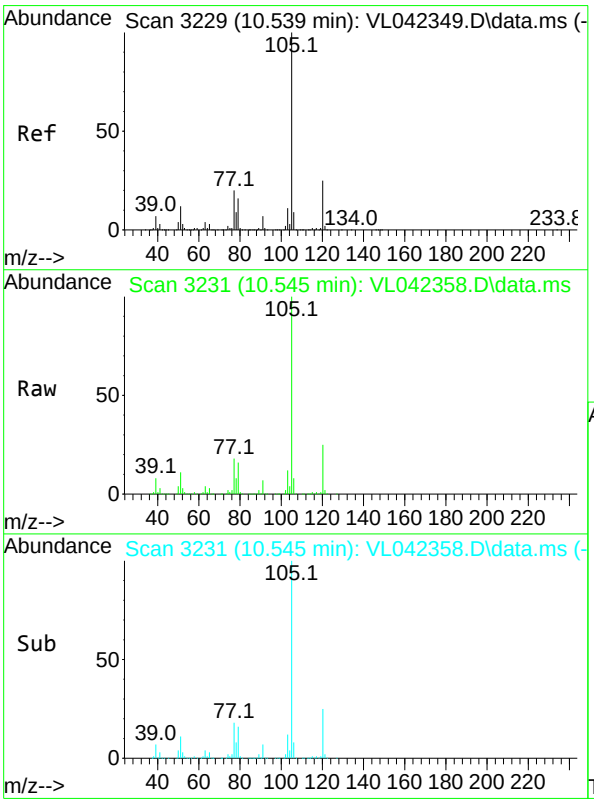
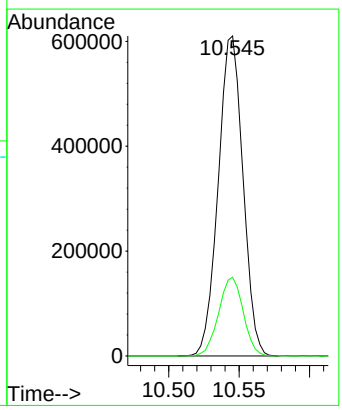
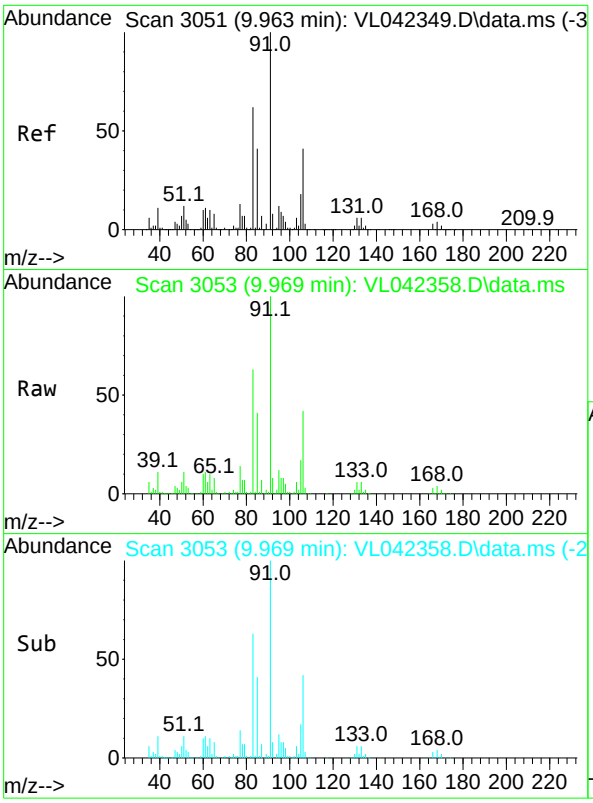


#62
Isopropylbenzene
Concen: 9.827 ppbv
RT: 10.545 min Scan# 3231
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 745571

Ion	Ratio	Lower	Upper
105	100		
120	24.5	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.916 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 83 Resp: 29858

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.5	13.7
85	64.5	32.4	97.0

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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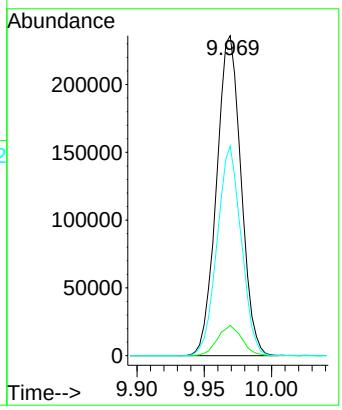
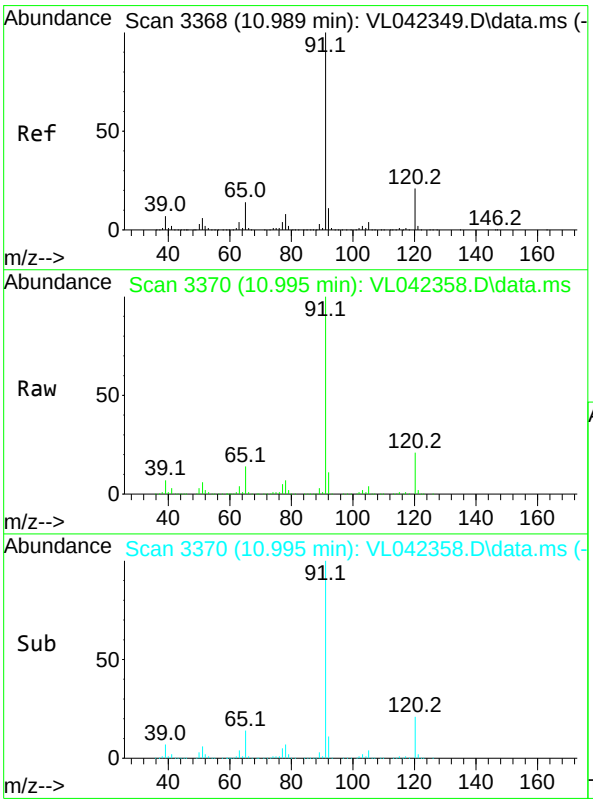
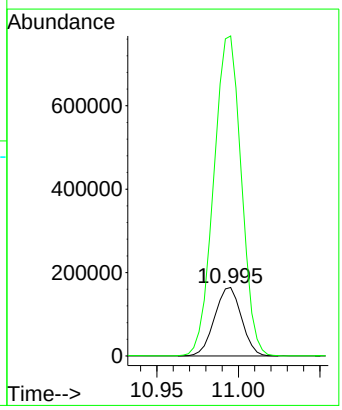


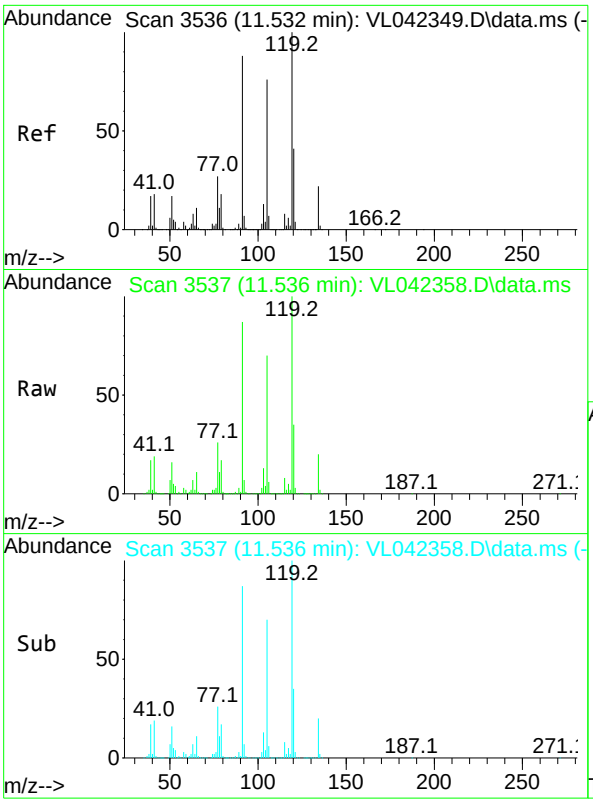


#64
n-propylbenzene
Concen: 9.875 ppbv
RT: 10.995 min Scan# 3370
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:120 Resp: 188310

Ion	Ratio	Lower	Upper
120	100		
91	478.2	392.4	588.6

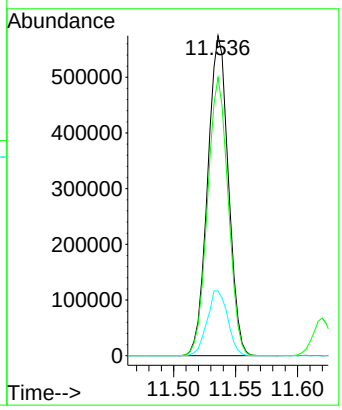




#65
tert-Butylbenzene
Concen: 9.589 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:119 Resp: 66868

Ion	Ratio	Lower	Upper
119	100		
91	86.7	74.6	111.8
134	20.2	18.8	28.2



Instrument :
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ClientSampleId :
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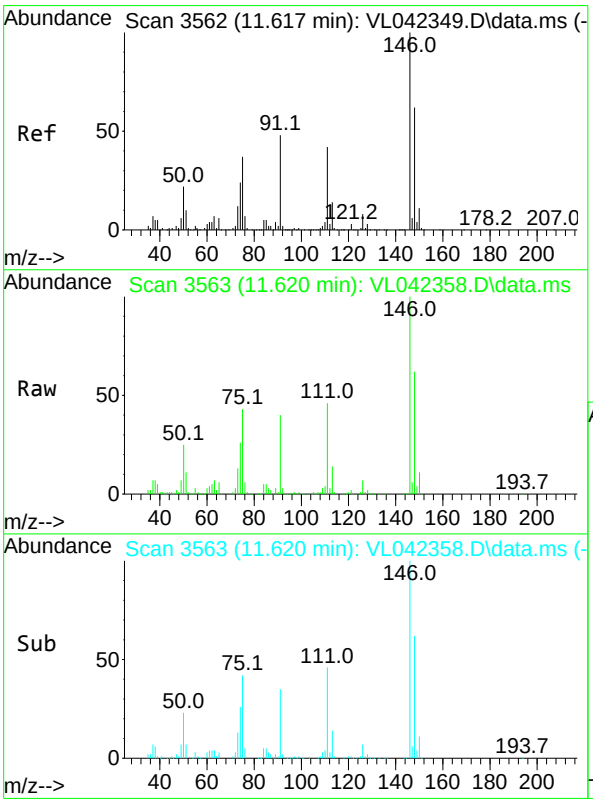
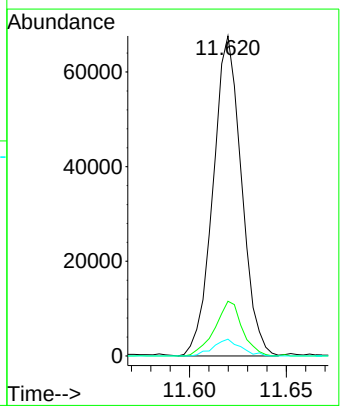
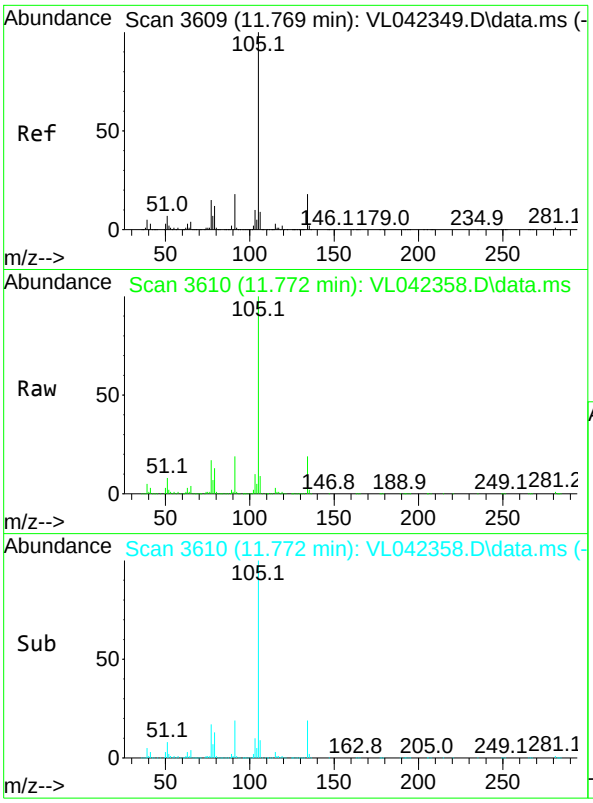


#66
Benzyl Chloride
Concen: 9.012 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 69058

Ion	Ratio	Lower	Upper
91	100		
126	16.5	11.8	17.6
128	5.0	4.5	6.7

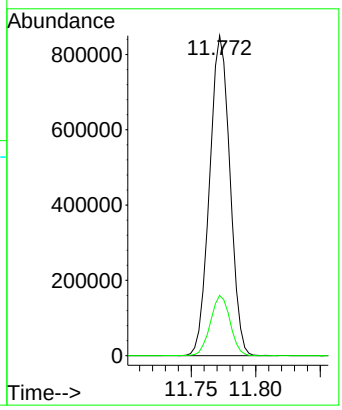




#67
sec-Butylbenzene
Concen: 9.592 ppbv
RT: 11.772 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 93042

Ion	Ratio	Lower	Upper
105	100		
134	18.3	14.6	21.8



Instrument :
MSVOA_L
ClientSampleId :
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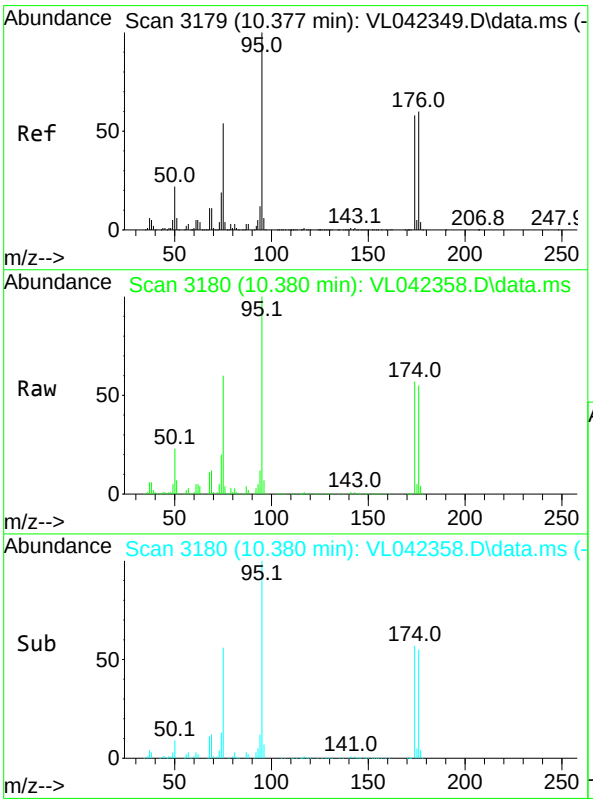
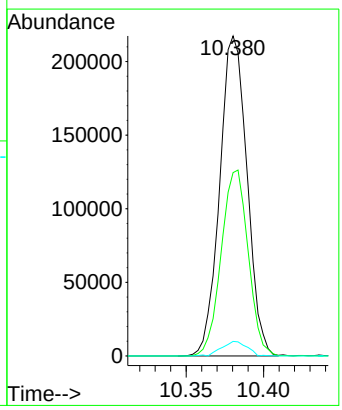
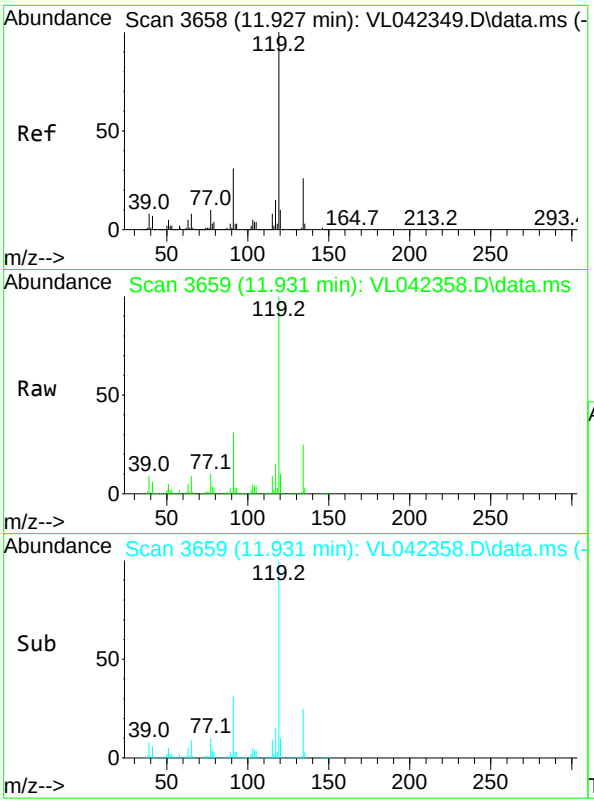


#68
1-Bromo-4-Fluorobenzene
Concen: 10.096 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 95 Resp: 266757

Ion	Ratio	Lower	Upper
95	100		
174	57.3	48.5	72.7
175	4.3	3.7	5.5

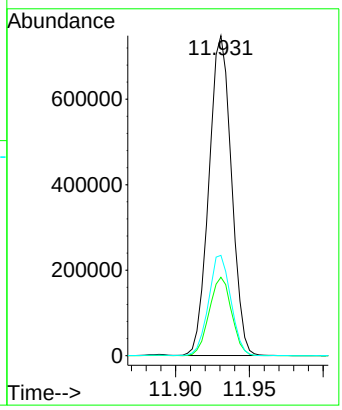




#69
p-Isopropyltoluene
Concen: 9.441 ppbv
RT: 11.931 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:119 Resp: 79553

Ion	Ratio	Lower	Upper
119	100		
134	24.5	20.0	30.0
91	31.2	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

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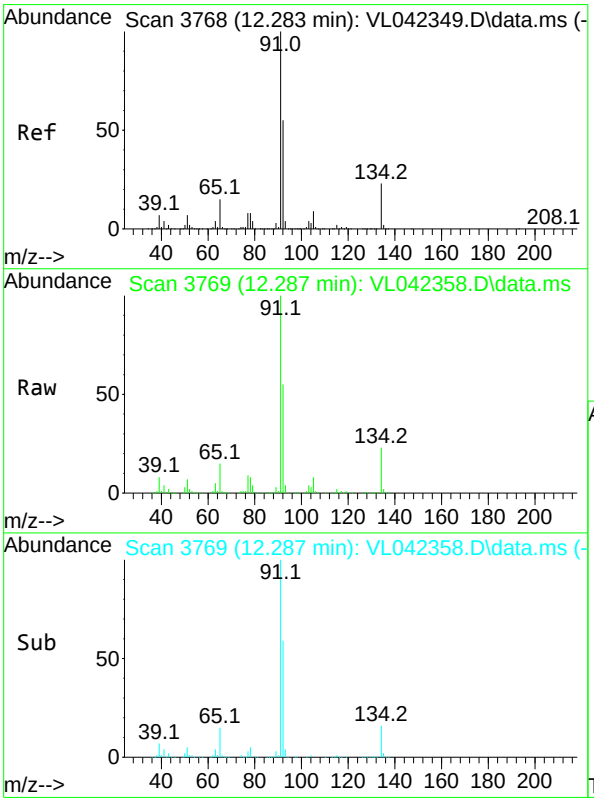
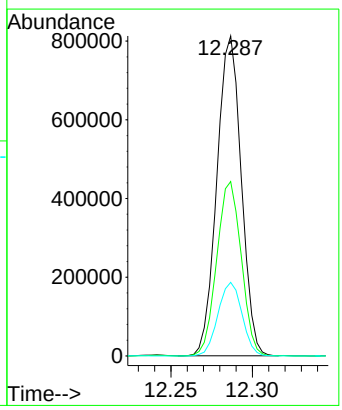
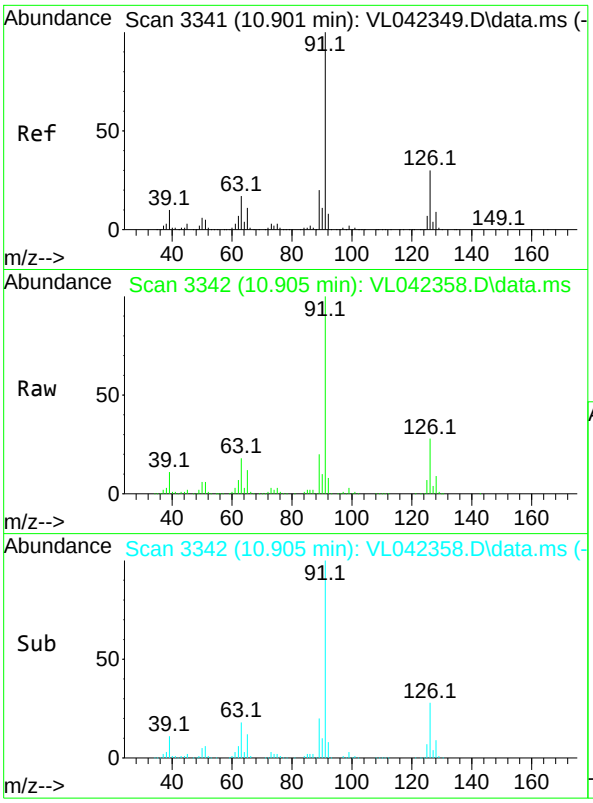


#70
n-Butylbenzene
Concen: 9.644 ppbv
RT: 12.287 min Scan# 3769
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 846427

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.2	66.4
134	22.7	18.2	27.4

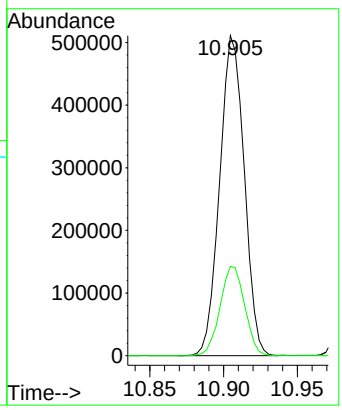




#71
2-Chlorotoluene
Concen: 9.934 ppbv
RT: 10.905 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 59115

Ion	Ratio	Lower	Upper
91	100		
126	27.9	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
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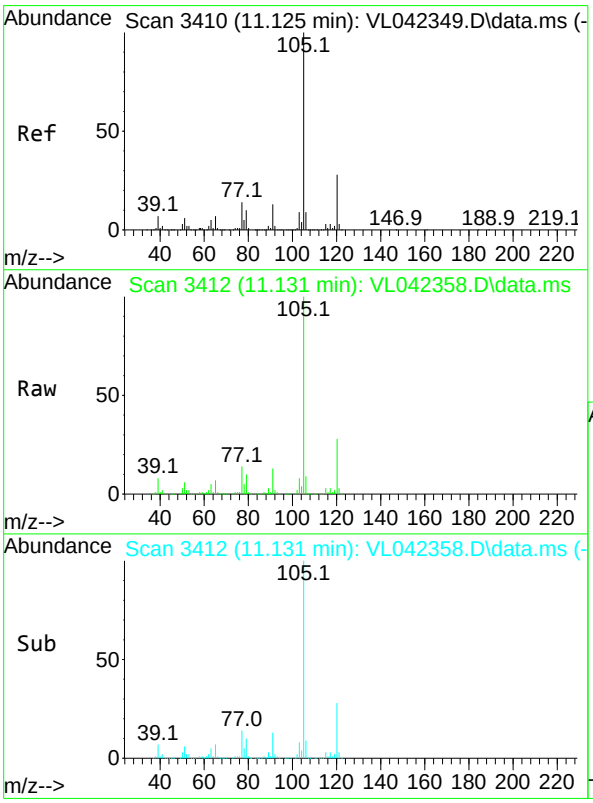
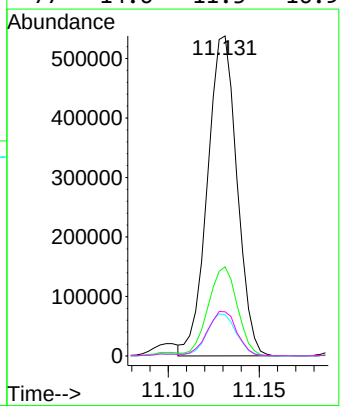
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

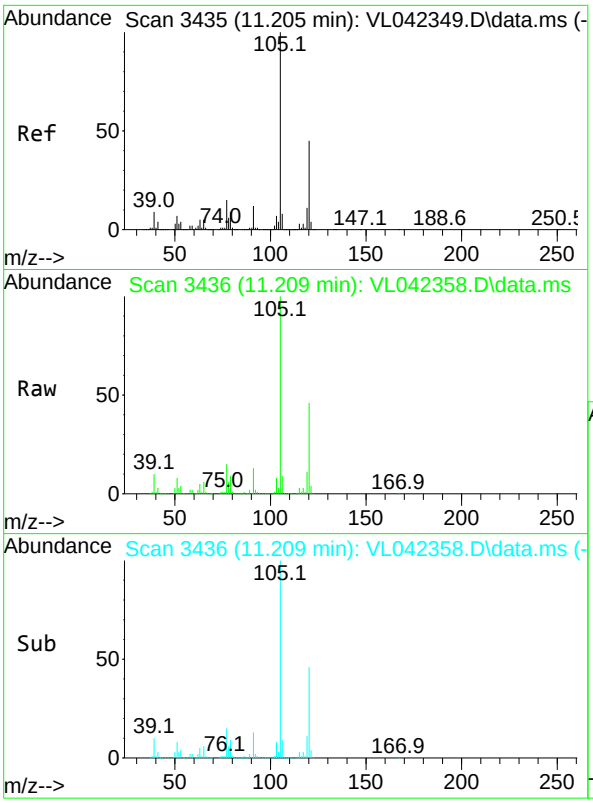


#72
4-Ethyltoluene
Concen: 9.606 ppbv
RT: 11.131 min Scan# 3412
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 606879

Ion	Ratio	Lower	Upper
105	100		
120	28.6	23.2	34.8
91	13.5	10.4	15.6
77	14.6	11.3	16.9





#73
1,3,5-Trimethylbenzene
Concen: 9.557 ppbv
RT: 11.209 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 53306

Ion	Ratio	Lower	Upper
105	100		
120	45.6	35.6	53.4

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
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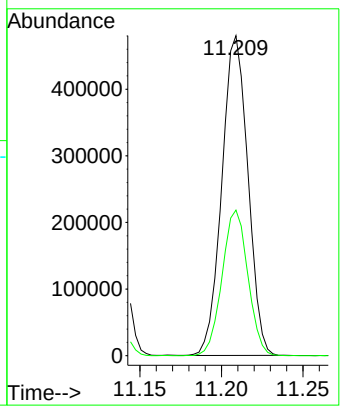
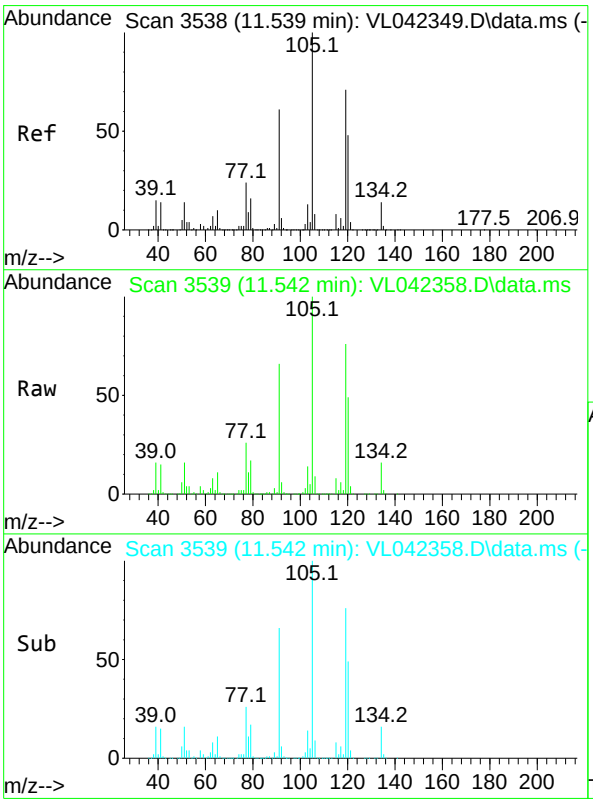
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

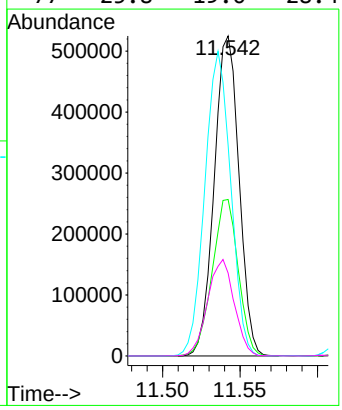


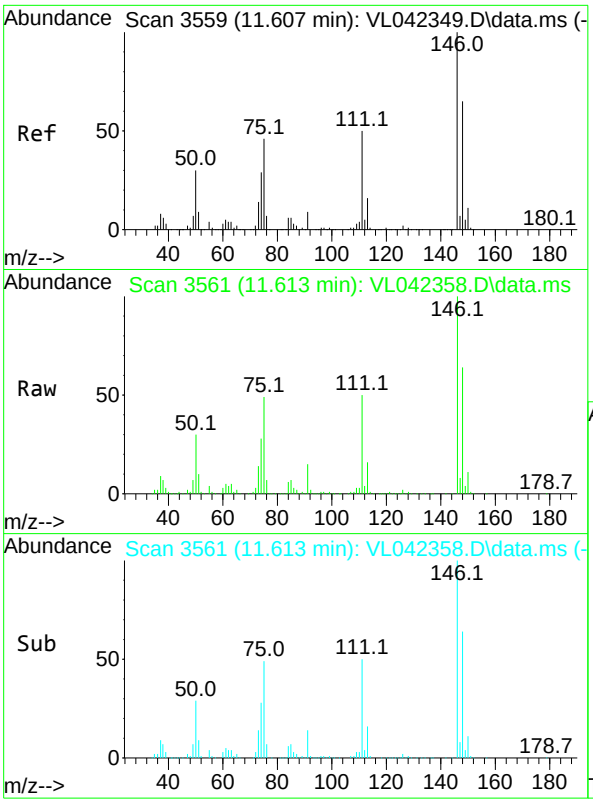


#74
1,2,4-Trimethylbenzene
Concen: 8.976 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 584747

Ion	Ratio	Lower	Upper
105	100		
120	48.9	38.1	57.1
91	65.8	48.8	73.2
77	25.8	19.0	28.4

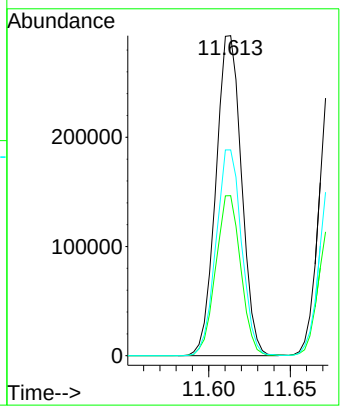




#75
1,3-Dichlorobenzene
Concen: 9.474 ppbv
RT: 11.613 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:146 Resp: 32081

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.3	72.8
148	64.0	31.6	94.8



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
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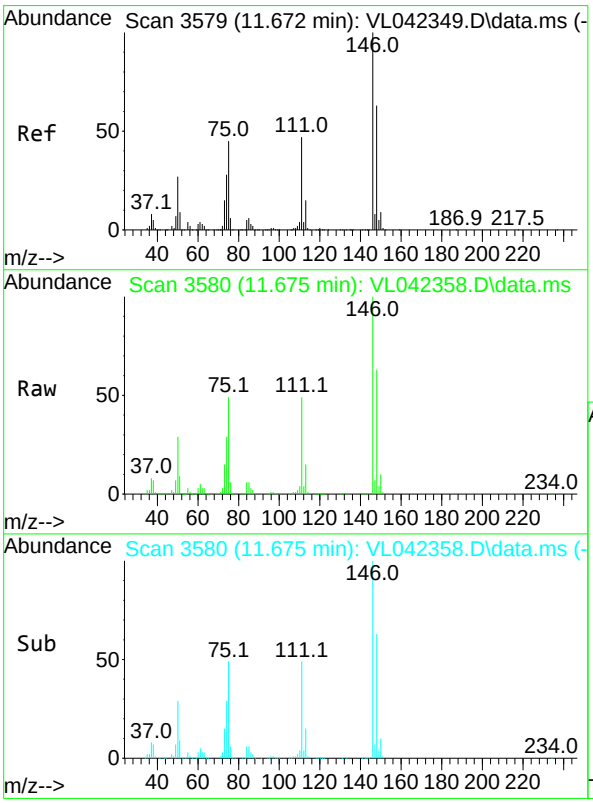
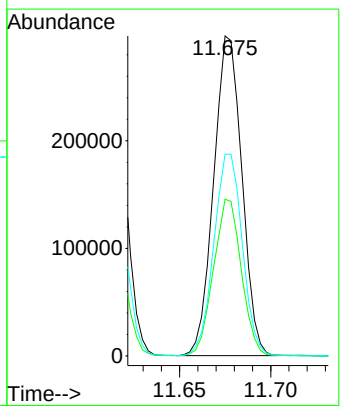
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

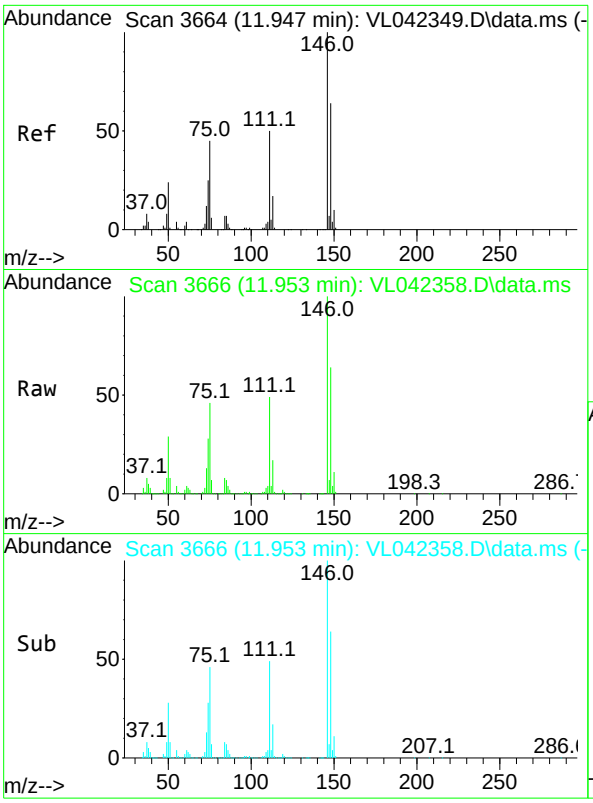


#76
1,4-Dichlorobenzene
Concen: 9.384 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:146 Resp: 319376

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.2	72.6
148	64.1	32.1	96.5

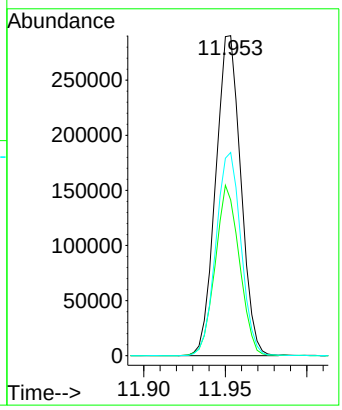




#77
1,2-Dichlorobenzene
Concen: 9.459 ppbv
RT: 11.953 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:146 Resp: 31146

Ion	Ratio	Lower	Upper
146	100		
111	51.4	25.3	75.9
148	63.4	31.5	94.5



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
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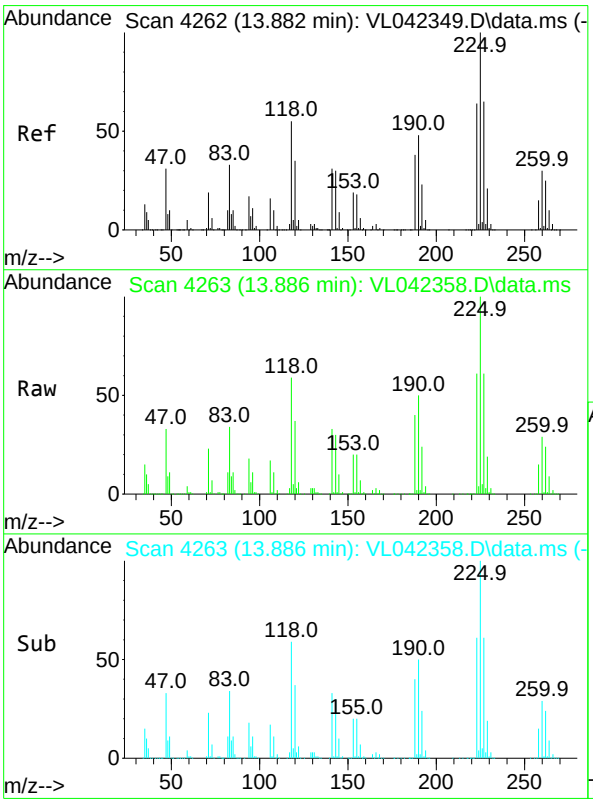
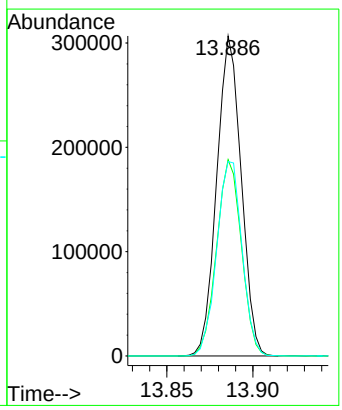
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

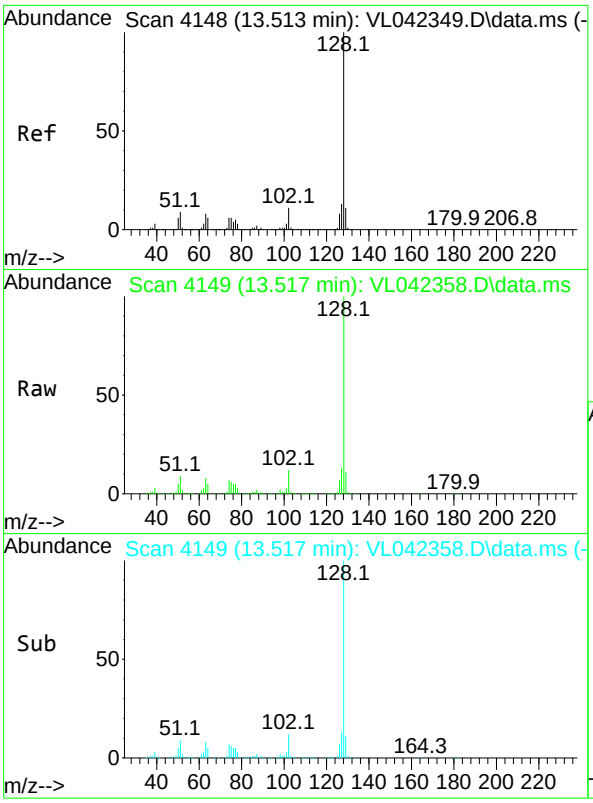


#78
Hexachloro-1,3-Butadiene
Concen: 9.124 ppbv
RT: 13.886 min Scan# 4263
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:225 Resp: 303379

Ion	Ratio	Lower	Upper
225	100		
223	62.3	50.3	75.5
227	62.9	51.5	77.3

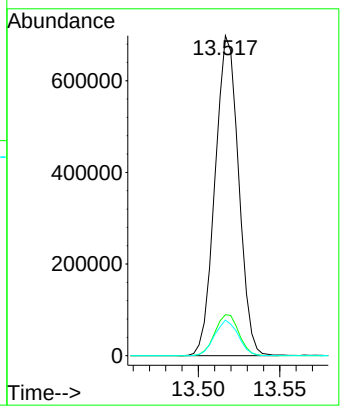




#79
Naphthalene
Concen: 8.999 ppbv
RT: 13.517 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:128 Resp: 70101

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	15.8
129	11.1	8.6	12.8



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
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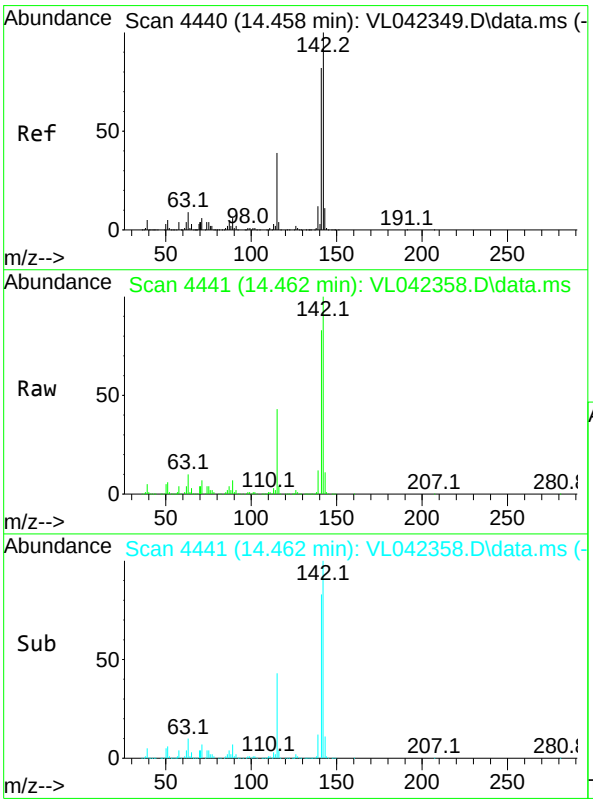
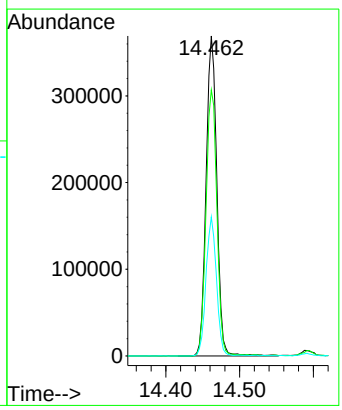
Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

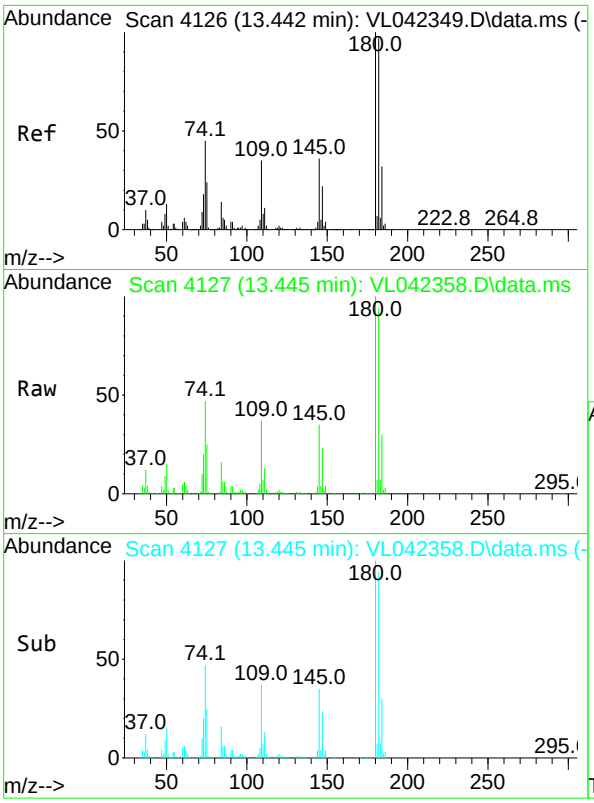


#80
Naphthalene,2-methyl-
Concen: 8.331 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:142 Resp: 369891

Ion	Ratio	Lower	Upper
142	100		
141	85.0	66.8	100.2
115	42.8	33.4	50.2

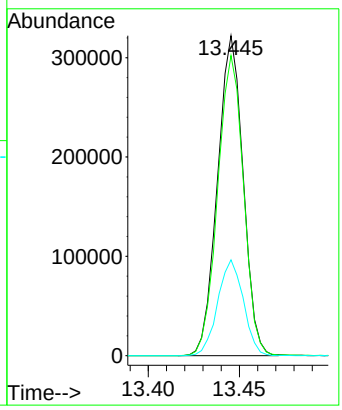




#81
1,2,4-Trichlorobenzene
Concen: 9.417 ppbv
RT: 13.445 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:180 Resp: 31500

Ion	Ratio	Lower	Upper
180	100		
182	94.8	76.8	115.2
184	30.1	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/18/2025
Supervised By :Mahesh Dadoda 04/18/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042418.D	1		04/28/25 10:10	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	10.0	49.5		1.04	2.47	ug/m3
64-17-5	Ethanol	3.00	5.65		0.60	0.94	ug/m3
74-87-3	Chloromethane	9.70	20.0		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	8.70	22.2		0.030	0.080	ug/m3
74-83-9	Bromomethane	9.40	36.5		0.54	1.94	ug/m3
75-00-3	Chloroethane	9.50	25.1		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	8.40	24.8		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	10.0	56.2		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	9.60	73.6		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	10.0	69.9		0.63	3.49	ug/m3
593-60-2	Bromoethene	9.60	42.0		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	8.90	27.0		0.58	1.52	ug/m3
142-82-5	Heptane	7.60	31.1		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	8.80	21.6		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	9.20	36.5		0.56	1.98	ug/m3
67-64-1	Acetone	8.60	20.4		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	9.40	29.3		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	8.70	31.4		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	7.90	27.4		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	9.20	36.5		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	9.40	38.0		0.53	2.02	ug/m3
110-82-7	Cyclohexane	8.60	29.6		0.76	1.72	ug/m3
78-93-3	2-Butanone	8.60	25.4		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	9.90	62.3		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	9.50	37.7		0.36	1.98	ug/m3
67-66-3	Chloroform	9.80	47.9		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	9.50	51.8		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	8.70	40.6		0.47	2.34	ug/m3
71-43-2	Benzene	9.00	28.8		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	10.6	42.9		0.36	2.02	ug/m3
79-01-6	Trichloroethene	8.30	44.6		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	8.80	40.7		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	10.2	68.3		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	7.70	31.6		0.37	2.05	ug/m3
108-88-3	Toluene	8.90	33.5		0.41	1.88	ug/m3

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

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042418.D	1		04/28/25 10:10	VL042825

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	9.10	41.3		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	9.10	41.3		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	9.50	51.8		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	9.80	83.5		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	9.20	70.7		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.10	54.9		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	9.50	43.8		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	9.30	40.4		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	19.0	82.5		0.91	4.34	ug/m3
95-47-6	o-Xylene	9.50	41.3		0.52	2.17	ug/m3
100-42-5	Styrene	9.10	38.7		0.47	2.13	ug/m3
75-25-2	Bromoform	9.20	95.1		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	8.80	60.4		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	9.60	49.7		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	9.30	45.7		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	8.90	43.8		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	9.00	54.1		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	9.00	54.1		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	9.10	54.7		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	8.70	64.6		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	8.80	93.9		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	9.00	19.9		0.29	1.11	ug/m3
91-20-3	Naphthalene	8.50	44.6		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	9.40	46.2		0.59	2.46	ug/m3
110-54-3	Hexane	8.10	28.6		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	9.00	28.2		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	8.00	28.8		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	8.30	34.0		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	10.5			70 (65) - 130 (135)	105%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	122000		2.78			
540-36-3	1,4-Difluorobenzene	337000		3.952			
3114-55-4	Chlorobenzene-d5	299000		8.875			

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0428ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0428ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042418.D	1		04/28/25 10:10	VL042825

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

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

E = Value Exceeds Calibration Range

D = Dilution

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

* = Values outside of QC limits

Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042418.D
Acq On : 28 Apr 2025 10:10
Operator : SY/MD
Sample : VL0428ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:32:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.780	49	122448	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	337202	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	299130	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	258626	10.521	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	216893	10.025	ppbv	99
3) Chlorodifluoromethane	1.473	51	187830	9.117	ppbv	97
4) Chloromethane	1.531	50	82976	9.692	ppbv	98
5) Vinyl Chloride	1.576	62	81506	8.746	ppbv	96
6) Bromomethane	1.664	94	37549	9.379	ppbv	86
7) Chloroethane	1.703	64	31924	9.472	ppbv	98
8) Dichlorotetrafluoroethane	1.550	85	184850	9.952	ppbv	95
9) Propene	1.482	41	74980	7.992	ppbv	95
10) Heptane	4.968	43	199403	7.565	ppbv	99
11) Trichlorofluoromethane	1.874	101	205815	10.004	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.136	101	161799	9.619	ppbv	97
13) Ethanol	1.719	45	4439	2.977	ppbv	81
14) Bromoethene	1.780	108	60748	9.581	ppbv	97
15) Acetone	1.832	43	172651	8.613	ppbv	99
16) 1,3-Butadiene	1.605	39	86553	9.028	ppbv	94
17) tert-Butyl alcohol	2.036	59	221069	8.899	ppbv	100
18) 1,1-Dichloroethene	2.029	96	72496	9.225	ppbv	98
19) Isopropyl Alcohol	1.884	45	97525	8.758	ppbv	88
20) Methylene Chloride	2.059	84	62175	7.920	ppbv	89
21) Allyl Chloride	2.091	41	124058	8.964	ppbv	97
22) trans-1,2-Dichloroethene	2.337	96	82175	9.184	ppbv	97
23) Vinyl Acetate	2.457	43	67206	8.283	ppbv #	99
24) 1,1-Dichloroethane	2.405	63	159644	9.393	ppbv	99
25) Ethyl Acetate	2.832	43	419372	8.485	ppbv	99
26) Hexane	2.819	57	162255	8.112	ppbv	99
27) Carbon Disulfide	2.146	76	200806	9.377	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	114239	8.718	ppbv	92
29) Chloroform	2.842	83	275655	9.751	ppbv	100
30) Cyclohexane	3.848	84	138766	8.583	ppbv	98
31) cis-1,2-Dichloroethene	2.716	61	179960	9.464	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	301358	9.469	ppbv	100
34) 2-Butanone	2.554	43	230104	8.628	ppbv	99
35) Carbon Tetrachloride	3.755	117	302298	9.906	ppbv	96
36) Benzene	3.648	78	329117	9.049	ppbv	94
37) 1,2-Dichloroethane	3.214	62	232279	10.641	ppbv	97
38) Trichloroethene	4.541	130	131178	8.252	ppbv	93
39) 1,2-Dichloropropane	4.308	63	119692	8.831	ppbv	93
40) 1,4-Dioxane	4.577	88	59666	8.010	ppbv #	91
41) Tetrahydrofuran	3.049	42	131046	8.428	ppbv	98
42) Bromodichloromethane	4.480	83	310553	10.222	ppbv #	99
43) Methyl Methacrylate	4.871	69	136249	8.312	ppbv	97
44) 2,2,4-Trimethylpentane	4.628	57	546967	8.707	ppbv	97
45) t-1,3-Dichloropropene	6.402	75	152930	9.133	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042418.D
Acq On : 28 Apr 2025 10:10
Operator : SY/MD
Sample : VL0428ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 29 01:32:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations APPROVED
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Supervised By :Mahesh Dadoda 04/30/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.587	75	185557	9.055	ppbv		91
47)	1,1,2-Trichloroethane	6.574	97	130821	9.474	ppbv		95
48)	Dibromochloromethane	7.376	129	237927	9.753	ppbv		100
49)	Bromoform	9.477	173	196872	9.229	ppbv		99
50)	4-Methyl-2-Pentanone	5.742	43	342379	7.726	ppbv		98
51)	2-Hexanone	7.428	43	280580	7.060	ppbv	#	95
52)	Tetrachloroethene	8.218	164	113273	8.058	ppbv		95
53)	Toluene	6.923	91	388626	8.904	ppbv		99
54)	1,2-Dibromoethane	7.642	107	181632	9.191	ppbv		92
56)	1,1,1,2-Tetrachloroethane	8.917	131	180122	9.949	ppbv		96
57)	Chlorobenzene	8.917	112	294922	9.480	ppbv		97
58)	Ethyl Benzene	9.347	91	552423	9.321	ppbv		100
59)	m/p-Xylene	9.545	91	907157m	19.000	ppbv		
60)	o-Xylene	9.959	91	457491	9.515	ppbv		98
61)	Styrene	9.865	104	208517	9.086	ppbv		97
62)	Isopropylbenzene	10.535	105	673842	9.546	ppbv		97
63)	1,1,2,2-Tetrachloroethane	9.956	83	273641	8.783	ppbv		100
64)	n-propylbenzene	10.985	120	164482	9.271	ppbv		98
65)	tert-Butylbenzene	11.526	119	612519	9.441	ppbv		95
66)	Benzyl Chloride	11.610	91	54781	7.684	ppbv		98
67)	sec-Butylbenzene	11.765	105	846457	9.380	ppbv		99
69)	p-Isopropyltoluene	11.921	119	722909	9.221	ppbv		97
70)	n-Butylbenzene	12.277	91	771835	9.452	ppbv		98
71)	2-Chlorotoluene	10.898	91	532755	9.623	ppbv		96
72)	4-Ethyltoluene	11.121	105	554770	9.438	ppbv		97
73)	1,3,5-Trimethylbenzene	11.199	105	481697	9.283	ppbv		94
74)	1,2,4-Trimethylbenzene	11.532	105	537510	8.869	ppbv	#	89
75)	1,3-Dichlorobenzene	11.603	146	284652	9.035	ppbv		98
76)	1,4-Dichlorobenzene	11.668	146	284740	8.992	ppbv		98
77)	1,2-Dichlorobenzene	11.943	146	278619	9.095	ppbv		98
78)	Hexachloro-1,3-Butadiene	13.876	225	271569	8.779	ppbv		99
79)	Naphthalene	13.510	128	614768	8.482	ppbv		100
80)	Naphthalene,2-methyl-	14.455	142	316027	7.651	ppbv		96
81)	1,2,4-Trichlorobenzene	13.435	180	271657	8.729	ppbv		98

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

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QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
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ClientSampleId :
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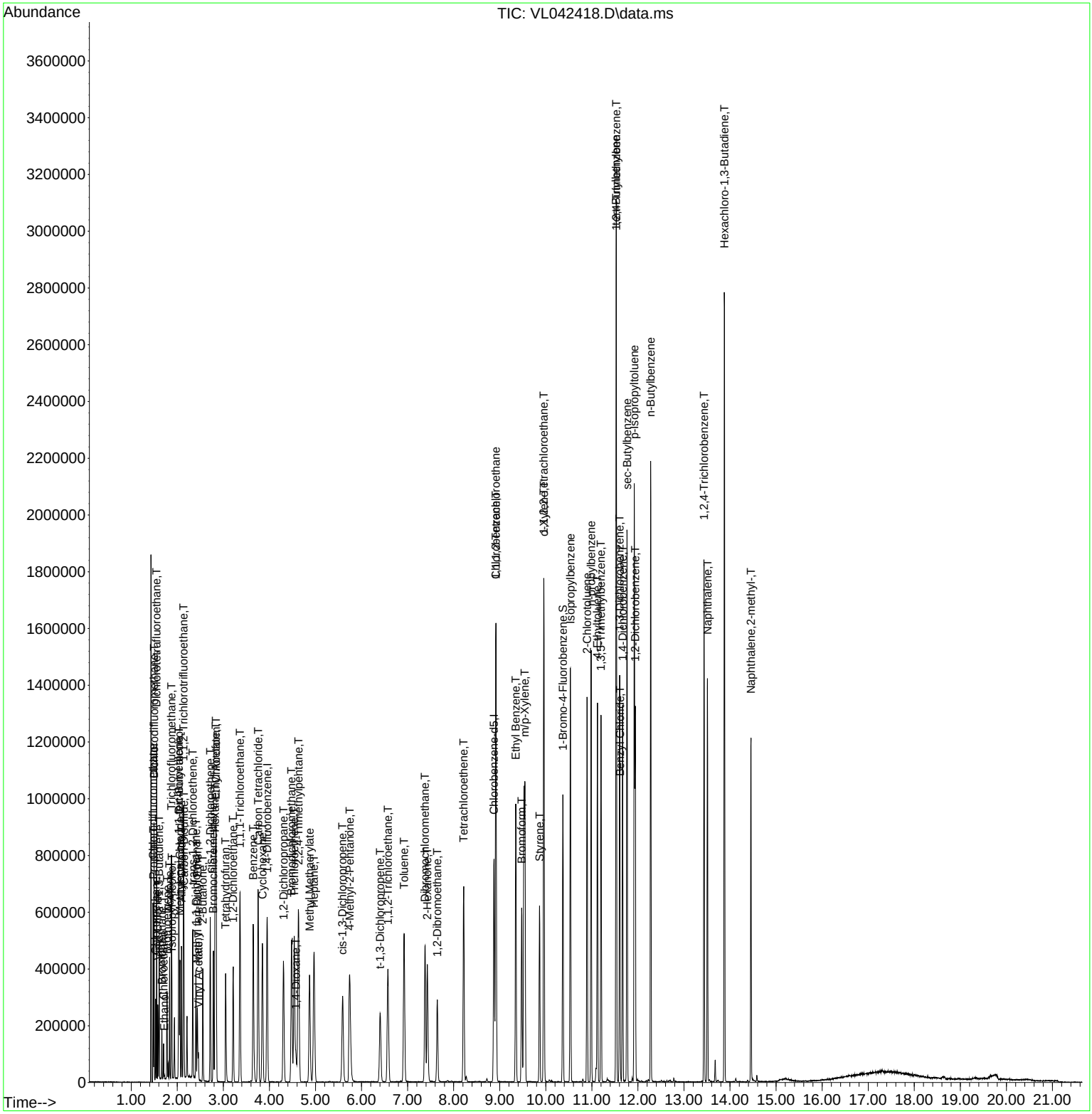
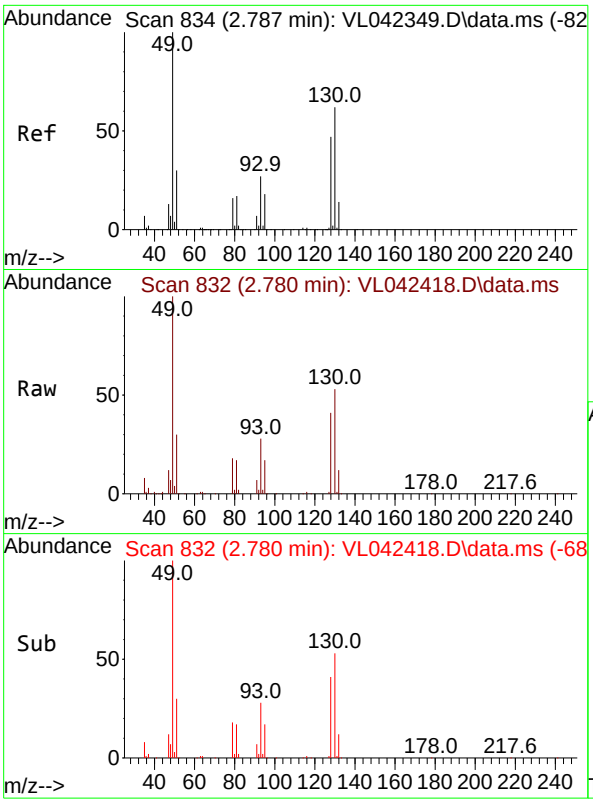
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 49 Resp: 12244

Ion	Ratio	Lower	Upper
49	100		
128	44.3	22.8	68.4
130	56.4	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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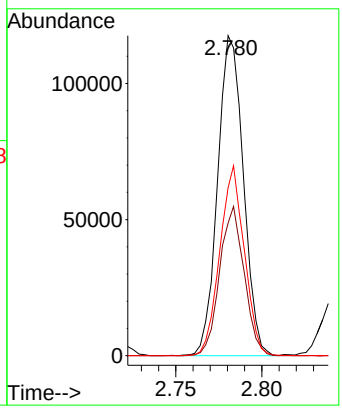
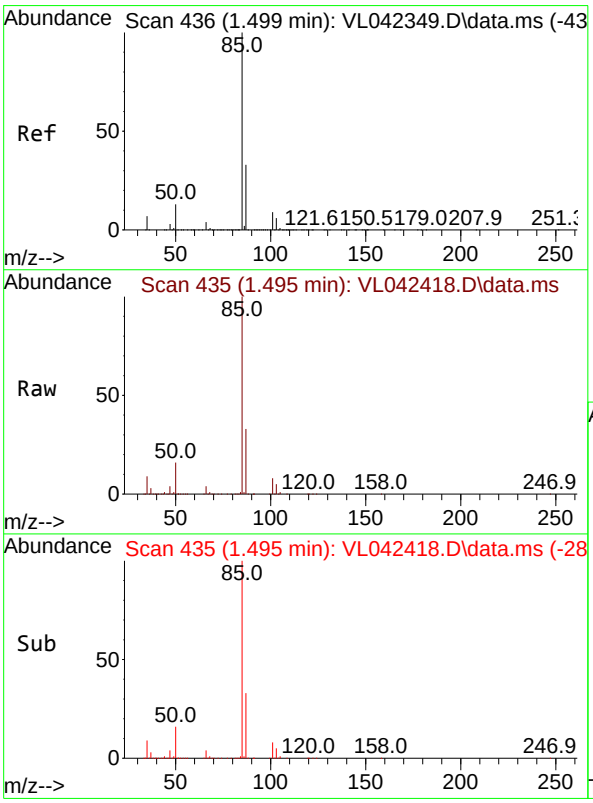
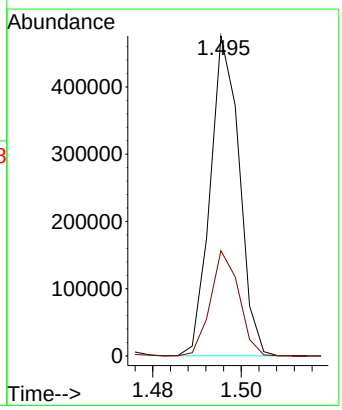


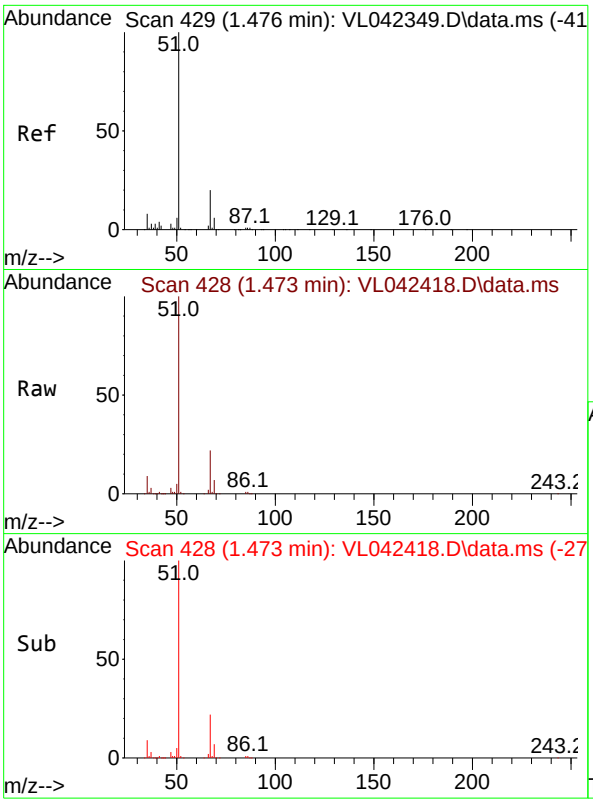


#2
Dichlorodifluoromethane
Concen: 10.025 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 85 Resp: 216893

Ion	Ratio	Lower	Upper
85	100		
87	32.9	26.6	39.8

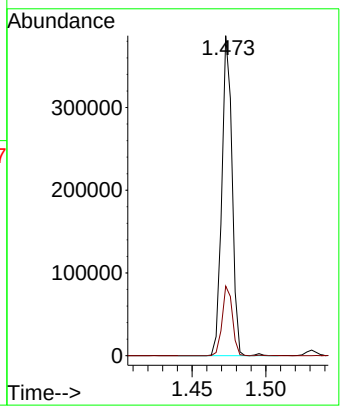




#3
Chlorodifluoromethane
Concen: 9.117 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 51 Resp: 18783

Ion	Ratio	Lower	Upper
51	100		
67	21.8	16.2	24.4



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ClientSampleId :
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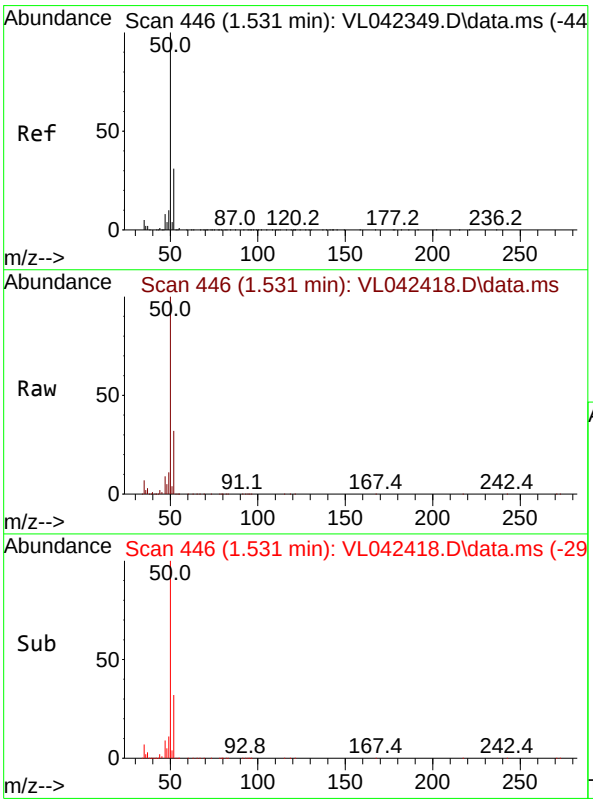
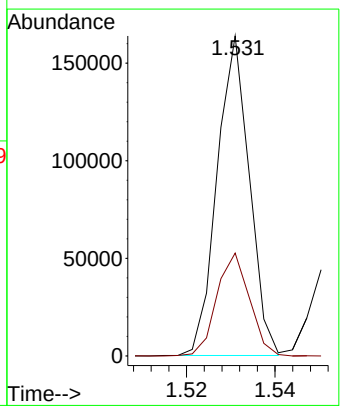
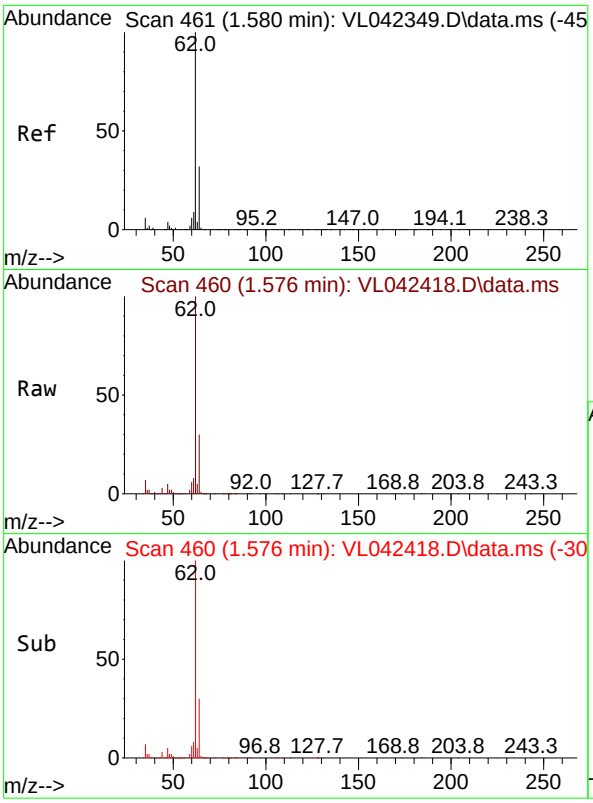


#4
Chloromethane
Concen: 9.692 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 50 Resp: 82976

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1

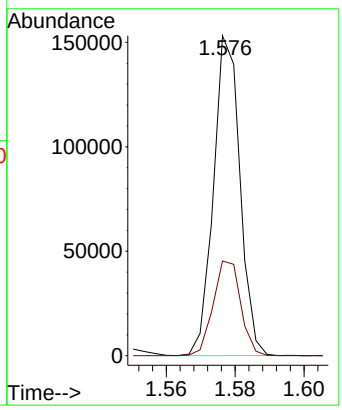




#5
Vinyl Chloride
Concen: 8.746 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 62 Resp: 8150

Ion	Ratio	Lower	Upper
62	100		
64	29.6	25.4	38.0



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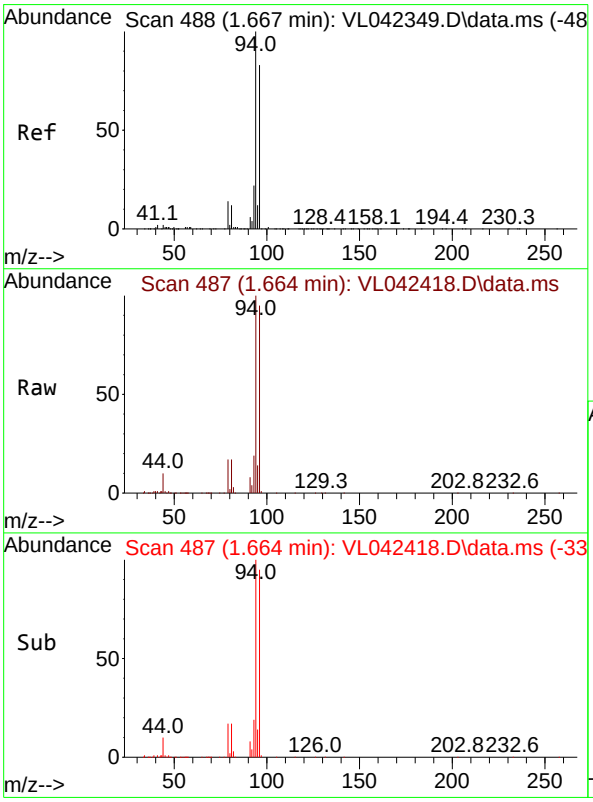
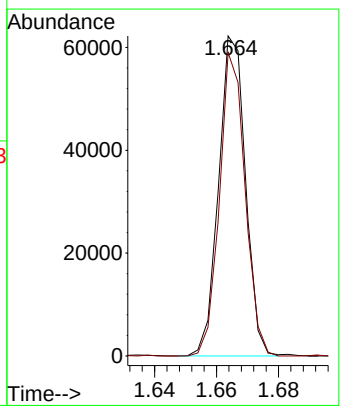
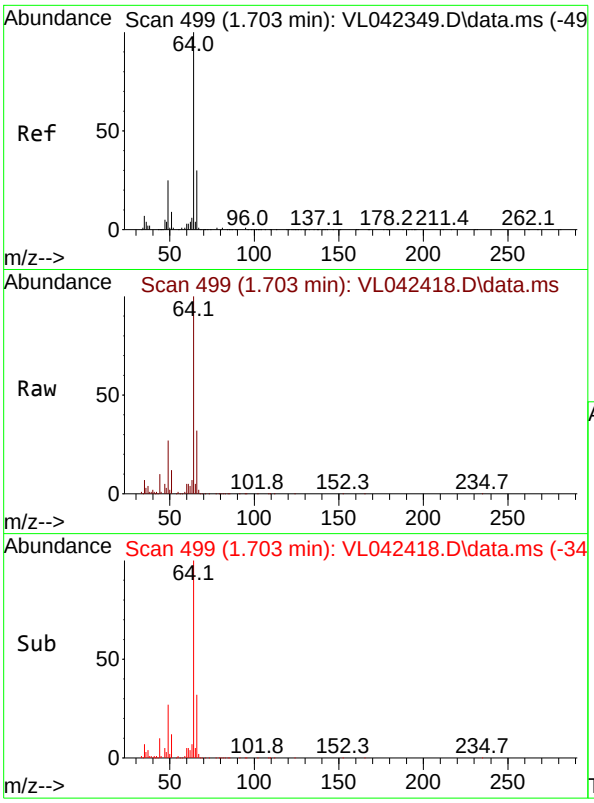


#6
Bromomethane
Concen: 9.379 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 94 Resp: 37549

Ion	Ratio	Lower	Upper
94	100		
96	94.8	66.2	99.2

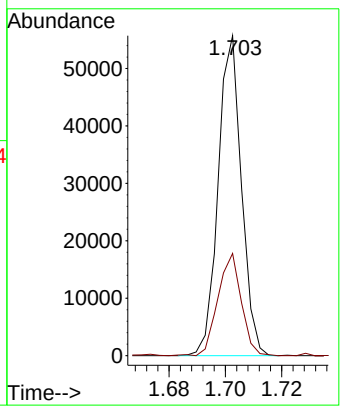




#7
Chloroethane
Concen: 9.472 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 64 Resp: 3192

Ion	Ratio	Lower	Upper
64	100		
66	31.9	24.6	37.0



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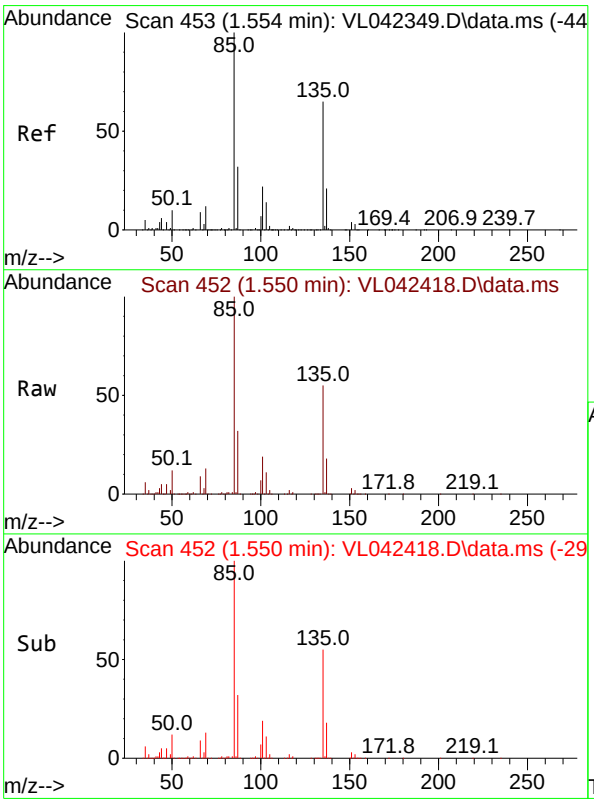
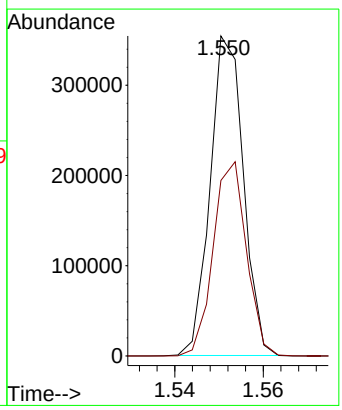
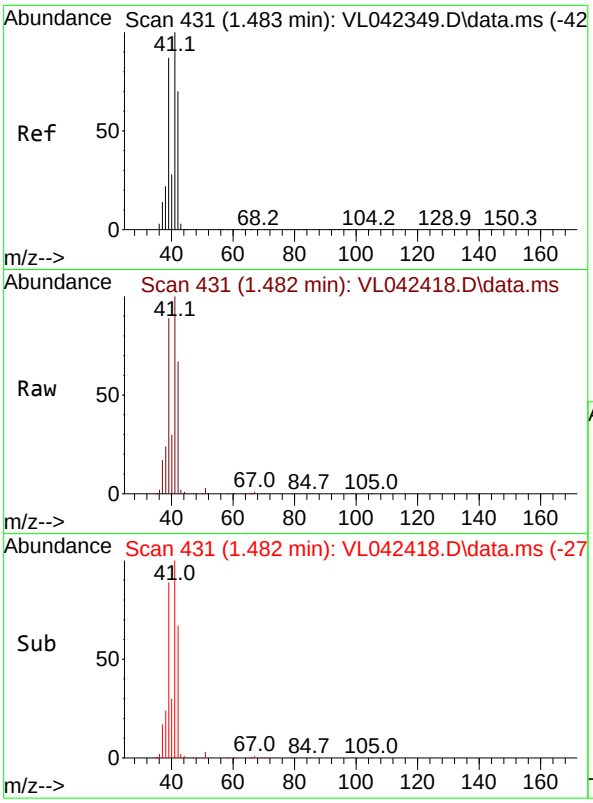


#8
Dichlorotetrafluoroethane
Concen: 9.952 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 85 Resp: 184850

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.2	78.2

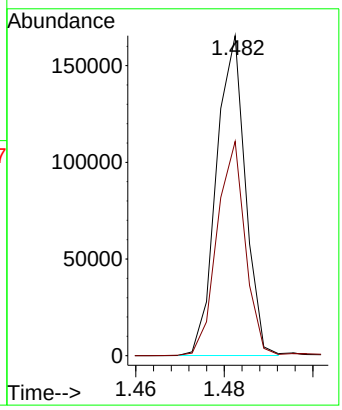




#9
Propene
Concen: 7.992 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 41 Resp: 7498

Ion	Ratio	Lower	Upper
41	100		
42	66.3	56.2	84.4



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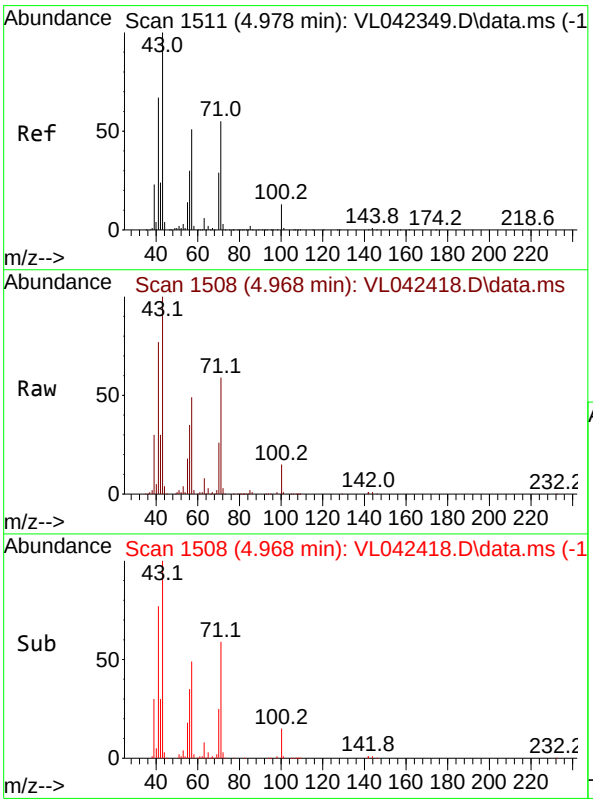
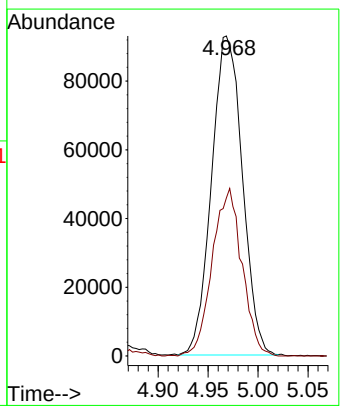
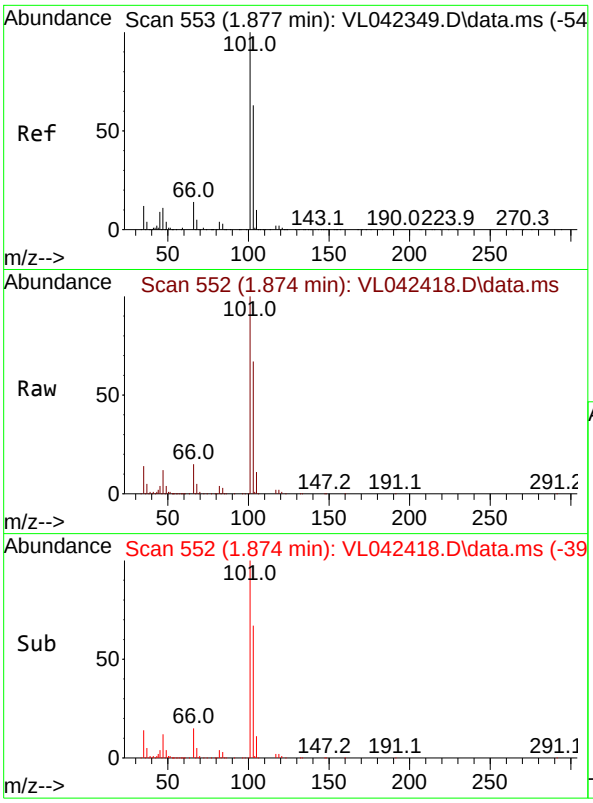


#10
Heptane
Concen: 7.565 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 199403

Ion	Ratio	Lower	Upper
43	100		
57	50.6	39.9	59.9





#11
Trichlorofluoromethane
Concen: 10.004 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:101 Resp: 20581

Ion	Ratio	Lower	Upper
101	100		
103	66.5	50.1	75.1

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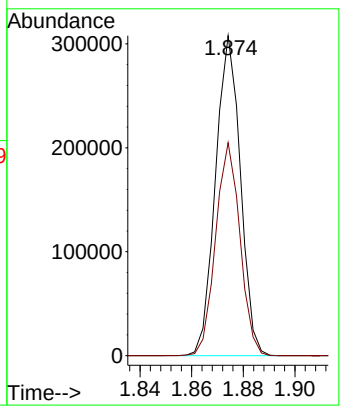
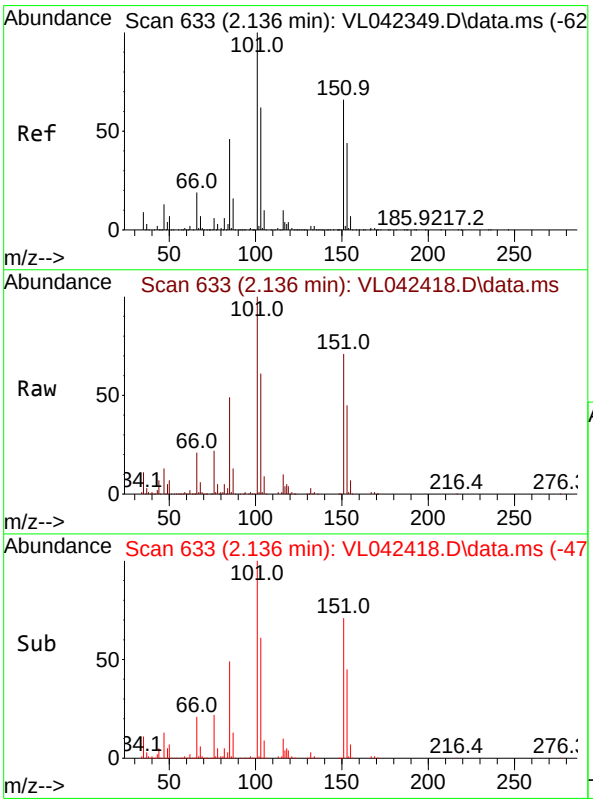
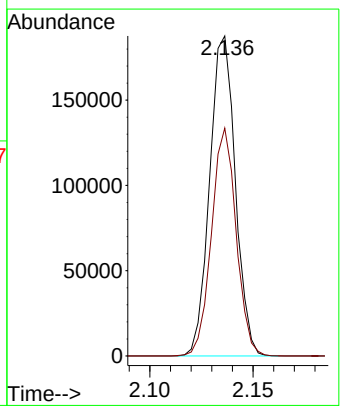


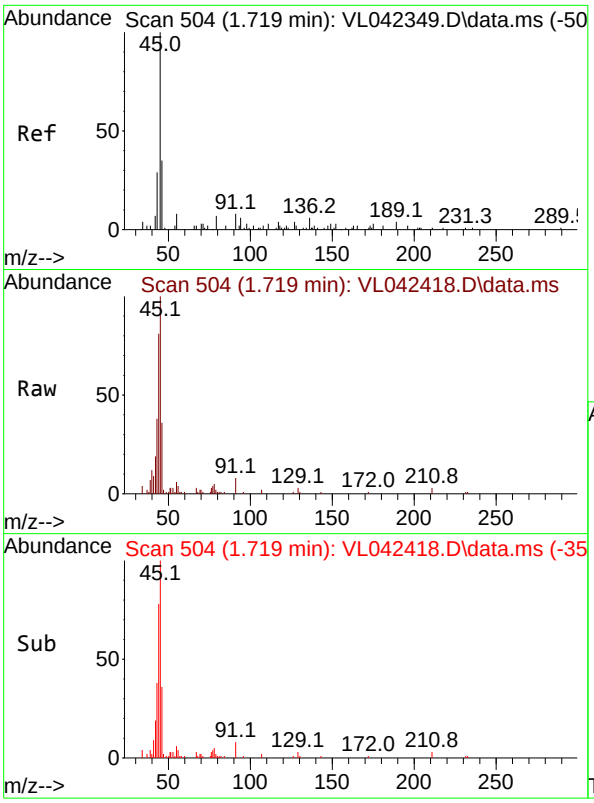


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.619 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:101 Resp: 161799

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.0	85.6

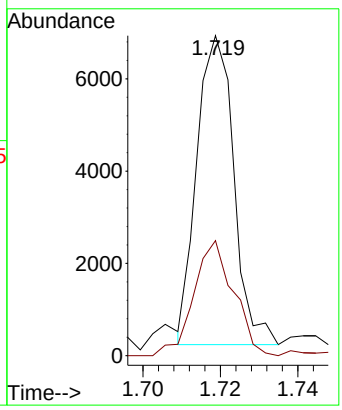




#13
Ethanol
Concen: 2.977 ppbv
RT: 1.719 min Scan# 5(
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 45 Resp: 443

Ion	Ratio	Lower	Upper
45	100		
46	41.4	21.9	87.7



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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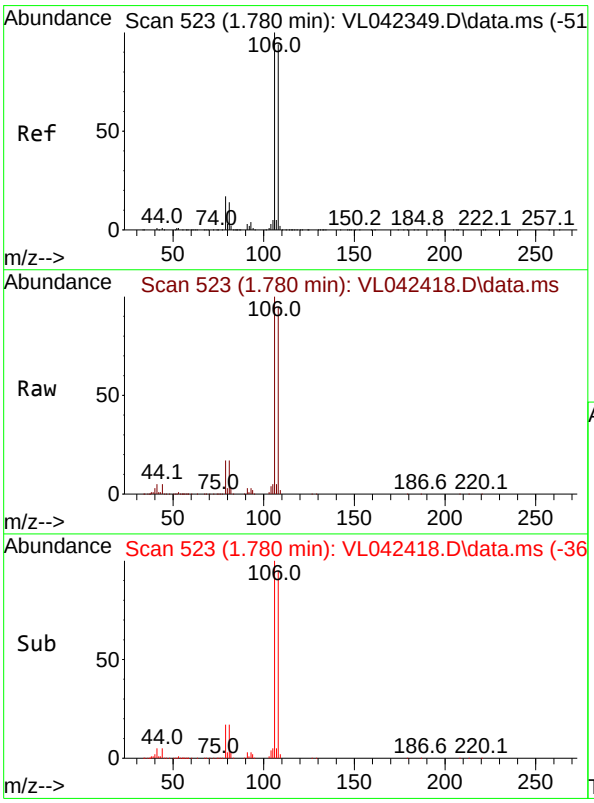
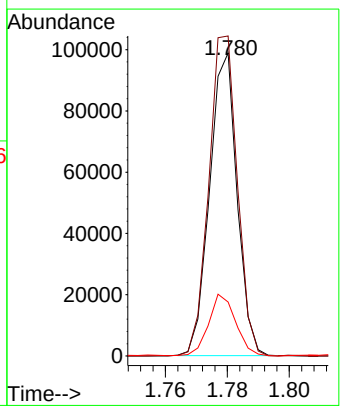
Supervised By :Mahesh Dadoda 04/30/2025

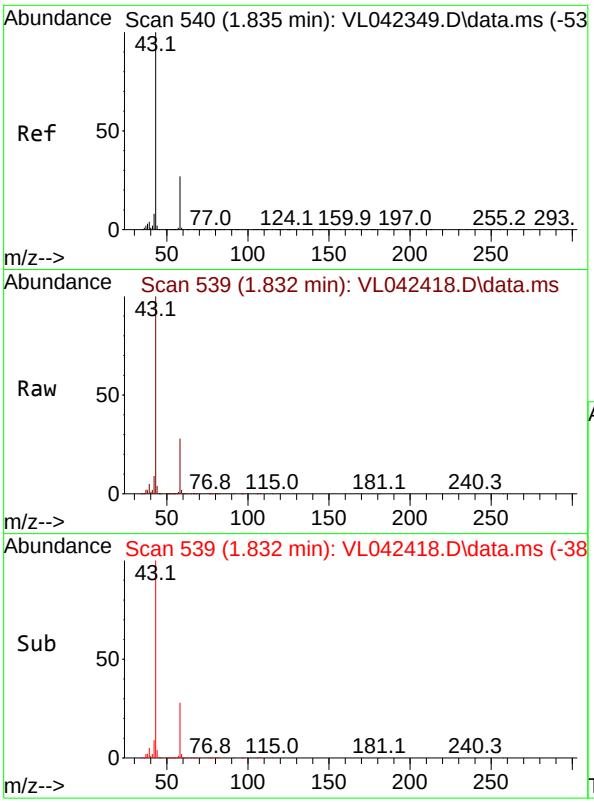


#14
Bromoethene
Concen: 9.581 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:108 Resp: 60748

Ion	Ratio	Lower	Upper
108	100		
106	110.0	85.9	128.9
79	20.2	13.9	20.9

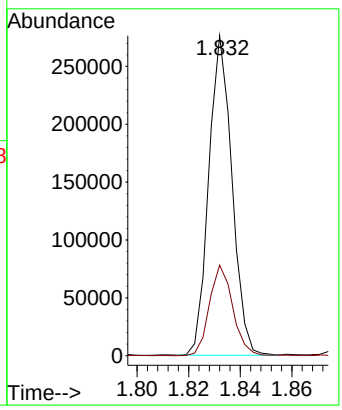




#15
Acetone
Concen: 8.613 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 17265

Ion	Ratio	Lower	Upper
43	100		
58	28.8	22.4	33.6



Instrument :
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ClientSampleId :
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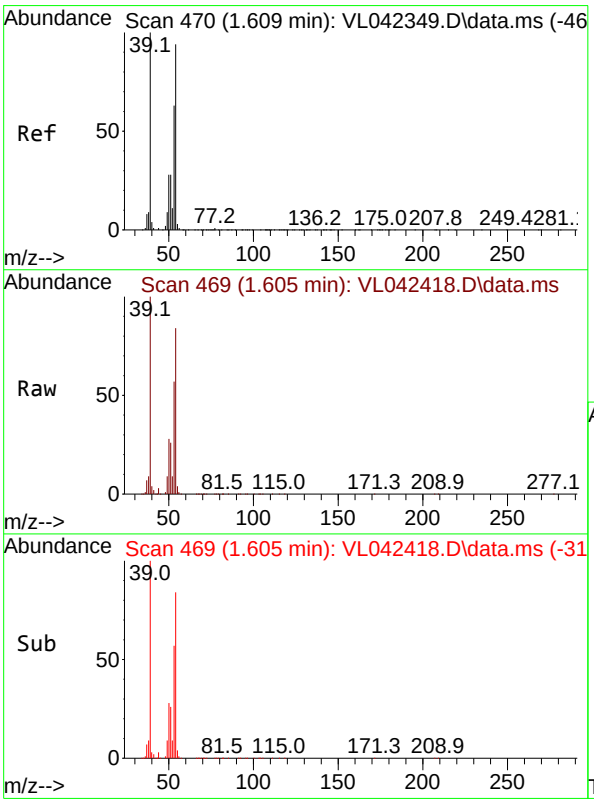
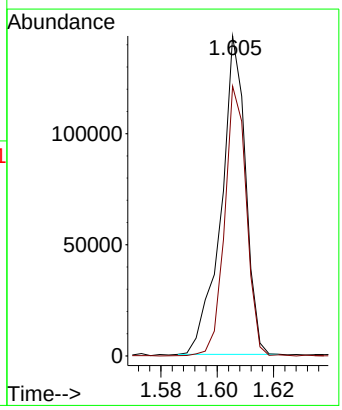
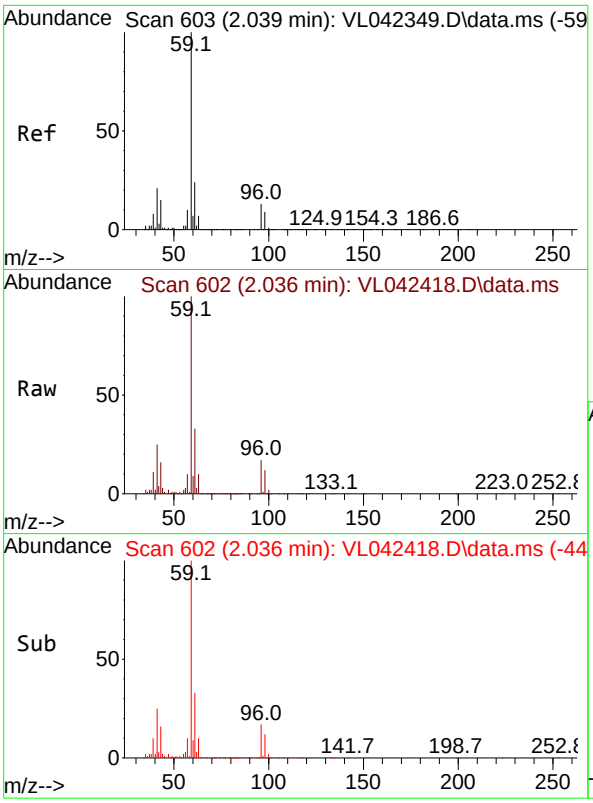


#16
1,3-Butadiene
Concen: 9.028 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 39 Resp: 86553

Ion	Ratio	Lower	Upper
39	100		
54	75.3	64.9	97.3

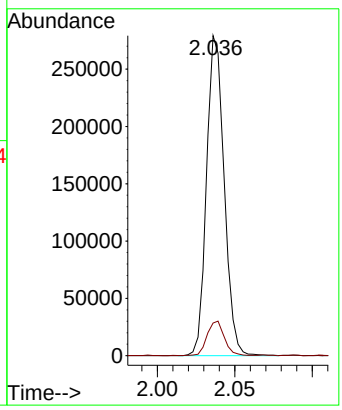




#17
tert-Butyl alcohol
Concen: 8.899 ppbv
RT: 2.036 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 59 Resp: 22106

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.7	13.1



Instrument :
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ClientSampleId :
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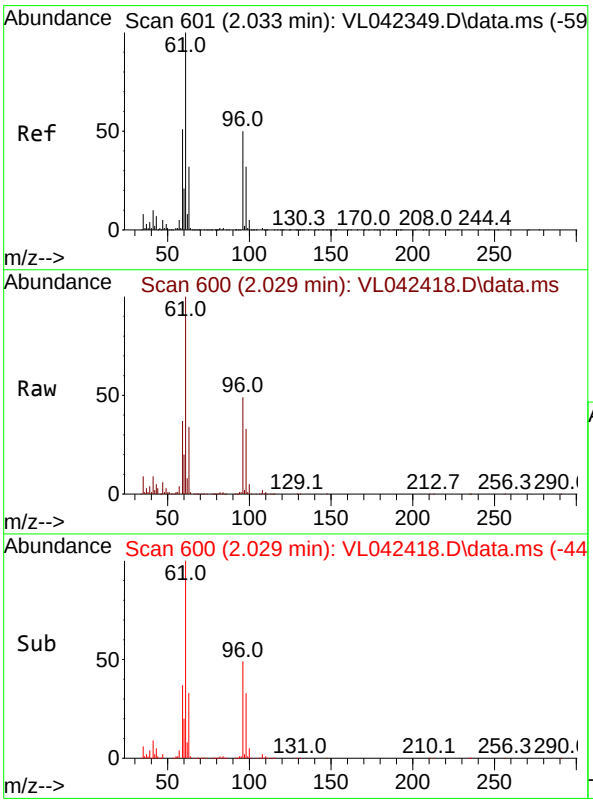
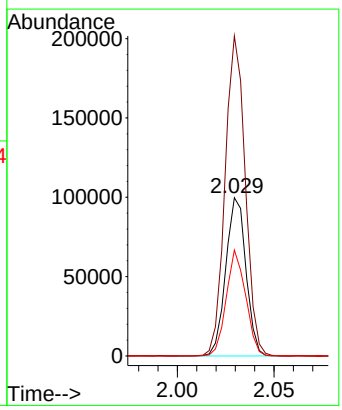
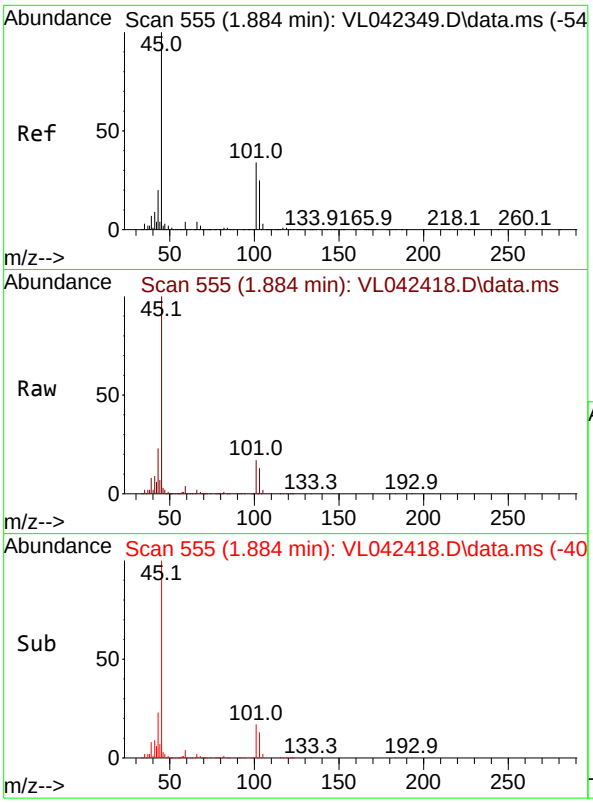


#18
1,1-Dichloroethene
Concen: 9.225 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 96 Resp: 72496

Ion	Ratio	Lower	Upper
96	100		
61	202.1	160.2	240.2
98	66.9	51.0	76.4

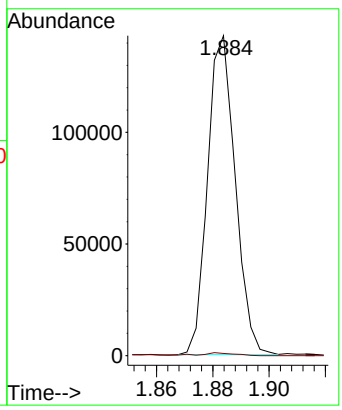




#19
Isopropyl Alcohol
Concen: 8.758 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 45 Resp: 9752

Ion	Ratio	Lower	Upper
45	100		
58	51.0	34.5	51.7



Instrument :
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ClientSampleId :
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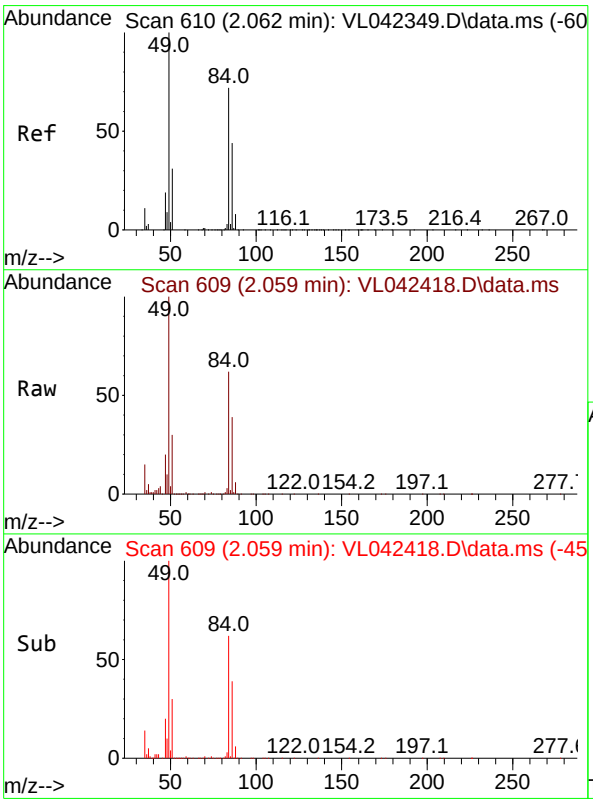
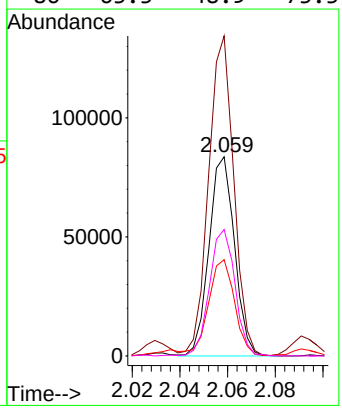
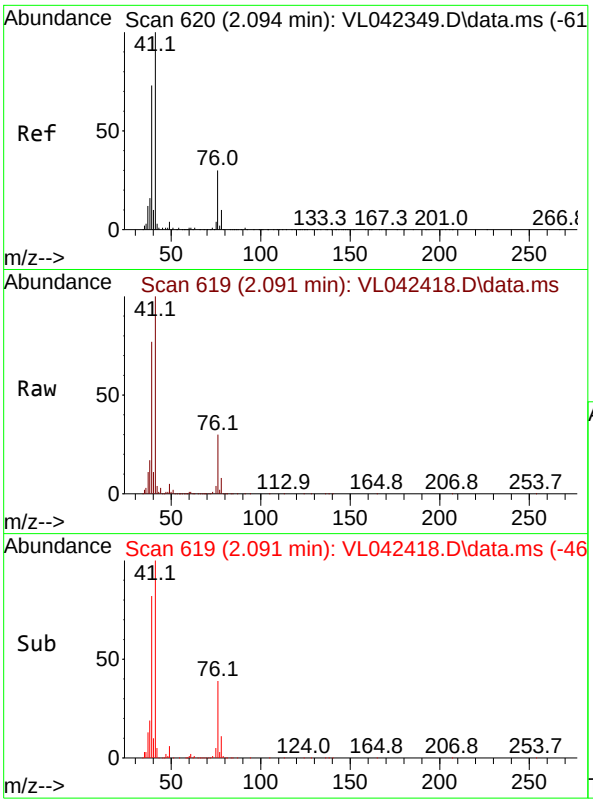


#20
Methylene Chloride
Concen: 7.920 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 84 Resp: 62175

Ion	Ratio	Lower	Upper
84	100		
49	159.9	111.6	167.4
51	47.8	35.1	52.7
86	63.3	48.9	73.3

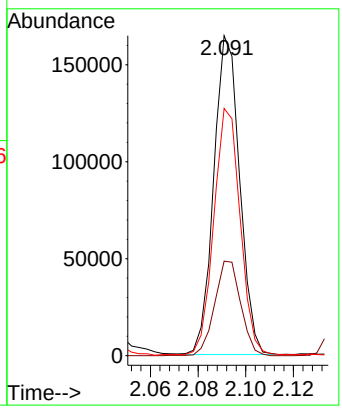




#21
Allyl Chloride
Concen: 8.964 ppbv
RT: 2.091 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 41 Resp: 12405

Ion	Ratio	Lower	Upper
41	100		
76	29.9	24.8	37.2
39	78.6	60.6	90.8



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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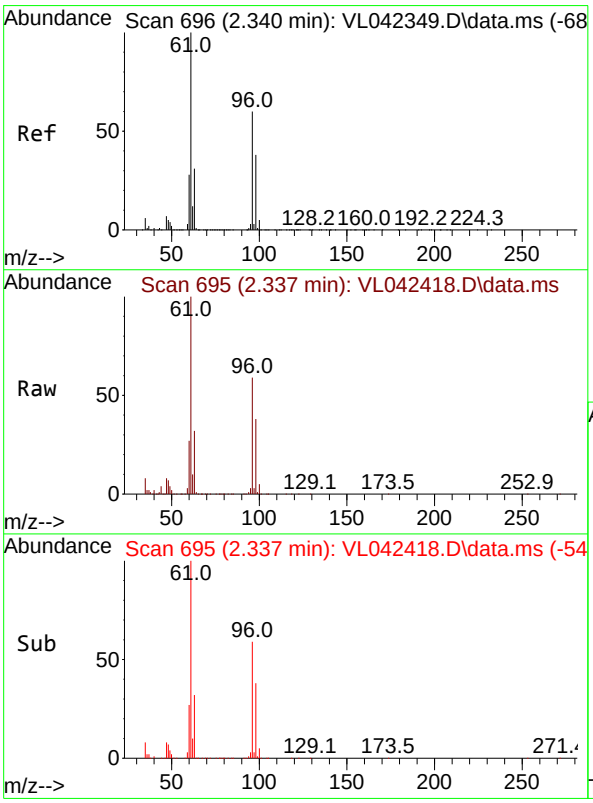
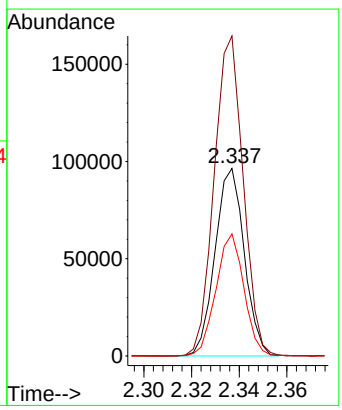
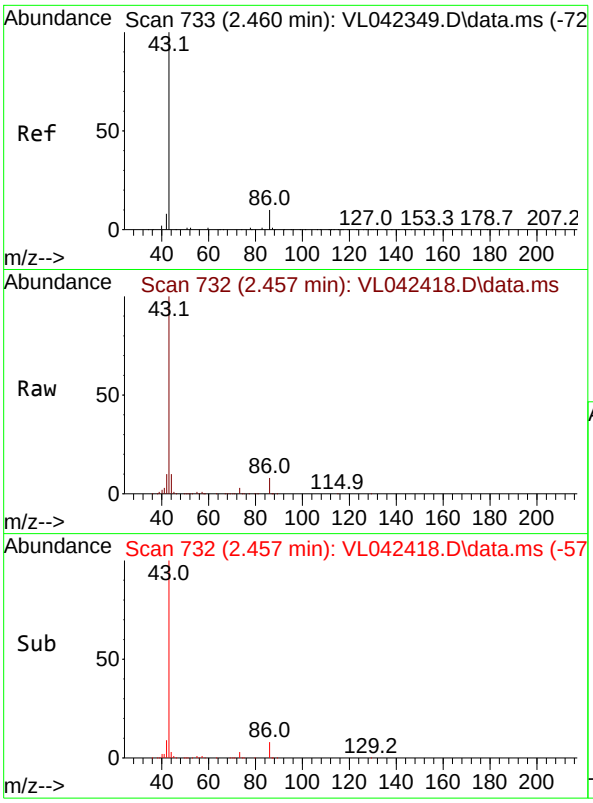


#22
trans-1,2-Dichloroethene
Concen: 9.184 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 96 Resp: 82175

Ion	Ratio	Lower	Upper
96	100		
61	170.5	133.7	200.5
98	65.0	50.3	75.5

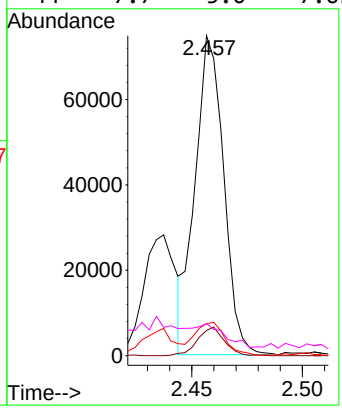




#23
Vinyl Acetate
Concen: 8.283 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 6720

Ion	Ratio	Lower	Upper
43	100		
86	7.9	6.5	9.7
42	9.8	7.8	11.8
44	7.7	5.0	7.6#



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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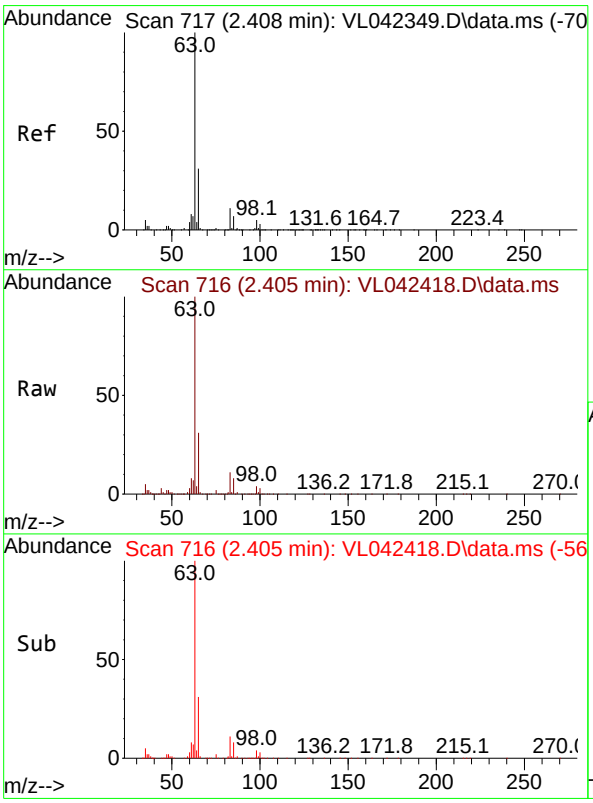
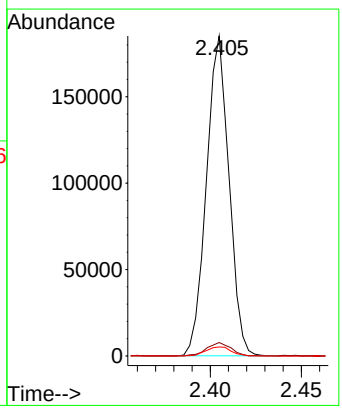
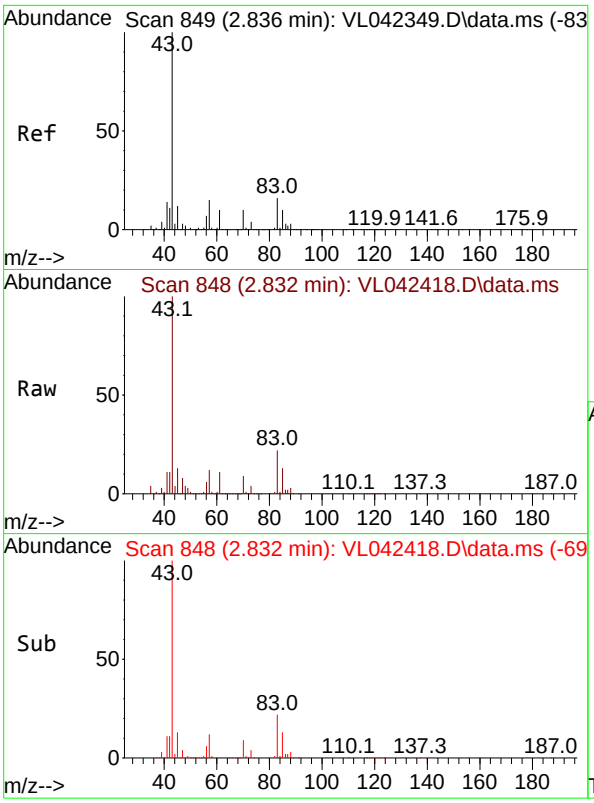


#24
1,1-Dichloroethane
Concen: 9.393 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 63 Resp: 159644

Ion	Ratio	Lower	Upper
63	100		
98	4.2	2.3	6.8
100	2.8	1.6	4.8

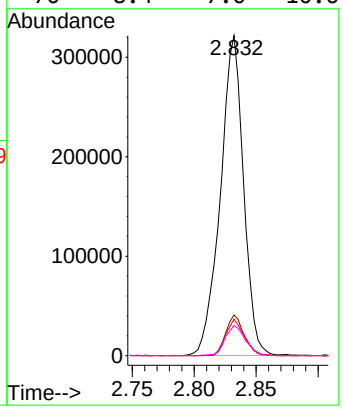




#25
Ethyl Acetate
Concen: 8.485 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 41937

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.3	12.5
61	9.1	7.3	10.9
70	8.4	7.0	10.6



Instrument :
MSVOA_L
ClientSampleId :
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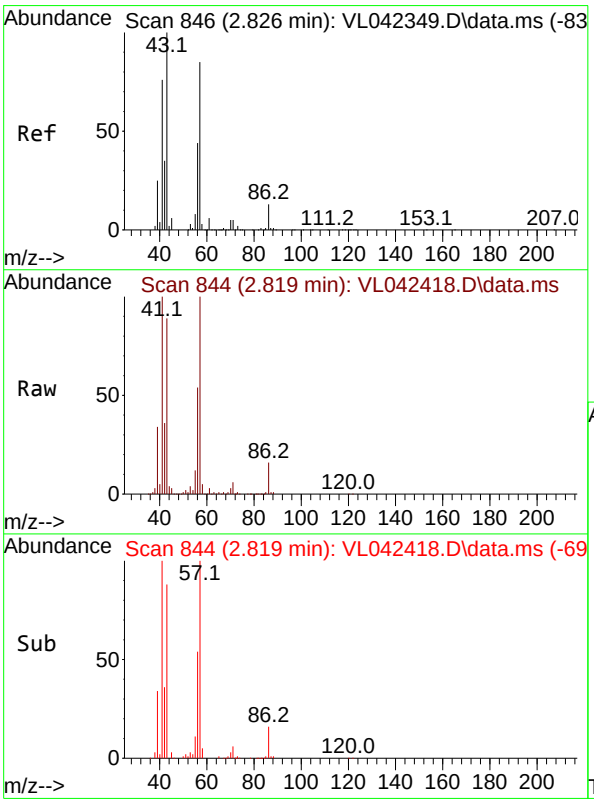
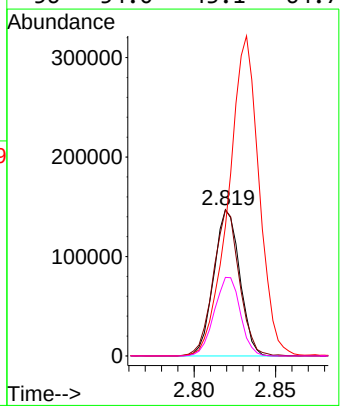
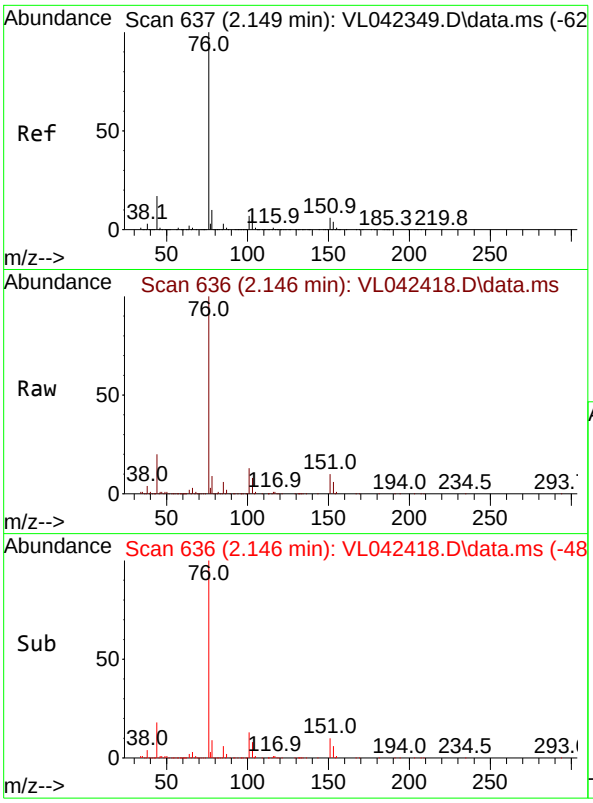


#26
Hexane
Concen: 8.112 ppbv
RT: 2.819 min Scan# 844
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 57 Resp: 162255

Ion	Ratio	Lower	Upper
57	100		
41	100.5	77.9	116.9
43	258.8	208.4	312.6
56	54.0	43.1	64.7

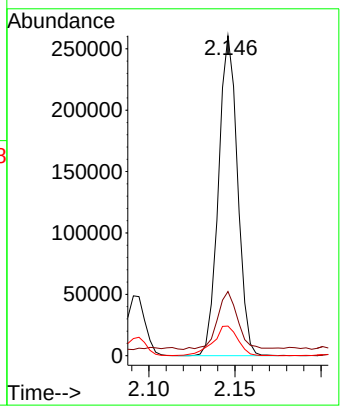




#27
Carbon Disulfide
Concen: 9.377 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 76 Resp: 20080

Ion	Ratio	Lower	Upper
76	100		
44	21.3	15.5	23.3
78	12.0	9.3	13.9



Instrument :
MSVOA_L
ClientSampleId :
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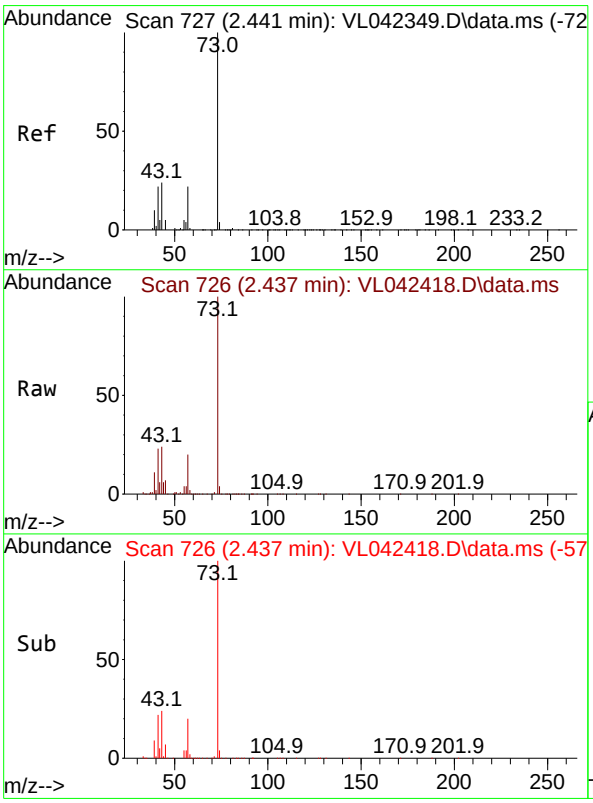
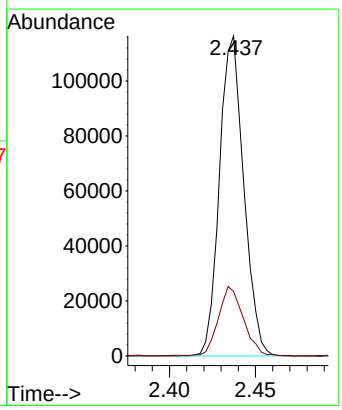
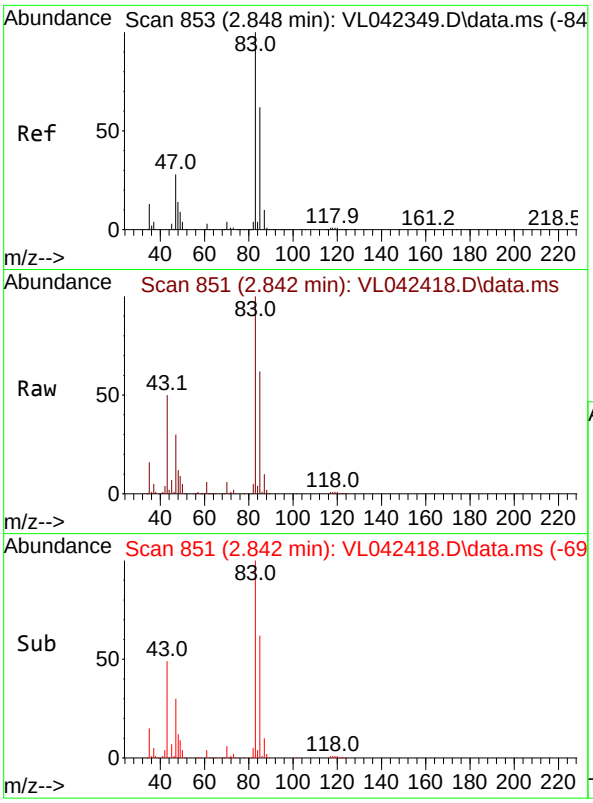


#28
Methyl tert-Butyl Ether
Concen: 8.718 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 73 Resp: 114239

Ion	Ratio	Lower	Upper
73	100		
57	22.6	21.3	31.9





#29
Chloroform
Concen: 9.751 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 83 Resp: 27565

Ion	Ratio	Lower	Upper
83	100		
85	62.3	50.0	75.0

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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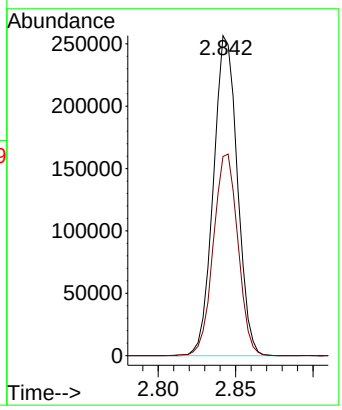
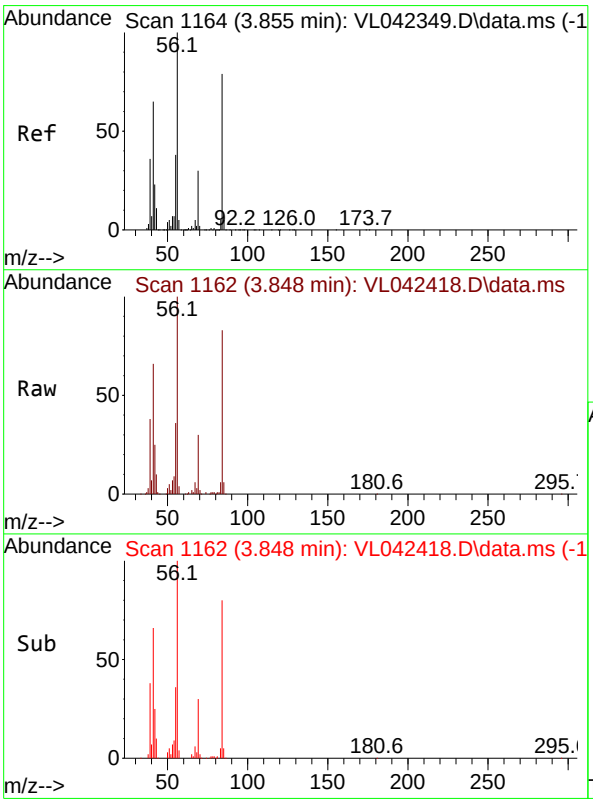
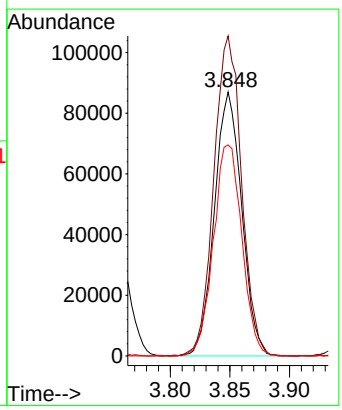


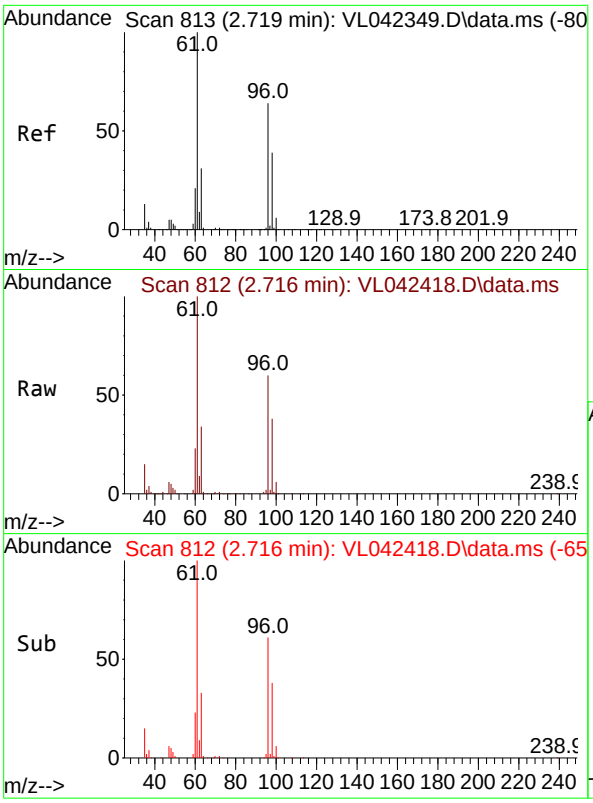


#30
Cyclohexane
Concen: 8.583 ppbv
RT: 3.848 min Scan# 1162
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 84 Resp: 138766

Ion	Ratio	Lower	Upper
84	100		
56	122.9	101.0	151.4
41	83.5	67.4	101.0

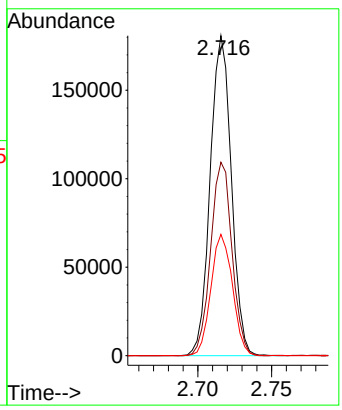




#31
cis-1,2-Dichloroethene
Concen: 9.464 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 61 Resp: 17996

Ion	Ratio	Lower	Upper
61	100		
96	60.5	50.8	76.2
98	37.9	30.9	46.3



Instrument :
MSVOA_L
ClientSampleId :
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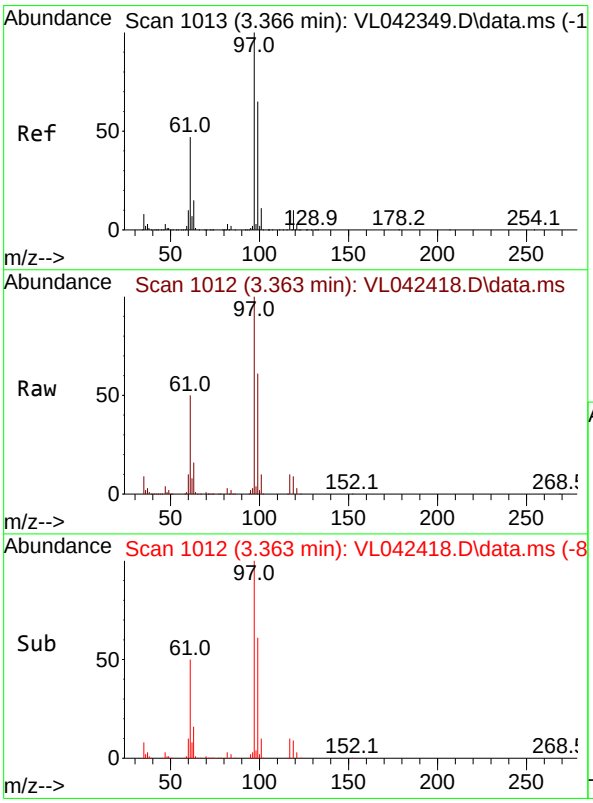
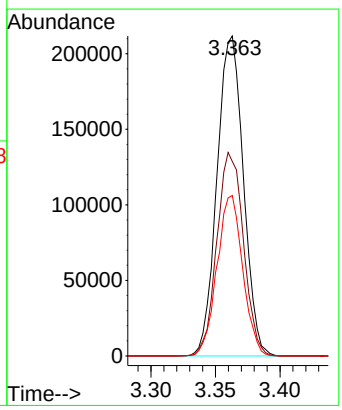
Supervised By :Mahesh Dadoda 04/30/2025

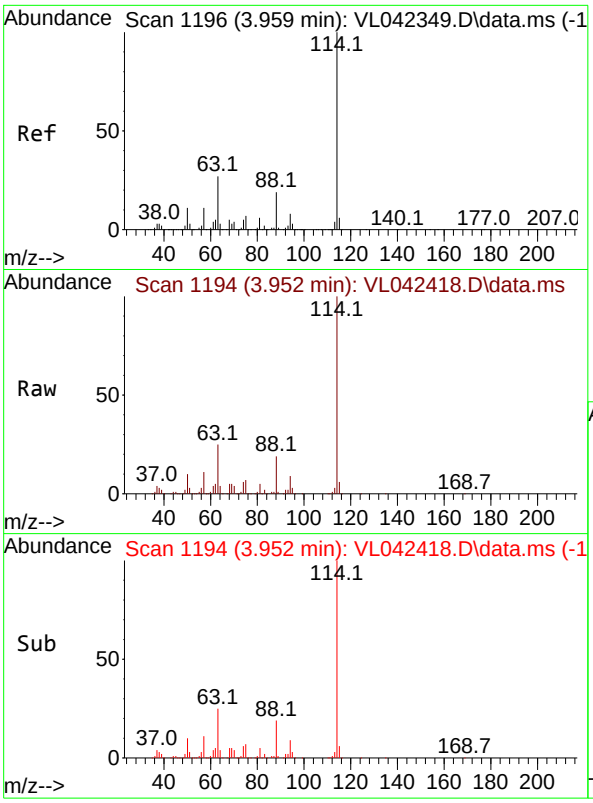


#32
1,1,1-Trichloroethane
Concen: 9.469 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 97 Resp: 301358

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.0	76.4
61	48.9	38.8	58.2





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:114 Resp: 33720

Ion	Ratio	Lower	Upper
114	100		
63	27.4	21.8	32.6
88	19.2	15.5	23.3

Instrument :
MSVOA_L
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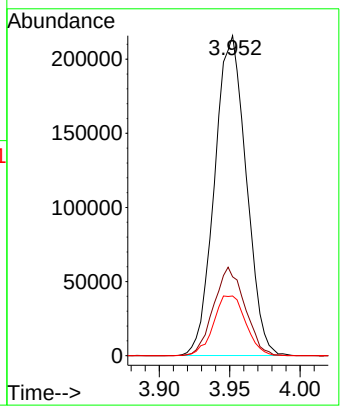
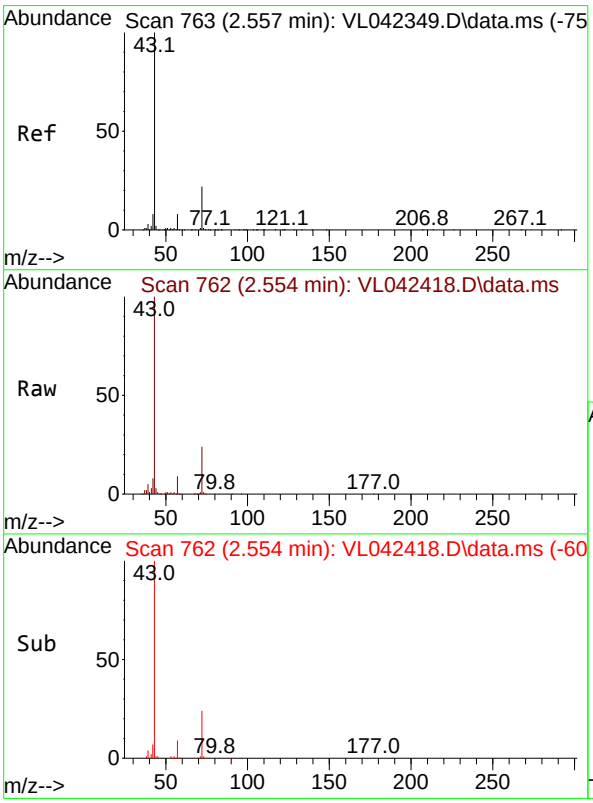
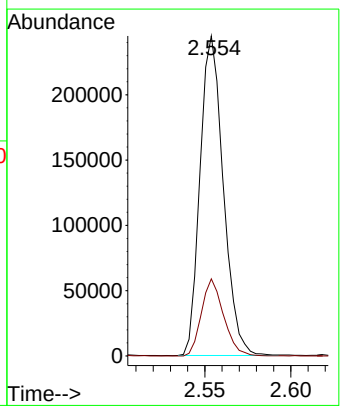


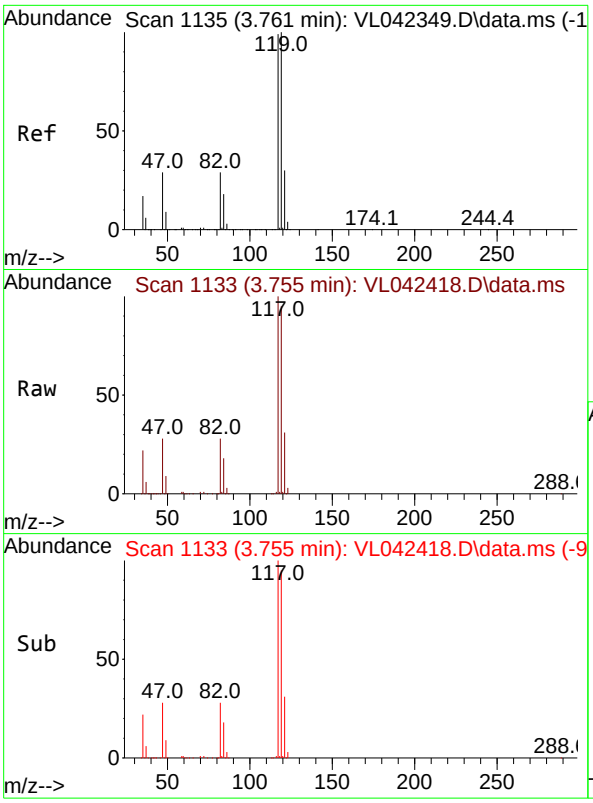


#34
2-Butanone
Concen: 8.628 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 230104

Ion	Ratio	Lower	Upper
43	100		
72	23.0	18.2	27.2

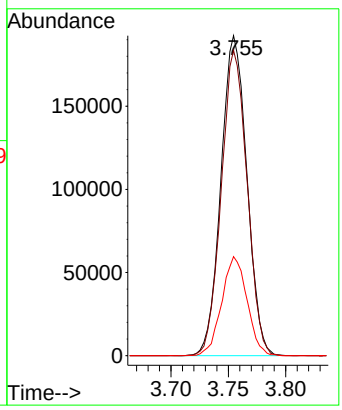




#35
Carbon Tetrachloride
Concen: 9.906 ppbv
RT: 3.755 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:117 Resp: 30229

Ion	Ratio	Lower	Upper
117	100		
119	95.4	80.5	120.7
121	30.9	24.2	36.2



Instrument :
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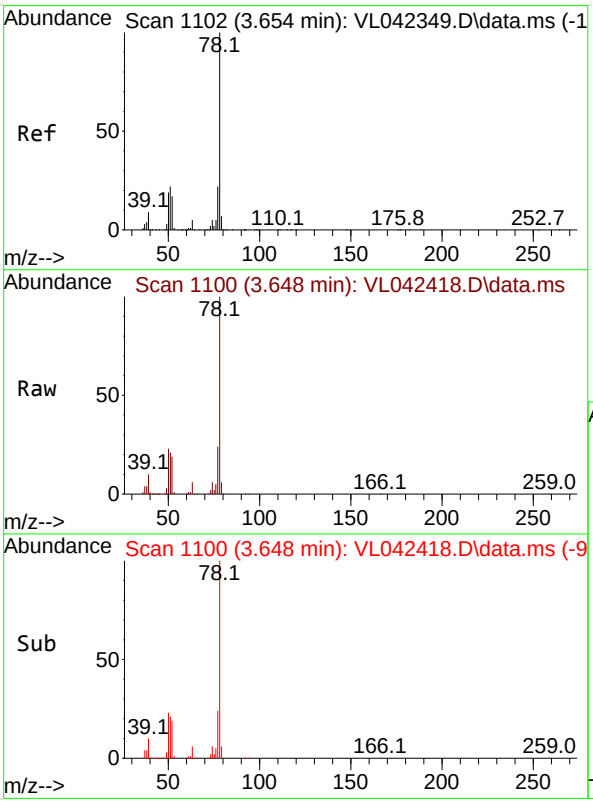
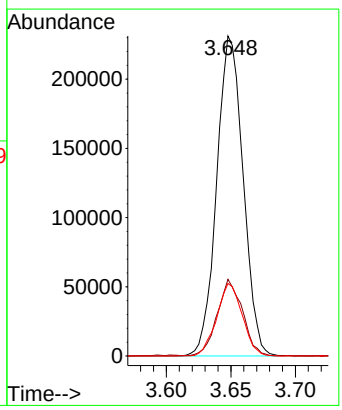
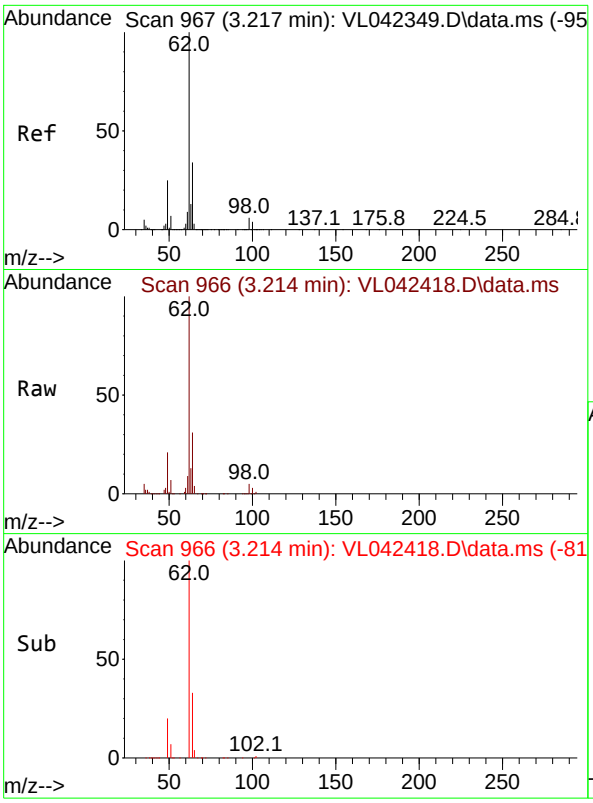


#36
Benzene
Concen: 9.049 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 78 Resp: 329117

Ion	Ratio	Lower	Upper
78	100		
77	23.8	17.4	26.0
50	22.7	15.5	23.3

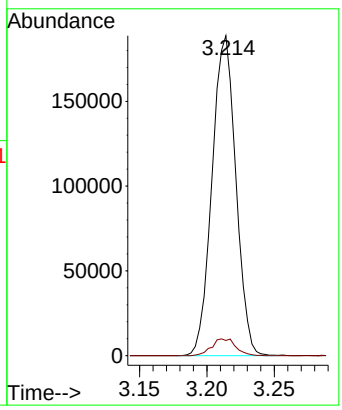




#37
1,2-Dichloroethane
Concen: 10.641 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 62 Resp: 23227

Ion	Ratio	Lower	Upper
62	100		
98	5.4	5.1	7.7



Instrument :
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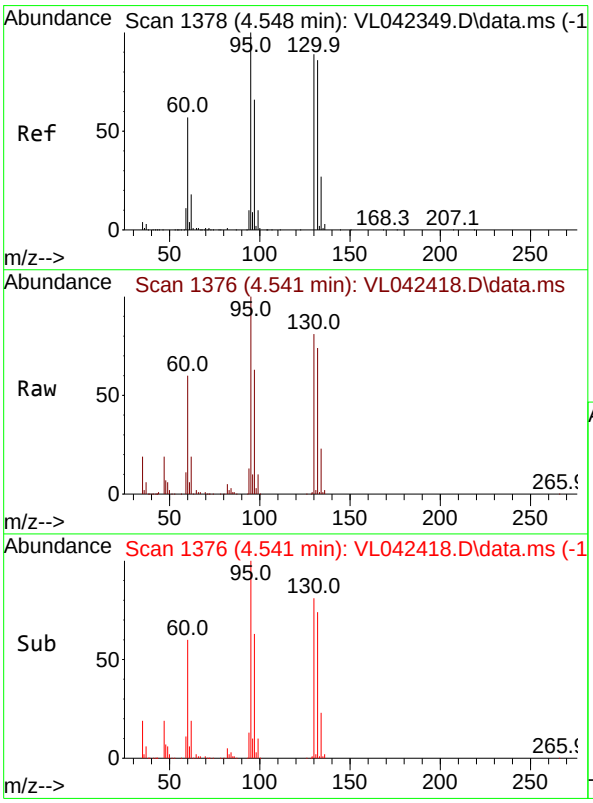
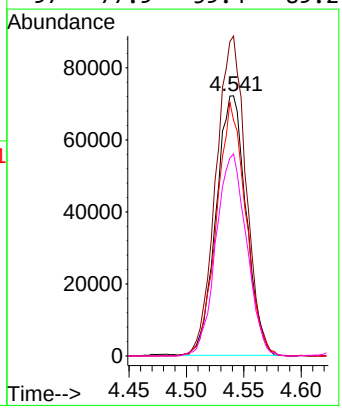
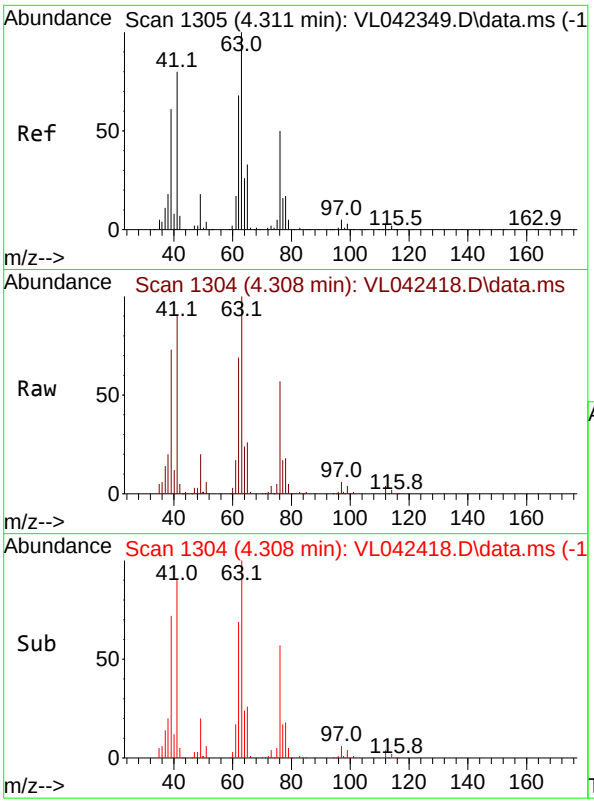


#38
Trichloroethene
Concen: 8.252 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:130 Resp: 131178

Ion	Ratio	Lower	Upper
130	100		
95	123.1	89.8	134.6
132	90.7	77.7	116.5
97	77.9	59.4	89.2

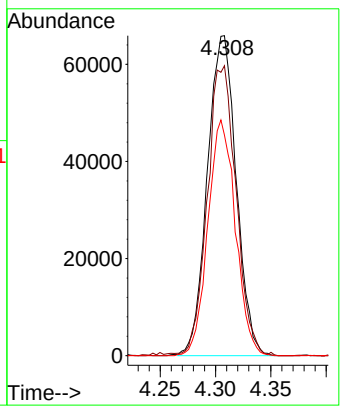




#39
1,2-Dichloropropane
Concen: 8.831 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 63 Resp: 11969

Ion	Ratio	Lower	Upper
63	100		
41	90.6	64.2	96.2
62	69.0	54.3	81.5



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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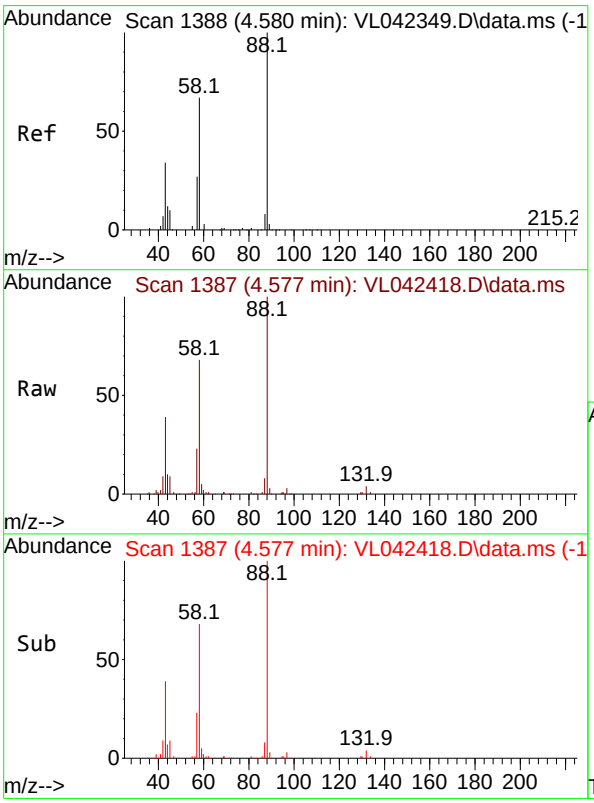
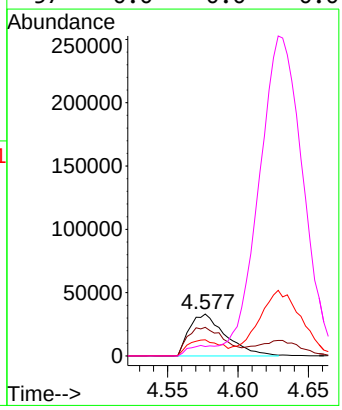
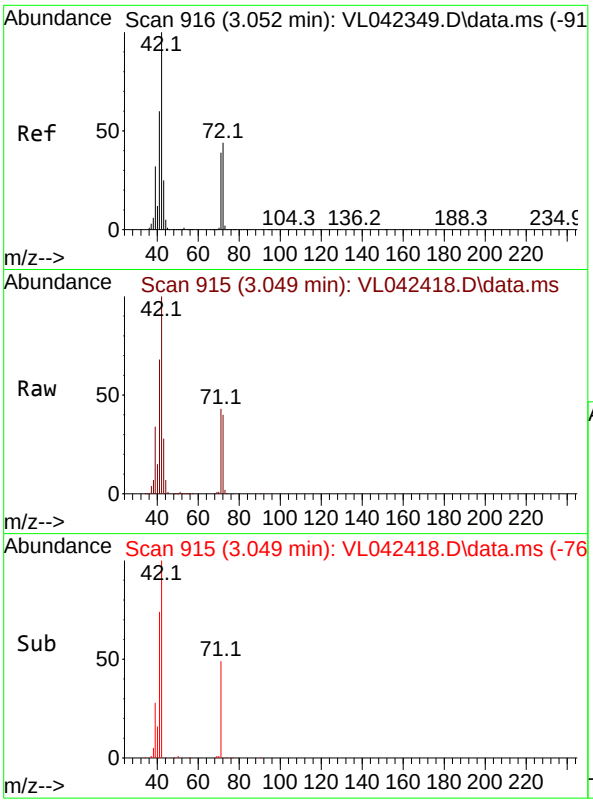


#40
1,4-Dioxane
Concen: 8.010 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 88 Resp: 59666

Ion	Ratio	Lower	Upper
88	100		
58	71.2	61.4	92.0
43	37.7	23.2	34.8#
57	0.0	0.0	0.0





#41
Tetrahydrofuran
Concen: 8.428 ppbv
RT: 3.049 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 42 Resp: 13104

Ion	Ratio	Lower	Upper
42	100		
72	41.4	32.3	48.5
71	38.3	31.4	47.2

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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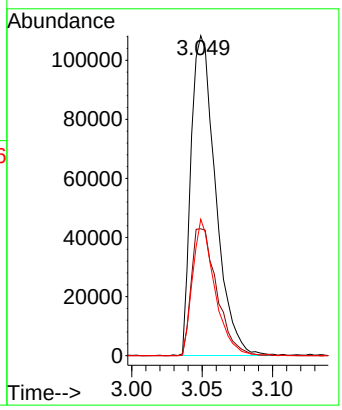
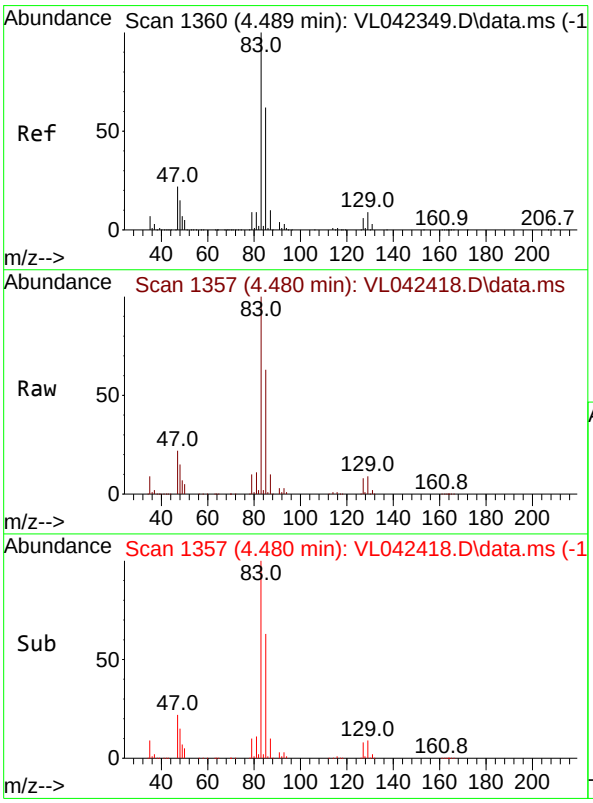
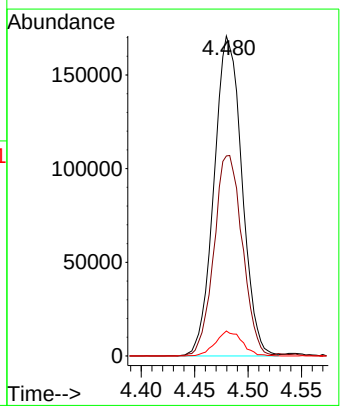


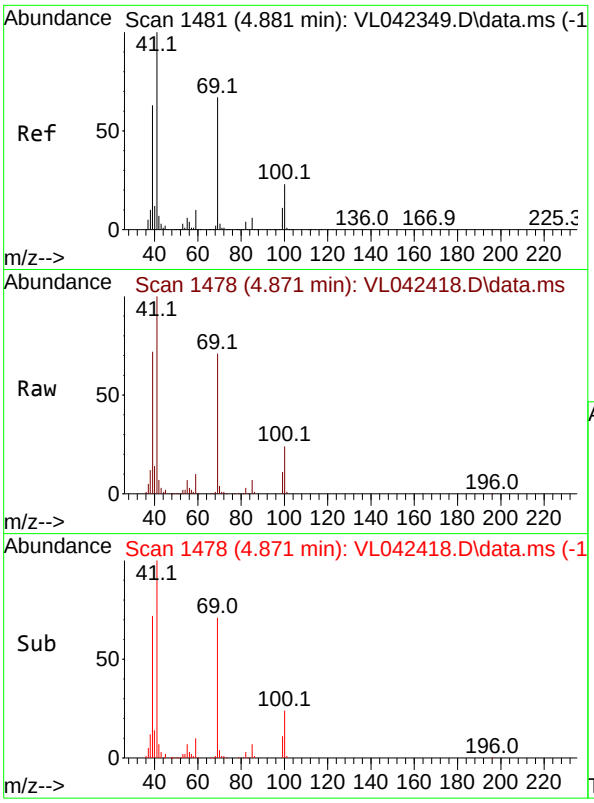


#42
Bromodichloromethane
Concen: 10.222 ppbv
RT: 4.480 min Scan# 1357
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 83 Resp: 310553

Ion	Ratio	Lower	Upper
83	100		
85	62.5	49.7	74.5
127	7.8	5.1	7.7#

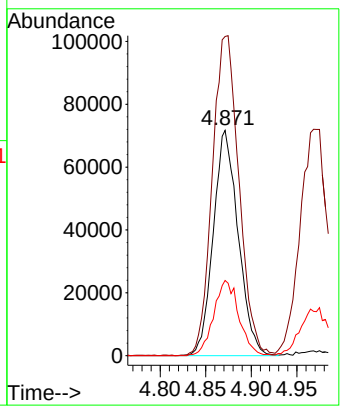




#43
Methyl Methacrylate
Concen: 8.312 ppbv
RT: 4.871 min Scan# 14
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 69 Resp: 13624

Ion	Ratio	Lower	Upper
69	100		
41	151.8	118.6	177.8
100	33.8	28.2	42.2



Instrument :
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ClientSampleId :
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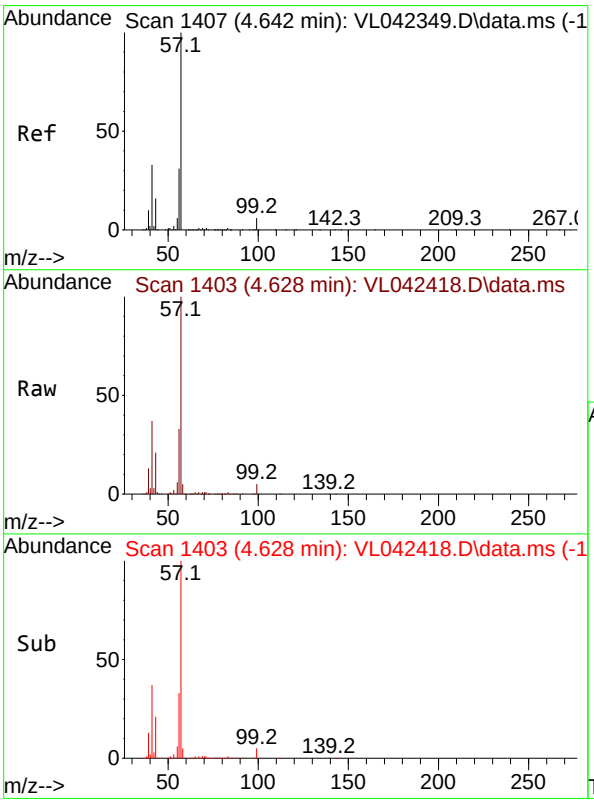
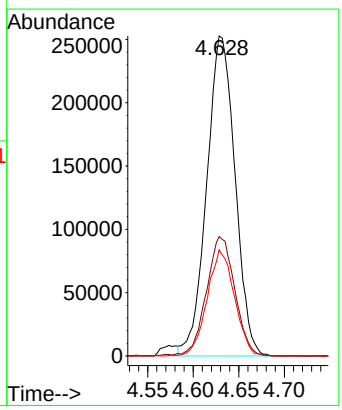
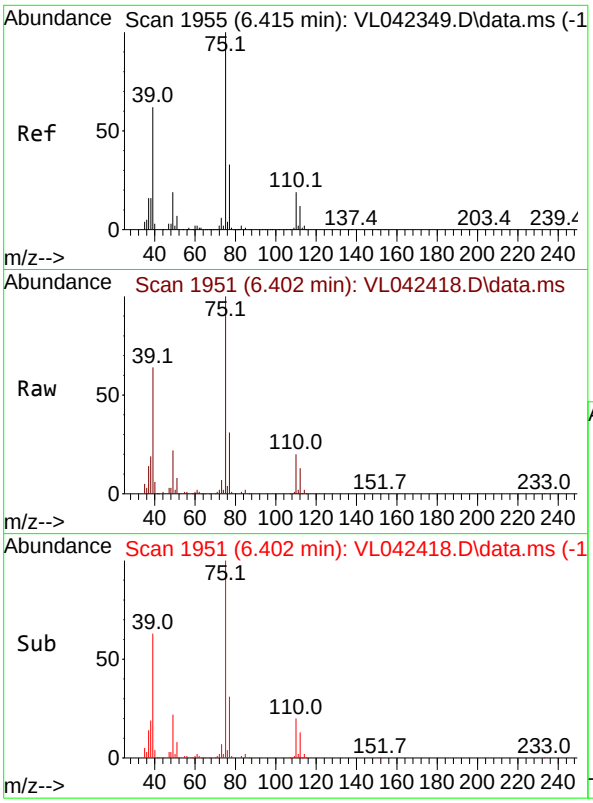


#44
2,2,4-Trimethylpentane
Concen: 8.707 ppbv
RT: 4.628 min Scan# 1403
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 57 Resp: 546967

Ion	Ratio	Lower	Upper
57	100		
41	37.6	27.2	40.8
56	31.9	25.7	38.5

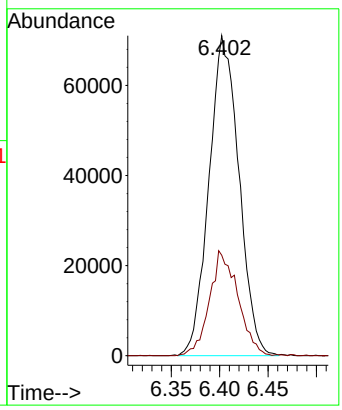




#45
t-1,3-Dichloropropene
Concen: 9.133 ppbv
RT: 6.402 min Scan# 1
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 75 Resp: 15293

Ion	Ratio	Lower	Upper
75	100		
77	31.4	27.0	40.6



Instrument :
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ClientSampleId :
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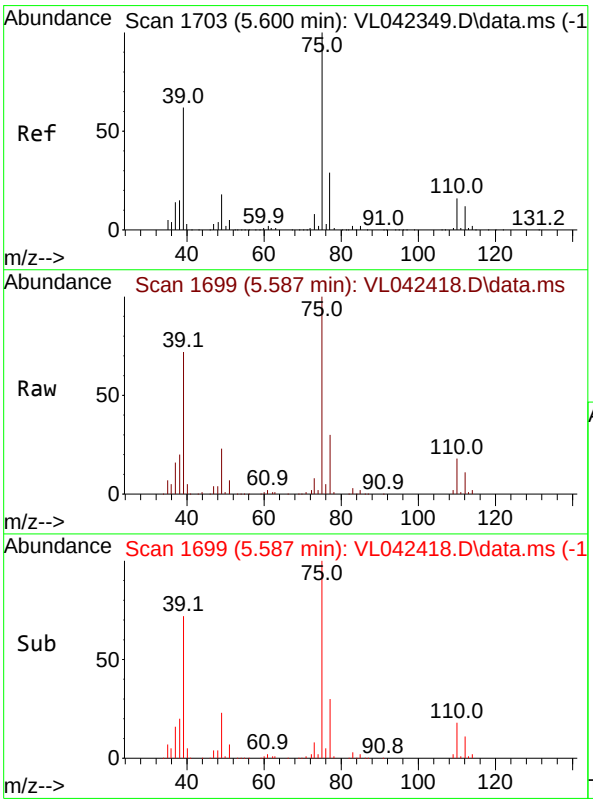
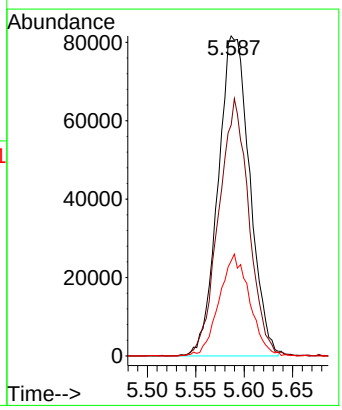
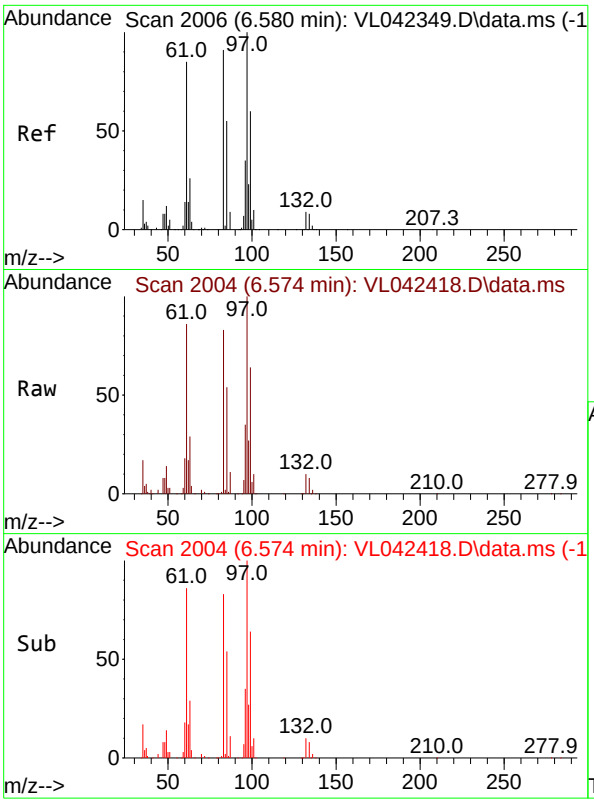


#46
cis-1,3-Dichloropropene
Concen: 9.055 ppbv
RT: 5.587 min Scan# 1699
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 75 Resp: 185557

Ion	Ratio	Lower	Upper
75	100		
39	72.0	50.0	75.0
77	29.7	23.0	34.6

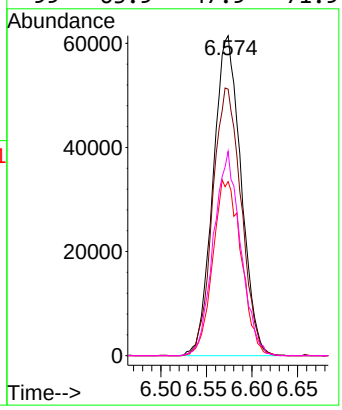




#47
1,1,2-Trichloroethane
Concen: 9.474 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 97 Resp: 13082

Ion	Ratio	Lower	Upper
97	100		
83	83.3	72.8	109.2
85	54.4	44.2	66.4
99	63.9	47.9	71.9



Instrument :
MSVOA_L
ClientSampleId :
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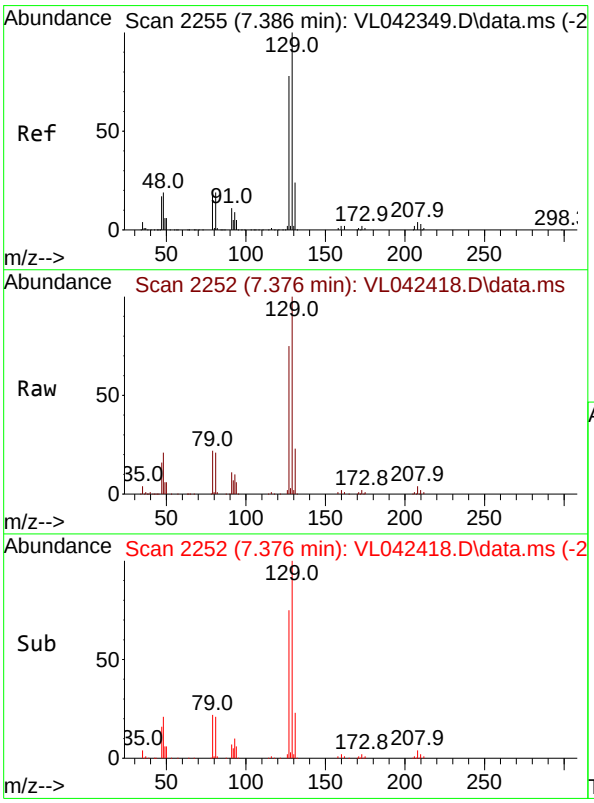
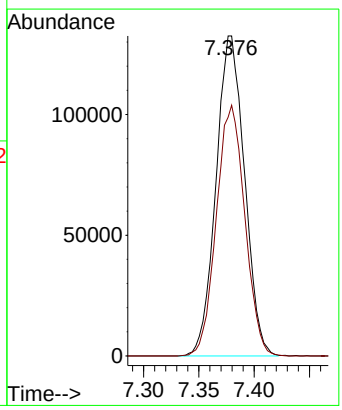
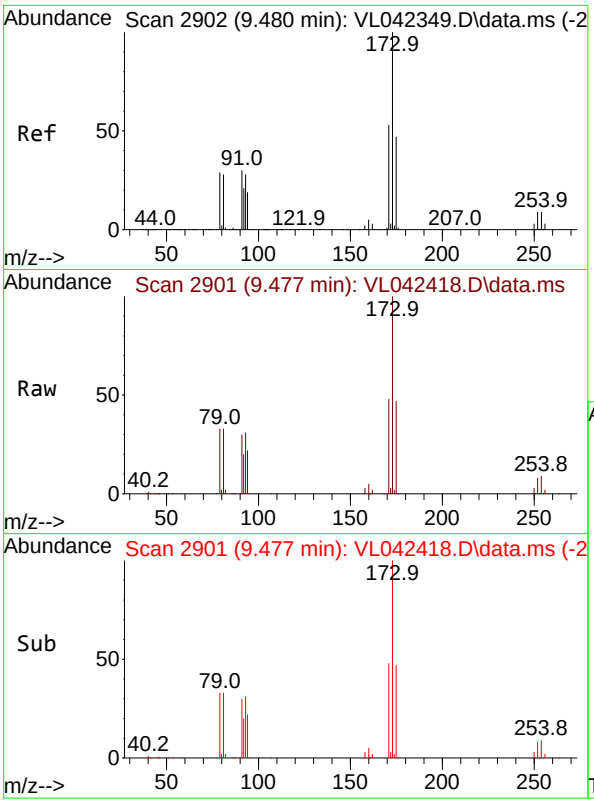


#48
Dibromochloromethane
Concen: 9.753 ppbv
RT: 7.376 min Scan# 2252
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:129 Resp: 237927

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3

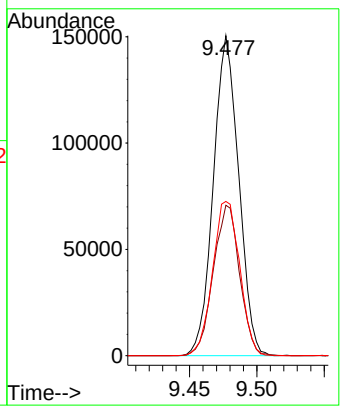




#49
Bromoform
Concen: 9.229 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:173 Resp: 19687

Ion	Ratio	Lower	Upper
173	100		
175	48.8	38.2	57.2
171	51.7	40.9	61.3



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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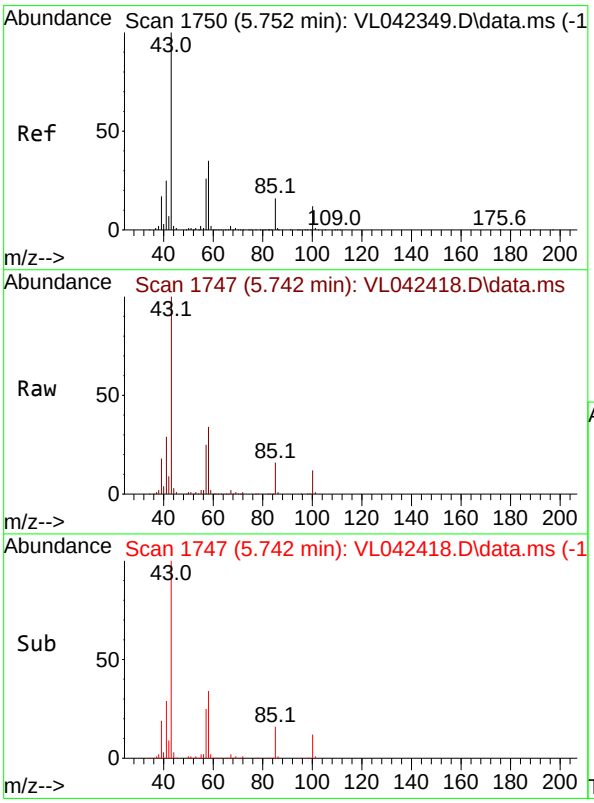
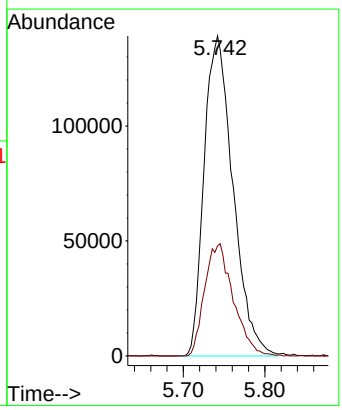
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

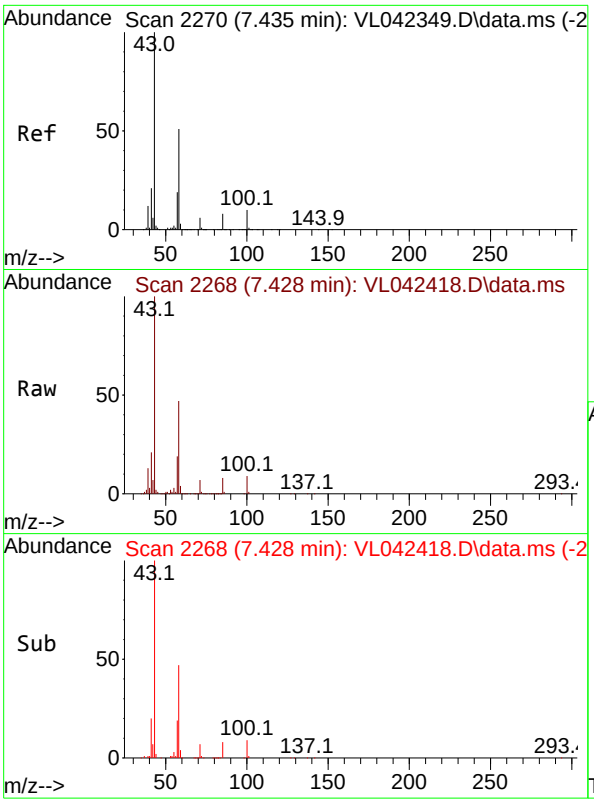


#50
4-Methyl-2-Pentanone
Concen: 7.726 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 342379

Ion	Ratio	Lower	Upper
43	100		
58	34.9	28.6	43.0





#51
2-Hexanone
Concen: 7.060 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 28058

Ion	Ratio	Lower	Upper
43	100		
58	46.8	40.2	60.4
98	0.2	0.1	0.1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
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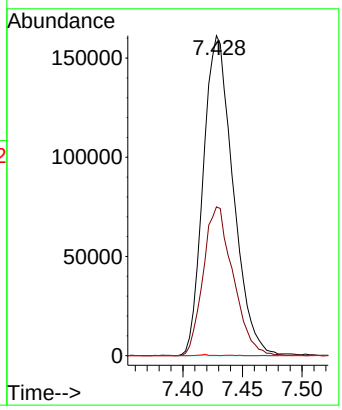
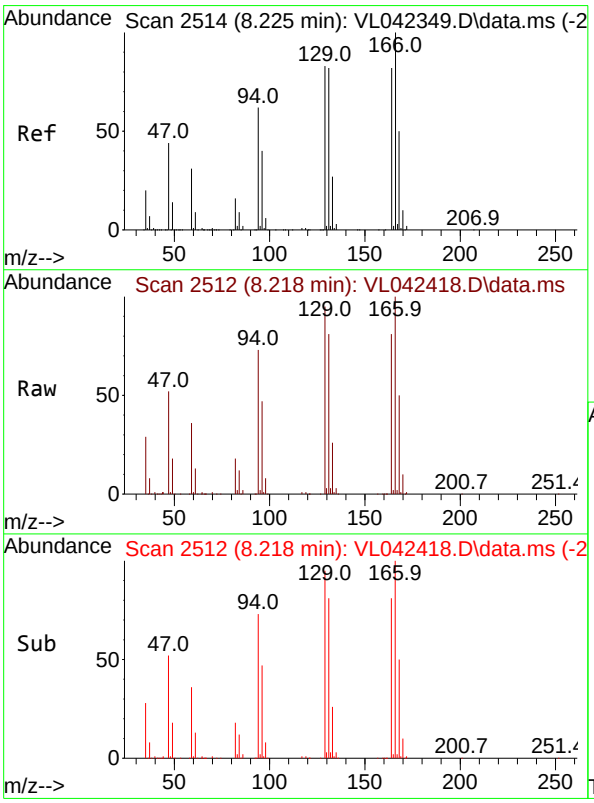
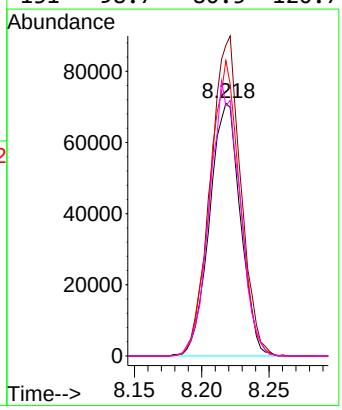


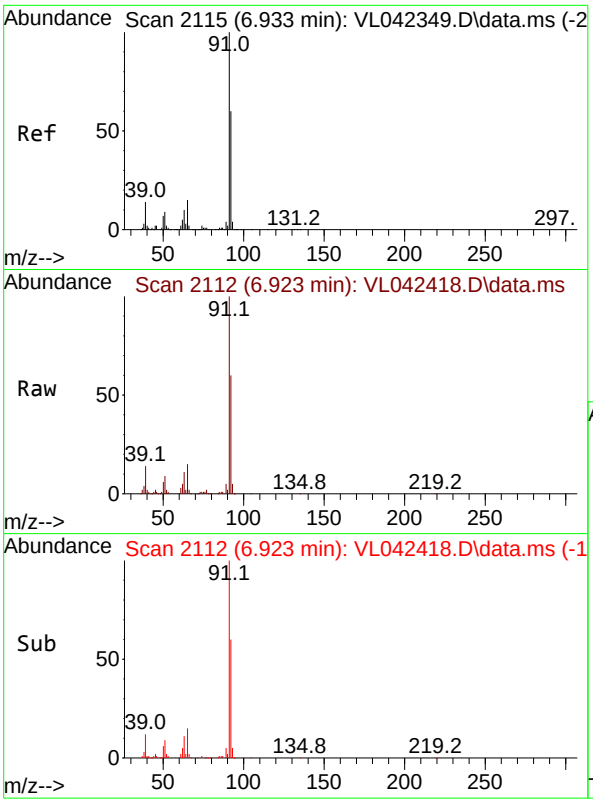


#52
Tetrachloroethene
Concen: 8.058 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:164 Resp: 113273

Ion	Ratio	Lower	Upper
164	100		
166	122.8	98.2	147.2
129	116.9	81.8	122.8
131	98.7	80.5	120.7

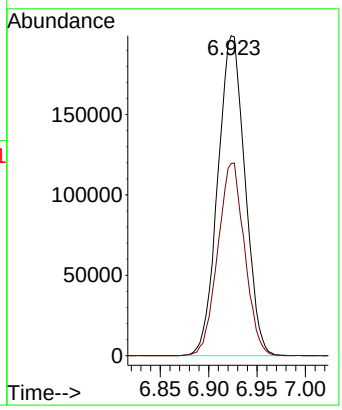




#53
Toluene
Concen: 8.904 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 38862

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
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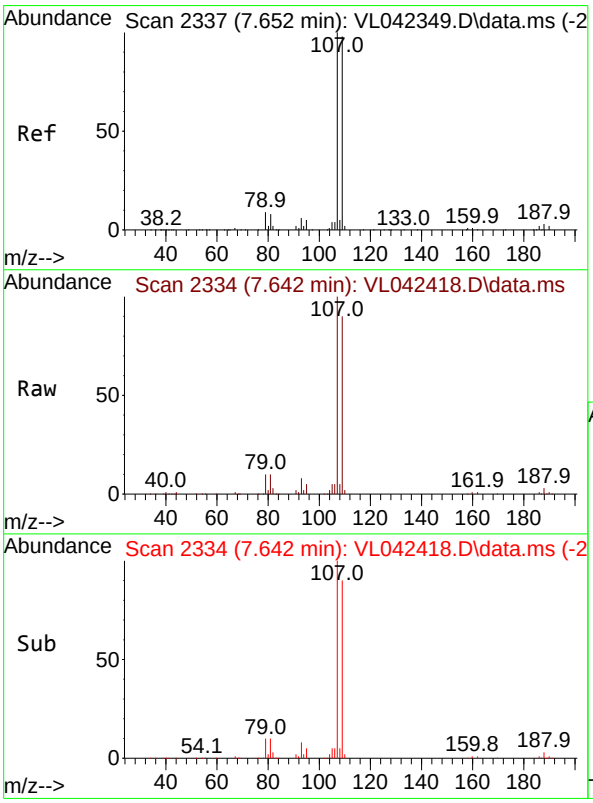
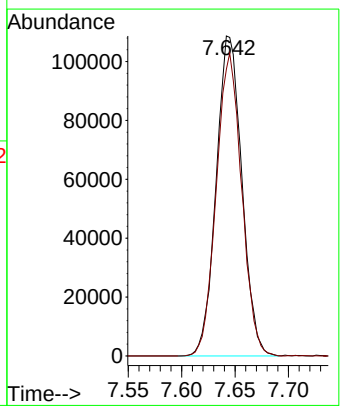
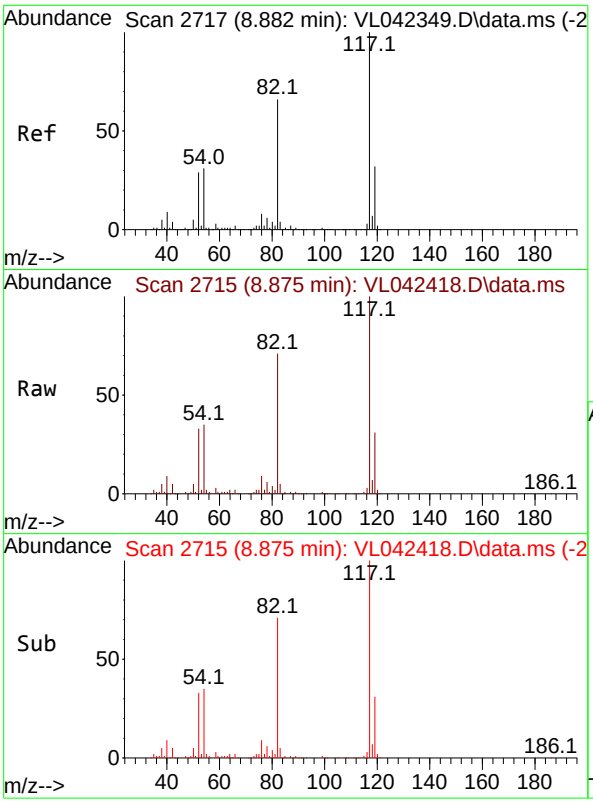


#54
1,2-Dibromoethane
Concen: 9.191 ppbv
RT: 7.642 min Scan# 2334
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:107 Resp: 181632

Ion	Ratio	Lower	Upper
107	100		
109	89.6	78.2	117.4

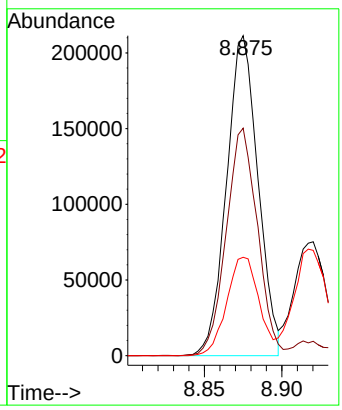




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:117 Resp: 29913

Ion	Ratio	Lower	Upper
117	100		
82	75.2	57.8	86.6
119	33.3	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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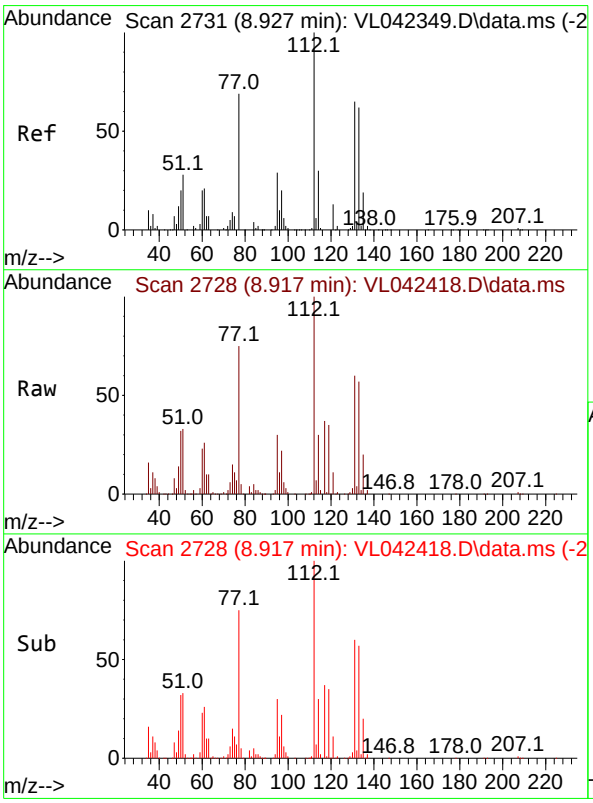
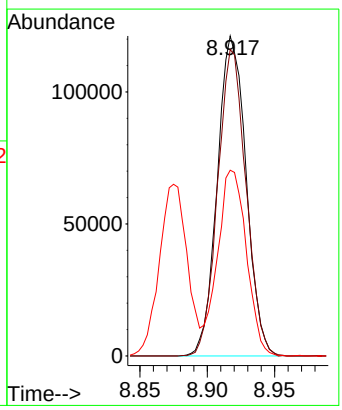
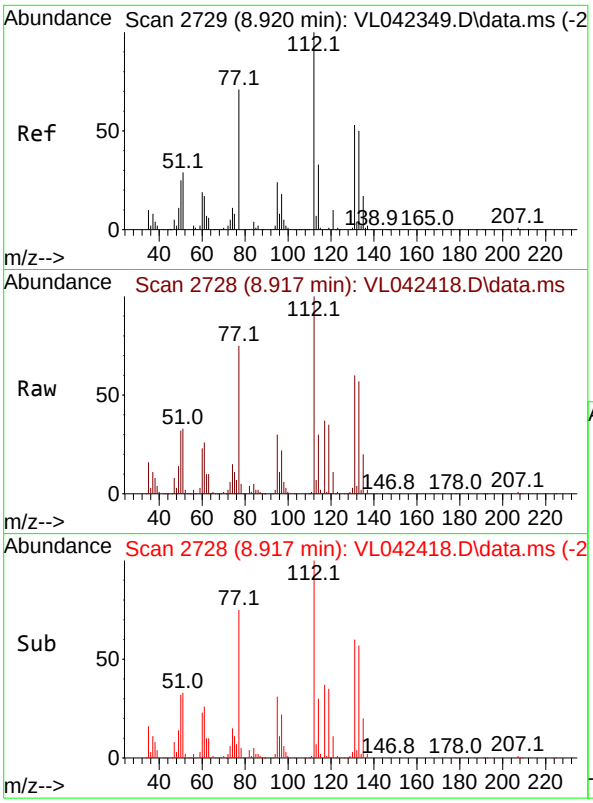


#56
1,1,1,2-Tetrachloroethane
Concen: 9.949 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:131 Resp: 180122

Ion	Ratio	Lower	Upper
131	100		
133	94.3	78.3	117.5
119	57.4	48.7	73.1

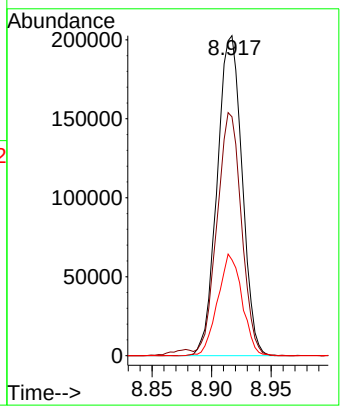




#57
Chlorobenzene
Concen: 9.480 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:112 Resp: 29492

Ion	Ratio	Lower	Upper
112	100		
77	74.6	57.8	86.6
114	29.9	29.3	35.9



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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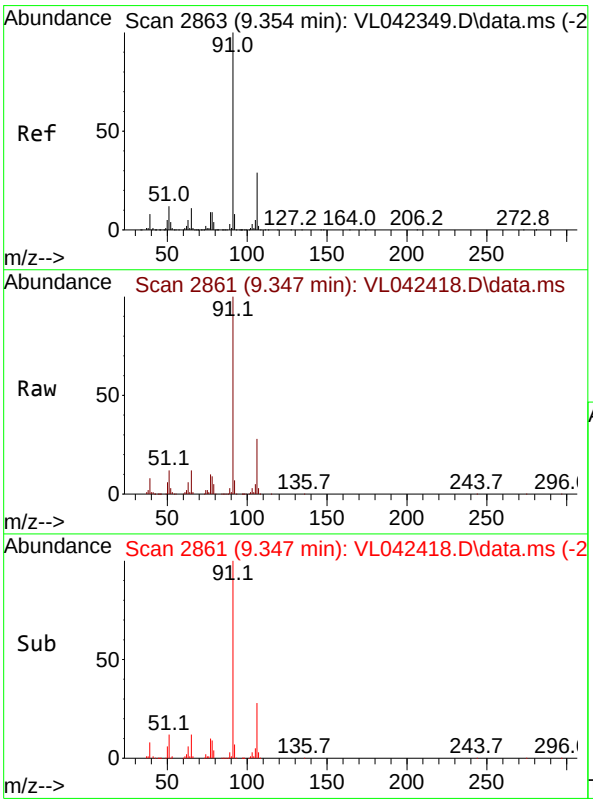
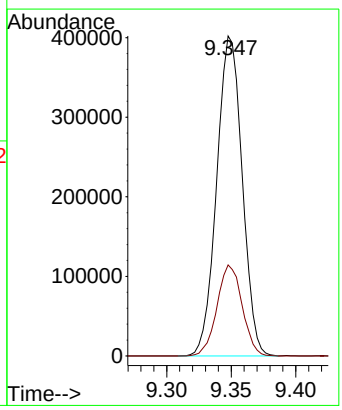
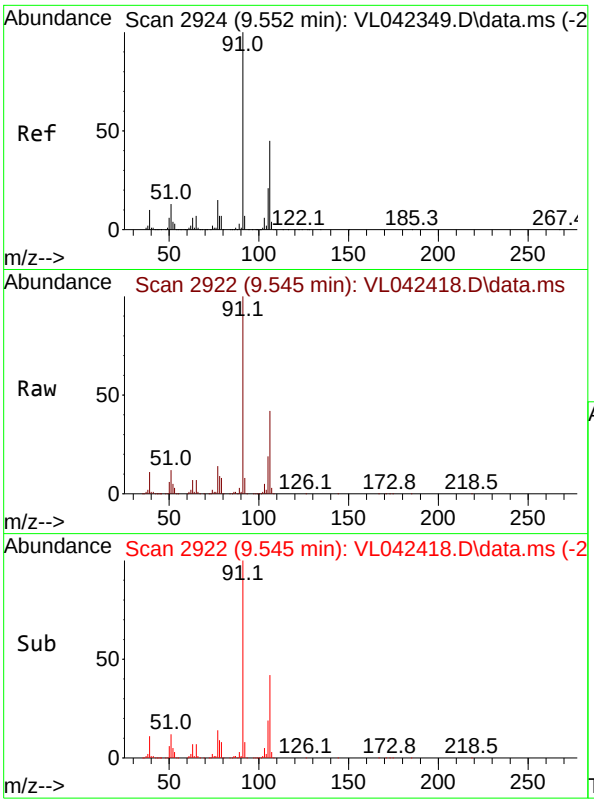


#58
Ethyl Benzene
Concen: 9.321 ppbv
RT: 9.347 min Scan# 2861
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 552423

Ion	Ratio	Lower	Upper
91	100		
106	28.5	23.0	34.4





#59
m/p-Xylene
Concen: 19.000 ppbv m
RT: 9.545 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 90715

Ion	Ratio	Lower	Upper
91	100		
106	42.6	35.4	53.2

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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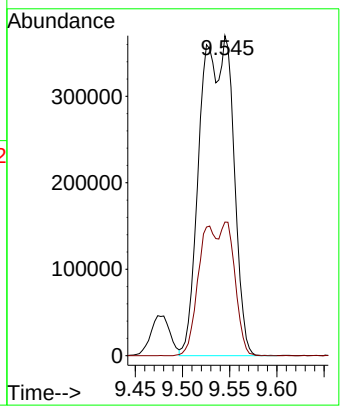
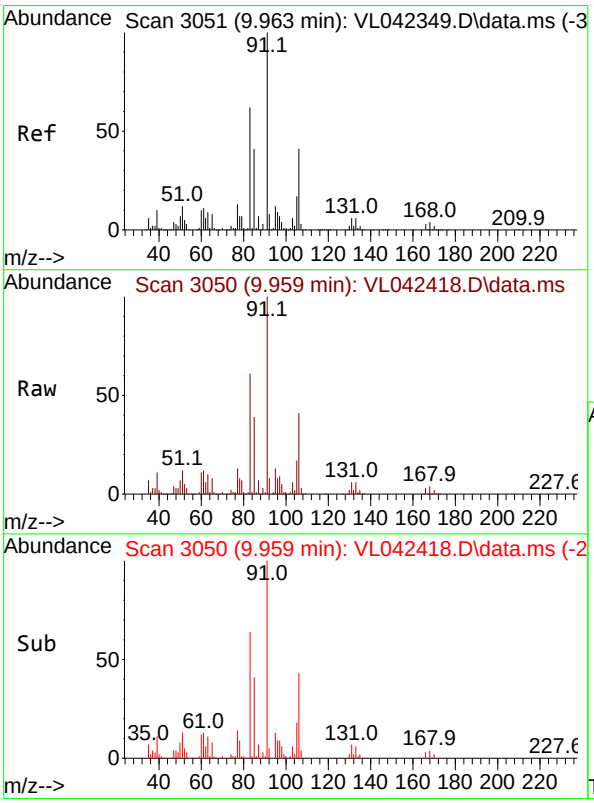
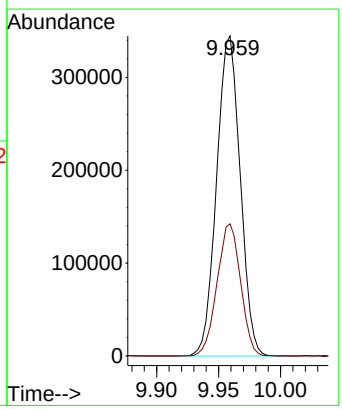


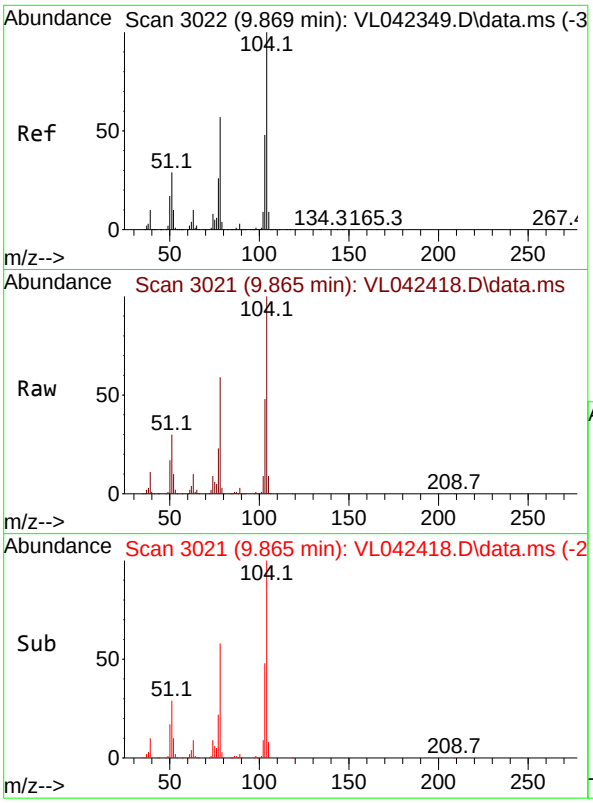


#60
o-Xylene
Concen: 9.515 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 457491

Ion	Ratio	Lower	Upper
91	100		
106	41.1	21.1	63.4





#61
Styrene
Concen: 9.086 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:104 Resp: 20851

Ion	Ratio	Lower	Upper
104	100		
78	59.1	44.6	66.8
103	46.5	37.4	56.0

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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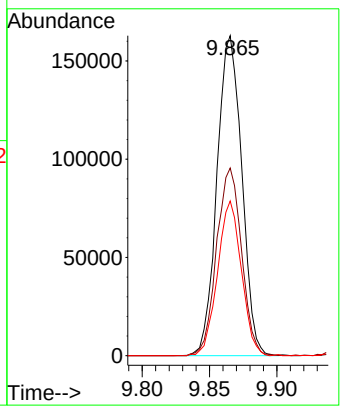
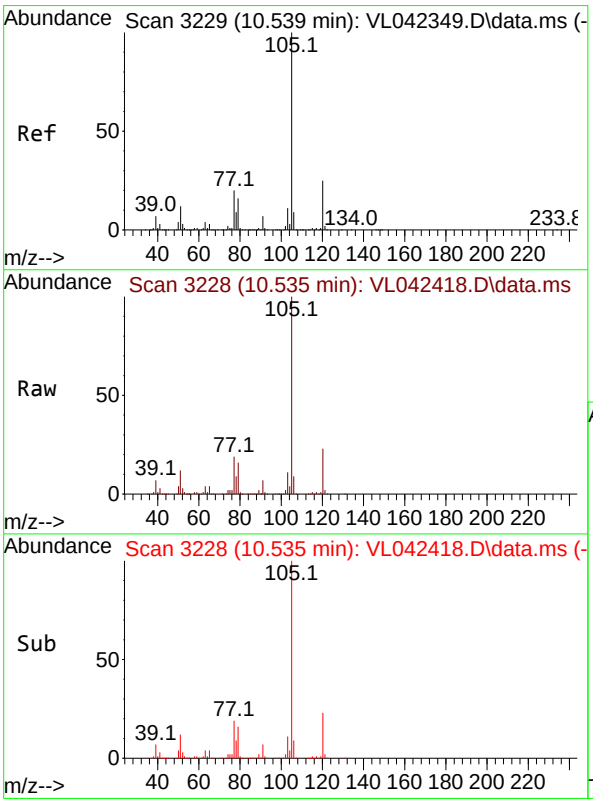
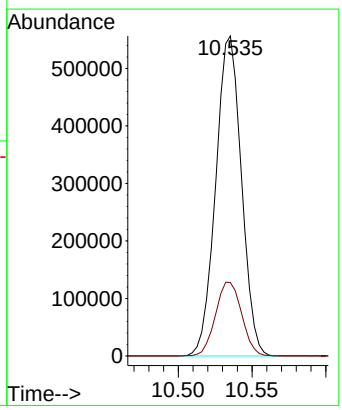


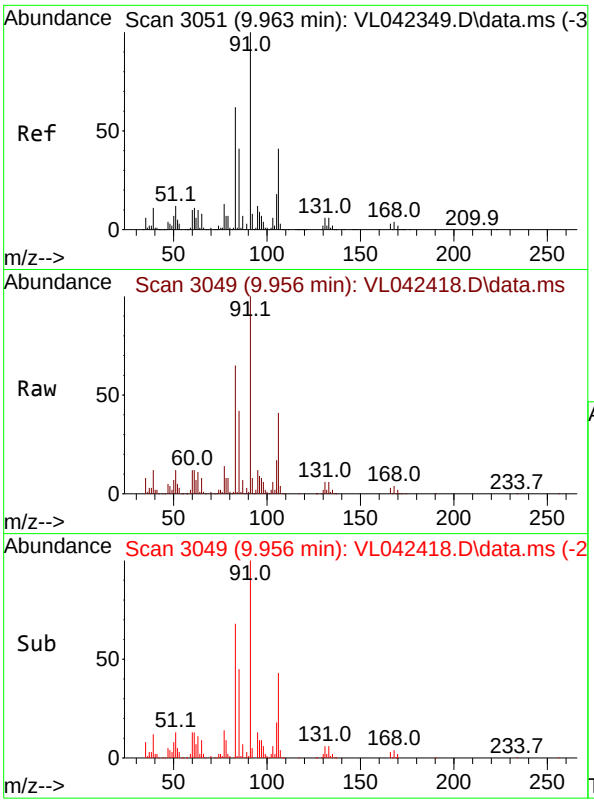


#62
Isopropylbenzene
Concen: 9.546 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 673842

Ion	Ratio	Lower	Upper
105	100		
120	23.5	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 8.783 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 83 Resp: 27364

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.5	13.7
85	64.8	32.4	97.0

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

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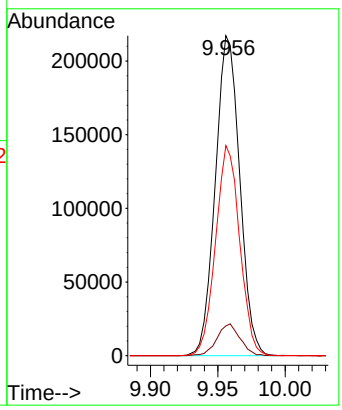
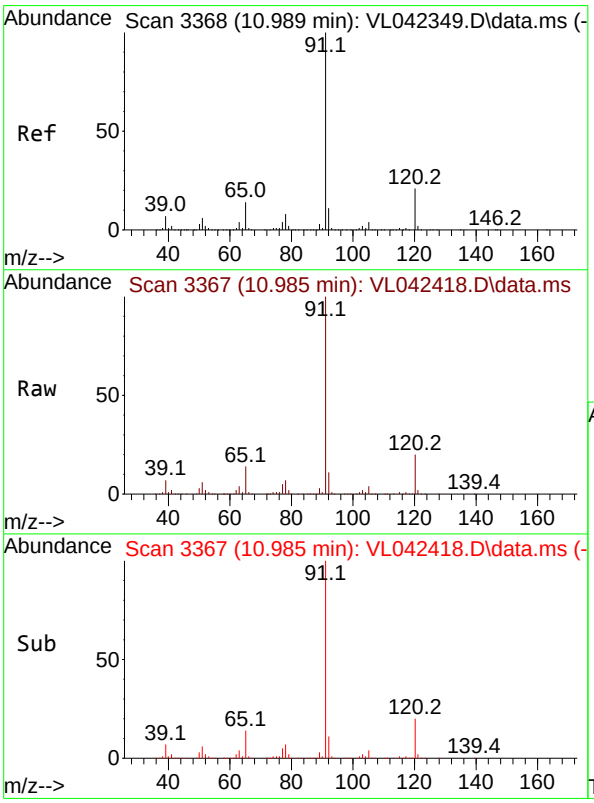
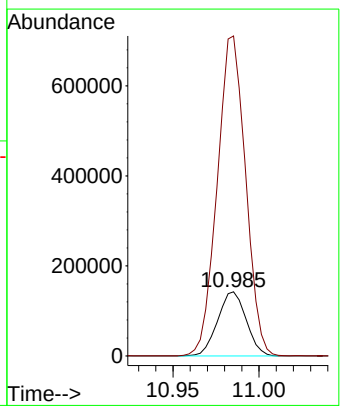


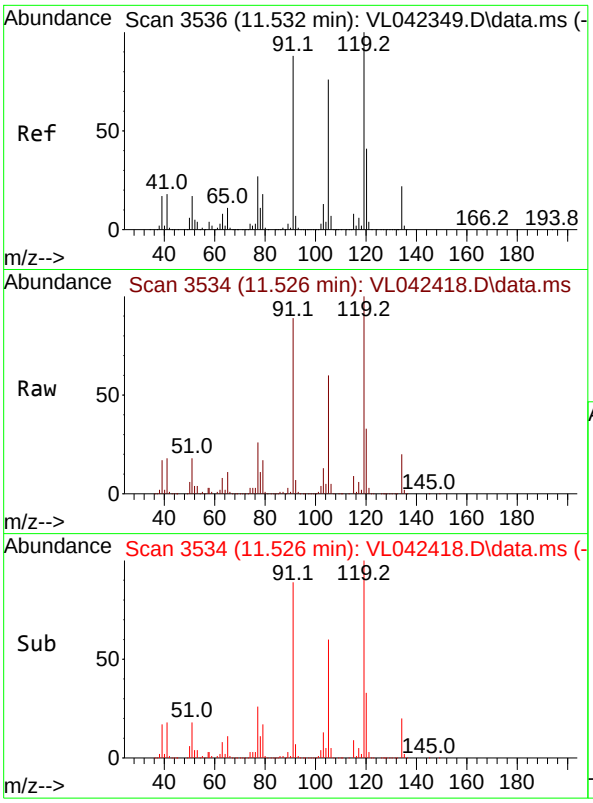


#64
n-propylbenzene
Concen: 9.271 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:120 Resp: 164482

Ion	Ratio	Lower	Upper
120	100		
91	497.0	392.4	588.6

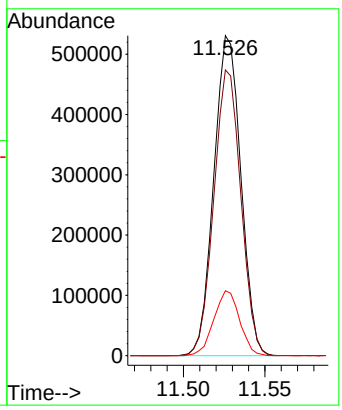




#65
tert-Butylbenzene
Concen: 9.441 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:119 Resp: 61251

Ion	Ratio	Lower	Upper
119	100		
91	89.2	74.6	111.8
134	19.3	18.8	28.2



Instrument :
MSVOA_L
ClientSampleId :
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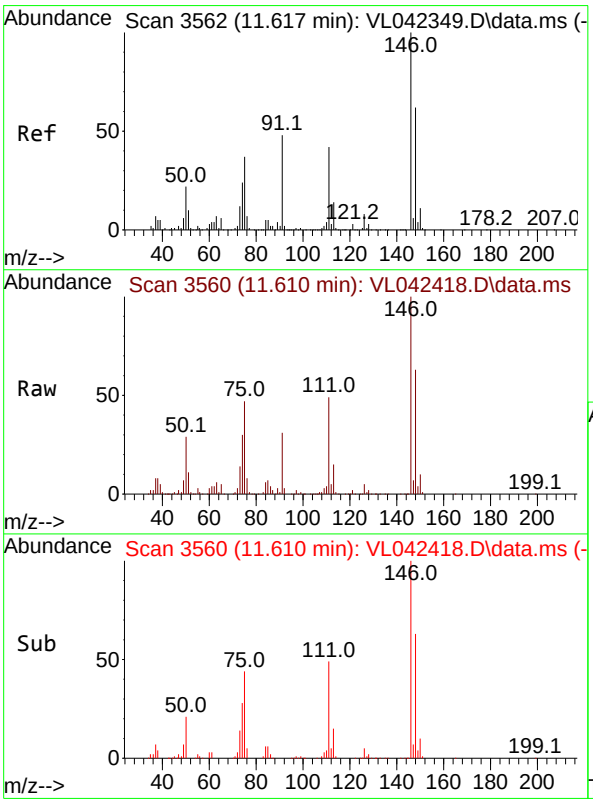
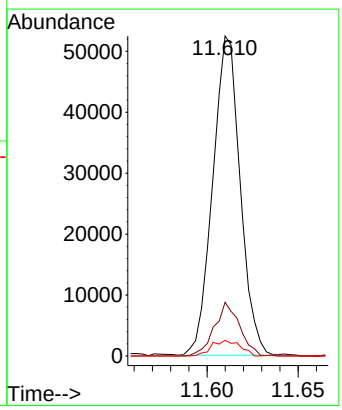
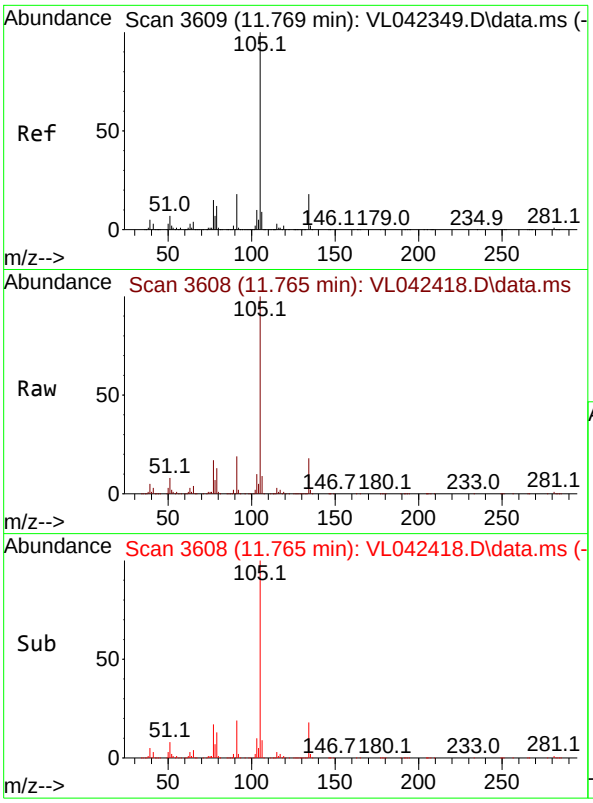


#66
Benzyl Chloride
Concen: 7.684 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 54781

Ion	Ratio	Lower	Upper
91	100		
126	15.5	11.8	17.6
128	5.1	4.5	6.7





#67
sec-Butylbenzene
Concen: 9.380 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

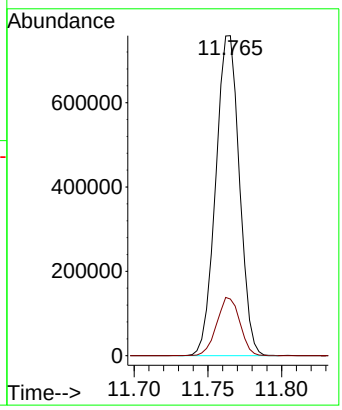
Tgt Ion:105 Resp: 84645

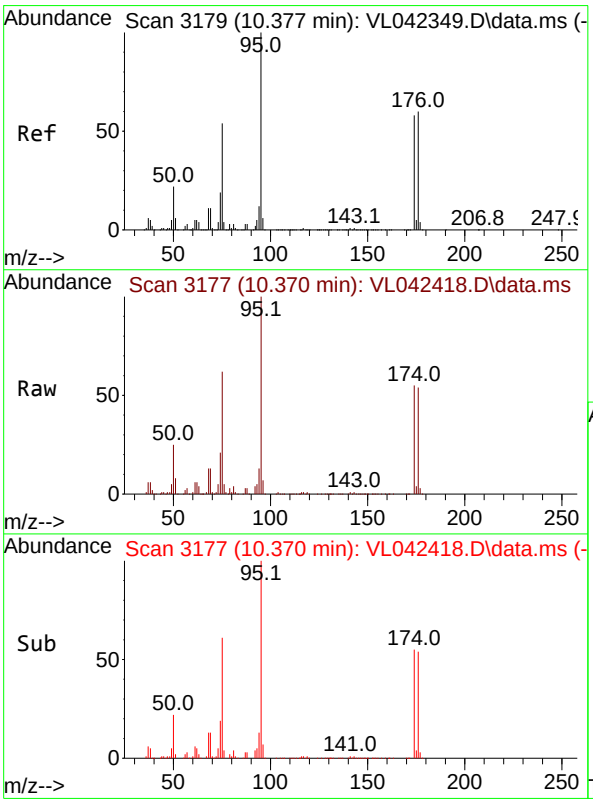
Ion	Ratio	Lower	Upper
105	100		
134	17.8	14.6	21.8

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

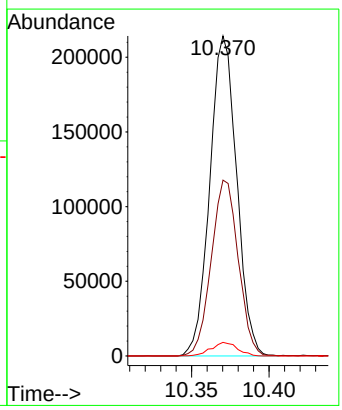


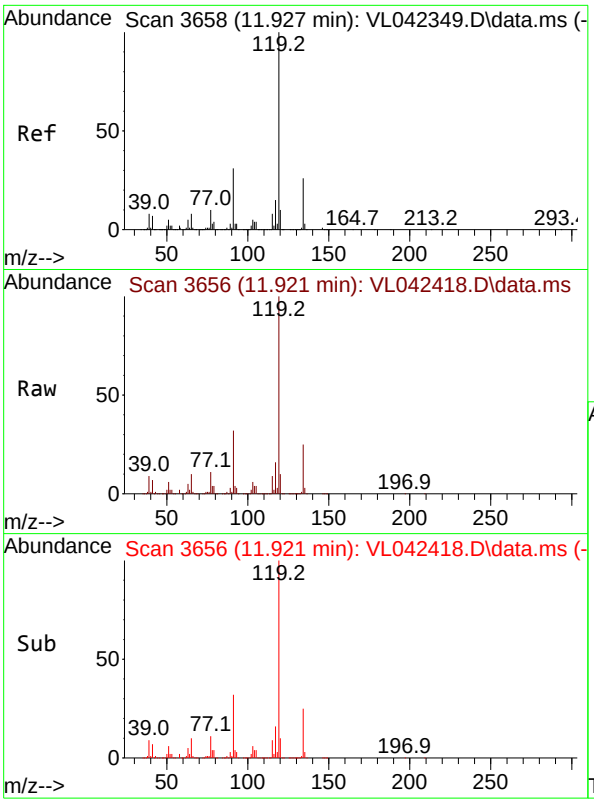


#68
1-Bromo-4-Fluorobenzene
Concen: 10.521 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 95 Resp: 258626

Ion	Ratio	Lower	Upper
95	100		
174	55.3	48.5	72.7
175	4.1	3.7	5.5

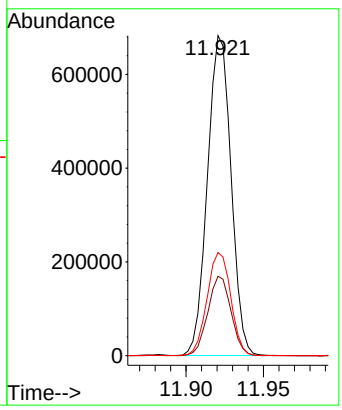




#69
p-Isopropyltoluene
Concen: 9.221 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:119 Resp: 722909

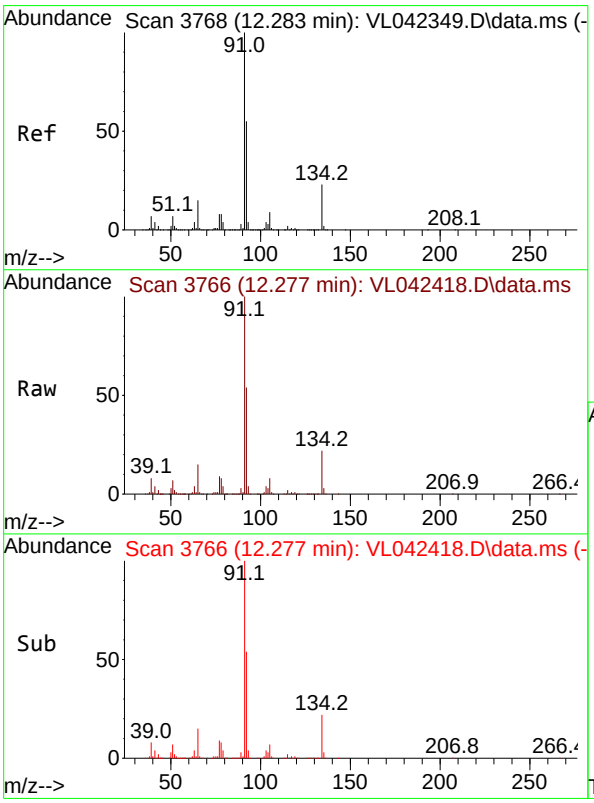
Ion	Ratio	Lower	Upper
119	100		
134	24.4	20.0	30.0
91	32.5	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

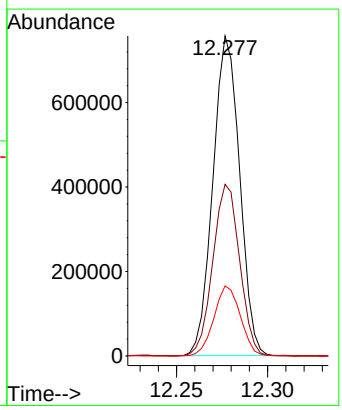
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

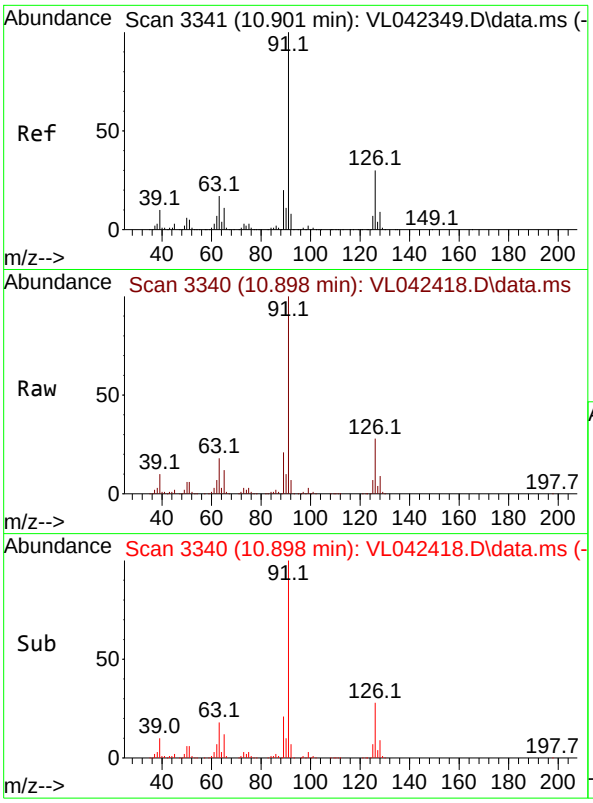


#70
n-Butylbenzene
Concen: 9.452 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 771835

Ion	Ratio	Lower	Upper
91	100		
92	54.2	44.2	66.4
134	21.8	18.2	27.4

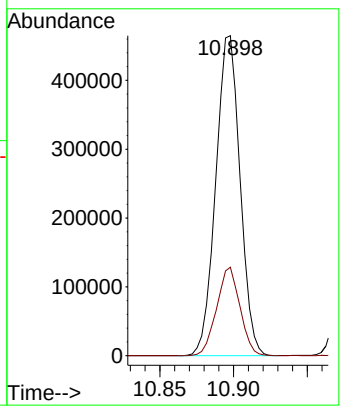




#71
2-Chlorotoluene
Concen: 9.623 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 53275

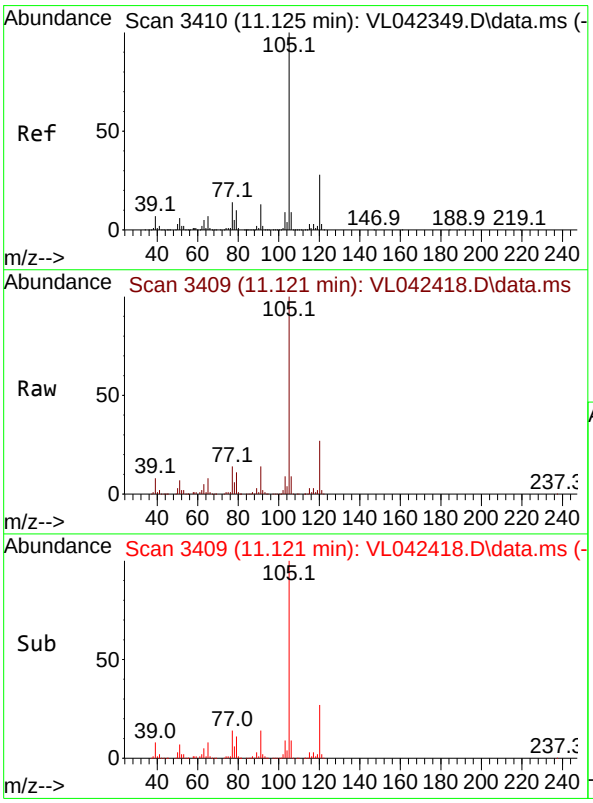
Ion	Ratio	Lower	Upper
91	100		
126	26.5	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

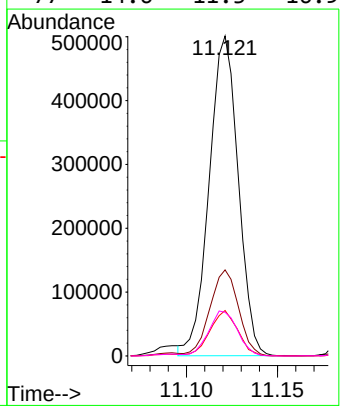
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

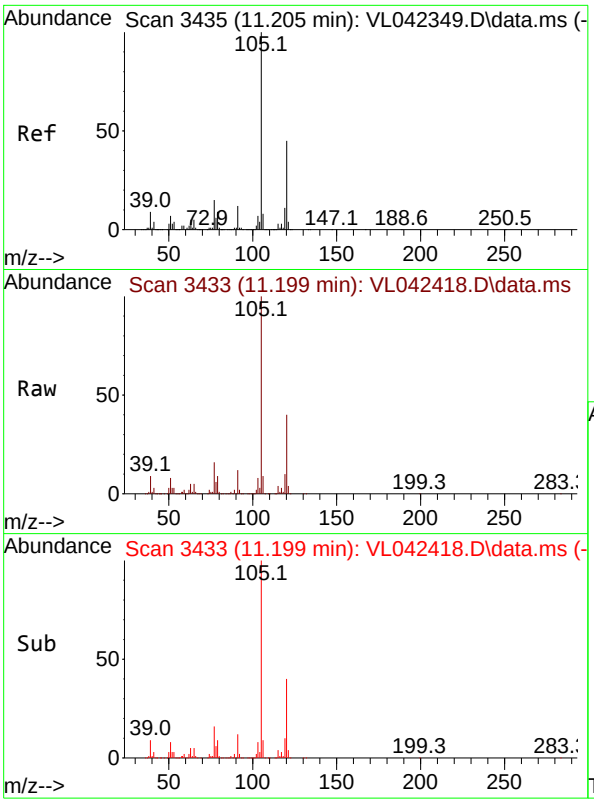


#72
4-Ethyltoluene
Concen: 9.438 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 554770

Ion	Ratio	Lower	Upper
105	100		
120	27.4	23.2	34.8
91	14.2	10.4	15.6
77	14.6	11.3	16.9

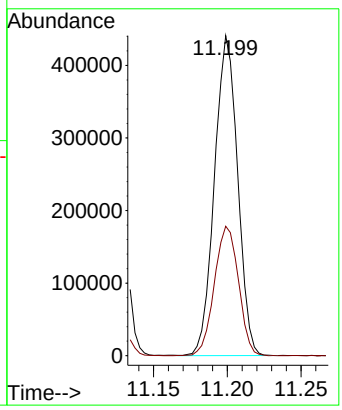




#73
1,3,5-Trimethylbenzene
Concen: 9.283 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 48169

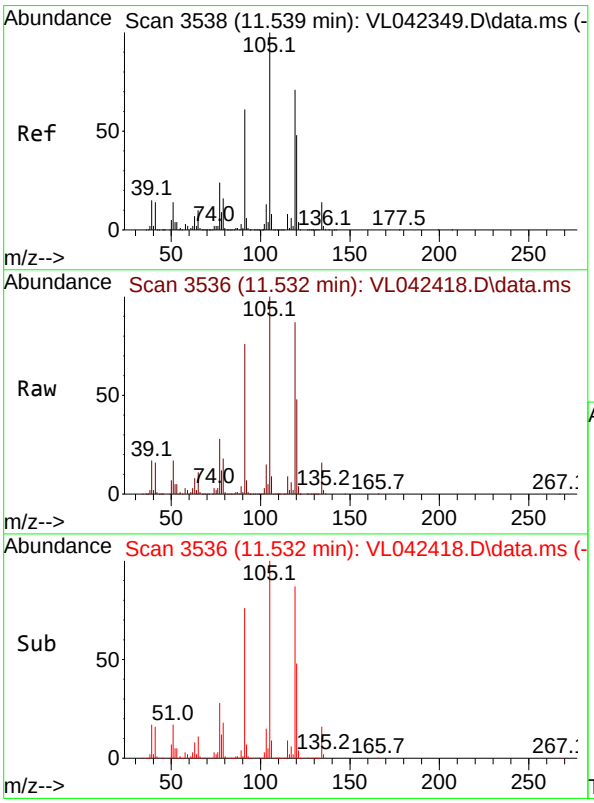
Ion	Ratio	Lower	Upper
105	100		
120	40.5	35.6	53.4



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

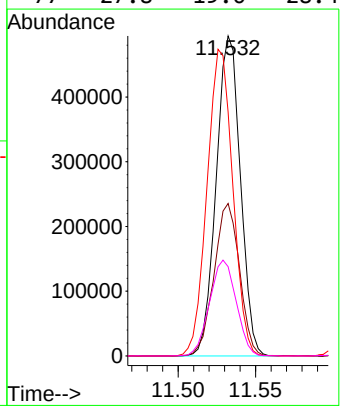
Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

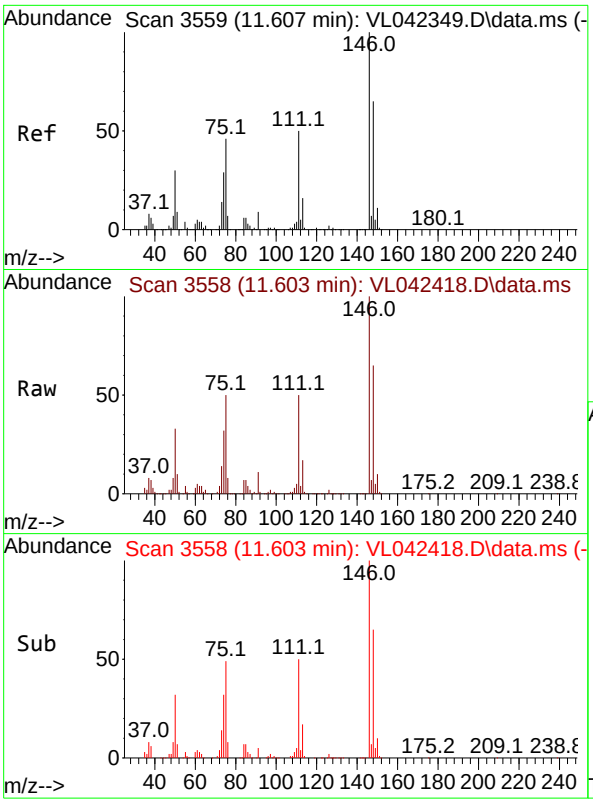


#74
1,2,4-Trimethylbenzene
Concen: 8.869 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 537510

Ion	Ratio	Lower	Upper
105	100		
120	47.6	38.1	57.1
91	76.2	48.8	73.2#
77	27.8	19.0	28.4





#75
1,3-Dichlorobenzene
Concen: 9.035 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

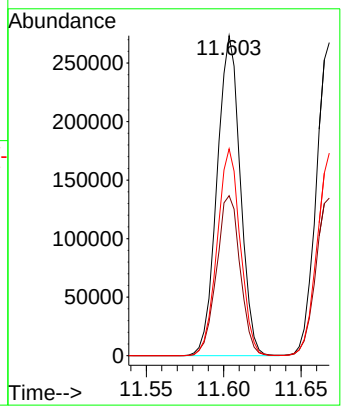
Tgt Ion:146 Resp: 28465

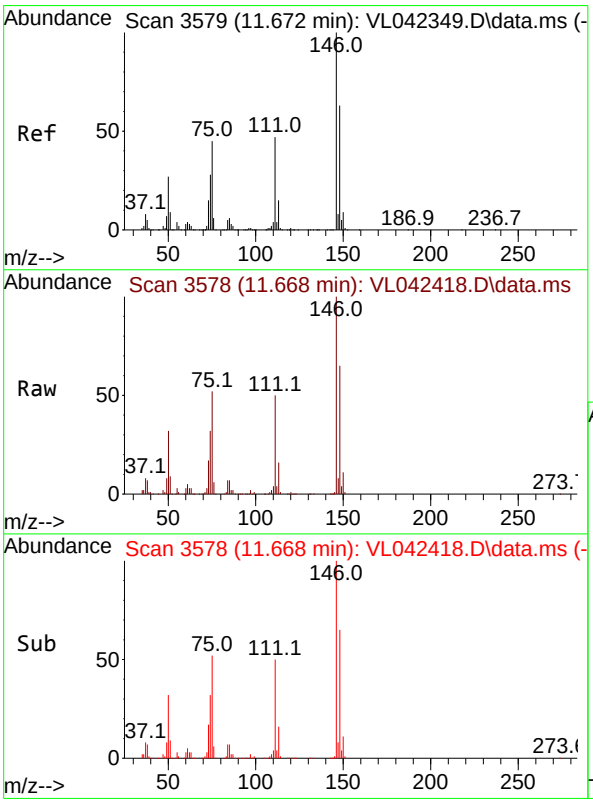
Ion	Ratio	Lower	Upper
146	100		
111	50.9	24.3	72.8
148	64.3	31.6	94.8

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

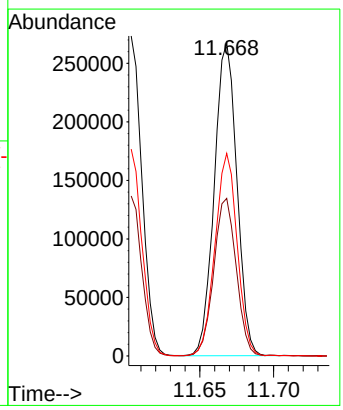


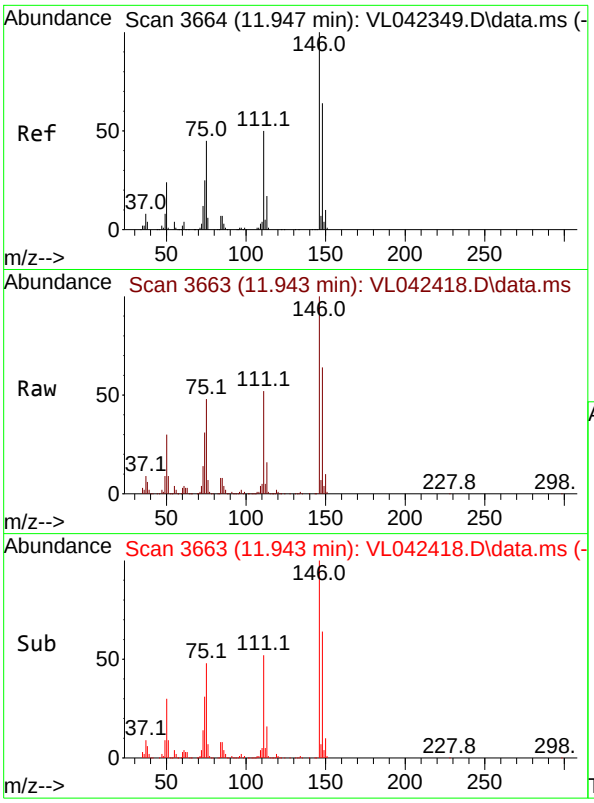


#76
1,4-Dichlorobenzene
Concen: 8.992 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:146 Resp: 284740

Ion	Ratio	Lower	Upper
146	100		
111	50.4	24.2	72.6
148	63.7	32.1	96.5





#77
1,2-Dichlorobenzene
Concen: 9.095 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

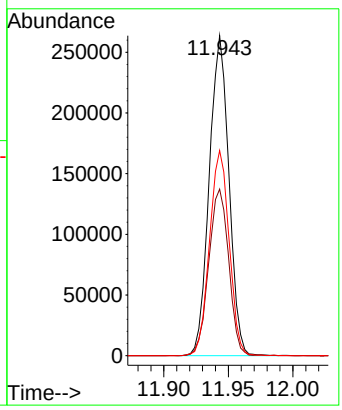
Tgt Ion:146 Resp: 27861

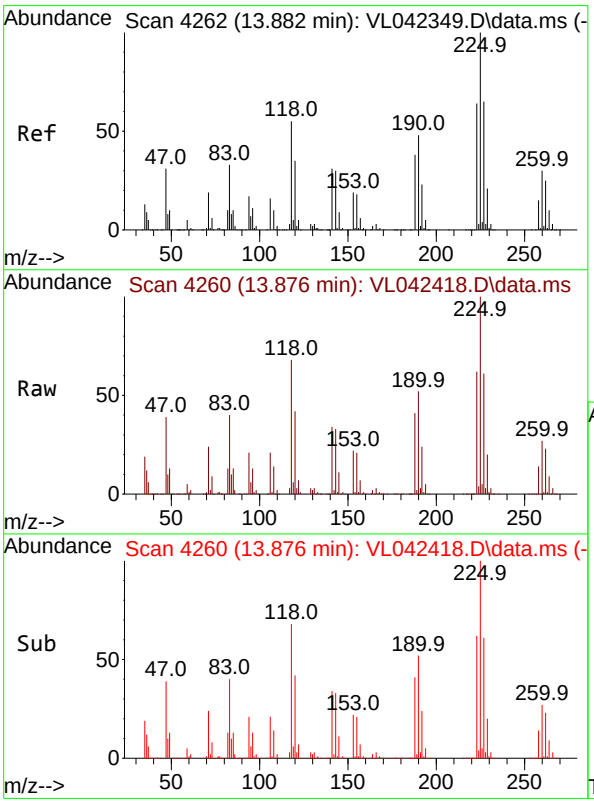
Ion	Ratio	Lower	Upper
146	100		
111	53.0	25.3	75.9
148	64.0	31.5	94.5

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

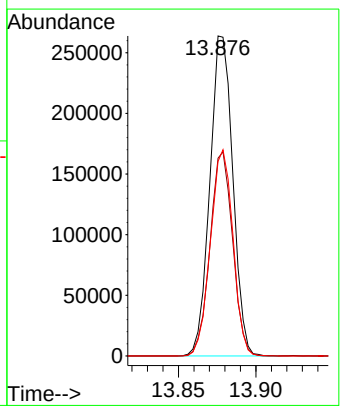


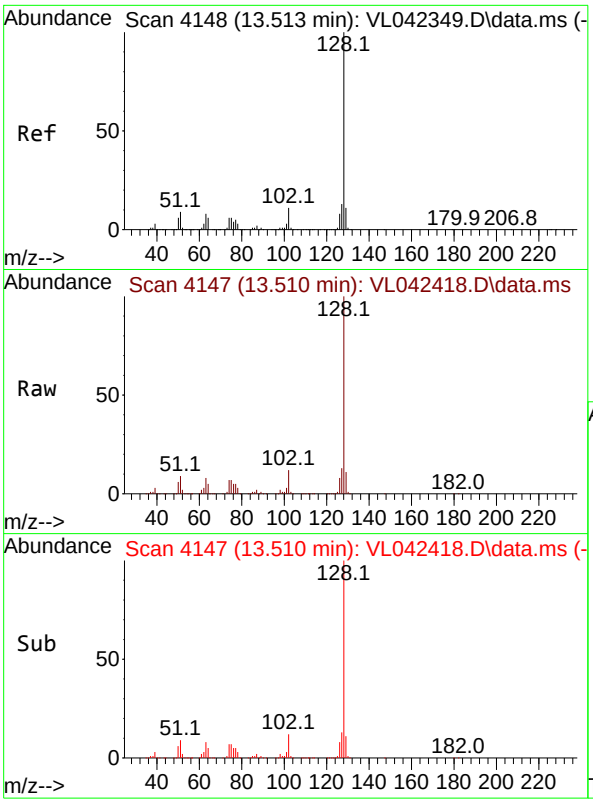


#78
Hexachloro-1,3-Butadiene
Concen: 8.779 ppbv
RT: 13.876 min Scan# 4260
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:225 Resp: 271569

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	63.3	51.5	77.3





#79
Naphthalene
Concen: 8.482 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

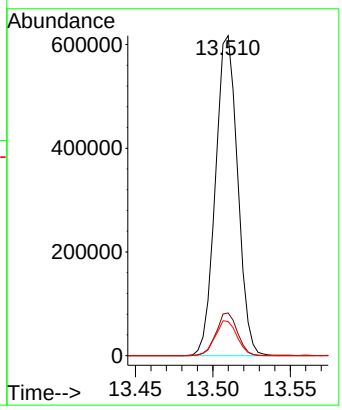
Tgt Ion:128 Resp: 61476

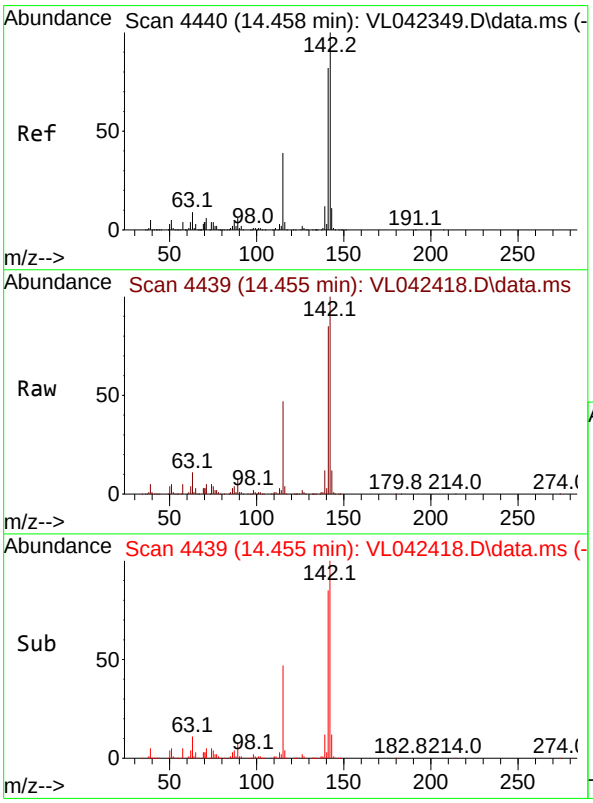
Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	15.8
129	10.7	8.6	12.8

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

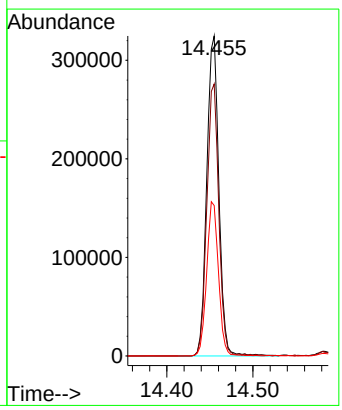


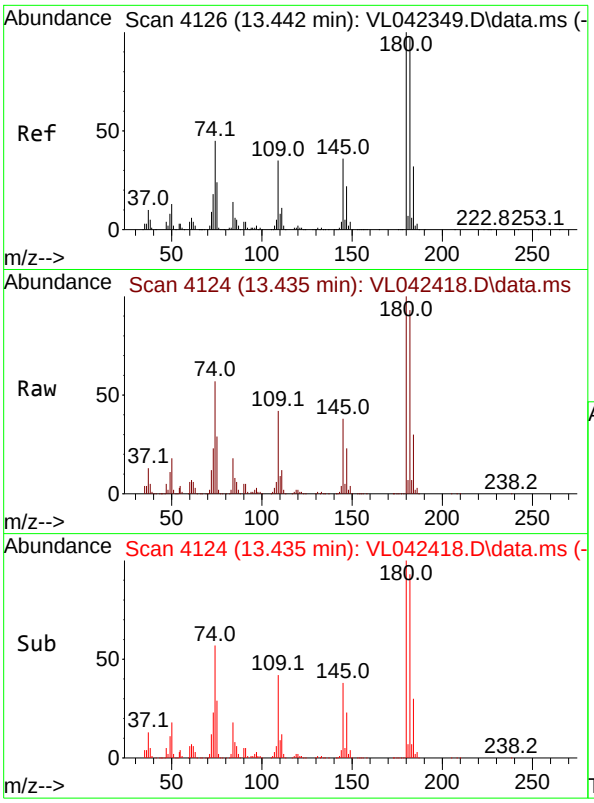


#80
Naphthalene,2-methyl-
Concen: 7.651 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:142 Resp: 316027

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.8	100.2
115	47.3	33.4	50.2

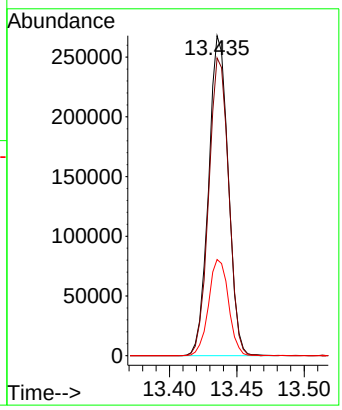




#81
1,2,4-Trichlorobenzene
Concen: 8.729 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:180 Resp: 27165

Ion	Ratio	Lower	Upper
180	100		
182	94.2	76.8	115.2
184	30.4	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/29/2025
Supervised By :Mahesh Dadoda 04/30/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042438.D	1		04/29/25 10:08	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	11.6	57.4		1.04	2.47	ug/m3
64-17-5	Ethanol	2.90	5.46		0.60	0.94	ug/m3
74-87-3	Chloromethane	11.0	22.7		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	9.60	24.5		0.030	0.080	ug/m3
74-83-9	Bromomethane	10.7	41.5		0.54	1.94	ug/m3
75-00-3	Chloroethane	10.5	27.7		0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	8.50	25.1		0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	11.5	64.6		0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	10.9	83.5		1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	11.2	78.3		0.63	3.49	ug/m3
593-60-2	Bromoethene	10.7	46.8		0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	9.70	29.4		0.58	1.52	ug/m3
142-82-5	Heptane	7.60	31.1		0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	9.80	24.1		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	10.2	40.4		0.56	1.98	ug/m3
67-64-1	Acetone	9.90	23.5		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	10.4	32.4		0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	9.30	33.5		0.43	1.80	ug/m3
75-09-2	Methylene Chloride	9.00	31.3		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	9.90	39.3		0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	10.9	44.1		0.53	2.02	ug/m3
110-82-7	Cyclohexane	8.60	29.6		0.76	1.72	ug/m3
78-93-3	2-Butanone	9.30	27.4		0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	11.0	69.2		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	9.60	38.1		0.36	1.98	ug/m3
67-66-3	Chloroform	10.6	51.8		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	10.3	56.2		0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	9.00	42.0		0.47	2.34	ug/m3
71-43-2	Benzene	9.30	29.7		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	12.0	48.6		0.36	2.02	ug/m3
79-01-6	Trichloroethene	8.50	45.7		0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	9.00	41.6		0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	11.1	74.4		0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	7.80	32.0		0.37	2.05	ug/m3
108-88-3	Toluene	8.80	33.2		0.41	1.88	ug/m3

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

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042438.D	1		04/29/25 10:08	VL042925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	8.90	40.4		0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	8.80	40.0		0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	9.90	54.0		0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	10.2	86.9		0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	9.60	73.8		0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	8.00	54.3		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	10.3	47.4		0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	10.1	43.9		0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	20.9	90.8		0.91	4.34	ug/m3
95-47-6	o-Xylene	10.6	46.0		0.52	2.17	ug/m3
100-42-5	Styrene	9.20	39.2		0.47	2.13	ug/m3
75-25-2	Bromoform	9.40	97.2		0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	9.80	67.3		0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	10.6	54.9		0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	10.4	51.1		0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	9.90	48.7		0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	9.90	59.5		0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	9.90	59.5		0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	10.1	60.7		0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	9.50	70.5		0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	10.0	107		0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	9.90	21.9		0.29	1.11	ug/m3
91-20-3	Naphthalene	9.40	49.3		0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	10.4	51.1		0.59	2.46	ug/m3
110-54-3	Hexane	8.30	29.3		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	9.90	31.0		0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	7.50	27.0		0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	8.00	32.8		0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	11.3			70 (65) - 130 (135)	113%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	117000		2.79			
540-36-3	1,4-Difluorobenzene	318000		3.962			
3114-55-4	Chlorobenzene-d5	272000		8.881			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	VL0429ABS01	SDG No.:	Q1665
Lab Sample ID:	VL0429ABS01	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042438.D	1		04/29/25 10:08	VL042925

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	116772	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	317590	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	272312	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	253021	11.307	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 113.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	238539	11.562	ppbv		96
3) Chlorodifluoromethane	1.476	51	192670	9.807	ppbv		92
4) Chloromethane	1.534	50	89832	11.003	ppbv		94
5) Vinyl Chloride	1.580	62	85334	9.601	ppbv		99
6) Bromomethane	1.667	94	40758	10.676	ppbv		94
7) Chloroethane	1.706	64	33756	10.502	ppbv		97
8) Dichlorotetrafluoroethane	1.554	85	198106	11.184	ppbv		95
9) Propene	1.486	41	70111	7.836	ppbv		97
10) Heptane	4.981	43	190583	7.582	ppbv		99
11) Trichlorofluoromethane	1.877	101	225308	11.484	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	174111	10.854	ppbv		97
13) Ethanol	1.722	45	4137	2.909	ppbv		90
14) Bromoethene	1.783	108	64544	10.674	ppbv	#	98
15) Acetone	1.835	43	189432	9.910	ppbv		98
16) 1,3-Butadiene	1.609	39	90473	9.895	ppbv		93
17) tert-Butyl alcohol	2.042	59	230217	9.718	ppbv		99
18) 1,1-Dichloroethene	2.036	96	76749	10.241	ppbv		96
19) Isopropyl Alcohol	1.887	45	103692	9.765	ppbv	#	36
20) Methylene Chloride	2.062	84	67298	8.989	ppbv		91
21) Allyl Chloride	2.097	41	130014	9.851	ppbv		95
22) trans-1,2-Dichloroethene	2.340	96	84797	9.938	ppbv		90
23) Vinyl Acetate	2.463	43	61036	7.888	ppbv	#	95
24) 1,1-Dichloroethane	2.408	63	177233	10.934	ppbv		98
25) Ethyl Acetate	2.839	43	416465	8.836	ppbv		99
26) Hexane	2.826	57	157544	8.260	ppbv		97
27) Carbon Disulfide	2.149	76	211824	10.372	ppbv		99
28) Methyl tert-Butyl Ether	2.441	73	116769	9.344	ppbv		94
29) Chloroform	2.852	83	286397	10.623	ppbv		96
30) Cyclohexane	3.858	84	132615	8.601	ppbv		95
31) cis-1,2-Dichloroethene	2.722	61	174328	9.613	ppbv		99
32) 1,1,1-Trichloroethane	3.369	97	312429	10.294	ppbv		99
34) 2-Butanone	2.560	43	233037	9.278	ppbv		98
35) Carbon Tetrachloride	3.764	117	317207	11.036	ppbv		93
36) Benzene	3.658	78	317350	9.264	ppbv		96
37) 1,2-Dichloroethane	3.221	62	247446	12.035	ppbv	#	96
38) Trichloroethene	4.551	130	127601	8.523	ppbv		91
39) 1,2-Dichloropropane	4.318	63	115449	9.044	ppbv		92
40) 1,4-Dioxane	4.586	88	52820	7.529	ppbv	#	92
41) Tetrahydrofuran	3.055	42	124059	8.471	ppbv		98
42) Bromodichloromethane	4.493	83	317253	11.088	ppbv		99
43) Methyl Methacrylate	4.881	69	123817m	8.020	ppbv		
44) 2,2,4-Trimethylpentane	4.641	57	531439	8.983	ppbv		95
45) t-1,3-Dichloropropene	6.418	75	140981	8.940	ppbv		100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	170063	8.811	ppbv	#	84
47) 1,1,2-Trichloroethane	6.583	97	128662	9.893	ppbv		95
48) Dibromochloromethane	7.389	129	233350	10.156	ppbv		100
49) Bromoform	9.487	173	189484	9.431	ppbv		99
50) 4-Methyl-2-Pentanone	5.755	43	327508	7.846	ppbv		98
51) 2-Hexanone	7.438	43	262697	7.018	ppbv	#	95
52) Tetrachloroethene	8.228	164	106031	8.008	ppbv		90
53) Toluene	6.936	91	363707	8.848	ppbv		99
54) 1,2-Dibromoethane	7.658	107	178709	9.601	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.930	131	180979	10.981	ppbv		96
57) Chlorobenzene	8.924	112	290861	10.270	ppbv		99
58) Ethyl Benzene	9.357	91	545497	10.111	ppbv		98
59) m/p-Xylene	9.555	91	906532m	20.857	ppbv		
60) o-Xylene	9.966	91	465645	10.639	ppbv		94
61) Styrene	9.872	104	191741	9.178	ppbv		97
62) Isopropylbenzene	10.542	105	667839	10.393	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.966	83	278491	9.819	ppbv		99
64) n-propylbenzene	10.992	120	161309	9.987	ppbv		91
65) tert-Butylbenzene	11.535	119	605972	10.260	ppbv		98
66) Benzyl Chloride	11.620	91	46913	7.229	ppbv		99
67) sec-Butylbenzene	11.772	105	868275	10.569	ppbv		98
69) p-Isopropyltoluene	11.927	119	733796	10.282	ppbv		96
70) n-Butylbenzene	12.283	91	796622	10.717	ppbv		98
71) 2-Chlorotoluene	10.904	91	534951	10.614	ppbv		96
72) 4-Ethyltoluene	11.128	105	553879	10.351	ppbv		97
73) 1,3,5-Trimethylbenzene	11.205	105	491459	10.403	ppbv		95
74) 1,2,4-Trimethylbenzene	11.539	105	548408	9.939	ppbv	#	86
75) 1,3-Dichlorobenzene	11.610	146	284809	9.931	ppbv		97
76) 1,4-Dichlorobenzene	11.675	146	285571	9.907	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	282424	10.128	ppbv		96
78) Hexachloro-1,3-Butadiene	13.885	225	280954	9.977	ppbv		98
79) Naphthalene	13.516	128	621879	9.425	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	312733	8.317	ppbv		95
81) 1,2,4-Trichlorobenzene	13.442	180	269082	9.498	ppbv		99

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

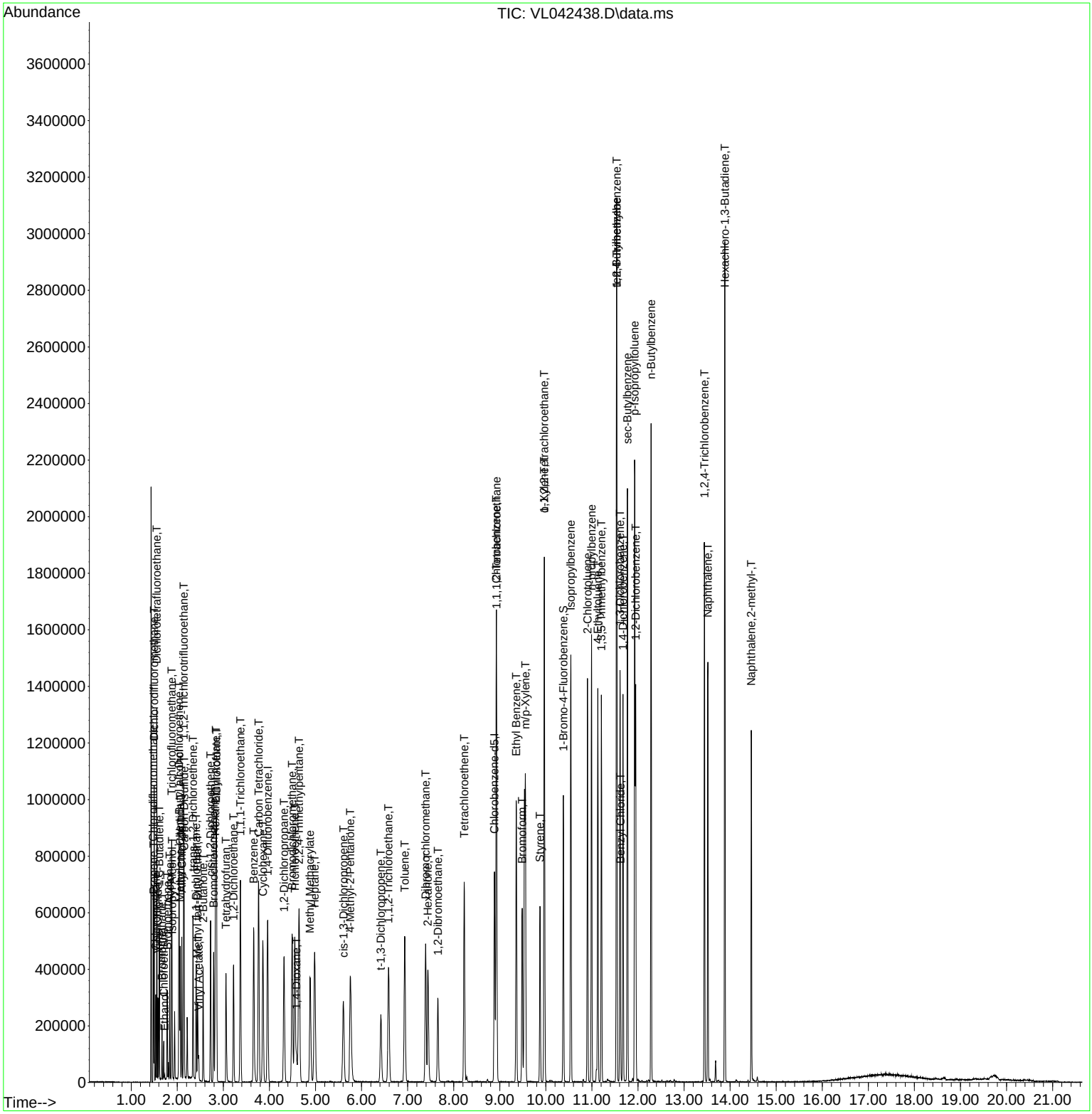
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

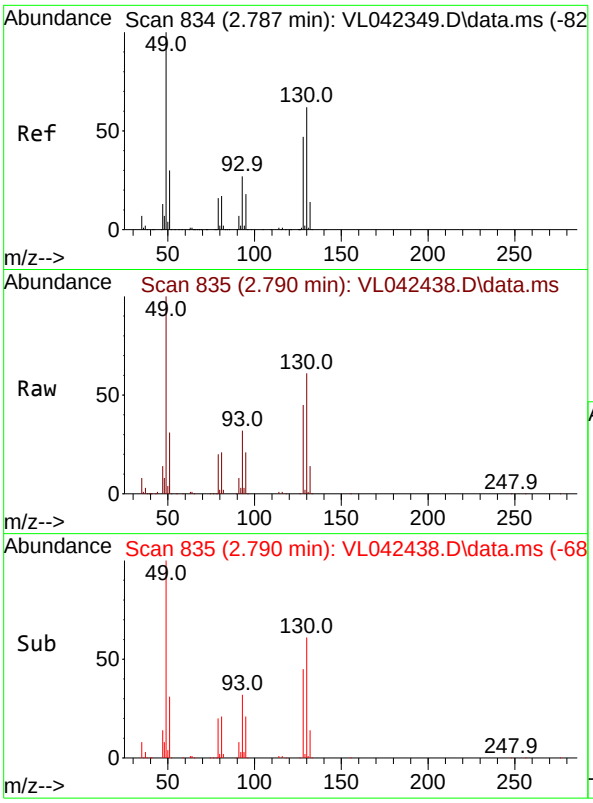
Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025





#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

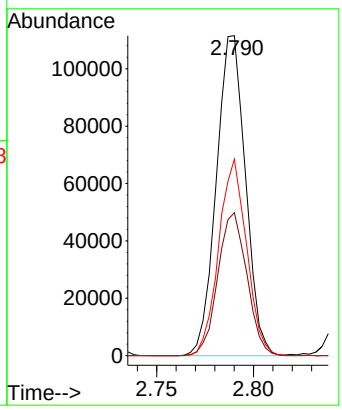
Tgt Ion: 49 Resp: 11677

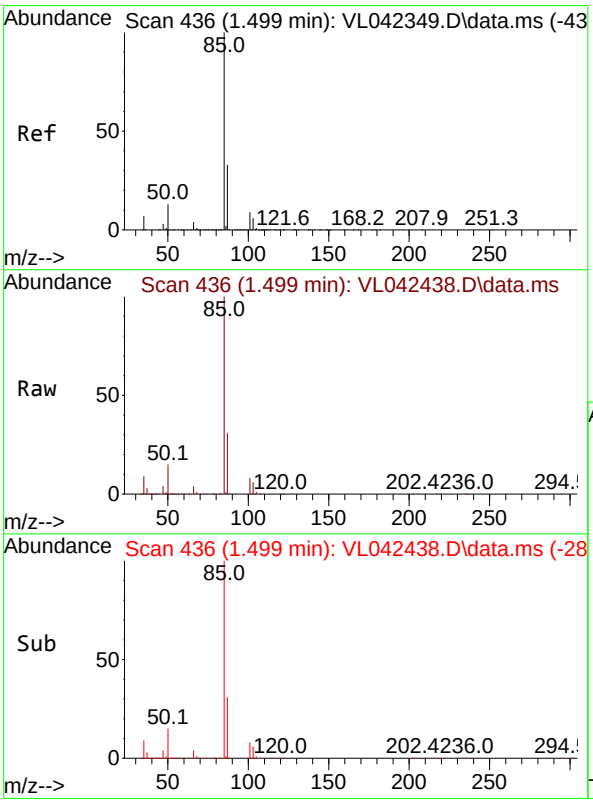
Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.8	68.4
130	58.8	29.3	88.0

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

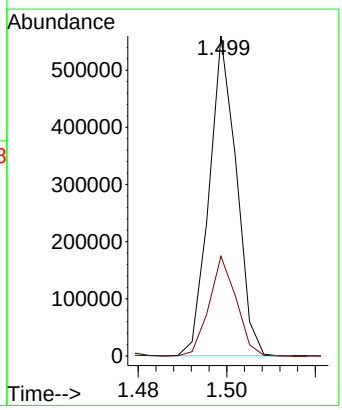


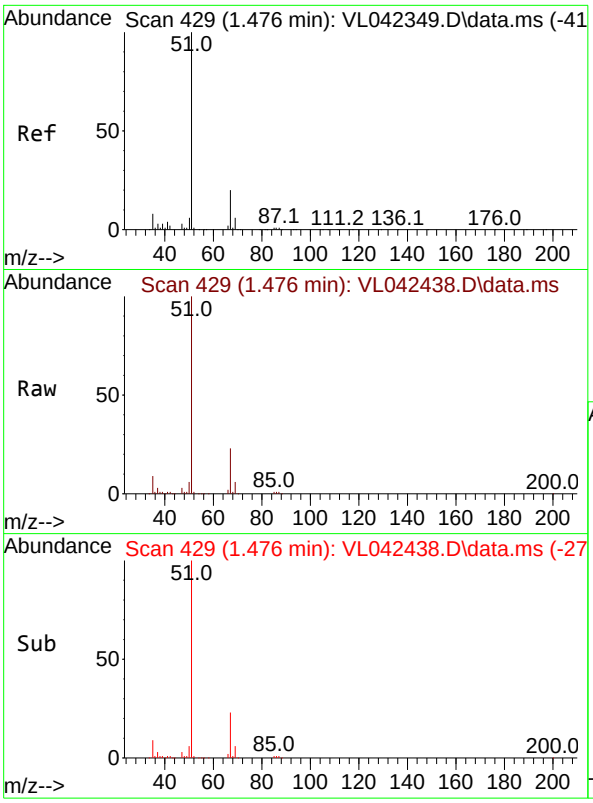


#2
Dichlorodifluoromethane
Concen: 11.562 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 85 Resp: 238539

Ion	Ratio	Lower	Upper
85	100		
87	31.2	26.6	39.8

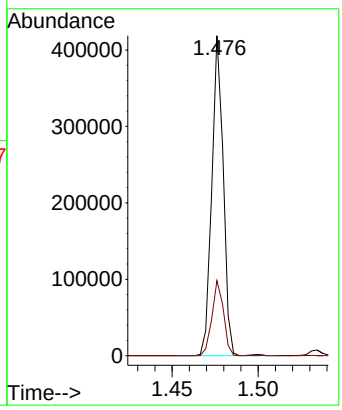




#3
Chlorodifluoromethane
Concen: 9.807 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 51 Resp: 19267

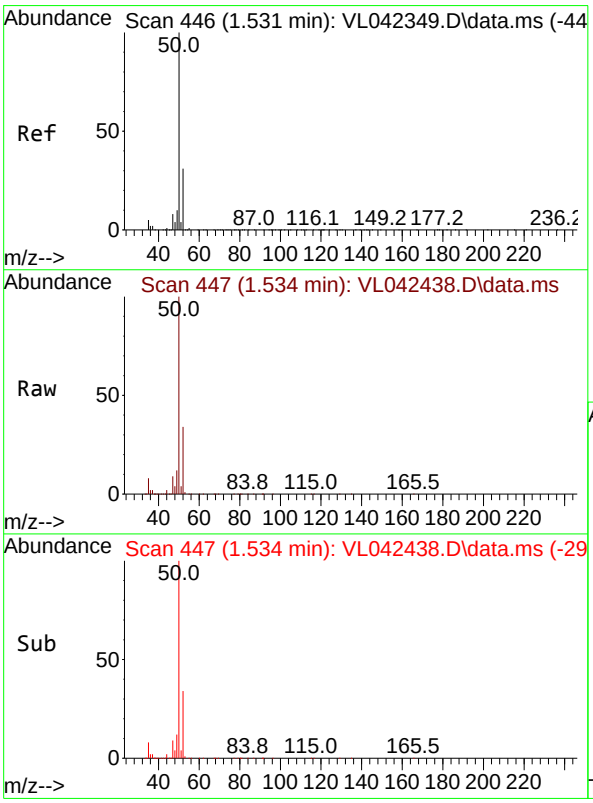
Ion	Ratio	Lower	Upper
51	100		
67	23.8	16.2	24.4



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
APPROVED

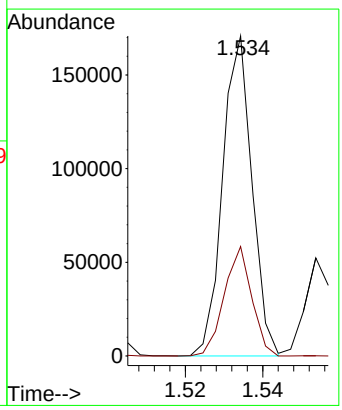
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

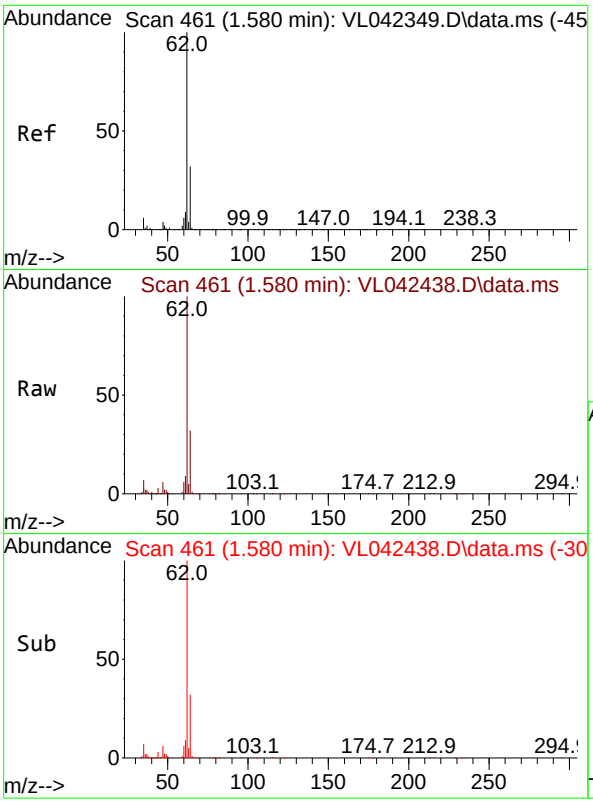


#4
Chloromethane
Concen: 11.003 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 50 Resp: 89832

Ion	Ratio	Lower	Upper
50	100		
52	34.2	24.7	37.1

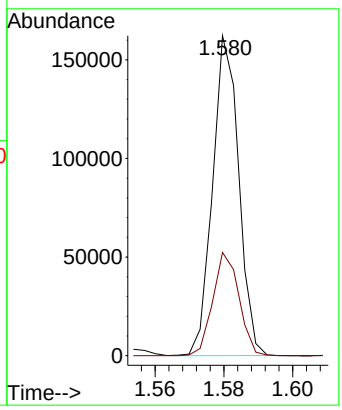




#5
Vinyl Chloride
Concen: 9.601 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 62 Resp: 8533

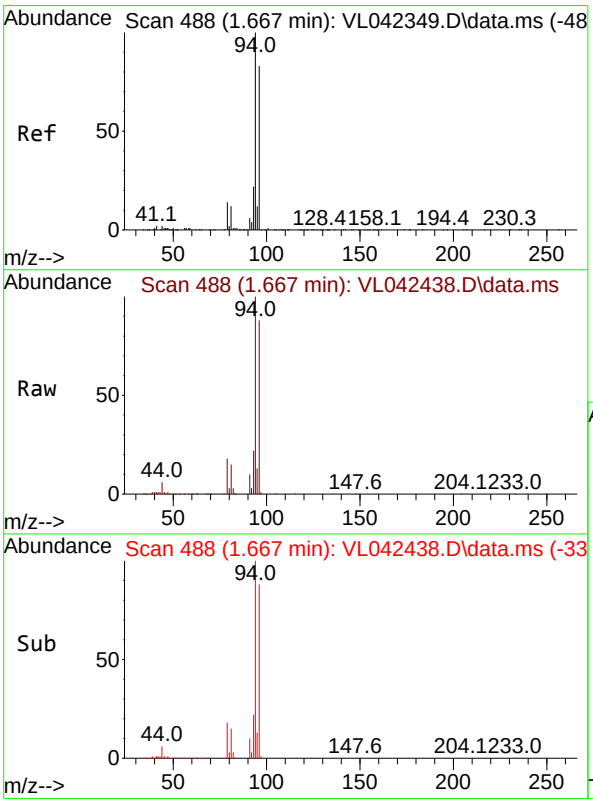
Ion	Ratio	Lower	Upper
62	100		
64	32.3	25.4	38.0



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
APPROVED

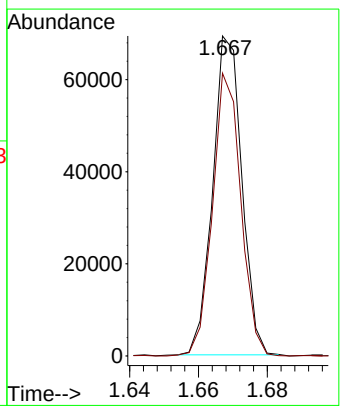
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

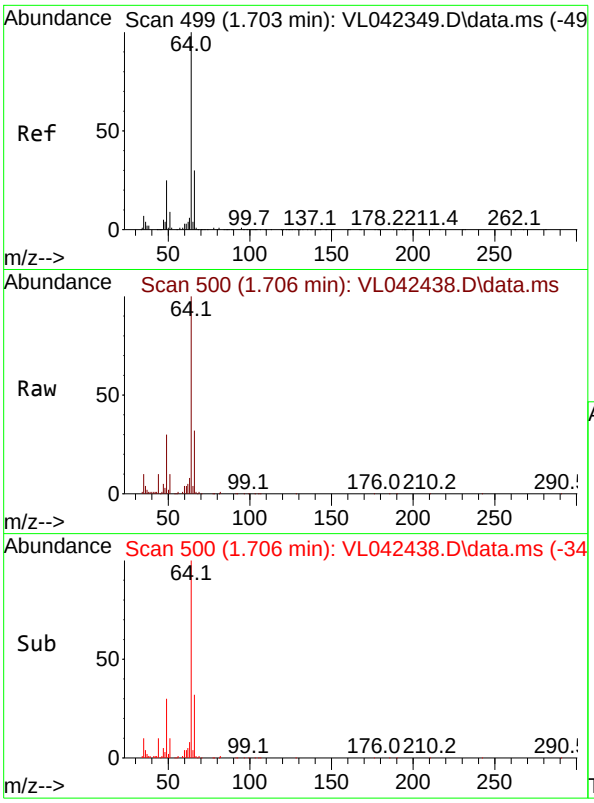


#6
Bromomethane
Concen: 10.676 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 94 Resp: 40758

Ion	Ratio	Lower	Upper
94	100		
96	88.5	66.2	99.2

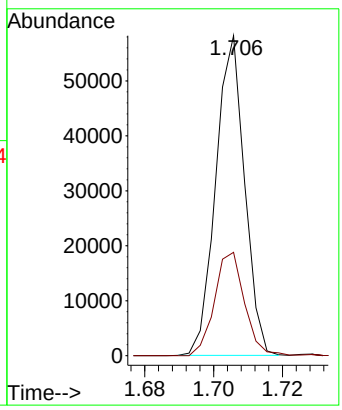




#7
Chloroethane
Concen: 10.502 ppbv
RT: 1.706 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 64 Resp: 3375(

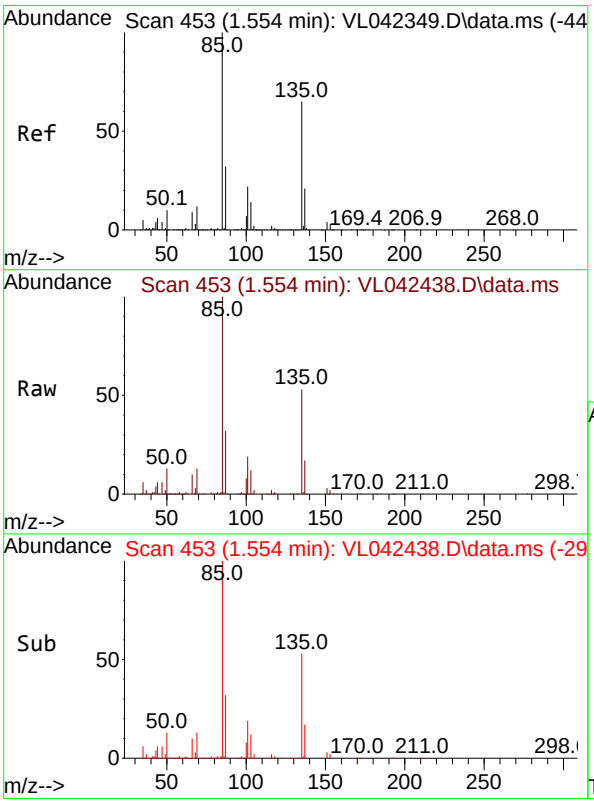
Ion	Ratio	Lower	Upper
64	100		
66	32.3	24.6	37.0



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
APPROVED

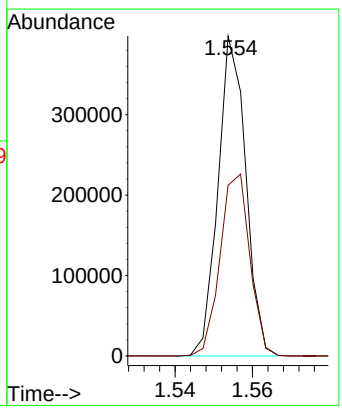
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

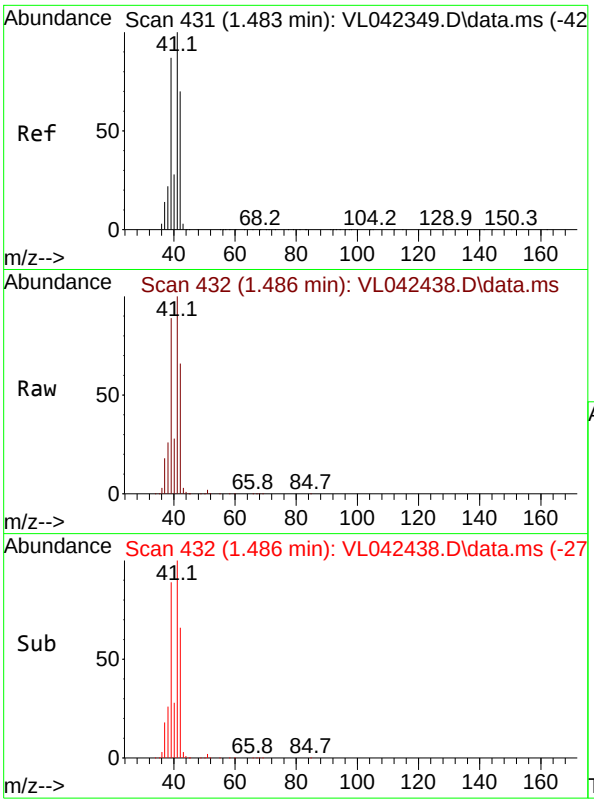


#8
Dichlorotetrafluoroethane
Concen: 11.184 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 85 Resp: 198106

Ion	Ratio	Lower	Upper
85	100		
135	61.2	52.2	78.2

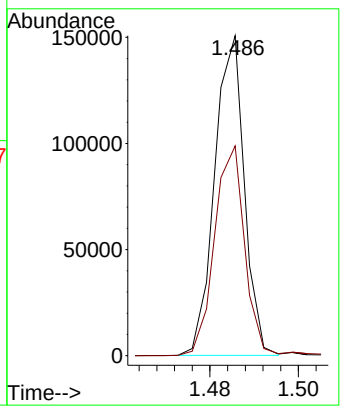




#9
Propene
Concen: 7.836 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 41 Resp: 7011

Ion	Ratio	Lower	Upper
41	100		
42	67.7	56.2	84.4



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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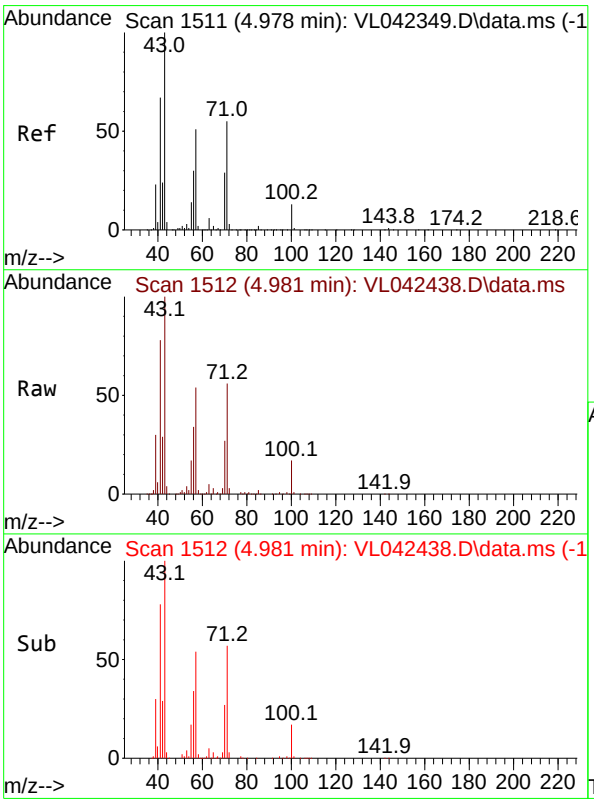
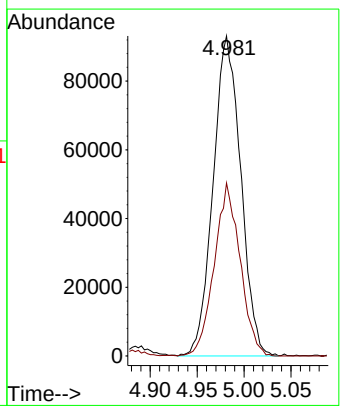
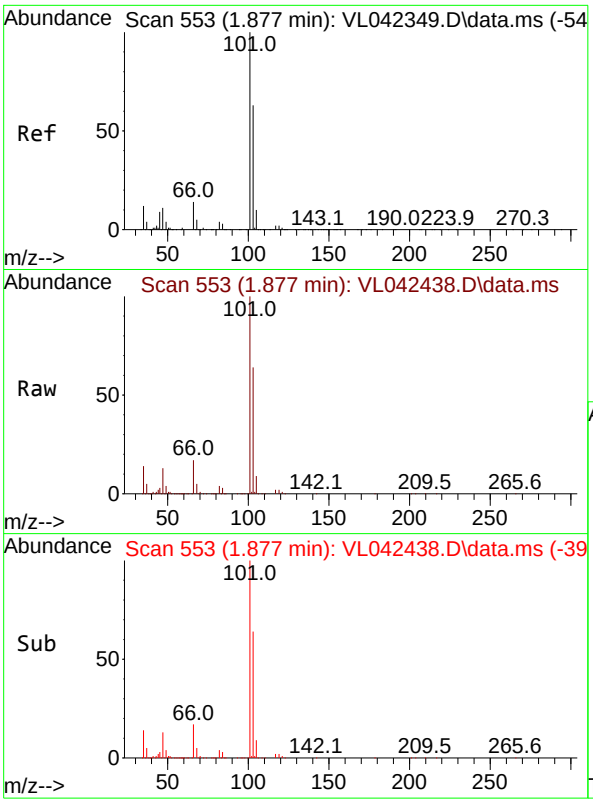


#10
Heptane
Concen: 7.582 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 190583

Ion	Ratio	Lower	Upper
43	100		
57	50.6	39.9	59.9

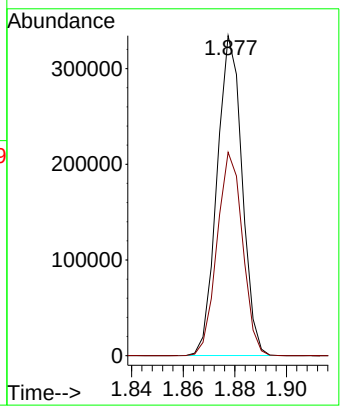




#11
Trichlorofluoromethane
Concen: 11.484 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:101 Resp: 22530

Ion	Ratio	Lower	Upper
101	100		
103	63.6	50.1	75.1



Instrument :
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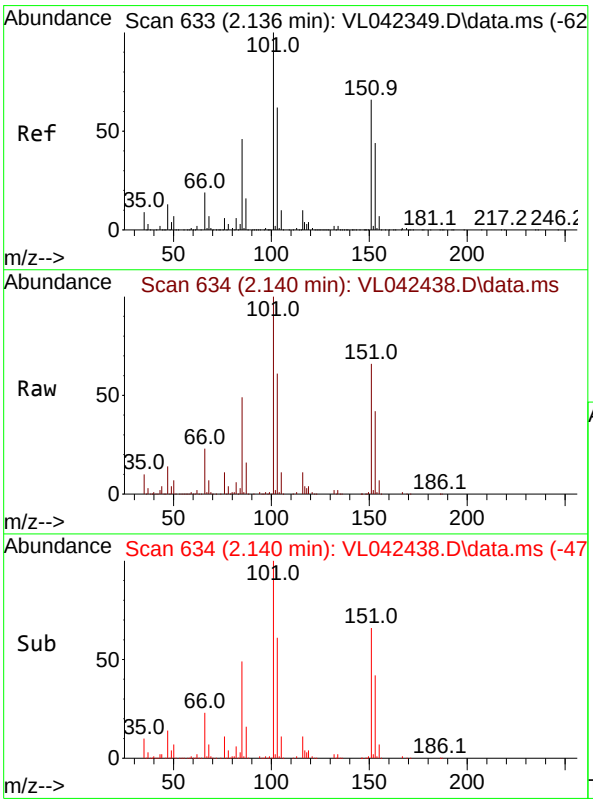
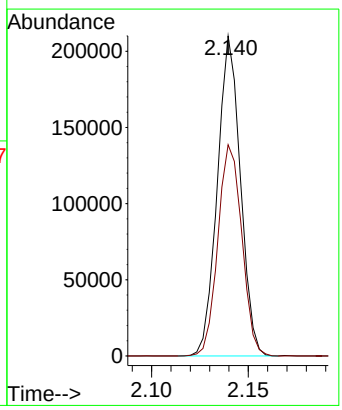
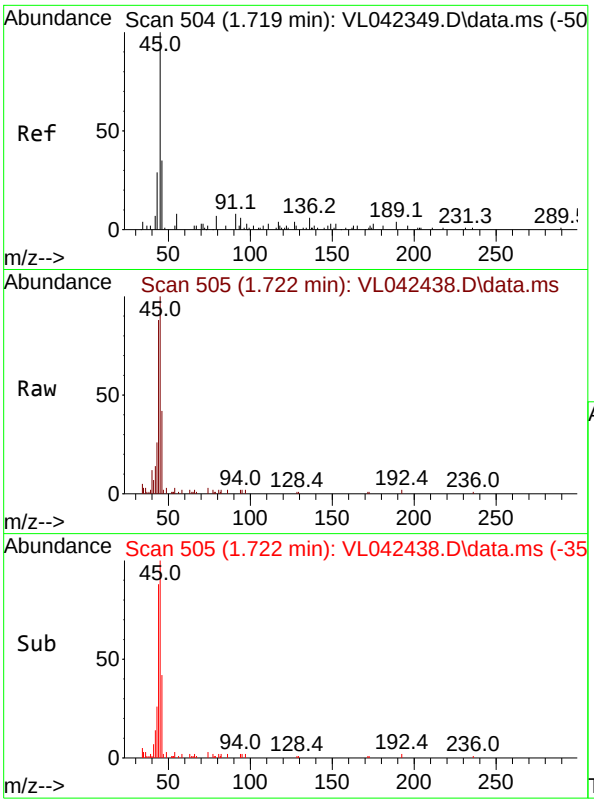


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.854 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:101 Resp: 174111

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.0	85.6





#13
Ethanol
Concen: 2.909 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 45 Resp: 413

Ion	Ratio	Lower	Upper
45	100		
46	47.5	21.9	87.7

Instrument :
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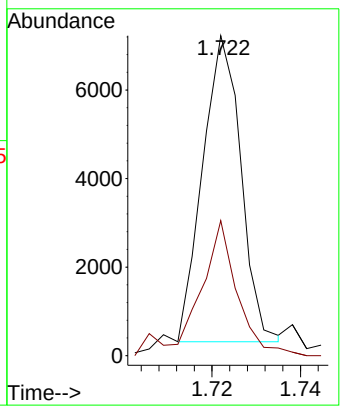
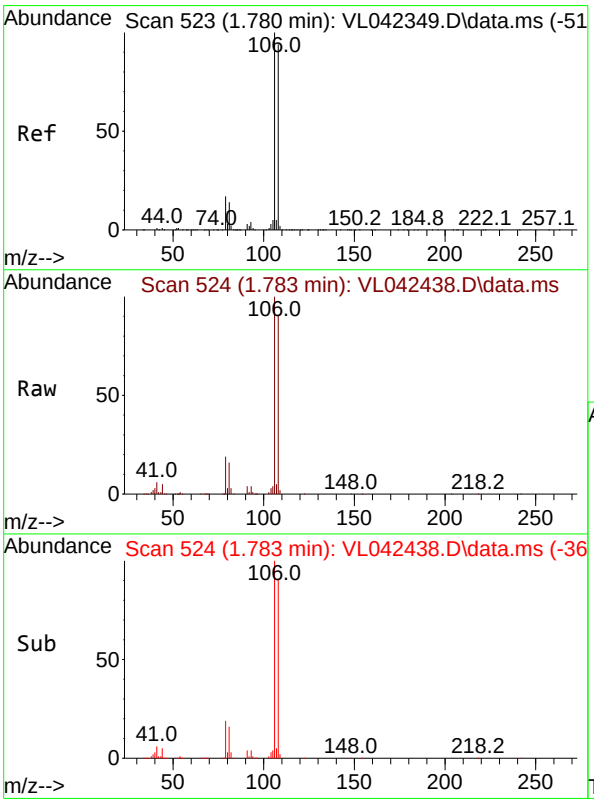
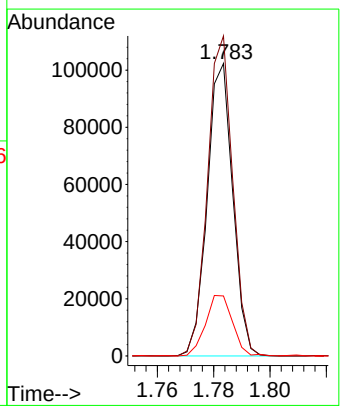


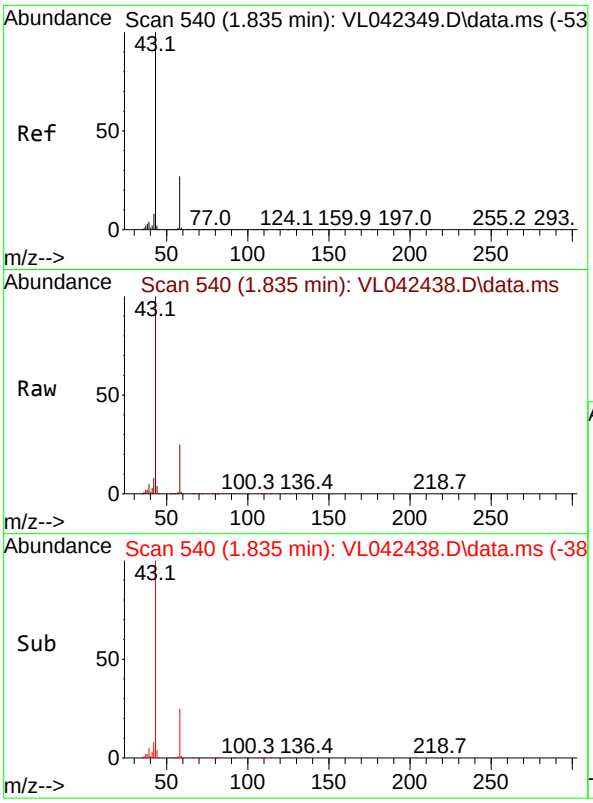


#14
Bromoethene
Concen: 10.674 ppbv
RT: 1.783 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:108 Resp: 64544

Ion	Ratio	Lower	Upper
108	100		
106	108.0	85.9	128.9
79	22.1	13.9	20.9#





#15
Acetone
Concen: 9.910 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 18943

Ion	Ratio	Lower	Upper
43	100		
58	27.1	22.4	33.6

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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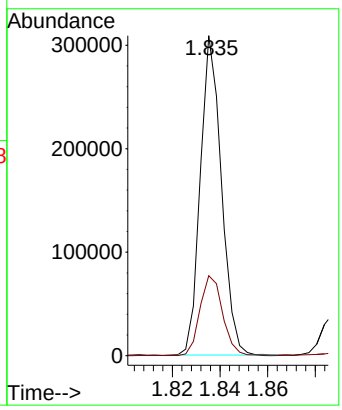
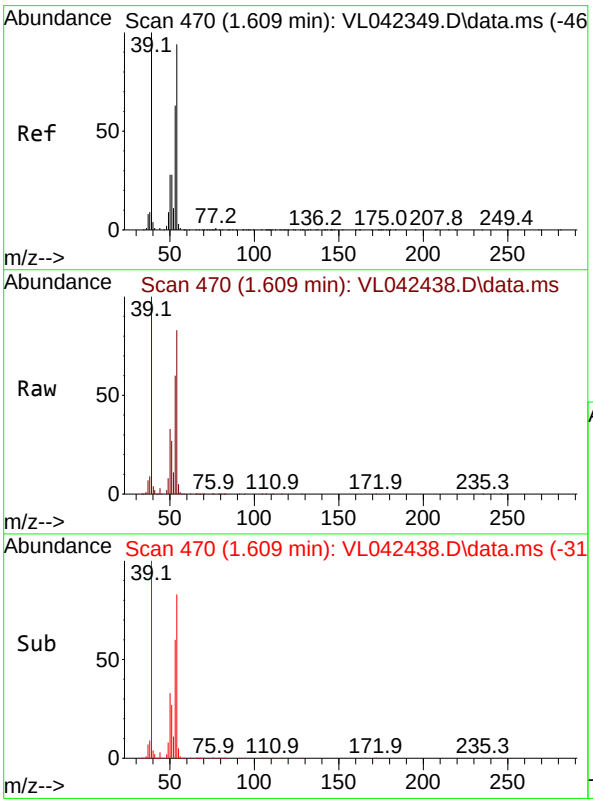
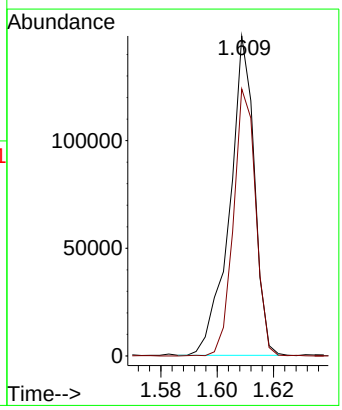


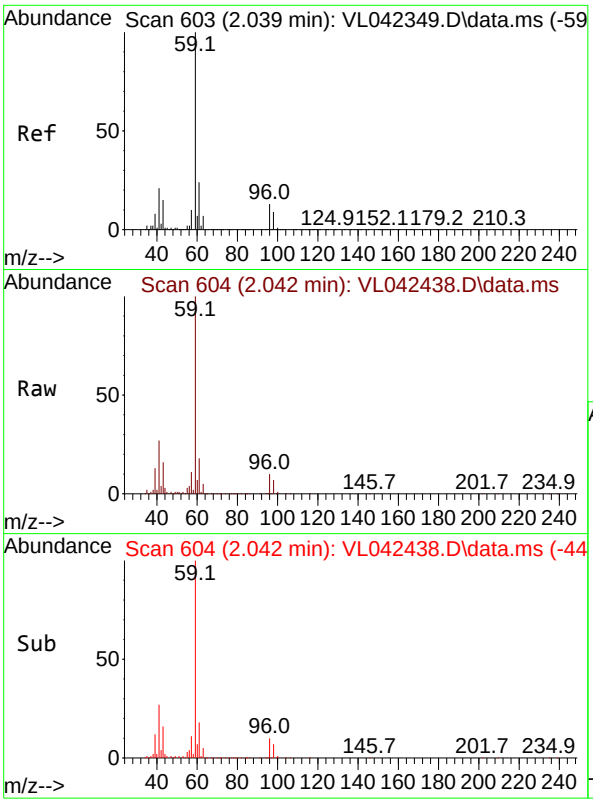


#16
1,3-Butadiene
Concen: 9.895 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 39 Resp: 90473

Ion	Ratio	Lower	Upper
39	100		
54	75.1	64.9	97.3

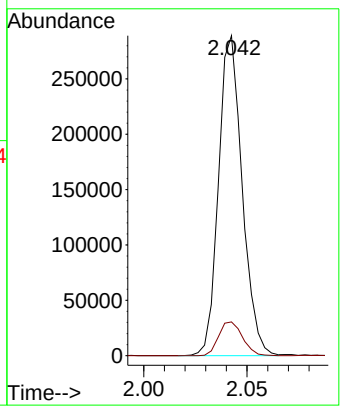




#17
tert-Butyl alcohol
Concen: 9.718 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 59 Resp: 23021

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.7	13.1



Instrument :
MSVOA_L
ClientSampleId :
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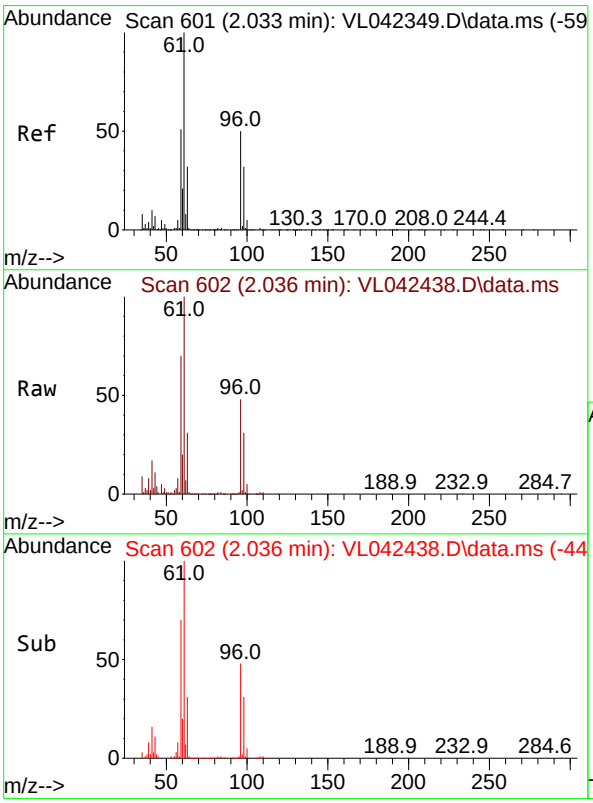
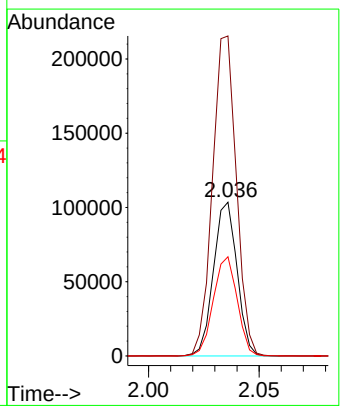
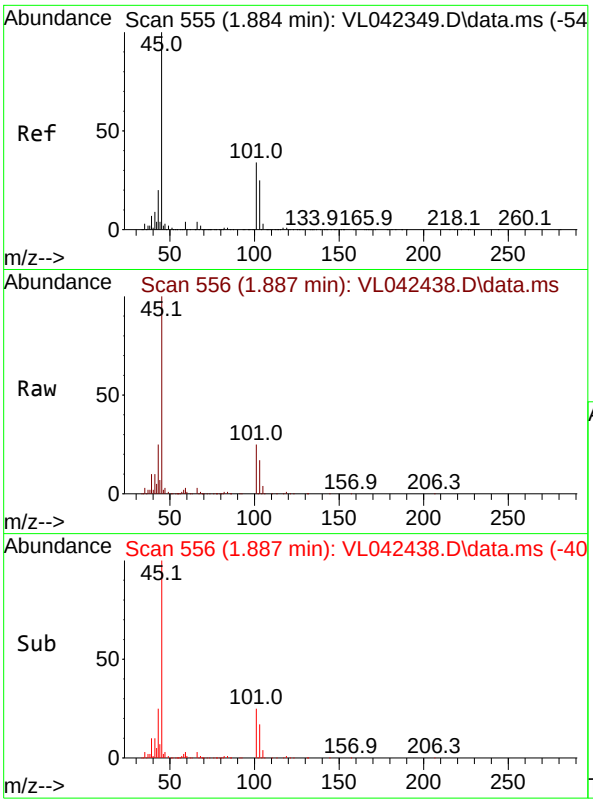


#18
1,1-Dichloroethene
Concen: 10.241 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 96 Resp: 76749

Ion	Ratio	Lower	Upper
96	100		
61	208.1	160.2	240.2
98	64.5	51.0	76.4





#19
Isopropyl Alcohol
Concen: 9.765 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 45 Resp: 10369

Ion	Ratio	Lower	Upper
45	100		
58	2.2	34.5	51.7#

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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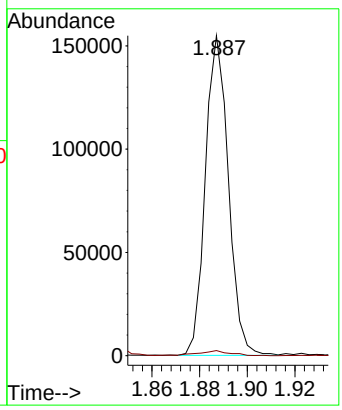
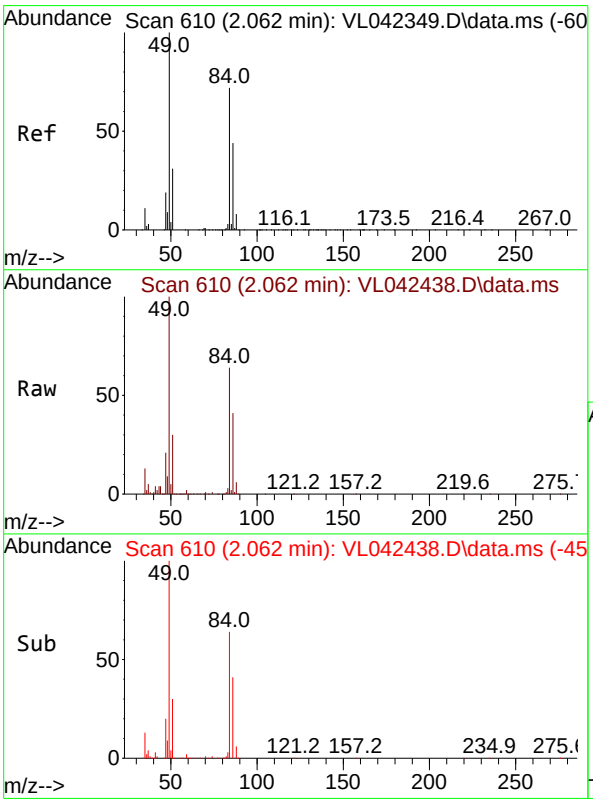
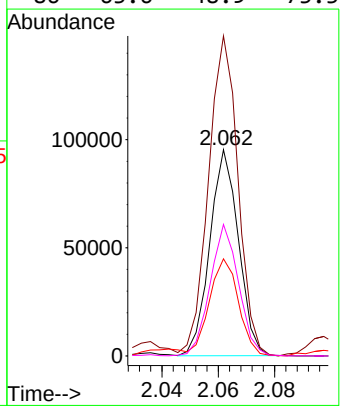


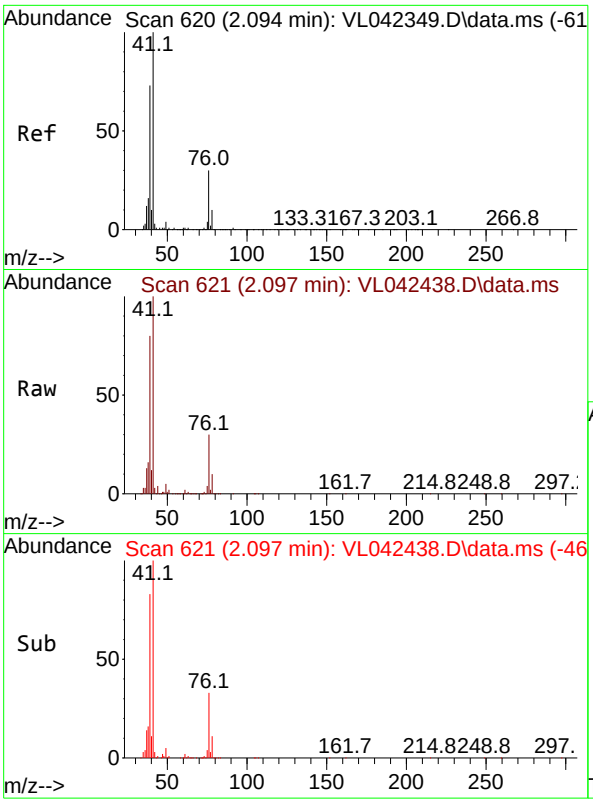


#20
Methylene Chloride
Concen: 8.989 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 84 Resp: 67298

Ion	Ratio	Lower	Upper
84	100		
49	155.2	111.6	167.4
51	47.0	35.1	52.7
86	63.6	48.9	73.3





#21
Allyl Chloride
Concen: 9.851 ppbv
RT: 2.097 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 41 Resp: 13001

Ion	Ratio	Lower	Upper
41	100		
76	29.2	24.8	37.2
39	80.1	60.6	90.8

Instrument :
MSVOA_L
ClientSampleId :
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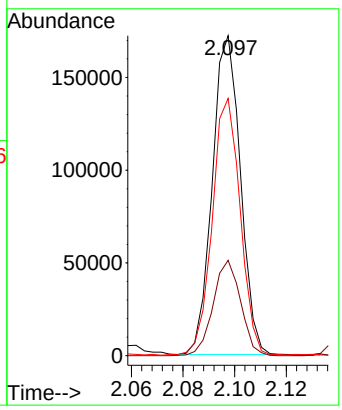
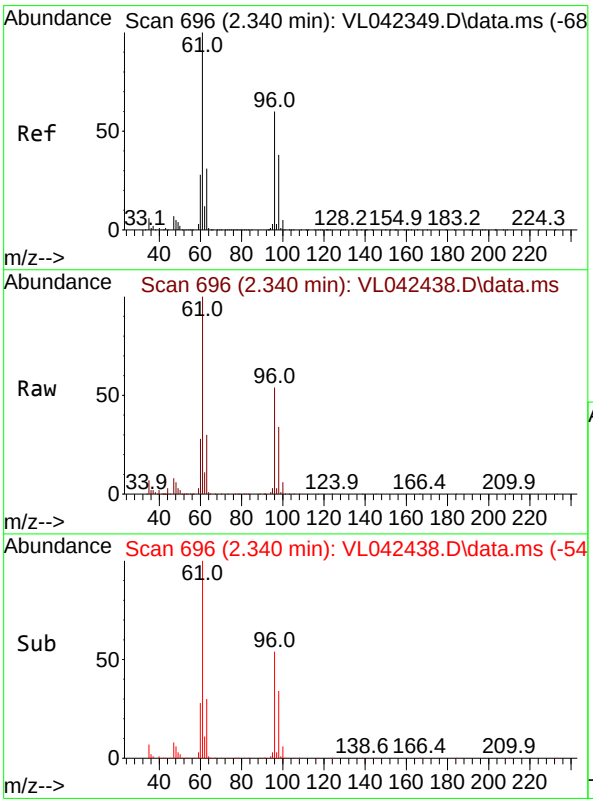
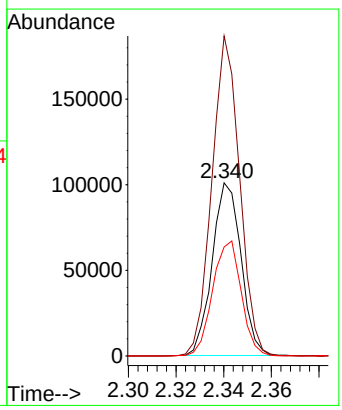


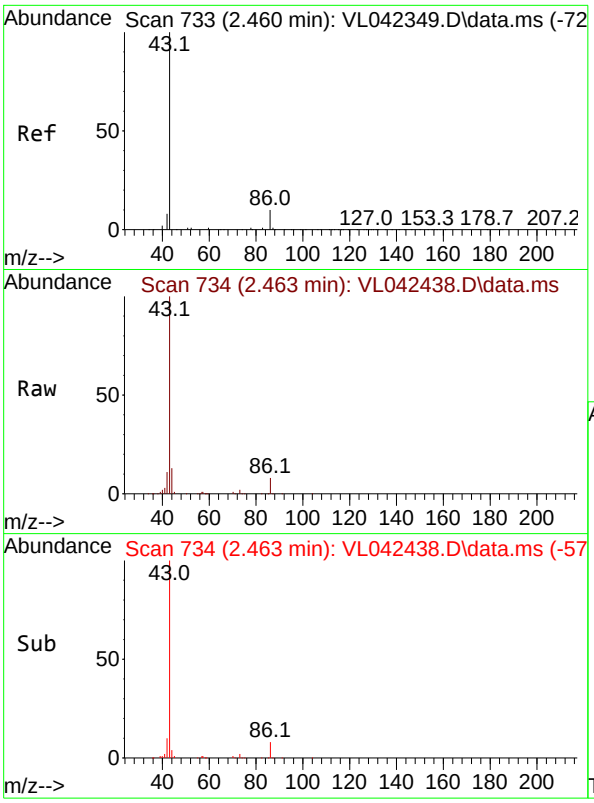


#22
trans-1,2-Dichloroethene
Concen: 9.938 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 96 Resp: 84797

Ion	Ratio	Lower	Upper
96	100		
61	185.1	133.7	200.5
98	63.1	50.3	75.5

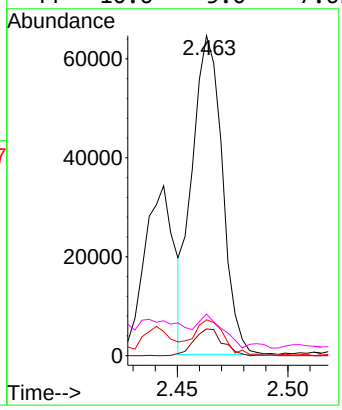




#23
Vinyl Acetate
Concen: 7.888 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 6103

Ion	Ratio	Lower	Upper
43	100		
86	8.4	6.5	9.7
42	11.0	7.8	11.8
44	10.6	5.0	7.6#



Instrument :
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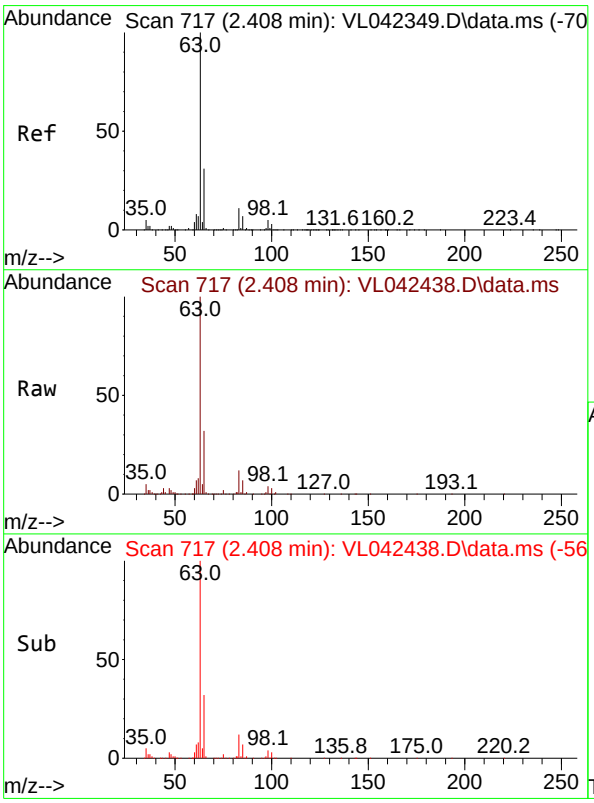
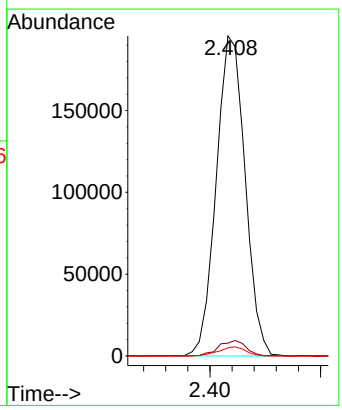
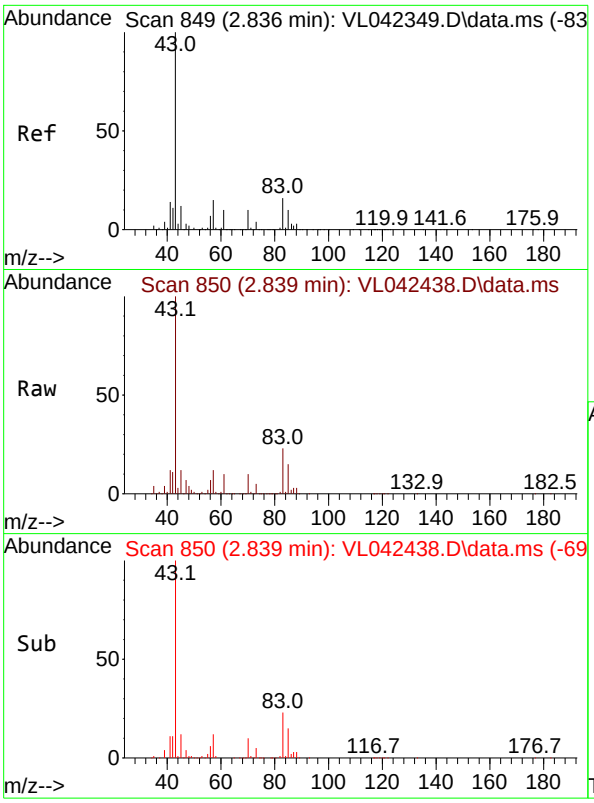


#24
1,1-Dichloroethane
Concen: 10.934 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 63 Resp: 177233

Ion	Ratio	Lower	Upper
63	100		
98	4.0	2.3	6.8
100	2.6	1.6	4.8

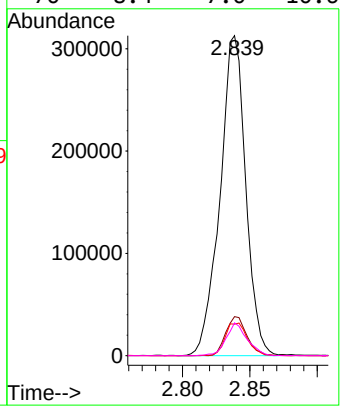




#25
Ethyl Acetate
Concen: 8.836 ppbv
RT: 2.839 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 41646

Ion	Ratio	Lower	Upper
43	100		
45	10.0	8.3	12.5
61	8.8	7.3	10.9
70	8.4	7.0	10.6



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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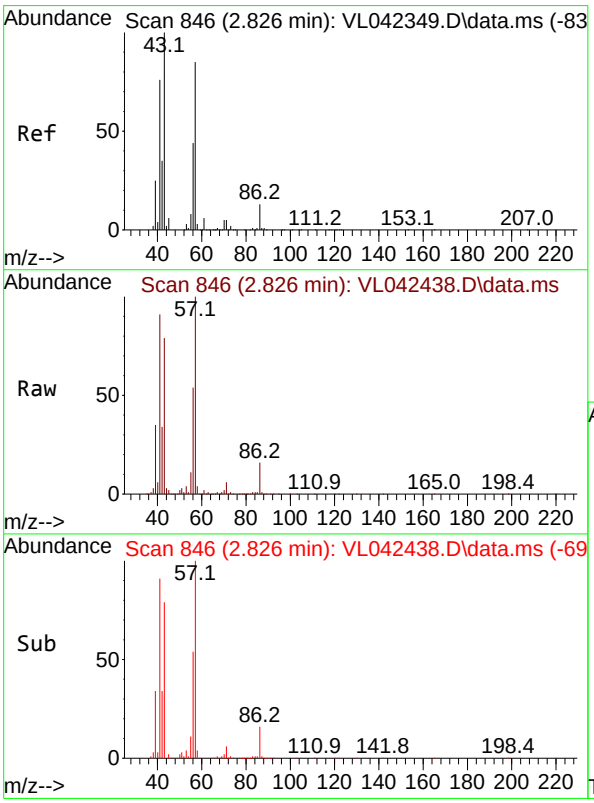
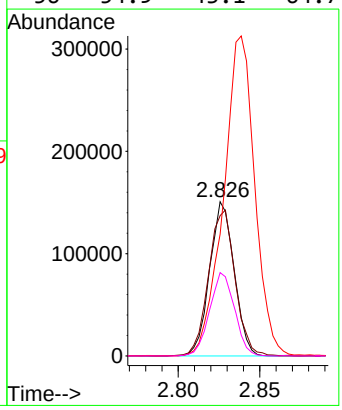
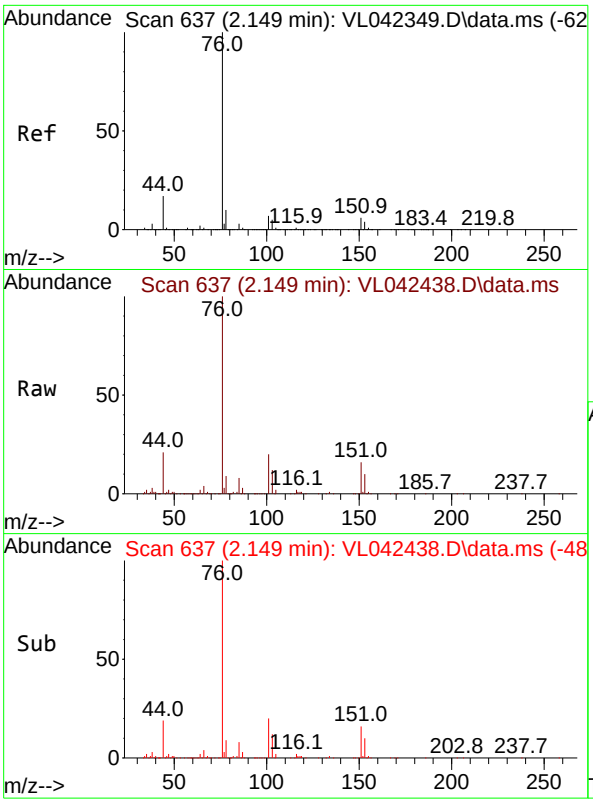


#26
Hexane
Concen: 8.260 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 57 Resp: 157544

Ion	Ratio	Lower	Upper
57	100		
41	103.2	77.9	116.9
43	265.6	208.4	312.6
56	54.9	43.1	64.7





#27
Carbon Disulfide
Concen: 10.372 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 76 Resp: 21182

Ion	Ratio	Lower	Upper
76	100		
44	19.8	15.5	23.3
78	11.7	9.3	13.9

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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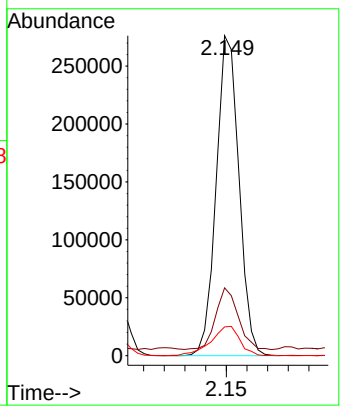
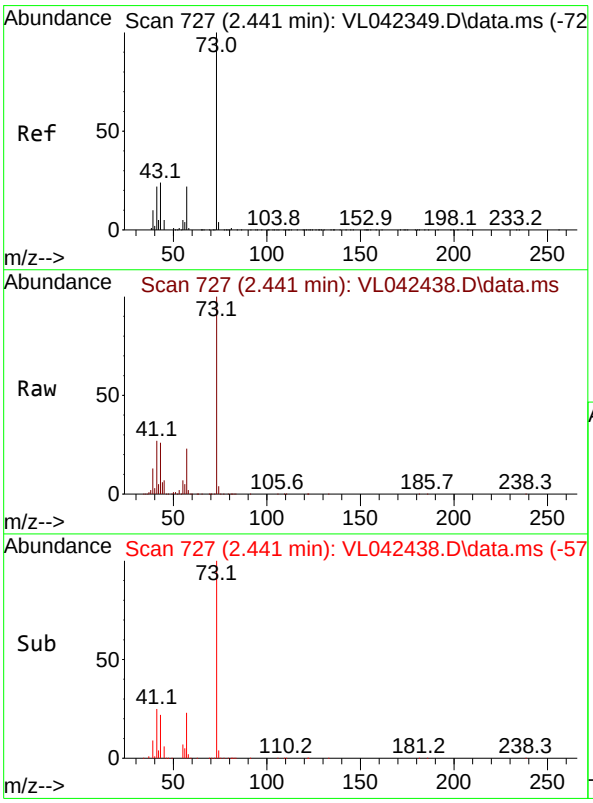
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

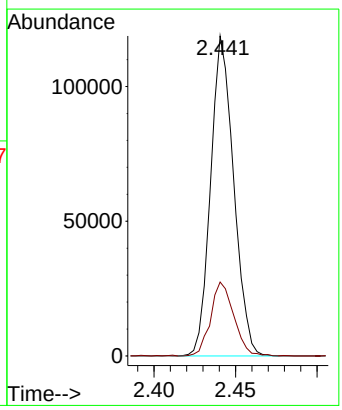


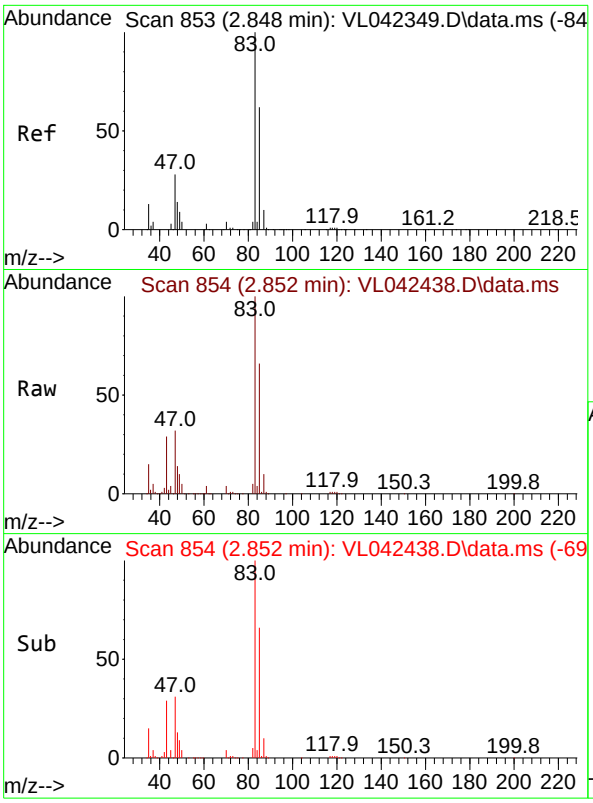


#28
Methyl tert-Butyl Ether
Concen: 9.344 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 73 Resp: 116769

Ion	Ratio	Lower	Upper
73	100		
57	23.4	21.3	31.9

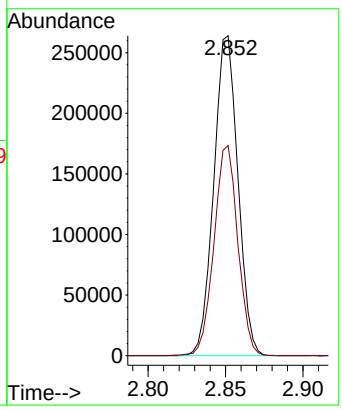




#29
Chloroform
Concen: 10.623 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 83 Resp: 28639

Ion	Ratio	Lower	Upper
83	100		
85	65.6	50.0	75.0



Instrument :
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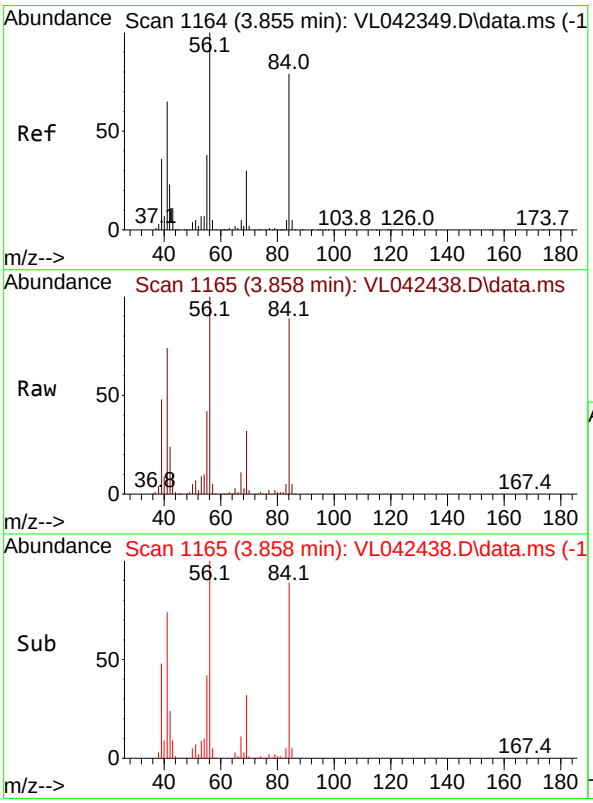
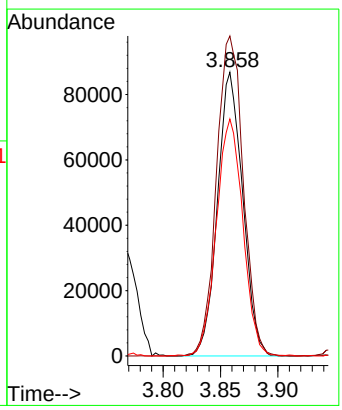
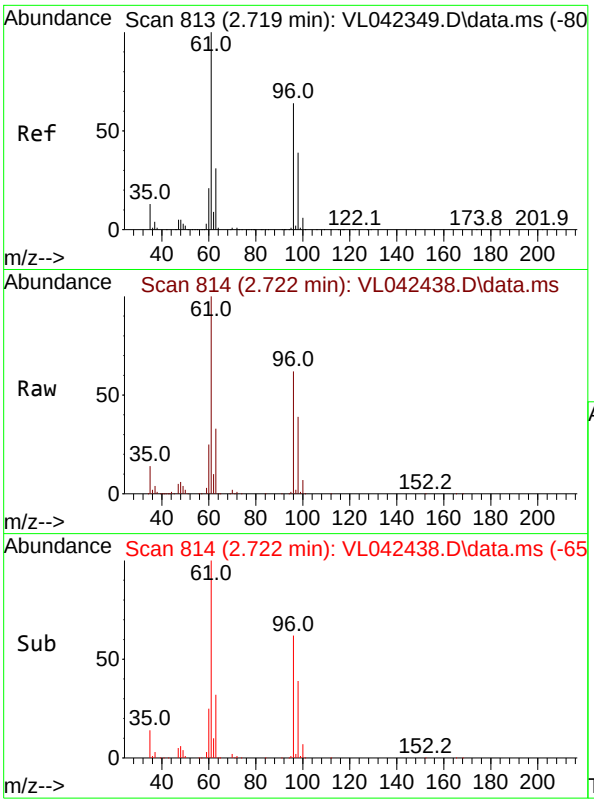


#30
Cyclohexane
Concen: 8.601 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 84 Resp: 132615

Ion	Ratio	Lower	Upper
84	100		
56	119.9	101.0	151.4
41	88.0	67.4	101.0

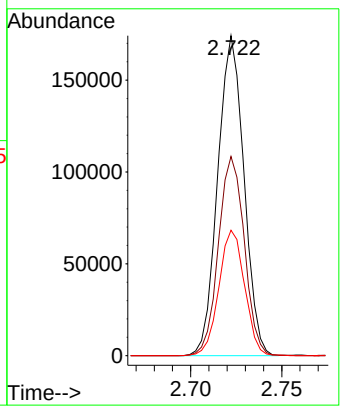




#31
cis-1,2-Dichloroethene
Concen: 9.613 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 61 Resp: 17432

Ion	Ratio	Lower	Upper
61	100		
96	62.3	50.8	76.2
98	39.2	30.9	46.3



Instrument :
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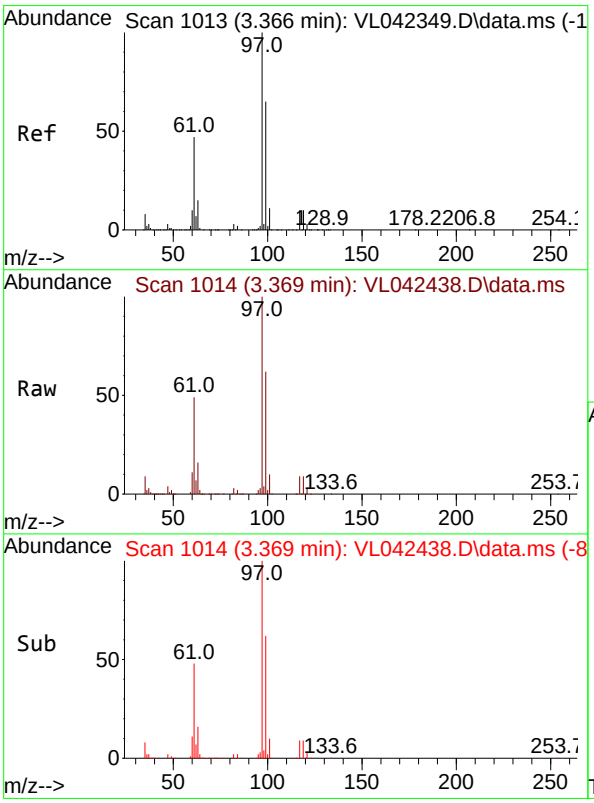
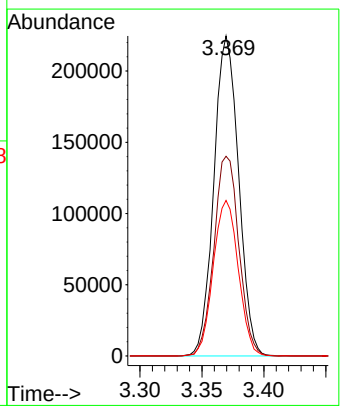
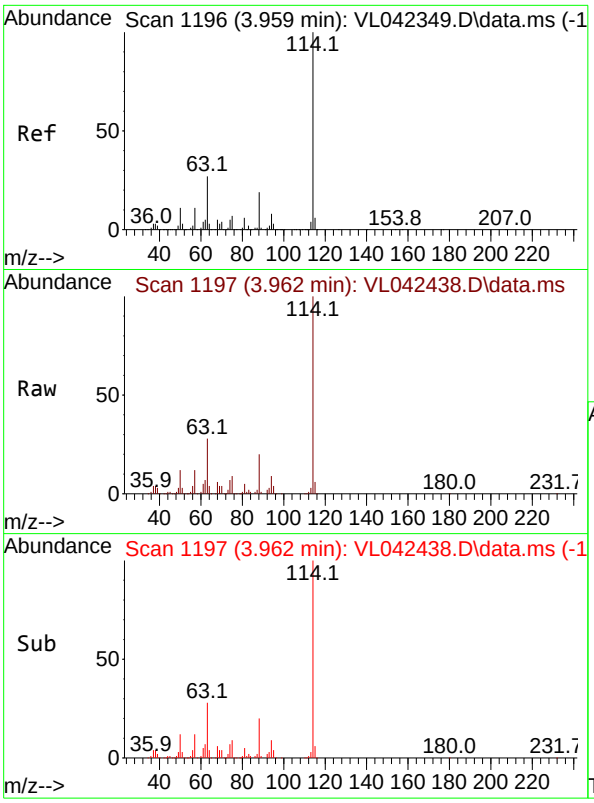


#32
1,1,1-Trichloroethane
Concen: 10.294 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 97 Resp: 312429

Ion	Ratio	Lower	Upper
97	100		
99	63.2	51.0	76.4
61	49.4	38.8	58.2

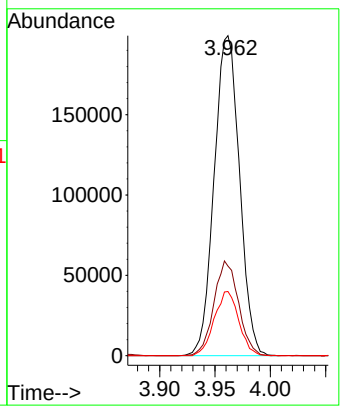




#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:114 Resp: 31759

Ion	Ratio	Lower	Upper
114	100		
63	28.7	21.8	32.6
88	19.4	15.5	23.3



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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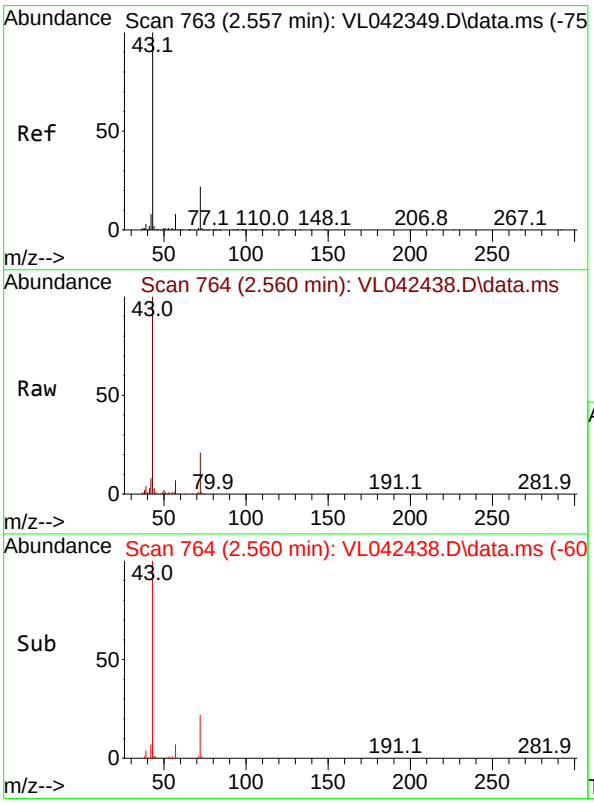
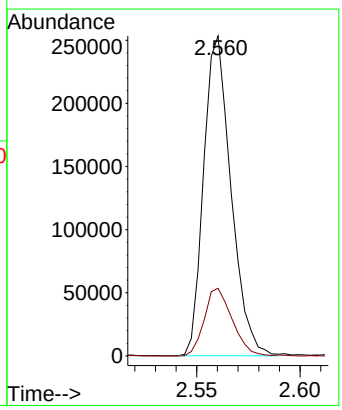
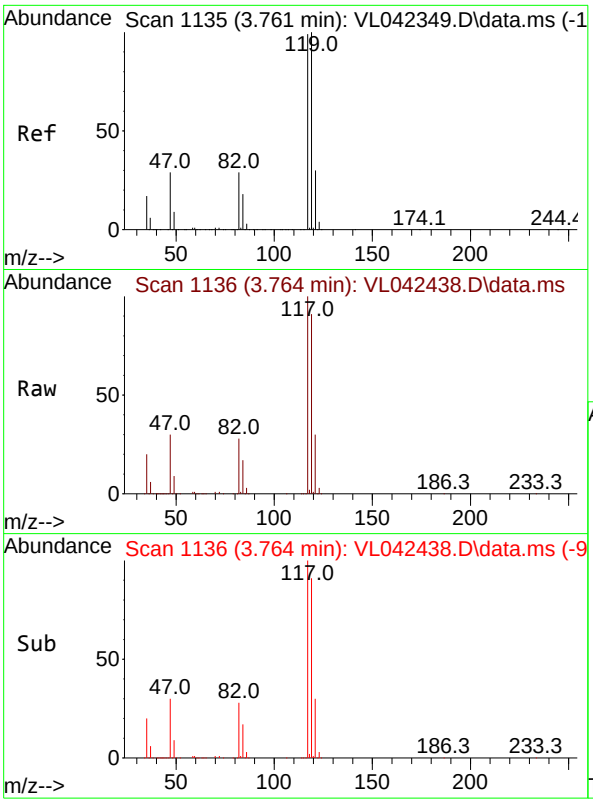


#34
2-Butanone
Concen: 9.278 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 233037

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2

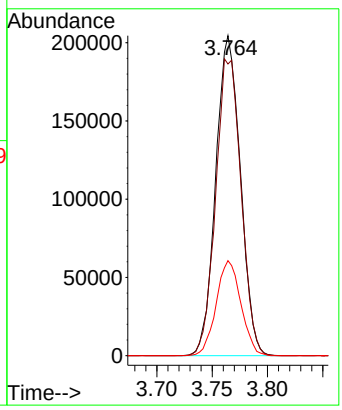




#35
Carbon Tetrachloride
Concen: 11.036 ppbv
RT: 3.764 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:117 Resp: 31720

Ion	Ratio	Lower	Upper
117	100		
119	91.1	80.5	120.7
121	29.7	24.2	36.2



Instrument :
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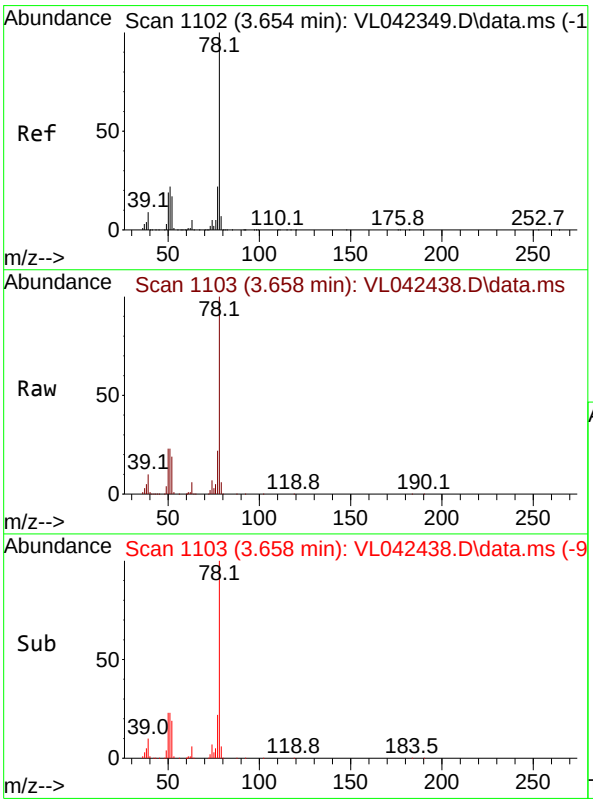
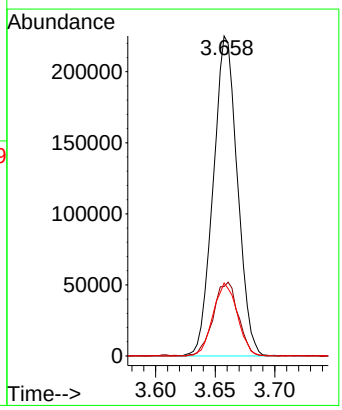
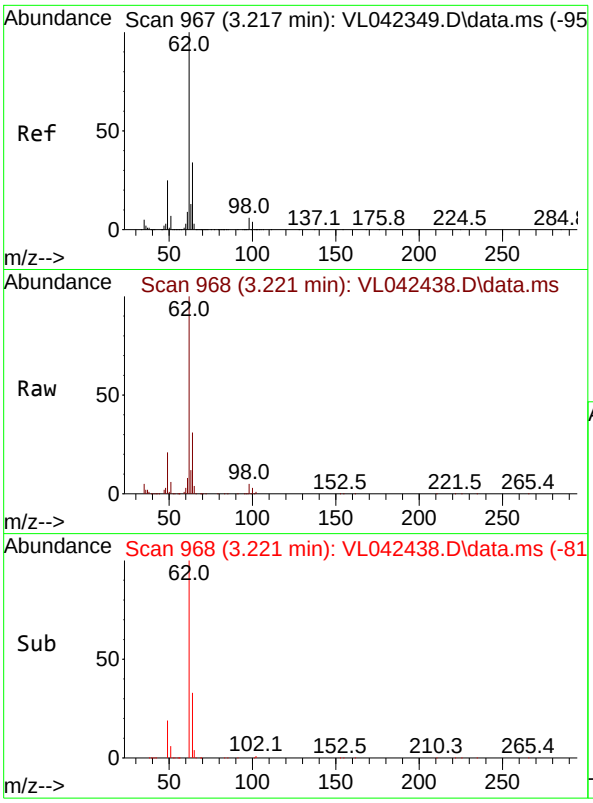


#36
Benzene
Concen: 9.264 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 78 Resp: 317350

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	22.8	15.5	23.3





#37
1,2-Dichloroethane
Concen: 12.035 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 62 Resp: 24744

Ion	Ratio	Lower	Upper
62	100		
98	5.0	5.1	7.7#

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
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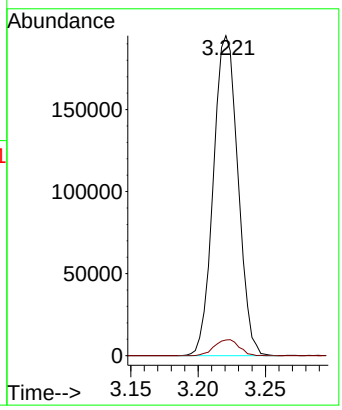
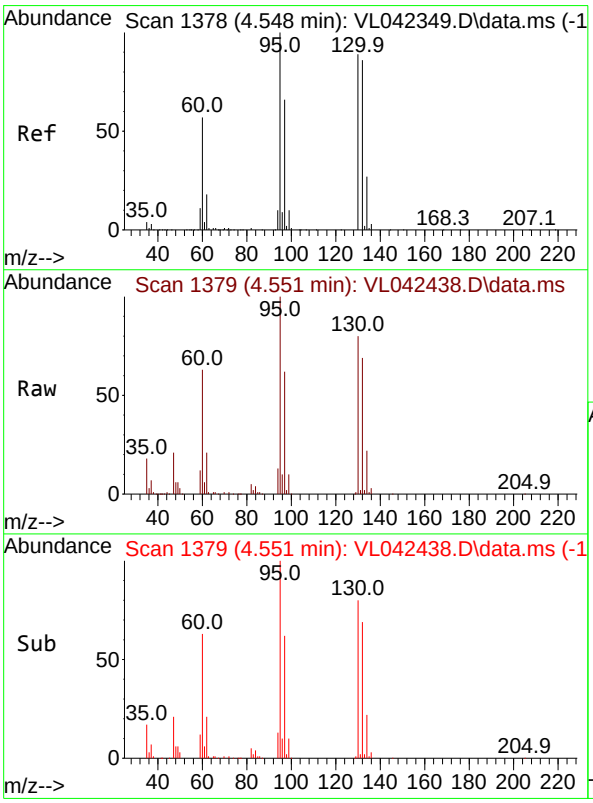
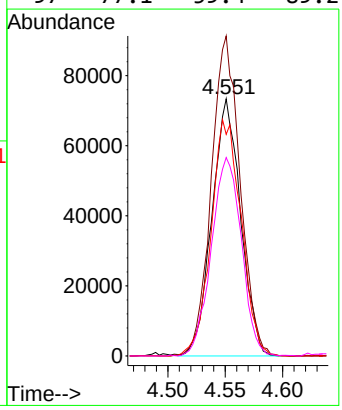


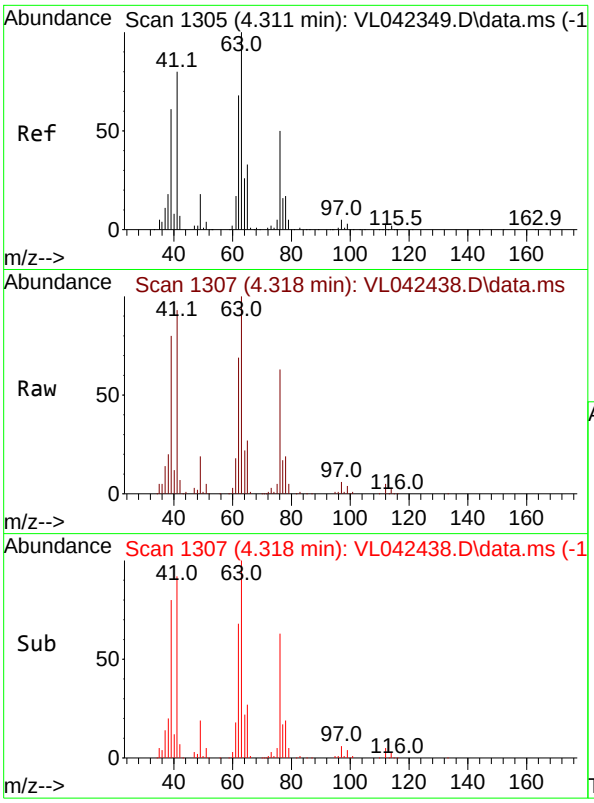


#38
Trichloroethene
Concen: 8.523 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:130 Resp: 127601

Ion	Ratio	Lower	Upper
130	100		
95	124.2	89.8	134.6
132	86.0	77.7	116.5
97	77.1	59.4	89.2

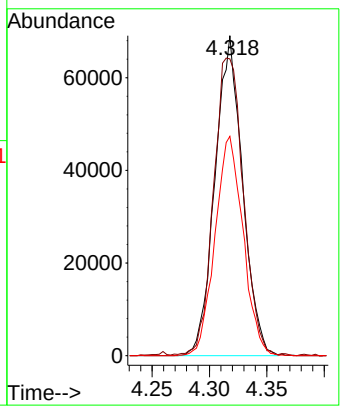




#39
1,2-Dichloropropane
Concen: 9.044 ppbv
RT: 4.318 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 63 Resp: 11544

Ion	Ratio	Lower	Upper
63	100		
41	92.4	64.2	96.2
62	68.4	54.3	81.5



Instrument :
MSVOA_L
ClientSampleId :
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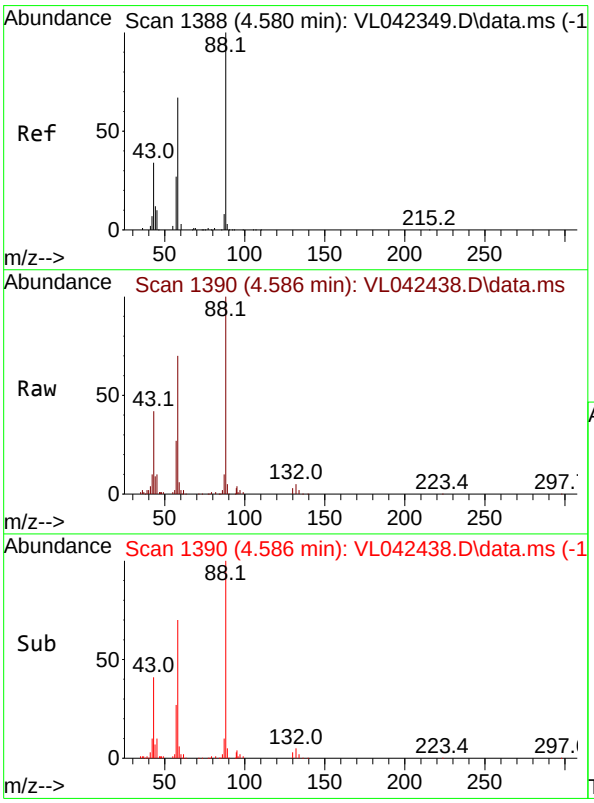
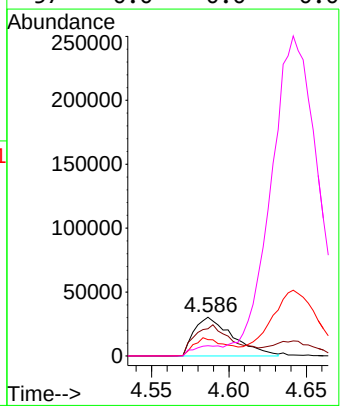
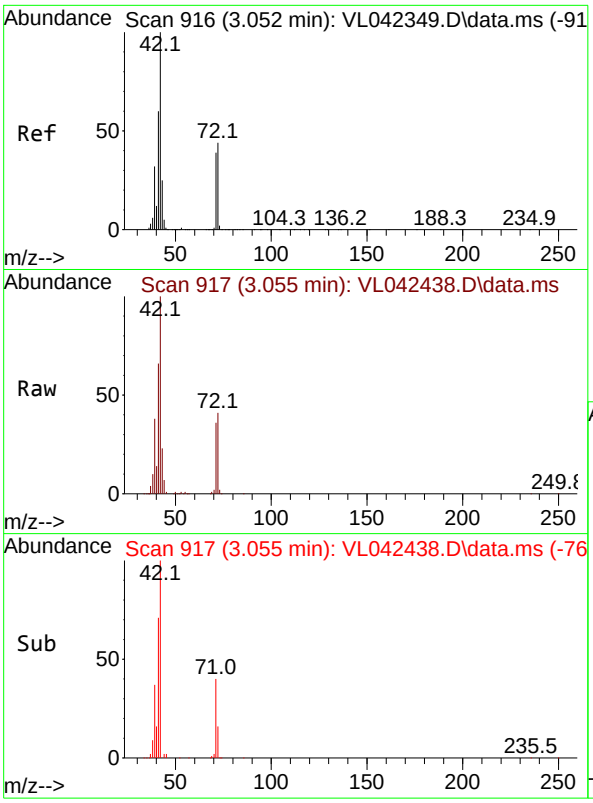


#40
1,4-Dioxane
Concen: 7.529 ppbv
RT: 4.586 min Scan# 1390
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 88 Resp: 52820

Ion	Ratio	Lower	Upper
88	100		
58	78.5	61.4	92.0
43	41.9	23.2	34.8#
57	0.0	0.0	0.0

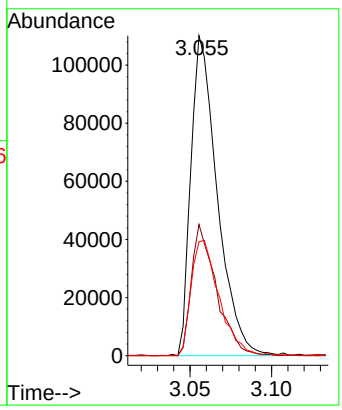




#41
Tetrahydrofuran
Concen: 8.471 ppbv
RT: 3.055 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 42 Resp: 12405

Ion	Ratio	Lower	Upper
42	100		
72	38.9	32.3	48.5
71	38.4	31.4	47.2



Instrument :
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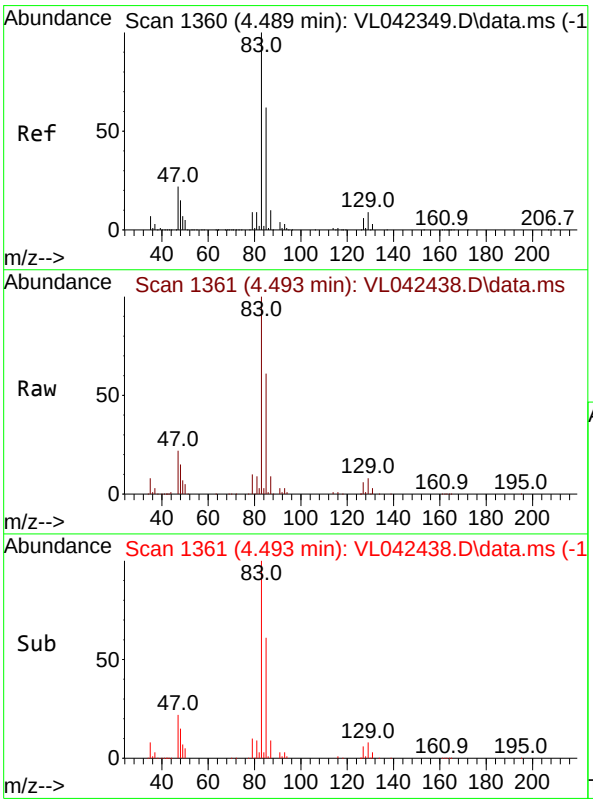
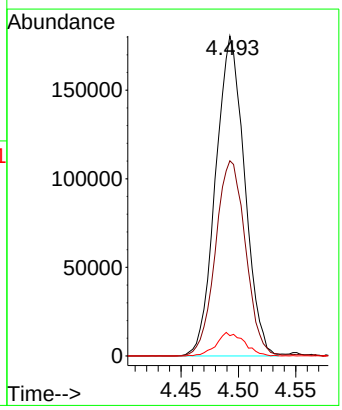
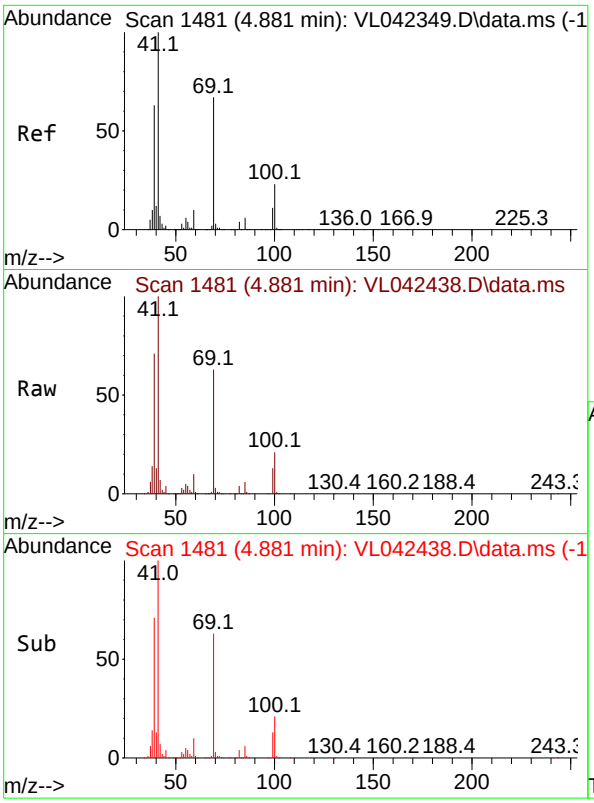


#42
Bromodichloromethane
Concen: 11.088 ppbv
RT: 4.493 min Scan# 1361
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 83 Resp: 317253

Ion	Ratio	Lower	Upper
83	100		
85	61.0	49.7	74.5
127	6.4	5.1	7.7

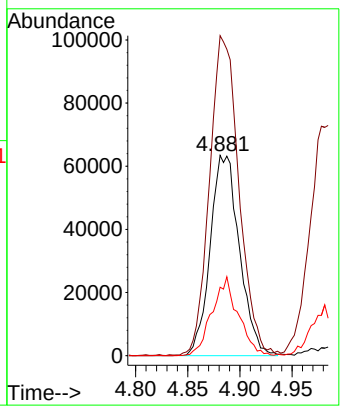




#43
Methyl Methacrylate
Concen: 8.020 ppbv m
RT: 4.881 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 69 Resp: 12381

Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.6	177.8#
100	35.4	28.2	42.2



Instrument :
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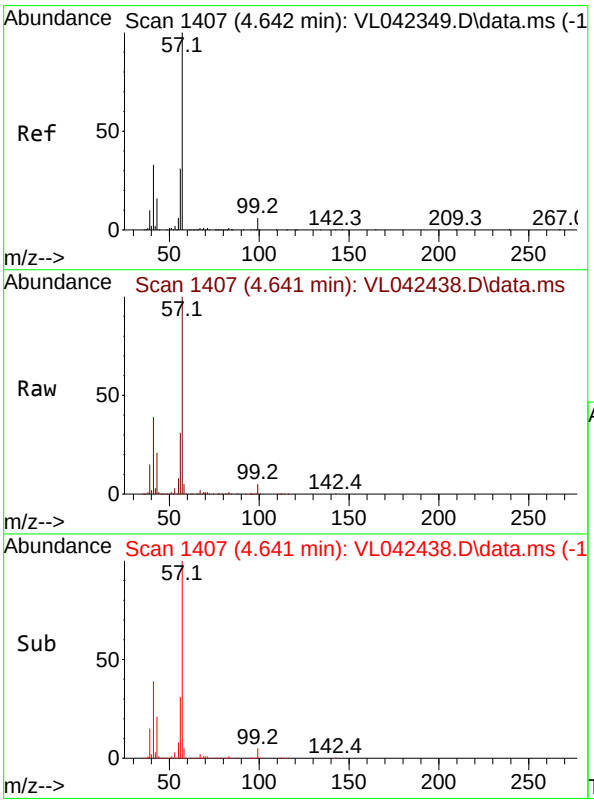
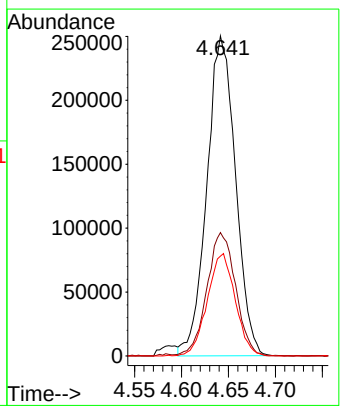
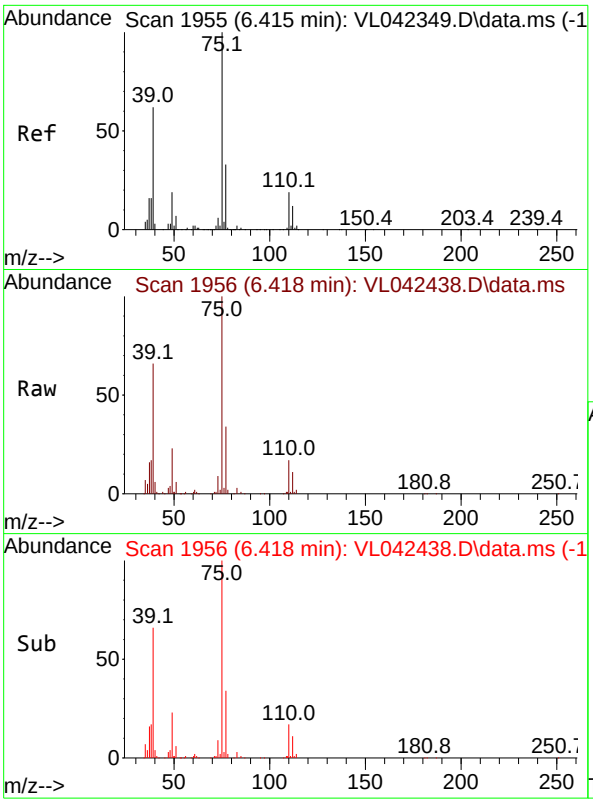


#44
2,2,4-Trimethylpentane
Concen: 8.983 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 57 Resp: 531439

Ion	Ratio	Lower	Upper
57	100		
41	39.1	27.2	40.8
56	31.1	25.7	38.5

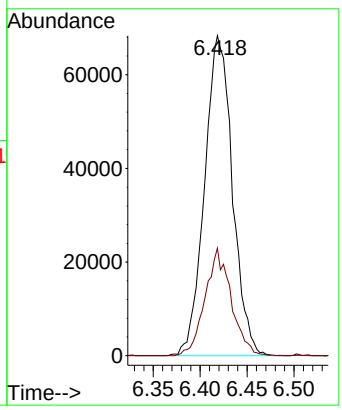




#45
t-1,3-Dichloropropene
Concen: 8.940 ppbv
RT: 6.418 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 75 Resp: 14098

Ion	Ratio	Lower	Upper
75	100		
77	33.6	27.0	40.6



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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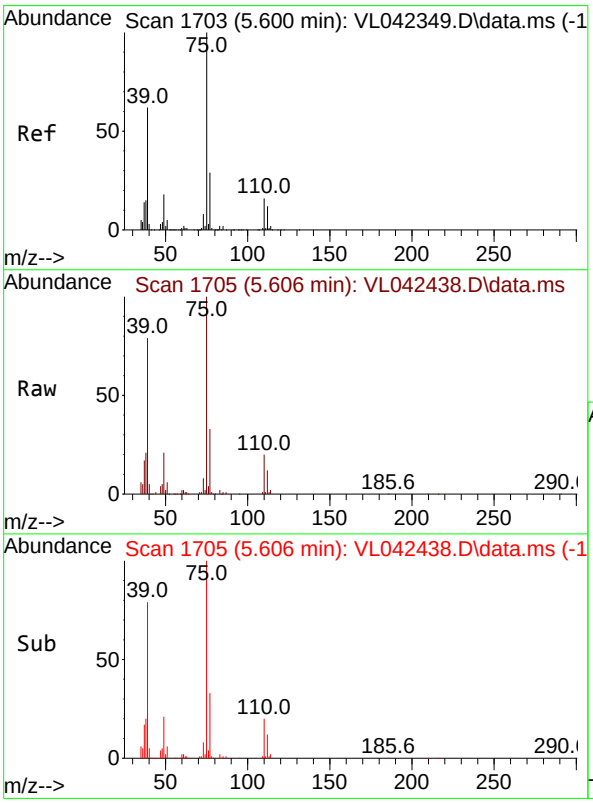
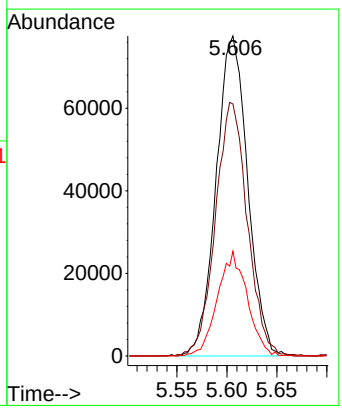
Supervised By :Mahesh Dadoda 04/30/2025

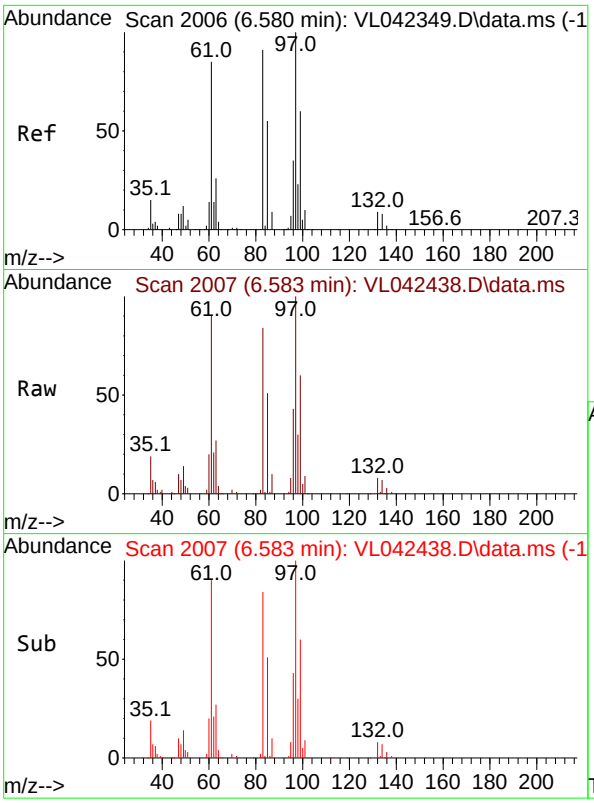


#46
cis-1,3-Dichloropropene
Concen: 8.811 ppbv
RT: 5.606 min Scan# 1705
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 75 Resp: 170063

Ion	Ratio	Lower	Upper
75	100		
39	78.3	50.0	75.0#
77	32.7	23.0	34.6

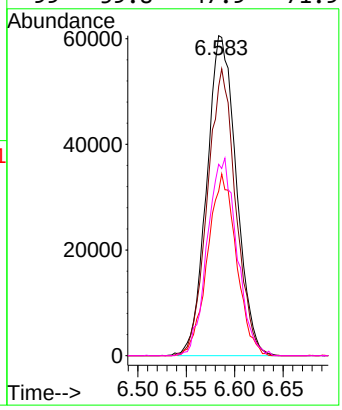




#47
1,1,2-Trichloroethane
Concen: 9.893 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 97 Resp: 12866

Ion	Ratio	Lower	Upper
97	100		
83	84.0	72.8	109.2
85	51.4	44.2	66.4
99	59.8	47.9	71.9



Instrument :
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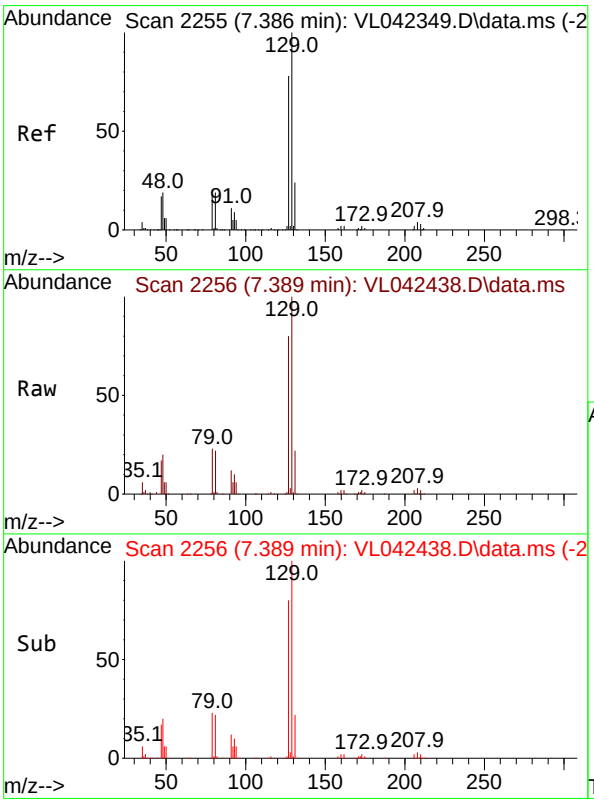
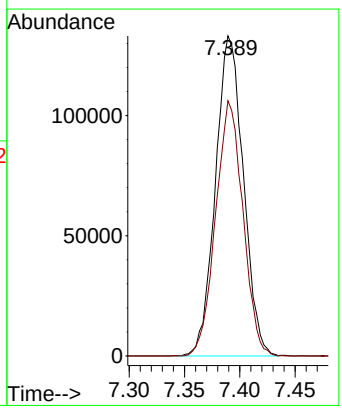
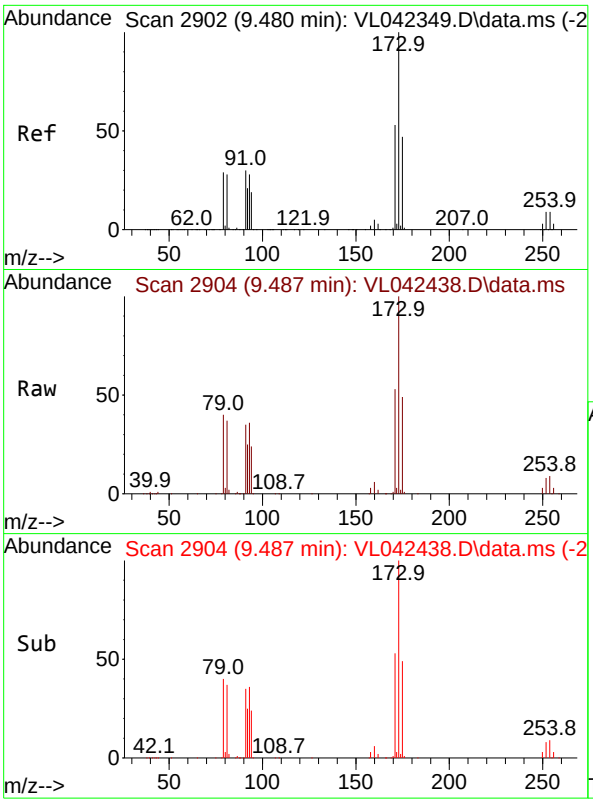


#48
Dibromochloromethane
Concen: 10.156 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:129 Resp: 233350

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3

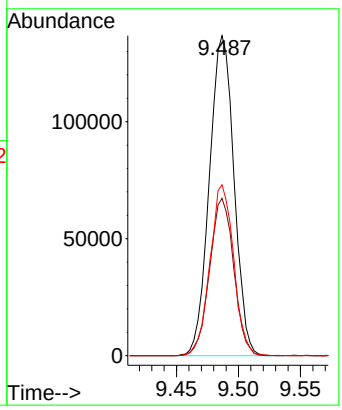




#49
Bromoform
Concen: 9.431 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:173 Resp: 18948

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.2	57.2
171	51.4	40.9	61.3



Instrument :
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ClientSampleId :
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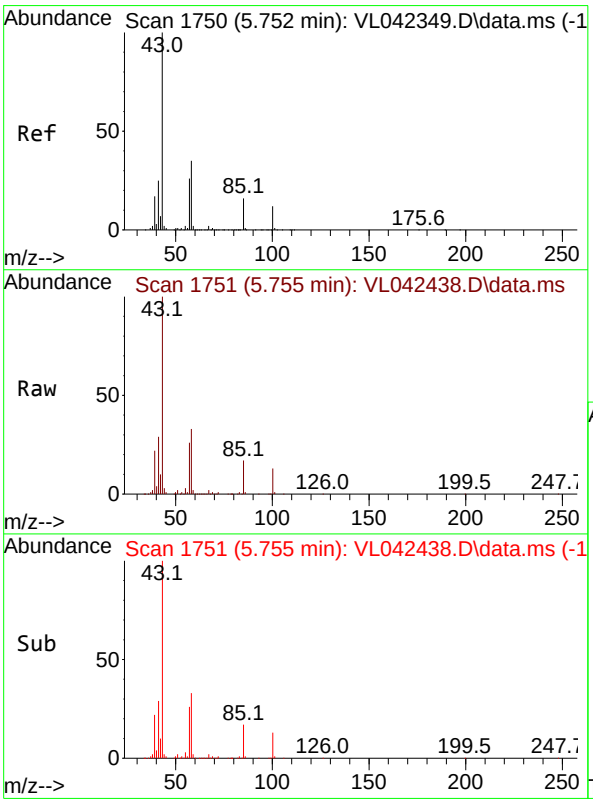
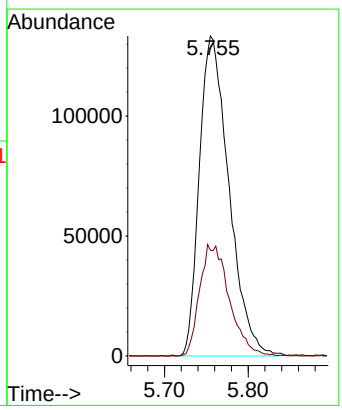
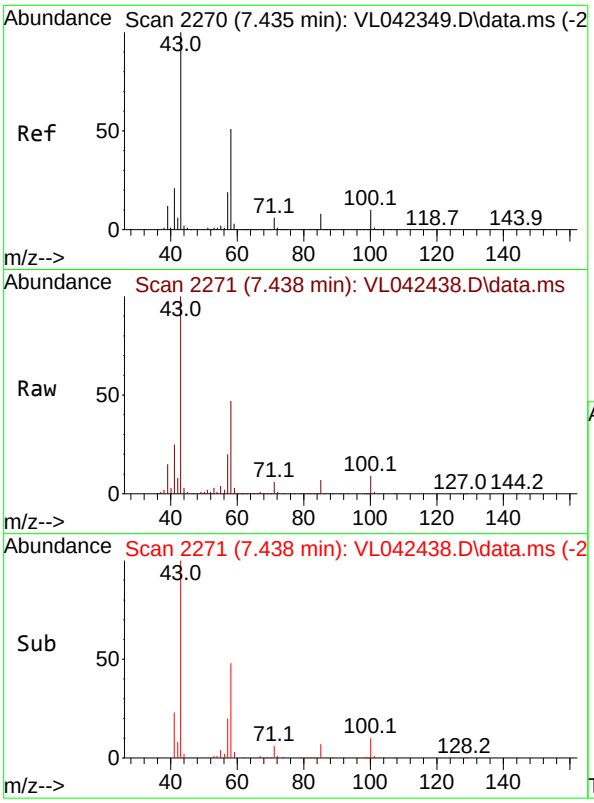


#50
4-Methyl-2-Pentanone
Concen: 7.846 ppbv
RT: 5.755 min Scan# 1751
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 327508

Ion	Ratio	Lower	Upper
43	100		
58	34.9	28.6	43.0

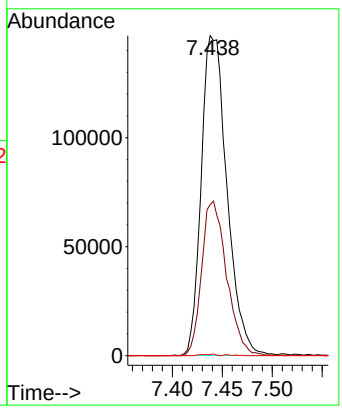




#51
2-Hexanone
Concen: 7.018 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 26269

Ion	Ratio	Lower	Upper
43	100		
58	47.0	40.2	60.4
98	0.4	0.1	0.1



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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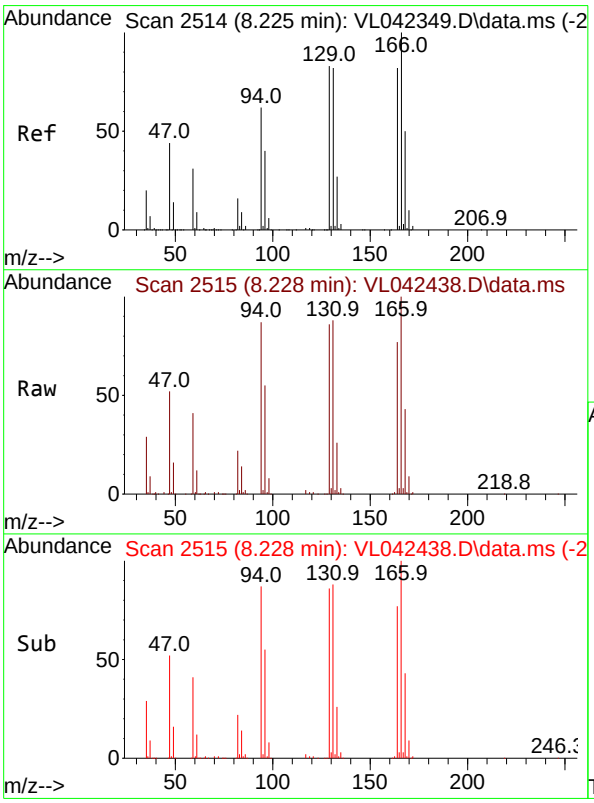
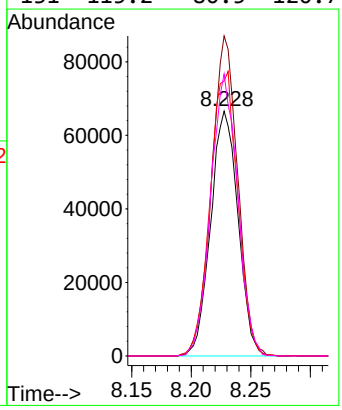
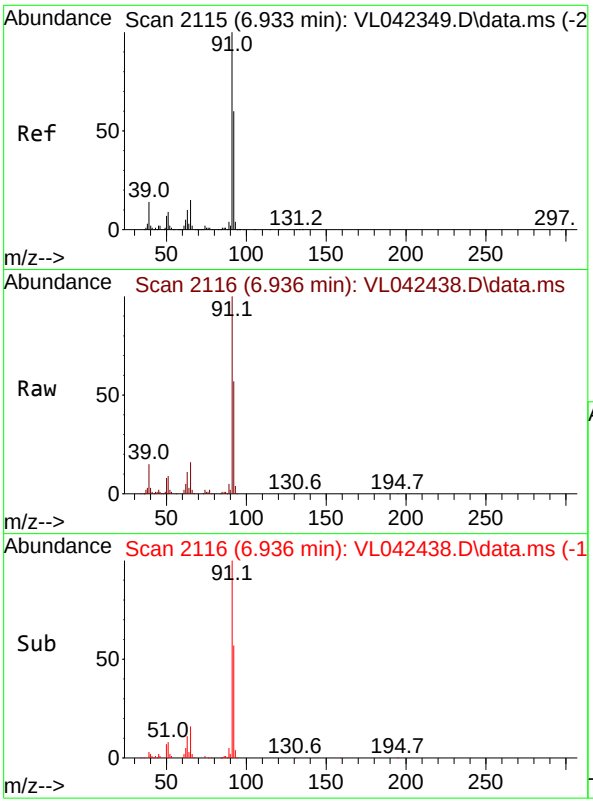


#52
Tetrachloroethene
Concen: 8.008 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:164 Resp: 106031

Ion	Ratio	Lower	Upper
164	100		
166	130.7	98.2	147.2
129	112.3	81.8	122.8
131	115.2	80.5	120.7

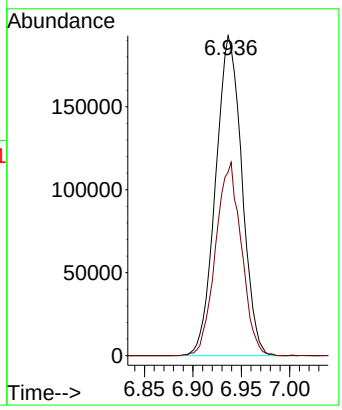




#53
Toluene
Concen: 8.848 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 36370

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4



Instrument :
MSVOA_L
ClientSampleId :
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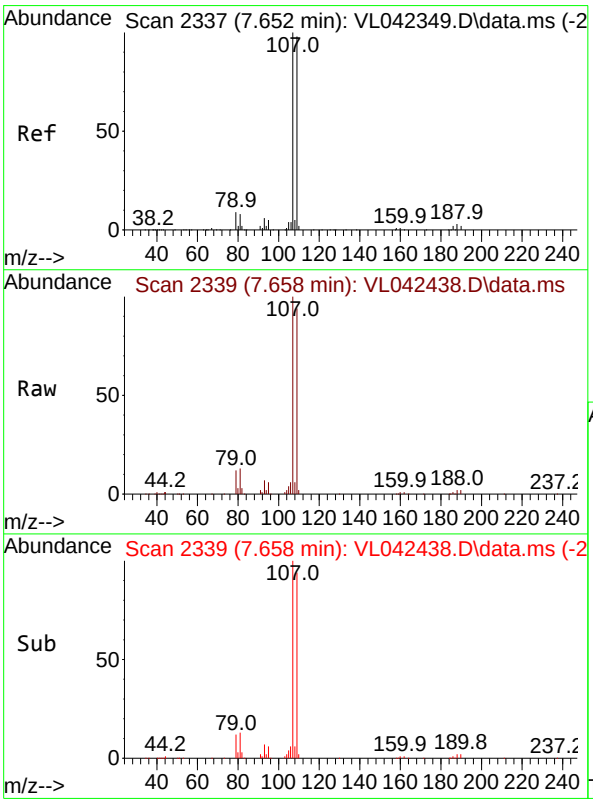
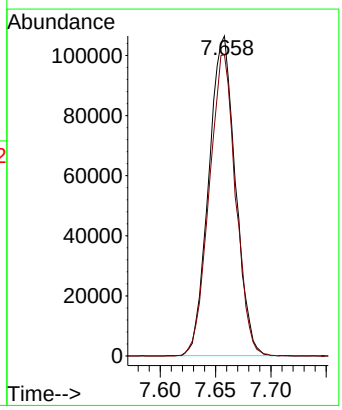
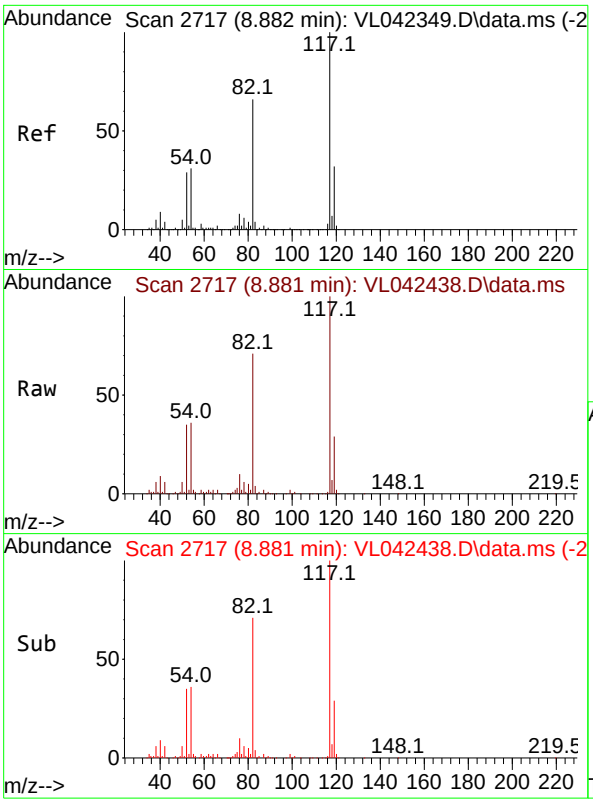


#54
1,2-Dibromoethane
Concen: 9.601 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:107 Resp: 178709

Ion	Ratio	Lower	Upper
107	100		
109	94.3	78.2	117.4

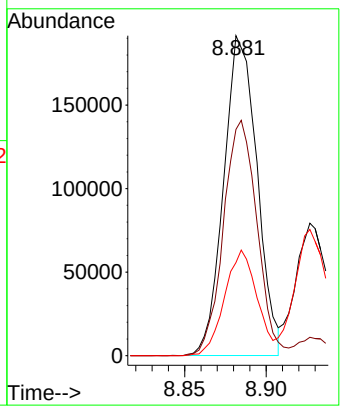




#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:117 Resp: 27231

Ion	Ratio	Lower	Upper
117	100		
82	79.2	57.8	86.6
119	32.0	25.2	37.8



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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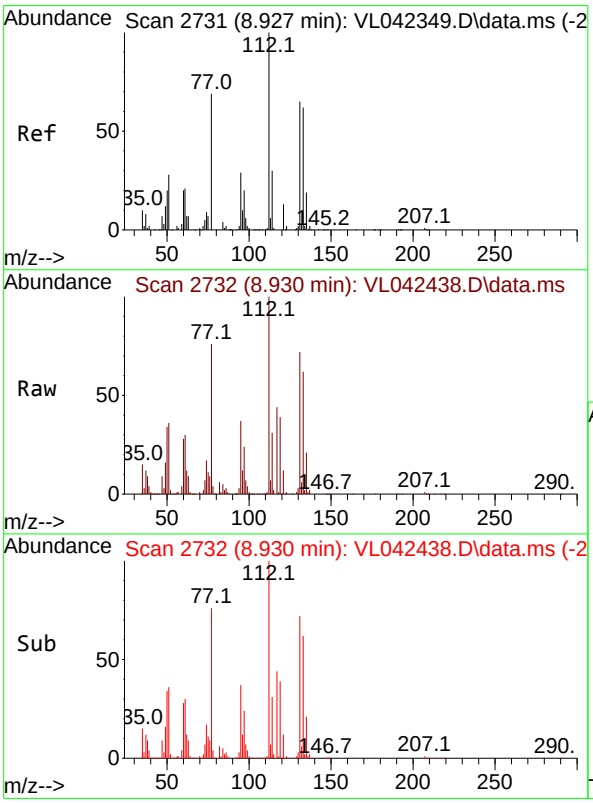
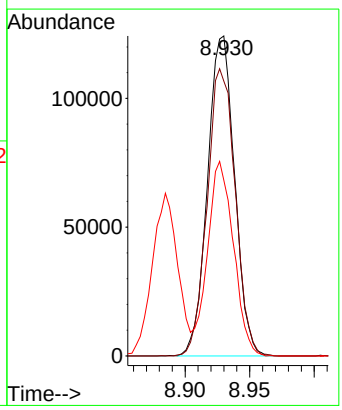
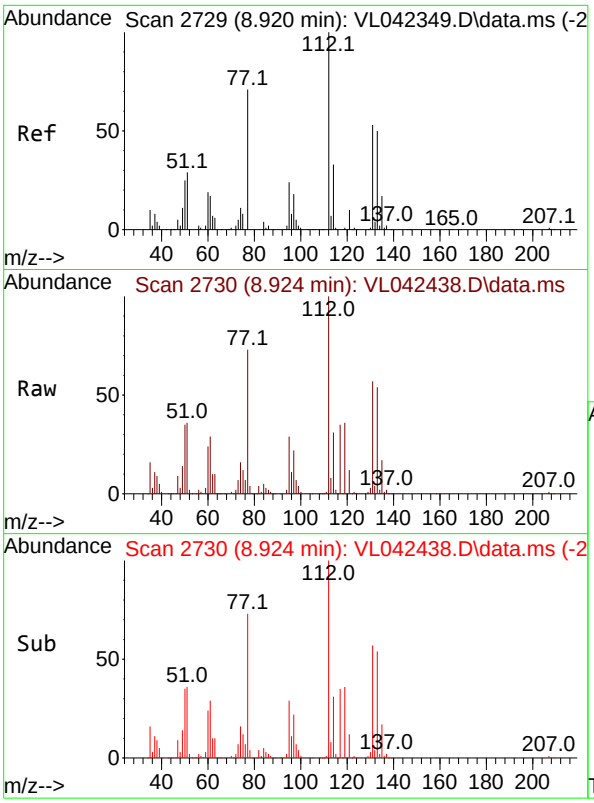


#56
1,1,1,2-Tetrachloroethane
Concen: 10.981 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:131 Resp: 180979

Ion	Ratio	Lower	Upper
131	100		
133	93.2	78.3	117.5
119	58.6	48.7	73.1





#57
Chlorobenzene
Concen: 10.270 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:112 Resp: 29086

Ion	Ratio	Lower	Upper
112	100		
77	72.8	57.8	86.6
114	30.8	29.3	35.9

Instrument :
MSVOA_L
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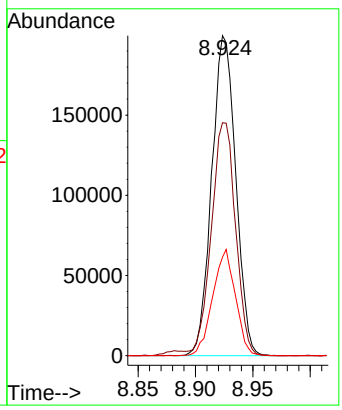
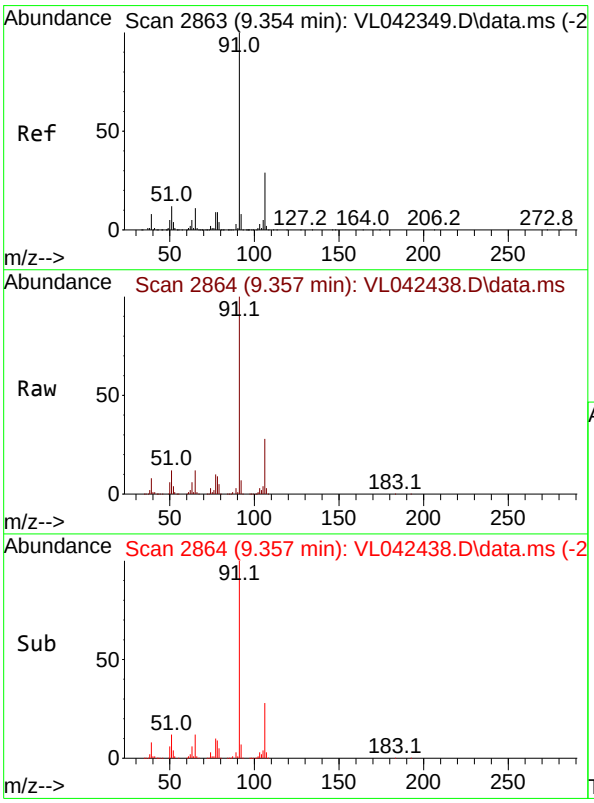
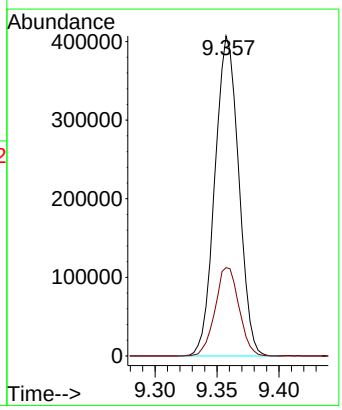


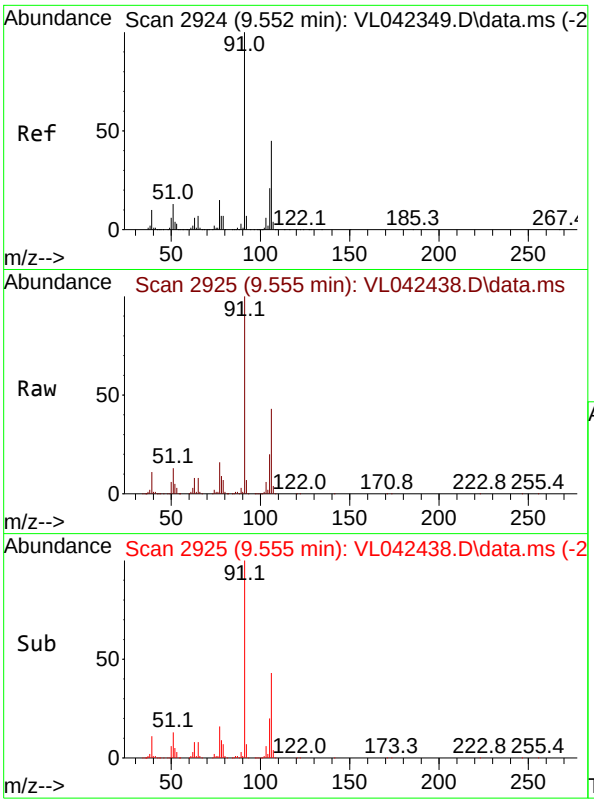


#58
Ethyl Benzene
Concen: 10.111 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 545497

Ion	Ratio	Lower	Upper
91	100		
106	27.6	23.0	34.4

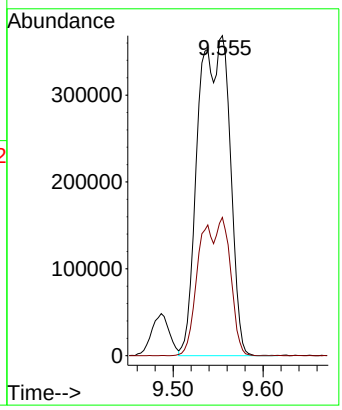




#59
m/p-Xylene
Concen: 20.857 ppbv m
RT: 9.555 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 90653

Ion	Ratio	Lower	Upper
91	100		
106	41.8	35.4	53.2



Instrument :
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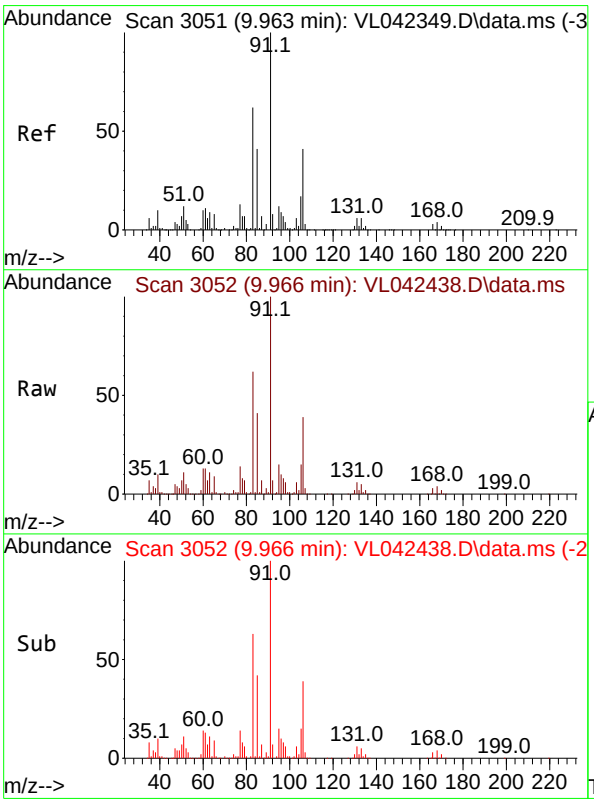
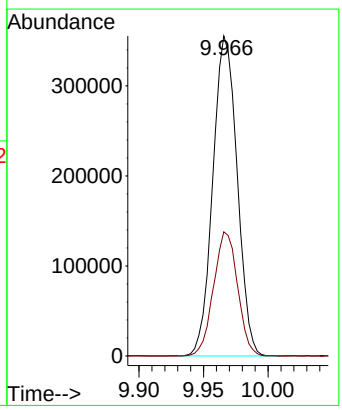
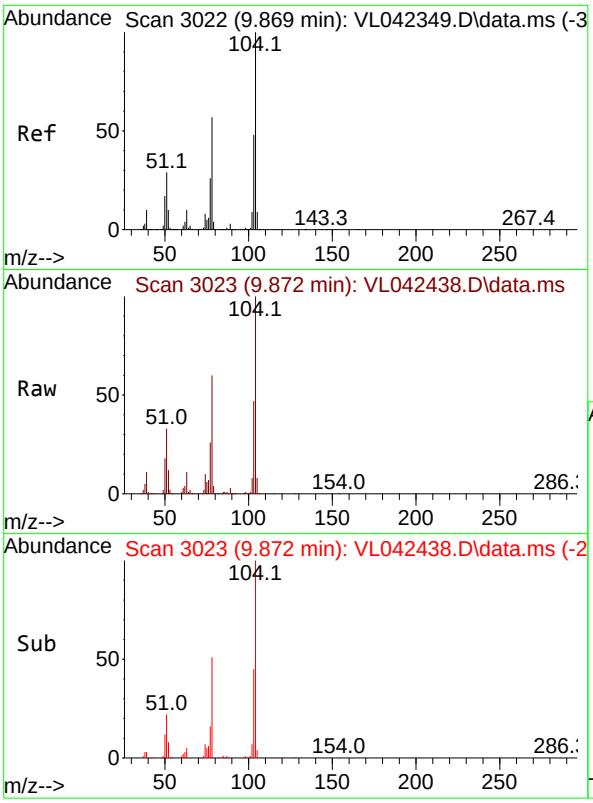


#60
o-Xylene
Concen: 10.639 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 465645

Ion	Ratio	Lower	Upper
91	100		
106	38.4	21.1	63.4

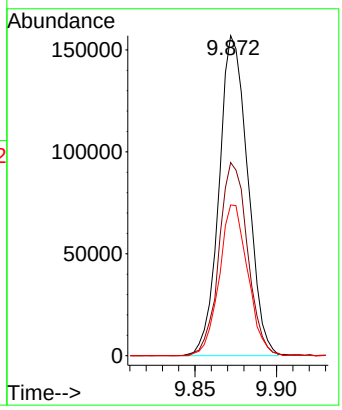




#61
Styrene
Concen: 9.178 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:104 Resp: 19174

Ion	Ratio	Lower	Upper
104	100		
78	60.1	44.6	66.8
103	47.0	37.4	56.0



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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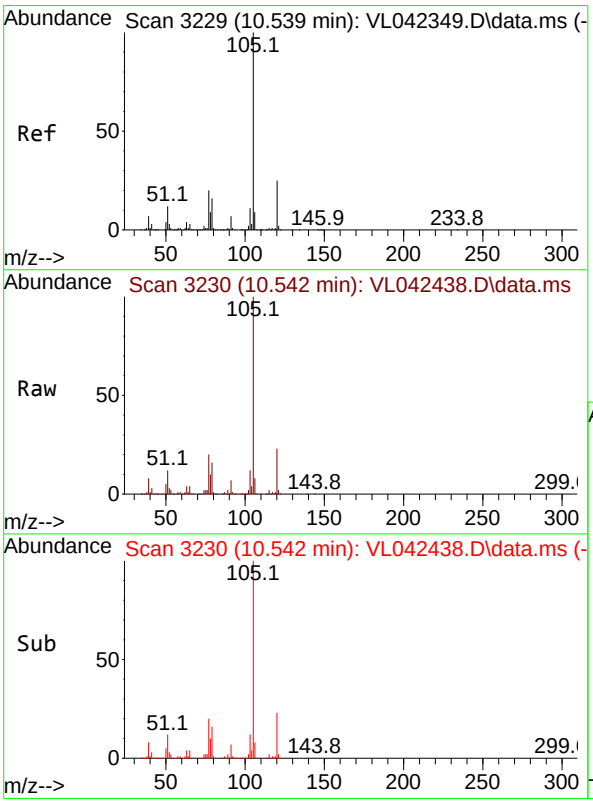
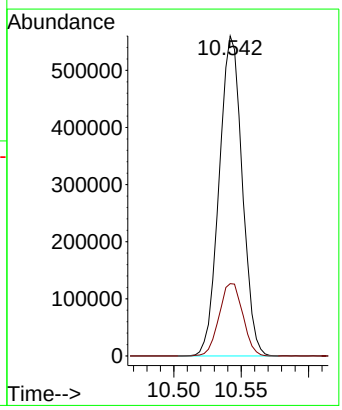
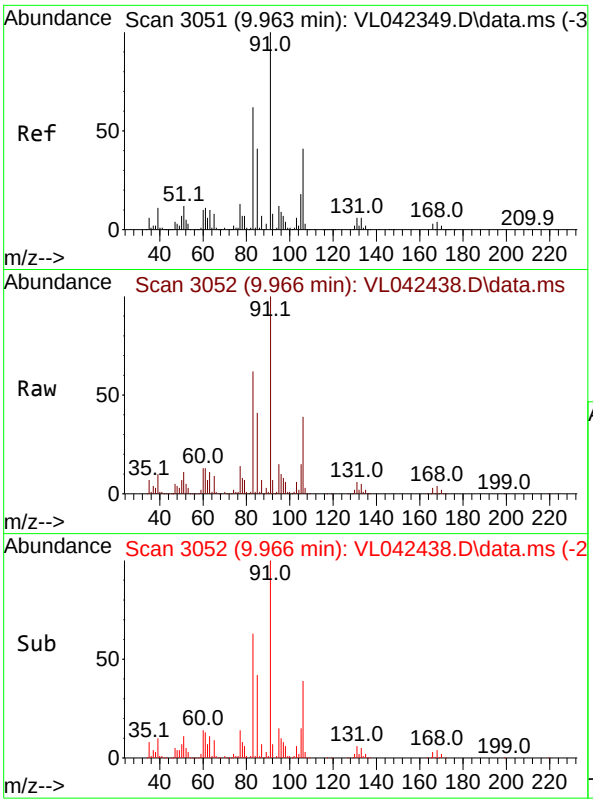


#62
Isopropylbenzene
Concen: 10.393 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 667839

Ion	Ratio	Lower	Upper
105	100		
120	23.2	19.8	29.8





#63
1,1,2,2-Tetrachloroethane
Concen: 9.819 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 83 Resp: 27849

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	64.4	32.4	97.0

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
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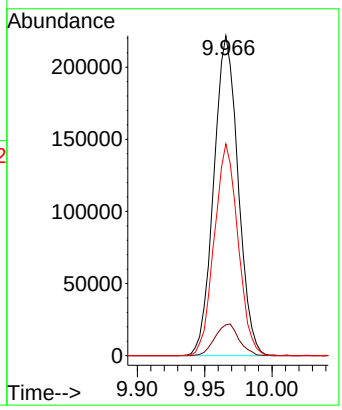
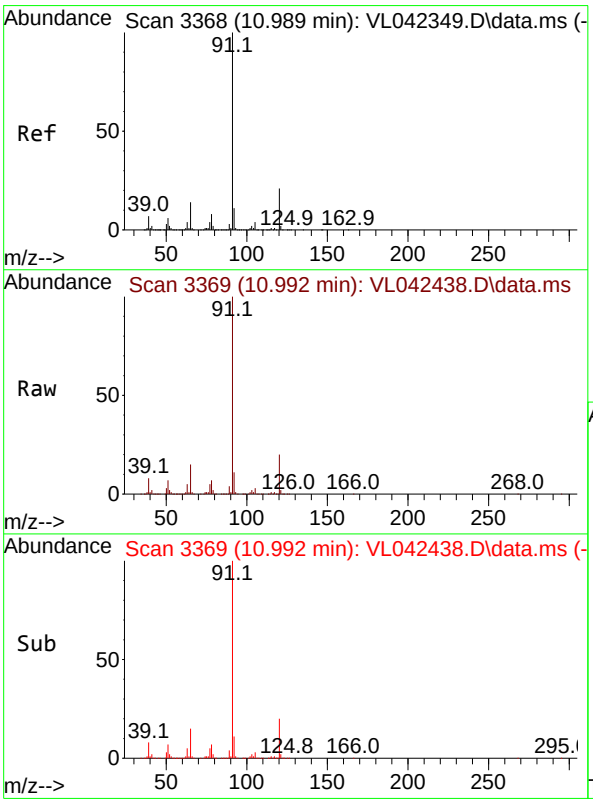
Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

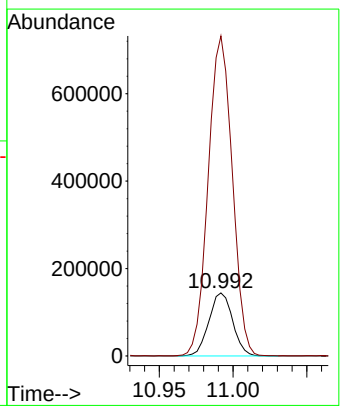


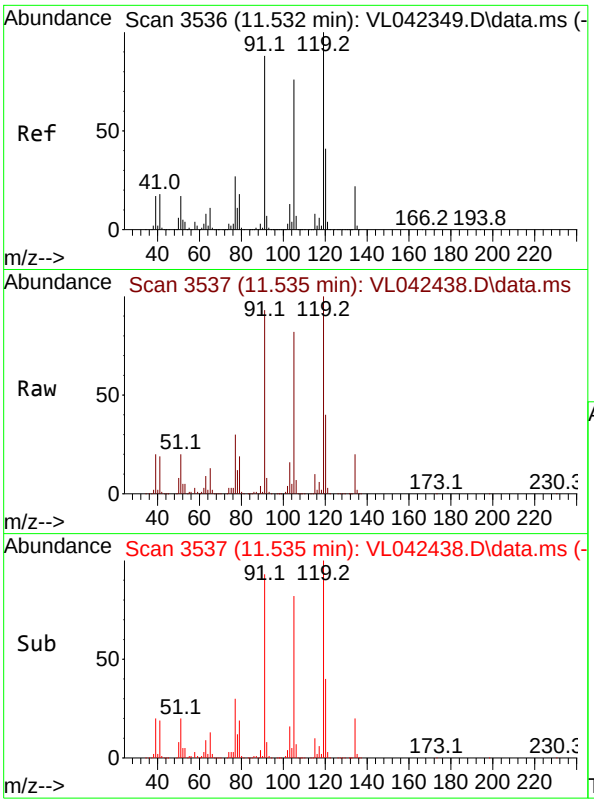


#64
n-propylbenzene
Concen: 9.987 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:120 Resp: 161309

Ion	Ratio	Lower	Upper
120	100		
91	515.8	392.4	588.6

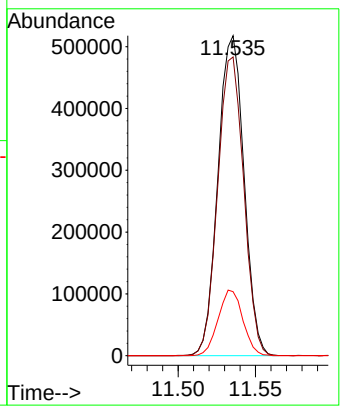




#65
tert-Butylbenzene
Concen: 10.260 ppbv
RT: 11.535 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:119 Resp: 60597

Ion	Ratio	Lower	Upper
119	100		
91	93.3	74.6	111.8
134	19.5	18.8	28.2



Instrument :
MSVOA_L
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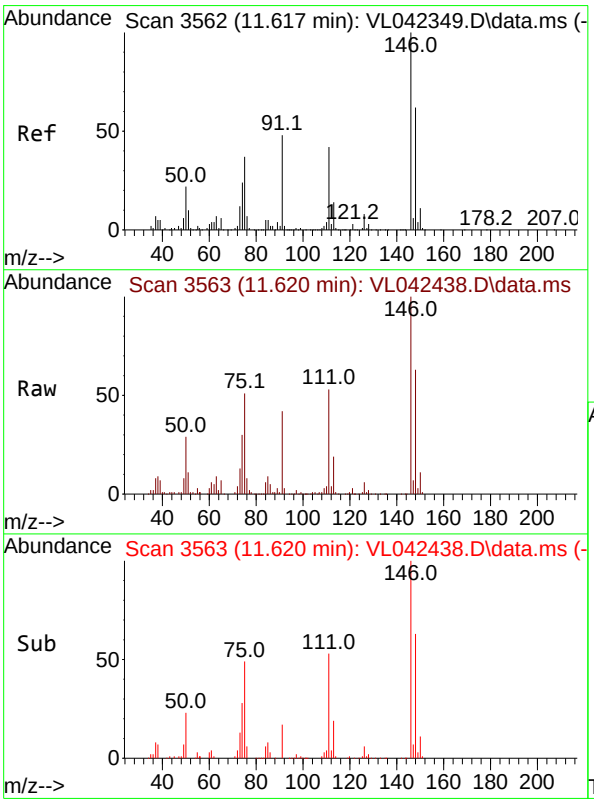
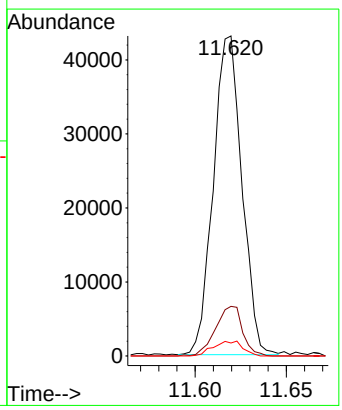
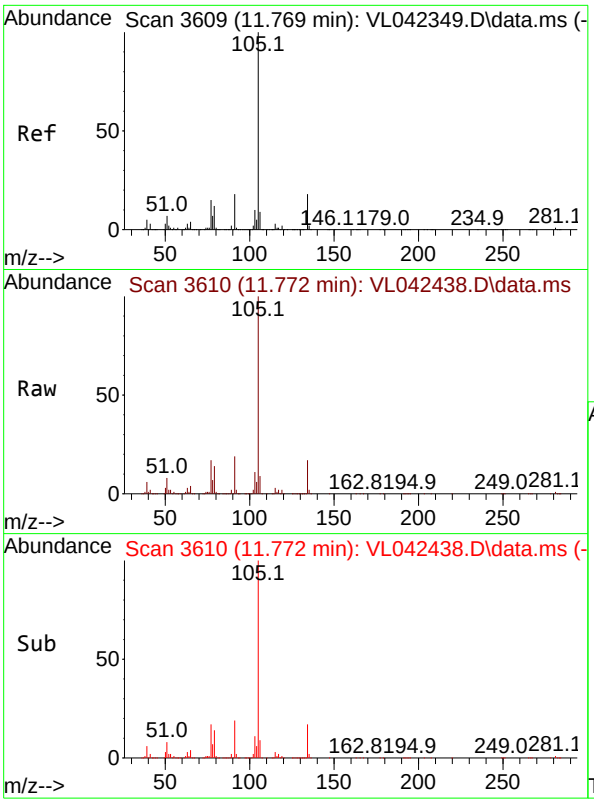


#66
Benzyl Chloride
Concen: 7.229 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 46913

Ion	Ratio	Lower	Upper
91	100		
126	14.8	11.8	17.6
128	4.8	4.5	6.7

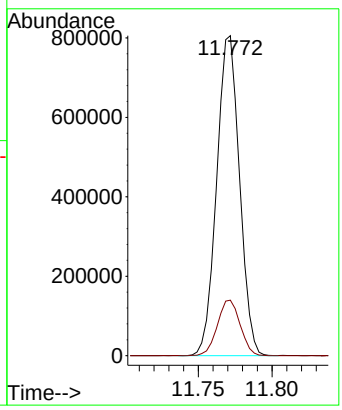




#67
sec-Butylbenzene
Concen: 10.569 ppbv
RT: 11.772 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 86827

Ion	Ratio	Lower	Upper
105	100		
134	17.3	14.6	21.8



Instrument :
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ClientSampleId :
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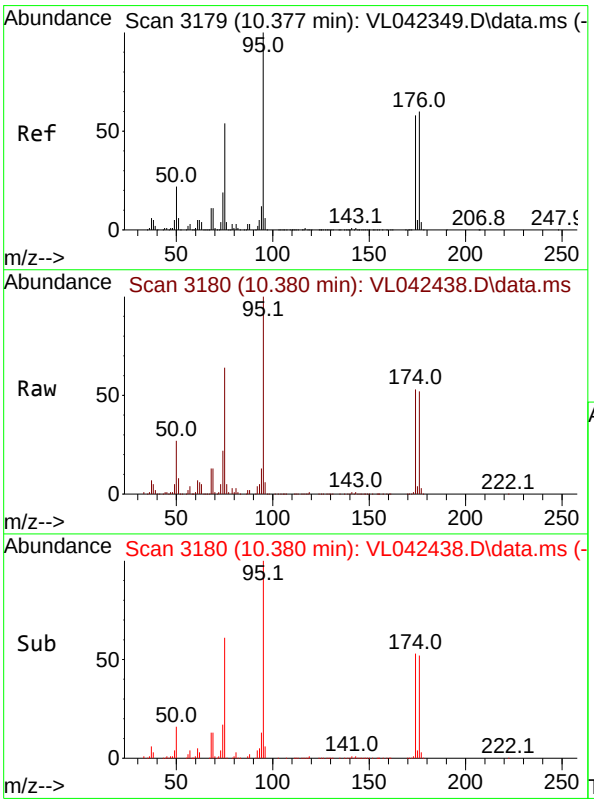
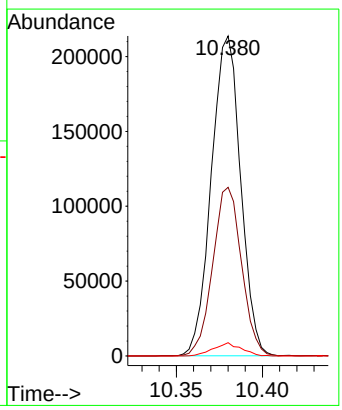
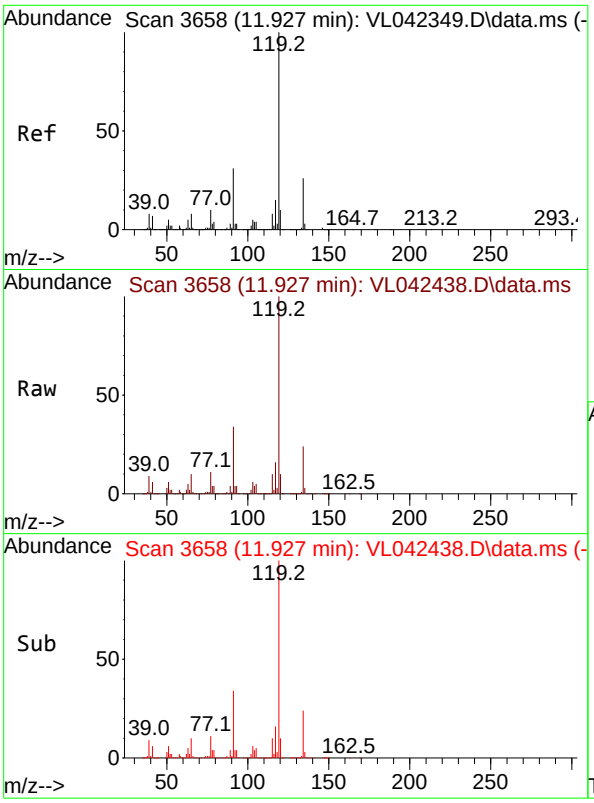


#68
1-Bromo-4-Fluorobenzene
Concen: 11.307 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 95 Resp: 253021

Ion	Ratio	Lower	Upper
95	100		
174	52.0	48.5	72.7
175	3.9	3.7	5.5

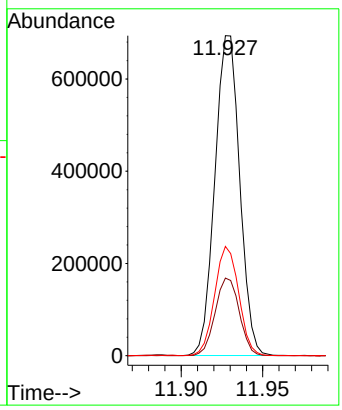




#69
p-Isopropyltoluene
Concen: 10.282 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:119 Resp: 73379

Ion	Ratio	Lower	Upper
119	100		
134	23.7	20.0	30.0
91	33.4	24.4	36.6



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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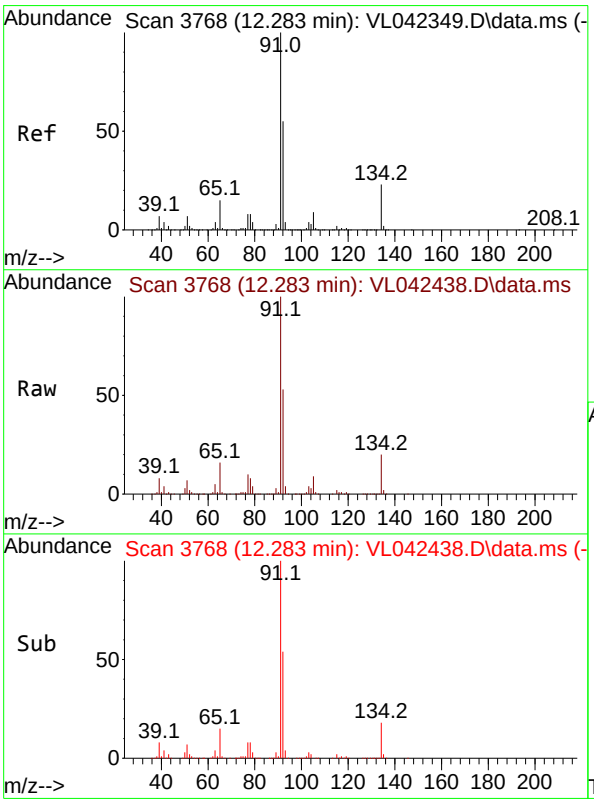
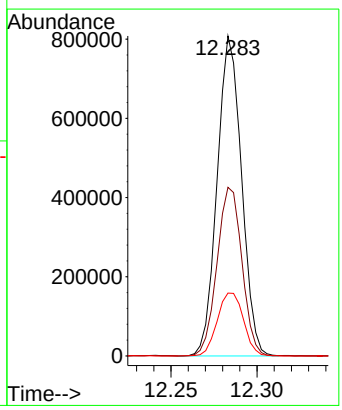
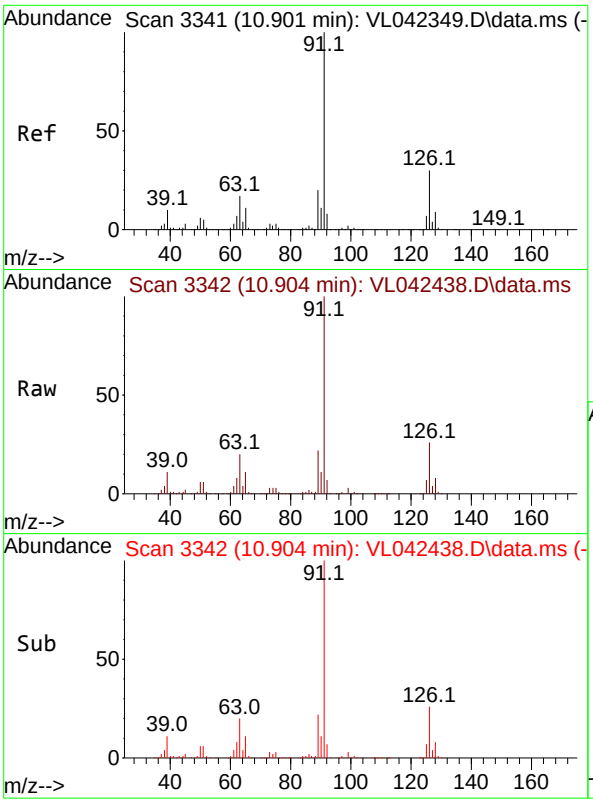


#70
n-Butylbenzene
Concen: 10.717 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 796622

Ion	Ratio	Lower	Upper
91	100		
92	54.1	44.2	66.4
134	21.1	18.2	27.4

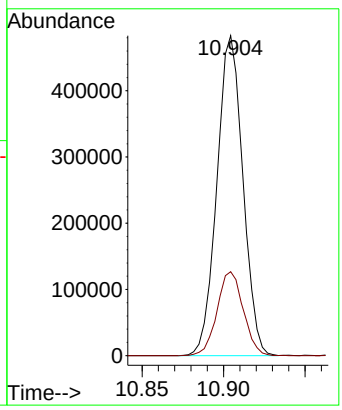




#71
2-Chlorotoluene
Concen: 10.614 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 53495

Ion	Ratio	Lower	Upper
91	100		
126	26.4	11.4	45.4



Instrument :
MSVOA_L
ClientSampleId :
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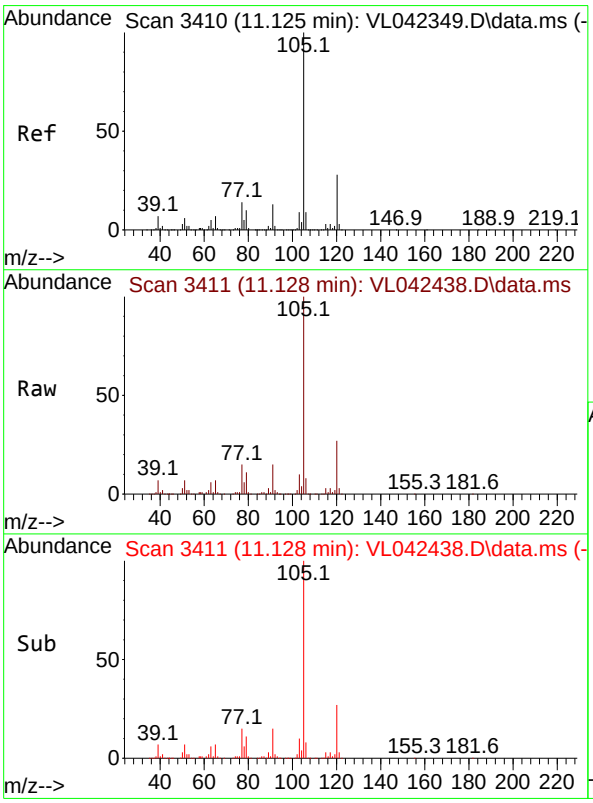
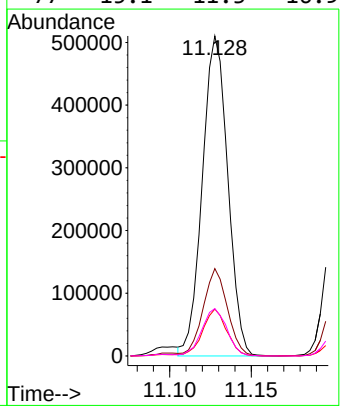
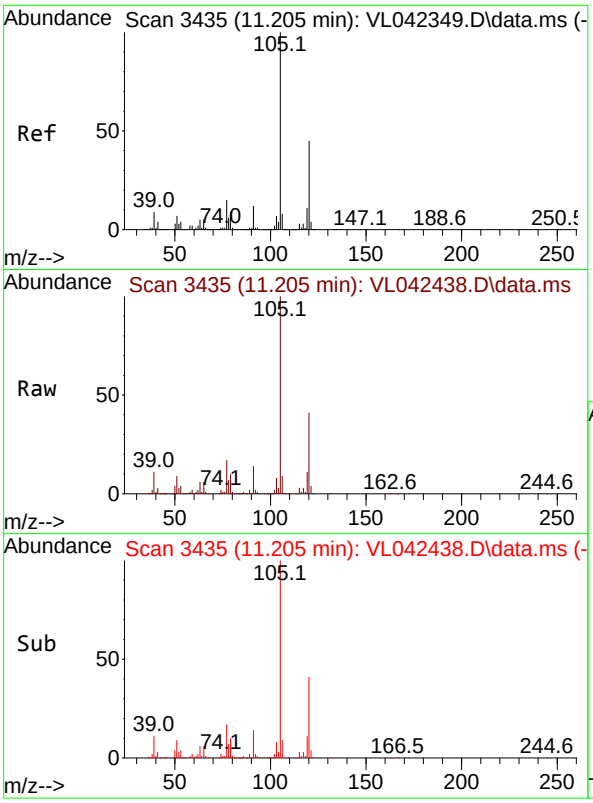


#72
4-Ethyltoluene
Concen: 10.351 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 553879

Ion	Ratio	Lower	Upper
105	100		
120	26.9	23.2	34.8
91	14.3	10.4	15.6
77	15.1	11.3	16.9





#73
1,3,5-Trimethylbenzene
Concen: 10.403 ppbv
RT: 11.205 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 49145

Ion	Ratio	Lower	Upper
105	100		
120	41.1	35.6	53.4

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

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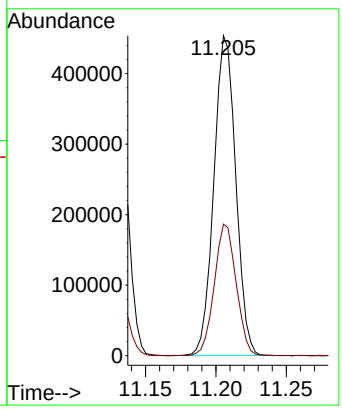
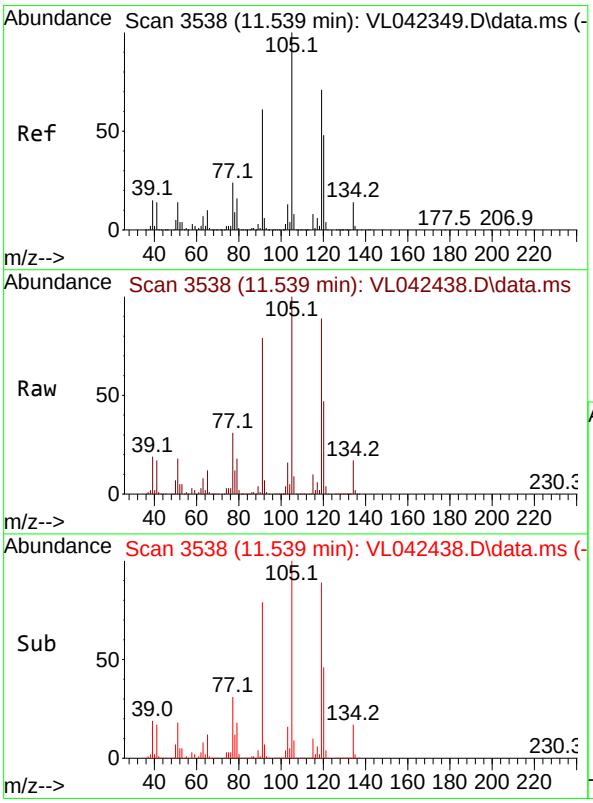
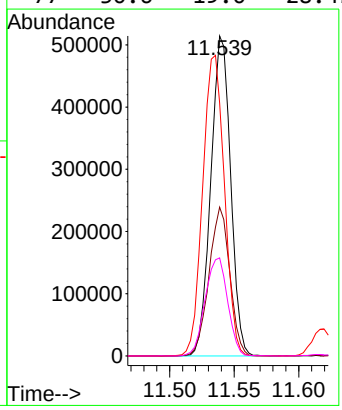


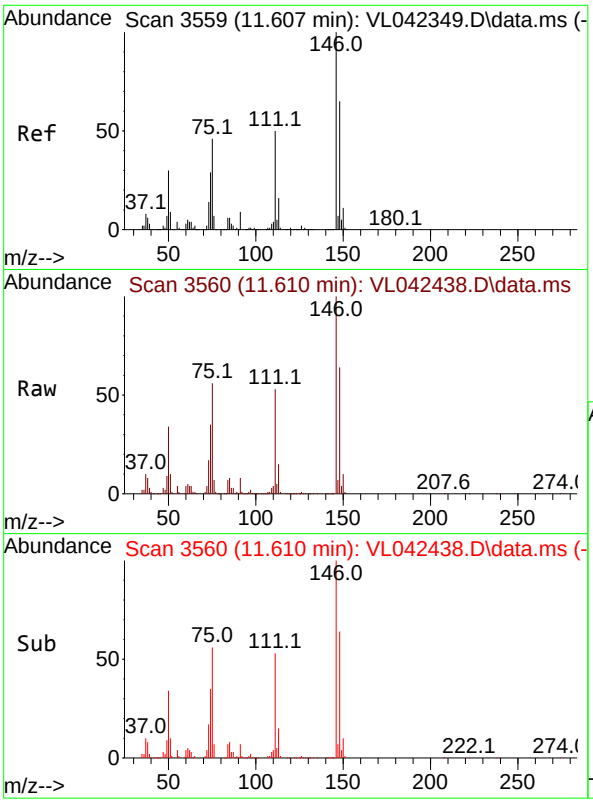


#74
1,2,4-Trimethylbenzene
Concen: 9.939 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 548408

Ion	Ratio	Lower	Upper
105	100		
120	46.5	38.1	57.1
91	79.0	48.8	73.2#
77	30.6	19.0	28.4#

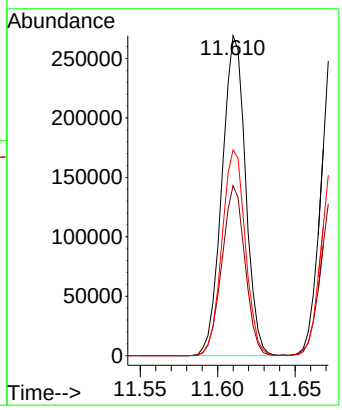




#75
1,3-Dichlorobenzene
Concen: 9.931 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:146 Resp: 28480

Ion	Ratio	Lower	Upper
146	100		
111	52.1	24.3	72.8
148	63.8	31.6	94.8



Instrument :
MSVOA_L
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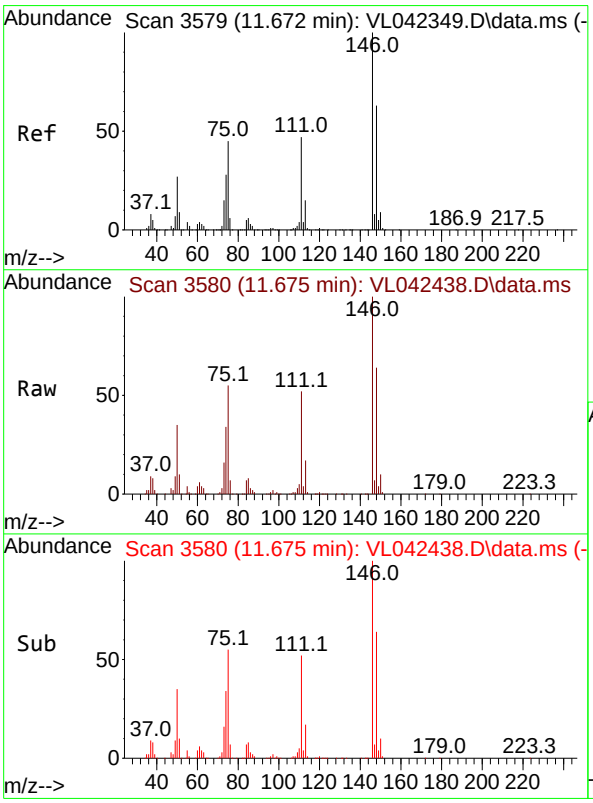
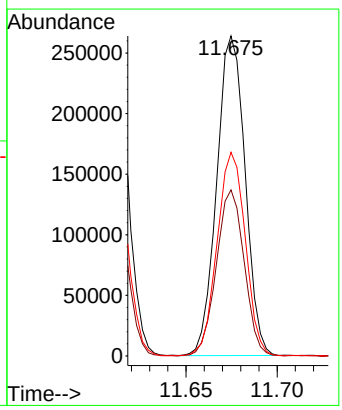
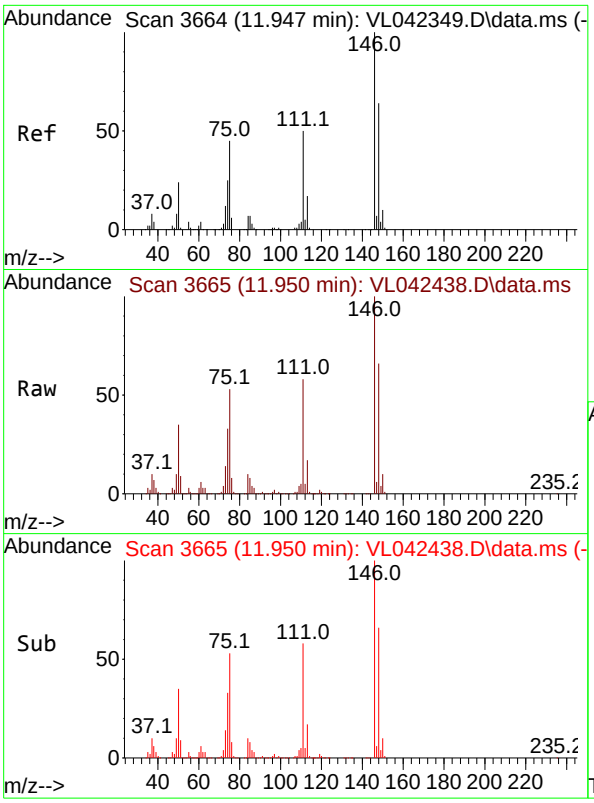


#76
1,4-Dichlorobenzene
Concen: 9.907 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:146 Resp: 285571

Ion	Ratio	Lower	Upper
146	100		
111	51.1	24.2	72.6
148	63.6	32.1	96.5

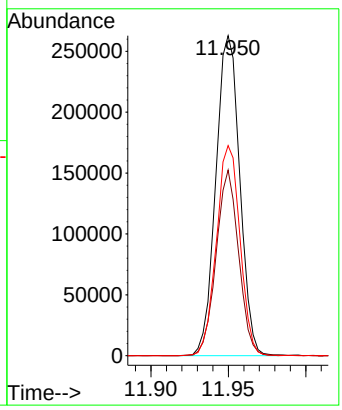




#77
1,2-Dichlorobenzene
Concen: 10.128 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:146 Resp: 28242

Ion	Ratio	Lower	Upper
146	100		
111	54.6	25.3	75.9
148	64.8	31.5	94.5



Instrument :
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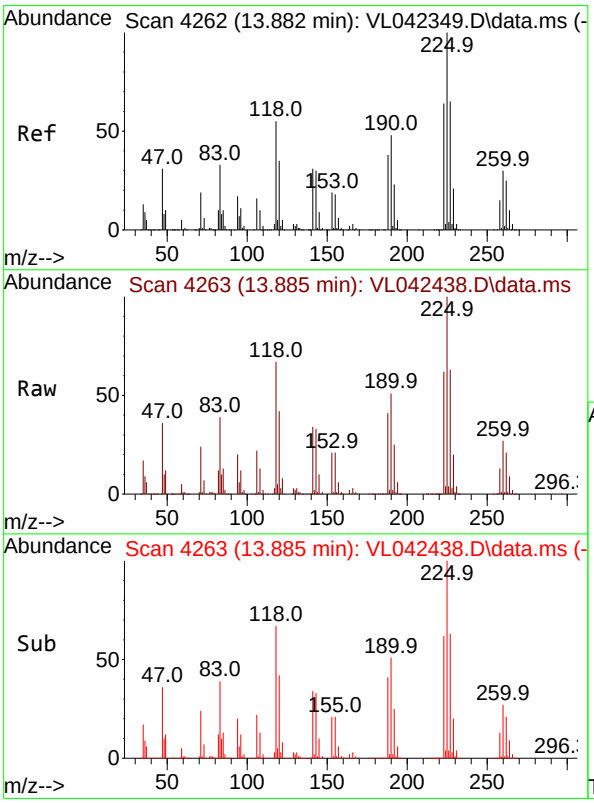
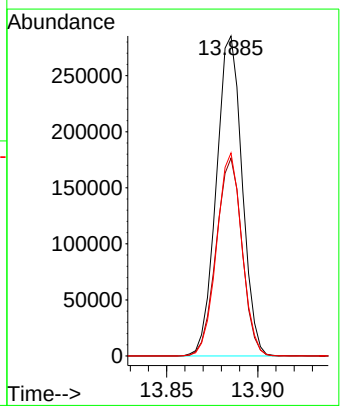
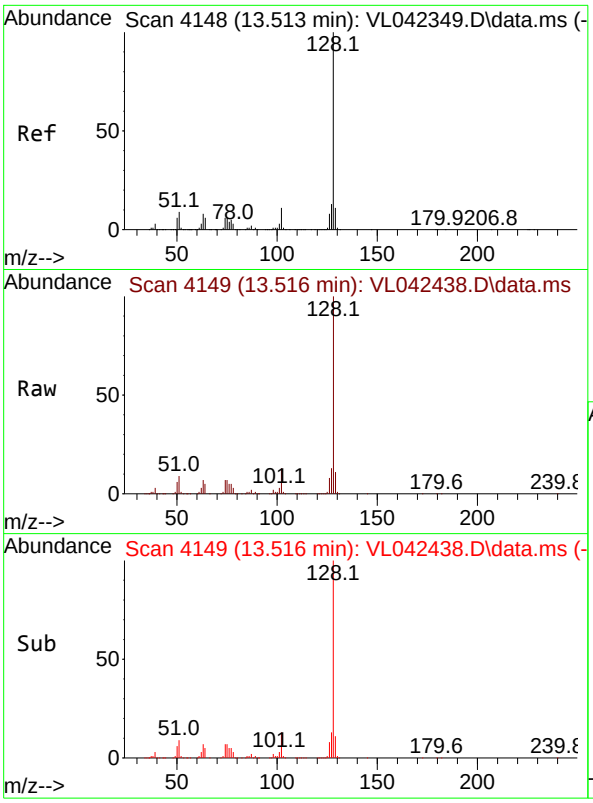


#78
Hexachloro-1,3-Butadiene
Concen: 9.977 ppbv
RT: 13.885 min Scan# 4263
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:225 Resp: 280954

Ion	Ratio	Lower	Upper
225	100		
223	61.8	50.3	75.5
227	61.9	51.5	77.3

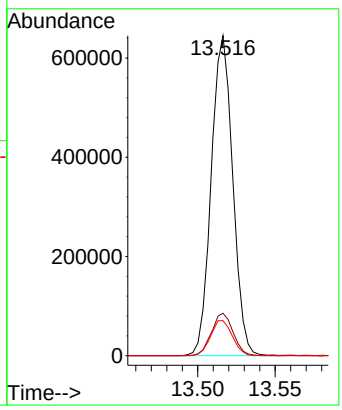




#79
Naphthalene
Concen: 9.425 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:128 Resp: 62187

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.0	8.6	12.8



Instrument :
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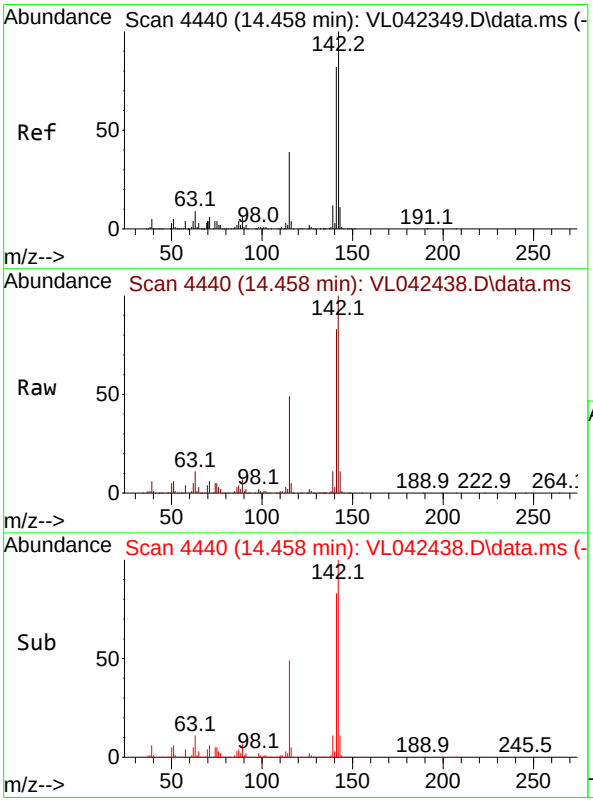
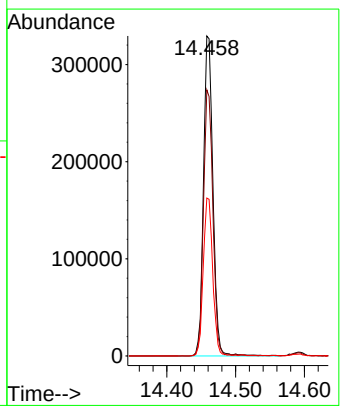
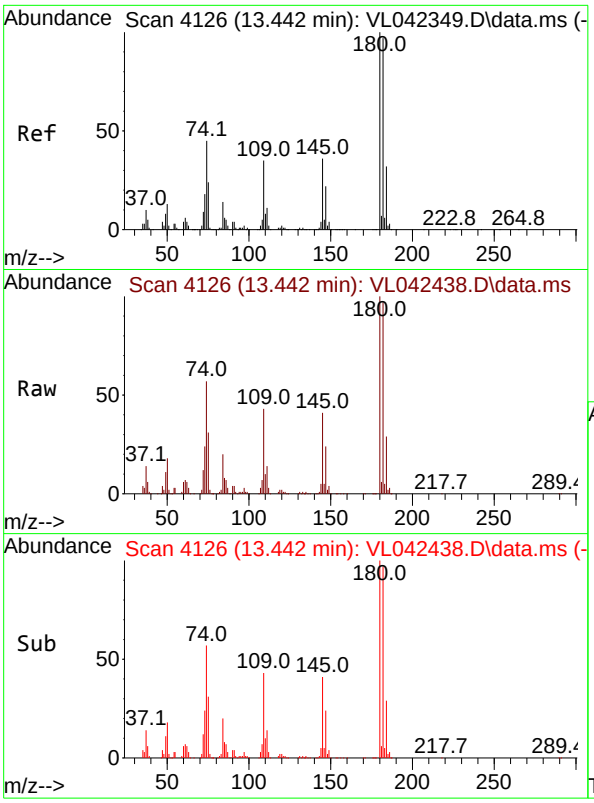


#80
Naphthalene,2-methyl-
Concen: 8.317 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:142 Resp: 312733

Ion	Ratio	Lower	Upper
142	100		
141	84.1	66.8	100.2
115	49.9	33.4	50.2

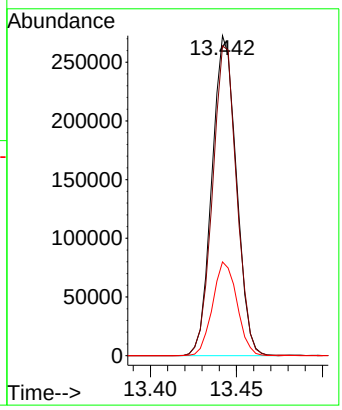




#81
1,2,4-Trichlorobenzene
Concen: 9.498 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:180 Resp: 26908

Ion	Ratio	Lower	Upper
180	100		
182	95.8	76.8	115.2
184	29.3	24.6	36.8



Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/30/2025
Supervised By :Mahesh Dadoda 04/30/2025

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	AA-DUP-1-3242025DUP	SDG No.:	Q1665
Lab Sample ID:	Q1665-01DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042291.D	1		04/09/25 14:02	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.38	1.88	J	1.04	2.47	ug/m3
64-17-5	Ethanol	12.8	24.1		0.60	0.94	ug/m3
74-87-3	Chloromethane	0.55	1.14		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.19	0.58	U	0.58	1.52	ug/m3
142-82-5	Heptane	0.10	0.41	U	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	1.90	4.67		0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	3.60	8.55		0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	0.95	3.30		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	0.33	0.97	J	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.080	0.50		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	0.080	0.39	U	0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.24	0.77	J	0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.28	1.06	J	0.41	1.88	ug/m3

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Report of Analysis

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Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	AA-DUP-1-3242025DUP	SDG No.:	Q1665
Lab Sample ID:	Q1665-01DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042291.D	1		04/09/25 14:02	VL040925

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.020	0.14	U	0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.12	0.52	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	U	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.080	0.39	U	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	1.40	4.93		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.30			70 (65) - 130 (135)	93%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	157000		2.784			
540-36-3	1,4-Difluorobenzene	397000		3.952			
3114-55-4	Chlorobenzene-d5	332000		8.875			

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Lab Sample ID:	Q1665-01DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042291.D	1		04/09/25 14:02	VL040925

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042291.D
Acq On : 09 Apr 2025 14:02
Operator : SY/MD
Sample : Q1665-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:43:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	156655	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	397453	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	332015	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	254829	9.346	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	8694	0.376	ppbv		98
3) Chlorodifluoromethane	1.473	51	7625m	0.323	ppbv		
4) Chloromethane	1.531	50	5160	0.546	ppbv		96
9) Propene	1.486	41	8735	0.807	ppbv		85
10) Heptane	4.965	43	2744m	0.095	ppbv		
11) Trichlorofluoromethane	1.878	101	5033m	0.224	ppbv		
13) Ethanol	1.719	45	13066	12.762	ppbv		82
15) Acetone	1.832	43	79514	3.629	ppbv		93
19) Isopropyl Alcohol	1.884	45	23262	1.882	ppbv	#	39
20) Methylene Chloride	2.059	84	7721	0.946	ppbv		92
26) Hexane	2.823	57	29831	1.358	ppbv	#	32
34) 2-Butanone	2.557	43	9468	0.329	ppbv		96
35) Carbon Tetrachloride	3.755	117	2412m	0.078	ppbv		
36) Benzene	3.655	78	9601	0.244	ppbv		99
53) Toluene	6.924	91	12958	0.277	ppbv		96
59) m/p-Xylene	9.526	91	5621m	0.119	ppbv		

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042291.D
Acq On : 09 Apr 2025 14:02
Operator : SY/MD
Sample : Q1665-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 10 01:43:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

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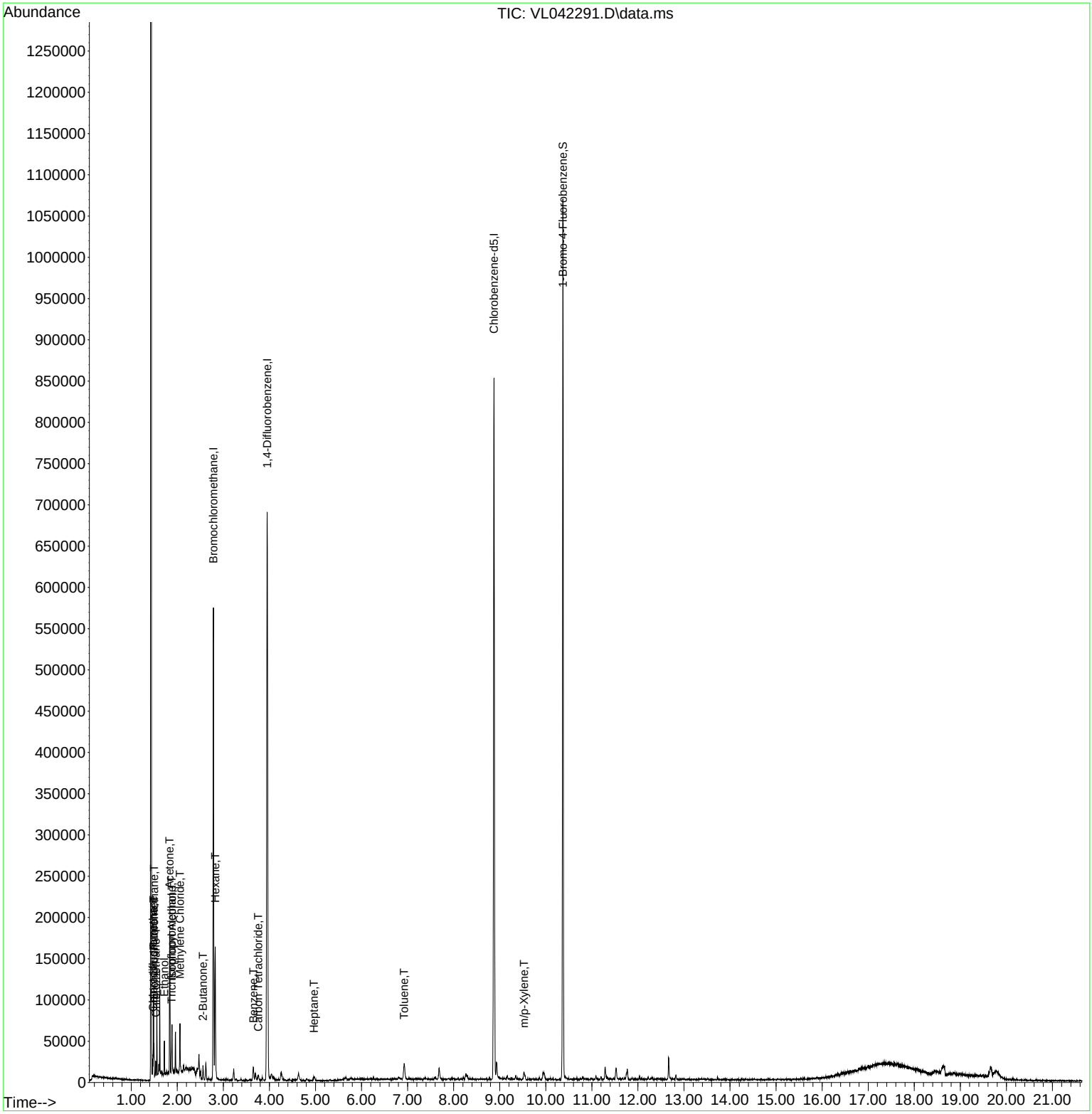
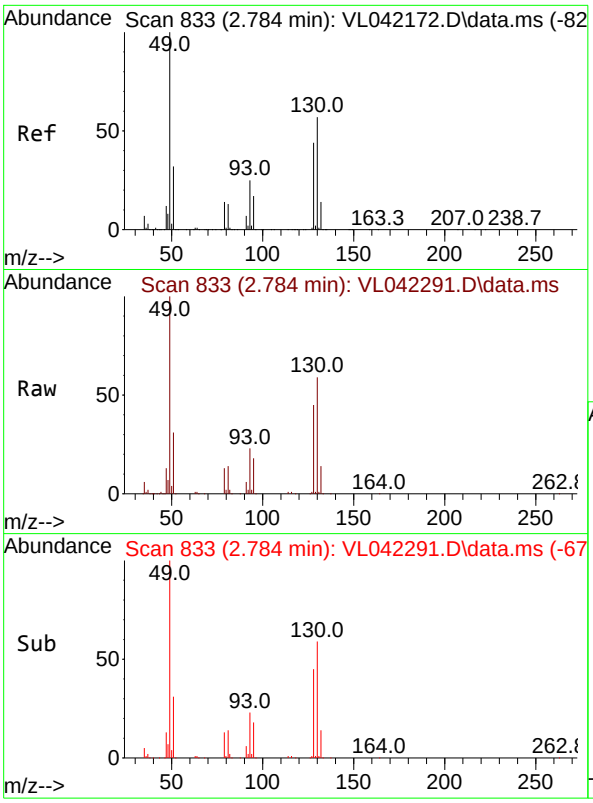
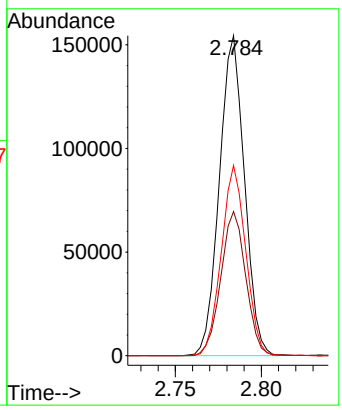




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 49 Resp: 15665

Ion	Ratio	Lower	Upper
49	100		
128	44.8	22.9	68.5
130	57.8	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

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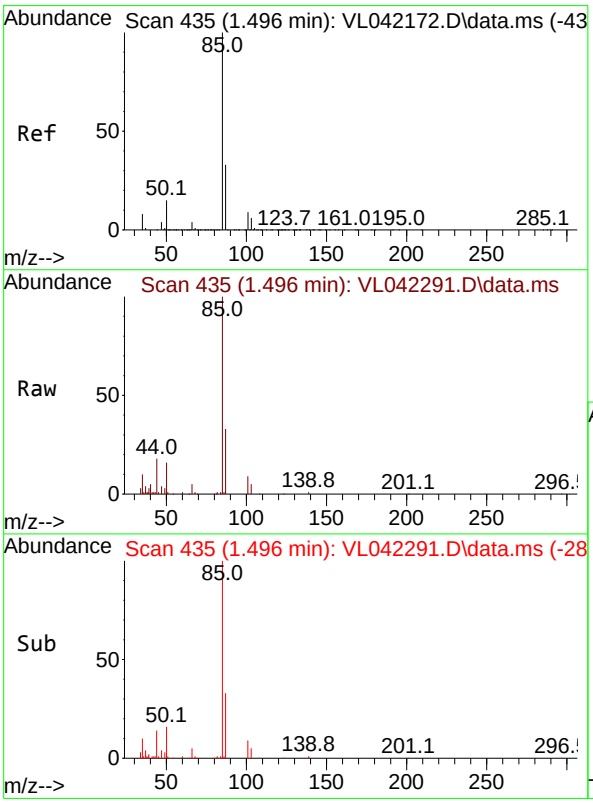
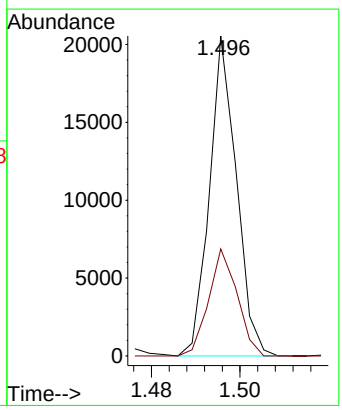
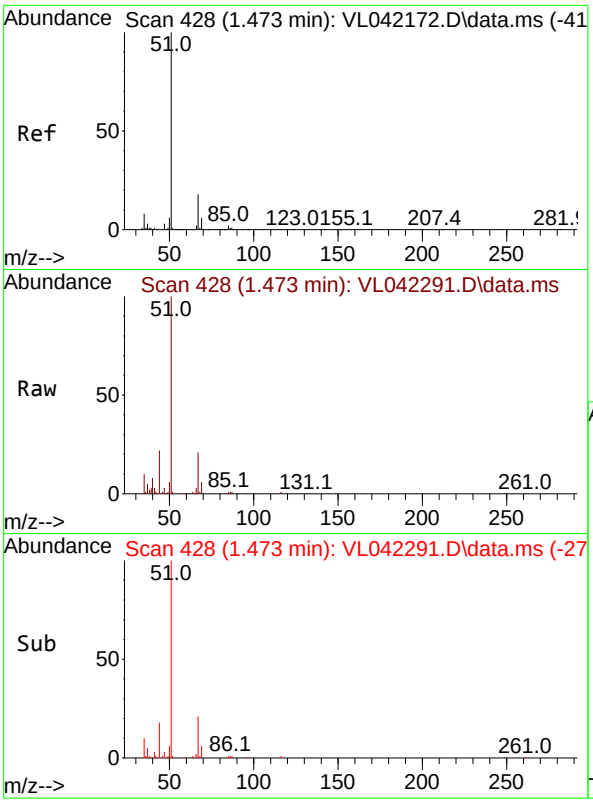


#2
Dichlorodifluoromethane
Concen: 0.376 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 85 Resp: 8694

Ion	Ratio	Lower	Upper
85	100		
87	33.5	26.1	39.1

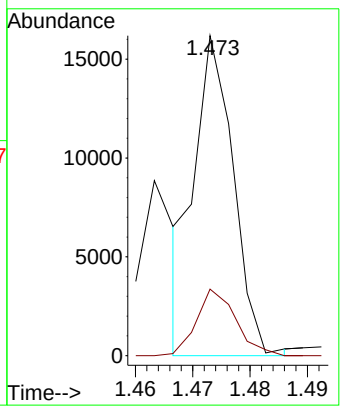




#3
Chlorodifluoromethane
Concen: 0.323 ppbv m
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 51 Resp: 762

Ion	Ratio	Lower	Upper
51	100		
67	2.0	15.0	22.6



Instrument :
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ClientSampleId :
AA-DUP-1-3242025DUP

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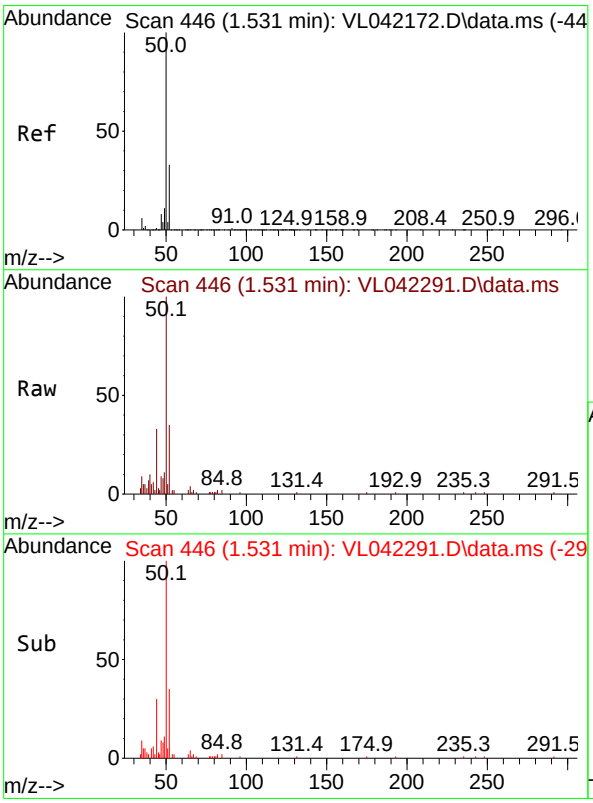
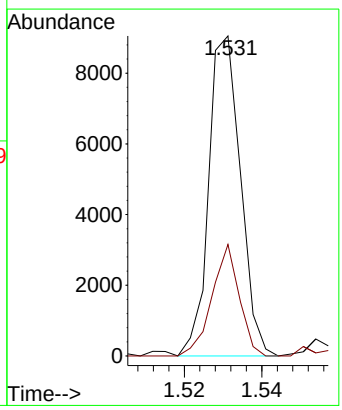
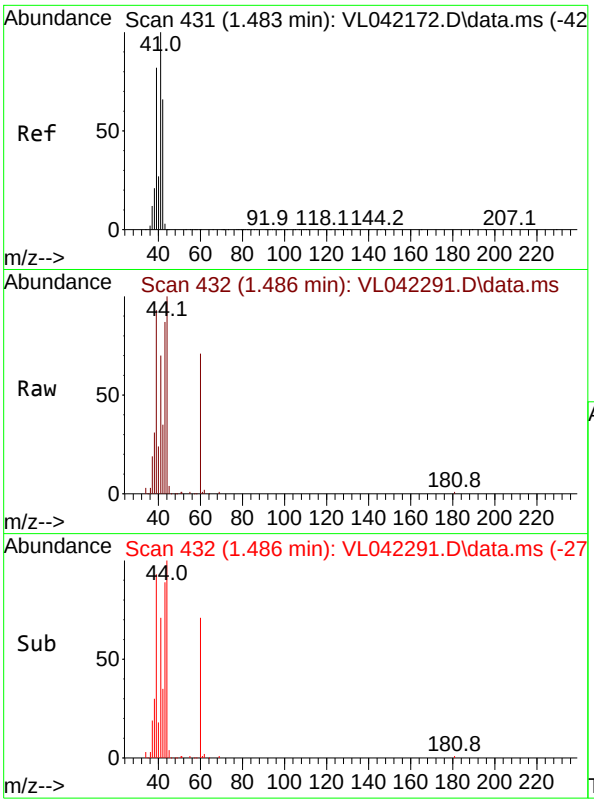


#4
Chloromethane
Concen: 0.546 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 50 Resp: 5160

Ion	Ratio	Lower	Upper
50	100		
52	34.9	26.1	39.1

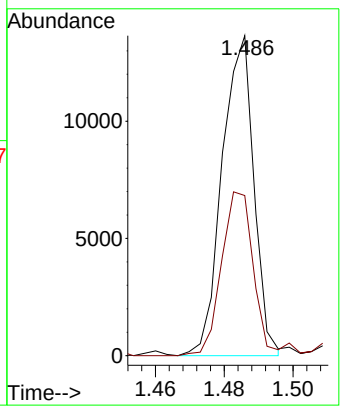




#9
Propene
Concen: 0.807 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 41 Resp: 873

Ion	Ratio	Lower	Upper
41	100		
42	57.1	55.4	83.2



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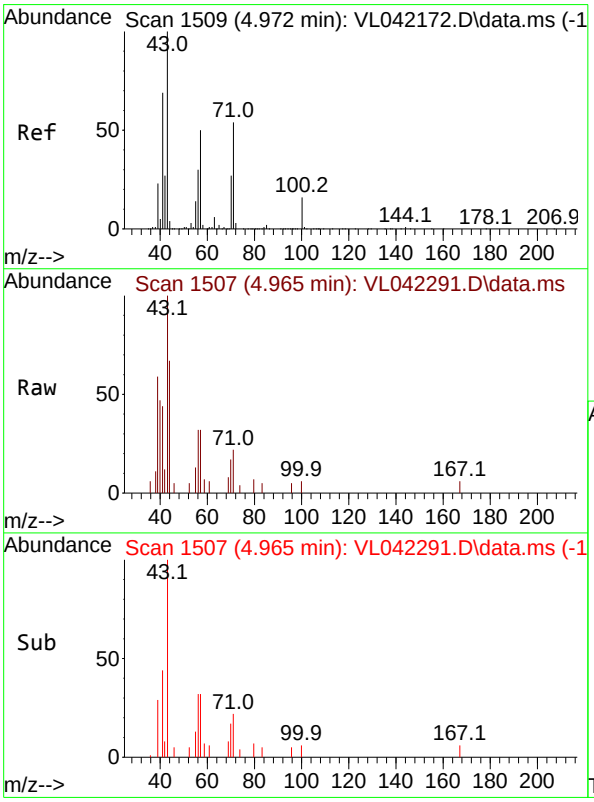
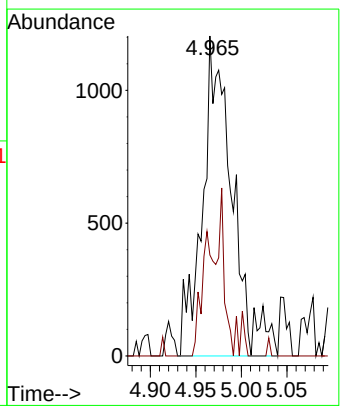
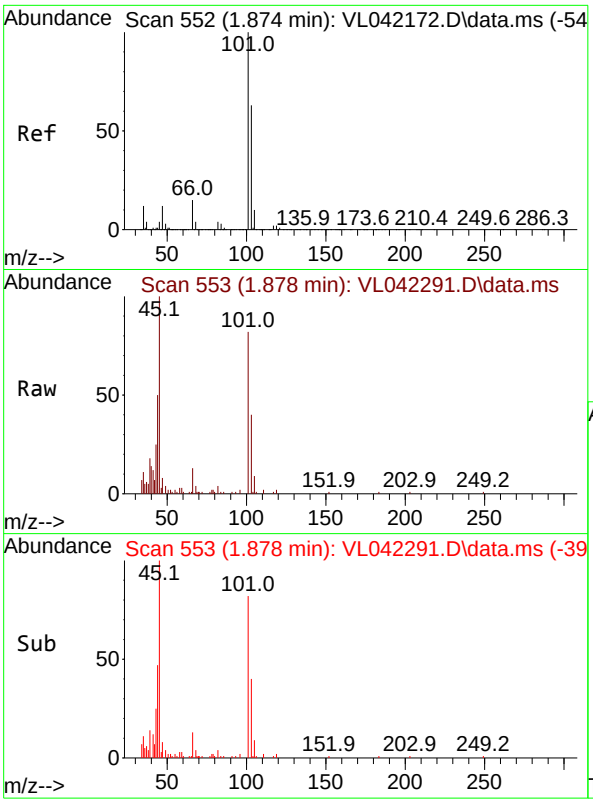


#10
Heptane
Concen: 0.095 ppbv m
RT: 4.965 min Scan# 1507
Delta R.T. -0.007 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 2744

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#





#11
Trichlorofluoromethane
Concen: 0.224 ppbv m
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:101 Resp: 503

Ion	Ratio	Lower	Upper
101	100		
103	49.2	50.2	75.2

Instrument :
MSVOA_L
ClientSampleId :
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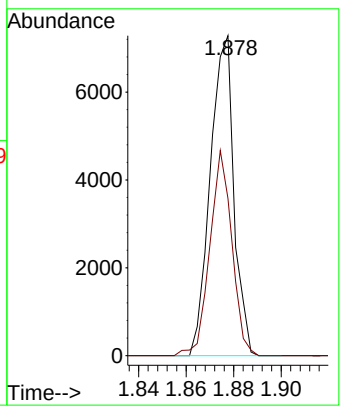
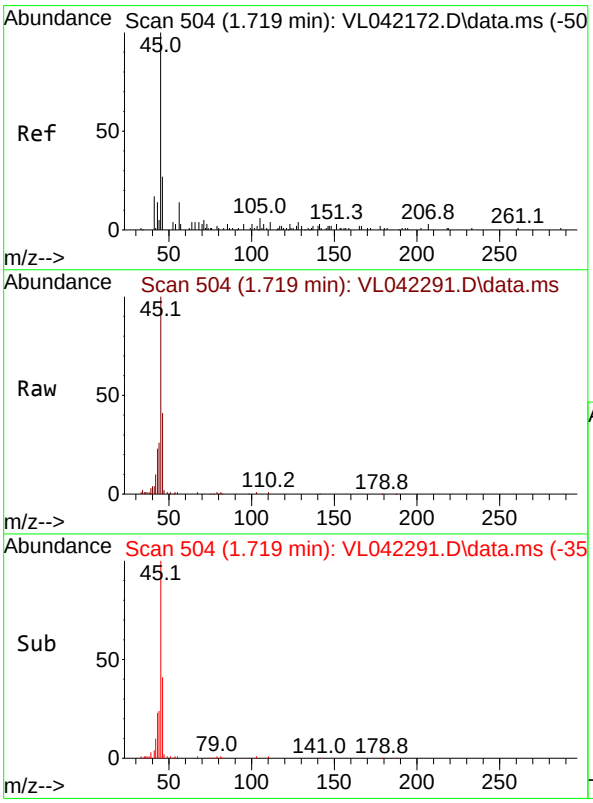
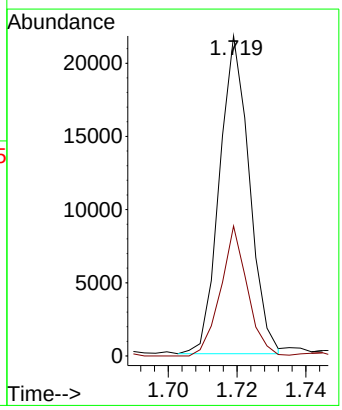


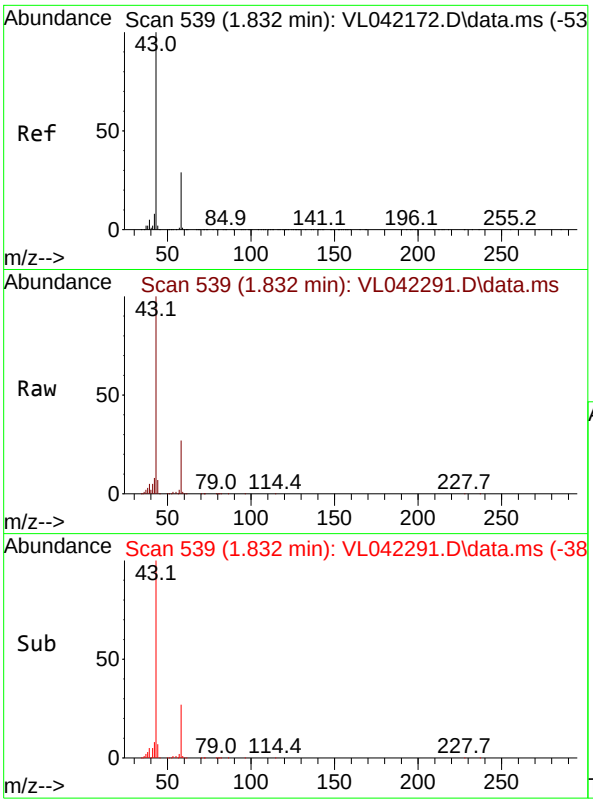


#13
Ethanol
Concen: 12.762 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 45 Resp: 13066

Ion	Ratio	Lower	Upper
45	100		
46	37.8	20.2	80.8

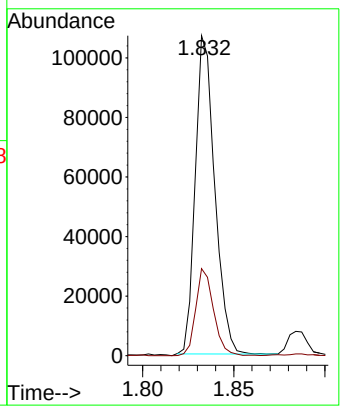




#15
Acetone
Concen: 3.629 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 7951

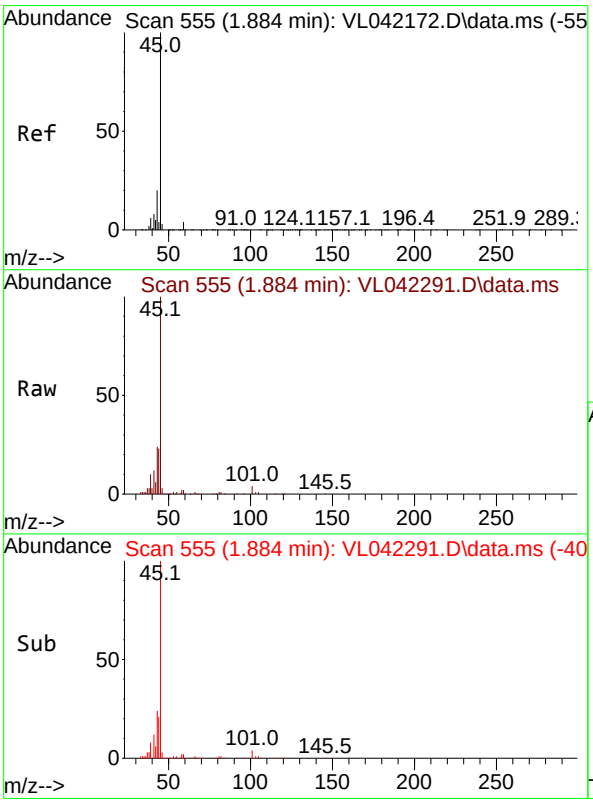
Ion	Ratio	Lower	Upper
43	100		
58	25.3	23.2	34.8



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
APPROVED

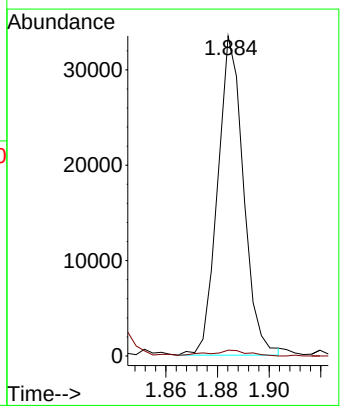
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

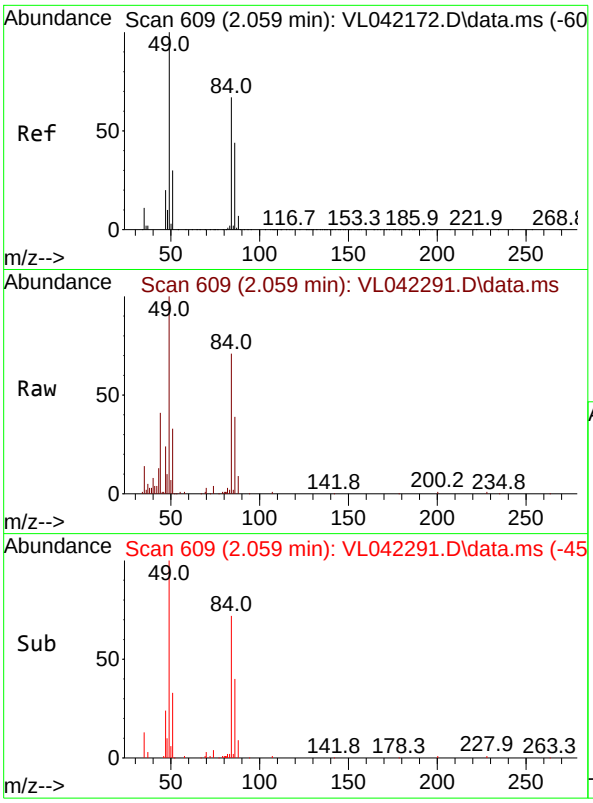


#19
Isopropyl Alcohol
Concen: 1.882 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 45 Resp: 23262

Ion	Ratio	Lower	Upper
45	100		
58	86.4	36.9	55.3#

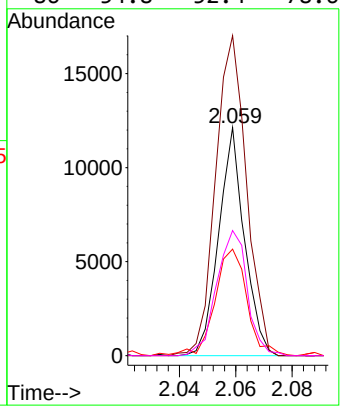




#20
Methylene Chloride
Concen: 0.946 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 84 Resp: 772

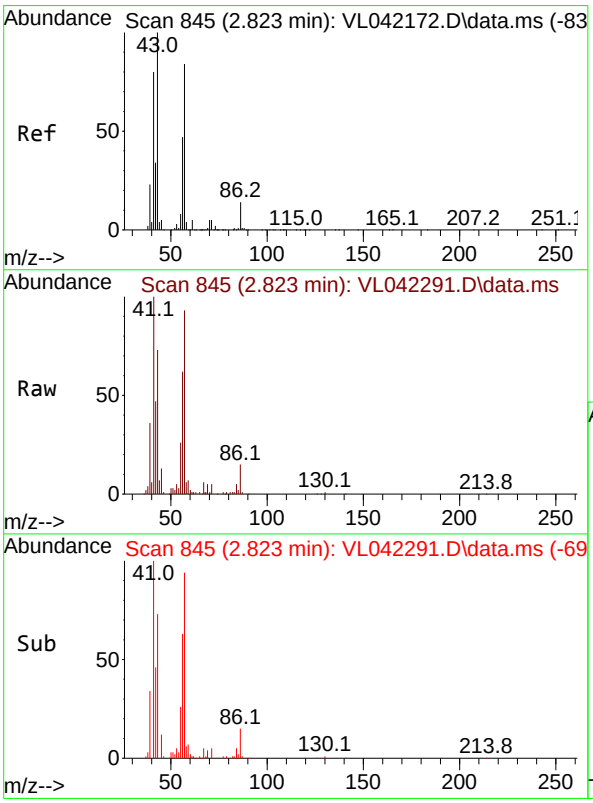
Ion	Ratio	Lower	Upper
84	100		
49	140.2	120.2	180.4
51	45.4	37.4	56.0
86	54.8	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
APPROVED

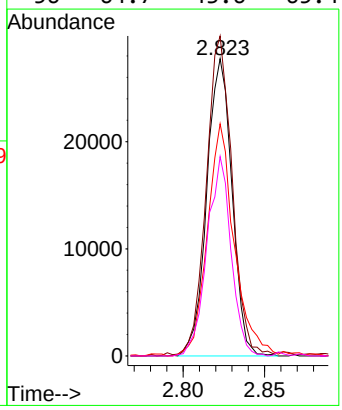
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

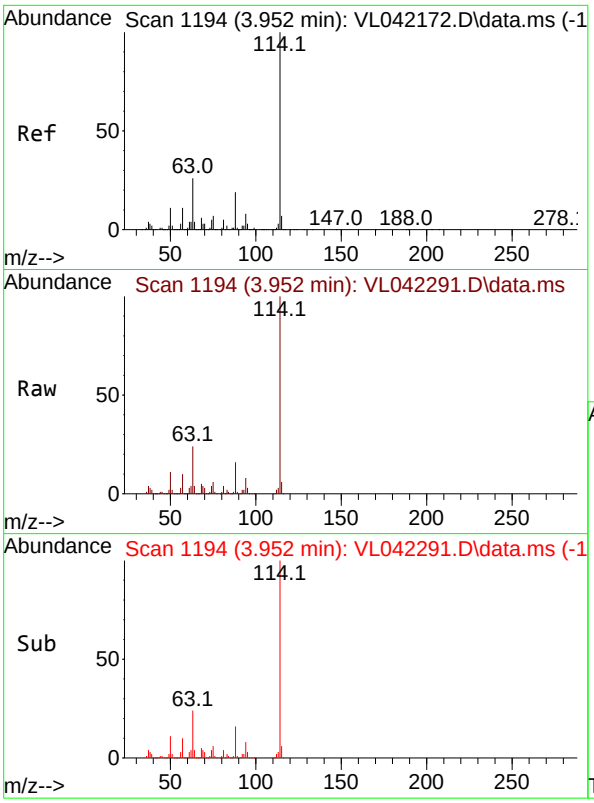


#26
Hexane
Concen: 1.358 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 57 Resp: 29831

Ion	Ratio	Lower	Upper
57	100		
41	111.8	76.6	114.8
43	85.5	207.8	311.8#
56	64.7	43.6	65.4





#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:114 Resp: 39745

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.2	15.0	22.4

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
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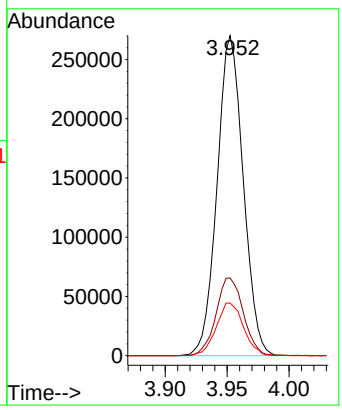
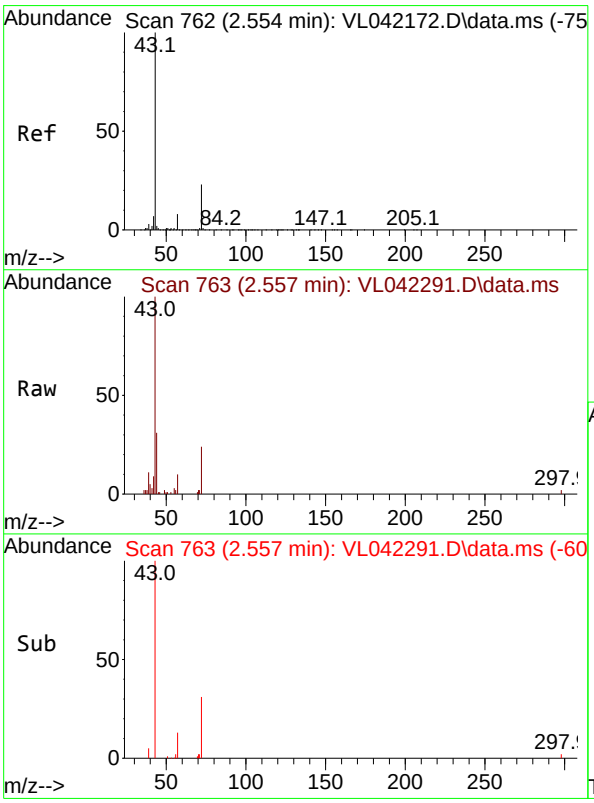
Supervised By :Mahesh Dadoda 04/10/2025

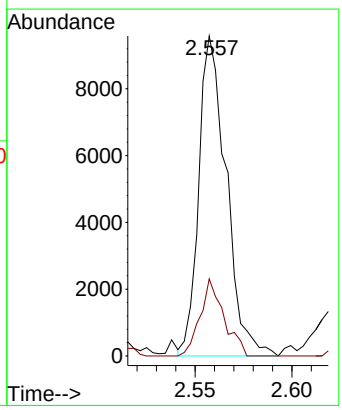


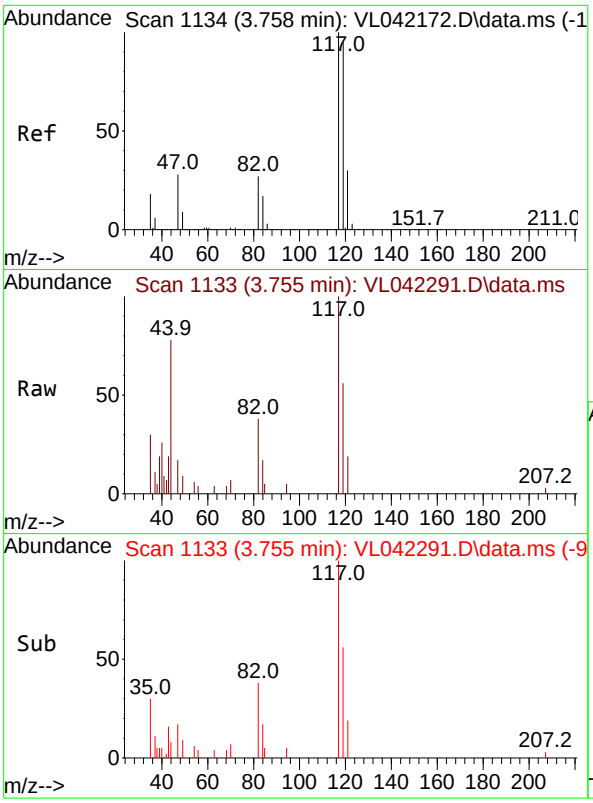


#34
2-Butanone
Concen: 0.329 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 9468

Ion	Ratio	Lower	Upper
43	100		
72	20.8	18.2	27.2

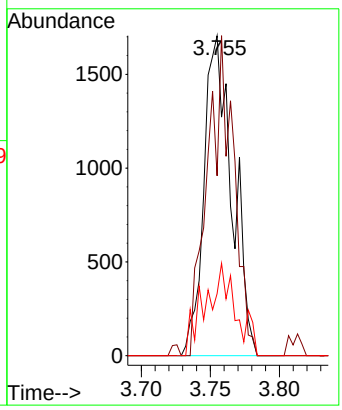




#35
Carbon Tetrachloride
Concen: 0.078 ppbv m
RT: 3.755 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:117 Resp: 241

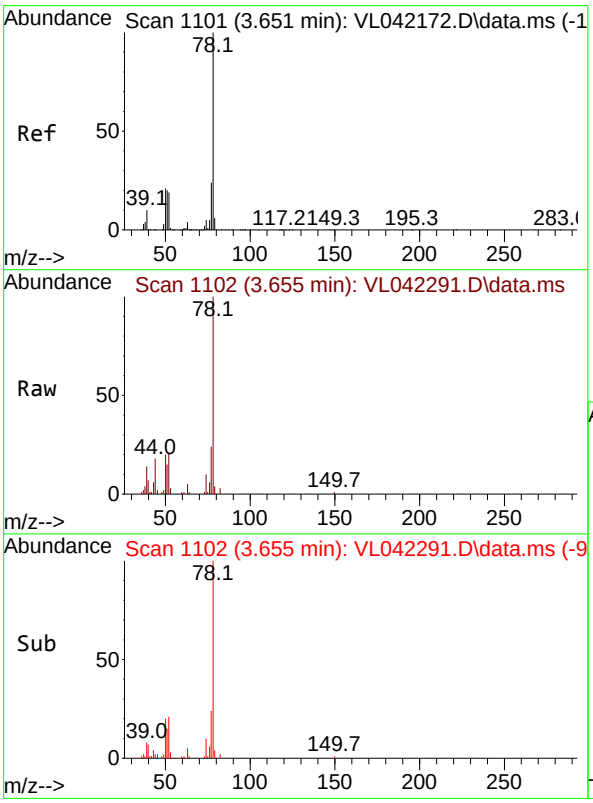
Ion	Ratio	Lower	Upper
117	100		
119	56.2	76.2	114.2#
121	19.4	24.2	36.4#



Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
APPROVED

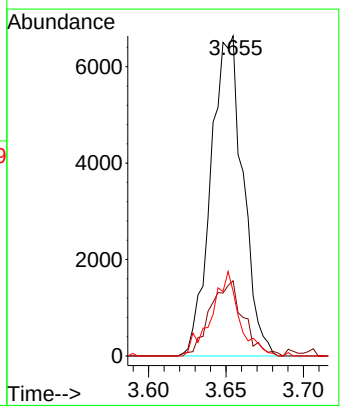
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

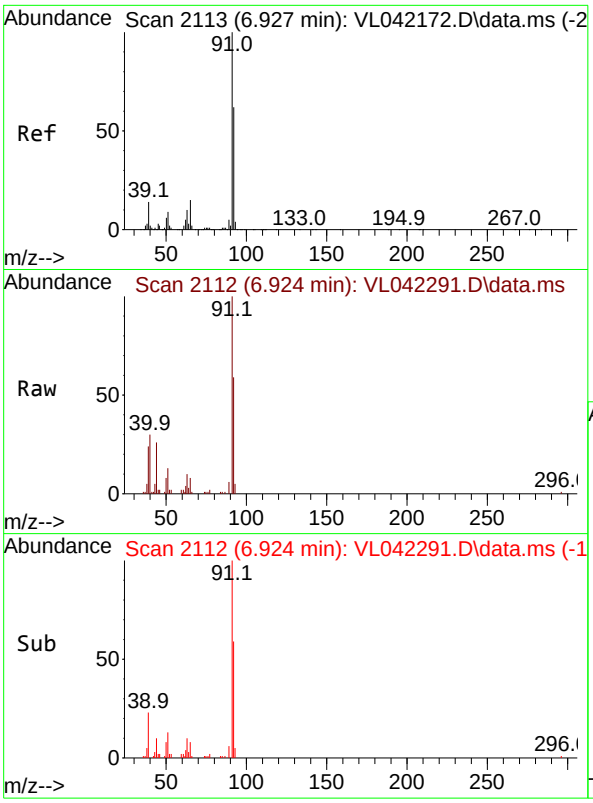


#36
Benzene
Concen: 0.244 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 78 Resp: 9601

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.3	16.6	24.8





#53
Toluene
Concen: 0.277 ppbv
RT: 6.924 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 91 Resp: 1295

Ion	Ratio	Lower	Upper
91	100		
92	63.2	48.4	72.6

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
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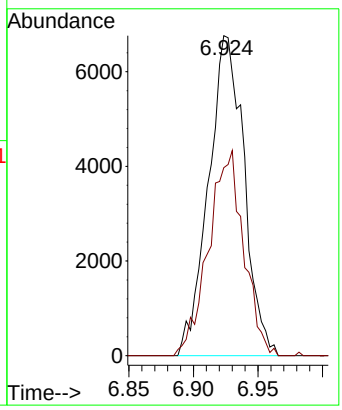
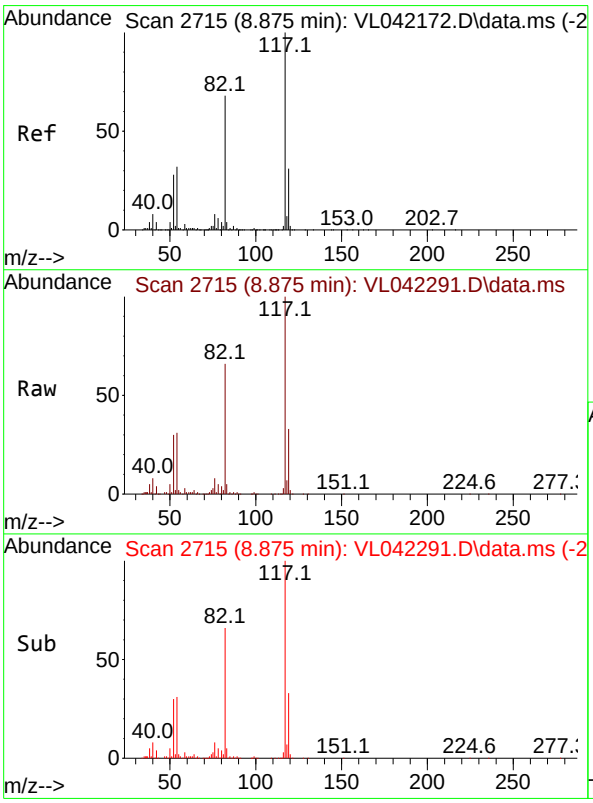
Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

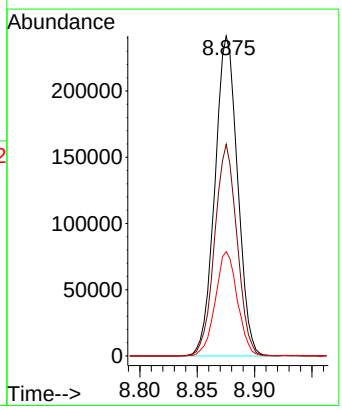


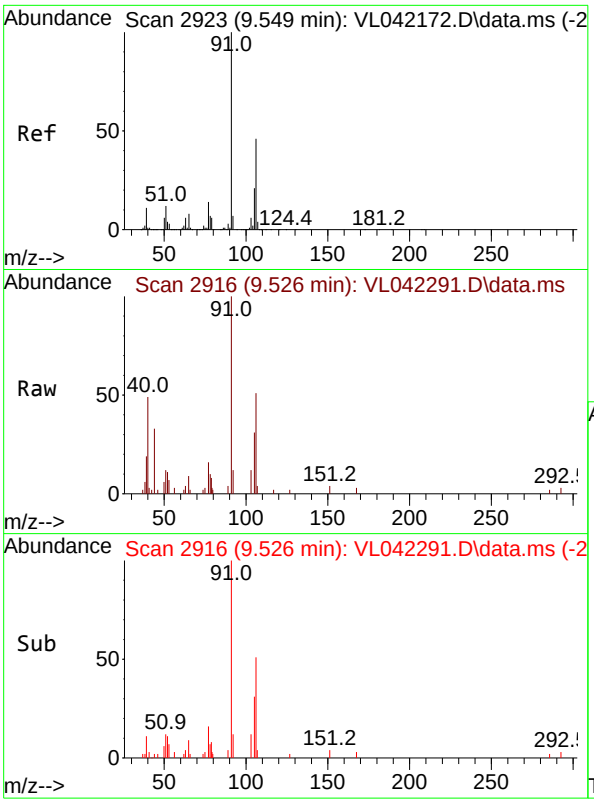


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:117 Resp: 332015

Ion	Ratio	Lower	Upper
117	100		
82	65.3	55.8	83.6
119	31.8	25.5	38.3





#59
m/p-Xylene
Concen: 0.119 ppbv m
RT: 9.526 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

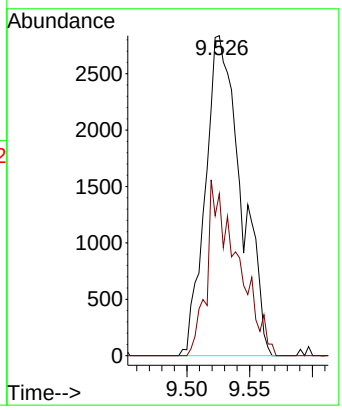
Tgt Ion: 91 Resp: 562

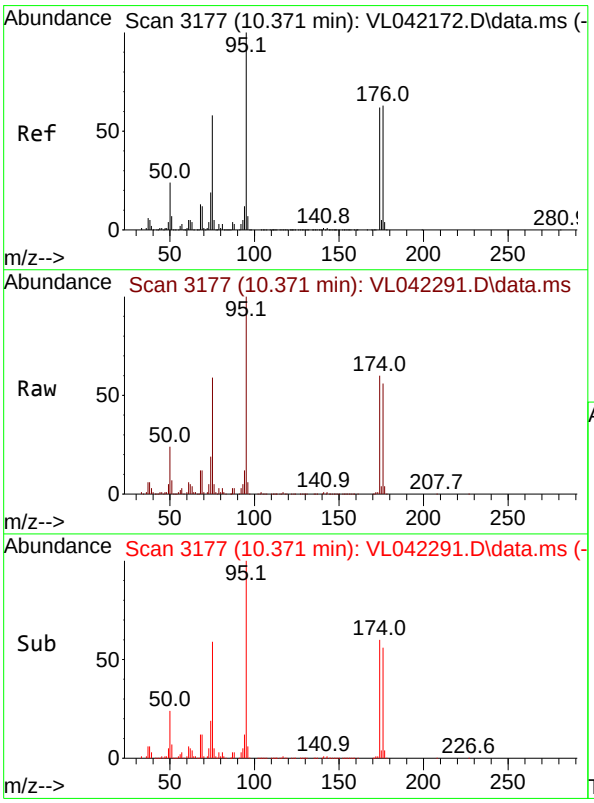
Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Manual Integrations
APPROVED

Reviewed By :Semsettin Yesilyurt 04/10/2025
Supervised By :Mahesh Dadoda 04/10/2025

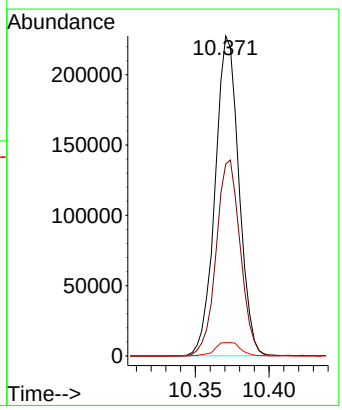




#68
1-Bromo-4-Fluorobenzene
Concen: 9.346 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 95 Resp: 254829

Ion	Ratio	Lower	Upper
95	100		
174	62.4	50.6	76.0
175	4.5	3.8	5.6



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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	IA-B10-2-3242025DUP	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042318.D	1		04/11/25 13:52	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
TARGETS							
75-71-8	Dichlorodifluoromethane	0.42	2.08	J	1.04	2.47	ug/m3
64-17-5	Ethanol	1300	2450	E	0.60	0.94	ug/m3
74-87-3	Chloromethane	0.59	1.22		0.21	1.03	ug/m3
75-01-4	Vinyl Chloride	0.010	0.030	U	0.030	0.080	ug/m3
74-83-9	Bromomethane	0.14	0.54	U	0.54	1.94	ug/m3
75-00-3	Chloroethane	0.17	0.45	U	0.45	1.32	ug/m3
109-99-9	Tetrahydrofuran	0.13	0.38	U	0.38	1.47	ug/m3
75-69-4	Trichlorofluoromethane	0.22	1.24	J	0.90	2.81	ug/m3
76-13-1	1,1,2-Trichlorotrifluoroethane	0.16	1.23	U	1.23	3.83	ug/m3
76-14-2	Dichlorotetrafluoroethane	0.090	0.63	U	0.63	3.49	ug/m3
593-60-2	Bromoethene	0.12	0.52	U	0.52	2.19	ug/m3
75-65-0	tert-Butyl alcohol	0.46	1.39	J	0.58	1.52	ug/m3
142-82-5	Heptane	0.19	0.78	J	0.45	2.05	ug/m3
67-63-0	Isopropyl Alcohol	83.2	205	E	0.17	1.23	ug/m3
75-35-4	1,1-Dichloroethene	0.14	0.56	U	0.56	1.98	ug/m3
67-64-1	Acetone	82.1	195	E	0.57	1.19	ug/m3
75-15-0	Carbon Disulfide	0.16	0.50	U	0.50	1.56	ug/m3
1634-04-4	Methyl tert-Butyl Ether	0.12	0.43	U	0.43	1.80	ug/m3
75-09-2	Methylene Chloride	1.60	5.56		0.66	1.74	ug/m3
156-60-5	trans-1,2-Dichloroethene	0.19	0.75	U	0.75	1.98	ug/m3
75-34-3	1,1-Dichloroethane	0.13	0.53	U	0.53	2.02	ug/m3
110-82-7	Cyclohexane	0.22	0.76	U	0.76	1.72	ug/m3
78-93-3	2-Butanone	26.6	78.5	E	0.35	1.47	ug/m3
56-23-5	Carbon Tetrachloride	0.090	0.57		0.060	0.19	ug/m3
156-59-2	cis-1,2-Dichloroethene	0.090	0.36	U	0.36	1.98	ug/m3
67-66-3	Chloroform	1.40	6.84		0.39	2.44	ug/m3
71-55-6	1,1,1-Trichloroethane	0.010	0.050	U	0.050	0.16	ug/m3
540-84-1	2,2,4-Trimethylpentane	0.10	0.47	U	0.47	2.34	ug/m3
71-43-2	Benzene	0.60	1.92		0.29	1.60	ug/m3
107-06-2	1,2-Dichloroethane	0.090	0.36	U	0.36	2.02	ug/m3
79-01-6	Trichloroethene	0.020	0.11	U	0.11	0.16	ug/m3
78-87-5	1,2-Dichloropropane	0.11	0.51	U	0.51	2.31	ug/m3
75-27-4	Bromodichloromethane	0.080	0.54	U	0.54	3.35	ug/m3
108-10-1	4-Methyl-2-Pentanone	0.090	0.37	U	0.37	2.05	ug/m3
108-88-3	Toluene	0.51	1.92		0.41	1.88	ug/m3

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Report of Analysis

Client:	Woodard & Curran	Date Collected:	
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	
Client Sample ID:	IA-B10-2-3242025DUP	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042318.D	1		04/11/25 13:52	VL041125

CAS Number	Parameter	Conc. ppbv	Conc. ug/M3	Qualifier	MDL	LOQ / CRQL	Units
10061-02-6	t-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
10061-01-5	cis-1,3-Dichloropropene	0.060	0.27	U	0.27	2.27	ug/m3
79-00-5	1,1,2-Trichloroethane	0.070	0.38	U	0.38	2.73	ug/m3
124-48-1	Dibromochloromethane	0.070	0.60	U	0.60	4.26	ug/m3
106-93-4	1,2-Dibromoethane	0.070	0.54	U	0.54	0.77	ug/m3
127-18-4	Tetrachloroethene	0.040	0.27		0.14	0.20	ug/m3
108-90-7	Chlorobenzene	0.080	0.37	U	0.37	2.30	ug/m3
100-41-4	Ethyl Benzene	0.12	0.52	U	0.52	2.17	ug/m3
179601-23-1	m/p-Xylene	0.20	0.87	U	0.91	4.34	ug/m3
95-47-6	o-Xylene	0.12	0.52	J	0.52	2.17	ug/m3
100-42-5	Styrene	0.11	0.47	U	0.47	2.13	ug/m3
75-25-2	Bromoform	0.060	0.62	U	0.62	5.17	ug/m3
79-34-5	1,1,2,2-Tetrachloroethane	0.010	0.070	U	0.070	0.21	ug/m3
95-49-8	2-Chlorotoluene	0.11	0.57	U	0.57	2.59	ug/m3
108-67-8	1,3,5-Trimethylbenzene	0.11	0.54	U	0.54	2.46	ug/m3
95-63-6	1,2,4-Trimethylbenzene	0.13	0.64	J	0.39	2.46	ug/m3
541-73-1	1,3-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
106-46-7	1,4-Dichlorobenzene	0.050	0.30	U	0.30	3.01	ug/m3
95-50-1	1,2-Dichlorobenzene	0.080	0.48	U	0.48	3.01	ug/m3
120-82-1	1,2,4-Trichlorobenzene	0.090	0.67	U	0.67	3.71	ug/m3
87-68-3	Hexachloro-1,3-Butadiene	0.090	0.96	U	0.96	5.33	ug/m3
106-99-0	1,3-Butadiene	0.13	0.29	U	0.29	1.11	ug/m3
91-20-3	Naphthalene	0.080	0.42	U	0.42	0.52	ug/m3
622-96-8	4-Ethyltoluene	0.12	0.59	U	0.59	2.46	ug/m3
110-54-3	Hexane	2.70	9.52		0.39	1.76	ug/m3
107-05-1	Allyl Chloride	0.15	0.47	U	0.47	1.57	ug/m3
123-91-1	1,4-Dioxane	0.21	0.76	U	0.76	1.80	ug/m3
80-62-6	Methyl Methacrylate	0.090	0.37	U	0.37	2.05	ug/m3
SURROGATES							
460-00-4	1-Bromo-4-Fluorobenzene	9.70			70 (65) - 130 (135)	97%	SPK: 10
INTERNAL STANDARDS							
74-97-5	Bromochloromethane	183000		2.787			
540-36-3	1,4-Difluorobenzene	443000		3.958			
3114-55-4	Chlorobenzene-d5	381000		8.881			

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

Report of Analysis

Client:	Woodard & Curran	Date Collected:	04/11/25
Project:	US EPA Riverside Industrial Park Superfund Site	Date Received:	04/11/25
Client Sample ID:	IA-B10-2-3242025DUP	SDG No.:	Q1665
Lab Sample ID:	Q1665-03DUP	Matrix:	Air
Analytical Method:	TO-15	Test:	TO-15
Sample Wt/Vol:	400 Units: mL		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
VL042318.D	1		04/11/25 13:52	VL041125

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

U = Not Detected
RL = Reporting Limit
MDL = Method Detection Limit
E = Value Exceeds Calibration Range
D = Dilution

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
Q = indicates LCS control criteria did not meet requirements

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042318.D
Acq On : 11 Apr 2025 13:52
Operator : SY/MD
Sample : Q1665-03DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:59:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	183054	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.958	114	442590	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	380933	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	304733	9.741	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11308	0.418	ppbv		97
4) Chloromethane	1.531	50	6464	0.585	ppbv	#	84
9) Propene	1.486	41	56403m	4.457	ppbv		
10) Heptane	4.981	43	6238m	0.185	ppbv		
11) Trichlorofluoromethane	1.877	101	5756	0.219	ppbv		90
13) Ethanol	1.722	45	1578950	1319.793	ppbv		94
15) Acetone	1.832	43	2101760	82.096	ppbv	#	77
17) tert-Butyl alcohol	2.042	59	14809m	0.464	ppbv		
19) Isopropyl Alcohol	1.887	45	1201240	83.161	ppbv	#	60
20) Methylene Chloride	2.059	84	15544	1.630	ppbv		90
26) Hexane	2.826	57	69684	2.715	ppbv		93
29) Chloroform	2.848	83	51580	1.373	ppbv		99
34) 2-Butanone	2.557	43	853001	26.579	ppbv		99
35) Carbon Tetrachloride	3.768	117	3050m	0.088	ppbv		
36) Benzene	3.654	78	26349	0.601	ppbv		94
52) Tetrachloroethene	8.218	164	626m	0.036	ppbv		
53) Toluene	6.936	91	26345m	0.507	ppbv		
59) m/p-Xylene	9.529	91	10928m	0.202	ppbv		
60) o-Xylene	9.962	91	6311m	0.117	ppbv		
74) 1,2,4-Trimethylbenzene	11.535	105	8971	0.132	ppbv	#	75

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042318.D
Acq On : 11 Apr 2025 13:52
Operator : SY/MD
Sample : Q1665-03DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 11 22:59:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations APPROVED
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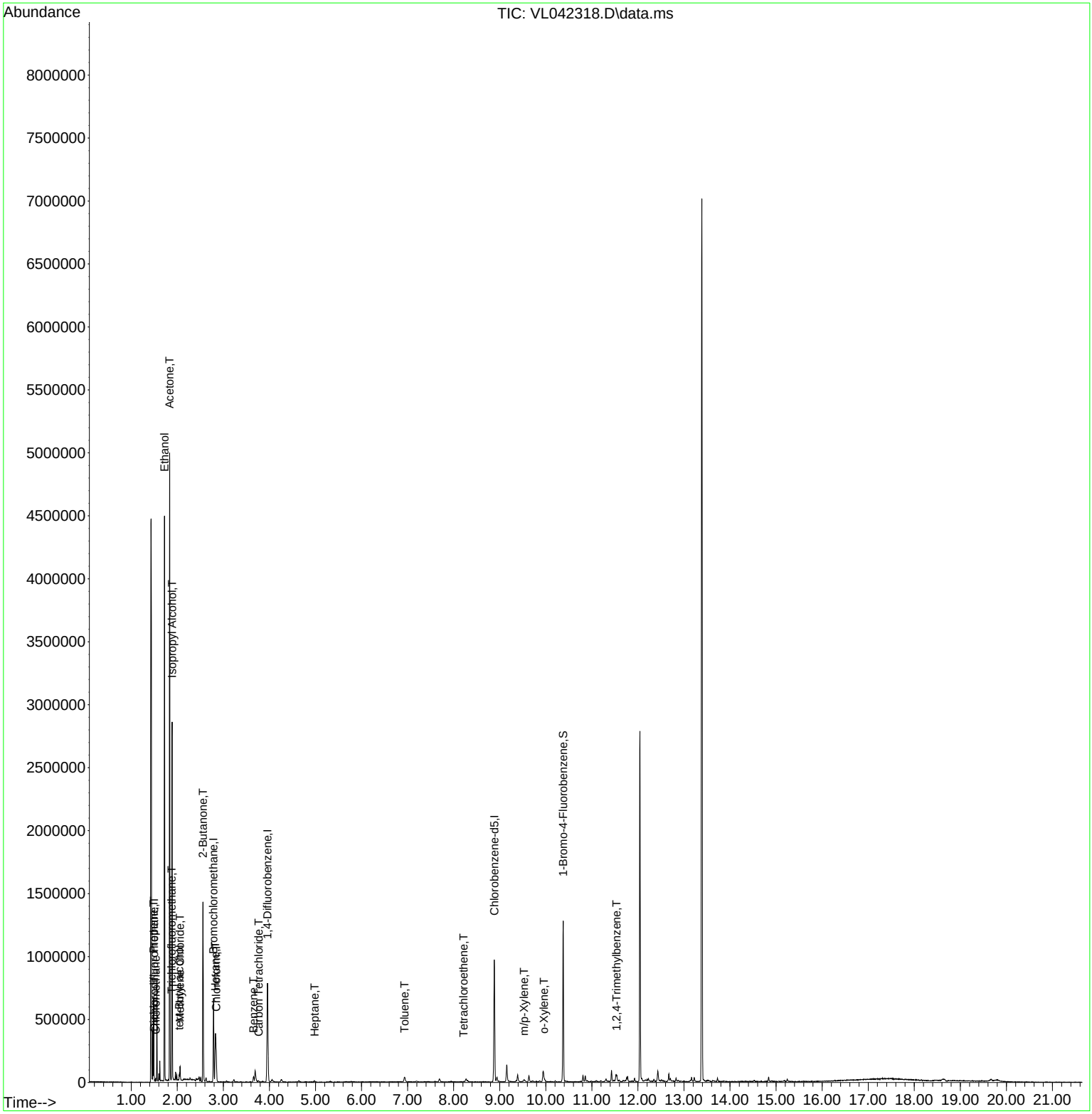
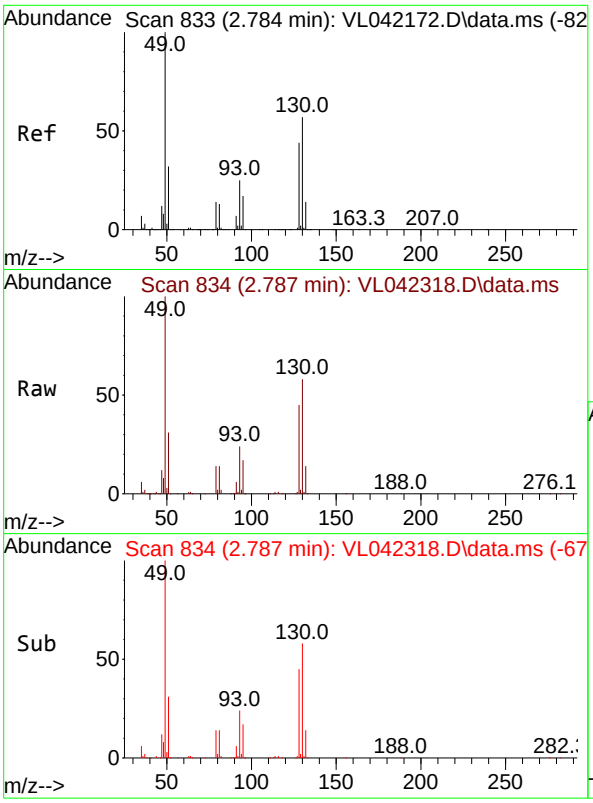
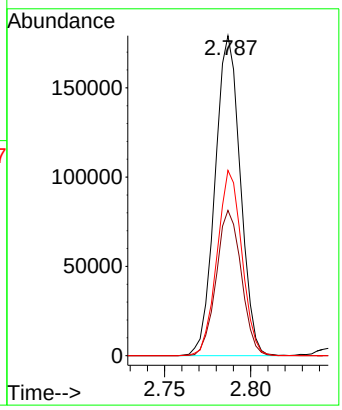




#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 49 Resp: 18305

Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.9	68.5
130	56.7	28.8	86.4



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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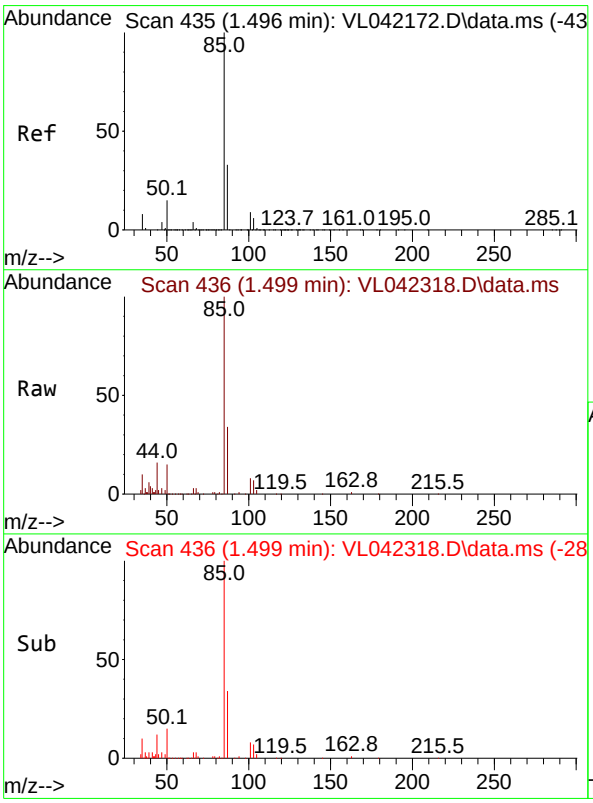
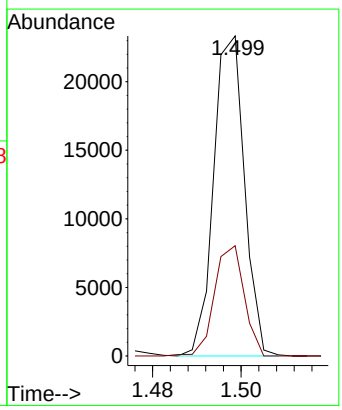
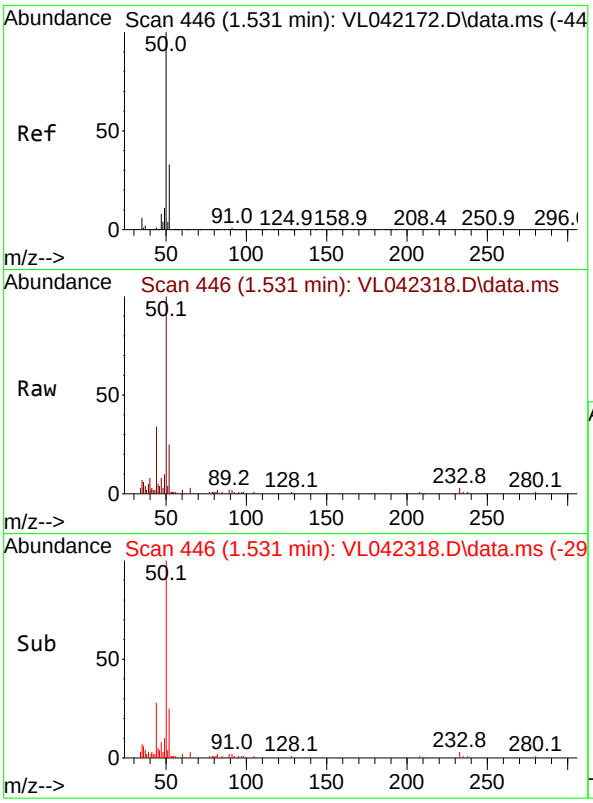


#2
Dichlorodifluoromethane
Concen: 0.418 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 85 Resp: 11308

Ion	Ratio	Lower	Upper
85	100		
87	34.5	26.1	39.1





#4
Chloromethane
Concen: 0.585 ppbv
RT: 1.531 min Scan# 44
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 50 Resp: 6464

Ion	Ratio	Lower	Upper
50	100		
52	23.7	26.1	39.1#

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

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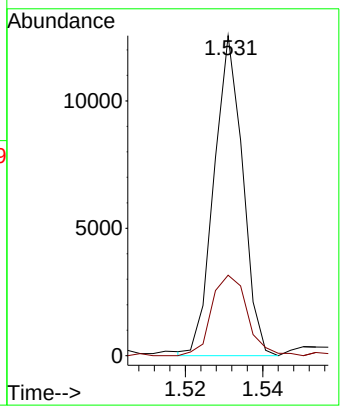
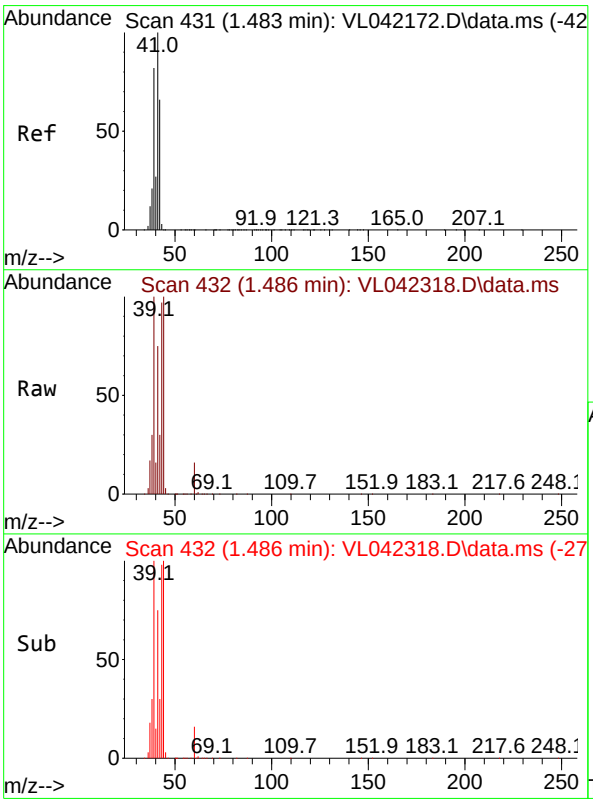
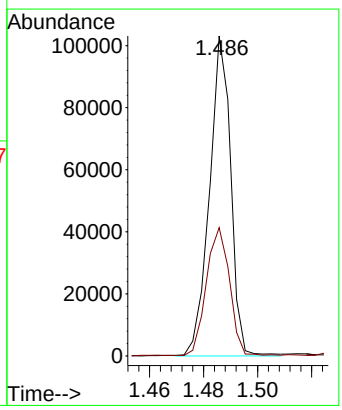


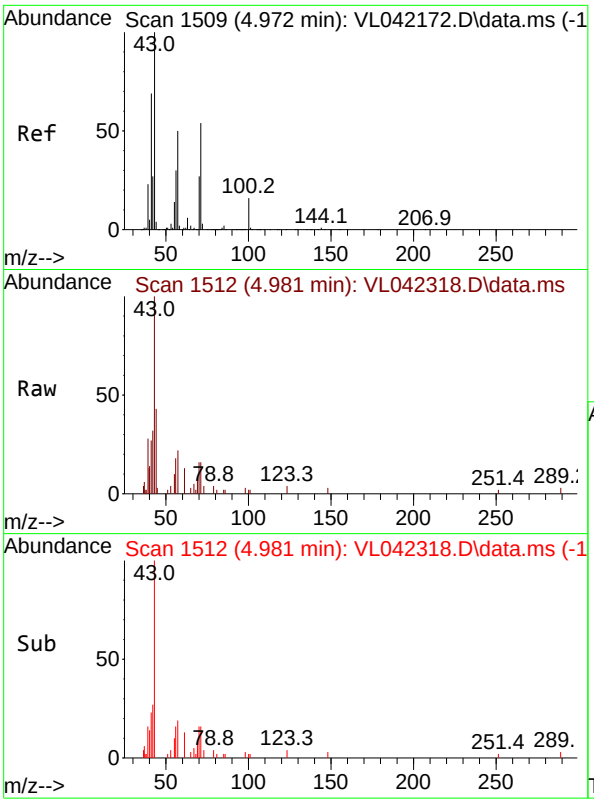


#9
Propene
Concen: 4.457 ppbv m
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 41 Resp: 56403

Ion	Ratio	Lower	Upper
41	100		
42	128.5	55.4	83.2#

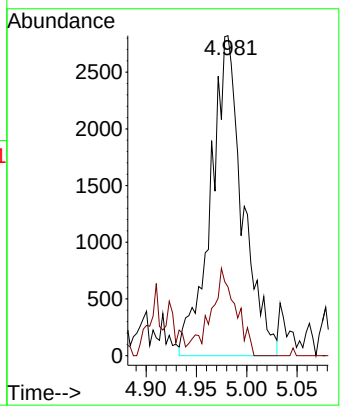




#10
Heptane
Concen: 0.185 ppbv m
RT: 4.981 min Scan# 1
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 623

Ion	Ratio	Lower	Upper
43	100		
57	21.3	39.4	59.2



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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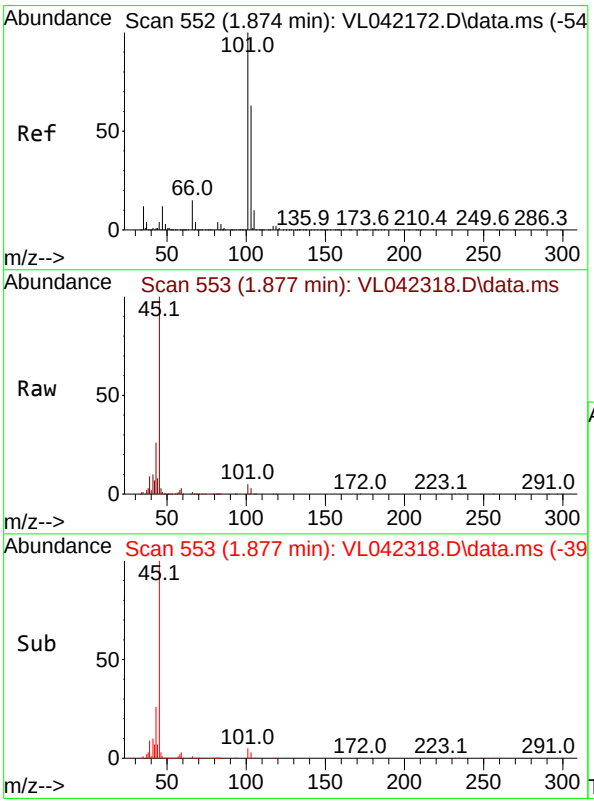
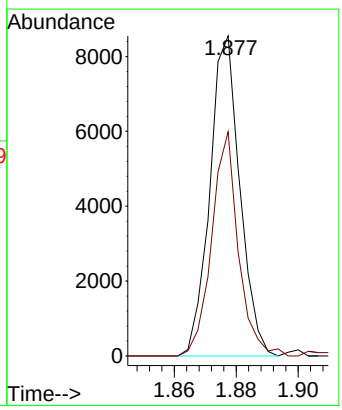
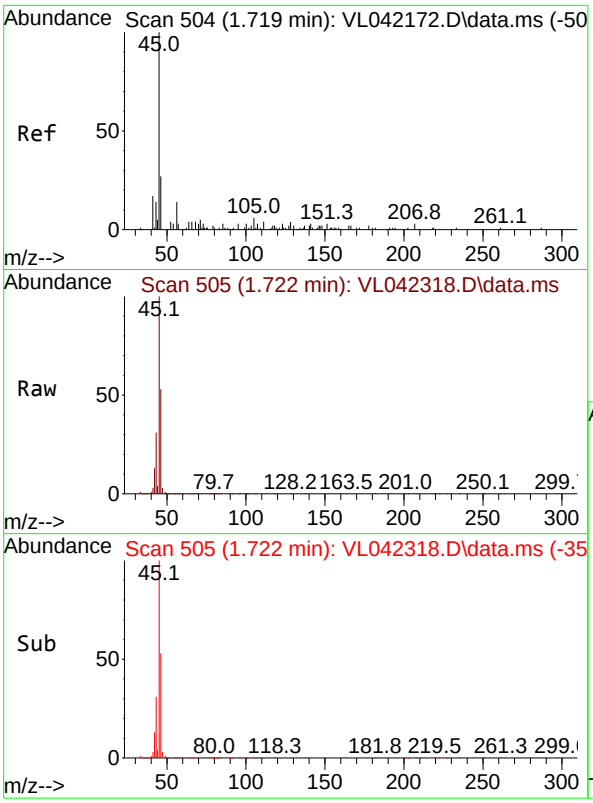


#11
Trichlorofluoromethane
Concen: 0.219 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:101 Resp: 5756

Ion	Ratio	Lower	Upper
101	100		
103	70.1	50.2	75.2





#13
Ethanol
Concen: 1319.793 ppbv
RT: 1.722 min Scan# 5(
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 45 Resp: 157895(

Ion	Ratio	Lower	Upper
45	100		
46	46.4	20.2	80.8

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

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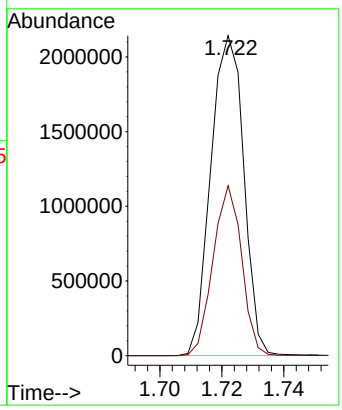
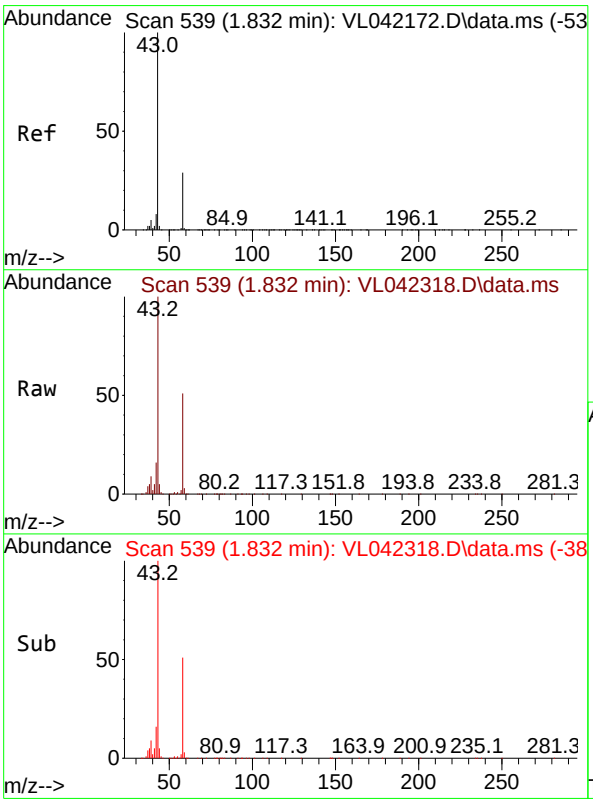
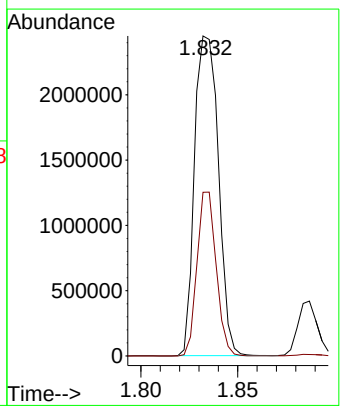


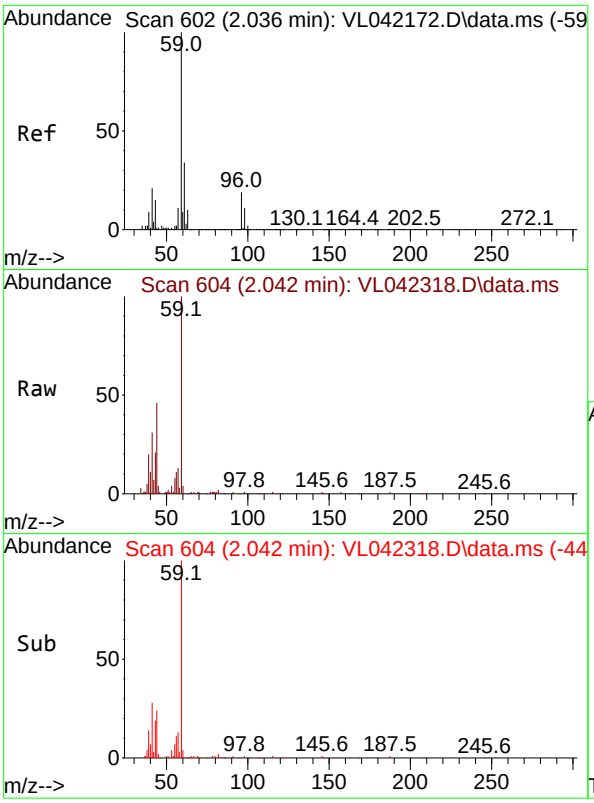


#15
Acetone
Concen: 82.096 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 2101760

Ion	Ratio	Lower	Upper
43	100		
58	41.3	23.2	34.8#

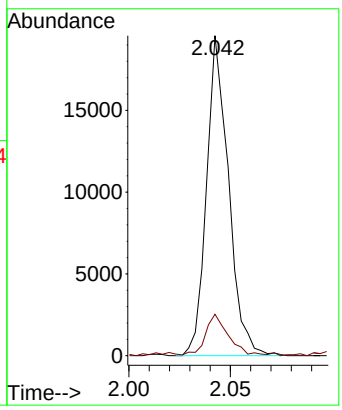




#17
tert-Butyl alcohol
Concen: 0.464 ppbv m
RT: 2.042 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 59 Resp: 1480

Ion	Ratio	Lower	Upper
59	100		
57	30.4	8.9	13.3#



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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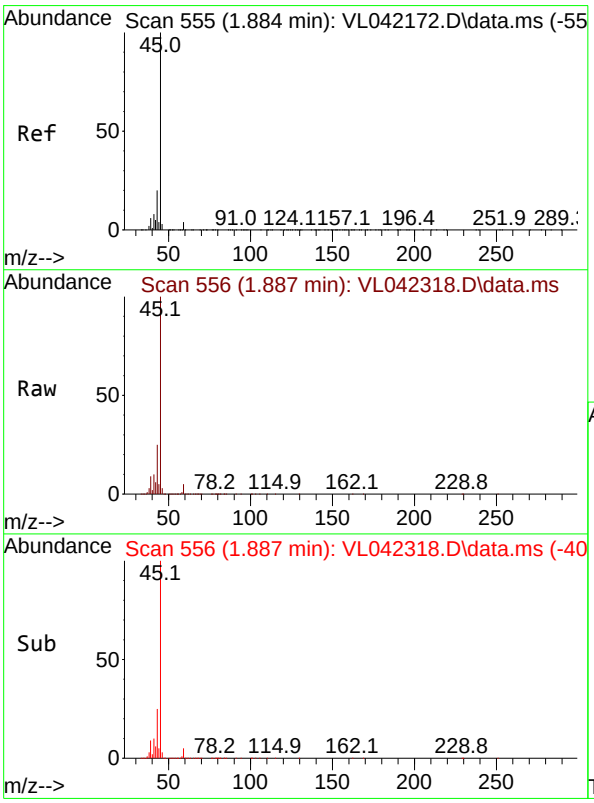
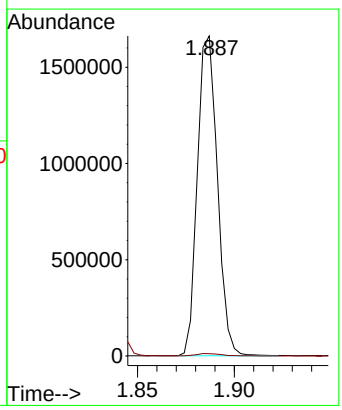
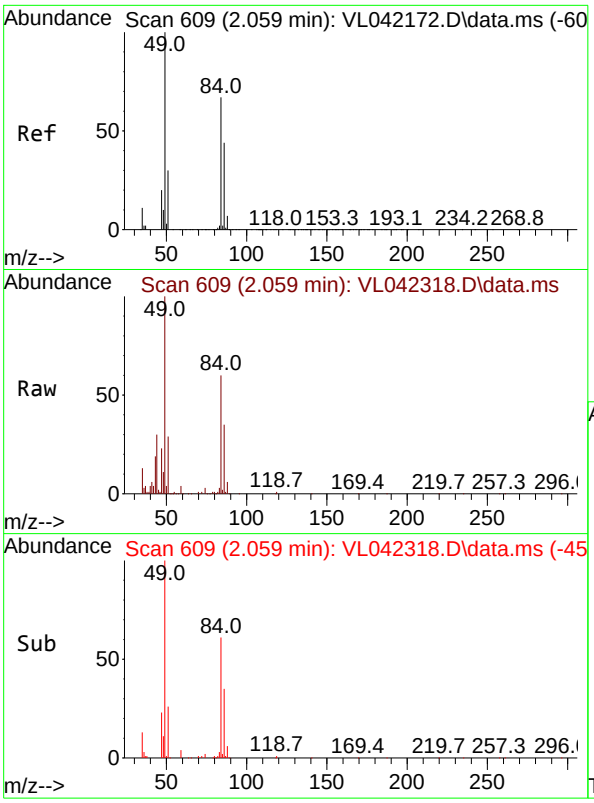


#19
Isopropyl Alcohol
Concen: 83.161 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 45 Resp: 1201240

Ion	Ratio	Lower	Upper
45	100		
58	72.3	36.9	55.3#

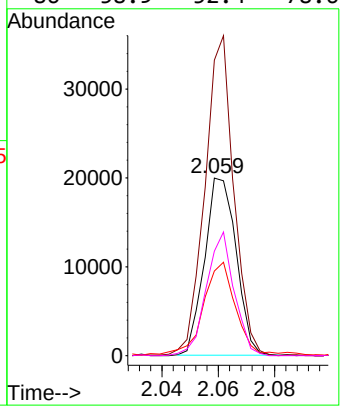




#20
Methylene Chloride
Concen: 1.630 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 84 Resp: 1554

Ion	Ratio	Lower	Upper
84	100		
49	166.8	120.2	180.4
51	46.4	37.4	56.0
86	58.9	52.4	78.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

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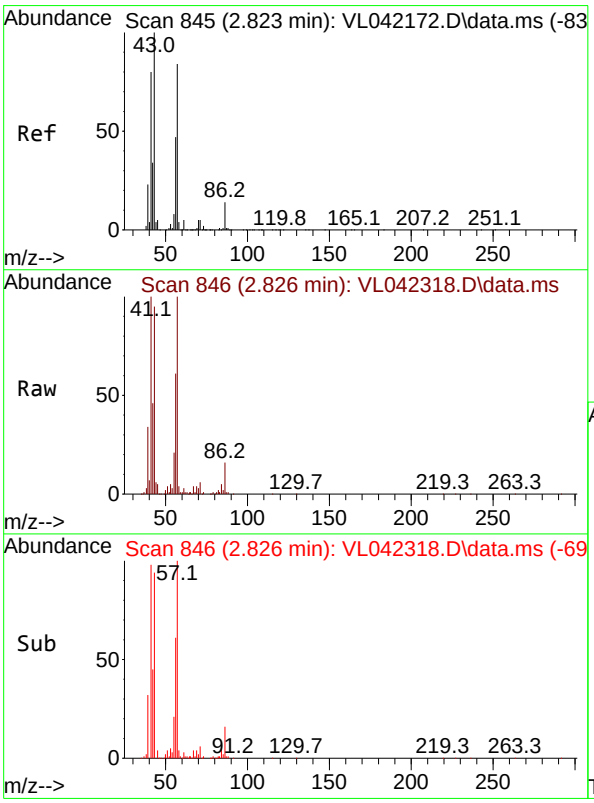
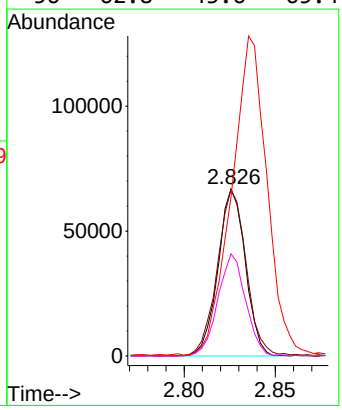
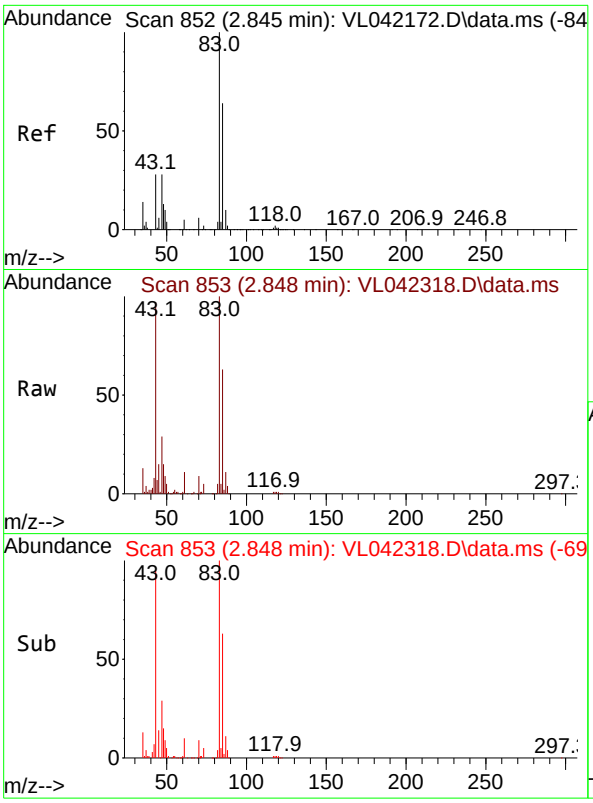


#26
Hexane
Concen: 2.715 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 57 Resp: 69684

Ion	Ratio	Lower	Upper
57	100		
41	105.3	76.6	114.8
43	249.9	207.8	311.8
56	62.8	43.6	65.4





#29
Chloroform
Concen: 1.373 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 83 Resp: 5158

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.4	77.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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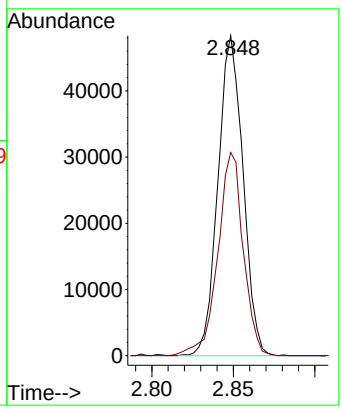
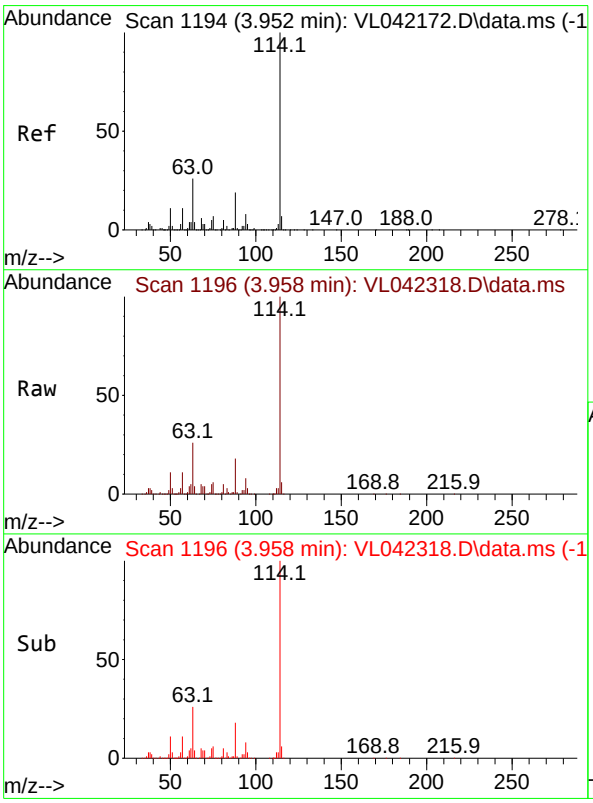
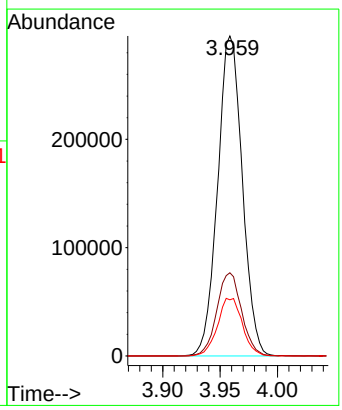


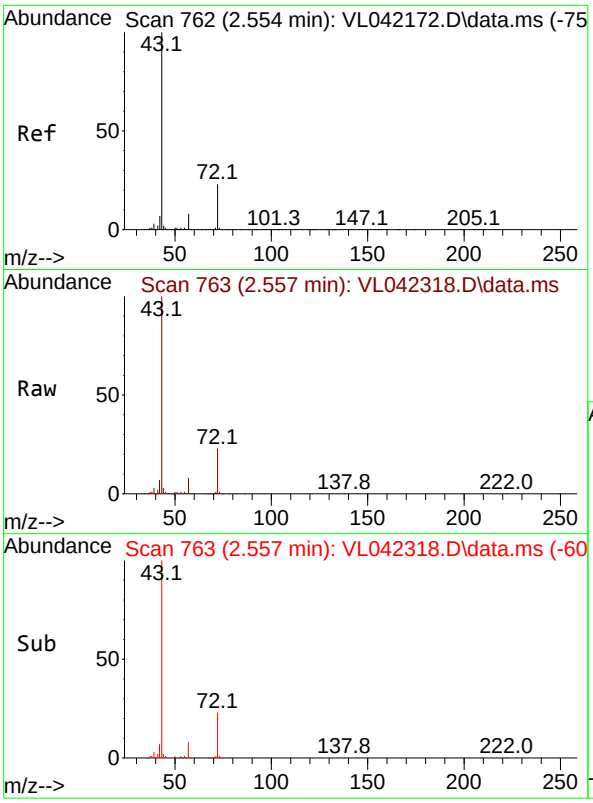


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.958 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:114 Resp: 442590

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.2	15.0	22.4





#34
2-Butanone
Concen: 26.579 ppbv
RT: 2.557 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 85300

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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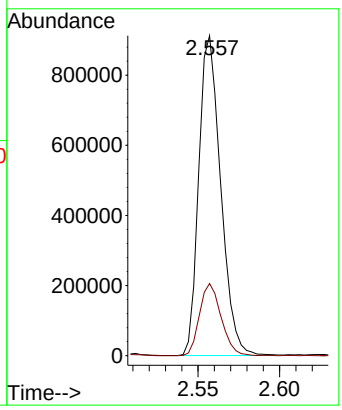
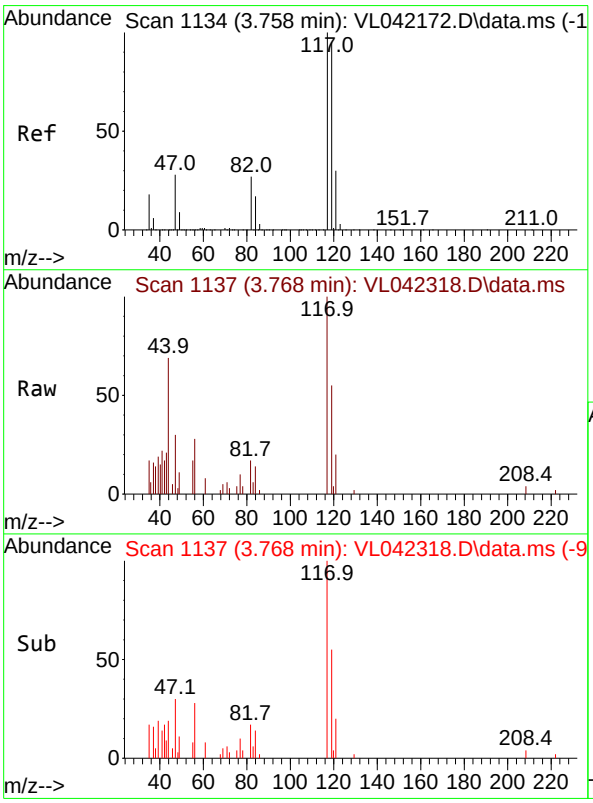
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

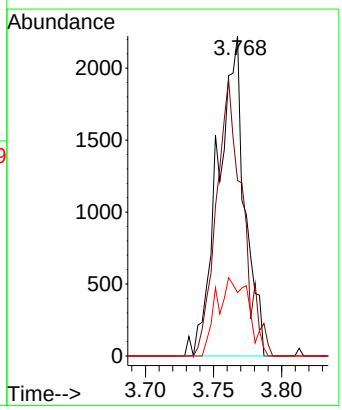


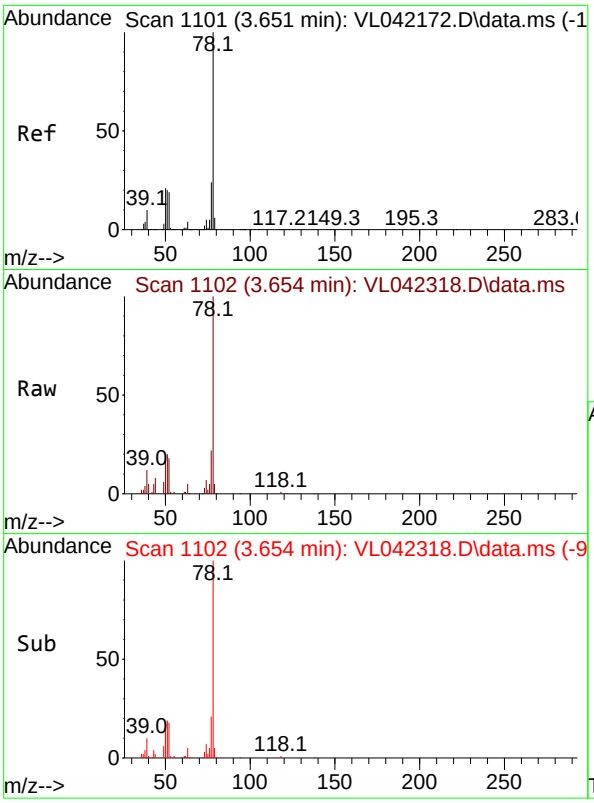


#35
Carbon Tetrachloride
Concen: 0.088 ppbv m
RT: 3.768 min Scan# 1137
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:117 Resp: 3050

Ion	Ratio	Lower	Upper
117	100		
119	54.8	76.2	114.2#
121	19.8	24.2	36.4#

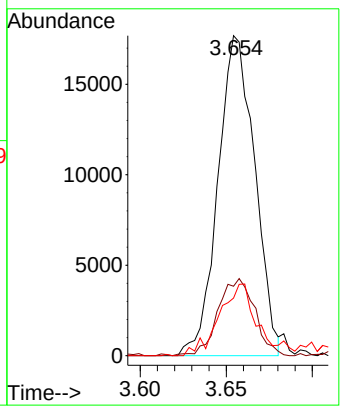




#36
Benzene
Concen: 0.601 ppbv
RT: 3.654 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 78 Resp: 2634

Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.1	28.7
50	18.0	16.6	24.8



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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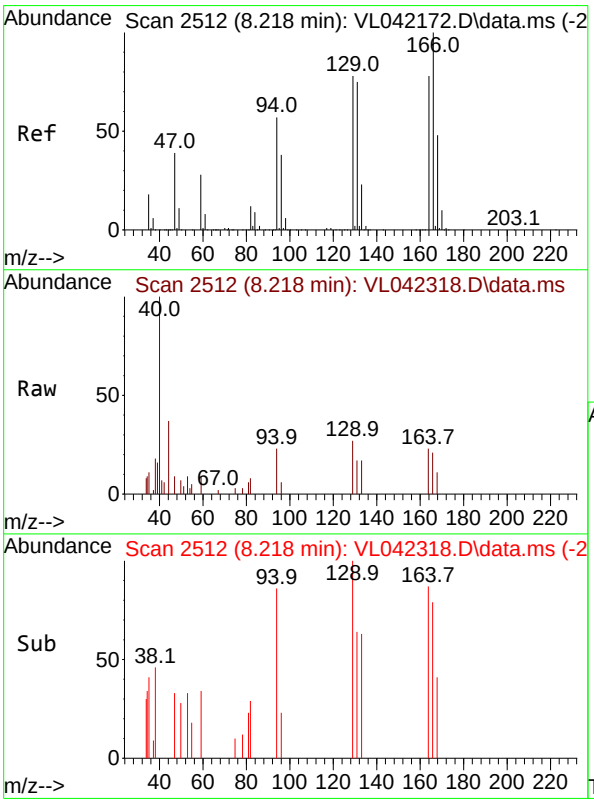
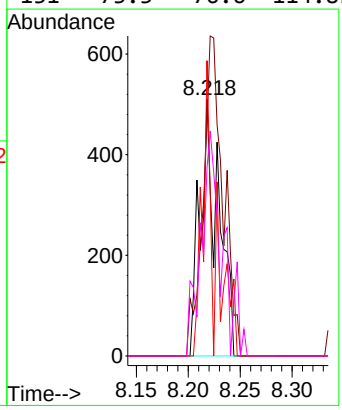
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

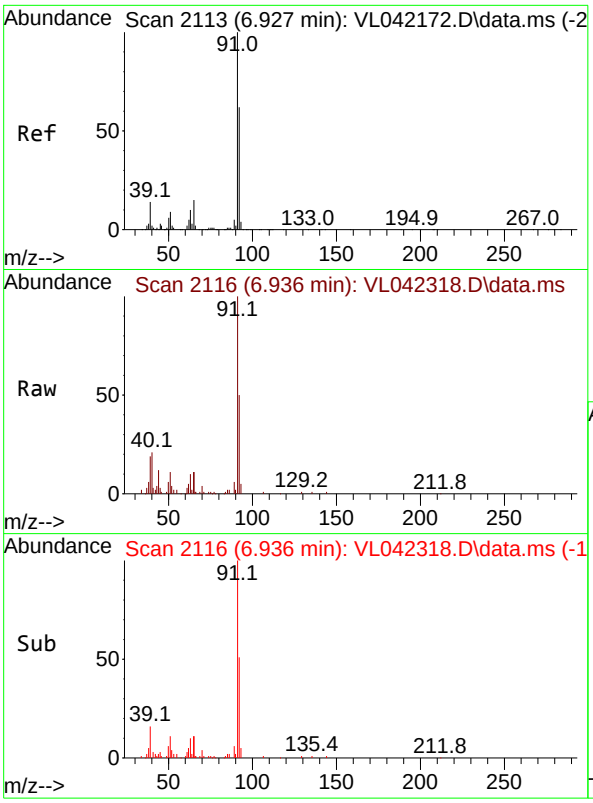


#52
Tetrachloroethene
Concen: 0.036 ppbv m
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:164 Resp: 626

Ion	Ratio	Lower	Upper
164	100		
166	90.8	102.5	153.7#
129	115.1	79.8	119.8
131	73.3	76.6	114.8#

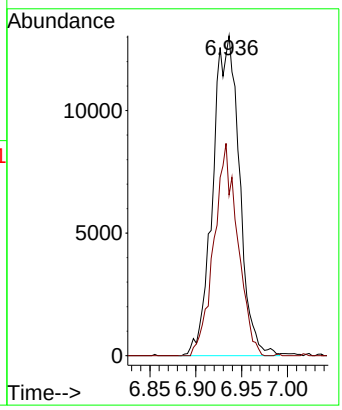




#53
Toluene
Concen: 0.507 ppbv m
RT: 6.936 min Scan# 21
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 2634

Ion	Ratio	Lower	Upper
91	100		
92	59.0	48.4	72.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Manual Integrations
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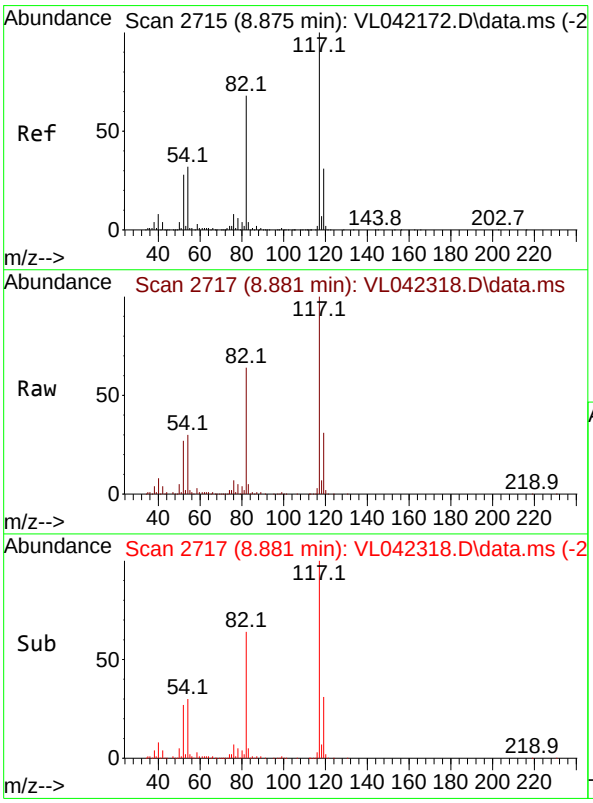
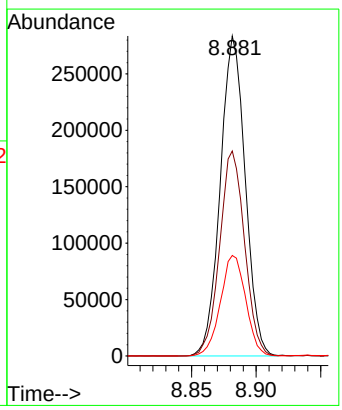
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

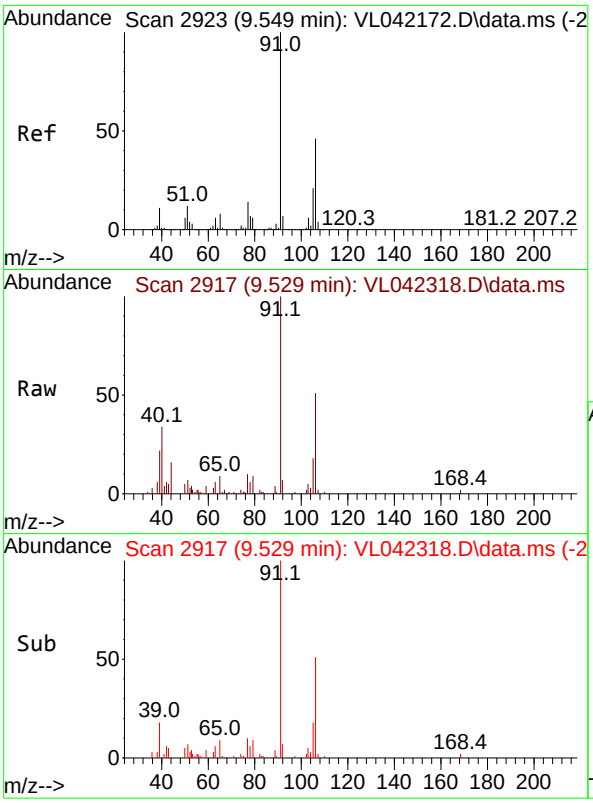


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:117 Resp: 380933

Ion	Ratio	Lower	Upper
117	100		
82	64.2	55.8	83.6
119	31.9	25.5	38.3

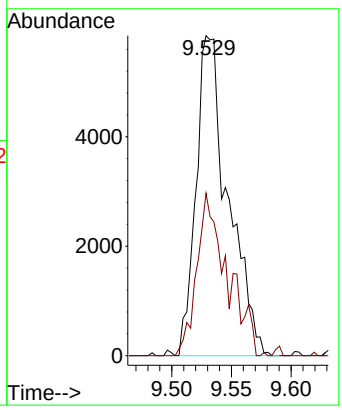




#59
m/p-Xylene
Concen: 0.202 ppbv m
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 1092

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

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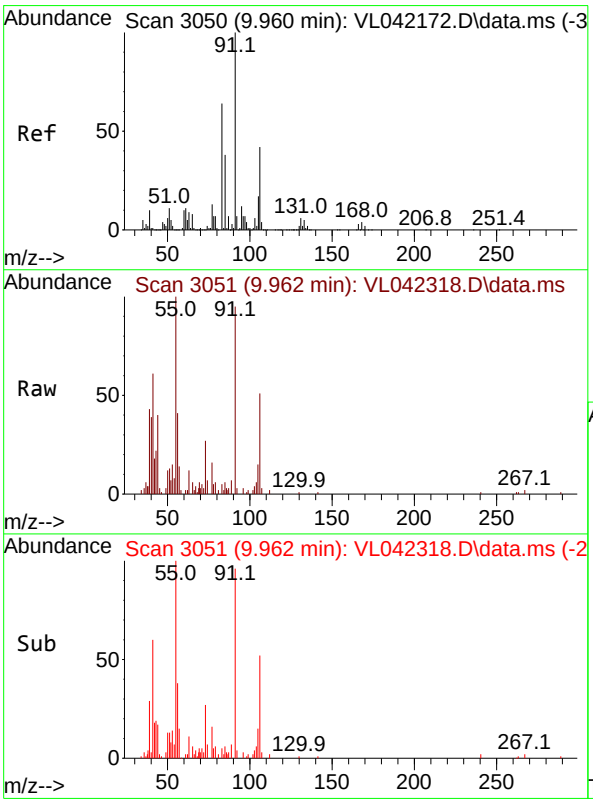
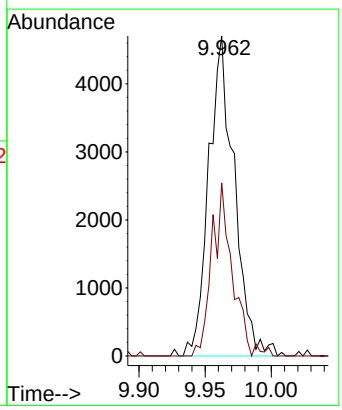
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025

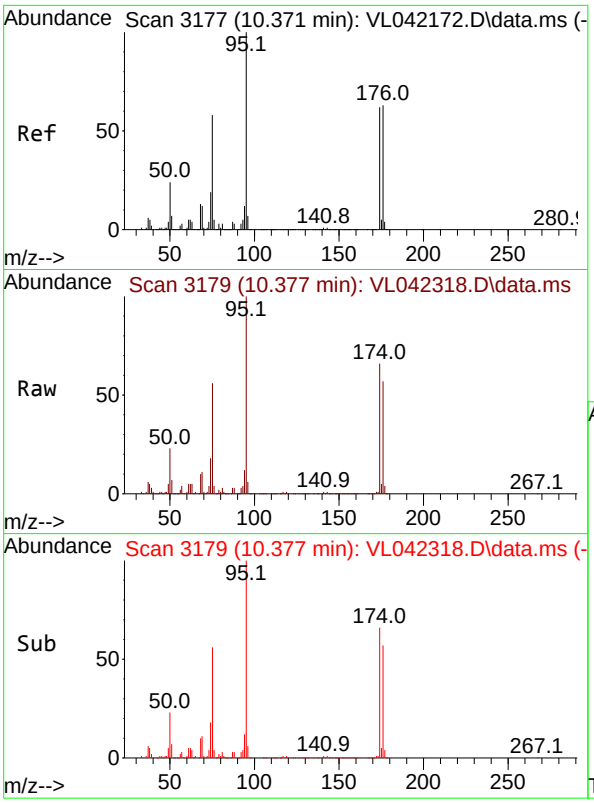


#60
o-Xylene
Concen: 0.117 ppbv m
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 6311

Ion	Ratio	Lower	Upper
91	100		
106	43.6	20.8	62.5

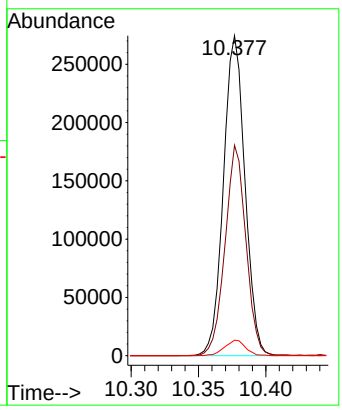




#68
1-Bromo-4-Fluorobenzene
Concen: 9.741 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 95 Resp: 30473

Ion	Ratio	Lower	Upper
95	100		
174	63.9	50.6	76.0
175	4.8	3.8	5.6



Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

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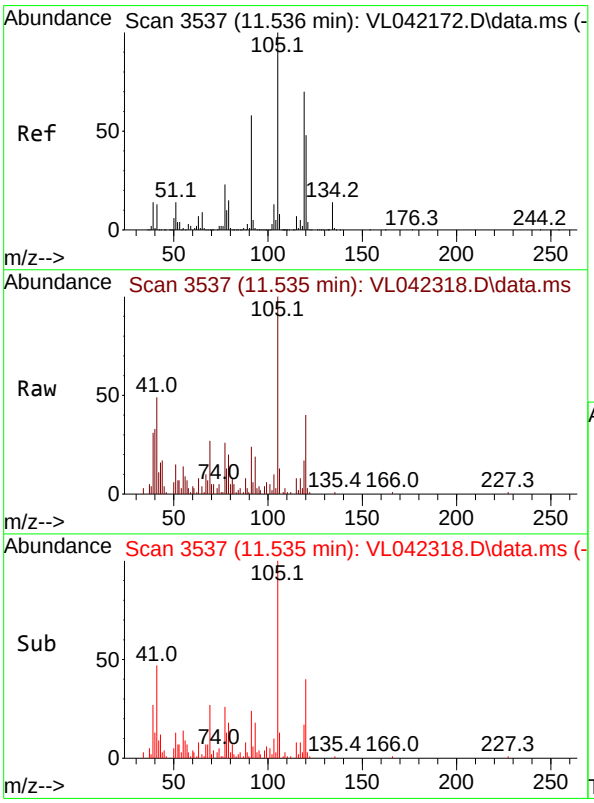
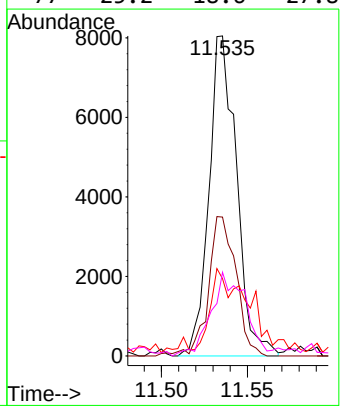
Reviewed By :Semsettin Yesilyurt 04/16/2025
Supervised By :Mahesh Dadoda 04/17/2025



#74
1,2,4-Trimethylbenzene
Concen: 0.132 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:105 Resp: 8971

Ion	Ratio	Lower	Upper
105	100		
120	43.4	38.6	58.0
91	21.9	46.2	69.2#
77	25.2	18.6	27.8



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

Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042172.D	m/p-Xylene	SAM	3/31/2025 11:24:55 AM	MMDadoda	4/3/2025 8:05:09 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	1,4-Dioxane	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	Ethanol	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC002	VL042173.D	m/p-Xylene	SAM	3/31/2025 11:25:00 AM	MMDadoda	4/3/2025 8:05:13 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	1,4-Dioxane	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	4-Methyl-2-Pentanone	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Ethanol	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	m/p-Xylene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Methyl Methacrylate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Propene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	t-1,3-Dichloropropene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	trans-1,2-Dichloroethene	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software
VSTDICC001	VL042174.D	Vinyl Acetate	SAM	3/31/2025 11:26:28 AM	MMDadoda	4/3/2025 8:05:22 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042175.D	1,1,2-Trichloroethane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	1,4-Dioxane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	cis-1,3-Dichloropropene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Cyclohexane	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	m/p-Xylene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Methyl Methacrylate	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Propene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Tetrahydrofuran	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.5	VL042175.D	Trichloroethene	SAM	3/31/2025 11:26:33 AM	MMDadoda	4/3/2025 8:05:37 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	1,2-Dibromoethane	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.1	VL042176.D	Carbon Tetrachloride	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl032725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.1	VL042176.D	Trichloroethene	SAM	3/31/2025 11:25:04 AM	MMDadoda	4/3/2025 8:05:45 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	1,1,1-Trichloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	1,1,2,2-Tetrachloroethane	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Carbon Tetrachloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Tetrachloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Trichloroethene	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC0.03	VL042177.D	Vinyl Chloride	SAM	3/31/2025 11:26:39 AM	MMDadoda	4/3/2025 8:05:59 AM	Peak Integrated by Software
VSTDICC015	VL042178.D	m/p-Xylene	SAM	3/31/2025 11:25:14 AM	MMDadoda	4/3/2025 8:06:09 AM	Peak Integrated by Software
VSTDICV010	VL042179.D	m/p-Xylene	SAM	3/31/2025 11:28:50 AM	MMDadoda	4/3/2025 8:06:14 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl040925	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042286.D	m/p-Xylene	SAM	4/10/2025 12:04:04 PM	MMDadoda	4/10/2025 3:39:20 PM	Peak Integrated by Software
VL0409ABS02	VL042289.D	m/p-Xylene	SAM	4/10/2025 12:04:58 PM	MMDadoda	4/10/2025 7:20:47 PM	Peak Integrated by Software
Q1665-01	VL042290.D	Benzene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01	VL042290.D	Carbon Tetrachloride	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01	VL042290.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01	VL042290.D	Heptane	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01	VL042290.D	m/p-Xylene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01	VL042290.D	Toluene	SAM	4/10/2025 12:05:04 PM	MMDadoda	4/10/2025 7:20:50 PM	Peak Integrated by Software
Q1665-01DUP	VL042291.D	Carbon Tetrachloride	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software
Q1665-01DUP	VL042291.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software
Q1665-01DUP	VL042291.D	Heptane	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software
Q1665-01DUP	VL042291.D	m/p-Xylene	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software
Q1665-01DUP	VL042291.D	Trichlorofluoromethane	SAM	4/10/2025 12:05:09 PM	MMDadoda	4/10/2025 7:20:53 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl040925	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-04	VL042292.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software
Q1665-04	VL042292.D	m/p-Xylene	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software
Q1665-04	VL042292.D	Toluene	SAM	4/10/2025 12:05:14 PM	MMDadoda	4/10/2025 7:20:55 PM	Peak Integrated by Software
Q1665-06	VL042293.D	Carbon Tetrachloride	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software
Q1665-06	VL042293.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software
Q1665-06	VL042293.D	Heptane	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software
Q1665-06	VL042293.D	Propene	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software
Q1665-06	VL042293.D	Tetrahydrofuran	SAM	4/10/2025 12:04:30 PM	MMDadoda	4/10/2025 7:20:58 PM	Peak Integrated by Software
Q1665-08	VL042294.D	Benzene	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software
Q1665-08	VL042294.D	Carbon Tetrachloride	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software
Q1665-08	VL042294.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software
Q1665-08	VL042294.D	Propene	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software
Q1665-08	VL042294.D	tert-Butyl alcohol	SAM	4/10/2025 12:04:43 PM	MMDadoda	4/10/2025 7:21:00 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl040925	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-09	VL042295.D	Carbon Tetrachloride	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software
Q1665-09	VL042295.D	Chlorodifluoromethane	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software
Q1665-09	VL042295.D	Heptane	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software
Q1665-09	VL042295.D	m/p-Xylene	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software
Q1665-09	VL042295.D	Propene	SAM	4/10/2025 12:04:26 PM	MMDadoda	4/10/2025 7:21:01 PM	Peak Integrated by Software
Q1665-20	VL042296.D	Chlorobenzene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software
Q1665-20	VL042296.D	Chlorodifluoromethane	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software
Q1665-20	VL042296.D	Heptane	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software
Q1665-20	VL042296.D	m/p-Xylene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software
Q1665-20	VL042296.D	Propene	SAM	4/10/2025 12:05:20 PM	MMDadoda	4/10/2025 7:21:06 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VL041125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042312.D	m/p-Xylene	SAM	4/16/2025 9:17:16 PM	MMDadoda	4/17/2025 1:40:05 PM	Peak Integrated by Software
VL0411ABS01	VL042314.D	m/p-Xylene	SAM	4/16/2025 9:17:26 PM	MMDadoda	4/17/2025 1:40:08 PM	Peak Integrated by Software
Q1665-03	VL042317.D	Carbon Tetrachloride	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software
Q1665-03	VL042317.D	Heptane	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software
Q1665-03	VL042317.D	m/p-Xylene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software
Q1665-03	VL042317.D	Propene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software
Q1665-03	VL042317.D	Tetrachloroethene	SAM	4/16/2025 9:17:31 PM	MMDadoda	4/17/2025 1:40:15 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	Carbon Tetrachloride	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	Heptane	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	m/p-Xylene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	o-Xylene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	Propene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	tert-Butyl alcohol	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	VL041125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-03DUP	VL042318.D	Tetrachloroethene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-03DUP	VL042318.D	Toluene	SAM	4/16/2025 9:17:45 PM	MMDadoda	4/17/2025 1:40:17 PM	Peak Integrated by Software
Q1665-10	VL042319.D	2,2,4-Trimethylpentane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	Carbon Tetrachloride	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	Chlorodifluoromethane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	Heptane	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	m/p-Xylene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	Propene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-10	VL042319.D	Toluene	SAM	4/16/2025 9:18:13 PM	MMDadoda	4/17/2025 1:40:19 PM	Peak Integrated by Software
Q1665-11	VL042320.D	4-Methyl-2-Pentanone	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software
Q1665-11	VL042320.D	Carbon Tetrachloride	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software
Q1665-11	VL042320.D	m/p-Xylene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software
Q1665-11	VL042320.D	Propene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software

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Sequence:	VL041125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-11	VL042320.D	tert-Butyl alcohol	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software
Q1665-11	VL042320.D	Toluene	SAM	4/16/2025 9:18:07 PM	MMDadoda	4/17/2025 1:40:21 PM	Peak Integrated by Software
Q1665-18	VL042321.D	4-Methyl-2-Pentanone	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	Carbon Tetrachloride	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	Chlorodifluoromethane	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	Heptane	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	m/p-Xylene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	o-Xylene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	Propene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	tert-Butyl alcohol	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-18	VL042321.D	Tetrachloroethene	SAM	4/16/2025 9:18:36 PM	MMDadoda	4/17/2025 1:40:23 PM	Peak Integrated by Software
Q1665-10DL	VL042323.D	Propene	SAM	4/16/2025 9:18:02 PM	MMDadoda	4/17/2025 1:40:25 PM	Peak Integrated by Software
Q1665-11DL	VL042324.D	Chloroform	SAM	4/16/2025 9:17:57 PM	MMDadoda	4/17/2025 1:40:26 PM	Peak Integrated by Software

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Sequence:	VL041125	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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Manual Integration Report

Sequence:	vl041525	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042326.D	m/p-Xylene	SAM	4/16/2025 2:13:04 PM	MMDadoda	4/16/2025 3:47:21 PM	Peak Integrated by Software
VL0415ABS01	VL042328.D	m/p-Xylene	SAM	4/16/2025 2:13:09 PM	MMDadoda	4/16/2025 3:47:23 PM	Peak Integrated by Software
Q1665-10DL2	VL042332.D	Propene	SAM	4/16/2025 2:13:14 PM	MMDadoda	4/16/2025 3:47:25 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl041725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICCC010	VL042349.D	m/p-Xylene	SAM	4/18/2025 4:19:07 PM	MMDadoda	4/18/2025 10:45:20 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	1,4-Dioxane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	Ethanol	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	Heptane	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	m/p-Xylene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC002	VL042350.D	Trichloroethene	SAM	4/18/2025 4:19:12 PM	MMDadoda	4/18/2025 10:45:17 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	1,3-Butadiene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	1,4-Dioxane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	Cyclohexane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software

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Sequence:	vl041725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC001	VL042351.D	Ethanol	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	Heptane	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	m/p-Xylene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	Methyl Methacrylate	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC001	VL042351.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:19:17 PM	MMDadoda	4/18/2025 10:45:15 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	1,1,2-Trichloroethane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	1,2-Dichloropropane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	1,4-Dioxane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	4-Methyl-2-Pentanone	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	Chlorobenzene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	cis-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	Ethanol	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	Heptane	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software

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Sequence:	vl041725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.5	VL042352.D	m/p-Xylene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	Methyl Methacrylate	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	t-1,3-Dichloropropene	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.5	VL042352.D	Tetrahydrofuran	SAM	4/18/2025 4:20:33 PM	MMDadoda	4/18/2025 10:45:07 PM	Peak Integrated by Software
VSTDICC0.1	VL042353.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software
VSTDICC0.1	VL042353.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software
VSTDICC0.1	VL042353.D	1,2-Dibromoethane	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software
VSTDICC0.1	VL042353.D	Tetrachloroethene	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software
VSTDICC0.1	VL042353.D	Trichloroethene	SAM	4/18/2025 4:20:37 PM	MMDadoda	4/18/2025 10:45:04 PM	Peak Integrated by Software
VSTDICC0.03	VL042354.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software
VSTDICC0.03	VL042354.D	1,1,2,2-Tetrachloroethane	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software
VSTDICC0.03	VL042354.D	Carbon Tetrachloride	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software
VSTDICC0.03	VL042354.D	Tetrachloroethene	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software

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Sequence:	vl041725	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDICC0.03	VL042354.D	Trichloroethene	SAM	4/18/2025 4:19:24 PM	MMDadoda	4/18/2025 10:45:02 PM	Peak Integrated by Software
VSTDICC015	VL042355.D	m/p-Xylene	SAM	4/18/2025 4:21:35 PM	MMDadoda	4/18/2025 10:44:59 PM	Peak Integrated by Software
VSTDICV010	VL042356.D	m/p-Xylene	SAM	4/18/2025 4:20:42 PM	MMDadoda	4/18/2025 10:44:57 PM	Peak Integrated by Software
VL0417ABS01	VL042358.D	m/p-Xylene	SAM	4/18/2025 4:21:39 PM	MMDadoda	4/18/2025 10:44:55 PM	Peak Integrated by Software
Q1665-15	VL042359.D	1,1,1-Trichloroethane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	1,4-Dioxane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	2,2,4-Trimethylpentane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	2-Hexanone	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	4-Methyl-2-Pentanone	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	Benzene	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	Carbon Tetrachloride	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	Chlorodifluoromethane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15	VL042359.D	Heptane	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software

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Sequence:	vl041725	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-15	VL042359.D	Naphthalene,2-methyl-	SAM	4/18/2025 4:22:27 PM	MMDadoda	4/18/2025 10:44:53 PM	Peak Integrated by Software
Q1665-15DL	VL042360.D	2-Butanone	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software
Q1665-15DL	VL042360.D	Ethanol	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software
Q1665-15DL	VL042360.D	m/p-Xylene	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software
Q1665-15DL	VL042360.D	Toluene	SAM	4/18/2025 4:21:44 PM	MMDadoda	4/18/2025 10:44:49 PM	Peak Integrated by Software

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Sequence:	vl042825	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042416.D	m/p-Xylene	SAM	4/29/2025 9:26:25 AM	MMDadoda	4/30/2025 2:28:57 PM	Peak Integrated by Software
VL0428ABS01	VL042418.D	m/p-Xylene	SAM	4/29/2025 9:26:31 AM	MMDadoda	4/30/2025 2:29:13 PM	Peak Integrated by Software
Q1665-05	VL042419.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	4-Methyl-2-Pentanone	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Acetone	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Carbon Tetrachloride	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Chlorodifluoromethane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Cyclohexane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Heptane	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Propene	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-05	VL042419.D	Tetrachloroethene	SAM	4/29/2025 9:28:27 AM	MMDadoda	4/30/2025 2:29:21 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Acetone	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Benzene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042825	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-07	VL042420.D	Carbon Tetrachloride	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Chlorodifluoromethane	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Heptane	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	m/p-Xylene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Propene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Tetrachloroethene	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-07	VL042420.D	Tetrahydrofuran	SAM	4/29/2025 9:26:36 AM	MMDadoda	4/30/2025 2:29:25 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Benzene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Cyclohexane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Heptane	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	m/p-Xylene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042825	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-12	VL042421.D	n-propylbenzene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Propene	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-12	VL042421.D	Tetrahydrofuran	SAM	4/29/2025 9:27:26 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-16	VL042422.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Heptane	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Propene	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Styrene	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	tert-Butyl alcohol	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-16	VL042422.D	Tetrahydrofuran	SAM	4/29/2025 9:27:50 AM	MMDadoda	4/30/2025 2:29:28 PM	Peak Integrated by Software
Q1665-19	VL042423.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	2-Hexanone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042825	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-19	VL042423.D	4-Ethyltoluene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	4-Methyl-2-Pentanone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Acetone	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Cyclohexane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Heptane	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Propene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-19	VL042423.D	Tetrachloroethene	SAM	4/29/2025 9:27:01 AM	MMDadoda	4/30/2025 2:29:40 PM	Peak Integrated by Software
Q1665-21	VL042424.D	2,2,4-Trimethylpentane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-21	VL042424.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-21	VL042424.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-21	VL042424.D	Heptane	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software
Q1665-21	VL042424.D	Propene	SAM	4/29/2025 9:27:55 AM	MMDadoda	4/30/2025 2:30:38 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042825	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1665-22	VL042425.D	Acetone	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software
Q1665-22	VL042425.D	Carbon Tetrachloride	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software
Q1665-22	VL042425.D	Chlorodifluoromethane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software
Q1665-22	VL042425.D	Cyclohexane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software
Q1665-22	VL042425.D	Heptane	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software
Q1665-22	VL042425.D	tert-Butyl alcohol	SAM	4/29/2025 9:27:07 AM	MMDadoda	4/30/2025 2:29:43 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042925	Instrument	MSVOA_l

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
VSTDCCC010	VL042436.D	1,1,2-Trichloroethane	SAM	4/30/2025 7:49:08 AM	MMDadoda	4/30/2025 2:26:33 PM	Peak Integrated by Software
VSTDCCC010	VL042436.D	m/p-Xylene	SAM	4/30/2025 7:49:08 AM	MMDadoda	4/30/2025 2:26:33 PM	Peak Integrated by Software
VL0429ABS01	VL042438.D	m/p-Xylene	SAM	4/30/2025 7:49:14 AM	MMDadoda	4/30/2025 2:26:38 PM	Peak Integrated by Software
VL0429ABS01	VL042438.D	Methyl Methacrylate	SAM	4/30/2025 7:49:14 AM	MMDadoda	4/30/2025 2:26:38 PM	Peak Integrated by Software
Q1665-07DL	VL042451.D	2,2,4-Trimethylpentane	SAM	4/30/2025 7:52:06 AM	MMDadoda	4/30/2025 2:27:43 PM	Peak Integrated by Software
Q1665-07DL	VL042451.D	m/p-Xylene	SAM	4/30/2025 7:52:06 AM	MMDadoda	4/30/2025 2:27:43 PM	Peak Integrated by Software
Q1665-19DL	VL042452.D	2,2,4-Trimethylpentane	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software
Q1665-19DL	VL042452.D	m/p-Xylene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software
Q1665-19DL	VL042452.D	Propene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software
Q1665-19DL	VL042452.D	Toluene	SAM	4/30/2025 7:49:38 AM	MMDadoda	4/30/2025 2:27:50 PM	Peak Integrated by Software
Q1665-21DL	VL042453.D	m/p-Xylene	SAM	4/30/2025 7:52:12 AM	MMDadoda	4/30/2025 2:27:54 PM	Peak Integrated by Software
Q1665-21DL	VL042453.D	Propene	SAM	4/30/2025 7:52:12 AM	MMDadoda	4/30/2025 2:27:54 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	vl042925	Instrument	MSVOA_I

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042171.D	27 Mar 2025 07:44	SY/MD	Ok
2	VSTDICCC010	VL042172.D	27 Mar 2025 08:26	SY/MD	Ok,M
3	VSTDICC002	VL042173.D	27 Mar 2025 08:59	SY/MD	Ok,M
4	VSTDICC001	VL042174.D	27 Mar 2025 09:30	SY/MD	Ok,M
5	VSTDICC0.5	VL042175.D	27 Mar 2025 10:01	SY/MD	Ok,M
6	VSTDICC0.1	VL042176.D	27 Mar 2025 10:32	SY/MD	Ok,M
7	VSTDICC0.03	VL042177.D	27 Mar 2025 11:03	SY/MD	Ok,M
8	VSTDICC015	VL042178.D	27 Mar 2025 11:36	SY/MD	Ok,M
9	VSTDICV010	VL042179.D	27 Mar 2025 12:23	SY/MD	Ok,M
10	VL0327ABL01	VL042180.D	27 Mar 2025 13:50	SY/MD	Ok
11	VL0327ABS01	VL042181.D	27 Mar 2025 14:39	SY/MD	Ok,M
12	QC032625 CAN 10448	VL042182.D	27 Mar 2025 16:41	SY/MD	Ok
13	Q1649-01	VL042183.D	27 Mar 2025 17:13	SY/MD	Not Ok
14	Q1649-02	VL042184.D	27 Mar 2025 17:45	SY/MD	Not Ok
15	Q1669-01	VL042185.D	27 Mar 2025 18:22	SY/MD	Dilution
16	Q1669-02	VL042186.D	27 Mar 2025 18:59	SY/MD	Ok,M
17	Q1669-03	VL042187.D	27 Mar 2025 19:36	SY/MD	Ok,M
18	Q1669-04	VL042188.D	27 Mar 2025 20:12	SY/MD	Ok,M
19	Q1669-09	VL042189.D	27 Mar 2025 20:48	SY/MD	Ok,M
20	Q1669-09DUP	VL042190.D	27 Mar 2025 21:24	SY/MD	Ok,M
21	Q1669-05	VL042191.D	27 Mar 2025 21:57	SY/MD	Not Ok

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1669-07DL	VL042192.D	27 Mar 2025 22:29	SY/MD	Ok,M
23	Q1669-08	VL042193.D	27 Mar 2025 23:01	SY/MD	Not Ok
24	VIBLK	VL042194.D	27 Mar 2025 23:34	SY/MD	Ok
25	Q1669-01DL	VL042195.D	28 Mar 2025 00:06	SY/MD	Ok,M
26	Q1669-01DUP	VL042196.D	28 Mar 2025 00:44	SY/MD	Ok,M
27	Q1669-05	VL042197.D	28 Mar 2025 01:20	SY/MD	Ok,M
28	Q1669-07	VL042198.D	28 Mar 2025 01:57	SY/MD	Dilution
29	Q1669-08	VL042199.D	28 Mar 2025 02:33	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL040925

Review By	Semsettin Yesilyurt	Review On	4/10/2025 7:20:08 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/10/2025 7:21:16 PM		
SubDirectory	VL040925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042285.D	09 Apr 2025 09:38	SY/MD	Ok
2	VSTDCCC010	VL042286.D	09 Apr 2025 10:20	SY/MD	Ok,M
3	VL0409ABL01	VL042287.D	09 Apr 2025 11:03	SY/MD	Ok
4	VL0409ABS01	VL042288.D	09 Apr 2025 11:46	SY/MD	Not Ok
5	VL0409ABS02	VL042289.D	09 Apr 2025 12:31	SY/MD	Ok,M
6	Q1665-01	VL042290.D	09 Apr 2025 13:25	SY/MD	Ok,M
7	Q1665-01DUP	VL042291.D	09 Apr 2025 14:02	SY/MD	Ok,M
8	Q1665-04	VL042292.D	09 Apr 2025 14:36	SY/MD	Ok,M
9	Q1665-06	VL042293.D	09 Apr 2025 15:15	SY/MD	Ok,M
10	Q1665-08	VL042294.D	09 Apr 2025 15:50	SY/MD	Ok,M
11	Q1665-09	VL042295.D	09 Apr 2025 16:23	SY/MD	Ok,M
12	Q1665-20	VL042296.D	09 Apr 2025 16:57	SY/MD	Ok,M
13	Q1757-02	VL042297.D	09 Apr 2025 17:31	SY/MD	Ok,M
14	Q1757-01	VL042298.D	10 Apr 2025 07:54	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041125

Review By	Semsettin Yesilyurt	Review On	4/16/2025 9:18:47 PM				
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:40:37 PM				
SubDirectory	VL041125	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042311.D	11 Apr 2025 08:18	SY/MD	Ok
2	VSTDCCC010	VL042312.D	11 Apr 2025 09:50	SY/MD	Ok,M
3	VL0411ABL01	VL042313.D	11 Apr 2025 10:36	SY/MD	Ok
4	VL0411ABS01	VL042314.D	11 Apr 2025 11:23	SY/MD	Ok,M
5	QC041025CAN 10596	VL042315.D	11 Apr 2025 12:08	SY/MD	Not Ok
6	QC041025CAN 10596	VL042316.D	11 Apr 2025 12:40	SY/MD	Ok
7	Q1665-03	VL042317.D	11 Apr 2025 13:15	SY/MD	Dilution
8	Q1665-03DUP	VL042318.D	11 Apr 2025 13:52	SY/MD	Ok,M
9	Q1665-10	VL042319.D	11 Apr 2025 14:27	SY/MD	Dilution
10	Q1665-11	VL042320.D	11 Apr 2025 15:01	SY/MD	Dilution
11	Q1665-18	VL042321.D	11 Apr 2025 15:36	SY/MD	Dilution
12	Q1665-03DL	VL042322.D	11 Apr 2025 16:08	SY/MD	Ok
13	Q1665-10DL	VL042323.D	11 Apr 2025 16:39	SY/MD	Dilution
14	Q1665-11DL	VL042324.D	11 Apr 2025 17:10	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041525

Review By	Semsettin Yesilyurt	Review On	4/16/2025 2:19:24 PM				
Supervise By	Mahesh Dadoda	Supervise On	4/16/2025 3:47:46 PM				
SubDirectory	VL041525	HP Acquire Method	TO15AIR.M		HP Processing Method	VL032725AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042325.D	15 Apr 2025 07:45	SY/MD	Ok
2	VSTDCCC010	VL042326.D	15 Apr 2025 11:30	SY/MD	Ok,M
3	VL0415ABL01	VL042327.D	15 Apr 2025 12:12	SY/MD	Ok
4	VL0415ABS01	VL042328.D	15 Apr 2025 12:54	SY/MD	Ok,M
5	QC041425 CAN 10401	VL042329.D	15 Apr 2025 13:26	SY/MD	Not Ok
6	QC041425 CAN 10401	VL042330.D	15 Apr 2025 13:57	SY/MD	Ok
7	Q1665-18DL	VL042331.D	15 Apr 2025 14:29	SY/MD	Ok
8	Q1665-10DL2	VL042332.D	15 Apr 2025 15:01	SY/MD	Ok,M
9	Q1802-02	VL042333.D	15 Apr 2025 15:35	SY/MD	Ok,M
10	Q1802-02DUP	VL042334.D	15 Apr 2025 16:08	SY/MD	Ok,M
11	Q1802-03	VL042335.D	15 Apr 2025 16:42	SY/MD	Ok,M
12	Q1802-01	VL042336.D	15 Apr 2025 17:14	SY/MD	Dilution
13	Q1802-01DL	VL042337.D	15 Apr 2025 17:46	SY/MD	Not Ok
14	Q1802-01DL	VL042338.D	15 Apr 2025 18:21	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041725

Review By	Semsettin Yesilyurt	Review On	4/18/2025 4:23:02 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/18/2025 10:46:12 PM		
SubDirectory	VL041725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2590
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2590
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042348.D	17 Apr 2025 07:50	SY/MD	Ok
2	VSTDICCC010	VL042349.D	17 Apr 2025 09:44	SY/MD	Ok,M
3	VSTDICC002	VL042350.D	17 Apr 2025 10:17	SY/MD	Ok,M
4	VSTDICC001	VL042351.D	17 Apr 2025 10:48	SY/MD	Ok,M
5	VSTDICC0.5	VL042352.D	17 Apr 2025 11:19	SY/MD	Ok,M
6	VSTDICC0.1	VL042353.D	17 Apr 2025 11:50	SY/MD	Ok,M
7	VSTDICC0.03	VL042354.D	17 Apr 2025 12:22	SY/MD	Ok,M
8	VSTDICC015	VL042355.D	17 Apr 2025 12:54	SY/MD	Ok,M
9	VSTDICV010	VL042356.D	17 Apr 2025 13:43	SY/MD	Ok,M
10	VL0417ABL01	VL042357.D	17 Apr 2025 14:23	SY/MD	Ok
11	VL0417ABS01	VL042358.D	17 Apr 2025 15:39	SY/MD	Ok,M
12	Q1665-15	VL042359.D	17 Apr 2025 16:12	SY/MD	Dilution
13	Q1665-15DL	VL042360.D	17 Apr 2025 16:44	SY/MD	Ok,M
14	Q1668-01	VL042361.D	17 Apr 2025 17:17	SY/MD	Dilution
15	Q1668-01DUP	VL042362.D	17 Apr 2025 17:51	SY/MD	Ok,M
16	Q1668-03	VL042363.D	17 Apr 2025 18:24	SY/MD	Dilution
17	Q1668-04	VL042364.D	17 Apr 2025 18:58	SY/MD	Ok,M
18	Q1668-02	VL042365.D	17 Apr 2025 19:31	SY/MD	Ok,M
19	Q1726-01	VL042366.D	17 Apr 2025 20:05	SY/MD	Dilution
20	Q1726-02	VL042367.D	17 Apr 2025 20:38	SY/MD	Dilution
21	Q1726-03	VL042368.D	17 Apr 2025 21:12	SY/MD	Dilution

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Daily Analysis Runlog For Sequence/QCBatch ID # VL041725

Review By	Semsettin Yesilyurt	Review On	4/18/2025 4:23:02 PM				
Supervise By	Mahesh Dadoda	Supervise On	4/18/2025 10:46:12 PM				
SubDirectory	VL041725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2590
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2590
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1726-04	VL042369.D	17 Apr 2025 21:45	SY/MD	Dilution
23	Q1726-05	VL042370.D	17 Apr 2025 22:19	SY/MD	Dilution
24	Q1726-06	VL042371.D	17 Apr 2025 22:52	SY/MD	Dilution
25	Q1726-07	VL042372.D	17 Apr 2025 23:26	SY/MD	Dilution
26	Q1726-07DL	VL042373.D	17 Apr 2025 23:57	SY/MD	Dilution
27	Q1668-01DL	VL042374.D	18 Apr 2025 00:28	SY/MD	Ok,M
28	Q1668-03DL	VL042375.D	18 Apr 2025 00:59	SY/MD	Ok,M
29	Q1726-01DL	VL042376.D	18 Apr 2025 01:30	SY/MD	Dilution
30	Q1726-02DL	VL042377.D	18 Apr 2025 02:01	SY/MD	Dilution
31	Q1726-03DL	VL042378.D	18 Apr 2025 02:32	SY/MD	Dilution
32	Q1726-04DL	VL042379.D	18 Apr 2025 03:03	SY/MD	Dilution
33	Q1726-05DL	VL042380.D	18 Apr 2025 03:34	SY/MD	Dilution
34	Q1726-06DL	VL042381.D	18 Apr 2025 04:05	SY/MD	Dilution

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042825

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:24:11 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:30:41 PM		
SubDirectory	VL042825	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042415.D	28 Apr 2025 07:59	SY/MD	Ok
2	VSTDCCC010	VL042416.D	28 Apr 2025 08:44	SY/MD	Ok,M
3	VL0428ABL01	VL042417.D	28 Apr 2025 09:27	SY/MD	Ok
4	VL0428ABS01	VL042418.D	28 Apr 2025 10:10	SY/MD	Ok,M
5	Q1665-05	VL042419.D	28 Apr 2025 10:59	SY/MD	Ok,M
6	Q1665-07	VL042420.D	28 Apr 2025 11:33	SY/MD	Dilution
7	Q1665-12	VL042421.D	28 Apr 2025 12:17	SY/MD	Ok,M
8	Q1665-16	VL042422.D	28 Apr 2025 12:51	SY/MD	Ok,M
9	Q1665-19	VL042423.D	28 Apr 2025 13:26	SY/MD	Dilution
10	Q1665-21	VL042424.D	28 Apr 2025 14:00	SY/MD	Dilution
11	Q1665-22	VL042425.D	28 Apr 2025 14:34	SY/MD	Ok,M
12	Q1880-02	VL042426.D	28 Apr 2025 15:08	SY/MD	Ok,M
13	Q1880-03	VL042427.D	28 Apr 2025 15:42	SY/MD	Ok,M
14	Q1880-08	VL042428.D	28 Apr 2025 16:16	SY/MD	Ok,M
15	Q1880-10	VL042429.D	28 Apr 2025 16:50	SY/MD	Ok,M
16	Q1880-10DUP	VL042430.D	28 Apr 2025 17:26	SY/MD	Ok,M
17	Q1880-01	VL042431.D	28 Apr 2025 18:00	SY/MD	Dilution
18	Q1880-06	VL042432.D	28 Apr 2025 18:35	SY/MD	Ok,M
19	Q1880-09	VL042433.D	28 Apr 2025 19:08	SY/MD	Ok,M
20	Q1880-04	VL042434.D	28 Apr 2025 19:41	SY/MD	Not Ok

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042925

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:23:53 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:28:33 PM		
SubDirectory	VL042925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042435.D	29 Apr 2025 07:55	SY/MD	Ok
2	VSTDCCC010	VL042436.D	29 Apr 2025 08:39	SY/MD	Ok,M
3	VL0429ABL01	VL042437.D	29 Apr 2025 09:25	SY/MD	Ok
4	VL0429ABS01	VL042438.D	29 Apr 2025 10:08	SY/MD	Ok,M
5	Q1880-04	VL042439.D	29 Apr 2025 10:59	SY/MD	Ok,M
6	Q1880-05DL	VL042440.D	29 Apr 2025 11:30	SY/MD	Not Ok
7	Q1880-07DL	VL042441.D	29 Apr 2025 12:02	SY/MD	Ok,M
8	Q1880-11DL	VL042442.D	29 Apr 2025 12:33	SY/MD	Not Ok
9	Q1908-01	VL042443.D	29 Apr 2025 13:11	SY/MD	Ok,M
10	Q1908-02	VL042444.D	29 Apr 2025 13:45	SY/MD	Not Ok
11	Q1908-03	VL042445.D	29 Apr 2025 14:19	SY/MD	Ok,M
12	Q1908-03DL	VL042446.D	29 Apr 2025 14:51	SY/MD	Not Ok
13	Q1880-05	VL042447.D	29 Apr 2025 15:24	SY/MD	Ok,M
14	Q1880-07	VL042448.D	29 Apr 2025 15:58	SY/MD	Dilution
15	Q1880-11	VL042449.D	29 Apr 2025 16:32	SY/MD	Ok,M
16	Q1880-01DL	VL042450.D	29 Apr 2025 17:04	SY/MD	Ok
17	Q1665-07DL	VL042451.D	29 Apr 2025 17:37	SY/MD	Ok,M
18	Q1665-19DL	VL042452.D	29 Apr 2025 18:09	SY/MD	Ok,M
19	Q1665-21DL	VL042453.D	29 Apr 2025 18:42	SY/MD	Ok,M
20	Q1908-01DUP	VL042454.D	29 Apr 2025 19:57	SY/MD	Ok,M
21	Q1908-02DL	VL042455.D	29 Apr 2025 20:30	SY/MD	Not Ok

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Daily Analysis Runlog For Sequence/QCBatch ID # VL042925

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:23:53 PM				
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:28:33 PM				
SubDirectory	VL042925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	Q1908-02	VL042456.D	29 Apr 2025 21:58	SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042171.D	27 Mar 2025 07:44		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042172.D	27 Mar 2025 08:26		SY/MD	Ok,M
3	VSTDICC002	VSTDICC002	VL042173.D	27 Mar 2025 08:59		SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042174.D	27 Mar 2025 09:30		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042175.D	27 Mar 2025 10:01		SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042176.D	27 Mar 2025 10:32		SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042177.D	27 Mar 2025 11:03		SY/MD	Ok,M
8	VSTDICC015	VSTDICC015	VL042178.D	27 Mar 2025 11:36		SY/MD	Ok,M
9	VSTDICV010	ICVVL032725	VL042179.D	27 Mar 2025 12:23		SY/MD	Ok,M
10	VL0327ABL01	VL0327ABL01	VL042180.D	27 Mar 2025 13:50		SY/MD	Ok
11	VL0327ABS01	VL0327ABS01	VL042181.D	27 Mar 2025 14:39		SY/MD	Ok,M
12	QC032625 CAN 10448	QC032625 CAN 10448	VL042182.D	27 Mar 2025 16:41		SY/MD	Ok
13	Q1649-01	SV1	VL042183.D	27 Mar 2025 17:13	rerun 4X,not required	SY/MD	Not Ok
14	Q1649-02	SV2	VL042184.D	27 Mar 2025 17:45	rerun 4X,not required	SY/MD	Not Ok
15	Q1669-01	IA-B9-3-3262025	VL042185.D	27 Mar 2025 18:22	Need 5x	SY/MD	Dilution
16	Q1669-02	IA-B9-2-3262025	VL042186.D	27 Mar 2025 18:59		SY/MD	Ok,M
17	Q1669-03	IA-B9-1-3262025	VL042187.D	27 Mar 2025 19:36		SY/MD	Ok,M
18	Q1669-04	AA-2-3252025	VL042188.D	27 Mar 2025 20:12		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL032725

Review By	Mahesh Dadoda	Review On	4/3/2025 8:14:07 AM		
Supervise By	Semsettin Yesilyurt	Supervise On	4/3/2025 8:45:16 AM		
SubDirectory	VL032725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2589
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2589
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1669-09	AA-3-3252025	VL042189.D	27 Mar 2025 20:48		SY/MD	Ok,M
20	Q1669-09DUP	AA-3-3252025DUP	VL042190.D	27 Mar 2025 21:24		SY/MD	Ok,M
21	Q1669-05	SSSG-B16-3-3262025	VL042191.D	27 Mar 2025 21:57	Need straight run	SY/MD	Not Ok
22	Q1669-07DL	SSSG-B16-1-3262025D	VL042192.D	27 Mar 2025 22:29		SY/MD	Ok,M
23	Q1669-08	SSSG-B16-2-3262025	VL042193.D	27 Mar 2025 23:01	Need straight run	SY/MD	Not Ok
24	VIBLK	VIBLK	VL042194.D	27 Mar 2025 23:34		SY/MD	Ok
25	Q1669-01DL	IA-B9-3-3262025DL	VL042195.D	28 Mar 2025 00:06		SY/MD	Ok,M
26	Q1669-01DUP	IA-B9-3-3262025DUP	VL042196.D	28 Mar 2025 00:44		SY/MD	Ok,M
27	Q1669-05	SSSG-B16-3-3262025	VL042197.D	28 Mar 2025 01:20		SY/MD	Ok,M
28	Q1669-07	SSSG-B16-1-3262025	VL042198.D	28 Mar 2025 01:57	Need 10X	SY/MD	Dilution
29	Q1669-08	SSSG-B16-2-3262025	VL042199.D	28 Mar 2025 02:33		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL040925

Review By	Semsettin Yesilyurt	Review On	4/10/2025 7:20:08 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/10/2025 7:21:16 PM		
SubDirectory	VL040925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042285.D	09 Apr 2025 09:38		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042286.D	09 Apr 2025 10:20		SY/MD	Ok,M
3	VL0409ABL01	VL0409ABL01	VL042287.D	09 Apr 2025 11:03		SY/MD	Ok
4	VL0409ABS01	VL0409ABS01	VL042288.D	09 Apr 2025 11:46	Recovery fail	SY/MD	Not Ok
5	VL0409ABS02	VL0409ABS02	VL042289.D	09 Apr 2025 12:31		SY/MD	Ok,M
6	Q1665-01	AA-DUP-1-3242025	VL042290.D	09 Apr 2025 13:25		SY/MD	Ok,M
7	Q1665-01DUP	AA-DUP-1-3242025DU	VL042291.D	09 Apr 2025 14:02		SY/MD	Ok,M
8	Q1665-04	AA-1-3242025	VL042292.D	09 Apr 2025 14:36		SY/MD	Ok,M
9	Q1665-06	IA-B9-1-3242025	VL042293.D	09 Apr 2025 15:15		SY/MD	Ok,M
10	Q1665-08	IA-DUP-2-3242025	VL042294.D	09 Apr 2025 15:50		SY/MD	Ok,M
11	Q1665-09	IA-B9-2-3242025	VL042295.D	09 Apr 2025 16:23		SY/MD	Ok,M
12	Q1665-20	IA-B9-3-3242025	VL042296.D	09 Apr 2025 16:57		SY/MD	Ok,M
13	Q1757-02	IA1	VL042297.D	09 Apr 2025 17:31		SY/MD	Ok,M
14	Q1757-01	SV1	VL042298.D	10 Apr 2025 07:54		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041125

Review By	Semsettin Yesilyurt	Review On	4/16/2025 9:18:47 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/17/2025 1:40:37 PM		
SubDirectory	VL041125	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042311.D	11 Apr 2025 08:18		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042312.D	11 Apr 2025 09:50		SY/MD	Ok,M
3	VL0411ABL01	VL0411ABL01	VL042313.D	11 Apr 2025 10:36		SY/MD	Ok
4	VL0411ABS01	VL0411ABS01	VL042314.D	11 Apr 2025 11:23		SY/MD	Ok,M
5	QC041025CAN 10596	QC041025CAN 10596	VL042315.D	11 Apr 2025 12:08	Contaminated	SY/MD	Not Ok
6	QC041025CAN 10596	QC041025CAN 10596	VL042316.D	11 Apr 2025 12:40		SY/MD	Ok
7	Q1665-03	IA-B10-2-3242025	VL042317.D	11 Apr 2025 13:15	Need 10X	SY/MD	Dilution
8	Q1665-03DUP	IA-B10-2-3242025DUP	VL042318.D	11 Apr 2025 13:52		SY/MD	Ok,M
9	Q1665-10	IA-B10-4-3242025	VL042319.D	11 Apr 2025 14:27	Need 40X	SY/MD	Dilution
10	Q1665-11	IA-B10-1-3242025	VL042320.D	11 Apr 2025 15:01	Need 10X	SY/MD	Dilution
11	Q1665-18	IA-B10-3-3242025	VL042321.D	11 Apr 2025 15:36	Need 10X	SY/MD	Dilution
12	Q1665-03DL	IA-B10-2-3242025DL	VL042322.D	11 Apr 2025 16:08		SY/MD	Ok
13	Q1665-10DL	IA-B10-4-3242025DL	VL042323.D	11 Apr 2025 16:39	Need 100X	SY/MD	Dilution
14	Q1665-11DL	IA-B10-1-3242025DL	VL042324.D	11 Apr 2025 17:10		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041525

Review By	Semsettin Yesilyurt	Review On	4/16/2025 2:19:24 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/16/2025 3:47:46 PM		
SubDirectory	VL041525	HP Acquire Method	TO15AIR.M	HP Processing Method	VL032725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2591
Initial Calibration Stds	AP2593,AP2595,AP2596
CCC	AP2593
Internal Standard/PEM	AP2591
ICV/I.BLK	AP2594
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042325.D	15 Apr 2025 07:45		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042326.D	15 Apr 2025 11:30		SY/MD	Ok,M
3	VL0415ABL01	VL0415ABL01	VL042327.D	15 Apr 2025 12:12		SY/MD	Ok
4	VL0415ABS01	VL0415ABS01	VL042328.D	15 Apr 2025 12:54		SY/MD	Ok,M
5	QC041425 CAN 10401	QC041425 CAN 10401	VL042329.D	15 Apr 2025 13:26	carryover	SY/MD	Not Ok
6	QC041425 CAN 10401	QC041425 CAN 10401	VL042330.D	15 Apr 2025 13:57		SY/MD	Ok
7	Q1665-18DL	IA-B10-3-3242025DL	VL042331.D	15 Apr 2025 14:29		SY/MD	Ok
8	Q1665-10DL2	IA-B10-4-3242025DL2	VL042332.D	15 Apr 2025 15:01		SY/MD	Ok,M
9	Q1802-02	IA1	VL042333.D	15 Apr 2025 15:35		SY/MD	Ok,M
10	Q1802-02DUP	IA1DUP	VL042334.D	15 Apr 2025 16:08		SY/MD	Ok,M
11	Q1802-03	OA1	VL042335.D	15 Apr 2025 16:42		SY/MD	Ok,M
12	Q1802-01	SV1	VL042336.D	15 Apr 2025 17:14	Need 40X	SY/MD	Dilution
13	Q1802-01DL	SV1DL	VL042337.D	15 Apr 2025 17:46	Need further dilution	SY/MD	Not Ok
14	Q1802-01DL	SV1DL	VL042338.D	15 Apr 2025 18:21		SY/MD	Ok,M

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041725

Review By	Semsettin Yesilyurt	Review On	4/18/2025 4:23:02 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/18/2025 10:46:12 PM		
SubDirectory	VL041725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2590
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2590
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042348.D	17 Apr 2025 07:50		SY/MD	Ok
2	VSTDICCC010	VSTDICCC010	VL042349.D	17 Apr 2025 09:44		SY/MD	Ok,M
3	VSTDICC002	VSTDICC002	VL042350.D	17 Apr 2025 10:17		SY/MD	Ok,M
4	VSTDICC001	VSTDICC001	VL042351.D	17 Apr 2025 10:48		SY/MD	Ok,M
5	VSTDICC0.5	VSTDICC0.5	VL042352.D	17 Apr 2025 11:19		SY/MD	Ok,M
6	VSTDICC0.1	VSTDICC0.1	VL042353.D	17 Apr 2025 11:50		SY/MD	Ok,M
7	VSTDICC0.03	VSTDICC0.03	VL042354.D	17 Apr 2025 12:22		SY/MD	Ok,M
8	VSTDICC015	VSTDICC015	VL042355.D	17 Apr 2025 12:54		SY/MD	Ok,M
9	VSTDICV010	ICVVL041725	VL042356.D	17 Apr 2025 13:43		SY/MD	Ok,M
10	VL0417ABL01	VL0417ABL01	VL042357.D	17 Apr 2025 14:23		SY/MD	Ok
11	VL0417ABS01	VL0417ABS01	VL042358.D	17 Apr 2025 15:39		SY/MD	Ok,M
12	Q1665-15	IA-B14-1-3242025	VL042359.D	17 Apr 2025 16:12	Need 10X	SY/MD	Dilution
13	Q1665-15DL	IA-B14-1-3242025DL	VL042360.D	17 Apr 2025 16:44		SY/MD	Ok,M
14	Q1668-01	IA-B1-4-3252025	VL042361.D	17 Apr 2025 17:17	Need 4X	SY/MD	Dilution
15	Q1668-01DUP	IA-B1-4-3252025DUP	VL042362.D	17 Apr 2025 17:51		SY/MD	Ok,M
16	Q1668-03	IA-B1-3-3252025	VL042363.D	17 Apr 2025 18:24	Need 4X	SY/MD	Dilution
17	Q1668-04	IA-B1-1-3252025	VL042364.D	17 Apr 2025 18:58		SY/MD	Ok,M
18	Q1668-02	IA-B1-2-3252025	VL042365.D	17 Apr 2025 19:31		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL041725

Review By	Semsettin Yesilyurt	Review On	4/18/2025 4:23:02 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/18/2025 10:46:12 PM		
SubDirectory	VL041725	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2590
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2590
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1726-01	IA-DUP-3-03312025	VL042366.D	17 Apr 2025 20:05	Need 20X	SY/MD	Dilution
20	Q1726-02	IA-B2-6-03312025	VL042367.D	17 Apr 2025 20:38	Need 20X	SY/MD	Dilution
21	Q1726-03	IA-B2-2-03312025	VL042368.D	17 Apr 2025 21:12	Need 20X	SY/MD	Dilution
22	Q1726-04	IA-B2-5-03312025	VL042369.D	17 Apr 2025 21:45	Need 20X	SY/MD	Dilution
23	Q1726-05	IA-B2-1-03312025	VL042370.D	17 Apr 2025 22:19	Need 20X	SY/MD	Dilution
24	Q1726-06	IA-B2-3-03312025	VL042371.D	17 Apr 2025 22:52	Need 20X	SY/MD	Dilution
25	Q1726-07	IA-B2-4-03312025	VL042372.D	17 Apr 2025 23:26	Need 20X	SY/MD	Dilution
26	Q1726-07DL	IA-B2-4-03312025DL	VL042373.D	17 Apr 2025 23:57	Need 40X	SY/MD	Dilution
27	Q1668-01DL	IA-B1-4-3252025DL	VL042374.D	18 Apr 2025 00:28		SY/MD	Ok,M
28	Q1668-03DL	IA-B1-3-3252025DL	VL042375.D	18 Apr 2025 00:59		SY/MD	Ok,M
29	Q1726-01DL	IA-DUP-3-03312025DL	VL042376.D	18 Apr 2025 01:30	Need 40X	SY/MD	Dilution
30	Q1726-02DL	IA-B2-6-03312025DL	VL042377.D	18 Apr 2025 02:01	Need 40X	SY/MD	Dilution
31	Q1726-03DL	IA-B2-2-03312025DL	VL042378.D	18 Apr 2025 02:32	Need 100X	SY/MD	Dilution
32	Q1726-04DL	IA-B2-5-03312025DL	VL042379.D	18 Apr 2025 03:03	Need 40X	SY/MD	Dilution
33	Q1726-05DL	IA-B2-1-03312025DL	VL042380.D	18 Apr 2025 03:34	Need 100X	SY/MD	Dilution
34	Q1726-06DL	IA-B2-3-03312025DL	VL042381.D	18 Apr 2025 04:05	Need 100X	SY/MD	Dilution

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042825

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:24:11 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:30:41 PM		
SubDirectory	VL042825	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042415.D	28 Apr 2025 07:59		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042416.D	28 Apr 2025 08:44		SY/MD	Ok,M
3	VL0428ABL01	VL0428ABL01	VL042417.D	28 Apr 2025 09:27		SY/MD	Ok
4	VL0428ABS01	VL0428ABS01	VL042418.D	28 Apr 2025 10:10		SY/MD	Ok,M
5	Q1665-05	IA-B2-3-3242025	VL042419.D	28 Apr 2025 10:59		SY/MD	Ok,M
6	Q1665-07	IA-DUP-1-3242025	VL042420.D	28 Apr 2025 11:33	Need 4x	SY/MD	Dilution
7	Q1665-12	IA-B2-6-3242025	VL042421.D	28 Apr 2025 12:17		SY/MD	Ok,M
8	Q1665-16	IA-B2-5-3242025	VL042422.D	28 Apr 2025 12:51		SY/MD	Ok,M
9	Q1665-19	IA-B2-2-3242025	VL042423.D	28 Apr 2025 13:26	Need 4x	SY/MD	Dilution
10	Q1665-21	IA-B2-1-3242025	VL042424.D	28 Apr 2025 14:00	Need 4X	SY/MD	Dilution
11	Q1665-22	IA-B2-4-3242025	VL042425.D	28 Apr 2025 14:34		SY/MD	Ok,M
12	Q1880-02	EBR-P02-SL-IA02-2025	VL042426.D	28 Apr 2025 15:08		SY/MD	Ok,M
13	Q1880-03	EBR-P08-SC-IA01-202	VL042427.D	28 Apr 2025 15:42		SY/MD	Ok,M
14	Q1880-08	EBR-P02-SC-IA01-202	VL042428.D	28 Apr 2025 16:16		SY/MD	Ok,M
15	Q1880-10	EBR-P16-SC-AA01-202	VL042429.D	28 Apr 2025 16:50		SY/MD	Ok,M
16	Q1880-10DUP	EBR-P16-SC-AA01-202	VL042430.D	28 Apr 2025 17:26		SY/MD	Ok,M
17	Q1880-01	EBR-P11-SC-SS01-202	VL042431.D	28 Apr 2025 18:00	Need 20X	SY/MD	Dilution
18	Q1880-06	EBR-P02-SC-DUP01-2	VL042432.D	28 Apr 2025 18:35		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042825

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:24:11 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:30:41 PM		
SubDirectory	VL042825	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1880-09	EBR-P16-SC-AA-DUP-	VL042433.D	28 Apr 2025 19:08		SY/MD	Ok,M
20	Q1880-04	EBR-P08-SC-SS01-202	VL042434.D	28 Apr 2025 19:41	rerun straight	SY/MD	Not Ok

M : Manual Integration

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042925

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:23:53 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:28:33 PM		
SubDirectory	VL042925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	BFB	BFB	VL042435.D	29 Apr 2025 07:55		SY/MD	Ok
2	VSTDCCC010	VSTDCCC010	VL042436.D	29 Apr 2025 08:39		SY/MD	Ok,M
3	VL0429ABL01	VL0429ABL01	VL042437.D	29 Apr 2025 09:25		SY/MD	Ok
4	VL0429ABS01	VL0429ABS01	VL042438.D	29 Apr 2025 10:08		SY/MD	Ok,M
5	Q1880-04	EBR-P08-SC-SS01-202	VL042439.D	29 Apr 2025 10:59		SY/MD	Ok,M
6	Q1880-05DL	EBR-SC-SS-DUP01-20	VL042440.D	29 Apr 2025 11:30	Need Straight Run	SY/MD	Not Ok
7	Q1880-07DL	EBR-P16-SC-SS01-202	VL042441.D	29 Apr 2025 12:02		SY/MD	Ok,M
8	Q1880-11DL	EBR-P02-SC-SS01-202	VL042442.D	29 Apr 2025 12:33	Need Straight Run	SY/MD	Not Ok
9	Q1908-01	B-1	VL042443.D	29 Apr 2025 13:11		SY/MD	Ok,M
10	Q1908-02	B-2	VL042444.D	29 Apr 2025 13:45	rerun confirmation,4X	SY/MD	Not Ok
11	Q1908-03	B-3	VL042445.D	29 Apr 2025 14:19		SY/MD	Ok,M
12	Q1908-03DL	B-3DL	VL042446.D	29 Apr 2025 14:51	Not Required	SY/MD	Not Ok
13	Q1880-05	EBR-SC-SS-DUP01-20	VL042447.D	29 Apr 2025 15:24		SY/MD	Ok,M
14	Q1880-07	EBR-P16-SC-SS01-202	VL042448.D	29 Apr 2025 15:58	Need 10X	SY/MD	Dilution
15	Q1880-11	EBR-P02-SC-SS01-202	VL042449.D	29 Apr 2025 16:32		SY/MD	Ok,M
16	Q1880-01DL	EBR-P11-SC-SS01-202	VL042450.D	29 Apr 2025 17:04		SY/MD	Ok
17	Q1665-07DL	IA-DUP-1-3242025DL	VL042451.D	29 Apr 2025 17:37		SY/MD	Ok,M
18	Q1665-19DL	IA-B2-2-3242025DL	VL042452.D	29 Apr 2025 18:09		SY/MD	Ok,M

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Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL042925

Review By	Semsettin Yesilyurt	Review On	4/30/2025 2:23:53 PM		
Supervise By	Mahesh Dadoda	Supervise On	4/30/2025 2:28:33 PM		
SubDirectory	VL042925	HP Acquire Method	TO15AIR.M	HP Processing Method	VL041725AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2602
Initial Calibration Stds	AP2598,AP2599,AP2600
CCC	AP2598
Internal Standard/PEM	AP2602
ICV/I.BLK	AP2601
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

19	Q1665-21DL	IA-B2-1-3242025DL	VL042453.D	29 Apr 2025 18:42		SY/MD	Ok,M
20	Q1908-01DUP	B-1DUP	VL042454.D	29 Apr 2025 19:57		SY/MD	Ok,M
21	Q1908-02DL	B-2DL	VL042455.D	29 Apr 2025 20:30	not required ,not match	SY/MD	Not Ok
22	Q1908-02	B-2	VL042456.D	29 Apr 2025 21:58		SY/MD	Ok,M

M : Manual Integration

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Prep Standard - Chemical Standard Summary

Order ID : Q1665

Test : TO-15

Prepbatch ID :

Sequence ID/Qc Batch ID: vl040925,VL041125,vl041525,vl041725,vl042825,vl042925,

Standard ID :
AP2590,AP2591,AP2593,AP2594,AP2595,AP2596,AP2598,AP2599,AP2600,AP2601,AP2602,

Chemical ID :
A1117,A1135,A1136,A1137,

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
47	Internal Standard/Surrogate Mix-80 ppbv	AP2590	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 2.40000psi of A1135 + 27.60000psi of A1117 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
47	Internal Standard/Surrogate Mix-80 ppbv	AP2591	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 2.40000psi of A1135 + 27.60000psi of A1117 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2593	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1136 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2594	03/21/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1137 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2397	TO-15 -2 PPBV CAL.MIX	AP2595	03/25/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 26.00000psi of A1117 + 4.00000psi of AP2593 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2668	0.5 PPBV CAL.MIX	AP2596	03/25/2025	04/21/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/03/2025

FROM 29.00000psi of A1117 + 1.00000psi of AP2593 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2598	04/16/2025	05/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/18/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1136 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2397	TO-15 -2 PPBV CAL.MIX	AP2599	04/16/2025	05/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/18/2025

FROM 26.00000psi of A1117 + 4.00000psi of AP2598 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2668	0.5 PPBV CAL.MIX	AP2600	04/16/2025	05/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/18/2025

FROM 29.00000psi of A1117 + 1.00000psi of AP2598 = Final Quantity: 30.000 psi

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
2396	TO-15 15 PPBV CAL MIX	AP2601	04/16/2025	05/17/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/18/2025

FROM 1455.00000SCCM of A1117 + 45.00000SCCM of A1137 = Final Quantity: 30.000 psi

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Air STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
47	Internal Standard/Surrogate Mix-80 ppbv	AP2602	04/18/2025	05/18/2025	Semsettin Yesilyurt	None	None	Mahesh Dadoda 04/22/2025

FROM 2.40000psi of A1135 + 27.60000psi of A1117 = Final Quantity: 30.000 psi

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
AIR LIQUIDE	365A-49 / AIR, Compressed	90402401186-01	04/01/2026	04/01/2022 / apatel	04/01/2022 / SAM	A1117

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TB500009-110 / TO-15 Internal Standard/Surrogate Standard	BC275465	07/16/2025	07/22/2024 / SAM	07/22/2024 / SAM	A1135

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene)	040424-003A	07/16/2025	07/25/2024 / SAM	07/22/2024 / SAM	A1136

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CUSTOMGAS Solutions	TO15-80-6R-07092 / TO-15 Modified (80 comp) in Nitrogen (addition of 2-methylnaphthalene)	040424-003B	07/16/2025	07/25/2024 / SAM	07/22/2024 / SAM	A1137

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

Certificate of Analysis

Customer:

Chem Tech
284 Sheffield Street
Mountainside, NJ 07092

Tel: (908) 789-8900

Cylinder Number: BC275465
Cylinder Size/CGA: 170/180SS
Fill Pressure: 1815 PSIA
Gas Volume: ~170 liters
Date of Mfg: 07/16/2024
Expiration Date: 07/16/2025

Ship To : Chem Tech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Bromochloromethane	1 ppm	1.014 ppm +/- 0.02 ppm	Gravimetric Master Gas
4-Bromofluorobenzene	1 ppm	1.008 ppm +/- 0.02 ppm	
Chlorobenzene-D5	1 ppm	0.993 ppm +/- 0.02 ppm	
1,4-Difluorbenzene	1 ppm	0.979 ppm +/- 0.02 ppm	
Nitrogen	balance	balance	

NOTES:

Blend Tolerance: +/- 10 %

Analytical Tolerance: +/- 5 %

Traceability: NIST by weight set. NIST Traceability No MT001810.
Internal Standards by analysis

Reactive Mixtures: Analyzed twice with required agreement between analyses of 2%.
Required wait time between analyses of >7 days.

Caution: Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

Signature:

QA Signature:

Date: 07/16/2024

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: BC917782
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 07/16/2024
Expiration Date: 07/16/2025
Lot Number: 040424-003A

Ship To : Chemtech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Acetone	500 ppb	517 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	534 ppb +/- 50 ppb	
Acrolein	500 ppb	545 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	539 ppb +/- 50 ppb	
Allyl chloride	500 ppb	509 ppb +/- 50 ppb	
Benzene	500 ppb	483 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	489 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	509 ppb +/- 50 ppb	
Bromoform	500 ppb	495 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	504 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	532 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	529 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	485 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	506 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	491 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	488 ppb +/- 50 ppb	
Chloroform	500 ppb	492 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	532 ppb +/- 50 ppb	
Cyclohexane	500 ppb	482 ppb +/- 50 ppb	
1,2-Dibromoethane	500 ppb	491 ppb +/- 50 ppb	
1,2-Dichlorobenzene	500 ppb	510 ppb +/- 50 ppb	
1,3-Dichlorobenzene	500 ppb	489 ppb +/- 50 ppb	
1,4-Dichlorobenzene	500 ppb	490 ppb +/- 50 ppb	
Dichlorodifluoromethane (R12)	500 ppb	508 ppb +/- 50 ppb	

1,1-Dichloroethane	500 ppb	492 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	497 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	493 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	488 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	488 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	490 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	516 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	466 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	505 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	484 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	486 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	555 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	497 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	506 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	485 ppb +/- 50 ppb	
n-Heptane	500 ppb	487 ppb +/- 50 ppb	
Hexachloro-1,3-butadiene	500 ppb	489 ppb +/- 50 ppb	
2-Hexanone	500 ppb	490 ppb +/- 50 ppb	
n-Hexane	500 ppb	485 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	511 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	527 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	534 ppb +/- 50 ppb	
Methyl Bromide	500 ppb	505 ppb +/- 50 ppb	
Methyl Chloride	500 ppb	509 ppb +/- 50 ppb	
Methyl ethyl ketone	500 ppb	496 ppb +/- 50 ppb	
Methyl isobutyl ketone	500 ppb	493 ppb +/- 50 ppb	
Methyl methacrylate	500 ppb	532 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	483 ppb +/- 50 ppb	
Methylene chloride	500 ppb	498 ppb +/- 50 ppb	
Naphthalene	500 ppb	542 ppb +/- 50 ppb	
n-Propylbenzene	500 ppb	529 ppb +/- 50 ppb	
Propylene	500 ppb	508 ppb +/- 50 ppb	
Styrene	500 ppb	485 ppb +/- 50 ppb	
1,1,1,2-Tetrachloroethane	500 ppb	483 ppb +/- 50 ppb	
1,1,2,2-Tetrachloroethane	500 ppb	534 ppb +/- 50 ppb	
Tetrachloroethylene	500 ppb	487 ppb +/- 50 ppb	
Tetrahydrofuran	500 ppb	535 ppb +/- 50 ppb	
Toluene	500 ppb	491 ppb +/- 50 ppb	
1,2,4-Trichlorobenzene	500 ppb	494 ppb +/- 50 ppb	
1,1,1-Trichloroethane	500 ppb	494 ppb +/- 50 ppb	
1,1,2-Trichloroethane	500 ppb	494 ppb +/- 50 ppb	
Trichloroethylene	500 ppb	488 ppb +/- 50 ppb	
Trichlorofluoromethane	500 ppb	508 ppb +/- 50 ppb	
1,1,2-Trichlorotrifluoroethane	500 ppb	495 ppb +/- 50 ppb	
1,2,4-Trimethylbenzene	500 ppb	494 ppb +/- 50 ppb	
1,3,5-Trimethylbenzene	500 ppb	498 ppb +/- 50 ppb	
2,2,4- Trimethylpentane	500 ppb	489 ppb +/- 50 ppb	
Vinyl acetate	500 ppb	499 ppb +/- 50 ppb	
Vinyl bromide	500 ppb	505 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	507 ppb +/- 50 ppb	
m-Xylene	500 ppb	492 ppb +/- 50 ppb	
o-Xylene	500 ppb	480 ppb +/- 50 ppb	
p-Xylene	500 ppb	486 ppb +/- 50 ppb	
2-Methyl Naphthalene	500 ppb	498 ppb +/- 50 ppb	
R-22	500 ppb	590 ppb +/- 50 ppb	
Nitrogen	balance	balance	

NOTES:	**Blend Tolerance:**	+/- 20 %
	Analytical Tolerance:	+/- 10 %
	Traceability:	NIST by weight set. NIST Traceability No MT001810. Internal Standards by analysis
	Reactive Mixtures:	Analyzed twice with required agreement between analyses of 2%. Required wait time between analyses of >7 days.
	Caution:	Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

QA Signature:

Signature:

Date: 07/16/2024

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

CUSTOMGAS
SOLUTIONS

1750 East Club Boulevard
Durham, NC 27704
Phone: (919) 220-2570
Fax: (919) 220-4540

Certificate of Analysis

Customer:

ChemTech
284 Sheffield Street
Mountianside, NJ 07092

Cylinder Number: BC169552
Cylinder Size/CGA: 170/180
Fill Pressure: 1815 PSIA
Gas Volume: 110 liters
Date of Mfg: 07/16/2024
Expiration Date: 07/16/2025
Lot Number: 040424-003B

Ship To : Chemtech
284 Sheffield Street
Mountainside, NJ 07092

Customer Number	Ship VIA	Job No.	Customer PO	Mixture Type
00107092NJ	Best Way	040424-003	240404-10	Gravimetric

Component	Nominal Concentration	Actual Concentration*	Mixture Type
Acetone	500 ppb	502 ppb +/- 50 ppb	Gravimetric Master Gas
Acetonitrile	500 ppb	530 ppb +/- 50 ppb	
Acrolein	500 ppb	540 ppb +/- 50 ppb	
Acrylonitrile	500 ppb	535 ppb +/- 50 ppb	
Allyl chloride	500 ppb	494 ppb +/- 50 ppb	
Benzene	500 ppb	470 ppb +/- 50 ppb	
Benzyl Chloride	500 ppb	476 ppb +/- 50 ppb	
Bromodichloromethane	500 ppb	495 ppb +/- 50 ppb	
Bromoform	500 ppb	481 ppb +/- 50 ppb	
1,3-Butadiene	500 ppb	490 ppb +/- 50 ppb	
tert-Butyl alcohol	500 ppb	527 ppb +/- 50 ppb	
n-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
sec-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
tert-Butyl benzene	500 ppb	525 ppb +/- 50 ppb	
Carbon disulfide	500 ppb	471 ppb +/- 50 ppb	
Carbon tetrachloride	500 ppb	492 ppb +/- 50 ppb	
Chlorobenzene	500 ppb	478 ppb +/- 50 ppb	
Chlorodibromomethane	500 ppb	474 ppb +/- 50 ppb	
Chloroform	500 ppb	478 ppb +/- 50 ppb	
2-Chlorotoluene	500 ppb	527 ppb +/- 50 ppb	
Cyclohexane	500 ppb	469 ppb +/- 50 ppb	
1,2-Dibromoethane	500 ppb	477 ppb +/- 50 ppb	
1,2-Dichlorobenzene	500 ppb	495 ppb +/- 50 ppb	
1,3-Dichlorobenzene	500 ppb	475 ppb +/- 50 ppb	
1,4-Dichlorobenzene	500 ppb	476 ppb +/- 50 ppb	
Dichlorodifluoromethane (R12)	500 ppb	494 ppb +/- 50 ppb	

1,1-Dichloroethane	500 ppb	478 ppb +/- 50 ppb	
1,2-Dichloroethane	500 ppb	483 ppb +/- 50 ppb	
1,1-Dichlororethylene	500 ppb	479 ppb +/- 50 ppb	
cis 1,2-Dichloroethylene	500 ppb	475 ppb +/- 50 ppb	
trans 1,2-Dichloroethylene	500 ppb	475 ppb +/- 50 ppb	
1,2-Dichloropropane	500 ppb	476 ppb +/- 50 ppb	
cis 1,3-Dichloropropylene	500 ppb	501 ppb +/- 50 ppb	
trans 1,3-Dichloropropylene	500 ppb	466 ppb +/- 50 ppb	
1,2-Dichlorotetrafluoroethane	500 ppb	491 ppb +/- 50 ppb	
1,4-Dioxane	500 ppb	470 ppb +/- 50 ppb	
Ethyl acetate	500 ppb	472 ppb +/- 50 ppb	
Ethyl Alcohol	500 ppb	550 ppb +/- 50 ppb	
Ethyl benzene	500 ppb	483 ppb +/- 50 ppb	
Ethyl Chloride	500 ppb	492 ppb +/- 50 ppb	
4-Ethyltoluene	500 ppb	472 ppb +/- 50 ppb	
n-Heptane	500 ppb	473 ppb +/- 50 ppb	
Hexachloro-1,3-butadiene	500 ppb	475 ppb +/- 50 ppb	
2-Hexanone	500 ppb	477 ppb +/- 50 ppb	
n-Hexane	500 ppb	471 ppb +/- 50 ppb	
Isopropyl alcohol	500 ppb	497 ppb +/- 50 ppb	
Isopropyl benzene	500 ppb	522 ppb +/- 50 ppb	
p-Isopropyl toluene	500 ppb	530 ppb +/- 50 ppb	
Methyl Bromide	500 ppb	491 ppb +/- 50 ppb	
Methyl Chloride	500 ppb	494 ppb +/- 50 ppb	
Methyl ethyl ketone	500 ppb	482 ppb +/- 50 ppb	
Methyl isobutyl ketone	500 ppb	479 ppb +/- 50 ppb	
Methyl methacrylate	500 ppb	527 ppb +/- 50 ppb	
Methyl tertiary butyl ether	500 ppb	470 ppb +/- 50 ppb	
Methylene chloride	500 ppb	484 ppb +/- 50 ppb	
Naphthalene	500 ppb	537 ppb +/- 50 ppb	
n-Propylbenzene	500 ppb	525 ppb +/- 50 ppb	
Propylene	500 ppb	494 ppb +/- 50 ppb	
Styrene	500 ppb	472 ppb +/- 50 ppb	
1,1,1,2-Tetrachloroethane	500 ppb	530 ppb +/- 50 ppb	
1,1,2,2-Tetrachloroethane	500 ppb	470 ppb +/- 50 ppb	
Tetrachloroethylene	500 ppb	473 ppb +/- 50 ppb	
Tetrahydrofuran	500 ppb	520 ppb +/- 50 ppb	
Toluene	500 ppb	477 ppb +/- 50 ppb	
1,2,4-Trichlorobenzene	500 ppb	480 ppb +/- 50 ppb	
1,1,1-Trichloroethane	500 ppb	480 ppb +/- 50 ppb	
1,1,2-Trichloroethane	500 ppb	481 ppb +/- 50 ppb	
Trichloroethylene	500 ppb	474 ppb +/- 50 ppb	
Trichlorofluoromethane	500 ppb	494 ppb +/- 50 ppb	
1,1,2-Trichlorotrifluoroethane	500 ppb	481 ppb +/- 50 ppb	
1,2,4-Trimethylbenzene	500 ppb	480 ppb +/- 50 ppb	
1.3,5-Trimethylbenzene	500 ppb	484 ppb +/- 50 ppb	
2,2,4- Trimethylpentane	500 ppb	475 ppb +/- 50 ppb	
Vinyl acetate	500 ppb	485 ppb +/- 50 ppb	
Vinyl bromide	500 ppb	491 ppb +/- 50 ppb	
Vinyl chloride	500 ppb	493 ppb +/- 50 ppb	
m-Xylene	500 ppb	479 ppb +/- 50 ppb	
o-Xylene	500 ppb	466 ppb +/- 50 ppb	
p-Xylene	500 ppb	473 ppb +/- 50 ppb	
2-Methyl Naphthalene	500 ppb	497 ppb +/- 50 ppb	
R-22	500 ppb	589 ppb +/- 50 ppb	
Nitrogen	balance	balance	

NOTES:	**Blend Tolerance:**	+/- 20 %
	Analytical Tolerance:	+/- 10 %
	Traceability:	NIST by weight set. NIST Traceability No MT001810. Internal Standards by analysis
	Reactive Mixtures:	Analyzed twice with required agreement between analyses of 2%. Required wait time between analyses of >7 days.
	Caution:	Do not use below 150 PSIG.

Analyst Name: Joseph A. Ernst

QA Signature:

Signature:

Date: 07/16/2024

*Every effort has been made to establish the actual concentration of the components using master gas blending technology however, Custom Gas Solutions shall have no liability in excess of the established charge for this material.

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

Process Report

Order ID : Q1665

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/31/2025	B2502051	Q1665-17	-6.7	10294	6 L	10505		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/31/2025	B2502051	Q1665-05	-8.0	10281	6 L	10552		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D
03/31/2025	B2502051	Q1665-14	-7.1	10275	6 L	10482		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/31/2025	B2502051	Q1665-12	-13.7	10271	6 L	10222		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D
03/31/2025	B2502051	Q1665-04	-7.1	10268	6 L	10101		C2501003	**VL041954.D** Seq :VL012725 TUNE : VL041943.D ICAL : VL041894.D CCAL : VL041944.D MB : VL041946.D
03/31/2025	B2502051	Q1665-15	-6.3	10266	6 L	10696		C2503003	VL042145.D Seq VL031425 Tune VL042140.D ICAL VL042041.D CCAL VL042141.D MB VL042142.D
03/31/2025	B2502051	Q1665-06	-12.0	10198	6 L	10204		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D

Alliance TECHNICAL GROUP

Process Report

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

Order ID : Q1665

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/31/2025	B2502051	Q1665-19	-8.0	10331	6 L	10206		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/31/2025	B2502051	Q1665-21	-7.5	10332	6 L	10236		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D
03/31/2025	B2502051	Q1665-16	-8.0	10608	6 L	10240		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/31/2025	B2502051	Q1665-09	-5.5	10599	6 L	10207		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/31/2025	B2502051	Q1665-11	-6.3	10598	6 L	10515		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/31/2025	B2502051	Q1665-20	-5.5	10595	6 L	10626		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D

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

Process Report

Order ID : Q1665

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/31/2025	B2502051	Q1665-07	-6.7	10592	6 L	10558		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D
03/31/2025	B2502051	Q1665-10	-7.1	10492	6 L	10172		C2503001	**VL042143.D** Seq :VL031425 TUNE : VL042140.D ICAL : VL042046.D CCAL : VL042141.D MB : VL042142.D
03/31/2025	B2502051	Q1665-02	-3.5	10443	6 L	10203		C2501001	**VL041853.D** Seq :vl010725 TUNE : VL041836.D ICAL : VL041843.D CCAL : VL041838.D MB : VL041846.D
03/31/2025	B2502051	Q1665-01	-8.8	10323	6 L	10478		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/31/2025	B2502051	Q1665-13	-1.8	10315	6 L	10183		C2502003	**VL042078.D** Seq :VL030325 TUNE : VL042074.D ICAL : VL042046.D CCAL : VL042075.D MB : VL042076.D
03/31/2025	B2502051	Q1665-22	-7.1	10306	6 L	10713		C2502002	**VL042052.D** Seq :vl022625 TUNE : VL042049.D ICAL : VL042046.D CCAL : VL042050.D MB : VL042051.D
03/31/2025	B2502051	Q1665-18	-8.0	10297	6 L	10190		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D

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

Process Report

Order ID : Q1665

Date	Bottle ID	Lab Sample Number	InComing Vacuum	Canister ID	Can Size	Reg ID	Reg Size	Batch Code	Certification ID
03/31/2025	B2502051	Q1665-03	-8.4	10154	6 L	10476		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D
03/31/2025	B2502051	Q1665-08	-7.5	10053	6 L	10168		C2502001	**VL041974.D** Seq :vl020325 TUNE : VL041957.D ICAL : VL041894.D CCAL : VL041958.D MB : VL041960.D

Canister Cleaning

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

Canister Batch : C2501003

Type of Canister : 6 L

Cleaning Date : 01/21/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10410	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1533-03	10268	VL041954.D
10303	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1532-01	10268	VL041954.D
10266	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1533-04	10268	VL041954.D
10268	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1665-04	10268	VL041954.D
10197	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1483-06	10268	VL041954.D
10258	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1649-01	10268	VL041954.D
10024	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1483-05	10268	VL041954.D
10153	-30	01/22/2025	01/27/2025	-30	01/23/2025	Q1533-05	10268	VL041954.D

Canister Cleaning

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

Canister Batch : C2502001

Type of Canister : 6 L

Cleaning Date : 02/03/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10323	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-01	10599	VL041974.D
10607	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1669-05	10599	VL041974.D
10599	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-09	10599	VL041974.D
10053	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-08	10599	VL041974.D
10598	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-11	10599	VL041974.D
10154	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-03	10599	VL041974.D
10297	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-18	10599	VL041974.D
10608	-30	02/04/2025	02/04/2025	-30	02/05/2025	Q1665-16	10599	VL041974.D

Canister Cleaning

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

Canister Batch : C2502002

Type of Canister : 6 L

Cleaning Date : 02/17/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10281	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-05	10271	VL042052.D
10592	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-07	10271	VL042052.D
10306	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-22	10271	VL042052.D
10595	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-20	10271	VL042052.D
10198	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-06	10271	VL042052.D
10332	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-21	10271	VL042052.D
10269	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1668-02	10271	VL042052.D
10271	-30	02/18/2025	02/26/2025	-30	02/19/2025	Q1665-12	10271	VL042052.D

Canister Cleaning

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

Canister Batch : C2502003

Type of Canister : 6 L

Cleaning Date : 02/27/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10311	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-01	10331	VL042078.D
10315	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-13	10331	VL042078.D
10275	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-14	10331	VL042078.D
10285	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-09	10331	VL042078.D
10331	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-19	10331	VL042078.D
10283	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1669-02	10331	VL042078.D
10294	-30	02/28/2025	03/03/2025	-30	03/03/2025	Q1665-17	10331	VL042078.D

Canister Cleaning

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

Canister Batch : C2503001

Type of Canister : 6 L

Cleaning Date : 03/10/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10445	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-07	10267	VL042143.D
10267	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-04	10267	VL042143.D
10492	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1665-10	10267	VL042143.D
10606	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-06	10267	VL042143.D
10280	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1726-02	10267	VL042143.D
10597	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1726-01	10267	VL042143.D
10320	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1669-03	10267	VL042143.D
10060	-30	03/11/2025	03/14/2025	-30	03/12/2025	Q1668-03	10267	VL042143.D

Canister Cleaning

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

Canister Batch : C2503003

Type of Canister : 6 L

Cleaning Date : 03/13/2025

Analyst : SAM

Oven Temperature : 125.0 c

Canister	Vaccum After Cleaning ("Hg)	Vaccum After Cleaning Date	Analysis Date	VAC 24Hr ("Hg)	Vaccum After 24hr Date	New Sample Number	QC Canister	File
10153	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1725-01	10266	VL042145.D
10321	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1725-02	10266	VL042145.D
10329	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1718-02	10266	VL042145.D
10266	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1665-15	10266	VL042145.D
10054	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1726-04	10266	VL042145.D
10303	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1725-07	10266	VL042145.D
10296	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1725-03	10266	VL042145.D
10279	-30	03/14/2025	03/14/2025	-30	03/17/2025	Q1725-05	10266	VL042145.D

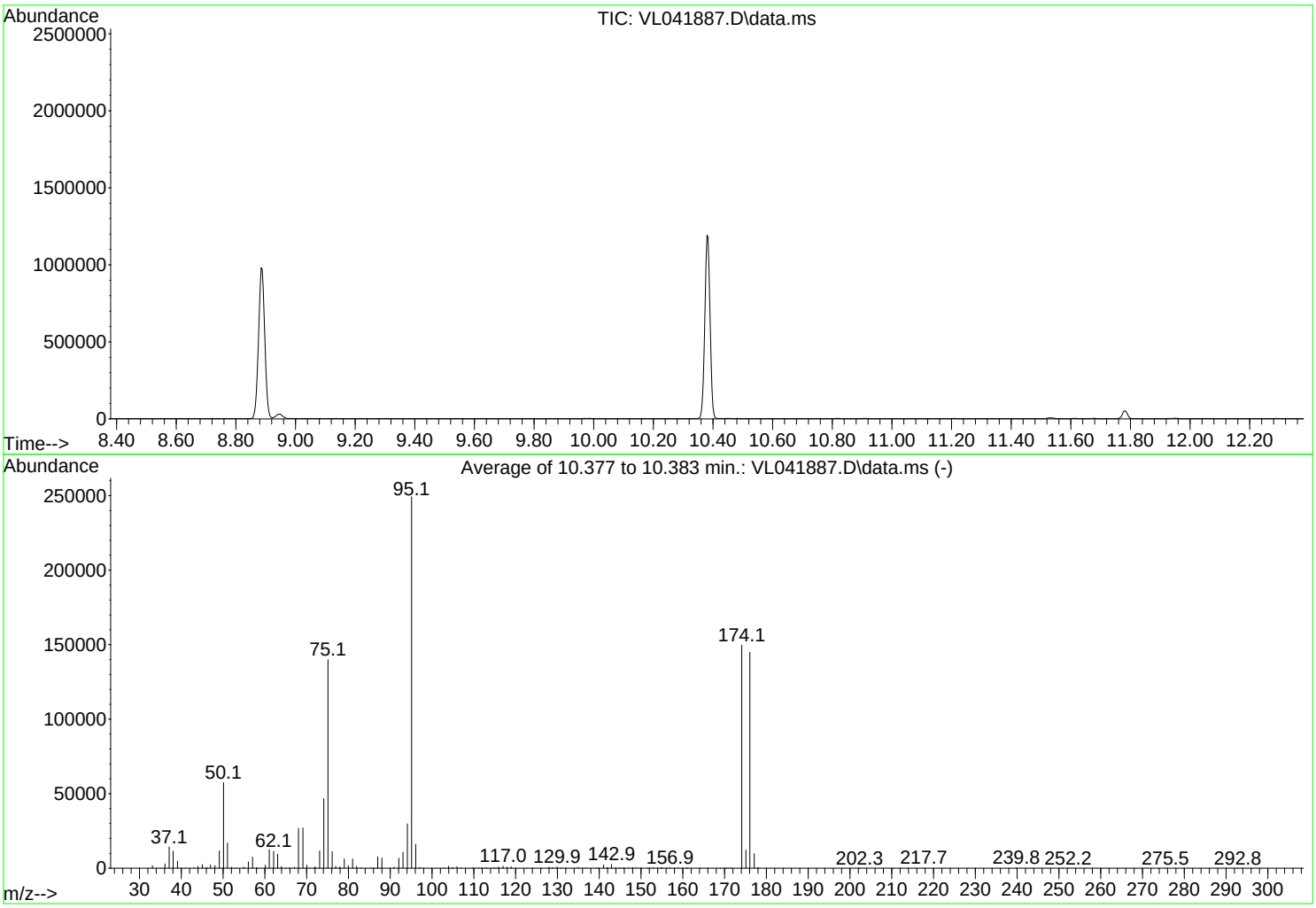
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041887.D
Acq On : 14 Jan 2025 07:50
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025



AutoFind: Scans 3179, 3180, 3181; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.0	57448	PASS
75	95	30	66	56.1	139893	PASS
95	95	100	100	100.0	249280	PASS
96	95	5	9	6.5	16102	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	60.0	149632	PASS
175	174	4	9	8.2	12223	PASS
176	174	93	101	96.8	144917	PASS
177	176	5	9	6.8	9838	PASS

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL041894.D 0.1 =VL041893.D 0.5 =VL041892.D 1 =VL041891.D 2 =VL041890.D 10 =VL041889.D 15 =VL041895.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.450	1.406	1.359	1.300	1.295	1.362	4.93
3)		Chlorodifluoro...			1.448	1.547	1.466	1.330	1.343	1.427	6.34
4)		Chloromethane			0.546	0.499	0.525	0.492	0.499	0.512	4.41
5)	T	Vinyl Chloride	0.504	0.578	0.561	0.531	0.502	0.466	0.491	0.519	7.62
6)	T	Bromomethane			0.253	0.274	0.248	0.229	0.233	0.247	7.30
7)		Chloroethane			0.210	0.205	0.209	0.193	0.194	0.202	4.08
8)	T	Dichlorotetraf...			1.282	1.198	1.225	1.095	1.151	1.190	5.99
9)	T	Propene			0.642	0.577	0.605	0.568	0.548	0.588	6.21
10)	T	Heptane			1.536	1.616	1.635	1.530	1.538	1.571	3.19
11)	T	Trichlorofluor...			1.488	1.417	1.435	1.335	1.410	1.417	3.87
12)	T	1,1,2-Trichlor...			1.098	1.137	1.166	1.057	1.095	1.110	3.78
13)		Ethanol			0.065	0.043	0.051	0.027	0.029	0.043#	36.98
14)	T	Bromoethene			0.420	0.445	0.403	0.371	0.393	0.407	6.93
15)	T	Acetone			1.405	1.301	1.256	0.991	1.051	1.201	14.50
16)	T	1,3-Butadiene			0.552	0.589	0.545	0.494	0.515	0.539	6.74
17)		tert-Butyl alc...			1.527	1.559	1.503	1.399	1.404	1.478	4.91
18)	T	1,1-Dichloroet...			0.520	0.517	0.514	0.458	0.492	0.501	5.18
19)	T	Isopropyl Alcohol			0.864	0.731	0.714	0.621	0.631	0.712	13.77
20)	T	Methylene Chlo...			0.586	0.503	0.478	0.390	0.416	0.475	16.27
21)	T	Allyl Chloride			0.897	0.823	0.847	0.792	0.799	0.832	5.06
22)	T	trans-1,2-Dich...			0.549	0.583	0.595	0.540	0.556	0.565	4.13
23)	T	Vinyl Acetate			0.873	0.475	0.543	0.538	0.549	0.595	26.54
24)	T	1,1-Dichloroet...			1.165	1.099	1.100	1.016	1.083	1.093	4.84
25)	T	Ethyl Acetate			3.219	3.352	3.399	3.094	3.131	3.239	4.13
26)	T	Hexane			1.265	1.249	1.388	1.261	1.242	1.281	4.71
27)	T	Carbon Disulfide			1.210	1.256	1.304	1.258	1.311	1.268	3.22
28)	T	Methyl tert-Bu...			1.043	1.187	1.007	0.774	0.885	0.979	16.08
29)	T	Chloroform			2.101	2.060	2.105	1.911	1.947	2.025	4.45
30)	T	Cyclohexane			1.037	1.193	1.145	1.082	1.098	1.111	5.41
31)	T	cis-1,2-Dichlo...			1.406	1.397	1.390	1.272	1.279	1.349	4.98
32)	T	1,1,1-Trichlor...	1.937	1.841	1.942	2.010	1.956	1.905	1.973	1.938	2.76
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.649	0.646	0.679	0.602	0.605	0.636	5.13
35)	T	Carbon Tetrach...	0.605	0.608	0.584	0.616	0.657	0.649	0.677	0.628	5.32
36)	T	Benzene			0.926	0.949	0.949	0.882	0.879	0.917	3.78
37)	T	1,2-Dichloroet...			0.539	0.516	0.517	0.493	0.510	0.515	3.23
38)	T	Trichloroethene	0.286	0.427	0.381	0.374	0.373	0.354	0.353	0.364	11.62
39)	T	1,2-Dichloropr...			0.349	0.321	0.329	0.305	0.304	0.322	5.81

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL011425AIR.M

40)	T	1,4-Dioxane		0.187	0.162	0.161	0.147	0.155	0.162	9.21
41)	T	Tetrahydrofuran		0.333	0.344	0.358	0.348	0.346	0.346	2.53
42)	T	Bromodichlorom...		0.700	0.659	0.703	0.684	0.707	0.691	2.84
43)		Methyl Methacr...		0.340	0.336	0.349	0.338	0.341	0.341	1.41
44)	T	2,2,4-Trimethy...		1.450	1.501	1.566	1.457	1.444	1.484	3.45
45)	T	t-1,3-Dichloro...		0.300	0.292	0.319	0.338	0.346	0.319	7.38
46)	T	cis-1,3-Dichlo...		0.371	0.391	0.439	0.446	0.447	0.419	8.43
47)	T	1,1,2-Trichlor...		0.340	0.345	0.350	0.333	0.336	0.341	2.06
48)	T	Dibromochlorom...		0.490	0.489	0.541	0.545	0.566	0.526	6.64
49)	T	Bromoform		0.379	0.394	0.439	0.460	0.488	0.432	10.53
50)	T	4-Methyl-2-Pen...		0.892	0.870	0.899	0.833	0.846	0.868	3.29
51)	T	2-Hexanone		0.622	0.640	0.739	0.652	0.683	0.667	6.91
52)	T	Tetrachloroethene	0.320	0.348	0.317	0.329	0.330	0.292	0.291	0.318	6.46
53)	T	Toluene		0.934	0.996	1.048	1.011	1.008	0.999	4.14
54)	T	1,2-Dibromoethane	0.440	0.488	0.468	0.494	0.454	0.470	0.469	4.32
55)	I	Chlorobenzene-d5	----------ISTD----------							
56)		1,1,1,2-Tetrac...		0.502	0.514	0.510	0.481	0.488	0.499	2.86
57)	T	Chlorobenzene		0.986	0.968	0.977	0.848	0.832	0.922	8.18
58)	T	Ethyl Benzene		1.507	1.563	1.653	1.551	1.541	1.563	3.49
59)	T	m/p-Xylene		1.186	1.265	1.355	1.223	1.234	1.253	5.10
60)	T	o-Xylene		1.179	1.241	1.348	1.224	1.224	1.243	5.06
61)	T	Styrene		0.516	0.515	0.576	0.587	0.595	0.558	7.02
62)		Isopropylbenzene		1.927	1.925	2.066	1.854	1.848	1.924	4.56
63)	T	1,1,2,2-Tetrac...	0.756	0.816	0.845	0.858	0.751	0.741	0.795	6.52
64)		n-propylbenzene		0.481	0.495	0.521	0.469	0.464	0.486	4.78
65)		tert-Butylbenzene		1.746	1.782	1.919	1.675	1.645	1.753	6.12
66)	T	Benzyl Chloride		0.102	0.093	0.113	0.115	0.119	0.109	9.71
67)		sec-Butylbenzene		2.389	2.457	2.681	2.299	2.246	2.414	7.04
68)	S	1-Bromo-4-Fluo...	0.783	0.785	0.784	0.792	0.795	0.782	0.792	0.788	0.65
69)		p-Isopropyltol...		1.852	2.013	2.256	1.927	1.892	1.988	8.11
70)		n-Butylbenzene		1.867	2.048	2.206	1.898	1.840	1.972	7.80
71)		2-Chlorotoluene		1.394	1.410	1.537	1.389	1.385	1.423	4.54
72)	T	4-Ethyltoluene		1.442	1.447	1.610	1.466	1.472	1.487	4.67
73)	T	1,3,5-Trimethy...		1.222	1.360	1.448	1.263	1.275	1.313	6.88
74)	T	1,2,4-Trimethy...		1.359	1.456	1.607	1.346	1.344	1.422	7.97
75)	T	1,3-Dichlorobe...		0.881	0.884	0.903	0.776	0.771	0.843	7.61
76)	T	1,4-Dichlorobe...		0.830	0.859	0.889	0.769	0.777	0.825	6.29
77)	T	1,2-Dichlorobe...		0.863	0.902	0.909	0.757	0.745	0.835	9.43
78)	T	Hexachloro-1,3...		0.747	0.742	0.772	0.586	0.582	0.686	13.66
79)	T	Naphthalene	0.978	1.479	1.682	1.941	1.255	1.259	1.432	24.01
80)	T	Naphthalene,2-...		0.572	0.724	1.151	0.463	0.485	0.679	41.70
81)	T	1,2,4-Trichlor...		0.745	0.738	0.819	0.598	0.596	0.699	14.10

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	152325	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	449256	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.894	117	400269	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	313194	9.934	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	197959	9.541	ppbv	100
3) Chlorodifluoromethane	1.479	51	202651	9.323	ppbv	100
4) Chloromethane	1.538	50	74977	9.608	ppbv	100
5) Vinyl Chloride	1.583	62	71006	8.984	ppbv	100
6) Bromomethane	1.674	94	34817	9.243	ppbv	100
7) Chloroethane	1.709	64	29349	9.544	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	166754	9.196	ppbv	100
9) Propene	1.486	41	86544	9.665	ppbv	100
10) Heptane	5.001	43	233062	9.738	ppbv	100
11) Trichlorofluoromethane	1.884	101	203374	9.423	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.146	101	160993	9.517	ppbv	100
13) Ethanol	1.725	45	4155	6.335	ppbv	98
14) Bromoethene	1.787	108	56447	9.114	ppbv	100
15) Acetone	1.842	43	151022	8.255	ppbv	100
16) 1,3-Butadiene	1.612	39	75244	9.163	ppbv	100
17) tert-Butyl alcohol	2.046	59	213109	9.464	ppbv	100
18) 1,1-Dichloroethene	2.039	96	69825	9.158	ppbv	100
19) Isopropyl Alcohol	1.890	45	94532	8.714	ppbv	100
20) Methylene Chloride	2.068	84	59427	8.219	ppbv	100
21) Allyl Chloride	2.101	41	120681	9.526	ppbv	100
22) trans-1,2-Dichloroethene	2.347	96	82326	9.568	ppbv	100
23) Vinyl Acetate	2.470	43	81885	10.281	ppbv	100
24) 1,1-Dichloroethane	2.418	63	154838	9.303	ppbv	100
25) Ethyl Acetate	2.845	43	471257	9.552	ppbv	100
26) Hexane	2.835	57	192009	9.841	ppbv	100
27) Carbon Disulfide	2.156	76	191567	9.921	ppbv	99
28) Methyl tert-Butyl Ether	2.450	73	117898	7.905	ppbv	100
29) Chloroform	2.858	83	291118	9.438	ppbv	100
30) Cyclohexane	3.868	84	164788	9.737	ppbv	100
31) cis-1,2-Dichloroethene	2.729	61	193774	9.432	ppbv	100
32) 1,1,1-Trichloroethane	3.379	97	290126	9.830	ppbv	100
34) 2-Butanone	2.567	43	270263	9.459	ppbv	100
35) Carbon Tetrachloride	3.777	117	291448	10.309	ppbv	100
36) Benzene	3.671	78	396344	9.619	ppbv	100
37) 1,2-Dichloroethane	3.230	62	221352	9.565	ppbv	100
38) Trichloroethene	4.564	130	159253	9.736	ppbv	100
39) 1,2-Dichloropropane	4.331	63	137090	9.484	ppbv	100
40) 1,4-Dioxane	4.606	88	66200	9.075	ppbv #	94
41) Tetrahydrofuran	3.065	42	156141	10.023	ppbv	100
42) Bromodichloromethane	4.509	83	307176	9.900	ppbv	100
43) Methyl Methacrylate	4.897	69	152001	9.930	ppbv	100
44) 2,2,4-Trimethylpentane	4.658	57	654395	9.819	ppbv	100
45) t-1,3-Dichloropropene	6.435	75	151920	10.603	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.622	75	200330	10.649	ppbv		100
47)	1,1,2-Trichloroethane	6.600	97	149634	9.766	ppbv		100
48)	Dibromochloromethane	7.402	129	245066	10.368	ppbv		100
49)	Bromoform	9.496	173	206751	10.649	ppbv		100
50)	4-Methyl-2-Pentanone	5.778	43	374267	9.615	ppbv		100
51)	2-Hexanone	7.454	43	292941	9.775	ppbv	#	100
52)	Tetrachloroethene	8.241	164	131334	9.193	ppbv		100
53)	Toluene	6.952	91	454085	10.116	ppbv		100
54)	1,2-Dibromoethane	7.668	107	203859	9.679	ppbv		100
56)	1,1,1,2-Tetrachloroethane	8.940	131	192449	9.637	ppbv		99
57)	Chlorobenzene	8.937	112	339570	9.197	ppbv		100
58)	Ethyl Benzene	9.367	91	620719	9.923	ppbv		100
59)	m/p-Xylene	9.564	91	979297m	19.504	ppbv		
60)	o-Xylene	9.979	91	490108	9.848	ppbv		100
61)	Styrene	9.885	104	234901	10.522	ppbv		100
62)	Isopropylbenzene	10.552	105	742261	9.638	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.976	83	300600	9.596	ppbv		100
64)	n-propylbenzene	11.002	120	187706	9.646	ppbv		99
65)	tert-Butylbenzene	11.542	119	670259	9.550	ppbv		100
66)	Benzyl Chloride	11.626	91	46008	10.591	ppbv		100
67)	sec-Butylbenzene	11.778	105	920046	9.521	ppbv		100
69)	p-Isopropyltoluene	11.937	119	771465	9.694	ppbv		100
70)	n-Butylbenzene	12.293	91	759785	9.627	ppbv		100
71)	2-Chlorotoluene	10.914	91	556170	9.763	ppbv		100
72)	4-Ethyltoluene	11.137	105	586667	9.855	ppbv		100
73)	1,3,5-Trimethylbenzene	11.215	105	505443	9.614	ppbv		100
74)	1,2,4-Trimethylbenzene	11.549	105	538665	9.461	ppbv		100
75)	1,3-Dichlorobenzene	11.620	146	310421	9.201	ppbv		100
76)	1,4-Dichlorobenzene	11.684	146	307758	9.324	ppbv		100
77)	1,2-Dichlorobenzene	11.960	146	303196	9.068	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.895	225	234457	8.543	ppbv		100
79)	Naphthalene	13.526	128	502354	8.764	ppbv		100
80)	Naphthalene,2-methyl-	14.471	142	185336	6.819	ppbv		100
81)	1,2,4-Trichlorobenzene	13.452	180	239317	8.553	ppbv		100

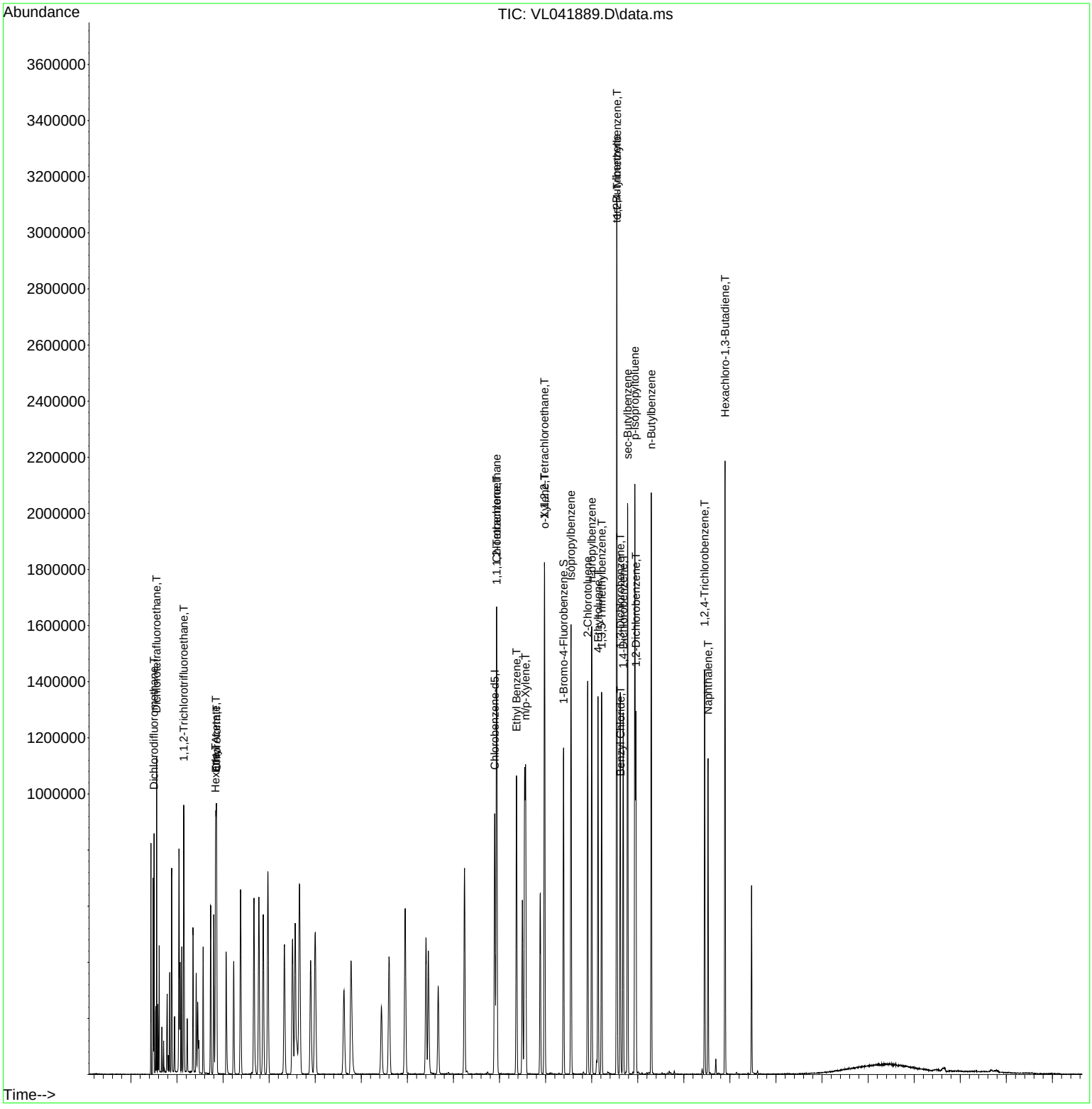
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041889.D
Acq On : 14 Jan 2025 12:55
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	150761	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.971	114	452131	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.894	117	394865	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	313784	10.089	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	40991	1.996	ppbv		98
3) Chlorodifluoromethane	1.479	51	44207	2.055	ppbv		99
4) Chloromethane	1.538	50	15833	2.050	ppbv		93
5) Vinyl Chloride	1.583	62	15137	1.935	ppbv		99
6) Bromomethane	1.673	94	7486	2.008	ppbv		91
7) Chloroethane	1.709	64	6303	2.071	ppbv	#	84
8) Dichlorotetrafluoroethane	1.557	85	36941	2.058	ppbv		99
9) Propene	1.486	41	18248	2.059	ppbv		95
10) Heptane	5.001	43	49302	2.081	ppbv		97
11) Trichlorofluoromethane	1.884	101	43266	2.025	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.146	101	35162	2.100	ppbv		97
13) Ethanol	1.725	45	1534	2.363	ppbv		84
14) Bromoethene	1.787	108	12163	1.984	ppbv	#	95
15) Acetone	1.842	43	37867	2.091	ppbv		99
16) 1,3-Butadiene	1.612	39	16446	2.024	ppbv		100
17) tert-Butyl alcohol	2.049	59	45305	2.033	ppbv		99
18) 1,1-Dichloroethene	2.039	96	15508	2.055	ppbv		97
19) Isopropyl Alcohol	1.894	45	21530	2.005	ppbv		94
20) Methylene Chloride	2.068	84	14399	2.012	ppbv		95
21) Allyl Chloride	2.104	41	25533	2.036	ppbv		97
22) trans-1,2-Dichloroethene	2.350	96	17951	2.108	ppbv		83
23) Vinyl Acetate	2.470	43	16358	2.075	ppbv		99
24) 1,1-Dichloroethane	2.418	63	33175	2.014	ppbv		99
25) Ethyl Acetate	2.848	43	102475	2.099	ppbv		99
26) Hexane	2.835	57	41844	2.167	ppbv		99
27) Carbon Disulfide	2.156	76	39306	2.057	ppbv	#	70
28) Methyl tert-Butyl Ether	2.454	73	30355	2.056	ppbv		96
29) Chloroform	2.858	83	63457	2.079	ppbv		94
30) Cyclohexane	3.874	84	34518	2.061	ppbv		97
31) cis-1,2-Dichloroethene	2.729	61	41921	2.062	ppbv		89
32) 1,1,1-Trichloroethane	3.382	97	58965	2.019	ppbv		98
34) 2-Butanone	2.570	43	61381	2.135	ppbv		99
35) Carbon Tetrachloride	3.777	117	59430	2.089	ppbv		95
36) Benzene	3.670	78	85859	2.070	ppbv		96
37) 1,2-Dichloroethane	3.230	62	46786	2.009	ppbv		100
38) Trichloroethene	4.564	130	33773	2.052	ppbv		98
39) 1,2-Dichloropropane	4.334	63	29723	2.043	ppbv		96
40) 1,4-Dioxane	4.619	88	14566m	1.984	ppbv		
41) Tetrahydrofuran	3.072	42	32358	2.064	ppbv		96
42) Bromodichloromethane	4.509	83	63611	2.037	ppbv		99
43) Methyl Methacrylate	4.900	69	31519	2.046	ppbv		99
44) 2,2,4-Trimethylpentane	4.658	57	141602	2.111	ppbv		100
45) t-1,3-Dichloropropene	6.435	75	28818	1.999	ppbv		97

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.625	75	39668	2.095	ppbv		94
47) 1,1,2-Trichloroethane	6.600	97	31694m	2.055	ppbv		
48) Dibromochloromethane	7.406	129	48894	2.055	ppbv		99
49) Bromoform	9.496	173	39710	2.032	ppbv		99
50) 4-Methyl-2-Pentanone	5.784	43	81330	2.076	ppbv		98
51) 2-Hexanone	7.457	43	66831	2.216	ppbv	#	98
52) Tetrachloroethene	8.241	164	29814	2.074	ppbv		94
53) Toluene	6.952	91	94741	2.097	ppbv		98
54) 1,2-Dibromoethane	7.671	107	44636	2.106	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.940	131	40249	2.043	ppbv		93
57) Chlorobenzene	8.933	112	77180	2.119	ppbv		94
58) Ethyl Benzene	9.367	91	130554	2.116	ppbv		98
59) m/p-Xylene	9.561	91	214076m	4.322	ppbv		
60) o-Xylene	9.975	91	106458	2.168	ppbv		99
61) Styrene	9.885	104	45490	2.065	ppbv		99
62) Isopropylbenzene	10.552	105	163135	2.147	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.975	83	67775	2.193	ppbv		99
64) n-propylbenzene	11.001	120	41184	2.145	ppbv		99
65) tert-Butylbenzene	11.542	119	151534	2.189	ppbv		97
66) Benzyl Chloride	11.626	91	8925	2.083	ppbv		97
67) sec-Butylbenzene	11.778	105	211759	2.221	ppbv		99
69) p-Isopropyltoluene	11.937	119	178172	2.270	ppbv		100
70) n-Butylbenzene	12.293	91	174217	2.238	ppbv		99
71) 2-Chlorotoluene	10.914	91	121418	2.161	ppbv		100
72) 4-Ethyltoluene	11.137	105	127115	2.164	ppbv		100
73) 1,3,5-Trimethylbenzene	11.215	105	114342	2.205	ppbv		99
74) 1,2,4-Trimethylbenzene	11.548	105	126939	2.260	ppbv	#	89
75) 1,3-Dichlorobenzene	11.616	146	71332	2.143	ppbv		98
76) 1,4-Dichlorobenzene	11.684	146	70219	2.156	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	71818	2.177	ppbv		100
78) Hexachloro-1,3-Butadiene	13.892	225	60984	2.253	ppbv		99
79) Naphthalene	13.526	128	153268	2.710	ppbv		98
80) Naphthalene,2-methyl-	14.471	142	90910	3.391	ppbv		99
81) 1,2,4-Trichlorobenzene	13.452	180	64653	2.342	ppbv		98

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

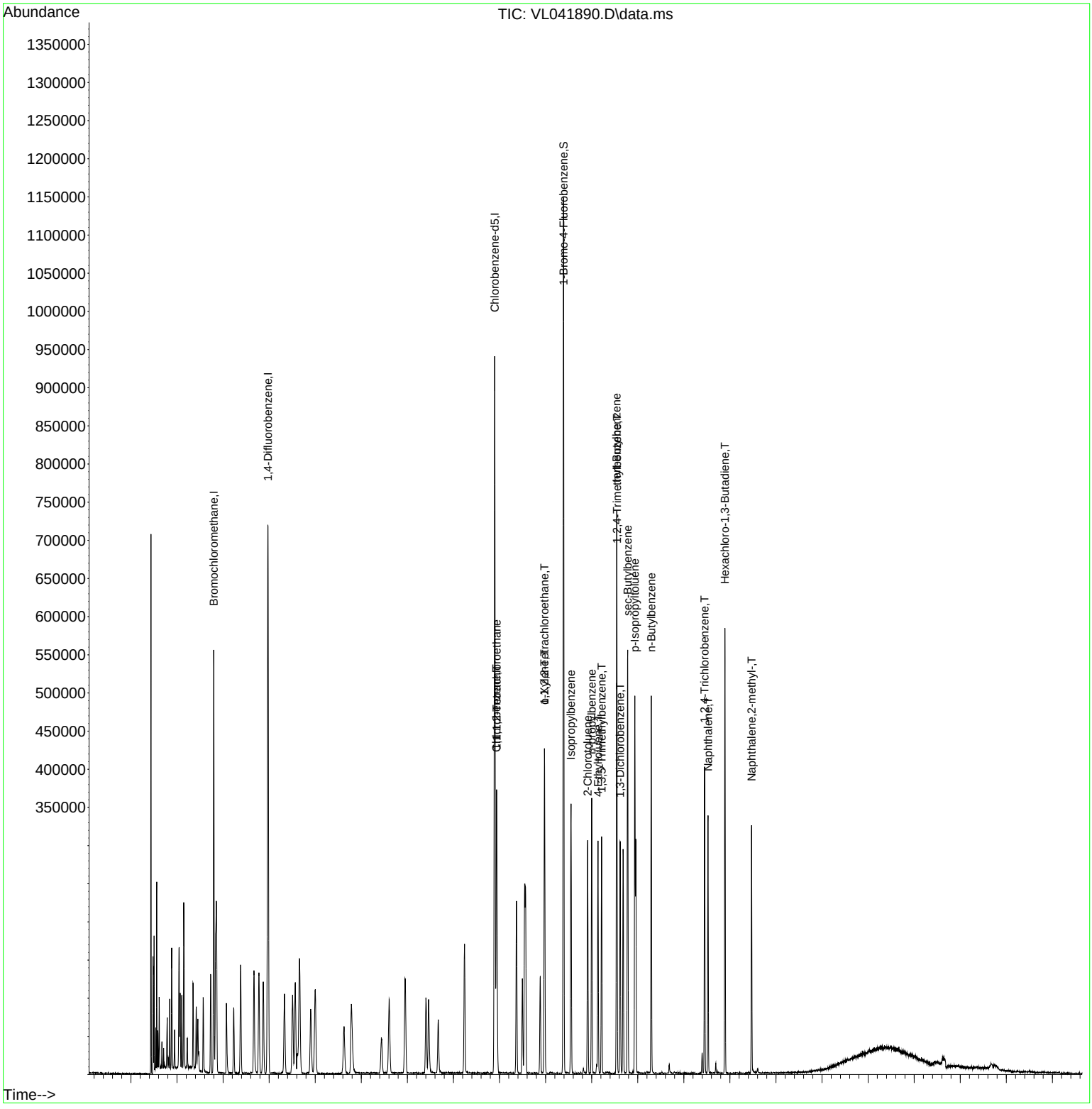
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041890.D
Acq On : 14 Jan 2025 13:28
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	151226	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.972	114	453418	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.895	117	393836	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.387	95	312013	10.058	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	21262	1.032	ppbv		95
3) Chlorodifluoromethane	1.479	51	23396	1.084	ppbv		100
4) Chloromethane	1.534	50	7546	0.974	ppbv		94
5) Vinyl Chloride	1.583	62	8031	1.023	ppbv		97
6) Bromomethane	1.674	94	4139	1.107	ppbv	#	81
7) Chloroethane	1.709	64	3093	1.013	ppbv		92
8) Dichlorotetrafluoroethane	1.557	85	18122	1.007	ppbv		100
9) Propene	1.486	41	8719	0.981	ppbv		93
10) Heptane	5.001	43	24438	1.029	ppbv		96
11) Trichlorofluoromethane	1.884	101	21425	1.000	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.143	101	17187	1.023	ppbv		95
13) Ethanol	1.725	45	650	0.998	ppbv	#	29
14) Bromoethene	1.787	108	6736	1.096	ppbv	#	88
15) Acetone	1.842	43	19681	1.084	ppbv		95
16) 1,3-Butadiene	1.612	39	8901	1.092	ppbv		98
17) tert-Butyl alcohol	2.049	59	23571	1.054	ppbv		95
18) 1,1-Dichloroethene	2.039	96	7819m	1.033	ppbv		
19) Isopropyl Alcohol	1.894	45	11054	1.026	ppbv	#	32
20) Methylene Chloride	2.065	84	7608	1.060	ppbv	#	89
21) Allyl Chloride	2.101	41	12451	0.990	ppbv		98
22) trans-1,2-Dichloroethene	2.347	96	8819	1.032	ppbv		96
23) Vinyl Acetate	2.470	43	7181	0.908	ppbv	#	93
24) 1,1-Dichloroethane	2.415	63	16623	1.006	ppbv		97
25) Ethyl Acetate	2.845	43	50690	1.035	ppbv		98
26) Hexane	2.836	57	18893	0.975	ppbv		86
27) Carbon Disulfide	2.156	76	18993	0.991	ppbv	#	23
28) Methyl tert-Butyl Ether	2.450	73	17955	1.213	ppbv		98
29) Chloroform	2.858	83	31155	1.017	ppbv		97
30) Cyclohexane	3.871	84	18048	1.074	ppbv		96
31) cis-1,2-Dichloroethene	2.729	61	21124	1.036	ppbv		99
32) 1,1,1-Trichloroethane	3.383	97	30396	1.037	ppbv		98
34) 2-Butanone	2.570	43	29280	1.015	ppbv		99
35) Carbon Tetrachloride	3.774	117	27946	0.979	ppbv		96
36) Benzene	3.671	78	43023	1.035	ppbv		93
37) 1,2-Dichloroethane	3.230	62	23402	1.002	ppbv		98
38) Trichloroethene	4.564	130	16954m	1.027	ppbv		
39) 1,2-Dichloropropane	4.331	63	14570	0.999	ppbv		98
40) 1,4-Dioxane	4.613	88	7345m	0.998	ppbv		
41) Tetrahydrofuran	3.075	42	15580m	0.991	ppbv		
42) Bromodichloromethane	4.509	83	29893m	0.955	ppbv		
43) Methyl Methacrylate	4.901	69	15222	0.985	ppbv		95
44) 2,2,4-Trimethylpentane	4.661	57	68050	1.012	ppbv		98
45) t-1,3-Dichloropropene	6.438	75	13220	0.914	ppbv		92

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.626	75	17749	0.935	ppbv		97
47) 1,1,2-Trichloroethane	6.603	97	15658m	1.013	ppbv		
48) Dibromochloromethane	7.402	129	22169	0.929	ppbv		100
49) Bromoform	9.497	173	17876	0.912	ppbv		100
50) 4-Methyl-2-Pentanone	5.787	43	39436m	1.004	ppbv		
51) 2-Hexanone	7.464	43	28999	0.959	ppbv	#	95
52) Tetrachloroethene	8.244	164	14903	1.034	ppbv	#	80
53) Toluene	6.956	91	45140m	0.996	ppbv		
54) 1,2-Dibromoethane	7.668	107	21202	0.997	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.937	131	20255	1.031	ppbv		94
57) Chlorobenzene	8.933	112	38141	1.050	ppbv		98
58) Ethyl Benzene	9.367	91	61537	1.000	ppbv		99
59) m/p-Xylene	9.561	91	99618m	2.016	ppbv		
60) o-Xylene	9.972	91	48888	0.998	ppbv		98
61) Styrene	9.882	104	20285	0.923	ppbv		99
62) Isopropylbenzene	10.549	105	75801	1.000	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.972	83	33289	1.080	ppbv		97
64) n-propylbenzene	11.002	120	19511	1.019	ppbv		99
65) tert-Butylbenzene	11.539	119	70183	1.016	ppbv		98
66) Benzyl Chloride	11.626	91	3681m	0.861	ppbv		
67) sec-Butylbenzene	11.778	105	96749	1.018	ppbv		97
69) p-Isopropyltoluene	11.937	119	79283	1.013	ppbv		98
70) n-Butylbenzene	12.290	91	80664	1.039	ppbv		99
71) 2-Chlorotoluene	10.911	91	55540	0.991	ppbv		99
72) 4-Ethyltoluene	11.134	105	56973	0.973	ppbv		97
73) 1,3,5-Trimethylbenzene	11.215	105	53550	1.035	ppbv		97
74) 1,2,4-Trimethylbenzene	11.545	105	57352	1.024	ppbv		96
75) 1,3-Dichlorobenzene	11.617	146	34810	1.049	ppbv		99
76) 1,4-Dichlorobenzene	11.681	146	33822	1.041	ppbv		97
77) 1,2-Dichlorobenzene	11.960	146	35516	1.080	ppbv		98
78) Hexachloro-1,3-Butadiene	13.892	225	29210	1.082	ppbv		99
79) Naphthalene	13.523	128	66232	1.174	ppbv		98
80) Naphthalene,2-methyl-	14.468	142	28506	1.066	ppbv		98
81) 1,2,4-Trichlorobenzene	13.452	180	29053	1.055	ppbv		99

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

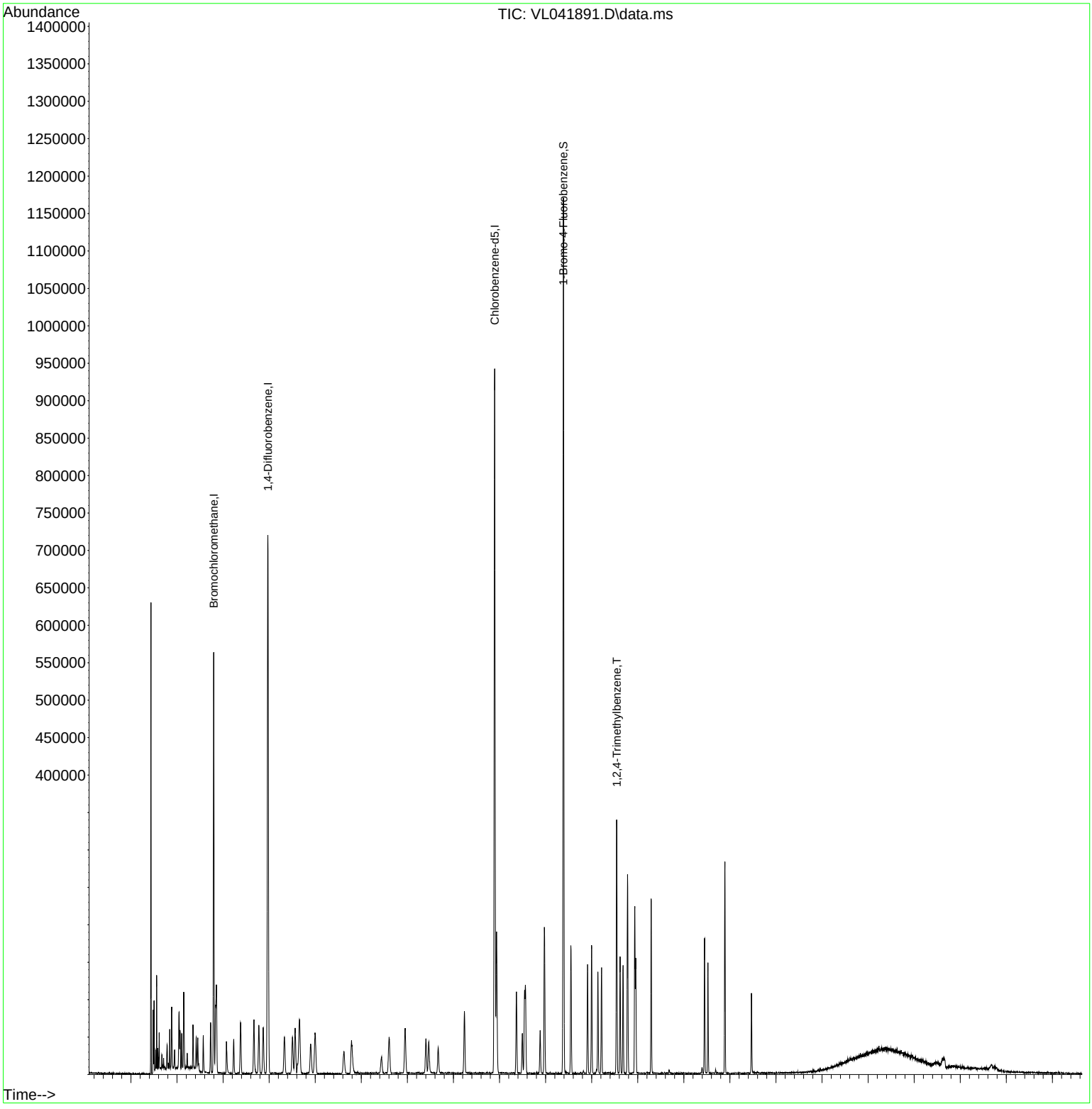
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041891.D
Acq On : 14 Jan 2025 13:59
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:20:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	146186	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	430874	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.891	117	379402	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.383	95	297462	9.954	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10599	0.532	ppbv		99
3) Chlorodifluoromethane	1.476	51	10582	0.507	ppbv		98
4) Chloromethane	1.534	50	3990	0.533	ppbv		98
5) Vinyl Chloride	1.580	62	4097	0.540	ppbv		94
6) Bromomethane	1.670	94	1852	0.512	ppbv	#	78
7) Chloroethane	1.706	64	1532	0.519	ppbv	#	77
8) Dichlorotetrafluoroethane	1.557	85	9372	0.539	ppbv		95
9) Propene	1.486	41	4690	0.546	ppbv		85
10) Heptane	4.988	43	11230	0.489	ppbv		95
11) Trichlorofluoromethane	1.881	101	10873	0.525	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.143	101	8027	0.494	ppbv		90
13) Ethanol	1.725	45	478m	0.759	ppbv		
14) Bromoethene	1.784	108	3071	0.517	ppbv	#	94
15) Acetone	1.839	43	10273	0.585	ppbv		99
16) 1,3-Butadiene	1.612	39	4038	0.512	ppbv		99
17) tert-Butyl alcohol	2.046	59	11158	0.516	ppbv	#	94
18) 1,1-Dichloroethene	2.036	96	3803	0.520	ppbv		95
19) Isopropyl Alcohol	1.891	45	6317	0.607	ppbv	#	32
20) Methylene Chloride	2.065	84	4286	0.618	ppbv		93
21) Allyl Chloride	2.101	41	6553	0.539	ppbv		96
22) trans-1,2-Dichloroethene	2.347	96	4015	0.486	ppbv		89
23) Vinyl Acetate	2.467	43	6381m	0.835	ppbv		
24) 1,1-Dichloroethane	2.415	63	8512	0.533	ppbv		97
25) Ethyl Acetate	2.845	43	23529	0.497	ppbv		97
26) Hexane	2.829	57	9246m	0.494	ppbv		
27) Carbon Disulfide	2.153	76	8847	0.477	ppbv	#	1
28) Methyl tert-Butyl Ether	2.447	73	7621	0.532	ppbv		97
29) Chloroform	2.855	83	15360	0.519	ppbv		92
30) Cyclohexane	3.871	84	7579	0.467	ppbv		92
31) cis-1,2-Dichloroethene	2.726	61	10275	0.521	ppbv	#	89
32) 1,1,1-Trichloroethane	3.379	97	14198	0.501	ppbv		98
34) 2-Butanone	2.567	43	13981	0.510	ppbv		94
35) Carbon Tetrachloride	3.774	117	12590	0.464	ppbv		89
36) Benzene	3.667	78	19954	0.505	ppbv		95
37) 1,2-Dichloroethane	3.227	62	11613	0.523	ppbv		97
38) Trichloroethene	4.561	130	8199	0.523	ppbv	#	89
39) 1,2-Dichloropropane	4.324	63	7526m	0.543	ppbv		
40) 1,4-Dioxane	4.616	88	4031m	0.576	ppbv		
41) Tetrahydrofuran	3.072	42	7183	0.481	ppbv		94
42) Bromodichloromethane	4.499	83	15081m	0.507	ppbv		
43) Methyl Methacrylate	4.891	69	7332m	0.499	ppbv		
44) 2,2,4-Trimethylpentane	4.645	57	31243	0.489	ppbv		95
45) t-1,3-Dichloropropene	6.428	75	6465m	0.470	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.609	75	7986m	0.443	ppbv		
47) 1,1,2-Trichloroethane	6.597	97	7324	0.498	ppbv	#	84
48) Dibromochloromethane	7.393	129	10548m	0.465	ppbv		
49) Bromoform	9.493	173	8162	0.438	ppbv		97
50) 4-Methyl-2-Pentanone	5.794	43	19221m	0.515	ppbv		
51) 2-Hexanone	7.454	43	13390	0.466	ppbv	#	97
52) Tetrachloroethene	8.238	164	6821m	0.498	ppbv		
53) Toluene	6.946	91	20118	0.467	ppbv		96
54) 1,2-Dibromoethane	7.665	107	10511	0.520	ppbv		89
56) 1,1,1,2-Tetrachloroethane	8.930	131	9524	0.503	ppbv	#	1
57) Chlorobenzene	8.930	112	18701	0.534	ppbv	#	90
58) Ethyl Benzene	9.364	91	28584	0.482	ppbv	#	88
59) m/p-Xylene	9.558	91	45003m	0.946	ppbv		
60) o-Xylene	9.972	91	22370	0.474	ppbv		97
61) Styrene	9.879	104	9788	0.463	ppbv		99
62) Isopropylbenzene	10.545	105	36561	0.501	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.969	83	15485	0.521	ppbv		98
64) n-propylbenzene	10.995	120	9128	0.495	ppbv		93
65) tert-Butylbenzene	11.536	119	33122	0.498	ppbv		98
66) Benzyl Chloride	11.620	91	1935	0.470	ppbv		99
67) sec-Butylbenzene	11.775	105	45326	0.495	ppbv		98
69) p-Isopropyltoluene	11.931	119	35136	0.466	ppbv		98
70) n-Butylbenzene	12.287	91	35409	0.473	ppbv		96
71) 2-Chlorotoluene	10.908	91	26436	0.490	ppbv		99
72) 4-Ethyltoluene	11.131	105	27363	0.485	ppbv		97
73) 1,3,5-Trimethylbenzene	11.209	105	23183	0.465	ppbv		93
74) 1,2,4-Trimethylbenzene	11.545	105	25777	0.478	ppbv		89
75) 1,3-Dichlorobenzene	11.610	146	16708	0.522	ppbv		100
76) 1,4-Dichlorobenzene	11.678	146	15738	0.503	ppbv		96
77) 1,2-Dichlorobenzene	11.953	146	16364	0.516	ppbv		93
78) Hexachloro-1,3-Butadiene	13.892	225	14162	0.544	ppbv		96
79) Naphthalene	13.520	128	28052	0.516	ppbv		98
80) Naphthalene,2-methyl-	14.468	142	10859	0.422	ppbv		97
81) 1,2,4-Trichlorobenzene	13.445	180	14136	0.533	ppbv		95

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

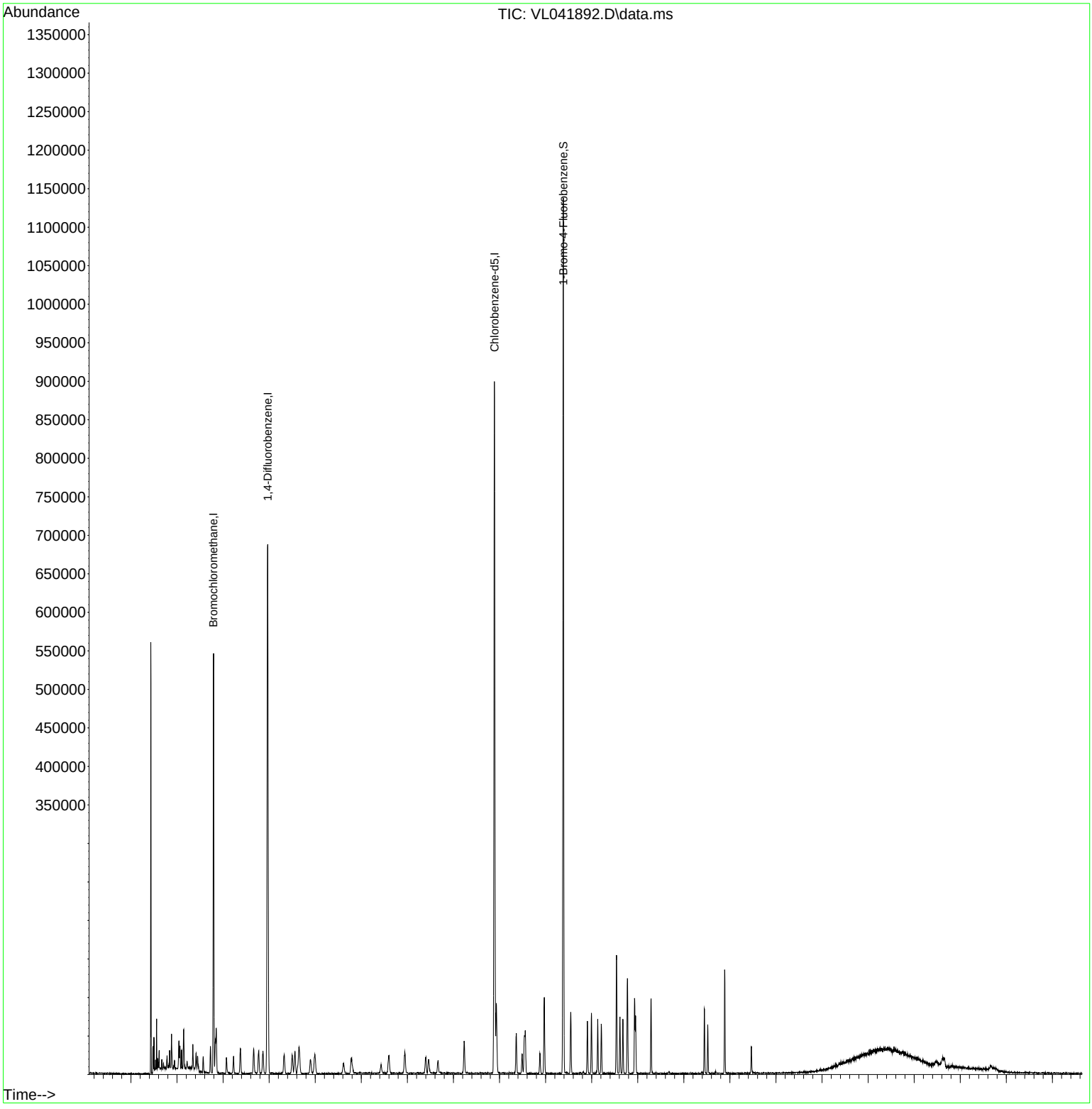
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041892.D
Acq On : 14 Jan 2025 14:30
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041893.D
Acq On : 14 Jan 2025 15:01
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 22:42:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.793	49	143362	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	425675	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.891	117	372545	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.387	95	292283	9.961	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%				
Target Compounds							Qvalue
5) Vinyl Chloride	1.583	62	828	0.111	ppbv		96
32) 1,1,1-Trichloroethane	3.383	97	2640m	0.095	ppbv		
35) Carbon Tetrachloride	3.768	117	2587m	0.097	ppbv		
38) Trichloroethene	4.557	130	1816m	0.117	ppbv		
52) Tetrachloroethene	8.234	164	1480m	0.109	ppbv		
54) 1,2-Dibromoethane	7.668	107	1872m	0.094	ppbv		
63) 1,1,2,2-Tetrachloroethane	9.976	83	2816	0.097	ppbv		95
79) Naphthalene	13.520	128	3643	0.068	ppbv	#	96

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

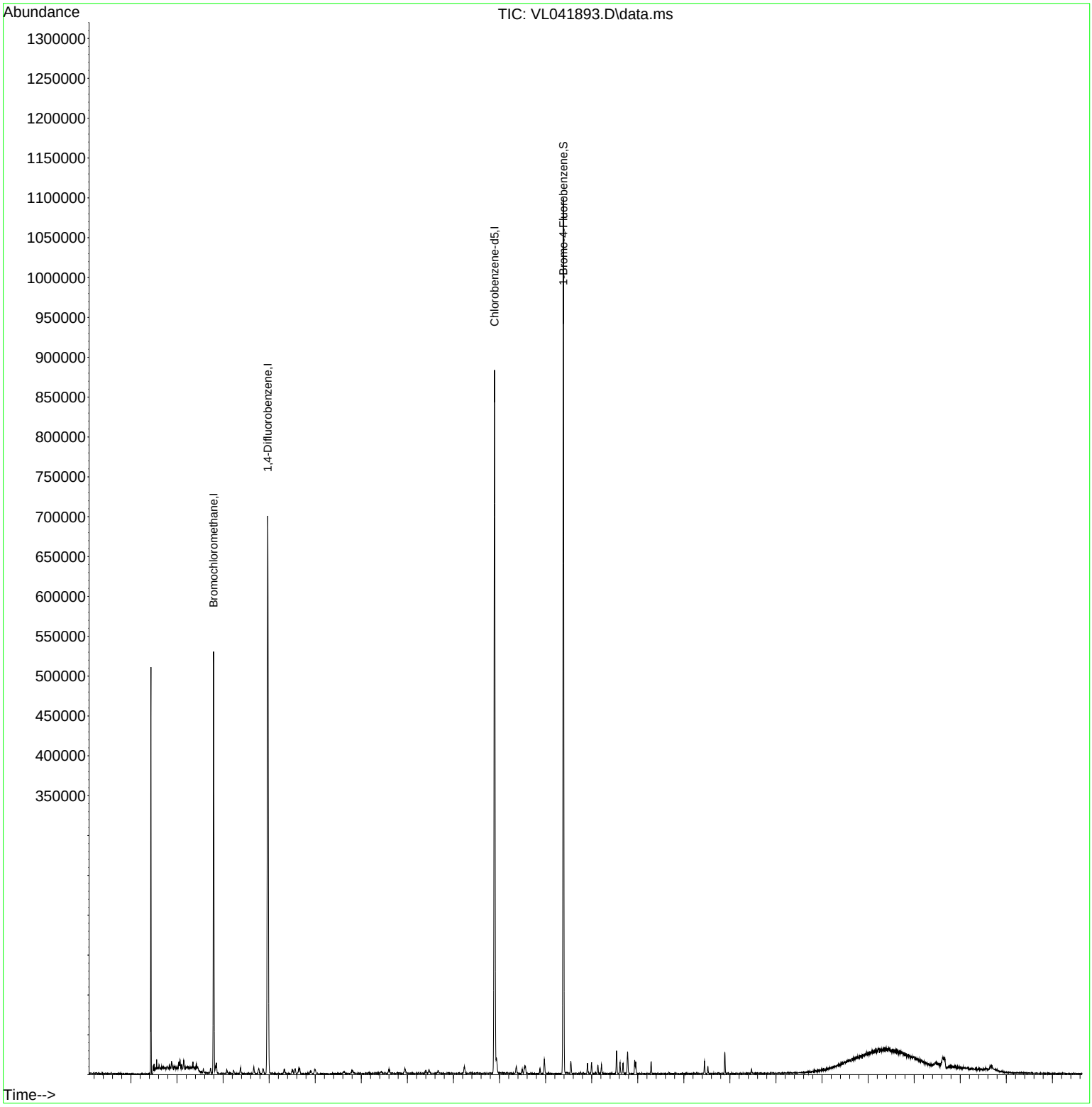
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041893.D
Acq On : 14 Jan 2025 15:01
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 22:42:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041894.D
Acq On : 14 Jan 2025 15:32
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	141659	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	424686	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	367402	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	287792	9.945	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	214m	0.029	ppbv	
32) 1,1,1-Trichloroethane	3.379	97	823	0.030	ppbv	85
35) Carbon Tetrachloride	3.774	117	771	0.029	ppbv #	56
38) Trichloroethene	4.557	130	364m	0.024	ppbv	
52) Tetrachloroethene	8.250	164	408m	0.030	ppbv	

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

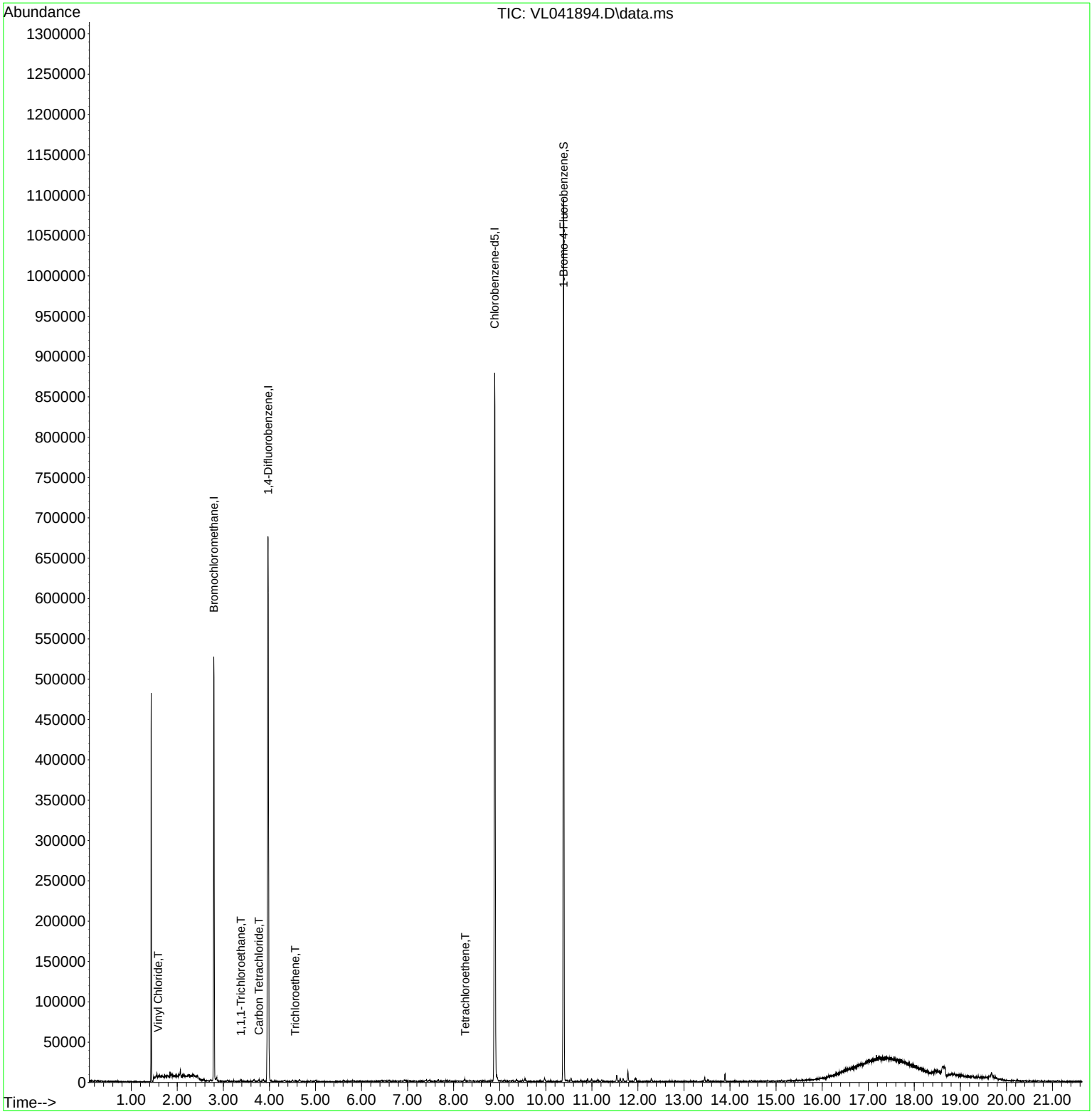
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041894.D
Acq On : 14 Jan 2025 15:32
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:32 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	141652	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	419859	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	383799	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	304042	10.058	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	275248	14.266	ppbv	100
3) Chlorodifluoromethane	1.479	51	285437	14.121	ppbv	98
4) Chloromethane	1.534	50	106071	14.617	ppbv	98
5) Vinyl Chloride	1.583	62	104404	14.204	ppbv	98
6) Bromomethane	1.670	94	49415	14.106	ppbv	91
7) Chloroethane	1.709	64	41130	14.383	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	244666	14.510	ppbv	100
9) Propene	1.486	41	116343	13.972	ppbv	99
10) Heptane	4.998	43	326897	14.688	ppbv	98
11) Trichlorofluoromethane	1.881	101	299656	14.930	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.143	101	232607	14.787	ppbv	100
13) Ethanol	1.725	45	6109	10.016	ppbv	83
14) Bromoethene	1.784	108	83586	14.513	ppbv	98
15) Acetone	1.839	43	223353	13.128	ppbv	99
16) 1,3-Butadiene	1.612	39	109420	14.329	ppbv	99
17) tert-Butyl alcohol	2.046	59	298424	14.252	ppbv	99
18) 1,1-Dichloroethene	2.039	96	104645	14.759	ppbv	92
19) Isopropyl Alcohol	1.890	45	134050	13.288	ppbv	98
20) Methylene Chloride	2.065	84	88425	13.151	ppbv	98
21) Allyl Chloride	2.101	41	169875	14.419	ppbv	96
22) trans-1,2-Dichloroethene	2.347	96	118169	14.768	ppbv	97
23) Vinyl Acetate	2.470	43	116632	15.747	ppbv	98
24) 1,1-Dichloroethane	2.415	63	230015	14.862	ppbv	99
25) Ethyl Acetate	2.842	43	665170	14.499	ppbv	100
26) Hexane	2.836	57	263948	14.547	ppbv	97
27) Carbon Disulfide	2.156	76	278476	15.509	ppbv	99
28) Methyl tert-Butyl Ether	2.447	73	187986	13.555	ppbv	98
29) Chloroform	2.858	83	413733	14.424	ppbv	98
30) Cyclohexane	3.868	84	233398	14.830	ppbv	99
31) cis-1,2-Dichloroethene	2.729	61	271739	14.223	ppbv	94
32) 1,1,1-Trichloroethane	3.379	97	419117	15.271	ppbv	99
34) 2-Butanone	2.564	43	380813	14.262	ppbv	99
35) Carbon Tetrachloride	3.774	117	426619	16.146	ppbv	97
36) Benzene	3.667	78	553665	14.378	ppbv	100
37) 1,2-Dichloroethane	3.227	62	321362	14.859	ppbv	99
38) Trichloroethene	4.564	130	222328	14.543	ppbv	98
39) 1,2-Dichloropropane	4.328	63	191532	14.179	ppbv	98
40) 1,4-Dioxane	4.596	88	97521	14.305	ppbv #	93
41) Tetrahydrofuran	3.062	42	217707	14.953	ppbv	99
42) Bromodichloromethane	4.502	83	445130	15.351	ppbv	95
43) Methyl Methacrylate	4.894	69	214564	14.999	ppbv	99
44) 2,2,4-Trimethylpentane	4.655	57	909437	14.601	ppbv	100
45) t-1,3-Dichloropropene	6.435	75	218001	16.281	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.619	75	281492	16.011	ppbv		98
47) 1,1,2-Trichloroethane	6.597	97	211658	14.782	ppbv		95
48) Dibromochloromethane	7.402	129	356392	16.134	ppbv		100
49) Bromoform	9.493	173	307617	16.953	ppbv		99
50) 4-Methyl-2-Pentanone	5.774	43	533053	14.653	ppbv		99
51) 2-Hexanone	7.451	43	430297	15.363	ppbv	#	97
52) Tetrachloroethene	8.237	164	183208	13.721	ppbv		96
53) Toluene	6.949	91	634515	15.126	ppbv		99
54) 1,2-Dibromoethane	7.665	107	295967	15.036	ppbv		93
56) 1,1,1,2-Tetrachloroethane	8.937	131	280809	14.665	ppbv		98
57) Chlorobenzene	8.933	112	479092	13.533	ppbv		99
58) Ethyl Benzene	9.367	91	887072	14.789	ppbv		100
59) m/p-Xylene	9.565	91	1420585m	29.506	ppbv		
60) o-Xylene	9.976	91	704577	14.765	ppbv		100
61) Styrene	9.882	104	342490	15.999	ppbv		99
62) Isopropylbenzene	10.548	105	1063809	14.406	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.976	83	426347	14.194	ppbv		100
64) n-propylbenzene	10.998	120	266972	14.308	ppbv		100
65) tert-Butylbenzene	11.542	119	947297	14.077	ppbv		98
66) Benzyl Chloride	11.626	91	68623	16.475	ppbv		98
67) sec-Butylbenzene	11.778	105	1292858	13.952	ppbv		100
69) p-Isopropyltoluene	11.937	119	1089109	14.273	ppbv		99
70) n-Butylbenzene	12.290	91	1059002	13.994	ppbv		99
71) 2-Chlorotoluene	10.911	91	797555	14.601	ppbv		100
72) 4-Ethyltoluene	11.134	105	847451	14.846	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	733759	14.556	ppbv		96
74) 1,2,4-Trimethylbenzene	11.549	105	773569	14.170	ppbv		92
75) 1,3-Dichlorobenzene	11.620	146	443828	13.720	ppbv		99
76) 1,4-Dichlorobenzene	11.681	146	447164	14.129	ppbv		99
77) 1,2-Dichlorobenzene	11.956	146	429118	13.385	ppbv		99
78) Hexachloro-1,3-Butadiene	13.892	225	335016	12.731	ppbv		100
79) Naphthalene	13.523	128	724573	13.183	ppbv		99
80) Naphthalene,2-methyl-	14.468	142	278955	10.704	ppbv		99
81) 1,2,4-Trichlorobenzene	13.452	180	342977	12.784	ppbv		98

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

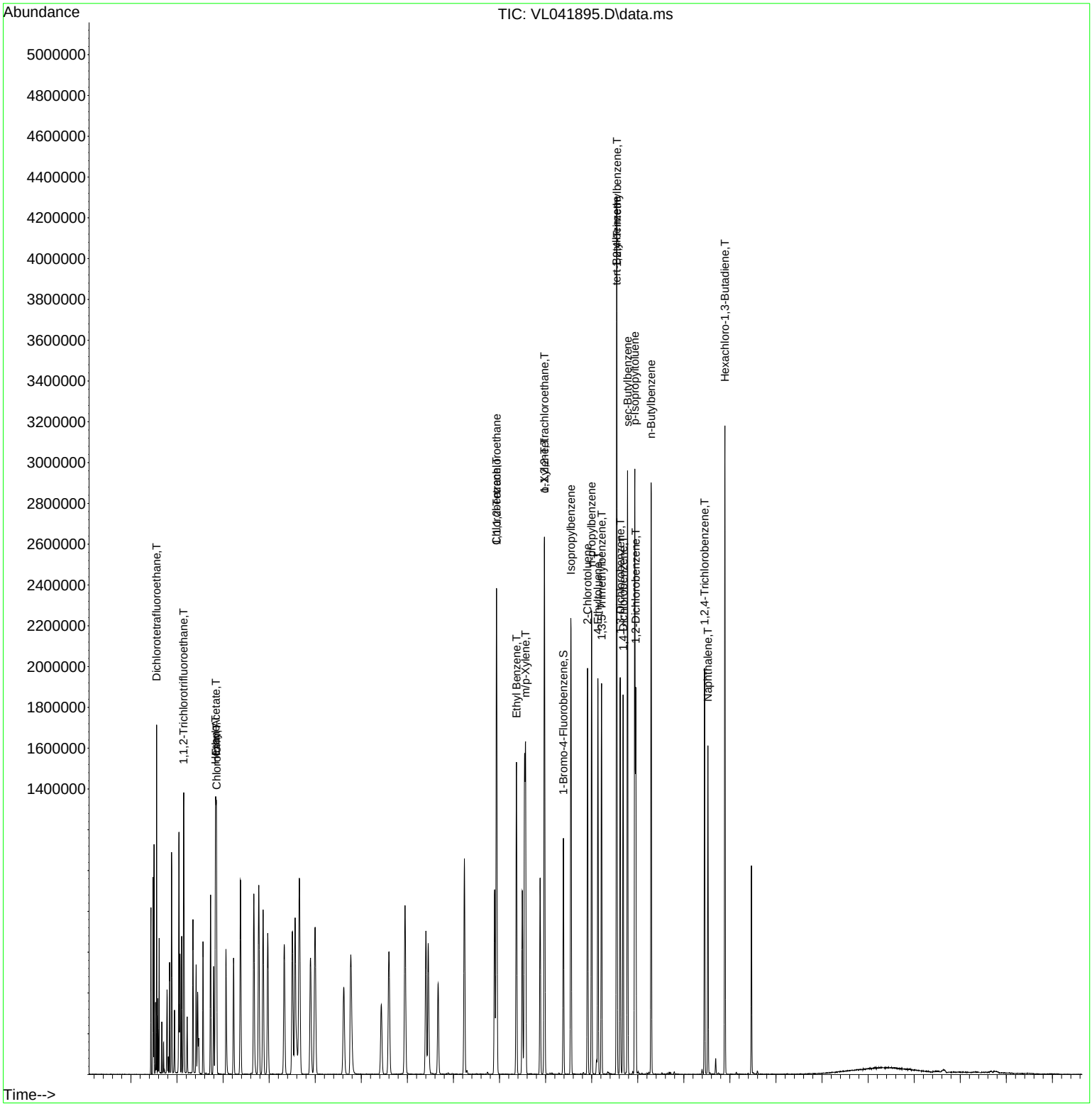
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041895.D
Acq On : 14 Jan 2025 16:05
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 14 21:21:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 16:31:18 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	141664	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	417936	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	373391	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	298000	10.133	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	190925	9.894	ppbv	97
3) Chlorodifluoromethane	1.479	51	200455	9.916	ppbv	100
4) Chloromethane	1.534	50	71767	9.889	ppbv	95
5) Vinyl Chloride	1.583	62	71974	9.791	ppbv	94
6) Bromomethane	1.670	94	33594	9.589	ppbv	96
7) Chloroethane	1.706	64	29553	10.333	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	163783	9.712	ppbv	99
9) Propene	1.486	41	82320	9.886	ppbv	99
10) Heptane	4.998	43	225230	10.119	ppbv	99
11) Trichlorofluoromethane	1.881	101	198523	9.890	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.143	101	159862	10.162	ppbv	100
13) Ethanol	1.725	45	3780	6.197	ppbv	97
14) Bromoethene	1.784	108	57260	9.941	ppbv	98
15) Acetone	1.839	43	150112	8.822	ppbv	98
16) 1,3-Butadiene	1.612	39	73640	9.643	ppbv	100
17) tert-Butyl alcohol	2.046	59	204358	9.758	ppbv	98
18) 1,1-Dichloroethene	2.039	96	71011	10.015	ppbv	96
19) Isopropyl Alcohol	1.890	45	93592	9.277	ppbv	97
20) Methylene Chloride	2.065	84	60115	8.940	ppbv	97
21) Allyl Chloride	2.101	41	118907	10.092	ppbv	97
22) trans-1,2-Dichloroethene	2.347	96	77379	9.669	ppbv	96
23) Vinyl Acetate	2.470	43	80428	9.536	ppbv #	95
24) 1,1-Dichloroethane	2.415	63	155440	10.042	ppbv	98
25) Ethyl Acetate	2.842	43	458484	9.993	ppbv	100
26) Hexane	2.832	57	184436	10.164	ppbv	99
27) Carbon Disulfide	2.156	76	186668	10.395	ppbv	98
28) Methyl tert-Butyl Ether	2.447	73	112489	8.110	ppbv	99
29) Chloroform	2.855	83	282467	9.847	ppbv	99
30) Cyclohexane	3.865	84	159296	10.120	ppbv	99
31) cis-1,2-Dichloroethene	2.729	61	187012	9.787	ppbv	97
32) 1,1,1-Trichloroethane	3.376	97	284661	10.371	ppbv	99
34) 2-Butanone	2.564	43	261536	9.840	ppbv	99
35) Carbon Tetrachloride	3.771	117	285391	10.871	ppbv	96
36) Benzene	3.667	78	374271	9.764	ppbv	99
37) 1,2-Dichloroethane	3.227	62	214545	9.966	ppbv	100
38) Trichloroethene	4.564	130	153255	10.075	ppbv	95
39) 1,2-Dichloropropane	4.324	63	130483	9.704	ppbv	97
40) 1,4-Dioxane	4.599	88	63736	9.386	ppbv #	99
41) Tetrahydrofuran	3.062	42	148132	10.255	ppbv	98
42) Bromodichloromethane	4.506	83	299656	10.381	ppbv	96
43) Methyl Methacrylate	4.894	69	145663	10.229	ppbv	100
44) 2,2,4-Trimethylpentane	4.654	57	619804	9.997	ppbv	100
45) t-1,3-Dichloropropene	6.428	75	145145	10.889	ppbv	98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.616	75	186898	10.680	ppbv		98
47) 1,1,2-Trichloroethane	6.596	97	140891	9.886	ppbv		97
48) Dibromochloromethane	7.399	129	238244	10.835	ppbv		100
49) Bromoform	9.493	173	201141	11.136	ppbv		99
50) 4-Methyl-2-Pentanone	5.771	43	363675	10.023	ppbv		99
51) 2-Hexanone	7.451	43	284058	10.189	ppbv	#	99
52) Tetrachloroethene	8.237	164	127806	9.616	ppbv		98
53) Toluene	6.949	91	427033	10.227	ppbv		99
54) 1,2-Dibromoethane	7.665	107	199339	10.175	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.937	131	188209	10.103	ppbv		99
57) Chlorobenzene	8.933	112	329025	9.553	ppbv		99
58) Ethyl Benzene	9.364	91	601857	10.314	ppbv		99
59) m/p-Xylene	9.561	91	964838m	20.628	ppbv		
60) o-Xylene	9.972	91	480442	10.348	ppbv		100
61) Styrene	9.878	104	229797	11.034	ppbv		99
62) Isopropylbenzene	10.548	105	728189	10.136	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.972	83	290998	9.809	ppbv		100
64) n-propylbenzene	10.998	120	182397	10.048	ppbv		98
65) tert-Butylbenzene	11.539	119	657521	10.043	ppbv		100
66) Benzyl Chloride	11.623	91	42509	10.490	ppbv	#	97
67) sec-Butylbenzene	11.778	105	901260	9.997	ppbv		98
69) p-Isopropyltoluene	11.934	119	745566	10.043	ppbv		99
70) n-Butylbenzene	12.290	91	733637	9.965	ppbv		99
71) 2-Chlorotoluene	10.911	91	543858	10.234	ppbv		100
72) 4-Ethyltoluene	11.134	105	568921	10.245	ppbv		99
73) 1,3,5-Trimethylbenzene	11.212	105	493388	10.061	ppbv		99
74) 1,2,4-Trimethylbenzene	11.545	105	528225	9.946	ppbv		98
75) 1,3-Dichlorobenzene	11.617	146	304133	9.664	ppbv		99
76) 1,4-Dichlorobenzene	11.681	146	297765	9.670	ppbv		99
77) 1,2-Dichlorobenzene	11.956	146	298039	9.555	ppbv		99
78) Hexachloro-1,3-Butadiene	13.889	225	228592	8.929	ppbv		99
79) Naphthalene	13.523	128	497063	9.295	ppbv		99
80) Naphthalene,2-methyl-	14.468	142	187571	7.398	ppbv		98
81) 1,2,4-Trichlorobenzene	13.448	180	236181	9.049	ppbv		99

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

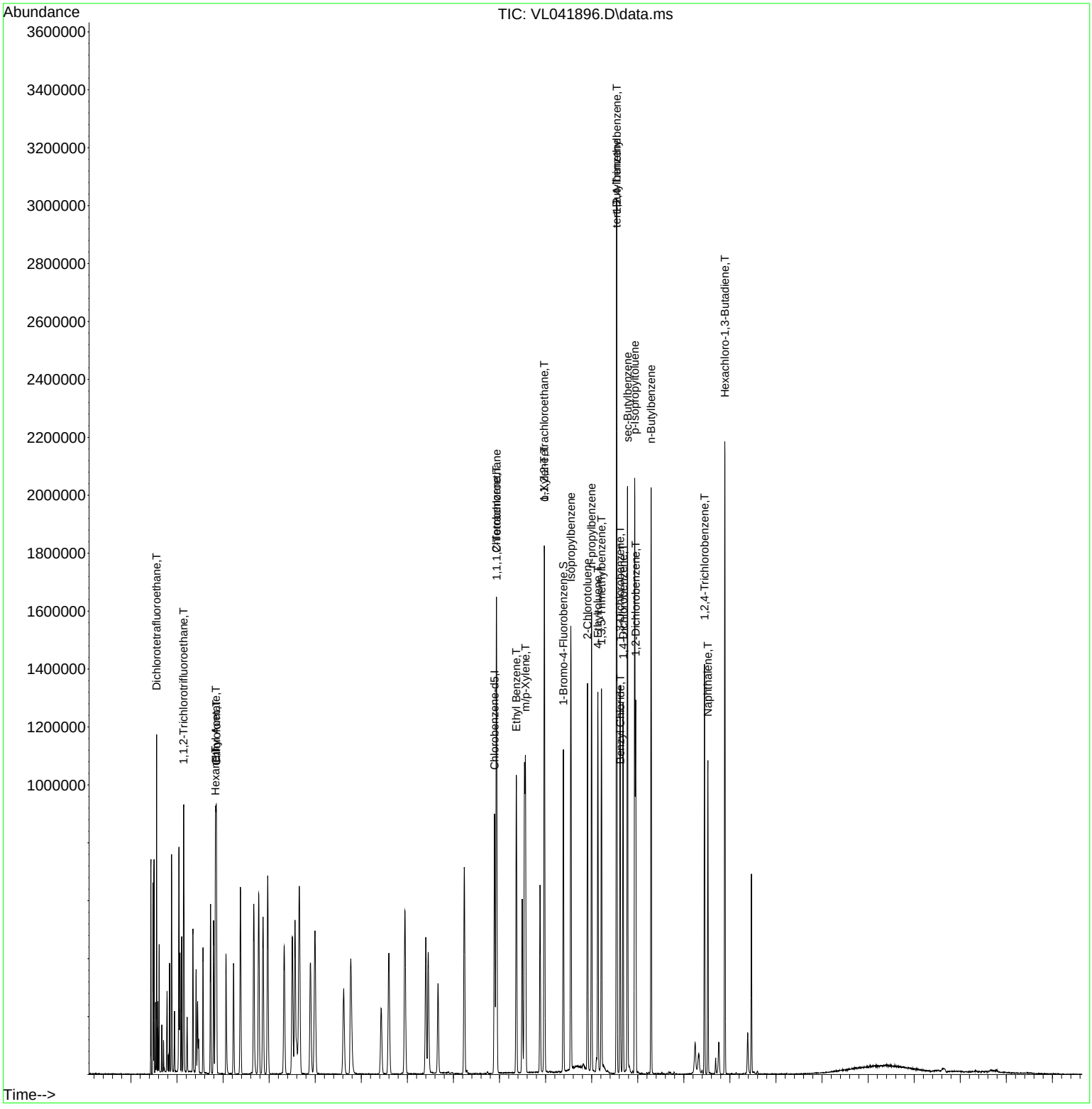
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/15/2025
Supervised By :Mahesh Dadoda 01/15/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	93	0.00
2	T	Dichlorodifluoromethane	1.362	1.348	1.0	96	0.00
3		Chlorodifluoromethane	1.427	1.415	0.8	99	0.00
4		Chloromethane	0.512	0.507	1.0	96	0.00
5	T	Vinyl Chloride	0.519	0.508	2.1	101	0.00
6	T	Bromomethane	0.247	0.237	4.0	96	0.00
7		Chloroethane	0.202	0.209	-3.5	101	0.00
8	T	Dichlorotetrafluoroethane	1.190	1.156	2.9	98	0.00
9	T	Propene	0.588	0.581	1.2	95	0.00
10	T	Heptane	1.571	1.590	-1.2	97	0.00
11	T	Trichlorofluoromethane	1.417	1.401	1.1	98	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.110	1.128	-1.6	99	0.00
13		Ethanol	0.043	0.027#	37.2#	91	0.00
14	T	Bromoethene	0.407	0.404	0.7	101	0.00
15	T	Acetone	1.201	1.060	11.7	99	0.00
16	T	1,3-Butadiene	0.539	0.520	3.5	98	0.00
17		tert-Butyl alcohol	1.478	1.443	2.4	96	0.00
18	T	1,1-Dichloroethene	0.501	0.501	0.0	102	0.00
19	T	Isopropyl Alcohol	0.712	0.661	7.2	99	0.00
20	T	Methylene Chloride	0.475	0.424	10.7	101	0.00
21	T	Allyl Chloride	0.832	0.839	-0.8	99	0.00
22	T	trans-1,2-Dichloroethene	0.565	0.546	3.4	94	0.00
23	T	Vinyl Acetate	0.595	0.568	4.5	98	0.00
24	T	1,1-Dichloroethane	1.093	1.097	-0.4	100	0.00
25	T	Ethyl Acetate	3.239	3.236	0.1	97	0.00
26	T	Hexane	1.281	1.302	-1.6	96	0.00
27	T	Carbon Disulfide	1.268	1.318	-3.9	97	0.00
28	T	Methyl tert-Butyl Ether	0.979	0.794	18.9	95	0.00
29	T	Chloroform	2.025	1.994	1.5	97	0.00
30	T	Cyclohexane	1.111	1.124	-1.2	97	0.00
31	T	cis-1,2-Dichloroethene	1.349	1.320	2.1	97	0.00
32	T	1,1,1-Trichloroethane	1.938	2.009	-3.7	98	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	93	0.00
34	T	2-Butanone	0.636	0.626	1.6	97	0.00
35	T	Carbon Tetrachloride	0.628	0.683	-8.8	98	0.00
36	T	Benzene	0.917	0.896	2.3	94	0.00
37	T	1,2-Dichloroethane	0.515	0.513	0.4	97	0.00
38	T	Trichloroethene	0.364	0.367	-0.8	96	0.00
39	T	1,2-Dichloropropane	0.322	0.312	3.1	95	0.00
40	T	1,4-Dioxane	0.162	0.153	5.6	96	0.00
41	T	Tetrahydrofuran	0.346	0.354	-2.3	95	0.00
42	T	Bromodichloromethane	0.691	0.717	-3.8	98	0.00
43		Methyl Methacrylate	0.341	0.349	-2.3	96	0.00
44	T	2,2,4-Trimethylpentane	1.484	1.483	0.1	95	0.00
45	T	t-1,3-Dichloropropene	0.319	0.347	-8.8	96	0.00
46	T	cis-1,3-Dichloropropene	0.419	0.447	-6.7	93	0.00
47	T	1,1,2-Trichloroethane	0.341	0.337	1.2	94	0.00
48	T	Dibromochloromethane	0.526	0.570	-8.4	97	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL011425\
Data File : VL041896.D
Acq On : 14 Jan 2025 17:33
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL011425

Quant Time: Jan 15 03:23:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.432	0.481	-11.3	97	0.00
50	T	4-Methyl-2-Pentanone	0.868	0.870	-0.2	97	0.00
51	T	2-Hexanone	0.667	0.680	-1.9	97	0.00
52	T	Tetrachloroethene	0.318	0.306	3.8	97	0.00
53	T	Toluene	0.999	1.022	-2.3	94	0.00
54	T	1,2-Dibromoethane	0.469	0.477	-1.7	98	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	0.499	0.504	-1.0	98	0.00
57	T	Chlorobenzene	0.922	0.881	4.4	97	0.00
58	T	Ethyl Benzene	1.563	1.612	-3.1	97	0.00
59	T	m/p-Xylene	1.253	1.292	-3.1	99	0.00
60	T	o-Xylene	1.243	1.287	-3.5	98	0.00
61	T	Styrene	0.558	0.615	-10.2	98	0.00
62		Isopropylbenzene	1.924	1.950	-1.4	98	0.00
63	T	1,1,2,2-Tetrachloroethane	0.795	0.779	2.0	97	0.00
64		n-propylbenzene	0.486	0.488	-0.4	97	0.00
65		tert-Butylbenzene	1.753	1.761	-0.5	98	0.00
66	T	Benzyl Chloride	0.109	0.114	-4.6	92	0.00
67		sec-Butylbenzene	2.414	2.414	0.0	98	0.00
68	S	1-Bromo-4-Fluorobenzene	0.788	0.798	-1.3	95	0.00
69		p-Isopropyltoluene	1.988	1.997	-0.5	97	0.00
70		n-Butylbenzene	1.972	1.965	0.4	97	0.00
71		2-Chlorotoluene	1.423	1.457	-2.4	98	0.00
72	T	4-Ethyltoluene	1.487	1.524	-2.5	97	0.00
73	T	1,3,5-Trimethylbenzene	1.313	1.321	-0.6	98	0.00
74	T	1,2,4-Trimethylbenzene	1.422	1.415	0.5	98	0.00
75	T	1,3-Dichlorobenzene	0.843	0.815	3.3	98	0.00
76	T	1,4-Dichlorobenzene	0.825	0.797	3.4	97	0.00
77	T	1,2-Dichlorobenzene	0.835	0.798	4.4	98	0.00
78	T	Hexachloro-1,3-Butadiene	0.686	0.612	10.8	97	0.00
79	T	Naphthalene	1.432	1.331	7.1	99	0.00
80	T	Naphthalene,2-methyl-	0.679	0.502	26.1	101	0.00
81	T	1,2,4-Trichlorobenzene	0.699	0.633	9.4	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

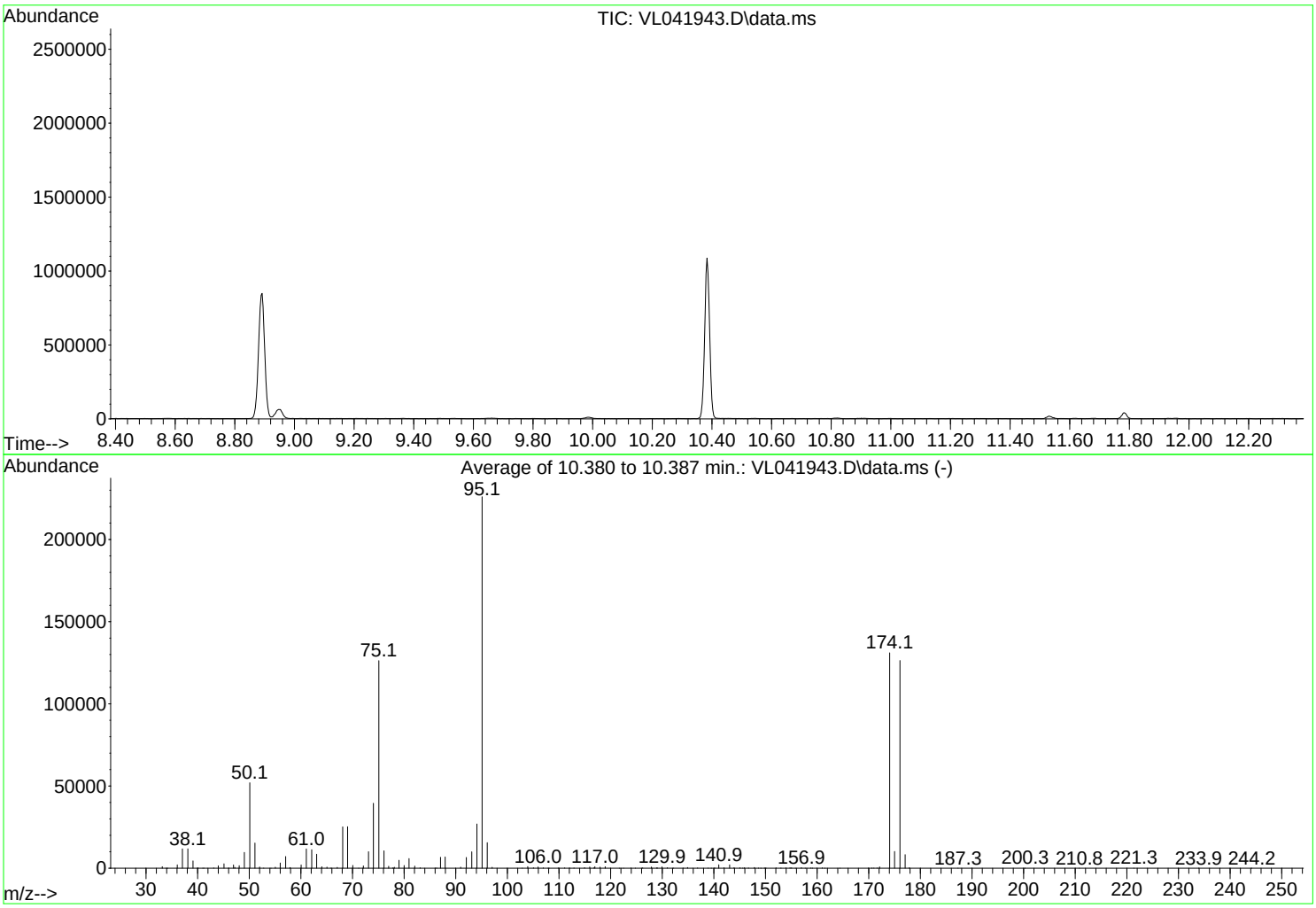
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041943.D
Acq On : 27 Jan 2025 09:02
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025



AutoFind: Scans 3180, 3181, 3182; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.0	51995	PASS
75	95	30	66	55.9	126285	PASS
95	95	100	100	100.0	226027	PASS
96	95	5	9	6.9	15556	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	58.0	131061	PASS
175	174	4	9	7.8	10200	PASS
176	174	93	101	96.4	126352	PASS
177	176	5	9	6.5	8251	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041944.D
Acq On : 27 Jan 2025 10:05
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 28 02:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.793	49	149075	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	415161	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	364534	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	290387	10.114	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	213119	10.496	ppbv	98
3) Chlorodifluoromethane	1.479	51	227003	10.671	ppbv	100
4) Chloromethane	1.534	50	82387	10.788	ppbv	98
5) Vinyl Chloride	1.583	62	78132	10.101	ppbv	97
6) Bromomethane	1.670	94	37894	10.279	ppbv	98
7) Chloroethane	1.706	64	33025	10.973	ppbv	97
8) Dichlorotetrafluoroethane	1.557	85	184435	10.393	ppbv	98
9) Propene	1.486	41	90955	10.380	ppbv	95
10) Heptane	4.994	43	258967	11.056	ppbv	98
11) Trichlorofluoromethane	1.881	101	205801	9.743	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.146	101	170817	10.318	ppbv	99
13) Ethanol	1.725	45	4415	6.878	ppbv	94
14) Bromoethene	1.787	108	58083	9.583	ppbv	96
15) Acetone	1.839	43	169478	9.465	ppbv	99
16) 1,3-Butadiene	1.612	39	84348	10.496	ppbv	100
17) tert-Butyl alcohol	2.046	59	207930	9.435	ppbv	98
18) 1,1-Dichloroethene	2.039	96	75629	10.136	ppbv	99
19) Isopropyl Alcohol	1.890	45	96486	9.088	ppbv	95
20) Methylene Chloride	2.065	84	64225	9.076	ppbv	98
21) Allyl Chloride	2.101	41	129597	10.453	ppbv	98
22) trans-1,2-Dichloroethene	2.347	96	87196	10.355	ppbv	97
23) Vinyl Acetate	2.470	43	73473	8.278	ppbv #	95
24) 1,1-Dichloroethane	2.415	63	168681	10.356	ppbv	99
25) Ethyl Acetate	2.845	43	533237	11.044	ppbv	99
26) Hexane	2.832	57	211315	11.066	ppbv	97
27) Carbon Disulfide	2.156	76	205971	10.900	ppbv	97
28) Methyl tert-Butyl Ether	2.447	73	111584	7.645	ppbv	100
29) Chloroform	2.858	83	326439	10.814	ppbv	99
30) Cyclohexane	3.871	84	176628	10.664	ppbv	100
31) cis-1,2-Dichloroethene	2.729	61	205197	10.205	ppbv	93
32) 1,1,1-Trichloroethane	3.379	97	312255	10.810	ppbv	99
34) 2-Butanone	2.564	43	303997	11.514	ppbv	99
35) Carbon Tetrachloride	3.774	117	316836	12.150	ppbv	99
36) Benzene	3.667	78	432961	11.370	ppbv	97
37) 1,2-Dichloroethane	3.227	62	240456	11.244	ppbv	99
38) Trichloroethene	4.564	130	167416	11.079	ppbv	97
39) 1,2-Dichloropropane	4.324	63	148143	11.091	ppbv	98
40) 1,4-Dioxane	4.596	88	69928	10.367	ppbv #	99
41) Tetrahydrofuran	3.065	42	170732	11.899	ppbv	99
42) Bromodichloromethane	4.502	83	334591	11.669	ppbv	96
43) Methyl Methacrylate	4.897	69	156013	11.029	ppbv	98
44) 2,2,4-Trimethylpentane	4.655	57	717998	11.658	ppbv	99
45) t-1,3-Dichloropropene	6.435	75	147450	11.136	ppbv	99

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041944.D
Acq On : 27 Jan 2025 10:05
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 28 02:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.619	75	202424	11.644	ppbv		99
47)	1,1,2-Trichloroethane	6.597	97	164305	11.606	ppbv		97
48)	Dibromochloromethane	7.399	129	262942	12.038	ppbv		100
49)	Bromoform	9.493	173	216634	12.074	ppbv		99
50)	4-Methyl-2-Pentanone	5.771	43	410655	11.394	ppbv		100
51)	2-Hexanone	7.451	43	319063	11.521	ppbv	#	98
52)	Tetrachloroethene	8.238	164	137364	10.404	ppbv		98
53)	Toluene	6.946	91	475146	11.456	ppbv		99
54)	1,2-Dibromoethane	7.668	107	224086	11.514	ppbv		94
56)	1,1,1,2-Tetrachloroethane	8.937	131	211703	11.640	ppbv		99
57)	Chlorobenzene	8.933	112	376929	11.210	ppbv		97
58)	Ethyl Benzene	9.364	91	655579	11.507	ppbv		99
59)	m/p-Xylene	9.561	91	1069261m	23.416	ppbv		
60)	o-Xylene	9.972	91	536013	11.826	ppbv		99
61)	Styrene	9.882	104	240993	11.853	ppbv		100
62)	Isopropylbenzene	10.548	105	806301	11.496	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.972	83	339396	11.718	ppbv		99
64)	n-propylbenzene	10.998	120	209670	11.831	ppbv		98
65)	tert-Butylbenzene	11.542	119	733219	11.472	ppbv		100
66)	Benzyl Chloride	11.626	91	42157	10.656	ppbv		97
67)	sec-Butylbenzene	11.778	105	1007276	11.445	ppbv		100
69)	p-Isopropyltoluene	11.937	119	838003	11.563	ppbv		99
70)	n-Butylbenzene	12.290	91	822628	11.445	ppbv		100
71)	2-Chlorotoluene	10.911	91	593791	11.445	ppbv		100
72)	4-Ethyltoluene	11.134	105	639849	11.802	ppbv		99
73)	1,3,5-Trimethylbenzene	11.212	105	552715	11.544	ppbv		94
74)	1,2,4-Trimethylbenzene	11.545	105	595508	11.485	ppbv		96
75)	1,3-Dichlorobenzene	11.617	146	342543	11.149	ppbv		99
76)	1,4-Dichlorobenzene	11.681	146	337079	11.213	ppbv		99
77)	1,2-Dichlorobenzene	11.956	146	339752	11.157	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.892	225	238004	9.523	ppbv		99
79)	Naphthalene	13.523	128	531745	10.186	ppbv		99
80)	Naphthalene,2-methyl-	14.468	142	172526	6.970	ppbv		99
81)	1,2,4-Trichlorobenzene	13.452	180	242148	9.503	ppbv		99

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

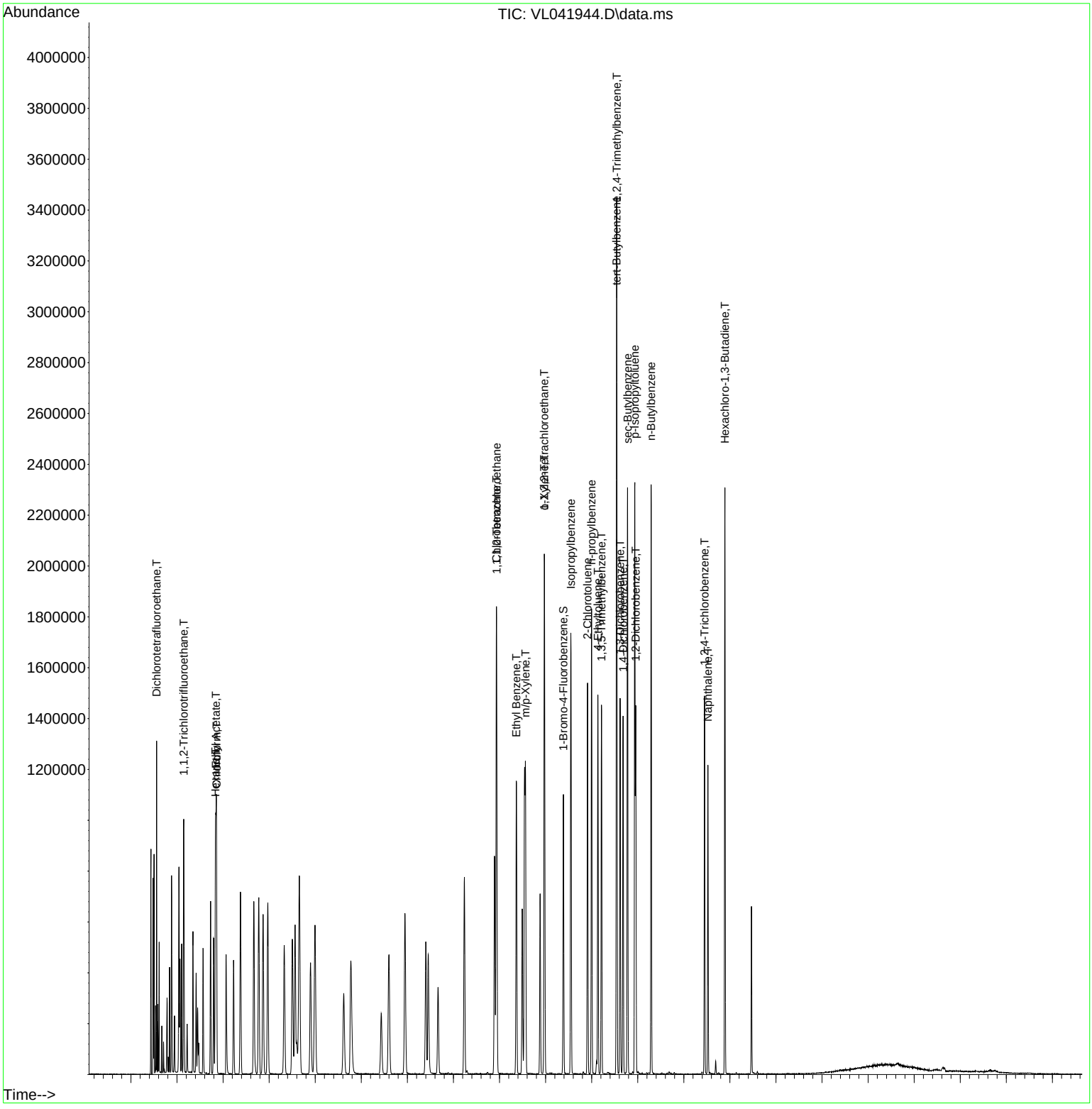
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041944.D
Acq On : 27 Jan 2025 10:05
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jan 28 02:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041944.D
Acq On : 27 Jan 2025 10:05
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Jan 28 02:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	1.362	1.430	-5.0	108	0.00
3		Chlorodifluoromethane	1.427	1.523	-6.7	112	0.00
4		Chloromethane	0.512	0.553	-8.0	110	0.00
5	T	Vinyl Chloride	0.519	0.524	-1.0	110	0.00
6	T	Bromomethane	0.247	0.254	-2.8	109	0.00
7		Chloroethane	0.202	0.222	-9.9	113	0.00
8	T	Dichlorotetrafluoroethane	1.190	1.237	-3.9	111	0.00
9	T	Propene	0.588	0.610	-3.7	105	0.00
10	T	Heptane	1.571	1.737	-10.6	111	0.00
11	T	Trichlorofluoromethane	1.417	1.381	2.5	101	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.110	1.146	-3.2	106	0.00
13		Ethanol	0.043	0.030#	30.2#	106	0.00
14	T	Bromoethene	0.407	0.390	4.2	103	0.00
15	T	Acetone	1.201	1.137	5.3	112	0.00
16	T	1,3-Butadiene	0.539	0.566	-5.0	112	0.00
17		tert-Butyl alcohol	1.478	1.395	5.6	98	0.00
18	T	1,1-Dichloroethene	0.501	0.507	-1.2	108	0.00
19	T	Isopropyl Alcohol	0.712	0.647	9.1	102	0.00
20	T	Methylene Chloride	0.475	0.431	9.3	108	0.00
21	T	Allyl Chloride	0.832	0.869	-4.4	107	0.00
22	T	trans-1,2-Dichloroethene	0.565	0.585	-3.5	106	0.00
23	T	Vinyl Acetate	0.595	0.493	17.1	90	0.00
24	T	1,1-Dichloroethane	1.093	1.132	-3.6	109	0.00
25	T	Ethyl Acetate	3.239	3.577	-10.4	113	0.00
26	T	Hexane	1.281	1.418	-10.7	110	0.00
27	T	Carbon Disulfide	1.268	1.382	-9.0	108	0.00
28	T	Methyl tert-Butyl Ether	0.979	0.749	23.5	95	0.00
29	T	Chloroform	2.025	2.190	-8.1	112	0.00
30	T	Cyclohexane	1.111	1.185	-6.7	107	0.00
31	T	cis-1,2-Dichloroethene	1.349	1.376	-2.0	106	0.00
32	T	1,1,1-Trichloroethane	1.938	2.095	-8.1	108	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.00
34	T	2-Butanone	0.636	0.732	-15.1	112	0.00
35	T	Carbon Tetrachloride	0.628	0.763	-21.5	109	0.00
36	T	Benzene	0.917	1.043	-13.7	109	0.00
37	T	1,2-Dichloroethane	0.515	0.579	-12.4	109	0.00
38	T	Trichloroethene	0.364	0.403	-10.7	105	0.00
39	T	1,2-Dichloropropane	0.322	0.357	-10.9	108	0.00
40	T	1,4-Dioxane	0.162	0.168	-3.7	106	0.00
41	T	Tetrahydrofuran	0.346	0.411	-18.8	109	0.00
42	T	Bromodichloromethane	0.691	0.806	-16.6	109	0.00
43		Methyl Methacrylate	0.341	0.376	-10.3	103	0.00
44	T	2,2,4-Trimethylpentane	1.484	1.729	-16.5	110	0.00
45	T	t-1,3-Dichloropropene	0.319	0.355	-11.3	97	0.00
46	T	cis-1,3-Dichloropropene	0.419	0.488	-16.5	101	0.00
47	T	1,1,2-Trichloroethane	0.341	0.396	-16.1	110	0.00
48	T	Dibromochloromethane	0.526	0.633	-20.3	107	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041944.D
Acq On : 27 Jan 2025 10:05
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument : MSVOA_L
LabSampleId : VSTDCCC010

Quant Time: Jan 28 02:32:47 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.432	0.522	-20.8	105	0.00
50	T	4-Methyl-2-Pentanone	0.868	0.989	-13.9	110	0.00
51	T	2-Hexanone	0.667	0.769	-15.3	109	0.00
52	T	Tetrachloroethene	0.318	0.331	-4.1	105	0.00
53	T	Toluene	0.999	1.144	-14.5	105	0.00
54	T	1,2-Dibromoethane	0.469	0.540	-15.1	110	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	91	0.00
56		1,1,1,2-Tetrachloroethane	0.499	0.581	-16.4	110	0.00
57	T	Chlorobenzene	0.922	1.034	-12.1	111	0.00
58	T	Ethyl Benzene	1.563	1.798	-15.0	106	0.00
59	T	m/p-Xylene	1.253	1.467	-17.1	109	0.00
60	T	o-Xylene	1.243	1.470	-18.3	109	0.00
61	T	Styrene	0.558	0.661	-18.5	103	0.00
62		Isopropylbenzene	1.924	2.212	-15.0	109	0.00
63	T	1,1,2,2-Tetrachloroethane	0.795	0.931	-17.1	113	0.00
64		n-propylbenzene	0.486	0.575	-18.3	112	0.00
65		tert-Butylbenzene	1.753	2.011	-14.7	109	0.00
66	T	Benzyl Chloride	0.109	0.116	-6.4	92	0.00
67		sec-Butylbenzene	2.414	2.763	-14.5	109	0.00
68	S	1-Bromo-4-Fluorobenzene	0.788	0.797	-1.1	93	0.00
69		p-Isopropyltoluene	1.988	2.299	-15.6	109	0.00
70		n-Butylbenzene	1.972	2.257	-14.5	108	0.00
71		2-Chlorotoluene	1.423	1.629	-14.5	107	0.00
72	T	4-Ethyltoluene	1.487	1.755	-18.0	109	0.00
73	T	1,3,5-Trimethylbenzene	1.313	1.516	-15.5	109	0.00
74	T	1,2,4-Trimethylbenzene	1.422	1.634	-14.9	111	0.00
75	T	1,3-Dichlorobenzene	0.843	0.940	-11.5	110	0.00
76	T	1,4-Dichlorobenzene	0.825	0.925	-12.1	110	0.00
77	T	1,2-Dichlorobenzene	0.835	0.932	-11.6	112	0.00
78	T	Hexachloro-1,3-Butadiene	0.686	0.653	4.8	102	0.00
79	T	Naphthalene	1.432	1.459	-1.9	106	0.00
80	T	Naphthalene,2-methyl-	0.679	0.473	30.3#	93	0.00
81	T	1,2,4-Trichlorobenzene	0.699	0.664	5.0	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041946.D
Acq On : 27 Jan 2025 11:17
Operator : SY/MD
Sample : VL0127ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0127ABL02

Quant Time: Jan 28 02:34:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

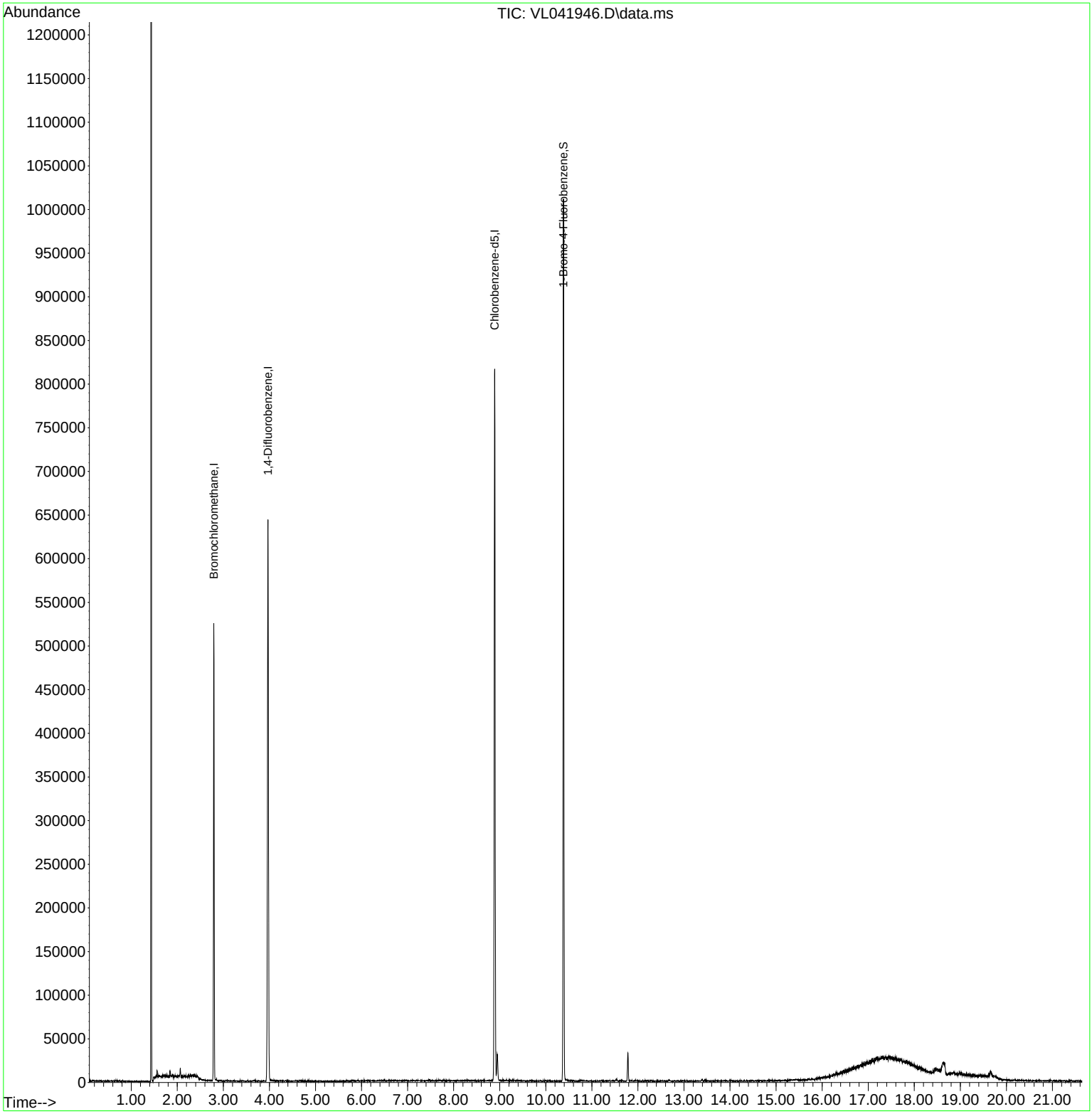
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	142661	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.968	114	386765	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	337301	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.383	95	257049	9.675	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.800%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041946.D
Acq On : 27 Jan 2025 11:17
Operator : SY/MD
Sample : VL0127ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0127ABL02

Quant Time: Jan 28 02:34:02 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041947.D
Acq On : 27 Jan 2025 12:19
Operator : SY/MD
Sample : VL0127ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 28 02:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0127ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	143025	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.975	114	399567	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.895	117	348759	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	276515	10.066	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	206901	10.620	ppbv		99
3) Chlorodifluoromethane	1.480	51	214338	10.502	ppbv		99
4) Chloromethane	1.538	50	76820	10.485	ppbv		96
5) Vinyl Chloride	1.583	62	76382	10.292	ppbv		97
6) Bromomethane	1.671	94	35162	9.941	ppbv		96
7) Chloroethane	1.709	64	30210	10.463	ppbv		98
8) Dichlorotetrafluoroethane	1.557	85	172692	10.143	ppbv		100
9) Propene	1.486	41	86511	10.290	ppbv		97
10) Heptane	4.998	43	253457	11.279	ppbv		98
11) Trichlorofluoromethane	1.884	101	197641	9.753	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.146	101	156498	9.853	ppbv		98
13) Ethanol	1.729	45	4346	7.057	ppbv		90
14) Bromoethene	1.787	108	57049	9.810	ppbv		99
15) Acetone	1.842	43	158965	9.254	ppbv		99
16) 1,3-Butadiene	1.612	39	83092	10.777	ppbv		97
17) tert-Butyl alcohol	2.049	59	194278	9.189	ppbv		98
18) 1,1-Dichloroethene	2.040	96	69693	9.736	ppbv		96
19) Isopropyl Alcohol	1.894	45	92836	9.115	ppbv		94
20) Methylene Chloride	2.069	84	60388	8.895	ppbv		95
21) Allyl Chloride	2.104	41	116571	9.800	ppbv		99
22) trans-1,2-Dichloroethene	2.347	96	81007	10.027	ppbv		97
23) Vinyl Acetate	2.470	43	79222	9.304	ppbv	#	96
24) 1,1-Dichloroethane	2.418	63	162663	10.409	ppbv		99
25) Ethyl Acetate	2.849	43	513887	11.094	ppbv		99
26) Hexane	2.836	57	200961	10.969	ppbv		95
27) Carbon Disulfide	2.156	76	192704	10.629	ppbv		99
28) Methyl tert-Butyl Ether	2.451	73	124946	8.923	ppbv		99
29) Chloroform	2.858	83	315137	10.881	ppbv		97
30) Cyclohexane	3.872	84	171665	10.802	ppbv		100
31) cis-1,2-Dichloroethene	2.732	61	198570	10.293	ppbv		92
32) 1,1,1-Trichloroethane	3.380	97	299609	10.811	ppbv		99
34) 2-Butanone	2.567	43	290154	11.419	ppbv		99
35) Carbon Tetrachloride	3.778	117	308983	12.311	ppbv		98
36) Benzene	3.671	78	414621	11.314	ppbv		99
37) 1,2-Dichloroethane	3.231	62	230482	11.198	ppbv		99
38) Trichloroethene	4.567	130	164755	11.329	ppbv		95
39) 1,2-Dichloropropane	4.334	63	143940	11.197	ppbv		97
40) 1,4-Dioxane	4.606	88	69223	10.663	ppbv	#	97
41) Tetrahydrofuran	3.069	42	160711	11.637	ppbv		99
42) Bromodichloromethane	4.509	83	328091	11.889	ppbv		95
43) Methyl Methacrylate	4.901	69	156642	11.506	ppbv		99
44) 2,2,4-Trimethylpentane	4.661	57	691648	11.668	ppbv		99
45) t-1,3-Dichloropropene	6.435	75	146256	11.477	ppbv		98

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041947.D
Acq On : 27 Jan 2025 12:19
Operator : SY/MD
Sample : VL0127ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 28 02:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 2
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0127ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.626	75	197114	11.781	ppbv		100
47) 1,1,2-Trichloroethane	6.607	97	162420	11.921	ppbv		96
48) Dibromochloromethane	7.406	129	248197	11.806	ppbv		99
49) Bromoform	9.497	173	205170	11.881	ppbv		99
50) 4-Methyl-2-Pentanone	5.778	43	396687	11.436	ppbv		100
51) 2-Hexanone	7.461	43	320223	12.014	ppbv	#	97
52) Tetrachloroethene	8.238	164	137187	10.796	ppbv		95
53) Toluene	6.953	91	467674	11.715	ppbv		100
54) 1,2-Dibromoethane	7.671	107	215083	11.483	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.940	131	206531	11.870	ppbv		100
57) Chlorobenzene	8.937	112	373904	11.623	ppbv		97
58) Ethyl Benzene	9.371	91	647487	11.880	ppbv		96
59) m/p-Xylene	9.545	91	1065769m	24.395	ppbv		
60) o-Xylene	9.979	91	529149	12.203	ppbv		99
61) Styrene	9.885	104	243068	12.495	ppbv		99
62) Isopropylbenzene	10.552	105	793281	11.822	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.976	83	323789	11.685	ppbv		99
64) n-propylbenzene	11.002	120	206392	12.173	ppbv		99
65) tert-Butylbenzene	11.542	119	702412	11.487	ppbv		99
66) Benzyl Chloride	11.627	91	39829	10.523	ppbv		99
67) sec-Butylbenzene	11.779	105	980787	11.648	ppbv		100
69) p-Isopropyltoluene	11.937	119	813693	11.735	ppbv		100
70) n-Butylbenzene	12.293	91	802930	11.677	ppbv		99
71) 2-Chlorotoluene	10.914	91	587822	11.843	ppbv		100
72) 4-Ethyltoluene	11.138	105	644084	12.417	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	543491	11.865	ppbv		96
74) 1,2,4-Trimethylbenzene	11.549	105	591073	11.915	ppbv		95
75) 1,3-Dichlorobenzene	11.620	146	342442	11.649	ppbv		99
76) 1,4-Dichlorobenzene	11.682	146	338784	11.780	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	327583	11.244	ppbv		100
78) Hexachloro-1,3-Butadiene	13.895	225	217546	9.098	ppbv		99
79) Naphthalene	13.526	128	498588	9.982	ppbv		99
80) Naphthalene,2-methyl-	14.472	142	203477	8.593	ppbv		97
81) 1,2,4-Trichlorobenzene	13.452	180	220567	9.047	ppbv		99

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

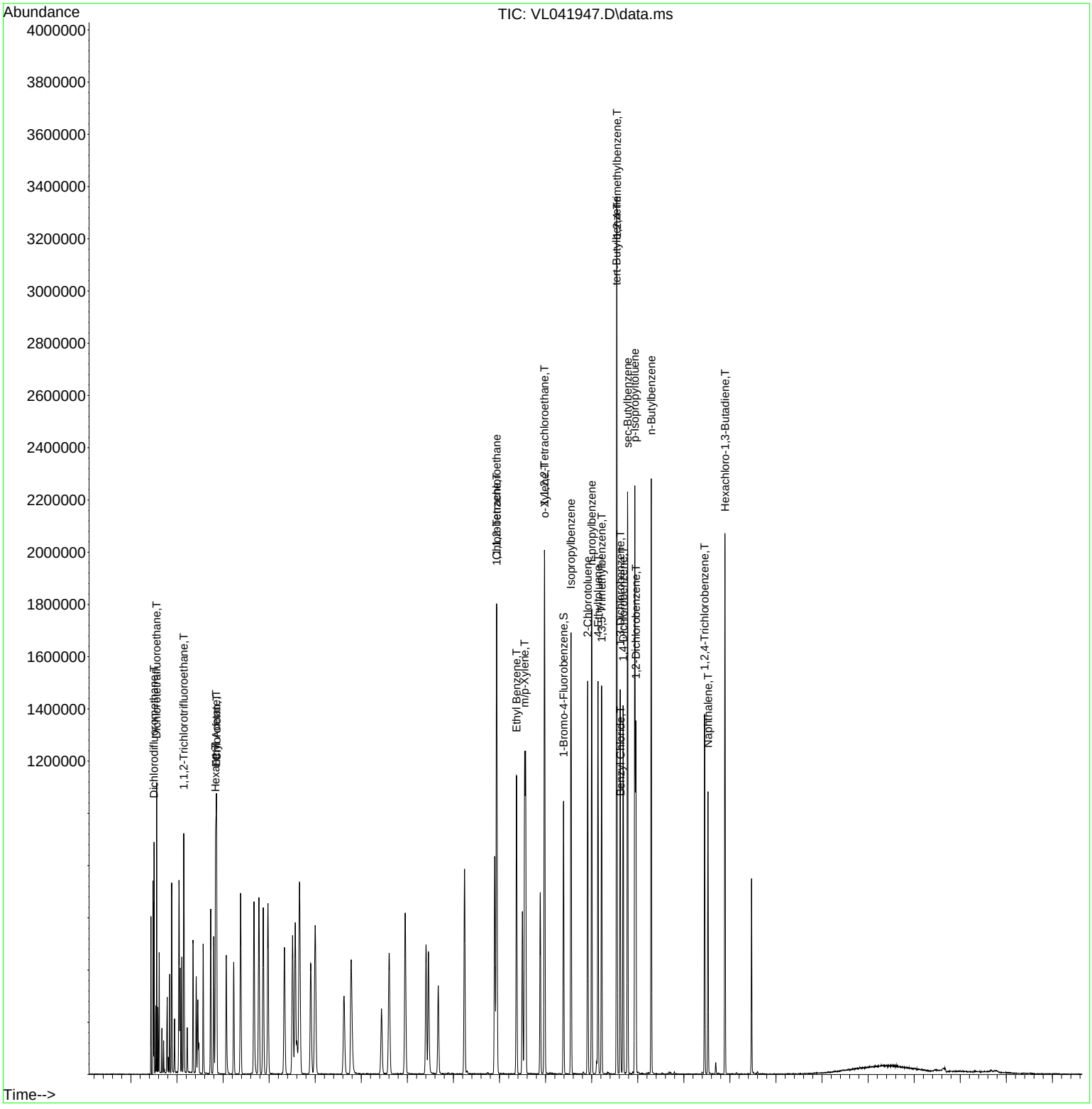
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041947.D
Acq On : 27 Jan 2025 12:19
Operator : SY/MD
Sample : VL0127ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Jan 28 02:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0127ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 01/30/2025
Supervised By :Mahesh Dadoda 01/30/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041954.D
Acq On : 27 Jan 2025 16:11
Operator : SY/MD
Sample : QC012125 CAN 10268
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC012125 CAN 10268

Quant Time: Jan 28 02:39:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

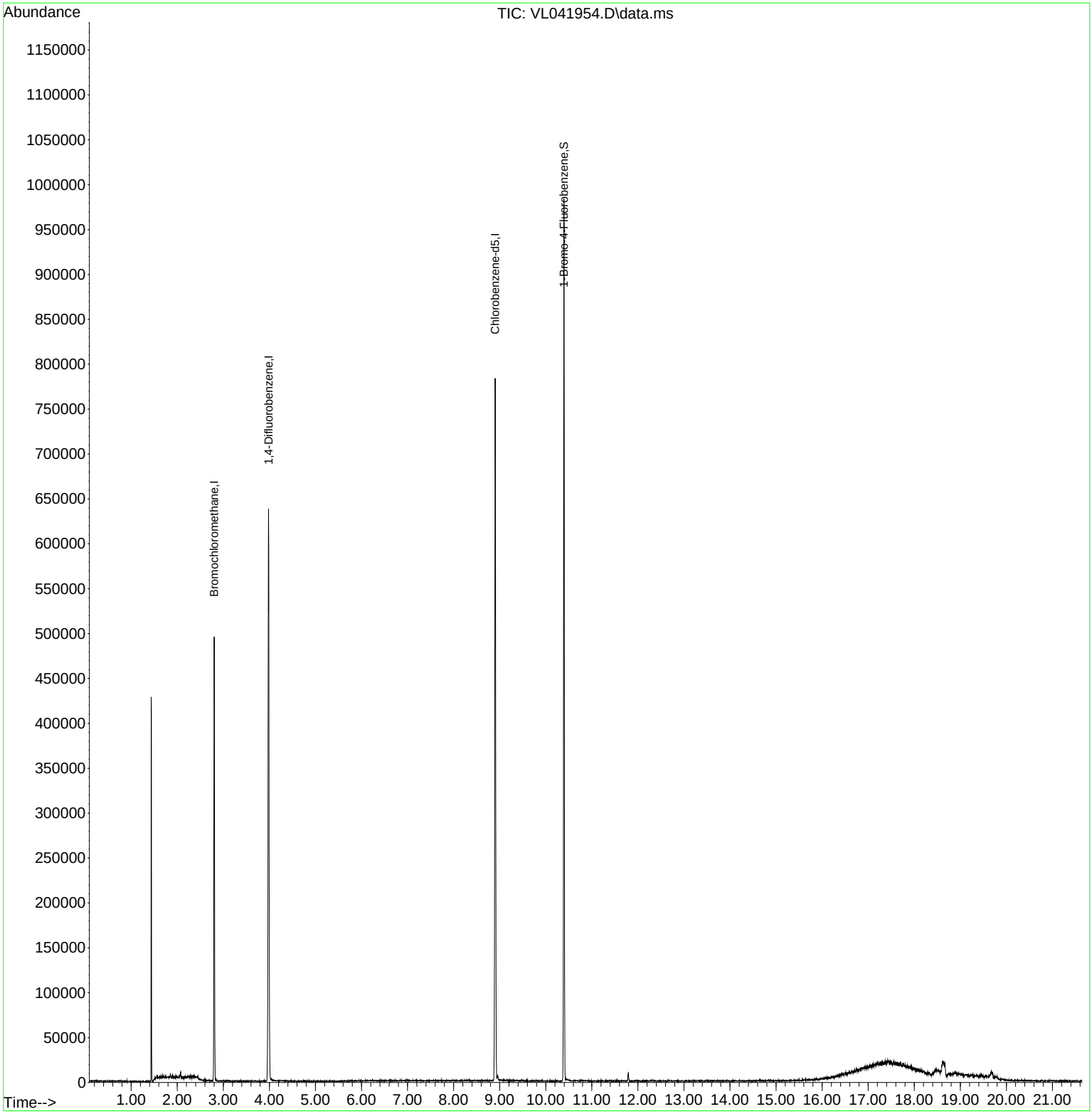
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	136962	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.982	114	367356	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.901	117	317099	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	238739	9.559	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.600%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL012725\
Data File : VL041954.D
Acq On : 27 Jan 2025 16:11
Operator : SY/MD
Sample : QC012125 CAN 10268
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC012125 CAN 10268

Quant Time: Jan 28 02:39:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



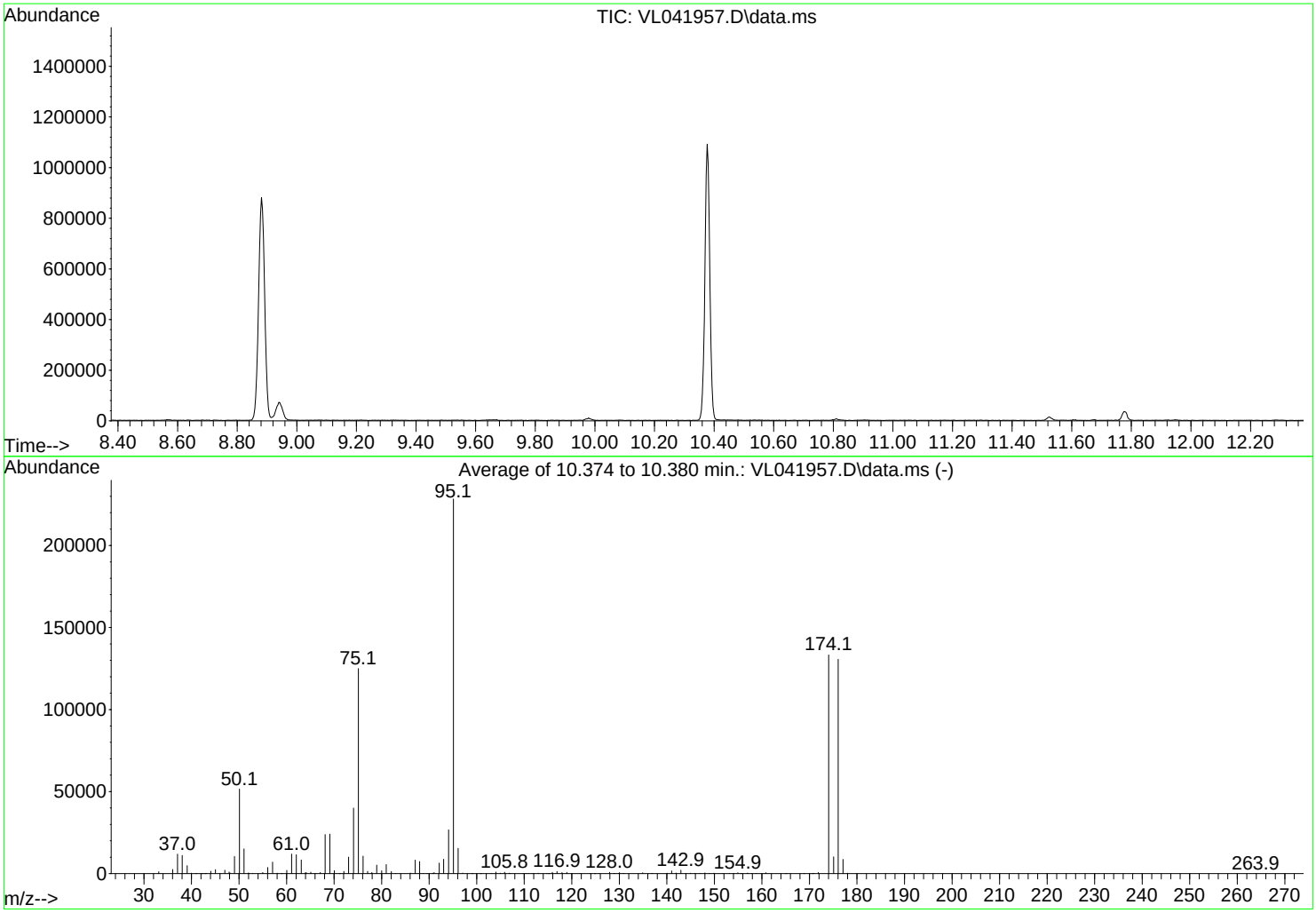
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041957.D
Acq On : 03 Feb 2025 09:47
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Tue Jan 14 23:15:42 2025



AutoFind: Scans 3178, 3179, 3180; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.6	51539	PASS
75	95	30	66	54.7	125019	PASS
95	95	100	100	100.0	228352	PASS
96	95	5	9	6.8	15439	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	58.4	133352	PASS
175	174	4	9	7.7	10244	PASS
176	174	93	101	98.0	130661	PASS
177	176	5	9	6.6	8641	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	157470	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	429487	10.000	ppbv	-0.01
55) Chlorobenzene-d5	8.885	117	371333	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.381	95	289698	9.905	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	218366	10.181	ppbv	100
3) Chlorodifluoromethane	1.477	51	231387	10.298	ppbv	99
4) Chloromethane	1.535	50	86482	10.721	ppbv	97
5) Vinyl Chloride	1.580	62	83248	10.188	ppbv	98
6) Bromomethane	1.667	94	38248	9.822	ppbv	99
7) Chloroethane	1.706	64	34164	10.747	ppbv	99
8) Dichlorotetrafluoroethane	1.554	85	186350	9.941	ppbv	99
9) Propene	1.483	41	95902	10.361	ppbv	98
10) Heptane	4.985	43	266975	10.790	ppbv	97
11) Trichlorofluoromethane	1.878	101	212261	9.513	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.140	101	162930	9.317	ppbv	99
13) Ethanol	1.722	45	4416	6.513	ppbv	99
14) Bromoethene	1.784	108	60620	9.468	ppbv	100
15) Acetone	1.836	43	176459	9.330	ppbv	99
16) 1,3-Butadiene	1.609	39	86792	10.224	ppbv	99
17) tert-Butyl alcohol	2.043	59	206522	8.872	ppbv	99
18) 1,1-Dichloroethene	2.036	96	74437	9.444	ppbv	93
19) Isopropyl Alcohol	1.888	45	101008	9.007	ppbv	94
20) Methylene Chloride	2.062	84	62977	8.426	ppbv	95
21) Allyl Chloride	2.098	41	126741	9.677	ppbv	98
22) trans-1,2-Dichloroethene	2.344	96	86281	9.700	ppbv	97
23) Vinyl Acetate	2.467	43	84390	9.001	ppbv #	98
24) 1,1-Dichloroethane	2.412	63	171515	9.969	ppbv	100
25) Ethyl Acetate	2.839	43	552271	10.829	ppbv	100
26) Hexane	2.829	57	216097	10.713	ppbv	95
27) Carbon Disulfide	2.153	76	200432	10.041	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	149839	9.719	ppbv	100
29) Chloroform	2.852	83	333879	10.471	ppbv	100
30) Cyclohexane	3.862	84	183180	10.470	ppbv	98
31) cis-1,2-Dichloroethene	2.723	61	208686	9.825	ppbv	95
32) 1,1,1-Trichloroethane	3.370	97	318650	10.444	ppbv	99
34) 2-Butanone	2.561	43	312946	11.458	ppbv	99
35) Carbon Tetrachloride	3.765	117	320703	11.888	ppbv	99
36) Benzene	3.661	78	444350	11.280	ppbv	97
37) 1,2-Dichloroethane	3.221	62	241263	10.905	ppbv	99
38) Trichloroethene	4.551	130	175365	11.218	ppbv	90
39) 1,2-Dichloropropane	4.322	63	155514	11.255	ppbv	98
40) 1,4-Dioxane	4.590	88	74675	10.701	ppbv #	97
41) Tetrahydrofuran	3.059	42	174208	11.736	ppbv	98
42) Bromodichloromethane	4.496	83	344670	11.620	ppbv	96
43) Methyl Methacrylate	4.888	69	156216	10.675	ppbv	95
44) 2,2,4-Trimethylpentane	4.645	57	751181	11.790	ppbv	99
45) t-1,3-Dichloropropene	6.425	75	148089	10.811	ppbv	98

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.610	75	202762	11.274	ppbv		99
47)	1,1,2-Trichloroethane	6.590	97	167097	11.410	ppbv		98
48)	Dibromochloromethane	7.393	129	269437	11.924	ppbv		99
49)	Bromoform	9.487	173	225054	12.125	ppbv		100
50)	4-Methyl-2-Pentanone	5.762	43	428753	11.499	ppbv		98
51)	2-Hexanone	7.445	43	336693	11.752	ppbv	#	96
52)	Tetrachloroethene	8.231	164	139466	10.211	ppbv		95
53)	Toluene	6.940	91	483814	11.275	ppbv		100
54)	1,2-Dibromoethane	7.659	107	229203	11.384	ppbv		97
56)	1,1,1,2-Tetrachloroethane	8.931	131	220185	11.885	ppbv		99
57)	Chlorobenzene	8.927	112	386374	11.280	ppbv		98
58)	Ethyl Benzene	9.358	91	669174	11.531	ppbv		97
59)	m/p-Xylene	9.555	91	1106231m	23.782	ppbv		
60)	o-Xylene	9.969	91	555194	12.025	ppbv		98
61)	Styrene	9.876	104	246355	11.895	ppbv		99
62)	Isopropylbenzene	10.542	105	834260	11.677	ppbv		99
63)	1,1,2,2-Tetrachloroethane	9.966	83	362310	12.280	ppbv		99
64)	n-propylbenzene	10.992	120	215585	11.942	ppbv		98
65)	tert-Butylbenzene	11.536	119	746398	11.464	ppbv		99
66)	Benzyl Chloride	11.620	91	44973	11.160	ppbv		98
67)	sec-Butylbenzene	11.772	105	1044912	11.655	ppbv		100
69)	p-Isopropyltoluene	11.931	119	867909	11.756	ppbv		99
70)	n-Butylbenzene	12.284	91	848499	11.589	ppbv		100
71)	2-Chlorotoluene	10.905	91	615388	11.644	ppbv		98
72)	4-Ethyltoluene	11.128	105	658660	11.926	ppbv		100
73)	1,3,5-Trimethylbenzene	11.209	105	566361	11.613	ppbv		96
74)	1,2,4-Trimethylbenzene	11.542	105	616177	11.666	ppbv		90
75)	1,3-Dichlorobenzene	11.614	146	357966	11.437	ppbv		99
76)	1,4-Dichlorobenzene	11.675	146	352145	11.500	ppbv		100
77)	1,2-Dichlorobenzene	11.950	146	355386	11.457	ppbv		100
78)	Hexachloro-1,3-Butadiene	13.886	225	247691	9.729	ppbv		99
79)	Naphthalene	13.517	128	553420	10.407	ppbv		99
80)	Naphthalene,2-methyl-	14.465	142	173813	6.894	ppbv		97
81)	1,2,4-Trichlorobenzene	13.446	180	251038	9.671	ppbv		98

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

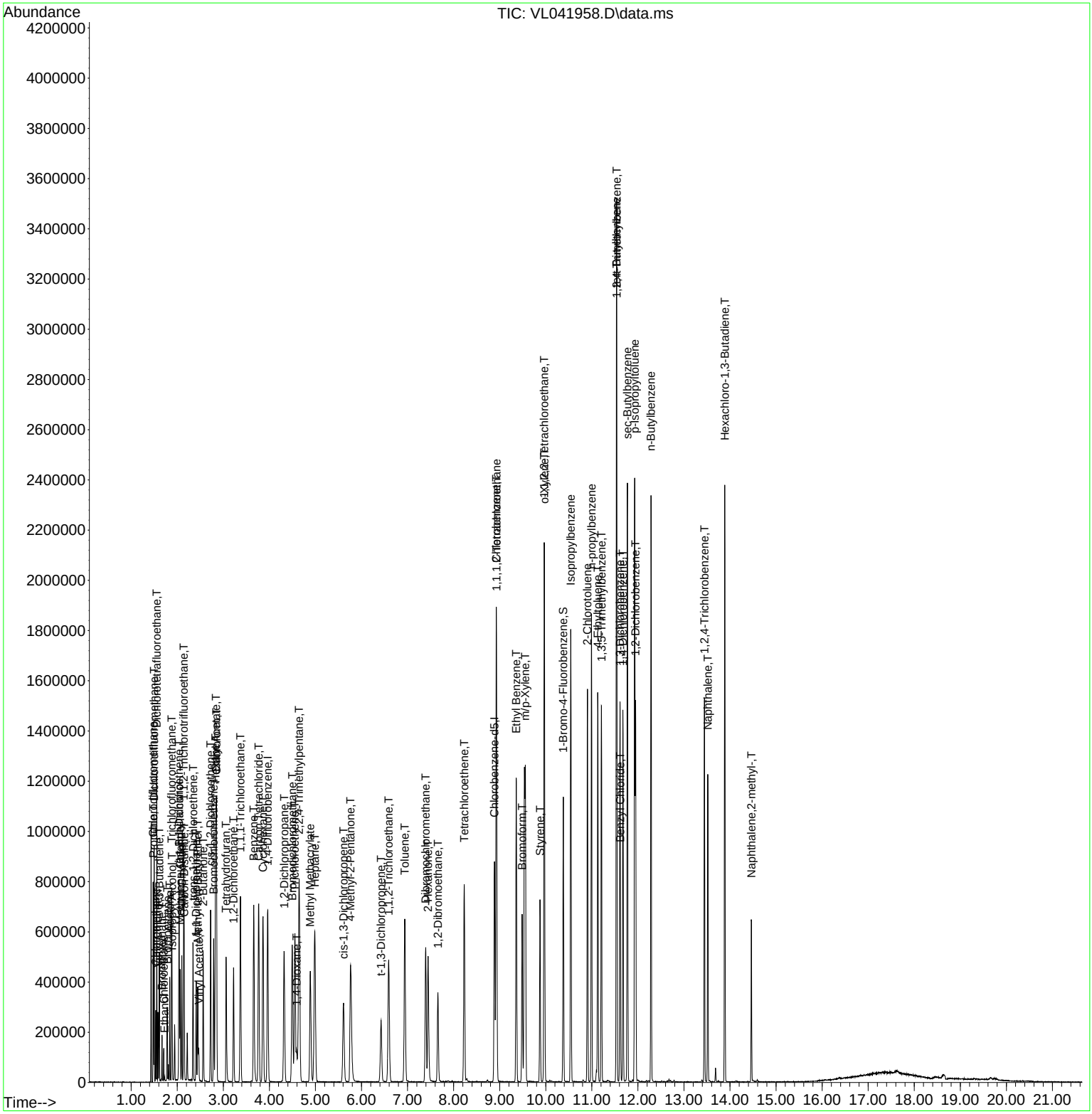
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	103	0.00
2	T	Dichlorodifluoromethane	1.362	1.387	-1.8	110	0.00
3		Chlorodifluoromethane	1.427	1.469	-2.9	114	0.00
4		Chloromethane	0.512	0.549	-7.2	115	0.00
5	T	Vinyl Chloride	0.519	0.529	-1.9	117	0.00
6	T	Bromomethane	0.247	0.243	1.6	110	0.00
7		Chloroethane	0.202	0.217	-7.4	116	0.00
8	T	Dichlorotetrafluoroethane	1.190	1.183	0.6	112	0.00
9	T	Propene	0.588	0.609	-3.6	111	0.00
10	T	Heptane	1.571	1.695	-7.9	115	-0.02
11	T	Trichlorofluoromethane	1.417	1.348	4.9	104	0.00
12	T	1,1,2-Trichlorotrifluoroeth	1.110	1.035	6.8	101	0.00
13		Ethanol	0.043	0.028#	34.9#	106	0.00
14	T	Bromoethene	0.407	0.385	5.4	107	0.00
15	T	Acetone	1.201	1.121	6.7	117	0.00
16	T	1,3-Butadiene	0.539	0.551	-2.2	115	0.00
17		tert-Butyl alcohol	1.478	1.312	11.2	97	0.00
18	T	1,1-Dichloroethene	0.501	0.473	5.6	107	0.00
19	T	Isopropyl Alcohol	0.712	0.641	10.0	107	0.00
20	T	Methylene Chloride	0.475	0.400	15.8	106	0.00
21	T	Allyl Chloride	0.832	0.805	3.2	105	0.00
22	T	trans-1,2-Dichloroethene	0.565	0.548	3.0	105	0.00
23	T	Vinyl Acetate	0.595	0.536	9.9	103	0.00
24	T	1,1-Dichloroethane	1.093	1.089	0.4	111	0.00
25	T	Ethyl Acetate	3.239	3.507	-8.3	117	0.00
26	T	Hexane	1.281	1.372	-7.1	113	0.00
27	T	Carbon Disulfide	1.268	1.273	-0.4	105	0.00
28	T	Methyl tert-Butyl Ether	0.979	0.952	2.8	127	0.00
29	T	Chloroform	2.025	2.120	-4.7	115	0.00
30	T	Cyclohexane	1.111	1.163	-4.7	111	0.00
31	T	cis-1,2-Dichloroethene	1.349	1.325	1.8	108	0.00
32	T	1,1,1-Trichloroethane	1.938	2.024	-4.4	110	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	-0.01
34	T	2-Butanone	0.636	0.729	-14.6	116	0.00
35	T	Carbon Tetrachloride	0.628	0.747	-18.9	110	-0.01
36	T	Benzene	0.917	1.035	-12.9	112	0.00
37	T	1,2-Dichloroethane	0.515	0.562	-9.1	109	0.00
38	T	Trichloroethene	0.364	0.408	-12.1	110	-0.01
39	T	1,2-Dichloropropane	0.322	0.362	-12.4	113	0.00
40	T	1,4-Dioxane	0.162	0.174	-7.4	113	-0.02
41	T	Tetrahydrofuran	0.346	0.406	-17.3	112	0.00
42	T	Bromodichloromethane	0.691	0.803	-16.2	112	-0.01
43		Methyl Methacrylate	0.341	0.364	-6.7	103	0.00
44	T	2,2,4-Trimethylpentane	1.484	1.749	-17.9	115	-0.01
45	T	t-1,3-Dichloropropene	0.319	0.345	-8.2	97	0.00
46	T	cis-1,3-Dichloropropene	0.419	0.472	-12.6	101	-0.01
47	T	1,1,2-Trichloroethane	0.341	0.389	-14.1	112	0.00
48	T	Dibromochloromethane	0.526	0.627	-19.2	110	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041958.D
Acq On : 03 Feb 2025 10:48
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 04 02:30:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.432	0.524	-21.3	109	0.00
50	T	4-Methyl-2-Pentanone	0.868	0.998	-15.0	115	-0.02
51	T	2-Hexanone	0.667	0.784	-17.5	115	0.00
52	T	Tetrachloroethene	0.318	0.325	-2.2	106	0.00
53	T	Toluene	0.999	1.126	-12.7	107	-0.01
54	T	1,2-Dibromoethane	0.469	0.534	-13.9	112	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	93	0.00
56		1,1,1,2-Tetrachloroethane	0.499	0.593	-18.8	114	0.00
57	T	Chlorobenzene	0.922	1.041	-12.9	114	0.00
58	T	Ethyl Benzene	1.563	1.802	-15.3	108	0.00
59	T	m/p-Xylene	1.253	1.490	-18.9	113	0.00
60	T	o-Xylene	1.243	1.495	-20.3	113	0.00
61	T	Styrene	0.558	0.663	-18.8	105	0.00
62		Isopropylbenzene	1.924	2.247	-16.8	112	0.00
63	T	1,1,2,2-Tetrachloroethane	0.795	0.976	-22.8	121	0.00
64		n-propylbenzene	0.486	0.581	-19.5	115	0.00
65		tert-Butylbenzene	1.753	2.010	-14.7	111	0.00
66	T	Benzyl Chloride	0.109	0.121	-11.0	98	0.00
67		sec-Butylbenzene	2.414	2.814	-16.6	114	0.00
68	S	1-Bromo-4-Fluorobenzene	0.788	0.780	1.0	92	0.00
69		p-Isopropyltoluene	1.988	2.337	-17.6	113	0.00
70		n-Butylbenzene	1.972	2.285	-15.9	112	0.00
71		2-Chlorotoluene	1.423	1.657	-16.4	111	0.00
72	T	4-Ethyltoluene	1.487	1.774	-19.3	112	0.00
73	T	1,3,5-Trimethylbenzene	1.313	1.525	-16.1	112	0.00
74	T	1,2,4-Trimethylbenzene	1.422	1.659	-16.7	114	0.00
75	T	1,3-Dichlorobenzene	0.843	0.964	-14.4	115	0.00
76	T	1,4-Dichlorobenzene	0.825	0.948	-14.9	114	0.00
77	T	1,2-Dichlorobenzene	0.835	0.957	-14.6	117	0.00
78	T	Hexachloro-1,3-Butadiene	0.686	0.667	2.8	106	0.00
79	T	Naphthalene	1.432	1.490	-4.1	110	0.00
80	T	Naphthalene,2-methyl-	0.679	0.468	31.1#	94	0.00
81	T	1,2,4-Trichlorobenzene	0.699	0.676	3.3	105	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041960.D
Acq On : 03 Feb 2025 12:05
Operator : SY/MD
Sample : VL0203ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABL02

Quant Time: Feb 04 02:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	151198	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	407814	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	347345	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	262058	9.579	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.800%			
Target Compounds						Qvalue

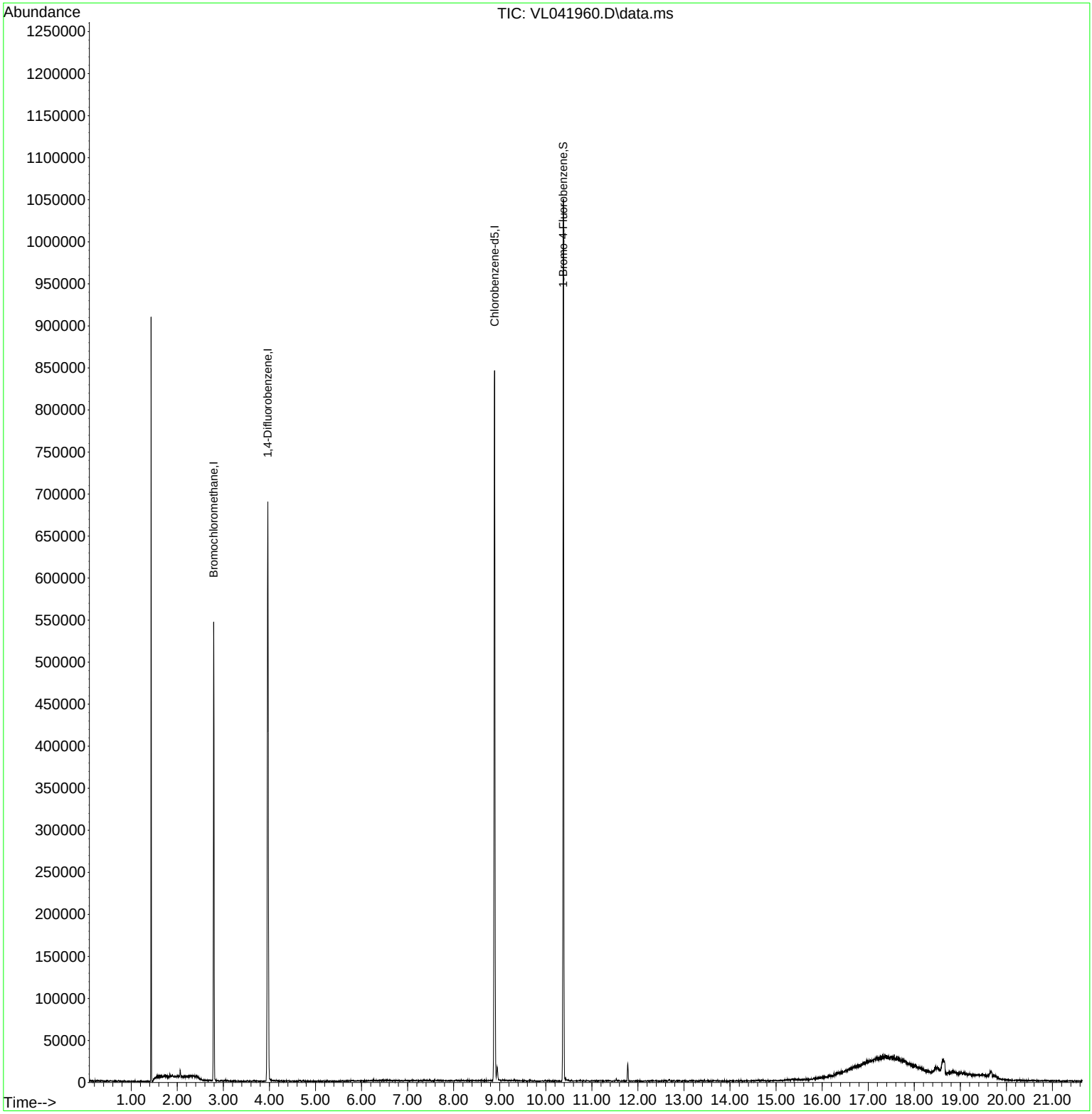
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041960.D
Acq On : 03 Feb 2025 12:05
Operator : SY/MD
Sample : VL0203ABL02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABL02

Quant Time: Feb 04 02:33:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	152847	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	418895	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	367437	10.000	ppbv	-0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	287209	9.924	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	203280	9.764	ppbv	99
3) Chlorodifluoromethane	1.476	51	225433	10.336	ppbv	99
4) Chloromethane	1.535	50	81880	10.457	ppbv	94
5) Vinyl Chloride	1.583	62	77713	9.799	ppbv	98
6) Bromomethane	1.670	94	36640	9.694	ppbv	88
7) Chloroethane	1.706	64	31280	10.137	ppbv	94
8) Dichlorotetrafluoroethane	1.557	85	179670	9.875	ppbv	98
9) Propene	1.486	41	91411	10.174	ppbv	99
10) Heptane	4.985	43	161638	6.731	ppbv	99
11) Trichlorofluoromethane	1.881	101	201683	9.312	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.143	101	164938	9.717	ppbv	98
13) Ethanol	1.722	45	4592	6.978	ppbv	91
14) Bromoethene	1.784	108	57833	9.306	ppbv	99
15) Acetone	1.839	43	165826	9.033	ppbv	98
16) 1,3-Butadiene	1.609	39	83163	10.093	ppbv	98
17) tert-Butyl alcohol	2.043	59	198776	8.797	ppbv	98
18) 1,1-Dichloroethene	2.036	96	70323	9.192	ppbv	97
19) Isopropyl Alcohol	1.891	45	99004	9.096	ppbv	95
20) Methylene Chloride	2.065	84	62278	8.584	ppbv	99
21) Allyl Chloride	2.098	41	122853	9.664	ppbv	98
22) trans-1,2-Dichloroethene	2.344	96	85089	9.855	ppbv	98
23) Vinyl Acetate	2.467	43	86919	9.552	ppbv #	96
24) 1,1-Dichloroethane	2.412	63	166034	9.942	ppbv	99
25) Ethyl Acetate	2.842	43	536156	10.831	ppbv	100
26) Hexane	2.832	57	210051	10.728	ppbv	95
27) Carbon Disulfide	2.153	76	198444	10.242	ppbv	99
28) Methyl tert-Butyl Ether	2.444	73	110198	7.364	ppbv	99
29) Chloroform	2.855	83	325966	10.532	ppbv	96
30) Cyclohexane	3.865	84	173840	10.236	ppbv	98
31) cis-1,2-Dichloroethene	2.726	61	204611	9.925	ppbv	95
32) 1,1,1-Trichloroethane	3.376	97	305623	10.320	ppbv	99
34) 2-Butanone	2.564	43	302190	11.344	ppbv	99
35) Carbon Tetrachloride	3.768	117	309917	11.778	ppbv	97
36) Benzene	3.664	78	426241	11.094	ppbv	99
37) 1,2-Dichloroethane	3.224	62	235620	10.920	ppbv	99
38) Trichloroethene	4.554	130	167629	10.995	ppbv	97
39) 1,2-Dichloropropane	4.318	63	151232	11.221	ppbv	97
40) 1,4-Dioxane	4.590	88	74021	10.876	ppbv #	100
41) Tetrahydrofuran	3.062	42	169798	11.728	ppbv	98
42) Bromodichloromethane	4.496	83	335595	11.600	ppbv	98
43) Methyl Methacrylate	4.884	69	102724	7.197	ppbv	96
44) 2,2,4-Trimethylpentane	4.648	57	725196	11.670	ppbv	99
45) t-1,3-Dichloropropene	6.422	75	145441	10.886	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.609	75	122518	6.985	ppbv		98
47) 1,1,2-Trichloroethane	6.590	97	167038	11.694	ppbv		95
48) Dibromochloromethane	7.390	129	260120	11.803	ppbv		100
49) Bromoform	9.487	173	217089	11.991	ppbv		99
50) 4-Methyl-2-Pentanone	5.765	43	267280	7.350	ppbv		98
51) 2-Hexanone	7.445	43	328817	11.767	ppbv	#	96
52) Tetrachloroethene	8.225	164	136143	10.220	ppbv		97
53) Toluene	6.936	91	469033	11.207	ppbv		99
54) 1,2-Dibromoethane	7.655	107	222983	11.356	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.927	131	214758	11.715	ppbv		99
57) Chlorobenzene	8.924	112	382465	11.284	ppbv		99
58) Ethyl Benzene	9.357	91	646825	11.264	ppbv		98
59) m/p-Xylene	9.555	91	1068374m	23.212	ppbv		
60) o-Xylene	9.966	91	537558	11.766	ppbv		98
61) Styrene	9.872	104	239767	11.699	ppbv		98
62) Isopropylbenzene	10.542	105	802003	11.345	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.966	83	357905	12.260	ppbv		100
64) n-propylbenzene	10.992	120	208748	11.686	ppbv		99
65) tert-Butylbenzene	11.536	119	731901	11.360	ppbv		99
66) Benzyl Chloride	11.620	91	41013	10.285	ppbv		97
67) sec-Butylbenzene	11.772	105	1015579	11.448	ppbv		99
69) p-Isopropyltoluene	11.931	119	836492	11.451	ppbv		98
70) n-Butylbenzene	12.290	91	824000	11.374	ppbv		100
71) 2-Chlorotoluene	10.905	91	592446	11.329	ppbv		99
72) 4-Ethyltoluene	11.131	105	634050	11.602	ppbv		99
73) 1,3,5-Trimethylbenzene	11.209	105	551677	11.432	ppbv		97
74) 1,2,4-Trimethylbenzene	11.542	105	602744	11.533	ppbv		96
75) 1,3-Dichlorobenzene	11.613	146	348392	11.249	ppbv		99
76) 1,4-Dichlorobenzene	11.678	146	344428	11.367	ppbv		99
77) 1,2-Dichlorobenzene	11.953	146	350456	11.418	ppbv		98
78) Hexachloro-1,3-Butadiene	13.892	225	239328	9.500	ppbv		99
79) Naphthalene	13.523	128	539332	10.249	ppbv		98
80) Naphthalene,2-methyl-	14.468	142	172189	6.902	ppbv		97
81) 1,2,4-Trichlorobenzene	13.452	180	244059	9.502	ppbv		99

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

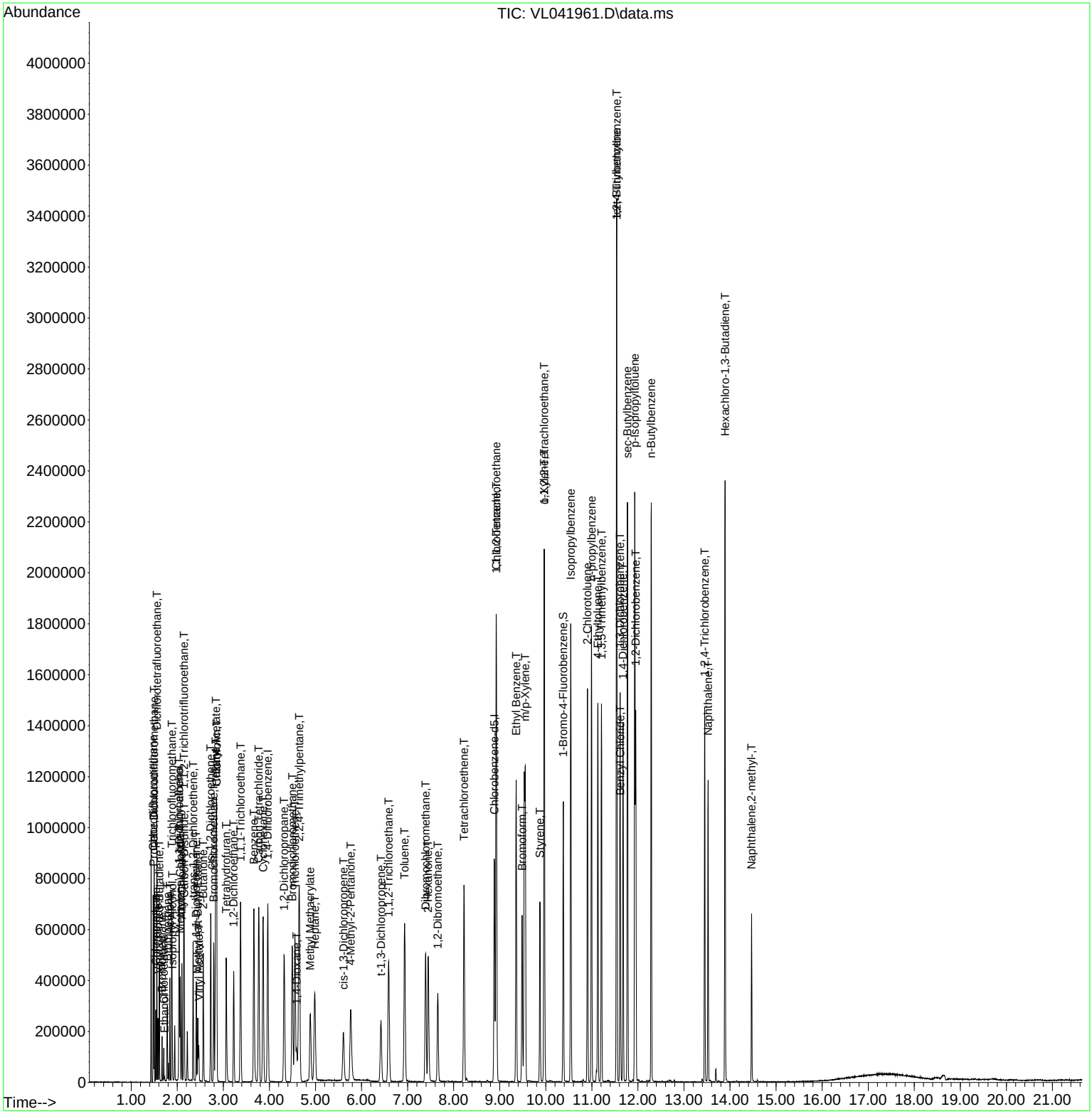
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041961.D
Acq On : 03 Feb 2025 12:57
Operator : SY/MD
Sample : VL0203ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 04 02:34:05 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0203ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/04/2025
Supervised By :Mahesh Dadoda 02/04/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041974.D
Acq On : 04 Feb 2025 08:03
Operator : SY/MD
Sample : QC020325 CAN 10599
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC020325 CAN 10599

Quant Time: Feb 04 08:27:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

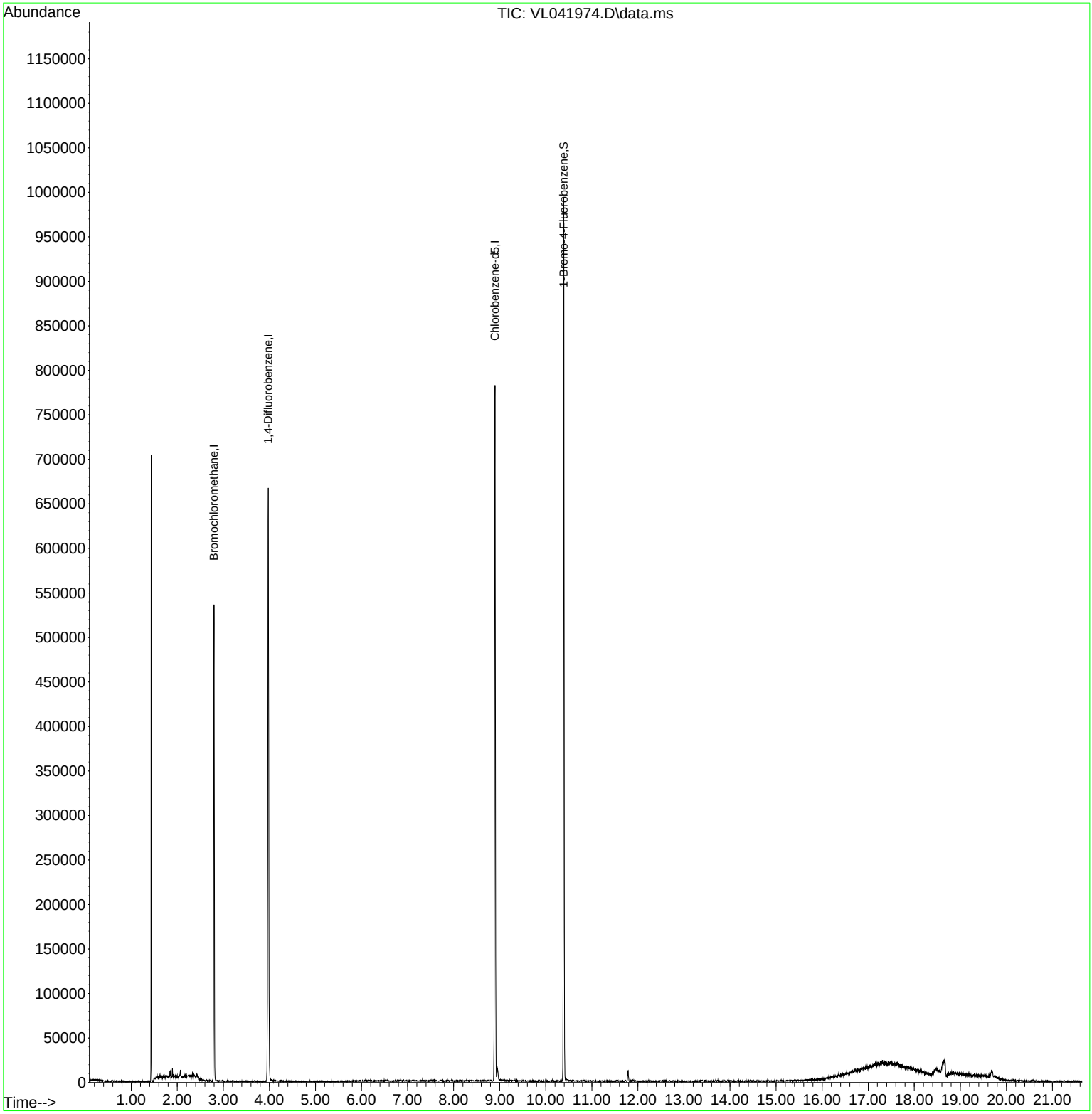
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	148524	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	371804	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	315945	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	232316	9.336	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.400%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL020325\
Data File : VL041974.D
Acq On : 04 Feb 2025 08:03
Operator : SY/MD
Sample : QC020325 CAN 10599
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC020325 CAN 10599

Quant Time: Feb 04 08:27:00 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL011425AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Tue Jan 14 23:15:42 2025
Response via : Initial Calibration

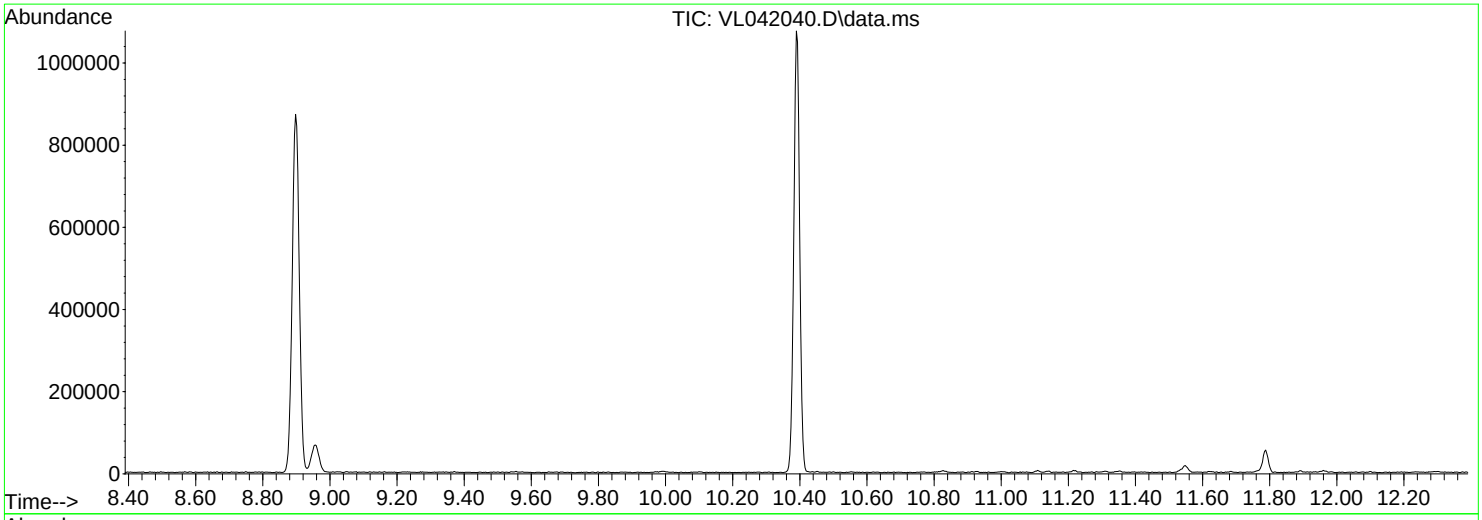


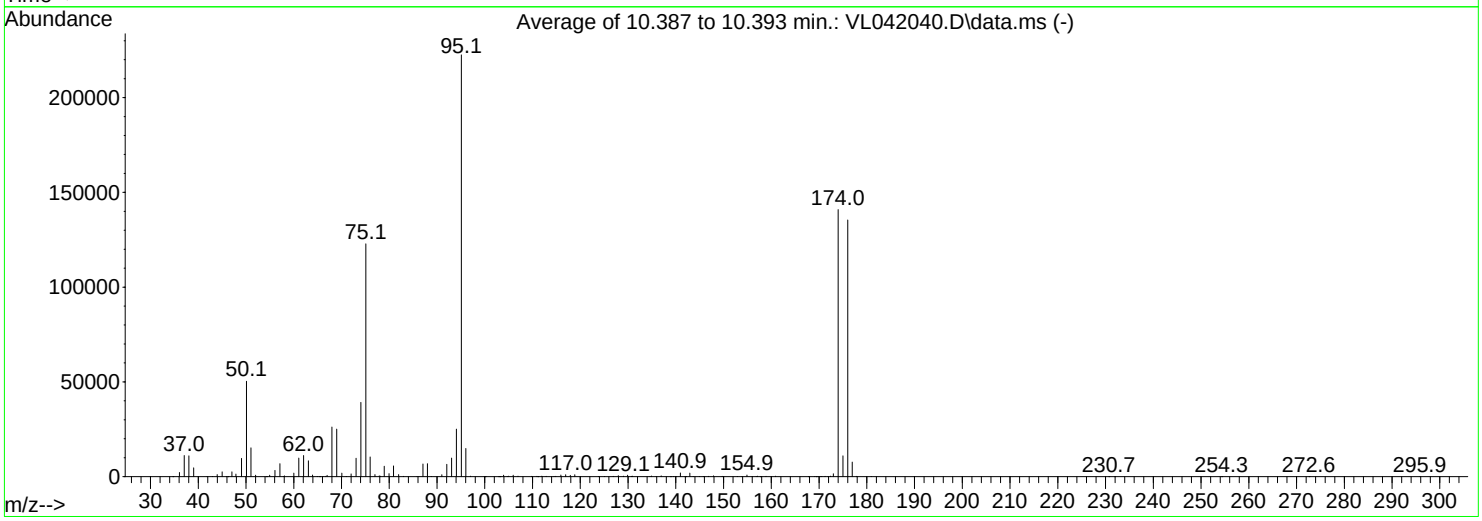
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042040.D
Acq On : 25 Feb 2025 07:56
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025





AutoFind: Scans 3182, 3183, 3184; Background Corrected with Scan 3168

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.6	50320	PASS
75	95	30	66	55.2	122859	PASS
95	95	100	100	100.0	222571	PASS
96	95	5	9	6.7	14875	PASS
173	174	0.00	2	1.1	1534	PASS
174	95	50	120	63.3	140957	PASS
175	174	4	9	7.8	11014	PASS
176	174	93	101	96.1	135437	PASS
177	176	5	9	5.7	7676	PASS

Response Factor Report MSVOA_L

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025
Response Via : Initial Calibration

Calibration Files
0.03=VL042046.D 0.1 =VL042045.D 0.5 =VL042044.D 1 =VL042043.D 2 =VL042042.D 10 =VL042041.D 15 =VL042047.D

		Compound	0.03	0.1	0.5	1	2	10	15	Avg	%RSD
1)	I	Bromochloromethane	----------ISTD----------								
2)	T	Dichlorodifluo...			1.109	1.084	1.091	0.943	0.973	1.040	7.31
3)		Chlorodifluoro...			1.493	1.566	1.535	1.311	1.362	1.453	7.67
4)		Chloromethane			0.438	0.398	0.399	0.344	0.344	0.385	10.53
5)	T	Vinyl Chloride	0.447	0.336	0.376	0.346	0.361	0.337	0.343	0.364	10.89
6)	T	Bromomethane			0.170	0.184	0.186	0.160	0.165	0.173	6.63
7)		Chloroethane			0.151	0.158	0.156	0.135	0.140	0.148	6.83
8)	T	Dichlorotetraf...			0.892	0.910	0.901	0.779	0.791	0.855	7.47
9)	T	Propene			0.614	0.630	0.636	0.522	0.558	0.592	8.47
10)	T	Heptane			1.971	1.946	1.960	1.662	1.679	1.844	8.59
11)	T	Trichlorofluor...			1.056	1.122	1.119	0.944	0.968	1.042	7.98
12)	T	1,1,2-Trichlor...			0.919	0.902	0.865	0.697	0.773	0.831	11.28
13)		Ethanol			0.053	0.057	0.040	0.020	0.018	0.038#	48.50
14)	T	Bromoethene			0.325	0.304	0.299	0.264	0.275	0.293	8.41
15)	T	Acetone			1.084	0.960	0.933	0.714	0.723	0.883	18.17
16)	T	1,3-Butadiene			0.476	0.435	0.418	0.358	0.367	0.411	11.96
17)		tert-Butyl alc...			1.184	1.185	1.201	0.950	1.004	1.105	10.71
18)	T	1,1-Dichloroet...			0.398	0.437	0.386	0.320	0.338	0.376	12.57
19)	T	Isopropyl Alcohol			0.561	0.571	0.557	0.419	0.429	0.507	15.06
20)	T	Methylene Chlo...			0.429	0.374	0.329	0.261	0.278	0.334	20.72
21)	T	Allyl Chloride			0.707	0.717	0.639	0.538	0.590	0.638	11.94
22)	T	trans-1,2-Dich...			0.481	0.506	0.450	0.358	0.395	0.438	13.90
23)	T	Vinyl Acetate			0.689	0.614	0.695	0.520	0.586	0.621	11.82
24)	T	1,1-Dichloroet...			0.927	0.856	0.863	0.669	0.758	0.815	12.42
25)	T	Ethyl Acetate			3.833	3.674	3.776	3.174	3.217	3.535	8.91
26)	T	Hexane			1.596	1.462	1.519	1.282	1.287	1.429	9.83
27)	T	Carbon Disulfide			1.042	0.972	1.032	0.856	0.942	0.969	7.78
28)	T	Methyl tert-Bu...			0.650	0.844	0.838	0.522	0.705	0.711	19.02
29)	T	Chloroform			2.165	2.044	1.971	1.722	1.716	1.923	10.36
30)	T	Cyclohexane			1.154	1.239	1.255	1.076	1.076	1.160	7.39
31)	T	cis-1,2-Dichlo...			1.421	1.401	1.450	1.237	1.255	1.353	7.33
32)	T	1,1,1-Trichlor...	1.921	1.875	1.883	1.916	1.944	1.771	1.751	1.866	4.05
33)	I	1,4-Difluorobenzene	----------ISTD----------								
34)	T	2-Butanone			0.833	0.799	0.812	0.692	0.759	0.779	7.15
35)	T	Carbon Tetrach...	0.664	0.705	0.675	0.723	0.725	0.655	0.681	0.690	4.09
36)	T	Benzene			1.079	1.084	1.104	0.969	0.999	1.047	5.66
37)	T	1,2-Dichloroet...			0.624	0.604	0.598	0.520	0.556	0.580	7.20
38)	T	Trichloroethene	0.447	0.462	0.433	0.447	0.447	0.378	0.379	0.427	8.06
39)	T	1,2-Dichloropr...			0.421	0.415	0.414	0.357	0.379	0.397	7.02

Method Path : Z:\voasrv\HPCHEM1\MSVOA_L\methods\
Method File : VL022525AIR.M

40)	T	1,4-Dioxane			0.192	0.196	0.181	0.164	0.173	0.181	7.31
41)	T	Tetrahydrofuran			0.469	0.492	0.473	0.418	0.450	0.460	6.04
42)	T	Bromodichlorom...			0.806	0.791	0.810	0.739	0.765	0.782	3.81
43)		Methyl Methacr...			0.400	0.418	0.426	0.392	0.409	0.409	3.35
44)	T	2,2,4-Trimethy...			1.928	1.935	1.955	1.670	1.750	1.848	6.99
45)	T	t-1,3-Dichloro...			0.414	0.392	0.418	0.393	0.414	0.406	3.12
46)	T	cis-1,3-Dichlo...			0.514	0.523	0.548	0.516	0.526	0.526	2.59
47)	T	1,1,2-Trichlor...			0.426	0.429	0.426	0.361	0.375	0.403	8.12
48)	T	Dibromochlorom...			0.618	0.667	0.667	0.594	0.613	0.632	5.25
49)	T	Bromoform			0.553	0.551	0.588	0.525	0.526	0.549	4.68
50)	T	4-Methyl-2-Pen...			0.996	0.974	0.975	1.014	1.079	1.008	4.27
51)	T	2-Hexanone			0.577	0.570	0.608	0.834	0.879	0.693	21.69
52)	T	Tetrachloroethene	0.322	0.374	0.380	0.383	0.385	0.327	0.337	0.358	7.88
53)	T	Toluene			1.150	1.210	1.284	1.088	1.118	1.170	6.67
54)	T	1,2-Dibromoethane		0.563	0.556	0.553	0.586	0.500	0.514	0.545	5.87
55)	I	Chlorobenzene-d5	----------ISTD----------								
56)		1,1,1,2-Tetrac...			0.607	0.596	0.595	0.505	0.524	0.565	8.37
57)	T	Chlorobenzene			1.102	1.113	1.121	0.910	0.938	1.037	10.02
58)	T	Ethyl Benzene			1.886	1.906	1.974	1.694	1.749	1.842	6.31
59)	T	m/p-Xylene			1.488	1.550	1.580	1.330	1.380	1.466	7.35
60)	T	o-Xylene			1.572	1.550	1.577	1.317	1.351	1.473	8.68
61)	T	Styrene			0.659	0.719	0.738	0.658	0.690	0.693	5.18
62)		Isopropylbenzene			2.299	2.339	2.399	1.969	2.026	2.207	8.84
63)	T	1,1,2,2-Tetrac...	0.999	0.975	1.026	1.041	1.031	0.848	0.872	0.970	8.13
64)		n-propylbenzene			0.596	0.607	0.632	0.524	0.535	0.579	8.11
65)		tert-Butylbenzene			2.080	2.251	2.222	1.733	1.753	2.008	12.47
66)	T	Benzyl Chloride			0.141	0.159	0.163	0.153	0.150	0.153	5.40
67)		sec-Butylbenzene			2.973	3.229	3.182	2.482	2.494	2.872	12.65
68)	S	1-Bromo-4-Fluo...	0.773	0.760	0.768	0.777	0.765	0.764	0.779	0.769	0.92
69)		p-Isopropyltol...			2.240	2.533	2.575	2.021	2.056	2.285	11.38
70)		n-Butylbenzene			2.332	2.567	2.572	2.070	2.120	2.332	10.20
71)		2-Chlorotoluene			1.758	1.829	1.853	1.514	1.551	1.701	9.30
72)	T	4-Ethyltoluene			1.775	1.944	1.985	1.621	1.670	1.799	8.99
73)	T	1,3,5-Trimethy...			1.592	1.732	1.696	1.381	1.400	1.560	10.47
74)	T	1,2,4-Trimethy...			1.855	1.982	1.990	1.471	1.488	1.757	14.76
75)	T	1,3-Dichlorobe...			1.112	1.110	1.083	0.869	0.882	1.011	12.30
76)	T	1,4-Dichlorobe...			1.120	1.061	1.092	0.861	0.886	1.004	12.07
77)	T	1,2-Dichlorobe...			1.059	1.097	1.063	0.836	0.852	0.981	12.88
78)	T	Hexachloro-1,3...			0.840	0.832	0.844	0.637	0.666	0.764	13.53
79)	T	Naphthalene		0.841	0.978	1.237	1.352	1.371	1.450	1.205	20.15
80)	T	Naphthalene,2-...			0.090	0.142	0.240	0.562	0.615	0.330	73.74
81)	T	1,2,4-Trichlor...			0.589	0.687	0.765	0.644	0.673	0.671	9.58

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	161135	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	422655	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.901	117	374249	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	285943	9.263	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	152005	5.480	ppbv	99
3) Chlorodifluoromethane	1.479	51	211185	6.887	ppbv	96
4) Chloromethane	1.538	50	55364	5.136	ppbv	98
5) Vinyl Chloride	1.586	62	54228	4.207	ppbv	98
6) Bromomethane	1.674	94	25846	5.173	ppbv	90
7) Chloroethane	1.709	64	21717	5.169	ppbv	96
8) Dichlorotetrafluoroethane	1.560	85	125595	5.147	ppbv	94
9) Propene	1.489	41	84038	6.357	ppbv	97
10) Heptane	5.007	43	267860	7.296	ppbv	97
11) Trichlorofluoromethane	1.884	101	152112	5.449	ppbv	96
12) 1,1,2-Trichlorotrifluo...	2.146	101	112374	5.162	ppbv	93
13) Ethanol	1.729	45	3178	2.131	ppbv	85
14) Bromoethene	1.787	108	42461	5.223	ppbv	99
15) Acetone	1.842	43	115085	4.327	ppbv	95
16) 1,3-Butadiene	1.615	39	57707	4.574	ppbv	100
17) tert-Butyl alcohol	2.049	59	153073	4.651	ppbv	100
18) 1,1-Dichloroethene	2.043	96	51534	4.954	ppbv	95
19) Isopropyl Alcohol	1.894	45	67445	4.522	ppbv	98
20) Methylene Chloride	2.069	84	41998	4.195	ppbv	94
21) Allyl Chloride	2.104	41	86723	4.504	ppbv	99
22) trans-1,2-Dichloroethene	2.350	96	57617	5.104	ppbv	96
23) Vinyl Acetate	2.473	43	83866	5.823	ppbv	98
24) 1,1-Dichloroethane	2.418	63	107817	4.704	ppbv	100
25) Ethyl Acetate	2.852	43	511505	7.007	ppbv	99
26) Hexane	2.839	57	206577	7.052	ppbv	98
27) Carbon Disulfide	2.159	76	137978	5.008	ppbv	97
28) Methyl tert-Butyl Ether	2.450	73	84091	4.696	ppbv	98
29) Chloroform	2.862	83	277411	6.538	ppbv	96
30) Cyclohexane	3.875	84	173351	7.295	ppbv	98
31) cis-1,2-Dichloroethene	2.732	61	199354	6.886	ppbv	98
32) 1,1,1-Trichloroethane	3.383	97	285335	6.064	ppbv	98
34) 2-Butanone	2.570	43	292449	8.043	ppbv	100
35) Carbon Tetrachloride	3.781	117	276677	6.741	ppbv	97
36) Benzene	3.674	78	409501	7.999	ppbv	98
37) 1,2-Dichloroethane	3.234	62	219829	7.543	ppbv	100
38) Trichloroethene	4.570	130	159933	7.689	ppbv	93
39) 1,2-Dichloropropane	4.337	63	151036	8.047	ppbv	99
40) 1,4-Dioxane	4.609	88	69399	7.105	ppbv #	76
41) Tetrahydrofuran	3.072	42	176830	8.509	ppbv	95
42) Bromodichloromethane	4.512	83	312250	7.908	ppbv	97
43) Methyl Methacrylate	4.907	69	165494	7.091	ppbv	97
44) 2,2,4-Trimethylpentane	4.661	57	705920	8.122	ppbv	97
45) t-1,3-Dichloropropene	6.444	75	166207	7.544	ppbv	91

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.629	75	218294	7.809	ppbv		99
47) 1,1,2-Trichloroethane	6.610	97	152556	7.723	ppbv		97
48) Dibromochloromethane	7.412	129	251213	7.593	ppbv		99
49) Bromoform	9.503	173	222057	8.183	ppbv		98
50) 4-Methyl-2-Pentanone	5.787	43	428434	7.666	ppbv		100
51) 2-Hexanone	7.464	43	352331	7.709	ppbv	#	96
52) Tetrachloroethene	8.244	164	138263	7.743	ppbv		94
53) Toluene	6.959	91	460041	7.541	ppbv		97
54) 1,2-Dibromoethane	7.678	107	211395	7.772	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.943	131	188811	7.049	ppbv		97
57) Chlorobenzene	8.940	112	340525	7.735	ppbv		97
58) Ethyl Benzene	9.374	91	633939	7.739	ppbv		98
59) m/p-Xylene	9.552	91	995259m	15.427	ppbv		
60) o-Xylene	9.982	91	493069	7.557	ppbv		97
61) Styrene	9.888	104	246161	7.912	ppbv		98
62) Isopropylbenzene	10.555	105	736884	7.522	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.979	83	317313	7.538	ppbv		100
64) n-propylbenzene	11.005	120	196044	8.145	ppbv		90
65) tert-Butylbenzene	11.545	119	648698	7.596	ppbv		97
66) Benzyl Chloride	11.630	91	57345	6.699	ppbv	#	97
67) sec-Butylbenzene	11.782	105	928863	7.744	ppbv		99
69) p-Isopropyltoluene	11.940	119	756264	7.702	ppbv		98
70) n-Butylbenzene	12.296	91	774646	8.009	ppbv		99
71) 2-Chlorotoluene	10.918	91	566619	7.681	ppbv		97
72) 4-Ethyltoluene	11.141	105	606538	7.934	ppbv		98
73) 1,3,5-Trimethylbenzene	11.219	105	516875	7.838	ppbv		100
74) 1,2,4-Trimethylbenzene	11.552	105	550412	7.777	ppbv		98
75) 1,3-Dichlorobenzene	11.623	146	325160	8.535	ppbv		97
76) 1,4-Dichlorobenzene	11.685	146	322404	8.678	ppbv		97
77) 1,2-Dichlorobenzene	11.963	146	312942	8.593	ppbv		96
78) Hexachloro-1,3-Butadiene	13.895	225	238217	7.907	ppbv		100
79) Naphthalene	13.526	128	513192	7.372	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	210405	6.676	ppbv		95
81) 1,2,4-Trichlorobenzene	13.455	180	241031	8.517	ppbv		99

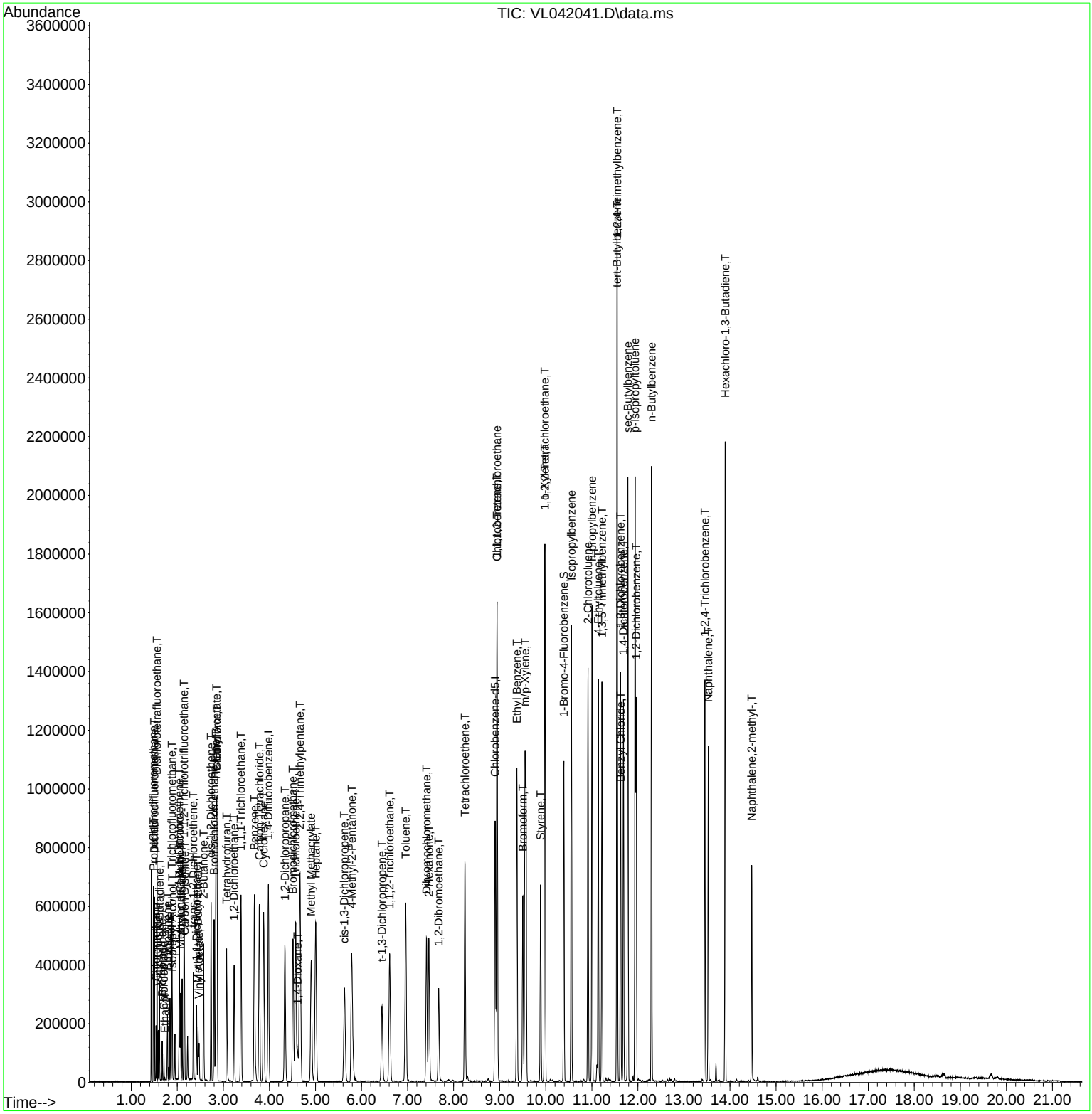
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042041.D
Acq On : 25 Feb 2025 08:56
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:10:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Manual Integrations APPROVED
Reviewed By :Mahesh Dadoda 03/06/2025
Supervised By :Semsettin Yesilyurt 03/06/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.800	49	160999	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.981	114	427051	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.901	117	377910	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.393	95	289049	9.273	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.505	85	35122	1.267	ppbv		95
3) Chlorodifluoromethane	1.483	51	49423	1.613	ppbv		94
4) Chloromethane	1.538	50	12833	1.192	ppbv	#	87
5) Vinyl Chloride	1.586	62	11611	0.902	ppbv		97
6) Bromomethane	1.674	94	5996	1.201	ppbv		97
7) Chloroethane	1.712	64	5014	1.195	ppbv		90
8) Dichlorotetrafluoroethane	1.560	85	29028	1.191	ppbv		99
9) Propene	1.489	41	20484	1.551	ppbv		95
10) Heptane	5.004	43	63098	1.720	ppbv		94
11) Trichlorofluoromethane	1.884	101	36041	1.292	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.149	101	27846	1.280	ppbv		90
13) Ethanol	1.729	45	1291	0.866	ppbv		91
14) Bromoethene	1.790	108	9642	1.187	ppbv		93
15) Acetone	1.842	43	30058	1.131	ppbv		100
16) 1,3-Butadiene	1.615	39	13471	1.069	ppbv		100
17) tert-Butyl alcohol	2.052	59	38684	1.176	ppbv		96
18) 1,1-Dichloroethene	2.043	96	12417	1.195	ppbv		93
19) Isopropyl Alcohol	1.894	45	17927	1.203	ppbv		96
20) Methylene Chloride	2.072	84	10587	1.058	ppbv	#	80
21) Allyl Chloride	2.107	41	20564	1.069	ppbv		96
22) trans-1,2-Dichloroethene	2.350	96	14475	1.283	ppbv		81
23) Vinyl Acetate	2.473	43	22394	1.556	ppbv	#	94
24) 1,1-Dichloroethane	2.421	63	27804	1.214	ppbv		99
25) Ethyl Acetate	2.852	43	121593	1.667	ppbv		100
26) Hexane	2.839	57	48912	1.671	ppbv		98
27) Carbon Disulfide	2.159	76	33222	1.207	ppbv	#	57
28) Methyl tert-Butyl Ether	2.457	73	26968	1.507	ppbv		100
29) Chloroform	2.865	83	63463	1.497	ppbv		92
30) Cyclohexane	3.878	84	40420	1.702	ppbv		98
31) cis-1,2-Dichloroethene	2.732	61	46690	1.614	ppbv		96
32) 1,1,1-Trichloroethane	3.386	97	62586	1.331	ppbv		97
34) 2-Butanone	2.573	43	69370	1.888	ppbv		96
35) Carbon Tetrachloride	3.784	117	61895	1.493	ppbv		97
36) Benzene	3.677	78	94277	1.822	ppbv		98
37) 1,2-Dichloroethane	3.237	62	51050	1.734	ppbv		99
38) Trichloroethene	4.574	130	38184	1.817	ppbv		99
39) 1,2-Dichloropropane	4.341	63	35396	1.866	ppbv		95
40) 1,4-Dioxane	4.622	88	15442	1.565	ppbv	#	28
41) Tetrahydrofuran	3.075	42	40365	1.922	ppbv		96
42) Bromodichloromethane	4.512	83	69154	1.733	ppbv		94
43) Methyl Methacrylate	4.910	69	36393	1.543	ppbv		94
44) 2,2,4-Trimethylpentane	4.664	57	166945	1.901	ppbv		97
45) t-1,3-Dichloropropene	6.448	75	35707	1.604	ppbv		93

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	46835	1.658	ppbv		93
47) 1,1,2-Trichloroethane	6.613	97	36368	1.822	ppbv		93
48) Dibromochloromethane	7.412	129	56931	1.703	ppbv		99
49) Bromoform	9.503	173	50259	1.833	ppbv		99
50) 4-Methyl-2-Pentanone	5.797	43	83246	1.474	ppbv		99
51) 2-Hexanone	7.470	43	51926	1.124	ppbv	#	94
52) Tetrachloroethene	8.244	164	32874	1.822	ppbv		95
53) Toluene	6.962	91	109646	1.779	ppbv		98
54) 1,2-Dibromoethane	7.678	107	50010	1.820	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.946	131	44947	1.662	ppbv		98
57) Chlorobenzene	8.943	112	84749	1.906	ppbv		95
58) Ethyl Benzene	9.374	91	149185	1.804	ppbv		99
59) m/p-Xylene	9.568	91	238800m	3.666	ppbv		
60) o-Xylene	9.982	91	119170	1.809	ppbv		97
61) Styrene	9.888	104	55798	1.776	ppbv		96
62) Isopropylbenzene	10.555	105	181311	1.833	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.982	83	77911	1.833	ppbv		96
64) n-propylbenzene	11.005	120	47764	1.965	ppbv		92
65) tert-Butylbenzene	11.545	119	167973	1.948	ppbv		96
66) Benzyl Chloride	11.630	91	12304	1.423	ppbv	#	98
67) sec-Butylbenzene	11.782	105	240504	1.986	ppbv		99
69) p-Isopropyltoluene	11.940	119	194660	1.963	ppbv		99
70) n-Butylbenzene	12.296	91	194416	1.991	ppbv		99
71) 2-Chlorotoluene	10.917	91	140068	1.880	ppbv		98
72) 4-Ethyltoluene	11.141	105	150038	1.944	ppbv		98
73) 1,3,5-Trimethylbenzene	11.218	105	128202	1.925	ppbv		99
74) 1,2,4-Trimethylbenzene	11.549	105	150380	2.104	ppbv	#	88
75) 1,3-Dichlorobenzene	11.623	146	81884	2.129	ppbv		98
76) 1,4-Dichlorobenzene	11.688	146	82560	2.201	ppbv		97
77) 1,2-Dichlorobenzene	11.963	146	80367	2.186	ppbv		96
78) Hexachloro-1,3-Butadiene	13.895	225	63815	2.098	ppbv		99
79) Naphthalene	13.526	128	102197	1.454	ppbv		98
80) Naphthalene,2-methyl-	14.475	142	18104	0.569	ppbv		94
81) 1,2,4-Trichlorobenzene	13.455	180	57798	2.023	ppbv		98

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

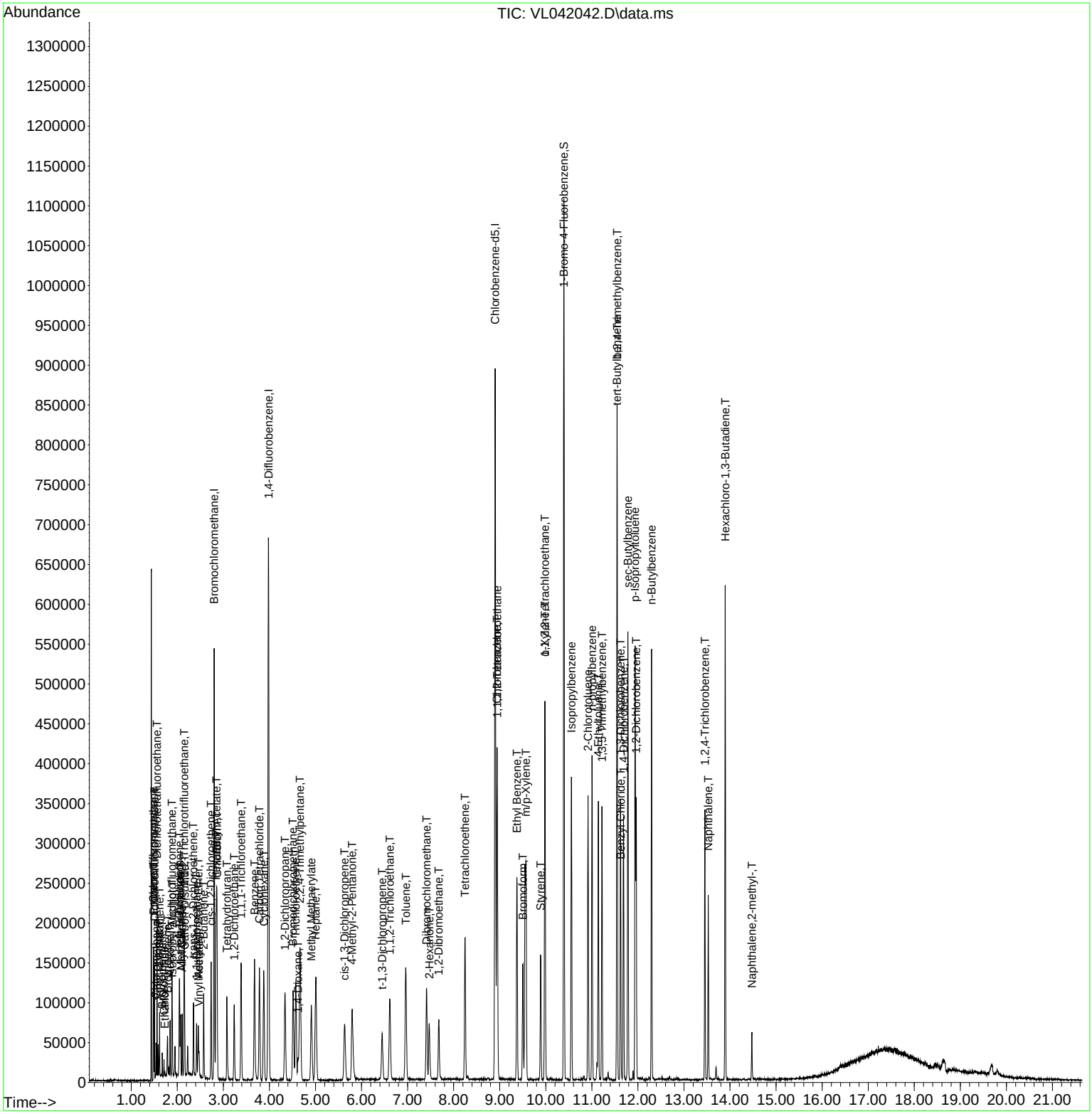
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042042.D
Acq On : 25 Feb 2025 09:29
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 25 10:12:18 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 18 00:13:37 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.800	49	161096	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.978	114	423363	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.898	117	369917	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	287450	9.420	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 94.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	17457	0.629	ppbv		95
3) Chlorodifluoromethane	1.479	51	25229	0.823	ppbv		98
4) Chloromethane	1.538	50	6417	0.595	ppbv	#	75
5) Vinyl Chloride	1.586	62	5567	0.432	ppbv		96
6) Bromomethane	1.674	94	2966	0.594	ppbv		100
7) Chloroethane	1.709	64	2542	0.605	ppbv		96
8) Dichlorotetrafluoroethane	1.560	85	14655	0.601	ppbv		90
9) Propene	1.486	41	10156	0.768	ppbv		96
10) Heptane	4.998	43	31354m	0.854	ppbv		
11) Trichlorofluoromethane	1.884	101	18079	0.648	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.149	101	14527	0.667	ppbv		92
13) Ethanol	1.725	45	915m	0.614	ppbv		
14) Bromoethene	1.787	108	4905	0.604	ppbv	#	95
15) Acetone	1.845	43	15468	0.582	ppbv		98
16) 1,3-Butadiene	1.615	39	7010	0.556	ppbv		99
17) tert-Butyl alcohol	2.052	59	19092	0.580	ppbv		97
18) 1,1-Dichloroethene	2.043	96	7042	0.677	ppbv		94
19) Isopropyl Alcohol	1.894	45	9191	0.616	ppbv	#	32
20) Methylene Chloride	2.068	84	6026	0.602	ppbv		95
21) Allyl Chloride	2.104	41	11550	0.600	ppbv		95
22) trans-1,2-Dichloroethene	2.347	96	8145m	0.722	ppbv		
23) Vinyl Acetate	2.473	43	9893	0.687	ppbv	#	91
24) 1,1-Dichloroethane	2.418	63	13783	0.601	ppbv		98
25) Ethyl Acetate	2.852	43	59183	0.811	ppbv		99
26) Hexane	2.836	57	23549	0.804	ppbv		96
27) Carbon Disulfide	2.159	76	15659	0.568	ppbv	#	46
28) Methyl tert-Butyl Ether	2.454	73	13593	0.759	ppbv		95
29) Chloroform	2.861	83	32925	0.776	ppbv		94
30) Cyclohexane	3.874	84	19953	0.840	ppbv		97
31) cis-1,2-Dichloroethene	2.732	61	22565	0.780	ppbv		97
32) 1,1,1-Trichloroethane	3.386	97	30870	0.656	ppbv		96
34) 2-Butanone	2.570	43	33820	0.929	ppbv		99
35) Carbon Tetrachloride	3.777	117	30618	0.745	ppbv		90
36) Benzene	3.674	78	45892	0.895	ppbv		96
37) 1,2-Dichloroethane	3.234	62	25585	0.876	ppbv		99
38) Trichloroethene	4.570	130	18921	0.908	ppbv		91
39) 1,2-Dichloropropane	4.334	63	17557	0.934	ppbv		94
40) 1,4-Dioxane	4.619	88	8319m	0.850	ppbv		
41) Tetrahydrofuran	3.075	42	20823	1.000	ppbv		96
42) Bromodichloromethane	4.515	83	33481	0.847	ppbv		97
43) Methyl Methacrylate	4.907	69	17679	0.756	ppbv		99
44) 2,2,4-Trimethylpentane	4.661	57	81921	0.941	ppbv		98
45) t-1,3-Dichloropropene	6.444	75	16578m	0.751	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.632	75	22127m	0.790	ppbv		
47) 1,1,2-Trichloroethane	6.616	97	18160m	0.918	ppbv		
48) Dibromochloromethane	7.412	129	28239	0.852	ppbv		97
49) Bromoform	9.500	173	23310	0.858	ppbv		94
50) 4-Methyl-2-Pentanone	5.791	43	41249m	0.737	ppbv		
51) 2-Hexanone	7.470	43	24117	0.527	ppbv	#	97
52) Tetrachloroethene	8.241	164	16217	0.907	ppbv		89
53) Toluene	6.959	91	51231	0.838	ppbv		99
54) 1,2-Dibromoethane	7.674	107	23427	0.860	ppbv		94
56) 1,1,1,2-Tetrachloroethane	8.943	131	22060	0.833	ppbv		97
57) Chlorobenzene	8.937	112	41173	0.946	ppbv		96
58) Ethyl Benzene	9.370	91	70507	0.871	ppbv		97
59) m/p-Xylene	9.568	91	114691m	1.799	ppbv		
60) o-Xylene	9.979	91	57322	0.889	ppbv		99
61) Styrene	9.885	104	26596	0.865	ppbv		98
62) Isopropylbenzene	10.555	105	86533	0.894	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.979	83	38520	0.926	ppbv		98
64) n-propylbenzene	11.002	120	22456	0.944	ppbv		94
65) tert-Butylbenzene	11.545	119	83284	0.987	ppbv		99
66) Benzyl Chloride	11.626	91	5880m	0.695	ppbv		
67) sec-Butylbenzene	11.782	105	119435	1.007	ppbv		99
69) p-Isopropyltoluene	11.940	119	93710	0.966	ppbv		99
70) n-Butylbenzene	12.293	91	94969	0.993	ppbv		98
71) 2-Chlorotoluene	10.914	91	67655	0.928	ppbv		98
72) 4-Ethyltoluene	11.137	105	71906	0.952	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	64087	0.983	ppbv		96
74) 1,2,4-Trimethylbenzene	11.549	105	73323	1.048	ppbv		100
75) 1,3-Dichlorobenzene	11.620	146	41063	1.091	ppbv		99
76) 1,4-Dichlorobenzene	11.685	146	39235	1.068	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	40574	1.127	ppbv		98
78) Hexachloro-1,3-Butadiene	13.895	225	30764	1.033	ppbv		99
79) Naphthalene	13.526	128	45743	0.665	ppbv		98
80) Naphthalene,2-methyl-	14.471	142	5244	0.168	ppbv		94
81) 1,2,4-Trichlorobenzene	13.452	180	25404	0.908	ppbv		95

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

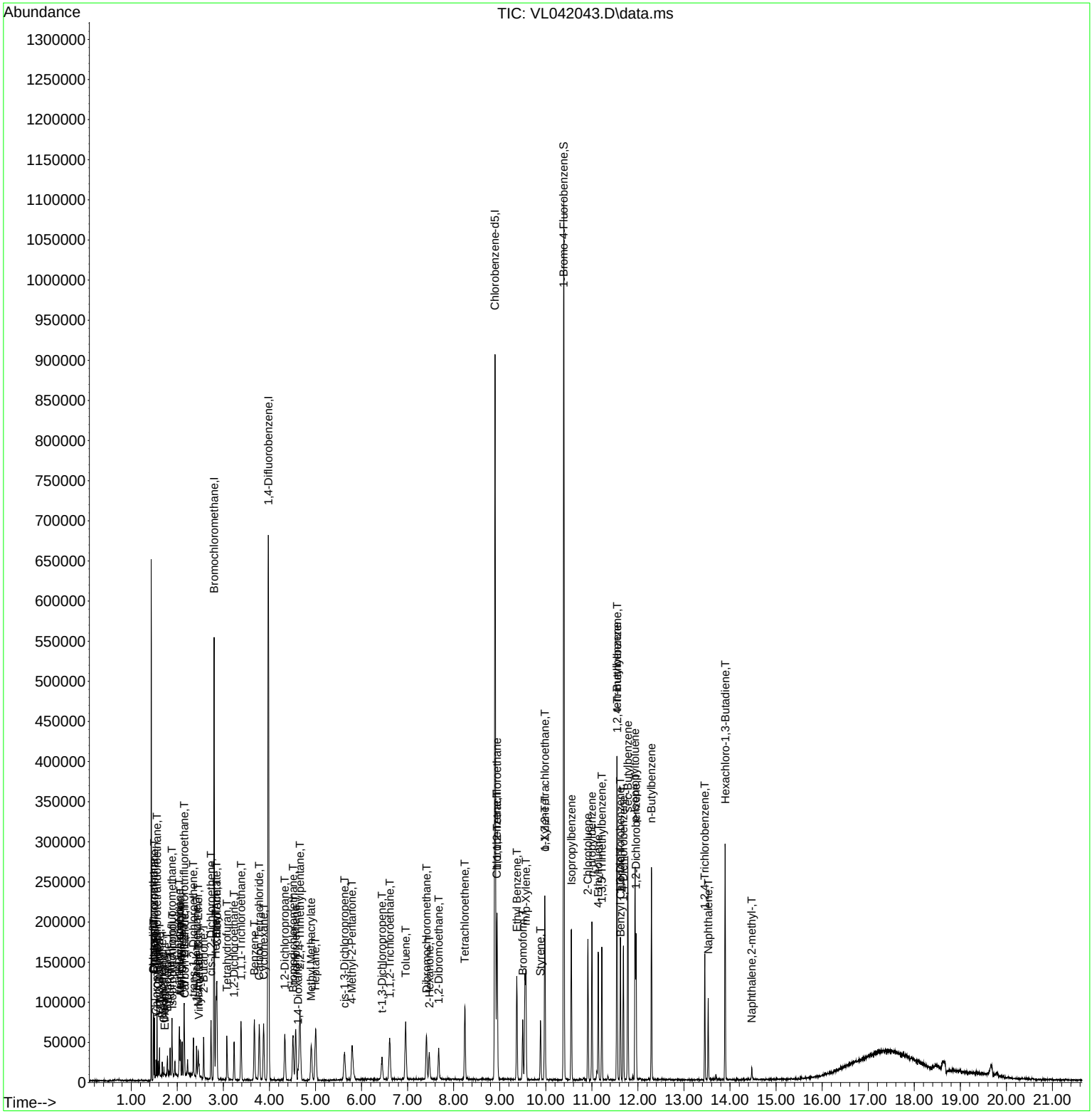
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042043.D
Acq On : 25 Feb 2025 10:00
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:27:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:15:00 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	159644	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.975	114	421340	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.898	117	365954	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	281042	9.310	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	8852	0.322	ppbv		98
3) Chlorodifluoromethane	1.479	51	11921	0.392	ppbv		94
4) Chloromethane	1.537	50	3497	0.327	ppbv	#	88
5) Vinyl Chloride	1.583	62	3005	0.235	ppbv		98
6) Bromomethane	1.673	94	1359	0.275	ppbv		92
7) Chloroethane	1.709	64	1205	0.290	ppbv		89
8) Dichlorotetrafluoroethane	1.557	85	7123	0.295	ppbv		99
9) Propene	1.486	41	4904	0.374	ppbv		94
10) Heptane	5.004	43	15731	0.432	ppbv		98
11) Trichlorofluoromethane	1.884	101	8429	0.305	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.146	101	7336	0.340	ppbv		98
13) Ethanol	1.725	45	426	0.288	ppbv		75
14) Bromoethene	1.787	108	2598	0.323	ppbv	#	89
15) Acetone	1.842	43	8655	0.328	ppbv		96
16) 1,3-Butadiene	1.615	39	3803	0.304	ppbv		97
17) tert-Butyl alcohol	2.049	59	9447	0.290	ppbv	#	90
18) 1,1-Dichloroethene	2.039	96	3173	0.308	ppbv		94
19) Isopropyl Alcohol	1.894	45	4481	0.303	ppbv	#	32
20) Methylene Chloride	2.068	84	3423	0.345	ppbv		97
21) Allyl Chloride	2.104	41	5640	0.296	ppbv		100
22) trans-1,2-Dichloroethene	2.347	96	3838m	0.343	ppbv		
23) Vinyl Acetate	2.473	43	5499	0.385	ppbv	#	86
24) 1,1-Dichloroethane	2.418	63	7396	0.326	ppbv	#	88
25) Ethyl Acetate	2.848	43	30593	0.423	ppbv		98
26) Hexane	2.832	57	12739	0.439	ppbv		98
27) Carbon Disulfide	2.159	76	8316	0.305	ppbv	#	15
28) Methyl tert-Butyl Ether	2.450	73	5185	0.292	ppbv	#	80
29) Chloroform	2.858	83	17278	0.411	ppbv		93
30) Cyclohexane	3.874	84	9209	0.391	ppbv		88
31) cis-1,2-Dichloroethene	2.729	61	11344	0.395	ppbv		97
32) 1,1,1-Trichloroethane	3.382	97	15027	0.322	ppbv		93
34) 2-Butanone	2.570	43	17555	0.484	ppbv		99
35) Carbon Tetrachloride	3.780	117	14223	0.348	ppbv		90
36) Benzene	3.670	78	22728	0.445	ppbv		95
37) 1,2-Dichloroethane	3.230	62	13141	0.452	ppbv		100
38) Trichloroethene	4.570	130	9115	0.440	ppbv	#	87
39) 1,2-Dichloropropane	4.331	63	8877m	0.474	ppbv		
40) 1,4-Dioxane	4.622	88	4046m	0.416	ppbv		
41) Tetrahydrofuran	3.078	42	9880	0.477	ppbv		98
42) Bromodichloromethane	4.505	83	16973	0.431	ppbv	#	96
43) Methyl Methacrylate	4.904	69	8428	0.362	ppbv		93
44) 2,2,4-Trimethylpentane	4.661	57	40623	0.469	ppbv		98
45) t-1,3-Dichloropropene	6.441	75	8720m	0.397	ppbv		

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.629	75	10834m	0.389	ppbv		
47) 1,1,2-Trichloroethane	6.609	97	8982m	0.456	ppbv		
48) Dibromochloromethane	7.406	129	13014m	0.395	ppbv		
49) Bromoform	9.496	173	11640	0.430	ppbv		98
50) 4-Methyl-2-Pentanone	5.794	43	20992m	0.377	ppbv		
51) 2-Hexanone	7.470	43	12149m	0.267	ppbv		
52) Tetrachloroethene	8.241	164	8012	0.450	ppbv		95
53) Toluene	6.956	91	24224	0.398	ppbv		96
54) 1,2-Dibromoethane	7.674	107	11718m	0.432	ppbv		
56) 1,1,1,2-Tetrachloroethane	8.940	131	11100	0.424	ppbv	#	61
57) Chlorobenzene	8.936	112	20167	0.468	ppbv		97
58) Ethyl Benzene	9.370	91	34506	0.431	ppbv		90
59) m/p-Xylene	9.568	91	54449m	0.863	ppbv		
60) o-Xylene	9.979	91	28757	0.451	ppbv		95
61) Styrene	9.885	104	12051	0.396	ppbv		99
62) Isopropylbenzene	10.552	105	42074	0.439	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.975	83	18774	0.456	ppbv		96
64) n-propylbenzene	11.001	120	10900	0.463	ppbv		100
65) tert-Butylbenzene	11.542	119	38066	0.456	ppbv		98
66) Benzyl Chloride	11.626	91	2589	0.309	ppbv	#	96
67) sec-Butylbenzene	11.778	105	54394	0.464	ppbv		97
69) p-Isopropyltoluene	11.937	119	40978	0.427	ppbv		95
70) n-Butylbenzene	12.293	91	42673	0.451	ppbv		99
71) 2-Chlorotoluene	10.914	91	32161	0.446	ppbv		99
72) 4-Ethyltoluene	11.137	105	32477	0.434	ppbv	#	95
73) 1,3,5-Trimethylbenzene	11.215	105	29130	0.452	ppbv		91
74) 1,2,4-Trimethylbenzene	11.548	105	33950	0.491	ppbv		97
75) 1,3-Dichlorobenzene	11.616	146	20339	0.546	ppbv		96
76) 1,4-Dichlorobenzene	11.684	146	20492	0.564	ppbv		93
77) 1,2-Dichlorobenzene	11.959	146	19373	0.544	ppbv		96
78) Hexachloro-1,3-Butadiene	13.892	225	15367	0.522	ppbv		99
79) Naphthalene	13.523	128	17897	0.263	ppbv	#	95
80) Naphthalene,2-methyl-	14.478	142	1646	0.053	ppbv	#	81
81) 1,2,4-Trichlorobenzene	13.452	180	10771	0.389	ppbv		94

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

Quantitation Report (QT Reviewed)

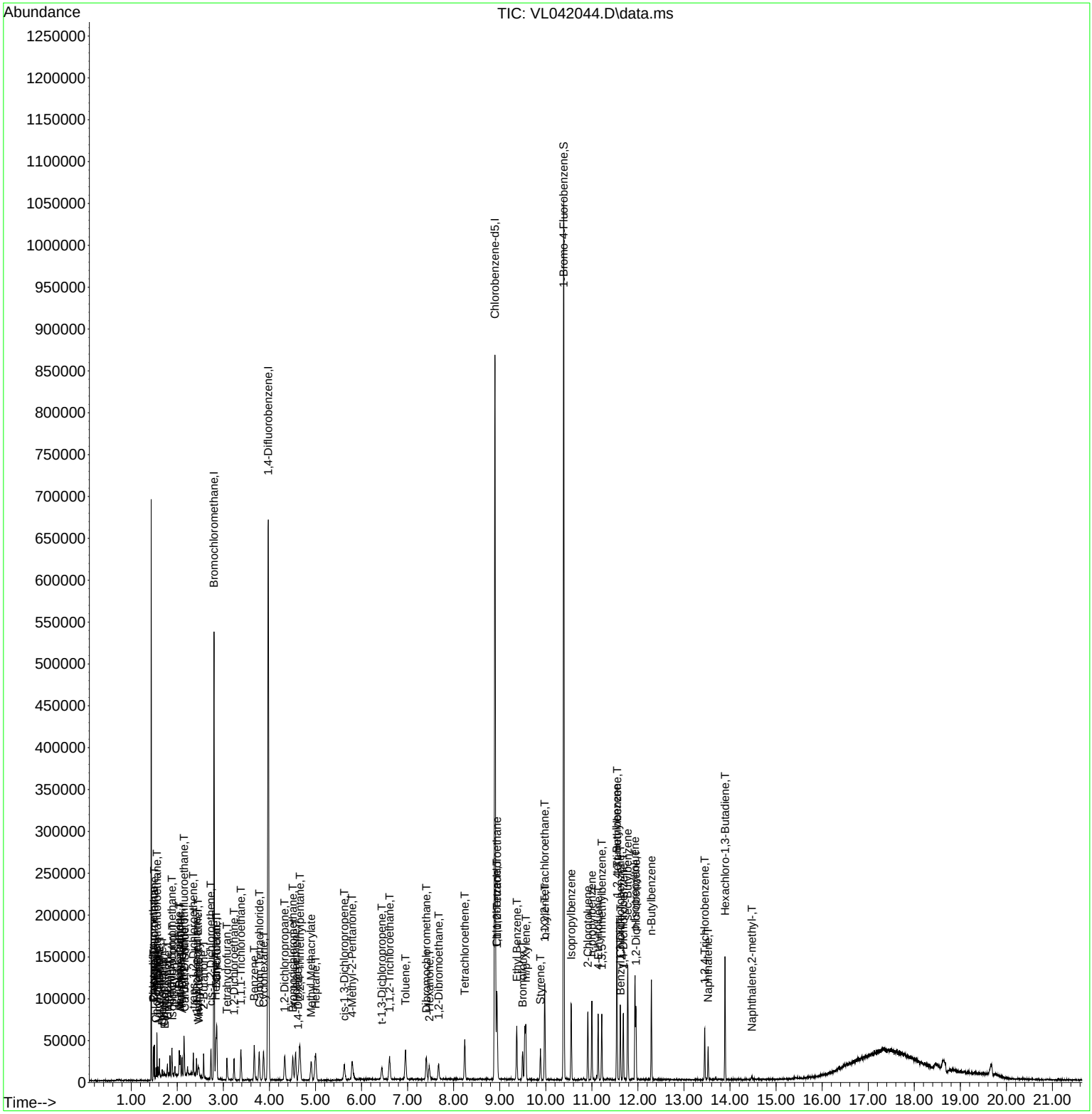
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042044.D
Acq On : 25 Feb 2025 10:31
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 10:56:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042045.D
Acq On : 25 Feb 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:33:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.803	49	161406	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.981	114	414875	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.904	117	363831	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	276484	9.213	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.100%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	543	0.042	ppbv	# 88
32) 1,1,1-Trichloroethane	3.386	97	3026	0.064	ppbv	# 86
35) Carbon Tetrachloride	3.787	117	2923m	0.073	ppbv	
38) Trichloroethene	4.577	130	1915m	0.094	ppbv	
52) Tetrachloroethene	8.254	164	1552m	0.089	ppbv	
54) 1,2-Dibromoethane	7.678	107	2335m	0.087	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.982	83	3549m	0.087	ppbv	
79) Naphthalene	13.529	128	3058	0.045	ppbv	# 91

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

Quantitation Report (QT Reviewed)

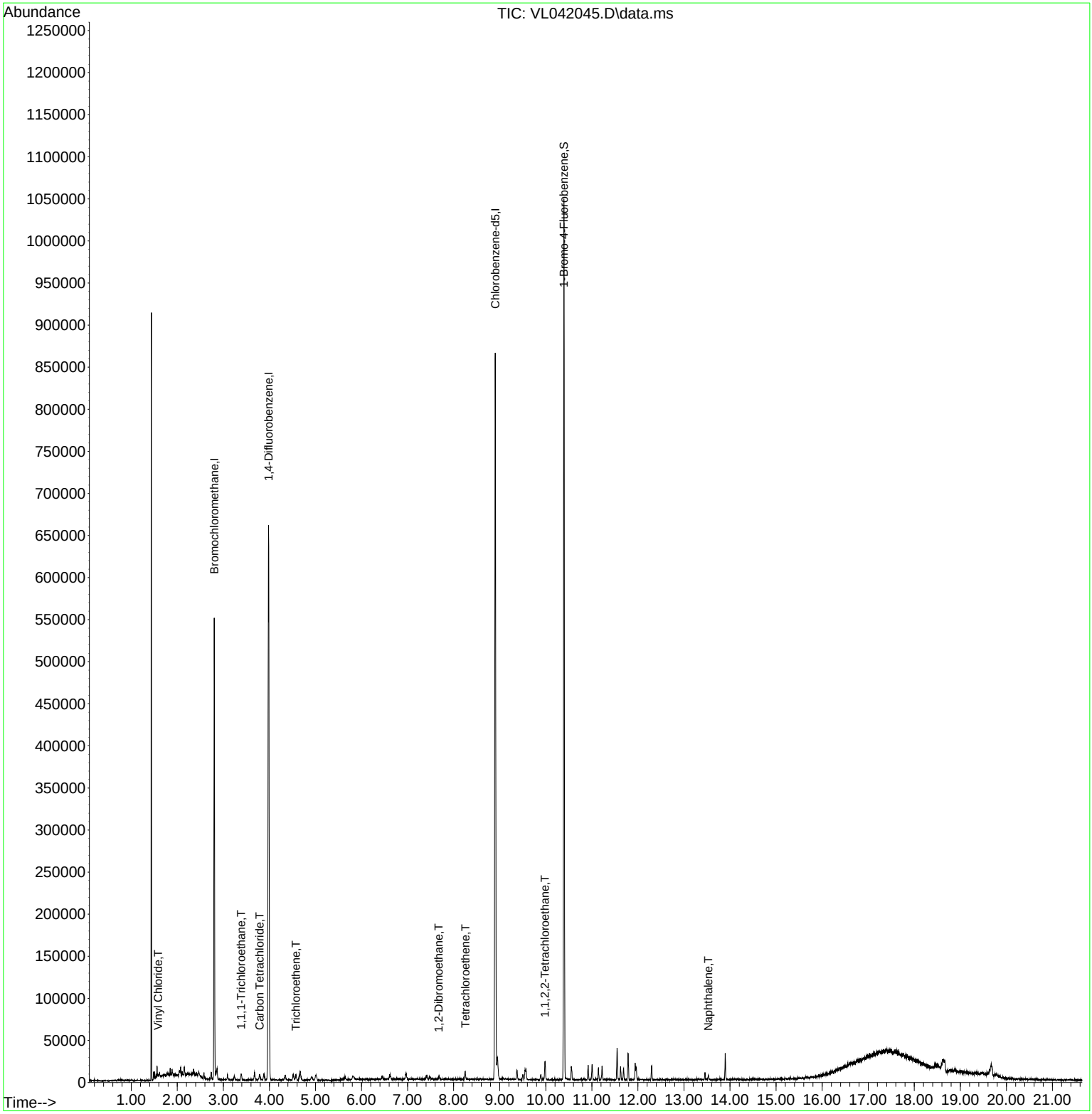
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042045.D
Acq On : 25 Feb 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:33:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042046.D
Acq On : 25 Feb 2025 11:34
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:34:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	160156	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	410900	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	353154	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	272906	9.368	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.700%			
Target Compounds						Qvalue
5) Vinyl Chloride	1.586	62	215	0.017	ppbv	89
32) 1,1,1-Trichloroethane	3.379	97	923m	0.020	ppbv	
35) Carbon Tetrachloride	3.784	117	818m	0.021	ppbv	
38) Trichloroethene	4.577	130	551m	0.027	ppbv	
52) Tetrachloroethene	8.237	164	397m	0.023	ppbv	
63) 1,1,2,2-Tetrachloroethane	9.979	83	1058m	0.027	ppbv	

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

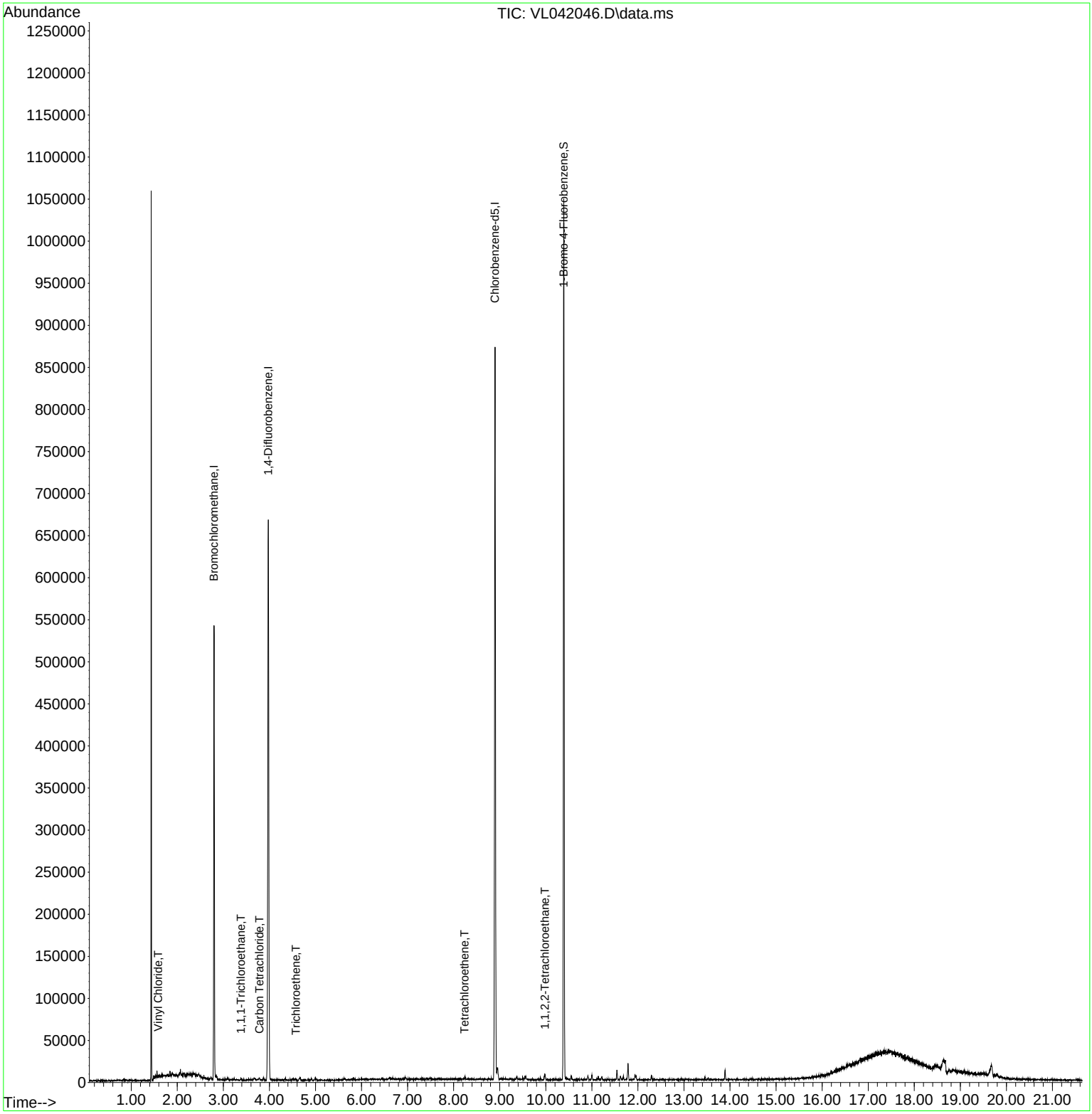
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042046.D
Acq On : 25 Feb 2025 11:34
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:34:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.800	49	159015	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.978	114	401919	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.904	117	351637	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.393	95	273846	9.441	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 94.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	231978	8.474	ppbv	99
3) Chlorodifluoromethane	1.479	51	324821	10.733	ppbv	100
4) Chloromethane	1.537	50	82097	7.718	ppbv	98
5) Vinyl Chloride	1.586	62	81863	6.436	ppbv	99
6) Bromomethane	1.673	94	39366	7.983	ppbv	97
7) Chloroethane	1.709	64	33329	8.039	ppbv	92
8) Dichlorotetrafluoroethane	1.560	85	188716	7.837	ppbv	98
9) Propene	1.489	41	133086	10.201	ppbv	97
10) Heptane	5.004	43	400418	11.052	ppbv	99
11) Trichlorofluoromethane	1.884	101	230938	8.383	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.149	101	184306	8.579	ppbv	99
13) Ethanol	1.725	45	4281	2.909	ppbv	100
14) Bromoethene	1.787	108	65496	8.164	ppbv	99
15) Acetone	1.842	43	172538	6.574	ppbv	98
16) 1,3-Butadiene	1.615	39	87490	7.027	ppbv	100
17) tert-Butyl alcohol	2.049	59	239569	7.377	ppbv	98
18) 1,1-Dichloroethene	2.042	96	80535	7.845	ppbv	98
19) Isopropyl Alcohol	1.894	45	102365	6.955	ppbv	99
20) Methylene Chloride	2.068	84	66282	6.709	ppbv	98
21) Allyl Chloride	2.104	41	140726	7.406	ppbv	99
22) trans-1,2-Dichloroethene	2.350	96	94321	8.466	ppbv	95
23) Vinyl Acetate	2.473	43	139727	9.831	ppbv	99
24) 1,1-Dichloroethane	2.418	63	180882	7.997	ppbv	99
25) Ethyl Acetate	2.848	43	767353	10.652	ppbv	99
26) Hexane	2.839	57	306864	10.615	ppbv	99
27) Carbon Disulfide	2.159	76	224609	8.261	ppbv	98
28) Methyl tert-Butyl Ether	2.453	73	168058	9.510	ppbv	98
29) Chloroform	2.861	83	409240	9.774	ppbv	100
30) Cyclohexane	3.874	84	256687	10.946	ppbv	98
31) cis-1,2-Dichloroethene	2.732	61	299324	10.476	ppbv	96
32) 1,1,1-Trichloroethane	3.386	97	417615	8.994	ppbv	98
34) 2-Butanone	2.570	43	457602	13.234	ppbv	98
35) Carbon Tetrachloride	3.780	117	410730	10.524	ppbv	96
36) Benzene	3.674	78	602107	12.367	ppbv	97
37) 1,2-Dichloroethane	3.233	62	335275	12.097	ppbv	99
38) Trichloroethene	4.573	130	228298	11.542	ppbv	98
39) 1,2-Dichloropropane	4.337	63	228418	12.797	ppbv	98
40) 1,4-Dioxane	4.609	88	104519	11.253	ppbv #	96
41) Tetrahydrofuran	3.068	42	271202	13.724	ppbv	100
42) Bromodichloromethane	4.512	83	461272	12.285	ppbv	96
43) Methyl Methacrylate	4.907	69	246468	11.105	ppbv	97
44) 2,2,4-Trimethylpentane	4.667	57	1054880	12.763	ppbv	99
45) t-1,3-Dichloropropene	6.444	75	249612	11.914	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.635	75	317266	11.935	ppbv		98
47) 1,1,2-Trichloroethane	6.609	97	226021	12.032	ppbv		95
48) Dibromochloromethane	7.412	129	369666	11.750	ppbv		99
49) Bromoform	9.503	173	317322	12.297	ppbv		99
50) 4-Methyl-2-Pentanone	5.787	43	650307	12.237	ppbv		99
51) 2-Hexanone	7.461	43	530165	12.198	ppbv	#	100
52) Tetrachloroethene	8.247	164	203233	11.968	ppbv		94
53) Toluene	6.959	91	673822	11.615	ppbv		99
54) 1,2-Dibromoethane	7.677	107	309982	11.985	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.946	131	276326	10.979	ppbv		99
57) Chlorobenzene	8.943	112	494606	11.957	ppbv		98
58) Ethyl Benzene	9.373	91	922265	11.984	ppbv		100
59) m/p-Xylene	9.571	91	1456036m	24.020	ppbv		
60) o-Xylene	9.982	91	712735	11.626	ppbv		99
61) Styrene	9.888	104	363855	12.446	ppbv		99
62) Isopropylbenzene	10.558	105	1068777	11.612	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.982	83	459839	11.626	ppbv		100
64) n-propylbenzene	11.005	120	282364	12.486	ppbv		99
65) tert-Butylbenzene	11.548	119	924810	11.526	ppbv		99
66) Benzyl Chloride	11.633	91	78975	9.819	ppbv		98
67) sec-Butylbenzene	11.785	105	1315730	11.674	ppbv		99
69) p-Isopropyltoluene	11.940	119	1084253	11.752	ppbv		99
70) n-Butylbenzene	12.296	91	1118373	12.306	ppbv		99
71) 2-Chlorotoluene	10.917	91	818204	11.804	ppbv		100
72) 4-Ethyltoluene	11.141	105	880883	12.264	ppbv		99
73) 1,3,5-Trimethylbenzene	11.218	105	738619	11.921	ppbv		98
74) 1,2,4-Trimethylbenzene	11.552	105	784701	11.801	ppbv		91
75) 1,3-Dichlorobenzene	11.623	146	465436	13.003	ppbv		98
76) 1,4-Dichlorobenzene	11.688	146	467249	13.386	ppbv		99
77) 1,2-Dichlorobenzene	11.963	146	449222	13.129	ppbv		98
78) Hexachloro-1,3-Butadiene	13.895	225	351085	12.403	ppbv		100
79) Naphthalene	13.526	128	764990	11.696	ppbv		99
80) Naphthalene,2-methyl-	14.471	142	324431	10.956	ppbv		99
81) 1,2,4-Trichlorobenzene	13.455	180	354990	13.351	ppbv		99

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

Quantitation Report (QT Reviewed)

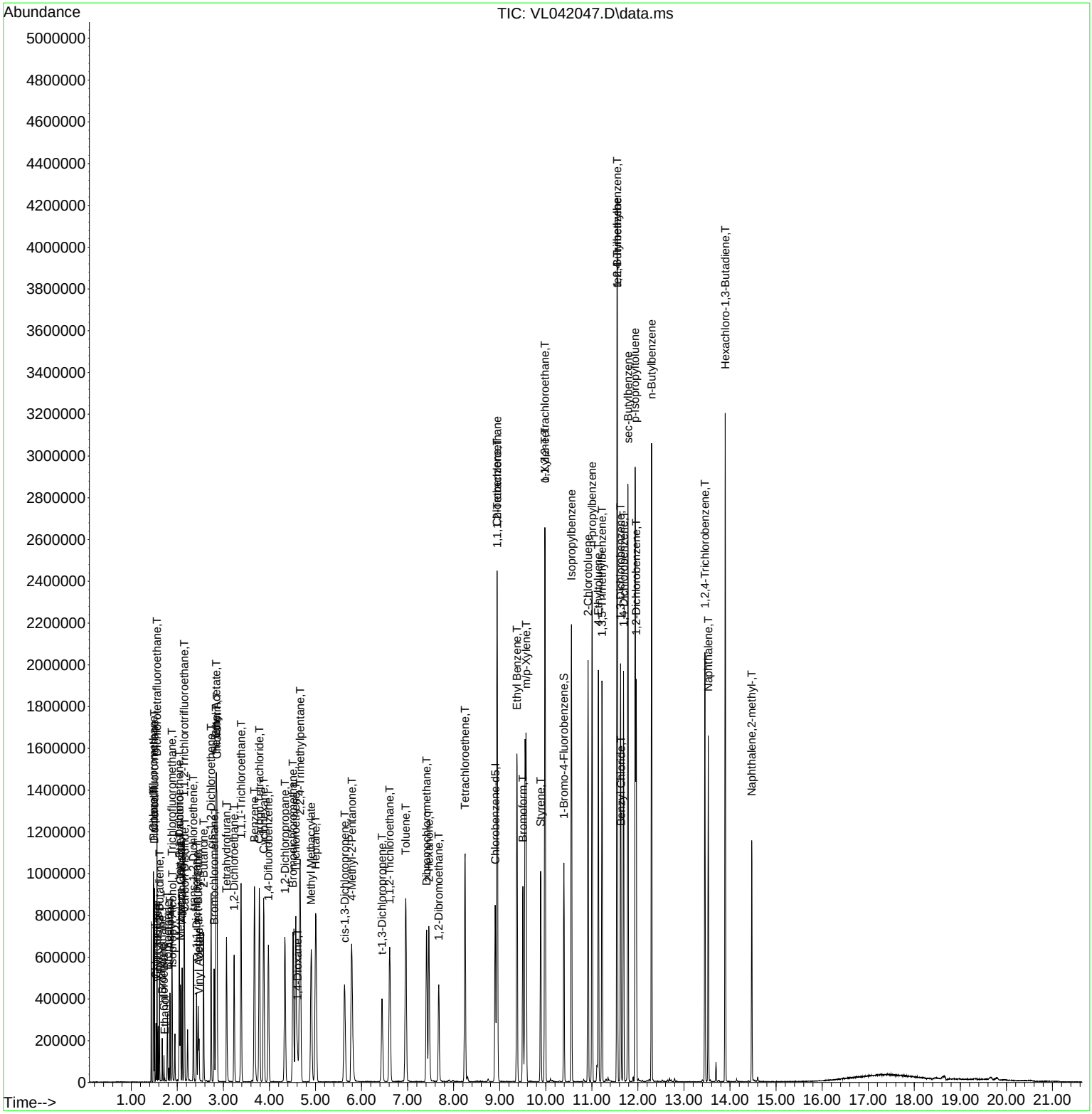
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042047.D
Acq On : 25 Feb 2025 12:07
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 25 12:35:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Tue Feb 25 10:31:48 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.800	49	158881	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.981	114	406520	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.904	117	350262	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.393	95	274527	10.188	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.505	85	158709	9.606	ppbv		99
3) Chlorodifluoromethane	1.479	51	219646	9.512	ppbv		100
4) Chloromethane	1.537	50	54628	8.941	ppbv		100
5) Vinyl Chloride	1.586	62	52672	9.114	ppbv		98
6) Bromomethane	1.673	94	25374	9.221	ppbv		100
7) Chloroethane	1.709	64	22174	9.443	ppbv	#	87
8) Dichlorotetrafluoroethane	1.560	85	127046	9.354	ppbv		100
9) Propene	1.489	41	90844	9.657	ppbv		96
10) Heptane	5.010	43	269133	9.188	ppbv		99
11) Trichlorofluoromethane	1.884	101	156871	9.476	ppbv		100
12) 1,1,2-Trichlorotrifluo...	2.149	101	115089	8.715	ppbv		99
13) Ethanol	1.728	45	2630	4.404	ppbv		98
14) Bromoethene	1.790	108	43546	9.338	ppbv		98
15) Acetone	1.842	43	118697	8.460	ppbv		97
16) 1,3-Butadiene	1.615	39	61603	9.434	ppbv		98
17) tert-Butyl alcohol	2.049	59	154116	8.779	ppbv		98
18) 1,1-Dichloroethene	2.042	96	51973	8.711	ppbv		98
19) Isopropyl Alcohol	1.894	45	69546	8.629	ppbv		96
20) Methylene Chloride	2.072	84	42028	7.919	ppbv		96
21) Allyl Chloride	2.104	41	90745	8.951	ppbv		98
22) trans-1,2-Dichloroethene	2.350	96	59140	8.502	ppbv		98
23) Vinyl Acetate	2.476	43	93605	9.488	ppbv	#	98
24) 1,1-Dichloroethane	2.421	63	112869	8.721	ppbv		100
25) Ethyl Acetate	2.852	43	533113	9.492	ppbv		99
26) Hexane	2.839	57	208955	9.203	ppbv		97
27) Carbon Disulfide	2.159	76	138176	8.978	ppbv		97
28) Methyl tert-Butyl Ether	2.453	73	94554	8.365	ppbv		100
29) Chloroform	2.865	83	281191	9.202	ppbv		97
30) Cyclohexane	3.878	84	168830	9.161	ppbv		94
31) cis-1,2-Dichloroethene	2.735	61	199564	9.285	ppbv		99
32) 1,1,1-Trichloroethane	3.386	97	278512	9.396	ppbv		98
34) 2-Butanone	2.570	43	308064	9.727	ppbv		97
35) Carbon Tetrachloride	3.784	117	276599	9.867	ppbv		98
36) Benzene	3.677	78	399804	9.395	ppbv		98
37) 1,2-Dichloroethane	3.233	62	223946	9.491	ppbv		99
38) Trichloroethene	4.573	130	156488	9.005	ppbv		96
39) 1,2-Dichloropropane	4.340	63	152063	9.414	ppbv		97
40) 1,4-Dioxane	4.616	88	65010	8.817	ppbv	#	98
41) Tetrahydrofuran	3.072	42	181453	9.696	ppbv		99
42) Bromodichloromethane	4.512	83	305385	9.606	ppbv		97
43) Methyl Methacrylate	4.910	69	160954	9.685	ppbv		95
44) 2,2,4-Trimethylpentane	4.667	57	712051	9.480	ppbv		99
45) t-1,3-Dichloropropene	6.447	75	159680	9.671	ppbv		90

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.635	75	206836	9.680	ppbv		96
47) 1,1,2-Trichloroethane	6.613	97	148220	9.039	ppbv		95
48) Dibromochloromethane	7.412	129	241593	9.407	ppbv		100
49) Bromoform	9.503	173	210370	9.432	ppbv		98
50) 4-Methyl-2-Pentanone	5.790	43	431123	10.526	ppbv		98
51) 2-Hexanone	7.464	43	354515	12.576	ppbv	#	100
52) Tetrachloroethene	8.247	164	134062	9.202	ppbv		97
53) Toluene	6.962	91	448495	9.430	ppbv		98
54) 1,2-Dibromoethane	7.677	107	206335	9.307	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.946	131	182800	9.234	ppbv		99
57) Chlorobenzene	8.943	112	334696	9.216	ppbv		99
58) Ethyl Benzene	9.377	91	613622	9.513	ppbv		99
59) m/p-Xylene	9.571	91	977425m	19.041	ppbv		
60) o-Xylene	9.985	91	481683	9.334	ppbv		100
61) Styrene	9.891	104	241617	9.959	ppbv		99
62) Isopropylbenzene	10.558	105	729350	9.437	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.982	83	312794	9.204	ppbv		99
64) n-propylbenzene	11.008	120	192704	9.506	ppbv		99
65) tert-Butylbenzene	11.548	119	632202	8.988	ppbv		100
66) Benzyl Chloride	11.633	91	52645	9.808	ppbv		98
67) sec-Butylbenzene	11.785	105	914405	9.090	ppbv		99
69) p-Isopropyltoluene	11.940	119	753761	9.418	ppbv		100
70) n-Butylbenzene	12.296	91	781034	9.560	ppbv		99
71) 2-Chlorotoluene	10.917	91	559993	9.399	ppbv		100
72) 4-Ethyltoluene	11.144	105	602156	9.557	ppbv		99
73) 1,3,5-Trimethylbenzene	11.222	105	505451	9.248	ppbv		100
74) 1,2,4-Trimethylbenzene	11.555	105	547176	8.891	ppbv		95
75) 1,3-Dichlorobenzene	11.623	146	324491	9.161	ppbv		98
76) 1,4-Dichlorobenzene	11.688	146	322712	9.176	ppbv		99
77) 1,2-Dichlorobenzene	11.963	146	312159	9.081	ppbv		99
78) Hexachloro-1,3-Butadiene	13.895	225	228480	8.543	ppbv		99
79) Naphthalene	13.529	128	513148	12.160	ppbv		98
80) Naphthalene,2-methyl-	14.474	142	198077	17.152	ppbv		98
81) 1,2,4-Trichlorobenzene	13.455	180	234354	9.965	ppbv		97

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

Quantitation Report (QT Reviewed)

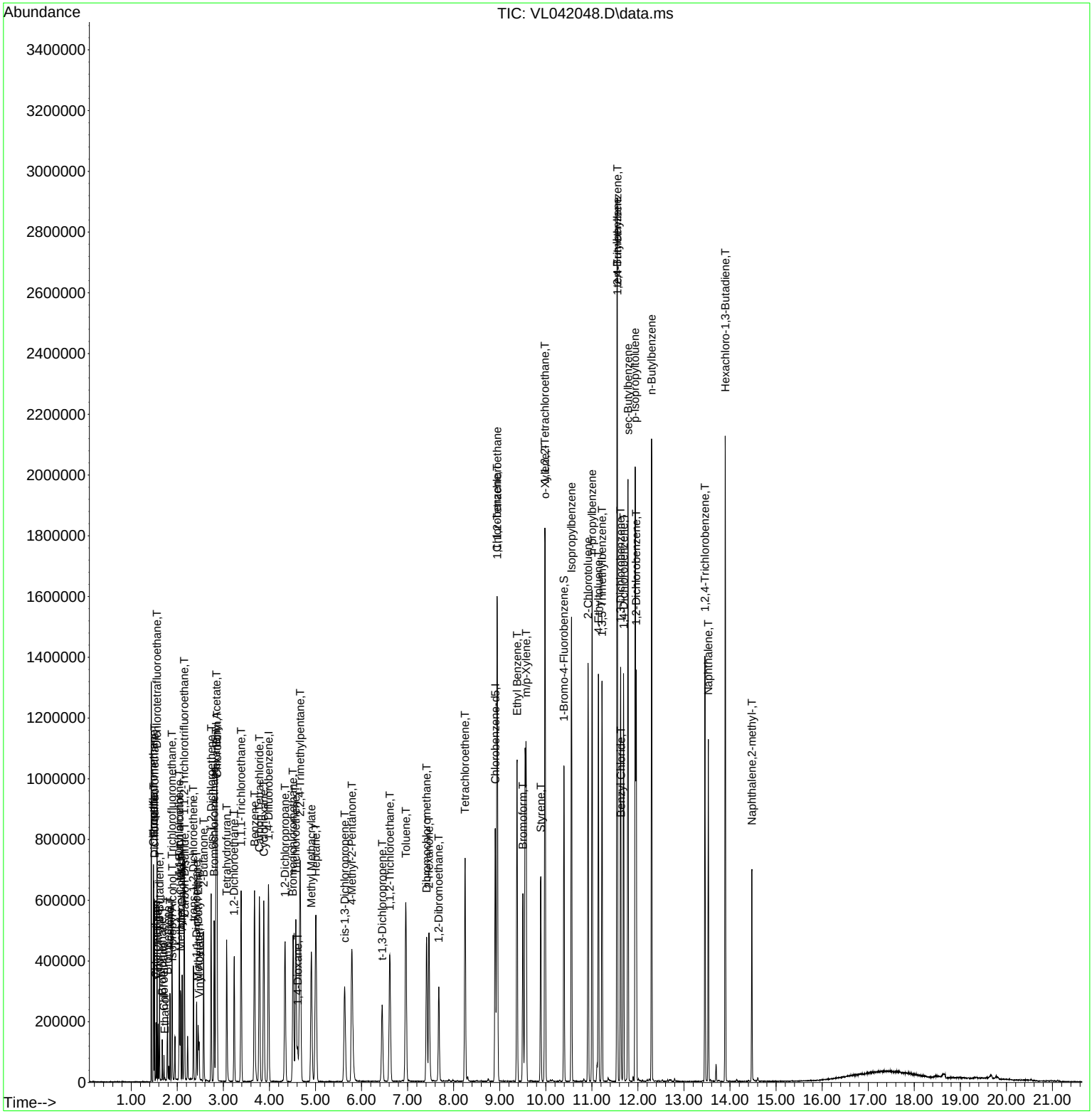
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/26/2025
Supervised By :Mahesh Dadoda 02/26/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	99	0.00
2	T	Dichlorodifluoromethane	1.040	0.999	3.9	104	0.00
3		Chlorodifluoromethane	1.453	1.382	4.9	104	0.00
4		Chloromethane	0.385	0.344	10.6	99	0.00
5	T	Vinyl Chloride	0.364	0.332	8.8	97	0.00
6	T	Bromomethane	0.173	0.160	7.5	98	0.00
7		Chloroethane	0.148	0.140	5.4	102	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.800	6.4	101	0.00
9	T	Propene	0.592	0.572	3.4	108	0.00
10	T	Heptane	1.844	1.694	8.1	100	0.00
11	T	Trichlorofluoromethane	1.042	0.987	5.3	103	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.724	12.9	102	0.00
13		Ethanol	0.038	0.017#	55.3#	83	0.00
14	T	Bromoethene	0.293	0.274	6.5	103	0.00
15	T	Acetone	0.883	0.747	15.4	103	0.00
16	T	1,3-Butadiene	0.411	0.388	5.6	107	0.00
17		tert-Butyl alcohol	1.105	0.970	12.2	101	0.00
18	T	1,1-Dichloroethene	0.376	0.327	13.0	101	0.00
19	T	Isopropyl Alcohol	0.507	0.438	13.6	103	0.00
20	T	Methylene Chloride	0.334	0.265	20.7	100	0.00
21	T	Allyl Chloride	0.638	0.571	10.5	105	0.00
22	T	trans-1,2-Dichloroethene	0.438	0.372	15.1	103	0.00
23	T	Vinyl Acetate	0.621	0.589	5.2	112	0.00
24	T	1,1-Dichloroethane	0.815	0.710	12.9	105	0.00
25	T	Ethyl Acetate	3.535	3.355	5.1	104	0.00
26	T	Hexane	1.429	1.315	8.0	101	0.00
27	T	Carbon Disulfide	0.969	0.870	10.2	100	0.00
28	T	Methyl tert-Butyl Ether	0.711	0.595	16.3	112	0.00
29	T	Chloroform	1.923	1.770	8.0	101	0.00
30	T	Cyclohexane	1.160	1.063	8.4	97	0.00
31	T	cis-1,2-Dichloroethene	1.353	1.256	7.2	100	0.00
32	T	1,1,1-Trichloroethane	1.866	1.753	6.1	98	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	96	0.00
34	T	2-Butanone	0.779	0.758	2.7	105	0.00
35	T	Carbon Tetrachloride	0.690	0.680	1.4	100	0.00
36	T	Benzene	1.047	0.983	6.1	98	0.00
37	T	1,2-Dichloroethane	0.580	0.551	5.0	102	0.00
38	T	Trichloroethene	0.427	0.385	9.8	98	0.00
39	T	1,2-Dichloropropane	0.397	0.374	5.8	101	0.00
40	T	1,4-Dioxane	0.181	0.160	11.6	94	0.00
41	T	Tetrahydrofuran	0.460	0.446	3.0	103	0.00
42	T	Bromodichloromethane	0.782	0.751	4.0	98	0.00
43		Methyl Methacrylate	0.409	0.396	3.2	97	0.00
44	T	2,2,4-Trimethylpentane	1.848	1.752	5.2	101	0.00
45	T	t-1,3-Dichloropropene	0.406	0.393	3.2	96	0.00
46	T	cis-1,3-Dichloropropene	0.526	0.509	3.2	95	0.00
47	T	1,1,2-Trichloroethane	0.403	0.365	9.4	97	0.00
48	T	Dibromochloromethane	0.632	0.594	6.0	96	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022525\
Data File : VL042048.D
Acq On : 25 Feb 2025 13:15
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL022525

Quant Time: Feb 26 01:31:59 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.549	0.517	5.8	95	0.00
50	T	4-Methyl-2-Pentanone	1.008	1.061	-5.3	101	0.00
51	T	2-Hexanone	0.693	0.872	-25.8	101	0.00
52	T	Tetrachloroethene	0.358	0.330	7.8	97	0.00
53	T	Toluene	1.170	1.103	5.7	97	0.00
54	T	1,2-Dibromoethane	0.545	0.508	6.8	98	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	94	0.00
56		1,1,1,2-Tetrachloroethane	0.565	0.522	7.6	97	0.00
57	T	Chlorobenzene	1.037	0.956	7.8	98	0.00
58	T	Ethyl Benzene	1.842	1.752	4.9	97	0.00
59	T	m/p-Xylene	1.466	1.395	4.8	98	0.02
60	T	o-Xylene	1.473	1.375	6.7	98	0.00
61	T	Styrene	0.693	0.690	0.4	98	0.00
62		Isopropylbenzene	2.207	2.082	5.7	99	0.00
63	T	1,1,2,2-Tetrachloroethane	0.970	0.893	7.9	99	0.00
64		n-propylbenzene	0.579	0.550	5.0	98	0.00
65		tert-Butylbenzene	2.008	1.805	10.1	97	0.00
66	T	Benzyl Chloride	0.153	0.150	2.0	92	0.00
67		sec-Butylbenzene	2.872	2.611	9.1	98	0.00
68	S	1-Bromo-4-Fluorobenzene	0.769	0.784	-2.0	96	0.00
69		p-Isopropyltoluene	2.285	2.152	5.8	100	0.00
70		n-Butylbenzene	2.332	2.230	4.4	101	0.00
71		2-Chlorotoluene	1.701	1.599	6.0	99	0.00
72	T	4-Ethyltoluene	1.799	1.719	4.4	99	0.00
73	T	1,3,5-Trimethylbenzene	1.560	1.443	7.5	98	0.00
74	T	1,2,4-Trimethylbenzene	1.757	1.562	11.1	99	0.00
75	T	1,3-Dichlorobenzene	1.011	0.926	8.4	100	0.00
76	T	1,4-Dichlorobenzene	1.004	0.921	8.3	100	0.00
77	T	1,2-Dichlorobenzene	0.981	0.891	9.2	100	0.00
78	T	Hexachloro-1,3-Butadiene	0.764	0.652	14.7	96	0.00
79	T	Naphthalene	1.205	1.465	-21.6	100	0.00
80	T	Naphthalene,2-methyl-	0.330	0.566	-71.5#	94	0.00
81	T	1,2,4-Trichlorobenzene	0.671	0.669	0.3	97	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

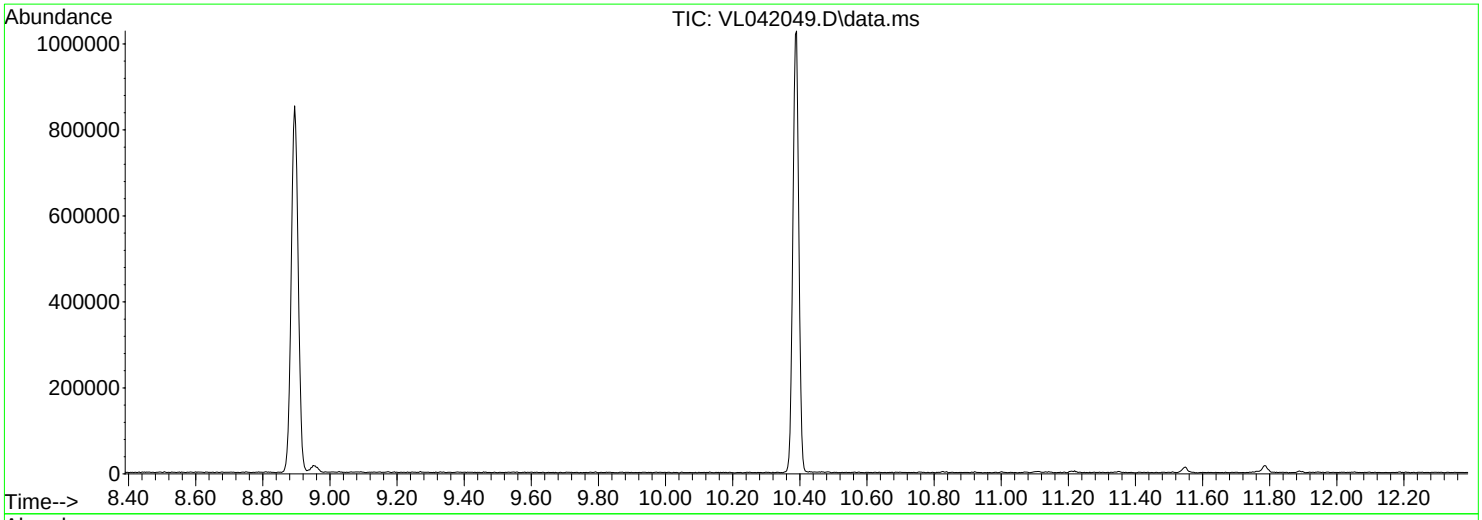
BFB

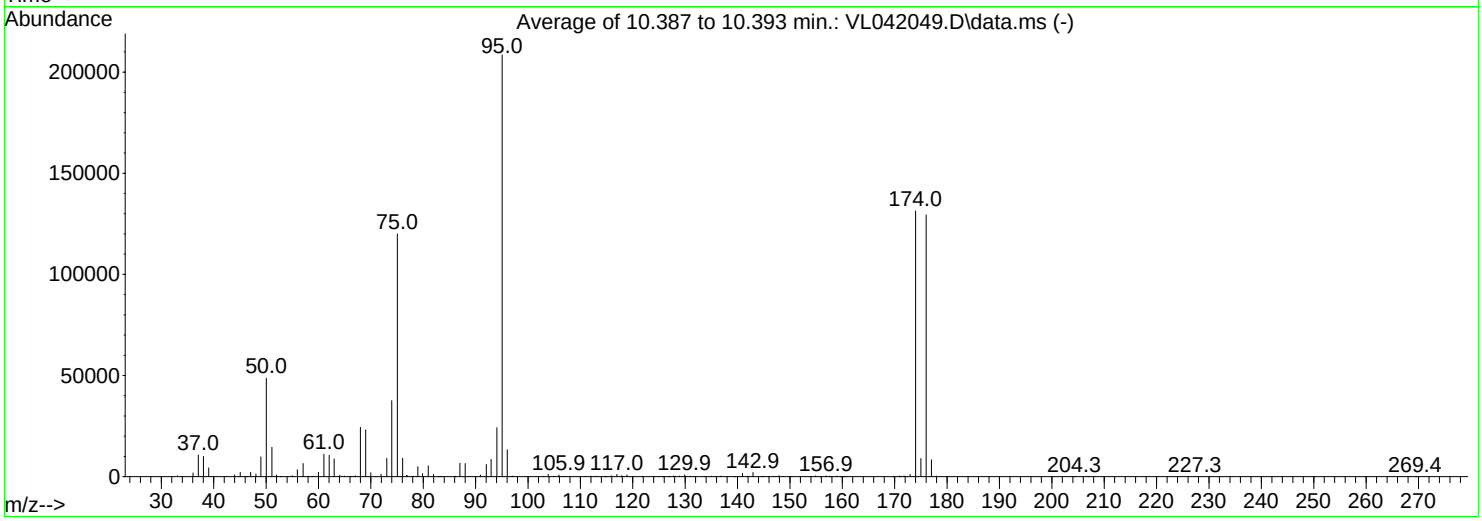
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042049.D
Acq On : 26 Feb 2025 07:46
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025





AutoFind: Scans 3182, 3183, 3184; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	23.3	48688	PASS
75	95	30	66	57.6	120021	PASS
95	95	100	100	100.0	208533	PASS
96	95	5	9	6.4	13271	PASS
173	174	0.00	2	0.8	1077	PASS
174	95	50	120	63.0	131429	PASS
175	174	4	9	6.8	8951	PASS
176	174	93	101	98.5	129411	PASS
177	176	5	9	6.4	8302	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042050.D
Acq On : 26 Feb 2025 08:38
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	157492	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	387144	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	336136	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	264623	10.233	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	159125	9.716	ppbv	96
3) Chlorodifluoromethane	1.479	51	217238	9.491	ppbv	99
4) Chloromethane	1.538	50	54275	8.962	ppbv	97
5) Vinyl Chloride	1.583	62	53871	9.404	ppbv	99
6) Bromomethane	1.670	94	25674	9.412	ppbv	100
7) Chloroethane	1.709	64	22033	9.466	ppbv	89
8) Dichlorotetrafluoroethane	1.557	85	129383	9.610	ppbv	99
9) Propene	1.486	41	87439	9.377	ppbv	97
10) Heptane	5.001	43	268030	9.231	ppbv	99
11) Trichlorofluoromethane	1.884	101	155832	9.496	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.146	101	114341	8.735	ppbv	99
13) Ethanol	1.725	45	2918	4.929	ppbv	98
14) Bromoethene	1.787	108	44414	9.608	ppbv	95
15) Acetone	1.842	43	116372	8.367	ppbv	98
16) 1,3-Butadiene	1.612	39	59133	9.136	ppbv	99
17) tert-Butyl alcohol	2.046	59	153167	8.802	ppbv	96
18) 1,1-Dichloroethene	2.039	96	51101	8.640	ppbv	93
19) Isopropyl Alcohol	1.890	45	69014	8.638	ppbv	98
20) Methylene Chloride	2.068	84	42907	8.156	ppbv	98
21) Allyl Chloride	2.101	41	86423	8.600	ppbv	99
22) trans-1,2-Dichloroethene	2.347	96	61551	8.927	ppbv	98
23) Vinyl Acetate	2.470	43	84867	8.678	ppbv	98
24) 1,1-Dichloroethane	2.418	63	118286	9.220	ppbv	99
25) Ethyl Acetate	2.848	43	521677	9.371	ppbv	99
26) Hexane	2.835	57	207168	9.205	ppbv	98
27) Carbon Disulfide	2.156	76	138544	9.081	ppbv	95
28) Methyl tert-Butyl Ether	2.447	73	88652	7.912	ppbv	97
29) Chloroform	2.858	83	273992	9.045	ppbv	98
30) Cyclohexane	3.871	84	167364	9.162	ppbv	94
31) cis-1,2-Dichloroethene	2.732	61	197466	9.268	ppbv	97
32) 1,1,1-Trichloroethane	3.379	97	275336	9.370	ppbv	97
34) 2-Butanone	2.567	43	298594	9.900	ppbv	97
35) Carbon Tetrachloride	3.777	117	272097	10.192	ppbv	97
36) Benzene	3.670	78	394494	9.734	ppbv	97
37) 1,2-Dichloroethane	3.230	62	224585	9.995	ppbv	99
38) Trichloroethene	4.567	130	149021	9.005	ppbv	97
39) 1,2-Dichloropropane	4.331	63	151626	9.857	ppbv	95
40) 1,4-Dioxane	4.606	88	68639	9.775	ppbv #	98
41) Tetrahydrofuran	3.065	42	178871	10.037	ppbv	97
42) Bromodichloromethane	4.509	83	306517	10.124	ppbv	98
43) Methyl Methacrylate	4.900	69	156460	9.885	ppbv	96
44) 2,2,4-Trimethylpentane	4.658	57	703370	9.834	ppbv	99
45) t-1,3-Dichloropropene	6.438	75	155197	9.870	ppbv	96

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042050.D
Acq On : 26 Feb 2025 08:38
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.622	75	205249	10.087	ppbv		99
47) 1,1,2-Trichloroethane	6.603	97	148058	9.481	ppbv		96
48) Dibromochloromethane	7.409	129	240304	9.825	ppbv		100
49) Bromoform	9.496	173	205649	9.682	ppbv		98
50) 4-Methyl-2-Pentanone	5.778	43	423271	10.851	ppbv		97
51) 2-Hexanone	7.454	43	345562	12.872	ppbv	#	100
52) Tetrachloroethene	8.237	164	131164	9.454	ppbv		97
53) Toluene	6.952	91	439634	9.706	ppbv		98
54) 1,2-Dibromoethane	7.671	107	200726	9.507	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.940	131	178871	9.415	ppbv		100
57) Chlorobenzene	8.937	112	326805	9.377	ppbv		99
58) Ethyl Benzene	9.367	91	598242	9.664	ppbv		99
59) m/p-Xylene	9.564	91	957021m	19.427	ppbv		
60) o-Xylene	9.979	91	475848	9.608	ppbv		100
61) Styrene	9.885	104	231133	9.927	ppbv		99
62) Isopropylbenzene	10.552	105	718826	9.692	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.975	83	312195	9.572	ppbv		98
64) n-propylbenzene	11.001	120	185068	9.513	ppbv		95
65) tert-Butylbenzene	11.542	119	618290	9.160	ppbv		98
66) Benzyl Chloride	11.629	91	49850	9.678	ppbv		98
67) sec-Butylbenzene	11.778	105	890927	9.229	ppbv		100
69) p-Isopropyltoluene	11.937	119	724678	9.435	ppbv		100
70) n-Butylbenzene	12.293	91	756366	9.648	ppbv		99
71) 2-Chlorotoluene	10.914	91	545538	9.541	ppbv		99
72) 4-Ethyltoluene	11.137	105	574661	9.504	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	484912	9.245	ppbv		98
74) 1,2,4-Trimethylbenzene	11.548	105	527932	8.938	ppbv		96
75) 1,3-Dichlorobenzene	11.620	146	309408	9.102	ppbv		99
76) 1,4-Dichlorobenzene	11.684	146	309423	9.168	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	302720	9.177	ppbv		99
78) Hexachloro-1,3-Butadiene	13.892	225	229379	8.937	ppbv		100
79) Naphthalene	13.523	128	493813	12.193	ppbv		99
80) Naphthalene,2-methyl-	14.468	142	190978	17.232	ppbv		99
81) 1,2,4-Trichlorobenzene	13.452	180	226561	10.038	ppbv		98

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

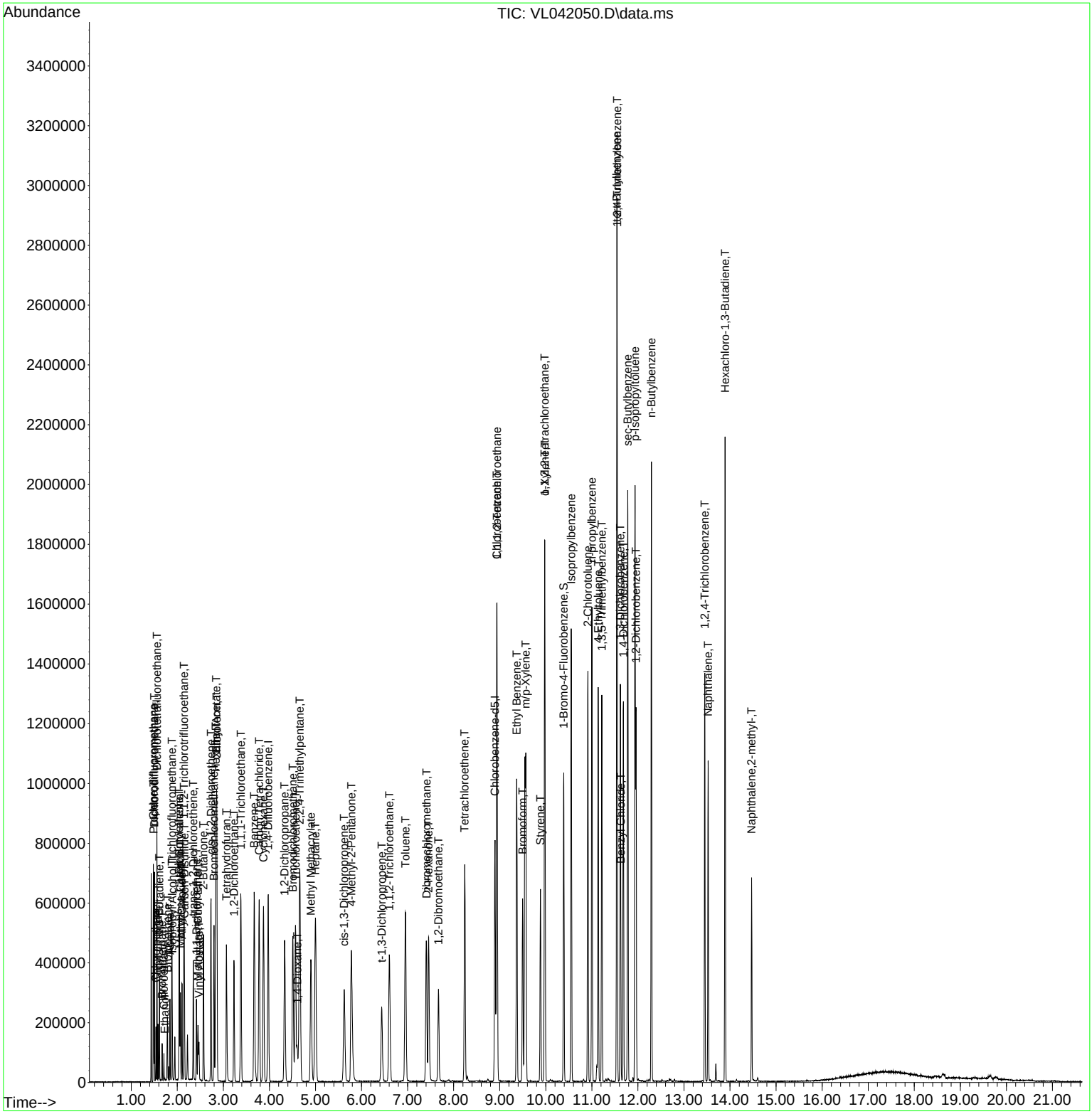
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042050.D
Acq On : 26 Feb 2025 08:38
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042050.D
Acq On : 26 Feb 2025 08:38
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 27 00:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	98	0.00
2	T	Dichlorodifluoromethane	1.040	1.010	2.9	105	0.00
3		Chlorodifluoromethane	1.453	1.379	5.1	103	0.00
4		Chloromethane	0.385	0.345	10.4	98	0.00
5	T	Vinyl Chloride	0.364	0.342	6.0	99	0.00
6	T	Bromomethane	0.173	0.163	5.8	99	0.00
7		Chloroethane	0.148	0.140	5.4	101	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.822	3.9	103	0.00
9	T	Propene	0.592	0.555	6.2	104	0.00
10	T	Heptane	1.844	1.702	7.7	100	0.00
11	T	Trichlorofluoromethane	1.042	0.989	5.1	102	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.726	12.6	102	0.00
13		Ethanol	0.038	0.019#	50.0#	92	0.00
14	T	Bromoethene	0.293	0.282	3.8	105	0.00
15	T	Acetone	0.883	0.739	16.3	101	0.00
16	T	1,3-Butadiene	0.411	0.375	8.8	102	0.00
17		tert-Butyl alcohol	1.105	0.973	11.9	100	0.00
18	T	1,1-Dichloroethene	0.376	0.324	13.8	99	0.00
19	T	Isopropyl Alcohol	0.507	0.438	13.6	102	0.00
20	T	Methylene Chloride	0.334	0.272	18.6	102	0.00
21	T	Allyl Chloride	0.638	0.549	13.9	100	0.00
22	T	trans-1,2-Dichloroethene	0.438	0.391	10.7	107	0.00
23	T	Vinyl Acetate	0.621	0.539	13.2	101	0.00
24	T	1,1-Dichloroethane	0.815	0.751	7.9	110	0.00
25	T	Ethyl Acetate	3.535	3.312	6.3	102	0.00
26	T	Hexane	1.429	1.315	8.0	100	0.00
27	T	Carbon Disulfide	0.969	0.880	9.2	100	0.00
28	T	Methyl tert-Butyl Ether	0.711	0.563	20.8	105	0.00
29	T	Chloroform	1.923	1.740	9.5	99	0.00
30	T	Cyclohexane	1.160	1.063	8.4	97	0.00
31	T	cis-1,2-Dichloroethene	1.353	1.254	7.3	99	0.00
32	T	1,1,1-Trichloroethane	1.866	1.748	6.3	96	0.00
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	92	0.00
34	T	2-Butanone	0.779	0.771	1.0	102	0.00
35	T	Carbon Tetrachloride	0.690	0.703	-1.9	98	0.00
36	T	Benzene	1.047	1.019	2.7	96	0.00
37	T	1,2-Dichloroethane	0.580	0.580	0.0	102	0.00
38	T	Trichloroethene	0.427	0.385	9.8	93	0.00
39	T	1,2-Dichloropropane	0.397	0.392	1.3	100	0.00
40	T	1,4-Dioxane	0.181	0.177	2.2	99	0.00
41	T	Tetrahydrofuran	0.460	0.462	-0.4	101	0.00
42	T	Bromodichloromethane	0.782	0.792	-1.3	98	0.00
43		Methyl Methacrylate	0.409	0.404	1.2	95	0.00
44	T	2,2,4-Trimethylpentane	1.848	1.817	1.7	100	0.00
45	T	t-1,3-Dichloropropene	0.406	0.401	1.2	93	0.00
46	T	cis-1,3-Dichloropropene	0.526	0.530	-0.8	94	0.00
47	T	1,1,2-Trichloroethane	0.403	0.382	5.2	97	0.00
48	T	Dibromochloromethane	0.632	0.621	1.7	96	0.00

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042050.D
Acq On : 26 Feb 2025 08:38
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Feb 27 00:24:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.549	0.531	3.3	93	0.00
50	T	4-Methyl-2-Pentanone	1.008	1.093	-8.4	99	0.00
51	T	2-Hexanone	0.693	0.893	-28.9	98	0.00
52	T	Tetrachloroethene	0.358	0.339	5.3	95	0.00
53	T	Toluene	1.170	1.136	2.9	96	0.00
54	T	1,2-Dibromoethane	0.545	0.518	5.0	95	0.00
55	I	Chlorobenzene-d5	1.000	1.000	0.0	90	0.00
56		1,1,1,2-Tetrachloroethane	0.565	0.532	5.8	95	0.00
57	T	Chlorobenzene	1.037	0.972	6.3	96	0.00
58	T	Ethyl Benzene	1.842	1.780	3.4	94	0.00
59	T	m/p-Xylene	1.466	1.424	2.9	96	0.01
60	T	o-Xylene	1.473	1.416	3.9	97	0.00
61	T	Styrene	0.693	0.688	0.7	94	0.00
62		Isopropylbenzene	2.207	2.138	3.1	98	0.00
63	T	1,1,2,2-Tetrachloroethane	0.970	0.929	4.2	98	0.00
64		n-propylbenzene	0.579	0.551	4.8	94	0.00
65		tert-Butylbenzene	2.008	1.839	8.4	95	0.00
66	T	Benzyl Chloride	0.153	0.148	3.3	87	0.00
67		sec-Butylbenzene	2.872	2.650	7.7	96	0.00
68	S	1-Bromo-4-Fluorobenzene	0.769	0.787	-2.3	93	0.00
69		p-Isopropyltoluene	2.285	2.156	5.6	96	0.00
70		n-Butylbenzene	2.332	2.250	3.5	98	0.00
71		2-Chlorotoluene	1.701	1.623	4.6	96	0.00
72	T	4-Ethyltoluene	1.799	1.710	4.9	95	0.00
73	T	1,3,5-Trimethylbenzene	1.560	1.443	7.5	94	0.00
74	T	1,2,4-Trimethylbenzene	1.757	1.571	10.6	96	0.00
75	T	1,3-Dichlorobenzene	1.011	0.920	9.0	95	0.00
76	T	1,4-Dichlorobenzene	1.004	0.921	8.3	96	0.00
77	T	1,2-Dichlorobenzene	0.981	0.901	8.2	97	0.00
78	T	Hexachloro-1,3-Butadiene	0.764	0.682	10.7	96	0.00
79	T	Naphthalene	1.205	1.469	-21.9	96	0.00
80	T	Naphthalene,2-methyl-	0.330	0.568	-72.1#	91	0.00
81	T	1,2,4-Trichlorobenzene	0.671	0.674	-0.4	94	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042051.D
Acq On : 26 Feb 2025 09:20
Operator : SY/MD
Sample : VL0226ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0226ABL01

Quant Time: Feb 27 00:25:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

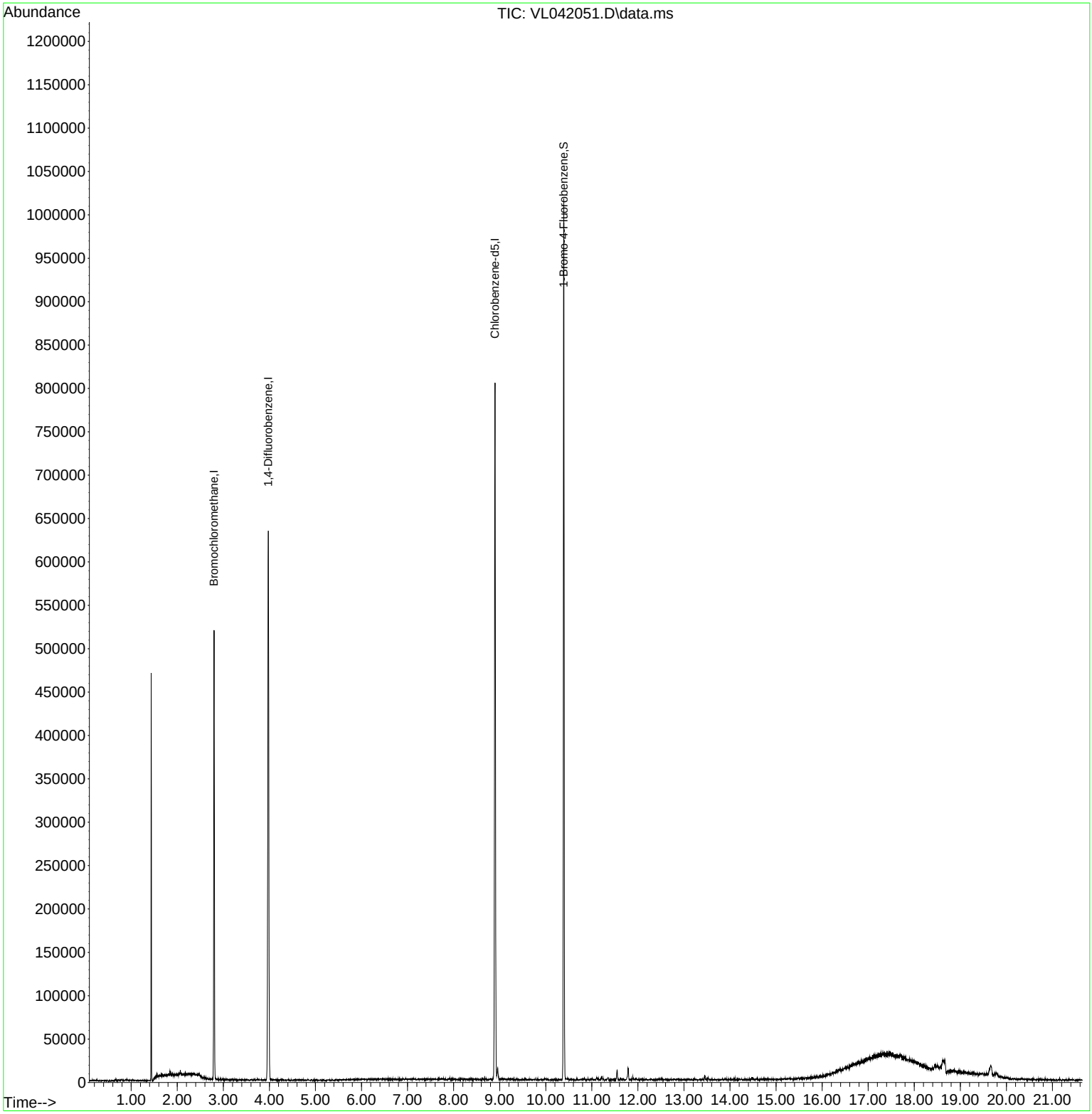
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	157395	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.975	114	386755	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.898	117	331916	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.390	95	257988	10.103	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.000%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042051.D
Acq On : 26 Feb 2025 09:20
Operator : SY/MD
Sample : VL0226ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0226ABL01

Quant Time: Feb 27 00:25:17 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042052.D
Acq On : 26 Feb 2025 10:04
Operator : SY/MD
Sample : QC021725 CAN 10271
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC021725 CAN 10271

Quant Time: Feb 27 00:25:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

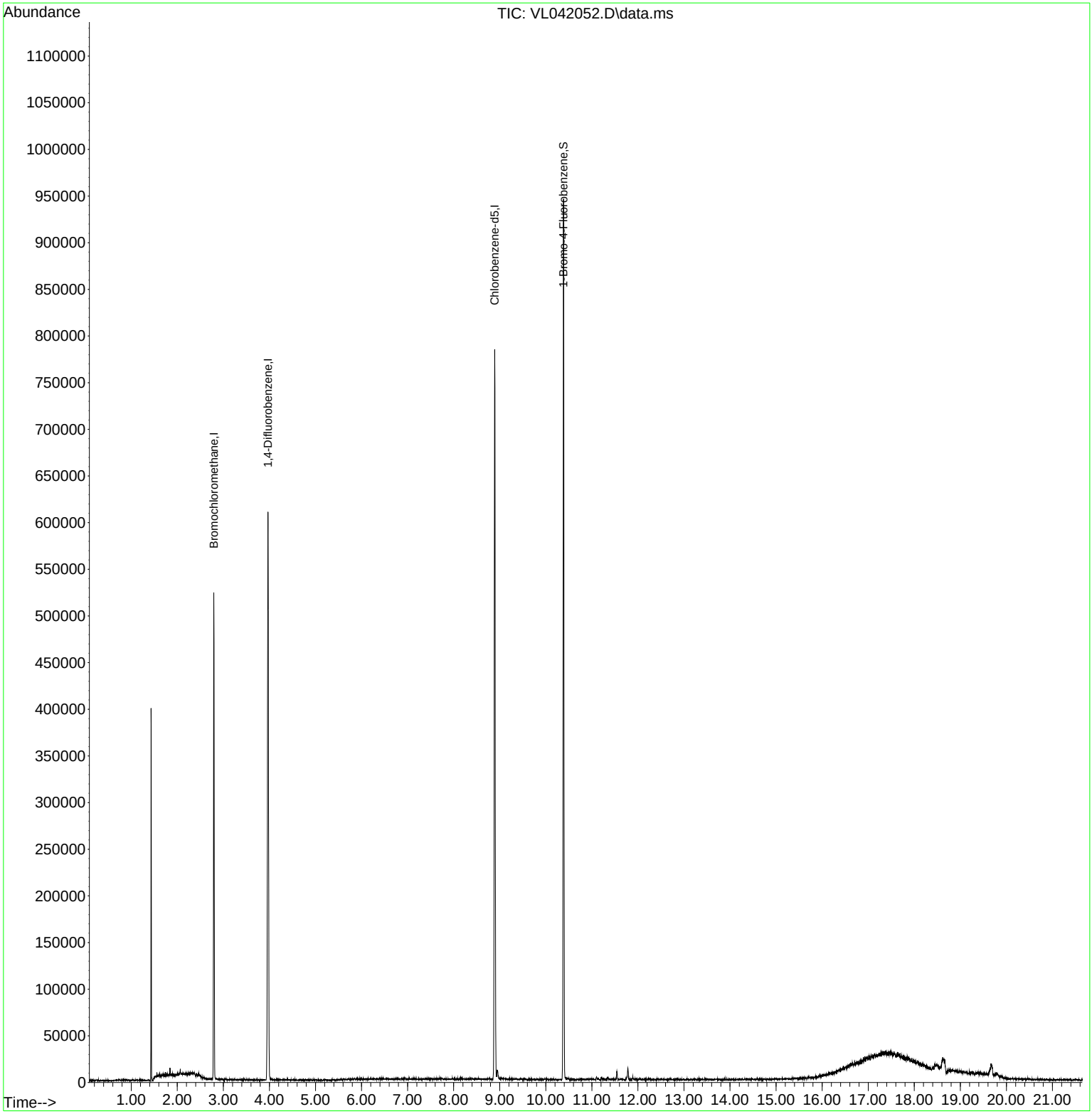
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	152414	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.969	114	364923	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.891	117	316584	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.384	95	246219	10.109	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042052.D
Acq On : 26 Feb 2025 10:04
Operator : SY/MD
Sample : QC021725 CAN 10271
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC021725 CAN 10271

Quant Time: Feb 27 00:25:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042054.D
Acq On : 26 Feb 2025 11:07
Operator : SY/MD
Sample : VL0226ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:26:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0226ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	153181	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	369057	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.895	117	318885	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	257152	10.482	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	154942	9.727	ppbv	100
3) Chlorodifluoromethane	1.480	51	208345	9.358	ppbv	100
4) Chloromethane	1.538	50	53585	9.097	ppbv	99
5) Vinyl Chloride	1.583	62	54944	9.861	ppbv	96
6) Bromomethane	1.674	94	25364	9.560	ppbv	96
7) Chloroethane	1.709	64	21007	9.279	ppbv	88
8) Dichlorotetrafluoroethane	1.557	85	125091	9.553	ppbv	98
9) Propene	1.486	41	83500	9.206	ppbv	99
10) Heptane	5.001	43	256046	9.067	ppbv	99
11) Trichlorofluoromethane	1.884	101	154527	9.682	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.146	101	124837	9.805	ppbv	96
13) Ethanol	1.726	45	3000	5.211	ppbv	92
14) Bromoethene	1.787	108	43051	9.576	ppbv	99
15) Acetone	1.842	43	116404	8.605	ppbv	100
16) 1,3-Butadiene	1.612	39	57319	9.105	ppbv	99
17) tert-Butyl alcohol	2.049	59	156939	9.273	ppbv	99
18) 1,1-Dichloroethene	2.039	96	53389	9.281	ppbv	86
19) Isopropyl Alcohol	1.891	45	68899	8.867	ppbv	100
20) Methylene Chloride	2.069	84	46174	9.024	ppbv	93
21) Allyl Chloride	2.101	41	92702	9.484	ppbv	99
22) trans-1,2-Dichloroethene	2.347	96	61477	9.167	ppbv	99
23) Vinyl Acetate	2.470	43	80476	8.461	ppbv	98
24) 1,1-Dichloroethane	2.415	63	119185	9.551	ppbv	99
25) Ethyl Acetate	2.845	43	509260	9.405	ppbv	100
26) Hexane	2.836	57	194754	8.897	ppbv	94
27) Carbon Disulfide	2.156	76	144095	9.711	ppbv #	91
28) Methyl tert-Butyl Ether	2.451	73	106845	9.804	ppbv	99
29) Chloroform	2.858	83	266332	9.040	ppbv	98
30) Cyclohexane	3.871	84	158311	8.910	ppbv	94
31) cis-1,2-Dichloroethene	2.729	61	193240	9.325	ppbv	94
32) 1,1,1-Trichloroethane	3.379	97	262261	9.177	ppbv	96
34) 2-Butanone	2.567	43	292802	10.184	ppbv	97
35) Carbon Tetrachloride	3.778	117	262129	10.300	ppbv	95
36) Benzene	3.671	78	375533	9.720	ppbv	95
37) 1,2-Dichloroethane	3.231	62	218716	10.211	ppbv	98
38) Trichloroethene	4.567	130	143714	9.110	ppbv	95
39) 1,2-Dichloropropane	4.331	63	146117	9.964	ppbv	99
40) 1,4-Dioxane	4.603	88	65661	9.809	ppbv #	96
41) Tetrahydrofuran	3.066	42	172429	10.150	ppbv	98
42) Bromodichloromethane	4.506	83	289453	10.029	ppbv	100
43) Methyl Methacrylate	4.904	69	151059	10.012	ppbv	95
44) 2,2,4-Trimethylpentane	4.658	57	684336	10.036	ppbv	99
45) t-1,3-Dichloropropene	6.441	75	147062	9.811	ppbv	94

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042054.D
Acq On : 26 Feb 2025 11:07
Operator : SY/MD
Sample : VL0226ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:26:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0226ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.626	75	191420	9.868	ppbv		98
47) 1,1,2-Trichloroethane	6.603	97	139001	9.337	ppbv		97
48) Dibromochloromethane	7.406	129	228694	9.808	ppbv		100
49) Bromoform	9.497	173	194002	9.581	ppbv		99
50) 4-Methyl-2-Pentanone	5.775	43	407870	10.969	ppbv		98
51) 2-Hexanone	7.454	43	327784	12.808	ppbv	#	99
52) Tetrachloroethene	8.241	164	123860	9.365	ppbv		95
53) Toluene	6.953	91	418086	9.683	ppbv		98
54) 1,2-Dibromoethane	7.671	107	190454	9.462	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.940	131	171980	9.542	ppbv		100
57) Chlorobenzene	8.937	112	313487	9.482	ppbv		98
58) Ethyl Benzene	9.370	91	575798	9.805	ppbv		99
59) m/p-Xylene	9.565	91	909392m	19.459	ppbv		
60) o-Xylene	9.976	91	450481	9.588	ppbv		100
61) Styrene	9.882	104	218205	9.879	ppbv		100
62) Isopropylbenzene	10.552	105	678100	9.637	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.976	83	295251	9.543	ppbv		99
64) n-propylbenzene	10.999	120	178544	9.674	ppbv		95
65) tert-Butylbenzene	11.542	119	599970	9.369	ppbv		98
66) Benzyl Chloride	11.630	91	44022	9.009	ppbv		97
67) sec-Butylbenzene	11.779	105	863022	9.423	ppbv		99
69) p-Isopropyltoluene	11.937	119	715231	9.816	ppbv		99
70) n-Butylbenzene	12.293	91	744799	10.014	ppbv		99
71) 2-Chlorotoluene	10.914	91	520897	9.603	ppbv		99
72) 4-Ethyltoluene	11.138	105	558376	9.734	ppbv		99
73) 1,3,5-Trimethylbenzene	11.215	105	475566	9.557	ppbv		98
74) 1,2,4-Trimethylbenzene	11.549	105	520419	9.288	ppbv		99
75) 1,3-Dichlorobenzene	11.620	146	302808	9.390	ppbv		98
76) 1,4-Dichlorobenzene	11.685	146	298128	9.311	ppbv		99
77) 1,2-Dichlorobenzene	11.960	146	293043	9.364	ppbv		99
78) Hexachloro-1,3-Butadiene	13.892	225	216968	8.911	ppbv		99
79) Naphthalene	13.523	128	476359	12.399	ppbv		99
80) Naphthalene,2-methyl-	14.468	142	187061	17.792	ppbv		98
81) 1,2,4-Trichlorobenzene	13.452	180	218258	10.194	ppbv		99

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

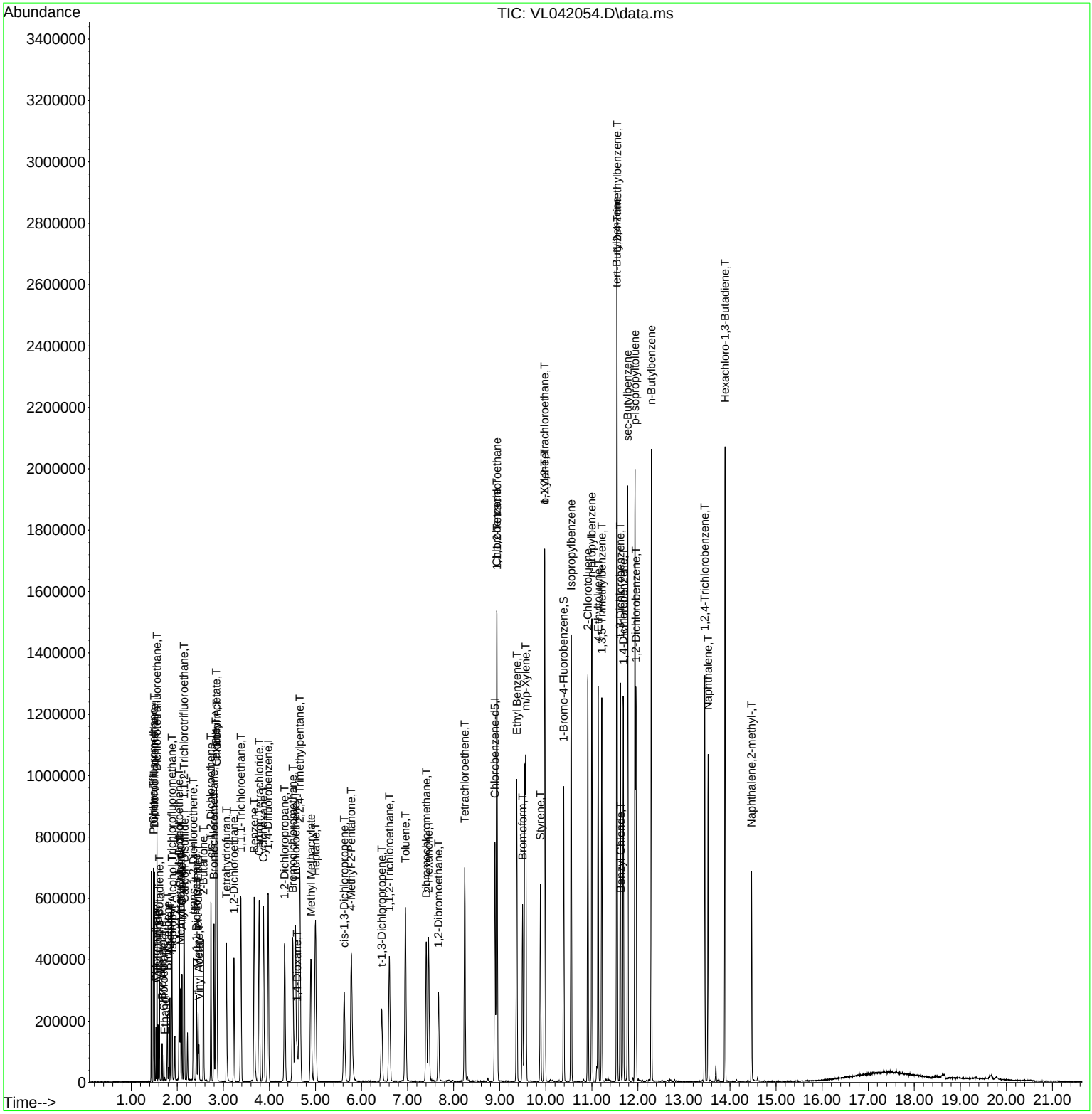
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL022625\
Data File : VL042054.D
Acq On : 26 Feb 2025 11:07
Operator : SY/MD
Sample : VL0226ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Feb 27 00:26:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0226ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 02/27/2025
Supervised By :Mahesh Dadoda 02/27/2025



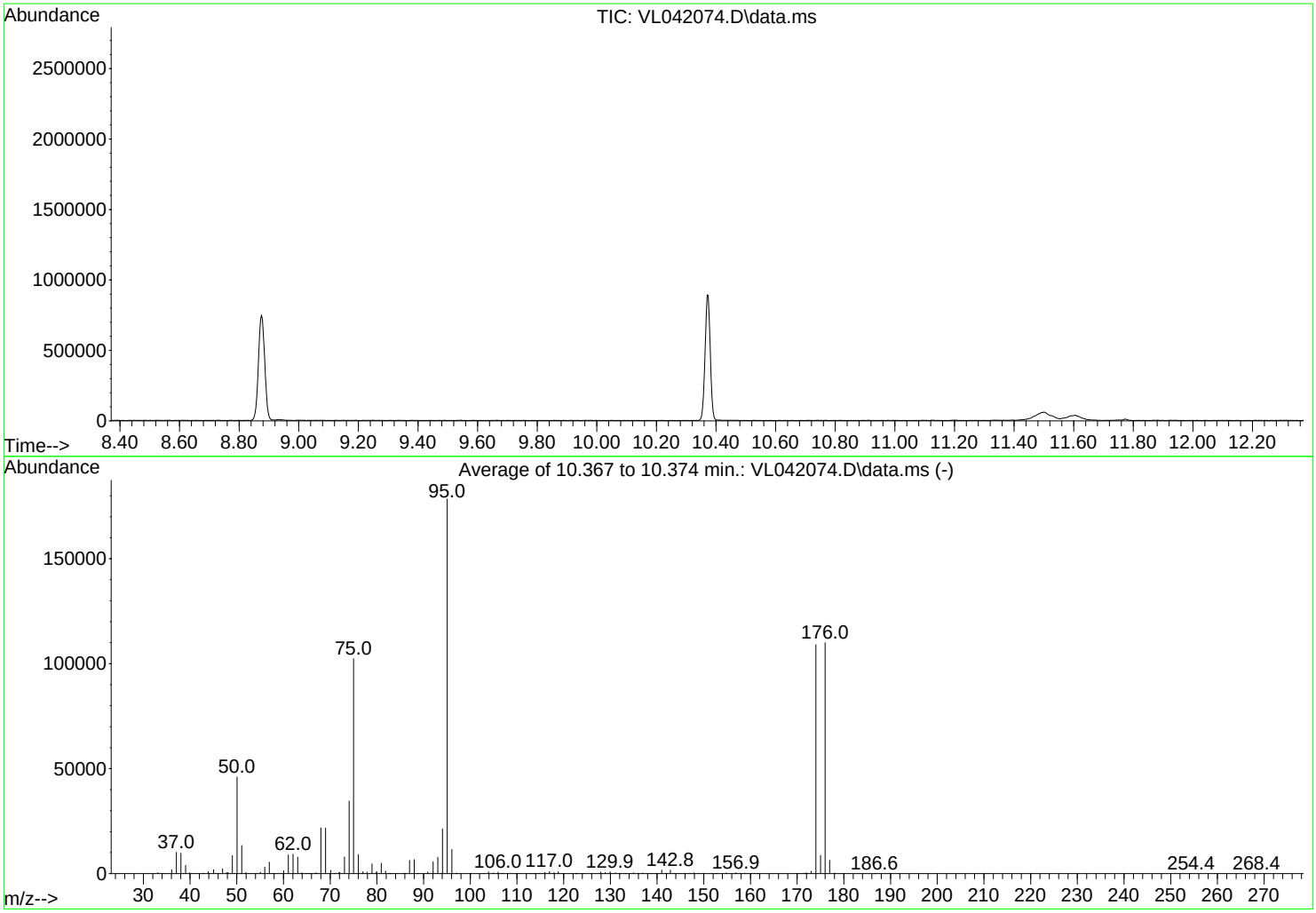
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042074.D
Acq On : 03 Mar 2025 11:45
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025



AutoFind: Scans 3176, 3177, 3178; Background Corrected with Scan 3162

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	25.8	45971	PASS
75	95	30	66	57.4	102347	PASS
95	95	100	100	100.0	178453	PASS
96	95	5	9	6.5	11542	PASS
173	174	0.00	2	1.0	1135	PASS
174	95	50	120	61.1	109091	PASS
175	174	4	9	7.9	8641	PASS
176	174	93	101	100.9	110029	PASS
177	176	5	9	5.8	6386	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	173325	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.952	114	409365	10.000	ppbv	-0.03
55) Chlorobenzene-d5	8.875	117	350236	10.000	ppbv	-0.03
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	273654	10.156	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	176895	9.815	ppbv	98
3) Chlorodifluoromethane	1.473	51	229308	9.103	ppbv	100
4) Chloromethane	1.531	50	61184	9.180	ppbv	99
5) Vinyl Chloride	1.576	62	60317	9.567	ppbv	100
6) Bromomethane	1.664	94	30156	10.045	ppbv	92
7) Chloroethane	1.703	64	24074	9.398	ppbv	98
8) Dichlorotetrafluoroethane	1.550	85	144041	9.722	ppbv	99
9) Propene	1.482	41	95116	9.268	ppbv	99
10) Heptane	4.972	43	285343	8.930	ppbv	96
11) Trichlorofluoromethane	1.874	101	187492	10.382	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.136	101	142259	9.875	ppbv	98
13) Ethanol	1.719	45	3376	5.182	ppbv	95
14) Bromoethene	1.780	108	48570	9.548	ppbv	100
15) Acetone	1.832	43	133956	8.752	ppbv	99
16) 1,3-Butadiene	1.605	39	64990	9.124	ppbv	99
17) tert-Butyl alcohol	2.036	59	174843	9.130	ppbv	97
18) 1,1-Dichloroethene	2.029	96	62817	9.651	ppbv	98
19) Isopropyl Alcohol	1.884	45	79667	9.061	ppbv	100
20) Methylene Chloride	2.059	84	53086	9.169	ppbv	97
21) Allyl Chloride	2.091	41	107750	9.743	ppbv	99
22) trans-1,2-Dichloroethene	2.337	96	72547	9.561	ppbv	93
23) Vinyl Acetate	2.460	43	89888	8.352	ppbv	99
24) 1,1-Dichloroethane	2.405	63	136644	9.678	ppbv	99
25) Ethyl Acetate	2.832	43	563012	9.189	ppbv	99
26) Hexane	2.822	57	216702	8.749	ppbv	94
27) Carbon Disulfide	2.146	76	166324	9.906	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	102443	8.307	ppbv	99
29) Chloroform	2.845	83	294142	8.824	ppbv	100
30) Cyclohexane	3.852	84	170364	8.474	ppbv	91
31) cis-1,2-Dichloroethene	2.716	61	209328	8.928	ppbv	95
32) 1,1,1-Trichloroethane	3.363	97	275584	8.522	ppbv	94
34) 2-Butanone	2.554	43	324639	10.179	ppbv	96
35) Carbon Tetrachloride	3.755	117	281106	9.958	ppbv	93
36) Benzene	3.651	78	410714	9.584	ppbv	98
37) 1,2-Dichloroethane	3.214	62	235420	9.908	ppbv	98
38) Trichloroethene	4.541	130	154616	8.836	ppbv	99
39) 1,2-Dichloropropane	4.308	63	159010	9.776	ppbv	95
40) 1,4-Dioxane	4.577	88	69401	9.347	ppbv #	99
41) Tetrahydrofuran	3.052	42	189509	10.057	ppbv	97
42) Bromodichloromethane	4.483	83	315387	9.852	ppbv	97
43) Methyl Methacrylate	4.871	69	160485	9.589	ppbv	92
44) 2,2,4-Trimethylpentane	4.635	57	731737	9.675	ppbv	98
45) t-1,3-Dichloropropene	6.409	75	150198	9.033	ppbv	89

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46)	cis-1,3-Dichloropropene	5.590	75	201389	9.360	ppbv		97
47)	1,1,2-Trichloroethane	6.574	97	155548	9.419	ppbv		94
48)	Dibromochloromethane	7.380	129	244551	9.456	ppbv		99
49)	Bromoform	9.477	173	215068	9.576	ppbv		99
50)	4-Methyl-2-Pentanone	5.742	43	451104	10.937	ppbv		97
51)	2-Hexanone	7.428	43	364047	12.824	ppbv	#	98
52)	Tetrachloroethene	8.218	164	135049	9.205	ppbv		96
53)	Toluene	6.926	91	448652	9.368	ppbv		99
54)	1,2-Dibromoethane	7.645	107	207672	9.302	ppbv		97
56)	1,1,1,2-Tetrachloroethane	8.917	131	186364	9.414	ppbv		99
57)	Chlorobenzene	8.917	112	344415	9.485	ppbv		99
58)	Ethyl Benzene	9.351	91	617808	9.578	ppbv		99
59)	m/p-Xylene	9.545	91	999203m	19.467	ppbv		
60)	o-Xylene	9.959	91	499183	9.674	ppbv		99
61)	Styrene	9.865	104	239891	9.888	ppbv		99
62)	Isopropylbenzene	10.535	105	742029	9.602	ppbv		100
63)	1,1,2,2-Tetrachloroethane	9.956	83	327826	9.647	ppbv		99
64)	n-propylbenzene	10.985	120	194972	9.618	ppbv		95
65)	tert-Butylbenzene	11.529	119	655219	9.316	ppbv		98
66)	Benzyl Chloride	11.613	91	44259	8.247	ppbv		99
67)	sec-Butylbenzene	11.765	105	956463	9.509	ppbv		100
69)	p-Isopropyltoluene	11.924	119	773774	9.669	ppbv		99
70)	n-Butylbenzene	12.280	91	803607	9.837	ppbv		99
71)	2-Chlorotoluene	10.898	91	568423	9.541	ppbv		99
72)	4-Ethyltoluene	11.121	105	607815	9.647	ppbv		99
73)	1,3,5-Trimethylbenzene	11.199	105	516320	9.447	ppbv		99
74)	1,2,4-Trimethylbenzene	11.532	105	569704	9.257	ppbv	#	91
75)	1,3-Dichlorobenzene	11.603	146	332997	9.402	ppbv		98
76)	1,4-Dichlorobenzene	11.668	146	334533	9.513	ppbv		99
77)	1,2-Dichlorobenzene	11.943	146	328836	9.567	ppbv		99
78)	Hexachloro-1,3-Butadiene	13.879	225	235840	8.819	ppbv		98
79)	Naphthalene	13.510	128	519908	12.321	ppbv		99
80)	Naphthalene,2-methyl-	14.455	142	193268	16.737	ppbv		98
81)	1,2,4-Trichlorobenzene	13.439	180	237980	10.120	ppbv		98

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

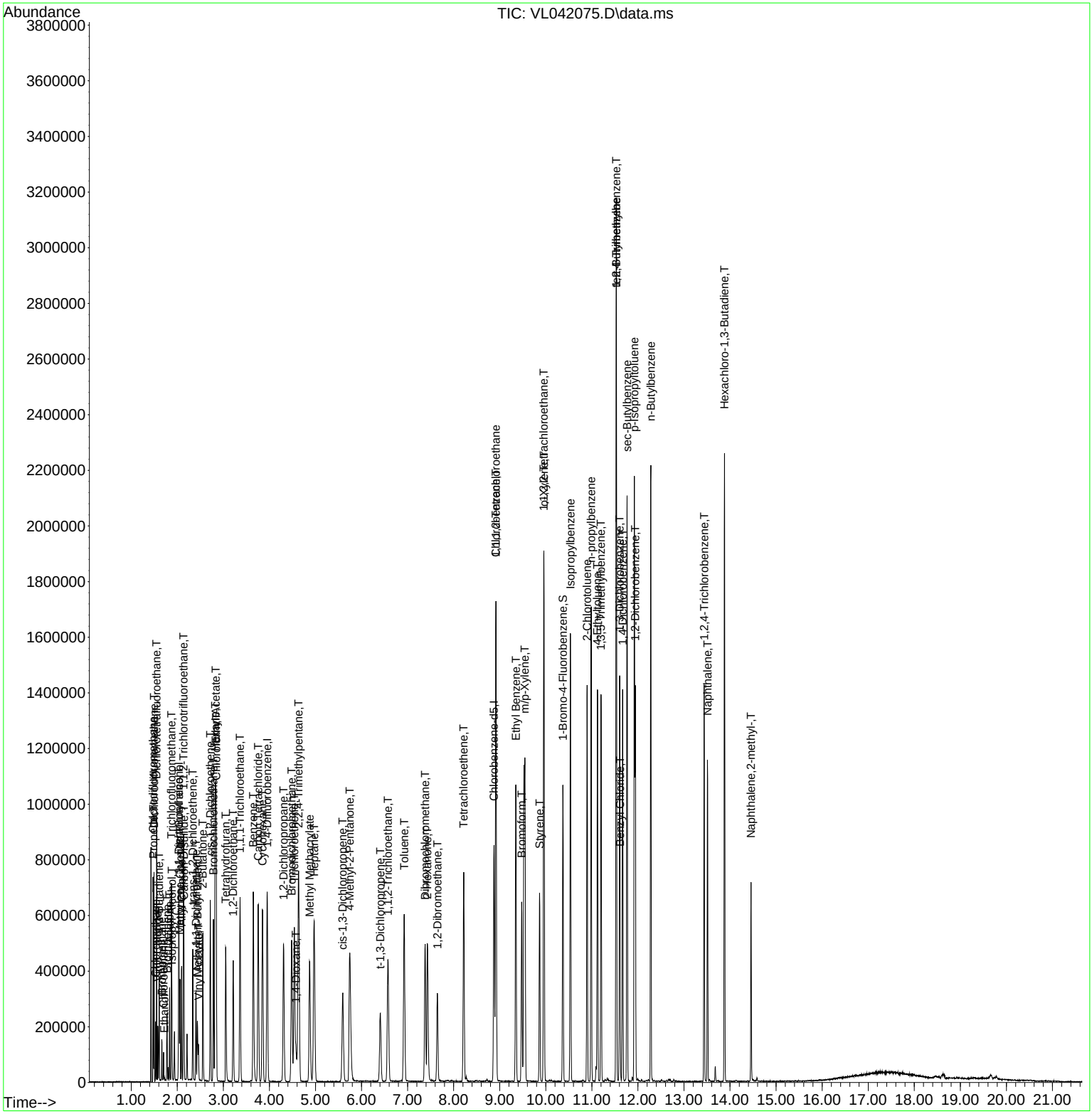
Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	108	-0.02
2	T	Dichlorodifluoromethane	1.040	1.021	1.8	116	0.00
3		Chlorodifluoromethane	1.453	1.323	8.9	109	0.00
4		Chloromethane	0.385	0.353	8.3	111	0.00
5	T	Vinyl Chloride	0.364	0.348	4.4	111	0.00
6	T	Bromomethane	0.173	0.174	-0.6	117	0.00
7		Chloroethane	0.148	0.139	6.1	111	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.831	2.8	115	0.00
9	T	Propene	0.592	0.549	7.3	113	0.00
10	T	Heptane	1.844	1.646	10.7	107	-0.04
11	T	Trichlorofluoromethane	1.042	1.082	-3.8	123	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.821	1.2	127	0.00
13		Ethanol	0.038	0.019#	50.0#	106	0.00
14	T	Bromoethene	0.293	0.280	4.4	114	0.00
15	T	Acetone	0.883	0.773	12.5	116	0.00
16	T	1,3-Butadiene	0.411	0.375	8.8	113	0.00
17		tert-Butyl alcohol	1.105	1.009	8.7	114	-0.01
18	T	1,1-Dichloroethene	0.376	0.362	3.7	122	-0.01
19	T	Isopropyl Alcohol	0.507	0.460	9.3	118	0.00
20	T	Methylene Chloride	0.334	0.306	8.4	126	0.00
21	T	Allyl Chloride	0.638	0.622	2.5	124	-0.01
22	T	trans-1,2-Dichloroethene	0.438	0.419	4.3	126	-0.01
23	T	Vinyl Acetate	0.621	0.519	16.4	107	-0.01
24	T	1,1-Dichloroethane	0.815	0.788	3.3	127	-0.01
25	T	Ethyl Acetate	3.535	3.248	8.1	110	-0.02
26	T	Hexane	1.429	1.250	12.5	105	-0.02
27	T	Carbon Disulfide	0.969	0.960	0.9	121	-0.01
28	T	Methyl tert-Butyl Ether	0.711	0.591	16.9	122	-0.01
29	T	Chloroform	1.923	1.697	11.8	106	-0.02
30	T	Cyclohexane	1.160	0.983	15.3	98	-0.02
31	T	cis-1,2-Dichloroethene	1.353	1.208	10.7	105	-0.02
32	T	1,1,1-Trichloroethane	1.866	1.590	14.8	97	-0.02
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	97	-0.03
34	T	2-Butanone	0.779	0.793	-1.8	111	-0.02
35	T	Carbon Tetrachloride	0.690	0.687	0.4	102	-0.03
36	T	Benzene	1.047	1.003	4.2	100	-0.02
37	T	1,2-Dichloroethane	0.580	0.575	0.9	107	-0.02
38	T	Trichloroethene	0.427	0.378	11.5	97	-0.03
39	T	1,2-Dichloropropane	0.397	0.388	2.3	105	-0.03
40	T	1,4-Dioxane	0.181	0.170	6.1	100	-0.03
41	T	Tetrahydrofuran	0.460	0.463	-0.7	107	-0.02
42	T	Bromodichloromethane	0.782	0.770	1.5	101	-0.03
43		Methyl Methacrylate	0.409	0.392	4.2	97	-0.04
44	T	2,2,4-Trimethylpentane	1.848	1.787	3.3	104	-0.03
45	T	t-1,3-Dichloropropene	0.406	0.367	9.6	90	-0.04
46	T	cis-1,3-Dichloropropene	0.526	0.492	6.5	92	-0.04
47	T	1,1,2-Trichloroethane	0.403	0.380	5.7	102	-0.04
48	T	Dibromochloromethane	0.632	0.597	5.5	97	-0.03

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042075.D
Acq On : 03 Mar 2025 12:15
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 04 00:16:36 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.549	0.525	4.4	97	-0.03
50	T	4-Methyl-2-Pentanone	1.008	1.102	-9.3	105	-0.05
51	T	2-Hexanone	0.693	0.889	-28.3	103	-0.04
52	T	Tetrachloroethene	0.358	0.330	7.8	98	-0.03
53	T	Toluene	1.170	1.096	6.3	98	-0.03
54	T	1,2-Dibromoethane	0.545	0.507	7.0	98	-0.03
55	I	Chlorobenzene-d5	1.000	1.000	0.0	94	-0.03
56		1,1,1,2-Tetrachloroethane	0.565	0.532	5.8	99	-0.03
57	T	Chlorobenzene	1.037	0.983	5.2	101	-0.02
58	T	Ethyl Benzene	1.842	1.764	4.2	97	-0.02
59	T	m/p-Xylene	1.466	1.426	2.7	100	0.00
60	T	o-Xylene	1.473	1.425	3.3	101	-0.02
61	T	Styrene	0.693	0.685	1.2	97	-0.02
62		Isopropylbenzene	2.207	2.119	4.0	101	-0.02
63	T	1,1,2,2-Tetrachloroethane	0.970	0.936	3.5	103	-0.02
64		n-propylbenzene	0.579	0.557	3.8	99	-0.02
65		tert-Butylbenzene	2.008	1.871	6.8	101	-0.02
66	T	Benzyl Chloride	0.153	0.126	17.6	77	-0.02
67		sec-Butylbenzene	2.872	2.731	4.9	103	-0.02
68	S	1-Bromo-4-Fluorobenzene	0.769	0.781	-1.6	96	-0.02
69		p-Isopropyltoluene	2.285	2.209	3.3	102	-0.02
70		n-Butylbenzene	2.332	2.294	1.6	104	-0.02
71		2-Chlorotoluene	1.701	1.623	4.6	100	-0.02
72	T	4-Ethyltoluene	1.799	1.735	3.6	100	-0.02
73	T	1,3,5-Trimethylbenzene	1.560	1.474	5.5	100	-0.02
74	T	1,2,4-Trimethylbenzene	1.757	1.627	7.4	104	-0.02
75	T	1,3-Dichlorobenzene	1.011	0.951	5.9	102	-0.02
76	T	1,4-Dichlorobenzene	1.004	0.955	4.9	104	-0.02
77	T	1,2-Dichlorobenzene	0.981	0.939	4.3	105	-0.02
78	T	Hexachloro-1,3-Butadiene	0.764	0.673	11.9	99	-0.02
79	T	Naphthalene	1.205	1.484	-23.2	101	-0.02
80	T	Naphthalene,2-methyl-	0.330	0.552	-67.3#	92	-0.02
81	T	1,2,4-Trichlorobenzene	0.671	0.679	-1.2	99	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042076.D
Acq On : 03 Mar 2025 14:49
Operator : SY/MD
Sample : VL0303ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABL01

Quant Time: Mar 04 00:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

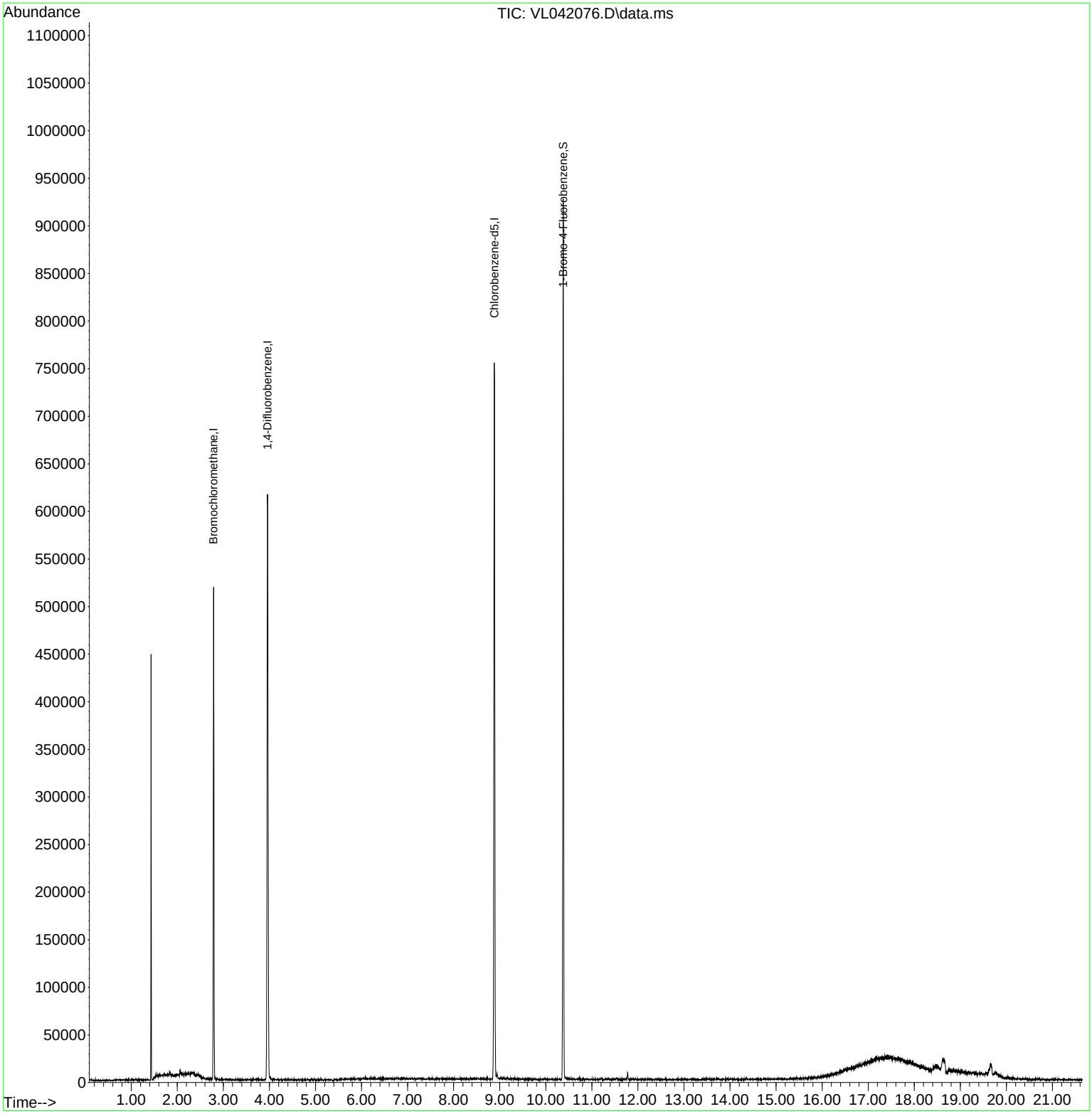
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	156551	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.959	114	349743	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	302717	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	224142	9.624	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.200%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042076.D
Acq On : 03 Mar 2025 14:49
Operator : SY/MD
Sample : VL0303ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABL01

Quant Time: Mar 04 00:17:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	157956	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.959	114	356972	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	309763	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	242622	10.181	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	174930	10.650	ppbv	99
3) Chlorodifluoromethane	1.476	51	222297	9.683	ppbv	100
4) Chloromethane	1.531	50	62156	10.233	ppbv	97
5) Vinyl Chloride	1.580	62	59385	10.336	ppbv	100
6) Bromomethane	1.667	94	28458	10.402	ppbv	97
7) Chloroethane	1.703	64	24205	10.368	ppbv	93
8) Dichlorotetrafluoroethane	1.554	85	142918	10.584	ppbv	98
9) Propene	1.483	41	90270	9.652	ppbv	98
10) Heptane	4.978	43	279114	9.585	ppbv	97
11) Trichlorofluoromethane	1.878	101	191850	11.657	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	147601	11.243	ppbv	95
13) Ethanol	1.722	45	3648	6.145	ppbv	97
14) Bromoethene	1.780	108	48227	10.403	ppbv	100
15) Acetone	1.835	43	137515	9.858	ppbv	100
16) 1,3-Butadiene	1.609	39	64593	9.950	ppbv	97
17) tert-Butyl alcohol	2.039	59	167124	9.576	ppbv	100
18) 1,1-Dichloroethene	2.033	96	61659	10.394	ppbv	91
19) Isopropyl Alcohol	1.887	45	78936	9.851	ppbv	98
20) Methylene Chloride	2.062	84	52065	9.868	ppbv	96
21) Allyl Chloride	2.098	41	105683	10.486	ppbv	99
22) trans-1,2-Dichloroethene	2.340	96	70753	10.232	ppbv	93
23) Vinyl Acetate	2.463	43	74937	7.640	ppbv	98
24) 1,1-Dichloroethane	2.408	63	137183	10.661	ppbv	100
25) Ethyl Acetate	2.836	43	548497	9.824	ppbv	99
26) Hexane	2.826	57	207965	9.213	ppbv	92
27) Carbon Disulfide	2.149	76	168252	10.996	ppbv	99
28) Methyl tert-Butyl Ether	2.441	73	94112	8.374	ppbv	100
29) Chloroform	2.849	83	286765	9.439	ppbv	97
30) Cyclohexane	3.858	84	163145	8.905	ppbv	91
31) cis-1,2-Dichloroethene	2.722	61	199200	9.322	ppbv	97
32) 1,1,1-Trichloroethane	3.370	97	269140	9.133	ppbv	95
34) 2-Butanone	2.557	43	313084	11.258	ppbv	95
35) Carbon Tetrachloride	3.765	117	268731	10.917	ppbv	96
36) Benzene	3.658	78	390842	10.459	ppbv	96
37) 1,2-Dichloroethane	3.218	62	227067	10.959	ppbv	98
38) Trichloroethene	4.551	130	148971	9.762	ppbv	94
39) 1,2-Dichloropropane	4.315	63	151311	10.668	ppbv	96
40) 1,4-Dioxane	4.587	88	67241	10.385	ppbv #	91
41) Tetrahydrofuran	3.056	42	183578	11.172	ppbv	93
42) Bromodichloromethane	4.490	83	302583	10.839	ppbv	100
43) Methyl Methacrylate	4.881	69	150871	10.338	ppbv	91
44) 2,2,4-Trimethylpentane	4.638	57	718377	10.892	ppbv	98
45) t-1,3-Dichloropropene	6.415	75	139814	9.643	ppbv	100

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	189075	10.077	ppbv	95
47) 1,1,2-Trichloroethane	6.587	97	146747	10.191	ppbv	97
48) Dibromochloromethane	7.390	129	229765	10.188	ppbv	99
49) Bromoform	9.487	173	205188	10.477	ppbv	98
50) 4-Methyl-2-Pentanone	5.752	43	434273	12.074	ppbv	95
51) 2-Hexanone	7.438	43	347904	14.054	ppbv #	96
52) Tetrachloroethene	8.225	164	128803	10.068	ppbv	97
53) Toluene	6.933	91	428586	10.262	ppbv	97
54) 1,2-Dibromoethane	7.652	107	199250	10.235	ppbv	100
56) 1,1,1,2-Tetrachloroethane	8.927	131	181131	10.346	ppbv	99
57) Chlorobenzene	8.924	112	328409	10.225	ppbv	98
58) Ethyl Benzene	9.357	91	596825	10.462	ppbv	100
59) m/p-Xylene	9.552	91	977538m	21.533	ppbv	
60) o-Xylene	9.966	91	488769	10.710	ppbv	100
61) Styrene	9.872	104	226533	10.558	ppbv	99
62) Isopropylbenzene	10.542	105	733758	10.735	ppbv	99
63) 1,1,2,2-Tetrachloroethane	9.963	83	327069	10.882	ppbv	99
64) n-propylbenzene	10.992	120	192573	10.741	ppbv	97
65) tert-Butylbenzene	11.532	119	643195	10.340	ppbv	98
66) Benzyl Chloride	11.617	91	39375	8.295	ppbv	98
67) sec-Butylbenzene	11.769	105	940060	10.567	ppbv	100
69) p-Isopropyltoluene	11.927	119	759761	10.734	ppbv	100
70) n-Butylbenzene	12.283	91	795433	11.010	ppbv	99
71) 2-Chlorotoluene	10.901	91	553780	10.510	ppbv	99
72) 4-Ethyltoluene	11.128	105	592316	10.629	ppbv	99
73) 1,3,5-Trimethylbenzene	11.206	105	508702	10.524	ppbv	98
74) 1,2,4-Trimethylbenzene	11.539	105	557804	10.248	ppbv	97
75) 1,3-Dichlorobenzene	11.610	146	328061	10.473	ppbv	98
76) 1,4-Dichlorobenzene	11.675	146	328671	10.568	ppbv	100
77) 1,2-Dichlorobenzene	11.950	146	324906	10.688	ppbv	100
78) Hexachloro-1,3-Butadiene	13.886	225	232449	9.827	ppbv	99
79) Naphthalene	13.517	128	503470	13.490	ppbv	98
80) Naphthalene,2-methyl-	14.462	142	184155	18.031	ppbv	97
81) 1,2,4-Trichlorobenzene	13.442	180	227832	10.954	ppbv	98

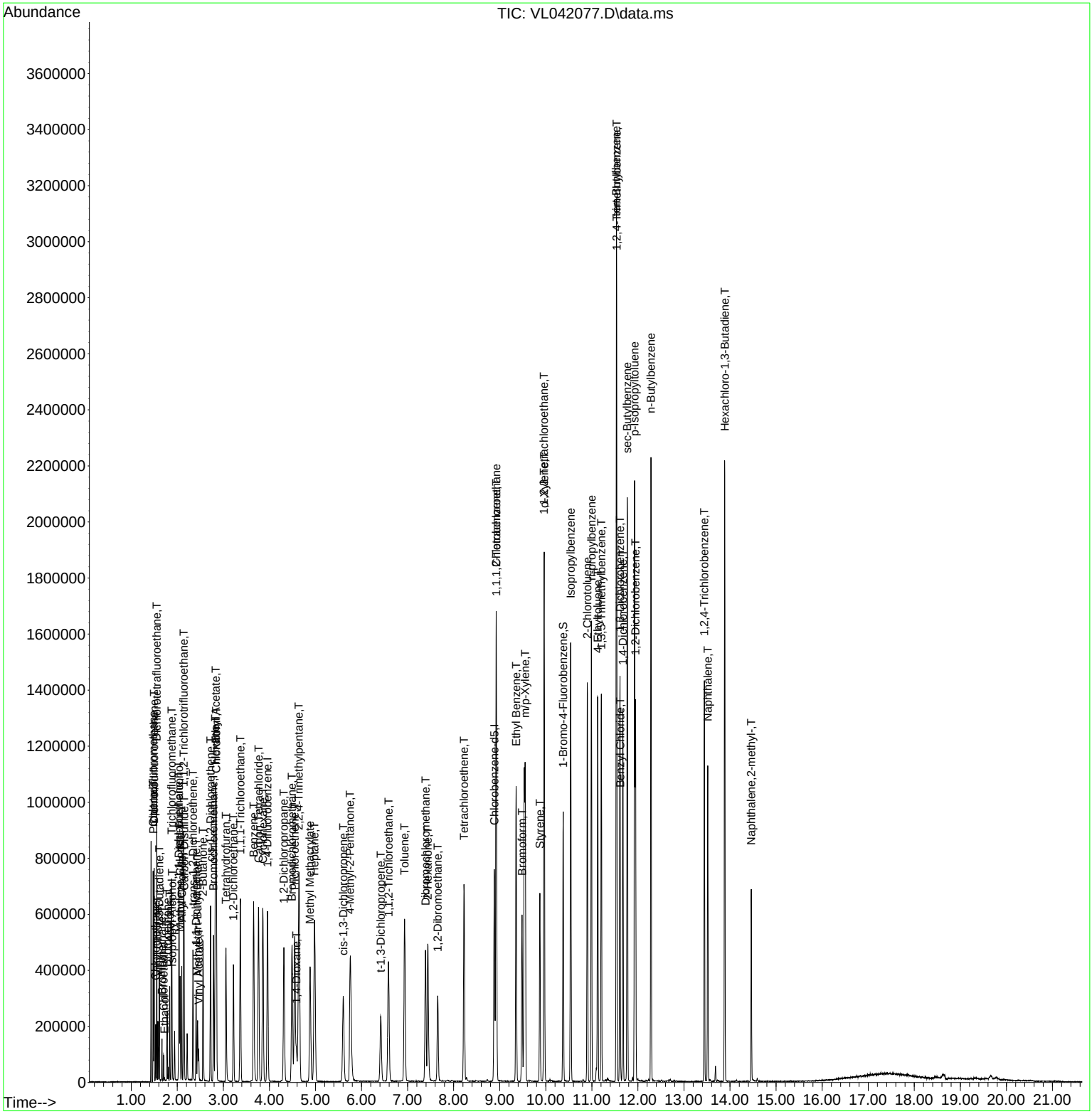
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042077.D
Acq On : 03 Mar 2025 15:19
Operator : SY/MD
Sample : VL0303ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 04 00:17:54 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0303ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/04/2025
Supervised By :Mahesh Dadoda 03/05/2025



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042078.D
Acq On : 03 Mar 2025 15:52
Operator : SY/MD
Sample : QC022725 CAN 10331
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC022725 CAN 10331

Quant Time: Mar 04 00:18:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

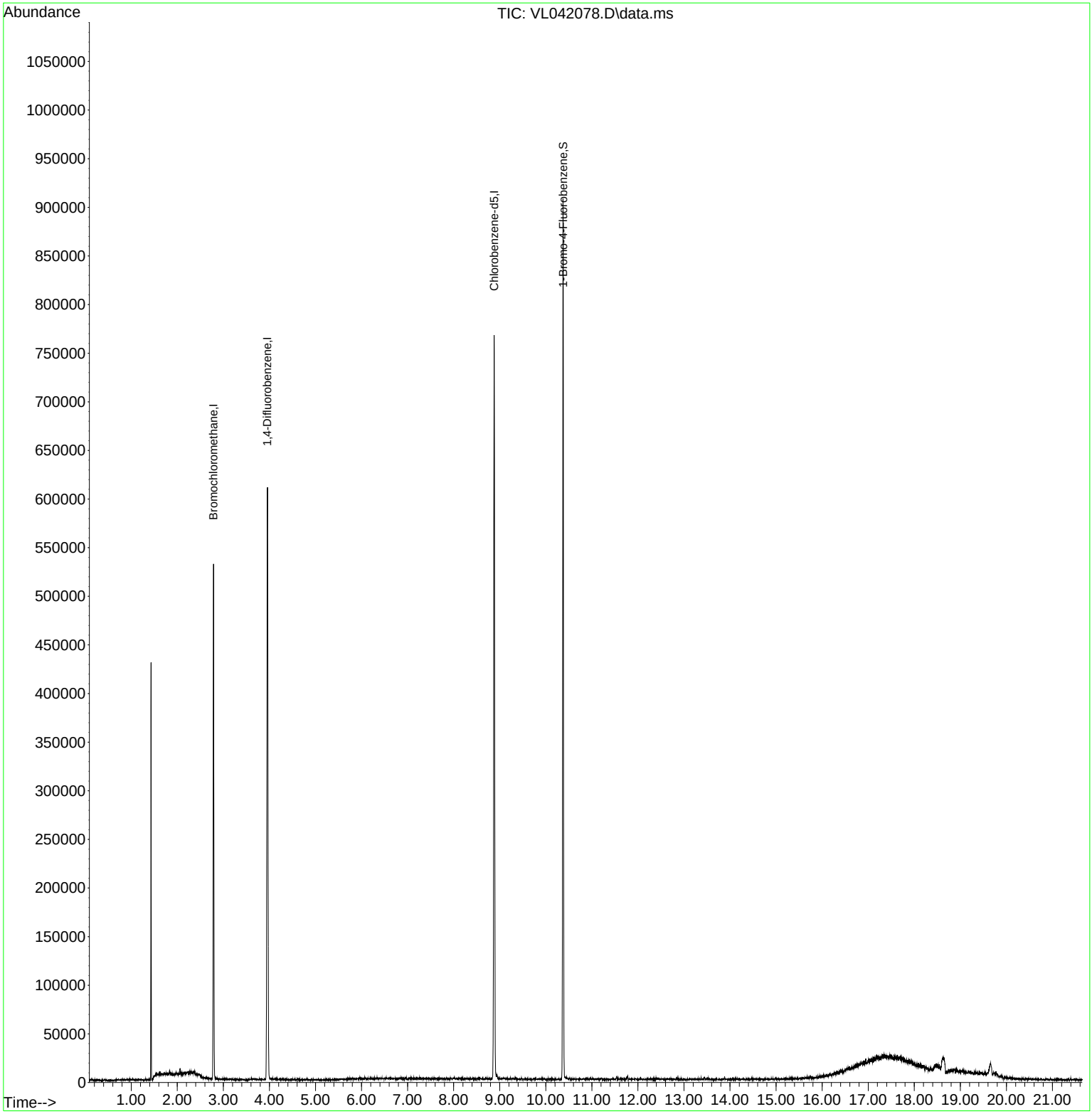
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	158432	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.955	114	355709	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.878	117	304769	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	223606	9.537	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.400%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL030325\
Data File : VL042078.D
Acq On : 03 Mar 2025 15:52
Operator : SY/MD
Sample : QC022725 CAN 10331
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC022725 CAN 10331

Quant Time: Mar 04 00:18:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



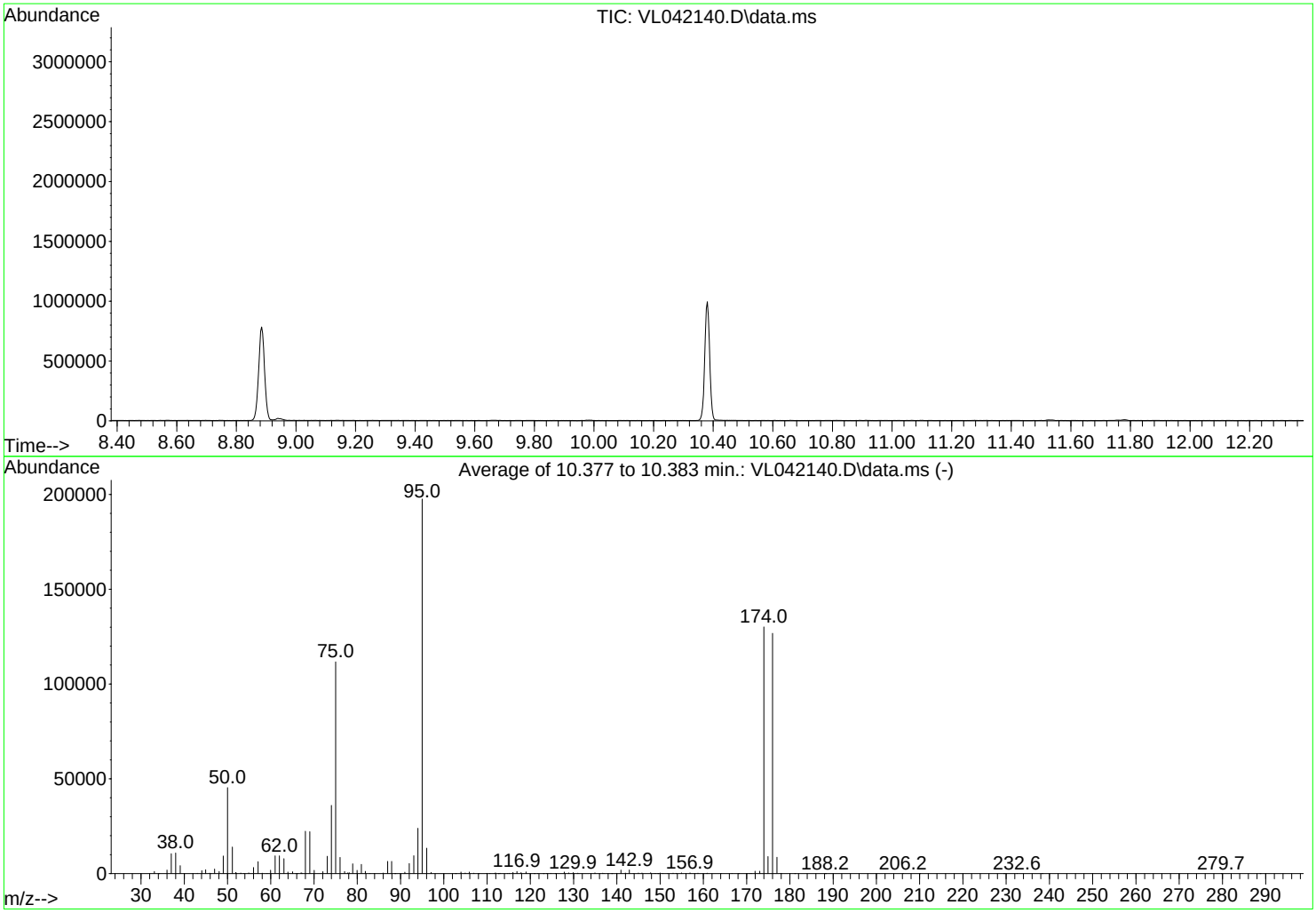
BFB

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042140.D
Acq On : 14 Mar 2025 07:56
Operator : SY/MD
Sample : BFB
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
BFB

Integration File: RTEINT.P

Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
Last Update : Wed Feb 26 01:08:36 2025



AutoFind: Scans 3179, 3180, 3181; Background Corrected with Scan 3165

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	8	40	22.9	45333	PASS
75	95	30	66	56.5	111685	PASS
95	95	100	100	100.0	197589	PASS
96	95	5	9	6.8	13388	PASS
173	174	0.00	2	1.0	1315	PASS
174	95	50	120	65.9	130120	PASS
175	174	4	9	6.9	8967	PASS
176	174	93	101	97.4	126715	PASS
177	176	5	9	6.8	8618	PASS

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	175939	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.959	114	420429	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.882	117	358414	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	293332	10.638	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 106.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	191974	10.493	ppbv	100
3) Chlorodifluoromethane	1.476	51	228149	8.922	ppbv	100
4) Chloromethane	1.532	50	72618	10.733	ppbv	97
5) Vinyl Chloride	1.580	62	70955	11.087	ppbv	96
6) Bromomethane	1.667	94	34387	11.284	ppbv	97
7) Chloroethane	1.703	64	27399	10.537	ppbv	94
8) Dichlorotetrafluoroethane	1.554	85	161623	10.746	ppbv	98
9) Propene	1.483	41	95933	9.209	ppbv	98
10) Heptane	4.979	43	269945	8.323	ppbv	98
11) Trichlorofluoromethane	1.875	101	202929	11.070	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.137	101	150319	10.280	ppbv	96
13) Ethanol	1.719	45	5940	8.982	ppbv	91
14) Bromoethene	1.781	108	55223	10.694	ppbv	99
15) Acetone	1.836	43	157921	10.164	ppbv	98
16) 1,3-Butadiene	1.609	39	76015	10.513	ppbv	99
17) tert-Butyl alcohol	2.040	59	177586	9.136	ppbv	100
18) 1,1-Dichloroethene	2.033	96	64716	9.795	ppbv	92
19) Isopropyl Alcohol	1.884	45	90039	10.088	ppbv	96
20) Methylene Chloride	2.059	84	64336	10.947	ppbv	97
21) Allyl Chloride	2.095	41	113949	10.150	ppbv	97
22) trans-1,2-Dichloroethene	2.341	96	80485	10.449	ppbv	90
23) Vinyl Acetate	2.460	43	94433	8.644	ppbv	99
24) 1,1-Dichloroethane	2.409	63	154561	10.784	ppbv	99
25) Ethyl Acetate	2.836	43	552236	8.880	ppbv	99
26) Hexane	2.823	57	224625	8.934	ppbv	98
27) Carbon Disulfide	2.150	76	186073	10.918	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	106326	8.494	ppbv	99
29) Chloroform	2.849	83	296552	8.764	ppbv	99
30) Cyclohexane	3.855	84	163459	8.010	ppbv	95
31) cis-1,2-Dichloroethene	2.719	61	193004	8.109	ppbv	98
32) 1,1,1-Trichloroethane	3.367	97	268630	8.184	ppbv	95
34) 2-Butanone	2.558	43	305355	9.323	ppbv	96
35) Carbon Tetrachloride	3.762	117	279849	9.653	ppbv	99
36) Benzene	3.655	78	399974	9.088	ppbv	95
37) 1,2-Dichloroethane	3.218	62	217321	8.906	ppbv	100
38) Trichloroethene	4.548	130	152158	8.466	ppbv	96
39) 1,2-Dichloropropane	4.315	63	150906	9.033	ppbv	96
40) 1,4-Dioxane	4.580	88	67340	8.830	ppbv #	99
41) Tetrahydrofuran	3.056	42	174452	9.014	ppbv	98
42) Bromodichloromethane	4.487	83	307764	9.361	ppbv	93
43) Methyl Methacrylate	4.881	69	145265	8.451	ppbv	96
44) 2,2,4-Trimethylpentane	4.635	57	717940	9.243	ppbv	98
45) t-1,3-Dichloropropene	6.412	75	135149	7.914	ppbv	95

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	183303	8.295	ppbv		98
47) 1,1,2-Trichloroethane	6.581	97	154904	9.134	ppbv		96
48) Dibromochloromethane	7.387	129	239456	9.015	ppbv		98
49) Bromoform	9.484	173	213827	9.270	ppbv		99
50) 4-Methyl-2-Pentanone	5.755	43	408504	9.644	ppbv		96
51) 2-Hexanone	7.438	43	316988	10.872	ppbv	#	98
52) Tetrachloroethene	8.225	164	129959	8.625	ppbv		98
53) Toluene	6.933	91	423735	8.614	ppbv		98
54) 1,2-Dibromoethane	7.652	107	201881	8.805	ppbv		90
56) 1,1,1,2-Tetrachloroethane	8.924	131	192287	9.492	ppbv		100
57) Chlorobenzene	8.921	112	344848	9.280	ppbv		99
58) Ethyl Benzene	9.354	91	572580	8.675	ppbv		100
59) m/p-Xylene	9.552	91	960961m	18.294	ppbv		
60) o-Xylene	9.963	91	485048	9.185	ppbv		99
61) Styrene	9.872	104	211885	8.535	ppbv		99
62) Isopropylbenzene	10.539	105	718498	9.085	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.963	83	341487	9.820	ppbv		100
64) n-propylbenzene	10.989	120	196285	9.462	ppbv		100
65) tert-Butylbenzene	11.533	119	655886	9.113	ppbv		98
66) Benzyl Chloride	11.617	91	45818	8.342	ppbv		97
67) sec-Butylbenzene	11.769	105	924266	8.979	ppbv		98
69) p-Isopropyltoluene	11.928	119	753153	9.197	ppbv		99
70) n-Butylbenzene	12.280	91	771737	9.232	ppbv		100
71) 2-Chlorotoluene	10.902	91	537863	8.822	ppbv		100
72) 4-Ethyltoluene	11.125	105	585082	9.074	ppbv		99
73) 1,3,5-Trimethylbenzene	11.203	105	494157	8.836	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	560827	8.905	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	336601	9.287	ppbv		98
76) 1,4-Dichlorobenzene	11.672	146	327927	9.113	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	330229	9.389	ppbv		99
78) Hexachloro-1,3-Butadiene	13.883	225	230108	8.408	ppbv		99
79) Naphthalene	13.514	128	481899	11.160	ppbv		100
80) Naphthalene,2-methyl-	14.459	142	151227	12.797	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	219258	9.111	ppbv		99

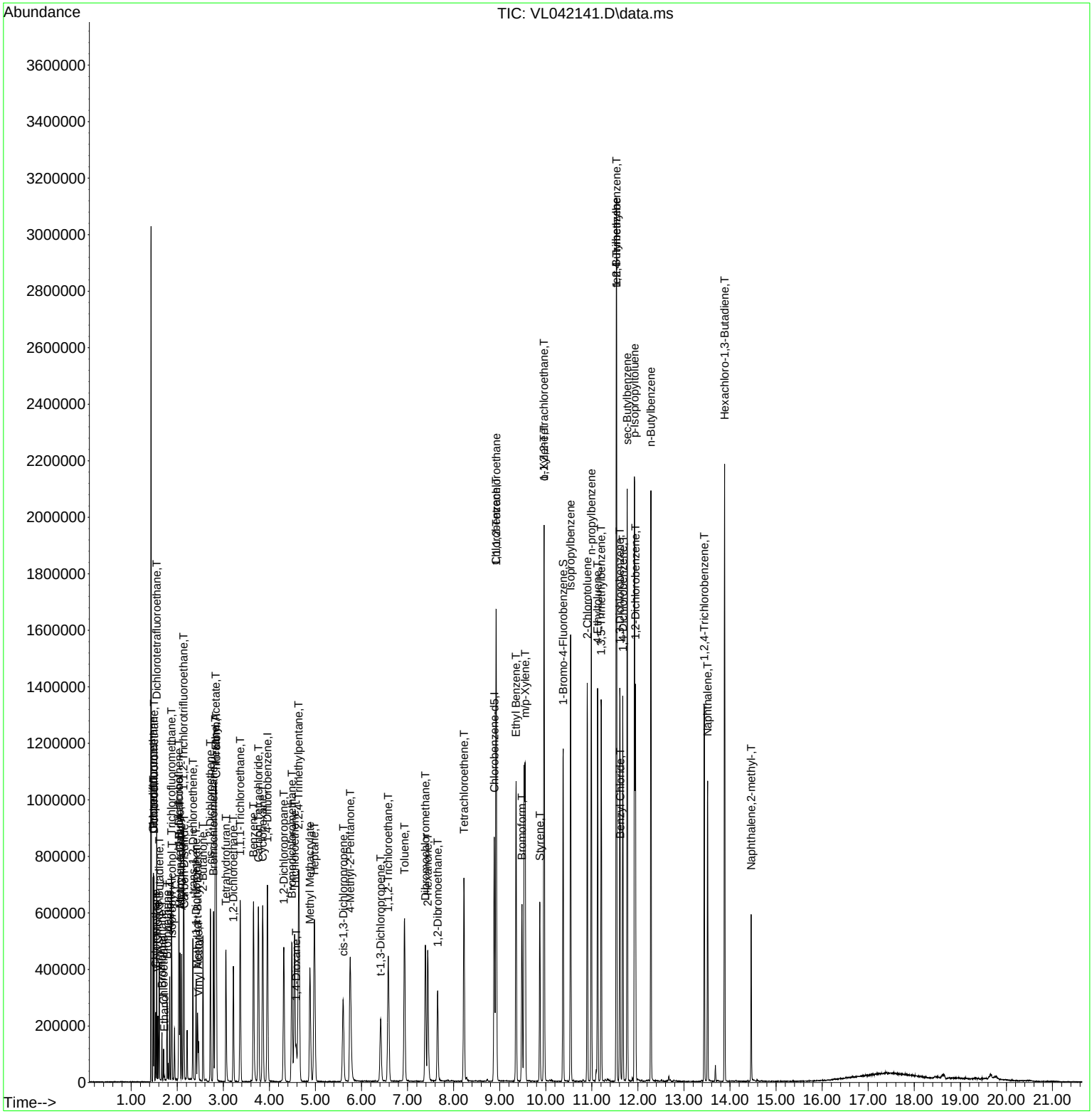
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025



Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Bromochloromethane	1.000	1.000	0.0	109	-0.02
2	T	Dichlorodifluoromethane	1.040	1.091	-4.9	126	0.00
3		Chlorodifluoromethane	1.453	1.297	10.7	108	0.00
4		Chloromethane	0.385	0.413	-7.3	131	0.00
5	T	Vinyl Chloride	0.364	0.403	-10.7	131	0.00
6	T	Bromomethane	0.173	0.195	-12.7	133	0.00
7		Chloroethane	0.148	0.156	-5.4	126	0.00
8	T	Dichlorotetrafluoroethane	0.855	0.919	-7.5	129	0.00
9	T	Propene	0.592	0.545	7.9	114	0.00
10	T	Heptane	1.844	1.534	16.8	101	-0.03
11	T	Trichlorofluoromethane	1.042	1.153	-10.7	133	0.00
12	T	1,1,2-Trichlorotrifluoroeth	0.831	0.854	-2.8	134	0.00
13		Ethanol	0.038	0.034#	10.5	187#	0.00
14	T	Bromoethene	0.293	0.314	-7.2	130	0.00
15	T	Acetone	0.883	0.898	-1.7	137	0.00
16	T	1,3-Butadiene	0.411	0.432	-5.1	132	0.00
17		tert-Butyl alcohol	1.105	1.009	8.7	116	0.00
18	T	1,1-Dichloroethene	0.376	0.368	2.1	126	0.00
19	T	Isopropyl Alcohol	0.507	0.512	-1.0	133	0.00
20	T	Methylene Chloride	0.334	0.366	-9.6	153#	0.00
21	T	Allyl Chloride	0.638	0.648	-1.6	131	0.00
22	T	trans-1,2-Dichloroethene	0.438	0.457	-4.3	140	0.00
23	T	Vinyl Acetate	0.621	0.537	13.5	113	-0.01
24	T	1,1-Dichloroethane	0.815	0.878	-7.7	143	0.00
25	T	Ethyl Acetate	3.535	3.139	11.2	108	-0.02
26	T	Hexane	1.429	1.277	10.6	109	-0.02
27	T	Carbon Disulfide	0.969	1.058	-9.2	135	0.00
28	T	Methyl tert-Butyl Ether	0.711	0.604	15.0	126	-0.01
29	T	Chloroform	1.923	1.686	12.3	107	-0.01
30	T	Cyclohexane	1.160	0.929	19.9	94	-0.02
31	T	cis-1,2-Dichloroethene	1.353	1.097	18.9	97	-0.01
32	T	1,1,1-Trichloroethane	1.866	1.527	18.2	94	-0.02
33	I	1,4-Difluorobenzene	1.000	1.000	0.0	99	-0.02
34	T	2-Butanone	0.779	0.726	6.8	104	-0.01
35	T	Carbon Tetrachloride	0.690	0.666	3.5	101	-0.02
36	T	Benzene	1.047	0.951	9.2	98	-0.02
37	T	1,2-Dichloroethane	0.580	0.517	10.9	99	-0.02
38	T	Trichloroethene	0.427	0.362	15.2	95	-0.02
39	T	1,2-Dichloropropane	0.397	0.359	9.6	100	-0.02
40	T	1,4-Dioxane	0.181	0.160	11.6	97	-0.03
41	T	Tetrahydrofuran	0.460	0.415	9.8	99	-0.02
42	T	Bromodichloromethane	0.782	0.732	6.4	99	-0.03
43		Methyl Methacrylate	0.409	0.346	15.4	88	-0.03
44	T	2,2,4-Trimethylpentane	1.848	1.708	7.6	102	-0.03
45	T	t-1,3-Dichloropropene	0.406	0.321	20.9	81	-0.03
46	T	cis-1,3-Dichloropropene	0.526	0.436	17.1	84	-0.03
47	T	1,1,2-Trichloroethane	0.403	0.368	8.7	102	-0.03
48	T	Dibromochloromethane	0.632	0.570	9.8	95	-0.03

Evaluate Continuing Calibration Report

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042141.D
Acq On : 14 Mar 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
LabSampleId :
VSTDCCC010

Quant Time: Mar 14 23:16:35 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 20% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
49	T	Bromoform	0.549	0.509	7.3	96	-0.02
50	T	4-Methyl-2-Pentanone	1.008	0.972	3.6	95	-0.03
51	T	2-Hexanone	0.693	0.754	-8.8	90	-0.03
52	T	Tetrachloroethene	0.358	0.309	13.7	94	-0.02
53	T	Toluene	1.170	1.008	13.8	92	-0.03
54	T	1,2-Dibromoethane	0.545	0.480	11.9	95	-0.03
55	I	Chlorobenzene-d5	1.000	1.000	0.0	96	-0.02
56		1,1,1,2-Tetrachloroethane	0.565	0.536	5.1	102	-0.02
57	T	Chlorobenzene	1.037	0.962	7.2	101	-0.02
58	T	Ethyl Benzene	1.842	1.598	13.2	90	-0.02
59	T	m/p-Xylene	1.466	1.341	8.5	97	0.00
60	T	o-Xylene	1.473	1.353	8.1	98	-0.02
61	T	Styrene	0.693	0.591	14.7	86	-0.02
62		Isopropylbenzene	2.207	2.005	9.2	98	-0.02
63	T	1,1,2,2-Tetrachloroethane	0.970	0.953	1.8	108	-0.02
64		n-propylbenzene	0.579	0.548	5.4	100	-0.02
65		tert-Butylbenzene	2.008	1.830	8.9	101	-0.01
66	T	Benzyl Chloride	0.153	0.128	16.3	80	-0.01
67		sec-Butylbenzene	2.872	2.579	10.2	100	-0.01
68	S	1-Bromo-4-Fluorobenzene	0.769	0.818	-6.4	103	-0.02
69		p-Isopropyltoluene	2.285	2.101	8.1	100	-0.01
70		n-Butylbenzene	2.332	2.153	7.7	100	-0.02
71		2-Chlorotoluene	1.701	1.501	11.8	95	-0.02
72	T	4-Ethyltoluene	1.799	1.632	9.3	96	-0.02
73	T	1,3,5-Trimethylbenzene	1.560	1.379	11.6	96	-0.02
74	T	1,2,4-Trimethylbenzene	1.757	1.565	10.9	102	-0.02
75	T	1,3-Dichlorobenzene	1.011	0.939	7.1	104	-0.02
76	T	1,4-Dichlorobenzene	1.004	0.915	8.9	102	-0.01
77	T	1,2-Dichlorobenzene	0.981	0.921	6.1	106	-0.02
78	T	Hexachloro-1,3-Butadiene	0.764	0.642	16.0	97	-0.01
79	T	Naphthalene	1.205	1.345	-11.6	94	-0.01
80	T	Naphthalene,2-methyl-	0.330	0.422	-27.9	72	-0.01
81	T	1,2,4-Trichlorobenzene	0.671	0.612	8.8	91	-0.02

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042142.D
Acq On : 14 Mar 2025 09:23
Operator : SY/MD
Sample : VL0314ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABL01

Quant Time: Mar 14 23:17:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

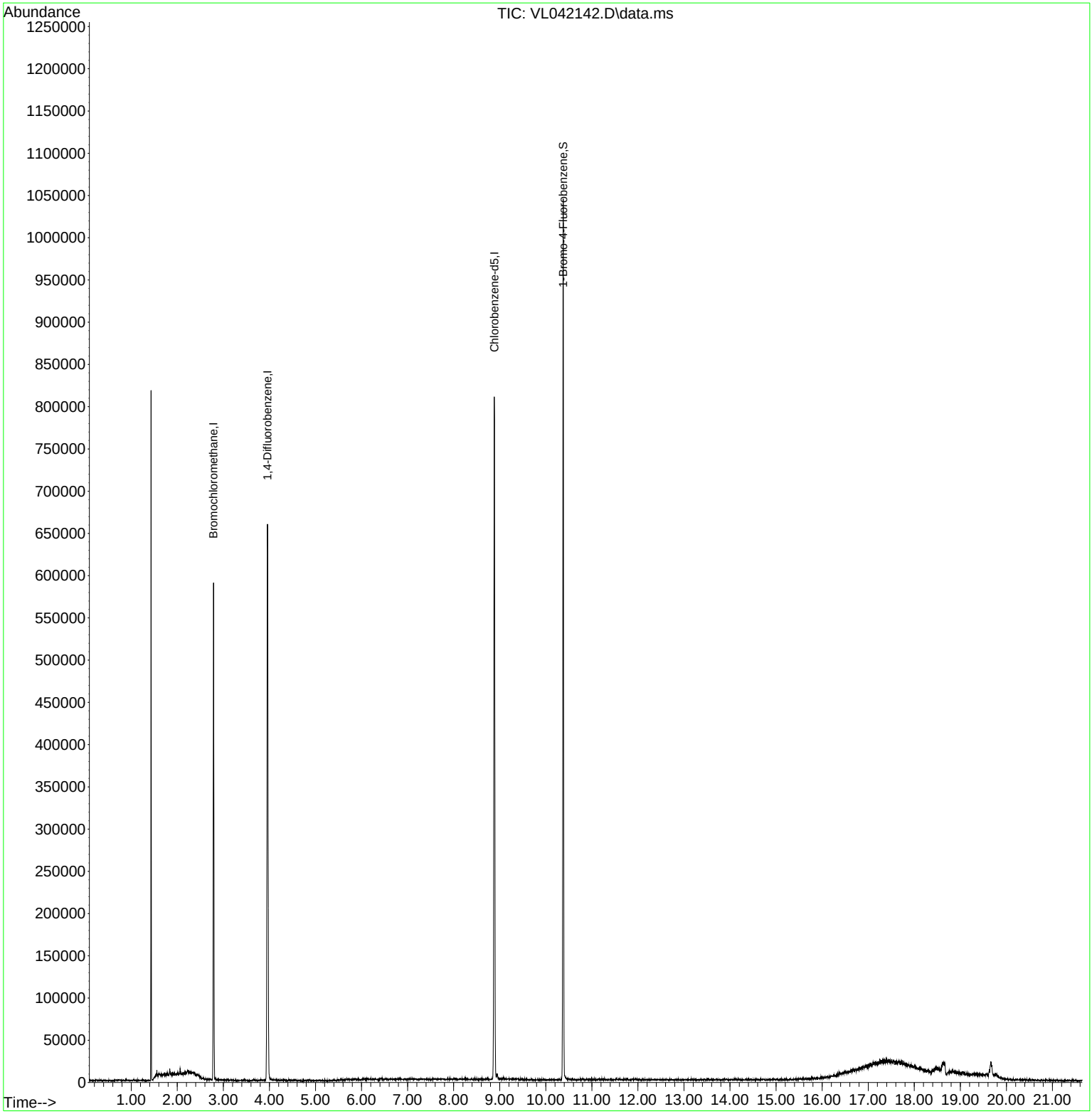
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	167826	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.958	114	392046	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.881	117	329113	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	250856	9.907	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042142.D
Acq On : 14 Mar 2025 09:23
Operator : SY/MD
Sample : VL0314ABL01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABL01

Quant Time: Mar 14 23:17:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042143.D
Acq On : 14 Mar 2025 10:09
Operator : SY/MD
Sample : QC031025 CAN 10267
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031025 CAN 10267

Quant Time: Mar 14 23:17:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

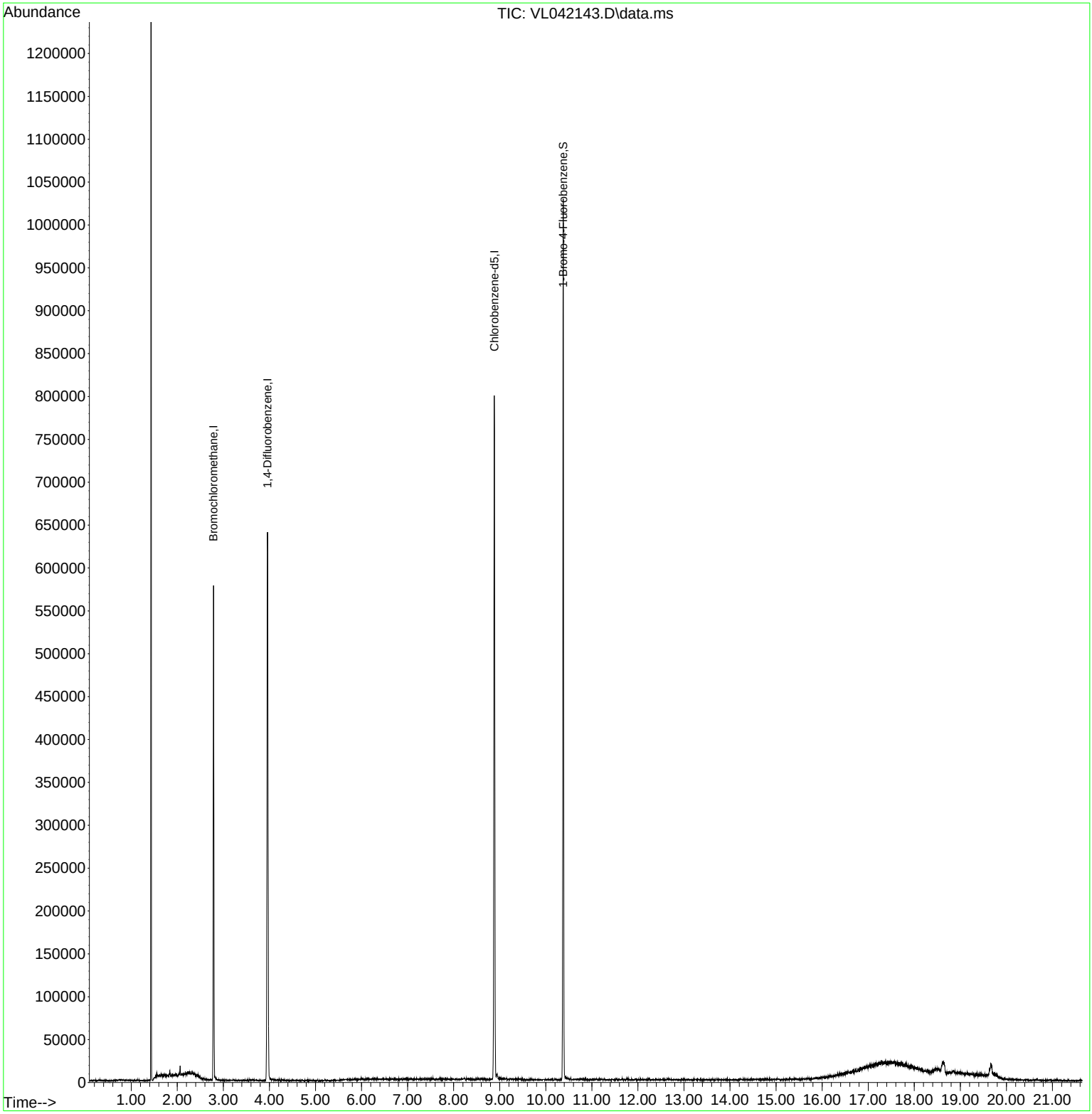
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	165110	10.000	ppbv	-0.01
33) 1,4-Difluorobenzene	3.958	114	377773	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.881	117	315162	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	245153	10.111	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042143.D
Acq On : 14 Mar 2025 10:09
Operator : SY/MD
Sample : QC031025 CAN 10267
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031025 CAN 10267

Quant Time: Mar 14 23:17:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042145.D
Acq On : 14 Mar 2025 11:11
Operator : SY/MD
Sample : QC031325 CAN 10266
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031325 CAN 10266

Quant Time: Mar 15 06:25:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

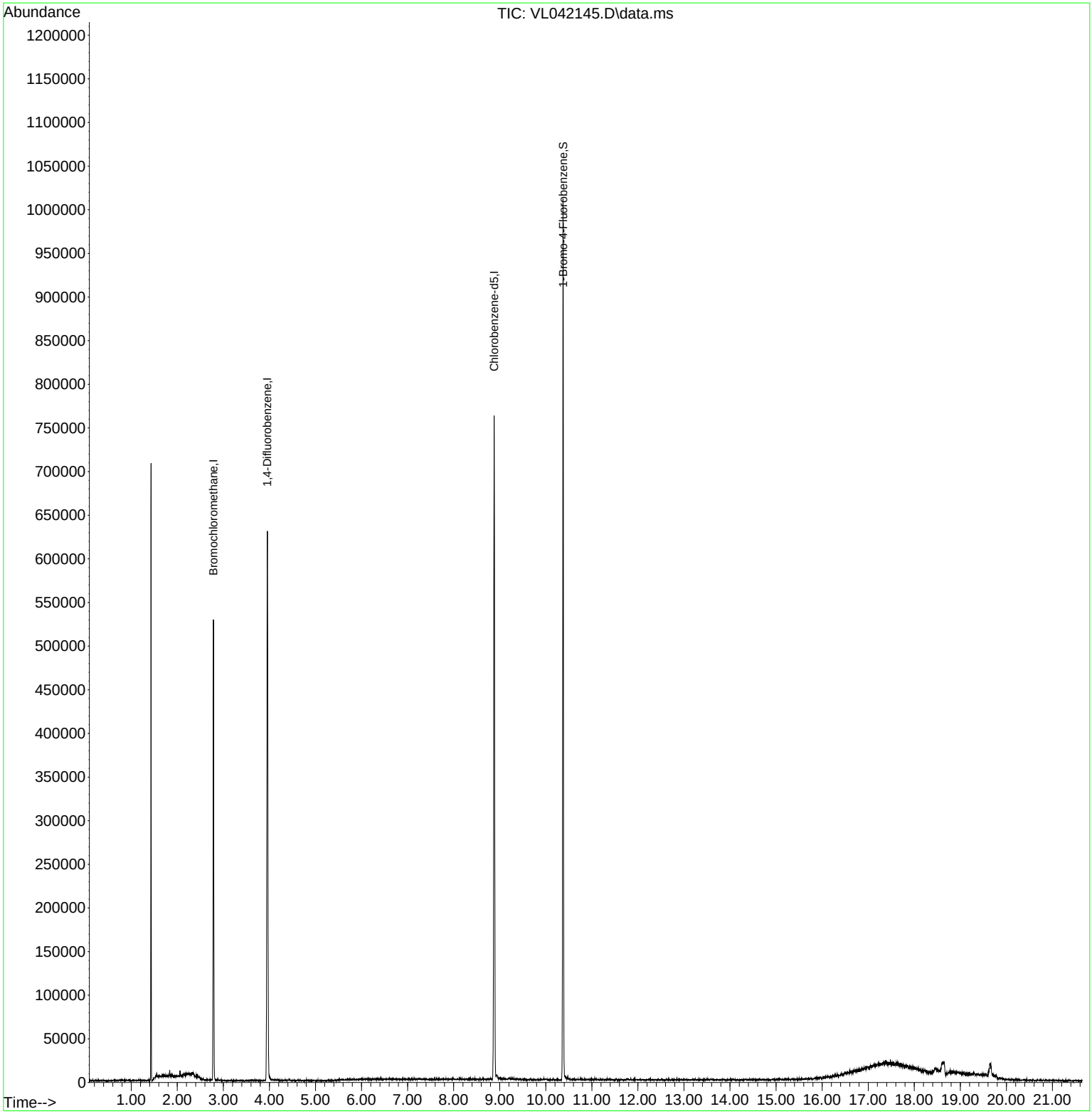
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	156307	10.000	ppbv	-0.02
33) 1,4-Difluorobenzene	3.955	114	350286	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.878	117	303615	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	230207	9.855	ppbv	-0.02
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%			
Target Compounds						Qvalue

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

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042145.D
Acq On : 14 Mar 2025 11:11
Operator : SY/MD
Sample : QC031325 CAN 10266
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
QC031325 CAN 10266

Quant Time: Mar 15 06:25:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 1
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	163026	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	381842	10.000	ppbv	-0.02
55) Chlorobenzene-d5	8.885	117	325786	10.000	ppbv	-0.02
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	276407	11.028	ppbv	-0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 110.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	183411	10.819	ppbv	99
3) Chlorodifluoromethane	1.476	51	224569	9.478	ppbv	99
4) Chloromethane	1.534	50	72105	11.502	ppbv	95
5) Vinyl Chloride	1.580	62	69189	11.667	ppbv	98
6) Bromomethane	1.667	94	31681	11.220	ppbv	96
7) Chloroethane	1.706	64	27615	11.461	ppbv	92
8) Dichlorotetrafluoroethane	1.554	85	159489	11.444	ppbv	99
9) Propene	1.486	41	85053	8.811	ppbv	99
10) Heptane	4.985	43	257569	8.570	ppbv	99
11) Trichlorofluoromethane	1.877	101	201423	11.858	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	144035	10.630	ppbv	97
13) Ethanol	1.722	45	5622	9.175	ppbv	97
14) Bromoethene	1.784	108	55222	11.541	ppbv	97
15) Acetone	1.835	43	154842	10.755	ppbv	98
16) 1,3-Butadiene	1.609	39	74468	11.115	ppbv	99
17) tert-Butyl alcohol	2.042	59	168993	9.382	ppbv	96
18) 1,1-Dichloroethene	2.036	96	64700	10.568	ppbv	97
19) Isopropyl Alcohol	1.887	45	85819	10.377	ppbv #	35
20) Methylene Chloride	2.062	84	64018	11.756	ppbv	96
21) Allyl Chloride	2.098	41	110336	10.607	ppbv	97
22) trans-1,2-Dichloroethene	2.340	96	72399	10.144	ppbv	99
23) Vinyl Acetate	2.463	43	87289	8.623	ppbv #	94
24) 1,1-Dichloroethane	2.411	63	140322	10.566	ppbv	99
25) Ethyl Acetate	2.839	43	528086	9.164	ppbv	100
26) Hexane	2.826	57	215050	9.231	ppbv	98
27) Carbon Disulfide	2.153	76	170348	10.787	ppbv	100
28) Methyl tert-Butyl Ether	2.444	73	91925	7.925	ppbv	98
29) Chloroform	2.852	83	284422	9.071	ppbv	98
30) Cyclohexane	3.861	84	155818	8.240	ppbv	94
31) cis-1,2-Dichloroethene	2.722	61	180243	8.173	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	256963	8.448	ppbv	95
34) 2-Butanone	2.560	43	289331	9.726	ppbv	95
35) Carbon Tetrachloride	3.764	117	267662	10.165	ppbv	97
36) Benzene	3.661	78	376328	9.415	ppbv	99
37) 1,2-Dichloroethane	3.221	62	209658	9.460	ppbv	99
38) Trichloroethene	4.554	130	143571	8.796	ppbv	94
39) 1,2-Dichloropropane	4.318	63	142402	9.386	ppbv	97
40) 1,4-Dioxane	4.590	88	65583	9.469	ppbv #	98
41) Tetrahydrofuran	3.059	42	161433	9.184	ppbv	97
42) Bromodichloromethane	4.493	83	289116	9.682	ppbv	99
43) Methyl Methacrylate	4.884	69	133935	8.580	ppbv	95
44) 2,2,4-Trimethylpentane	4.645	57	687261	9.742	ppbv	98
45) t-1,3-Dichloropropene	6.418	75	122213	7.880	ppbv	97

Quantitation Report (QT Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED
Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	173008	8.620	ppbv		98
47) 1,1,2-Trichloroethane	6.590	97	148902	9.667	ppbv		96
48) Dibromochloromethane	7.393	129	230834	9.569	ppbv		98
49) Bromoform	9.487	173	207997	9.928	ppbv		98
50) 4-Methyl-2-Pentanone	5.761	43	388572	10.100	ppbv		95
51) 2-Hexanone	7.444	43	302871	11.438	ppbv	#	97
52) Tetrachloroethene	8.228	164	123920	9.056	ppbv		98
53) Toluene	6.940	91	392631	8.789	ppbv		98
54) 1,2-Dibromoethane	7.655	107	196312	9.427	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.930	131	188895	10.258	ppbv		99
57) Chlorobenzene	8.924	112	335300	9.927	ppbv		98
58) Ethyl Benzene	9.357	91	553145	9.220	ppbv		99
59) m/p-Xylene	9.555	91	938027m	19.646	ppbv		
60) o-Xylene	9.966	91	472738	9.849	ppbv		99
61) Styrene	9.875	104	200572	8.888	ppbv		99
62) Isopropylbenzene	10.542	105	698706	9.720	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.966	83	335051	10.599	ppbv		99
64) n-propylbenzene	10.992	120	189167	10.032	ppbv		99
65) tert-Butylbenzene	11.536	119	645167	9.861	ppbv		99
66) Benzyl Chloride	11.620	91	46836	9.382	ppbv		97
67) sec-Butylbenzene	11.772	105	930077	9.940	ppbv		99
69) p-Isopropyltoluene	11.930	119	755360	10.147	ppbv		99
70) n-Butylbenzene	12.283	91	760425	10.007	ppbv		100
71) 2-Chlorotoluene	10.904	91	519669	9.378	ppbv		99
72) 4-Ethyltoluene	11.128	105	580446	9.904	ppbv		99
73) 1,3,5-Trimethylbenzene	11.209	105	489177	9.623	ppbv		99
74) 1,2,4-Trimethylbenzene	11.542	105	558174	9.751	ppbv		94
75) 1,3-Dichlorobenzene	11.610	146	329807	10.011	ppbv		100
76) 1,4-Dichlorobenzene	11.675	146	327949	10.026	ppbv		100
77) 1,2-Dichlorobenzene	11.950	146	329758	10.314	ppbv		100
78) Hexachloro-1,3-Butadiene	13.885	225	227664	9.152	ppbv		99
79) Naphthalene	13.516	128	477761	12.172	ppbv		99
80) Naphthalene,2-methyl-	14.461	142	148881	13.860	ppbv		100
81) 1,2,4-Trichlorobenzene	13.445	180	217204	9.930	ppbv		100

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

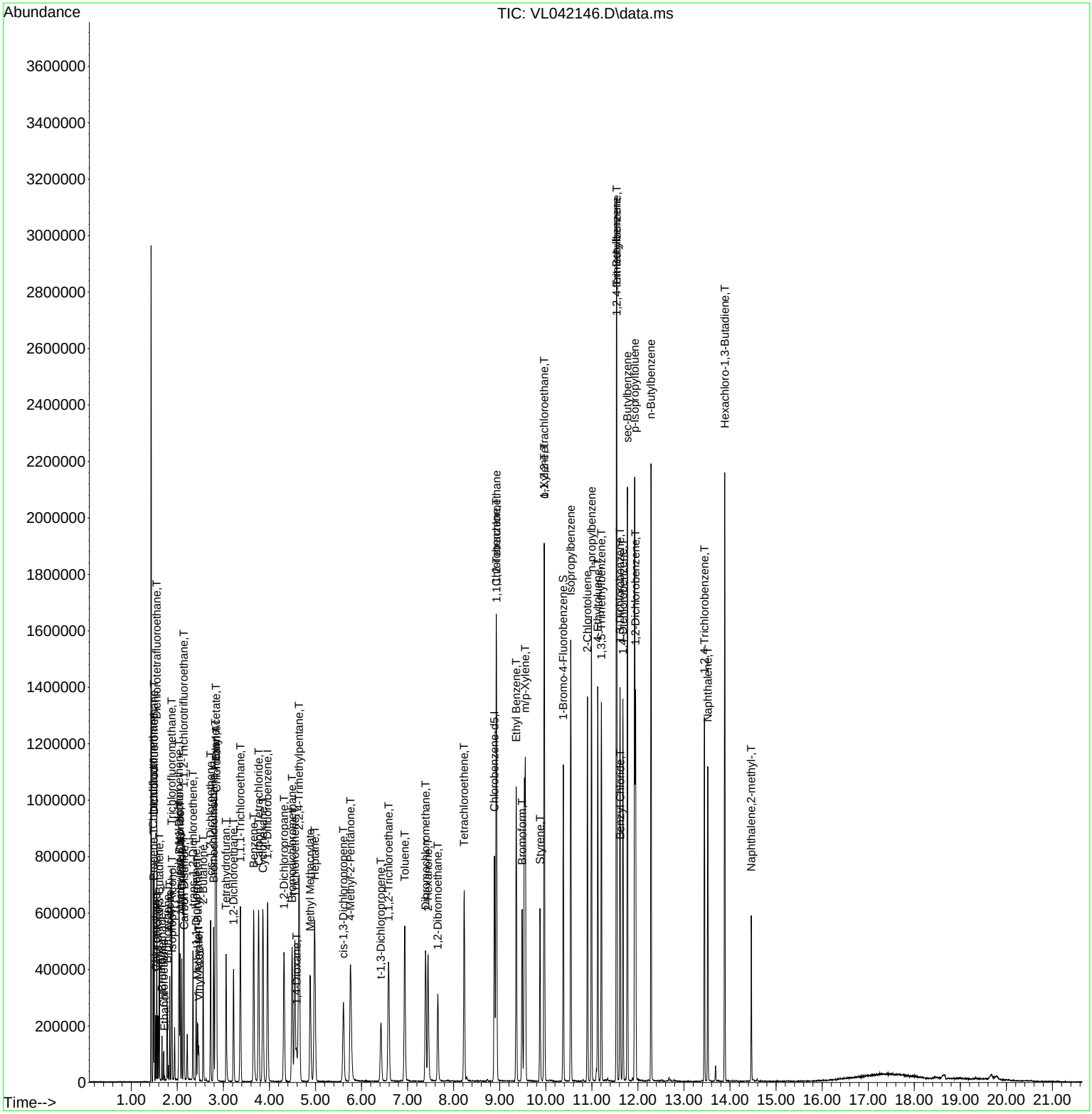
Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL031425\
Data File : VL042146.D
Acq On : 14 Mar 2025 12:27
Operator : SY/MD
Sample : VL0314ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 14 23:18:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL022525AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug
QLast Update : Wed Feb 26 01:08:36 2025
Response via : Initial Calibration

Instrument :
MSVOA_L
ClientSampleId :
VL0314ABS01

Manual Integrations APPROVED

Reviewed By :Semsettin Yesilyurt 03/17/2025
Supervised By :Mahesh Dadoda 03/17/2025



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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL011425

Review By	Mahesh Dadoda	Review On	1/15/2025 12:59:33 PM		
Supervise By	Semsettin Yesilyurt	Supervise On	1/15/2025 1:00:29 PM		
SubDirectory	VL011425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL011425AIR.M

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574,MDL,AP2572,AP2573
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL041887.D	14 Jan 2025 07:50	SY/MD	Ok
2	VSTDICC0.5	VL041888.D	14 Jan 2025 11:40	SY/MD	Not Ok
3	VSTDICCC010	VL041889.D	14 Jan 2025 12:55	SY/MD	Ok,M
4	VSTDICC002	VL041890.D	14 Jan 2025 13:28	SY/MD	Ok,M
5	VSTDICC001	VL041891.D	14 Jan 2025 13:59	SY/MD	Ok,M
6	VSTDICC0.5	VL041892.D	14 Jan 2025 14:30	SY/MD	Ok,M
7	VSTDICC0.1	VL041893.D	14 Jan 2025 15:01	SY/MD	Ok,M
8	VSTDICC0.03	VL041894.D	14 Jan 2025 15:32	SY/MD	Ok,M
9	VSTDICC015	VL041895.D	14 Jan 2025 16:05	SY/MD	Ok,M
10	VSTDICV010	VL041896.D	14 Jan 2025 17:33	SY/MD	Ok,M
11	VL0114ABL01	VL041897.D	14 Jan 2025 18:34	SY/MD	Ok
12	VL0114ABL02	VL041898.D	14 Jan 2025 19:05	SY/MD	Ok
13	VL0114ABS01	VL041899.D	14 Jan 2025 19:36	SY/MD	Ok,M
14	VIBLK	VL041900.D	14 Jan 2025 20:07	SY/MD	Ok
15	Q1073-04	VL041901.D	14 Jan 2025 20:40	SY/MD	Ok,M
16	Q1073-04DUP	VL041902.D	14 Jan 2025 21:14	SY/MD	Ok,M
17	Q1073-05	VL041903.D	14 Jan 2025 21:47	SY/MD	Ok,M
18	Q1073-06	VL041904.D	14 Jan 2025 22:21	SY/MD	Ok,M
19	Q1073-01	VL041905.D	14 Jan 2025 22:51	SY/MD	Ok,M
20	Q1073-02	VL041906.D	14 Jan 2025 23:22	SY/MD	Ok,M
21	Q1073-03	VL041907.D	14 Jan 2025 23:52	SY/MD	Ok,M

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL011425

Review By	Mahesh Dadoda	Review On	1/15/2025 12:59:33 PM				
Supervise By	Semsettin Yesilyurt	Supervise On	1/15/2025 1:00:29 PM				
SubDirectory	VL011425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL011425AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574,MDL,AP2572,AP2573
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

22	VIBLK	VL041908.D	15 Jan 2025 00:22	SY/MD	Ok
23	MDL 0.4	VL041909.D	15 Jan 2025 00:52	SY/MD	Ok,M
24	MDL 0.4	VL041910.D	15 Jan 2025 01:23	SY/MD	Ok,M
25	MDL 0.1	VL041911.D	15 Jan 2025 01:53	SY/MD	Ok,M
26	MDL 0.1	VL041912.D	15 Jan 2025 02:23	SY/MD	Ok,M
27	MDL 0.03	VL041913.D	15 Jan 2025 02:53	SY/MD	Ok,M
28	MDL 0.03	VL041914.D	15 Jan 2025 03:23	SY/MD	Ok,M
29	VSTDCCC010	VL041915.D	15 Jan 2025 08:37	SY/MD	Not Ok

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL012725

Review By	Semsettin Yesilyurt	Review On	1/30/2025 10:54:41 AM				
Supervise By	Mahesh Dadoda	Supervise On	1/30/2025 11:53:52 AM				
SubDirectory	VL012725	HP Acquire Method	TO15AIR.M		HP Processing Method	VL011425AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL041943.D	27 Jan 2025 09:02	SY/MD	Ok
2	VSTDCCC010	VL041944.D	27 Jan 2025 10:05	SY/MD	Ok,M
3	VL0127ABL01	VL041945.D	27 Jan 2025 10:47	SY/MD	Ok
4	VL0127ABL02	VL041946.D	27 Jan 2025 11:17	SY/MD	Ok
5	VL0127ABS01	VL041947.D	27 Jan 2025 12:19	SY/MD	Ok,M
6	Q1168-14 0.5	VL041948.D	27 Jan 2025 13:05	SY/MD	Ok,M
7	Q1168-13 0.45	VL041949.D	27 Jan 2025 13:36	SY/MD	Ok,M
8	Q1168-13 0.40	VL041950.D	27 Jan 2025 14:06	SY/MD	Ok,M
9	Q1168-13 0.1	VL041951.D	27 Jan 2025 14:37	SY/MD	Ok,M
10	Q1168-13 0.03	VL041952.D	27 Jan 2025 15:09	SY/MD	Not Ok
11	Q1168-14 0.03	VL041953.D	27 Jan 2025 15:40	SY/MD	Not Ok
12	QC012125 CAN 10268	VL041954.D	27 Jan 2025 16:11	SY/MD	Ok
13	QC012125 CAN 10268	VL041955.D	27 Jan 2025 16:42	SY/MD	Not Ok
14	VSTDCCC010	VL041956.D	27 Jan 2025 17:13	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL020325

Review By	Semsettin Yesilyurt	Review On	2/4/2025 9:24:56 AM				
Supervise By	Mahesh Dadoda	Supervise On	2/4/2025 3:44:53 PM				
SubDirectory	VL020325	HP Acquire Method	TO15AIR.M	HP Processing Method	VL011425AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2569
Initial Calibration Stds	AP2571,AP2572,AP2573
CCC	AP2571
Internal Standard/PEM	AP2569
ICV/I.BLK	AP2574
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL041957.D	03 Feb 2025 09:47	SY/MD	Ok
2	VSTDCCC010	VL041958.D	03 Feb 2025 10:48	SY/MD	Ok,M
3	VL0203ABL01	VL041959.D	03 Feb 2025 11:34	SY/MD	Ok
4	VL0203ABL02	VL041960.D	03 Feb 2025 12:05	SY/MD	Ok
5	VL0203ABS01	VL041961.D	03 Feb 2025 12:57	SY/MD	Ok,M
6	Q1222-01	VL041962.D	03 Feb 2025 13:57	SY/MD	Ok,M
7	Q1222-01DL	VL041963.D	03 Feb 2025 14:28	SY/MD	Not Ok
8	Q1256-01	VL041964.D	03 Feb 2025 14:59	SY/MD	Ok,M
9	Q1256-01DL	VL041965.D	03 Feb 2025 15:30	SY/MD	Not Ok
10	QC012825 CAN 10439	VL041966.D	03 Feb 2025 16:02	SY/MD	Ok
11	Q1222-02	VL041967.D	03 Feb 2025 16:35	SY/MD	Ok,M
12	Q1222-02DUP	VL041968.D	03 Feb 2025 17:08	SY/MD	Ok,M
13	Q1222-03	VL041969.D	03 Feb 2025 17:41	SY/MD	Ok,M
14	Q1256-02	VL041970.D	03 Feb 2025 18:15	SY/MD	Ok,M
15	Q1168-14 0.03	VL041971.D	03 Feb 2025 21:01	SY/MD	Not Ok
16	Q1168-13 0.03	VL041972.D	03 Feb 2025 21:32	SY/MD	Ok,M
17	Q1168-14 0.03	VL041973.D	03 Feb 2025 22:13	SY/MD	Ok,M
18	QC020325 CAN 10599	VL041974.D	04 Feb 2025 08:03	SY/MD	Ok
19	VSTDCCC010	VL041975.D	04 Feb 2025 08:34	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL022525

Review By	Semsettin Yesilyurt	Review On	2/26/2025 8:27:25 AM				
Supervise By	Mahesh Dadoda	Supervise On	2/26/2025 1:45:21 PM				
SubDirectory	VL022525	HP Acquire Method	TO15AIR.M	HP Processing Method	VL022525AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2576
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2576
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042040.D	25 Feb 2025 07:56	SY/MD	Ok
2	VSTDICC010	VL042041.D	25 Feb 2025 08:56	SY/MD	Ok,M
3	VSTDICC002	VL042042.D	25 Feb 2025 09:29	SY/MD	Ok,M
4	VSTDICC001	VL042043.D	25 Feb 2025 10:00	SY/MD	Ok,M
5	VSTDICC0.5	VL042044.D	25 Feb 2025 10:31	SY/MD	Ok,M
6	VSTDICC0.1	VL042045.D	25 Feb 2025 11:03	SY/MD	Ok,M
7	VSTDICC0.03	VL042046.D	25 Feb 2025 11:34	SY/MD	Ok,M
8	VSTDICC015	VL042047.D	25 Feb 2025 12:07	SY/MD	Ok,M
9	VSTDICV010	VL042048.D	25 Feb 2025 13:15	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL022625

Review By	Semsettin Yesilyurt	Review On	2/27/2025 10:12:04 AM				
Supervise By	Mahesh Dadoda	Supervise On	2/27/2025 12:13:24 PM				
SubDirectory	VL022625	HP Acquire Method	TO15AIR.M		HP Processing Method	VL022525AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2576
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2576
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042049.D	26 Feb 2025 07:46	SY/MD	Ok
2	VSTDCCC010	VL042050.D	26 Feb 2025 08:38	SY/MD	Ok,M
3	VL0226ABL01	VL042051.D	26 Feb 2025 09:20	SY/MD	Ok
4	QC021725 CAN 10271	VL042052.D	26 Feb 2025 10:04	SY/MD	Ok
5	QC022525 CAN 10795	VL042053.D	26 Feb 2025 10:36	SY/MD	Ok
6	VL0226ABS01	VL042054.D	26 Feb 2025 11:07	SY/MD	Ok,M
7	Q1419-02	VL042055.D	26 Feb 2025 11:40	SY/MD	Ok,M
8	Q1430-05	VL042056.D	26 Feb 2025 12:14	SY/MD	Ok,M
9	Q1430-05DUP	VL042057.D	26 Feb 2025 12:48	SY/MD	Ok,M
10	Q1430-06	VL042058.D	26 Feb 2025 13:21	SY/MD	Ok,M
11	Q1430-06DL	VL042059.D	26 Feb 2025 13:52	SY/MD	Not Ok
12	Q1419-01	VL042060.D	26 Feb 2025 14:24	SY/MD	Dilution
13	Q1419-01DL	VL042061.D	26 Feb 2025 14:55	SY/MD	Not Ok
14	Q1419-01DL	VL042062.D	26 Feb 2025 15:27	SY/MD	Ok,M
15	Q1419-01DL2	VL042063.D	26 Feb 2025 15:58	SY/MD	Not Ok
16	VSTDCCC010	VL042064.D	26 Feb 2025 16:29	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL030325

Review By	Semsettin Yesilyurt	Review On	3/4/2025 4:05:35 PM				
Supervise By	Mahesh Dadoda	Supervise On	3/5/2025 12:17:04 PM				
SubDirectory	VL030325	HP Acquire Method	TO15AIR.M		HP Processing Method	VL022525AIR.M	

STD. NAME	STD REF.#
Tune/Reschk	AP2587
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2587
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042074.D	03 Mar 2025 11:45	SY/MD	Ok
2	VSTDCCC010	VL042075.D	03 Mar 2025 12:15	SY/MD	Ok,M
3	VL0303ABL01	VL042076.D	03 Mar 2025 14:49	SY/MD	Ok
4	VL0303ABS01	VL042077.D	03 Mar 2025 15:19	SY/MD	Ok,M
5	QC022725 CAN 10331	VL042078.D	03 Mar 2025 15:52	SY/MD	Ok
6	Q1430-03	VL042079.D	03 Mar 2025 16:23	SY/MD	Ok,M
7	Q1430-03DL	VL042080.D	03 Mar 2025 16:53	SY/MD	Not Ok
8	Q1430-02	VL042081.D	03 Mar 2025 17:24	SY/MD	Ok,M
9	Q1430-02DL	VL042082.D	03 Mar 2025 17:55	SY/MD	Not Ok
10	Q1430-04	VL042083.D	03 Mar 2025 18:26	SY/MD	Ok,M
11	Q1430-04DL	VL042084.D	03 Mar 2025 18:57	SY/MD	Not Ok
12	Q1430-01	VL042085.D	03 Mar 2025 19:28	SY/MD	Ok,M
13	Q1430-01DL	VL042086.D	03 Mar 2025 19:59	SY/MD	Not Ok
14	Q1430-01DUP	VL042087.D	03 Mar 2025 20:29	SY/MD	Ok,M
15	VIBLK	VL042088.D	03 Mar 2025 21:00	SY/MD	Ok
16	QC022625 CAN 10682	VL042089.D	03 Mar 2025 21:31	SY/MD	Not Ok
17	QC022625 CAN 10746	VL042090.D	03 Mar 2025 22:02	SY/MD	Ok
18	VL0303ABS02	VL042091.D	03 Mar 2025 22:33	SY/MD	Not Ok
19	QC022625 CAN 10682	VL042092.D	04 Mar 2025 08:07	SY/MD	Ok
20	VSTDCCC010	VL042093.D	04 Mar 2025 09:04	SY/MD	Ok,M

M : Manual Integration

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

Instrument ID: MSVOA_L

Daily Analysis Runlog For Sequence/QCBatch ID # VL031425

Review By	Semsettin Yesilyurt	Review On	3/17/2025 8:36:35 AM				
Supervise By	Mahesh Dadoda	Supervise On	3/17/2025 1:46:41 PM				
SubDirectory	VL031425	HP Acquire Method	TO15AIR.M	HP Processing Method	VL022525AIR.M		

STD. NAME	STD REF.#
Tune/Reschk	AP2588
Initial Calibration Stds	AP2582,AP2584,AP2585
CCC	AP2582
Internal Standard/PEM	AP2588
ICV/I.BLK	AP2586
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	BFB	VL042140.D	14 Mar 2025 07:56	SY/MD	Ok
2	VSTDCCC010	VL042141.D	14 Mar 2025 08:39	SY/MD	Ok,M
3	VL0314ABL01	VL042142.D	14 Mar 2025 09:23	SY/MD	Ok
4	QC031025 CAN 10267	VL042143.D	14 Mar 2025 10:09	SY/MD	Ok
5	QC031225 CAN 10300	VL042144.D	14 Mar 2025 10:40	SY/MD	Not Ok
6	QC031325 CAN 10266	VL042145.D	14 Mar 2025 11:11	SY/MD	Ok
7	VL0314ABS01	VL042146.D	14 Mar 2025 12:27	SY/MD	Ok,M
8	QC031225 CAN 10300	VL042147.D	14 Mar 2025 15:56	SY/MD	Ok
9	QC031225 CAN 10300	VL042148.D	14 Mar 2025 16:29	SY/MD	Not Ok

M : Manual Integration

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	187002	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	545068	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	519536	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	422410	9.901	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	262496	9.507	ppbv	100
3) Chlorodifluoromethane	1.473	51	272522	9.662	ppbv	100
4) Chloromethane	1.531	50	107099	9.491	ppbv	100
5) Vinyl Chloride	1.577	62	102699	8.925	ppbv	100
6) Bromomethane	1.664	94	47950	9.377	ppbv	100
7) Chloroethane	1.703	64	42516	9.387	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	227041	9.656	ppbv	100
9) Propene	1.483	41	123386	9.709	ppbv	100
10) Heptane	4.972	43	335086	9.744	ppbv	100
11) Trichlorofluoromethane	1.874	101	250349	9.318	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.137	101	209365	9.481	ppbv	100
13) Ethanol	1.719	45	5338	5.364	ppbv	100
14) Bromoethene	1.777	108	77999	9.220	ppbv	100
15) Acetone	1.832	43	208061	7.955	ppbv	100
16) 1,3-Butadiene	1.606	39	107104	9.105	ppbv	100
17) tert-Butyl alcohol	2.036	59	302616	9.290	ppbv	100
18) 1,1-Dichloroethene	2.030	96	94236	9.128	ppbv	100
19) Isopropyl Alcohol	1.884	45	131359	8.902	ppbv	100
20) Methylene Chloride	2.059	84	81828	8.401	ppbv	100
21) Allyl Chloride	2.091	41	168602	9.141	ppbv	100
22) trans-1,2-Dichloroethene	2.337	96	110371	9.149	ppbv	100
23) Vinyl Acetate	2.460	43	93080	8.563	ppbv	100
24) 1,1-Dichloroethane	2.405	63	209753	9.484	ppbv	100
25) Ethyl Acetate	2.833	43	646501	9.524	ppbv	100
26) Hexane	2.823	57	249331	9.510	ppbv	100
27) Carbon Disulfide	2.146	76	268507	9.550	ppbv	100
28) Methyl tert-Butyl Ether	2.438	73	155398	9.520	ppbv	100
29) Chloroform	2.845	83	361264	9.415	ppbv	100
30) Cyclohexane	3.852	84	217215	9.537	ppbv	100
31) cis-1,2-Dichloroethene	2.716	61	256425	9.634	ppbv	100
32) 1,1,1-Trichloroethane	3.363	97	385628	8.784	ppbv	100
34) 2-Butanone	2.554	43	363735	9.203	ppbv	100
35) Carbon Tetrachloride	3.758	117	382925	9.129	ppbv	100
36) Benzene	3.651	78	508860	9.417	ppbv	100
37) 1,2-Dichloroethane	3.214	62	292937	9.469	ppbv	100
38) Trichloroethene	4.545	130	204027	9.045	ppbv	100
39) 1,2-Dichloropropane	4.312	63	183439	9.321	ppbv	100
40) 1,4-Dioxane	4.577	88	92327	9.042	ppbv #	100
41) Tetrahydrofuran	3.049	42	216851	9.643	ppbv	100
42) Bromodichloromethane	4.483	83	418887	9.822	ppbv	100
43) Methyl Methacrylate	4.872	69	219399	9.618	ppbv	100
44) 2,2,4-Trimethylpentane	4.635	57	876649	9.600	ppbv	100
45) t-1,3-Dichloropropene	6.406	75	239180	9.746	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	300021	9.973	ppbv		100
47) 1,1,2-Trichloroethane	6.574	97	198176	9.526	ppbv		100
48) Dibromochloromethane	7.380	129	346499	9.828	ppbv		100
49) Bromoform	9.477	173	317189	10.021	ppbv		100
50) 4-Methyl-2-Pentanone	5.745	43	559800	8.934	ppbv		100
51) 2-Hexanone	7.432	43	460013	8.848	ppbv	#	100
52) Tetrachloroethene	8.218	164	186912	8.722	ppbv		100
53) Toluene	6.927	91	613378	9.576	ppbv		100
54) 1,2-Dibromoethane	7.649	107	276797	9.536	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.917	131	265037	9.268	ppbv		100
57) Chlorobenzene	8.917	112	454511	9.223	ppbv		100
58) Ethyl Benzene	9.351	91	868003	9.406	ppbv		100
59) m/p-Xylene	9.549	91	595445	8.071	ppbv	#	9
60) o-Xylene	9.960	91	689933	9.340	ppbv		100
61) Styrene	9.866	104	354697	9.706	ppbv		100
62) Isopropylbenzene	10.536	105	1019255	9.227	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.960	83	413392	9.210	ppbv		100
64) n-propylbenzene	10.986	120	259405	9.122	ppbv		100
65) tert-Butylbenzene	11.529	119	901951	8.828	ppbv		100
66) Benzyl Chloride	11.610	91	105411	9.724	ppbv		100
67) sec-Butylbenzene	11.766	105	1249106	8.796	ppbv		100
69) p-Isopropyltoluene	11.924	119	1079675	8.830	ppbv		100
70) n-Butylbenzene	12.277	91	1110351	8.879	ppbv		100
71) 2-Chlorotoluene	10.898	91	799102	9.320	ppbv		100
72) 4-Ethyltoluene	11.122	105	846232	9.200	ppbv		100
73) 1,3,5-Trimethylbenzene	11.199	105	720566	8.970	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	784745	8.480	ppbv		100
75) 1,3-Dichlorobenzene	11.604	146	458226	9.028	ppbv		100
76) 1,4-Dichlorobenzene	11.669	146	461371	9.134	ppbv		100
77) 1,2-Dichlorobenzene	11.944	146	441473	8.933	ppbv		100
78) Hexachloro-1,3-Butadiene	13.879	225	416735	8.284	ppbv		100
79) Naphthalene	13.510	128	938470	9.271	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	514394	10.436	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	446420	9.561	ppbv		100

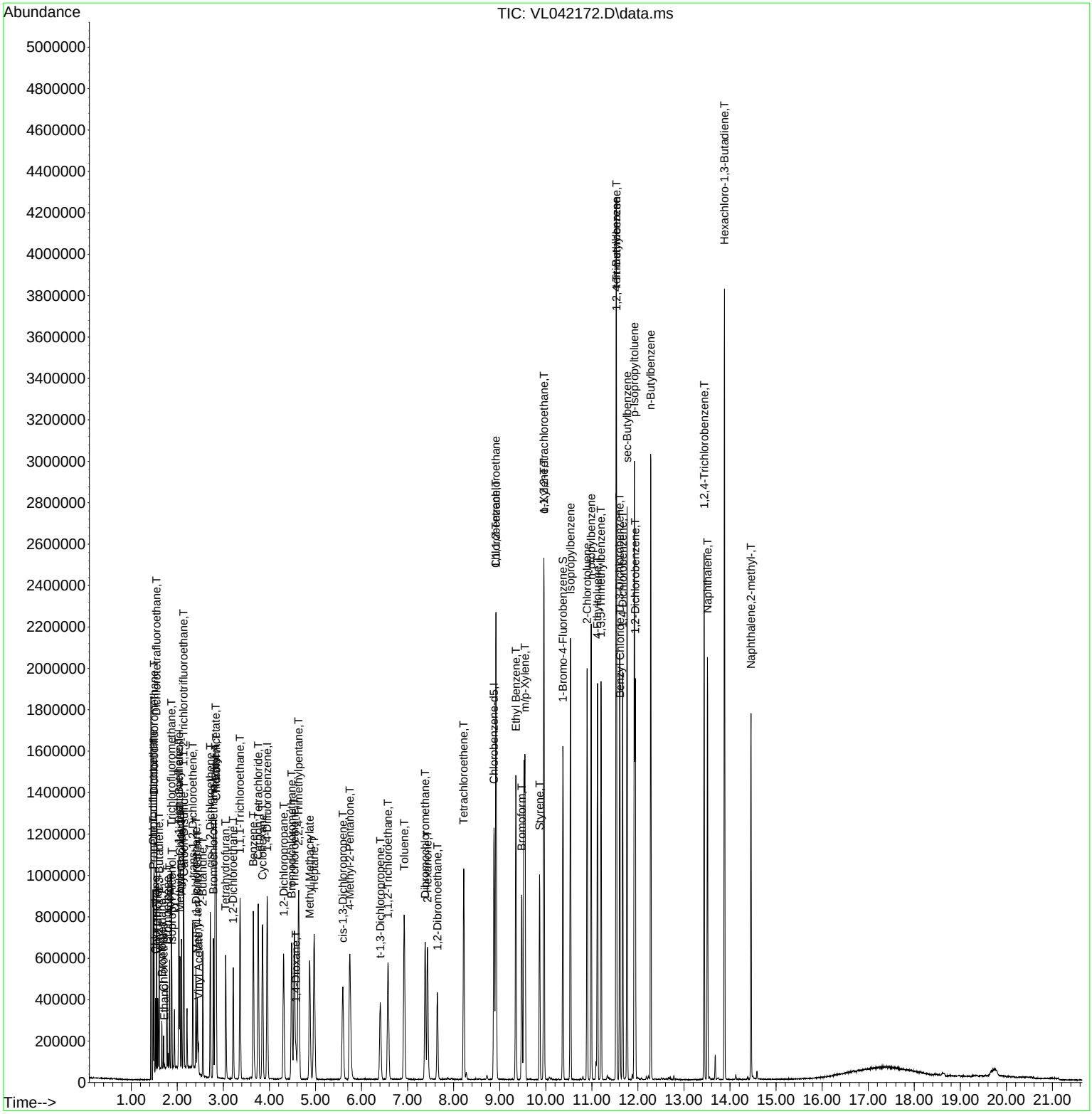
(#) = qualifier out of range (m) = manual integration (+) = signals summed

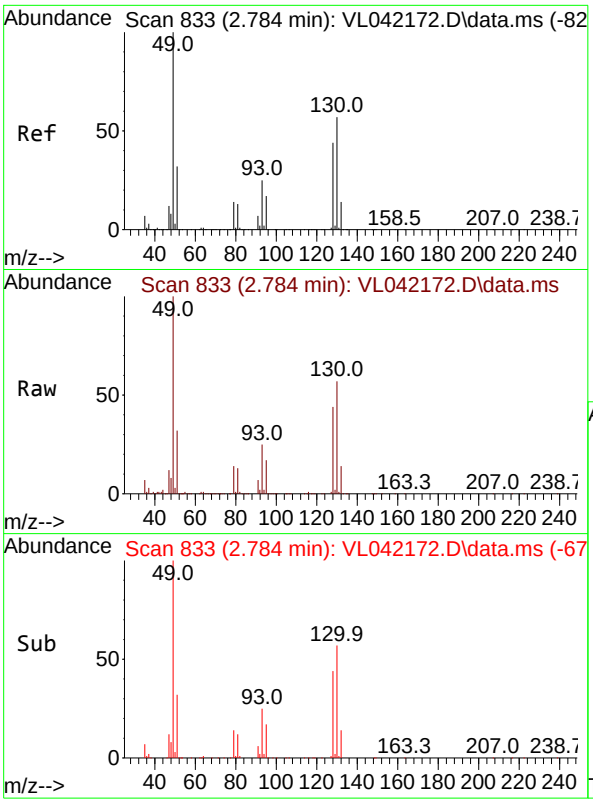
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042172.D
Acq On : 27 Mar 2025 08:26
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Mar 28 01:31:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



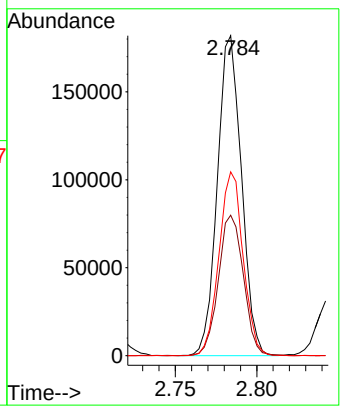


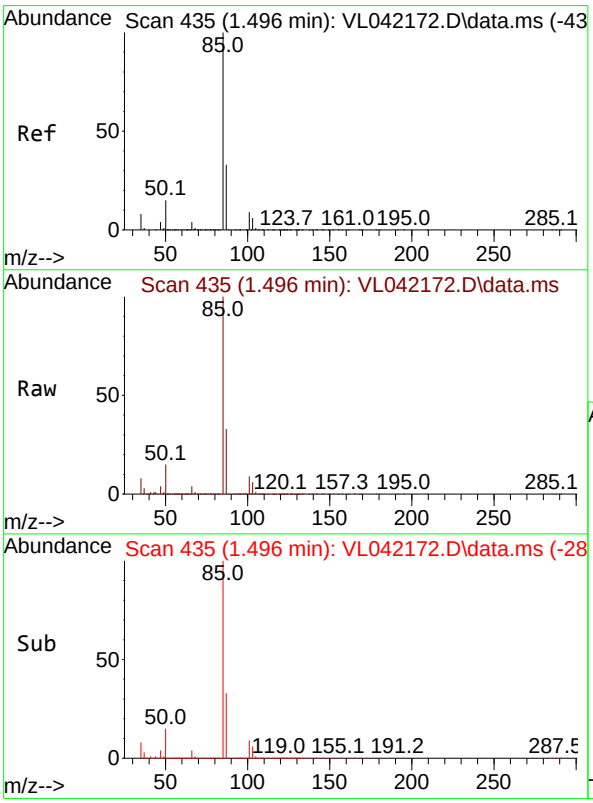
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 49 Resp: 187002

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.6	28.8	86.4

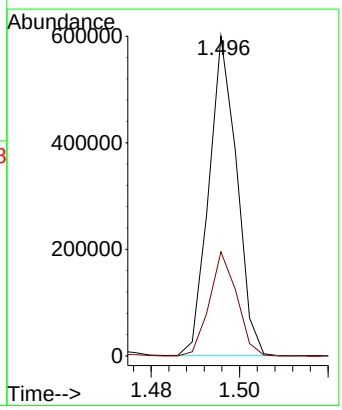


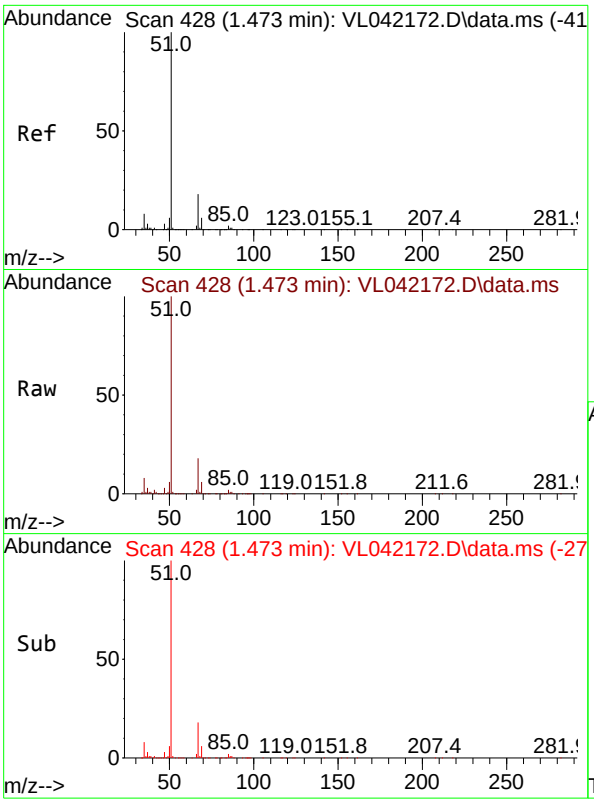


#2
Dichlorodifluoromethane
Concen: 9.507 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 262496

Ion	Ratio	Lower	Upper
85	100		
87	32.6	26.1	39.1



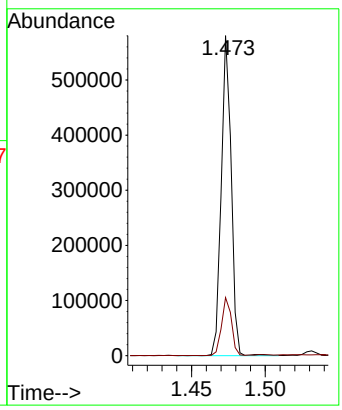


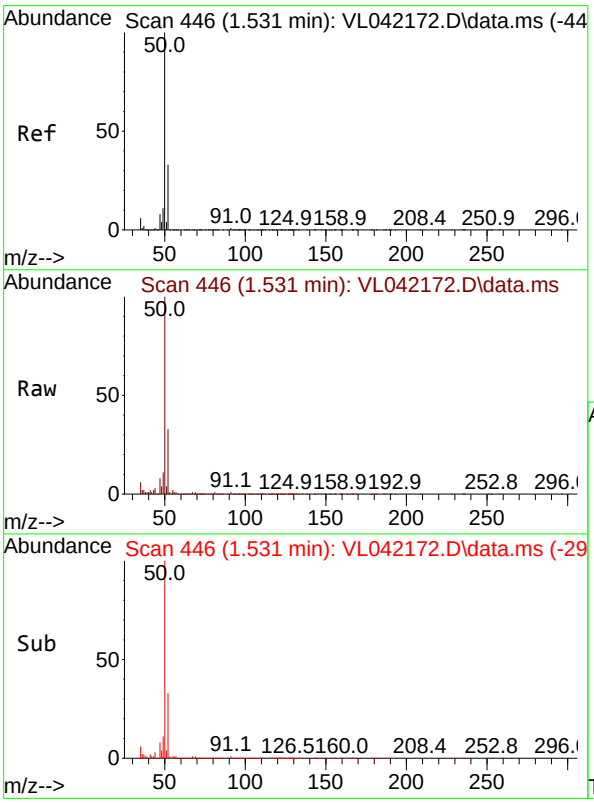
#3
Chlorodifluoromethane
Concen: 9.662 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 51 Resp: 272522

Ion	Ratio	Lower	Upper
51	100		
67	18.8	15.0	22.6

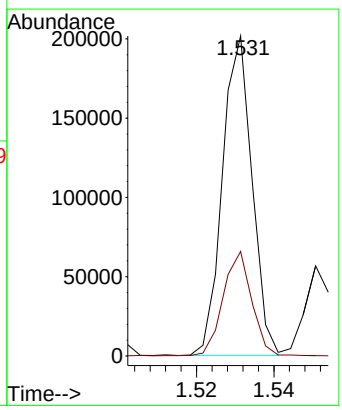


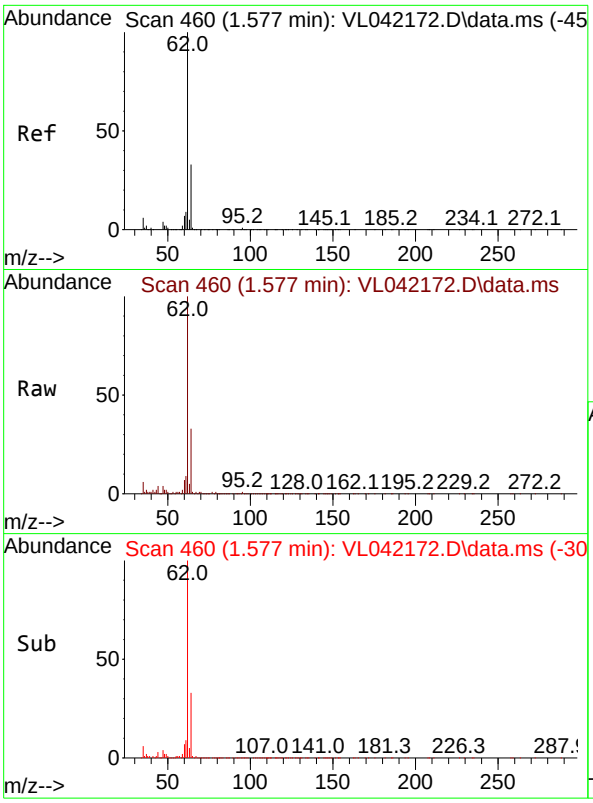


#4
Chloromethane
Concen: 9.491 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 50 Resp: 107099

Ion	Ratio	Lower	Upper
50	100		
52	32.6	26.1	39.1



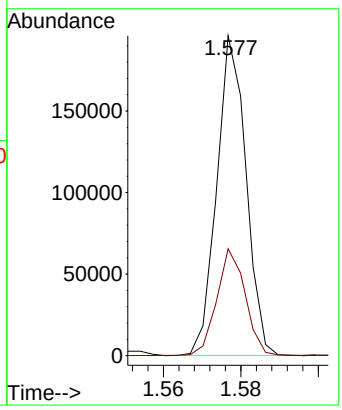


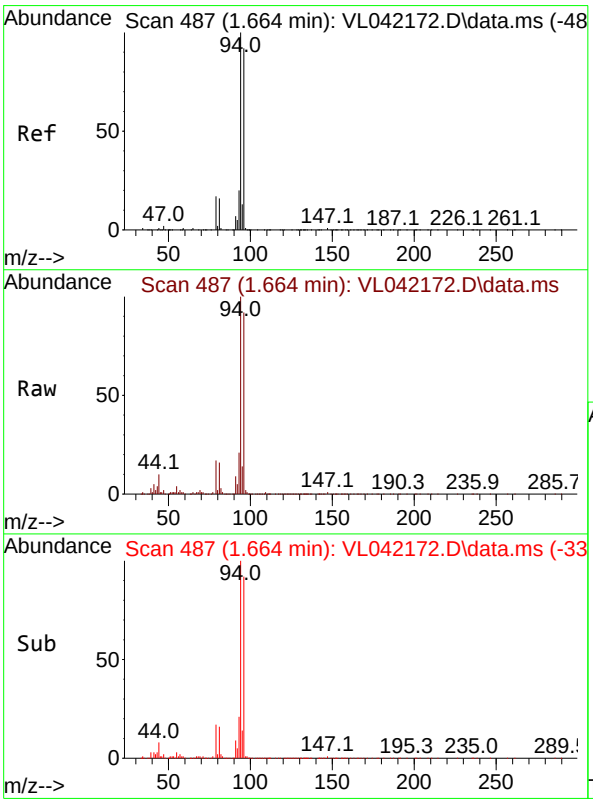
#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.577 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 102699

Ion	Ratio	Lower	Upper
62	100		
64	33.3	26.6	40.0

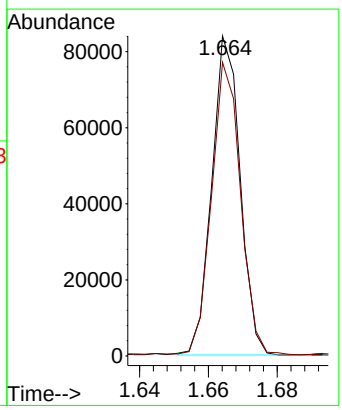


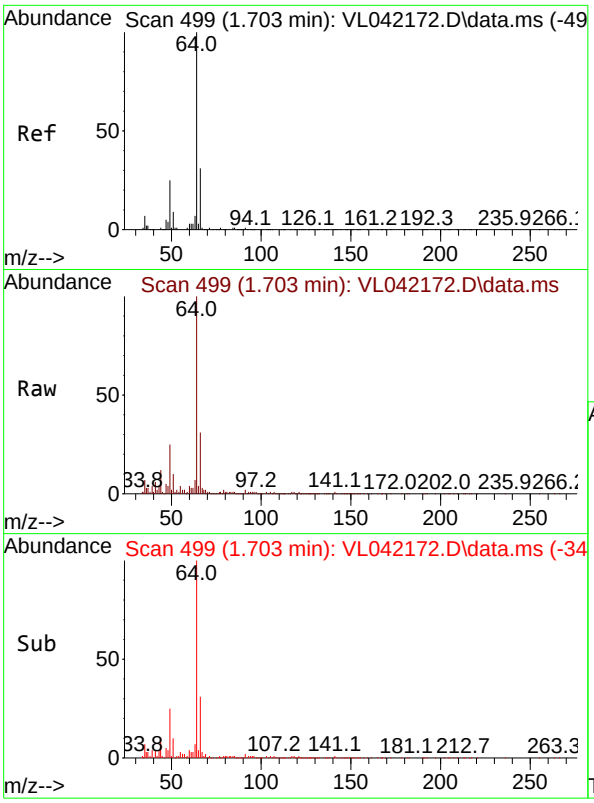


#6
Bromomethane
Concen: 9.377 ppbv
RT: 1.664 min Scan# 487
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 94 Resp: 47950

Ion	Ratio	Lower	Upper
94	100		
96	91.4	73.1	109.7



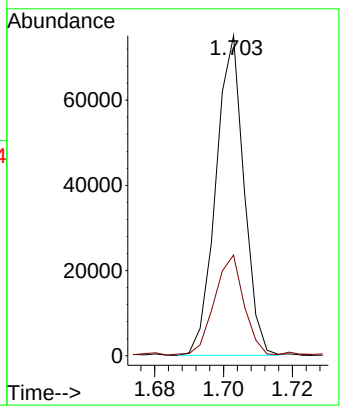


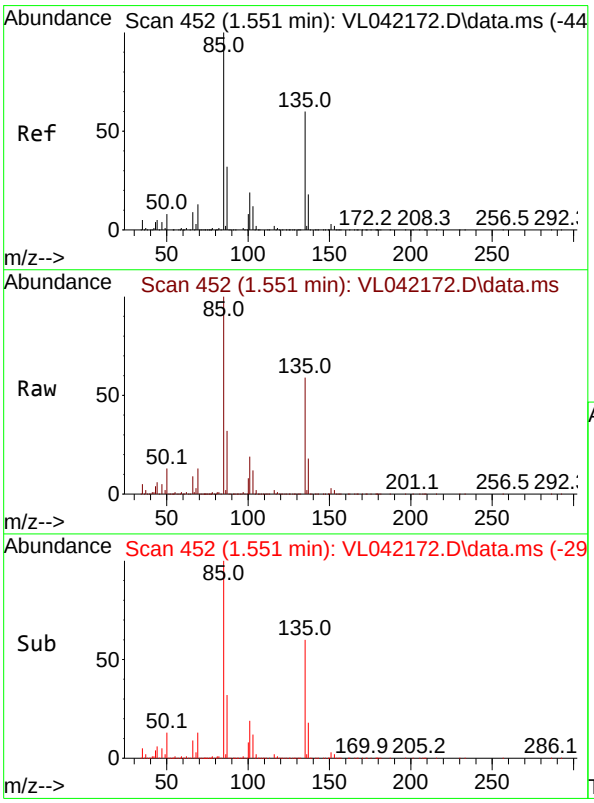
#7
Chloroethane
Concen: 9.387 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 64 Resp: 42516

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8

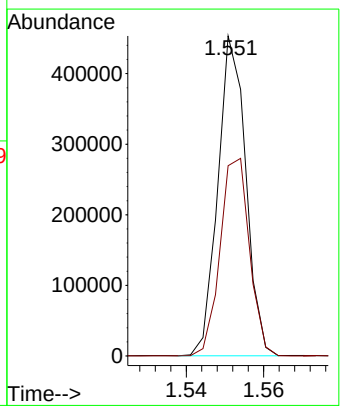


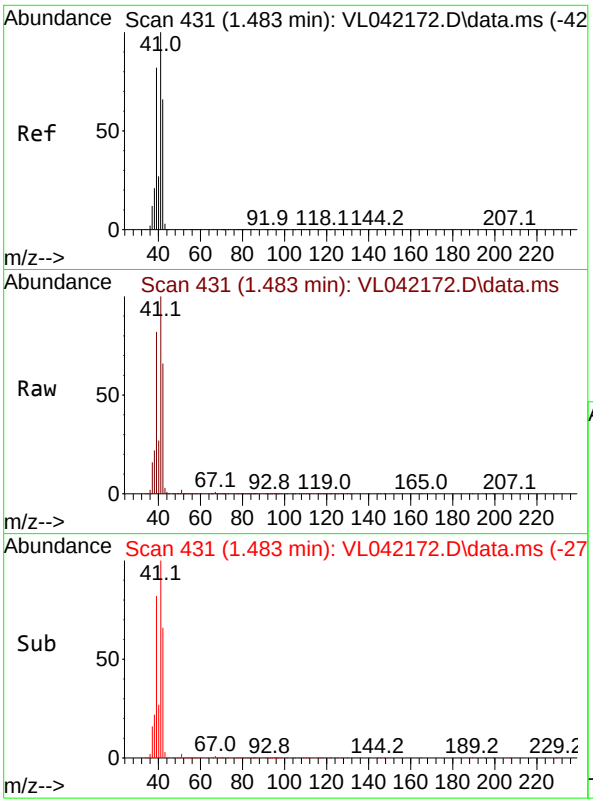


#8
Dichlorotetrafluoroethane
Concen: 9.656 ppbv
RT: 1.551 min Scan# 452
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 85 Resp: 227041

Ion	Ratio	Lower	Upper
85	100		
135	65.5	52.4	78.6



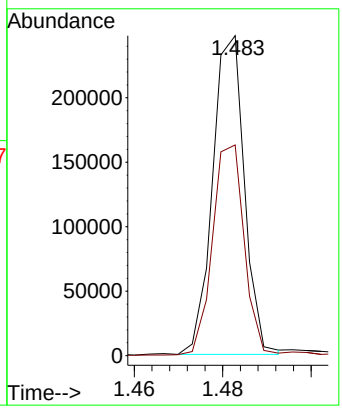


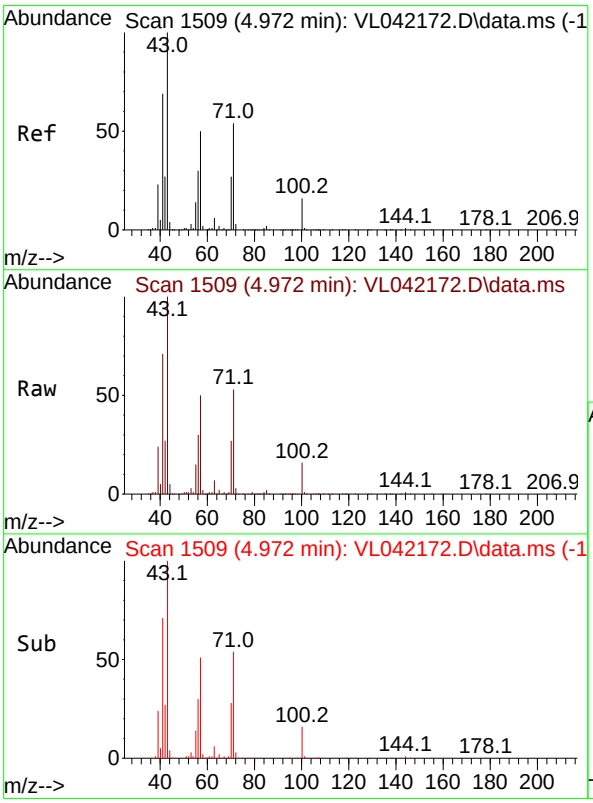
#9
Propene
Concen: 9.709 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 123386

Ion	Ratio	Lower	Upper
41	100		
42	69.3	55.4	83.2

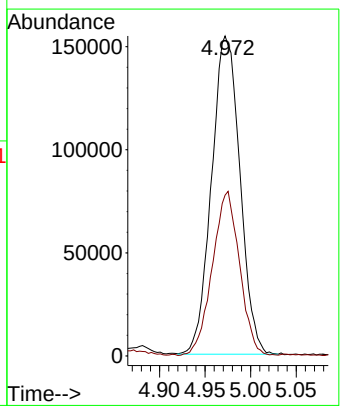


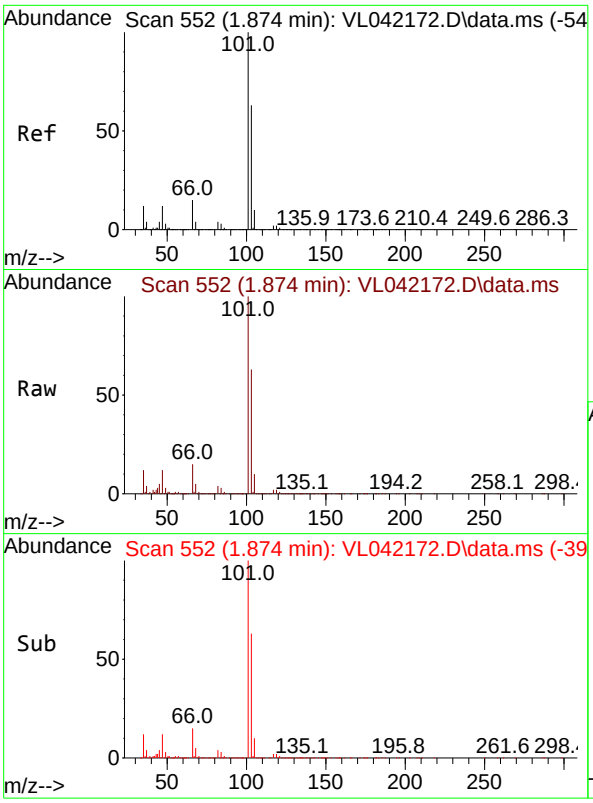


#10
Heptane
Concen: 9.744 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 335086

Ion	Ratio	Lower	Upper
43	100		
57	49.3	39.4	59.2



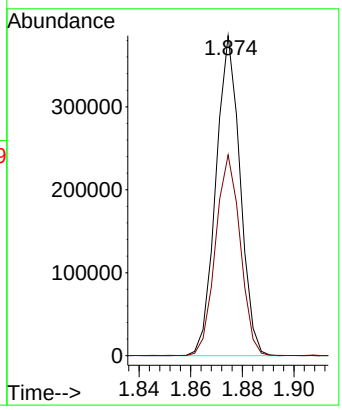


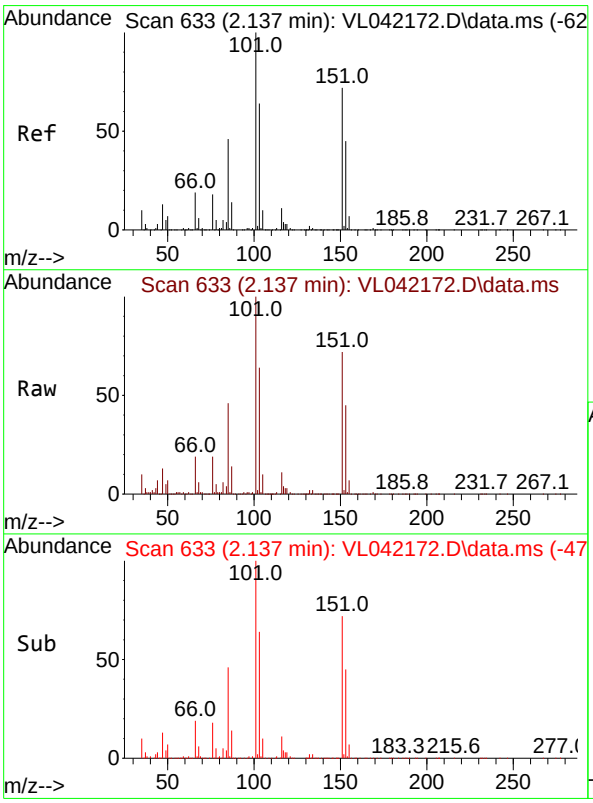
#11
Trichlorofluoromethane
Concen: 9.318 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:101 Resp: 250349

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2

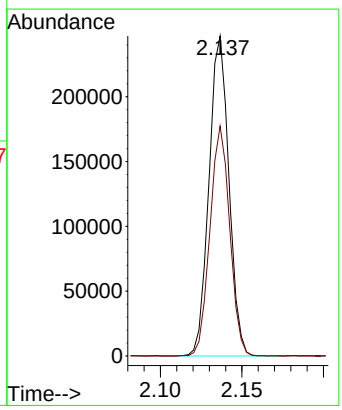


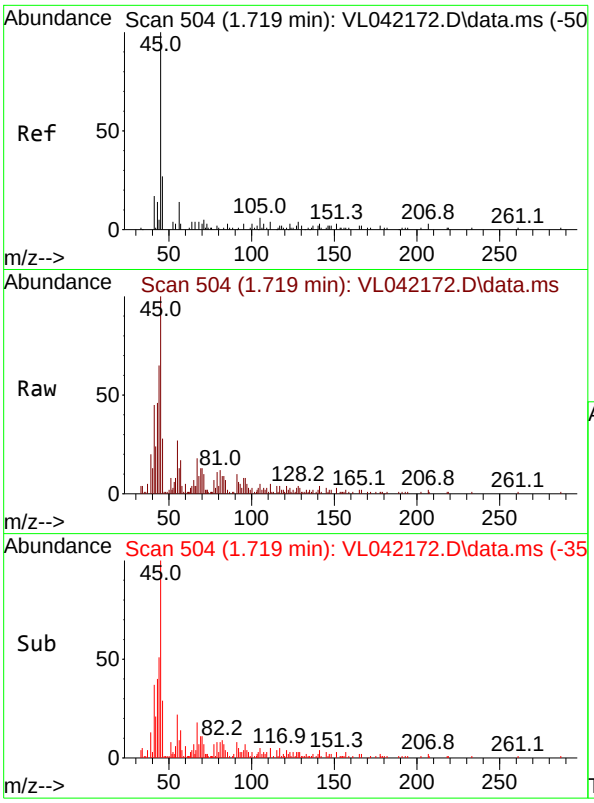


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.481 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:101 Resp: 209365

Ion	Ratio	Lower	Upper
101	100		
151	71.4	57.1	85.7



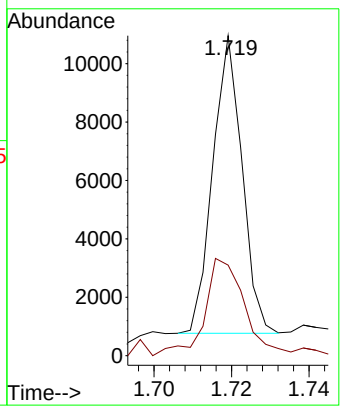


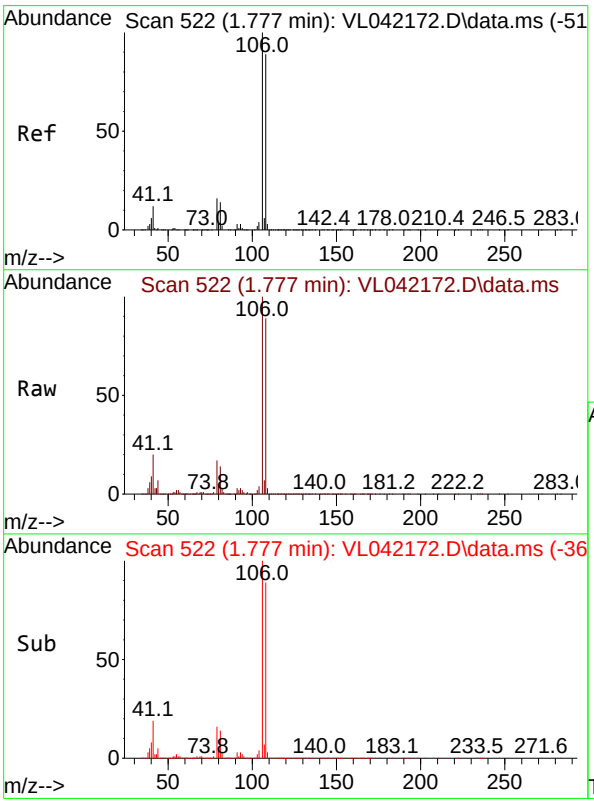
#13
Ethanol
Concen: 5.364 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 5338

Ion	Ratio	Lower	Upper
45	100		
46	50.5	20.2	80.8

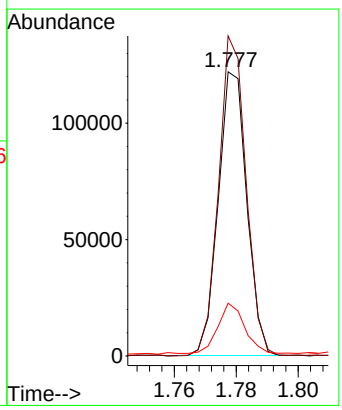


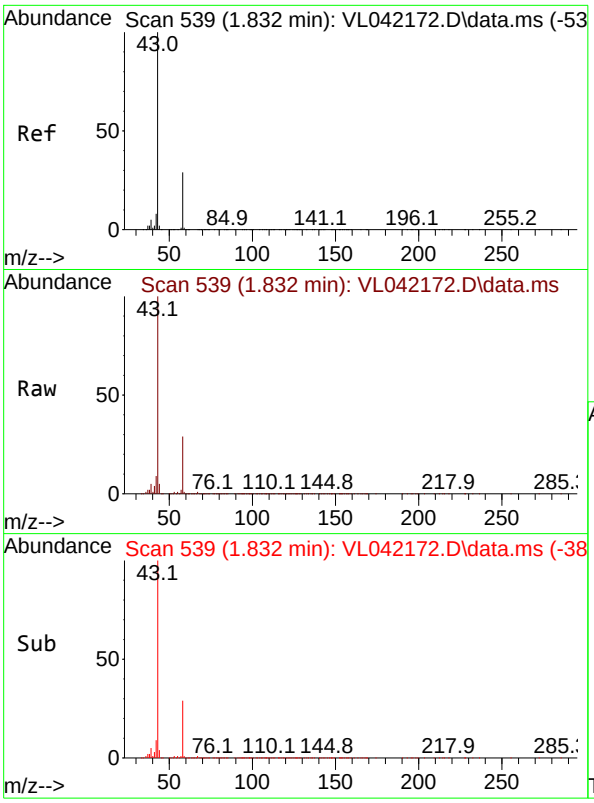


#14
Bromoethene
Concen: 9.220 ppbv
RT: 1.777 min Scan# 522
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:108 Resp: 77999

Ion	Ratio	Lower	Upper
108	100		
106	108.5	86.8	130.2
79	18.8	15.0	22.6



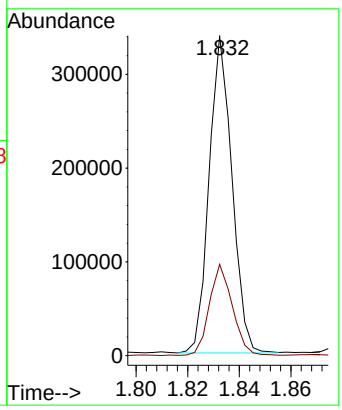


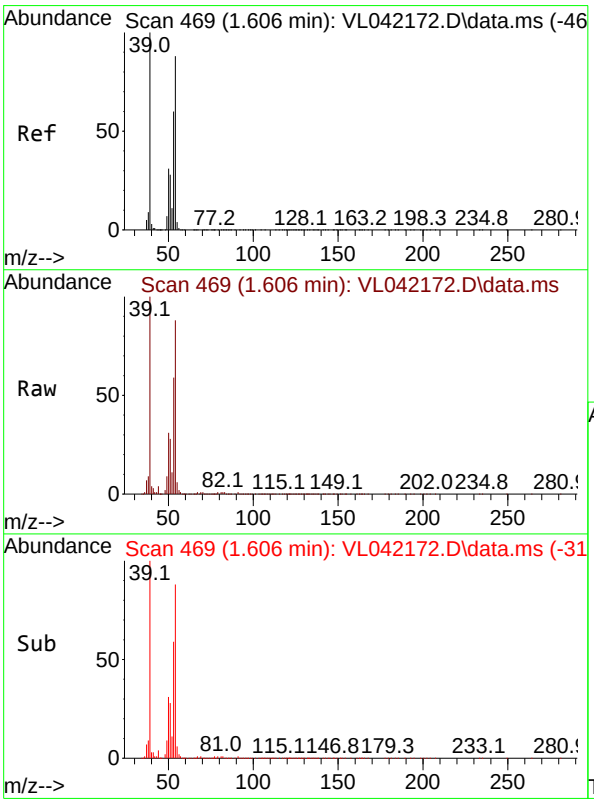
#15
Acetone
Concen: 7.955 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 208061

Ion	Ratio	Lower	Upper
43	100		
58	29.0	23.2	34.8

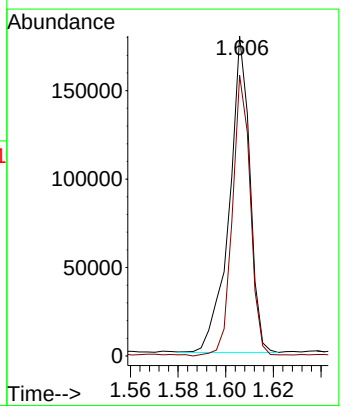


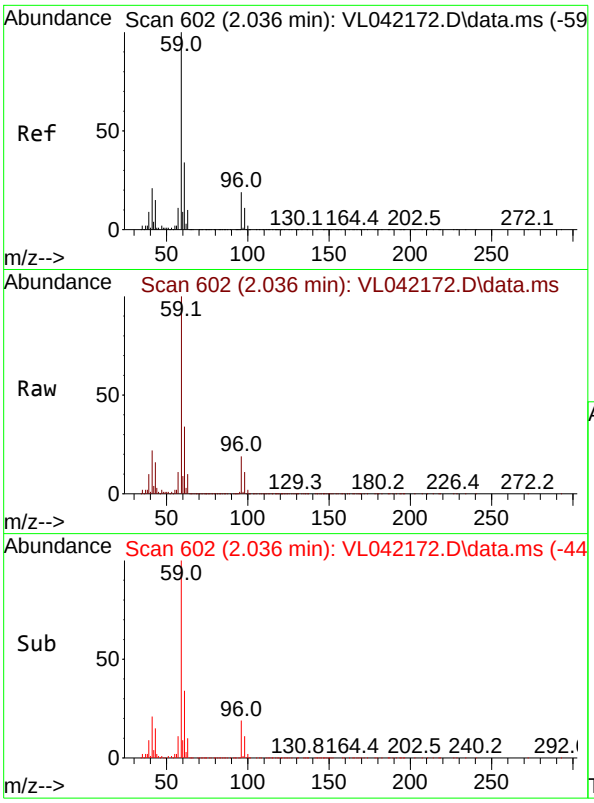


#16
1,3-Butadiene
Concen: 9.105 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 39 Resp: 107104

Ion	Ratio	Lower	Upper
39	100		
54	75.9	60.7	91.1



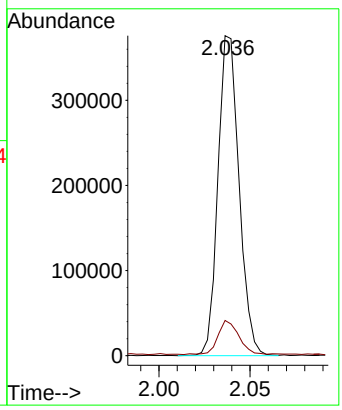


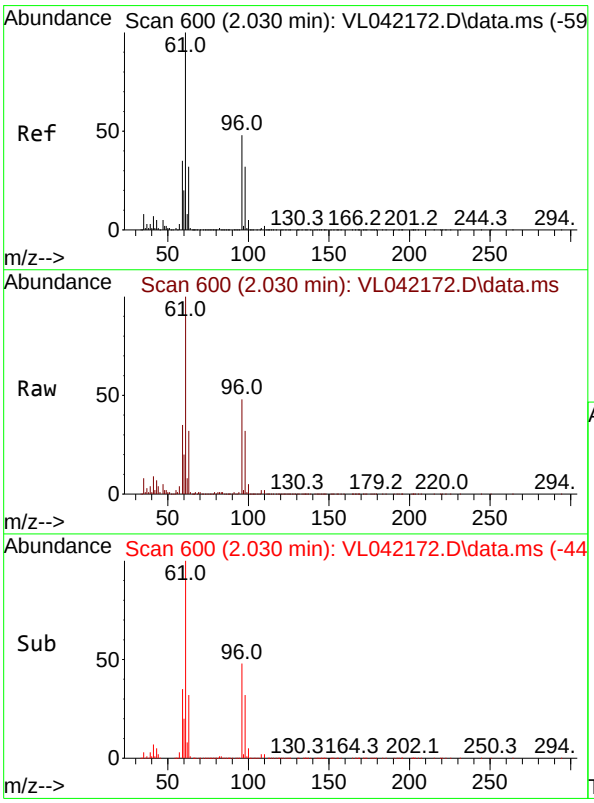
#17
tert-Butyl alcohol
Concen: 9.290 ppbv
RT: 2.036 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 59 Resp: 302616

Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.9	13.3

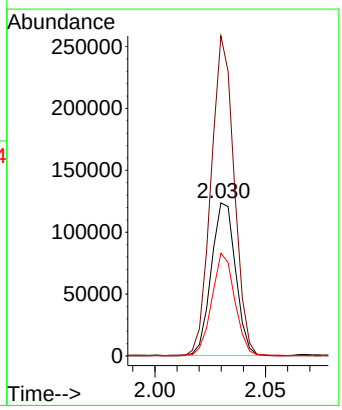


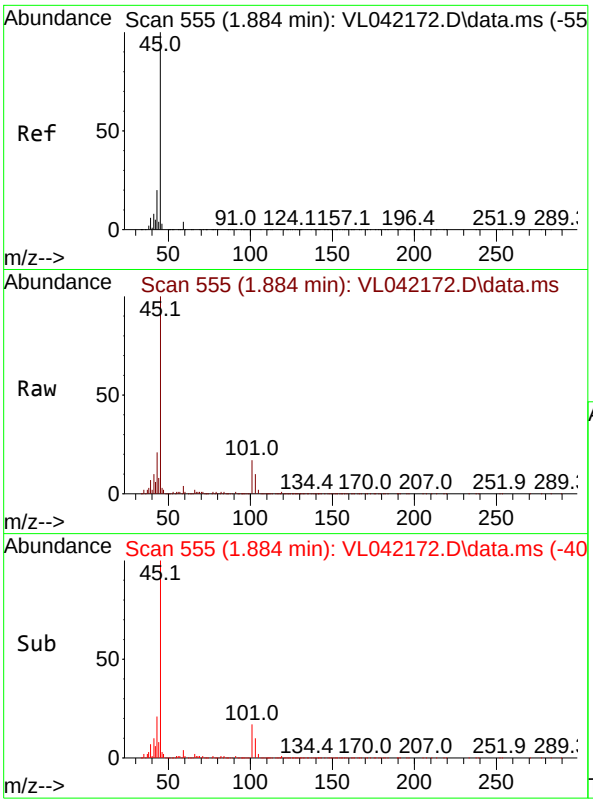


#18
1,1-Dichloroethene
Concen: 9.128 ppbv
RT: 2.030 min Scan# 600
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 94236

Ion	Ratio	Lower	Upper
96	100		
61	209.5	167.6	251.4
98	66.9	53.5	80.3



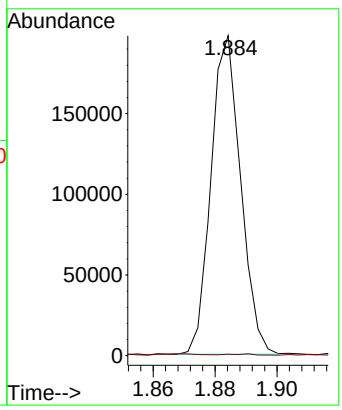


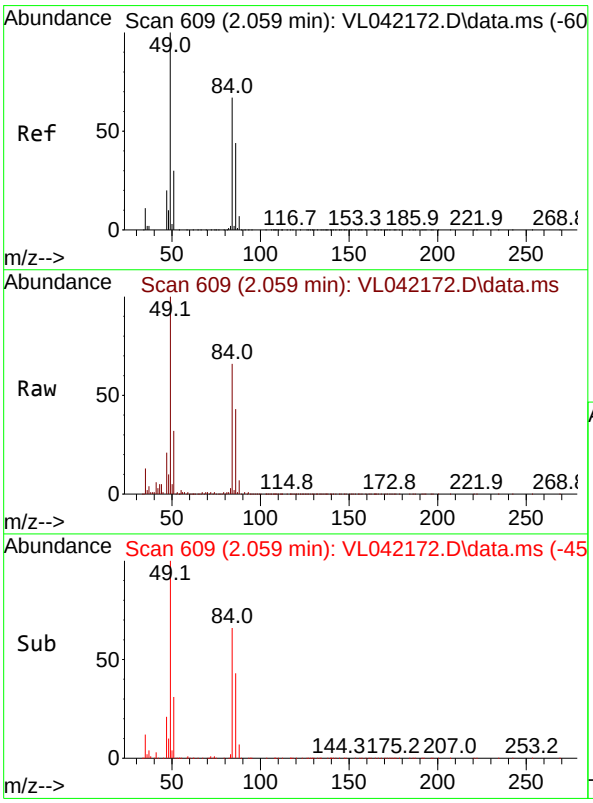
#19
Isopropyl Alcohol
Concen: 8.902 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 131359

Ion	Ratio	Lower	Upper
45	100		
58	46.1	36.9	55.3

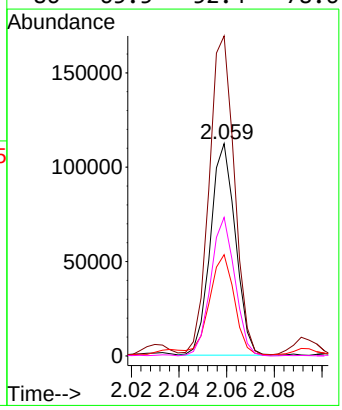


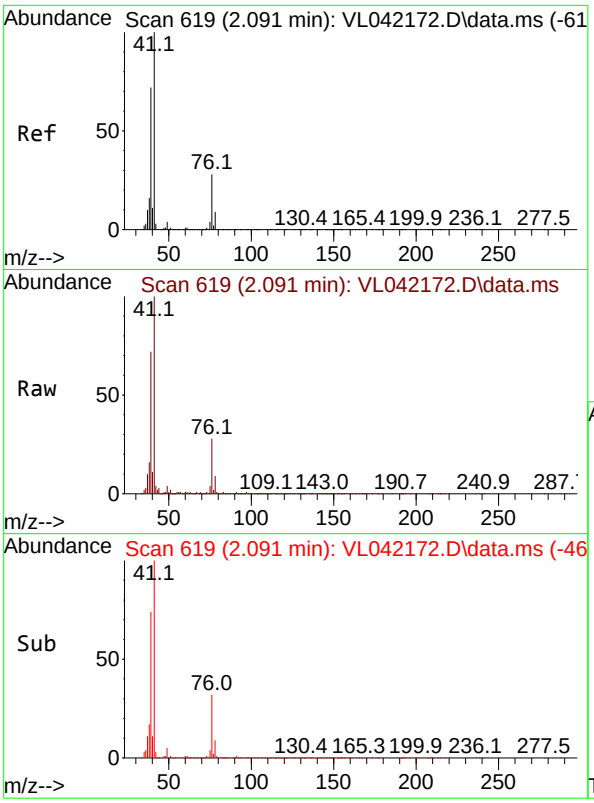


#20
Methylene Chloride
Concen: 8.401 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 81828

Ion	Ratio	Lower	Upper
84	100		
49	150.3	120.2	180.4
51	46.7	37.4	56.0
86	65.5	52.4	78.6



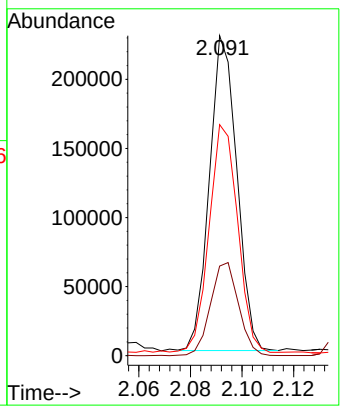


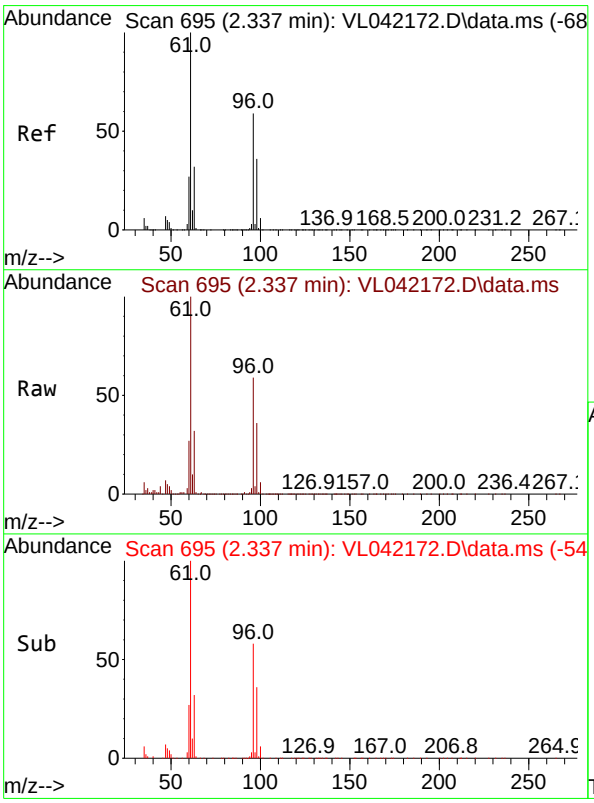
#21
Allyl Chloride
Concen: 9.141 ppbv
RT: 2.091 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 168602

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.1	36.1
39	76.4	61.1	91.7

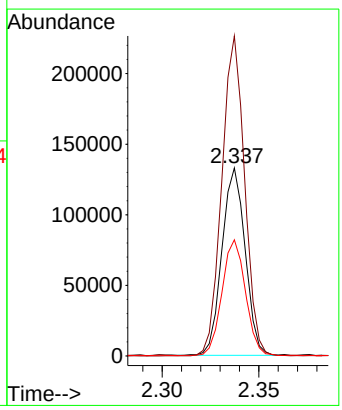


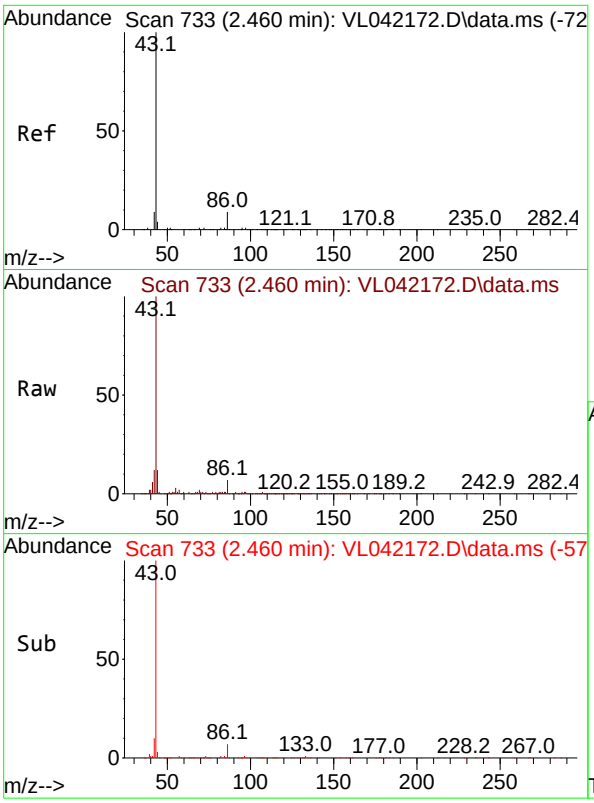


#22
trans-1,2-Dichloroethene
Concen: 9.149 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 96 Resp: 110371

Ion	Ratio	Lower	Upper
96	100		
61	170.7	136.6	204.8
98	61.8	49.4	74.2



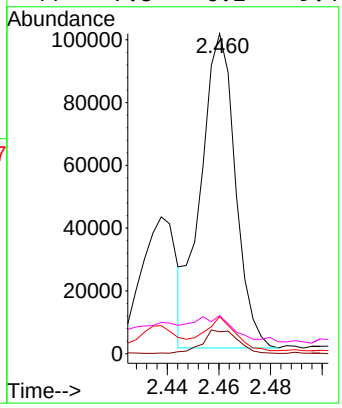


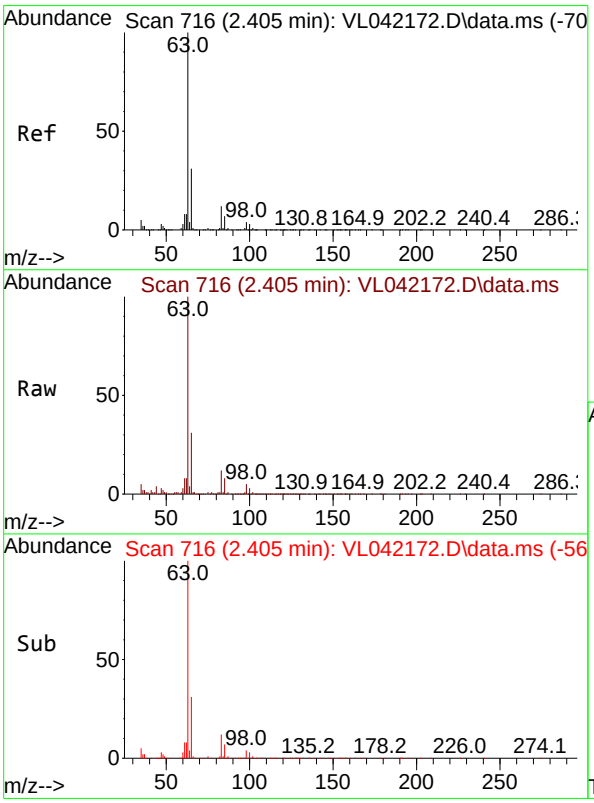
#23
Vinyl Acetate
Concen: 8.563 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 93080

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.8	8.6	13.0
44	7.8	6.2	9.4

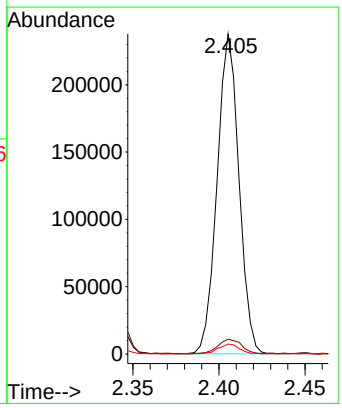


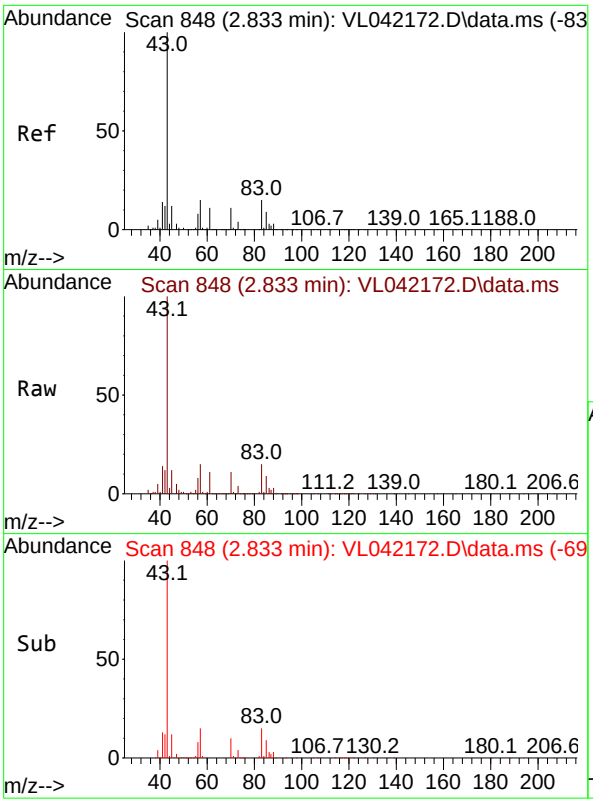


#24
1,1-Dichloroethane
Concen: 9.484 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 63 Resp: 209753

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.1	1.6	4.7



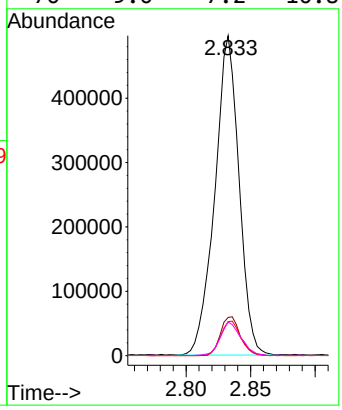


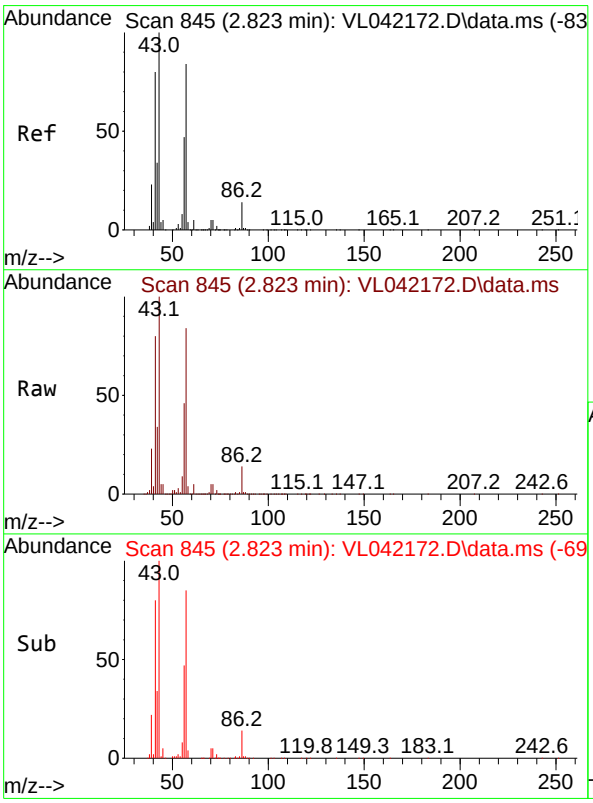
#25
Ethyl Acetate
Concen: 9.524 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 646501

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.1	7.3	10.9
70	9.0	7.2	10.8

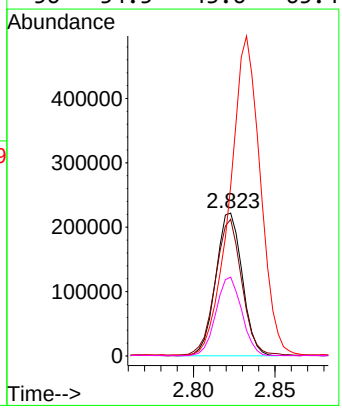


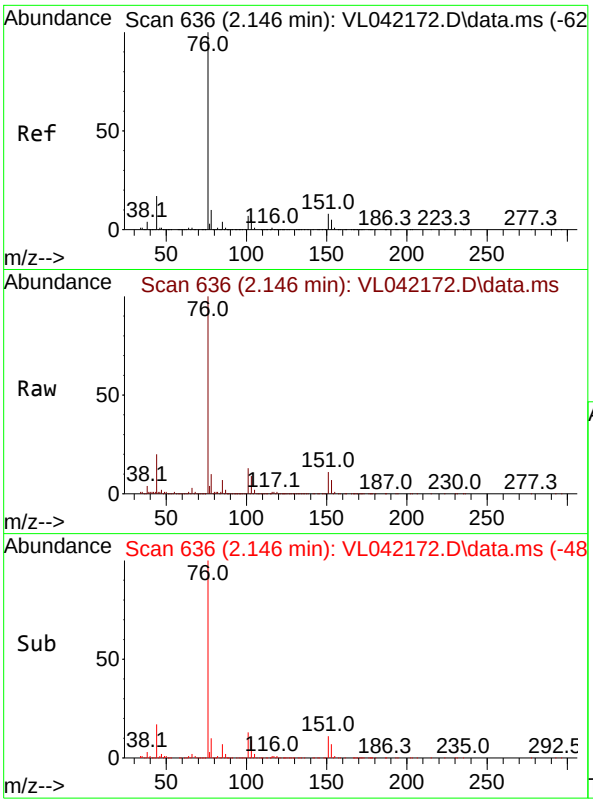


#26
Hexane
Concen: 9.510 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 249331

Ion	Ratio	Lower	Upper
57	100		
41	95.7	76.6	114.8
43	259.8	207.8	311.8
56	54.5	43.6	65.4



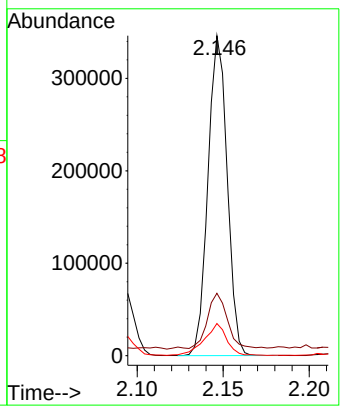


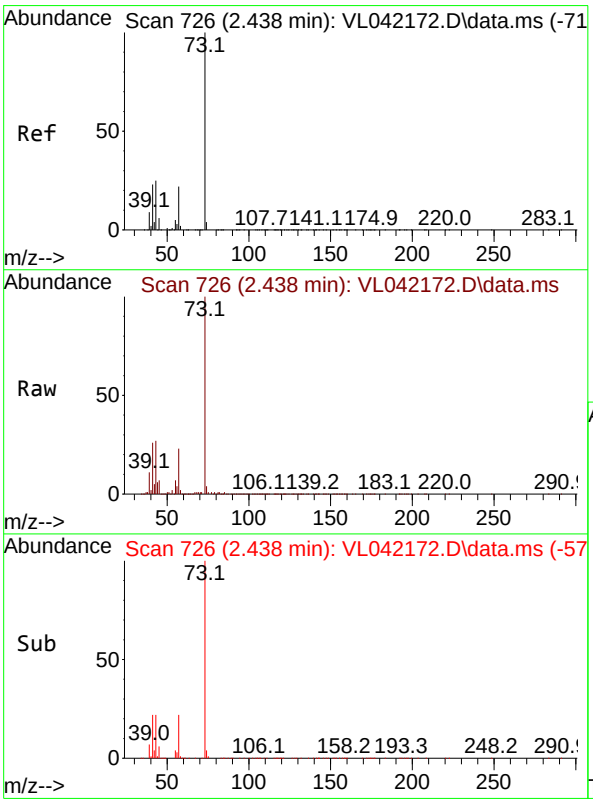
#27
Carbon Disulfide
Concen: 9.550 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 76 Resp: 268507

Ion	Ratio	Lower	Upper
76	100		
44	18.4	14.7	22.1
78	11.6	9.3	13.9

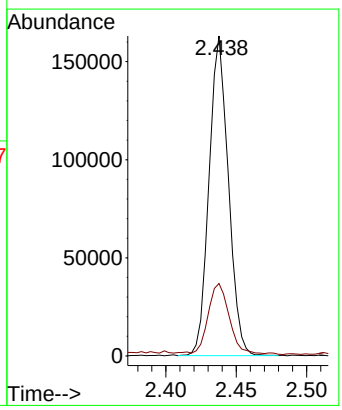


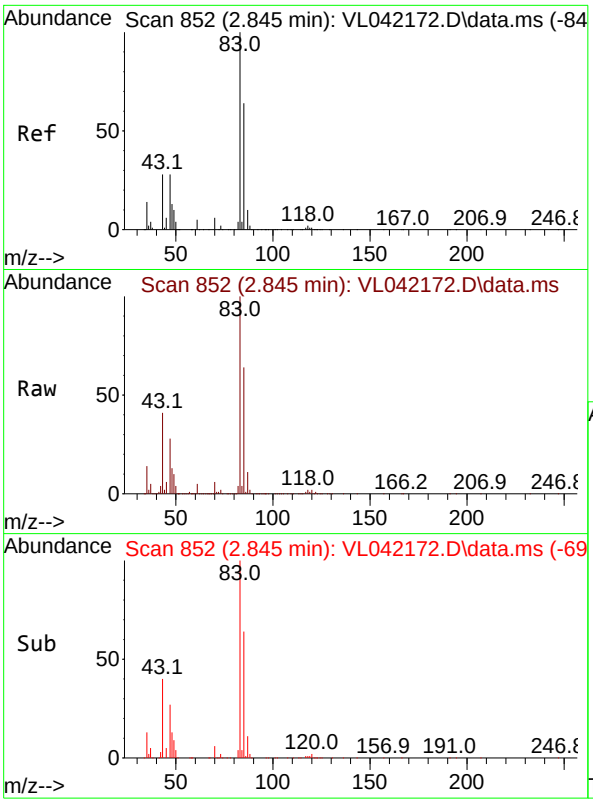


#28
Methyl tert-Butyl Ether
Concen: 9.520 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 73 Resp: 155398

Ion	Ratio	Lower	Upper
73	100		
57	25.6	20.5	30.7



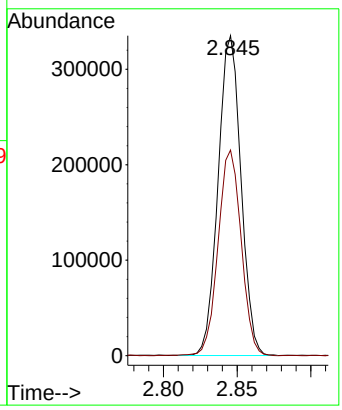


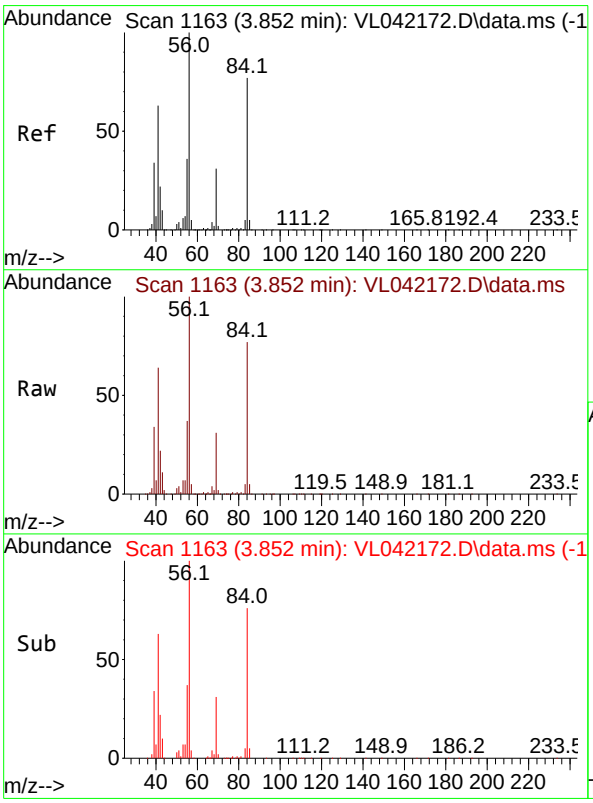
#29
Chloroform
Concen: 9.415 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 361264

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.4	77.2

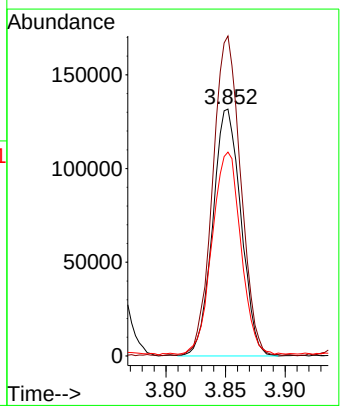


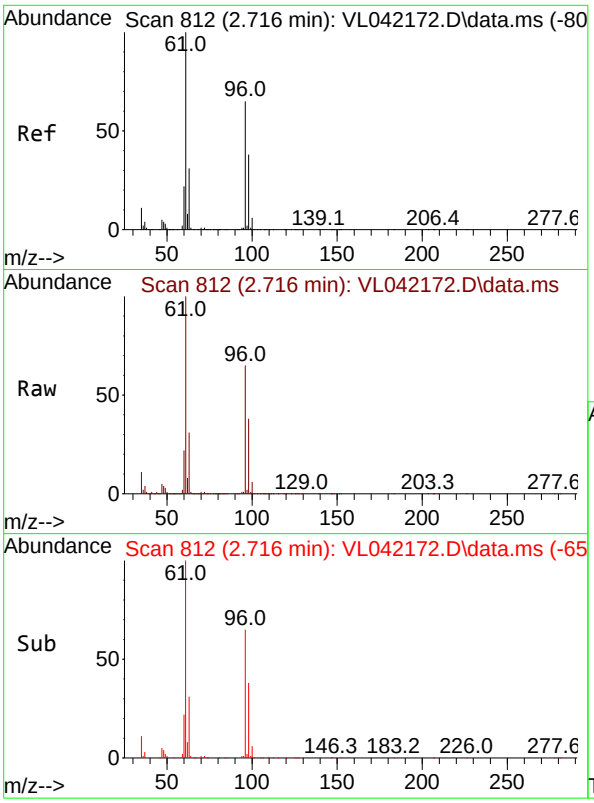


#30
Cyclohexane
Concen: 9.537 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 84 Resp: 217215

Ion	Ratio	Lower	Upper
84	100		
56	128.5	102.8	154.2
41	83.1	66.5	99.7



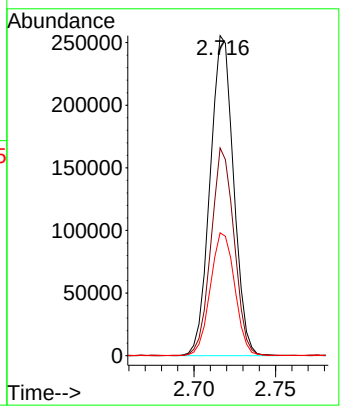


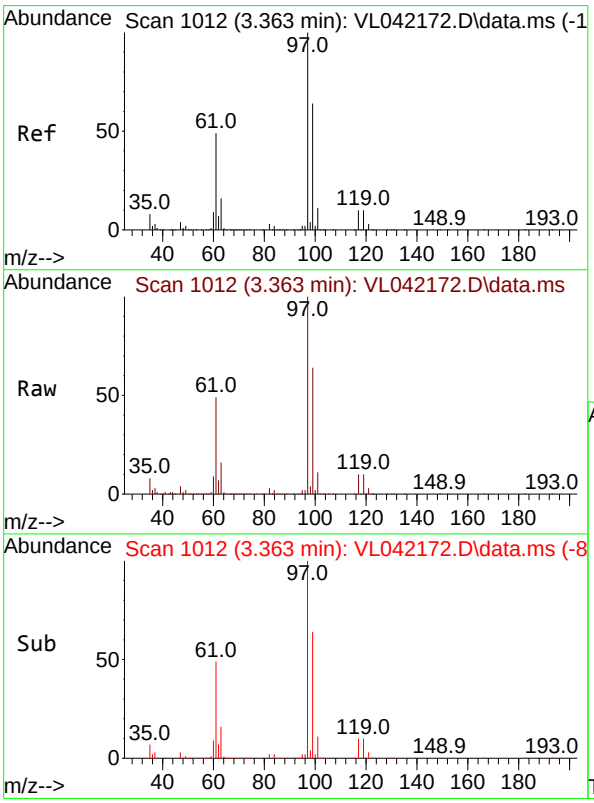
#31
cis-1,2-Dichloroethene
Concen: 9.634 ppbv
RT: 2.716 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 61 Resp: 256425

Ion	Ratio	Lower	Upper
61	100		
96	64.8	51.8	77.8
98	38.3	30.6	46.0

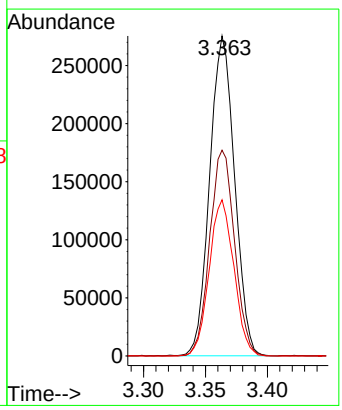


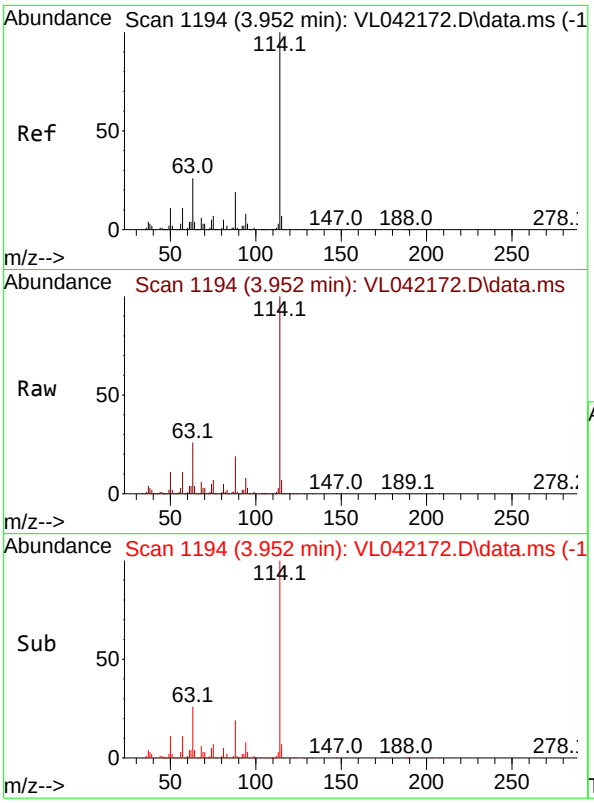


#32
1,1,1-Trichloroethane
Concen: 8.784 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 97 Resp: 385628

Ion	Ratio	Lower	Upper
97	100		
99	64.4	51.5	77.3
61	48.4	38.7	58.1



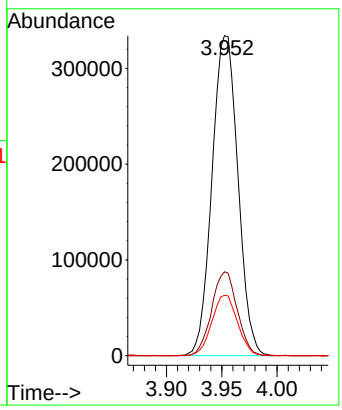


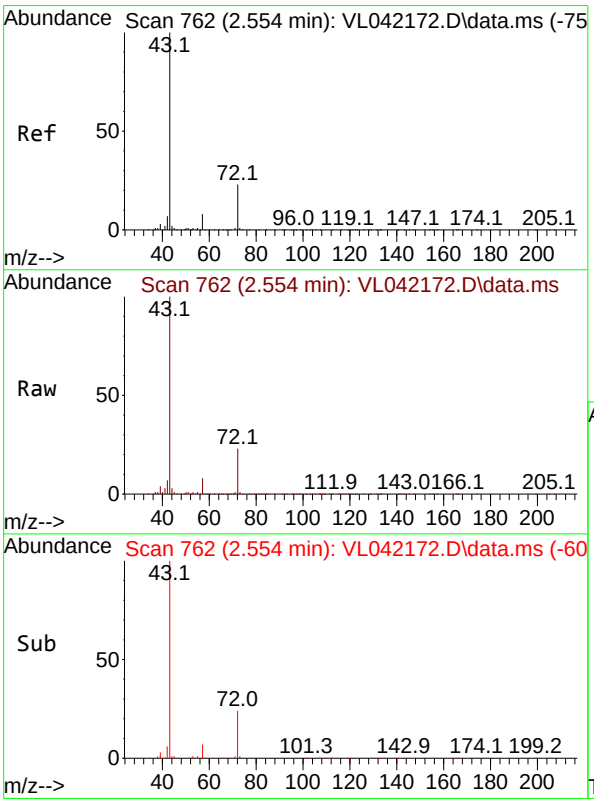
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:114 Resp: 545068

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.7	15.0	22.4

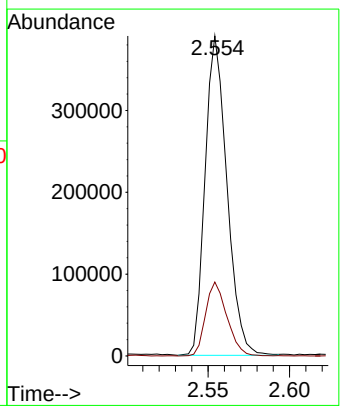


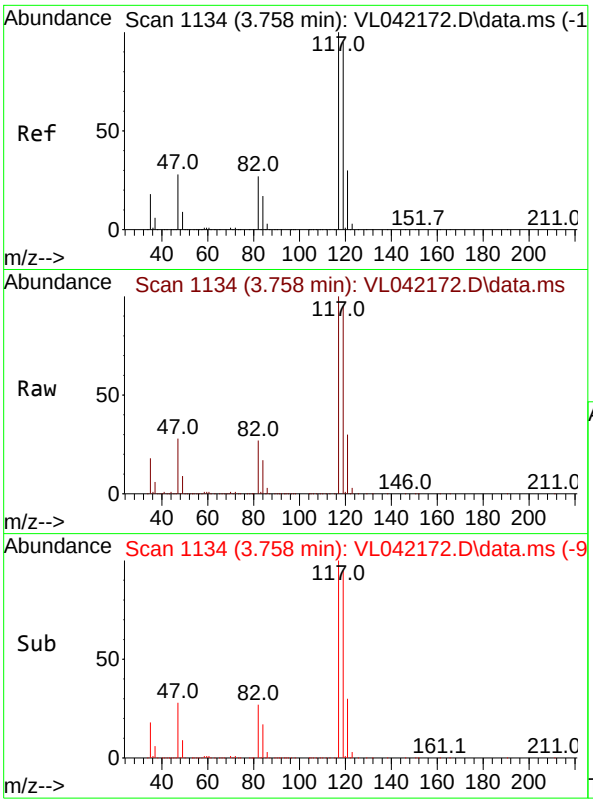


#34
2-Butanone
Concen: 9.203 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 363735

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2



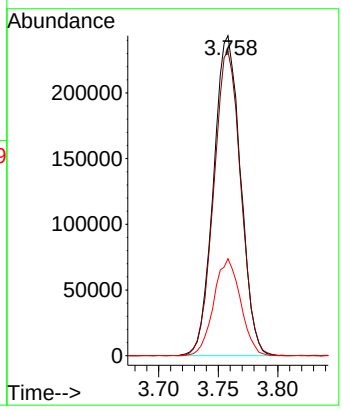


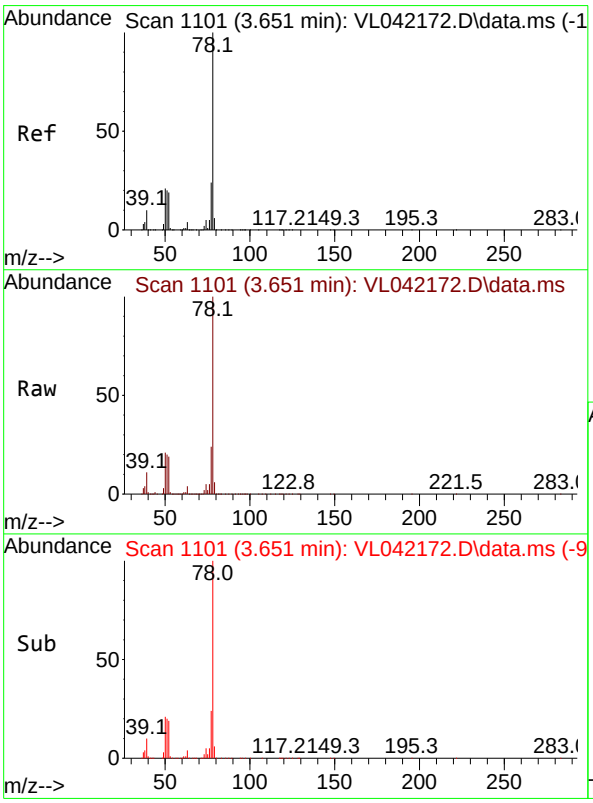
#35
Carbon Tetrachloride
Concen: 9.129 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 382925

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	30.3	24.2	36.4

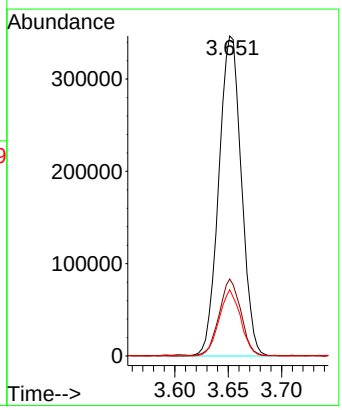


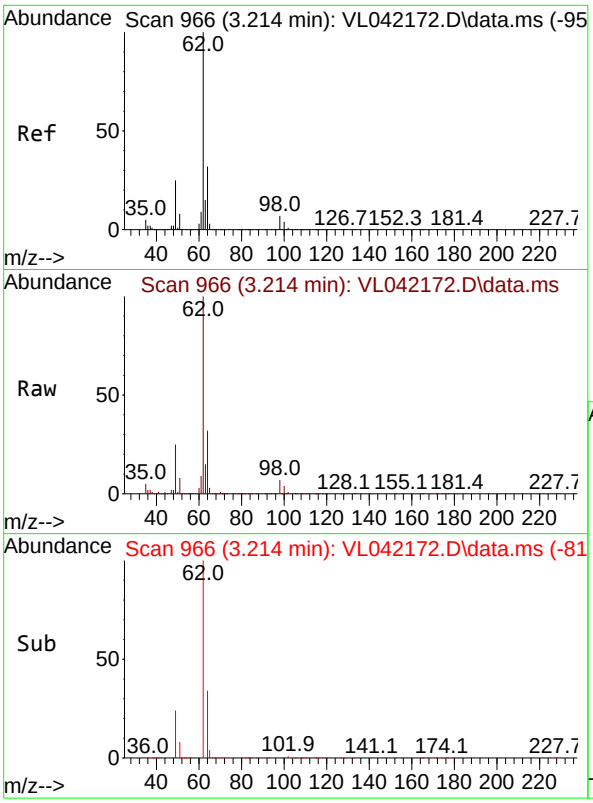


#36
Benzene
Concen: 9.417 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 78 Resp: 508860

Ion	Ratio	Lower	Upper
78	100		
77	23.9	19.1	28.7
50	20.7	16.6	24.8



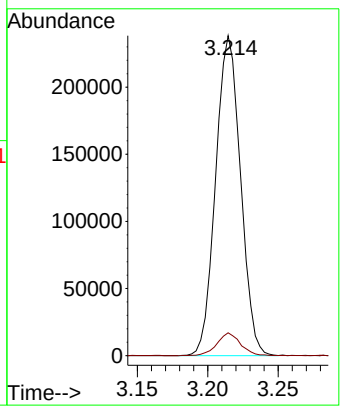


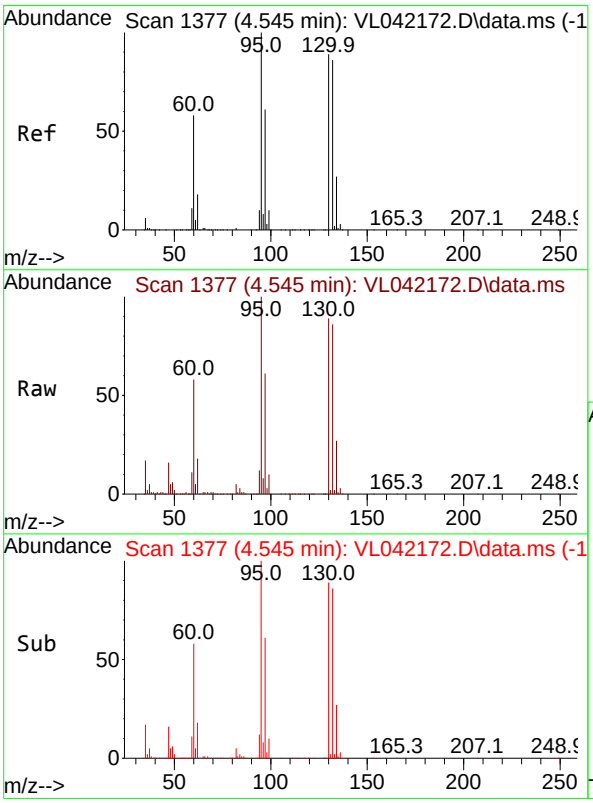
#37
1,2-Dichloroethane
Concen: 9.469 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 292937

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2

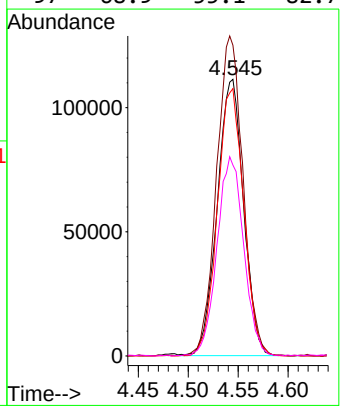


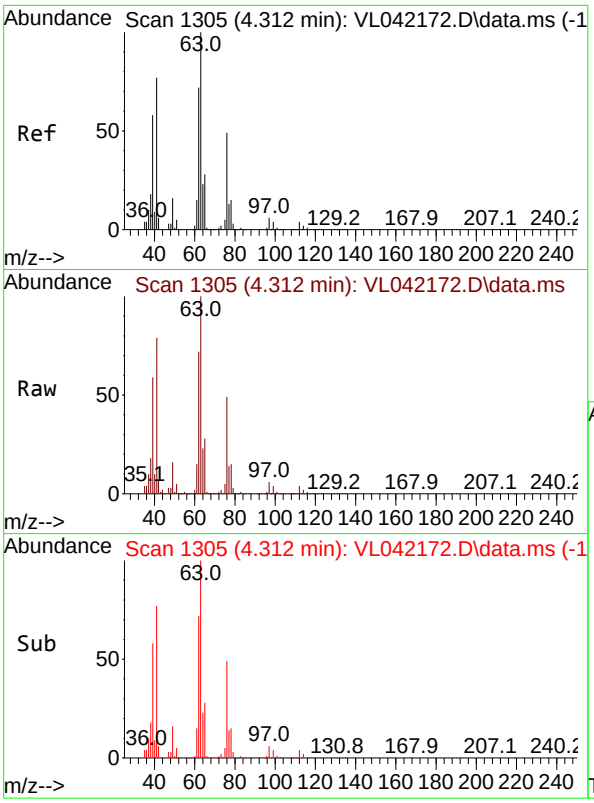


#38
Trichloroethene
Concen: 9.045 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:130 Resp: 204027

Ion	Ratio	Lower	Upper
130	100		
95	112.3	89.8	134.8
132	96.8	77.4	116.2
97	68.9	55.1	82.7



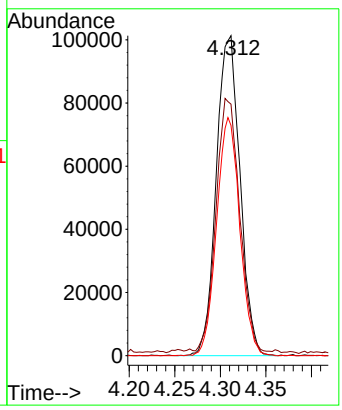


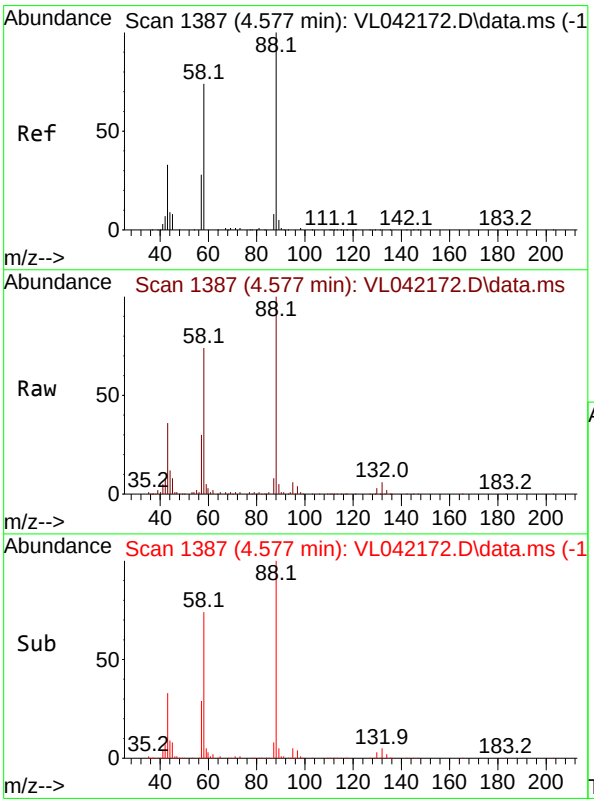
#39
1,2-Dichloropropane
Concen: 9.321 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 63 Resp: 183439

Ion	Ratio	Lower	Upper
63	100		
41	77.1	61.7	92.5
62	72.0	57.6	86.4

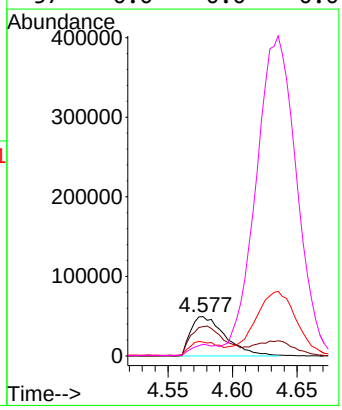


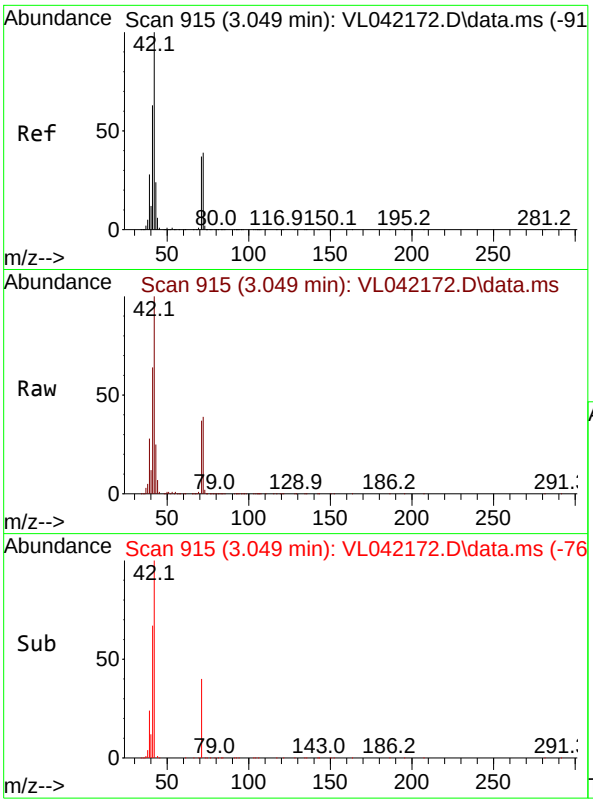


#40
1,4-Dioxane
Concen: 9.042 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 88 Resp: 92327

Ion	Ratio	Lower	Upper
88	100		
58	78.4	62.7	94.1
43	28.7	23.0	34.4
57	0.0	0.0	0.0



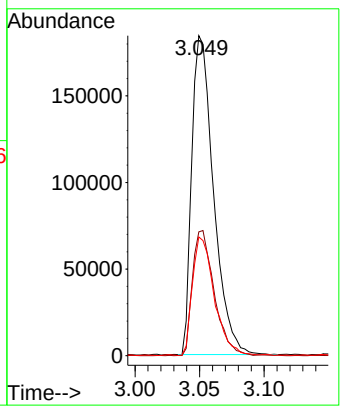


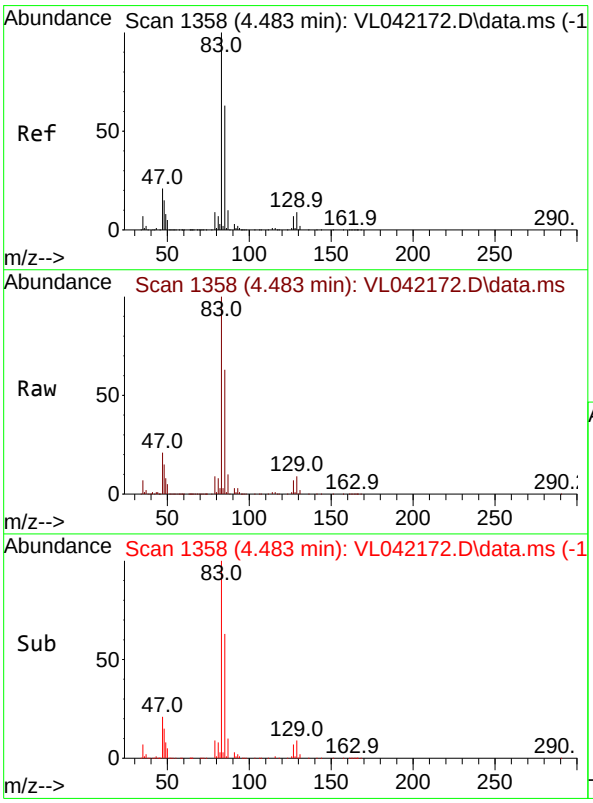
#41
Tetrahydrofuran
Concen: 9.643 ppbv
RT: 3.049 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 42 Resp: 216851

Ion	Ratio	Lower	Upper
42	100		
72	39.2	31.4	47.0
71	37.8	30.2	45.4

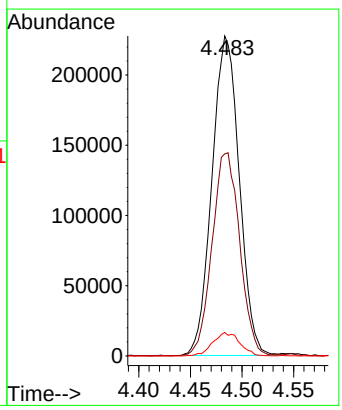


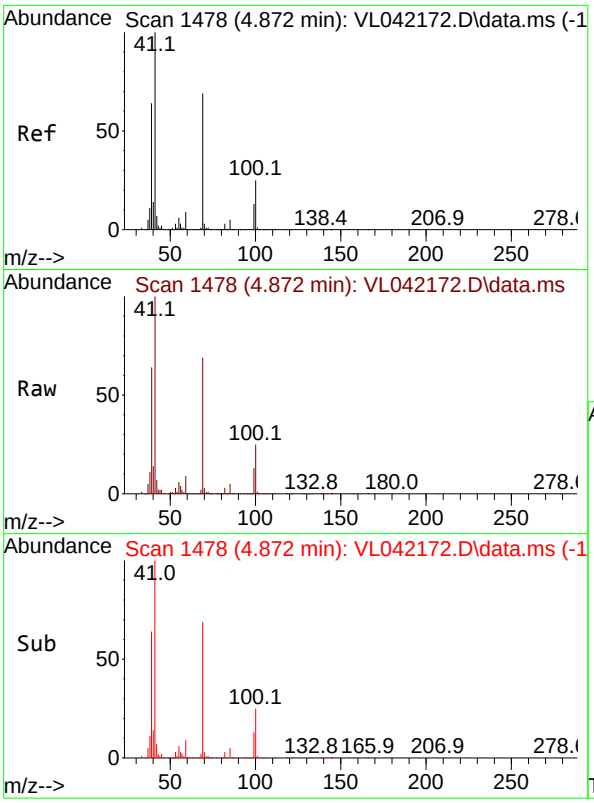


#42
Bromodichloromethane
Concen: 9.822 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 83 Resp: 418887

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9



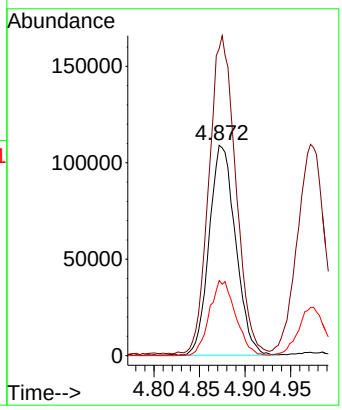


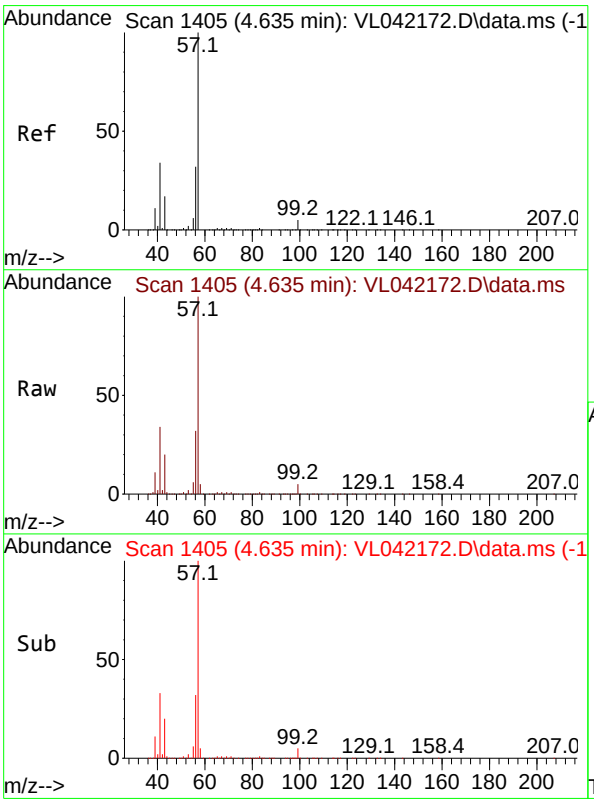
#43
Methyl Methacrylate
Concen: 9.618 ppbv
RT: 4.872 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 69 Resp: 219399

Ion	Ratio	Lower	Upper
69	100		
41	154.7	123.8	185.6
100	35.5	28.4	42.6

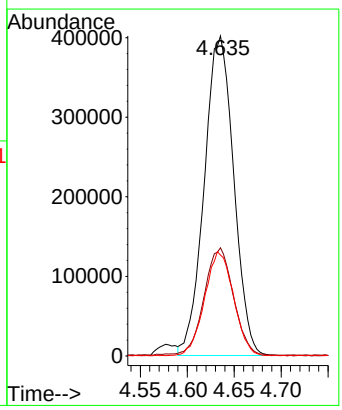


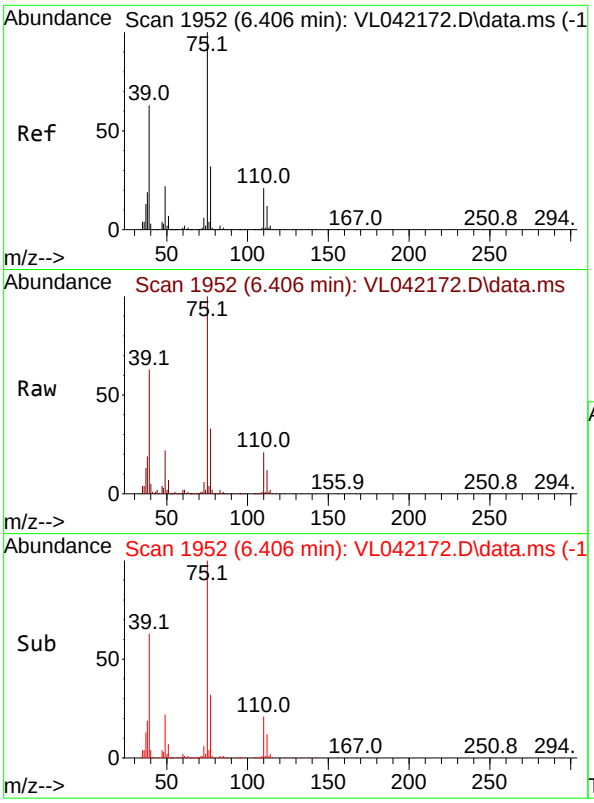


#44
2,2,4-Trimethylpentane
Concen: 9.600 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 57 Resp: 876649

Ion	Ratio	Lower	Upper
57	100		
41	33.5	26.8	40.2
56	32.0	25.6	38.4



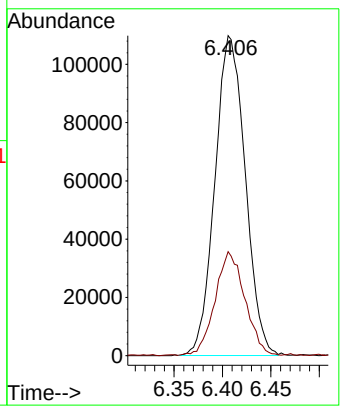


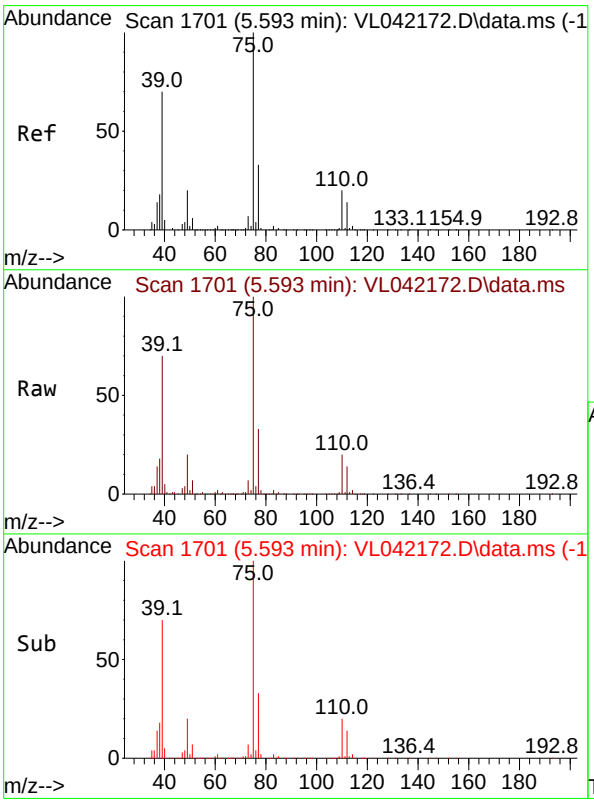
#45
t-1,3-Dichloropropene
Concen: 9.746 ppbv
RT: 6.406 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 75 Resp: 239180

Ion	Ratio	Lower	Upper
75	100		
77	32.5	26.0	39.0

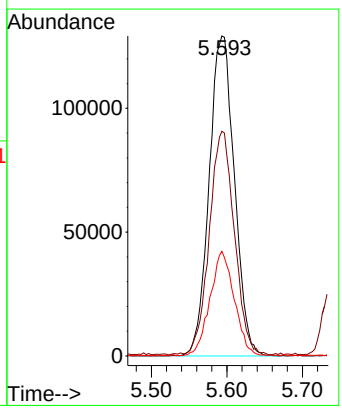


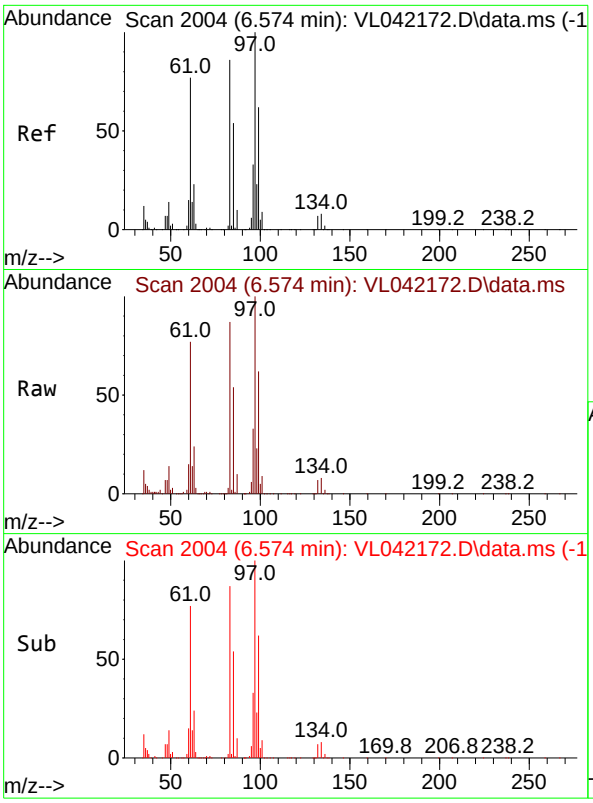


#46
cis-1,3-Dichloropropene
Concen: 9.973 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 75 Resp: 300021

Ion	Ratio	Lower	Upper
75	100		
39	69.7	55.8	83.6
77	32.5	26.0	39.0



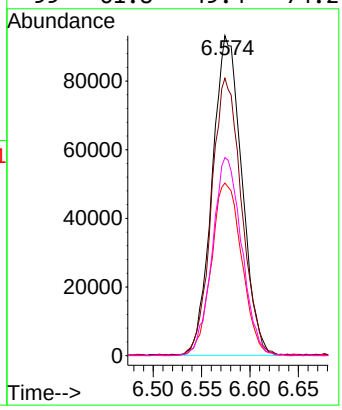


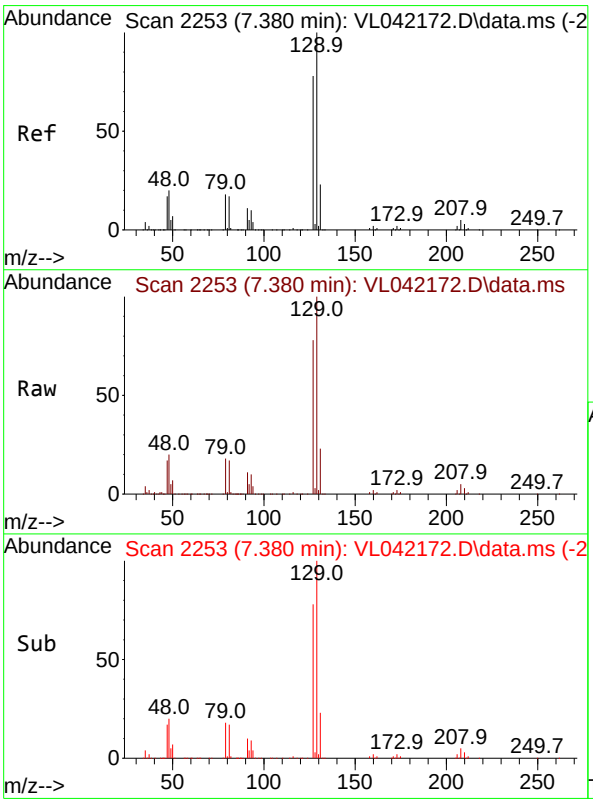
#47
1,1,2-Trichloroethane
Concen: 9.526 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 97 Resp: 198176

Ion	Ratio	Lower	Upper
97	100		
83	86.5	69.2	103.8
85	53.9	43.1	64.7
99	61.8	49.4	74.2

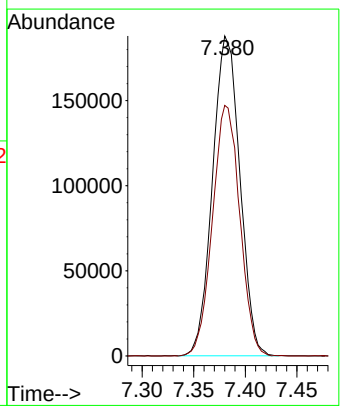


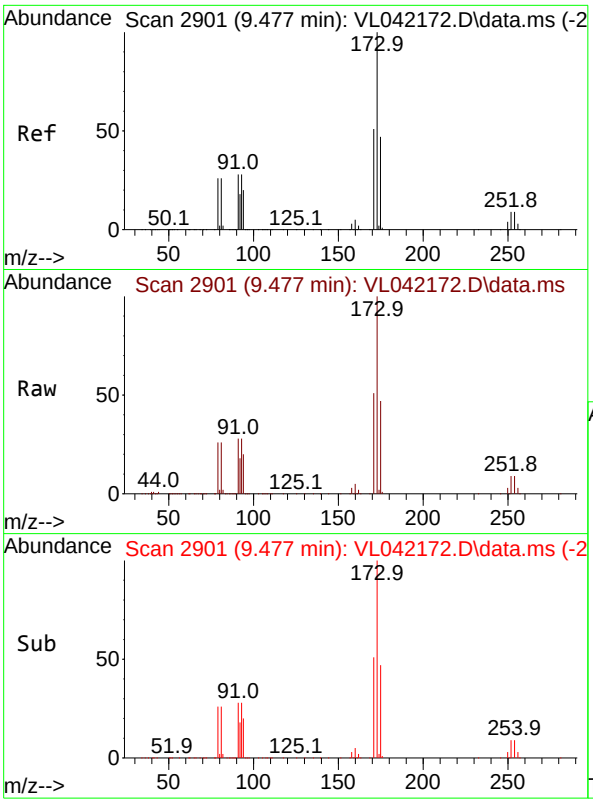


#48
Dibromochloromethane
Concen: 9.828 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:129 Resp: 346499

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2



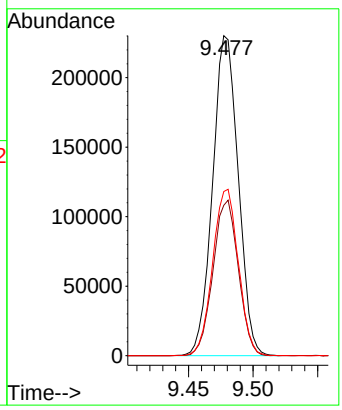


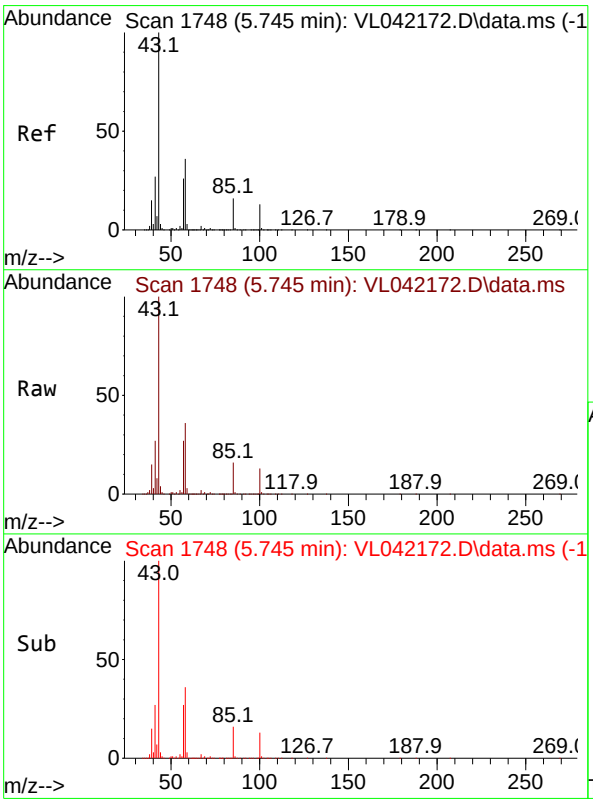
#49
Bromoform
Concen: 10.021 ppbv
RT: 9.477 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:173 Resp: 317189

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.6	57.8
171	52.2	41.8	62.6

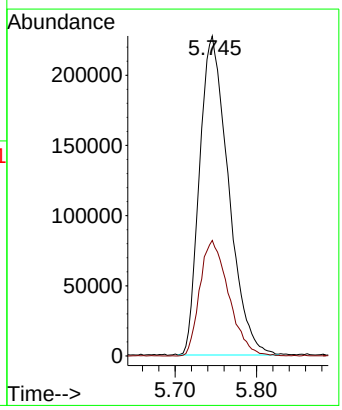


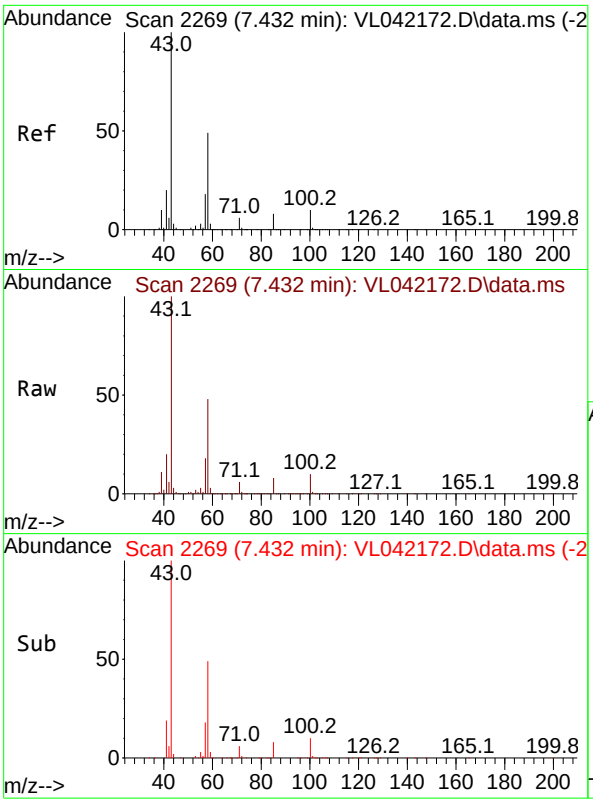


#50
4-Methyl-2-Pentanone
Concen: 8.934 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 43 Resp: 559800

Ion	Ratio	Lower	Upper
43	100		
58	36.3	29.0	43.6



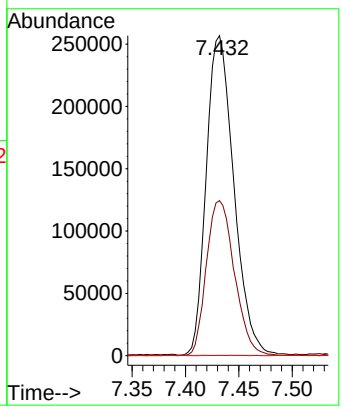


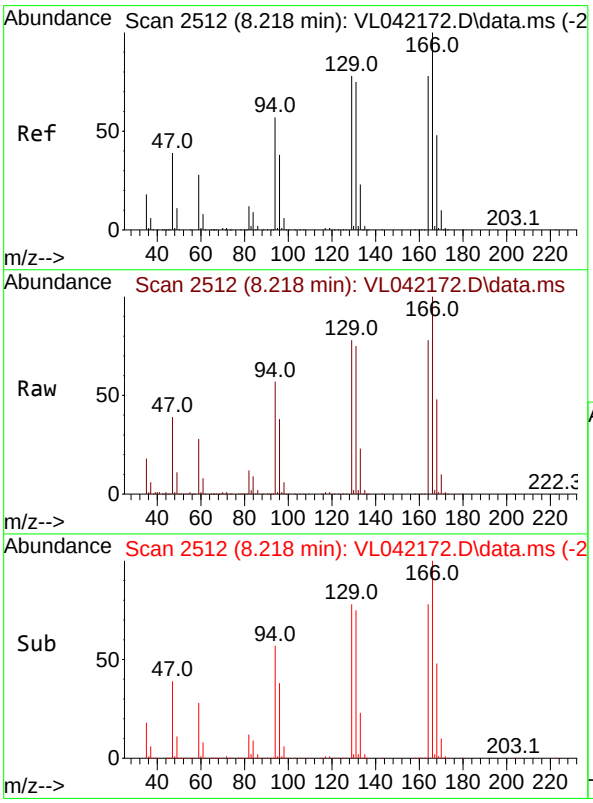
#51
2-Hexanone
Concen: 8.848 ppbv
RT: 7.432 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 460013

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

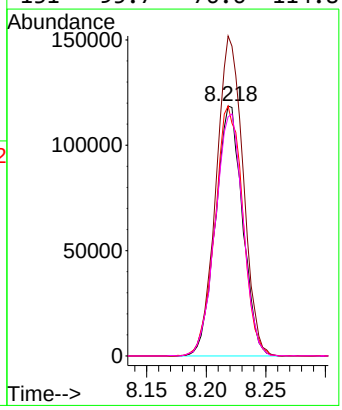


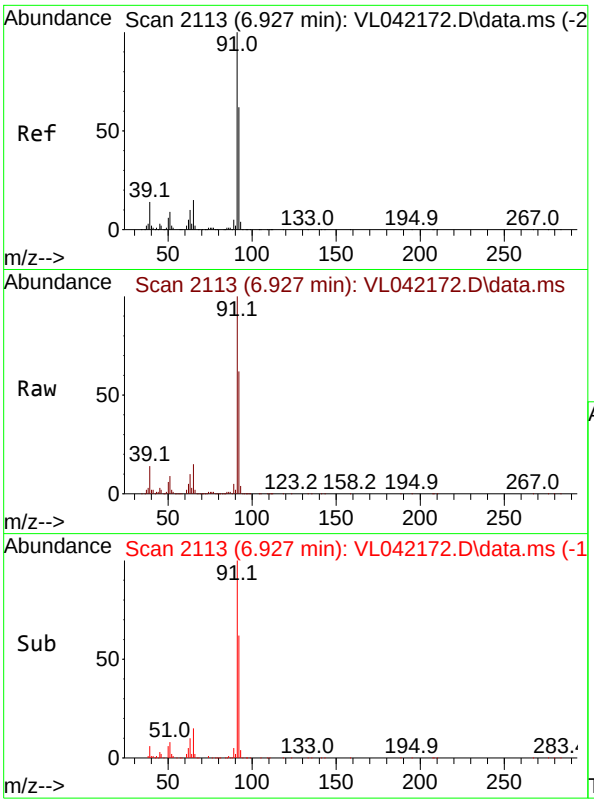


#52
Tetrachloroethene
Concen: 8.722 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:164 Resp: 186912

Ion	Ratio	Lower	Upper
164	100		
166	128.1	102.5	153.7
129	99.8	79.8	119.8
131	95.7	76.6	114.8



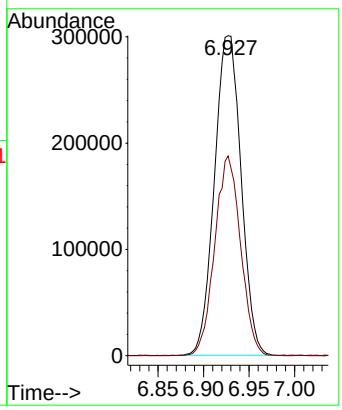


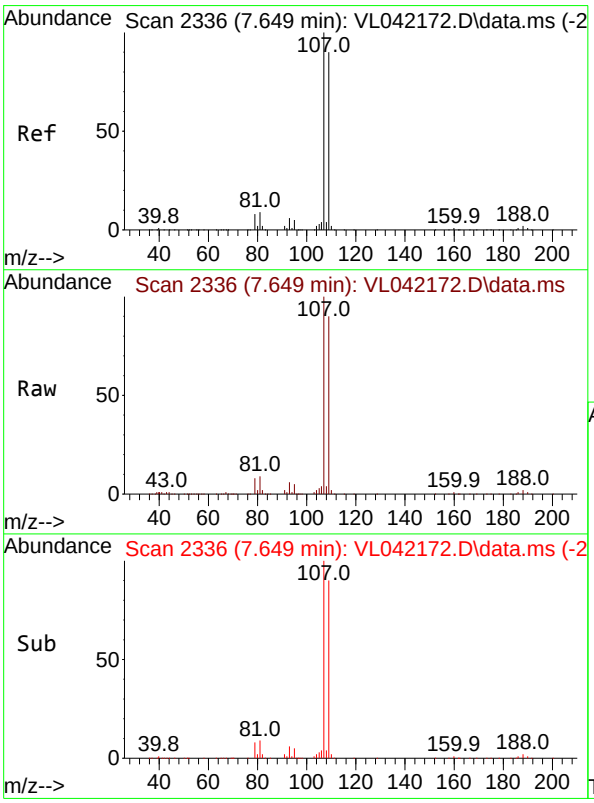
#53
Toluene
Concen: 9.576 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 613378

Ion	Ratio	Lower	Upper
91	100		
92	60.5	48.4	72.6

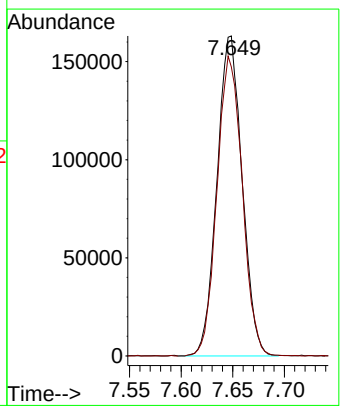


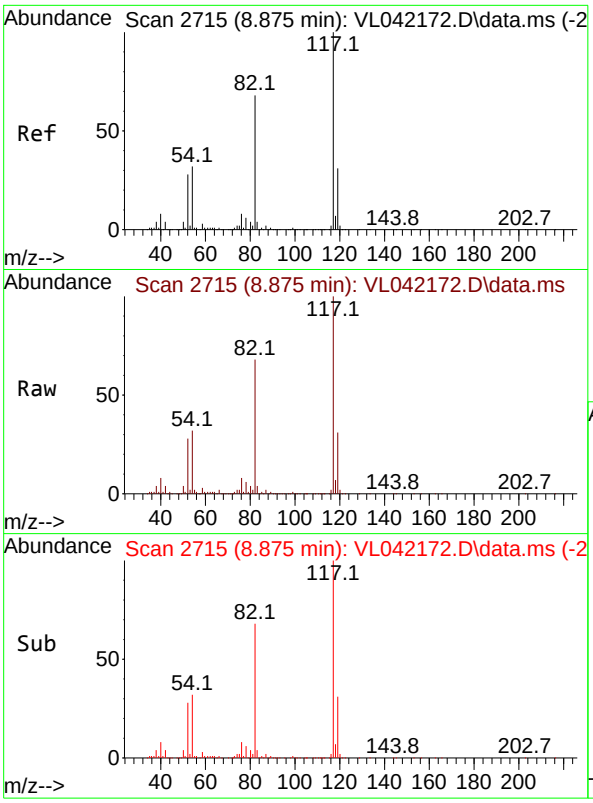


#54
1,2-Dibromoethane
Concen: 9.536 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:107 Resp: 276797

Ion	Ratio	Lower	Upper
107	100		
109	90.3	72.2	108.4



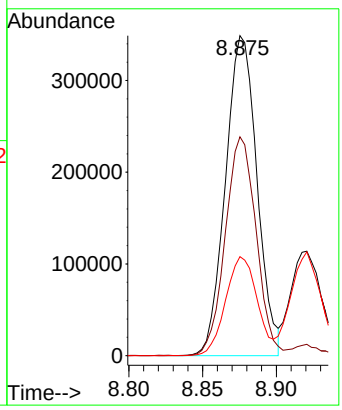


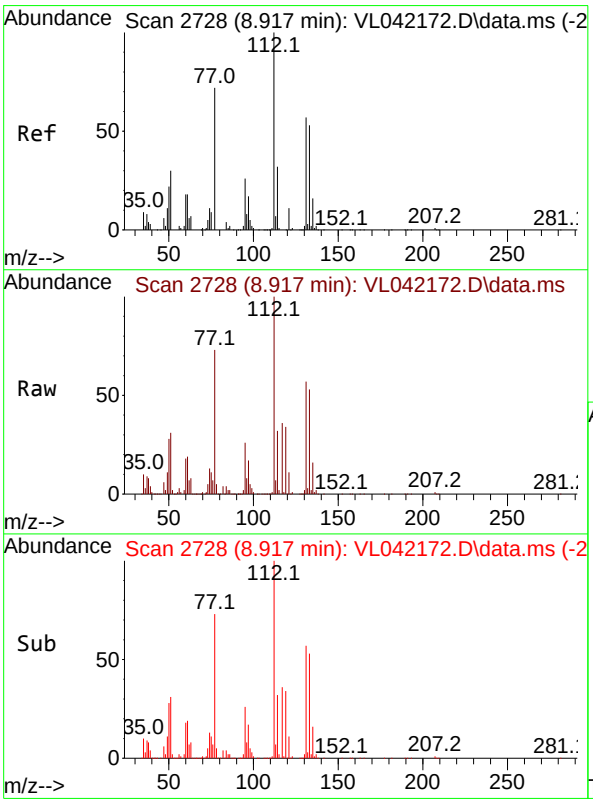
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 519536

Ion	Ratio	Lower	Upper
117	100		
82	69.7	55.8	83.6
119	31.9	25.5	38.3

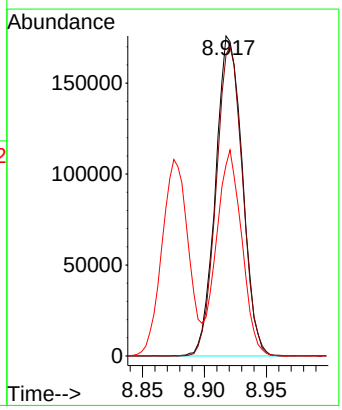


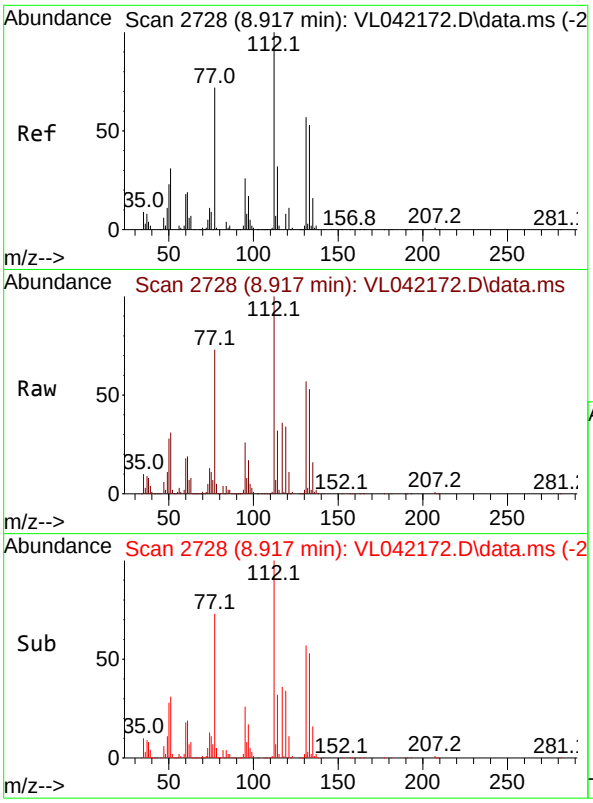


#56
1,1,1,2-Tetrachloroethane
Concen: 9.268 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:131 Resp: 265037

Ion	Ratio	Lower	Upper
131	100		
133	95.7	76.6	114.8
119	62.2	49.8	74.6



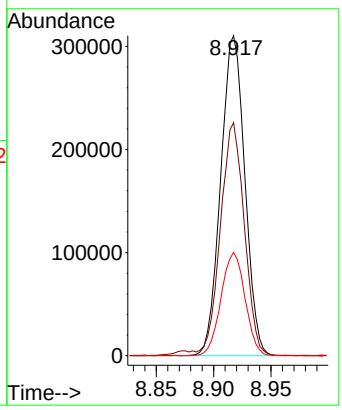


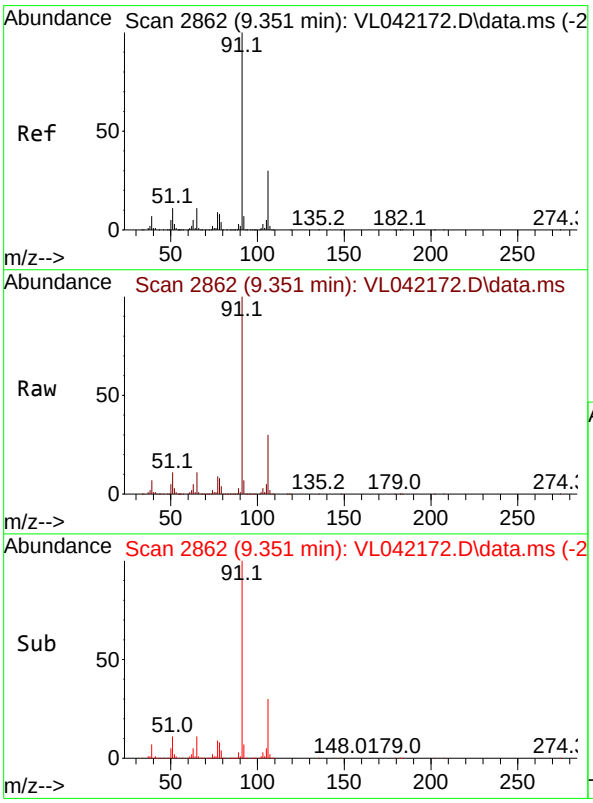
#57
Chlorobenzene
Concen: 9.223 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:112 Resp: 454511

Ion	Ratio	Lower	Upper
112	100		
77	72.7	58.2	87.2
114	32.3	29.1	35.5

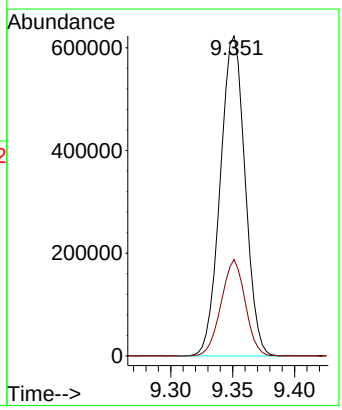


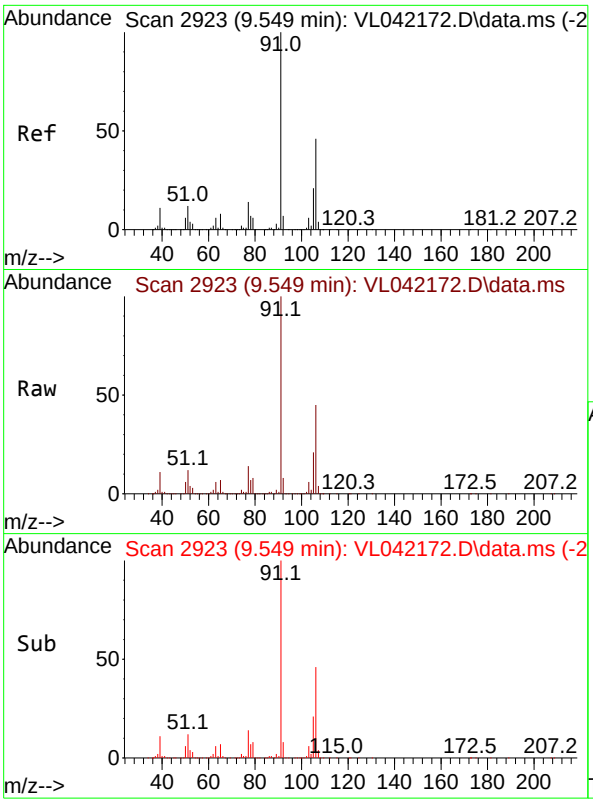


#58
Ethyl Benzene
Concen: 9.406 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 868003

Ion	Ratio	Lower	Upper
91	100		
106	30.2	24.2	36.2



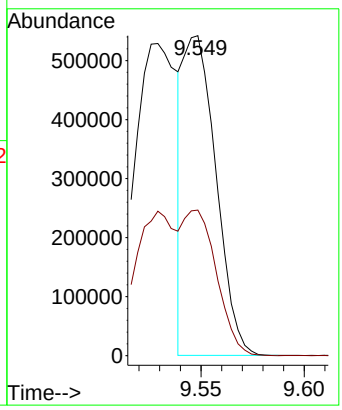


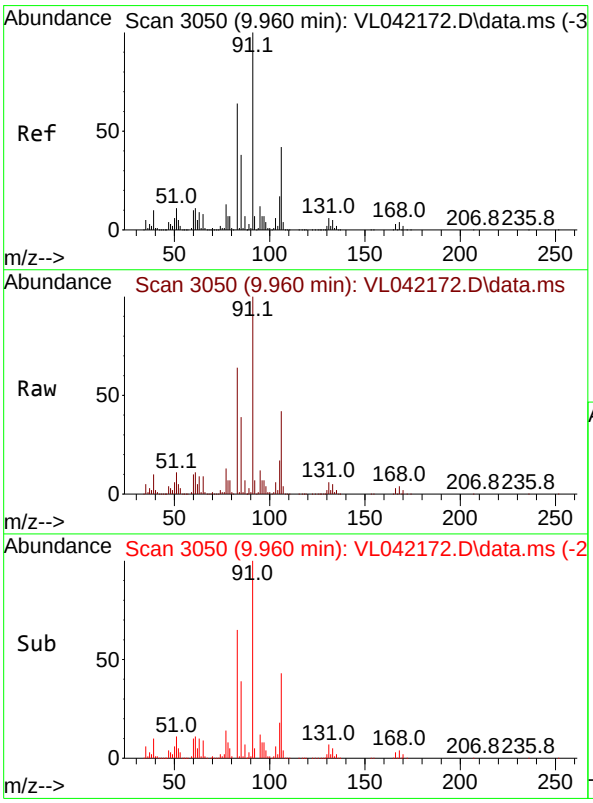
#59
m/p-Xylene
Concen: 8.071 ppbv
RT: 9.549 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 595445

Ion	Ratio	Lower	Upper
91	100		
106	105.0	36.4	54.6#

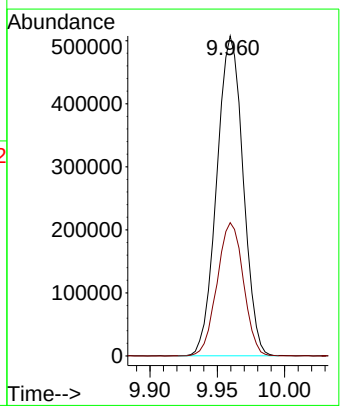


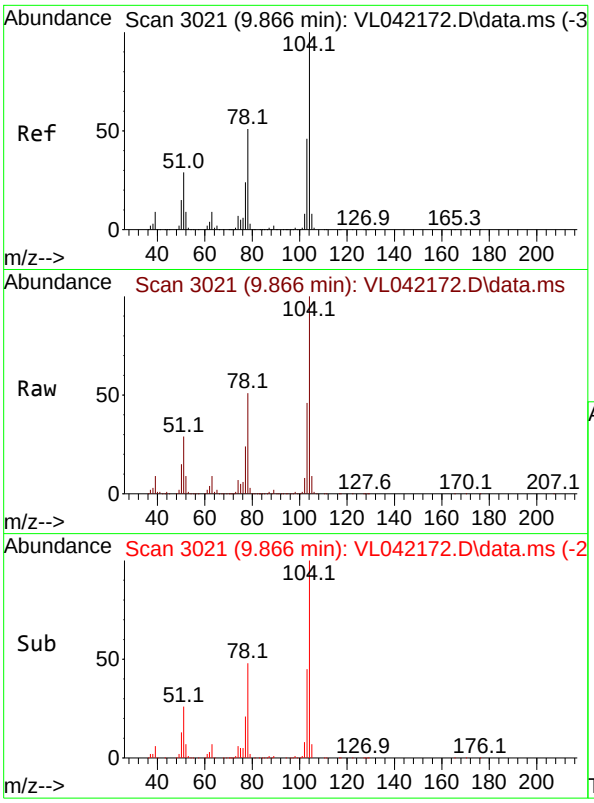


#60
o-Xylene
Concen: 9.340 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 689933

Ion	Ratio	Lower	Upper
91	100		
106	41.7	20.8	62.5



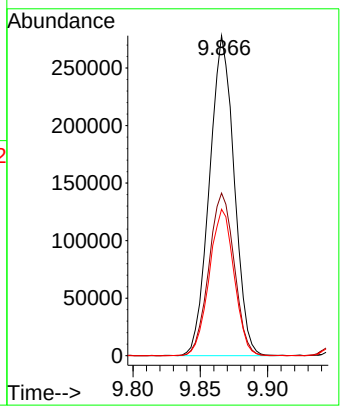


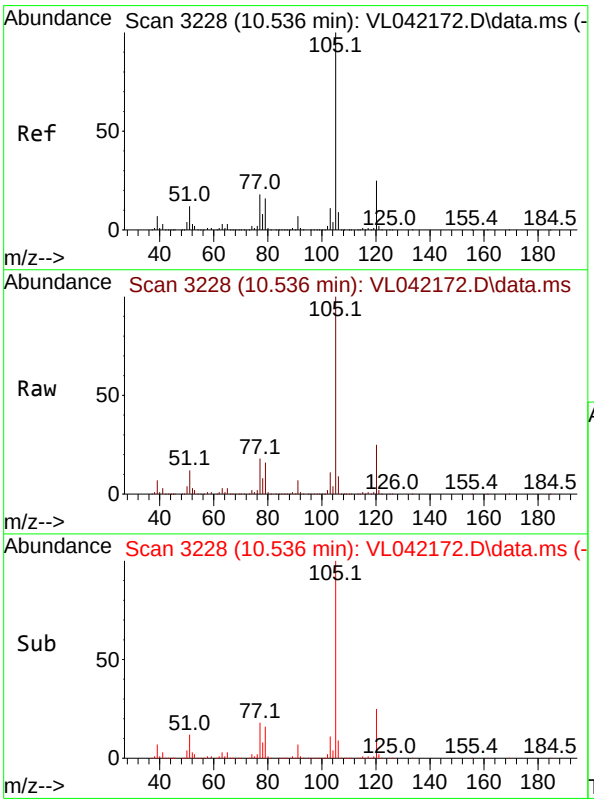
#61
Styrene
Concen: 9.706 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:104 Resp: 354697

Ion	Ratio	Lower	Upper
104	100		
78	52.2	41.8	62.6
103	46.2	37.0	55.4

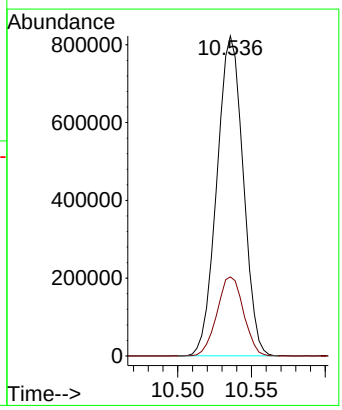


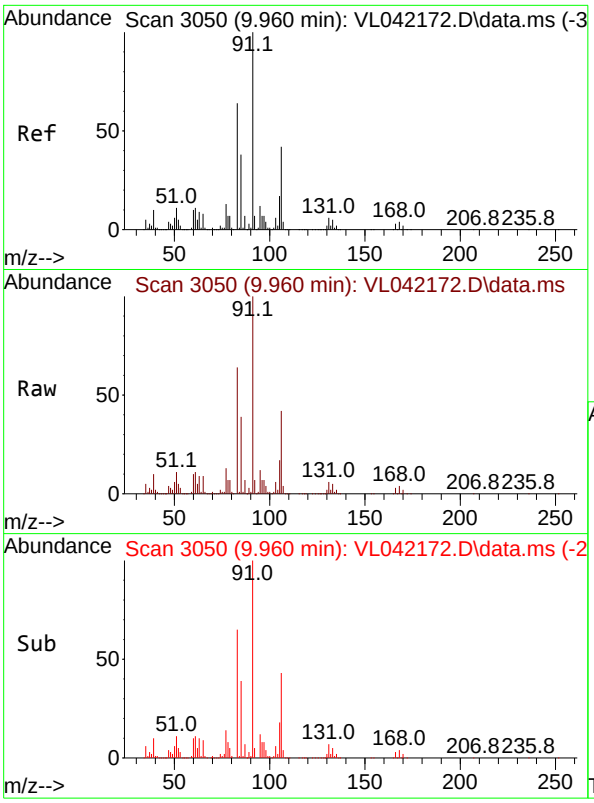


#62
Isopropylbenzene
Concen: 9.227 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 1019255

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9



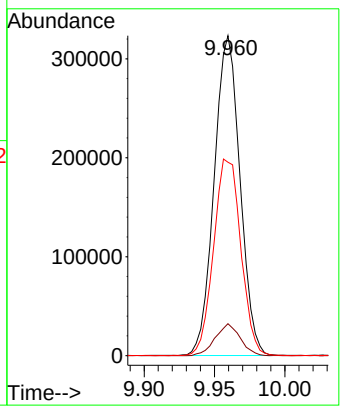


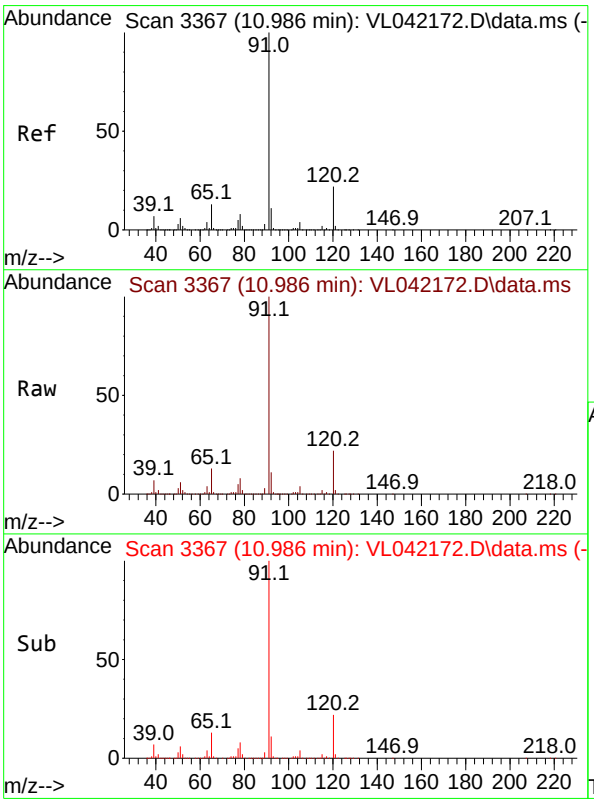
#63
1,1,2,2-Tetrachloroethane
Concen: 9.210 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 413392

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	65.0	32.5	97.5

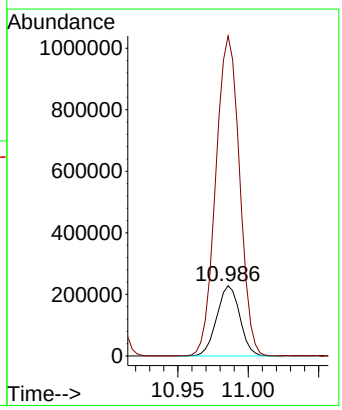


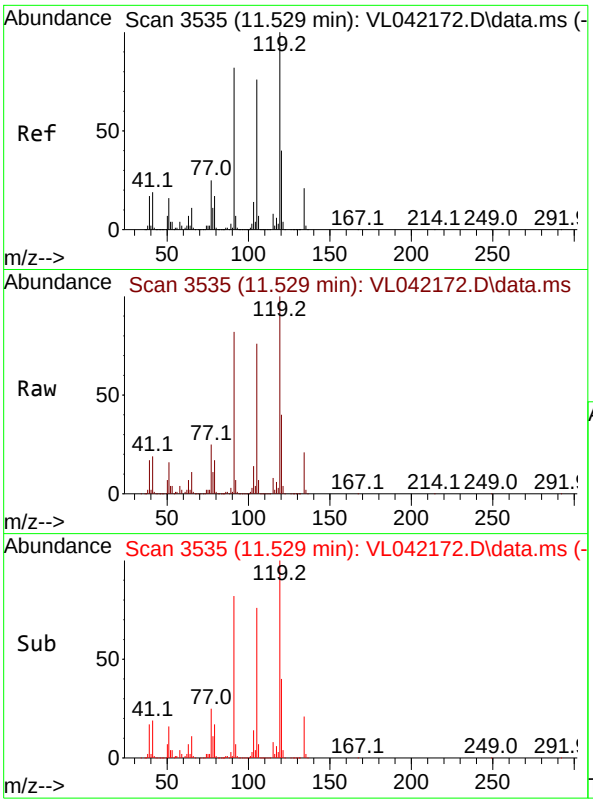


#64
n-propylbenzene
Concen: 9.122 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:120 Resp: 259405

Ion	Ratio	Lower	Upper
120	100		
91	471.1	376.9	565.3



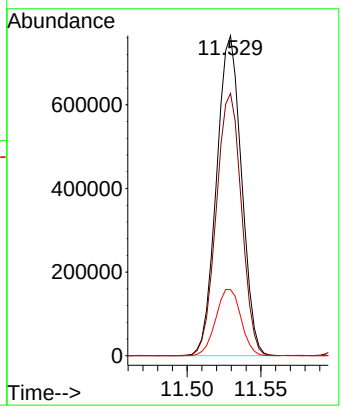


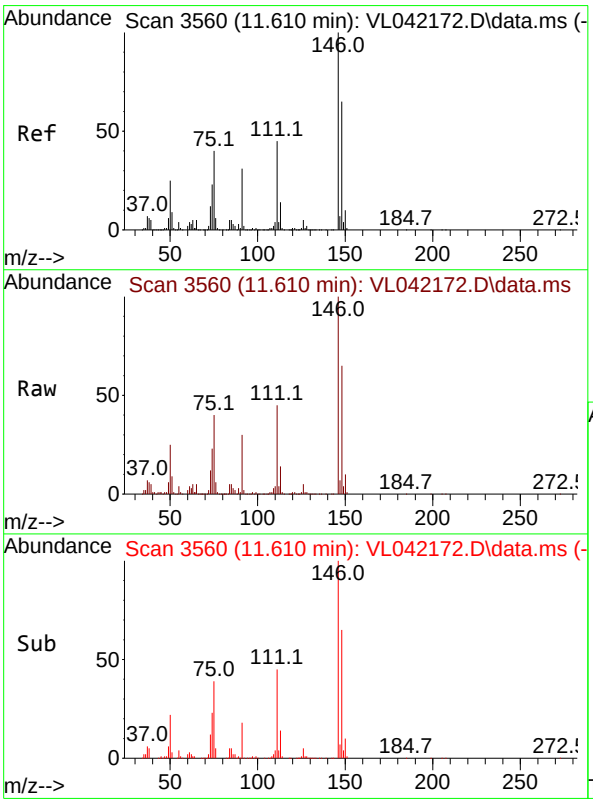
#65
tert-Butylbenzene
Concen: 8.828 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 901951

Ion	Ratio	Lower	Upper
119	100		
91	82.5	66.0	99.0
134	20.9	16.7	25.1

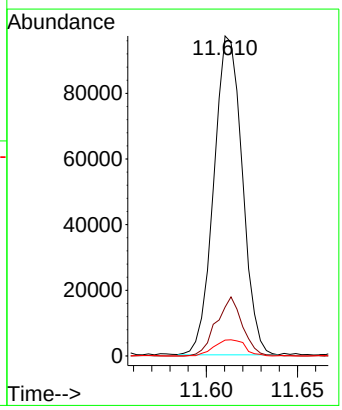


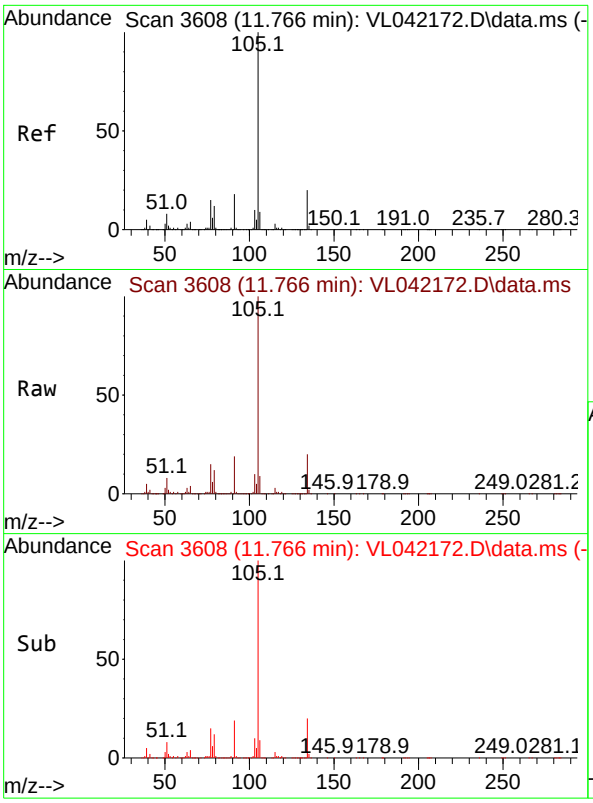


#66
Benzyl Chloride
Concen: 9.724 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 105411

Ion	Ratio	Lower	Upper
91	100		
126	17.2	13.8	20.6
128	5.6	4.5	6.7



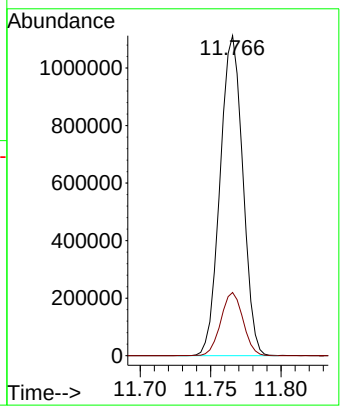


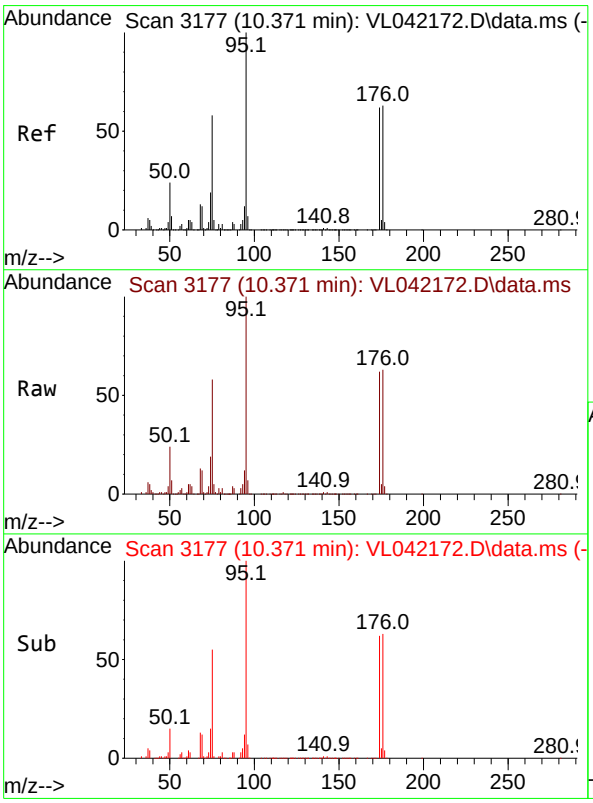
#67
sec-Butylbenzene
Concen: 8.796 ppbv
RT: 11.766 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 1249106

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

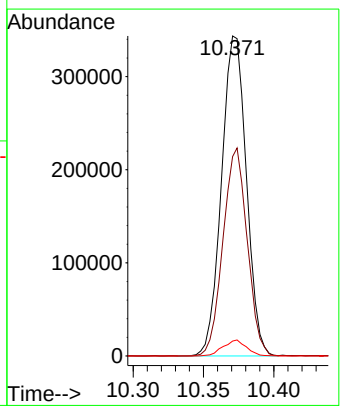


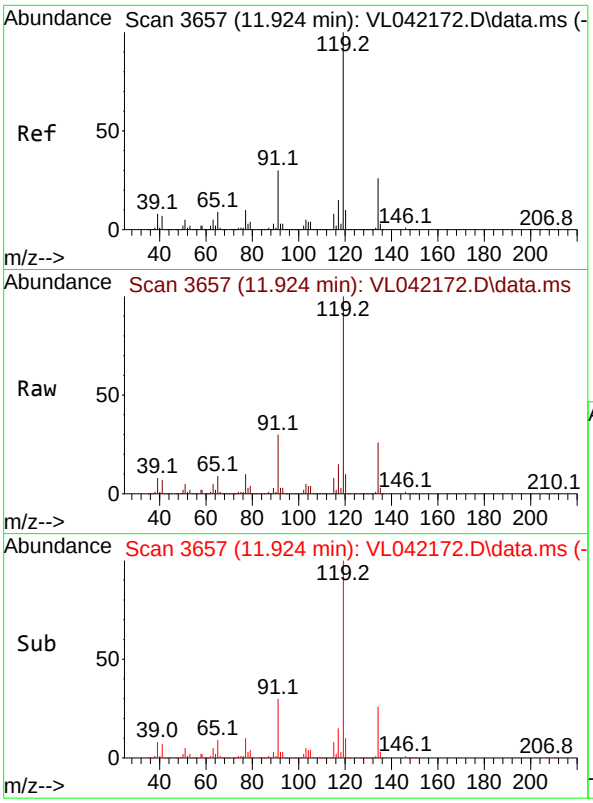


#68
1-Bromo-4-Fluorobenzene
Concen: 9.901 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 95 Resp: 422410

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6



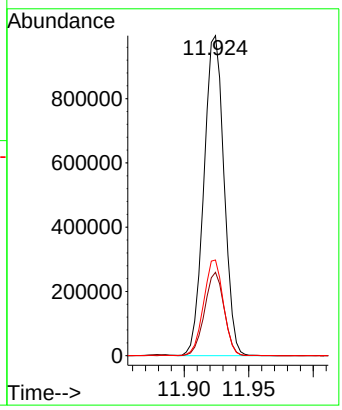


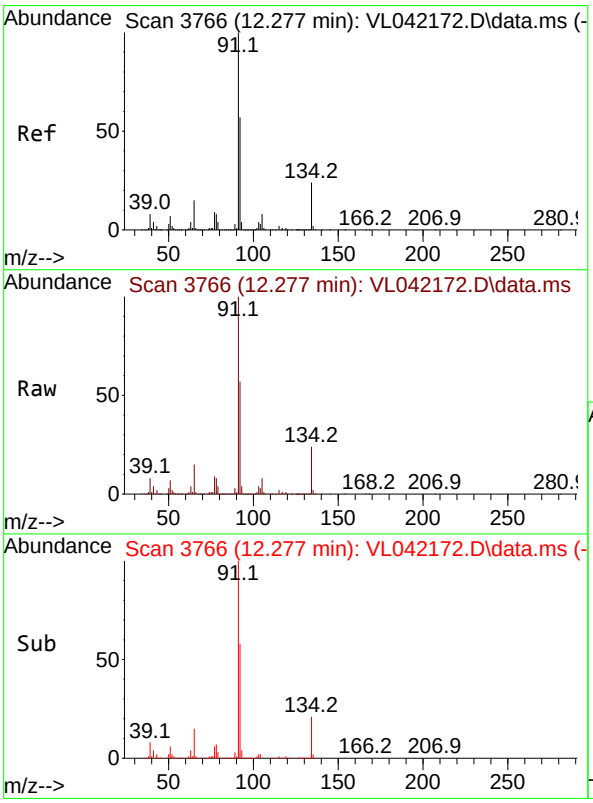
#69
p-Isopropyltoluene
Concen: 8.830 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 1079675

Ion	Ratio	Lower	Upper
119	100		
134	25.5	20.4	30.6
91	29.6	23.7	35.5

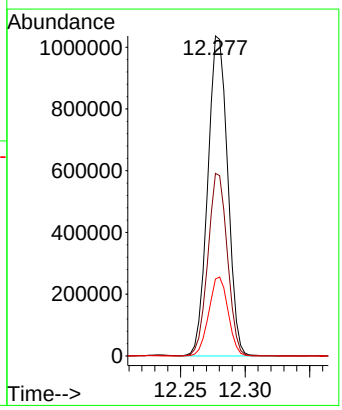


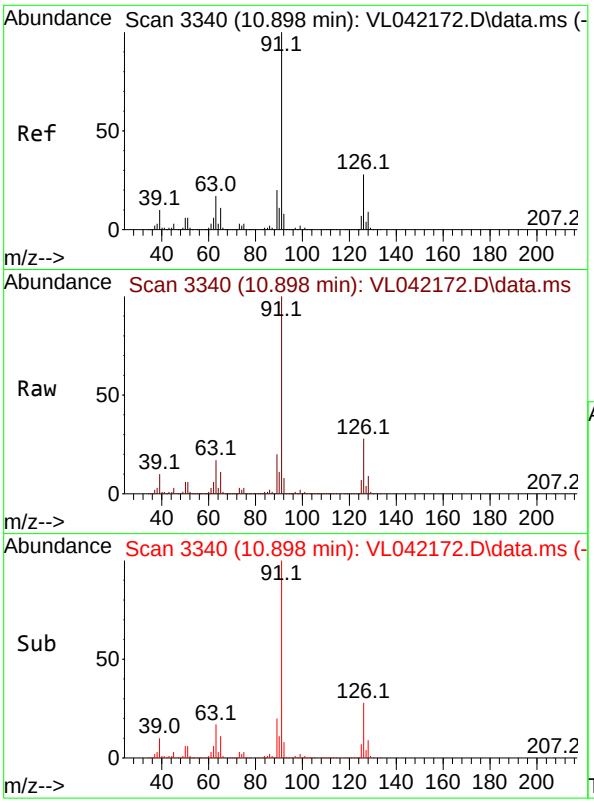


#70
n-Butylbenzene
Concen: 8.879 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion: 91 Resp: 1110351

Ion	Ratio	Lower	Upper
91	100		
92	56.1	44.9	67.3
134	24.0	19.2	28.8



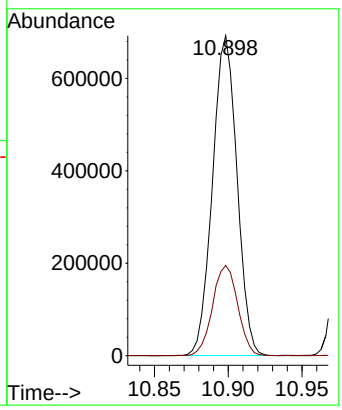


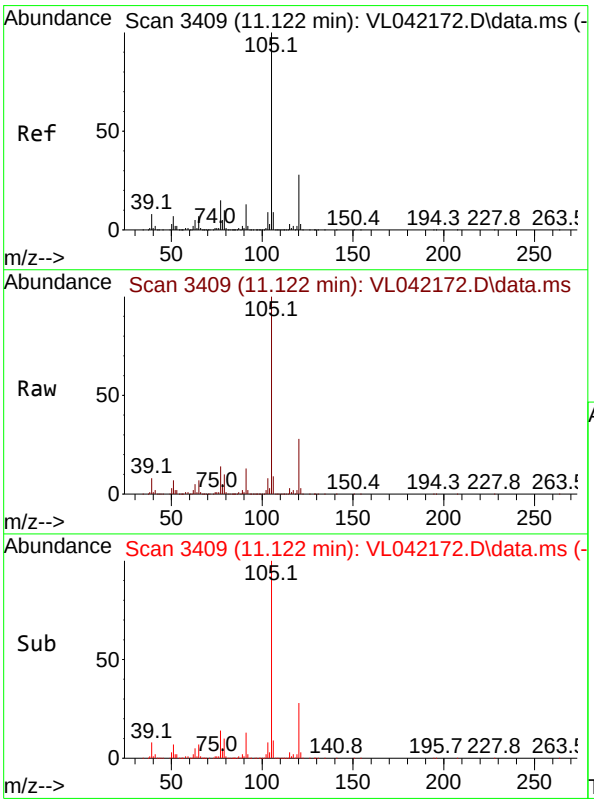
#71
2-Chlorotoluene
Concen: 9.320 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 799102

Ion	Ratio	Lower	Upper
91	100		
126	29.0	11.6	46.4

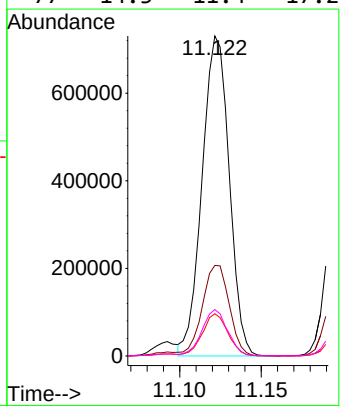


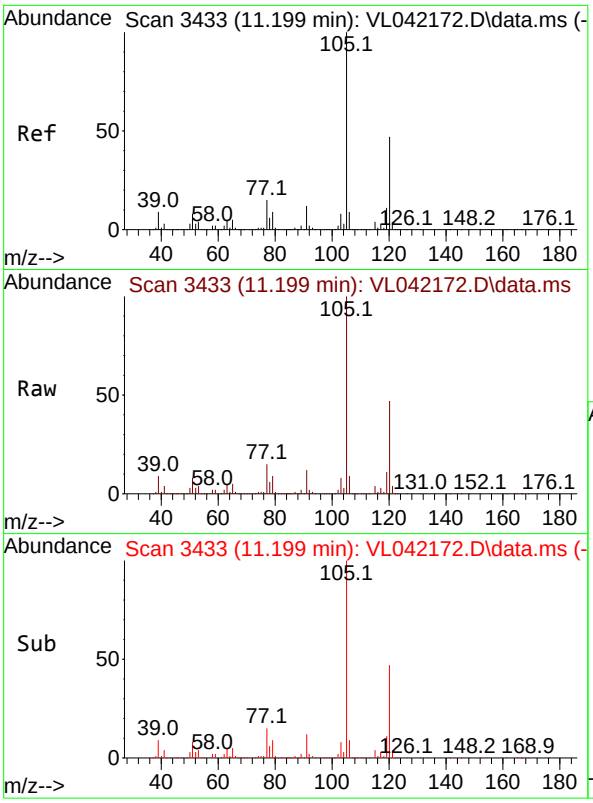


#72
4-Ethyltoluene
Concen: 9.200 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 846232

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.4	35.0
91	12.9	10.3	15.5
77	14.3	11.4	17.2



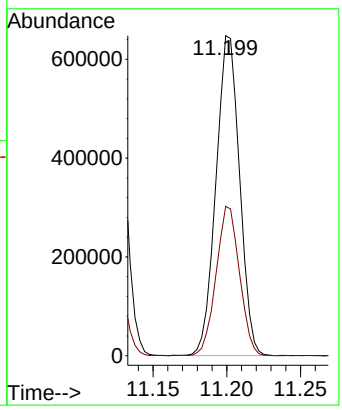


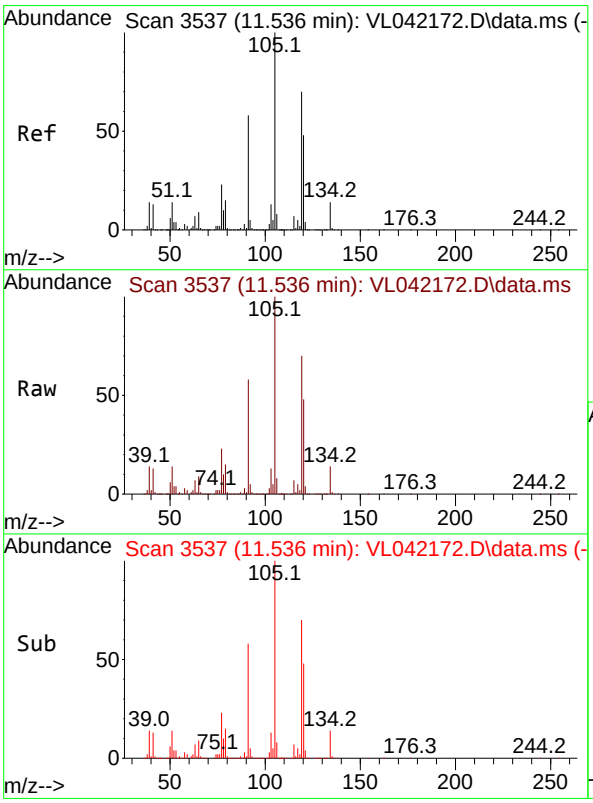
#73
1,3,5-Trimethylbenzene
Concen: 8.970 ppbv
RT: 11.199 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 720566

Ion	Ratio	Lower	Upper
105	100		
120	46.7	37.4	56.0

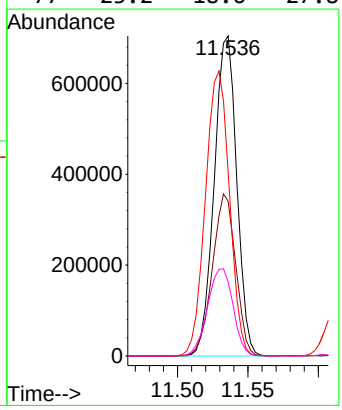


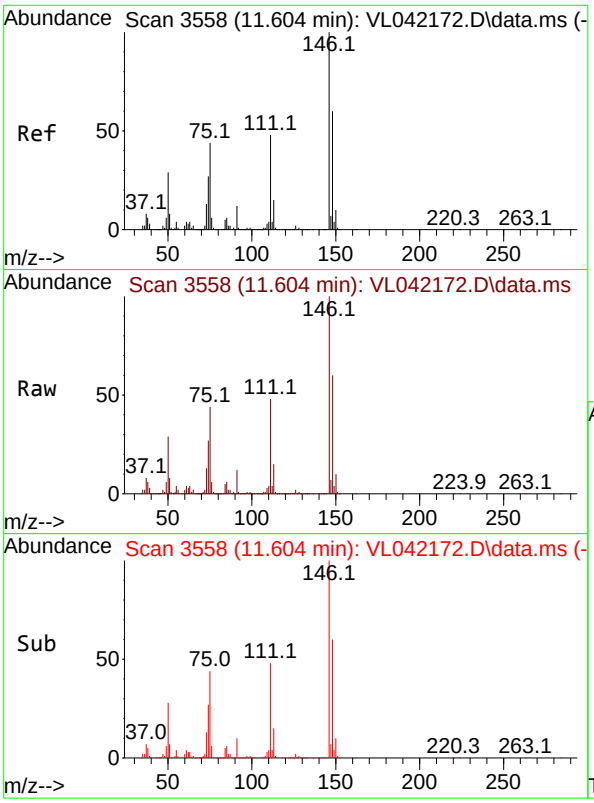


#74
1,2,4-Trimethylbenzene
Concen: 8.480 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:105 Resp: 784745

Ion	Ratio	Lower	Upper
105	100		
120	48.3	38.6	58.0
91	57.7	46.2	69.2
77	23.2	18.6	27.8



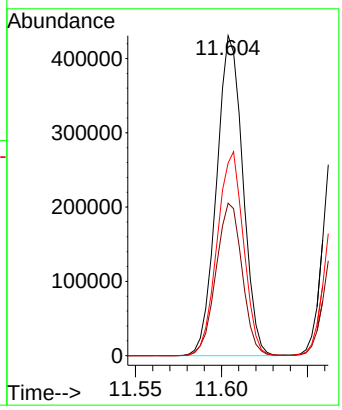


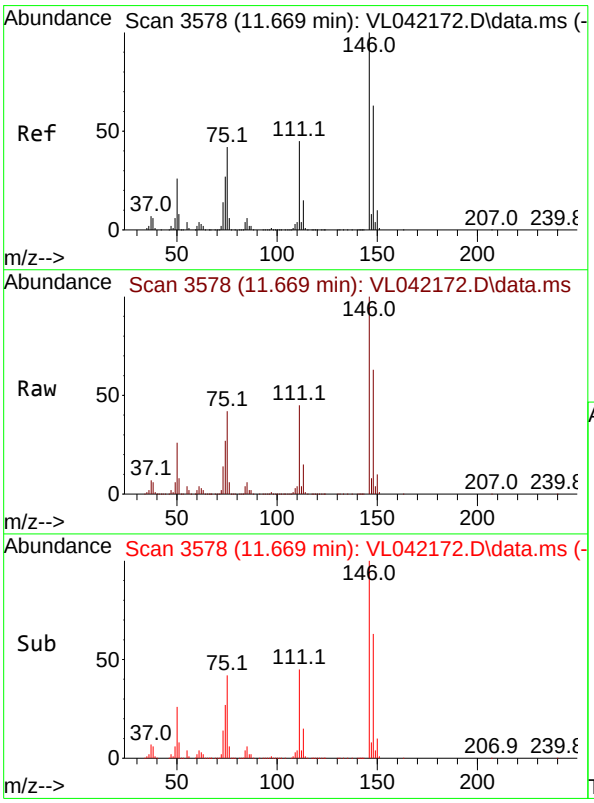
#75
1,3-Dichlorobenzene
Concen: 9.028 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 458226

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.9	31.9	95.9

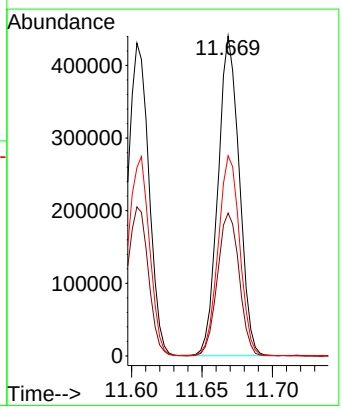


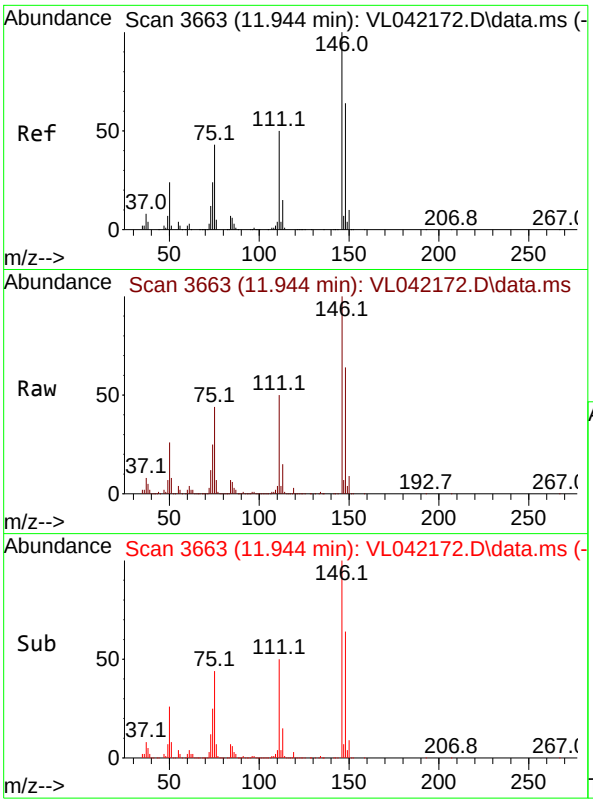


#76
1,4-Dichlorobenzene
Concen: 9.134 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:146 Resp: 461371

Ion	Ratio	Lower	Upper
146	100		
111	46.0	23.0	69.0
148	63.8	31.9	95.7



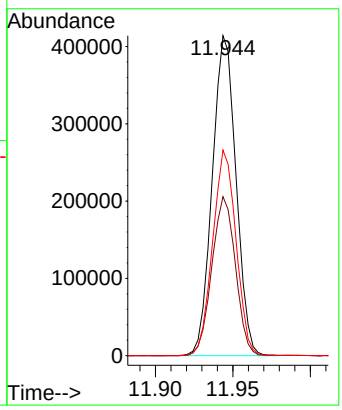


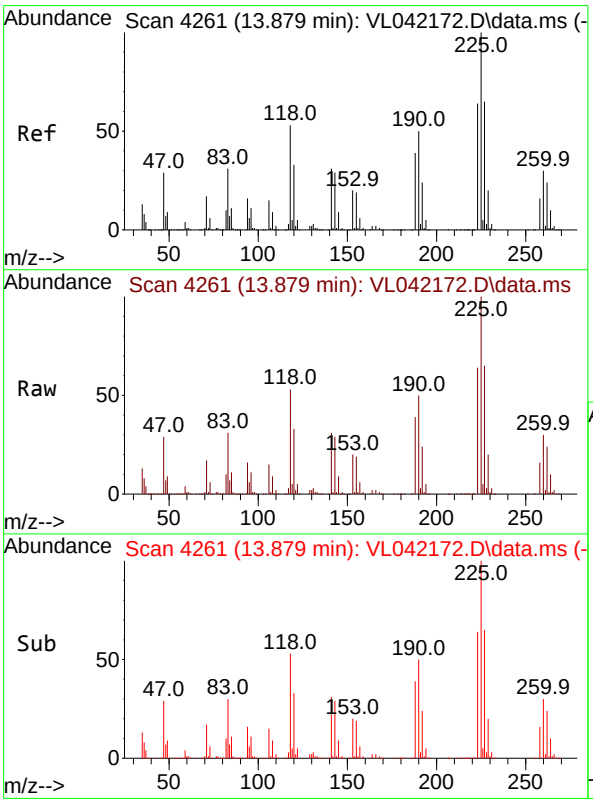
#77
1,2-Dichlorobenzene
Concen: 8.933 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 441473

Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.8	74.3
148	63.2	31.6	94.8

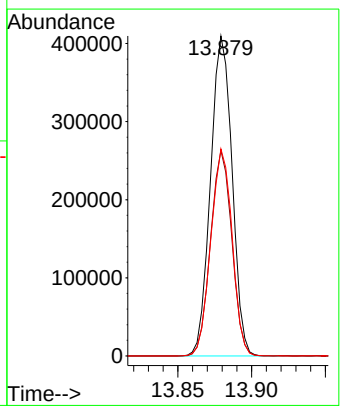


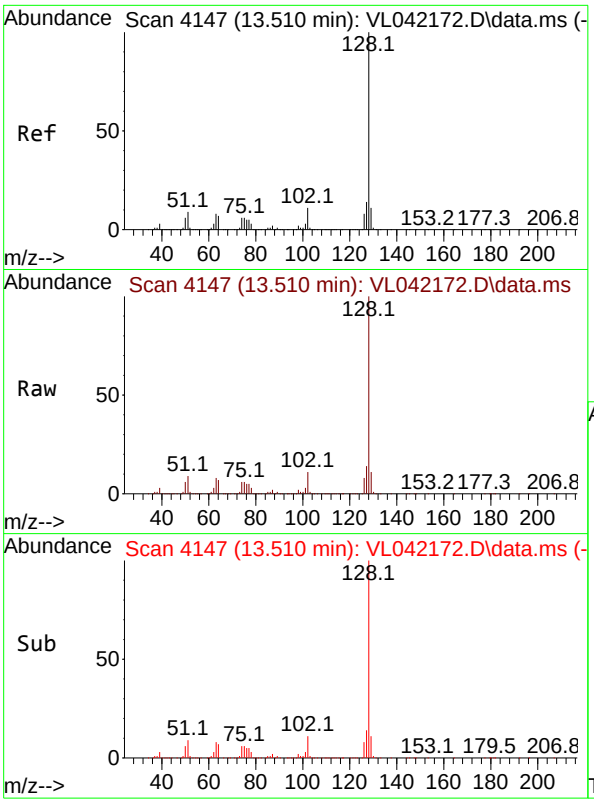


#78
Hexachloro-1,3-Butadiene
Concen: 8.284 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:225 Resp: 416735

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.6	76.0
227	64.0	51.2	76.8



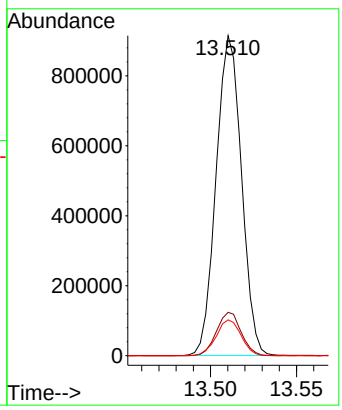


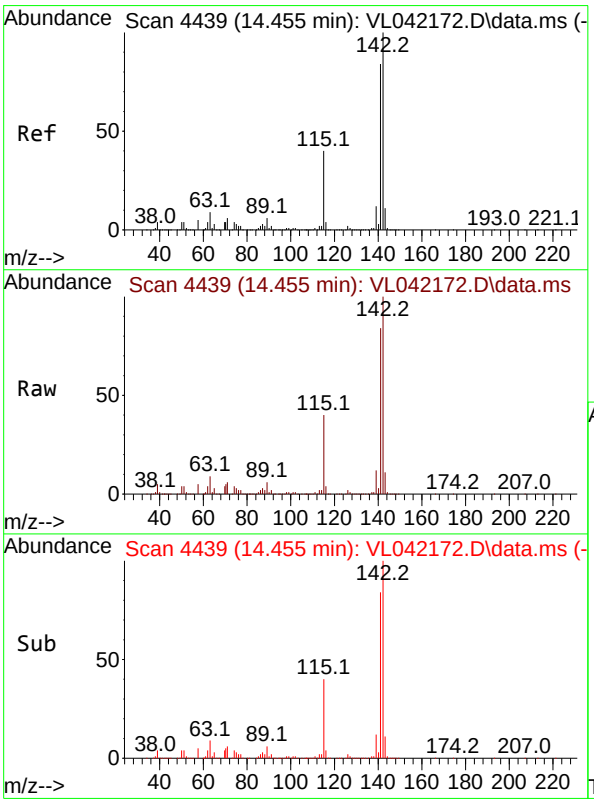
#79
Naphthalene
Concen: 9.271 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:128 Resp: 938470

Ion	Ratio	Lower	Upper
128	100		
127	13.5	10.8	16.2
129	11.2	9.0	13.4

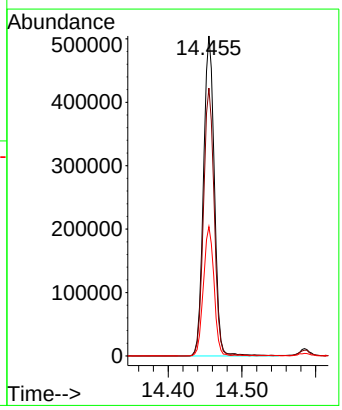


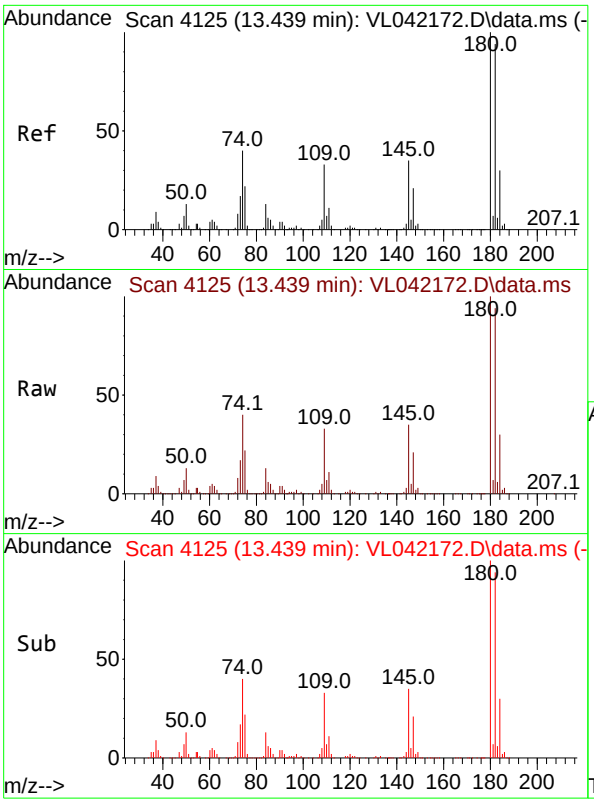


#80
Naphthalene,2-methyl-
Concen: 10.436 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Tgt Ion:142 Resp: 514394

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.5	31.6	47.4



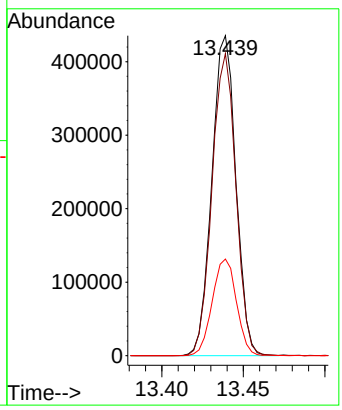


#81
1,2,4-Trichlorobenzene
Concen: 9.561 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042172.D
Acq: 27 Mar 2025 08:26

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:180 Resp: 446420

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.5	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	188395	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	546394	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	504538	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	417532	10.077	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	55859	2.008	ppbv		99
3) Chlorodifluoromethane	1.473	51	57045	2.007	ppbv		99
4) Chloromethane	1.531	50	23293	2.049	ppbv		94
5) Vinyl Chloride	1.576	62	21989	1.897	ppbv		99
6) Bromomethane	1.664	94	10027	1.946	ppbv		98
7) Chloroethane	1.703	64	8413	1.844	ppbv		92
8) Dichlorotetrafluoroethane	1.551	85	48008	2.027	ppbv		98
9) Propene	1.483	41	26295	2.054	ppbv		94
10) Heptane	4.972	43	71466	2.063	ppbv		99
11) Trichlorofluoromethane	1.874	101	55754	2.060	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.136	101	44761	2.012	ppbv		98
13) Ethanol	1.719	45	1827	1.822	ppbv	#	49
14) Bromoethene	1.780	108	17323	2.033	ppbv	#	89
15) Acetone	1.832	43	55365	2.101	ppbv		95
16) 1,3-Butadiene	1.606	39	22894	1.932	ppbv		95
17) tert-Butyl alcohol	2.039	59	66174	2.016	ppbv		100
18) 1,1-Dichloroethene	2.030	96	21103	2.029	ppbv		95
19) Isopropyl Alcohol	1.884	45	27804	1.870	ppbv	#	35
20) Methylene Chloride	2.059	84	20518	2.091	ppbv		96
21) Allyl Chloride	2.094	41	38425	2.068	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	23384	1.924	ppbv		92
23) Vinyl Acetate	2.460	43	20736	1.894	ppbv	#	97
24) 1,1-Dichloroethane	2.405	63	44740	2.008	ppbv		99
25) Ethyl Acetate	2.832	43	139516	2.040	ppbv		99
26) Hexane	2.823	57	52095	1.972	ppbv		92
27) Carbon Disulfide	2.146	76	57969	2.047	ppbv	#	76
28) Methyl tert-Butyl Ether	2.437	73	33703	2.049	ppbv		99
29) Chloroform	2.845	83	78043	2.019	ppbv		95
30) Cyclohexane	3.852	84	45641	1.989	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	53713	2.003	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	81070	1.833	ppbv		99
34) 2-Butanone	2.554	43	84157	2.124	ppbv		99
35) Carbon Tetrachloride	3.758	117	81735	1.944	ppbv		96
36) Benzene	3.651	78	110727	2.044	ppbv		97
37) 1,2-Dichloroethane	3.214	62	61476	1.982	ppbv		97
38) Trichloroethene	4.541	130	43501	1.924	ppbv		97
39) 1,2-Dichloropropane	4.308	63	39912	2.023	ppbv		93
40) 1,4-Dioxane	4.587	88	14008	1.369	ppbv	#	2
41) Tetrahydrofuran	3.056	42	47262	2.097	ppbv		99
42) Bromodichloromethane	4.483	83	87640	2.050	ppbv		99
43) Methyl Methacrylate	4.878	69	44624	1.952	ppbv		97
44) 2,2,4-Trimethylpentane	4.632	57	188282	2.057	ppbv		100
45) t-1,3-Dichloropropene	6.406	75	49461	2.011	ppbv		99

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

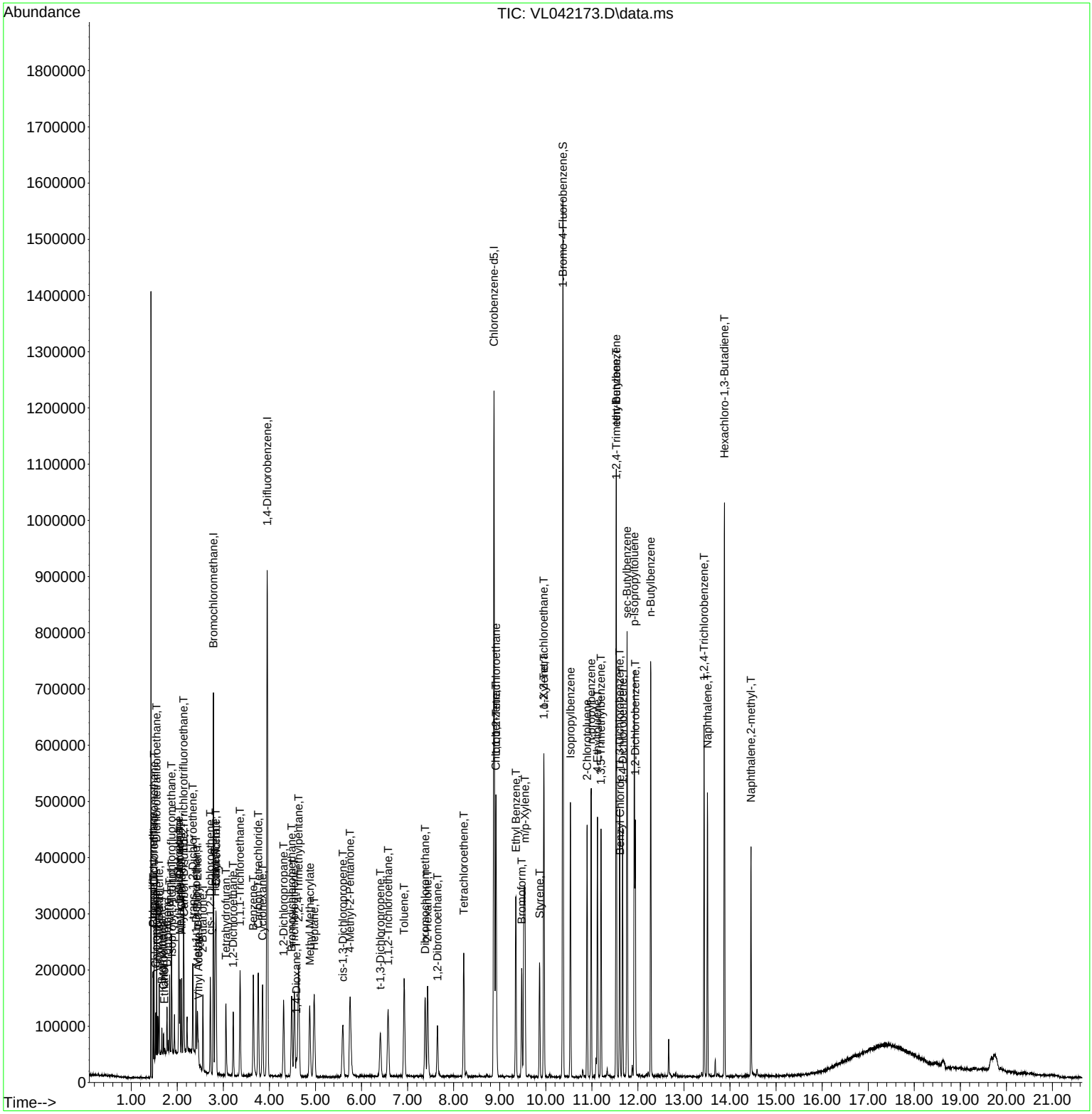
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	61829	2.050	ppbv	#	91
47) 1,1,2-Trichloroethane	6.577	97	41387	1.985	ppbv		95
48) Dibromochloromethane	7.383	129	72441	2.050	ppbv		100
49) Bromoform	9.477	173	65221	2.056	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	132328	2.107	ppbv		99
51) 2-Hexanone	7.435	43	112681	2.162	ppbv	#	99
52) Tetrachloroethene	8.221	164	40558	1.888	ppbv		98
53) Toluene	6.923	91	131314	2.045	ppbv		99
54) 1,2-Dibromoethane	7.648	107	56799	1.952	ppbv		90
56) 1,1,1,2-Tetrachloroethane	8.920	131	58141	2.093	ppbv		97
57) Chlorobenzene	8.914	112	100308	2.096	ppbv	#	94
58) Ethyl Benzene	9.351	91	191114	2.132	ppbv		96
59) m/p-Xylene	9.548	91	167182	2.333	ppbv	#	31
60) o-Xylene	9.959	91	151292	2.109	ppbv		98
61) Styrene	9.865	104	74134	2.089	ppbv		98
62) Isopropylbenzene	10.535	105	228191	2.127	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.956	83	90114	2.067	ppbv		99
64) n-propylbenzene	10.985	120	58105	2.104	ppbv		92
65) tert-Butylbenzene	11.529	119	216336	2.180	ppbv		99
66) Benzyl Chloride	11.610	91	22272	2.116	ppbv		95
67) sec-Butylbenzene	11.762	105	297381	2.156	ppbv		99
69) p-Isopropyltoluene	11.921	119	258357	2.176	ppbv		100
70) n-Butylbenzene	12.277	91	270616	2.228	ppbv		99
71) 2-Chlorotoluene	10.898	91	177487	2.132	ppbv		100
72) 4-Ethyltoluene	11.121	105	194660	2.179	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	169221	2.169	ppbv		96
74) 1,2,4-Trimethylbenzene	11.532	105	198351	2.207	ppbv		96
75) 1,3-Dichlorobenzene	11.604	146	107217	2.175	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	104925	2.139	ppbv		99
77) 1,2-Dichlorobenzene	11.943	146	102310	2.132	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	109539	2.242	ppbv		99
79) Naphthalene	13.510	128	233451	2.375	ppbv		97
80) Naphthalene,2-methyl-	14.455	142	117313	2.451	ppbv		99
81) 1,2,4-Trichlorobenzene	13.435	180	103765	2.288	ppbv		97

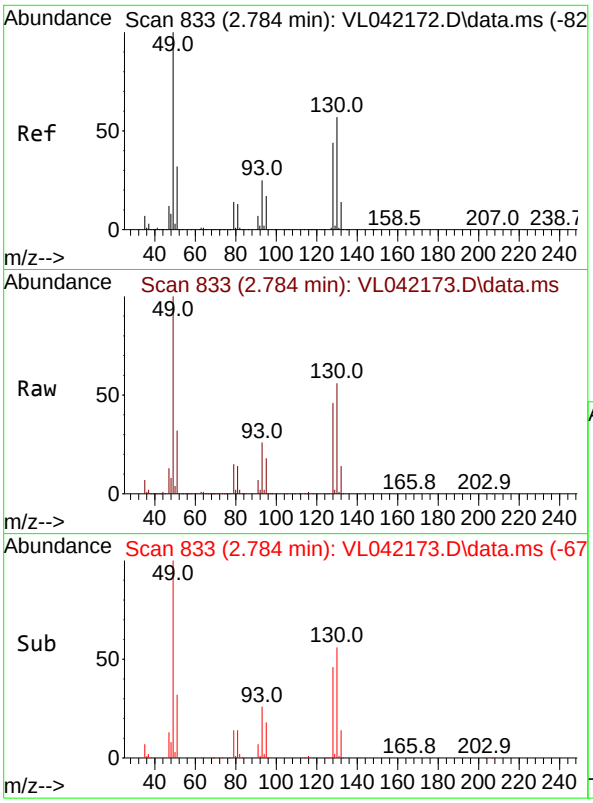
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042173.D
Acq On : 27 Mar 2025 08:59
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Mar 28 01:32:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



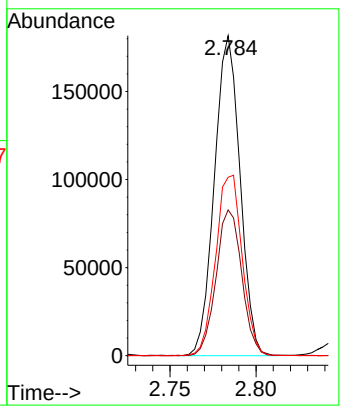


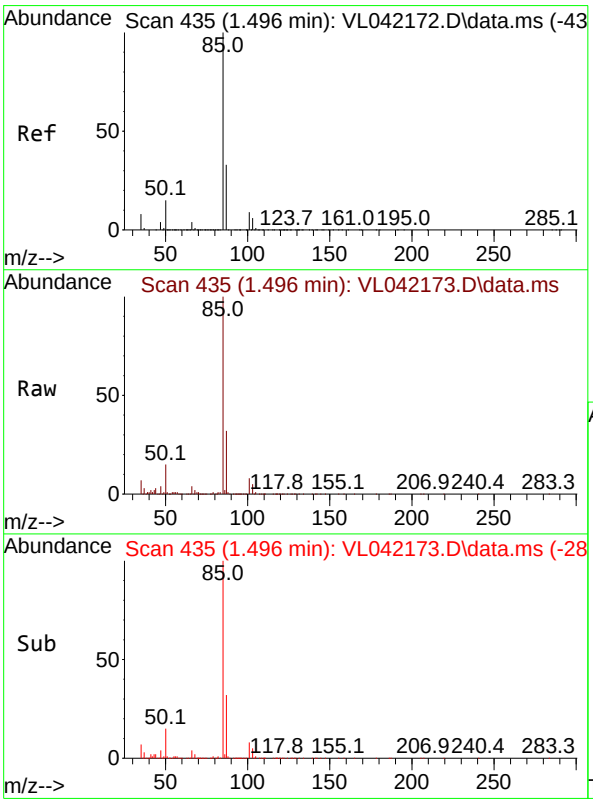
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 49 Resp: 188395

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.5	28.8	86.4

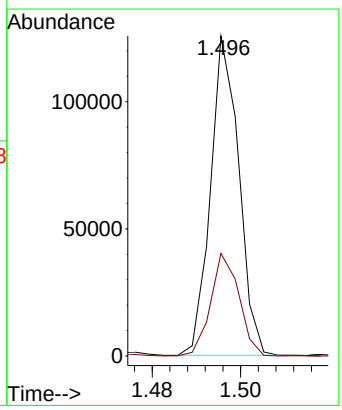


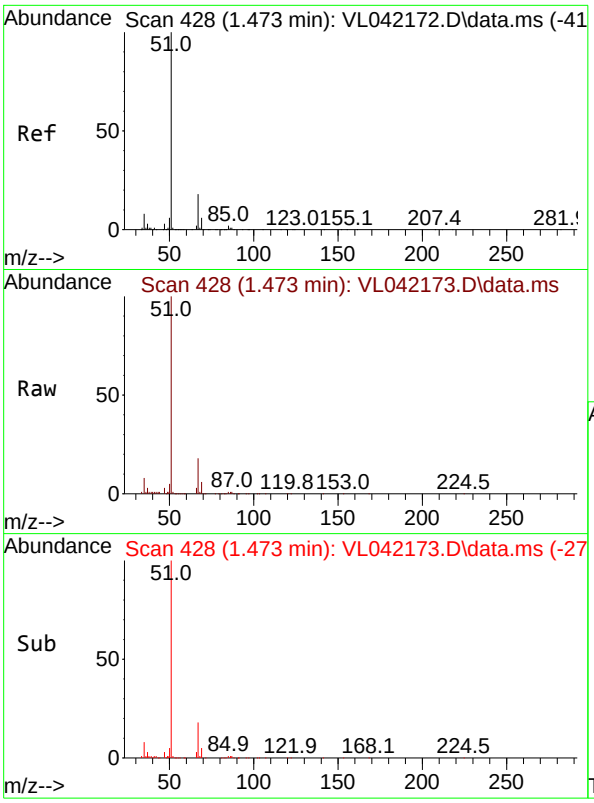


#2
Dichlorodifluoromethane
Concen: 2.008 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 55859

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1



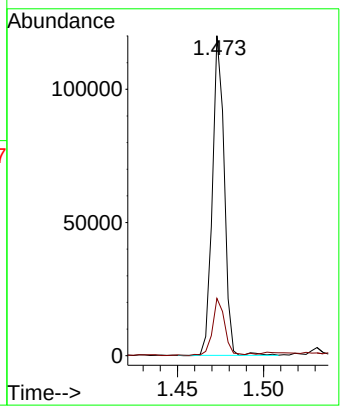


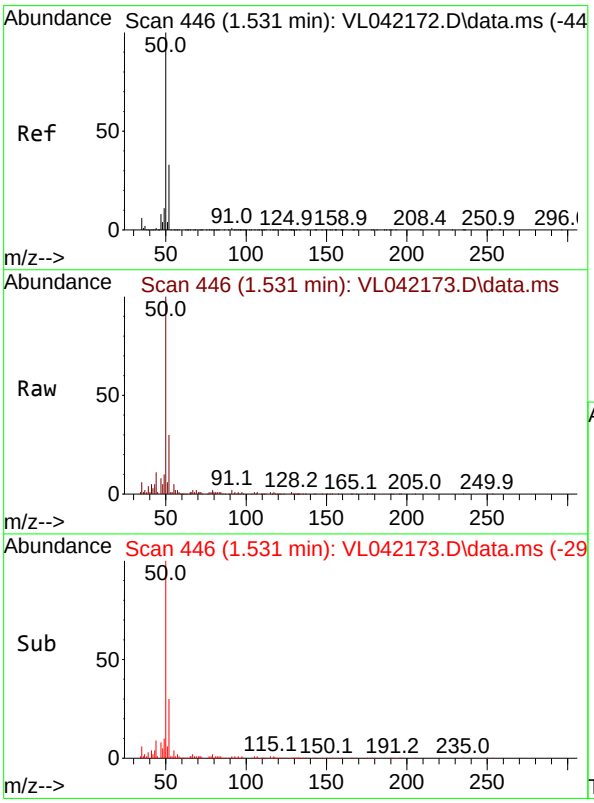
#3
Chlorodifluoromethane
Concen: 2.007 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 51 Resp: 57045

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6

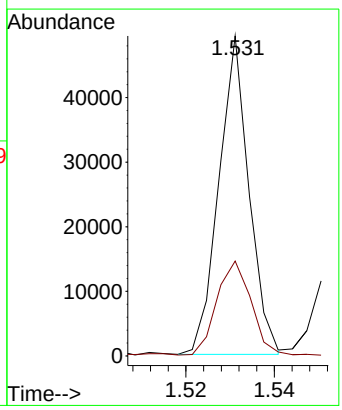


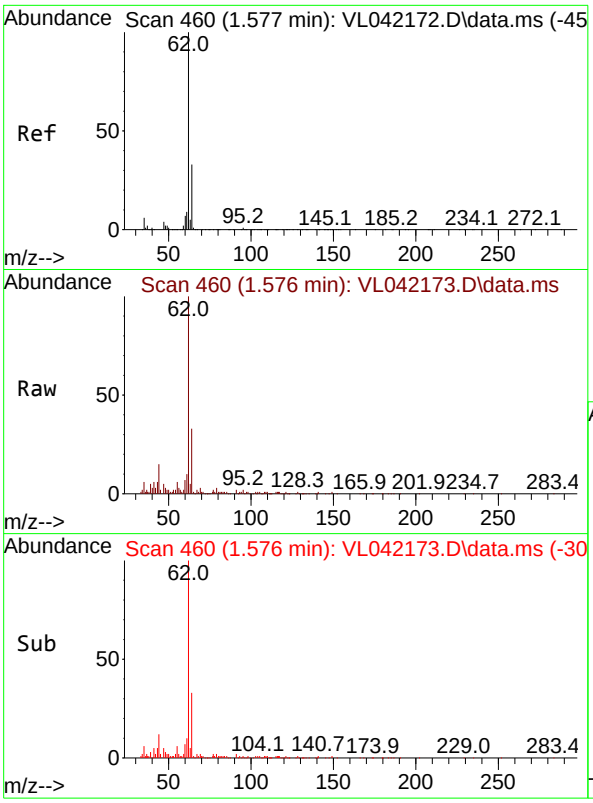


#4
Chloromethane
Concen: 2.049 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 50 Resp: 23293

Ion	Ratio	Lower	Upper
50	100		
52	29.5	26.1	39.1



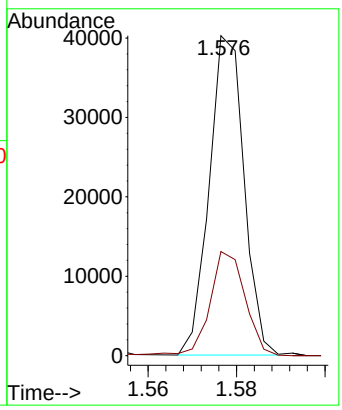


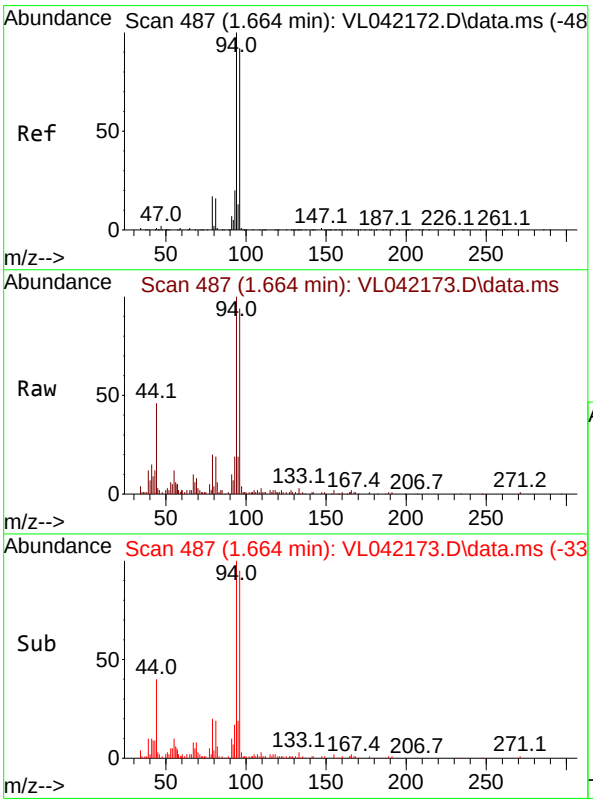
#5
Vinyl Chloride
Concen: 1.897 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 21989

Ion	Ratio	Lower	Upper
62	100		
64	32.5	26.6	40.0

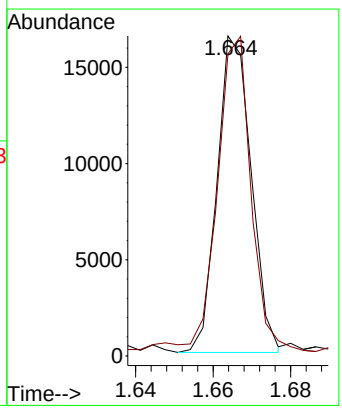


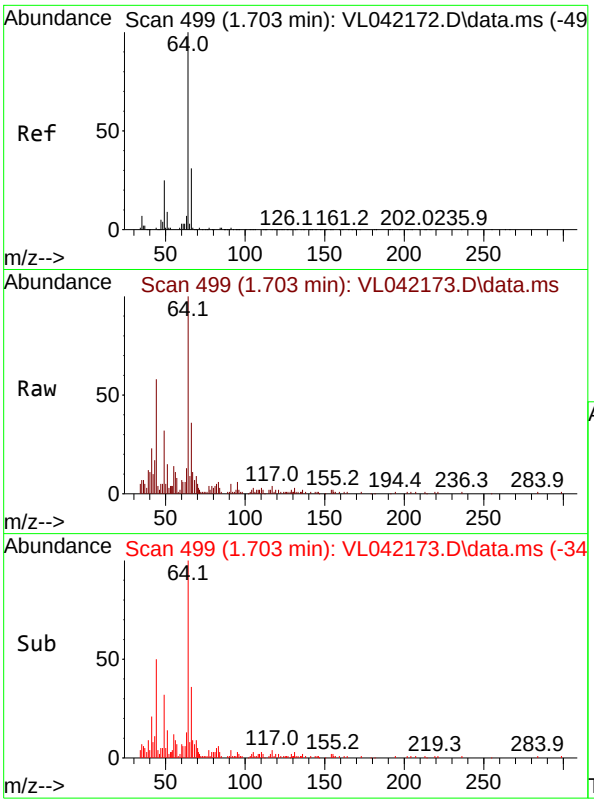


#6
Bromomethane
Concen: 1.946 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 94 Resp: 10027

Ion	Ratio	Lower	Upper
94	100		
96	93.6	73.1	109.7



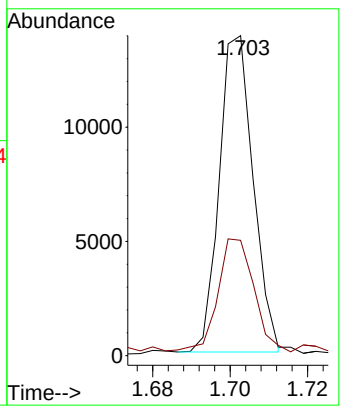


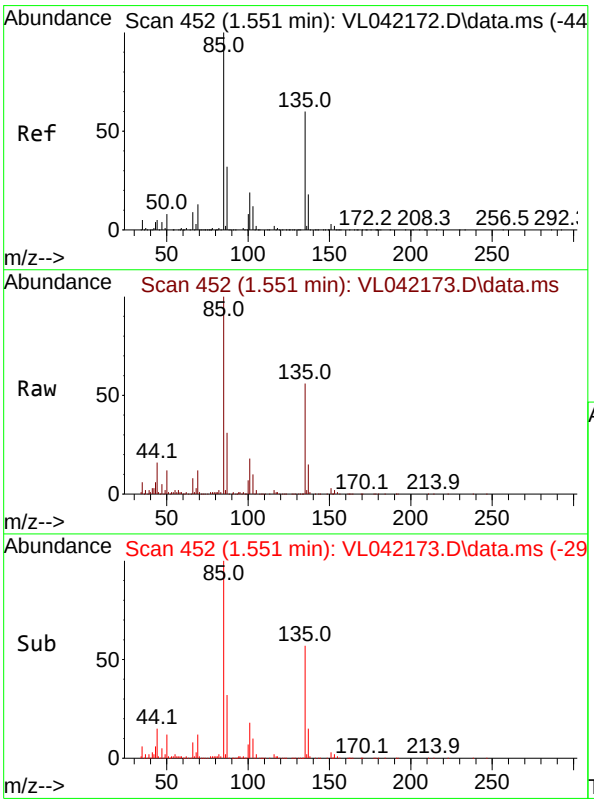
#7
Chloroethane
Concen: 1.844 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 64 Resp: 8413

Ion	Ratio	Lower	Upper
64	100		
66	36.1	25.2	37.8

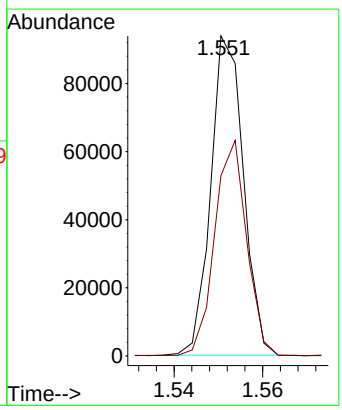


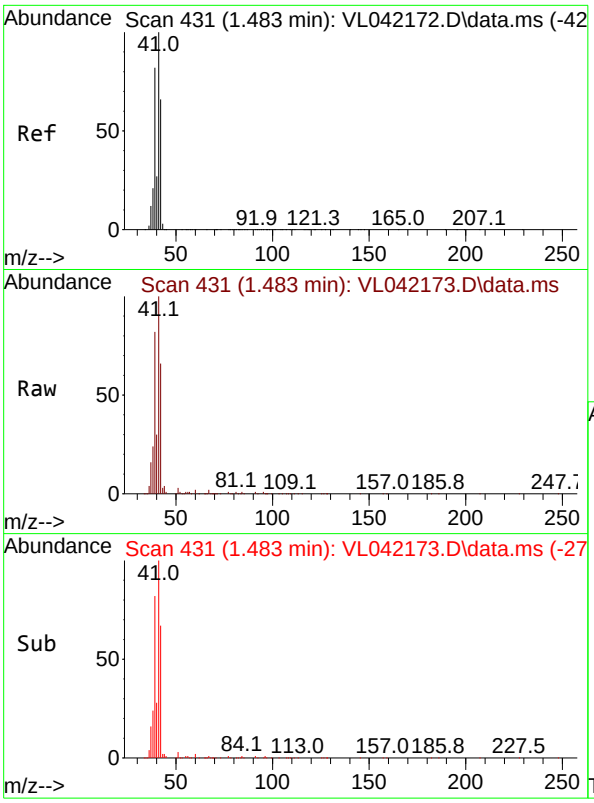


#8
Dichlorotetrafluoroethane
Concen: 2.027 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 85 Resp: 48008

Ion	Ratio	Lower	Upper
85	100		
135	66.8	52.4	78.6



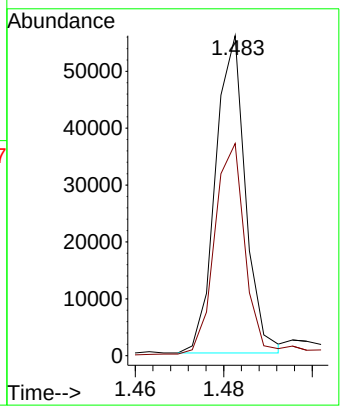


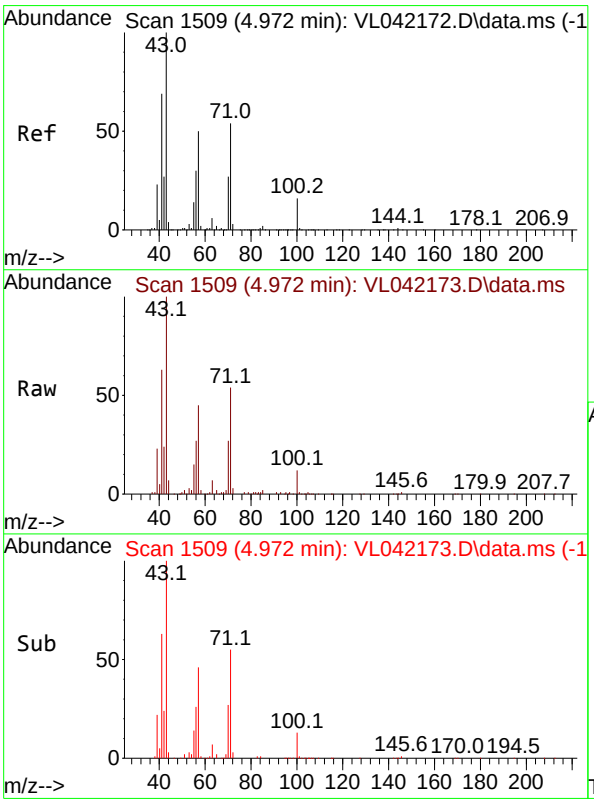
#9
Propene
Concen: 2.054 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 26295

Ion	Ratio	Lower	Upper
41	100		
42	73.9	55.4	83.2

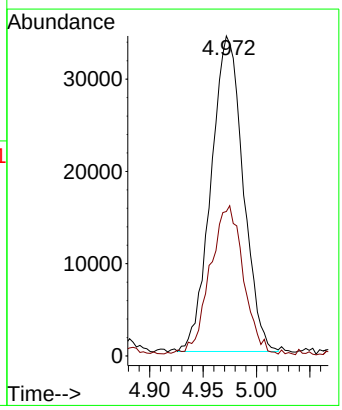


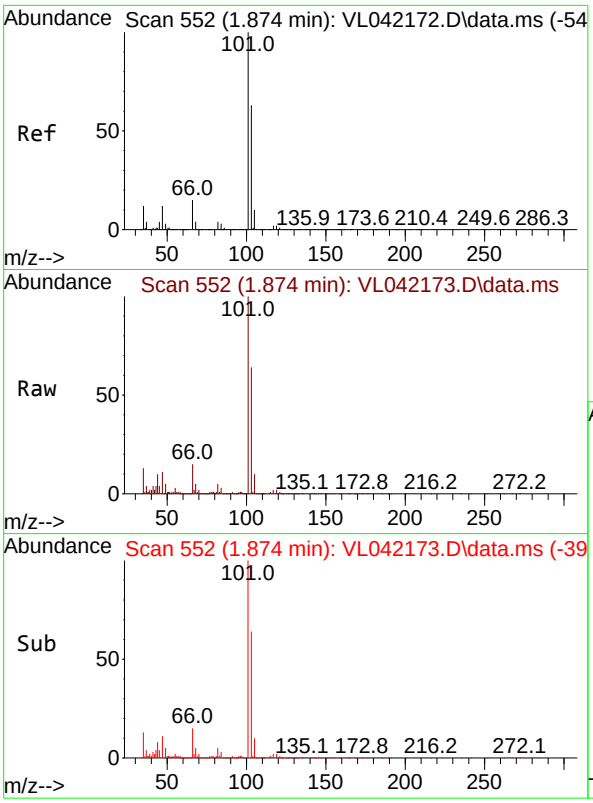


#10
Heptane
Concen: 2.063 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 71466

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2



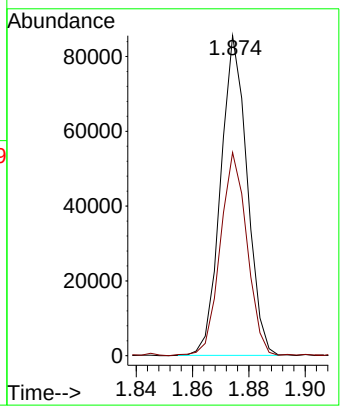


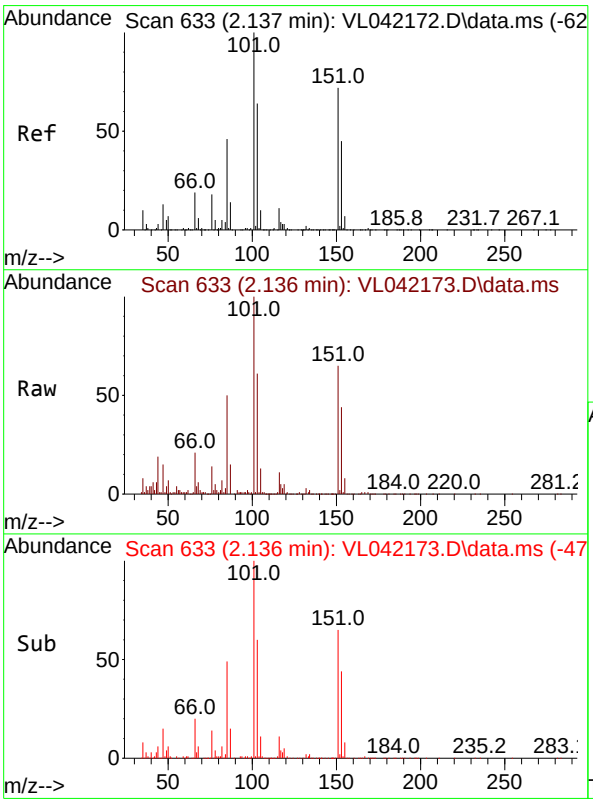
#11
Trichlorofluoromethane
Concen: 2.060 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:101 Resp: 55754

Ion	Ratio	Lower	Upper
101	100		
103	63.5	50.2	75.2

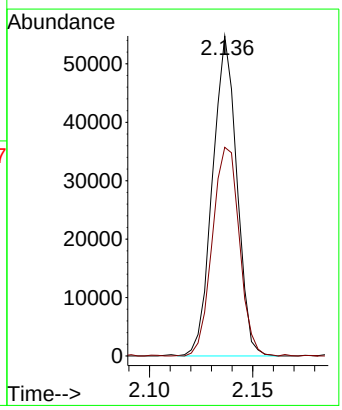


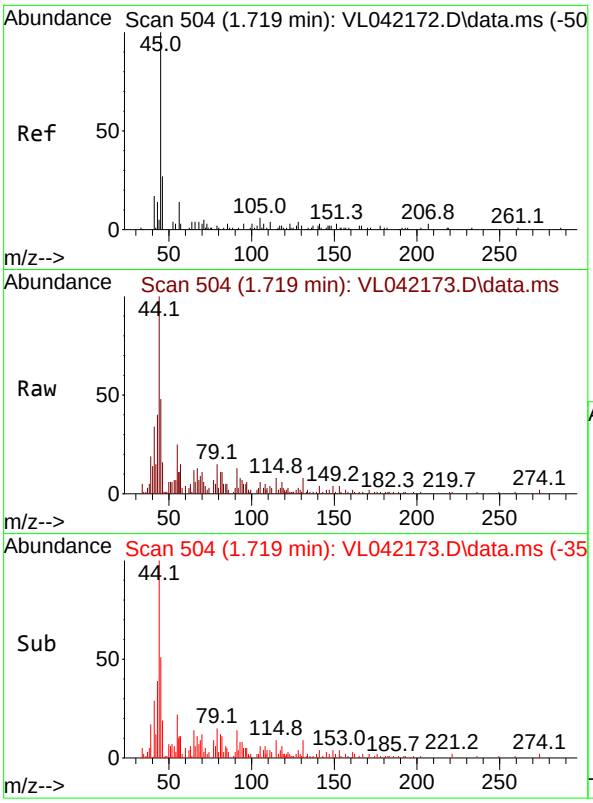


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.012 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:101 Resp: 44761

Ion	Ratio	Lower	Upper
101	100		
151	73.0	57.1	85.7



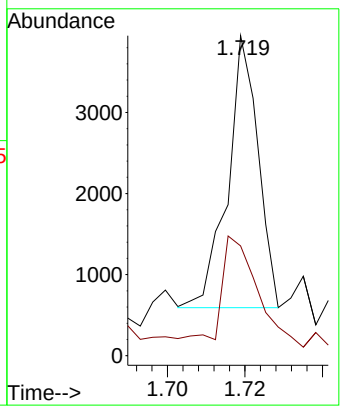


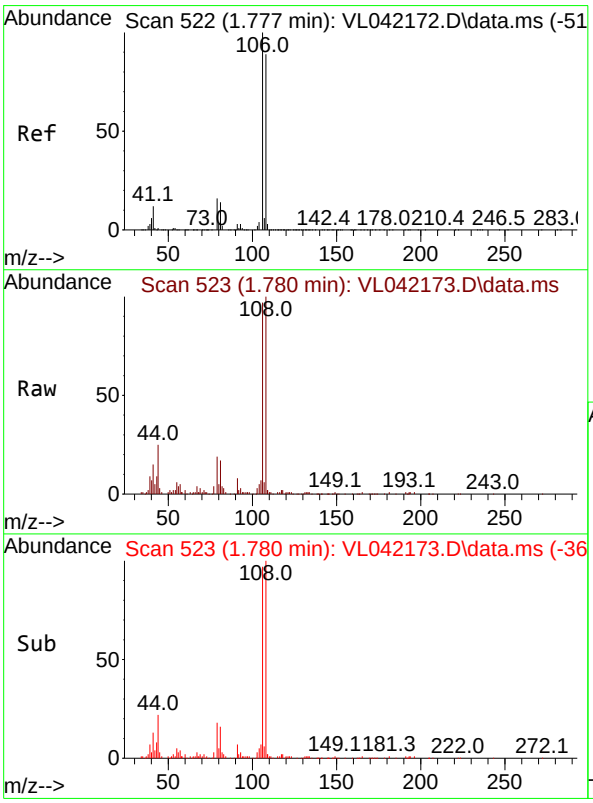
#13
Ethanol
Concen: 1.822 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 1827

Ion	Ratio	Lower	Upper
45	100		
46	85.6	20.2	80.8#

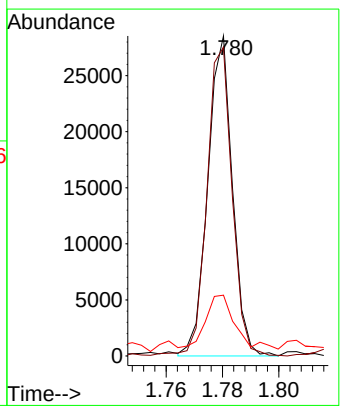


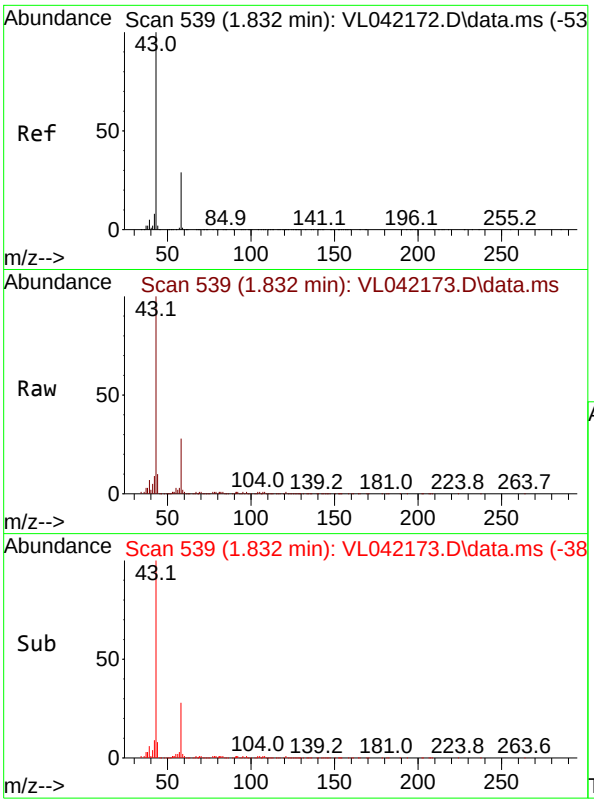


#14
Bromoethene
Concen: 2.033 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:108 Resp: 17323

Ion	Ratio	Lower	Upper
108	100		
106	100.6	86.8	130.2
79	32.0	15.0	22.6#



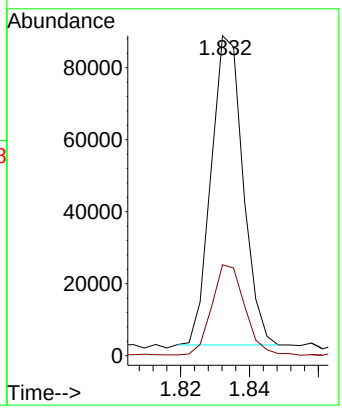


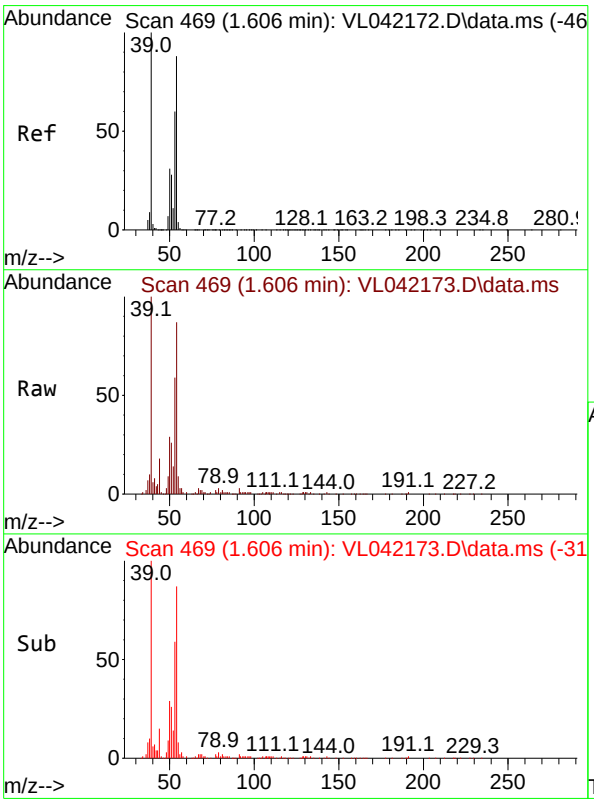
#15
Acetone
Concen: 2.101 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 55365

Ion	Ratio	Lower	Upper
43	100		
58	31.8	23.2	34.8

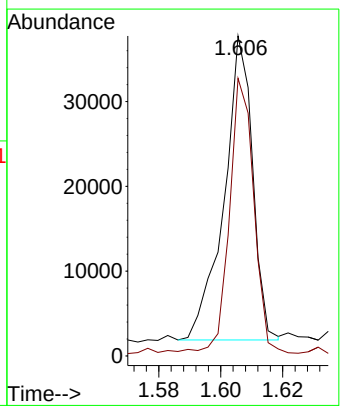


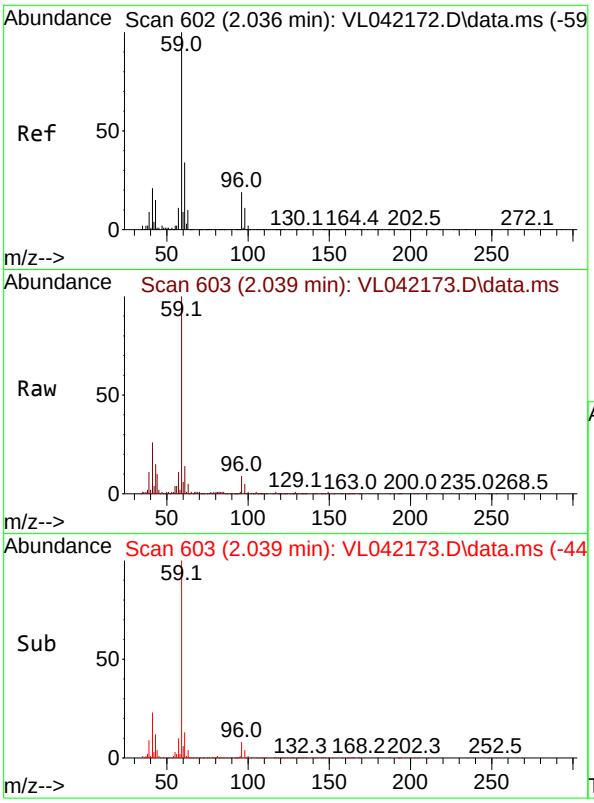


#16
1,3-Butadiene
Concen: 1.932 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 39 Resp: 22894

Ion	Ratio	Lower	Upper
39	100		
54	79.9	60.7	91.1



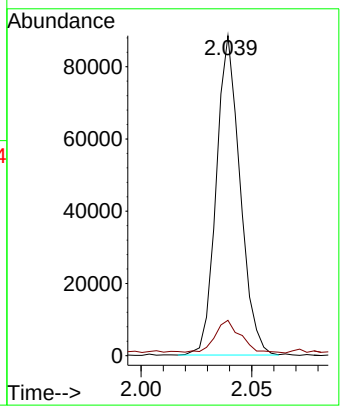


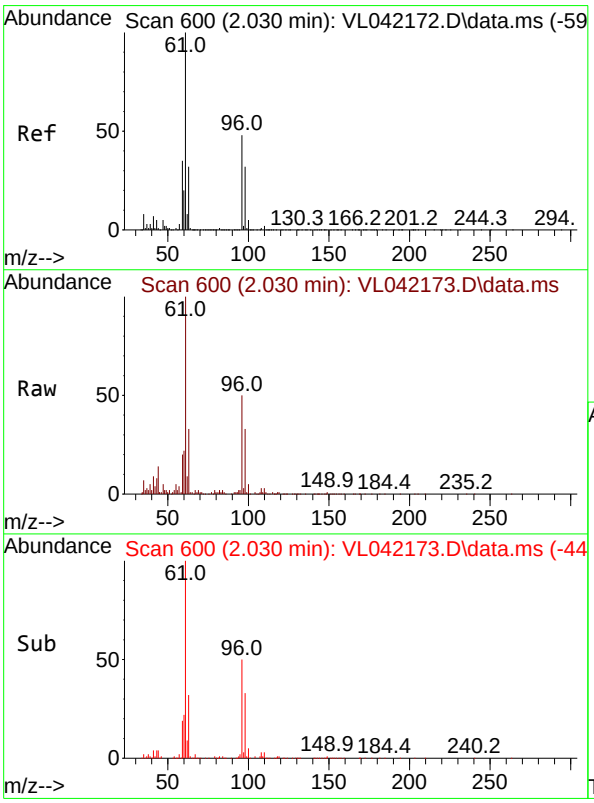
#17
tert-Butyl alcohol
Concen: 2.016 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 59 Resp: 66174

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.9	13.3

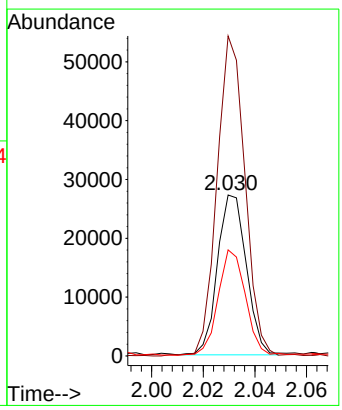


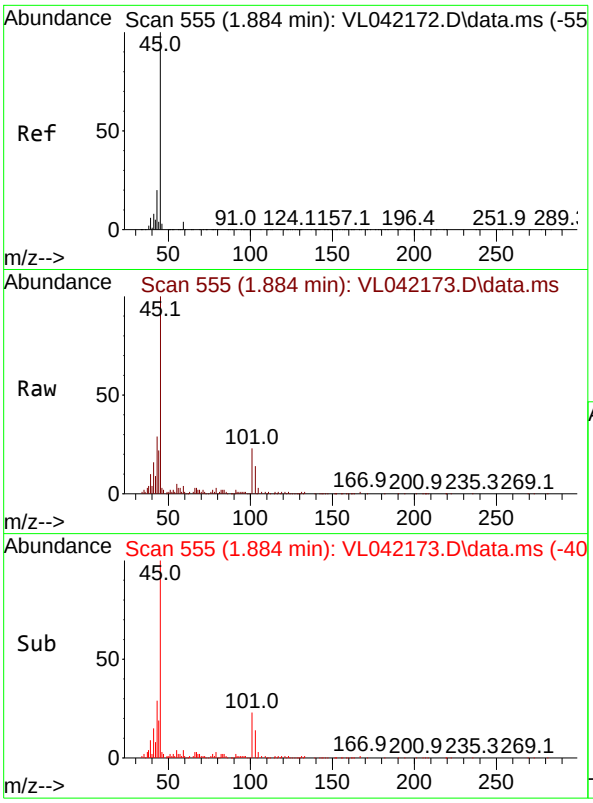


#18
1,1-Dichloroethene
Concen: 2.029 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 21103

Ion	Ratio	Lower	Upper
96	100		
61	199.8	167.6	251.4
98	66.0	53.5	80.3



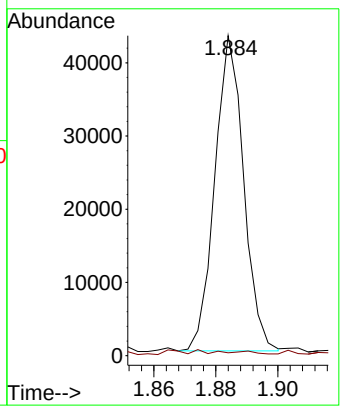


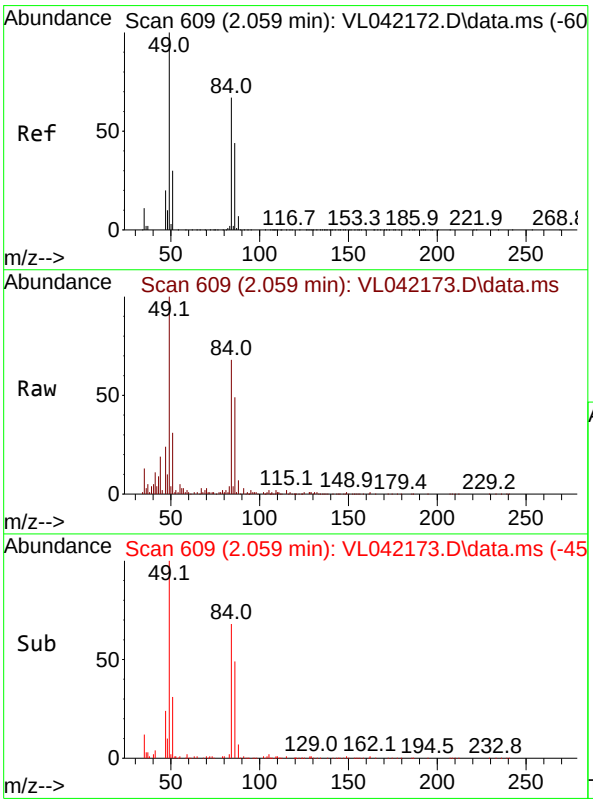
#19
Isopropyl Alcohol
Concen: 1.870 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 27804

Ion	Ratio	Lower	Upper
45	100		
58	3.3	36.9	55.3#

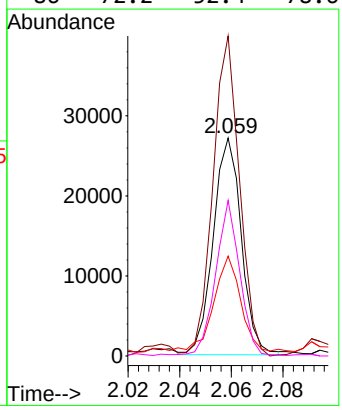


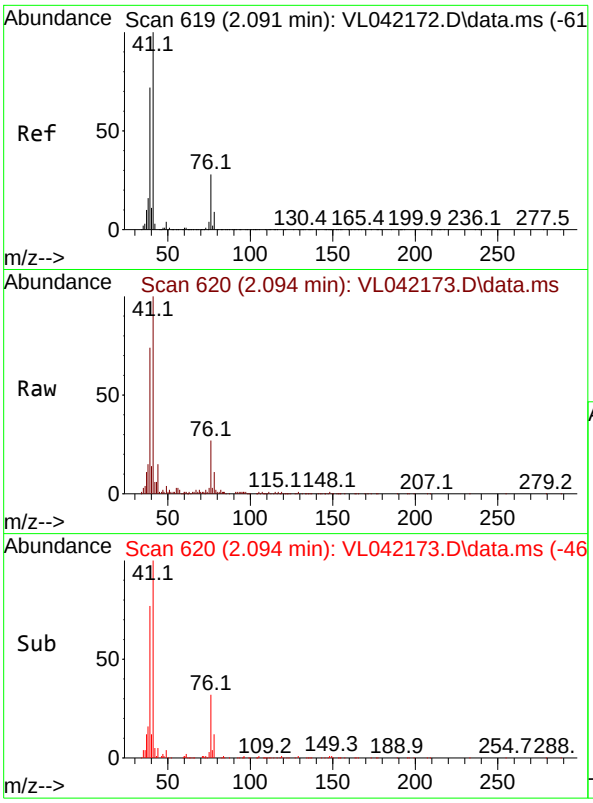


#20
Methylene Chloride
Concen: 2.091 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 20518

Ion	Ratio	Lower	Upper
84	100		
49	148.8	120.2	180.4
51	43.5	37.4	56.0
86	72.2	52.4	78.6



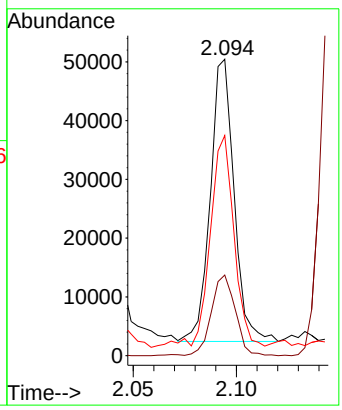


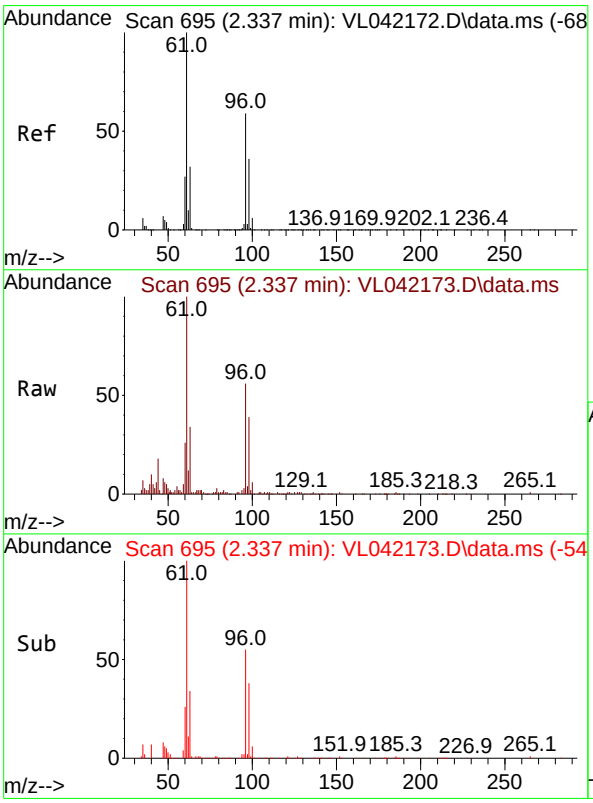
#21
Allyl Chloride
Concen: 2.068 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 38425

Ion	Ratio	Lower	Upper
41	100		
76	29.0	24.1	36.1
39	77.5	61.1	91.7

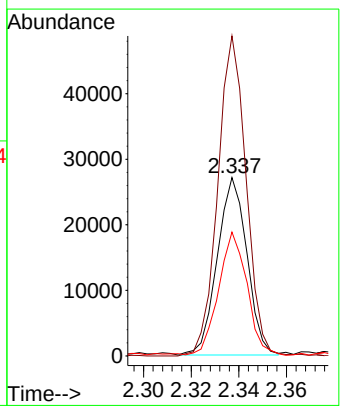


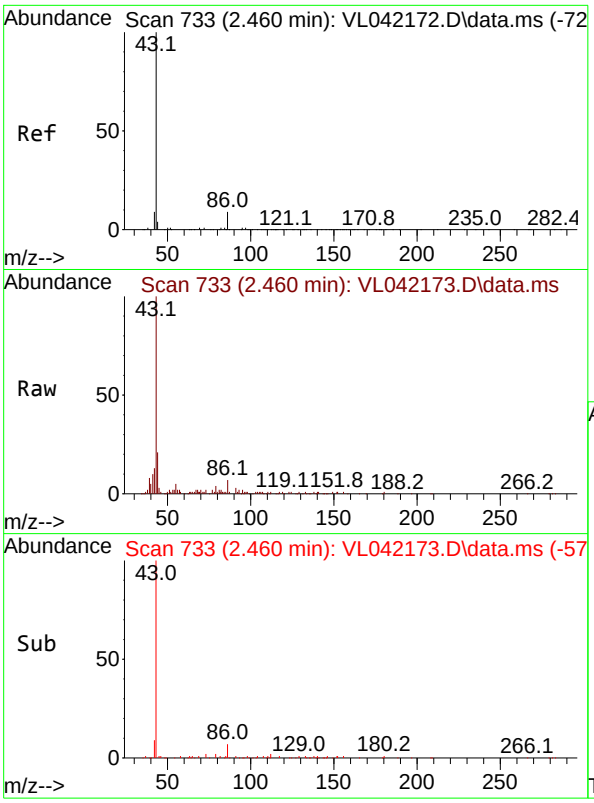


#22
trans-1,2-Dichloroethene
Concen: 1.924 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 96 Resp: 23384

Ion	Ratio	Lower	Upper
96	100		
61	180.3	136.6	204.8
98	68.6	49.4	74.2



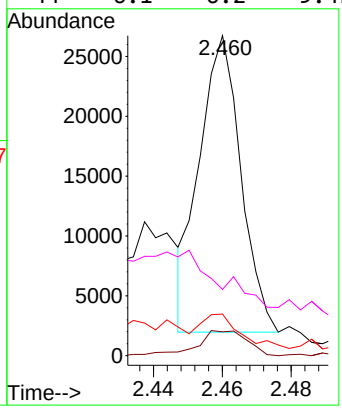


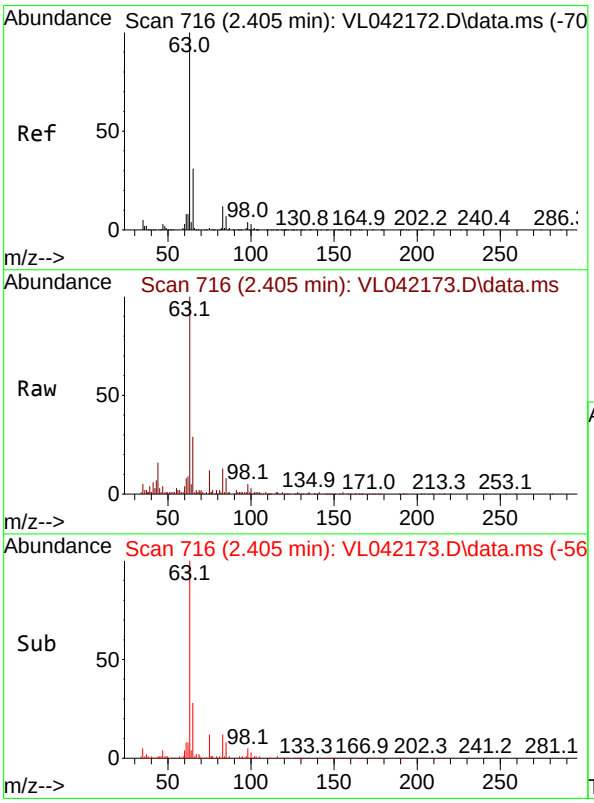
#23
Vinyl Acetate
Concen: 1.894 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 20736

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.4	8.6	13.0
44	6.1	6.2	9.4#

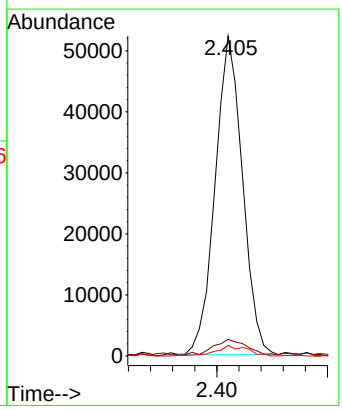


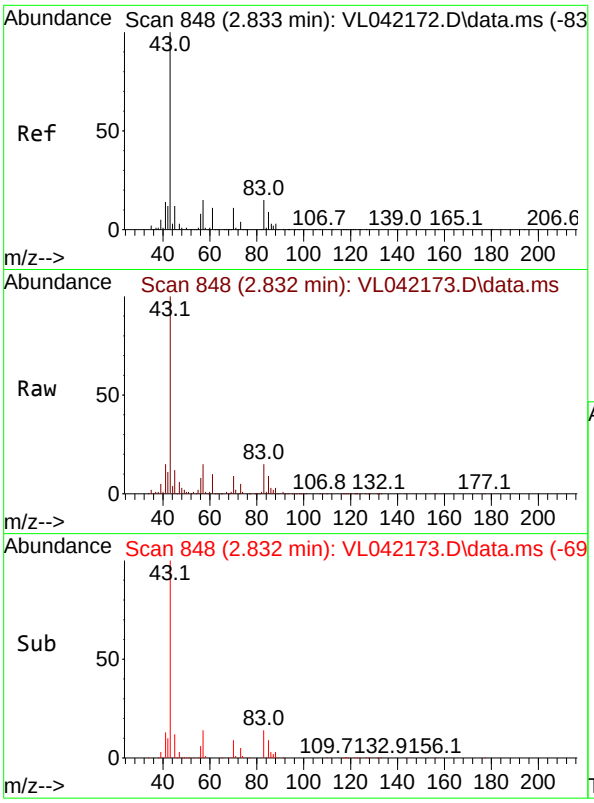


#24
1,1-Dichloroethane
Concen: 2.008 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 63 Resp: 44740

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.3	1.6	4.7



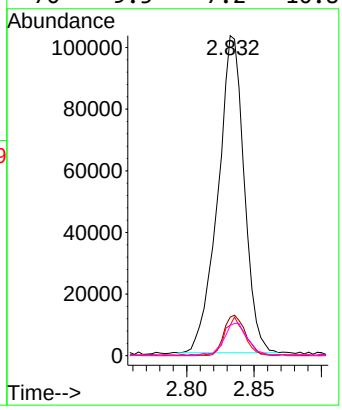


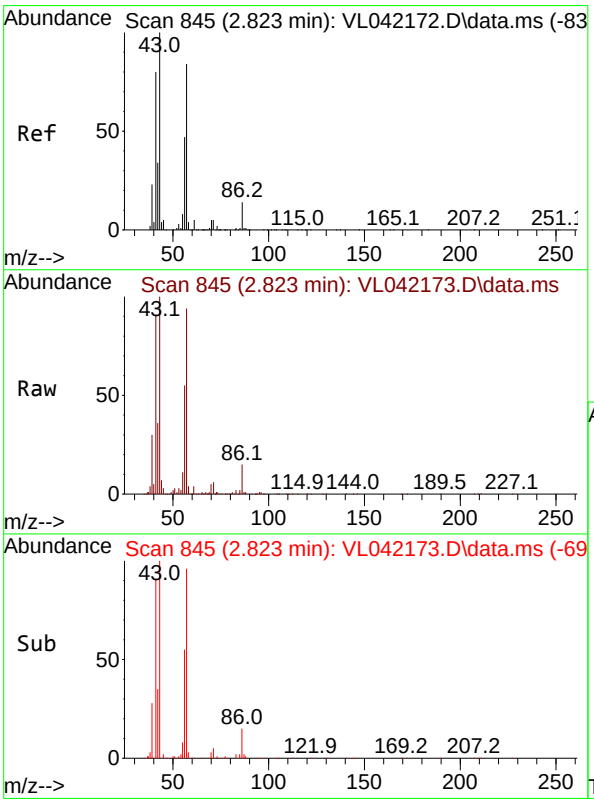
#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 139516

Ion	Ratio	Lower	Upper
43	100		
45	10.9	8.2	12.2
61	9.1	7.3	10.9
70	9.5	7.2	10.8

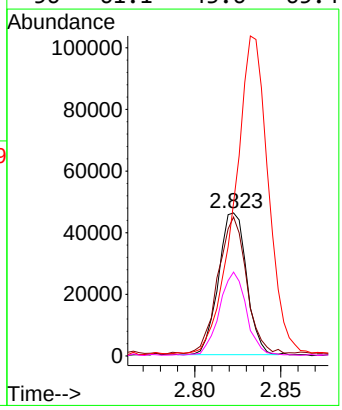


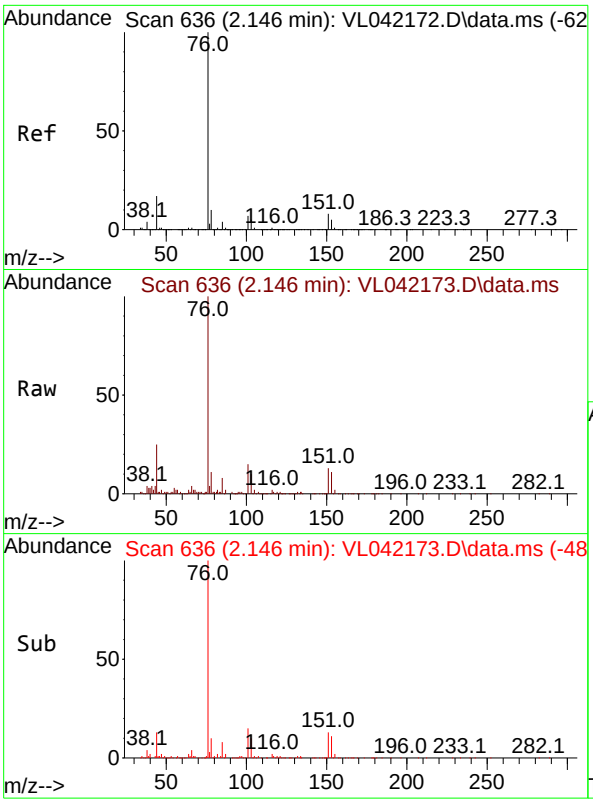


#26
Hexane
Concen: 1.972 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 52095

Ion	Ratio	Lower	Upper
57	100		
41	100.9	76.6	114.8
43	274.8	207.8	311.8
56	61.1	43.6	65.4



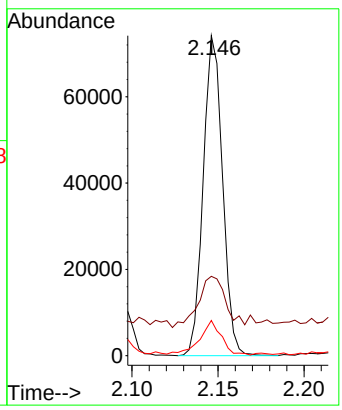


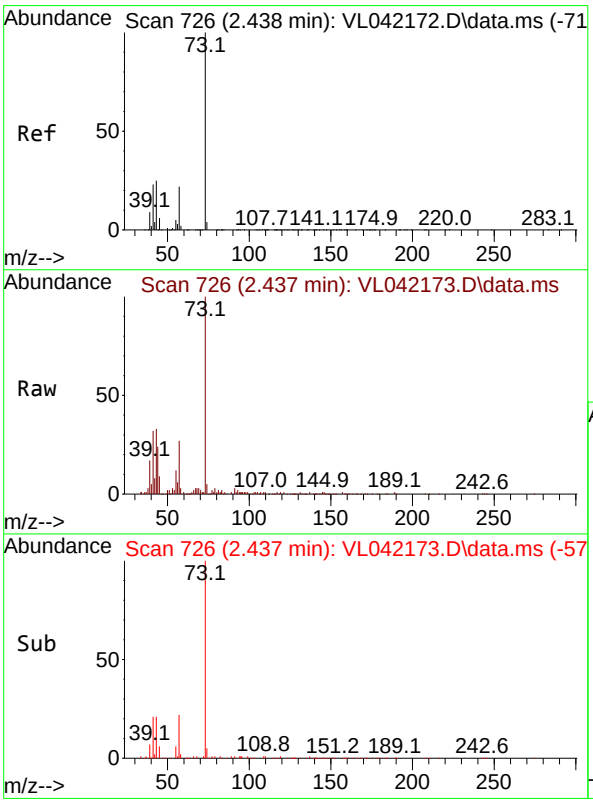
#27
Carbon Disulfide
Concen: 2.047 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 76 Resp: 57969

Ion	Ratio	Lower	Upper
76	100		
44	35.2	14.7	22.1#
78	12.0	9.3	13.9

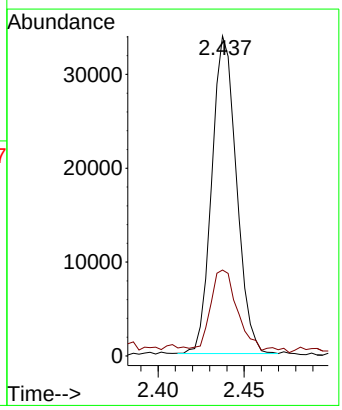


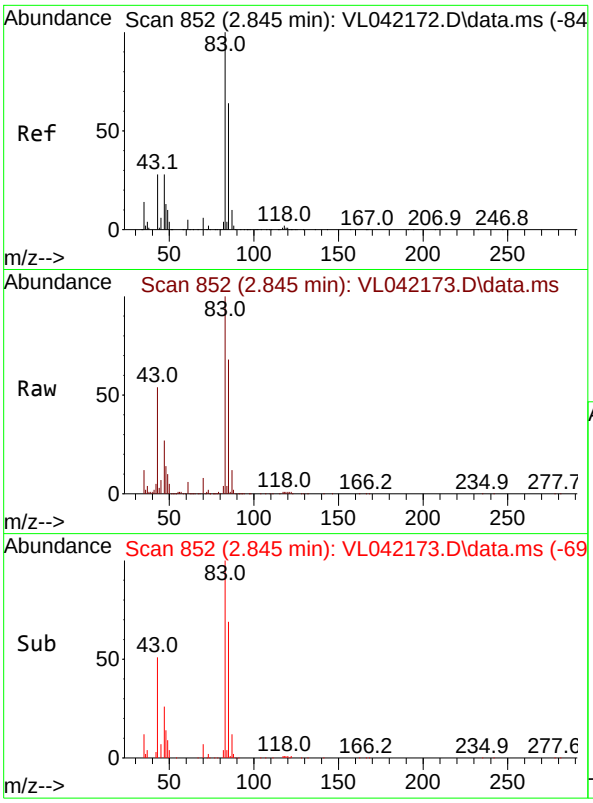


#28
Methyl tert-Butyl Ether
Concen: 2.049 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 73 Resp: 33703

Ion	Ratio	Lower	Upper
73	100		
57	25.2	20.5	30.7



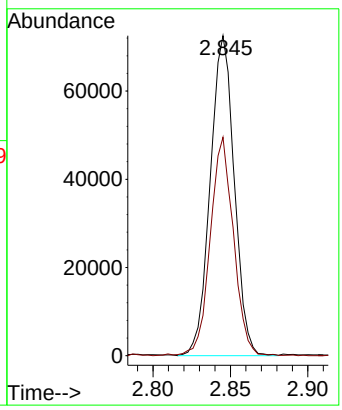


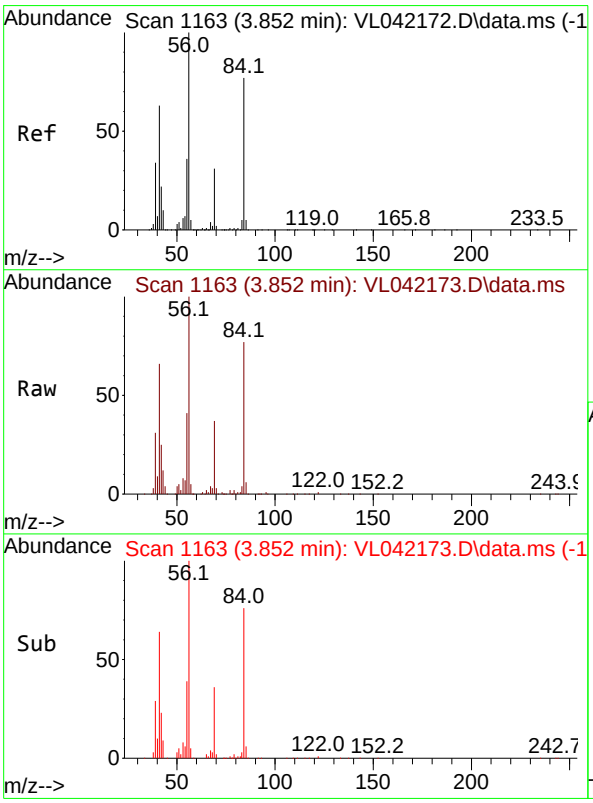
#29
Chloroform
Concen: 2.019 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 78043

Ion	Ratio	Lower	Upper
83	100		
85	68.2	51.4	77.2

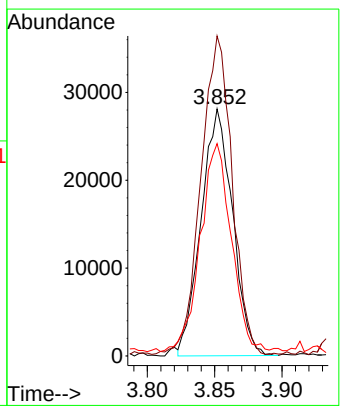


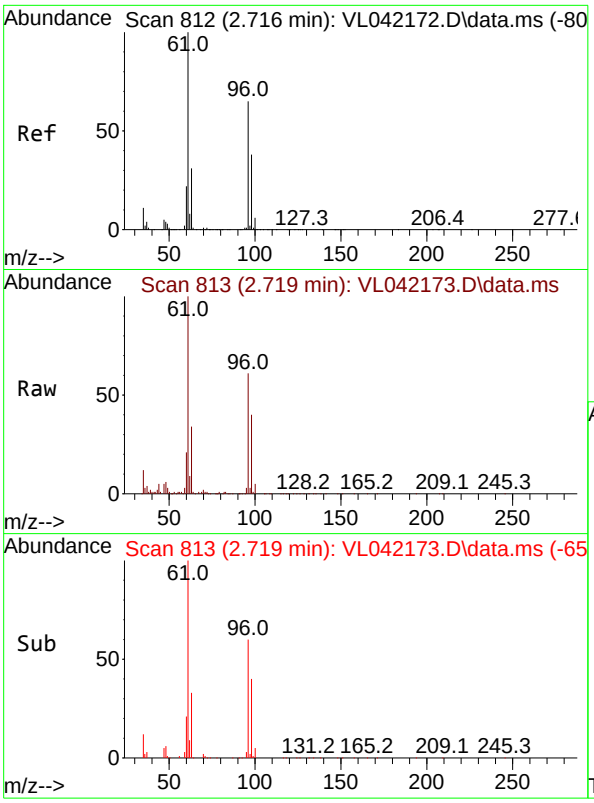


#30
Cyclohexane
Concen: 1.989 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 84 Resp: 45641

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	84.6	66.5	99.7



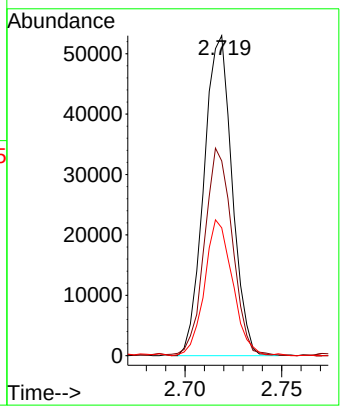


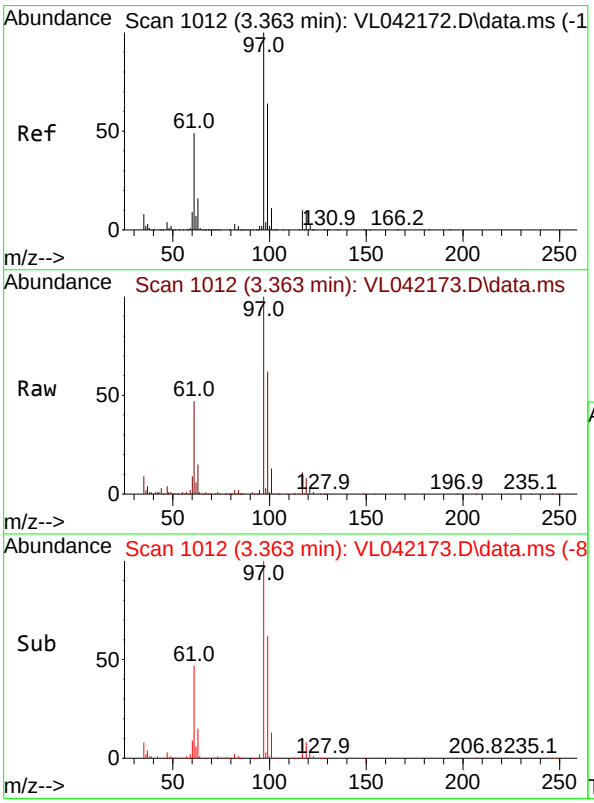
#31
cis-1,2-Dichloroethene
Concen: 2.003 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 61 Resp: 53713

Ion	Ratio	Lower	Upper
61	100		
96	60.6	51.8	77.8
98	39.6	30.6	46.0

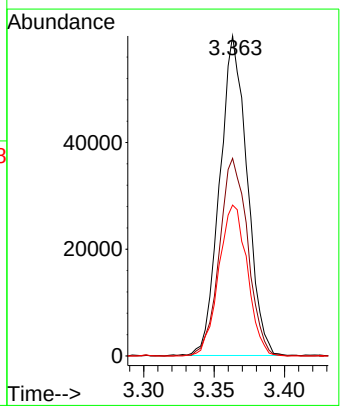


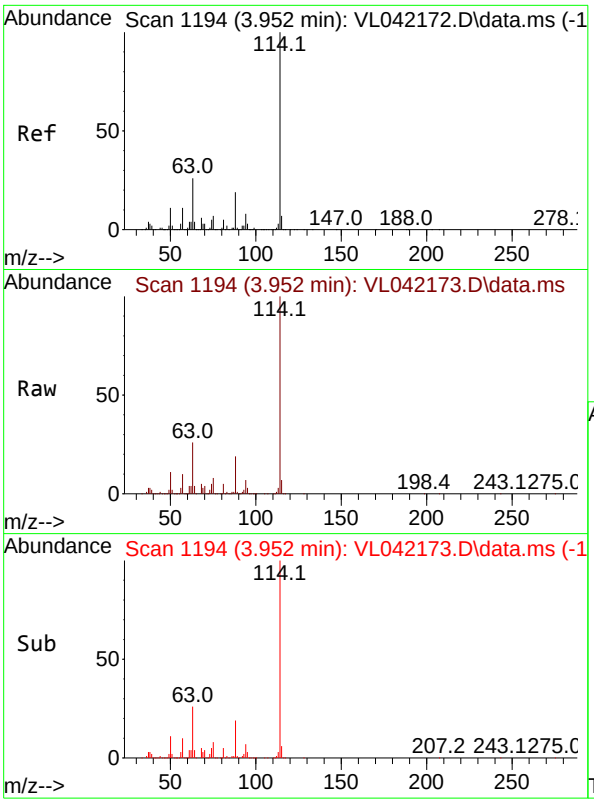


#32
1,1,1-Trichloroethane
Concen: 1.833 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 97 Resp: 81070

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.5	77.3
61	49.3	38.7	58.1



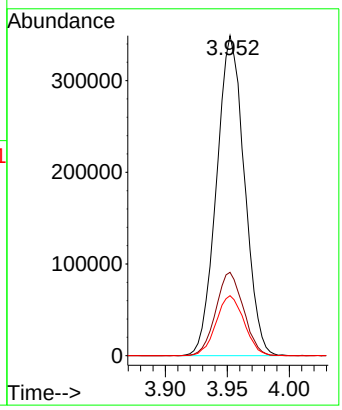


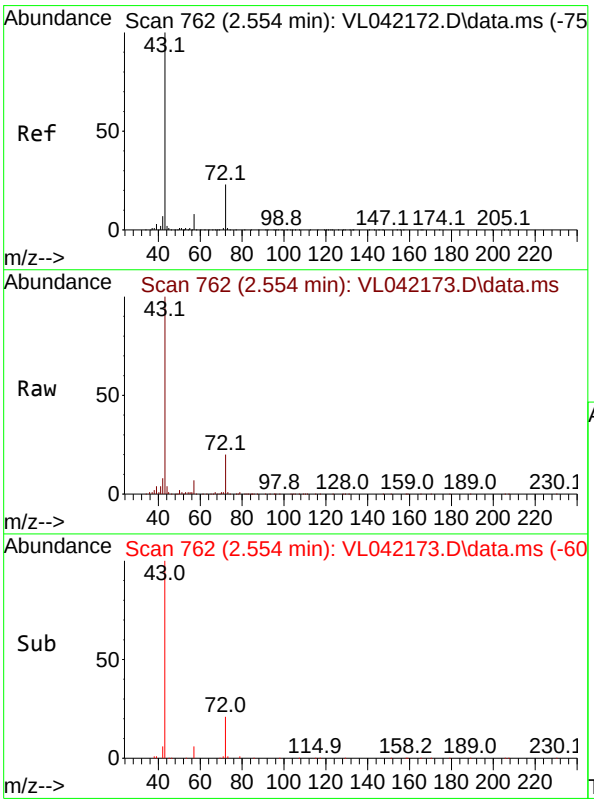
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:114 Resp: 546394

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	18.9	15.0	22.4

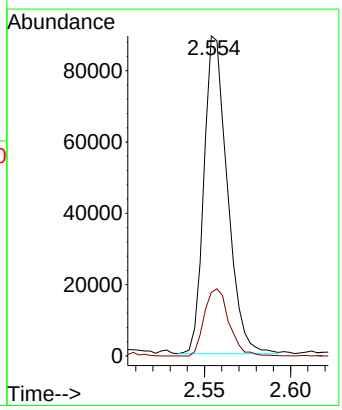


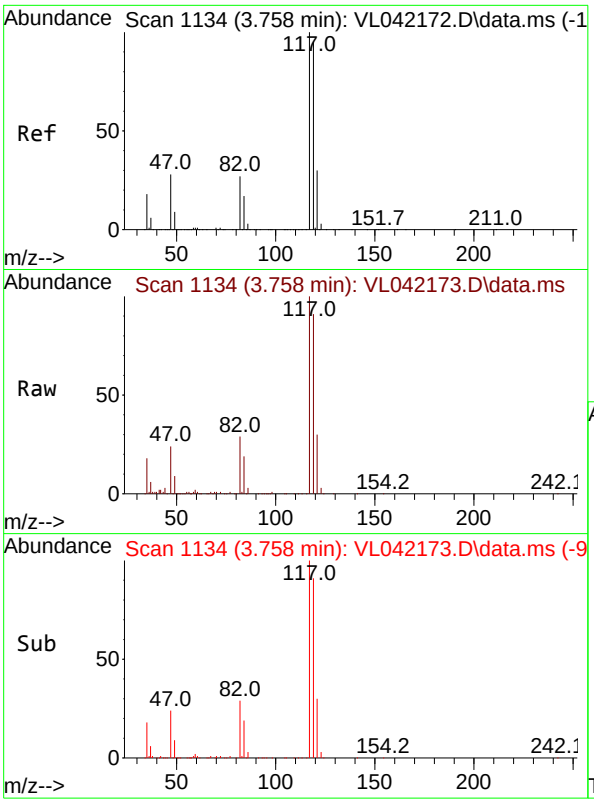


#34
2-Butanone
Concen: 2.124 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 84157

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2



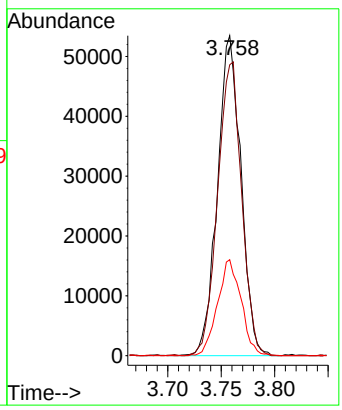


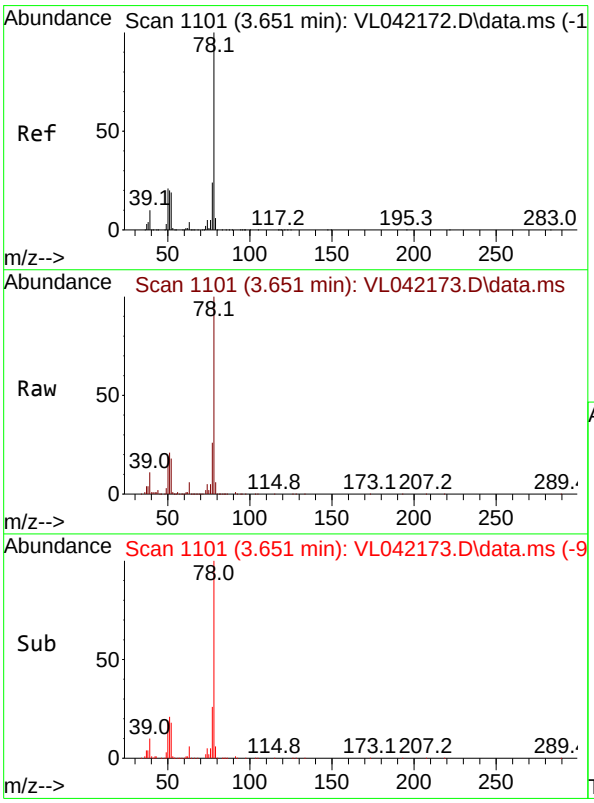
#35
Carbon Tetrachloride
Concen: 1.944 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 81735

Ion	Ratio	Lower	Upper
117	100		
119	90.8	76.2	114.2
121	30.0	24.2	36.4

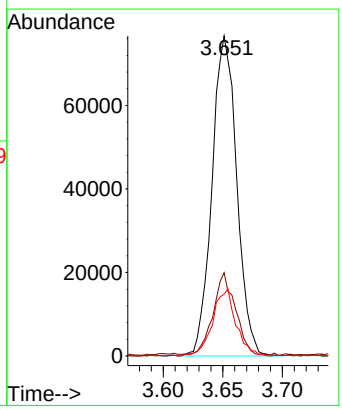


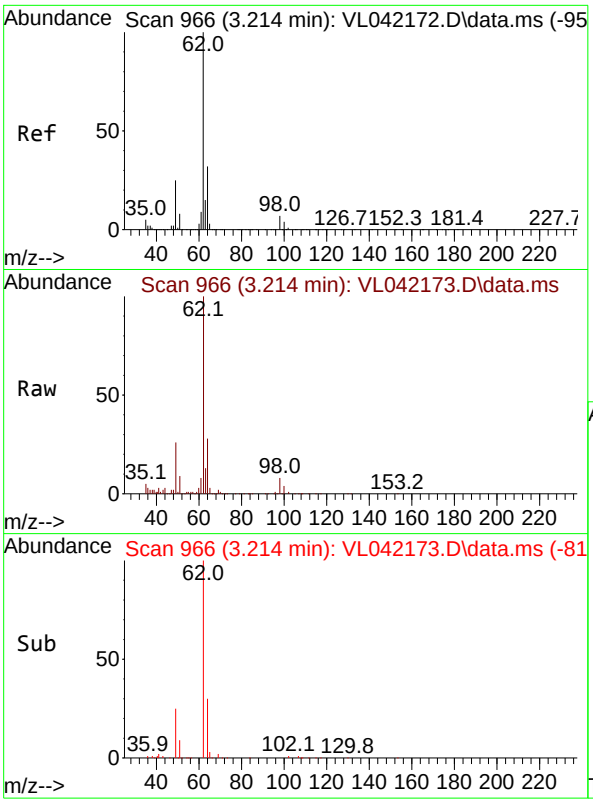


#36
Benzene
Concen: 2.044 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 78 Resp: 110727

Ion	Ratio	Lower	Upper
78	100		
77	25.7	19.1	28.7
50	19.3	16.6	24.8



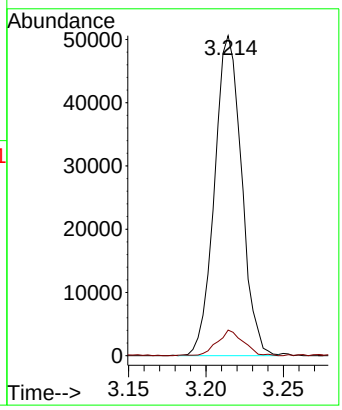


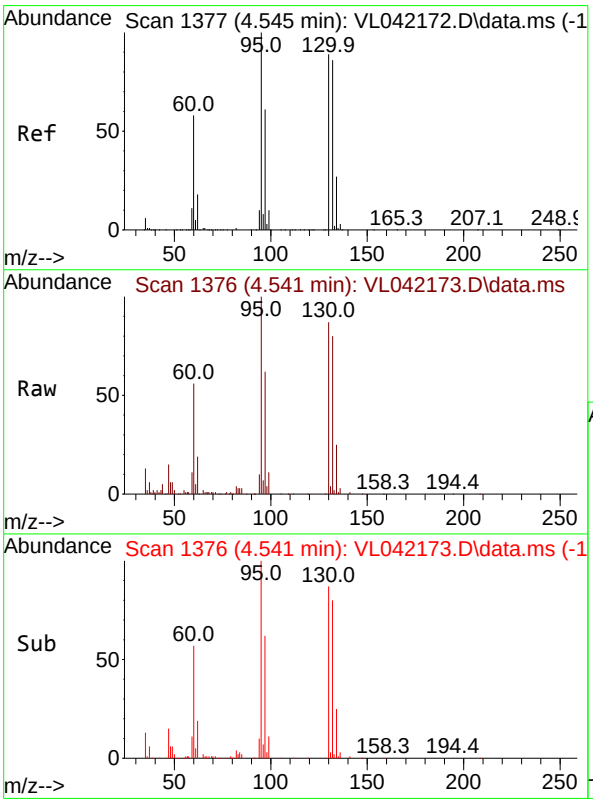
#37
1,2-Dichloroethane
Concen: 1.982 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 61476

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2

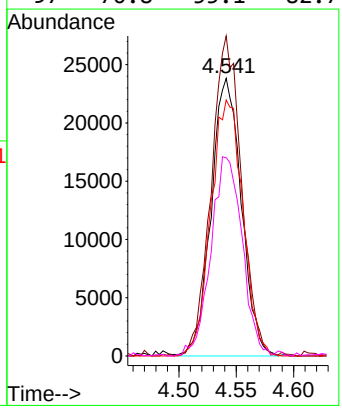


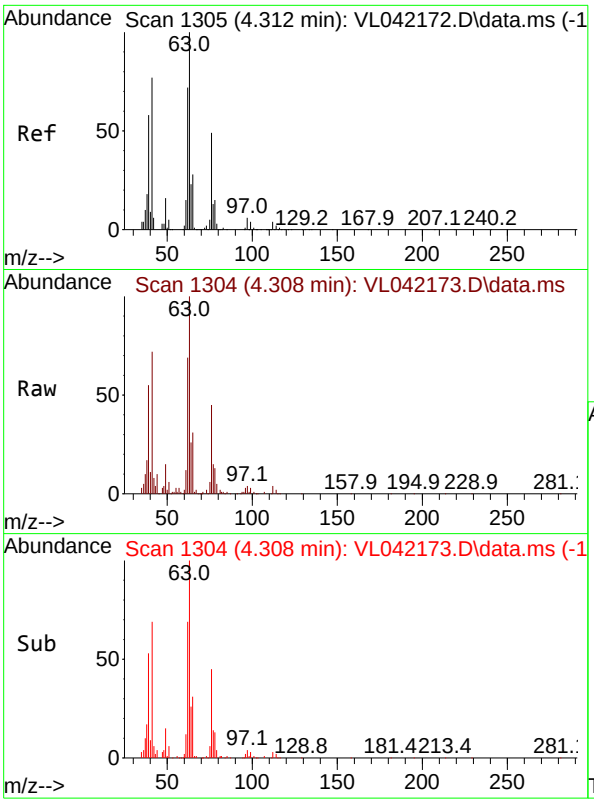


#38
Trichloroethene
Concen: 1.924 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:130 Resp: 43501

Ion	Ratio	Lower	Upper
130	100		
95	114.8	89.8	134.8
132	92.2	77.4	116.2
97	70.8	55.1	82.7



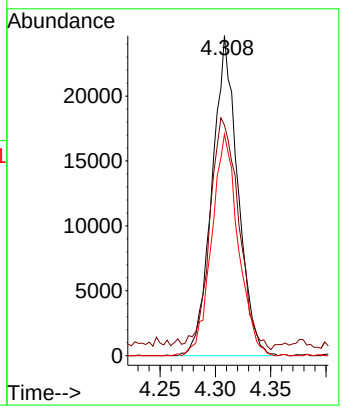


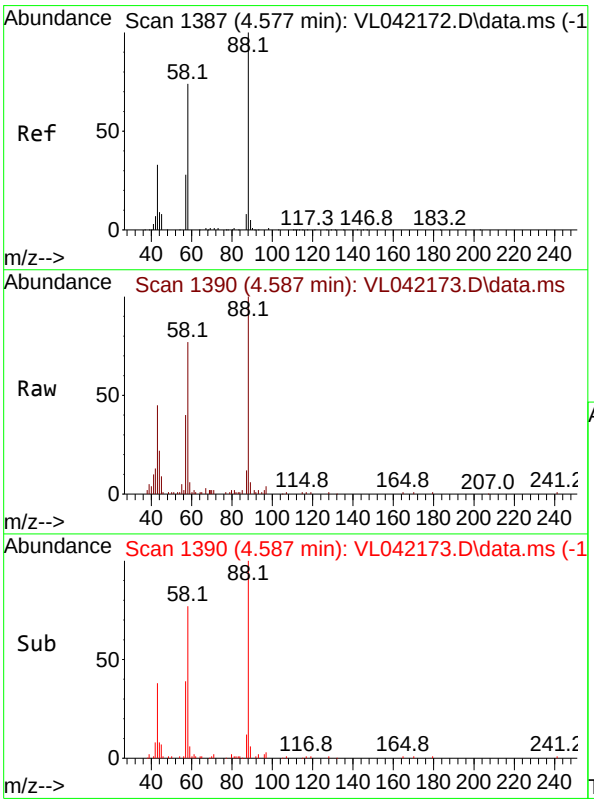
#39
1,2-Dichloropropane
Concen: 2.023 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 63 Resp: 39912

Ion	Ratio	Lower	Upper
63	100		
41	68.6	61.7	92.5
62	69.2	57.6	86.4

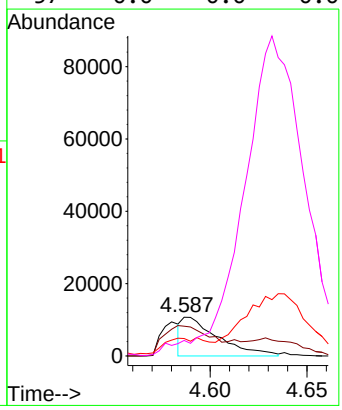


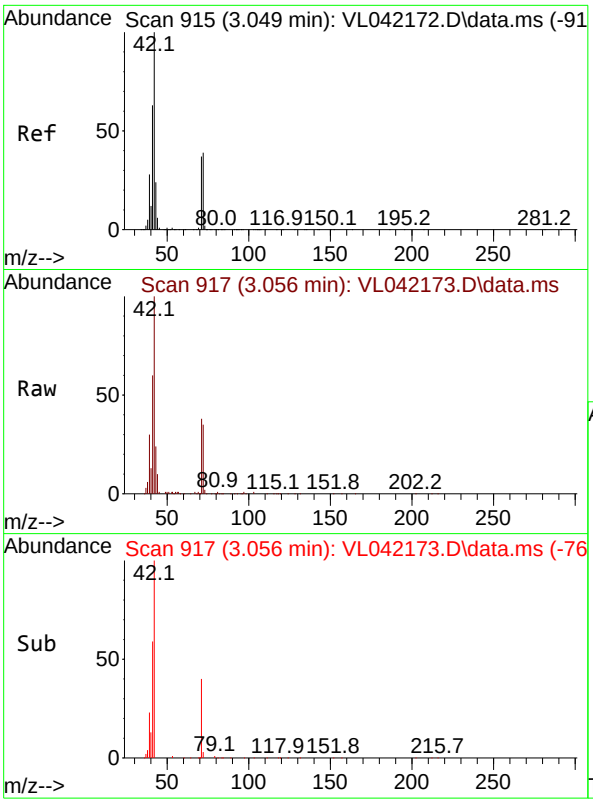


#40
1,4-Dioxane
Concen: 1.369 ppbv
RT: 4.587 min Scan# 1390
Delta R.T. 0.009 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 88 Resp: 14008

Ion	Ratio	Lower	Upper
88	100		
58	178.2	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



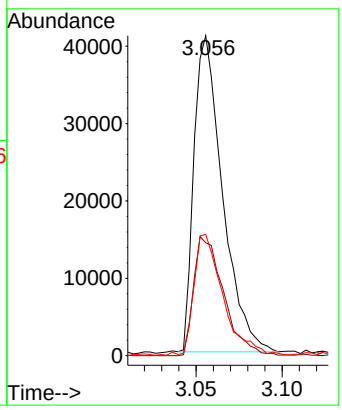


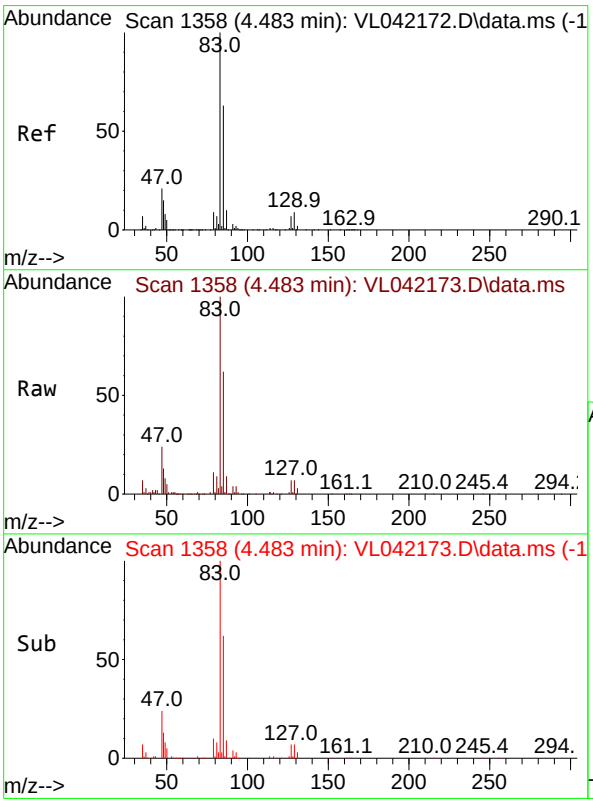
#41
Tetrahydrofuran
Concen: 2.097 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 42 Resp: 47262

Ion	Ratio	Lower	Upper
42	100		
72	39.6	31.4	47.0
71	39.0	30.2	45.4

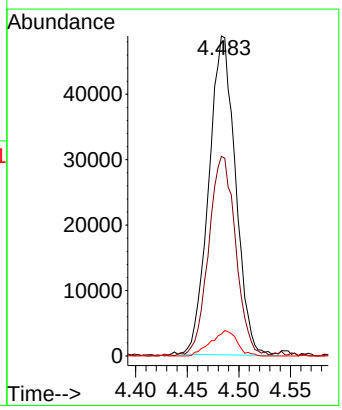


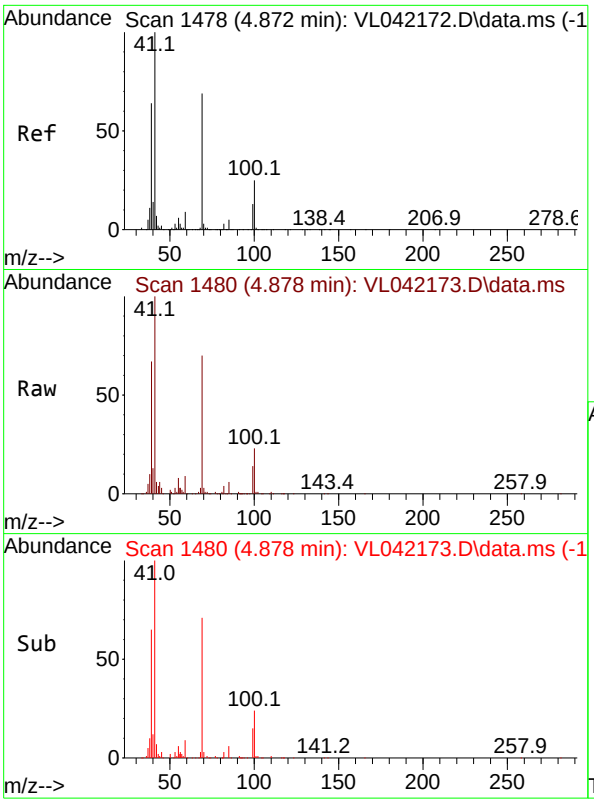


#42
Bromodichloromethane
Concen: 2.050 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 83 Resp: 87640

Ion	Ratio	Lower	Upper
83	100		
85	62.2	50.5	75.7
127	6.9	5.9	8.9



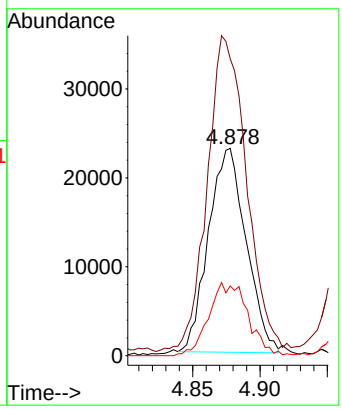


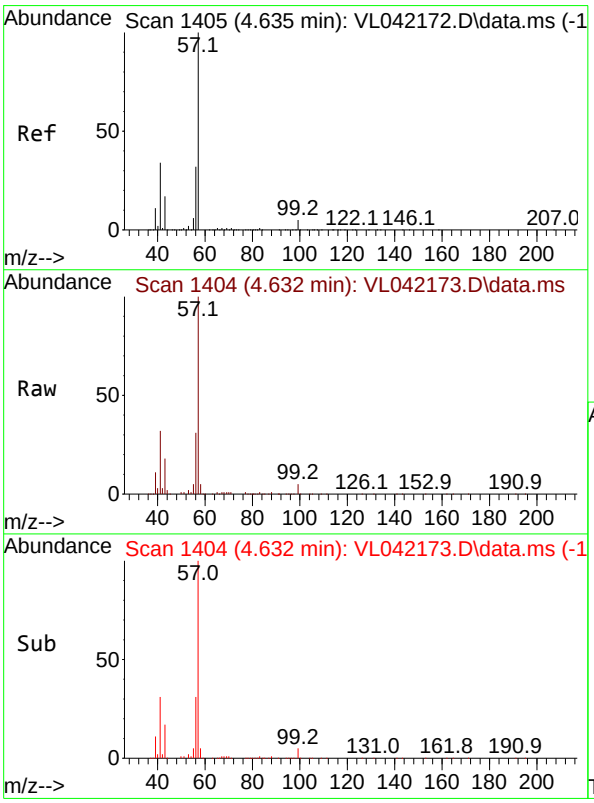
#43
Methyl Methacrylate
Concen: 1.952 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 69 Resp: 44624

Ion	Ratio	Lower	Upper
69	100		
41	158.7	123.8	185.6
100	37.5	28.4	42.6

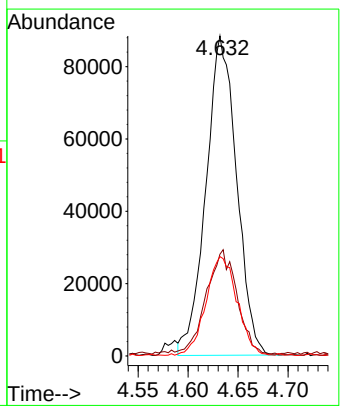


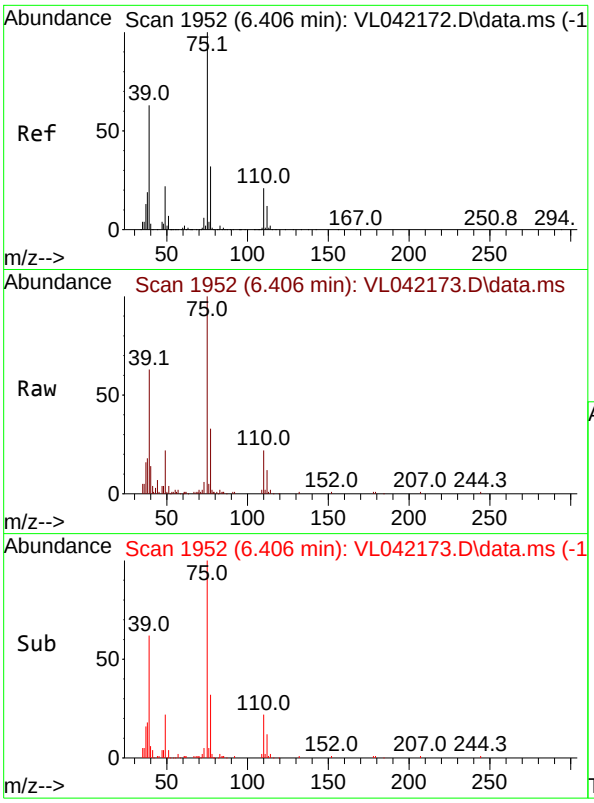


#44
2,2,4-Trimethylpentane
Concen: 2.057 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 57 Resp: 188282

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	31.8	25.6	38.4



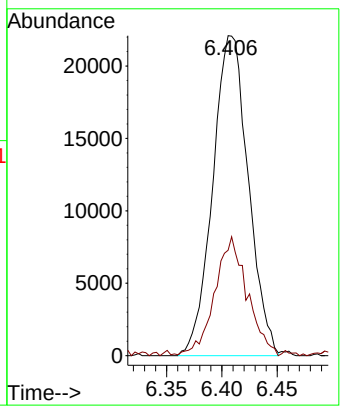


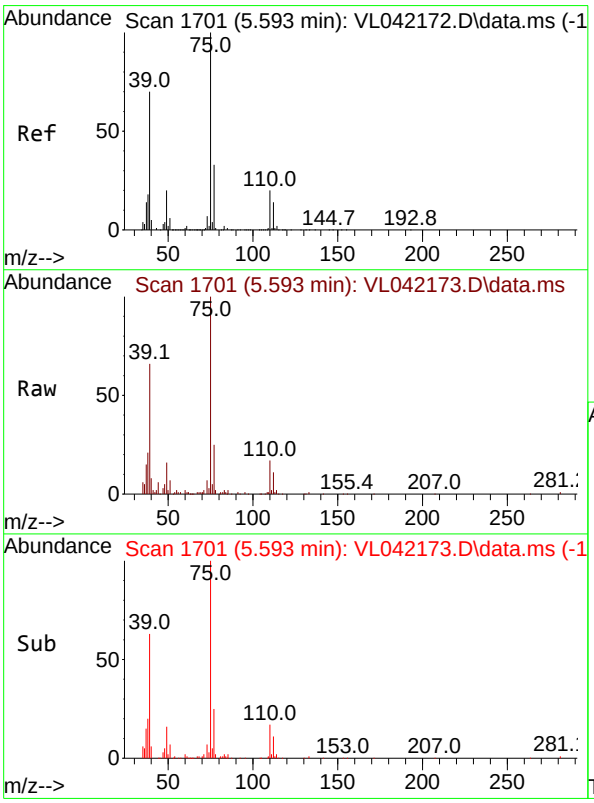
#45
t-1,3-Dichloropropene
Concen: 2.011 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 75 Resp: 49461

Ion	Ratio	Lower	Upper
75	100		
77	32.9	26.0	39.0

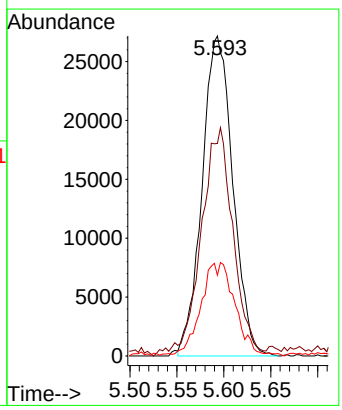


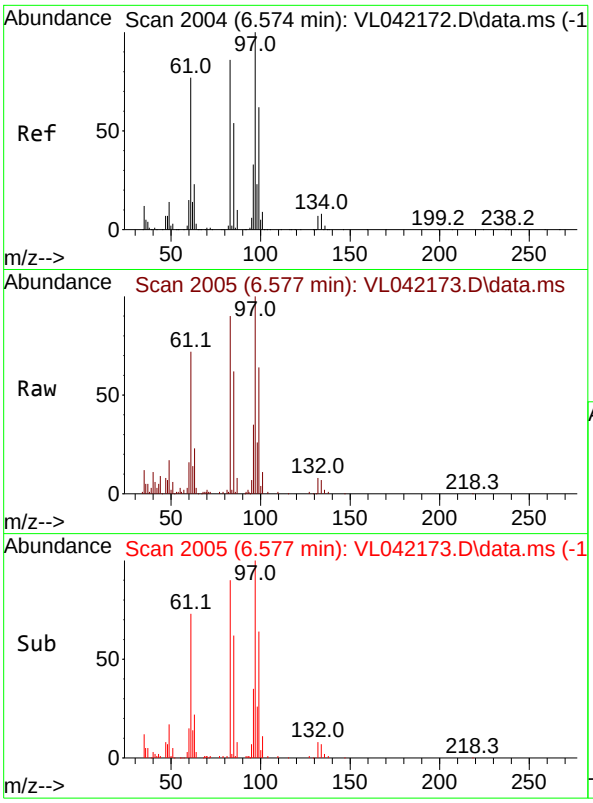


#46
cis-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 75 Resp: 61829

Ion	Ratio	Lower	Upper
75	100		
39	64.4	55.8	83.6
77	24.5	26.0	39.0#



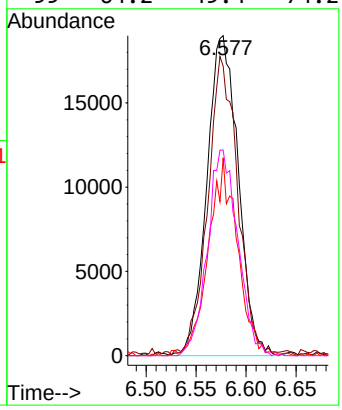


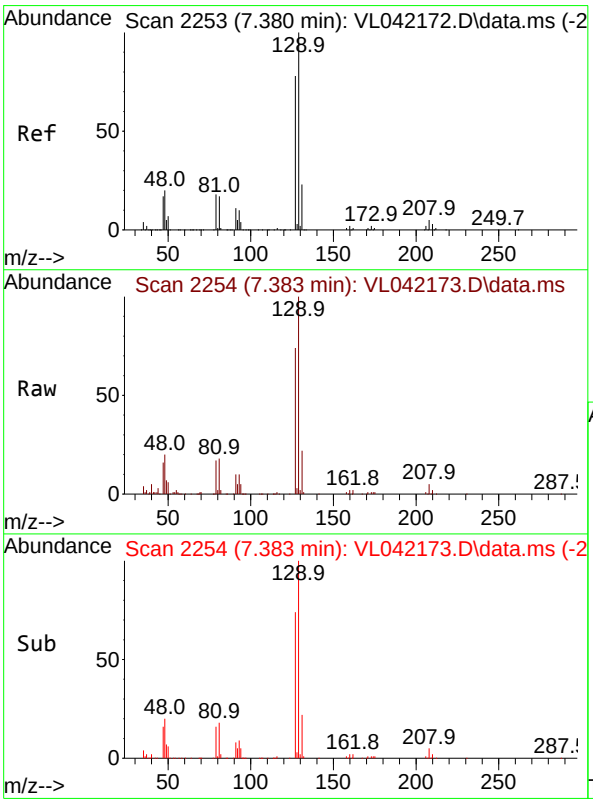
#47
1,1,2-Trichloroethane
Concen: 1.985 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 97 Resp: 41387

Ion	Ratio	Lower	Upper
97	100		
83	89.4	69.2	103.8
85	61.3	43.1	64.7
99	64.2	49.4	74.2

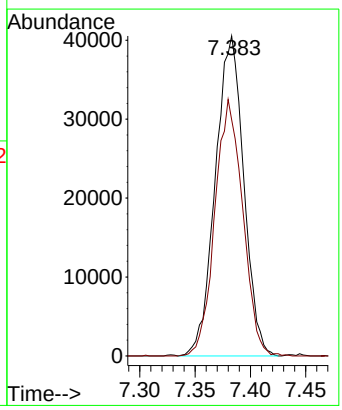


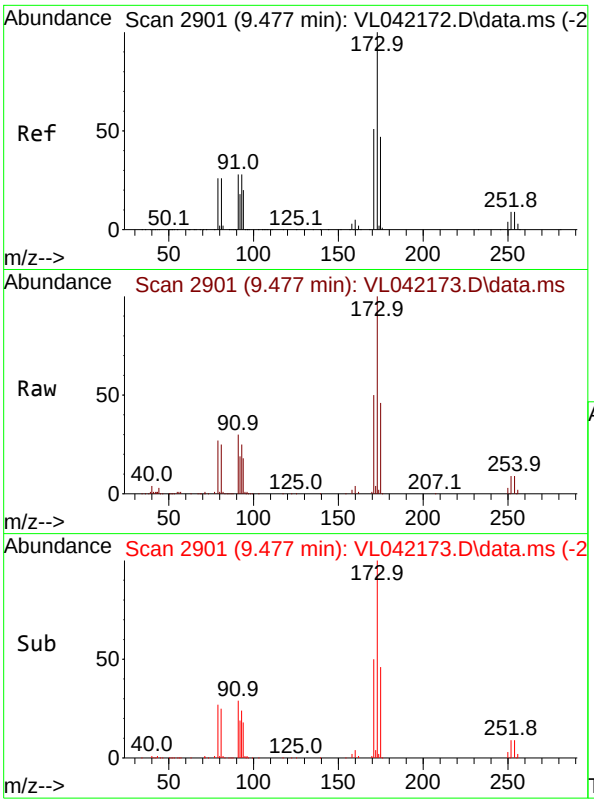


#48
Dibromochloromethane
Concen: 2.050 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:129 Resp: 72441

Ion	Ratio	Lower	Upper
129	100		
127	78.5	39.1	117.2



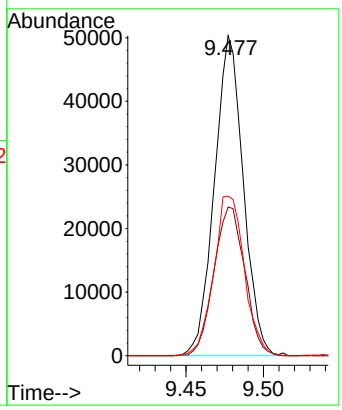


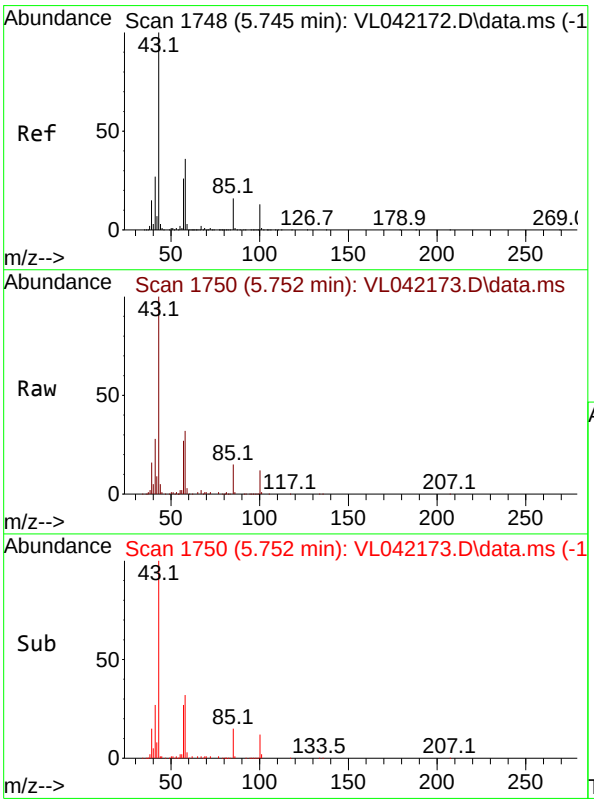
#49
Bromoform
Concen: 2.056 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:173 Resp: 65221

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.0	41.8	62.6

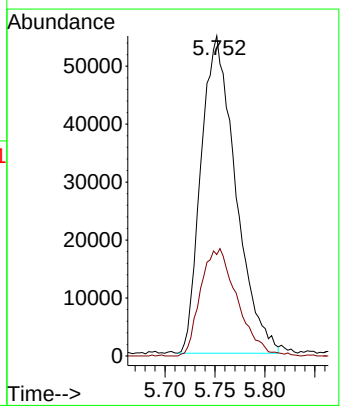


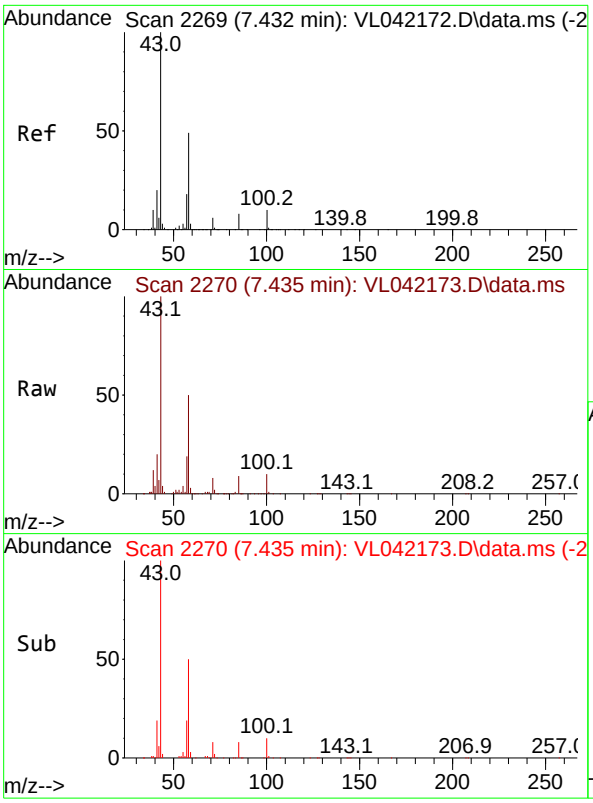


#50
4-Methyl-2-Pentanone
Concen: 2.107 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.006 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 43 Resp: 132328

Ion	Ratio	Lower	Upper
43	100		
58	35.9	29.0	43.6



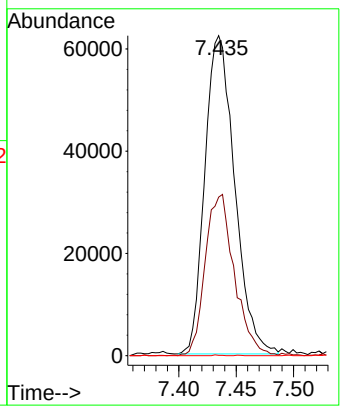


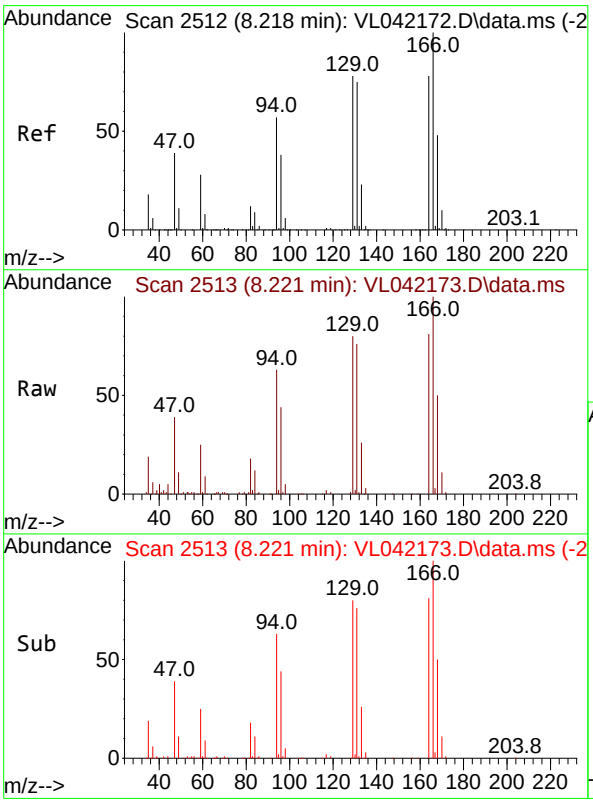
#51
2-Hexanone
Concen: 2.162 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 112681

Ion	Ratio	Lower	Upper
43	100		
58	50.0	39.7	59.5
98	0.0	0.1	0.1#

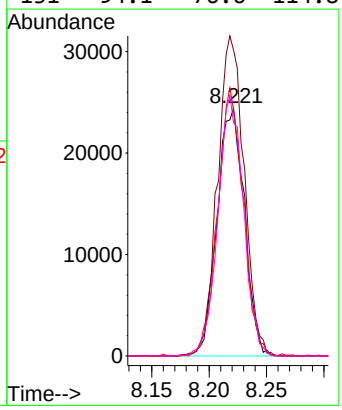


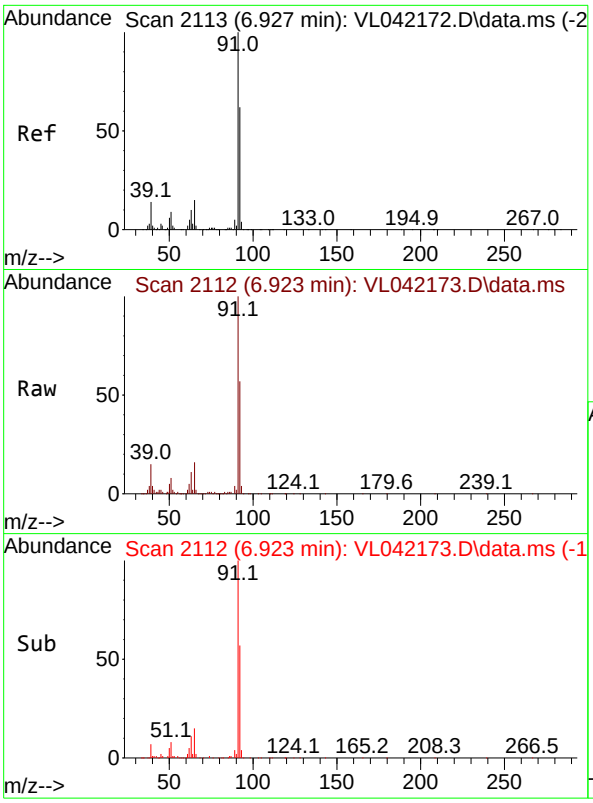


#52
Tetrachloroethene
Concen: 1.888 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:164 Resp: 40558

Ion	Ratio	Lower	Upper
164	100		
166	123.4	102.5	153.7
129	99.2	79.8	119.8
131	94.1	76.6	114.8



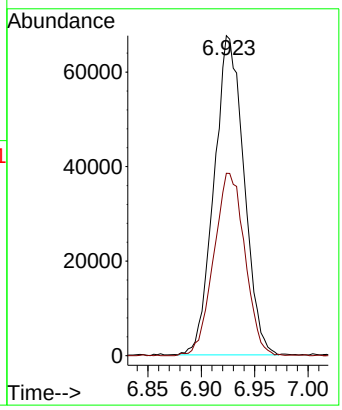


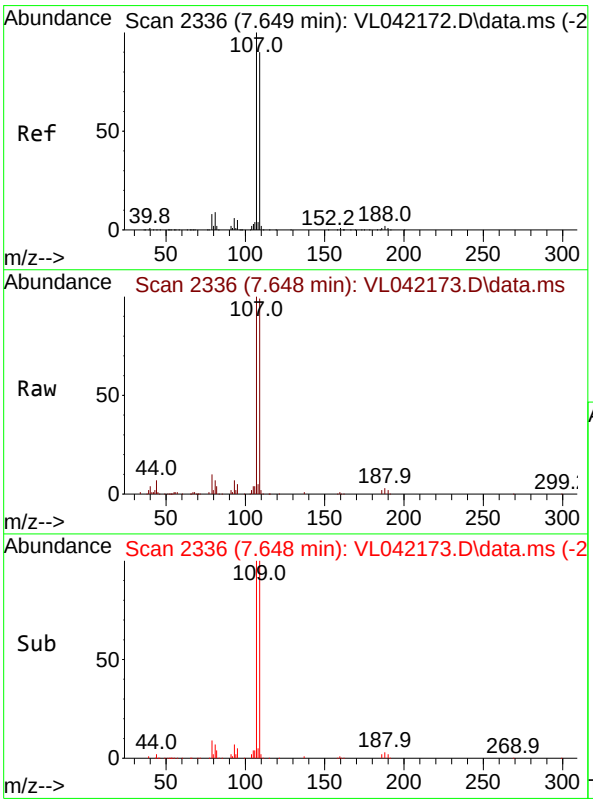
#53
Toluene
Concen: 2.045 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 131314

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6

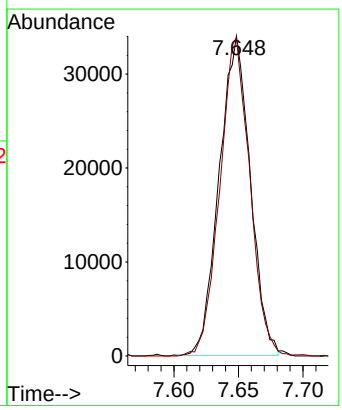


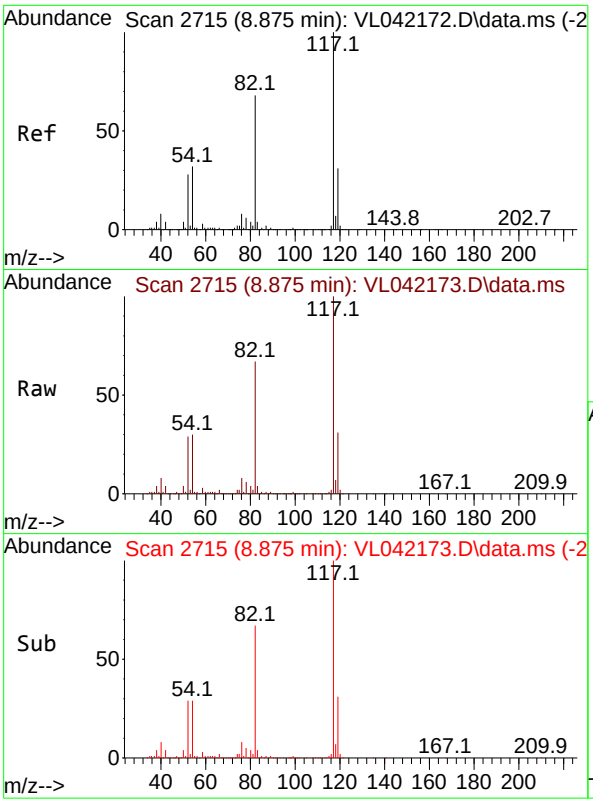


#54
1,2-Dibromoethane
Concen: 1.952 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:107 Resp: 56799

Ion	Ratio	Lower	Upper
107	100		
109	99.7	72.2	108.4



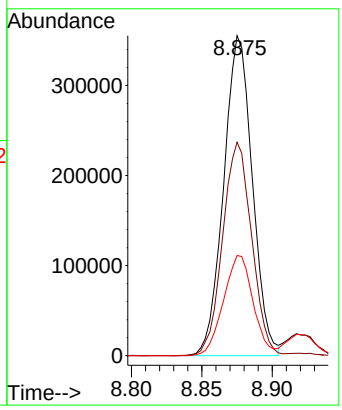


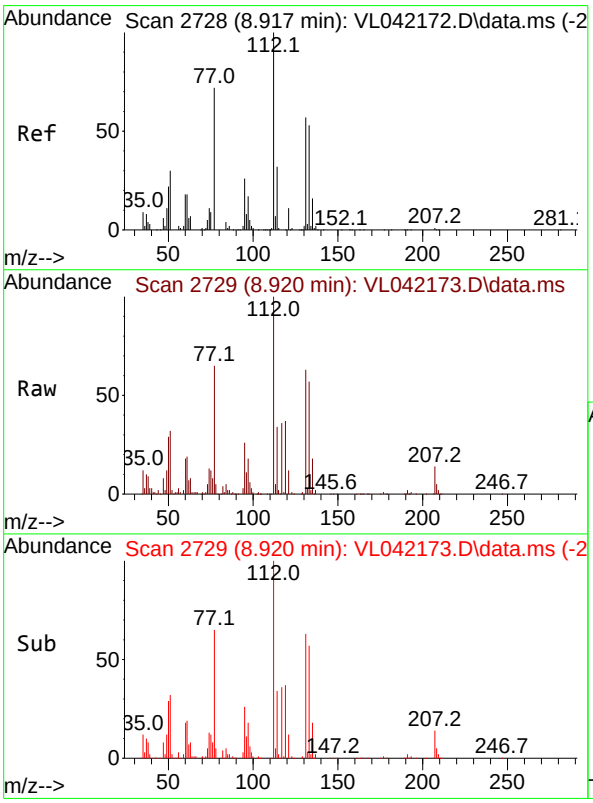
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 504538

Ion	Ratio	Lower	Upper
117	100		
82	68.2	55.8	83.6
119	33.0	25.5	38.3

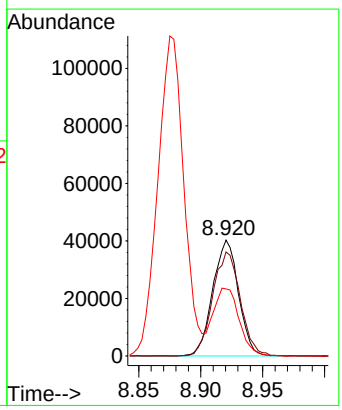


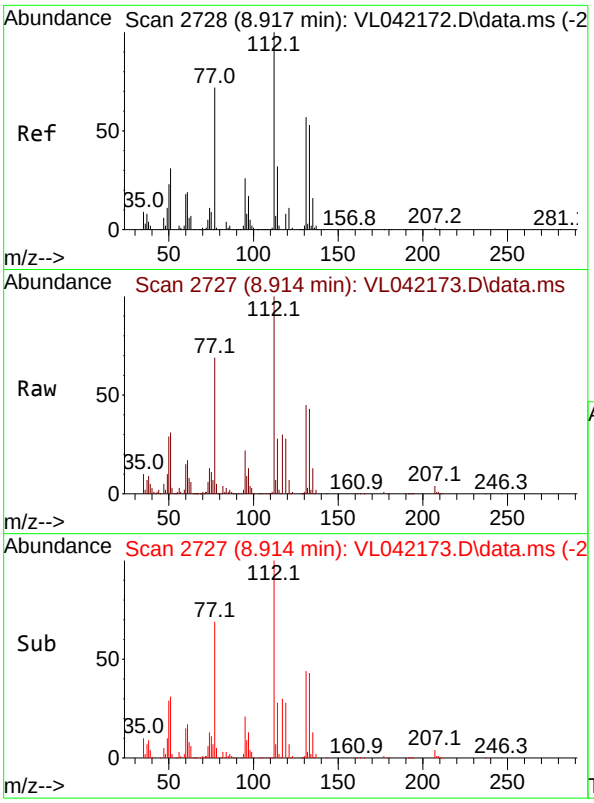


#56
1,1,1,2-Tetrachloroethane
Concen: 2.093 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:131 Resp: 58141

Ion	Ratio	Lower	Upper
131	100		
133	96.6	76.6	114.8
119	58.3	49.8	74.6



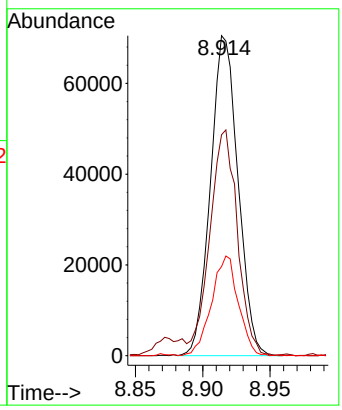


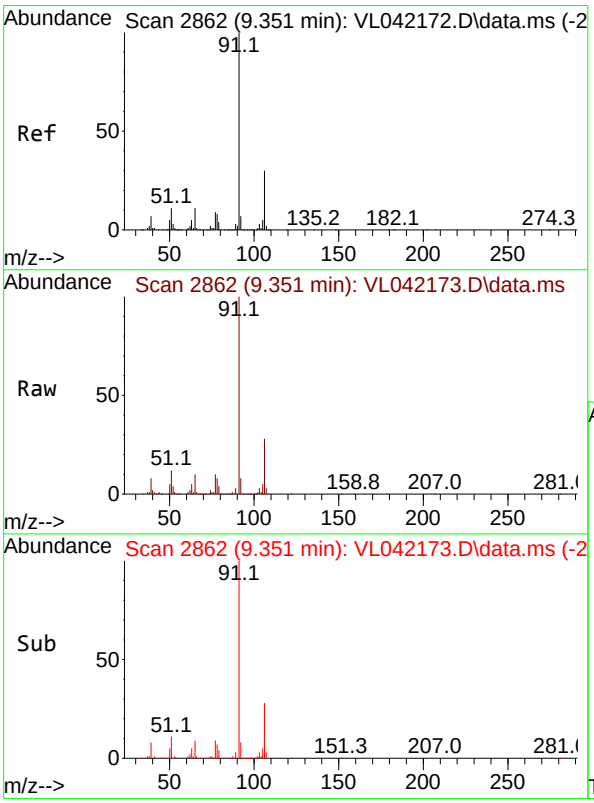
#57
Chlorobenzene
Concen: 2.096 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:112 Resp: 100308

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	27.8	29.1	35.5#

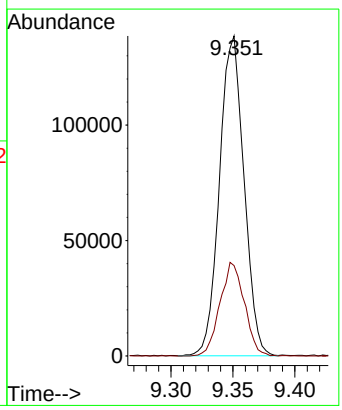


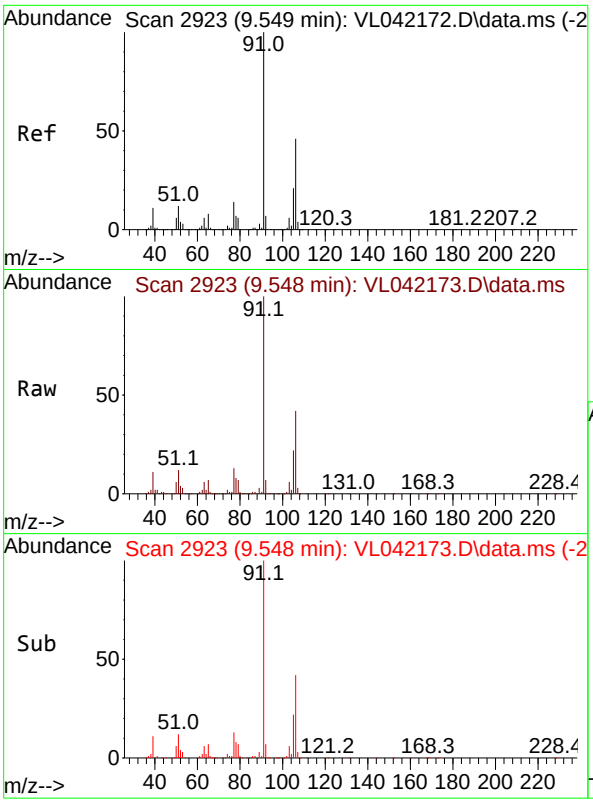


#58
Ethyl Benzene
Concen: 2.132 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 191114

Ion	Ratio	Lower	Upper
91	100		
106	28.3	24.2	36.2



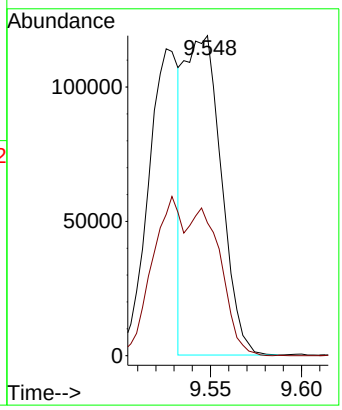


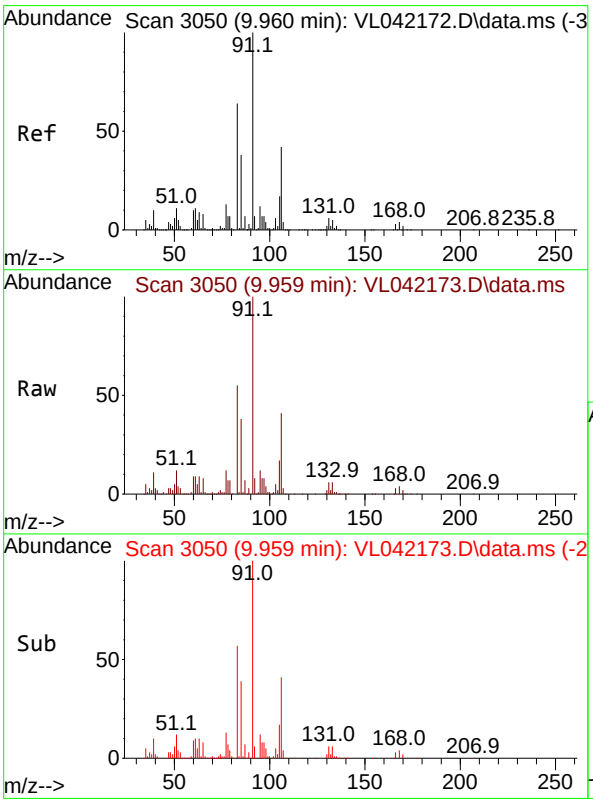
#59
m/p-Xylene
Concen: 2.333 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 167182

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

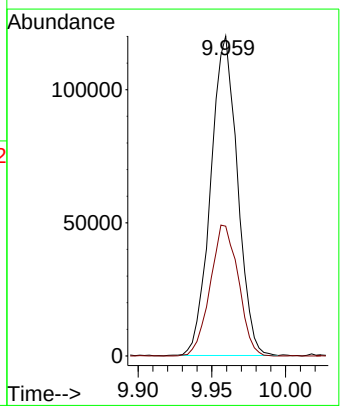


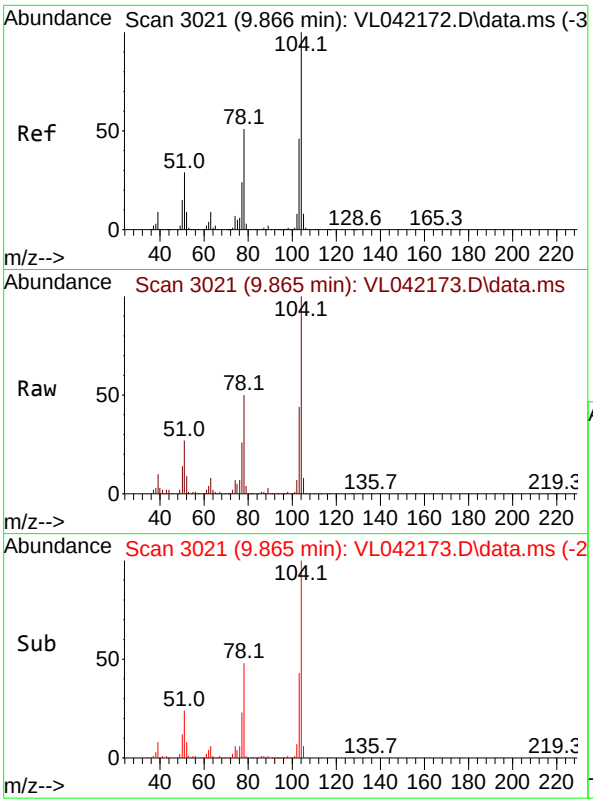


#60
o-Xylene
Concen: 2.109 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 151292

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5



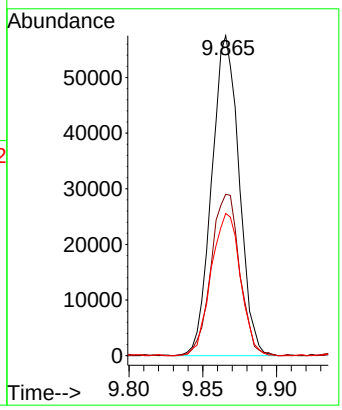


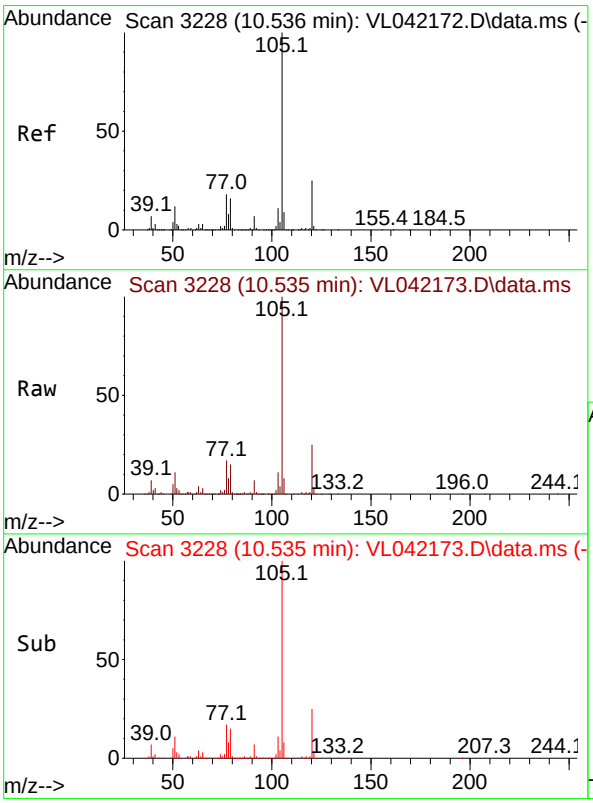
#61
Styrene
Concen: 2.089 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:104 Resp: 74134

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	47.8	37.0	55.4

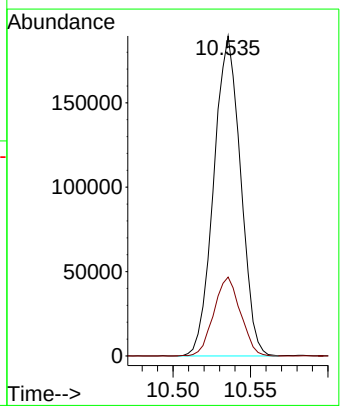


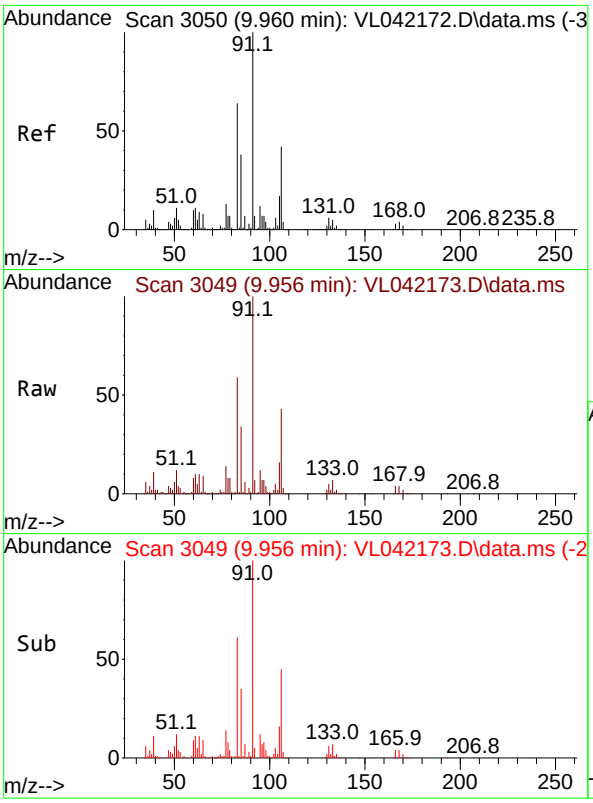


#62
Isopropylbenzene
Concen: 2.127 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 228191

Ion	Ratio	Lower	Upper
105	100		
120	24.4	19.9	29.9



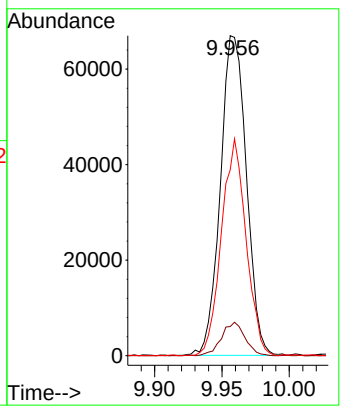


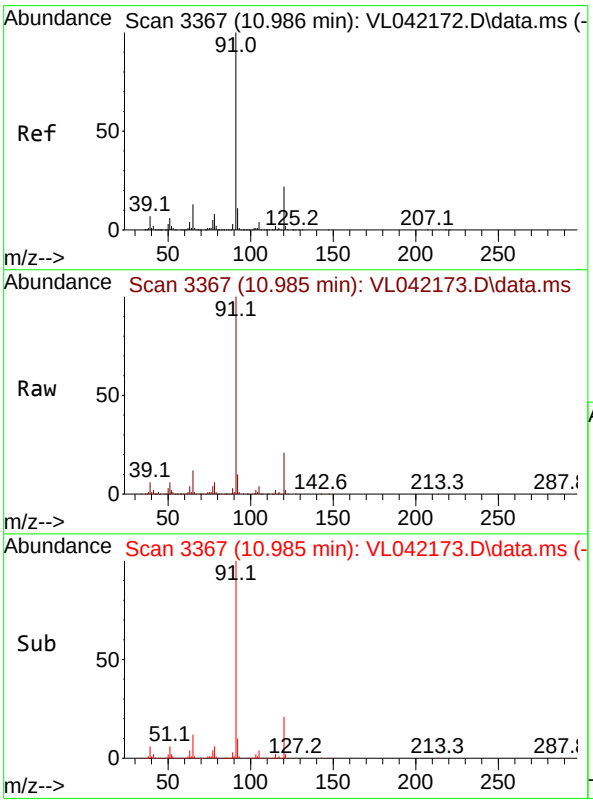
#63
1,1,2,2-Tetrachloroethane
Concen: 2.067 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 90114

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	64.4	32.5	97.5

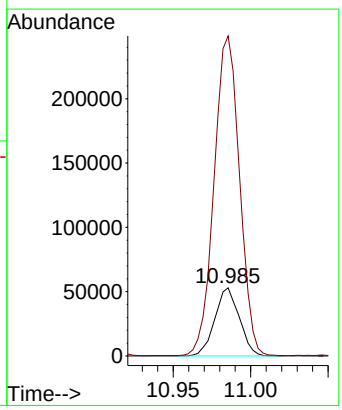


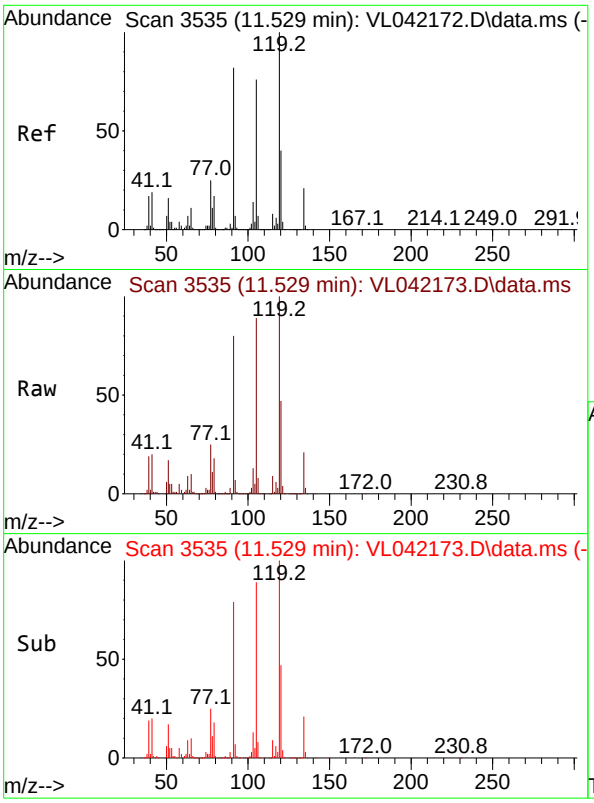


#64
n-propylbenzene
Concen: 2.104 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:120 Resp: 58105

Ion	Ratio	Lower	Upper
120	100		
91	491.1	376.9	565.3



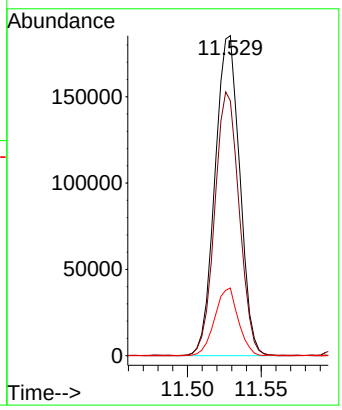


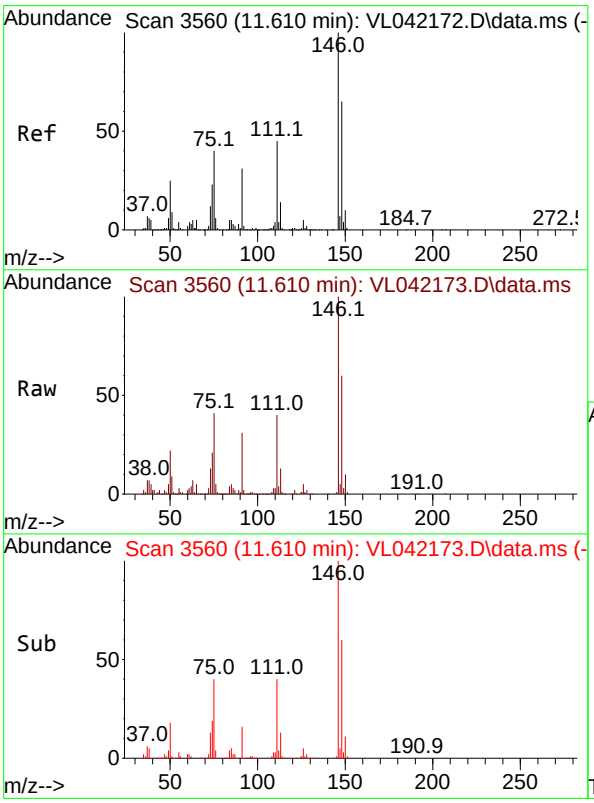
#65
tert-Butylbenzene
Concen: 2.180 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 216336

Ion	Ratio	Lower	Upper
119	100		
91	81.5	66.0	99.0
134	20.2	16.7	25.1

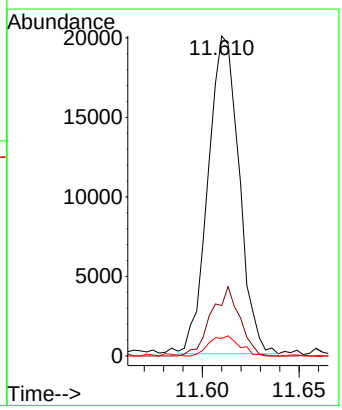


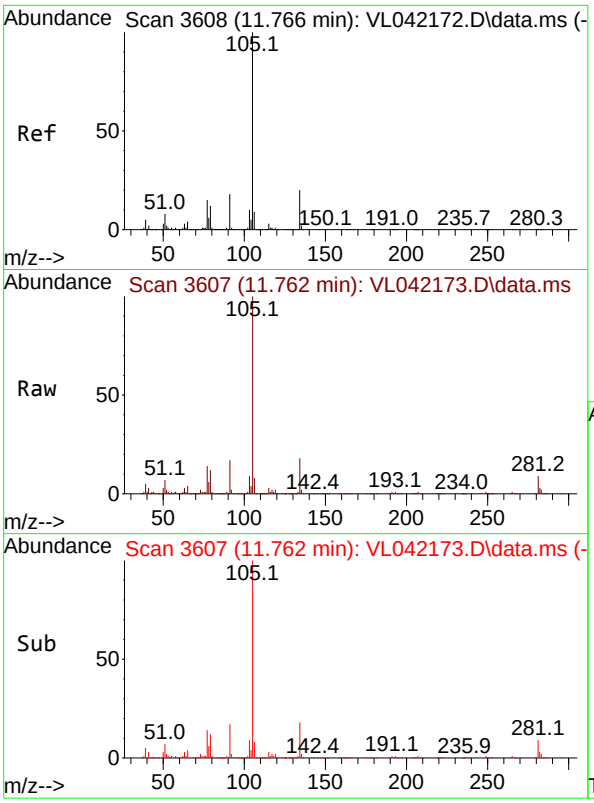


#66
Benzyl Chloride
Concen: 2.116 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 22272

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	6.5	4.5	6.7



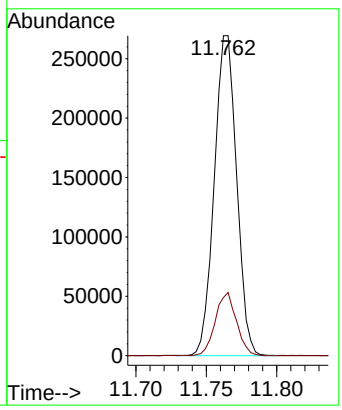


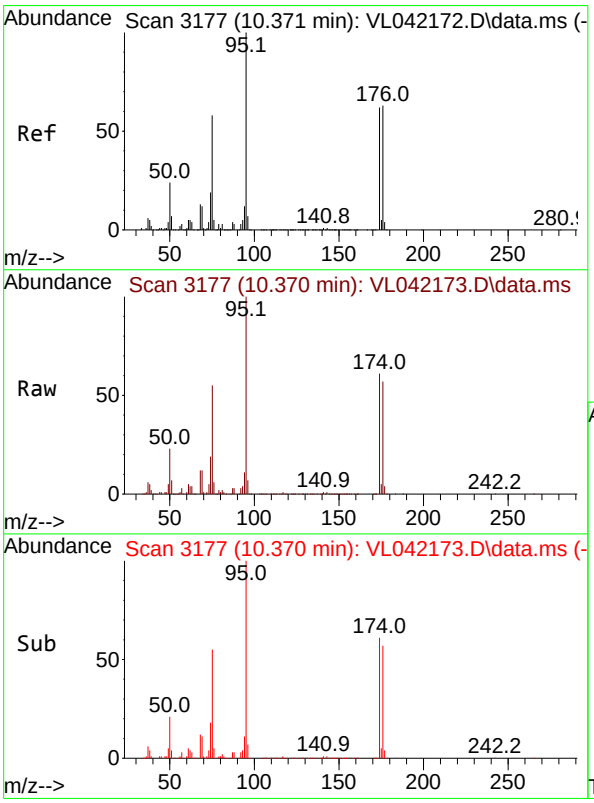
#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 297381

Ion	Ratio	Lower	Upper
105	100		
134	18.8	15.5	23.3

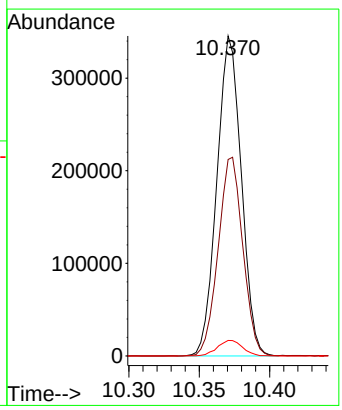


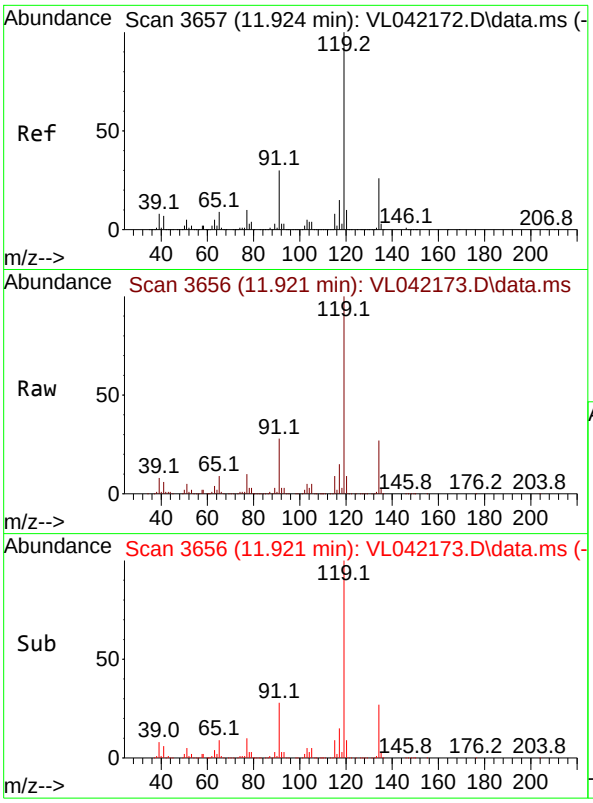


#68
1-Bromo-4-Fluorobenzene
Concen: 10.077 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 95 Resp: 417532

Ion	Ratio	Lower	Upper
95	100		
174	62.6	50.6	76.0
175	5.0	3.8	5.6



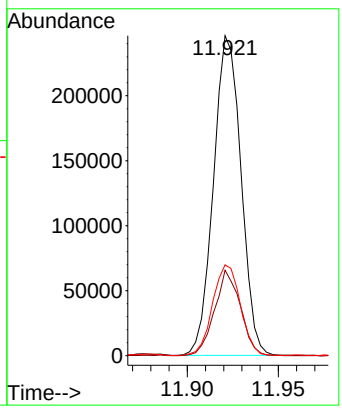


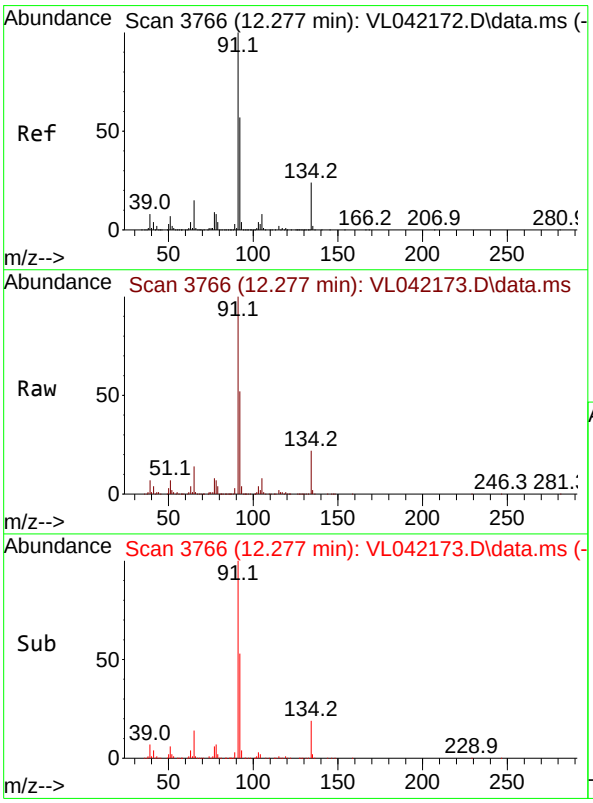
#69
p-Isopropyltoluene
Concen: 2.176 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 258357

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	29.5	23.7	35.5

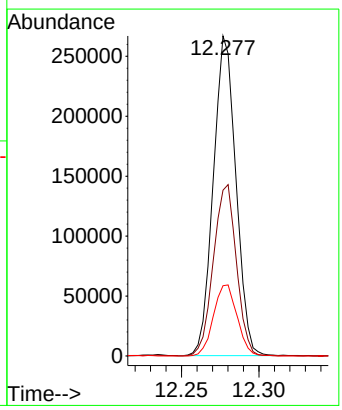


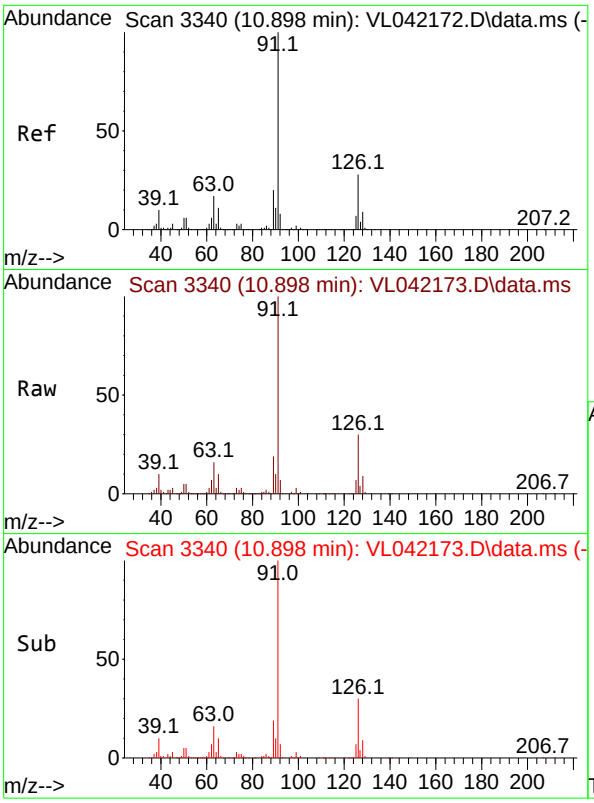


#70
n-Butylbenzene
Concen: 2.228 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion: 91 Resp: 270616

Ion	Ratio	Lower	Upper
91	100		
92	55.1	44.9	67.3
134	23.3	19.2	28.8



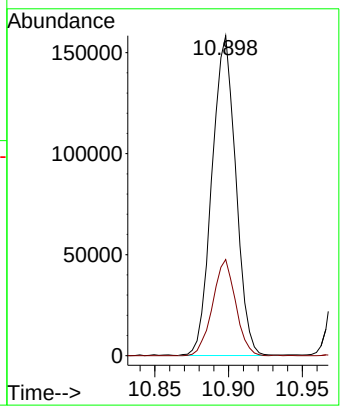


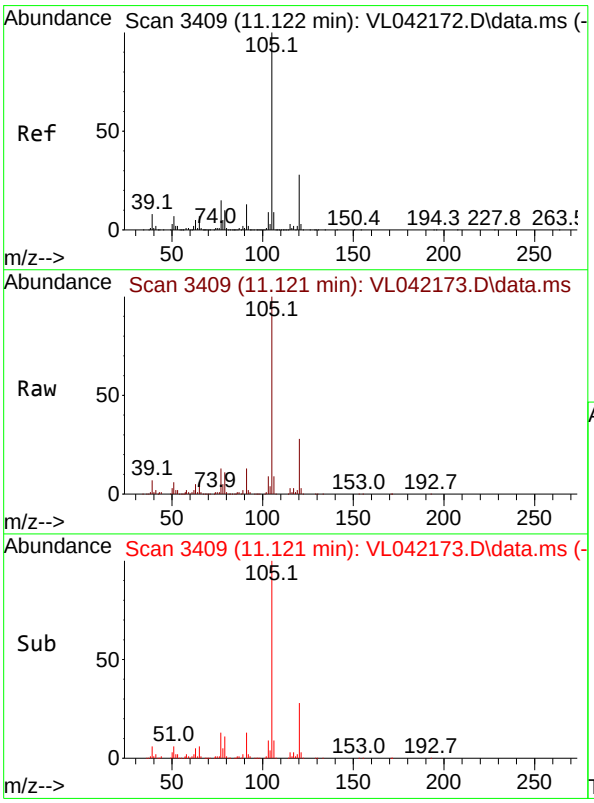
#71
2-Chlorotoluene
Concen: 2.132 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 177487

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4

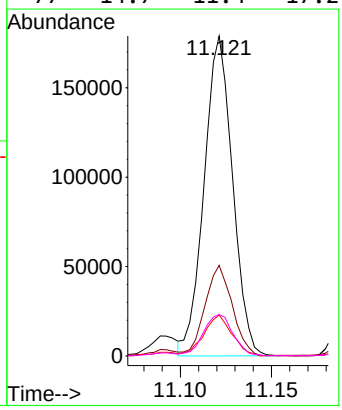


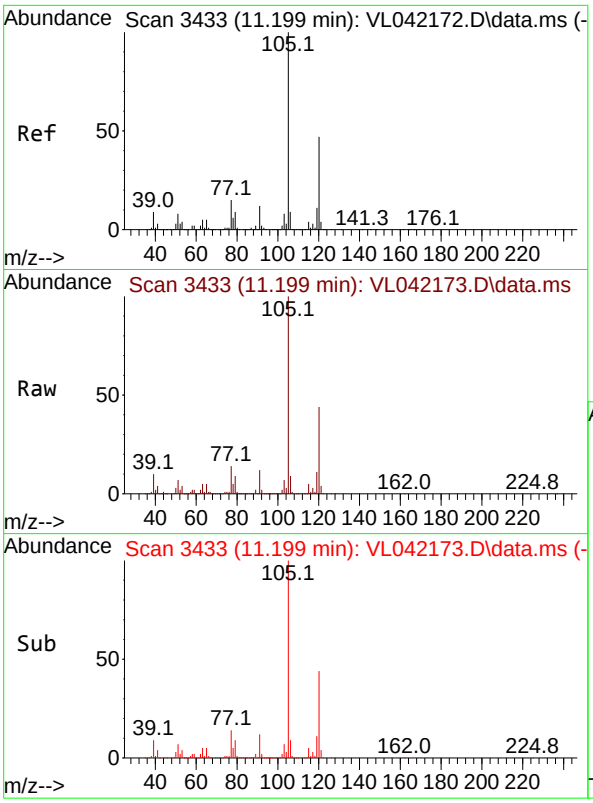


#72
4-Ethyltoluene
Concen: 2.179 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 194660

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	13.7	10.3	15.5
77	14.7	11.4	17.2



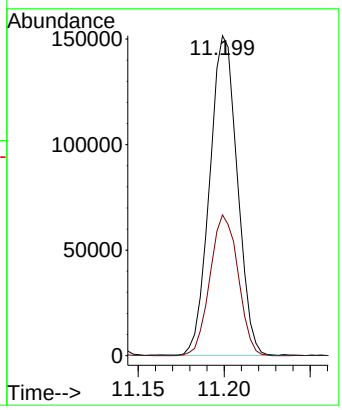


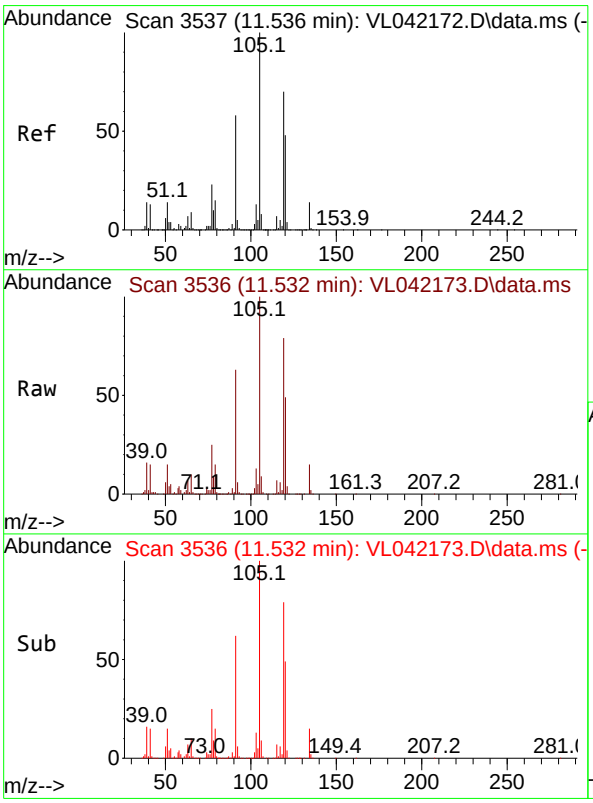
#73
1,3,5-Trimethylbenzene
Concen: 2.169 ppbv
RT: 11.199 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 169221

Ion	Ratio	Lower	Upper
105	100		
120	44.0	37.4	56.0

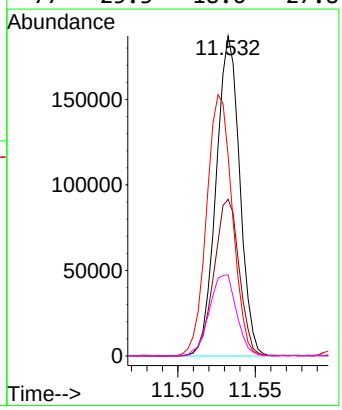


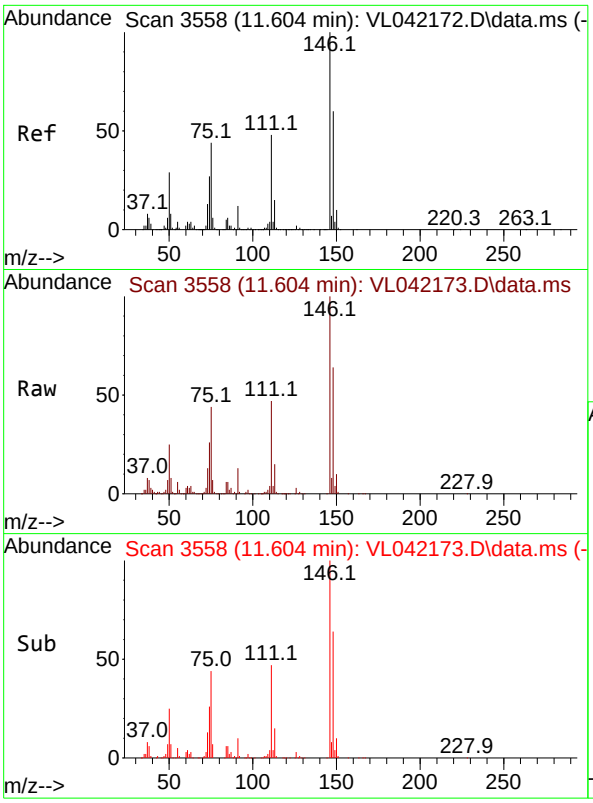


#74
1,2,4-Trimethylbenzene
Concen: 2.207 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:105 Resp: 198351

Ion	Ratio	Lower	Upper
105	100		
120	49.0	38.6	58.0
91	62.4	46.2	69.2
77	25.3	18.6	27.8



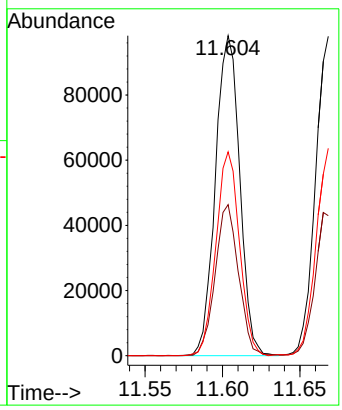


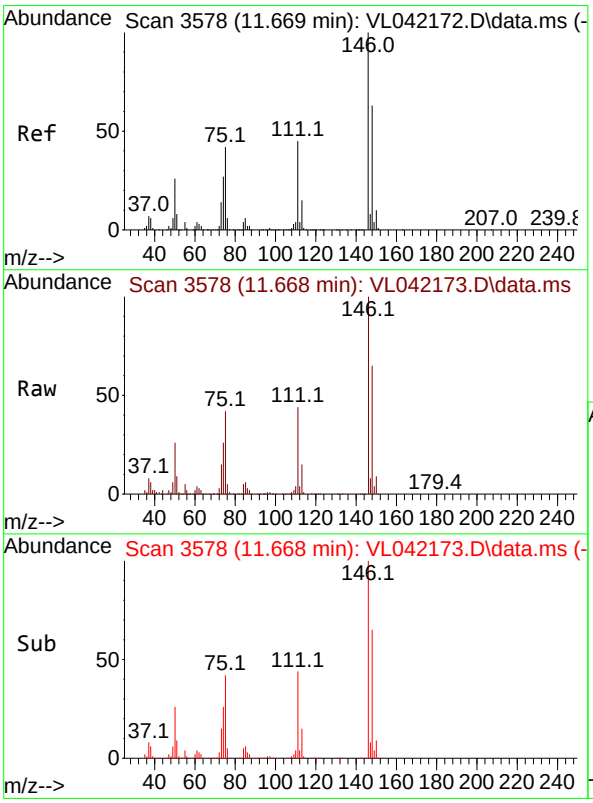
#75
1,3-Dichlorobenzene
Concen: 2.175 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 107217

Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	61.6	31.9	95.9

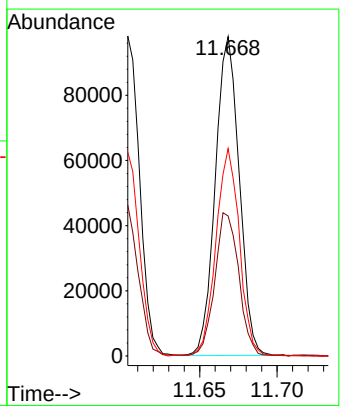


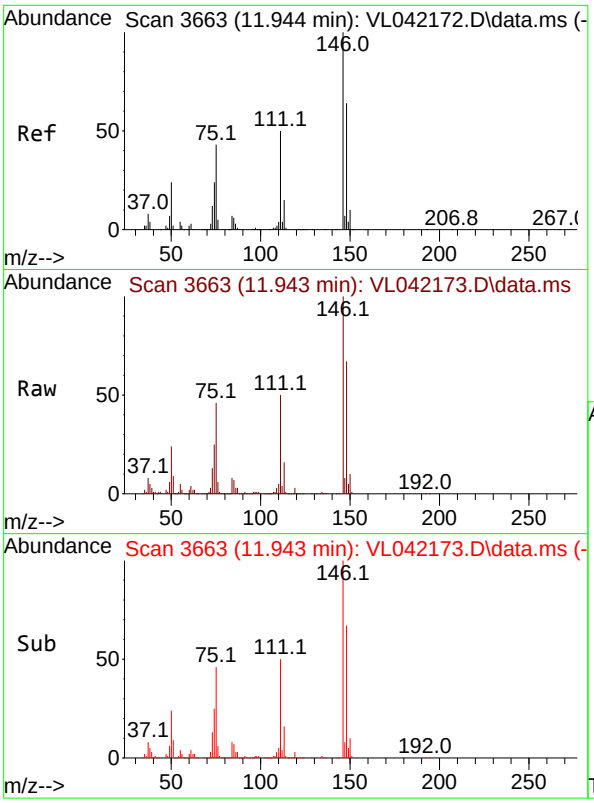


#76
1,4-Dichlorobenzene
Concen: 2.139 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:146 Resp: 104925

Ion	Ratio	Lower	Upper
146	100		
111	45.3	23.0	69.0
148	64.0	31.9	95.7



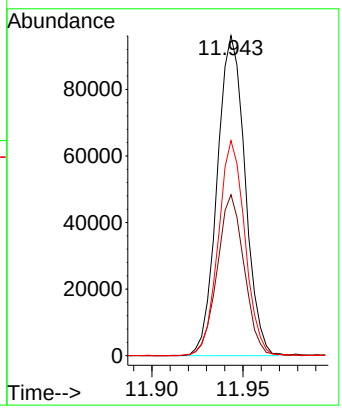


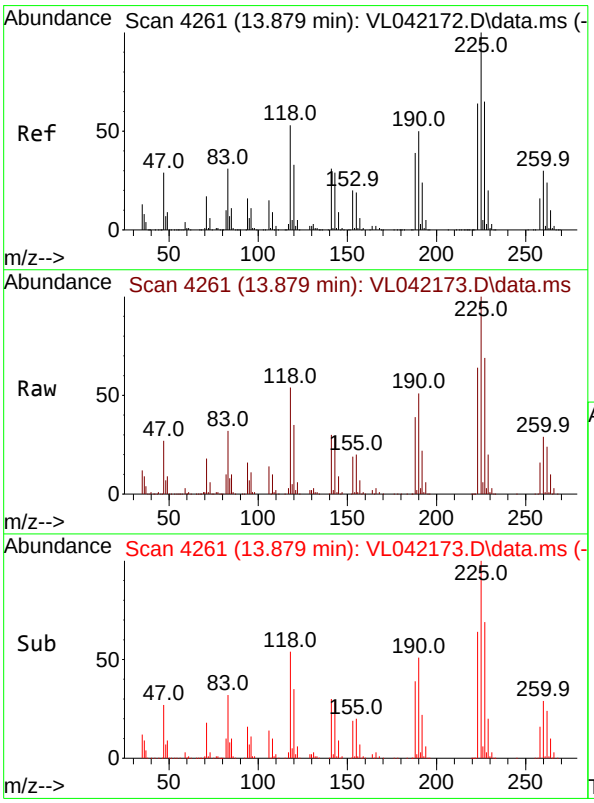
#77
1,2-Dichlorobenzene
Concen: 2.132 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 102310

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	64.6	31.6	94.8

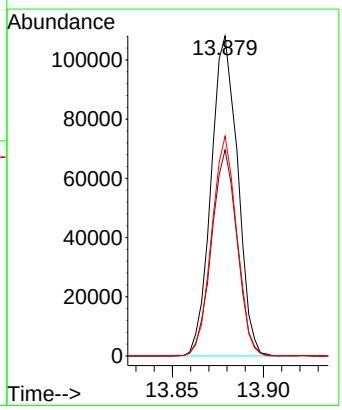


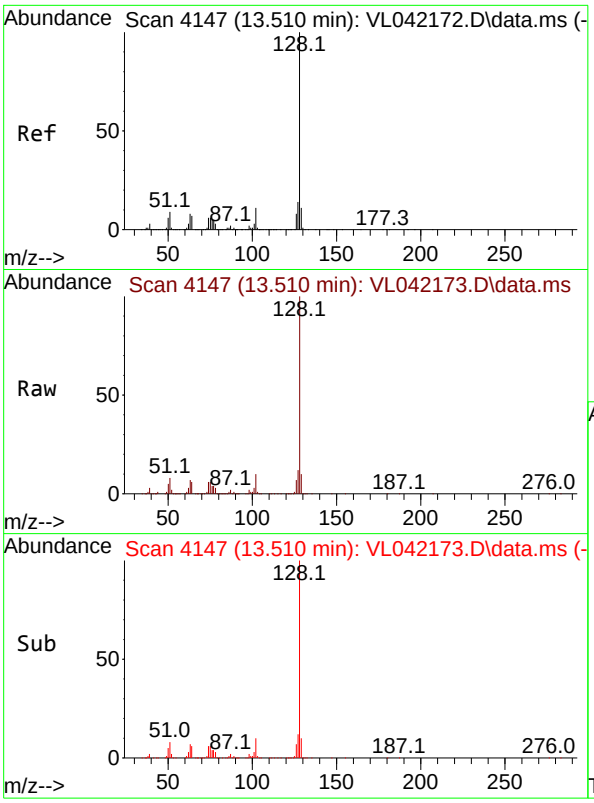


#78
Hexachloro-1,3-Butadiene
Concen: 2.242 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:225 Resp: 109539

Ion	Ratio	Lower	Upper
225	100		
223	62.2	50.6	76.0
227	64.9	51.2	76.8



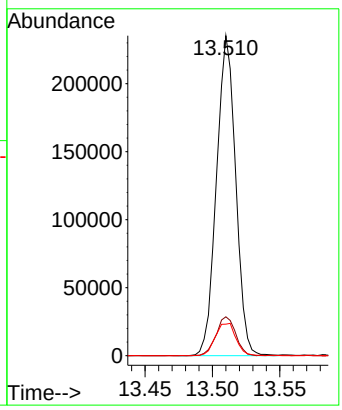


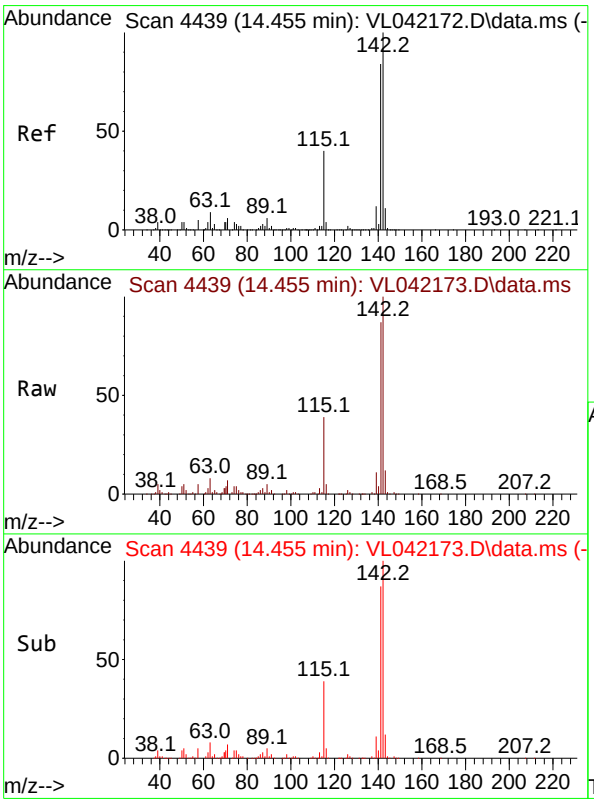
#79
Naphthalene
Concen: 2.375 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:128 Resp: 233451

Ion	Ratio	Lower	Upper
128	100		
127	12.1	10.8	16.2
129	9.9	9.0	13.4

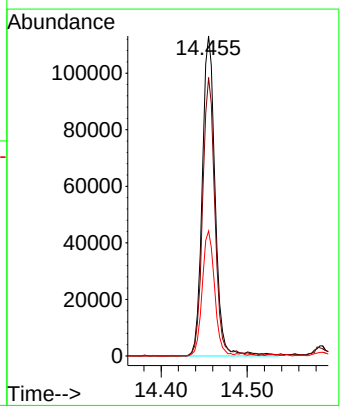


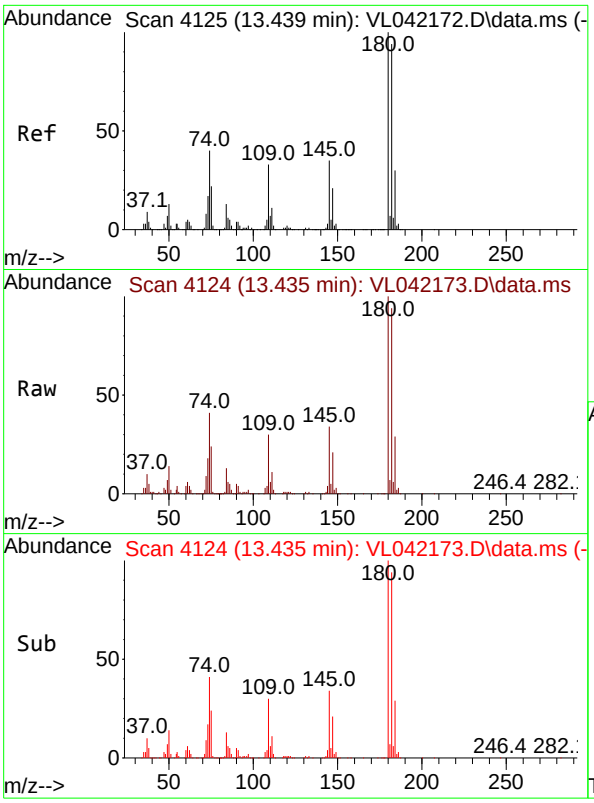


#80
Naphthalene,2-methyl-
Concen: 2.451 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Tgt Ion:142 Resp: 117313

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	38.5	31.6	47.4



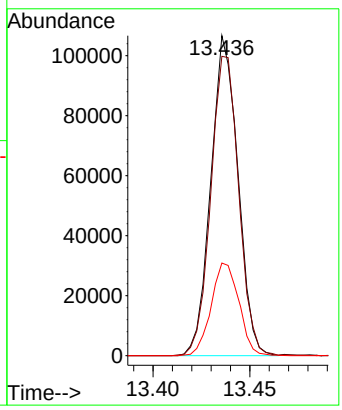


#81
1,2,4-Trichlorobenzene
Concen: 2.288 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042173.D
Acq: 27 Mar 2025 08:59

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:180 Resp: 103765

Ion	Ratio	Lower	Upper
180	100		
182	97.0	75.1	112.7
184	29.6	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	186244	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	537244	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	499830	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	404753	9.861	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	28203	1.026	ppbv		99
3) Chlorodifluoromethane	1.473	51	28693	1.021	ppbv		94
4) Chloromethane	1.531	50	11111	0.989	ppbv		99
5) Vinyl Chloride	1.577	62	10723	0.936	ppbv		98
6) Bromomethane	1.667	94	4984	0.979	ppbv		97
7) Chloroethane	1.703	64	4622	1.025	ppbv		100
8) Dichlorotetrafluoroethane	1.554	85	23886	1.020	ppbv		98
9) Propene	1.884	41	1465	0.116	ppbv		99
10) Heptane	4.975	43	36132	1.055	ppbv		100
11) Trichlorofluoromethane	1.875	101	27136	1.014	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.137	101	22629	1.029	ppbv		99
13) Ethanol	1.719	45	935	0.943	ppbv	#	1
14) Bromoethene	1.781	108	8330	0.989	ppbv	#	82
15) Acetone	1.836	43	29294	1.125	ppbv		95
16) 1,3-Butadiene	1.606	39	13133	1.121	ppbv		97
17) tert-Butyl alcohol	2.040	59	33500	1.033	ppbv		97
18) 1,1-Dichloroethene	2.033	96	10532	1.024	ppbv		89
19) Isopropyl Alcohol	1.884	45	14903	1.014	ppbv	#	38
20) Methylene Chloride	2.059	84	10481	1.080	ppbv		93
21) Allyl Chloride	2.095	41	19039	1.036	ppbv		99
22) trans-1,2-Dichloroethene	2.033	96	10532	0.877	ppbv		86
23) Vinyl Acetate	2.464	43	10644	0.983	ppbv	#	85
24) 1,1-Dichloroethane	2.409	63	22505	1.022	ppbv		99
25) Ethyl Acetate	2.836	43	67402	0.997	ppbv	#	96
26) Hexane	2.823	57	27223	1.043	ppbv		98
27) Carbon Disulfide	2.146	76	28167	1.006	ppbv	#	47
28) Methyl tert-Butyl Ether	2.441	73	16501	1.015	ppbv		95
29) Chloroform	2.845	83	38516	1.008	ppbv		96
30) Cyclohexane	3.852	84	23052	1.016	ppbv		97
31) cis-1,2-Dichloroethene	2.716	61	27187	1.026	ppbv		89
32) 1,1,1-Trichloroethane	3.363	97	40993	0.938	ppbv		99
34) 2-Butanone	2.557	43	41423	1.063	ppbv		98
35) Carbon Tetrachloride	3.758	117	39345	0.952	ppbv		93
36) Benzene	3.651	78	55156	1.036	ppbv		94
37) 1,2-Dichloroethane	3.218	62	30543	1.002	ppbv		98
38) Trichloroethene	4.545	130	21906	0.985	ppbv		93
39) 1,2-Dichloropropane	4.312	63	20020	1.032	ppbv		99
40) 1,4-Dioxane	4.593	88	10031	0.997	ppbv	#	49
41) Tetrahydrofuran	3.056	42	22818	1.029	ppbv		97
42) Bromodichloromethane	4.483	83	41864	0.996	ppbv		90
43) Methyl Methacrylate	4.875	69	14387	0.640	ppbv	#	31
44) 2,2,4-Trimethylpentane	4.632	57	90727	1.008	ppbv		96
45) t-1,3-Dichloropropene	6.412	75	13431	0.555	ppbv		97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	30063	1.014	ppbv		93
47) 1,1,2-Trichloroethane	6.577	97	20546	1.002	ppbv		96
48) Dibromochloromethane	7.383	129	34425	0.991	ppbv		100
49) Bromoform	9.481	173	31610	1.013	ppbv		98
50) 4-Methyl-2-Pentanone	5.752	43	34358	0.556	ppbv	#	39
51) 2-Hexanone	7.438	43	54680	1.067	ppbv	#	100
52) Tetrachloroethene	8.222	164	19415	0.919	ppbv		95
53) Toluene	6.927	91	64612	1.023	ppbv		99
54) 1,2-Dibromoethane	7.652	107	28879	1.009	ppbv		95
56) 1,1,1,2-Tetrachloroethane	8.924	131	28764	1.045	ppbv	#	87
57) Chlorobenzene	8.917	112	48930	1.032	ppbv		93
58) Ethyl Benzene	9.348	91	91086	1.026	ppbv		97
59) m/p-Xylene	9.545	91	73295	1.033	ppbv	#	31
60) o-Xylene	9.960	91	73702	1.037	ppbv		96
61) Styrene	9.866	104	36110	1.027	ppbv		97
62) Isopropylbenzene	10.536	105	109897	1.034	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.960	83	44431	1.029	ppbv		99
64) n-propylbenzene	10.986	120	29054	1.062	ppbv		98
65) tert-Butylbenzene	11.526	119	103520	1.053	ppbv		96
66) Benzyl Chloride	11.614	91	10660	1.022	ppbv	#	93
67) sec-Butylbenzene	11.762	105	149660	1.095	ppbv		97
69) p-Isopropyltoluene	11.921	119	127509	1.084	ppbv		99
70) n-Butylbenzene	12.280	91	129860	1.079	ppbv		99
71) 2-Chlorotoluene	10.898	91	86356	1.047	ppbv		100
72) 4-Ethyltoluene	11.122	105	92912	1.050	ppbv		99
73) 1,3,5-Trimethylbenzene	11.199	105	83497	1.080	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	97858	1.099	ppbv		94
75) 1,3-Dichlorobenzene	11.604	146	51096	1.046	ppbv		99
76) 1,4-Dichlorobenzene	11.669	146	50841	1.046	ppbv		99
77) 1,2-Dichlorobenzene	11.944	146	51523	1.084	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	55611	1.149	ppbv		97
79) Naphthalene	13.510	128	109031	1.120	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	44518	0.939	ppbv		99
81) 1,2,4-Trichlorobenzene	13.436	180	47040	1.047	ppbv		98

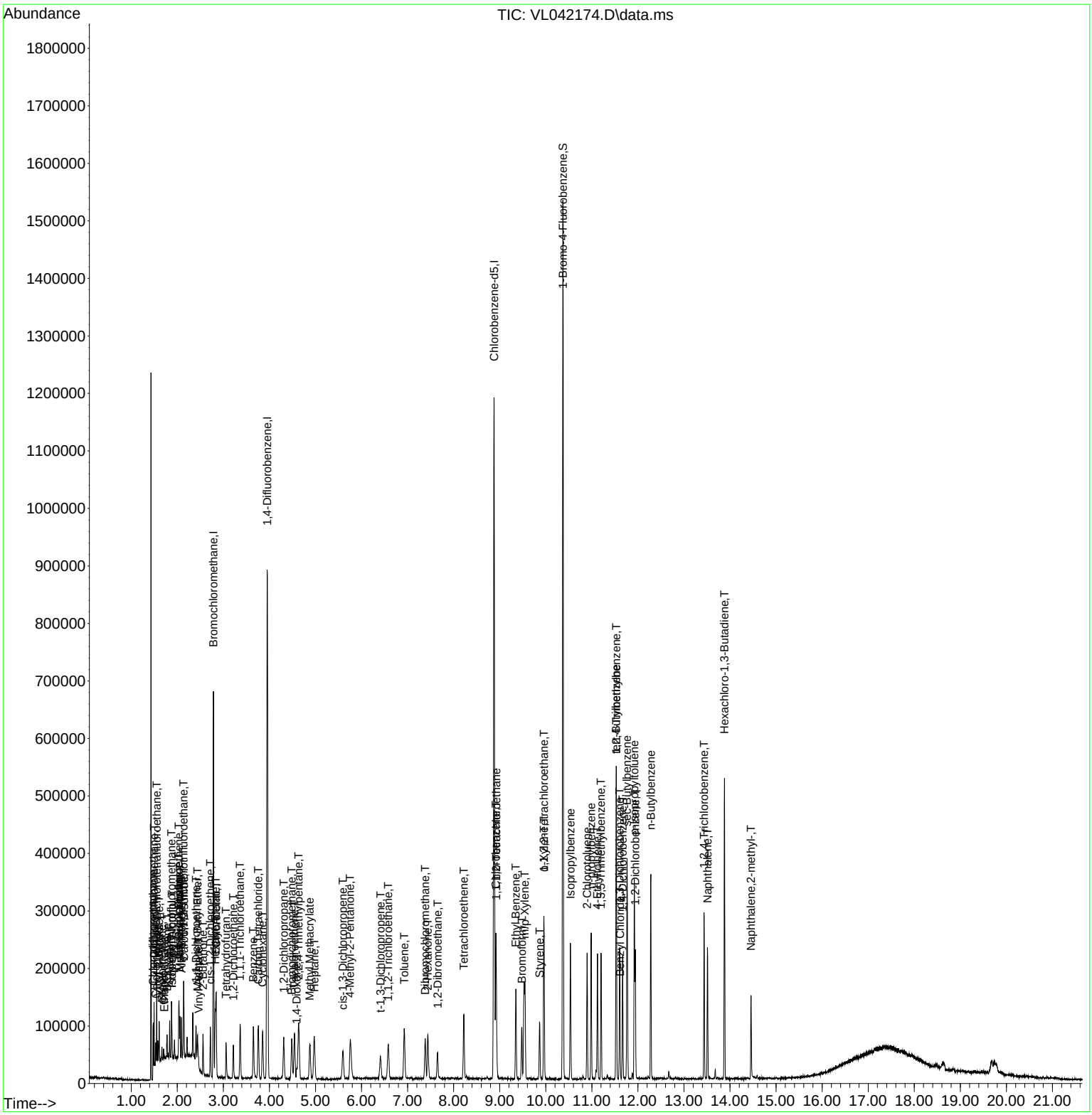
(#) = qualifier out of range (m) = manual integration (+) = signals summed

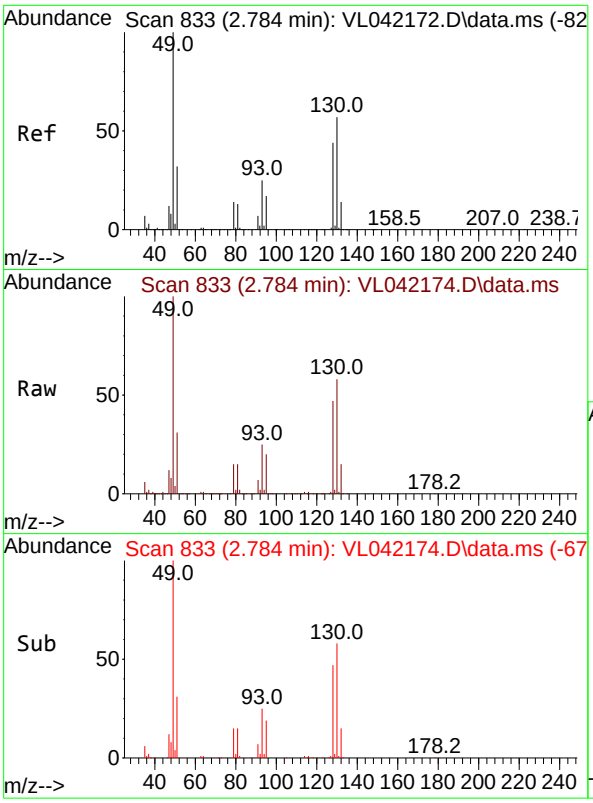
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042174.D
Acq On : 27 Mar 2025 09:30
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Mar 28 01:33:49 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



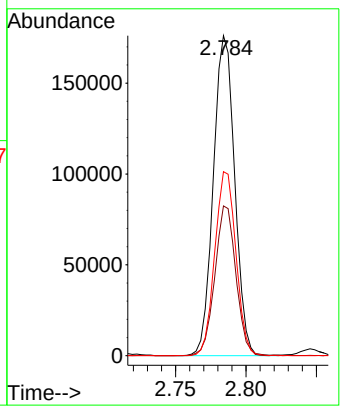


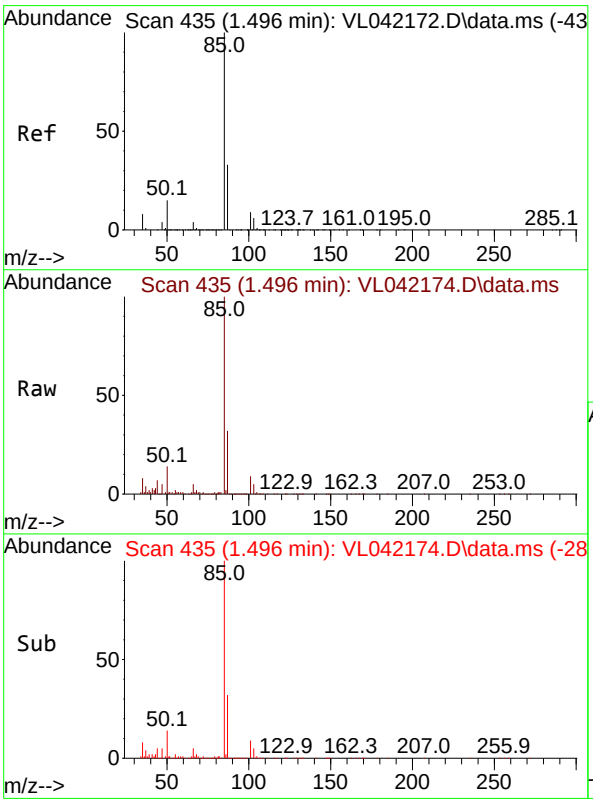
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 49 Resp: 186244

Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.9	68.5
130	57.0	28.8	86.4

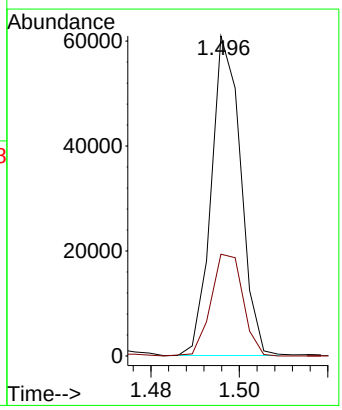


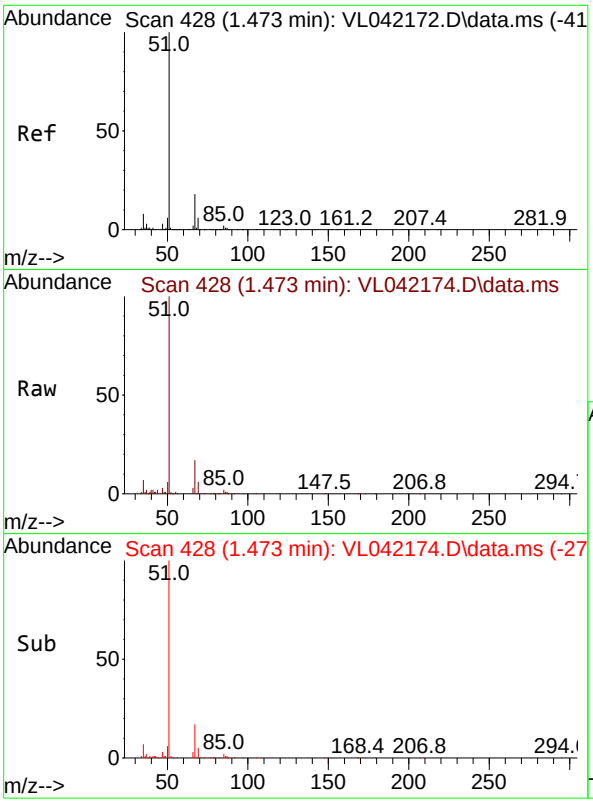


#2
Dichlorodifluoromethane
Concen: 1.026 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 28203

Ion	Ratio	Lower	Upper
85	100		
87	31.9	26.1	39.1



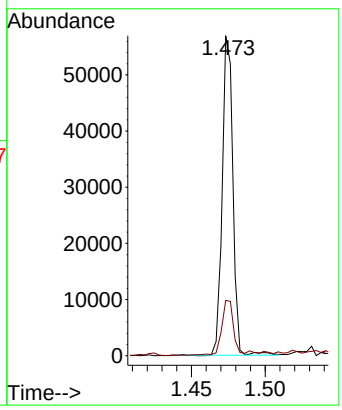


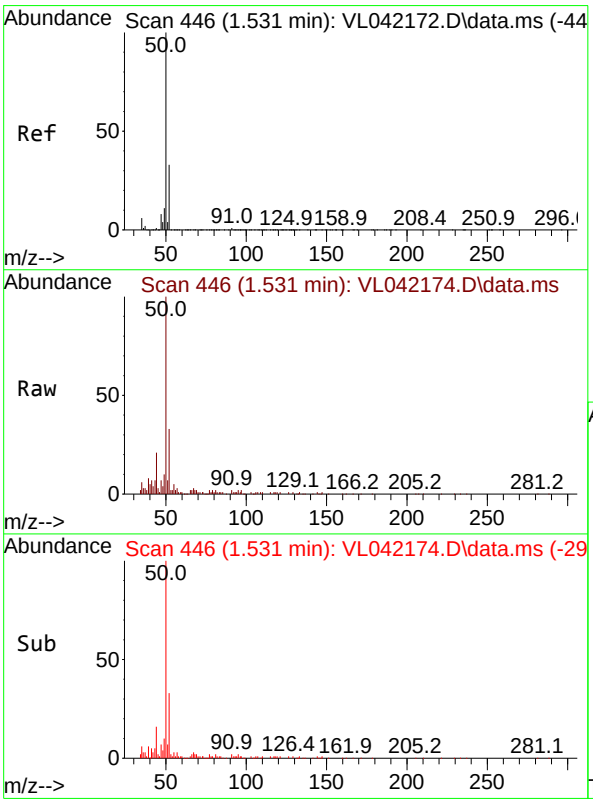
#3
Chlorodifluoromethane
Concen: 1.021 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 51 Resp: 28693

Ion	Ratio	Lower	Upper
51	100		
67	21.5	15.0	22.6

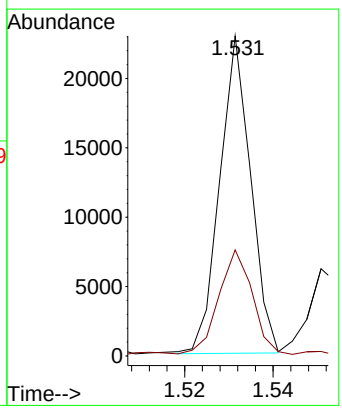


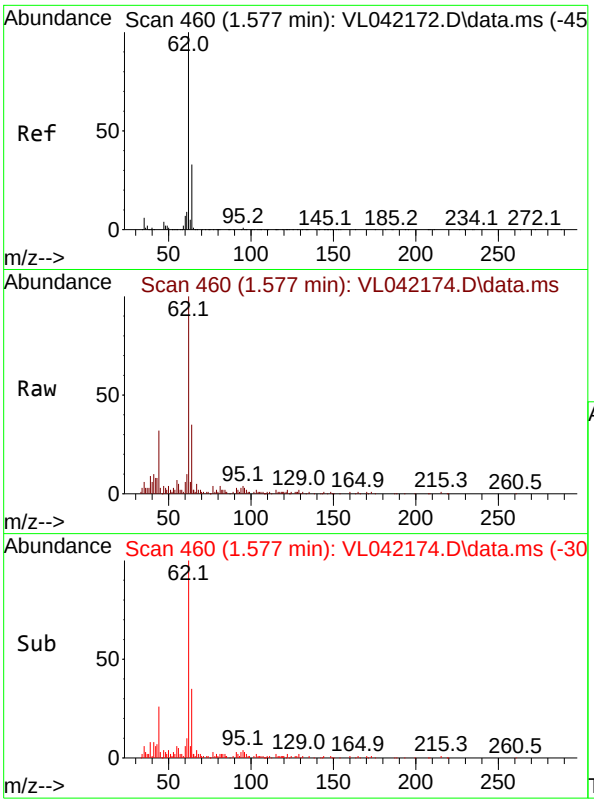


#4
Chloromethane
Concen: 0.989 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 50 Resp: 11111

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



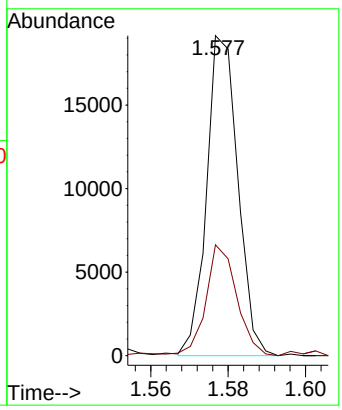


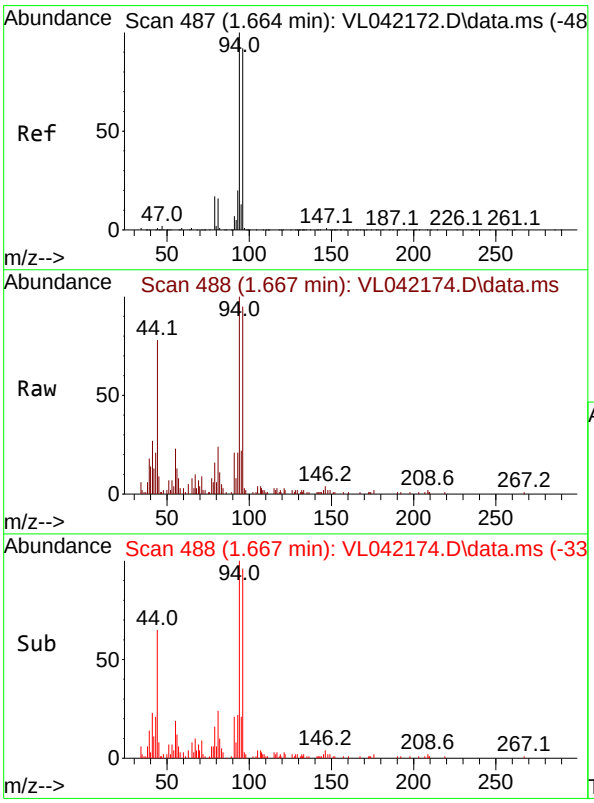
#5
Vinyl Chloride
Concen: 0.936 ppbv
RT: 1.577 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 10723

Ion	Ratio	Lower	Upper
62	100		
64	34.6	26.6	40.0

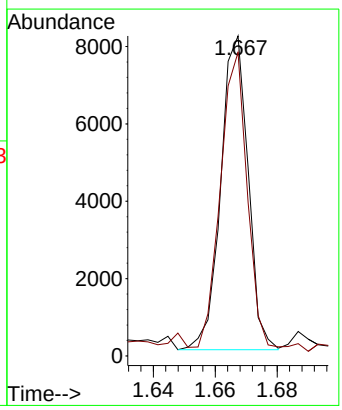


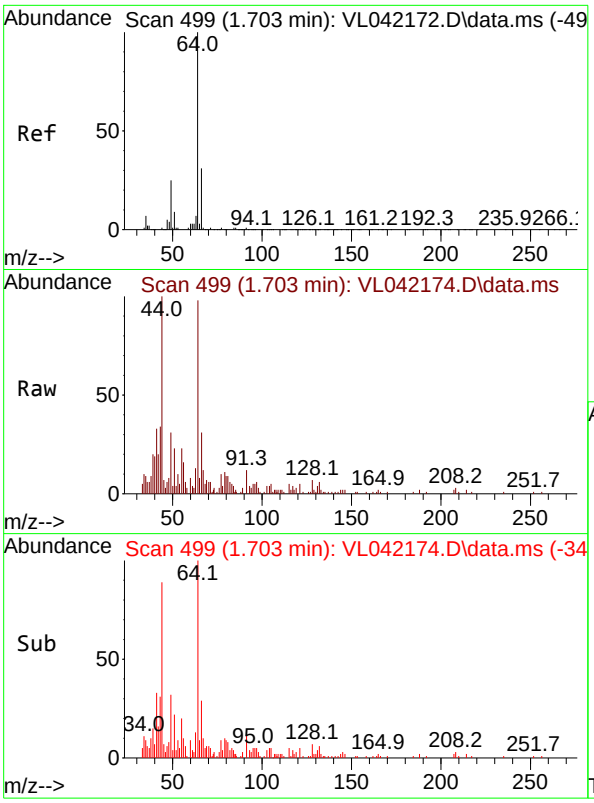


#6
Bromomethane
Concen: 0.979 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 94 Resp: 4984

Ion	Ratio	Lower	Upper
94	100		
96	93.8	73.1	109.7



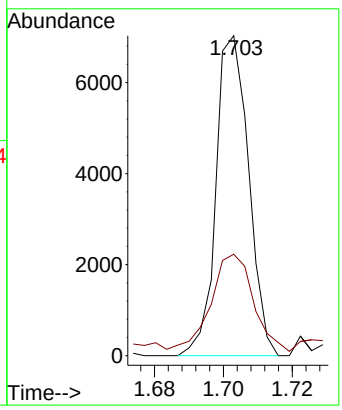


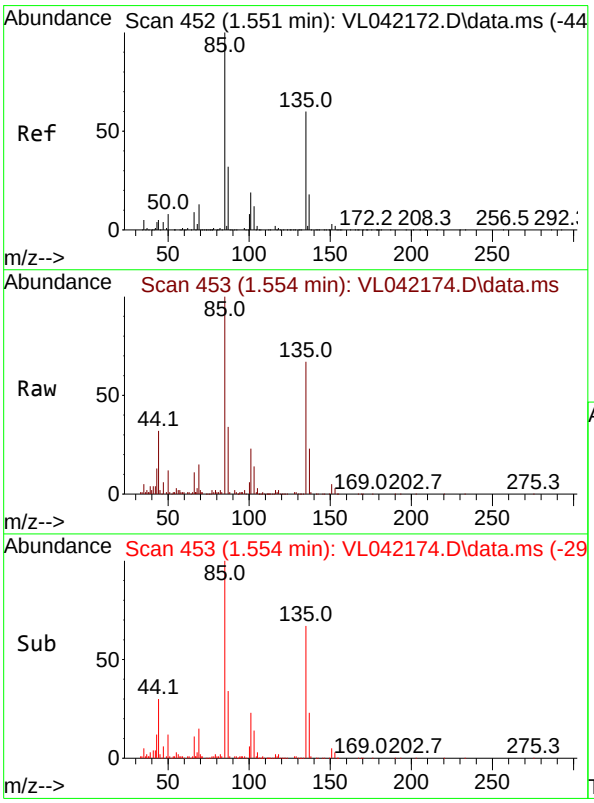
#7
Chloroethane
Concen: 1.025 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 64 Resp: 4622

Ion	Ratio	Lower	Upper
64	100		
66	31.7	25.2	37.8

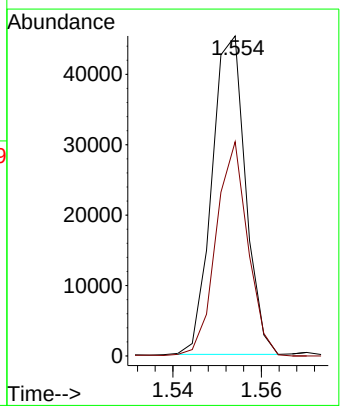


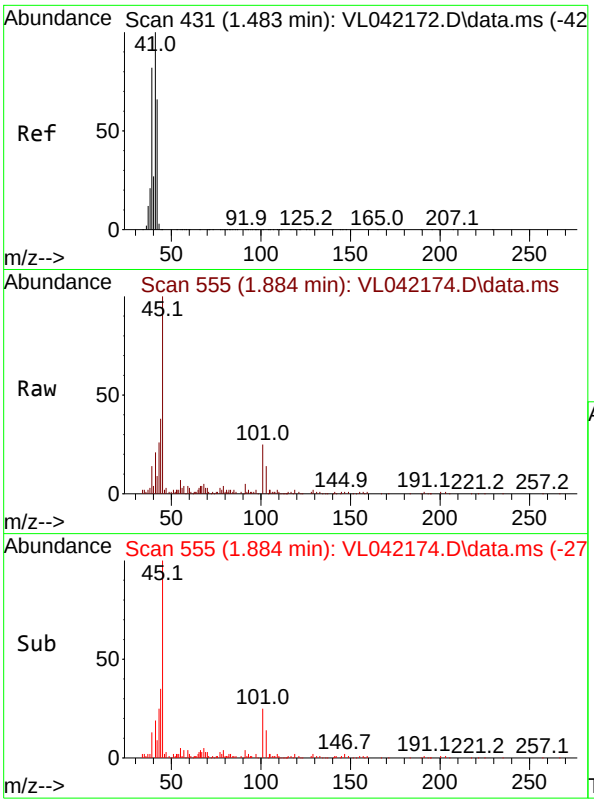


#8
Dichlorotetrafluoroethane
Concen: 1.020 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 85 Resp: 23886

Ion	Ratio	Lower	Upper
85	100		
135	64.2	52.4	78.6



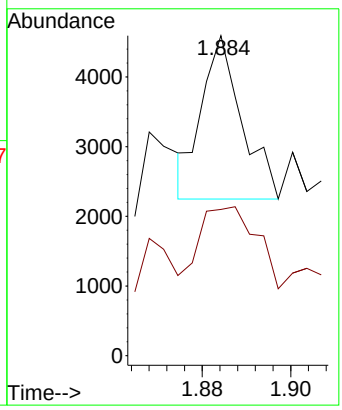


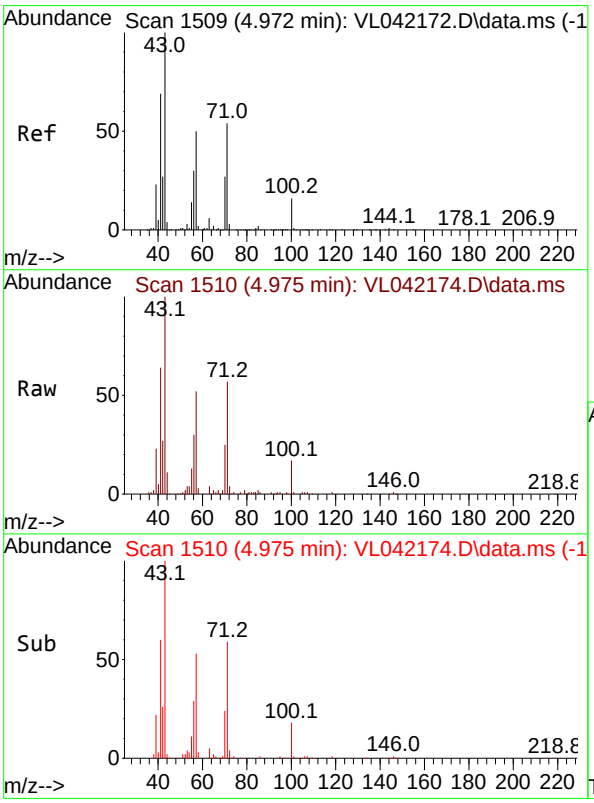
#9
Propene
Concen: 0.116 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.401 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 1465

Ion	Ratio	Lower	Upper
41	100		
42	69.8	55.4	83.2

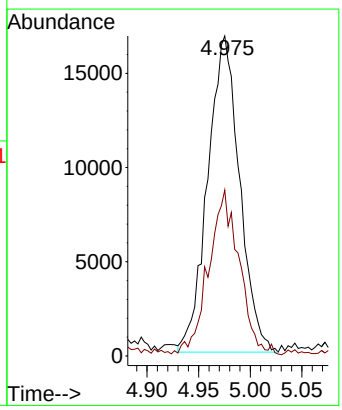


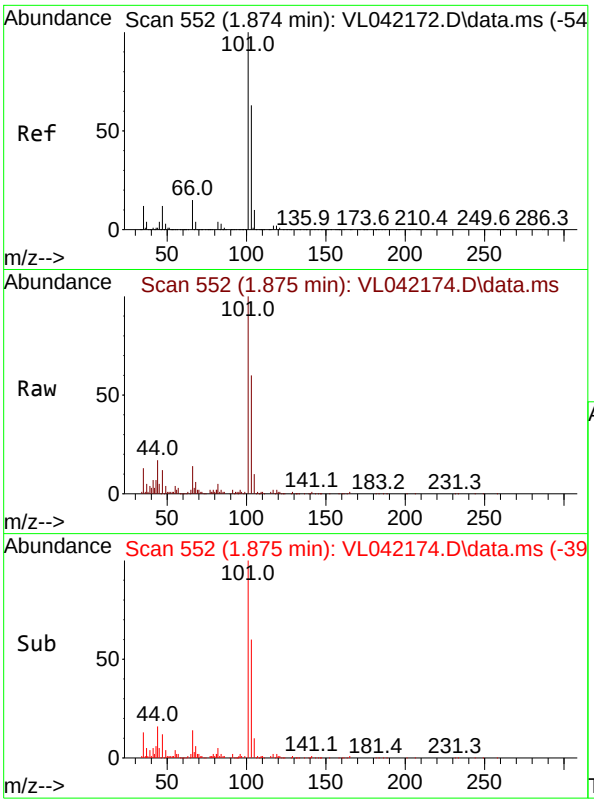


#10
Heptane
Concen: 1.055 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 36132

Ion	Ratio	Lower	Upper
43	100		
57	49.6	39.4	59.2



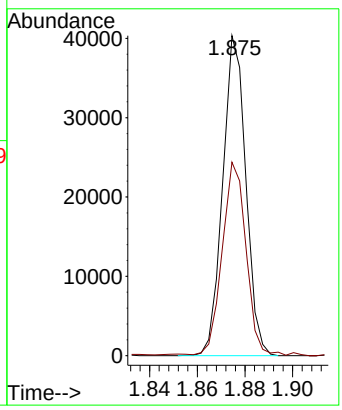


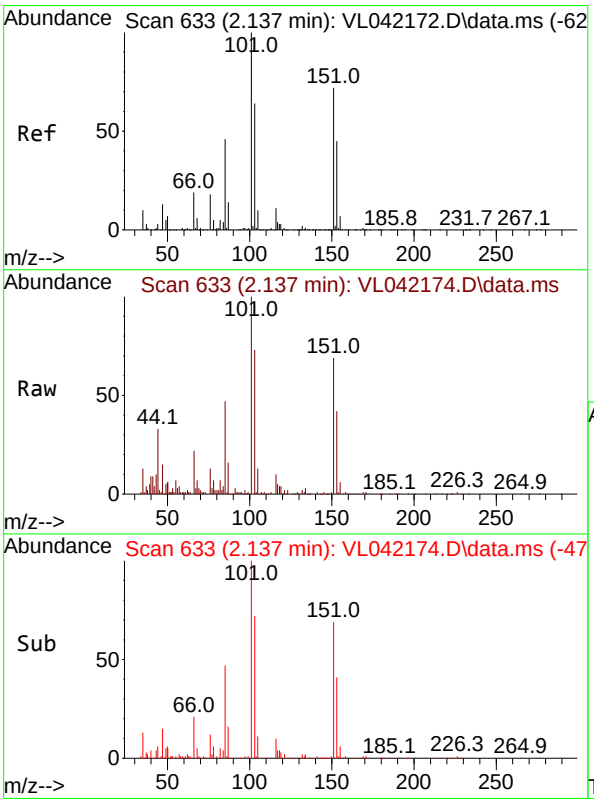
#11
Trichlorofluoromethane
Concen: 1.014 ppbv
RT: 1.875 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:101 Resp: 27136

Ion	Ratio	Lower	Upper
101	100		
103	59.9	50.2	75.2

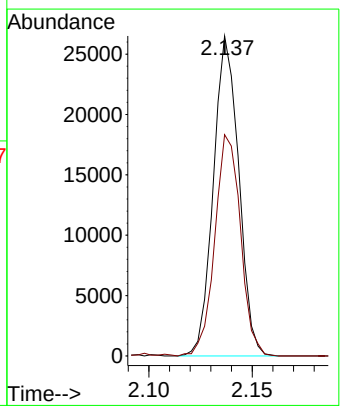


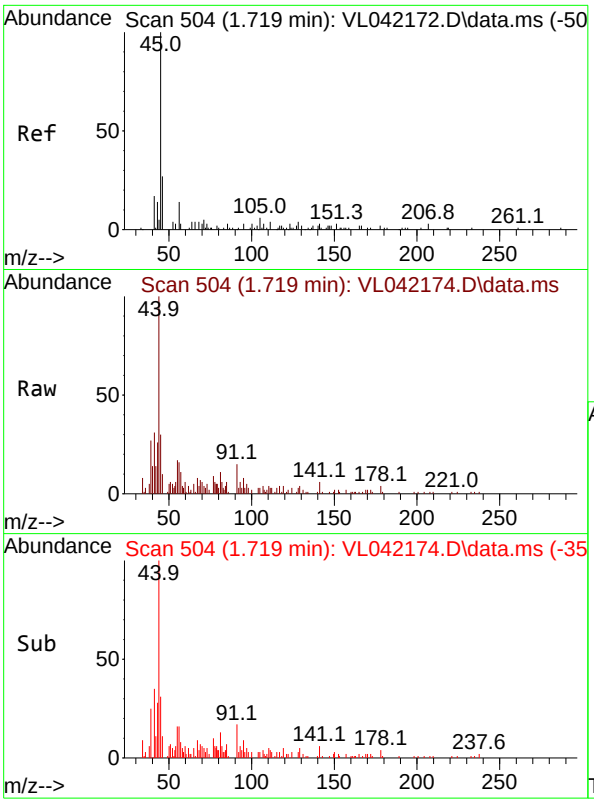


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.029 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:101 Resp: 22629

Ion	Ratio	Lower	Upper
101	100		
151	70.3	57.1	85.7



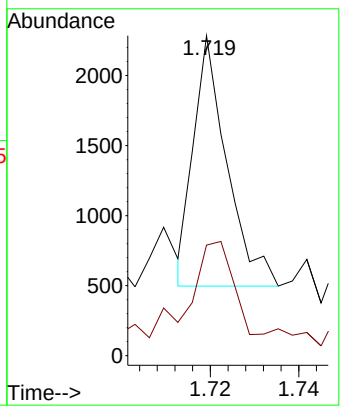


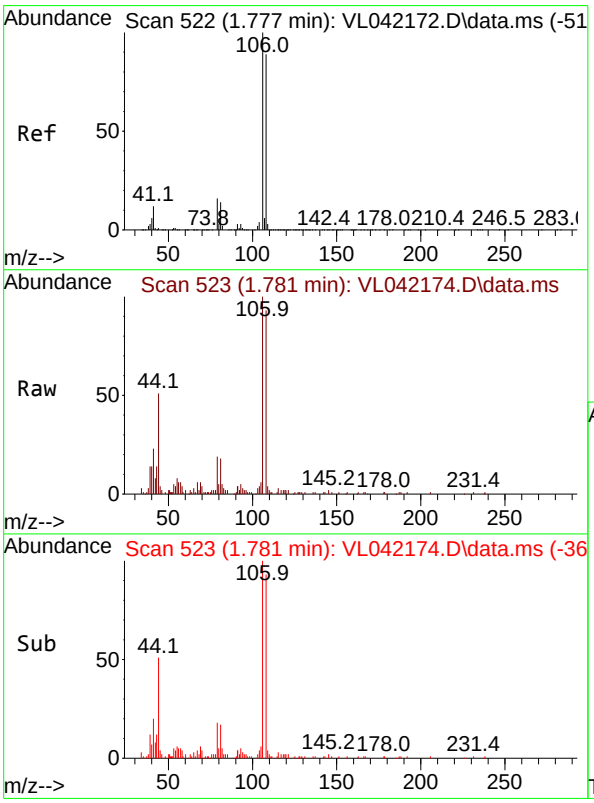
#13
Ethanol
Concen: 0.943 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 935

Ion	Ratio	Lower	Upper
45	100		
46	126.3	20.2	80.8#

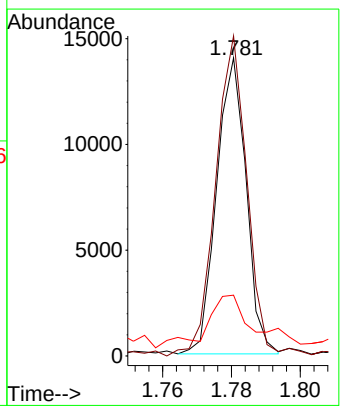


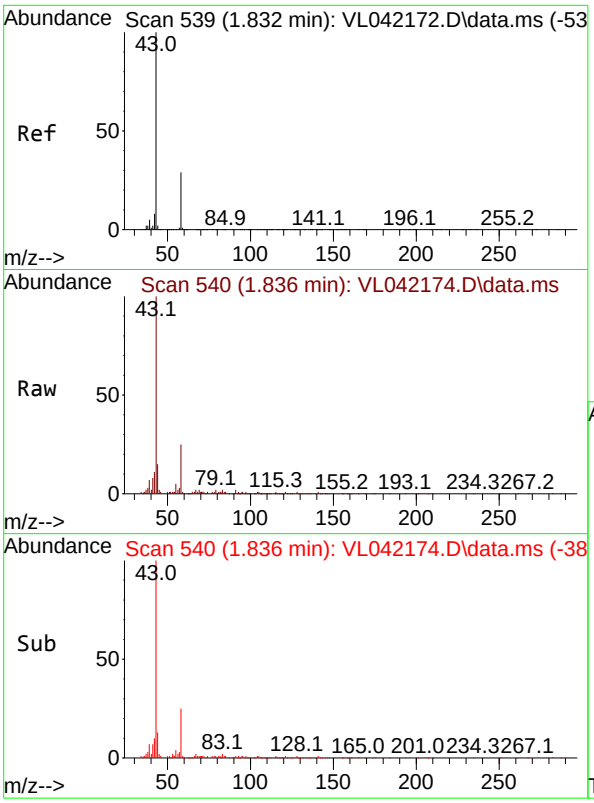


#14
Bromoethene
Concen: 0.989 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:108 Resp: 8330

Ion	Ratio	Lower	Upper
108	100		
106	115.2	86.8	130.2
79	57.0	15.0	22.6#



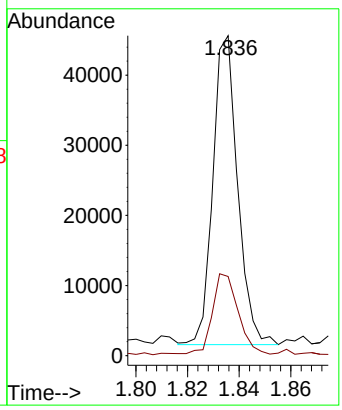


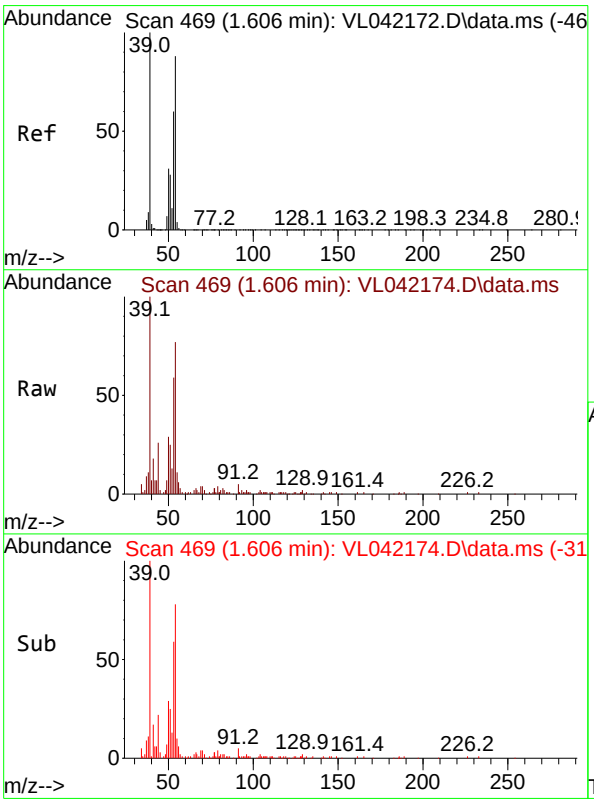
#15
Acetone
Concen: 1.125 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 29294

Ion	Ratio	Lower	Upper
43	100		
58	31.6	23.2	34.8

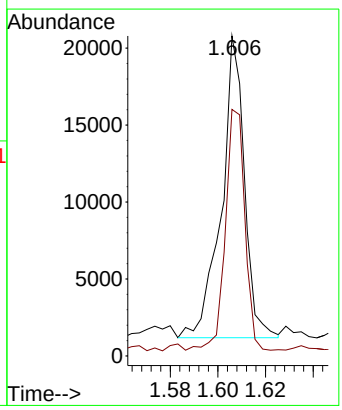


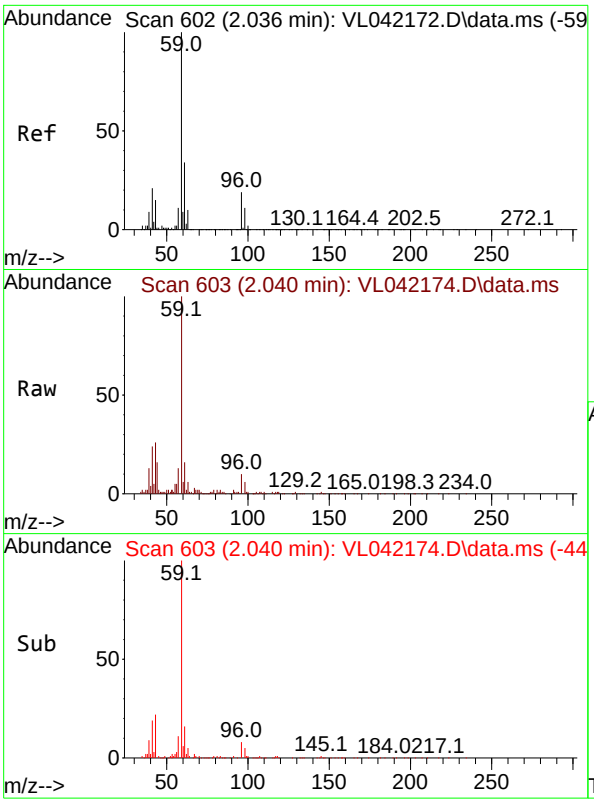


#16
1,3-Butadiene
Concen: 1.121 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 39 Resp: 13133

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1



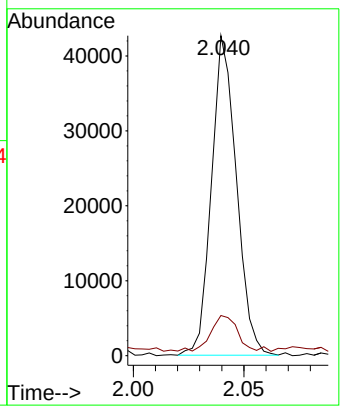


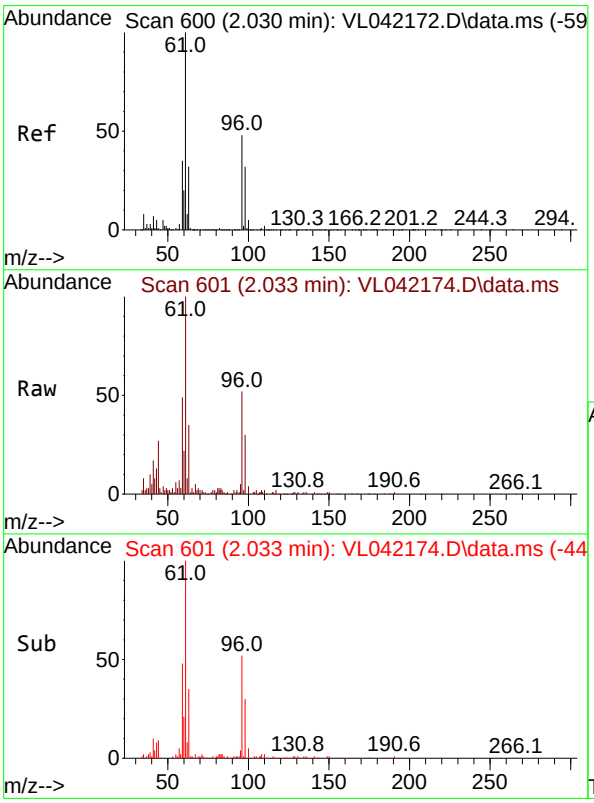
#17
tert-Butyl alcohol
Concen: 1.033 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 59 Resp: 33500

Ion	Ratio	Lower	Upper
59	100		
57	12.3	8.9	13.3

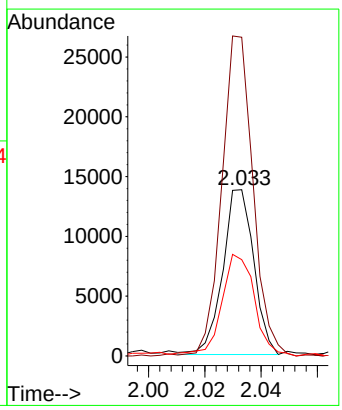


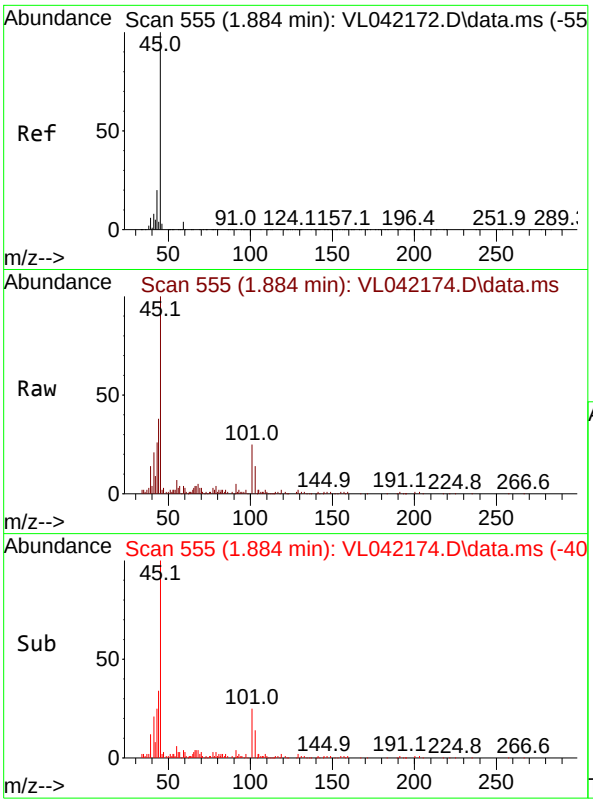


#18
1,1-Dichloroethene
Concen: 1.024 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	167.6	251.4
98	56.7	53.5	80.3



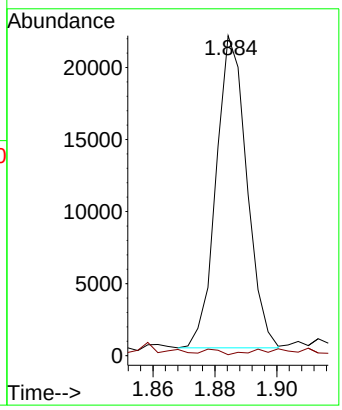


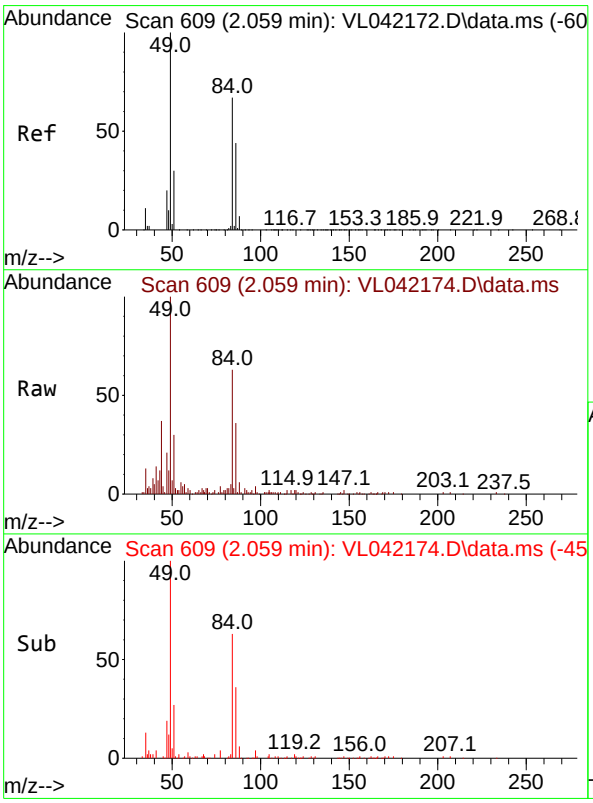
#19
Isopropyl Alcohol
Concen: 1.014 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 14903

Ion	Ratio	Lower	Upper
45	100		
58	4.9	36.9	55.3#

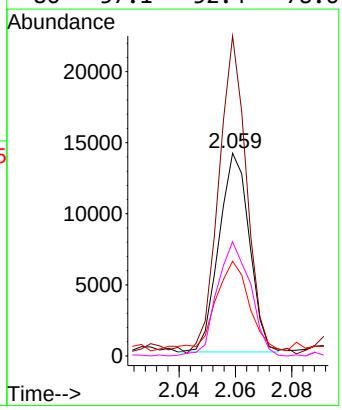


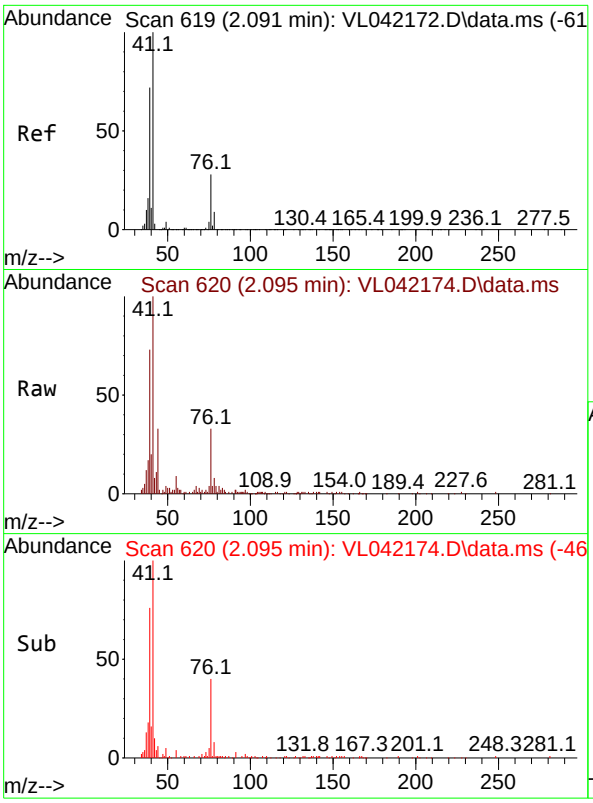


#20
Methylene Chloride
Concen: 1.080 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 10481

Ion	Ratio	Lower	Upper
84	100		
49	158.3	120.2	180.4
51	44.3	37.4	56.0
86	57.1	52.4	78.6



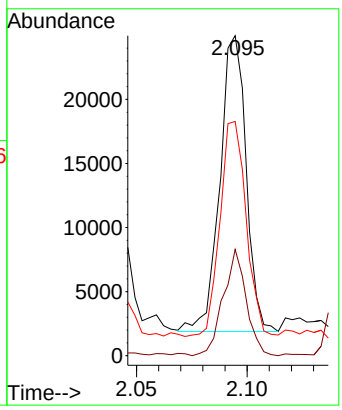


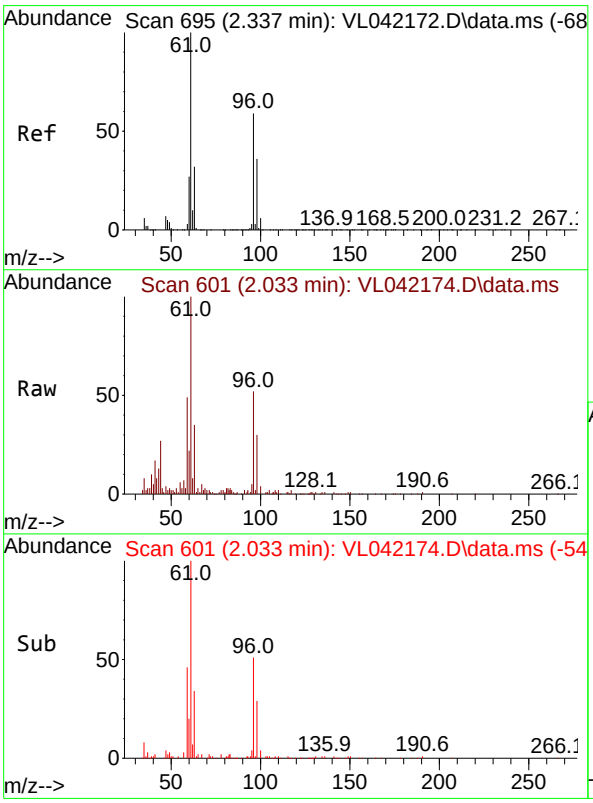
#21
Allyl Chloride
Concen: 1.036 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 19039

Ion	Ratio	Lower	Upper
41	100		
76	30.5	24.1	36.1
39	77.8	61.1	91.7

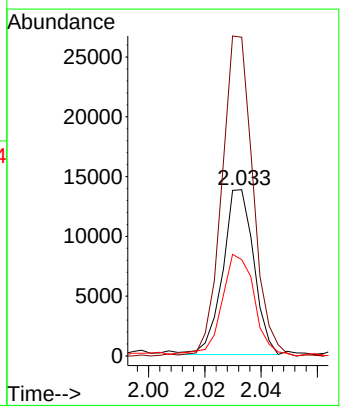


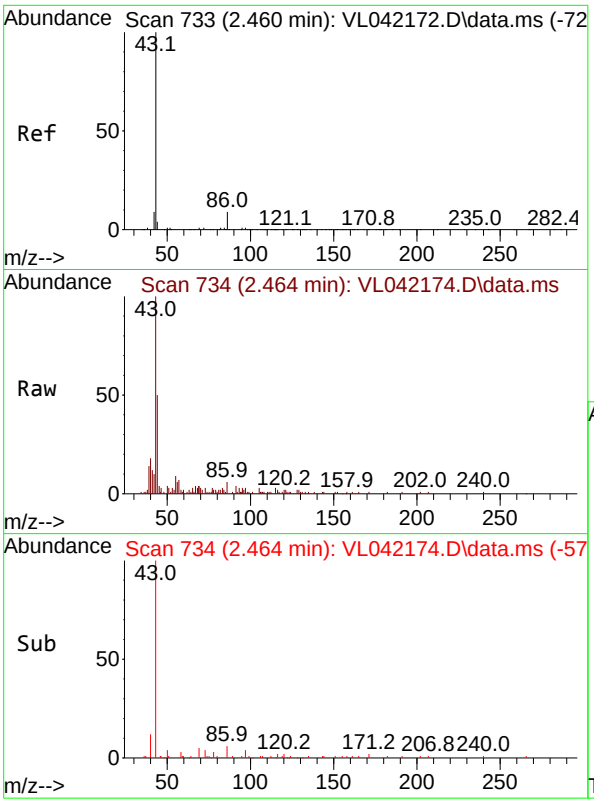


#22
trans-1,2-Dichloroethene
Concen: 0.877 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.304 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 96 Resp: 10532

Ion	Ratio	Lower	Upper
96	100		
61	192.9	136.6	204.8
98	56.7	49.4	74.2



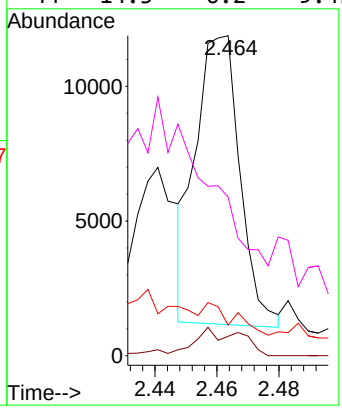


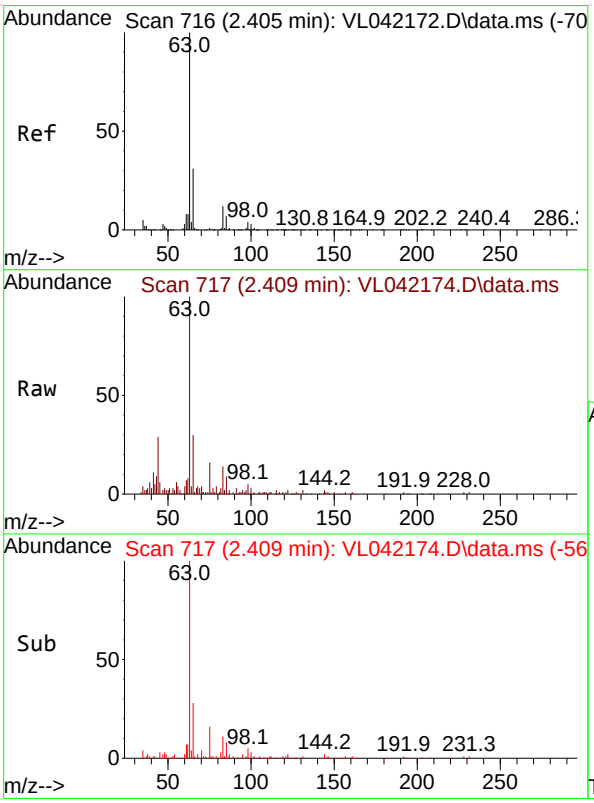
#23
Vinyl Acetate
Concen: 0.983 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 10644

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	2.4	8.6	13.0#
44	14.3	6.2	9.4#

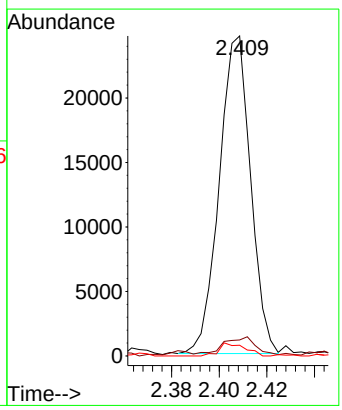


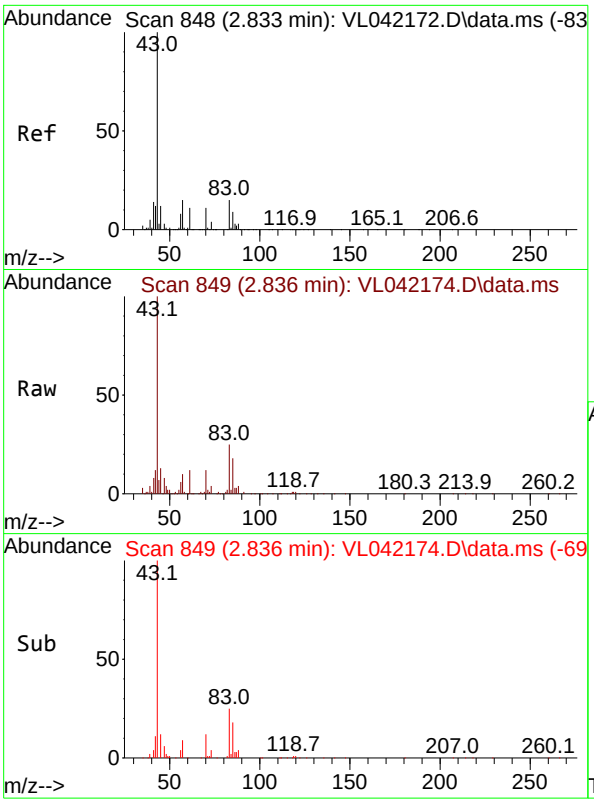


#24
1,1-Dichloroethane
Concen: 1.022 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 63 Resp: 22505

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.4	1.6	4.7



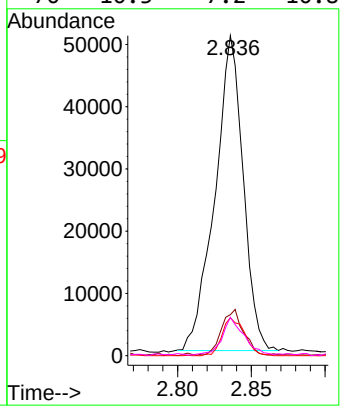


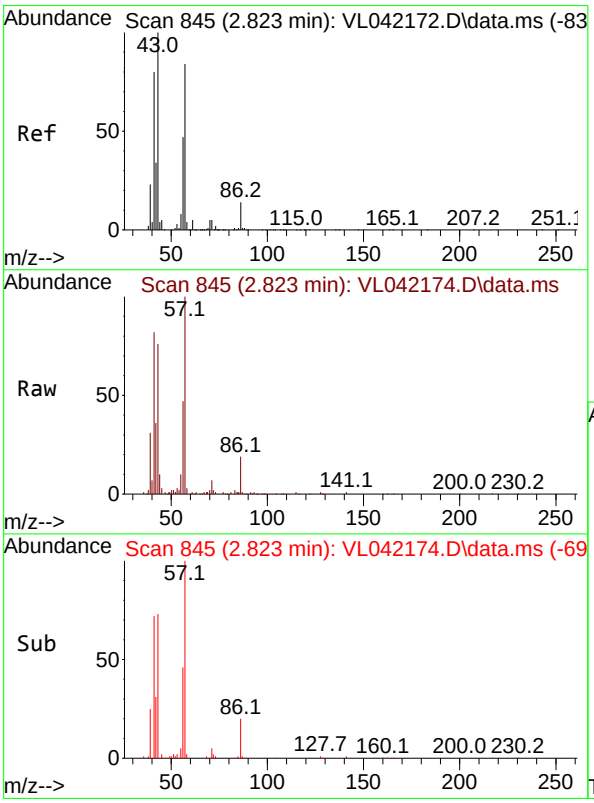
#25
Ethyl Acetate
Concen: 0.997 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 67402

Ion	Ratio	Lower	Upper
43	100		
45	12.3	8.2	12.2#
61	9.6	7.3	10.9
70	10.3	7.2	10.8

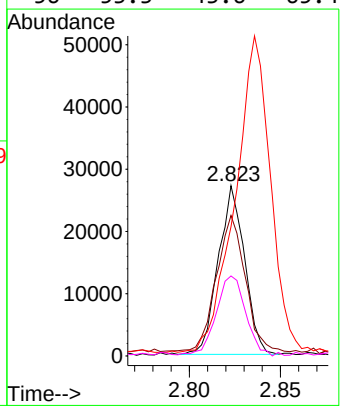


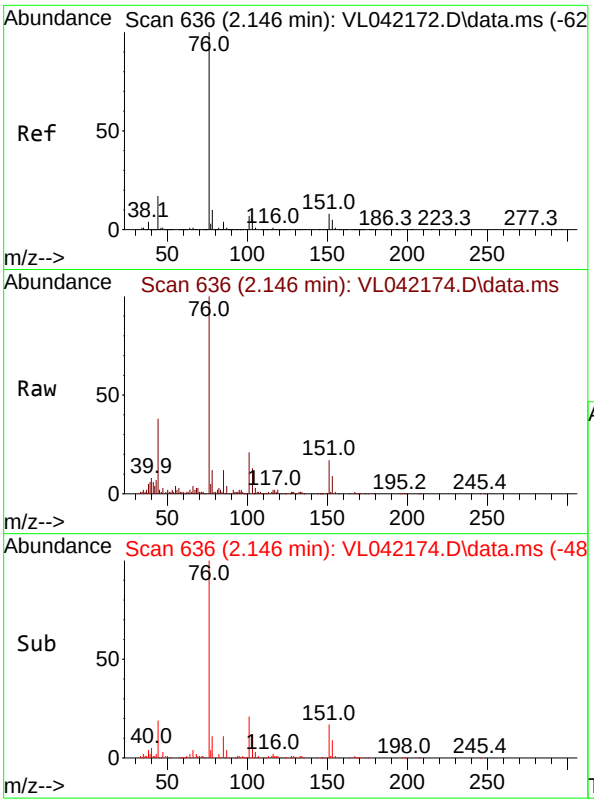


#26
Hexane
Concen: 1.043 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 27223

Ion	Ratio	Lower	Upper
57	100		
41	93.5	76.6	114.8
43	256.9	207.8	311.8
56	53.3	43.6	65.4



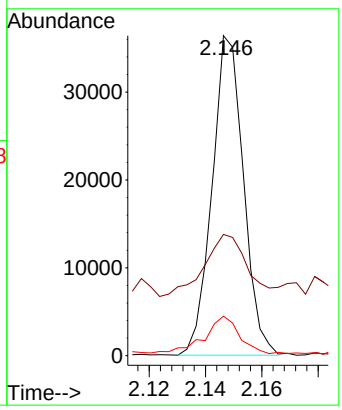


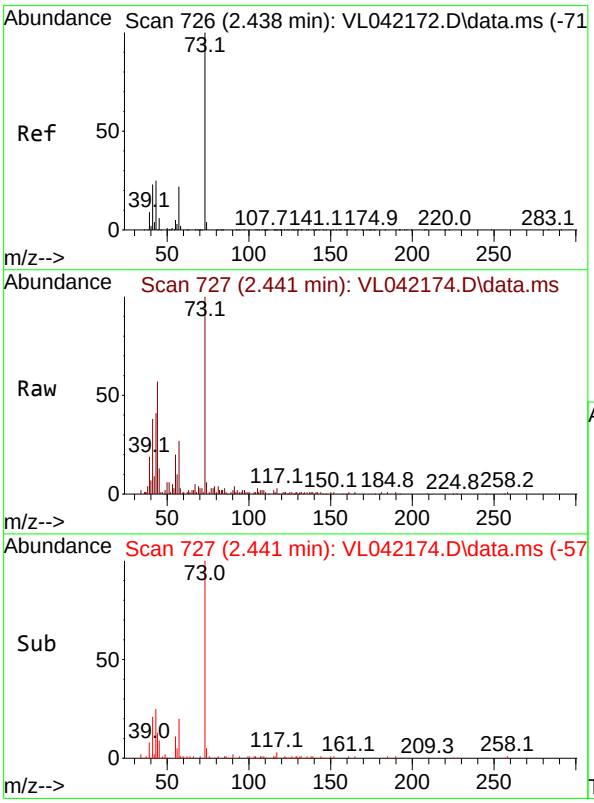
#27
Carbon Disulfide
Concen: 1.006 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 76 Resp: 28167

Ion	Ratio	Lower	Upper
76	100		
44	54.6	14.7	22.1#
78	15.0	9.3	13.9#

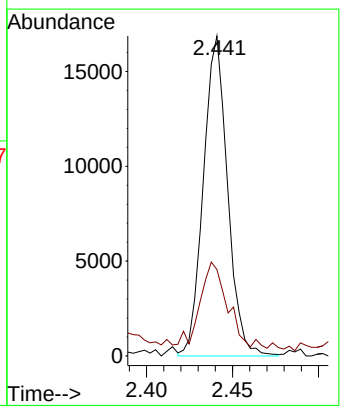


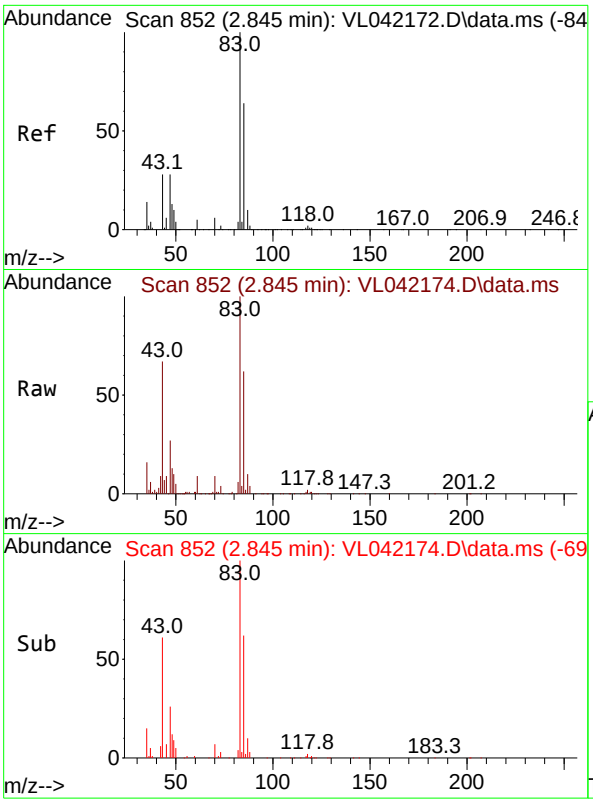


#28
Methyl tert-Butyl Ether
Concen: 1.015 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 73 Resp: 16501

Ion	Ratio	Lower	Upper
73	100		
57	28.0	20.5	30.7



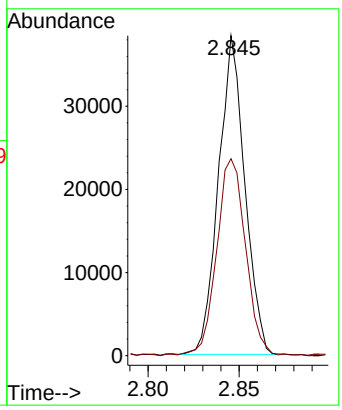


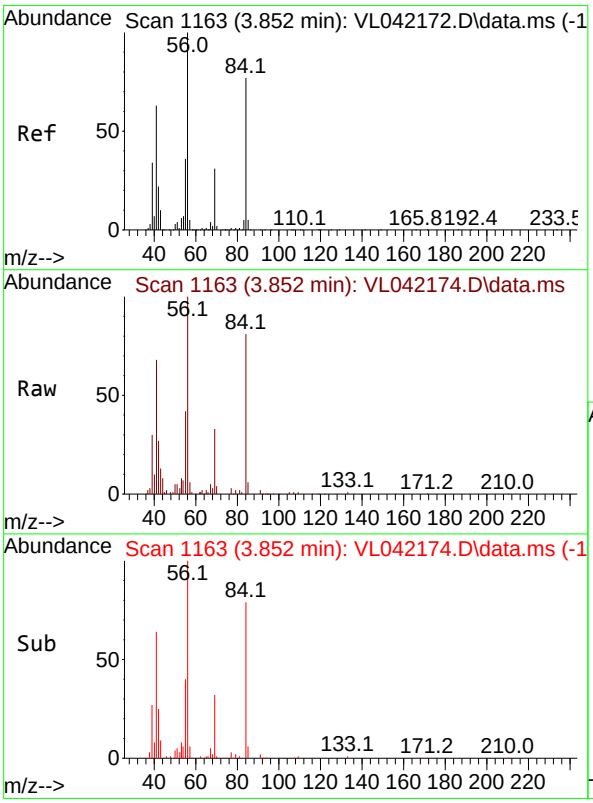
#29
Chloroform
Concen: 1.008 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 38516

Ion	Ratio	Lower	Upper
83	100		
85	61.6	51.4	77.2

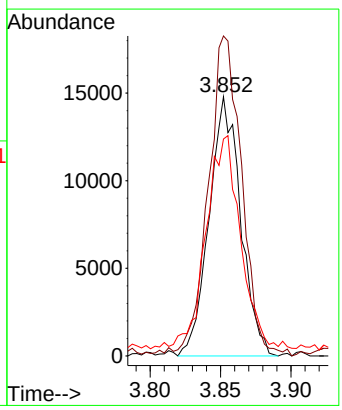


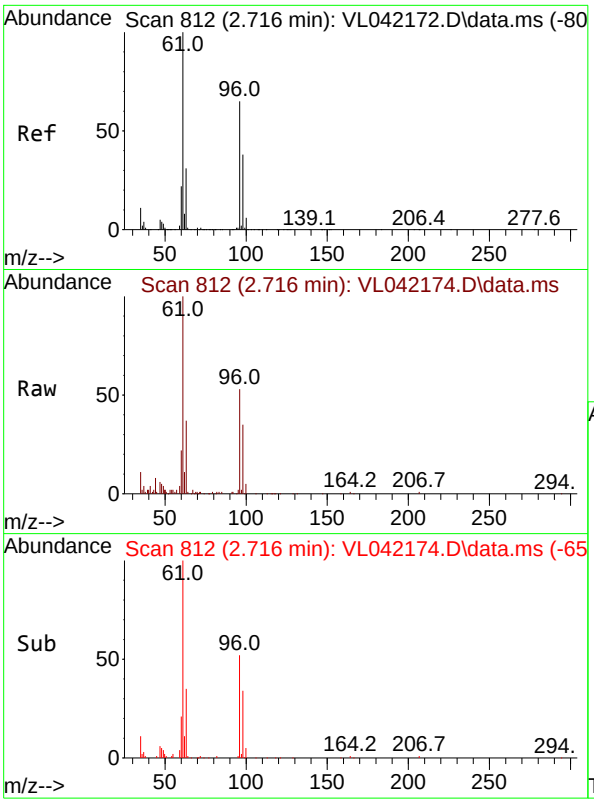


#30
Cyclohexane
Concen: 1.016 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 84 Resp: 23052

Ion	Ratio	Lower	Upper
84	100		
56	128.9	102.8	154.2
41	89.3	66.5	99.7



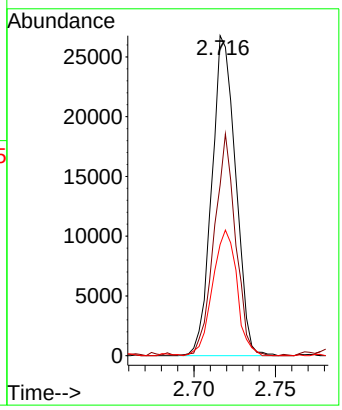


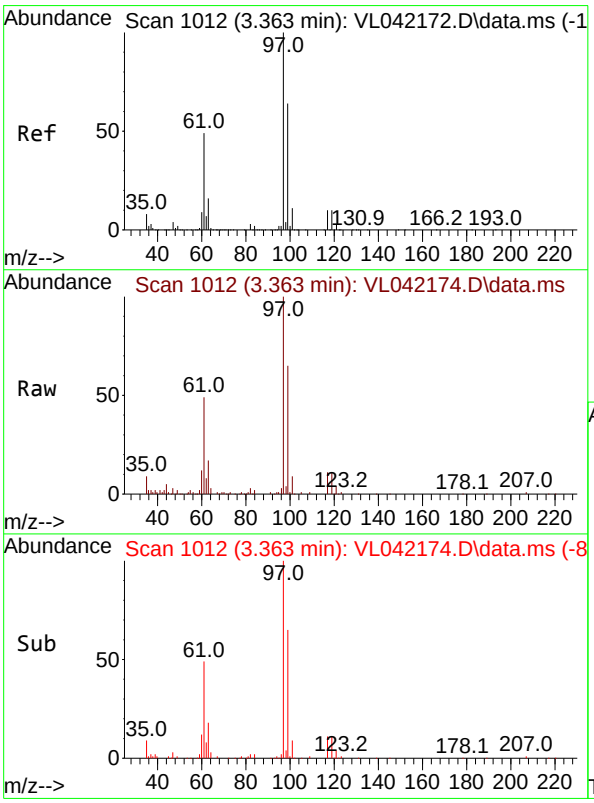
#31
cis-1,2-Dichloroethene
Concen: 1.026 ppbv
RT: 2.716 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 61 Resp: 27187

Ion	Ratio	Lower	Upper
61	100		
96	53.3	51.8	77.8
98	34.8	30.6	46.0

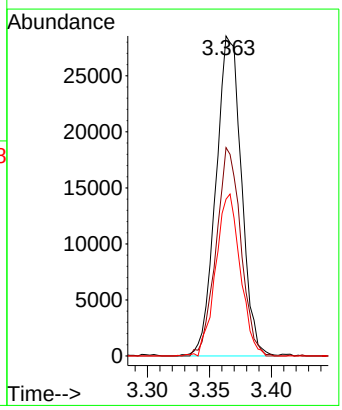


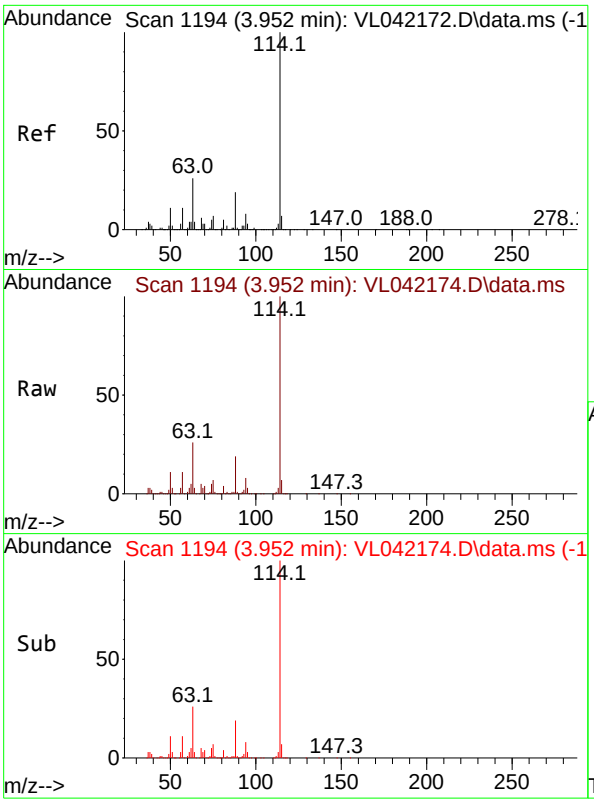


#32
1,1,1-Trichloroethane
Concen: 0.938 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 97 Resp: 40993

Ion	Ratio	Lower	Upper
97	100		
99	63.0	51.5	77.3
61	48.8	38.7	58.1



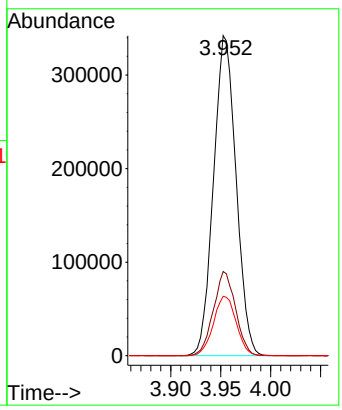


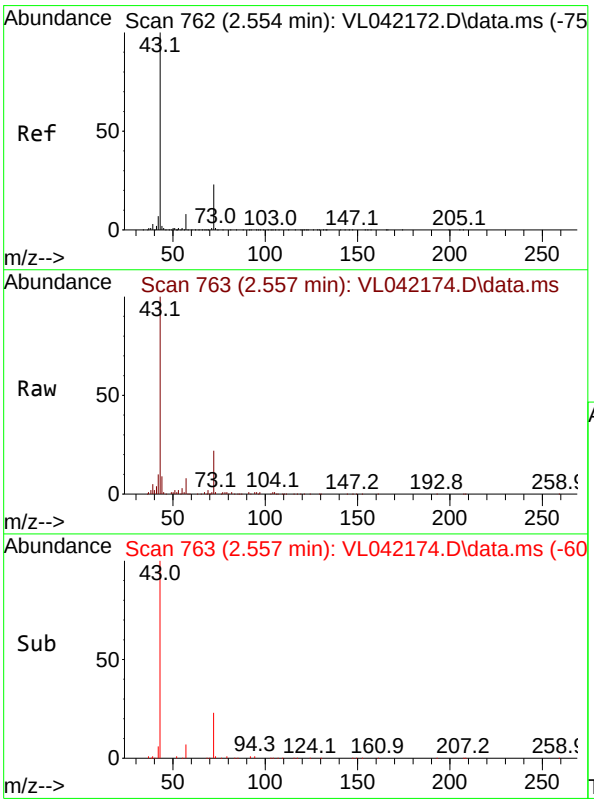
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:114 Resp: 537244

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.8	15.0	22.4

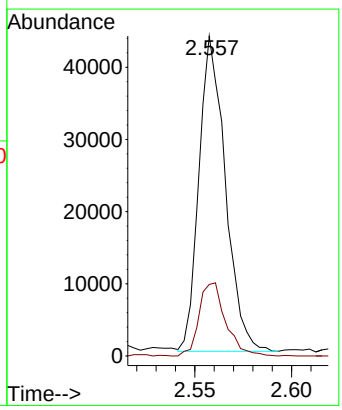


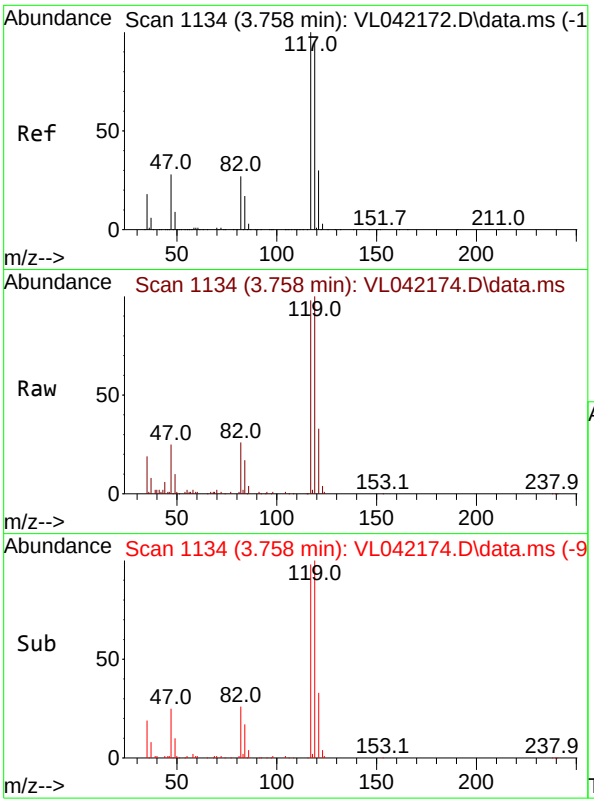


#34
2-Butanone
Concen: 1.063 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 41423

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2



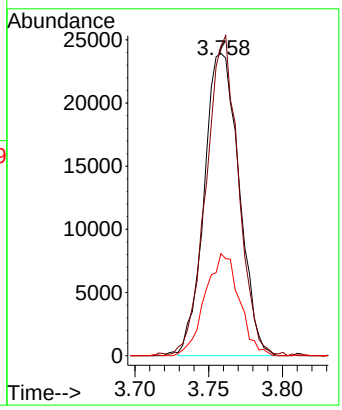


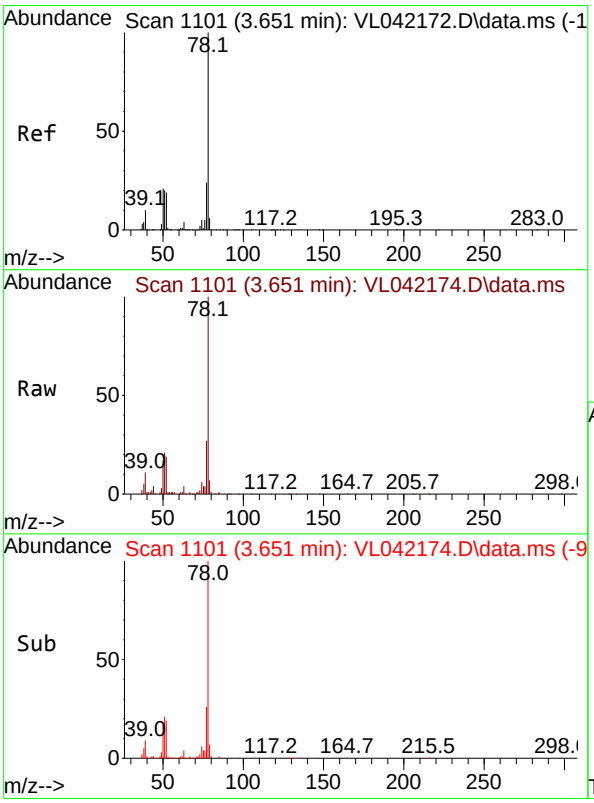
#35
Carbon Tetrachloride
Concen: 0.952 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 39345

Ion	Ratio	Lower	Upper
117	100		
119	101.8	76.2	114.2
121	33.7	24.2	36.4

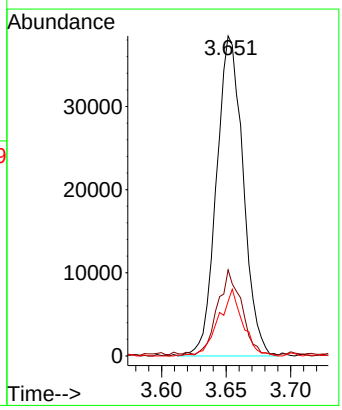


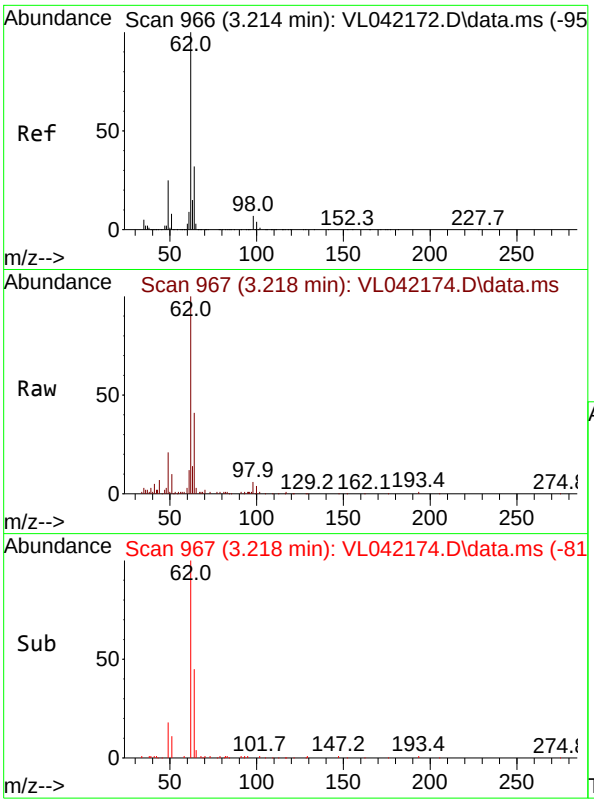


#36
Benzene
Concen: 1.036 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 78 Resp: 55156

Ion	Ratio	Lower	Upper
78	100		
77	26.5	19.1	28.7
50	17.1	16.6	24.8



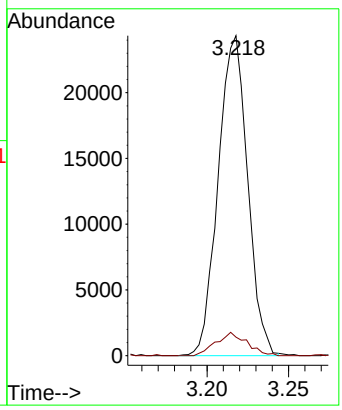


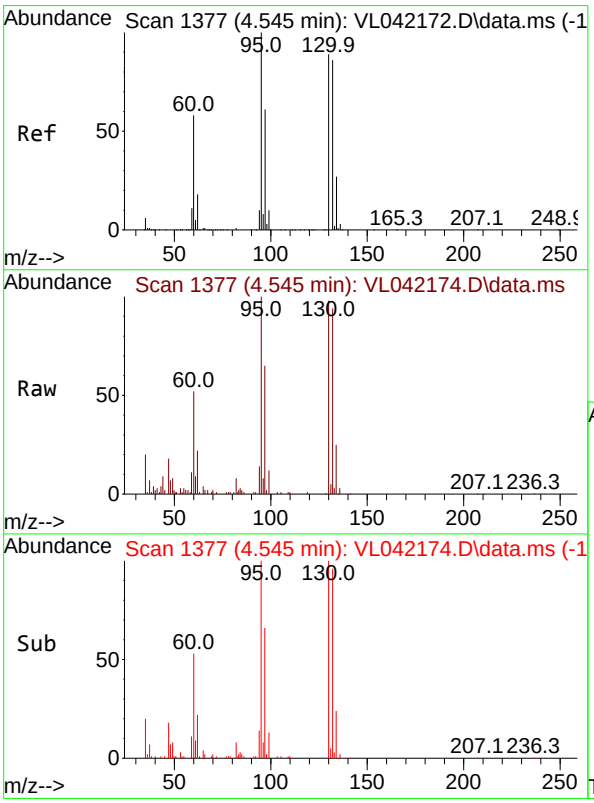
#37
1,2-Dichloroethane
Concen: 1.002 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 30543

Ion	Ratio	Lower	Upper
62	100		
98	7.6	5.4	8.2

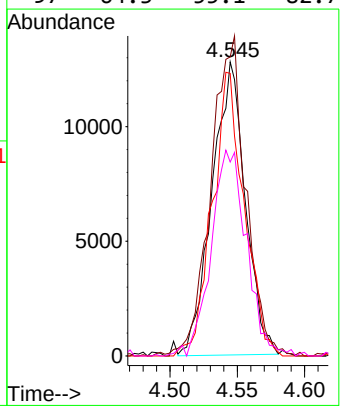


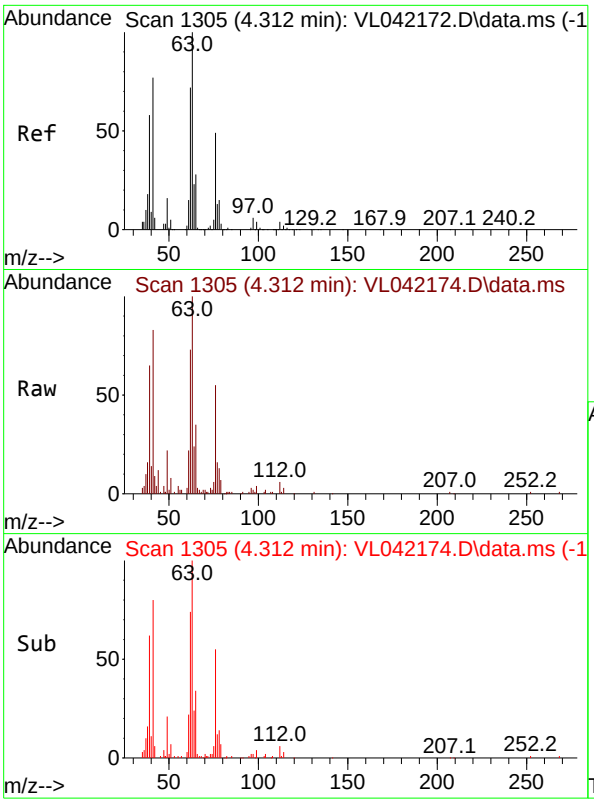


#38
Trichloroethene
Concen: 0.985 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:130 Resp: 21906

Ion	Ratio	Lower	Upper
130	100		
95	100.2	89.8	134.8
132	95.3	77.4	116.2
97	64.3	55.1	82.7



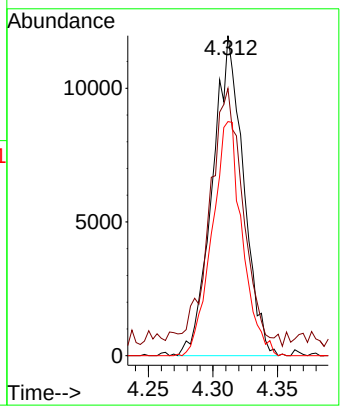


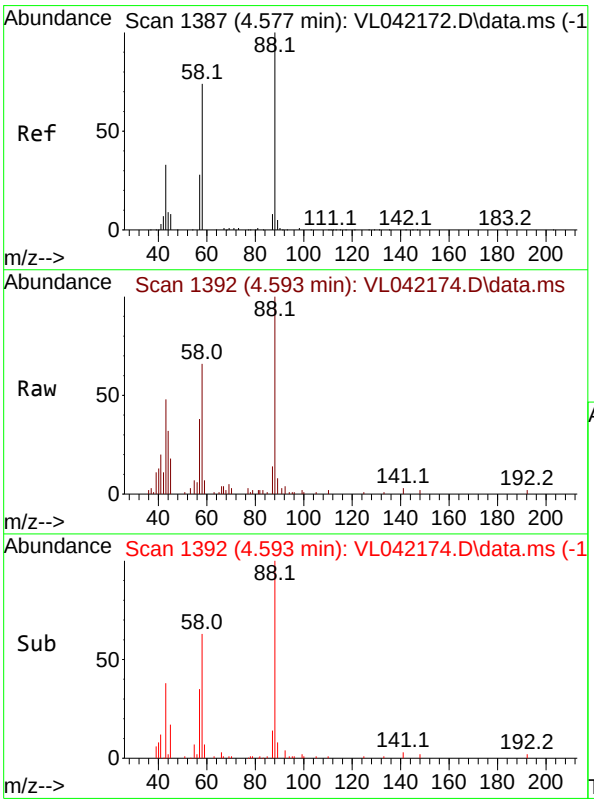
#39
1,2-Dichloropropane
Concen: 1.032 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 63 Resp: 20020

Ion	Ratio	Lower	Upper
63	100		
41	76.8	61.7	92.5
62	73.1	57.6	86.4

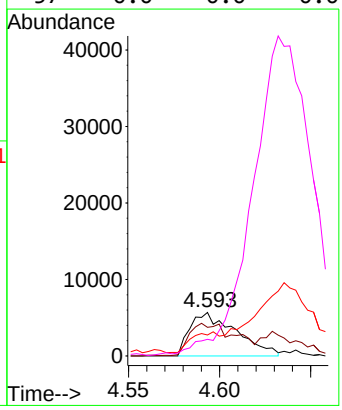


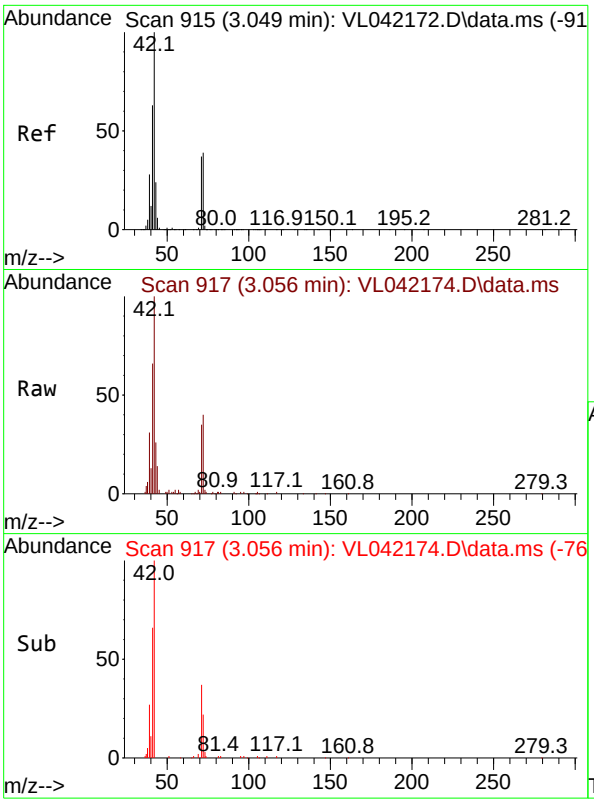


#40
1,4-Dioxane
Concen: 0.997 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 88 Resp: 10031

Ion	Ratio	Lower	Upper
88	100		
58	121.8	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



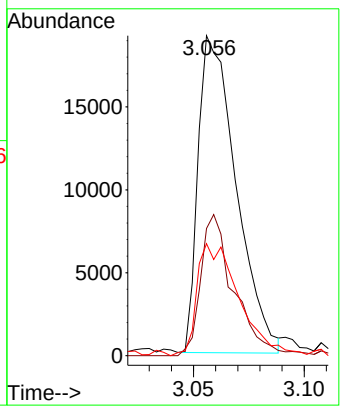


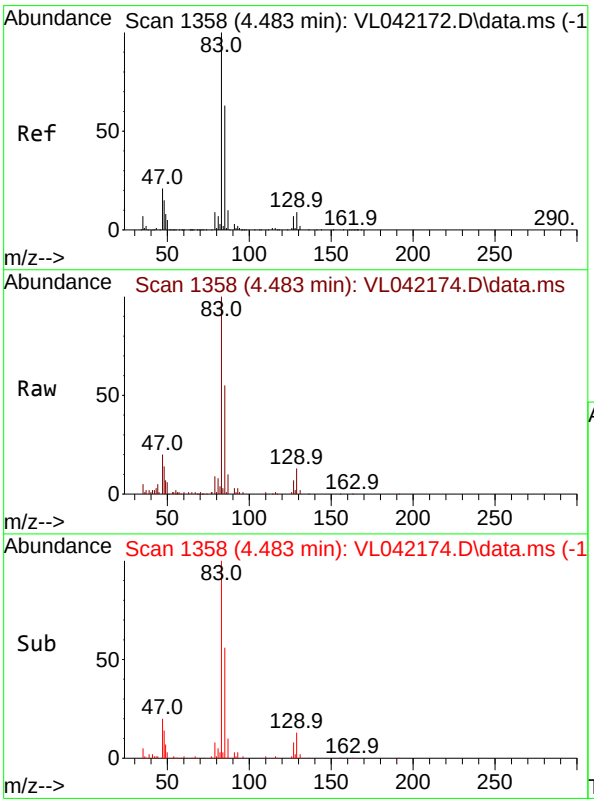
#41
Tetrahydrofuran
Concen: 1.029 ppbv
RT: 3.056 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 42 Resp: 22818

Ion	Ratio	Lower	Upper
42	100		
72	39.4	31.4	47.0
71	40.8	30.2	45.4

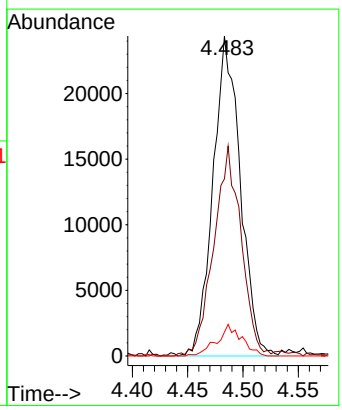


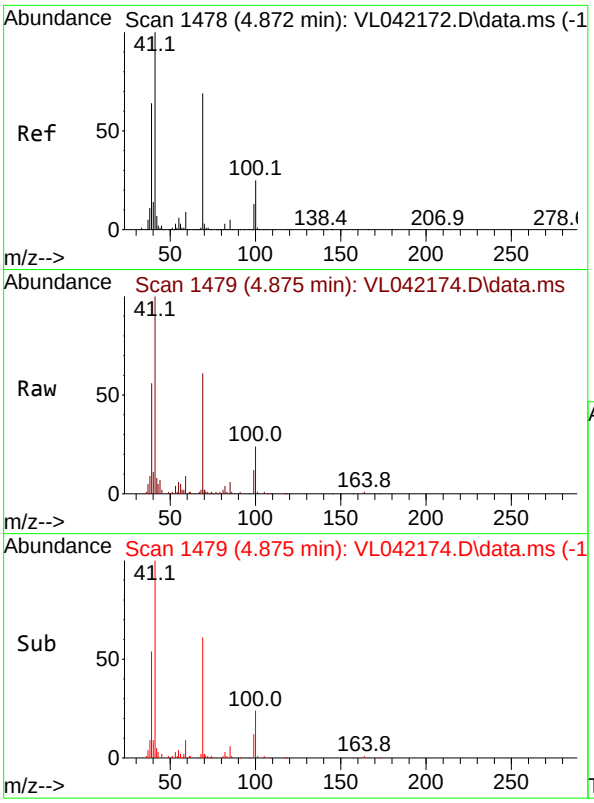


#42
Bromodichloromethane
Concen: 0.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 83 Resp: 41864

Ion	Ratio	Lower	Upper
83	100		
85	54.7	50.5	75.7
127	7.5	5.9	8.9



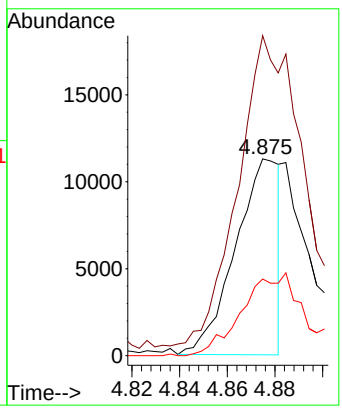


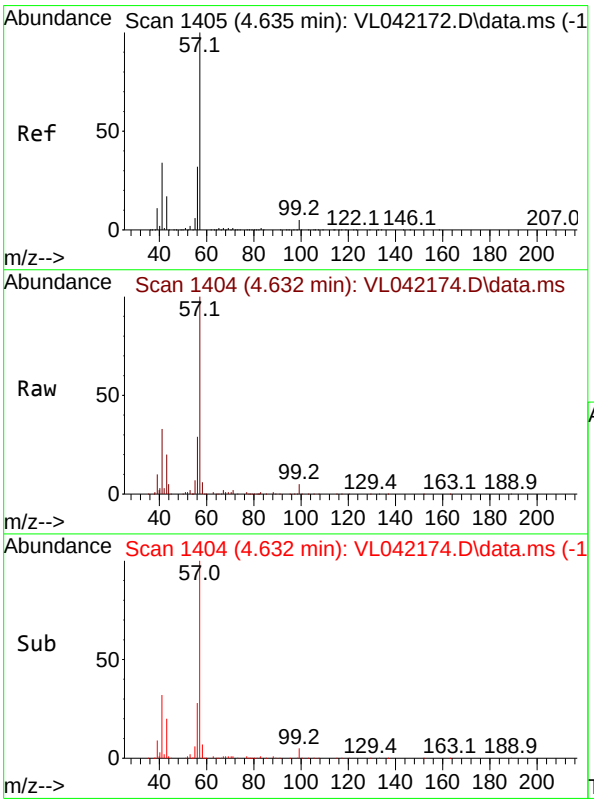
#43
Methyl Methacrylate
Concen: 0.640 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 69 Resp: 14387

Ion	Ratio	Lower	Upper
69	100		
41	246.1	123.8	185.6#
100	0.0	28.4	42.6#

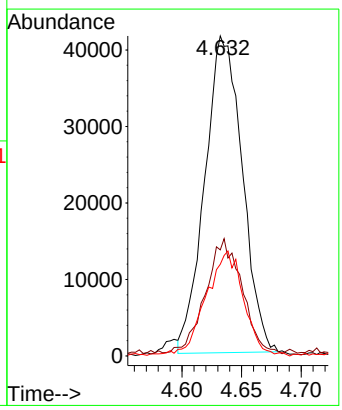


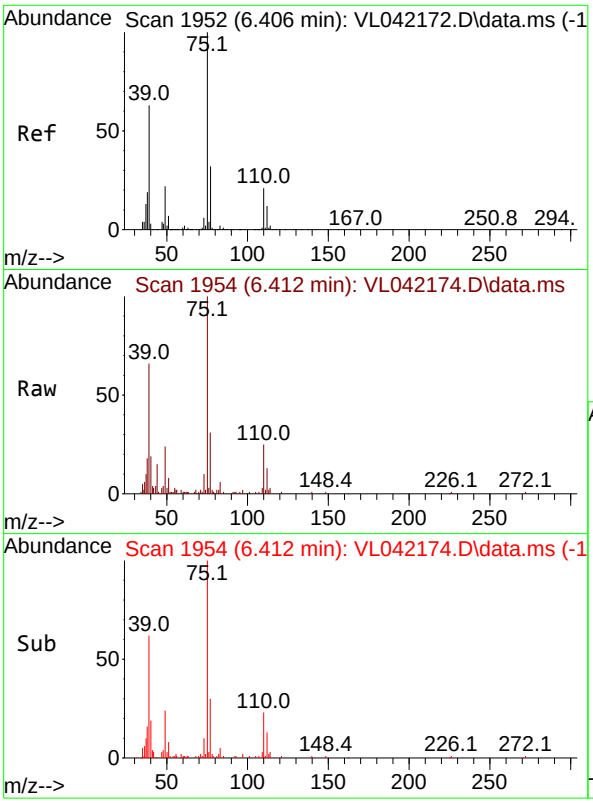


#44
2,2,4-Trimethylpentane
Concen: 1.008 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 57 Resp: 90727

Ion	Ratio	Lower	Upper
57	100		
41	35.9	26.8	40.2
56	33.7	25.6	38.4



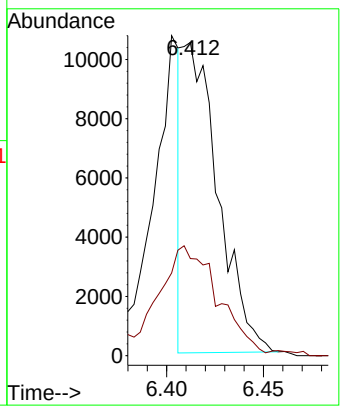


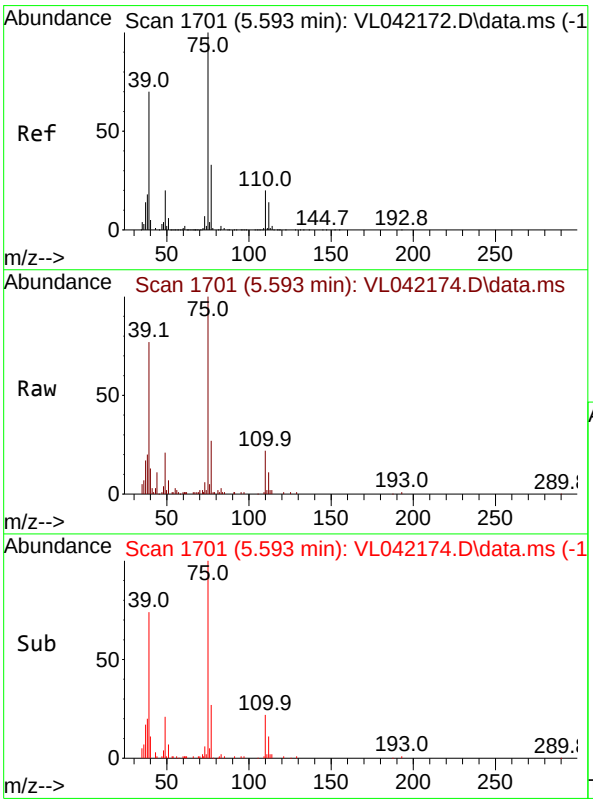
#45
t-1,3-Dichloropropene
Concen: 0.555 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 75 Resp: 13431

Ion	Ratio	Lower	Upper
75	100		
77	31.0	26.0	39.0

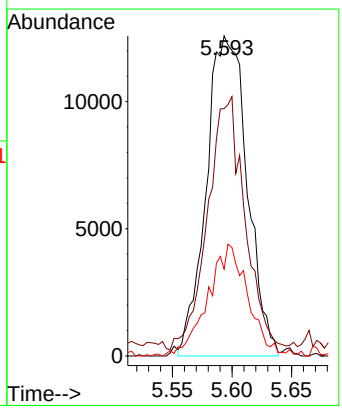


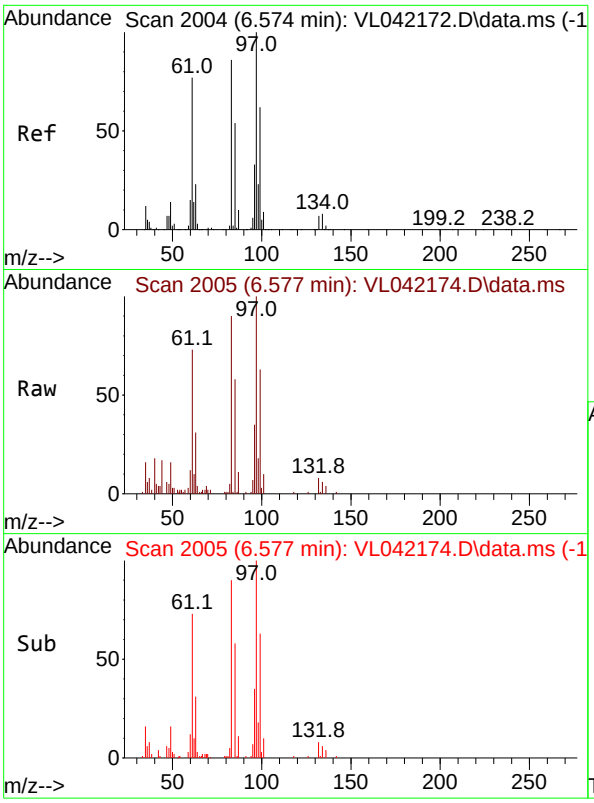


#46
cis-1,3-Dichloropropene
Concen: 1.014 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 75 Resp: 30063

Ion	Ratio	Lower	Upper
75	100		
39	74.2	55.8	83.6
77	26.4	26.0	39.0



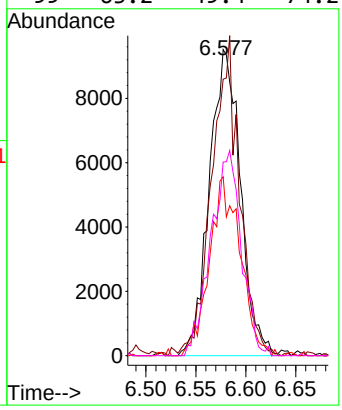


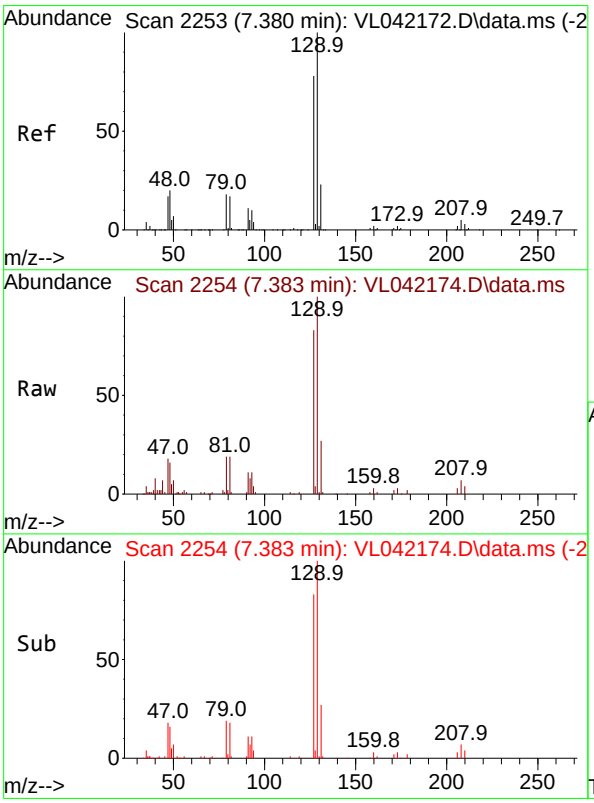
#47
1,1,2-Trichloroethane
Concen: 1.002 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 97 Resp: 20546

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	58.4	43.1	64.7
99	63.2	49.4	74.2

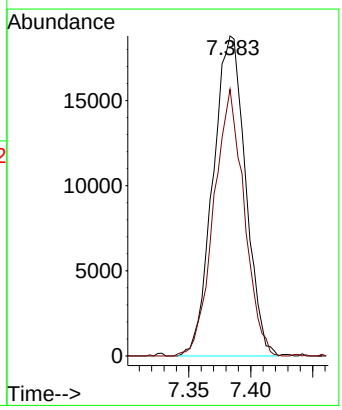


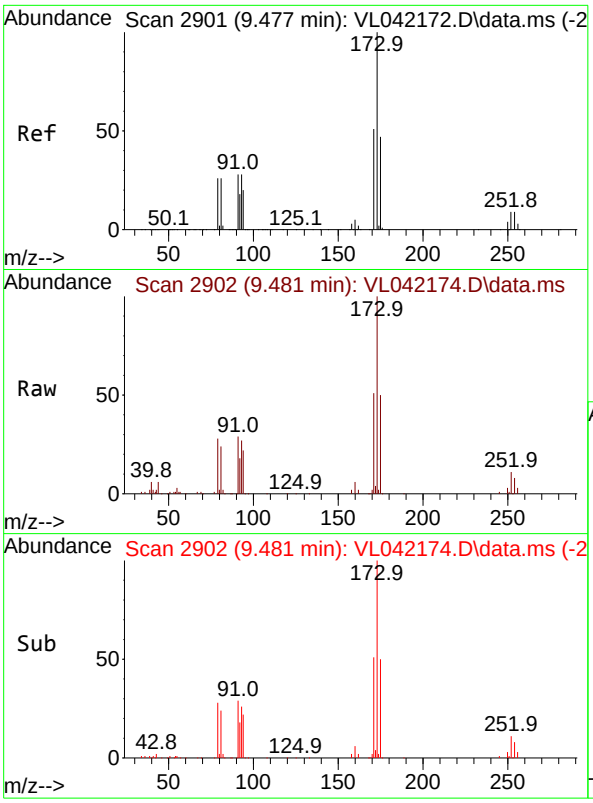


#48
Dibromochloromethane
Concen: 0.991 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:129 Resp: 34425

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.2



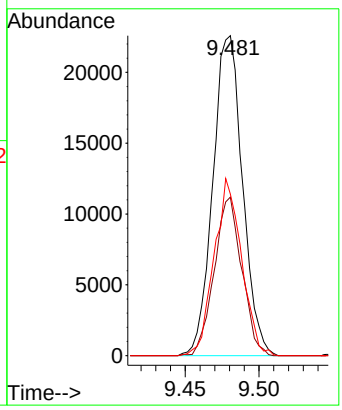


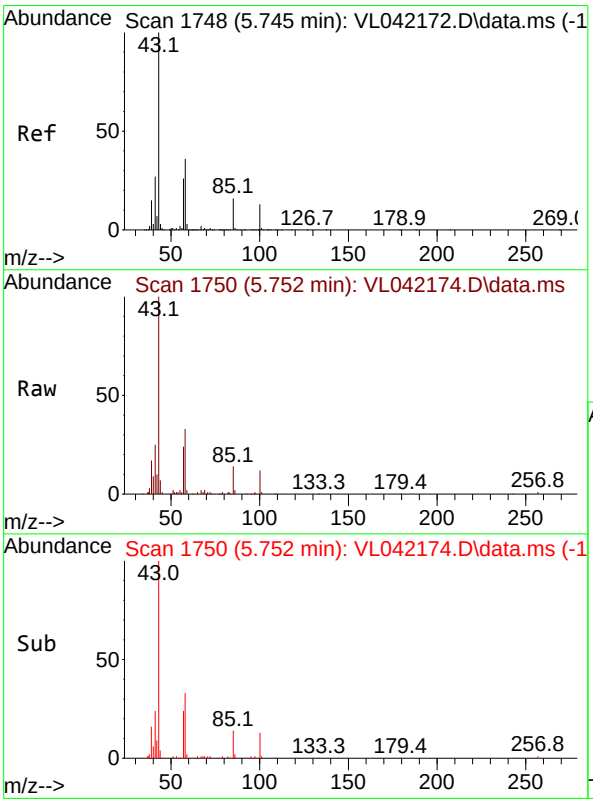
#49
Bromoform
Concen: 1.013 ppbv
RT: 9.481 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:173 Resp: 31610

Ion	Ratio	Lower	Upper
173	100		
175	46.1	38.6	57.8
171	51.3	41.8	62.6

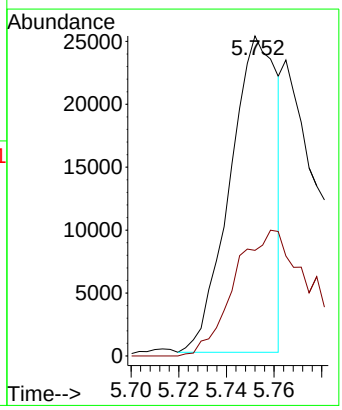


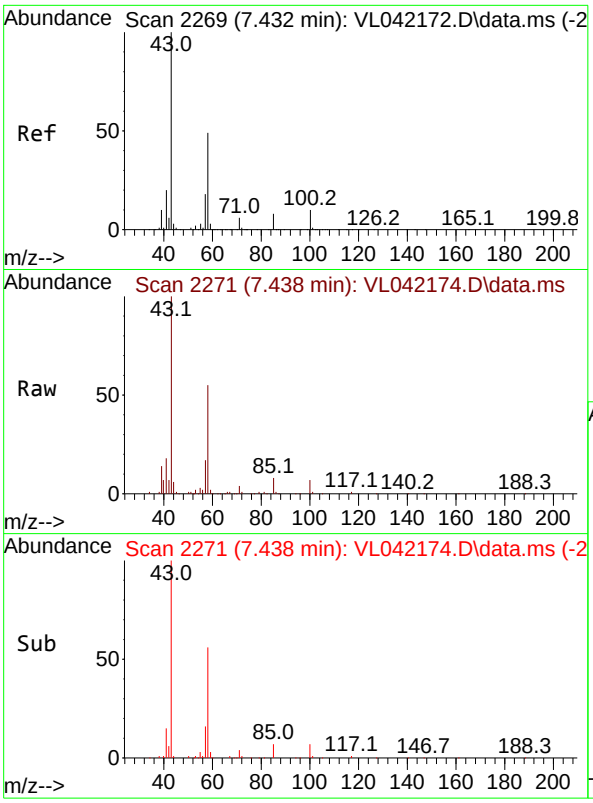


#50
4-Methyl-2-Pentanone
Concen: 0.556 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 43 Resp: 34358

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



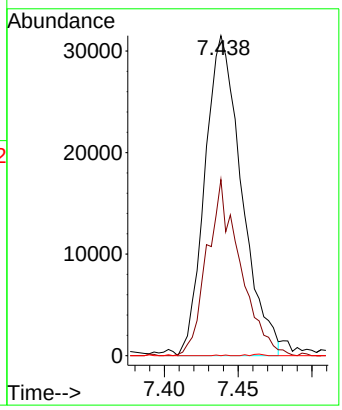


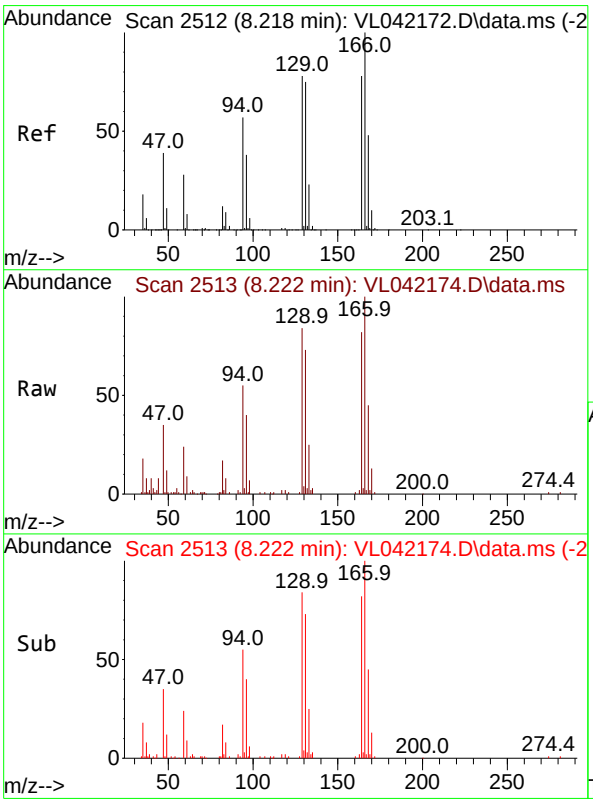
#51
2-Hexanone
Concen: 1.067 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 54680

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.2	0.1	0.1#

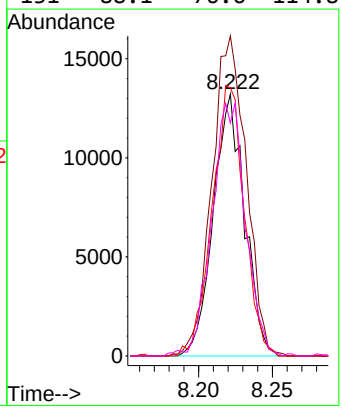


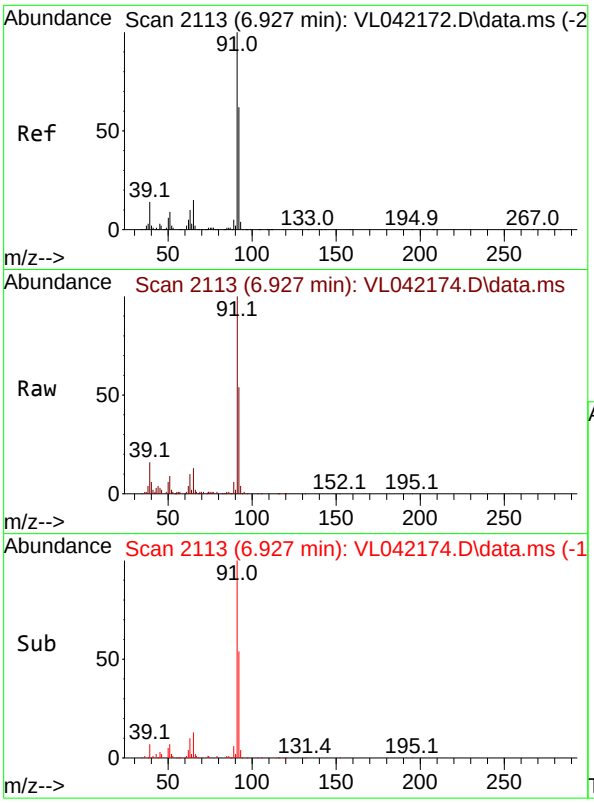


#52
Tetrachloroethene
Concen: 0.919 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:164 Resp: 19415

Ion	Ratio	Lower	Upper
164	100		
166	121.4	102.5	153.7
129	102.4	79.8	119.8
131	88.1	76.6	114.8



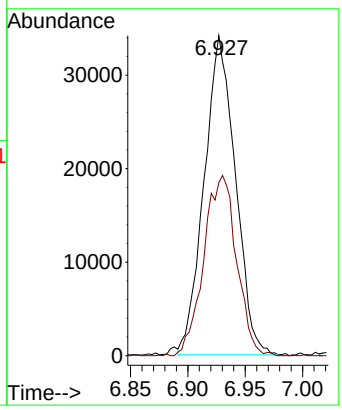


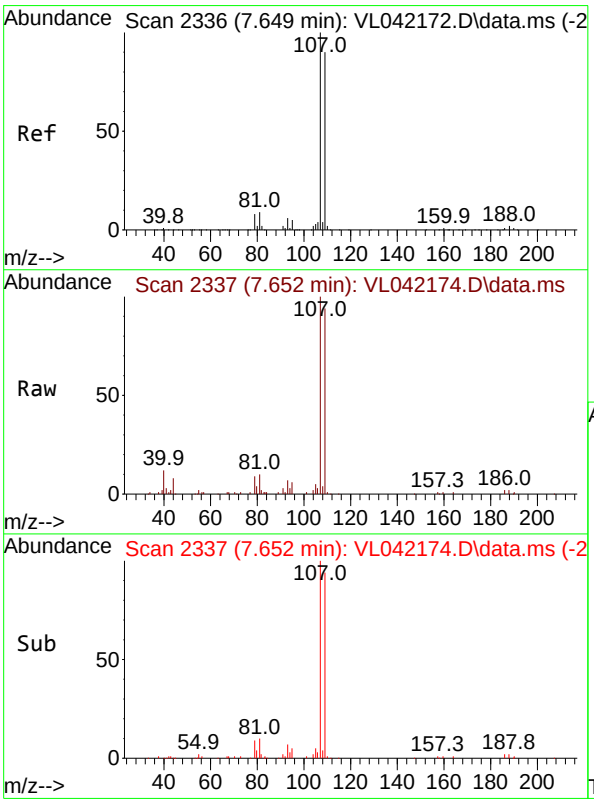
#53
Toluene
Concen: 1.023 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 64612

Ion	Ratio	Lower	Upper
91	100		
92	59.4	48.4	72.6

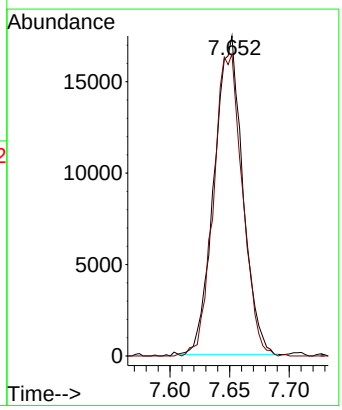


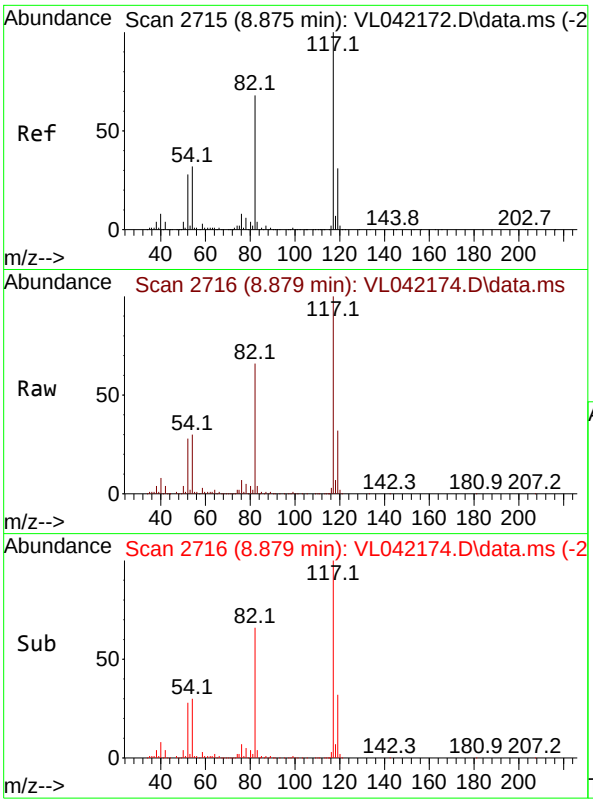


#54
1,2-Dibromoethane
Concen: 1.009 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:107 Resp: 28879

Ion	Ratio	Lower	Upper
107	100		
109	94.8	72.2	108.4



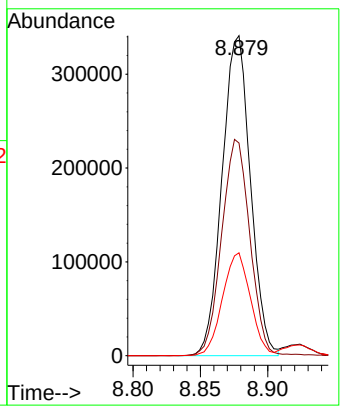


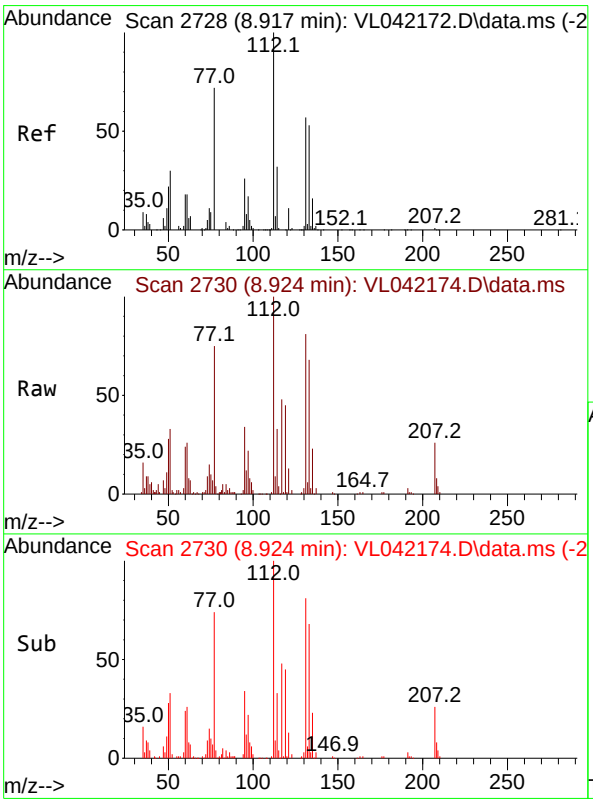
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 499830

Ion	Ratio	Lower	Upper
117	100		
82	67.6	55.8	83.6
119	32.2	25.5	38.3

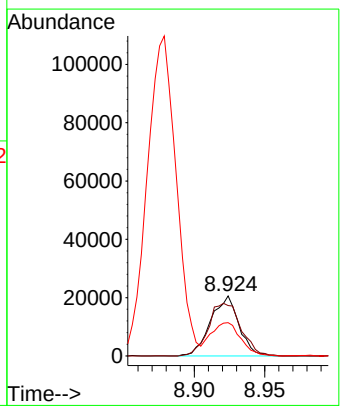


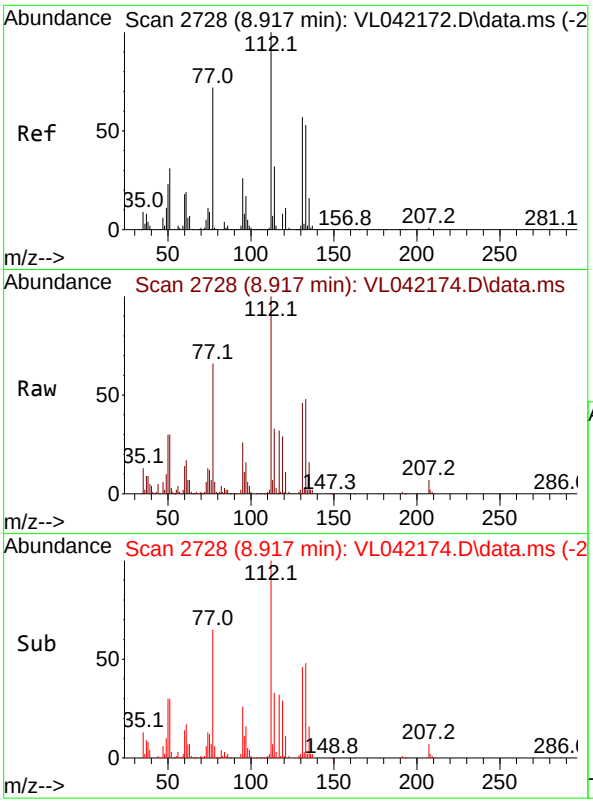


#56
1,1,1,2-Tetrachloroethane
Concen: 1.045 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.007 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:131 Resp: 28764

Ion	Ratio	Lower	Upper
131	100		
133	101.7	76.6	114.8
119	44.1	49.8	74.6#



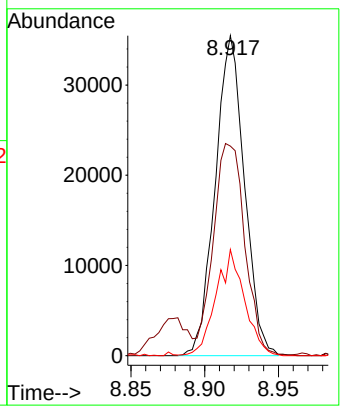


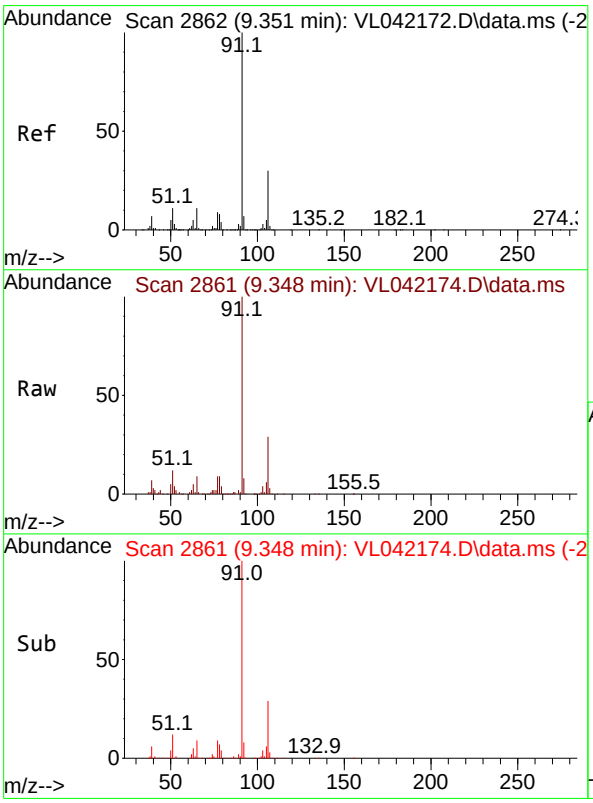
#57
Chlorobenzene
Concen: 1.032 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:112 Resp: 48930

Ion	Ratio	Lower	Upper
112	100		
77	65.0	58.2	87.2
114	32.9	29.1	35.5

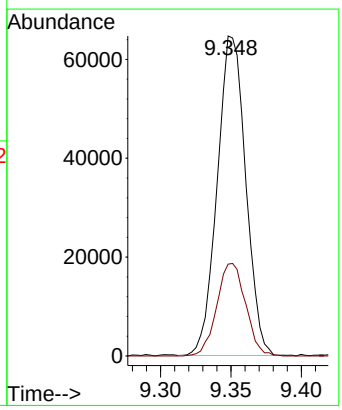


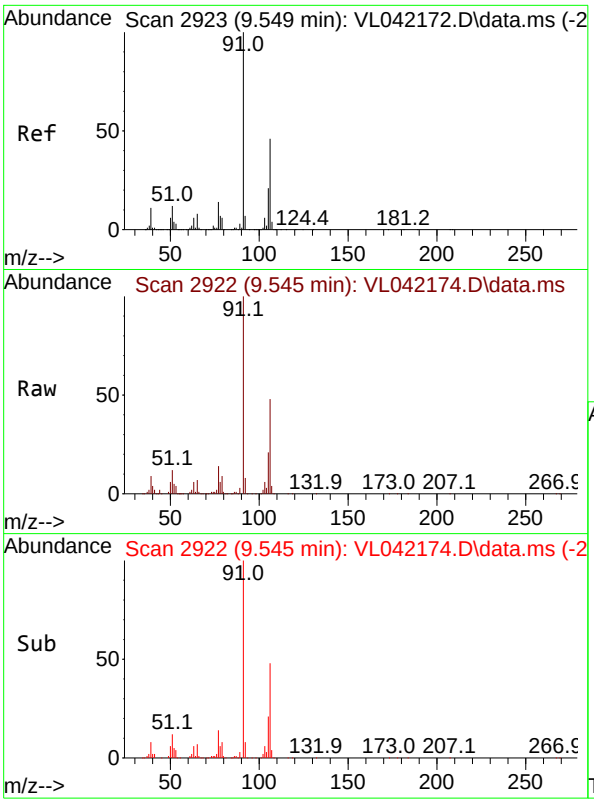


#58
Ethyl Benzene
Concen: 1.026 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 91086

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2



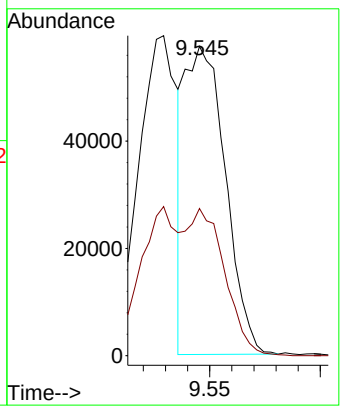


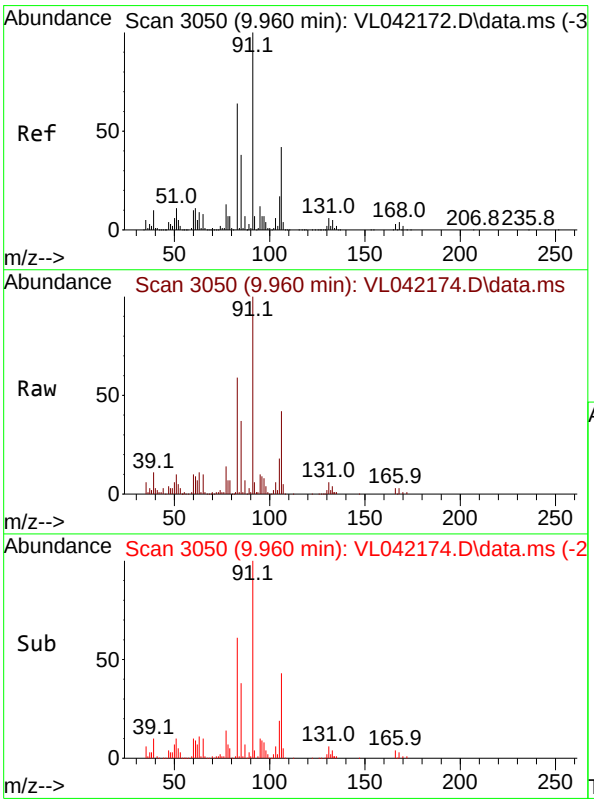
#59
m/p-Xylene
Concen: 1.033 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 73295

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

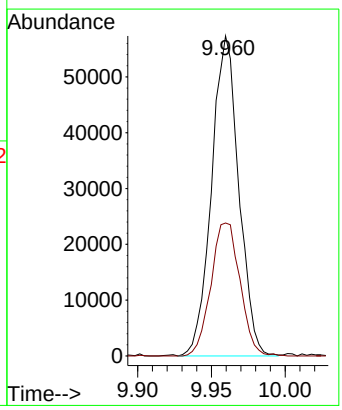


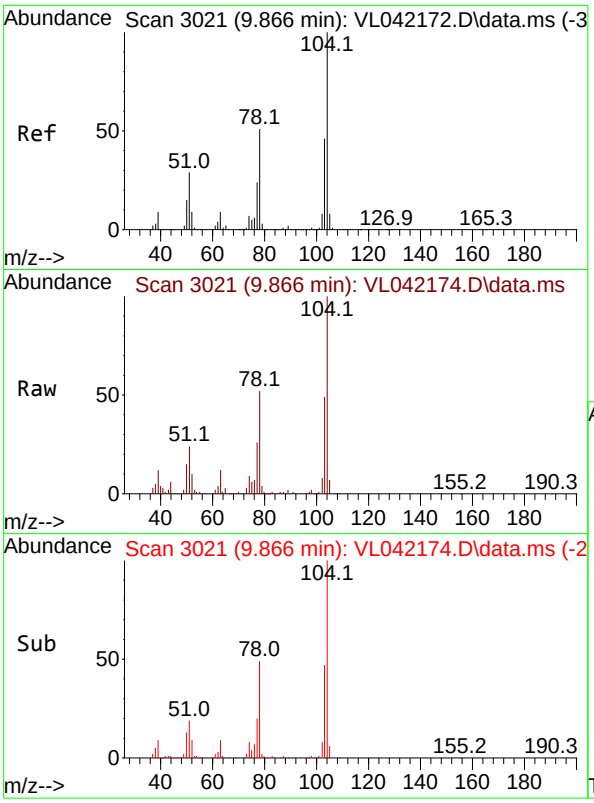


#60
o-Xylene
Concen: 1.037 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 73702

Ion	Ratio	Lower	Upper
91	100		
106	44.3	20.8	62.5



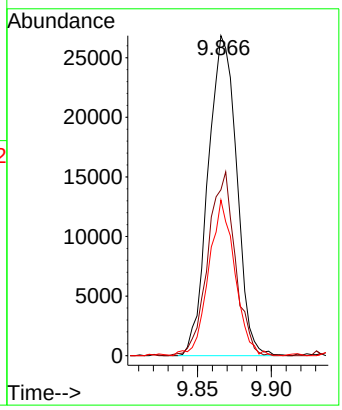


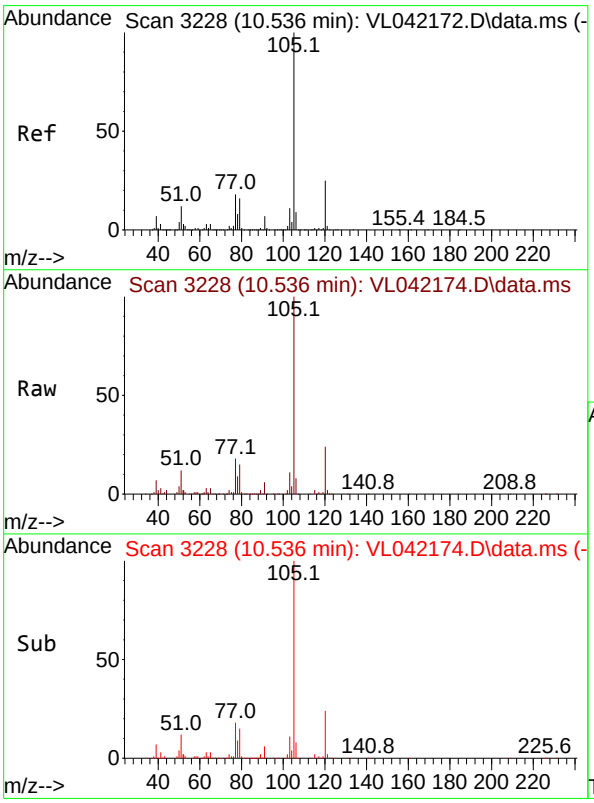
#61
Styrene
Concen: 1.027 ppbv
RT: 9.866 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:104 Resp: 36110

Ion	Ratio	Lower	Upper
104	100		
78	54.9	41.8	62.6
103	45.1	37.0	55.4

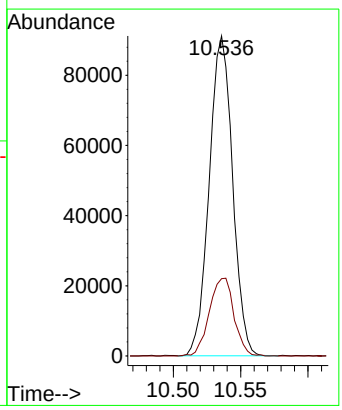


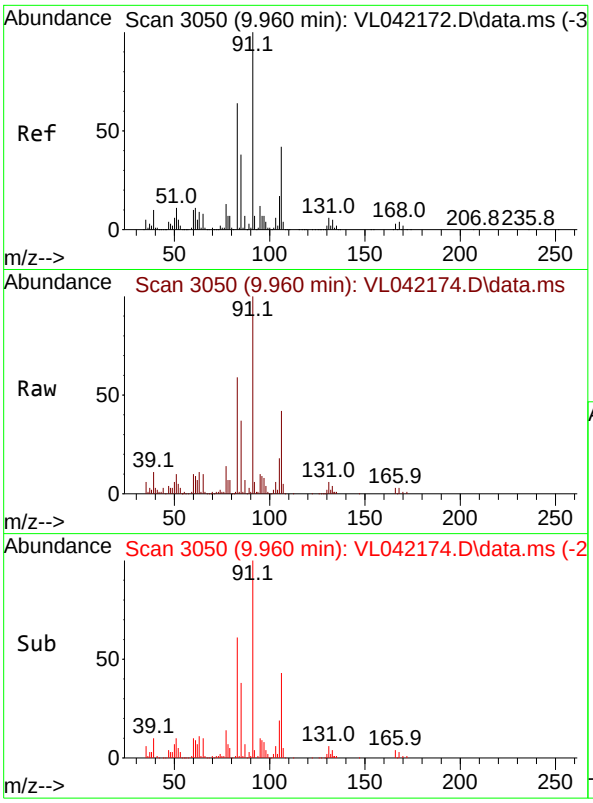


#62
Isopropylbenzene
Concen: 1.034 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 109897

Ion	Ratio	Lower	Upper
105	100		
120	25.7	19.9	29.9



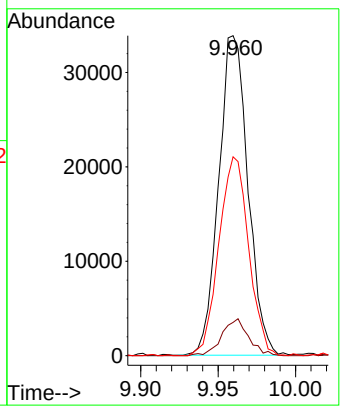


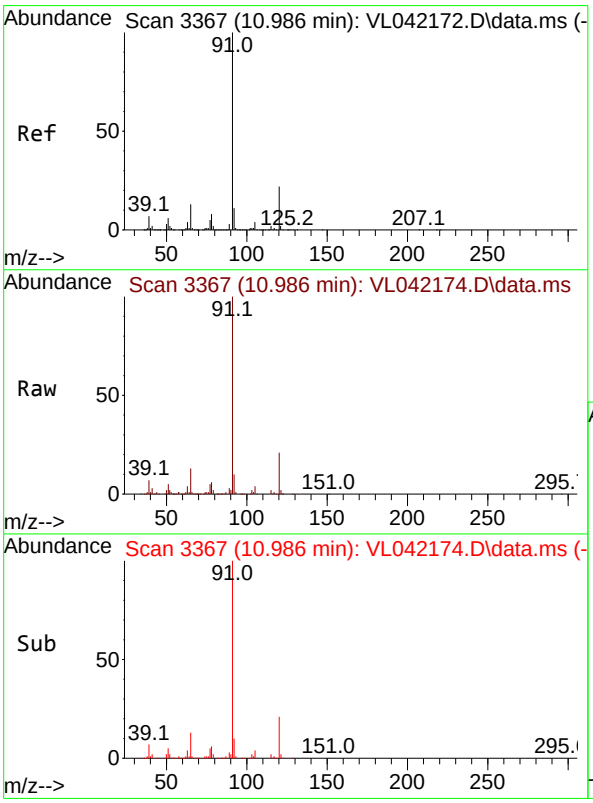
#63
1,1,2,2-Tetrachloroethane
Concen: 1.029 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 44431

Ion	Ratio	Lower	Upper
83	100		
131	10.6	4.8	14.4
85	64.0	32.5	97.5

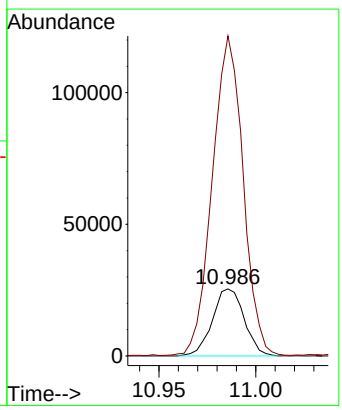


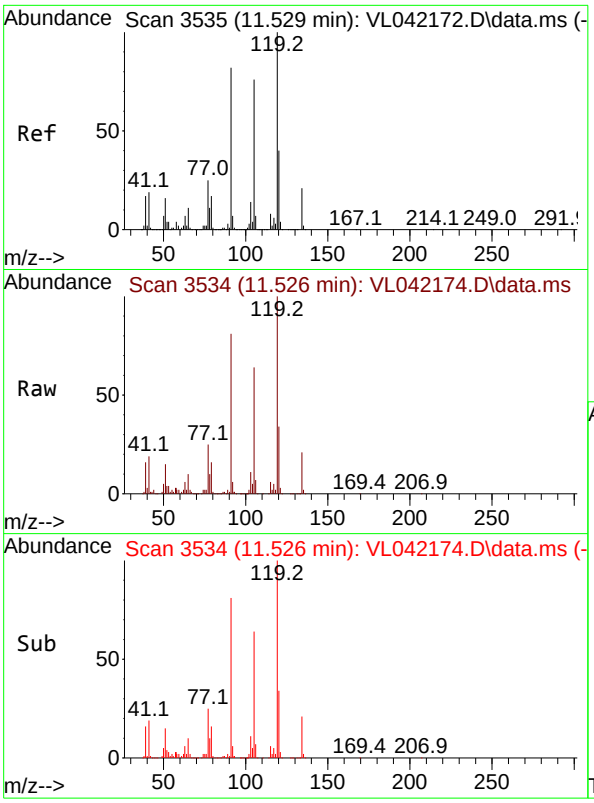


#64
n-propylbenzene
Concen: 1.062 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:120 Resp: 29054

Ion	Ratio	Lower	Upper
120	100		
91	466.9	376.9	565.3



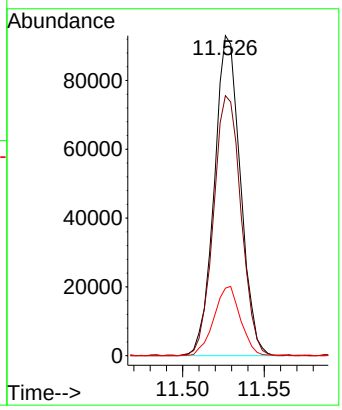


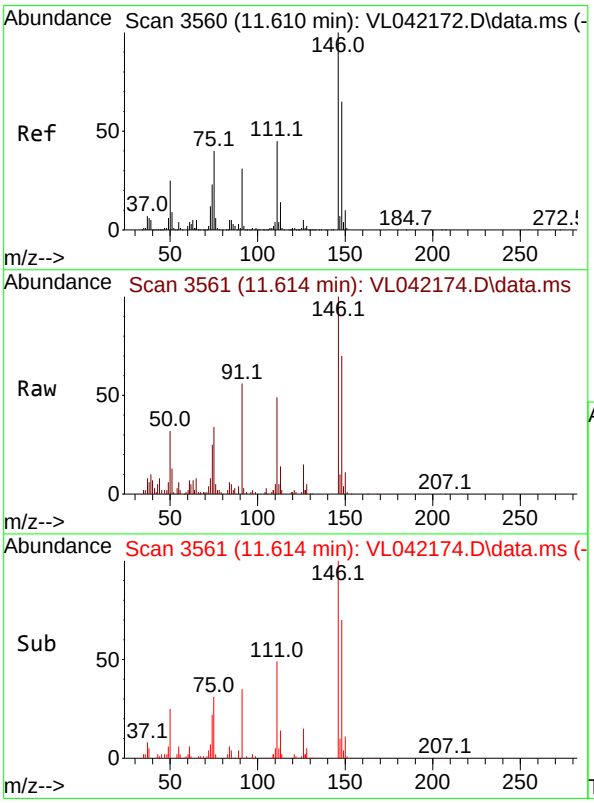
#65
tert-Butylbenzene
Concen: 1.053 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 103520

Ion	Ratio	Lower	Upper
119	100		
91	85.9	66.0	99.0
134	22.1	16.7	25.1

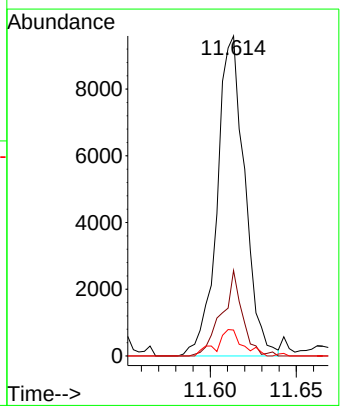


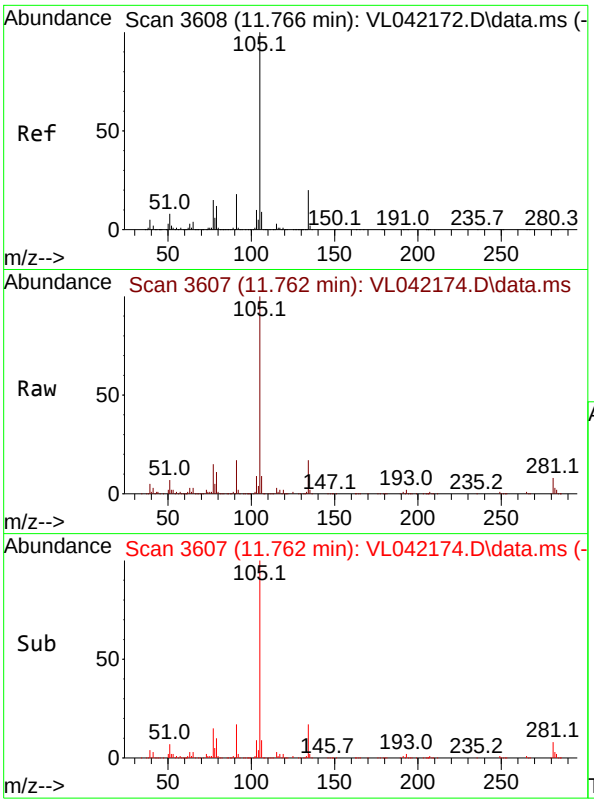


#66
Benzyl Chloride
Concen: 1.022 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 10660

Ion	Ratio	Lower	Upper
91	100		
126	20.0	13.8	20.6
128	8.0	4.5	6.7#



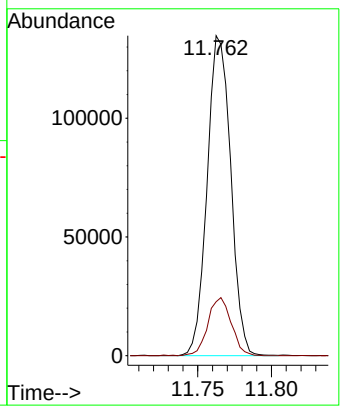


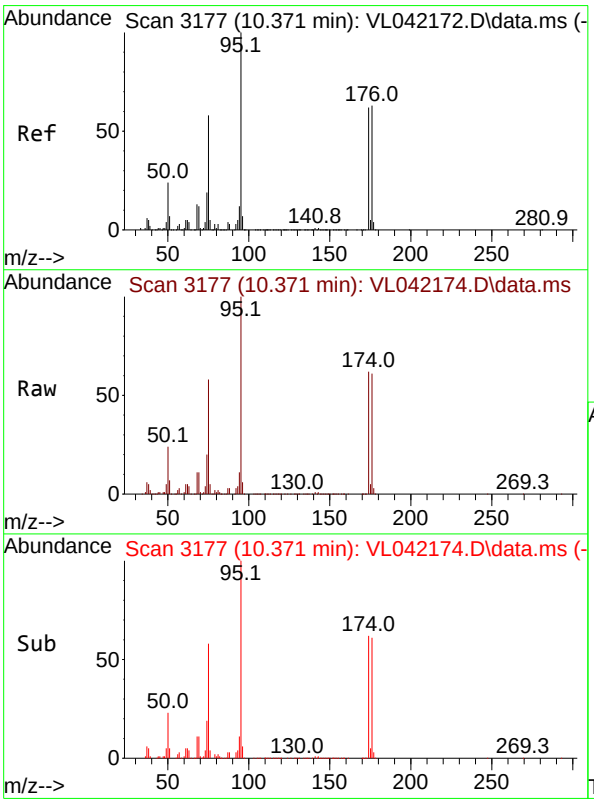
#67
sec-Butylbenzene
Concen: 1.095 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 149660

Ion	Ratio	Lower	Upper
105	100		
134	18.1	15.5	23.3

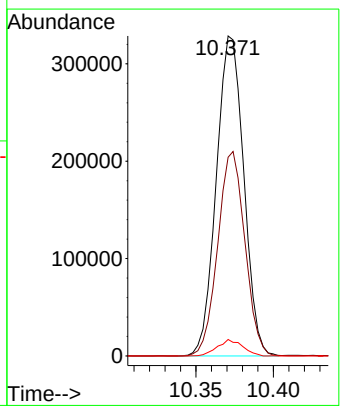


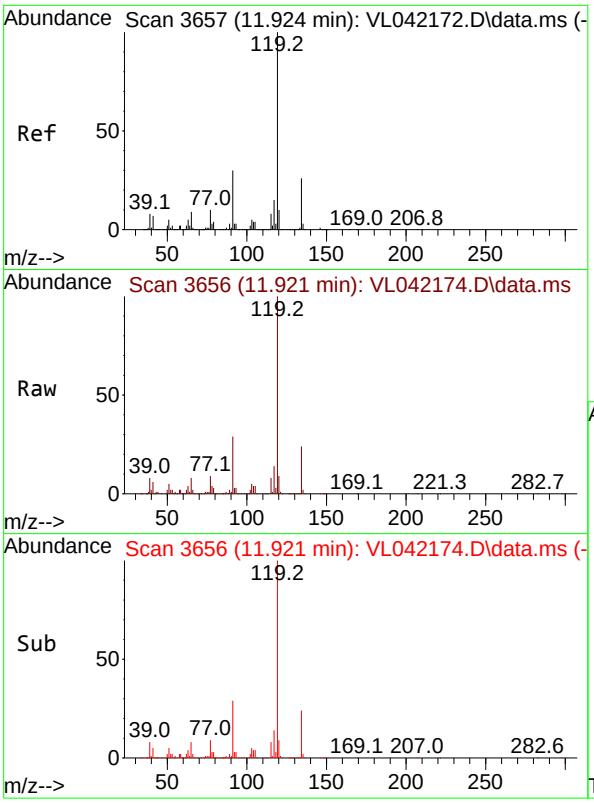


#68
1-Bromo-4-Fluorobenzene
Concen: 9.861 ppbv
RT: 10.371 min Scan# 3177
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 95 Resp: 404753

Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6



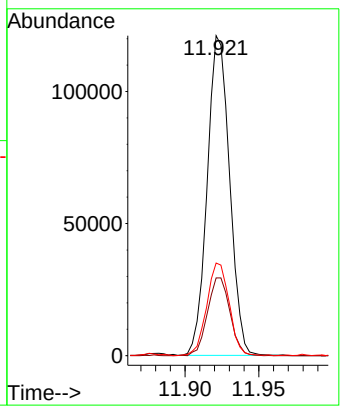


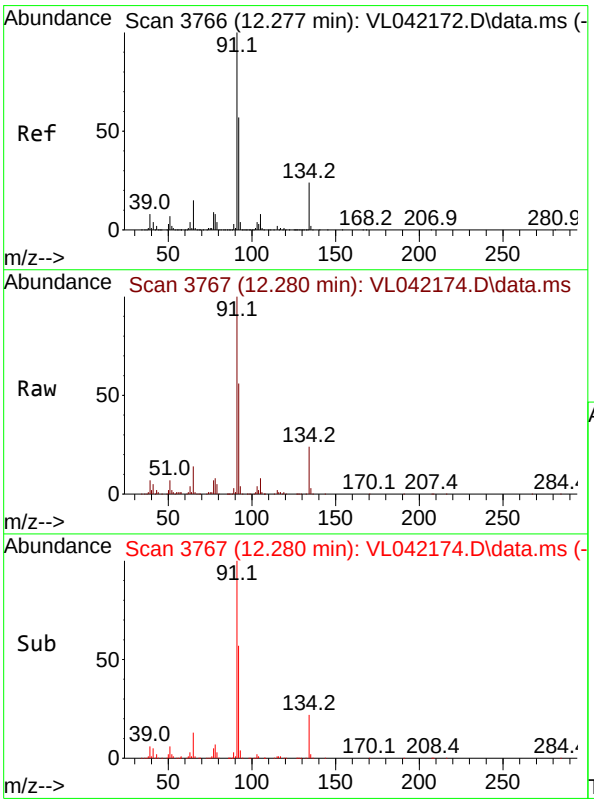
#69
p-Isopropyltoluene
Concen: 1.084 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 127509

Ion	Ratio	Lower	Upper
119	100		
134	24.6	20.4	30.6
91	30.0	23.7	35.5

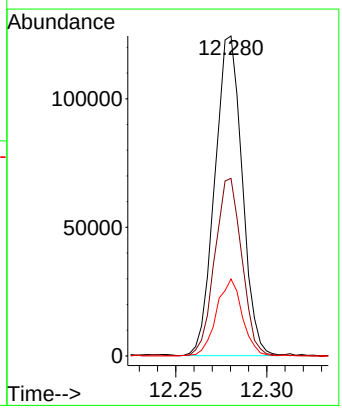


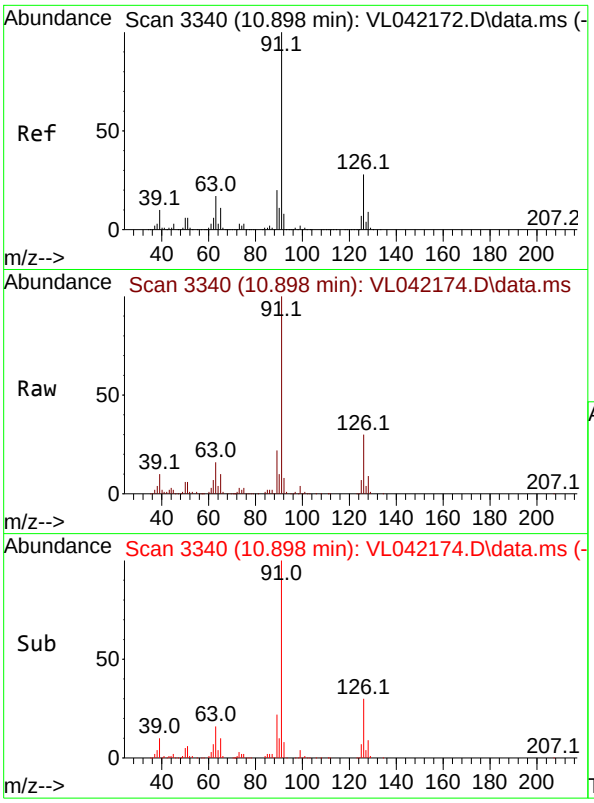


#70
n-Butylbenzene
Concen: 1.079 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion: 91 Resp: 129860

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.9	67.3
134	22.8	19.2	28.8



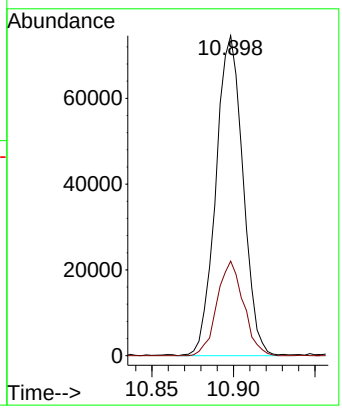


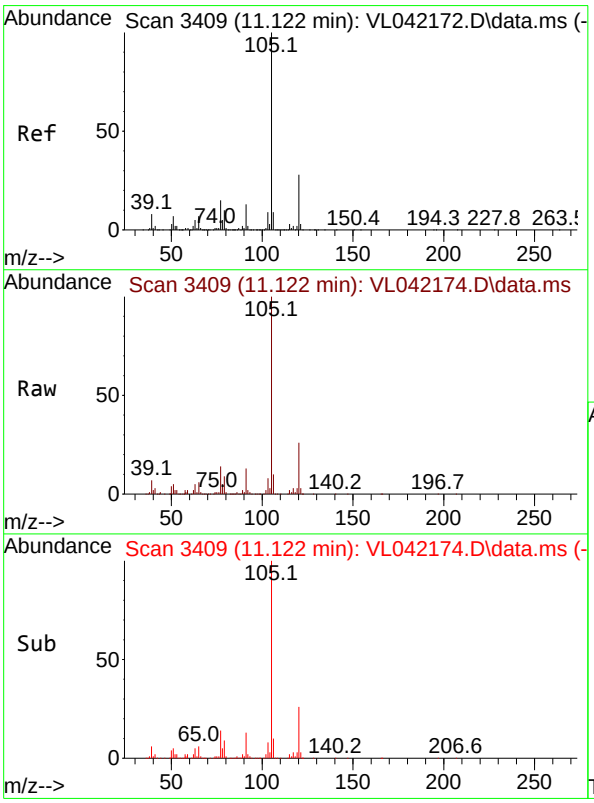
#71
2-Chlorotoluene
Concen: 1.047 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 86356

Ion	Ratio	Lower	Upper
91	100		
126	28.8	11.6	46.4

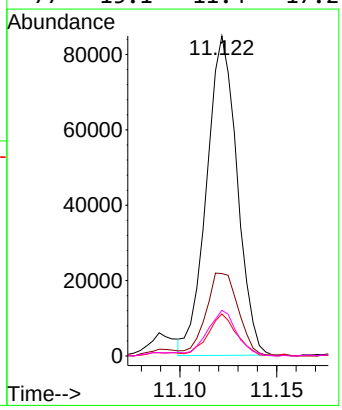


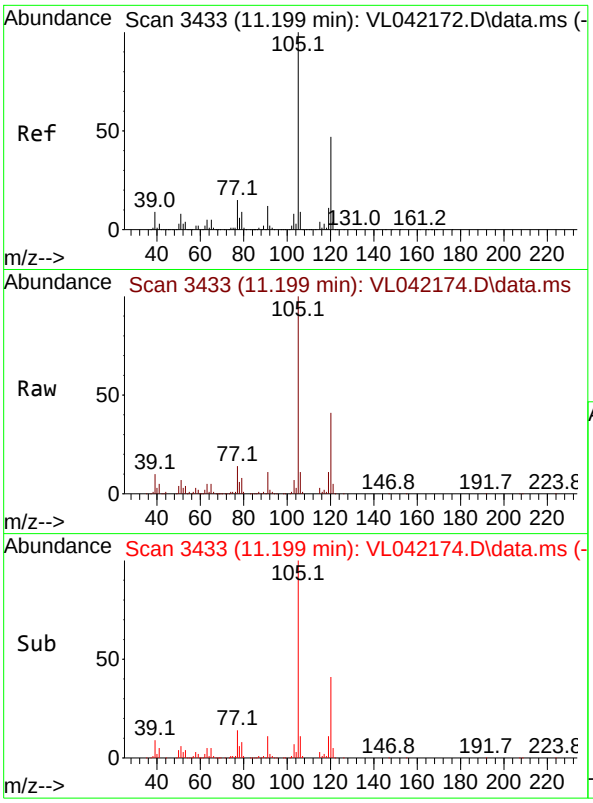


#72
4-Ethyltoluene
Concen: 1.050 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 92912

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.5	10.3	15.5
77	15.1	11.4	17.2



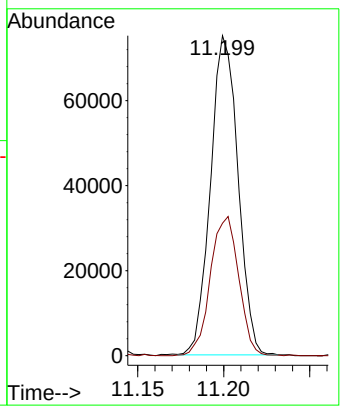


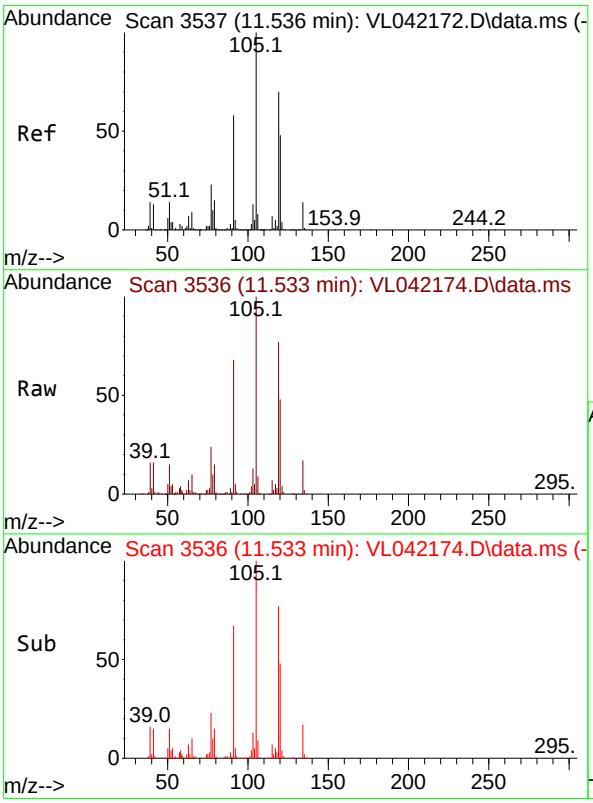
#73
1,3,5-Trimethylbenzene
Concen: 1.080 ppbv
RT: 11.199 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 83497

Ion	Ratio	Lower	Upper
105	100		
120	41.3	37.4	56.0

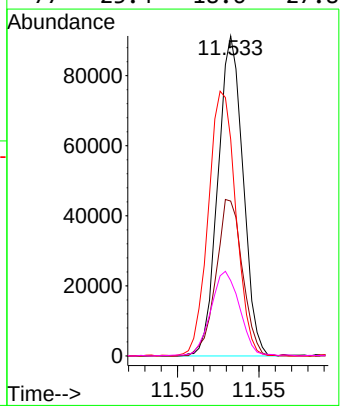


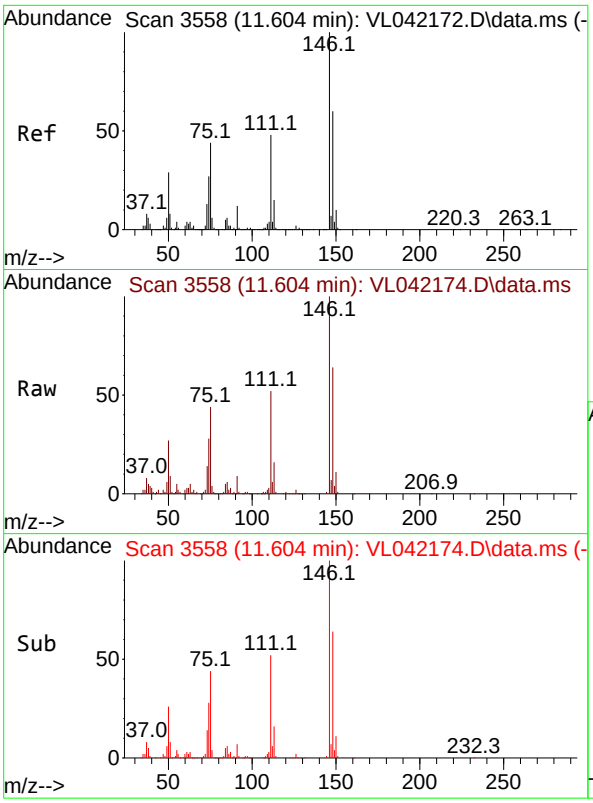


#74
1,2,4-Trimethylbenzene
Concen: 1.099 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:105 Resp: 97858

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	67.6	46.2	69.2
77	23.4	18.6	27.8



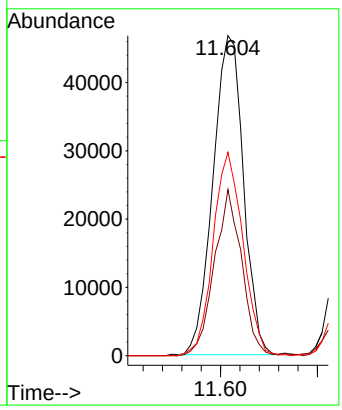


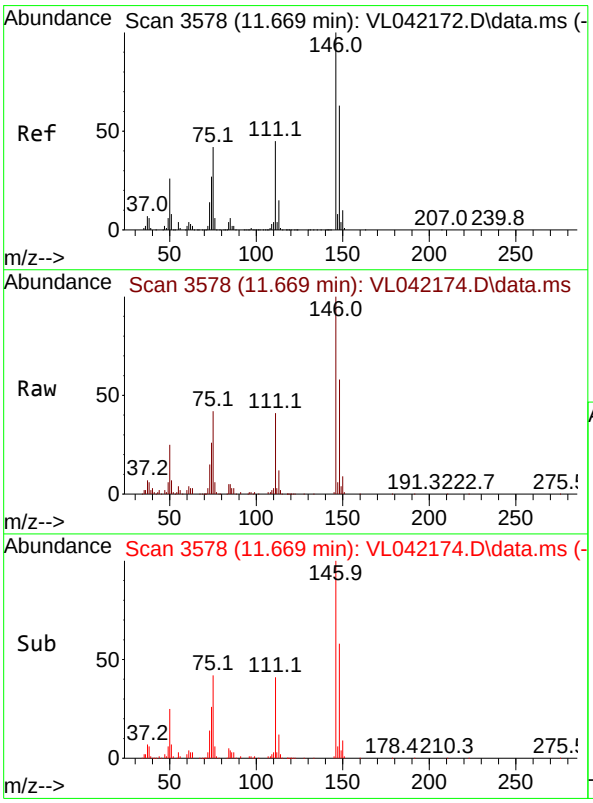
#75
1,3-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.604 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 51096

Ion	Ratio	Lower	Upper
146	100		
111	46.8	23.8	71.2
148	62.6	31.9	95.9

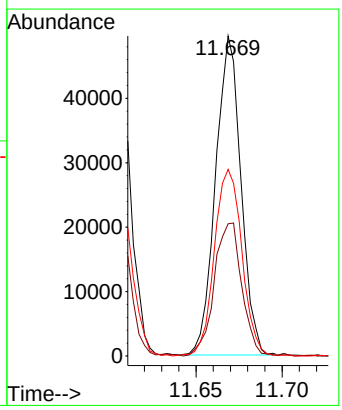


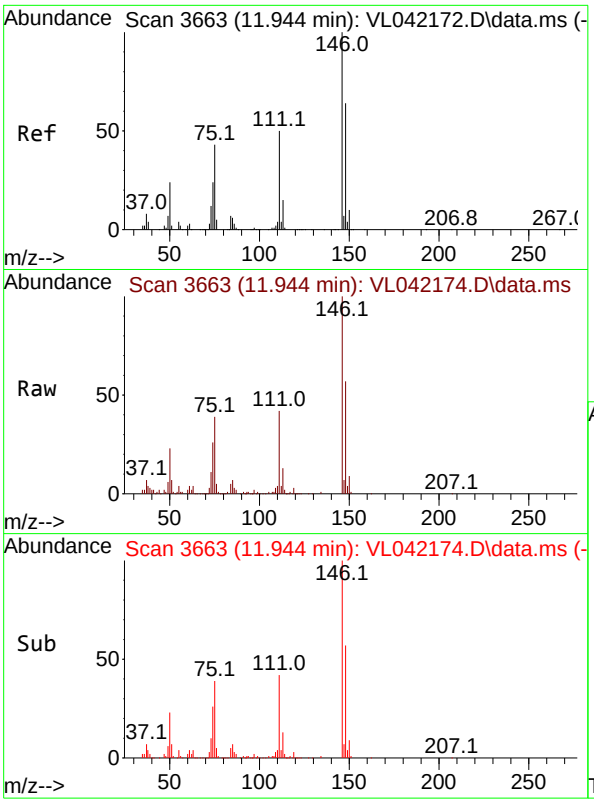


#76
1,4-Dichlorobenzene
Concen: 1.046 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:146 Resp: 50841

Ion	Ratio	Lower	Upper
146	100		
111	45.4	23.0	69.0
148	63.6	31.9	95.7



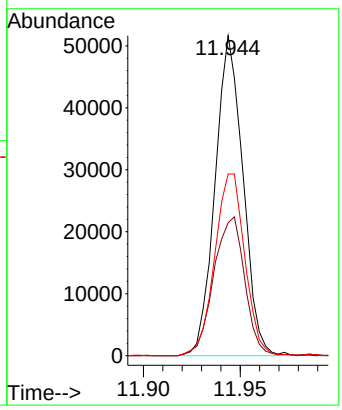


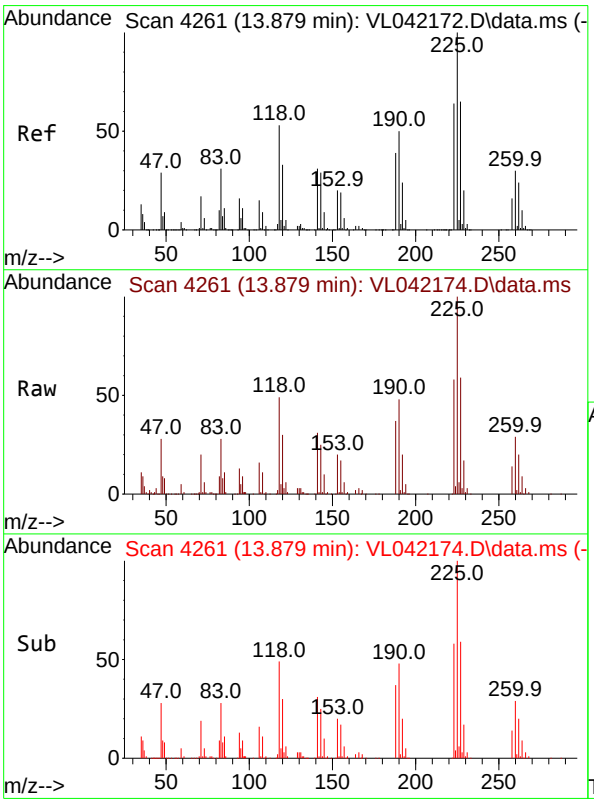
#77
1,2-Dichlorobenzene
Concen: 1.084 ppbv
RT: 11.944 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 51523

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.8	74.3
148	61.9	31.6	94.8

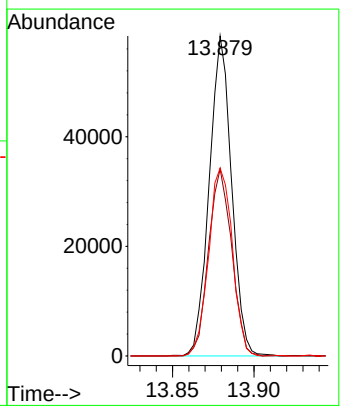


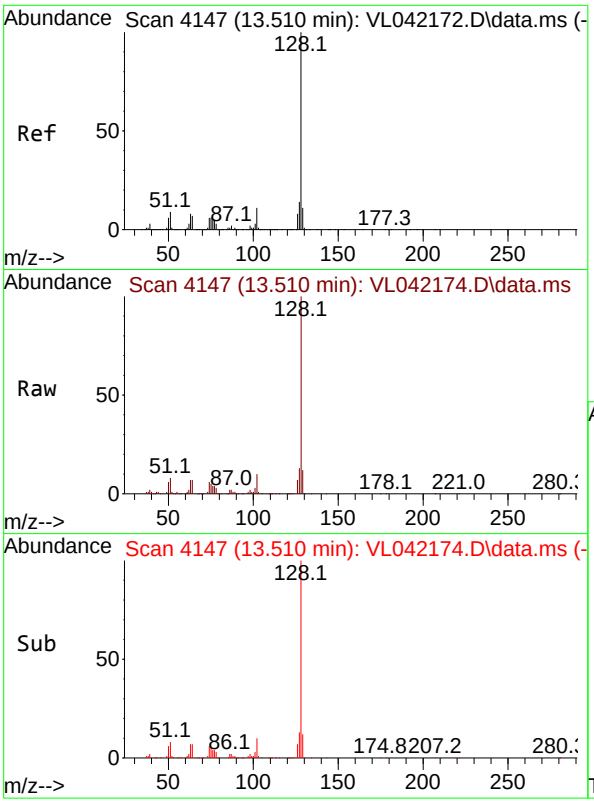


#78
Hexachloro-1,3-Butadiene
Concen: 1.149 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:225 Resp: 55611

Ion	Ratio	Lower	Upper
225	100		
223	60.8	50.6	76.0
227	62.3	51.2	76.8



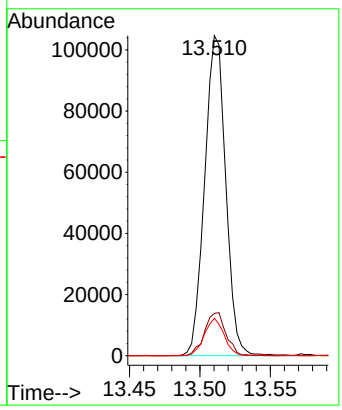


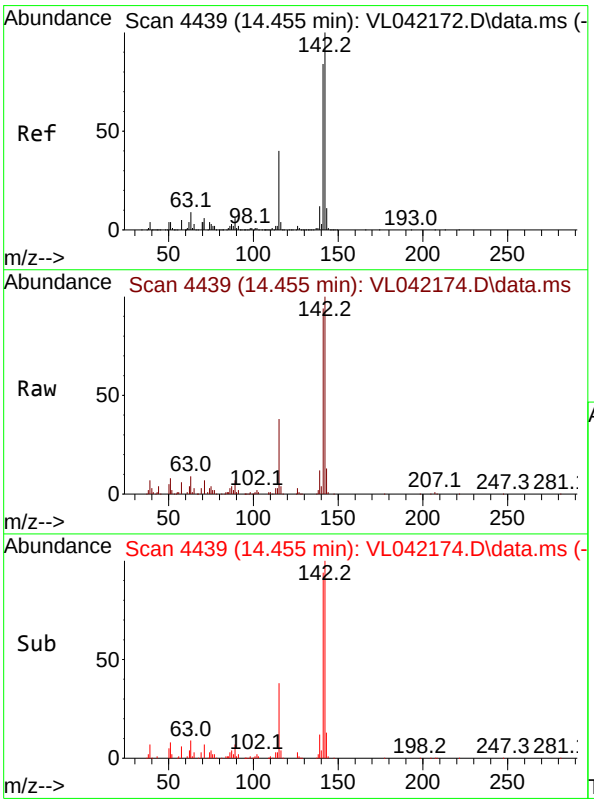
#79
Naphthalene
Concen: 1.120 ppbv
RT: 13.510 min Scan# 41
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:128 Resp: 109031

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	11.7	9.0	13.4

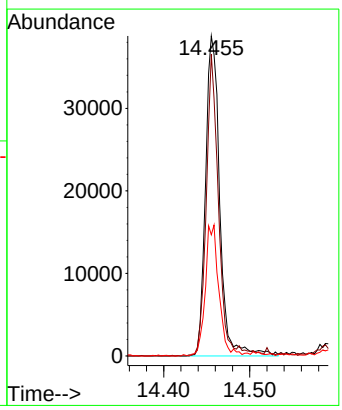


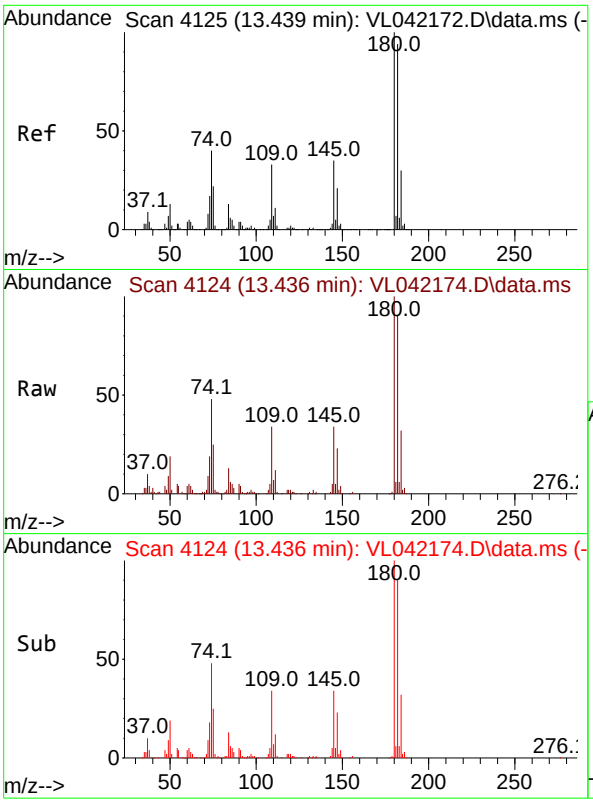


#80
Naphthalene,2-methyl-
Concen: 0.939 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. 0.000 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Tgt Ion:142 Resp: 44518

Ion	Ratio	Lower	Upper
142	100		
141	83.4	66.3	99.5
115	41.5	31.6	47.4



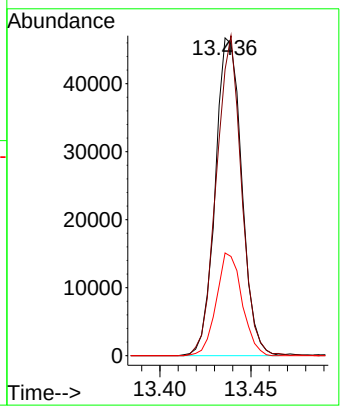


#81
1,2,4-Trichlorobenzene
Concen: 1.047 ppbv
RT: 13.436 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042174.D
Acq: 27 Mar 2025 09:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:180 Resp: 47040

Ion	Ratio	Lower	Upper
180	100		
182	95.7	75.1	112.7
184	31.4	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	180502	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	523832	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	485078	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	403513	10.130	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	14455	0.542	ppbv		95
3) Chlorodifluoromethane	1.473	51	14637	0.538	ppbv	#	89
4) Chloromethane	1.531	50	5956	0.547	ppbv		94
5) Vinyl Chloride	1.577	62	5732	0.516	ppbv		92
6) Bromomethane	1.664	94	2949	0.597	ppbv		95
7) Chloroethane	1.703	64	2582	0.591	ppbv	#	87
8) Dichlorotetrafluoroethane	1.551	85	11783	0.519	ppbv		98
9) Propene	1.557	41	2054	0.167	ppbv		92
10) Heptane	4.972	43	16673	0.502	ppbv		89
11) Trichlorofluoromethane	1.874	101	14099	0.544	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.136	101	11252	0.528	ppbv		99
13) Ethanol	1.722	45	997	1.038	ppbv	#	36
14) Bromoethene	1.780	108	4770	0.584	ppbv	#	86
15) Acetone	1.835	43	15331	0.607	ppbv	#	85
16) 1,3-Butadiene	1.606	39	8594	0.757	ppbv		82
17) tert-Butyl alcohol	2.039	59	17467	0.556	ppbv		97
18) 1,1-Dichloroethene	2.030	96	5634	0.565	ppbv	#	92
19) Isopropyl Alcohol	1.884	45	9171	0.644	ppbv	#	39
20) Methylene Chloride	2.059	84	5634	0.599	ppbv	#	93
21) Allyl Chloride	2.091	41	9632	0.541	ppbv		89
22) trans-1,2-Dichloroethene	2.334	96	6353	0.546	ppbv		83
23) Vinyl Acetate	2.457	43	6809	0.649	ppbv	#	91
24) 1,1-Dichloroethane	2.405	63	11258	0.527	ppbv		97
25) Ethyl Acetate	2.836	43	36258	0.553	ppbv		98
26) Hexane	2.823	57	13605	0.538	ppbv		92
27) Carbon Disulfide	2.146	76	14510	0.535	ppbv	#	1
28) Methyl tert-Butyl Ether	2.437	73	8310	0.527	ppbv	#	89
29) Chloroform	2.845	83	20149	0.544	ppbv		98
30) Cyclohexane	3.852	84	9635	0.438	ppbv	#	70
31) cis-1,2-Dichloroethene	2.719	61	13601	0.529	ppbv		92
32) 1,1,1-Trichloroethane	3.360	97	20567	0.485	ppbv		100
34) 2-Butanone	2.557	43	19739	0.520	ppbv		96
35) Carbon Tetrachloride	3.755	117	18558	0.460	ppbv		93
36) Benzene	3.651	78	27488	0.529	ppbv	#	87
37) 1,2-Dichloroethane	3.214	62	16062	0.540	ppbv		100
38) Trichloroethene	4.545	130	4992	0.230	ppbv		95
39) 1,2-Dichloropropane	4.308	63	10123	0.535	ppbv		92
40) 1,4-Dioxane	4.593	88	4487	0.457	ppbv	#	24
41) Tetrahydrofuran	3.059	42	10856	0.502	ppbv		94
42) Bromodichloromethane	4.483	83	20374	0.497	ppbv	#	98
43) Methyl Methacrylate	4.875	69	6229	0.284	ppbv	#	10
44) 2,2,4-Trimethylpentane	4.632	57	46646	0.532	ppbv		95
45) t-1,3-Dichloropropene	6.406	75	12404	0.526	ppbv	#	79

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

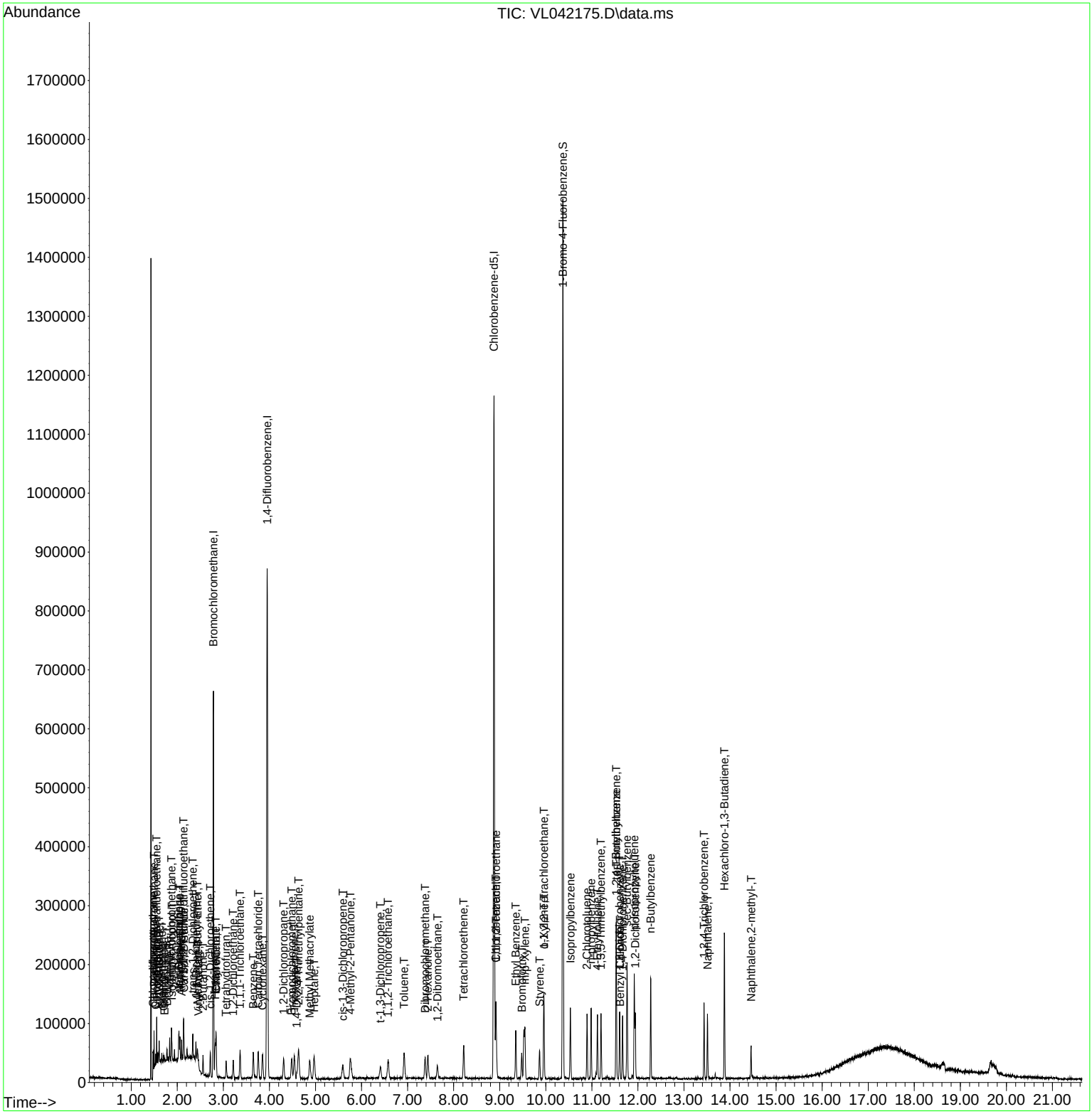
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	8584	0.297	ppbv	#	91
47) 1,1,2-Trichloroethane	6.574	97	8374	0.419	ppbv		96
48) Dibromochloromethane	7.380	129	17042	0.503	ppbv		99
49) Bromoform	9.480	173	14828	0.487	ppbv		98
50) 4-Methyl-2-Pentanone	5.758	43	33674	0.559	ppbv		97
51) 2-Hexanone	7.438	43	26154	0.523	ppbv	#	100
52) Tetrachloroethene	8.218	164	10502	0.510	ppbv		94
53) Toluene	6.923	91	32444	0.527	ppbv		98
54) 1,2-Dibromoethane	7.648	107	14220	0.510	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.920	131	13959	0.523	ppbv	#	1
57) Chlorobenzene	8.914	112	24826	0.540	ppbv	#	91
58) Ethyl Benzene	9.348	91	44862	0.521	ppbv		96
59) m/p-Xylene	9.548	91	18711	0.272	ppbv	#	1
60) o-Xylene	9.959	91	36879	0.535	ppbv		98
61) Styrene	9.866	104	17198	0.504	ppbv		96
62) Isopropylbenzene	10.536	105	55531	0.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	21989	0.525	ppbv		96
64) n-propylbenzene	10.985	120	14030	0.528	ppbv		95
65) tert-Butylbenzene	11.526	119	53115	0.557	ppbv		100
66) Benzyl Chloride	11.613	91	5263	0.520	ppbv		97
67) sec-Butylbenzene	11.762	105	72879	0.550	ppbv		98
69) p-Isopropyltoluene	11.921	119	61933	0.542	ppbv		100
70) n-Butylbenzene	12.277	91	61507	0.527	ppbv		99
71) 2-Chlorotoluene	10.895	91	41637	0.520	ppbv		95
72) 4-Ethyltoluene	11.121	105	44473	0.518	ppbv	#	94
73) 1,3,5-Trimethylbenzene	11.199	105	39190	0.523	ppbv		97
74) 1,2,4-Trimethylbenzene	11.532	105	48370	0.560	ppbv		97
75) 1,3-Dichlorobenzene	11.600	146	25122	0.530	ppbv		100
76) 1,4-Dichlorobenzene	11.668	146	24991	0.530	ppbv		97
77) 1,2-Dichlorobenzene	11.943	146	24548	0.532	ppbv		96
78) Hexachloro-1,3-Butadiene	13.879	225	25636	0.546	ppbv		99
79) Naphthalene	13.510	128	47990	0.508	ppbv		95
80) Naphthalene,2-methyl-	14.458	142	17486	0.380	ppbv		98
81) 1,2,4-Trichlorobenzene	13.436	180	19924	0.457	ppbv		97

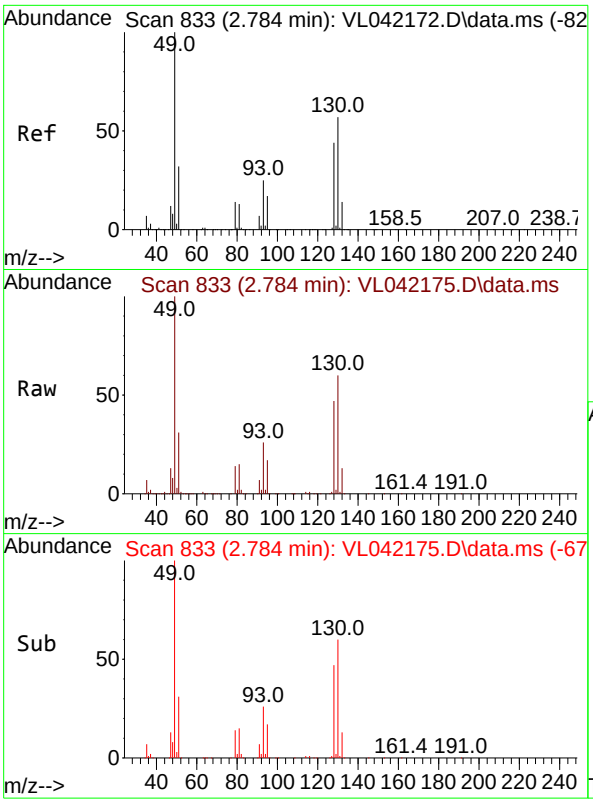
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042175.D
Acq On : 27 Mar 2025 10:01
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Mar 28 01:34:42 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



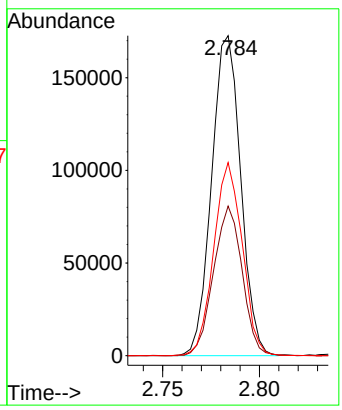


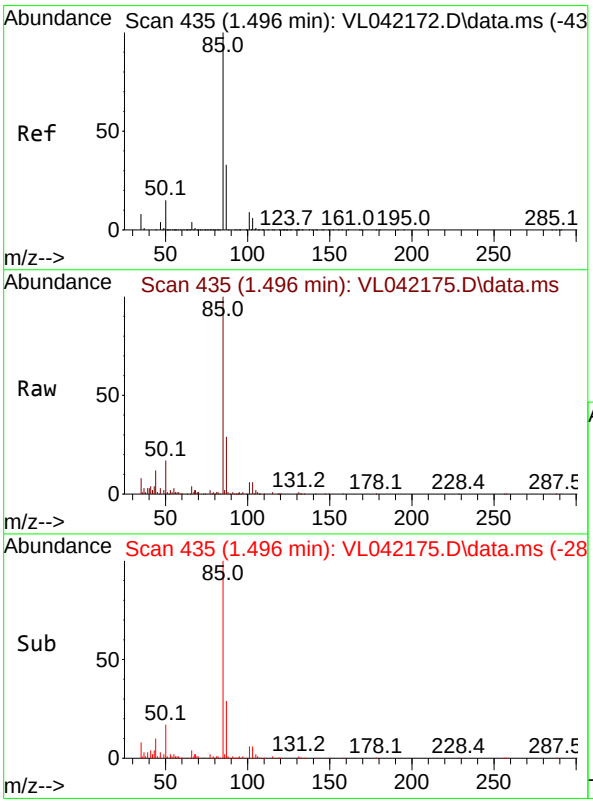
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 49 Resp: 180502

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	59.2	28.8	86.4

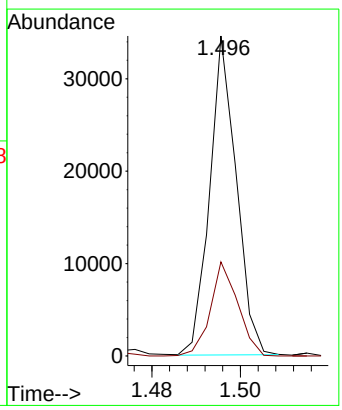


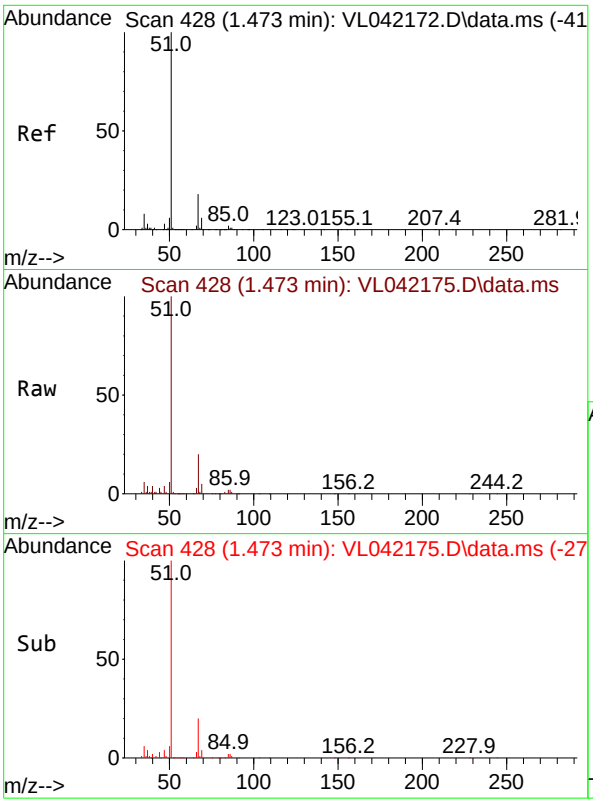


#2
Dichlorodifluoromethane
Concen: 0.542 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 14455

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1



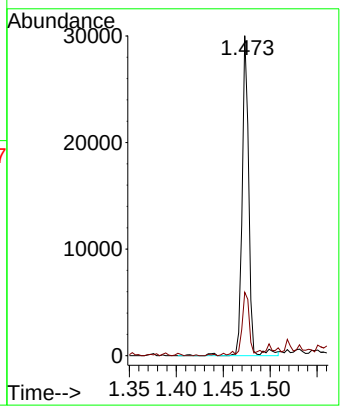


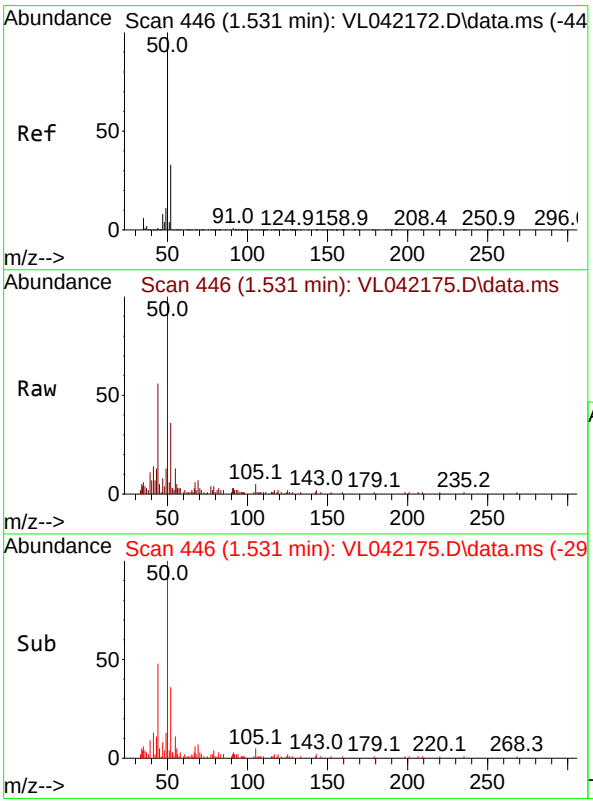
#3
Chlorodifluoromethane
Concen: 0.538 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 51 Resp: 14637

Ion	Ratio	Lower	Upper
51	100		
67	23.6	15.0	22.6#

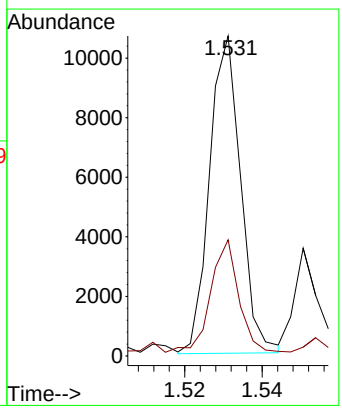


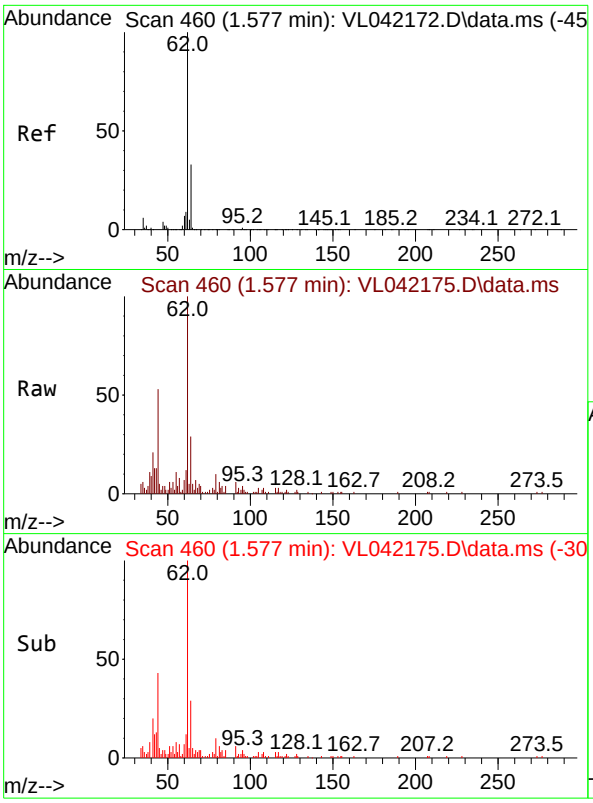


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 50 Resp: 5956

Ion	Ratio	Lower	Upper
50	100		
52	36.1	26.1	39.1



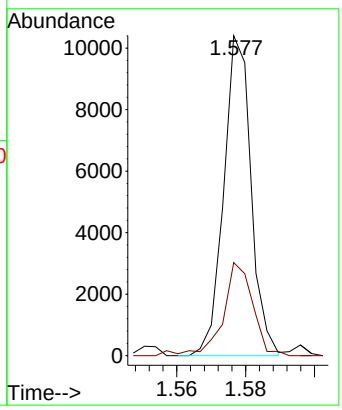


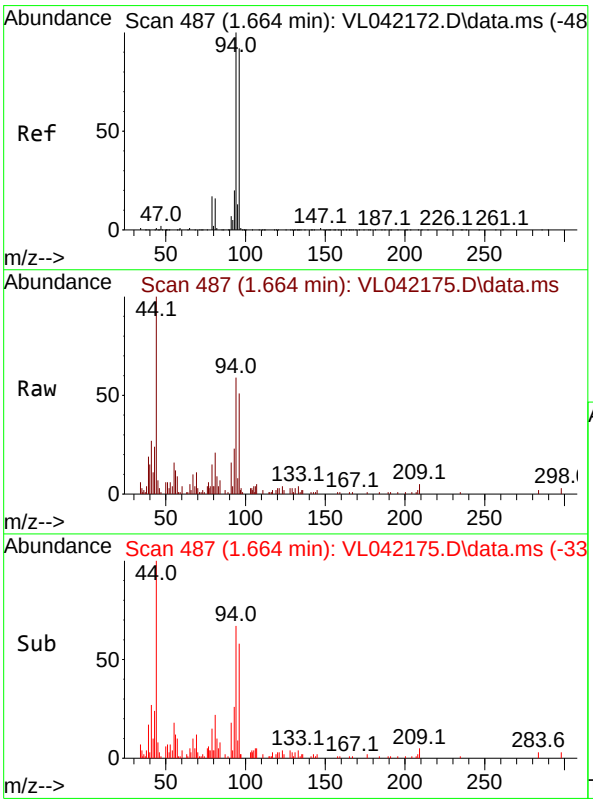
#5
Vinyl Chloride
Concen: 0.516 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 5732

Ion	Ratio	Lower	Upper
62	100		
64	28.5	26.6	40.0

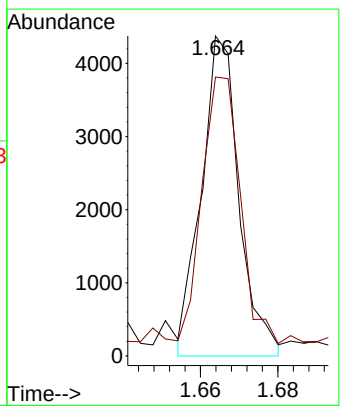


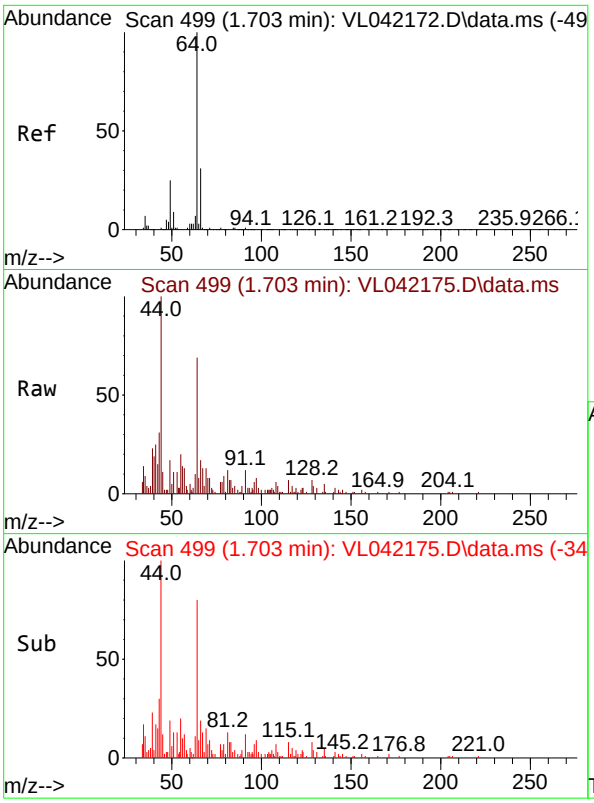


#6
Bromomethane
Concen: 0.597 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 94 Resp: 2949

Ion	Ratio	Lower	Upper
94	100		
96	86.2	73.1	109.7



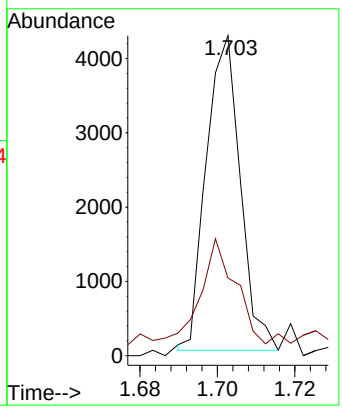


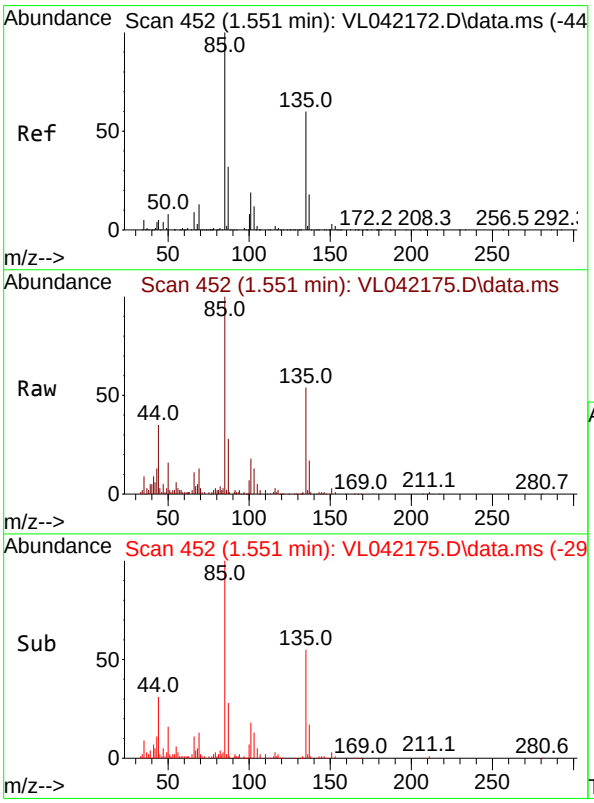
#7
Chloroethane
Concen: 0.591 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 64 Resp: 2582

Ion	Ratio	Lower	Upper
64	100		
66	24.2	25.2	37.8#

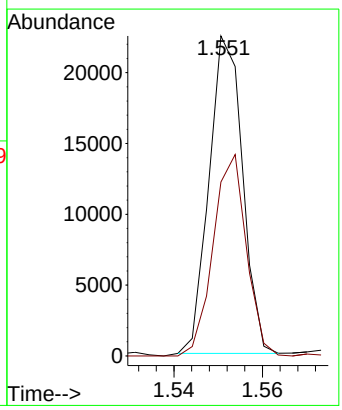


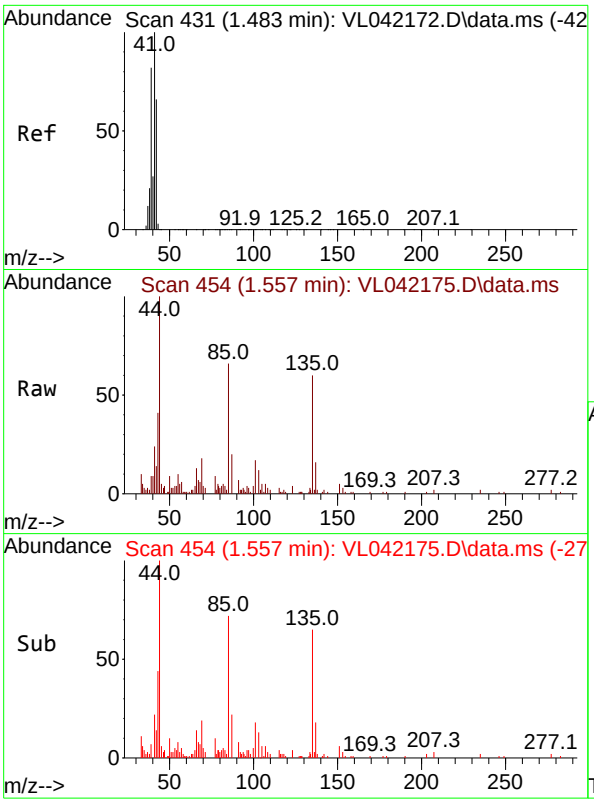


#8
Dichlorotetrafluoroethane
Concen: 0.519 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 85 Resp: 11783

Ion	Ratio	Lower	Upper
85	100		
135	63.7	52.4	78.6



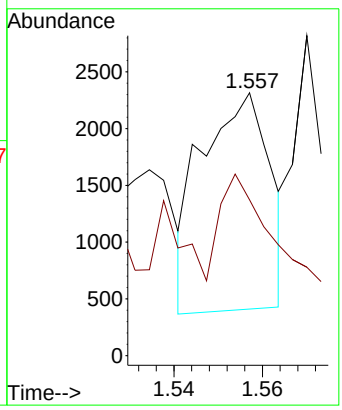


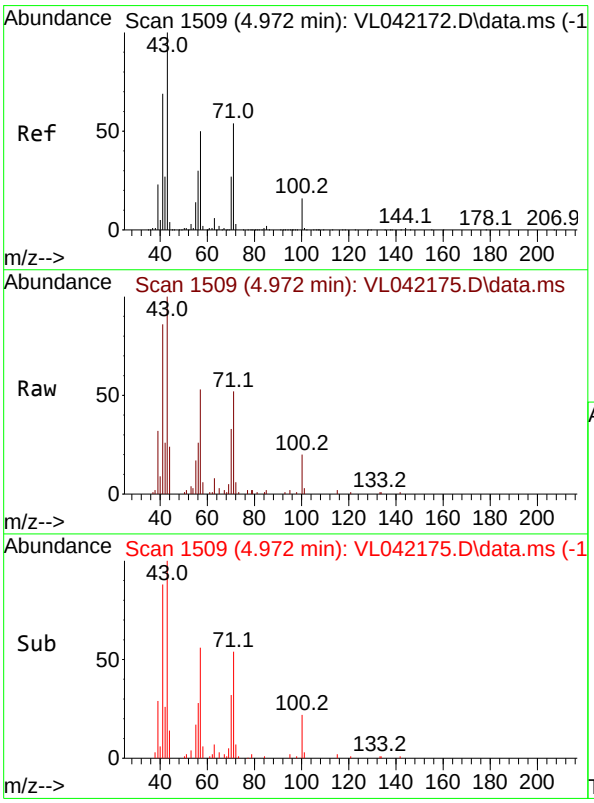
#9
Propene
Concen: 0.167 ppbv
RT: 1.557 min Scan# 4
Delta R.T. 0.074 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 2054

Ion	Ratio	Lower	Upper
41	100		
42	62.9	55.4	83.2

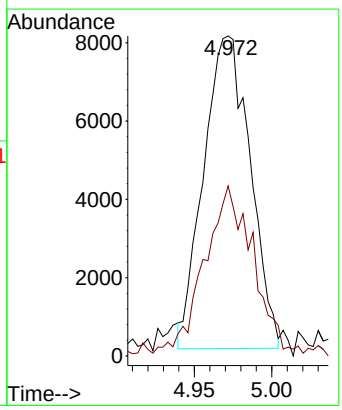


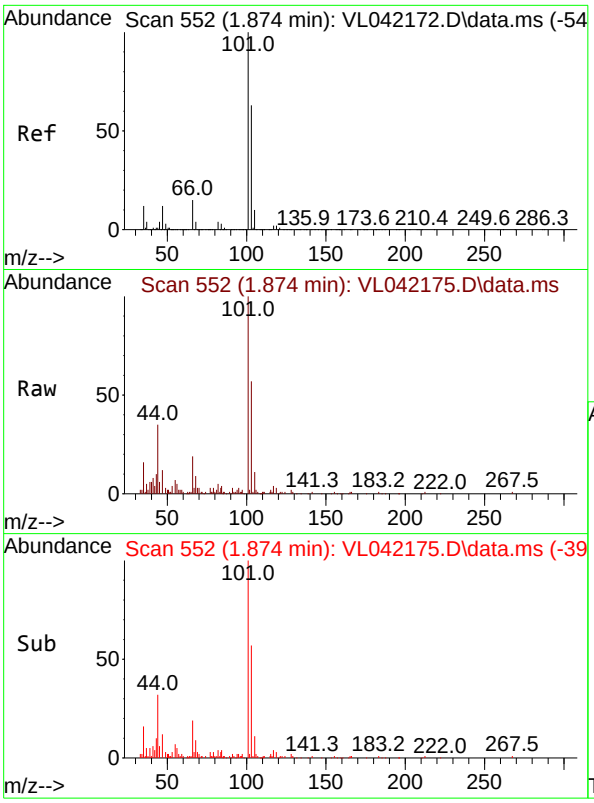


#10
Heptane
Concen: 0.502 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 16673

Ion	Ratio	Lower	Upper
43	100		
57	57.0	39.4	59.2



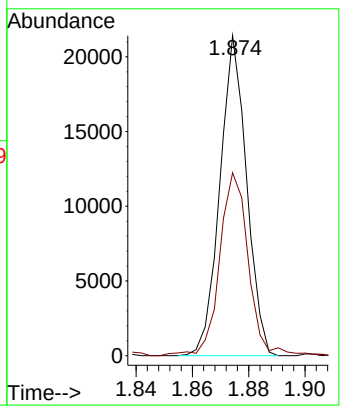


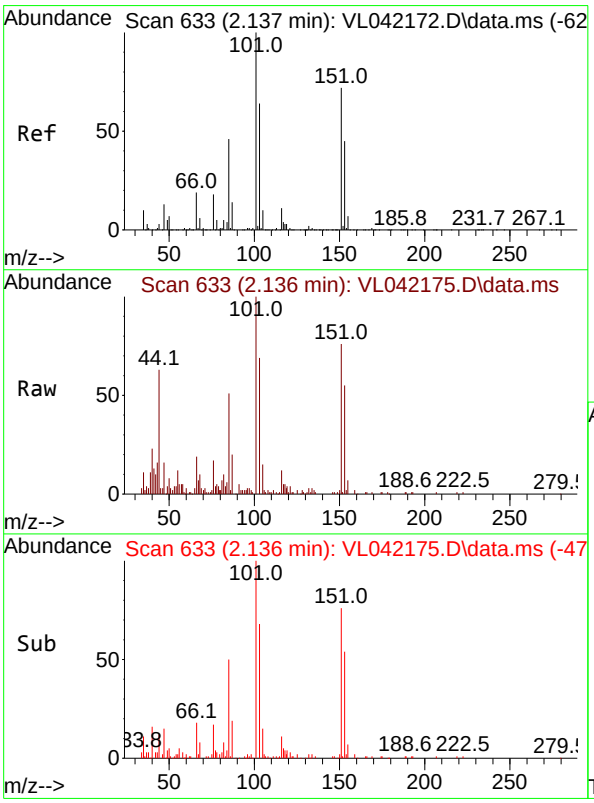
#11
Trichlorofluoromethane
Concen: 0.544 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:101 Resp: 14099

Ion	Ratio	Lower	Upper
101	100		
103	56.3	50.2	75.2

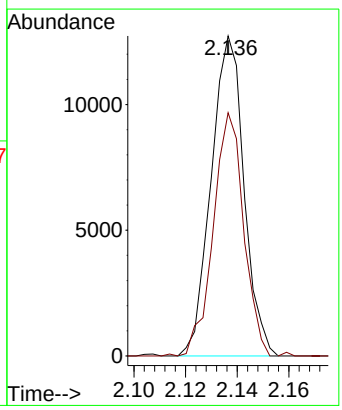


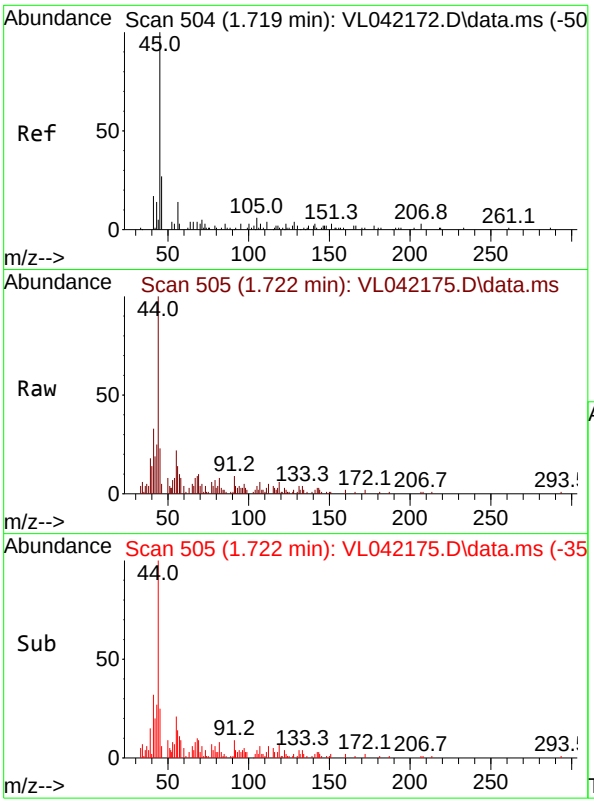


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.528 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:101 Resp: 11252

Ion	Ratio	Lower	Upper
101	100		
151	70.6	57.1	85.7



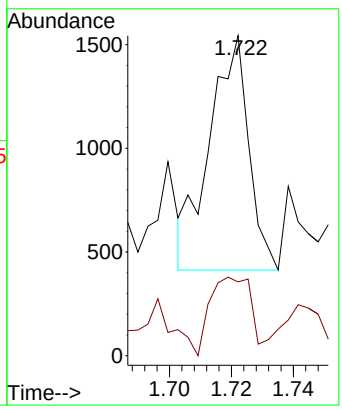


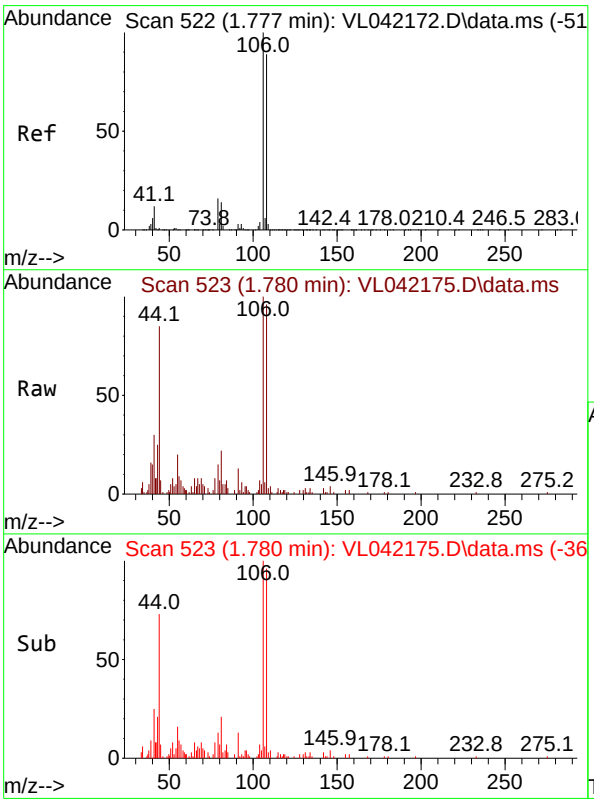
#13
Ethanol
Concen: 1.038 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 997

Ion	Ratio	Lower	Upper
45	100		
46	94.5	20.2	80.8#

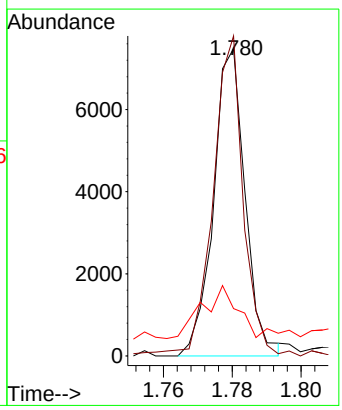


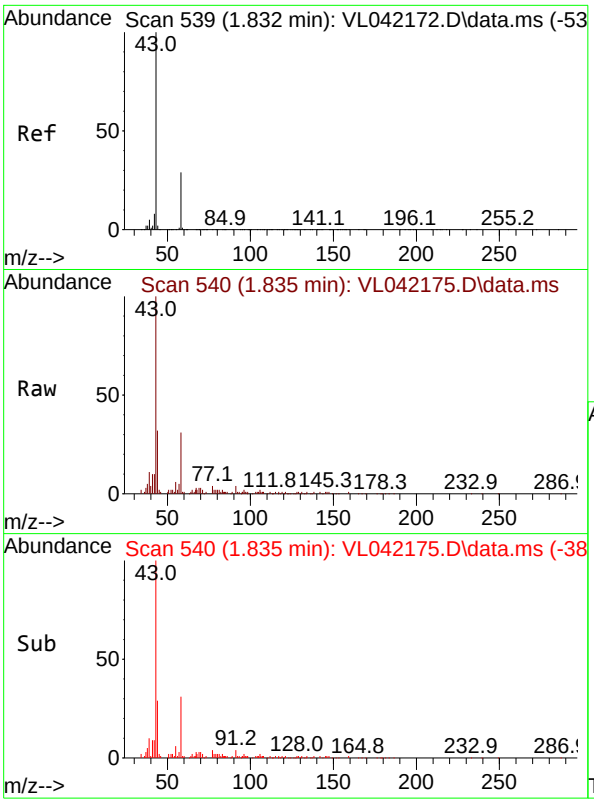


#14
Bromoethene
Concen: 0.584 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:108 Resp: 4770

Ion	Ratio	Lower	Upper
108	100		
106	101.3	86.8	130.2
79	42.6	15.0	22.6#



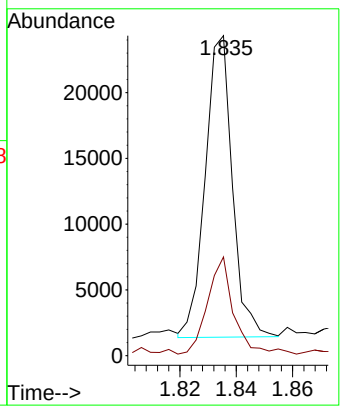


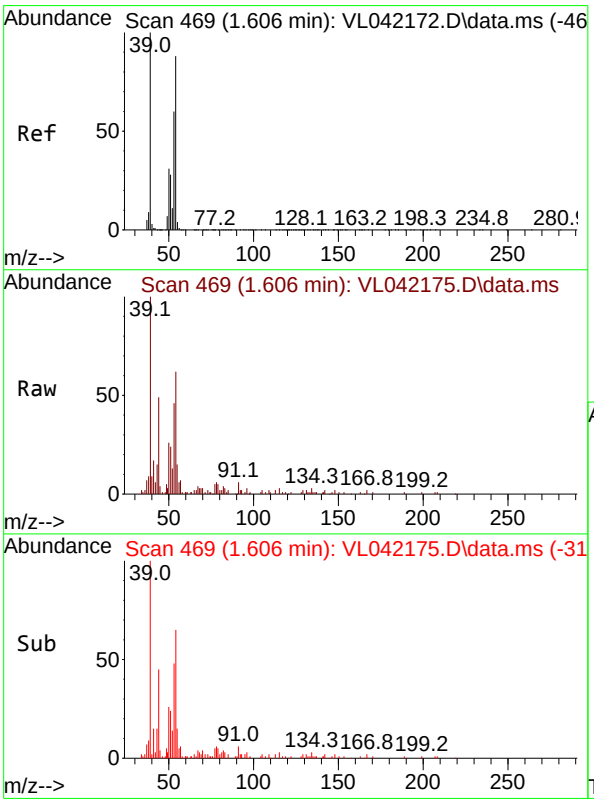
#15
Acetone
Concen: 0.607 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 15331

Ion	Ratio	Lower	Upper
43	100		
58	37.1	23.2	34.8#

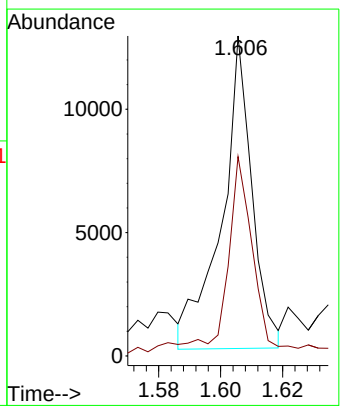


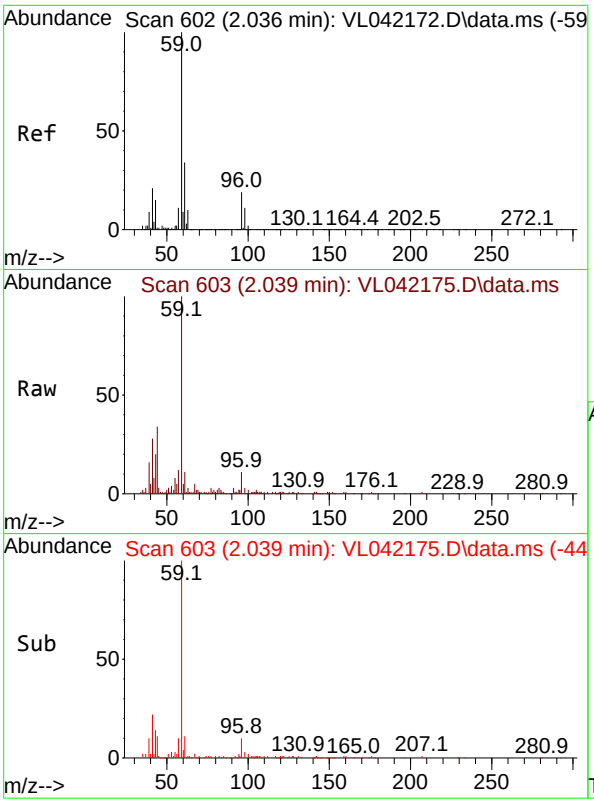


#16
1,3-Butadiene
Concen: 0.757 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 39 Resp: 8594

Ion	Ratio	Lower	Upper
39	100		
54	60.7	60.7	91.1



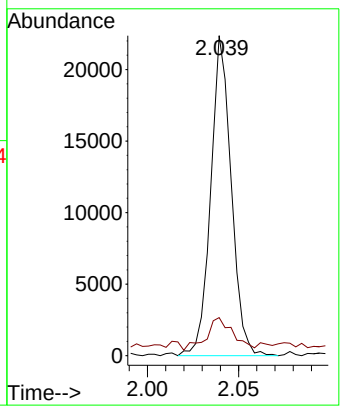


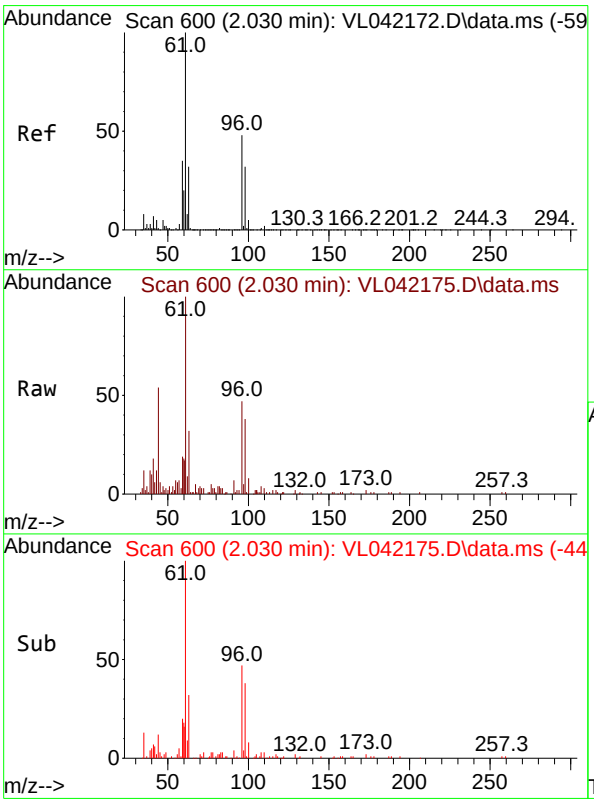
#17
tert-Butyl alcohol
Concen: 0.556 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 59 Resp: 17467

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.9	13.3

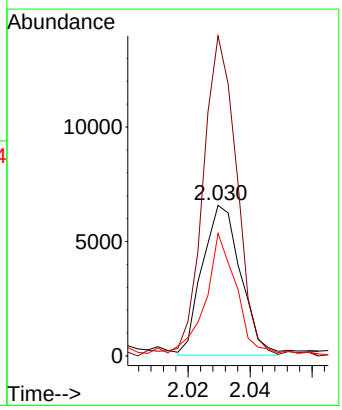


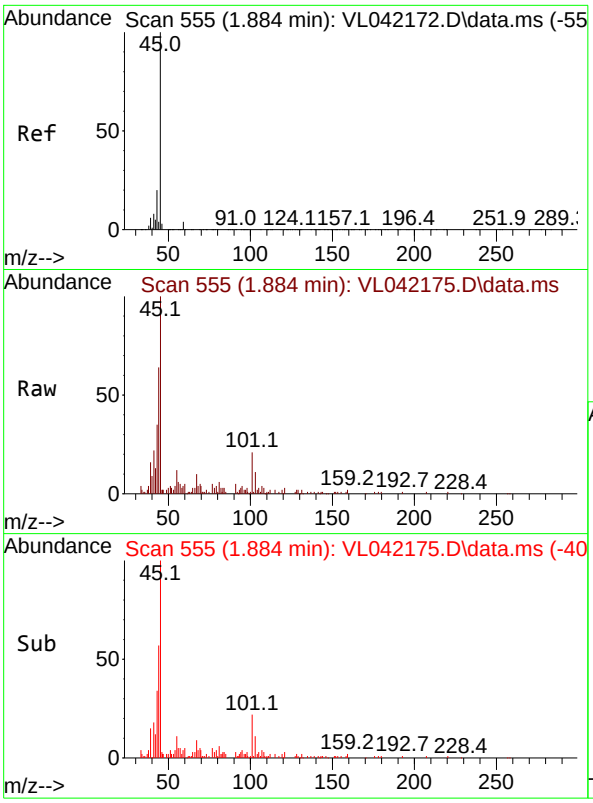


#18
1,1-Dichloroethene
Concen: 0.565 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 5634

Ion	Ratio	Lower	Upper
96	100		
61	216.6	167.6	251.4
98	81.2	53.5	80.3#



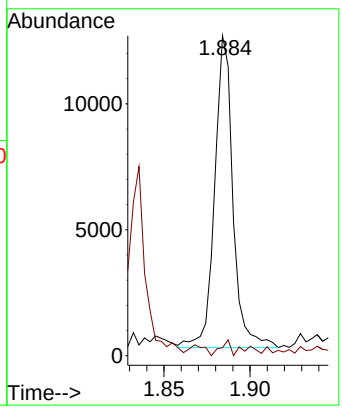


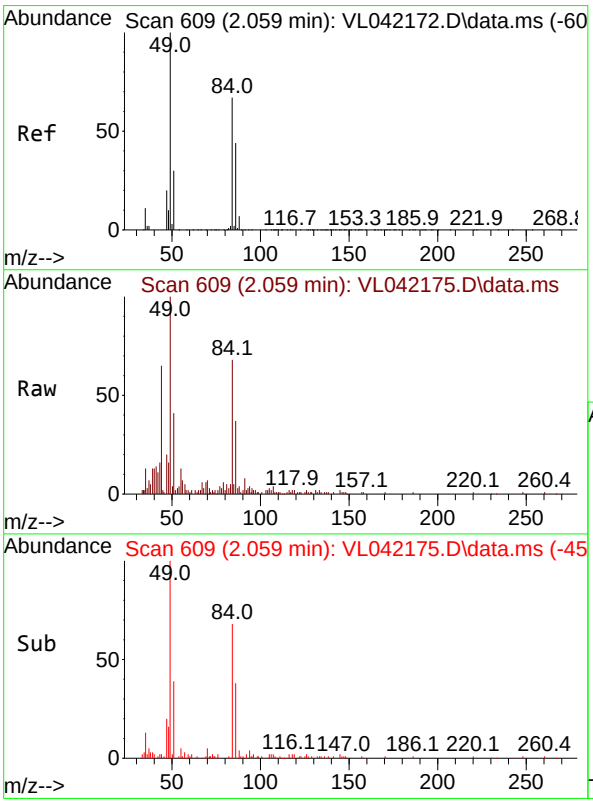
#19
Isopropyl Alcohol
Concen: 0.644 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 9171

Ion	Ratio	Lower	Upper
45	100		
58	5.5	36.9	55.3#

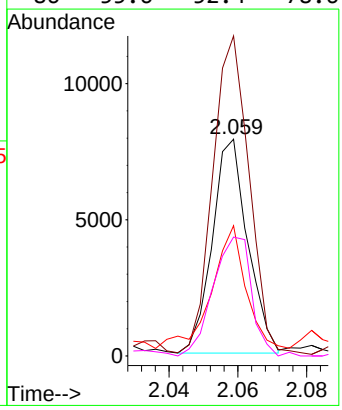


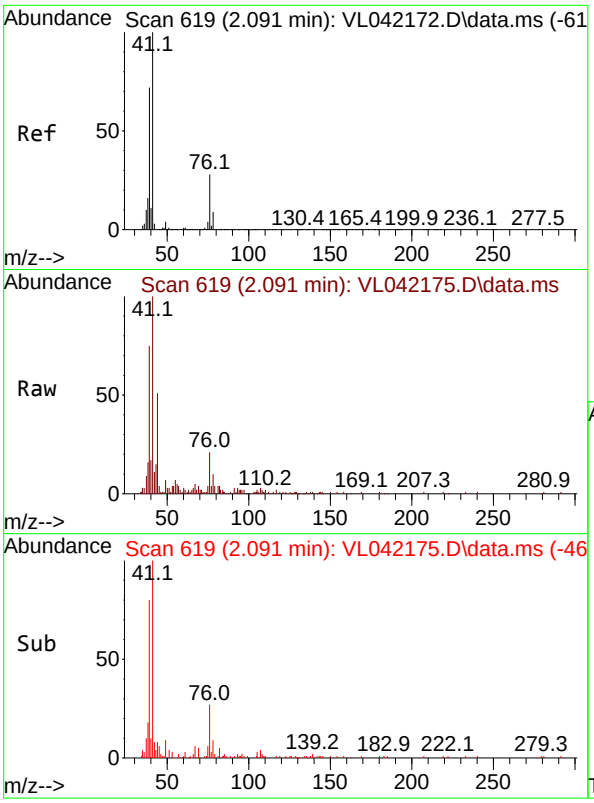


#20
Methylene Chloride
Concen: 0.599 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 5634

Ion	Ratio	Lower	Upper
84	100		
49	148.1	120.2	180.4
51	56.1	37.4	56.0#
86	55.6	52.4	78.6



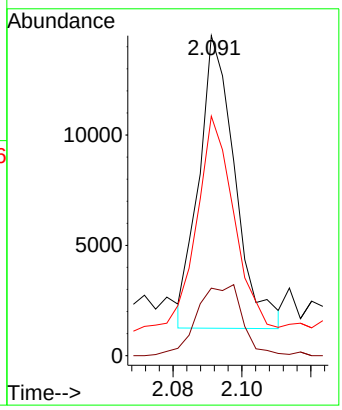


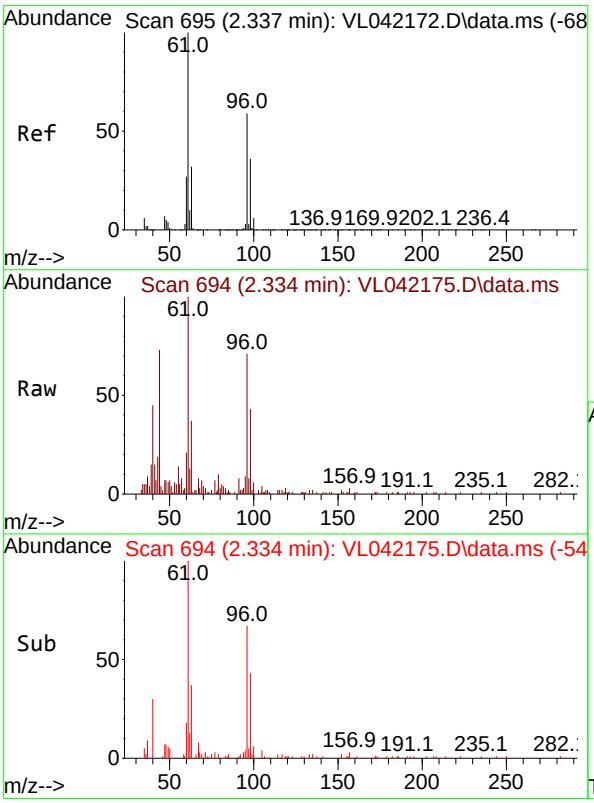
#21
Allyl Chloride
Concen: 0.541 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 9632

Ion	Ratio	Lower	Upper
41	100		
76	30.9	24.1	36.1
39	88.9	61.1	91.7

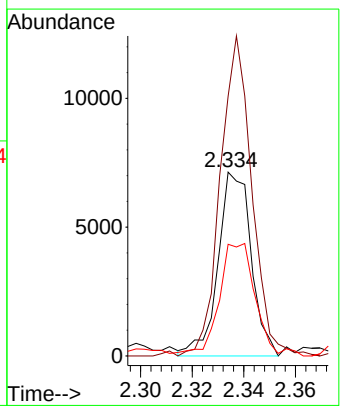


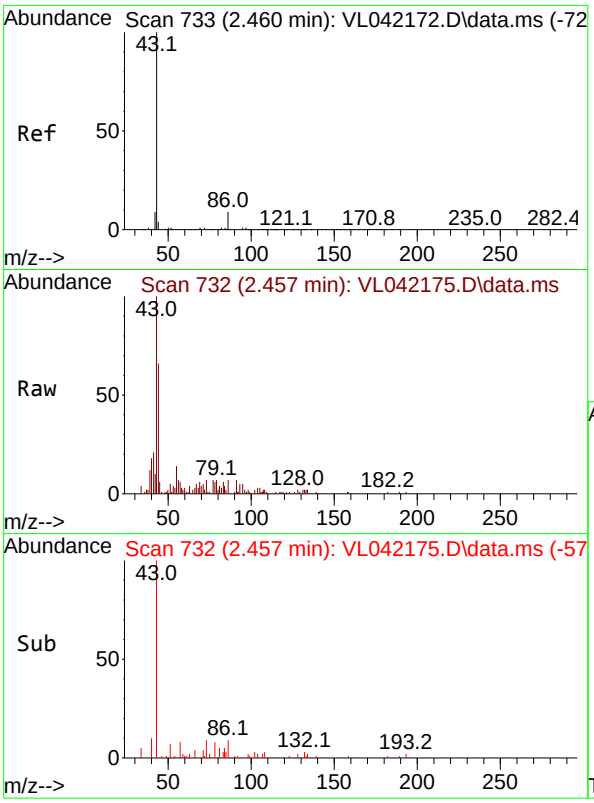


#22
trans-1,2-Dichloroethene
Concen: 0.546 ppbv
RT: 2.334 min Scan# 694
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 96 Resp: 6353

Ion	Ratio	Lower	Upper
96	100		
61	141.3	136.6	204.8
98	59.4	49.4	74.2



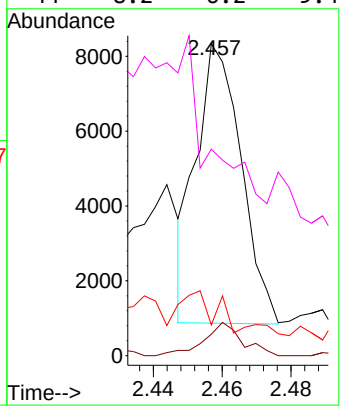


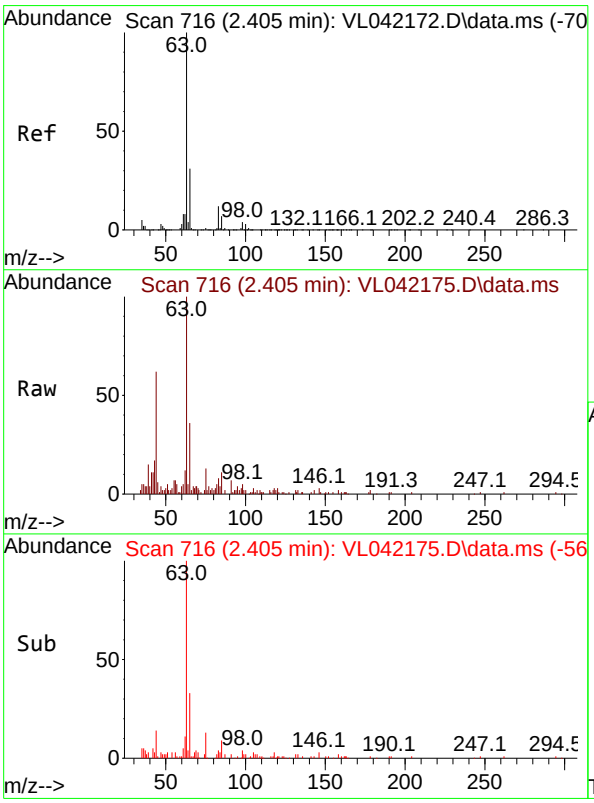
#23
Vinyl Acetate
Concen: 0.649 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 6809

Ion	Ratio	Lower	Upper
43	100		
86	7.7	5.5	8.3
42	3.2	8.6	13.0#
44	8.2	6.2	9.4

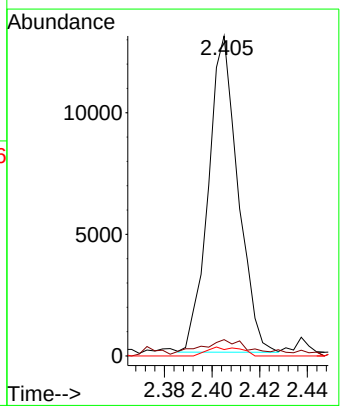


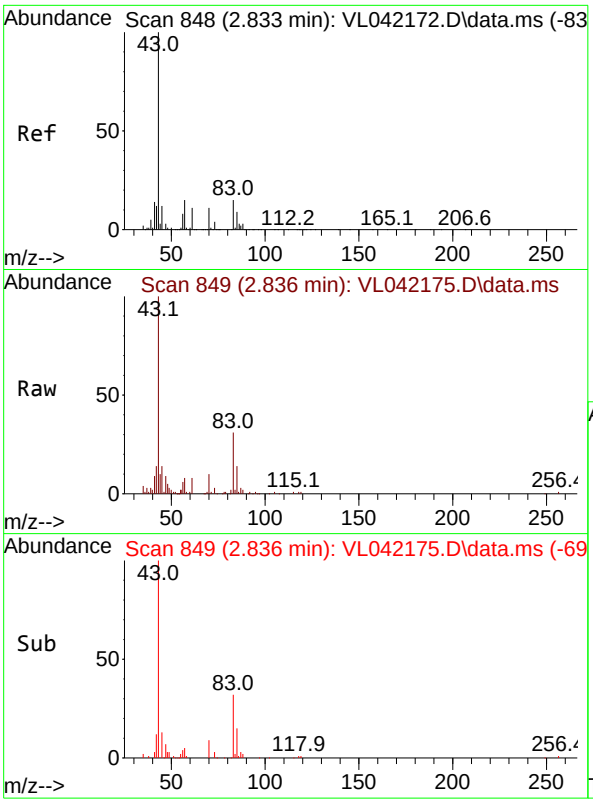


#24
1,1-Dichloroethane
Concen: 0.527 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 63 Resp: 11258

Ion	Ratio	Lower	Upper
63	100		
98	3.7	2.3	6.8
100	2.0	1.6	4.7



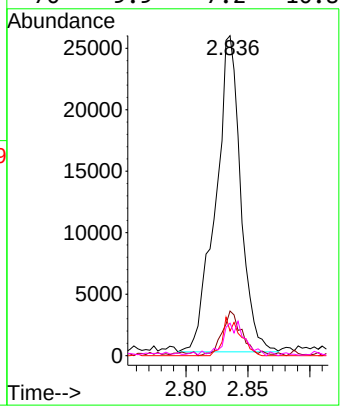


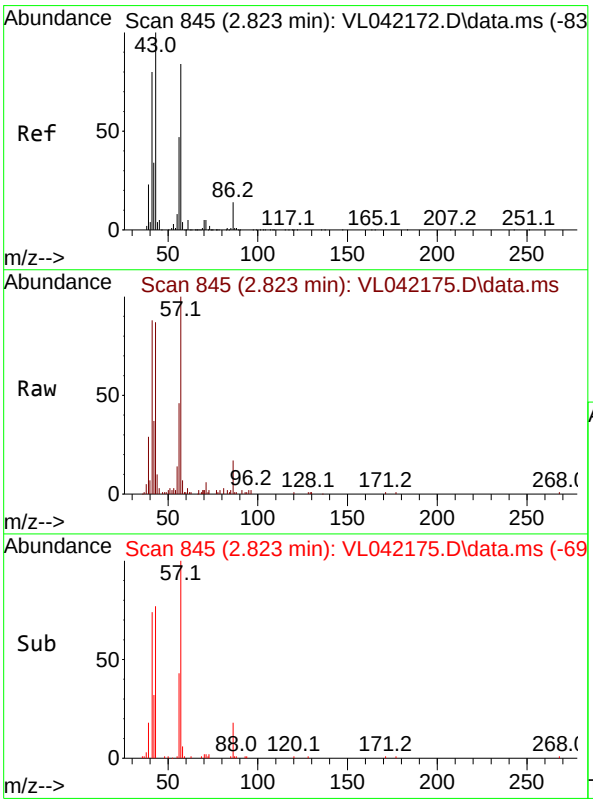
#25
Ethyl Acetate
Concen: 0.553 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 36258

Ion	Ratio	Lower	Upper
43	100		
45	11.2	8.2	12.2
61	8.3	7.3	10.9
70	9.9	7.2	10.8

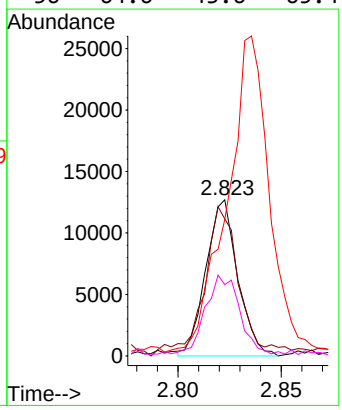


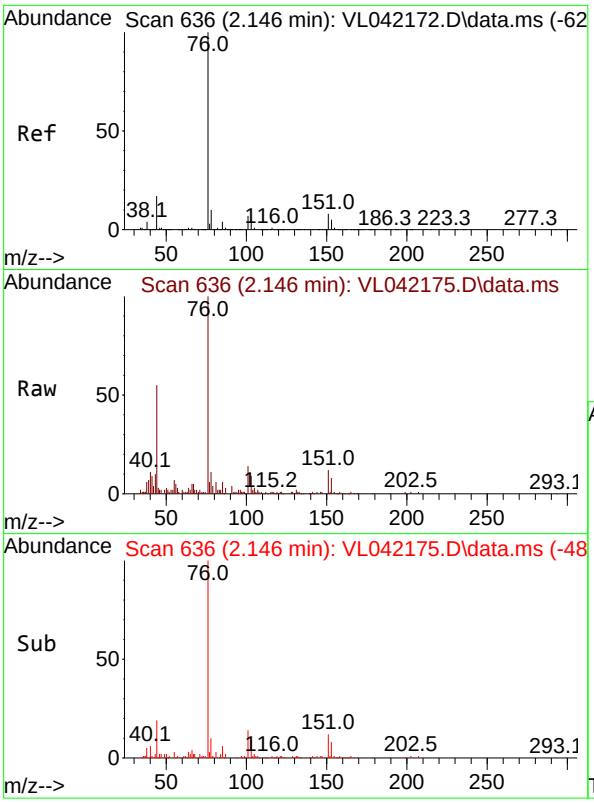


#26
Hexane
Concen: 0.538 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 13605

Ion	Ratio	Lower	Upper
57	100		
41	92.1	76.6	114.8
43	273.4	207.8	311.8
56	64.6	43.6	65.4



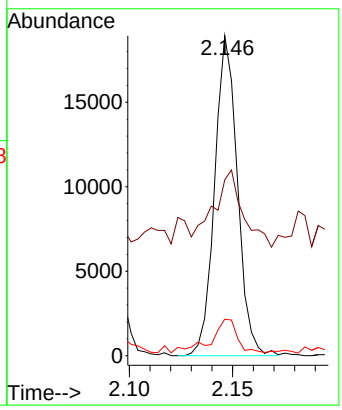


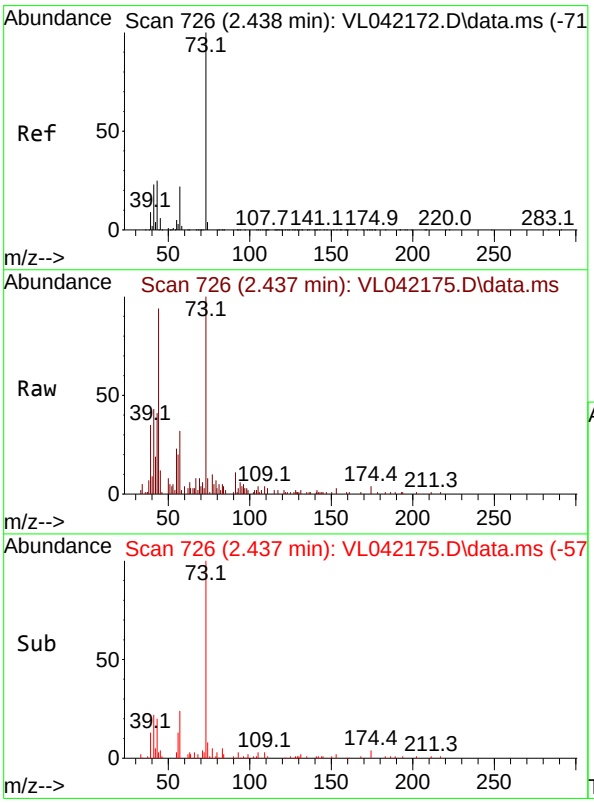
#27
Carbon Disulfide
Concen: 0.535 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 76 Resp: 14510

Ion	Ratio	Lower	Upper
76	100		
44	115.5	14.7	22.1#
78	14.9	9.3	13.9#

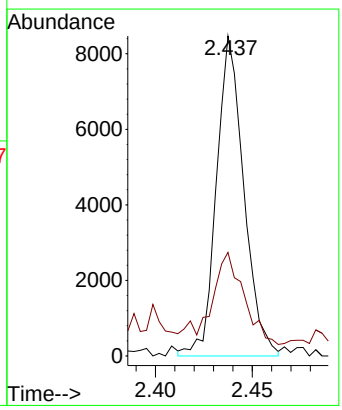


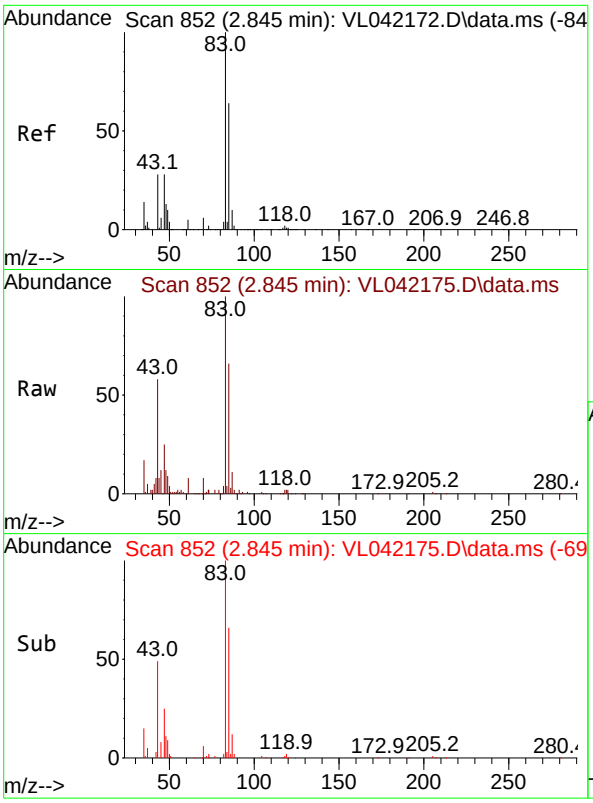


#28
Methyl tert-Butyl Ether
Concen: 0.527 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 73 Resp: 8310

Ion	Ratio	Lower	Upper
73	100		
57	31.1	20.5	30.7#



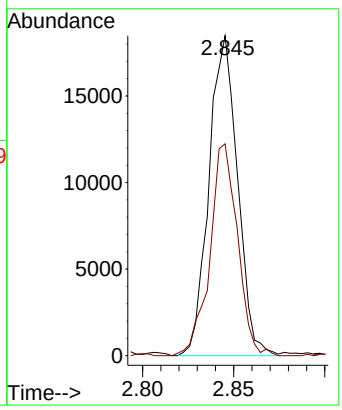


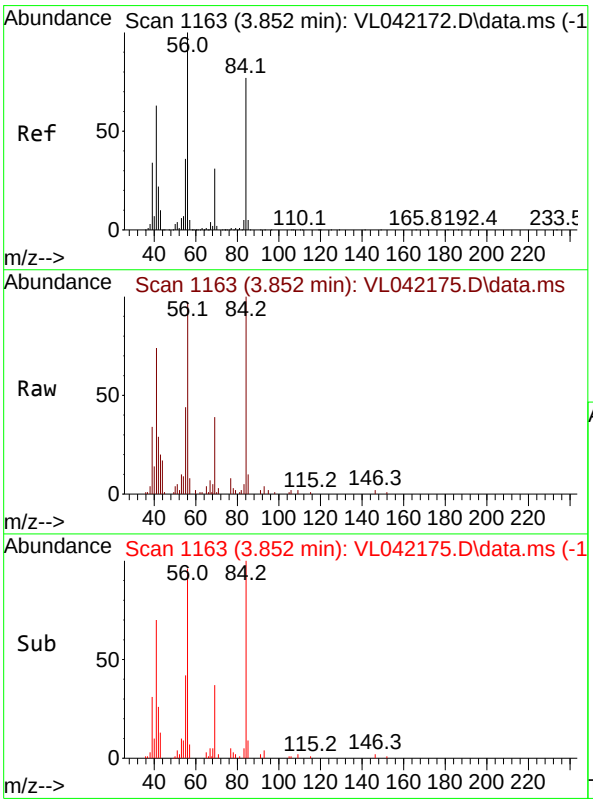
#29
Chloroform
Concen: 0.544 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 20149

Ion	Ratio	Lower	Upper
83	100		
85	66.2	51.4	77.2

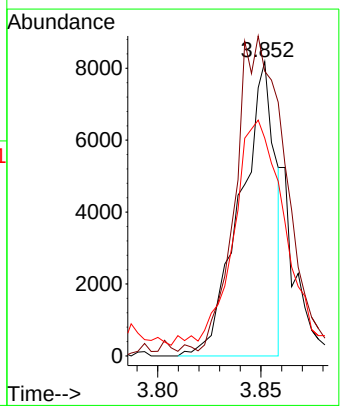


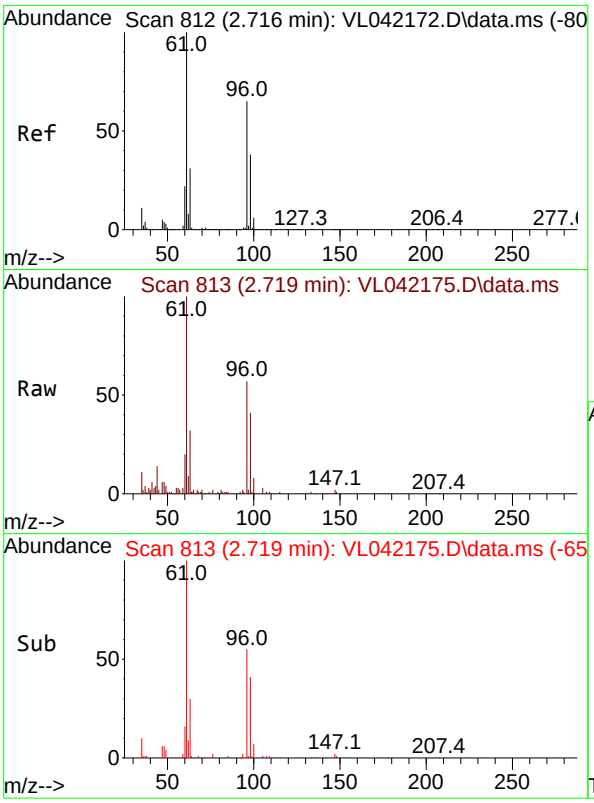


#30
Cyclohexane
Concen: 0.438 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 84 Resp: 9635

Ion	Ratio	Lower	Upper
84	100		
56	158.1	102.8	154.2#
41	117.1	66.5	99.7#



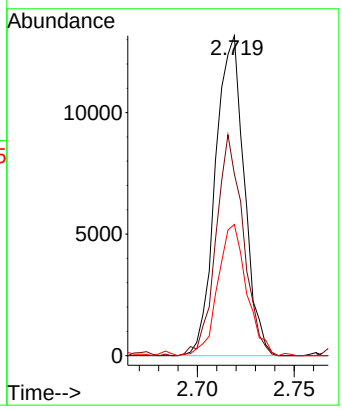


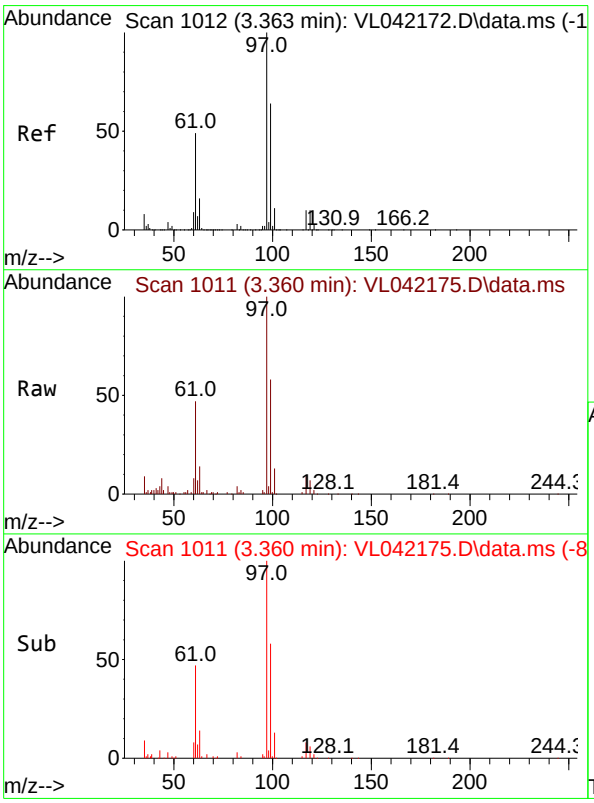
#31
cis-1,2-Dichloroethene
Concen: 0.529 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 61 Resp: 13601

Ion	Ratio	Lower	Upper
61	100		
96	56.8	51.8	77.8
98	41.0	30.6	46.0

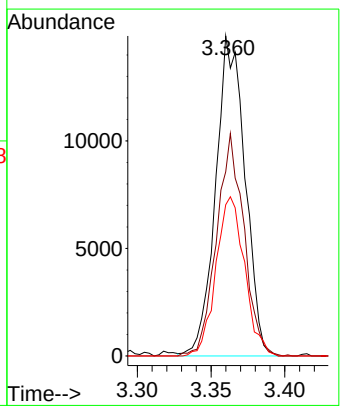


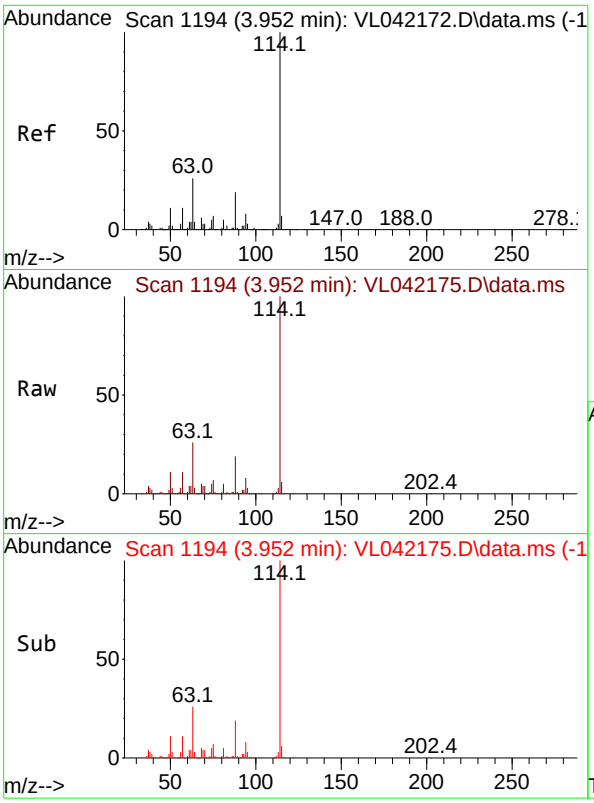


#32
1,1,1-Trichloroethane
Concen: 0.485 ppbv
RT: 3.360 min Scan# 1011
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 97 Resp: 20567

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	48.6	38.7	58.1



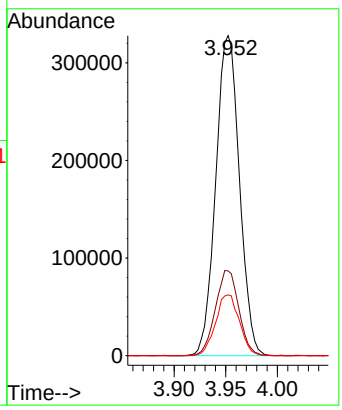


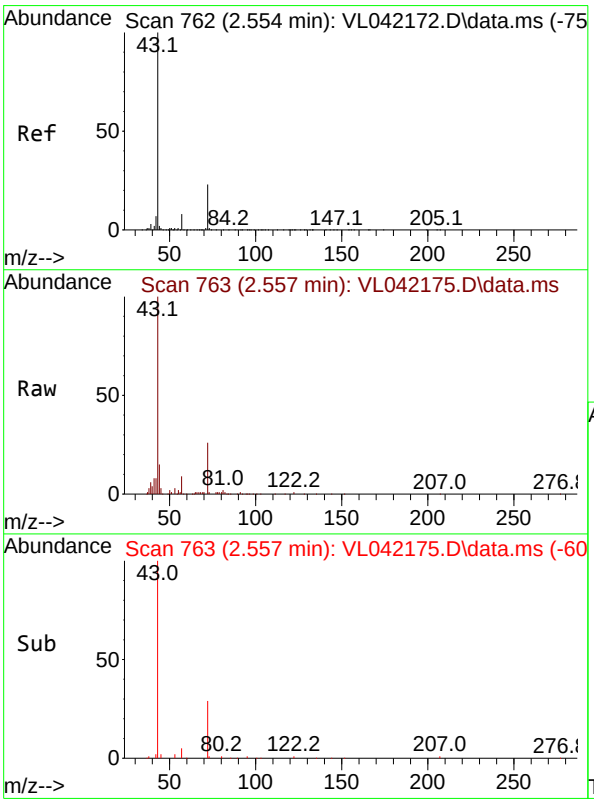
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:114 Resp: 523832

Ion	Ratio	Lower	Upper
114	100		
63	26.4	20.7	31.1
88	19.1	15.0	22.4

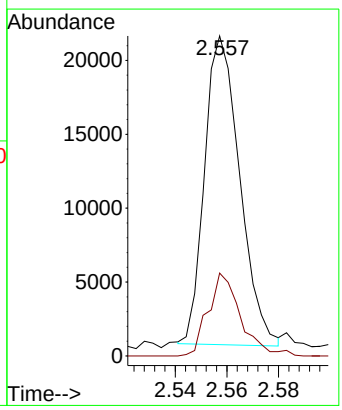


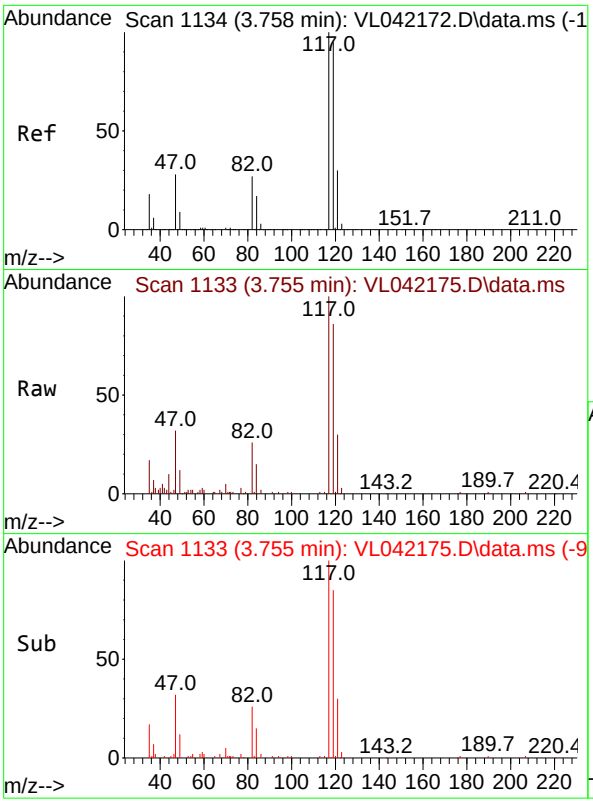


#34
2-Butanone
Concen: 0.520 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 19739

Ion	Ratio	Lower	Upper
43	100		
72	24.8	18.2	27.2



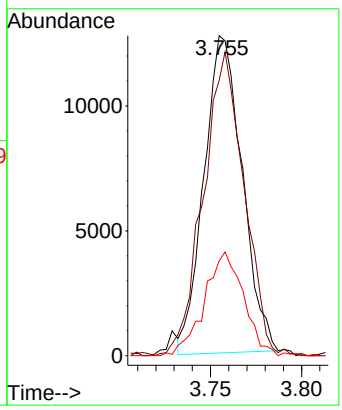


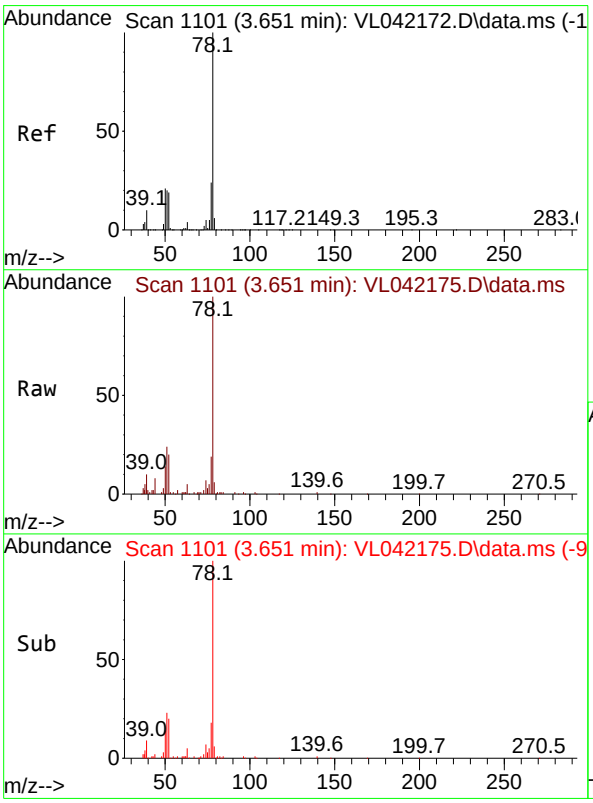
#35
Carbon Tetrachloride
Concen: 0.460 ppbv
RT: 3.755 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 18558

Ion	Ratio	Lower	Upper
117	100		
119	86.4	76.2	114.2
121	30.1	24.2	36.4

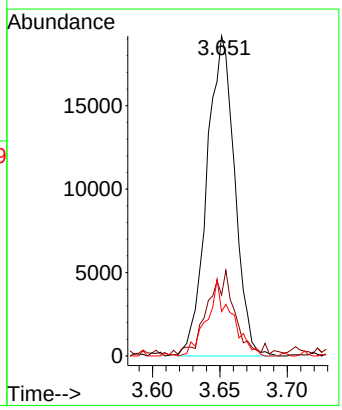


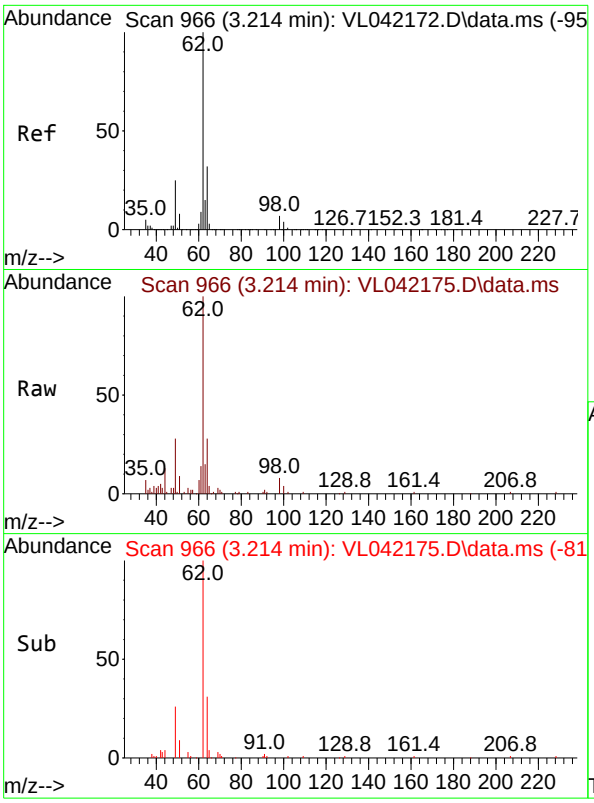


#36
Benzene
Concen: 0.529 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 78 Resp: 27488

Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	13.9	16.6	24.8#



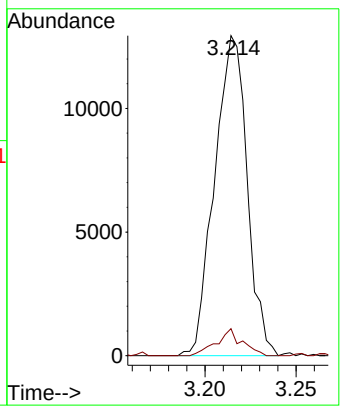


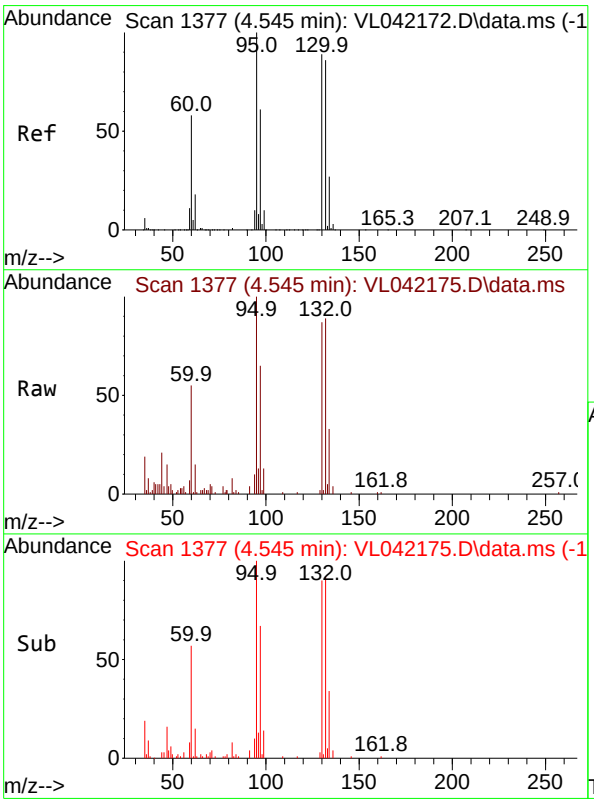
#37
1,2-Dichloroethane
Concen: 0.540 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 16062

Ion	Ratio	Lower	Upper
62	100		
98	7.0	5.4	8.2

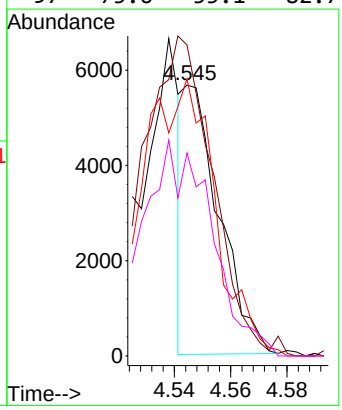


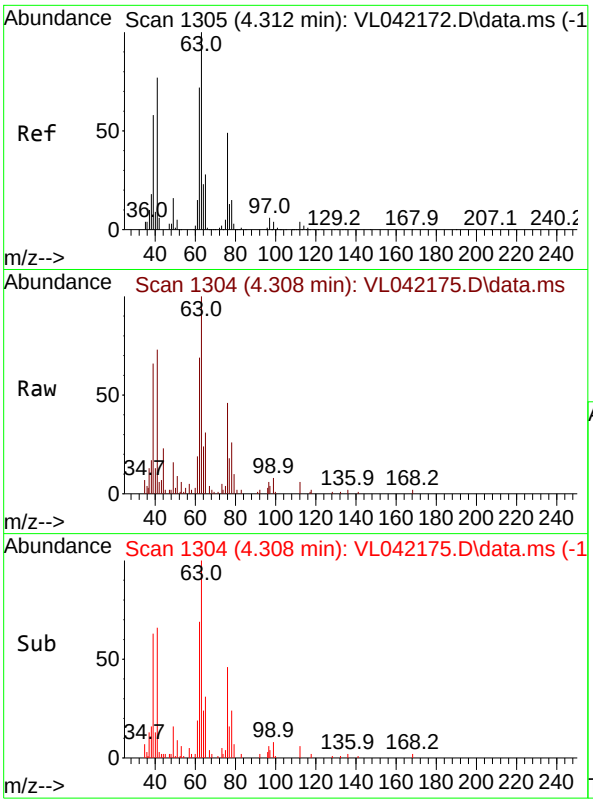


#38
Trichloroethene
Concen: 0.230 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:130 Resp: 4992

Ion	Ratio	Lower	Upper
130	100		
95	108.5	89.8	134.8
132	100.9	77.4	116.2
97	75.6	55.1	82.7



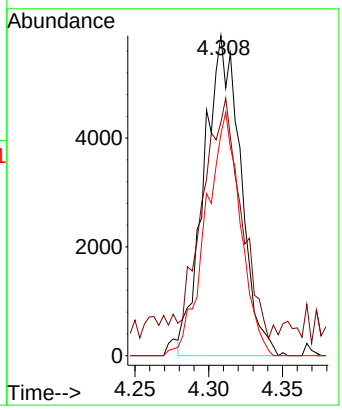


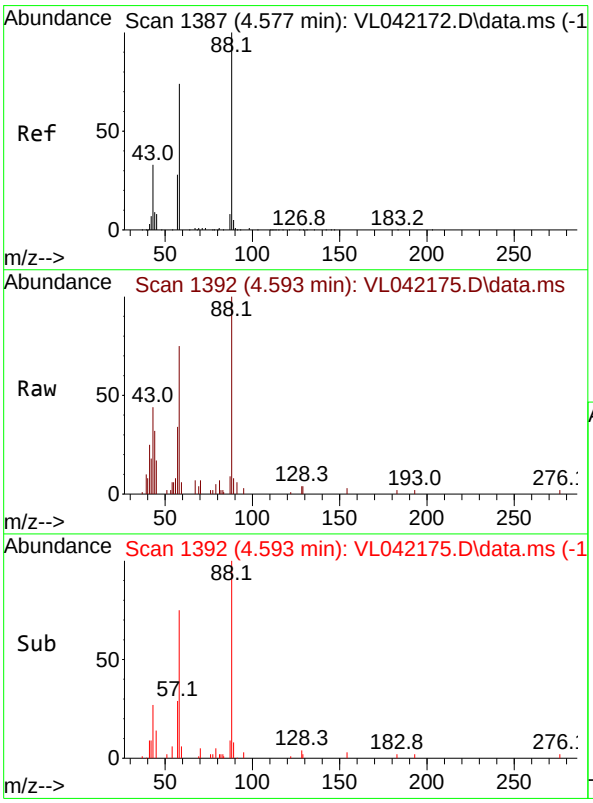
#39
1,2-Dichloropropane
Concen: 0.535 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 63 Resp: 10123

Ion	Ratio	Lower	Upper
63	100		
41	66.4	61.7	92.5
62	69.3	57.6	86.4

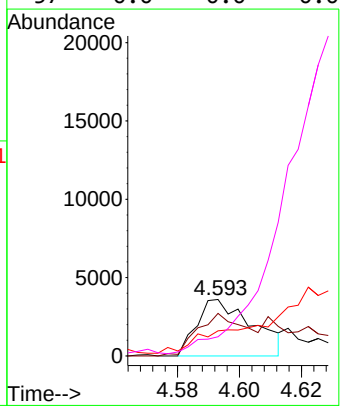


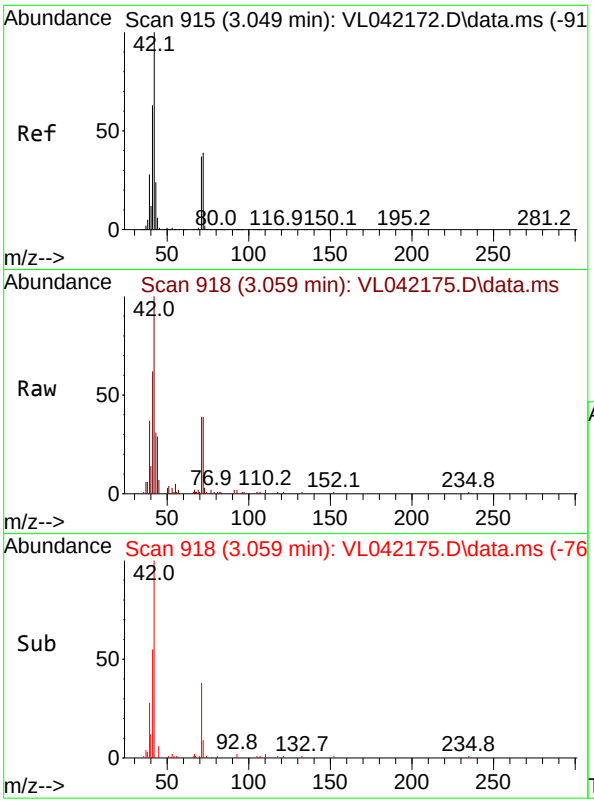


#40
1,4-Dioxane
Concen: 0.457 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.016 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 88 Resp: 4487

Ion	Ratio	Lower	Upper
88	100		
58	151.6	62.7	94.1#
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



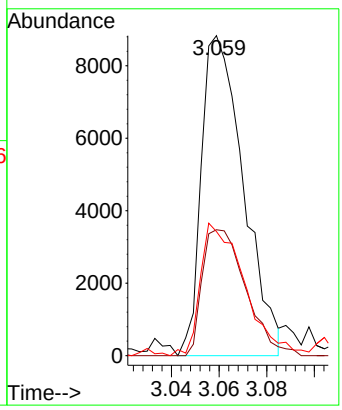


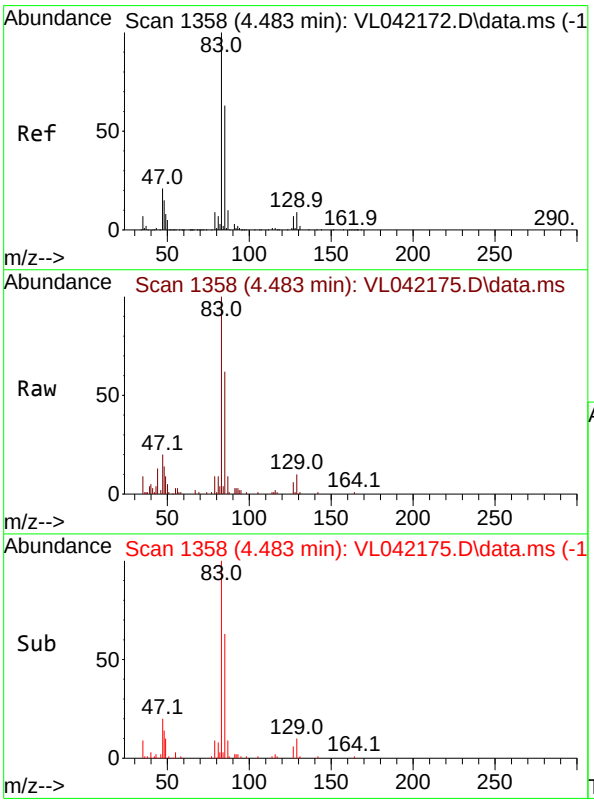
#41
Tetrahydrofuran
Concen: 0.502 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 42 Resp: 10856

Ion	Ratio	Lower	Upper
42	100		
72	40.7	31.4	47.0
71	43.1	30.2	45.4

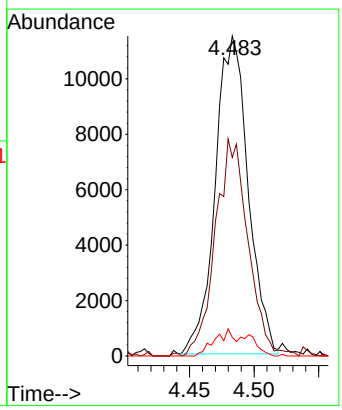


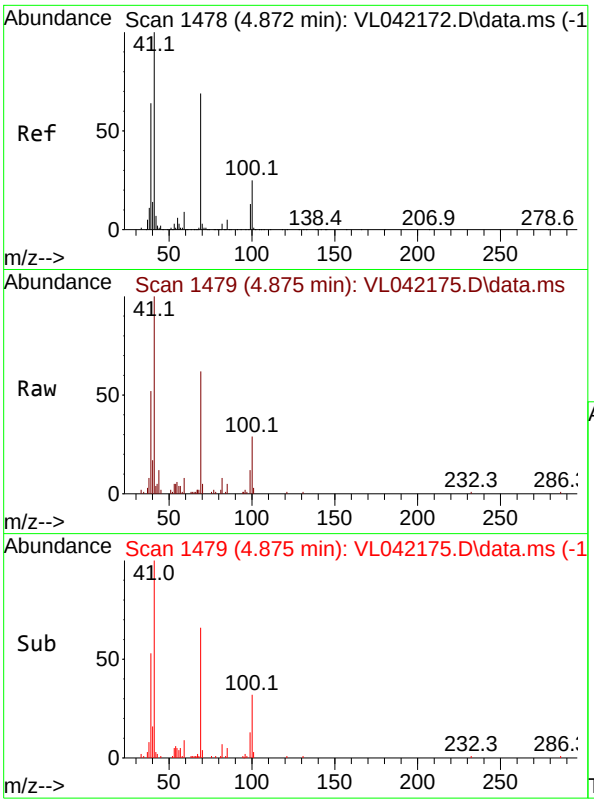


#42
Bromodichloromethane
Concen: 0.497 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 83 Resp: 20374

Ion	Ratio	Lower	Upper
83	100		
85	61.6	50.5	75.7
127	5.9	5.9	8.9#



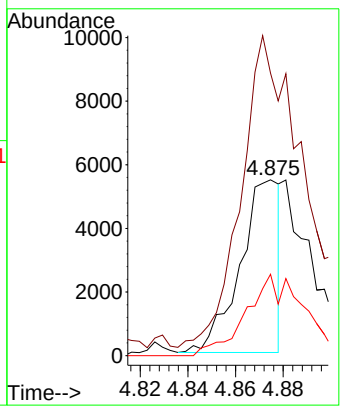


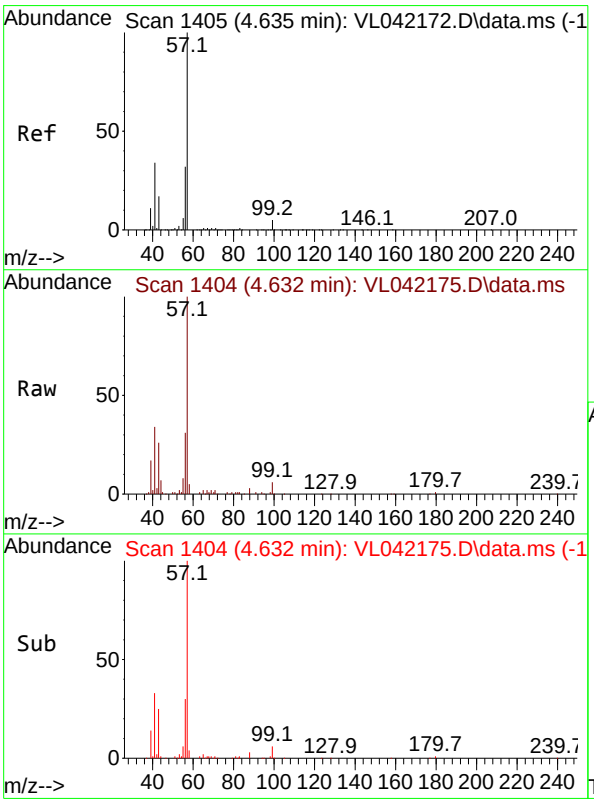
#43
Methyl Methacrylate
Concen: 0.284 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 69 Resp: 6229

Ion	Ratio	Lower	Upper
69	100		
41	279.4	123.8	185.6#
100	70.5	28.4	42.6#

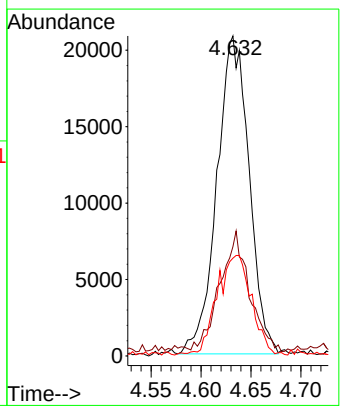


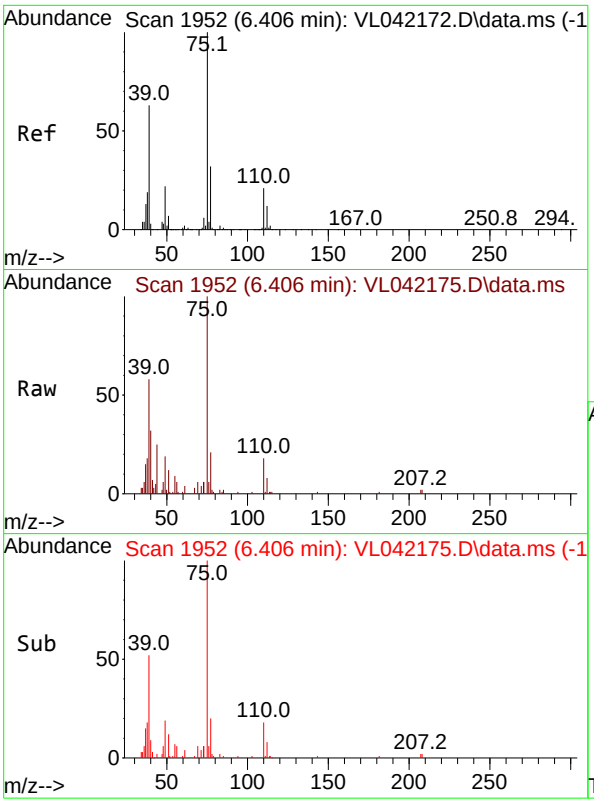


#44
2,2,4-Trimethylpentane
Concen: 0.532 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 57 Resp: 46646

Ion	Ratio	Lower	Upper
57	100		
41	36.7	26.8	40.2
56	34.3	25.6	38.4



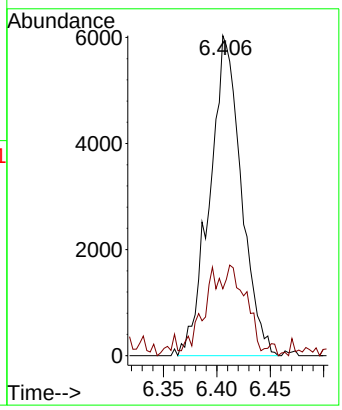


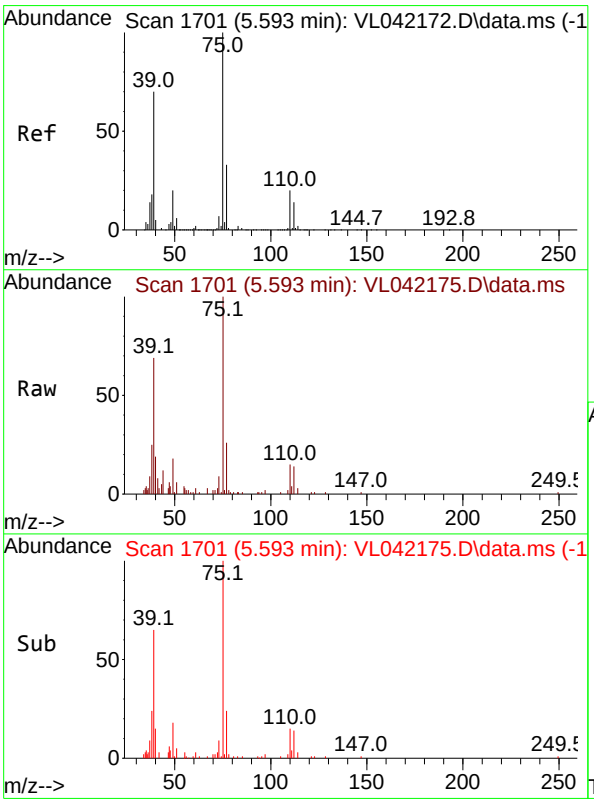
#45
t-1,3-Dichloropropene
Concen: 0.526 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 75 Resp: 12404

Ion	Ratio	Lower	Upper
75	100		
77	20.9	26.0	39.0#

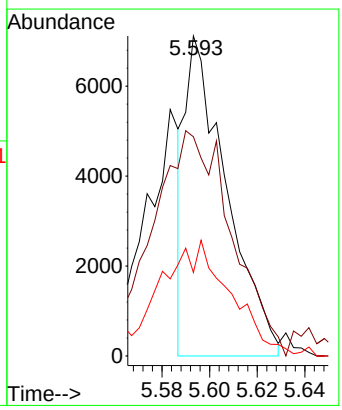


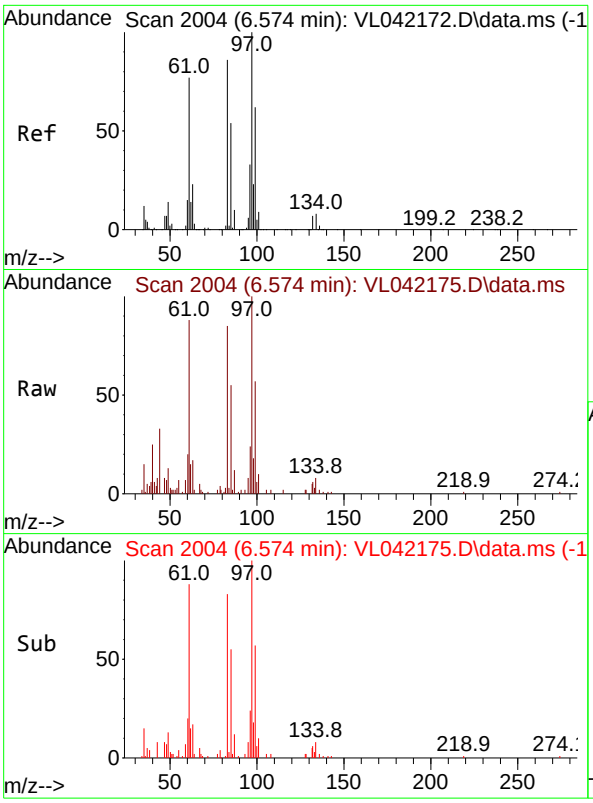


#46
cis-1,3-Dichloropropene
Concen: 0.297 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 75 Resp: 8584

Ion	Ratio	Lower	Upper
75	100		
39	65.0	55.8	83.6
77	23.4	26.0	39.0#



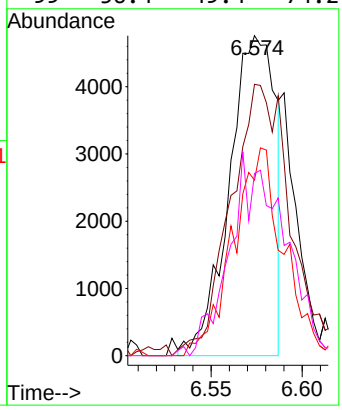


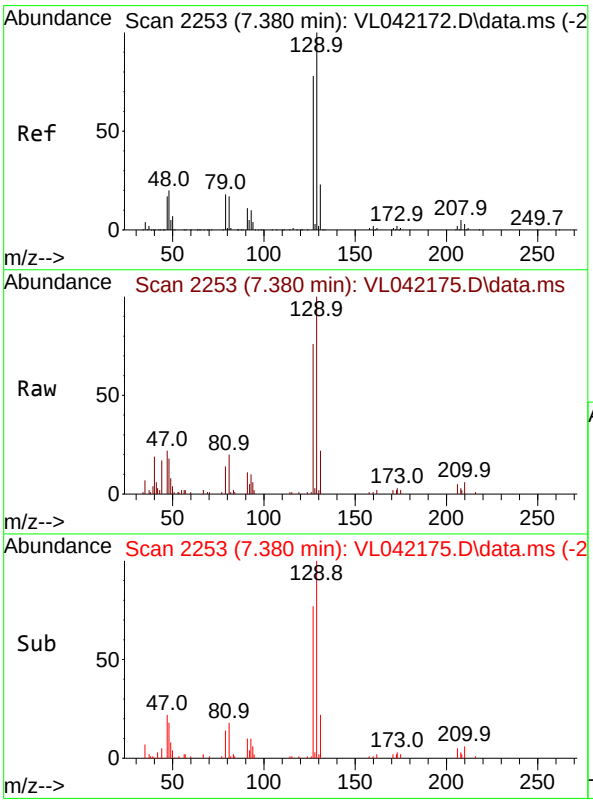
#47
1,1,2-Trichloroethane
Concen: 0.419 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 97 Resp: 8374

Ion	Ratio	Lower	Upper
97	100		
83	84.5	69.2	103.8
85	55.9	43.1	64.7
99	56.4	49.4	74.2

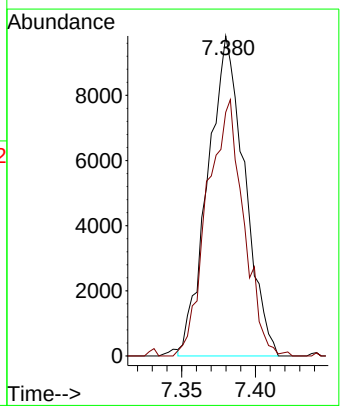


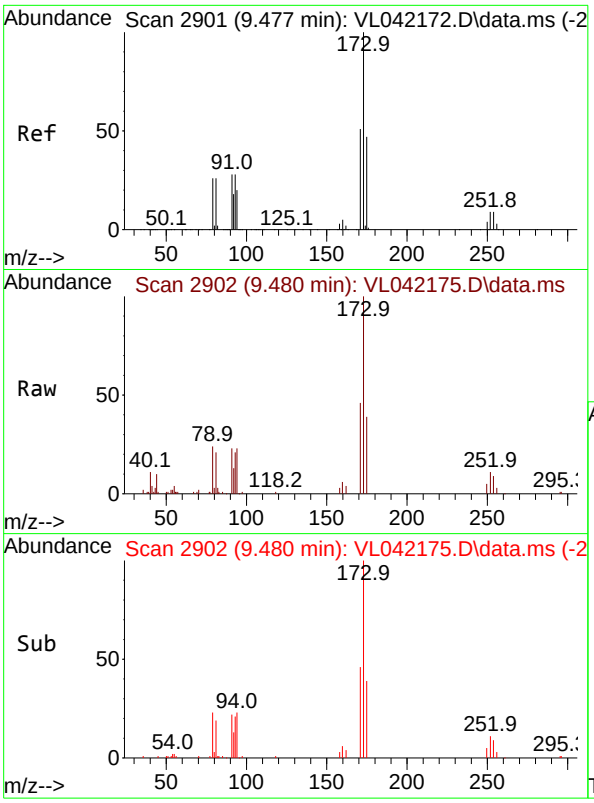


#48
Dibromochloromethane
Concen: 0.503 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:129 Resp: 17042

Ion	Ratio	Lower	Upper
129	100		
127	79.4	39.1	117.2



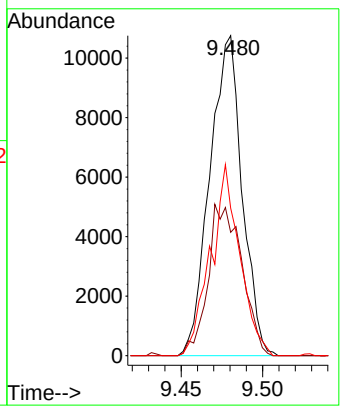


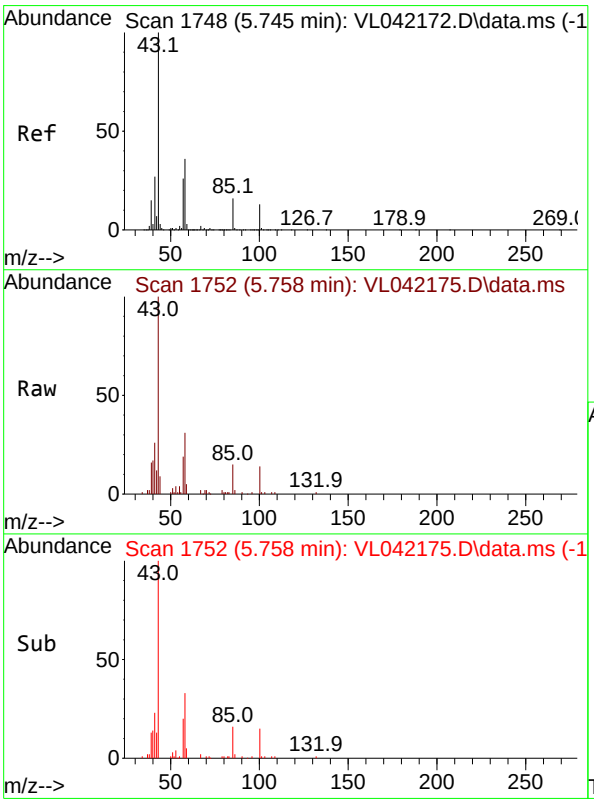
#49
Bromoform
Concen: 0.487 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:173 Resp: 14828

Ion	Ratio	Lower	Upper
173	100		
175	49.7	38.6	57.8
171	53.8	41.8	62.6

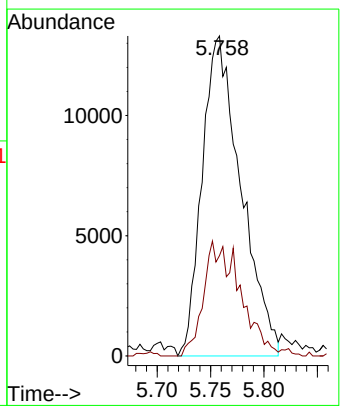


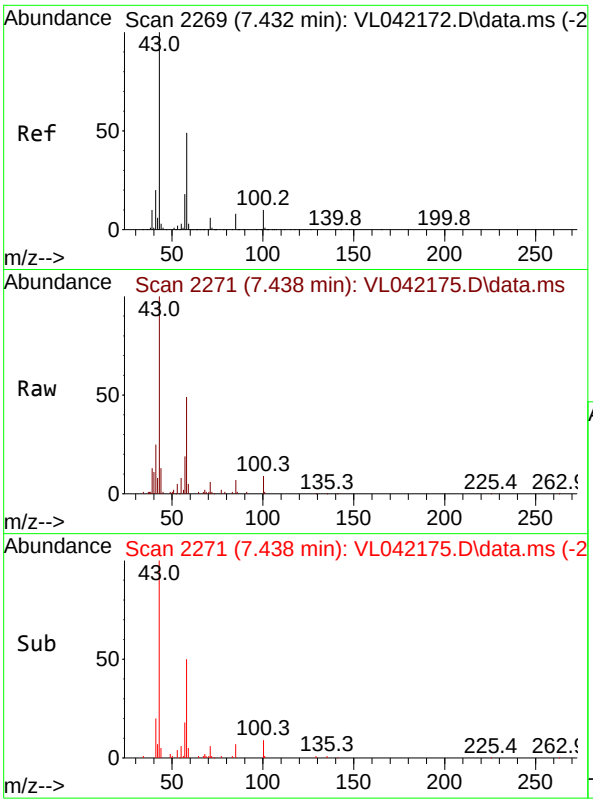


#50
4-Methyl-2-Pentanone
Concen: 0.559 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.013 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 43 Resp: 33674

Ion	Ratio	Lower	Upper
43	100		
58	34.4	29.0	43.6



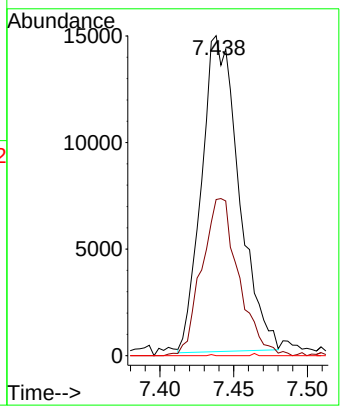


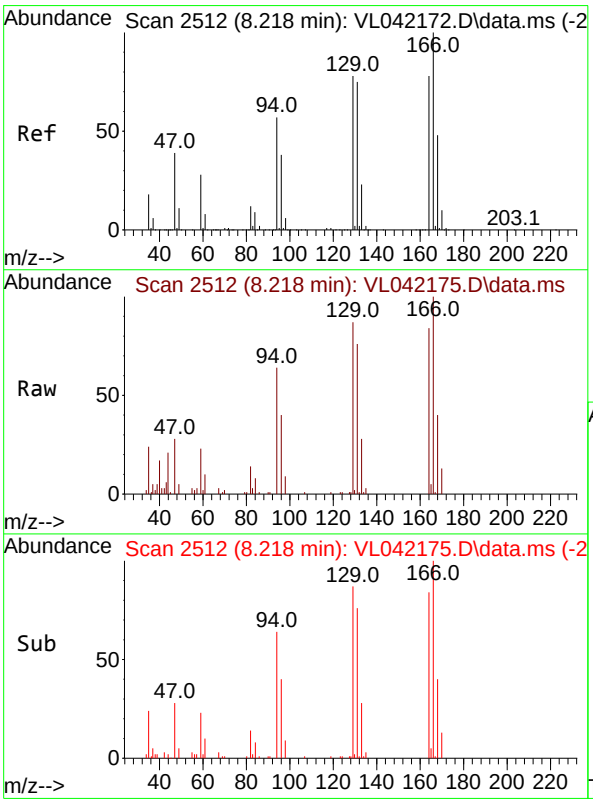
#51
2-Hexanone
Concen: 0.523 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 26154

Ion	Ratio	Lower	Upper
43	100		
58	49.8	39.7	59.5
98	0.0	0.1	0.1#

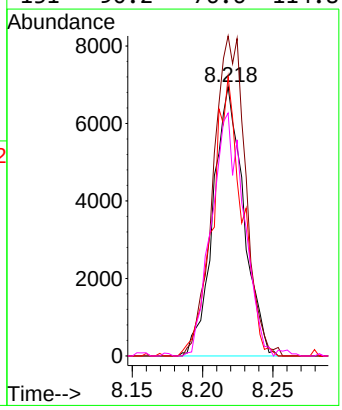


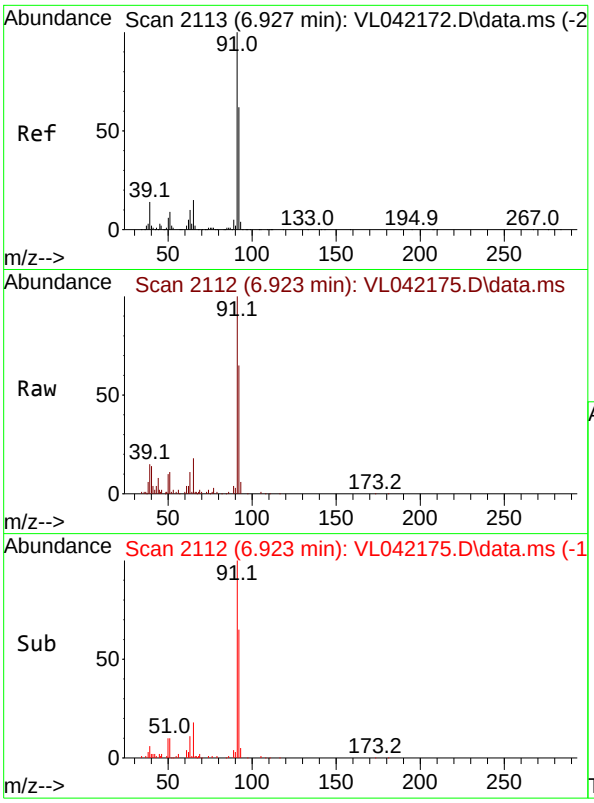


#52
Tetrachloroethene
Concen: 0.510 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:164 Resp: 10502

Ion	Ratio	Lower	Upper
164	100		
166	118.9	102.5	153.7
129	103.8	79.8	119.8
131	90.2	76.6	114.8



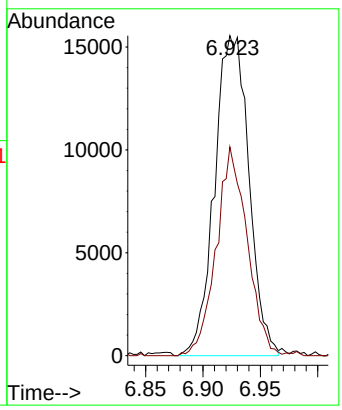


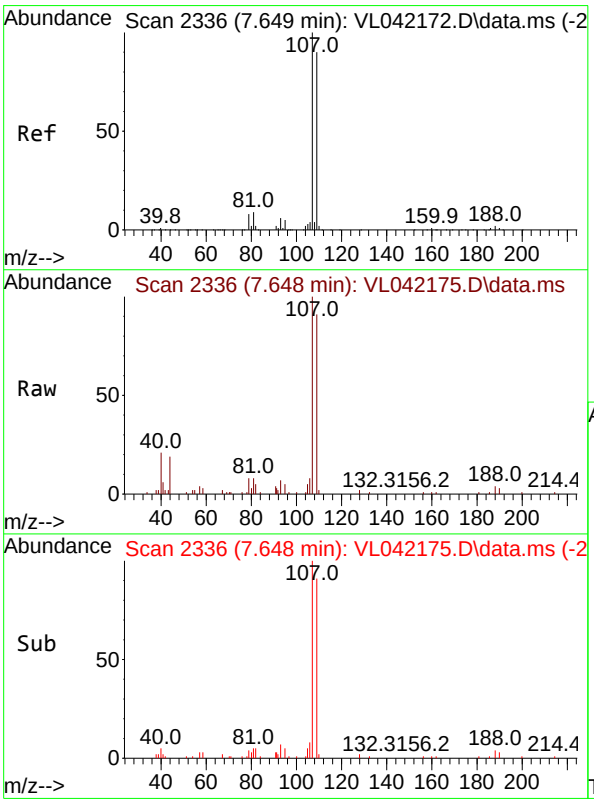
#53
Toluene
Concen: 0.527 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 32444

Ion	Ratio	Lower	Upper
91	100		
92	58.9	48.4	72.6

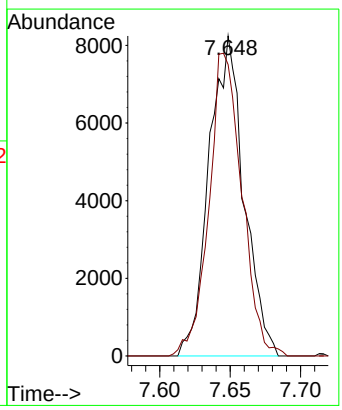


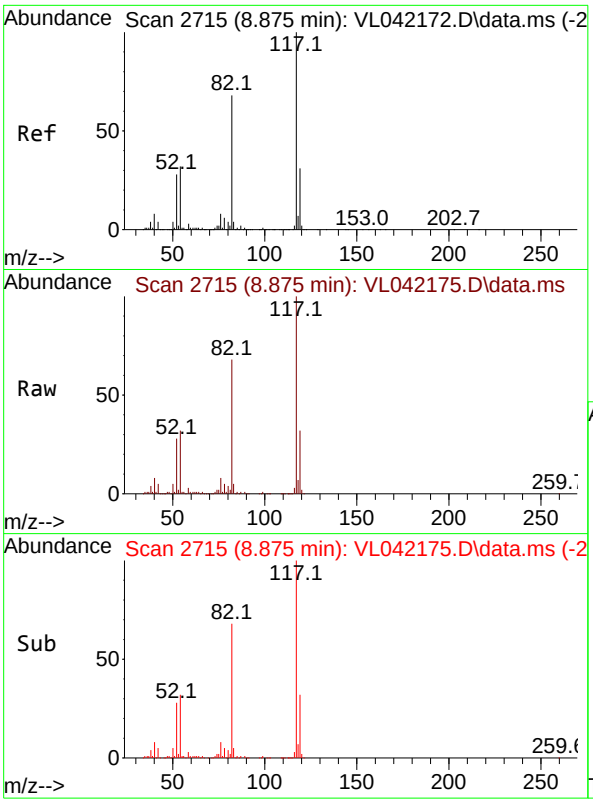


#54
1,2-Dibromoethane
Concen: 0.510 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:107 Resp: 14220

Ion	Ratio	Lower	Upper
107	100		
109	89.1	72.2	108.4



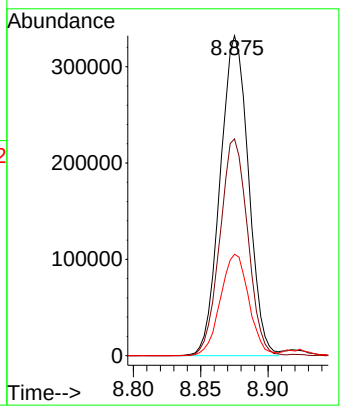


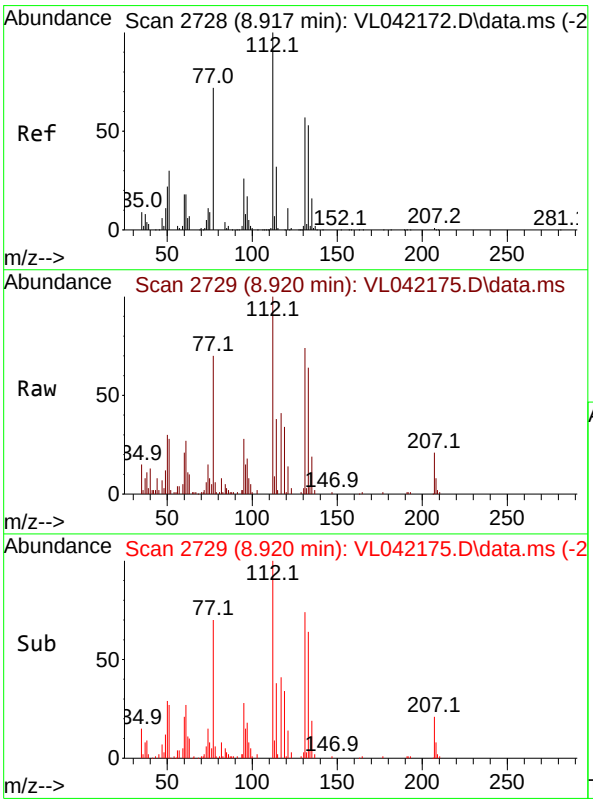
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 485078

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.7	25.5	38.3

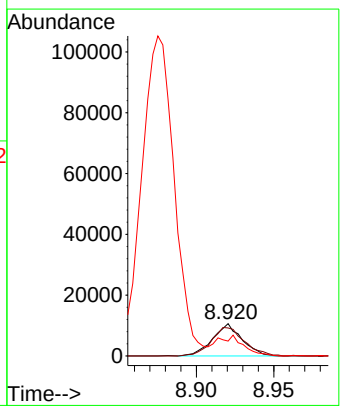


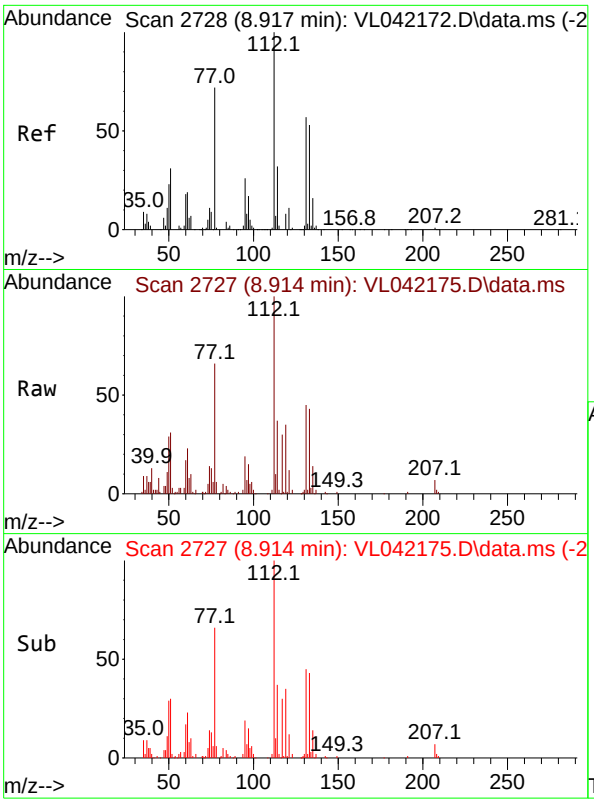


#56
1,1,1,2-Tetrachloroethane
Concen: 0.523 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:131 Resp: 13959

Ion	Ratio	Lower	Upper
131	100		
133	99.6	76.6	114.8
119	1170.3	49.8	74.6#



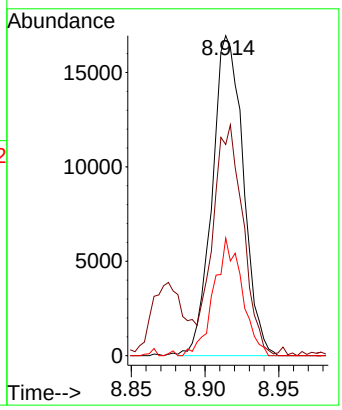


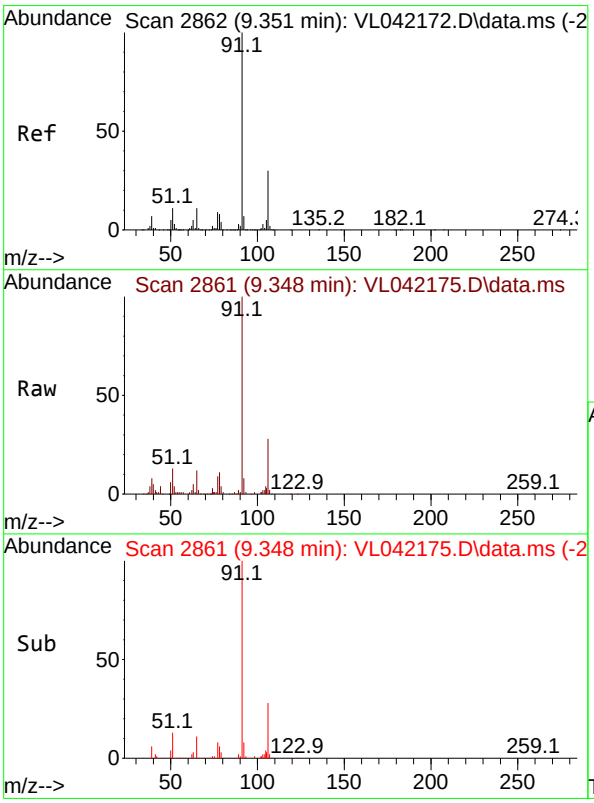
#57
Chlorobenzene
Concen: 0.540 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:112 Resp: 24826

Ion	Ratio	Lower	Upper
112	100		
77	65.1	58.2	87.2
114	36.8	29.1	35.5#

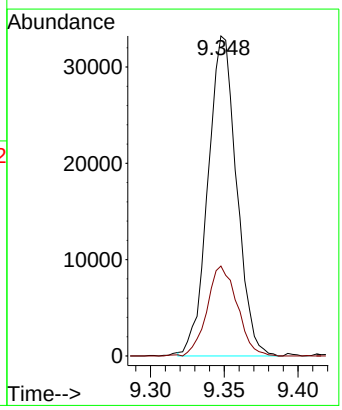


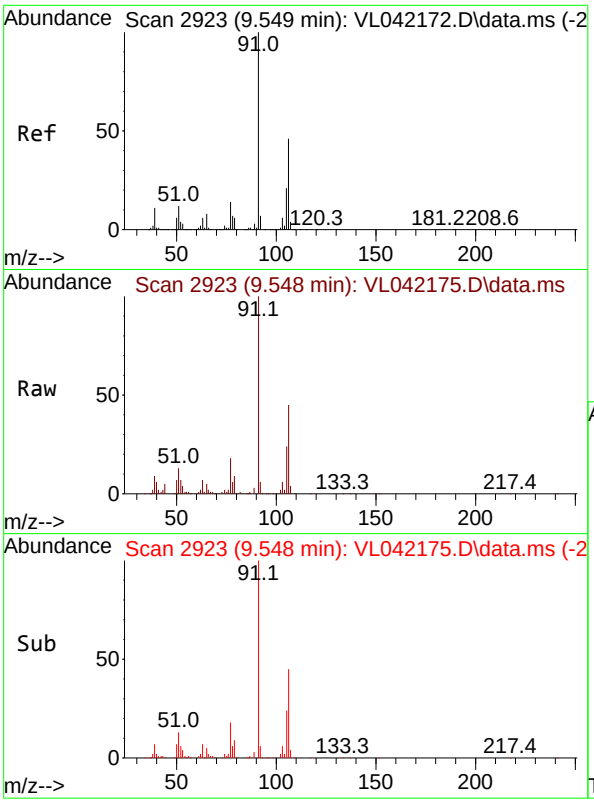


#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 44862

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.2	36.2



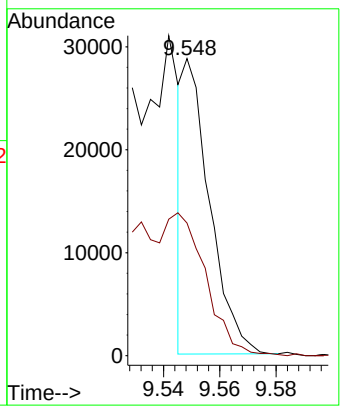


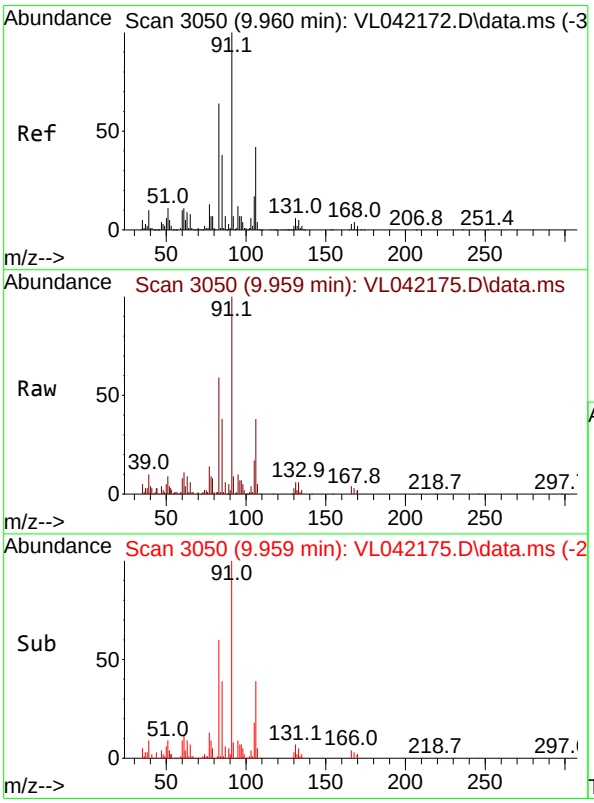
#59
m/p-Xylene
Concen: 0.272 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 18711

Ion	Ratio	Lower	Upper
91	100		
106	176.2	36.4	54.6#

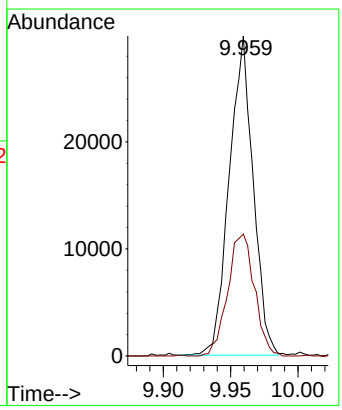


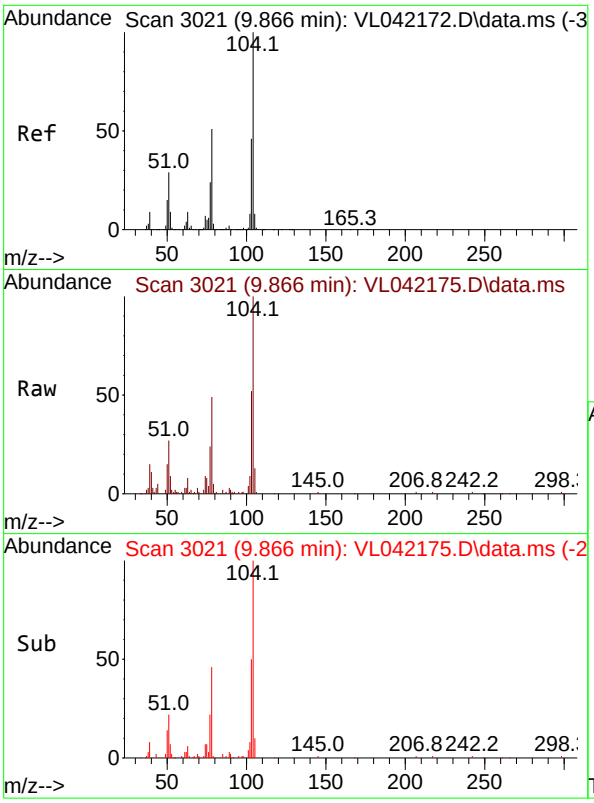


#60
o-Xylene
Concen: 0.535 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 36879

Ion	Ratio	Lower	Upper
91	100		
106	42.7	20.8	62.5



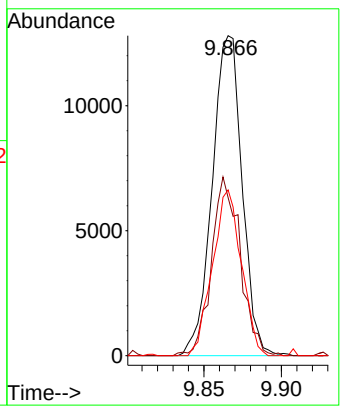


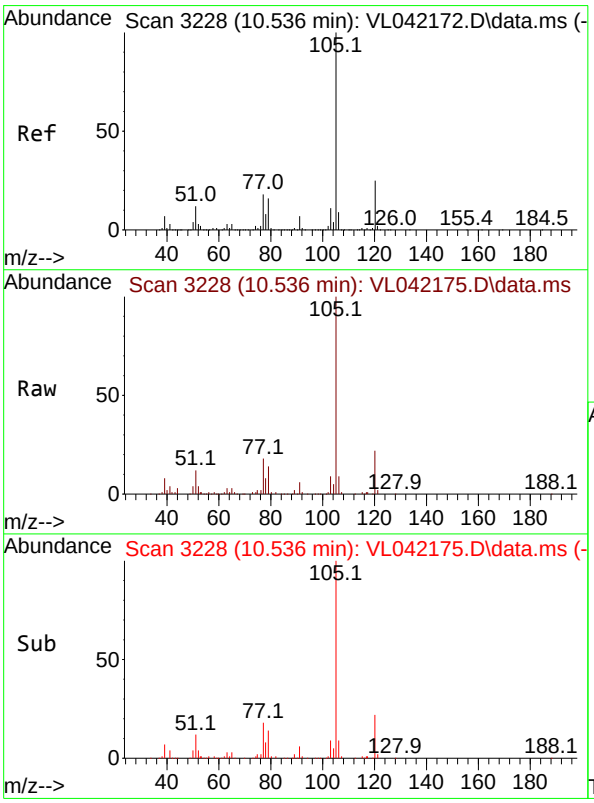
#61
Styrene
Concen: 0.504 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:104 Resp: 17198

Ion	Ratio	Lower	Upper
104	100		
78	53.7	41.8	62.6
103	50.2	37.0	55.4

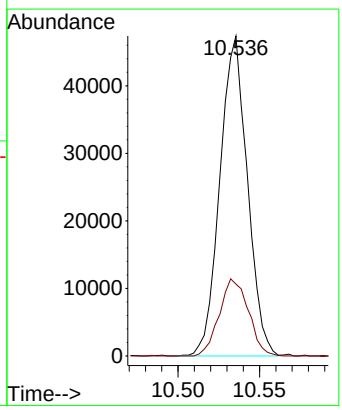


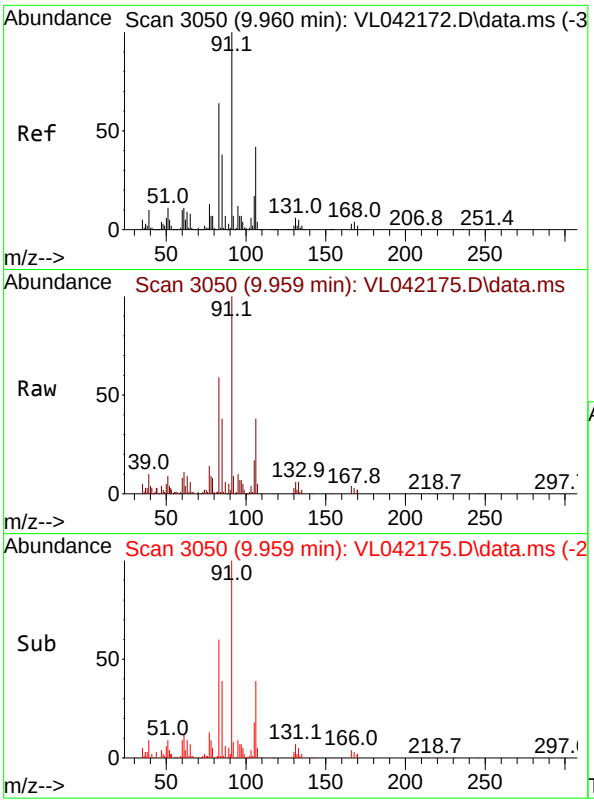


#62
Isopropylbenzene
Concen: 0.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 55531

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9



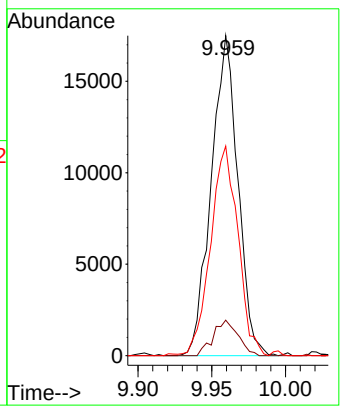


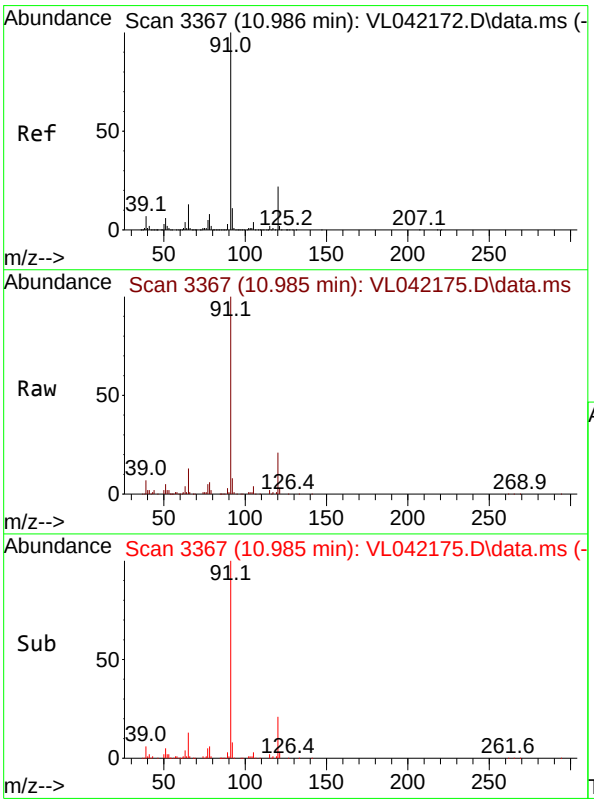
#63
1,1,2,2-Tetrachloroethane
Concen: 0.525 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 21989

Ion	Ratio	Lower	Upper
83	100		
131	10.4	4.8	14.4
85	68.1	32.5	97.5

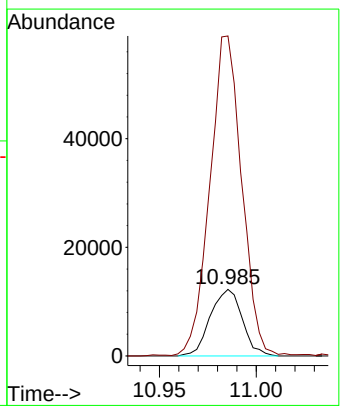


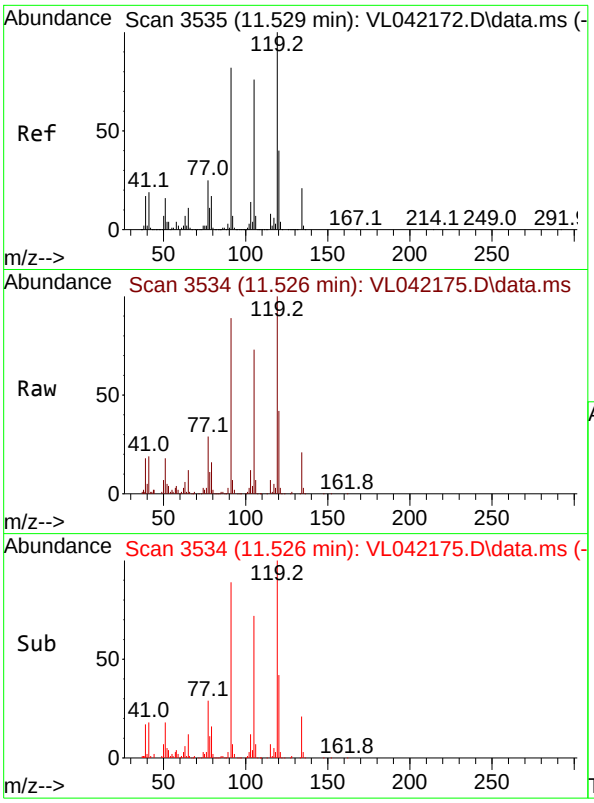


#64
n-propylbenzene
Concen: 0.528 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:120 Resp: 14030

Ion	Ratio	Lower	Upper
120	100		
91	483.1	376.9	565.3



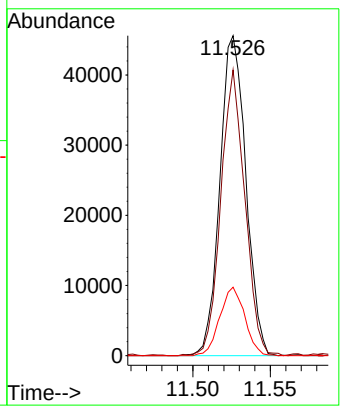


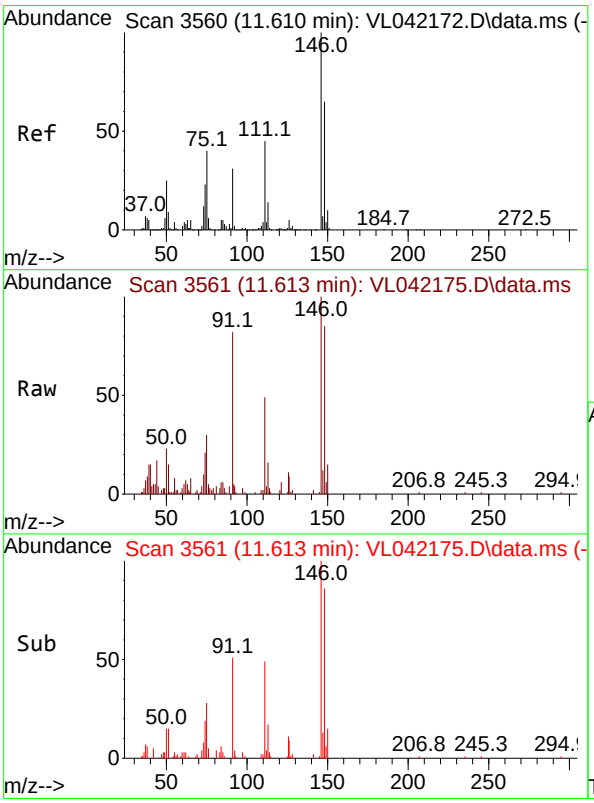
#65
tert-Butylbenzene
Concen: 0.557 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 53115

Ion	Ratio	Lower	Upper
119	100		
91	82.9	66.0	99.0
134	20.6	16.7	25.1

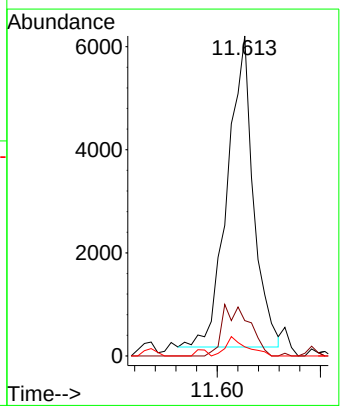


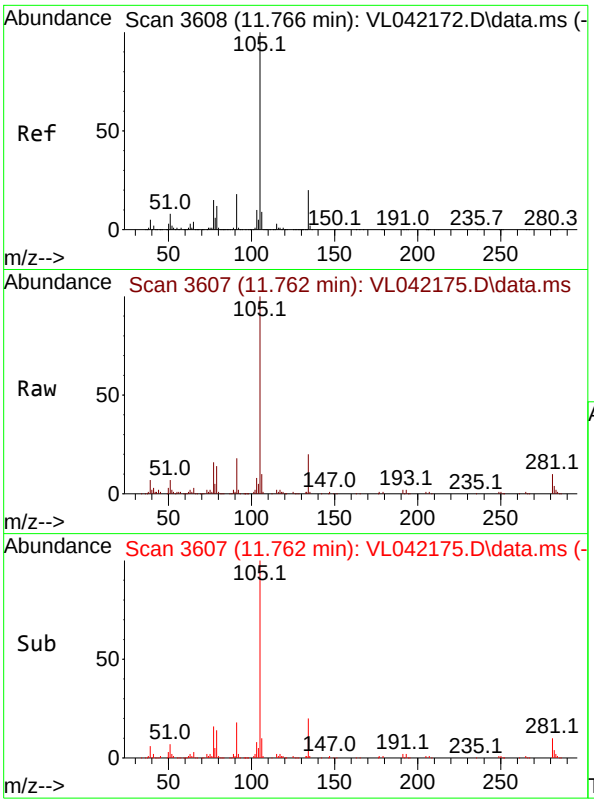


#66
Benzyl Chloride
Concen: 0.520 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 5263

Ion	Ratio	Lower	Upper
91	100		
126	18.7	13.8	20.6
128	5.8	4.5	6.7



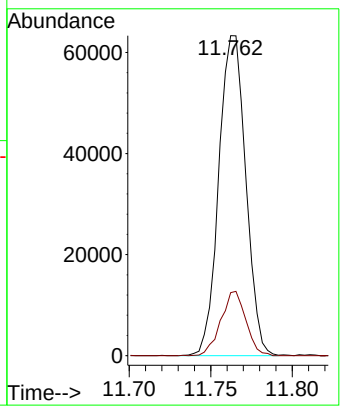


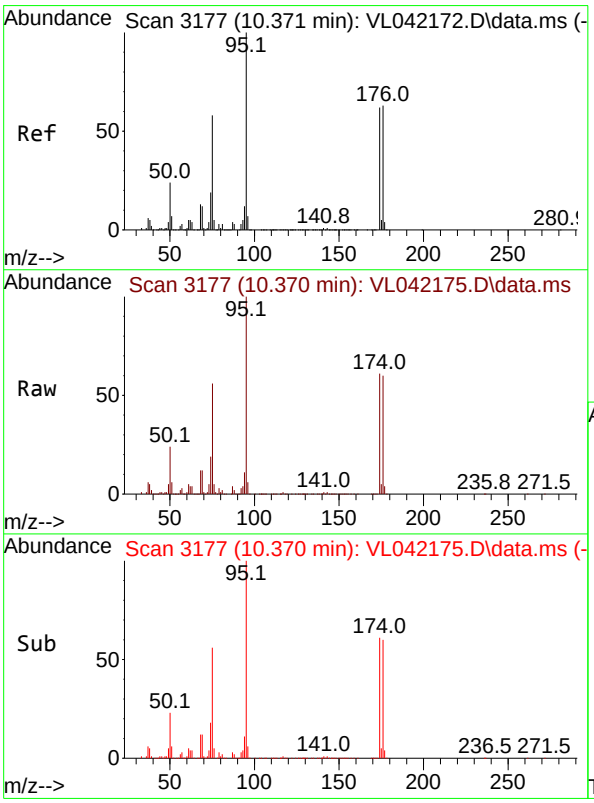
#67
sec-Butylbenzene
Concen: 0.550 ppbv
RT: 11.762 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 72879

Ion	Ratio	Lower	Upper
105	100		
134	18.6	15.5	23.3

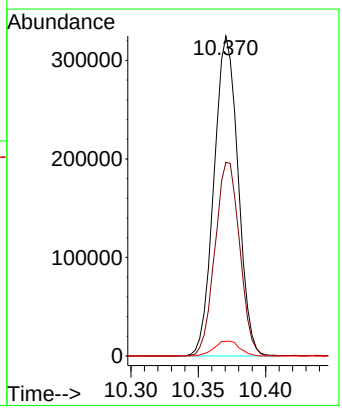


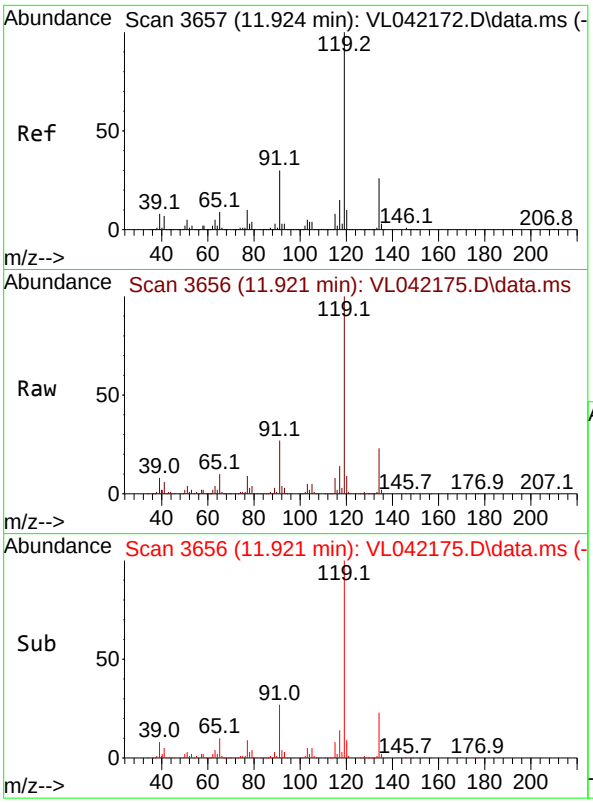


#68
1-Bromo-4-Fluorobenzene
Concen: 10.130 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 95 Resp: 403513

Ion	Ratio	Lower	Upper
95	100		
174	62.3	50.6	76.0
175	4.9	3.8	5.6



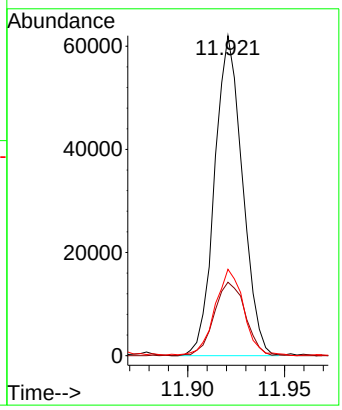


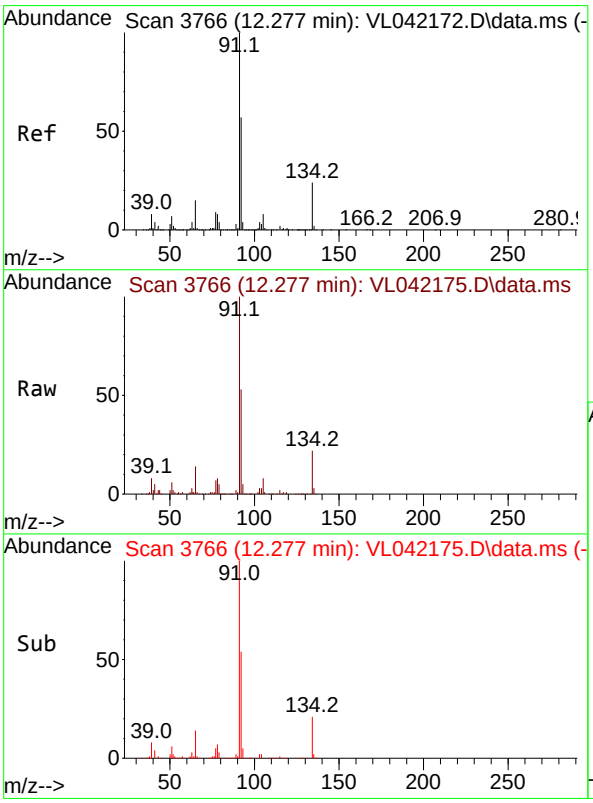
#69
p-Isopropyltoluene
Concen: 0.542 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 61933

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.4	23.7	35.5

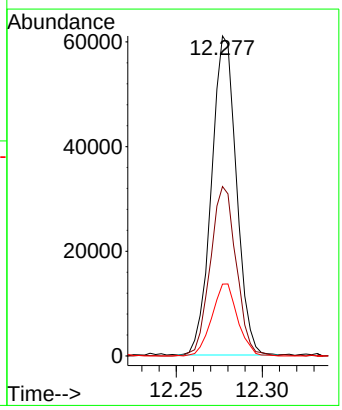


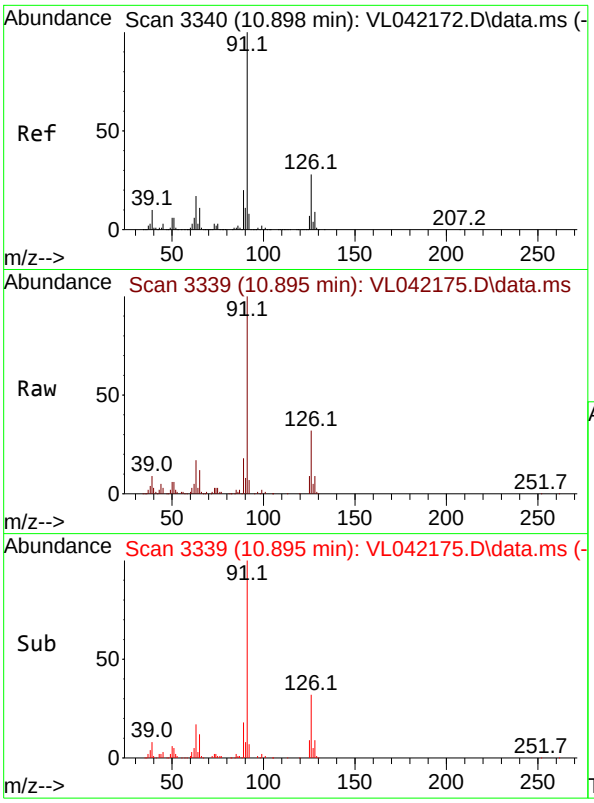


#70
n-Butylbenzene
Concen: 0.527 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion: 91 Resp: 61507

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.4	19.2	28.8



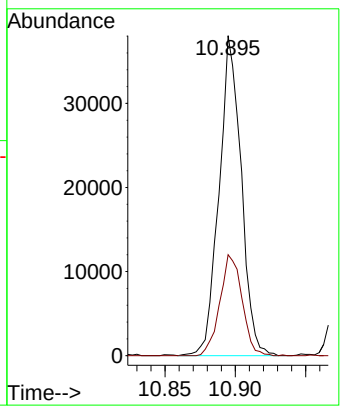


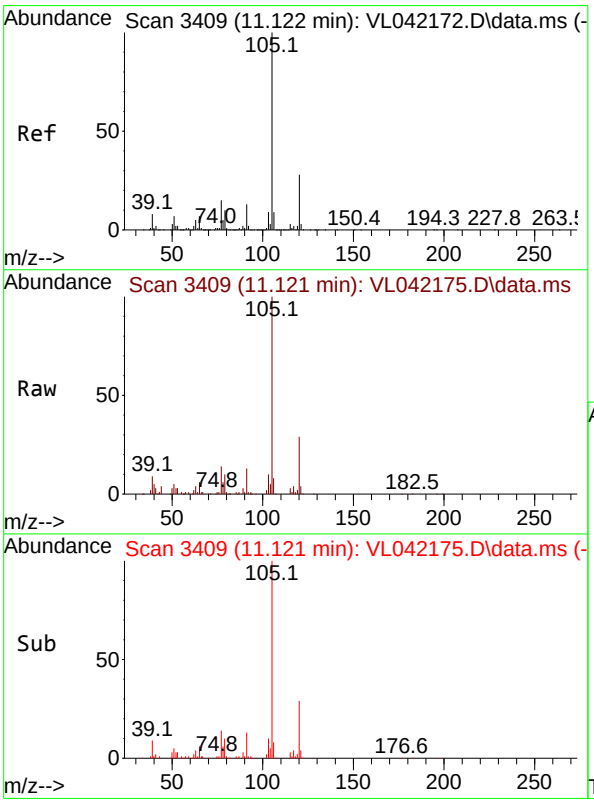
#71
2-Chlorotoluene
Concen: 0.520 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 41637

Ion	Ratio	Lower	Upper
91	100		
126	31.7	11.6	46.4

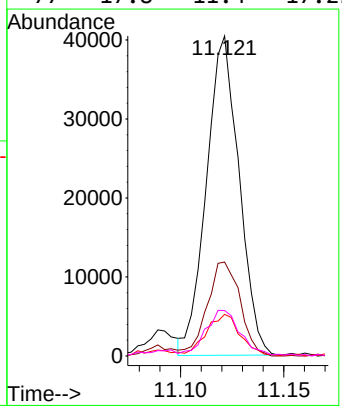


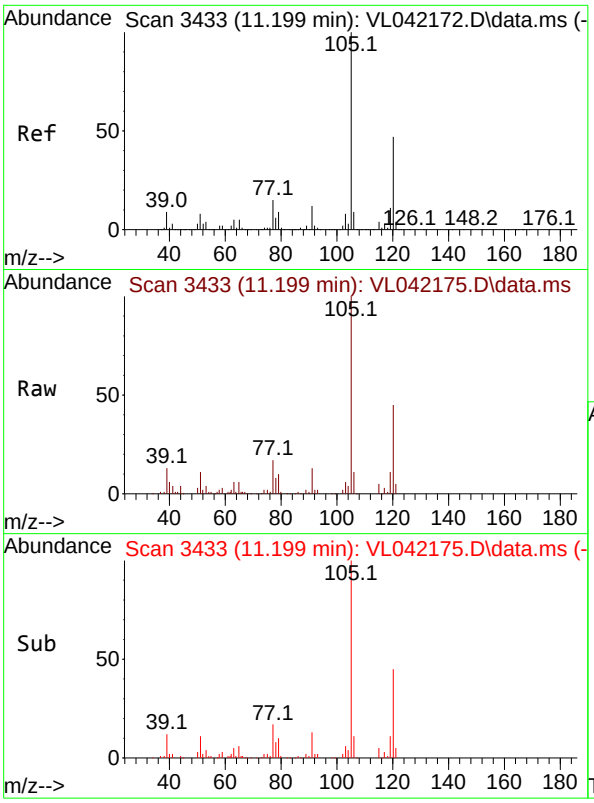


#72
4-Ethyltoluene
Concen: 0.518 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 44473

Ion	Ratio	Lower	Upper
105	100		
120	32.3	23.4	35.0
91	14.9	10.3	15.5
77	17.8	11.4	17.2#



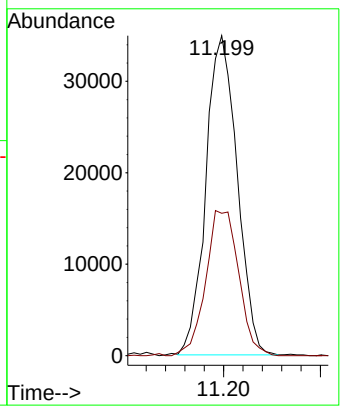


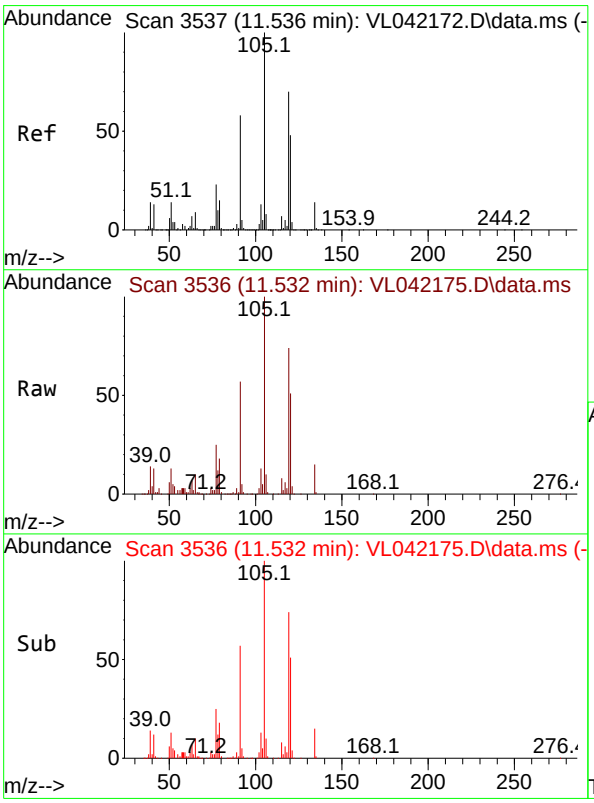
#73
1,3,5-Trimethylbenzene
Concen: 0.523 ppbv
RT: 11.199 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 39190

Ion	Ratio	Lower	Upper
105	100		
120	44.6	37.4	56.0

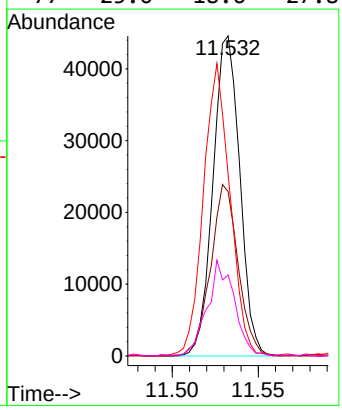


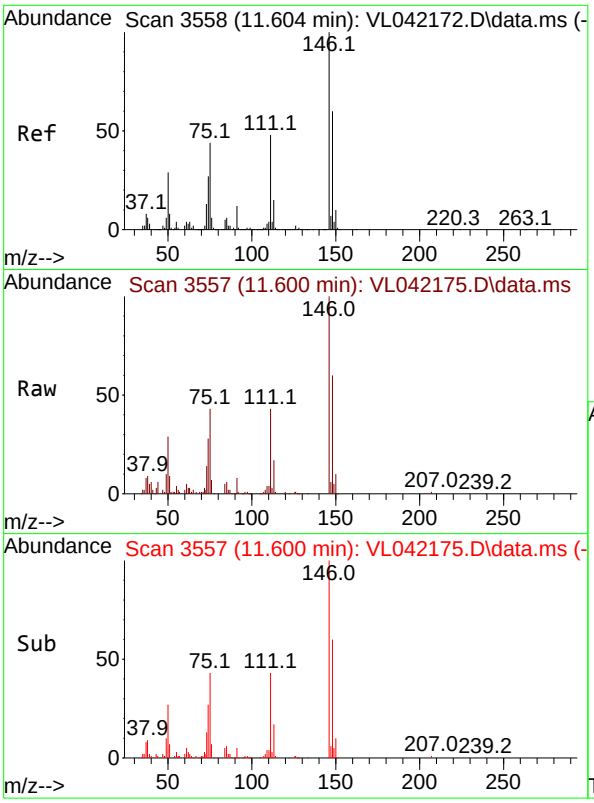


#74
1,2,4-Trimethylbenzene
Concen: 0.560 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:105 Resp: 48370

Ion	Ratio	Lower	Upper
105	100		
120	51.3	38.6	58.0
91	56.5	46.2	69.2
77	25.0	18.6	27.8



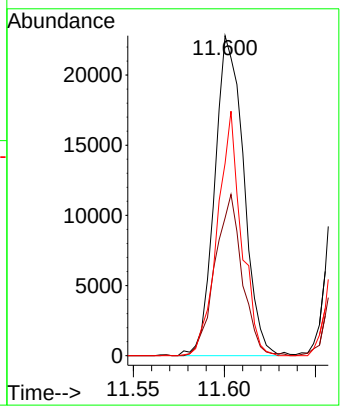


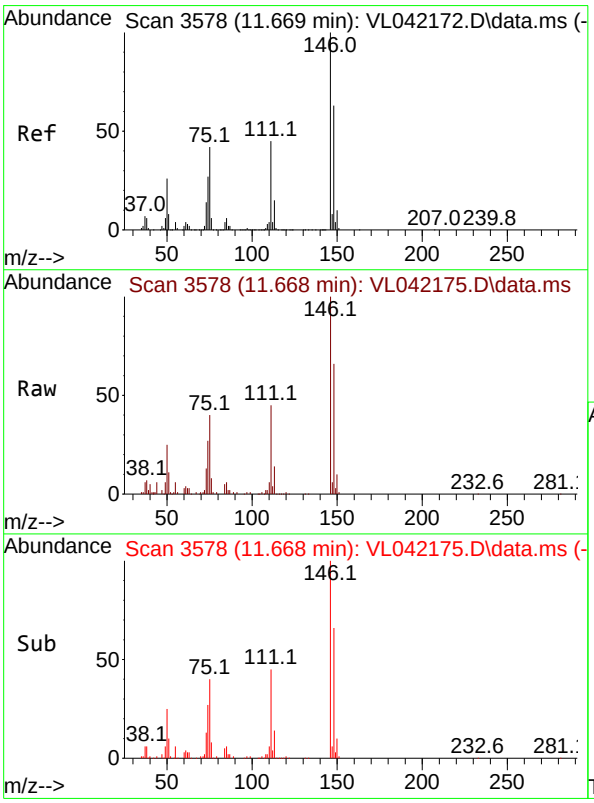
#75
1,3-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.600 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 25122

Ion	Ratio	Lower	Upper
146	100		
111	47.5	23.8	71.2
148	63.7	31.9	95.9

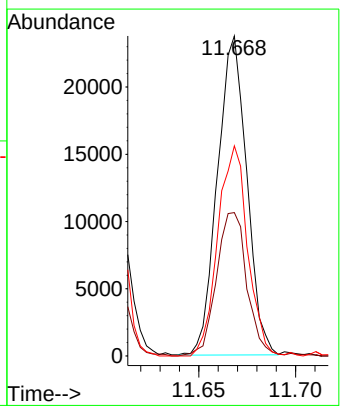


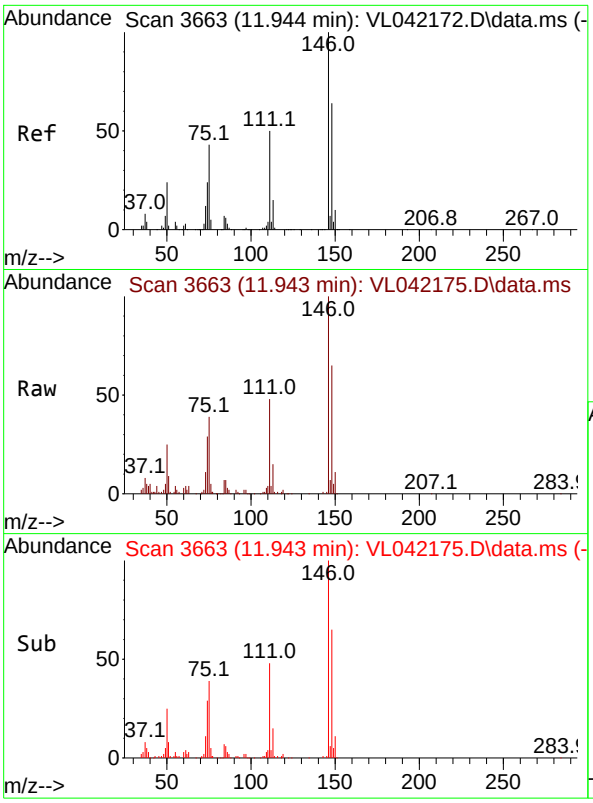


#76
1,4-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:146 Resp: 24991

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.0	69.0
148	67.5	31.9	95.7



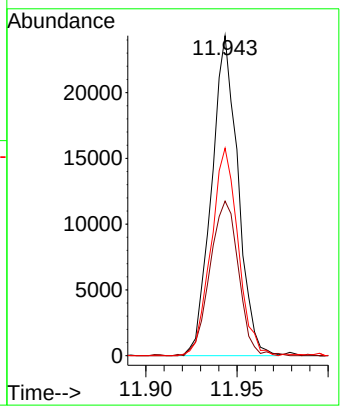


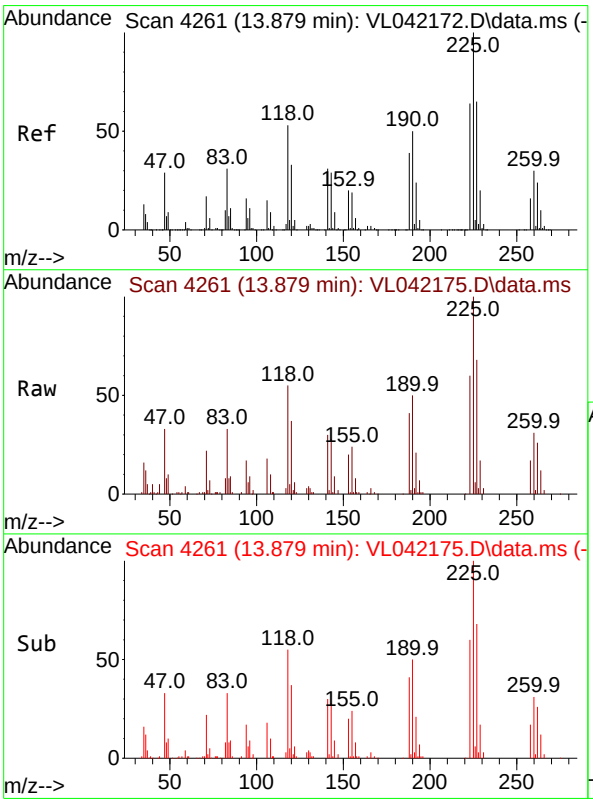
#77
1,2-Dichlorobenzene
Concen: 0.532 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 24548

Ion	Ratio	Lower	Upper
146	100		
111	52.2	24.8	74.3
148	66.6	31.6	94.8

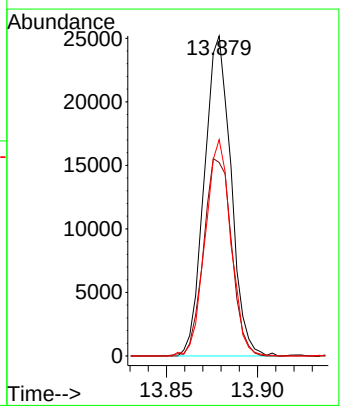


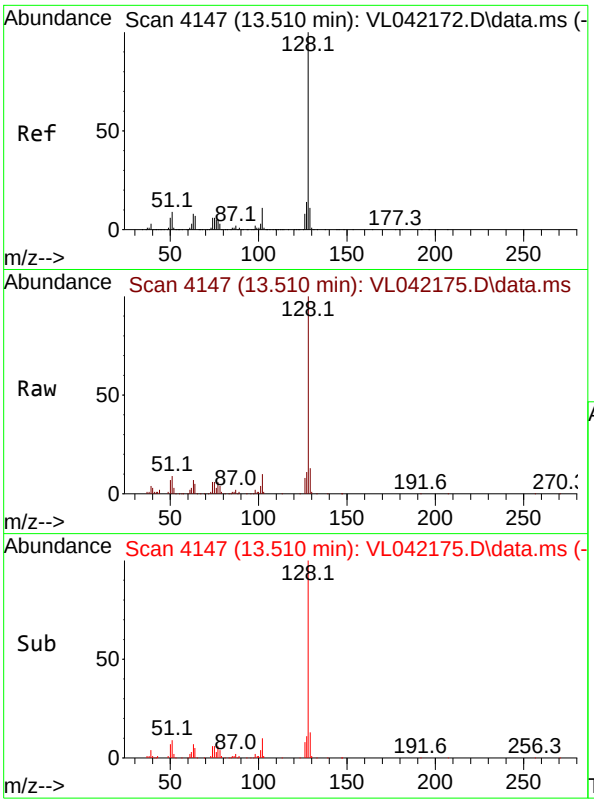


#78
Hexachloro-1,3-Butadiene
Concen: 0.546 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:225 Resp: 25636

Ion	Ratio	Lower	Upper
225	100		
223	64.5	50.6	76.0
227	64.8	51.2	76.8



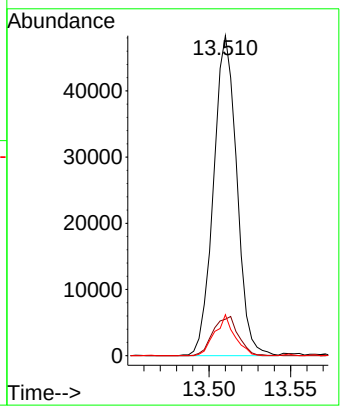


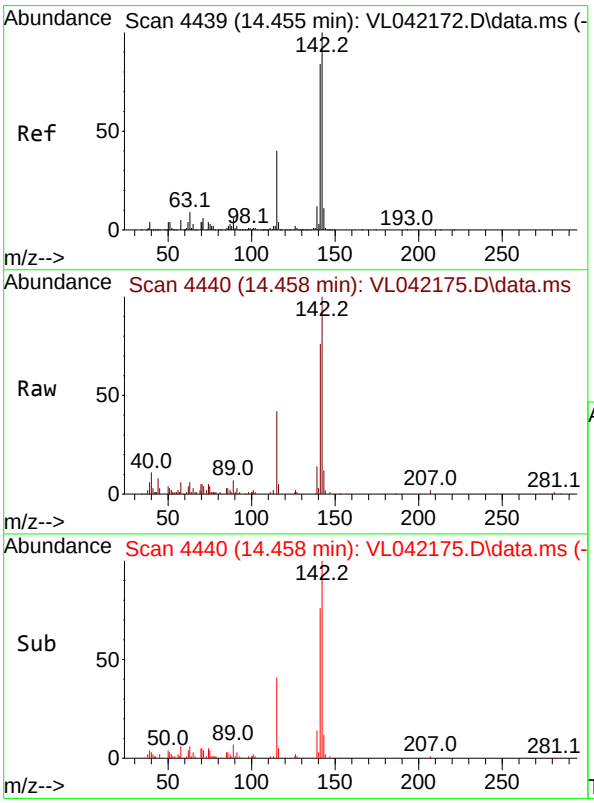
#79
Naphthalene
Concen: 0.508 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:128 Resp: 47990

Ion	Ratio	Lower	Upper
128	100		
127	11.4	10.8	16.2
129	12.8	9.0	13.4

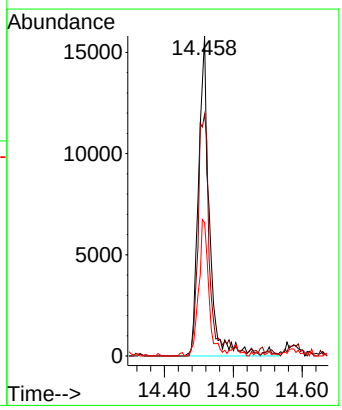


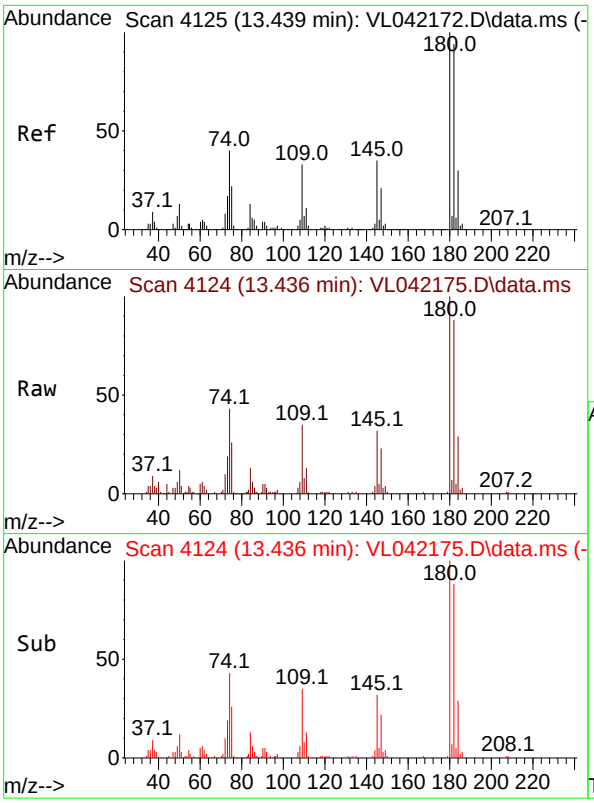


#80
Naphthalene,2-methyl-
Concen: 0.380 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Tgt Ion:142 Resp: 17486

Ion	Ratio	Lower	Upper
142	100		
141	83.3	66.3	99.5
115	43.5	31.6	47.4



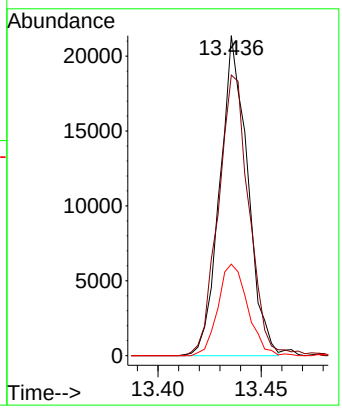


#81
1,2,4-Trichlorobenzene
Concen: 0.457 ppbv
RT: 13.436 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042175.D
Acq: 27 Mar 2025 10:01

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:180 Resp: 19924

Ion	Ratio	Lower	Upper
180	100		
182	97.9	75.1	112.7
184	31.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	180740	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	528028	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	481506	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	398069	10.067	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.554	85	2353	0.088	ppbv	100
3) Chlorodifluoromethane	1.476	51	3006	0.110	ppbv #	40
4) Chloromethane	1.531	50	1330	0.122	ppbv #	53
5) Vinyl Chloride	1.580	62	1274	0.115	ppbv #	42
6) Bromomethane	1.667	94	537	0.109	ppbv #	73
7) Chloroethane	1.703	64	616	0.141	ppbv #	49
8) Dichlorotetrafluoroethane	1.554	85	2353	0.104	ppbv	92
9) Propene	1.486	41	1664	0.135	ppbv #	44
11) Trichlorofluoromethane	1.878	101	2644	0.102	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.136	101	2551	0.120	ppbv #	81
13) Ethanol	1.716	45	721	0.750	ppbv	60
14) Bromoethene	1.780	108	956	0.117	ppbv #	11
15) Acetone	1.835	43	5179	0.205	ppbv	92
16) 1,3-Butadiene	1.609	39	1912	0.168	ppbv	94
17) tert-Butyl alcohol	2.046	59	3546	0.113	ppbv #	30
18) 1,1-Dichloroethene	2.033	96	1155	0.116	ppbv #	72
19) Isopropyl Alcohol	1.891	45	1838	0.129	ppbv #	49
20) Methylene Chloride	2.059	84	2388	0.254	ppbv #	88
21) Allyl Chloride	2.091	41	3040	0.171	ppbv #	77
22) trans-1,2-Dichloroethene	2.722	96	1512	0.130	ppbv	99
23) Vinyl Acetate	2.457	43	1746	0.166	ppbv #	1
24) 1,1-Dichloroethane	2.408	63	2446	0.114	ppbv #	92
25) Ethyl Acetate	2.842	43	6359	0.097	ppbv #	80
26) Hexane	2.823	57	3126	0.123	ppbv #	5
27) Carbon Disulfide	2.149	76	3075	0.113	ppbv #	1
28) Methyl tert-Butyl Ether	2.438	73	875	0.055	ppbv #	49
29) Chloroform	2.845	83	4120	0.111	ppbv	92
30) Cyclohexane	3.855	84	1113	0.051	ppbv #	1
31) cis-1,2-Dichloroethene	2.722	61	2587	0.101	ppbv	95
32) 1,1,1-Trichloroethane	3.366	97	2773	0.065	ppbv #	50
34) 2-Butanone	2.564	43	4331	0.113	ppbv	91
35) Carbon Tetrachloride	3.768	117	3523	0.087	ppbv #	71
36) Benzene	3.658	78	5031	0.096	ppbv #	82
37) 1,2-Dichloroethane	3.218	62	2942	0.098	ppbv	97
39) 1,2-Dichloropropane	3.959	63	135792	7.123	ppbv #	22
40) 1,4-Dioxane	4.616	88	843	0.085	ppbv #	25
42) Bromodichloromethane	4.490	83	4103	0.099	ppbv #	94
43) Methyl Methacrylate	4.878	69	930	0.042	ppbv #	1
45) t-1,3-Dichloropropene	6.419	75	1449	0.061	ppbv #	64
48) Dibromochloromethane	7.383	129	2284	0.067	ppbv	68
49) Bromoform	9.480	173	2928	0.095	ppbv	94
51) 2-Hexanone	7.448	43	4284	0.085	ppbv #	87
53) Toluene	6.930	91	3144	0.051	ppbv #	25

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) 1,2-Dibromoethane	7.652	107	1864	0.066	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.924	131	2963	0.112	ppbv	#	1
57) Chlorobenzene	8.917	112	4904	0.107	ppbv	#	74
58) Ethyl Benzene	9.354	91	8648	0.101	ppbv		93
59) m/p-Xylene	9.545	91	6005	0.088	ppbv	#	12
60) o-Xylene	9.959	91	8048	0.118	ppbv		96
61) Styrene	9.872	104	1723	0.051	ppbv	#	25
62) Isopropylbenzene	10.536	105	10359	0.101	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.959	83	1910	0.046	ppbv	#	25
64) n-propylbenzene	10.989	120	2375	0.090	ppbv	#	62
65) tert-Butylbenzene	11.526	119	9418	0.099	ppbv		94
66) Benzyl Chloride	11.617	91	844	0.084	ppbv	#	86
67) sec-Butylbenzene	11.765	105	13775	0.105	ppbv		96
69) p-Isopropyltoluene	11.924	119	11366	0.100	ppbv		98
70) n-Butylbenzene	12.280	91	10697	0.092	ppbv		97
71) 2-Chlorotoluene	10.898	91	8347	0.105	ppbv		98
72) 4-Ethyltoluene	11.125	105	8579	0.101	ppbv	#	84
73) 1,3,5-Trimethylbenzene	11.202	105	8407	0.113	ppbv		91
74) 1,2,4-Trimethylbenzene	11.536	105	10341	0.121	ppbv	#	95
75) 1,3-Dichlorobenzene	11.604	146	4426	0.094	ppbv		94
76) 1,4-Dichlorobenzene	11.672	146	4552	0.097	ppbv		95
77) 1,2-Dichlorobenzene	11.947	146	4867	0.106	ppbv		93
78) Hexachloro-1,3-Butadiene	13.882	225	4755	0.102	ppbv		94
79) Naphthalene	13.513	128	7882	0.084	ppbv	#	92
80) Naphthalene,2-methyl-	14.471	142	2174	0.048	ppbv	#	78
81) 1,2,4-Trichlorobenzene	13.442	180	2557	0.059	ppbv		98

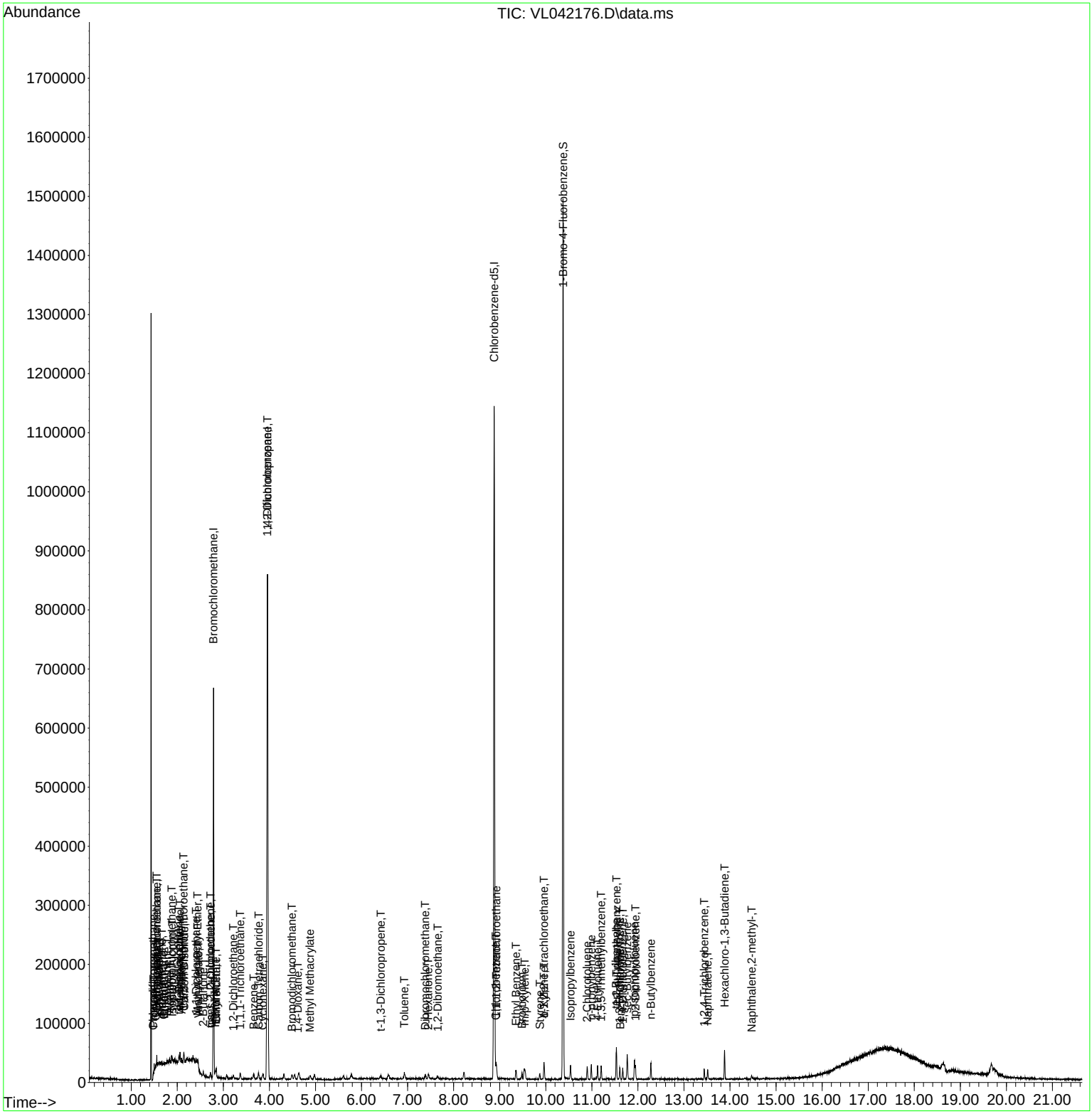
(#) = qualifier out of range (m) = manual integration (+) = signals summed

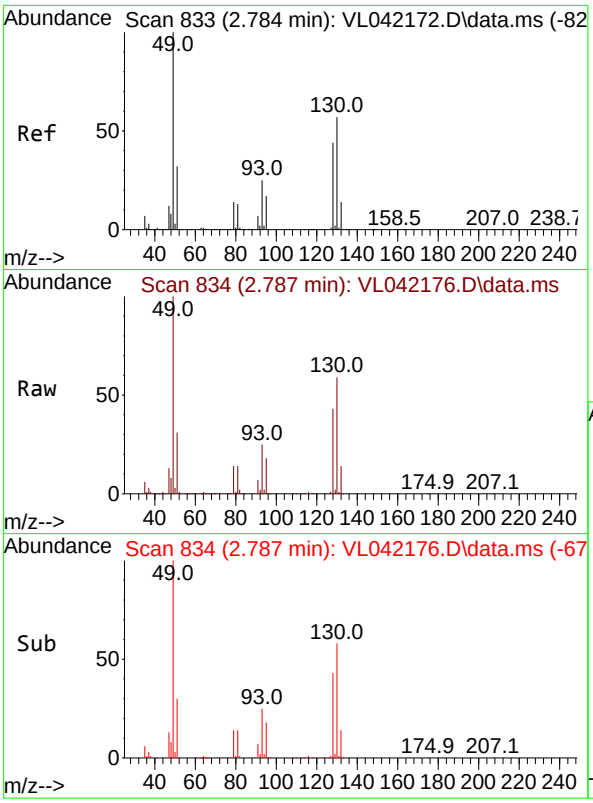
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042176.D
Acq On : 27 Mar 2025 10:32
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Mar 28 01:35:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



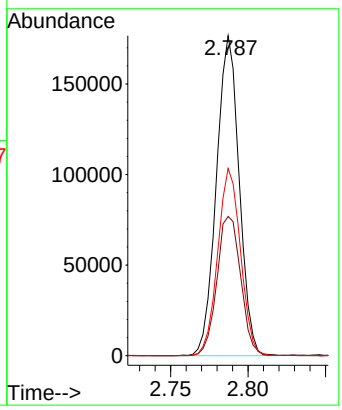


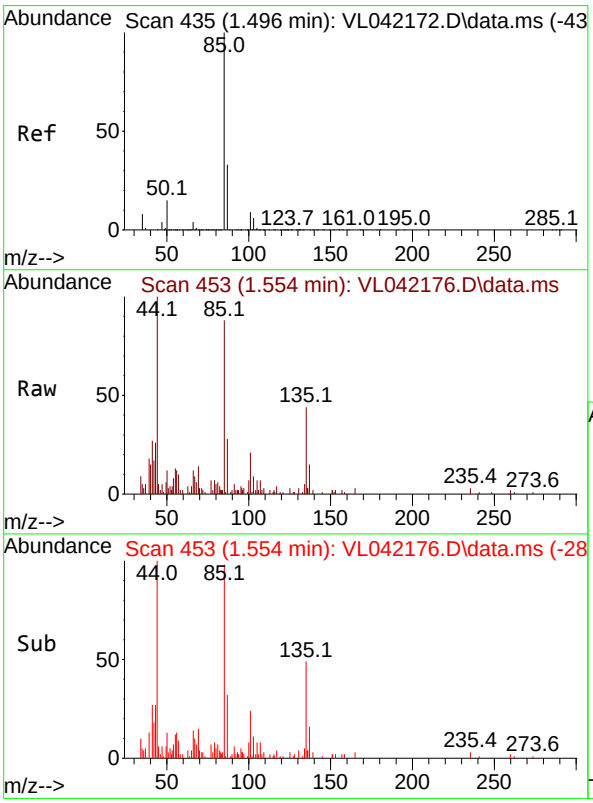
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 49 Resp: 180740

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.9	68.5
130	58.5	28.8	86.4

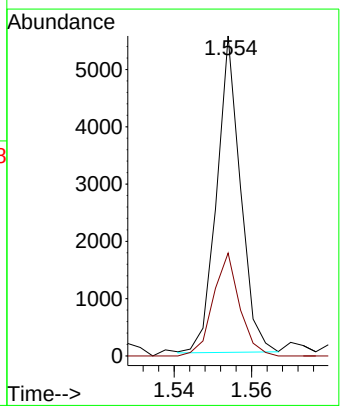


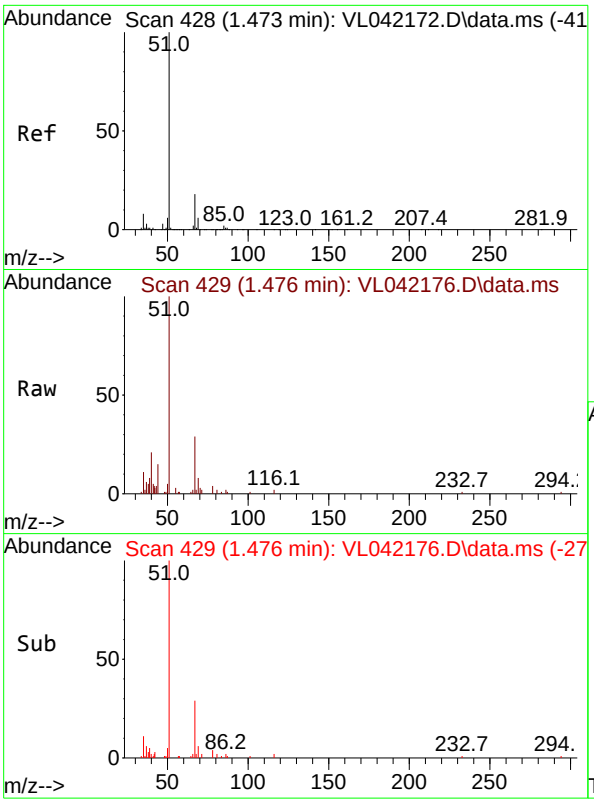


#2
Dichlorodifluoromethane
Concen: 0.088 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.058 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 85 Resp: 2353

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1



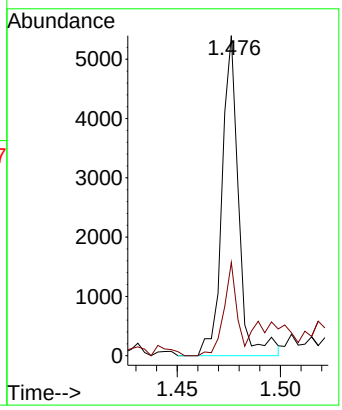


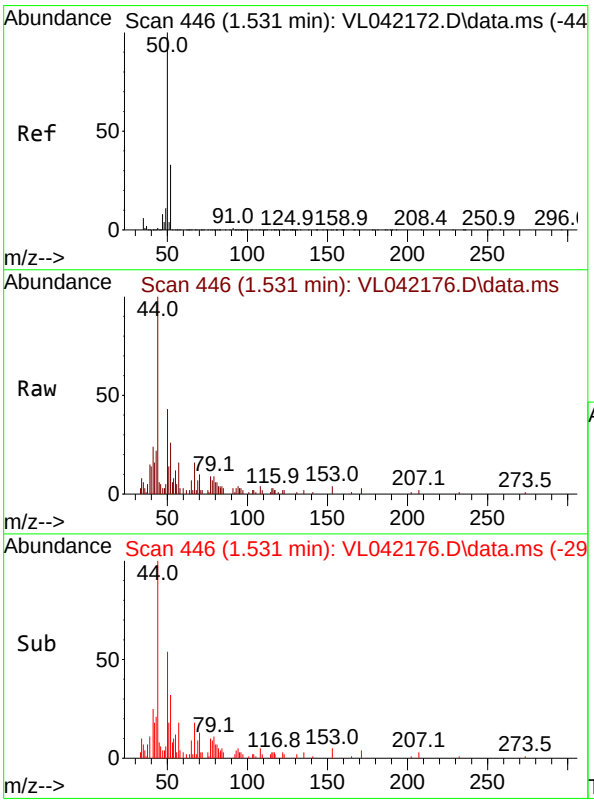
#3
Chlorodifluoromethane
Concen: 0.110 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 51 Resp: 3006

Ion	Ratio	Lower	Upper
51	100		
67	45.8	15.0	22.6#

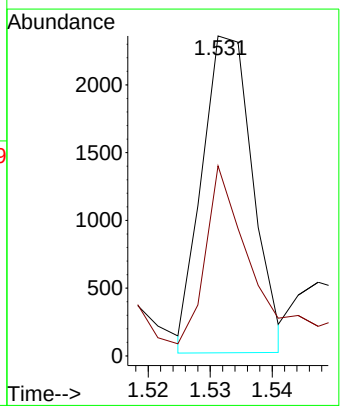


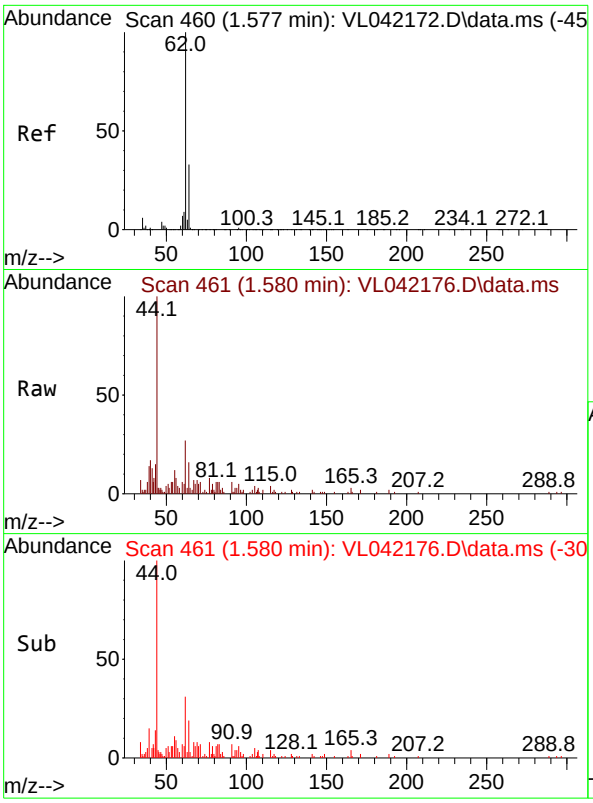


#4
Chloromethane
Concen: 0.122 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 50 Resp: 1330

Ion	Ratio	Lower	Upper
50	100		
52	59.3	26.1	39.1#



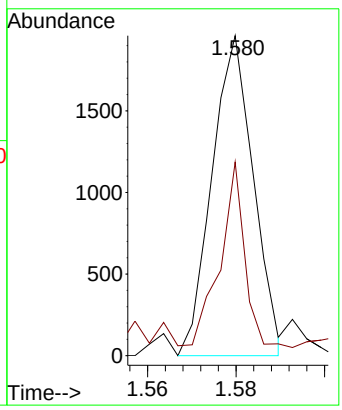


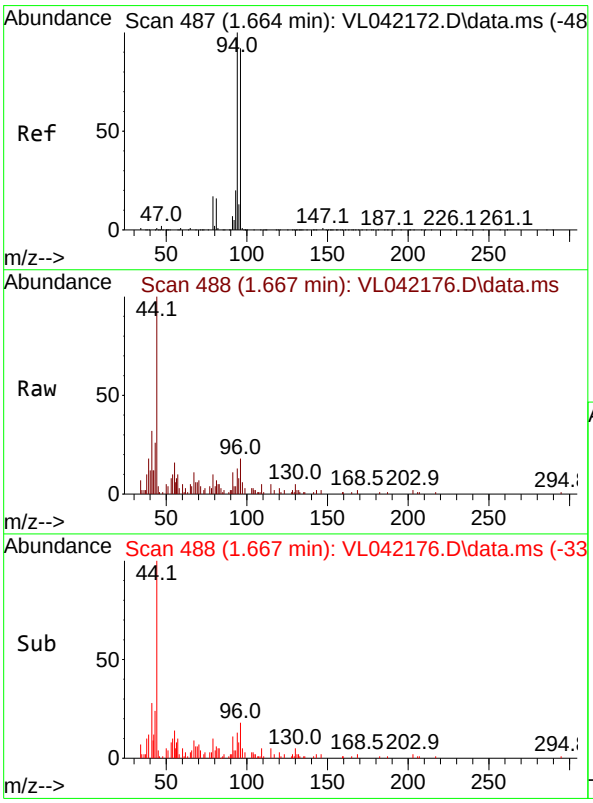
#5
Vinyl Chloride
Concen: 0.115 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 62 Resp: 1274

Ion	Ratio	Lower	Upper
62	100		
64	66.4	26.6	40.0#

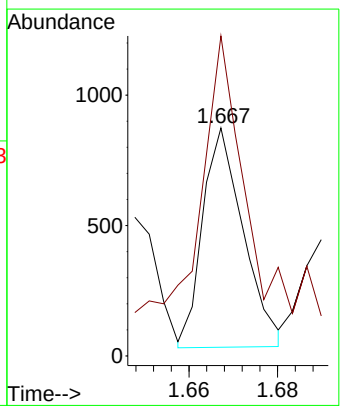


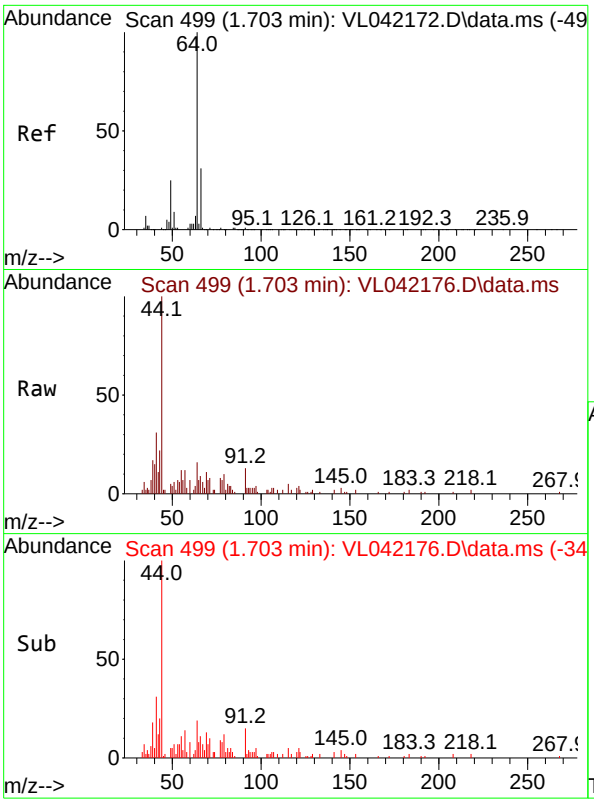


#6
Bromomethane
Concen: 0.109 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 94 Resp: 537

Ion	Ratio	Lower	Upper
94	100		
96	116.6	73.1	109.7#



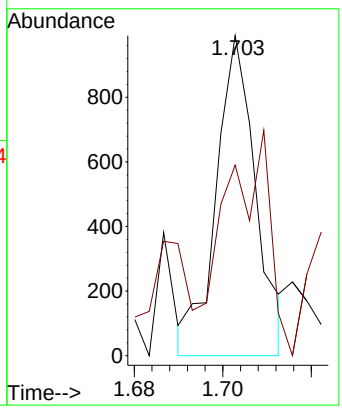


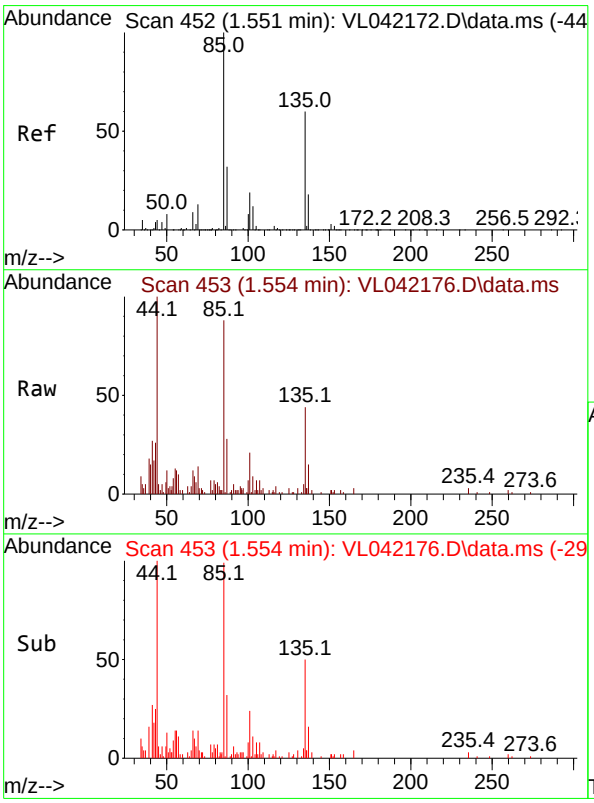
#7
Chloroethane
Concen: 0.141 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 64 Resp: 616

Ion	Ratio	Lower	Upper
64	100		
66	59.5	25.2	37.8#

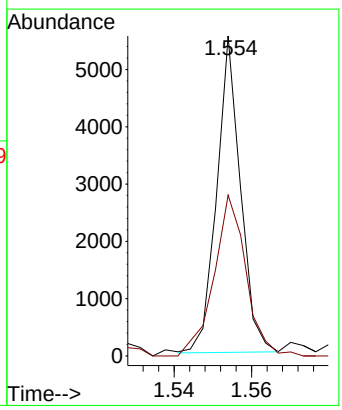


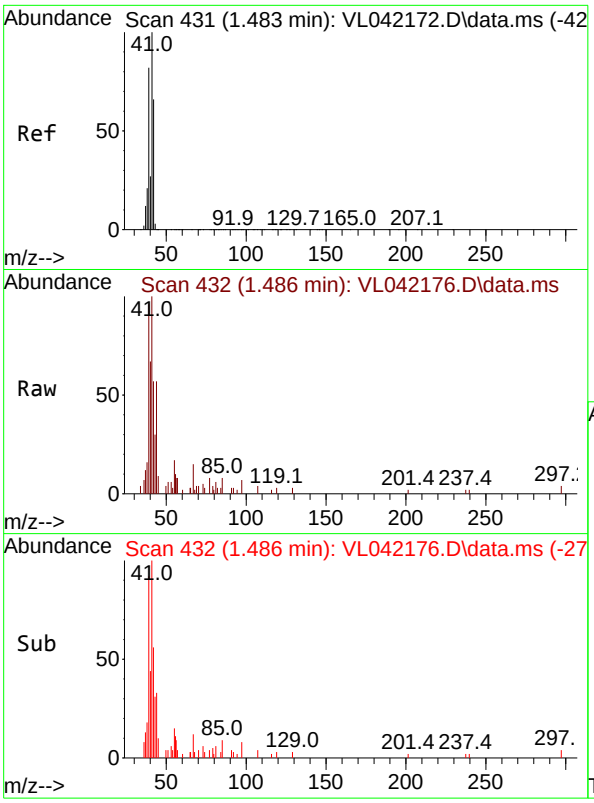


#8
Dichlorotetrafluoroethane
Concen: 0.104 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 85 Resp: 2353

Ion	Ratio	Lower	Upper
85	100		
135	71.7	52.4	78.6



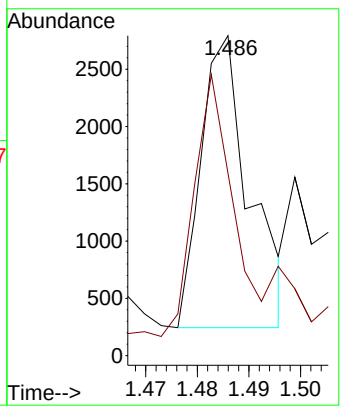


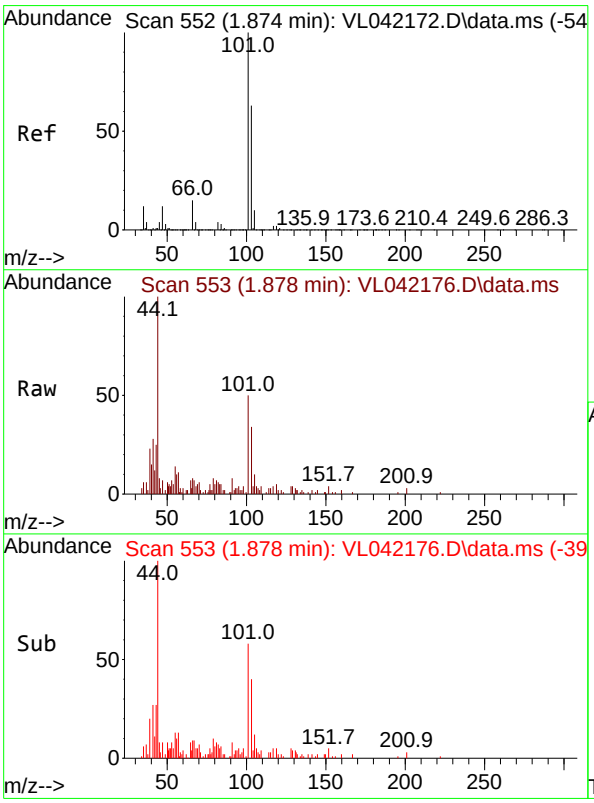
#9
Propene
Concen: 0.135 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 41 Resp: 1664

Ion	Ratio	Lower	Upper
41	100		
42	115.3	55.4	83.2#

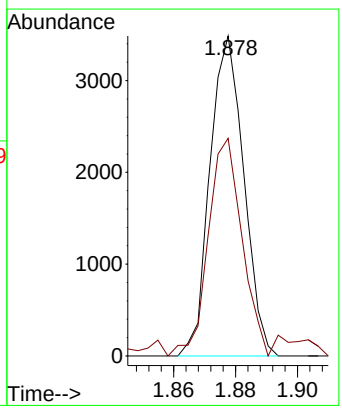


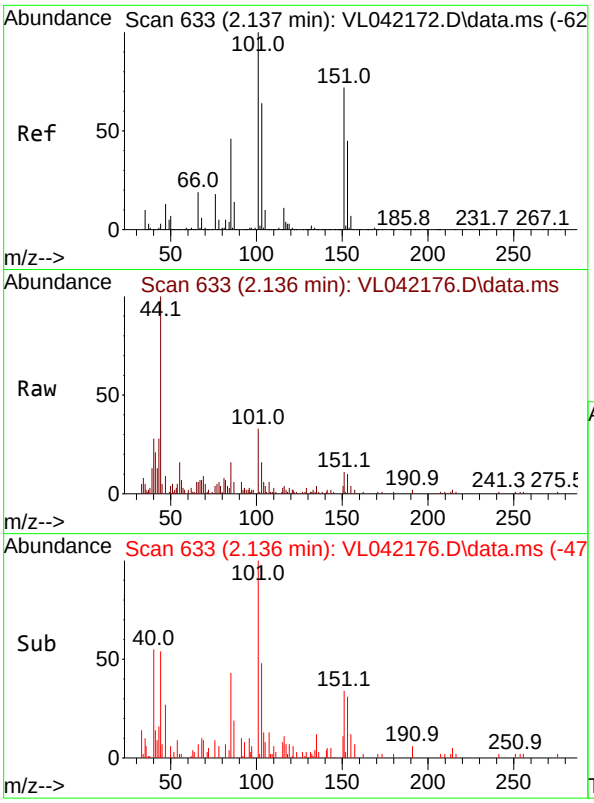


#11
Trichlorofluoromethane
Concen: 0.102 ppbv
RT: 1.878 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:101 Resp: 2644

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2



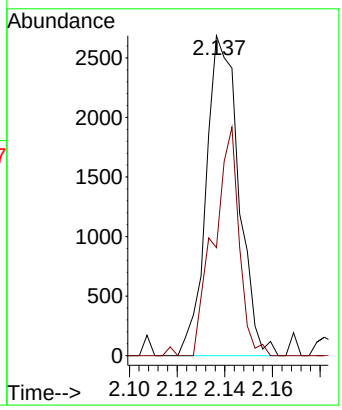


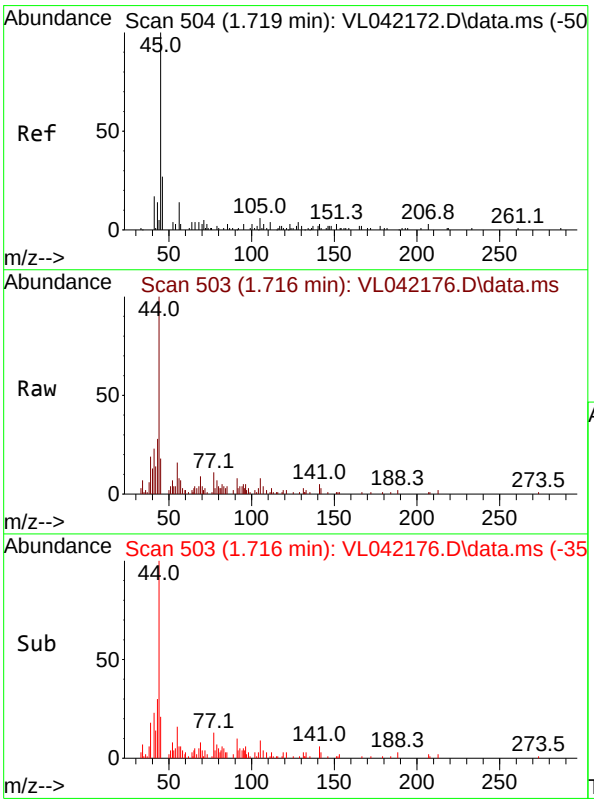
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.120 ppbv
RT: 2.136 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:101 Resp: 2551

Ion	Ratio	Lower	Upper
101	100		
151	55.7	57.1	85.7#

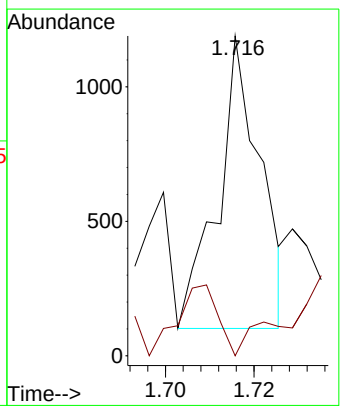


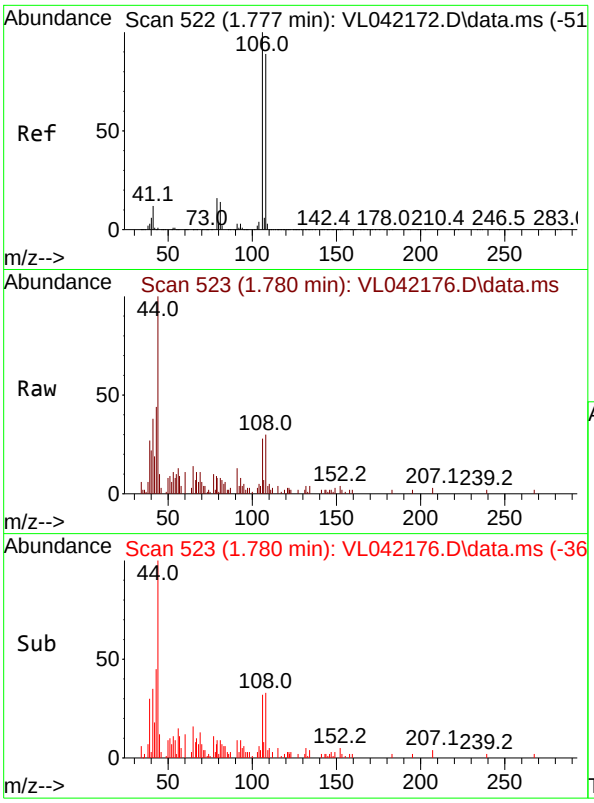


#13
Ethanol
Concen: 0.750 ppbv
RT: 1.716 min Scan# 503
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 45 Resp: 721

Ion	Ratio	Lower	Upper
45	100		
46	22.9	20.2	80.8



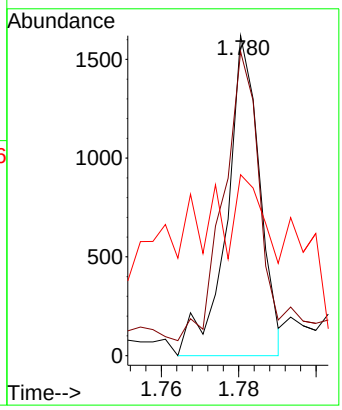


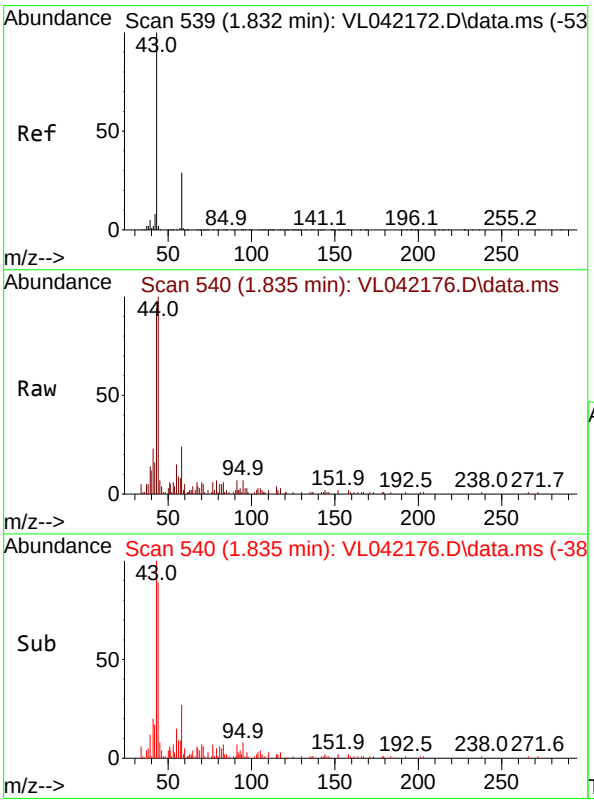
#14
Bromoethene
Concen: 0.117 ppbv
RT: 1.780 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:108 Resp: 956

Ion	Ratio	Lower	Upper
108	100		
106	177.0	86.8	130.2#
79	120.6	15.0	22.6#

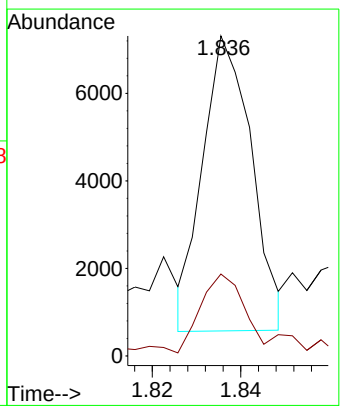


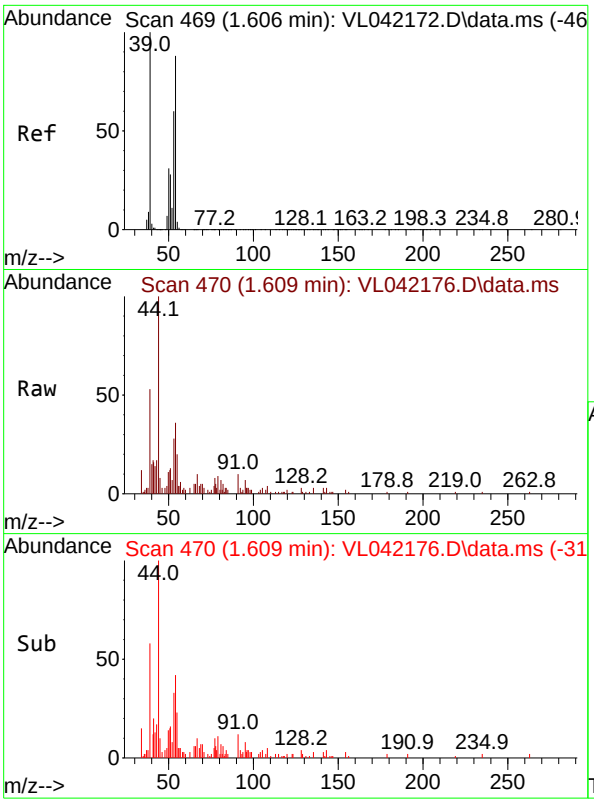


#15
Acetone
Concen: 0.205 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 5179

Ion	Ratio	Lower	Upper
43	100		
58	33.1	23.2	34.8



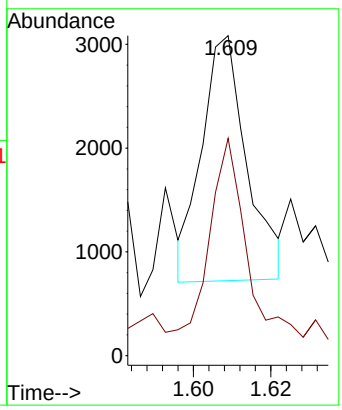


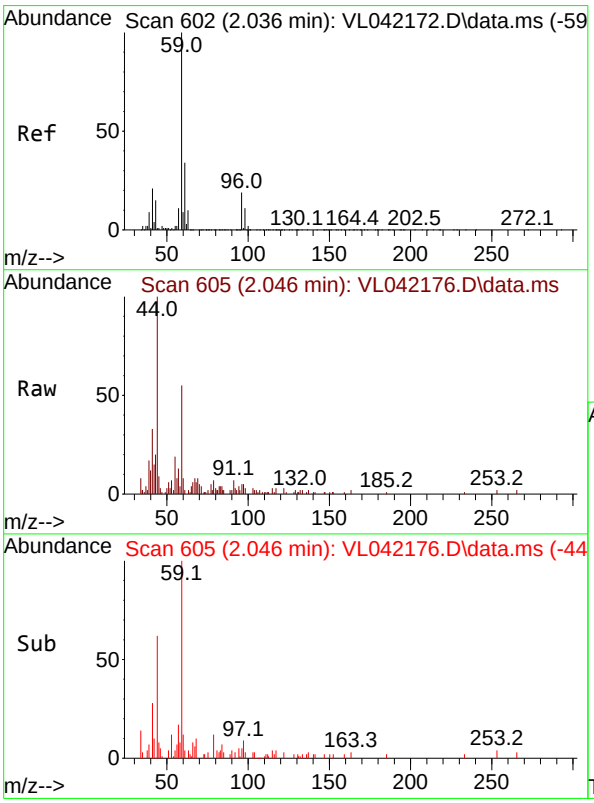
#16
1,3-Butadiene
Concen: 0.168 ppbv
RT: 1.609 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 39 Resp: 1912

Ion	Ratio	Lower	Upper
39	100		
54	70.7	60.7	91.1

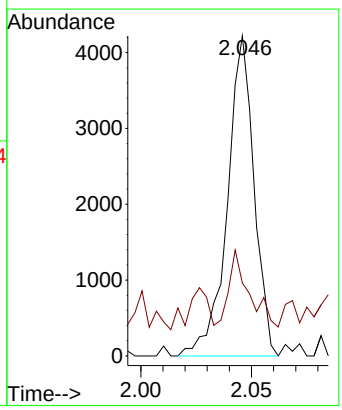


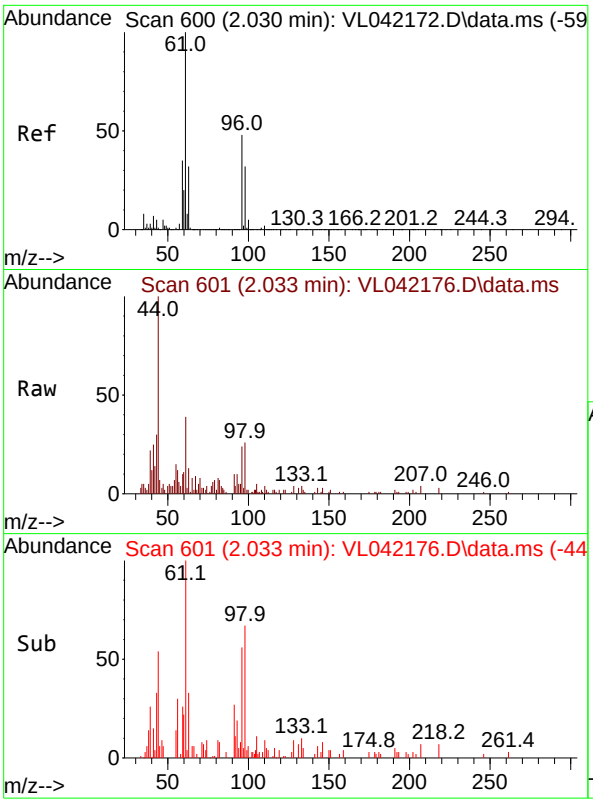


#17
tert-Butyl alcohol
Concen: 0.113 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 59 Resp: 3546

Ion	Ratio	Lower	Upper
59	100		
57	37.8	8.9	13.3#



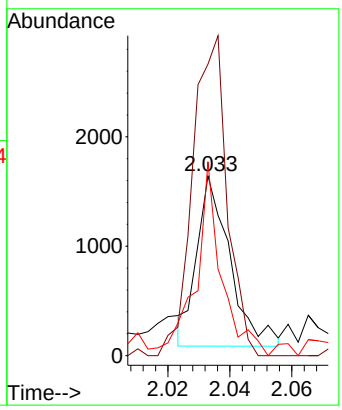


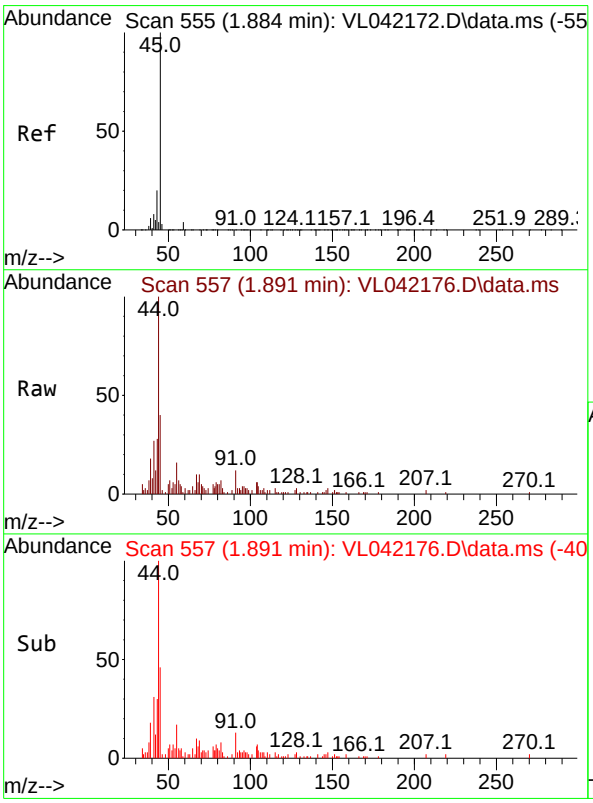
#18
1,1-Dichloroethene
Concen: 0.116 ppbv
RT: 2.033 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1155

Ion	Ratio	Lower	Upper
96	100		
61	179.9	167.6	251.4
98	112.6	53.5	80.3#

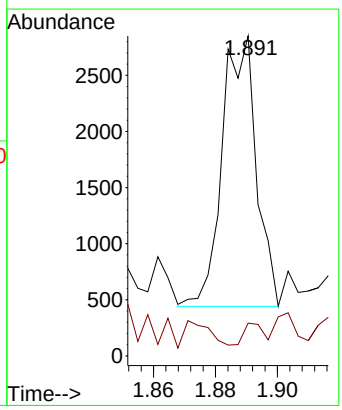


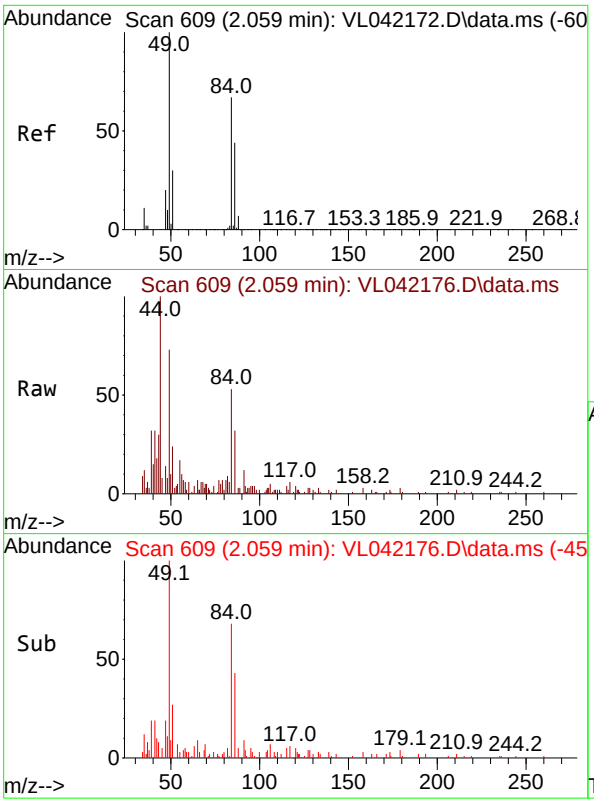


#19
Isopropyl Alcohol
Concen: 0.129 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 45 Resp: 1838

Ion	Ratio	Lower	Upper
45	100		
58	12.5	36.9	55.3#



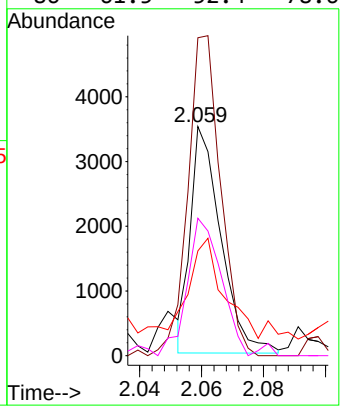


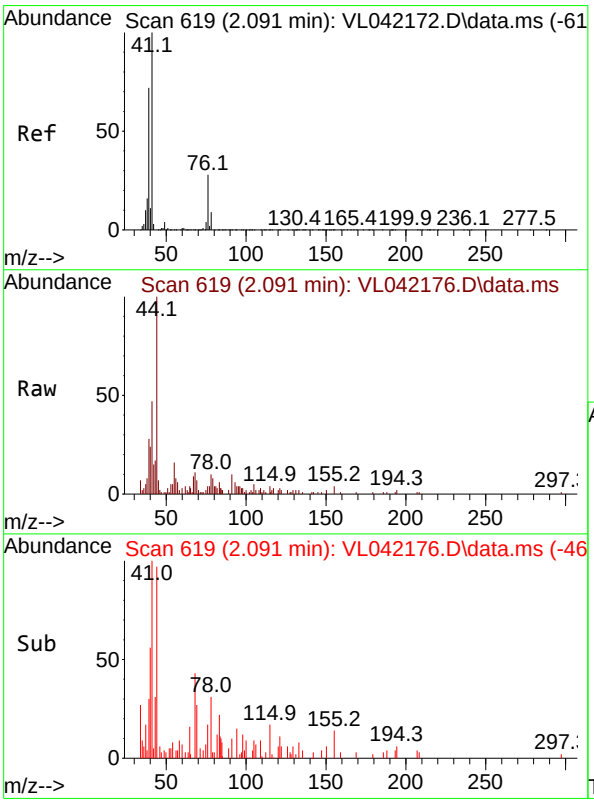
#20
Methylene Chloride
Concen: 0.254 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 84 Resp: 2388

Ion	Ratio	Lower	Upper
84	100		
49	132.5	120.2	180.4
51	37.3	37.4	56.0#
86	61.5	52.4	78.6

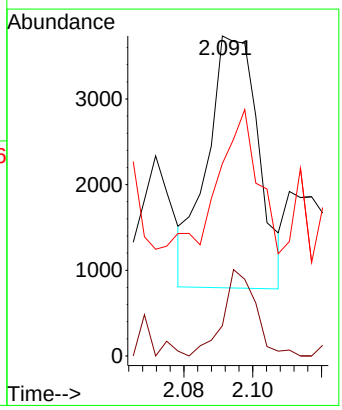


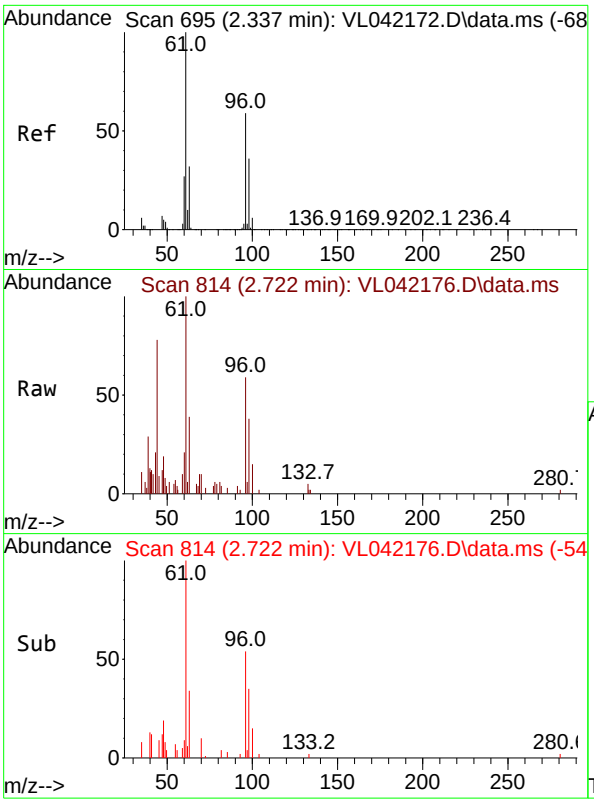


#21
Allyl Chloride
Concen: 0.171 ppbv
RT: 2.091 min Scan# 619
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 41 Resp: 3040

Ion	Ratio	Lower	Upper
41	100		
76	21.8	24.1	36.1#
39	98.7	61.1	91.7#



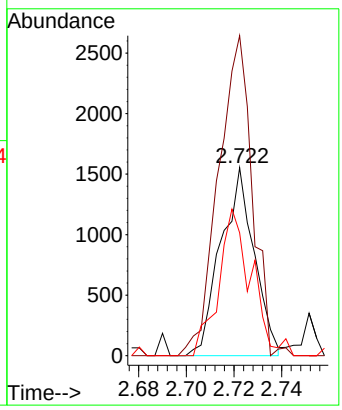


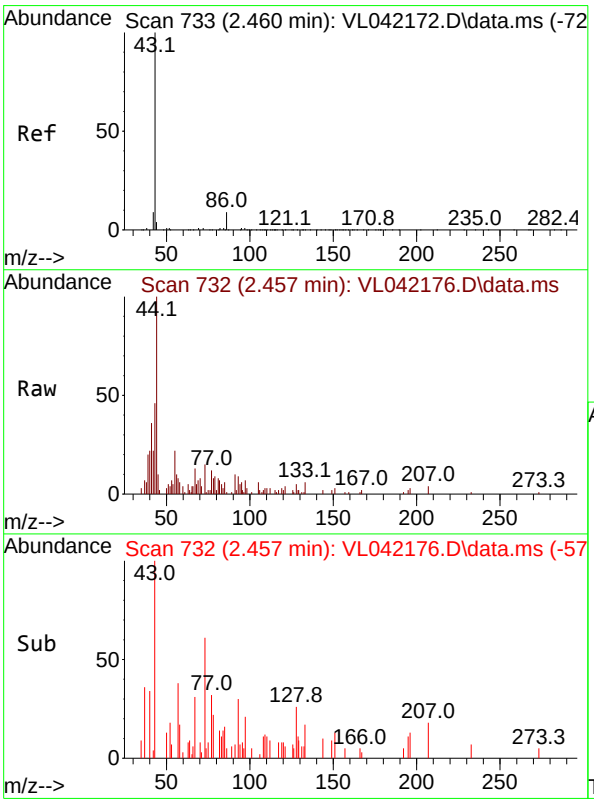
#22
trans-1,2-Dichloroethene
Concen: 0.130 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.385 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1512

Ion	Ratio	Lower	Upper
96	100		
61	170.3	136.6	204.8
98	65.4	49.4	74.2

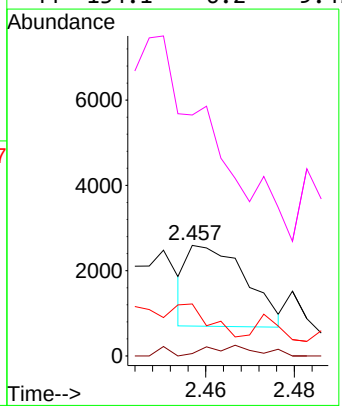


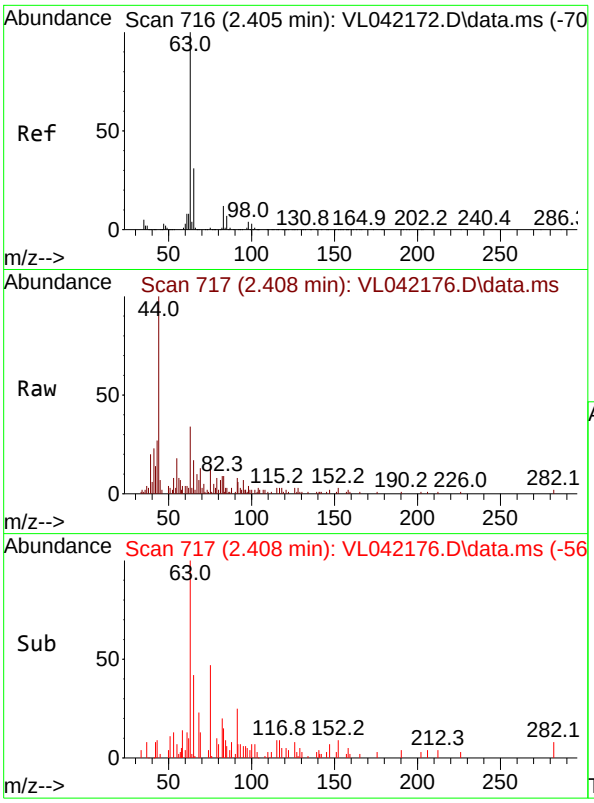


#23
Vinyl Acetate
Concen: 0.166 ppbv
RT: 2.457 min Scan# 732
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 1746

Ion	Ratio	Lower	Upper
43	100		
86	3.5	5.5	8.3#
42	32.0	8.6	13.0#
44	134.1	6.2	9.4#



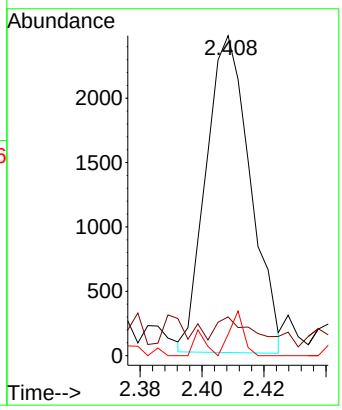


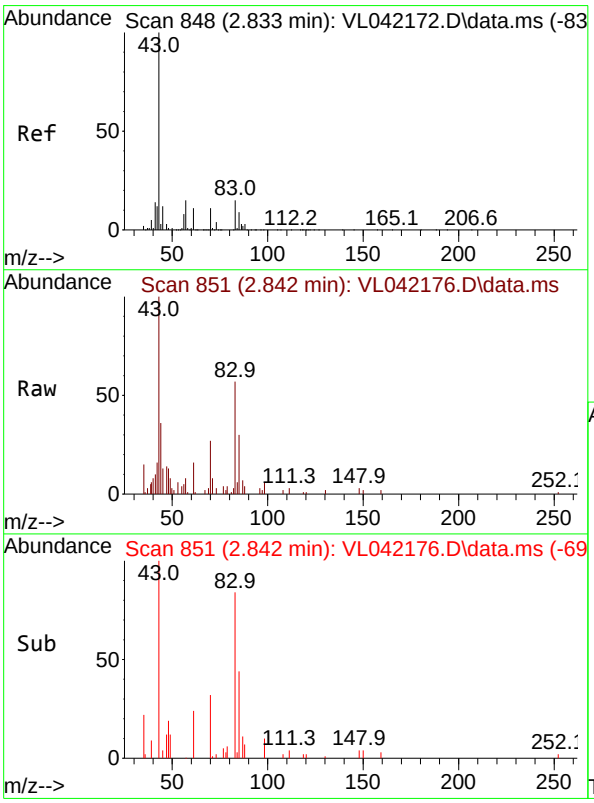
#24
1,1-Dichloroethane
Concen: 0.114 ppbv
RT: 2.408 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 2446

Ion	Ratio	Lower	Upper
63	100		
98	6.3	2.3	6.8
100	6.9	1.6	4.7#

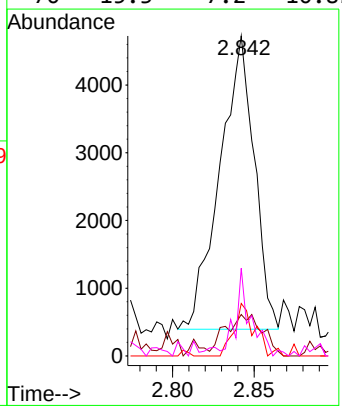


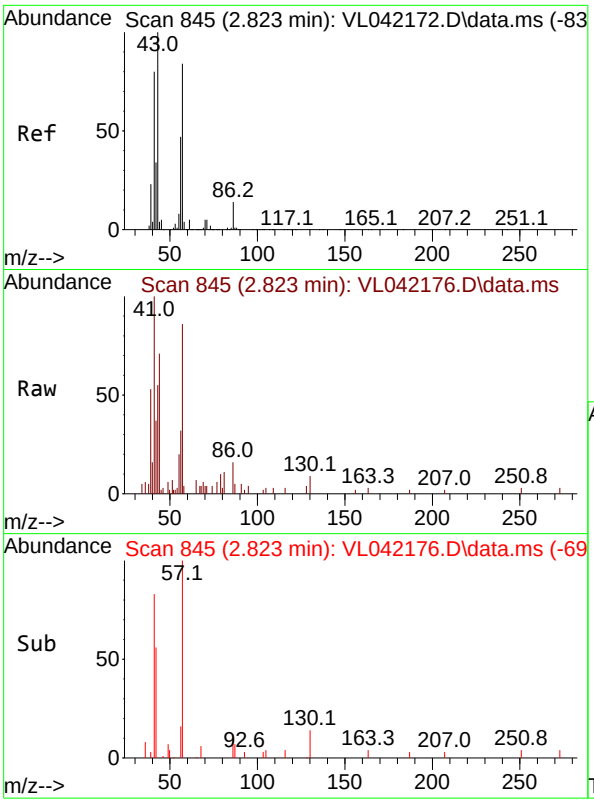


#25
Ethyl Acetate
Concen: 0.097 ppbv
RT: 2.842 min Scan# 851
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 6359

Ion	Ratio	Lower	Upper
43	100		
45	22.8	8.2	12.2#
61	11.2	7.3	10.9#
70	15.3	7.2	10.8#



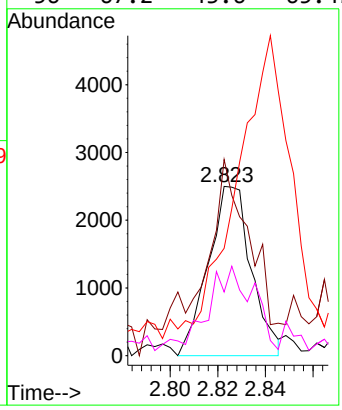


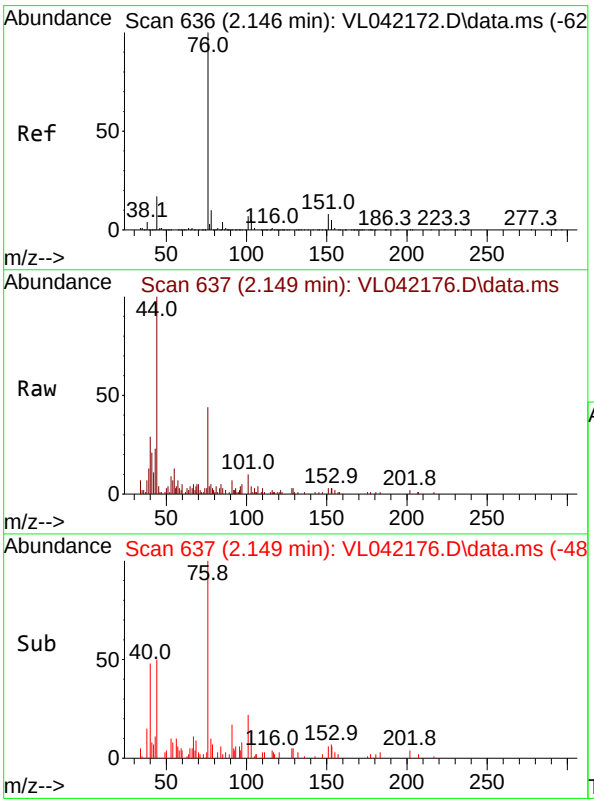
#26
Hexane
Concen: 0.123 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 57 Resp: 3126

Ion	Ratio	Lower	Upper
57	100		
41	96.0	76.6	114.8
43	0.0	207.8	311.8#
56	67.2	43.6	65.4#

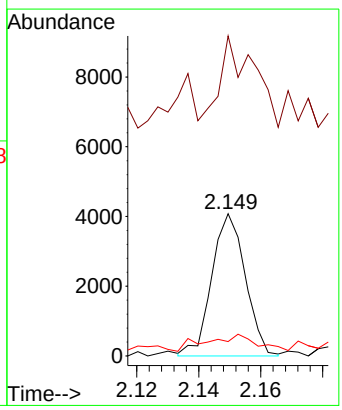


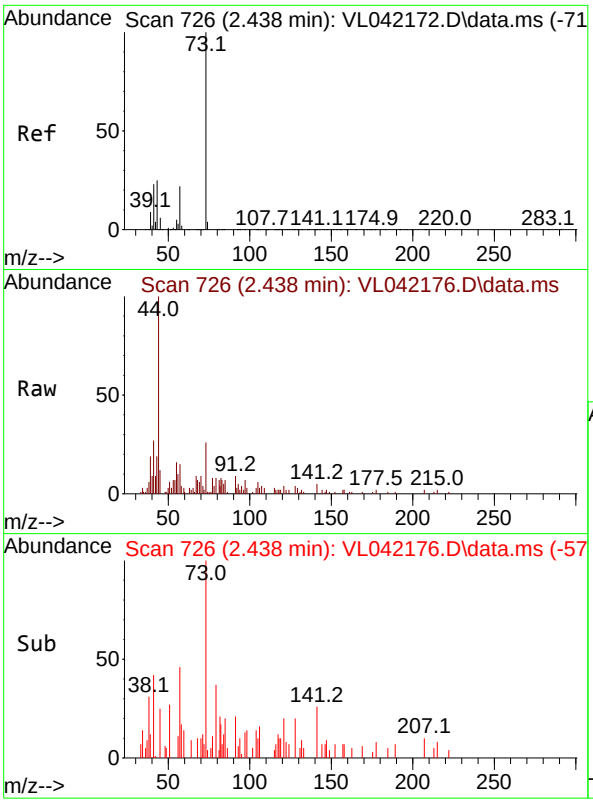


#27
Carbon Disulfide
Concen: 0.113 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 76 Resp: 3075

Ion	Ratio	Lower	Upper
76	100		
44	436.3	14.7	22.1#
78	28.7	9.3	13.9#



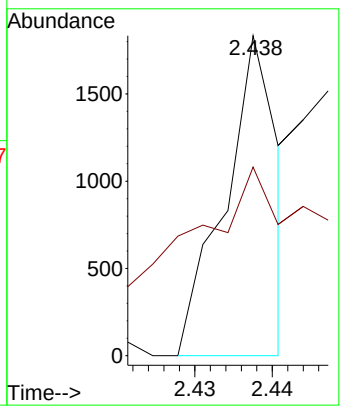


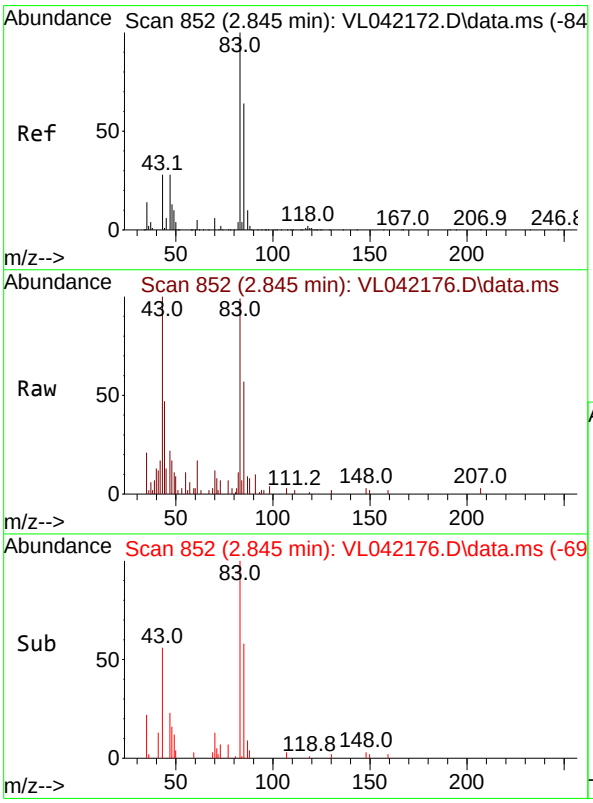
#28
Methyl tert-Butyl Ether
Concen: 0.055 ppbv
RT: 2.438 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 73 Resp: 875

Ion	Ratio	Lower	Upper
73	100		
57	0.0	20.5	30.7#

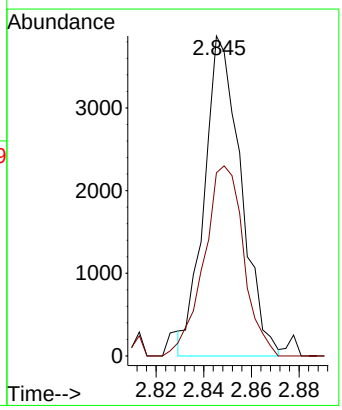


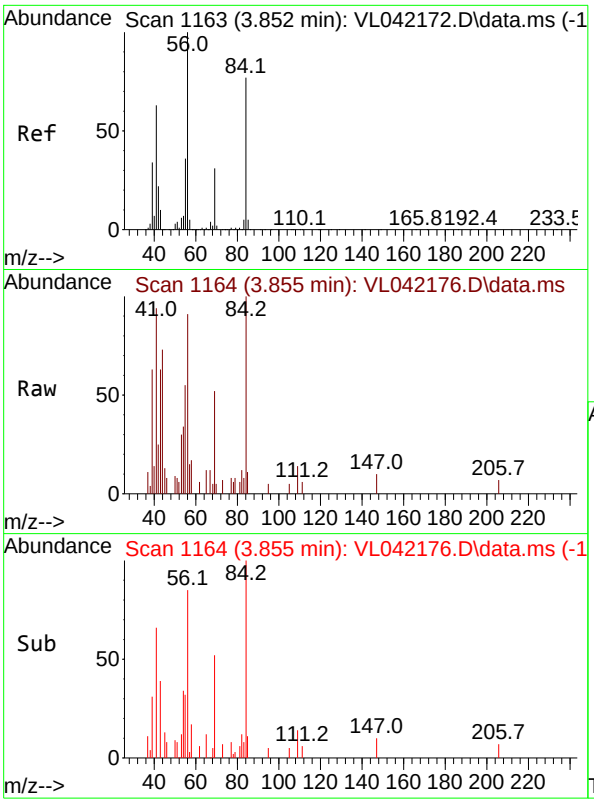


#29
Chloroform
Concen: 0.111 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 83 Resp: 4120

Ion	Ratio	Lower	Upper
83	100		
85	58.4	51.4	77.2



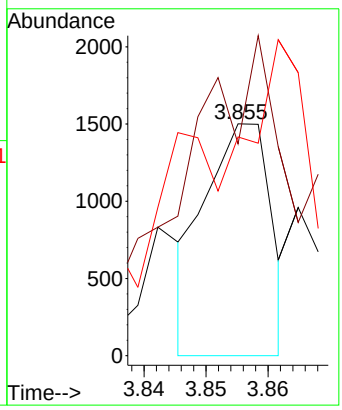


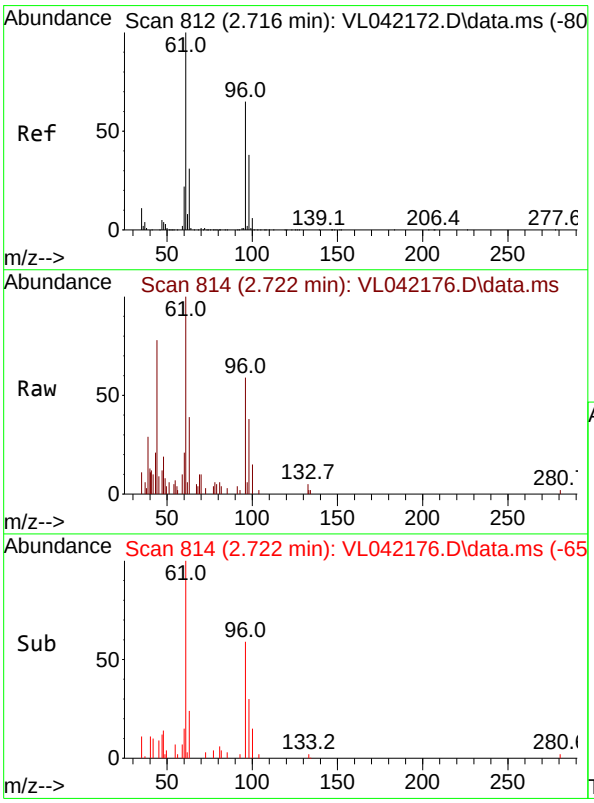
#30
Cyclohexane
Concen: 0.051 ppbv
RT: 3.855 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 84 Resp: 1113

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

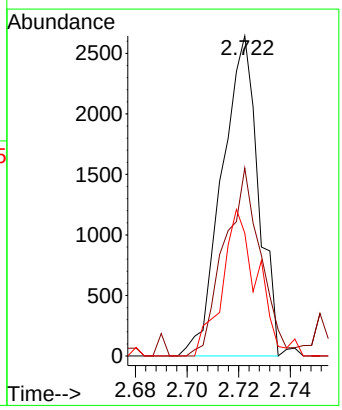


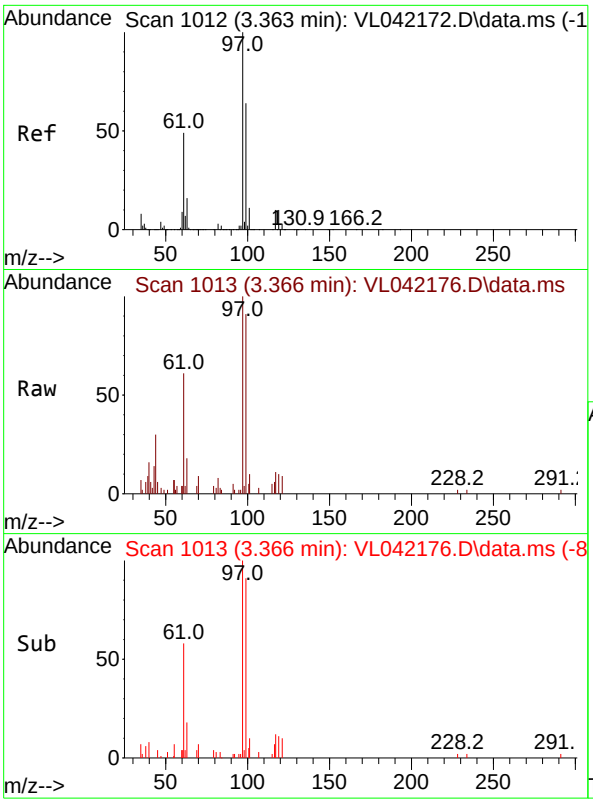


#31
cis-1,2-Dichloroethene
Concen: 0.101 ppbv
RT: 2.722 min Scan# 814
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 61 Resp: 2587

Ion	Ratio	Lower	Upper
61	100		
96	58.7	51.8	77.8
98	38.4	30.6	46.0



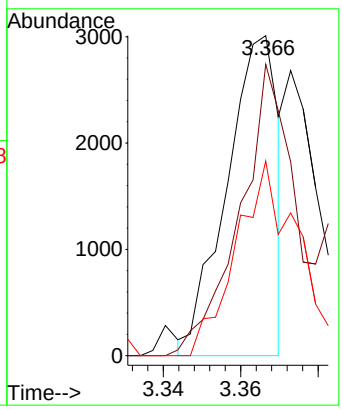


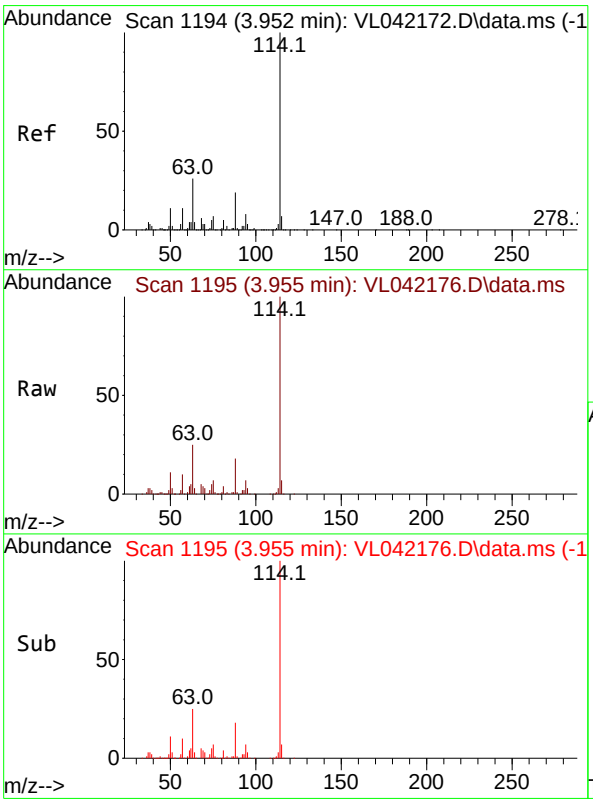
#32
1,1,1-Trichloroethane
Concen: 0.065 ppbv
RT: 3.366 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 97 Resp: 2773

Ion	Ratio	Lower	Upper
97	100		
99	111.5	51.5	77.3#
61	73.8	38.7	58.1#

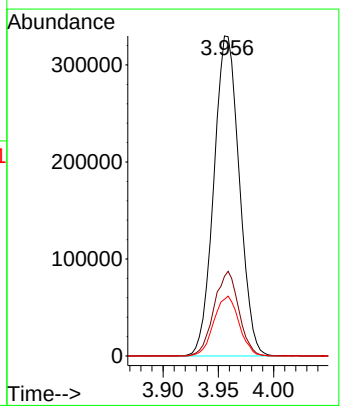


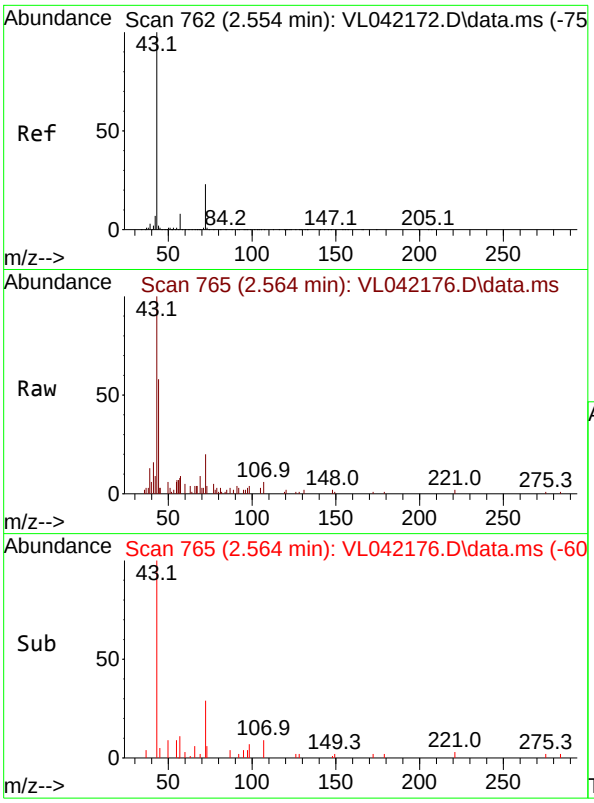


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:114 Resp: 528028

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	18.5	15.0	22.4



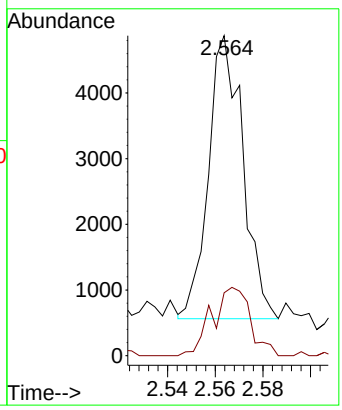


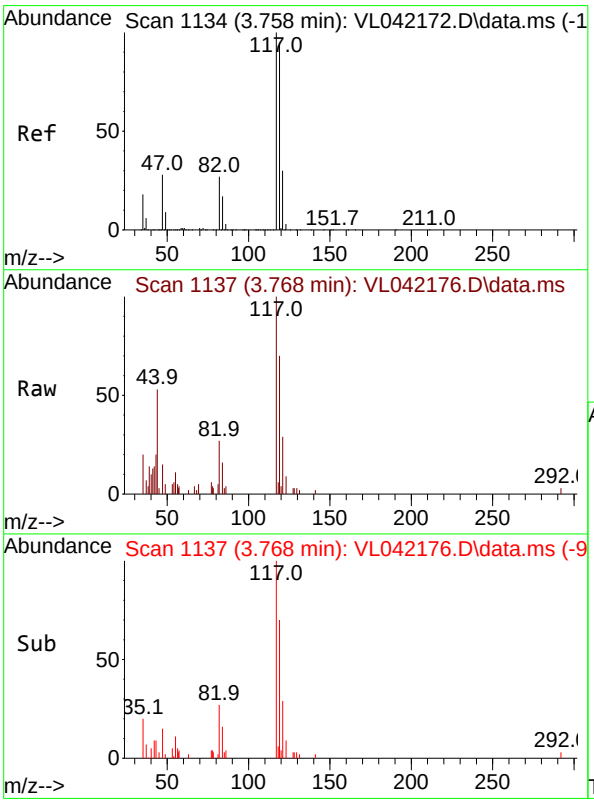
#34
2-Butanone
Concen: 0.113 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 4331

Ion	Ratio	Lower	Upper
43	100		
72	27.0	18.2	27.2

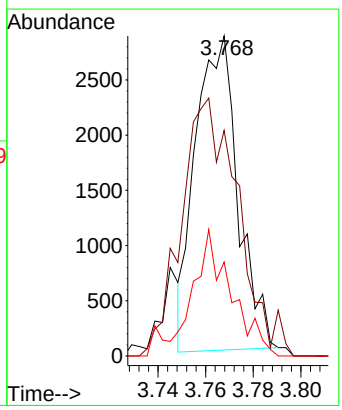


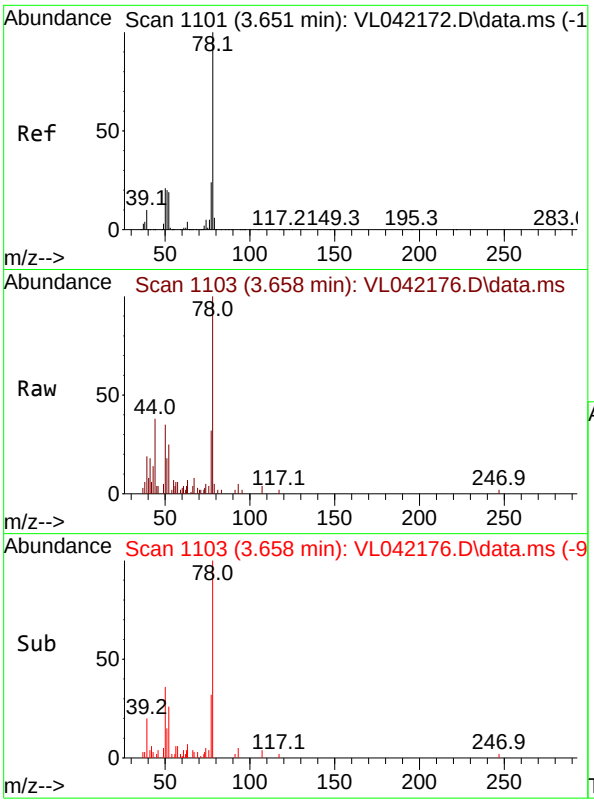


#35
Carbon Tetrachloride
Concen: 0.087 ppbv
RT: 3.768 min Scan# 1137
Delta R.T. 0.010 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:117 Resp: 3523

Ion	Ratio	Lower	Upper
117	100		
119	57.7	76.2	114.2#
121	30.1	24.2	36.4



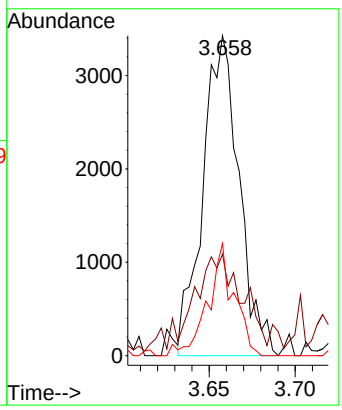


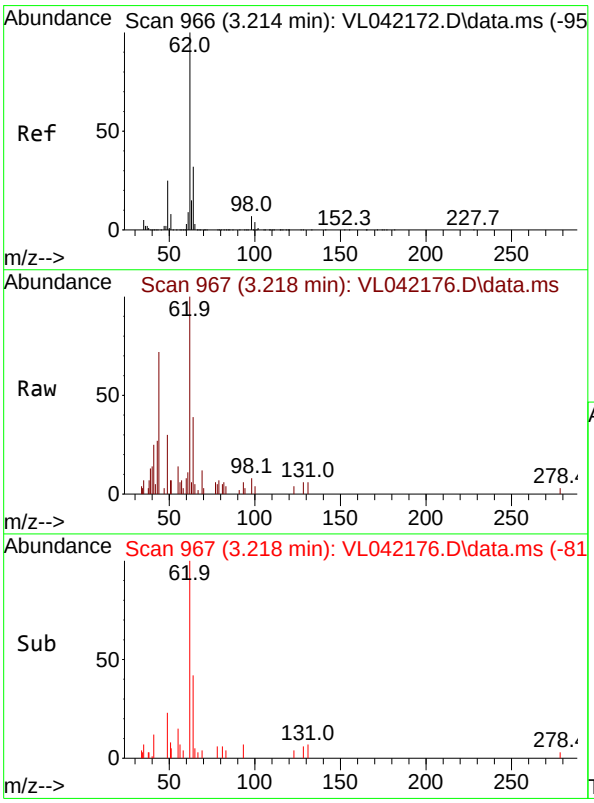
#36
Benzene
Concen: 0.096 ppbv
RT: 3.658 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 78 Resp: 5031

Ion	Ratio	Lower	Upper
78	100		
77	27.2	19.1	28.7
50	35.0	16.6	24.8#

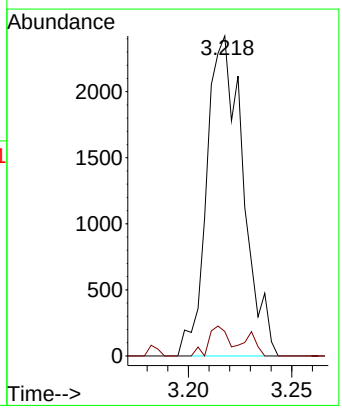


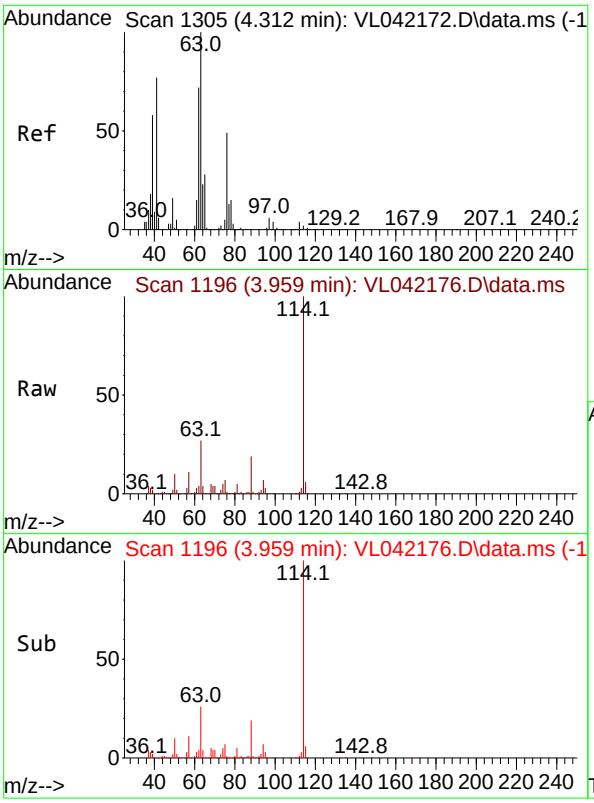


#37
1,2-Dichloroethane
Concen: 0.098 ppbv
RT: 3.218 min Scan# 967
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 62 Resp: 2942

Ion	Ratio	Lower	Upper
62	100		
98	7.7	5.4	8.2



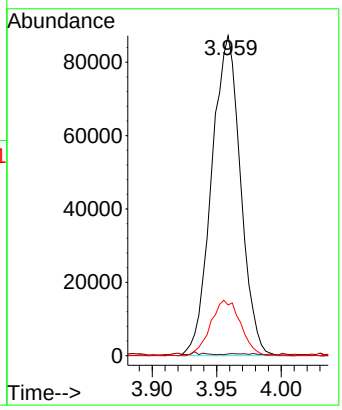


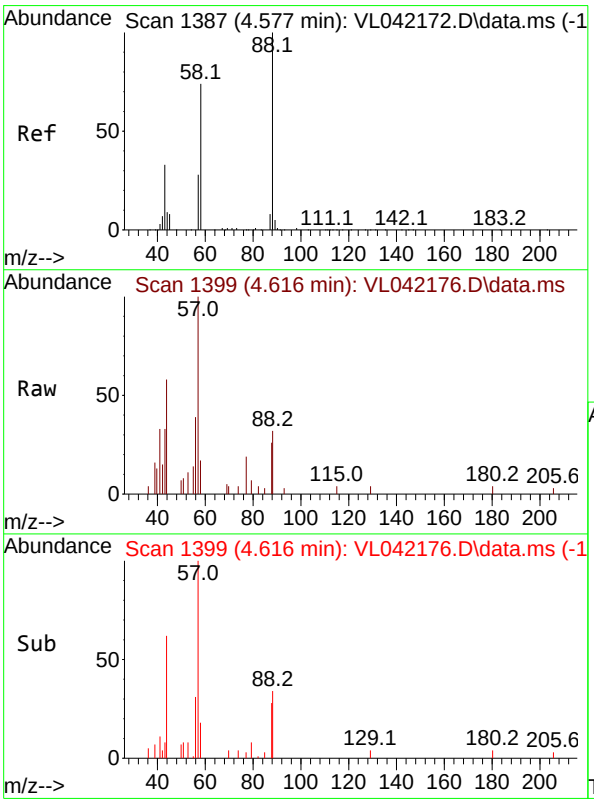
#39
1,2-Dichloropropane
Concen: 7.123 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.353 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 135792

Ion	Ratio	Lower	Upper
63	100		
41	0.3	61.7	92.5#
62	15.9	57.6	86.4#

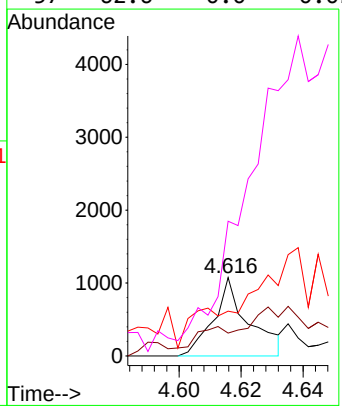


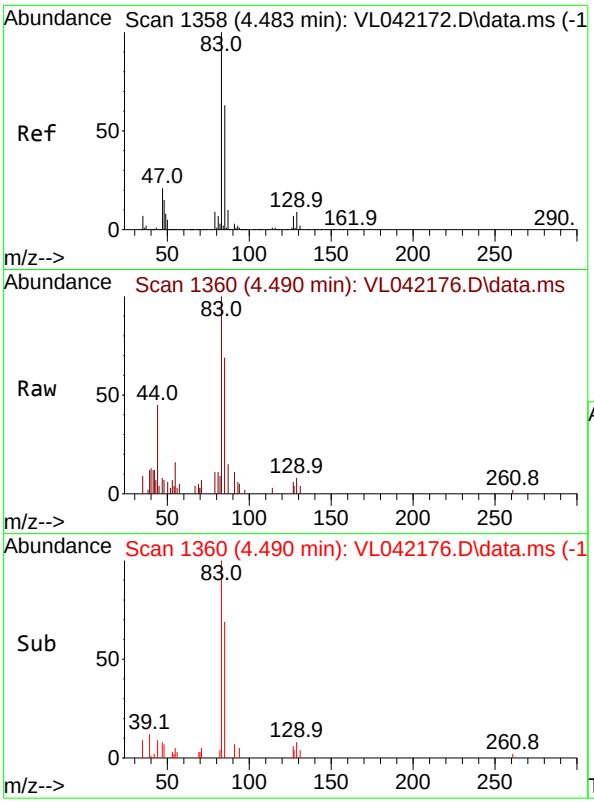


#40
1,4-Dioxane
Concen: 0.085 ppbv
RT: 4.616 min Scan# 1399
Delta R.T. 0.039 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 88 Resp: 843

Ion	Ratio	Lower	Upper
88	100		
58	0.0	62.7	94.1#
43	47.9	23.0	34.4#
57	62.6	0.0	0.0#



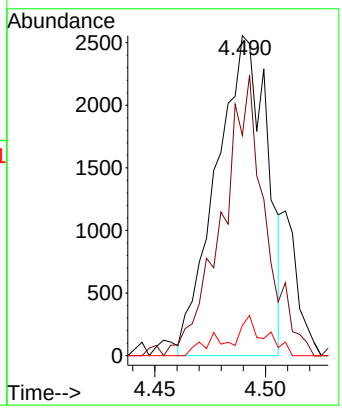


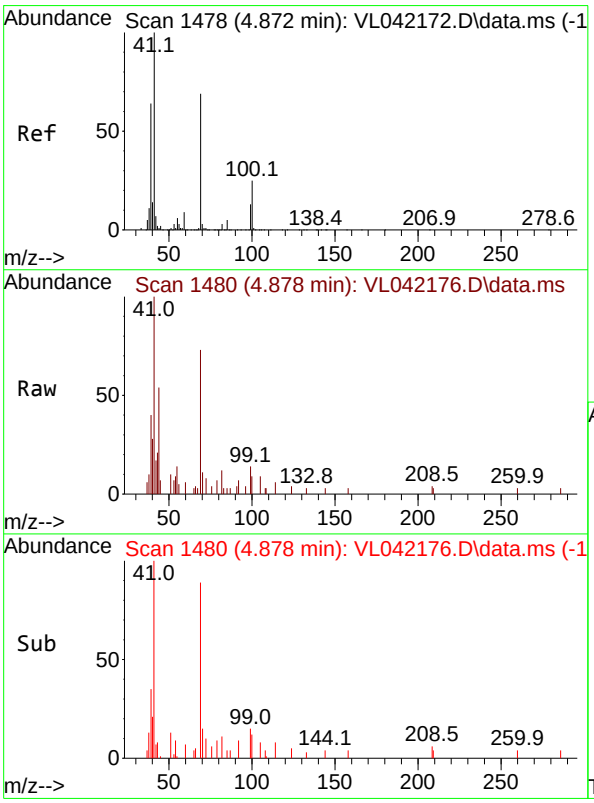
#42
Bromodichloromethane
Concen: 0.099 ppbv
RT: 4.490 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 4103

Ion	Ratio	Lower	Upper
83	100		
85	67.5	50.5	75.7
127	9.8	5.9	8.9#

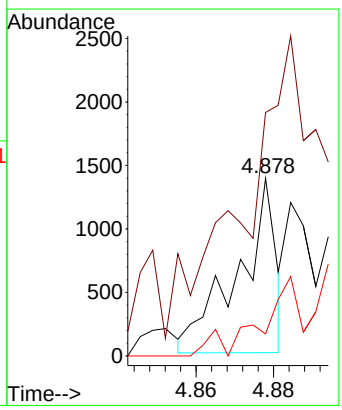


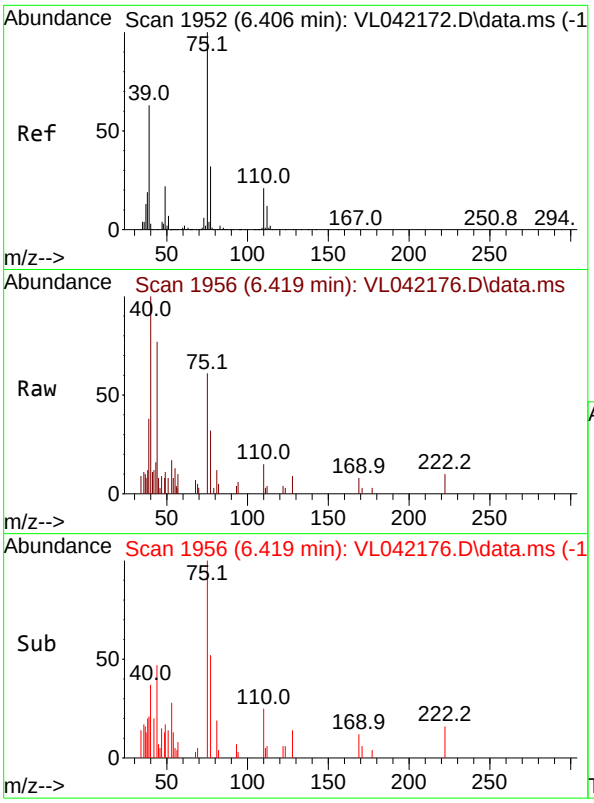


#43
Methyl Methacrylate
Concen: 0.042 ppbv
RT: 4.878 min Scan# 1480
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 69 Resp: 930

Ion	Ratio	Lower	Upper
69	100		
41	0.0	123.8	185.6#
100	0.0	28.4	42.6#



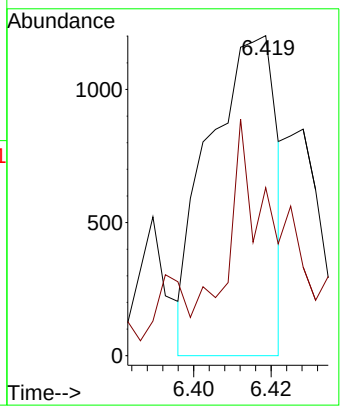


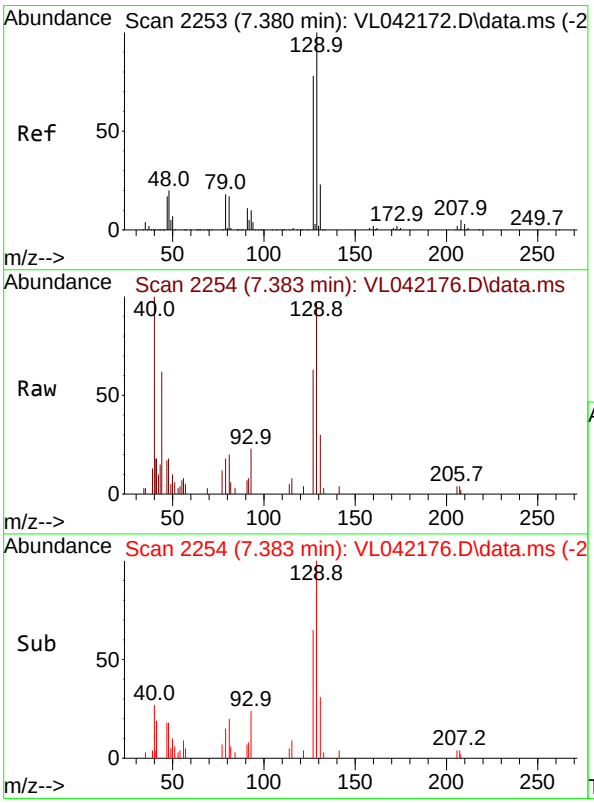
#45
t-1,3-Dichloropropene
Concen: 0.061 ppbv
RT: 6.419 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 75 Resp: 1449

Ion	Ratio	Lower	Upper
75	100		
77	52.5	26.0	39.0#

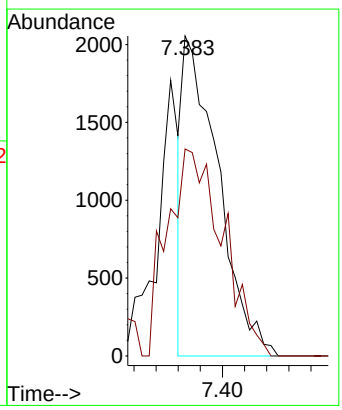


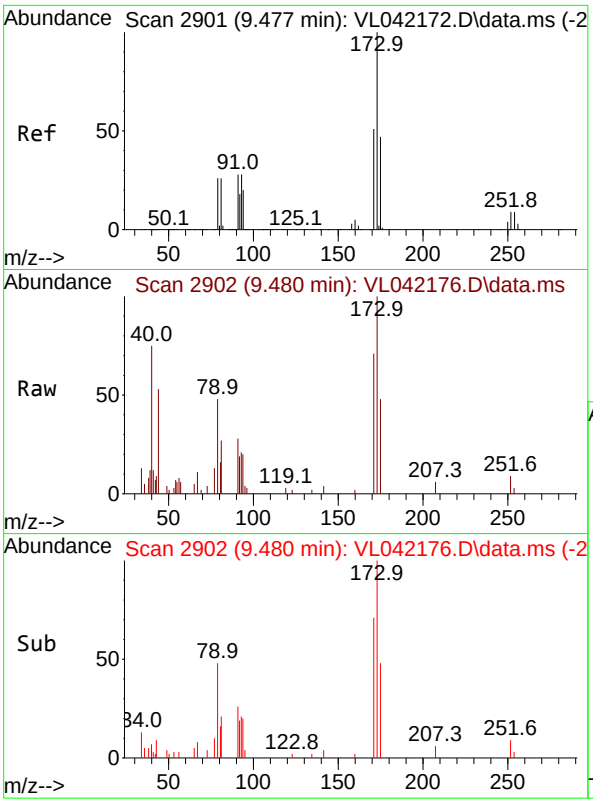


#48
Dibromochloromethane
Concen: 0.067 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:129 Resp: 2284

Ion	Ratio	Lower	Upper
129	100		
127	106.0	39.1	117.2



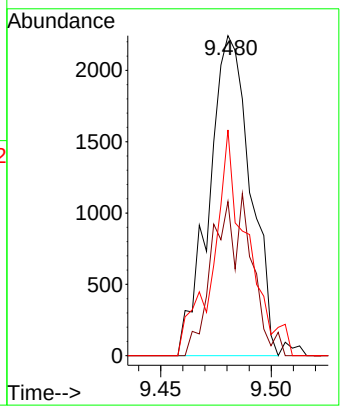


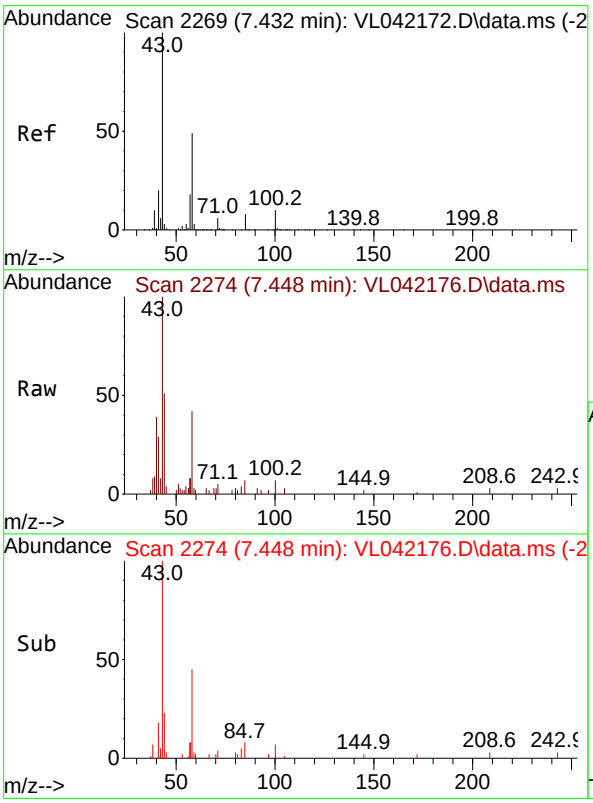
#49
Bromoform
Concen: 0.095 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:173 Resp: 2928

Ion	Ratio	Lower	Upper
173	100		
175	46.4	38.6	57.8
171	58.1	41.8	62.6

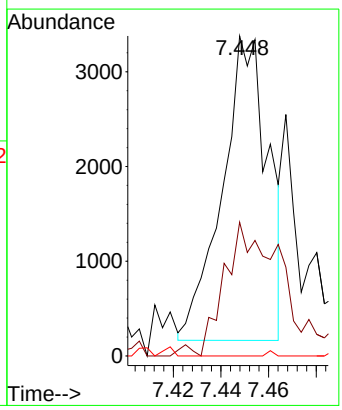


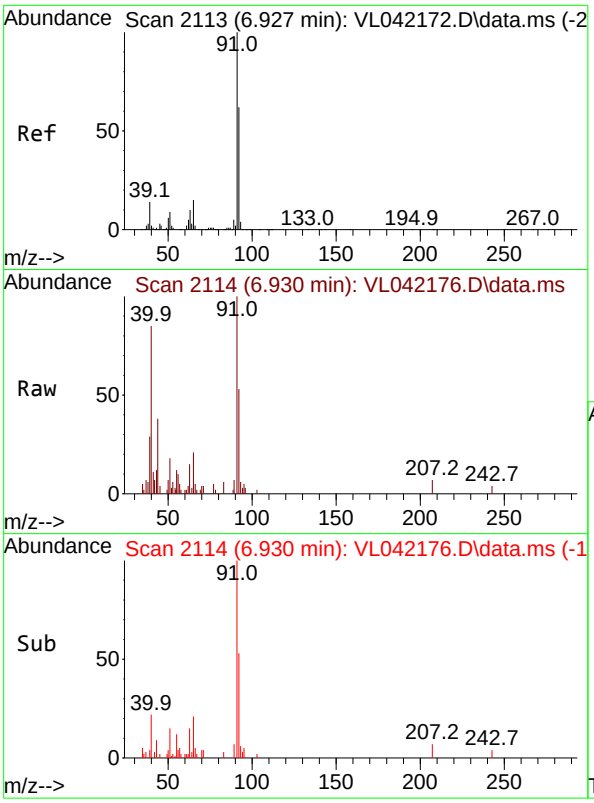


#51
2-Hexanone
Concen: 0.085 ppbv
RT: 7.448 min Scan# 2274
Delta R.T. 0.016 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 43 Resp: 4284

Ion	Ratio	Lower	Upper
43	100		
58	58.3	39.7	59.5
98	0.0	0.1	0.1#



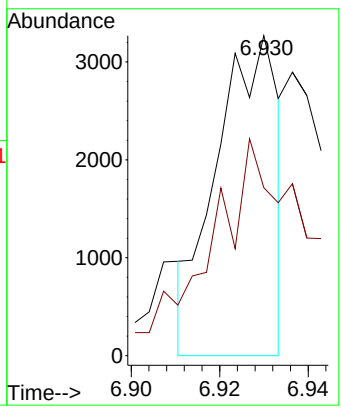


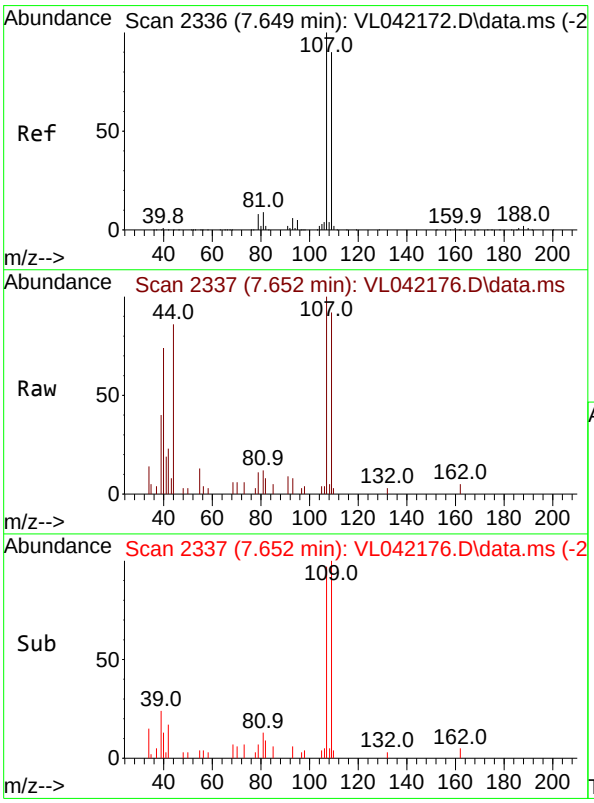
#53
Toluene
Concen: 0.051 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 3144

Ion	Ratio	Lower	Upper
91	100		
92	117.7	48.4	72.6#

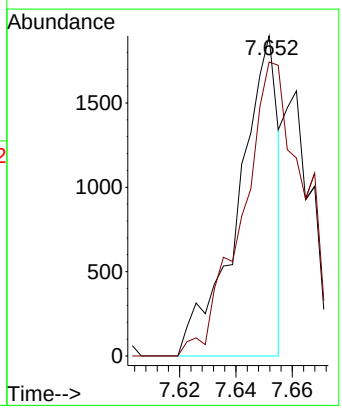


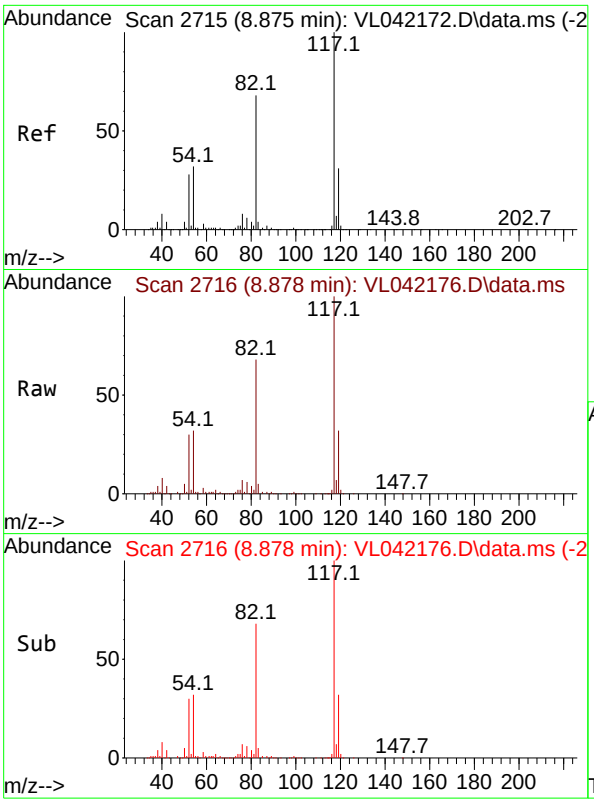


#54
1,2-Dibromoethane
Concen: 0.066 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:107 Resp: 1864

Ion	Ratio	Lower	Upper
107	100		
109	91.8	72.2	108.4



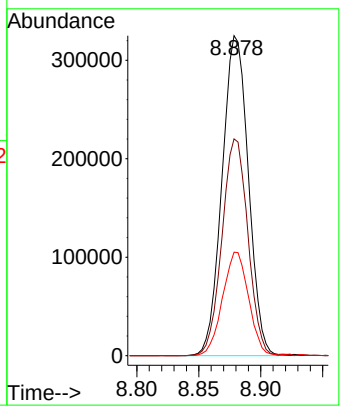


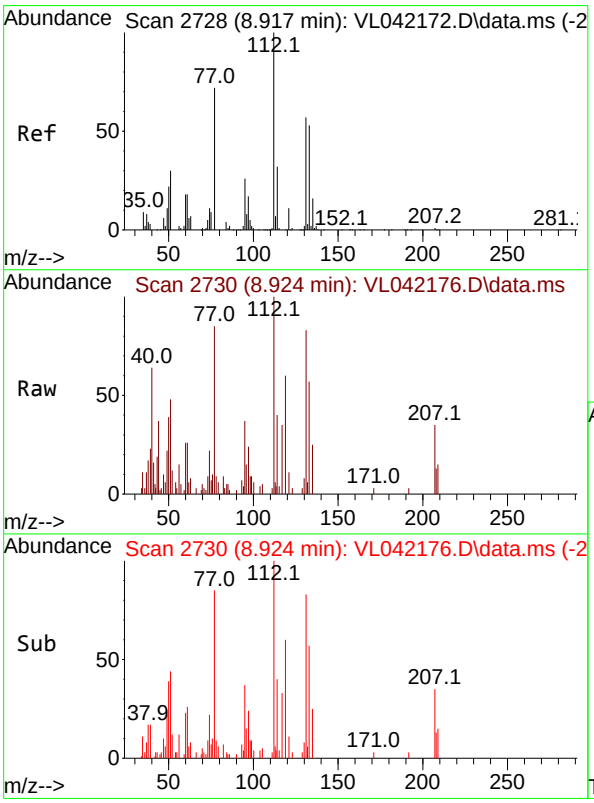
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:117 Resp: 481506

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	32.3	25.5	38.3

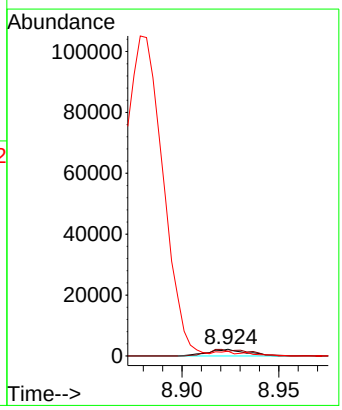


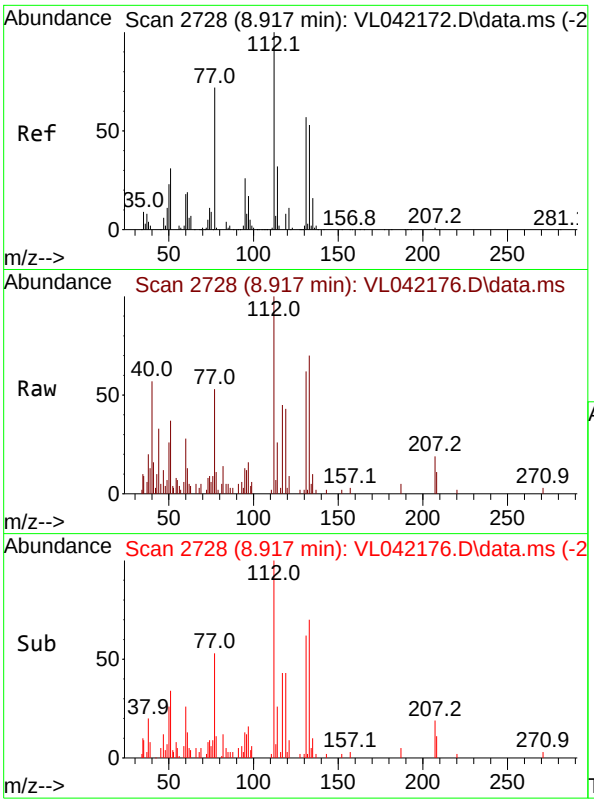


#56
1,1,1,2-Tetrachloroethane
Concen: 0.112 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:131 Resp: 2963

Ion	Ratio	Lower	Upper
131	100		
133	115.5	76.6	114.8#
119	5254.7	49.8	74.6#



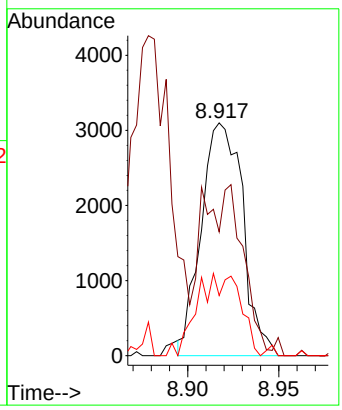


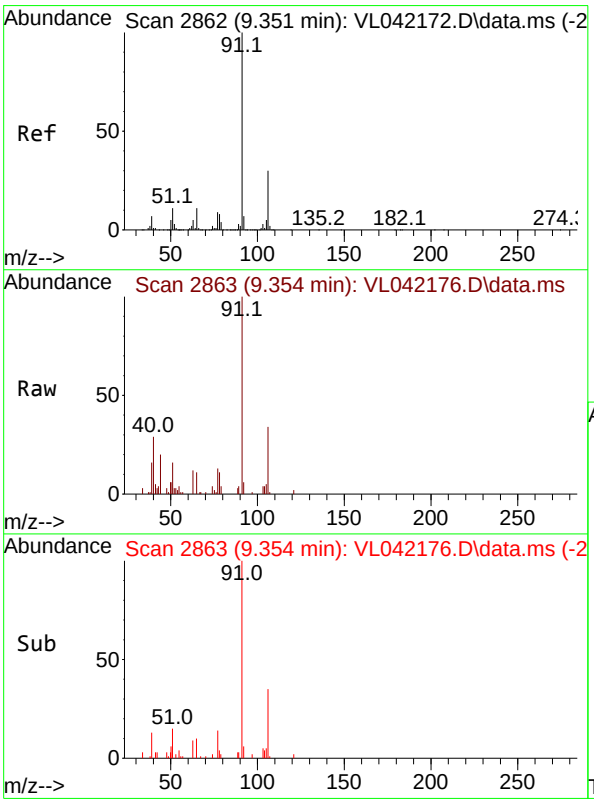
#57
Chlorobenzene
Concen: 0.107 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:112 Resp: 4904

Ion	Ratio	Lower	Upper
112	100		
77	45.4	58.2	87.2#
114	25.8	29.1	35.5#

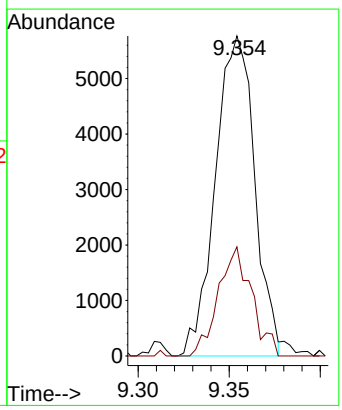


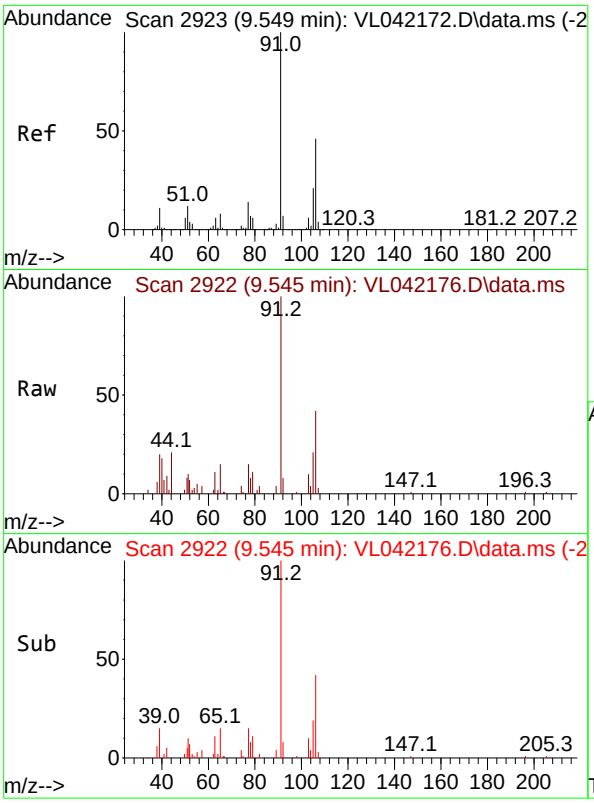


#58
Ethyl Benzene
Concen: 0.101 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 8648

Ion	Ratio	Lower	Upper
91	100		
106	34.1	24.2	36.2



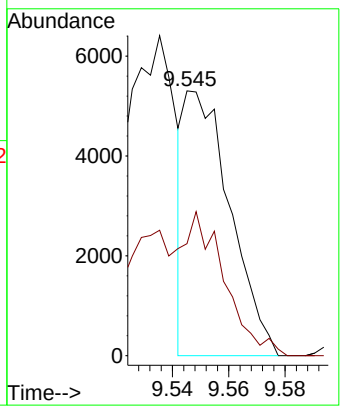


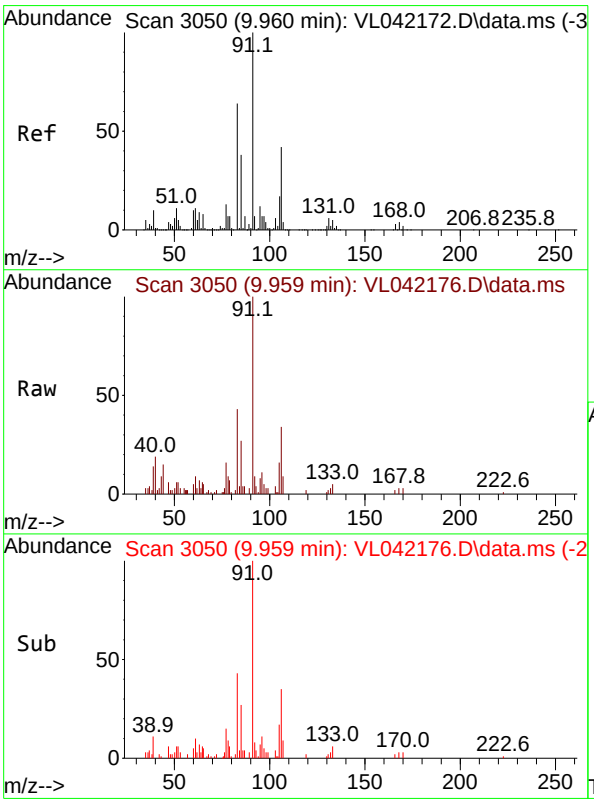
#59
m/p-Xylene
Concen: 0.088 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 6005

Ion	Ratio	Lower	Upper
91	100		
106	103.4	36.4	54.6#

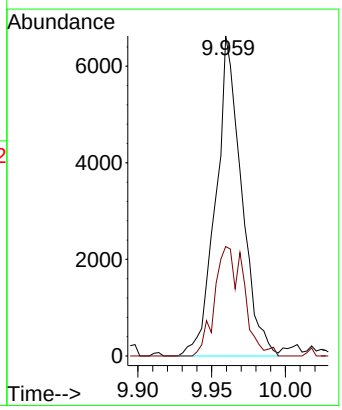


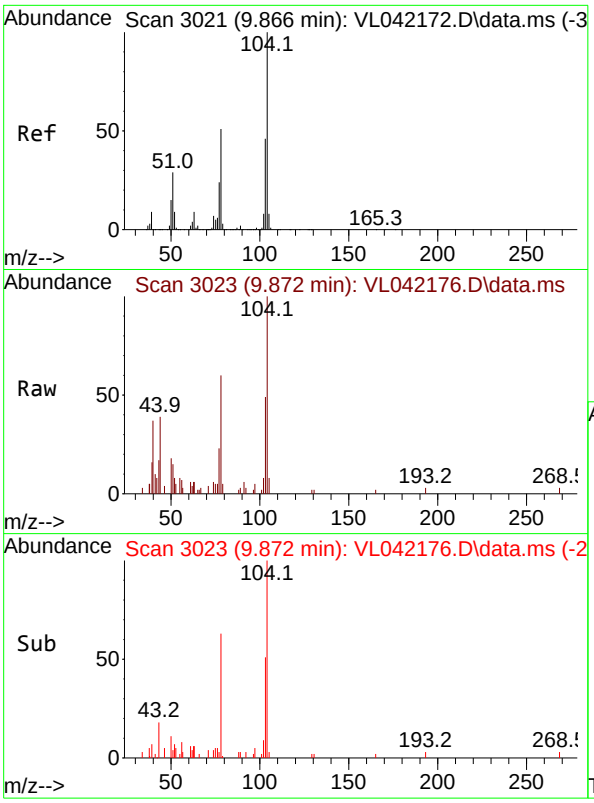


#60
o-Xylene
Concen: 0.118 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 8048

Ion	Ratio	Lower	Upper
91	100		
106	39.0	20.8	62.5



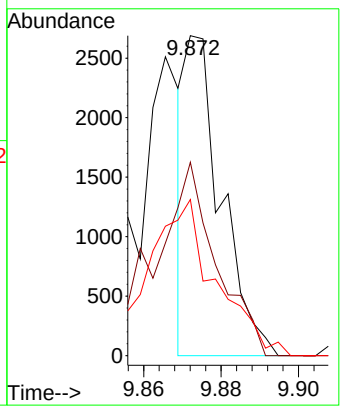


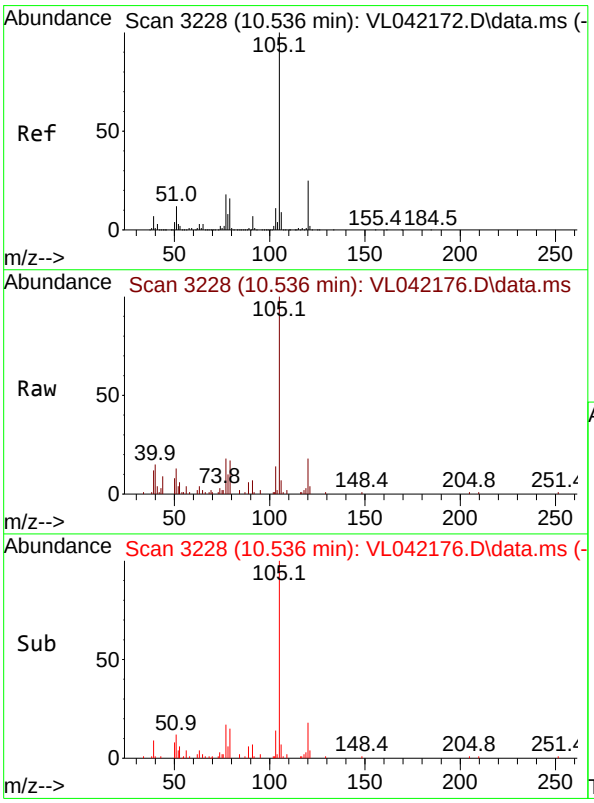
#61
Styrene
Concen: 0.051 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:104 Resp: 1723

Ion	Ratio	Lower	Upper
104	100		
78	105.9	41.8	62.6#
103	95.0	37.0	55.4#

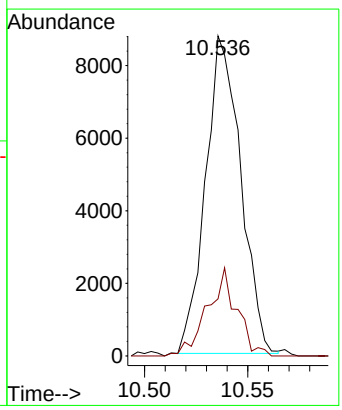


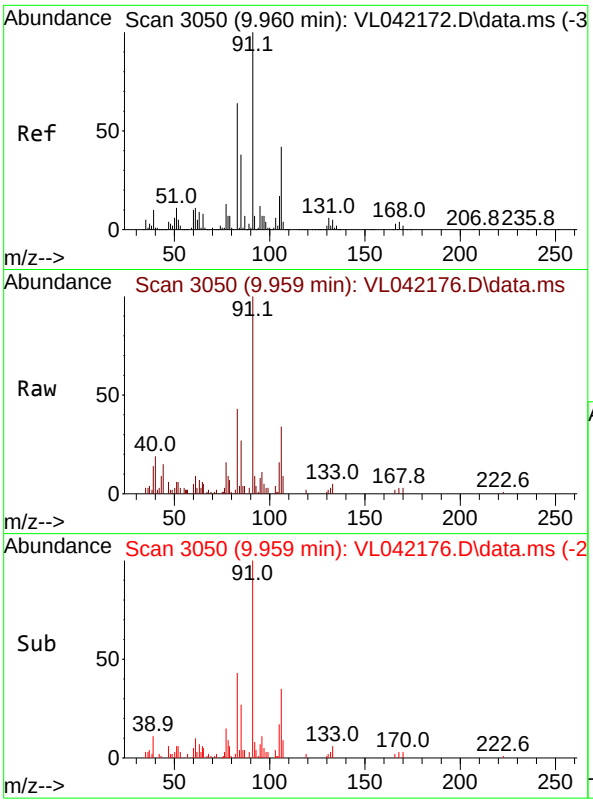


#62
Isopropylbenzene
Concen: 0.101 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 10359

Ion	Ratio	Lower	Upper
105	100		
120	23.2	19.9	29.9



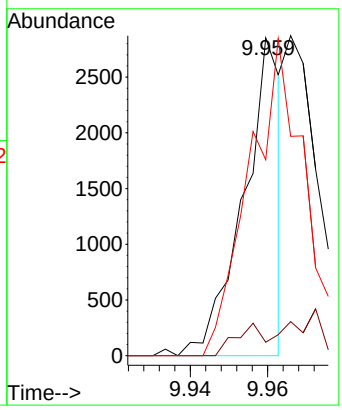


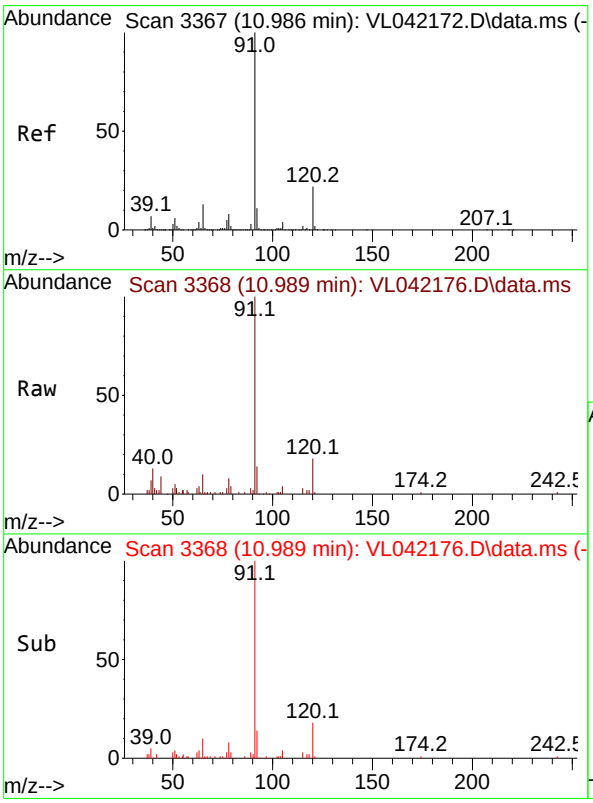
#63
1,1,2,2-Tetrachloroethane
Concen: 0.046 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 1910

Ion	Ratio	Lower	Upper
83	100		
131	0.0	4.8	14.4#
85	0.0	32.5	97.5#

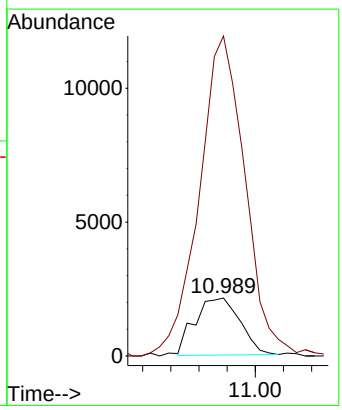


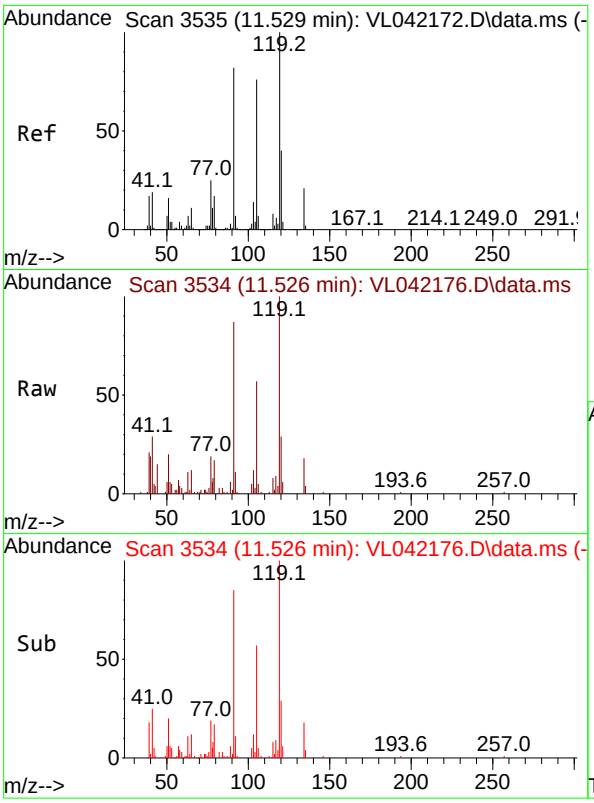


#64
n-propylbenzene
Concen: 0.090 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:120 Resp: 2375

Ion	Ratio	Lower	Upper
120	100		
91	572.3	376.9	565.3#



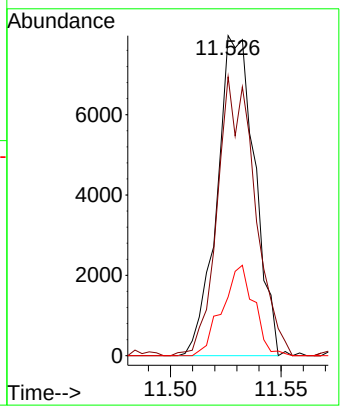


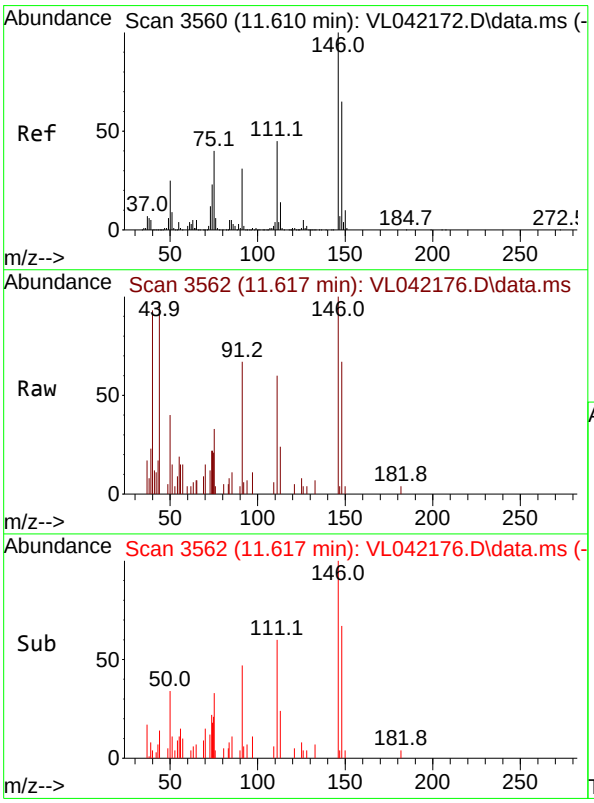
#65
tert-Butylbenzene
Concen: 0.099 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 9418

Ion	Ratio	Lower	Upper
119	100		
91	87.8	66.0	99.0
134	23.9	16.7	25.1

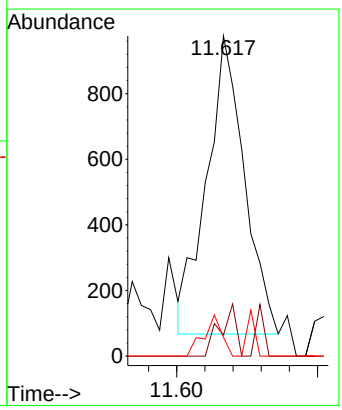


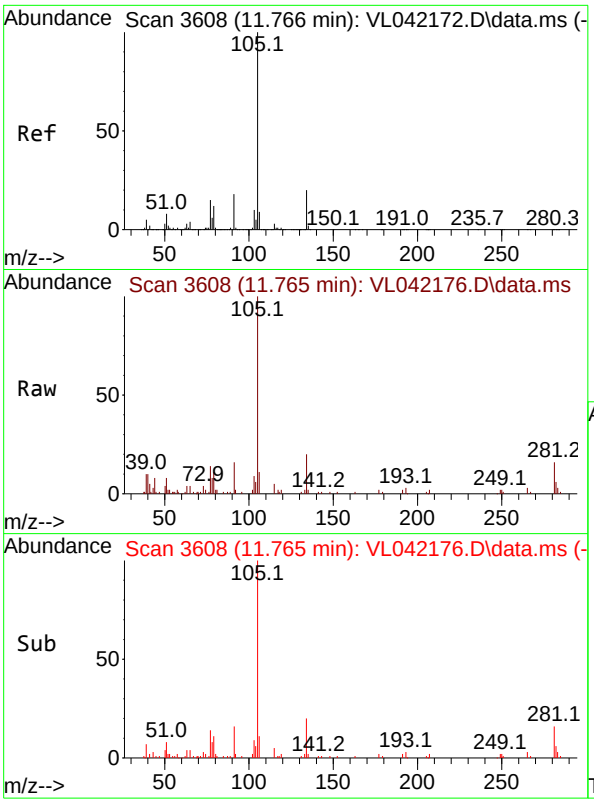


#66
Benzyl Chloride
Concen: 0.084 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 844

Ion	Ratio	Lower	Upper
91	100		
126	11.0	13.8	20.6#
128	10.0	4.5	6.7#



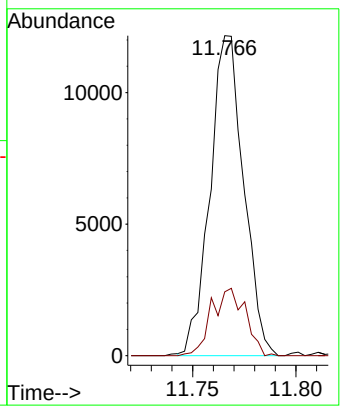


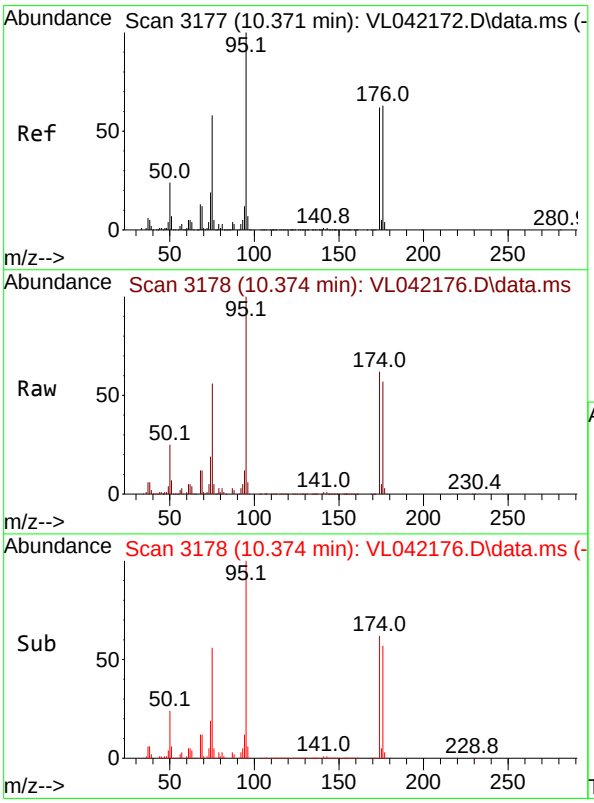
#67
sec-Butylbenzene
Concen: 0.105 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 13775

Ion	Ratio	Lower	Upper
105	100		
134	21.2	15.5	23.3

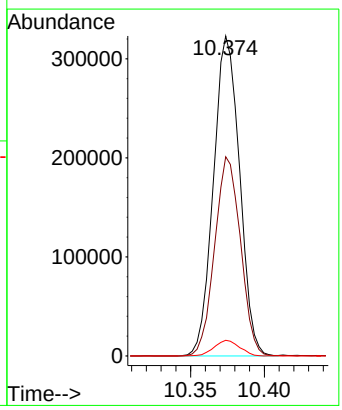


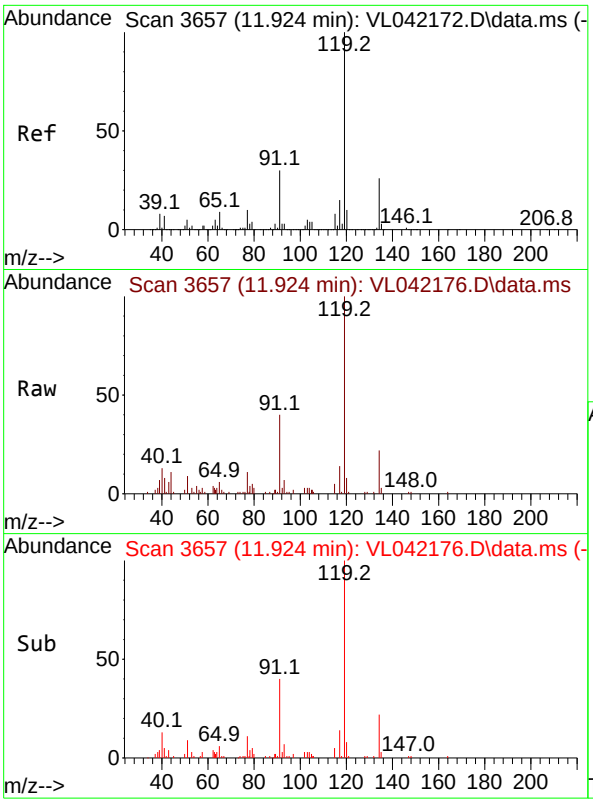


#68
1-Bromo-4-Fluorobenzene
Concen: 10.067 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 95 Resp: 398069

Ion	Ratio	Lower	Upper
95	100		
174	61.5	50.6	76.0
175	4.8	3.8	5.6



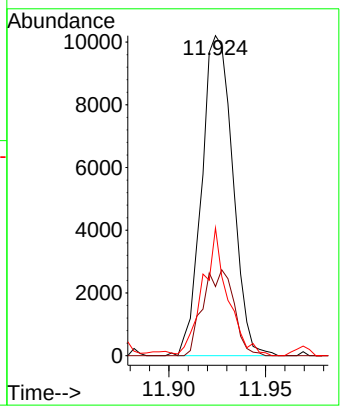


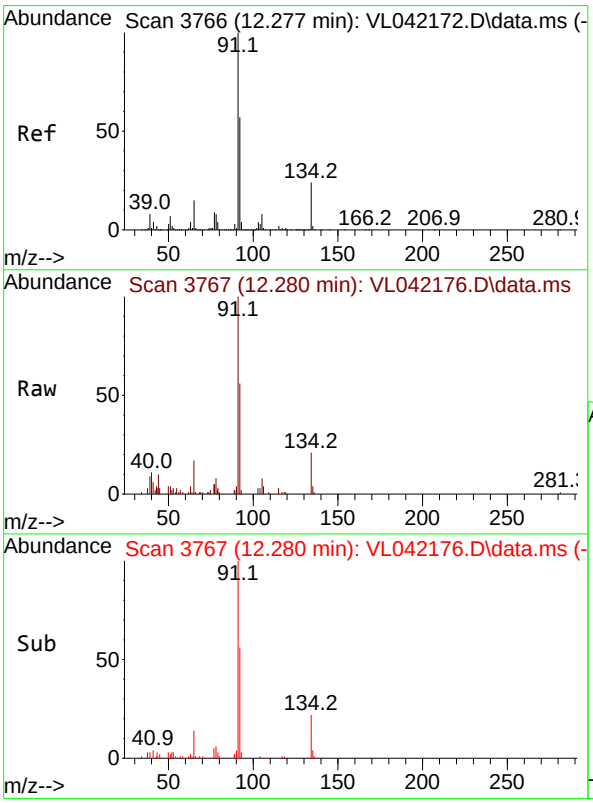
#69
p-Isopropyltoluene
Concen: 0.100 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 11366

Ion	Ratio	Lower	Upper
119	100		
134	26.8	20.4	30.6
91	30.7	23.7	35.5

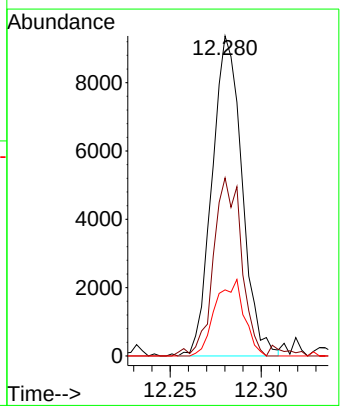


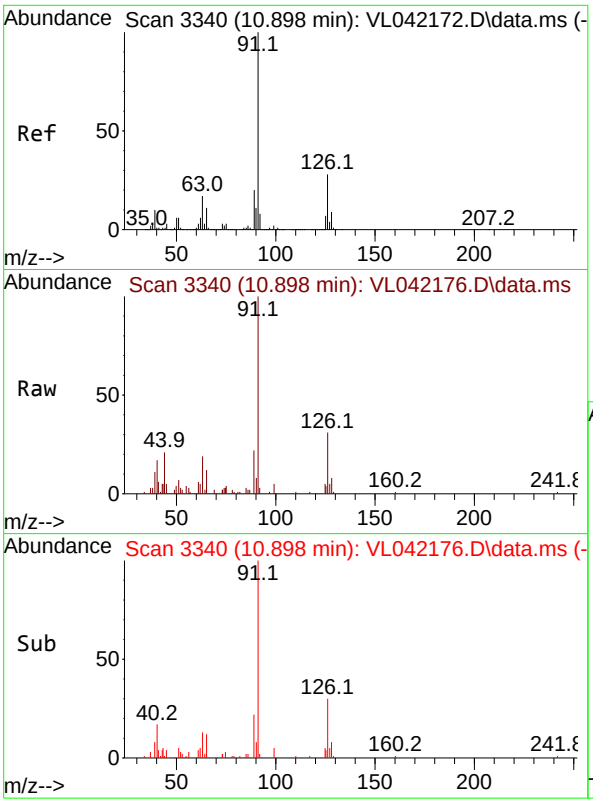


#70
n-Butylbenzene
Concen: 0.092 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion: 91 Resp: 10697

Ion	Ratio	Lower	Upper
91	100		
92	54.0	44.9	67.3
134	22.9	19.2	28.8



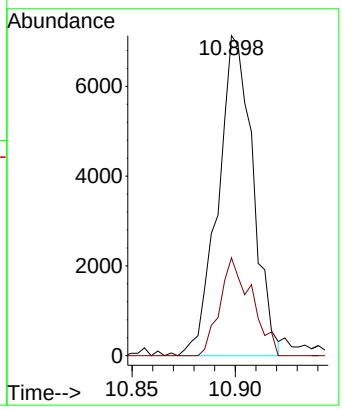


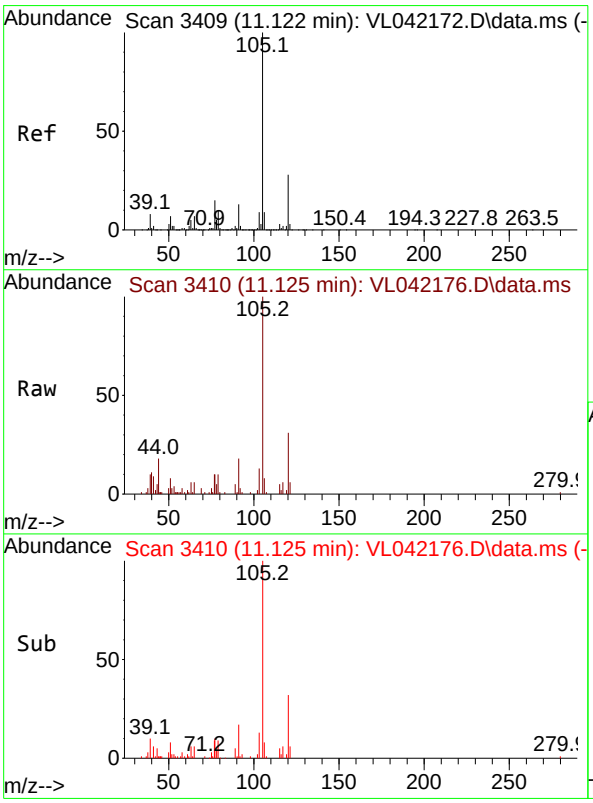
#71
2-Chlorotoluene
Concen: 0.105 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 8347

Ion	Ratio	Lower	Upper
91	100		
126	28.0	11.6	46.4

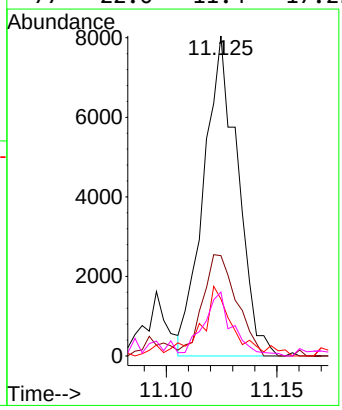


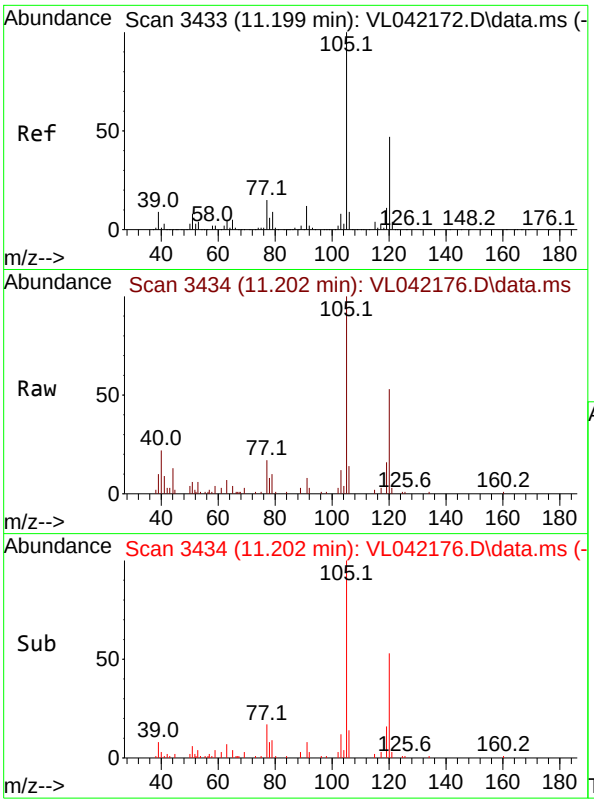


#72
4-Ethyltoluene
Concen: 0.101 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 8579

Ion	Ratio	Lower	Upper
105	100		
120	36.1	23.4	35.0#
91	21.4	10.3	15.5#
77	22.0	11.4	17.2#



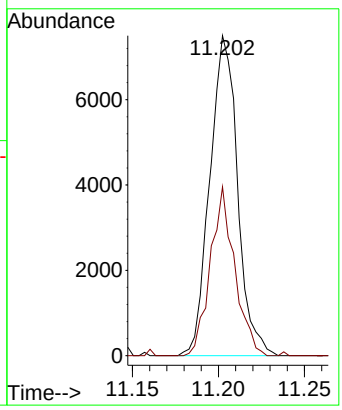


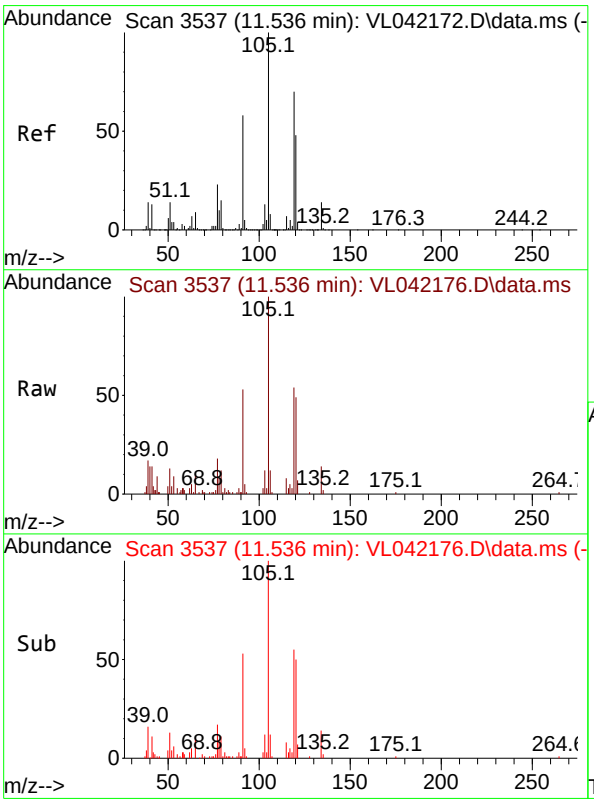
#73
1,3,5-Trimethylbenzene
Concen: 0.113 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 8407

Ion	Ratio	Lower	Upper
105	100		
120	52.7	37.4	56.0

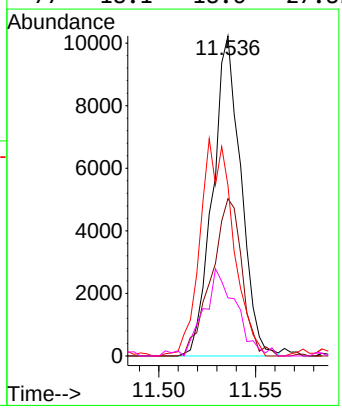


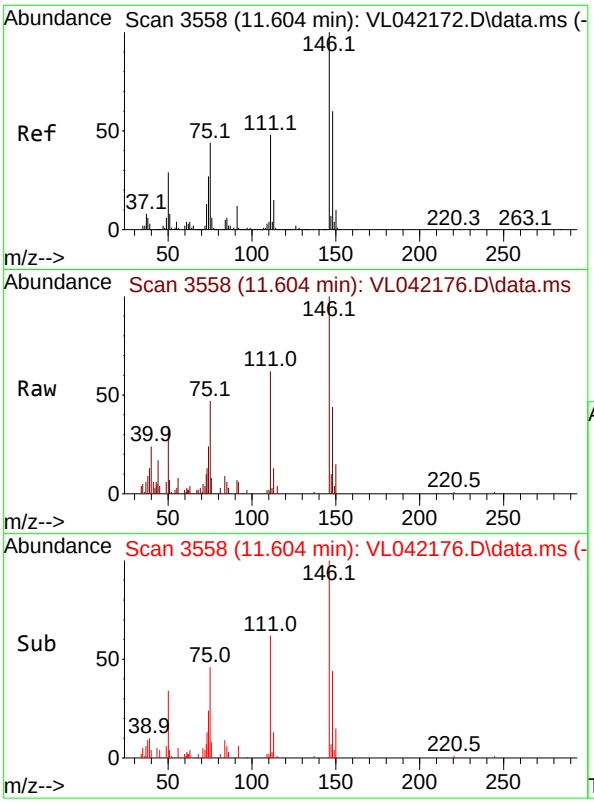


#74
1,2,4-Trimethylbenzene
Concen: 0.121 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:105 Resp: 10341

Ion	Ratio	Lower	Upper
105	100		
120	49.2	38.6	58.0
91	53.2	46.2	69.2
77	18.1	18.6	27.8#



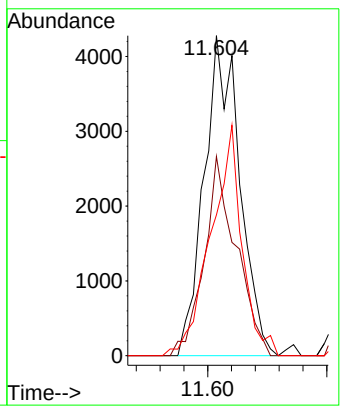


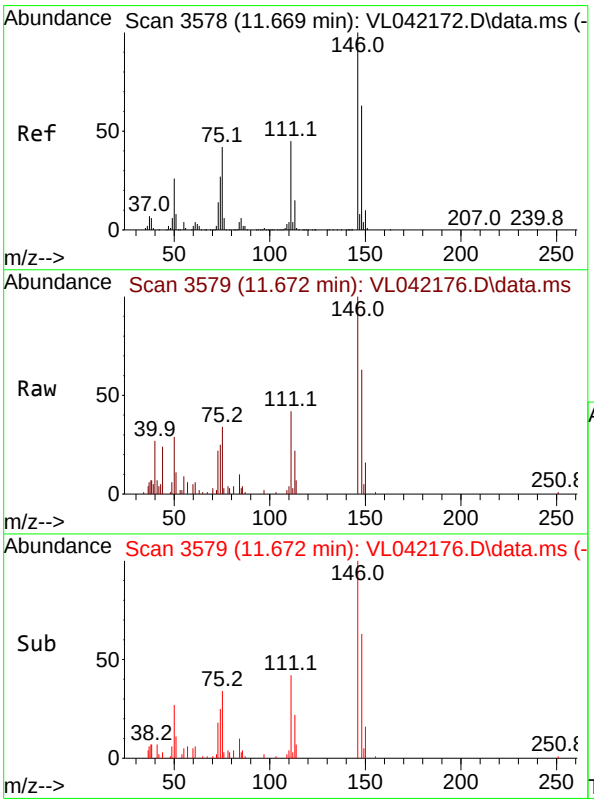
#75
1,3-Dichlorobenzene
Concen: 0.094 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4426

Ion	Ratio	Lower	Upper
146	100		
111	56.3	23.8	71.2
148	62.9	31.9	95.9

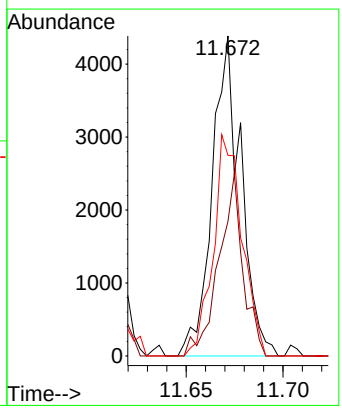


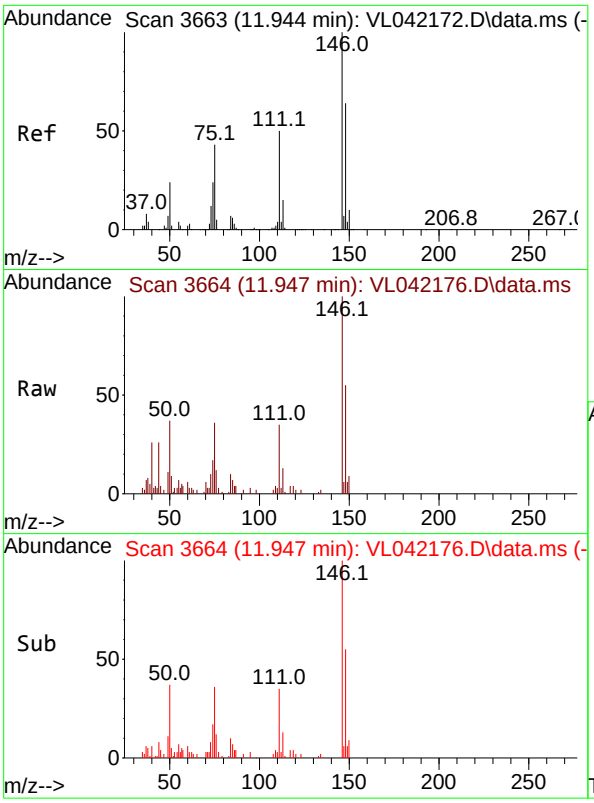


#76
1,4-Dichlorobenzene
Concen: 0.097 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:146 Resp: 4552

Ion	Ratio	Lower	Upper
146	100		
111	47.6	23.0	69.0
148	68.6	31.9	95.7



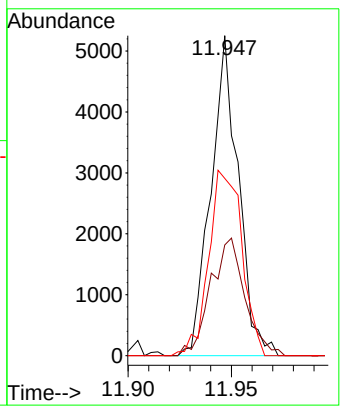


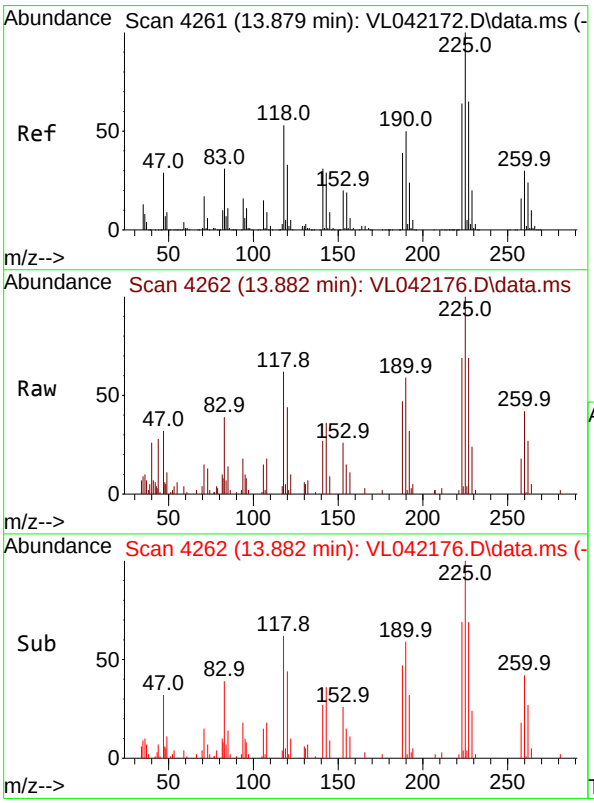
#77
1,2-Dichlorobenzene
Concen: 0.106 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 4867

Ion	Ratio	Lower	Upper
146	100		
111	45.8	24.8	74.3
148	69.7	31.6	94.8

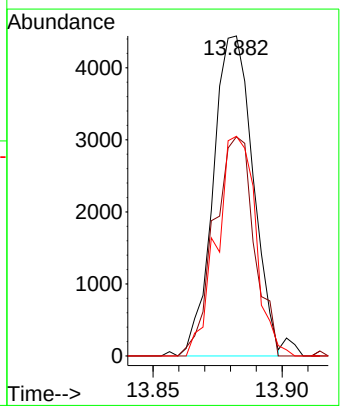


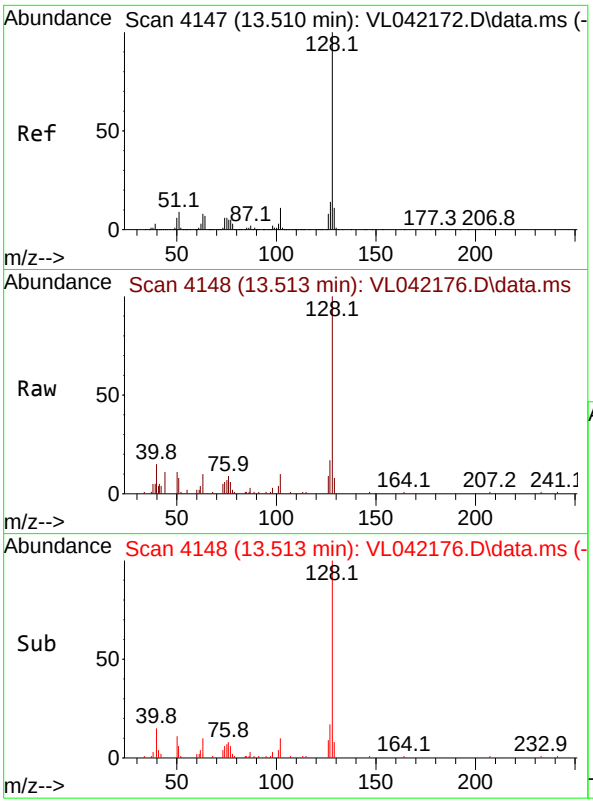


#78
Hexachloro-1,3-Butadiene
Concen: 0.102 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:225 Resp: 4755

Ion	Ratio	Lower	Upper
225	100		
223	68.9	50.6	76.0
227	67.4	51.2	76.8



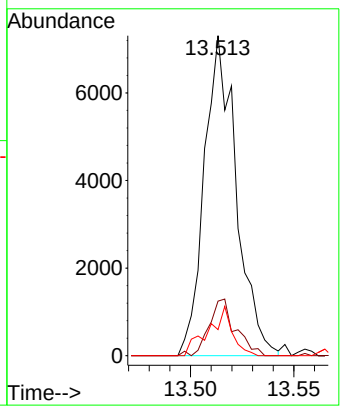


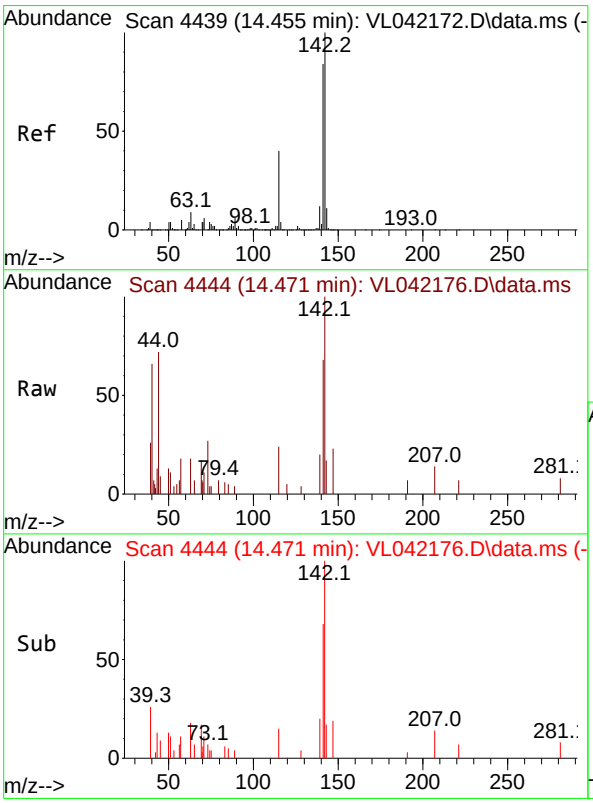
#79
Naphthalene
Concen: 0.084 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:128 Resp: 7882

Ion	Ratio	Lower	Upper
128	100		
127	17.1	10.8	16.2#
129	8.1	9.0	13.4#

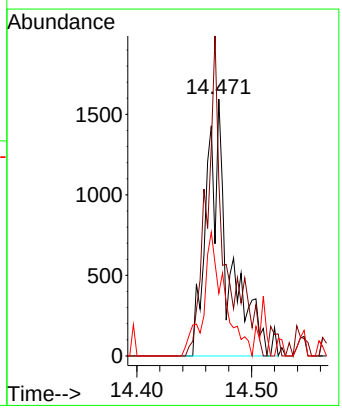


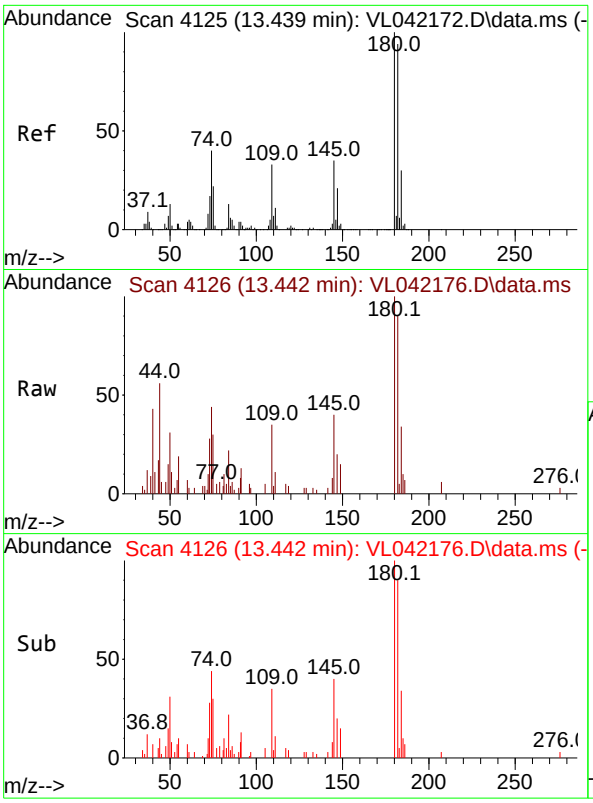


#80
Naphthalene,2-methyl-
Concen: 0.048 ppbv
RT: 14.471 min Scan# 4444
Delta R.T. 0.016 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Tgt Ion:142 Resp: 2174

Ion	Ratio	Lower	Upper
142	100		
141	109.3	66.3	99.5#
115	44.3	31.6	47.4



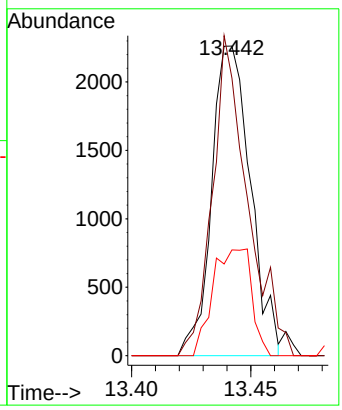


#81
1,2,4-Trichlorobenzene
Concen: 0.059 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042176.D
Acq: 27 Mar 2025 10:32

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:180 Resp: 2557

Ion	Ratio	Lower	Upper
180	100		
182	93.6	75.1	112.7
184	34.5	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

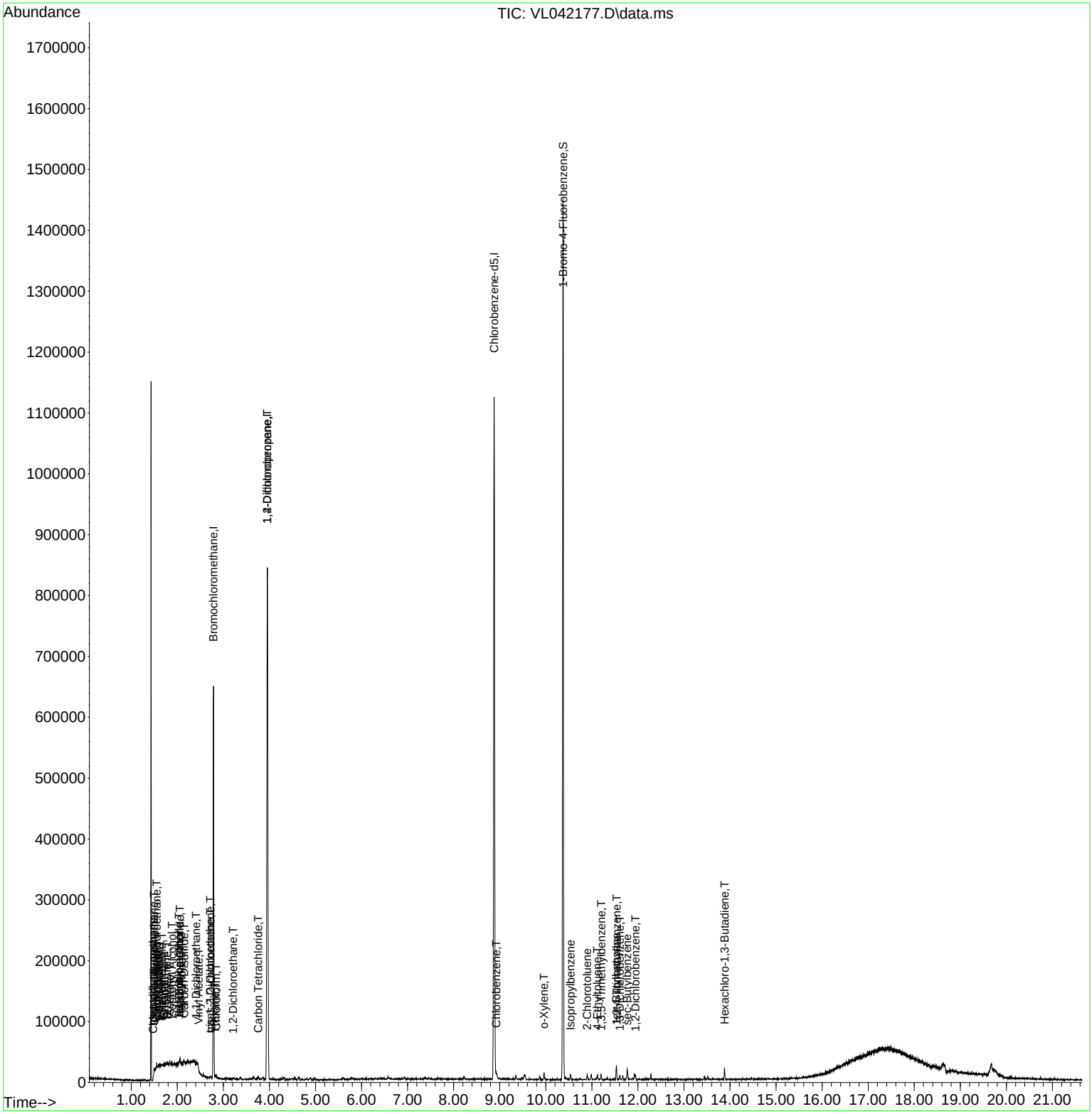
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	178058	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	512915	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	475617	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	389935	9.983	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	914	0.035	ppbv #	73
3) Chlorodifluoromethane	1.476	51	1354	0.050	ppbv #	1
4) Chloromethane	1.531	50	675	0.063	ppbv #	86
5) Vinyl Chloride	1.580	62	534	0.049	ppbv #	79
6) Bromomethane	1.670	94	483	0.099	ppbv #	9
7) Chloroethane	1.703	64	361	0.084	ppbv #	45
8) Dichlorotetrafluoroethane	1.554	85	815	0.036	ppbv #	79
13) Ethanol	1.719	45	312	0.329	ppbv #	27
14) Bromoethene	1.780	108	482	0.060	ppbv #	31
15) Acetone	1.835	43	3574	0.144	ppbv #	63
16) 1,3-Butadiene	1.606	39	1101	0.098	ppbv #	57
17) tert-Butyl alcohol	2.043	59	1215	0.039	ppbv #	1
18) 1,1-Dichloroethene	2.036	96	560	0.057	ppbv #	38
19) Isopropyl Alcohol	1.887	45	1071	0.076	ppbv #	30
20) Methylene Chloride	2.059	84	1823	0.197	ppbv #	91
21) Allyl Chloride	2.091	41	1518	0.086	ppbv #	29
22) trans-1,2-Dichloroethene	2.719	96	586	0.051	ppbv	96
23) Vinyl Acetate	2.463	43	689	0.067	ppbv #	1
24) 1,1-Dichloroethane	2.412	63	961	0.046	ppbv #	72
26) Hexane	2.819	57	1040	0.042	ppbv #	46
27) Carbon Disulfide	2.149	76	1061	0.040	ppbv #	1
29) Chloroform	2.848	83	1619	0.044	ppbv	92
31) cis-1,2-Dichloroethene	2.719	61	846	0.033	ppbv	92
35) Carbon Tetrachloride	3.758	117	1520	0.039	ppbv #	42
37) 1,2-Dichloroethane	3.214	62	1029	0.035	ppbv #	88
39) 1,2-Dichloropropane	3.955	63	136518	7.372	ppbv #	23
57) Chlorobenzene	8.924	112	1382	0.031	ppbv #	61
60) o-Xylene	9.959	91	2844	0.042	ppbv	96
62) Isopropylbenzene	10.535	105	3380	0.033	ppbv	95
65) tert-Butylbenzene	11.529	119	3543	0.038	ppbv	98
67) sec-Butylbenzene	11.765	105	4317	0.033	ppbv	92
71) 2-Chlorotoluene	10.898	91	2666	0.034	ppbv	97
72) 4-Ethyltoluene	11.121	105	3017	0.036	ppbv #	64
73) 1,3,5-Trimethylbenzene	11.205	105	3101	0.042	ppbv	94
74) 1,2,4-Trimethylbenzene	11.539	105	5313	0.063	ppbv #	73
75) 1,3-Dichlorobenzene	11.607	146	1577	0.034	ppbv	90
77) 1,2-Dichlorobenzene	11.947	146	1591	0.035	ppbv	92
78) Hexachloro-1,3-Butadiene	13.882	225	1821	0.040	ppbv	94

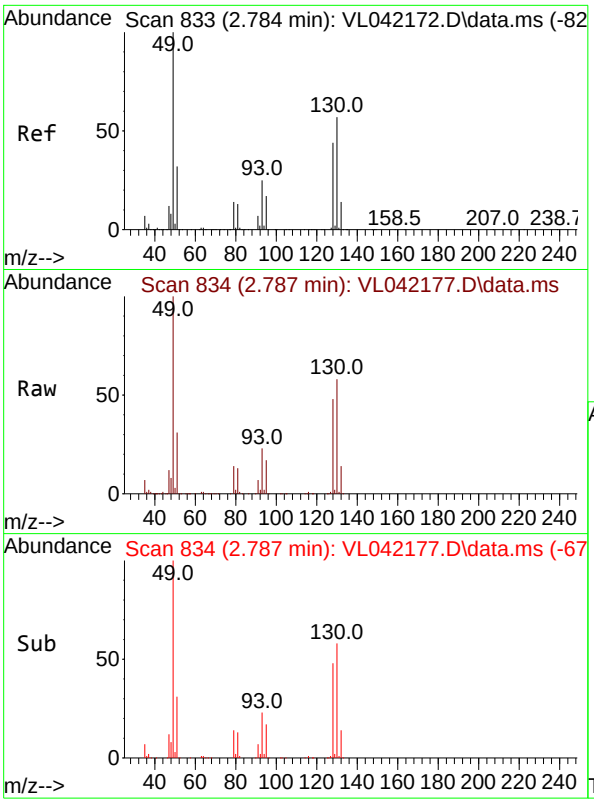
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042177.D
Acq On : 27 Mar 2025 11:03
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Mar 28 01:36:24 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



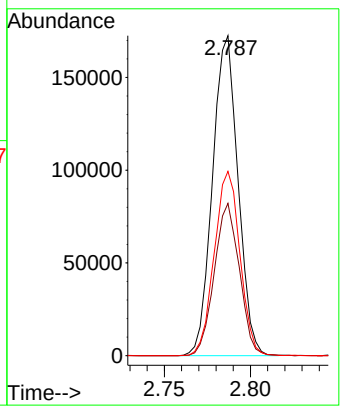


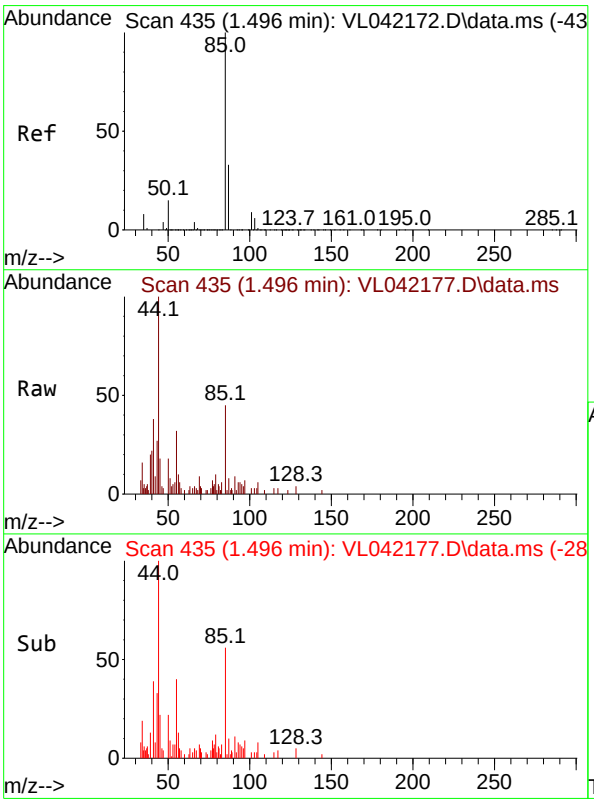
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 49 Resp: 178058

Ion	Ratio	Lower	Upper
49	100		
128	46.8	22.9	68.5
130	57.9	28.8	86.4

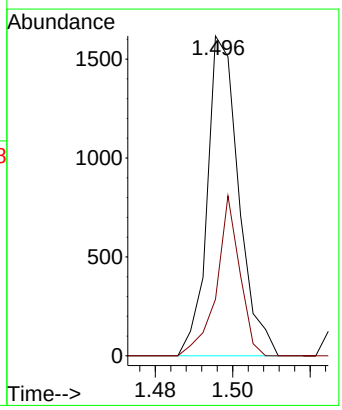


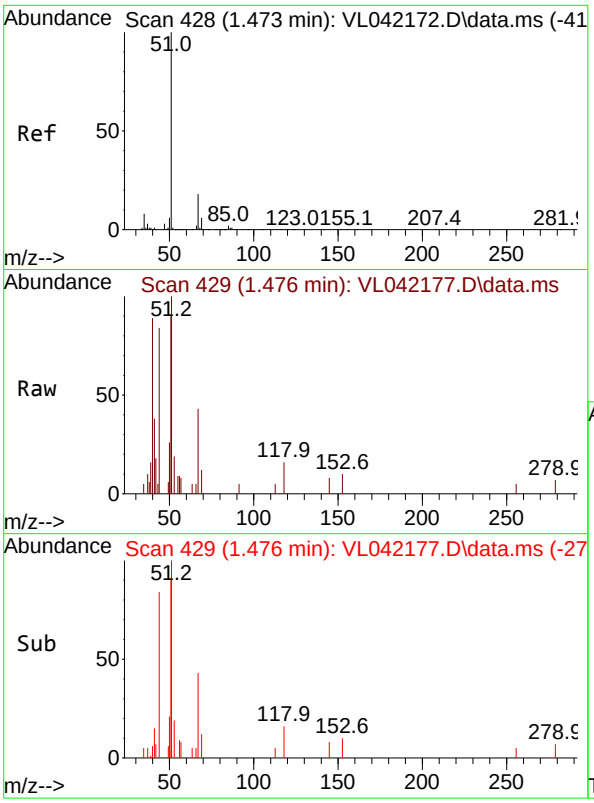


#2
Dichlorodifluoromethane
Concen: 0.035 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 914

Ion	Ratio	Lower	Upper
85	100		
87	17.7	26.1	39.1#



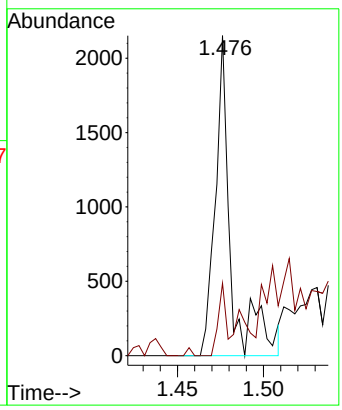


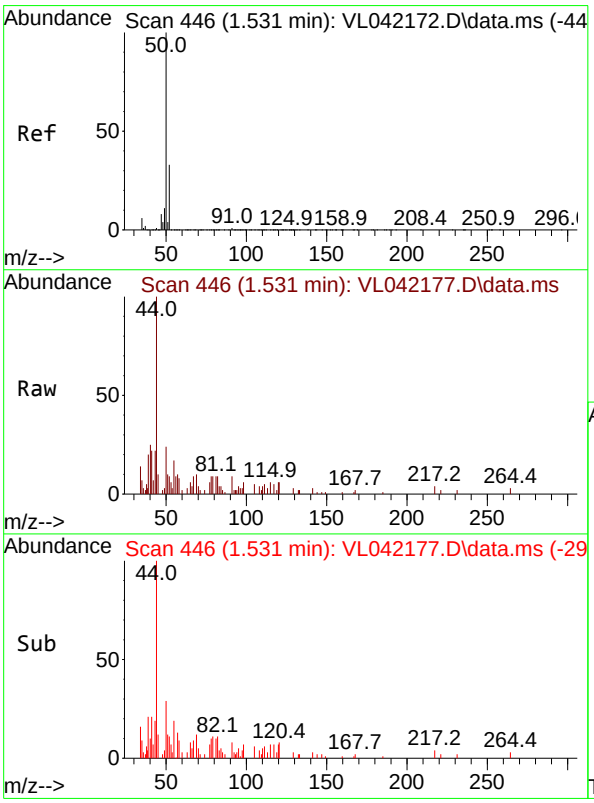
#3
Chlorodifluoromethane
Concen: 0.050 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 51 Resp: 1354

Ion	Ratio	Lower	Upper
51	100		
67	71.0	15.0	22.6#

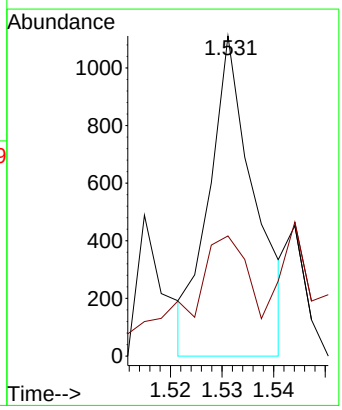


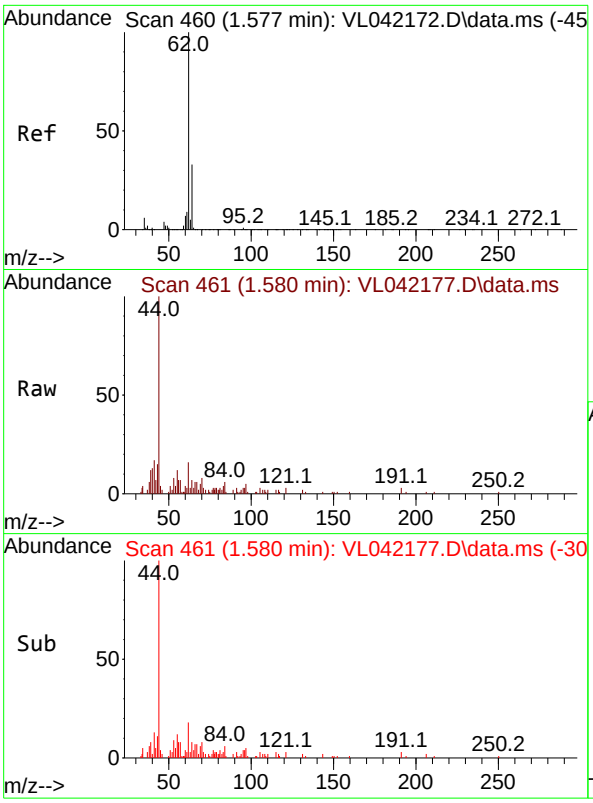


#4
Chloromethane
Concen: 0.063 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 50 Resp: 675

Ion	Ratio	Lower	Upper
50	100		
52	24.6	26.1	39.1#



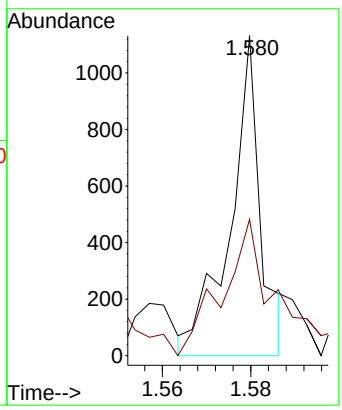


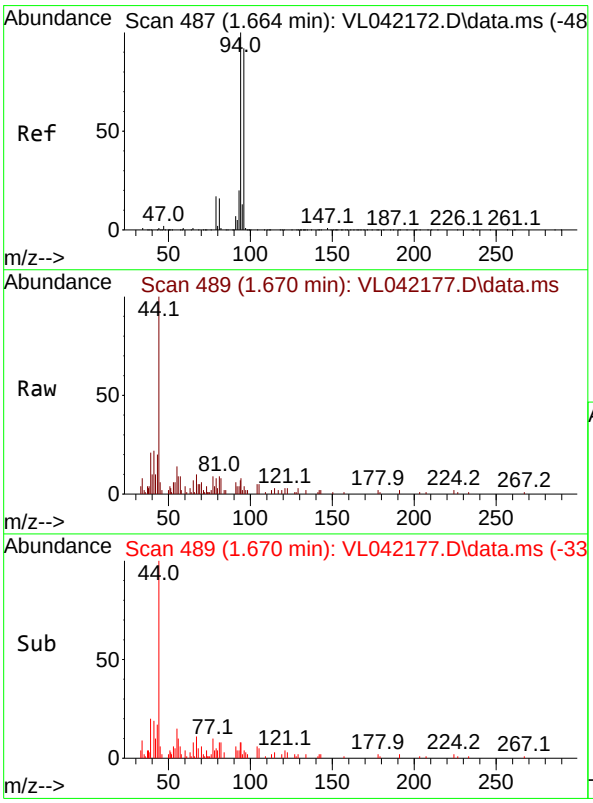
#5
Vinyl Chloride
Concen: 0.049 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 534

Ion	Ratio	Lower	Upper
62	100		
64	45.4	26.6	40.0#

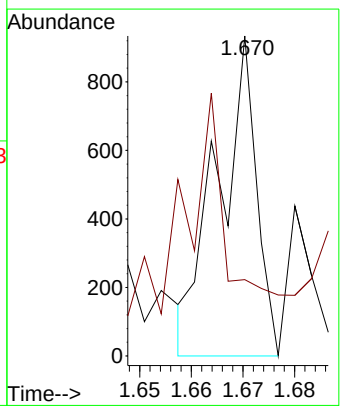


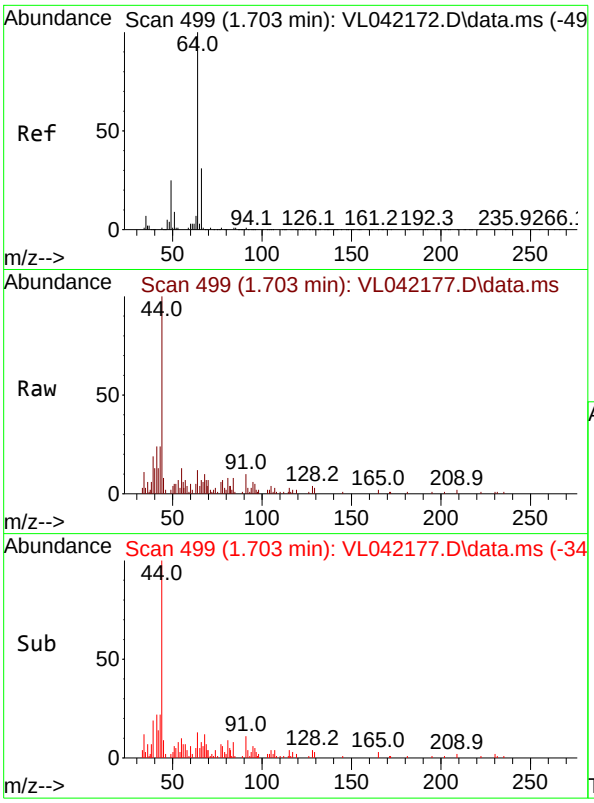


#6
Bromomethane
Concen: 0.099 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 94 Resp: 483

Ion	Ratio	Lower	Upper
94	100		
96	4.8	73.1	109.7#



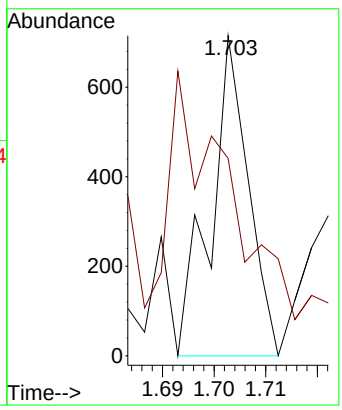


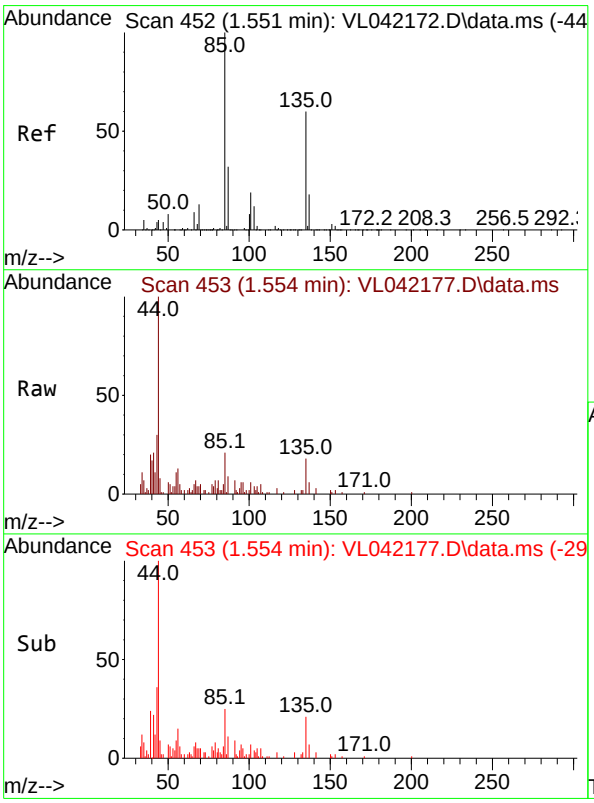
#7
Chloroethane
Concen: 0.084 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 64 Resp: 361

Ion	Ratio	Lower	Upper
64	100		
66	61.7	25.2	37.8#

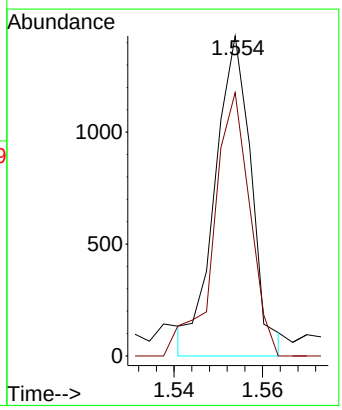


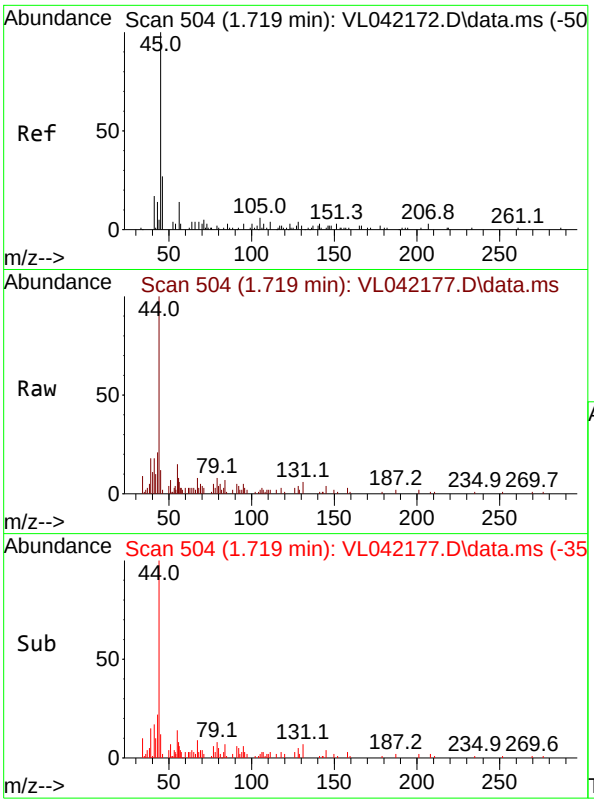


#8
Dichlorotetrafluoroethane
Concen: 0.036 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 85 Resp: 815

Ion	Ratio	Lower	Upper
85	100		
135	82.3	52.4	78.6#



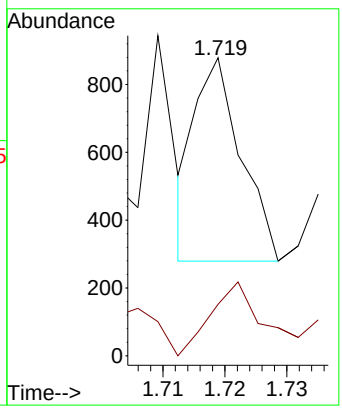


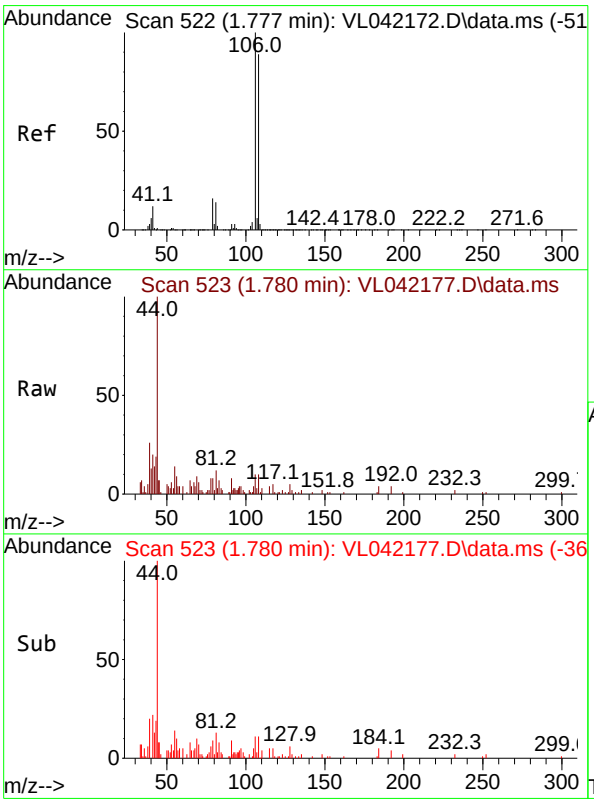
#13
Ethanol
Concen: 0.329 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 312

Ion	Ratio	Lower	Upper
45	100		
46	0.0	20.2	80.8#

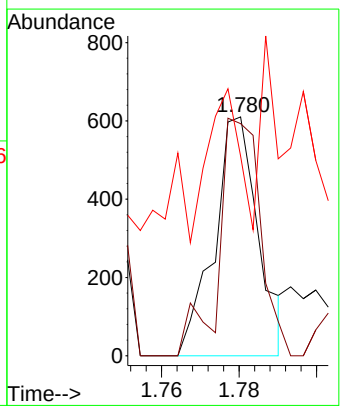


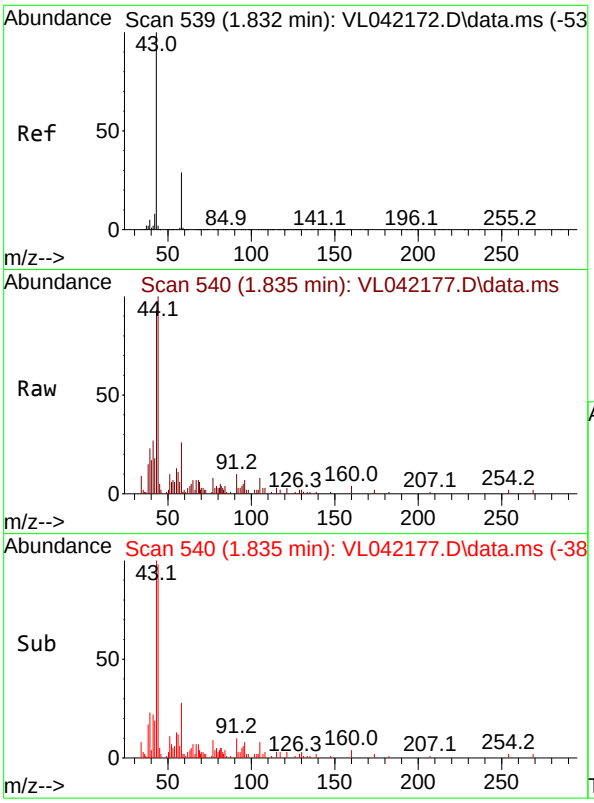


#14
Bromoethene
Concen: 0.060 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:108 Resp: 482

Ion	Ratio	Lower	Upper
108	100		
106	100.4	86.8	130.2
79	208.5	15.0	22.6#



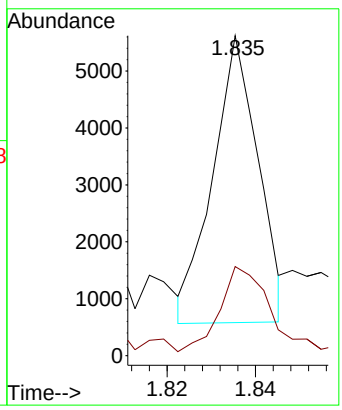


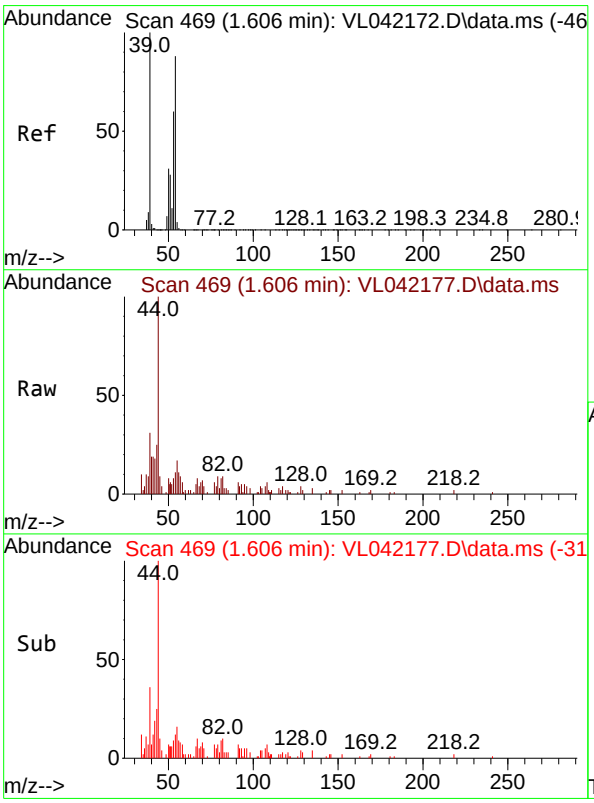
#15
Acetone
Concen: 0.144 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 3574

Ion	Ratio	Lower	Upper
43	100		
58	48.5	23.2	34.8#

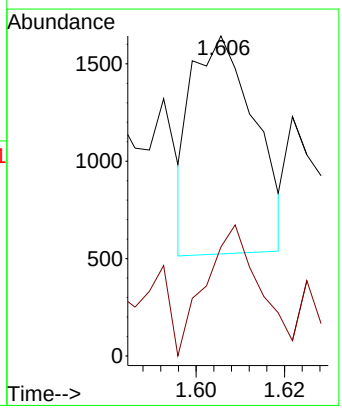


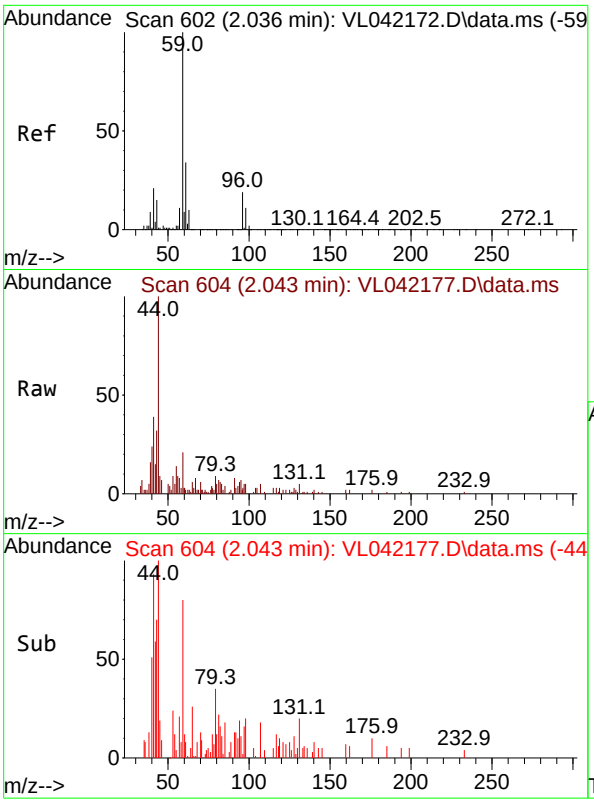


#16
1,3-Butadiene
Concen: 0.098 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 39 Resp: 1101

Ion	Ratio	Lower	Upper
39	100		
54	113.1	60.7	91.1#



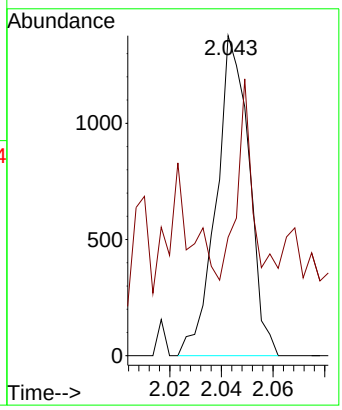


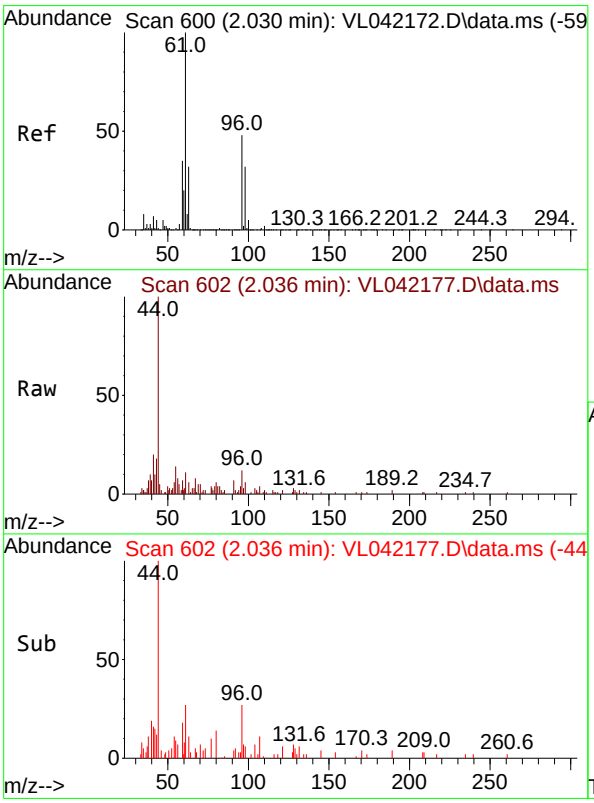
#17
tert-Butyl alcohol
Concen: 0.039 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 59 Resp: 1215

Ion	Ratio	Lower	Upper
59	100		
57	107.2	8.9	13.3#

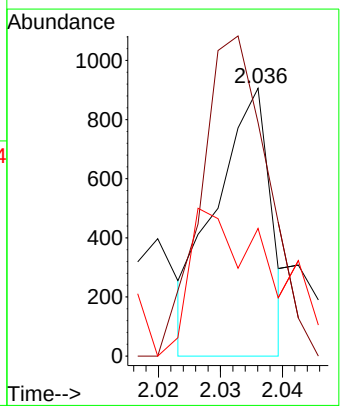


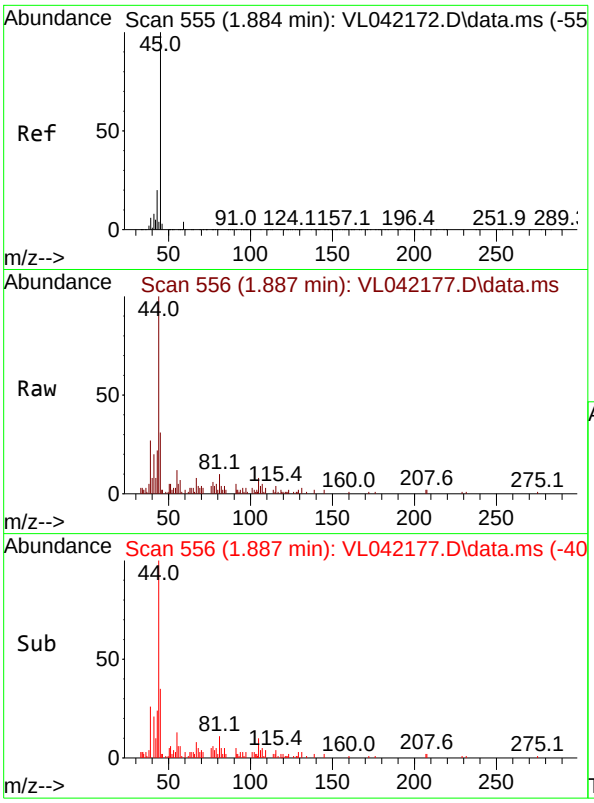


#18
1,1-Dichloroethene
Concen: 0.057 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 96 Resp: 560

Ion	Ratio	Lower	Upper
96	100		
61	87.3	167.6	251.4#
98	56.8	53.5	80.3



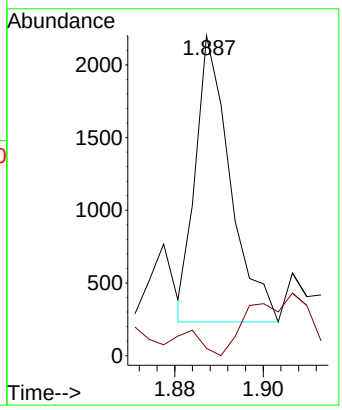


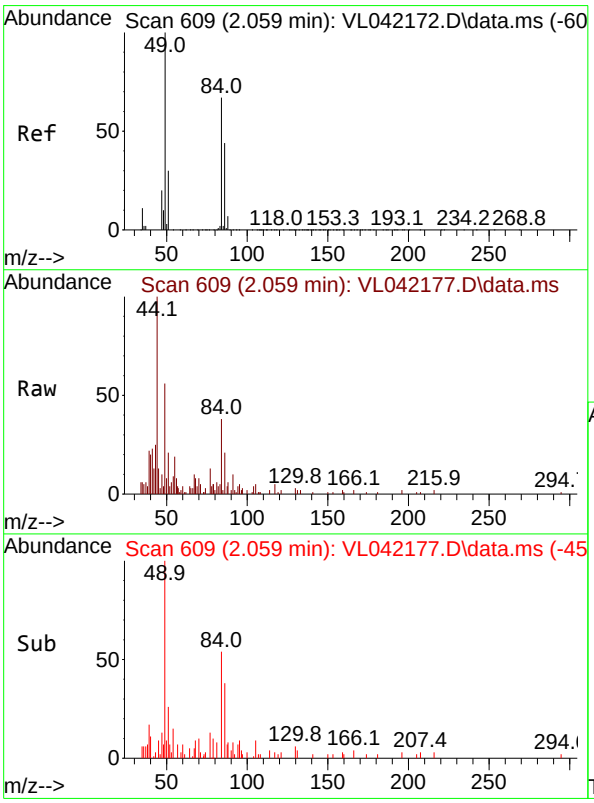
#19
Isopropyl Alcohol
Concen: 0.076 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 1071

Ion	Ratio	Lower	Upper
45	100		
58	0.0	36.9	55.3#

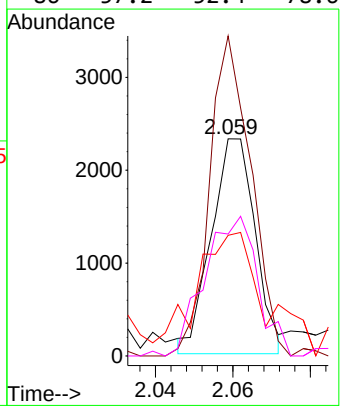


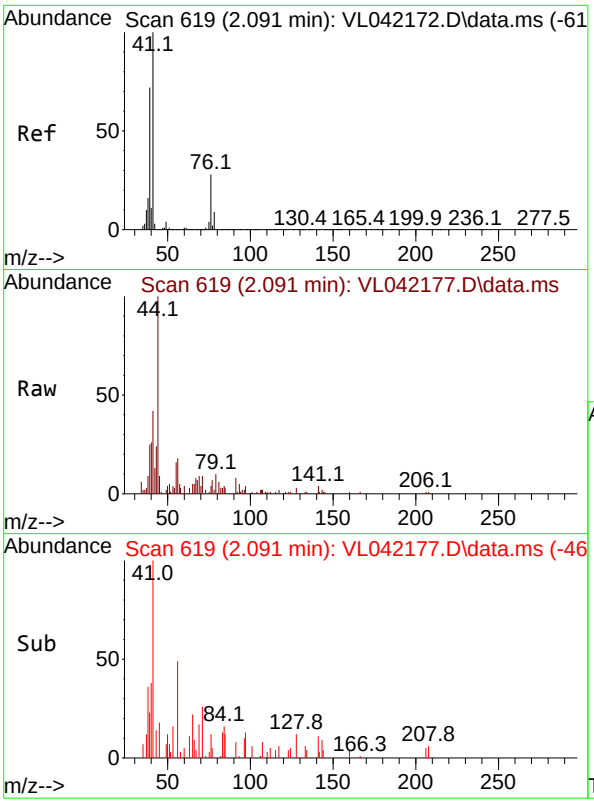


#20
Methylene Chloride
Concen: 0.197 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 84 Resp: 1823

Ion	Ratio	Lower	Upper
84	100		
49	156.6	120.2	180.4
51	34.6	37.4	56.0#
86	57.2	52.4	78.6



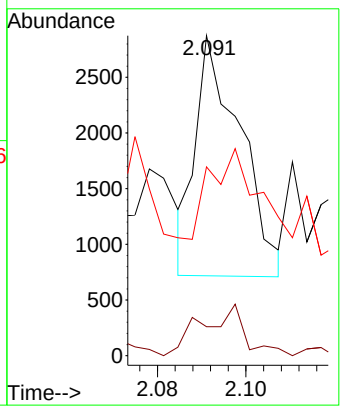


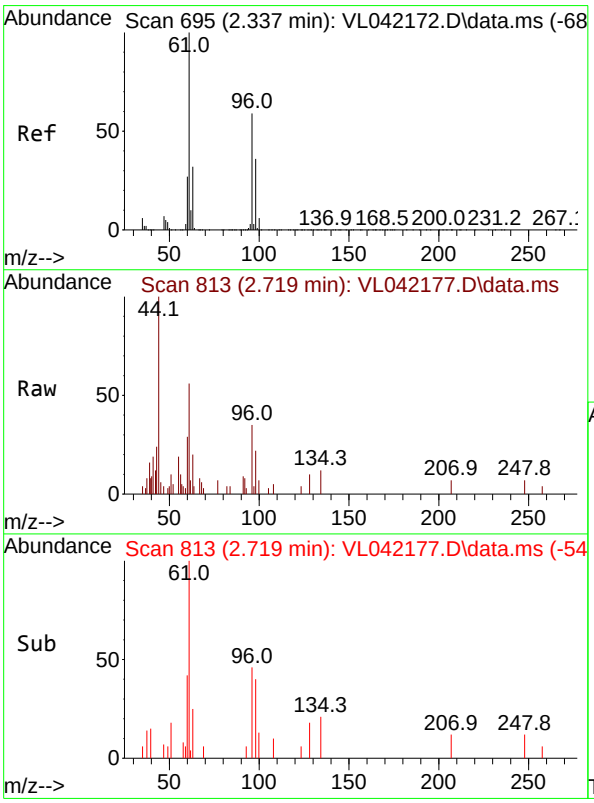
#21
Allyl Chloride
Concen: 0.086 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 41 Resp: 1518

Ion	Ratio	Lower	Upper
41	100		
76	25.9	24.1	36.1
39	158.8	61.1	91.7#

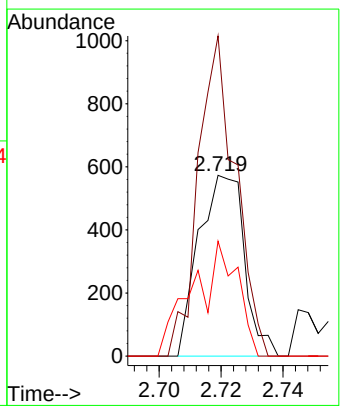


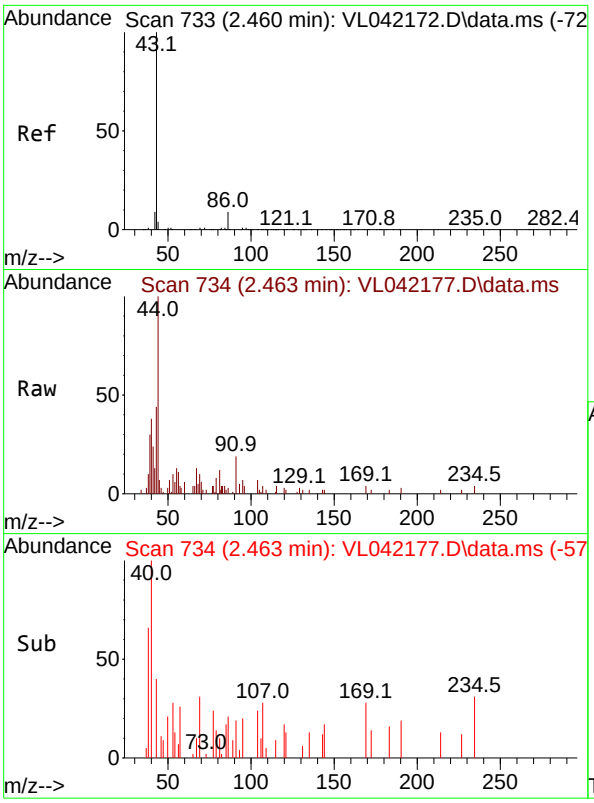


#22
trans-1,2-Dichloroethene
Concen: 0.051 ppbv
RT: 2.719 min Scan# 813
Delta R.T. 0.382 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 96 Resp: 586

Ion	Ratio	Lower	Upper
96	100		
61	177.1	136.6	204.8
98	63.5	49.4	74.2



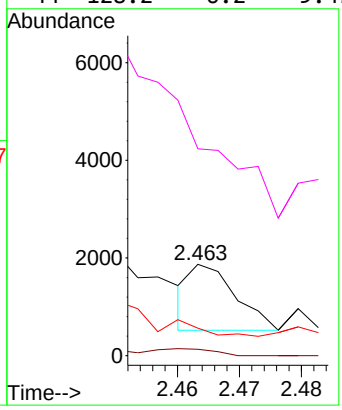


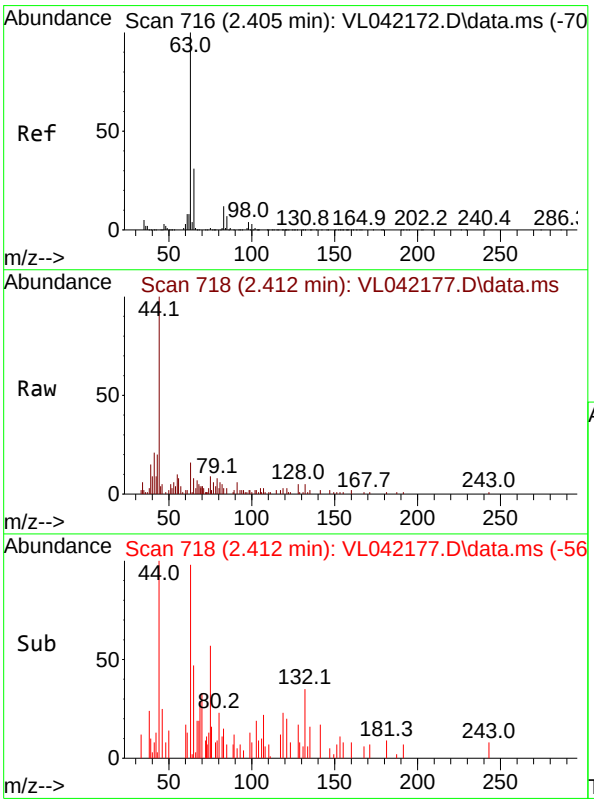
#23
Vinyl Acetate
Concen: 0.067 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 689

Ion	Ratio	Lower	Upper
43	100		
86	9.7	5.5	8.3#
42	6.8	8.6	13.0#
44	128.2	6.2	9.4#

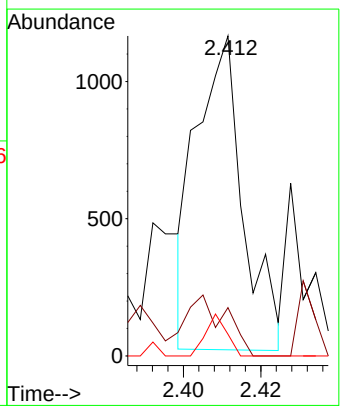


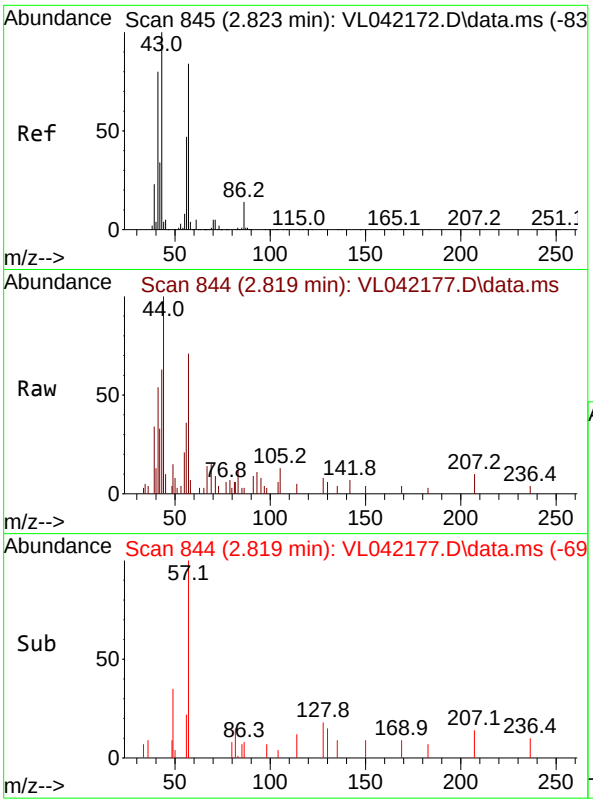


#24
1,1-Dichloroethane
Concen: 0.046 ppbv
RT: 2.412 min Scan# 718
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 63 Resp: 961

Ion	Ratio	Lower	Upper
63	100		
98	16.8	2.3	6.8#
100	7.6	1.6	4.7#



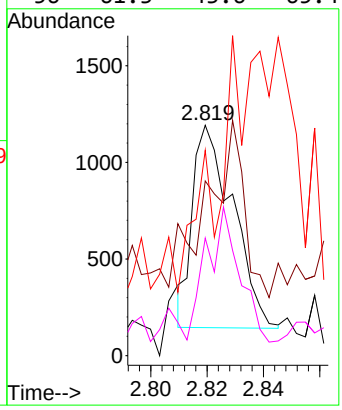


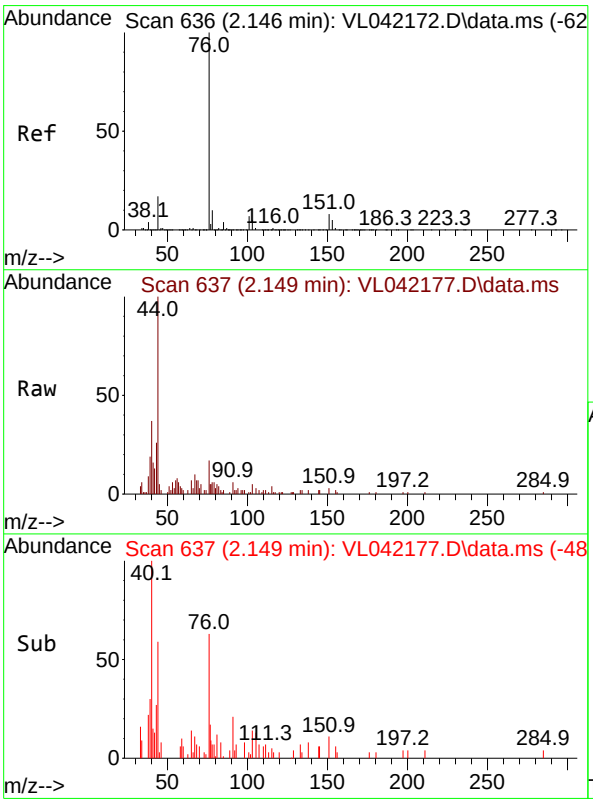
#26
Hexane
Concen: 0.042 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 57 Resp: 1040

Ion	Ratio	Lower	Upper
57	100		
41	179.4	76.6	114.8#
43	351.5	207.8	311.8#
56	61.3	43.6	65.4

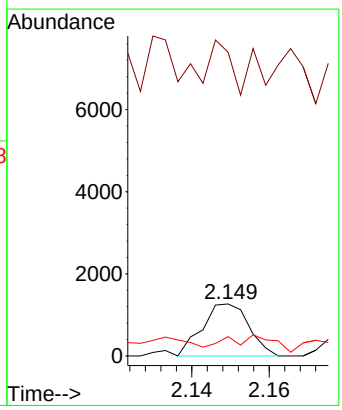


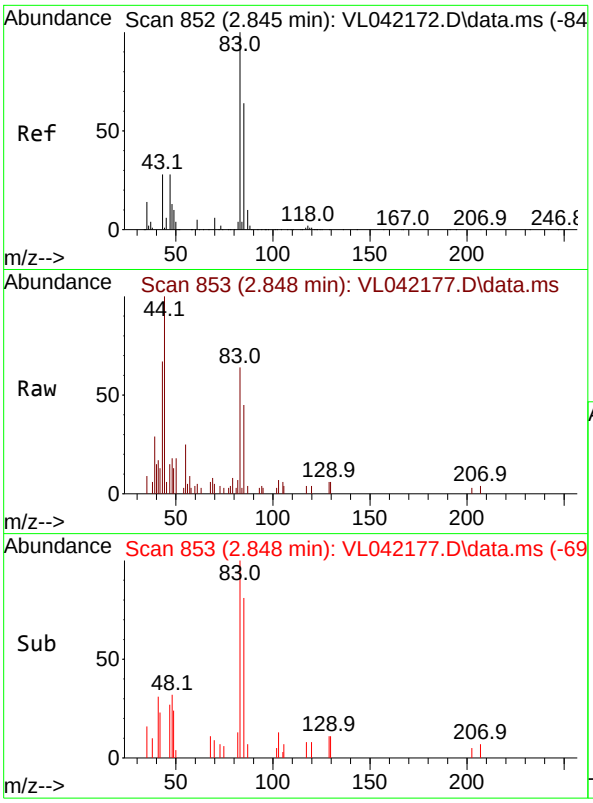


#27
Carbon Disulfide
Concen: 0.040 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 76 Resp: 1061

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	112.4	9.3	13.9#



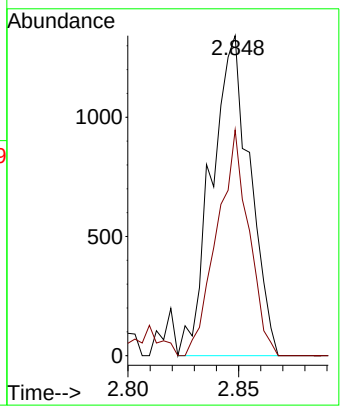


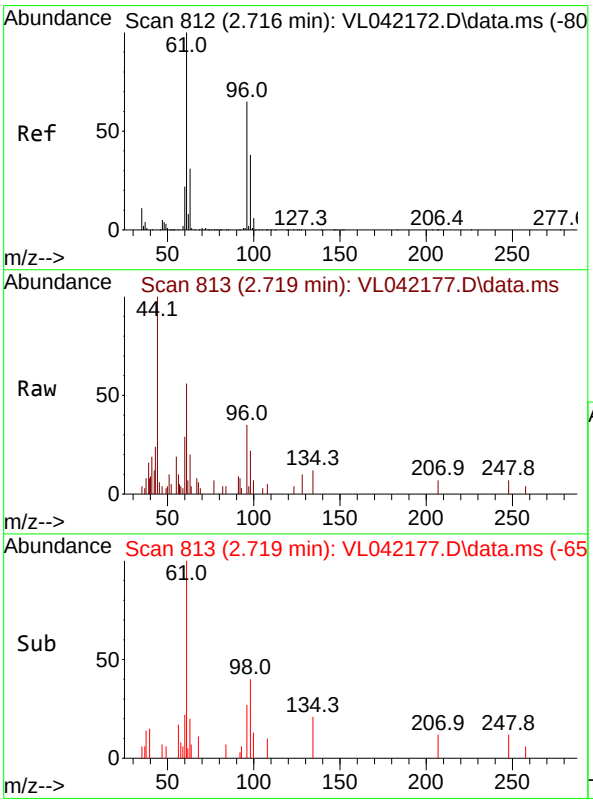
#29
Chloroform
Concen: 0.044 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 83 Resp: 1619

Ion	Ratio	Lower	Upper
83	100		
85	70.6	51.4	77.2

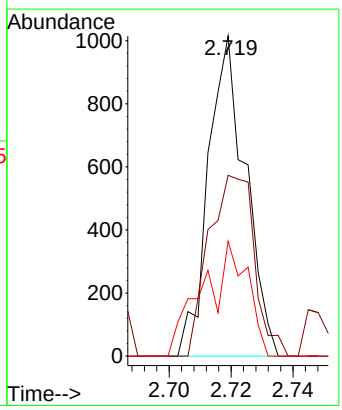


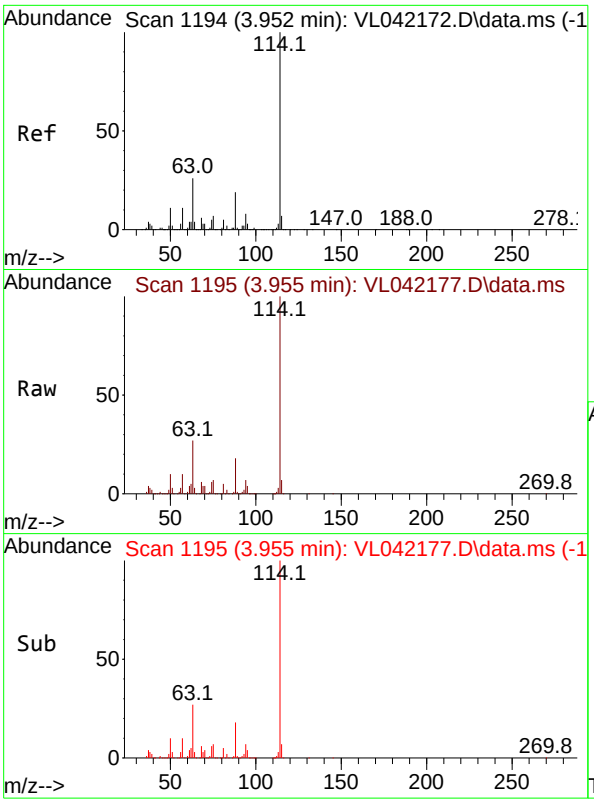


#31
cis-1,2-Dichloroethene
Concen: 0.033 ppbv
RT: 2.719 min Scan# 813
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 61 Resp: 846

Ion	Ratio	Lower	Upper
61	100		
96	56.5	51.8	77.8
98	35.9	30.6	46.0



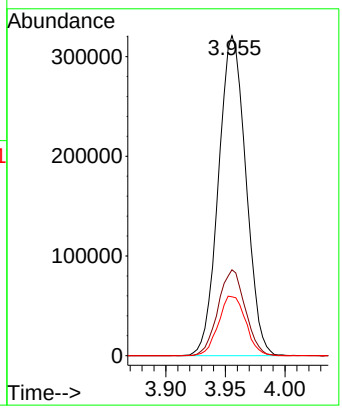


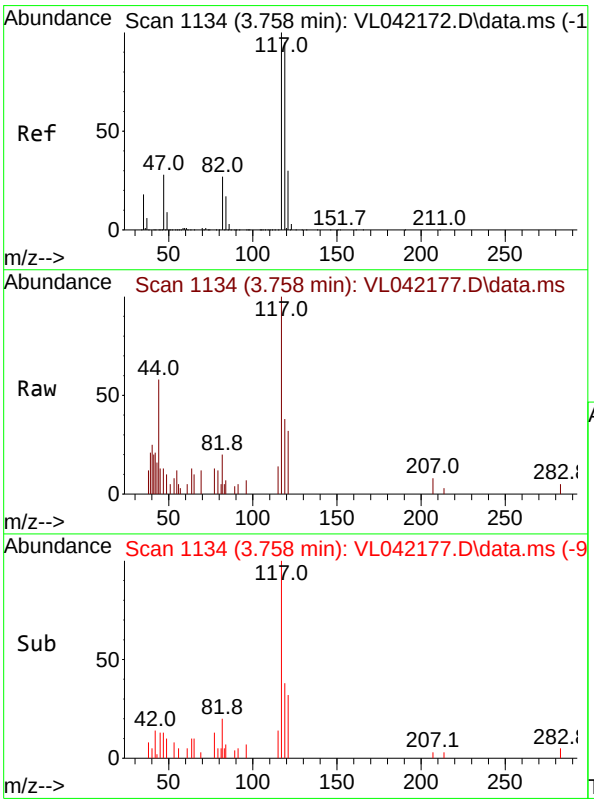
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:114 Resp: 512915

Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	18.6	15.0	22.4

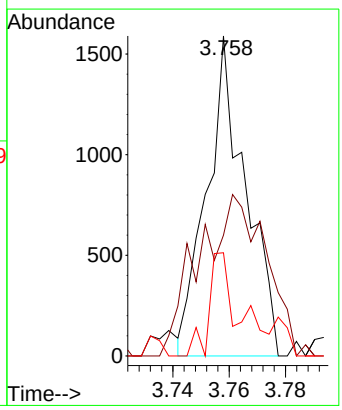


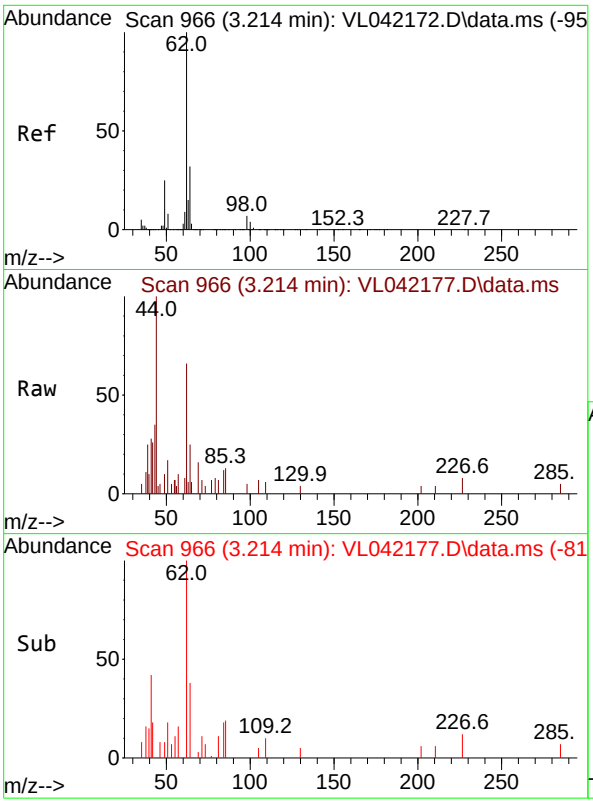


#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:117 Resp: 1520

Ion	Ratio	Lower	Upper
117	100		
119	22.1	76.2	114.2#
121	32.3	24.2	36.4



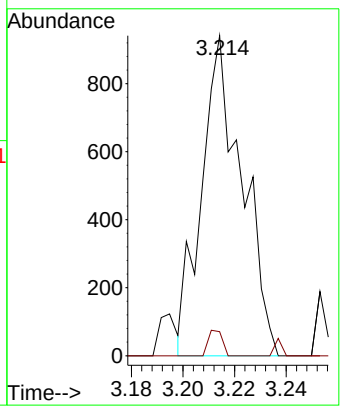


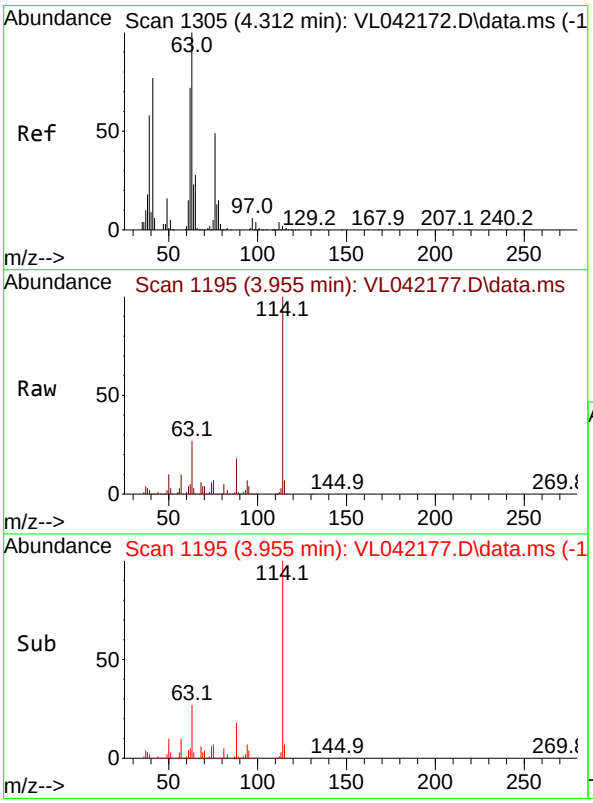
#37
1,2-Dichloroethane
Concen: 0.035 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 62 Resp: 1029

Ion	Ratio	Lower	Upper
62	100		
98	2.7	5.4	8.2#

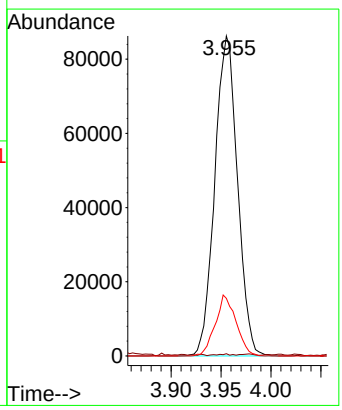


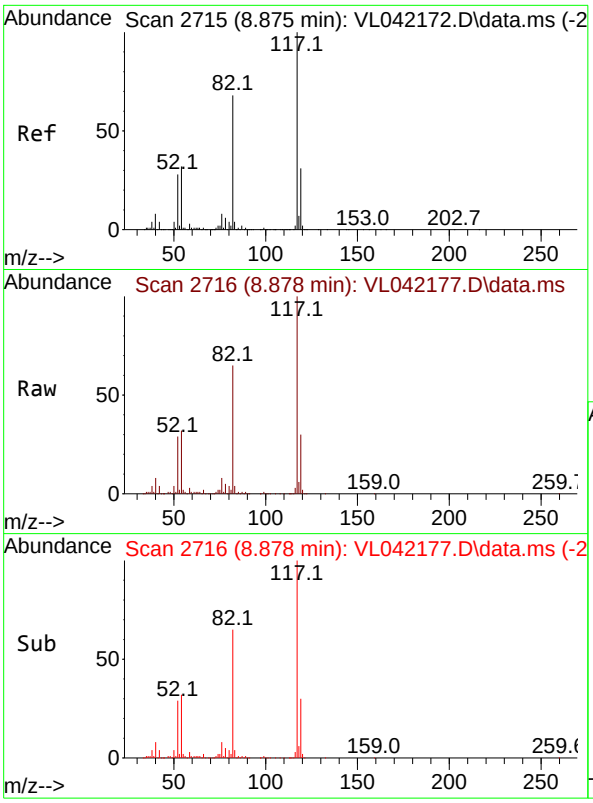


#39
1,2-Dichloropropane
Concen: 7.372 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 63 Resp: 136518

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	18.0	57.6	86.4#



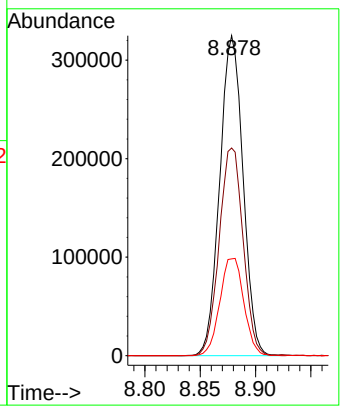


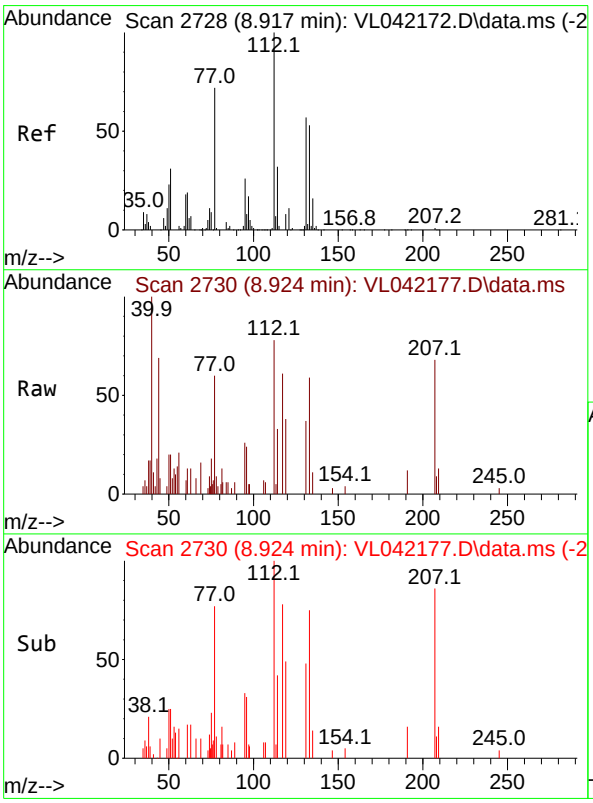
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:117 Resp: 475617

Ion	Ratio	Lower	Upper
117	100		
82	66.7	55.8	83.6
119	31.5	25.5	38.3

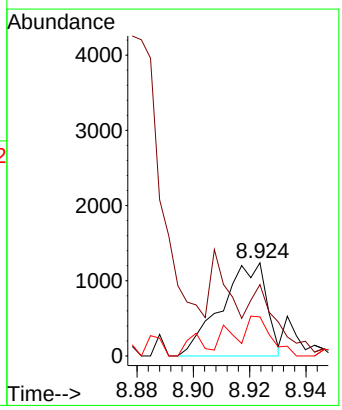


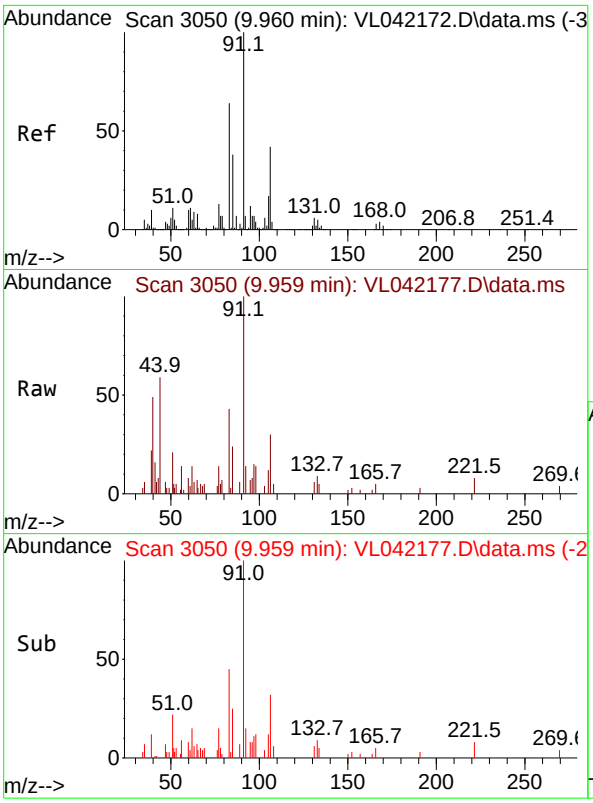


#57
Chlorobenzene
Concen: 0.031 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:112 Resp: 1382

Ion	Ratio	Lower	Upper
112	100		
77	32.1	58.2	87.2#
114	41.8	29.1	35.5#



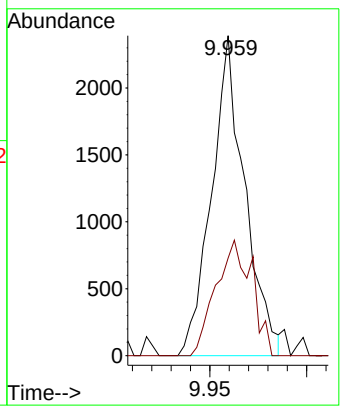


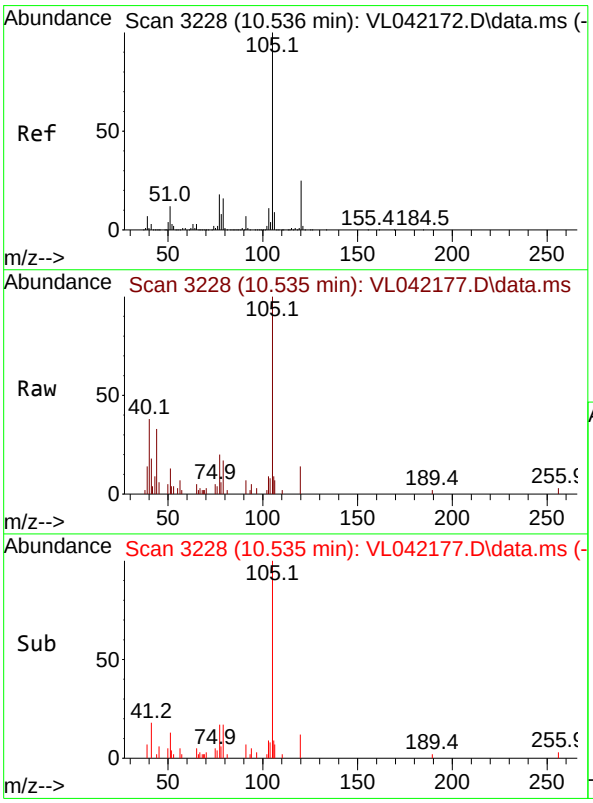
#60
o-Xylene
Concen: 0.042 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 2844

Ion	Ratio	Lower	Upper
91	100		
106	39.4	20.8	62.5

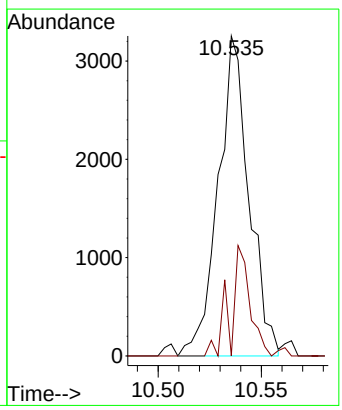


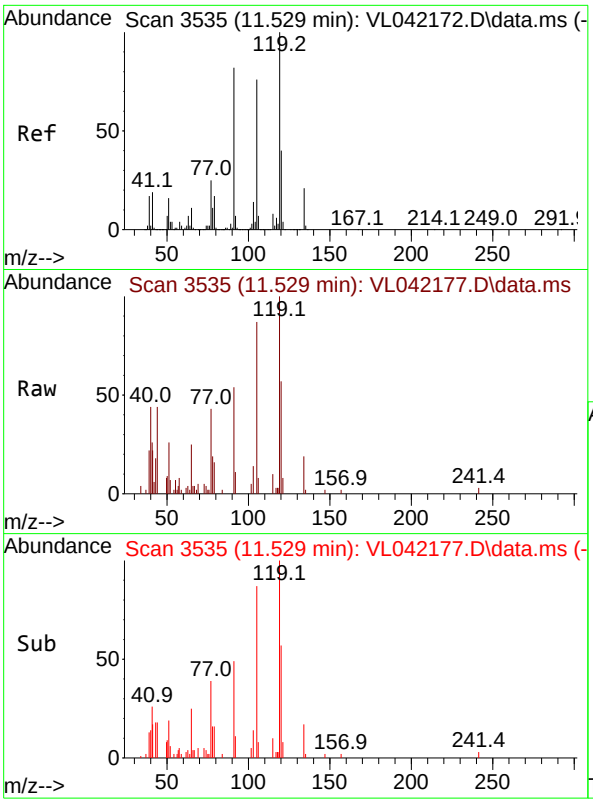


#62
Isopropylbenzene
Concen: 0.033 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 3380

Ion	Ratio	Lower	Upper
105	100		
120	22.3	19.9	29.9



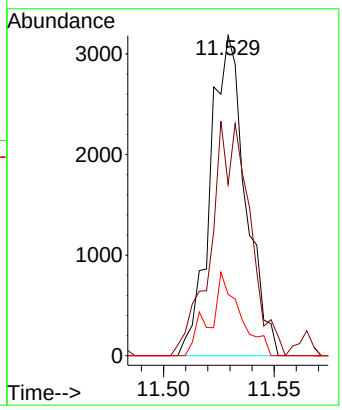


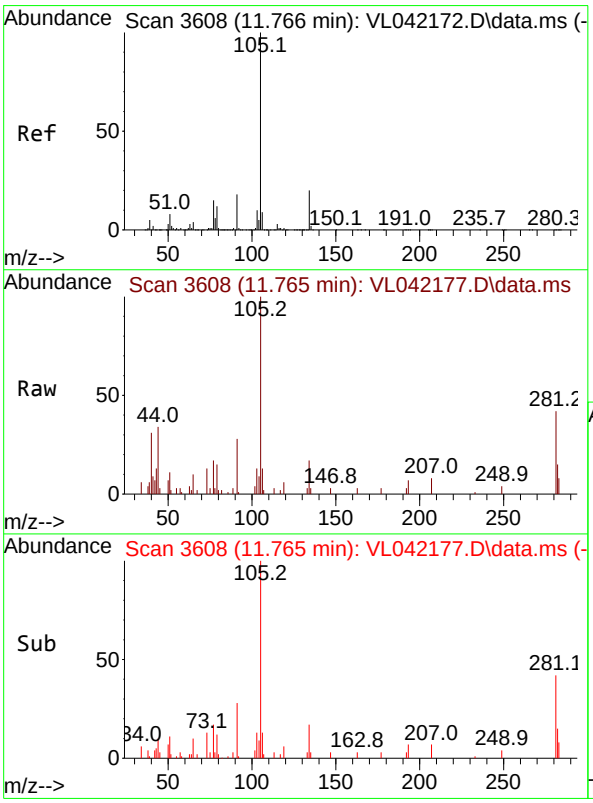
#65
tert-Butylbenzene
Concen: 0.038 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 3543

Ion	Ratio	Lower	Upper
119	100		
91	83.5	66.0	99.0
134	22.4	16.7	25.1

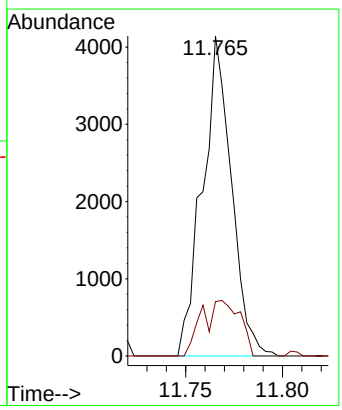


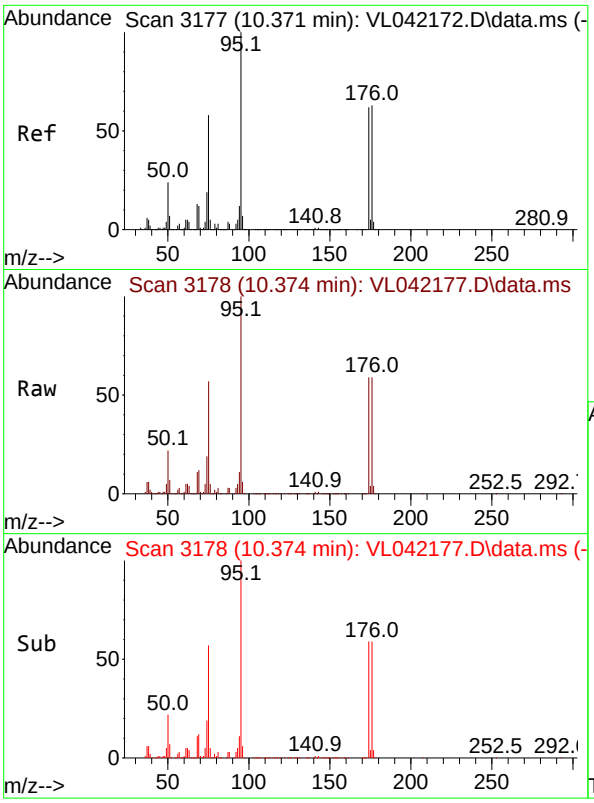


#67
sec-Butylbenzene
Concen: 0.033 ppbv
RT: 11.765 min Scan# 3608
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 4317

Ion	Ratio	Lower	Upper
105	100		
134	22.8	15.5	23.3



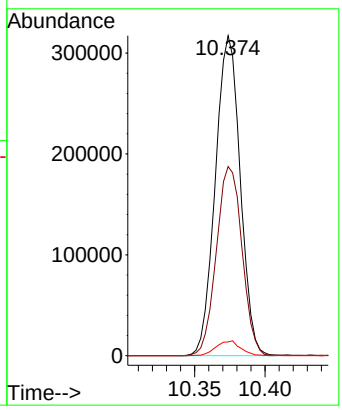


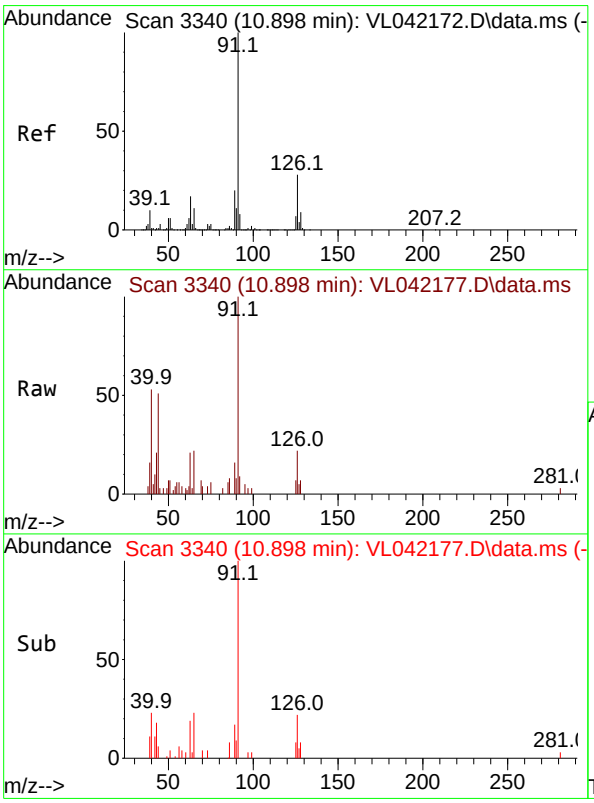
#68
1-Bromo-4-Fluorobenzene
Concen: 9.983 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 95 Resp: 389935

Ion	Ratio	Lower	Upper
95	100		
174	61.2	50.6	76.0
175	4.6	3.8	5.6

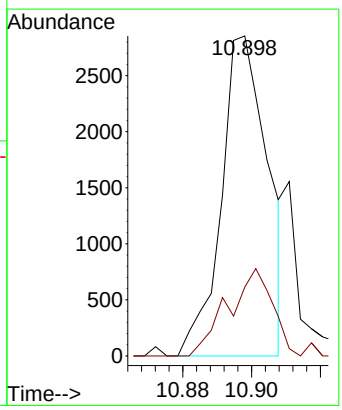


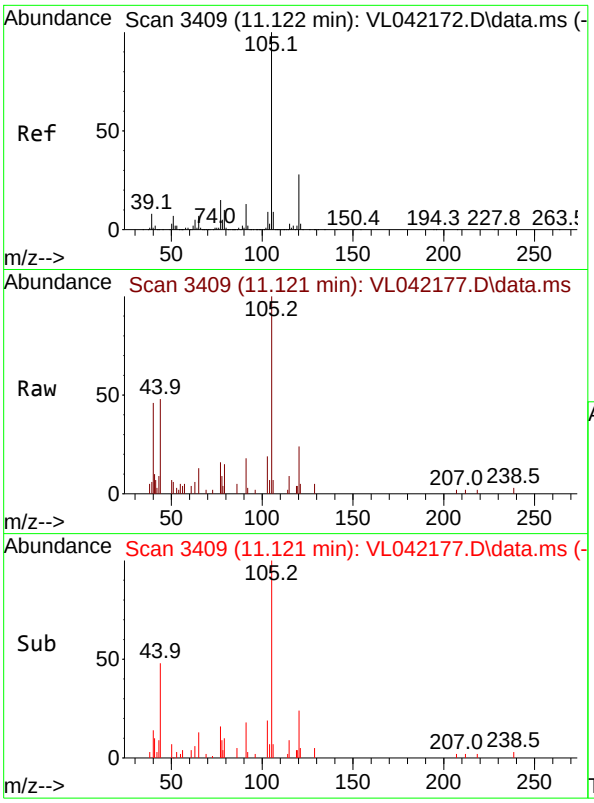


#71
2-Chlorotoluene
Concen: 0.034 ppbv
RT: 10.898 min Scan# 3340
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion: 91 Resp: 2666

Ion	Ratio	Lower	Upper
91	100		
126	27.2	11.6	46.4



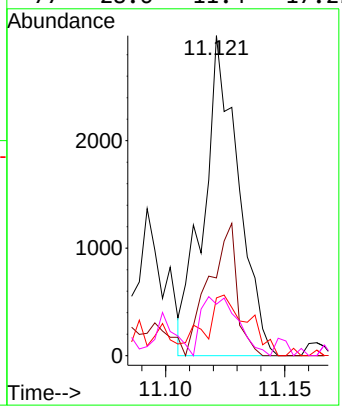


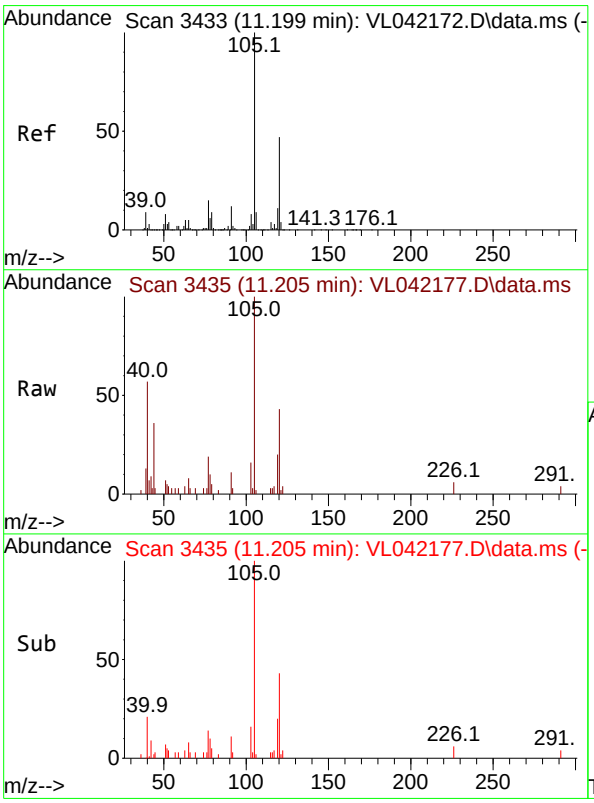
#72
4-Ethyltoluene
Concen: 0.036 ppbv
RT: 11.121 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 3017

Ion	Ratio	Lower	Upper
105	100		
120	44.5	23.4	35.0#
91	34.0	10.3	15.5#
77	28.6	11.4	17.2#

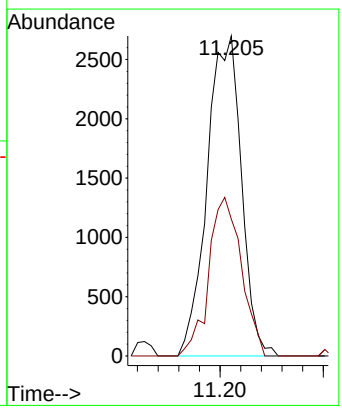


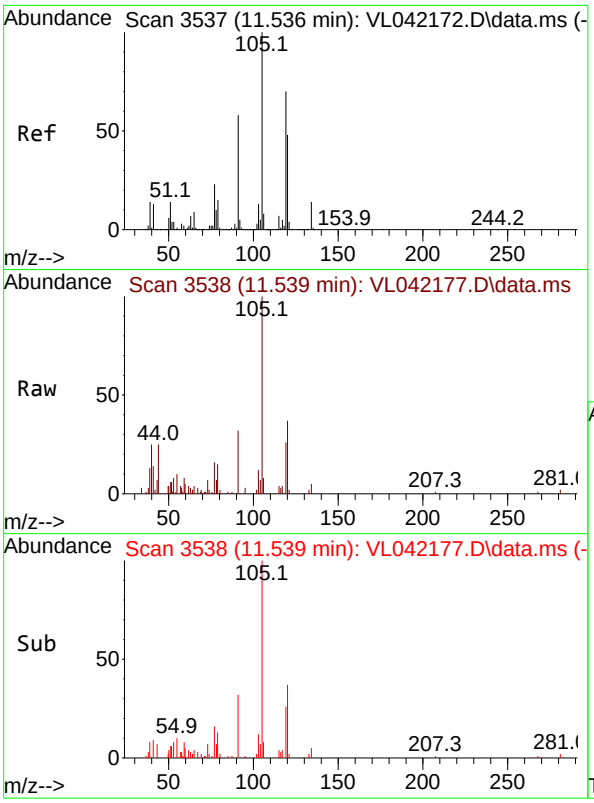


#73
1,3,5-Trimethylbenzene
Concen: 0.042 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:105 Resp: 3101

Ion	Ratio	Lower	Upper
105	100		
120	42.8	37.4	56.0



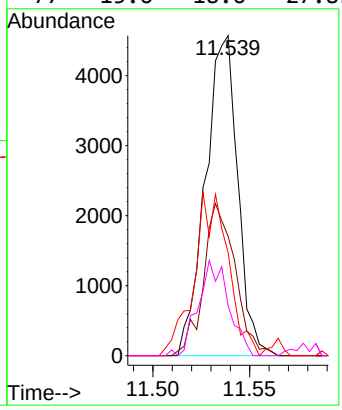


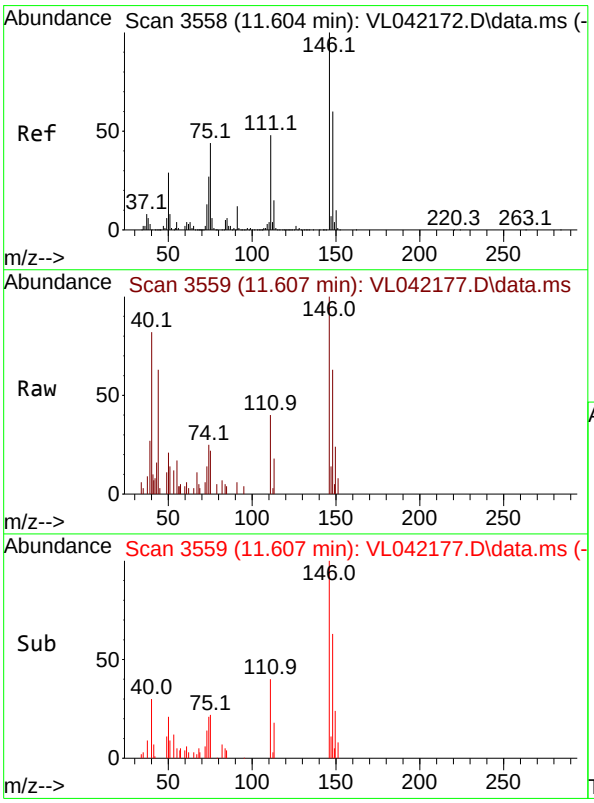
#74
1,2,4-Trimethylbenzene
Concen: 0.063 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 5313

Ion	Ratio	Lower	Upper
105	100		
120	37.3	38.6	58.0#
91	26.8	46.2	69.2#
77	15.6	18.6	27.8#

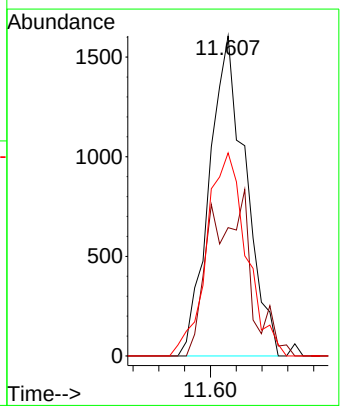


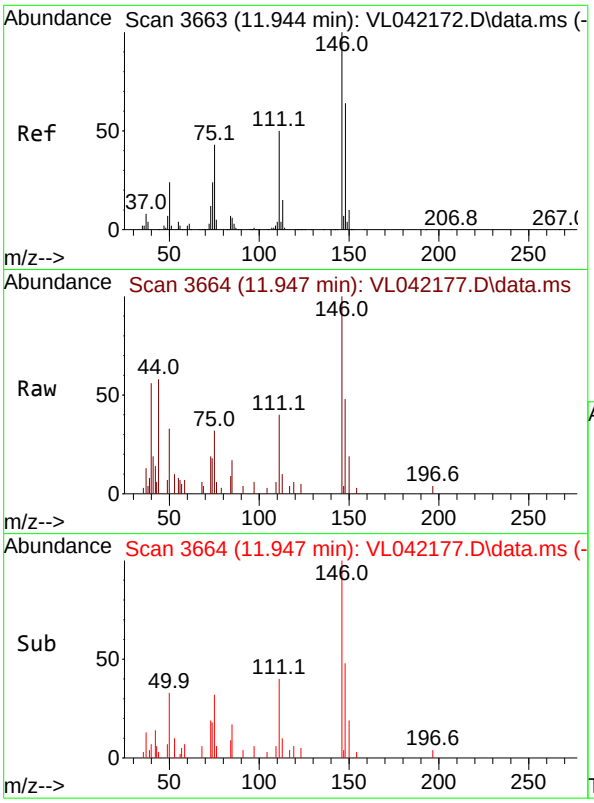


#75
1,3-Dichlorobenzene
Concen: 0.034 ppbv
RT: 11.607 min Scan# 3559
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:146 Resp: 1577

Ion	Ratio	Lower	Upper
146	100		
111	56.6	23.8	71.2
148	69.2	31.9	95.9



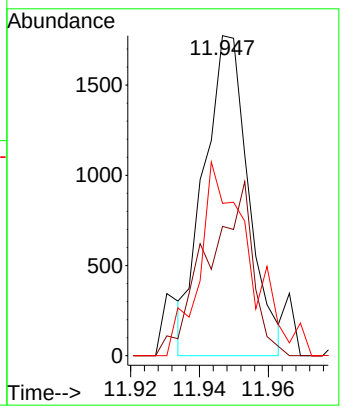


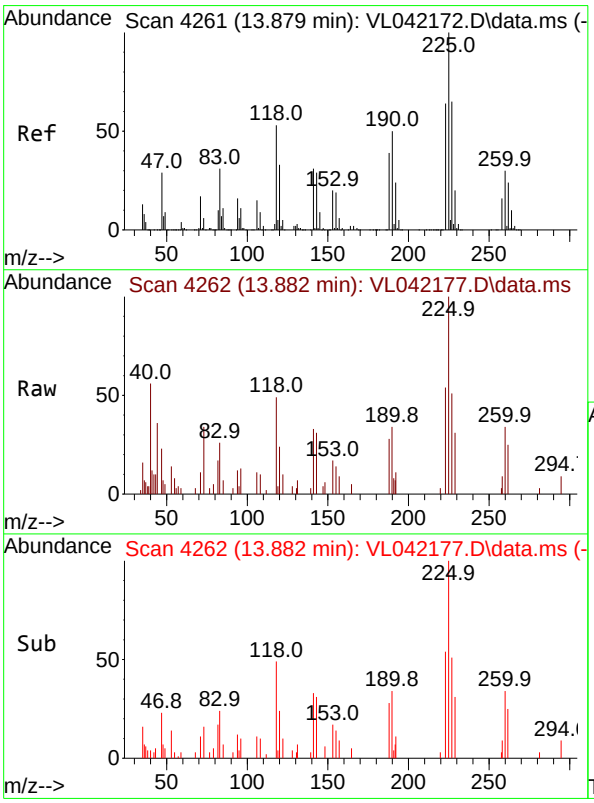
#77
1,2-Dichlorobenzene
Concen: 0.035 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1591

Ion	Ratio	Lower	Upper
146	100		
111	55.6	24.8	74.3
148	68.3	31.6	94.8

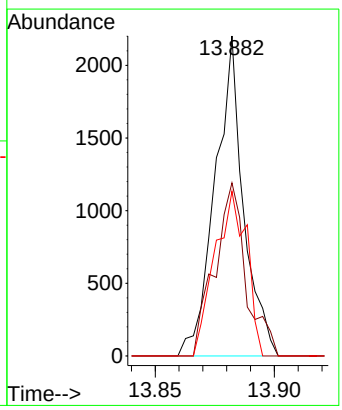




#78
Hexachloro-1,3-Butadiene
Concen: 0.040 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042177.D
Acq: 27 Mar 2025 11:03

Tgt Ion:225 Resp: 1821

Ion	Ratio	Lower	Upper
225	100		
223	59.6	50.6	76.0
227	58.0	51.2	76.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	173372	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	499360	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	473077	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	387777	9.981	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	358962	14.023	ppbv		99
3) Chlorodifluoromethane	1.473	51	366164	14.002	ppbv		98
4) Chloromethane	1.531	50	148133	14.160	ppbv		98
5) Vinyl Chloride	1.576	62	141938	13.304	ppbv		97
6) Bromomethane	1.667	94	65113	13.734	ppbv		99
7) Chloroethane	1.703	64	58820	14.007	ppbv		99
8) Dichlorotetrafluoroethane	1.550	85	314834	14.442	ppbv		98
9) Propene	1.482	41	163799	13.902	ppbv		95
10) Heptane	4.972	43	446949	14.019	ppbv		99
11) Trichlorofluoromethane	1.874	101	349967	14.050	ppbv		98
12) 1,1,2-Trichlorotrifluo...	2.136	101	295217	14.419	ppbv		99
13) Ethanol	1.719	45	7382	8.001	ppbv		92
14) Bromoethene	1.780	108	106436	13.571	ppbv		98
15) Acetone	1.832	43	296254	12.218	ppbv		98
16) 1,3-Butadiene	1.605	39	150122	13.766	ppbv		100
17) tert-Butyl alcohol	2.039	59	416362	13.787	ppbv		99
18) 1,1-Dichloroethene	2.029	96	131720	13.762	ppbv		99
19) Isopropyl Alcohol	1.884	45	179117	13.093	ppbv		100
20) Methylene Chloride	2.059	84	113183	12.533	ppbv		95
21) Allyl Chloride	2.094	41	239440	14.002	ppbv		99
22) trans-1,2-Dichloroethene	2.337	96	149455	13.362	ppbv		98
23) Vinyl Acetate	2.460	43	138419	13.736	ppbv	#	96
24) 1,1-Dichloroethane	2.405	63	298760	14.570	ppbv		99
25) Ethyl Acetate	2.832	43	871882	13.855	ppbv		100
26) Hexane	2.822	57	344636	14.178	ppbv		98
27) Carbon Disulfide	2.146	76	370022	14.196	ppbv		97
28) Methyl tert-Butyl Ether	2.437	73	216463	14.303	ppbv		95
29) Chloroform	2.845	83	508614	14.297	ppbv		100
30) Cyclohexane	3.852	84	296458	14.040	ppbv		99
31) cis-1,2-Dichloroethene	2.719	61	351945	14.262	ppbv		97
32) 1,1,1-Trichloroethane	3.363	97	547329	13.448	ppbv		99
34) 2-Butanone	2.554	43	497020	13.726	ppbv		99
35) Carbon Tetrachloride	3.758	117	543385	14.140	ppbv		100
36) Benzene	3.651	78	699549	14.131	ppbv		98
37) 1,2-Dichloroethane	3.214	62	416544	14.697	ppbv		99
38) Trichloroethene	4.541	130	283430	13.715	ppbv		98
39) 1,2-Dichloropropane	4.308	63	257891	14.304	ppbv		99
40) 1,4-Dioxane	4.577	88	124925	13.354	ppbv	#	91
41) Tetrahydrofuran	3.049	42	294634	14.301	ppbv		100
42) Bromodichloromethane	4.483	83	587772	15.043	ppbv		99
43) Methyl Methacrylate	4.874	69	295300	14.130	ppbv		99
44) 2,2,4-Trimethylpentane	4.635	57	1180275	14.108	ppbv		99
45) t-1,3-Dichloropropene	6.405	75	329360	14.649	ppbv		96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	400813	14.542	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	273137	14.331	ppbv		98
48) Dibromochloromethane	7.383	129	482431	14.936	ppbv		100
49) Bromoform	9.480	173	427143	14.730	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	755146	13.155	ppbv		99
51) 2-Hexanone	7.431	43	619419	13.005	ppbv	#	99
52) Tetrachloroethene	8.221	164	258356	13.159	ppbv		95
53) Toluene	6.926	91	829648	14.137	ppbv		100
54) 1,2-Dibromoethane	7.645	107	381823	14.359	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.920	131	365410	14.032	ppbv		99
57) Chlorobenzene	8.917	112	618201	13.777	ppbv		100
58) Ethyl Benzene	9.351	91	1167096	13.889	ppbv		97
59) m/p-Xylene	9.548	91	866684	12.901	ppbv	#	22
60) o-Xylene	9.962	91	913234	13.577	ppbv		99
61) Styrene	9.865	104	474195	14.250	ppbv		99
62) Isopropylbenzene	10.535	105	1362416	13.544	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	551386	13.491	ppbv		99
64) n-propylbenzene	10.985	120	356118	13.753	ppbv		94
65) tert-Butylbenzene	11.529	119	1200149	12.901	ppbv		98
66) Benzyl Chloride	11.613	91	134397	13.615	ppbv		100
67) sec-Butylbenzene	11.765	105	1643629	12.711	ppbv		99
69) p-Isopropyltoluene	11.924	119	1437016	12.906	ppbv		98
70) n-Butylbenzene	12.280	91	1477443	12.975	ppbv		99
71) 2-Chlorotoluene	10.898	91	1071432	13.724	ppbv		99
72) 4-Ethyltoluene	11.121	105	1136415	13.569	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	979783	13.395	ppbv		99
74) 1,2,4-Trimethylbenzene	11.535	105	1048874	12.447	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	626015	13.545	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	628694	13.668	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	602844	13.396	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	556392	12.147	ppbv		99
79) Naphthalene	13.513	128	1258479	13.653	ppbv		98
80) Naphthalene,2-methyl-	14.455	142	718900	16.018	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	598416	14.075	ppbv		99

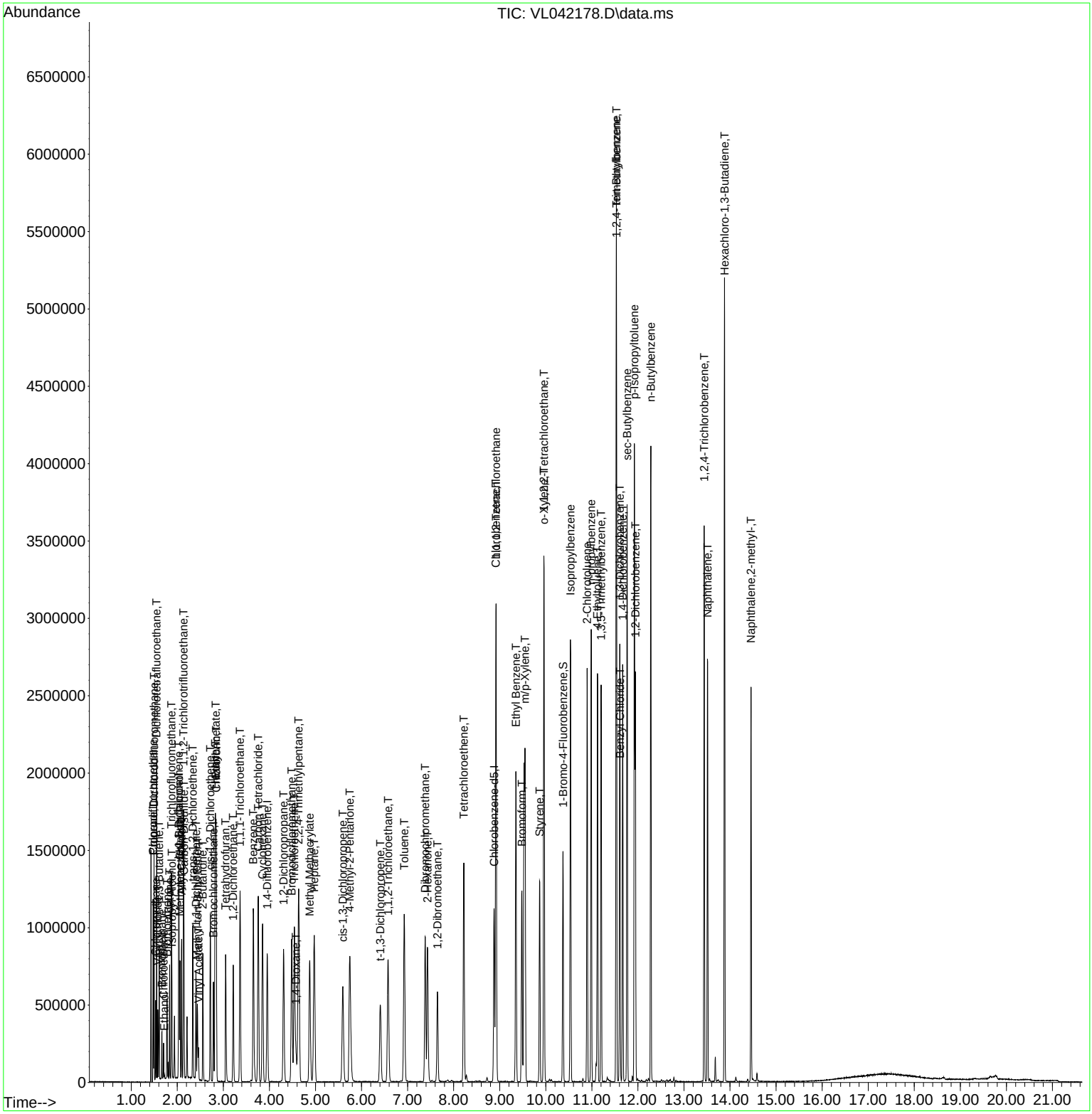
(#) = qualifier out of range (m) = manual integration (+) = signals summed

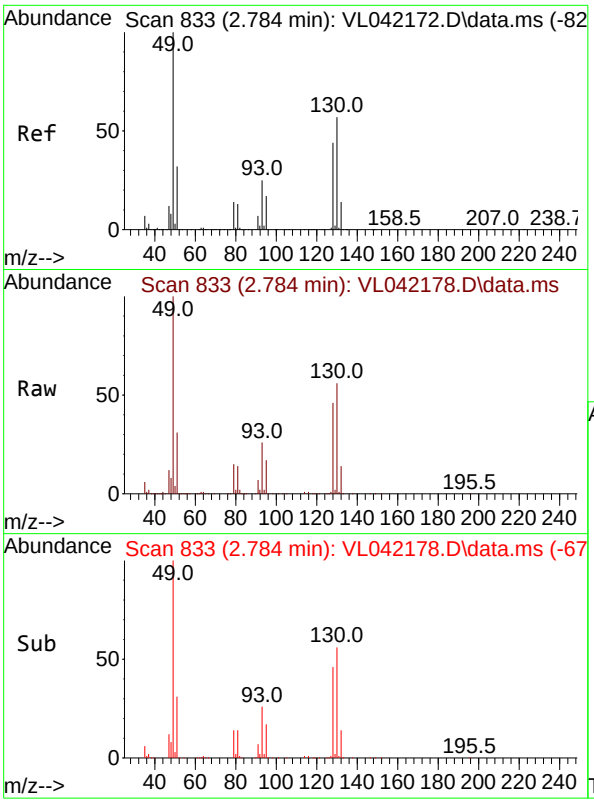
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042178.D
Acq On : 27 Mar 2025 11:36
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Mar 28 01:37:01 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 01:31:23 2025
Response via : Initial Calibration



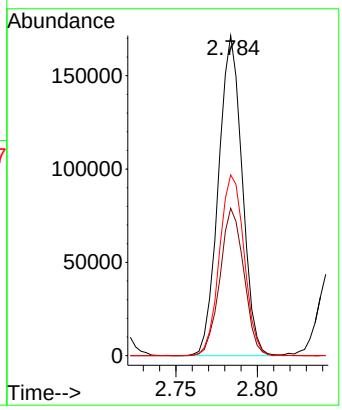


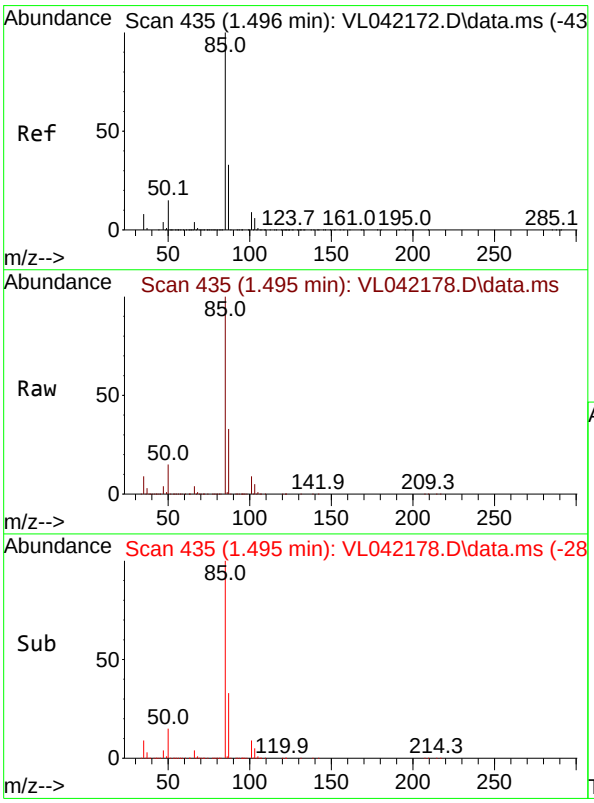
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 49 Resp: 173372

Ion	Ratio	Lower	Upper
49	100		
128	46.4	22.9	68.5
130	58.7	28.8	86.4

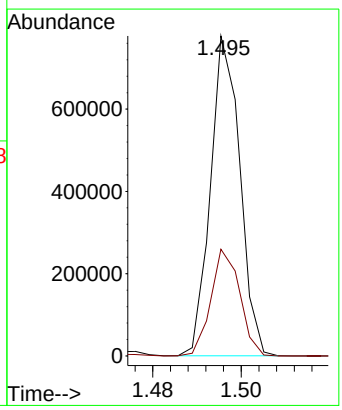


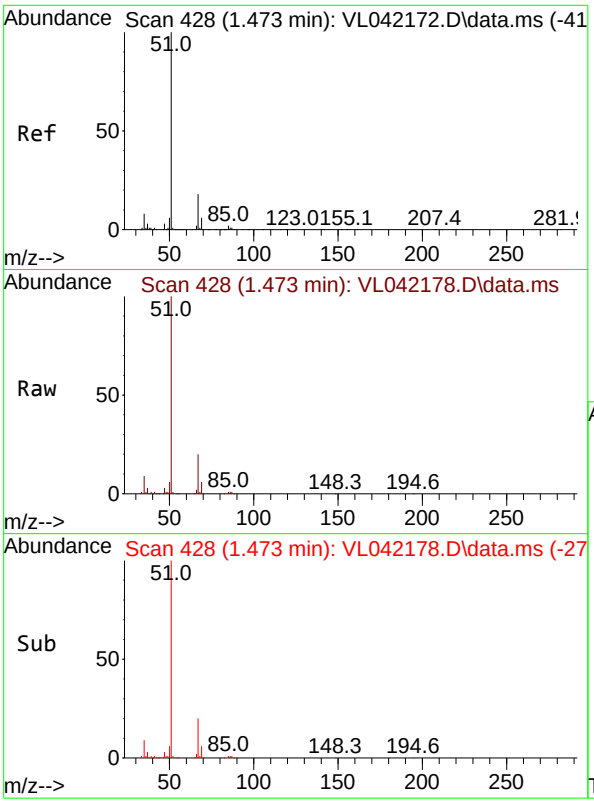


#2
Dichlorodifluoromethane
Concen: 14.023 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 358962

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1



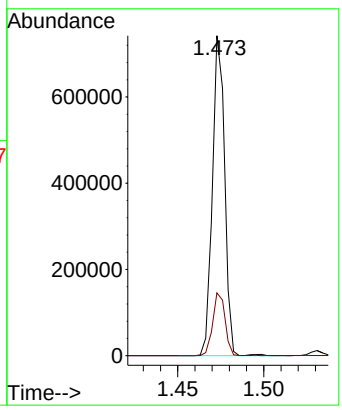


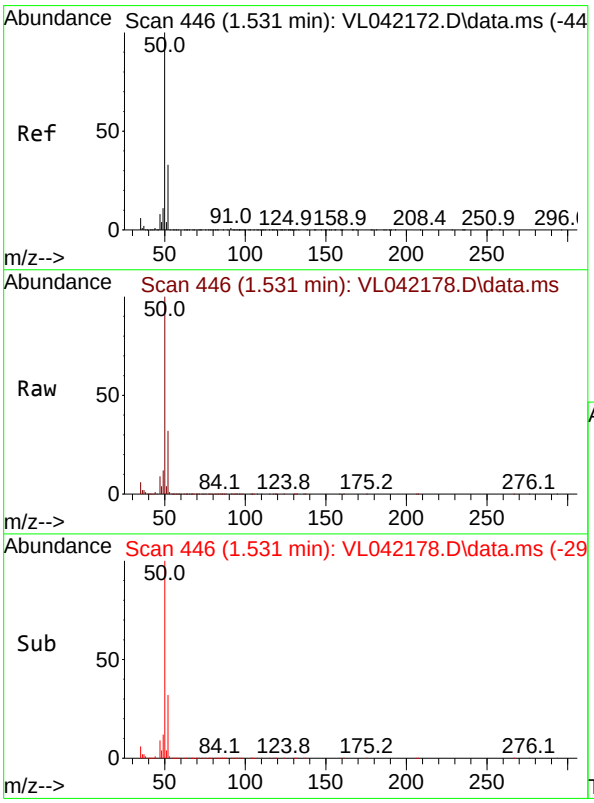
#3
Chlorodifluoromethane
Concen: 14.002 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 51 Resp: 366164

Ion	Ratio	Lower	Upper
51	100		
67	19.8	15.0	22.6

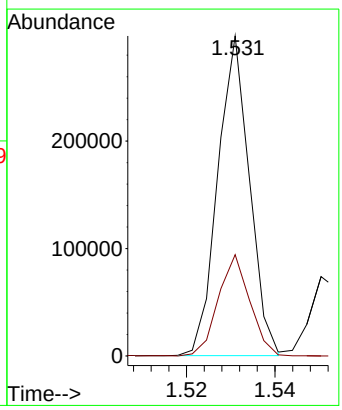


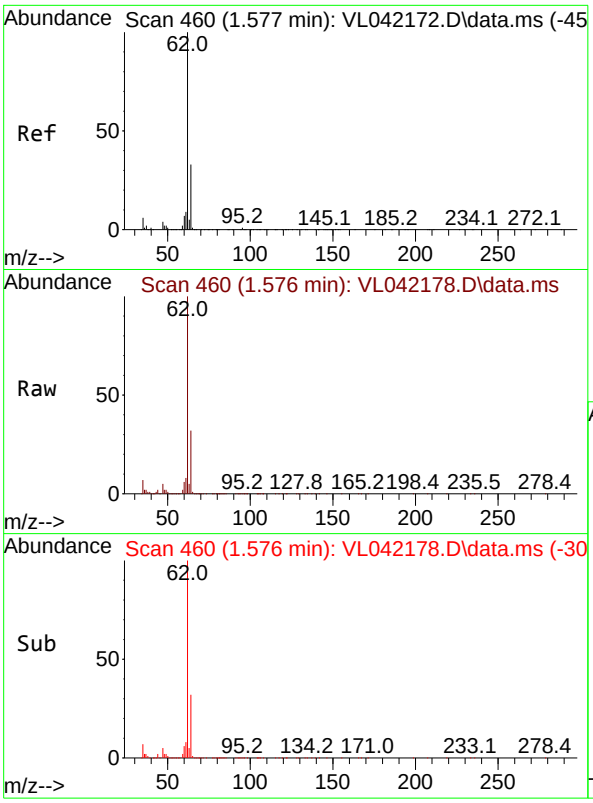


#4
Chloromethane
Concen: 14.160 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 50 Resp: 148133

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1



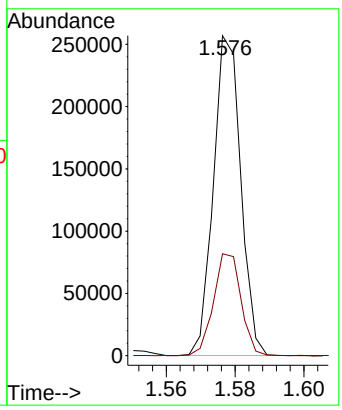


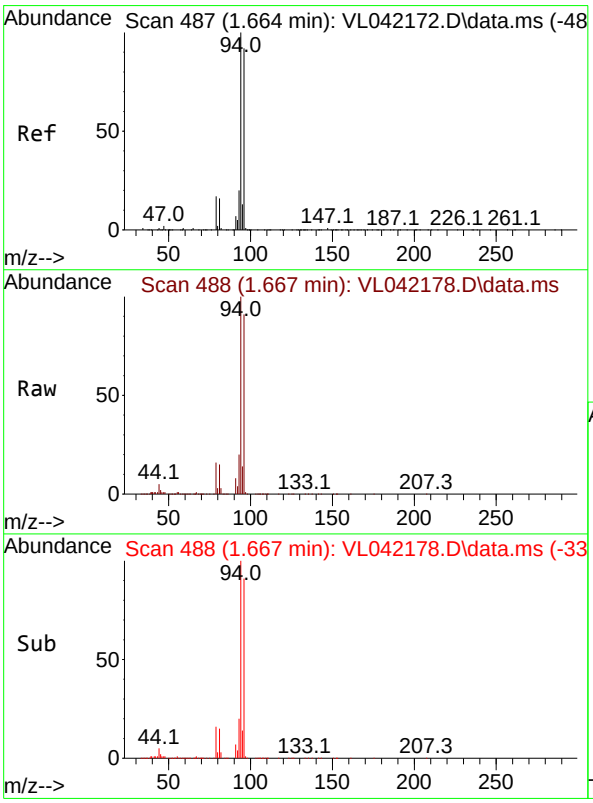
#5
Vinyl Chloride
Concen: 13.304 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 141938

Ion	Ratio	Lower	Upper
62	100		
64	31.9	26.6	40.0

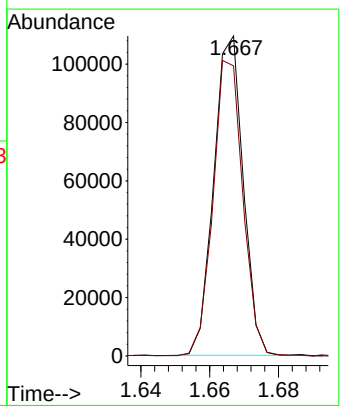


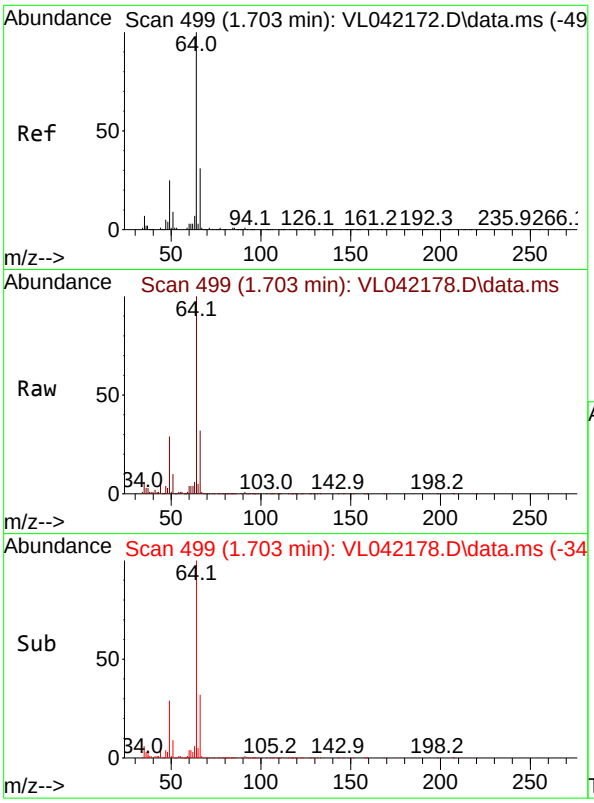


#6
Bromomethane
Concen: 13.734 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 94 Resp: 65113

Ion	Ratio	Lower	Upper
94	100		
96	90.7	73.1	109.7



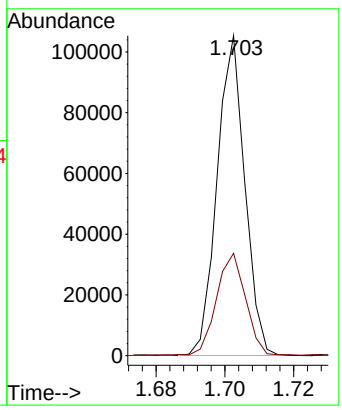


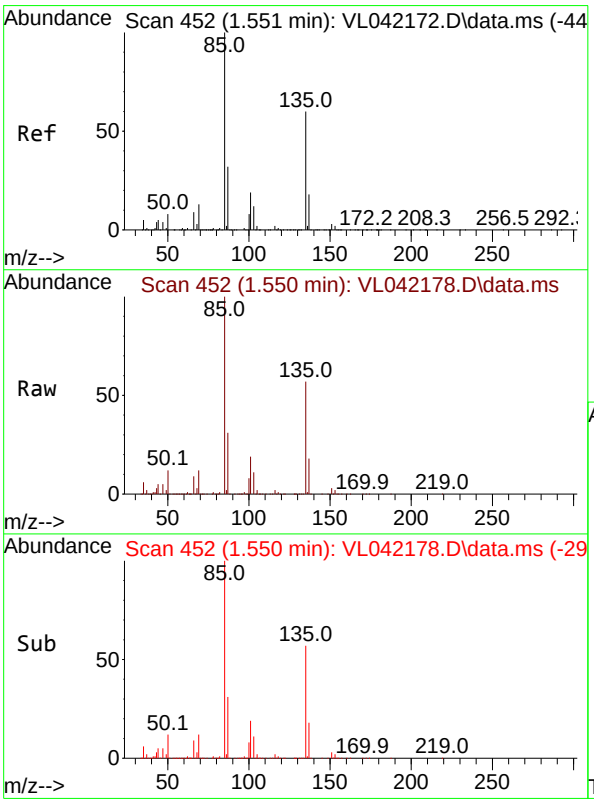
#7
Chloroethane
Concen: 14.007 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 64 Resp: 58820

Ion	Ratio	Lower	Upper
64	100		
66	32.0	25.2	37.8

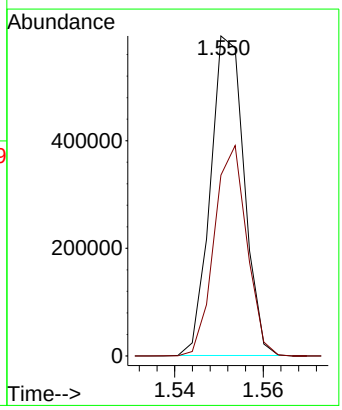


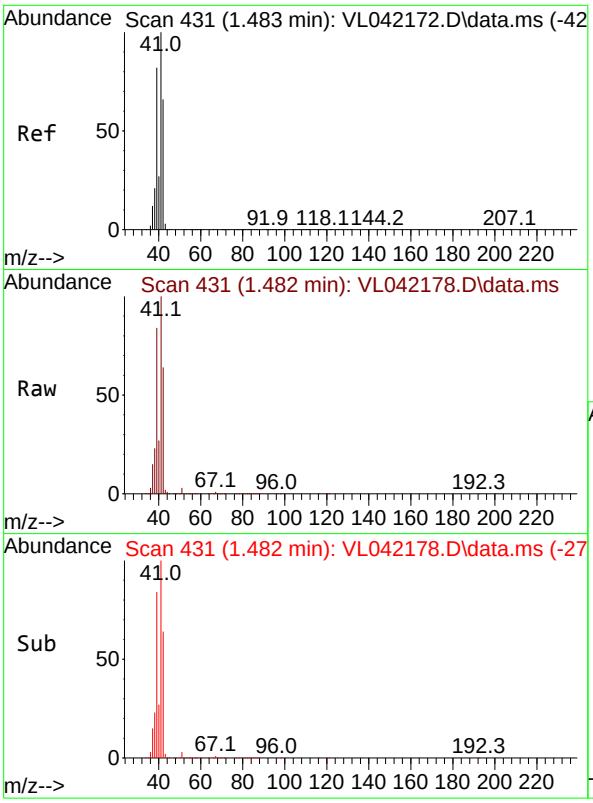


#8
Dichlorotetrafluoroethane
Concen: 14.442 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 85 Resp: 314834

Ion	Ratio	Lower	Upper
85	100		
135	63.8	52.4	78.6



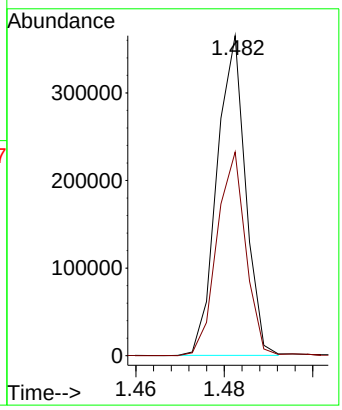


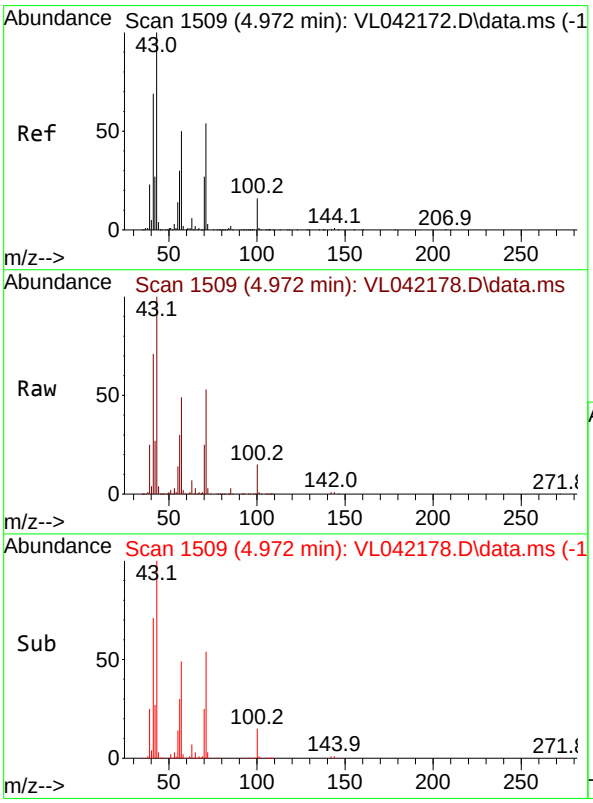
#9
Propene
Concen: 13.902 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 163799

Ion	Ratio	Lower	Upper
41	100		
42	65.3	55.4	83.2

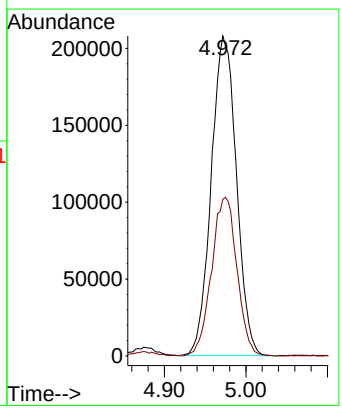


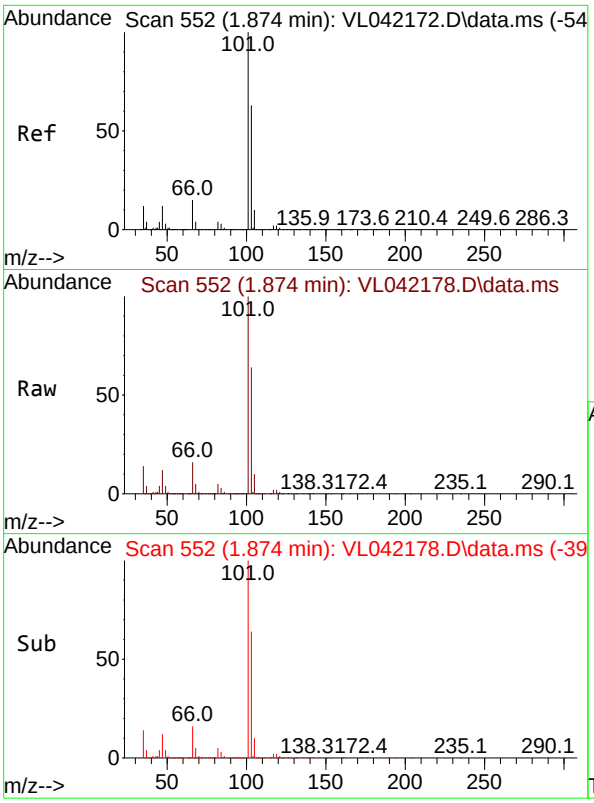


#10
Heptane
Concen: 14.019 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 446949

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.4	59.2



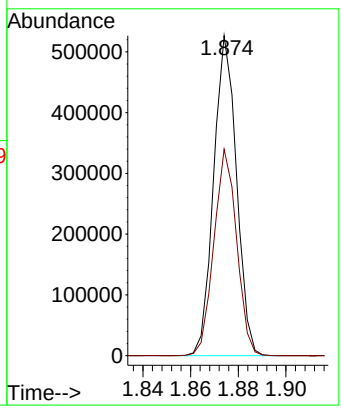


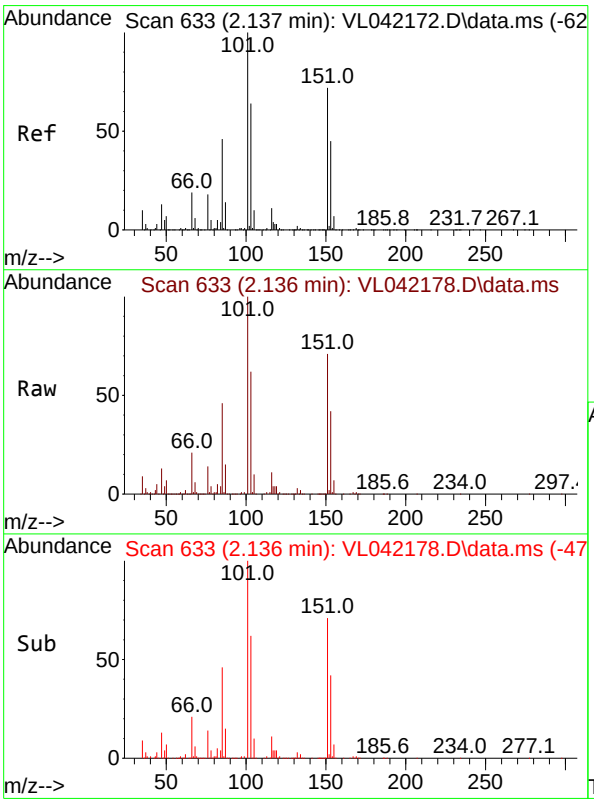
#11
Trichlorofluoromethane
Concen: 14.050 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:101 Resp: 349967

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2

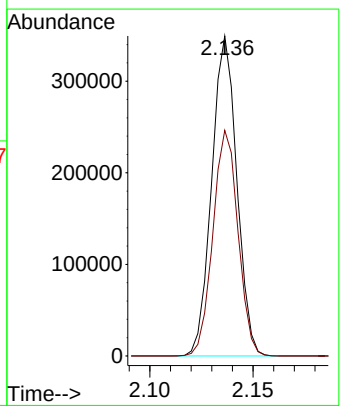


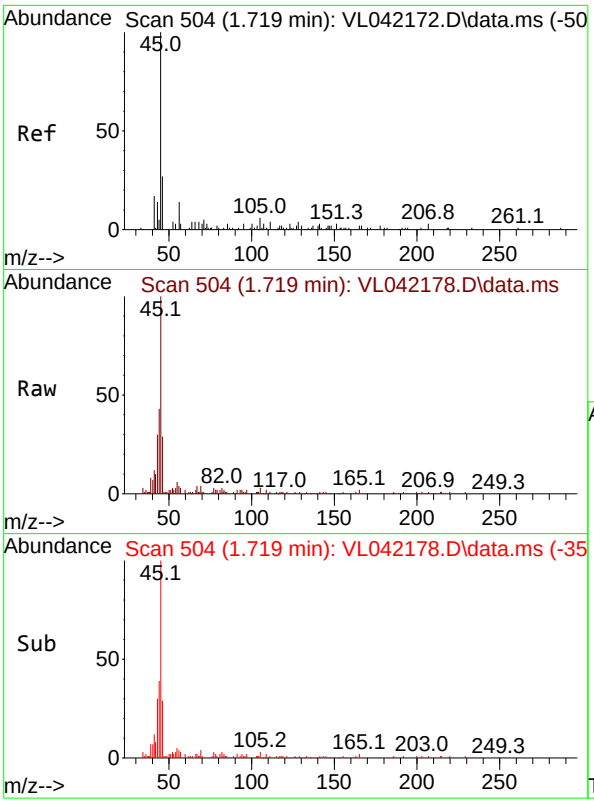


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.419 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:101 Resp: 295217

Ion	Ratio	Lower	Upper
101	100		
151	70.4	57.1	85.7



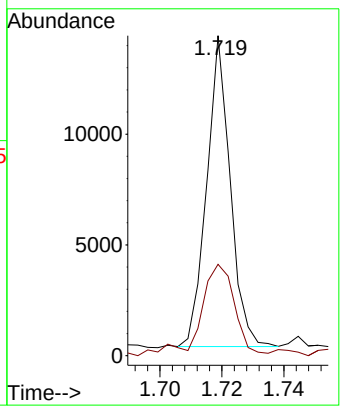


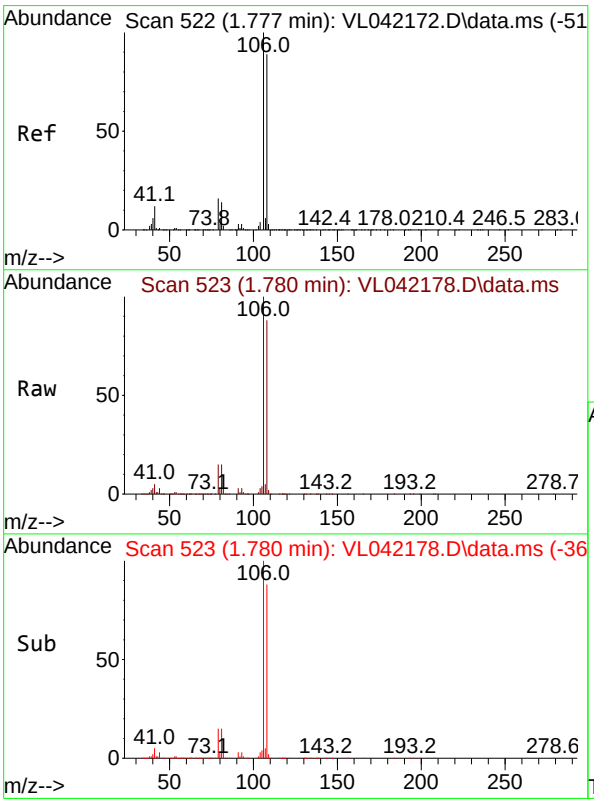
#13
Ethanol
Concen: 8.001 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 7382

Ion	Ratio	Lower	Upper
45	100		
46	44.6	20.2	80.8

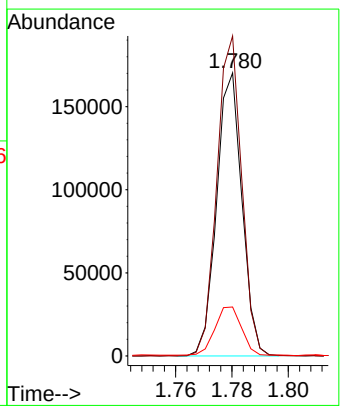


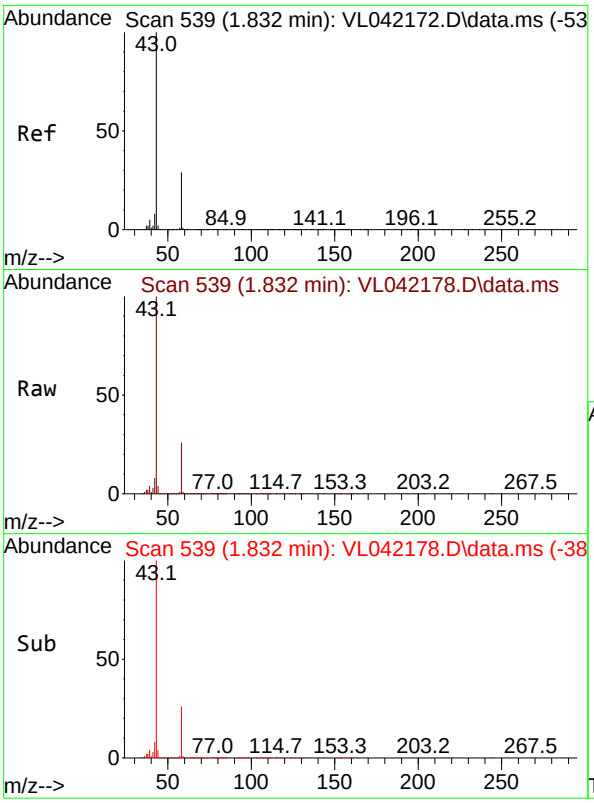


#14
Bromoethene
Concen: 13.571 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:108 Resp: 106436

Ion	Ratio	Lower	Upper
108	100		
106	110.9	86.8	130.2
79	18.8	15.0	22.6



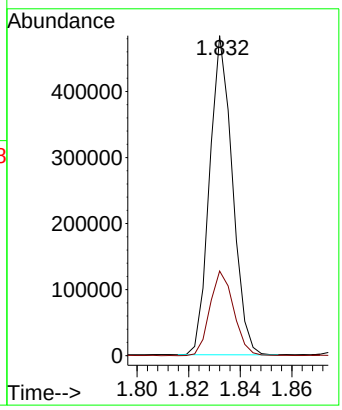


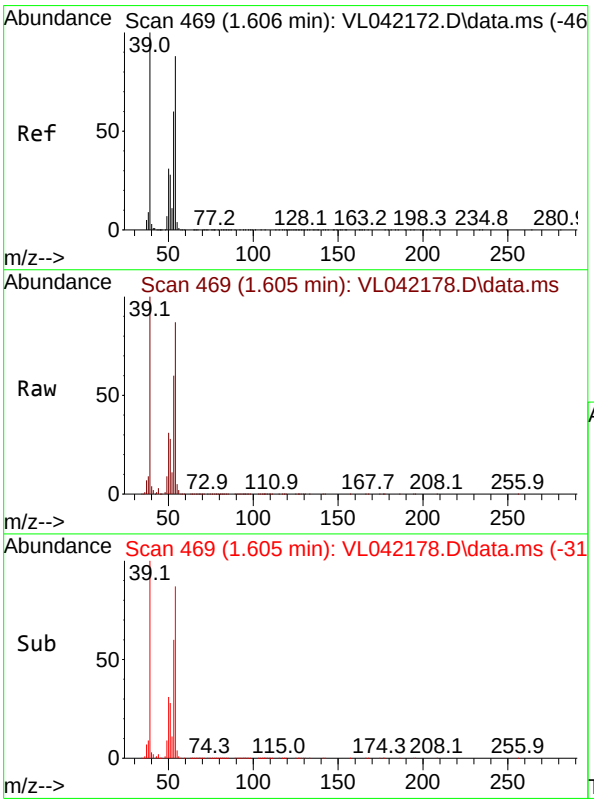
#15
Acetone
Concen: 12.218 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 296254

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8

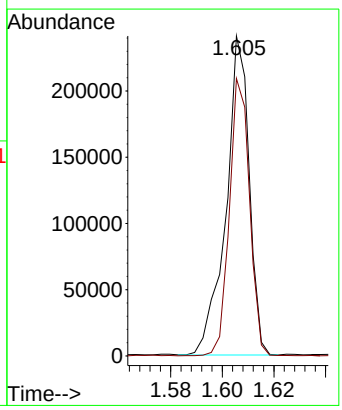


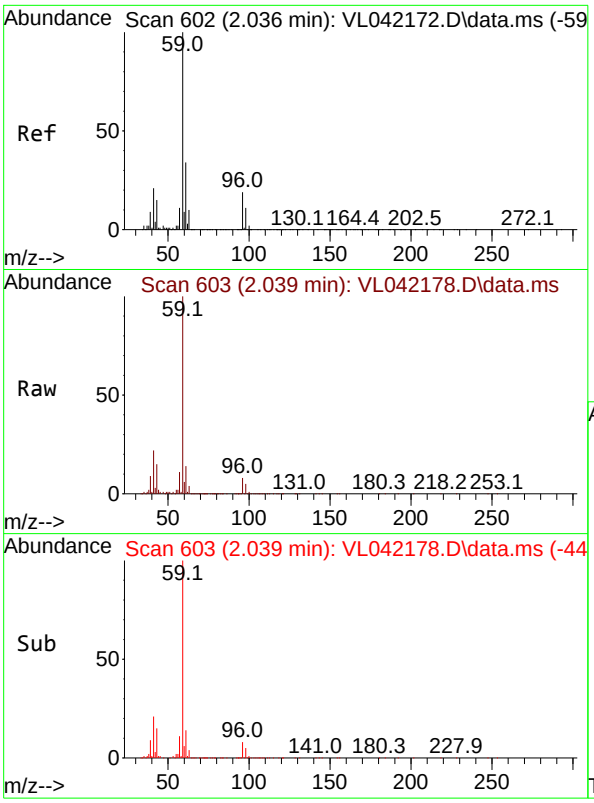


#16
1,3-Butadiene
Concen: 13.766 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 39 Resp: 150122

Ion	Ratio	Lower	Upper
39	100		
54	76.3	60.7	91.1



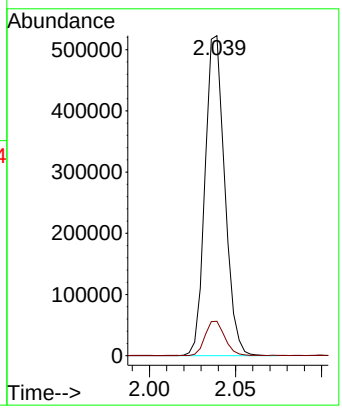


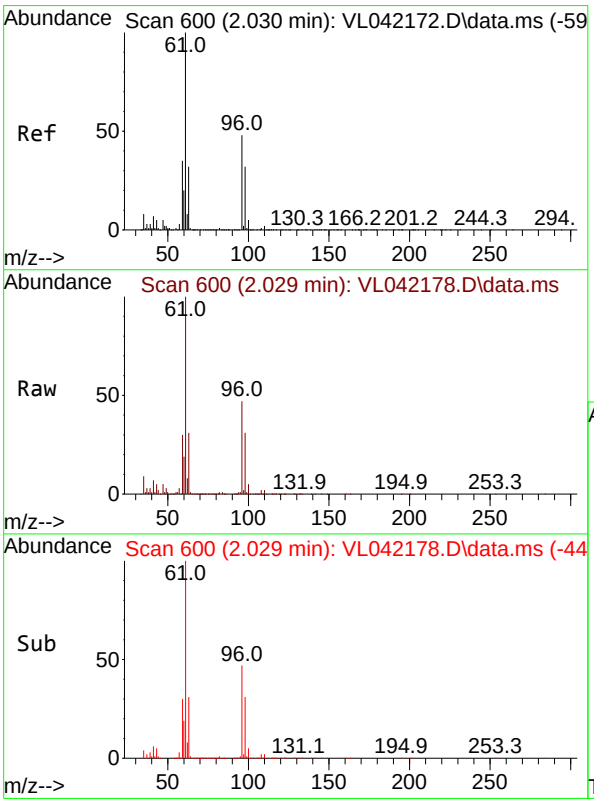
#17
tert-Butyl alcohol
Concen: 13.787 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 59 Resp: 416362

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3

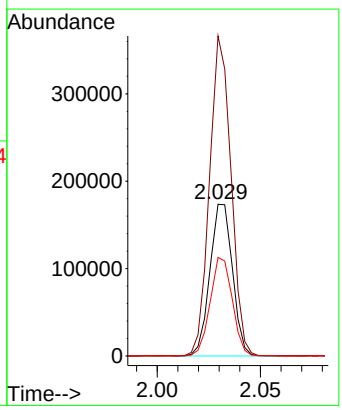


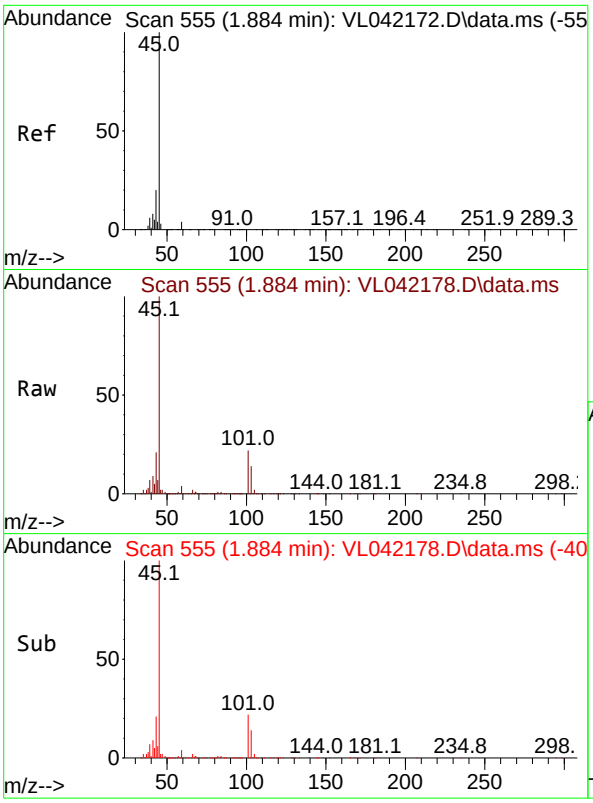


#18
1,1-Dichloroethene
Concen: 13.762 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 131720

Ion	Ratio	Lower	Upper
96	100		
61	211.1	167.6	251.4
98	64.9	53.5	80.3



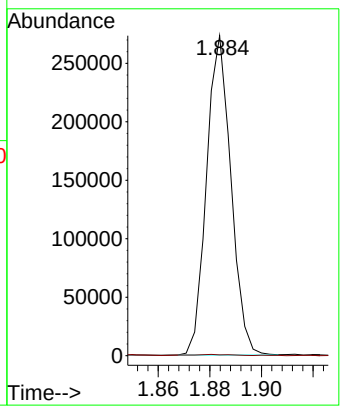


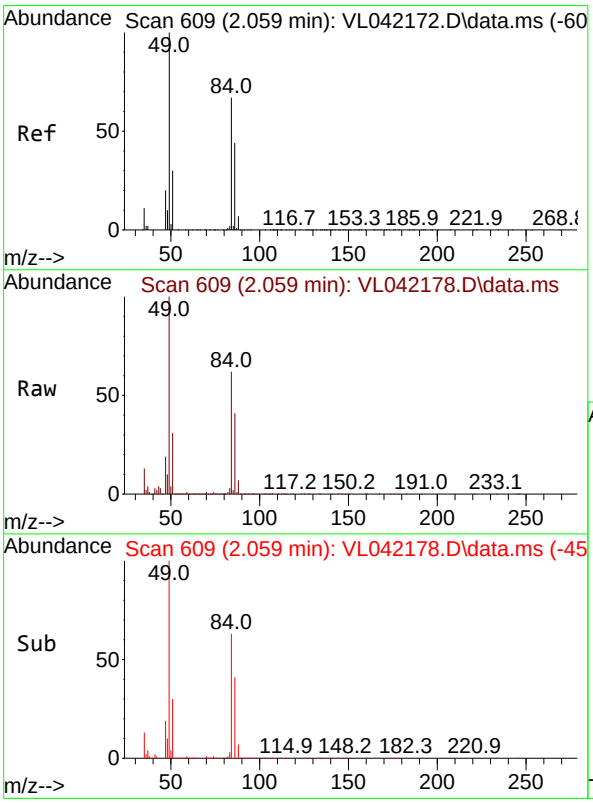
#19
Isopropyl Alcohol
Concen: 13.093 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 179117

Ion	Ratio	Lower	Upper
45	100		
58	46.4	36.9	55.3

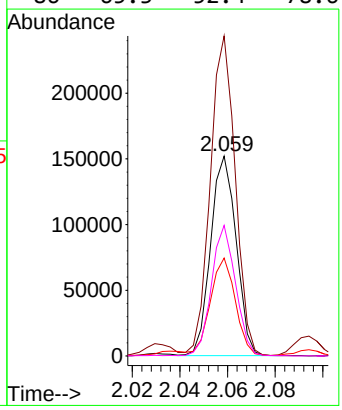


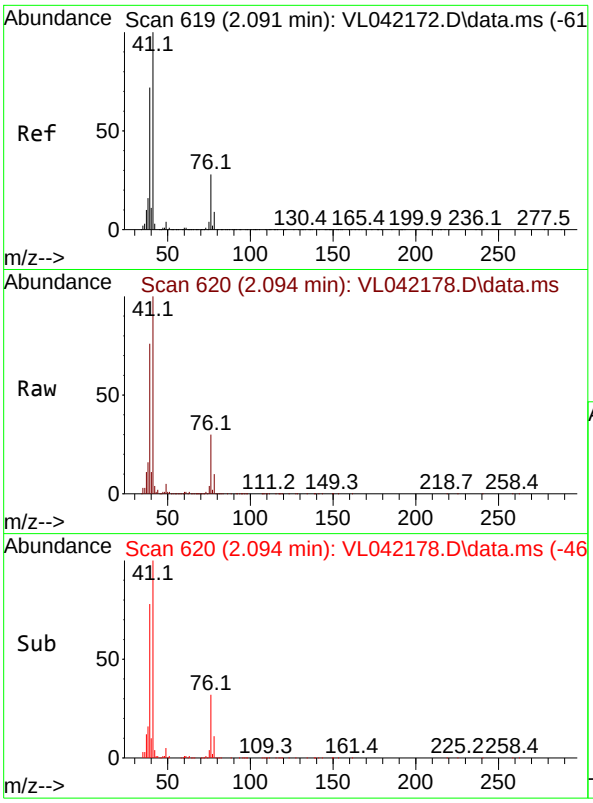


#20
Methylene Chloride
Concen: 12.533 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 113183

Ion	Ratio	Lower	Upper
84	100		
49	159.7	120.2	180.4
51	48.7	37.4	56.0
86	65.3	52.4	78.6



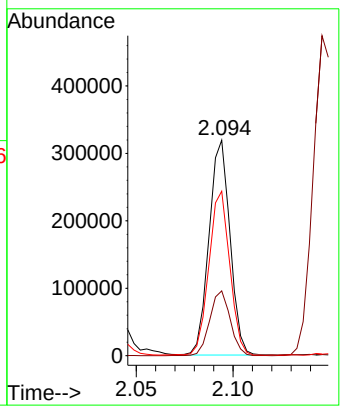


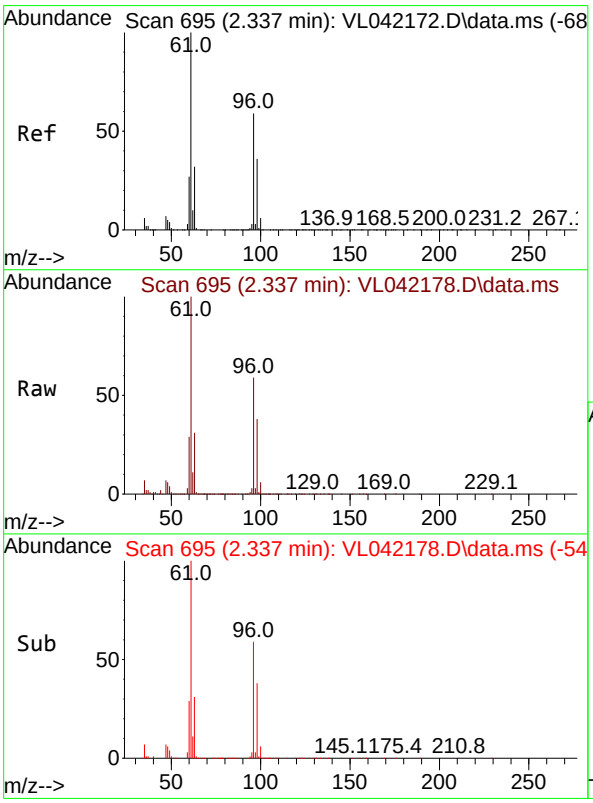
#21
Allyl Chloride
Concen: 14.002 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 239440

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.1	36.1
39	76.1	61.1	91.7

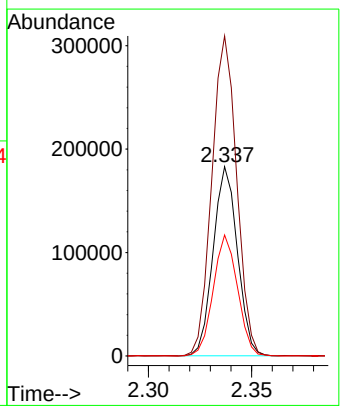


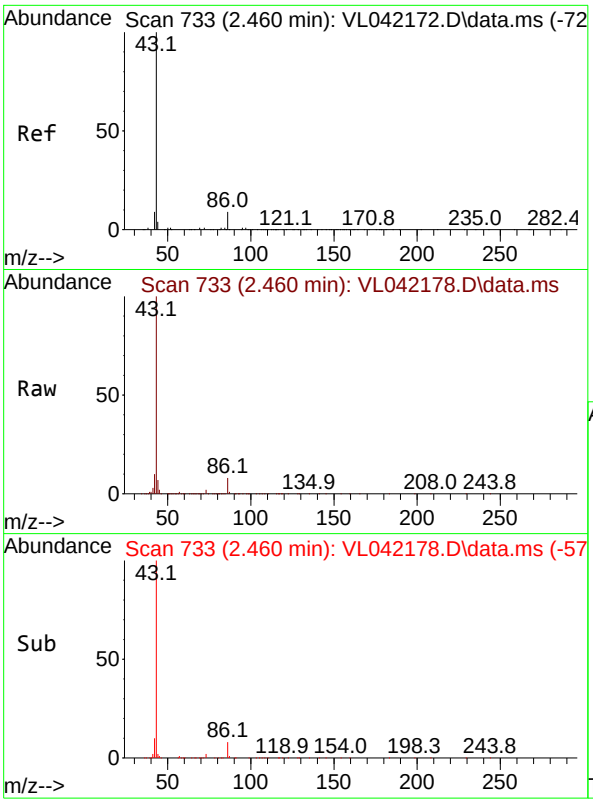


#22
trans-1,2-Dichloroethene
Concen: 13.362 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 96 Resp: 149455

Ion	Ratio	Lower	Upper
96	100		
61	169.2	136.6	204.8
98	63.9	49.4	74.2



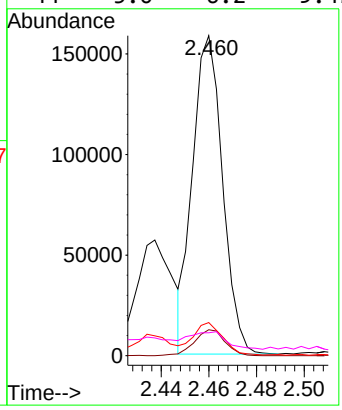


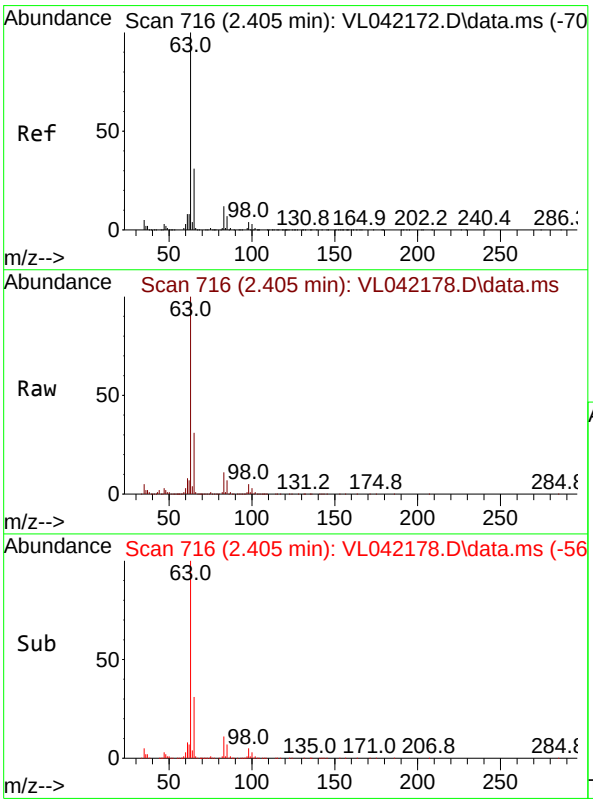
#23
Vinyl Acetate
Concen: 13.736 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 138419

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	10.1	8.6	13.0
44	5.0	6.2	9.4#

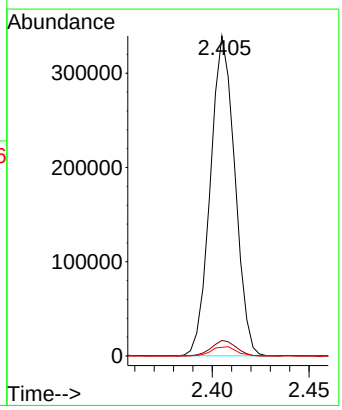


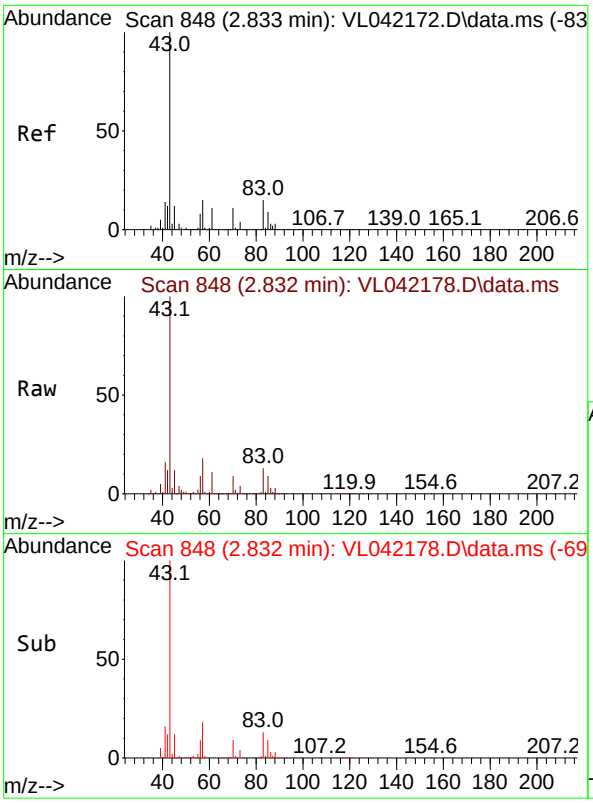


#24
1,1-Dichloroethane
Concen: 14.570 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 63 Resp: 298760

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	2.7	1.6	4.7



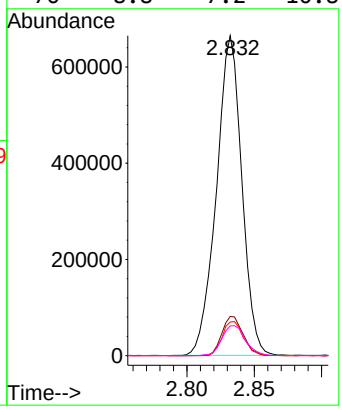


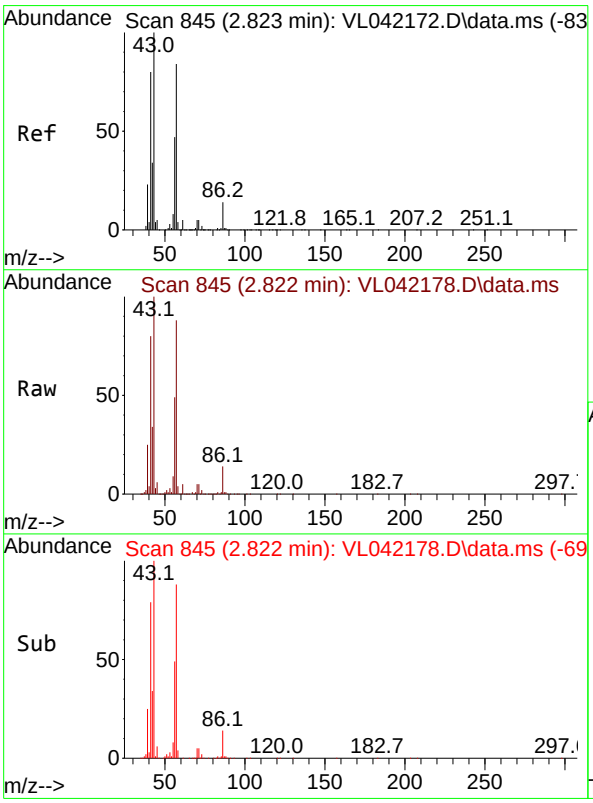
#25
Ethyl Acetate
Concen: 13.855 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 871882

Ion	Ratio	Lower	Upper
43	100		
45	10.3	8.2	12.2
61	9.0	7.3	10.9
70	8.8	7.2	10.8

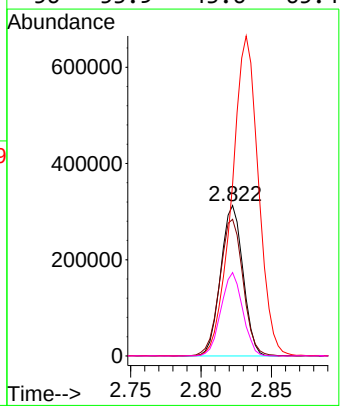


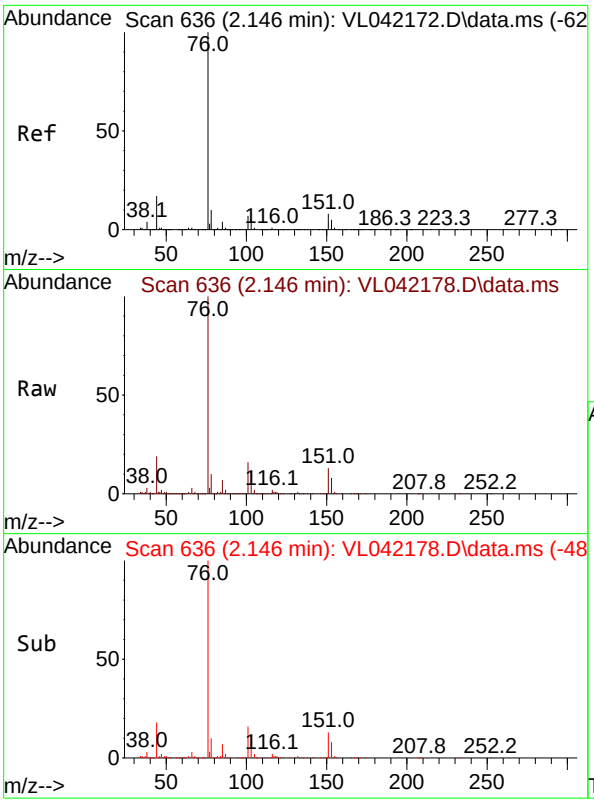


#26
Hexane
Concen: 14.178 ppbv
RT: 2.822 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 344636

Ion	Ratio	Lower	Upper
57	100		
41	96.1	76.6	114.8
43	254.0	207.8	311.8
56	53.9	43.6	65.4



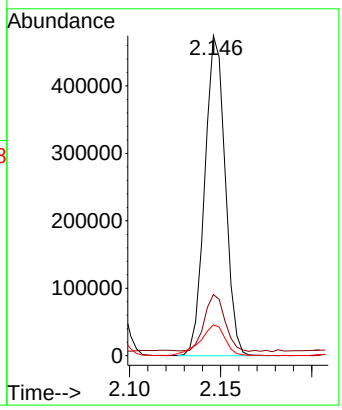


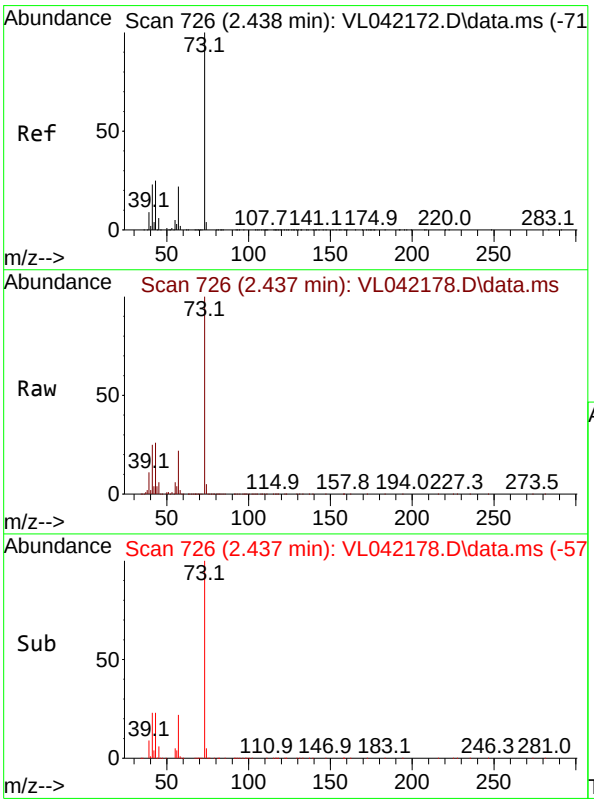
#27
Carbon Disulfide
Concen: 14.196 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 76 Resp: 370022

Ion	Ratio	Lower	Upper
76	100		
44	20.3	14.7	22.1
78	11.7	9.3	13.9

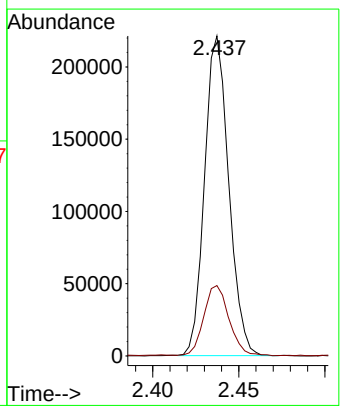


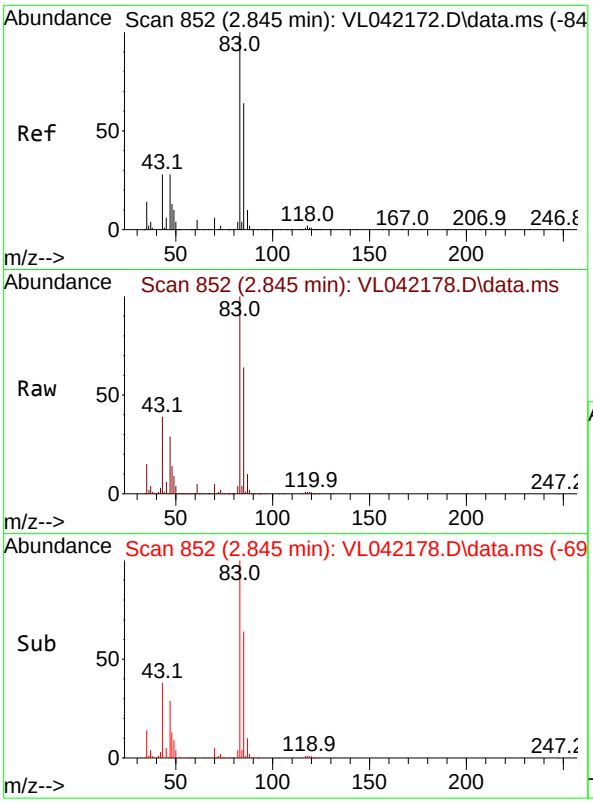


#28
Methyl tert-Butyl Ether
Concen: 14.303 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 73 Resp: 216463

Ion	Ratio	Lower	Upper
73	100		
57	23.2	20.5	30.7



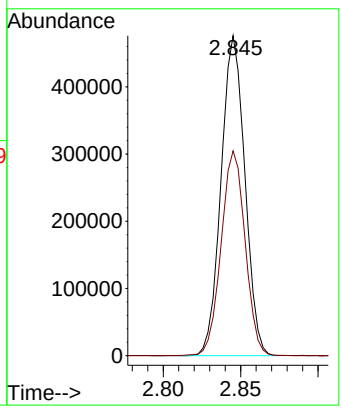


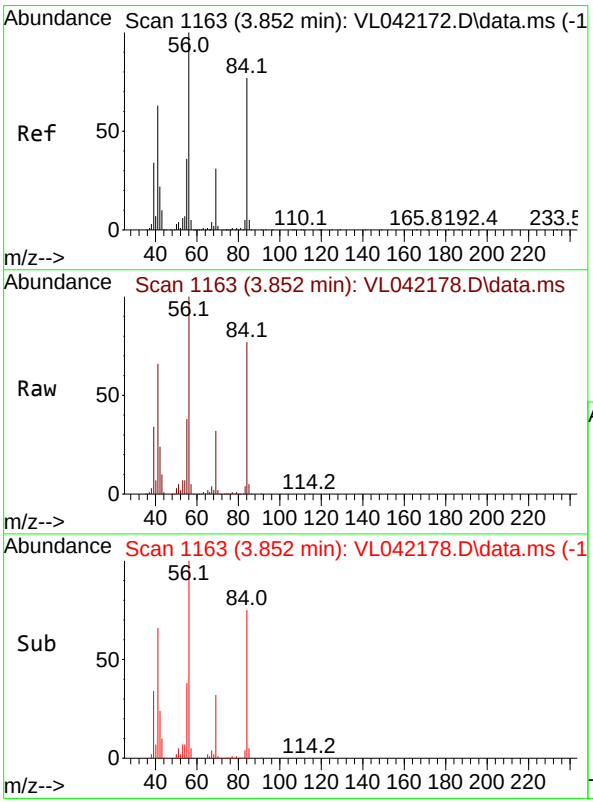
#29
Chloroform
Concen: 14.297 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 508614

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2

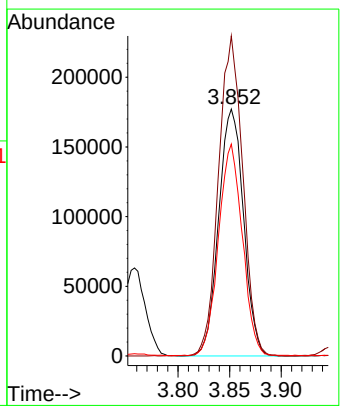


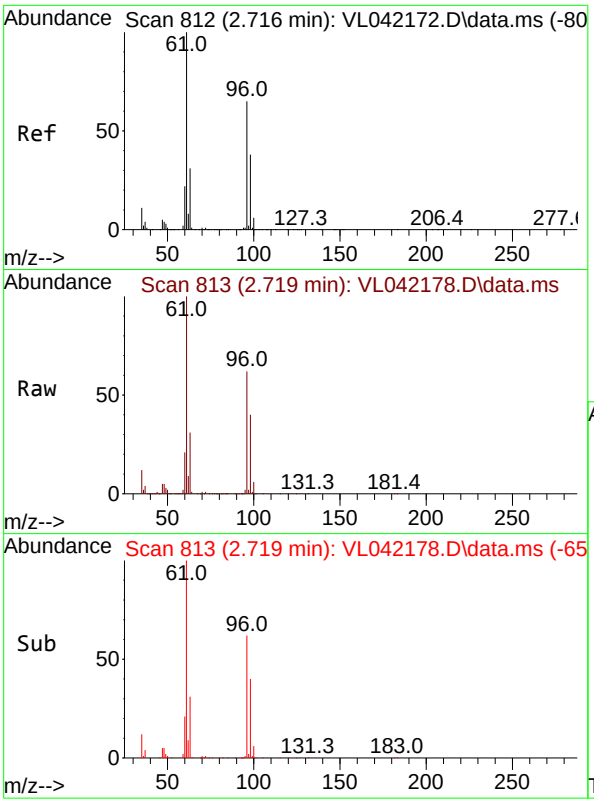


#30
Cyclohexane
Concen: 14.040 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 84 Resp: 296458

Ion	Ratio	Lower	Upper
84	100		
56	126.7	102.8	154.2
41	82.6	66.5	99.7



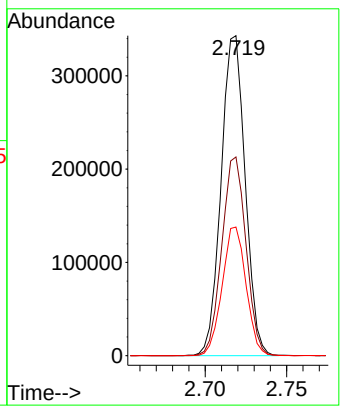


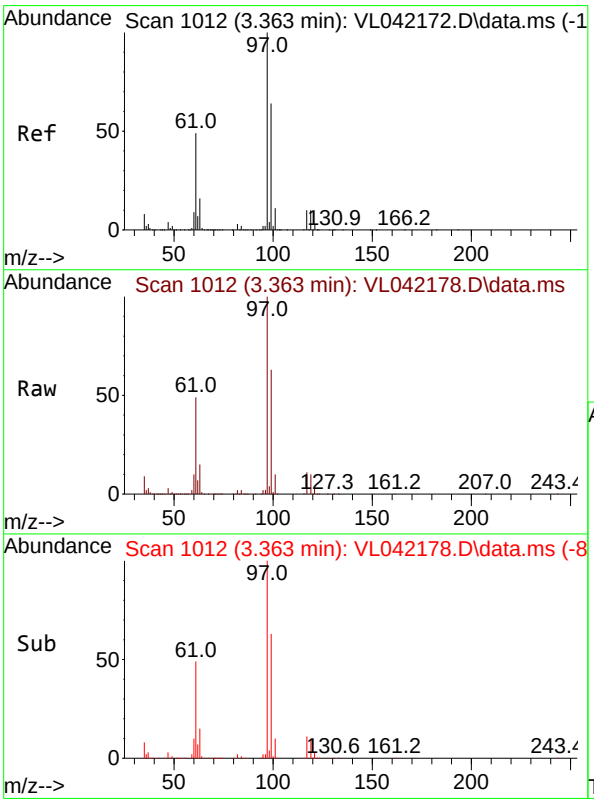
#31
cis-1,2-Dichloroethene
Concen: 14.262 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 61 Resp: 351945

Ion	Ratio	Lower	Upper
61	100		
96	62.1	51.8	77.8
98	40.2	30.6	46.0

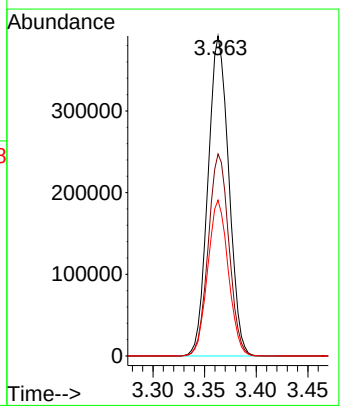


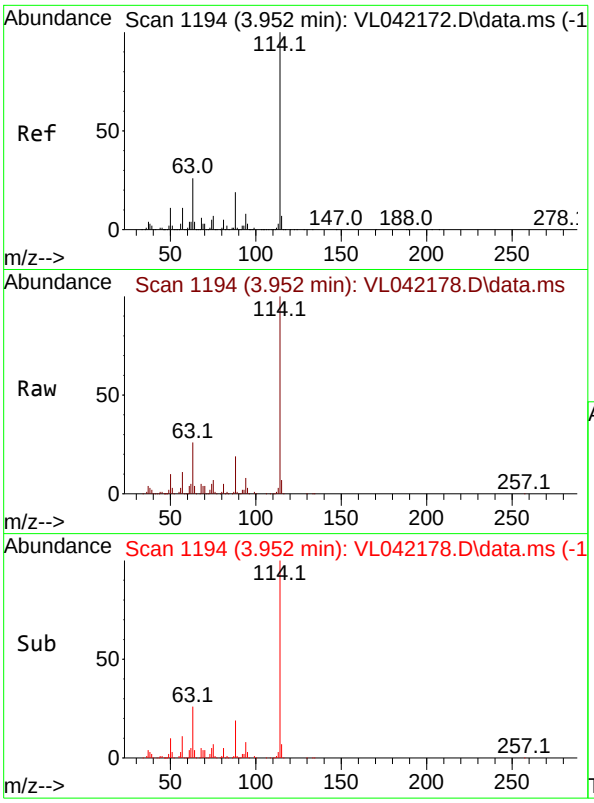


#32
1,1,1-Trichloroethane
Concen: 13.448 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 97 Resp: 547329

Ion	Ratio	Lower	Upper
97	100		
99	62.8	51.5	77.3
61	48.4	38.7	58.1



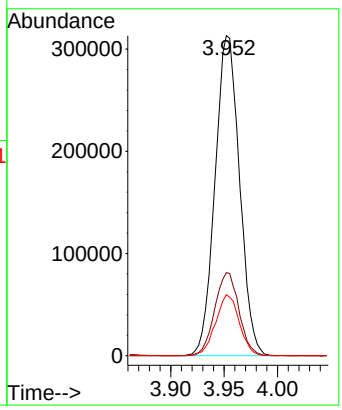


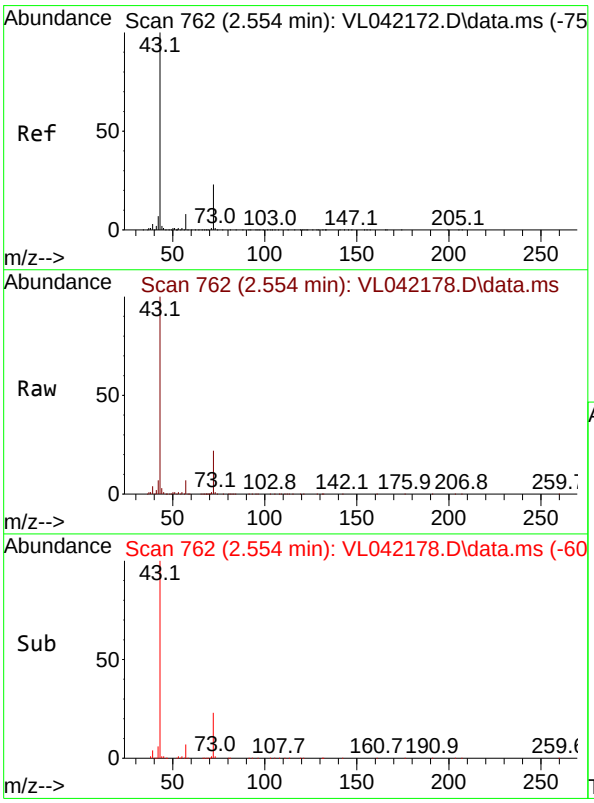
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:114 Resp: 499360

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.4	15.0	22.4

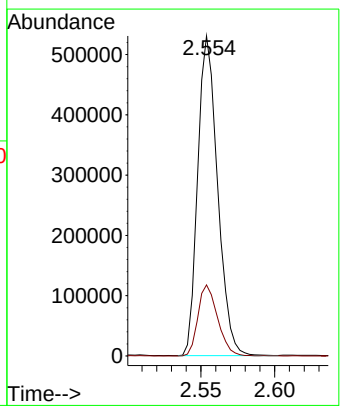


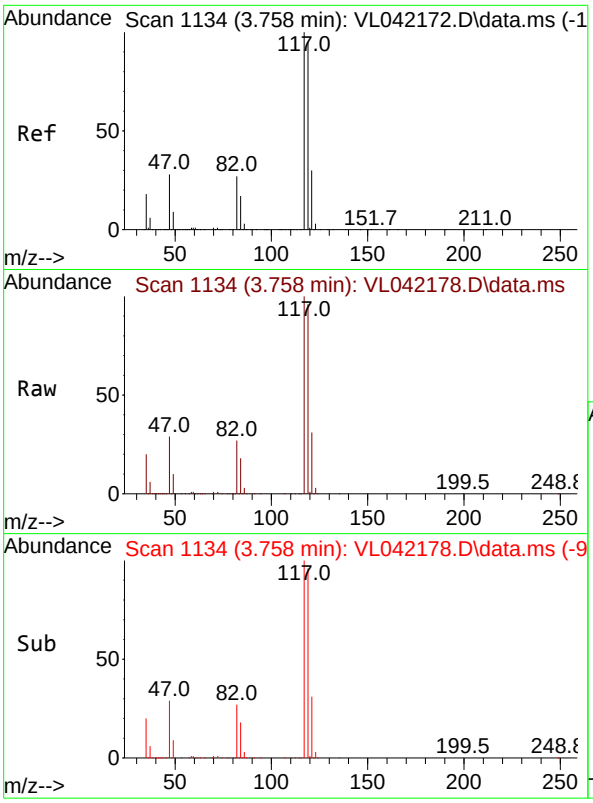


#34
2-Butanone
Concen: 13.726 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 497020

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2



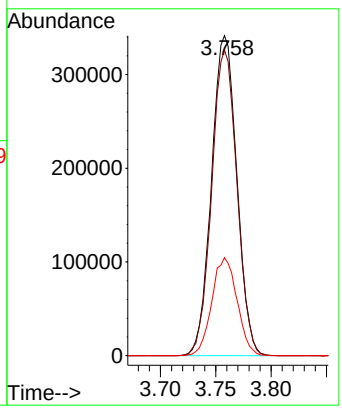


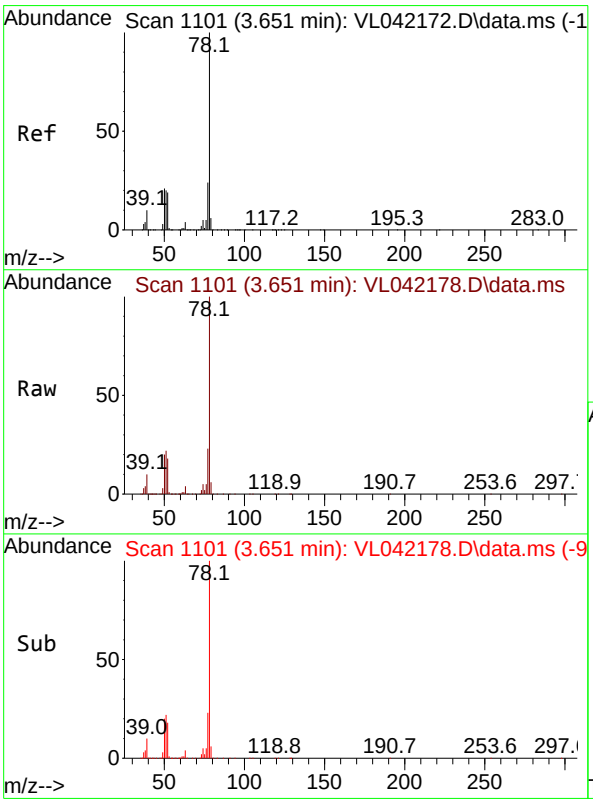
#35
Carbon Tetrachloride
Concen: 14.140 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 543385

Ion	Ratio	Lower	Upper
117	100		
119	95.5	76.2	114.2
121	30.6	24.2	36.4

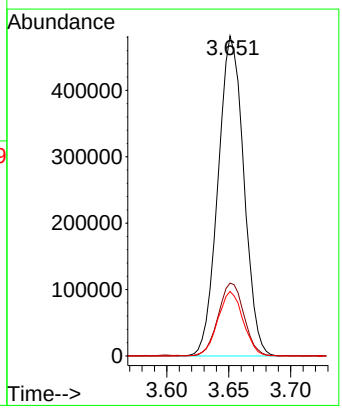


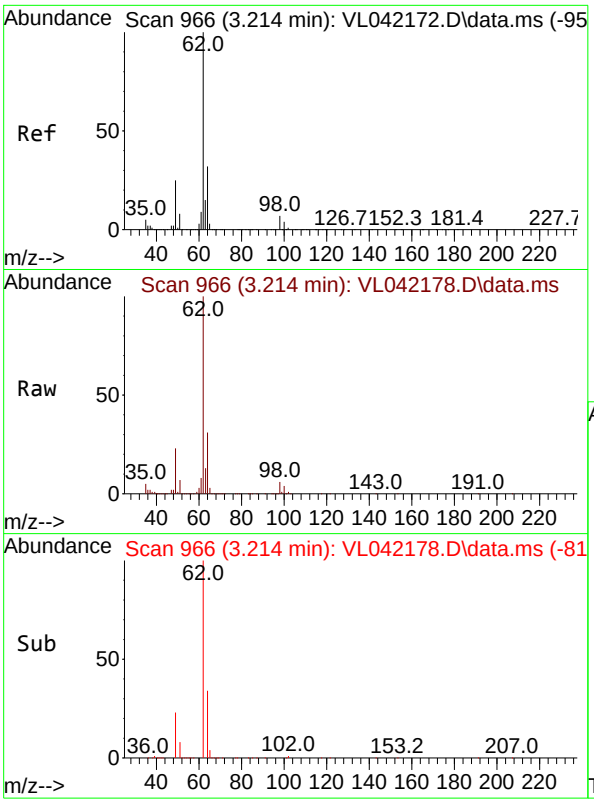


#36
Benzene
Concen: 14.131 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 78 Resp: 699549

Ion	Ratio	Lower	Upper
78	100		
77	22.7	19.1	28.7
50	20.1	16.6	24.8



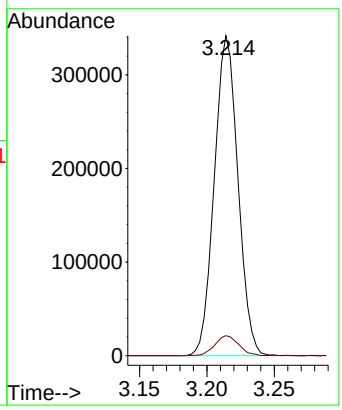


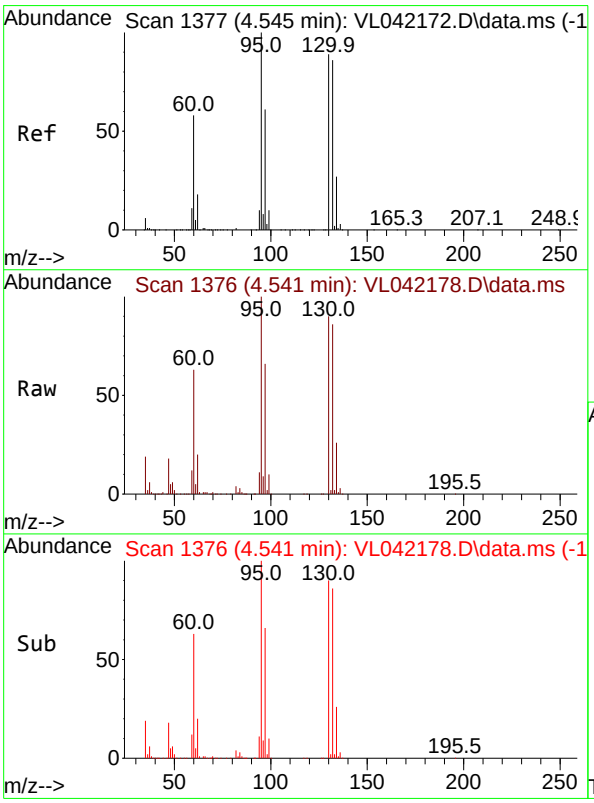
#37
1,2-Dichloroethane
Concen: 14.697 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 416544

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.4	8.2

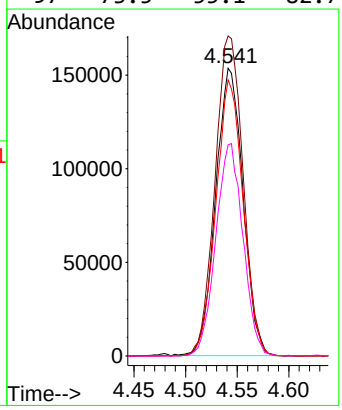


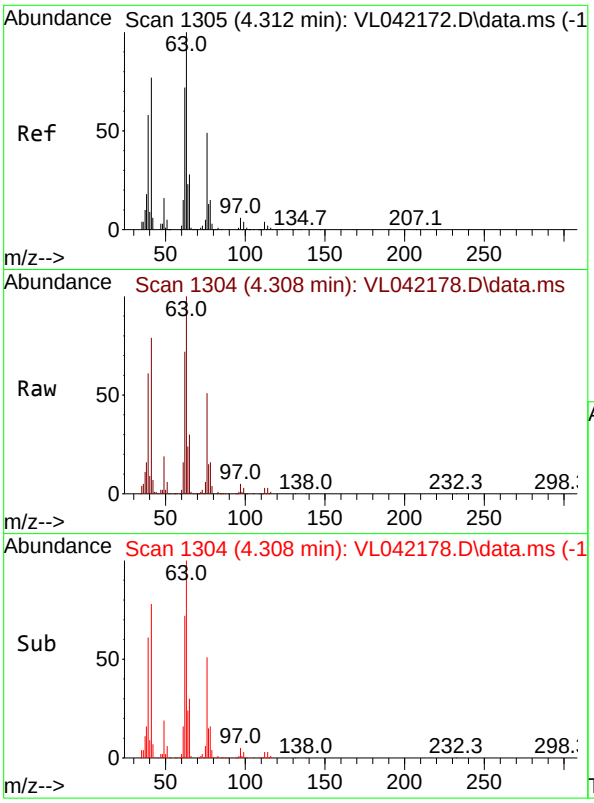


#38
Trichloroethene
Concen: 13.715 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:130 Resp: 283430

Ion	Ratio	Lower	Upper
130	100		
95	111.3	89.8	134.8
132	96.0	77.4	116.2
97	73.5	55.1	82.7



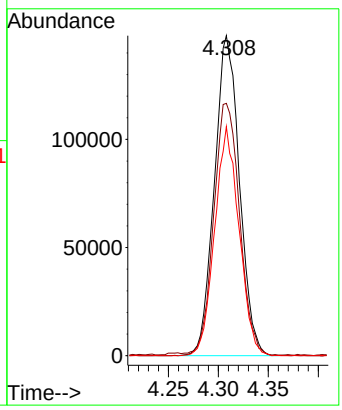


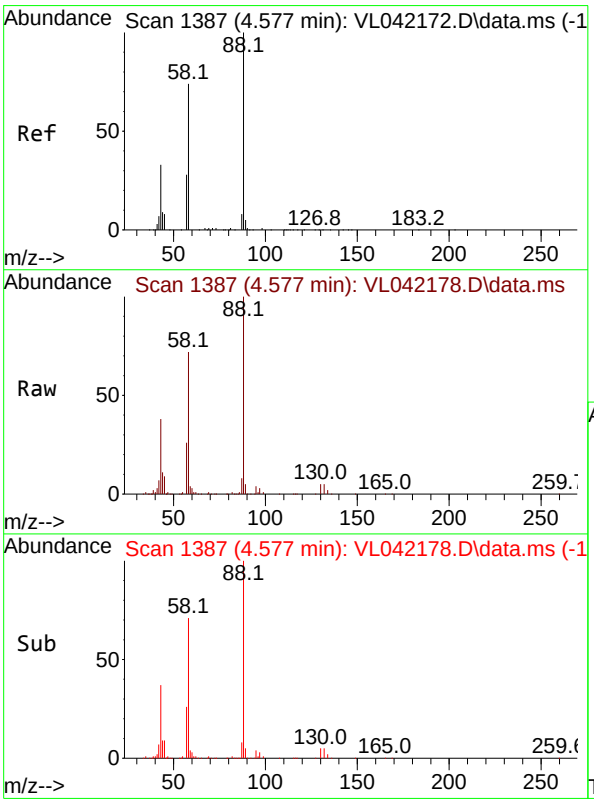
#39
1,2-Dichloropropane
Concen: 14.304 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 63 Resp: 257891

Ion	Ratio	Lower	Upper
63	100		
41	78.7	61.7	92.5
62	71.6	57.6	86.4

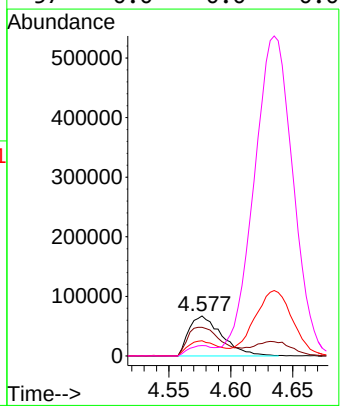


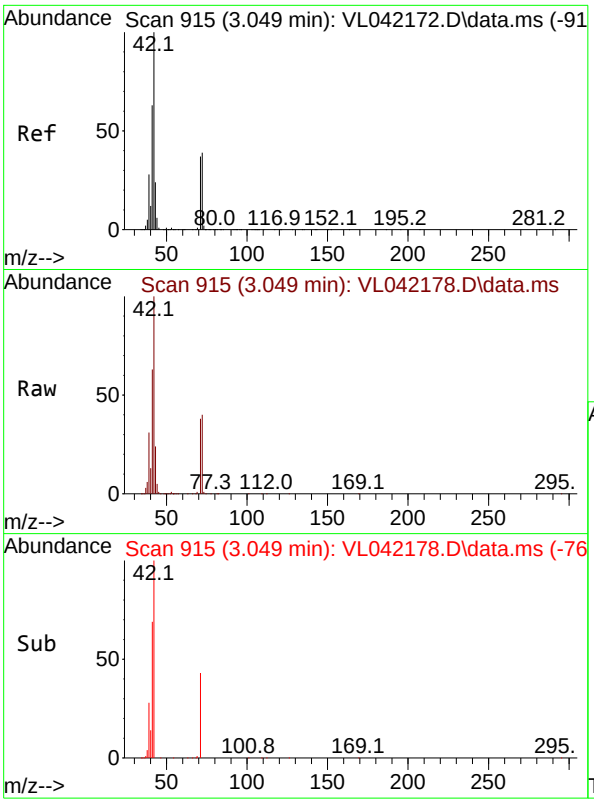


#40
1,4-Dioxane
Concen: 13.354 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 88 Resp: 124925

Ion	Ratio	Lower	Upper
88	100		
58	69.6	62.7	94.1
43	31.6	23.0	34.4
57	0.0	0.0	0.0



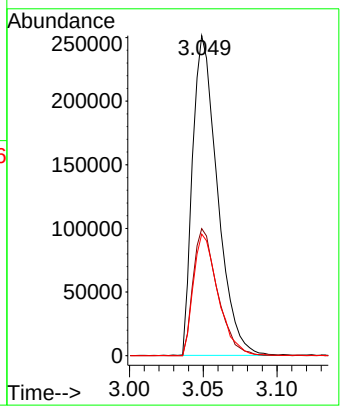


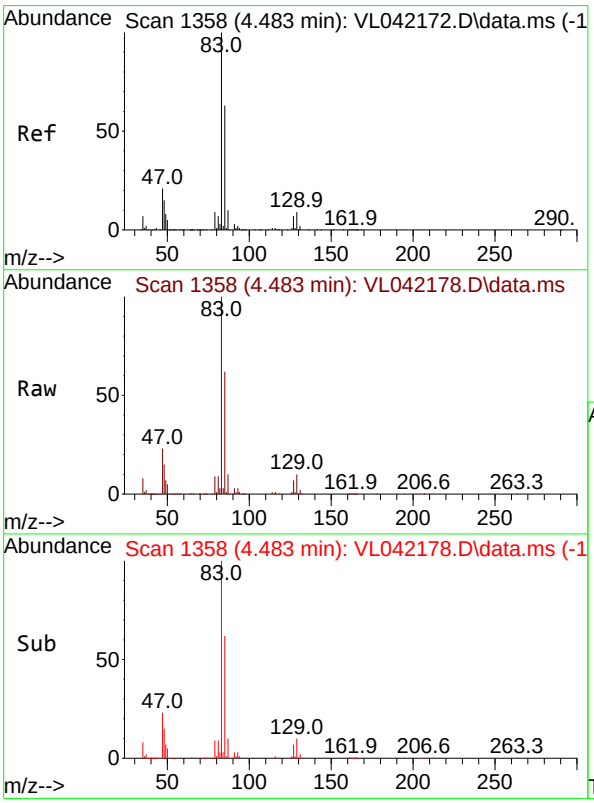
#41
Tetrahydrofuran
Concen: 14.301 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 42 Resp: 294634

Ion	Ratio	Lower	Upper
42	100		
72	39.0	31.4	47.0
71	37.9	30.2	45.4

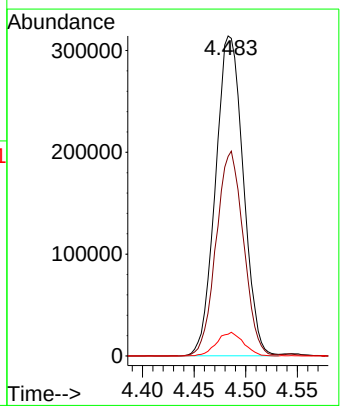


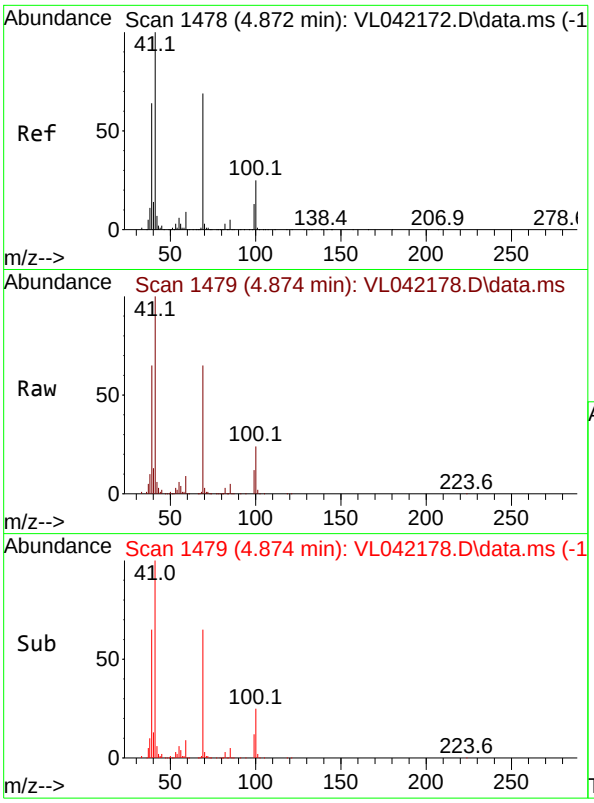


#42
Bromodichloromethane
Concen: 15.043 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 83 Resp: 587772

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	6.8	5.9	8.9



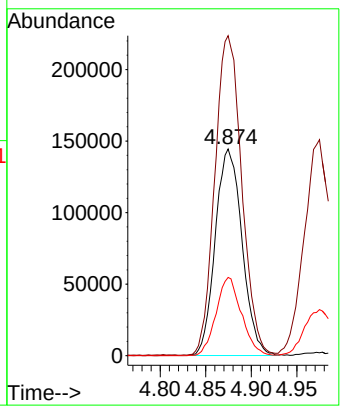


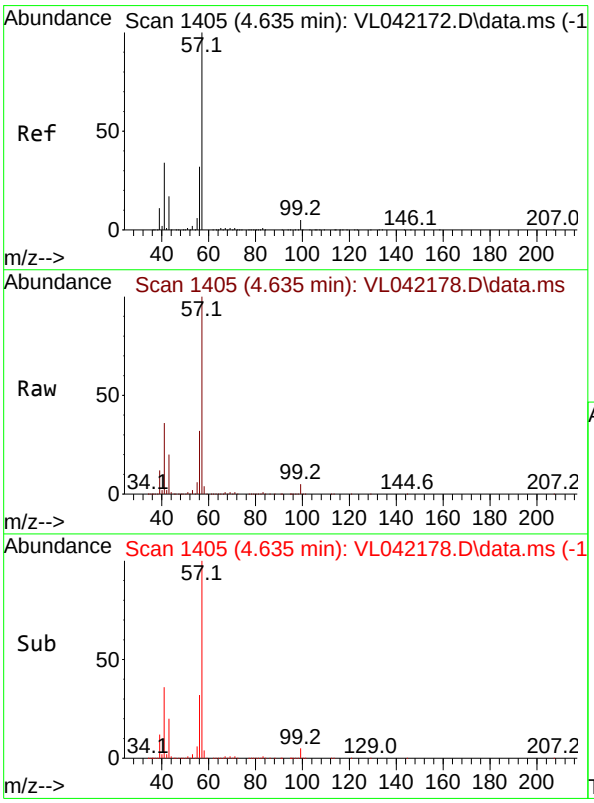
#43
Methyl Methacrylate
Concen: 14.130 ppbv
RT: 4.874 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 69 Resp: 295300

Ion	Ratio	Lower	Upper
69	100		
41	155.4	123.8	185.6
100	36.0	28.4	42.6

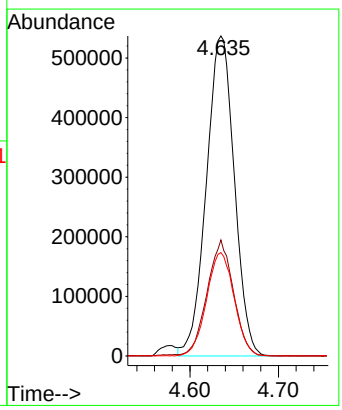


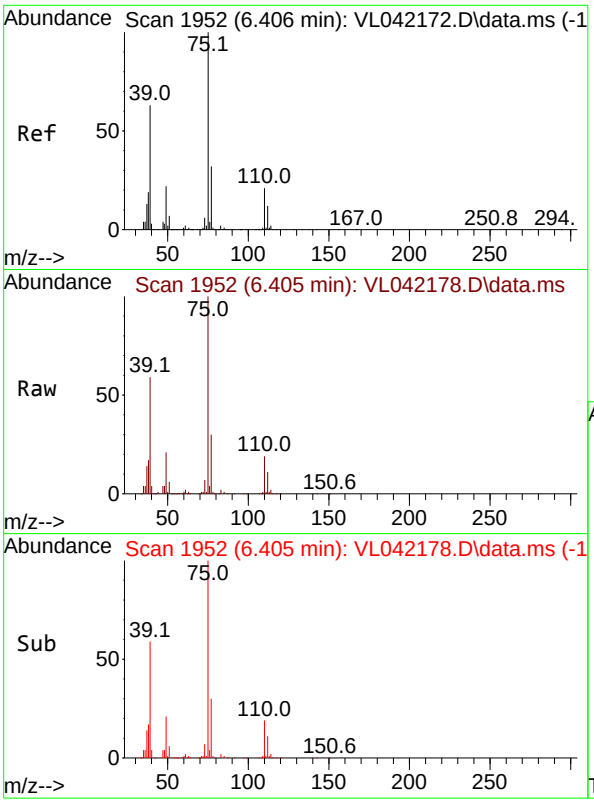


#44
2,2,4-Trimethylpentane
Concen: 14.108 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 57 Resp: 1180275

Ion	Ratio	Lower	Upper
57	100		
41	34.2	26.8	40.2
56	31.9	25.6	38.4



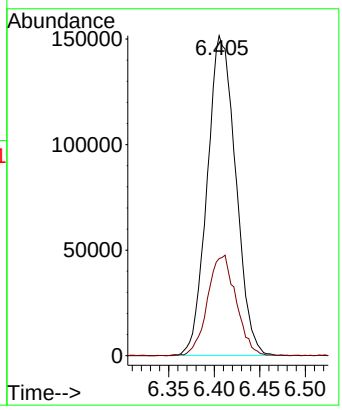


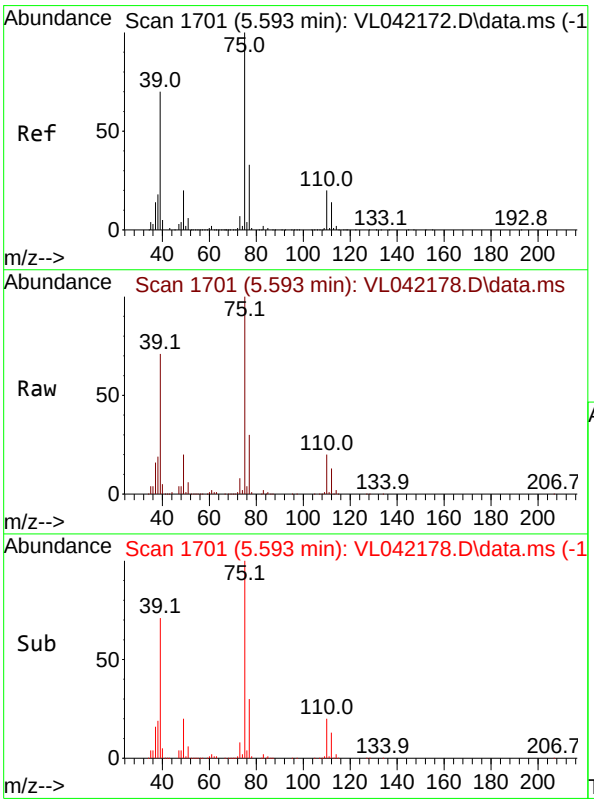
#45
t-1,3-Dichloropropene
Concen: 14.649 ppbv
RT: 6.405 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 75 Resp: 329360

Ion	Ratio	Lower	Upper
75	100		
77	30.4	26.0	39.0

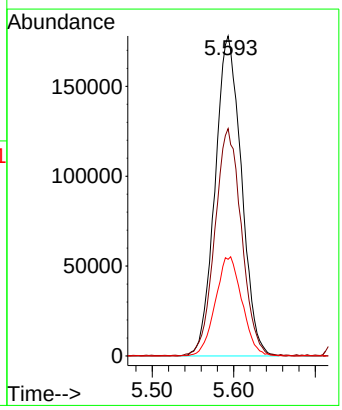


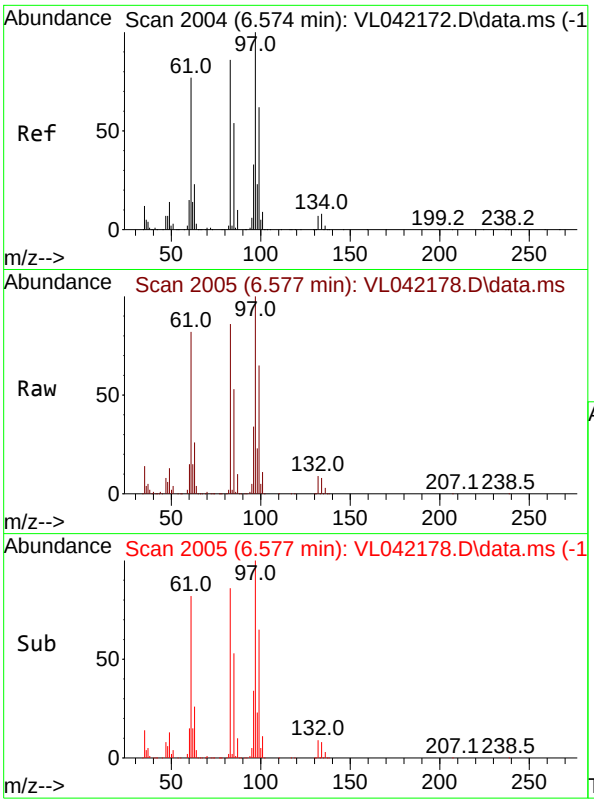


#46
cis-1,3-Dichloropropene
Concen: 14.542 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 75 Resp: 400813

Ion	Ratio	Lower	Upper
75	100		
39	70.9	55.8	83.6
77	30.2	26.0	39.0



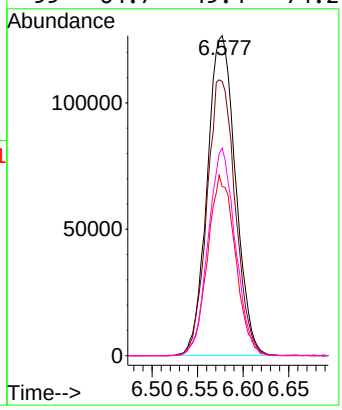


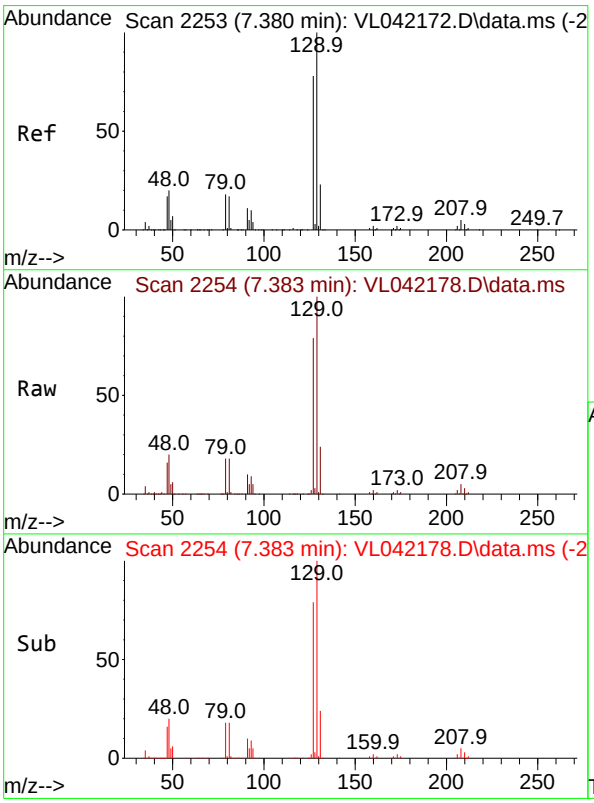
#47
1,1,2-Trichloroethane
Concen: 14.331 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 97 Resp: 273137

Ion	Ratio	Lower	Upper
97	100		
83	85.7	69.2	103.8
85	52.7	43.1	64.7
99	64.7	49.4	74.2

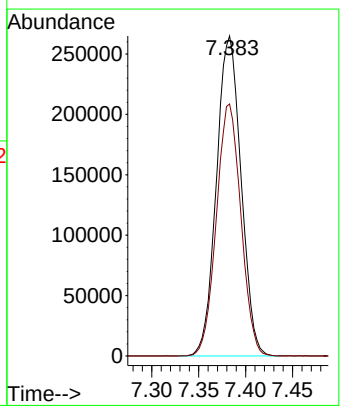


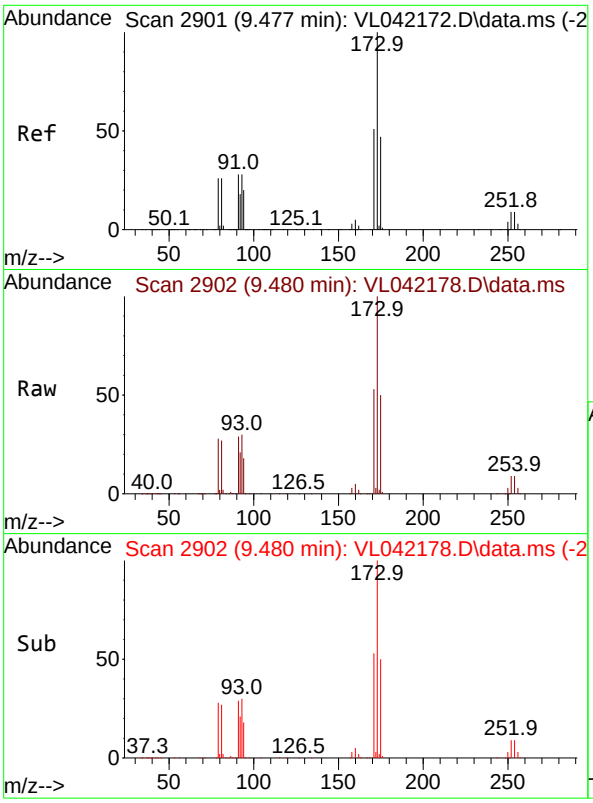


#48
Dibromochloromethane
Concen: 14.936 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:129 Resp: 482431

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2



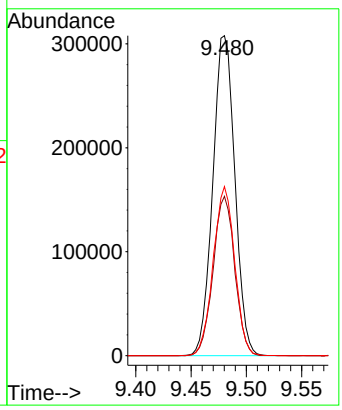


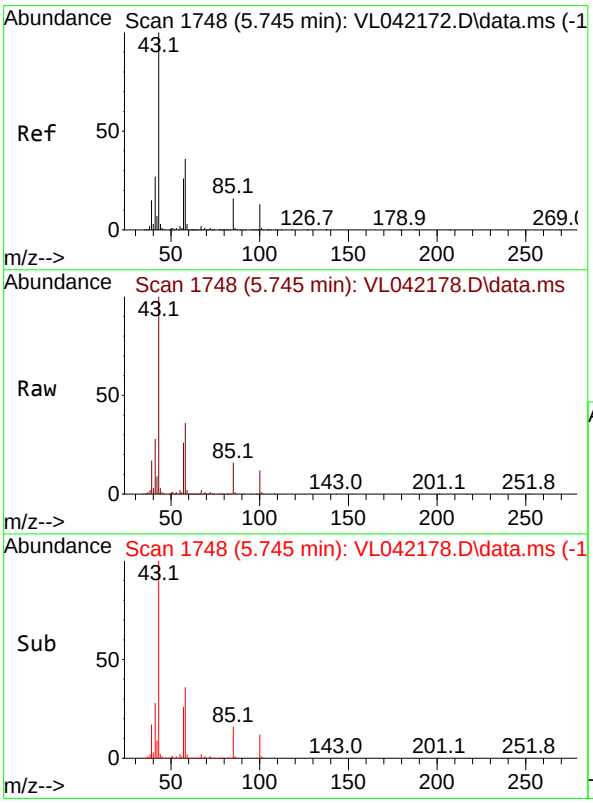
#49
Bromoform
Concen: 14.730 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:173 Resp: 427143

Ion	Ratio	Lower	Upper
173	100		
175	48.9	38.6	57.8
171	51.5	41.8	62.6

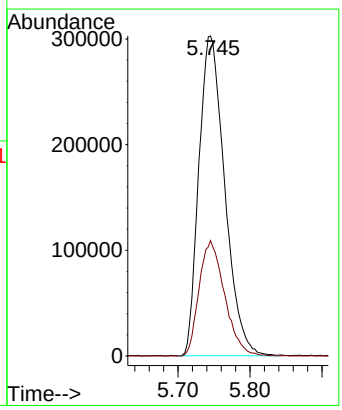


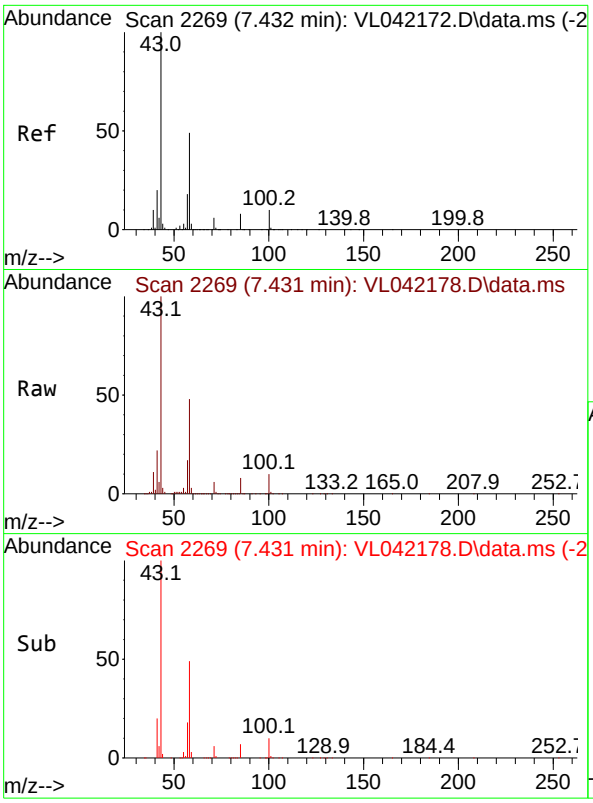


#50
4-Methyl-2-Pentanone
Concen: 13.155 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 43 Resp: 755146

Ion	Ratio	Lower	Upper
43	100		
58	35.5	29.0	43.6



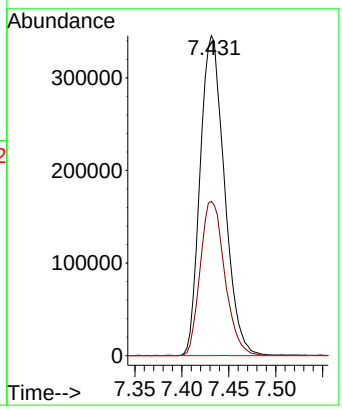


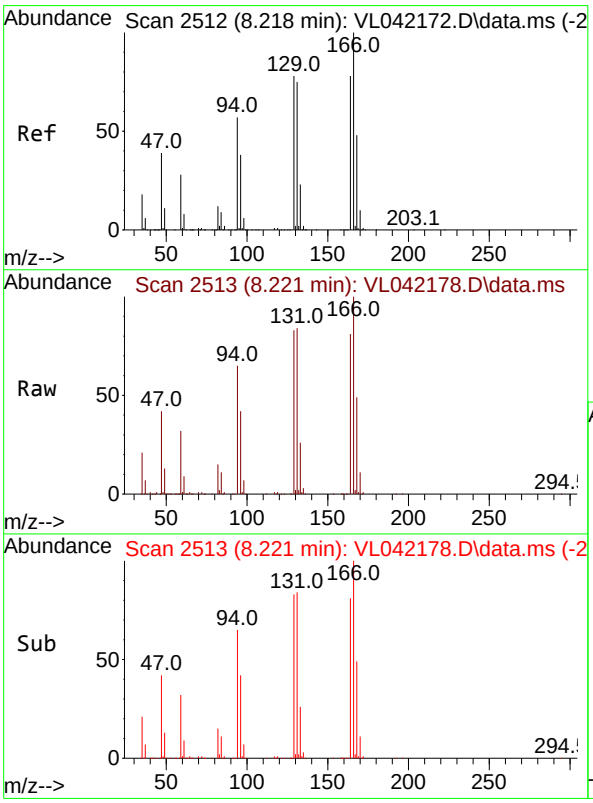
#51
2-Hexanone
Concen: 13.005 ppbv
RT: 7.431 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 619419

Ion	Ratio	Lower	Upper
43	100		
58	49.0	39.7	59.5
98	0.0	0.1	0.1#

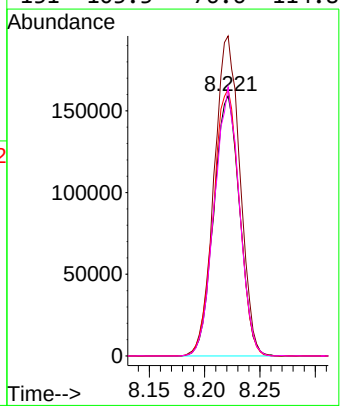


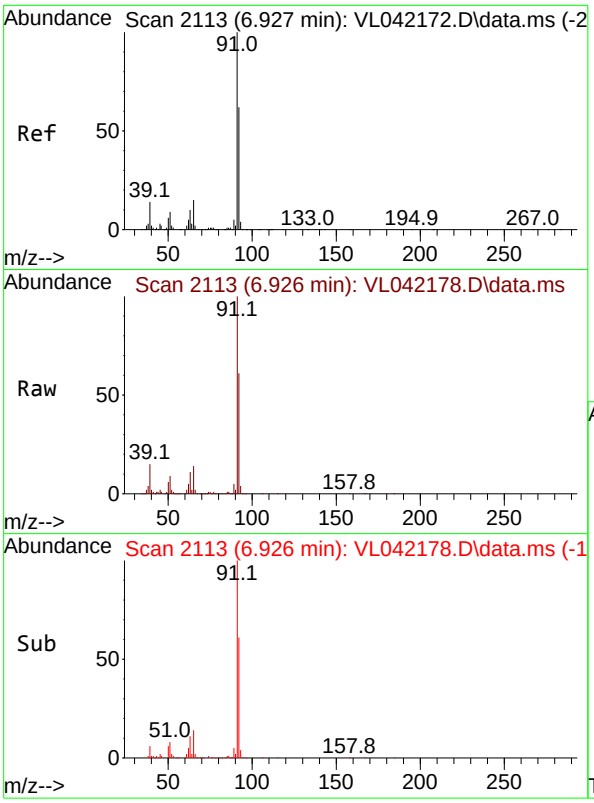


#52
Tetrachloroethene
Concen: 13.159 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:164 Resp: 258356

Ion	Ratio	Lower	Upper
164	100		
166	123.0	102.5	153.7
129	102.5	79.8	119.8
131	103.3	76.6	114.8



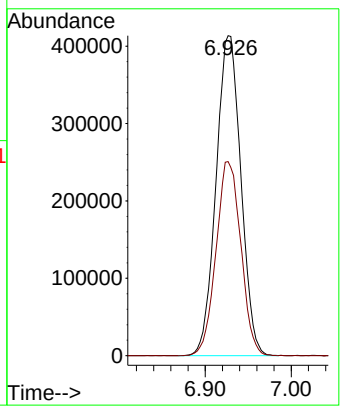


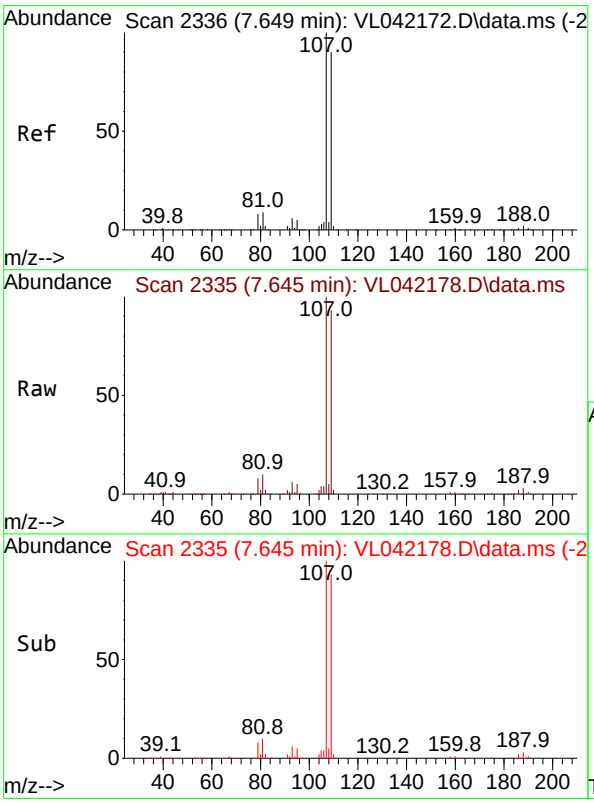
#53
Toluene
Concen: 14.137 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 829648

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.4	72.6

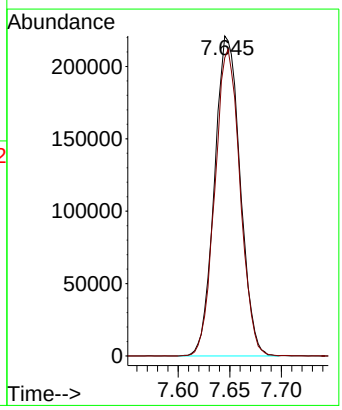


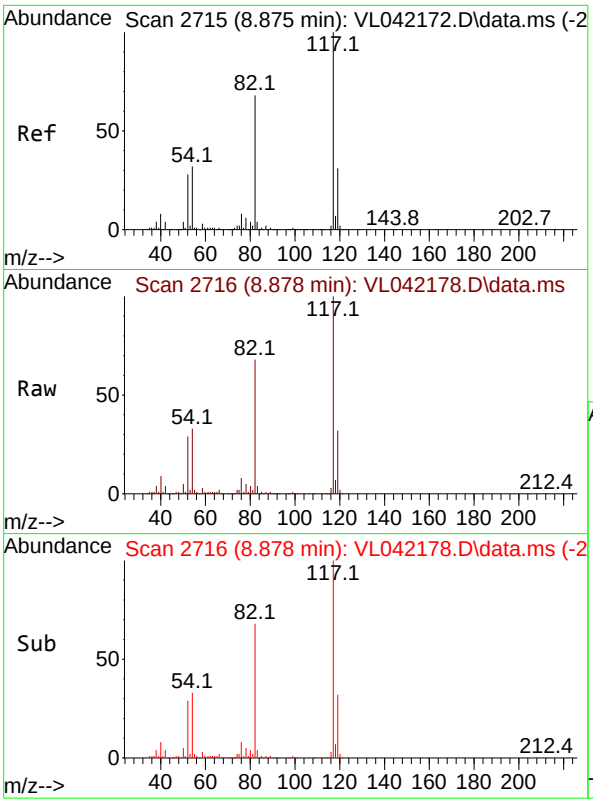


#54
1,2-Dibromoethane
Concen: 14.359 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.004 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:107 Resp: 381823

Ion	Ratio	Lower	Upper
107	100		
109	93.2	72.2	108.4



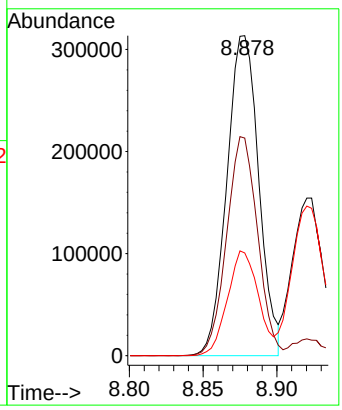


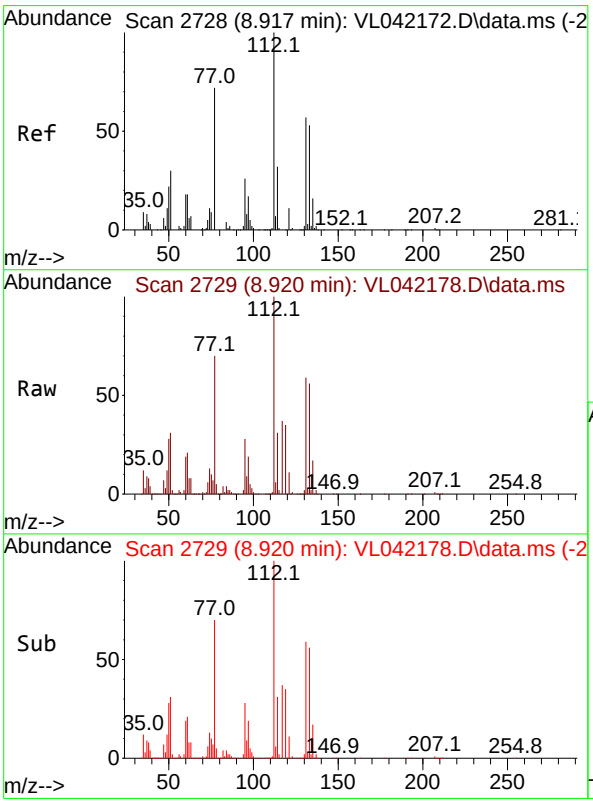
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 473077

Ion	Ratio	Lower	Upper
117	100		
82	71.4	55.8	83.6
119	31.7	25.5	38.3

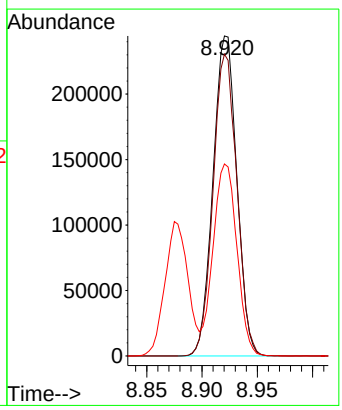


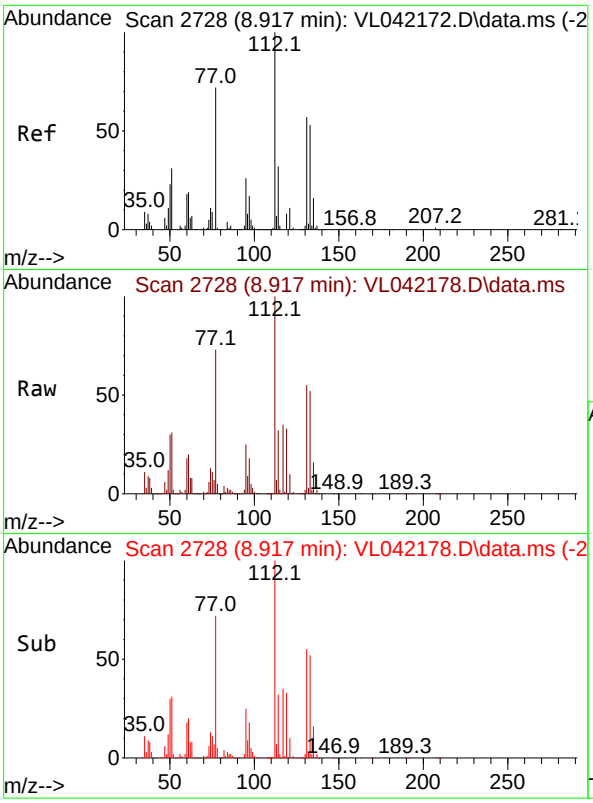


#56
1,1,1,2-Tetrachloroethane
Concen: 14.032 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:131 Resp: 365410

Ion	Ratio	Lower	Upper
131	100		
133	94.5	76.6	114.8
119	61.2	49.8	74.6



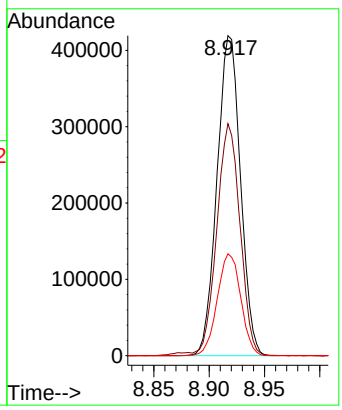


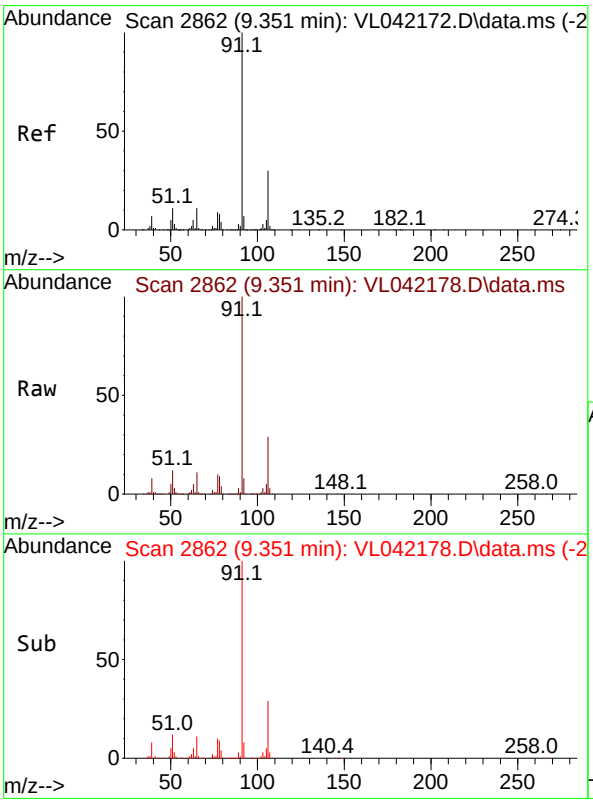
#57
Chlorobenzene
Concen: 13.777 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:112 Resp: 618201

Ion	Ratio	Lower	Upper
112	100		
77	72.5	58.2	87.2
114	31.8	29.1	35.5

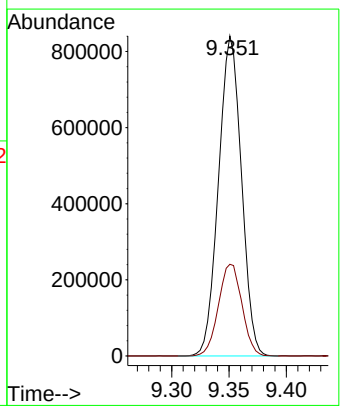


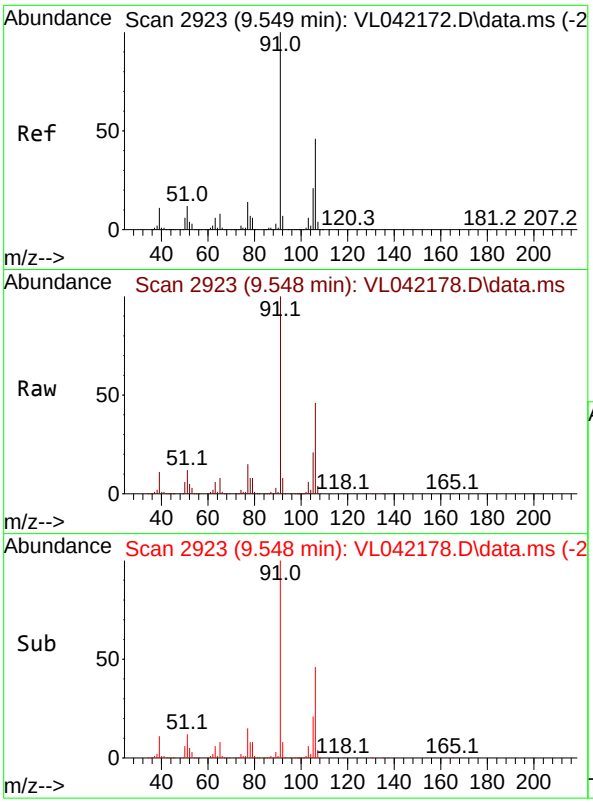


#58
Ethyl Benzene
Concen: 13.889 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1167096

Ion	Ratio	Lower	Upper
91	100		
106	28.7	24.2	36.2



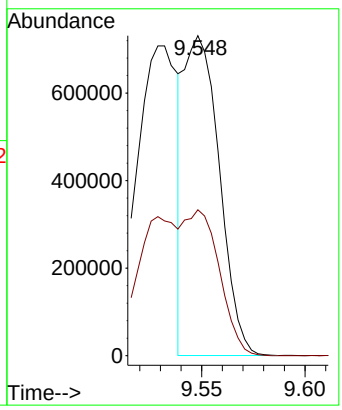


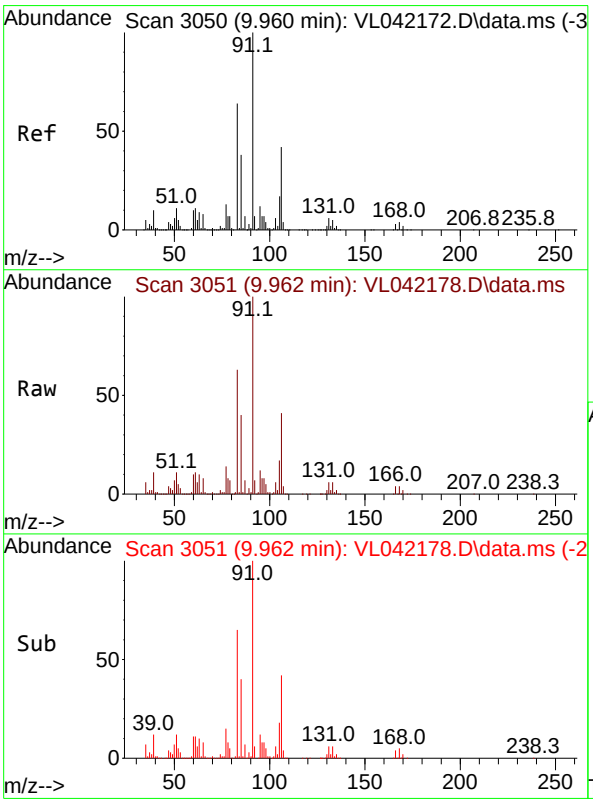
#59
m/p-Xylene
Concen: 12.901 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 866684

Ion	Ratio	Lower	Upper
91	100		
106	96.9	36.4	54.6#

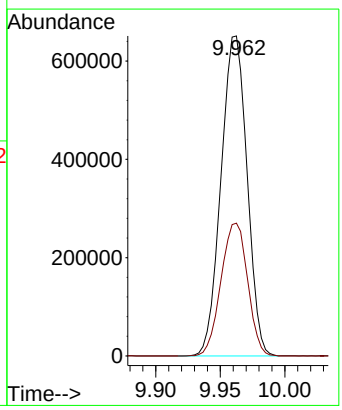


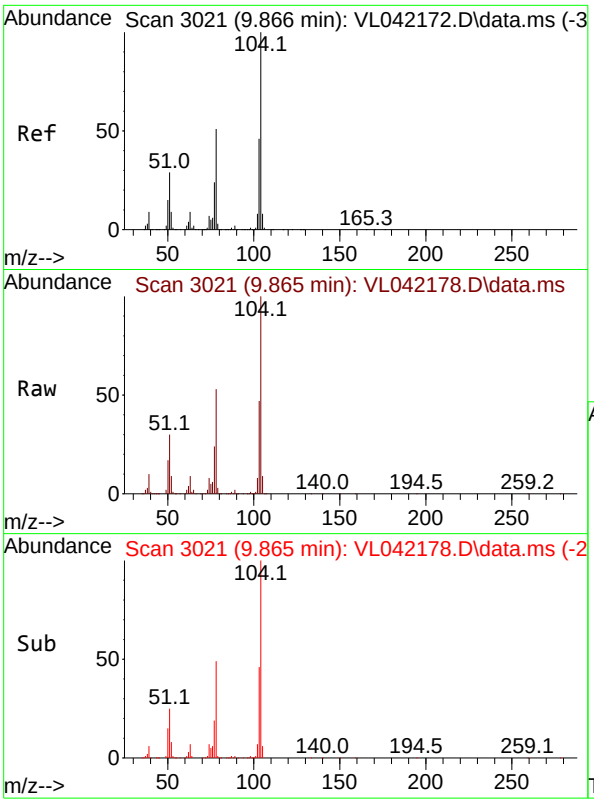


#60
o-Xylene
Concen: 13.577 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 913234

Ion	Ratio	Lower	Upper
91	100		
106	42.4	20.8	62.5



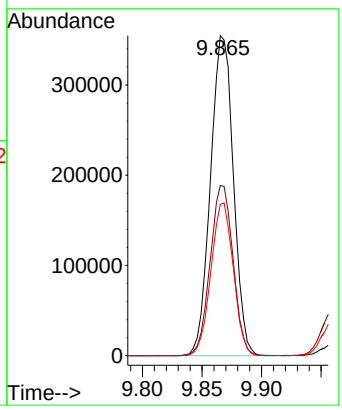


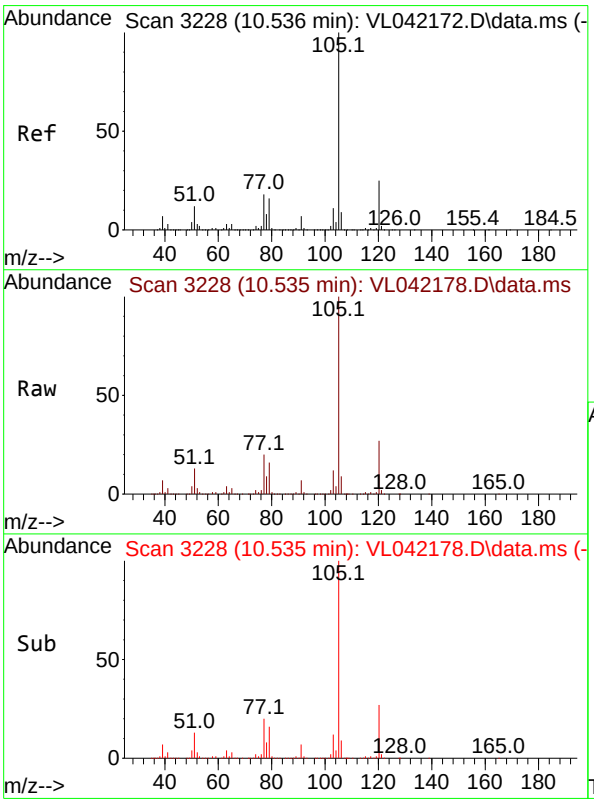
#61
Styrene
Concen: 14.250 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:104 Resp: 474195

Ion	Ratio	Lower	Upper
104	100		
78	53.0	41.8	62.6
103	46.7	37.0	55.4

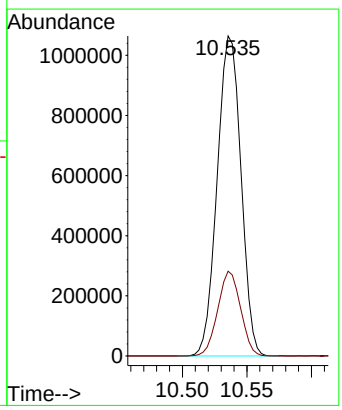


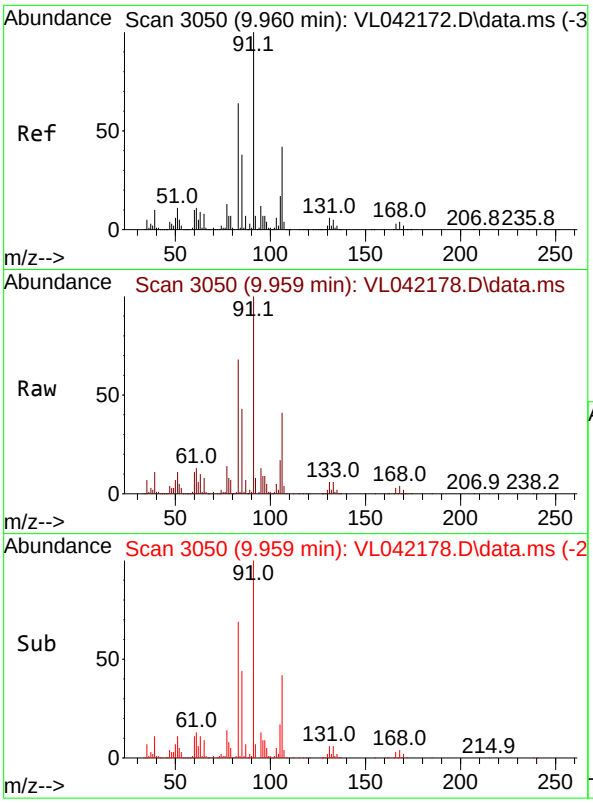


#62
Isopropylbenzene
Concen: 13.544 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1362416

Ion	Ratio	Lower	Upper
105	100		
120	25.3	19.9	29.9



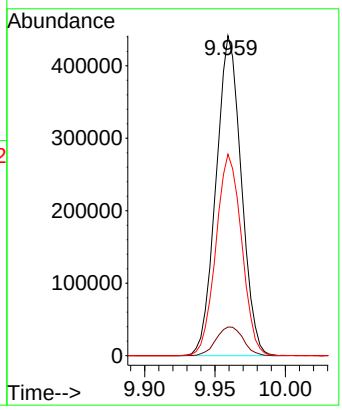


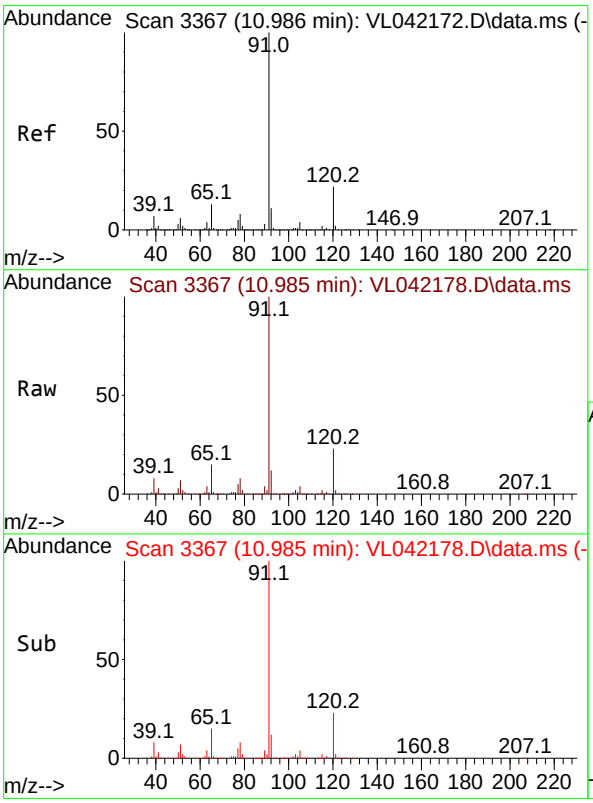
#63
1,1,2,2-Tetrachloroethane
Concen: 13.491 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 551386

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.2	32.5	97.5

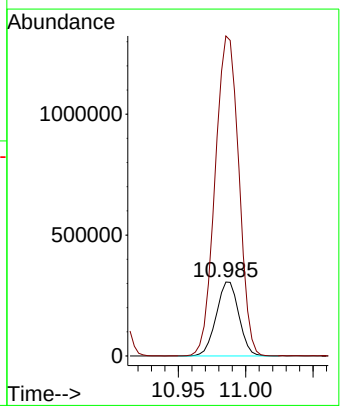


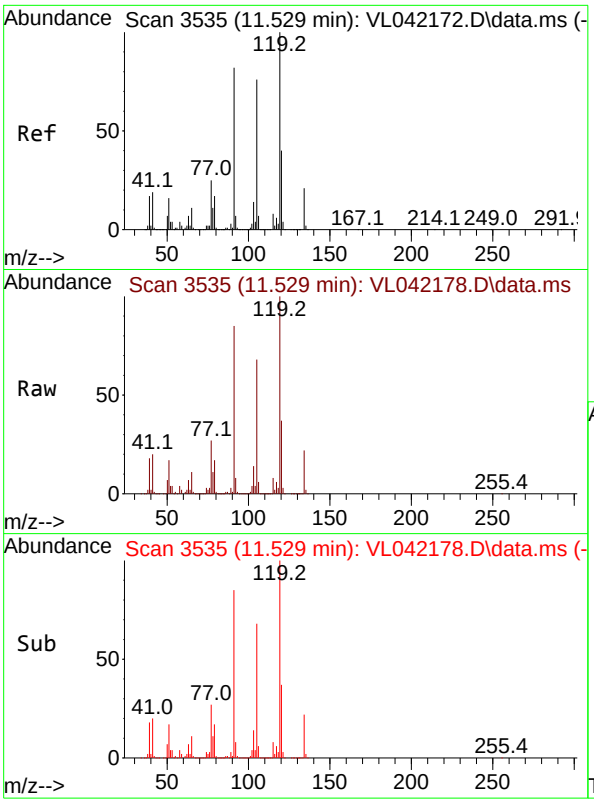


#64
n-propylbenzene
Concen: 13.753 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:120 Resp: 356118

Ion	Ratio	Lower	Upper
120	100		
91	455.4	376.9	565.3



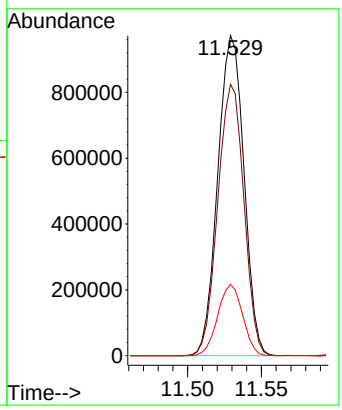


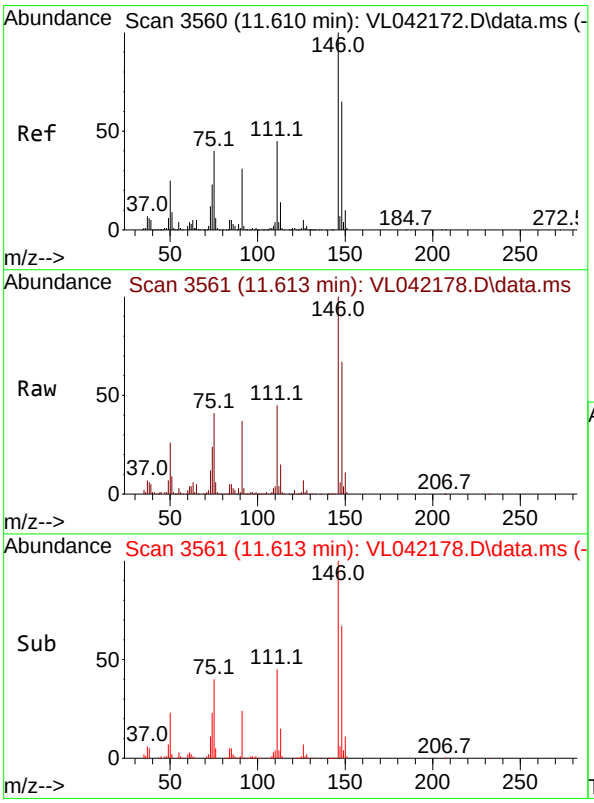
#65
tert-Butylbenzene
Concen: 12.901 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1200149

Ion	Ratio	Lower	Upper
119	100		
91	84.6	66.0	99.0
134	21.2	16.7	25.1

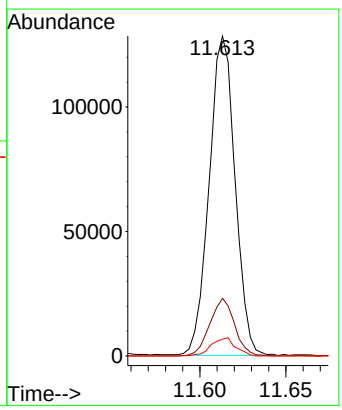


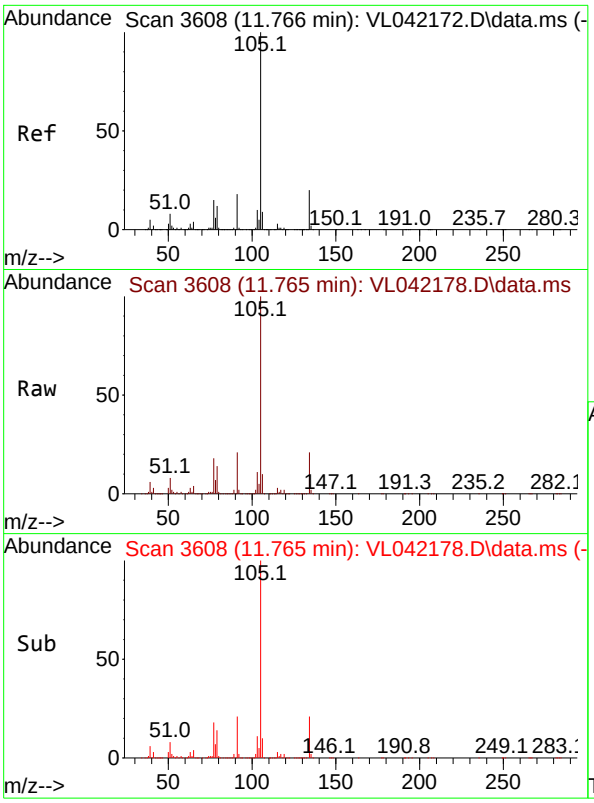


#66
Benzyl Chloride
Concen: 13.615 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 134397

Ion	Ratio	Lower	Upper
91	100		
126	17.3	13.8	20.6
128	5.4	4.5	6.7



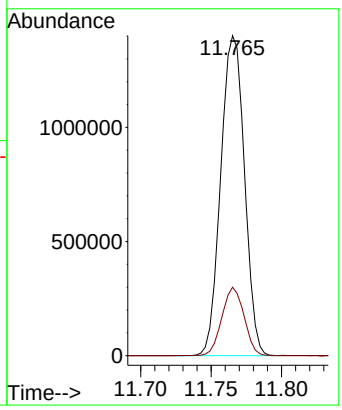


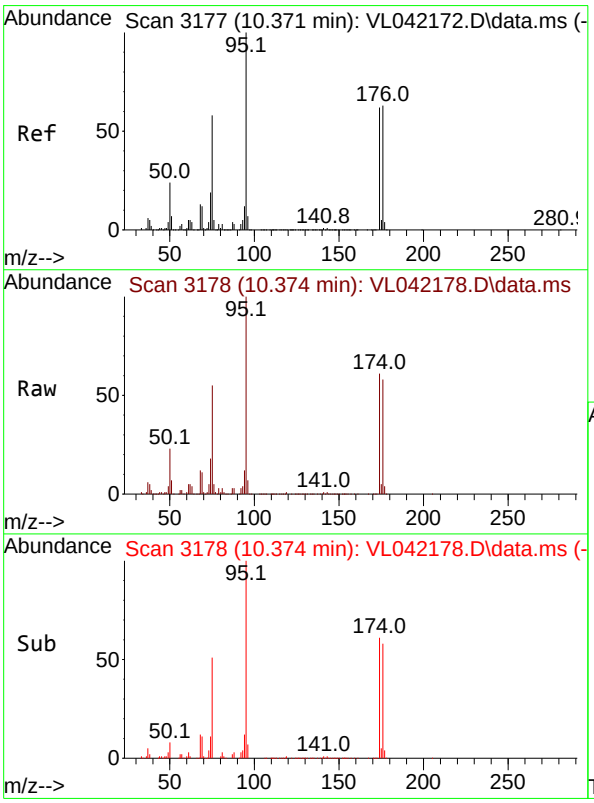
#67
sec-Butylbenzene
Concen: 12.711 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 1643629

Ion	Ratio	Lower	Upper
105	100		
134	20.0	15.5	23.3

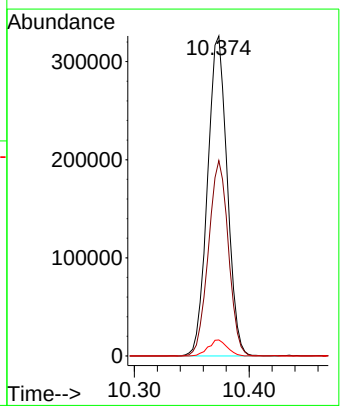


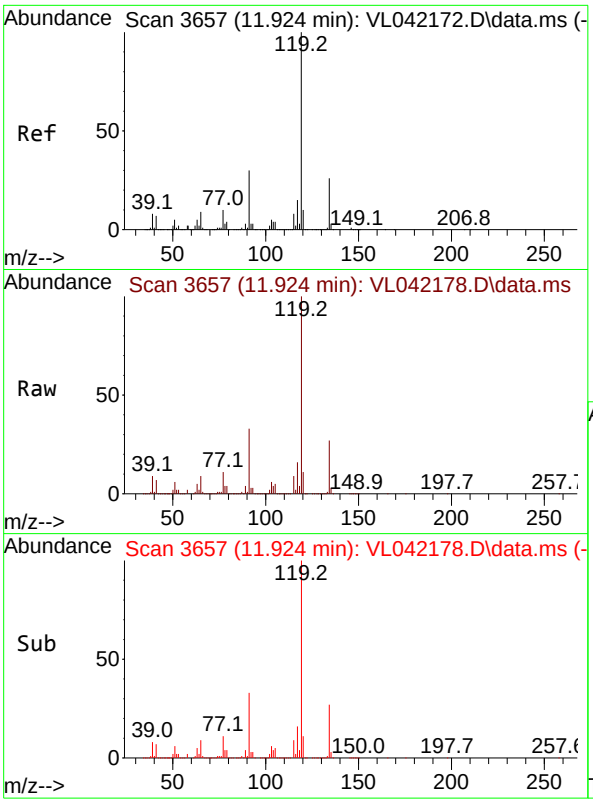


#68
1-Bromo-4-Fluorobenzene
Concen: 9.981 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 95 Resp: 387777

Ion	Ratio	Lower	Upper
95	100		
174	62.1	50.6	76.0
175	4.8	3.8	5.6



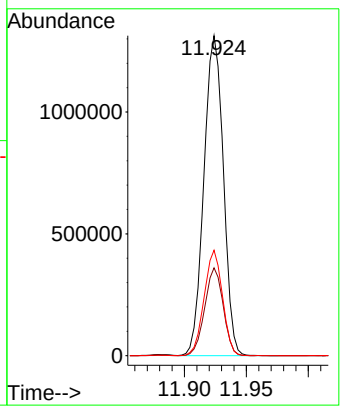


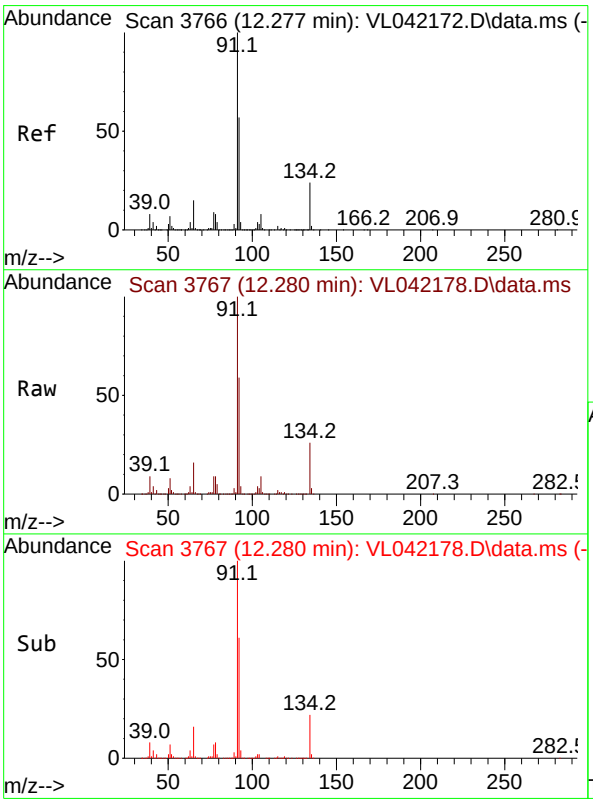
#69
p-Isopropyltoluene
Concen: 12.906 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1437016

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	31.2	23.7	35.5

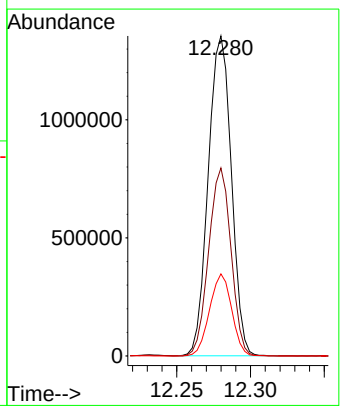


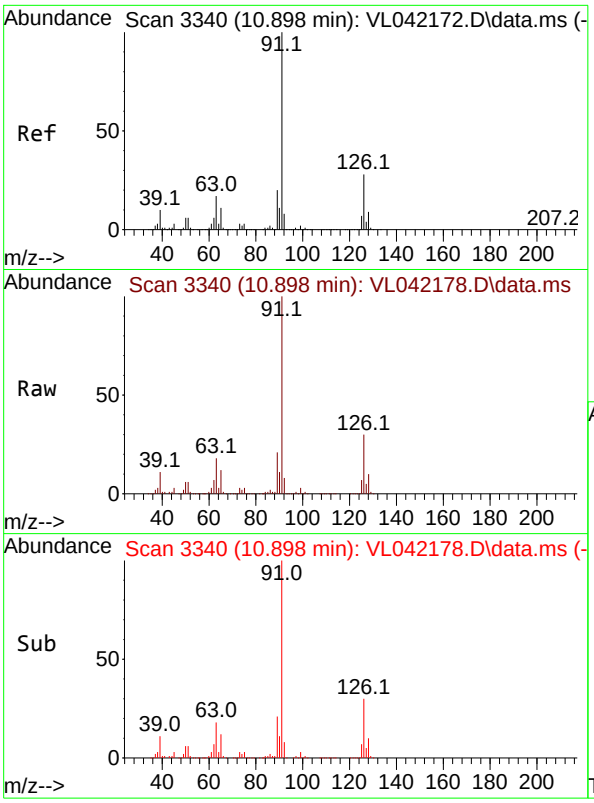


#70
n-Butylbenzene
Concen: 12.975 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion: 91 Resp: 1477443

Ion	Ratio	Lower	Upper
91	100		
92	57.0	44.9	67.3
134	24.6	19.2	28.8



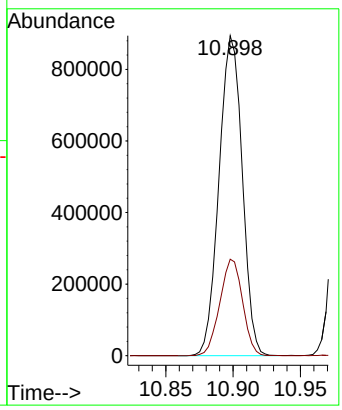


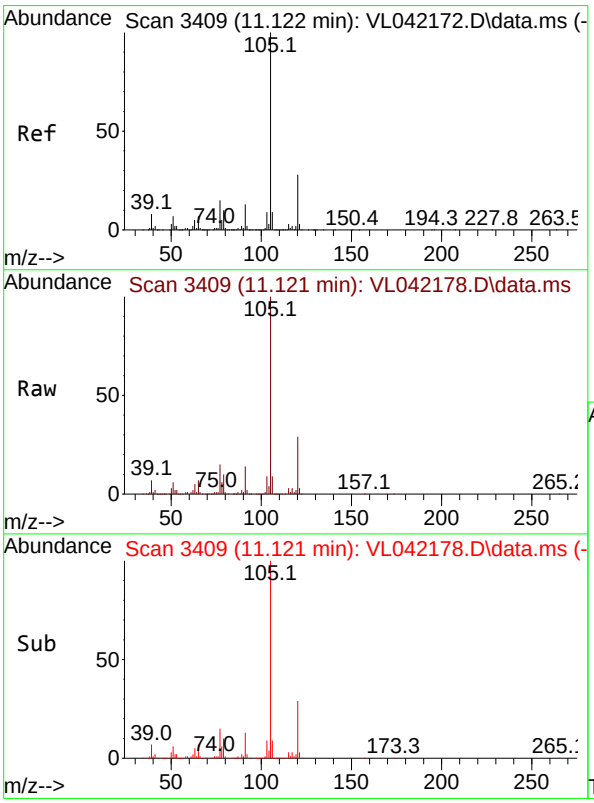
#71
2-Chlorotoluene
Concen: 13.724 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 1071432

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.6	46.4

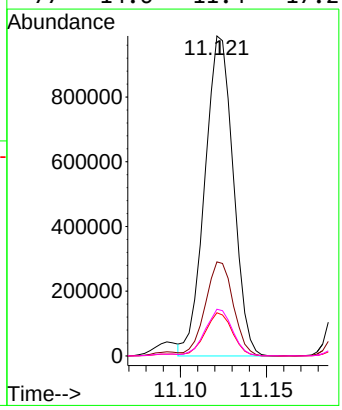


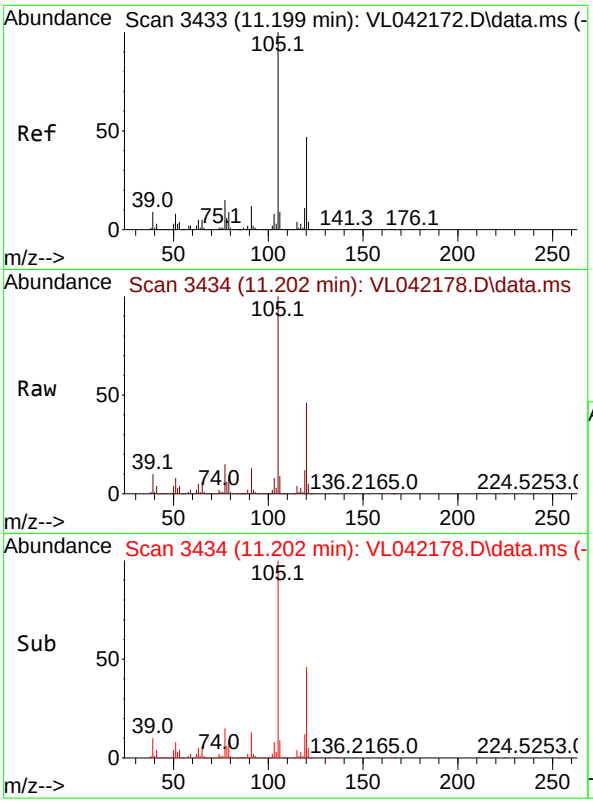


#72
4-Ethyltoluene
Concen: 13.569 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1136415

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.4	35.0
91	13.5	10.3	15.5
77	14.6	11.4	17.2



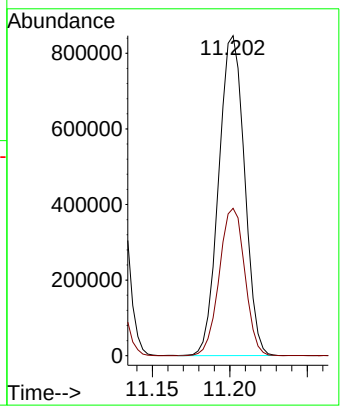


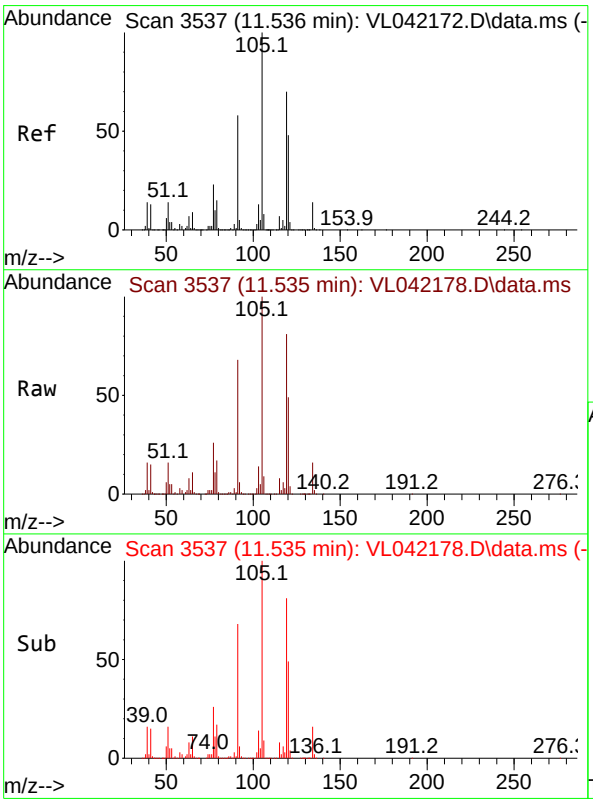
#73
1,3,5-Trimethylbenzene
Concen: 13.395 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 979783

Ion	Ratio	Lower	Upper
105	100		
120	46.1	37.4	56.0

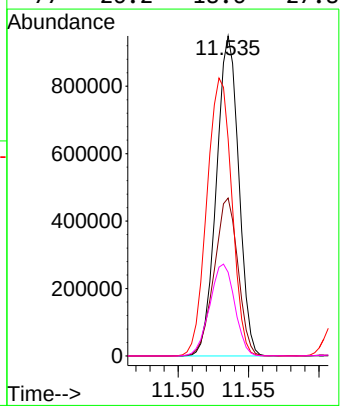


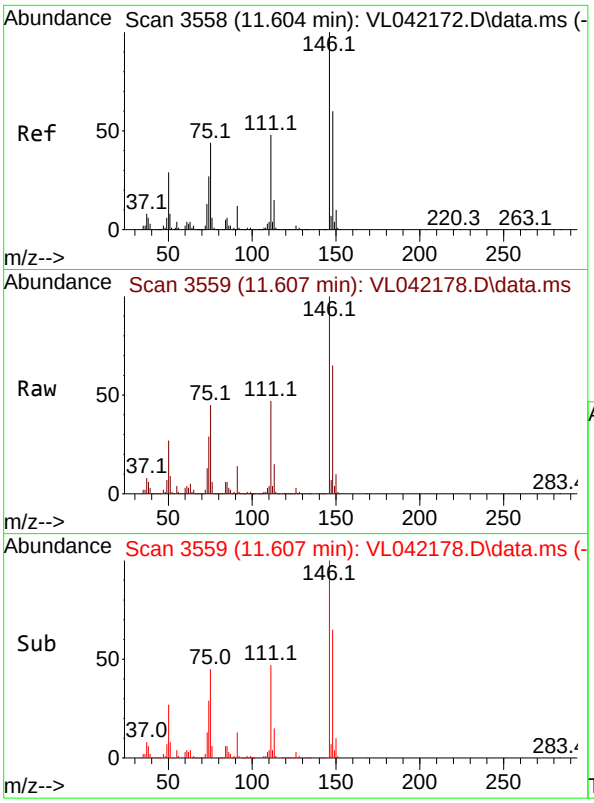


#74
1,2,4-Trimethylbenzene
Concen: 12.447 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:105 Resp: 1048874

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	67.8	46.2	69.2
77	26.2	18.6	27.8



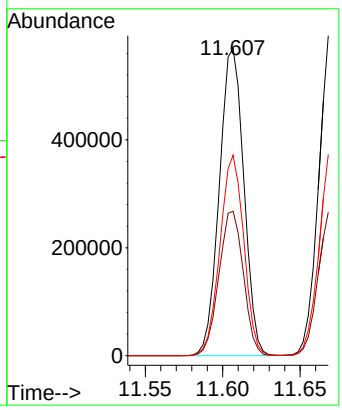


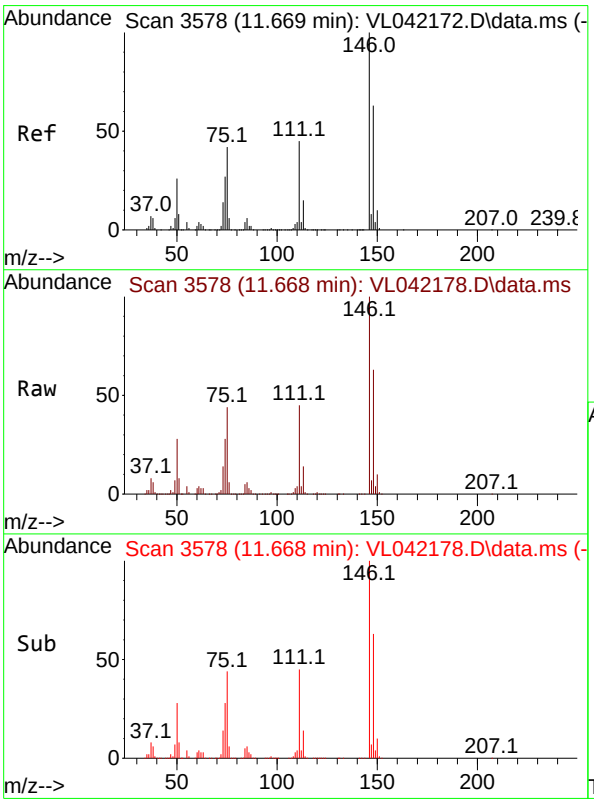
#75
1,3-Dichlorobenzene
Concen: 13.545 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 626015

Ion	Ratio	Lower	Upper
146	100		
111	47.0	23.8	71.2
148	63.5	31.9	95.9

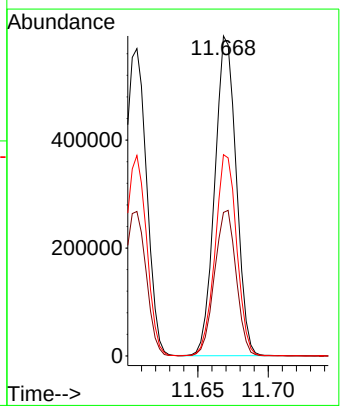


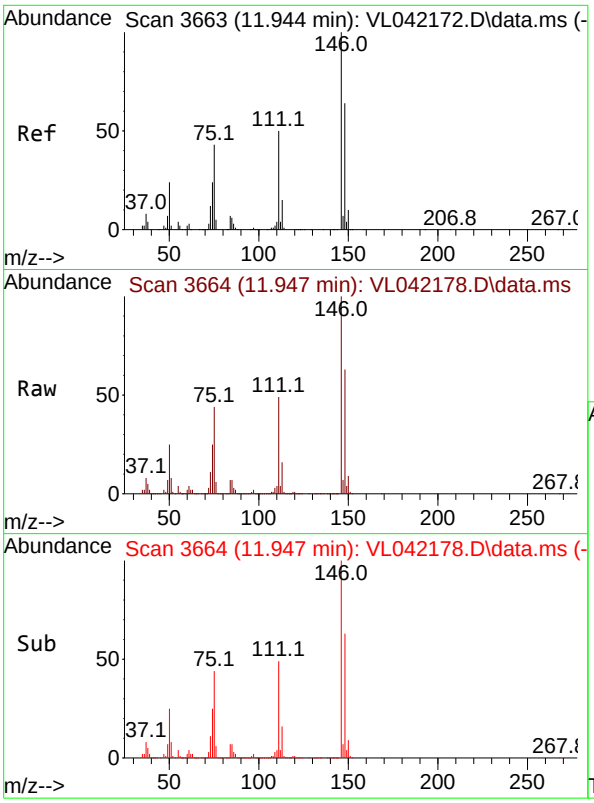


#76
1,4-Dichlorobenzene
Concen: 13.668 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:146 Resp: 628694

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.0	69.0
148	63.6	31.9	95.7



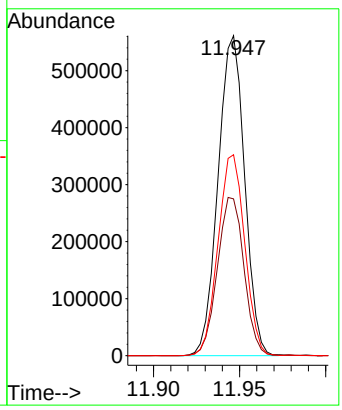


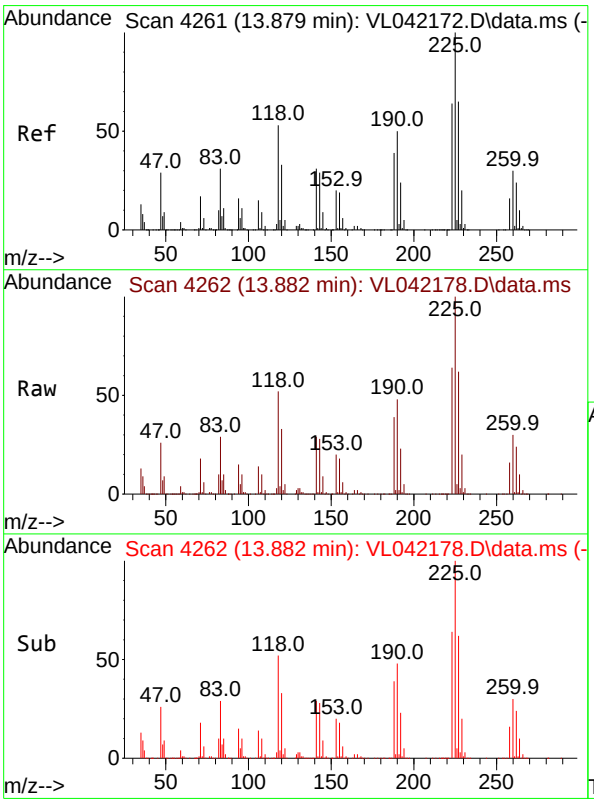
#77
1,2-Dichlorobenzene
Concen: 13.396 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 602844

Ion	Ratio	Lower	Upper
146	100		
111	49.7	24.8	74.3
148	63.3	31.6	94.8

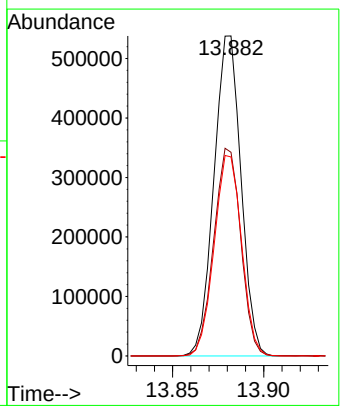


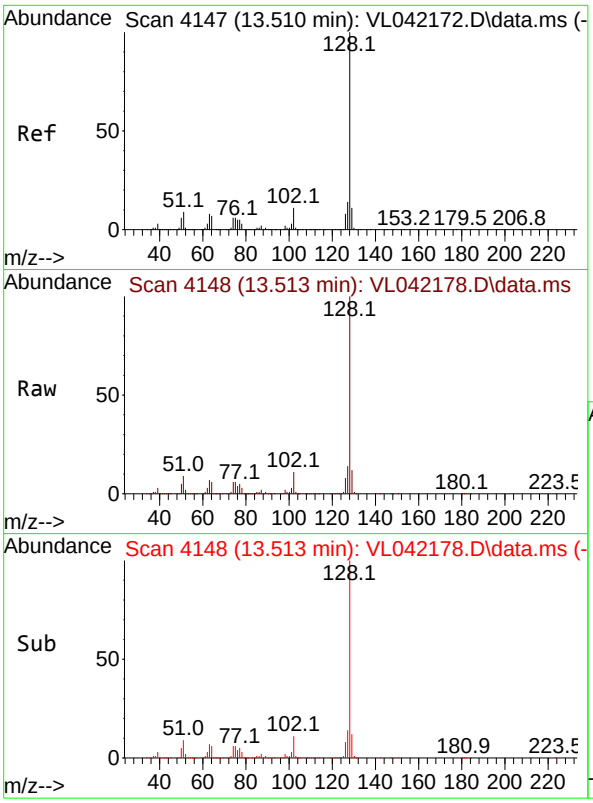


#78
Hexachloro-1,3-Butadiene
Concen: 12.147 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:225 Resp: 556392

Ion	Ratio	Lower	Upper
225	100		
223	64.7	50.6	76.0
227	63.3	51.2	76.8



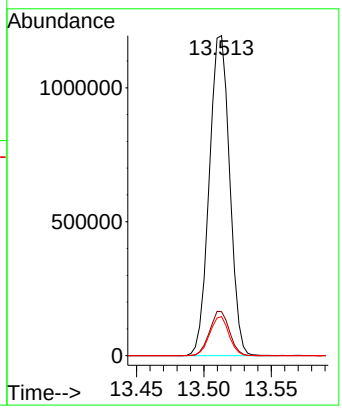


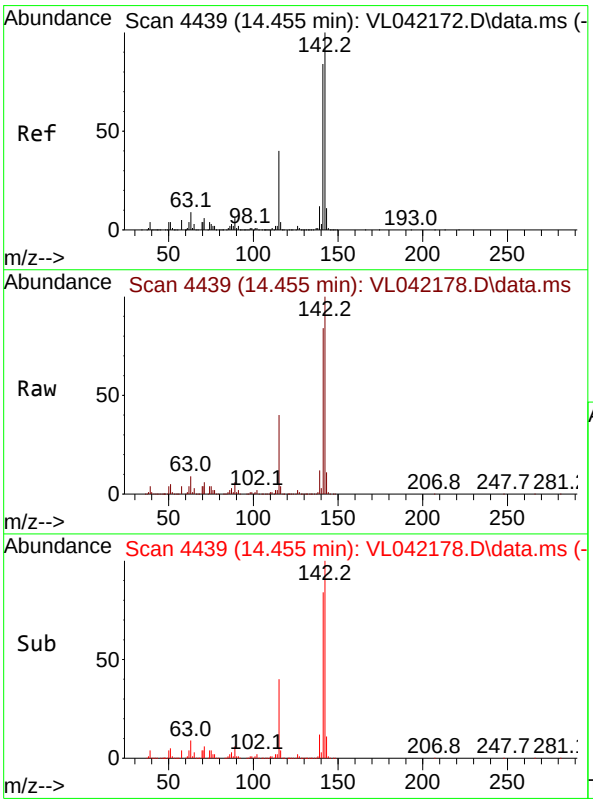
#79
Naphthalene
Concen: 13.653 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:128 Resp: 1258479

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.8	16.2
129	12.2	9.0	13.4

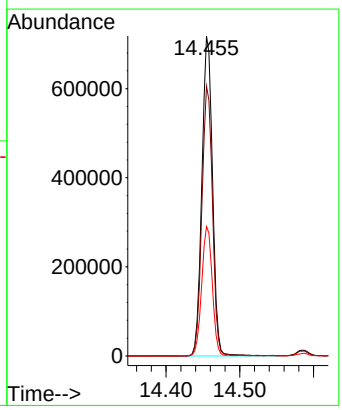


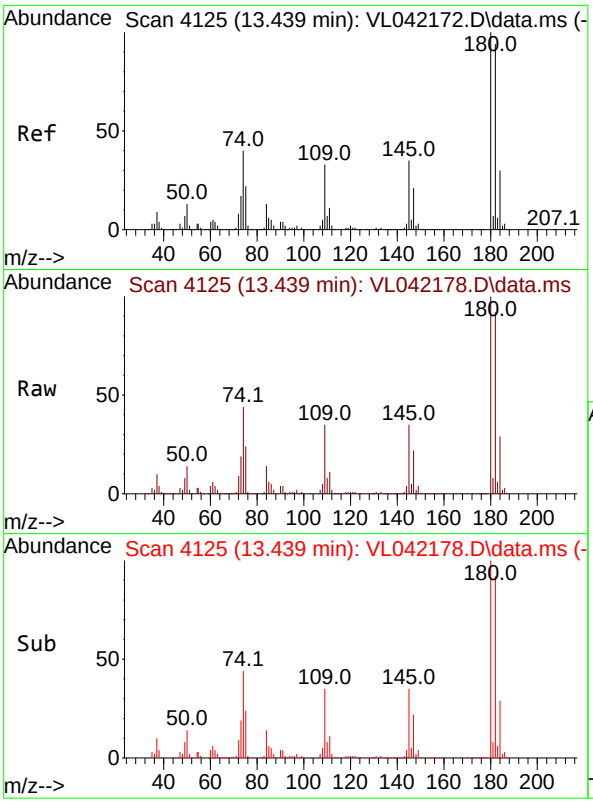


#80
Naphthalene,2-methyl-
Concen: 16.018 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Tgt Ion:142 Resp: 718900

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.3	99.5
115	40.6	31.6	47.4



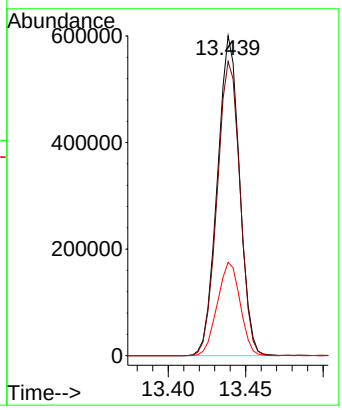


#81
1,2,4-Trichlorobenzene
Concen: 14.075 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042178.D
Acq: 27 Mar 2025 11:36

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:180 Resp: 598416

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	174350	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	498105	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	473357	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	379929	9.774	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	245714	9.545	ppbv	100
3) Chlorodifluoromethane	1.473	51	247046	9.394	ppbv	97
4) Chloromethane	1.531	50	98527	9.365	ppbv	98
5) Vinyl Chloride	1.577	62	95578	8.573	ppbv	97
6) Bromomethane	1.667	94	41950	8.799	ppbv	97
7) Chloroethane	1.703	64	37400	8.856	ppbv	94
8) Dichlorotetrafluoroethane	1.551	85	213819	9.753	ppbv	95
9) Propene	1.483	41	105338	8.739	ppbv	99
10) Heptane	4.972	43	298768	9.318	ppbv	100
11) Trichlorofluoromethane	1.874	101	236793	9.453	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.136	101	193965	9.421	ppbv	98
13) Ethanol	1.719	45	5773	5.066	ppbv	97
14) Bromoethene	1.780	108	73572	9.328	ppbv	97
15) Acetone	1.832	43	198300	8.132	ppbv	98
16) 1,3-Butadiene	1.606	39	97840	8.216	ppbv	99
17) tert-Butyl alcohol	2.039	59	276195	9.094	ppbv	99
18) 1,1-Dichloroethene	2.033	96	87137	9.053	ppbv	89
19) Isopropyl Alcohol	1.884	45	122768	8.923	ppbv	98
20) Methylene Chloride	2.059	84	72813	8.018	ppbv	97
21) Allyl Chloride	2.094	41	157418	9.154	ppbv	99
22) trans-1,2-Dichloroethene	2.337	96	101141	9.092	ppbv	93
23) Vinyl Acetate	2.460	43	90260	8.553	ppbv #	97
24) 1,1-Dichloroethane	2.405	63	197968	9.600	ppbv	99
25) Ethyl Acetate	2.832	43	592585	9.364	ppbv	99
26) Hexane	2.823	57	231125	9.455	ppbv	99
27) Carbon Disulfide	2.146	76	248834	9.493	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	146470	9.624	ppbv	95
29) Chloroform	2.845	83	344106	9.619	ppbv	100
30) Cyclohexane	3.852	84	197897	9.323	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	234487	9.449	ppbv	96
32) 1,1,1-Trichloroethane	3.363	97	365364	8.921	ppbv	99
34) 2-Butanone	2.554	43	331236	9.171	ppbv	99
35) Carbon Tetrachloride	3.758	117	363392	9.339	ppbv	98
36) Benzene	3.651	78	461261	9.341	ppbv	99
37) 1,2-Dichloroethane	3.217	62	273559	9.676	ppbv	99
38) Trichloroethene	4.541	130	191746	9.306	ppbv	97
39) 1,2-Dichloropropane	4.311	63	170839	9.500	ppbv	95
40) 1,4-Dioxane	4.577	88	80592	8.443	ppbv #	97
41) Tetrahydrofuran	3.052	42	196163	9.431	ppbv	99
42) Bromodichloromethane	4.486	83	384006	9.853	ppbv	100
43) Methyl Methacrylate	4.878	69	195339	9.344	ppbv	99
44) 2,2,4-Trimethylpentane	4.635	57	787400	9.436	ppbv	99
45) t-1,3-Dichloropropene	6.409	75	212335	9.467	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

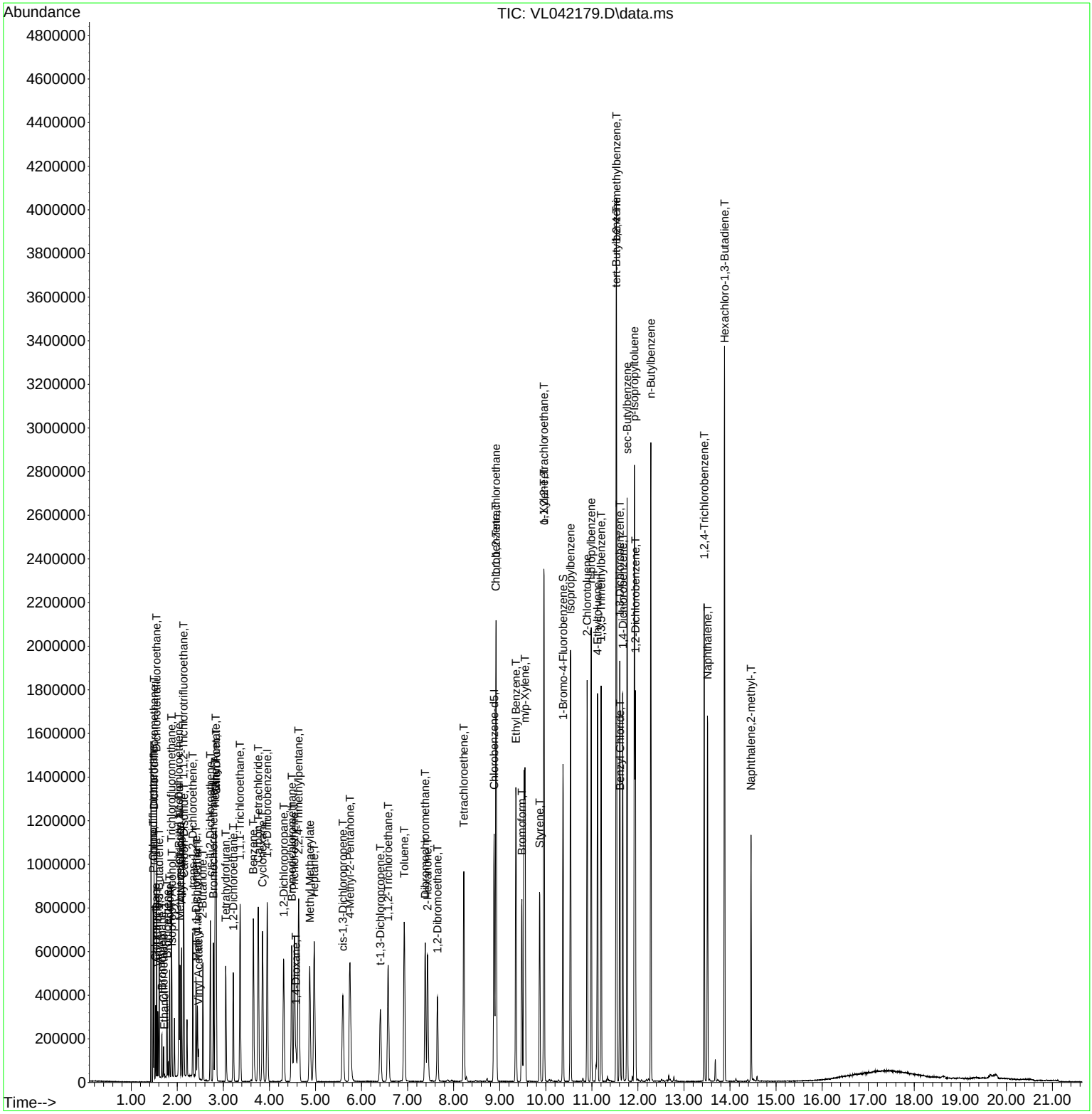
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	265101	9.643	ppbv		98
47) 1,1,2-Trichloroethane	6.577	97	183228	9.638	ppbv		98
48) Dibromochloromethane	7.383	129	322766	10.018	ppbv		100
49) Bromoform	9.480	173	285149	9.858	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	500791	8.749	ppbv		99
51) 2-Hexanone	7.432	43	410889	8.741	ppbv	#	99
52) Tetrachloroethene	8.221	164	173420	8.855	ppbv		93
53) Toluene	6.927	91	556897	9.514	ppbv		99
54) 1,2-Dibromoethane	7.645	107	256930	9.695	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	249270	9.567	ppbv		99
57) Chlorobenzene	8.917	112	422531	9.411	ppbv		98
58) Ethyl Benzene	9.351	91	791360	9.412	ppbv		98
59) m/p-Xylene	9.548	91	583773	8.695	ppbv	#	20
60) o-Xylene	9.959	91	632918	9.404	ppbv		99
61) Styrene	9.866	104	315910	9.488	ppbv		99
62) Isopropylbenzene	10.539	105	944938	9.388	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	382635	9.357	ppbv		99
64) n-propylbenzene	10.985	120	244547	9.439	ppbv		98
65) tert-Butylbenzene	11.529	119	843828	9.065	ppbv		98
66) Benzyl Chloride	11.613	91	86804	8.789	ppbv		97
67) sec-Butylbenzene	11.765	105	1172636	9.063	ppbv		100
69) p-Isopropyltoluene	11.924	119	1019694	9.153	ppbv		100
70) n-Butylbenzene	12.280	91	1038548	9.115	ppbv		100
71) 2-Chlorotoluene	10.898	91	732874	9.382	ppbv		100
72) 4-Ethyltoluene	11.125	105	785185	9.370	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	673541	9.203	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	729155	8.648	ppbv		94
75) 1,3-Dichlorobenzene	11.607	146	426573	9.224	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	426318	9.263	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	412180	9.154	ppbv		99
78) Hexachloro-1,3-Butadiene	13.882	225	356386	7.776	ppbv		100
79) Naphthalene	13.513	128	773311	8.385	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	323443	7.151	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	363863	8.553	ppbv		98

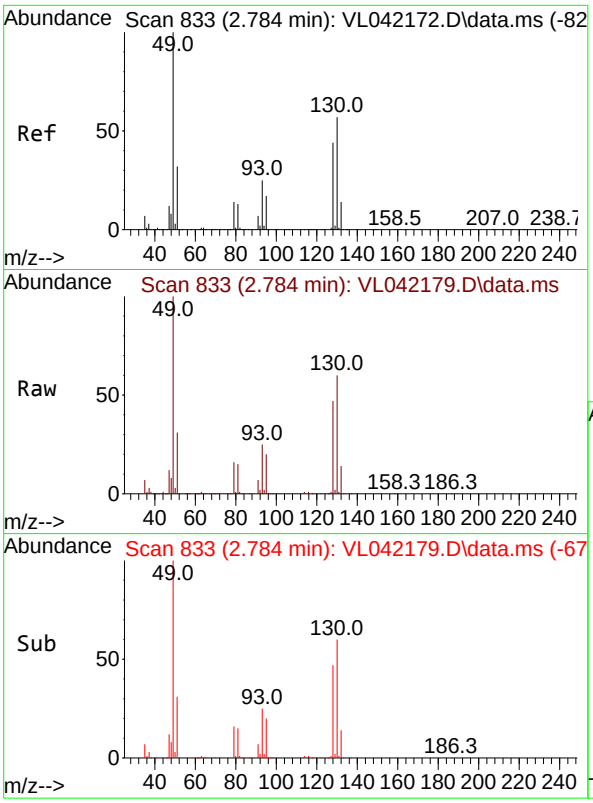
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL032725\
Data File : VL042179.D
Acq On : 27 Mar 2025 12:23
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Quant Time: Mar 28 02:05:15 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



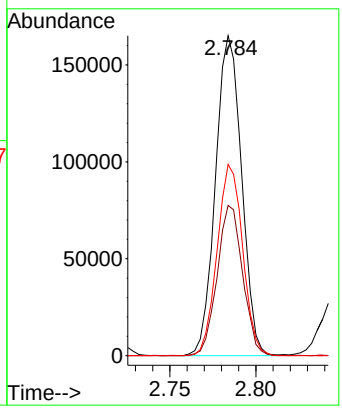


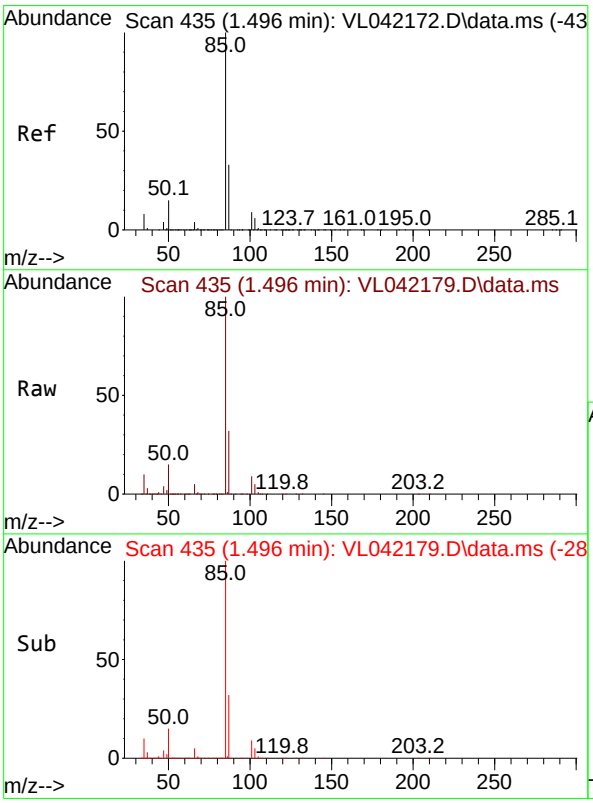
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 49 Resp: 174350

Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.9	68.5
130	58.4	28.8	86.4

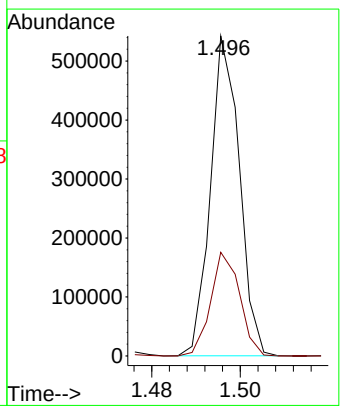


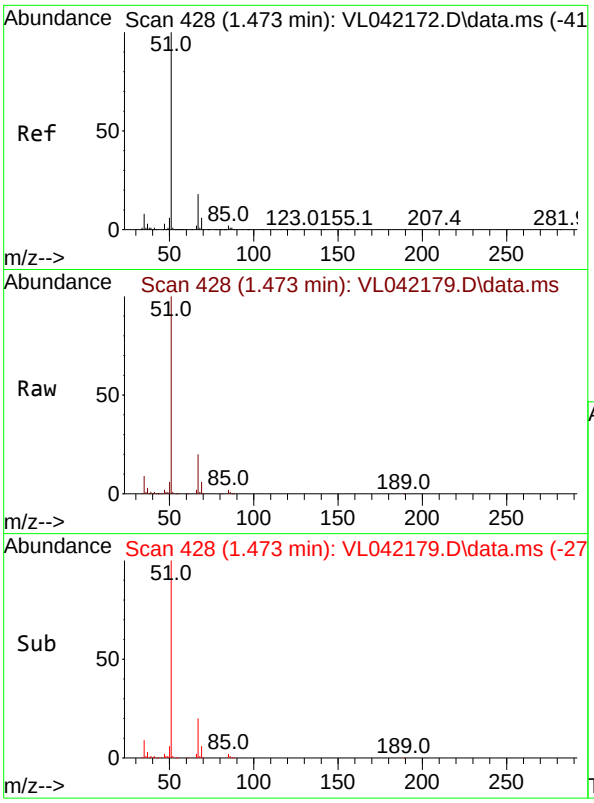


#2
Dichlorodifluoromethane
Concen: 9.545 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 245714

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1



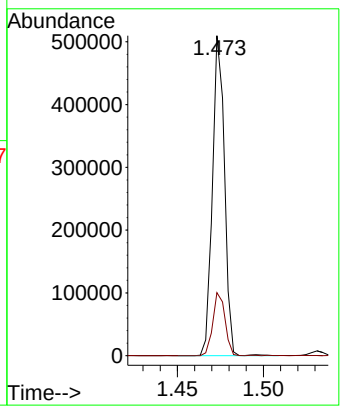


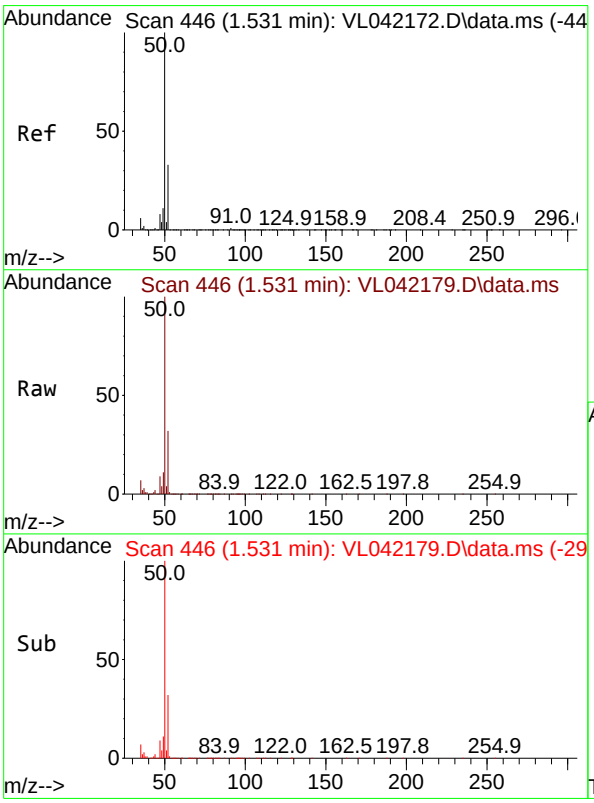
#3
Chlorodifluoromethane
Concen: 9.394 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 51 Resp: 247046

Ion	Ratio	Lower	Upper
51	100		
67	20.1	15.0	22.6

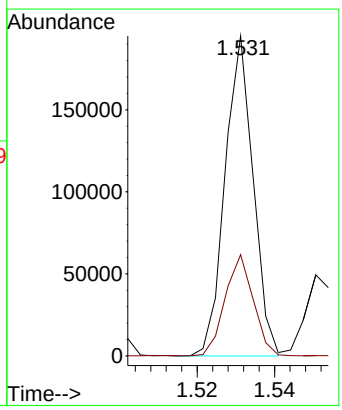


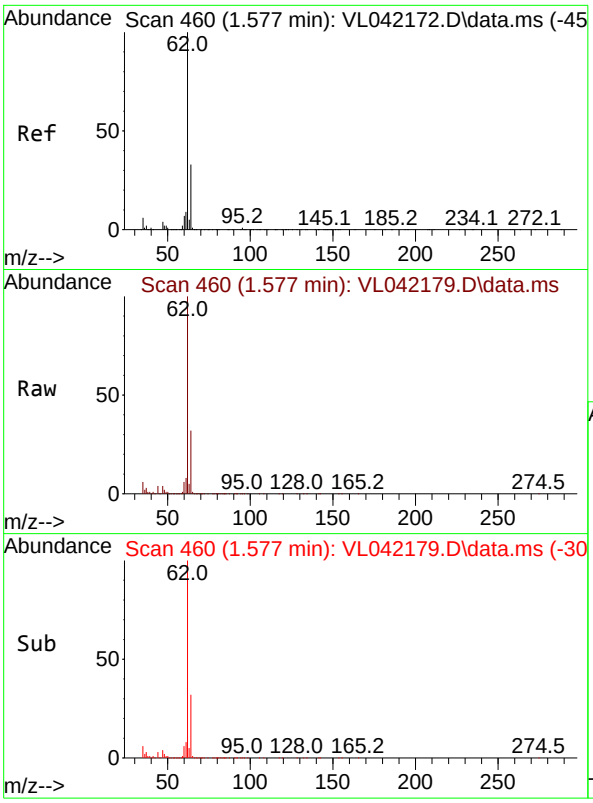


#4
Chloromethane
Concen: 9.365 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 50 Resp: 98527

Ion	Ratio	Lower	Upper
50	100		
52	31.6	26.1	39.1



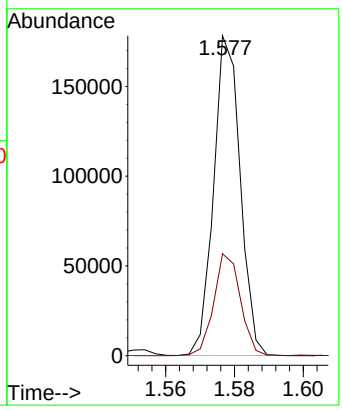


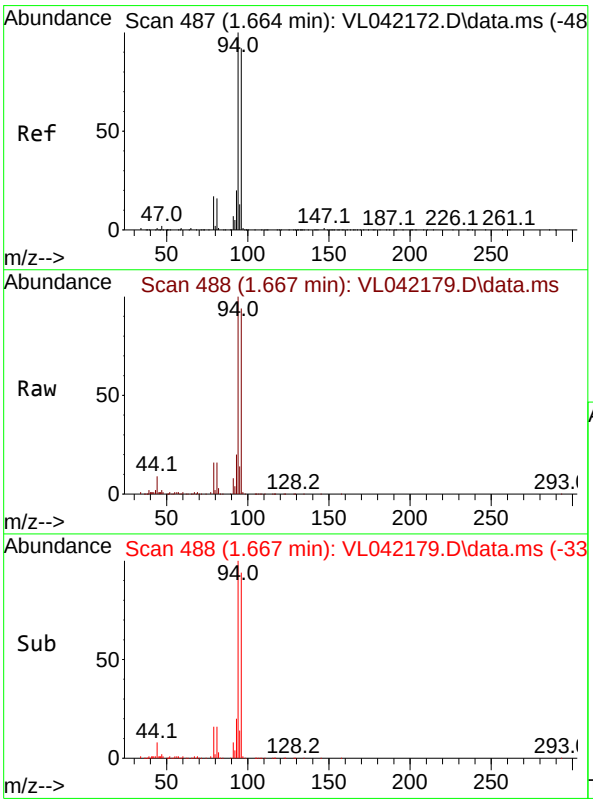
#5
Vinyl Chloride
Concen: 8.573 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 62 Resp: 95578

Ion	Ratio	Lower	Upper
62	100		
64	31.8	26.6	40.0

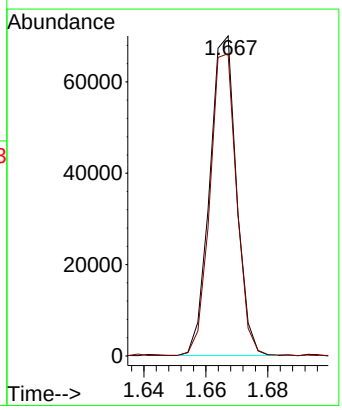


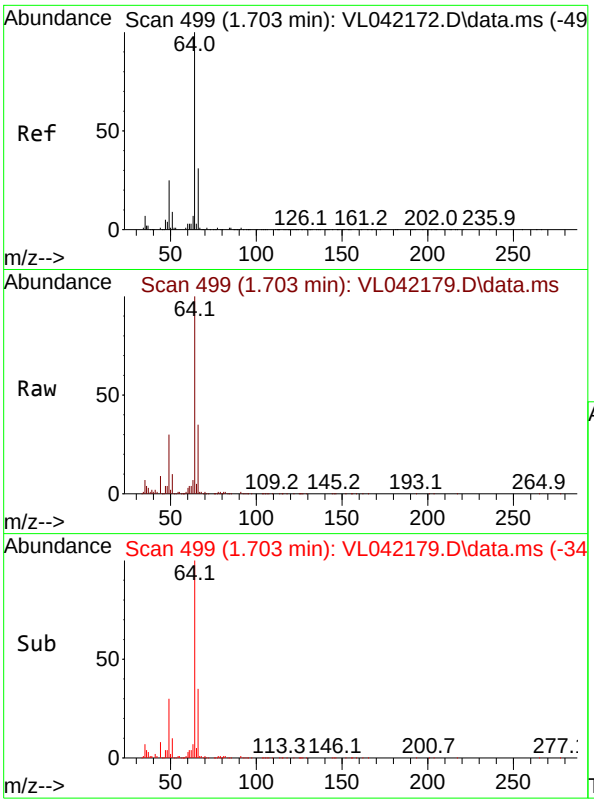


#6
Bromomethane
Concen: 8.799 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 94 Resp: 41950

Ion	Ratio	Lower	Upper
94	100		
96	94.4	73.1	109.7



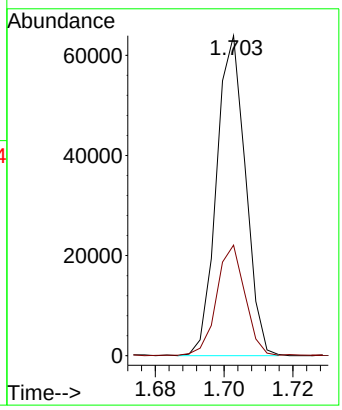


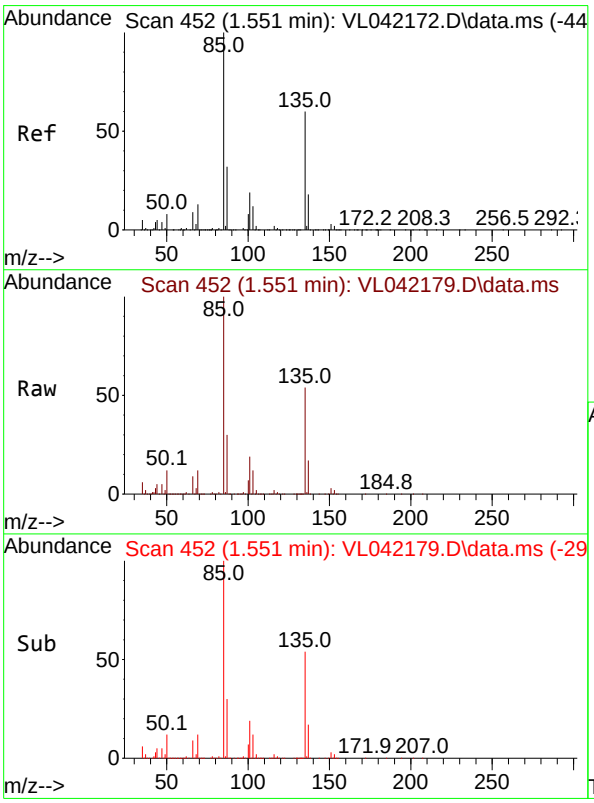
#7
Chloroethane
Concen: 8.856 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 64 Resp: 37400

Ion	Ratio	Lower	Upper
64	100		
66	34.5	25.2	37.8

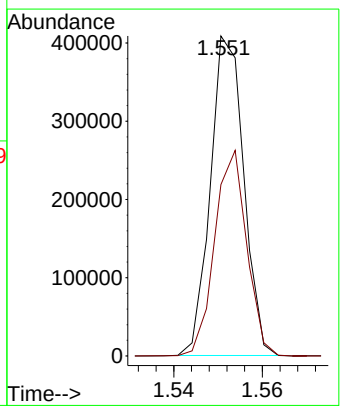


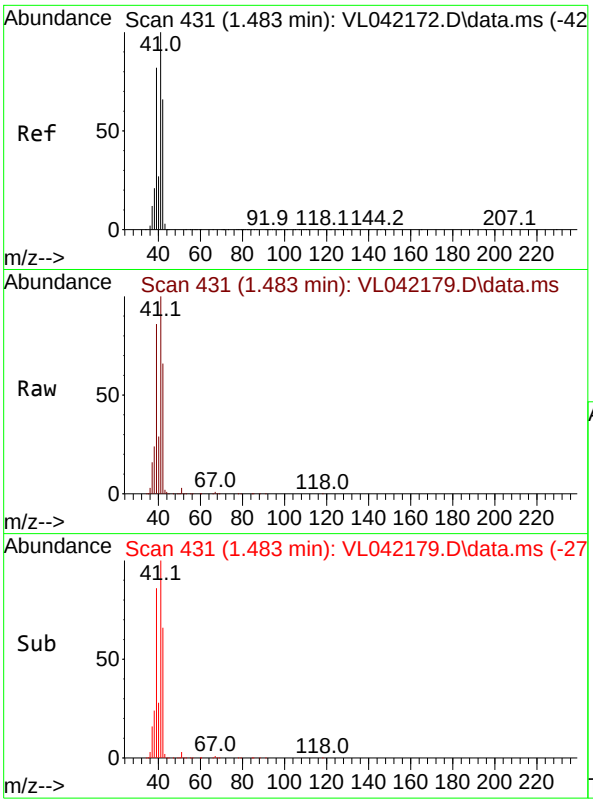


#8
Dichlorotetrafluoroethane
Concen: 9.753 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 85 Resp: 213819

Ion	Ratio	Lower	Upper
85	100		
135	61.9	52.4	78.6



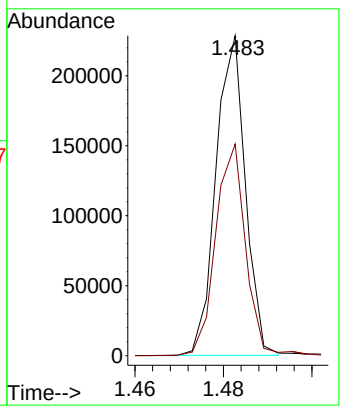


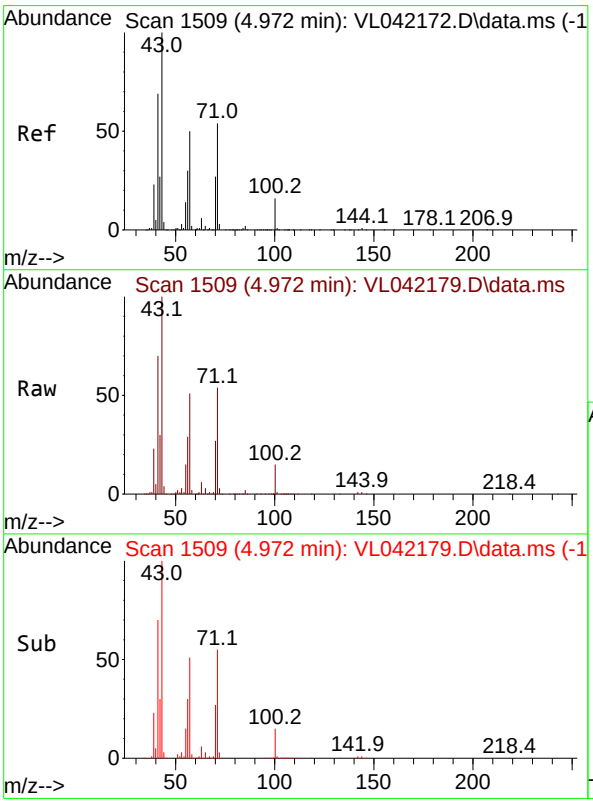
#9
Propene
Concen: 8.739 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 41 Resp: 105338

Ion	Ratio	Lower	Upper
41	100		
42	68.1	55.4	83.2

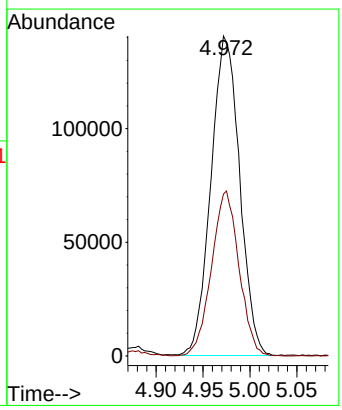


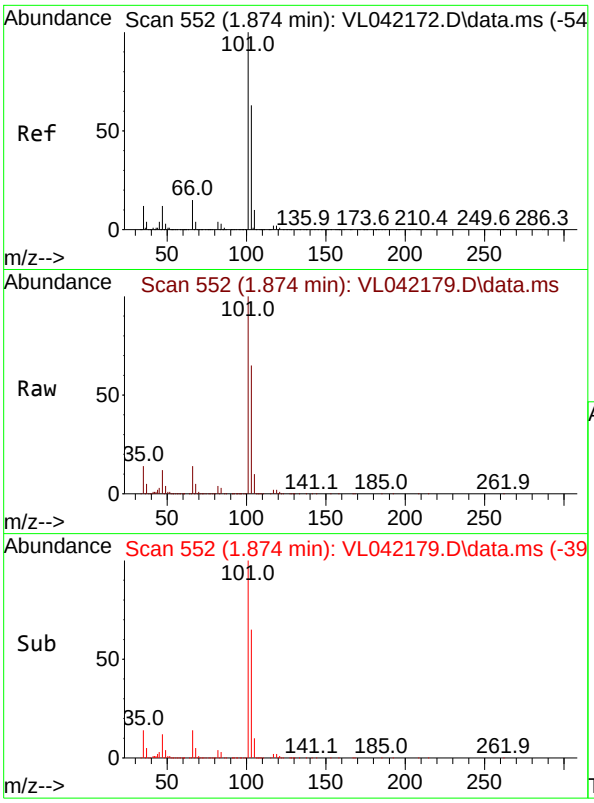


#10
Heptane
Concen: 9.318 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 298768

Ion	Ratio	Lower	Upper
43	100		
57	49.5	39.4	59.2



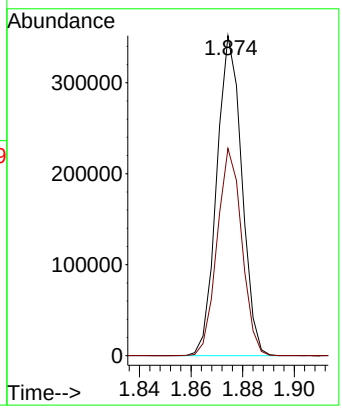


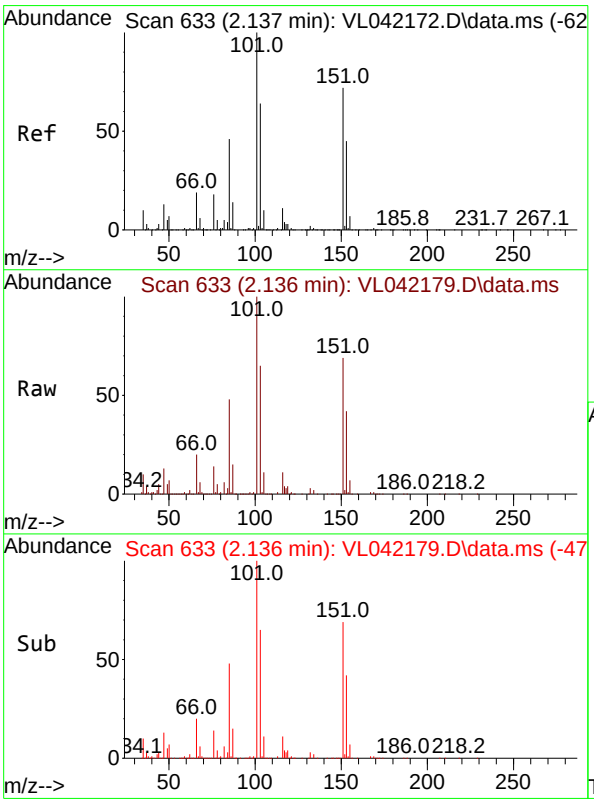
#11
Trichlorofluoromethane
Concen: 9.453 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:101 Resp: 236793

Ion	Ratio	Lower	Upper
101	100		
103	64.7	50.2	75.2

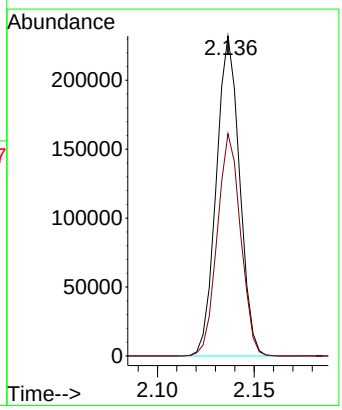


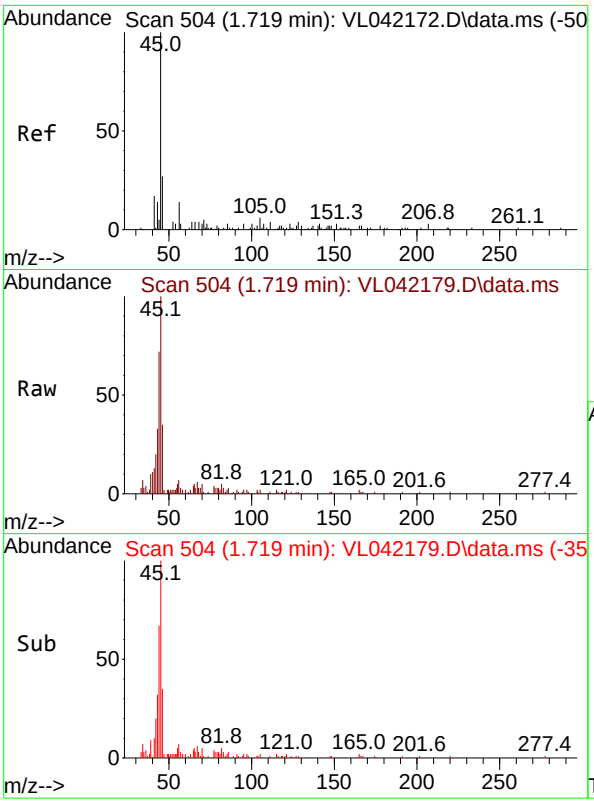


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.421 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:101 Resp: 193965

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7



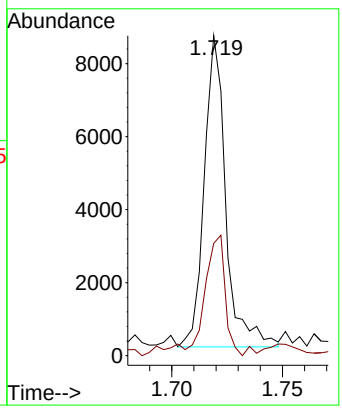


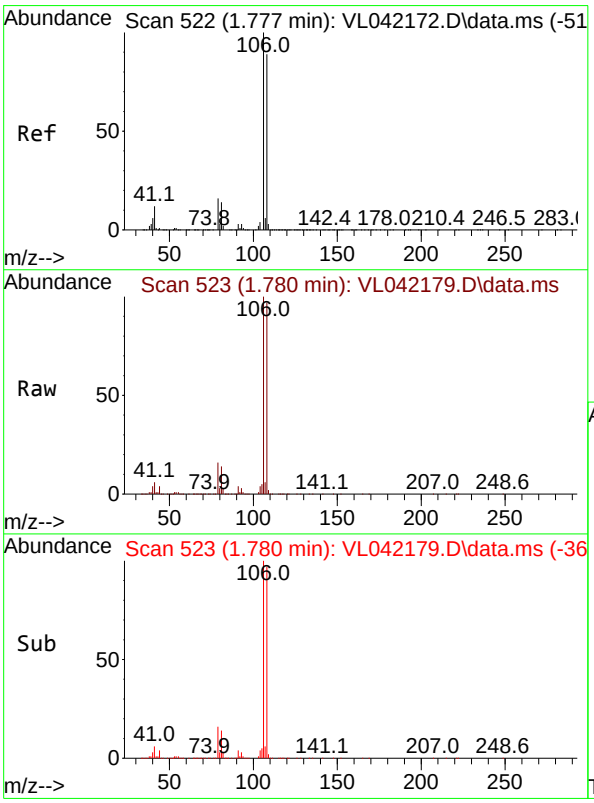
#13
Ethanol
Concen: 5.066 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 45 Resp: 5773

Ion	Ratio	Lower	Upper
45	100		
46	48.5	20.2	80.8

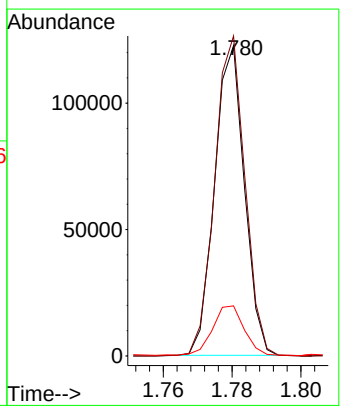


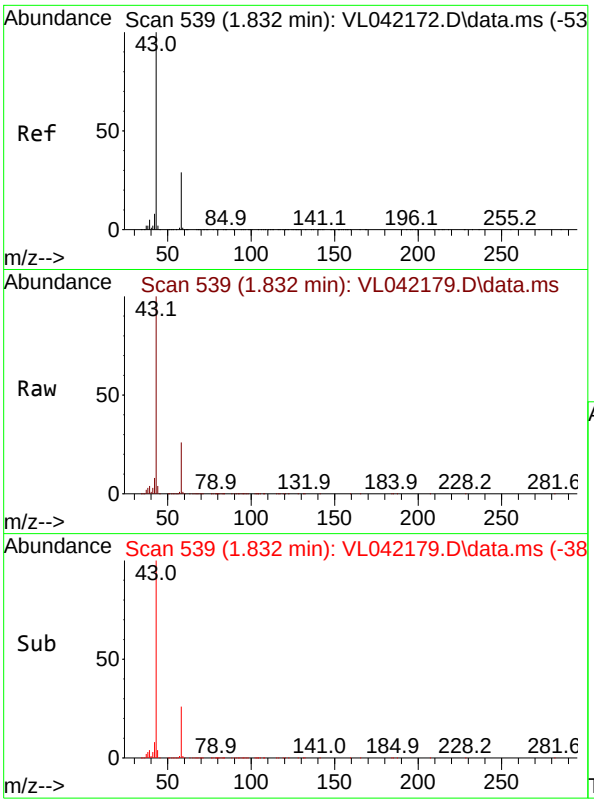


#14
Bromoethene
Concen: 9.328 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:108 Resp: 73572

Ion	Ratio	Lower	Upper
108	100		
106	105.0	86.8	130.2
79	18.8	15.0	22.6



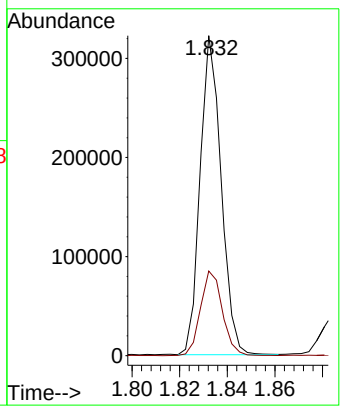


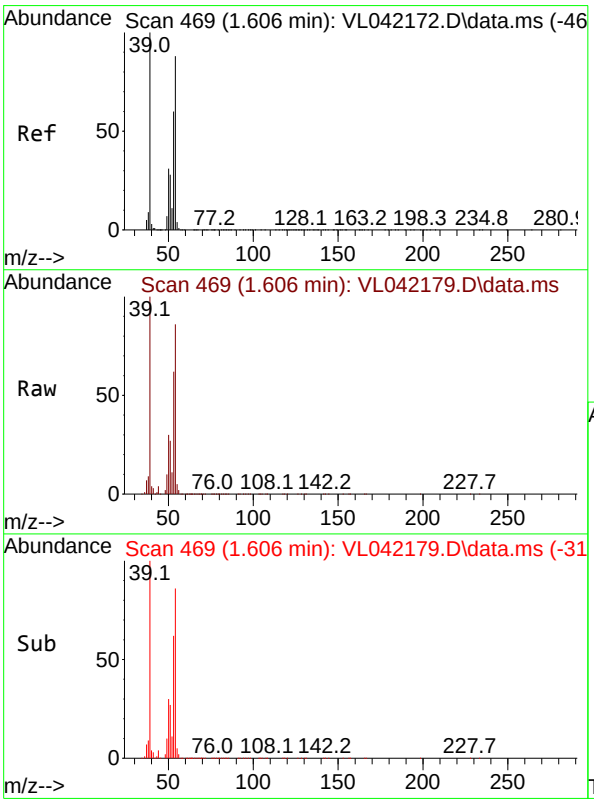
#15
Acetone
Concen: 8.132 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 198300

Ion	Ratio	Lower	Upper
43	100		
58	27.7	23.2	34.8

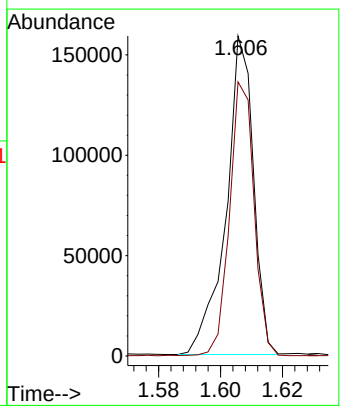


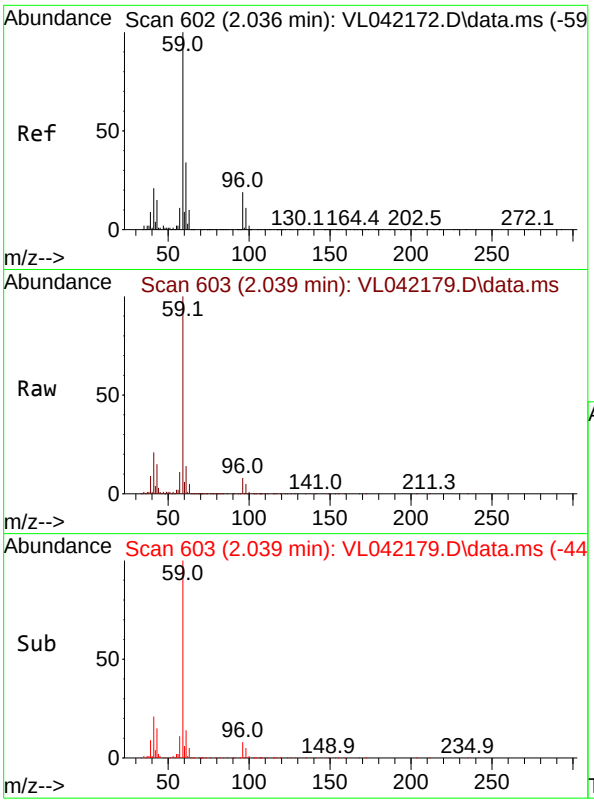


#16
1,3-Butadiene
Concen: 8.216 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 39 Resp: 97840

Ion	Ratio	Lower	Upper
39	100		
54	76.9	60.7	91.1



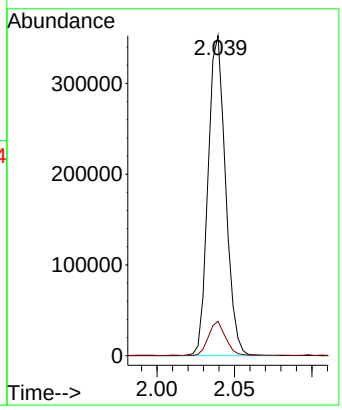


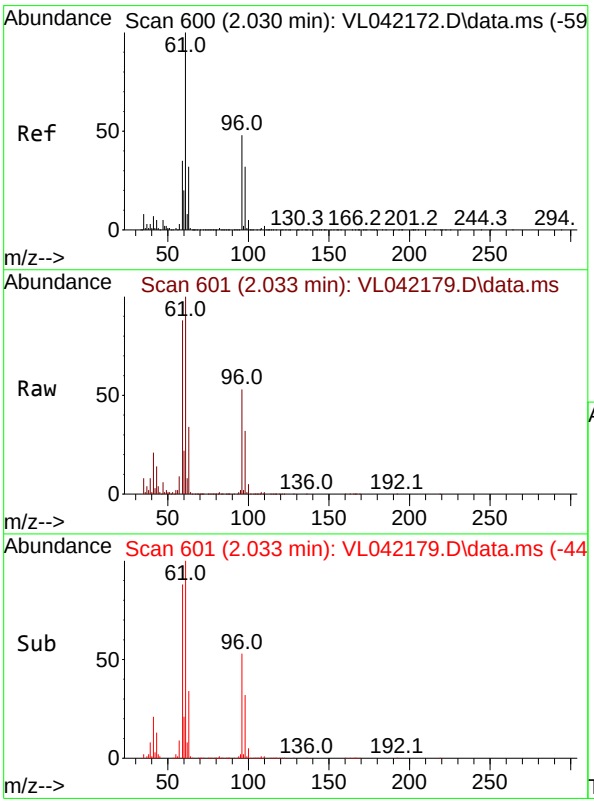
#17
tert-Butyl alcohol
Concen: 9.094 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 59 Resp: 276195

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3

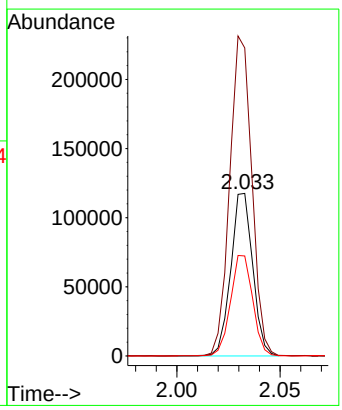


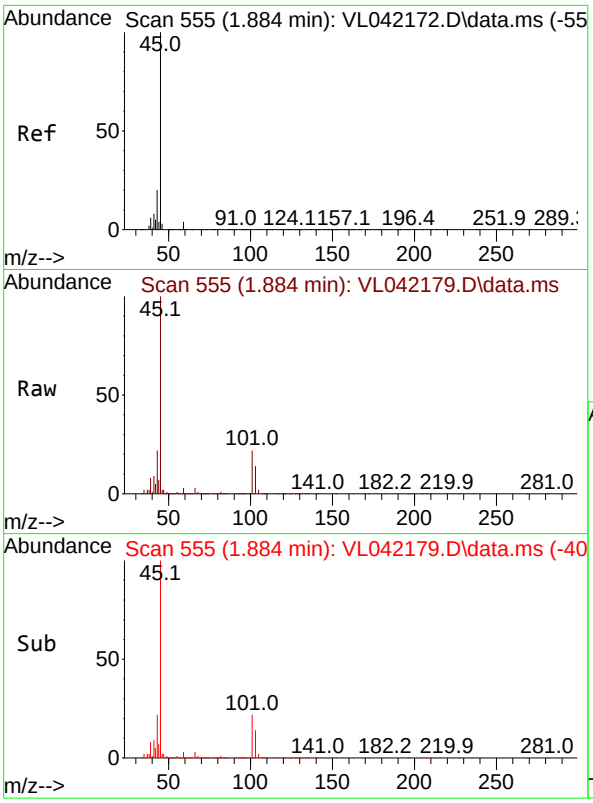


#18
1,1-Dichloroethene
Concen: 9.053 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 87137

Ion	Ratio	Lower	Upper
96	100		
61	189.6	167.6	251.4
98	61.5	53.5	80.3



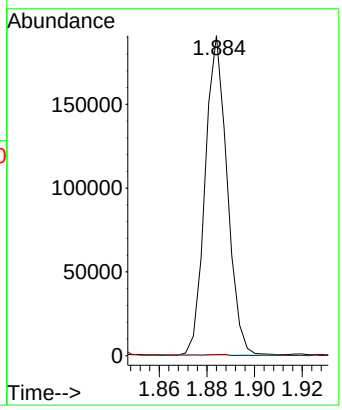


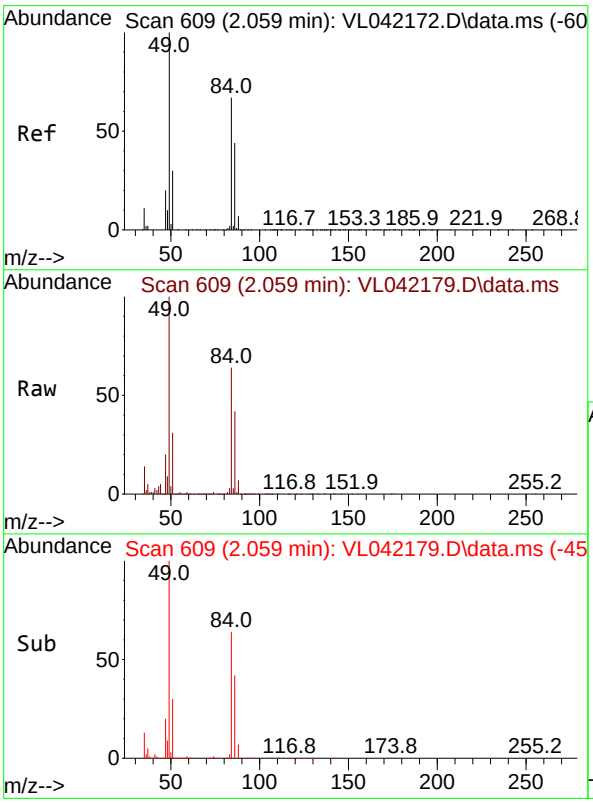
#19
Isopropyl Alcohol
Concen: 8.923 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 45 Resp: 122768

Ion	Ratio	Lower	Upper
45	100		
58	44.9	36.9	55.3

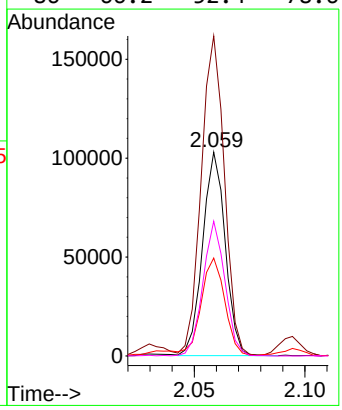


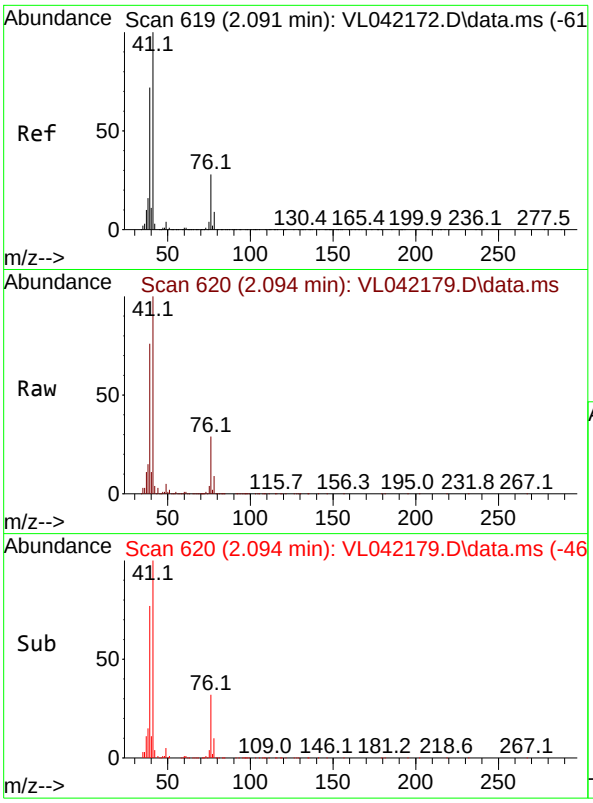


#20
Methylene Chloride
Concen: 8.018 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 72813

Ion	Ratio	Lower	Upper
84	100		
49	155.8	120.2	180.4
51	46.4	37.4	56.0
86	66.2	52.4	78.6



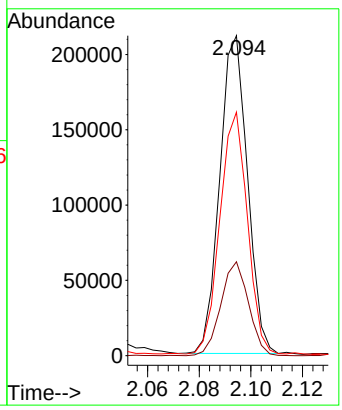


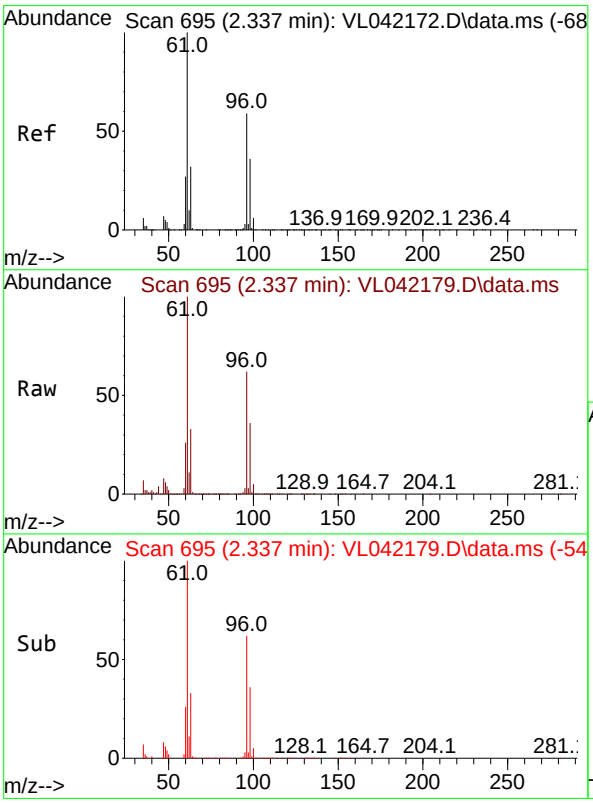
#21
Allyl Chloride
Concen: 9.154 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 41 Resp: 157418

Ion	Ratio	Lower	Upper
41	100		
76	29.6	24.1	36.1
39	75.5	61.1	91.7

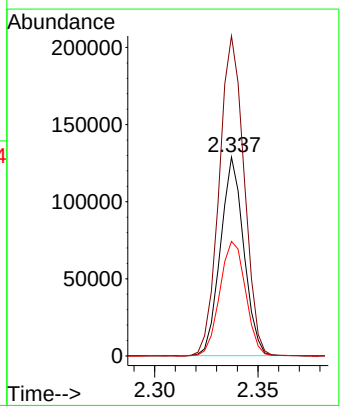


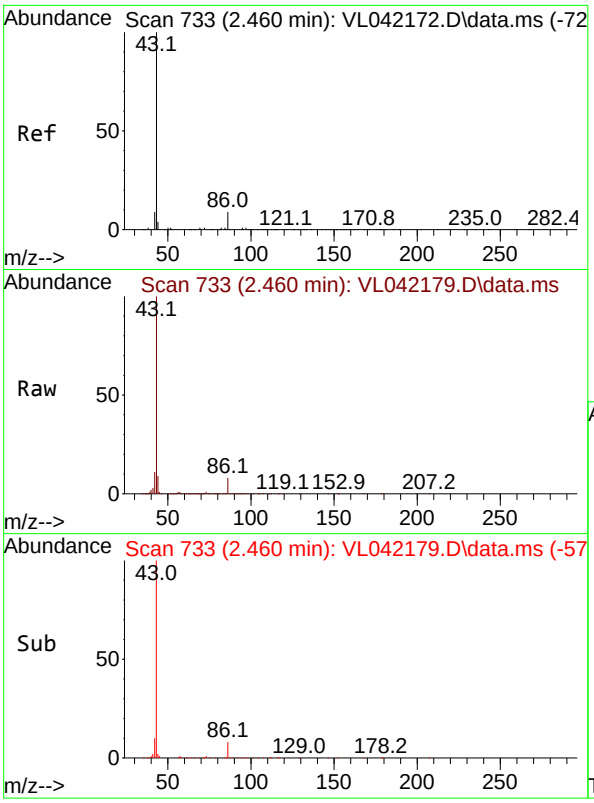


#22
trans-1,2-Dichloroethene
Concen: 9.092 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 96 Resp: 101141

Ion	Ratio	Lower	Upper
96	100		
61	161.2	136.6	204.8
98	57.7	49.4	74.2



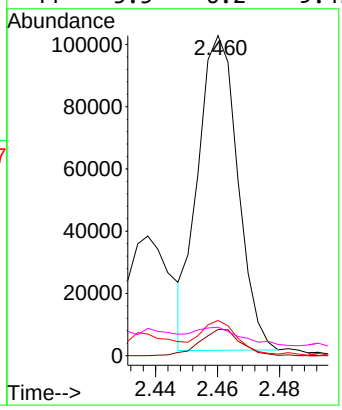


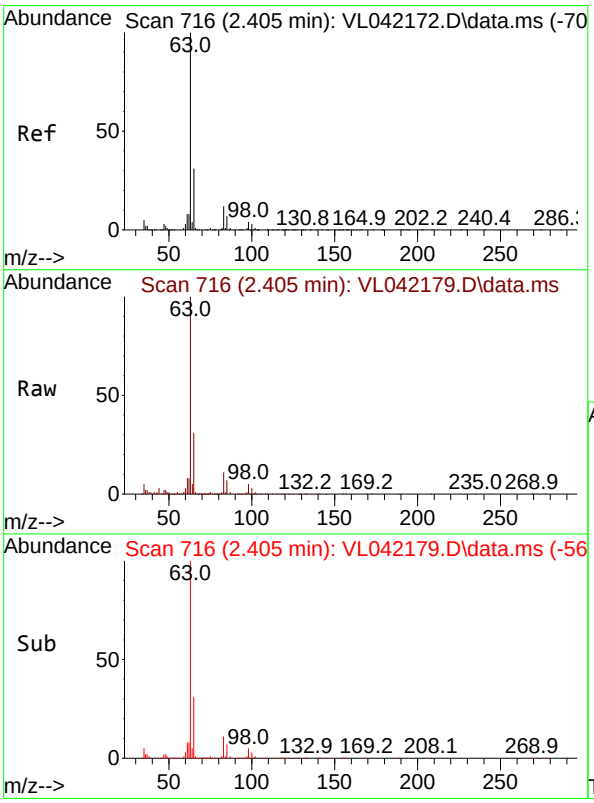
#23
Vinyl Acetate
Concen: 8.553 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 90260

Ion	Ratio	Lower	Upper
43	100		
86	8.3	5.5	8.3#
42	10.7	8.6	13.0
44	5.5	6.2	9.4#

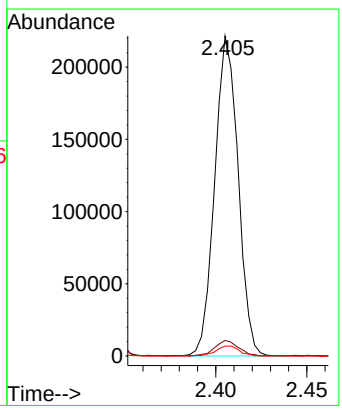


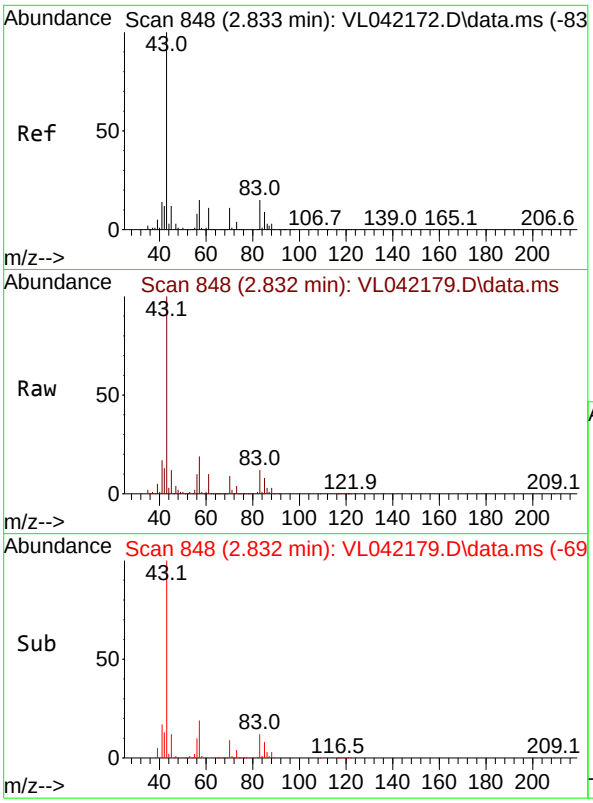


#24
1,1-Dichloroethane
Concen: 9.600 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 63 Resp: 197968

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	3.0	1.6	4.7



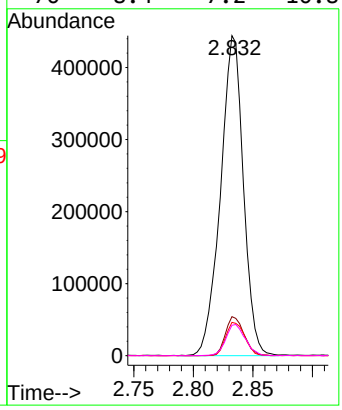


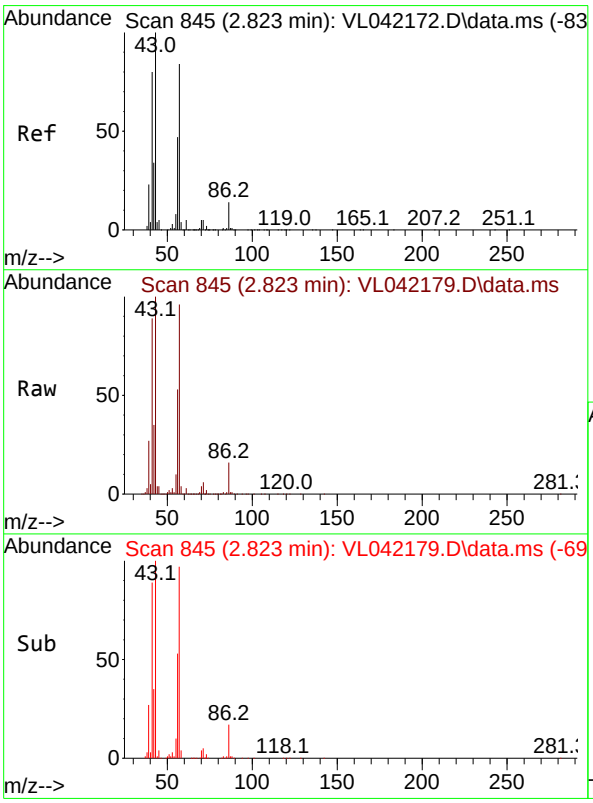
#25
Ethyl Acetate
Concen: 9.364 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 592585

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.2	12.2
61	8.7	7.3	10.9
70	8.4	7.2	10.8

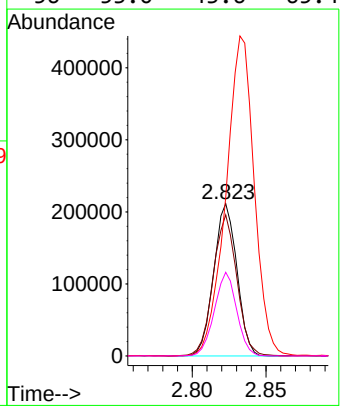


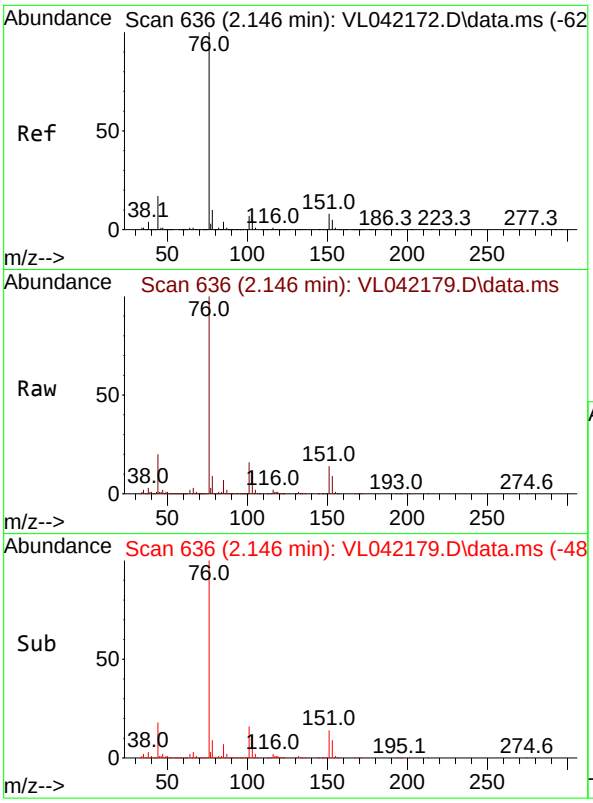


#26
Hexane
Concen: 9.455 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 231125

Ion	Ratio	Lower	Upper
57	100		
41	95.2	76.6	114.8
43	256.8	207.8	311.8
56	53.0	43.6	65.4



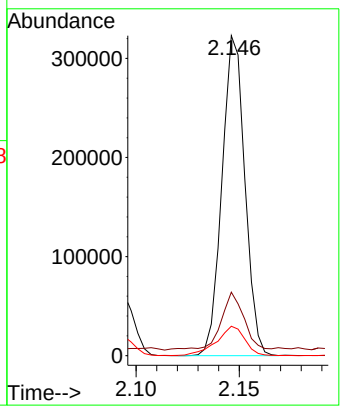


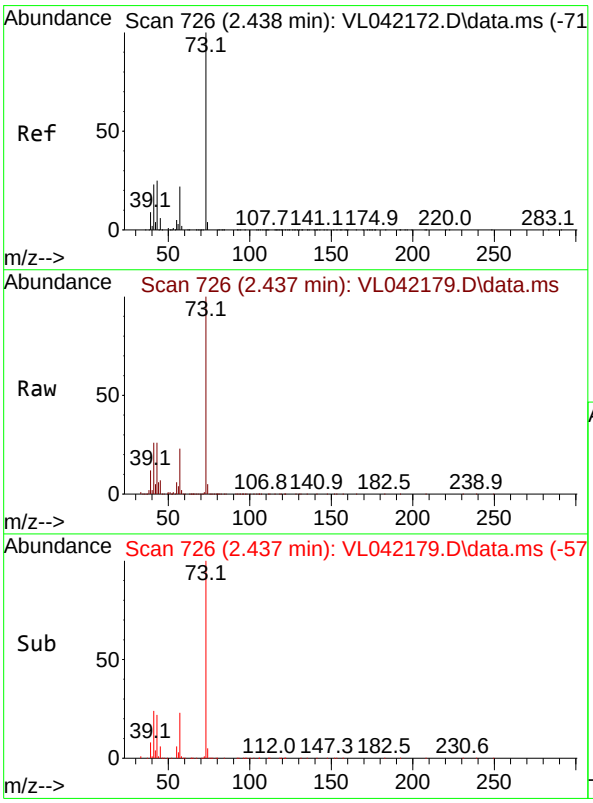
#27
Carbon Disulfide
Concen: 9.493 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 76 Resp: 248834

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.3	9.3	13.9

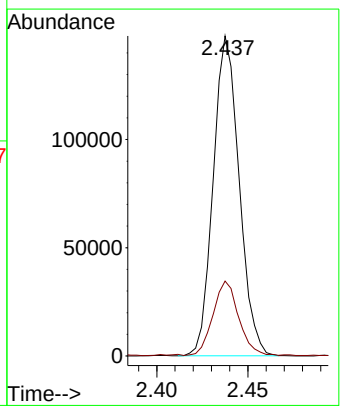


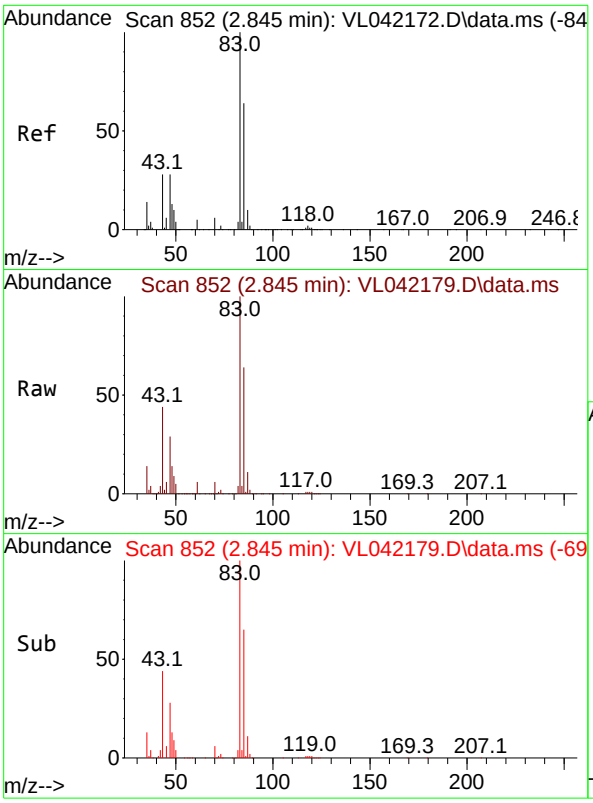


#28
Methyl tert-Butyl Ether
Concen: 9.624 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 73 Resp: 146470

Ion	Ratio	Lower	Upper
73	100		
57	23.3	20.5	30.7



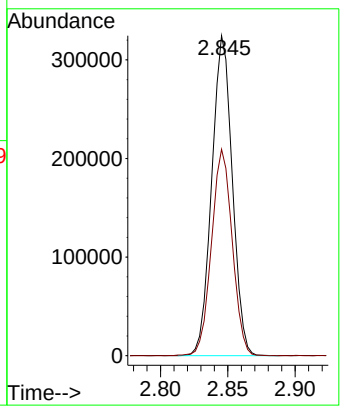


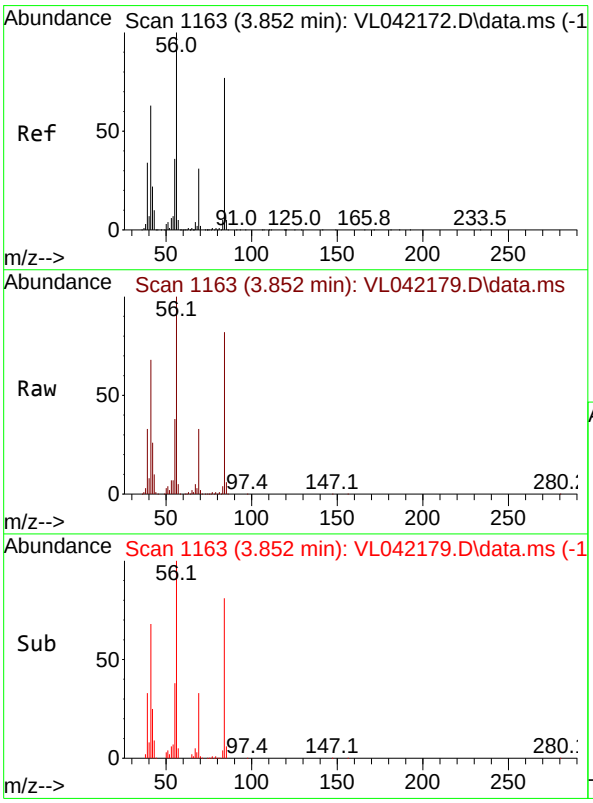
#29
Chloroform
Concen: 9.619 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 83 Resp: 344106

Ion	Ratio	Lower	Upper
83	100		
85	64.5	51.4	77.2

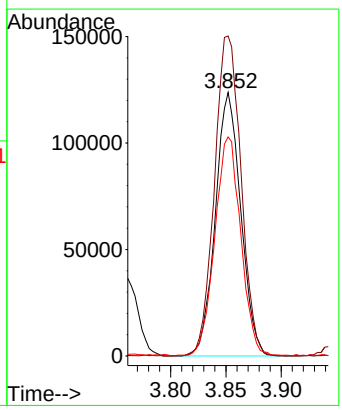


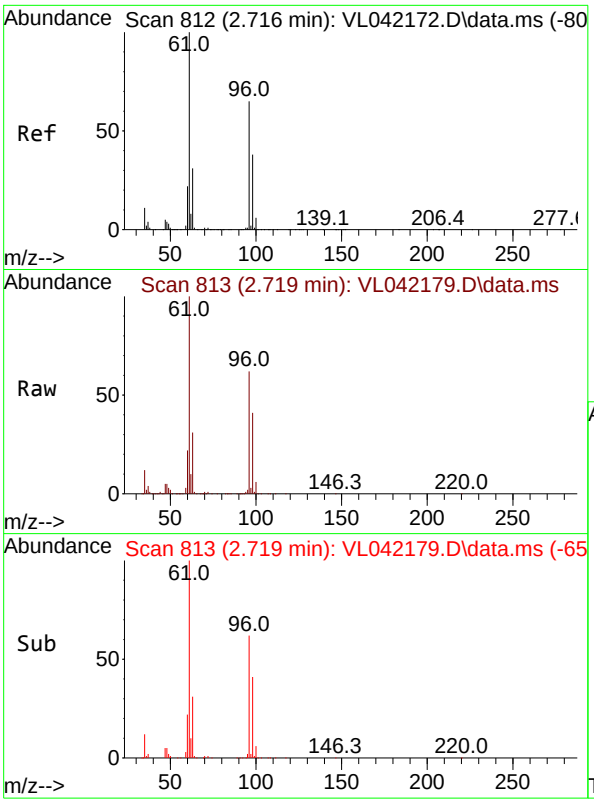


#30
Cyclohexane
Concen: 9.323 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 84 Resp: 197897

Ion	Ratio	Lower	Upper
84	100		
56	126.8	102.8	154.2
41	84.6	66.5	99.7



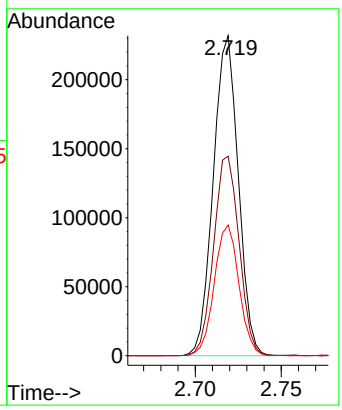


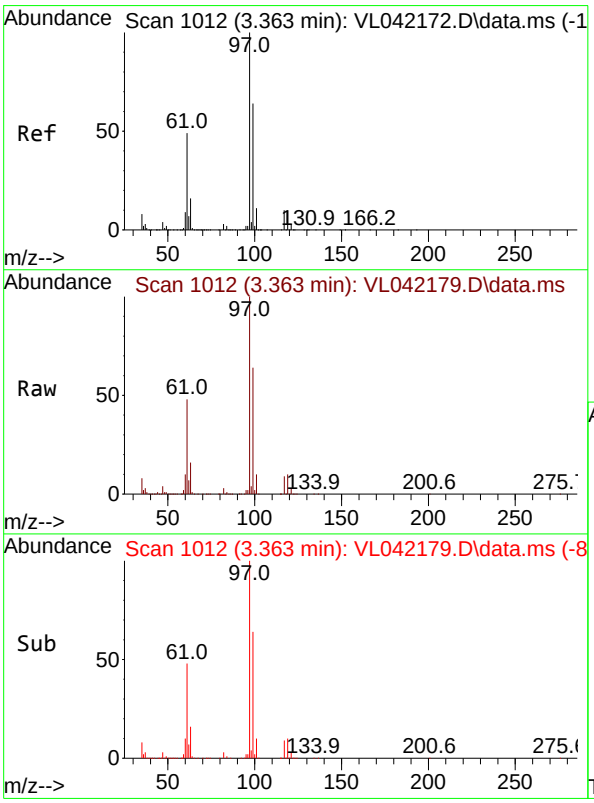
#31
cis-1,2-Dichloroethene
Concen: 9.449 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 61 Resp: 234487

Ion	Ratio	Lower	Upper
61	100		
96	62.3	51.8	77.8
98	40.9	30.6	46.0

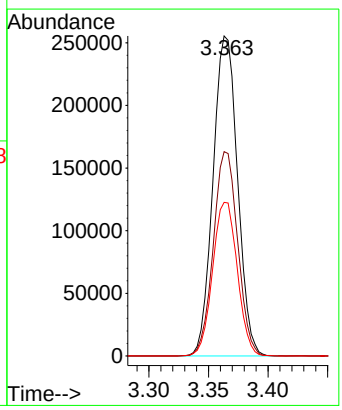


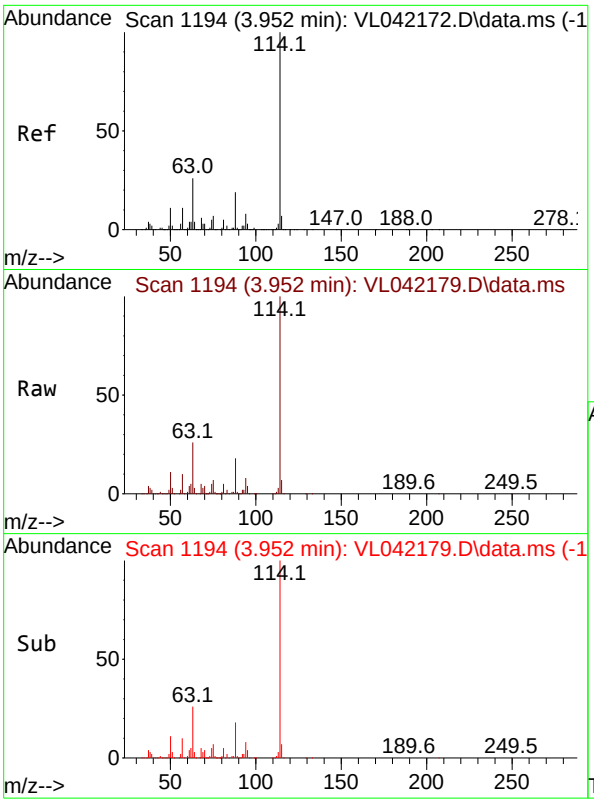


#32
1,1,1-Trichloroethane
Concen: 8.921 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 97 Resp: 365364

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	48.4	38.7	58.1



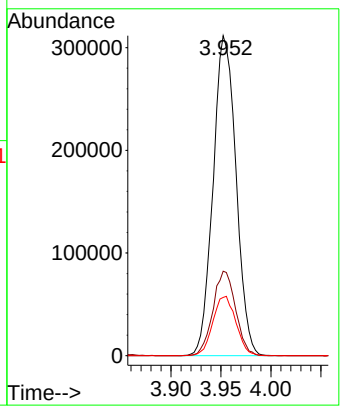


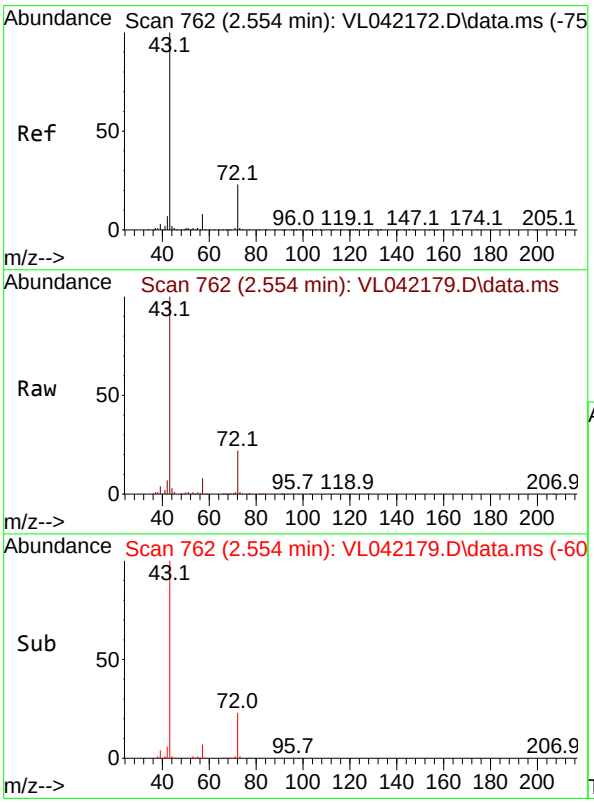
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:114 Resp: 498105

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.7	15.0	22.4

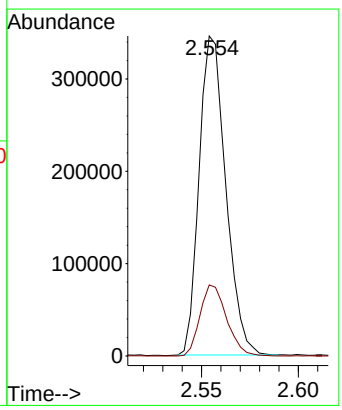


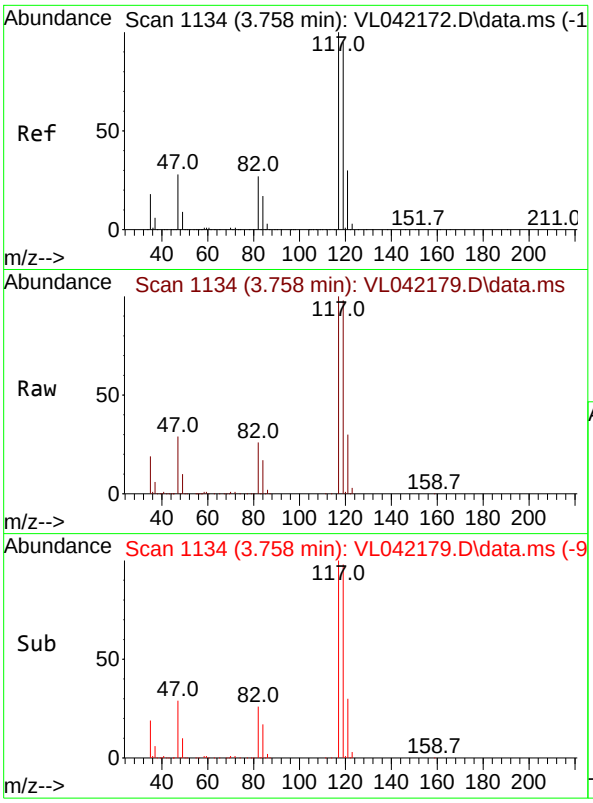


#34
2-Butanone
Concen: 9.171 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 331236

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2



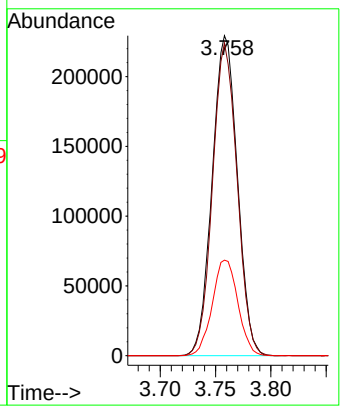


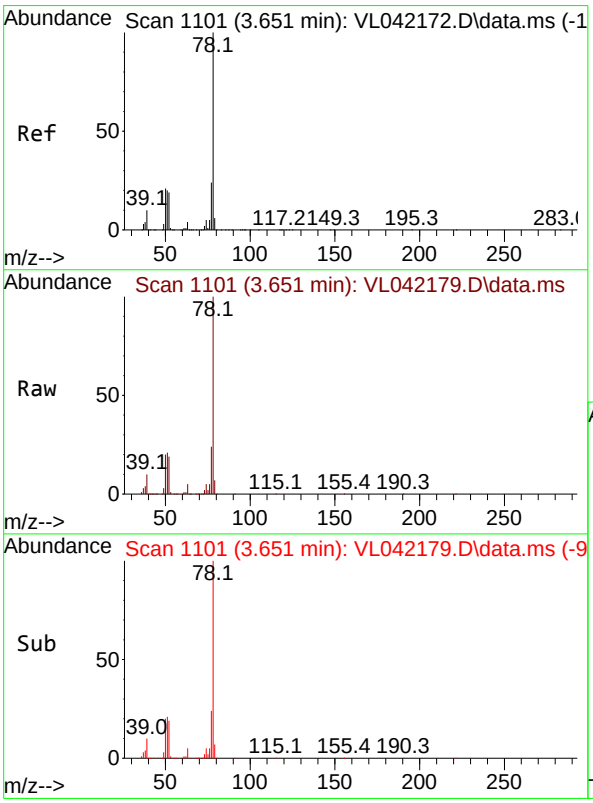
#35
Carbon Tetrachloride
Concen: 9.339 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:117 Resp: 363392

Ion	Ratio	Lower	Upper
117	100		
119	97.7	76.2	114.2
121	29.9	24.2	36.4

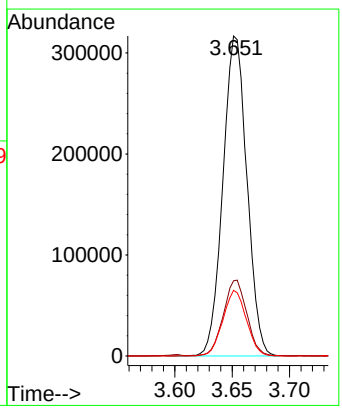


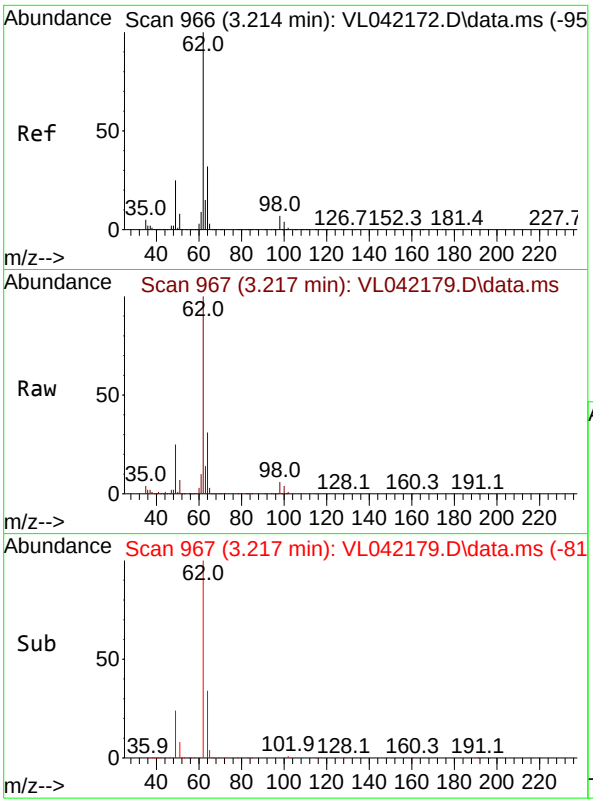


#36
Benzene
Concen: 9.341 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 78 Resp: 461261

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.4	16.6	24.8



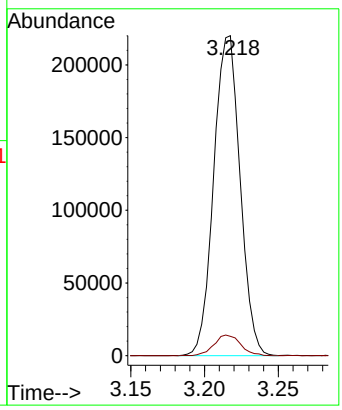


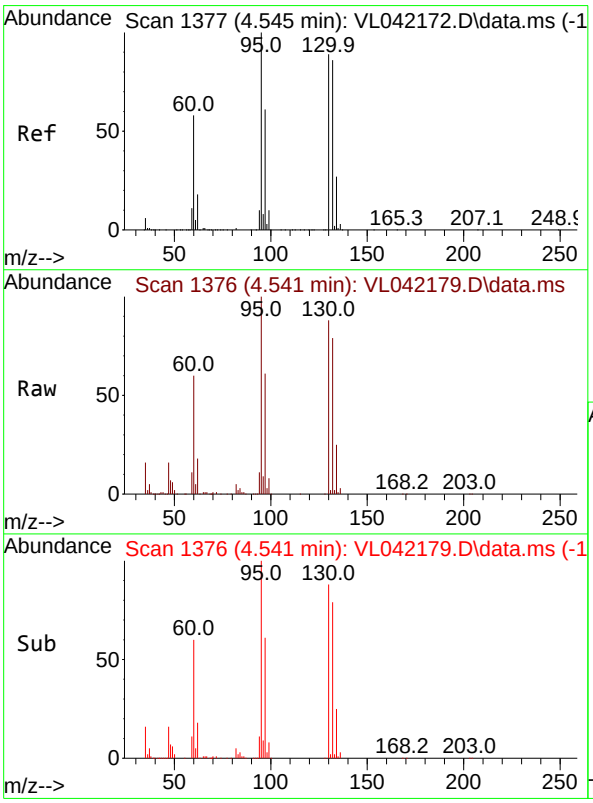
#37
1,2-Dichloroethane
Concen: 9.676 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 62 Resp: 273559

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2

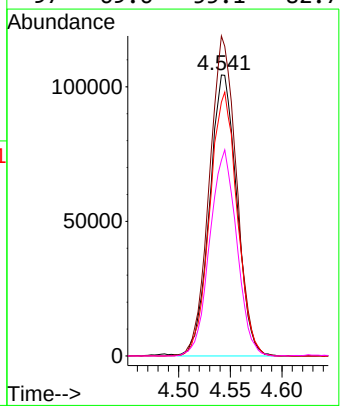


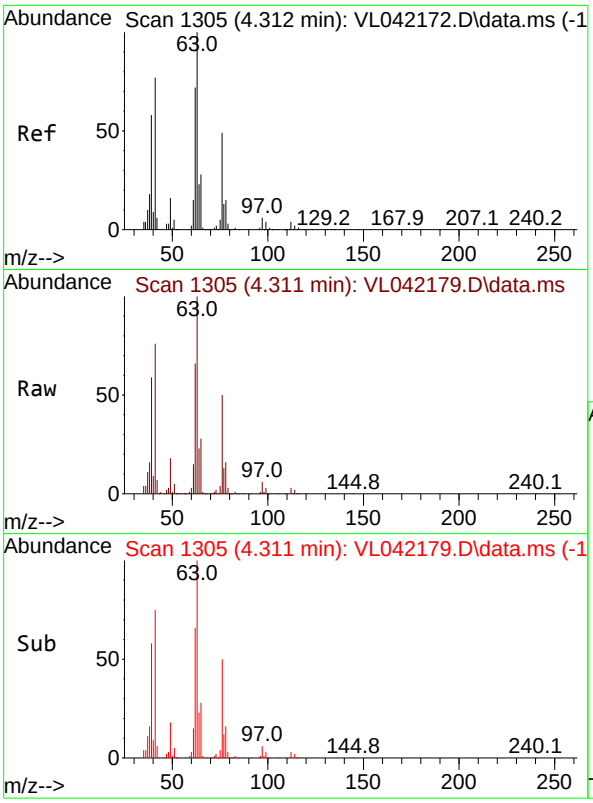


#38
Trichloroethene
Concen: 9.306 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:130 Resp: 191746

Ion	Ratio	Lower	Upper
130	100		
95	113.9	89.8	134.8
132	90.3	77.4	116.2
97	69.6	55.1	82.7



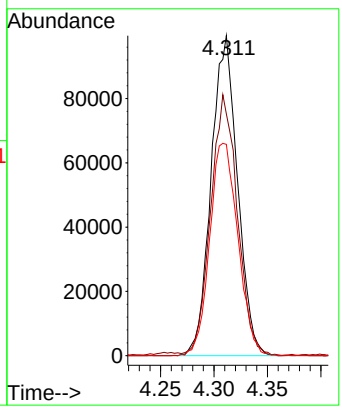


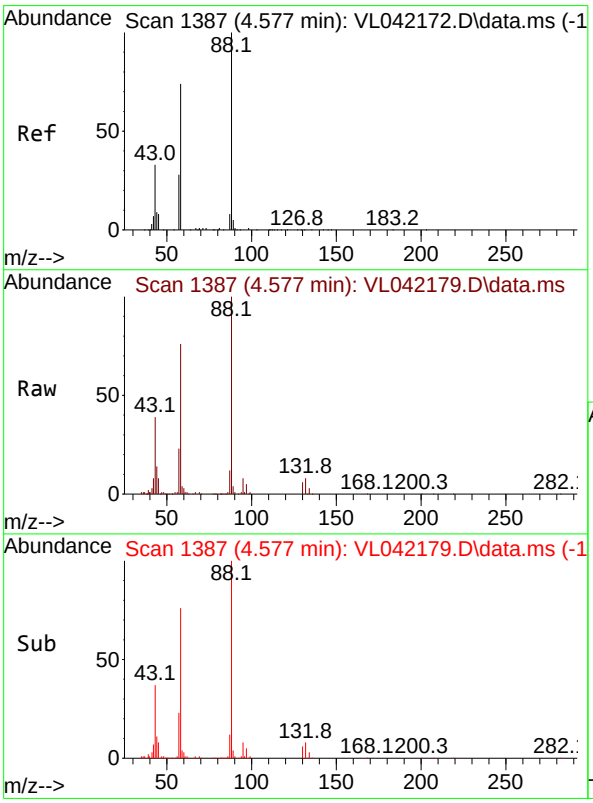
#39
1,2-Dichloropropane
Concen: 9.500 ppbv
RT: 4.311 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 63 Resp: 170839

Ion	Ratio	Lower	Upper
63	100		
41	75.3	61.7	92.5
62	66.0	57.6	86.4

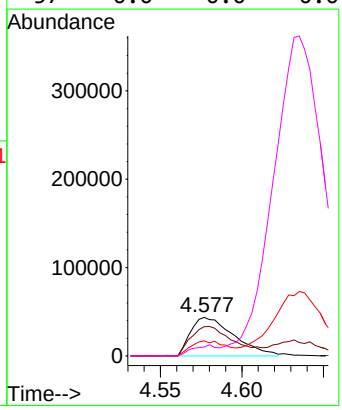


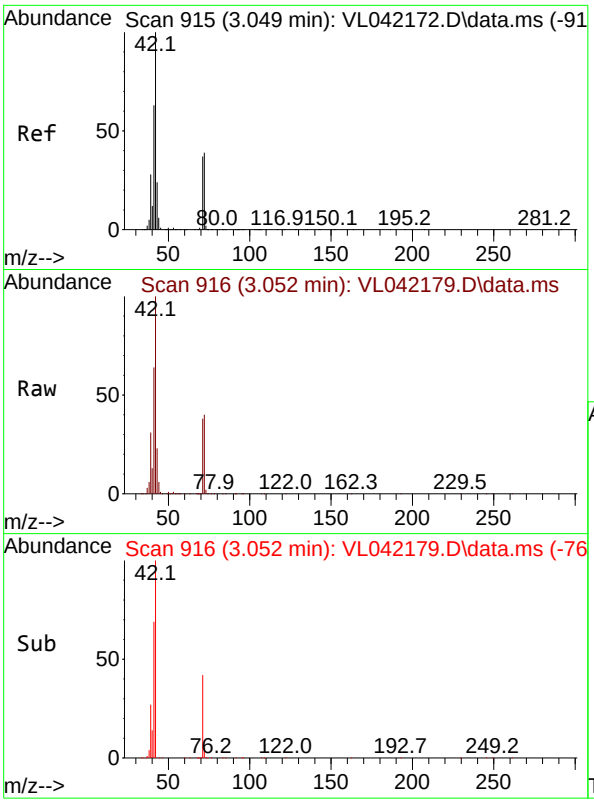


#40
1,4-Dioxane
Concen: 8.443 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 88 Resp: 80592

Ion	Ratio	Lower	Upper
88	100		
58	76.2	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0



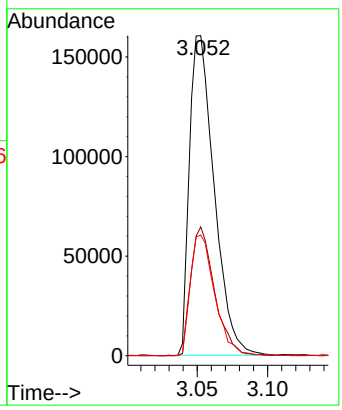


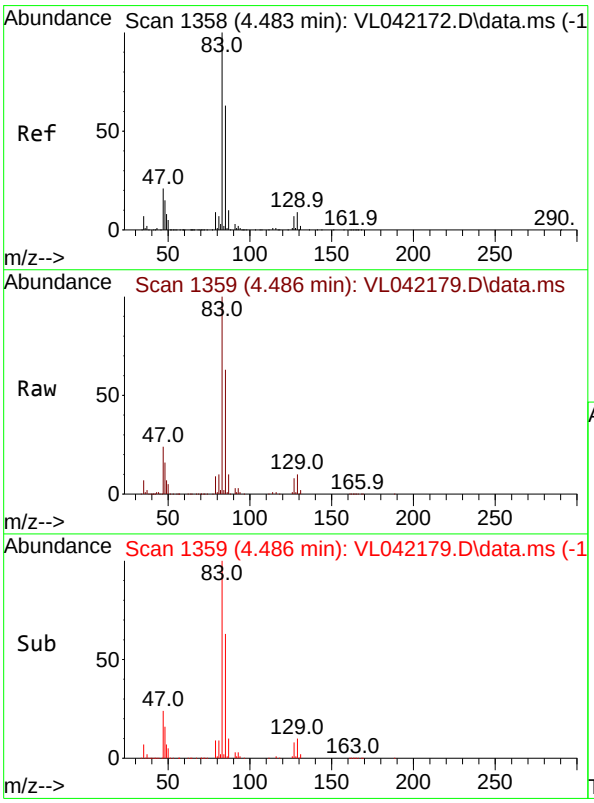
#41
Tetrahydrofuran
Concen: 9.431 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 42 Resp: 196163

Ion	Ratio	Lower	Upper
42	100		
72	38.9	31.4	47.0
71	37.2	30.2	45.4

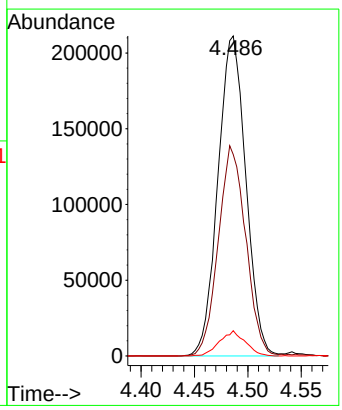


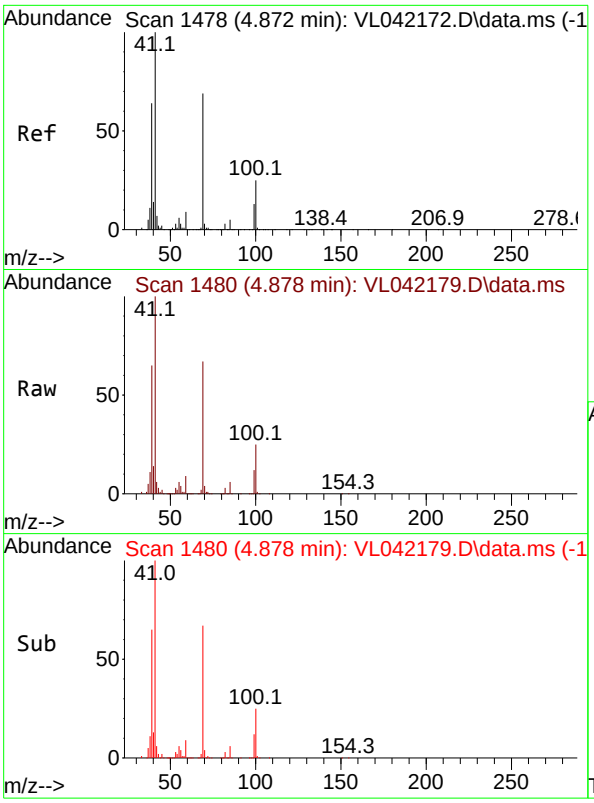


#42
Bromodichloromethane
Concen: 9.853 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 83 Resp: 384006

Ion	Ratio	Lower	Upper
83	100		
85	63.0	50.5	75.7
127	7.9	5.9	8.9



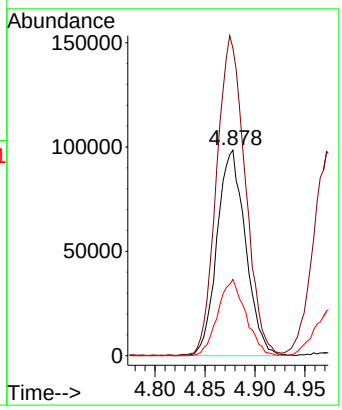


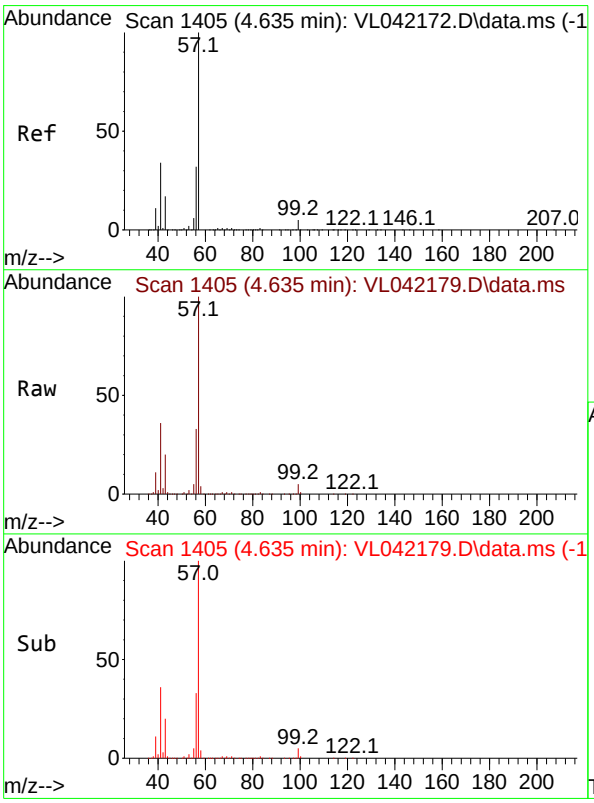
#43
Methyl Methacrylate
Concen: 9.344 ppbv
RT: 4.878 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 69 Resp: 195339

Ion	Ratio	Lower	Upper
69	100		
41	156.4	123.8	185.6
100	36.4	28.4	42.6

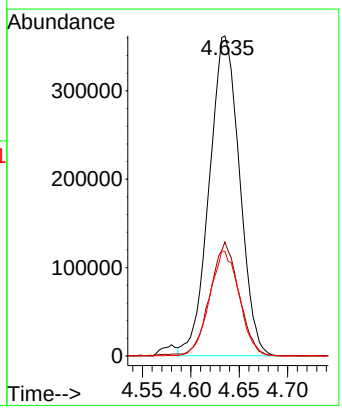


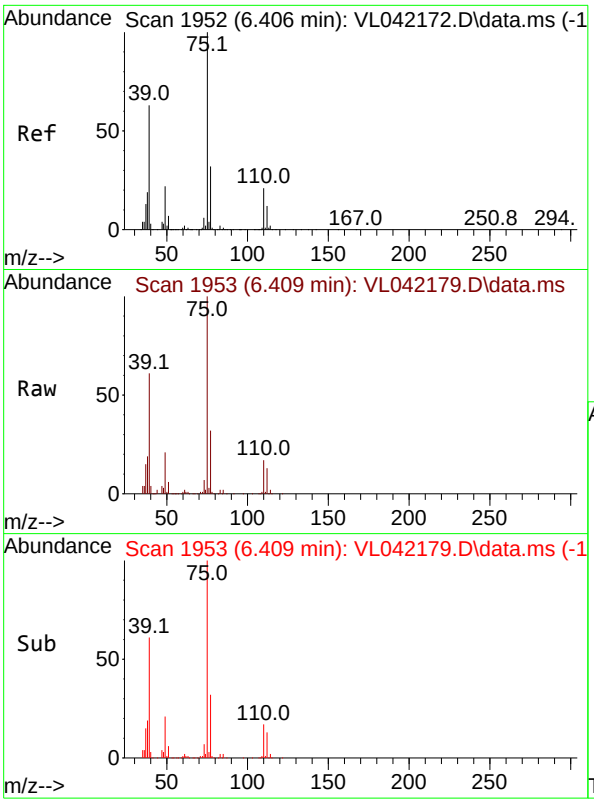


#44
2,2,4-Trimethylpentane
Concen: 9.436 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 57 Resp: 787400

Ion	Ratio	Lower	Upper
57	100		
41	34.3	26.8	40.2
56	32.5	25.6	38.4



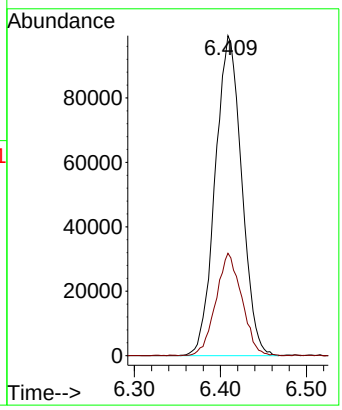


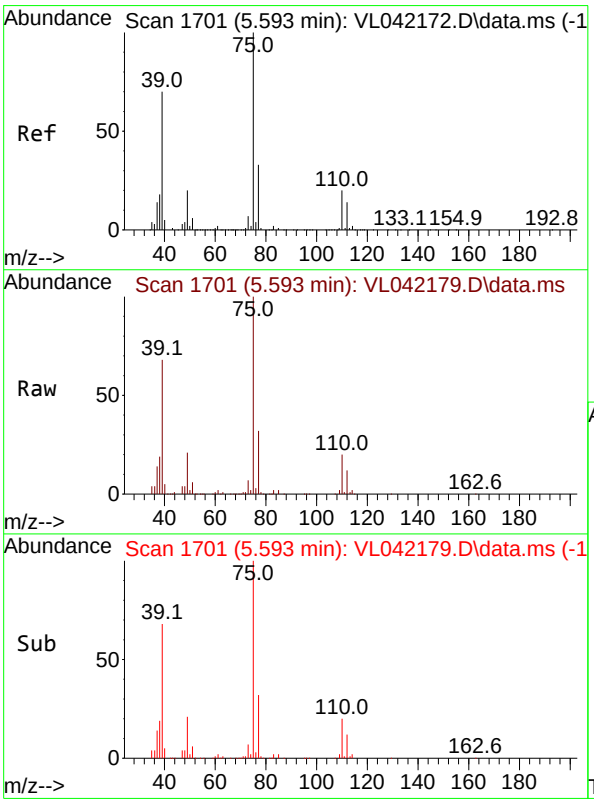
#45
t-1,3-Dichloropropene
Concen: 9.467 ppbv
RT: 6.409 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 75 Resp: 212335

Ion	Ratio	Lower	Upper
75	100		
77	32.0	26.0	39.0

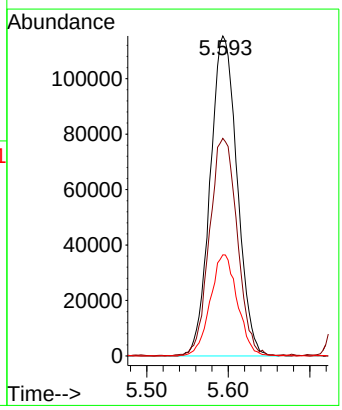


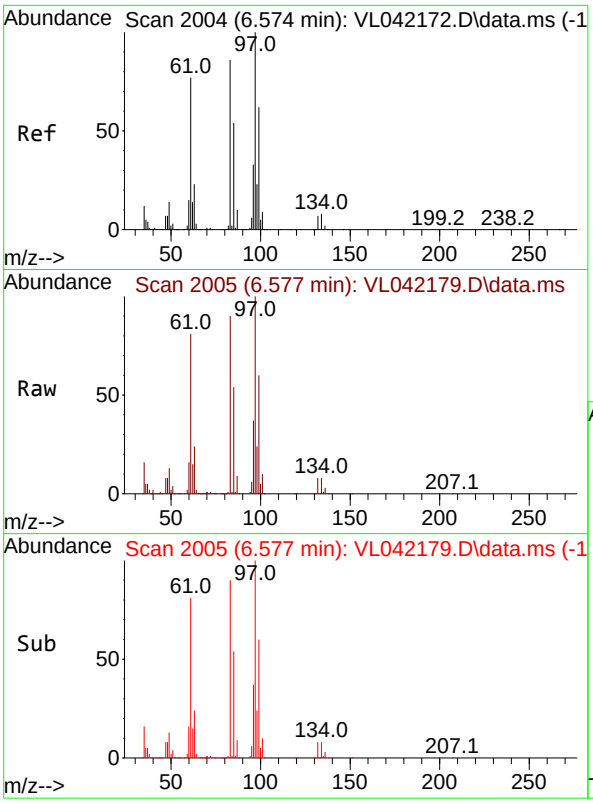


#46
cis-1,3-Dichloropropene
Concen: 9.643 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 75 Resp: 265101

Ion	Ratio	Lower	Upper
75	100		
39	67.8	55.8	83.6
77	31.6	26.0	39.0



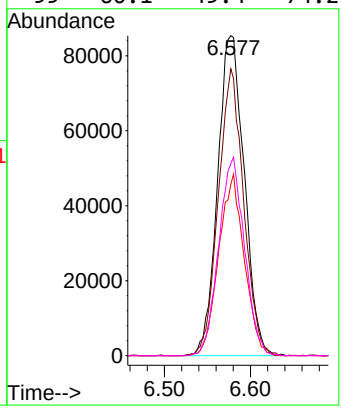


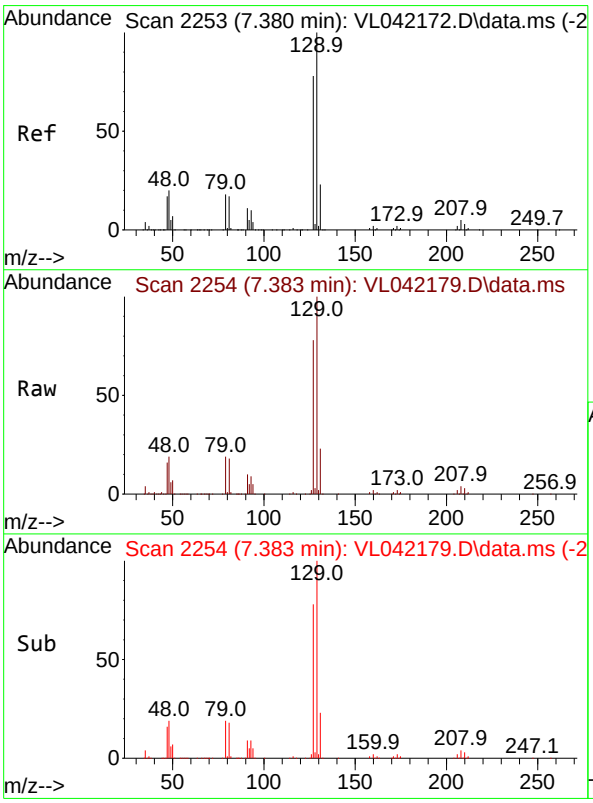
#47
1,1,2-Trichloroethane
Concen: 9.638 ppbv
RT: 6.577 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 97 Resp: 183228

Ion	Ratio	Lower	Upper
97	100		
83	89.7	69.2	103.8
85	53.6	43.1	64.7
99	60.1	49.4	74.2

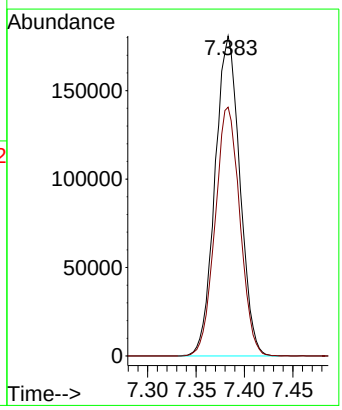


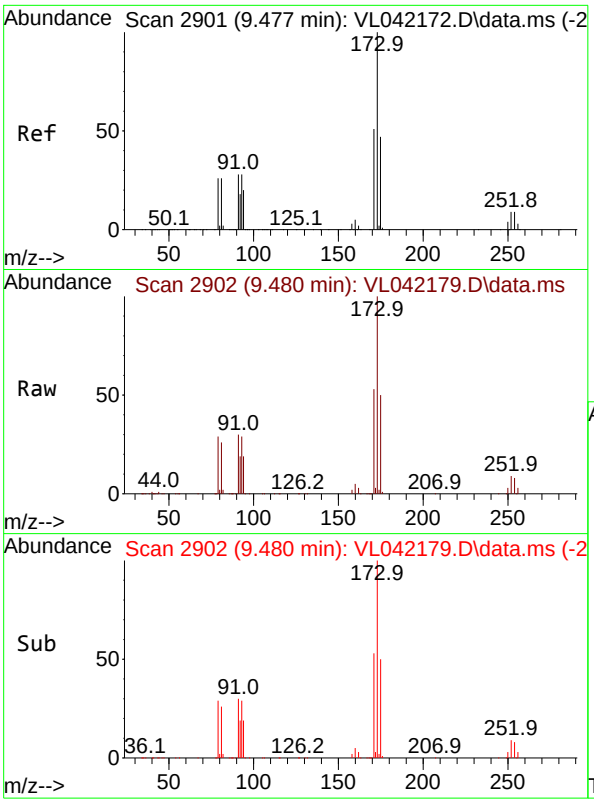


#48
Dibromochloromethane
Concen: 10.018 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:129 Resp: 322766

Ion	Ratio	Lower	Upper
129	100		
127	77.7	39.1	117.2



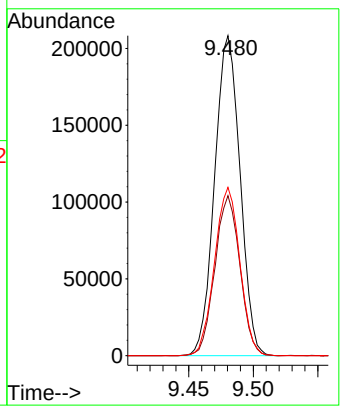


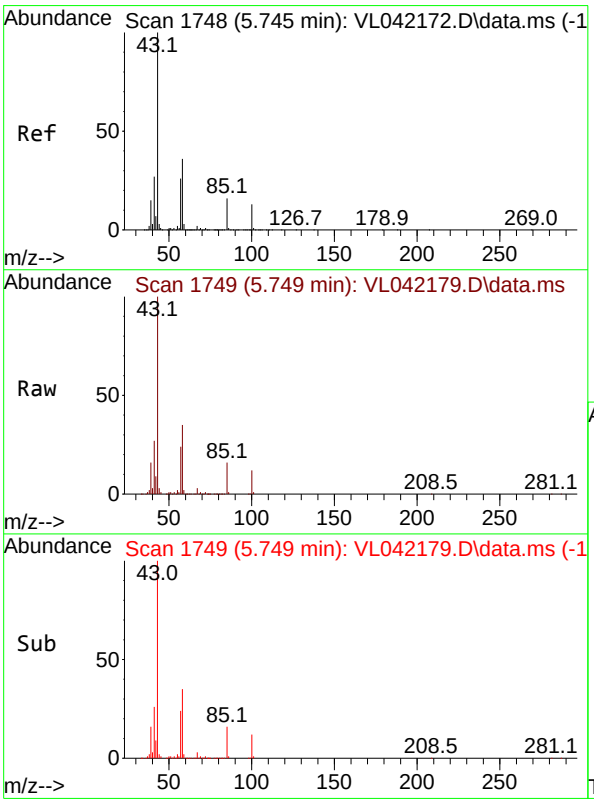
#49
Bromoform
Concen: 9.858 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:173 Resp: 285149

Ion	Ratio	Lower	Upper
173	100		
175	49.2	38.6	57.8
171	52.4	41.8	62.6

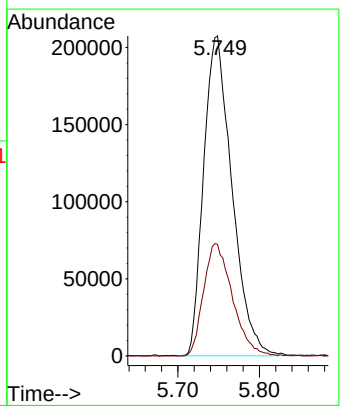


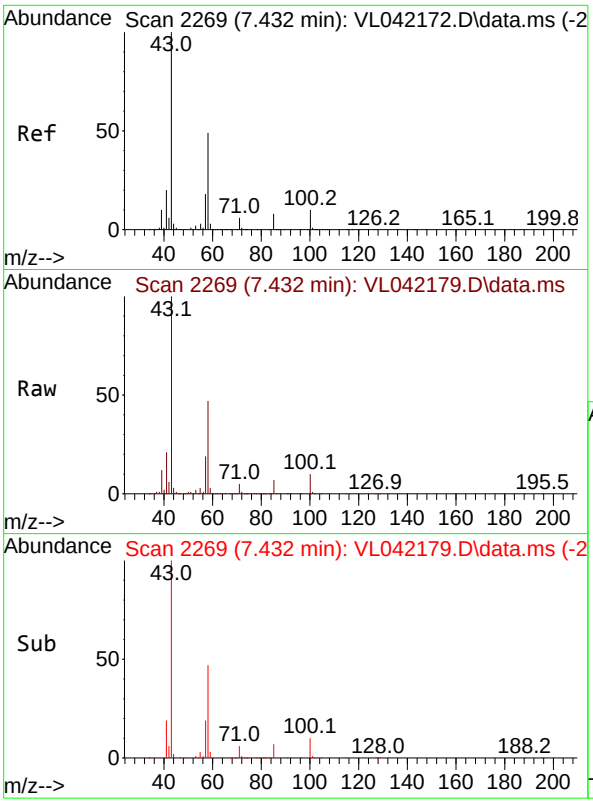


#50
4-Methyl-2-Pentanone
Concen: 8.749 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 43 Resp: 500791

Ion	Ratio	Lower	Upper
43	100		
58	35.8	29.0	43.6



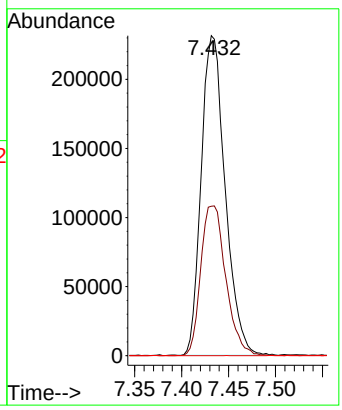


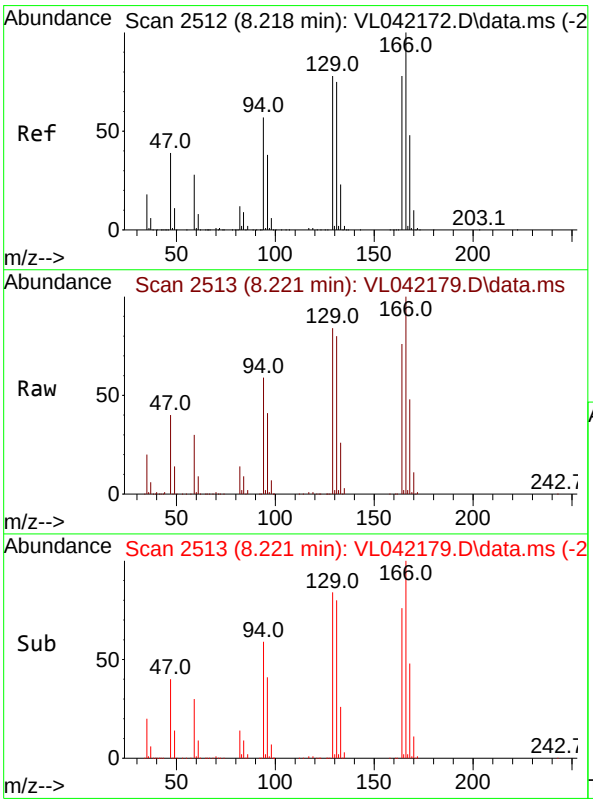
#51
2-Hexanone
Concen: 8.741 ppbv
RT: 7.432 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 43 Resp: 410889

Ion	Ratio	Lower	Upper
43	100		
58	48.9	39.7	59.5
98	0.0	0.1	0.1#

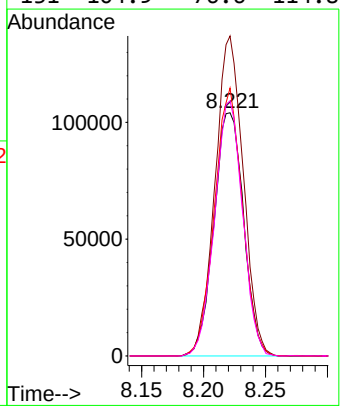


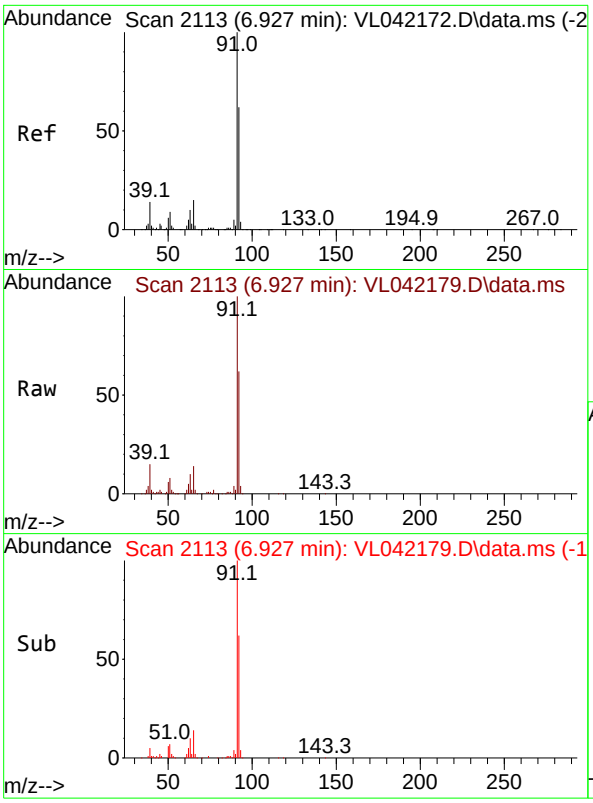


#52
Tetrachloroethene
Concen: 8.855 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:164 Resp: 173420

Ion	Ratio	Lower	Upper
164	100		
166	131.6	102.5	153.7
129	110.1	79.8	119.8
131	104.9	76.6	114.8



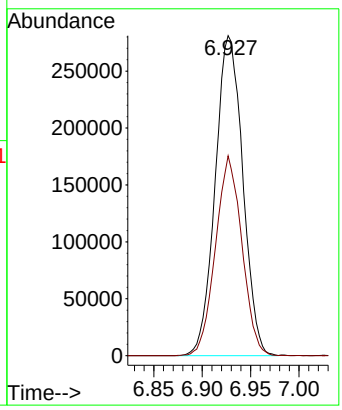


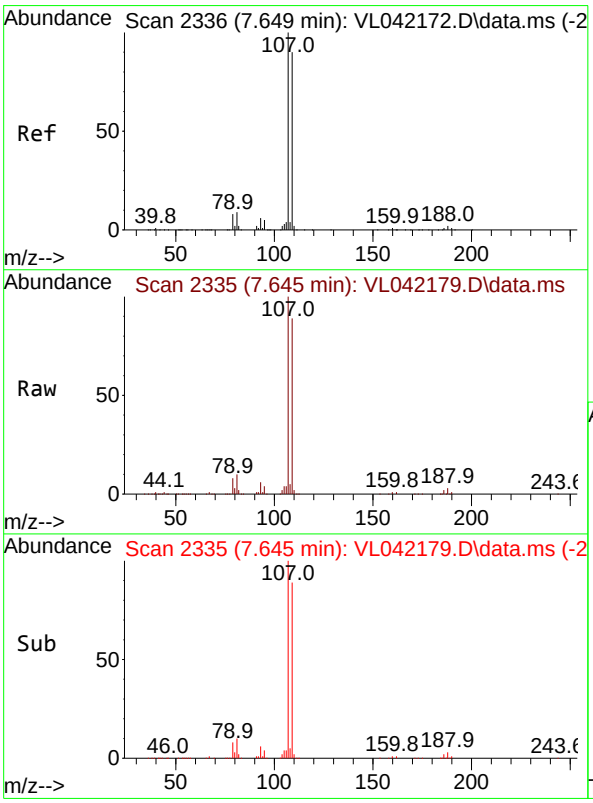
#53
Toluene
Concen: 9.514 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 556897

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.4	72.6

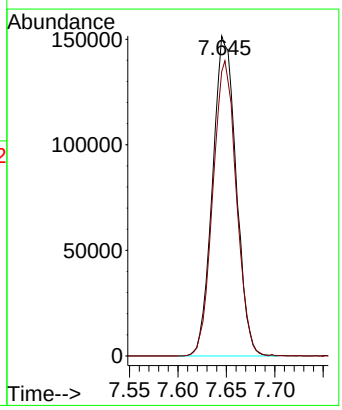


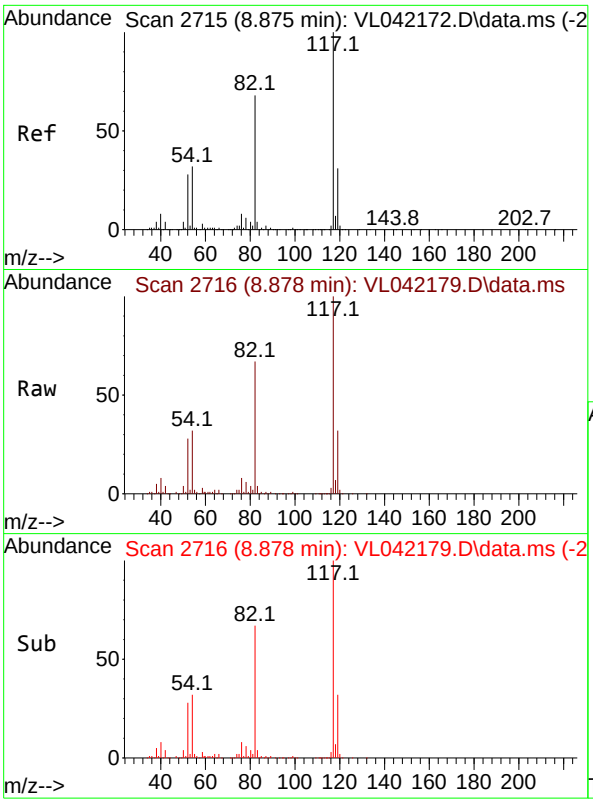


#54
1,2-Dibromoethane
Concen: 9.695 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:107 Resp: 256930

Ion	Ratio	Lower	Upper
107	100		
109	88.9	72.2	108.4



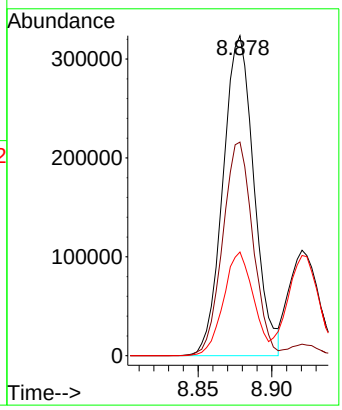


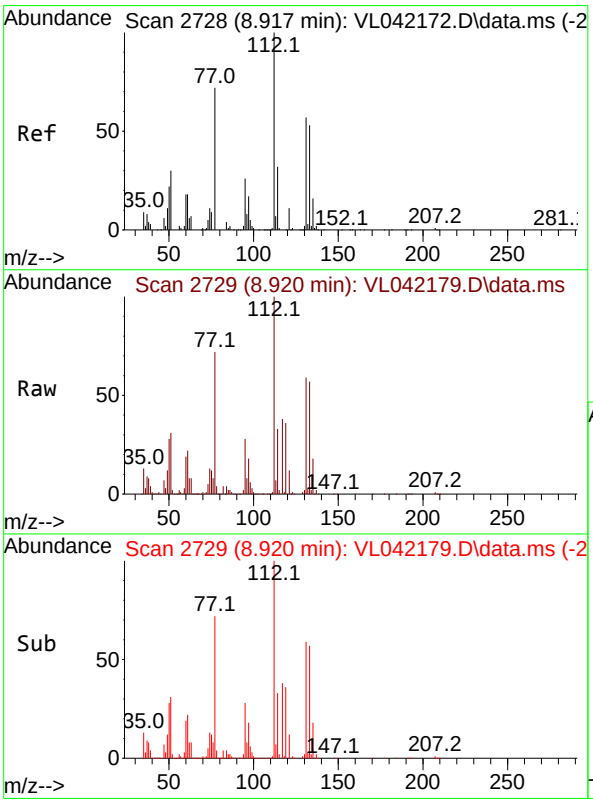
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:117 Resp: 473357

Ion	Ratio	Lower	Upper
117	100		
82	68.7	55.8	83.6
119	31.2	25.5	38.3

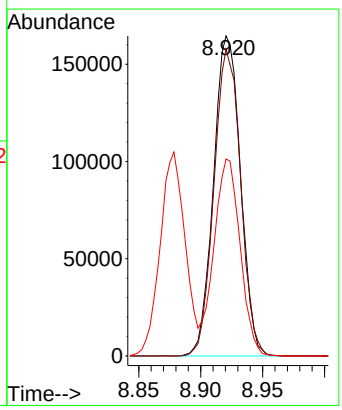


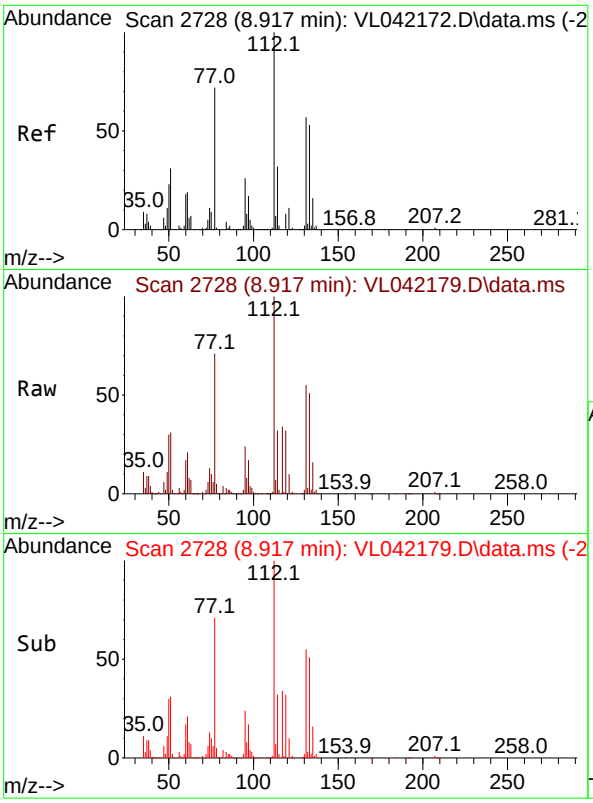


#56
1,1,1,2-Tetrachloroethane
Concen: 9.567 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:131 Resp: 249270

Ion	Ratio	Lower	Upper
131	100		
133	95.0	76.6	114.8
119	61.3	49.8	74.6



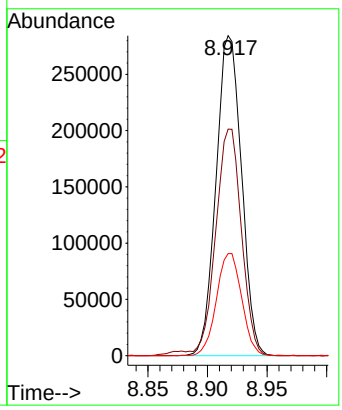


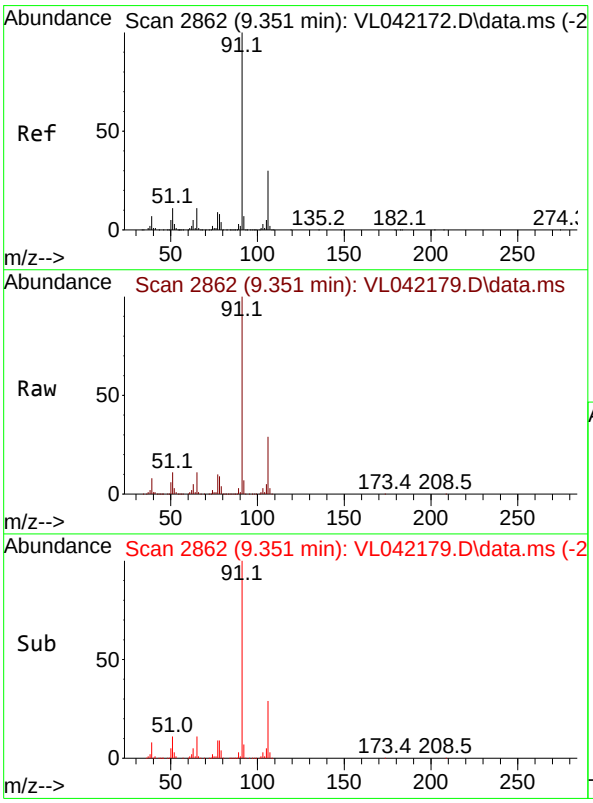
#57
Chlorobenzene
Concen: 9.411 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:112 Resp: 422531

Ion	Ratio	Lower	Upper
112	100		
77	70.6	58.2	87.2
114	31.9	29.1	35.5

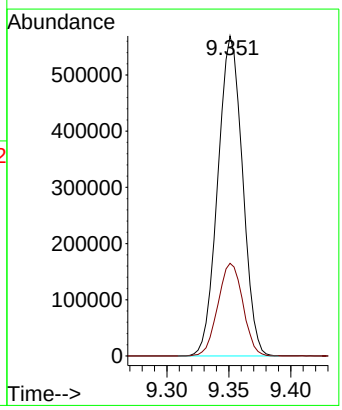


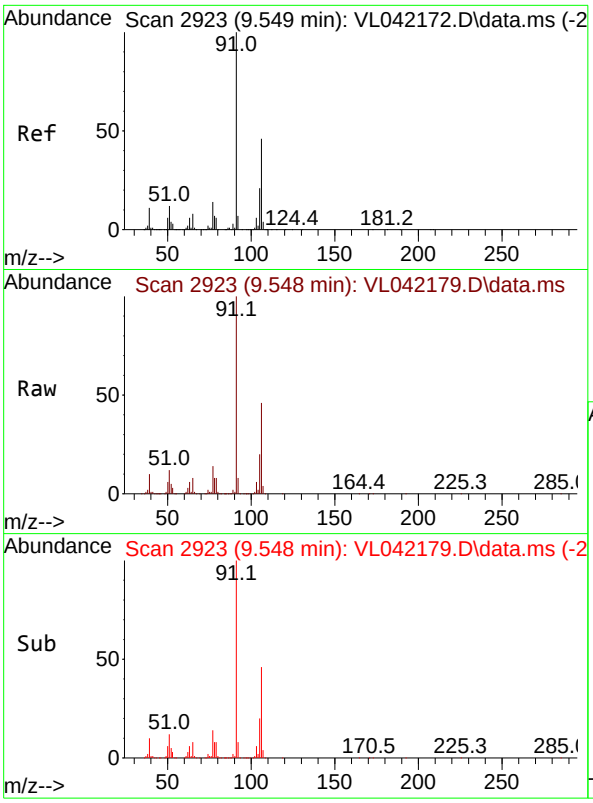


#58
Ethyl Benzene
Concen: 9.412 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 791360

Ion	Ratio	Lower	Upper
91	100		
106	28.9	24.2	36.2



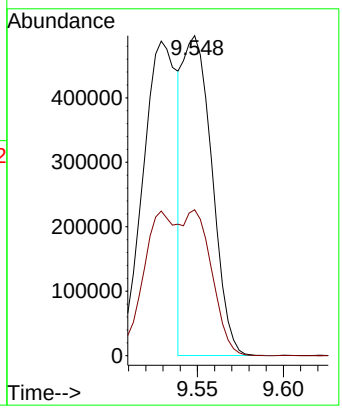


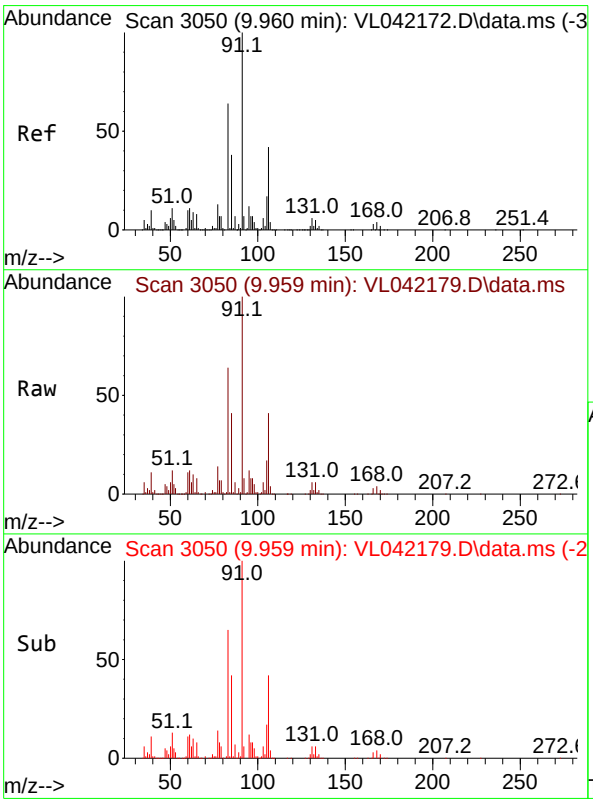
#59
m/p-Xylene
Concen: 8.695 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 583773

Ion	Ratio	Lower	Upper
91	100		
106	97.9	36.4	54.6#

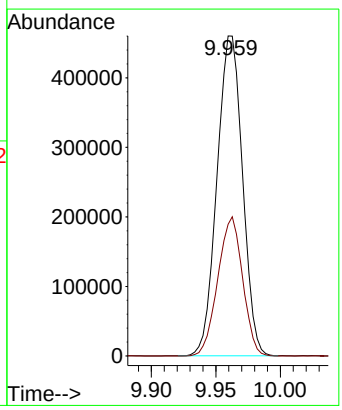


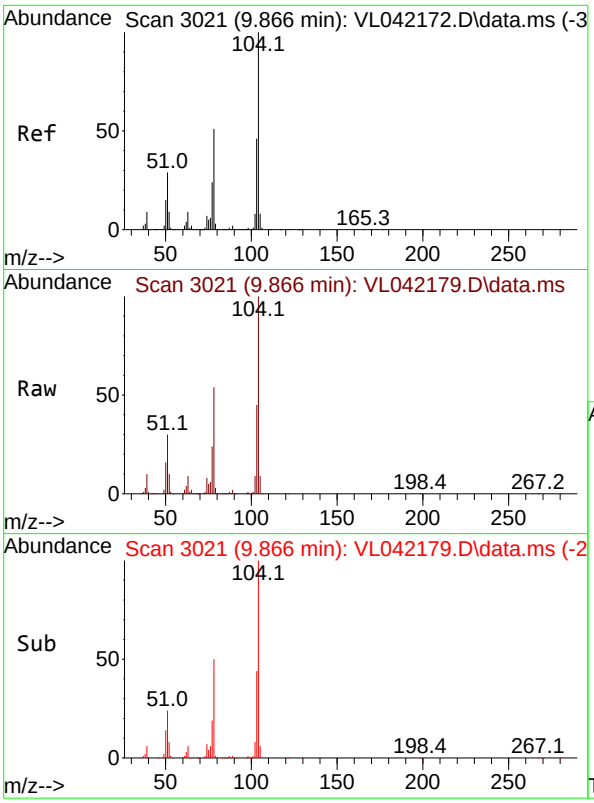


#60
o-Xylene
Concen: 9.404 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 632918

Ion	Ratio	Lower	Upper
91	100		
106	42.2	20.8	62.5



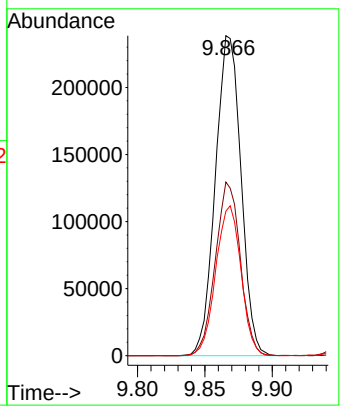


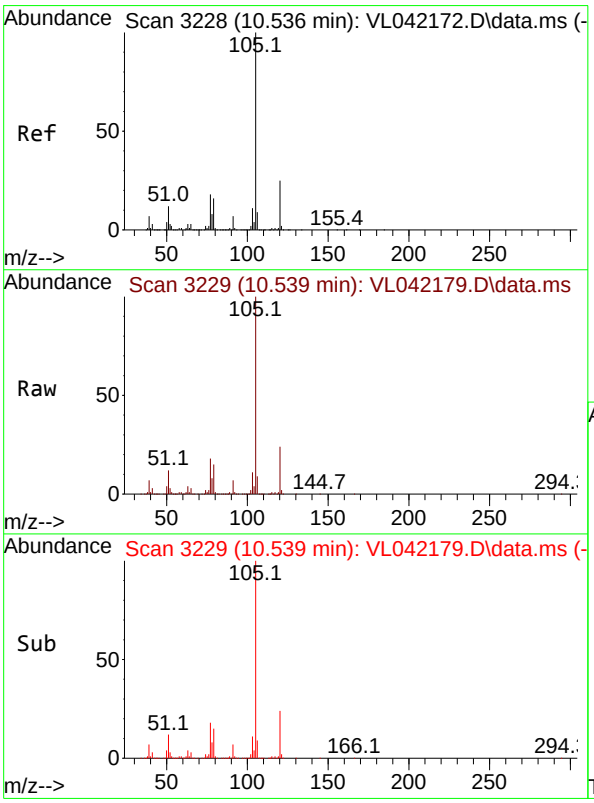
#61
Styrene
Concen: 9.488 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:104 Resp: 315910

Ion	Ratio	Lower	Upper
104	100		
78	52.8	41.8	62.6
103	46.3	37.0	55.4

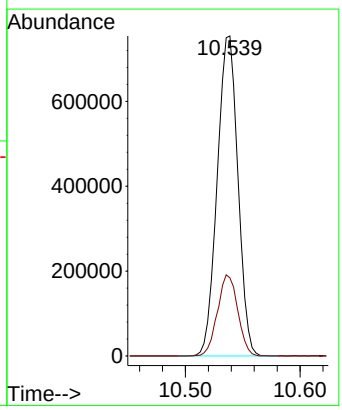


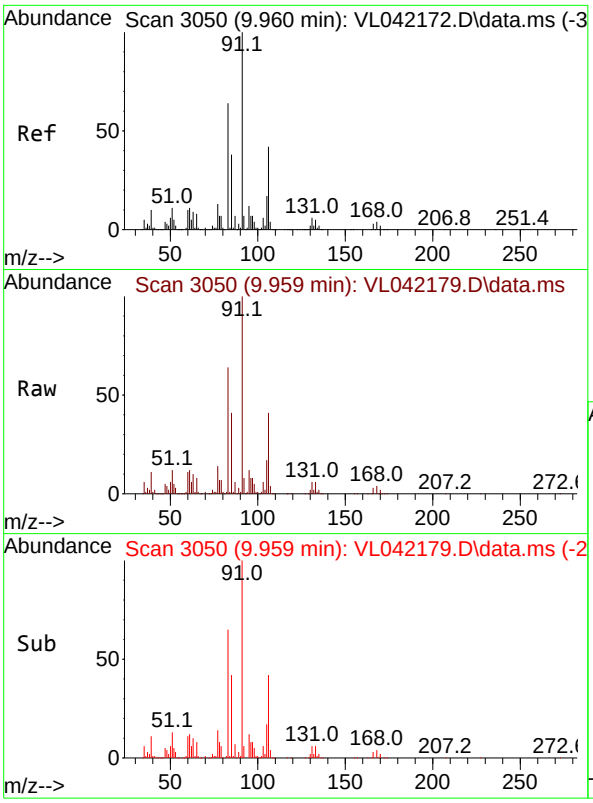


#62
Isopropylbenzene
Concen: 9.388 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 944938

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.9	29.9



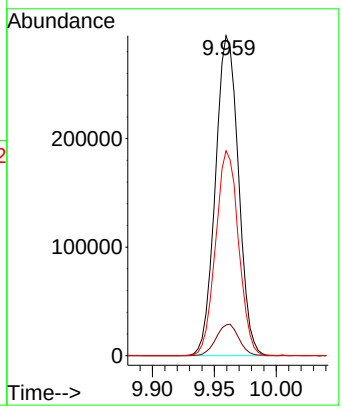


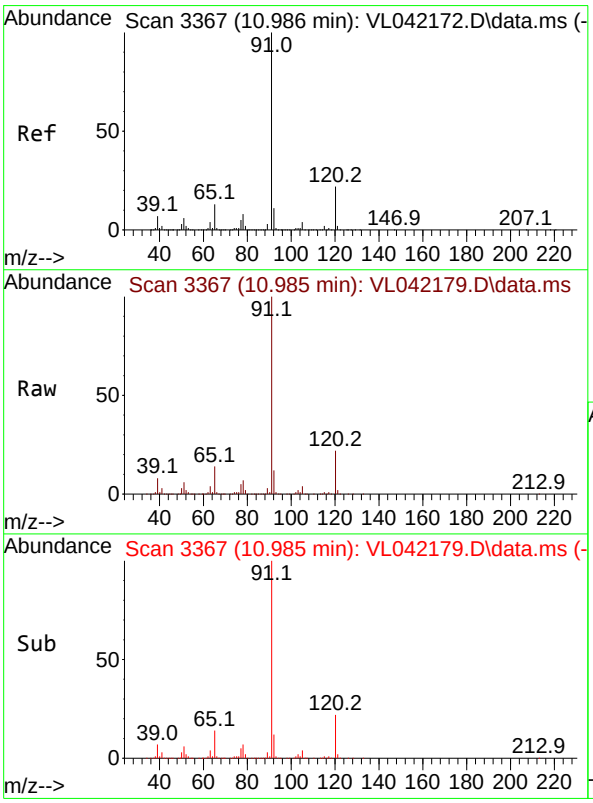
#63
1,1,2,2-Tetrachloroethane
Concen: 9.357 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 83 Resp: 382635

Ion	Ratio	Lower	Upper
83	100		
131	9.7	4.8	14.4
85	63.9	32.5	97.5

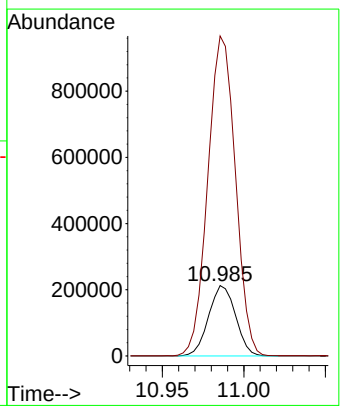


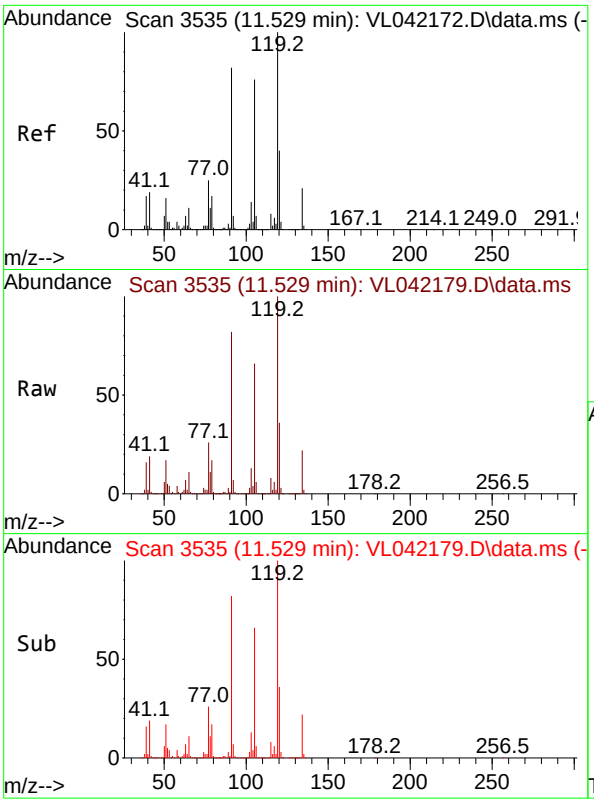


#64
n-propylbenzene
Concen: 9.439 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:120 Resp: 244547

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3



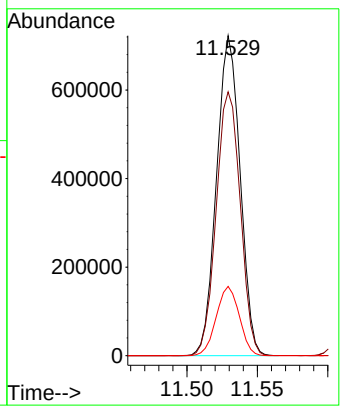


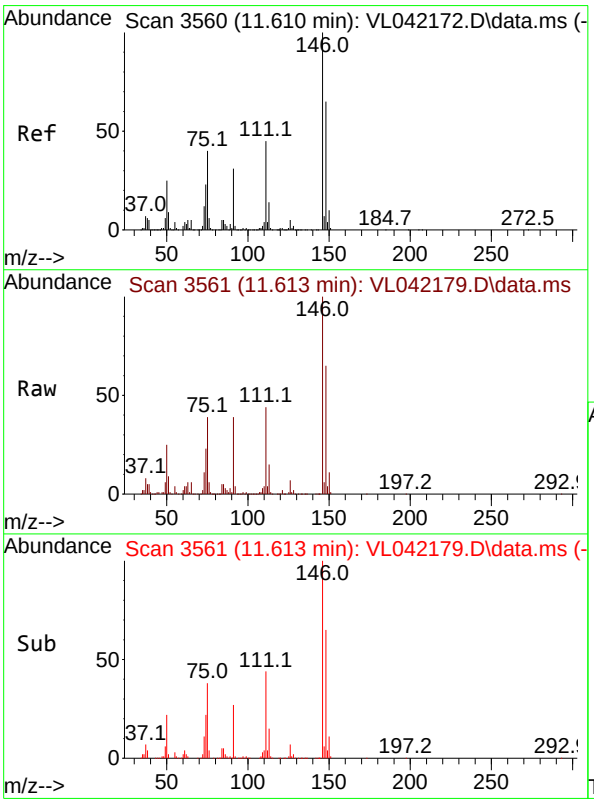
#65
tert-Butylbenzene
Concen: 9.065 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:119 Resp: 843828

Ion	Ratio	Lower	Upper
119	100		
91	84.3	66.0	99.0
134	21.2	16.7	25.1

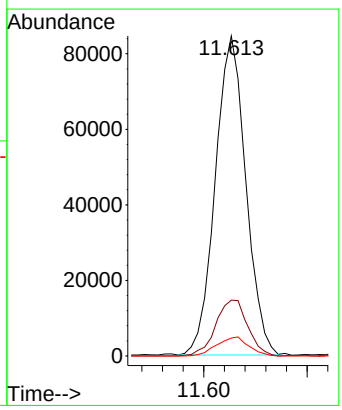


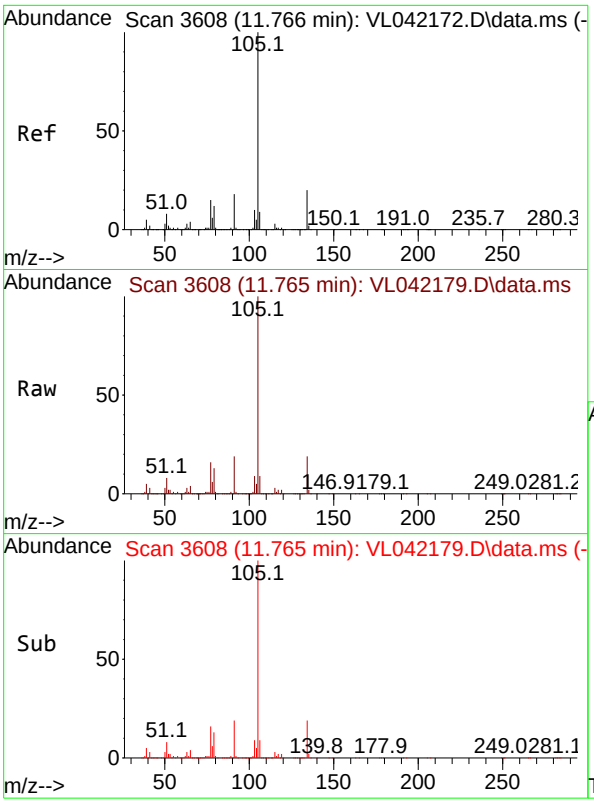


#66
Benzyl Chloride
Concen: 8.789 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 86804

Ion	Ratio	Lower	Upper
91	100		
126	18.5	13.8	20.6
128	6.2	4.5	6.7



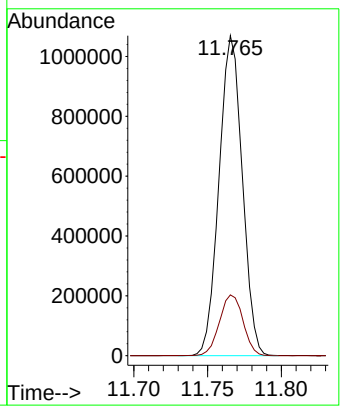


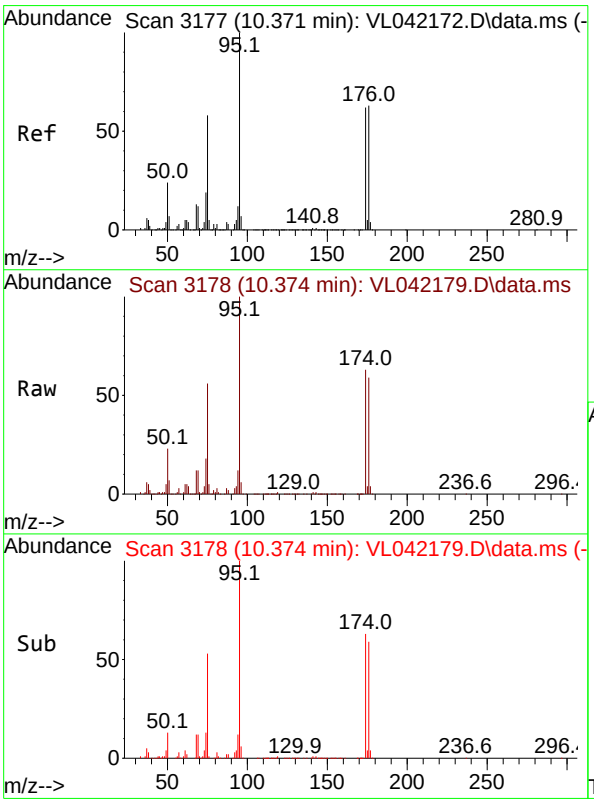
#67
sec-Butylbenzene
Concen: 9.063 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:105 Resp: 1172636

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

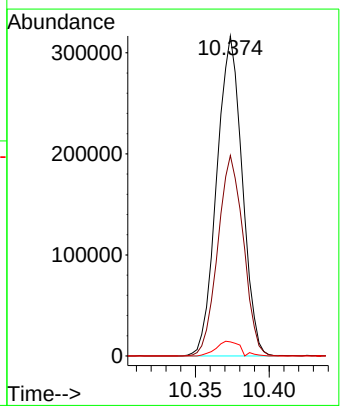


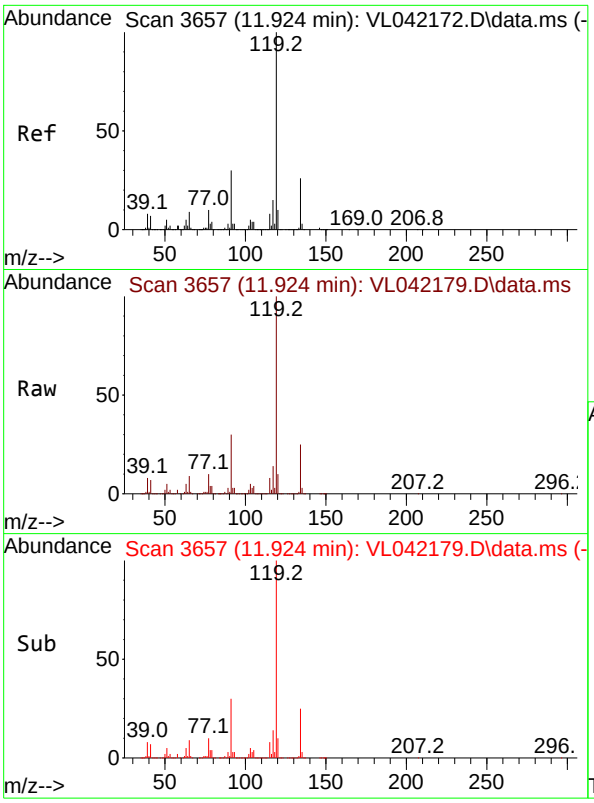


#68
1-Bromo-4-Fluorobenzene
Concen: 9.774 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 95 Resp: 379929

Ion	Ratio	Lower	Upper
95	100		
174	63.0	50.6	76.0
175	4.4	3.8	5.6



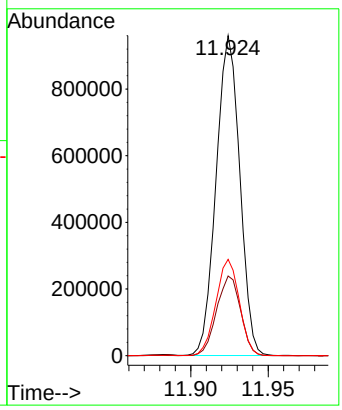


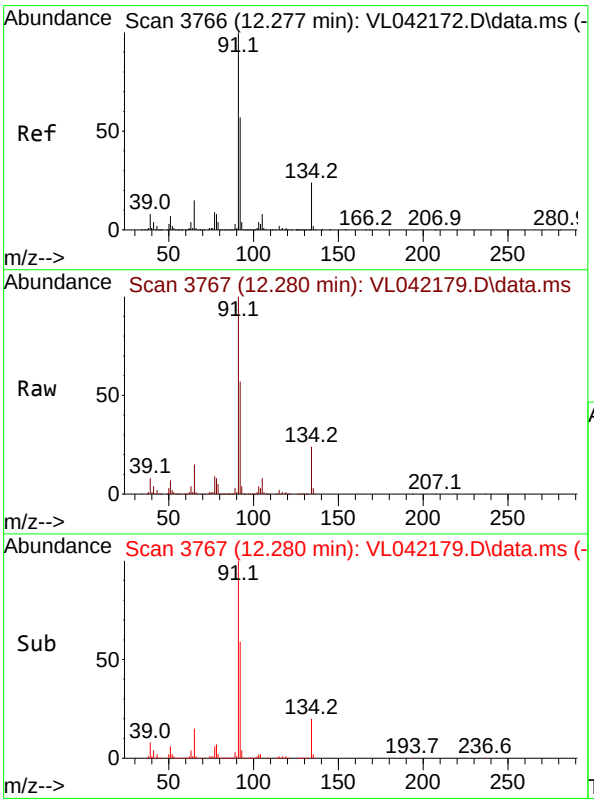
#69
p-Isopropyltoluene
Concen: 9.153 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:119 Resp: 1019694

Ion	Ratio	Lower	Upper
119	100		
134	25.3	20.4	30.6
91	29.9	23.7	35.5

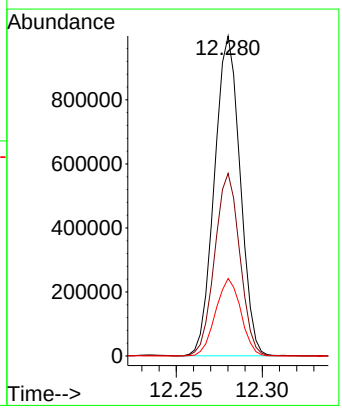


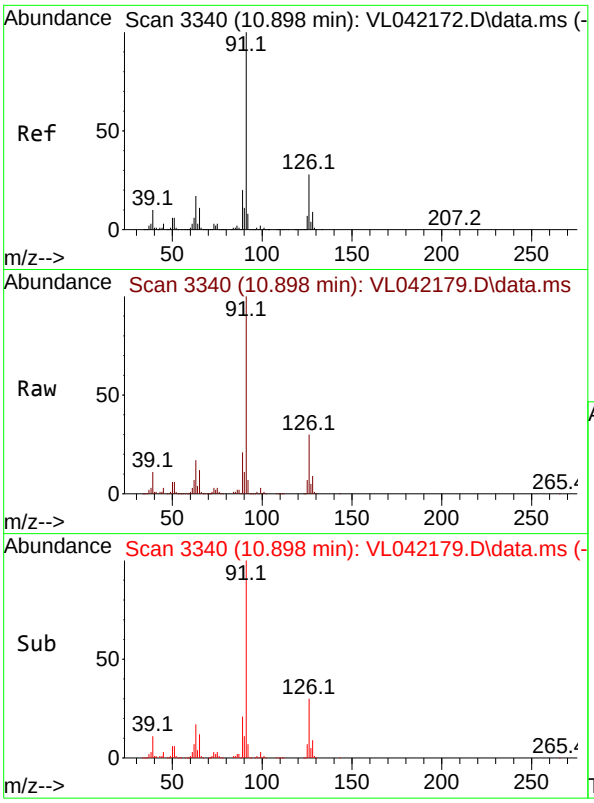


#70
n-Butylbenzene
Concen: 9.115 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion: 91 Resp: 1038548

Ion	Ratio	Lower	Upper
91	100		
92	56.0	44.9	67.3
134	23.8	19.2	28.8



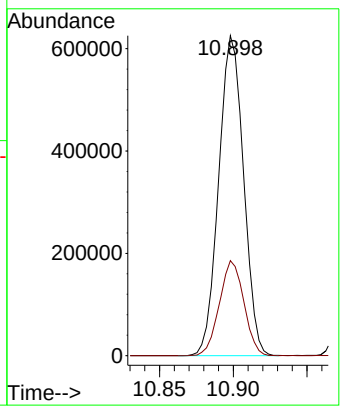


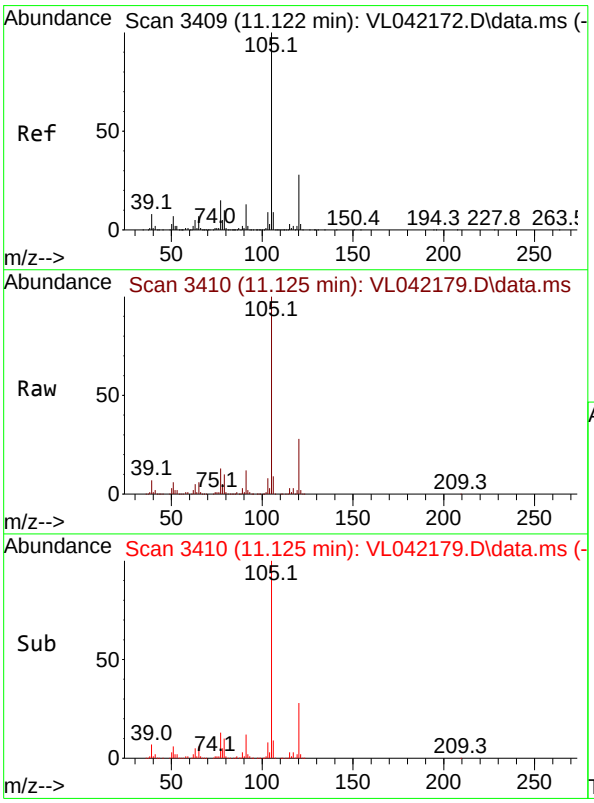
#71
2-Chlorotoluene
Concen: 9.382 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion: 91 Resp: 732874

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.6	46.4

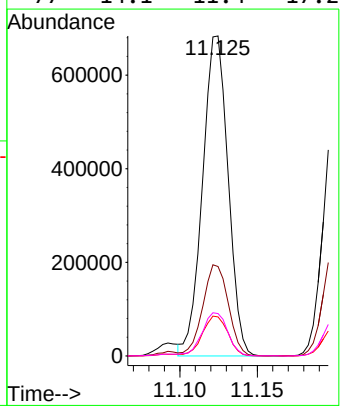


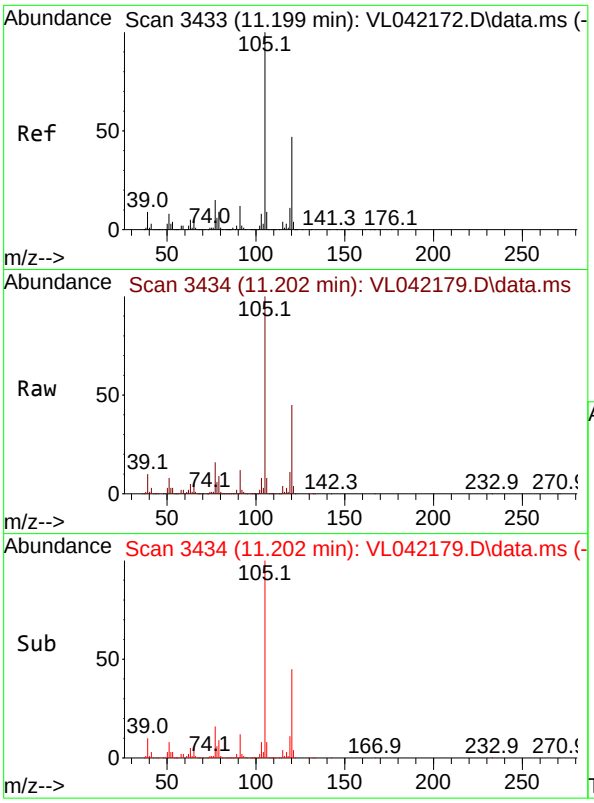


#72
4-Ethyltoluene
Concen: 9.370 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 785185

Ion	Ratio	Lower	Upper
105	100		
120	29.6	23.4	35.0
91	12.9	10.3	15.5
77	14.1	11.4	17.2



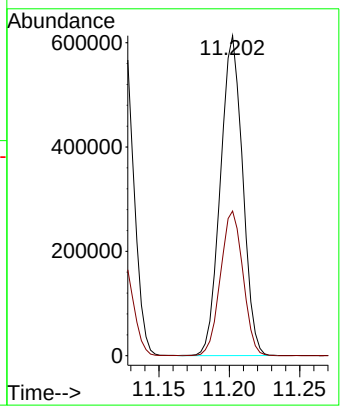


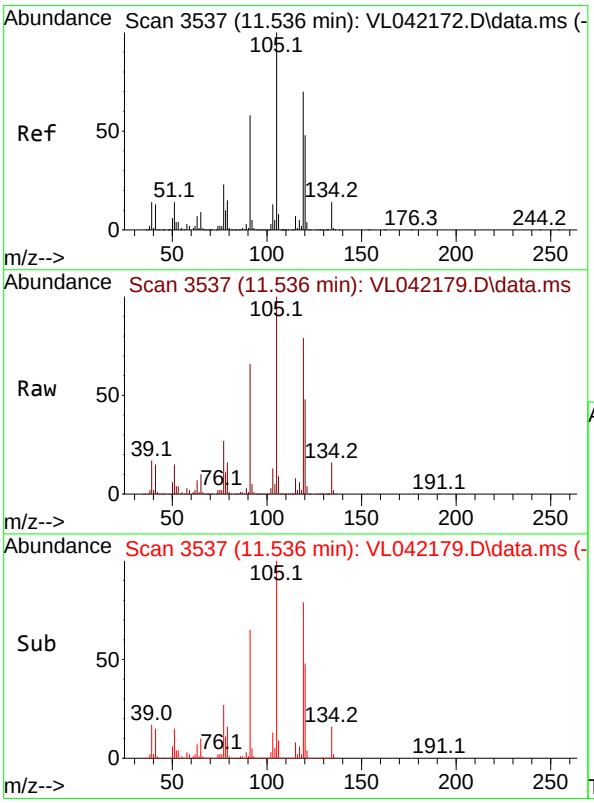
#73
1,3,5-Trimethylbenzene
Concen: 9.203 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:105 Resp: 673541

Ion	Ratio	Lower	Upper
105	100		
120	45.2	37.4	56.0

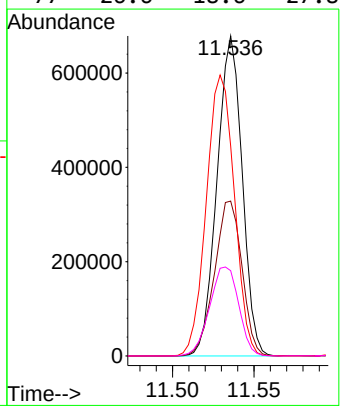


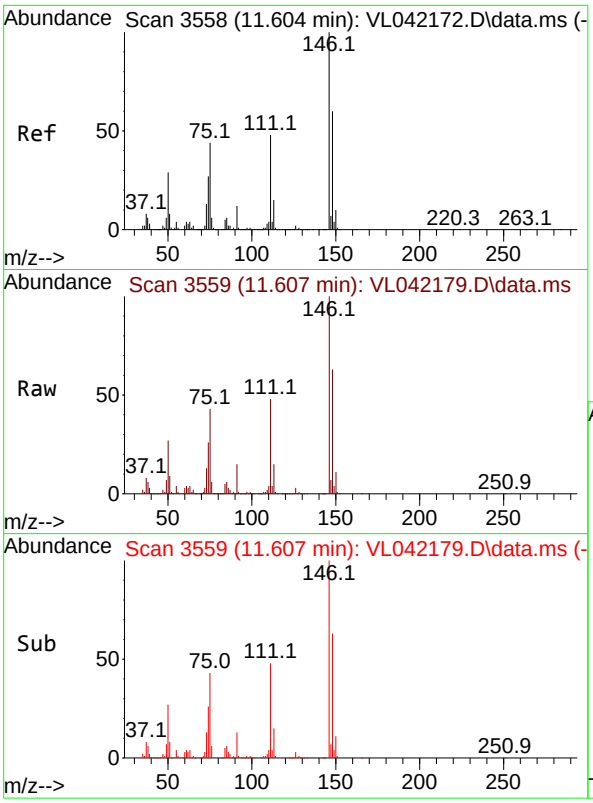


#74
1,2,4-Trimethylbenzene
Concen: 8.648 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:105 Resp: 729155

Ion	Ratio	Lower	Upper
105	100		
120	48.4	38.6	58.0
91	65.6	46.2	69.2
77	26.6	18.6	27.8



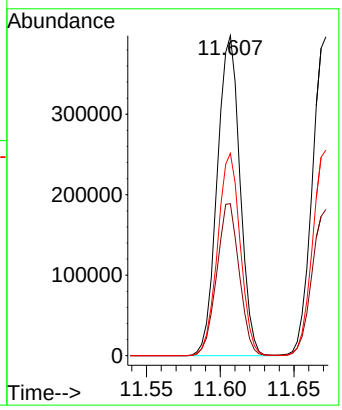


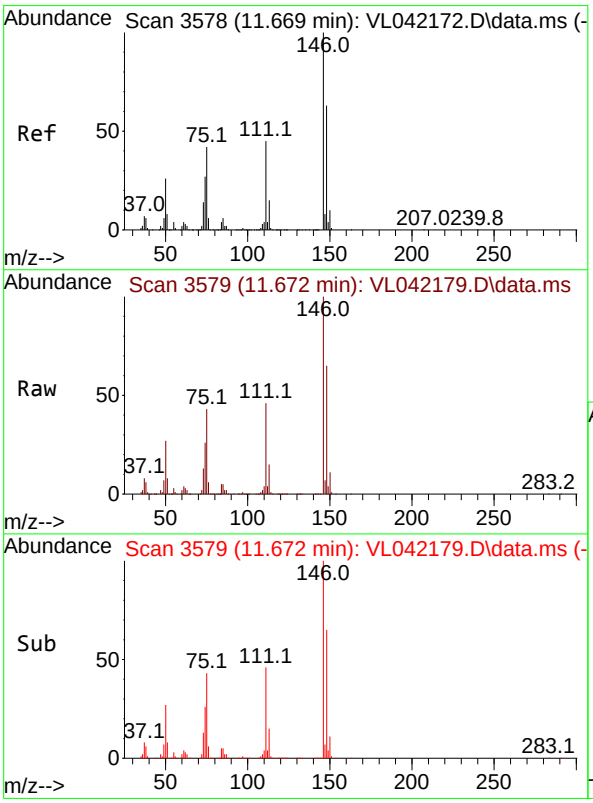
#75
1,3-Dichlorobenzene
Concen: 9.224 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:146 Resp: 426573

Ion	Ratio	Lower	Upper
146	100		
111	47.2	23.8	71.2
148	62.9	31.9	95.9

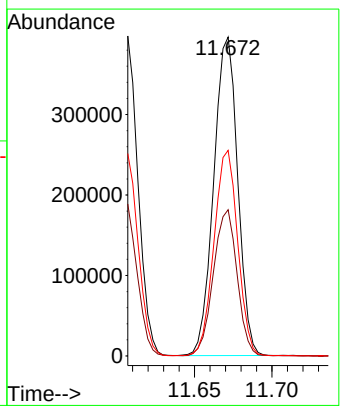


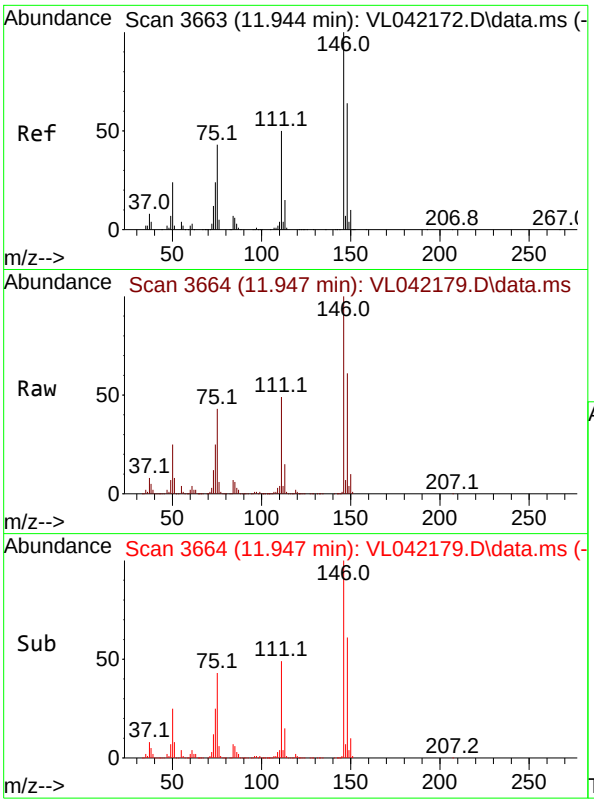


#76
1,4-Dichlorobenzene
Concen: 9.263 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:146 Resp: 426318

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.0	69.0
148	64.1	31.9	95.7



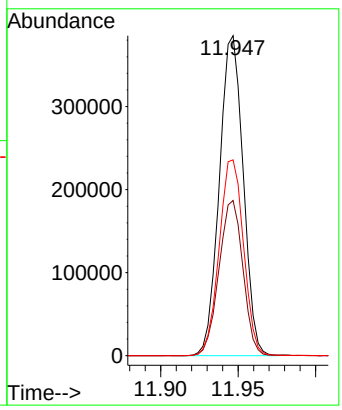


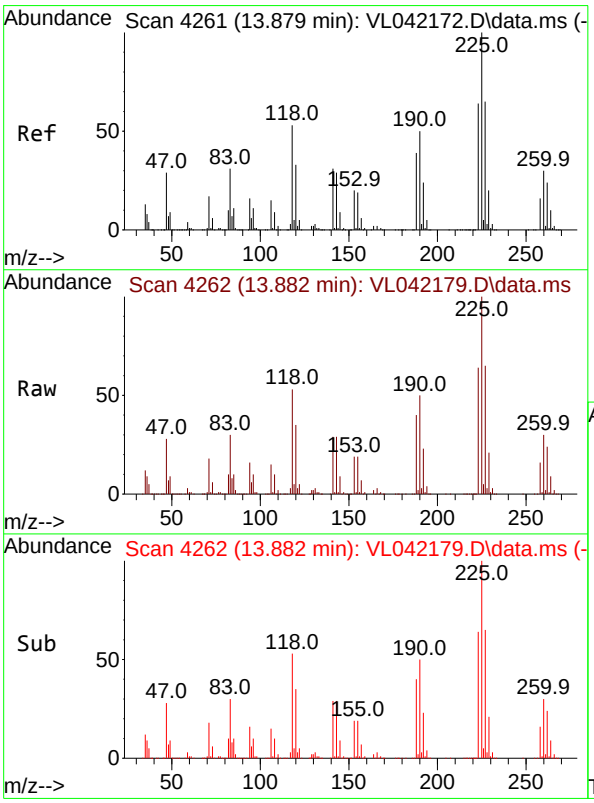
#77
1,2-Dichlorobenzene
Concen: 9.154 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:146 Resp: 412180

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.8	74.3
148	62.8	31.6	94.8

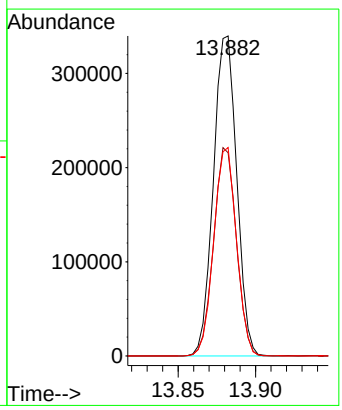


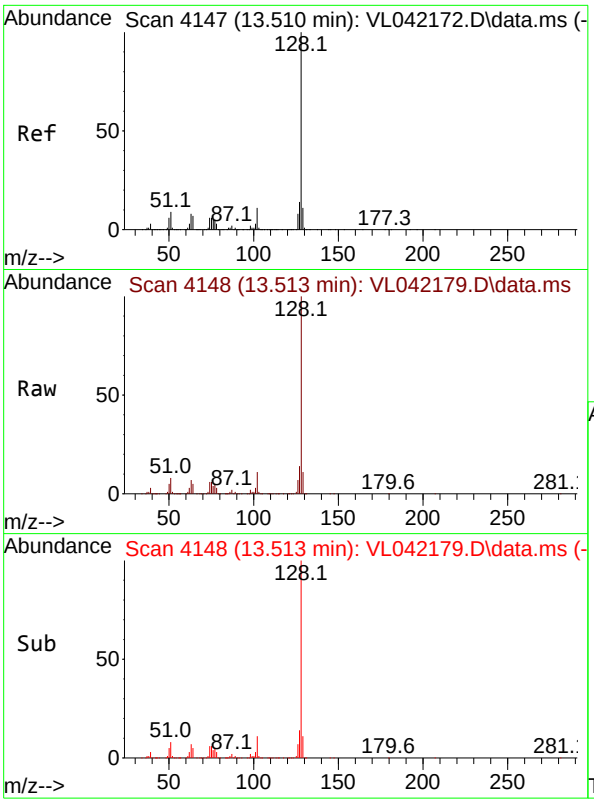


#78
Hexachloro-1,3-Butadiene
Concen: 7.776 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:225 Resp: 356386

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	63.4	51.2	76.8



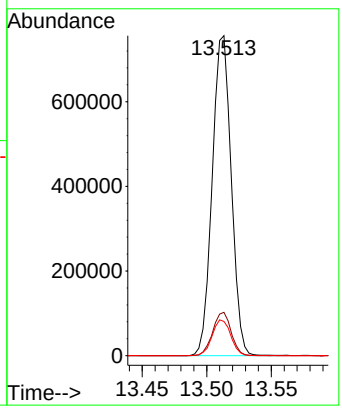


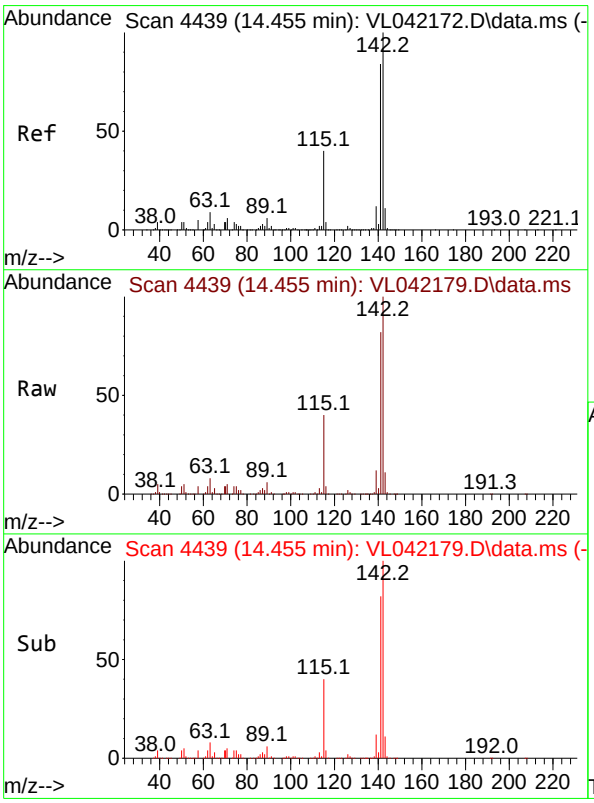
#79
Naphthalene
Concen: 8.385 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:128 Resp: 773311

Ion	Ratio	Lower	Upper
128	100		
127	13.6	10.8	16.2
129	10.7	9.0	13.4

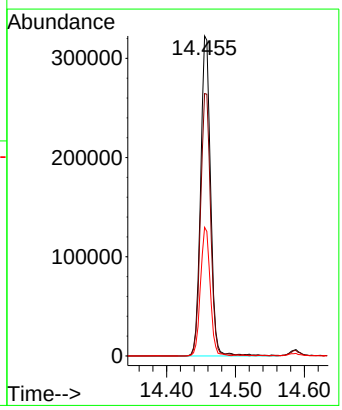


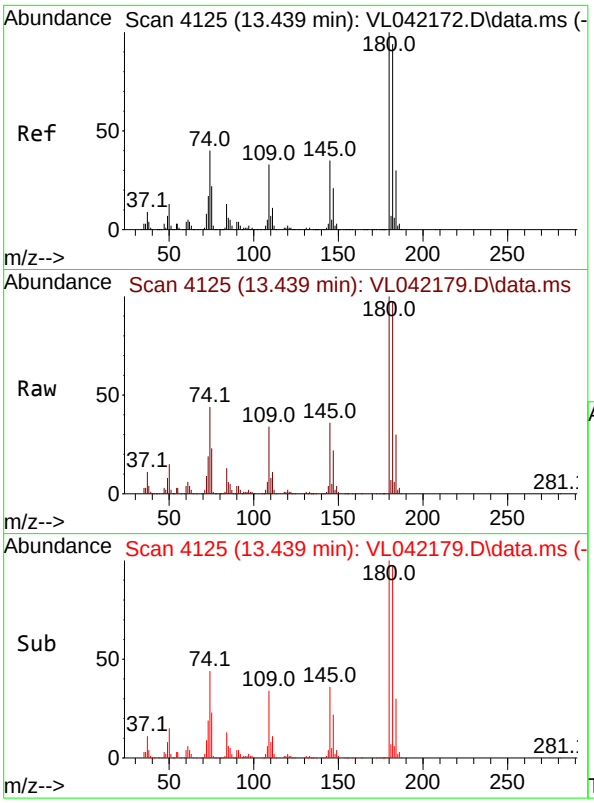


#80
Naphthalene,2-methyl-
Concen: 7.151 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Tgt Ion:142 Resp: 323443

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.3	99.5
115	39.8	31.6	47.4



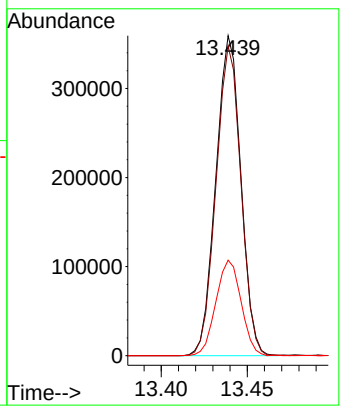


#81
1,2,4-Trichlorobenzene
Concen: 8.553 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042179.D
Acq: 27 Mar 2025 12:23

Instrument :
MSVOA_L
ClientSampleId :
ICVVL032725

Tgt Ion:180 Resp: 363863

Ion	Ratio	Lower	Upper
180	100		
182	96.2	75.1	112.7
184	30.1	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	155631	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.956	114	397176	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.879	117	350140	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	285515	9.930	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.300%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	224739	9.780	ppbv	99
3) Chlorodifluoromethane	1.473	51	242368	10.325	ppbv	99
4) Chloromethane	1.531	50	94421	10.054	ppbv	99
5) Vinyl Chloride	1.580	62	87077	8.750	ppbv	96
6) Bromomethane	1.667	94	38883	9.136	ppbv	95
7) Chloroethane	1.703	64	35019	9.290	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	193376	9.882	ppbv	92
9) Propene	1.483	41	92247	8.573	ppbv	98
10) Heptane	4.972	43	280156	9.789	ppbv	99
11) Trichlorofluoromethane	1.874	101	218729	9.783	ppbv	97
12) 1,1,2-Trichlorotrifluo...	2.137	101	178752	9.726	ppbv	98
13) Ethanol	1.719	45	4608	4.530	ppbv	92
14) Bromoethene	1.781	108	61204	8.693	ppbv	97
15) Acetone	1.832	43	196063	9.008	ppbv	96
16) 1,3-Butadiene	1.606	39	94932	8.931	ppbv	98
17) tert-Butyl alcohol	2.040	59	220187	8.122	ppbv	98
18) 1,1-Dichloroethene	2.033	96	77686	9.042	ppbv	98
19) Isopropyl Alcohol	1.884	45	103348	8.415	ppbv	93
20) Methylene Chloride	2.059	84	68588	8.461	ppbv	95
21) Allyl Chloride	2.095	41	139965	9.118	ppbv	96
22) trans-1,2-Dichloroethene	2.337	96	88334	8.896	ppbv	94
23) Vinyl Acetate	2.460	43	73162	7.766	ppbv #	96
24) 1,1-Dichloroethane	2.405	63	180404	9.801	ppbv	99
25) Ethyl Acetate	2.833	43	567125	10.039	ppbv	98
26) Hexane	2.823	57	214891	9.848	ppbv	97
27) Carbon Disulfide	2.146	76	216499	9.253	ppbv	97
28) Methyl tert-Butyl Ether	2.438	73	109726	8.077	ppbv	94
29) Chloroform	2.845	83	340889	10.675	ppbv	99
30) Cyclohexane	3.852	84	170359	8.991	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	201796	9.110	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	332252	9.088	ppbv	98
34) 2-Butanone	2.554	43	313515	10.886	ppbv	98
35) Carbon Tetrachloride	3.758	117	349240	11.256	ppbv	100
36) Benzene	3.651	78	425324	10.802	ppbv	97
37) 1,2-Dichloroethane	3.214	62	256791	11.391	ppbv	99
38) Trichloroethene	4.541	130	170362	10.370	ppbv	97
39) 1,2-Dichloropropane	4.312	63	153583	10.710	ppbv	95
40) 1,4-Dioxane	4.577	88	72604	9.539	ppbv #	95
41) Tetrahydrofuran	3.053	42	175060	10.556	ppbv	95
42) Bromodichloromethane	4.483	83	358962	11.551	ppbv	100
43) Methyl Methacrylate	4.875	69	154975	9.297	ppbv	97
44) 2,2,4-Trimethylpentane	4.635	57	742388	11.157	ppbv	96
45) t-1,3-Dichloropropene	6.412	75	147204	8.231	ppbv	98

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

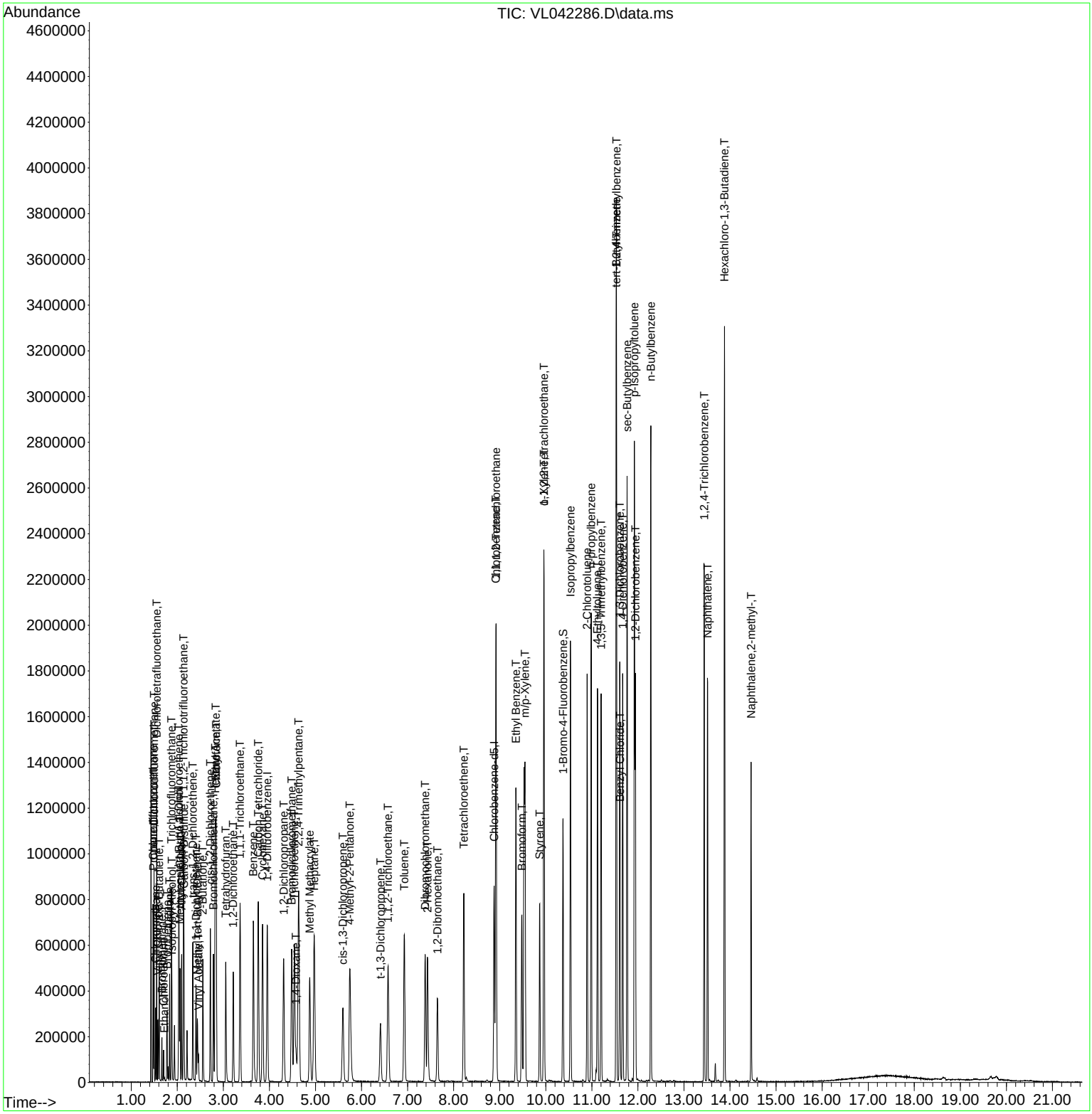
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	195802	8.932	ppbv		98
47) 1,1,2-Trichloroethane	6.574	97	172343	11.369	ppbv		97
48) Dibromochloromethane	7.380	129	280199	10.907	ppbv		100
49) Bromoform	9.481	173	250227	10.849	ppbv		99
50) 4-Methyl-2-Pentanone	5.745	43	445454	9.760	ppbv		95
51) 2-Hexanone	7.432	43	353706	9.437	ppbv	#	94
52) Tetrachloroethene	8.222	164	141976	9.092	ppbv		95
53) Toluene	6.927	91	464948	9.961	ppbv		99
54) 1,2-Dibromoethane	7.649	107	229720	10.871	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.921	131	231041	11.987	ppbv		98
57) Chlorobenzene	8.917	112	399227	12.021	ppbv		93
58) Ethyl Benzene	9.351	91	673801	10.834	ppbv		98
59) m/p-Xylene	9.549	91	529747	10.667	ppbv	#	14
60) o-Xylene	9.960	91	581045	11.671	ppbv		97
61) Styrene	9.869	104	251525	10.212	ppbv		98
62) Isopropylbenzene	10.536	105	859013	11.538	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.960	83	381841	12.623	ppbv		99
64) n-propylbenzene	10.986	120	228532	11.925	ppbv		100
65) tert-Butylbenzene	11.529	119	784483	11.393	ppbv		100
66) Benzyl Chloride	11.614	91	57966	7.934	ppbv		100
67) sec-Butylbenzene	11.766	105	1128106	11.787	ppbv		100
69) p-Isopropyltoluene	11.924	119	961623	11.669	ppbv		99
70) n-Butylbenzene	12.280	91	998455	11.847	ppbv		99
71) 2-Chlorotoluene	10.898	91	654276	11.323	ppbv		98
72) 4-Ethyltoluene	11.122	105	728517	11.753	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	620415	11.460	ppbv		100
74) 1,2,4-Trimethylbenzene	11.536	105	709204	11.371	ppbv		97
75) 1,3-Dichlorobenzene	11.607	146	426300	12.462	ppbv		98
76) 1,4-Dichlorobenzene	11.669	146	423561	12.442	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	419286	12.589	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	334414	9.864	ppbv		99
79) Naphthalene	13.513	128	808459	11.851	ppbv		99
80) Naphthalene,2-methyl-	14.459	142	373298	11.158	ppbv		100
81) 1,2,4-Trichlorobenzene	13.439	180	355741	11.305	ppbv		100

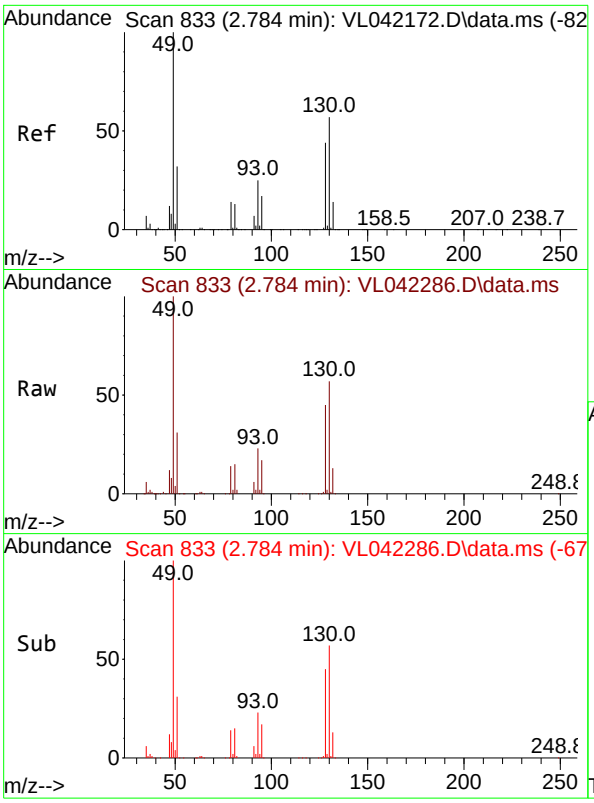
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042286.D
Acq On : 09 Apr 2025 10:20
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 10 01:39:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



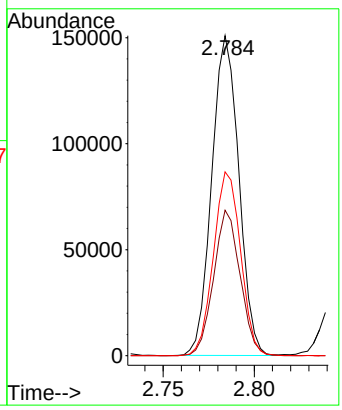


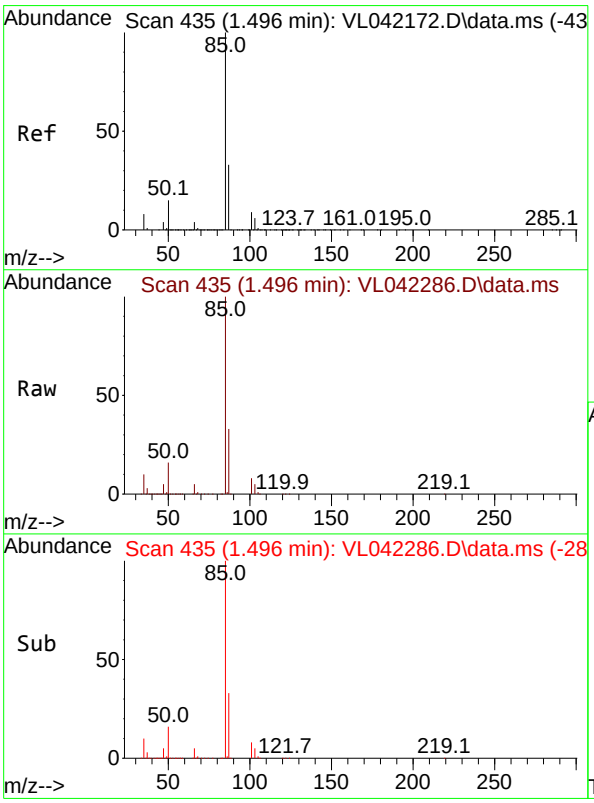
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 155631

Ion	Ratio	Lower	Upper
49	100		
128	44.6	22.9	68.5
130	57.7	28.8	86.4

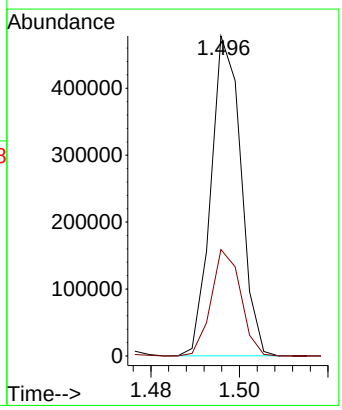


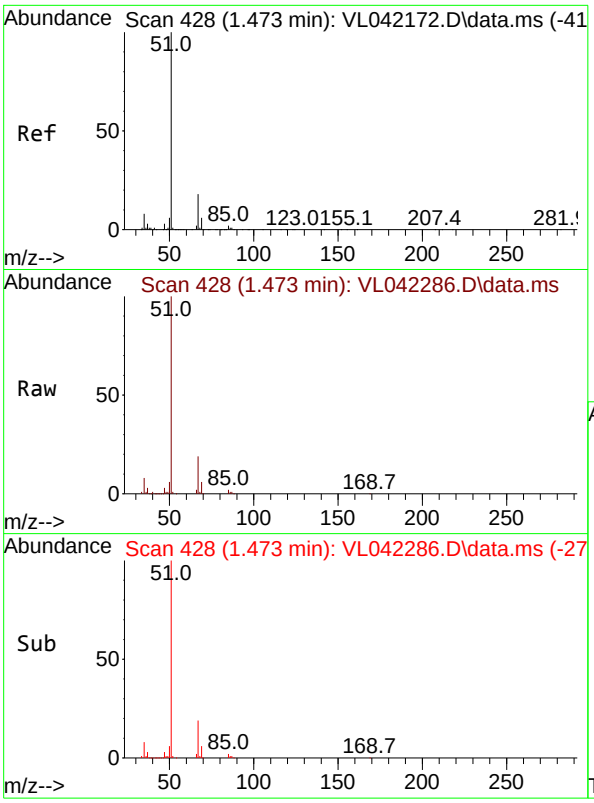


#2
Dichlorodifluoromethane
Concen: 9.780 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 85 Resp: 224739

Ion	Ratio	Lower	Upper
85	100		
87	33.3	26.1	39.1



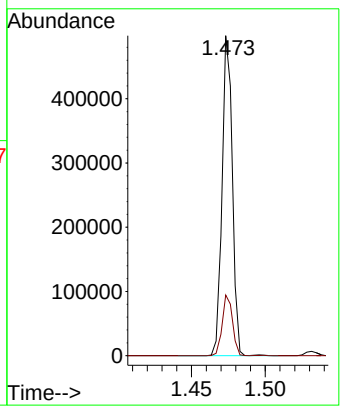


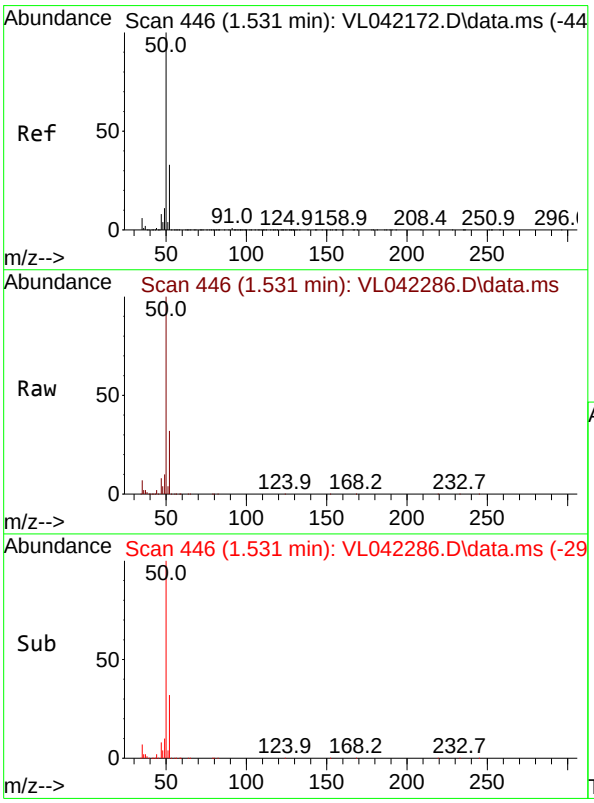
#3
Chlorodifluoromethane
Concen: 10.325 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 242368

Ion	Ratio	Lower	Upper
51	100		
67	19.0	15.0	22.6

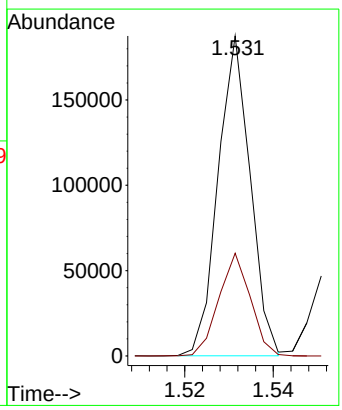


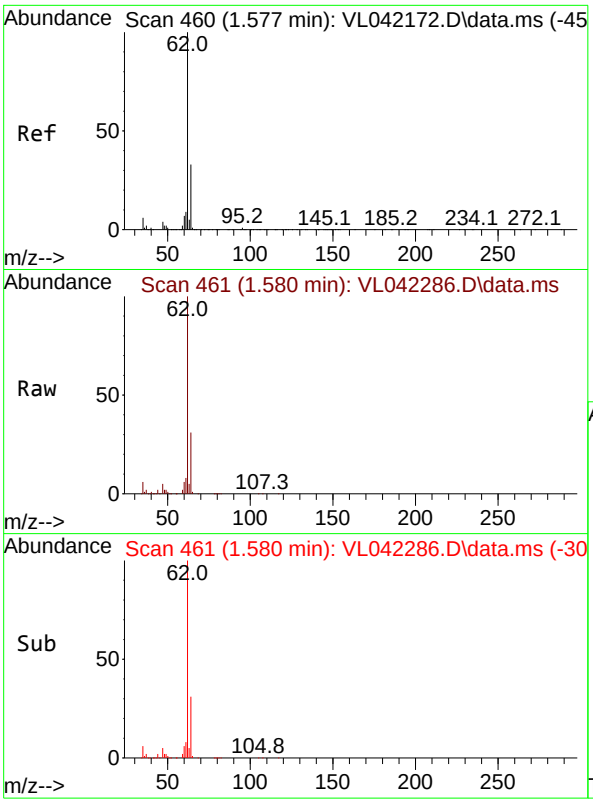


#4
Chloromethane
Concen: 10.054 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 50 Resp: 94421

Ion	Ratio	Lower	Upper
50	100		
52	32.1	26.1	39.1



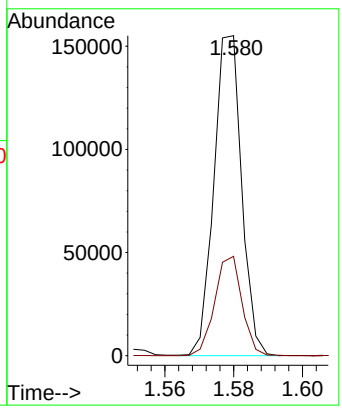


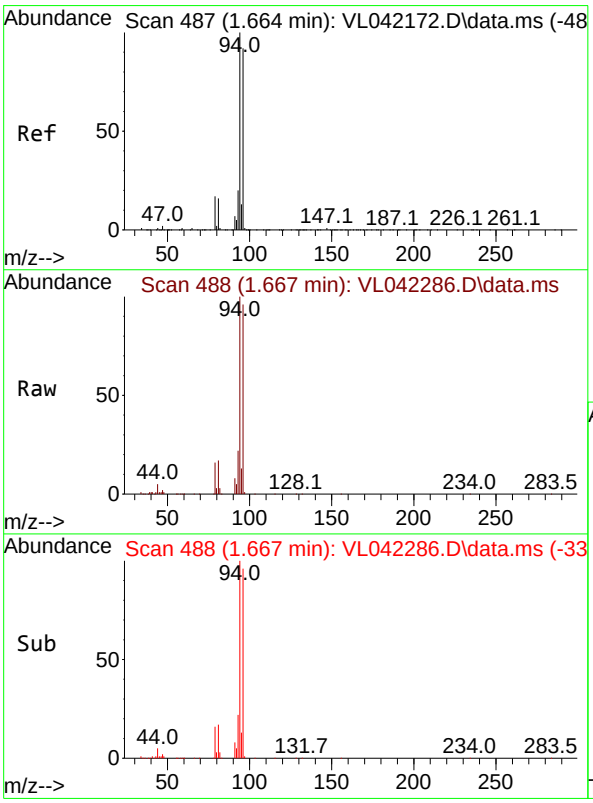
#5
Vinyl Chloride
Concen: 8.750 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 87077

Ion	Ratio	Lower	Upper
62	100		
64	31.1	26.6	40.0

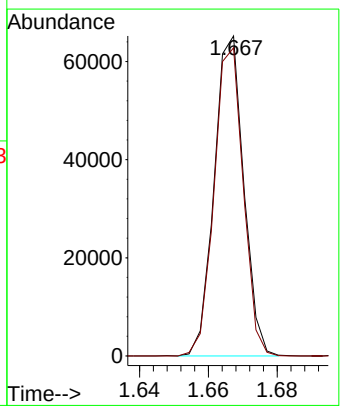


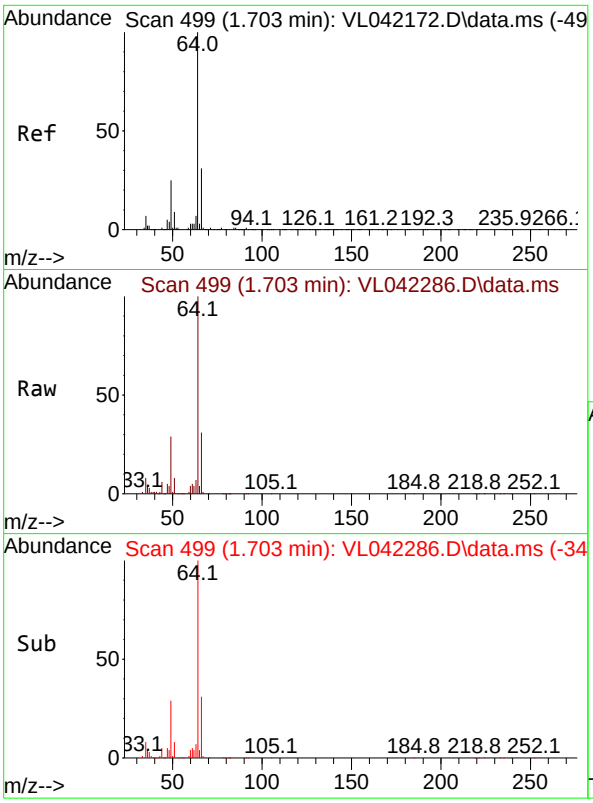


#6
Bromomethane
Concen: 9.136 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 94 Resp: 38883

Ion	Ratio	Lower	Upper
94	100		
96	96.3	73.1	109.7



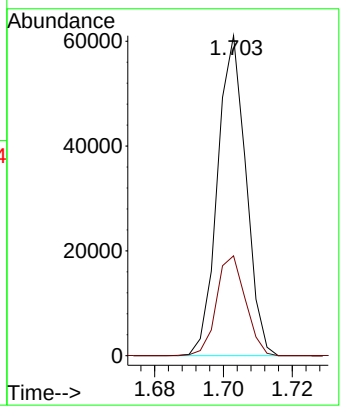


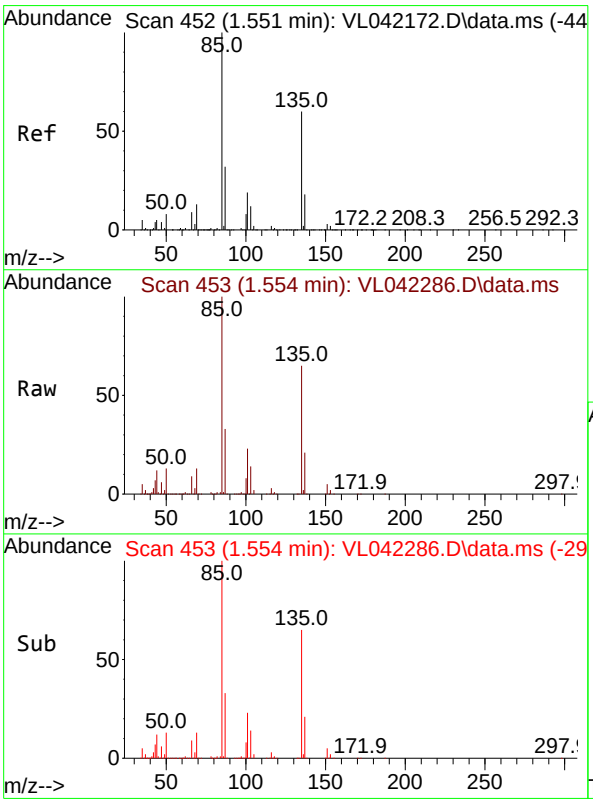
#7
Chloroethane
Concen: 9.290 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 35019

Ion	Ratio	Lower	Upper
64	100		
66	31.2	25.2	37.8

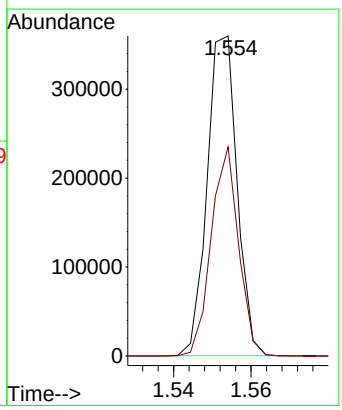


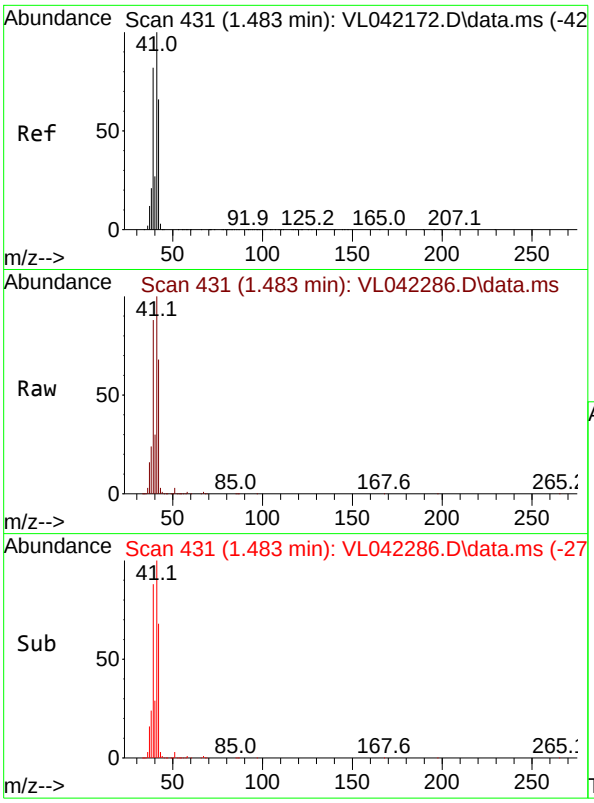


#8
Dichlorotetrafluoroethane
Concen: 9.882 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 85 Resp: 193376

Ion	Ratio	Lower	Upper
85	100		
135	59.6	52.4	78.6



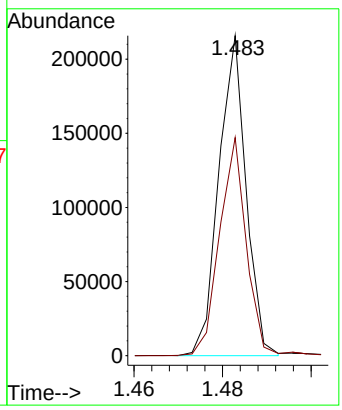


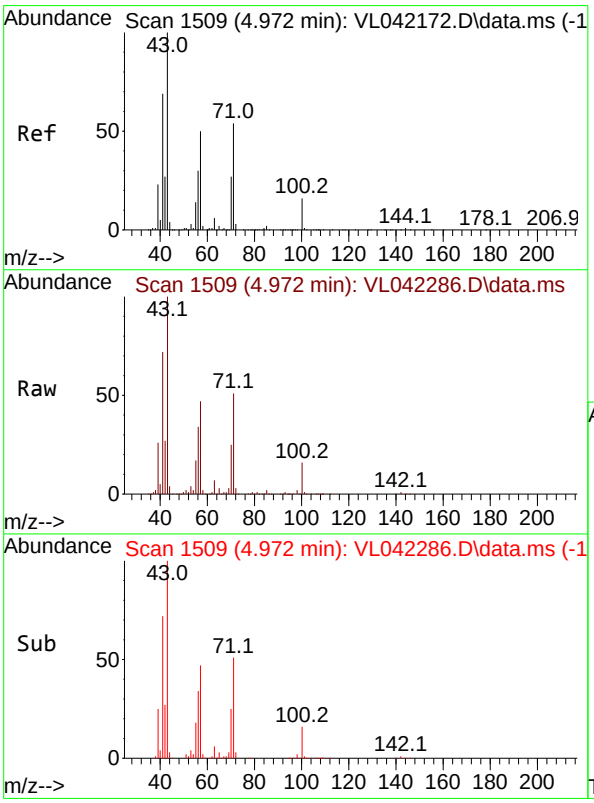
#9
Propene
Concen: 8.573 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 92247

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2

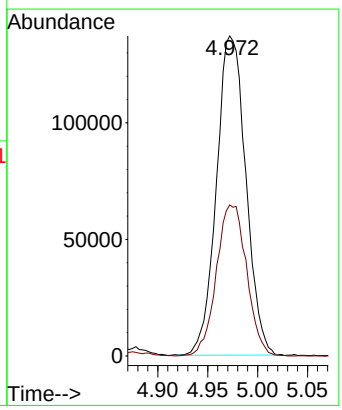


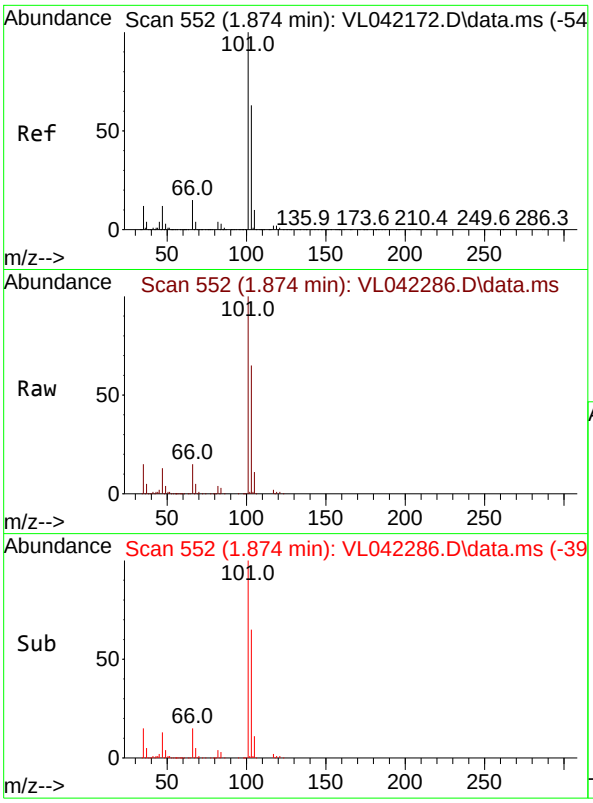


#10
Heptane
Concen: 9.789 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 280156

Ion	Ratio	Lower	Upper
43	100		
57	48.8	39.4	59.2



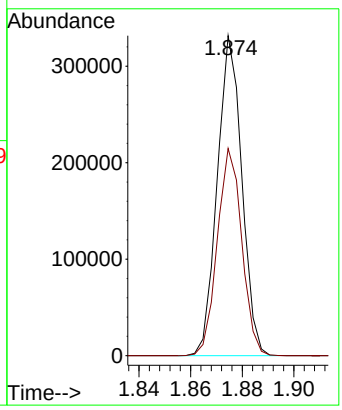


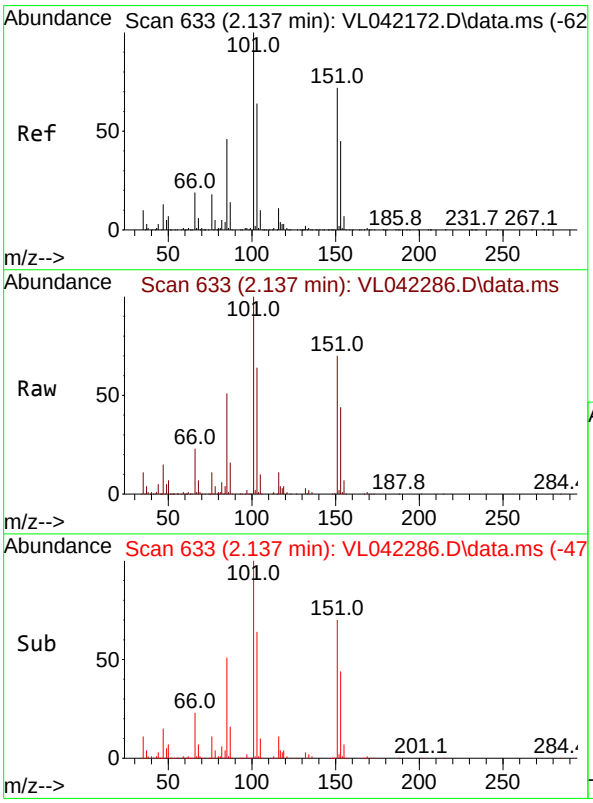
#11
Trichlorofluoromethane
Concen: 9.783 ppbv
RT: 1.874 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 218729

Ion	Ratio	Lower	Upper
101	100		
103	64.8	50.2	75.2

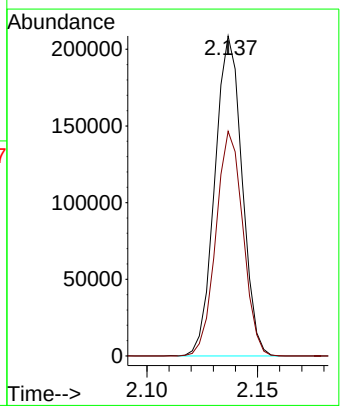


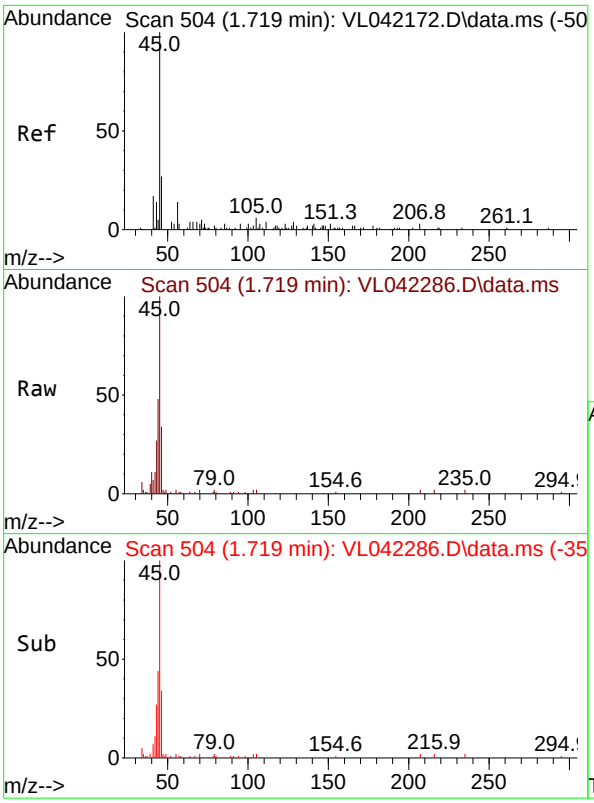


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.726 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:101 Resp: 178752

Ion	Ratio	Lower	Upper
101	100		
151	69.7	57.1	85.7



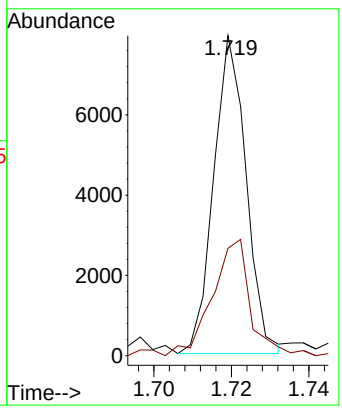


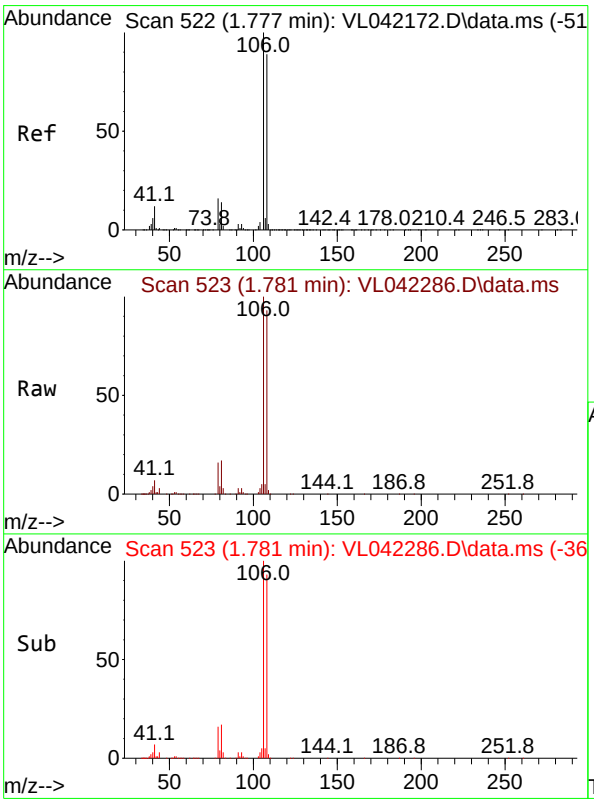
#13
Ethanol
Concen: 4.530 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 4608

Ion	Ratio	Lower	Upper
45	100		
46	44.9	20.2	80.8

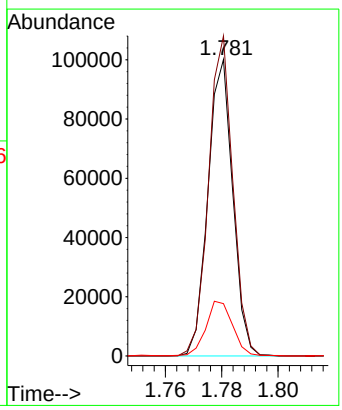


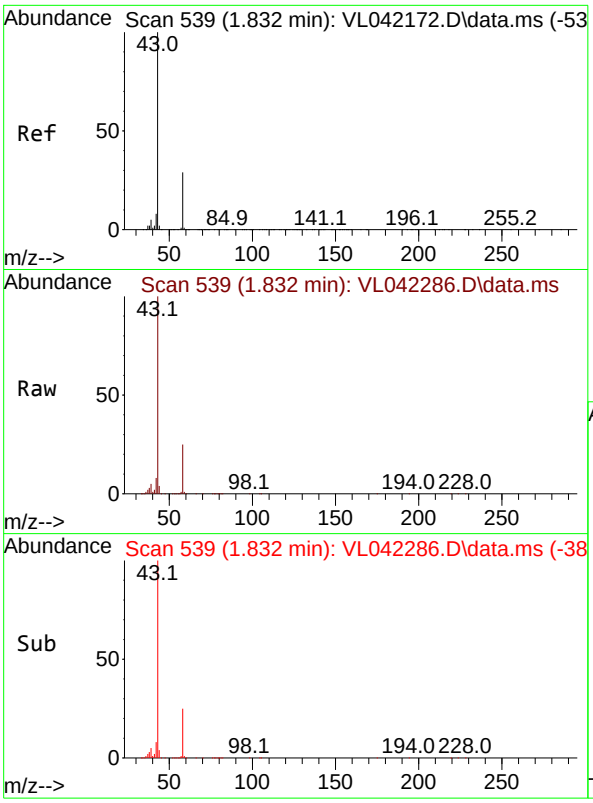


#14
Bromoethene
Concen: 8.693 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:108 Resp: 61204

Ion	Ratio	Lower	Upper
108	100		
106	105.7	86.8	130.2
79	20.3	15.0	22.6



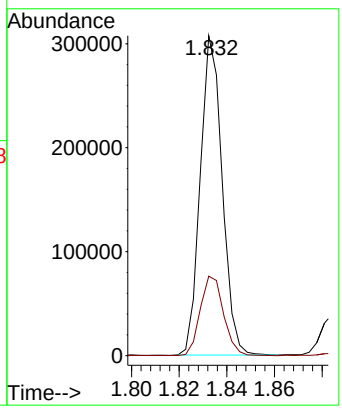


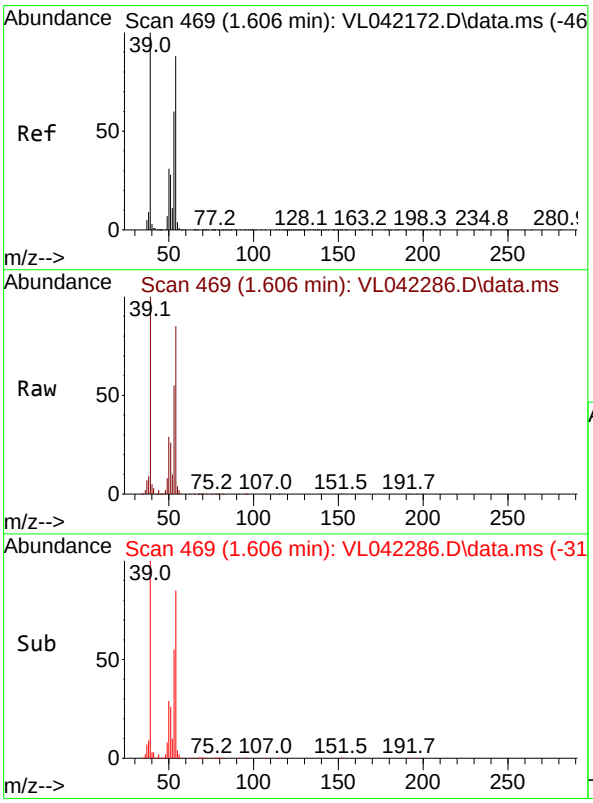
#15
Acetone
Concen: 9.008 ppbv
RT: 1.832 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 196063

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8

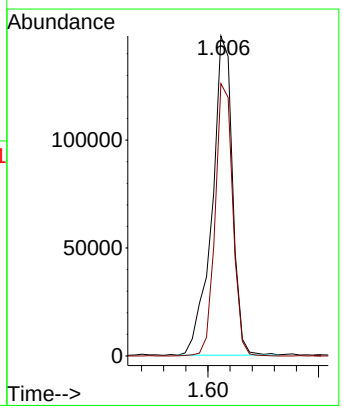


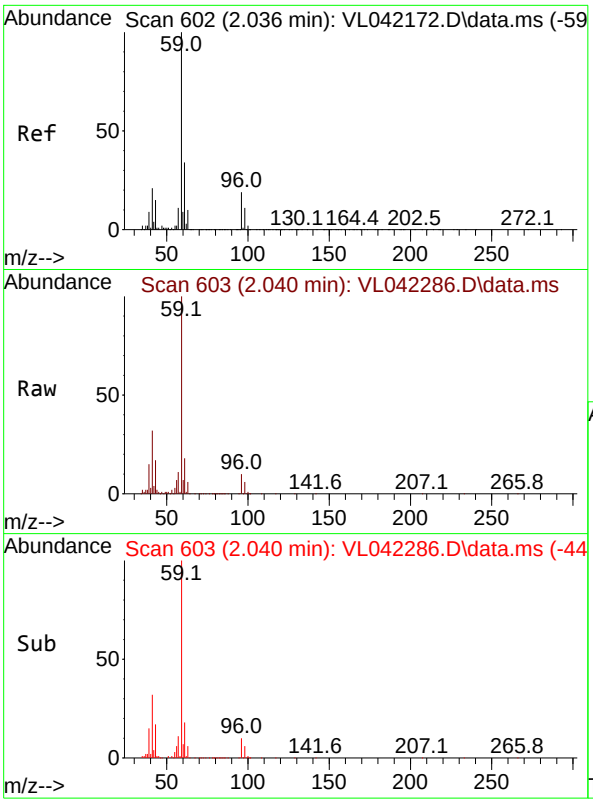


#16
1,3-Butadiene
Concen: 8.931 ppbv
RT: 1.606 min Scan# 469
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 39 Resp: 94932

Ion	Ratio	Lower	Upper
39	100		
54	73.9	60.7	91.1



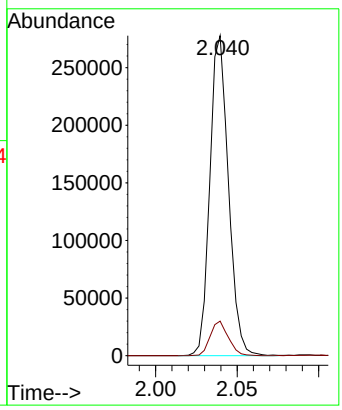


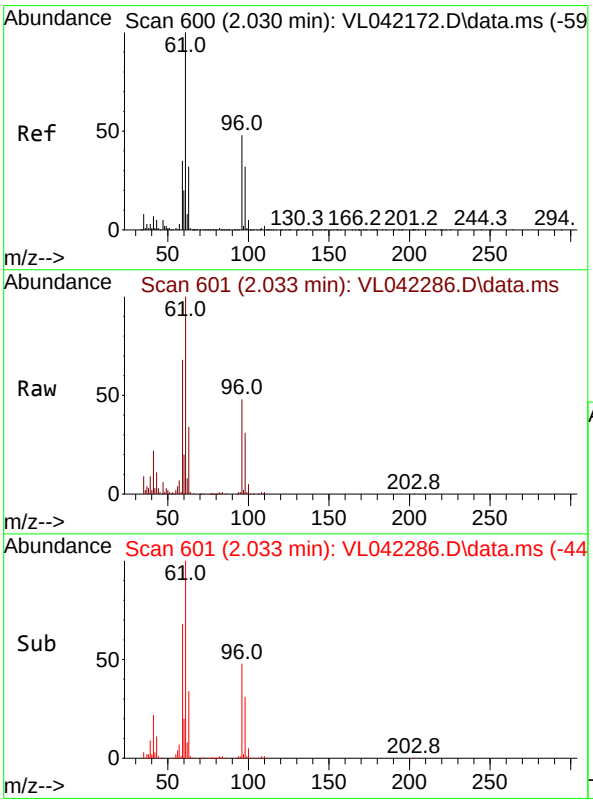
#17
tert-Butyl alcohol
Concen: 8.122 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 220187

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.9	13.3

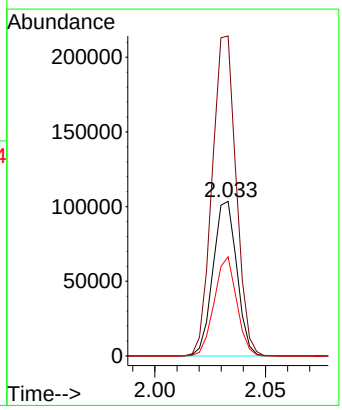


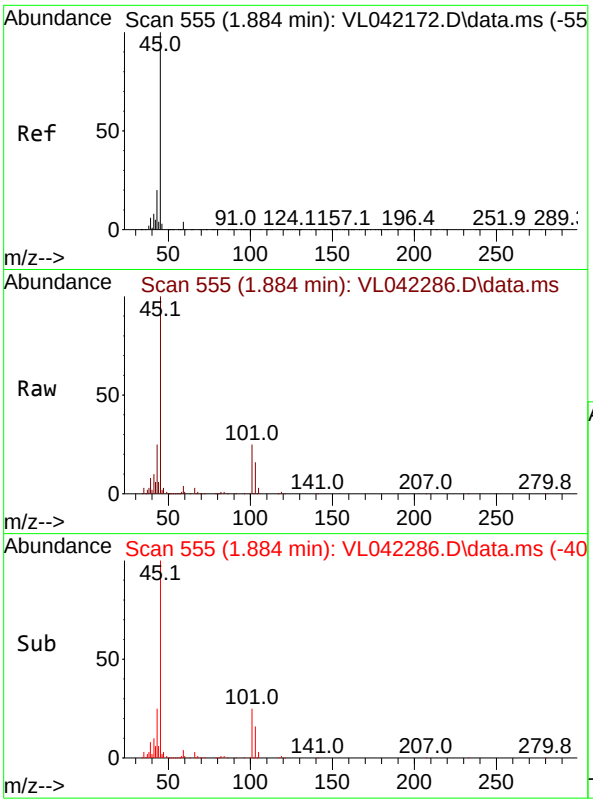


#18
1,1-Dichloroethene
Concen: 9.042 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 96 Resp: 77686

Ion	Ratio	Lower	Upper
96	100		
61	207.1	167.6	251.4
98	64.2	53.5	80.3



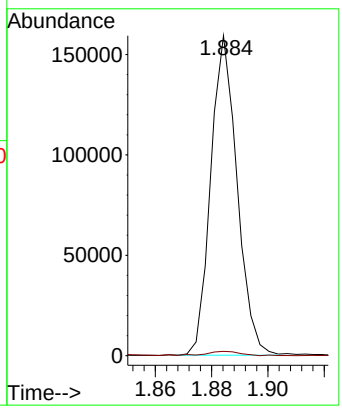


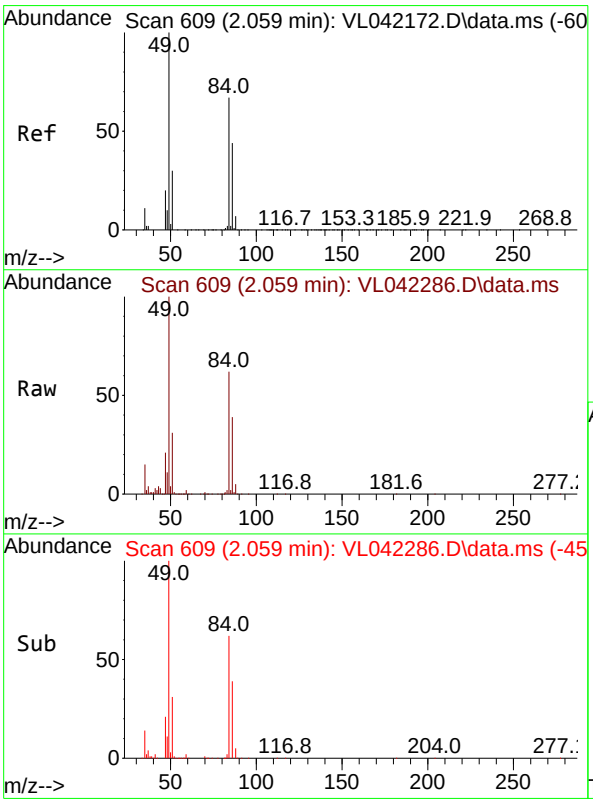
#19
Isopropyl Alcohol
Concen: 8.415 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 103348

Ion	Ratio	Lower	Upper
45	100		
58	50.7	36.9	55.3

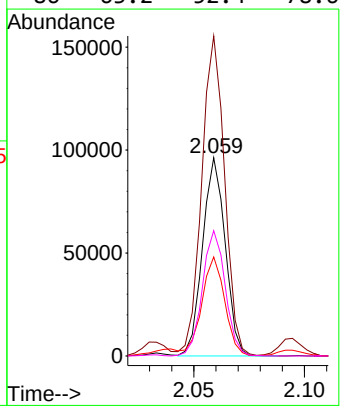


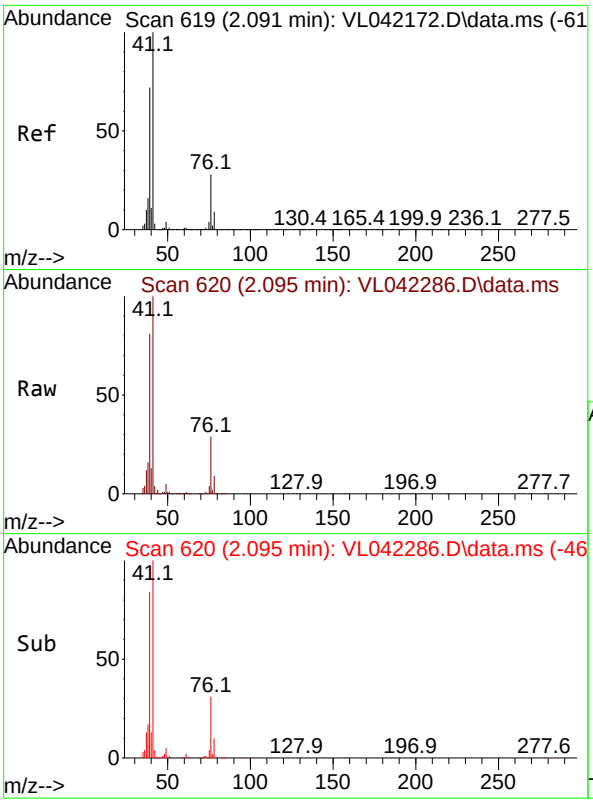


#20
Methylene Chloride
Concen: 8.461 ppbv
RT: 2.059 min Scan# 609
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 84 Resp: 68588

Ion	Ratio	Lower	Upper
84	100		
49	159.3	120.2	180.4
51	48.1	37.4	56.0
86	63.2	52.4	78.6



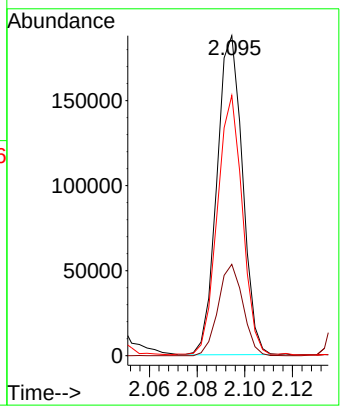


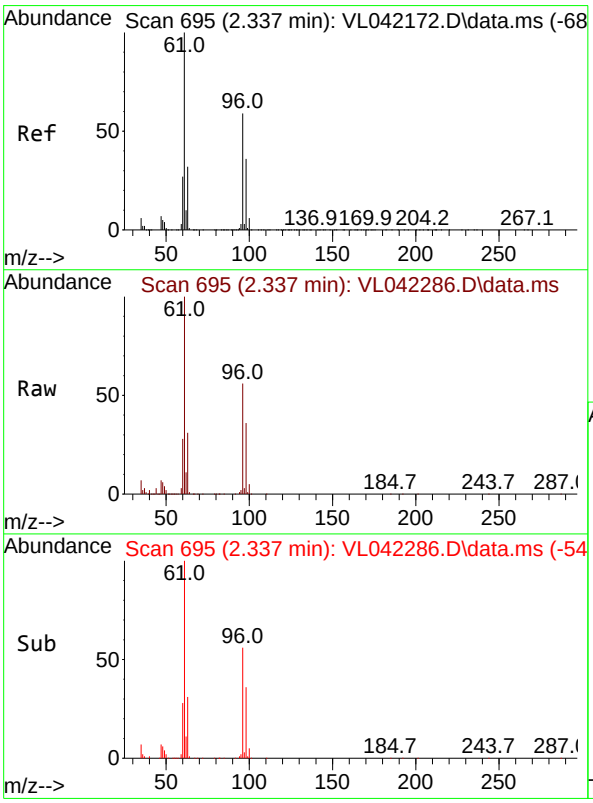
#21
Allyl Chloride
Concen: 9.118 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 139965

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	79.7	61.1	91.7

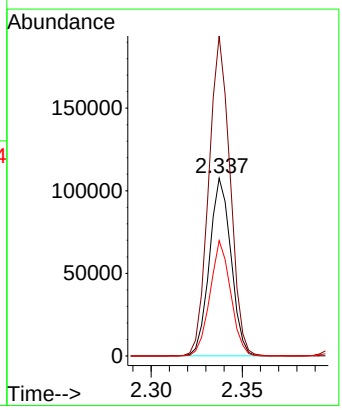


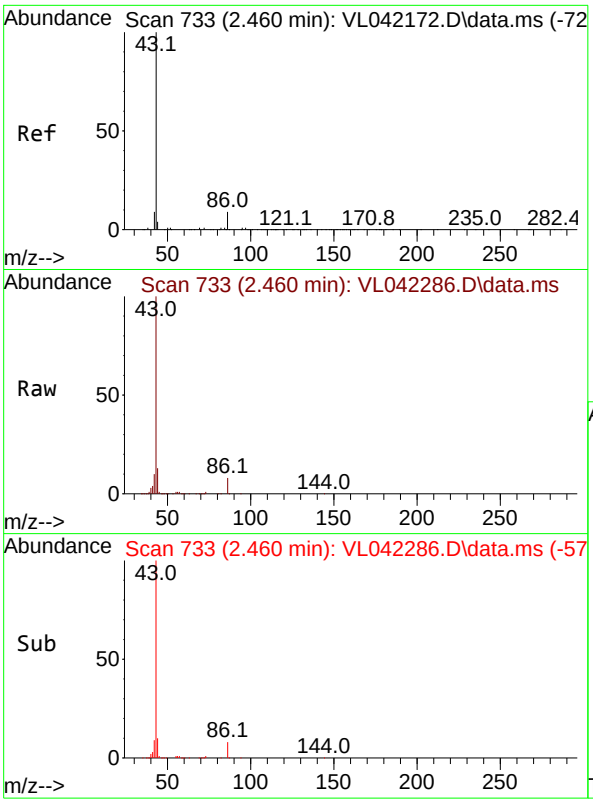


#22
trans-1,2-Dichloroethene
Concen: 8.896 ppbv
RT: 2.337 min Scan# 695
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 96 Resp: 88334

Ion	Ratio	Lower	Upper
96	100		
61	180.1	136.6	204.8
98	64.9	49.4	74.2



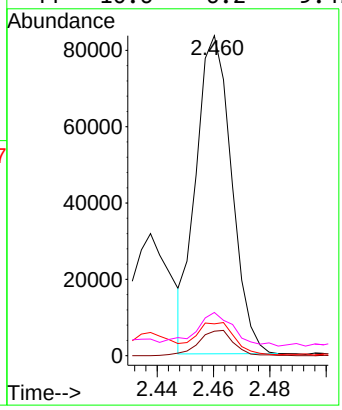


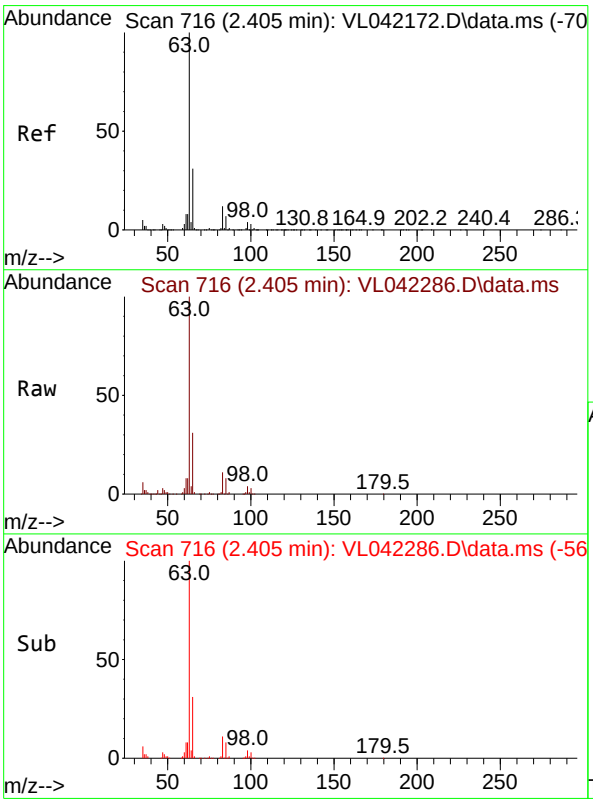
#23
Vinyl Acetate
Concen: 7.766 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 73162

Ion	Ratio	Lower	Upper
43	100		
86	7.6	5.5	8.3
42	9.7	8.6	13.0
44	10.6	6.2	9.4#

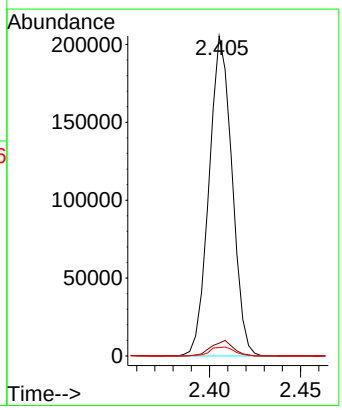


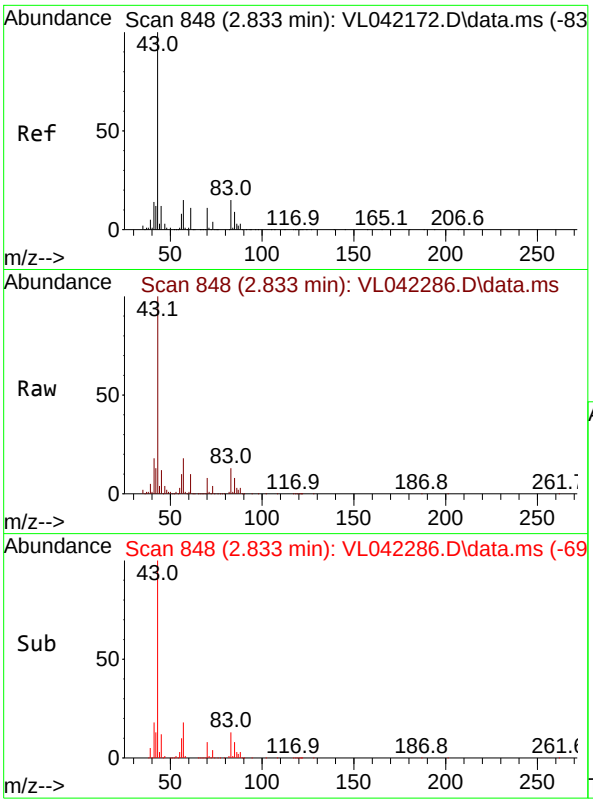


#24
1,1-Dichloroethane
Concen: 9.801 ppbv
RT: 2.405 min Scan# 716
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 63 Resp: 180404

Ion	Ratio	Lower	Upper
63	100		
98	4.0	2.3	6.8
100	2.6	1.6	4.7



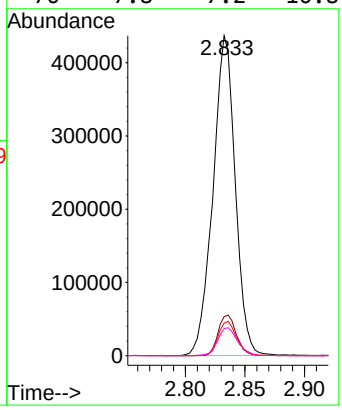


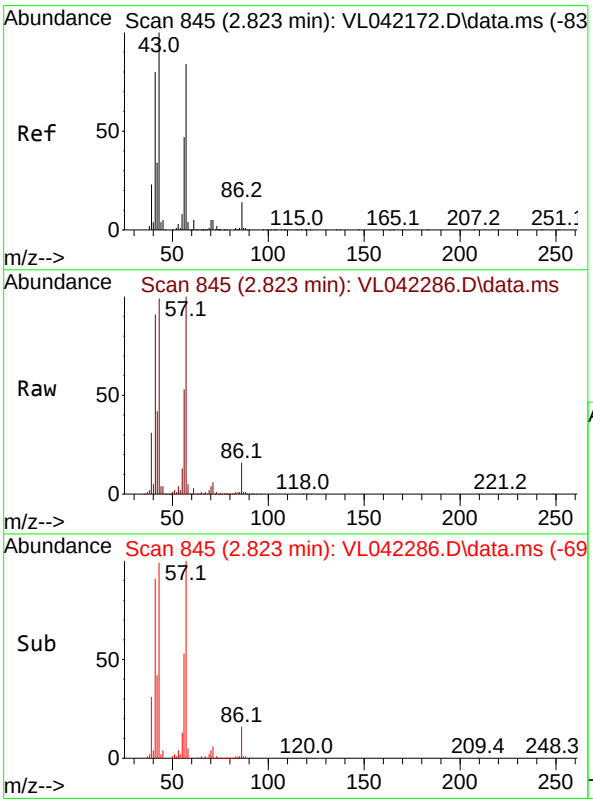
#25
Ethyl Acetate
Concen: 10.039 ppbv
RT: 2.833 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 567125

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	8.9	7.3	10.9
70	7.8	7.2	10.8

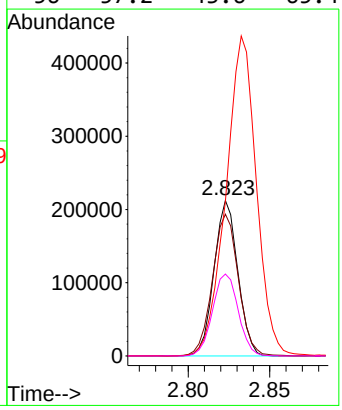


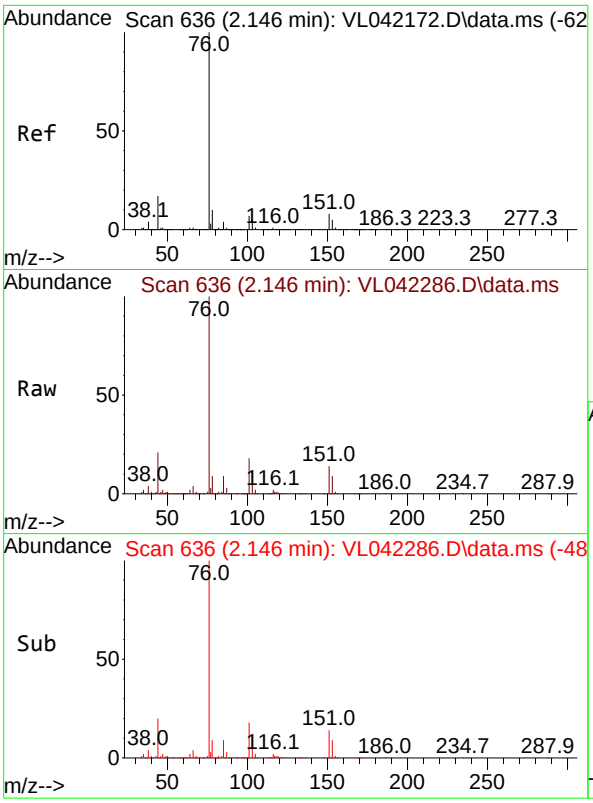


#26
Hexane
Concen: 9.848 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 57 Resp: 214891

Ion	Ratio	Lower	Upper
57	100		
41	99.1	76.6	114.8
43	264.9	207.8	311.8
56	57.2	43.6	65.4



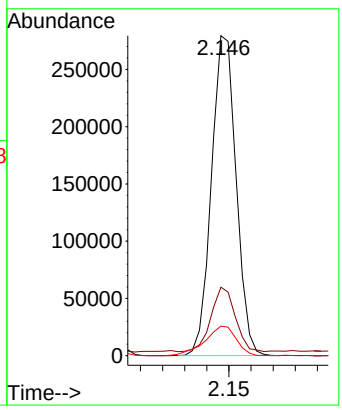


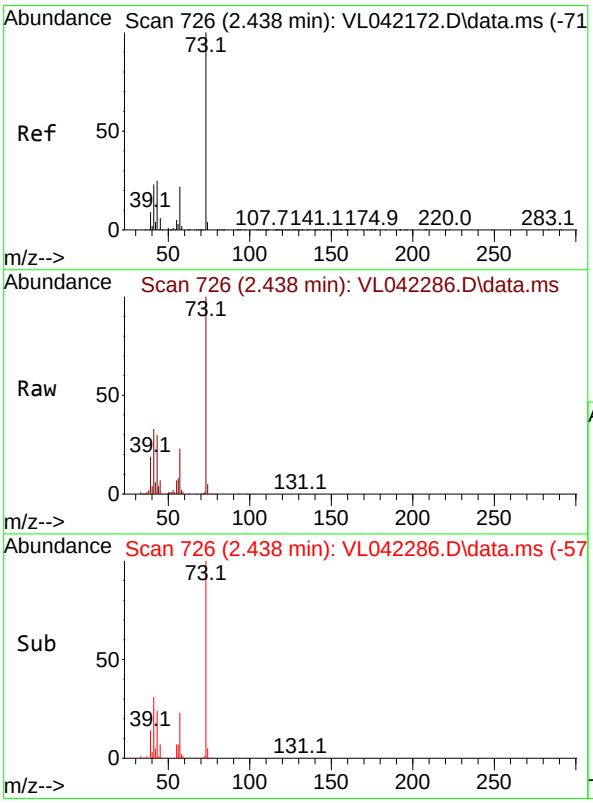
#27
Carbon Disulfide
Concen: 9.253 ppbv
RT: 2.146 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 216499

Ion	Ratio	Lower	Upper
76	100		
44	20.6	14.7	22.1
78	11.8	9.3	13.9

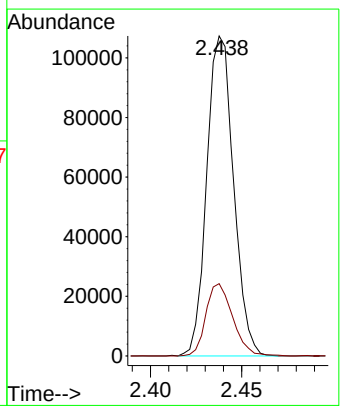


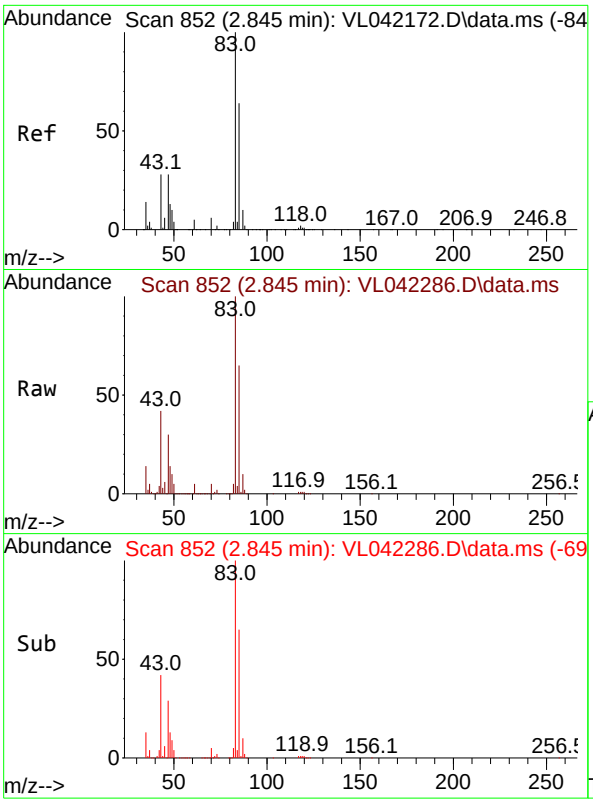


#28
Methyl tert-Butyl Ether
Concen: 8.077 ppbv
RT: 2.438 min Scan# 726
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 73 Resp: 109726

Ion	Ratio	Lower	Upper
73	100		
57	22.6	20.5	30.7



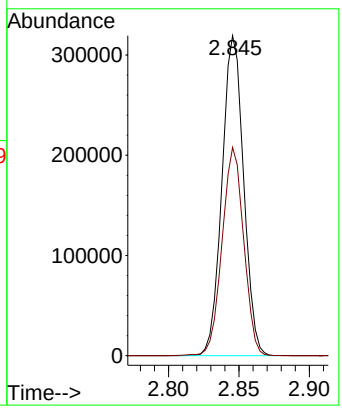


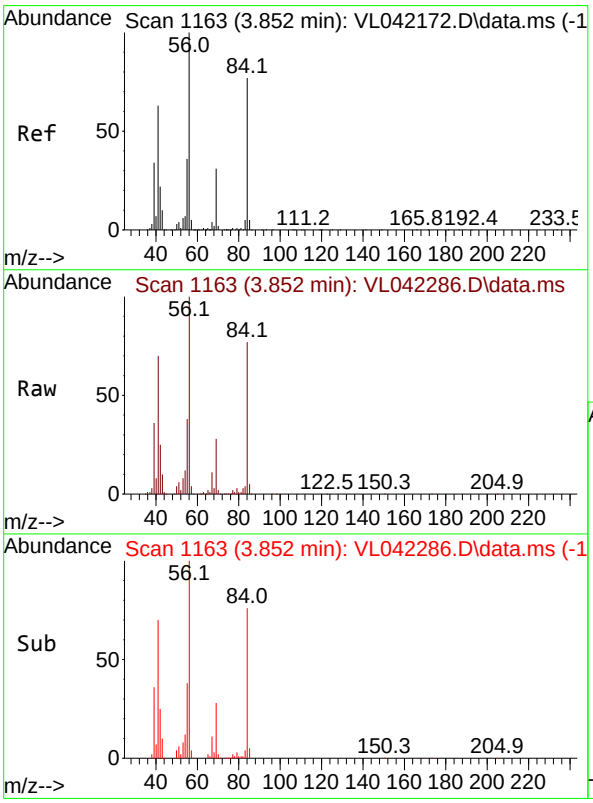
#29
Chloroform
Concen: 10.675 ppbv
RT: 2.845 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 340889

Ion	Ratio	Lower	Upper
83	100		
85	65.0	51.4	77.2

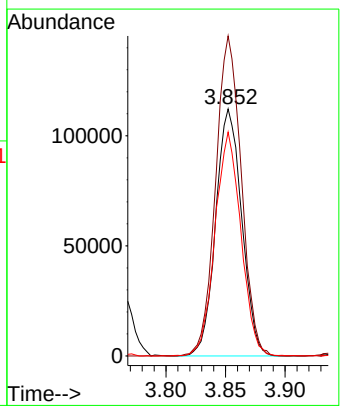


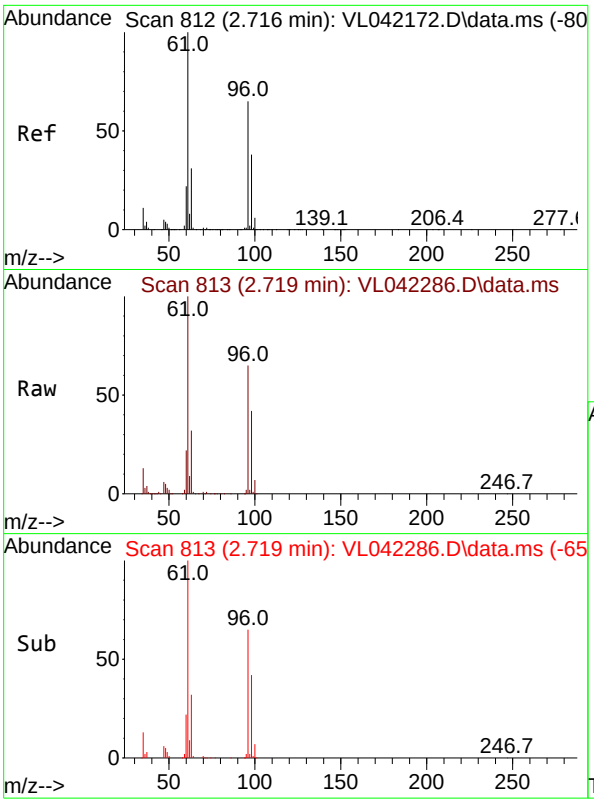


#30
Cyclohexane
Concen: 8.991 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 84 Resp: 170359

Ion	Ratio	Lower	Upper
84	100		
56	127.8	102.8	154.2
41	90.1	66.5	99.7



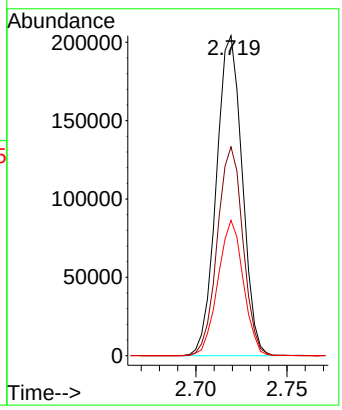


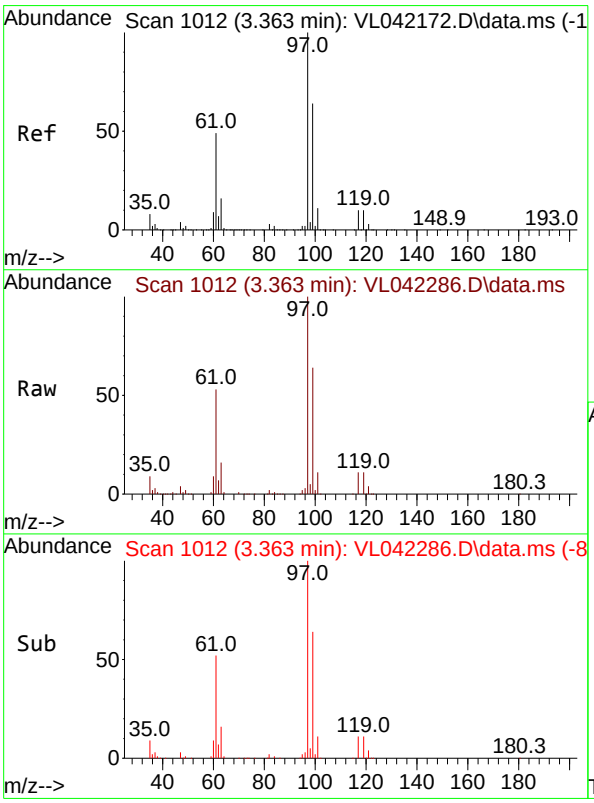
#31
cis-1,2-Dichloroethene
Concen: 9.110 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 201796

Ion	Ratio	Lower	Upper
61	100		
96	65.3	51.8	77.8
98	42.3	30.6	46.0

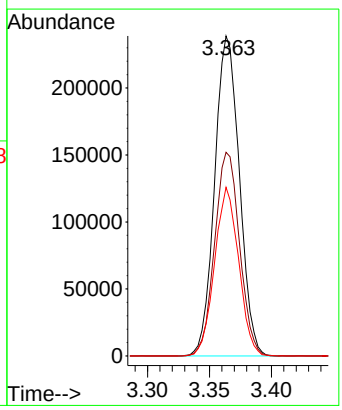


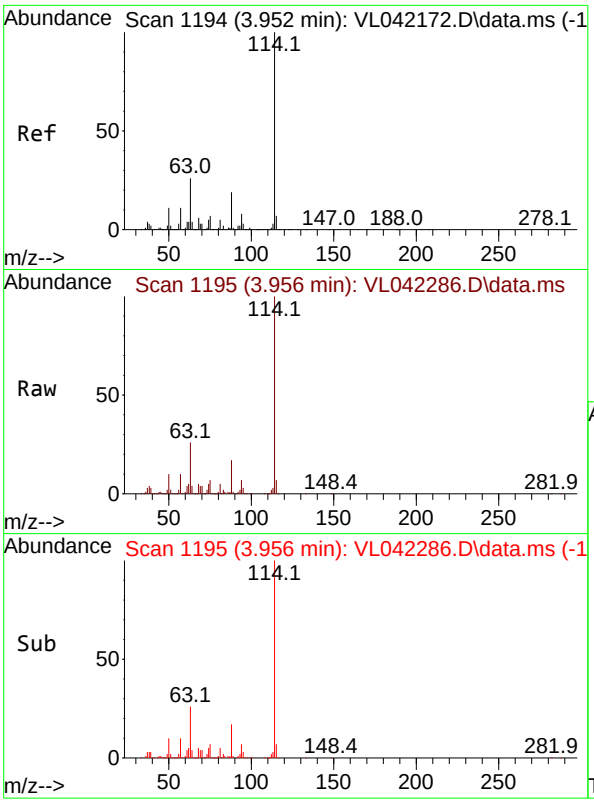


#32
1,1,1-Trichloroethane
Concen: 9.088 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 97 Resp: 332252

Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.5	77.3
61	51.3	38.7	58.1



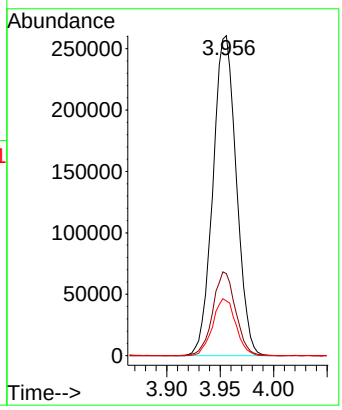


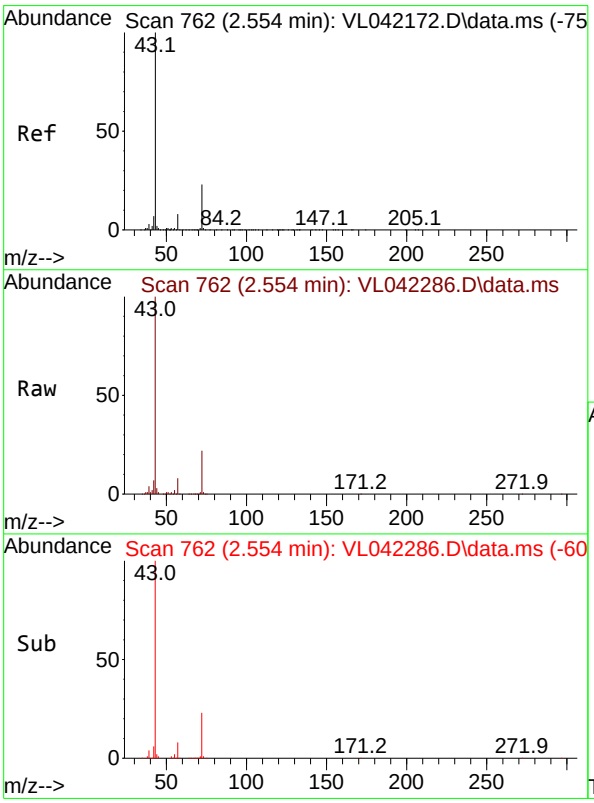
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 397176

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.6	15.0	22.4

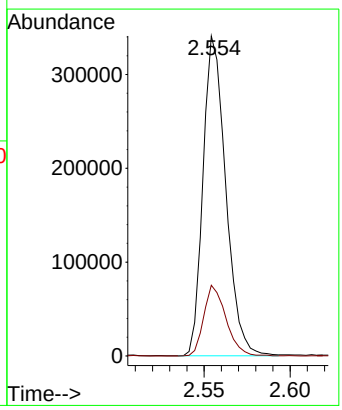


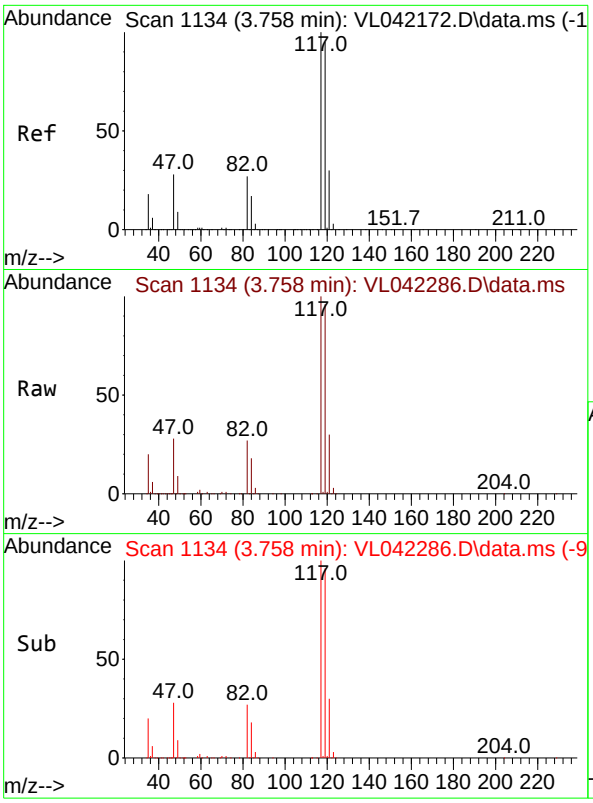


#34
2-Butanone
Concen: 10.886 ppbv
RT: 2.554 min Scan# 762
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 313515

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2



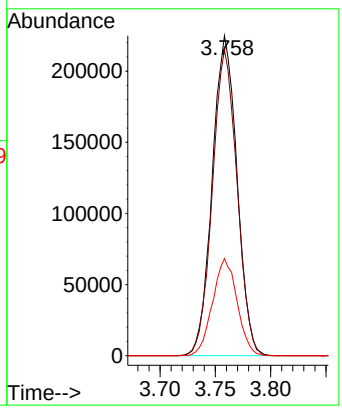


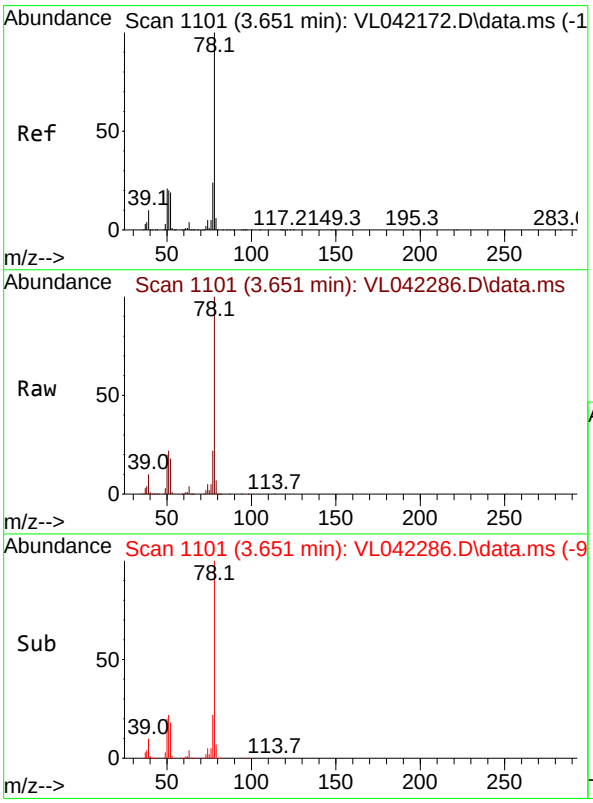
#35
Carbon Tetrachloride
Concen: 11.256 ppbv
RT: 3.758 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 349240

Ion	Ratio	Lower	Upper
117	100		
119	95.6	76.2	114.2
121	30.3	24.2	36.4

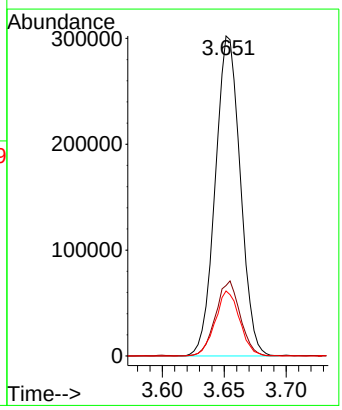


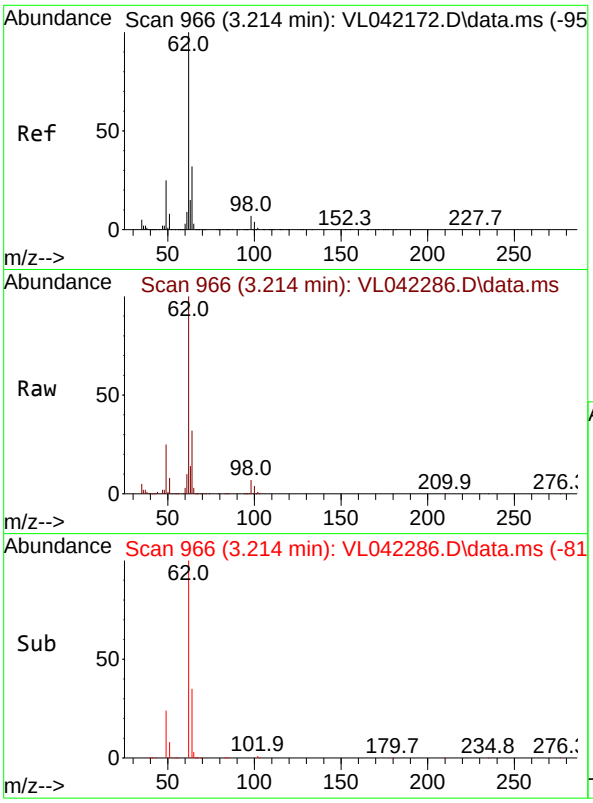


#36
Benzene
Concen: 10.802 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 78 Resp: 425324

Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	20.3	16.6	24.8



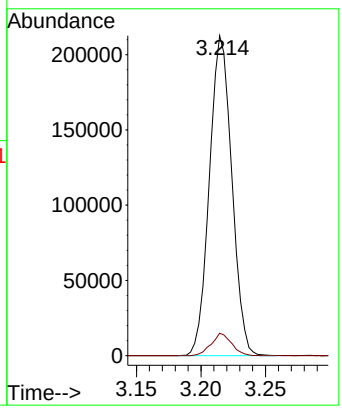


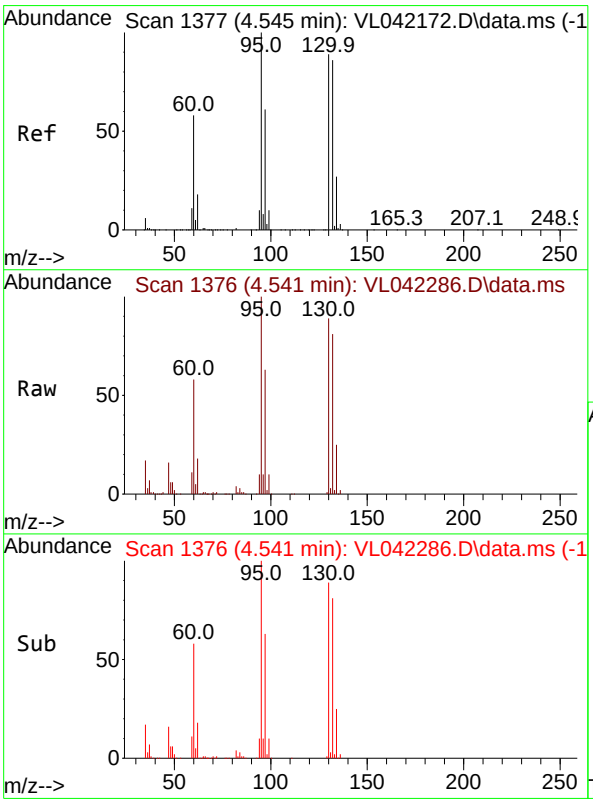
#37
1,2-Dichloroethane
Concen: 11.391 ppbv
RT: 3.214 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 256791

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.4	8.2

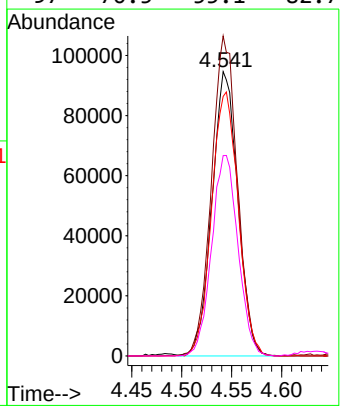


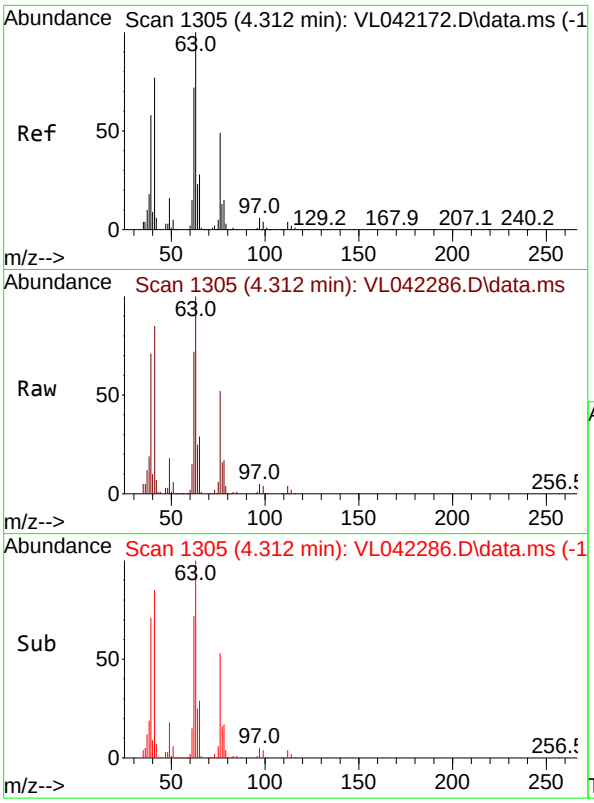


#38
Trichloroethene
Concen: 10.370 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:130 Resp: 170362

Ion	Ratio	Lower	Upper
130	100		
95	112.5	89.8	134.8
132	91.3	77.4	116.2
97	70.5	55.1	82.7



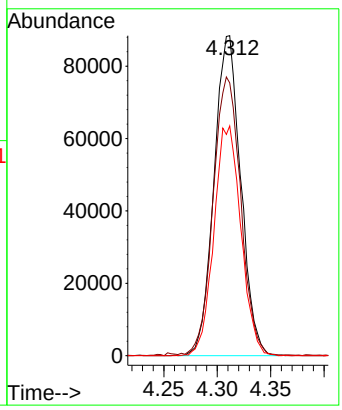


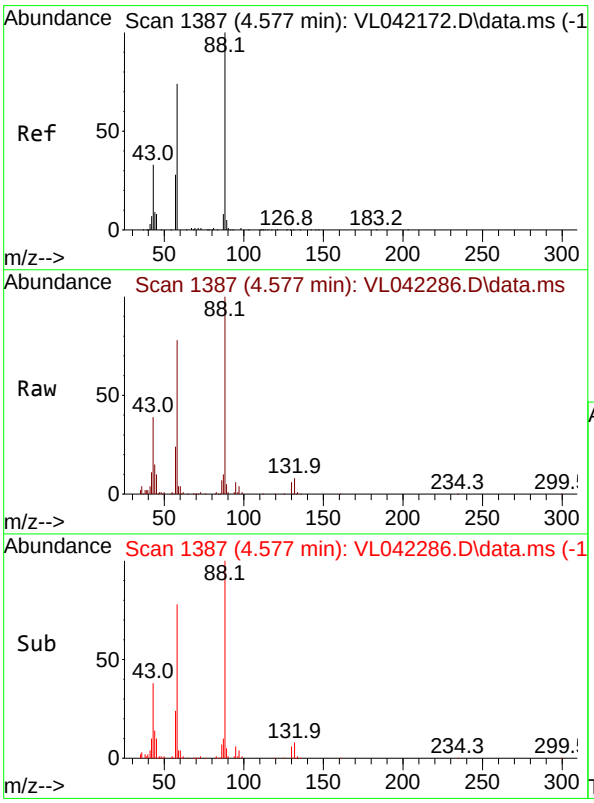
#39
1,2-Dichloropropane
Concen: 10.710 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 153583

Ion	Ratio	Lower	Upper
63	100		
41	85.0	61.7	92.5
62	71.8	57.6	86.4

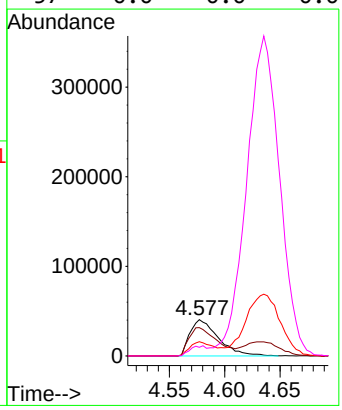


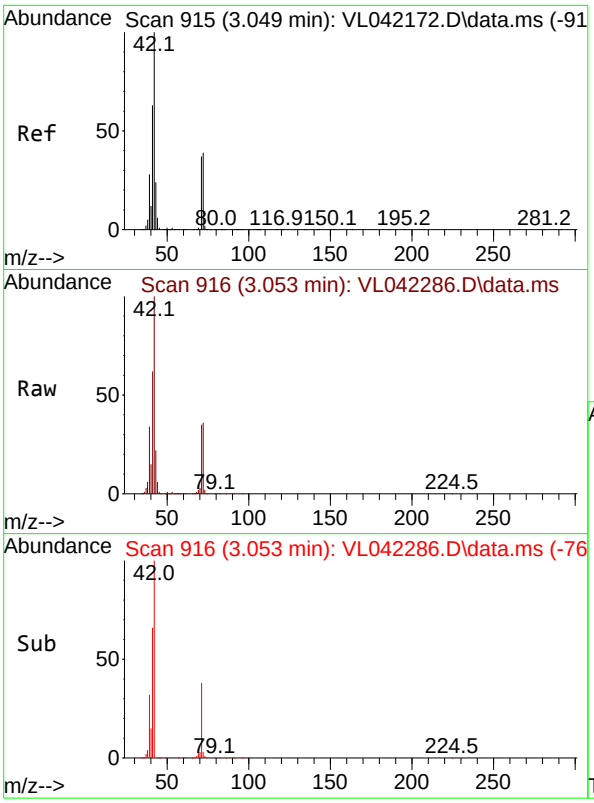


#40
1,4-Dioxane
Concen: 9.539 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 88 Resp: 72604

Ion	Ratio	Lower	Upper
88	100		
58	75.1	62.7	94.1
43	33.8	23.0	34.4
57	0.0	0.0	0.0



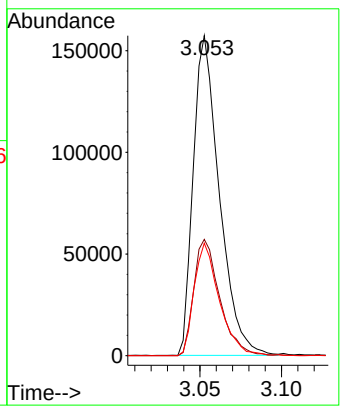


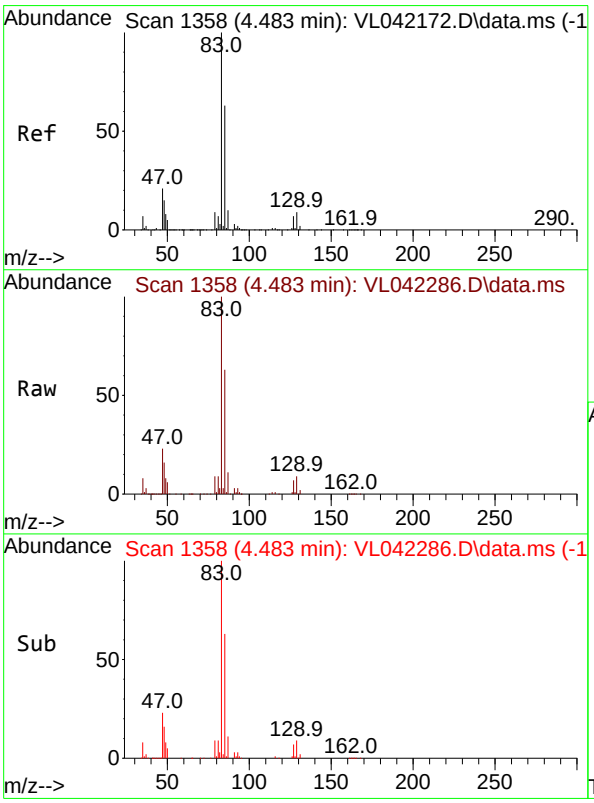
#41
Tetrahydrofuran
Concen: 10.556 ppbv
RT: 3.053 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 175060

Ion	Ratio	Lower	Upper
42	100		
72	36.2	31.4	47.0
71	34.2	30.2	45.4

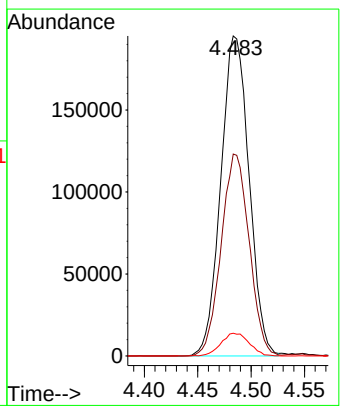


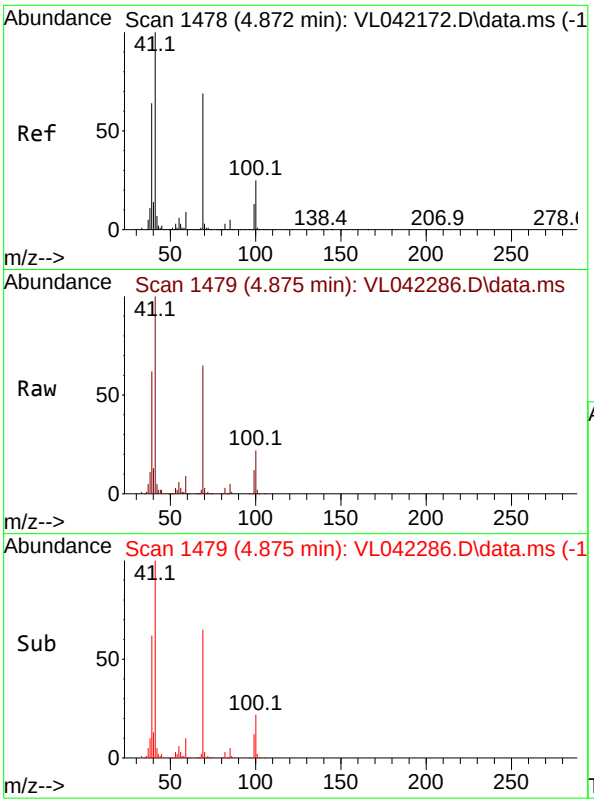


#42
Bromodichloromethane
Concen: 11.551 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 83 Resp: 358962

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.1	5.9	8.9



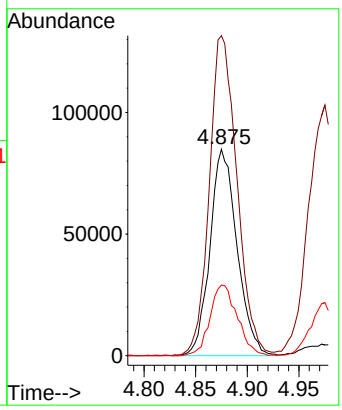


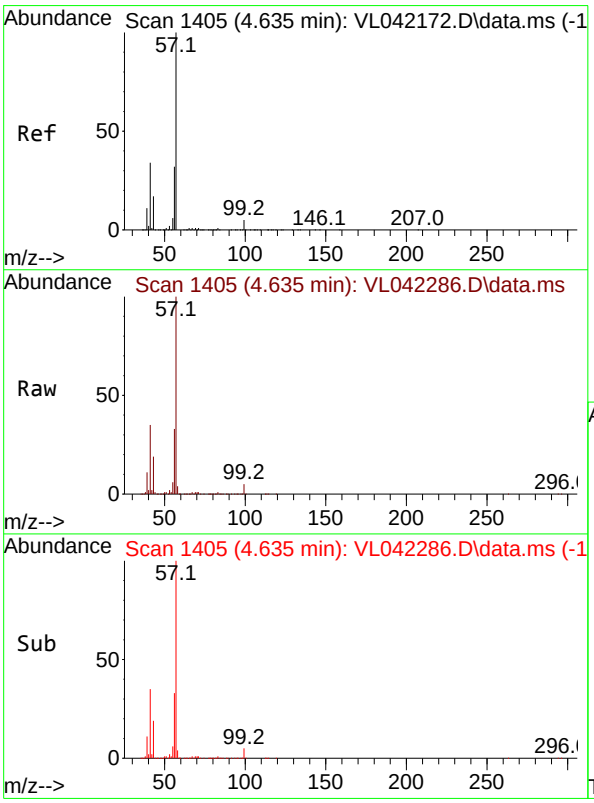
#43
Methyl Methacrylate
Concen: 9.297 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 154975

Ion	Ratio	Lower	Upper
69	100		
41	158.4	123.8	185.6
100	34.5	28.4	42.6

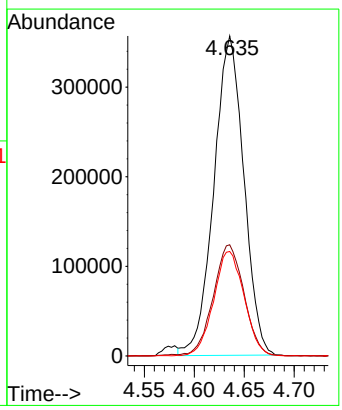


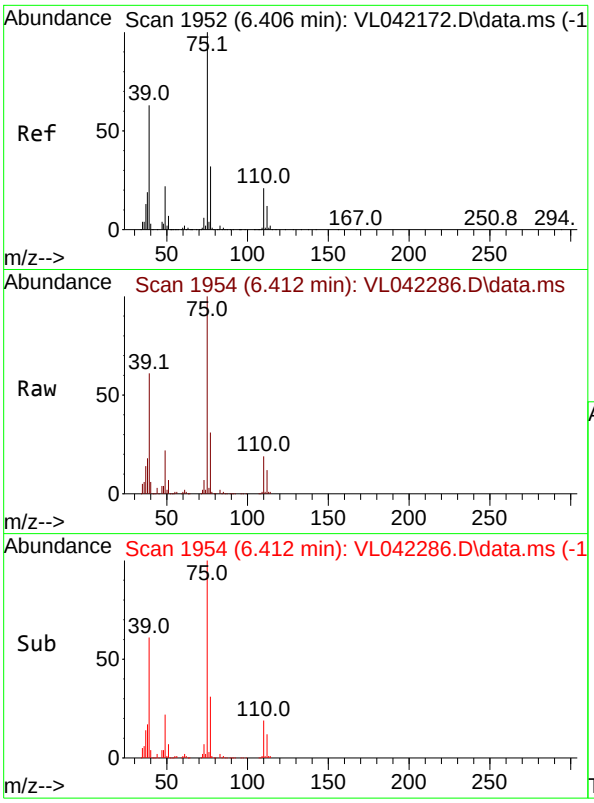


#44
2,2,4-Trimethylpentane
Concen: 11.157 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 57 Resp: 742388

Ion	Ratio	Lower	Upper
57	100		
41	36.2	26.8	40.2
56	33.5	25.6	38.4



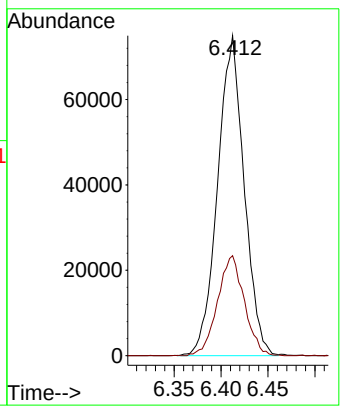


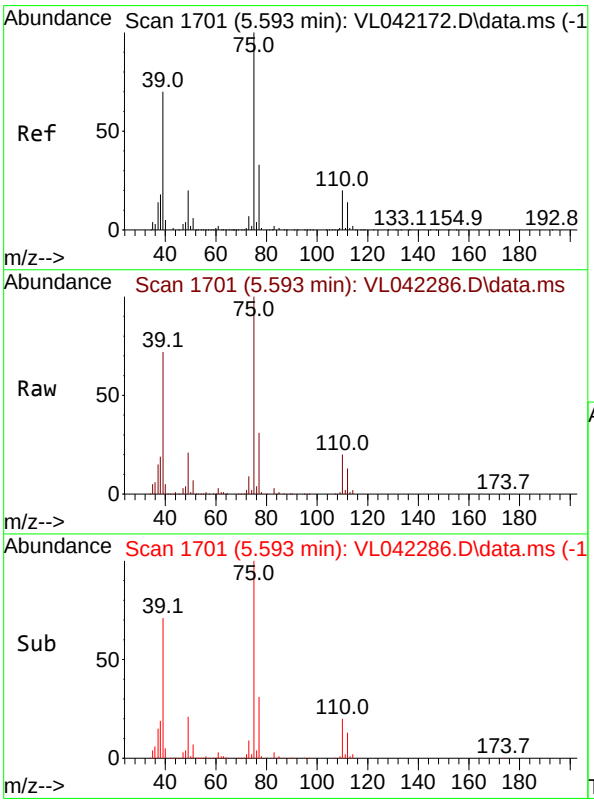
#45
t-1,3-Dichloropropene
Concen: 8.231 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 147204

Ion	Ratio	Lower	Upper
75	100		
77	31.2	26.0	39.0

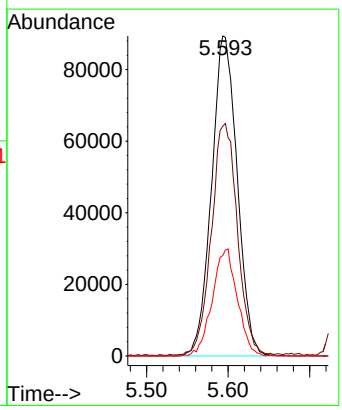


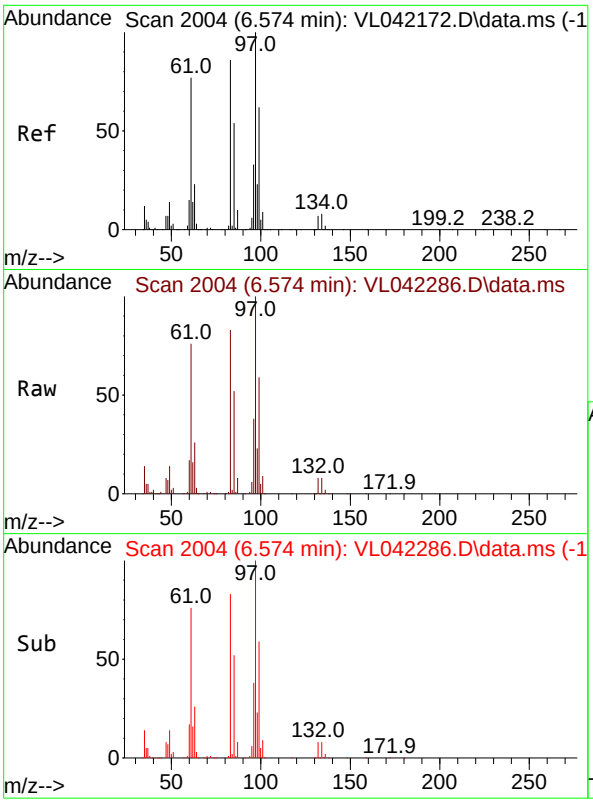


#46
cis-1,3-Dichloropropene
Concen: 8.932 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 75 Resp: 195802

Ion	Ratio	Lower	Upper
75	100		
39	71.5	55.8	83.6
77	31.4	26.0	39.0



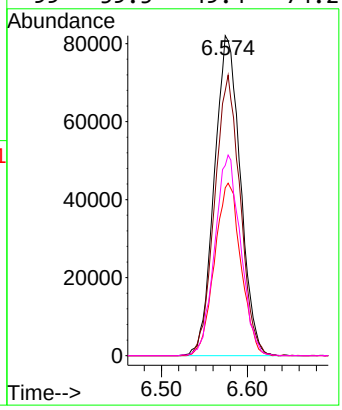


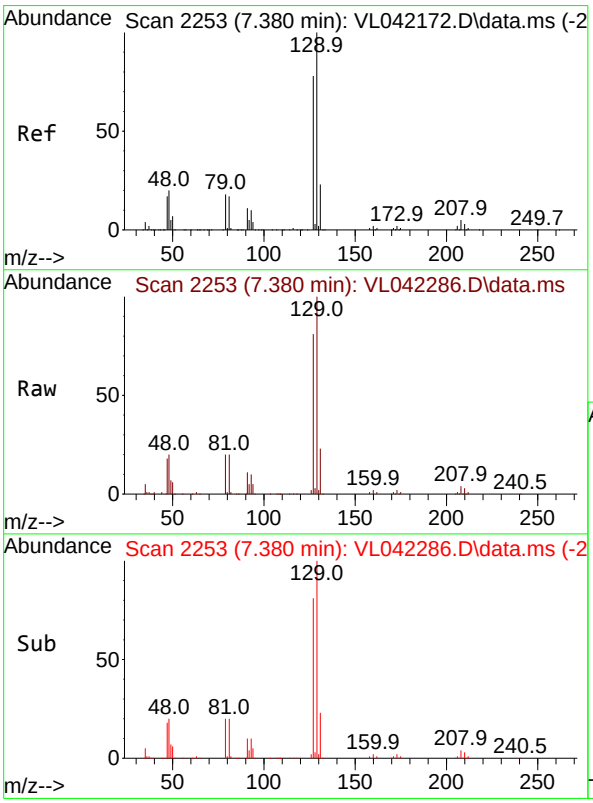
#47
1,1,2-Trichloroethane
Concen: 11.369 ppbv
RT: 6.574 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 172343

Ion	Ratio	Lower	Upper
97	100		
83	82.8	69.2	103.8
85	52.5	43.1	64.7
99	59.5	49.4	74.2

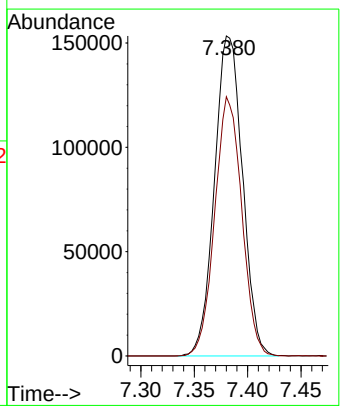


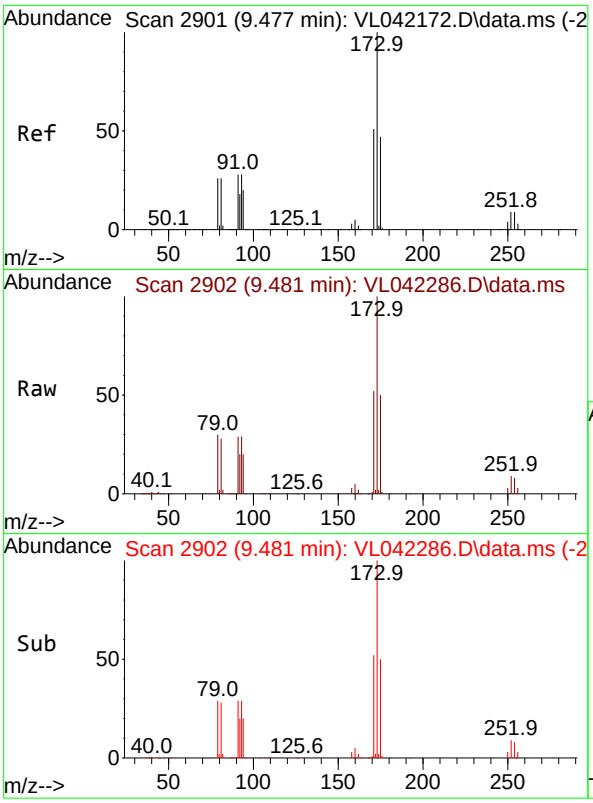


#48
Dibromochloromethane
Concen: 10.907 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:129 Resp: 280199

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.2



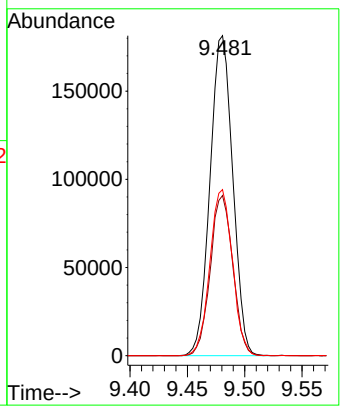


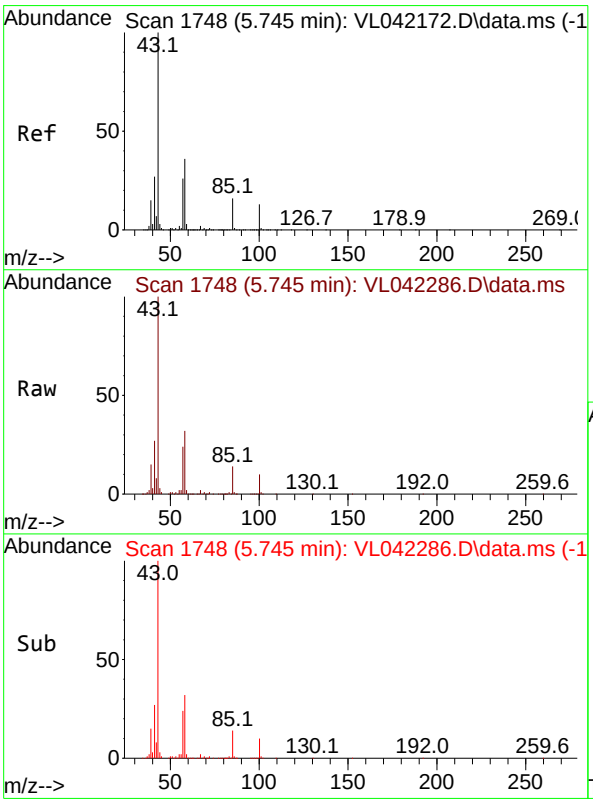
#49
Bromoform
Concen: 10.849 ppbv
RT: 9.481 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 250227

Ion	Ratio	Lower	Upper
173	100		
175	49.5	38.6	57.8
171	51.5	41.8	62.6

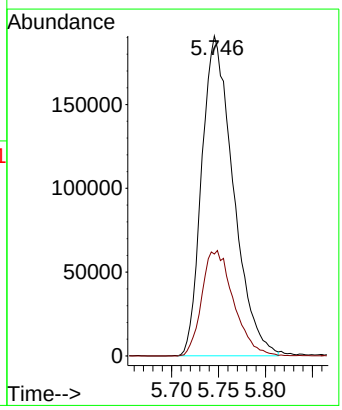


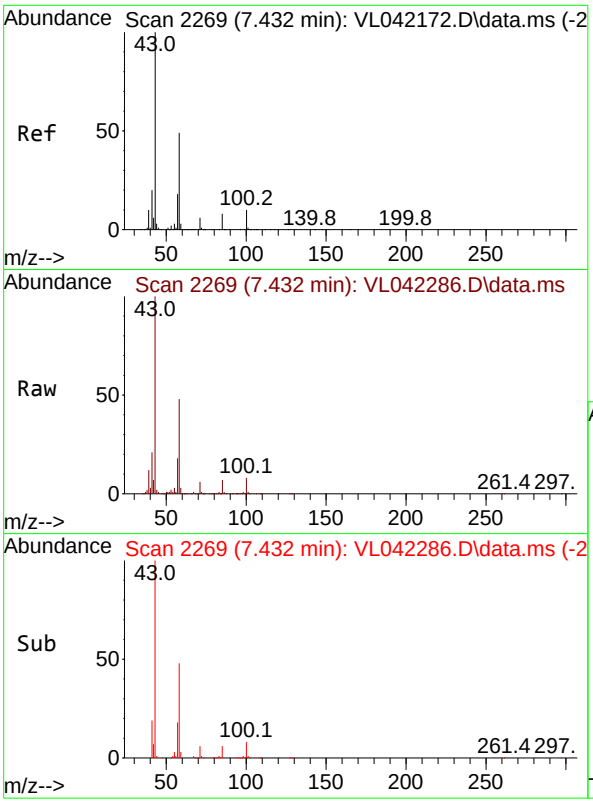


#50
4-Methyl-2-Pentanone
Concen: 9.760 ppbv
RT: 5.745 min Scan# 1748
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 43 Resp: 445454

Ion	Ratio	Lower	Upper
43	100		
58	33.4	29.0	43.6



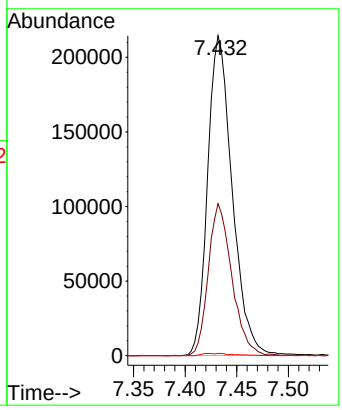


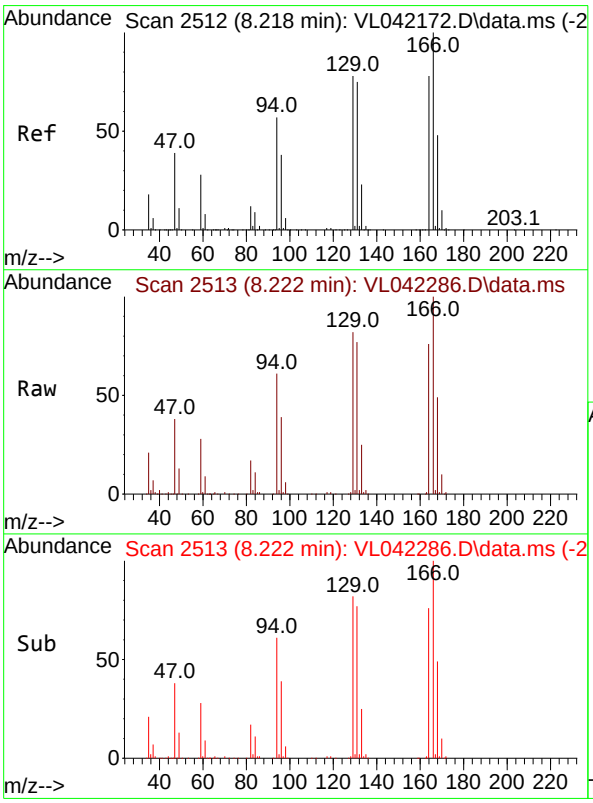
#51
2-Hexanone
Concen: 9.437 ppbv
RT: 7.432 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 353706

Ion	Ratio	Lower	Upper
43	100		
58	45.8	39.7	59.5
98	0.9	0.1	0.1#

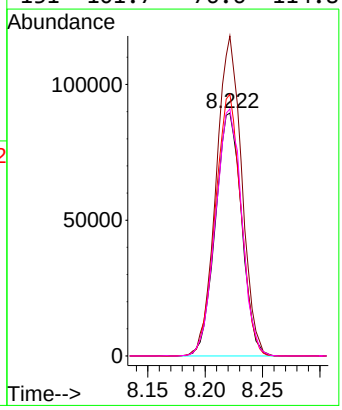


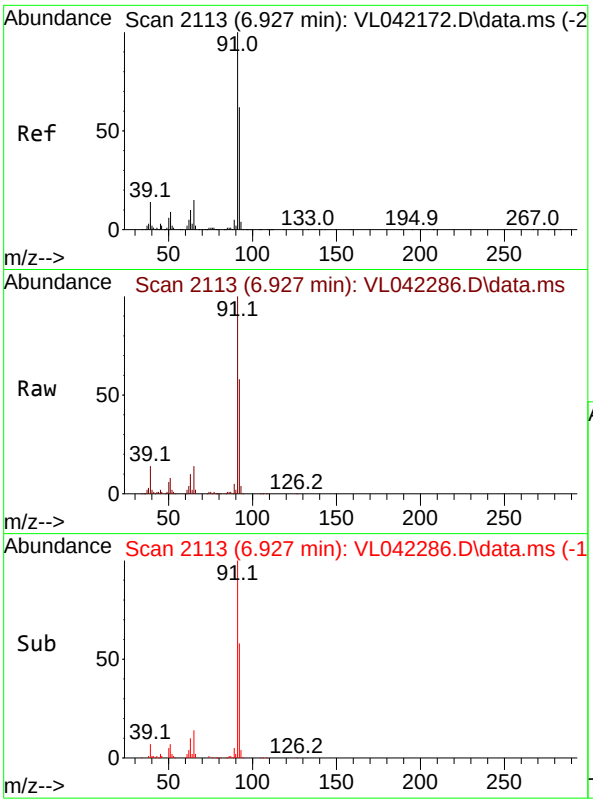


#52
Tetrachloroethene
Concen: 9.092 ppbv
RT: 8.222 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:164 Resp: 141976

Ion	Ratio	Lower	Upper
164	100		
166	131.7	102.5	153.7
129	107.7	79.8	119.8
131	101.7	76.6	114.8



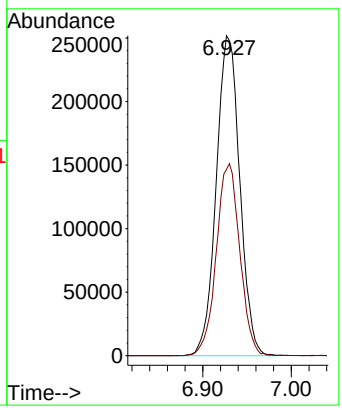


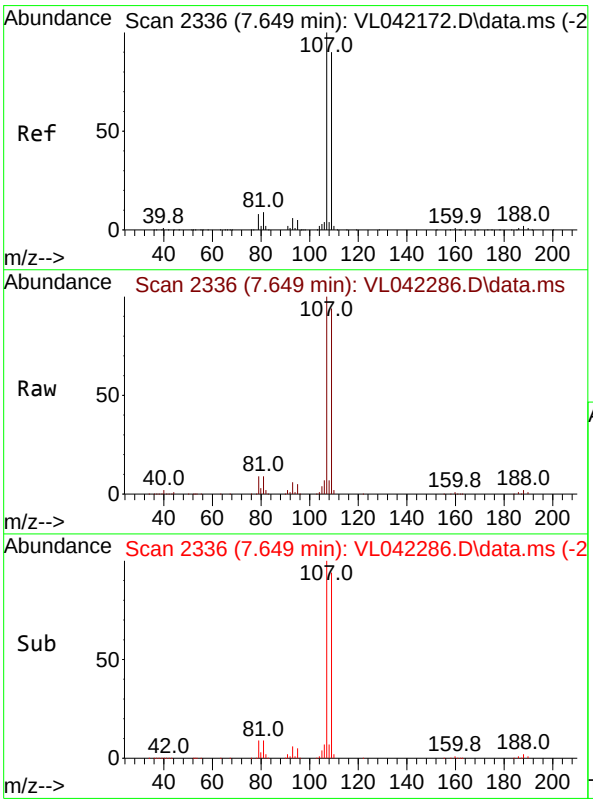
#53
Toluene
Concen: 9.961 ppbv
RT: 6.927 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 464948

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.4	72.6

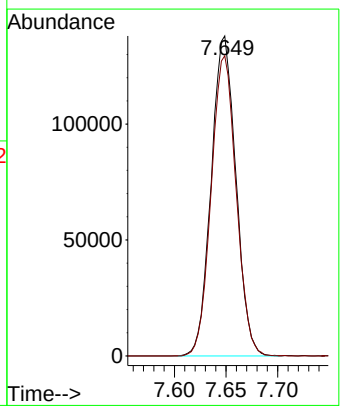


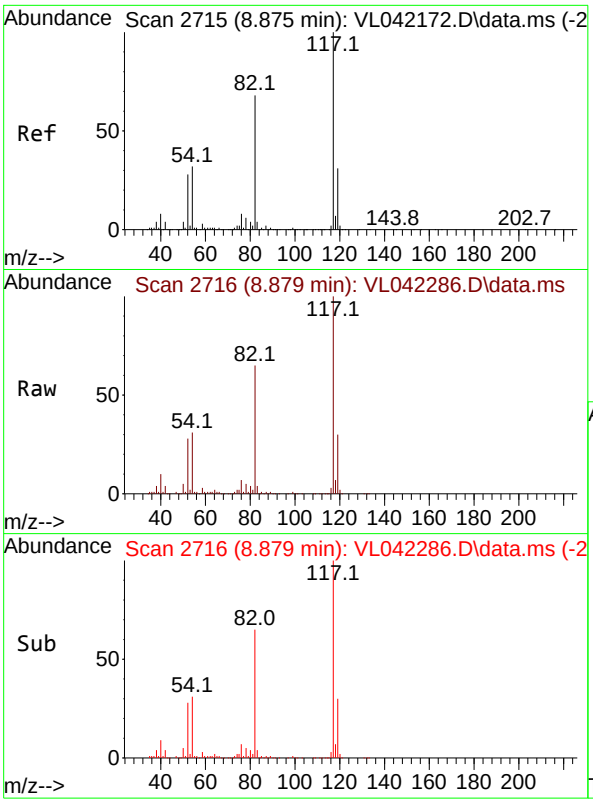


#54
1,2-Dibromoethane
Concen: 10.871 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:107 Resp: 229720

Ion	Ratio	Lower	Upper
107	100		
109	93.8	72.2	108.4



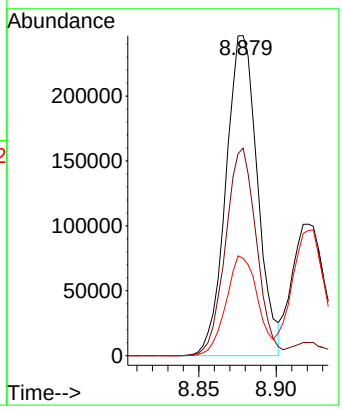


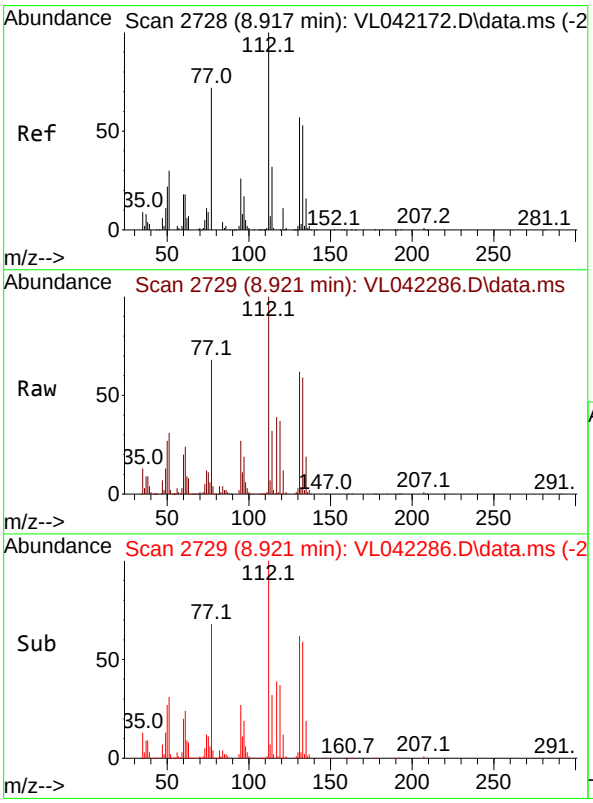
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 350140

Ion	Ratio	Lower	Upper
117	100		
82	67.4	55.8	83.6
119	31.2	25.5	38.3

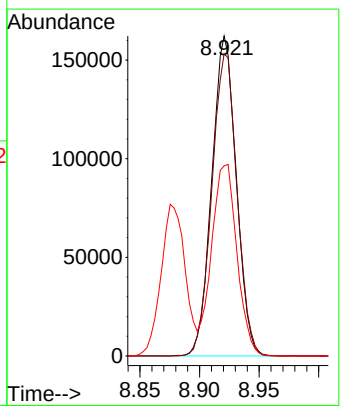


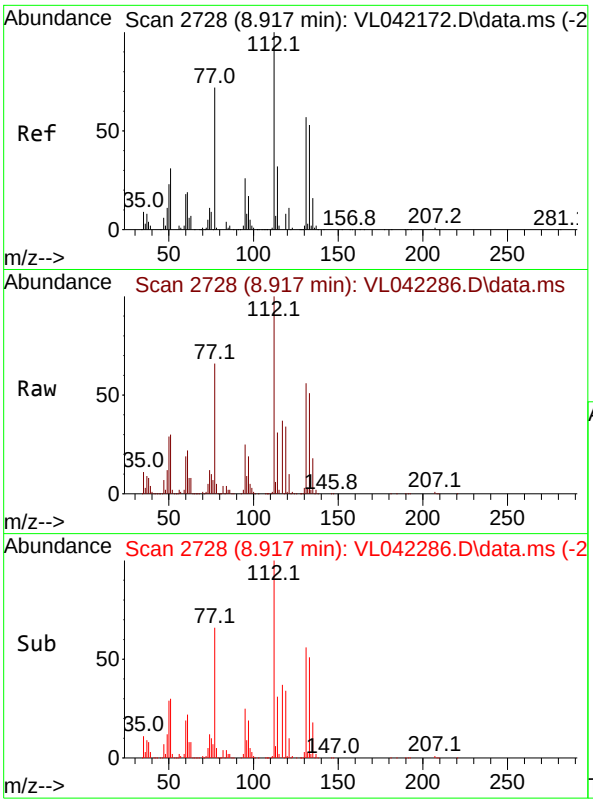


#56
1,1,1,2-Tetrachloroethane
Concen: 11.987 ppbv
RT: 8.921 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:131 Resp: 231041

Ion	Ratio	Lower	Upper
131	100		
133	97.4	76.6	114.8
119	63.2	49.8	74.6



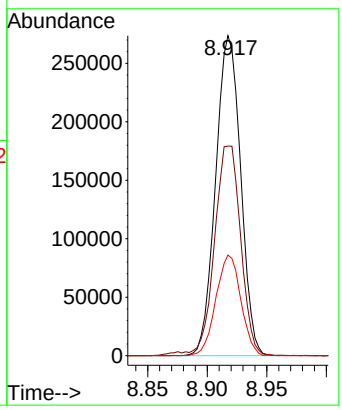


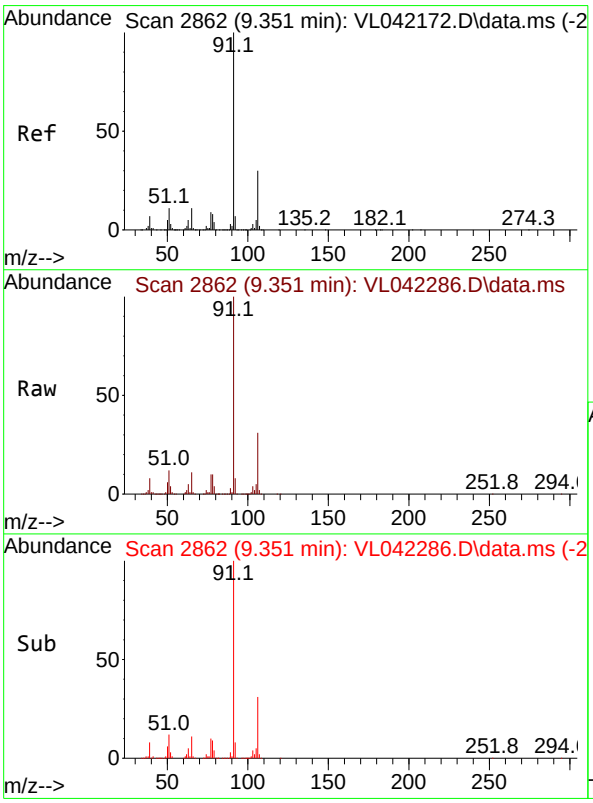
#57
Chlorobenzene
Concen: 12.021 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 399227

Ion	Ratio	Lower	Upper
112	100		
77	65.3	58.2	87.2
114	31.4	29.1	35.5

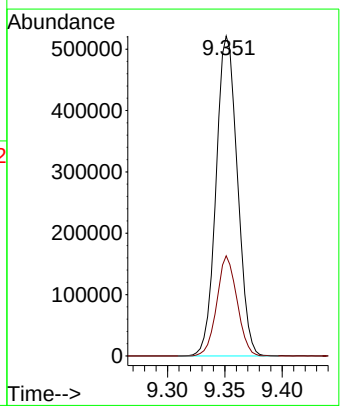


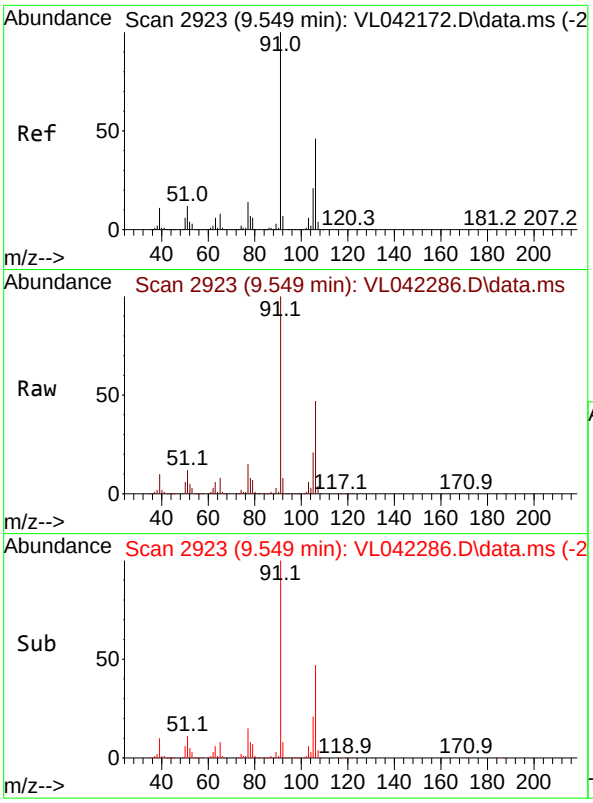


#58
Ethyl Benzene
Concen: 10.834 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 673801

Ion	Ratio	Lower	Upper
91	100		
106	31.3	24.2	36.2



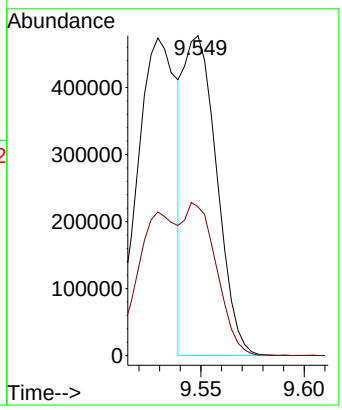


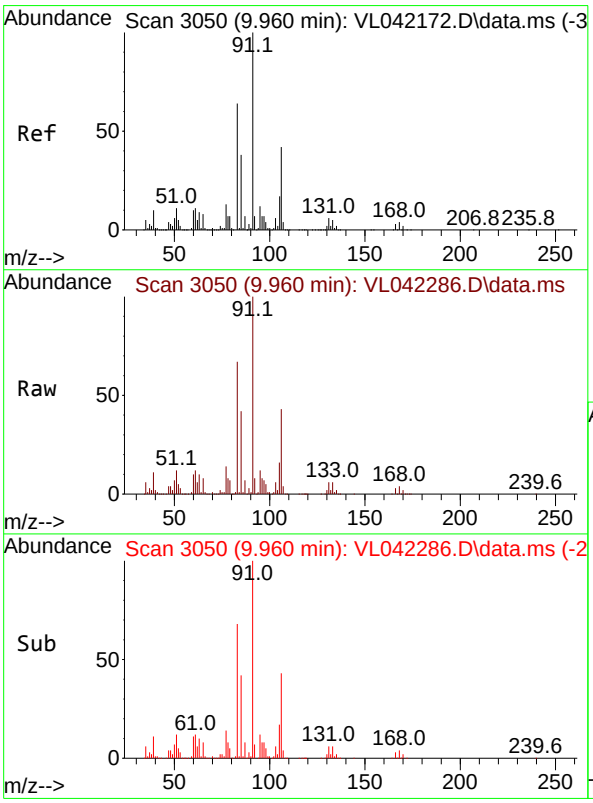
#59
m/p-Xylene
Concen: 10.667 ppbv
RT: 9.549 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 529747

Ion	Ratio	Lower	Upper
91	100		
106	101.9	36.4	54.6#

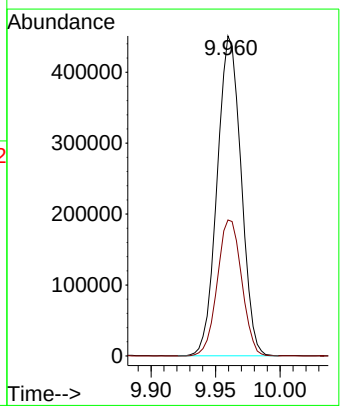


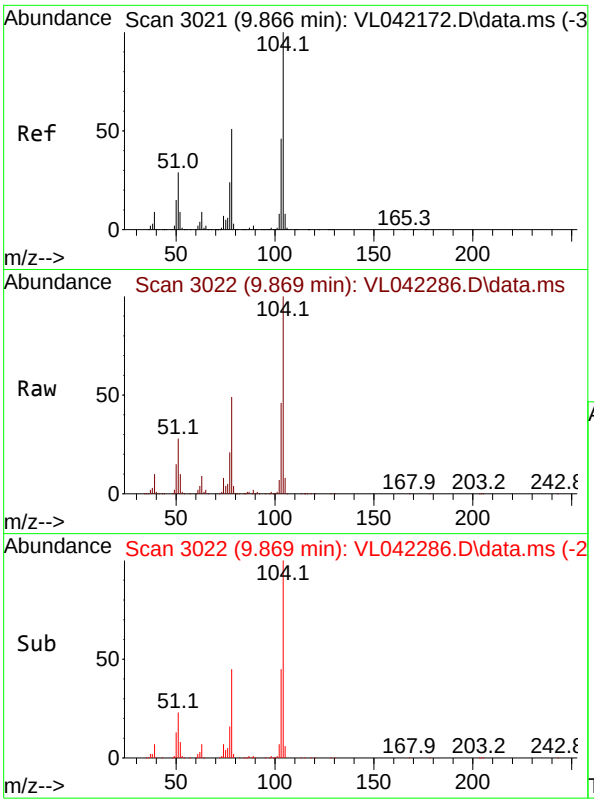


#60
o-Xylene
Concen: 11.671 ppbv
RT: 9.960 min Scan# 3050
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 581045

Ion	Ratio	Lower	Upper
91	100		
106	43.4	20.8	62.5



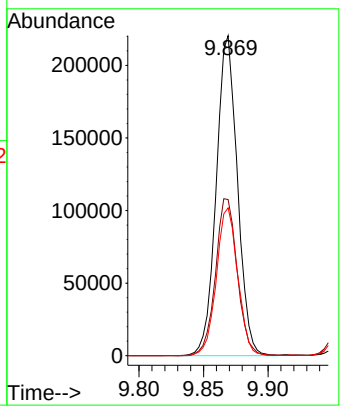


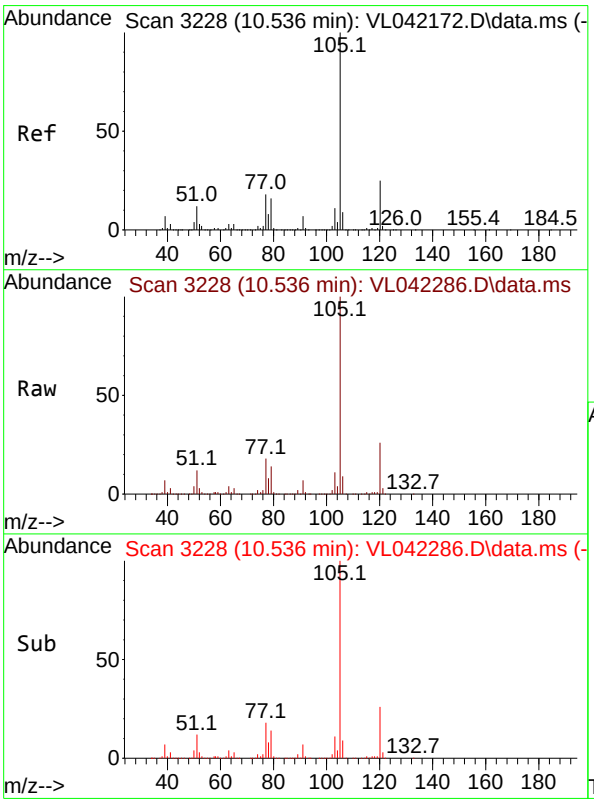
#61
Styrene
Concen: 10.212 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 251525

Ion	Ratio	Lower	Upper
104	100		
78	50.4	41.8	62.6
103	46.7	37.0	55.4

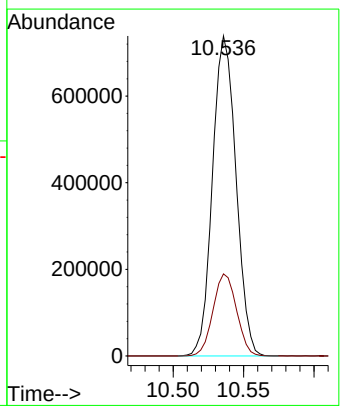


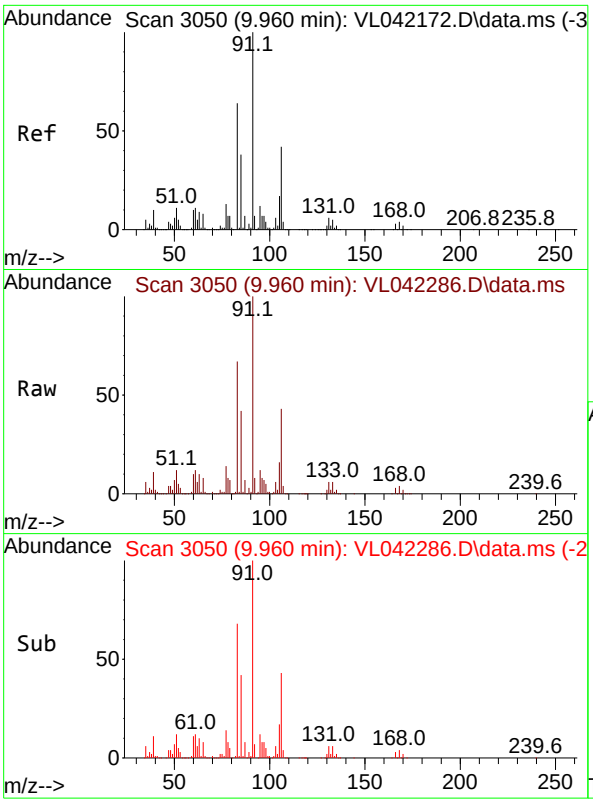


#62
Isopropylbenzene
Concen: 11.538 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 859013

Ion	Ratio	Lower	Upper
105	100		
120	25.6	19.9	29.9



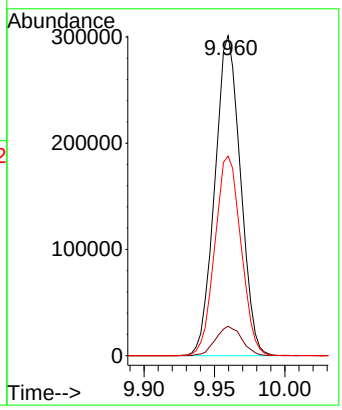


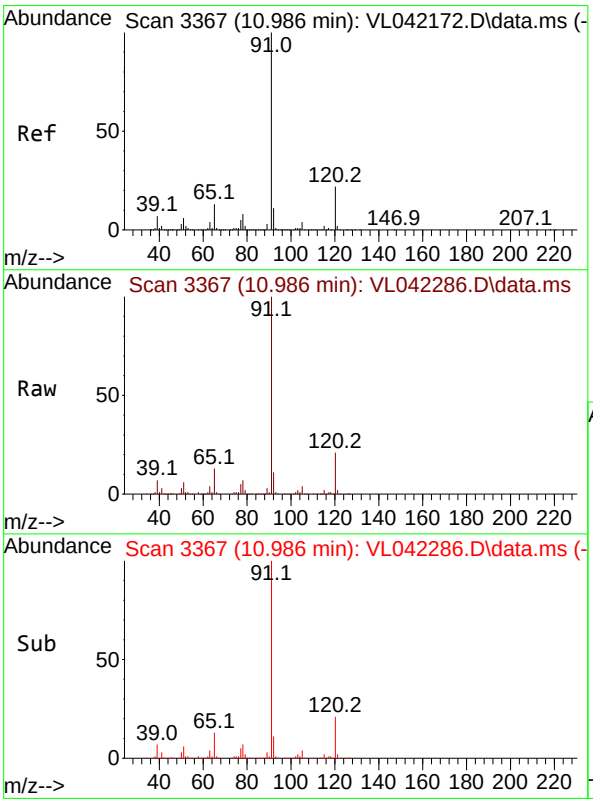
#63
1,1,2,2-Tetrachloroethane
Concen: 12.623 ppbv
RT: 9.960 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 381841

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	63.7	32.5	97.5

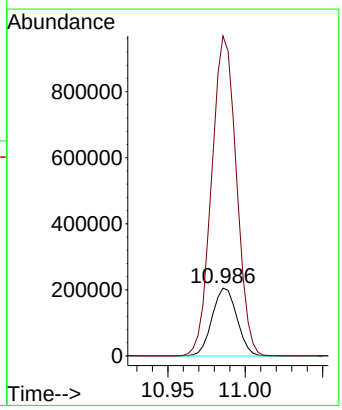


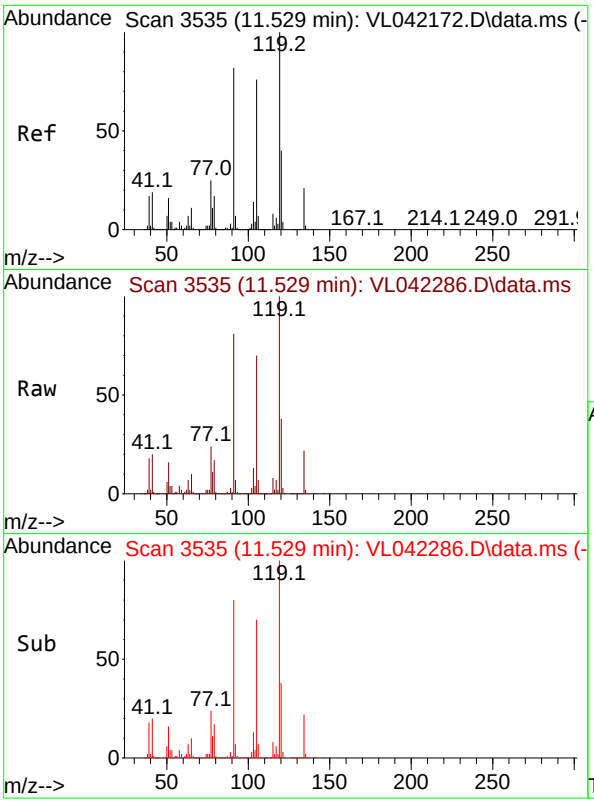


#64
n-propylbenzene
Concen: 11.925 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:120 Resp: 228532

Ion	Ratio	Lower	Upper
120	100		
91	472.2	376.9	565.3



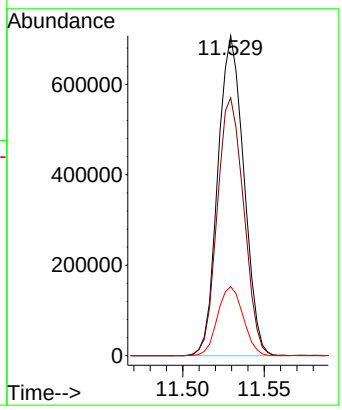


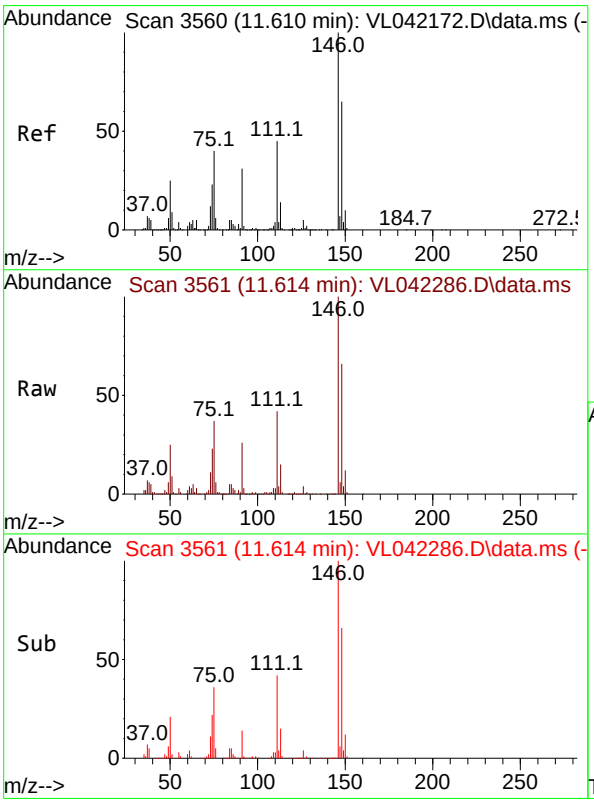
#65
tert-Butylbenzene
Concen: 11.393 ppbv
RT: 11.529 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 784483

Ion	Ratio	Lower	Upper
119	100		
91	82.1	66.0	99.0
134	21.2	16.7	25.1

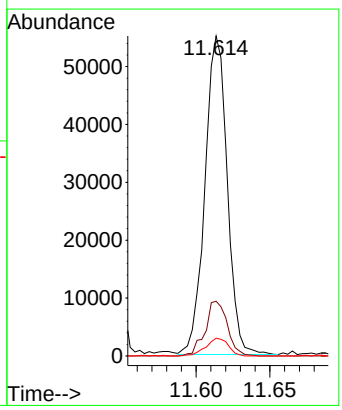


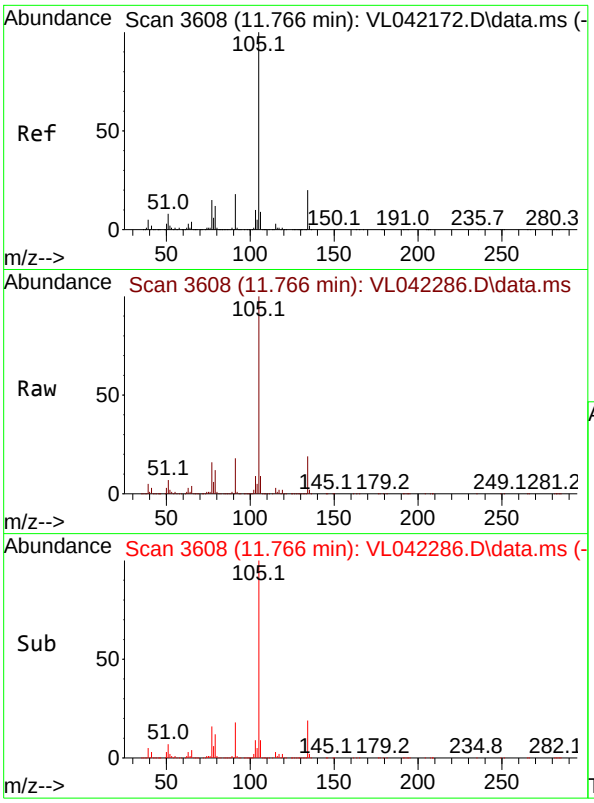


#66
Benzyl Chloride
Concen: 7.934 ppbv
RT: 11.614 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 57966

Ion	Ratio	Lower	Upper
91	100		
126	17.0	13.8	20.6
128	5.7	4.5	6.7



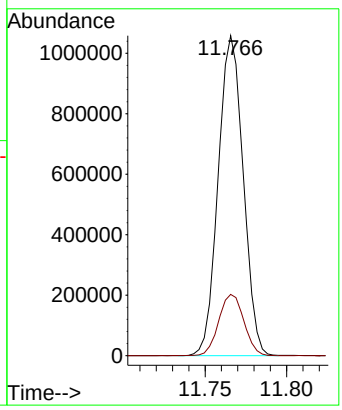


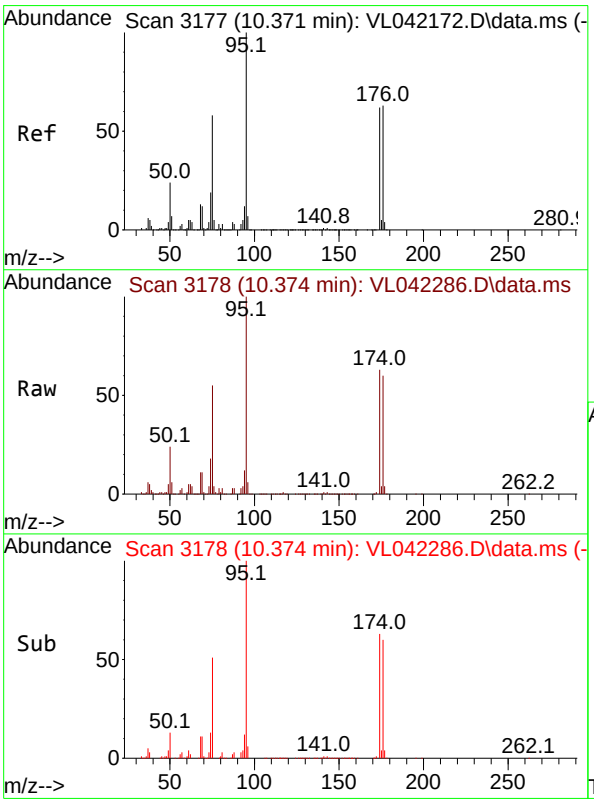
#67
sec-Butylbenzene
Concen: 11.787 ppbv
RT: 11.766 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 1128106

Ion	Ratio	Lower	Upper
105	100		
134	19.3	15.5	23.3

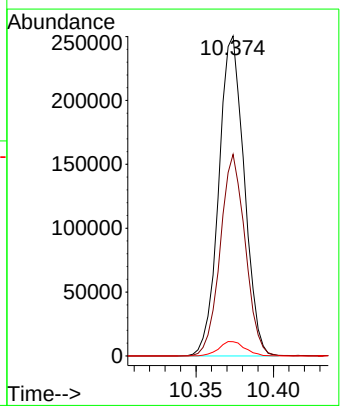


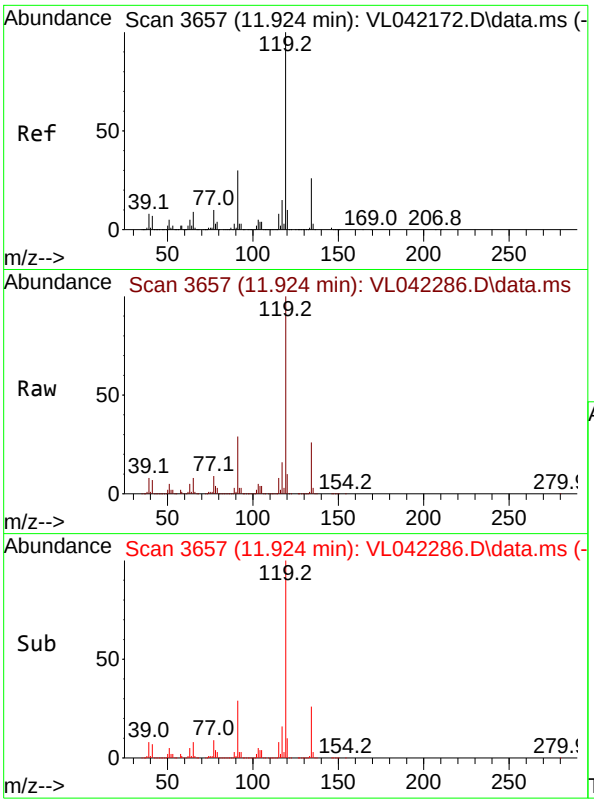


#68
1-Bromo-4-Fluorobenzene
Concen: 9.930 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 95 Resp: 285515

Ion	Ratio	Lower	Upper
95	100		
174	61.9	50.6	76.0
175	4.7	3.8	5.6



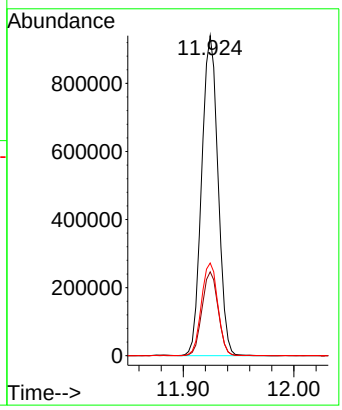


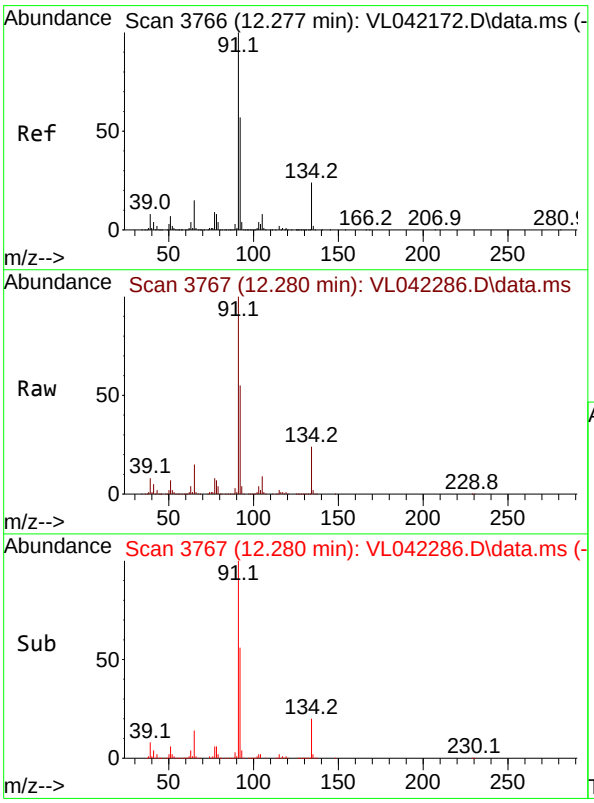
#69
p-Isopropyltoluene
Concen: 11.669 ppbv
RT: 11.924 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 961623

Ion	Ratio	Lower	Upper
119	100		
134	25.8	20.4	30.6
91	29.2	23.7	35.5

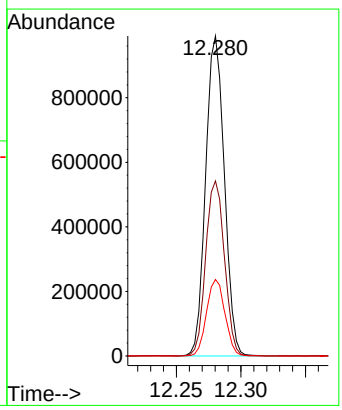


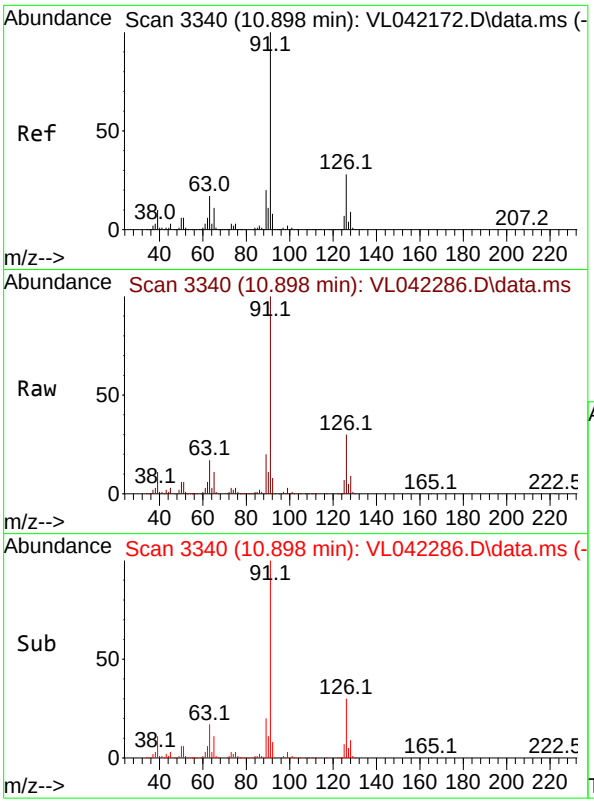


#70
n-Butylbenzene
Concen: 11.847 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion: 91 Resp: 998455

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.9	67.3
134	23.6	19.2	28.8



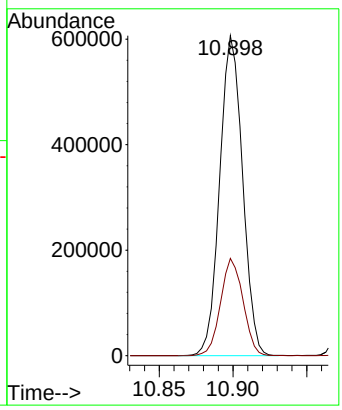


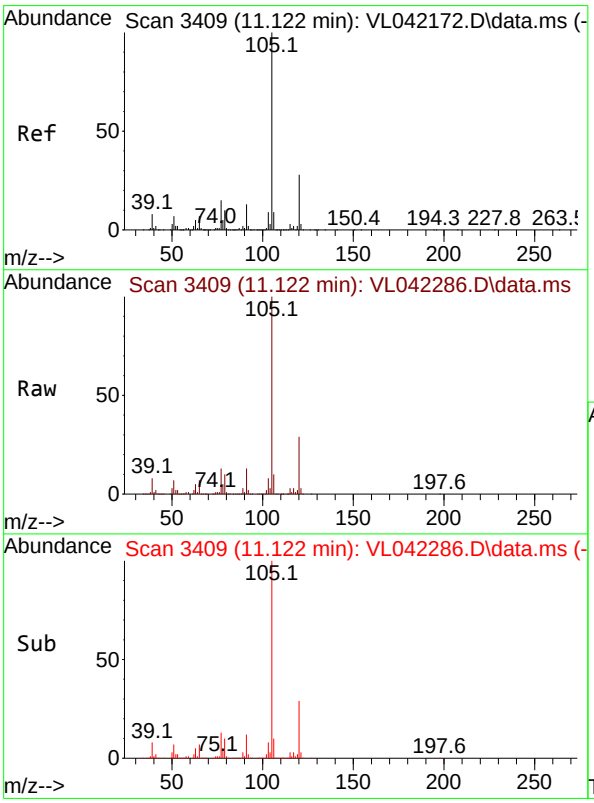
#71
2-Chlorotoluene
Concen: 11.323 ppbv
RT: 10.898 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 654276

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4

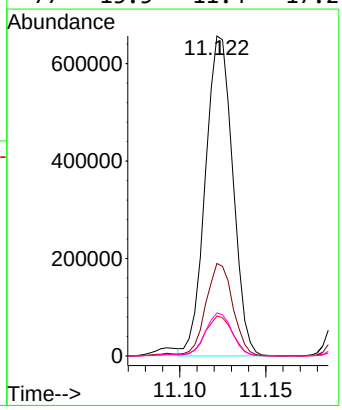


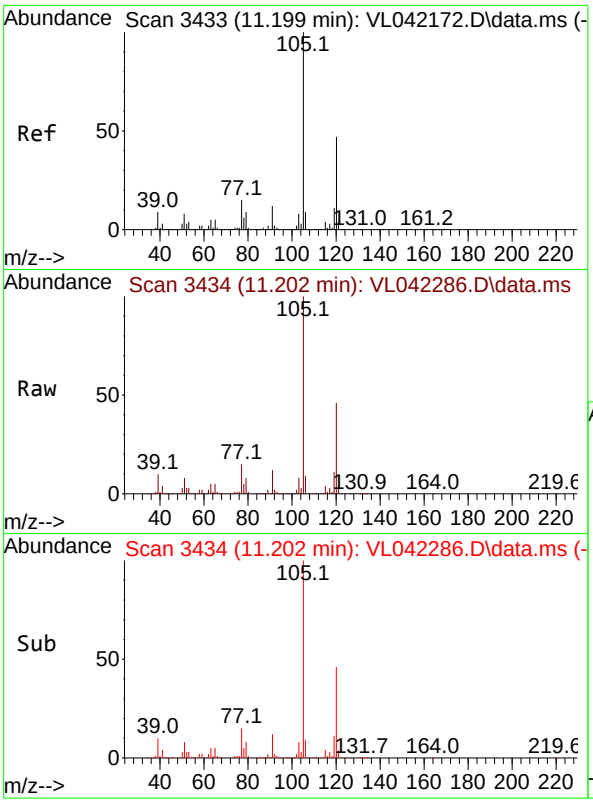


#72
4-Ethyltoluene
Concen: 11.753 ppbv
RT: 11.122 min Scan# 3409
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 728517

Ion	Ratio	Lower	Upper
105	100		
120	29.1	23.4	35.0
91	12.8	10.3	15.5
77	13.5	11.4	17.2



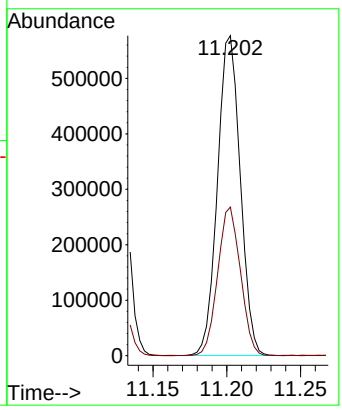


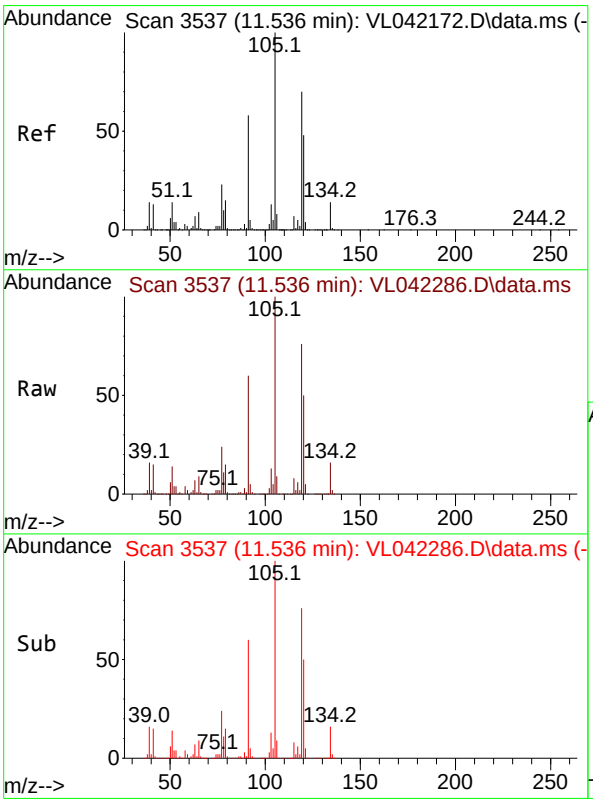
#73
1,3,5-Trimethylbenzene
Concen: 11.460 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 620415

Ion	Ratio	Lower	Upper
105	100		
120	46.4	37.4	56.0

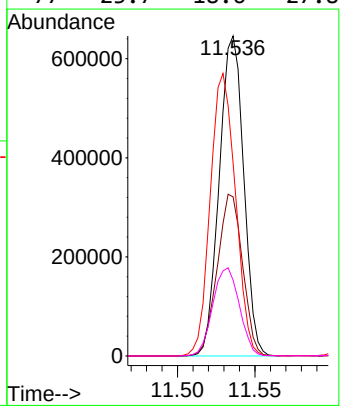


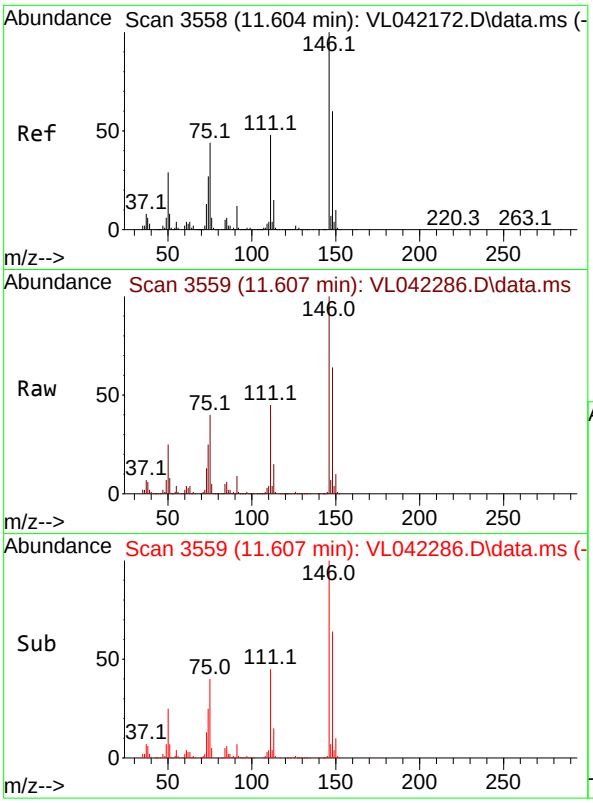


#74
1,2,4-Trimethylbenzene
Concen: 11.371 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:105 Resp: 709204

Ion	Ratio	Lower	Upper
105	100		
120	49.7	38.6	58.0
91	60.3	46.2	69.2
77	23.7	18.6	27.8



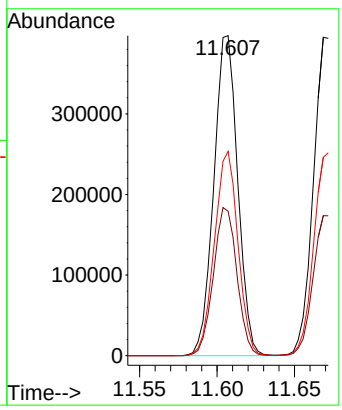


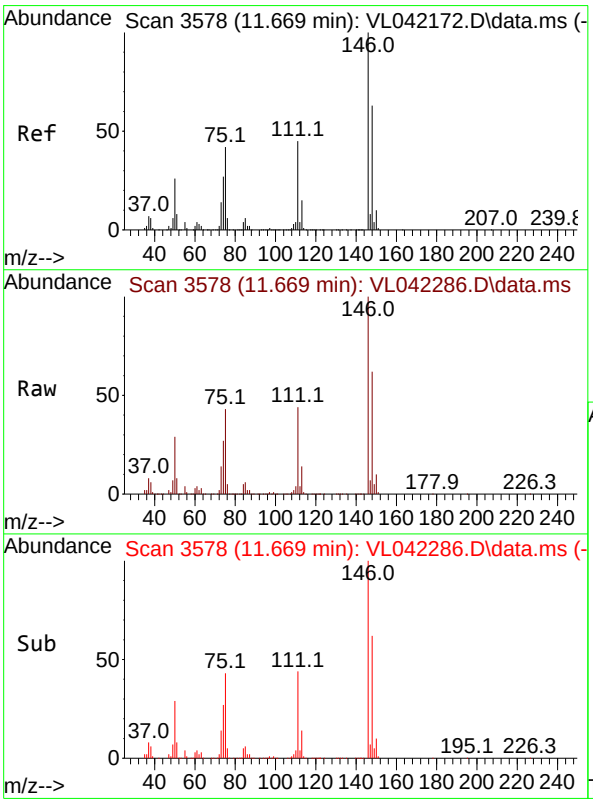
#75
1,3-Dichlorobenzene
Concen: 12.462 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 426300

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.8	71.2
148	63.0	31.9	95.9

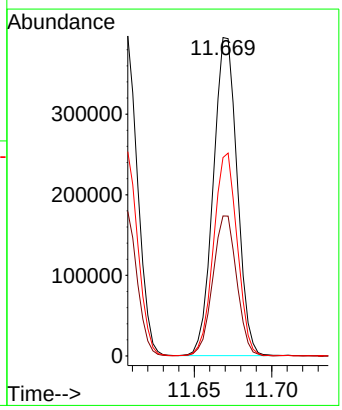


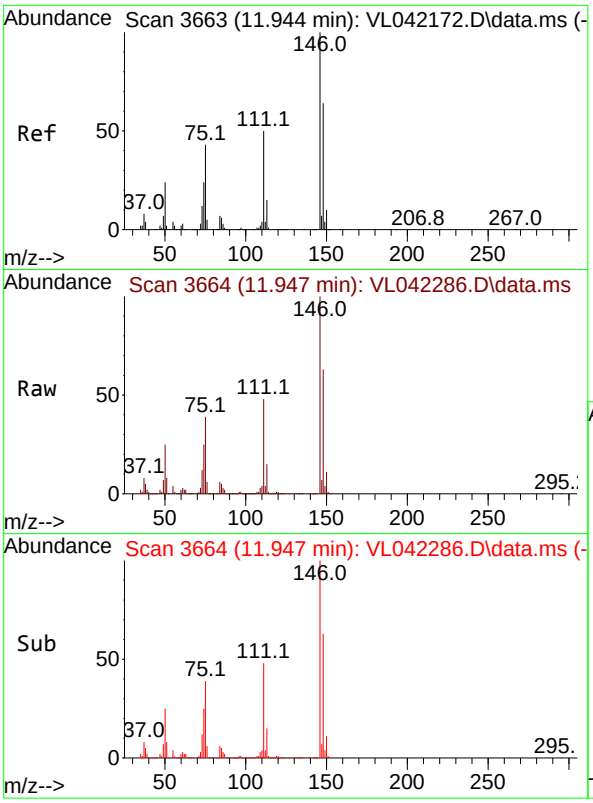


#76
1,4-Dichlorobenzene
Concen: 12.442 ppbv
RT: 11.669 min Scan# 3578
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:146 Resp: 423561

Ion	Ratio	Lower	Upper
146	100		
111	44.2	23.0	69.0
148	63.4	31.9	95.7



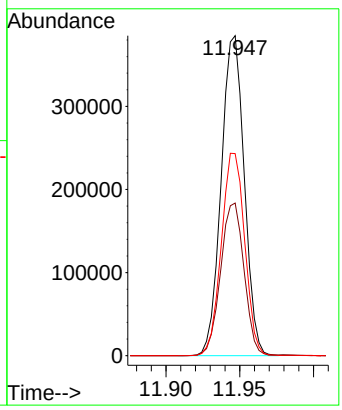


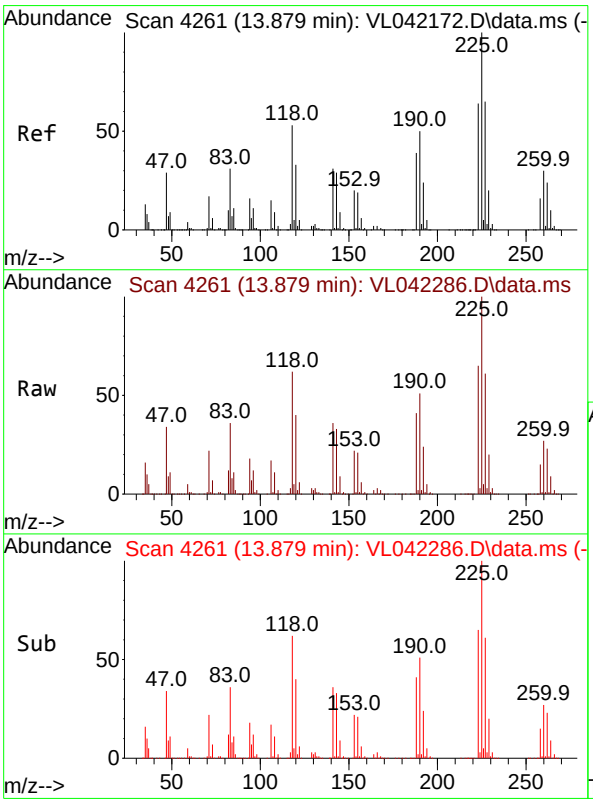
#77
1,2-Dichlorobenzene
Concen: 12.589 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 419286

Ion	Ratio	Lower	Upper
146	100		
111	48.5	24.8	74.3
148	64.3	31.6	94.8

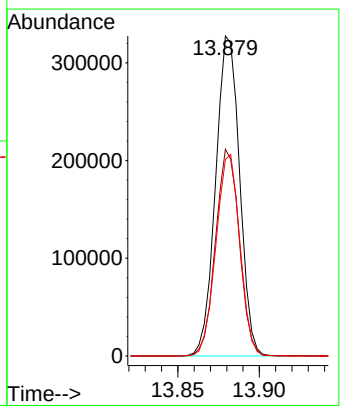


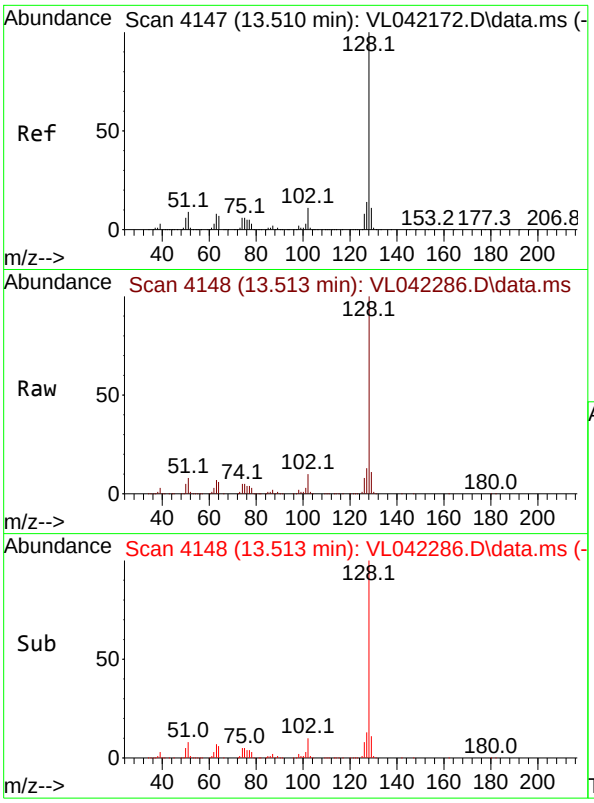


#78
Hexachloro-1,3-Butadiene
Concen: 9.864 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:225 Resp: 334414

Ion	Ratio	Lower	Upper
225	100		
223	63.9	50.6	76.0
227	62.8	51.2	76.8



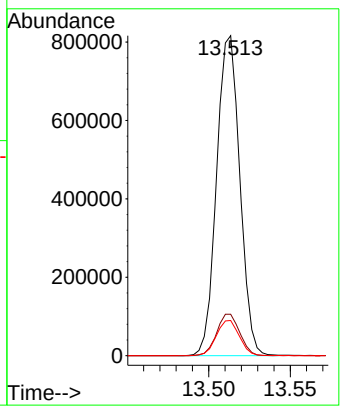


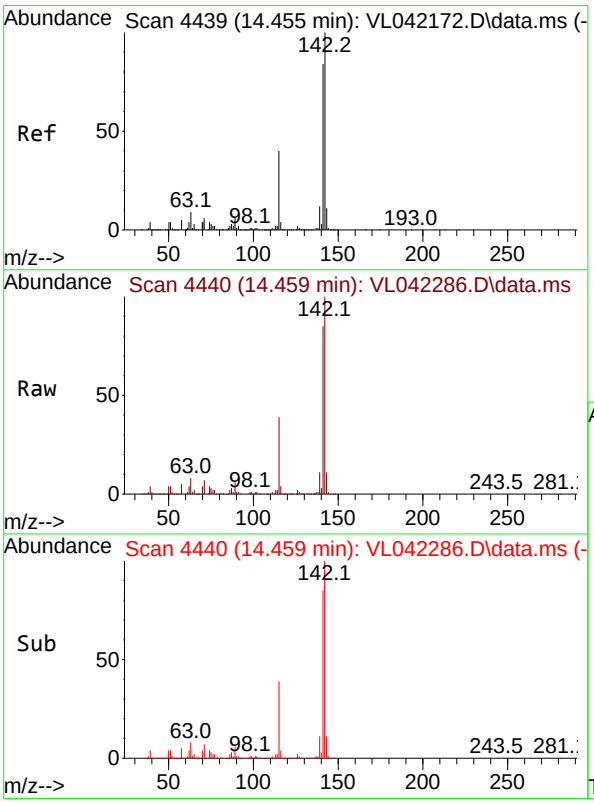
#79
Naphthalene
Concen: 11.851 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 808459

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.8	16.2
129	11.0	9.0	13.4

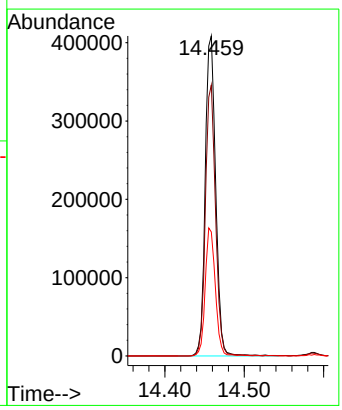


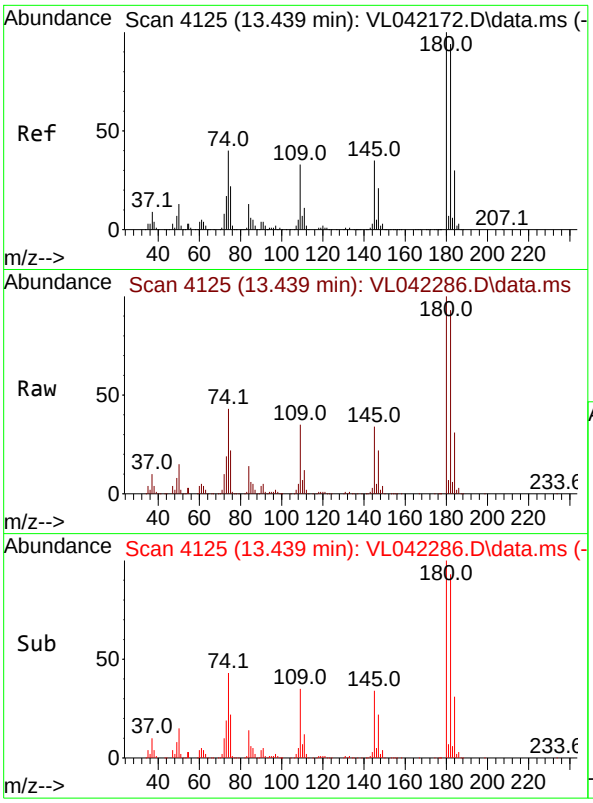


#80
Naphthalene,2-methyl-
Concen: 11.158 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Tgt Ion:142 Resp: 373298

Ion	Ratio	Lower	Upper
142	100		
141	82.9	66.3	99.5
115	39.2	31.6	47.4



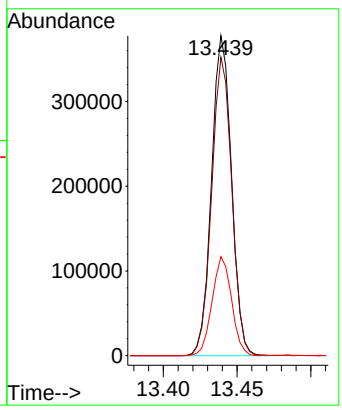


#81
1,2,4-Trichlorobenzene
Concen: 11.305 ppbv
RT: 13.439 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042286.D
Acq: 09 Apr 2025 10:20

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 355741

Ion	Ratio	Lower	Upper
180	100		
182	93.9	75.1	112.7
184	30.3	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	160536	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	421845	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	368487	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	288141	9.522	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	227351	9.592	ppbv	98
3) Chlorodifluoromethane	1.473	51	246719	10.189	ppbv	98
4) Chloromethane	1.531	50	94644	9.770	ppbv	99
5) Vinyl Chloride	1.577	62	89453	8.714	ppbv	95
6) Bromomethane	1.664	94	39433	8.983	ppbv	100
7) Chloroethane	1.703	64	35803	9.208	ppbv	97
8) Dichlorotetrafluoroethane	1.551	85	196779	9.748	ppbv	94
9) Propene	1.483	41	104428	9.409	ppbv	96
10) Heptane	4.972	43	285337	9.665	ppbv	99
11) Trichlorofluoromethane	1.874	101	219275	9.507	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	180430	9.518	ppbv	95
13) Ethanol	1.719	45	4753	4.530	ppbv	93
14) Bromoethene	1.780	108	64175	8.837	ppbv	98
15) Acetone	1.832	43	200151	8.915	ppbv	96
16) 1,3-Butadiene	1.606	39	93954	8.569	ppbv	99
17) tert-Butyl alcohol	2.039	59	231293	8.271	ppbv	98
18) 1,1-Dichloroethene	2.030	96	78979	8.912	ppbv	96
19) Isopropyl Alcohol	1.884	45	111918	8.835	ppbv	96
20) Methylene Chloride	2.059	84	70611	8.444	ppbv	95
21) Allyl Chloride	2.094	41	147389	9.308	ppbv	98
22) trans-1,2-Dichloroethene	2.337	96	89877	8.775	ppbv	94
23) Vinyl Acetate	2.460	43	85028	8.750	ppbv	97
24) 1,1-Dichloroethane	2.405	63	184801	9.733	ppbv	99
25) Ethyl Acetate	2.832	43	590692	10.137	ppbv	98
26) Hexane	2.823	57	223800	9.943	ppbv	98
27) Carbon Disulfide	2.146	76	223675	9.267	ppbv	98
28) Methyl tert-Butyl Ether	2.437	73	119034	8.494	ppbv	97
29) Chloroform	2.845	83	341042	10.353	ppbv	99
30) Cyclohexane	3.852	84	182880	9.357	ppbv	97
31) cis-1,2-Dichloroethene	2.716	61	221881	9.710	ppbv	98
32) 1,1,1-Trichloroethane	3.363	97	336493	8.923	ppbv	97
34) 2-Butanone	2.554	43	334636	10.940	ppbv	98
35) Carbon Tetrachloride	3.758	117	343376	10.420	ppbv	97
36) Benzene	3.651	78	442736	10.586	ppbv	98
37) 1,2-Dichloroethane	3.214	62	262528	10.965	ppbv	100
38) Trichloroethene	4.541	130	176435	10.111	ppbv	98
39) 1,2-Dichloropropane	4.308	63	161101	10.578	ppbv	97
40) 1,4-Dioxane	4.574	88	76321	9.441	ppbv #	97
41) Tetrahydrofuran	3.049	42	187790	10.661	ppbv	96
42) Bromodichloromethane	4.483	83	360662	10.927	ppbv	100
43) Methyl Methacrylate	4.875	69	165984	9.375	ppbv	98
44) 2,2,4-Trimethylpentane	4.632	57	757855	10.723	ppbv	98
45) t-1,3-Dichloropropene	6.406	75	161245	8.489	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

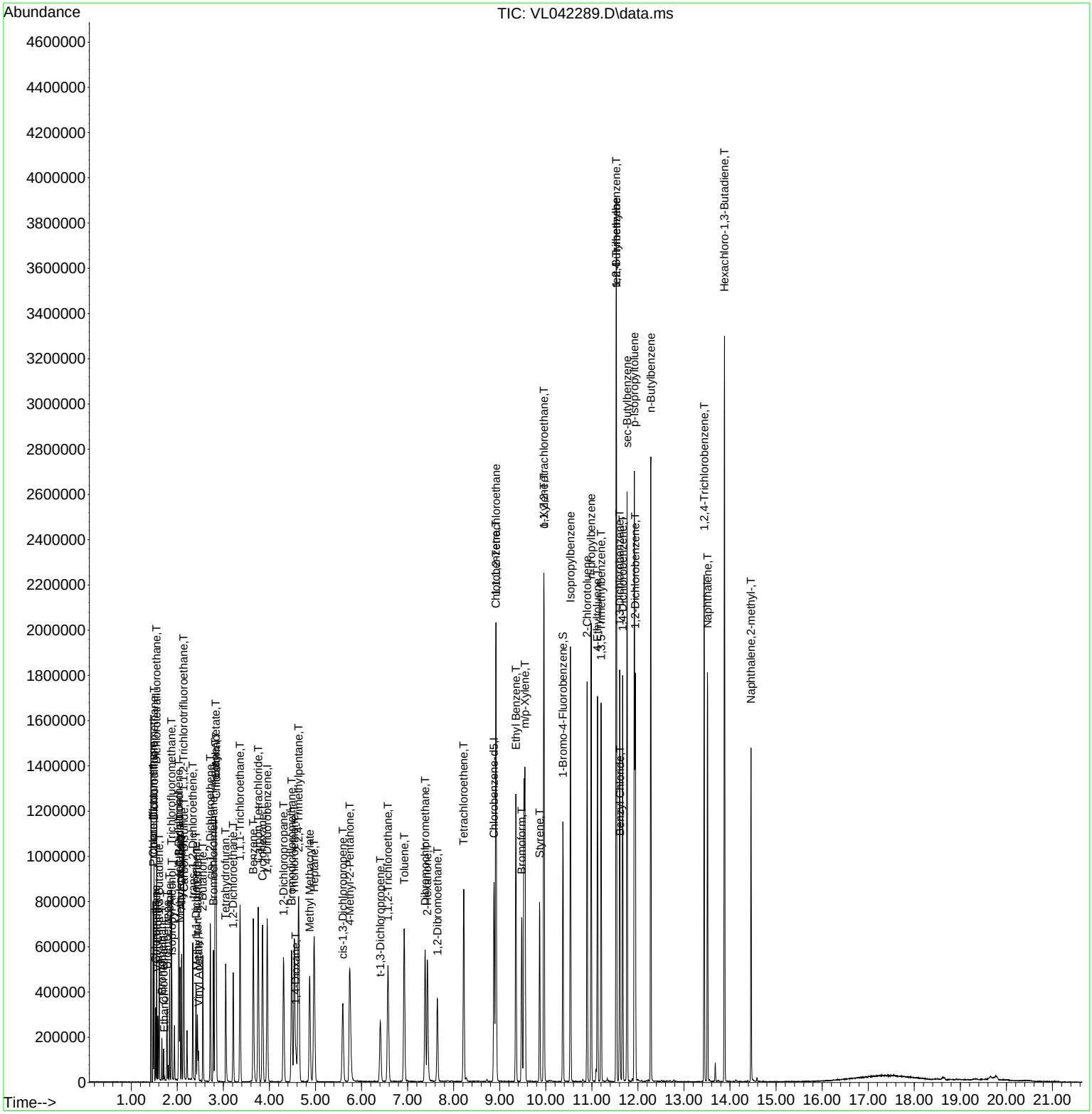
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	213566	9.172	ppbv		98
47) 1,1,2-Trichloroethane	6.574	97	173506	10.777	ppbv		99
48) Dibromochloromethane	7.380	129	286938	10.516	ppbv		100
49) Bromoform	9.477	173	254430	10.386	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	463069	9.552	ppbv		96
51) 2-Hexanone	7.428	43	364946	9.168	ppbv	#	96
52) Tetrachloroethene	8.218	164	148369	8.946	ppbv		94
53) Toluene	6.927	91	490916	9.903	ppbv		99
54) 1,2-Dibromoethane	7.648	107	238091	10.608	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.920	131	232553	11.465	ppbv		100
57) Chlorobenzene	8.914	112	397485	11.372	ppbv		93
58) Ethyl Benzene	9.351	91	695035	10.619	ppbv		98
59) m/p-Xylene	9.548	91	593323	11.352	ppbv	#	31
60) o-Xylene	9.959	91	574256	10.960	ppbv		97
61) Styrene	9.866	104	258350	9.967	ppbv		99
62) Isopropylbenzene	10.536	105	864354	11.032	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	377007	11.843	ppbv		99
64) n-propylbenzene	10.985	120	228525	11.331	ppbv		99
65) tert-Butylbenzene	11.529	119	790461	10.909	ppbv		99
66) Benzyl Chloride	11.613	91	58131	7.561	ppbv		97
67) sec-Butylbenzene	11.765	105	1124096	11.161	ppbv		99
69) p-Isopropyltoluene	11.924	119	950025	10.954	ppbv		99
70) n-Butylbenzene	12.280	91	986632	11.124	ppbv		99
71) 2-Chlorotoluene	10.898	91	660346	10.859	ppbv		99
72) 4-Ethyltoluene	11.121	105	726883	11.142	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	618219	10.851	ppbv		99
74) 1,2,4-Trimethylbenzene	11.532	105	702287	10.699	ppbv	#	84
75) 1,3-Dichlorobenzene	11.604	146	419165	11.644	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	417746	11.660	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	415780	11.862	ppbv		99
78) Hexachloro-1,3-Butadiene	13.879	225	331886	9.302	ppbv		99
79) Naphthalene	13.510	128	810441	11.288	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	388095	11.023	ppbv		99
81) 1,2,4-Trichlorobenzene	13.439	180	357711	10.802	ppbv		99

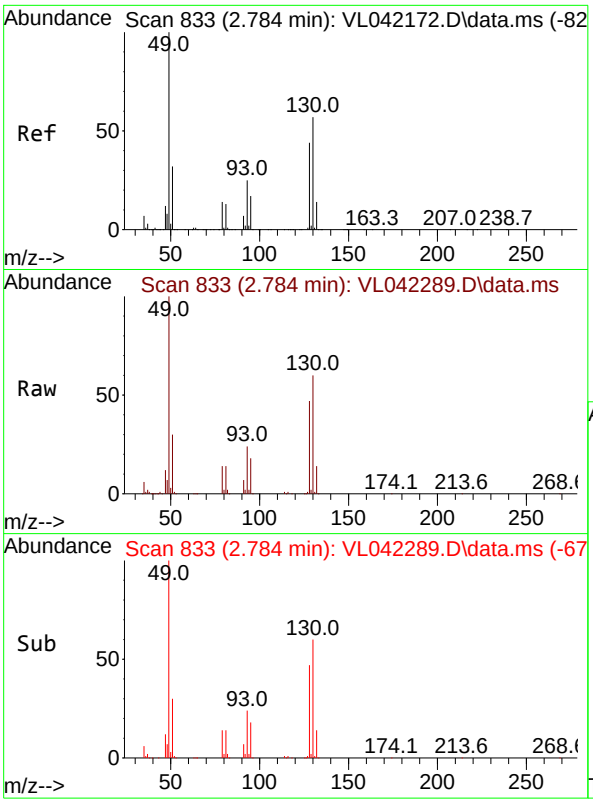
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042289.D
Acq On : 09 Apr 2025 12:31
Operator : SY/MD
Sample : VL0409ABS02
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Quant Time: Apr 10 01:42:11 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



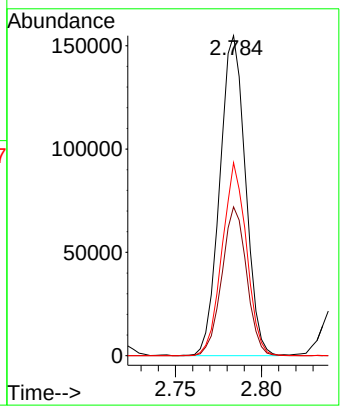


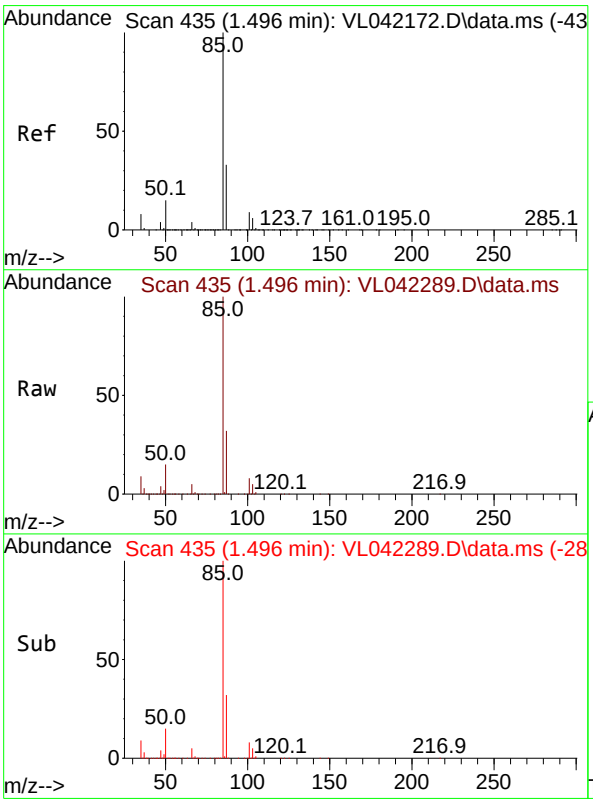
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 49 Resp: 160536

Ion	Ratio	Lower	Upper
49	100		
128	44.7	22.9	68.5
130	57.4	28.8	86.4

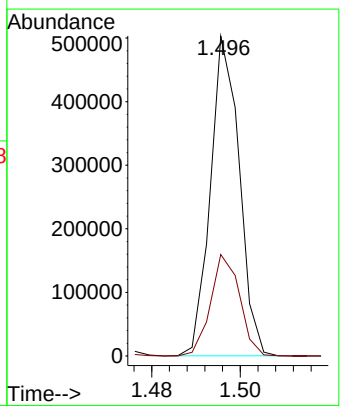


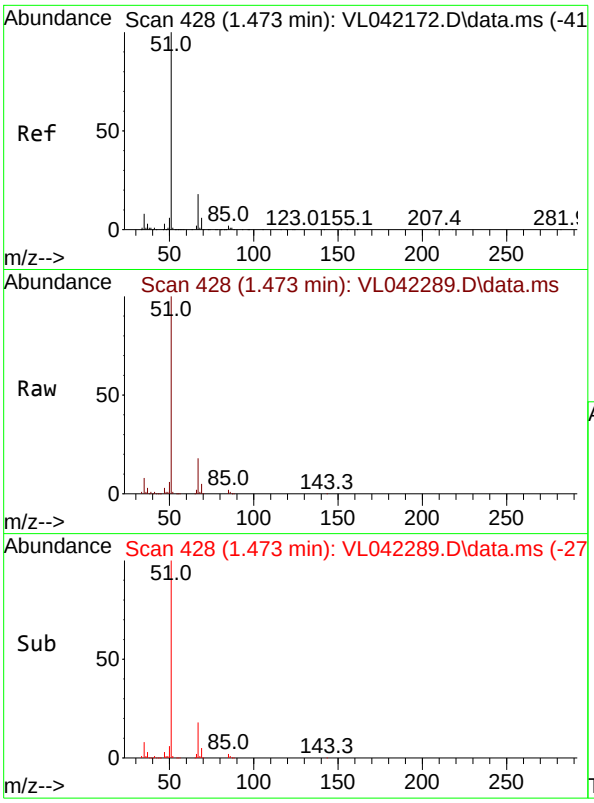


#2
Dichlorodifluoromethane
Concen: 9.592 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 85 Resp: 227351

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.1	39.1



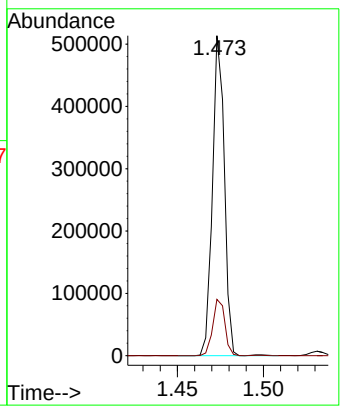


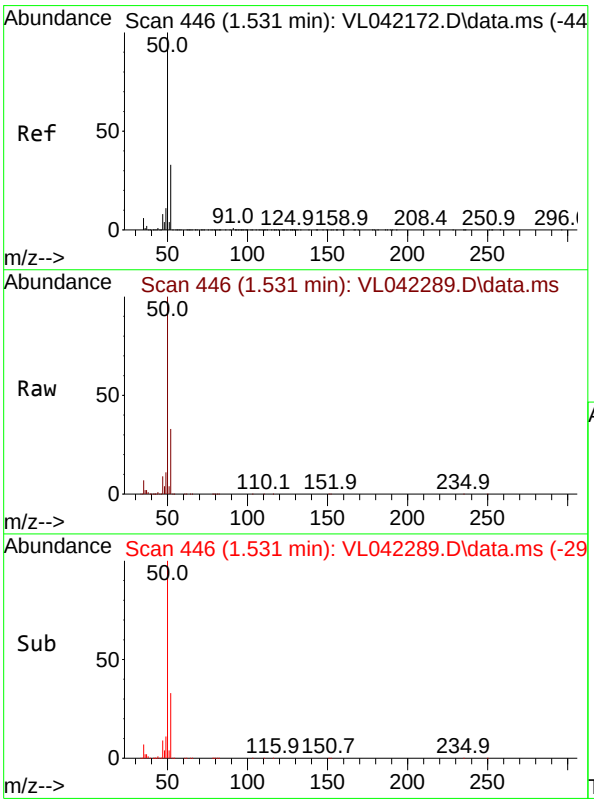
#3
Chlorodifluoromethane
Concen: 10.189 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 51 Resp: 246719

Ion	Ratio	Lower	Upper
51	100		
67	18.1	15.0	22.6

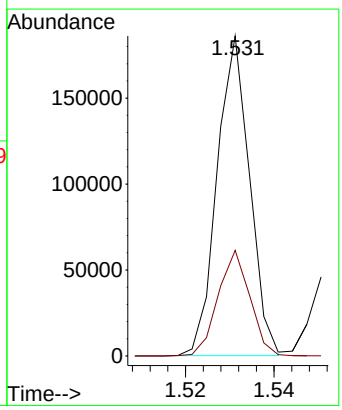


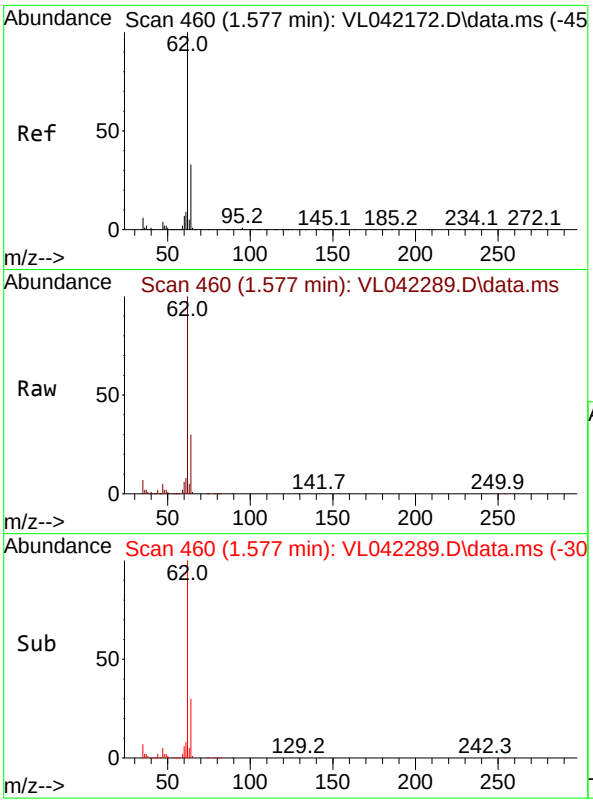


#4
Chloromethane
Concen: 9.770 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 50 Resp: 94644

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



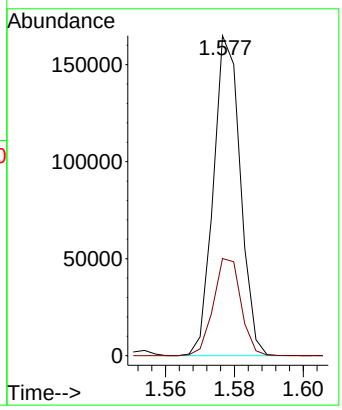


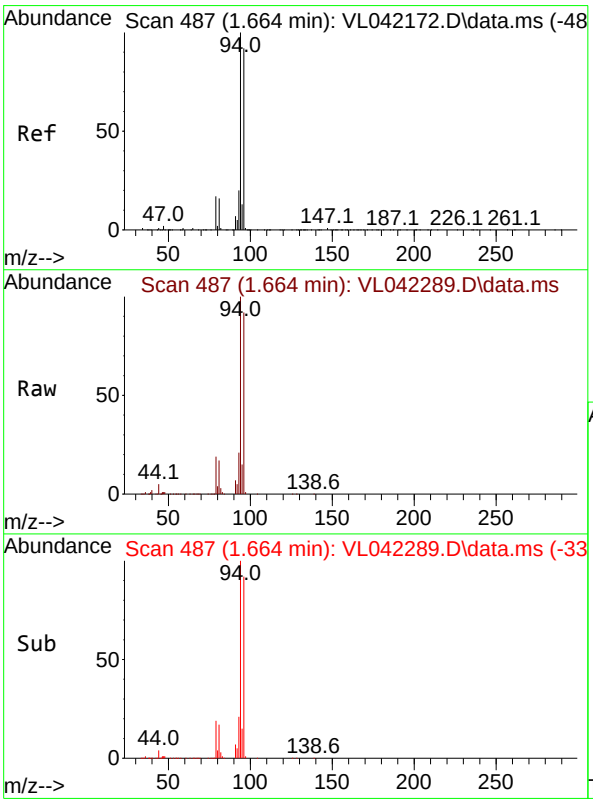
#5
Vinyl Chloride
Concen: 8.714 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 62 Resp: 89453

Ion	Ratio	Lower	Upper
62	100		
64	30.3	26.6	40.0

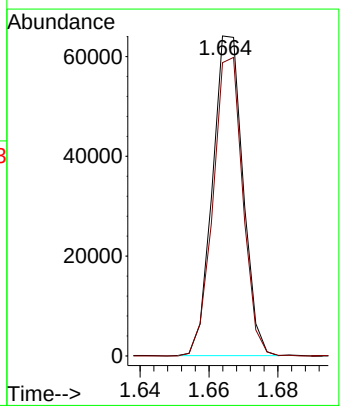


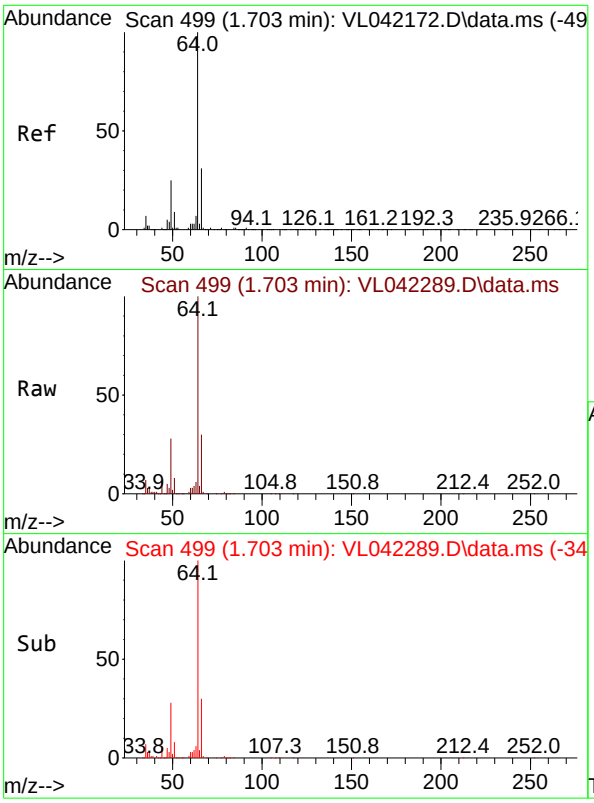


#6
Bromomethane
Concen: 8.983 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 94 Resp: 39433

Ion	Ratio	Lower	Upper
94	100		
96	91.7	73.1	109.7



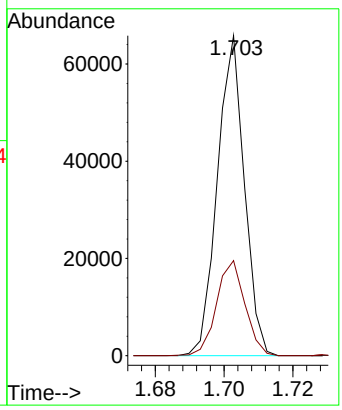


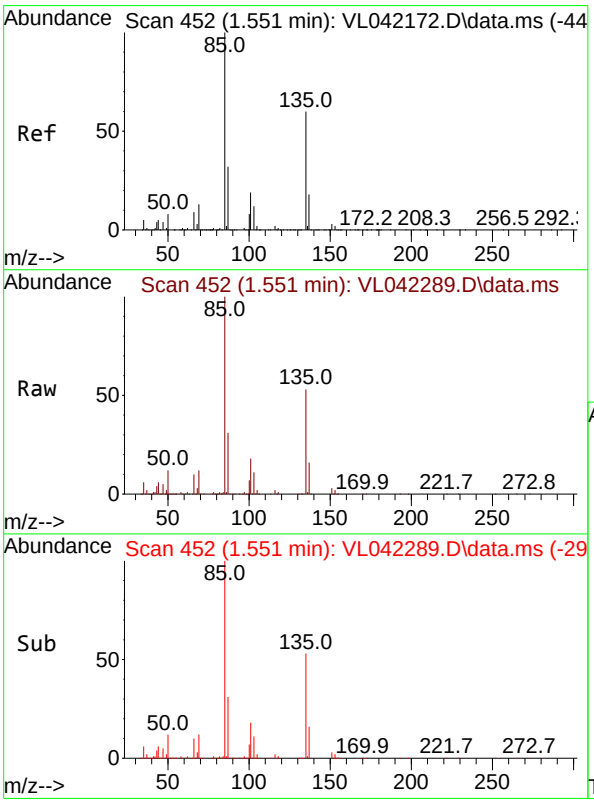
#7
Chloroethane
Concen: 9.208 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 64 Resp: 35803

Ion	Ratio	Lower	Upper
64	100		
66	29.7	25.2	37.8

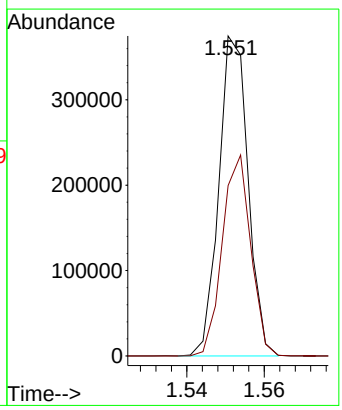


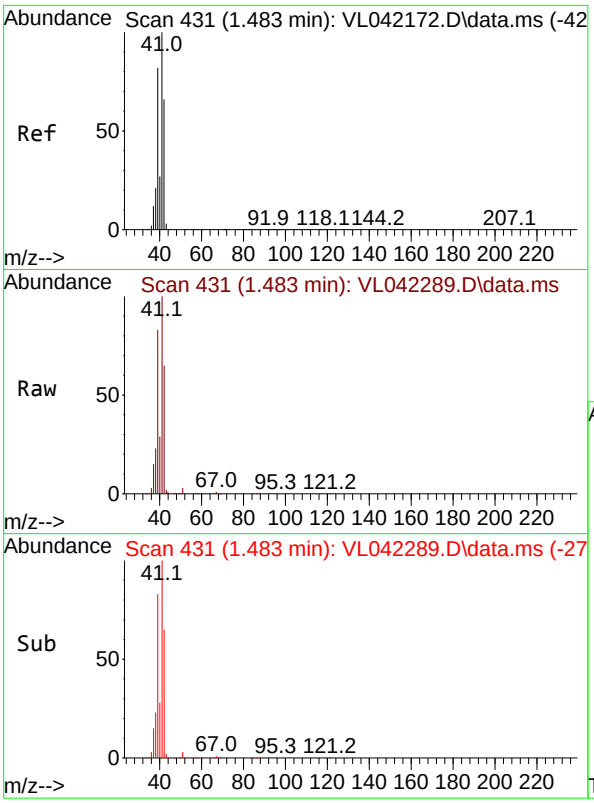


#8
Dichlorotetrafluoroethane
Concen: 9.748 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 85 Resp: 196779

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6



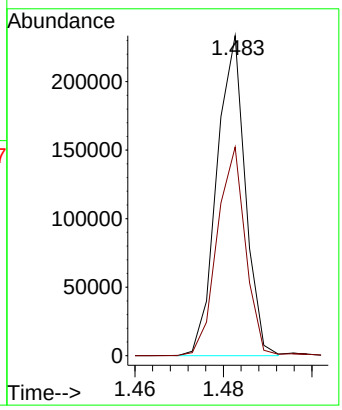


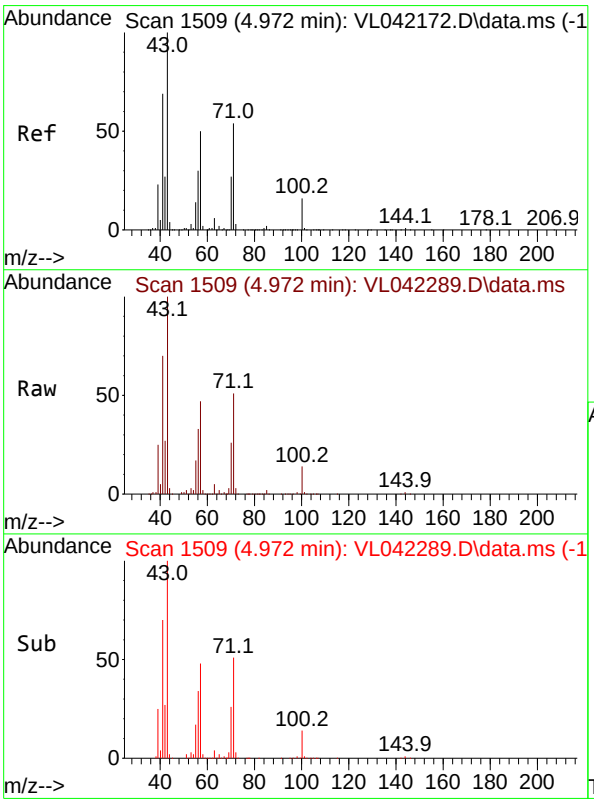
#9
Propene
Concen: 9.409 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 41 Resp: 104428

Ion	Ratio	Lower	Upper
41	100		
42	65.8	55.4	83.2

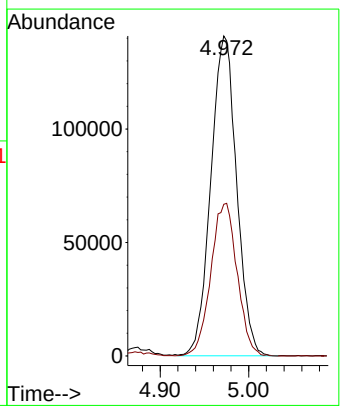


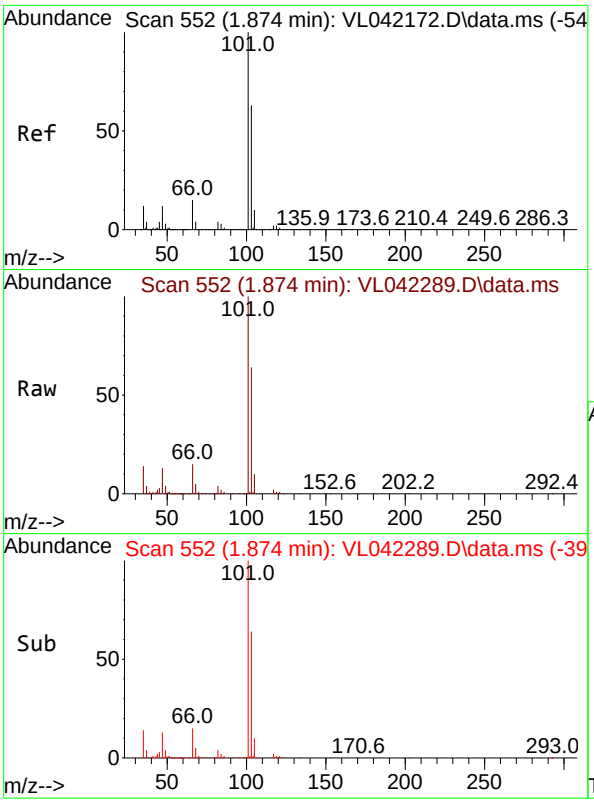


#10
Heptane
Concen: 9.665 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 285337

Ion	Ratio	Lower	Upper
43	100		
57	48.7	39.4	59.2



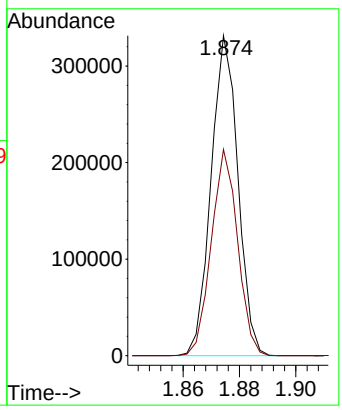


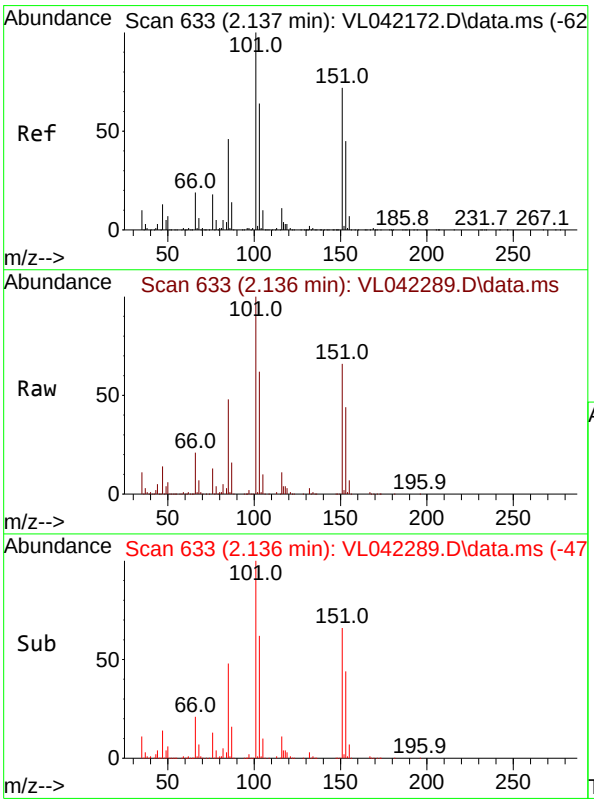
#11
Trichlorofluoromethane
Concen: 9.507 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:101 Resp: 219275

Ion	Ratio	Lower	Upper
101	100		
103	64.5	50.2	75.2

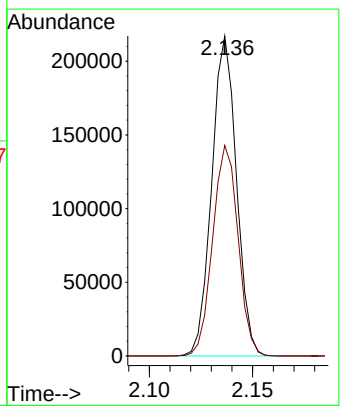


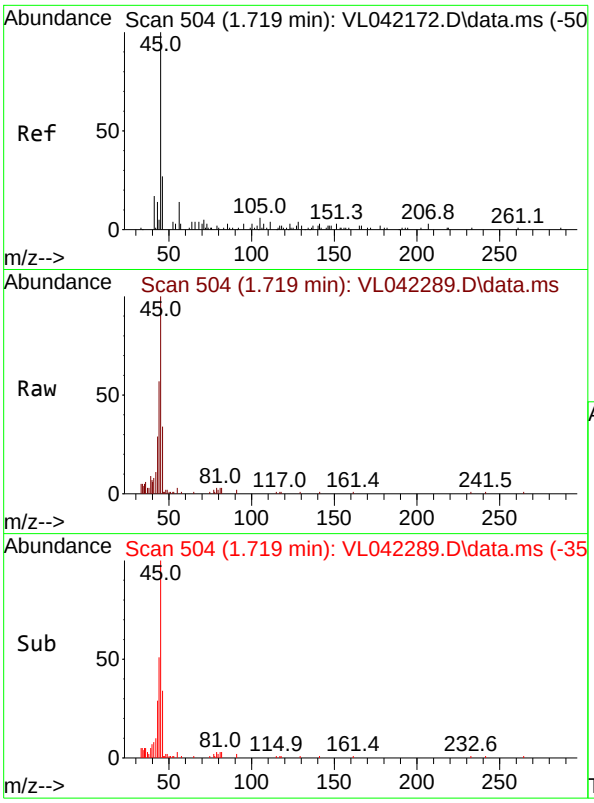


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.518 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:101 Resp: 180430

Ion	Ratio	Lower	Upper
101	100		
151	67.6	57.1	85.7



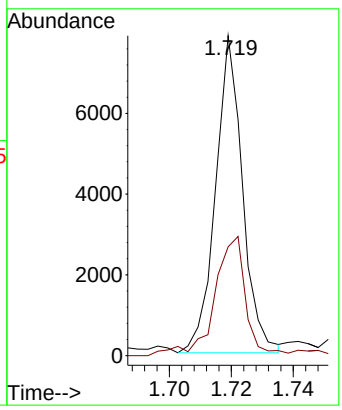


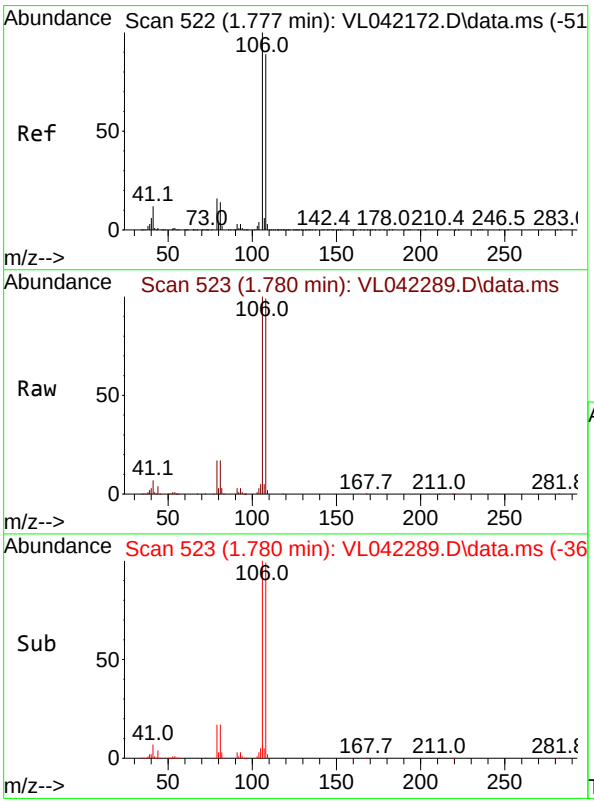
#13
Ethanol
Concen: 4.530 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 45 Resp: 4753

Ion	Ratio	Lower	Upper
45	100		
46	45.9	20.2	80.8

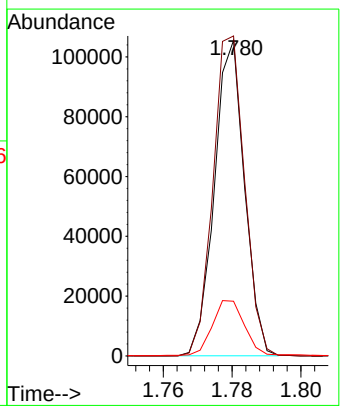


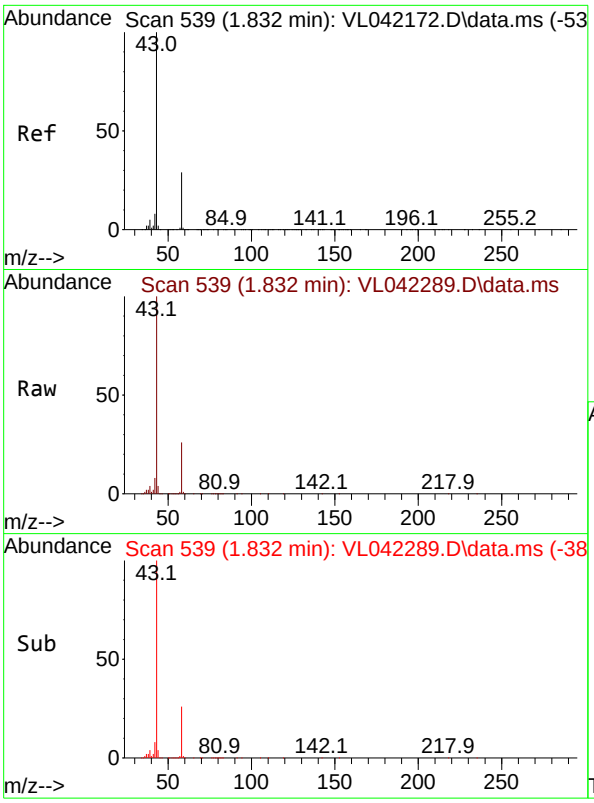


#14
Bromoethene
Concen: 8.837 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:108 Resp: 64175

Ion	Ratio	Lower	Upper
108	100		
106	106.5	86.8	130.2
79	20.4	15.0	22.6



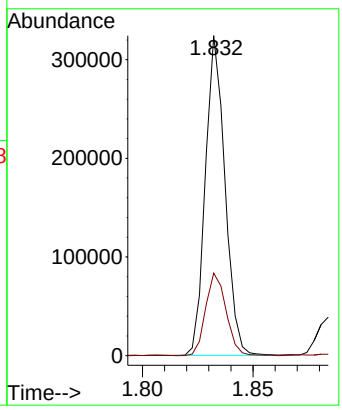


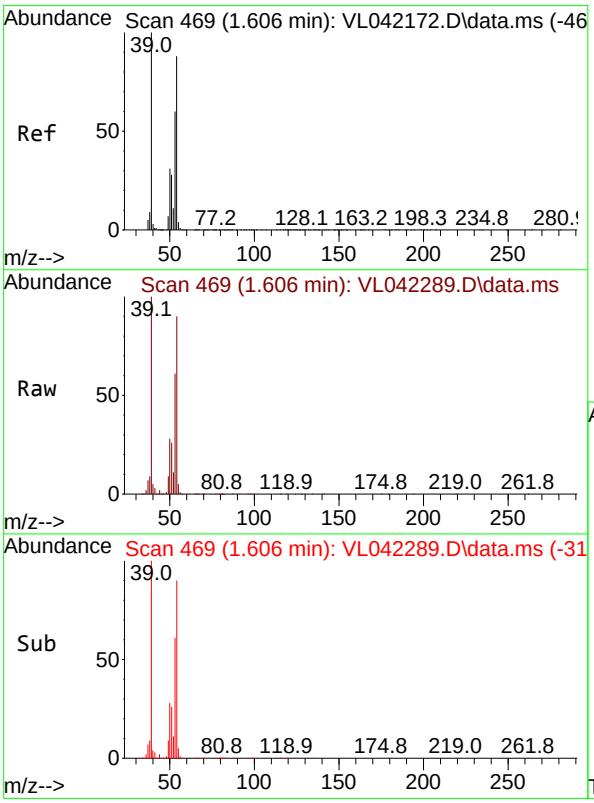
#15
Acetone
Concen: 8.915 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 43 Resp: 200151

Ion	Ratio	Lower	Upper
43	100		
58	27.1	23.2	34.8

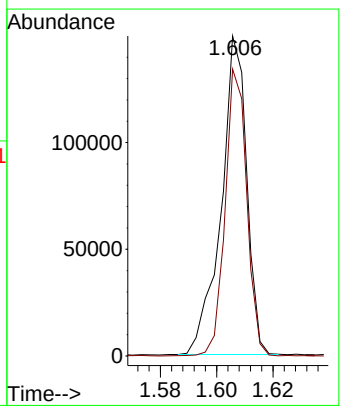


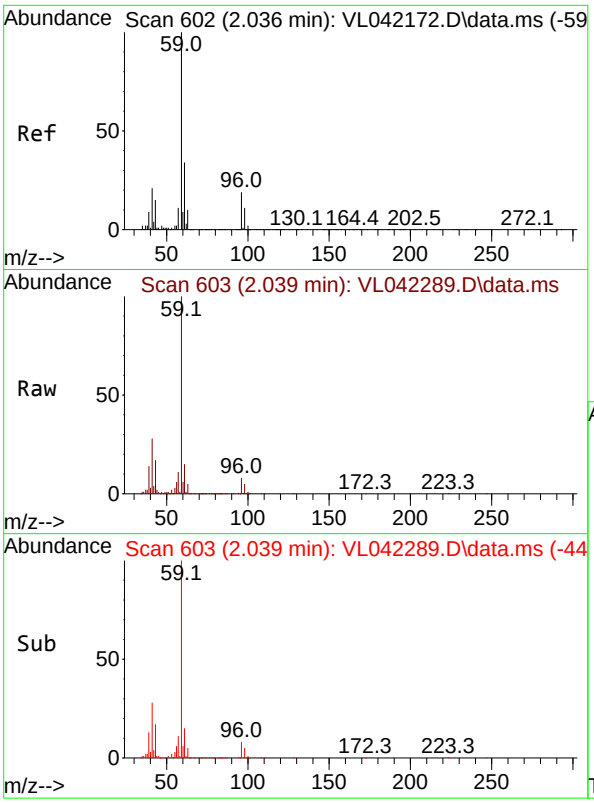


#16
1,3-Butadiene
Concen: 8.569 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 39 Resp: 93954

Ion	Ratio	Lower	Upper
39	100		
54	76.4	60.7	91.1



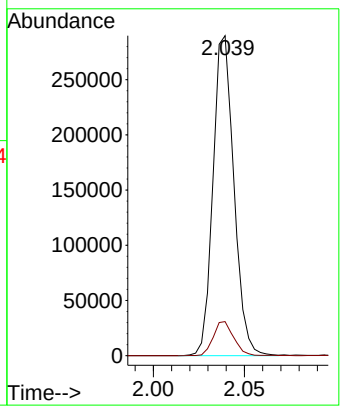


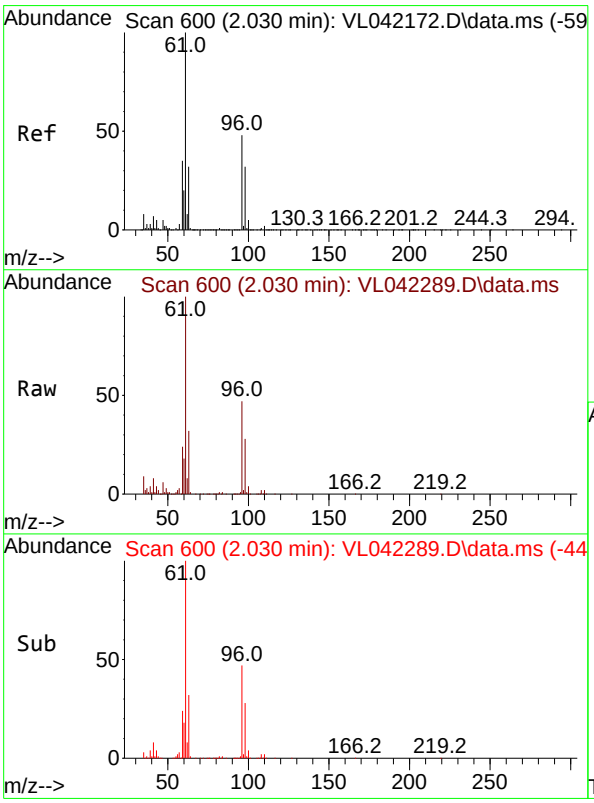
#17
tert-Butyl alcohol
Concen: 8.271 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 59 Resp: 231293

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.9	13.3

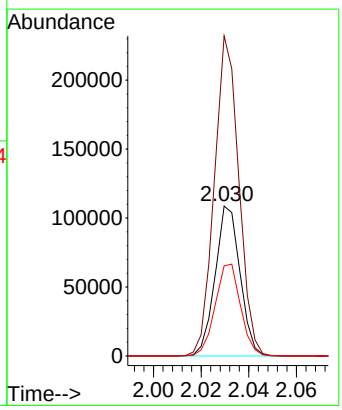


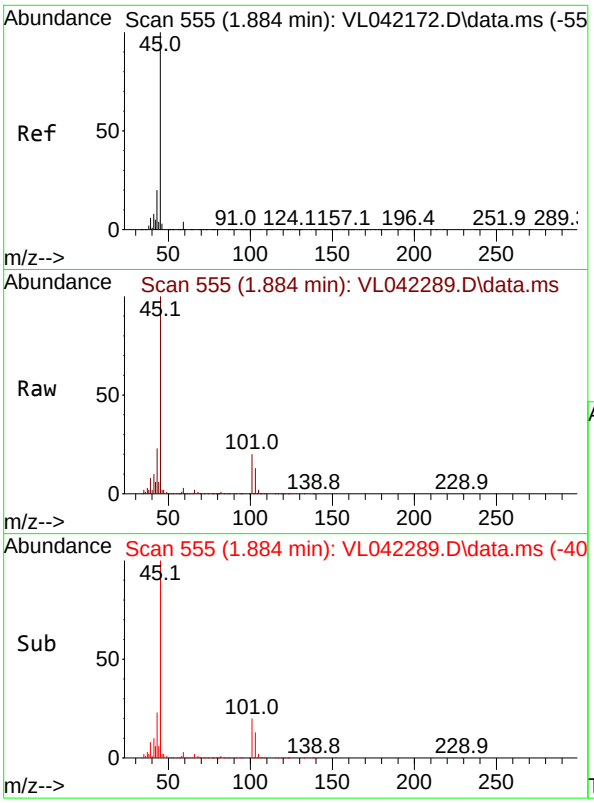


#18
1,1-Dichloroethene
Concen: 8.912 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 96 Resp: 78979

Ion	Ratio	Lower	Upper
96	100		
61	213.3	167.6	251.4
98	60.0	53.5	80.3



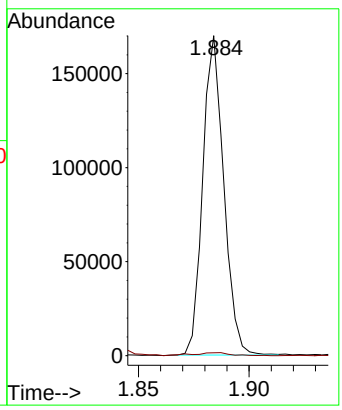


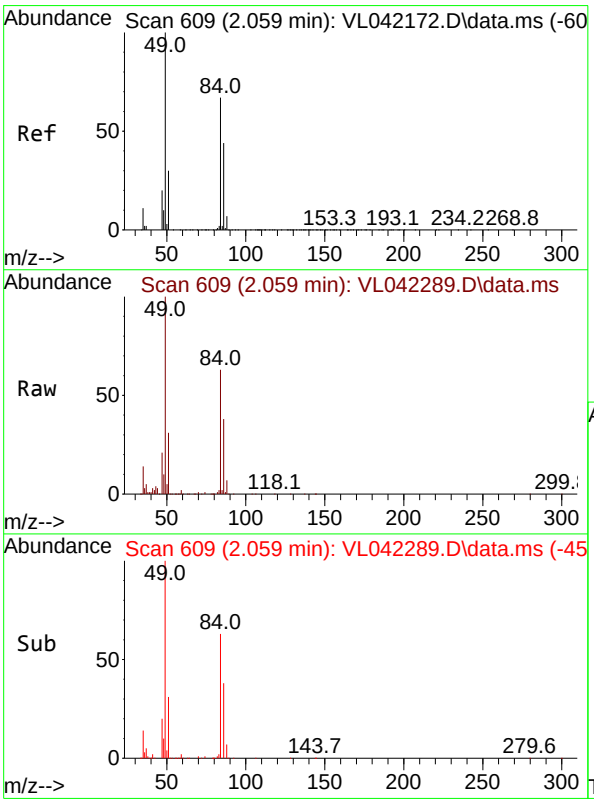
#19
Isopropyl Alcohol
Concen: 8.835 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 45 Resp: 111918

Ion	Ratio	Lower	Upper
45	100		
58	48.5	36.9	55.3

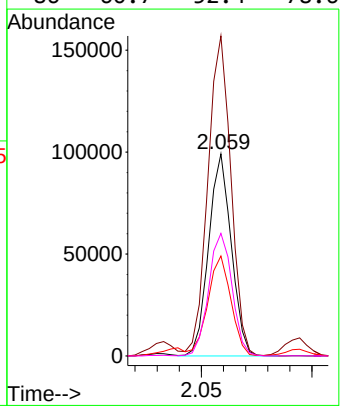


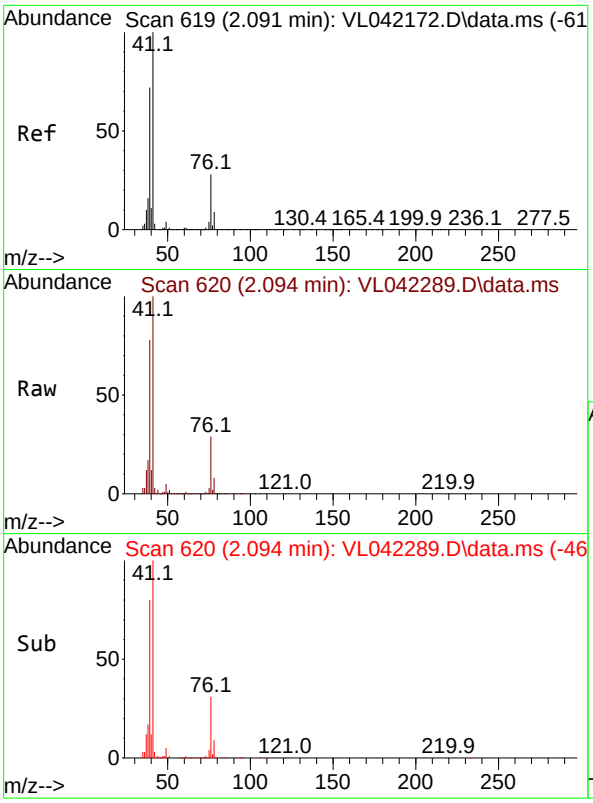


#20
Methylene Chloride
Concen: 8.444 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 84 Resp: 70611

Ion	Ratio	Lower	Upper
84	100		
49	156.0	120.2	180.4
51	48.6	37.4	56.0
86	60.7	52.4	78.6



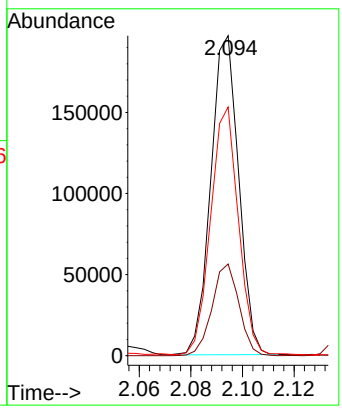


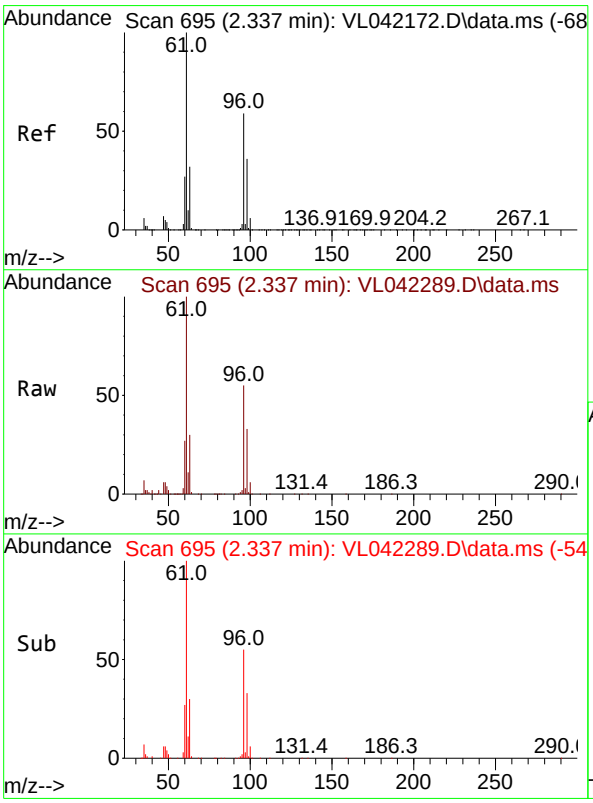
#21
Allyl Chloride
Concen: 9.308 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 41 Resp: 147389

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	77.7	61.1	91.7

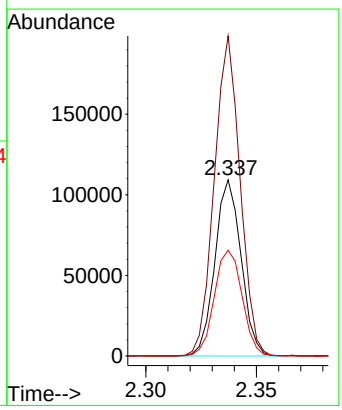


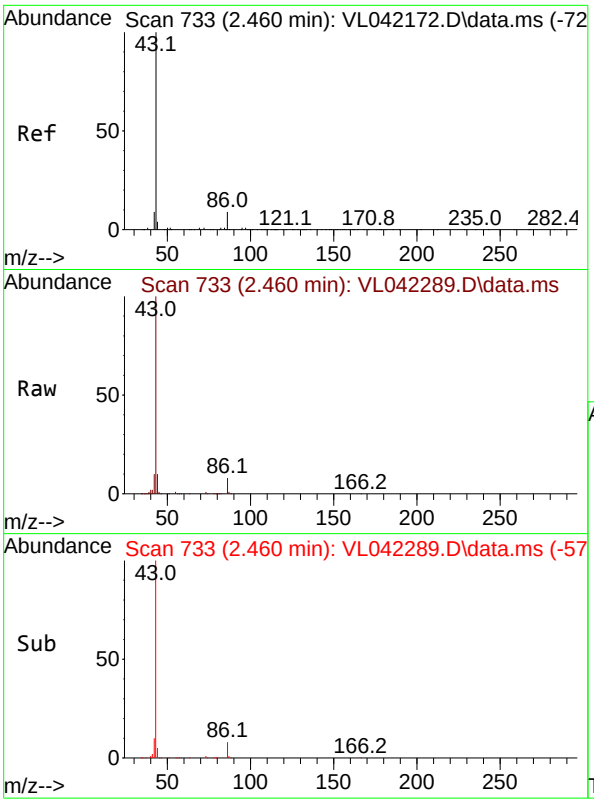


#22
trans-1,2-Dichloroethene
Concen: 8.775 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 96 Resp: 89877

Ion	Ratio	Lower	Upper
96	100		
61	181.6	136.6	204.8
98	60.0	49.4	74.2



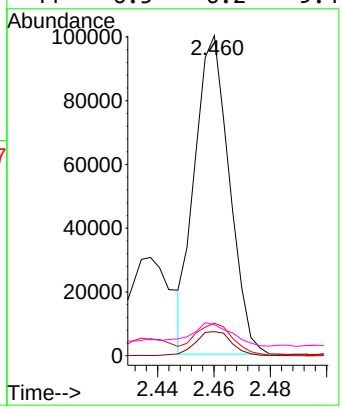


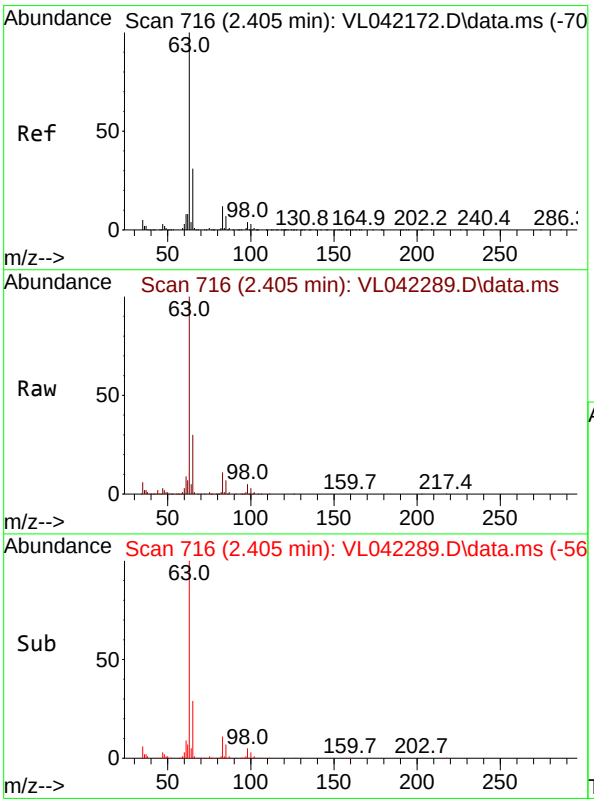
#23
Vinyl Acetate
Concen: 8.750 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 43 Resp: 85028

Ion	Ratio	Lower	Upper
43	100		
86	7.5	5.5	8.3
42	9.9	8.6	13.0
44	6.5	6.2	9.4

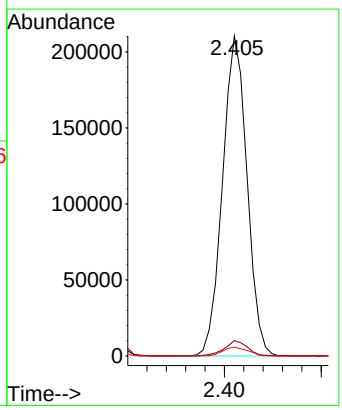


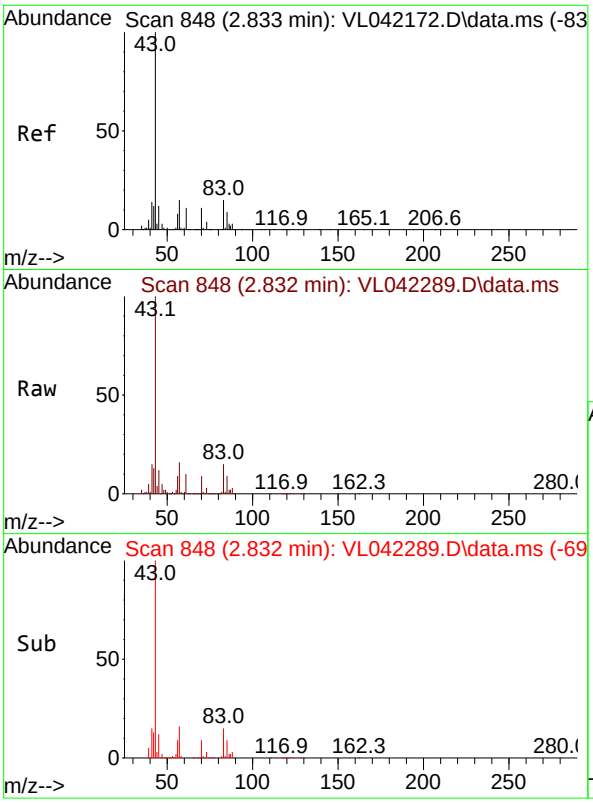


#24
1,1-Dichloroethane
Concen: 9.733 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 63 Resp: 184801

Ion	Ratio	Lower	Upper
63	100		
98	4.8	2.3	6.8
100	2.8	1.6	4.7



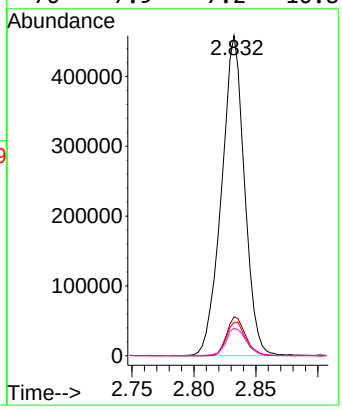


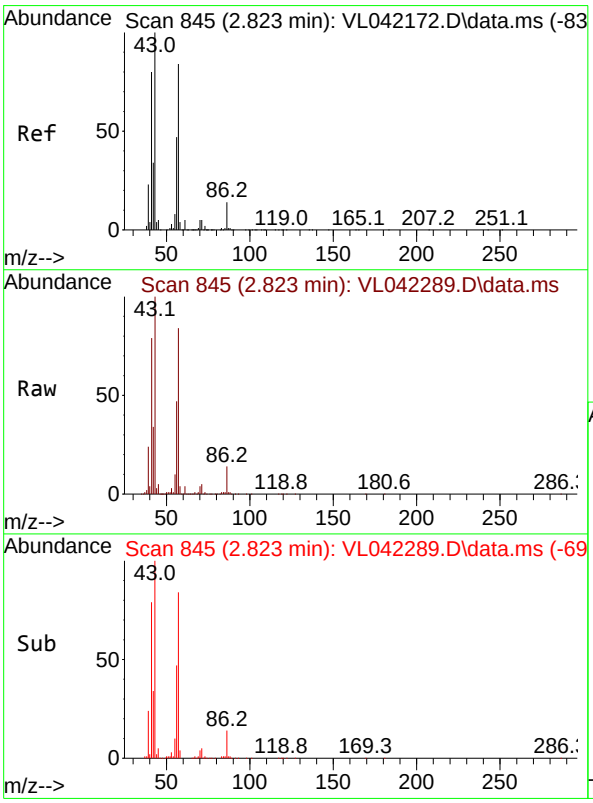
#25
Ethyl Acetate
Concen: 10.137 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 43 Resp: 590692

Ion	Ratio	Lower	Upper
43	100		
45	10.0	8.2	12.2
61	8.7	7.3	10.9
70	7.9	7.2	10.8

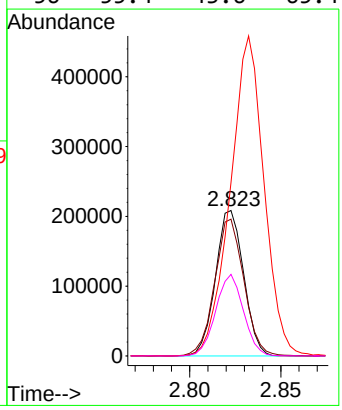


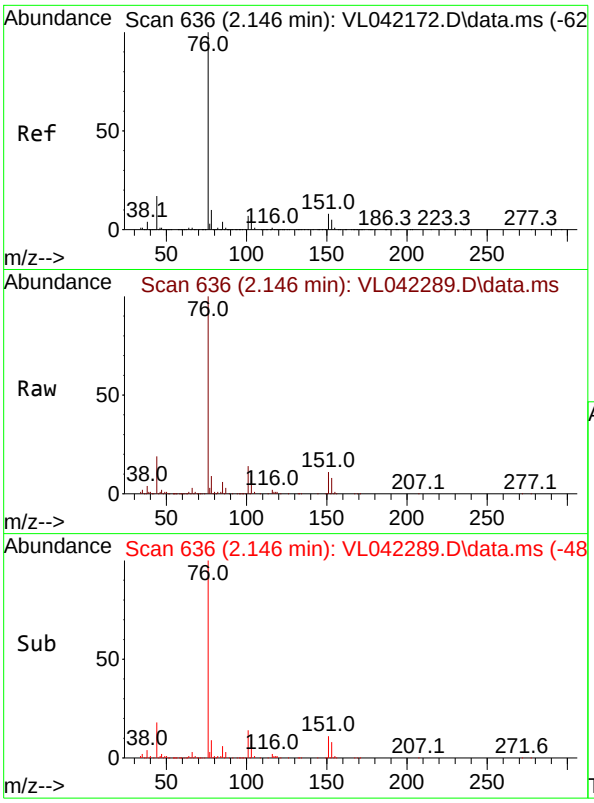


#26
Hexane
Concen: 9.943 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 57 Resp: 223800

Ion	Ratio	Lower	Upper
57	100		
41	97.7	76.6	114.8
43	264.7	207.8	311.8
56	55.4	43.6	65.4



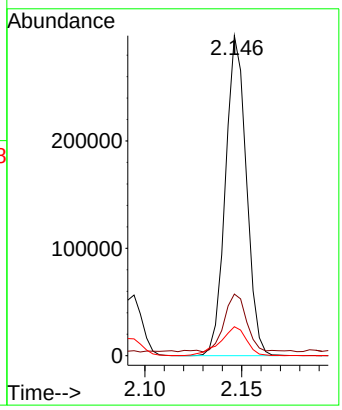


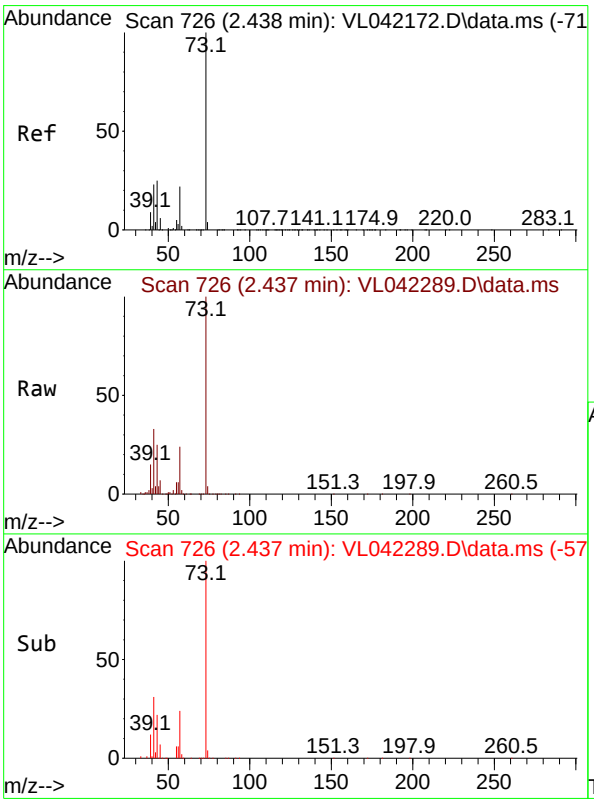
#27
Carbon Disulfide
Concen: 9.267 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 76 Resp: 223675

Ion	Ratio	Lower	Upper
76	100		
44	19.6	14.7	22.1
78	11.3	9.3	13.9

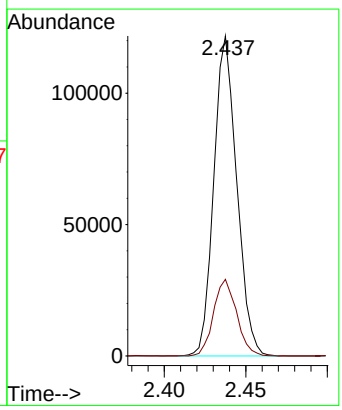


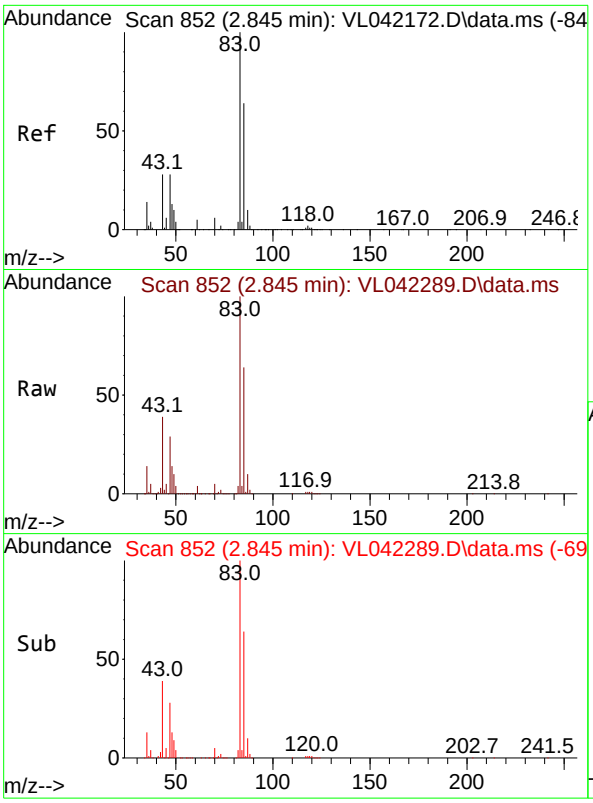


#28
Methyl tert-Butyl Ether
Concen: 8.494 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 73 Resp: 119034

Ion	Ratio	Lower	Upper
73	100		
57	24.2	20.5	30.7



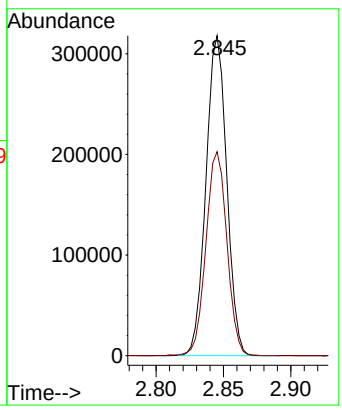


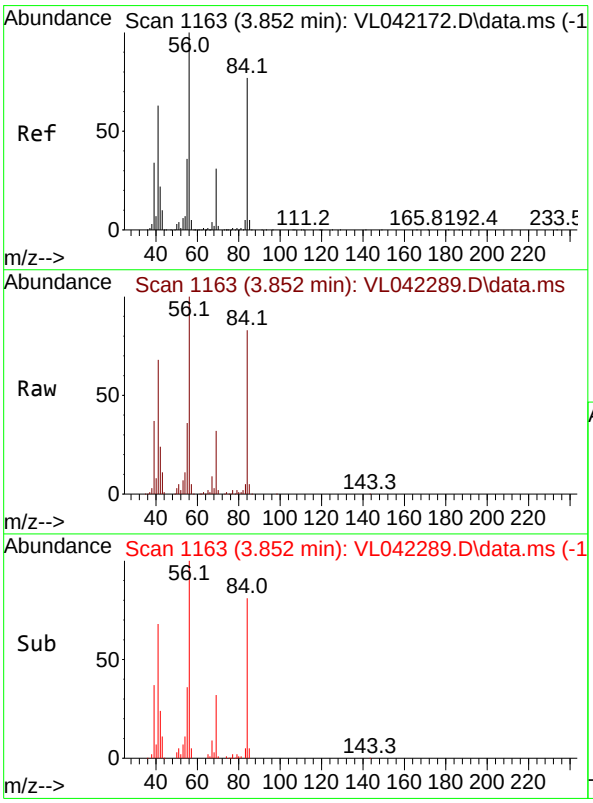
#29
Chloroform
Concen: 10.353 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 83 Resp: 341042

Ion	Ratio	Lower	Upper
83	100		
85	63.8	51.4	77.2

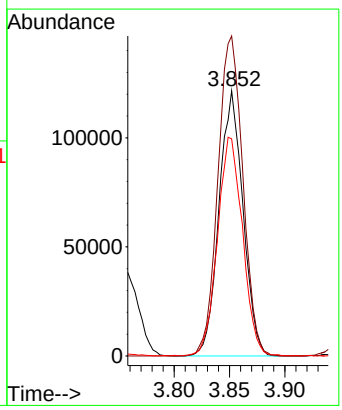


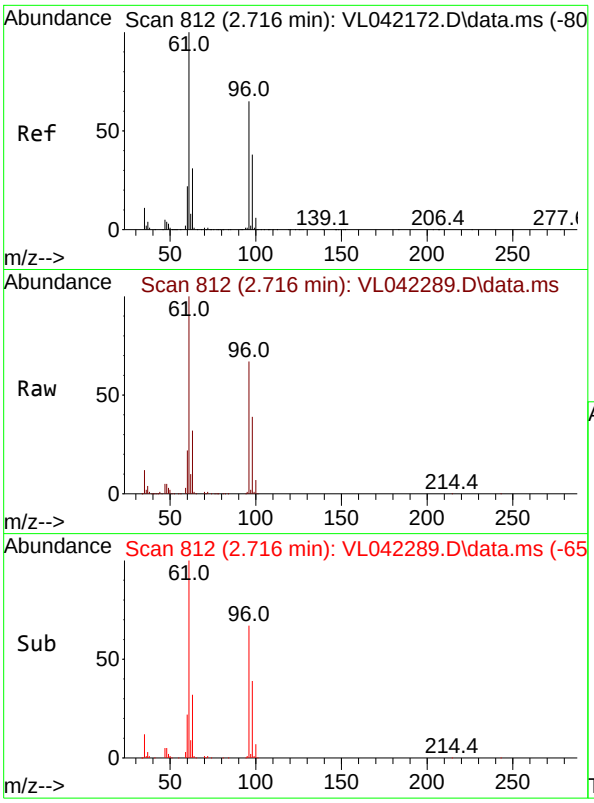


#30
Cyclohexane
Concen: 9.357 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 84 Resp: 182880

Ion	Ratio	Lower	Upper
84	100		
56	125.8	102.8	154.2
41	86.5	66.5	99.7



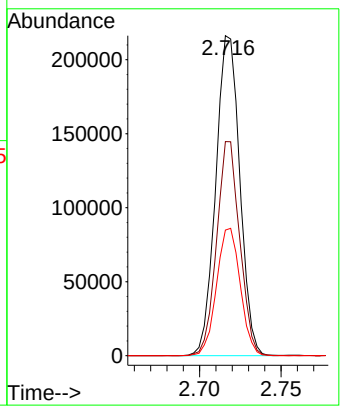


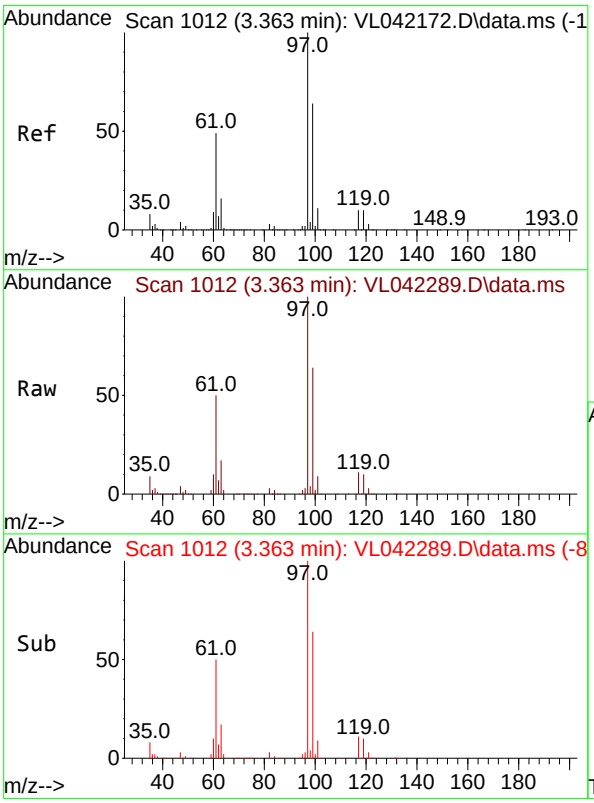
#31
cis-1,2-Dichloroethene
Concen: 9.710 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 61 Resp: 221881

Ion	Ratio	Lower	Upper
61	100		
96	66.9	51.8	77.8
98	39.2	30.6	46.0

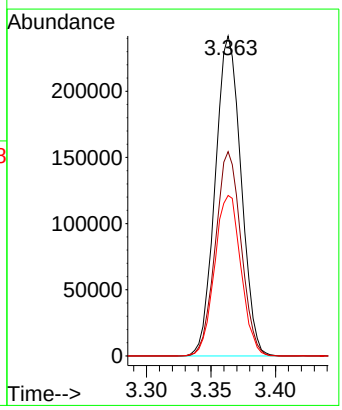


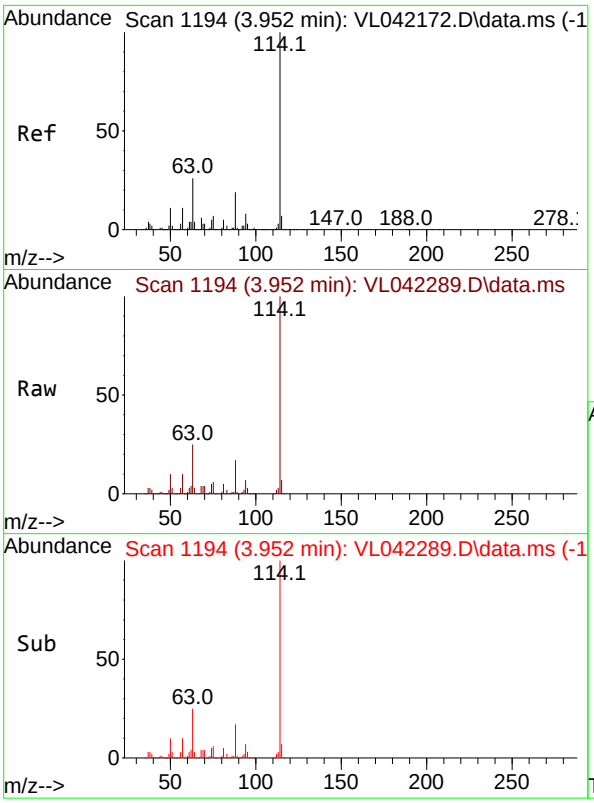


#32
1,1,1-Trichloroethane
Concen: 8.923 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 97 Resp: 336493

Ion	Ratio	Lower	Upper
97	100		
99	63.4	51.5	77.3
61	51.2	38.7	58.1



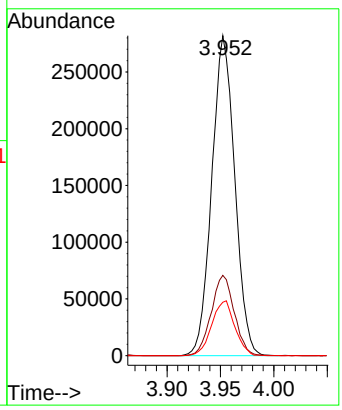


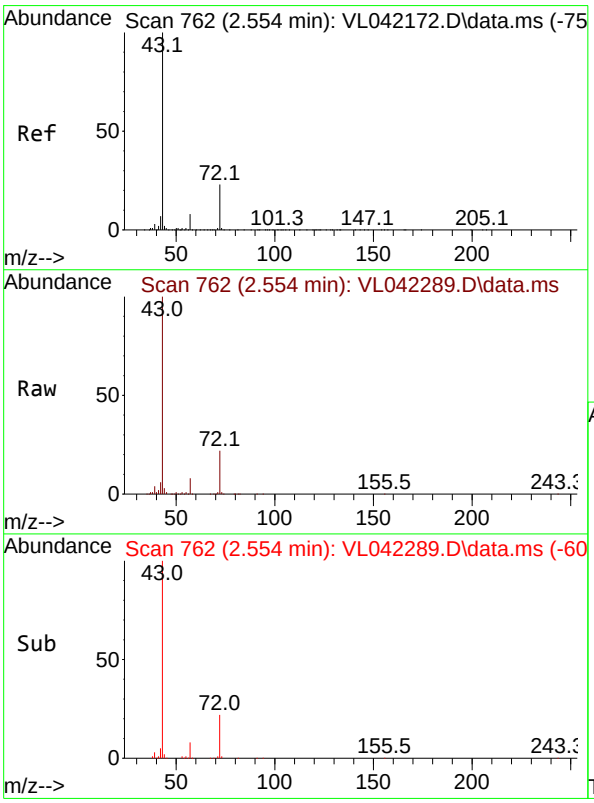
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:114 Resp: 421845

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	17.3	15.0	22.4

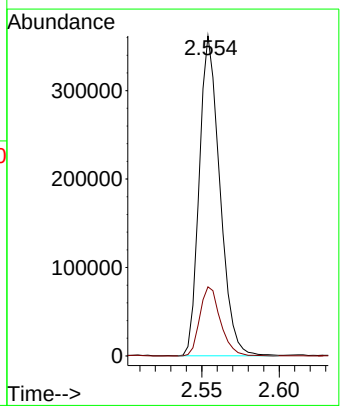


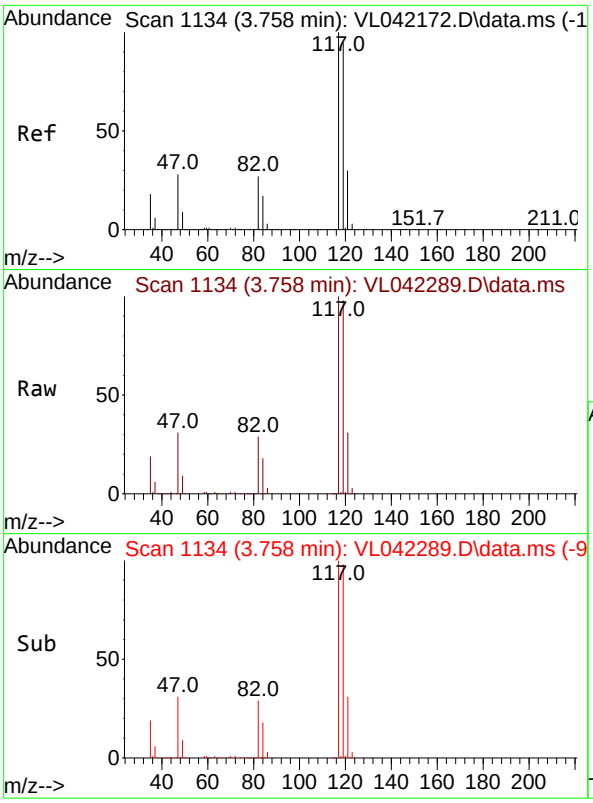


#34
2-Butanone
Concen: 10.940 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 334636

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2



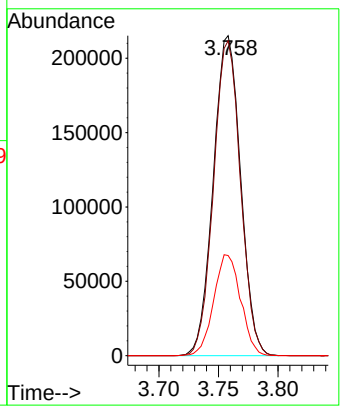


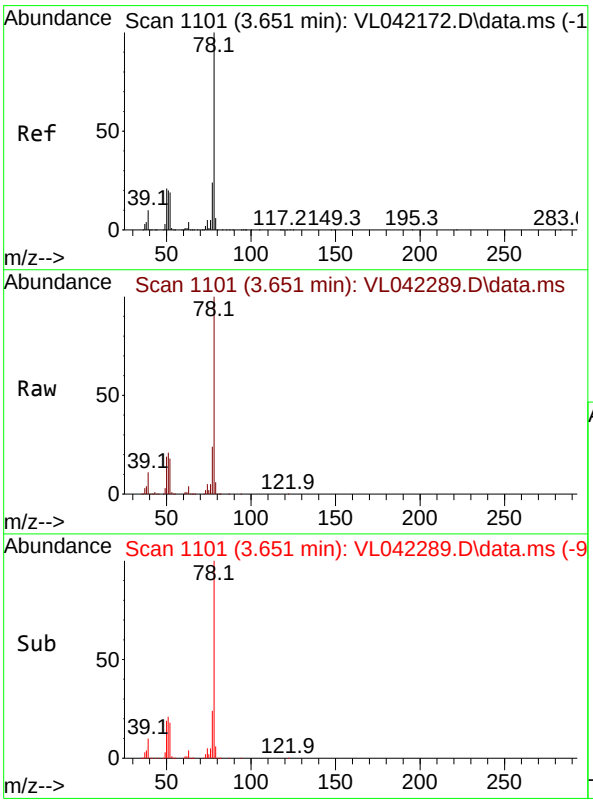
#35
Carbon Tetrachloride
Concen: 10.420 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:117 Resp: 343376

Ion	Ratio	Lower	Upper
117	100		
119	98.4	76.2	114.2
121	31.3	24.2	36.4

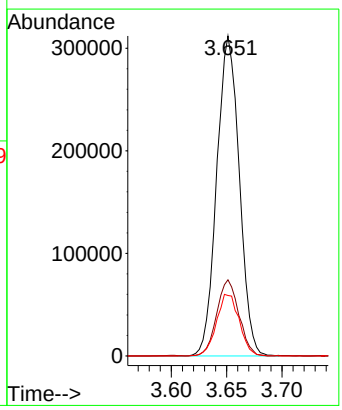


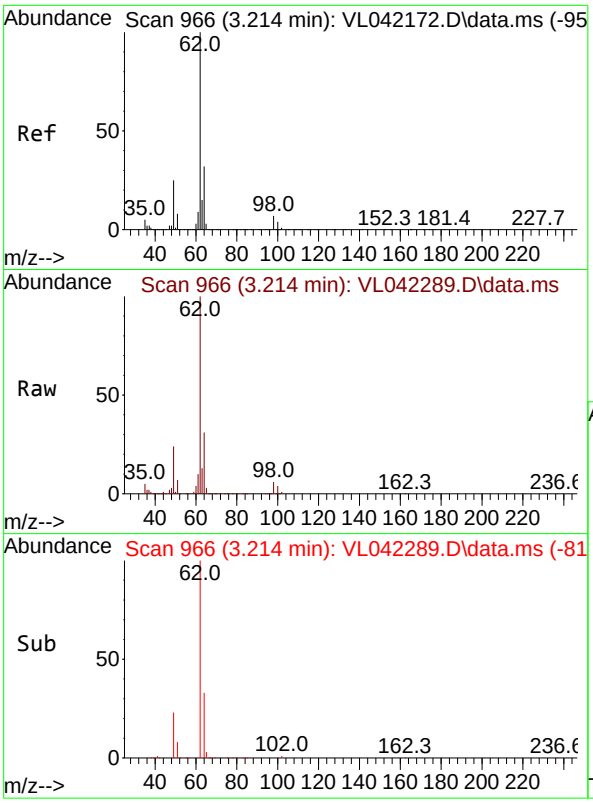


#36
Benzene
Concen: 10.586 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 78 Resp: 442736

Ion	Ratio	Lower	Upper
78	100		
77	23.7	19.1	28.7
50	18.9	16.6	24.8



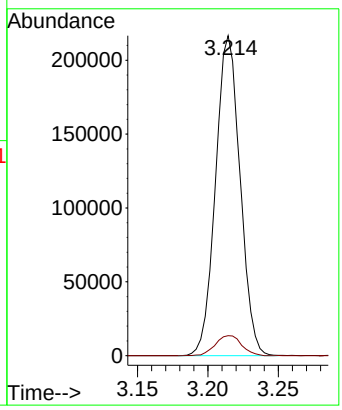


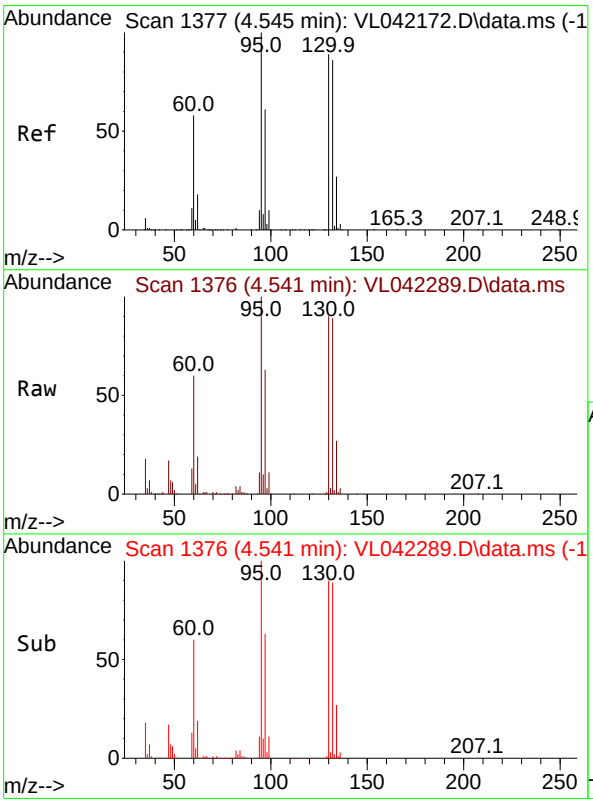
#37
1,2-Dichloroethane
Concen: 10.965 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 62 Resp: 262528

Ion	Ratio	Lower	Upper
62	100		
98	6.8	5.4	8.2

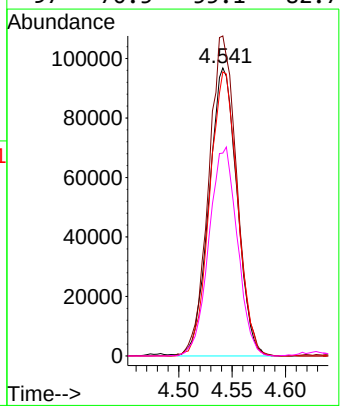


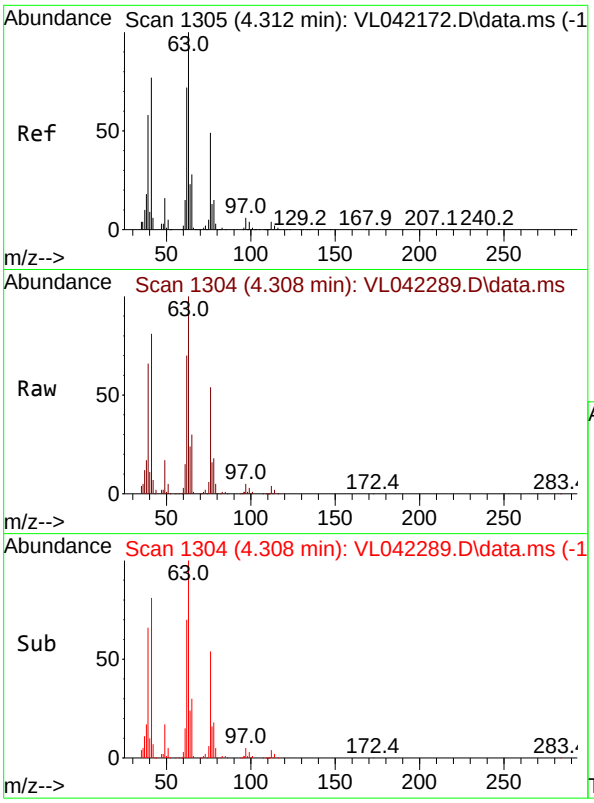


#38
Trichloroethene
Concen: 10.111 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:130 Resp: 176435

Ion	Ratio	Lower	Upper
130	100		
95	111.1	89.8	134.8
132	98.6	77.4	116.2
97	70.5	55.1	82.7



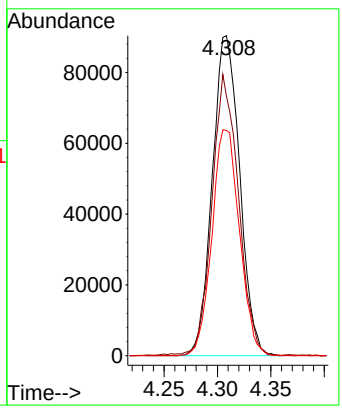


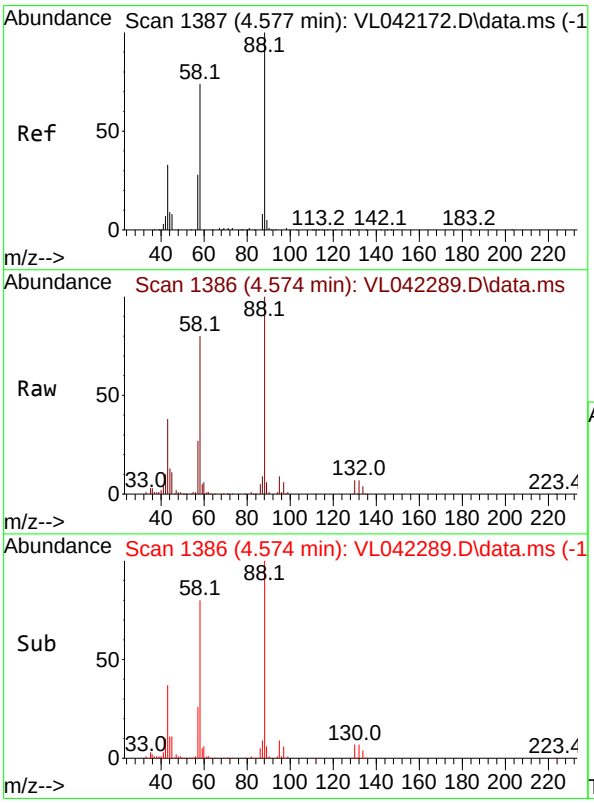
#39
1,2-Dichloropropane
Concen: 10.578 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 63 Resp: 161101

Ion	Ratio	Lower	Upper
63	100		
41	81.1	61.7	92.5
62	70.4	57.6	86.4

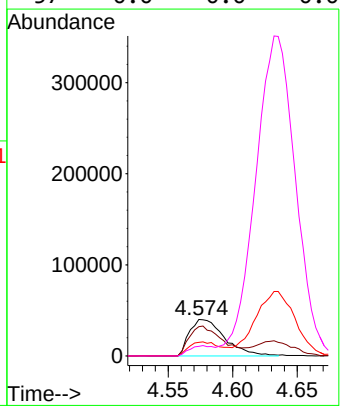


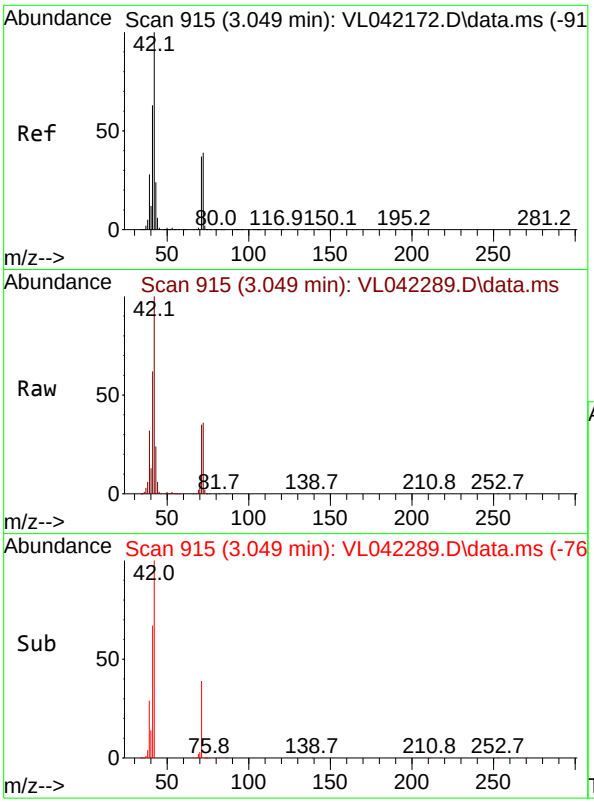


#40
1,4-Dioxane
Concen: 9.441 ppbv
RT: 4.574 min Scan# 1386
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 88 Resp: 76321

Ion	Ratio	Lower	Upper
88	100		
58	80.1	62.7	94.1
43	32.6	23.0	34.4
57	0.0	0.0	0.0



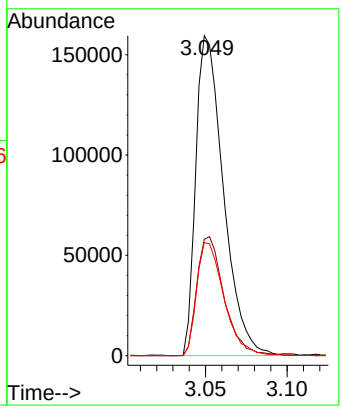


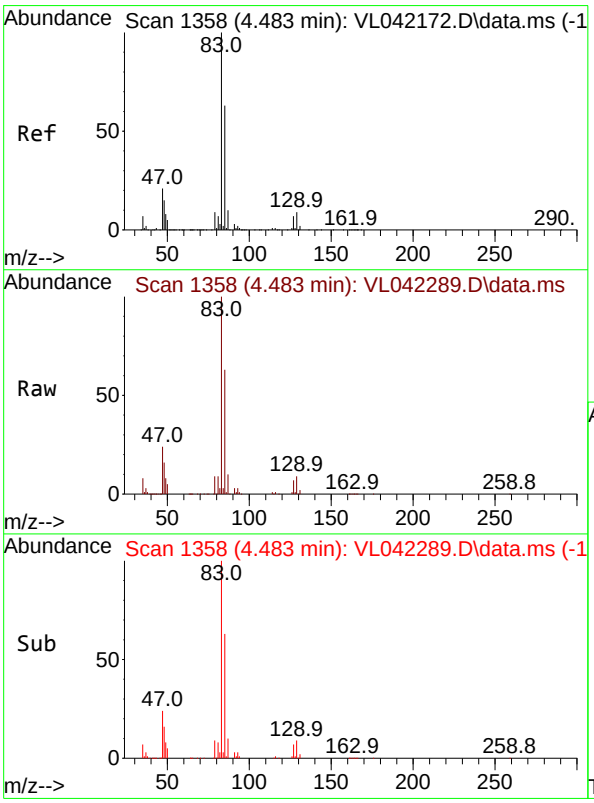
#41
Tetrahydrofuran
Concen: 10.661 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 42 Resp: 187790

Ion	Ratio	Lower	Upper
42	100		
72	36.8	31.4	47.0
71	35.0	30.2	45.4

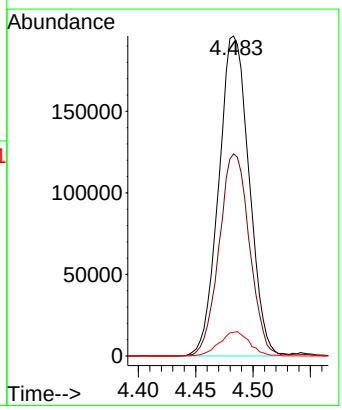


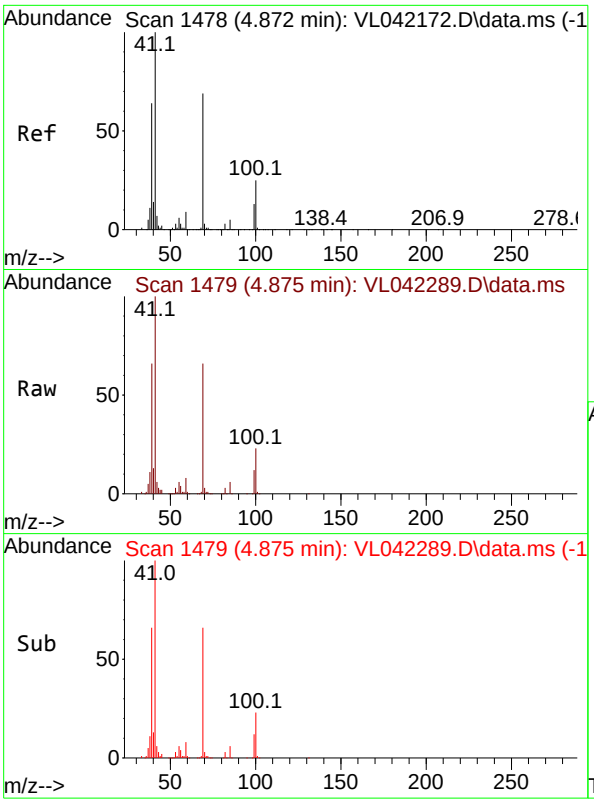


#42
Bromodichloromethane
Concen: 10.927 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 83 Resp: 360662

Ion	Ratio	Lower	Upper
83	100		
85	63.1	50.5	75.7
127	7.4	5.9	8.9



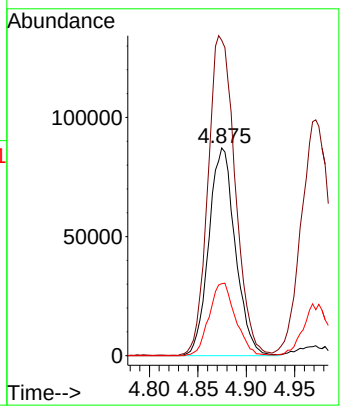


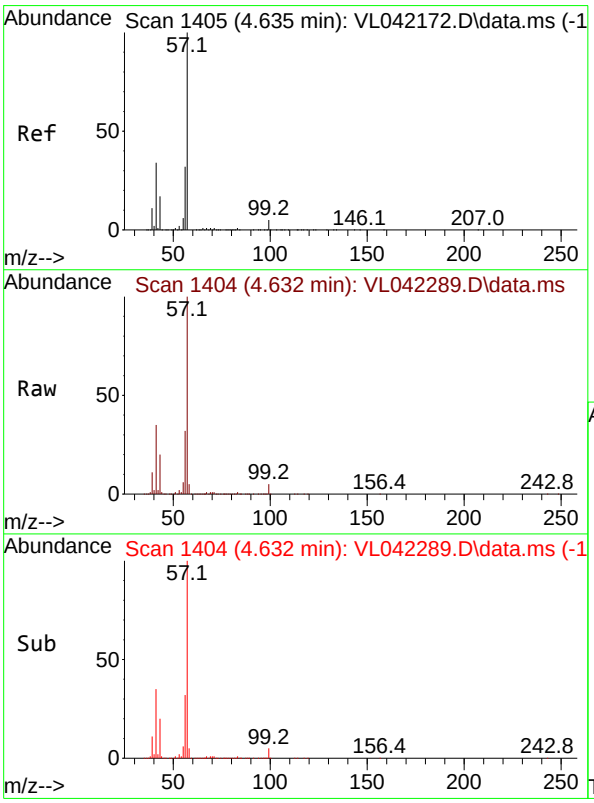
#43
Methyl Methacrylate
Concen: 9.375 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 69 Resp: 165984

Ion	Ratio	Lower	Upper
69	100		
41	157.7	123.8	185.6
100	34.7	28.4	42.6

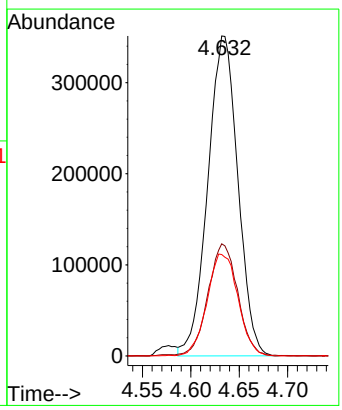


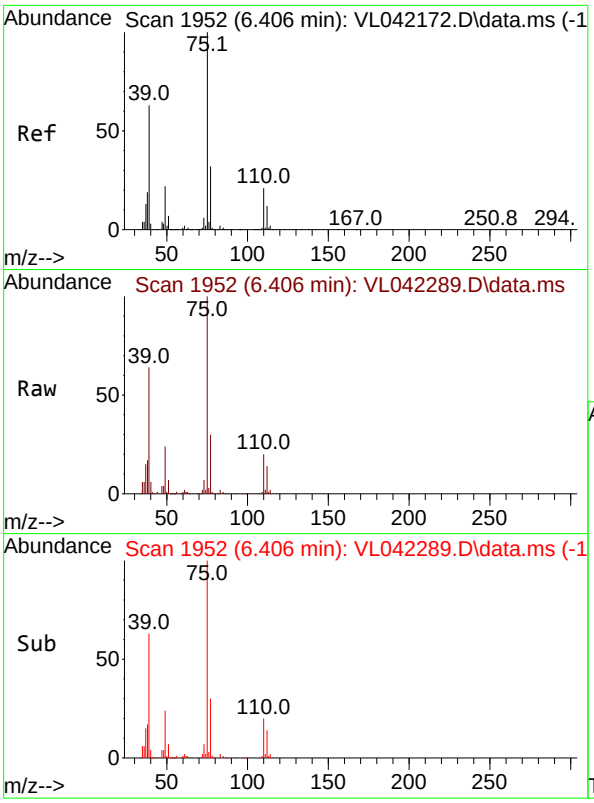


#44
2,2,4-Trimethylpentane
Concen: 10.723 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 57 Resp: 757855

Ion	Ratio	Lower	Upper
57	100		
41	35.2	26.8	40.2
56	32.9	25.6	38.4



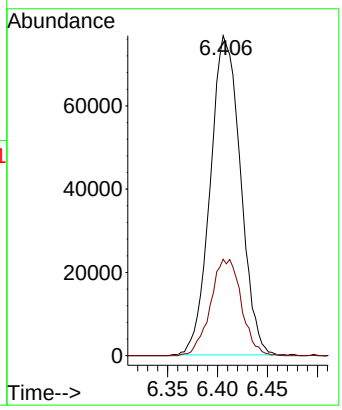


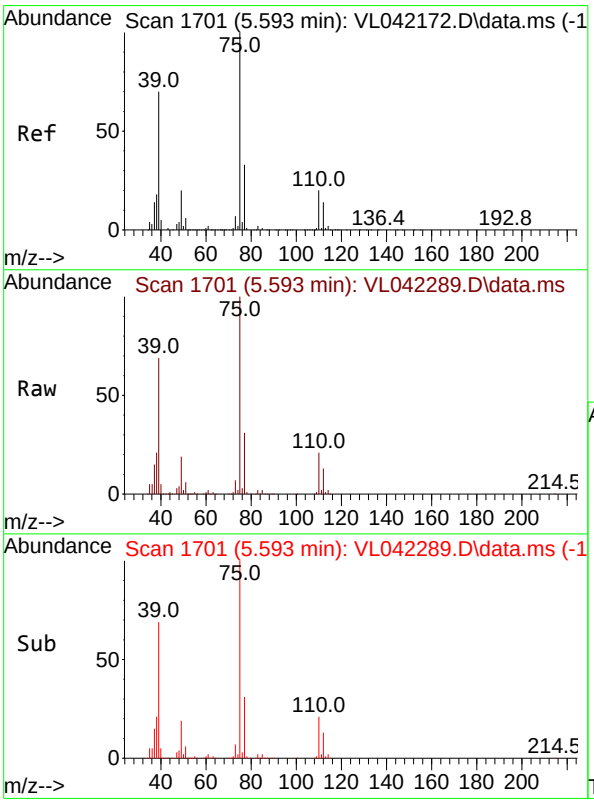
#45
t-1,3-Dichloropropene
Concen: 8.489 ppbv
RT: 6.406 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 75 Resp: 161245

Ion	Ratio	Lower	Upper
75	100		
77	30.2	26.0	39.0

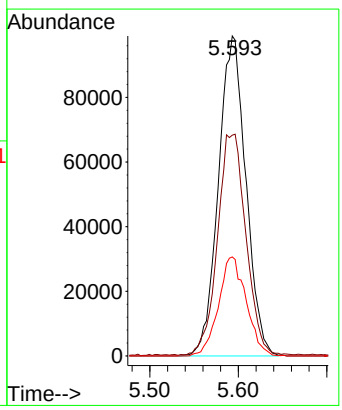


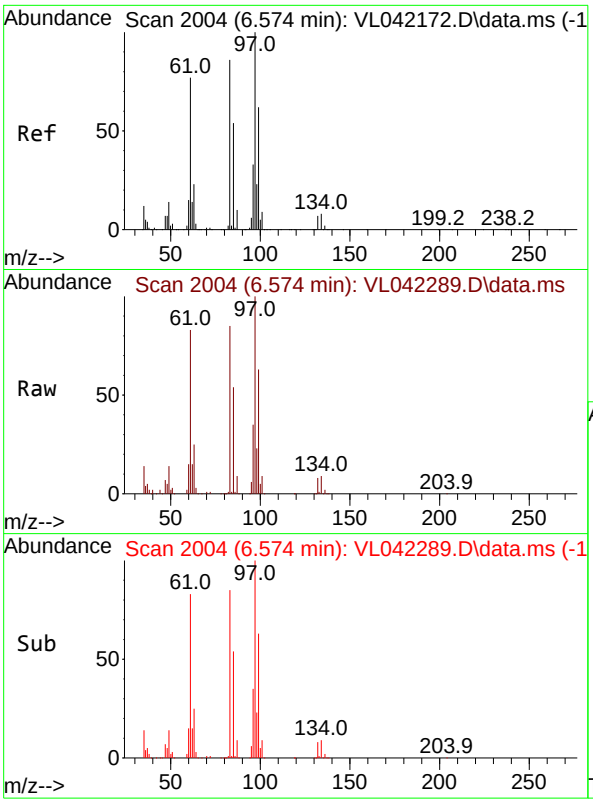


#46
cis-1,3-Dichloropropene
Concen: 9.172 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 75 Resp: 213566

Ion	Ratio	Lower	Upper
75	100		
39	68.8	55.8	83.6
77	30.9	26.0	39.0



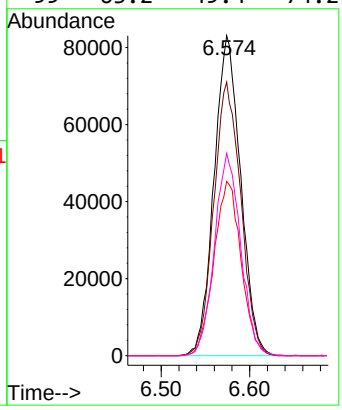


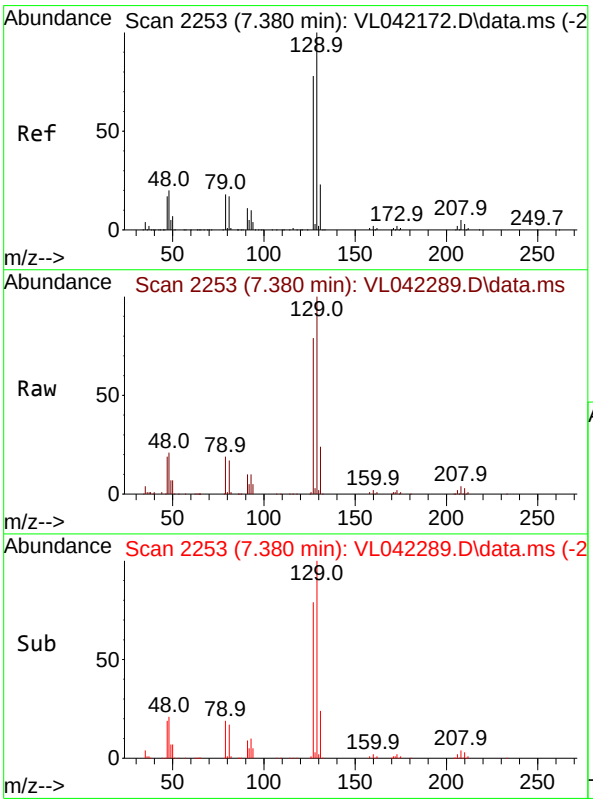
#47
1,1,2-Trichloroethane
Concen: 10.777 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 97 Resp: 173506

Ion	Ratio	Lower	Upper
97	100		
83	85.5	69.2	103.8
85	54.4	43.1	64.7
99	63.2	49.4	74.2

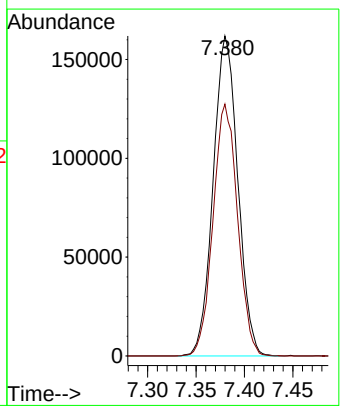


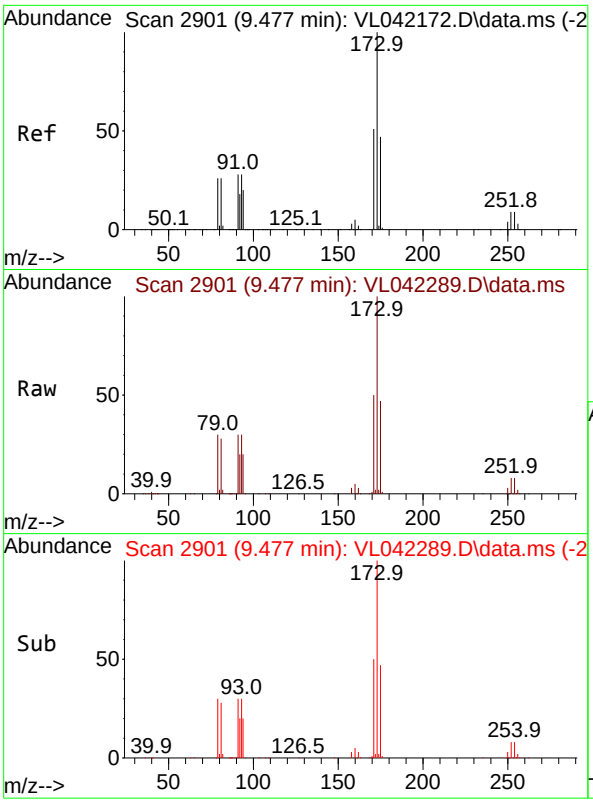


#48
Dibromochloromethane
Concen: 10.516 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:129 Resp: 286938

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.2



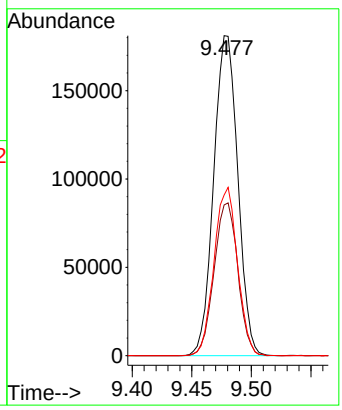


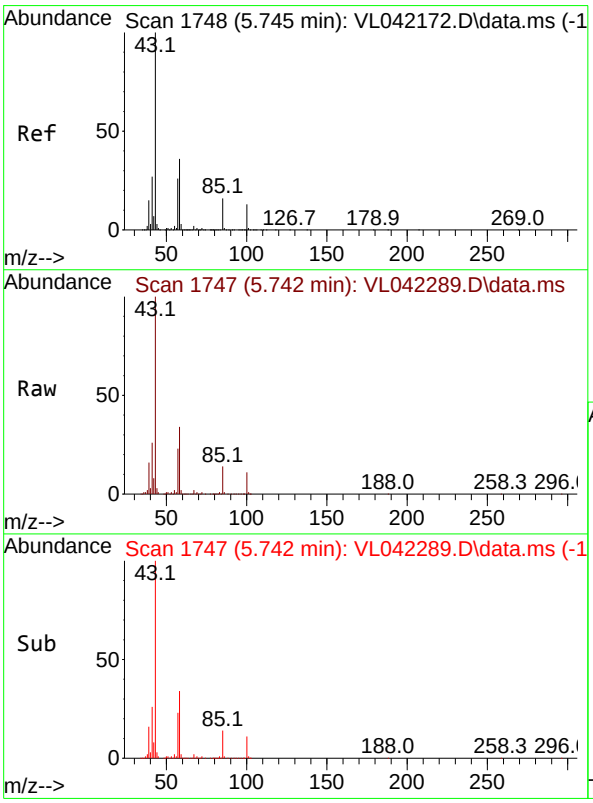
#49
Bromoform
Concen: 10.386 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:173 Resp: 254430

Ion	Ratio	Lower	Upper
173	100		
175	47.2	38.6	57.8
171	51.2	41.8	62.6

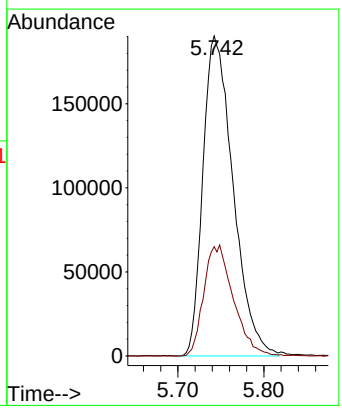


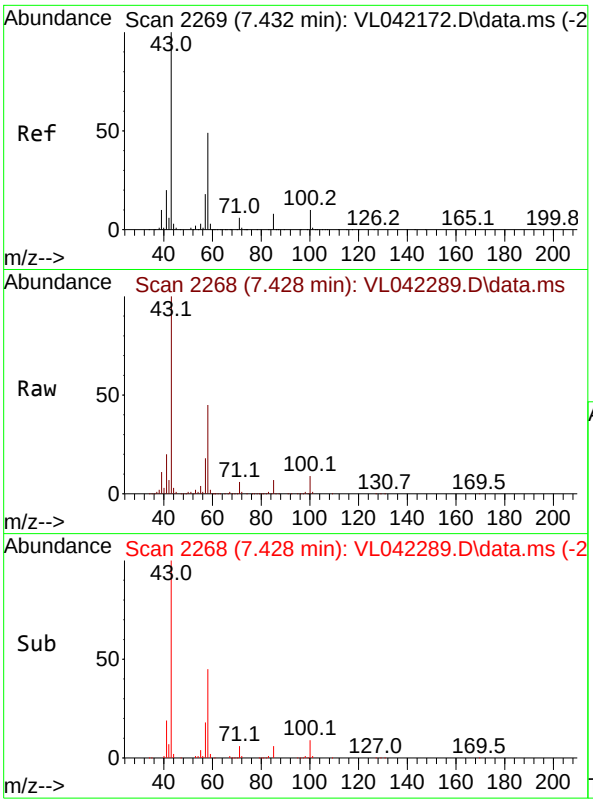


#50
4-Methyl-2-Pentanone
Concen: 9.552 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 43 Resp: 463069

Ion	Ratio	Lower	Upper
43	100		
58	34.2	29.0	43.6



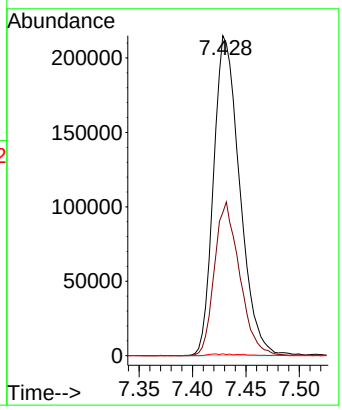


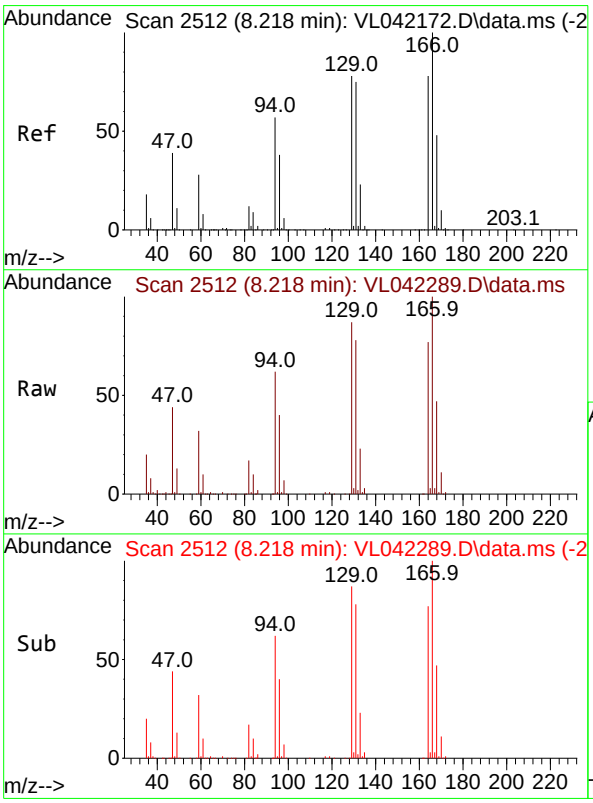
#51
2-Hexanone
Concen: 9.168 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 43 Resp: 364946

Ion	Ratio	Lower	Upper
43	100		
58	46.5	39.7	59.5
98	0.8	0.1	0.1#

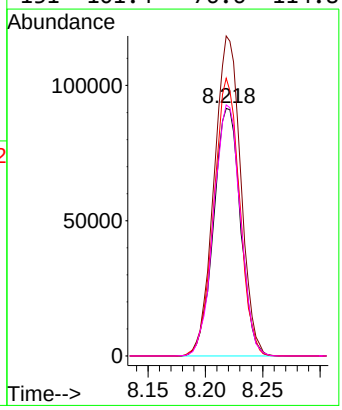


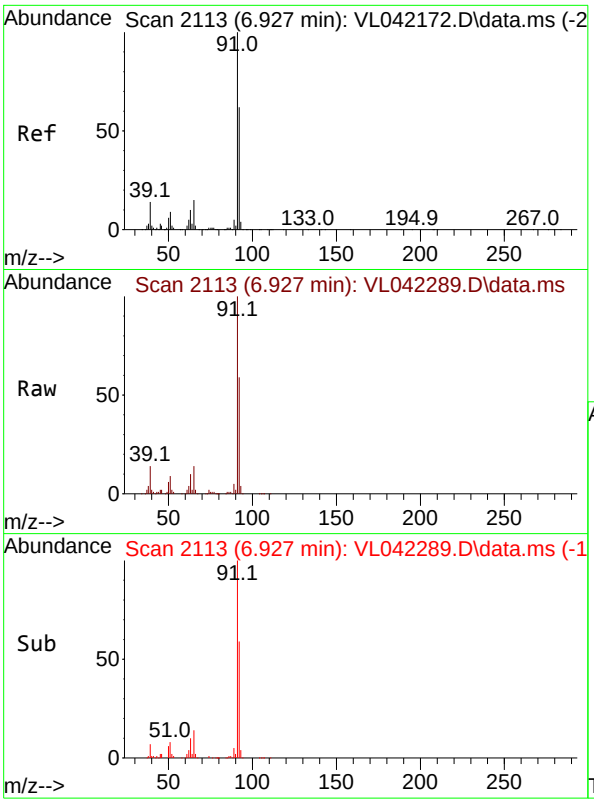


#52
Tetrachloroethene
Concen: 8.946 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:164 Resp: 148369

Ion	Ratio	Lower	Upper
164	100		
166	129.3	102.5	153.7
129	112.2	79.8	119.8
131	101.4	76.6	114.8



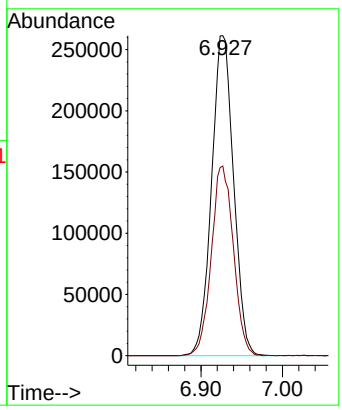


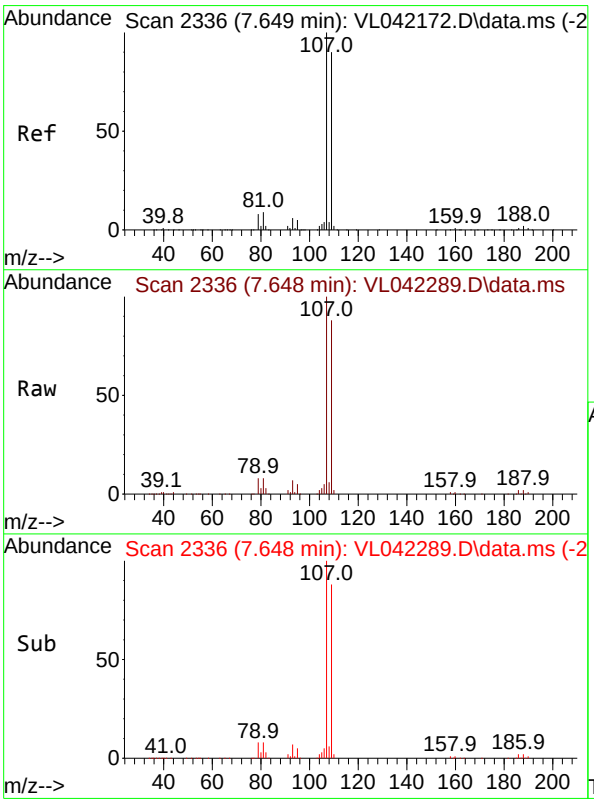
#53
Toluene
Concen: 9.903 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 91 Resp: 490916

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6

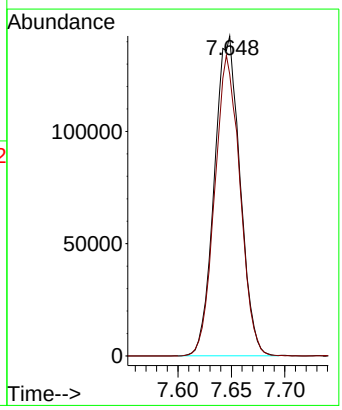


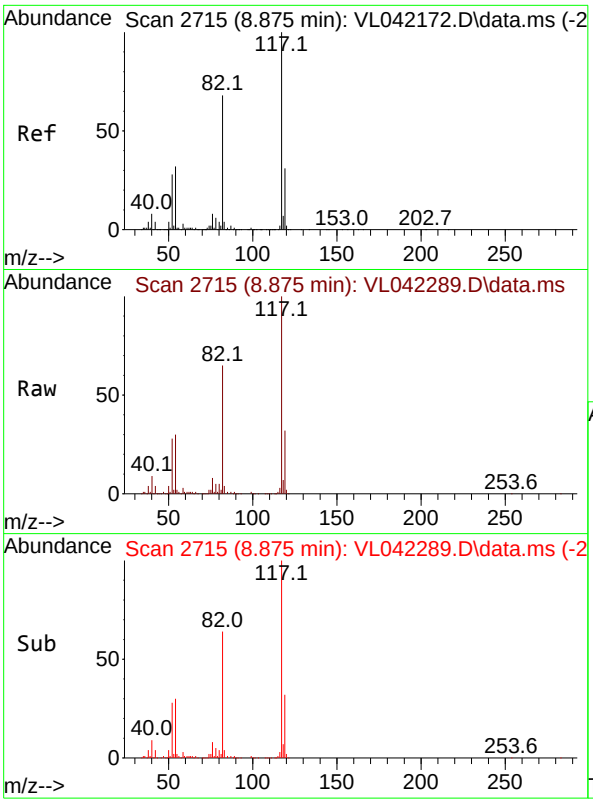


#54
1,2-Dibromoethane
Concen: 10.608 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:107 Resp: 238091

Ion	Ratio	Lower	Upper
107	100		
109	88.1	72.2	108.4



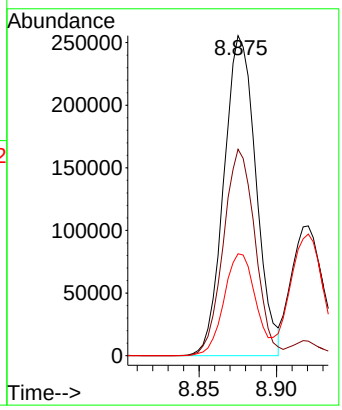


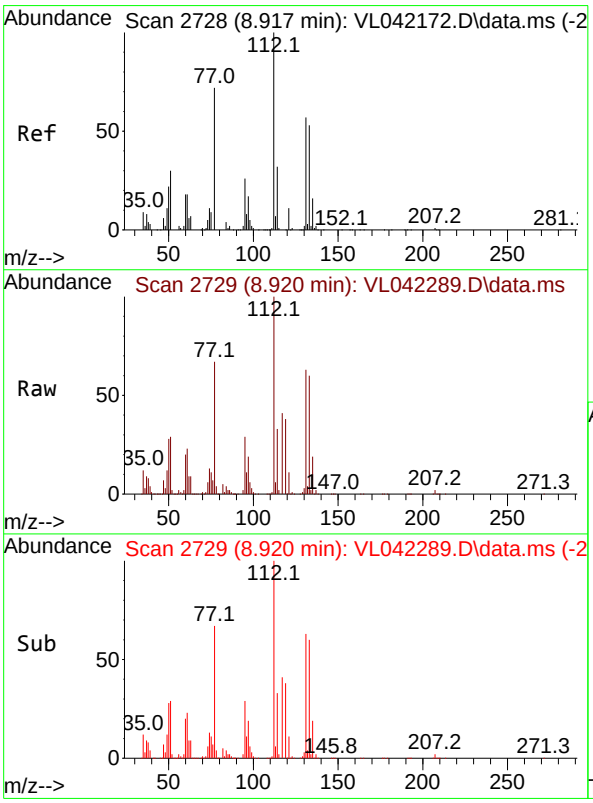
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:117 Resp: 368487

Ion	Ratio	Lower	Upper
117	100		
82	67.9	55.8	83.6
119	31.8	25.5	38.3

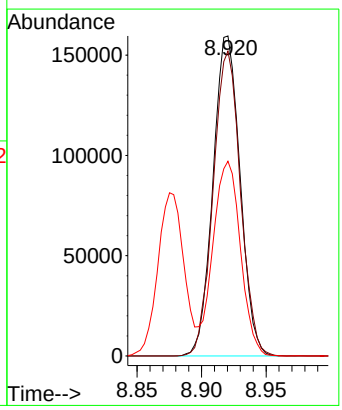


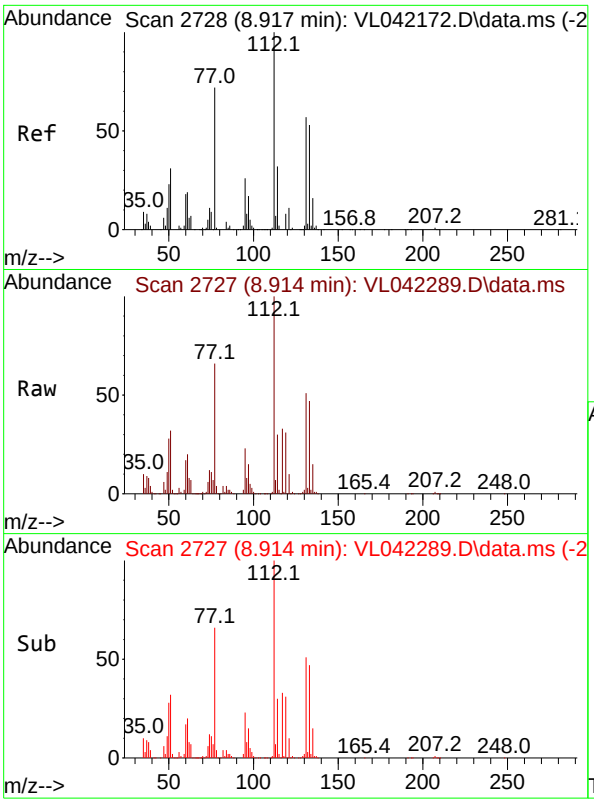


#56
1,1,1,2-Tetrachloroethane
Concen: 11.465 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:131 Resp: 232553

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.6	114.8
119	62.4	49.8	74.6



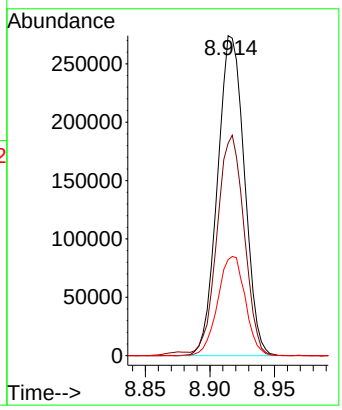


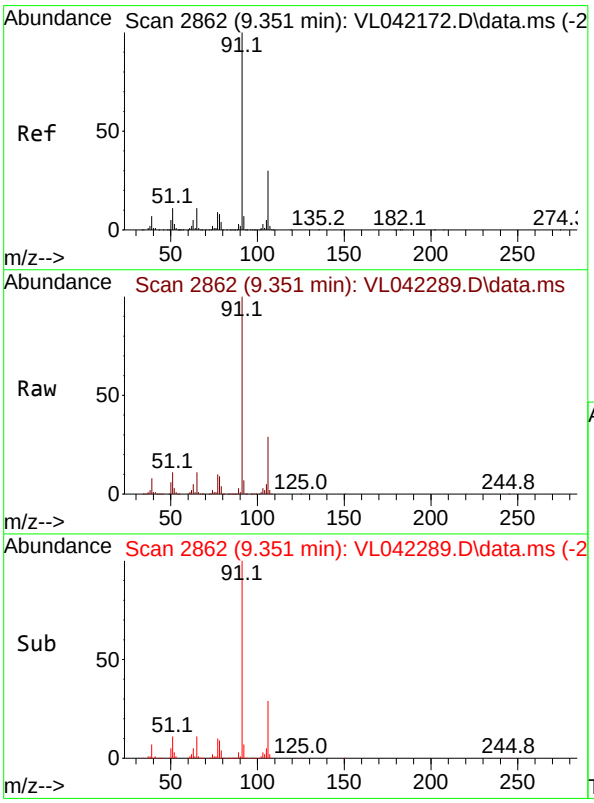
#57
Chlorobenzene
Concen: 11.372 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:112 Resp: 397485

Ion	Ratio	Lower	Upper
112	100		
77	66.3	58.2	87.2
114	30.0	29.1	35.5

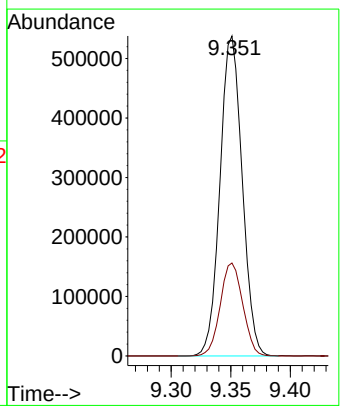


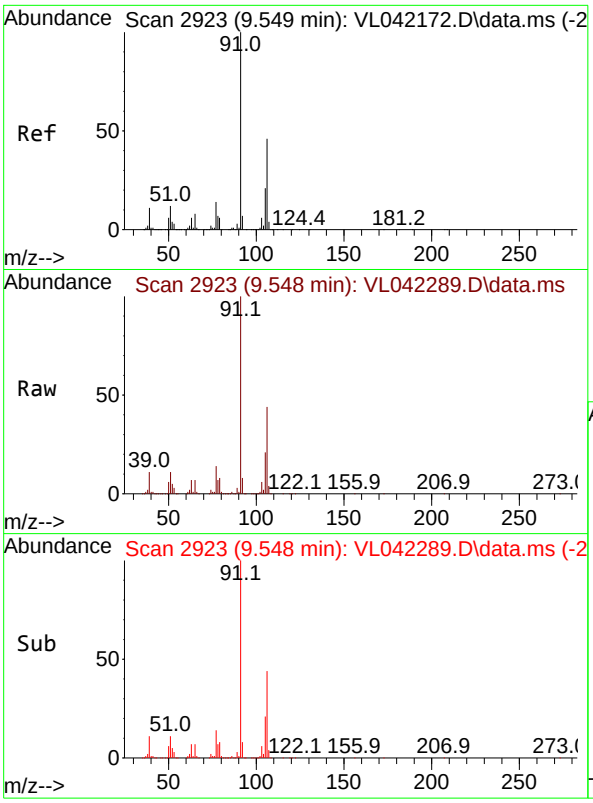


#58
Ethyl Benzene
Concen: 10.619 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 695035

Ion	Ratio	Lower	Upper
91	100		
106	29.0	24.2	36.2



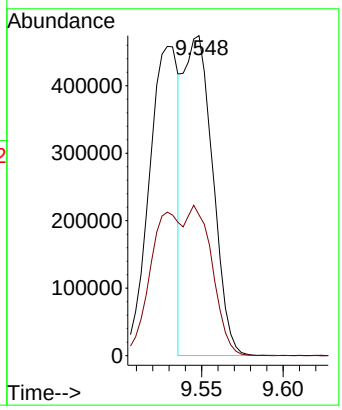


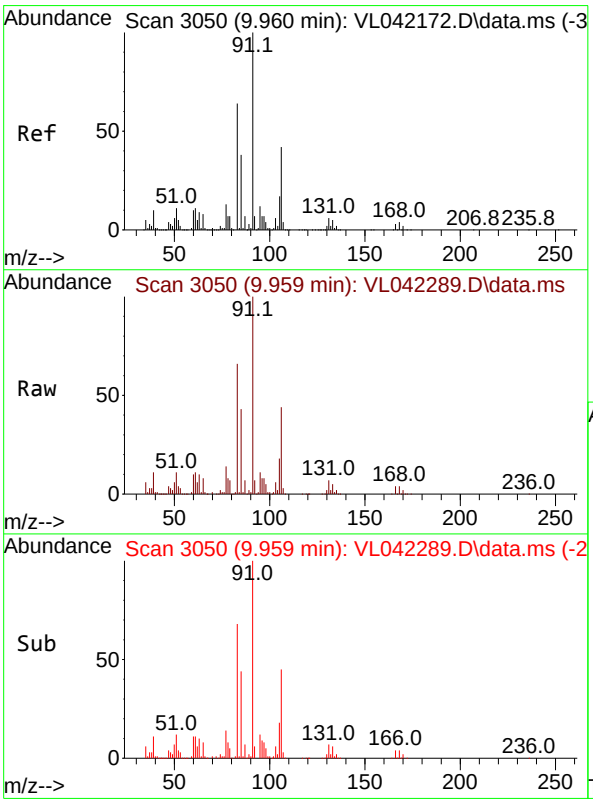
#59
m/p-Xylene
Concen: 11.352 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 91 Resp: 593323

Ion	Ratio	Lower	Upper
91	100		
106	90.6	36.4	54.6#

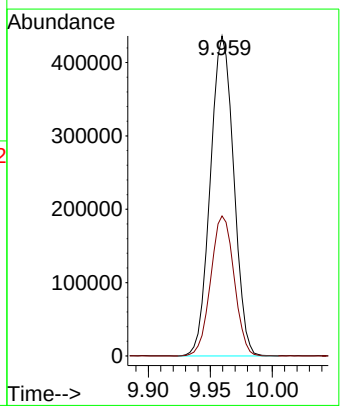


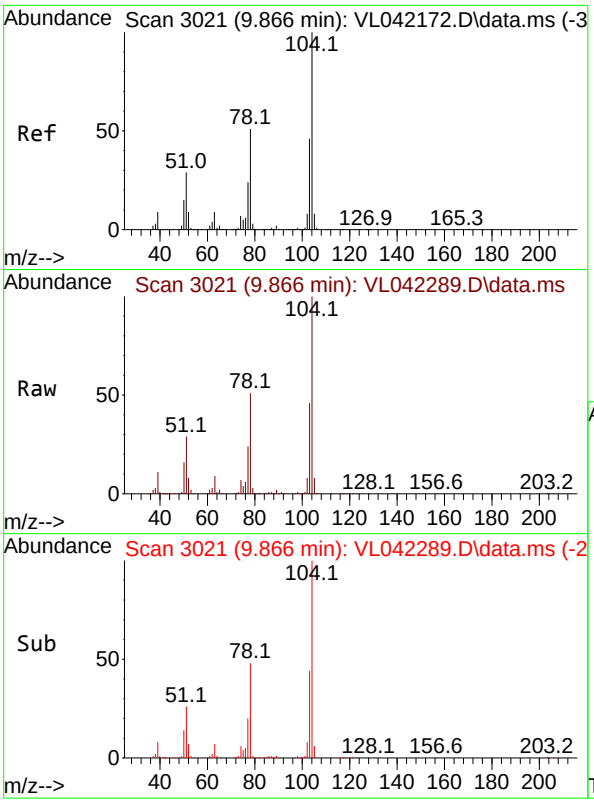


#60
o-Xylene
Concen: 10.960 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 574256

Ion	Ratio	Lower	Upper
91	100		
106	43.7	20.8	62.5



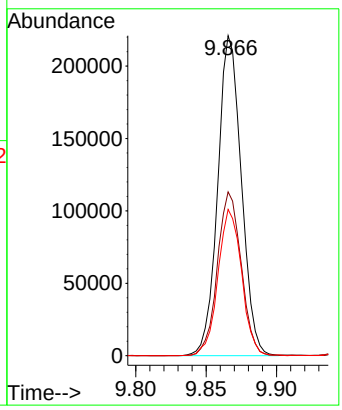


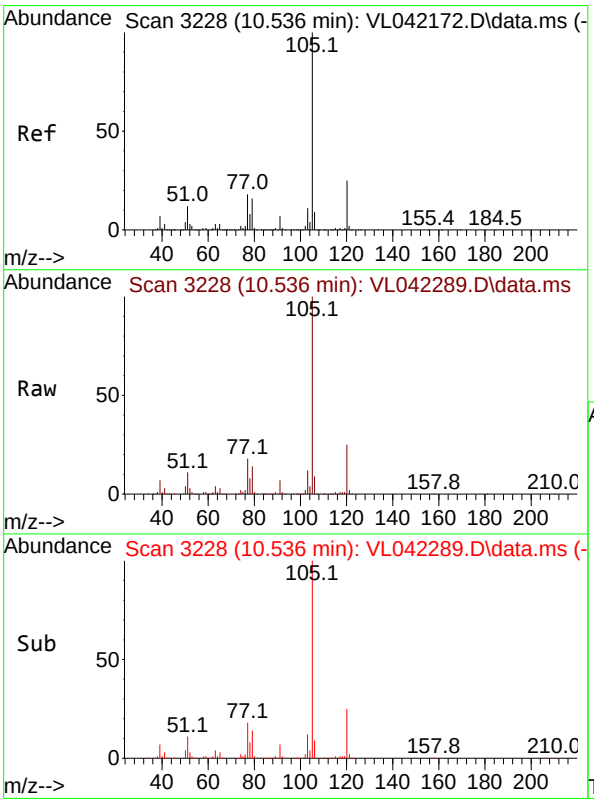
#61
Styrene
Concen: 9.967 ppbv
RT: 9.866 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:104 Resp: 258350

Ion	Ratio	Lower	Upper
104	100		
78	51.6	41.8	62.6
103	45.9	37.0	55.4

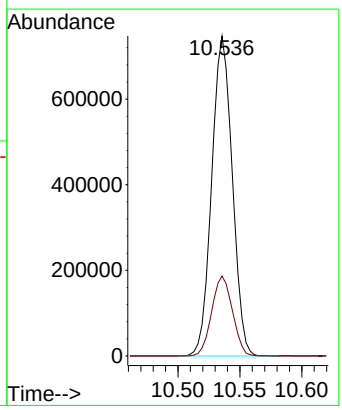


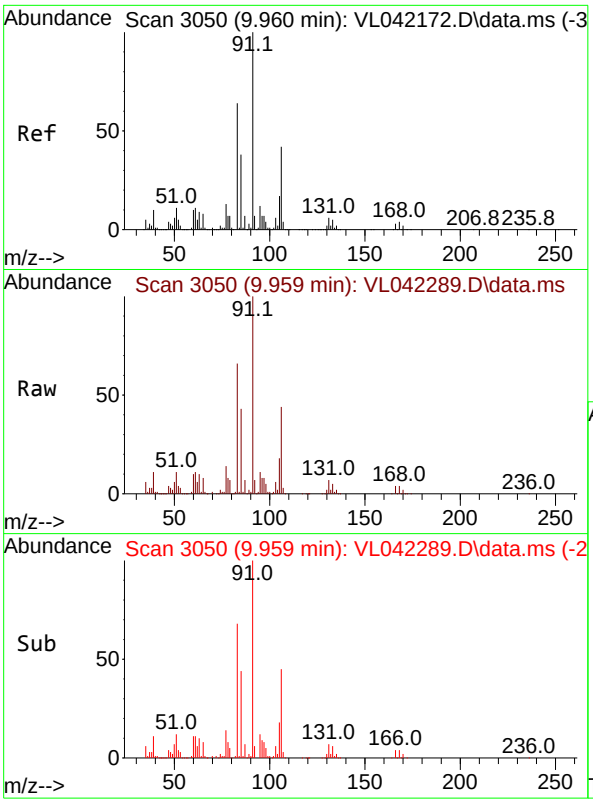


#62
Isopropylbenzene
Concen: 11.032 ppbv
RT: 10.536 min Scan# 3228
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 864354

Ion	Ratio	Lower	Upper
105	100		
120	25.1	19.9	29.9



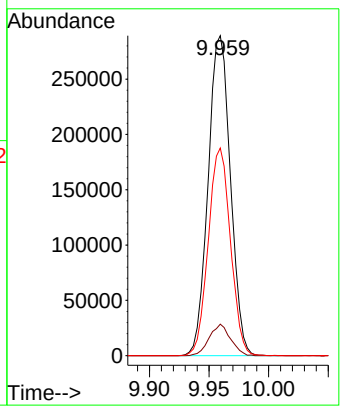


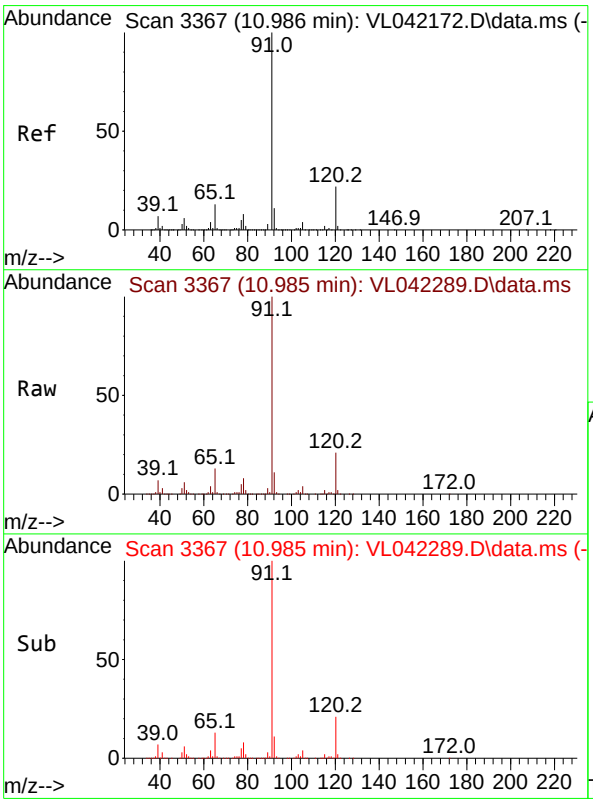
#63
1,1,2,2-Tetrachloroethane
Concen: 11.843 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 83 Resp: 377007

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.5	32.5	97.5

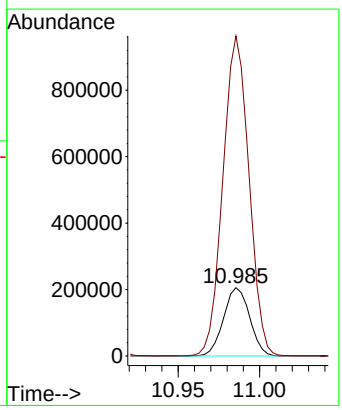


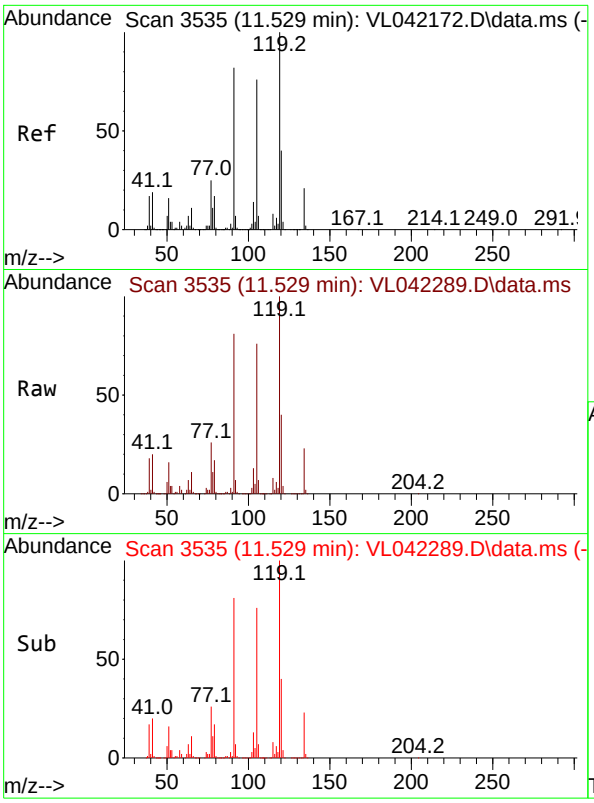


#64
n-propylbenzene
Concen: 11.331 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:120 Resp: 228525

Ion	Ratio	Lower	Upper
120	100		
91	468.7	376.9	565.3



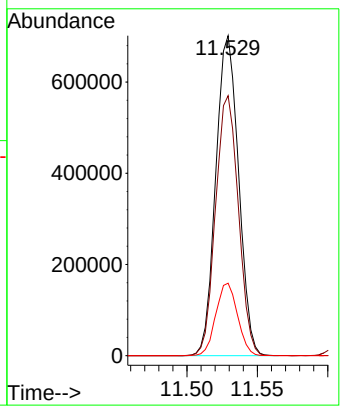


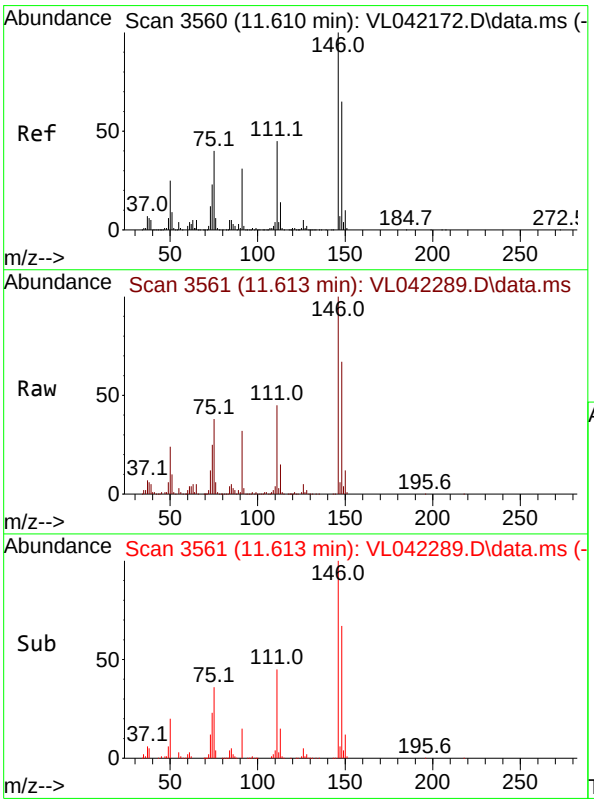
#65
tert-Butylbenzene
Concen: 10.909 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:119 Resp: 790461

Ion	Ratio	Lower	Upper
119	100		
91	81.4	66.0	99.0
134	21.6	16.7	25.1

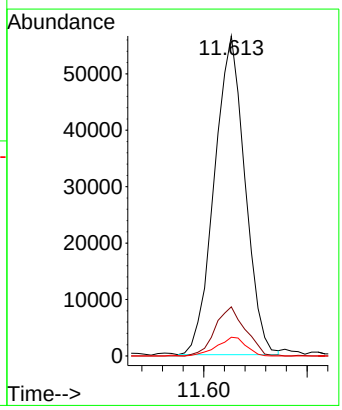


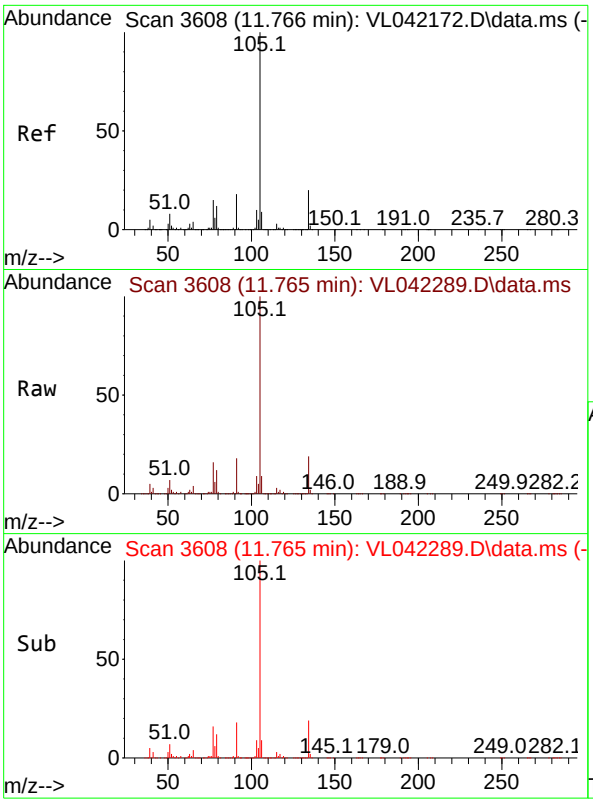


#66
Benzyl Chloride
Concen: 7.561 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 58131

Ion	Ratio	Lower	Upper
91	100		
126	15.2	13.8	20.6
128	5.6	4.5	6.7



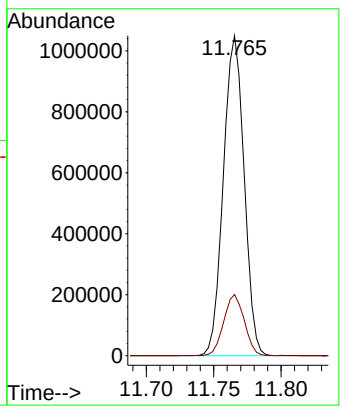


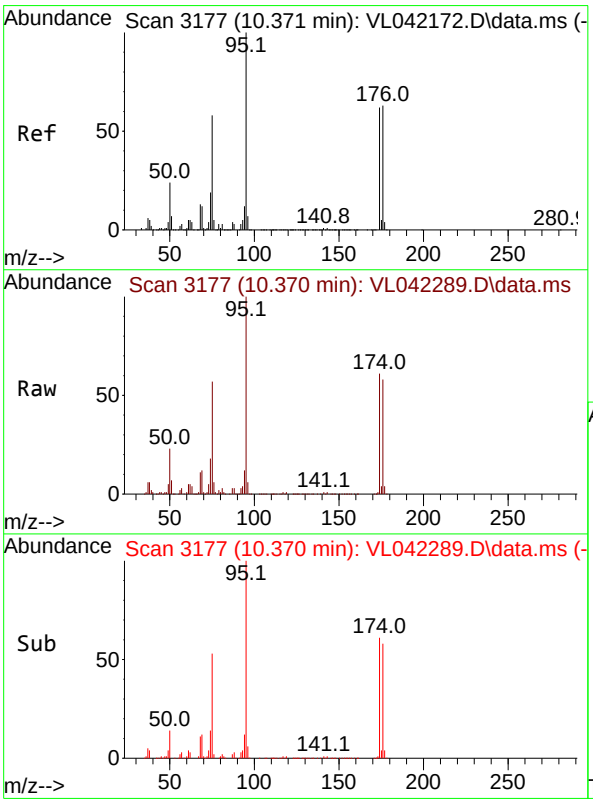
#67
sec-Butylbenzene
Concen: 11.161 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:105 Resp: 1124096

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3

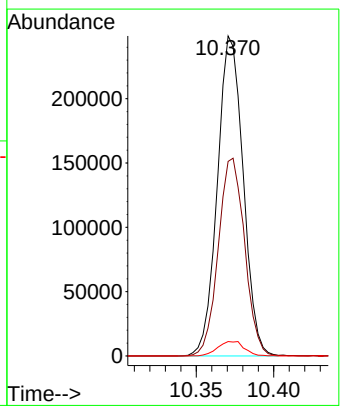


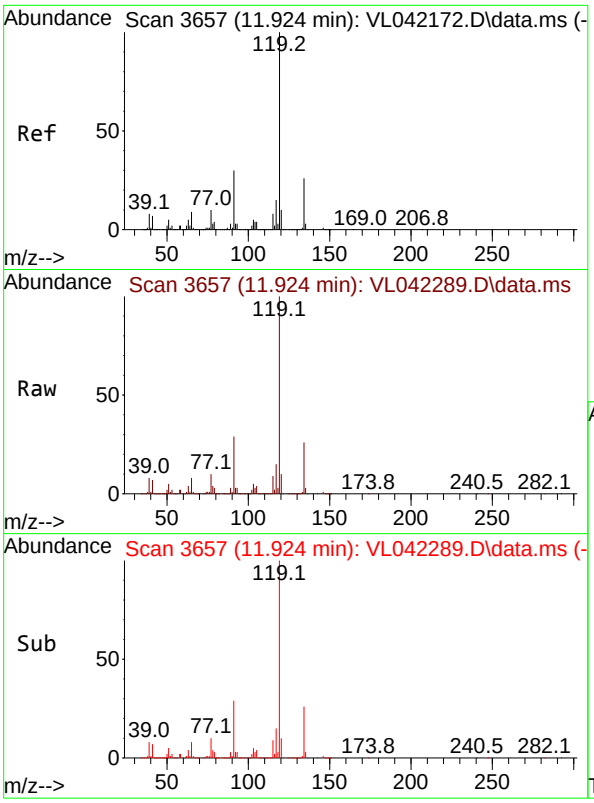


#68
1-Bromo-4-Fluorobenzene
Concen: 9.522 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 95 Resp: 288141

Ion	Ratio	Lower	Upper
95	100		
174	63.2	50.6	76.0
175	4.7	3.8	5.6



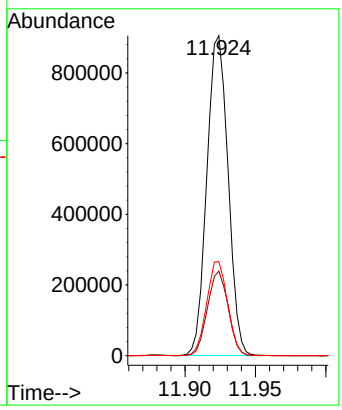


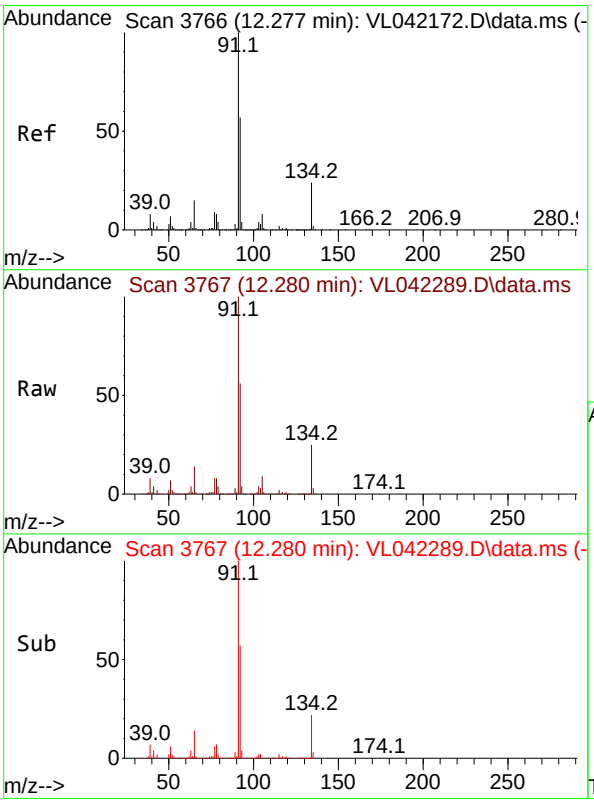
#69
p-Isopropyltoluene
Concen: 10.954 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:119 Resp: 950025

Ion	Ratio	Lower	Upper
119	100		
134	25.9	20.4	30.6
91	29.1	23.7	35.5

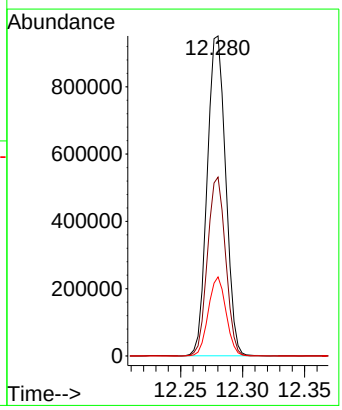


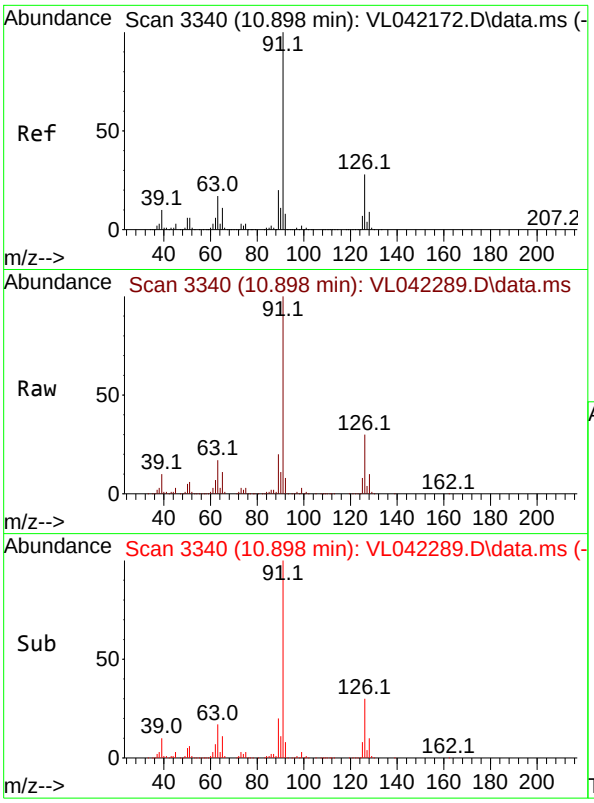


#70
n-Butylbenzene
Concen: 11.124 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion: 91 Resp: 986632

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.9	67.3
134	23.8	19.2	28.8



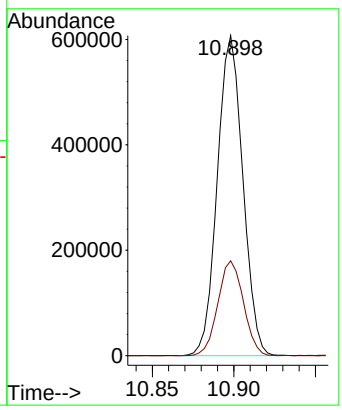


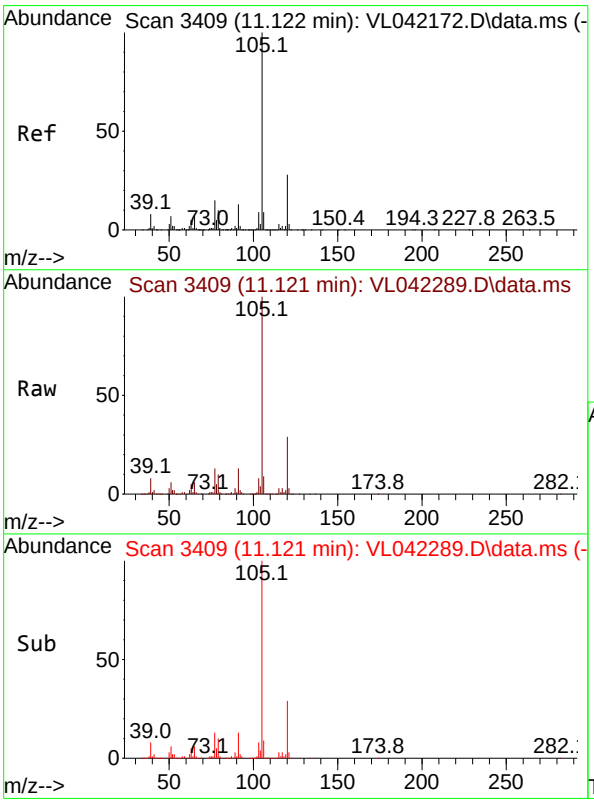
#71
2-Chlorotoluene
Concen: 10.859 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion: 91 Resp: 660346

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4

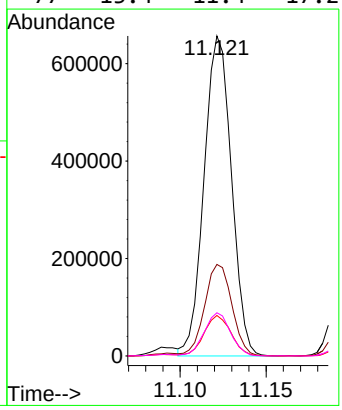


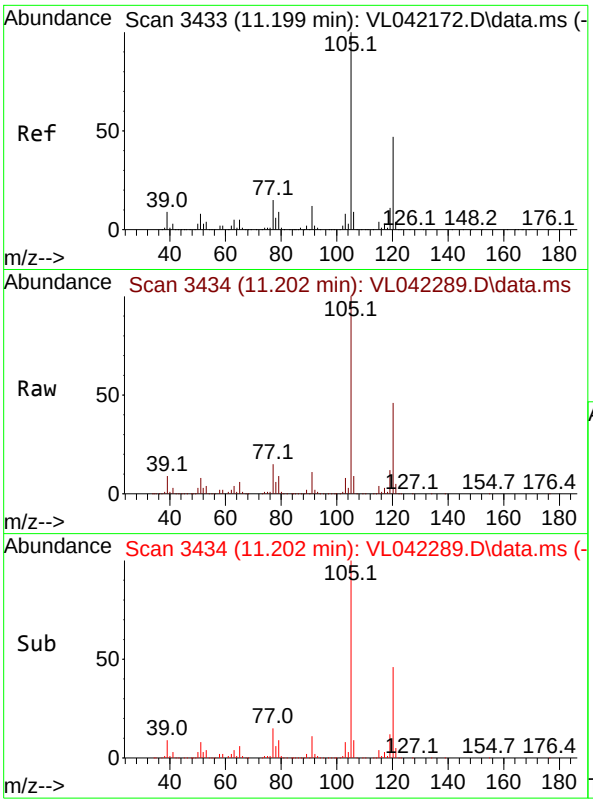


#72
4-Ethyltoluene
Concen: 11.142 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 726883

Ion	Ratio	Lower	Upper
105	100		
120	29.3	23.4	35.0
91	13.0	10.3	15.5
77	13.4	11.4	17.2



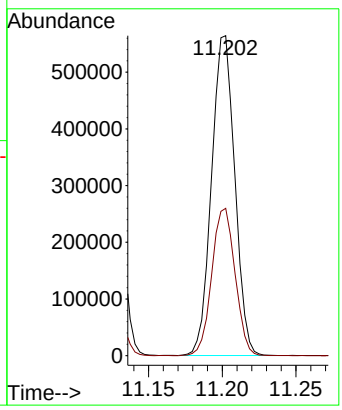


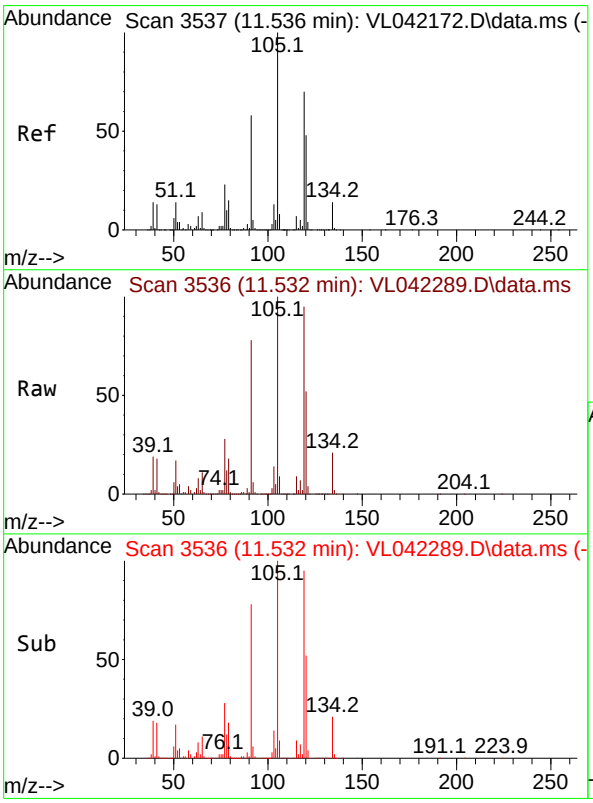
#73
1,3,5-Trimethylbenzene
Concen: 10.851 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:105 Resp: 618219

Ion	Ratio	Lower	Upper
105	100		
120	46.0	37.4	56.0

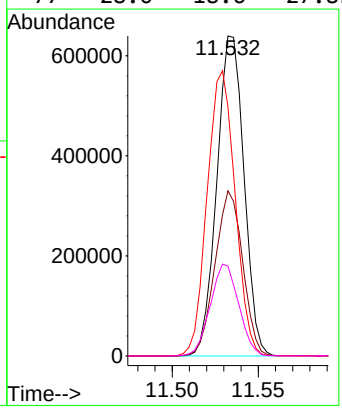


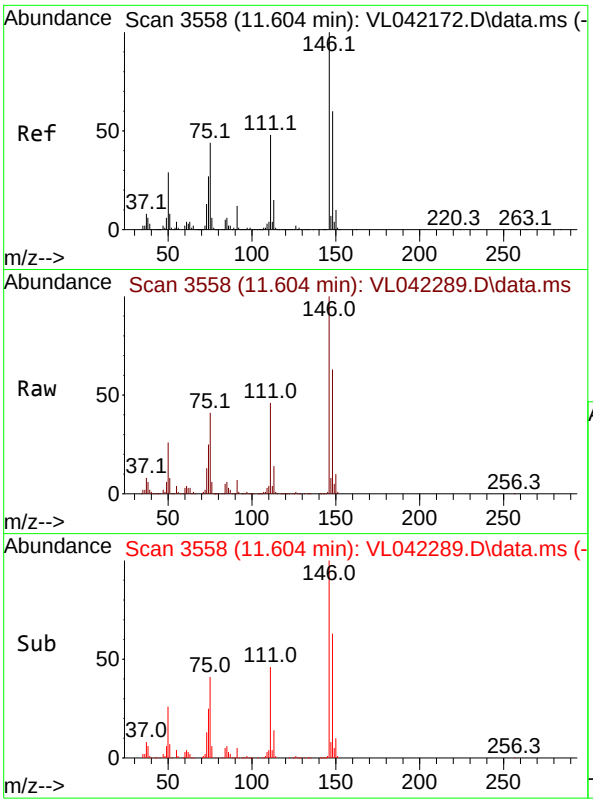


#74
1,2,4-Trimethylbenzene
Concen: 10.699 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:105 Resp: 702287

Ion	Ratio	Lower	Upper
105	100		
120	51.6	38.6	58.0
91	77.8	46.2	69.2#
77	28.0	18.6	27.8#



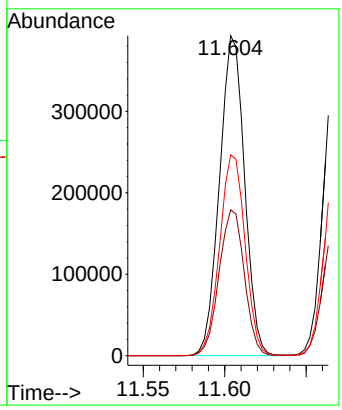


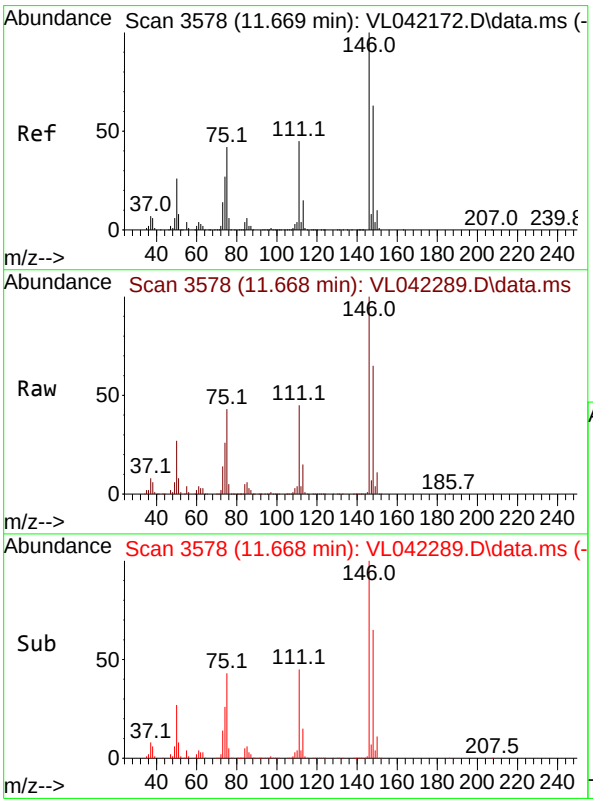
#75
1,3-Dichlorobenzene
Concen: 11.644 ppbv
RT: 11.604 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:146 Resp: 419165

Ion	Ratio	Lower	Upper
146	100		
111	46.1	23.8	71.2
148	64.0	31.9	95.9

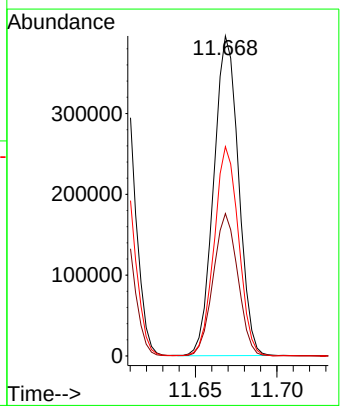


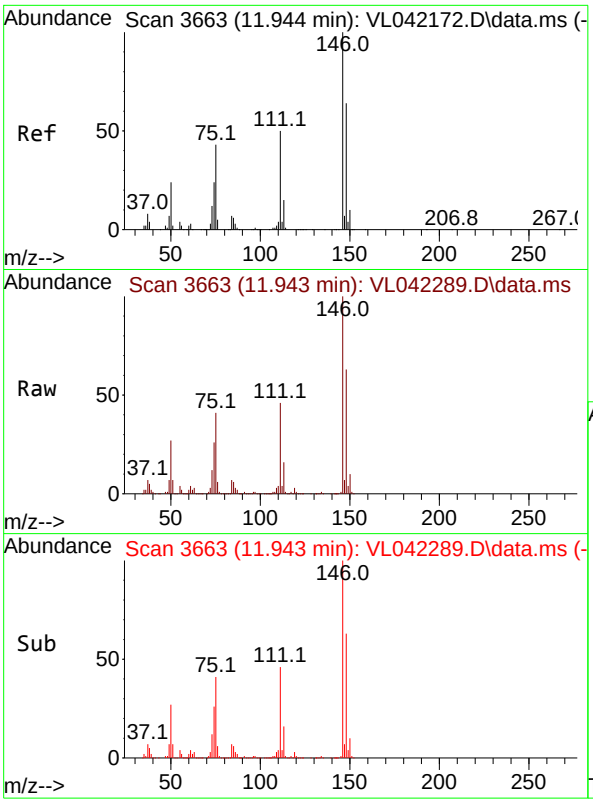


#76
1,4-Dichlorobenzene
Concen: 11.660 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:146 Resp: 417746

Ion	Ratio	Lower	Upper
146	100		
111	44.3	23.0	69.0
148	64.7	31.9	95.7



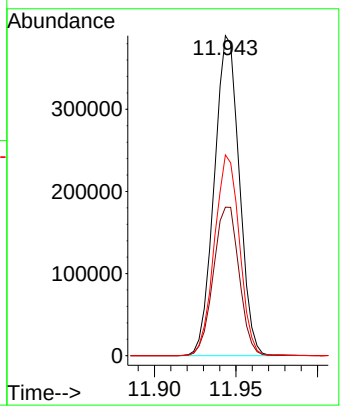


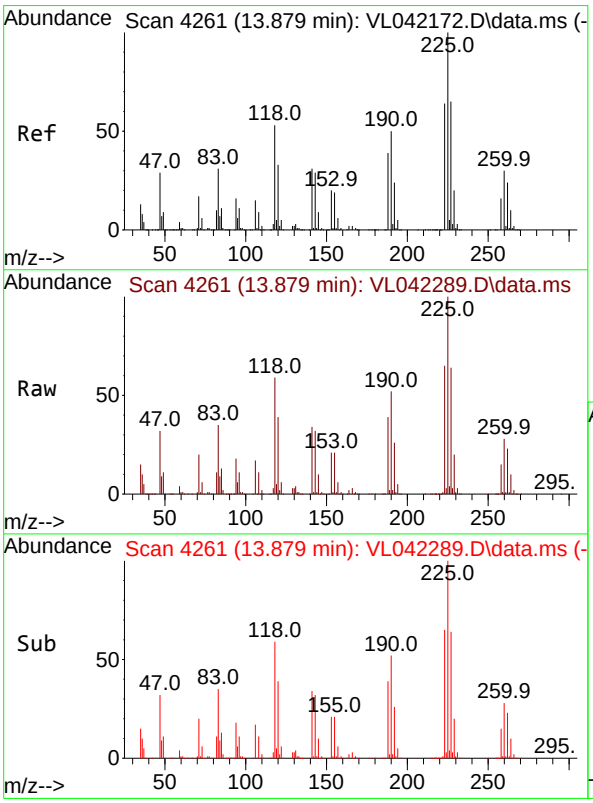
#77
1,2-Dichlorobenzene
Concen: 11.862 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:146 Resp: 415780

Ion	Ratio	Lower	Upper
146	100		
111	47.9	24.8	74.3
148	62.8	31.6	94.8

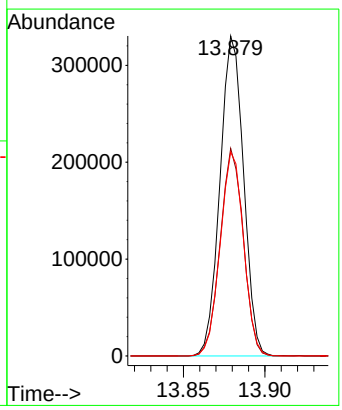


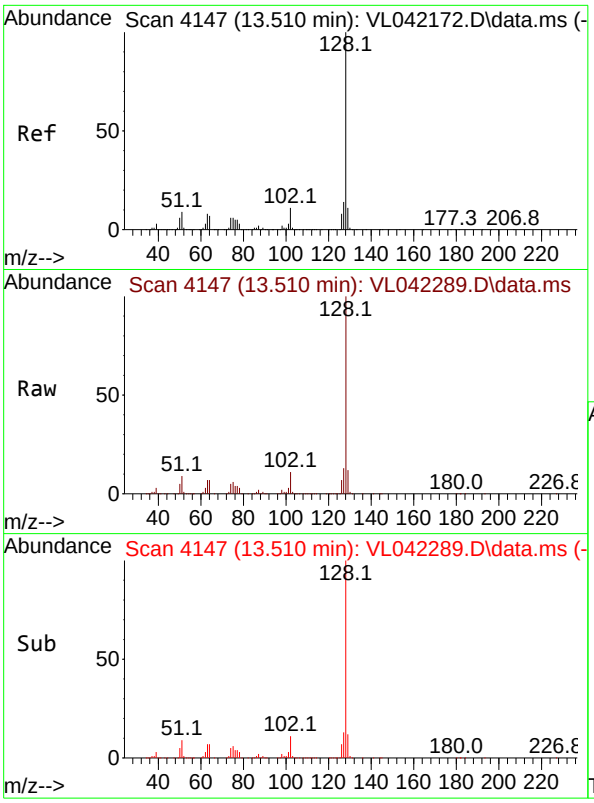


#78
Hexachloro-1,3-Butadiene
Concen: 9.302 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:225 Resp: 331886

Ion	Ratio	Lower	Upper
225	100		
223	63.6	50.6	76.0
227	63.3	51.2	76.8



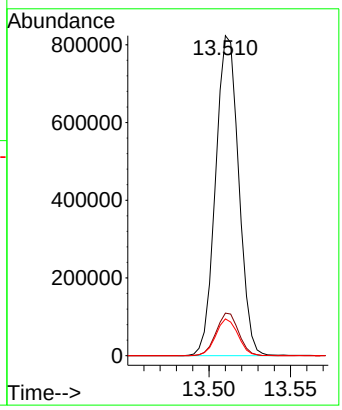


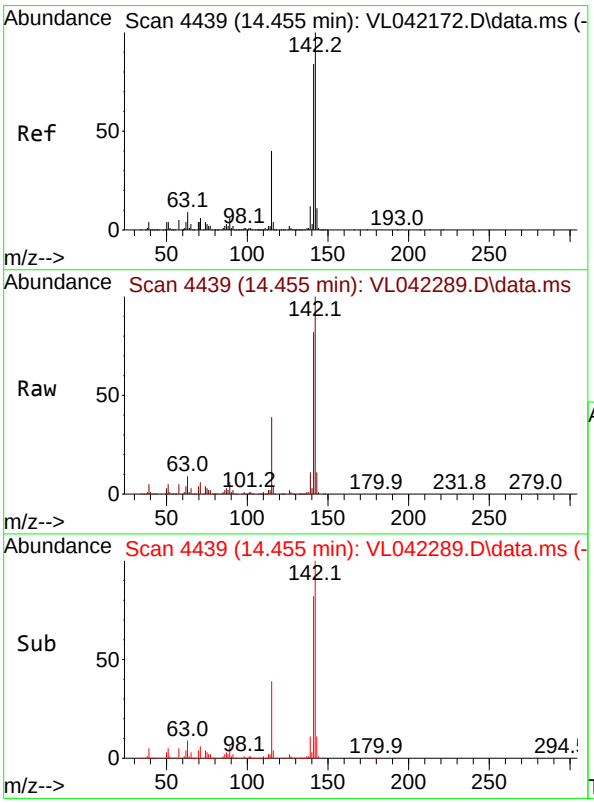
#79
Naphthalene
Concen: 11.288 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:128 Resp: 810441

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.5	9.0	13.4

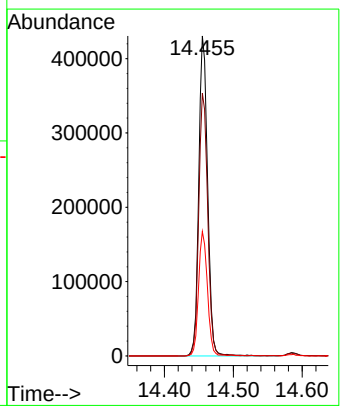


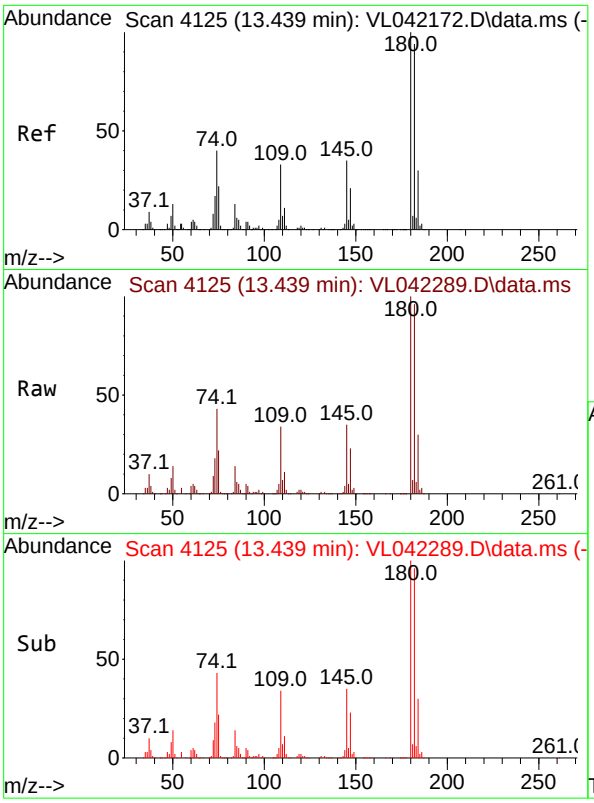


#80
Naphthalene,2-methyl-
Concen: 11.023 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Tgt Ion:142 Resp: 388095

Ion	Ratio	Lower	Upper
142	100		
141	83.6	66.3	99.5
115	39.2	31.6	47.4



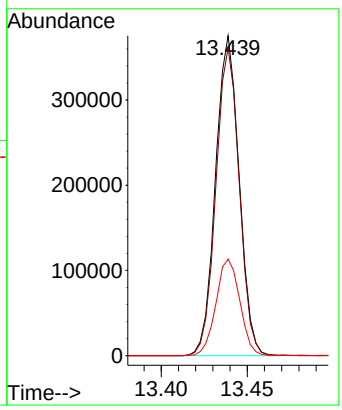


#81
1,2,4-Trichlorobenzene
Concen: 10.802 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042289.D
Acq: 09 Apr 2025 12:31

Instrument :
MSVOA_L
ClientSampleId :
VL0409ABS02

Tgt Ion:180 Resp: 357711

Ion	Ratio	Lower	Upper
180	100		
182	95.3	75.1	112.7
184	30.6	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Quant Time: Apr 10 01:43:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

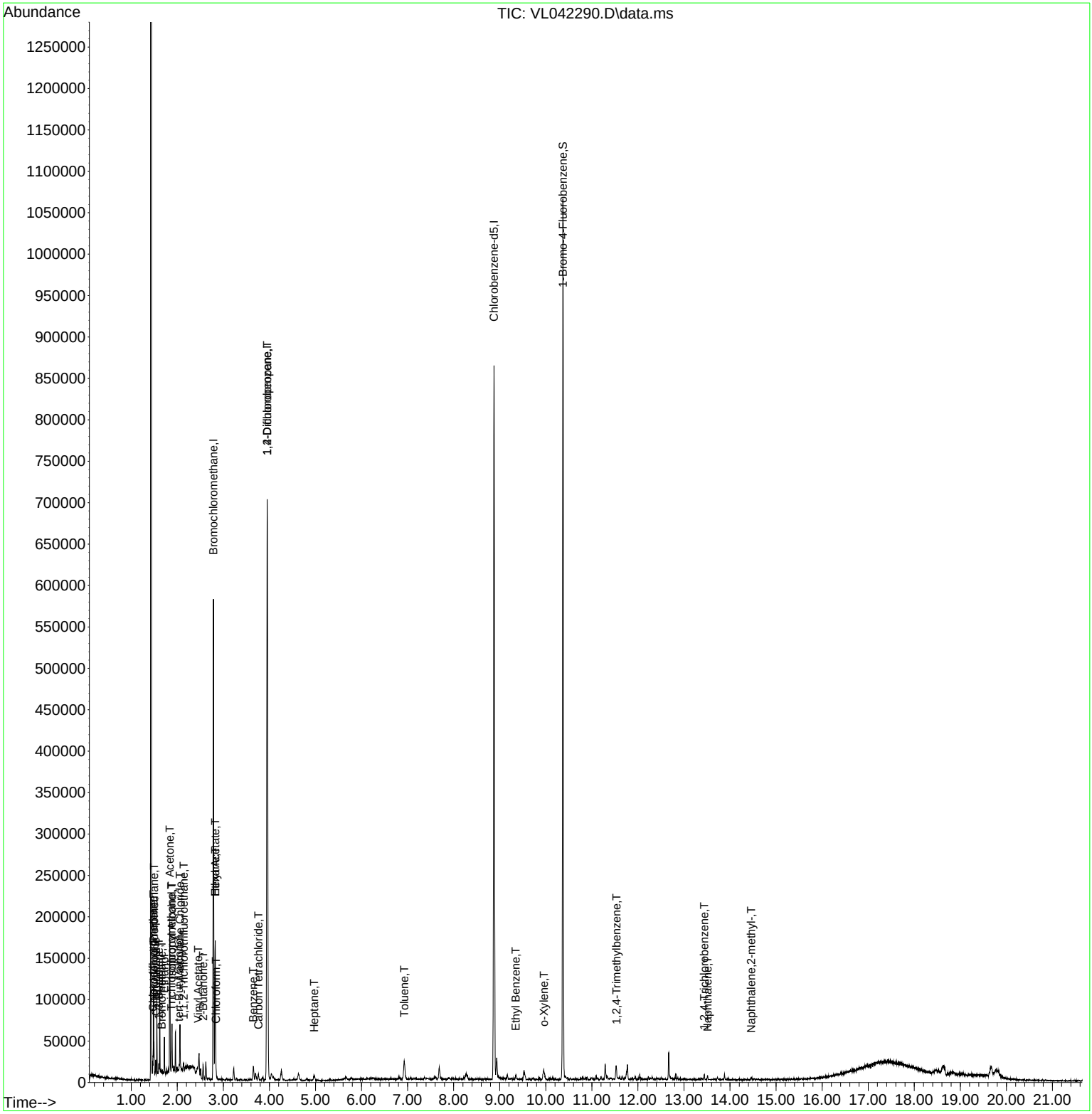
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	159221	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	408039	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	345931	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	258960	9.116	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	9289	0.395	ppbv	96
3) Chlorodifluoromethane	1.473	51	12980	0.540	ppbv #	84
4) Chloromethane	1.531	50	5425	0.565	ppbv	93
6) Bromomethane	1.661	94	185	0.042	ppbv #	4
9) Propene	1.486	41	9320	0.847	ppbv #	80
10) Heptane	4.972	43	1334	0.046	ppbv #	68
11) Trichlorofluoromethane	1.874	101	4760	0.208	ppbv	94
12) 1,1,2-Trichlorotrifluo...	2.140	101	1389	0.074	ppbv	84
13) Ethanol	1.719	45	13916	13.373	ppbv	84
15) Acetone	1.835	43	79179	3.556	ppbv	93
16) 1,3-Butadiene	1.599	39	1987	0.183	ppbv #	71
17) tert-Butyl alcohol	2.039	59	1723	0.062	ppbv #	53
19) Isopropyl Alcohol	1.884	45	22614	1.800	ppbv #	35
20) Methylene Chloride	2.059	84	7901	0.953	ppbv	93
23) Vinyl Acetate	2.454	43	6464	0.671	ppbv #	80
25) Ethyl Acetate	2.823	43	28683	0.496	ppbv #	81
26) Hexane	2.823	57	34660	1.553	ppbv #	37
29) Chloroform	2.842	83	1363	0.042	ppbv #	73
34) 2-Butanone	2.561	43	10562	0.357	ppbv	99
35) Carbon Tetrachloride	3.761	117	1242	0.039	ppbv	84
36) Benzene	3.651	78	6629	0.164	ppbv	95
39) 1,2-Dichloropropane	3.952	63	103630	7.034	ppbv #	22
53) Toluene	6.930	91	12275	0.256	ppbv #	79
58) Ethyl Benzene	9.348	91	2673	0.044	ppbv	99
60) o-Xylene	9.959	91	2526	0.051	ppbv	98
74) 1,2,4-Trimethylbenzene	11.536	105	3147	0.051	ppbv #	71
79) Naphthalene	13.513	128	2423	0.036	ppbv #	92
80) Naphthalene,2-methyl-	14.462	142	999	0.030	ppbv	91
81) 1,2,4-Trichlorobenzene	13.442	180	1092	0.035	ppbv	93

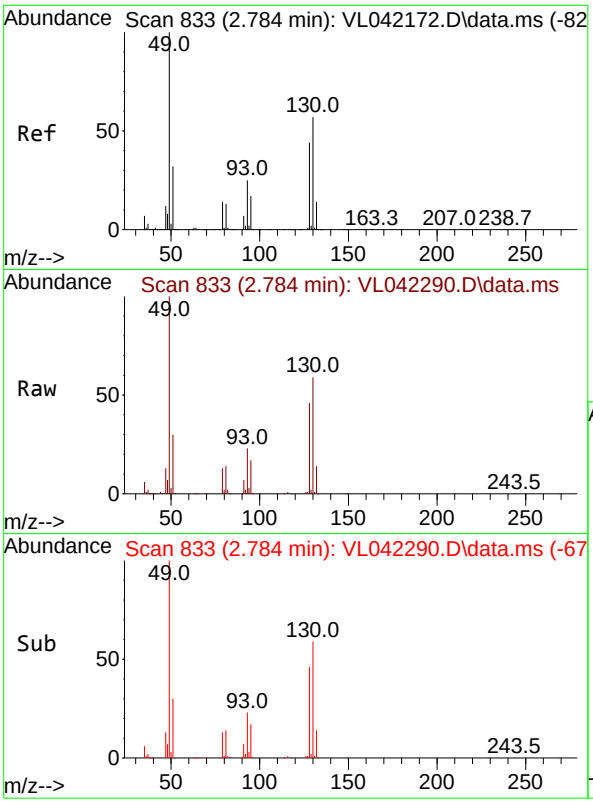
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042290.D
Acq On : 09 Apr 2025 13:25
Operator : SY/MD
Sample : Q1665-01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Quant Time: Apr 10 01:43:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



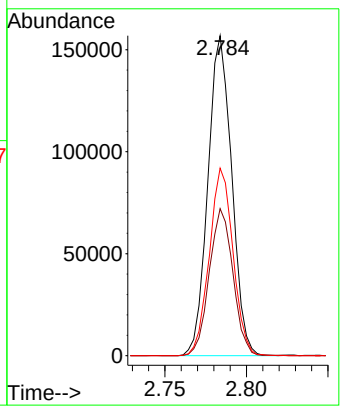


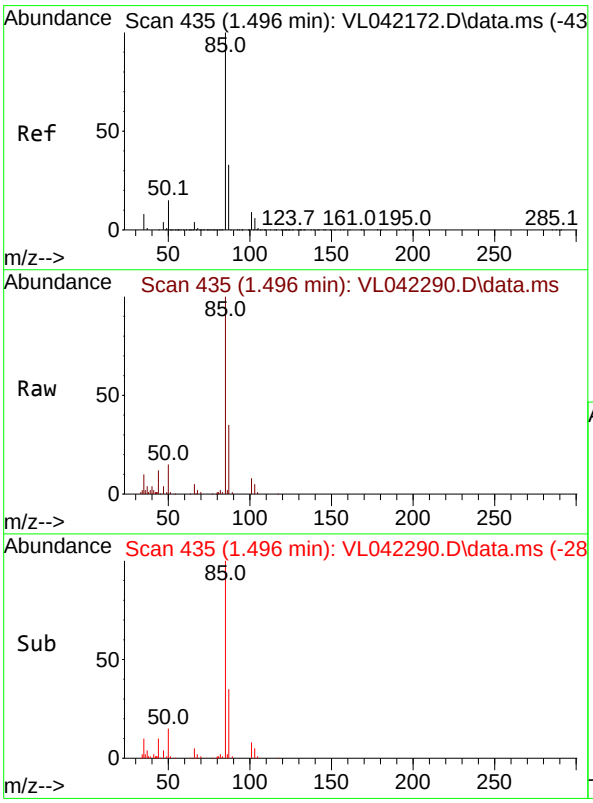
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 49 Resp: 159221

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.4	28.8	86.4

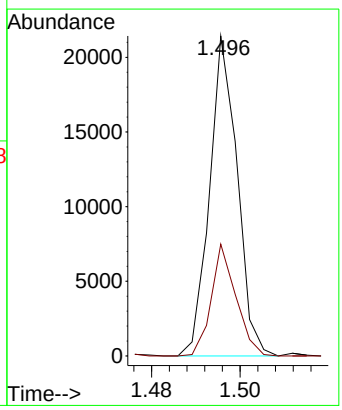


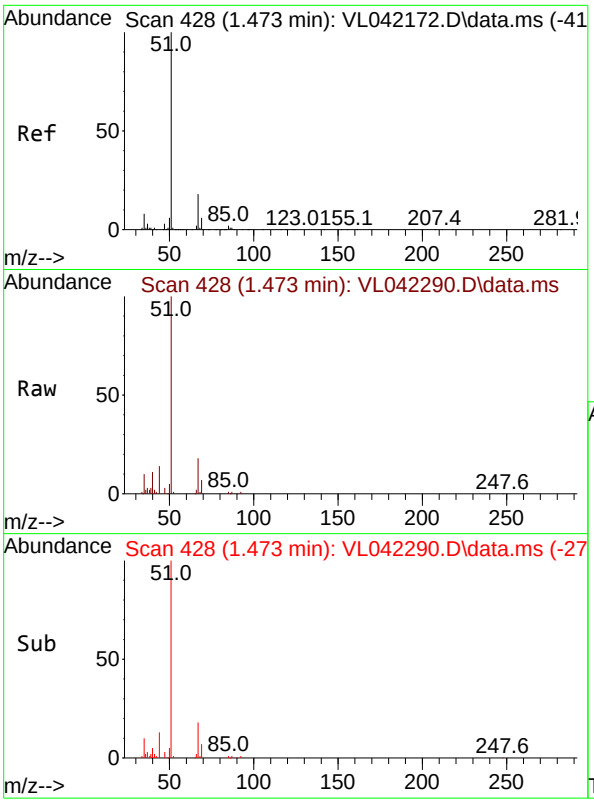


#2
Dichlorodifluoromethane
Concen: 0.395 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 85 Resp: 9289

Ion	Ratio	Lower	Upper
85	100		
87	34.9	26.1	39.1



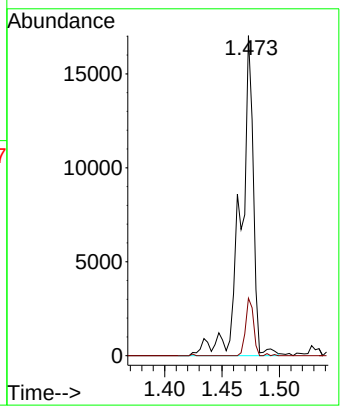


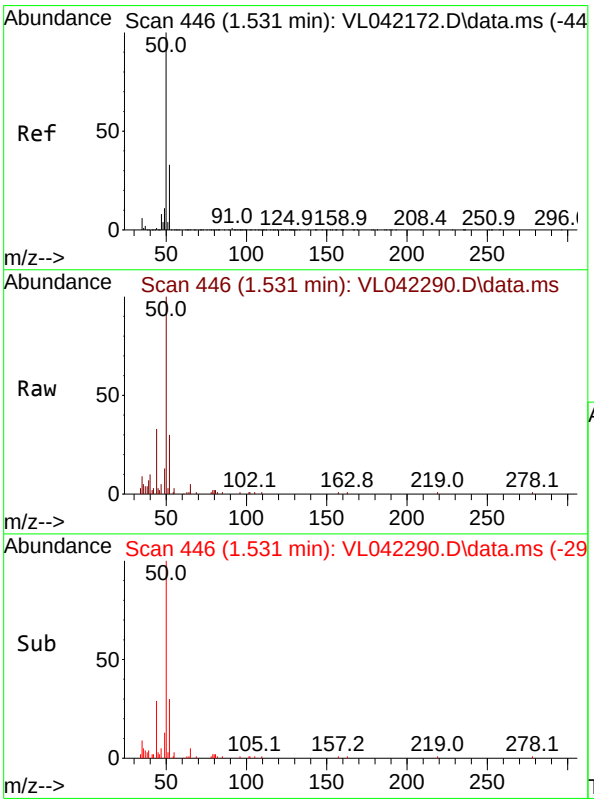
#3
Chlorodifluoromethane
Concen: 0.540 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 51 Resp: 12980

Ion	Ratio	Lower	Upper
51	100		
67	11.4	15.0	22.6#

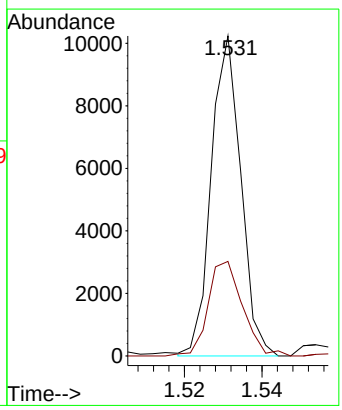


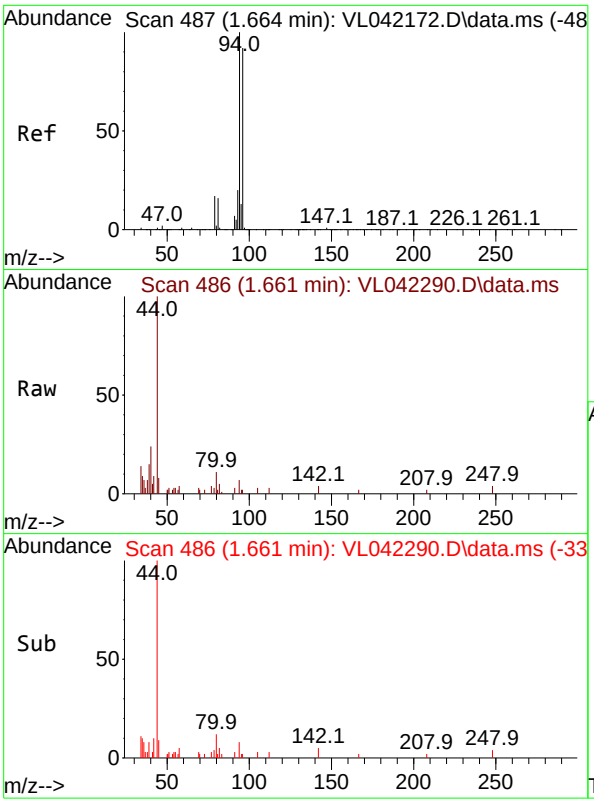


#4
Chloromethane
Concen: 0.565 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 50 Resp: 5425

Ion	Ratio	Lower	Upper
50	100		
52	28.9	26.1	39.1



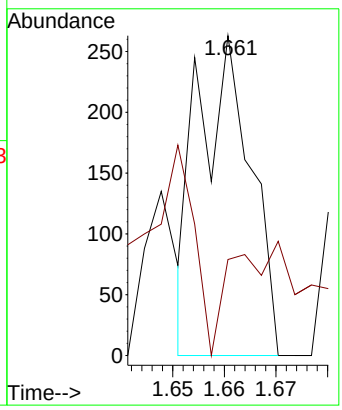


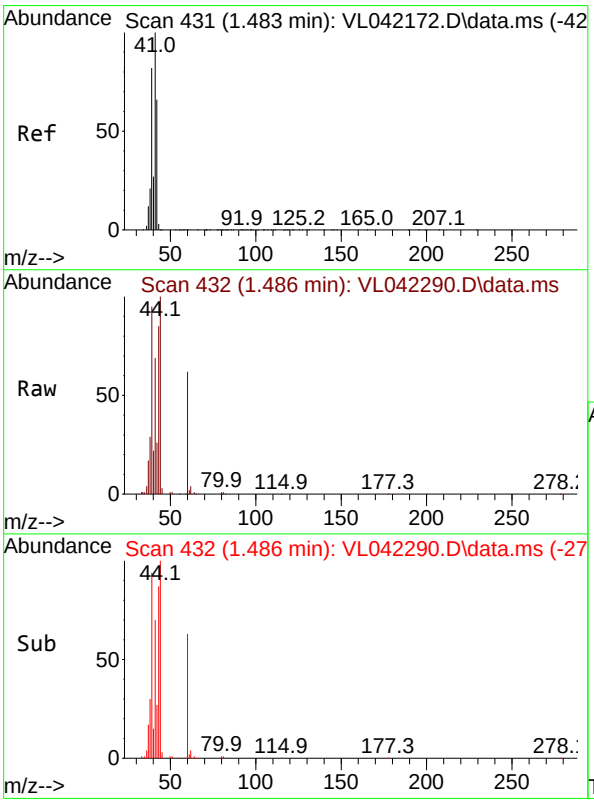
#6
Bromomethane
Concen: 0.042 ppbv
RT: 1.661 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 94 Resp: 185

Ion	Ratio	Lower	Upper
94	100		
96	0.0	73.1	109.7#

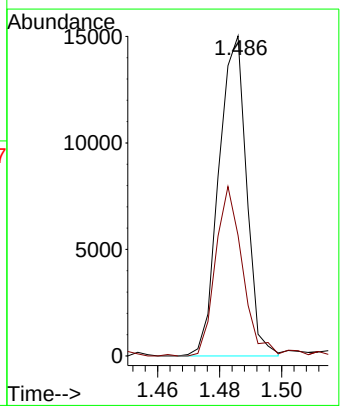


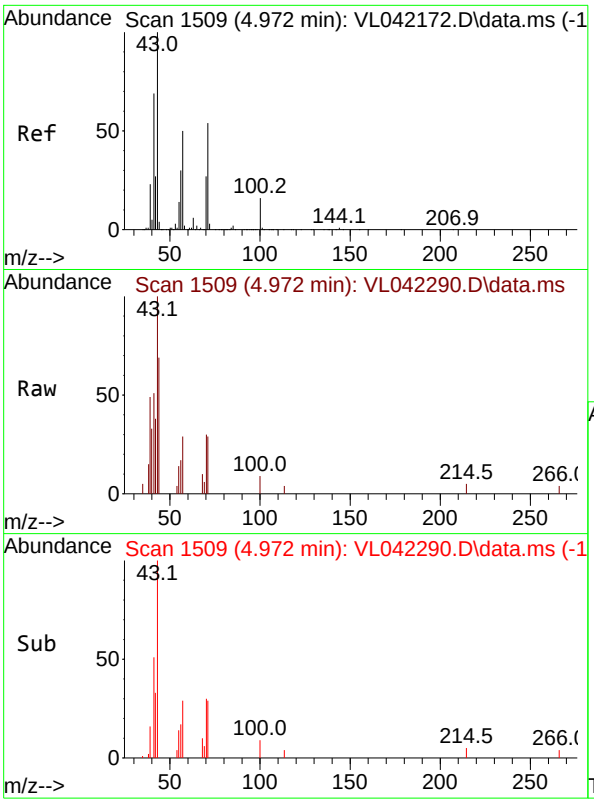


#9
Propene
Concen: 0.847 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 41 Resp: 9320

Ion	Ratio	Lower	Upper
41	100		
42	52.7	55.4	83.2#



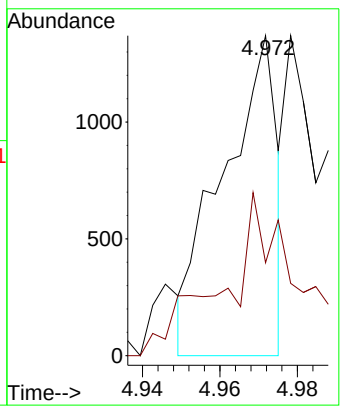


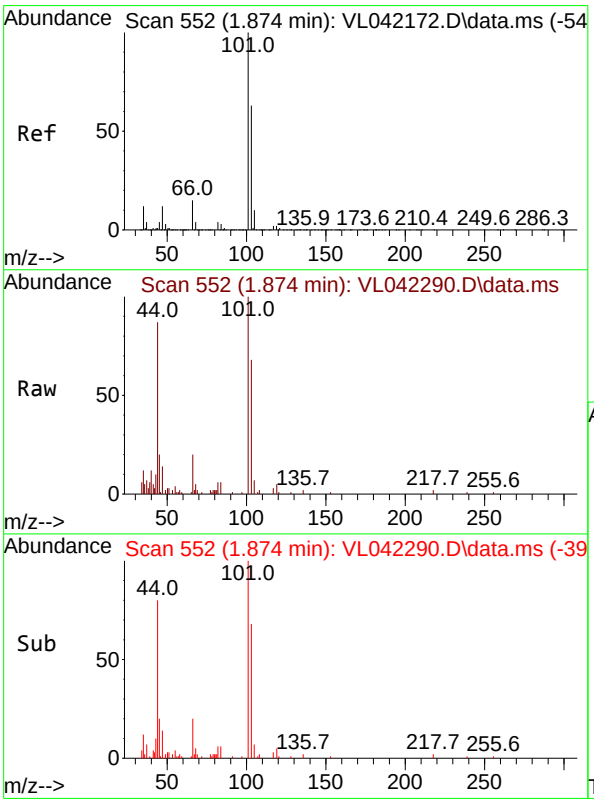
#10
Heptane
Concen: 0.046 ppbv
RT: 4.972 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 43 Resp: 1334

Ion	Ratio	Lower	Upper
43	100		
57	71.4	39.4	59.2#

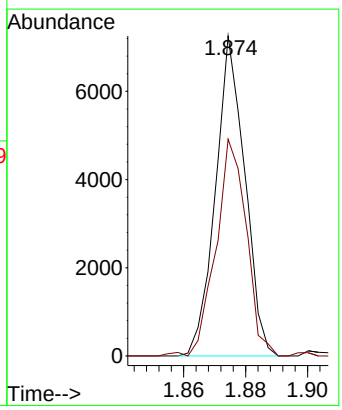


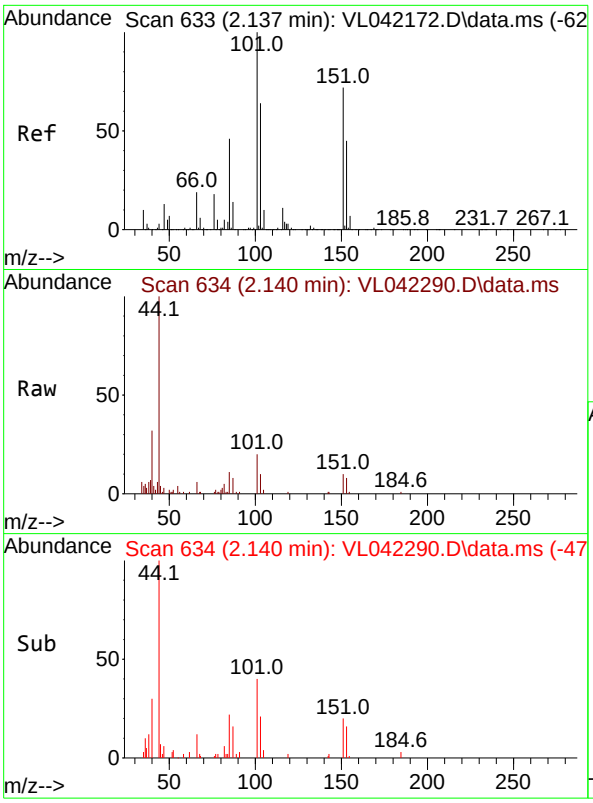


#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.874 min Scan# 552
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:101 Resp: 4760

Ion	Ratio	Lower	Upper
101	100		
103	67.7	50.2	75.2



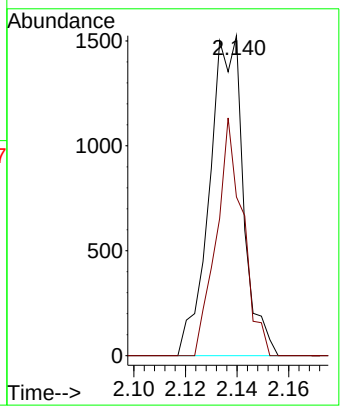


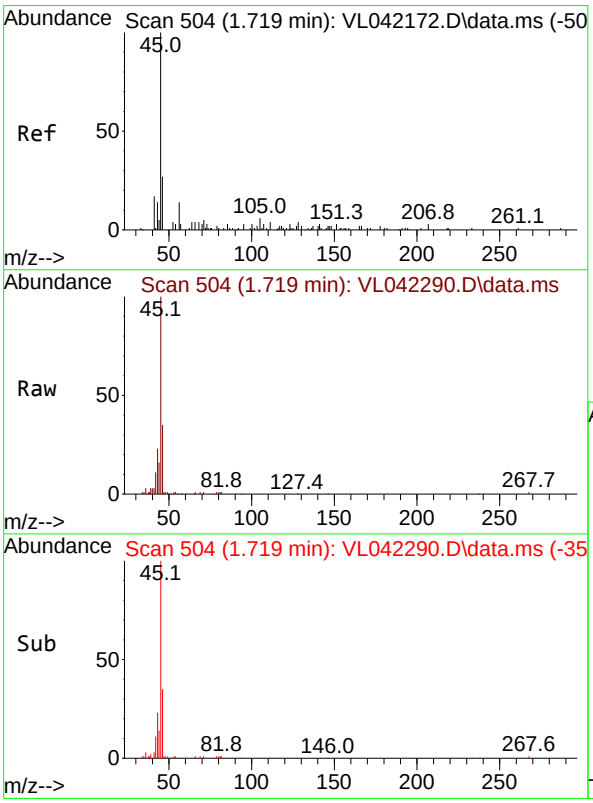
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.074 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion:101 Resp: 1389

Ion	Ratio	Lower	Upper
101	100		
151	58.2	57.1	85.7

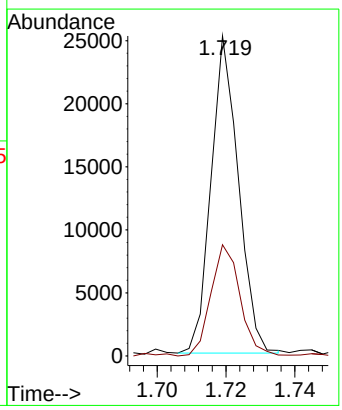


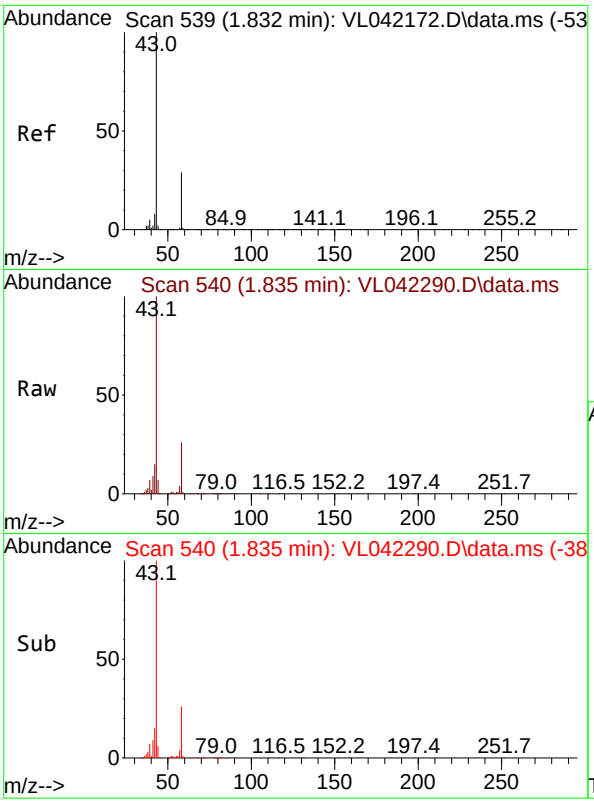


#13
Ethanol
Concen: 13.373 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 13916

Ion	Ratio	Lower	Upper
45	100		
46	39.5	20.2	80.8



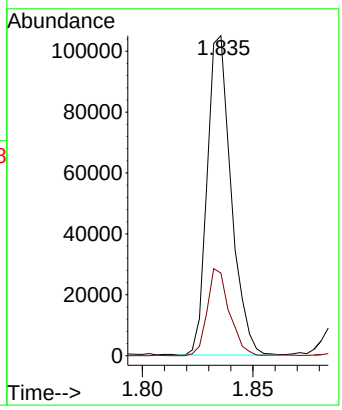


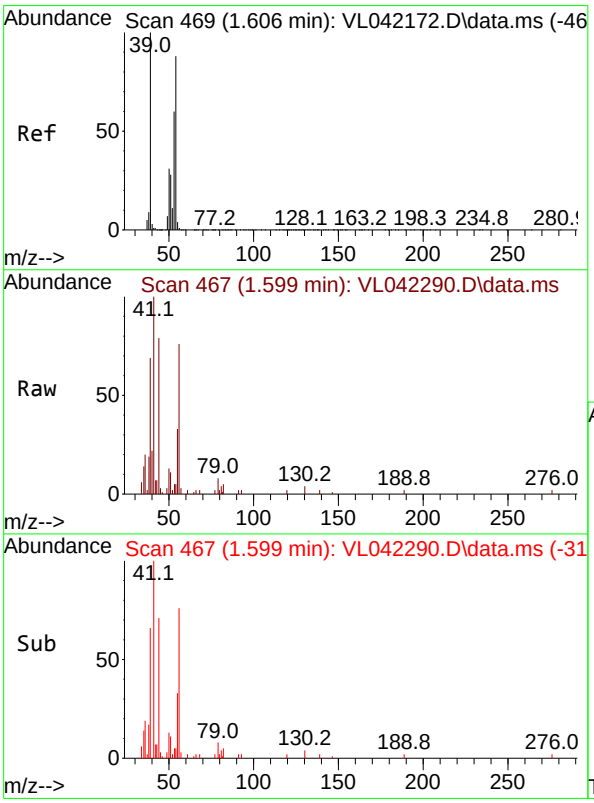
#15
Acetone
Concen: 3.556 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 43 Resp: 79179

Ion	Ratio	Lower	Upper
43	100		
58	25.4	23.2	34.8

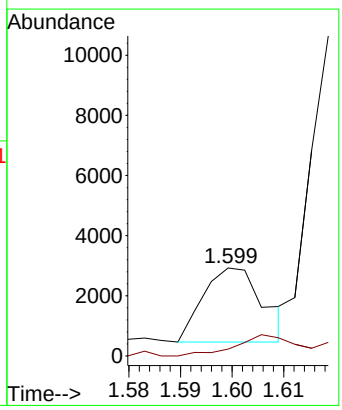


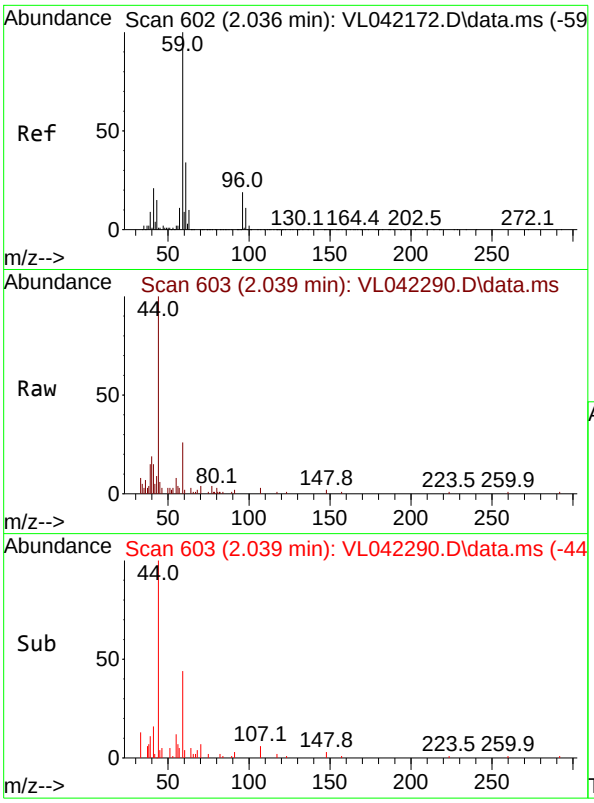


#16
1,3-Butadiene
Concen: 0.183 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 39 Resp: 1987

Ion	Ratio	Lower	Upper
39	100		
54	51.0	60.7	91.1#



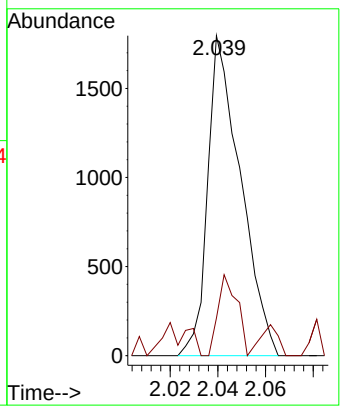


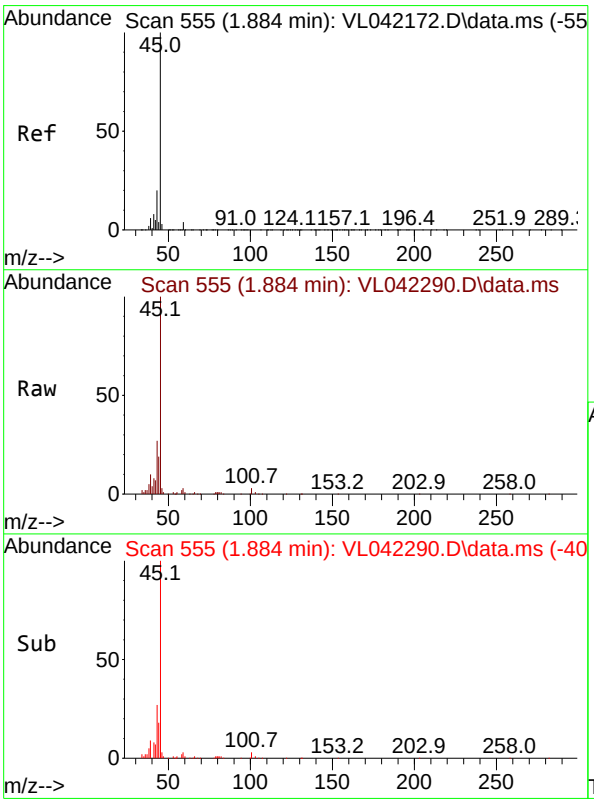
#17
tert-Butyl alcohol
Concen: 0.062 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 59 Resp: 1723

Ion	Ratio	Lower	Upper
59	100		
57	28.8	8.9	13.3#

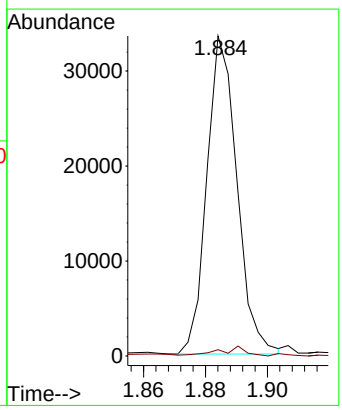


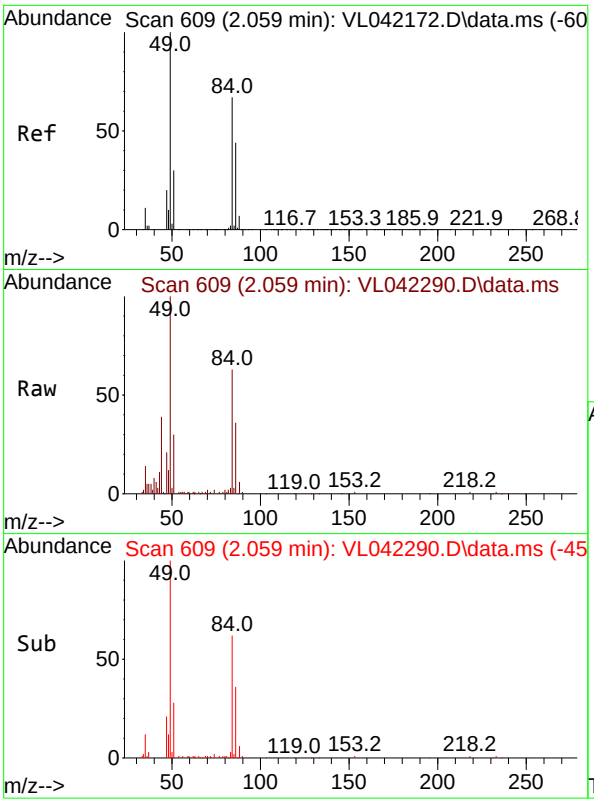


#19
Isopropyl Alcohol
Concen: 1.800 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 45 Resp: 22614

Ion	Ratio	Lower	Upper
45	100		
58	89.0	36.9	55.3#



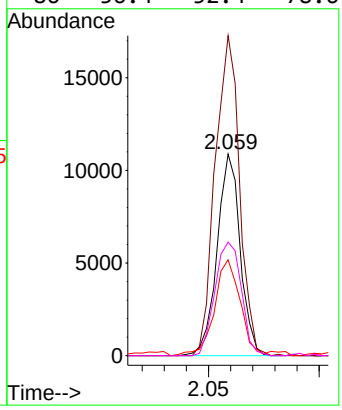


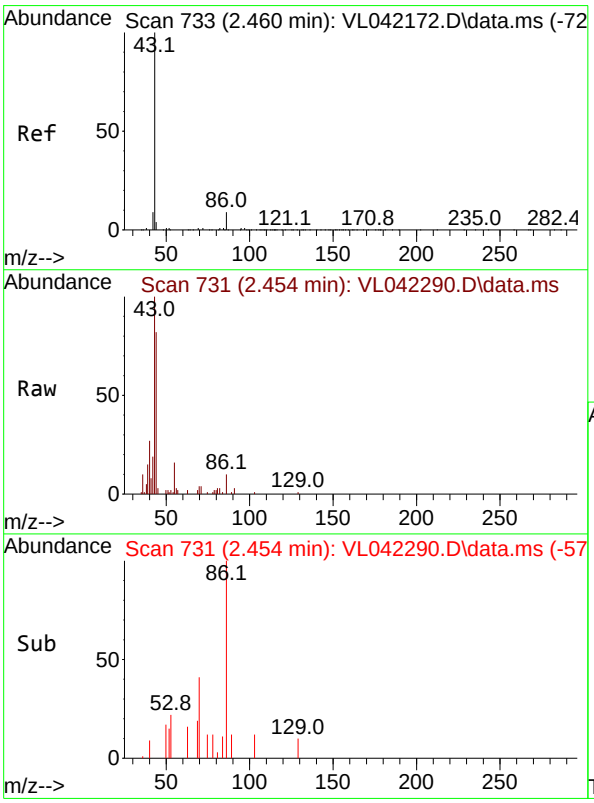
#20
Methylene Chloride
Concen: 0.953 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 84 Resp: 7901

Ion	Ratio	Lower	Upper
84	100		
49	158.8	120.2	180.4
51	47.0	37.4	56.0
86	56.4	52.4	78.6

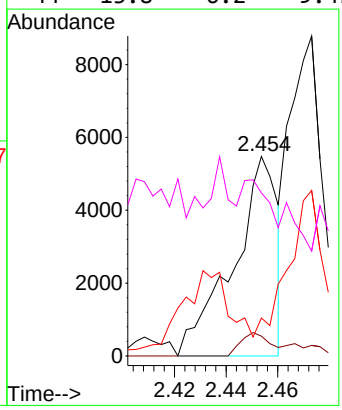


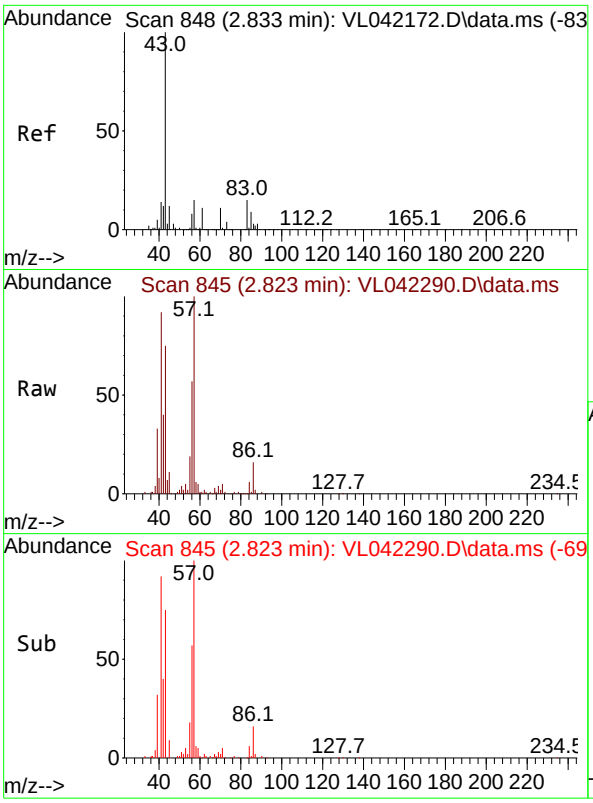


#23
Vinyl Acetate
Concen: 0.671 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 43 Resp: 6464

Ion	Ratio	Lower	Upper
43	100		
86	10.0	5.5	8.3#
42	0.0	8.6	13.0#
44	13.8	6.2	9.4#



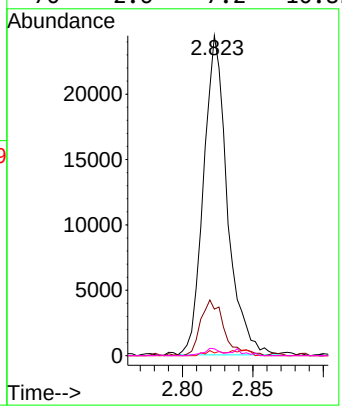


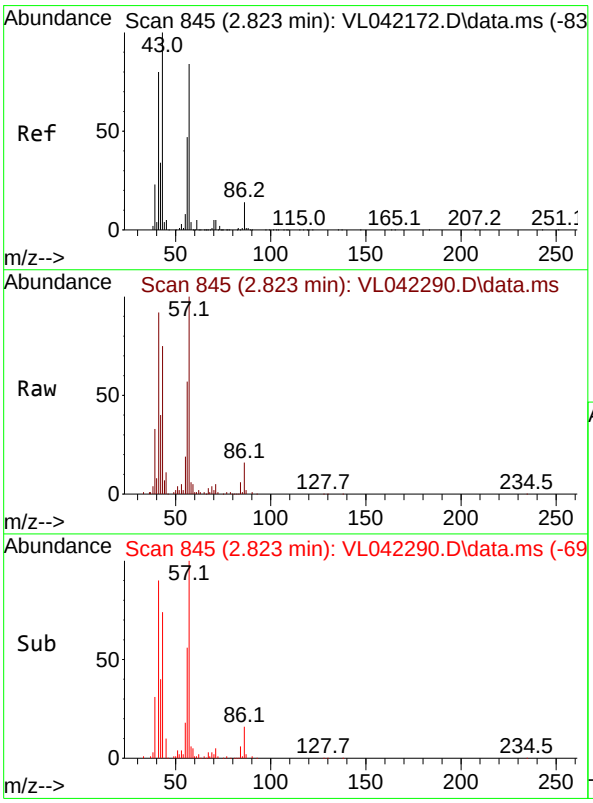
#25
Ethyl Acetate
Concen: 0.496 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 43 Resp: 28683

Ion	Ratio	Lower	Upper
43	100		
45	18.4	8.2	12.2#
61	2.4	7.3	10.9#
70	2.6	7.2	10.8#

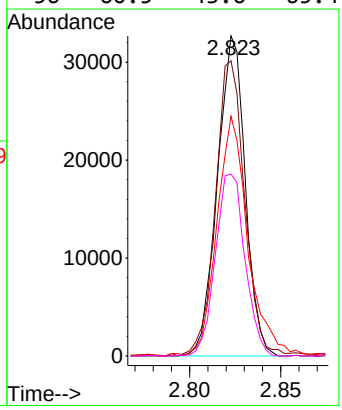


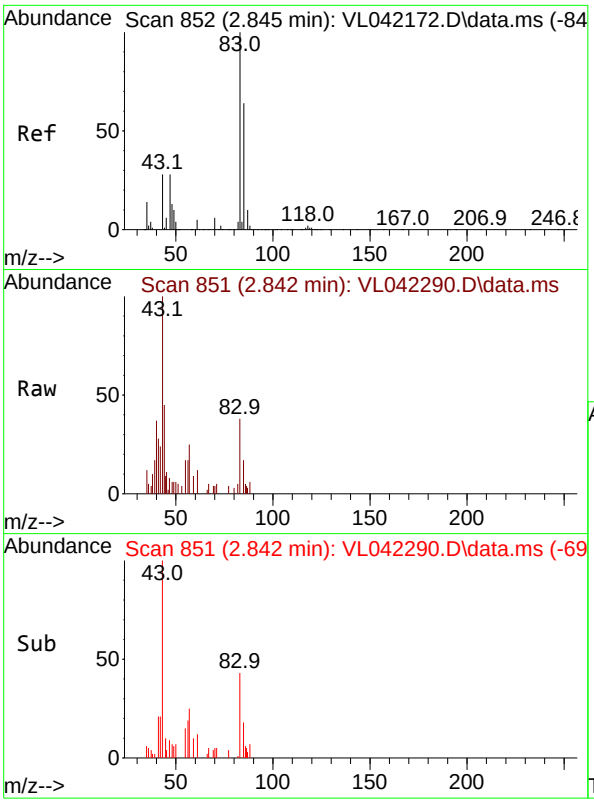


#26
Hexane
Concen: 1.553 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 57 Resp: 34660

Ion	Ratio	Lower	Upper
57	100		
41	96.0	76.6	114.8
43	85.4	207.8	311.8#
56	60.5	43.6	65.4



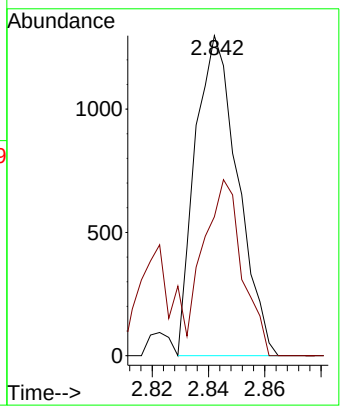


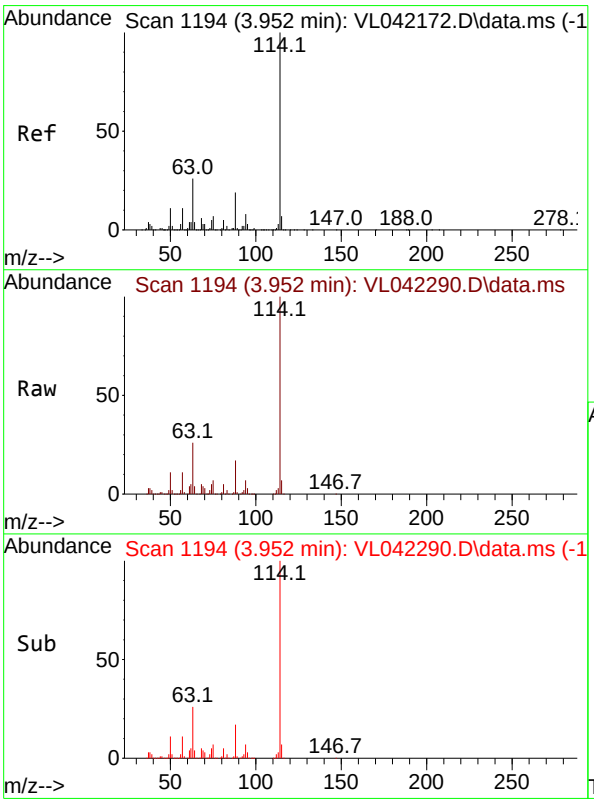
#29
Chloroform
Concen: 0.042 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 83 Resp: 1363

Ion	Ratio	Lower	Upper
83	100		
85	43.4	51.4	77.2#

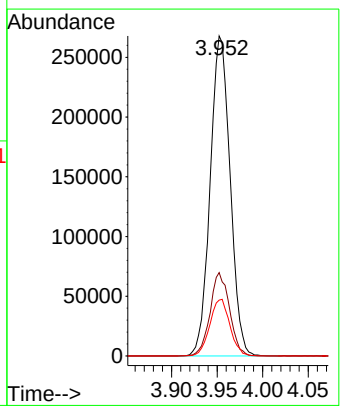


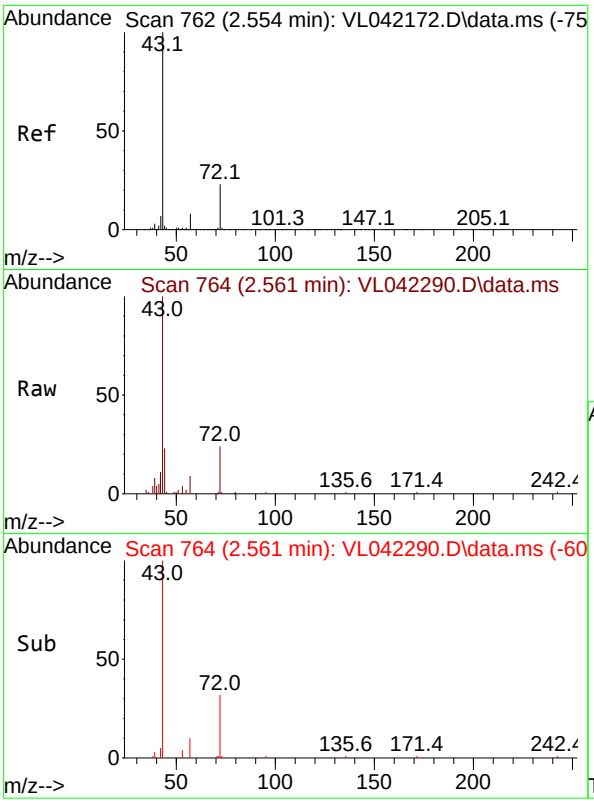


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:114 Resp: 408039

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.8	15.0	22.4



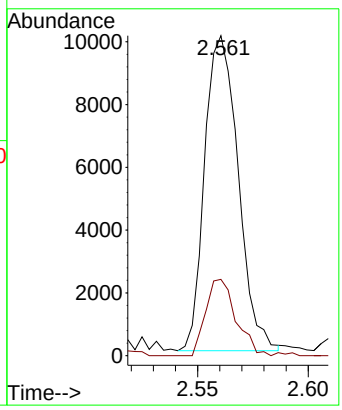


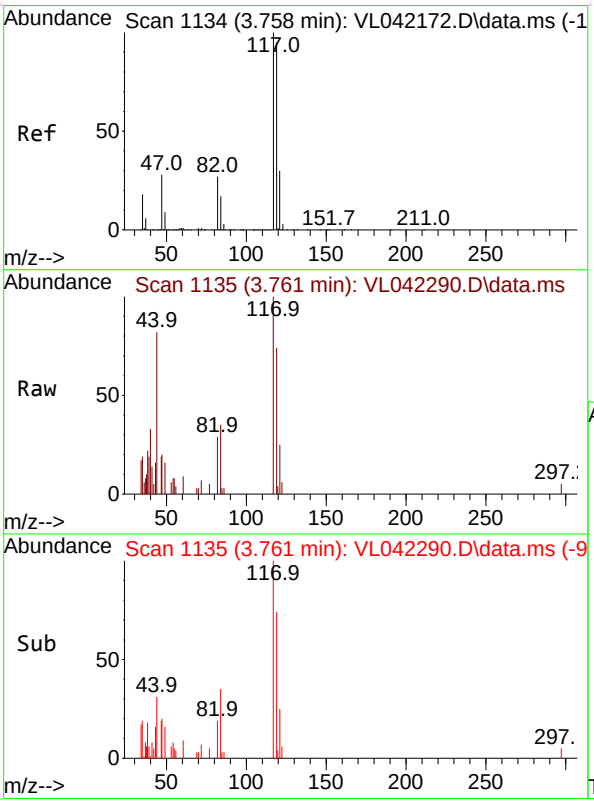
#34
2-Butanone
Concen: 0.357 ppbv
RT: 2.561 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 43 Resp: 10562

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2

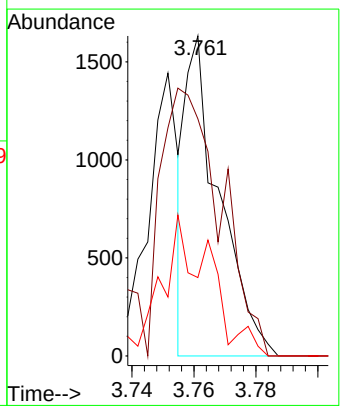


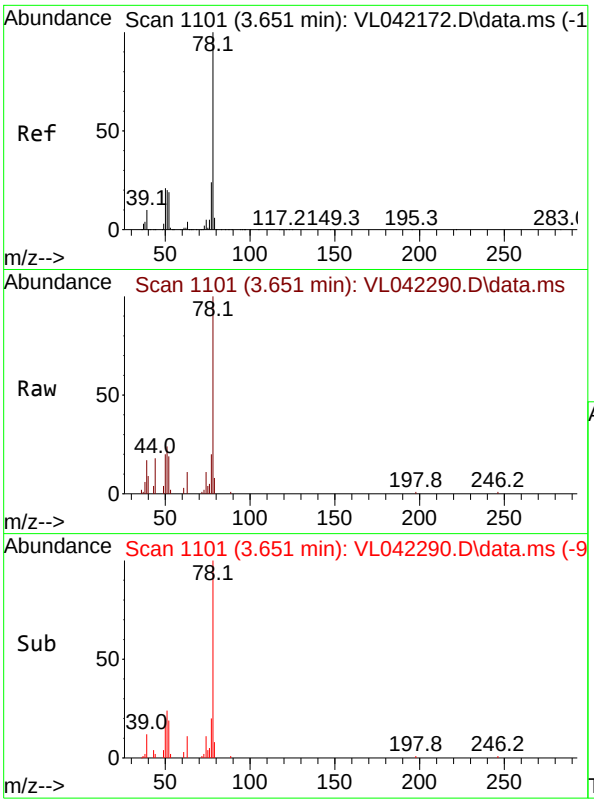


#35
Carbon Tetrachloride
Concen: 0.039 ppbv
RT: 3.761 min Scan# 1135
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:117 Resp: 1242

Ion	Ratio	Lower	Upper
117	100		
119	78.2	76.2	114.2
121	24.5	24.2	36.4



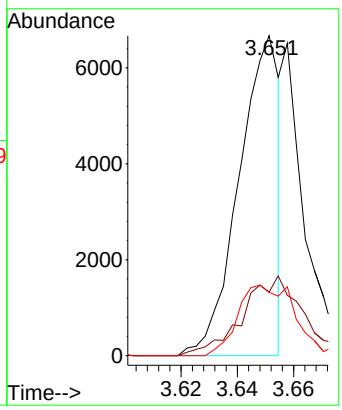


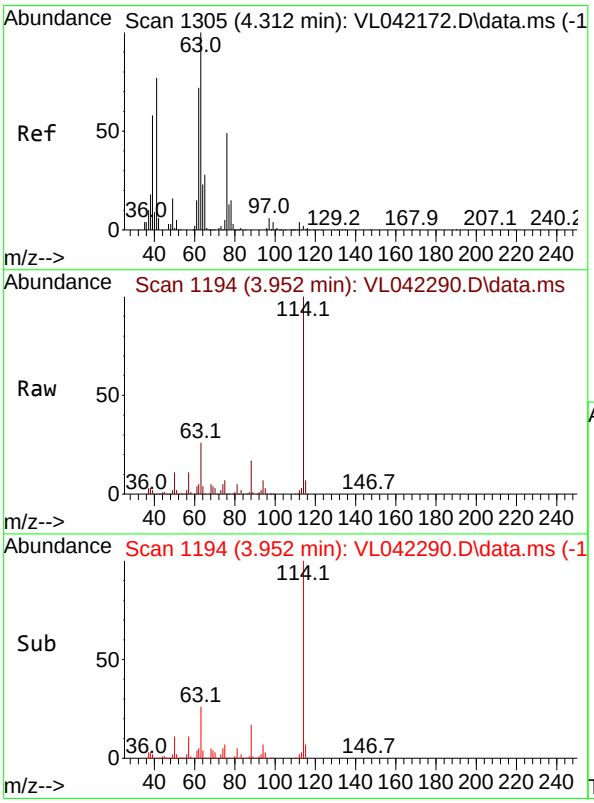
#36
Benzene
Concen: 0.164 ppbv
RT: 3.651 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 78 Resp: 6629

Ion	Ratio	Lower	Upper
78	100		
77	19.9	19.1	28.7
50	19.8	16.6	24.8

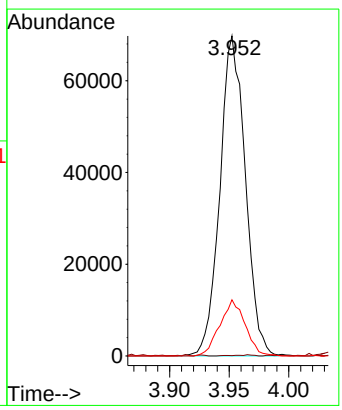


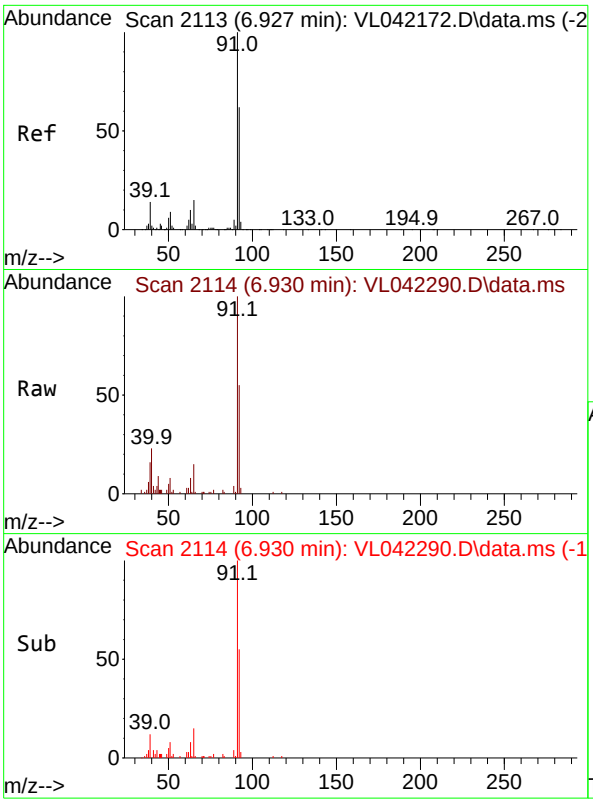


#39
1,2-Dichloropropane
Concen: 7.034 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 63 Resp: 103630

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	17.5	57.6	86.4#



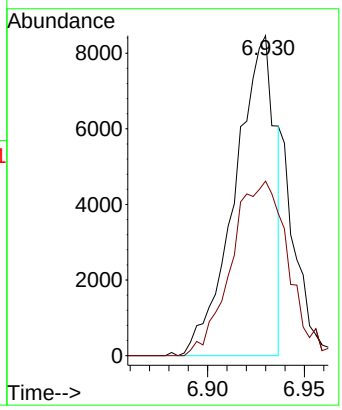


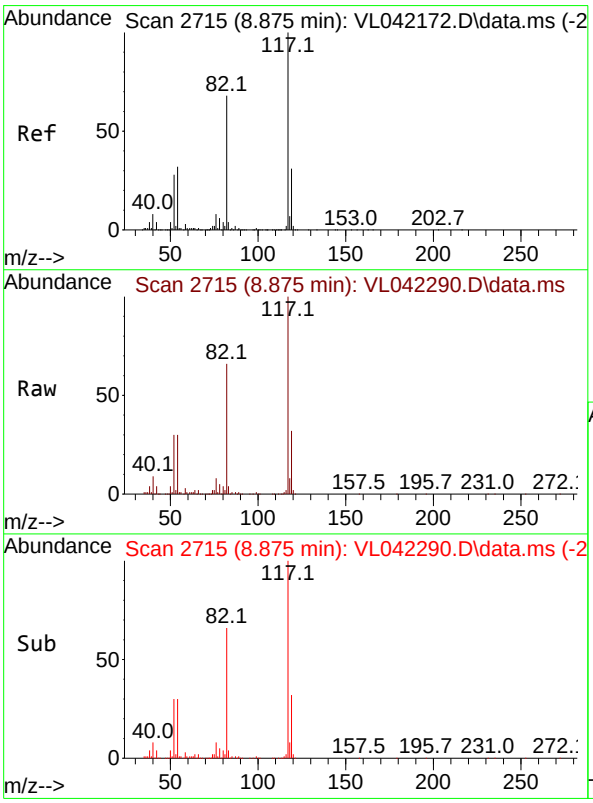
#53
Toluene
Concen: 0.256 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 91 Resp: 12275

Ion	Ratio	Lower	Upper
91	100		
92	76.4	48.4	72.6#

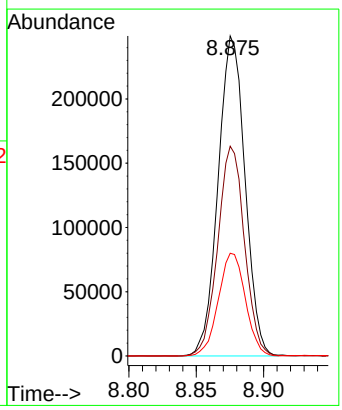


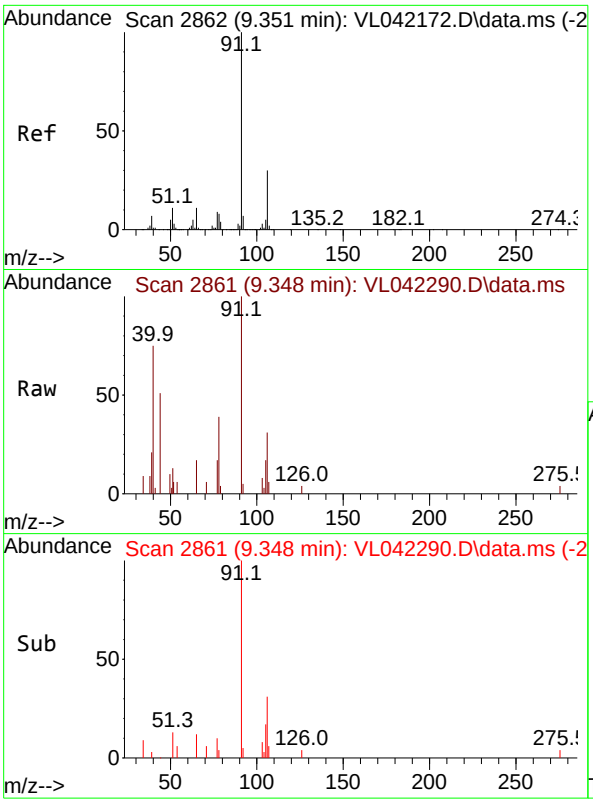


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:117 Resp: 345931

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	32.4	25.5	38.3



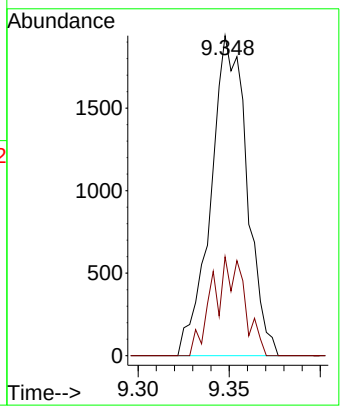


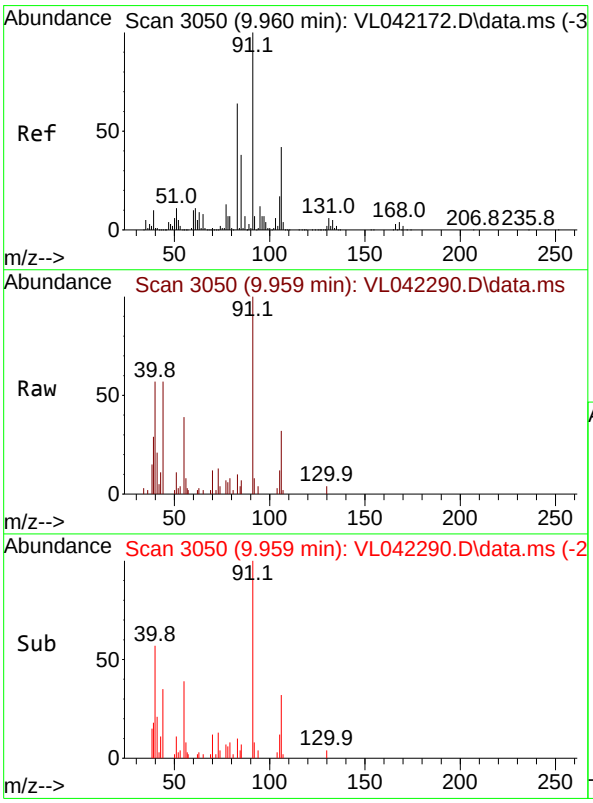
#58
Ethyl Benzene
Concen: 0.044 ppbv
RT: 9.348 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 91 Resp: 2673

Ion	Ratio	Lower	Upper
91	100		
106	30.9	24.2	36.2

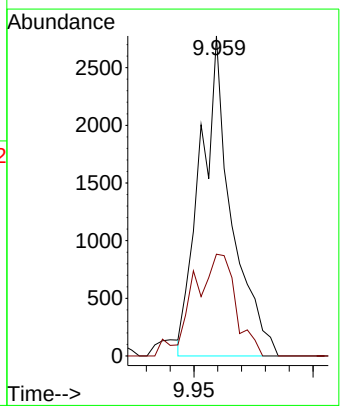


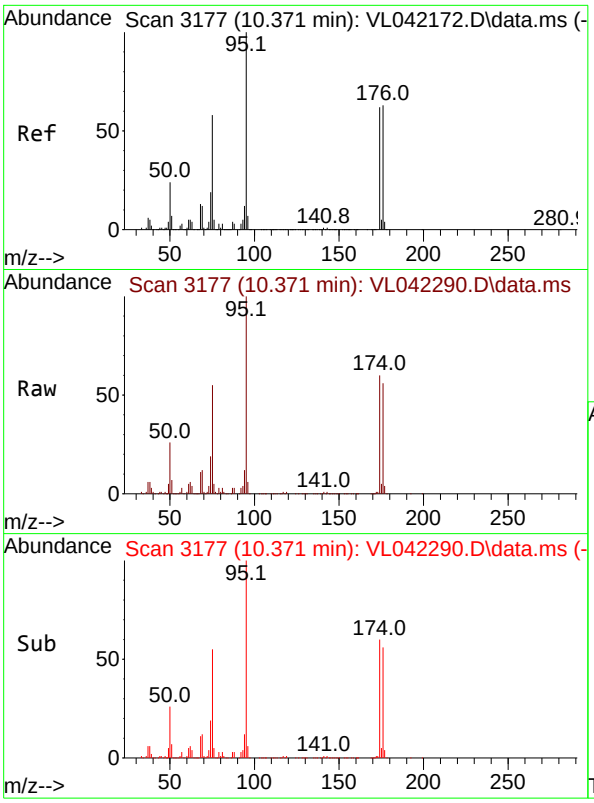


#60
o-Xylene
Concen: 0.051 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion: 91 Resp: 2526

Ion	Ratio	Lower	Upper
91	100		
106	43.2	20.8	62.5



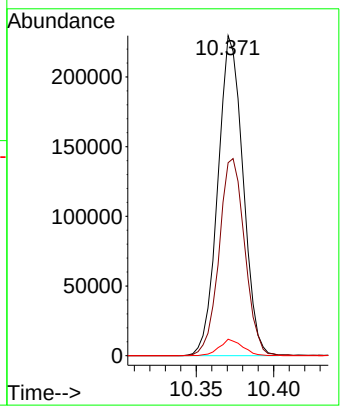


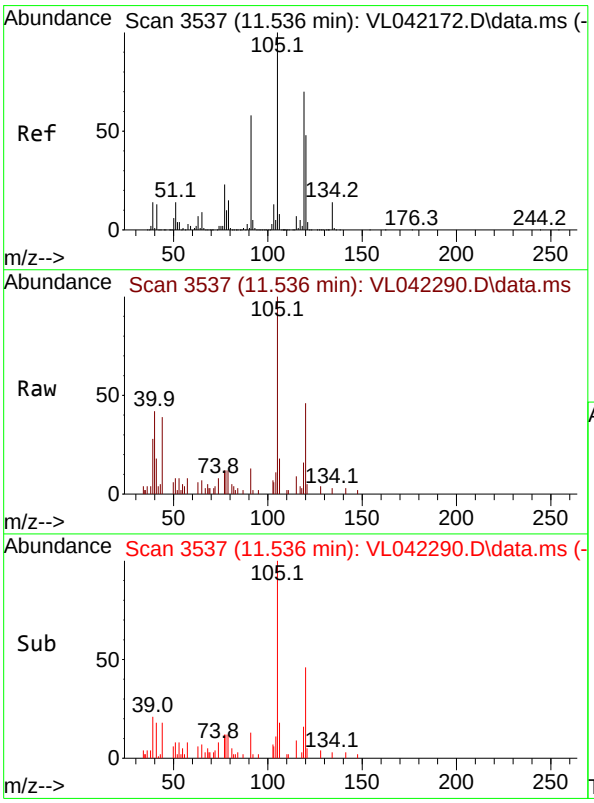
#68
1-Bromo-4-Fluorobenzene
Concen: 9.116 ppbv
RT: 10.371 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion: 95 Resp: 258960

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.8	3.8	5.6

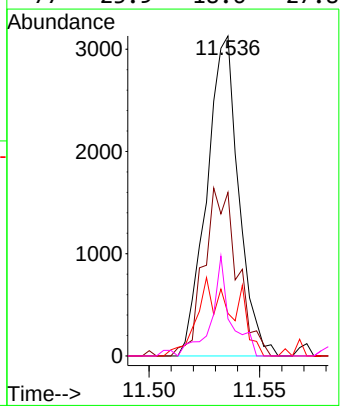


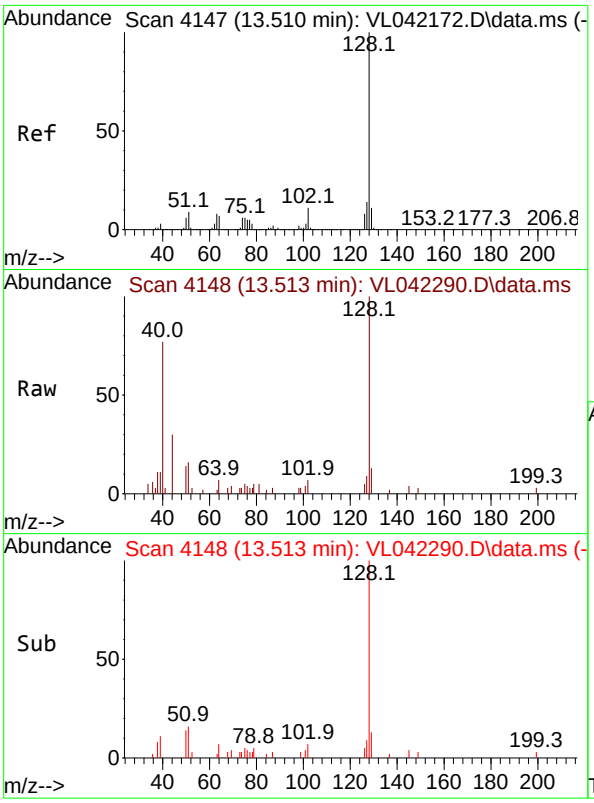


#74
1,2,4-Trimethylbenzene
Concen: 0.051 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:105 Resp: 3147

Ion	Ratio	Lower	Upper
105	100		
120	51.1	38.6	58.0
91	13.3	46.2	69.2#
77	23.9	18.6	27.8



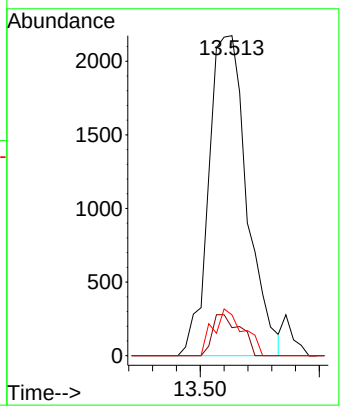


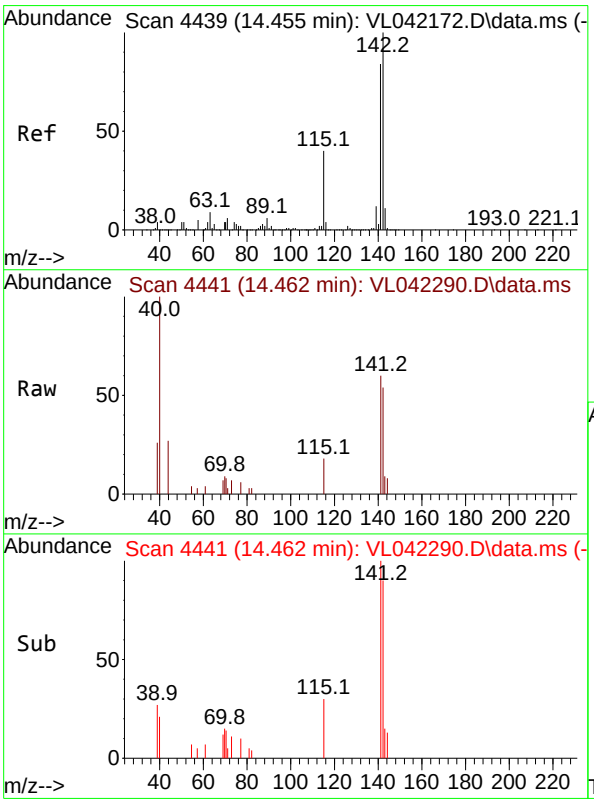
#79
Naphthalene
Concen: 0.036 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion:128 Resp: 2423

Ion	Ratio	Lower	Upper
128	100		
127	8.7	10.8	16.2#
129	12.7	9.0	13.4

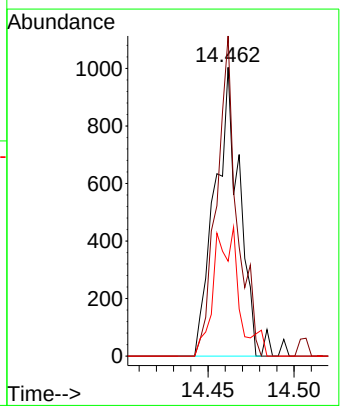


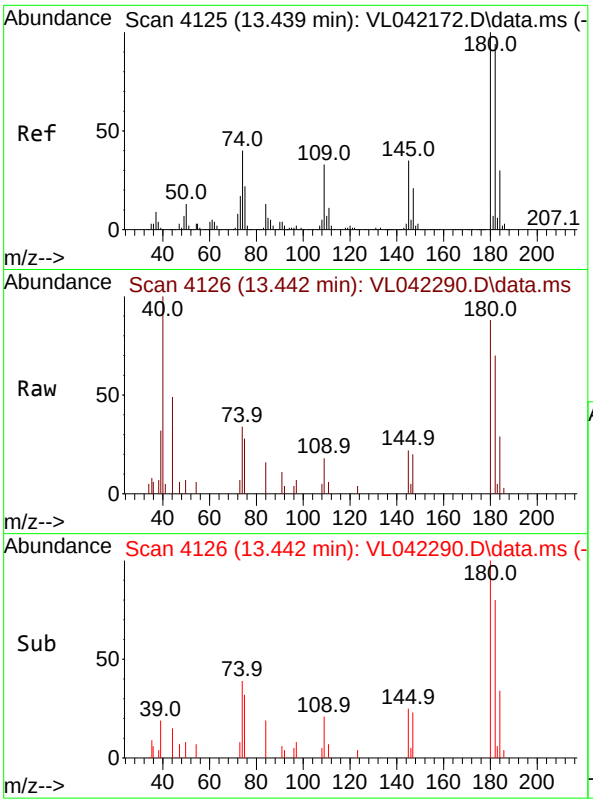


#80
Naphthalene,2-methyl-
Concen: 0.030 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.006 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Tgt Ion:142 Resp: 999

Ion	Ratio	Lower	Upper
142	100		
141	90.9	66.3	99.5
115	45.1	31.6	47.4



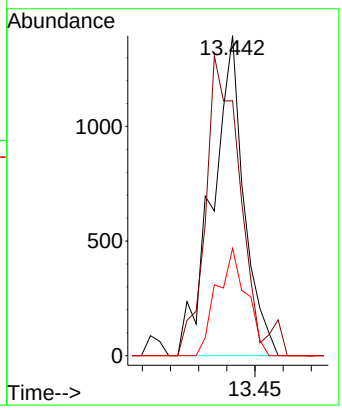


#81
1,2,4-Trichlorobenzene
Concen: 0.035 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042290.D
Acq: 09 Apr 2025 13:25

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025

Tgt Ion:180 Resp: 1092

Ion	Ratio	Lower	Upper
180	100		
182	102.4	75.1	112.7
184	31.3	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042291.D
Acq On : 09 Apr 2025 14:02
Operator : SY/MD
Sample : Q1665-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Quant Time: Apr 10 01:43:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

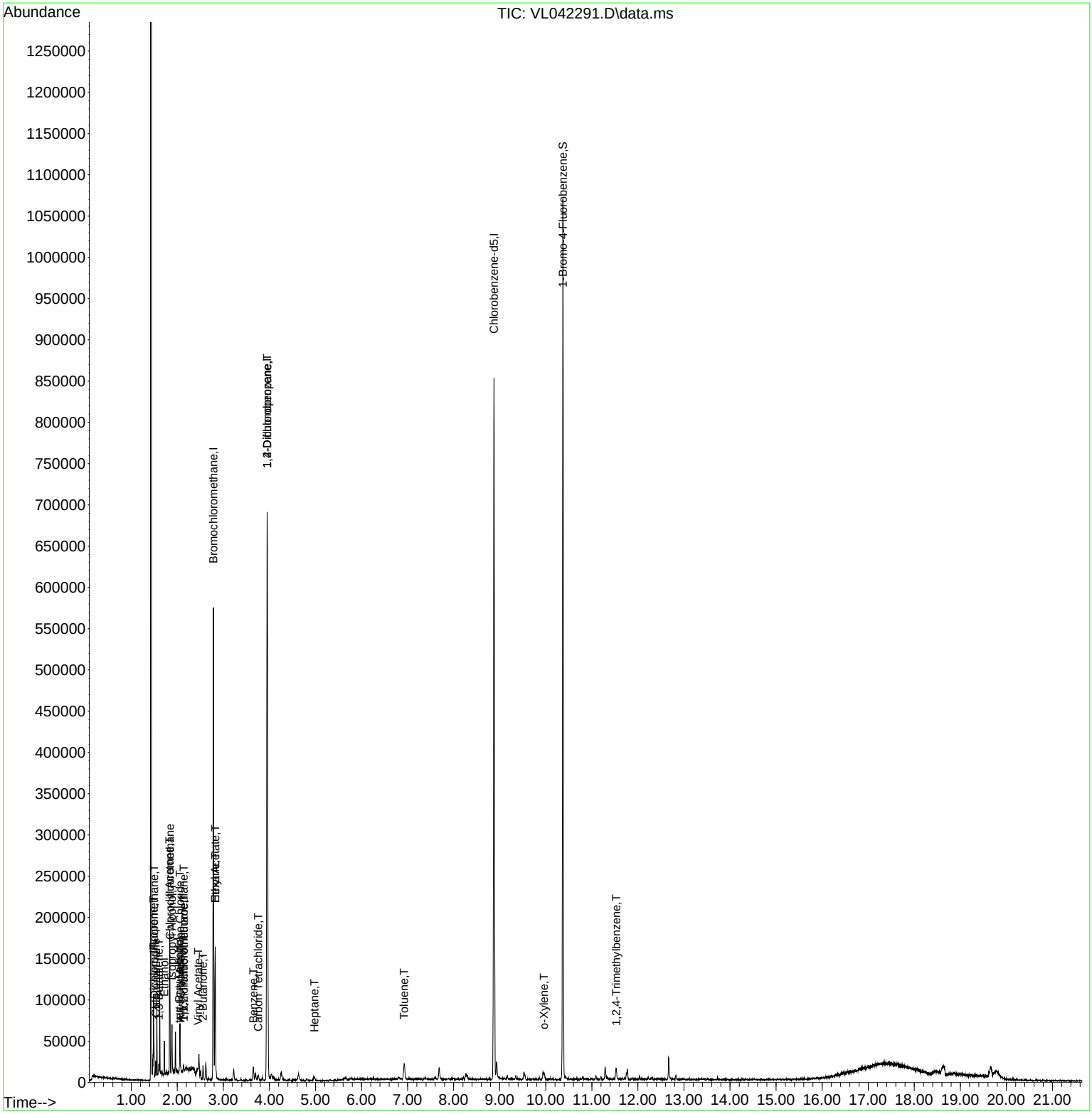
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	156655	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	397453	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	332015	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.371	95	254829	9.346	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	8694	0.376	ppbv	98
3) Chlorodifluoromethane	1.842	51	769	0.033	ppbv	97
4) Chloromethane	1.531	50	5160	0.546	ppbv	96
9) Propene	1.486	41	8735	0.807	ppbv	85
10) Heptane	4.975	43	1165	0.040	ppbv #	70
11) Trichlorofluoromethane	2.140	101	1343	0.060	ppbv	87
12) 1,1,2-Trichlorotrifluo...	2.140	101	1343	0.073	ppbv	93
13) Ethanol	1.719	45	13066	12.762	ppbv	82
15) Acetone	1.832	43	79514	3.629	ppbv	93
16) 1,3-Butadiene	1.599	39	2144	0.200	ppbv #	50
17) tert-Butyl alcohol	2.043	59	1332	0.049	ppbv #	71
19) Isopropyl Alcohol	1.884	45	23262	1.882	ppbv #	39
20) Methylene Chloride	2.059	84	7721	0.946	ppbv	92
21) Allyl Chloride	2.075	41	532	0.034	ppbv #	48
23) Vinyl Acetate	2.454	43	2459	0.259	ppbv #	35
25) Ethyl Acetate	2.823	43	24881	0.438	ppbv #	82
26) Hexane	2.823	57	29831	1.358	ppbv #	32
34) 2-Butanone	2.557	43	9468	0.329	ppbv	96
35) Carbon Tetrachloride	3.755	117	2063	0.066	ppbv #	65
36) Benzene	3.655	78	9601	0.244	ppbv	99
39) 1,2-Dichloropropane	3.952	63	100711	7.018	ppbv #	22
53) Toluene	6.924	91	12958	0.277	ppbv	96
60) o-Xylene	9.959	91	2248	0.048	ppbv	98
74) 1,2,4-Trimethylbenzene	11.532	105	2929	0.050	ppbv #	64

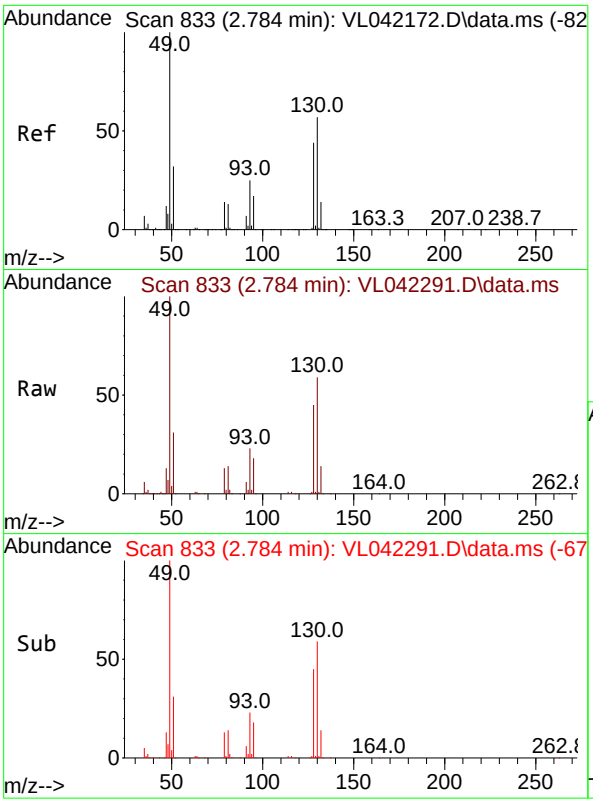
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042291.D
Acq On : 09 Apr 2025 14:02
Operator : SY/MD
Sample : Q1665-01DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Quant Time: Apr 10 01:43:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



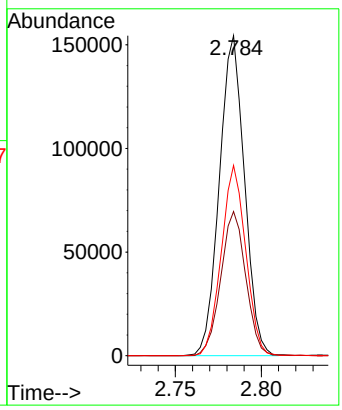


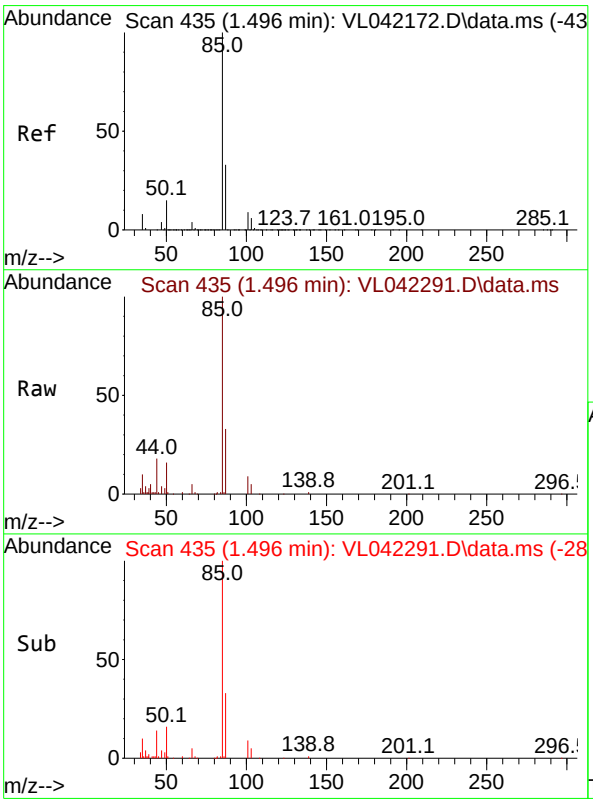
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 49 Resp: 156655

Ion	Ratio	Lower	Upper
49	100		
128	44.8	22.9	68.5
130	57.8	28.8	86.4

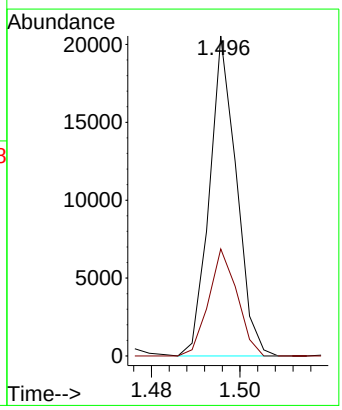


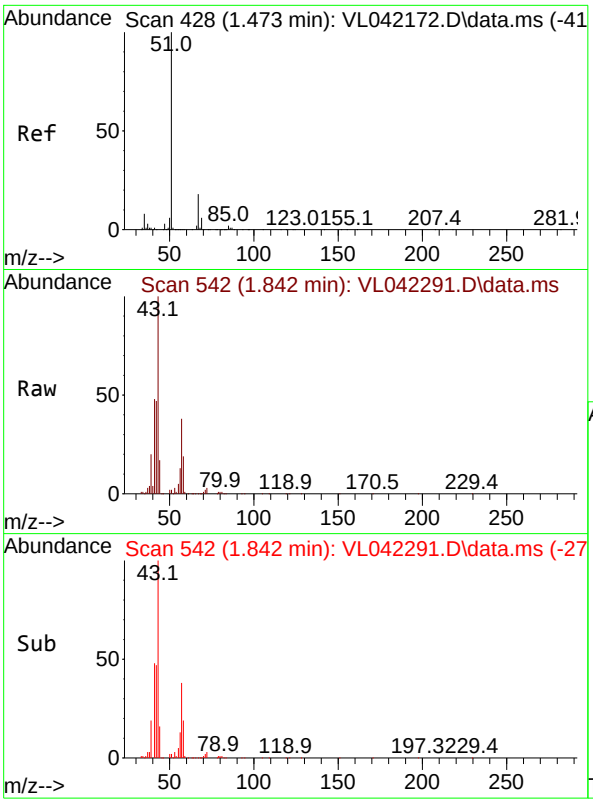


#2
Dichlorodifluoromethane
Concen: 0.376 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 85 Resp: 8694

Ion	Ratio	Lower	Upper
85	100		
87	33.5	26.1	39.1



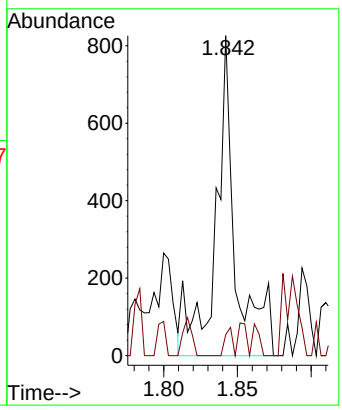


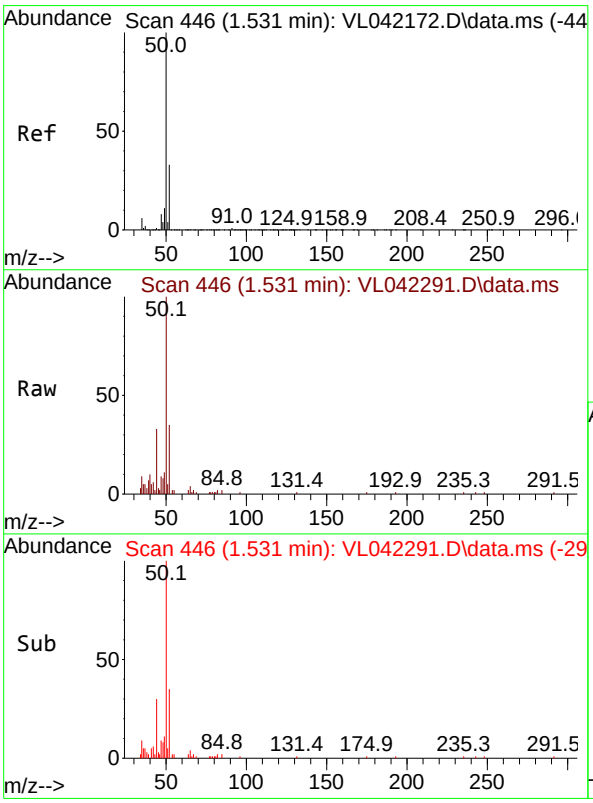
#3
Chlorodifluoromethane
Concen: 0.033 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.369 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 51 Resp: 769

Ion	Ratio	Lower	Upper
51	100		
67	20.2	15.0	22.6

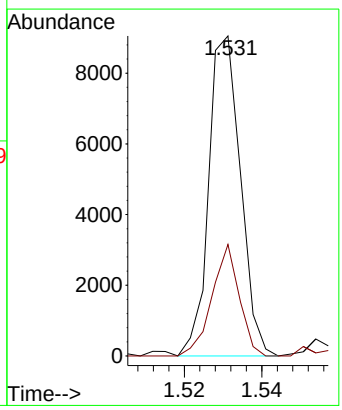


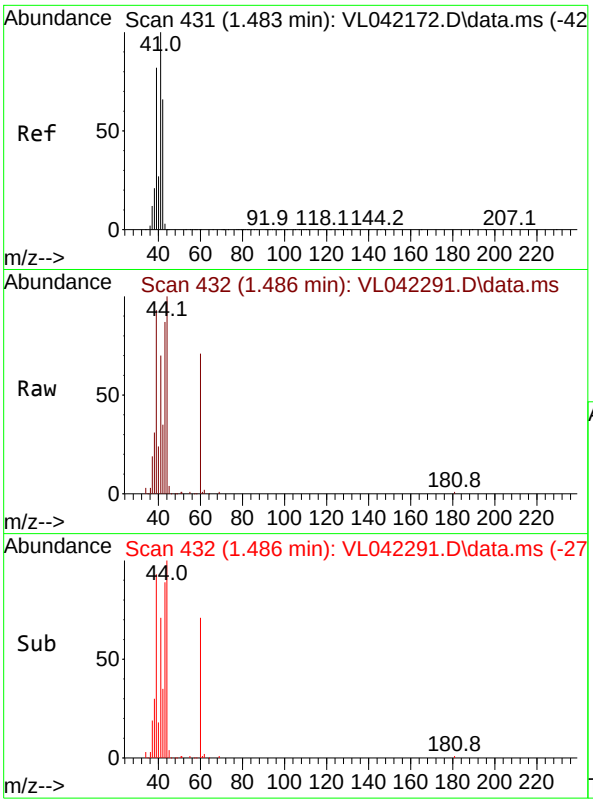


#4
Chloromethane
Concen: 0.546 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 50 Resp: 5160

Ion	Ratio	Lower	Upper
50	100		
52	34.9	26.1	39.1



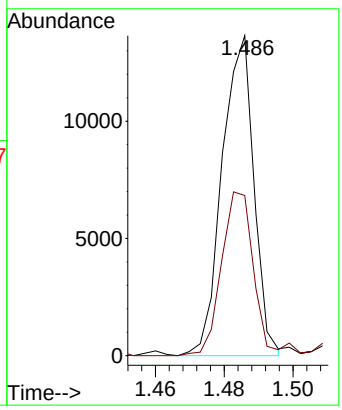


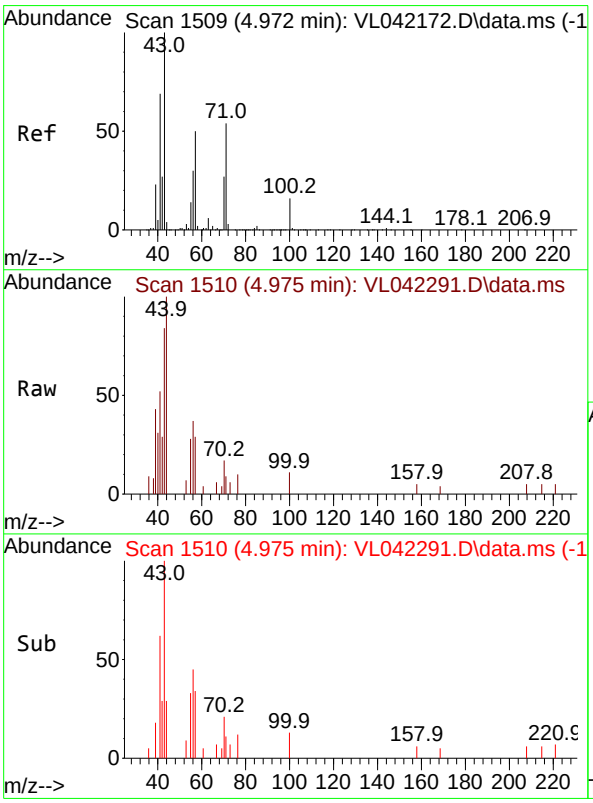
#9
Propene
Concen: 0.807 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 41 Resp: 8735

Ion	Ratio	Lower	Upper
41	100		
42	57.1	55.4	83.2

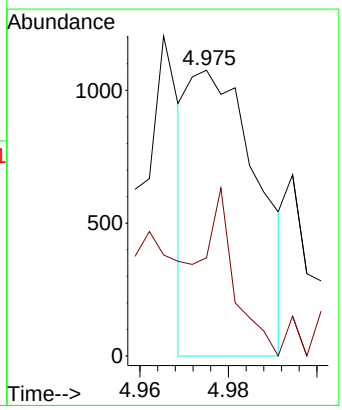


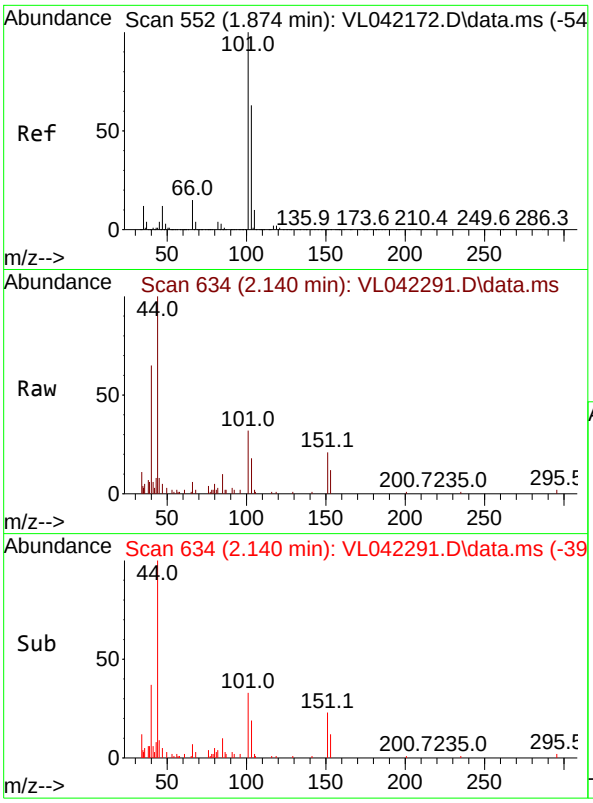


#10
Heptane
Concen: 0.040 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 1165

Ion	Ratio	Lower	Upper
43	100		
57	70.1	39.4	59.2#



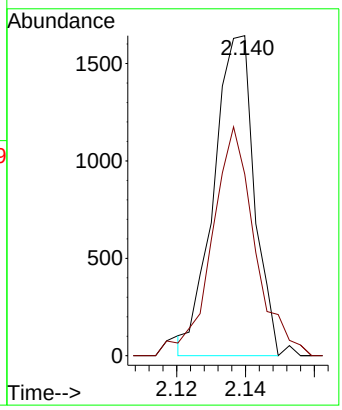


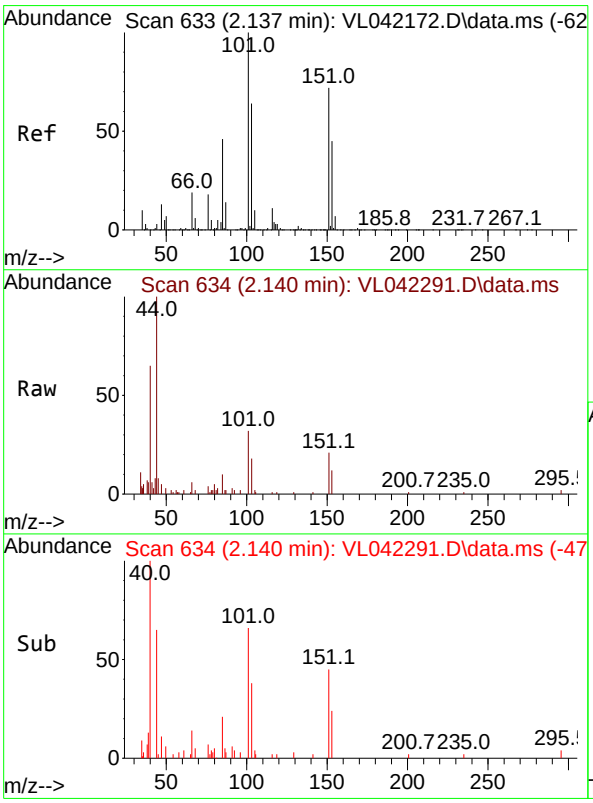
#11
Trichlorofluoromethane
Concen: 0.060 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.265 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion:101 Resp: 1343

Ion	Ratio	Lower	Upper
101	100		
103	52.8	50.2	75.2

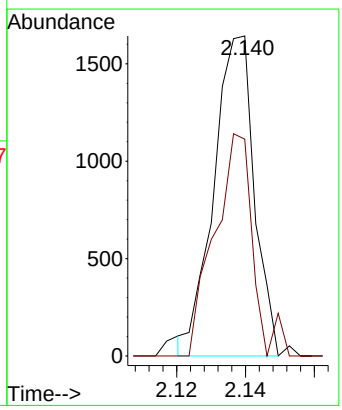


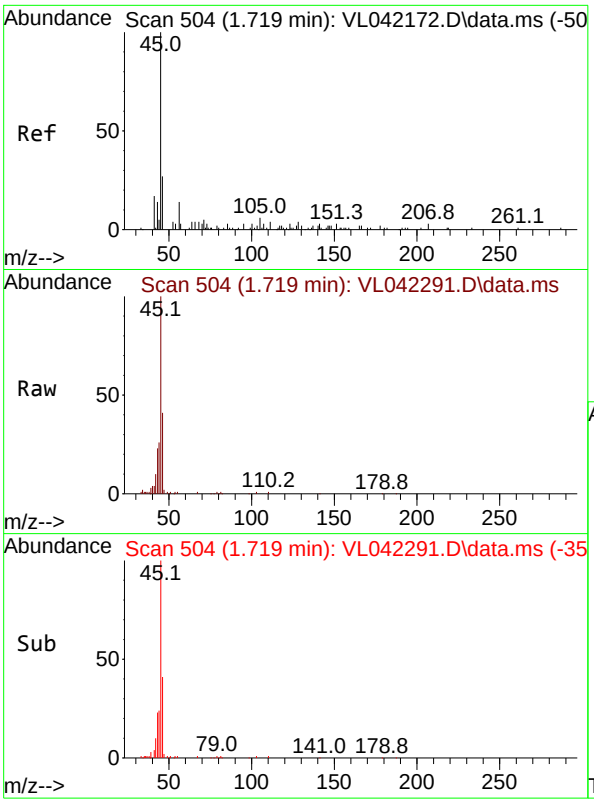


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.073 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:101 Resp: 1343

Ion	Ratio	Lower	Upper
101	100		
151	65.7	57.1	85.7



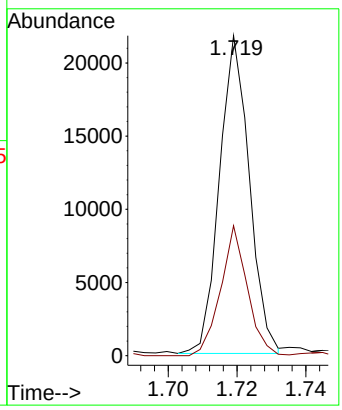


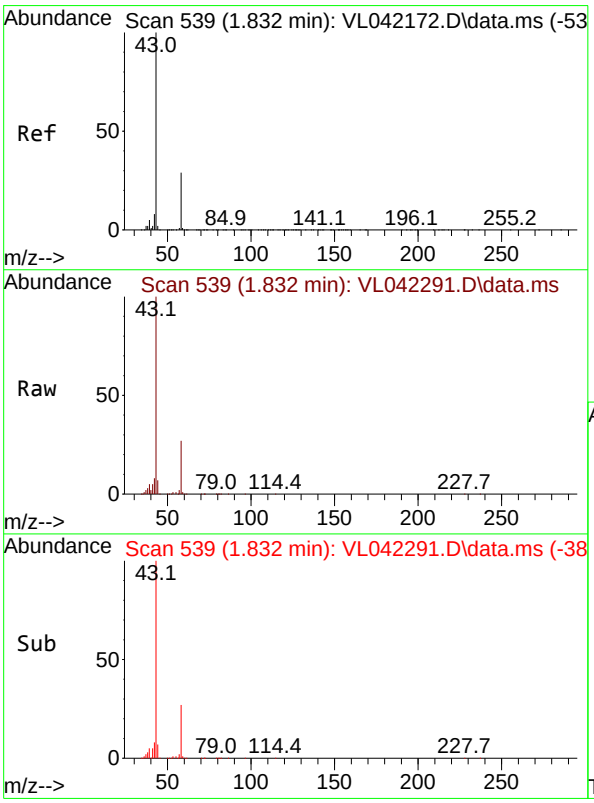
#13
Ethanol
Concen: 12.762 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 45 Resp: 13066

Ion	Ratio	Lower	Upper
45	100		
46	37.8	20.2	80.8

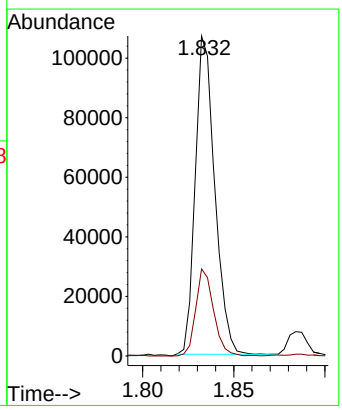


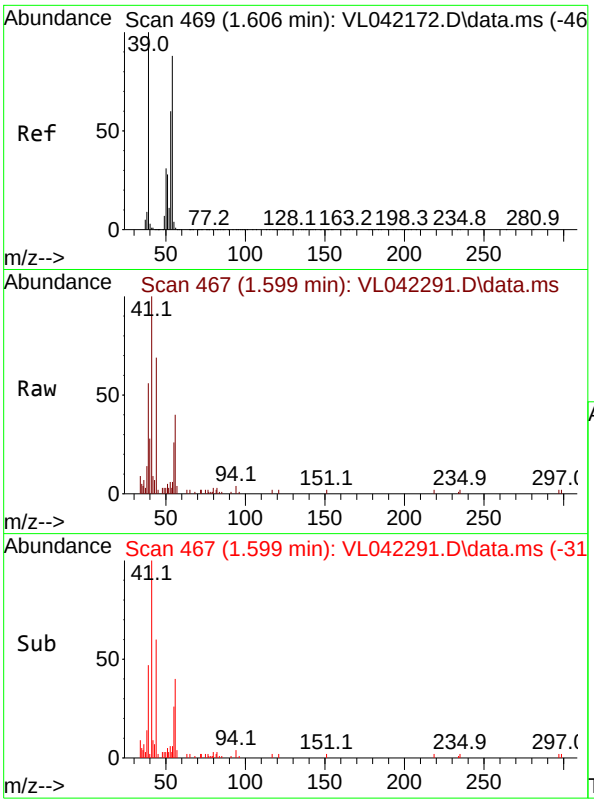


#15
Acetone
Concen: 3.629 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 79514

Ion	Ratio	Lower	Upper
43	100		
58	25.3	23.2	34.8



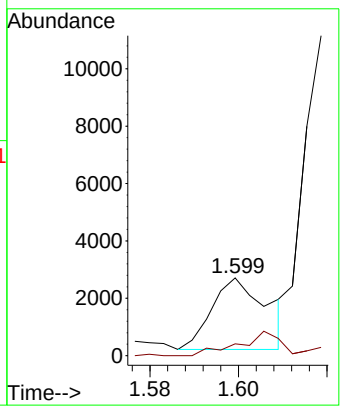


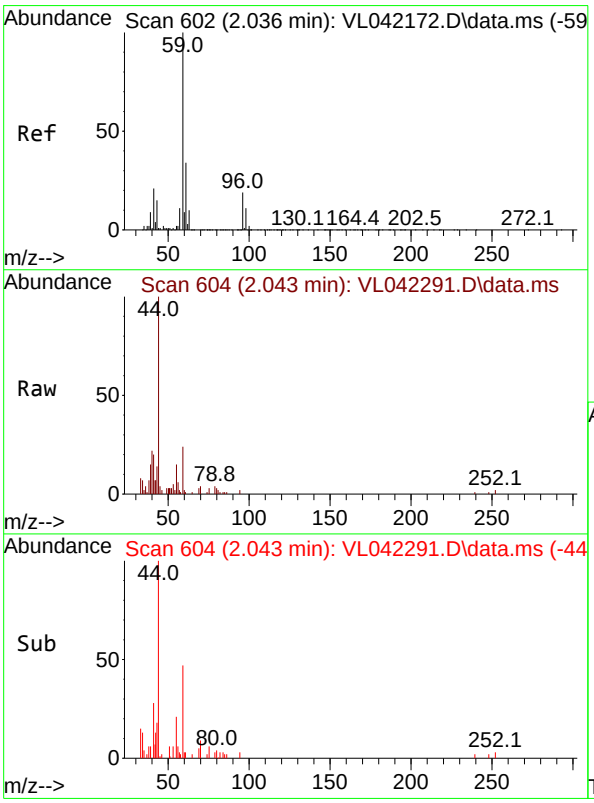
#16
1,3-Butadiene
Concen: 0.200 ppbv
RT: 1.599 min Scan# 4(
Delta R.T. -0.007 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 39 Resp: 2144

Ion	Ratio	Lower	Upper
39	100		
54	33.3	60.7	91.1#

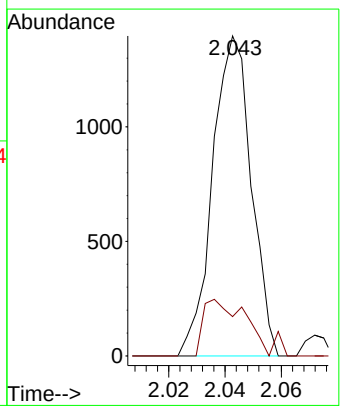


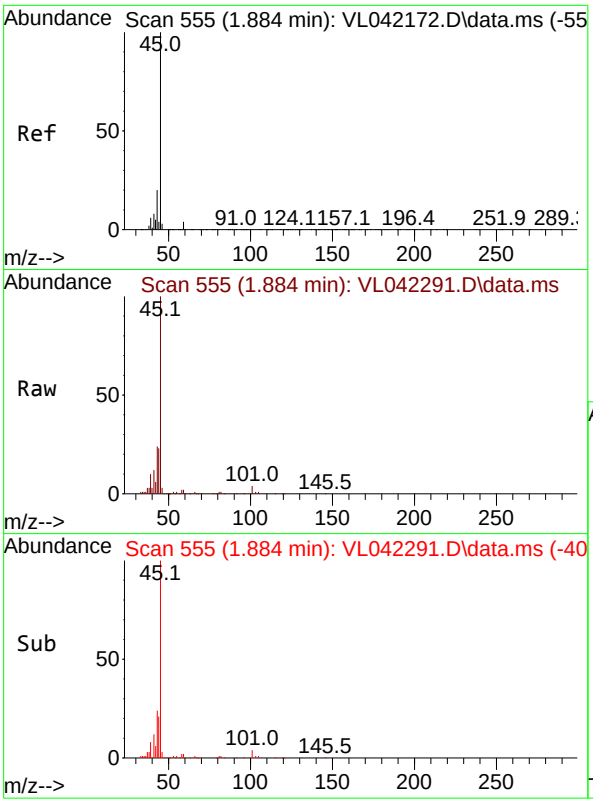


#17
tert-Butyl alcohol
Concen: 0.049 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.006 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 59 Resp: 1332

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#



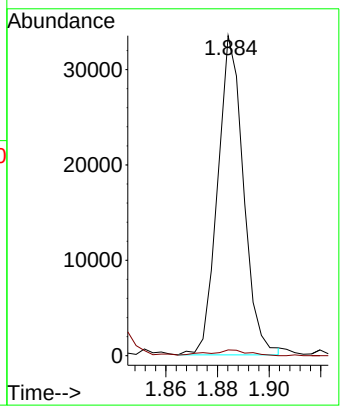


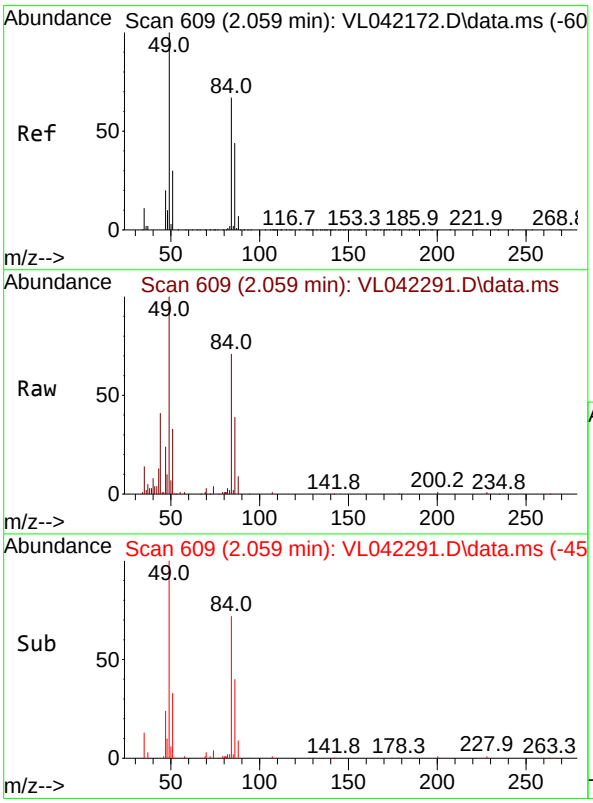
#19
Isopropyl Alcohol
Concen: 1.882 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 45 Resp: 23262

Ion	Ratio	Lower	Upper
45	100		
58	86.4	36.9	55.3#

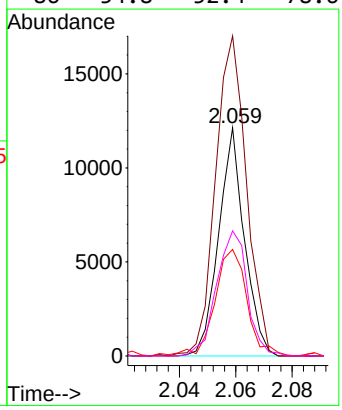


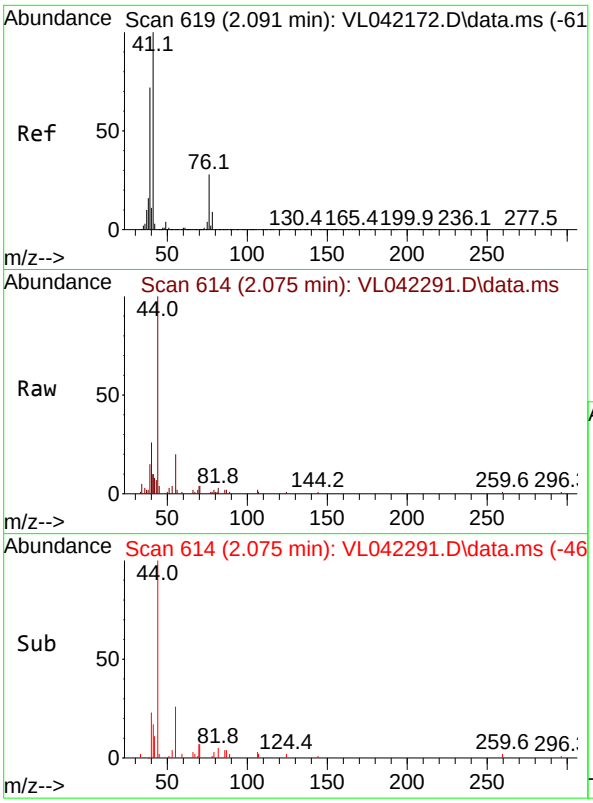


#20
Methylene Chloride
Concen: 0.946 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 84 Resp: 7721

Ion	Ratio	Lower	Upper
84	100		
49	140.2	120.2	180.4
51	45.4	37.4	56.0
86	54.8	52.4	78.6



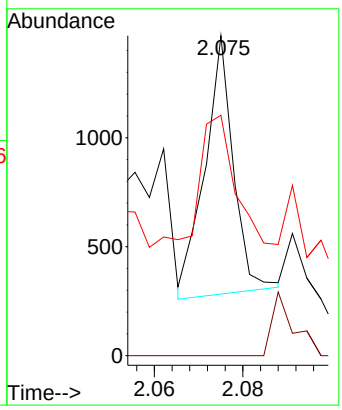


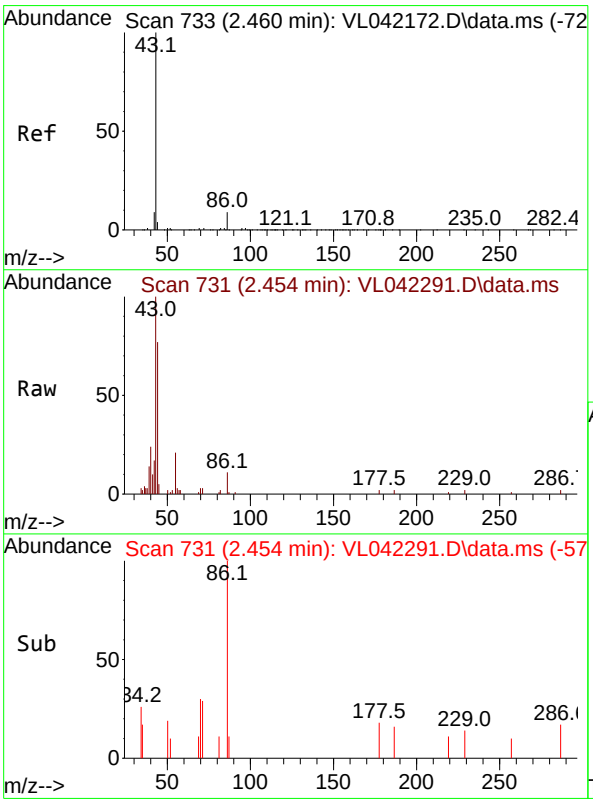
#21
Allyl Chloride
Concen: 0.034 ppbv
RT: 2.075 min Scan# 61
Delta R.T. -0.016 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 41 Resp: 532

Ion	Ratio	Lower	Upper
41	100		
76	18.6	24.1	36.1#
39	131.2	61.1	91.7#

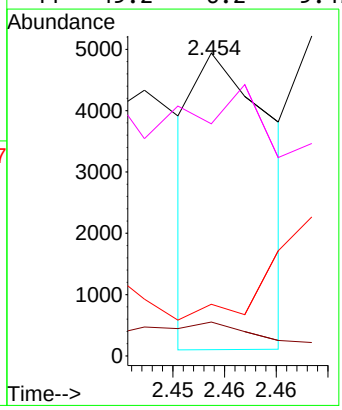


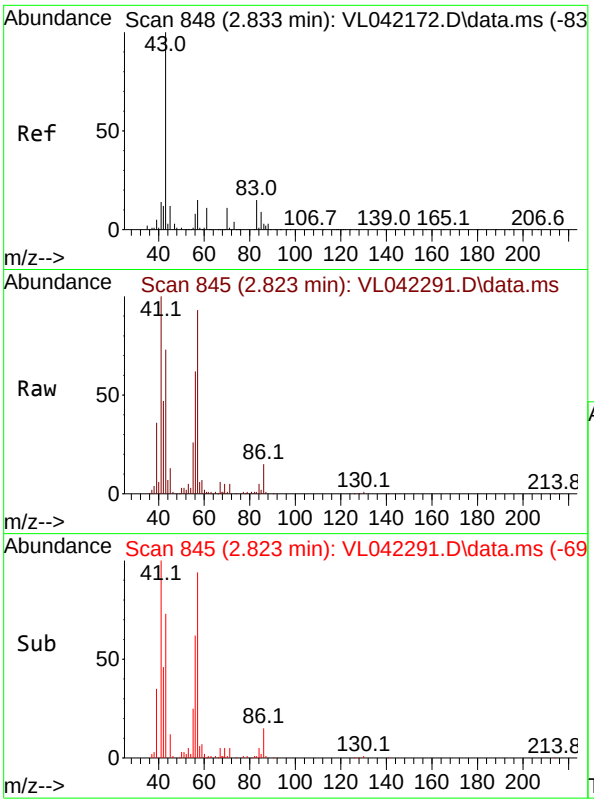


#23
Vinyl Acetate
Concen: 0.259 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 2459

Ion	Ratio	Lower	Upper
43	100		
86	26.8	5.5	8.3#
42	23.0	8.6	13.0#
44	49.2	6.2	9.4#



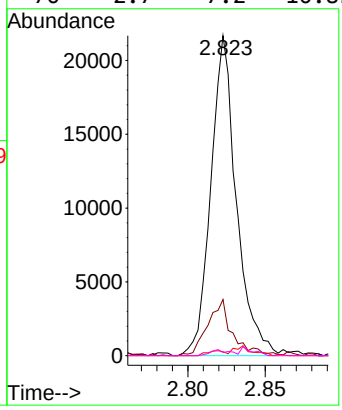


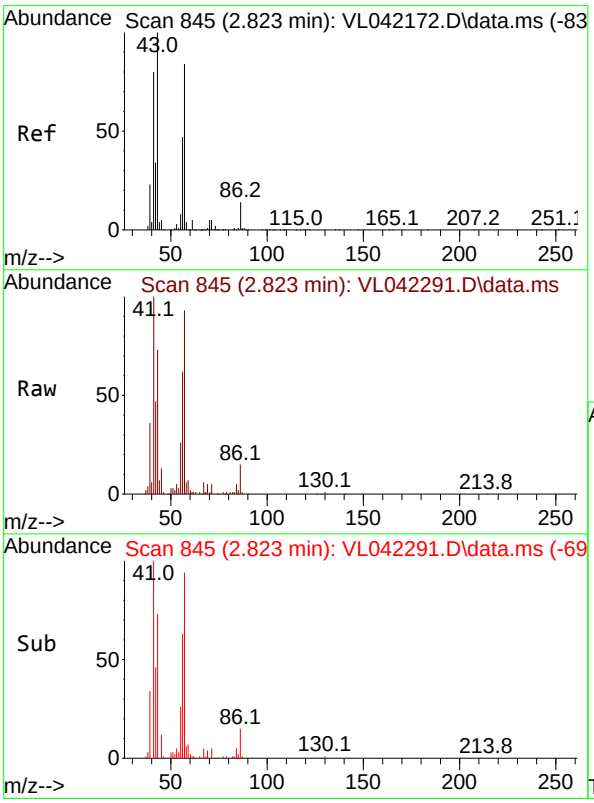
#25
Ethyl Acetate
Concen: 0.438 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 43 Resp: 24881

Ion	Ratio	Lower	Upper
43	100		
45	17.9	8.2	12.2#
61	3.3	7.3	10.9#
70	2.7	7.2	10.8#

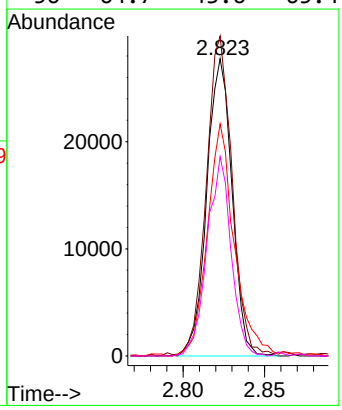


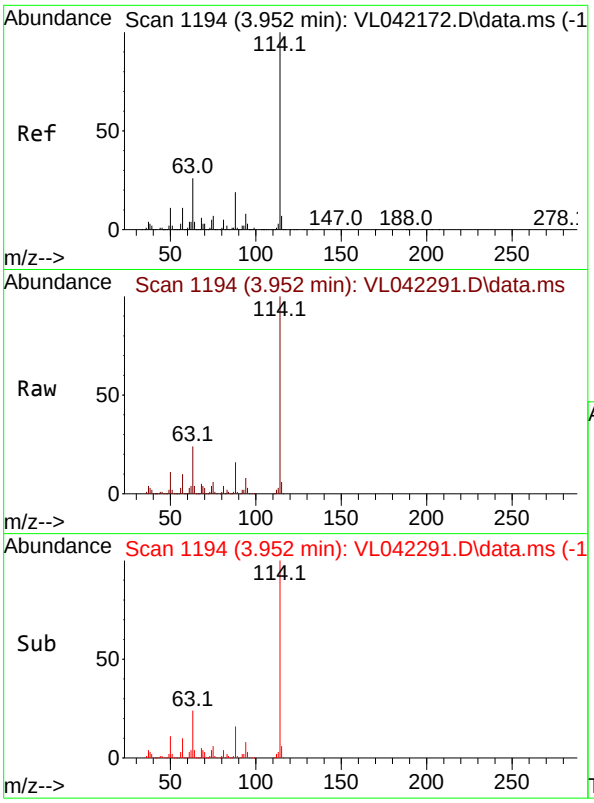


#26
Hexane
Concen: 1.358 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 57 Resp: 29831

Ion	Ratio	Lower	Upper
57	100		
41	111.8	76.6	114.8
43	85.5	207.8	311.8#
56	64.7	43.6	65.4



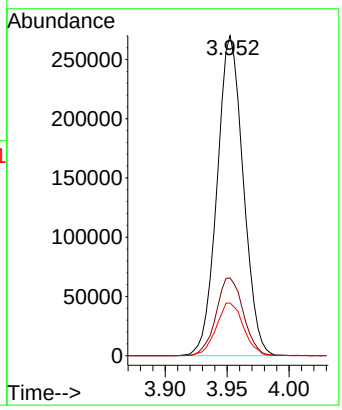


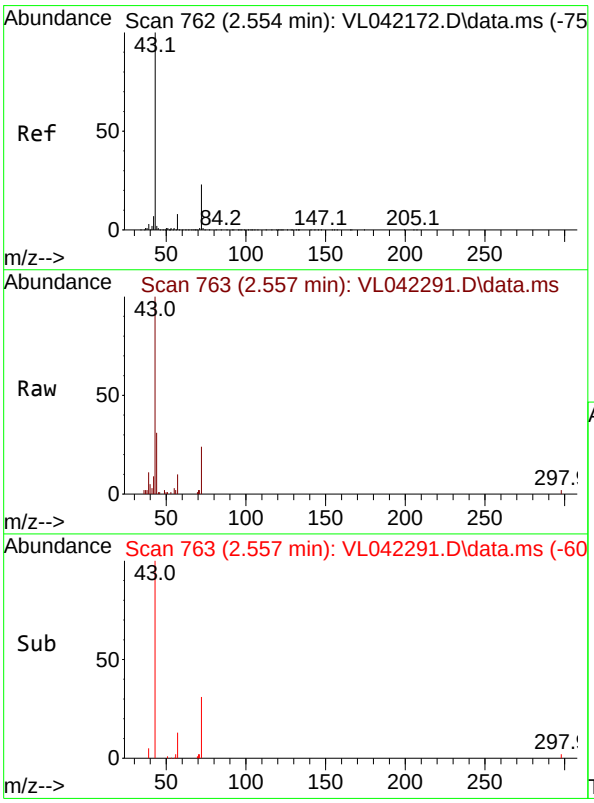
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion:114 Resp: 397453

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.2	15.0	22.4

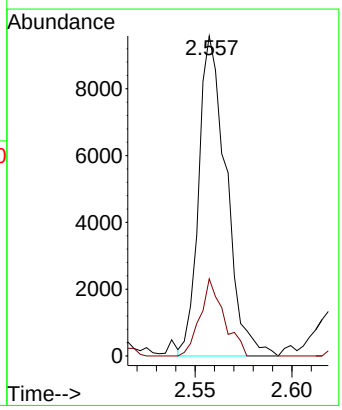


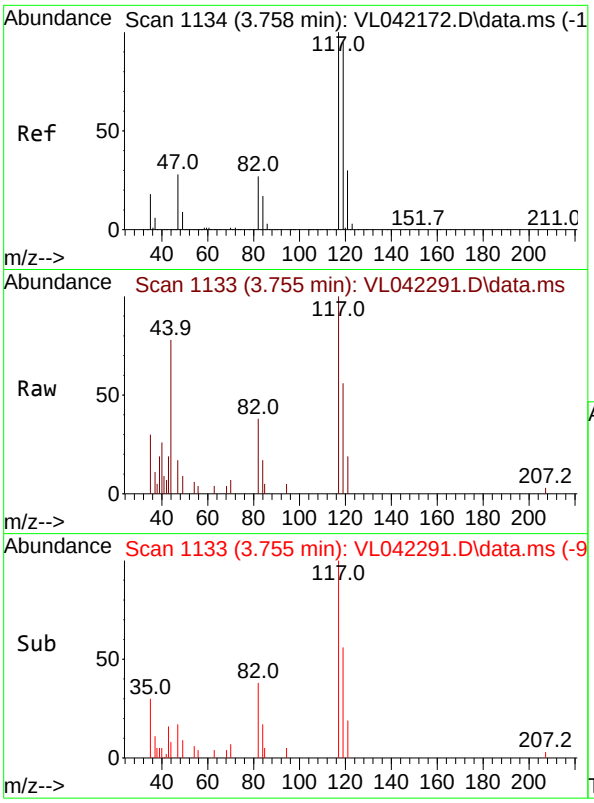


#34
2-Butanone
Concen: 0.329 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 43 Resp: 9468

Ion	Ratio	Lower	Upper
43	100		
72	20.8	18.2	27.2



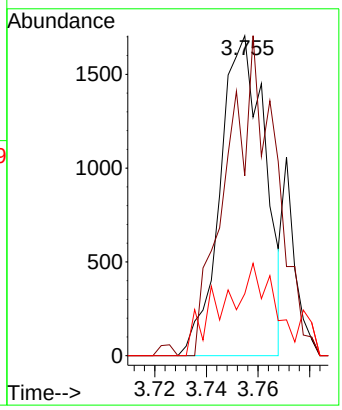


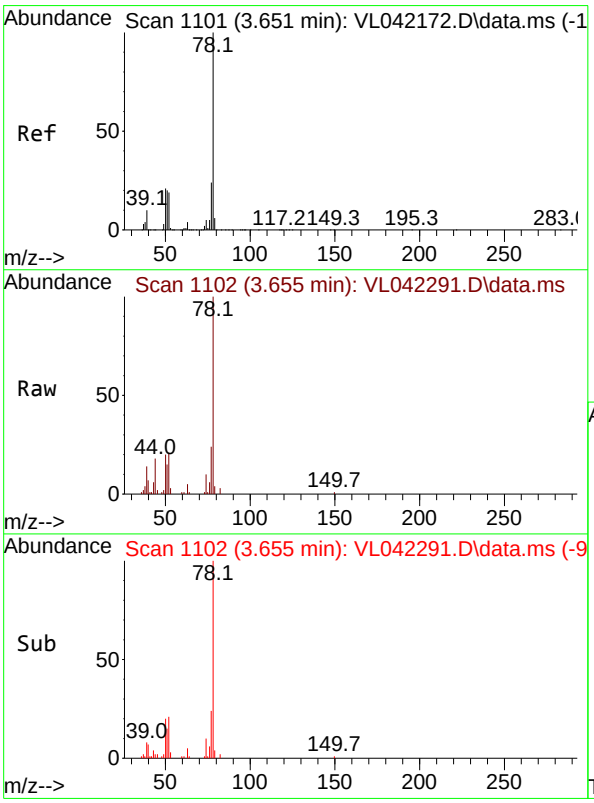
#35
Carbon Tetrachloride
Concen: 0.066 ppbv
RT: 3.755 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion:117 Resp: 2063

Ion	Ratio	Lower	Upper
117	100		
119	56.2	76.2	114.2#
121	19.4	24.2	36.4#

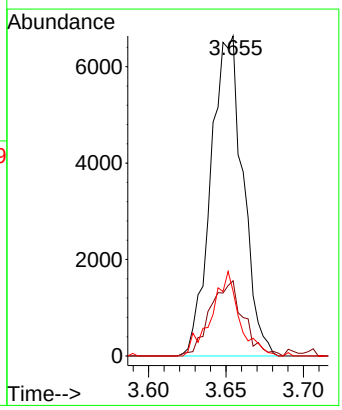


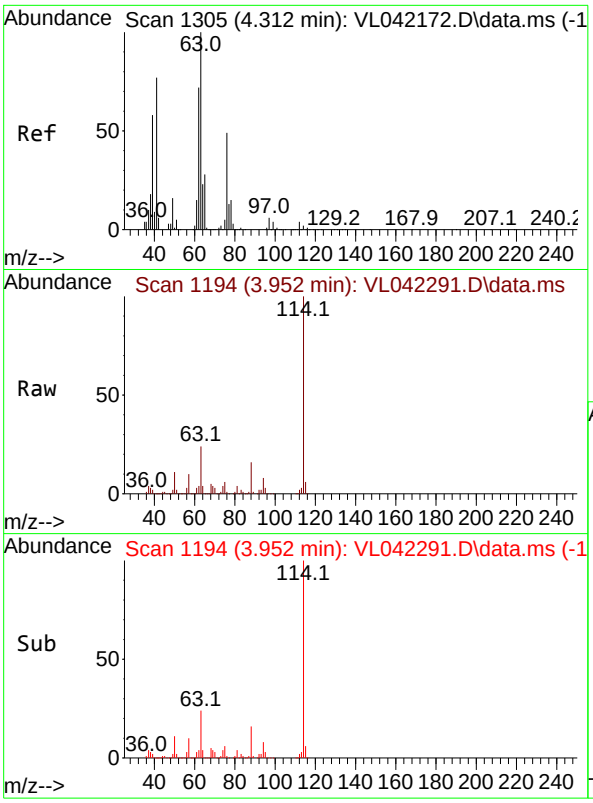


#36
Benzene
Concen: 0.244 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 78 Resp: 9601

Ion	Ratio	Lower	Upper
78	100		
77	23.5	19.1	28.7
50	20.3	16.6	24.8



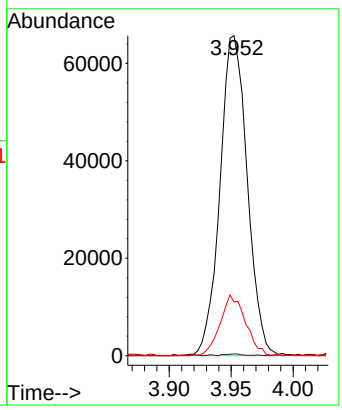


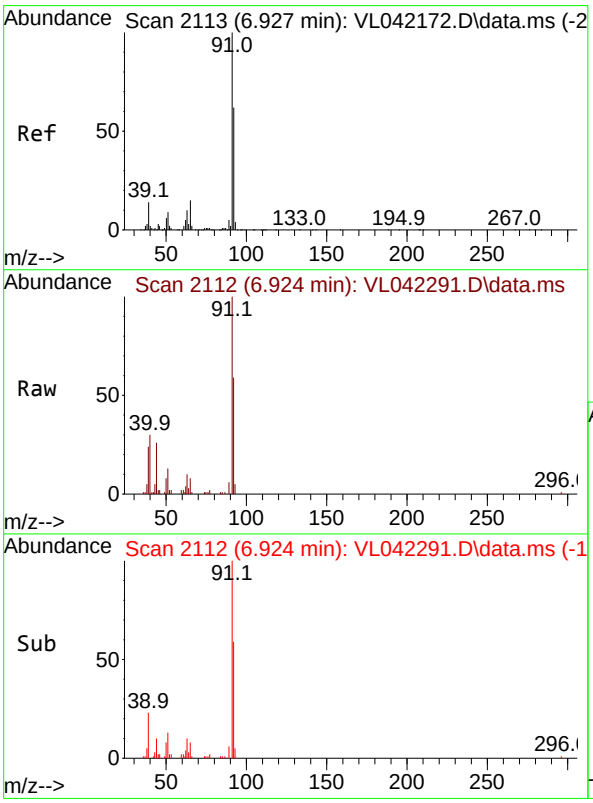
#39
1,2-Dichloropropane
Concen: 7.018 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.359 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 63 Resp: 100711

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	16.8	57.6	86.4#

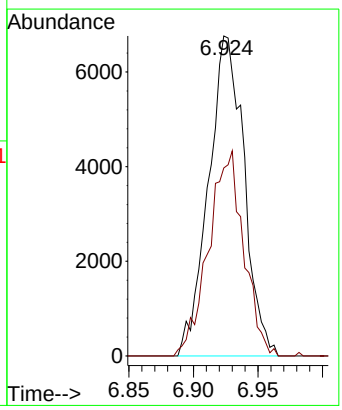


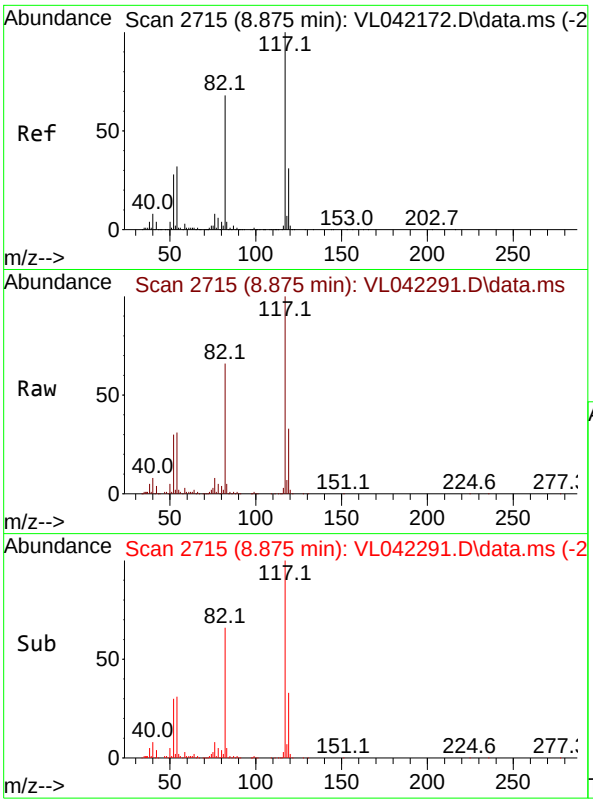


#53
Toluene
Concen: 0.277 ppbv
RT: 6.924 min Scan# 2112
Delta R.T. -0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 91 Resp: 12958

Ion	Ratio	Lower	Upper
91	100		
92	63.2	48.4	72.6



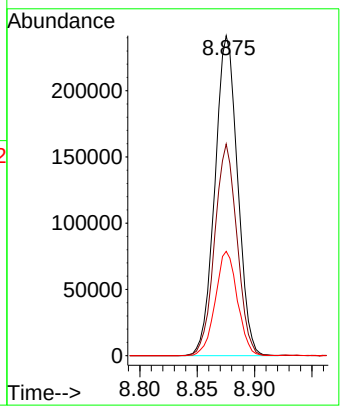


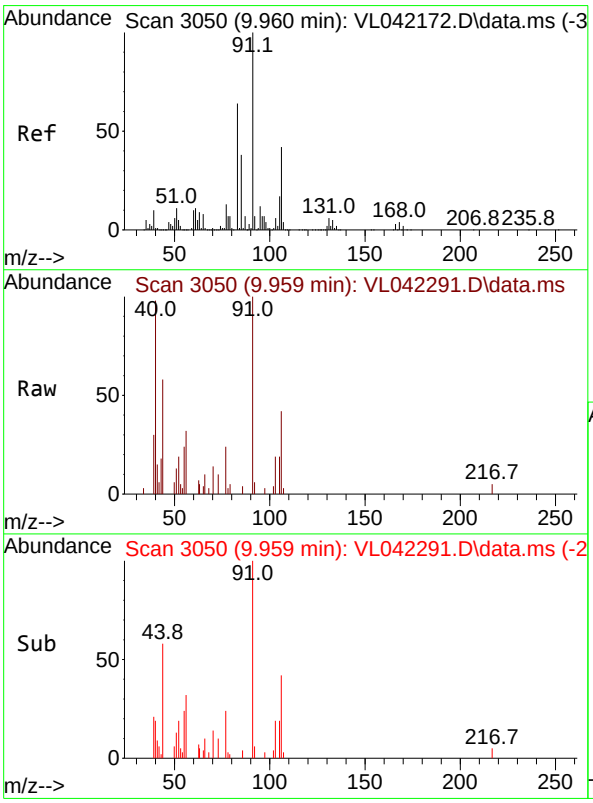
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion:117 Resp: 332015

Ion	Ratio	Lower	Upper
117	100		
82	65.3	55.8	83.6
119	31.8	25.5	38.3

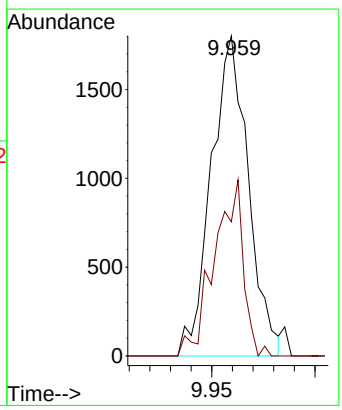


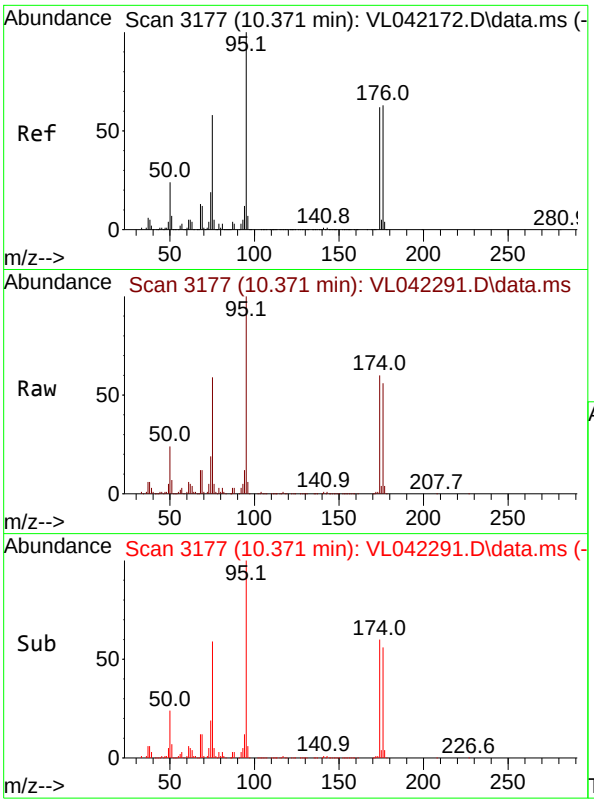


#60
o-Xylene
Concen: 0.048 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion: 91 Resp: 2248

Ion	Ratio	Lower	Upper
91	100		
106	43.1	20.8	62.5



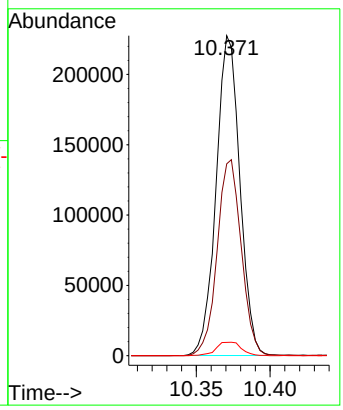


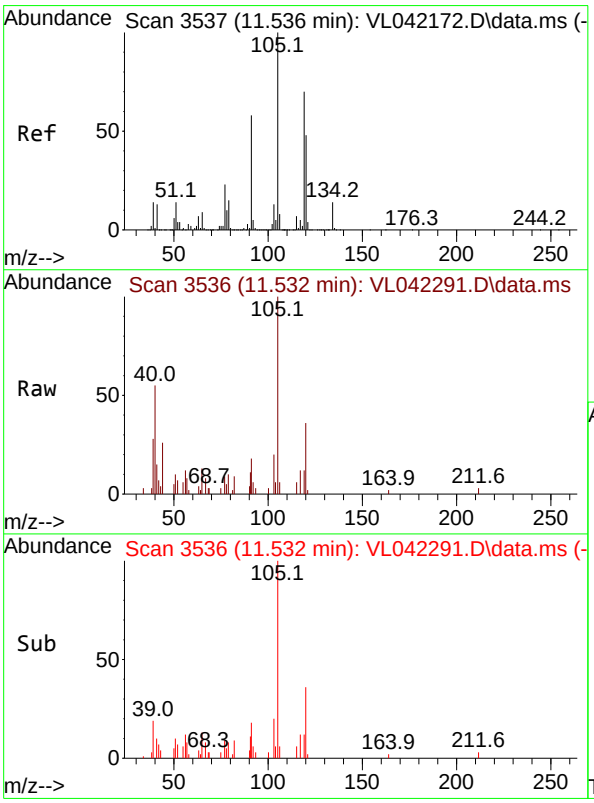
#68
1-Bromo-4-Fluorobenzene
Concen: 9.346 ppbv
RT: 10.371 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Instrument :
MSVOA_L
ClientSampleId :
AA-DUP-1-3242025DUP

Tgt Ion: 95 Resp: 254829

Ion	Ratio	Lower	Upper
95	100		
174	62.4	50.6	76.0
175	4.5	3.8	5.6

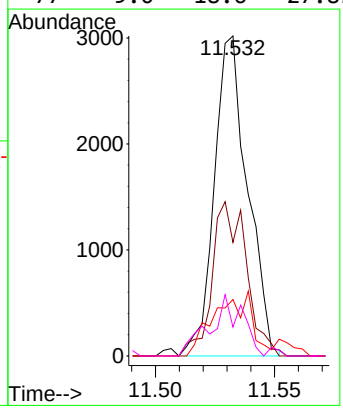




#74
1,2,4-Trimethylbenzene
Concen: 0.050 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042291.D
Acq: 09 Apr 2025 14:02

Tgt Ion:105 Resp: 2929

Ion	Ratio	Lower	Upper
105	100		
120	35.5	38.6	58.0#
91	17.6	46.2	69.2#
77	9.0	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Quant Time: Apr 10 01:44:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

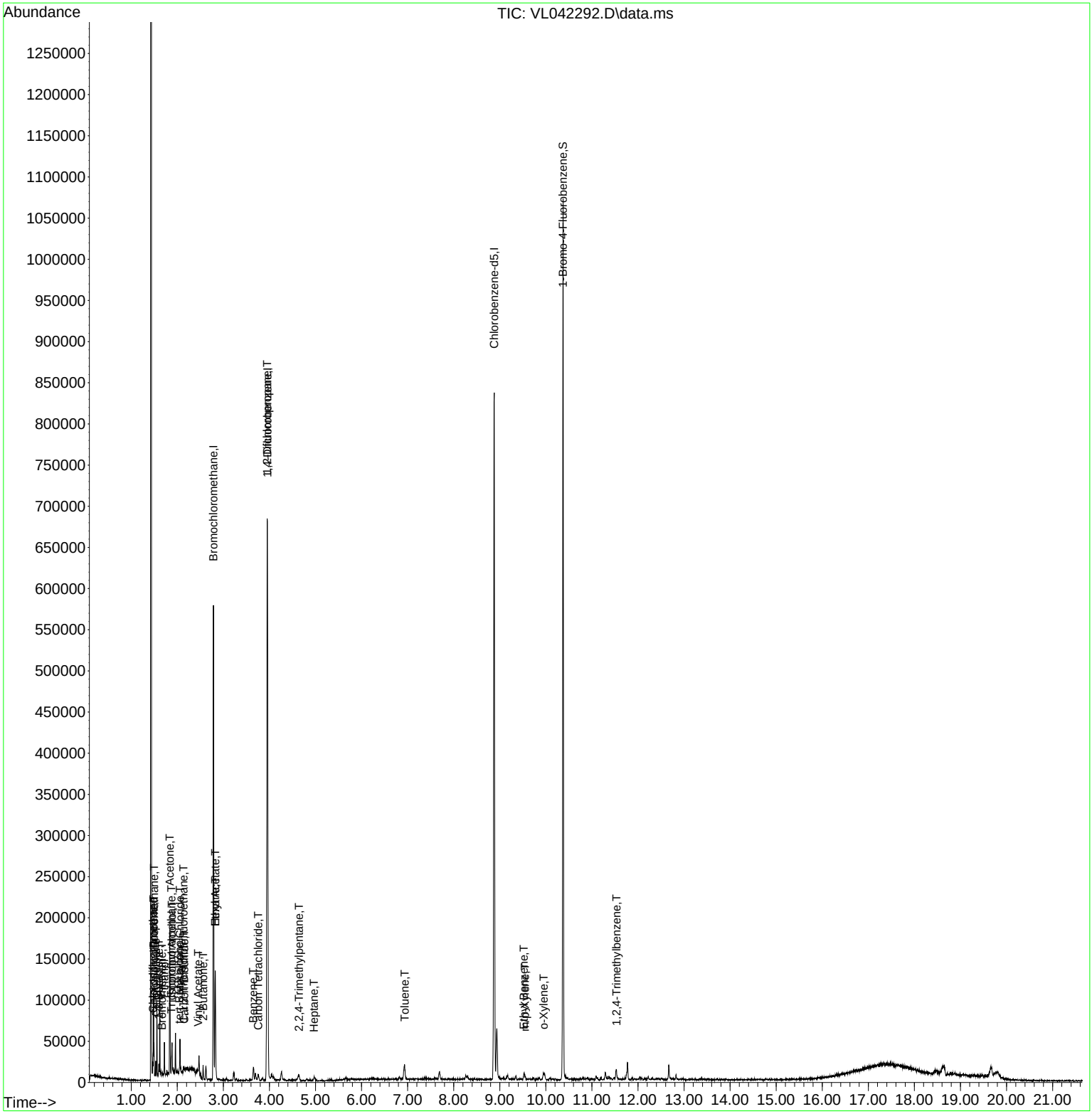
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	157856	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.956	114	383411	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	331322	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	250999	9.225	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	9272	0.398	ppbv		99
3) Chlorodifluoromethane	1.473	51	12952	0.544	ppbv	#	88
4) Chloromethane	1.531	50	5277	0.554	ppbv		92
6) Bromomethane	1.664	94	192	0.044	ppbv	#	47
9) Propene	1.486	41	8231	0.754	ppbv		93
10) Heptane	4.969	43	1272	0.044	ppbv	#	28
11) Trichlorofluoromethane	1.874	101	4773	0.210	ppbv		100
12) 1,1,2-Trichlorotrifluo...	2.137	101	1154	0.062	ppbv		92
13) Ethanol	1.719	45	13232	12.826	ppbv		88
15) Acetone	1.836	43	76719	3.475	ppbv		91
16) 1,3-Butadiene	1.599	39	1674	0.155	ppbv	#	68
17) tert-Butyl alcohol	2.046	59	1518	0.055	ppbv	#	71
19) Isopropyl Alcohol	1.884	45	14854	1.192	ppbv	#	1
20) Methylene Chloride	2.059	84	5511	0.670	ppbv		96
23) Vinyl Acetate	2.454	43	1222	0.128	ppbv	#	74
25) Ethyl Acetate	2.823	43	21094	0.368	ppbv	#	78
26) Hexane	2.823	57	23758	1.073	ppbv	#	35
27) Carbon Disulfide	2.150	76	1122	0.047	ppbv	#	51
34) 2-Butanone	2.561	43	9840	0.354	ppbv		99
35) Carbon Tetrachloride	3.758	117	2688	0.090	ppbv		89
36) Benzene	3.651	78	9637	0.254	ppbv	#	85
39) 1,2-Dichloropropane	3.952	63	102317	7.391	ppbv	#	22
44) 2,2,4-Trimethylpentane	4.642	57	2764	0.043	ppbv	#	26
53) Toluene	6.937	91	5021	0.111	ppbv	#	1
58) Ethyl Benzene	9.523	91	2126	0.036	ppbv		93
59) m/p-Xylene	9.549	91	1569	0.033	ppbv	#	31
60) o-Xylene	9.956	91	1723	0.037	ppbv		78
74) 1,2,4-Trimethylbenzene	11.533	105	2383	0.040	ppbv	#	68

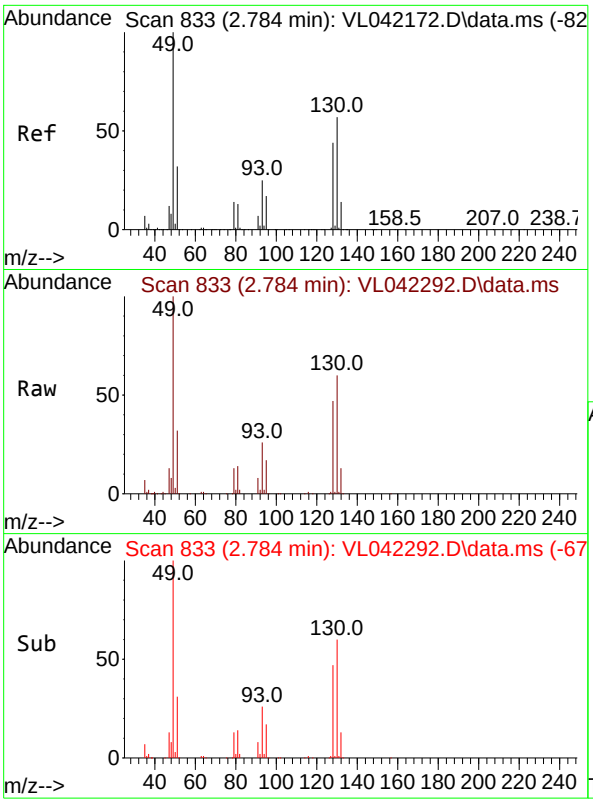
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042292.D
Acq On : 09 Apr 2025 14:36
Operator : SY/MD
Sample : Q1665-04
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Quant Time: Apr 10 01:44:34 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



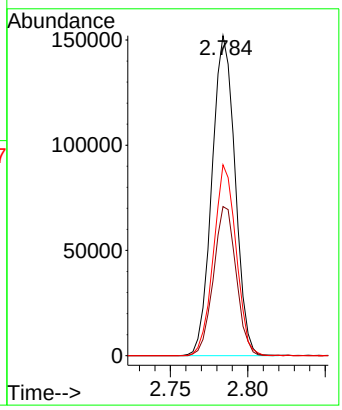


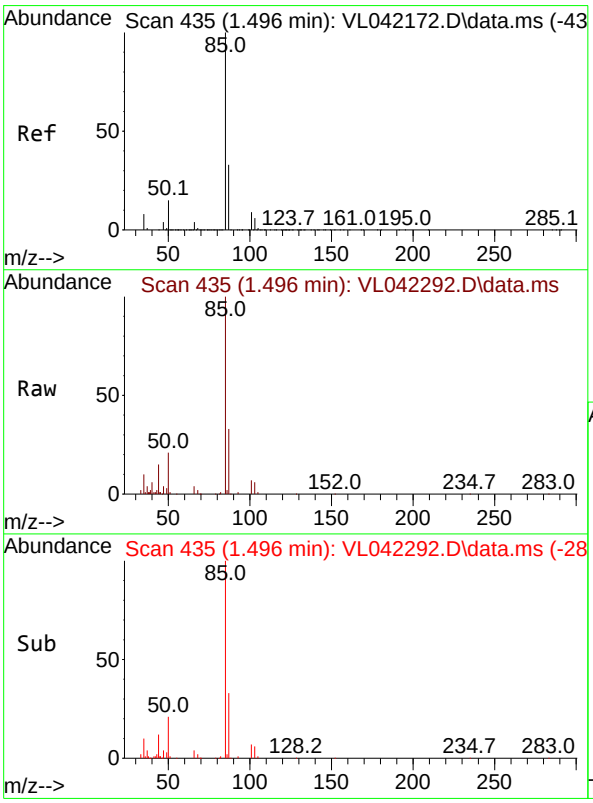
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 49 Resp: 157856

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	58.3	28.8	86.4

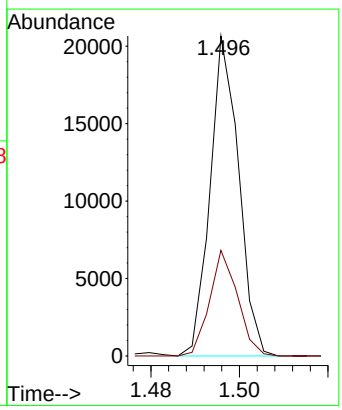


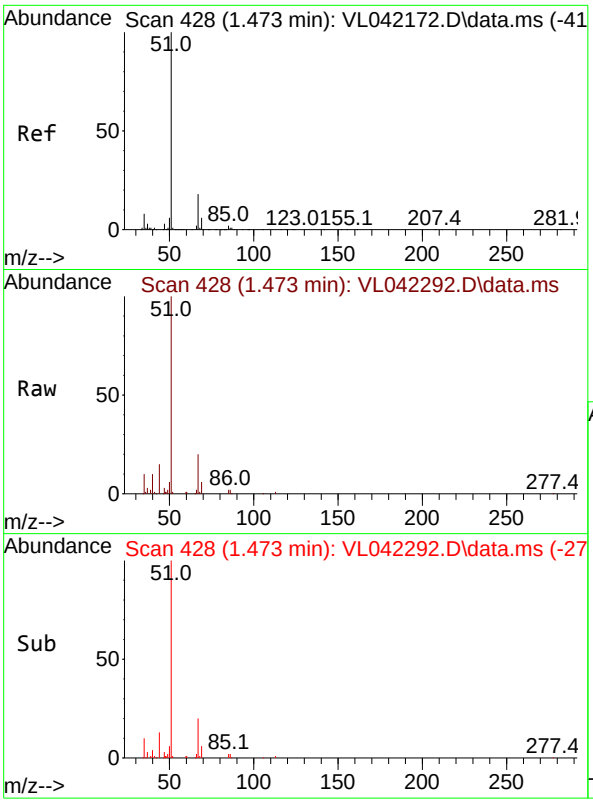


#2
Dichlorodifluoromethane
Concen: 0.398 ppbv
RT: 1.496 min Scan# 435
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 85 Resp: 9272

Ion	Ratio	Lower	Upper
85	100		
87	33.0	26.1	39.1



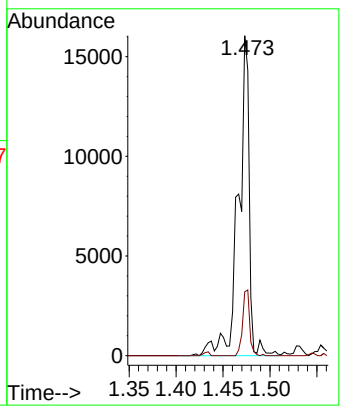


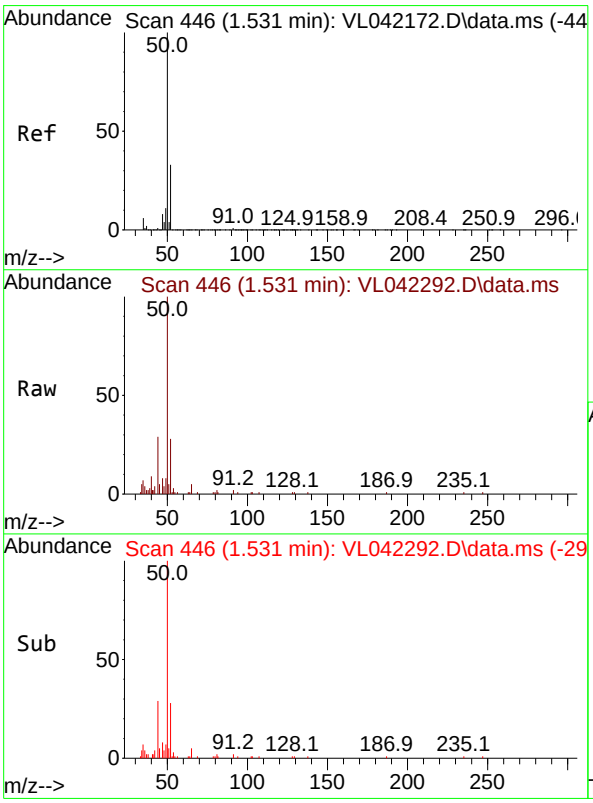
#3
Chlorodifluoromethane
Concen: 0.544 ppbv
RT: 1.473 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 51 Resp: 12952

Ion	Ratio	Lower	Upper
51	100		
67	13.3	15.0	22.6#

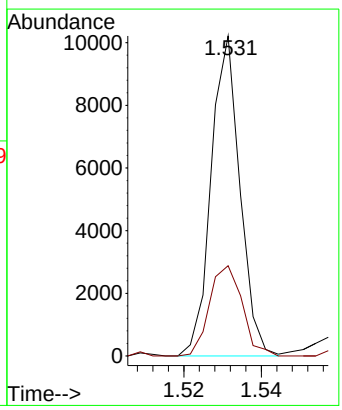


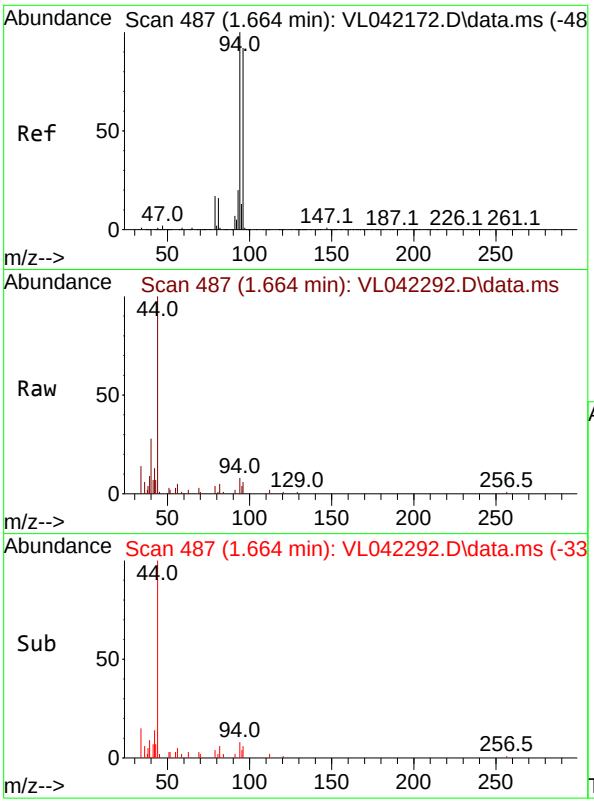


#4
Chloromethane
Concen: 0.554 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 50 Resp: 5277

Ion	Ratio	Lower	Upper
50	100		
52	28.2	26.1	39.1



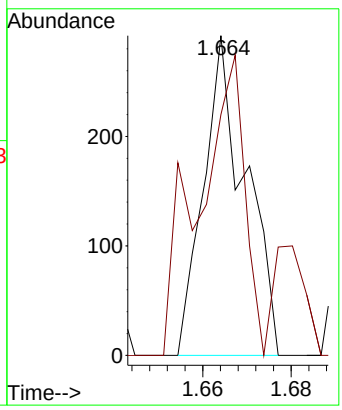


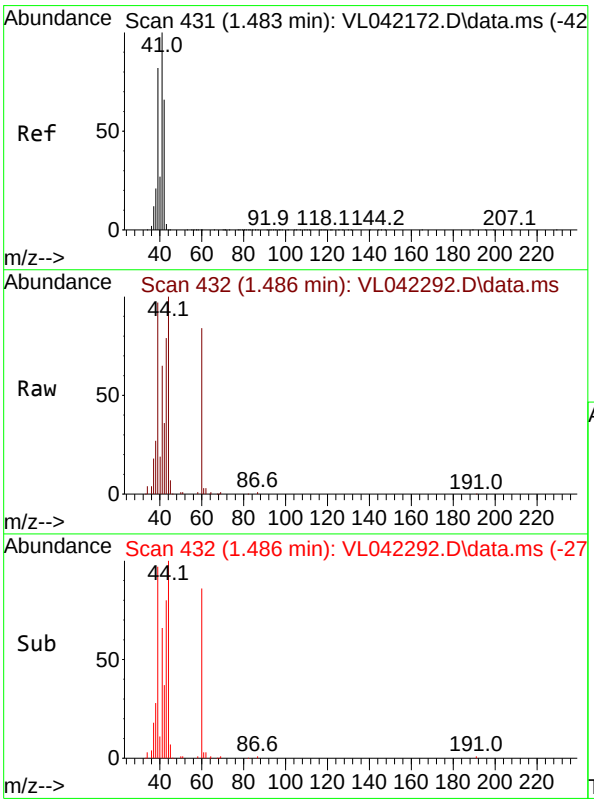
#6
Bromomethane
Concen: 0.044 ppbv
RT: 1.664 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 94 Resp: 192

Ion	Ratio	Lower	Upper
94	100		
96	41.4	73.1	109.7#

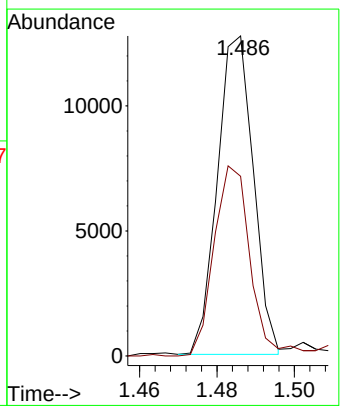


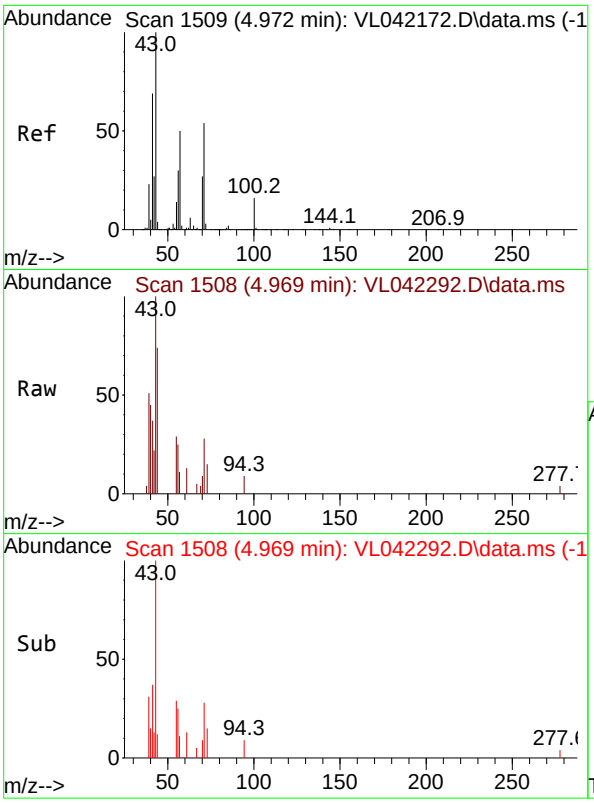


#9
Propene
Concen: 0.754 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 41 Resp: 8231

Ion	Ratio	Lower	Upper
41	100		
42	63.3	55.4	83.2



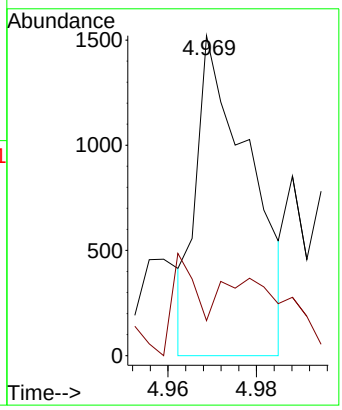


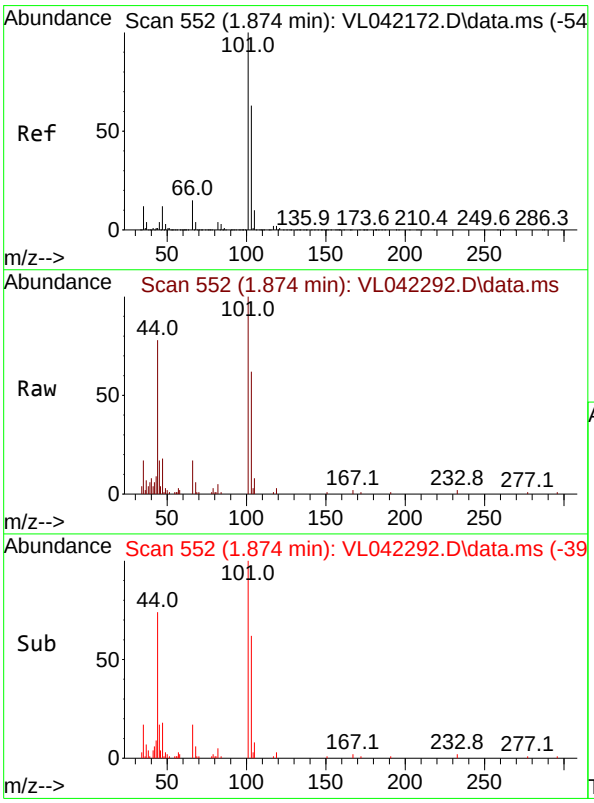
#10
Heptane
Concen: 0.044 ppbv
RT: 4.969 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 43 Resp: 1272

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

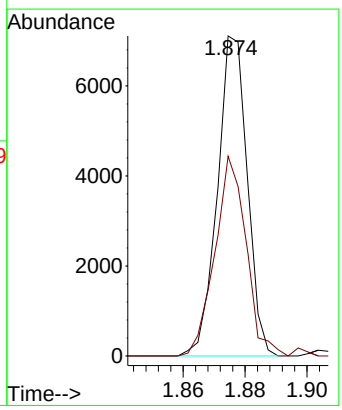


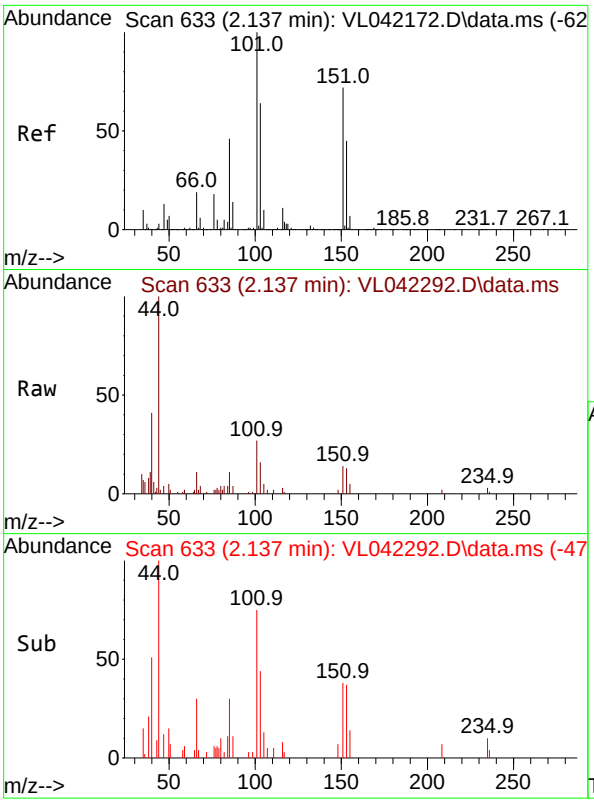


#11
Trichlorofluoromethane
Concen: 0.210 ppbv
RT: 1.874 min Scan# 552
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:101 Resp: 4773

Ion	Ratio	Lower	Upper
101	100		
103	62.4	50.2	75.2



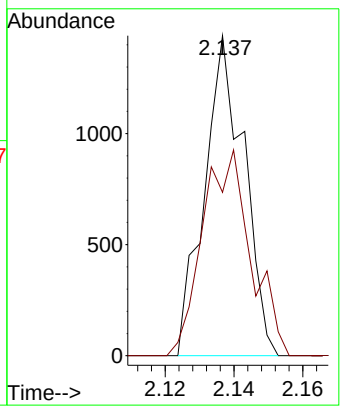


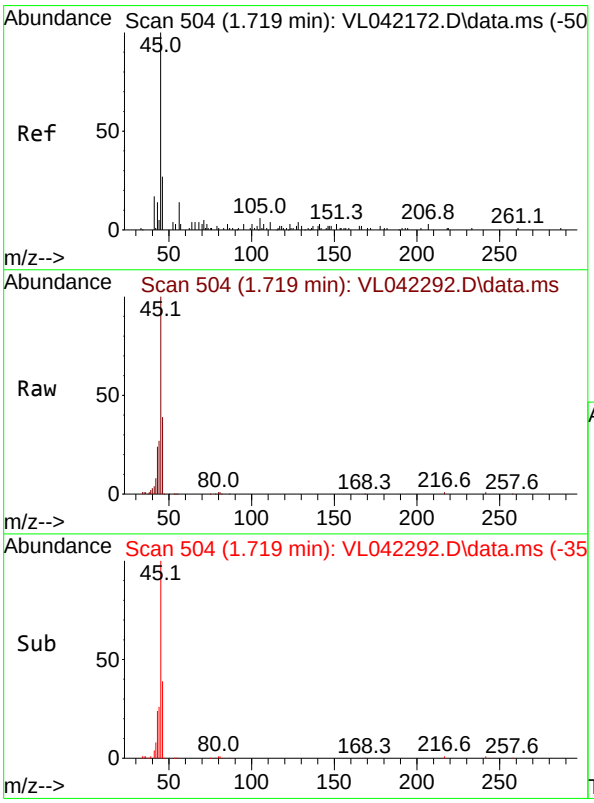
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.062 ppbv
RT: 2.137 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion:101 Resp: 1154

Ion	Ratio	Lower	Upper
101	100		
151	78.2	57.1	85.7

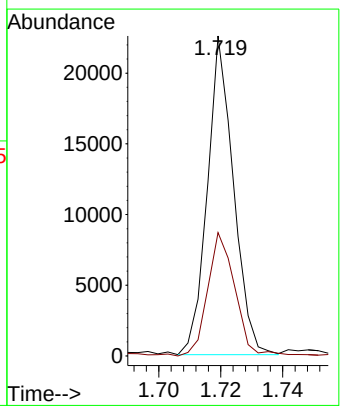


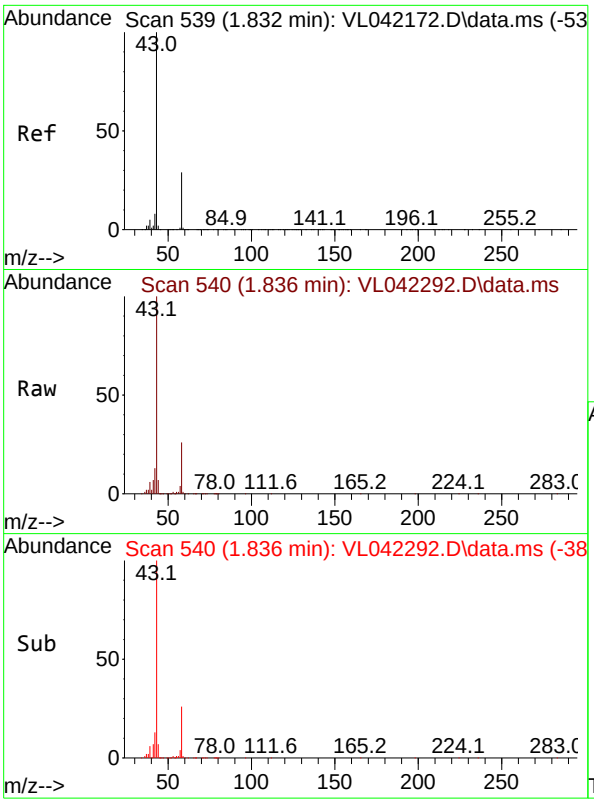


#13
Ethanol
Concen: 12.826 ppbv
RT: 1.719 min Scan# 504
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 45 Resp: 13232

Ion	Ratio	Lower	Upper
45	100		
46	42.5	20.2	80.8



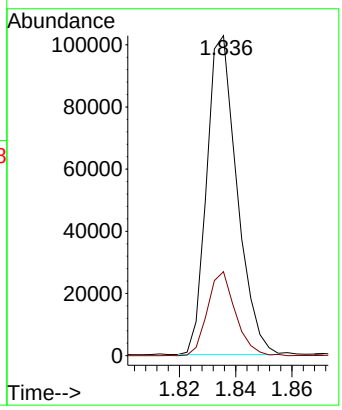


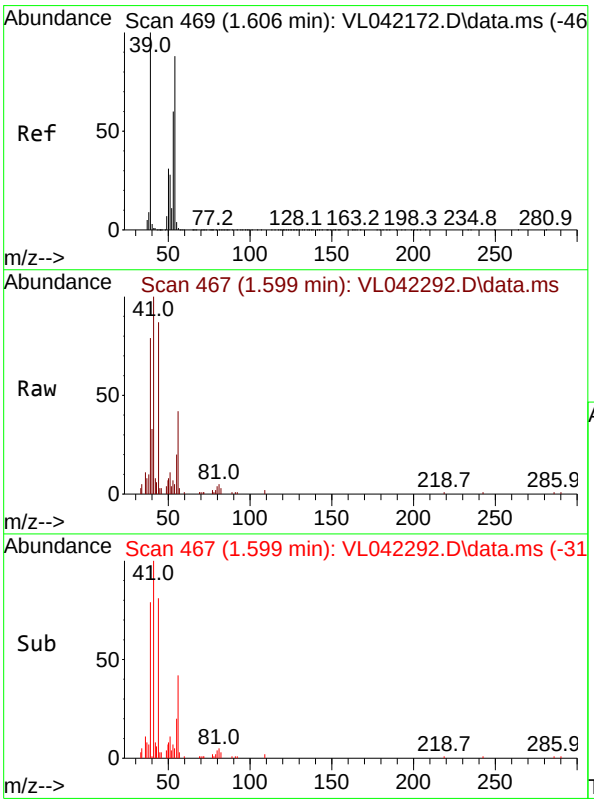
#15
Acetone
Concen: 3.475 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 43 Resp: 76719

Ion	Ratio	Lower	Upper
43	100		
58	24.3	23.2	34.8

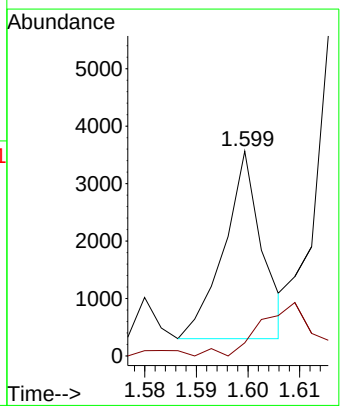


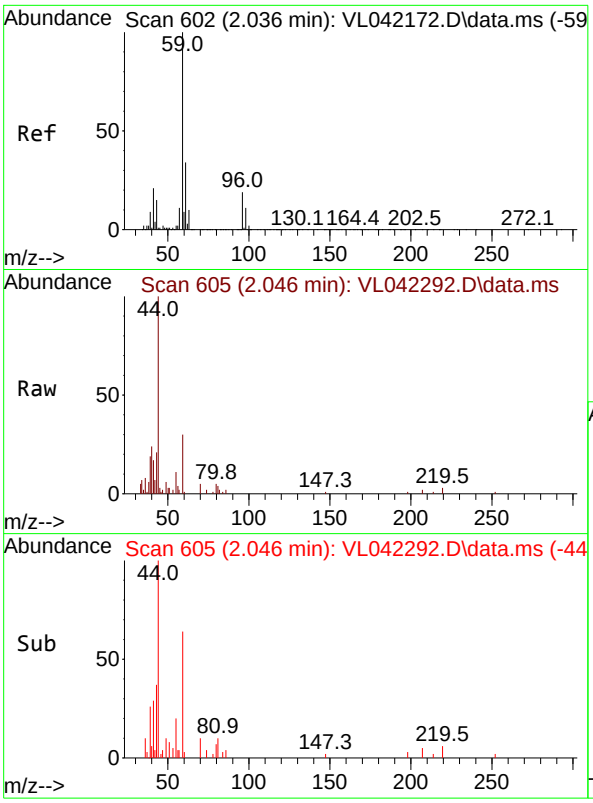


#16
1,3-Butadiene
Concen: 0.155 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.006 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 39 Resp: 1674

Ion	Ratio	Lower	Upper
39	100		
54	48.3	60.7	91.1#



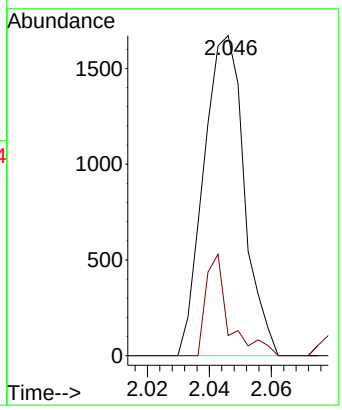


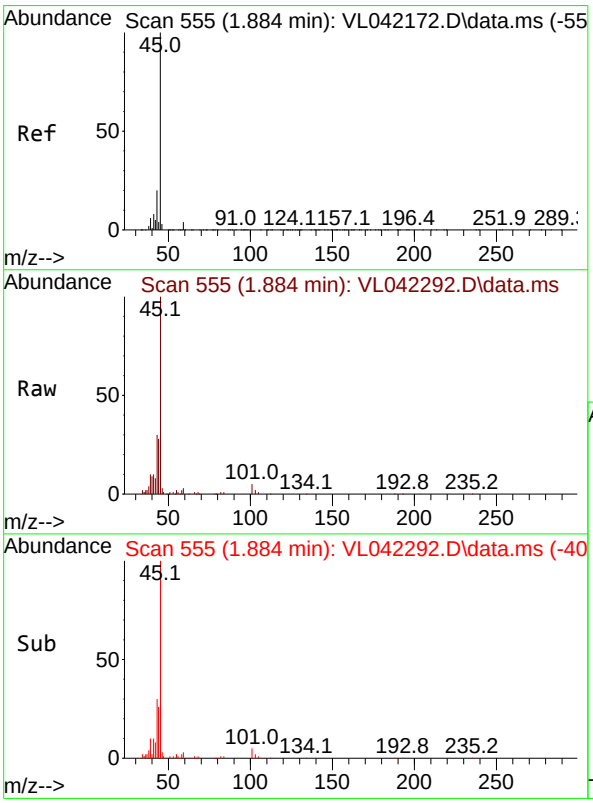
#17
tert-Butyl alcohol
Concen: 0.055 ppbv
RT: 2.046 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 59 Resp: 1518

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.9	13.3#

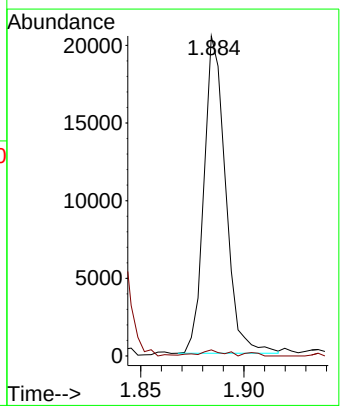


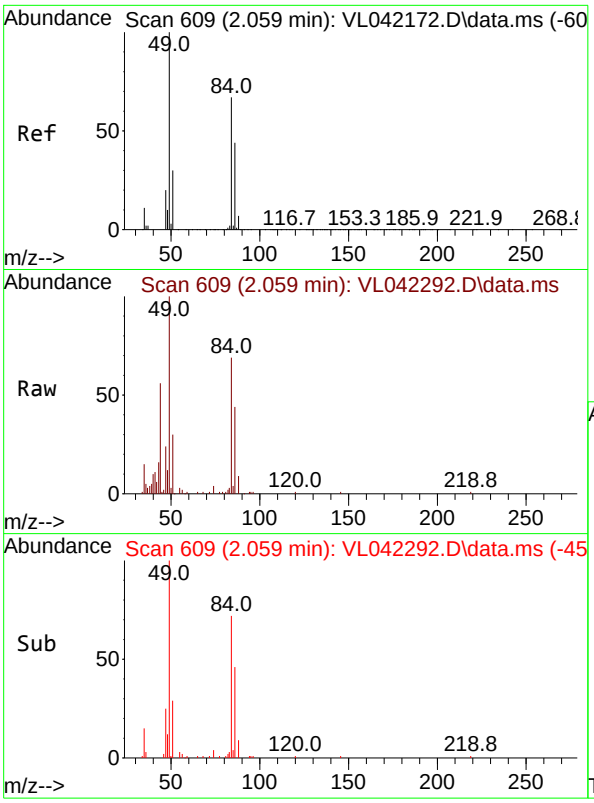


#19
Isopropyl Alcohol
Concen: 1.192 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 45 Resp: 14854

Ion	Ratio	Lower	Upper
45	100		
58	125.4	36.9	55.3#



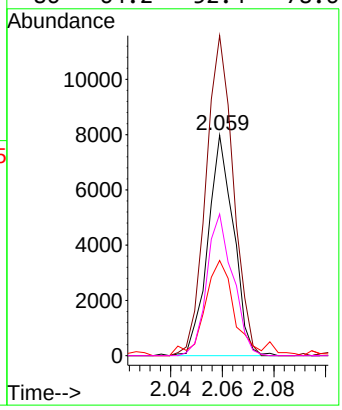


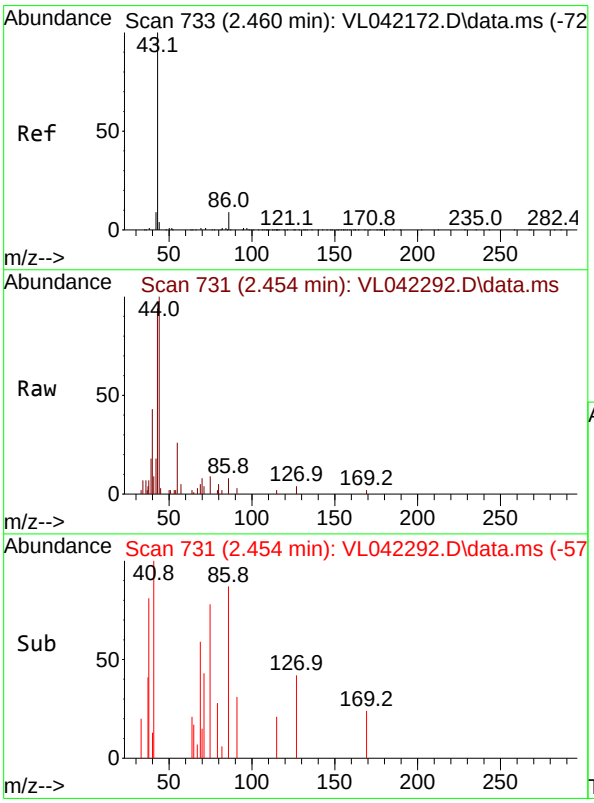
#20
Methylene Chloride
Concen: 0.670 ppbv
RT: 2.059 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 84 Resp: 5511

Ion	Ratio	Lower	Upper
84	100		
49	145.1	120.2	180.4
51	42.4	37.4	56.0
86	64.2	52.4	78.6

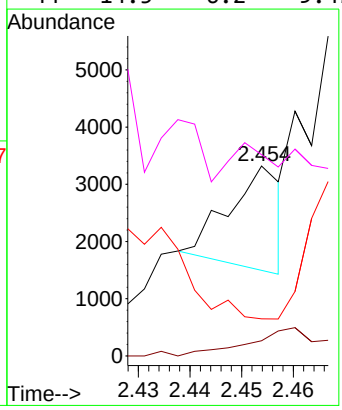


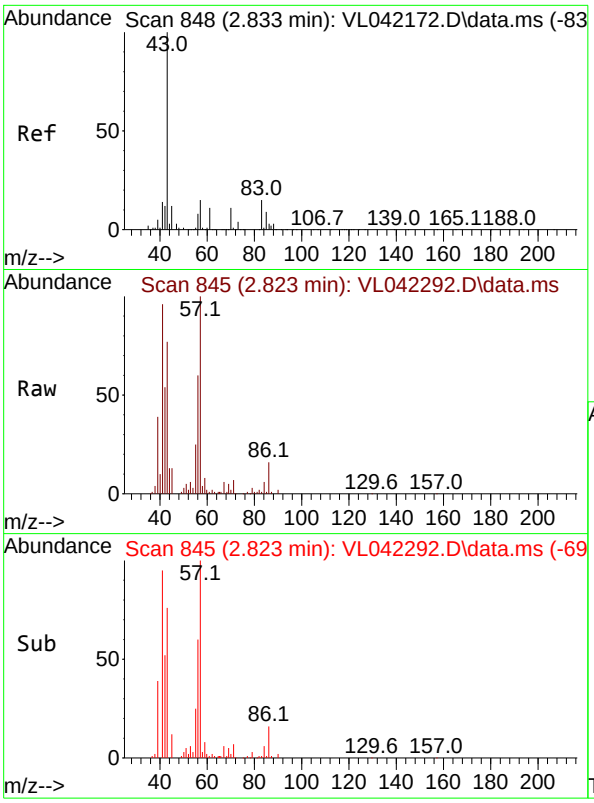


#23
Vinyl Acetate
Concen: 0.128 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.006 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 43 Resp: 1222

Ion	Ratio	Lower	Upper
43	100		
86	17.8	5.5	8.3#
42	0.2	8.6	13.0#
44	14.5	6.2	9.4#



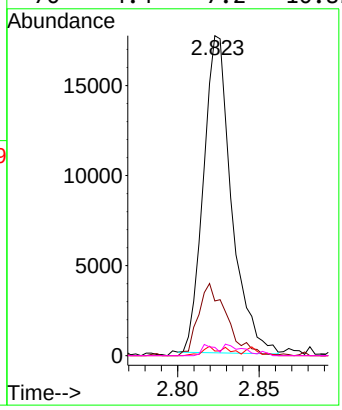


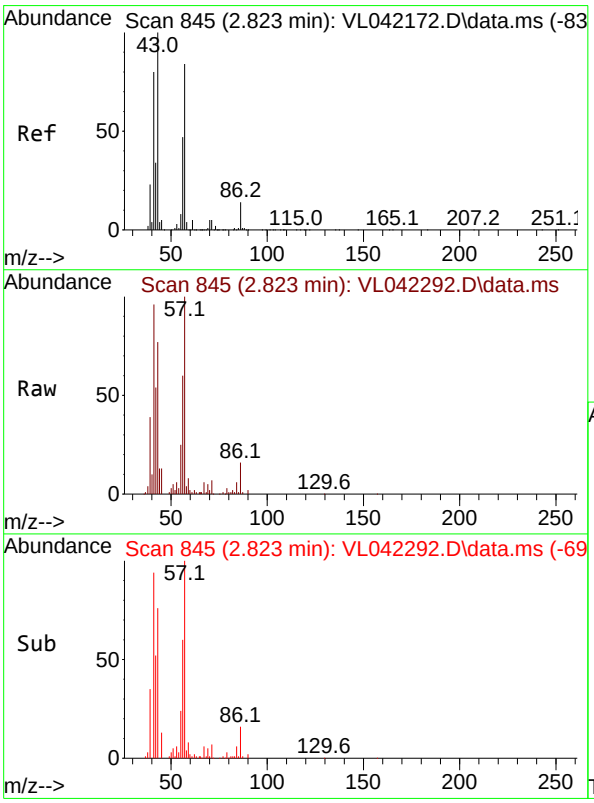
#25
Ethyl Acetate
Concen: 0.368 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 43 Resp: 21094

Ion	Ratio	Lower	Upper
43	100		
45	23.5	8.2	12.2#
61	3.7	7.3	10.9#
70	4.4	7.2	10.8#

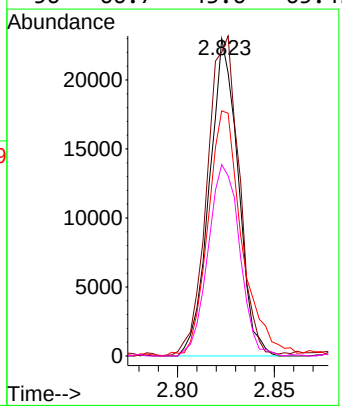


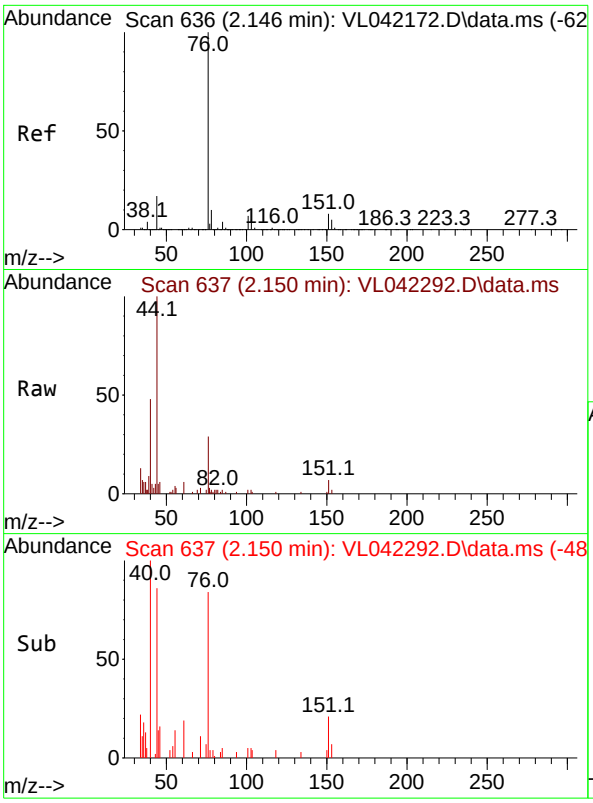


#26
Hexane
Concen: 1.073 ppbv
RT: 2.823 min Scan# 845
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 57 Resp: 23758

Ion	Ratio	Lower	Upper
57	100		
41	112.9	76.6	114.8
43	94.2	207.8	311.8#
56	66.7	43.6	65.4#



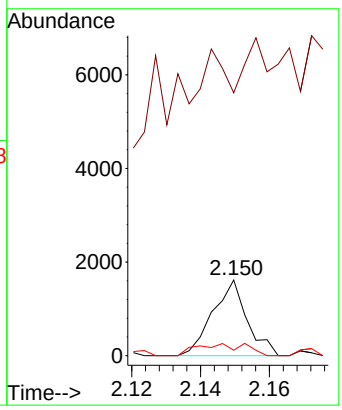


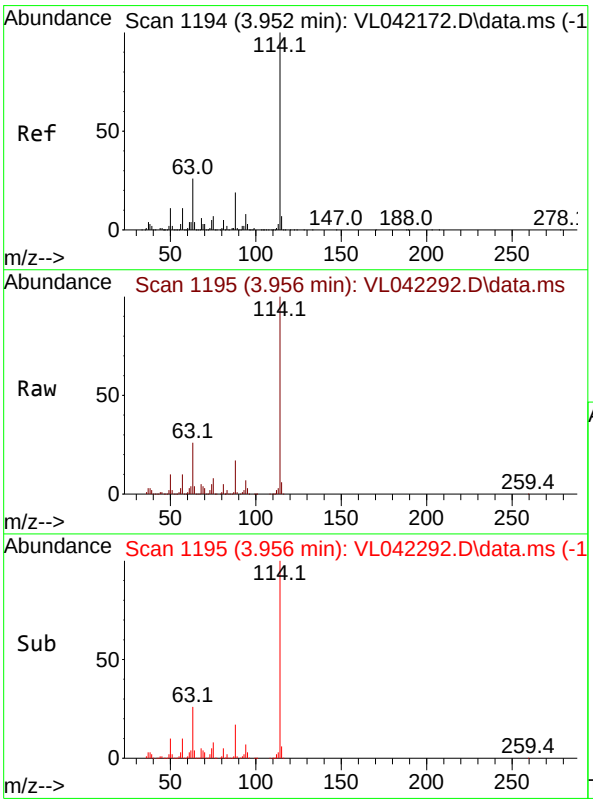
#27
Carbon Disulfide
Concen: 0.047 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 76 Resp: 1122

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	34.8	9.3	13.9#

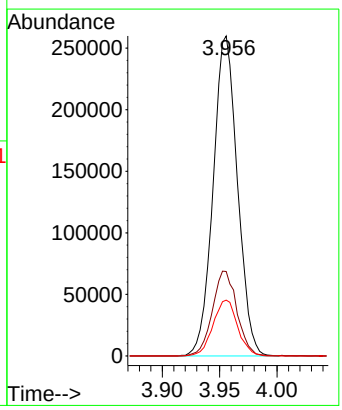


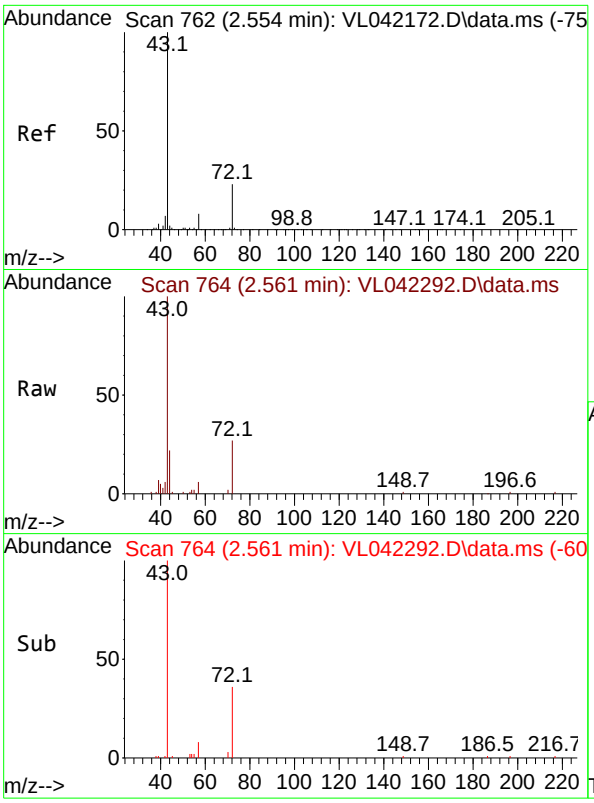


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:114 Resp: 383411

Ion	Ratio	Lower	Upper
114	100		
63	26.7	20.7	31.1
88	17.7	15.0	22.4



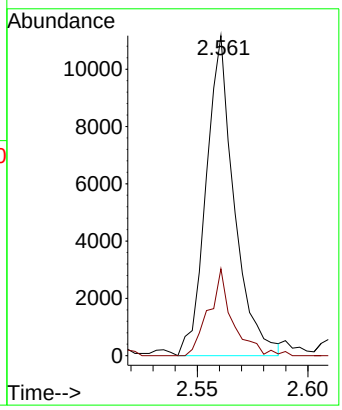


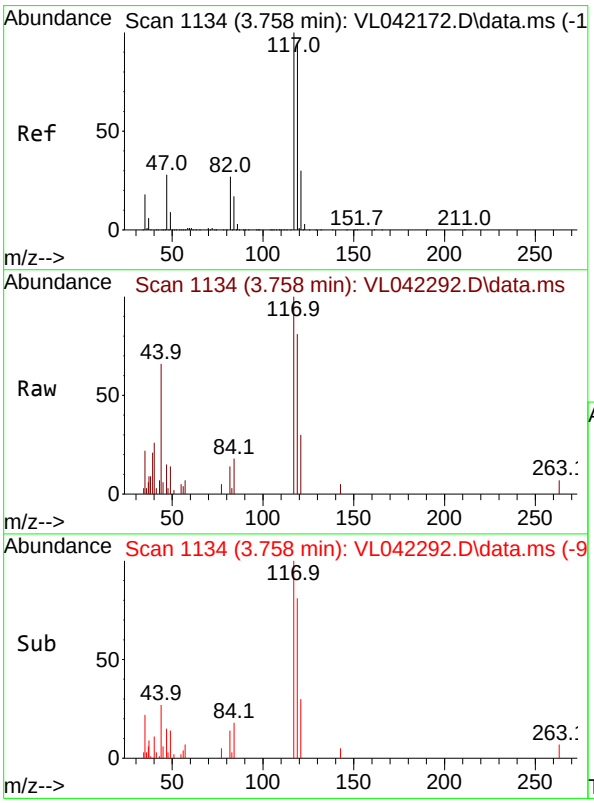
#34
2-Butanone
Concen: 0.354 ppbv
RT: 2.561 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 43 Resp: 9840

Ion	Ratio	Lower	Upper
43	100		
72	23.2	18.2	27.2

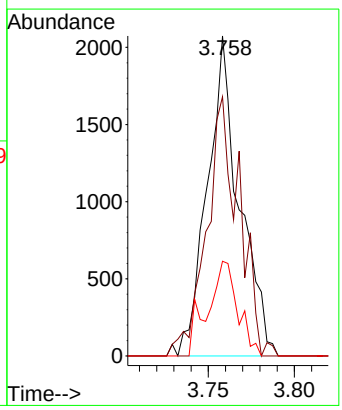


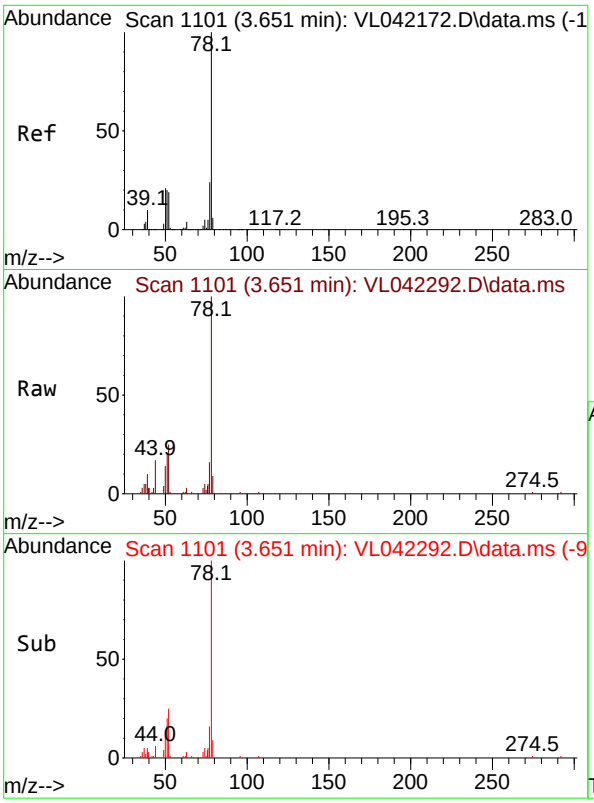


#35
Carbon Tetrachloride
Concen: 0.090 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:117 Resp: 2688

Ion	Ratio	Lower	Upper
117	100		
119	81.0	76.2	114.2
121	29.6	24.2	36.4



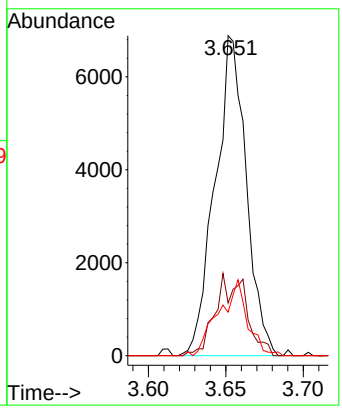


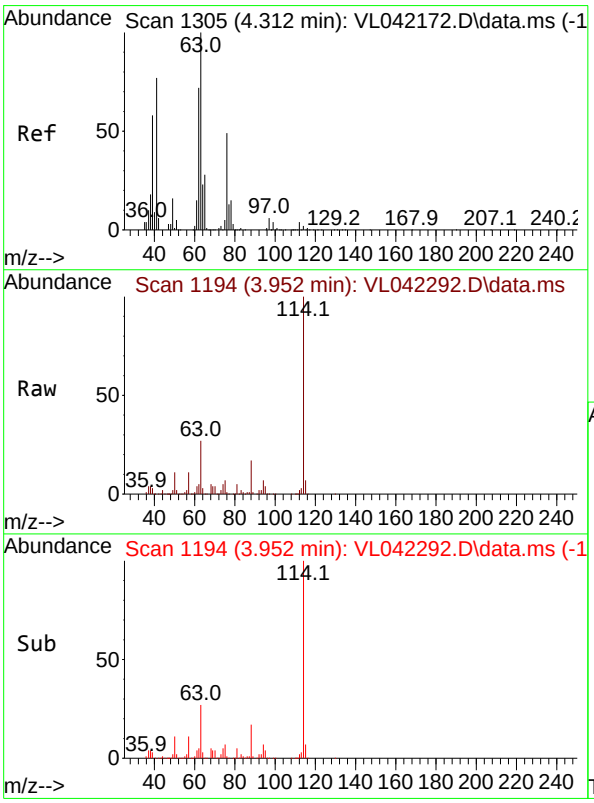
#36
Benzene
Concen: 0.254 ppbv
RT: 3.651 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 78 Resp: 9637

Ion	Ratio	Lower	Upper
78	100		
77	16.4	19.1	28.7#
50	13.6	16.6	24.8#

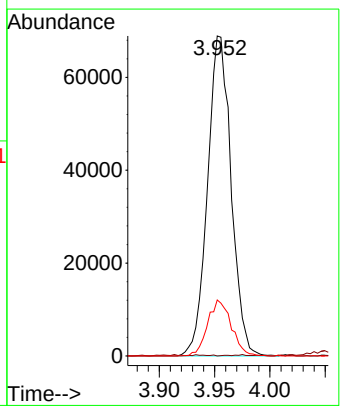


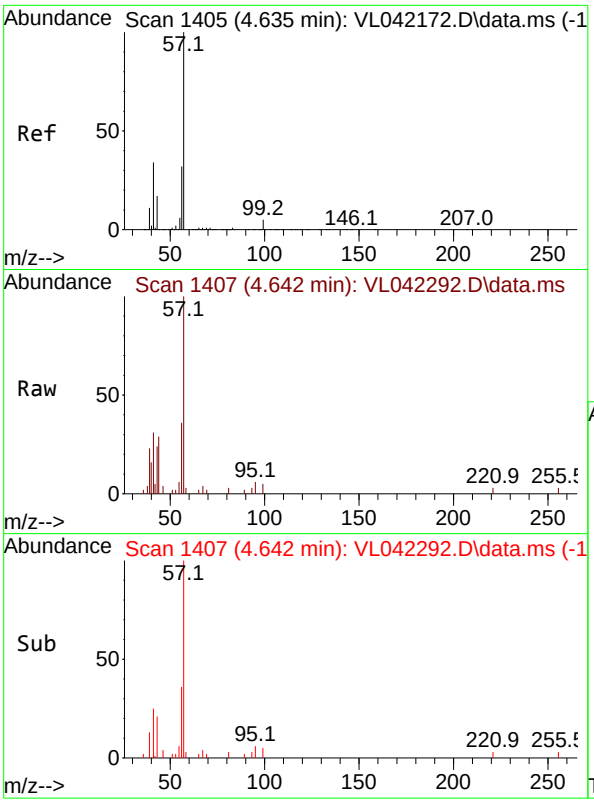


#39
1,2-Dichloropropane
Concen: 7.391 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.359 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 63 Resp: 102317

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	17.5	57.6	86.4#



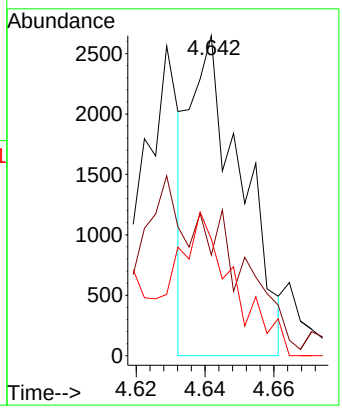


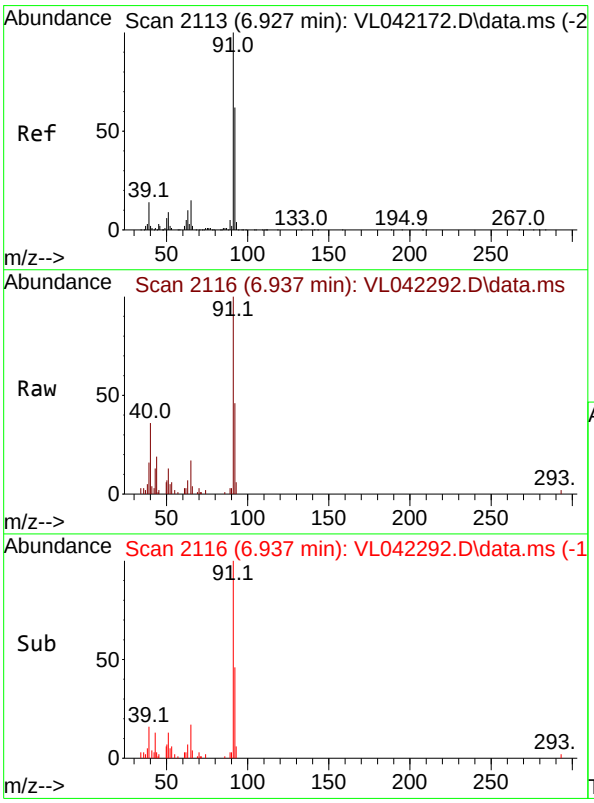
#44
2,2,4-Trimethylpentane
Concen: 0.043 ppbv
RT: 4.642 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 57 Resp: 2764

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	82.6	25.6	38.4#

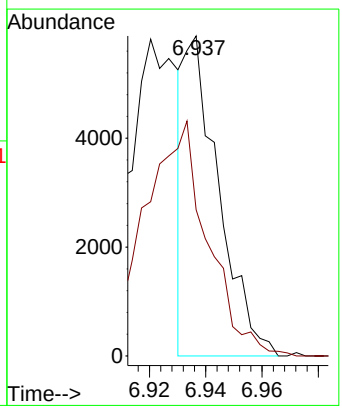


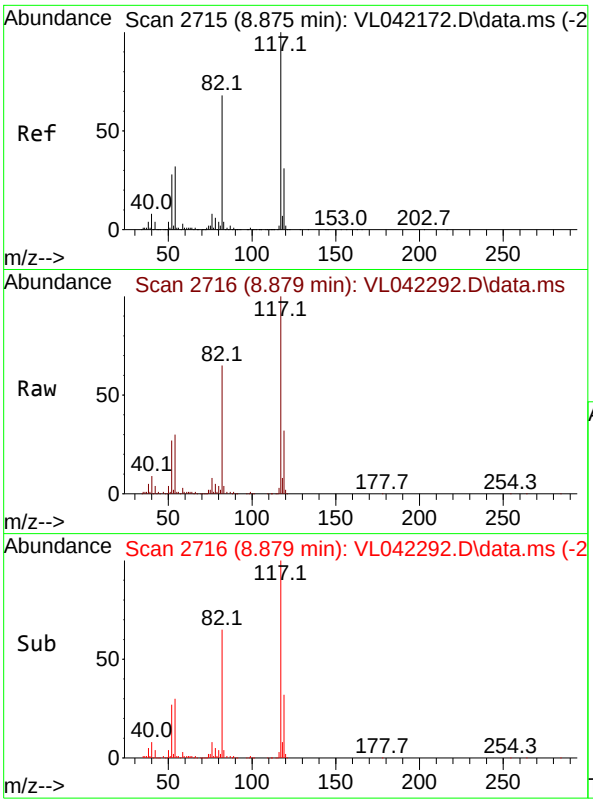


#53
Toluene
Concen: 0.111 ppbv
RT: 6.937 min Scan# 2116
Delta R.T. 0.010 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 91 Resp: 5021

Ion	Ratio	Lower	Upper
91	100		
92	142.8	48.4	72.6#



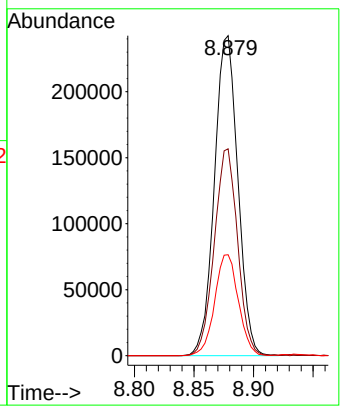


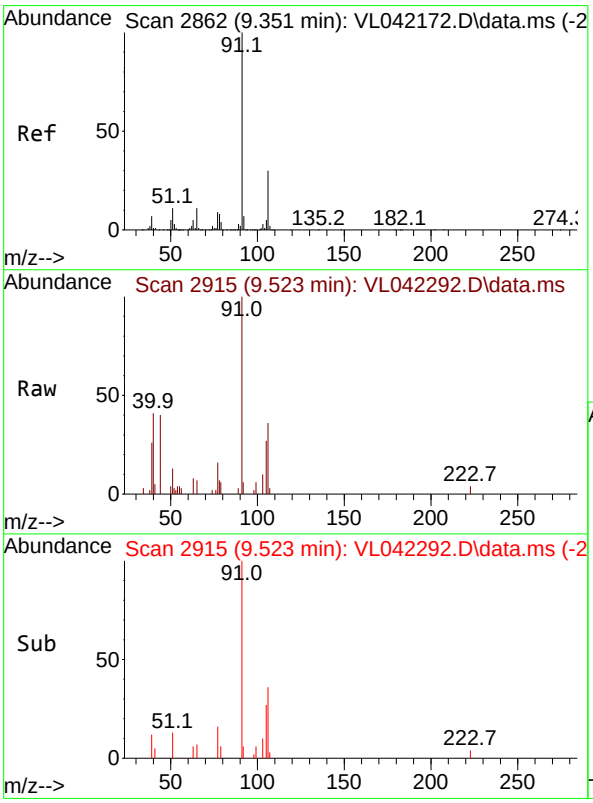
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion:117 Resp: 331322

Ion	Ratio	Lower	Upper
117	100		
82	64.4	55.8	83.6
119	31.9	25.5	38.3

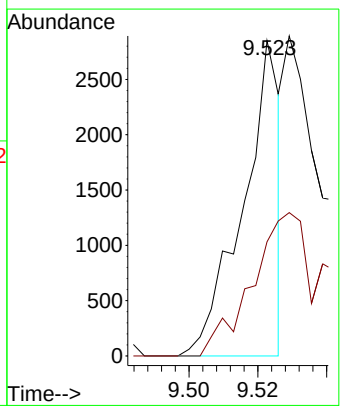


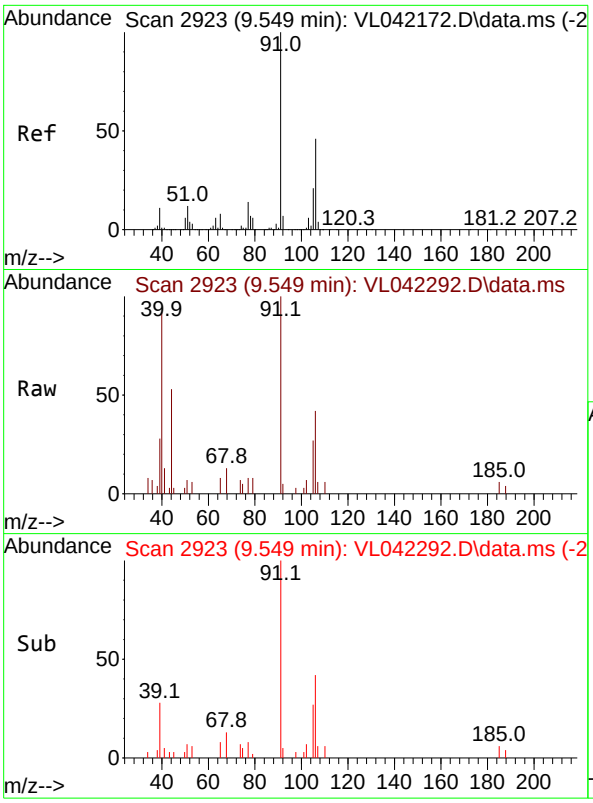


#58
Ethyl Benzene
Concen: 0.036 ppbv
RT: 9.523 min Scan# 2915
Delta R.T. 0.172 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 91 Resp: 2126

Ion	Ratio	Lower	Upper
91	100		
106	34.3	24.2	36.2



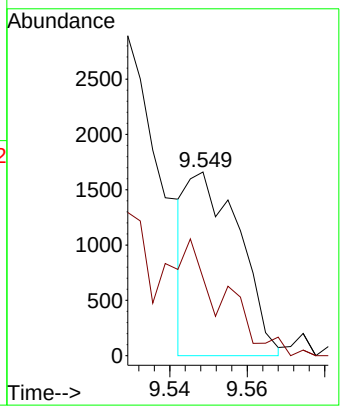


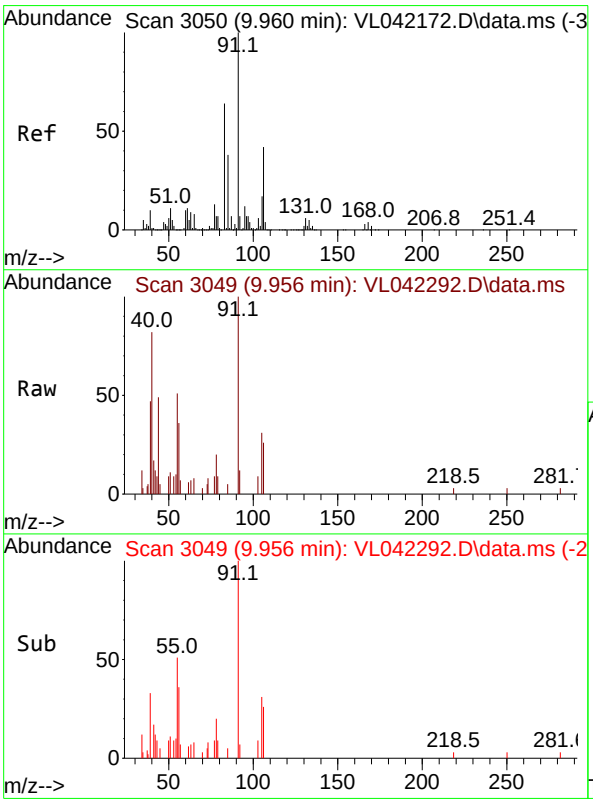
#59
m/p-Xylene
Concen: 0.033 ppbv
RT: 9.549 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 91 Resp: 1569

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

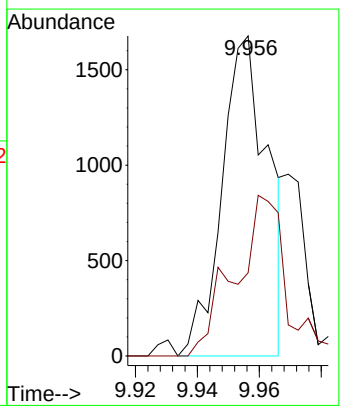


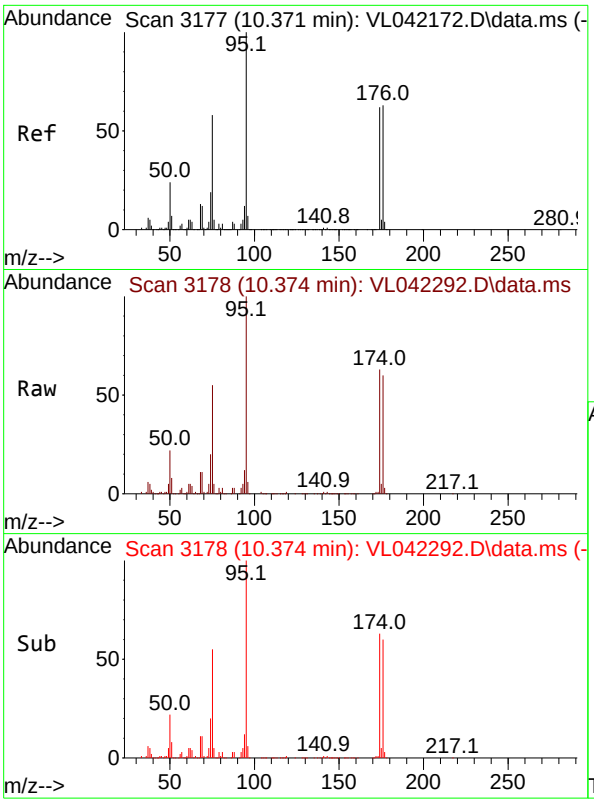


#60
o-Xylene
Concen: 0.037 ppbv
RT: 9.956 min Scan# 3049
Delta R.T. -0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion: 91 Resp: 1723

Ion	Ratio	Lower	Upper
91	100		
106	55.3	20.8	62.5



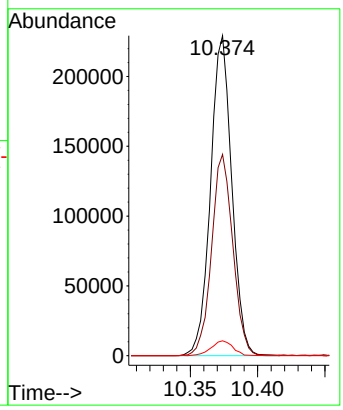


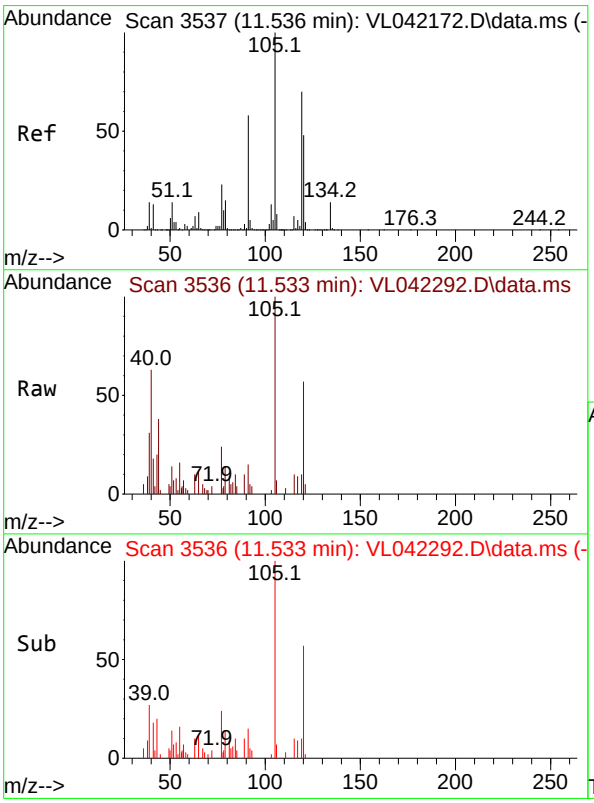
#68
1-Bromo-4-Fluorobenzene
Concen: 9.225 ppbv
RT: 10.374 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Instrument :
MSVOA_L
ClientSampleId :
AA-1-3242025

Tgt Ion: 95 Resp: 250999

Ion	Ratio	Lower	Upper
95	100		
174	63.1	50.6	76.0
175	4.8	3.8	5.6

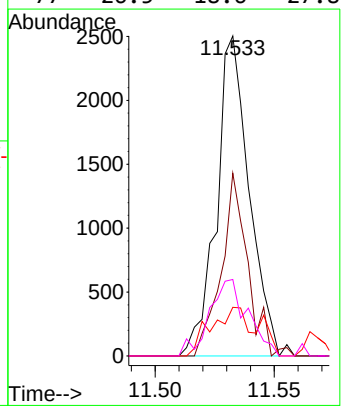




#74
1,2,4-Trimethylbenzene
Concen: 0.040 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.003 min
Lab File: VL042292.D
Acq: 09 Apr 2025 14:36

Tgt Ion:105 Resp: 2383

Ion	Ratio	Lower	Upper
105	100		
120	57.1	38.6	58.0
91	15.2	46.2	69.2#
77	26.5	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Quant Time: Apr 10 01:45:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	162172	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	394727	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	338809	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	260496	9.362	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	8768	0.366	ppbv	100
3) Chlorodifluoromethane	1.473	51	27592	1.128	ppbv	93
4) Chloromethane	1.531	50	5713	0.584	ppbv	94
6) Bromomethane	1.667	94	191	0.043	ppbv	83
7) Chloroethane	1.703	64	219	0.056	ppbv #	43
9) Propene	1.884	41	28450	2.537	ppbv	96
10) Heptane	4.975	43	1928	0.065	ppbv #	28
11) Trichlorofluoromethane	1.874	101	5120	0.220	ppbv	94
12) 1,1,2-Trichlorotrifluo...	2.140	101	1343	0.070	ppbv	100
13) Ethanol	1.719	45	40099	37.833	ppbv	81
15) Acetone	1.832	43	192031	8.467	ppbv	94
16) 1,3-Butadiene	1.599	39	2714	0.245	ppbv #	11
17) tert-Butyl alcohol	1.884	59	10927	0.387	ppbv	95
19) Isopropyl Alcohol	1.884	45	298845	23.353	ppbv #	32
20) Methylene Chloride	2.059	84	9248	1.095	ppbv	97
21) Allyl Chloride	2.072	41	495	0.031	ppbv #	23
23) Vinyl Acetate	2.450	43	17521	1.785	ppbv #	85
25) Ethyl Acetate	2.823	43	41224	0.700	ppbv #	83
26) Hexane	2.823	57	46406	2.041	ppbv #	35
29) Chloroform	2.848	83	1132	0.034	ppbv	86
34) 2-Butanone	2.554	43	134955	4.715	ppbv	98
35) Carbon Tetrachloride	3.758	117	1572	0.051	ppbv #	67
36) Benzene	3.651	78	11524	0.294	ppbv #	90
39) 1,2-Dichloropropane	3.955	63	99931	7.012	ppbv #	22
41) Tetrahydrofuran	3.062	42	4453	0.270	ppbv	94
44) 2,2,4-Trimethylpentane	4.629	57	4328	0.065	ppbv #	38
53) Toluene	6.930	91	22070	0.476	ppbv	98
57) Chlorobenzene	8.914	112	7743	0.241	ppbv #	83
58) Ethyl Benzene	9.354	91	3481	0.058	ppbv	99
59) m/p-Xylene	9.529	91	8935	0.186	ppbv	95
60) o-Xylene	9.963	91	4584	0.095	ppbv	94
62) Isopropylbenzene	10.804	105	143134	1.987	ppbv #	50
71) 2-Chlorotoluene	10.853	91	21081	0.377	ppbv #	46
72) 4-Ethyltoluene	11.092	105	3205	0.053	ppbv #	60
73) 1,3,5-Trimethylbenzene	11.202	105	1783	0.034	ppbv #	75
74) 1,2,4-Trimethylbenzene	11.536	105	5457	0.090	ppbv #	68

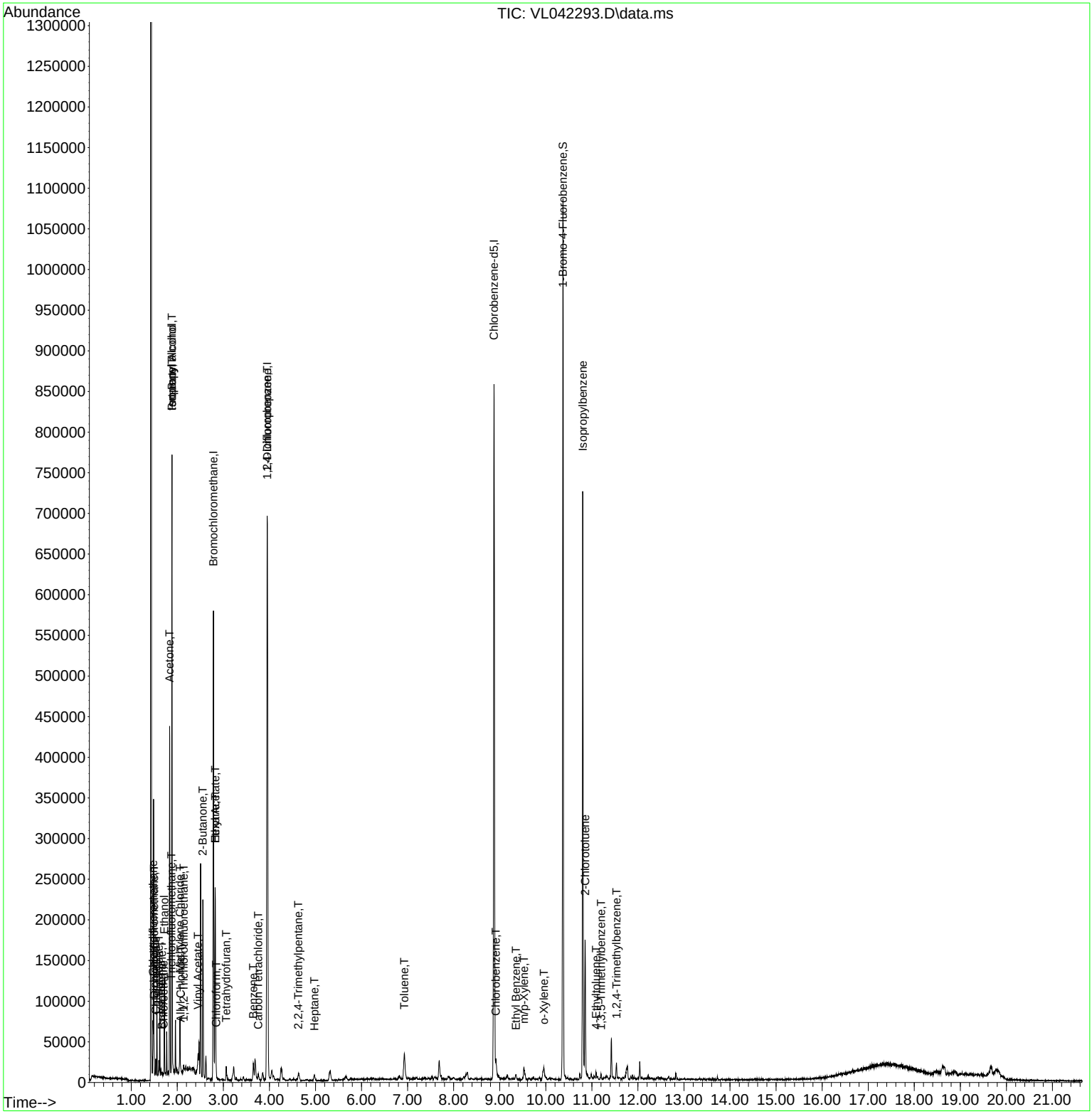
(#) = qualifier out of range (m) = manual integration (+) = signals summed

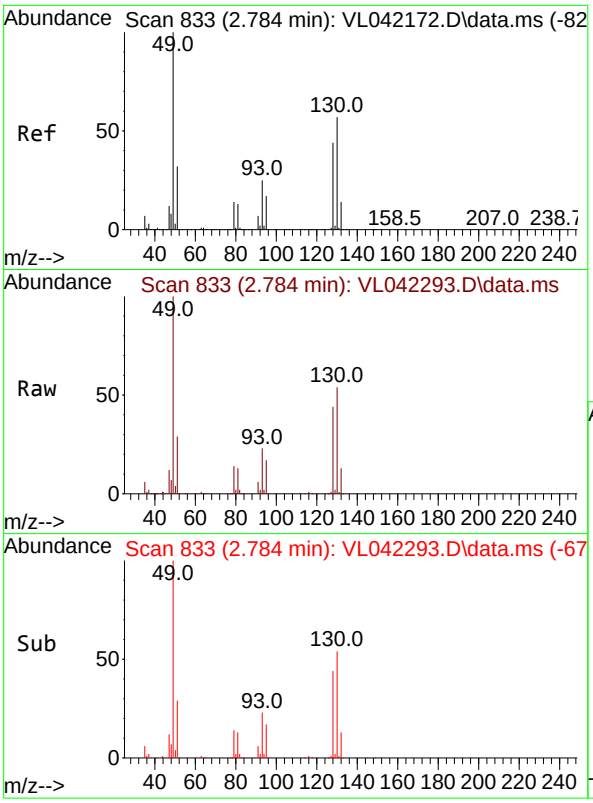
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042293.D
Acq On : 09 Apr 2025 15:15
Operator : SY/MD
Sample : Q1665-06
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Quant Time: Apr 10 01:45:06 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



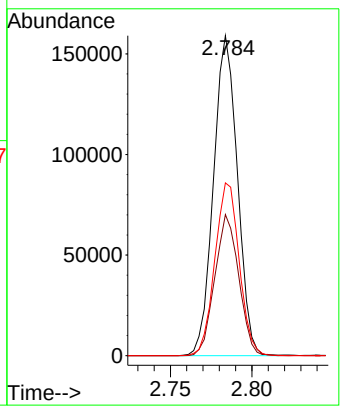


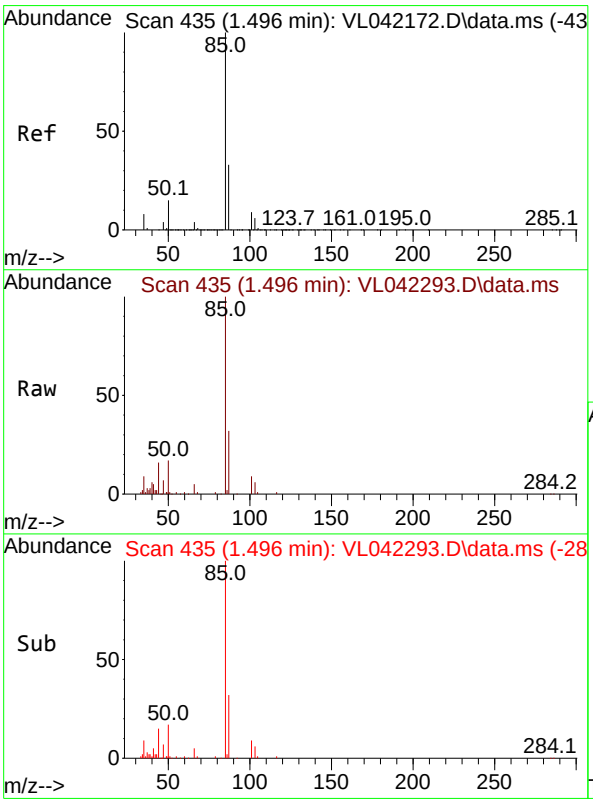
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 49 Resp: 162172

Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.9	68.5
130	55.0	28.8	86.4

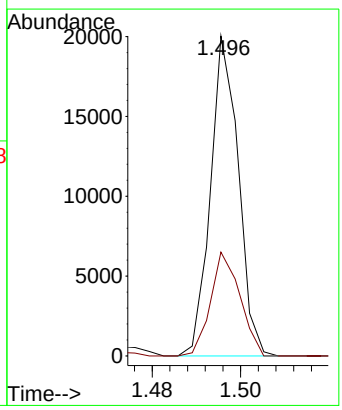


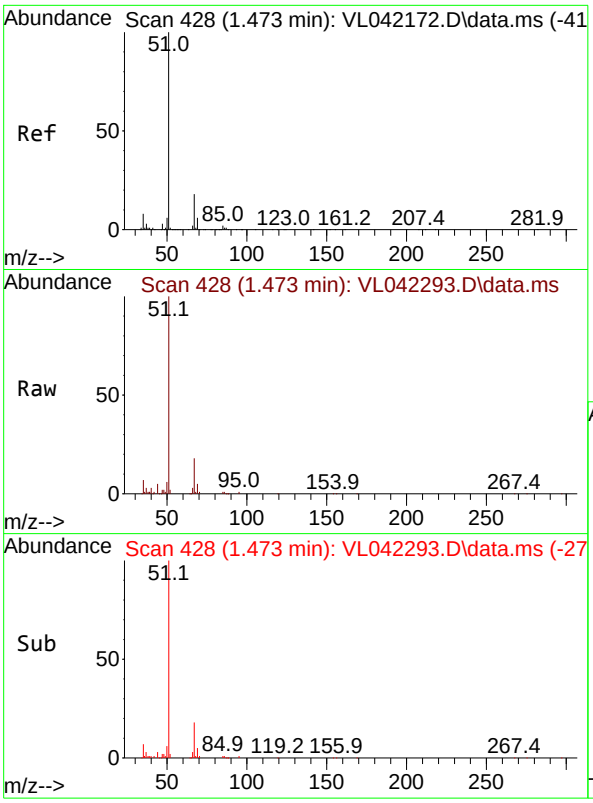


#2
Dichlorodifluoromethane
Concen: 0.366 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 85 Resp: 8768

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1



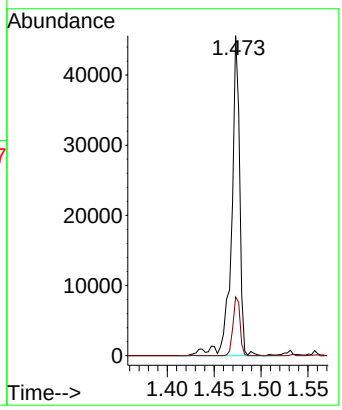


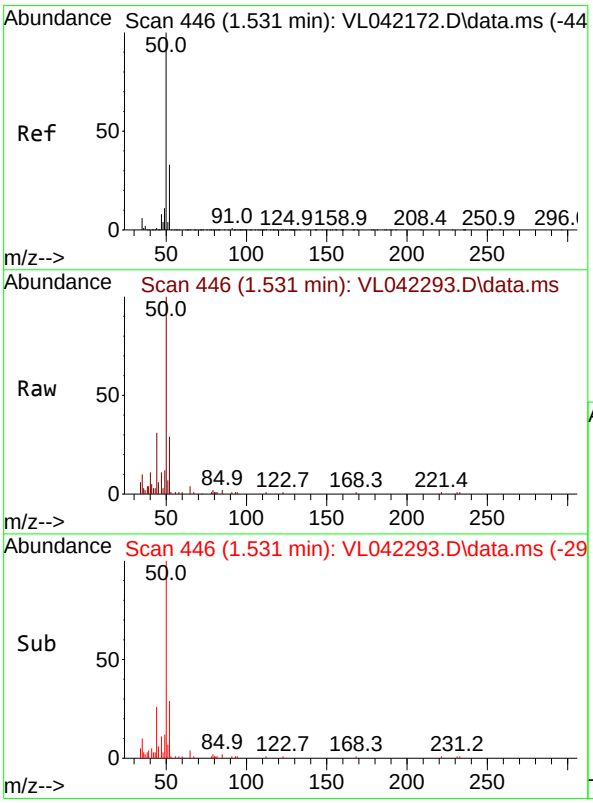
#3
Chlorodifluoromethane
Concen: 1.128 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 51 Resp: 27592

Ion	Ratio	Lower	Upper
51	100		
67	15.8	15.0	22.6

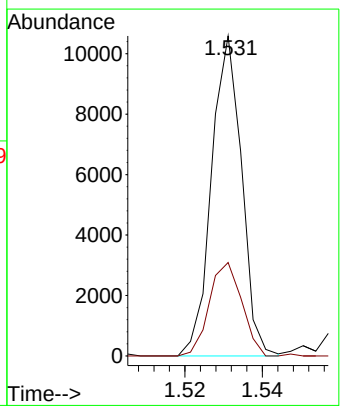


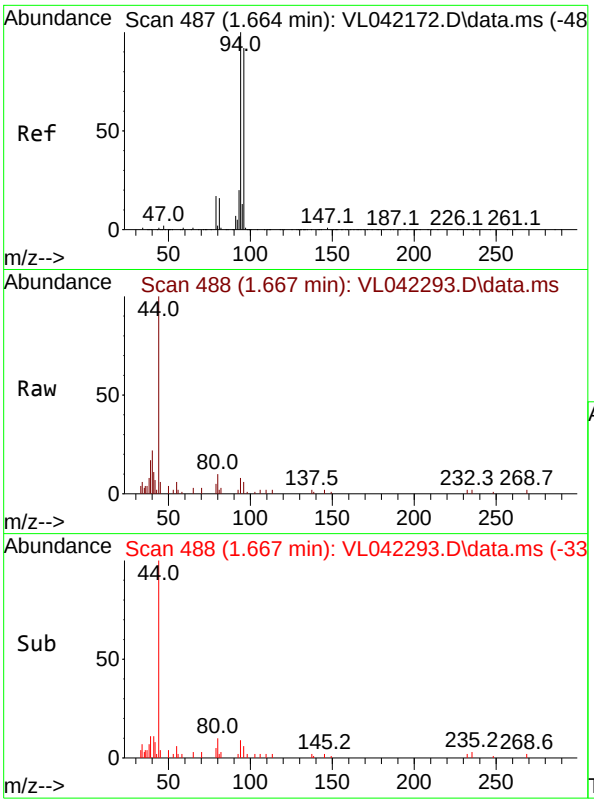


#4
Chloromethane
Concen: 0.584 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 50 Resp: 5713

Ion	Ratio	Lower	Upper
50	100		
52	29.2	26.1	39.1



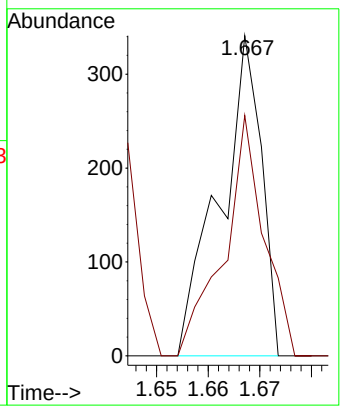


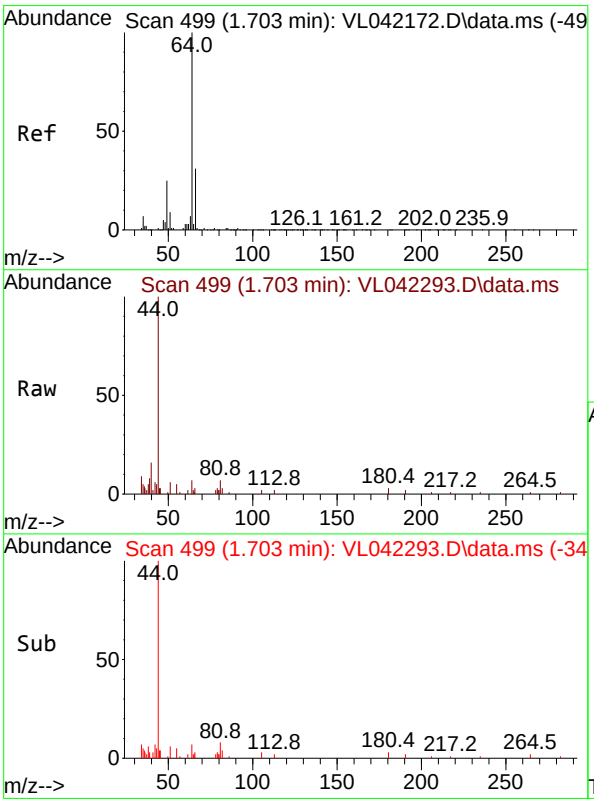
#6
Bromomethane
Concen: 0.043 ppbv
RT: 1.667 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 94 Resp: 191

Ion	Ratio	Lower	Upper
94	100		
96	75.1	73.1	109.7

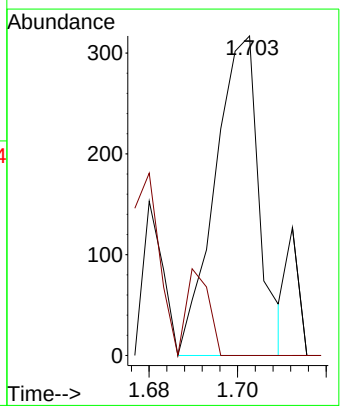


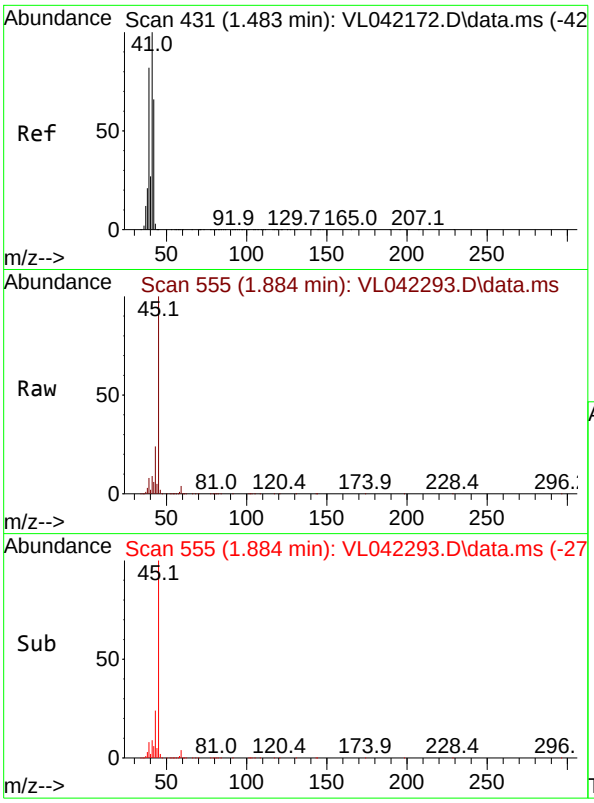


#7
Chloroethane
Concen: 0.056 ppbv
RT: 1.703 min Scan# 499
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 64 Resp: 219

Ion	Ratio	Lower	Upper
64	100		
66	0.0	25.2	37.8#



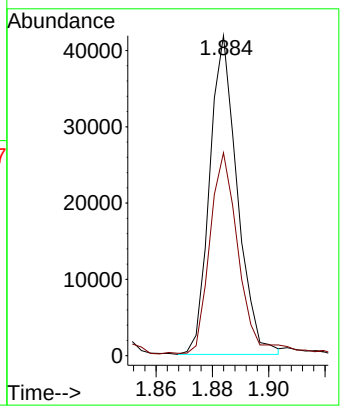


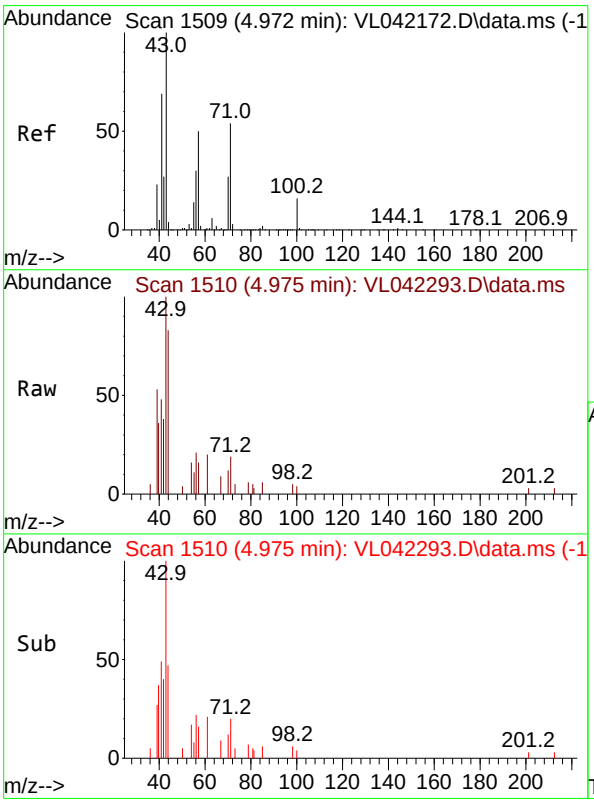
#9
Propene
Concen: 2.537 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.401 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 41 Resp: 28450

Ion	Ratio	Lower	Upper
41	100		
42	65.7	55.4	83.2

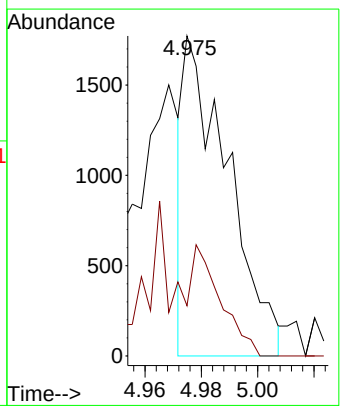


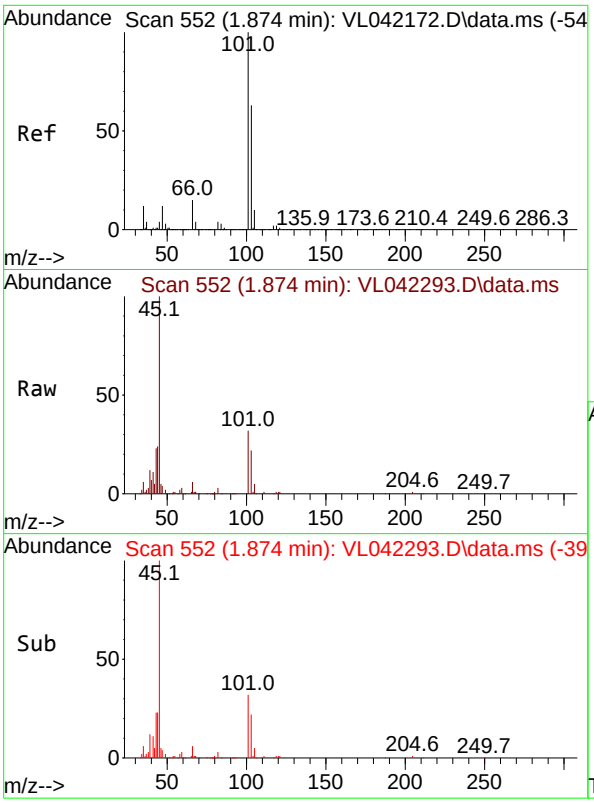


#10
Heptane
Concen: 0.065 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 1928

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#



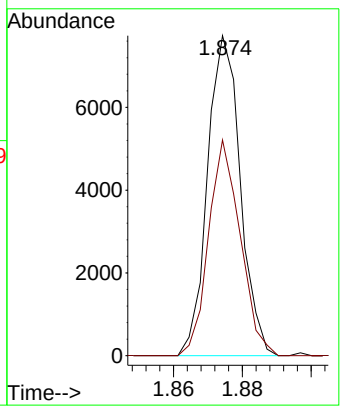


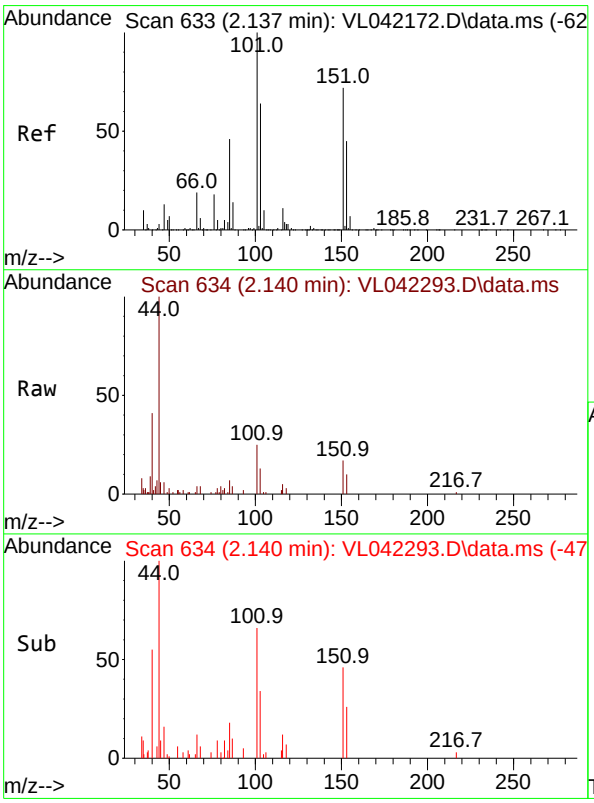
#11
Trichlorofluoromethane
Concen: 0.220 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion:101 Resp: 5120

Ion	Ratio	Lower	Upper
101	100		
103	67.4	50.2	75.2

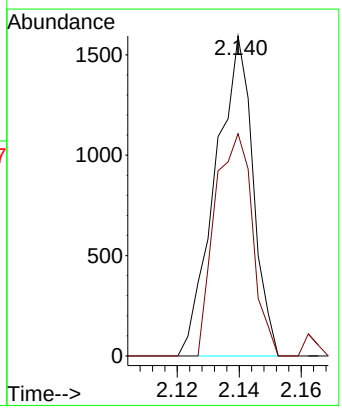


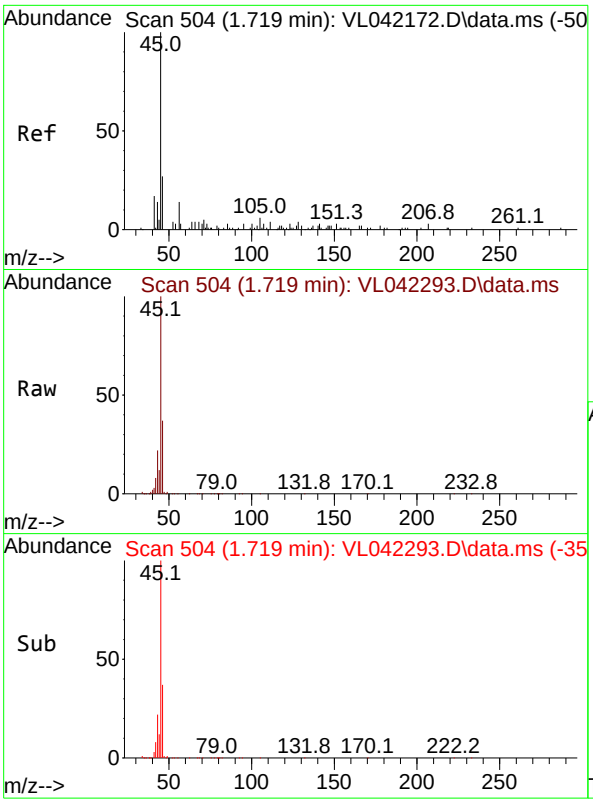


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.070 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:101 Resp: 1343

Ion	Ratio	Lower	Upper
101	100		
151	71.8	57.1	85.7



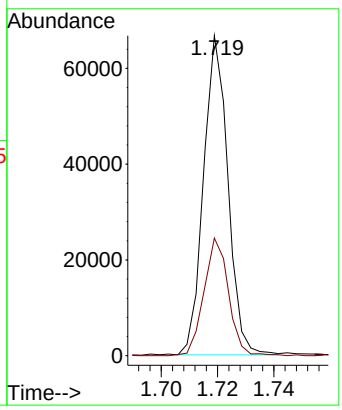


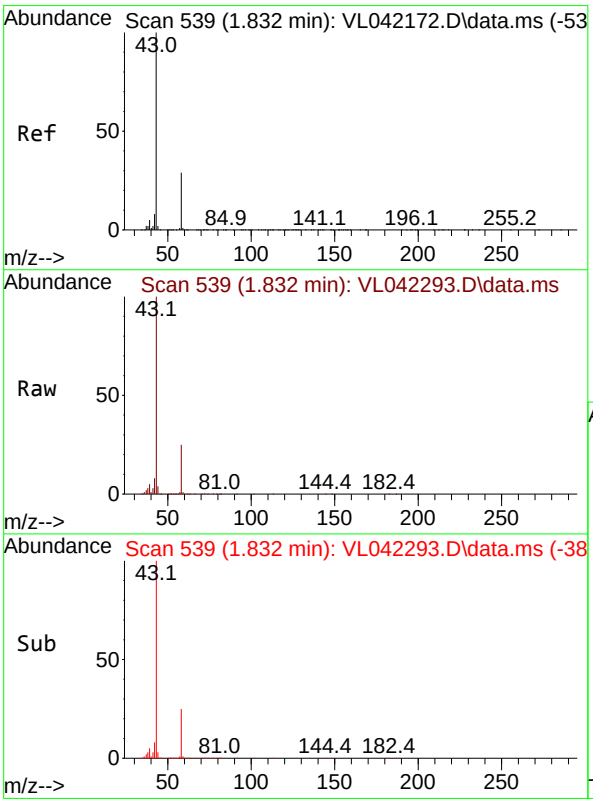
#13
Ethanol
Concen: 37.833 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 45 Resp: 40099

Ion	Ratio	Lower	Upper
45	100		
46	37.4	20.2	80.8

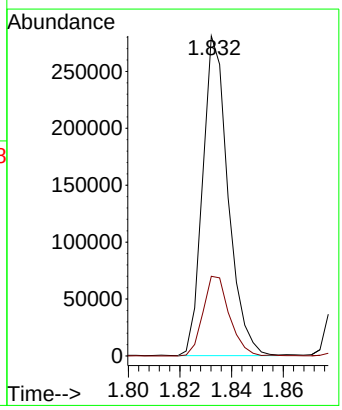


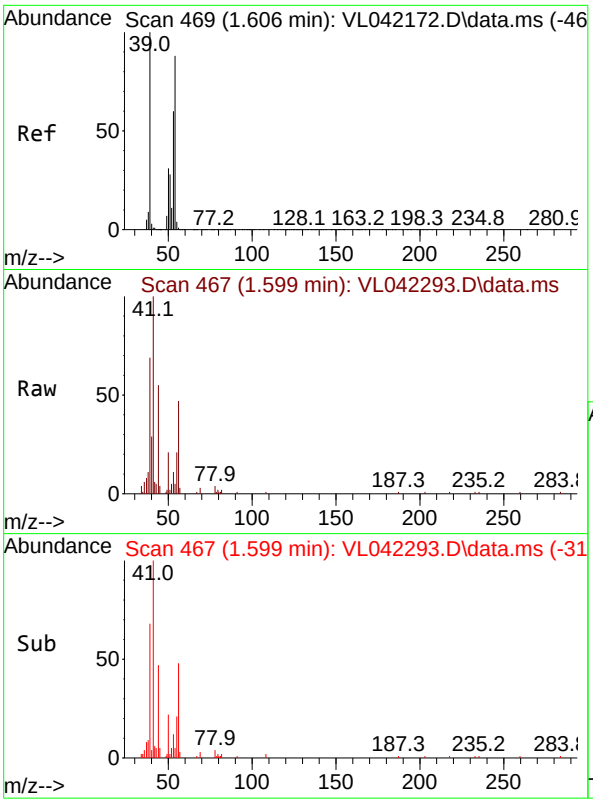


#15
Acetone
Concen: 8.467 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 192031

Ion	Ratio	Lower	Upper
43	100		
58	26.1	23.2	34.8



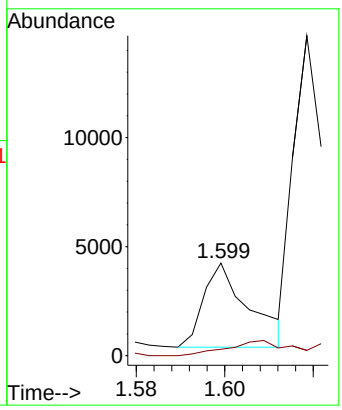


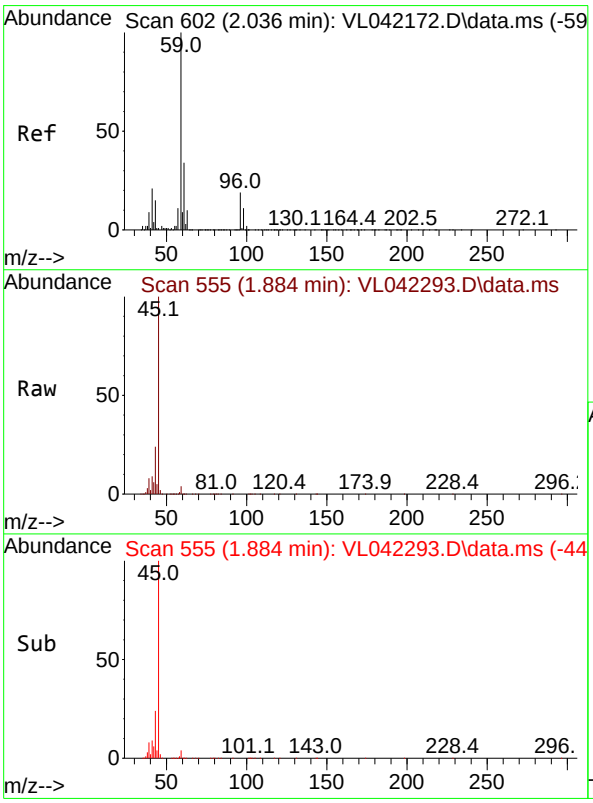
#16
1,3-Butadiene
Concen: 0.245 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 39 Resp: 2714

Ion	Ratio	Lower	Upper
39	100		
54	0.0	60.7	91.1#

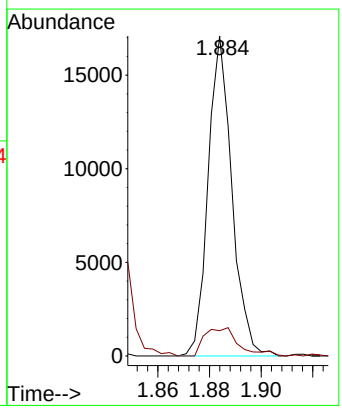


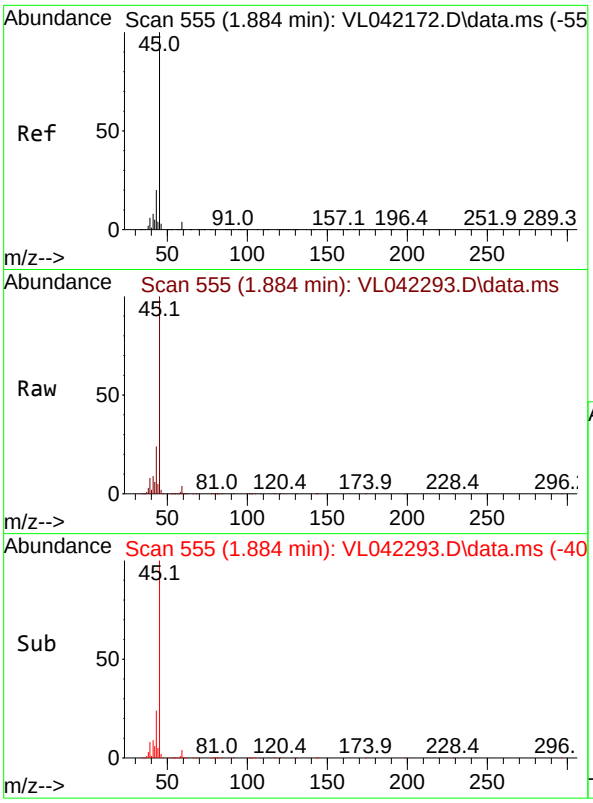


#17
tert-Butyl alcohol
Concen: 0.387 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.152 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 59 Resp: 10927

Ion	Ratio	Lower	Upper
59	100		
57	13.0	8.9	13.3



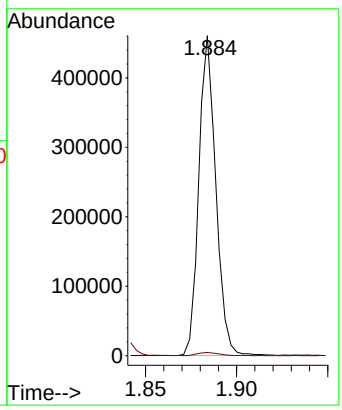


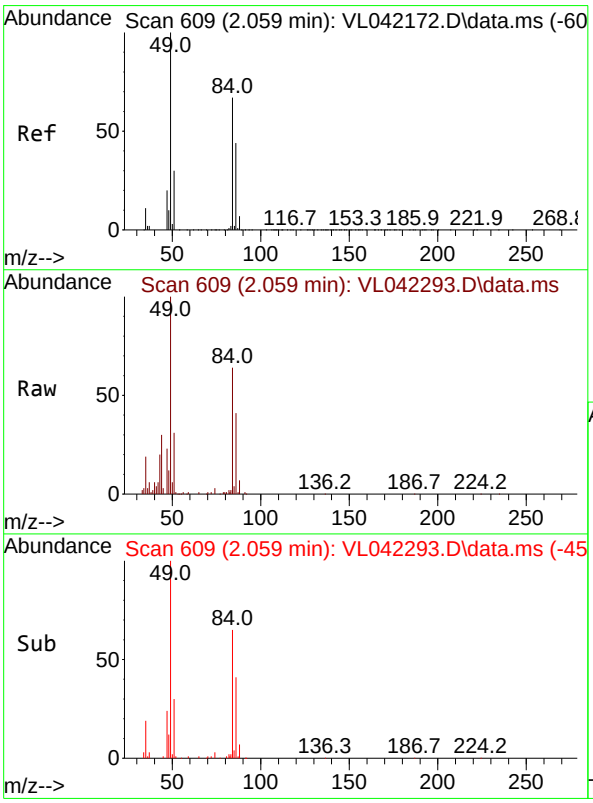
#19
Isopropyl Alcohol
Concen: 23.353 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 45 Resp: 298845

Ion	Ratio	Lower	Upper
45	100		
58	1.3	36.9	55.3#

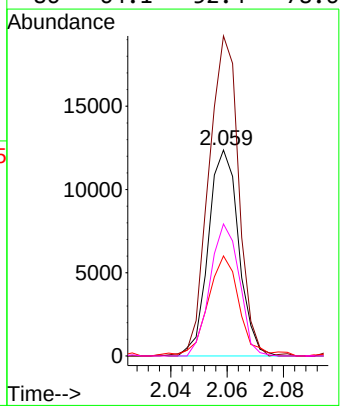


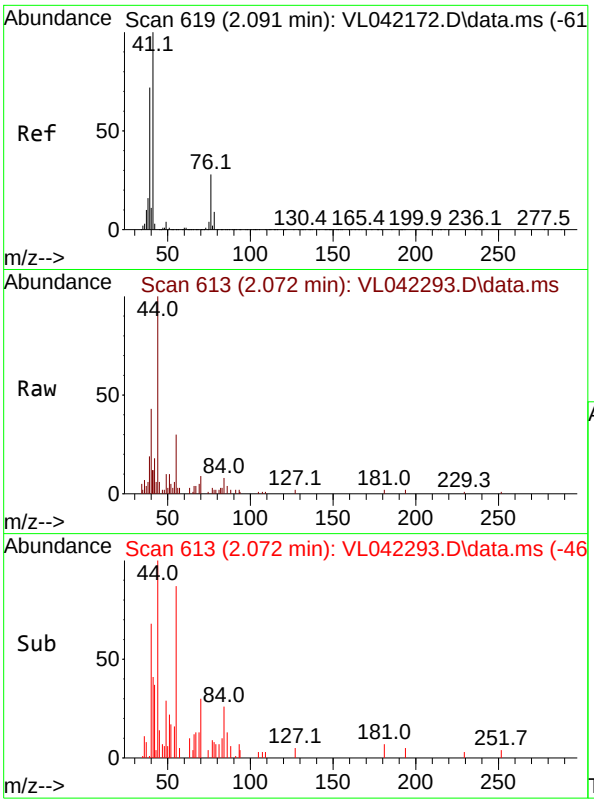


#20
Methylene Chloride
Concen: 1.095 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 84 Resp: 9248

Ion	Ratio	Lower	Upper
84	100		
49	154.7	120.2	180.4
51	47.8	37.4	56.0
86	64.1	52.4	78.6



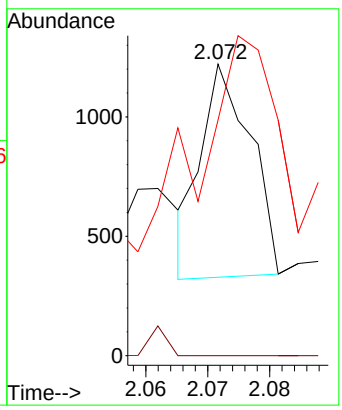


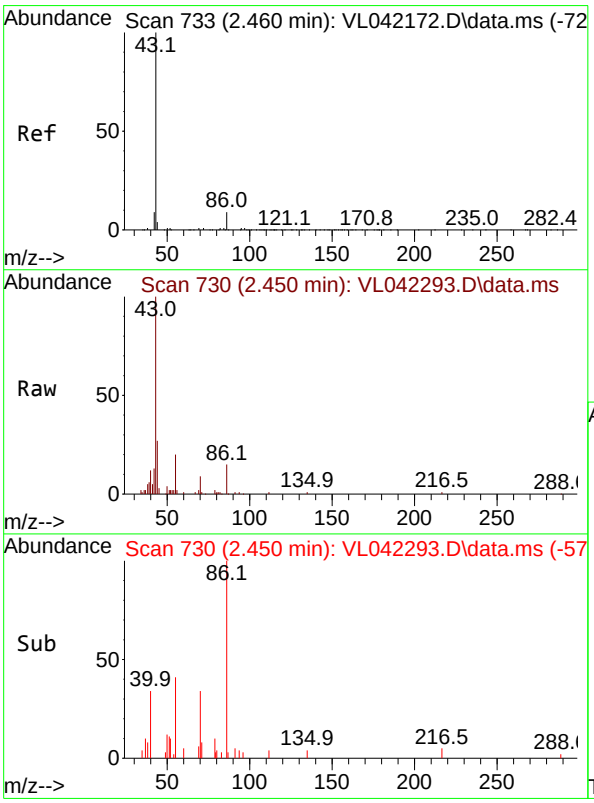
#21
Allyl Chloride
Concen: 0.031 ppbv
RT: 2.072 min Scan# 61
Delta R.T. -0.020 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 41 Resp: 495

Ion	Ratio	Lower	Upper
41	100		
76	55.4	24.1	36.1#
39	0.0	61.1	91.7#

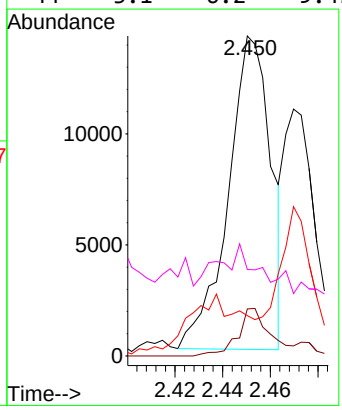


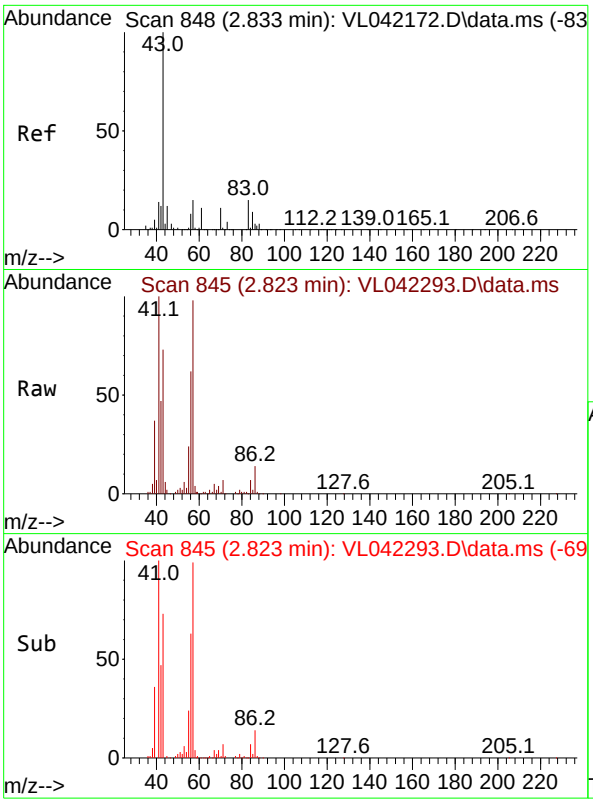


#23
Vinyl Acetate
Concen: 1.785 ppbv
RT: 2.450 min Scan# 730
Delta R.T. -0.010 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 43 Resp: 17521

Ion	Ratio	Lower	Upper
43	100		
86	15.0	5.5	8.3#
42	6.5	8.6	13.0#
44	3.1	6.2	9.4#



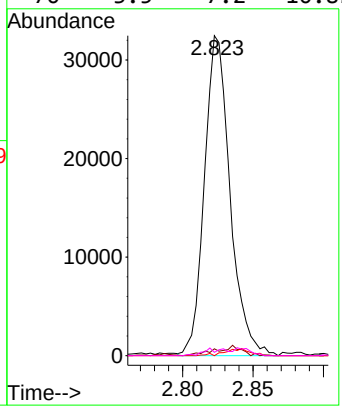


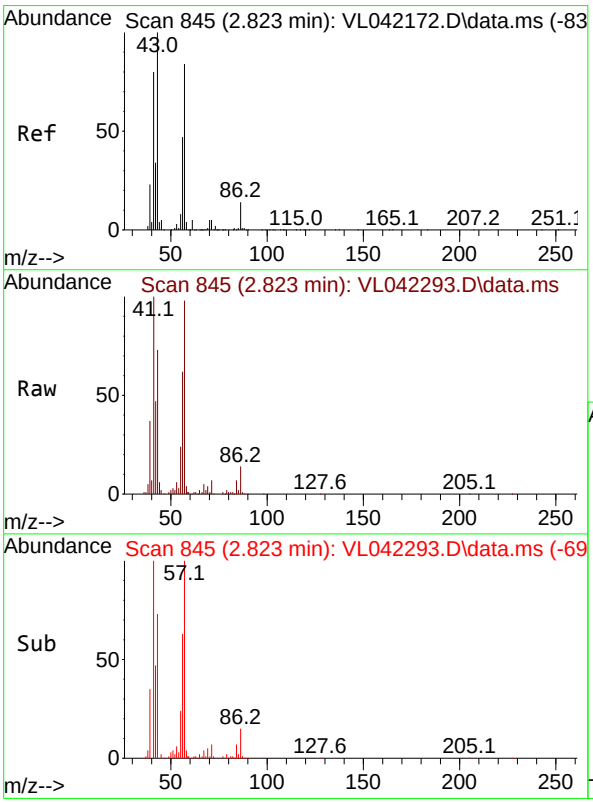
#25
Ethyl Acetate
Concen: 0.700 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 43 Resp: 41224

Ion	Ratio	Lower	Upper
43	100		
45	3.7	8.2	12.2#
61	2.1	7.3	10.9#
70	3.5	7.2	10.8#

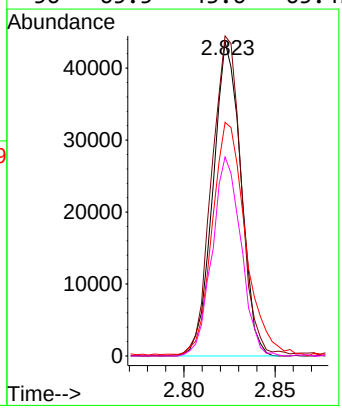


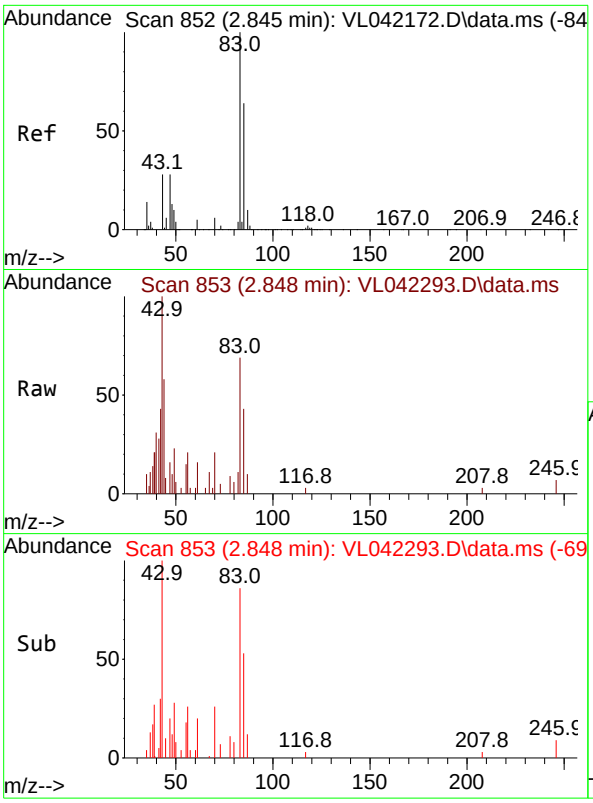


#26
Hexane
Concen: 2.041 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 57 Resp: 46406

Ion	Ratio	Lower	Upper
57	100		
41	108.6	76.6	114.8
43	89.9	207.8	311.8#
56	65.5	43.6	65.4#



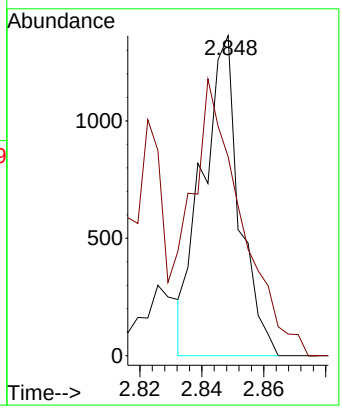


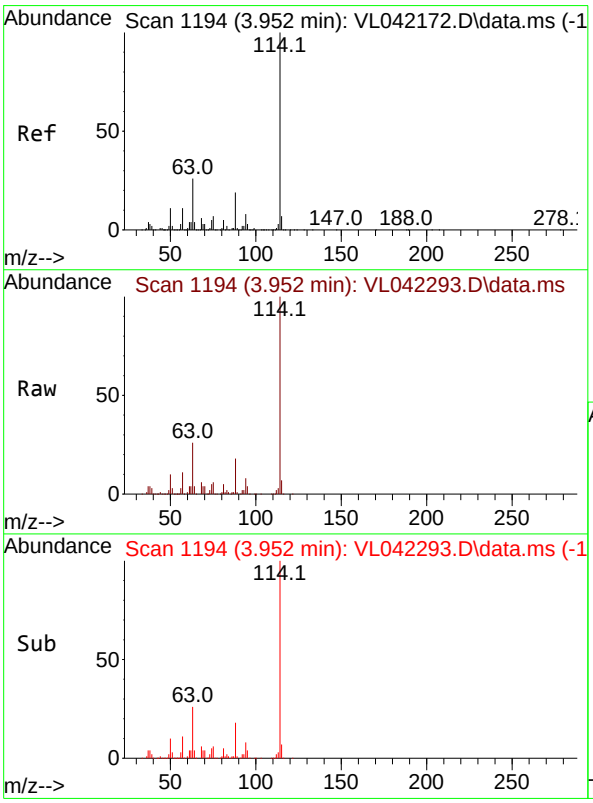
#29
Chloroform
Concen: 0.034 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 83 Resp: 1132

Ion	Ratio	Lower	Upper
83	100		
85	53.2	51.4	77.2

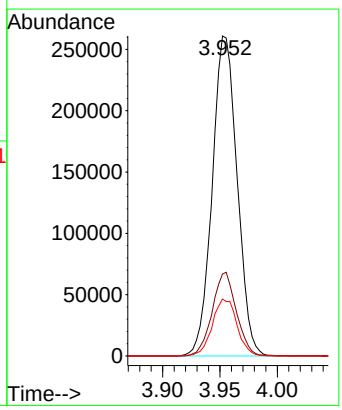


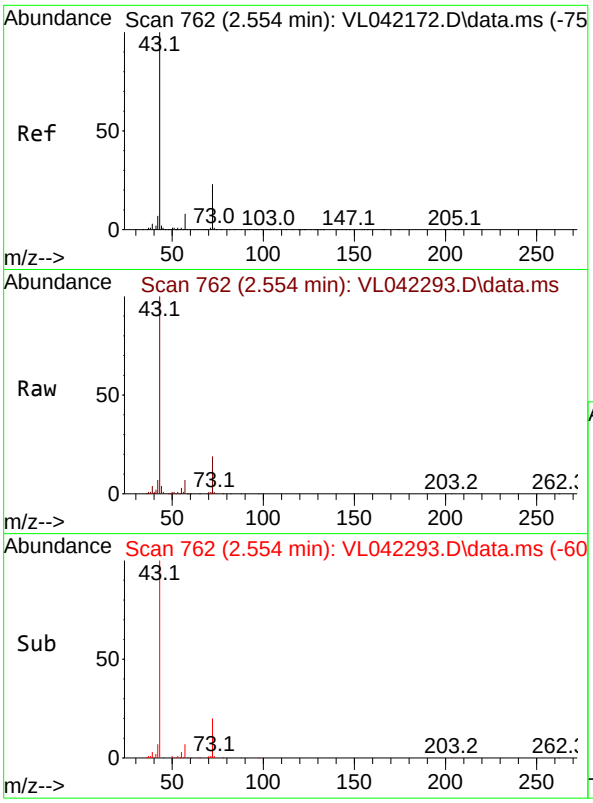


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:114 Resp: 394727

Ion	Ratio	Lower	Upper
114	100		
63	25.3	20.7	31.1
88	17.6	15.0	22.4



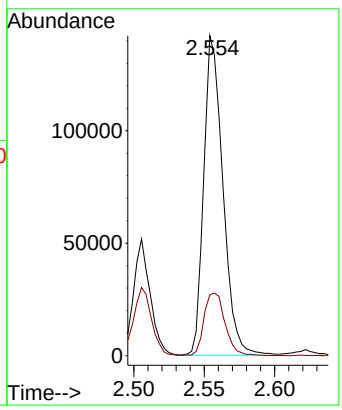


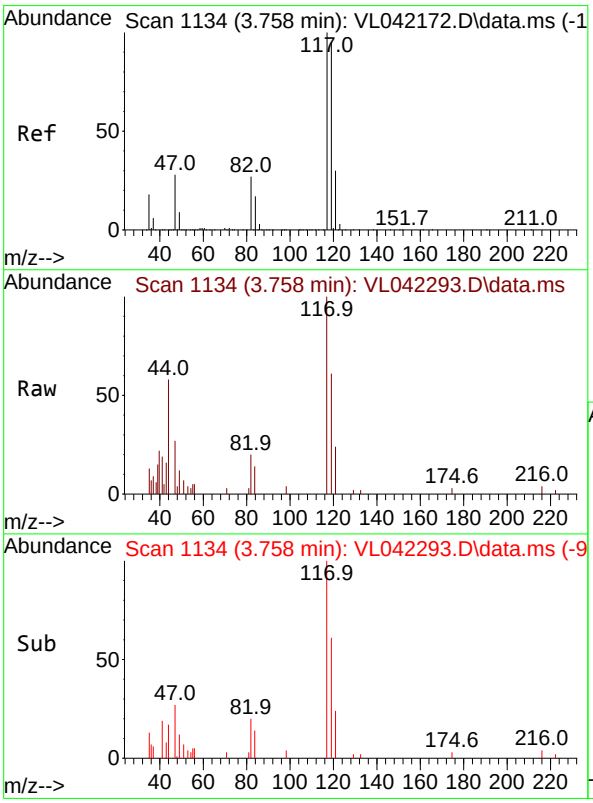
#34
2-Butanone
Concen: 4.715 ppbv
RT: 2.554 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 43 Resp: 134955

Ion	Ratio	Lower	Upper
43	100		
72	21.5	18.2	27.2

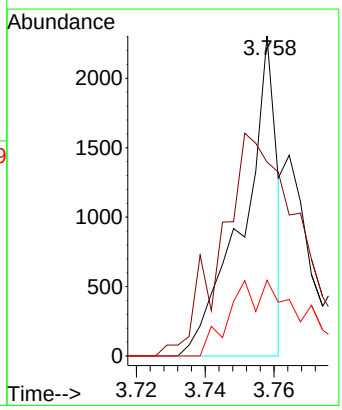


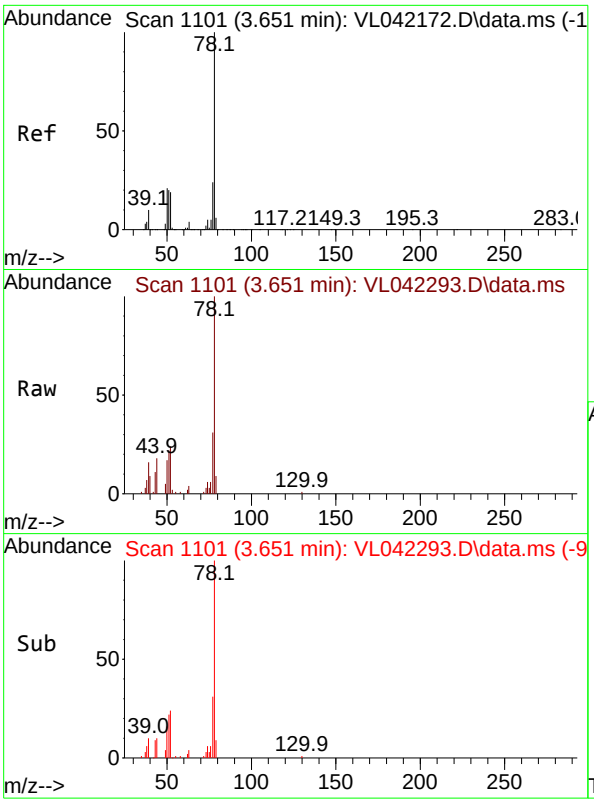


#35
Carbon Tetrachloride
Concen: 0.051 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:117 Resp: 1572

Ion	Ratio	Lower	Upper
117	100		
119	57.2	76.2	114.2#
121	23.6	24.2	36.4#



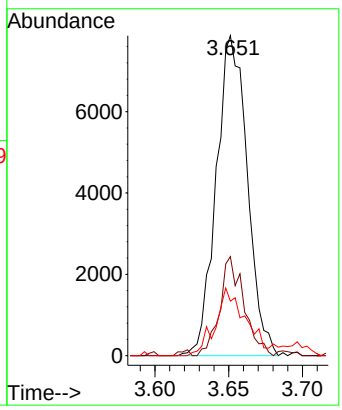


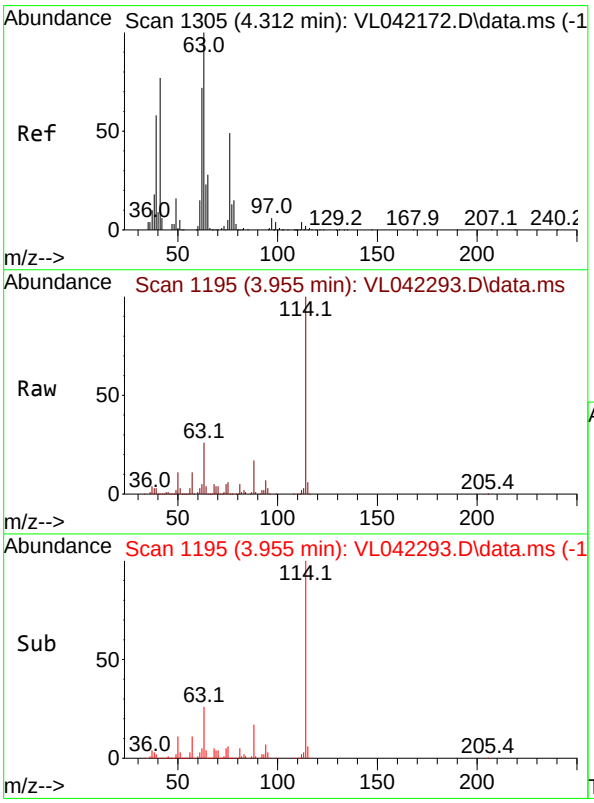
#36
Benzene
Concen: 0.294 ppbv
RT: 3.651 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 78 Resp: 11524

Ion	Ratio	Lower	Upper
78	100		
77	29.8	19.1	28.7#
50	17.1	16.6	24.8

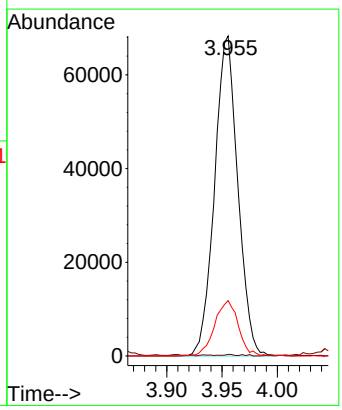


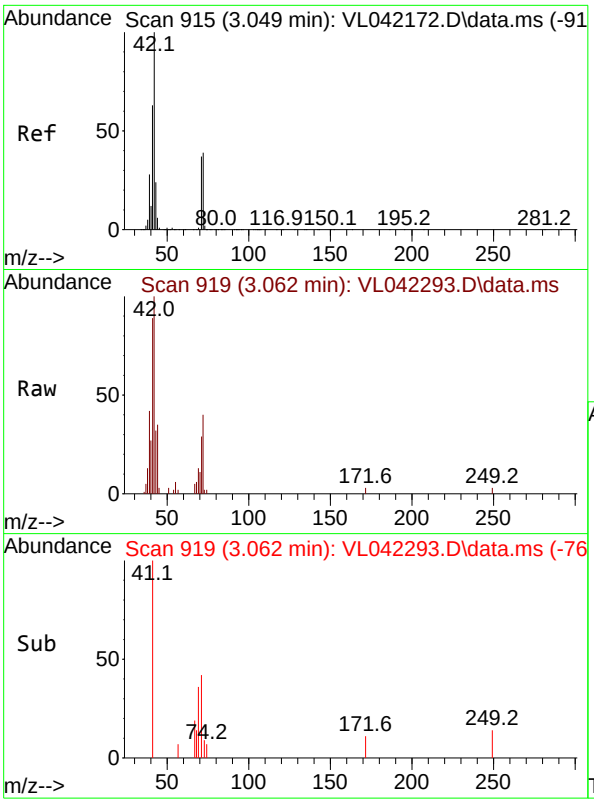


#39
1,2-Dichloropropane
Concen: 7.012 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 63 Resp: 99931

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	17.3	57.6	86.4#



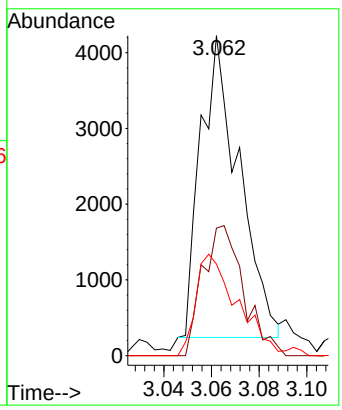


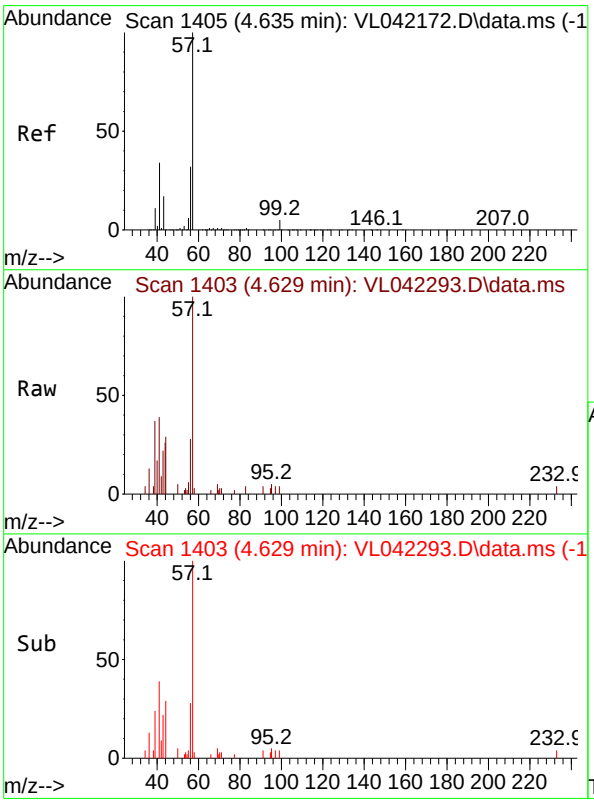
#41
Tetrahydrofuran
Concen: 0.270 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 42 Resp: 4453

Ion	Ratio	Lower	Upper
42	100		
72	45.9	31.4	47.0
71	37.1	30.2	45.4

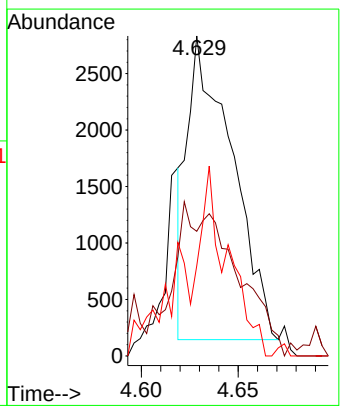


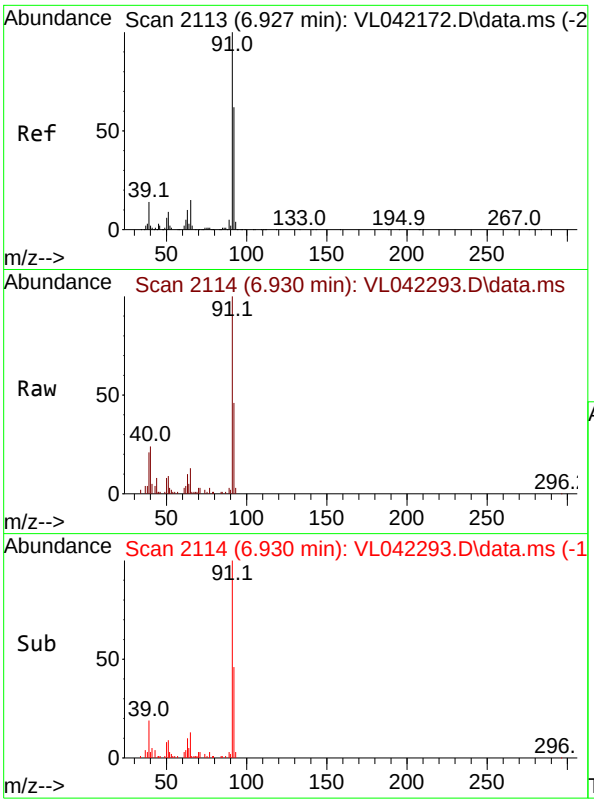


#44
2,2,4-Trimethylpentane
Concen: 0.065 ppbv
RT: 4.629 min Scan# 1403
Delta R.T. -0.007 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 57 Resp: 4328

Ion	Ratio	Lower	Upper
57	100		
41	65.9	26.8	40.2#
56	69.2	25.6	38.4#



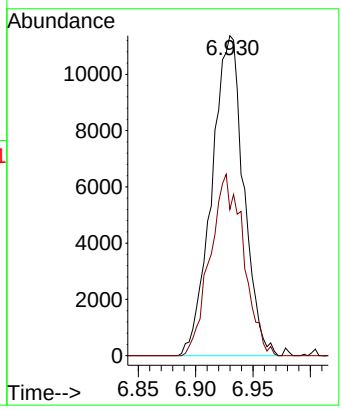


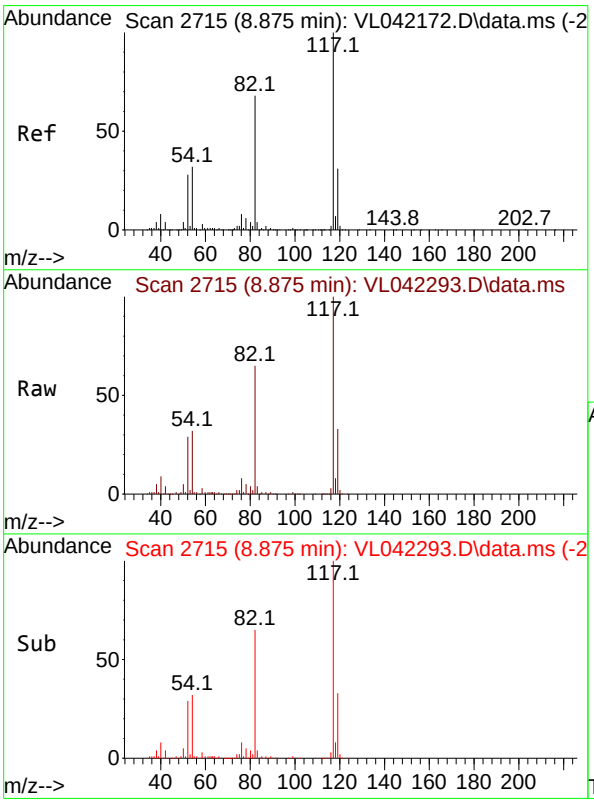
#53
Toluene
Concen: 0.476 ppbv
RT: 6.930 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 91 Resp: 22070

Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.4	72.6

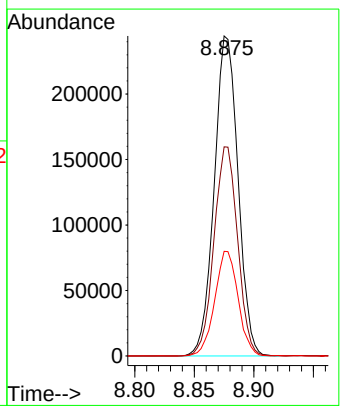


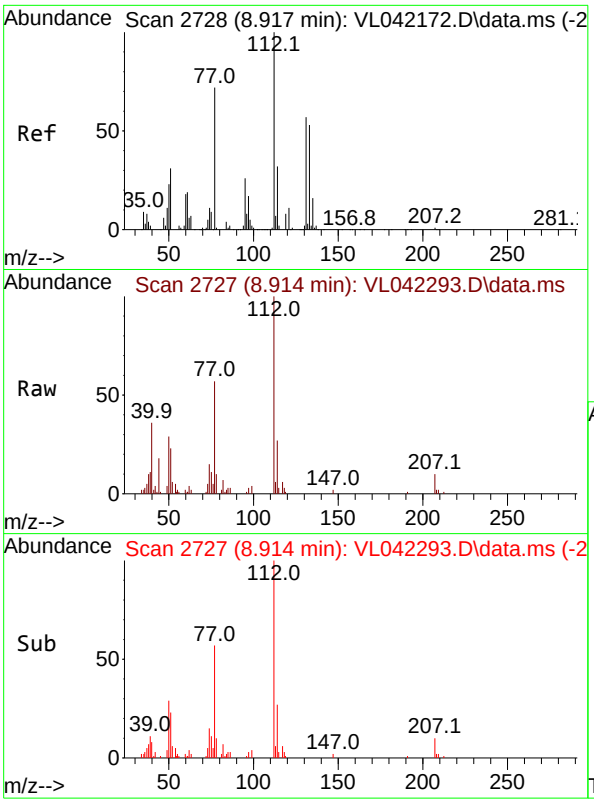


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2715
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:117 Resp: 338809

Ion	Ratio	Lower	Upper
117	100		
82	65.0	55.8	83.6
119	32.2	25.5	38.3



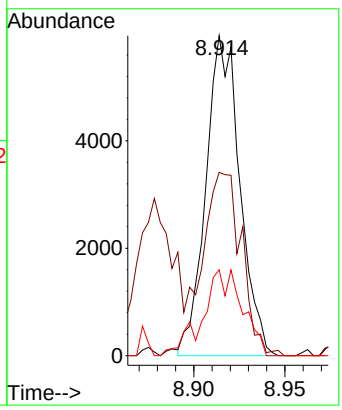


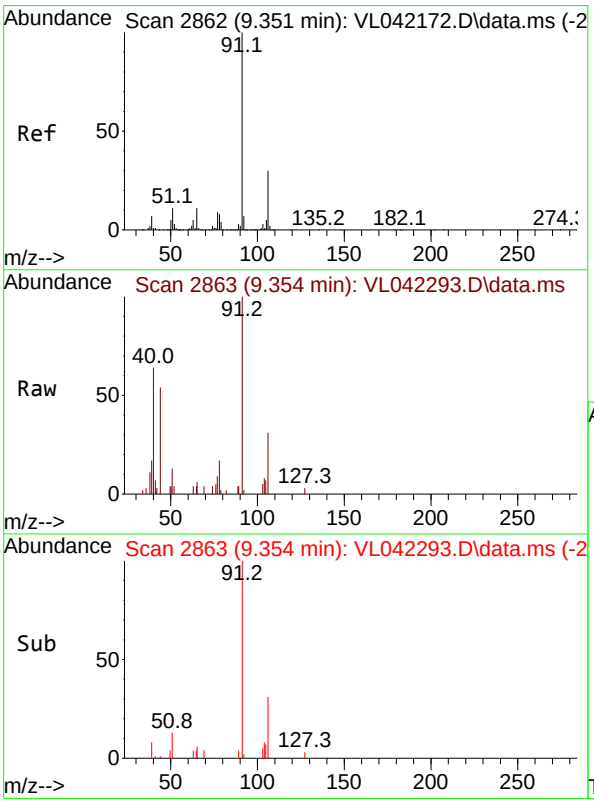
#57
Chlorobenzene
Concen: 0.241 ppbv
RT: 8.914 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion:112 Resp: 7743

Ion	Ratio	Lower	Upper
112	100		
77	55.6	58.2	87.2#
114	26.9	29.1	35.5#

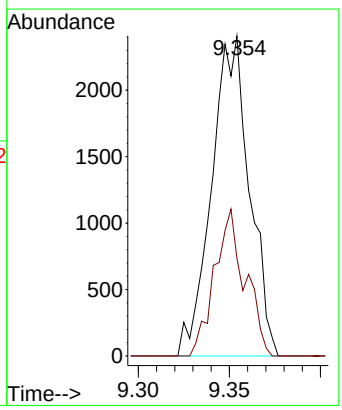


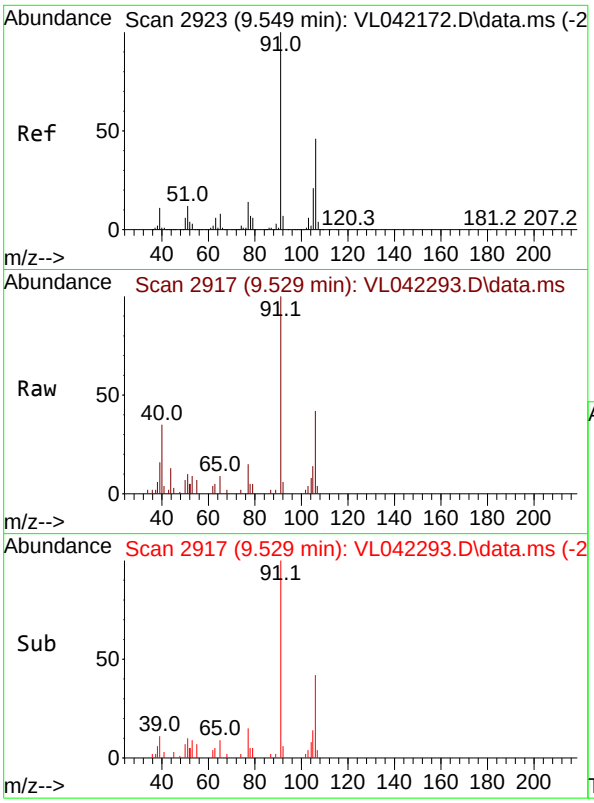


#58
Ethyl Benzene
Concen: 0.058 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 91 Resp: 3481

Ion	Ratio	Lower	Upper
91	100		
106	30.6	24.2	36.2



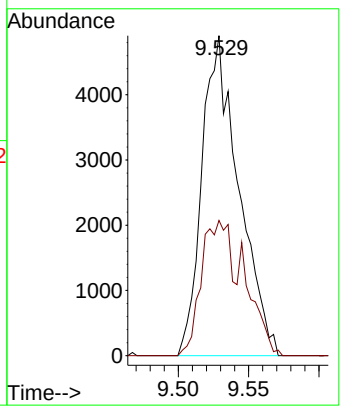


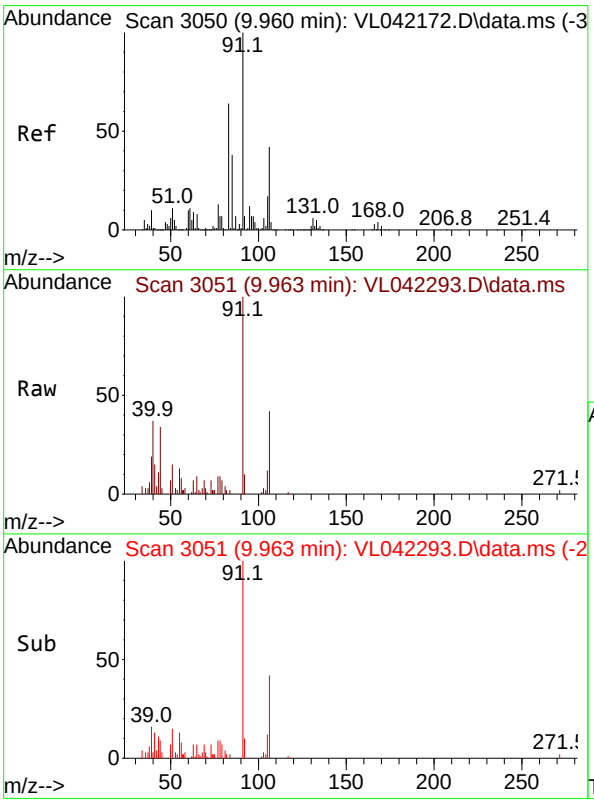
#59
m/p-Xylene
Concen: 0.186 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.020 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 91 Resp: 8935

Ion	Ratio	Lower	Upper
91	100		
106	48.6	36.4	54.6

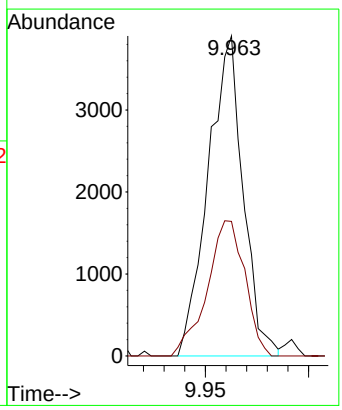


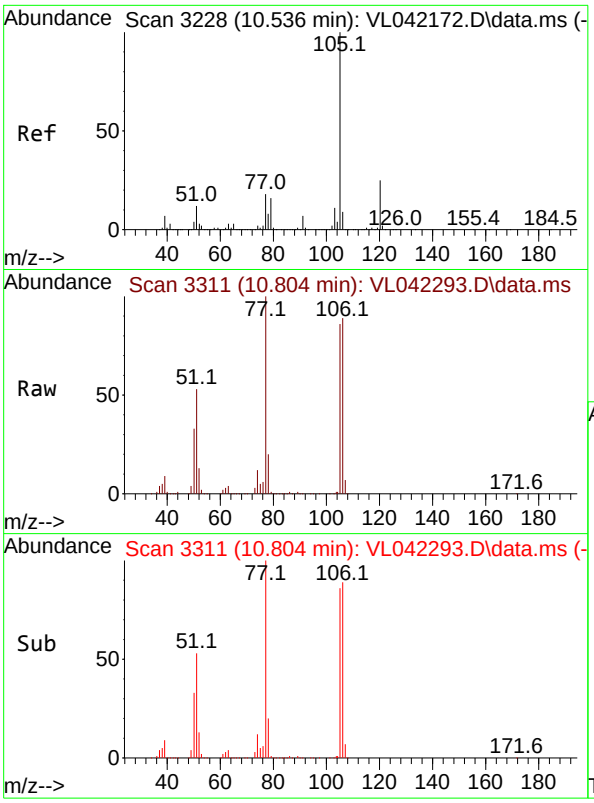


#60
o-Xylene
Concen: 0.095 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 91 Resp: 4584

Ion	Ratio	Lower	Upper
91	100		
106	45.5	20.8	62.5



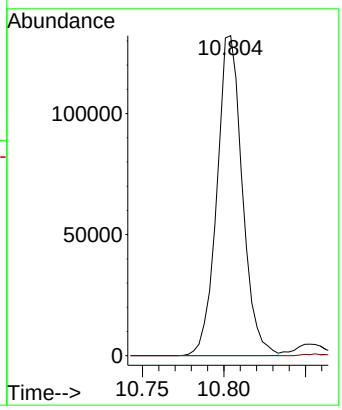


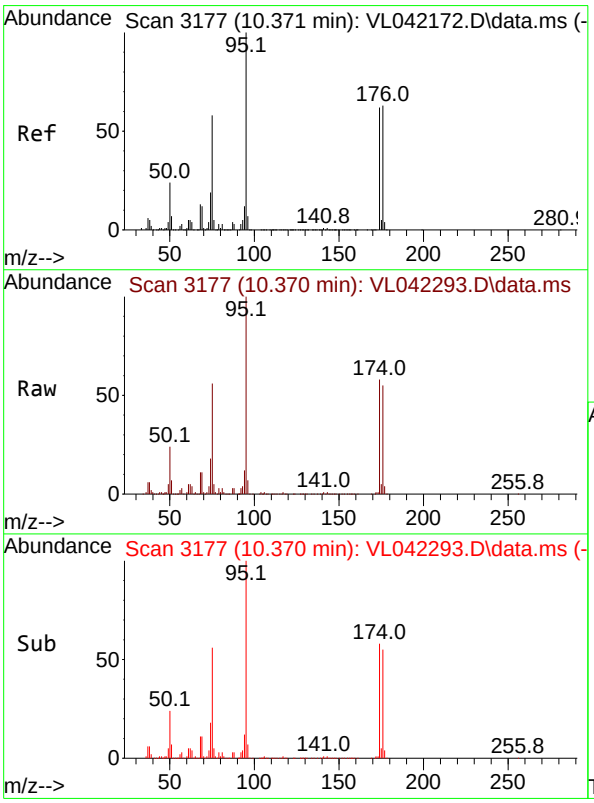
#62
Isopropylbenzene
Concen: 1.987 ppbv
RT: 10.804 min Scan# 3
Delta R.T. 0.268 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion:105 Resp: 143134

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.9	29.9#

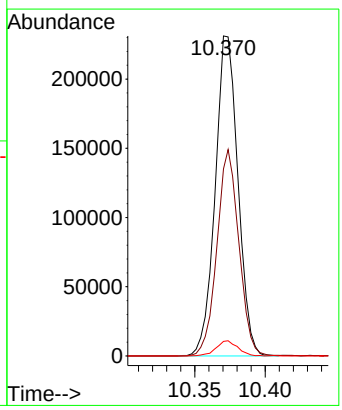


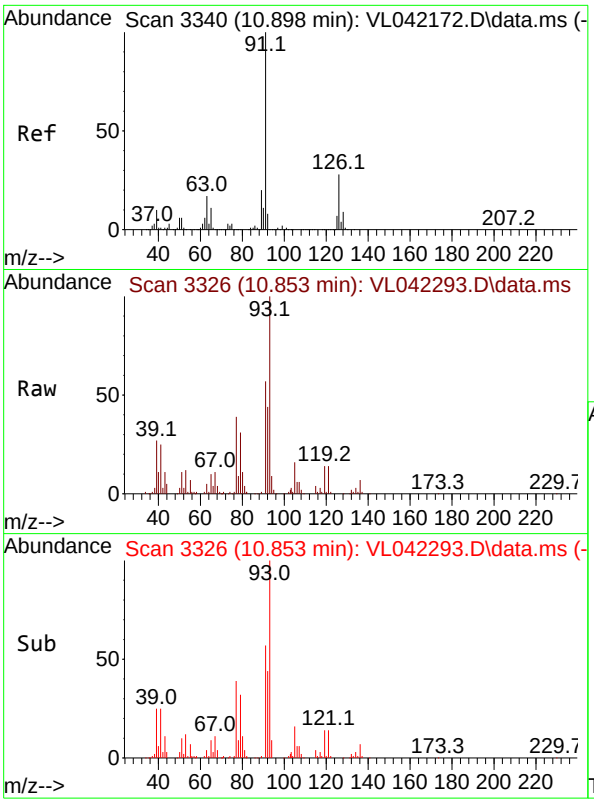


#68
1-Bromo-4-Fluorobenzene
Concen: 9.362 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion: 95 Resp: 260496

Ion	Ratio	Lower	Upper
95	100		
174	62.4	50.6	76.0
175	4.6	3.8	5.6



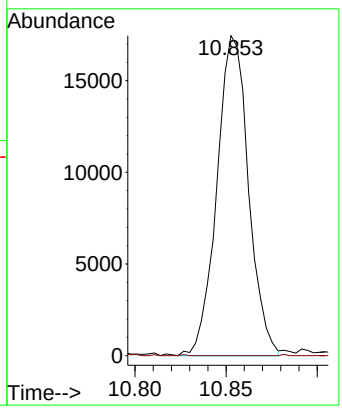


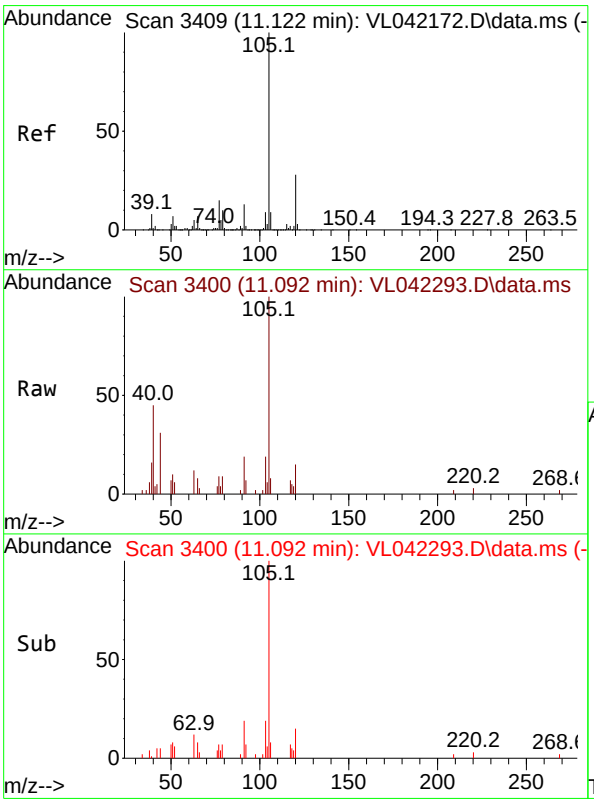
#71
2-Chlorotoluene
Concen: 0.377 ppbv
RT: 10.853 min Scan# 3
Delta R.T. -0.046 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion: 91 Resp: 21081

Ion	Ratio	Lower	Upper
91	100		
126	0.1	11.6	46.4#

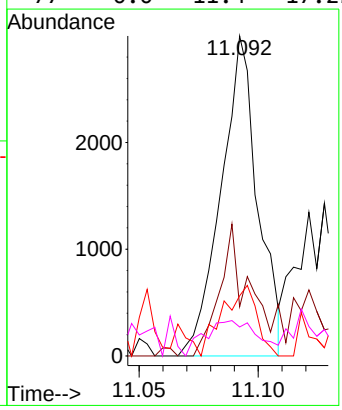


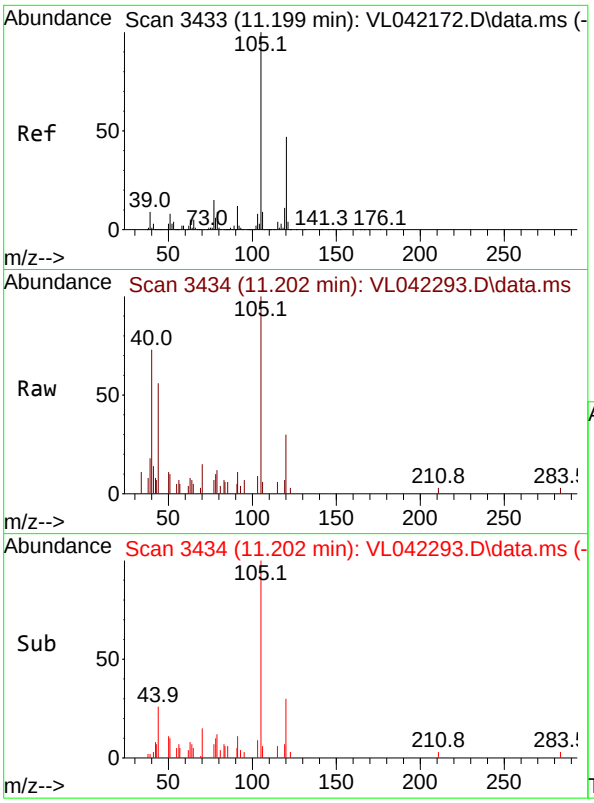


#72
4-Ethyltoluene
Concen: 0.053 ppbv
RT: 11.092 min Scan# 3400
Delta R.T. -0.029 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:105 Resp: 3205

Ion	Ratio	Lower	Upper
105	100		
120	54.5	23.4	35.0#
91	24.8	10.3	15.5#
77	0.0	11.4	17.2#



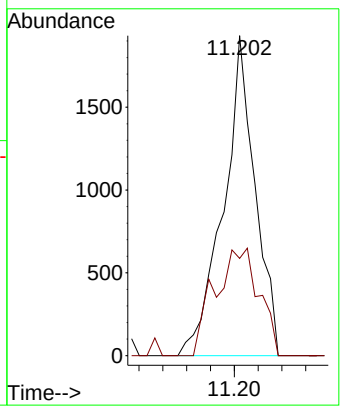


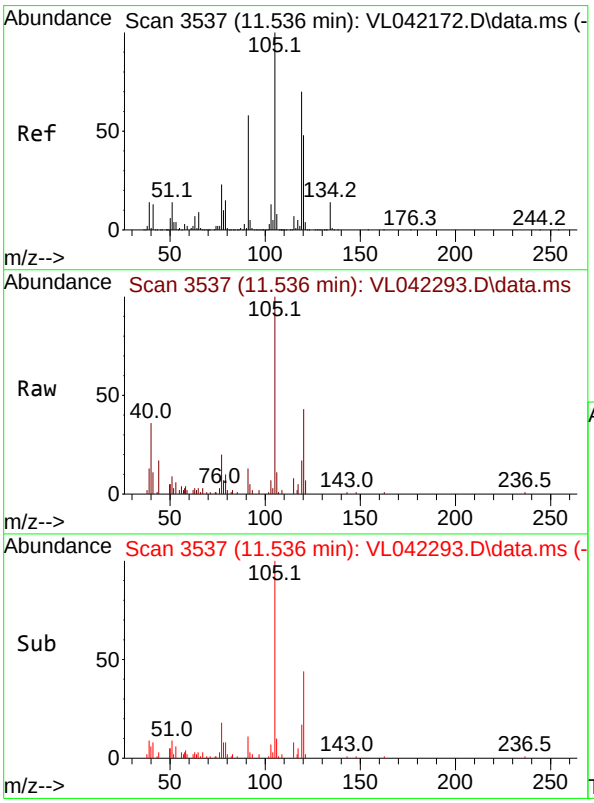
#73
1,3,5-Trimethylbenzene
Concen: 0.034 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-1-3242025

Tgt Ion:105 Resp: 1783

Ion	Ratio	Lower	Upper
105	100		
120	30.4	37.4	56.0#

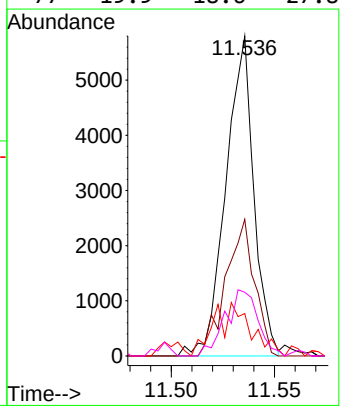




#74
1,2,4-Trimethylbenzene
Concen: 0.090 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042293.D
Acq: 09 Apr 2025 15:15

Tgt Ion:105 Resp: 5457

Ion	Ratio	Lower	Upper
105	100		
120	42.7	38.6	58.0
91	11.2	46.2	69.2#
77	19.9	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Quant Time: Apr 10 01:45:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

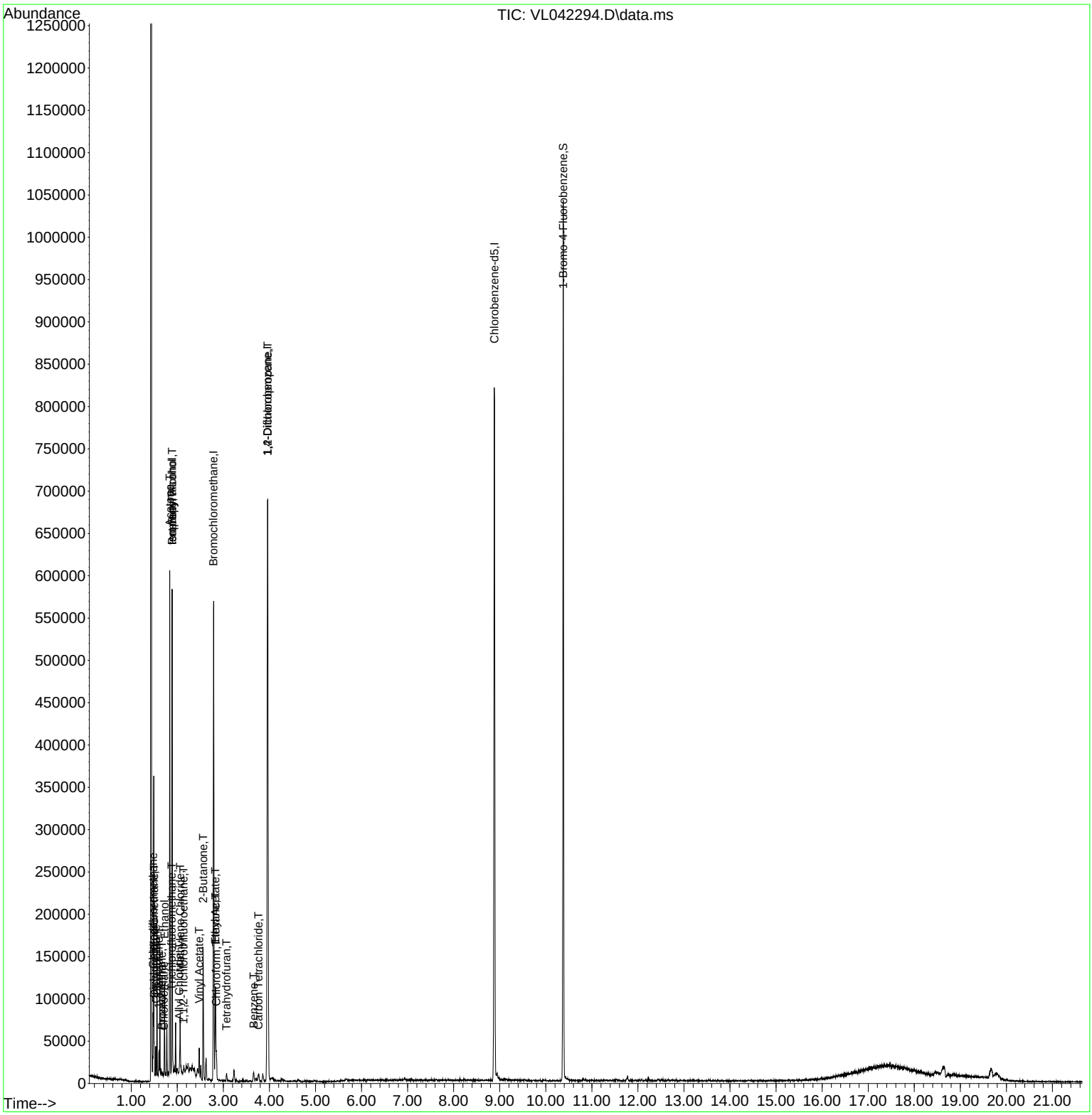
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	159184	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	384747	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	314874	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	236151	9.133	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	9013	0.383	ppbv		100
3) Chlorodifluoromethane	1.476	51	29537	1.230	ppbv	#	90
4) Chloromethane	1.534	50	10945	1.139	ppbv		99
6) Bromomethane	1.670	94	190	0.044	ppbv	#	63
7) Chloroethane	1.706	64	431	0.112	ppbv		95
9) Propene	1.887	41	22225	2.019	ppbv		95
11) Trichlorofluoromethane	1.877	101	5632	0.246	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.136	101	1388	0.074	ppbv	#	81
13) Ethanol	1.722	45	35576	34.196	ppbv		82
15) Acetone	1.835	43	257522	11.567	ppbv		96
16) 1,3-Butadiene	1.599	39	3737	0.344	ppbv	#	53
17) tert-Butyl alcohol	1.887	59	8353	0.301	ppbv		95
19) Isopropyl Alcohol	1.887	45	224606	17.881	ppbv	#	33
20) Methylene Chloride	2.062	84	8683	1.047	ppbv	#	84
21) Allyl Chloride	2.046	41	1988	0.127	ppbv	#	79
23) Vinyl Acetate	2.476	43	7754	0.805	ppbv	#	34
25) Ethyl Acetate	2.826	43	18155	0.314	ppbv	#	87
26) Hexane	2.829	57	20910	0.937	ppbv	#	31
29) Chloroform	2.848	83	10374	0.318	ppbv		96
34) 2-Butanone	2.560	43	91945	3.296	ppbv		97
35) Carbon Tetrachloride	3.764	117	2461	0.082	ppbv	#	83
36) Benzene	3.661	78	3707	0.097	ppbv	#	93
39) 1,2-Dichloropropane	3.962	63	97793	7.040	ppbv	#	22
41) Tetrahydrofuran	3.069	42	2861	0.178	ppbv	#	86

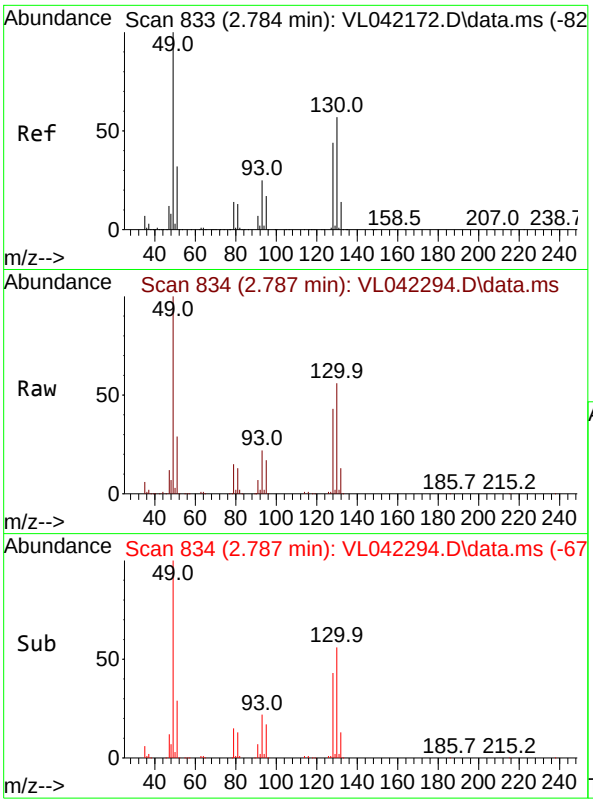
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042294.D
Acq On : 09 Apr 2025 15:50
Operator : SY/MD
Sample : Q1665-08
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Quant Time: Apr 10 01:45:44 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



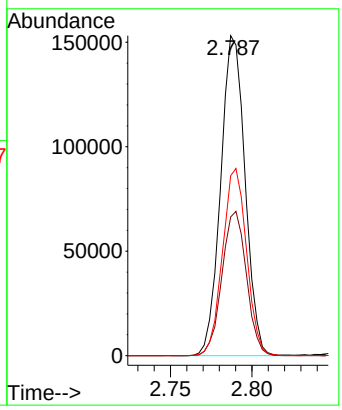


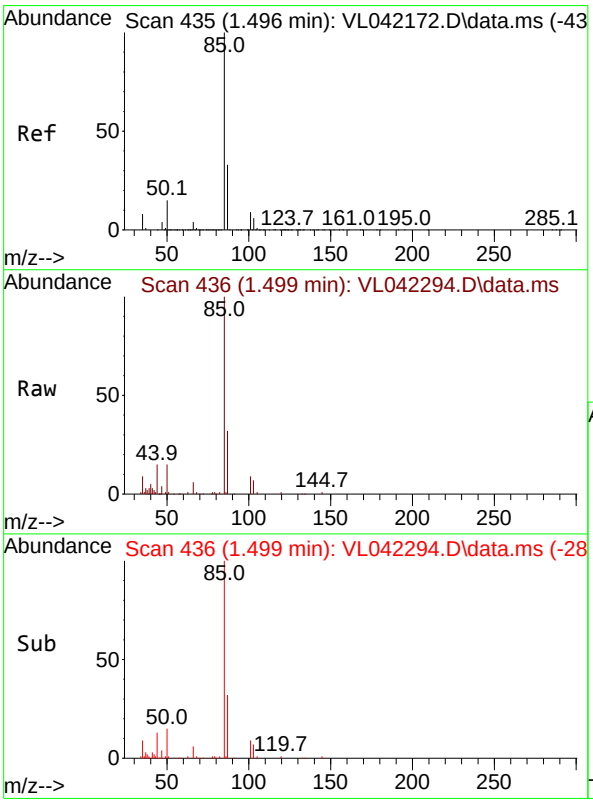
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 49 Resp: 159184

Ion	Ratio	Lower	Upper
49	100		
128	45.2	22.9	68.5
130	57.8	28.8	86.4

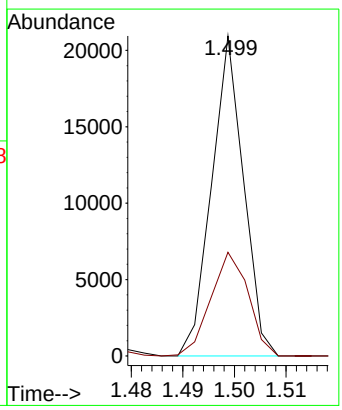


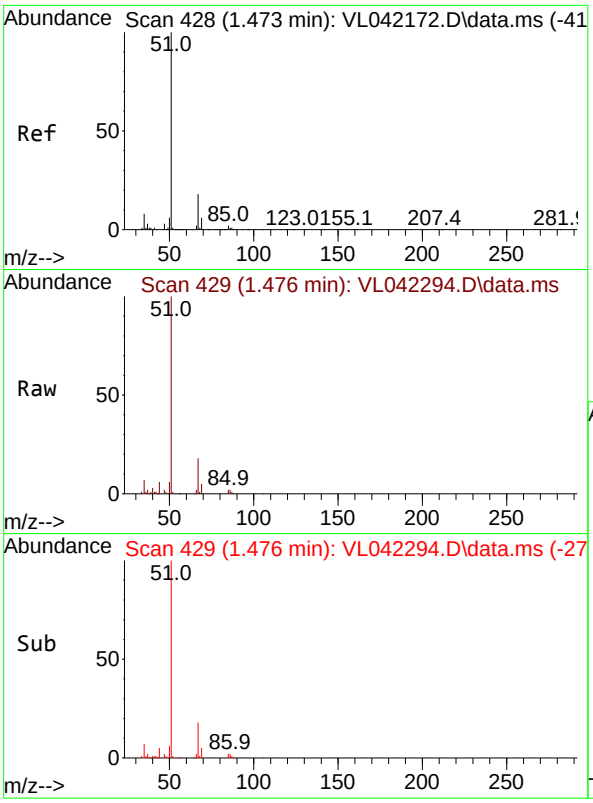


#2
Dichlorodifluoromethane
Concen: 0.383 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 85 Resp: 9013

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1



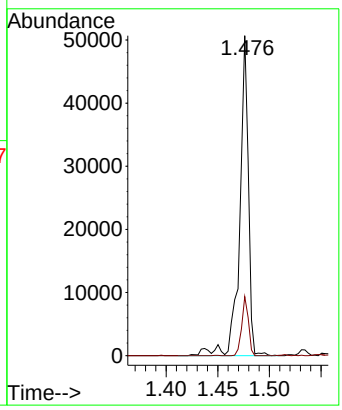


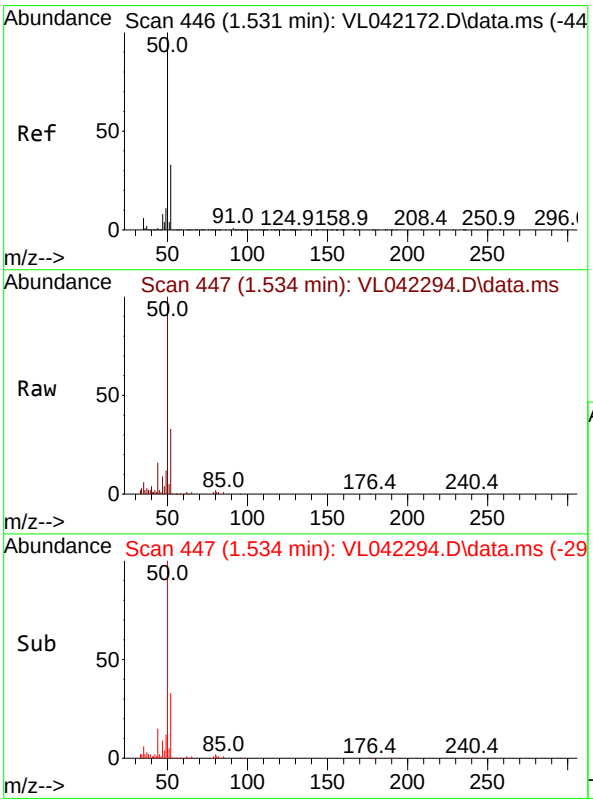
#3
Chlorodifluoromethane
Concen: 1.230 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 51 Resp: 29537

Ion	Ratio	Lower	Upper
51	100		
67	14.3	15.0	22.6#

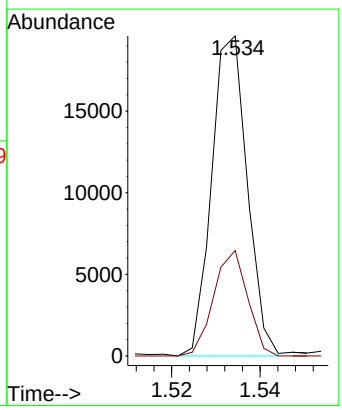


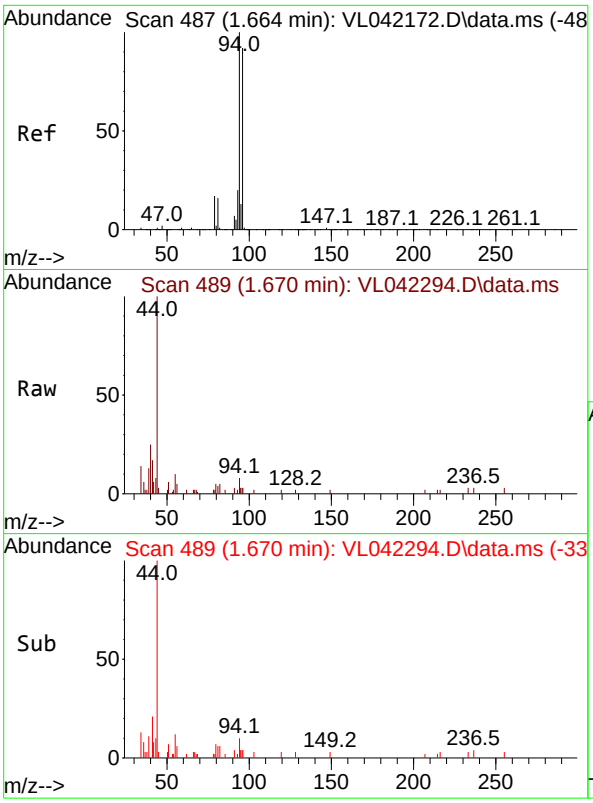


#4
Chloromethane
Concen: 1.139 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 50 Resp: 10945

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



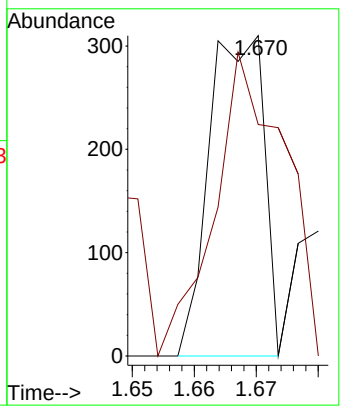


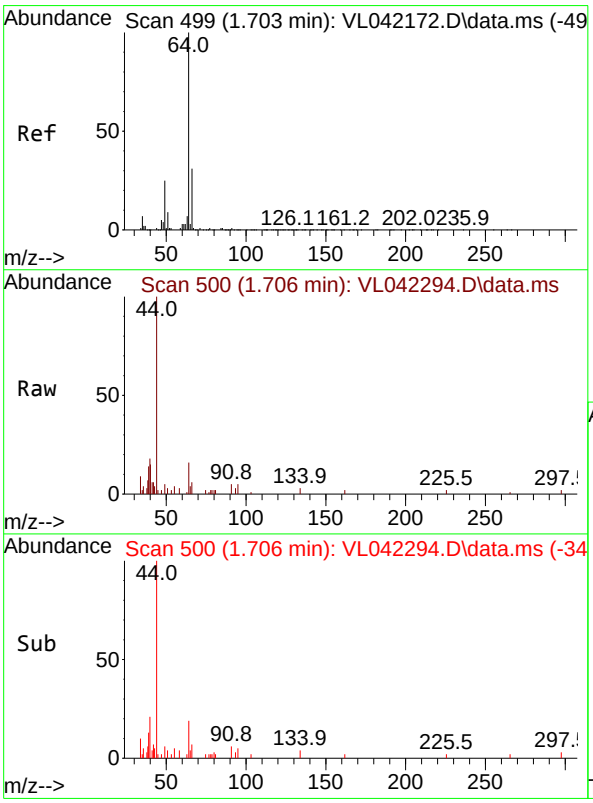
#6
Bromomethane
Concen: 0.044 ppbv
RT: 1.670 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 94 Resp: 190

Ion	Ratio	Lower	Upper
94	100		
96	56.1	73.1	109.7#

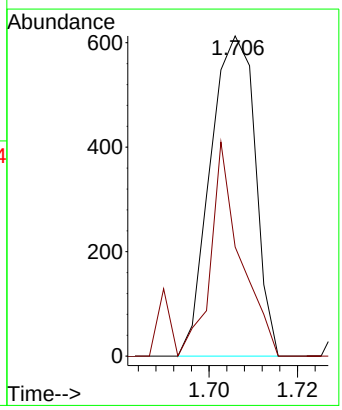


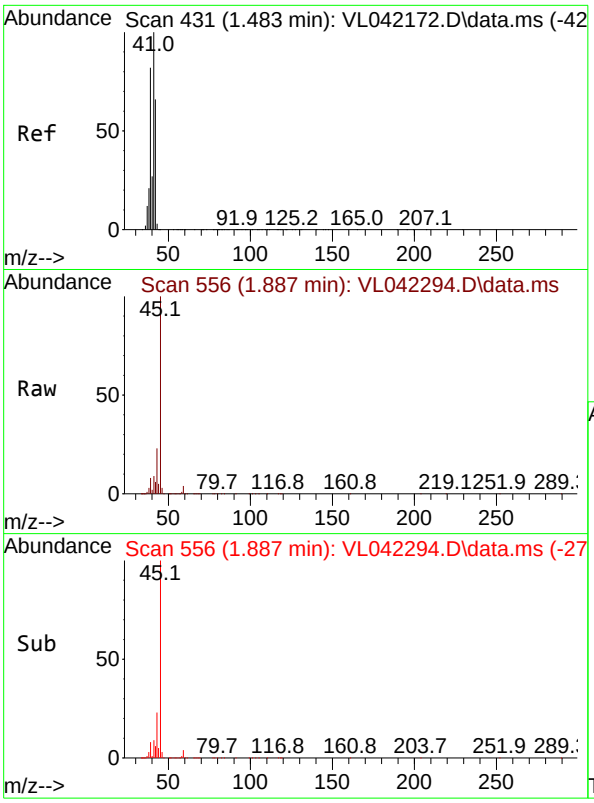


#7
Chloroethane
Concen: 0.112 ppbv
RT: 1.706 min Scan# 500
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 64 Resp: 431

Ion	Ratio	Lower	Upper
64	100		
66	34.1	25.2	37.8



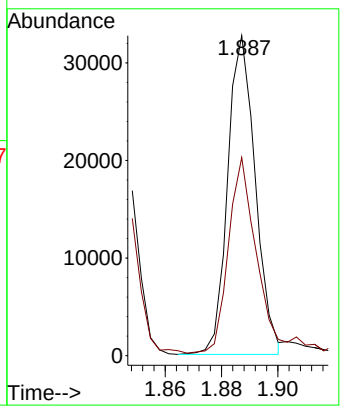


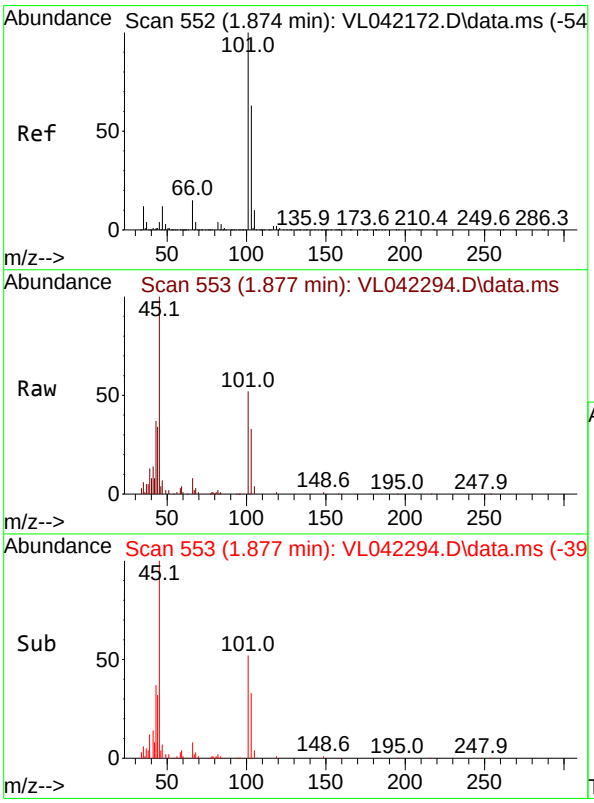
#9
Propene
Concen: 2.019 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.404 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 41 Resp: 22225

Ion	Ratio	Lower	Upper
41	100		
42	65.5	55.4	83.2

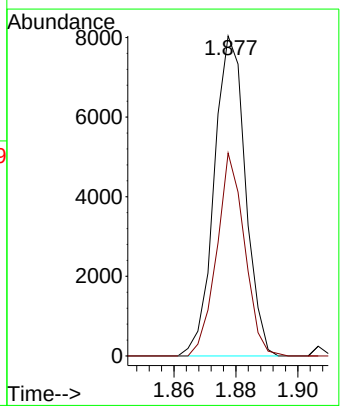


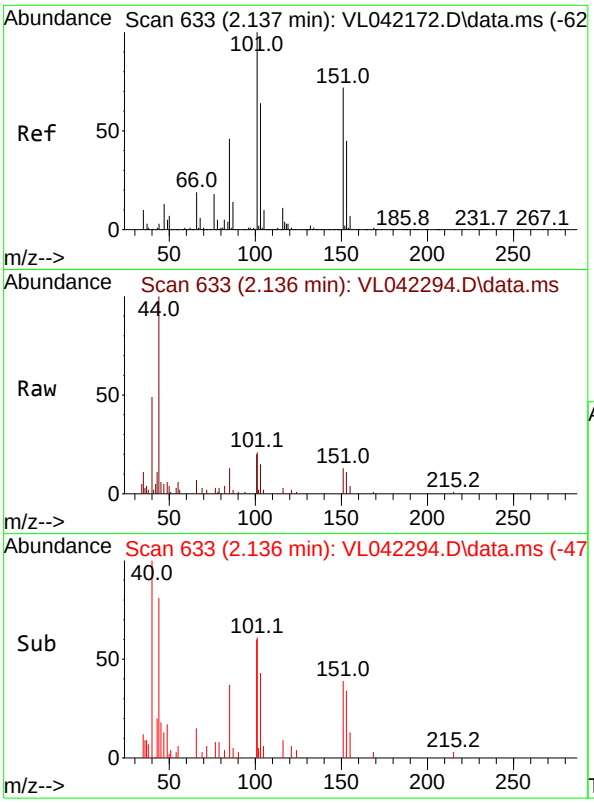


#11
Trichlorofluoromethane
Concen: 0.246 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion:101 Resp: 5632

Ion	Ratio	Lower	Upper
101	100		
103	63.4	50.2	75.2



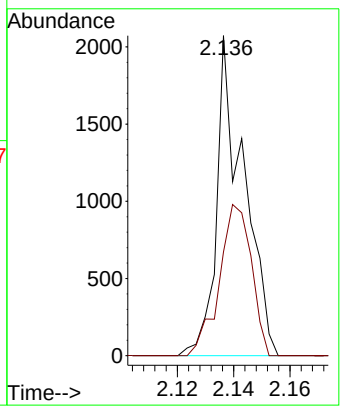


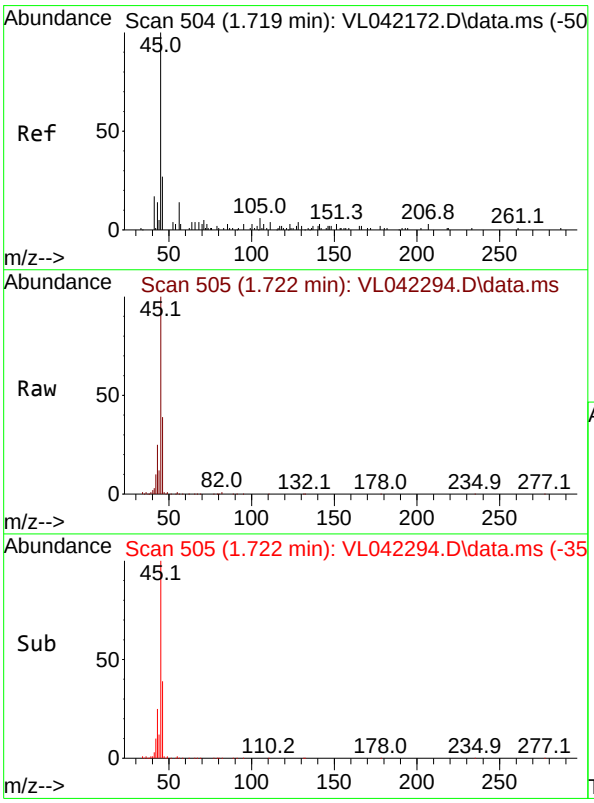
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.074 ppbv
RT: 2.136 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion:101 Resp: 1388

Ion	Ratio	Lower	Upper
101	100		
151	55.8	57.1	85.7#

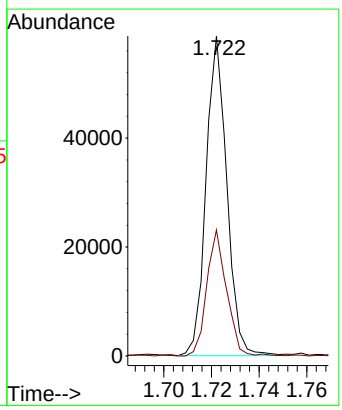


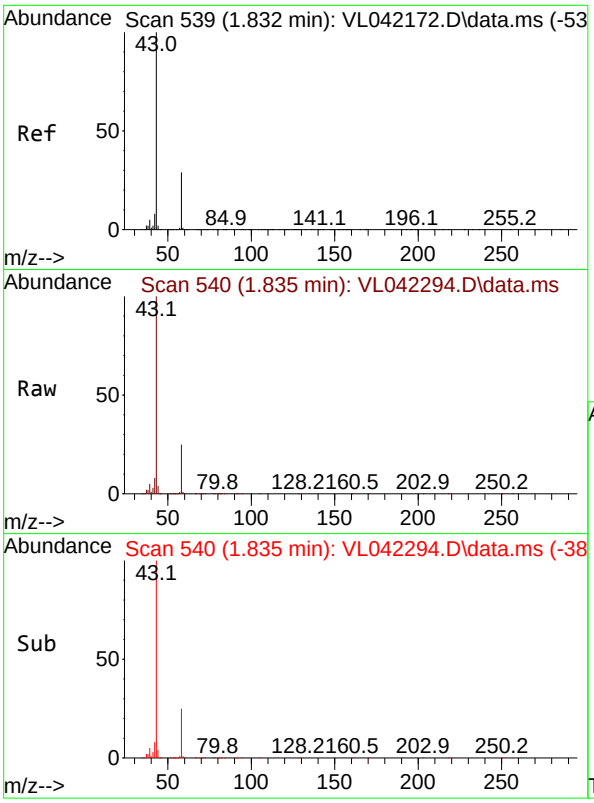


#13
Ethanol
Concen: 34.196 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 45 Resp: 35576

Ion	Ratio	Lower	Upper
45	100		
46	38.1	20.2	80.8



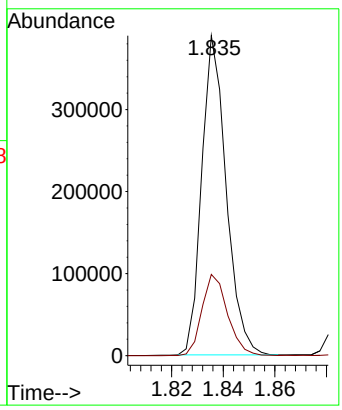


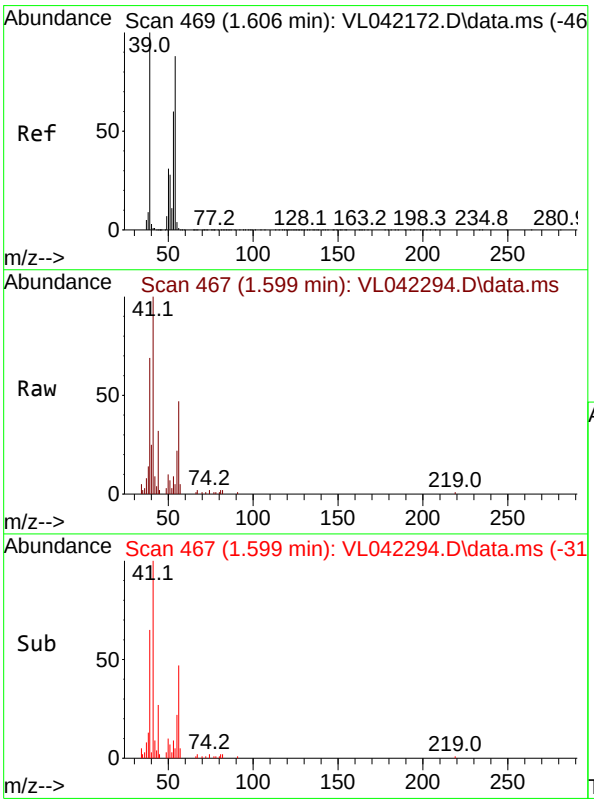
#15
Acetone
Concen: 11.567 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 43 Resp: 257522

Ion	Ratio	Lower	Upper
43	100		
58	26.6	23.2	34.8

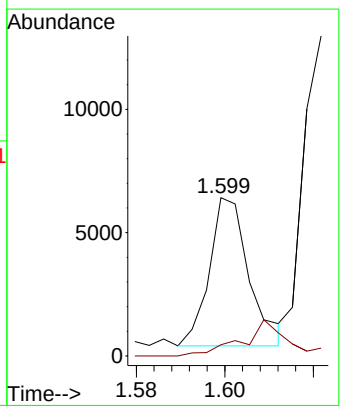


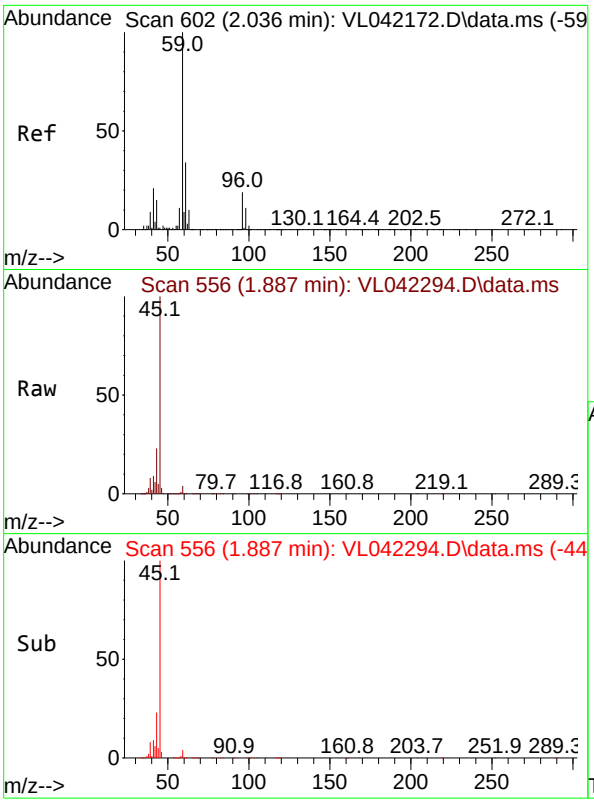


#16
1,3-Butadiene
Concen: 0.344 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 39 Resp: 3737

Ion	Ratio	Lower	Upper
39	100		
54	35.8	60.7	91.1#



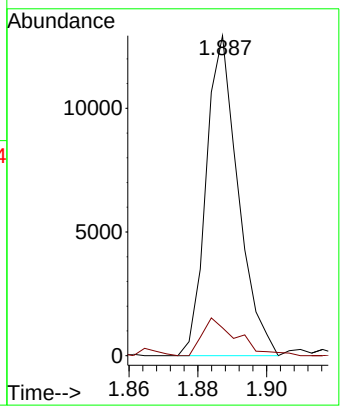


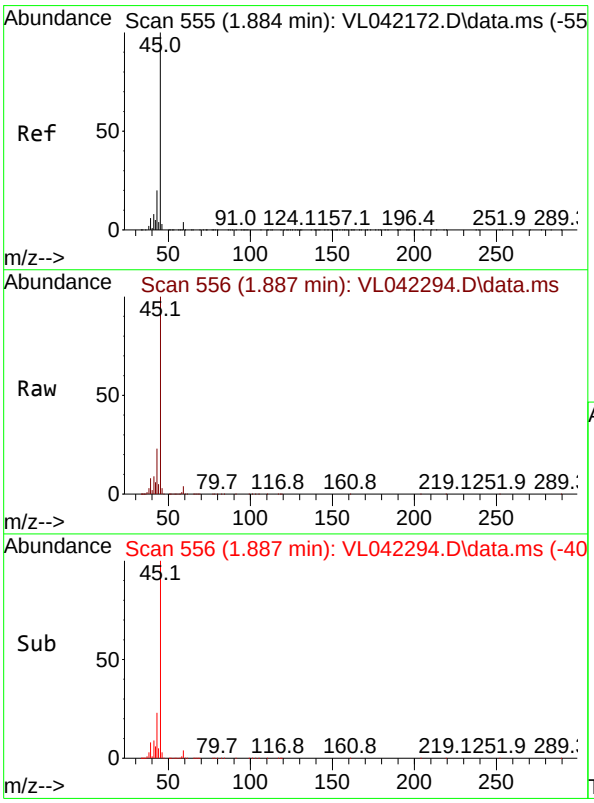
#17
tert-Butyl alcohol
Concen: 0.301 ppbv
RT: 1.887 min Scan# 5
Delta R.T. -0.149 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 59 Resp: 8353

Ion	Ratio	Lower	Upper
59	100		
57	12.8	8.9	13.3

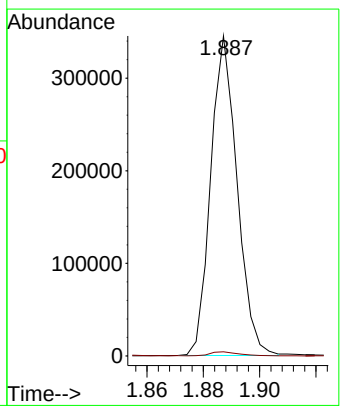


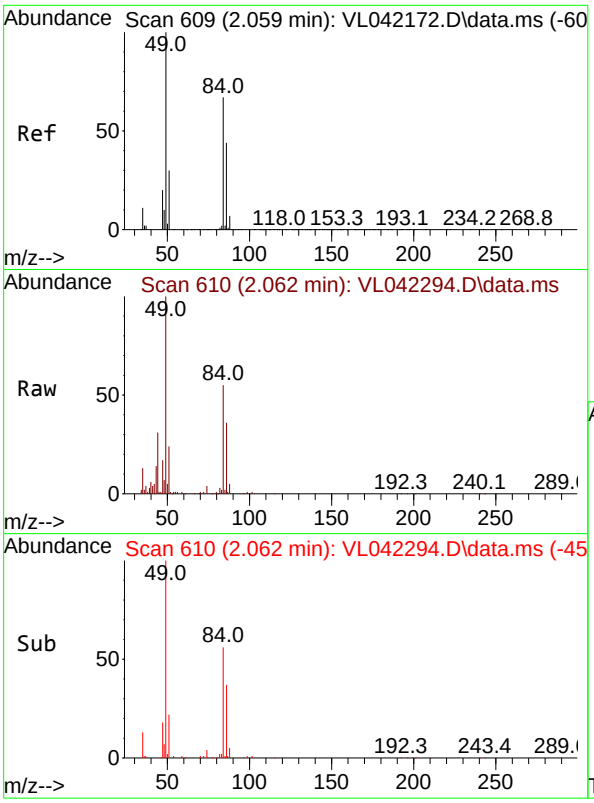


#19
Isopropyl Alcohol
Concen: 17.881 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 45 Resp: 224606

Ion	Ratio	Lower	Upper
45	100		
58	1.5	36.9	55.3#



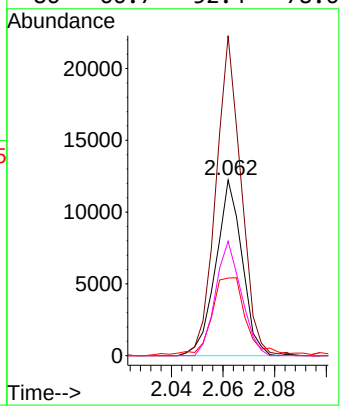


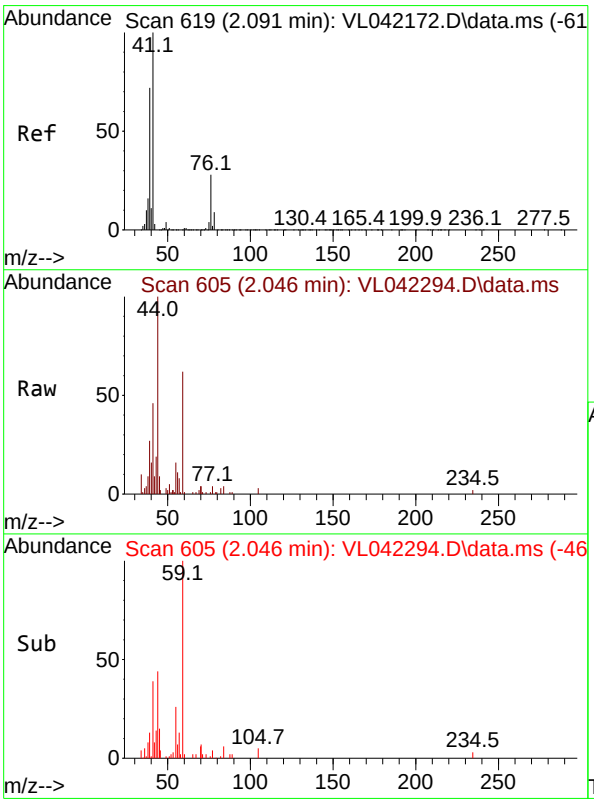
#20
Methylene Chloride
Concen: 1.047 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 84 Resp: 8683

Ion	Ratio	Lower	Upper
84	100		
49	182.2	120.2	180.4#
51	43.8	37.4	56.0
86	66.7	52.4	78.6

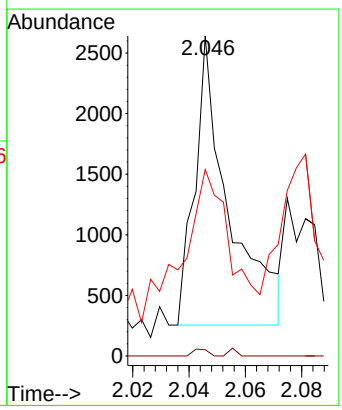


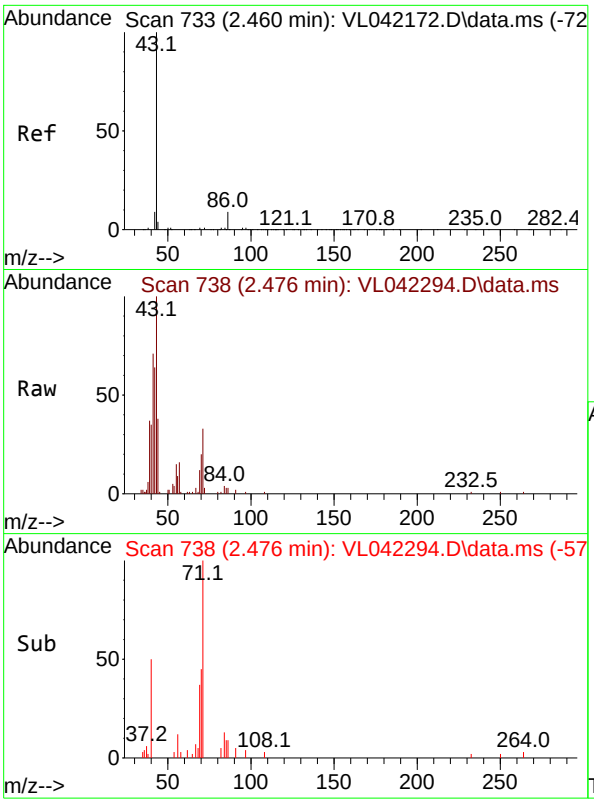


#21
Allyl Chloride
Concen: 0.127 ppbv
RT: 2.046 min Scan# 605
Delta R.T. -0.046 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 41 Resp: 1988

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	82.8	61.1	91.7



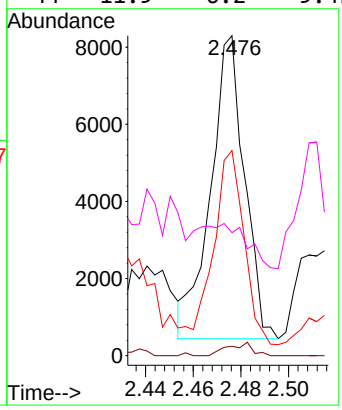


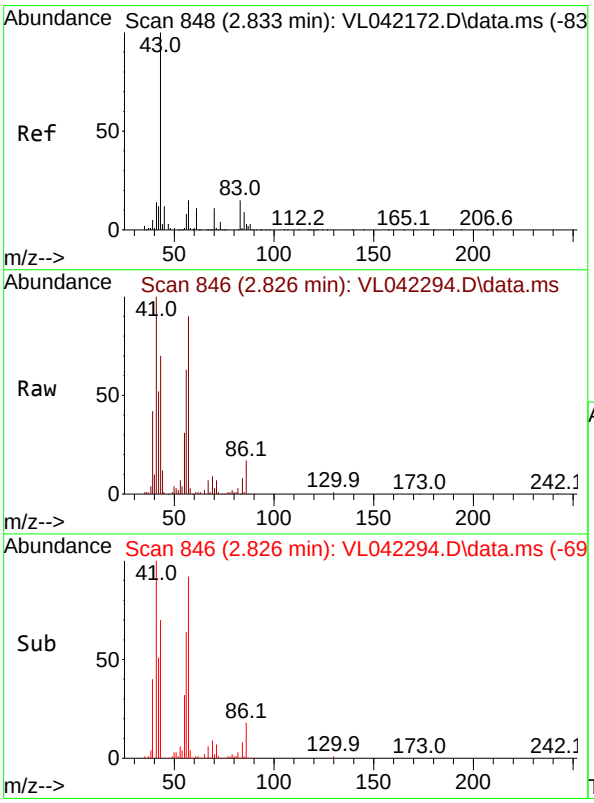
#23
Vinyl Acetate
Concen: 0.805 ppbv
RT: 2.476 min Scan# 7
Delta R.T. 0.016 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 43 Resp: 7754

Ion	Ratio	Lower	Upper
43	100		
86	3.1	5.5	8.3#
42	64.0	8.6	13.0#
44	11.9	6.2	9.4#

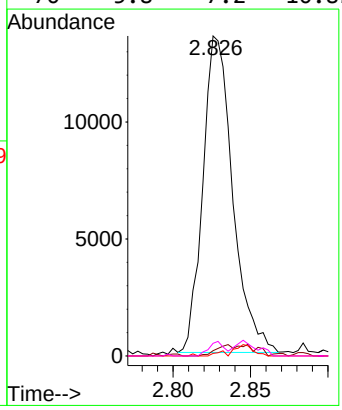


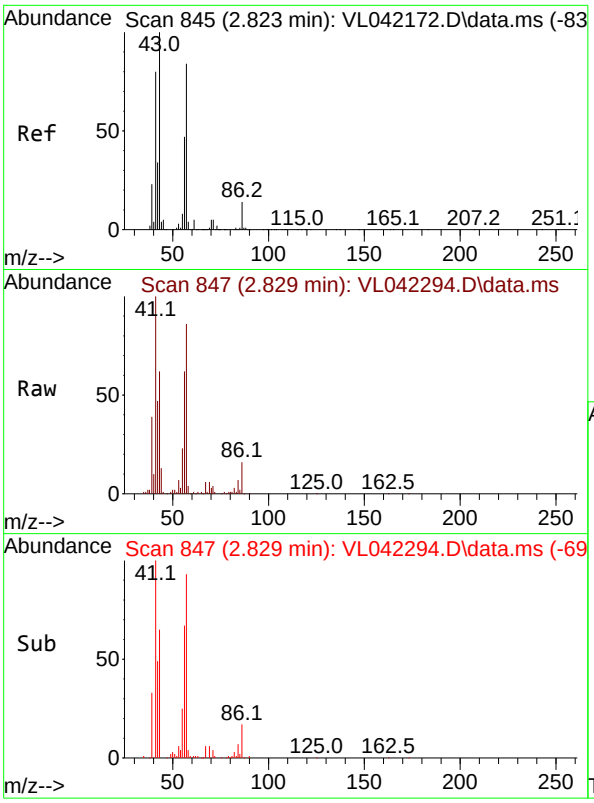


#25
Ethyl Acetate
Concen: 0.314 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.007 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 43 Resp: 18155

Ion	Ratio	Lower	Upper
43	100		
45	5.6	8.2	12.2#
61	2.7	7.3	10.9#
70	5.8	7.2	10.8#



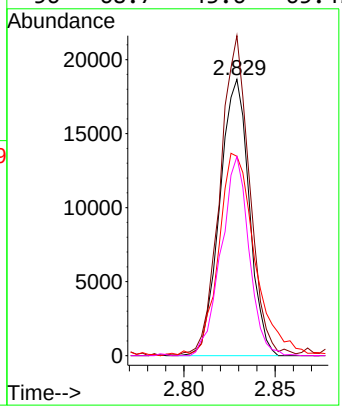


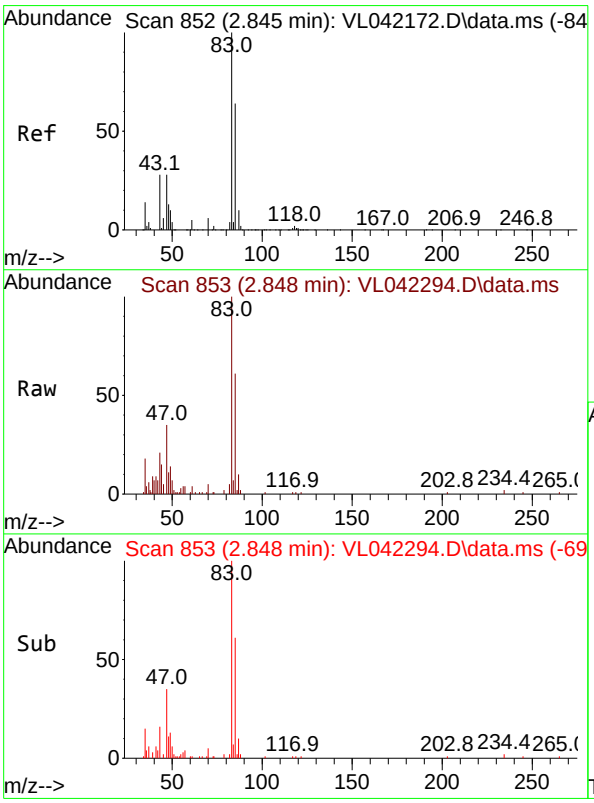
#26
Hexane
Concen: 0.937 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 57 Resp: 20910

Ion	Ratio	Lower	Upper
57	100		
41	120.6	76.6	114.8#
43	88.4	207.8	311.8#
56	68.7	43.6	65.4#

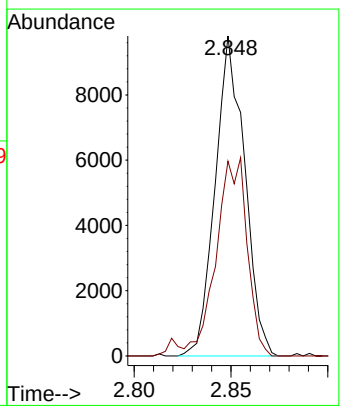


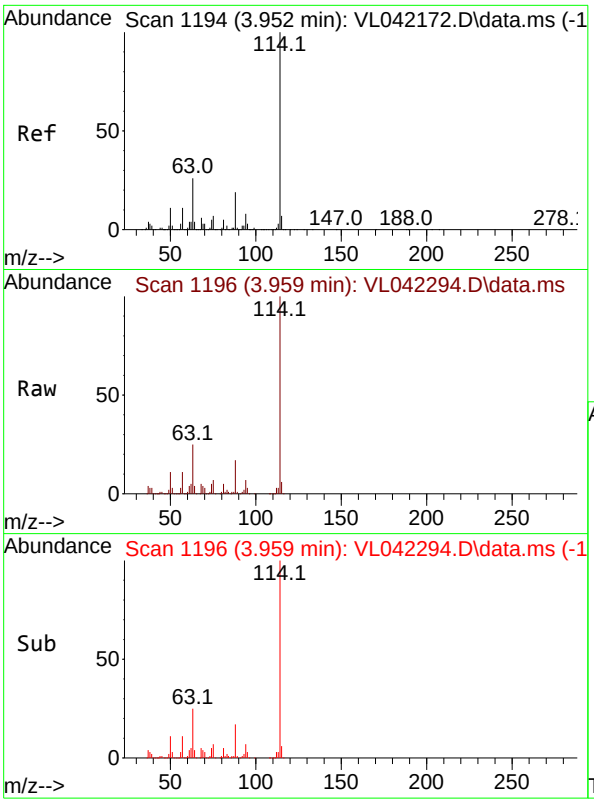


#29
Chloroform
Concen: 0.318 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 83 Resp: 10374

Ion	Ratio	Lower	Upper
83	100		
85	60.8	51.4	77.2



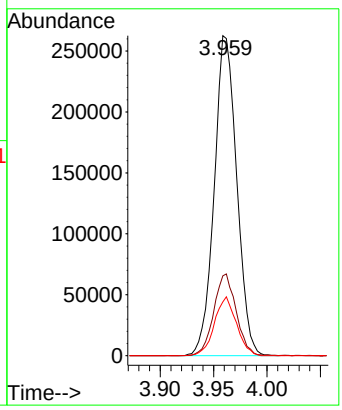


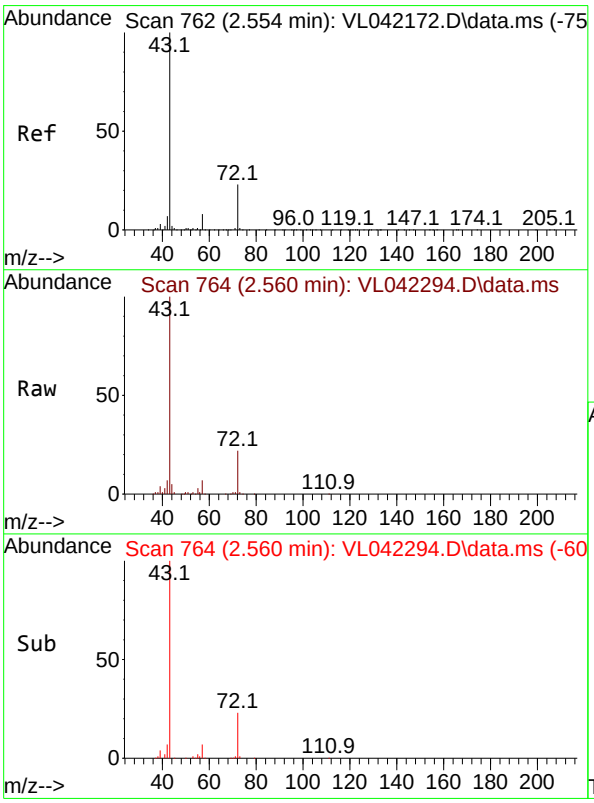
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion:114 Resp: 384747

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	18.0	15.0	22.4

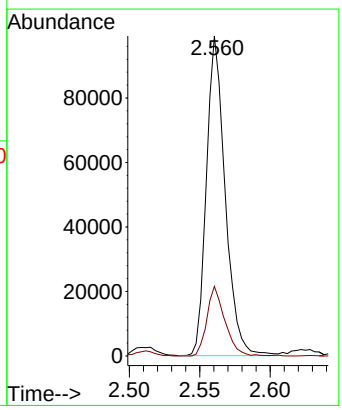


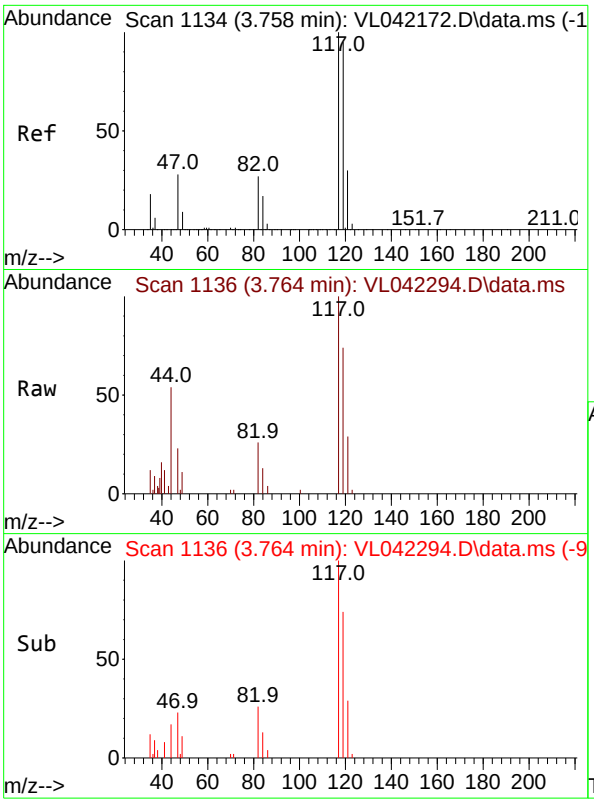


#34
2-Butanone
Concen: 3.296 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 43 Resp: 91945

Ion	Ratio	Lower	Upper
43	100		
72	21.0	18.2	27.2



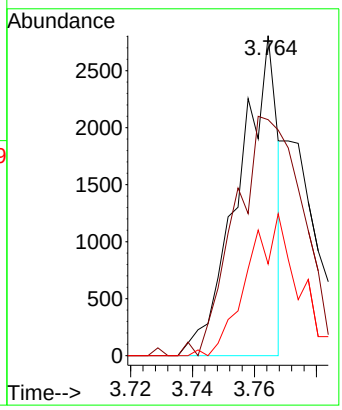


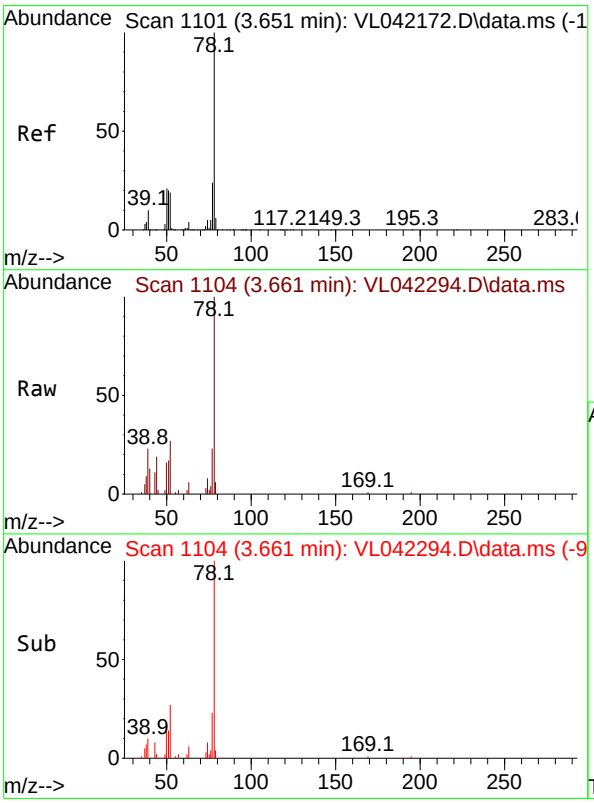
#35
Carbon Tetrachloride
Concen: 0.082 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion:117 Resp: 2461

Ion	Ratio	Lower	Upper
117	100		
119	73.7	76.2	114.2#
121	28.6	24.2	36.4

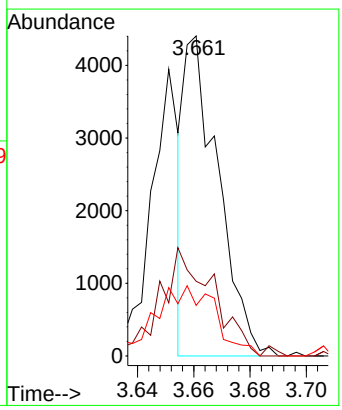


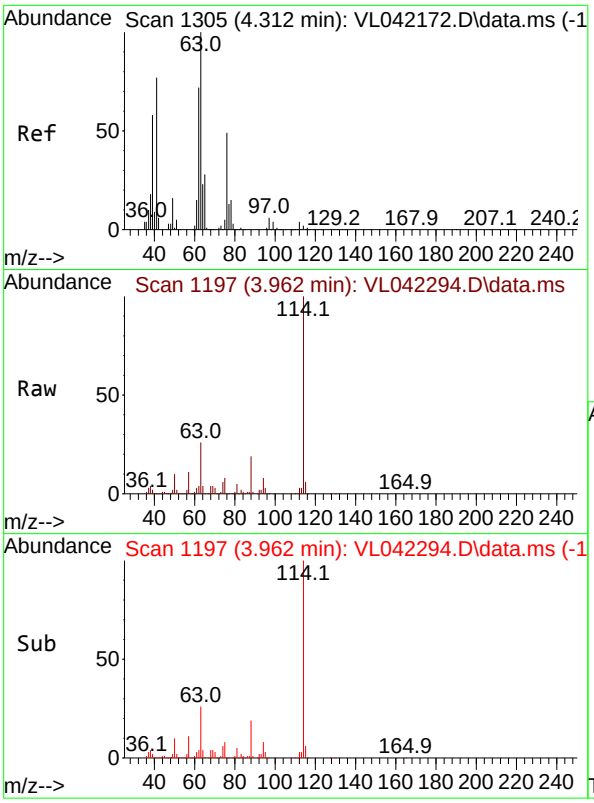


#36
Benzene
Concen: 0.097 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.009 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 78 Resp: 3707

Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	15.8	16.6	24.8#



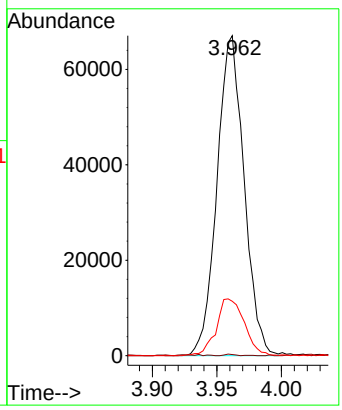


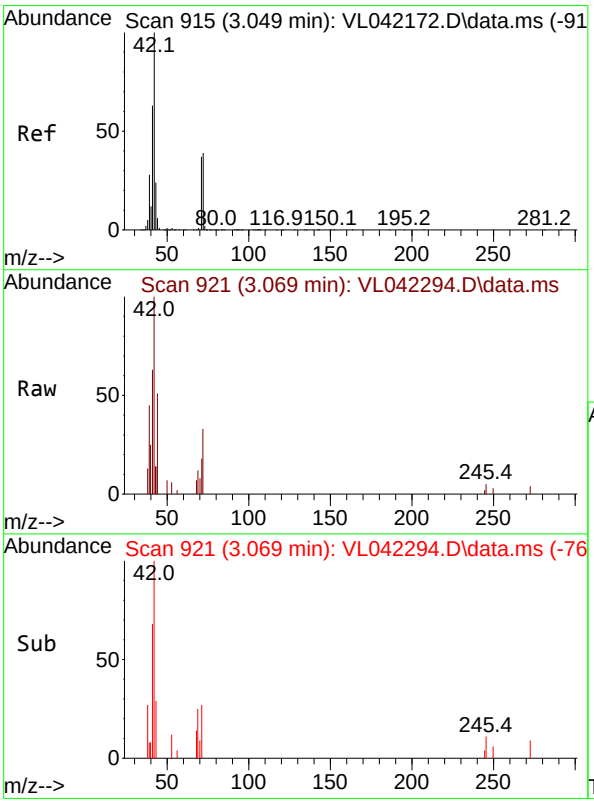
#39
1,2-Dichloropropane
Concen: 7.040 ppbv
RT: 3.962 min Scan# 11
Delta R.T. -0.350 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion: 63 Resp: 97793

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	17.0	57.6	86.4#

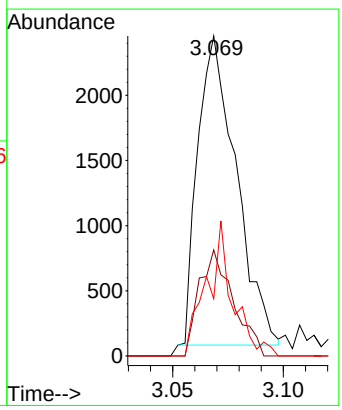


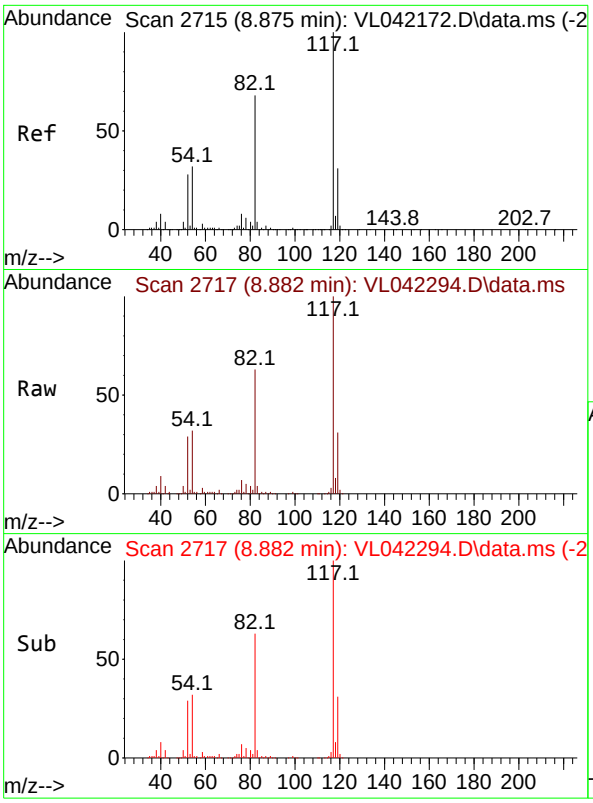


#41
Tetrahydrofuran
Concen: 0.178 ppbv
RT: 3.069 min Scan# 921
Delta R.T. 0.019 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 42 Resp: 2861

Ion	Ratio	Lower	Upper
42	100		
72	30.3	31.4	47.0#
71	29.6	30.2	45.4#



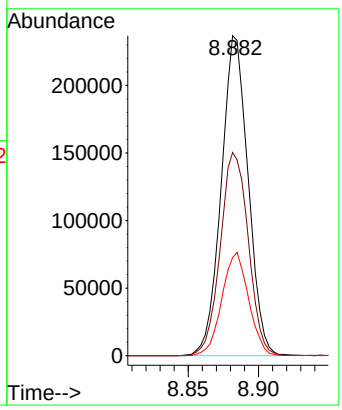


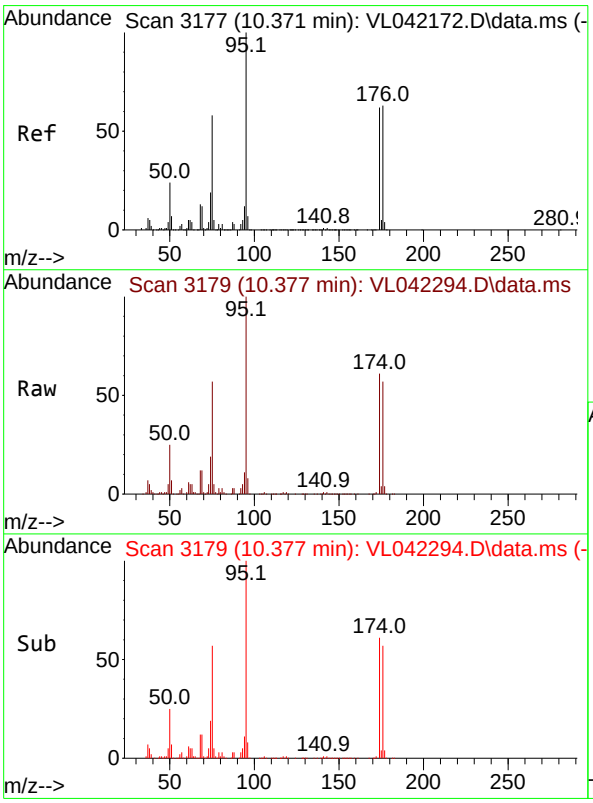
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-2-3242025

Tgt Ion:117 Resp: 314874

Ion	Ratio	Lower	Upper
117	100		
82	66.2	55.8	83.6
119	32.2	25.5	38.3

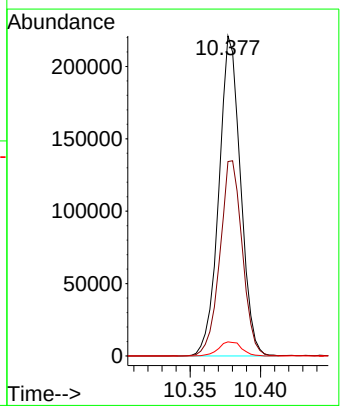




#68
1-Bromo-4-Fluorobenzene
Concen: 9.133 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042294.D
Acq: 09 Apr 2025 15:50

Tgt Ion: 95 Resp: 236151

Ion	Ratio	Lower	Upper
95	100		
174	63.3	50.6	76.0
175	4.7	3.8	5.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Quant Time: Apr 10 01:46:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	157163	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	385586	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	326865	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	260627	9.709	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	9767	0.421	ppbv		99
3) Chlorodifluoromethane	1.476	51	25214	1.064	ppbv	#	89
4) Chloromethane	1.531	50	5476	0.577	ppbv		100
7) Chloroethane	1.703	64	148	0.039	ppbv	#	70
9) Propene	1.560	41	18149	1.670	ppbv		84
11) Trichlorofluoromethane	1.877	101	5036	0.223	ppbv		91
12) 1,1,2-Trichlorotrifluo...	2.140	101	1123	0.061	ppbv		94
13) Ethanol	1.722	45	26305	25.610	ppbv		83
15) Acetone	1.835	43	140811	6.406	ppbv		91
16) 1,3-Butadiene	1.599	39	2235	0.208	ppbv	#	52
17) tert-Butyl alcohol	1.884	59	9877	0.361	ppbv		99
19) Isopropyl Alcohol	1.887	45	262397	21.158	ppbv	#	33
20) Methylene Chloride	2.062	84	9600	1.173	ppbv		93
21) Allyl Chloride	2.039	41	725	0.047	ppbv	#	24
23) Vinyl Acetate	2.470	43	9581	1.007	ppbv	#	49
25) Ethyl Acetate	2.826	43	39156	0.686	ppbv	#	83
26) Hexane	2.826	57	42387	1.924	ppbv	#	35
29) Chloroform	2.845	83	1821	0.056	ppbv	#	82
34) 2-Butanone	2.560	43	89072	3.186	ppbv		97
35) Carbon Tetrachloride	3.758	117	1368	0.045	ppbv	#	92
36) Benzene	3.654	78	11286	0.295	ppbv		92
39) 1,2-Dichloropropane	3.959	63	97589	7.010	ppbv	#	22
41) Tetrahydrofuran	3.065	42	2040	0.127	ppbv	#	88
44) 2,2,4-Trimethylpentane	4.645	57	2338	0.036	ppbv	#	1
53) Toluene	6.933	91	17473	0.386	ppbv		97
57) Chlorobenzene	8.924	112	6308	0.203	ppbv	#	76
58) Ethyl Benzene	9.354	91	3072	0.053	ppbv	#	82
59) m/p-Xylene	9.552	91	1588	0.034	ppbv	#	31
60) o-Xylene	9.963	91	4768	0.103	ppbv		97
62) Isopropylbenzene	10.807	105	46203	0.665	ppbv	#	50
71) 2-Chlorotoluene	10.856	91	13101	0.243	ppbv	#	48
74) 1,2,4-Trimethylbenzene	11.536	105	3557	0.061	ppbv	#	67

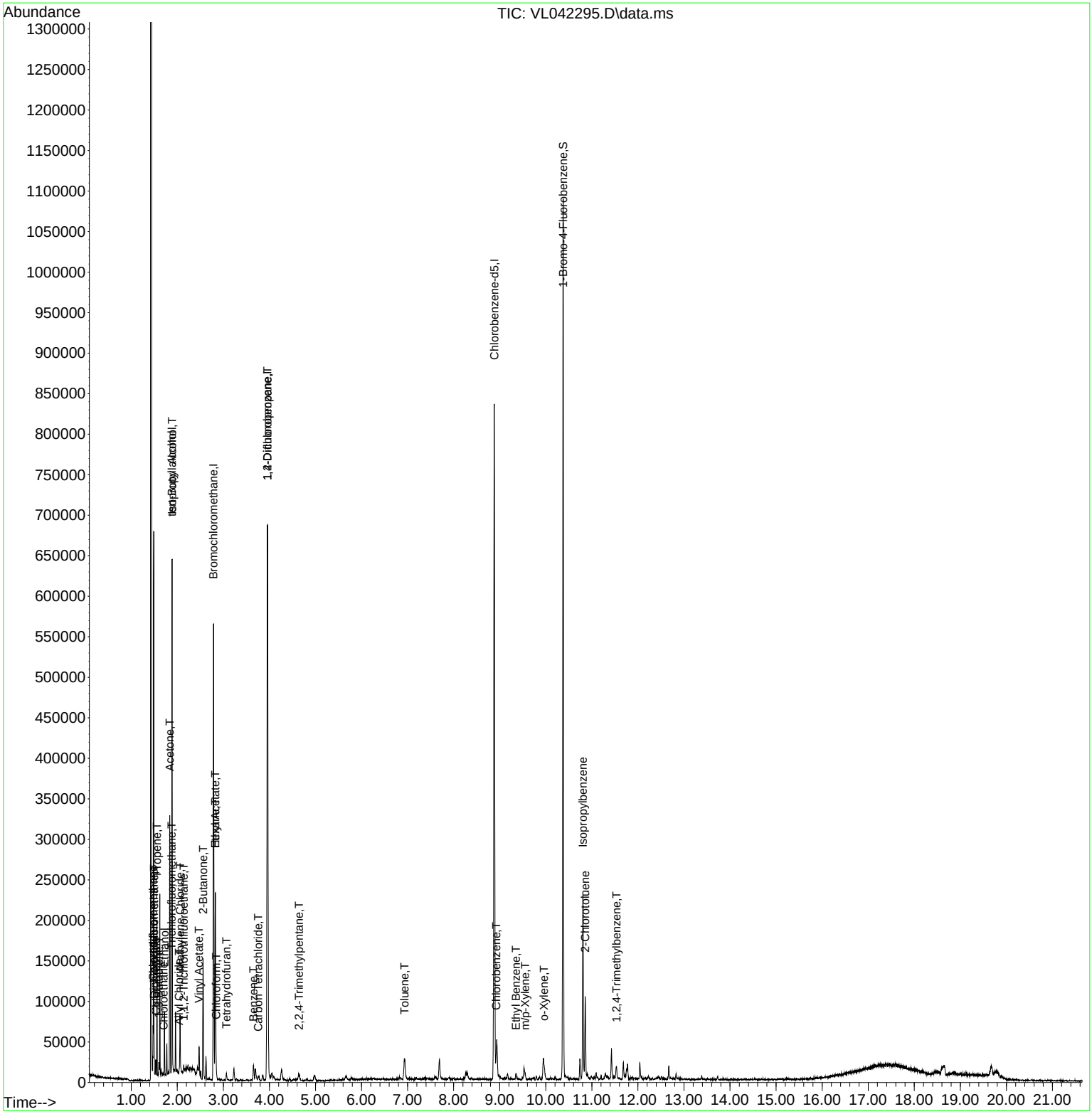
(#) = qualifier out of range (m) = manual integration (+) = signals summed

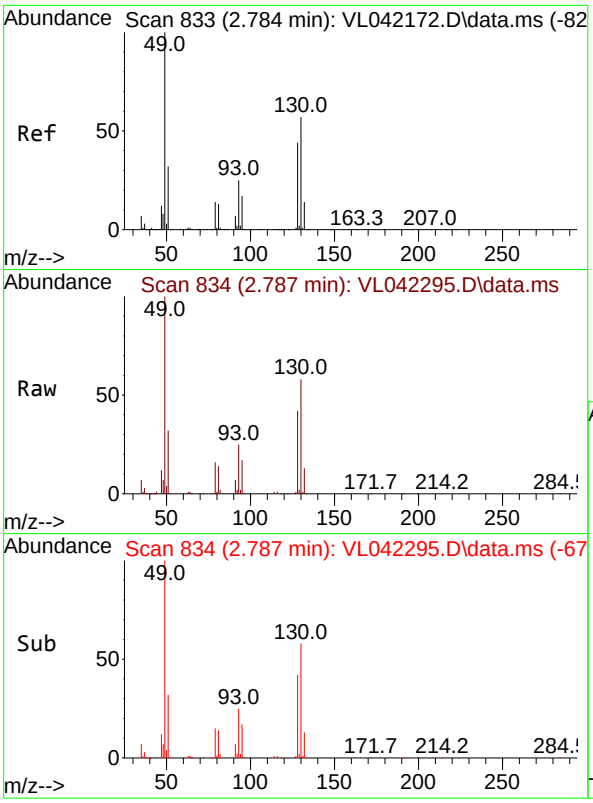
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042295.D
Acq On : 09 Apr 2025 16:23
Operator : SY/MD
Sample : Q1665-09
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Quant Time: Apr 10 01:46:13 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



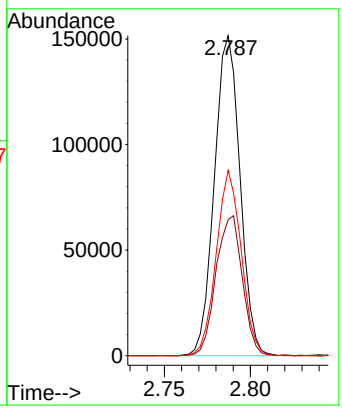


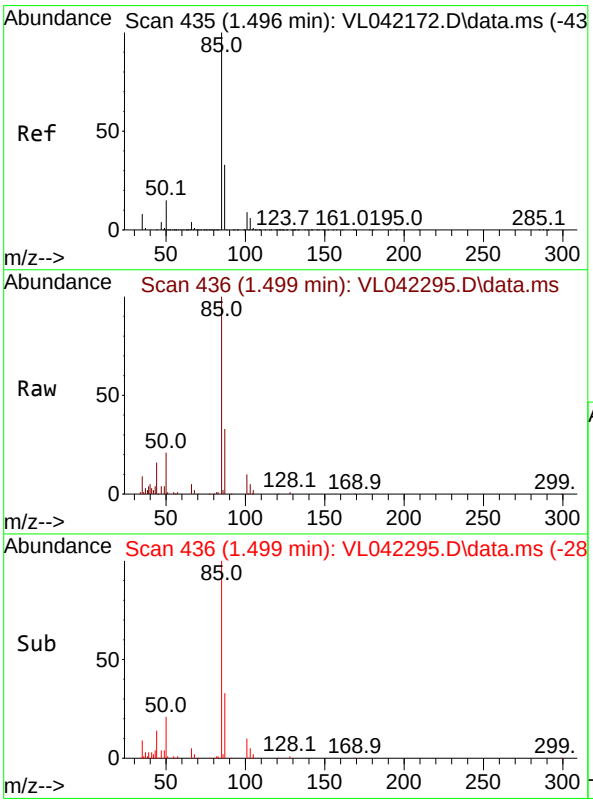
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 49 Resp: 157163

Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.9	68.5
130	56.4	28.8	86.4

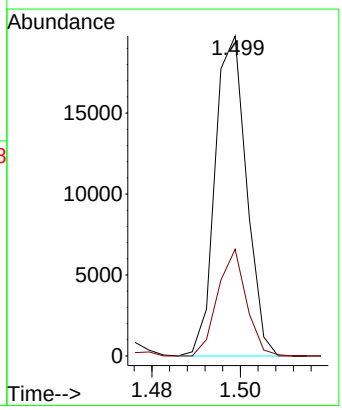


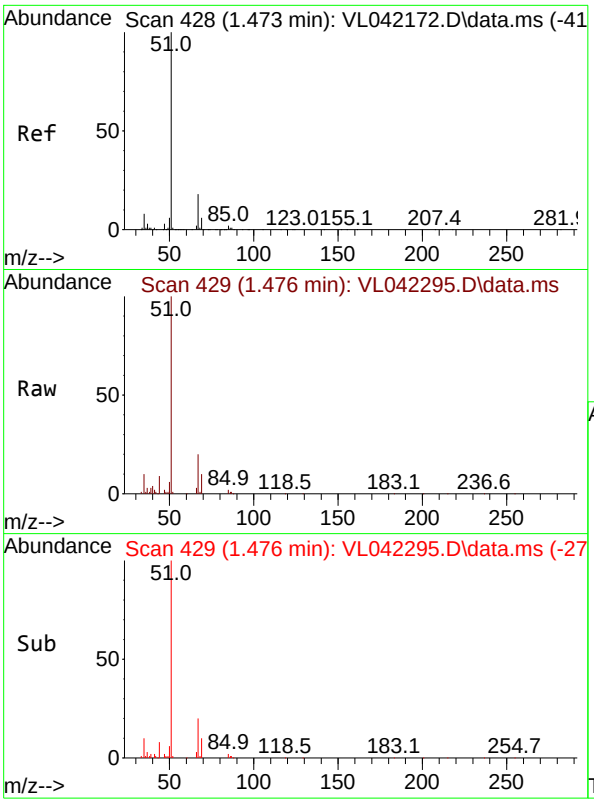


#2
Dichlorodifluoromethane
Concen: 0.421 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 85 Resp: 9767

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.1	39.1



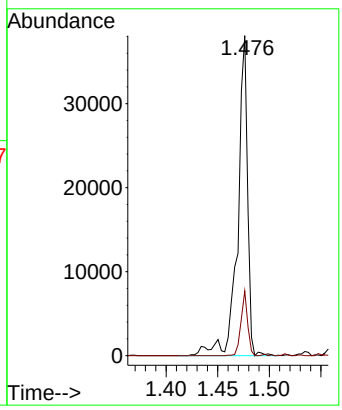


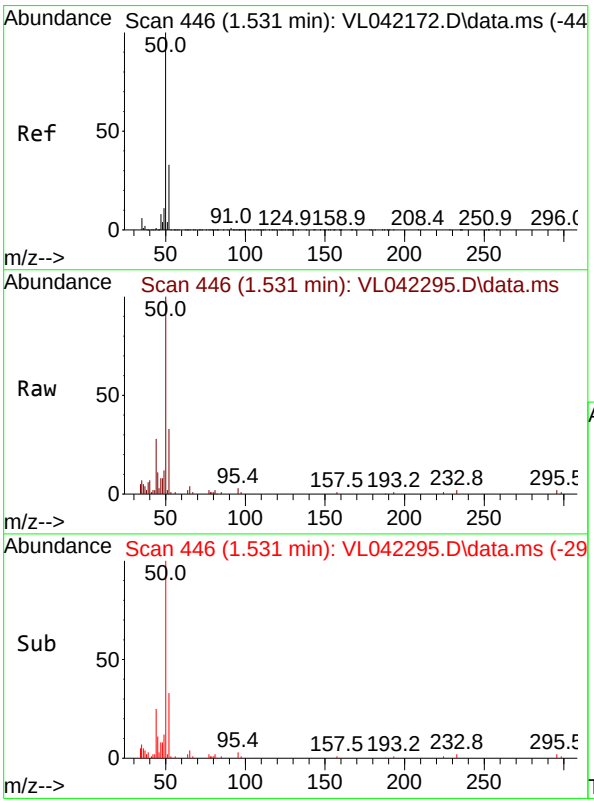
#3
Chlorodifluoromethane
Concen: 1.064 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 51 Resp: 25214

Ion	Ratio	Lower	Upper
51	100		
67	13.7	15.0	22.6#

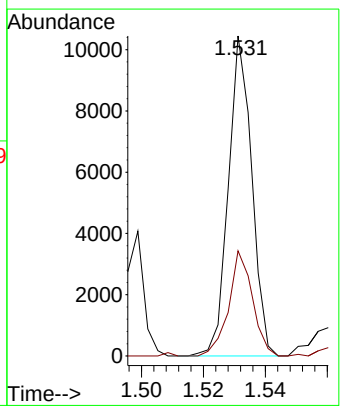


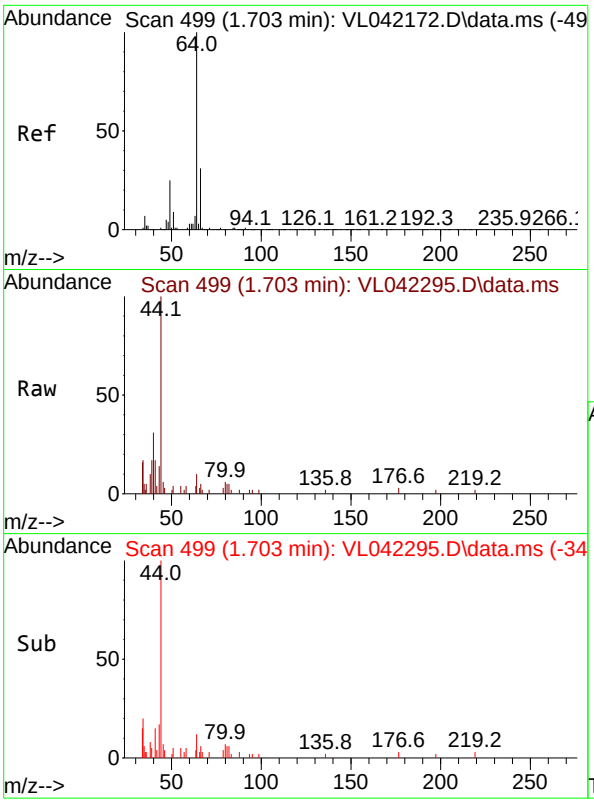


#4
Chloromethane
Concen: 0.577 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 50 Resp: 5476

Ion	Ratio	Lower	Upper
50	100		
52	32.9	26.1	39.1



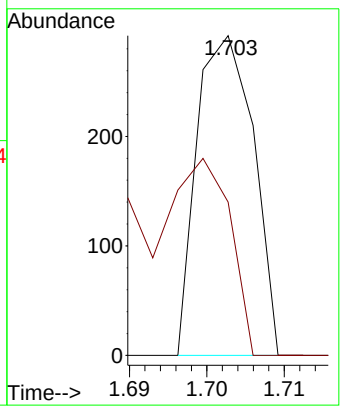


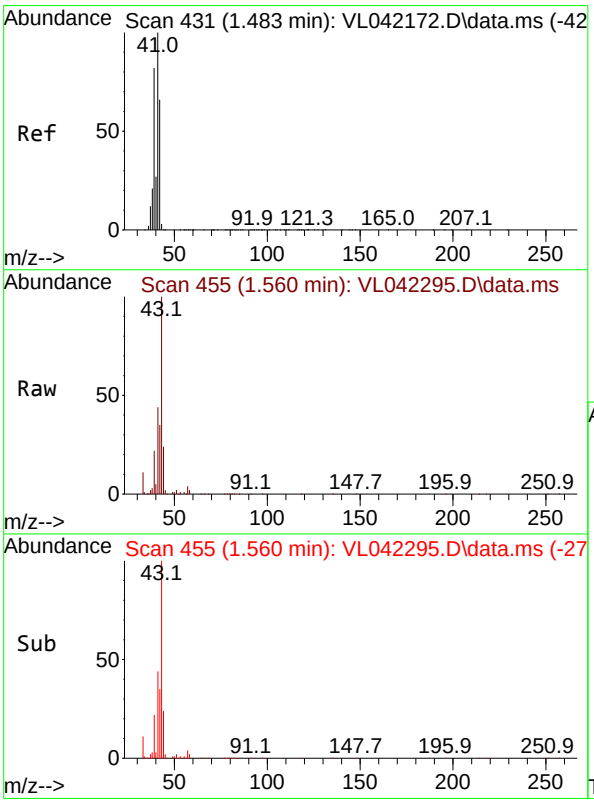
#7
Chloroethane
Concen: 0.039 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 64 Resp: 148

Ion	Ratio	Lower	Upper
64	100		
66	47.9	25.2	37.8#

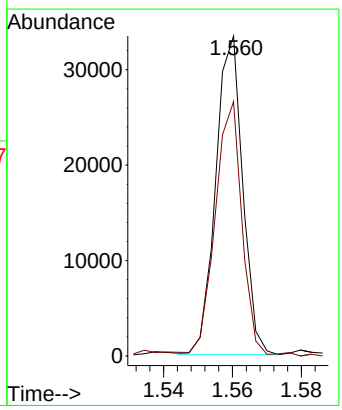


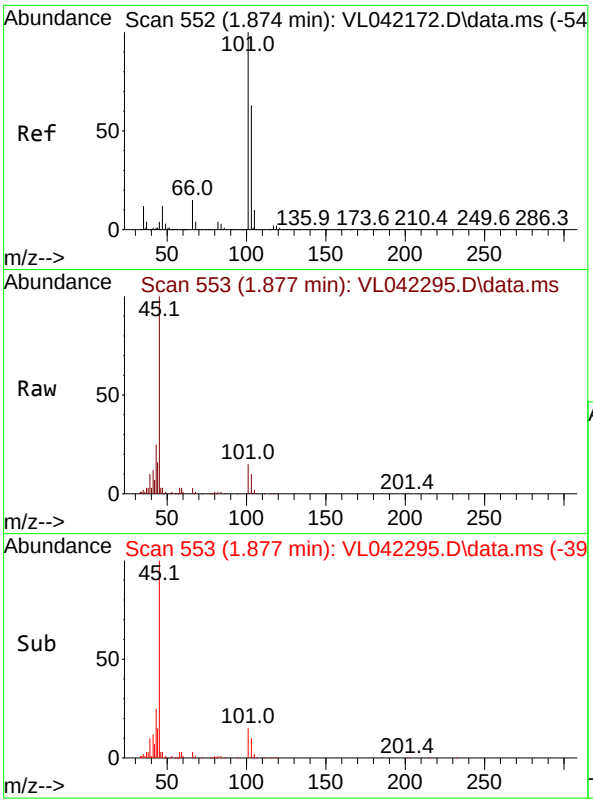


#9
Propene
Concen: 1.670 ppbv
RT: 1.560 min Scan# 455
Delta R.T. 0.077 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 41 Resp: 18149

Ion	Ratio	Lower	Upper
41	100		
42	82.3	55.4	83.2



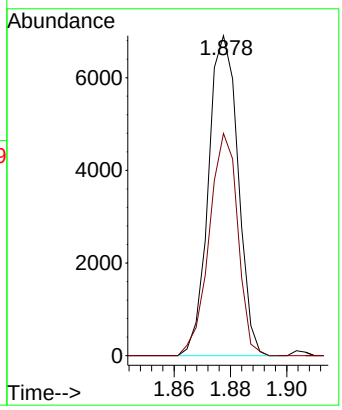


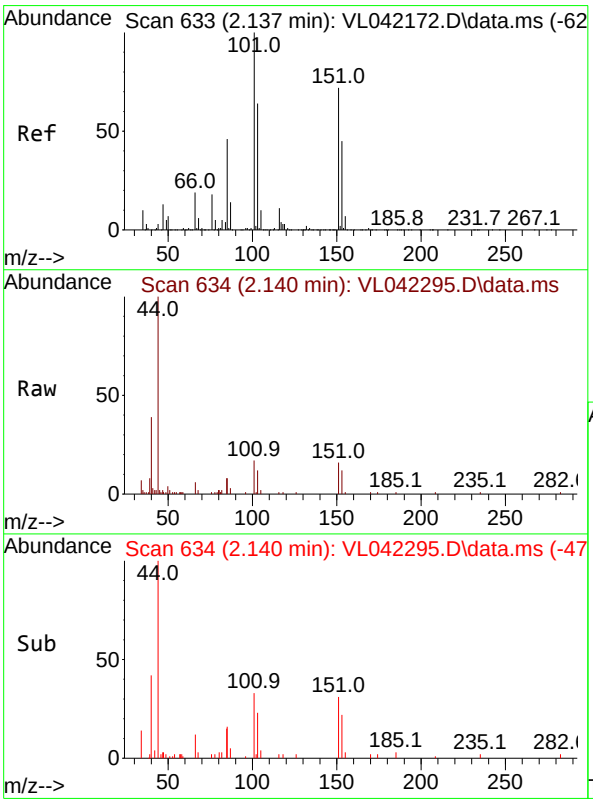
#11
Trichlorofluoromethane
Concen: 0.223 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion:101 Resp: 5036

Ion	Ratio	Lower	Upper
101	100		
103	69.5	50.2	75.2

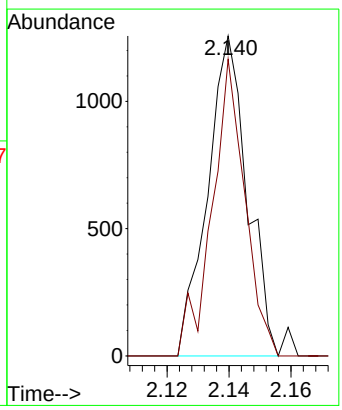


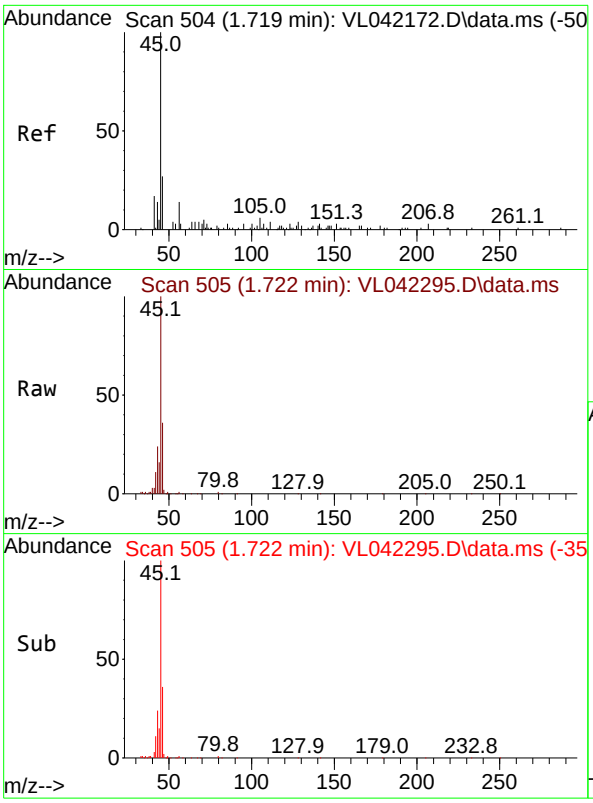


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.061 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:101 Resp: 1123

Ion	Ratio	Lower	Upper
101	100		
151	76.3	57.1	85.7



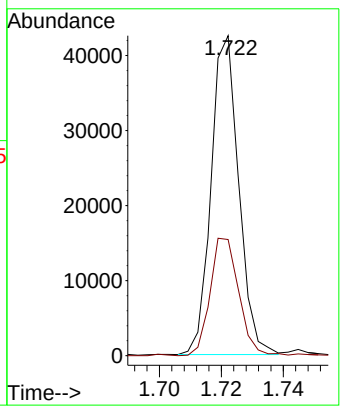


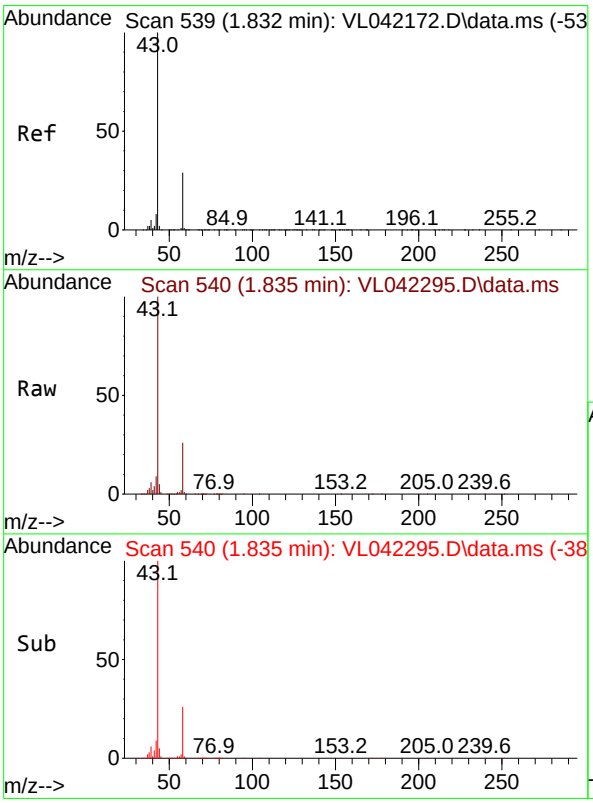
#13
Ethanol
Concen: 25.610 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 45 Resp: 26305

Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8

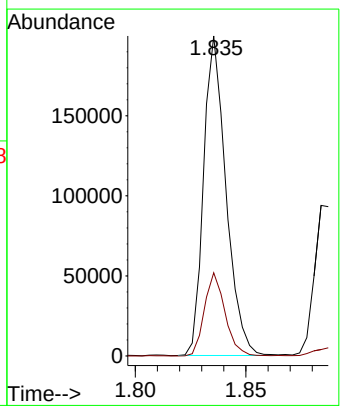


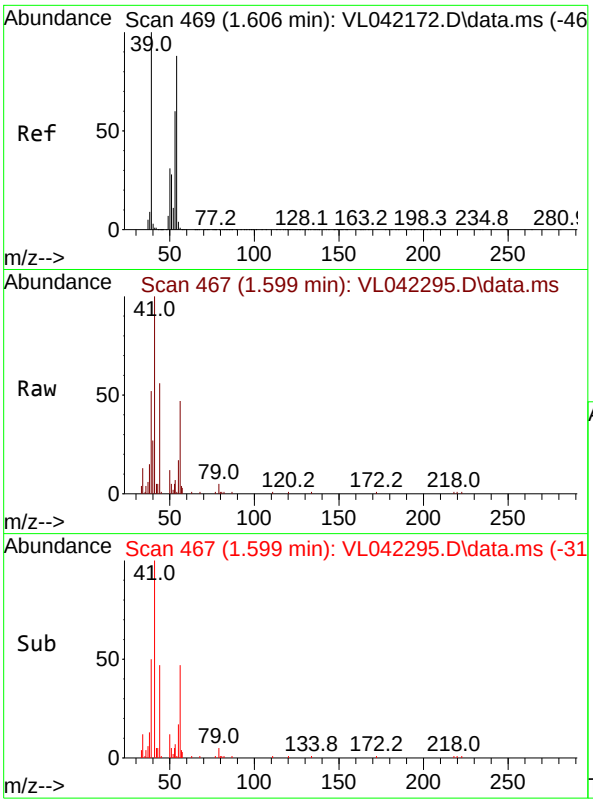


#15
Acetone
Concen: 6.406 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 43 Resp: 140811

Ion	Ratio	Lower	Upper
43	100		
58	24.0	23.2	34.8



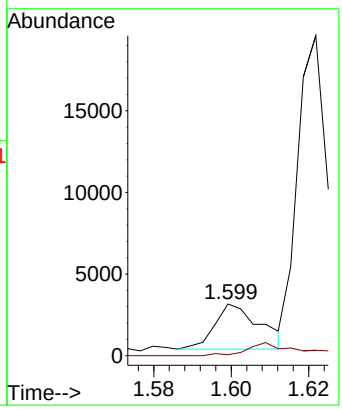


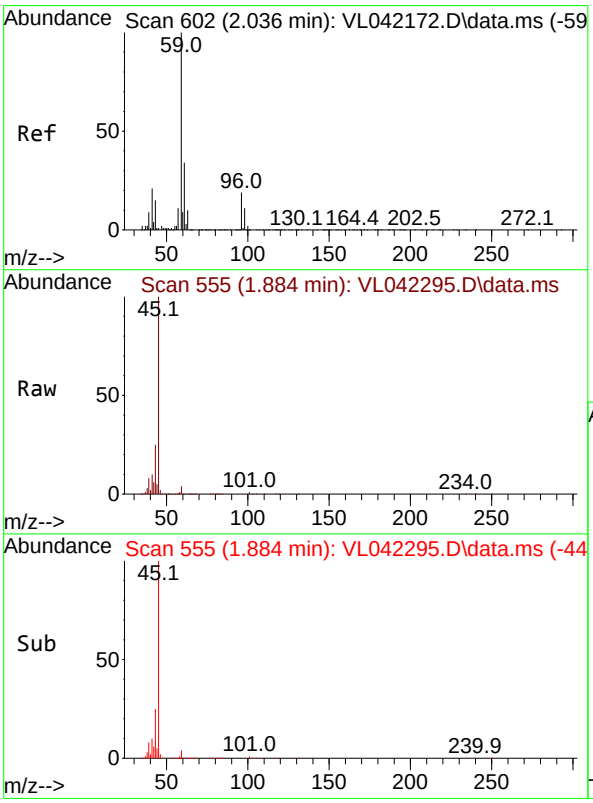
#16
1,3-Butadiene
Concen: 0.208 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 39 Resp: 2235

Ion	Ratio	Lower	Upper
39	100		
54	35.0	60.7	91.1#

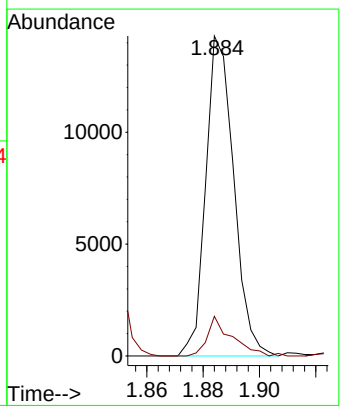


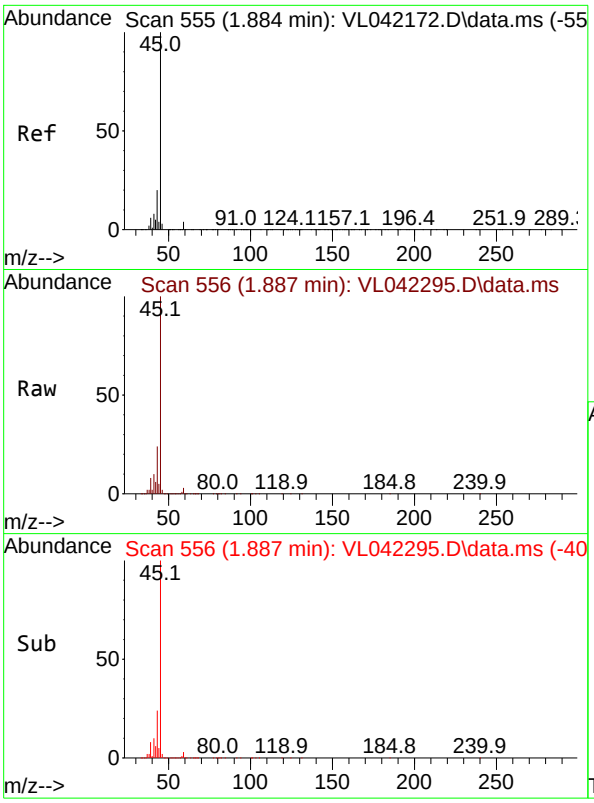


#17
tert-Butyl alcohol
Concen: 0.361 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.152 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 59 Resp: 9877

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.9	13.3



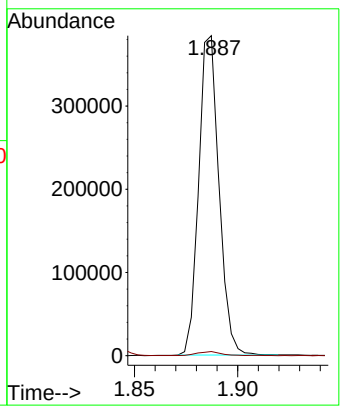


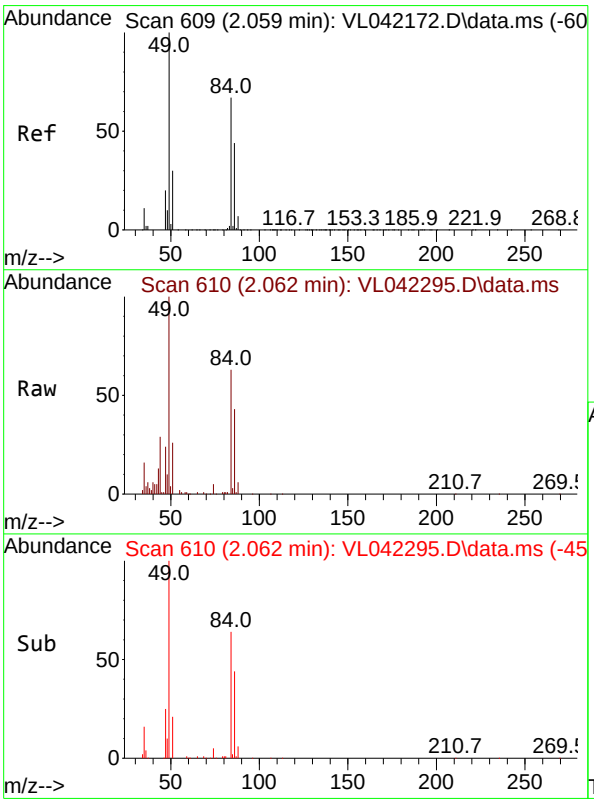
#19
Isopropyl Alcohol
Concen: 21.158 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 45 Resp: 262397

Ion	Ratio	Lower	Upper
45	100		
58	1.6	36.9	55.3#

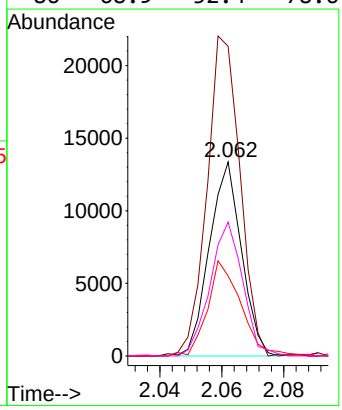


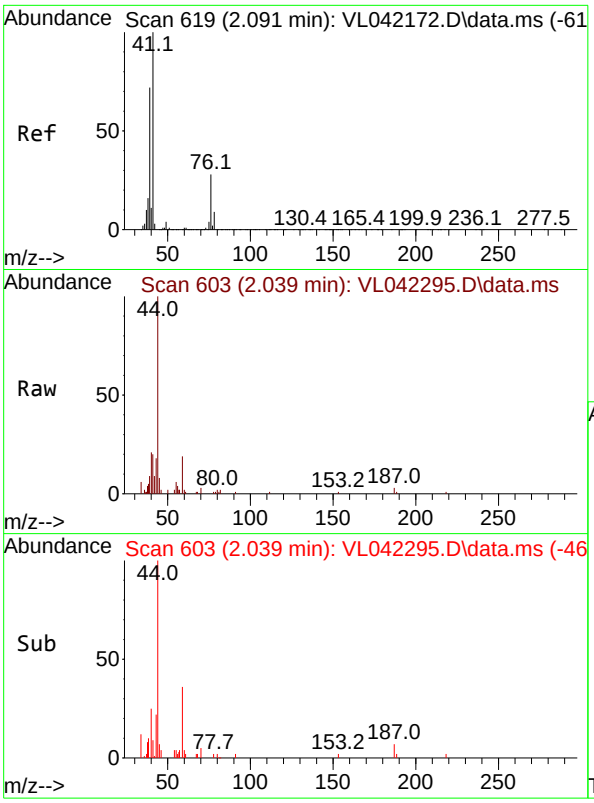


#20
Methylene Chloride
Concen: 1.173 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 84 Resp: 9600

Ion	Ratio	Lower	Upper
84	100		
49	158.7	120.2	180.4
51	39.5	37.4	56.0
86	68.9	52.4	78.6



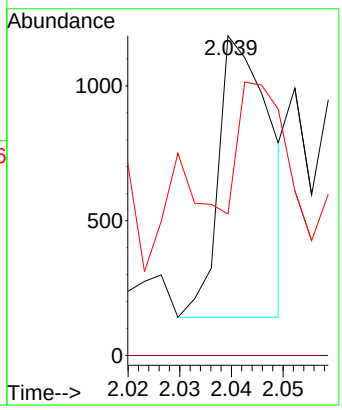


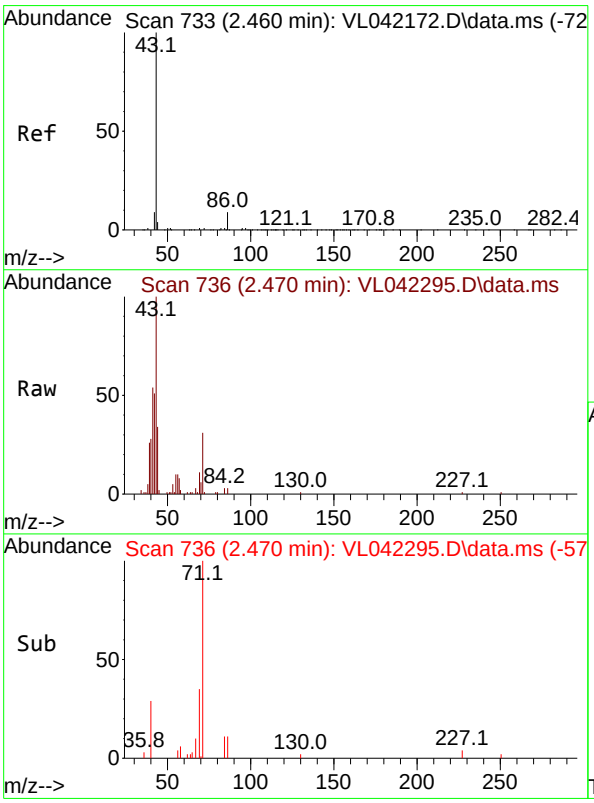
#21
Allyl Chloride
Concen: 0.047 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.052 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 41 Resp: 725

Ion	Ratio	Lower	Upper
41	100		
76	6.1	24.1	36.1#
39	0.0	61.1	91.7#

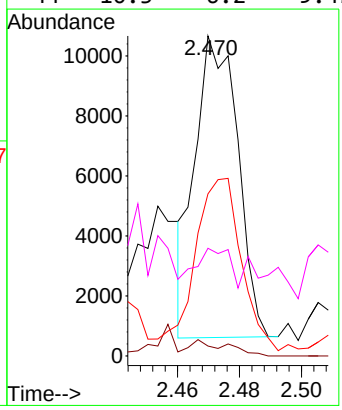


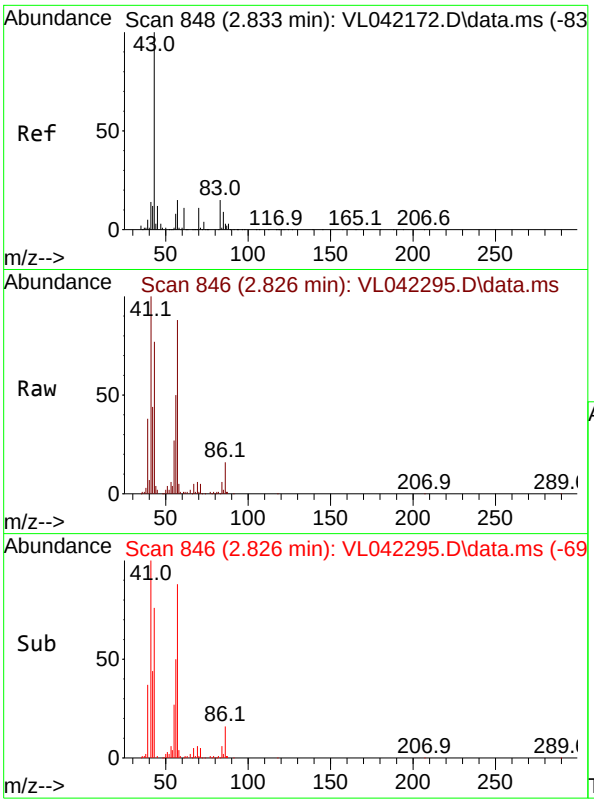


#23
Vinyl Acetate
Concen: 1.007 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.010 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 43 Resp: 9581

Ion	Ratio	Lower	Upper
43	100		
86	3.3	5.5	8.3#
42	52.1	8.6	13.0#
44	10.3	6.2	9.4#



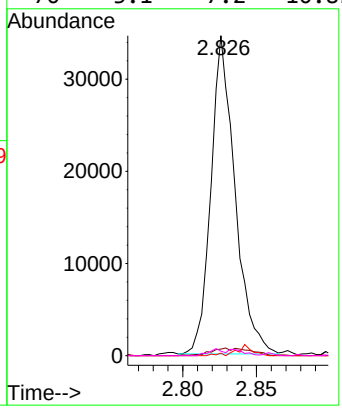


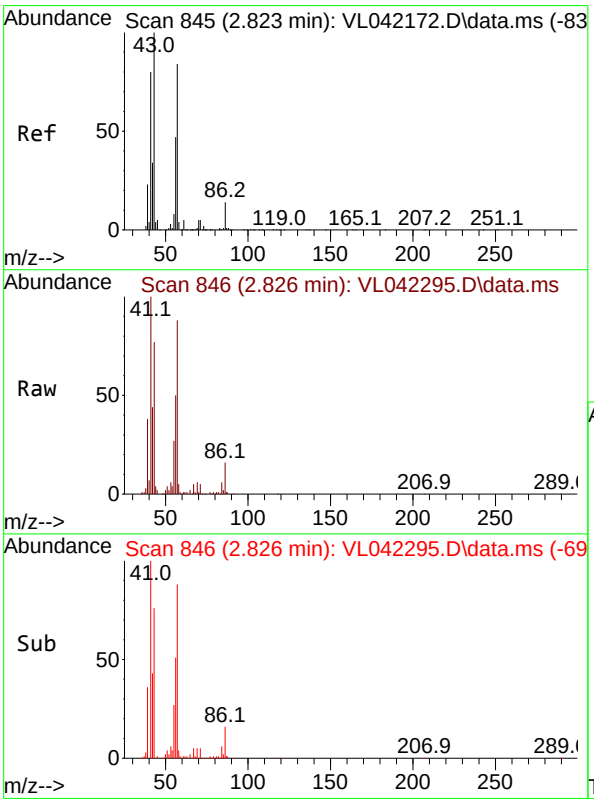
#25
Ethyl Acetate
Concen: 0.686 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.007 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 43 Resp: 39156

Ion	Ratio	Lower	Upper
43	100		
45	4.0	8.2	12.2#
61	2.2	7.3	10.9#
70	3.1	7.2	10.8#

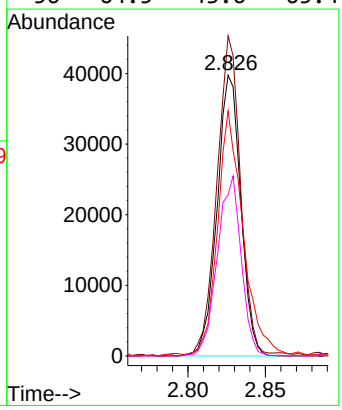


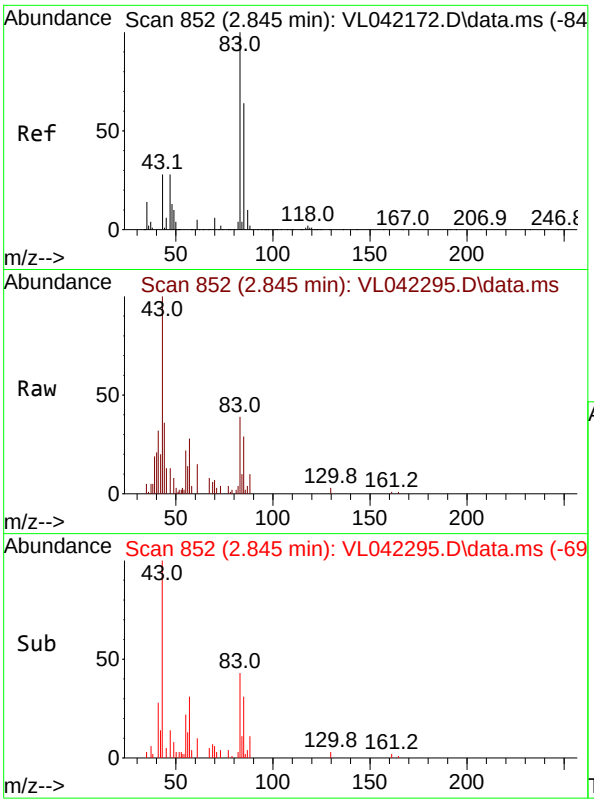


#26
Hexane
Concen: 1.924 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 57 Resp: 42387

Ion	Ratio	Lower	Upper
57	100		
41	114.5	76.6	114.8
43	95.4	207.8	311.8#
56	64.5	43.6	65.4



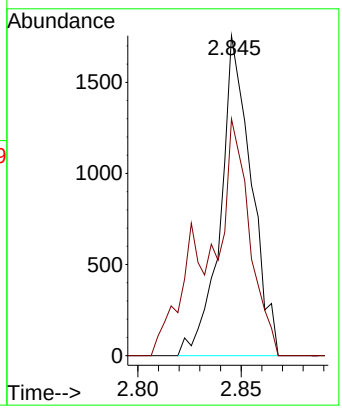


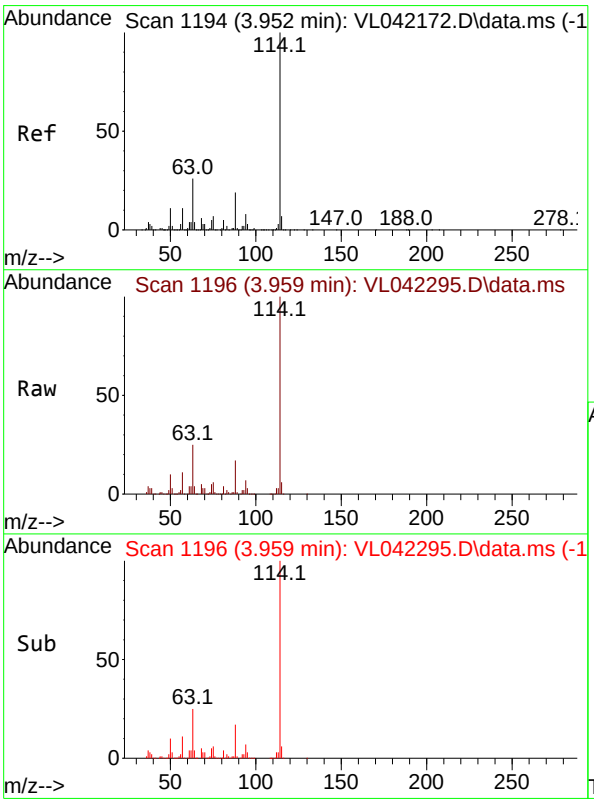
#29
Chloroform
Concen: 0.056 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 83 Resp: 1821

Ion	Ratio	Lower	Upper
83	100		
85	78.2	51.4	77.2#

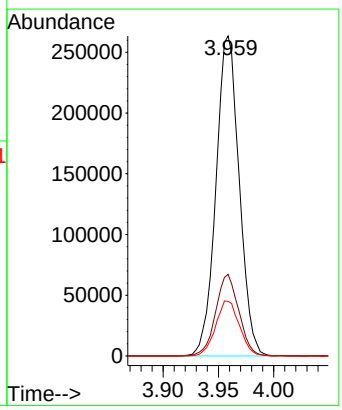


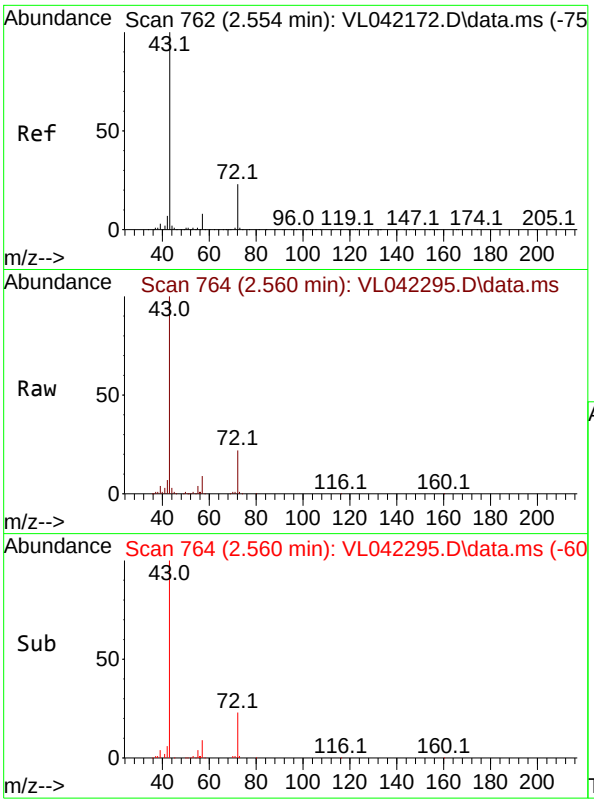


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:114 Resp: 385586

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.6	15.0	22.4



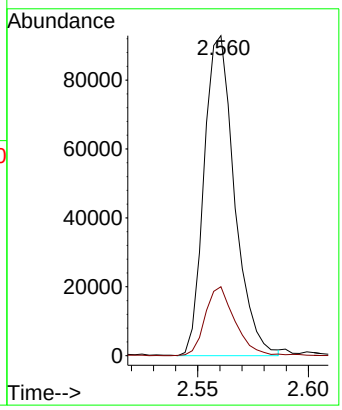


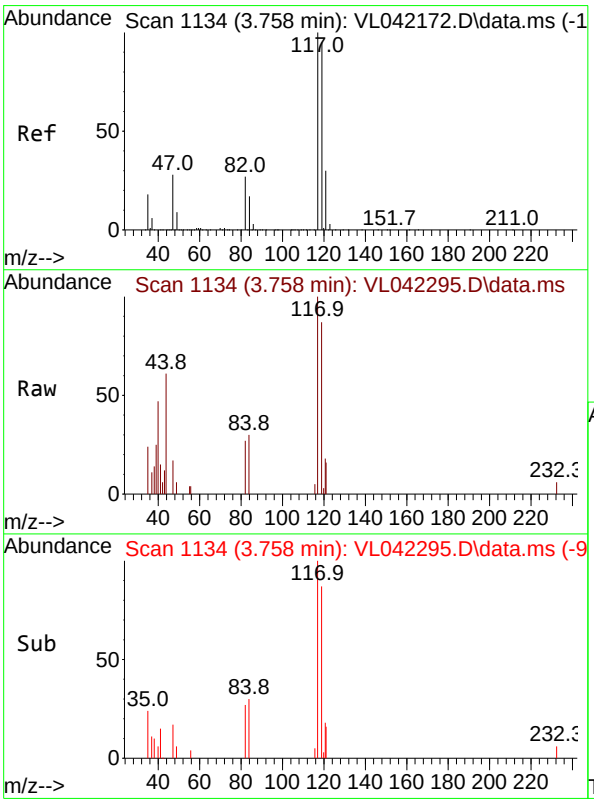
#34
2-Butanone
Concen: 3.186 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 43 Resp: 89072

Ion	Ratio	Lower	Upper
43	100		
72	21.3	18.2	27.2

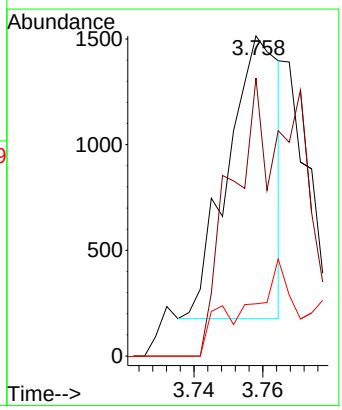


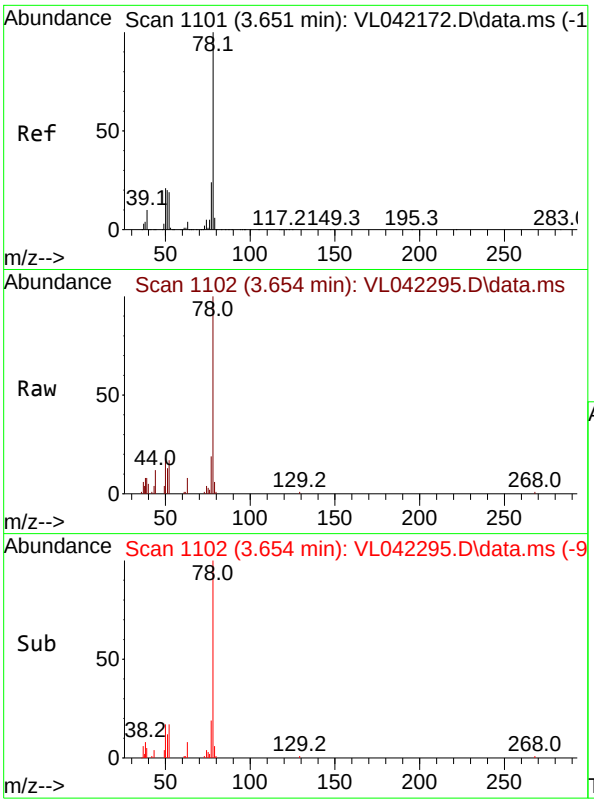


#35
Carbon Tetrachloride
Concen: 0.045 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:117 Resp: 1368

Ion	Ratio	Lower	Upper
117	100		
119	98.4	76.2	114.2
121	18.5	24.2	36.4#



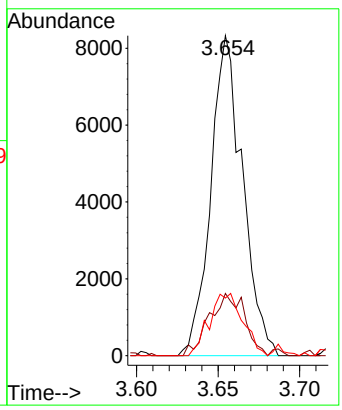


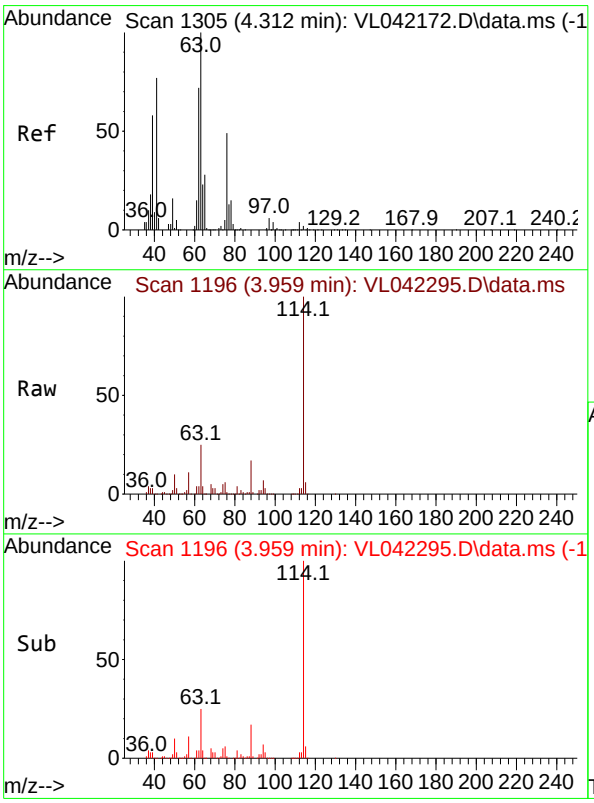
#36
Benzene
Concen: 0.295 ppbv
RT: 3.654 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 78 Resp: 11286

Ion	Ratio	Lower	Upper
78	100		
77	19.4	19.1	28.7
50	18.0	16.6	24.8

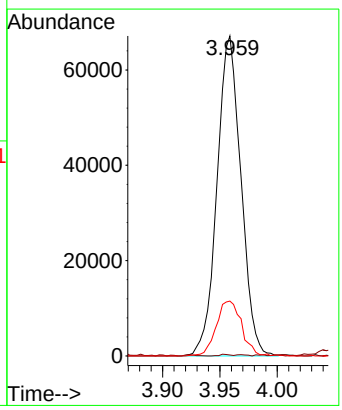


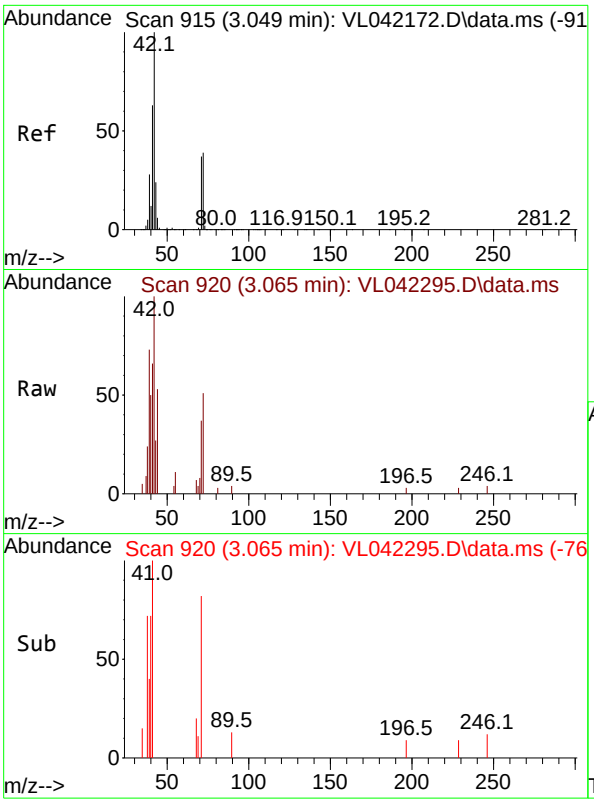


#39
1,2-Dichloropropane
Concen: 7.010 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 63 Resp: 97589

Ion	Ratio	Lower	Upper
63	100		
41	0.3	61.7	92.5#
62	17.1	57.6	86.4#



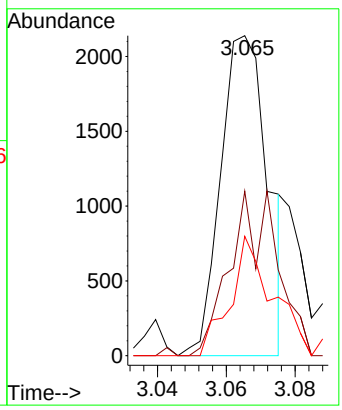


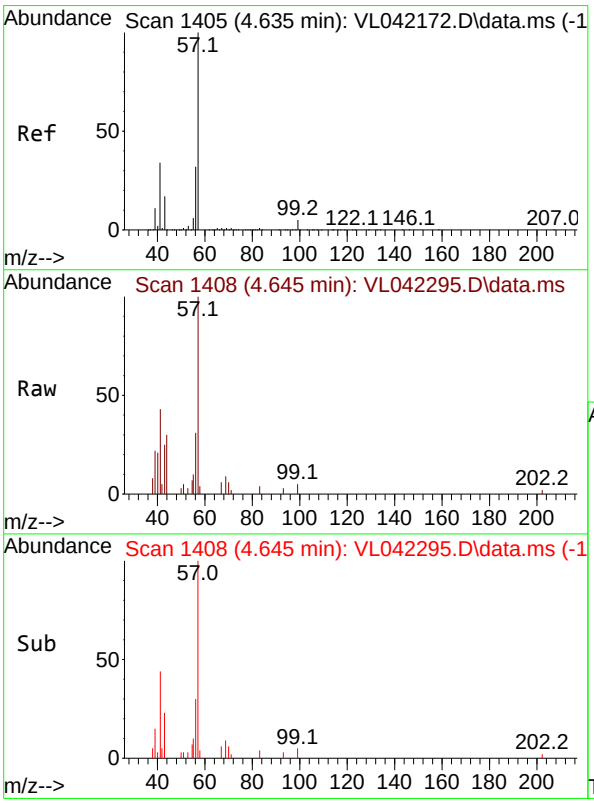
#41
Tetrahydrofuran
Concen: 0.127 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.016 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 42 Resp: 2040

Ion	Ratio	Lower	Upper
42	100		
72	51.7	31.4	47.0#
71	35.2	30.2	45.4

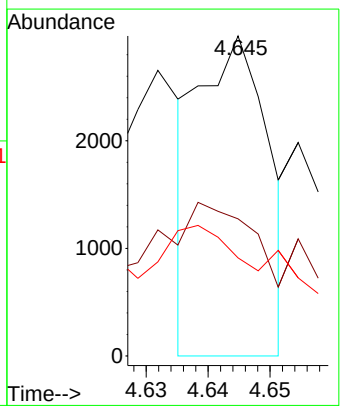


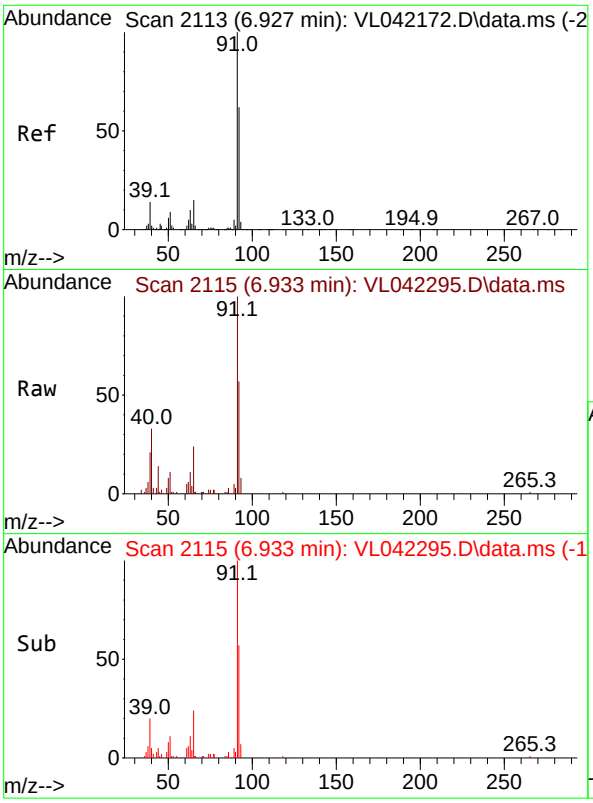


#44
2,2,4-Trimethylpentane
Concen: 0.036 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. 0.010 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 57 Resp: 2338

Ion	Ratio	Lower	Upper
57	100		
41	154.5	26.8	40.2#
56	123.6	25.6	38.4#



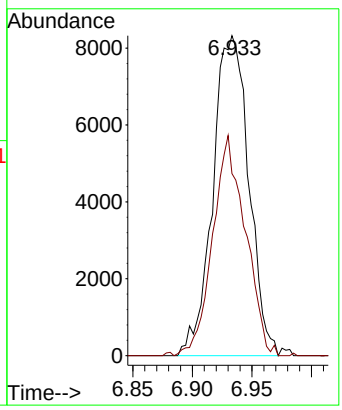


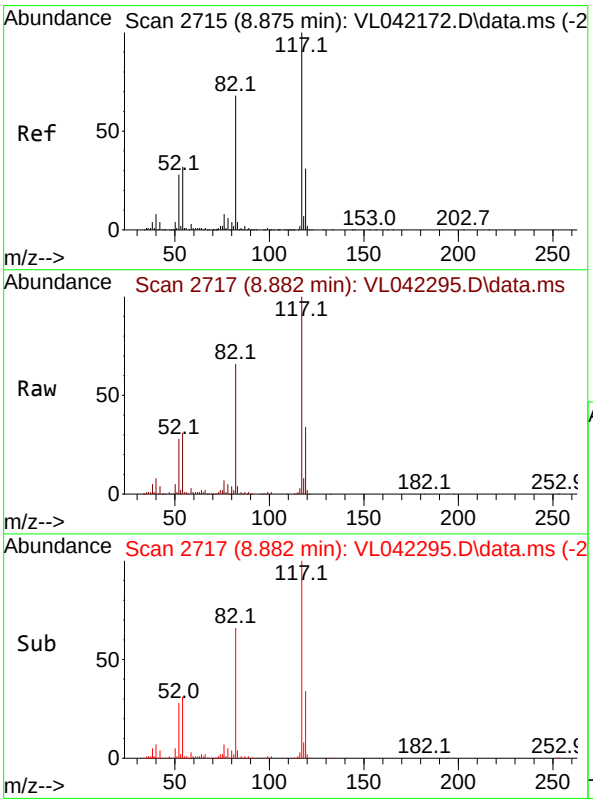
#53
Toluene
Concen: 0.386 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 91 Resp: 17473

Ion	Ratio	Lower	Upper
91	100		
92	62.6	48.4	72.6

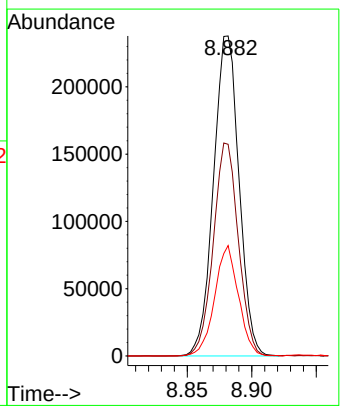


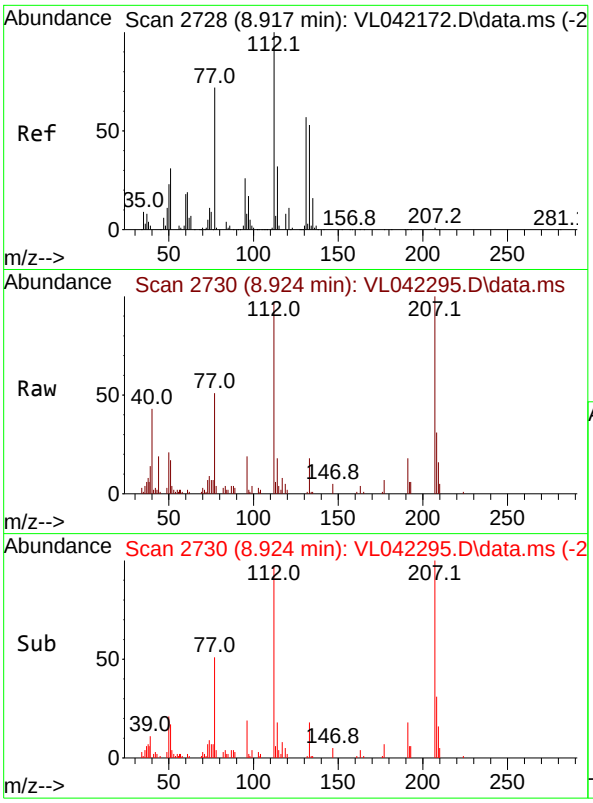


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2717
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:117 Resp: 326865

Ion	Ratio	Lower	Upper
117	100		
82	65.3	55.8	83.6
119	32.2	25.5	38.3



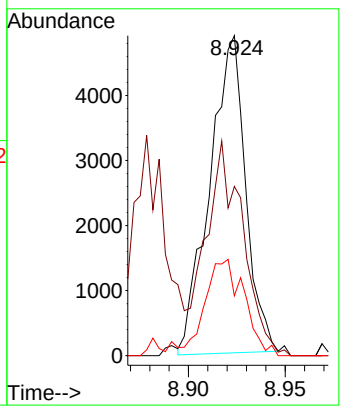


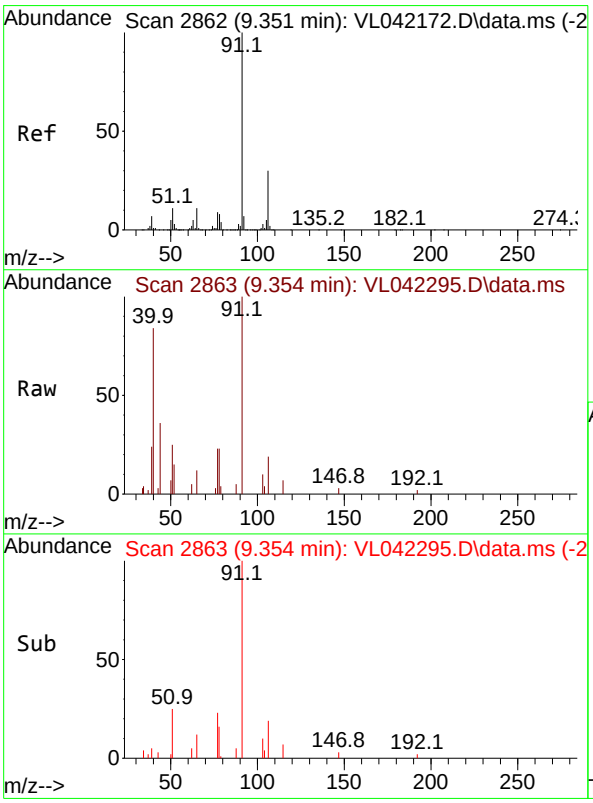
#57
Chlorobenzene
Concen: 0.203 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion:112 Resp: 6308

Ion	Ratio	Lower	Upper
112	100		
77	52.5	58.2	87.2#
114	18.9	29.1	35.5#

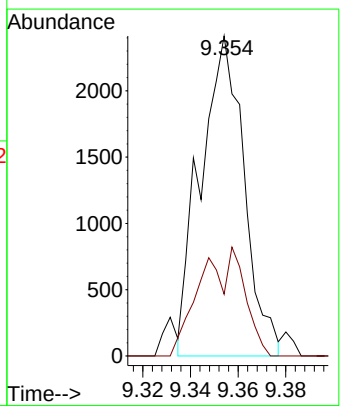


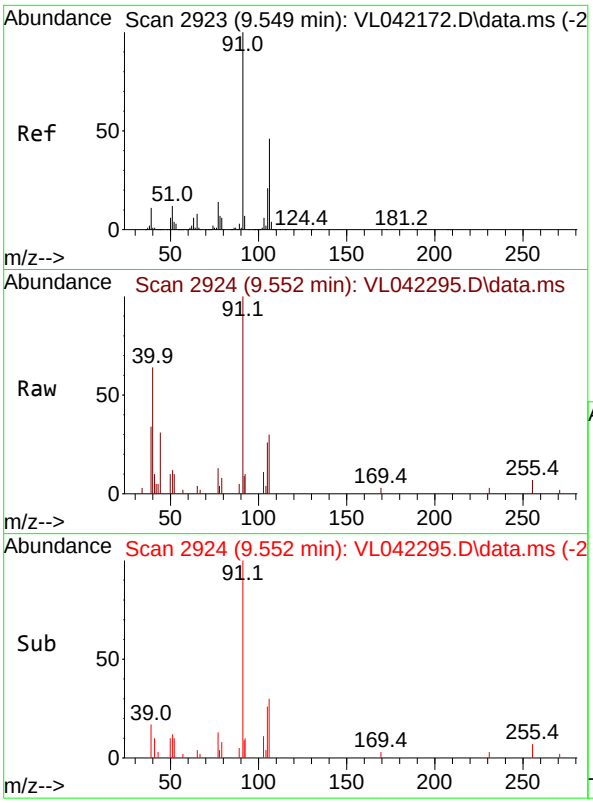


#58
Ethyl Benzene
Concen: 0.053 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 91 Resp: 3072

Ion	Ratio	Lower	Upper
91	100		
106	20.2	24.2	36.2#



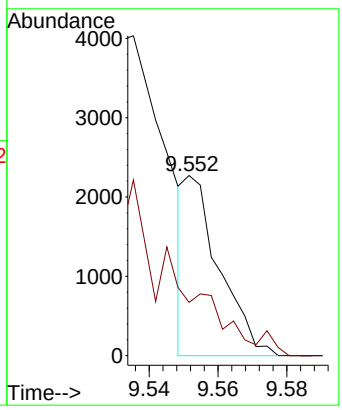


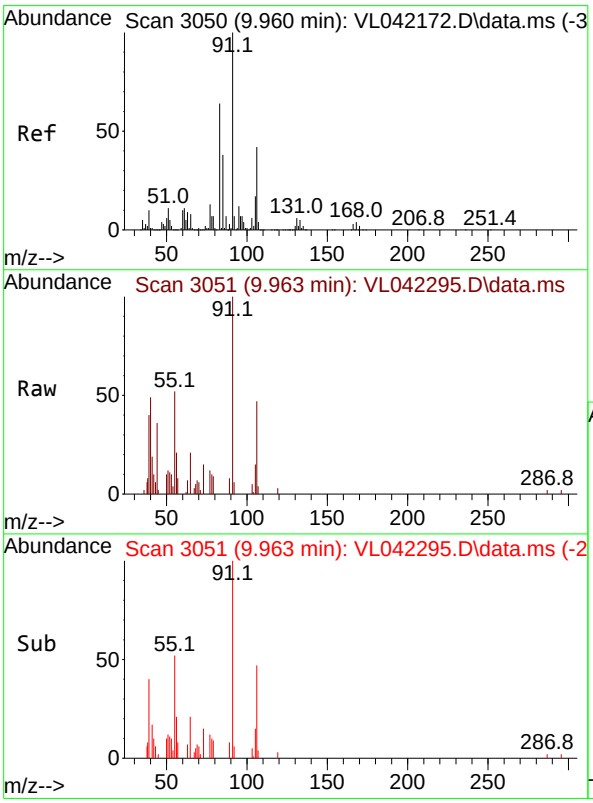
#59
m/p-Xylene
Concen: 0.034 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 91 Resp: 1588

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

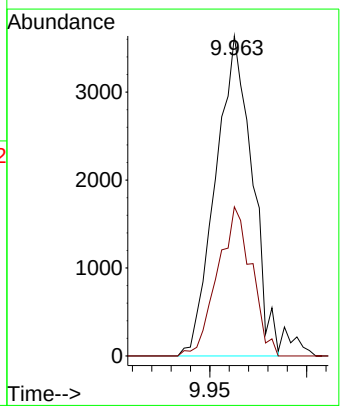


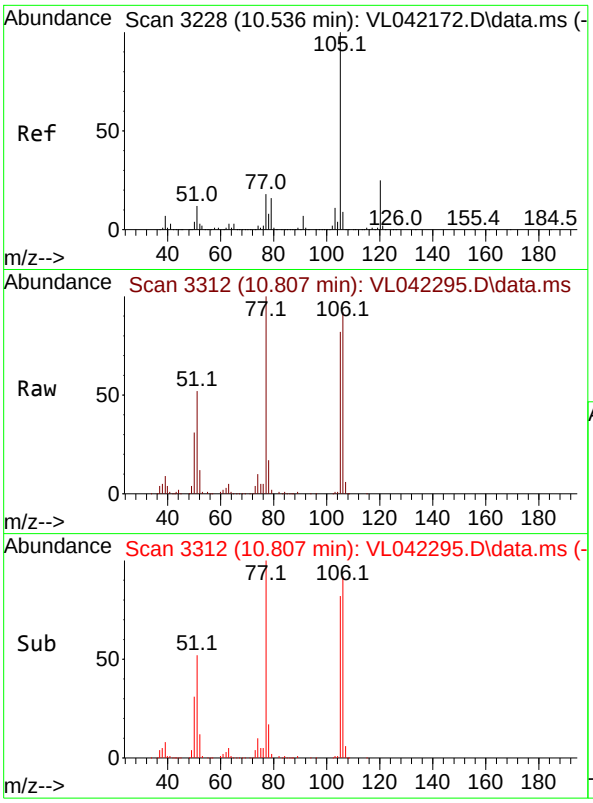


#60
o-Xylene
Concen: 0.103 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 91 Resp: 4768

Ion	Ratio	Lower	Upper
91	100		
106	43.4	20.8	62.5



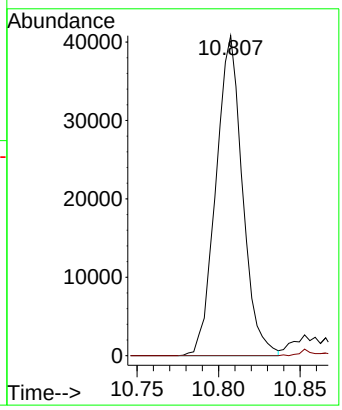


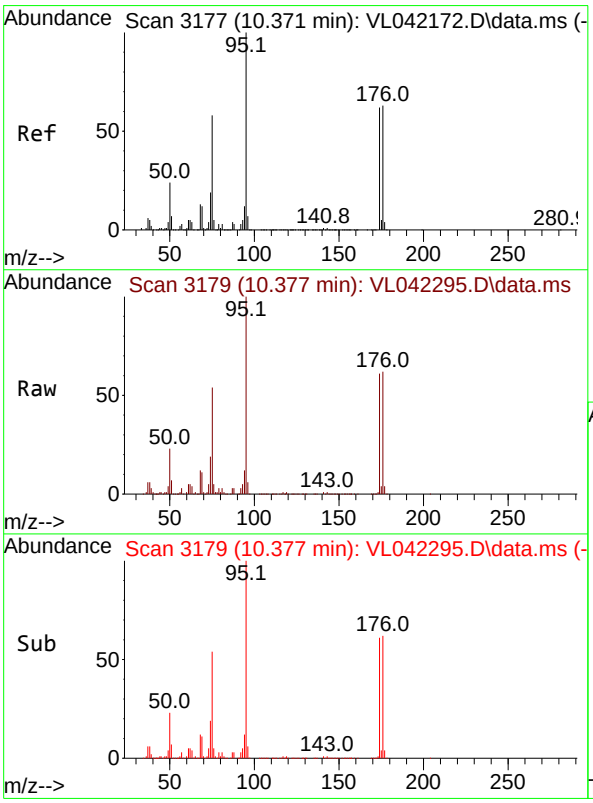
#62
Isopropylbenzene
Concen: 0.665 ppbv
RT: 10.807 min Scan# 3
Delta R.T. 0.272 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion:105 Resp: 46203

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.9	29.9#

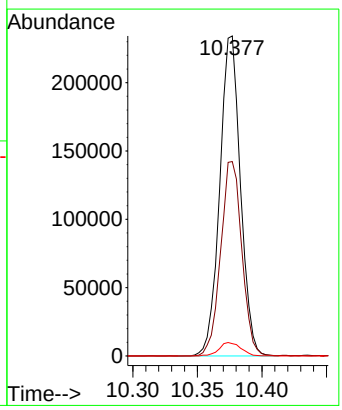


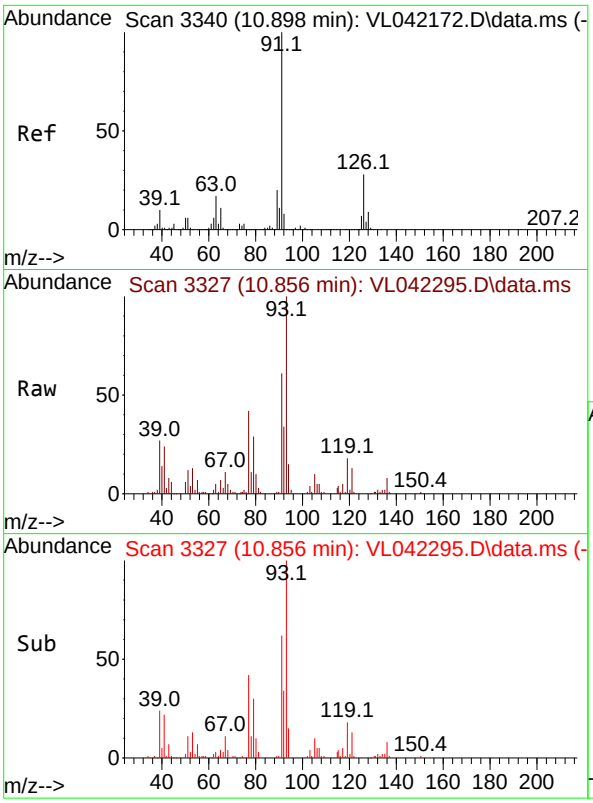


#68
1-Bromo-4-Fluorobenzene
Concen: 9.709 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion: 95 Resp: 260627

Ion	Ratio	Lower	Upper
95	100		
174	62.2	50.6	76.0
175	4.5	3.8	5.6



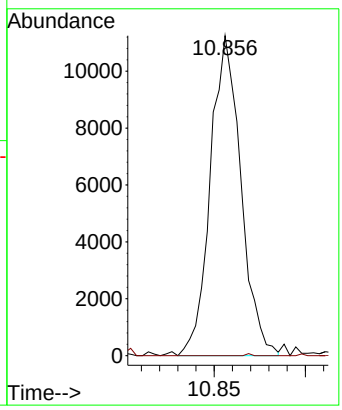


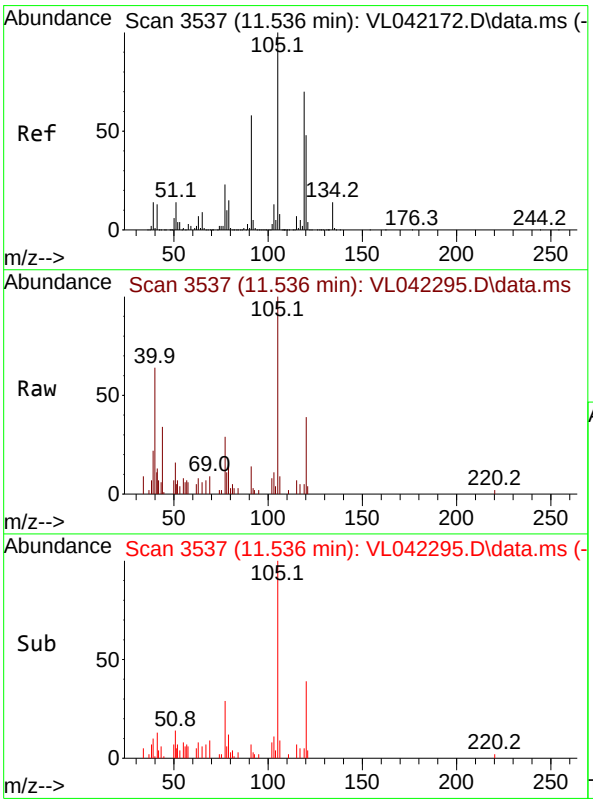
#71
2-Chlorotoluene
Concen: 0.243 ppbv
RT: 10.856 min Scan# 3
Delta R.T. -0.042 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-2-3242025

Tgt Ion: 91 Resp: 13101

Ion	Ratio	Lower	Upper
91	100		
126	1.2	11.6	46.4#

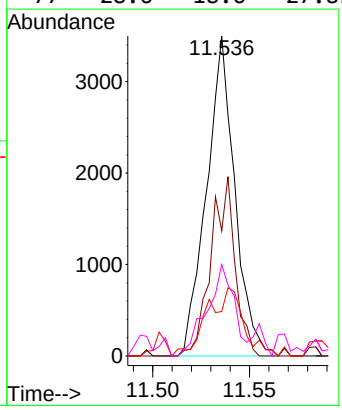




#74
1,2,4-Trimethylbenzene
Concen: 0.061 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042295.D
Acq: 09 Apr 2025 16:23

Tgt Ion:105 Resp: 3557

Ion	Ratio	Lower	Upper
105	100		
120	39.1	38.6	58.0
91	13.9	46.2	69.2#
77	28.6	18.6	27.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Quant Time: Apr 10 01:46:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	161865	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	384782	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	329132	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	253889	9.393	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10098	0.423	ppbv		94
3) Chlorodifluoromethane	1.622	51	2003	0.082	ppbv		99
4) Chloromethane	1.531	50	4745	0.486	ppbv		96
7) Chloroethane	1.706	64	129	0.033	ppbv	#	70
9) Propene	1.884	41	48825	4.363	ppbv		91
10) Heptane	4.981	43	1866	0.063	ppbv	#	28
11) Trichlorofluoromethane	1.877	101	4945	0.213	ppbv	#	74
12) 1,1,2-Trichlorotrifluo...	2.140	101	1447	0.076	ppbv		95
13) Ethanol	1.722	45	33576	31.739	ppbv		81
15) Acetone	1.835	43	182118	8.045	ppbv		92
16) 1,3-Butadiene	1.599	39	2415	0.218	ppbv	#	48
17) tert-Butyl alcohol	1.884	59	17996	0.638	ppbv		100
19) Isopropyl Alcohol	1.884	45	498343	39.016	ppbv	#	32
20) Methylene Chloride	2.062	84	11004	1.305	ppbv		96
21) Allyl Chloride	2.230	41	746	0.047	ppbv	#	26
23) Vinyl Acetate	2.473	43	11170	1.140	ppbv	#	44
25) Ethyl Acetate	2.826	43	31835	0.542	ppbv	#	87
26) Hexane	2.826	57	33283	1.467	ppbv	#	36
29) Chloroform	2.845	83	1483	0.045	ppbv	#	57
34) 2-Butanone	2.560	43	71103	2.548	ppbv		95
35) Carbon Tetrachloride	3.758	117	2271	0.076	ppbv	#	90
36) Benzene	3.654	78	10547	0.276	ppbv	#	94
39) 1,2-Dichloropropane	3.959	63	102058	7.346	ppbv	#	23
41) Tetrahydrofuran	3.062	42	4483	0.279	ppbv		92
44) 2,2,4-Trimethylpentane	4.641	57	2009	0.031	ppbv	#	42
53) Toluene	6.930	91	24055	0.532	ppbv		98
57) Chlorobenzene	8.920	112	1926	0.062	ppbv	#	89
58) Ethyl Benzene	9.354	91	4472	0.076	ppbv		96
59) m/p-Xylene	9.542	91	3344	0.072	ppbv	#	31
60) o-Xylene	9.963	91	5830	0.125	ppbv		99
74) 1,2,4-Trimethylbenzene	11.536	105	2269	0.039	ppbv	#	74

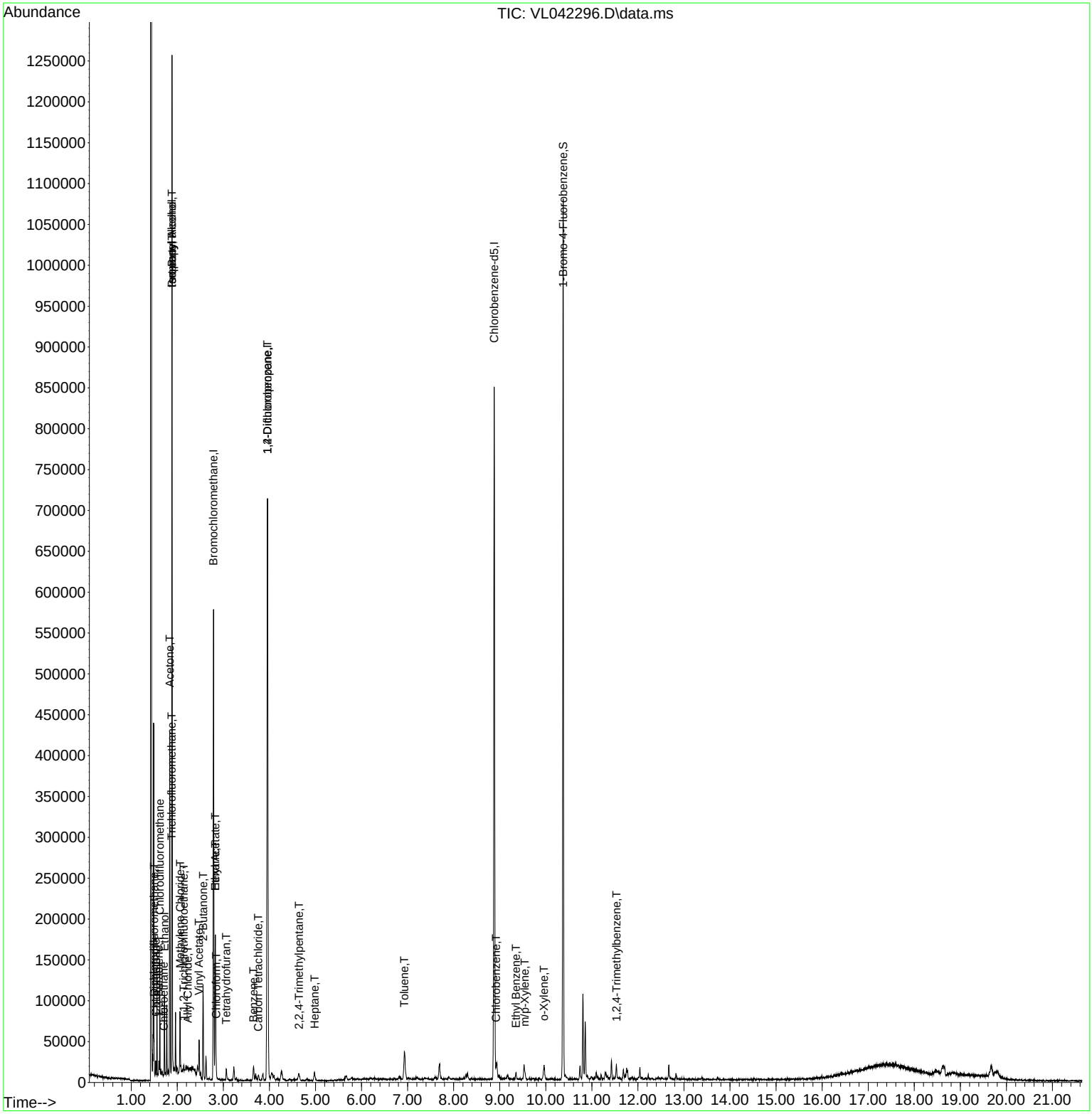
(#) = qualifier out of range (m) = manual integration (+) = signals summed

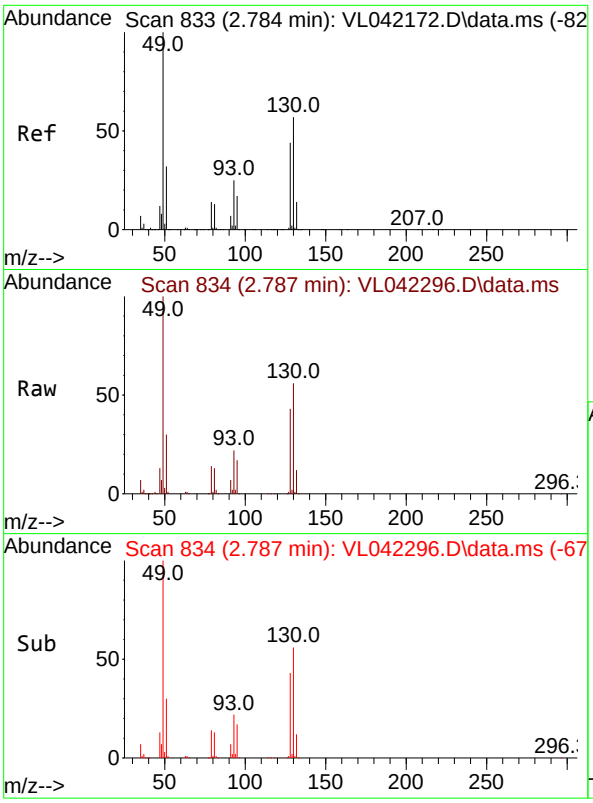
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL040925\
Data File : VL042296.D
Acq On : 09 Apr 2025 16:57
Operator : SY/MD
Sample : Q1665-20
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Quant Time: Apr 10 01:46:46 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



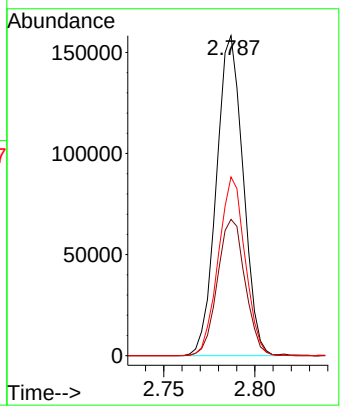


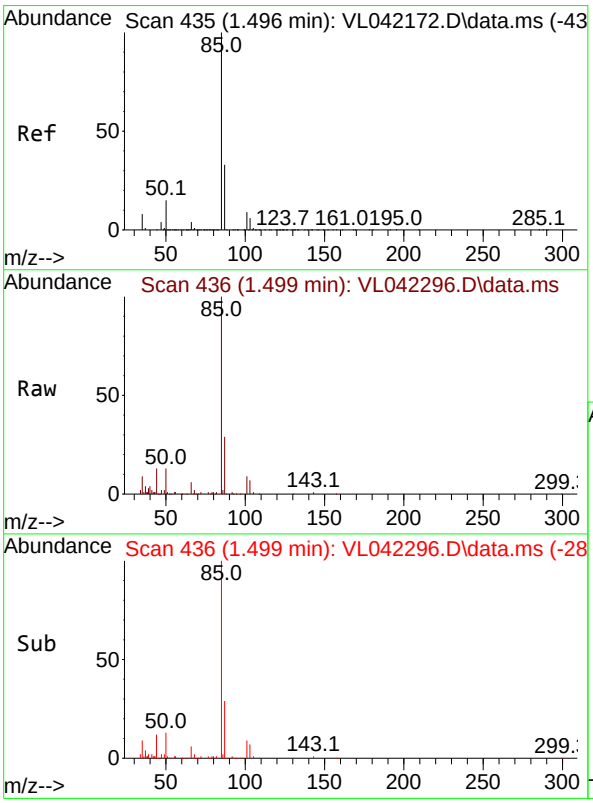
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 49 Resp: 161865

Ion	Ratio	Lower	Upper
49	100		
128	43.9	22.9	68.5
130	55.7	28.8	86.4

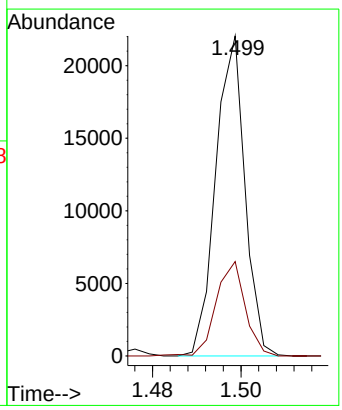


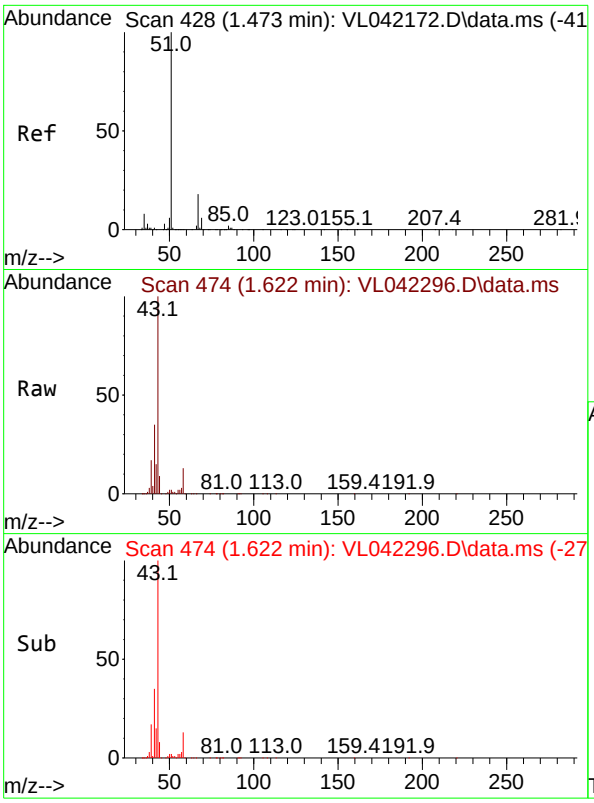


#2
Dichlorodifluoromethane
Concen: 0.423 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 85 Resp: 10098

Ion	Ratio	Lower	Upper
85	100		
87	29.5	26.1	39.1



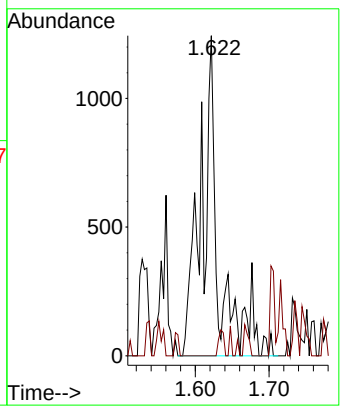


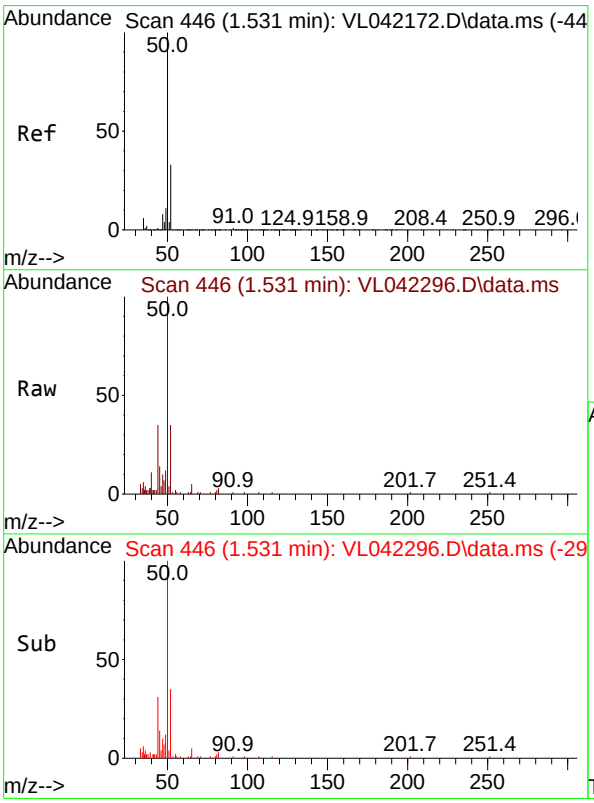
#3
Chlorodifluoromethane
Concen: 0.082 ppbv
RT: 1.622 min Scan# 4
Delta R.T. 0.149 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 51 Resp: 2003

Ion	Ratio	Lower	Upper
51	100		
67	19.4	15.0	22.6

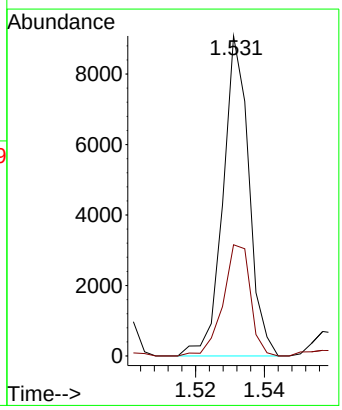


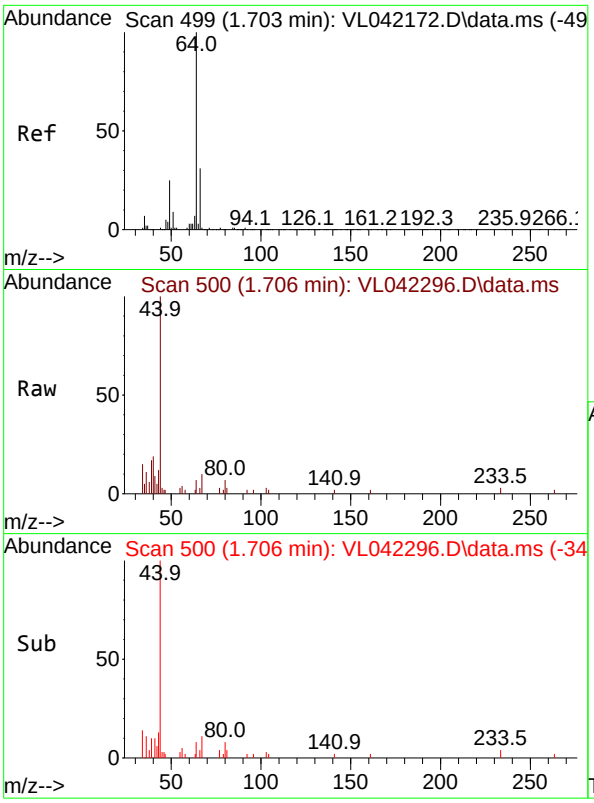


#4
Chloromethane
Concen: 0.486 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 50 Resp: 4745

Ion	Ratio	Lower	Upper
50	100		
52	34.8	26.1	39.1



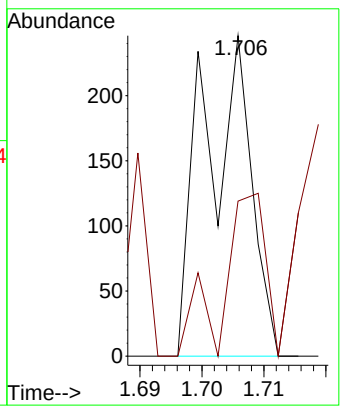


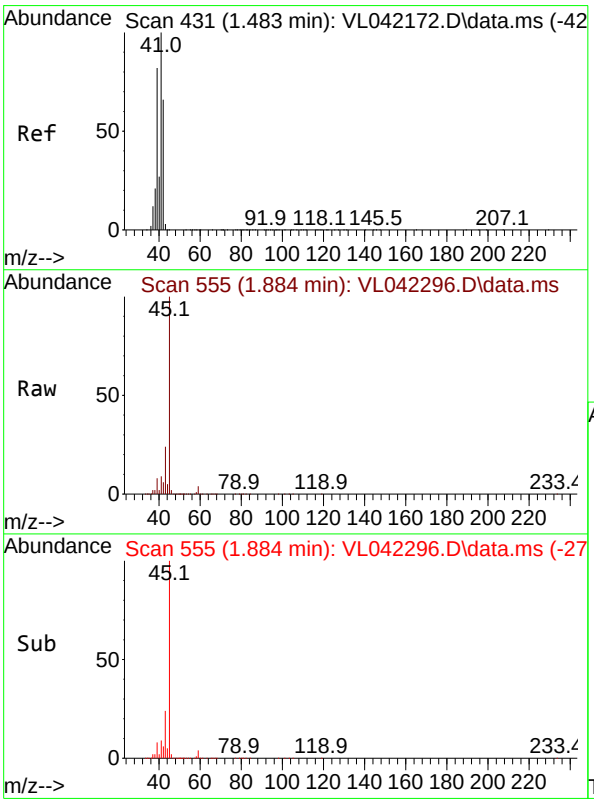
#7
Chloroethane
Concen: 0.033 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 64 Resp: 129

Ion	Ratio	Lower	Upper
64	100		
66	48.4	25.2	37.8#

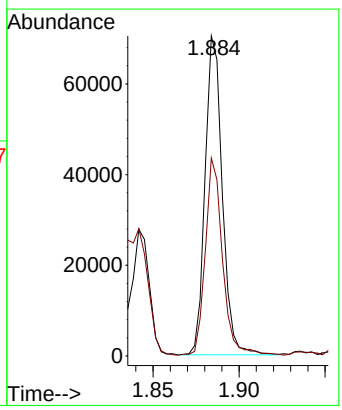


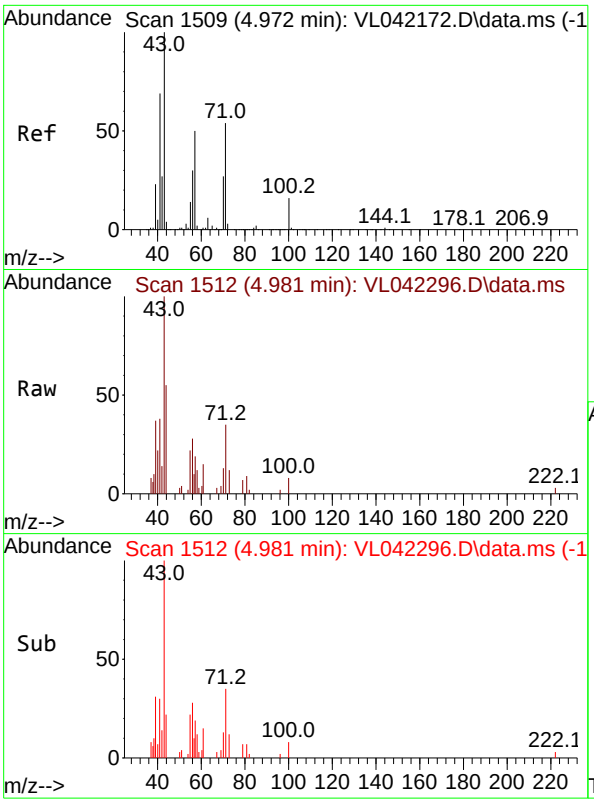


#9
Propene
Concen: 4.363 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.401 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 41 Resp: 48825

Ion	Ratio	Lower	Upper
41	100		
42	61.7	55.4	83.2



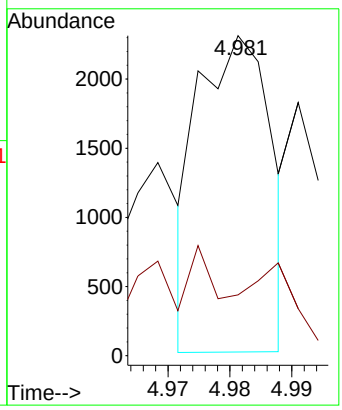


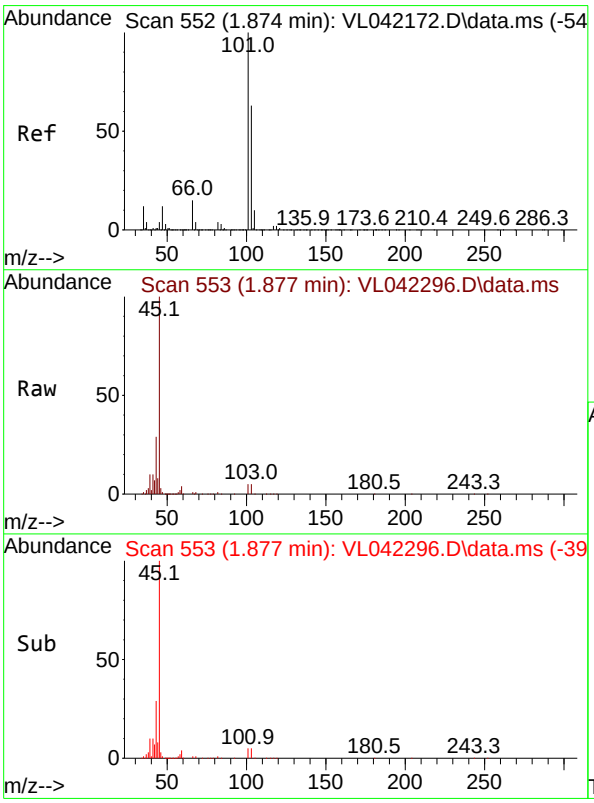
#10
Heptane
Concen: 0.063 ppbv
RT: 4.981 min Scan# 1
Delta R.T. 0.009 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 43 Resp: 1866

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

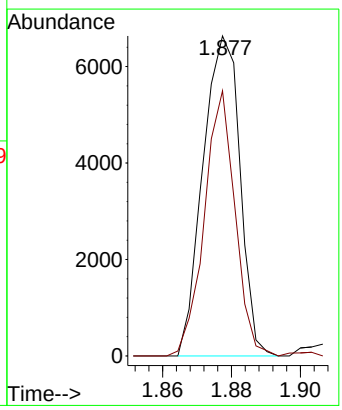


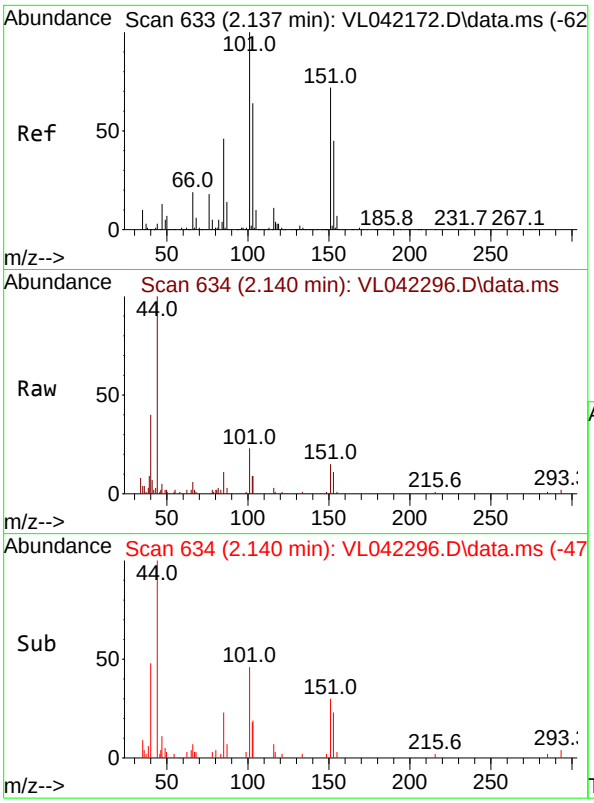


#11
Trichlorofluoromethane
Concen: 0.213 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:101 Resp: 4945

Ion	Ratio	Lower	Upper
101	100		
103	82.8	50.2	75.2#



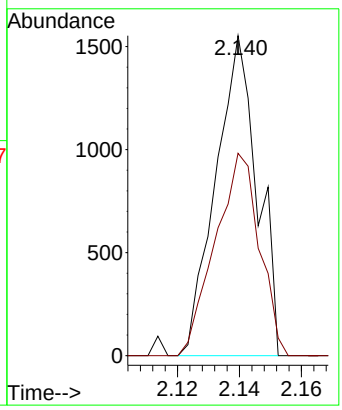


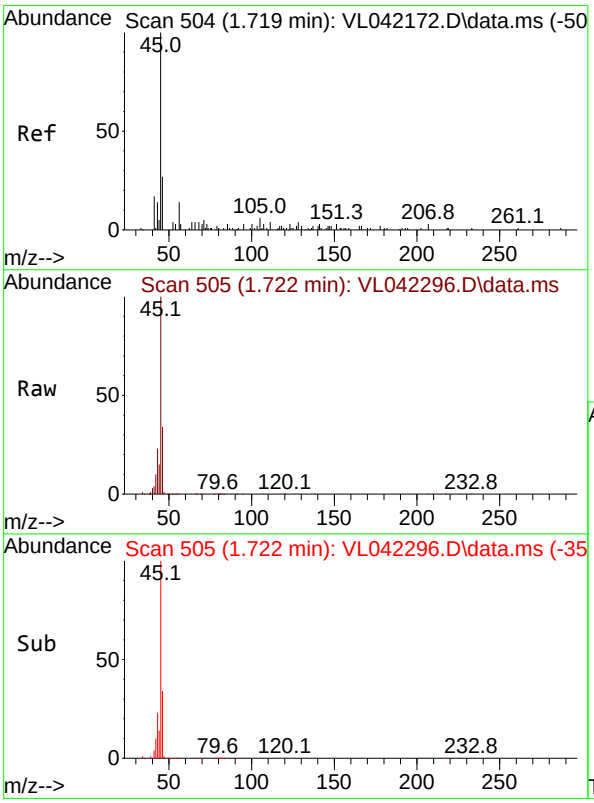
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.076 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion:101 Resp: 1447

Ion	Ratio	Lower	Upper
101	100		
151	67.2	57.1	85.7

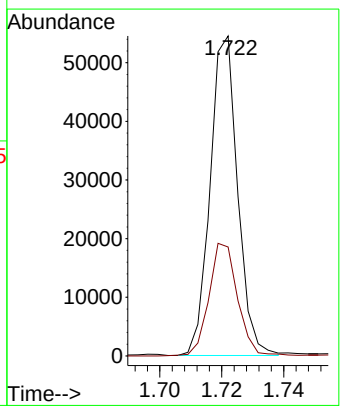


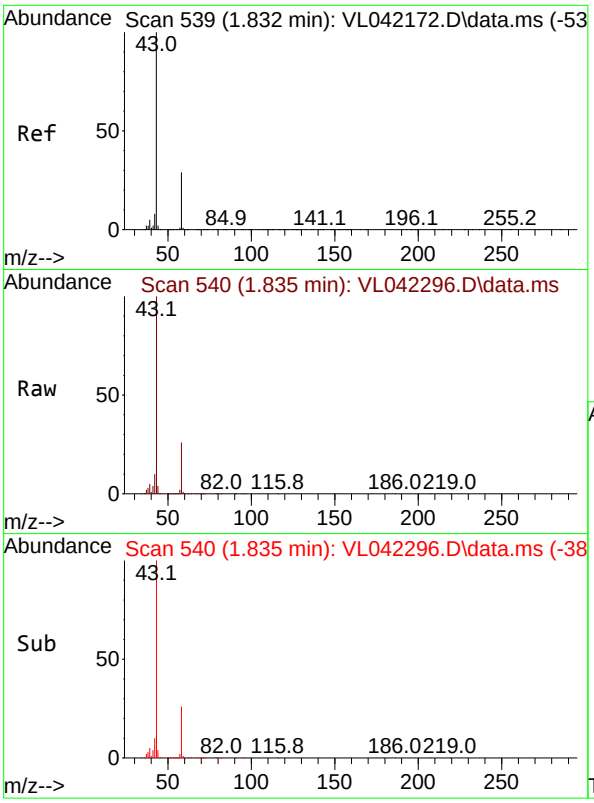


#13
Ethanol
Concen: 31.739 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 45 Resp: 33576

Ion	Ratio	Lower	Upper
45	100		
46	37.1	20.2	80.8



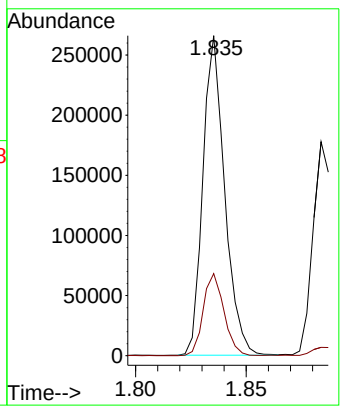


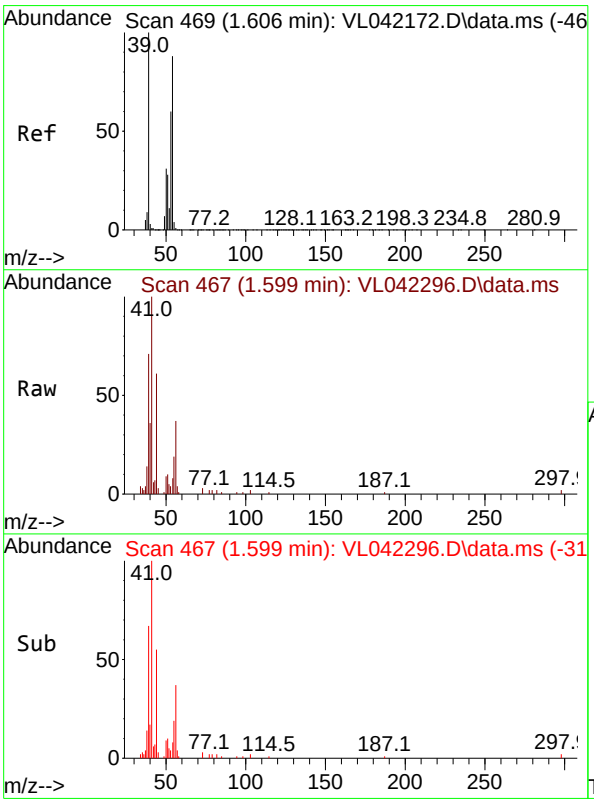
#15
Acetone
Concen: 8.045 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 43 Resp: 182118

Ion	Ratio	Lower	Upper
43	100		
58	24.5	23.2	34.8

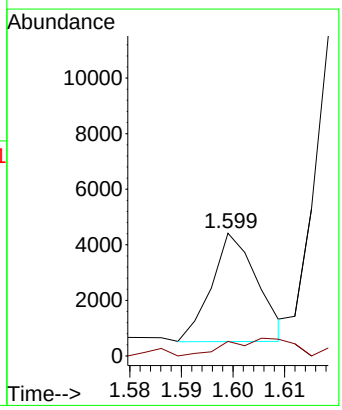


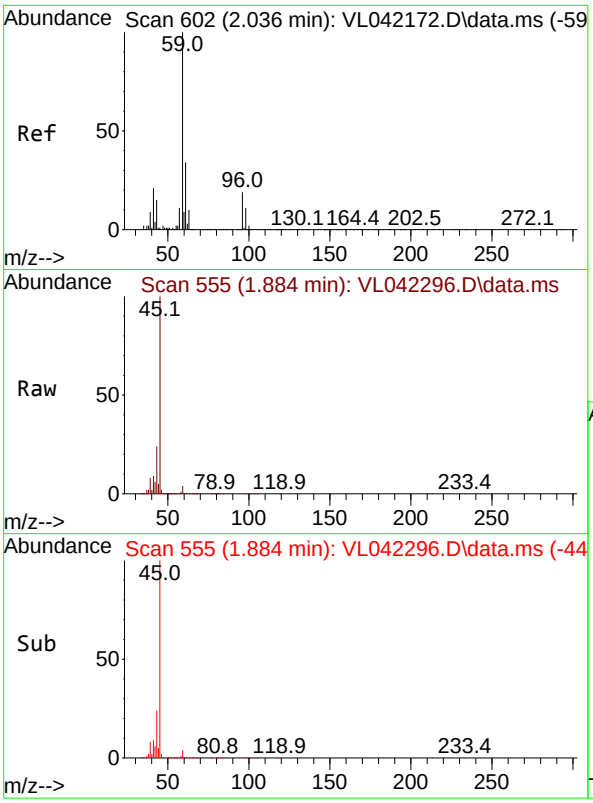


#16
1,3-Butadiene
Concen: 0.218 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 39 Resp: 2415

Ion	Ratio	Lower	Upper
39	100		
54	31.7	60.7	91.1#



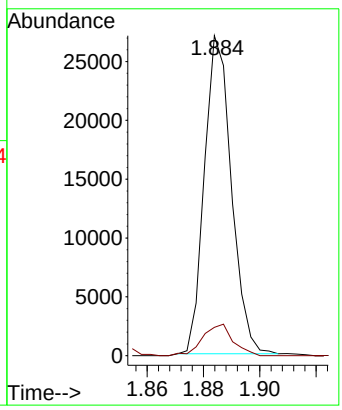


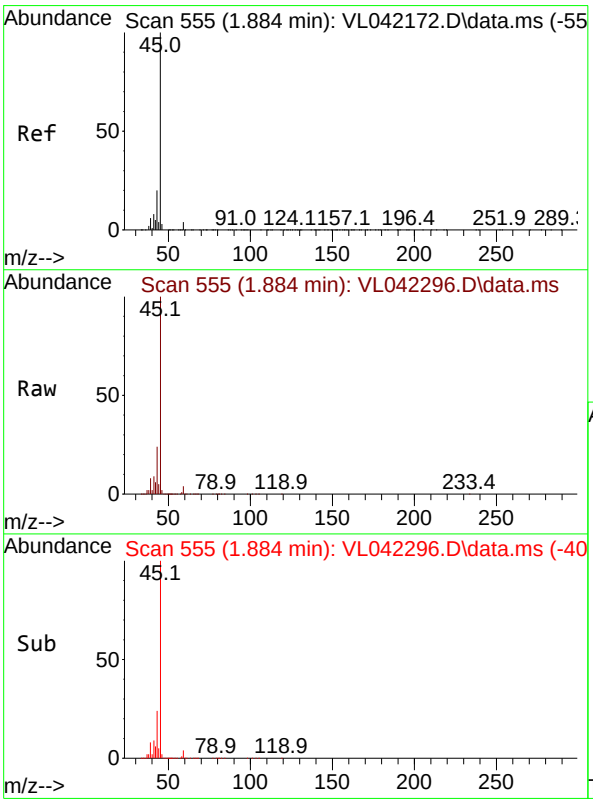
#17
tert-Butyl alcohol
Concen: 0.638 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.152 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 59 Resp: 17996

Ion	Ratio	Lower	Upper
59	100		
57	11.1	8.9	13.3

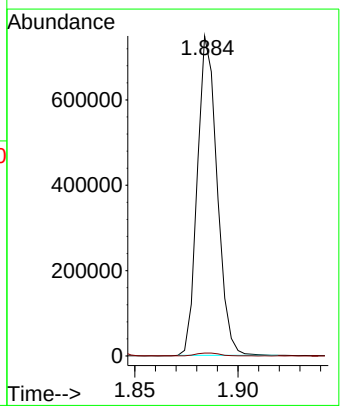


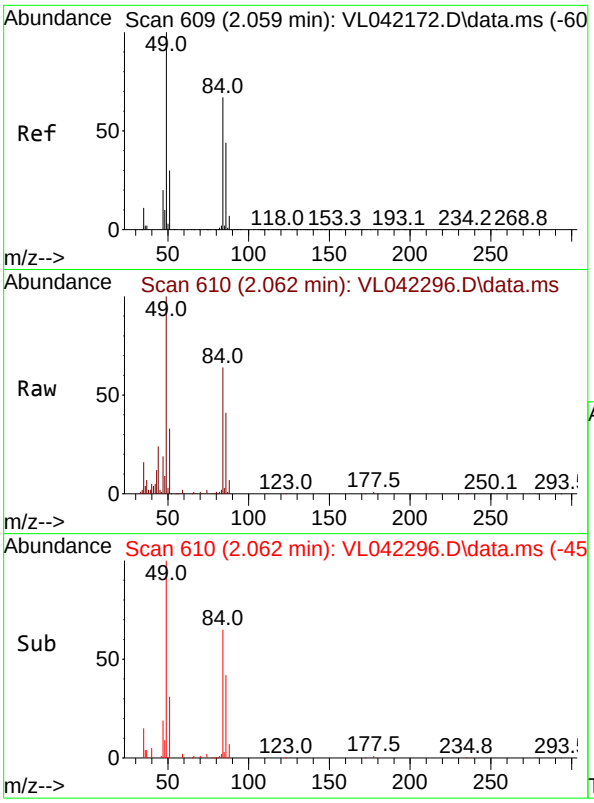


#19
Isopropyl Alcohol
Concen: 39.016 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 45 Resp: 498343

Ion	Ratio	Lower	Upper
45	100		
58	1.2	36.9	55.3#



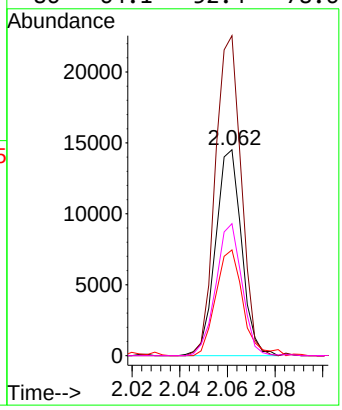


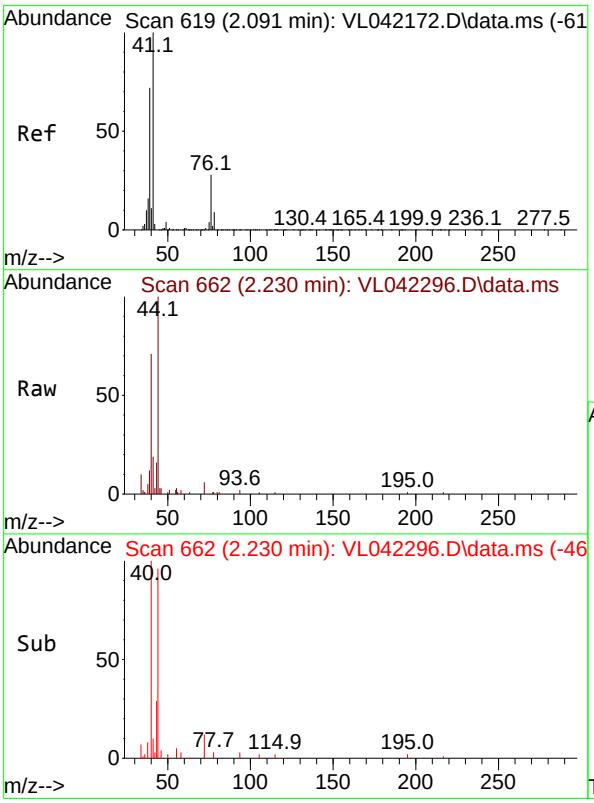
#20
Methylene Chloride
Concen: 1.305 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 84 Resp: 11004

Ion	Ratio	Lower	Upper
84	100		
49	155.3	120.2	180.4
51	51.4	37.4	56.0
86	64.1	52.4	78.6

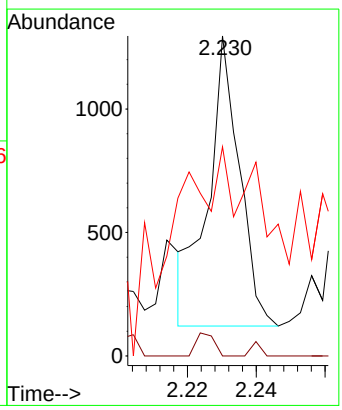


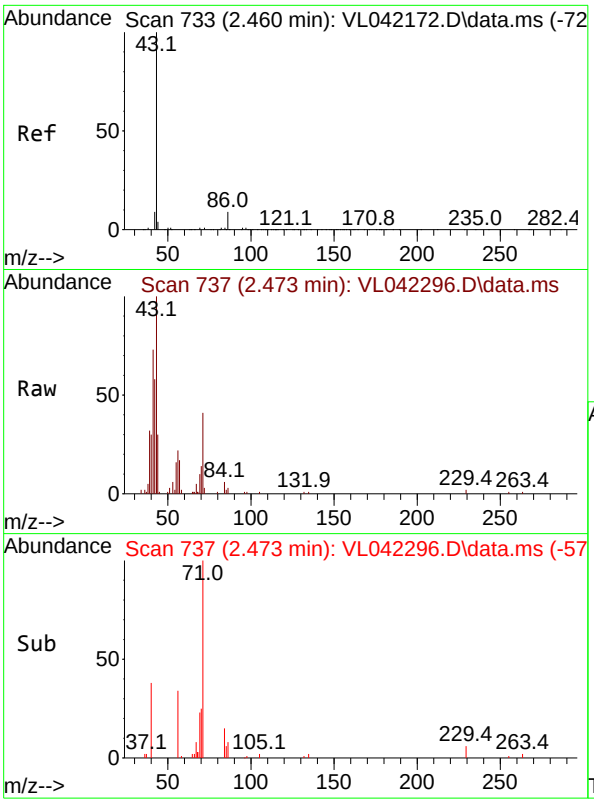


#21
Allyl Chloride
Concen: 0.047 ppbv
RT: 2.230 min Scan# 662
Delta R.T. 0.139 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 41 Resp: 746

Ion	Ratio	Lower	Upper
41	100		
76	10.3	24.1	36.1#
39	0.0	61.1	91.7#



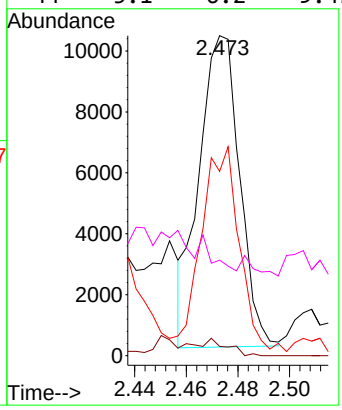


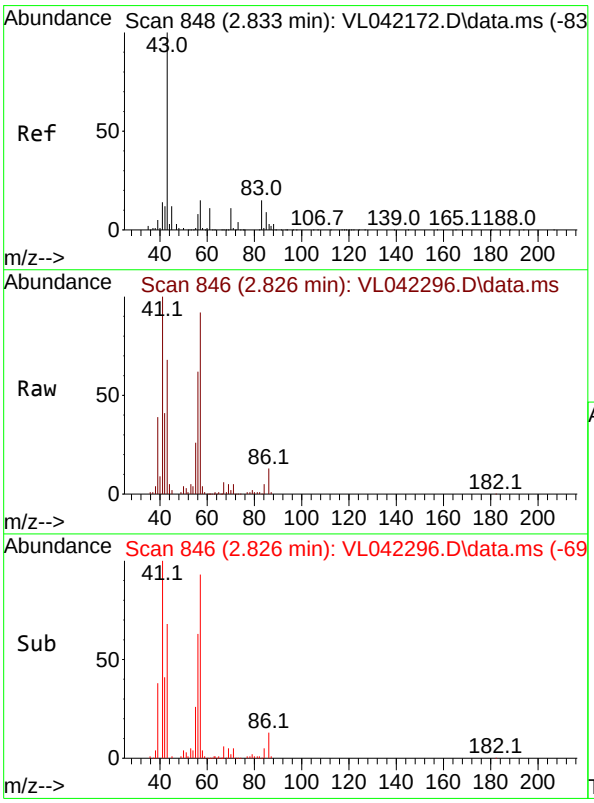
#23
Vinyl Acetate
Concen: 1.140 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 43 Resp: 11170

Ion	Ratio	Lower	Upper
43	100		
86	3.1	5.5	8.3#
42	56.1	8.6	13.0#
44	5.1	6.2	9.4#

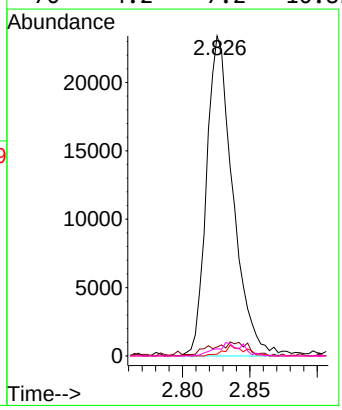


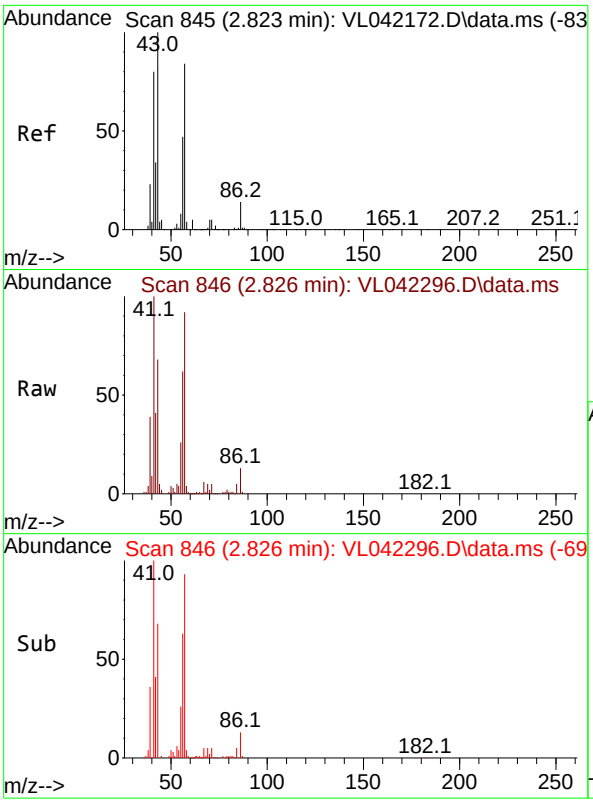


#25
Ethyl Acetate
Concen: 0.542 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.007 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 43 Resp: 31835

Ion	Ratio	Lower	Upper
43	100		
45	6.9	8.2	12.2#
61	2.7	7.3	10.9#
70	4.2	7.2	10.8#



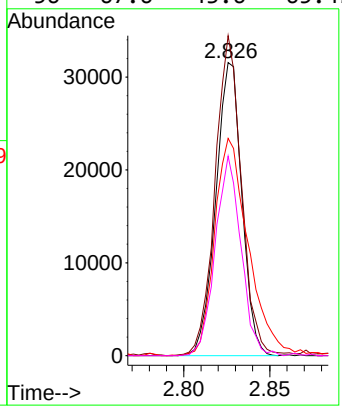


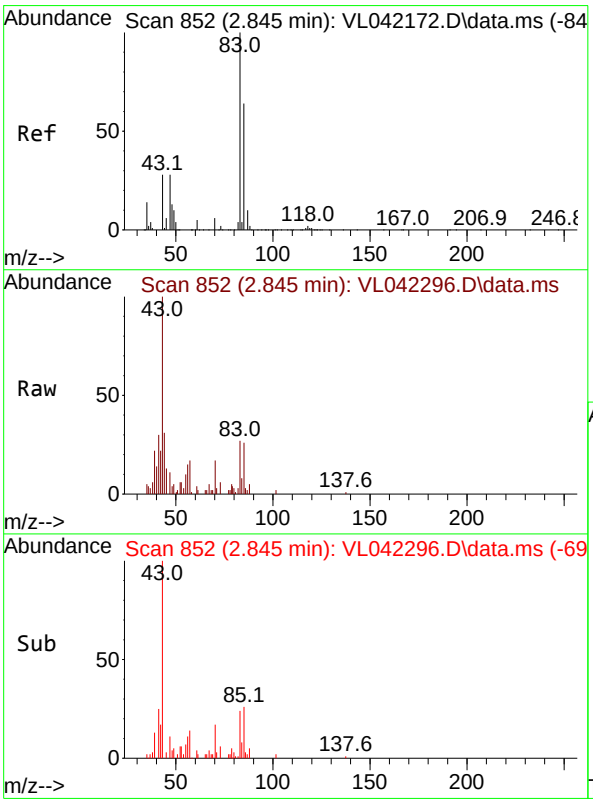
#26
Hexane
Concen: 1.467 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 57 Resp: 33283

Ion	Ratio	Lower	Upper
57	100		
41	112.6	76.6	114.8
43	96.8	207.8	311.8#
56	67.6	43.6	65.4#

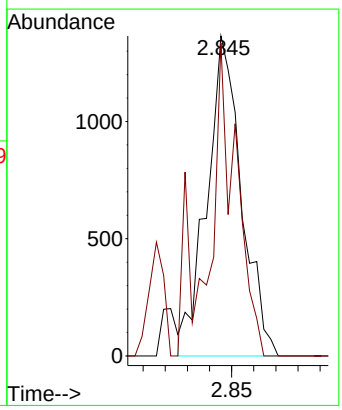


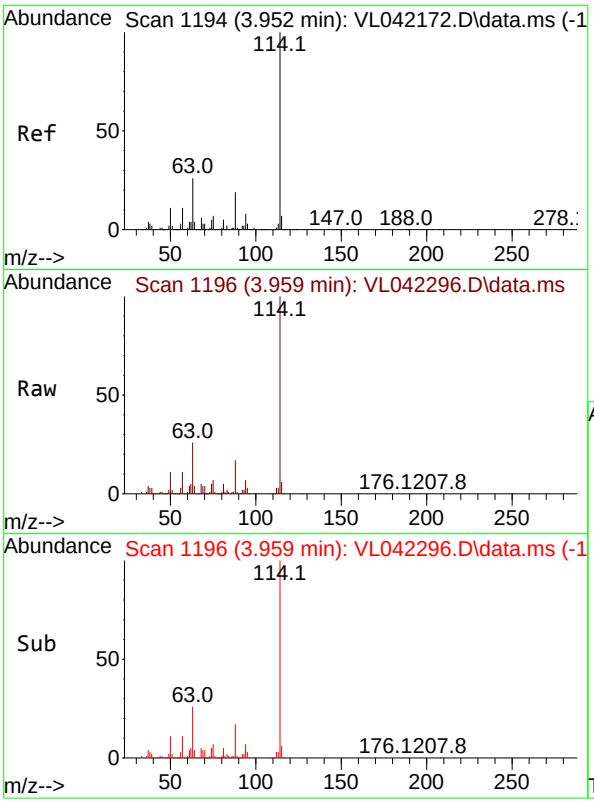


#29
Chloroform
Concen: 0.045 ppbv
RT: 2.845 min Scan# 852
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 83 Resp: 1483

Ion	Ratio	Lower	Upper
83	100		
85	97.8	51.4	77.2#



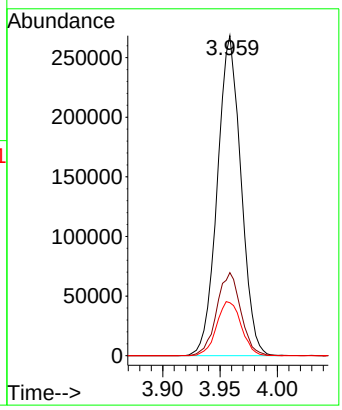


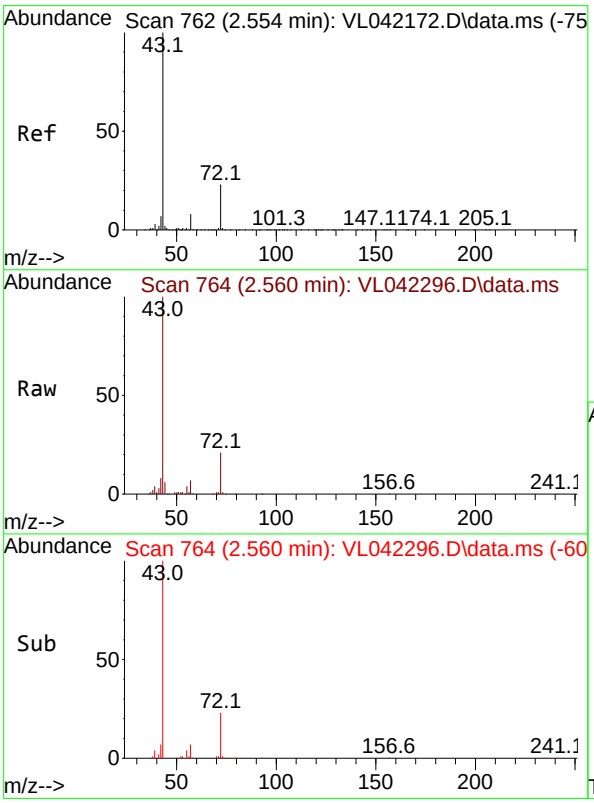
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion:114 Resp: 384782

Ion	Ratio	Lower	Upper
114	100		
63	26.6	20.7	31.1
88	17.6	15.0	22.4

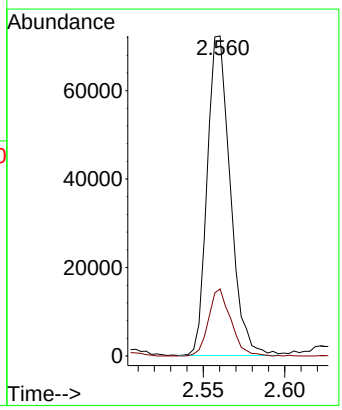


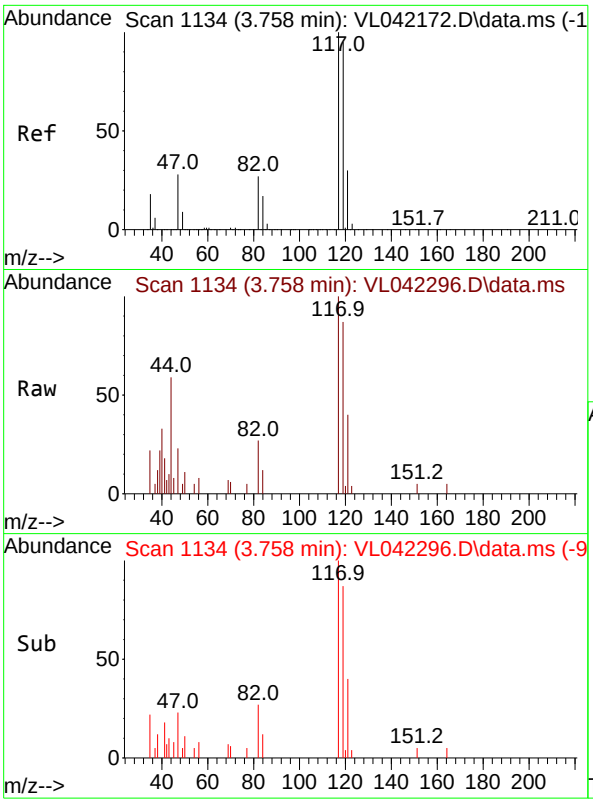


#34
2-Butanone
Concen: 2.548 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 43 Resp: 71103

Ion	Ratio	Lower	Upper
43	100		
72	20.4	18.2	27.2



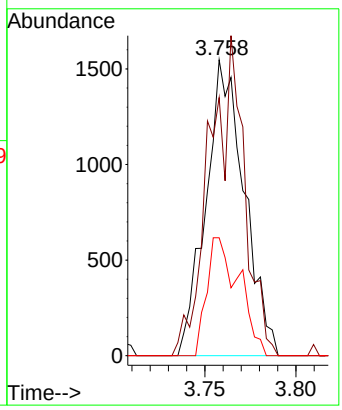


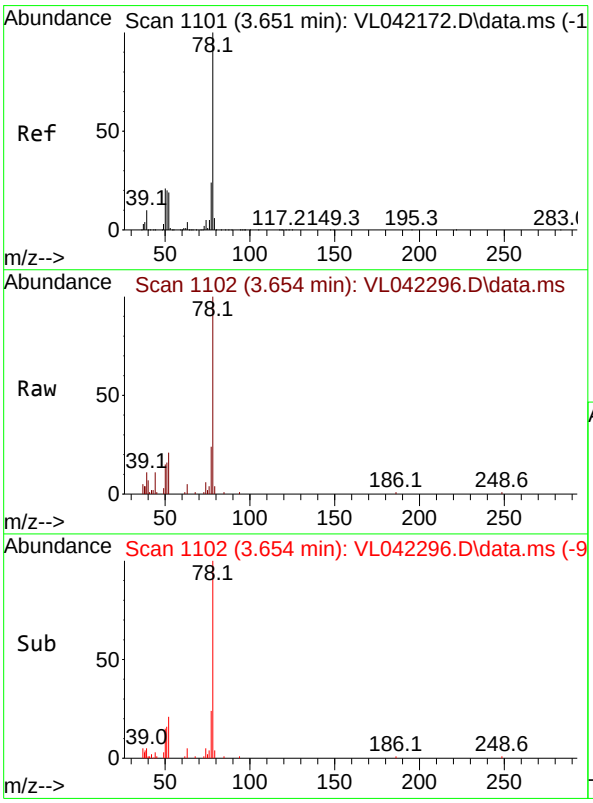
#35
Carbon Tetrachloride
Concen: 0.076 ppbv
RT: 3.758 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion:117 Resp: 2271

Ion	Ratio	Lower	Upper
117	100		
119	87.2	76.2	114.2
121	39.9	24.2	36.4#

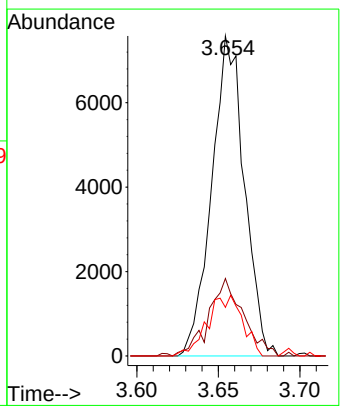


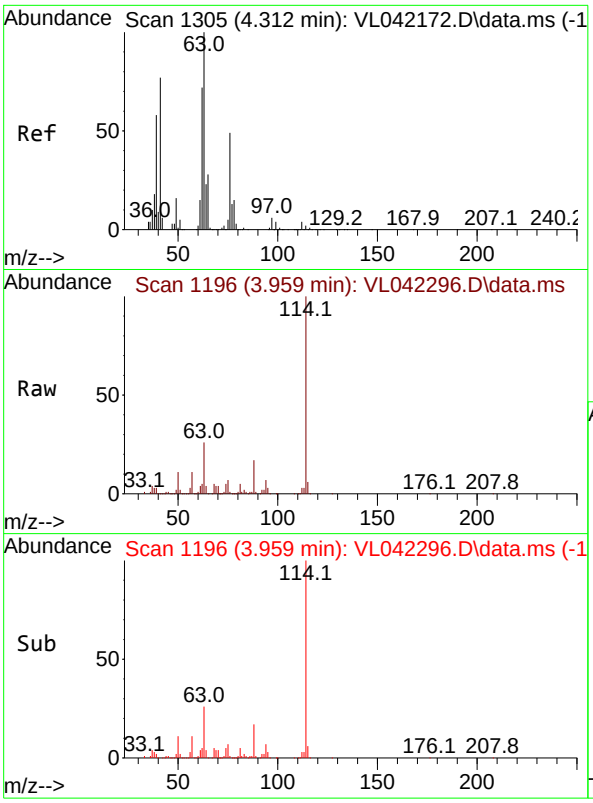


#36
Benzene
Concen: 0.276 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 78 Resp: 10547

Ion	Ratio	Lower	Upper
78	100		
77	24.2	19.1	28.7
50	15.2	16.6	24.8#



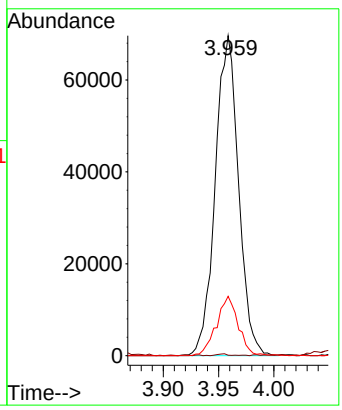


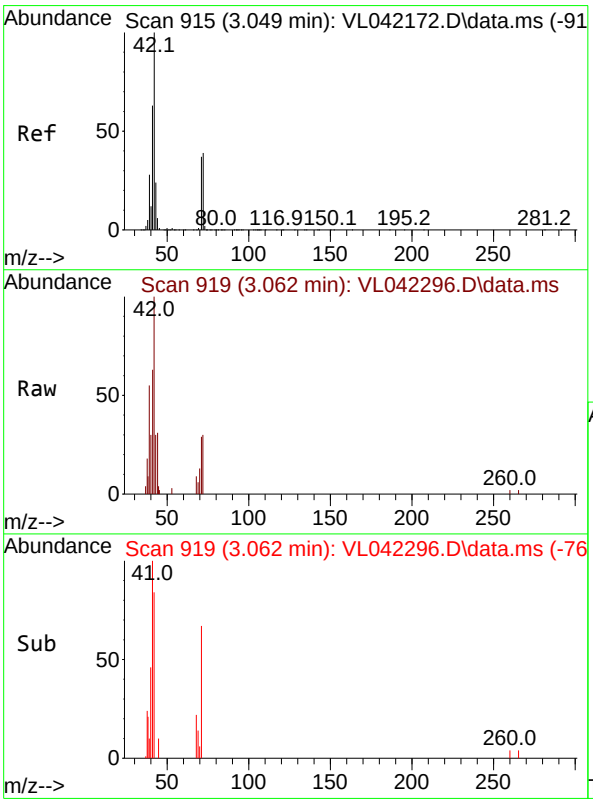
#39
1,2-Dichloropropane
Concen: 7.346 ppbv
RT: 3.959 min Scan# 11
Delta R.T. -0.353 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 63 Resp: 102058

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	18.5	57.6	86.4#

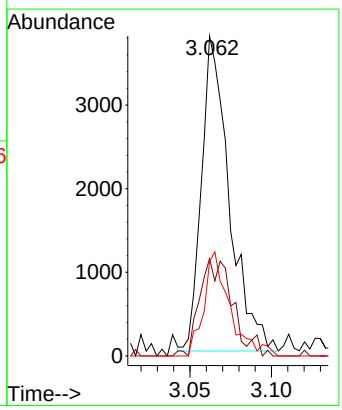


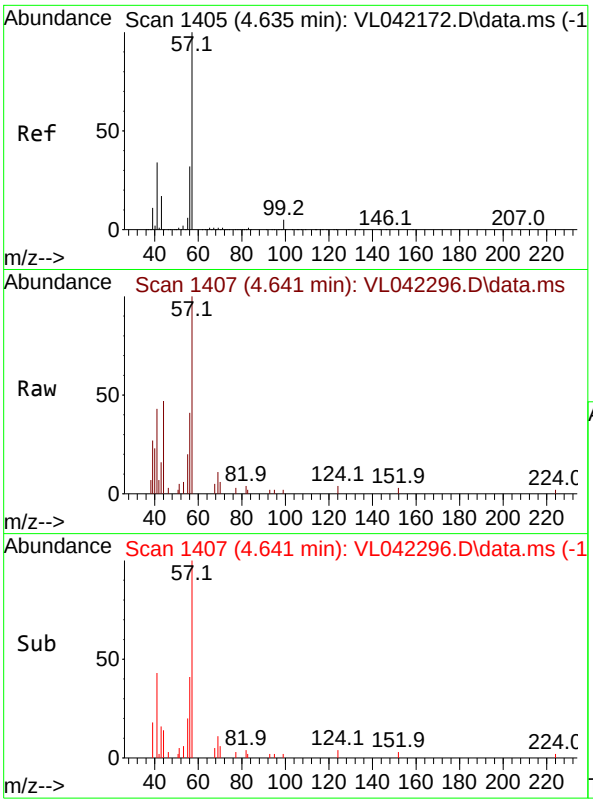


#41
Tetrahydrofuran
Concen: 0.279 ppbv
RT: 3.062 min Scan# 919
Delta R.T. 0.013 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 42 Resp: 4483

Ion	Ratio	Lower	Upper
42	100		
72	36.6	31.4	47.0
71	30.6	30.2	45.4



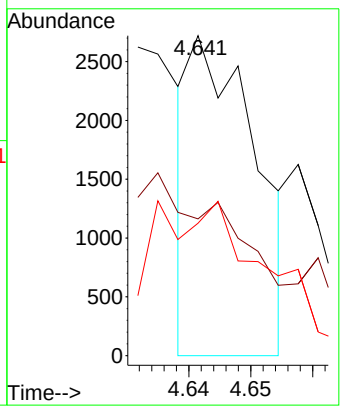


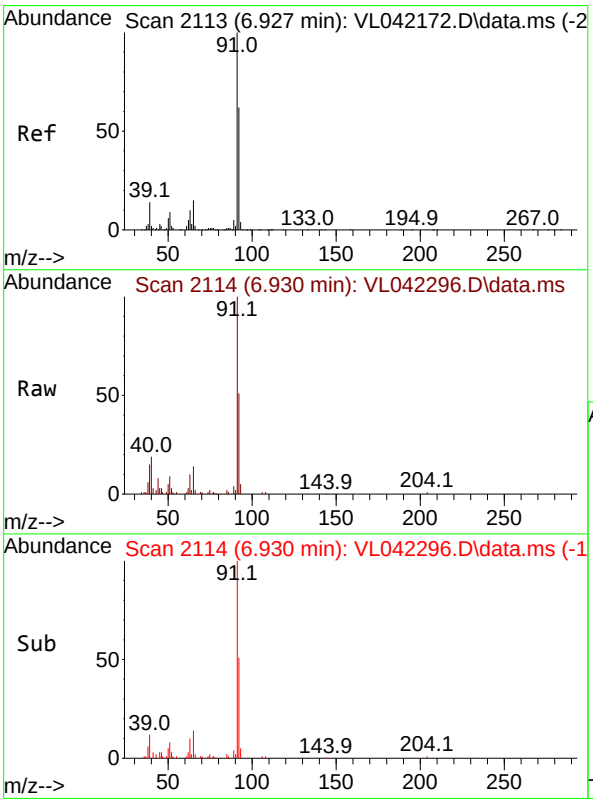
#44
2,2,4-Trimethylpentane
Concen: 0.031 ppbv
RT: 4.641 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 57 Resp: 2009

Ion	Ratio	Lower	Upper
57	100		
41	0.0	26.8	40.2#
56	0.0	25.6	38.4#

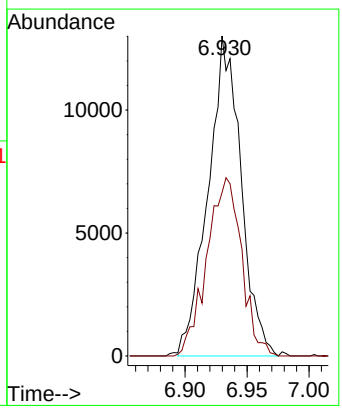


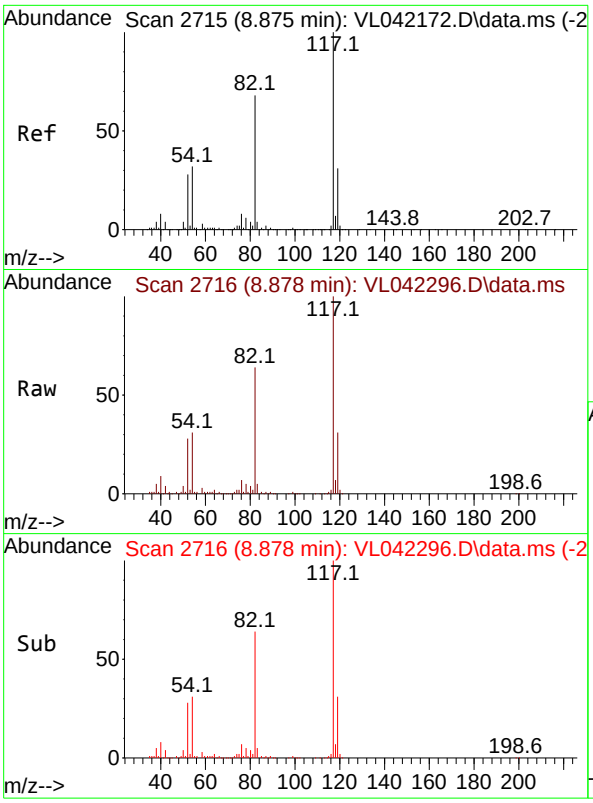


#53
Toluene
Concen: 0.532 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 91 Resp: 24055

Ion	Ratio	Lower	Upper
91	100		
92	58.8	48.4	72.6



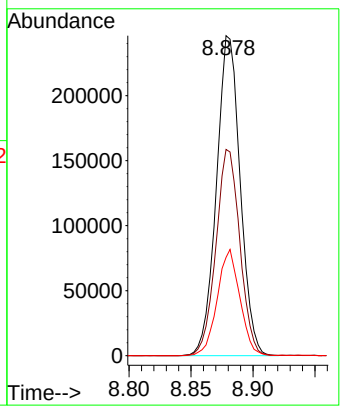


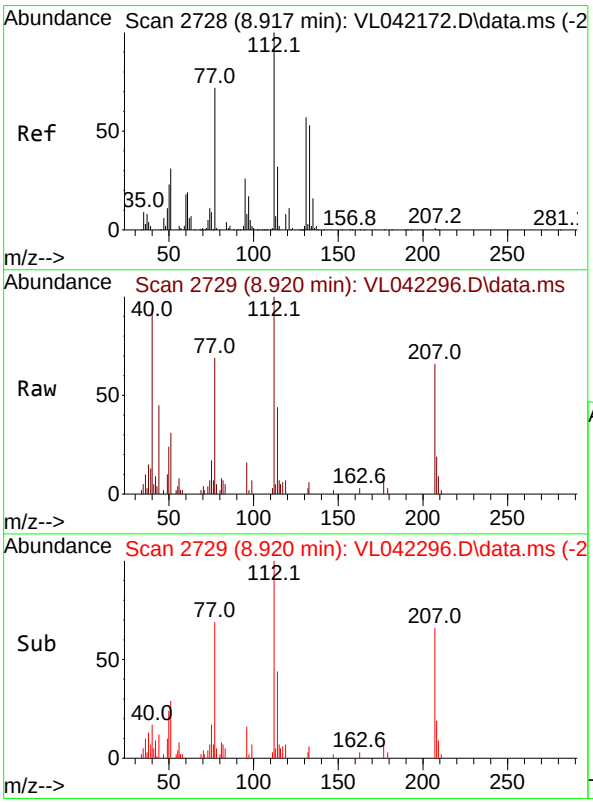
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion:117 Resp: 329132

Ion	Ratio	Lower	Upper
117	100		
82	64.9	55.8	83.6
119	31.8	25.5	38.3

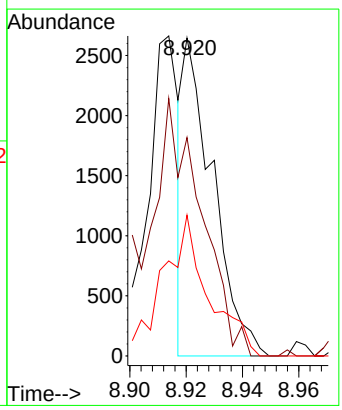


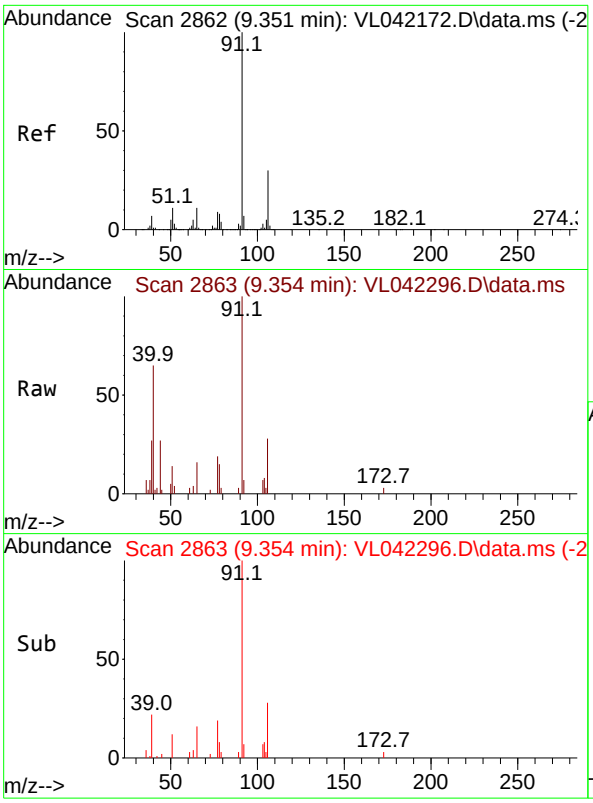


#57
Chlorobenzene
Concen: 0.062 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion:112 Resp: 1926

Ion	Ratio	Lower	Upper
112	100		
77	65.6	58.2	87.2
114	42.3	29.1	35.5#



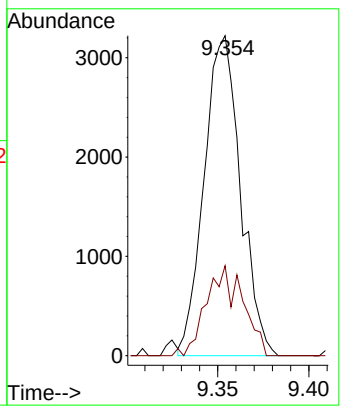


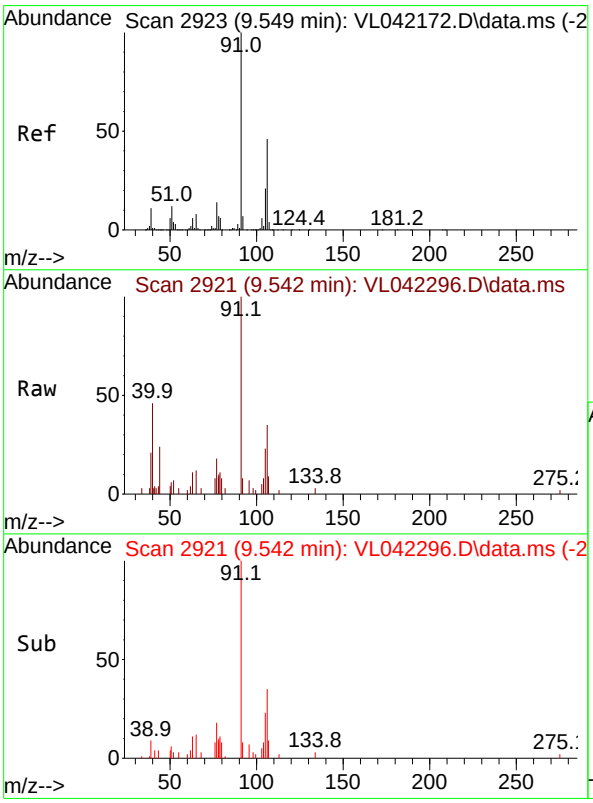
#58
Ethyl Benzene
Concen: 0.076 ppbv
RT: 9.354 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 91 Resp: 4472

Ion	Ratio	Lower	Upper
91	100		
106	28.1	24.2	36.2

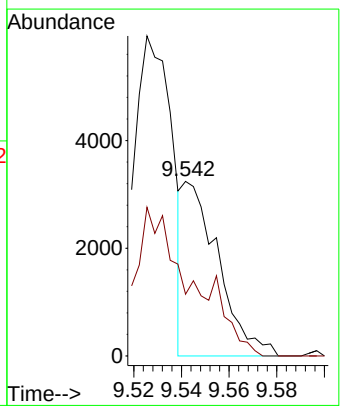


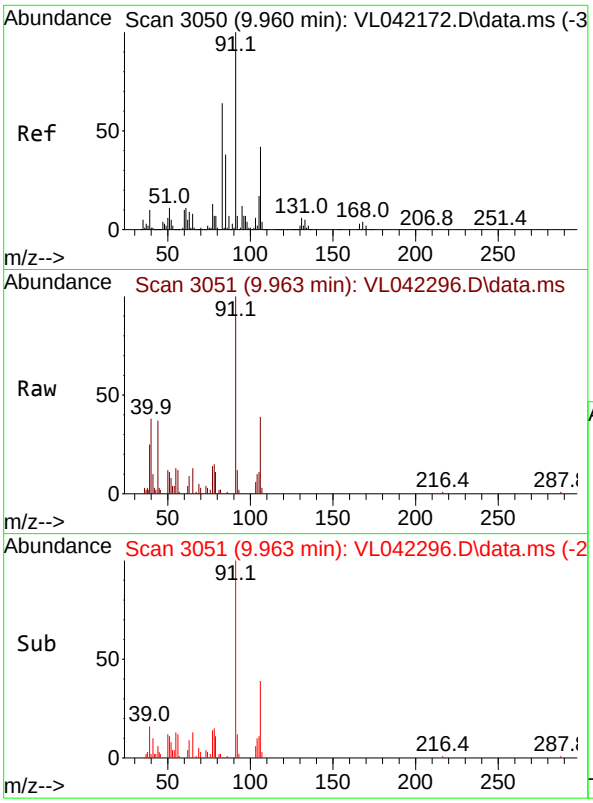


#59
m/p-Xylene
Concen: 0.072 ppbv
RT: 9.542 min Scan# 2921
Delta R.T. -0.007 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 91 Resp: 3344

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#



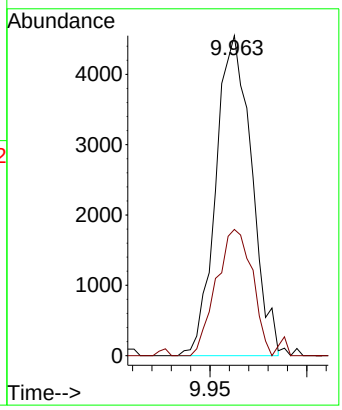


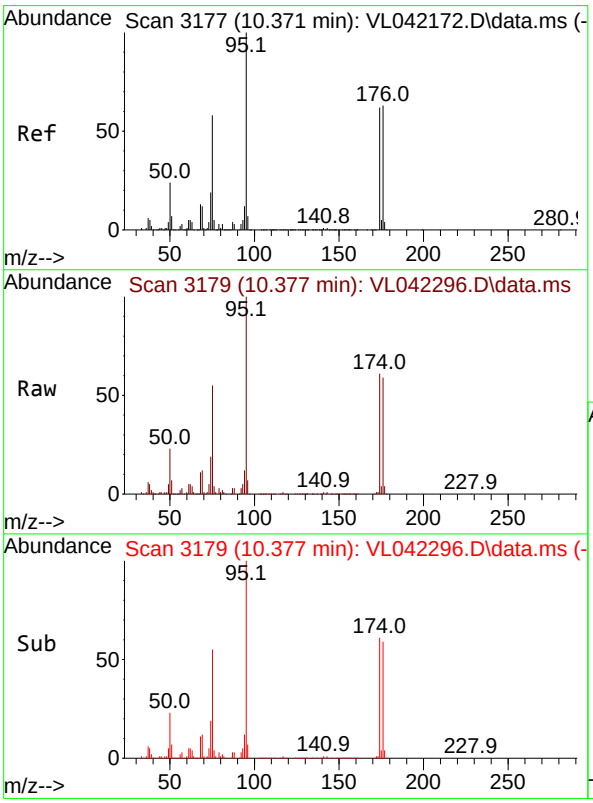
#60
o-Xylene
Concen: 0.125 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion: 91 Resp: 5830

Ion	Ratio	Lower	Upper
91	100		
106	41.2	20.8	62.5

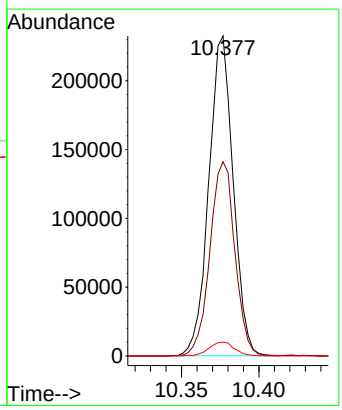


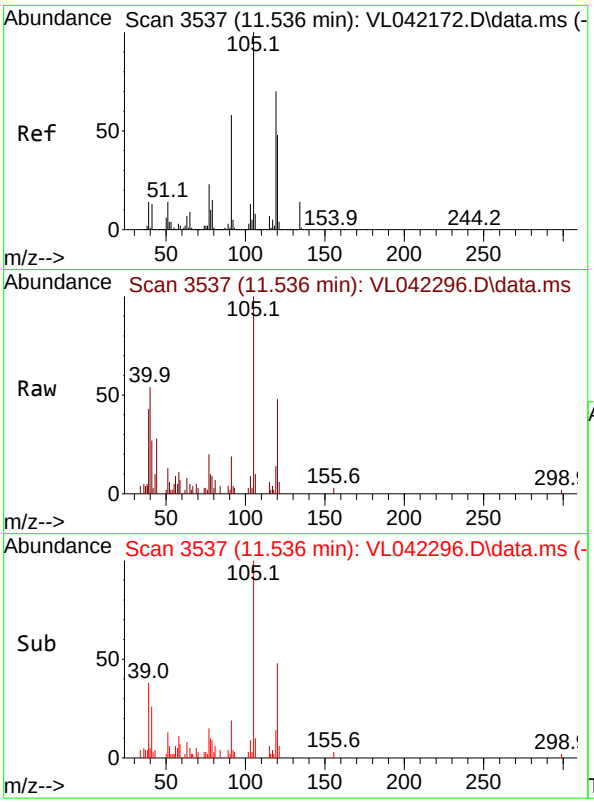


#68
1-Bromo-4-Fluorobenzene
Concen: 9.393 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Tgt Ion: 95 Resp: 253889

Ion	Ratio	Lower	Upper
95	100		
174	62.7	50.6	76.0
175	4.6	3.8	5.6



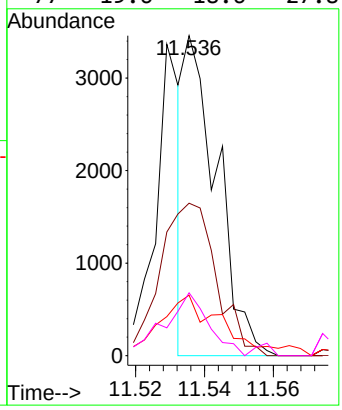


#74
1,2,4-Trimethylbenzene
Concen: 0.039 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042296.D
Acq: 09 Apr 2025 16:57

Instrument :
MSVOA_L
ClientSampleId :
IA-B9-3-3242025

Tgt Ion:105 Resp: 2269

Ion	Ratio	Lower	Upper
105	100		
120	47.6	38.6	58.0
91	16.6	46.2	69.2#
77	19.6	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	183700	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	463746	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	401340	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	318204	9.655	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	264775	9.762	ppbv	100
3) Chlorodifluoromethane	1.476	51	287991	10.394	ppbv	97
4) Chloromethane	1.531	50	111786	10.085	ppbv	98
5) Vinyl Chloride	1.580	62	102342	8.713	ppbv	95
6) Bromomethane	1.667	94	43054	8.571	ppbv	99
7) Chloroethane	1.703	64	41946	9.427	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	224489	9.719	ppbv	94
9) Propene	1.483	41	117677	9.266	ppbv	99
10) Heptane	4.981	43	334707	9.908	ppbv	100
11) Trichlorofluoromethane	1.877	101	250122	9.477	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	193510	8.920	ppbv	97
13) Ethanol	1.722	45	5849	4.872	ppbv	89
14) Bromoethene	1.780	108	73294	8.820	ppbv	100
15) Acetone	1.835	43	231724	9.019	ppbv	97
16) 1,3-Butadiene	1.609	39	112297	8.950	ppbv	97
17) tert-Butyl alcohol	2.039	59	255575	7.987	ppbv	99
18) 1,1-Dichloroethene	2.033	96	89512	8.827	ppbv	98
19) Isopropyl Alcohol	1.887	45	125233	8.639	ppbv	92
20) Methylene Chloride	2.062	84	76968	8.044	ppbv	93
21) Allyl Chloride	2.098	41	162998	8.996	ppbv	97
22) trans-1,2-Dichloroethene	2.340	96	101974	8.700	ppbv	95
23) Vinyl Acetate	2.463	43	95152	8.557	ppbv	99
24) 1,1-Dichloroethane	2.408	63	207862	9.567	ppbv	99
25) Ethyl Acetate	2.835	43	678920	10.182	ppbv	99
26) Hexane	2.826	57	256866	9.973	ppbv	98
27) Carbon Disulfide	2.149	76	243367	8.812	ppbv	98
28) Methyl tert-Butyl Ether	2.441	73	129141	8.053	ppbv	96
29) Chloroform	2.848	83	393638	10.443	ppbv	98
30) Cyclohexane	3.858	84	203526	9.100	ppbv	97
31) cis-1,2-Dichloroethene	2.722	61	247194	9.454	ppbv	97
32) 1,1,1-Trichloroethane	3.370	97	380312	8.813	ppbv	98
34) 2-Butanone	2.557	43	380682	11.321	ppbv	98
35) Carbon Tetrachloride	3.764	117	390140	10.769	ppbv	98
36) Benzene	3.658	78	506278	11.012	ppbv	97
37) 1,2-Dichloroethane	3.221	62	292183	11.101	ppbv	99
38) Trichloroethene	4.551	130	203156	10.591	ppbv	96
39) 1,2-Dichloropropane	4.315	63	185497	11.079	ppbv	97
40) 1,4-Dioxane	4.583	88	82376	9.270	ppbv #	98
41) Tetrahydrofuran	3.056	42	216646	11.188	ppbv	93
42) Bromodichloromethane	4.493	83	413250	11.389	ppbv	99
43) Methyl Methacrylate	4.884	69	184472	9.478	ppbv	96
44) 2,2,4-Trimethylpentane	4.642	57	872871	11.235	ppbv	98
45) t-1,3-Dichloropropene	6.422	75	176804	8.467	ppbv	97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

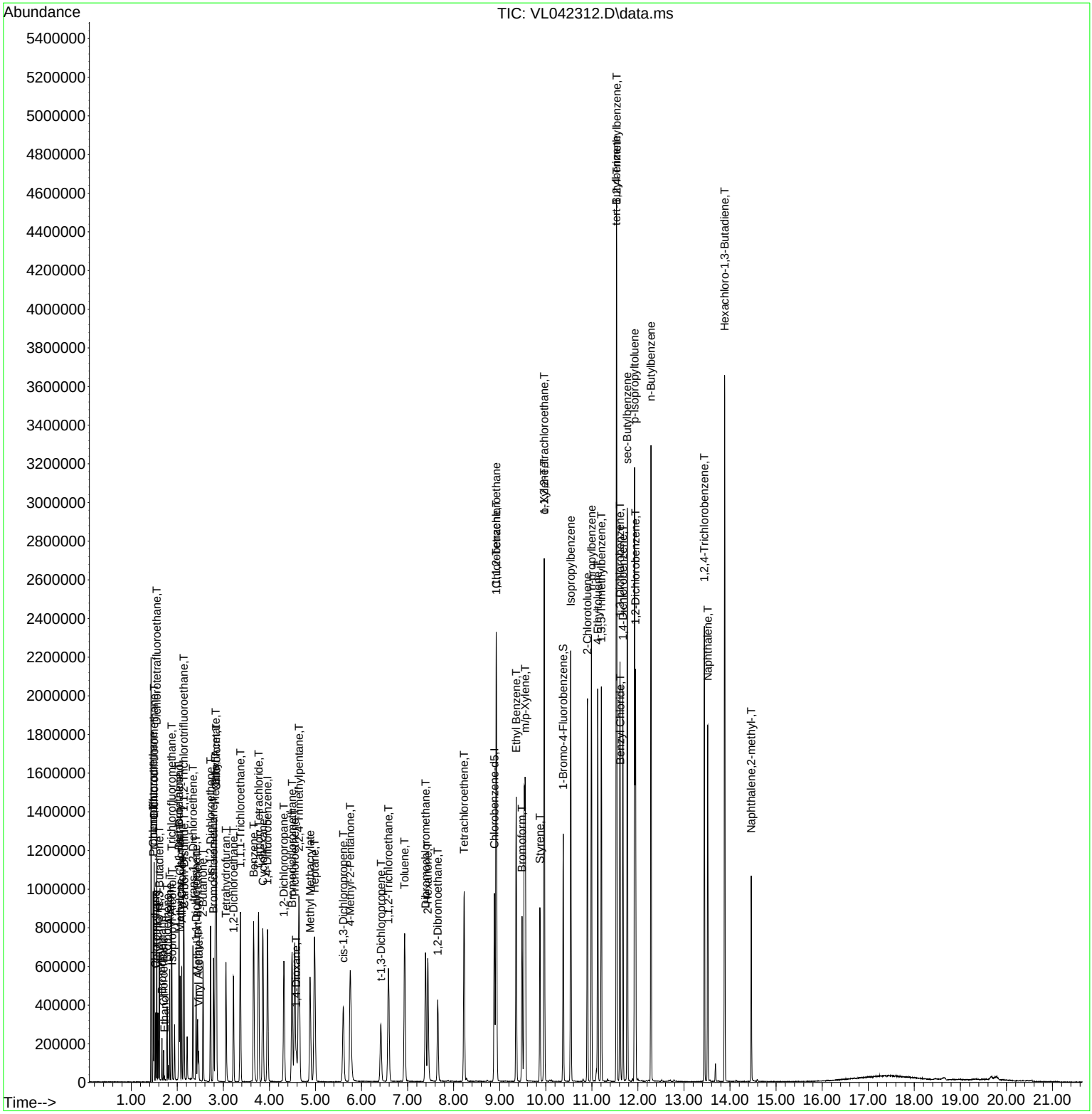
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	236039	9.222	ppbv		99
47) 1,1,2-Trichloroethane	6.583	97	202891	11.463	ppbv		98
48) Dibromochloromethane	7.389	129	333128	11.106	ppbv		99
49) Bromoform	9.484	173	294489	10.935	ppbv		100
50) 4-Methyl-2-Pentanone	5.755	43	531851	9.980	ppbv		95
51) 2-Hexanone	7.438	43	424035	9.689	ppbv	#	94
52) Tetrachloroethene	8.224	164	170989	9.378	ppbv		97
53) Toluene	6.936	91	547579	10.048	ppbv		99
54) 1,2-Dibromoethane	7.655	107	267225	10.831	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.927	131	271350	12.283	ppbv		100
57) Chlorobenzene	8.924	112	460598	12.099	ppbv		98
58) Ethyl Benzene	9.357	91	779227	10.931	ppbv		98
59) m/p-Xylene	9.552	91	686600	12.062	ppbv	#	31
60) o-Xylene	9.966	91	660065	11.567	ppbv		96
61) Styrene	9.872	104	291355	10.320	ppbv		99
62) Isopropylbenzene	10.542	105	988337	11.582	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.966	83	446341	12.873	ppbv		99
64) n-propylbenzene	10.992	120	268681	12.231	ppbv		97
65) tert-Butylbenzene	11.532	119	932850	11.820	ppbv		98
66) Benzyl Chloride	11.616	91	68675	8.201	ppbv		99
67) sec-Butylbenzene	11.769	105	1310042	11.942	ppbv		100
69) p-Isopropyltoluene	11.927	119	1107045	11.720	ppbv		99
70) n-Butylbenzene	12.283	91	1144571	11.848	ppbv		99
71) 2-Chlorotoluene	10.904	91	756562	11.423	ppbv		98
72) 4-Ethyltoluene	11.128	105	847821	11.932	ppbv		99
73) 1,3,5-Trimethylbenzene	11.205	105	729887	11.762	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	819490	11.463	ppbv		92
75) 1,3-Dichlorobenzene	11.610	146	492549	12.562	ppbv		99
76) 1,4-Dichlorobenzene	11.675	146	488636	12.522	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	494739	12.959	ppbv		98
78) Hexachloro-1,3-Butadiene	13.882	225	373025	9.599	ppbv		99
79) Naphthalene	13.516	128	824947	10.550	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	276556	7.212	ppbv		98
81) 1,2,4-Trichlorobenzene	13.442	180	374714	10.389	ppbv		99

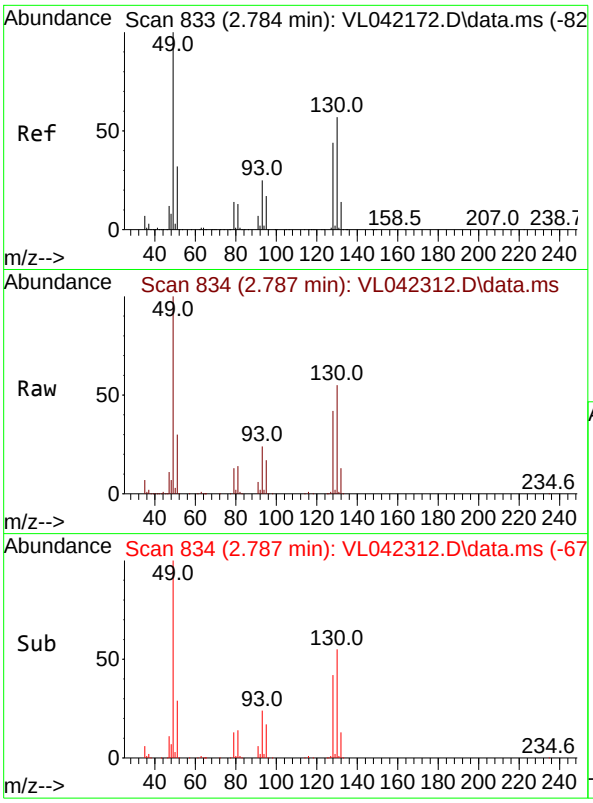
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042312.D
Acq On : 11 Apr 2025 09:50
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 11 22:56:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



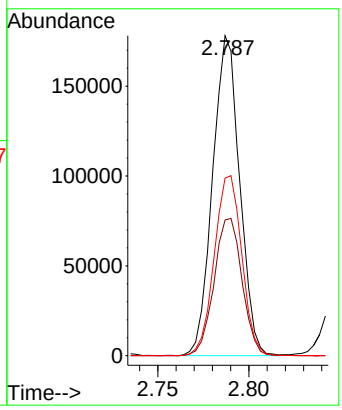


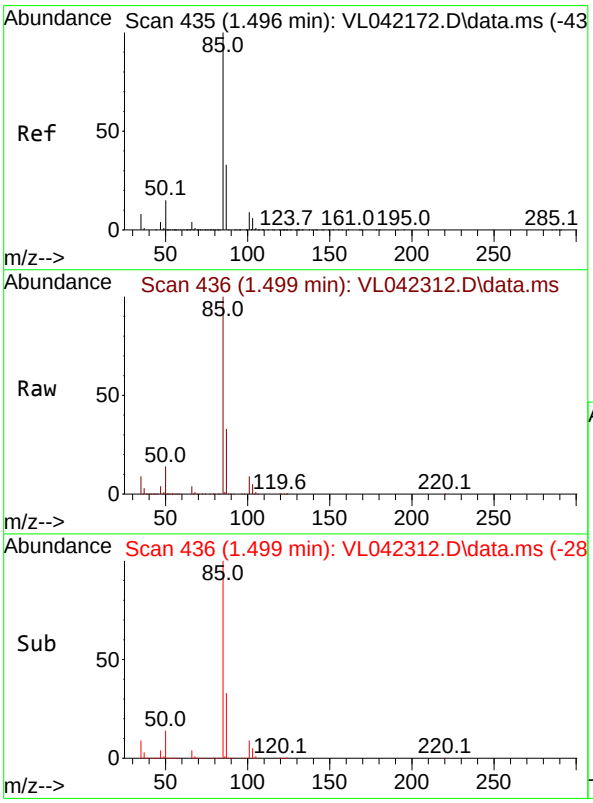
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 183700

Ion	Ratio	Lower	Upper
49	100		
128	44.4	22.9	68.5
130	57.3	28.8	86.4

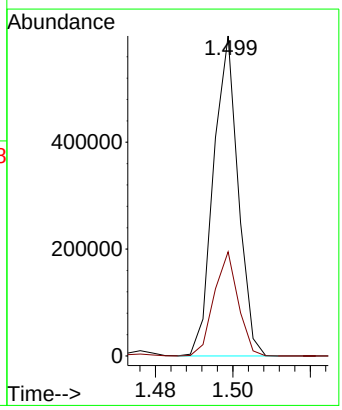


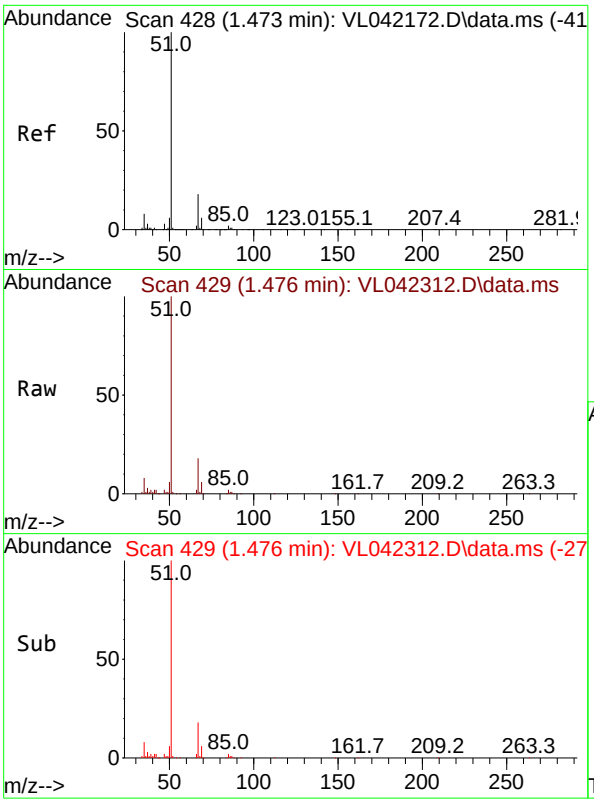


#2
Dichlorodifluoromethane
Concen: 9.762 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 85 Resp: 264775

Ion	Ratio	Lower	Upper
85	100		
87	32.5	26.1	39.1



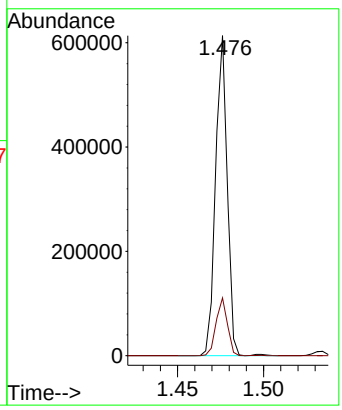


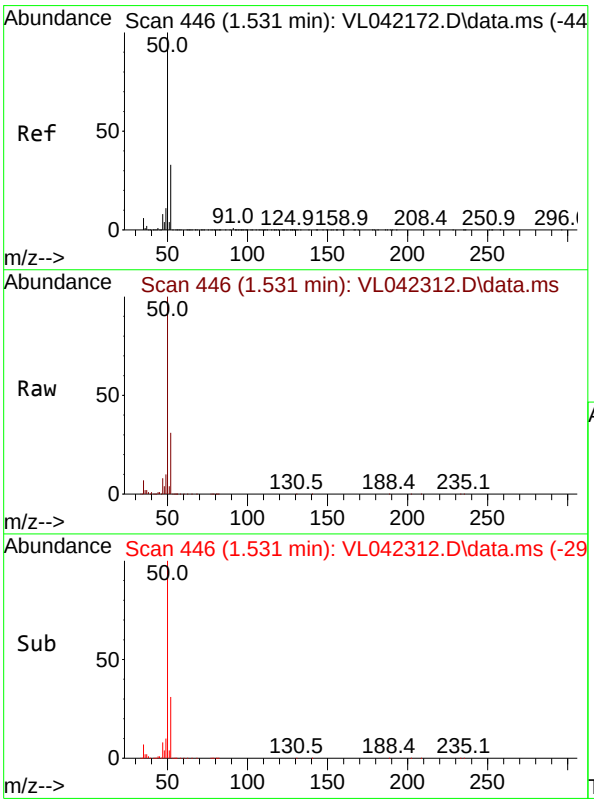
#3
Chlorodifluoromethane
Concen: 10.394 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 287991

Ion	Ratio	Lower	Upper
51	100		
67	17.6	15.0	22.6

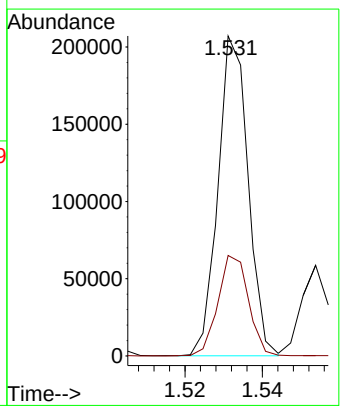


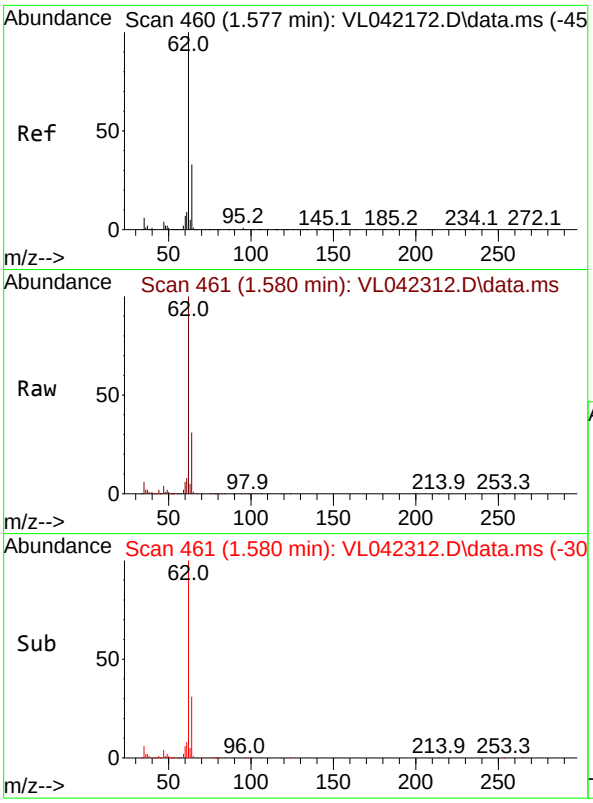


#4
Chloromethane
Concen: 10.085 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 50 Resp: 111786

Ion	Ratio	Lower	Upper
50	100		
52	31.3	26.1	39.1



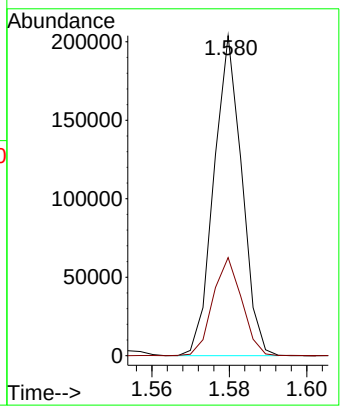


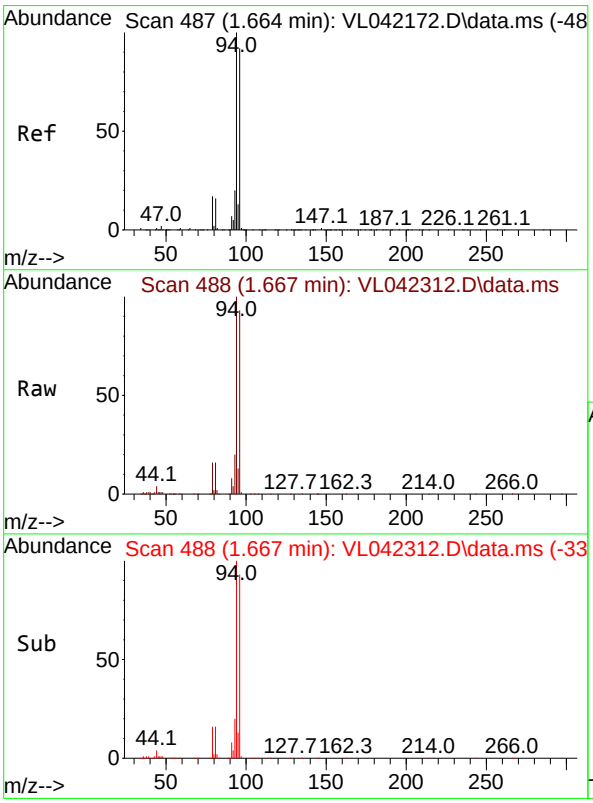
#5
Vinyl Chloride
Concen: 8.713 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 102342

Ion	Ratio	Lower	Upper
62	100		
64	30.6	26.6	40.0

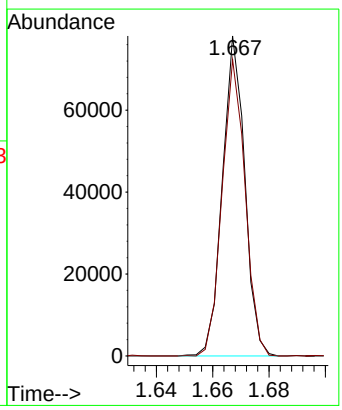


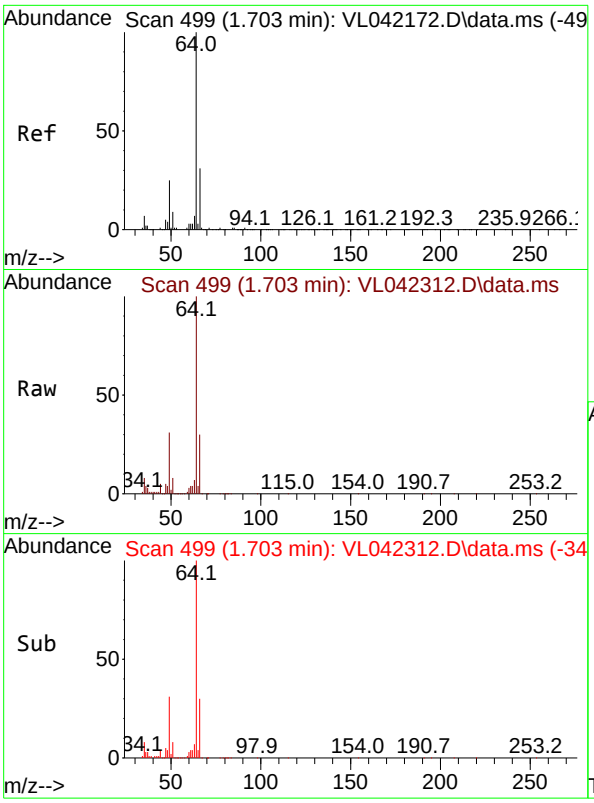


#6
Bromomethane
Concen: 8.571 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 94 Resp: 43054

Ion	Ratio	Lower	Upper
94	100		
96	92.7	73.1	109.7



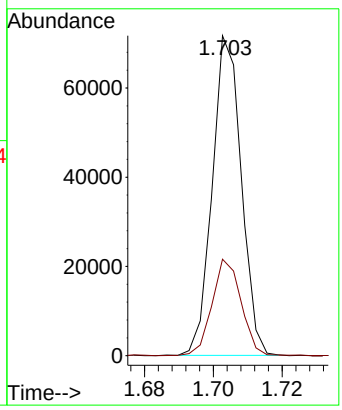


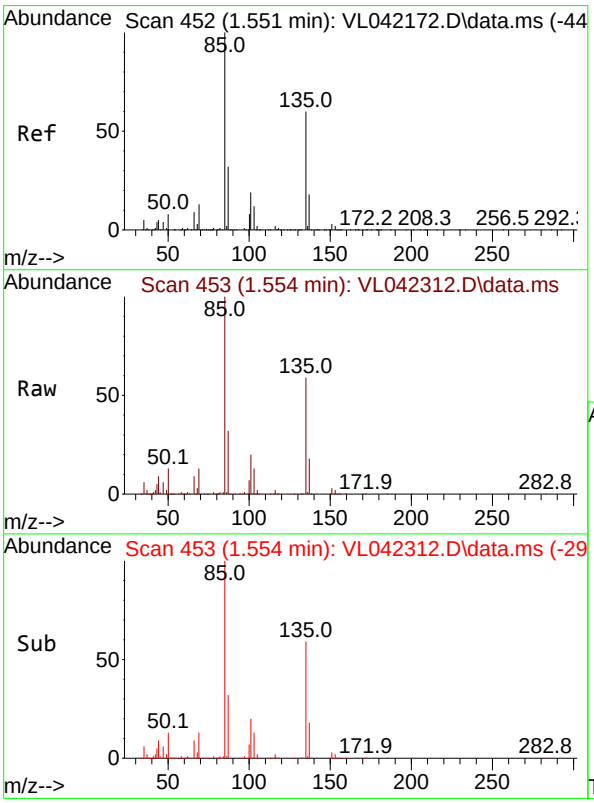
#7
Chloroethane
Concen: 9.427 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 41946

Ion	Ratio	Lower	Upper
64	100		
66	30.1	25.2	37.8

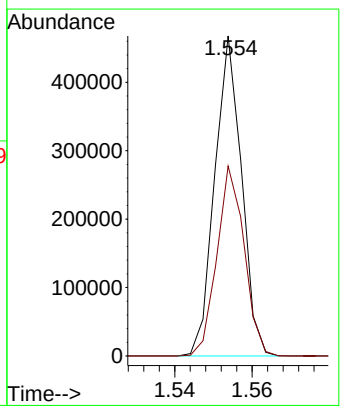


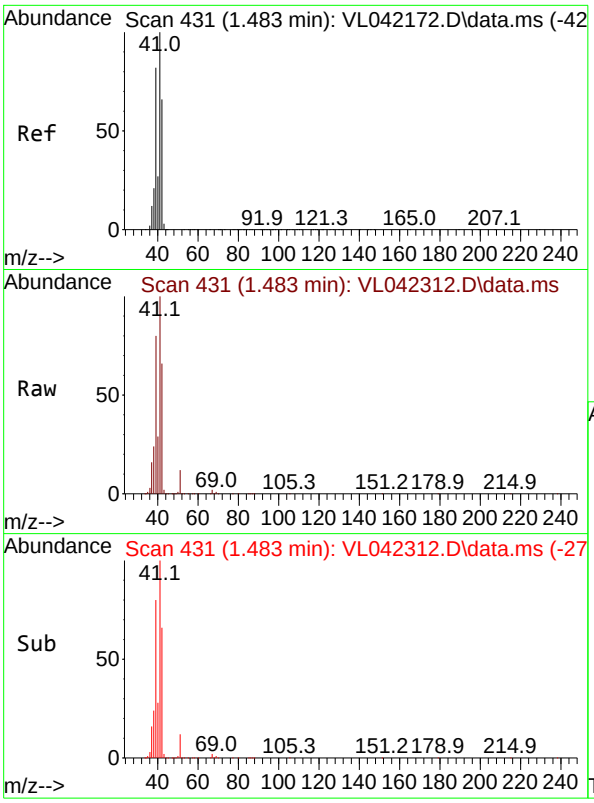


#8
Dichlorotetrafluoroethane
Concen: 9.719 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 85 Resp: 224489

Ion	Ratio	Lower	Upper
85	100		
135	60.5	52.4	78.6



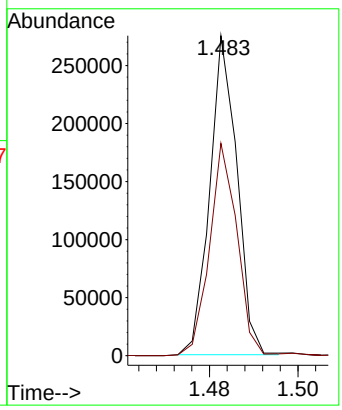


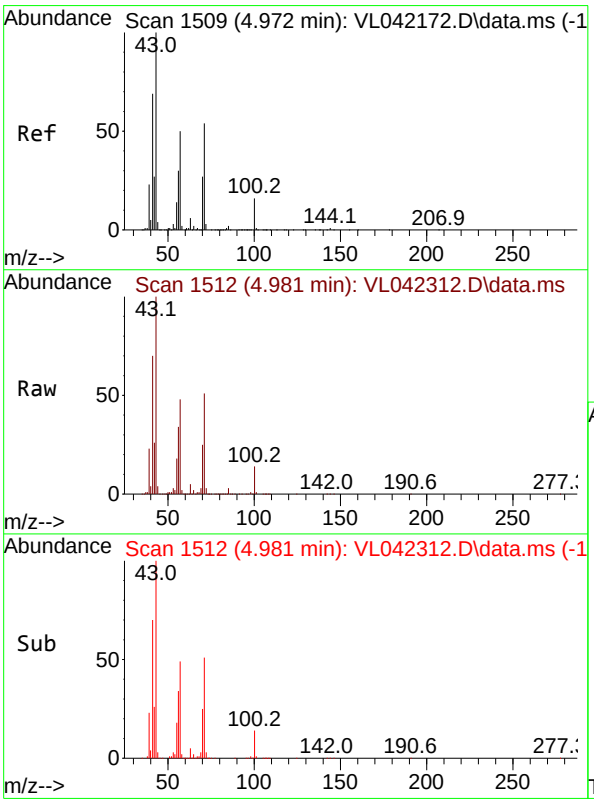
#9
Propene
Concen: 9.266 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 117677

Ion	Ratio	Lower	Upper
41	100		
42	68.3	55.4	83.2

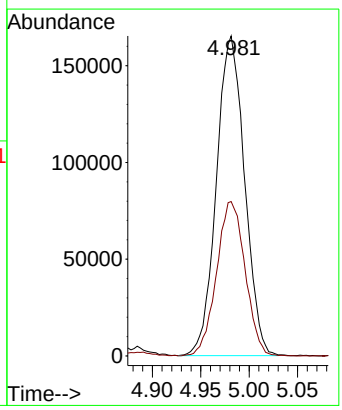


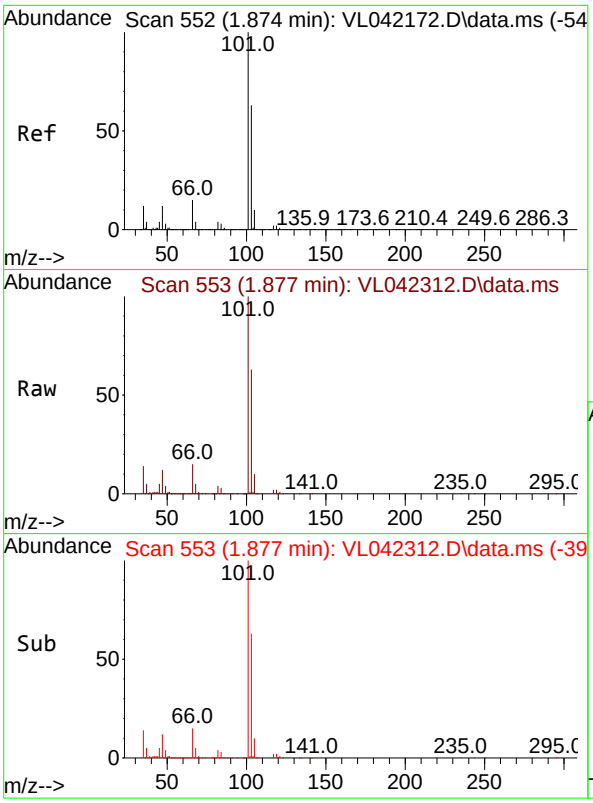


#10
Heptane
Concen: 9.908 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 334707

Ion	Ratio	Lower	Upper
43	100		
57	49.0	39.4	59.2



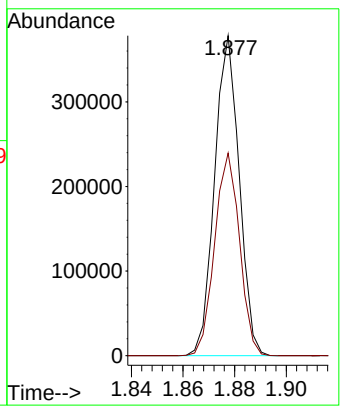


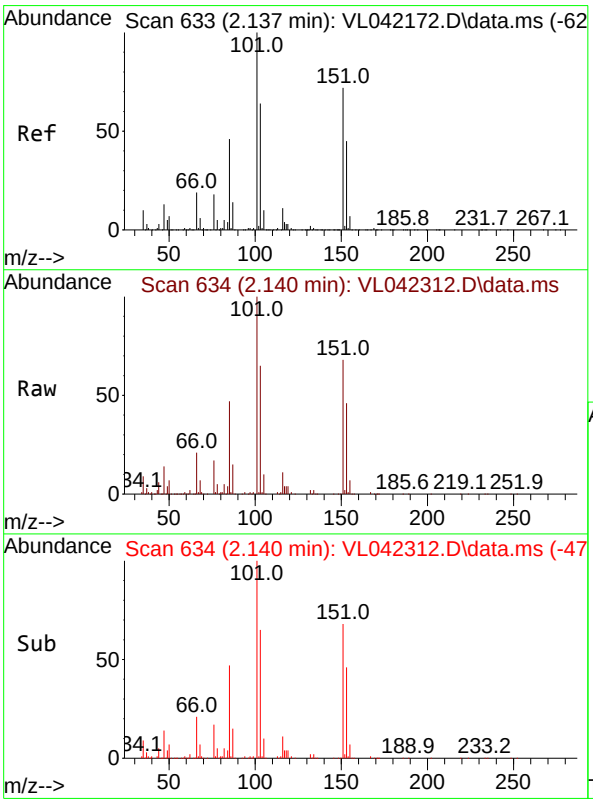
#11
Trichlorofluoromethane
Concen: 9.477 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 250122

Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.2	75.2

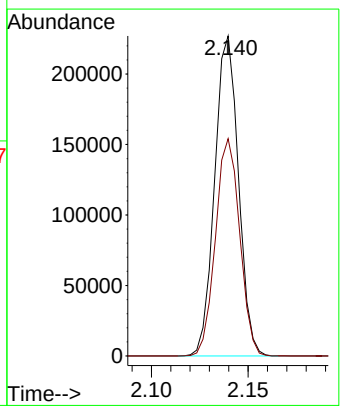


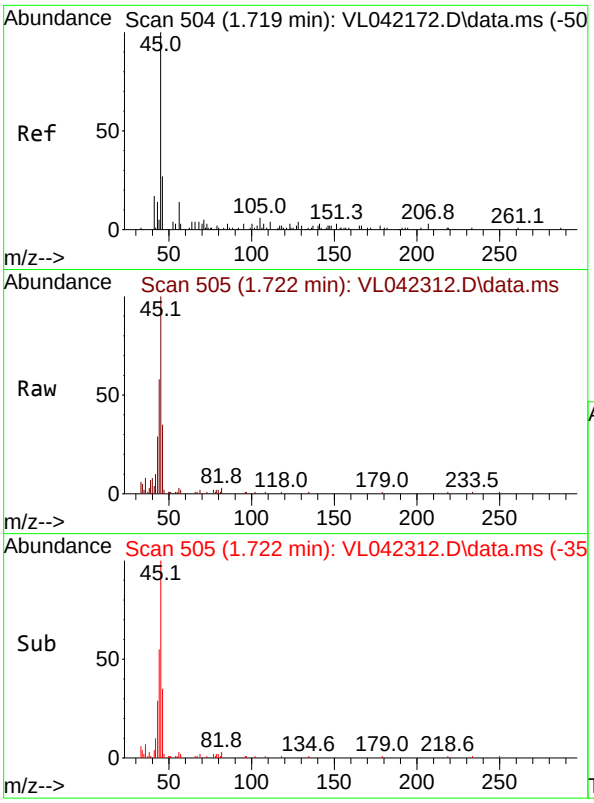


#12
1,1,2-Trichlorotrifluoroethane
Concen: 8.920 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:101 Resp: 193510

Ion	Ratio	Lower	Upper
101	100		
151	69.2	57.1	85.7



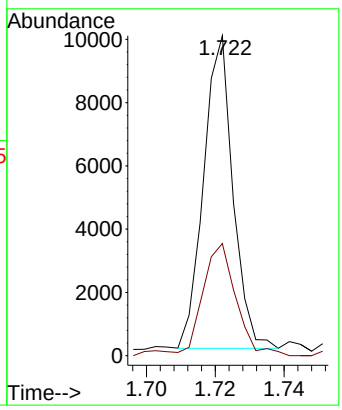


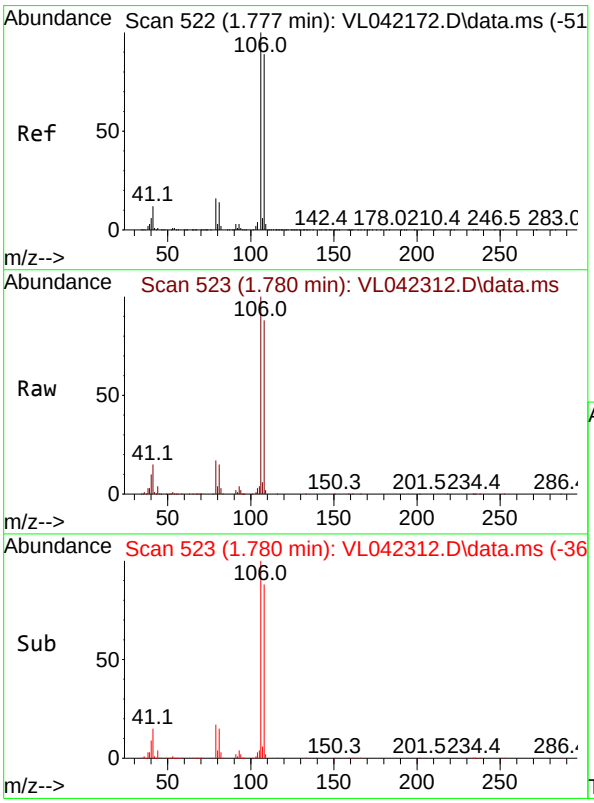
#13
Ethanol
Concen: 4.872 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 5849

Ion	Ratio	Lower	Upper
45	100		
46	43.0	20.2	80.8

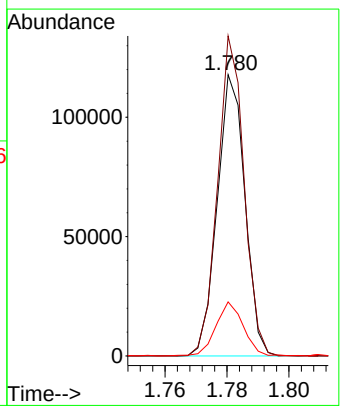


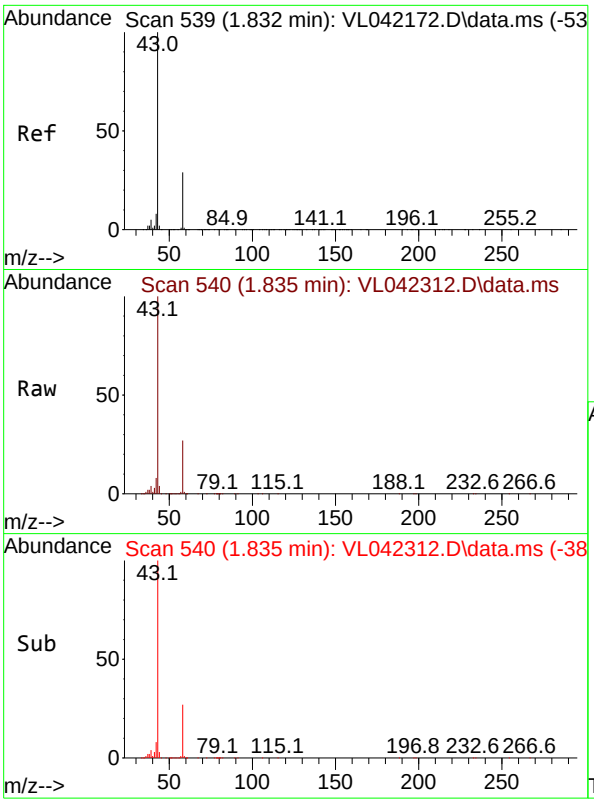


#14
Bromoethene
Concen: 8.820 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:108 Resp: 73294

Ion	Ratio	Lower	Upper
108	100		
106	108.4	86.8	130.2
79	19.5	15.0	22.6



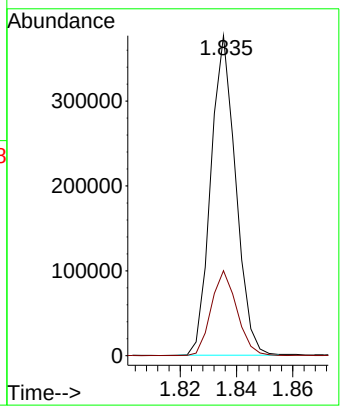


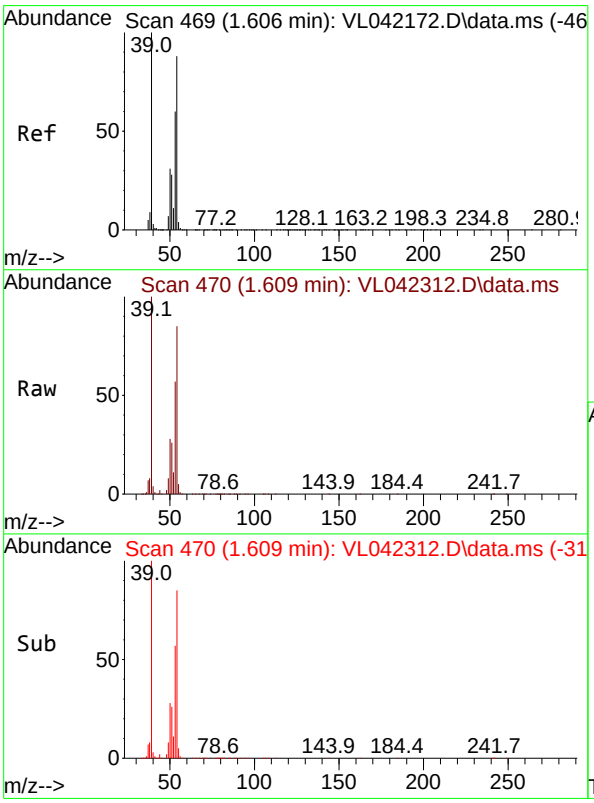
#15
Acetone
Concen: 9.019 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 231724

Ion	Ratio	Lower	Upper
43	100		
58	27.5	23.2	34.8

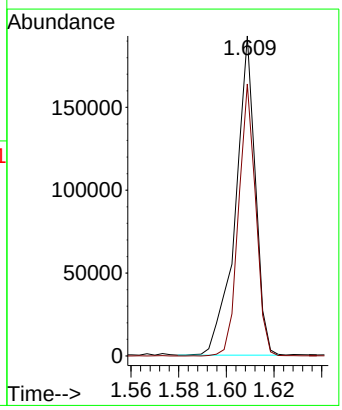


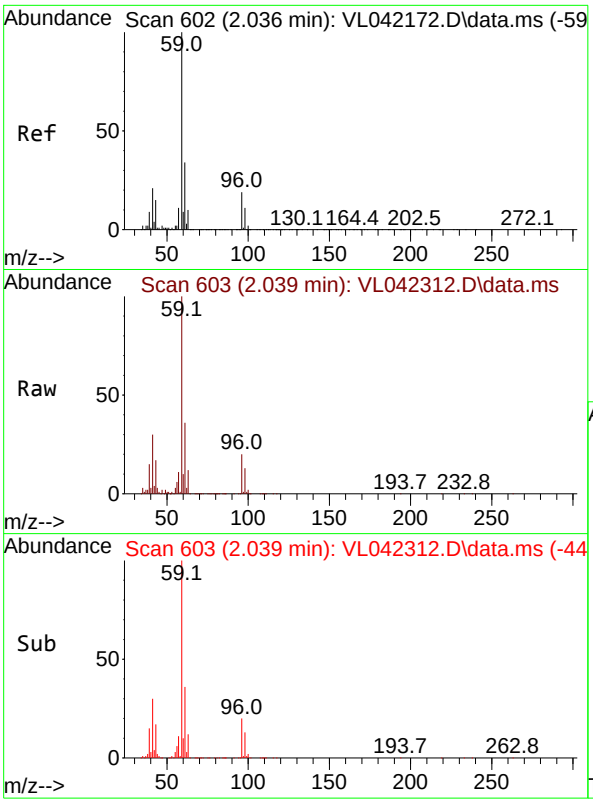


#16
1,3-Butadiene
Concen: 8.950 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 39 Resp: 112297

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1



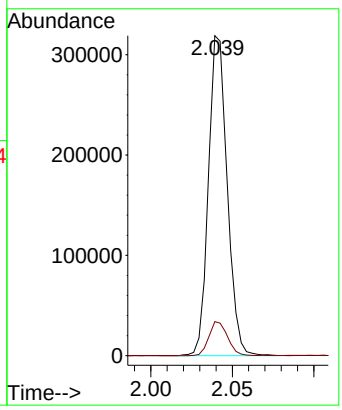


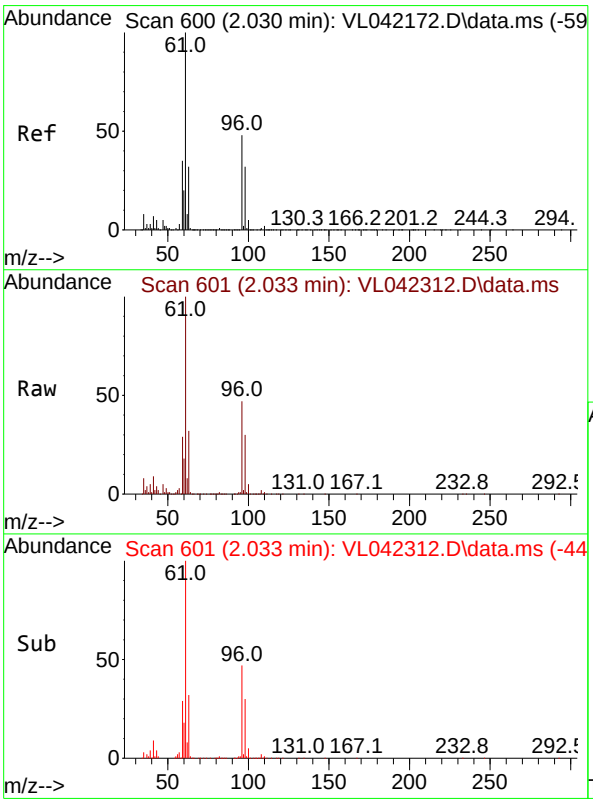
#17
tert-Butyl alcohol
Concen: 7.987 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 255575

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.9	13.3

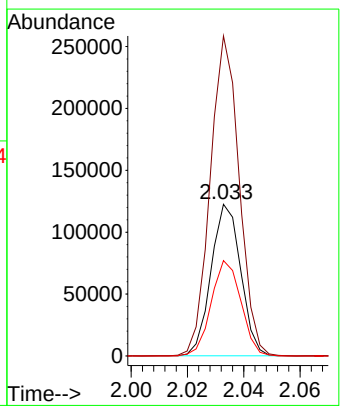


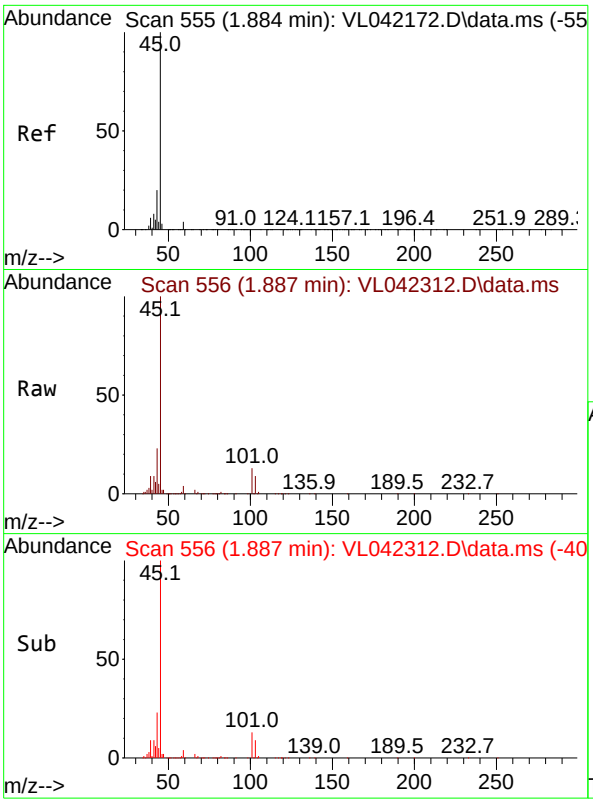


#18
1,1-Dichloroethene
Concen: 8.827 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 96 Resp: 89512

Ion	Ratio	Lower	Upper
96	100		
61	210.8	167.6	251.4
98	62.9	53.5	80.3



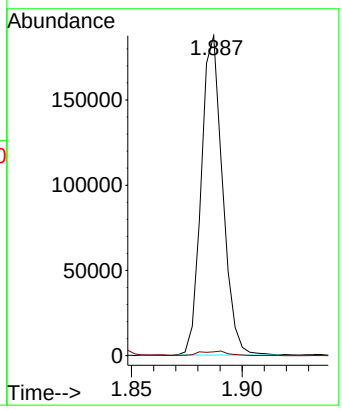


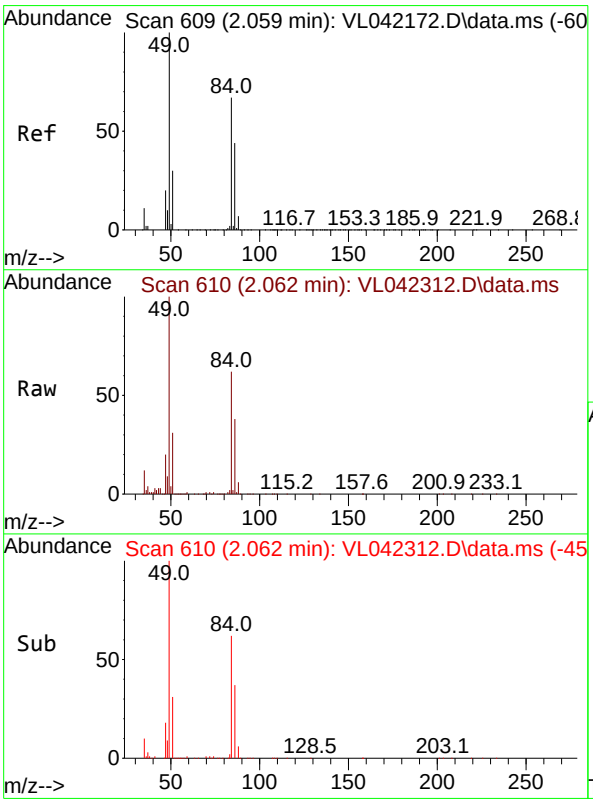
#19
Isopropyl Alcohol
Concen: 8.639 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 125233

Ion	Ratio	Lower	Upper
45	100		
58	51.2	36.9	55.3

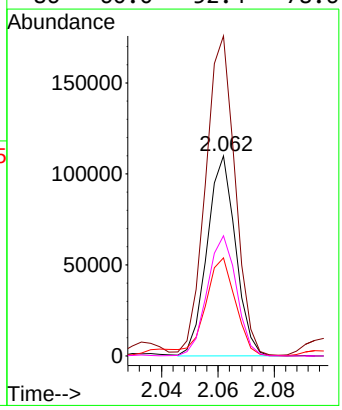


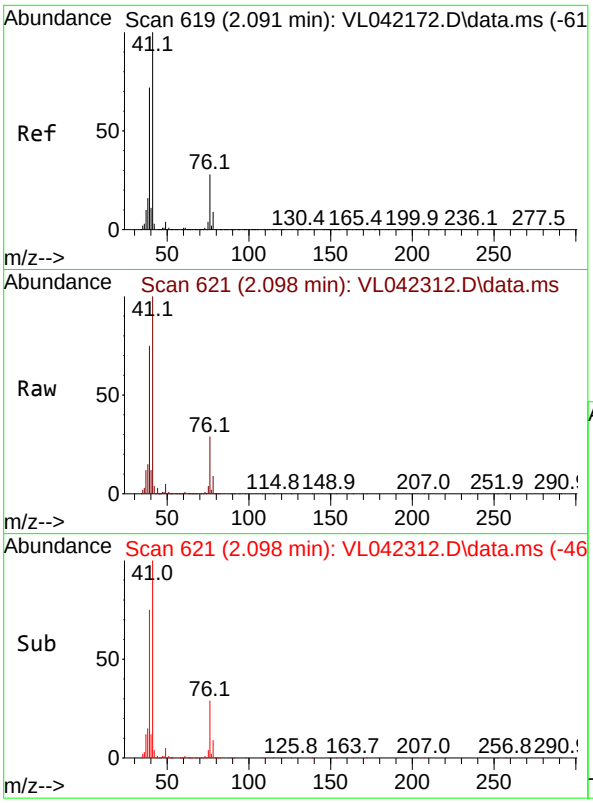


#20
Methylene Chloride
Concen: 8.044 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 84 Resp: 76968

Ion	Ratio	Lower	Upper
84	100		
49	159.9	120.2	180.4
51	48.8	37.4	56.0
86	60.0	52.4	78.6



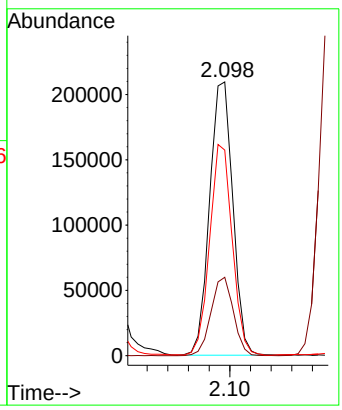


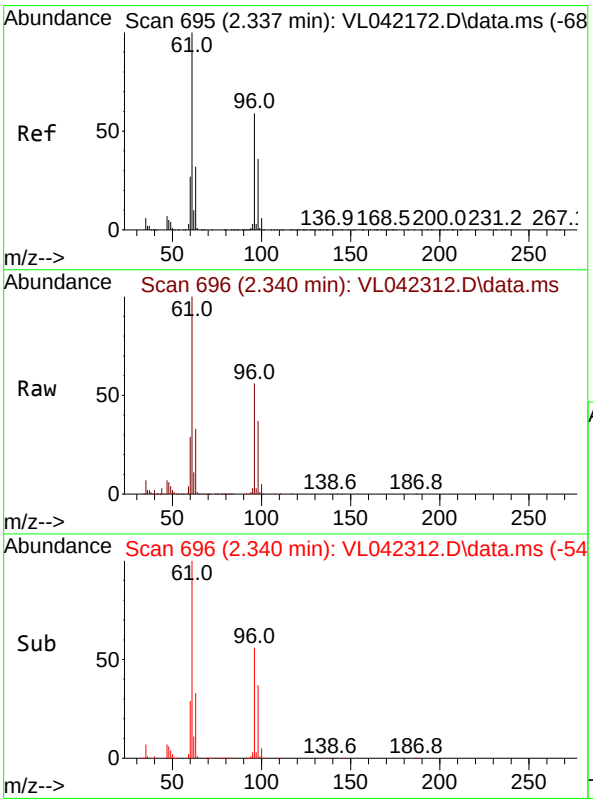
#21
Allyl Chloride
Concen: 8.996 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 162998

Ion	Ratio	Lower	Upper
41	100		
76	27.7	24.1	36.1
39	74.5	61.1	91.7

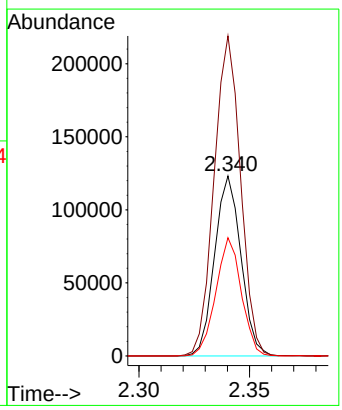


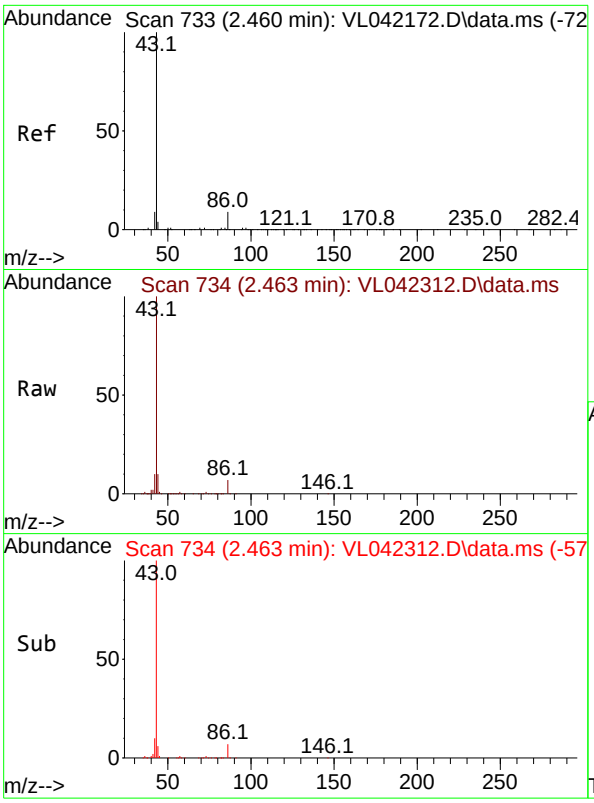


#22
trans-1,2-Dichloroethene
Concen: 8.700 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 96 Resp: 101974

Ion	Ratio	Lower	Upper
96	100		
61	177.7	136.6	204.8
98	65.6	49.4	74.2



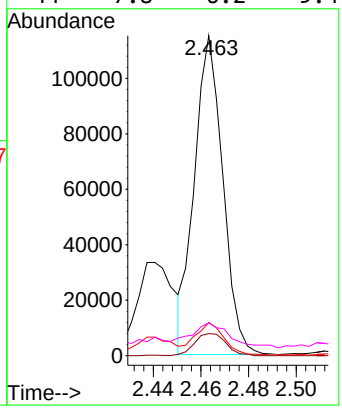


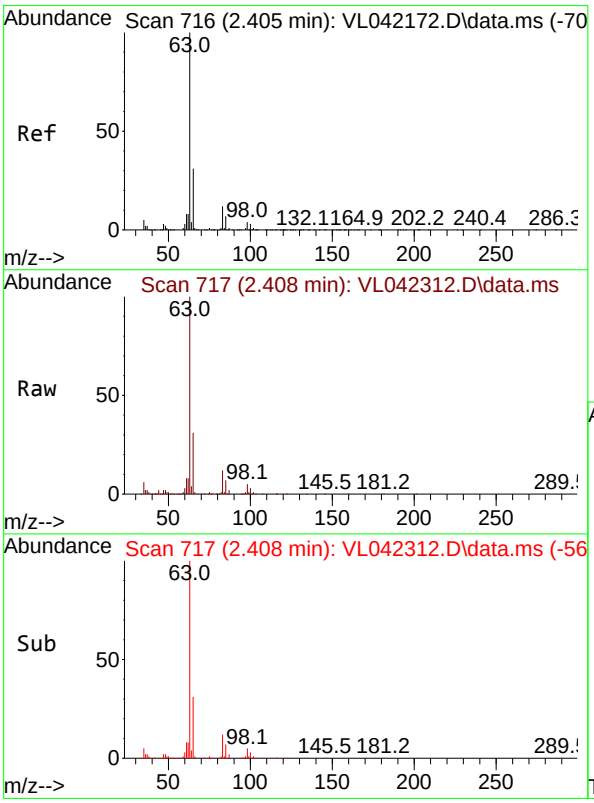
#23
Vinyl Acetate
Concen: 8.557 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 95152

Ion	Ratio	Lower	Upper
43	100		
86	6.9	5.5	8.3
42	10.1	8.6	13.0
44	7.8	6.2	9.4

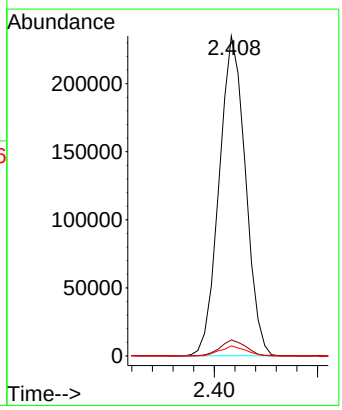


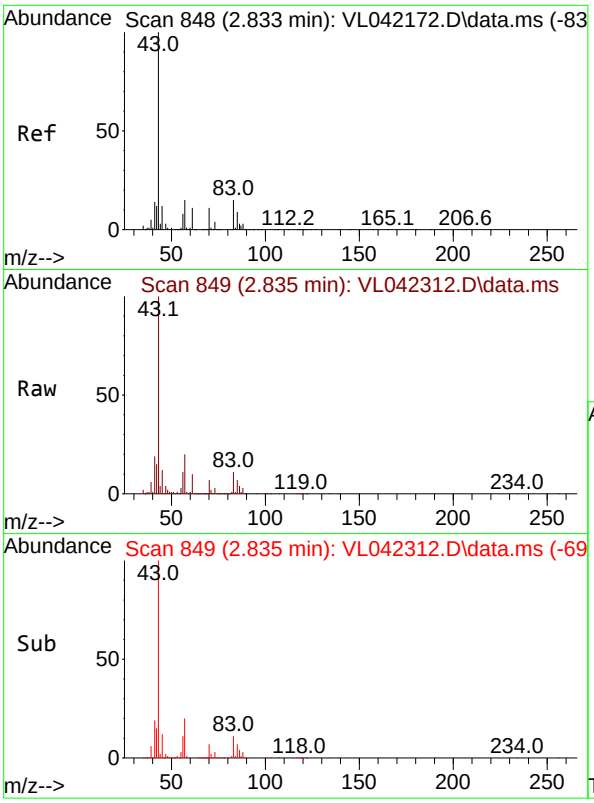


#24
1,1-Dichloroethane
Concen: 9.567 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 63 Resp: 207862

Ion	Ratio	Lower	Upper
63	100		
98	5.0	2.3	6.8
100	3.2	1.6	4.7



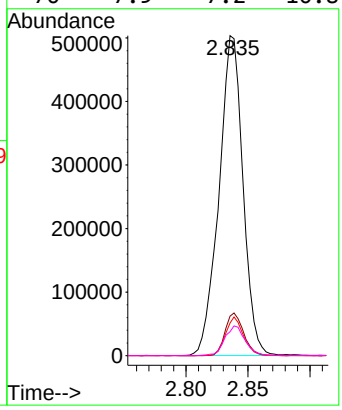


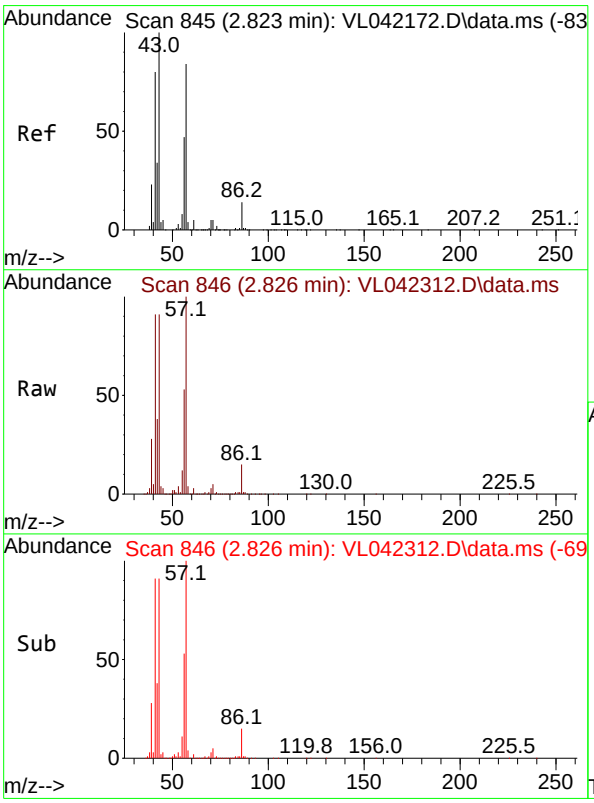
#25
Ethyl Acetate
Concen: 10.182 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 678920

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	9.1	7.3	10.9
70	7.9	7.2	10.8

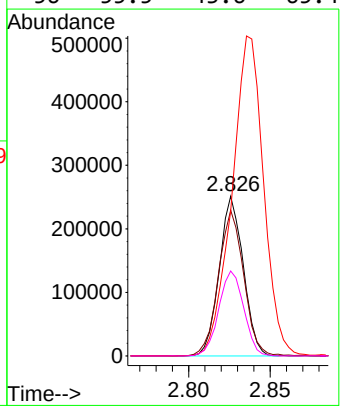


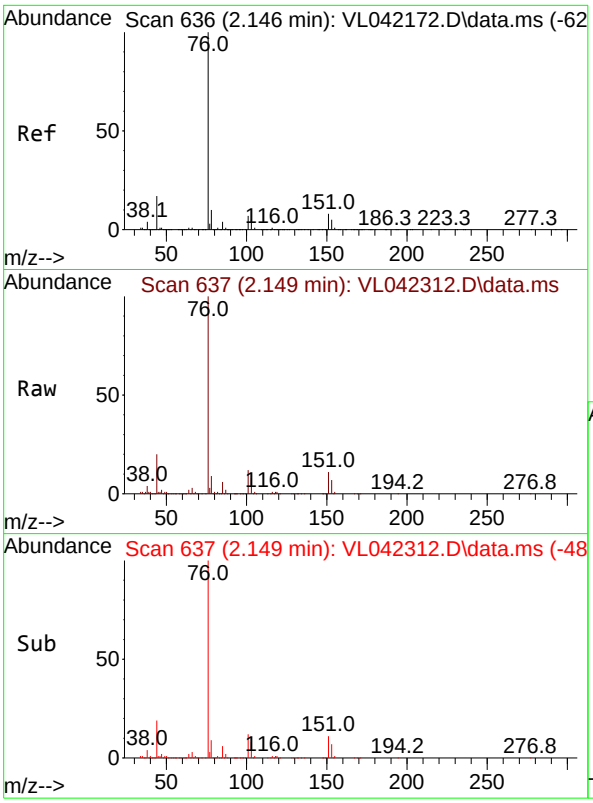


#26
Hexane
Concen: 9.973 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 57 Resp: 256866

Ion	Ratio	Lower	Upper
57	100		
41	96.5	76.6	114.8
43	265.7	207.8	311.8
56	55.5	43.6	65.4



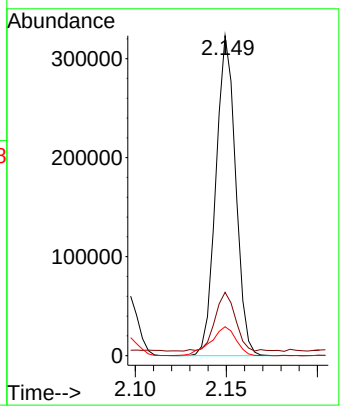


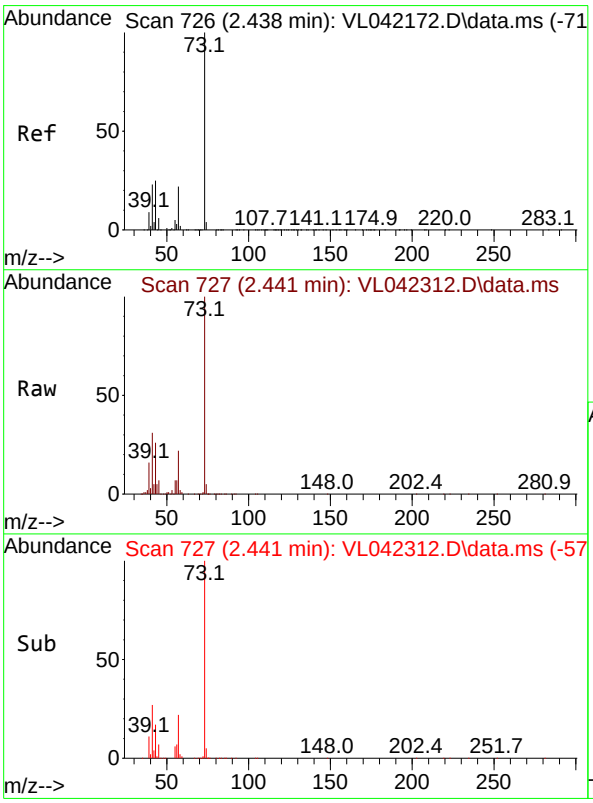
#27
Carbon Disulfide
Concen: 8.812 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 243367

Ion	Ratio	Lower	Upper
76	100		
44	19.5	14.7	22.1
78	11.6	9.3	13.9

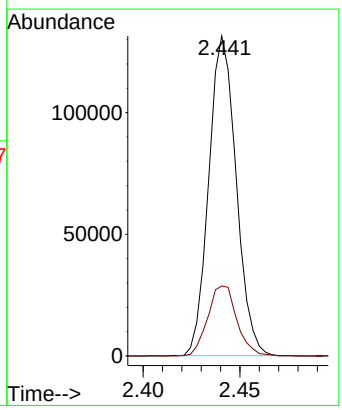


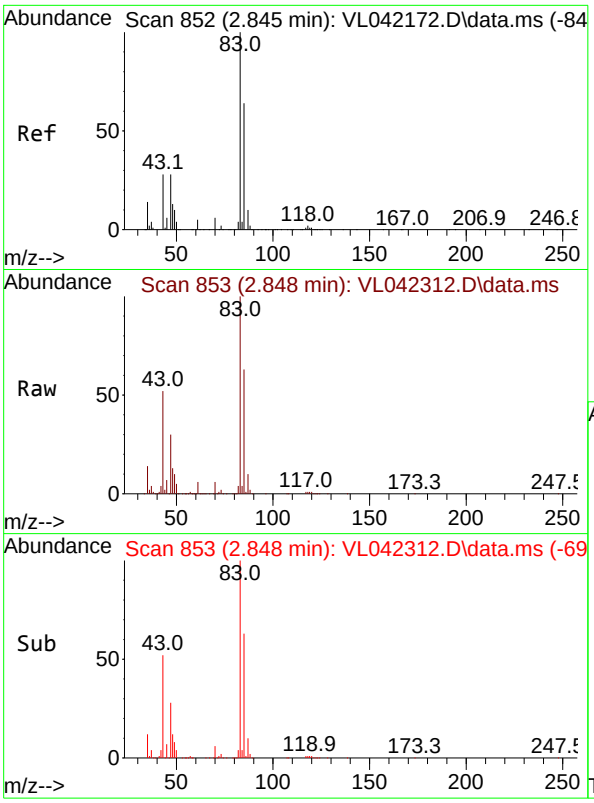


#28
Methyl tert-Butyl Ether
Concen: 8.053 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 73 Resp: 129141

Ion	Ratio	Lower	Upper
73	100		
57	23.4	20.5	30.7



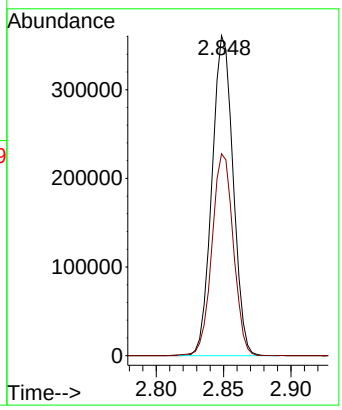


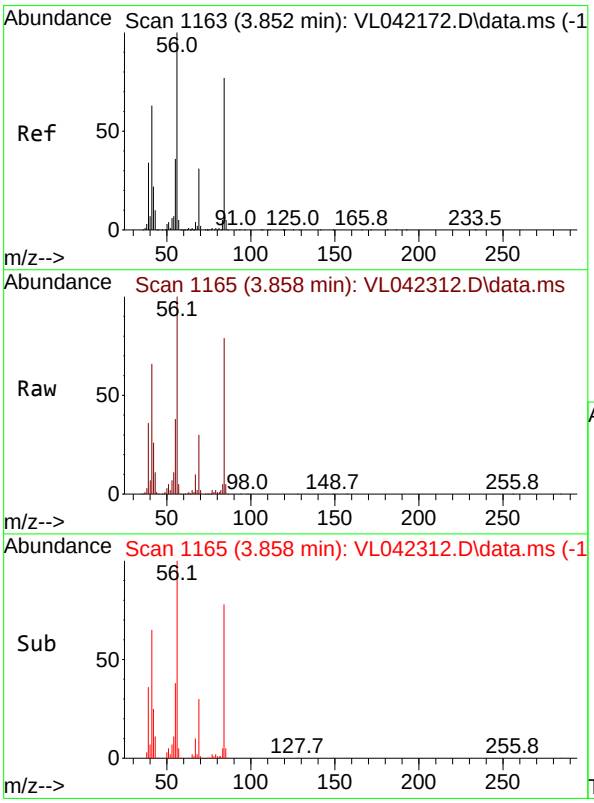
#29
Chloroform
Concen: 10.443 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 393638

Ion	Ratio	Lower	Upper
83	100		
85	63.1	51.4	77.2

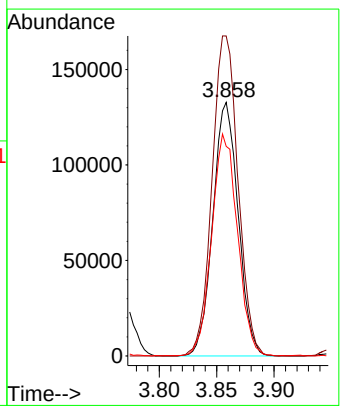


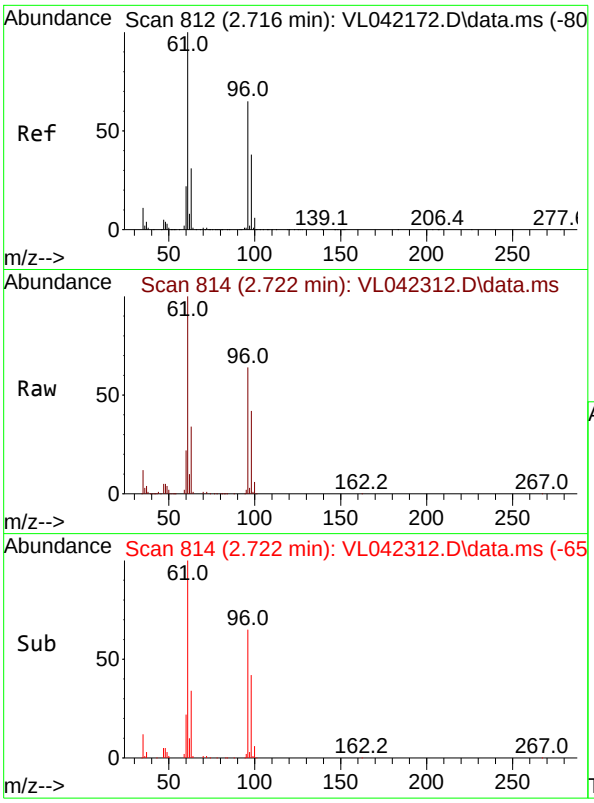


#30
Cyclohexane
Concen: 9.100 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 84 Resp: 203526

Ion	Ratio	Lower	Upper
84	100		
56	129.8	102.8	154.2
41	89.4	66.5	99.7



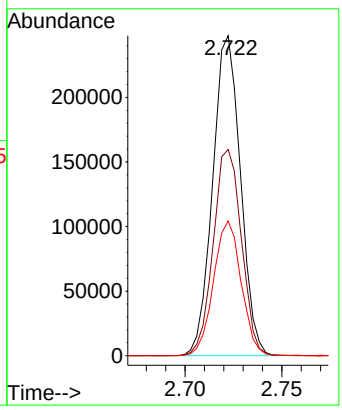


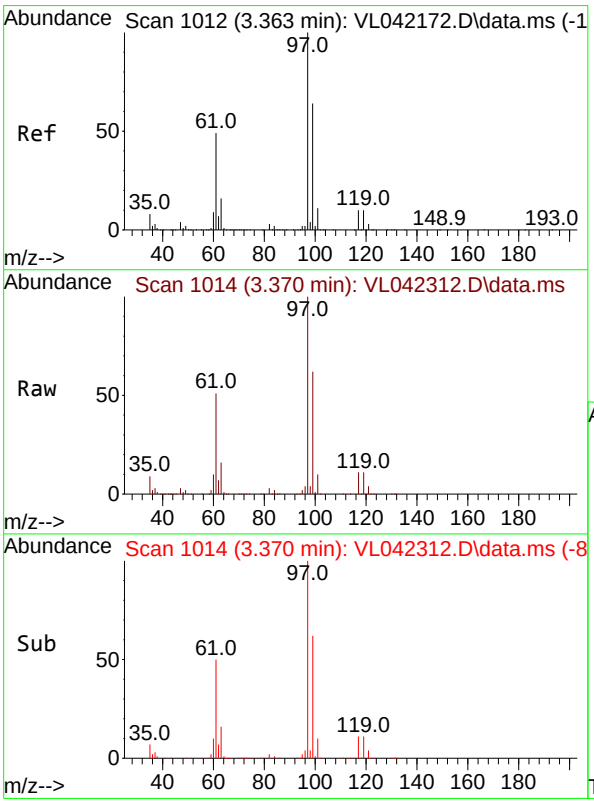
#31
cis-1,2-Dichloroethene
Concen: 9.454 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 247194

Ion	Ratio	Lower	Upper
61	100		
96	64.4	51.8	77.8
98	42.0	30.6	46.0

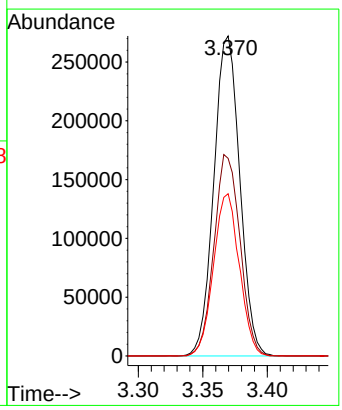


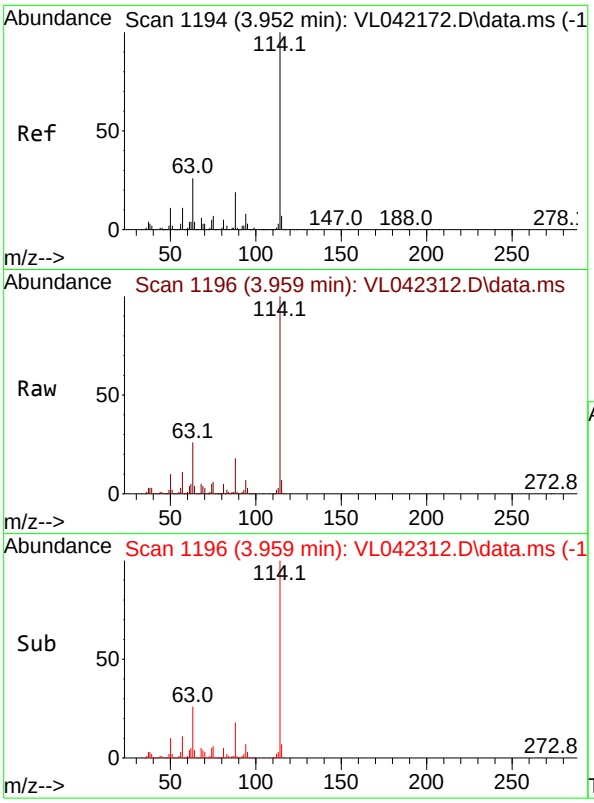


#32
1,1,1-Trichloroethane
Concen: 8.813 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 97 Resp: 380312

Ion	Ratio	Lower	Upper
97	100		
99	63.2	51.5	77.3
61	50.6	38.7	58.1



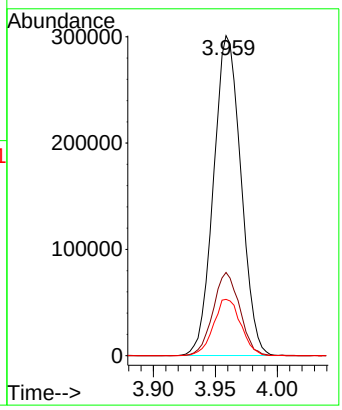


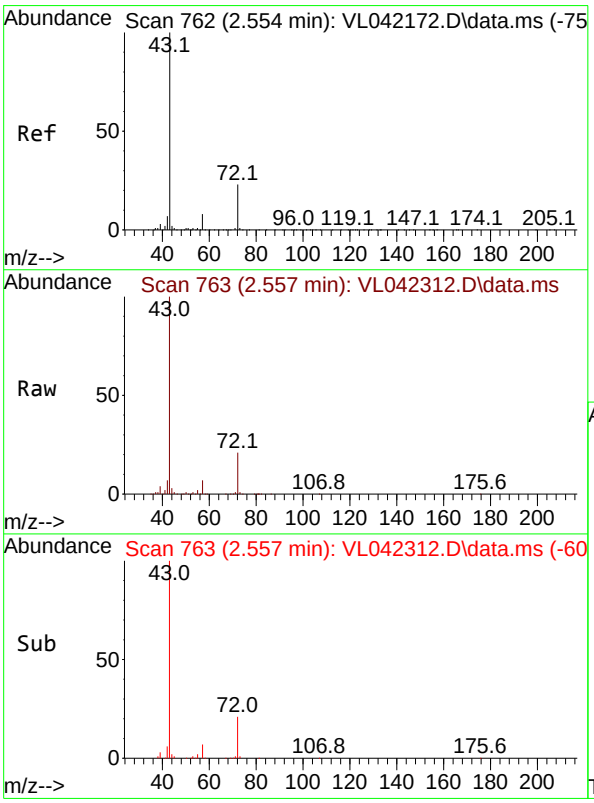
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 463746

Ion	Ratio	Lower	Upper
114	100		
63	25.5	20.7	31.1
88	17.7	15.0	22.4

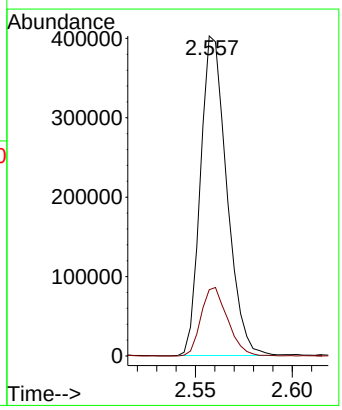


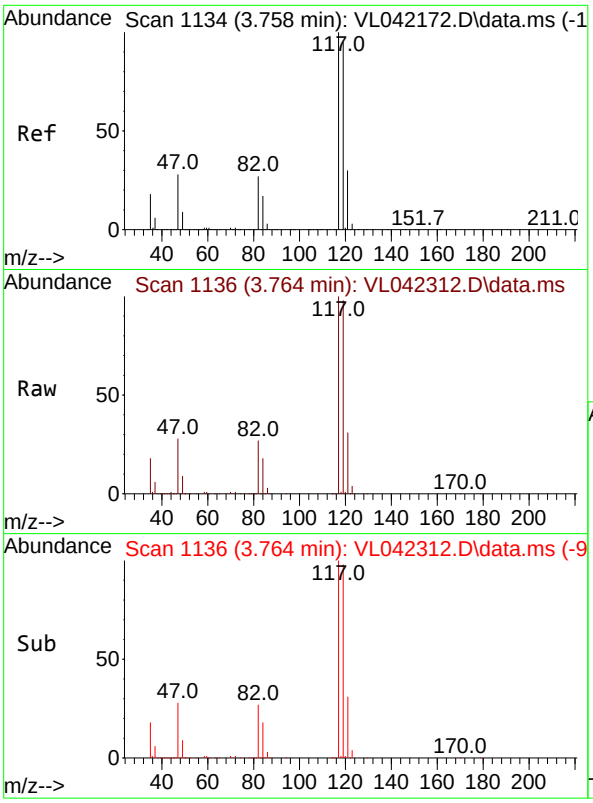


#34
2-Butanone
Concen: 11.321 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 380682

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2



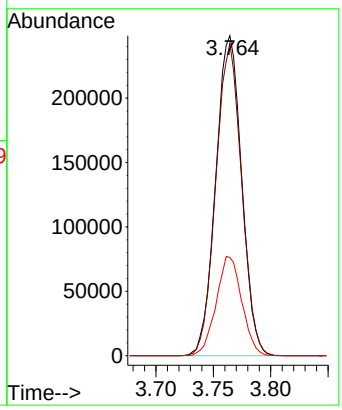


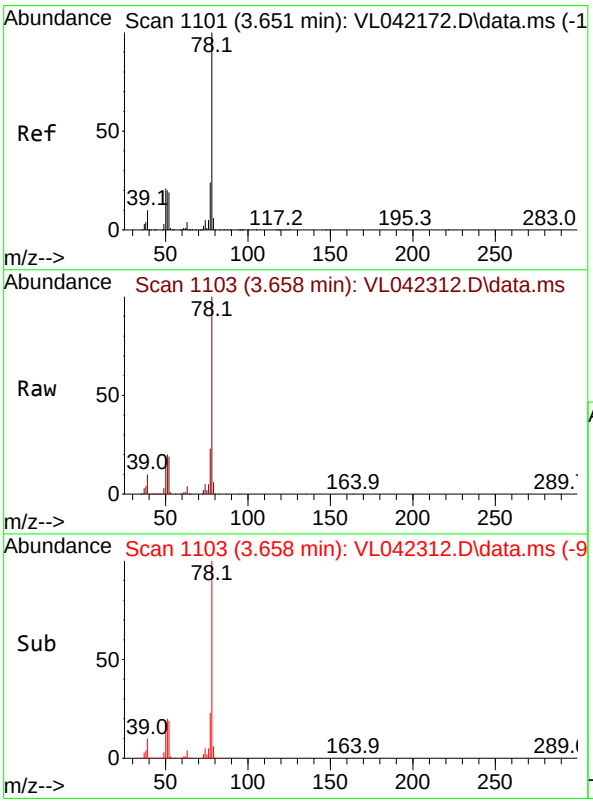
#35
Carbon Tetrachloride
Concen: 10.769 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 390140

Ion	Ratio	Lower	Upper
117	100		
119	97.6	76.2	114.2
121	30.7	24.2	36.4

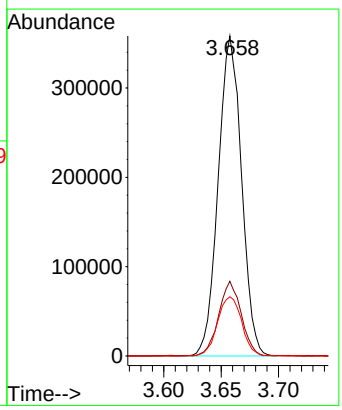


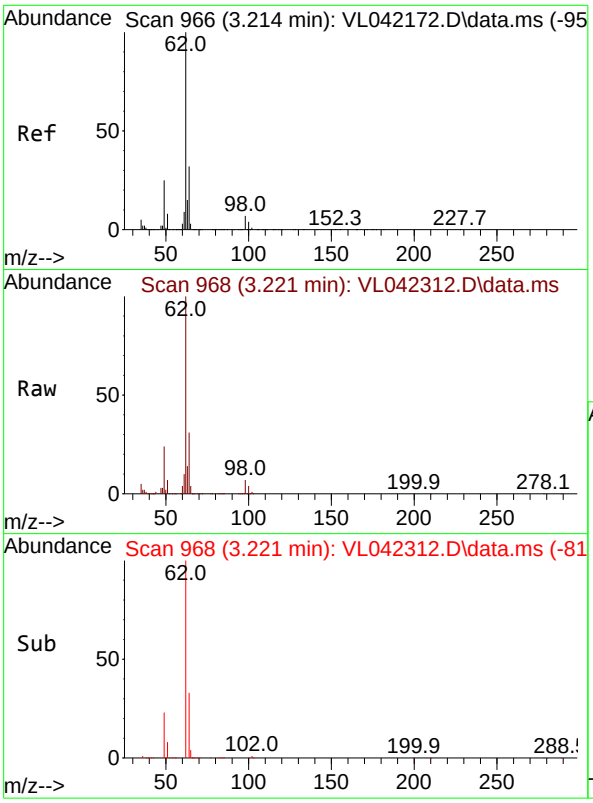


#36
Benzene
Concen: 11.012 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 78 Resp: 506278

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	18.5	16.6	24.8



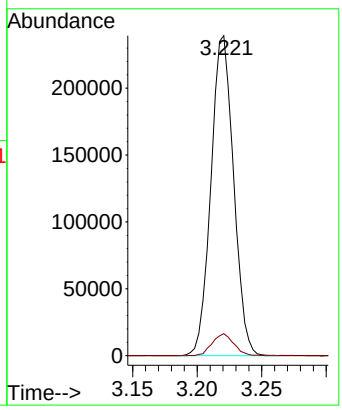


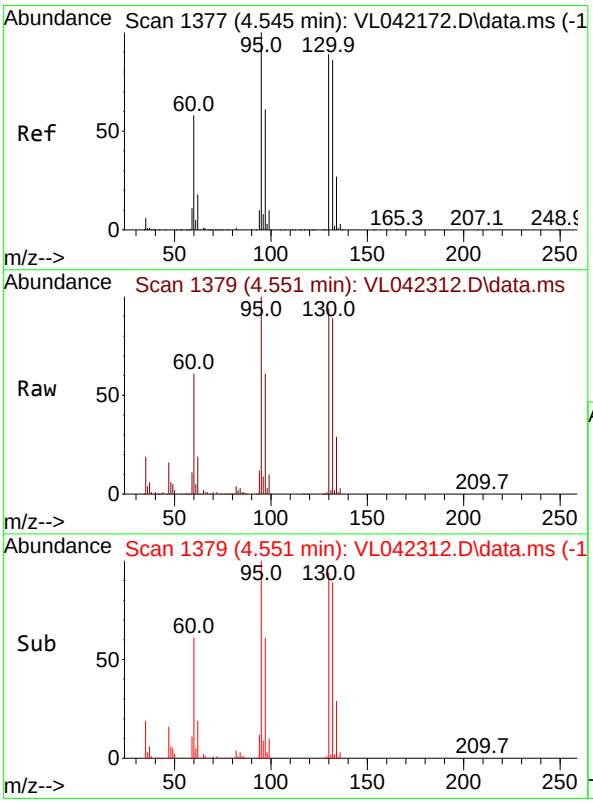
#37
1,2-Dichloroethane
Concen: 11.101 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 292183

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2

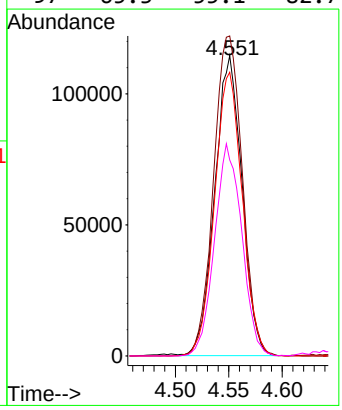


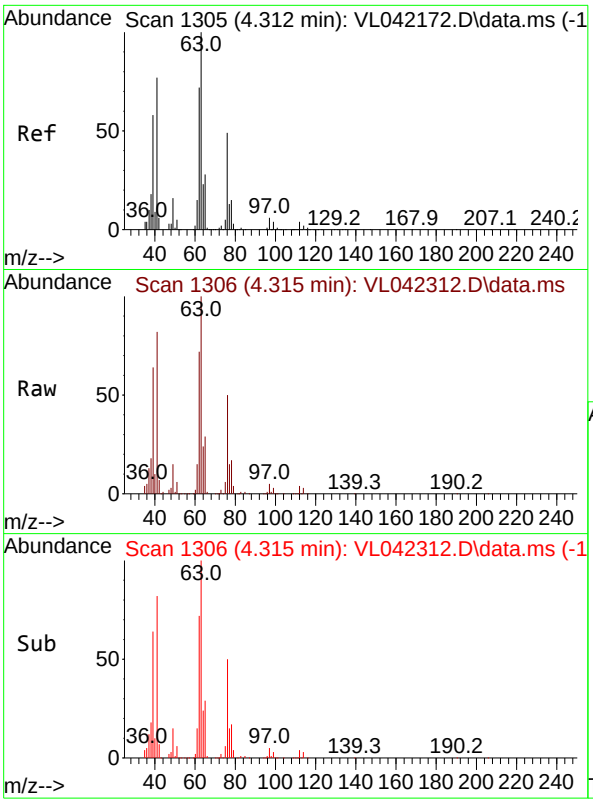


#38
Trichloroethene
Concen: 10.591 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:130 Resp: 203156

Ion	Ratio	Lower	Upper
130	100		
95	106.6	89.8	134.8
132	94.5	77.4	116.2
97	65.3	55.1	82.7



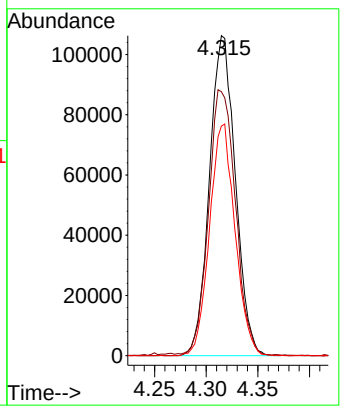


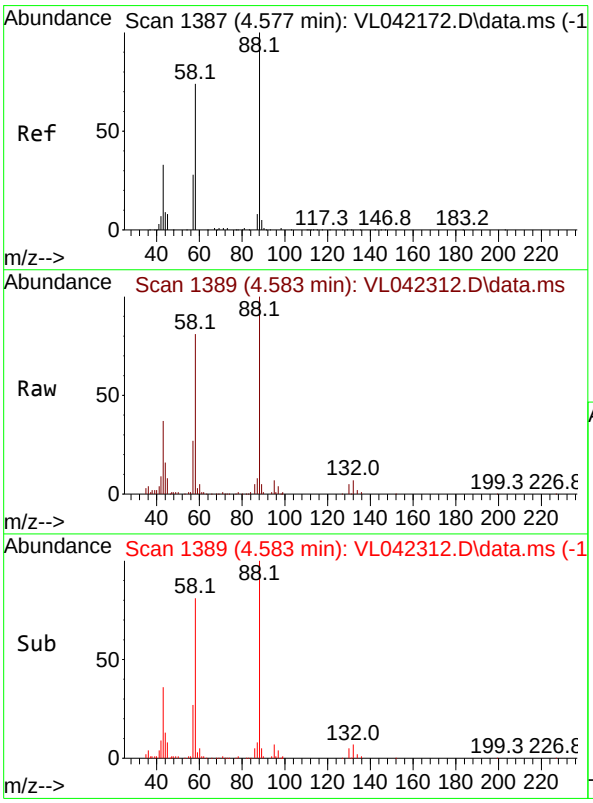
#39
1,2-Dichloropropane
Concen: 11.079 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 185497

Ion	Ratio	Lower	Upper
63	100		
41	82.2	61.7	92.5
62	71.8	57.6	86.4

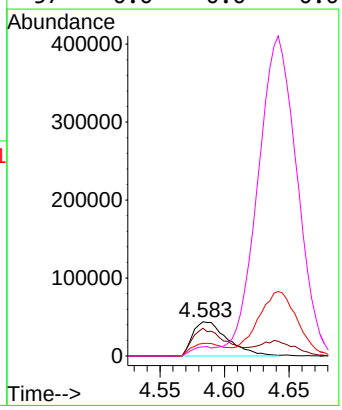


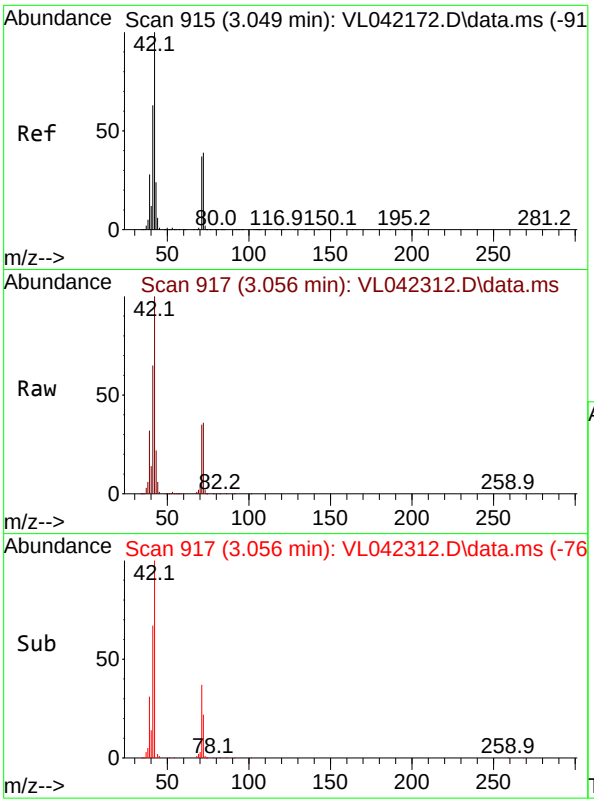


#40
1,4-Dioxane
Concen: 9.270 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 88 Resp: 82376

Ion	Ratio	Lower	Upper
88	100		
58	79.1	62.7	94.1
43	30.6	23.0	34.4
57	0.0	0.0	0.0



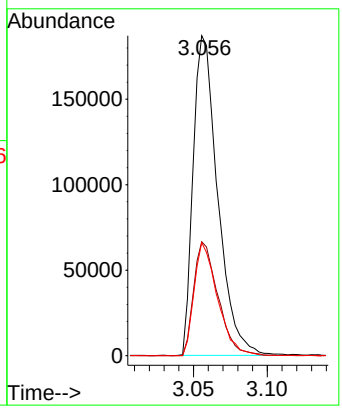


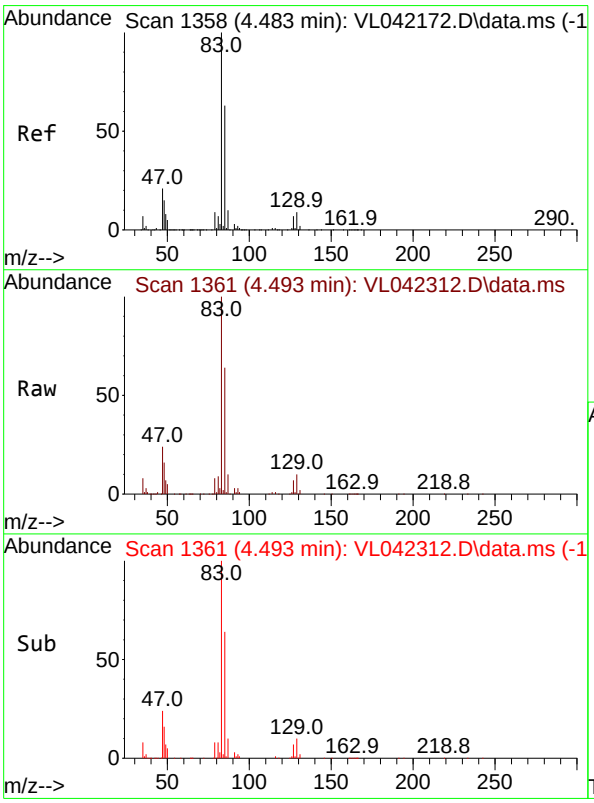
#41
Tetrahydrofuran
Concen: 11.188 ppbv
RT: 3.056 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 216646

Ion	Ratio	Lower	Upper
42	100		
72	35.3	31.4	47.0
71	33.8	30.2	45.4

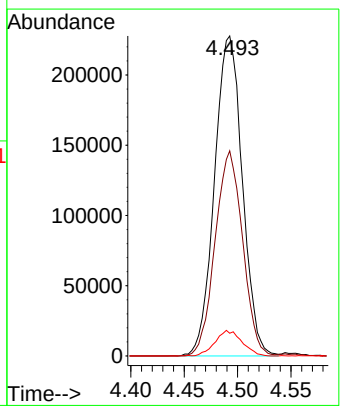


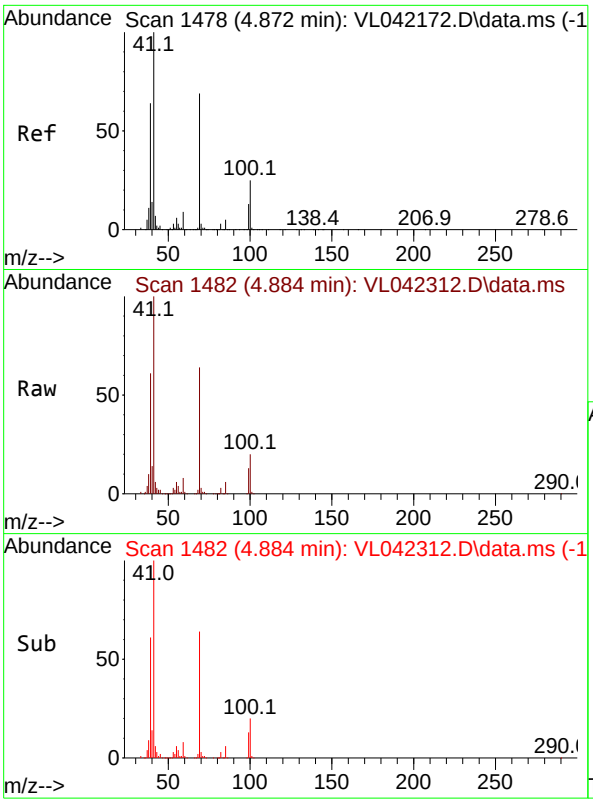


#42
Bromodichloromethane
Concen: 11.389 ppbv
RT: 4.493 min Scan# 1361
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 83 Resp: 413250

Ion	Ratio	Lower	Upper
83	100		
85	64.1	50.5	75.7
127	7.1	5.9	8.9



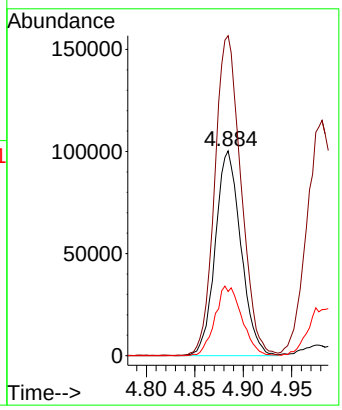


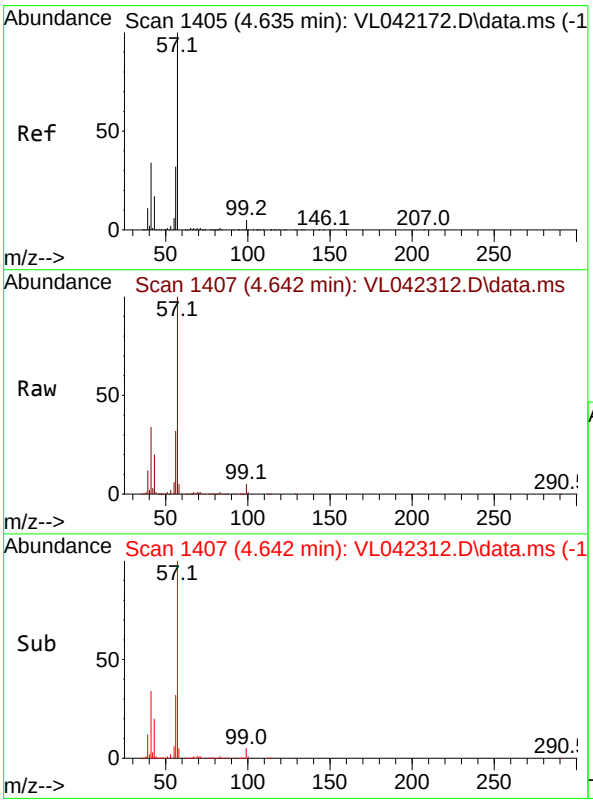
#43
Methyl Methacrylate
Concen: 9.478 ppbv
RT: 4.884 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 184472

Ion	Ratio	Lower	Upper
69	100		
41	160.3	123.8	185.6
100	35.6	28.4	42.6

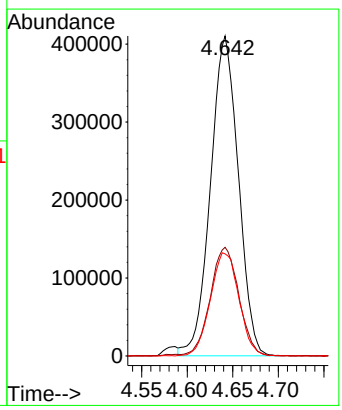


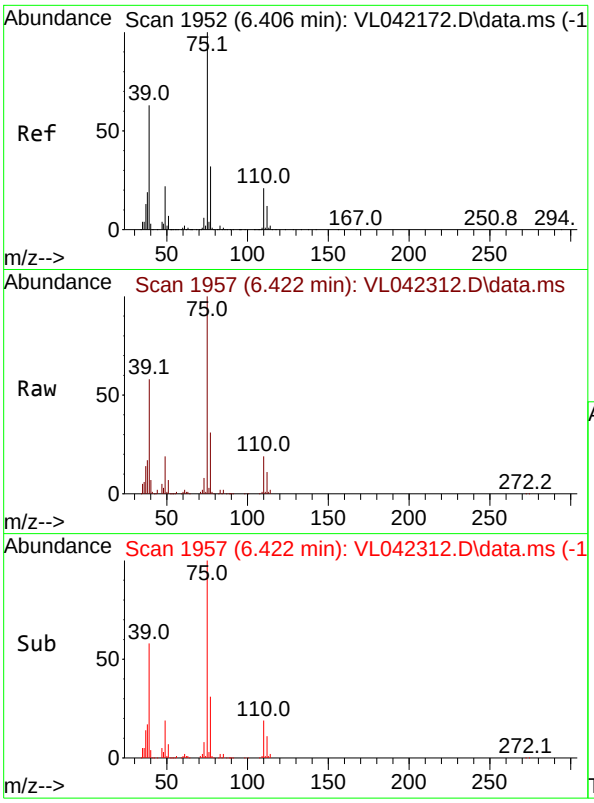


#44
2,2,4-Trimethylpentane
Concen: 11.235 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 57 Resp: 872871

Ion	Ratio	Lower	Upper
57	100		
41	35.1	26.8	40.2
56	33.1	25.6	38.4



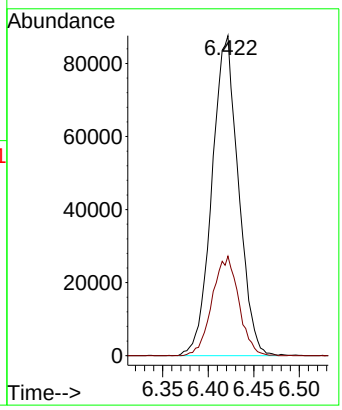


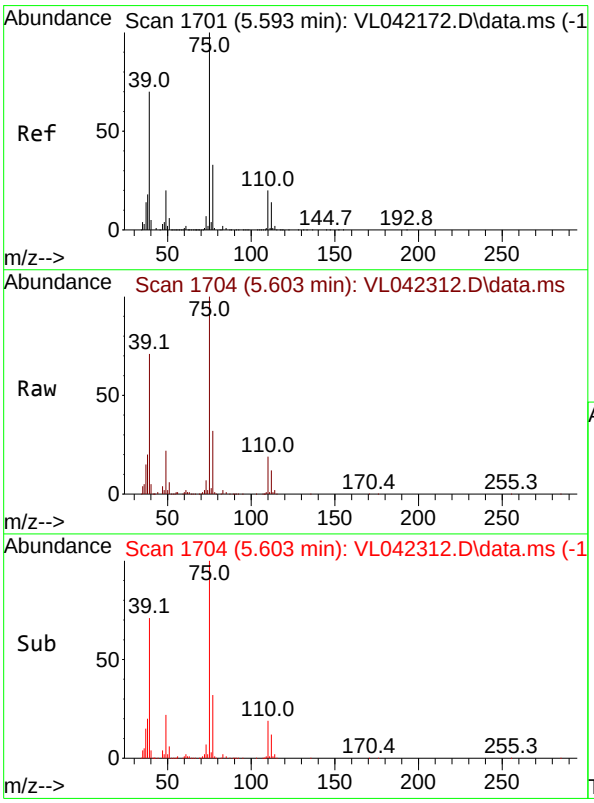
#45
t-1,3-Dichloropropene
Concen: 8.467 ppbv
RT: 6.422 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 176804

Ion	Ratio	Lower	Upper
75	100		
77	31.1	26.0	39.0

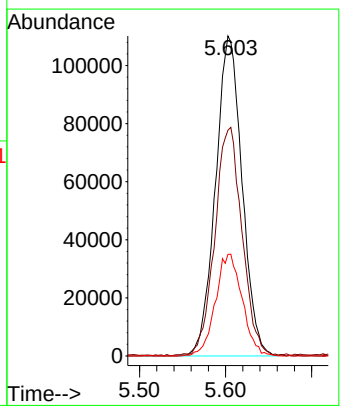


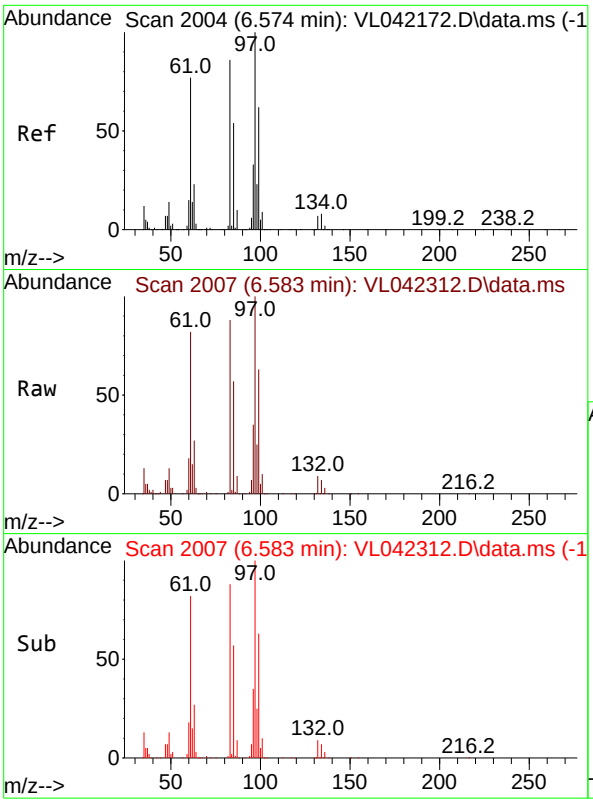


#46
cis-1,3-Dichloropropene
Concen: 9.222 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 75 Resp: 236039

Ion	Ratio	Lower	Upper
75	100		
39	70.2	55.8	83.6
77	31.7	26.0	39.0



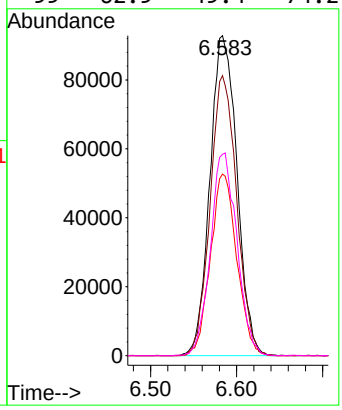


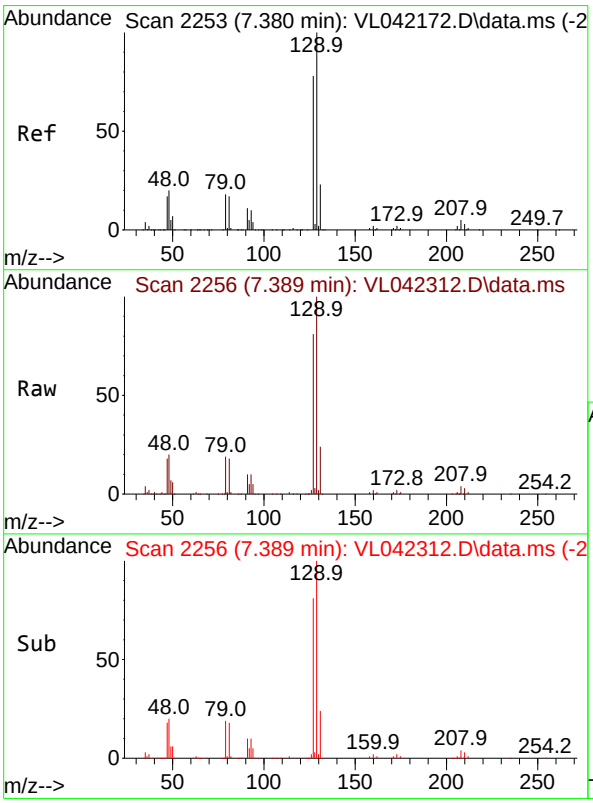
#47
1,1,2-Trichloroethane
Concen: 11.463 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 202891

Ion	Ratio	Lower	Upper
97	100		
83	87.5	69.2	103.8
85	56.7	43.1	64.7
99	62.9	49.4	74.2

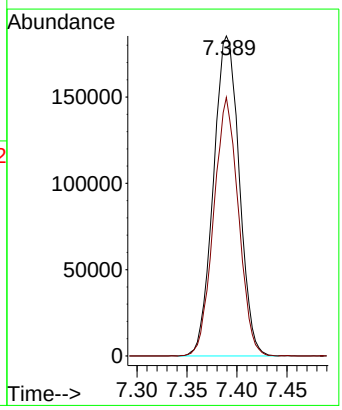


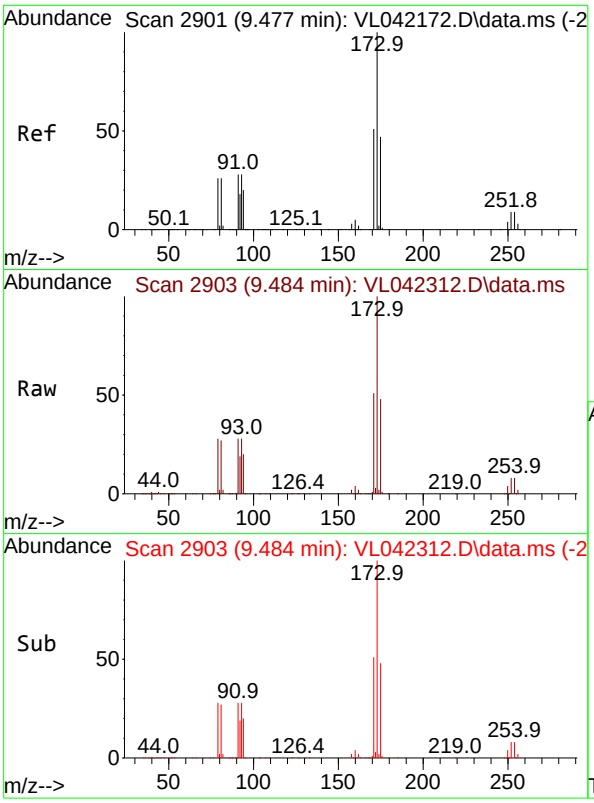


#48
Dibromochloromethane
Concen: 11.106 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:129 Resp: 333128

Ion	Ratio	Lower	Upper
129	100		
127	77.4	39.1	117.2



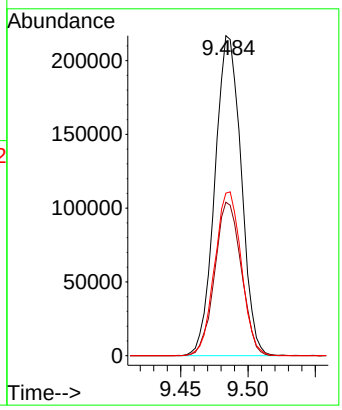


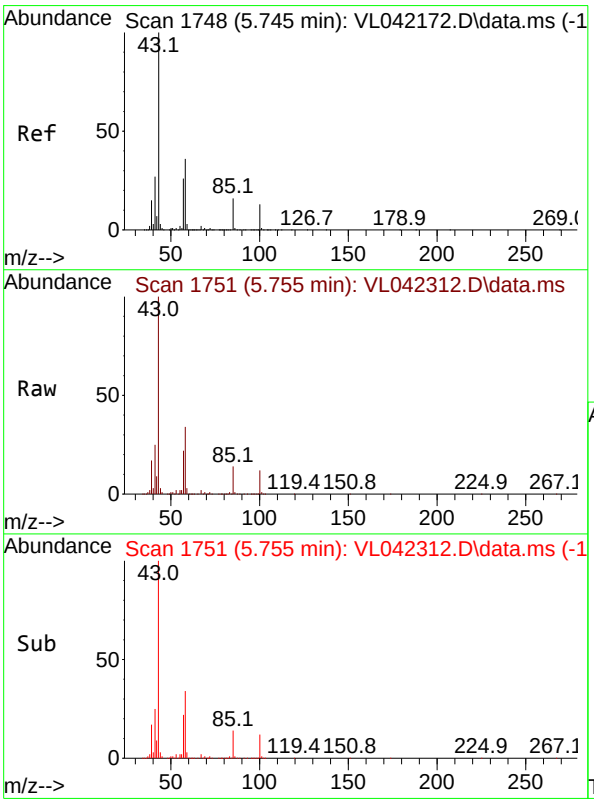
#49
Bromoform
Concen: 10.935 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 294489

Ion	Ratio	Lower	Upper
173	100		
175	48.5	38.6	57.8
171	51.8	41.8	62.6

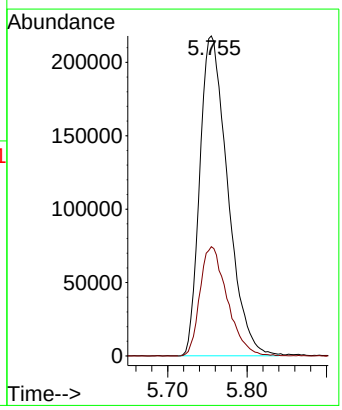


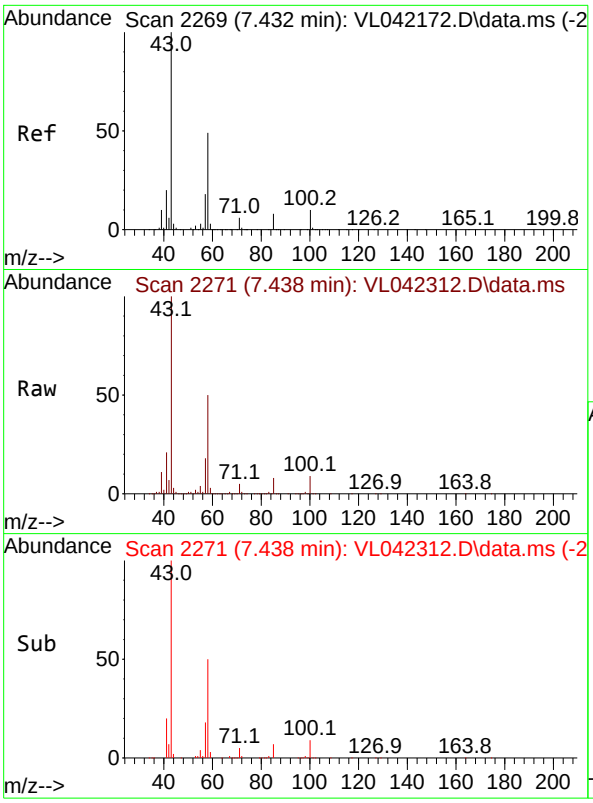


#50
4-Methyl-2-Pentanone
Concen: 9.980 ppbv
RT: 5.755 min Scan# 1751
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 43 Resp: 531851

Ion	Ratio	Lower	Upper
43	100		
58	33.5	29.0	43.6



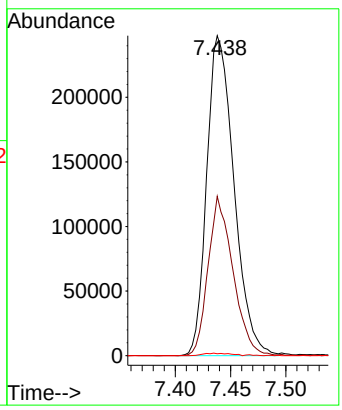


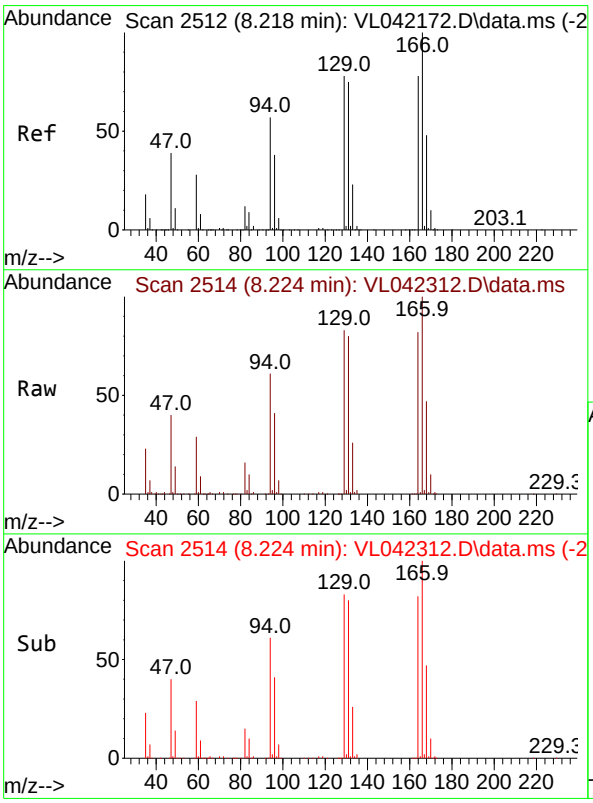
#51
2-Hexanone
Concen: 9.689 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 424035

Ion	Ratio	Lower	Upper
43	100		
58	45.7	39.7	59.5
98	0.9	0.1	0.1#

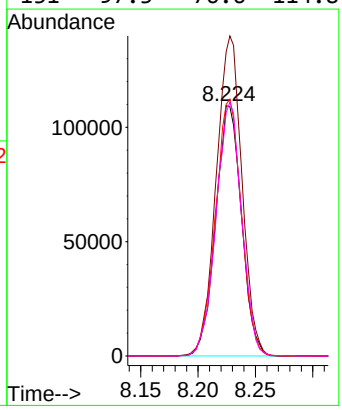


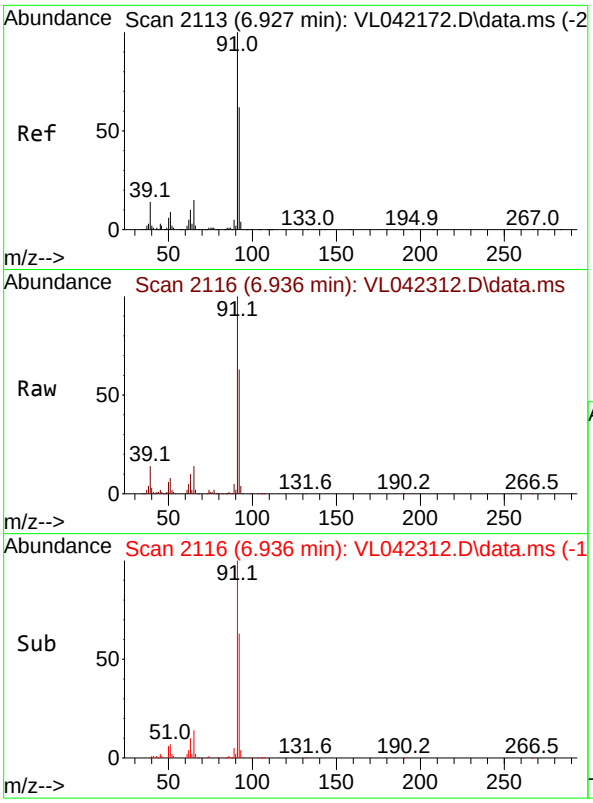


#52
Tetrachloroethene
Concen: 9.378 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:164 Resp: 170989

Ion	Ratio	Lower	Upper
164	100		
166	121.6	102.5	153.7
129	100.6	79.8	119.8
131	97.3	76.6	114.8



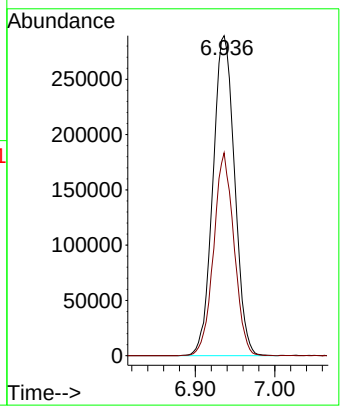


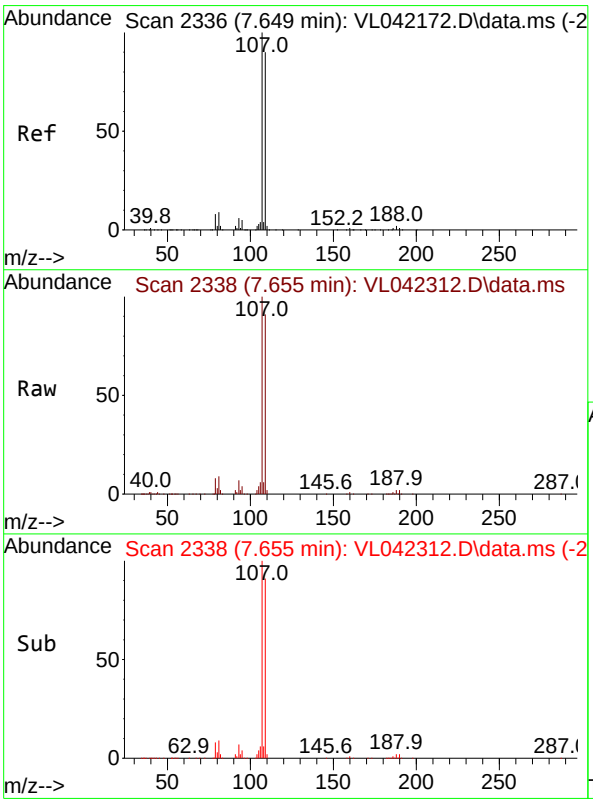
#53
Toluene
Concen: 10.048 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 547579

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.4	72.6

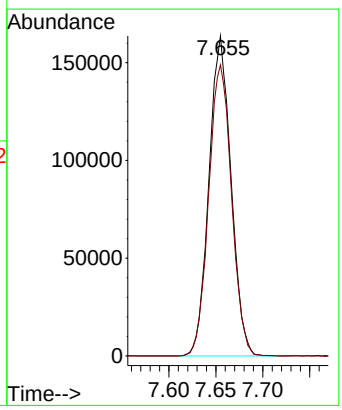


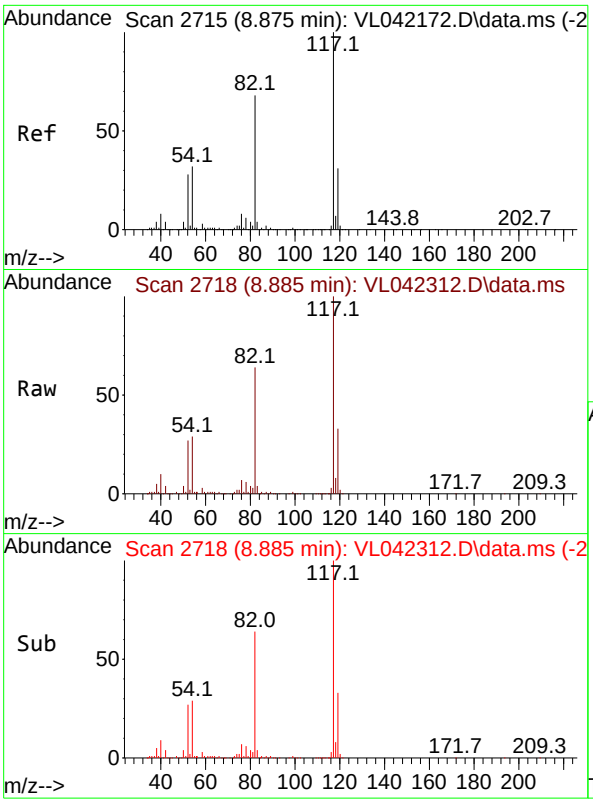


#54
1,2-Dibromoethane
Concen: 10.831 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:107 Resp: 267225

Ion	Ratio	Lower	Upper
107	100		
109	91.0	72.2	108.4



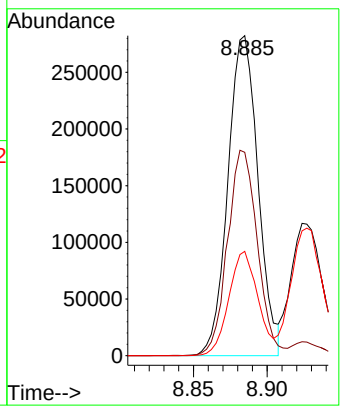


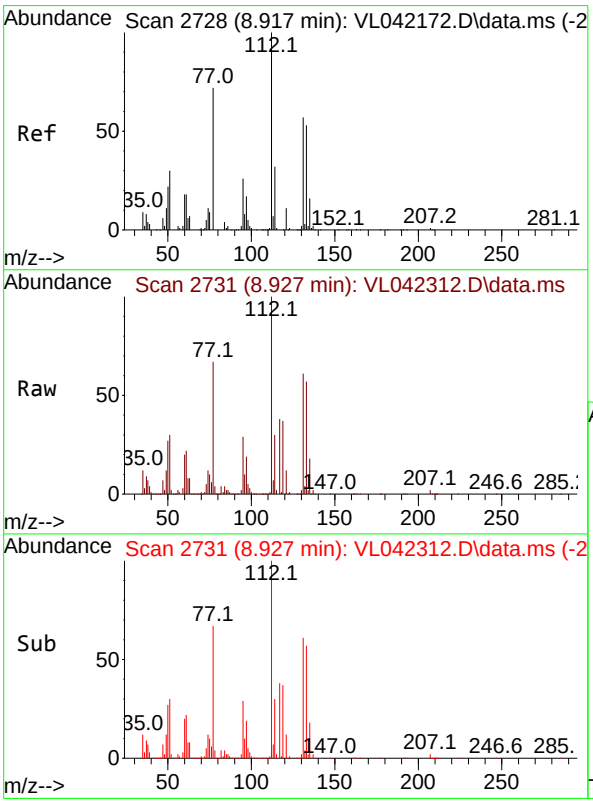
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 401340

Ion	Ratio	Lower	Upper
117	100		
82	67.7	55.8	83.6
119	31.5	25.5	38.3

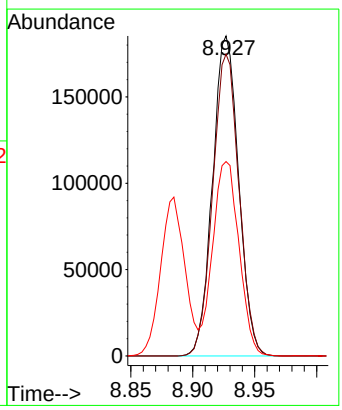


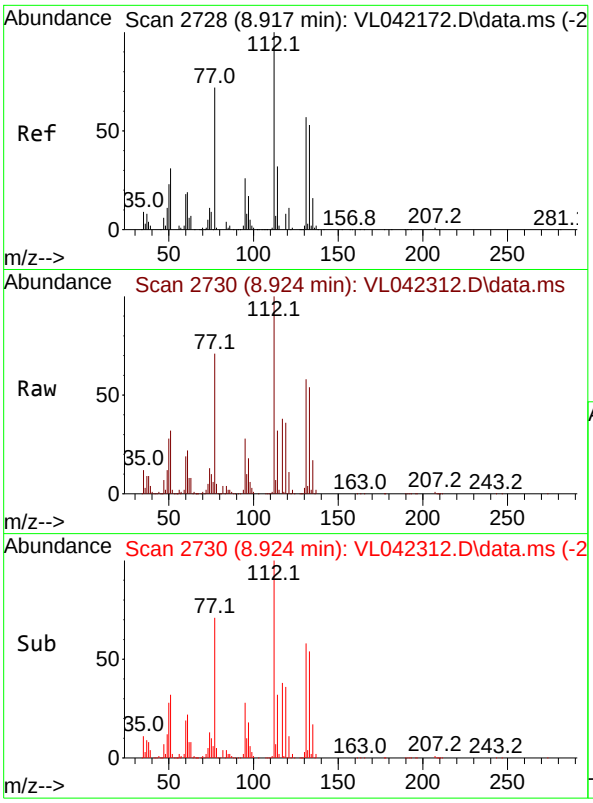


#56
1,1,1,2-Tetrachloroethane
Concen: 12.283 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.009 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:131 Resp: 271350

Ion	Ratio	Lower	Upper
131	100		
133	95.3	76.6	114.8
119	62.7	49.8	74.6



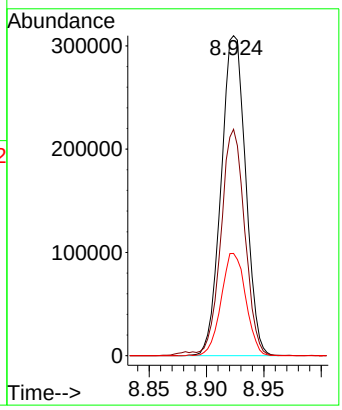


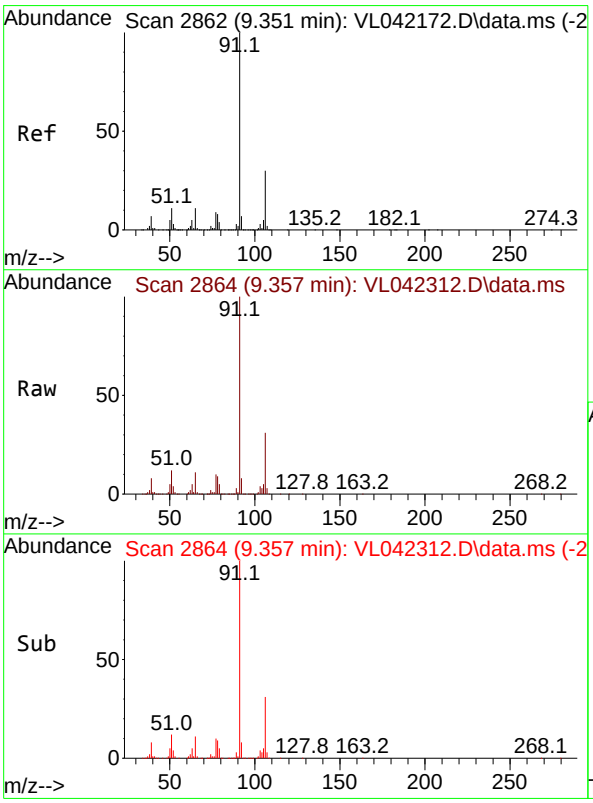
#57
Chlorobenzene
Concen: 12.099 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 460598

Ion	Ratio	Lower	Upper
112	100		
77	70.7	58.2	87.2
114	32.0	29.1	35.5

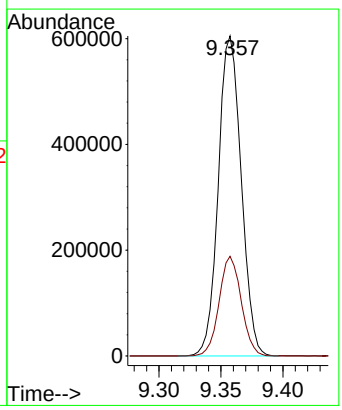


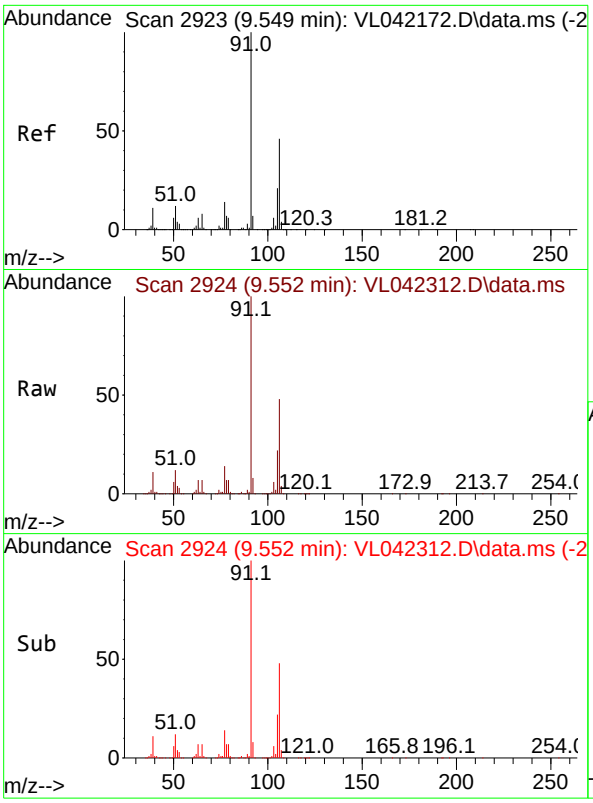


#58
Ethyl Benzene
Concen: 10.931 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 779227

Ion	Ratio	Lower	Upper
91	100		
106	31.1	24.2	36.2



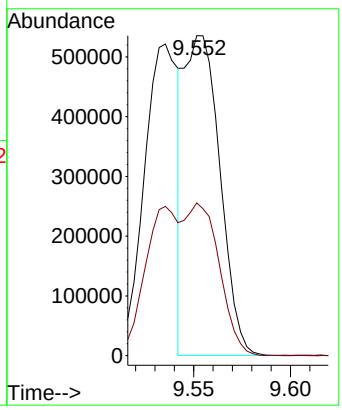


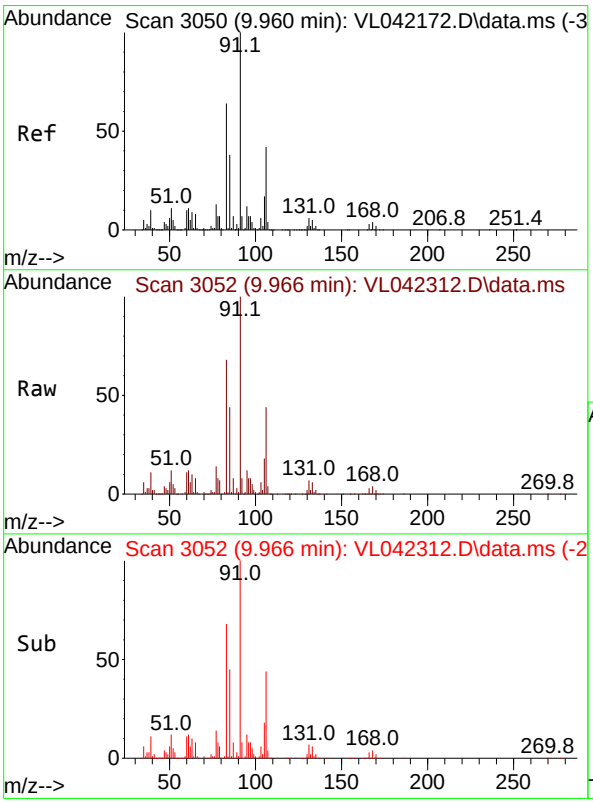
#59
m/p-Xylene
Concen: 12.062 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 686600

Ion	Ratio	Lower	Upper
91	100		
106	90.9	36.4	54.6#

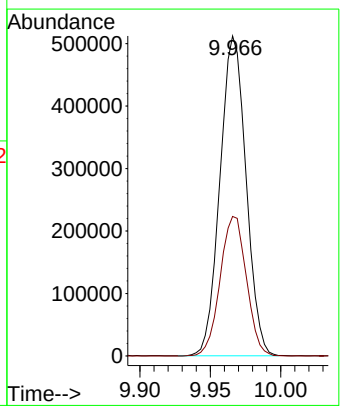


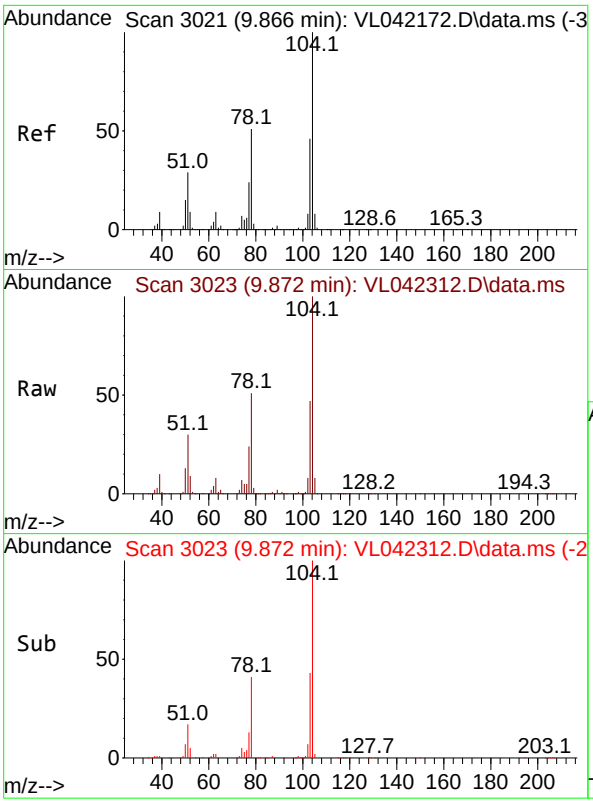


#60
o-Xylene
Concen: 11.567 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 660065

Ion	Ratio	Lower	Upper
91	100		
106	44.0	20.8	62.5



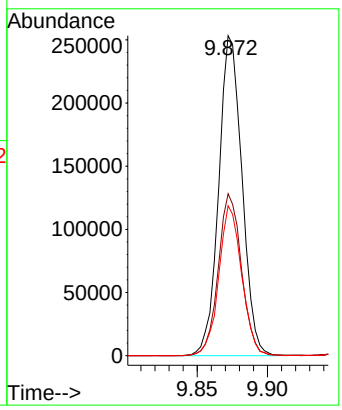


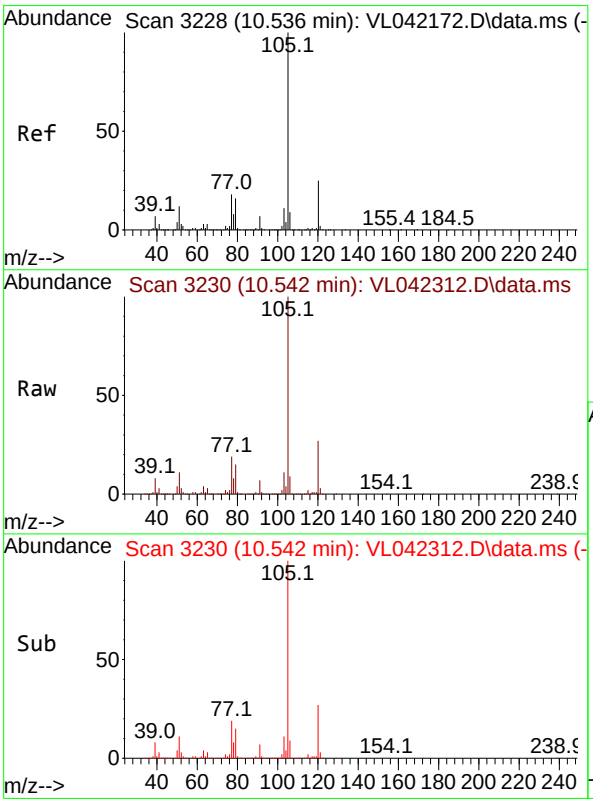
#61
Styrene
Concen: 10.320 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 291355

Ion	Ratio	Lower	Upper
104	100		
78	50.6	41.8	62.6
103	46.3	37.0	55.4

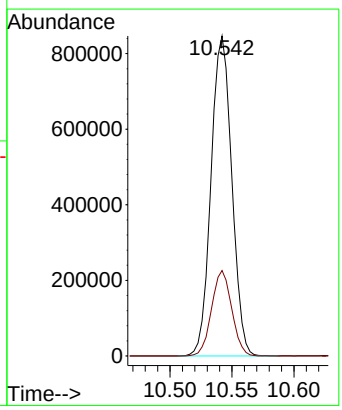


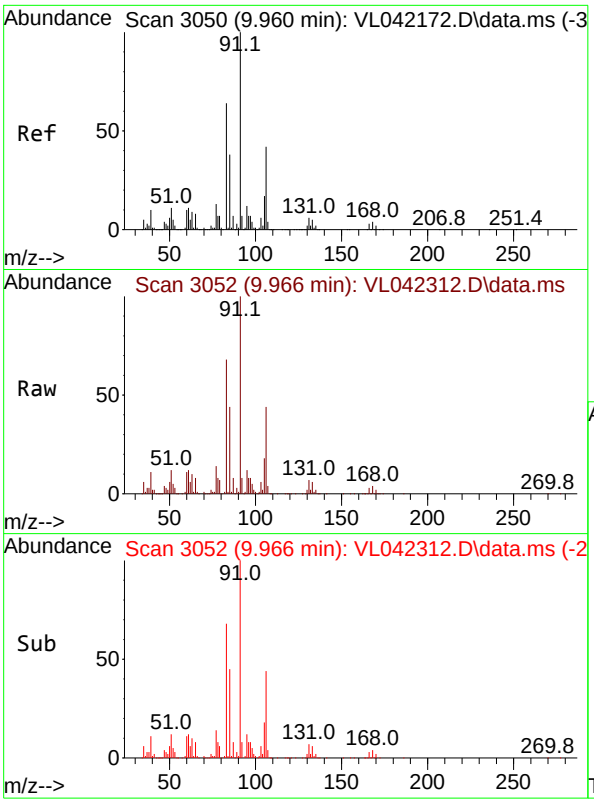


#62
Isopropylbenzene
Concen: 11.582 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 988337

Ion	Ratio	Lower	Upper
105	100		
120	25.9	19.9	29.9



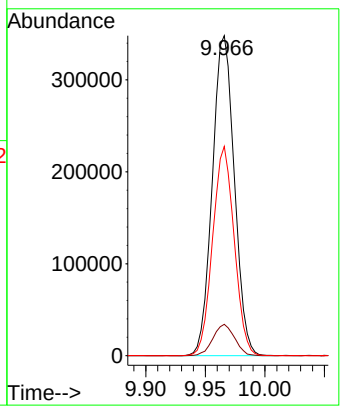


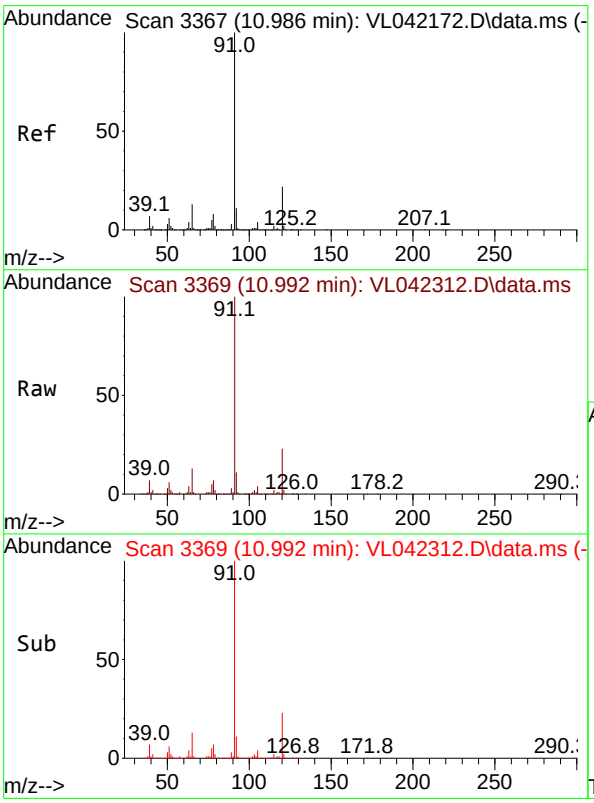
#63
1,1,2,2-Tetrachloroethane
Concen: 12.873 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 446341

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.8	14.4
85	64.0	32.5	97.5

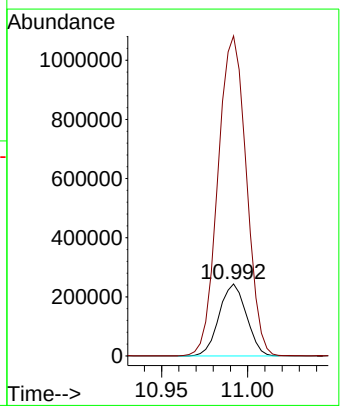


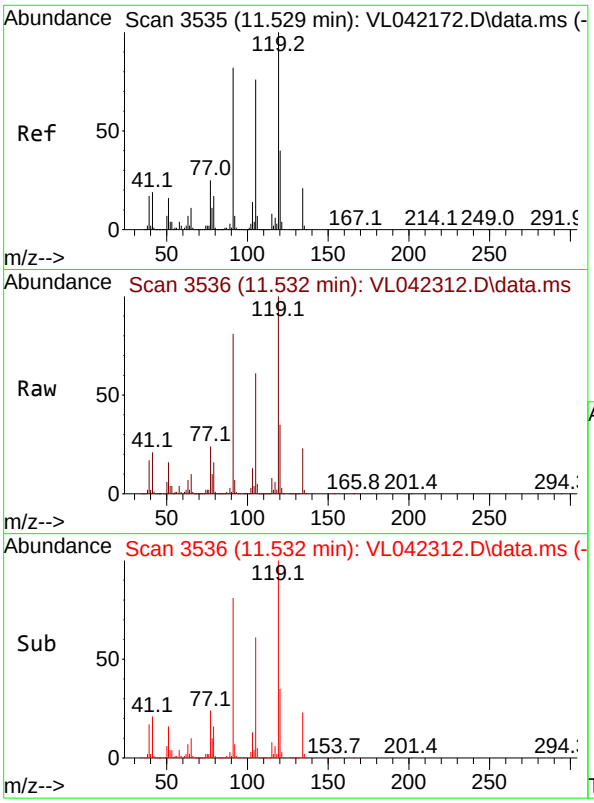


#64
n-propylbenzene
Concen: 12.231 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:120 Resp: 268681

Ion	Ratio	Lower	Upper
120	100		
91	463.6	376.9	565.3



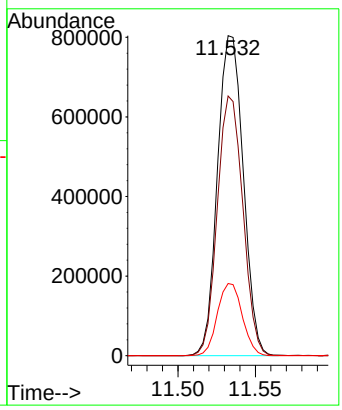


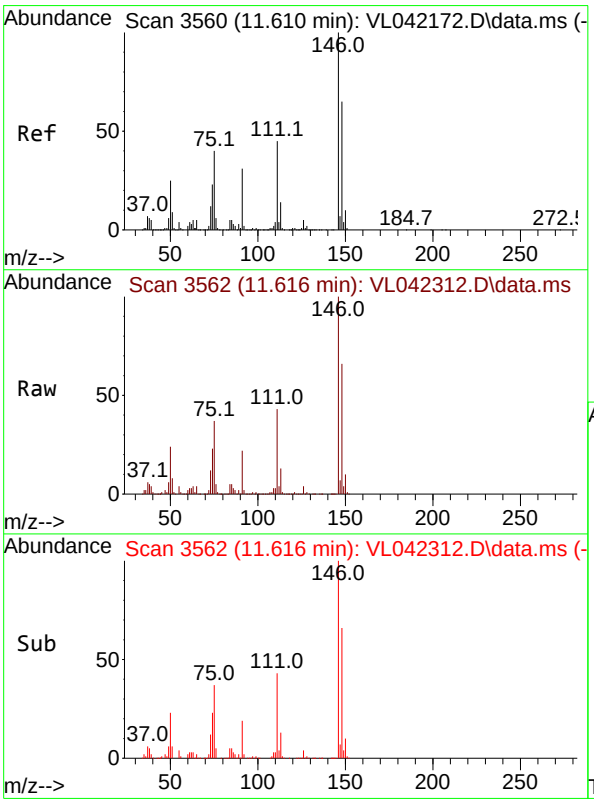
#65
tert-Butylbenzene
Concen: 11.820 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 932850

Ion	Ratio	Lower	Upper
119	100		
91	80.3	66.0	99.0
134	21.7	16.7	25.1

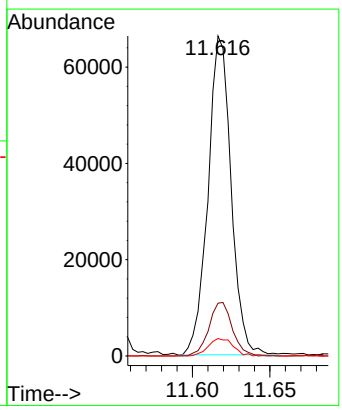


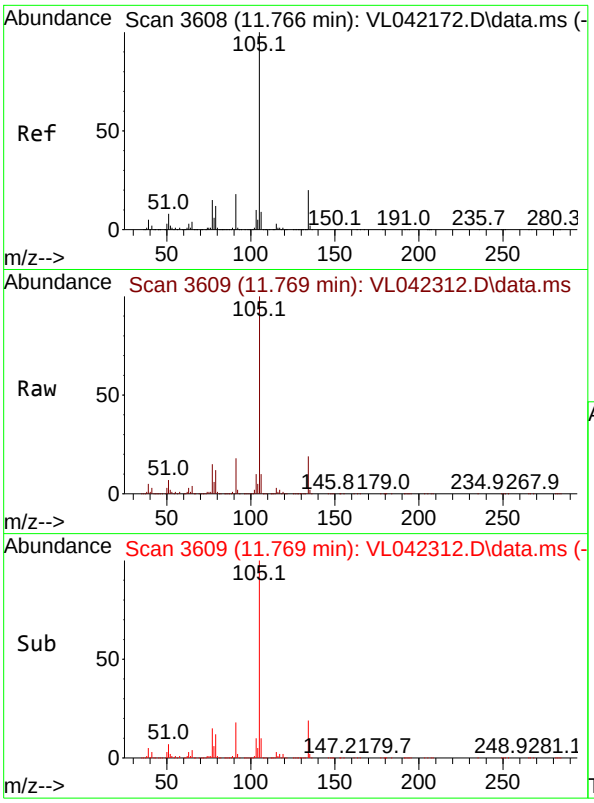


#66
Benzyl Chloride
Concen: 8.201 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 68675

Ion	Ratio	Lower	Upper
91	100		
126	16.9	13.8	20.6
128	6.2	4.5	6.7



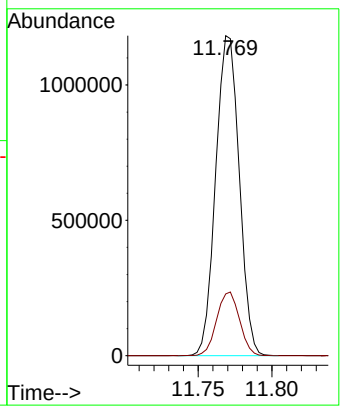


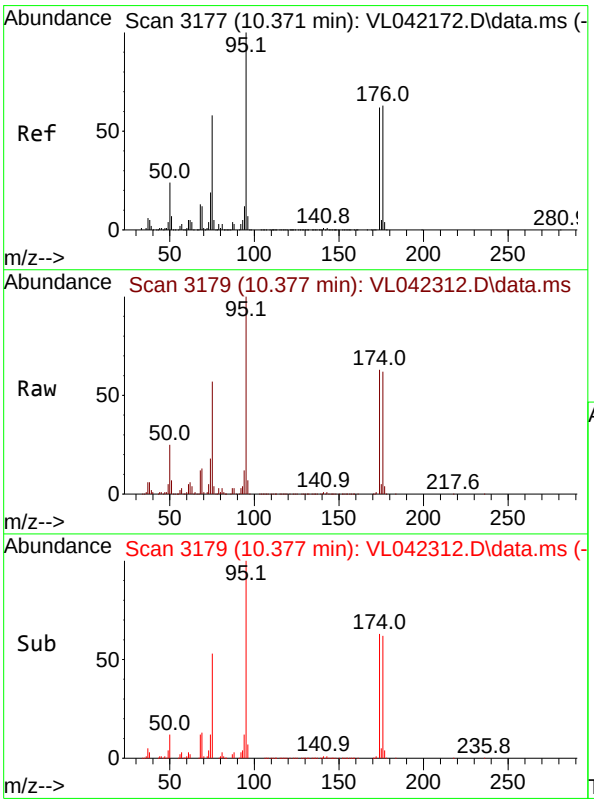
#67
sec-Butylbenzene
Concen: 11.942 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 1310042

Ion	Ratio	Lower	Upper
105	100		
134	19.4	15.5	23.3

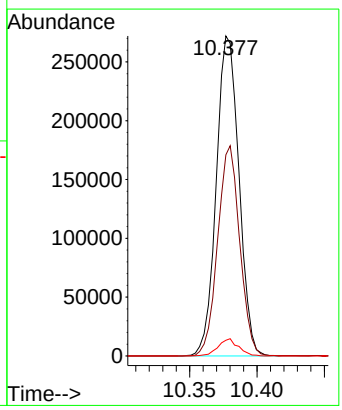


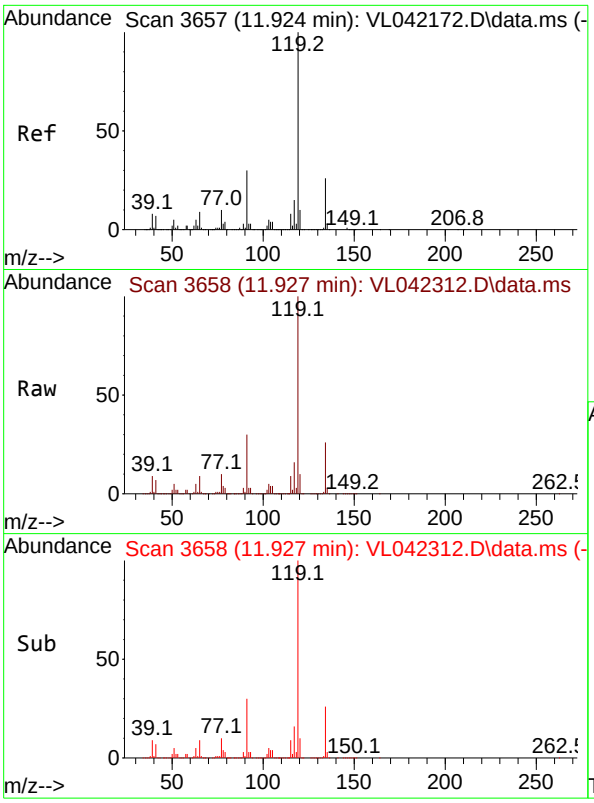


#68
1-Bromo-4-Fluorobenzene
Concen: 9.655 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 95 Resp: 318204

Ion	Ratio	Lower	Upper
95	100		
174	64.0	50.6	76.0
175	4.9	3.8	5.6



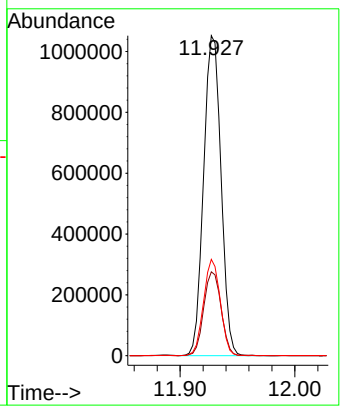


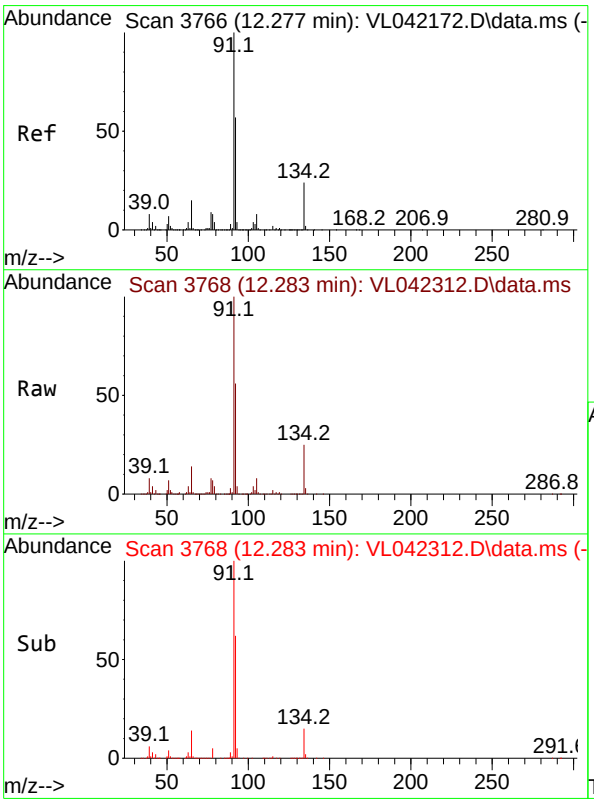
#69
p-Isopropyltoluene
Concen: 11.720 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 1107045

Ion	Ratio	Lower	Upper
119	100		
134	26.2	20.4	30.6
91	29.0	23.7	35.5

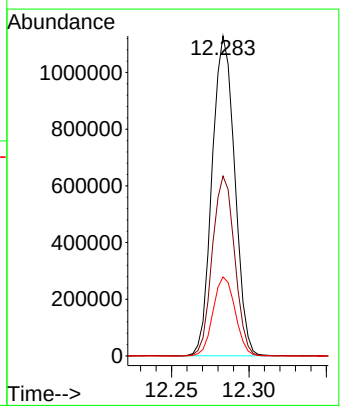


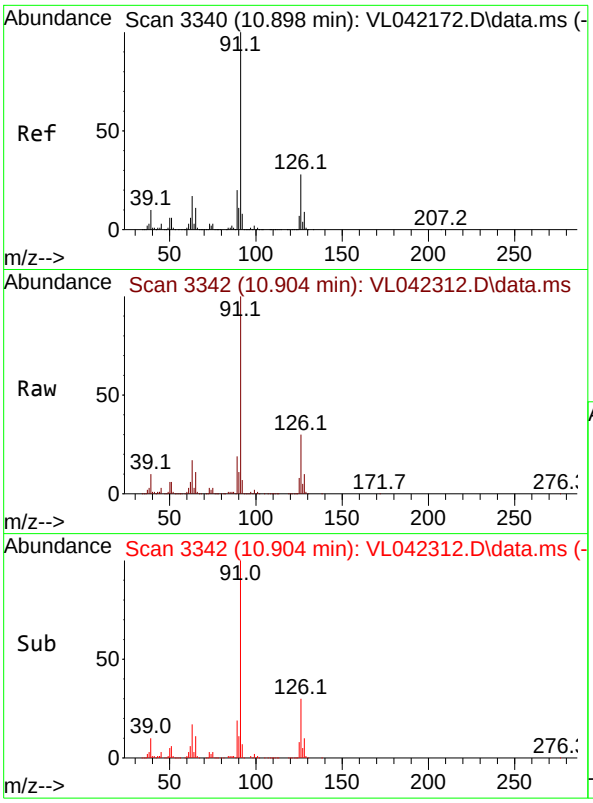


#70
n-Butylbenzene
Concen: 11.848 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion: 91 Resp: 1144571

Ion	Ratio	Lower	Upper
91	100		
92	55.6	44.9	67.3
134	24.2	19.2	28.8



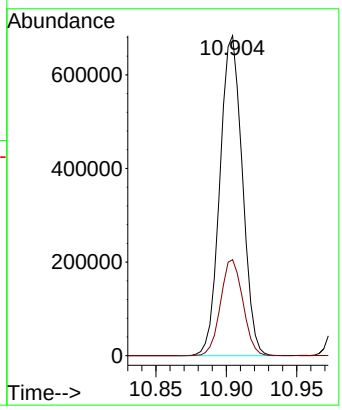


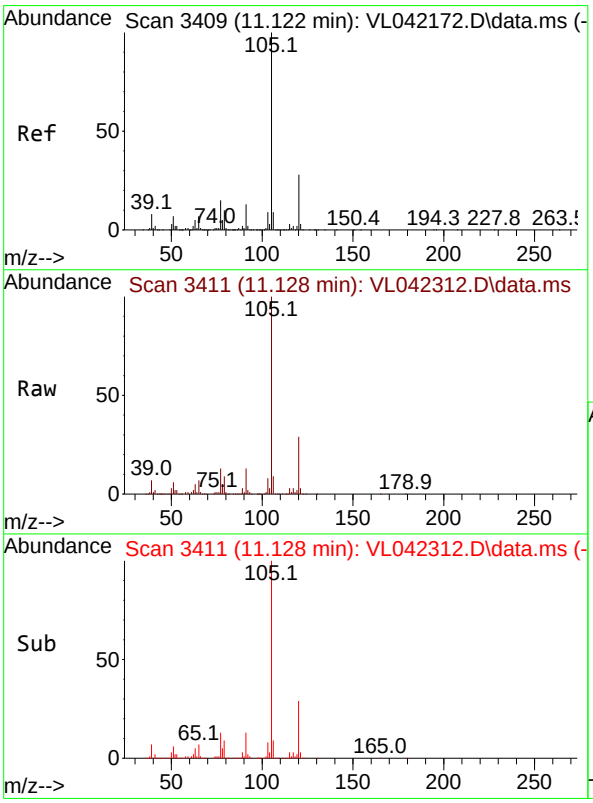
#71
2-Chlorotoluene
Concen: 11.423 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 756562

Ion	Ratio	Lower	Upper
91	100		
126	29.9	11.6	46.4

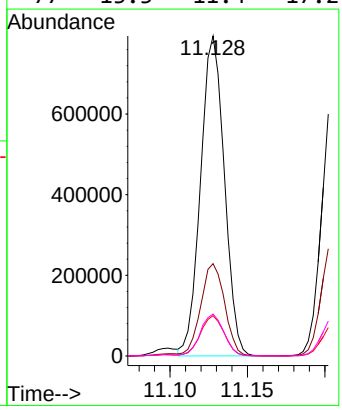


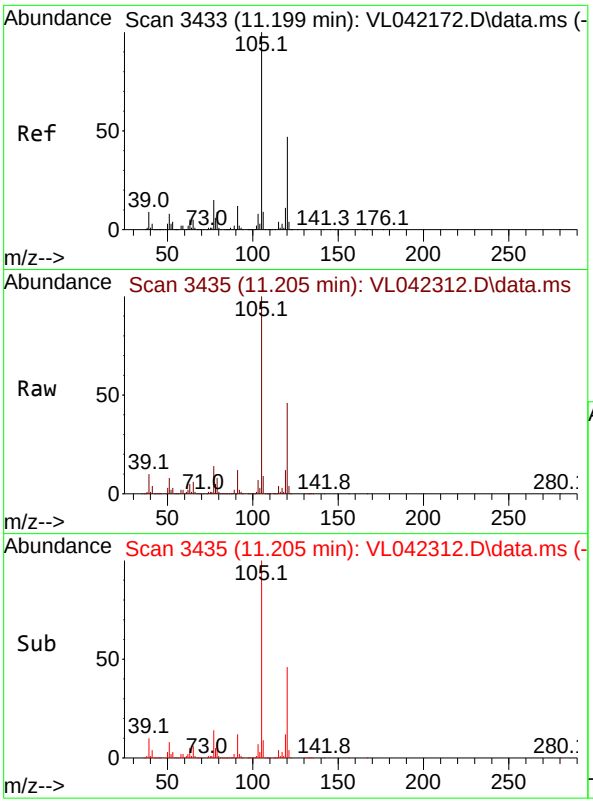


#72
4-Ethyltoluene
Concen: 11.932 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 847821

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2



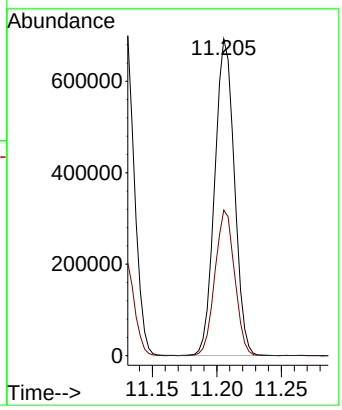


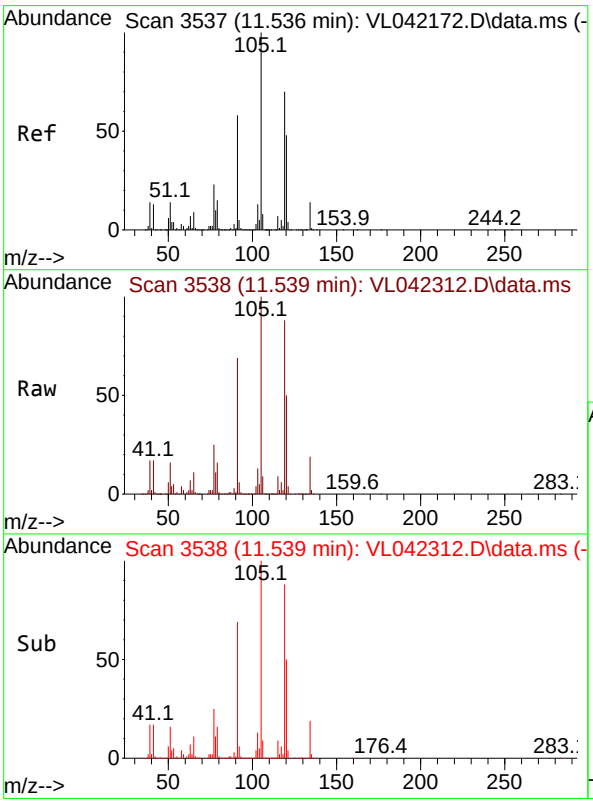
#73
1,3,5-Trimethylbenzene
Concen: 11.762 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 729887

Ion	Ratio	Lower	Upper
105	100		
120	46.0	37.4	56.0

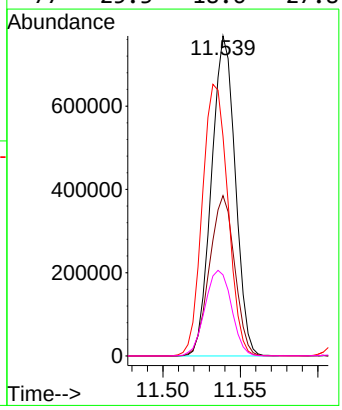


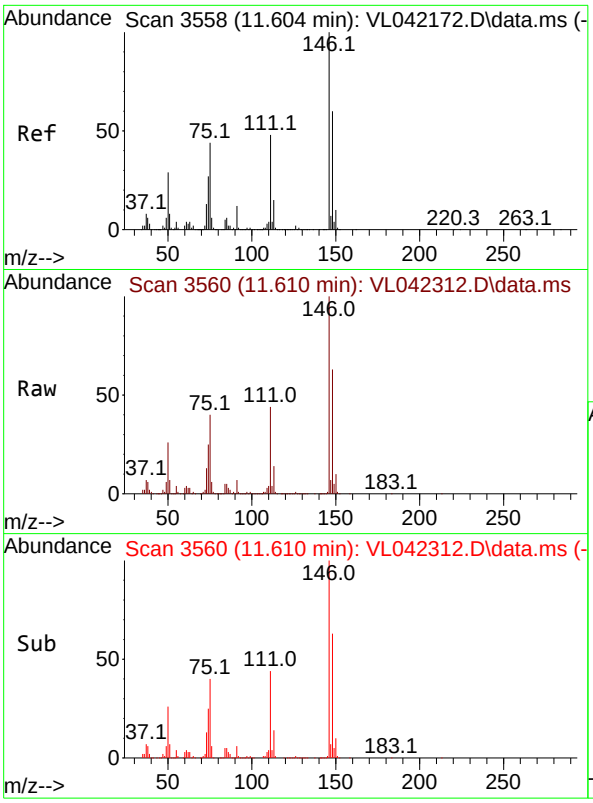


#74
1,2,4-Trimethylbenzene
Concen: 11.463 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:105 Resp: 819490

Ion	Ratio	Lower	Upper
105	100		
120	50.1	38.6	58.0
91	68.5	46.2	69.2
77	25.3	18.6	27.8



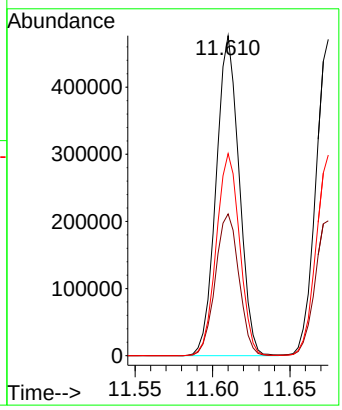


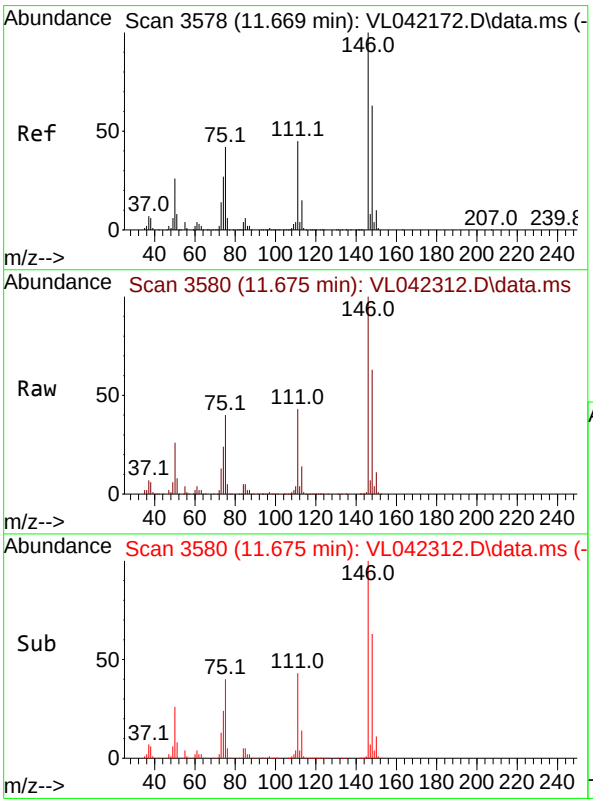
#75
1,3-Dichlorobenzene
Concen: 12.562 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 492549

Ion	Ratio	Lower	Upper
146	100		
111	45.5	23.8	71.2
148	64.0	31.9	95.9

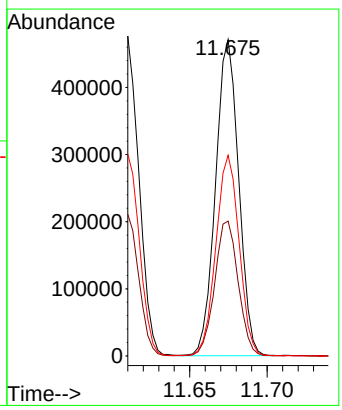


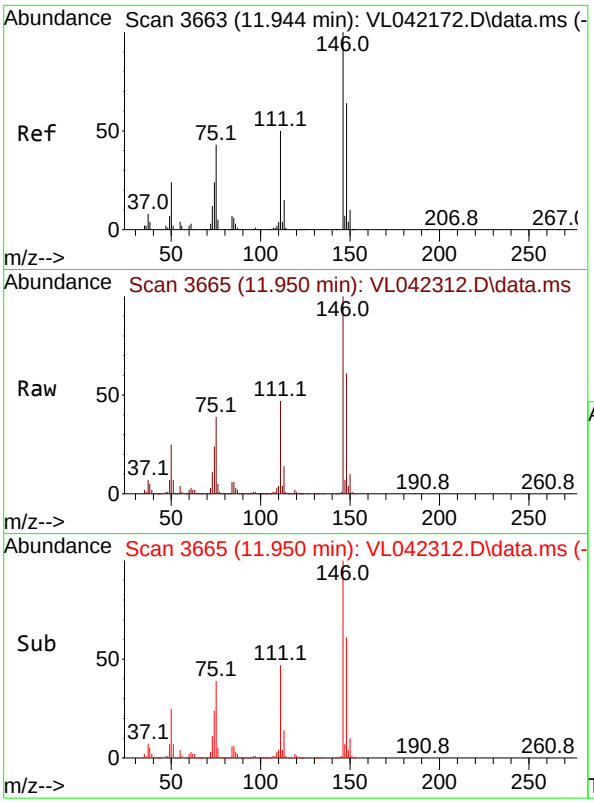


#76
1,4-Dichlorobenzene
Concen: 12.522 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:146 Resp: 488636

Ion	Ratio	Lower	Upper
146	100		
111	43.7	23.0	69.0
148	64.0	31.9	95.7



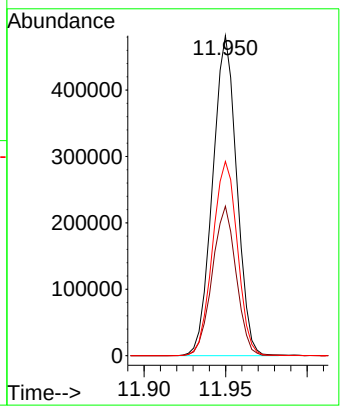


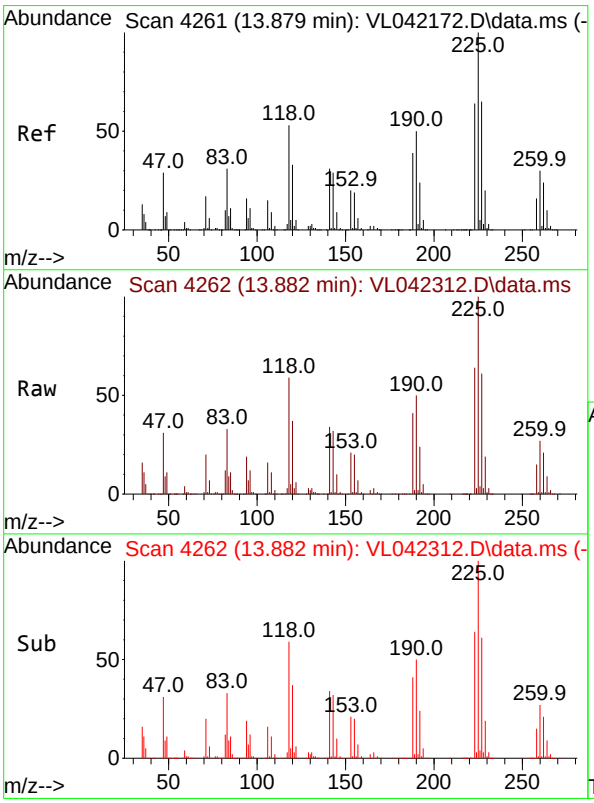
#77
1,2-Dichlorobenzene
Concen: 12.959 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 494739

Ion	Ratio	Lower	Upper
146	100		
111	46.4	24.8	74.3
148	62.7	31.6	94.8

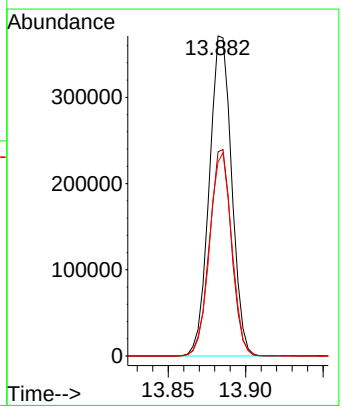


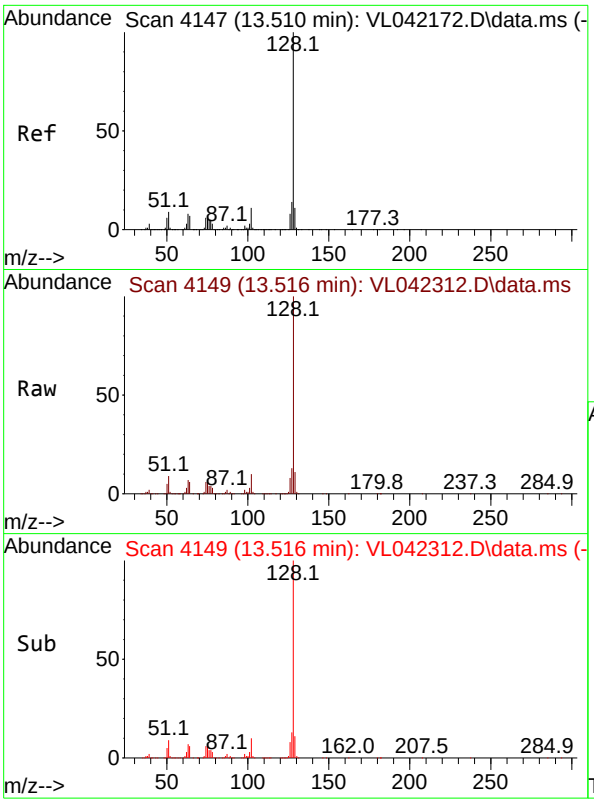


#78
Hexachloro-1,3-Butadiene
Concen: 9.599 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:225 Resp: 373025

Ion	Ratio	Lower	Upper
225	100		
223	63.4	50.6	76.0
227	62.8	51.2	76.8



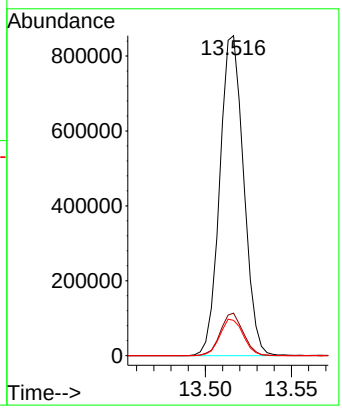


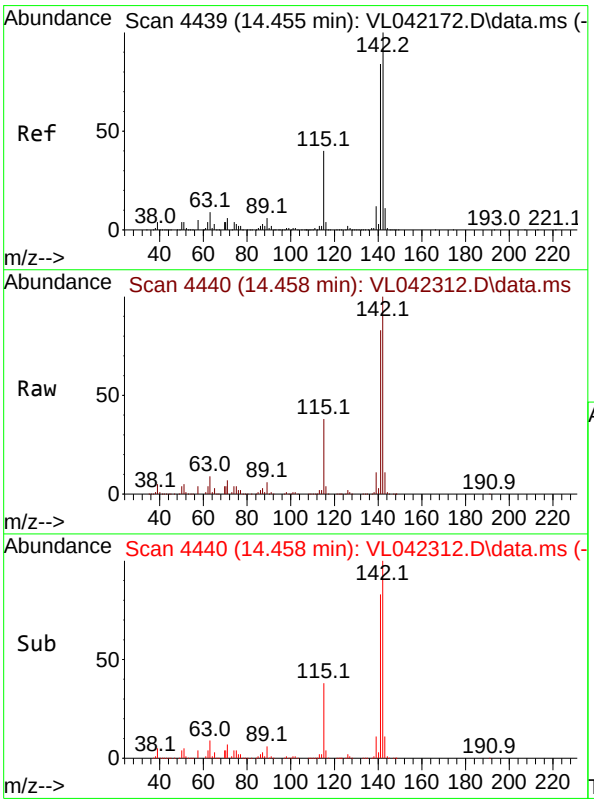
#79
Naphthalene
Concen: 10.550 ppbv
RT: 13.516 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 824947

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.1	9.0	13.4

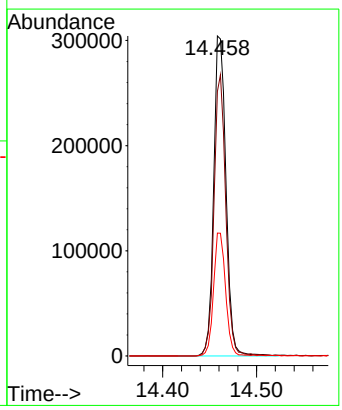


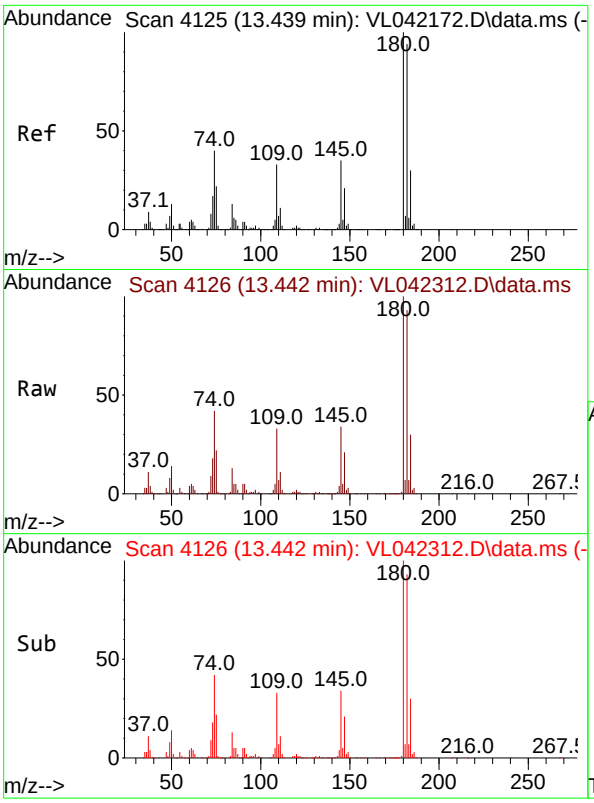


#80
Naphthalene,2-methyl-
Concen: 7.212 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Tgt Ion:142 Resp: 276556

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.3	99.5
115	38.0	31.6	47.4



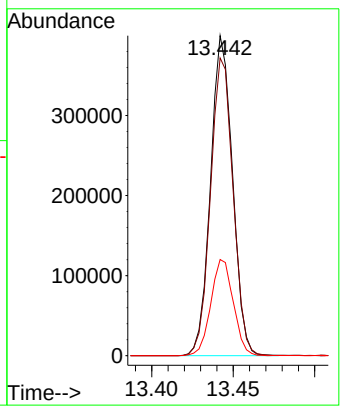


#81
1,2,4-Trichlorobenzene
Concen: 10.389 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042312.D
Acq: 11 Apr 2025 09:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 374714

Ion	Ratio	Lower	Upper
180	100		
182	95.6	75.1	112.7
184	30.8	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	178456	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	444353	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	386060	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	314180	9.910	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.496	85	260154	9.873	ppbv	99
3) Chlorodifluoromethane	1.473	51	278310	10.339	ppbv	99
4) Chloromethane	1.531	50	109906	10.207	ppbv	97
5) Vinyl Chloride	1.577	62	99540	8.723	ppbv	96
6) Bromomethane	1.667	94	43354	8.884	ppbv	99
7) Chloroethane	1.703	64	40372	9.340	ppbv	100
8) Dichlorotetrafluoroethane	1.551	85	219210	9.769	ppbv	94
9) Propene	1.483	41	109077	8.841	ppbv	98
10) Heptane	4.975	43	325268	9.912	ppbv	98
11) Trichlorofluoromethane	1.874	101	247344	9.647	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	191456	9.085	ppbv	97
13) Ethanol	1.719	45	4928	4.225	ppbv	95
14) Bromoethene	1.780	108	70702	8.758	ppbv	99
15) Acetone	1.832	43	228988	9.175	ppbv	95
16) 1,3-Butadiene	1.606	39	110429	9.060	ppbv	97
17) tert-Butyl alcohol	2.039	59	243034	7.818	ppbv	100
18) 1,1-Dichloroethene	2.030	96	83233	8.449	ppbv	97
19) Isopropyl Alcohol	1.884	45	118345	8.404	ppbv #	34
20) Methylene Chloride	2.059	84	75264	8.097	ppbv	93
21) Allyl Chloride	2.094	41	157261	8.934	ppbv	98
22) trans-1,2-Dichloroethene	2.337	96	98769	8.674	ppbv	96
23) Vinyl Acetate	2.460	43	86563	8.014	ppbv	98
24) 1,1-Dichloroethane	2.405	63	206840	9.800	ppbv	99
25) Ethyl Acetate	2.836	43	656719	10.138	ppbv	99
26) Hexane	2.823	57	249860	9.986	ppbv	98
27) Carbon Disulfide	2.146	76	236998	8.833	ppbv	99
28) Methyl tert-Butyl Ether	2.438	73	122818	7.884	ppbv	97
29) Chloroform	2.845	83	384713	10.506	ppbv	100
30) Cyclohexane	3.852	84	196133	9.028	ppbv	97
31) cis-1,2-Dichloroethene	2.719	61	233371	9.187	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	370405	8.836	ppbv	98
34) 2-Butanone	2.554	43	362633	11.254	ppbv	98
35) Carbon Tetrachloride	3.758	117	389738	11.228	ppbv	99
36) Benzene	3.654	78	490339	11.131	ppbv	96
37) 1,2-Dichloroethane	3.214	62	290983	11.538	ppbv	100
38) Trichloroethene	4.545	130	195654	10.645	ppbv	99
39) 1,2-Dichloropropane	4.312	63	179954	11.217	ppbv	91
40) 1,4-Dioxane	4.580	88	80106	9.408	ppbv #	83
41) Tetrahydrofuran	3.052	42	202793	10.930	ppbv	94
42) Bromodichloromethane	4.486	83	405729	11.669	ppbv	97
43) Methyl Methacrylate	4.875	69	177423	9.514	ppbv	98
44) 2,2,4-Trimethylpentane	4.635	57	850971	11.431	ppbv	97
45) t-1,3-Dichloropropene	6.412	75	166246	8.309	ppbv	93

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

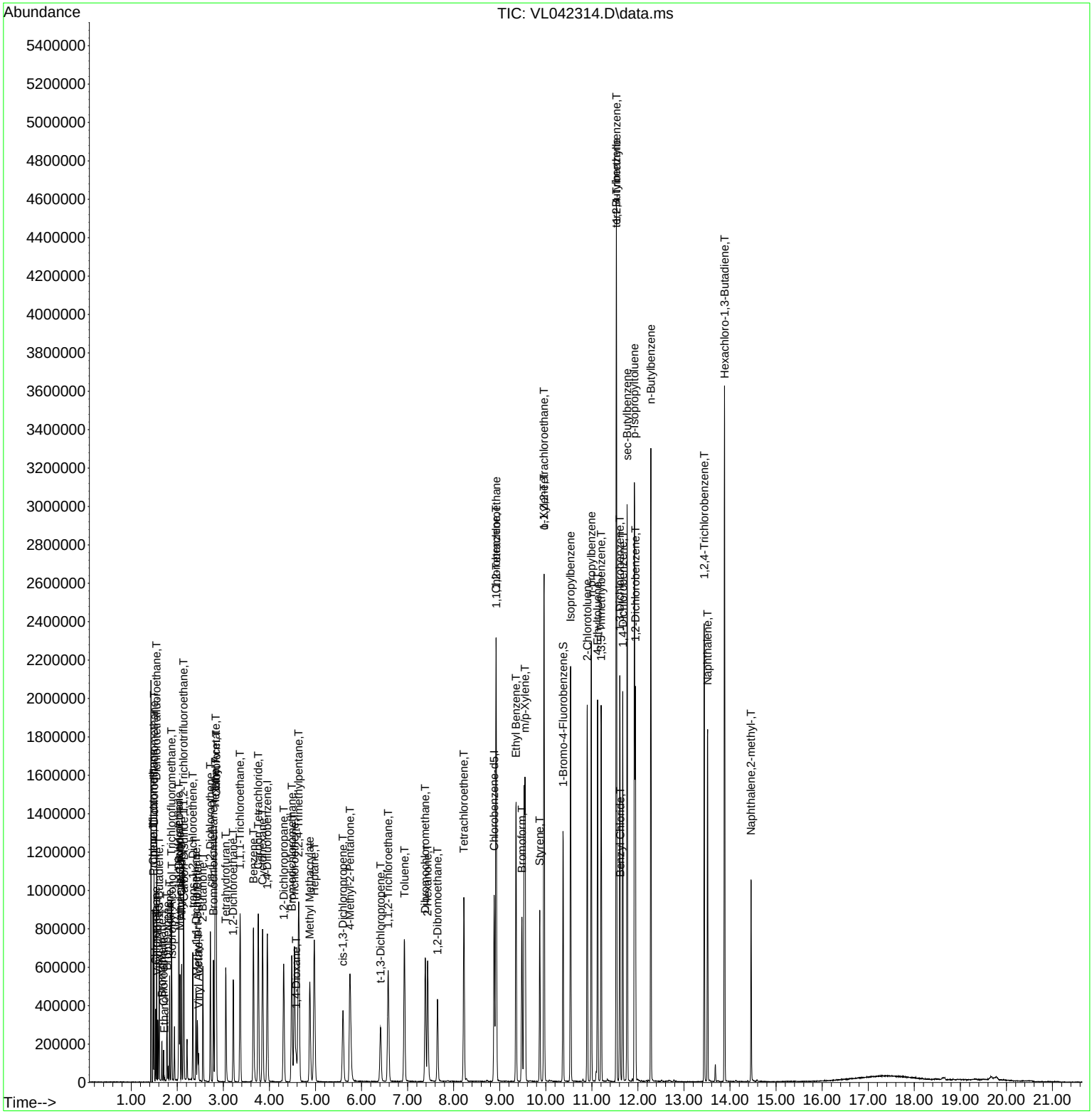
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	225952	9.213	ppbv		99
47) 1,1,2-Trichloroethane	6.580	97	198762	11.720	ppbv		97
48) Dibromochloromethane	7.383	129	321370	11.181	ppbv		100
49) Bromoform	9.480	173	291905	11.313	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	514910	10.084	ppbv		95
51) 2-Hexanone	7.435	43	414681	9.889	ppbv	#	94
52) Tetrachloroethene	8.221	164	165666	9.483	ppbv		96
53) Toluene	6.933	91	526341	10.079	ppbv		99
54) 1,2-Dibromoethane	7.649	107	264126	11.172	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.924	131	271061	12.755	ppbv		97
57) Chlorobenzene	8.921	112	457204	12.486	ppbv		96
58) Ethyl Benzene	9.354	91	761549	11.105	ppbv		98
59) m/p-Xylene	9.548	91	575744	10.514	ppbv	#	6
60) o-Xylene	9.963	91	654791	11.929	ppbv		96
61) Styrene	9.869	104	284318	10.470	ppbv		98
62) Isopropylbenzene	10.539	105	975799	11.887	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.963	83	440972	13.222	ppbv		100
64) n-propylbenzene	10.989	120	264518	12.518	ppbv		96
65) tert-Butylbenzene	11.529	119	908946	11.973	ppbv		99
66) Benzyl Chloride	11.617	91	69548	8.634	ppbv		98
67) sec-Butylbenzene	11.765	105	1300090	12.320	ppbv		100
69) p-Isopropyltoluene	11.924	119	1095041	12.051	ppbv		98
70) n-Butylbenzene	12.280	91	1129853	12.159	ppbv		100
71) 2-Chlorotoluene	10.901	91	749737	11.768	ppbv		99
72) 4-Ethyltoluene	11.125	105	825037	12.071	ppbv		99
73) 1,3,5-Trimethylbenzene	11.202	105	711175	11.914	ppbv		99
74) 1,2,4-Trimethylbenzene	11.536	105	816505	11.873	ppbv		91
75) 1,3-Dichlorobenzene	11.607	146	484099	12.835	ppbv		98
76) 1,4-Dichlorobenzene	11.672	146	485460	12.933	ppbv		98
77) 1,2-Dichlorobenzene	11.947	146	485421	13.218	ppbv		98
78) Hexachloro-1,3-Butadiene	13.882	225	366850	9.814	ppbv		99
79) Naphthalene	13.513	128	820200	10.904	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	274227	7.434	ppbv		98
81) 1,2,4-Trichlorobenzene	13.439	180	373404	10.762	ppbv		99

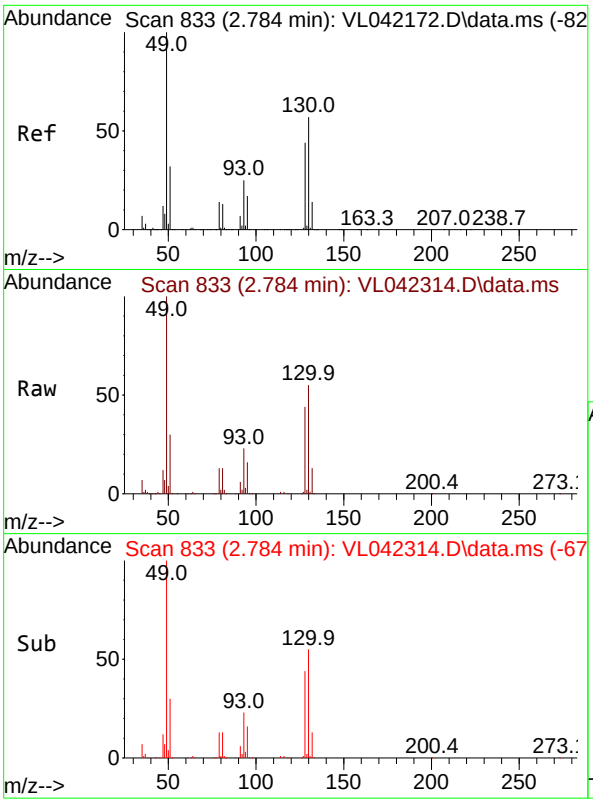
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042314.D
Acq On : 11 Apr 2025 11:23
Operator : SY/MD
Sample : VL0411ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Quant Time: Apr 11 22:57:41 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



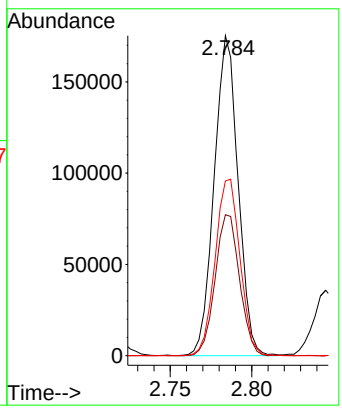


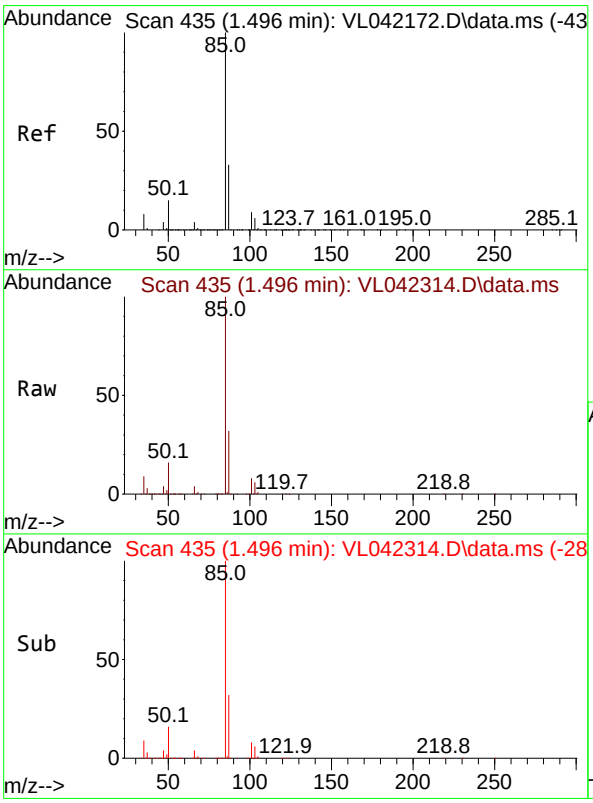
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 49 Resp: 178456

Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.9	68.5
130	57.3	28.8	86.4

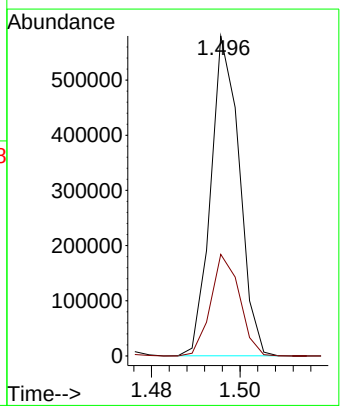


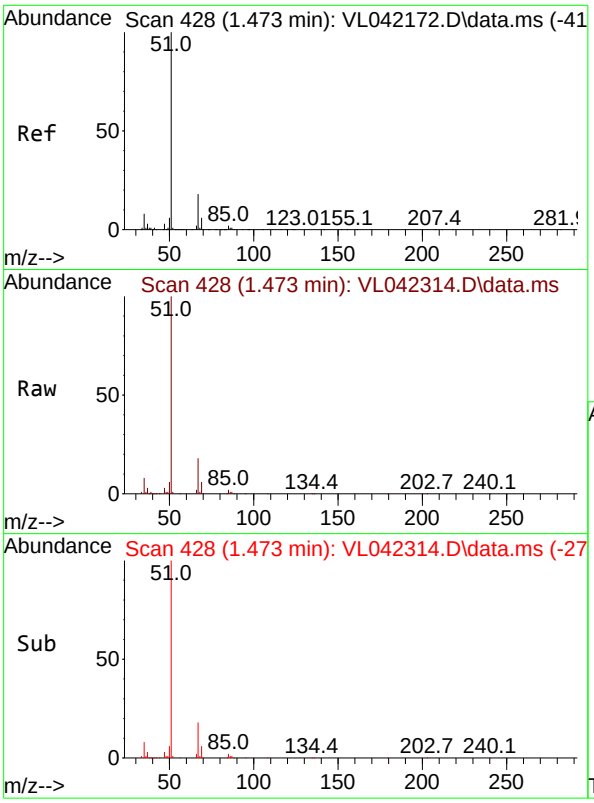


#2
Dichlorodifluoromethane
Concen: 9.873 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 85 Resp: 260154

Ion	Ratio	Lower	Upper
85	100		
87	31.8	26.1	39.1



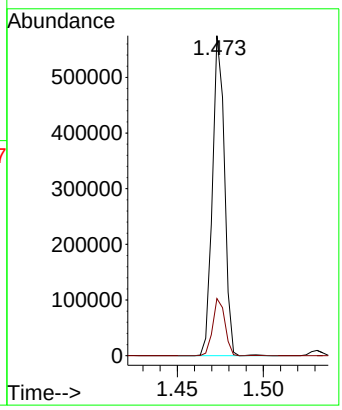


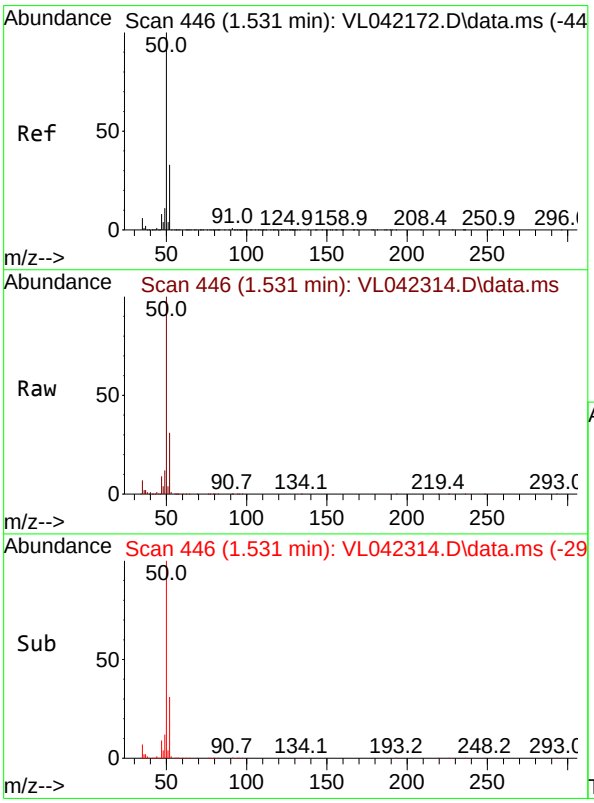
#3
Chlorodifluoromethane
Concen: 10.339 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 51 Resp: 278310

Ion	Ratio	Lower	Upper
51	100		
67	18.2	15.0	22.6

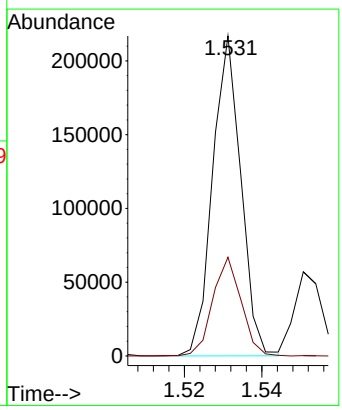


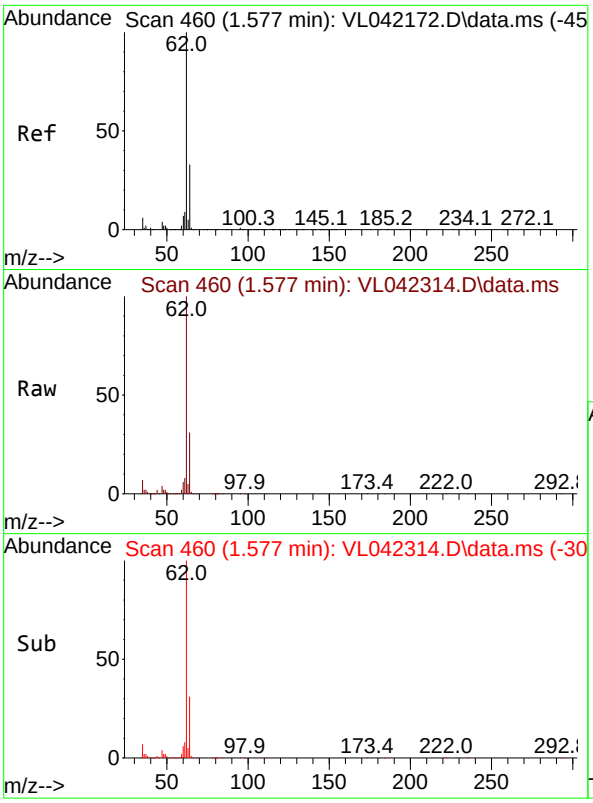


#4
Chloromethane
Concen: 10.207 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 50 Resp: 109906

Ion	Ratio	Lower	Upper
50	100		
52	30.8	26.1	39.1



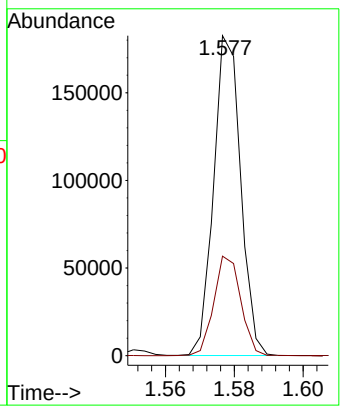


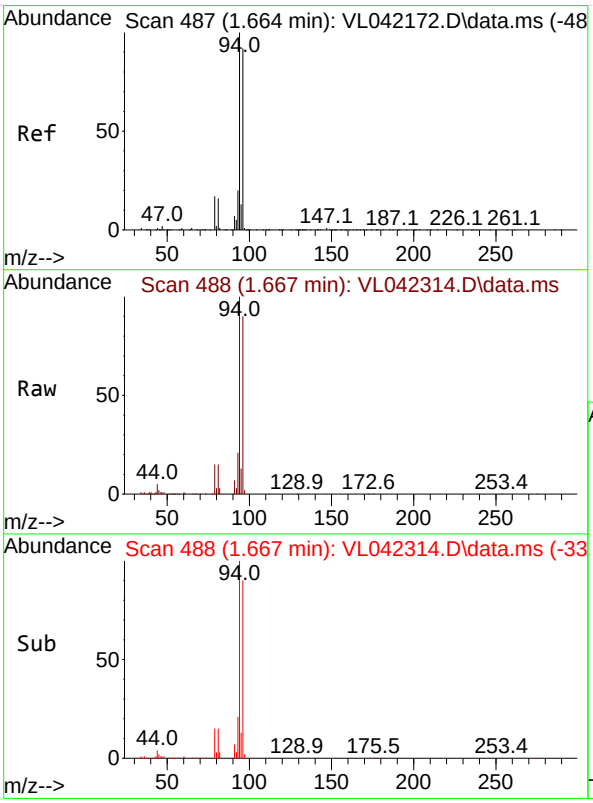
#5
Vinyl Chloride
Concen: 8.723 ppbv
RT: 1.577 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 62 Resp: 99540

Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.6	40.0

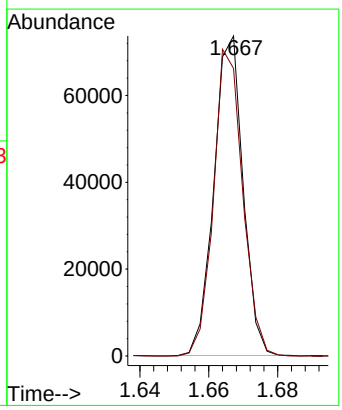


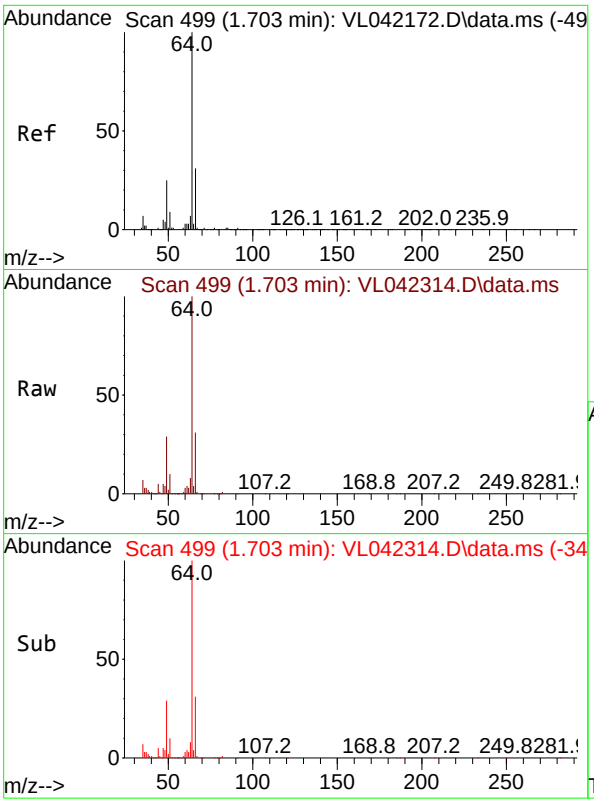


#6
Bromomethane
Concen: 8.884 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 94 Resp: 43354

Ion	Ratio	Lower	Upper
94	100		
96	90.0	73.1	109.7



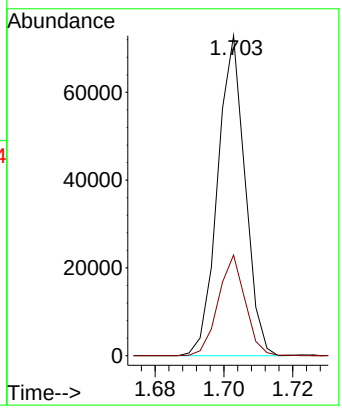


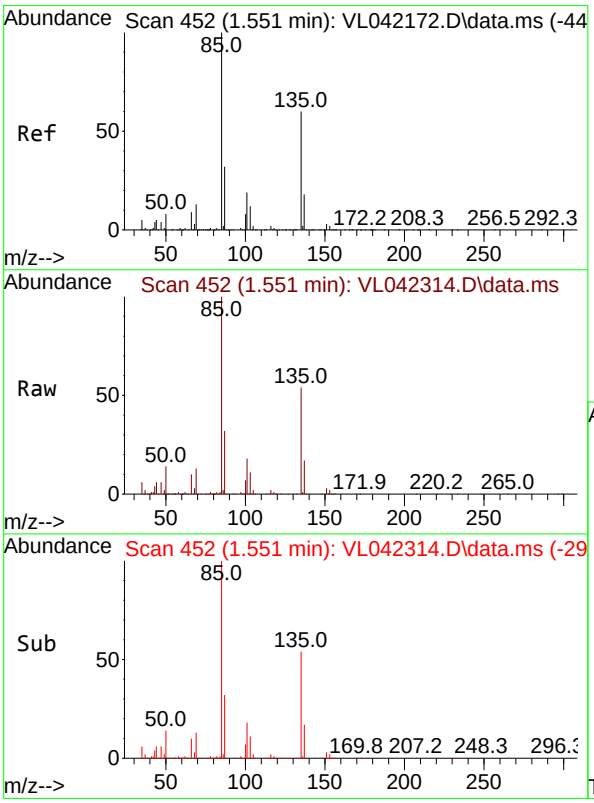
#7
Chloroethane
Concen: 9.340 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 64 Resp: 40372

Ion	Ratio	Lower	Upper
64	100		
66	31.5	25.2	37.8

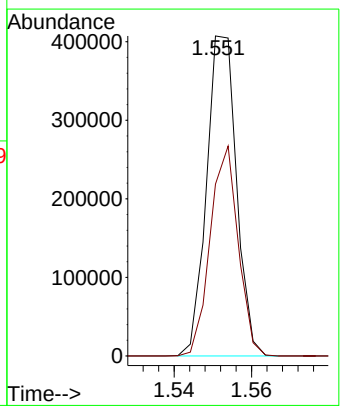


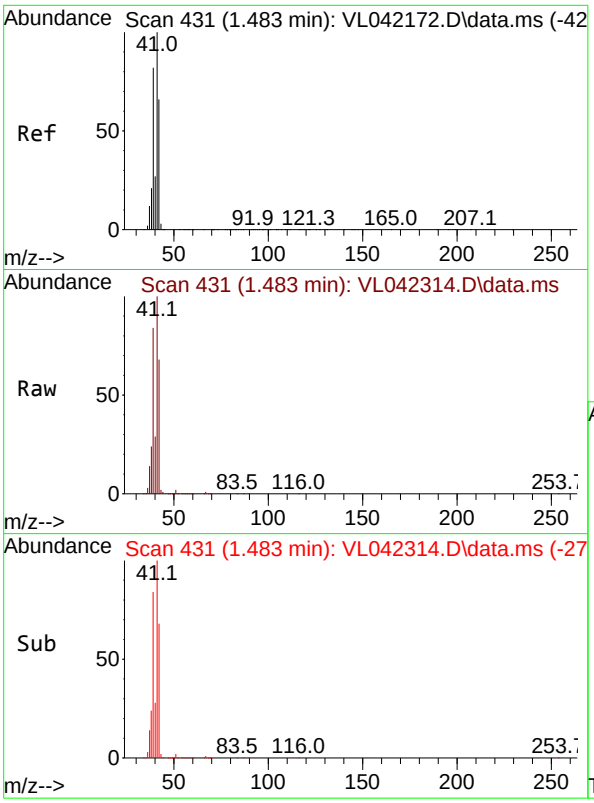


#8
Dichlorotetrafluoroethane
Concen: 9.769 ppbv
RT: 1.551 min Scan# 452
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 85 Resp: 219210

Ion	Ratio	Lower	Upper
85	100		
135	61.1	52.4	78.6



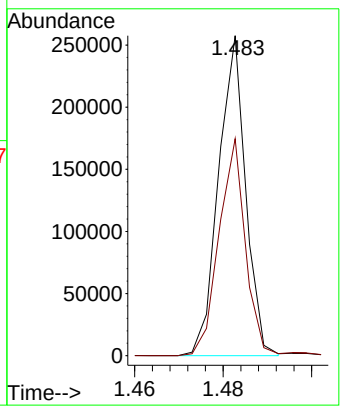


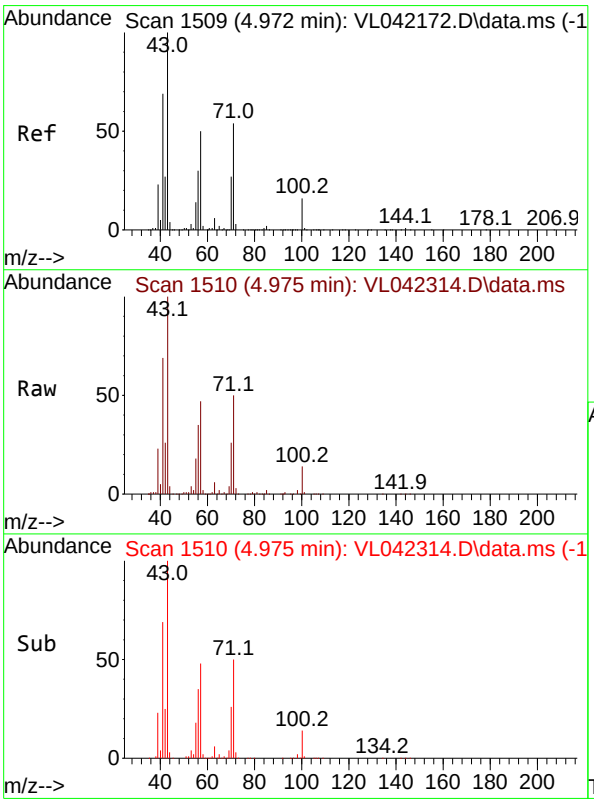
#9
Propene
Concen: 8.841 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 41 Resp: 109077

Ion	Ratio	Lower	Upper
41	100		
42	67.5	55.4	83.2

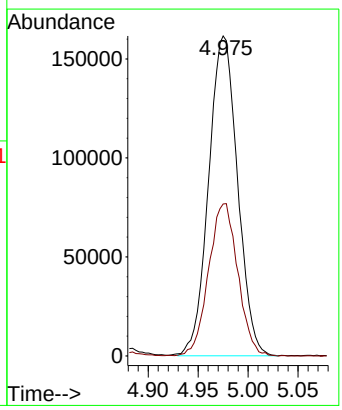


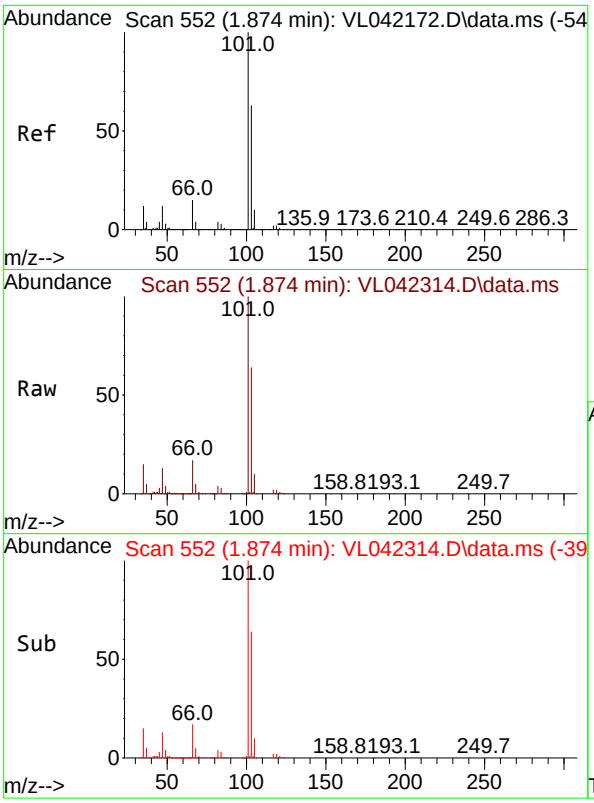


#10
Heptane
Concen: 9.912 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 325268

Ion	Ratio	Lower	Upper
43	100		
57	48.1	39.4	59.2



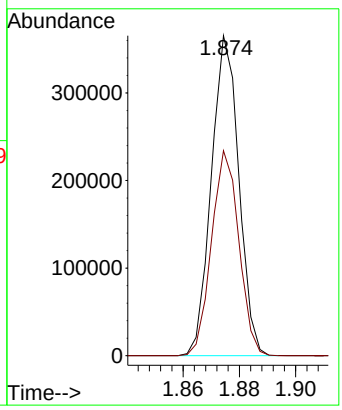


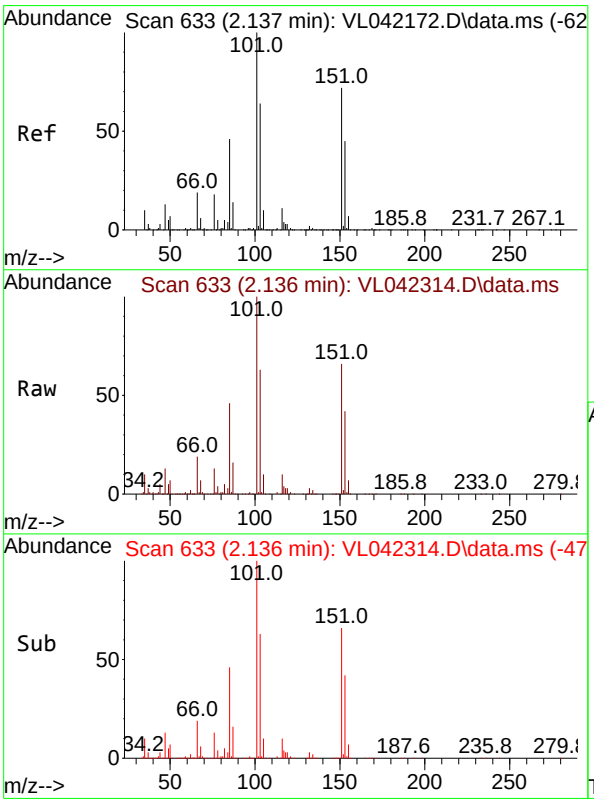
#11
Trichlorofluoromethane
Concen: 9.647 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:101 Resp: 247344

Ion	Ratio	Lower	Upper
101	100		
103	64.0	50.2	75.2

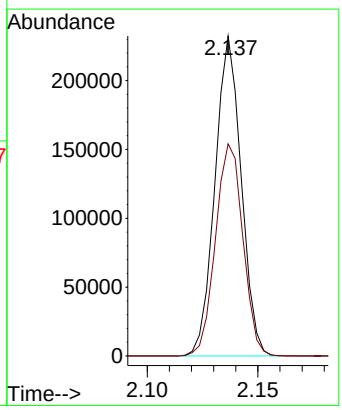


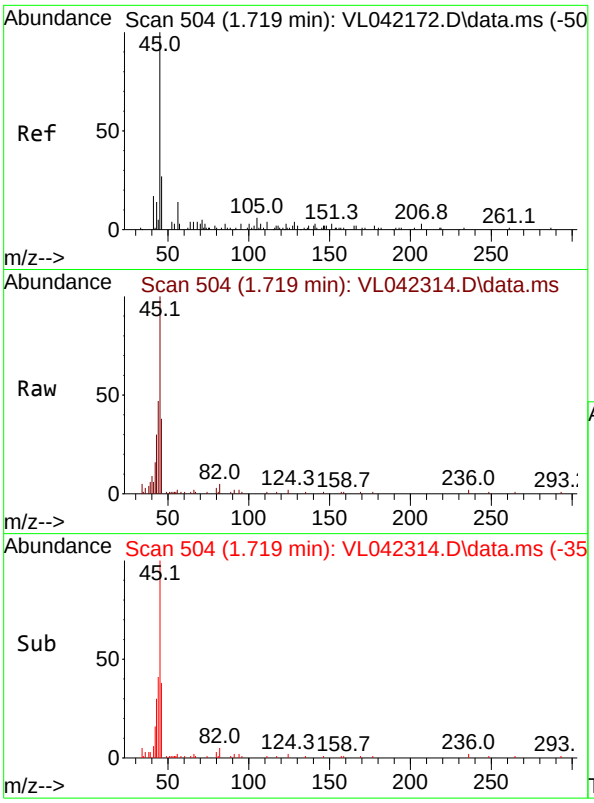


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.085 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:101 Resp: 191456

Ion	Ratio	Lower	Upper
101	100		
151	69.3	57.1	85.7



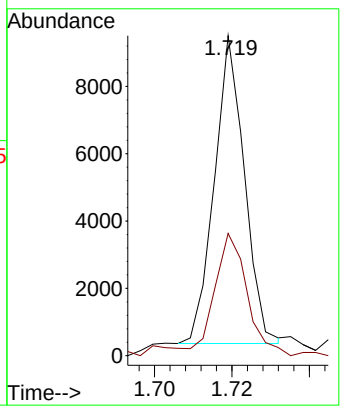


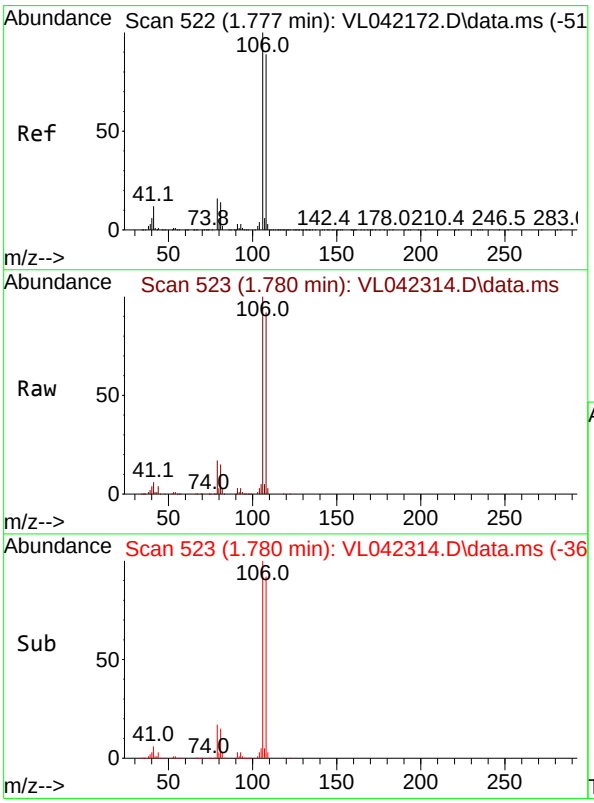
#13
Ethanol
Concen: 4.225 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 45 Resp: 4928

Ion	Ratio	Lower	Upper
45	100		
46	46.9	20.2	80.8

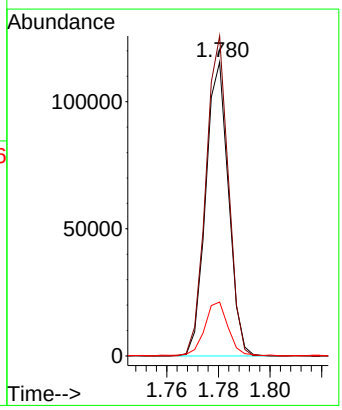


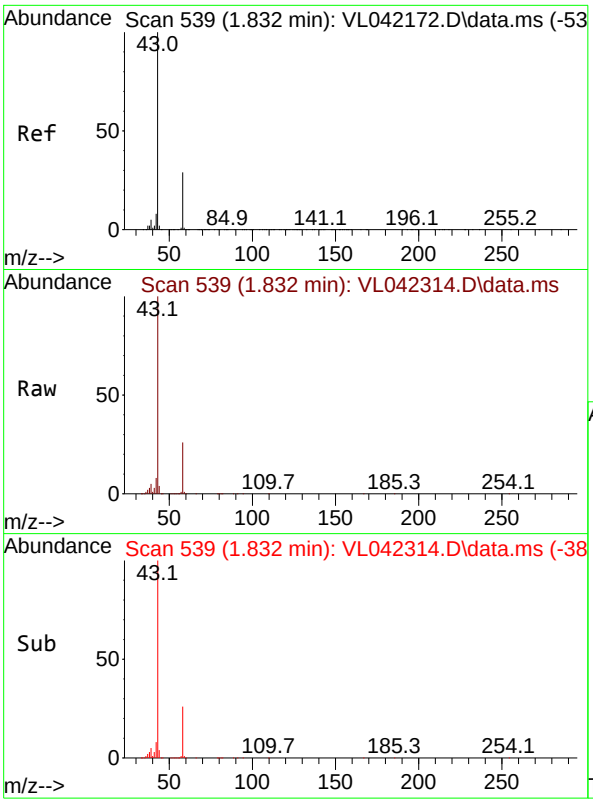


#14
Bromoethene
Concen: 8.758 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:108 Resp: 70702

Ion	Ratio	Lower	Upper
108	100		
106	107.1	86.8	130.2
79	19.5	15.0	22.6



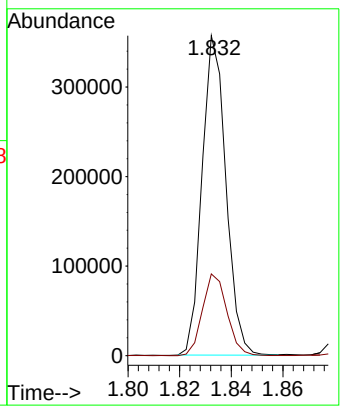


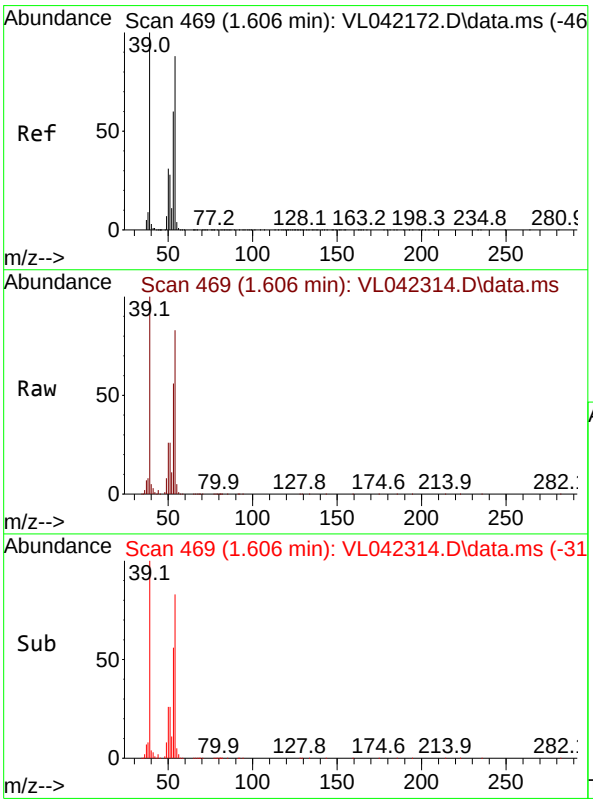
#15
Acetone
Concen: 9.175 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 43 Resp: 228988

Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8

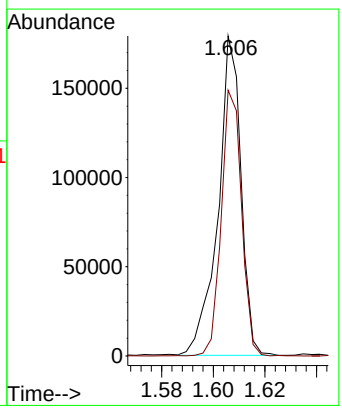


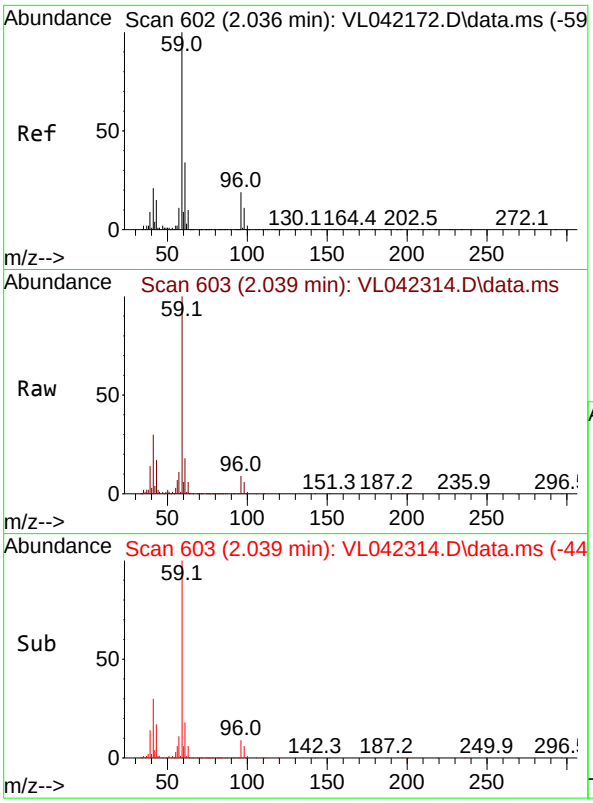


#16
1,3-Butadiene
Concen: 9.060 ppbv
RT: 1.606 min Scan# 469
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 39 Resp: 110429

Ion	Ratio	Lower	Upper
39	100		
54	73.5	60.7	91.1



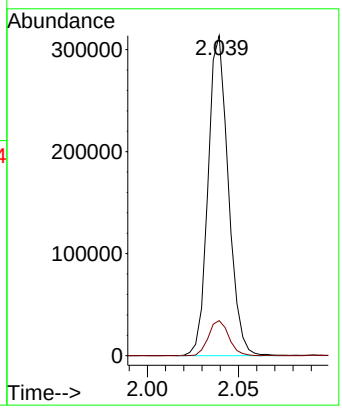


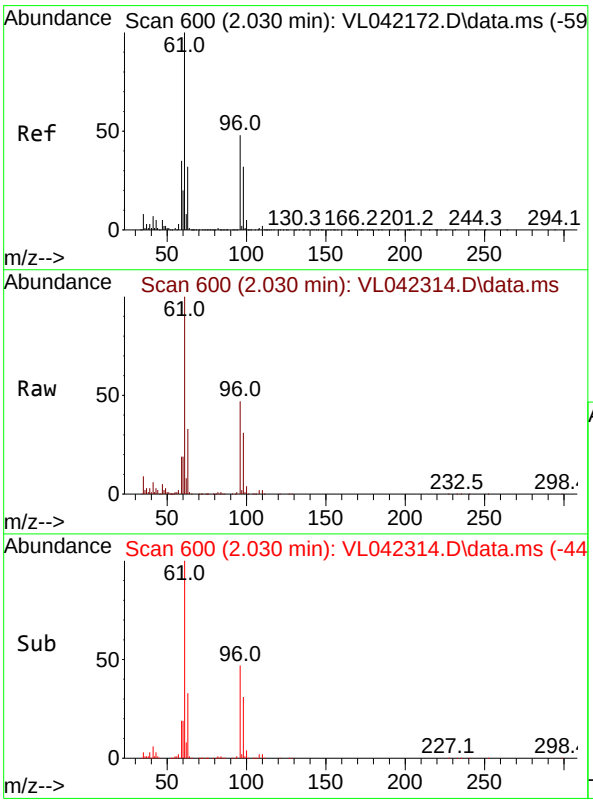
#17
tert-Butyl alcohol
Concen: 7.818 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 59 Resp: 243034

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3

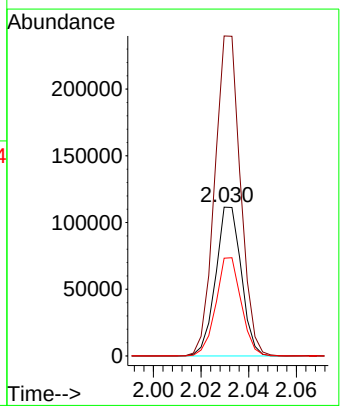


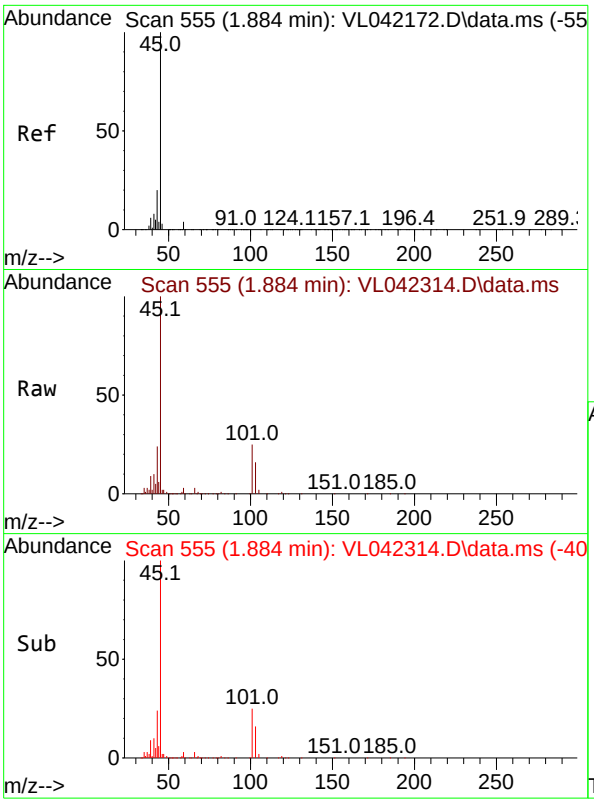


#18
1,1-Dichloroethene
Concen: 8.449 ppbv
RT: 2.030 min Scan# 600
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 96 Resp: 83233

Ion	Ratio	Lower	Upper
96	100		
61	215.0	167.6	251.4
98	65.6	53.5	80.3



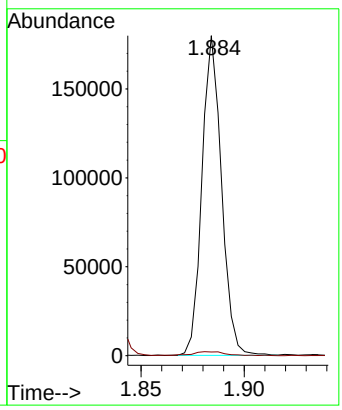


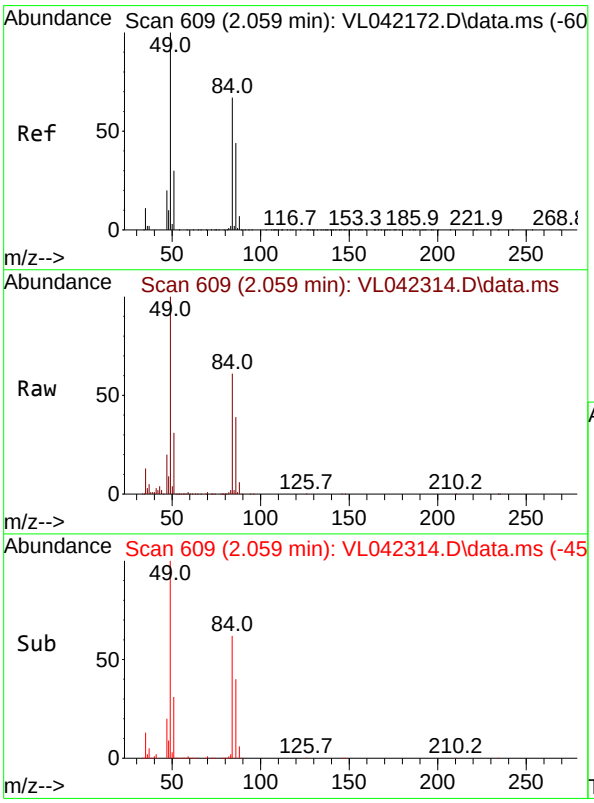
#19
Isopropyl Alcohol
Concen: 8.404 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 45 Resp: 118345

Ion	Ratio	Lower	Upper
45	100		
58	2.2	36.9	55.3#

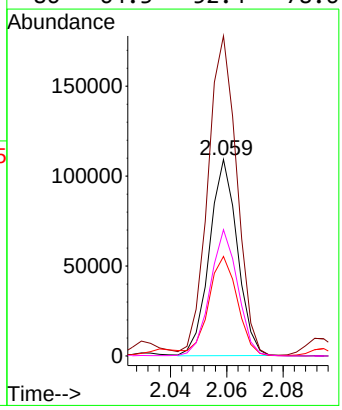


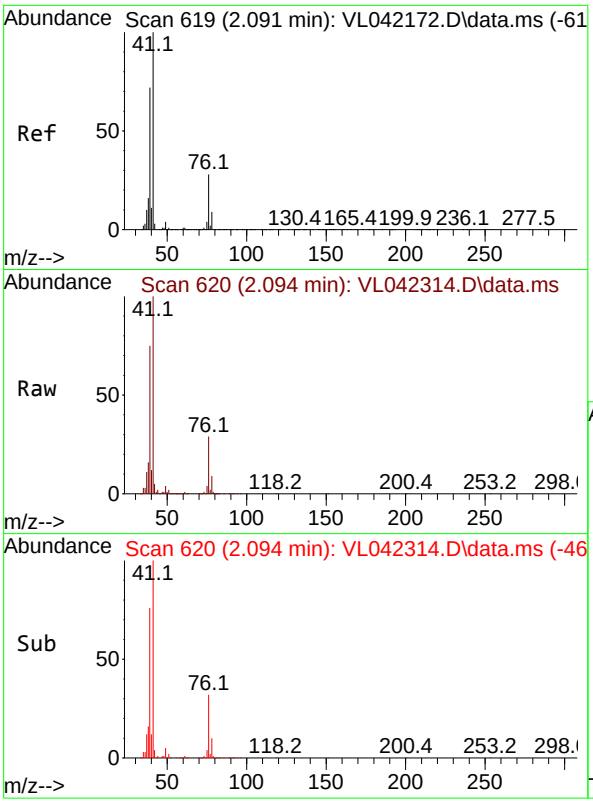


#20
Methylene Chloride
Concen: 8.097 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 84 Resp: 75264

Ion	Ratio	Lower	Upper
84	100		
49	162.8	120.2	180.4
51	50.6	37.4	56.0
86	64.3	52.4	78.6



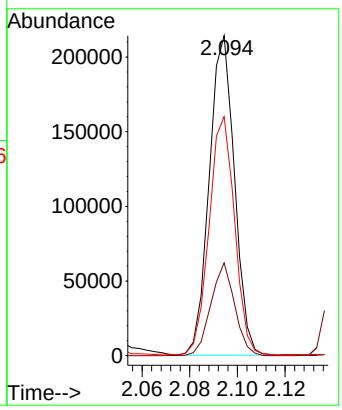


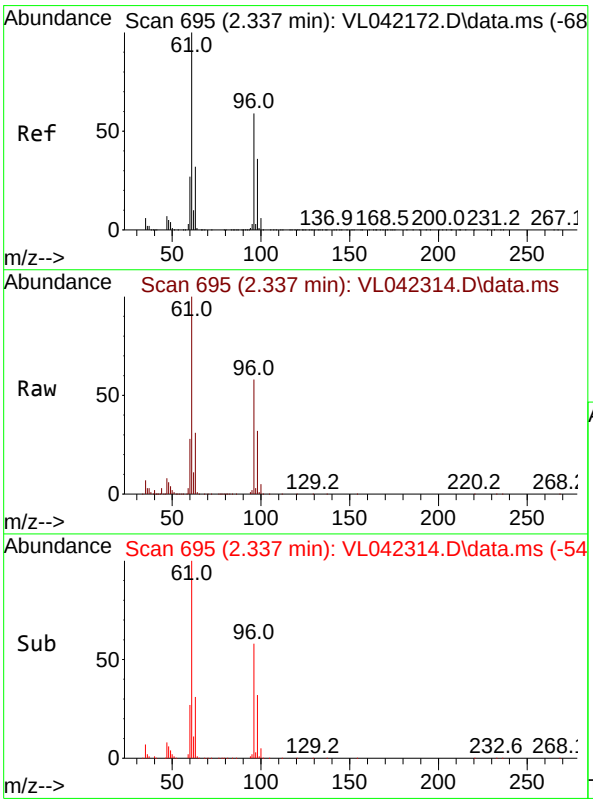
#21
Allyl Chloride
Concen: 8.934 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 41 Resp: 157261

Ion	Ratio	Lower	Upper
41	100		
76	27.5	24.1	36.1
39	75.1	61.1	91.7

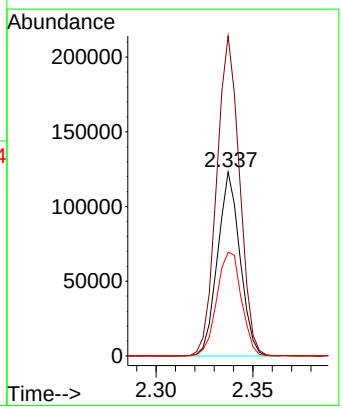


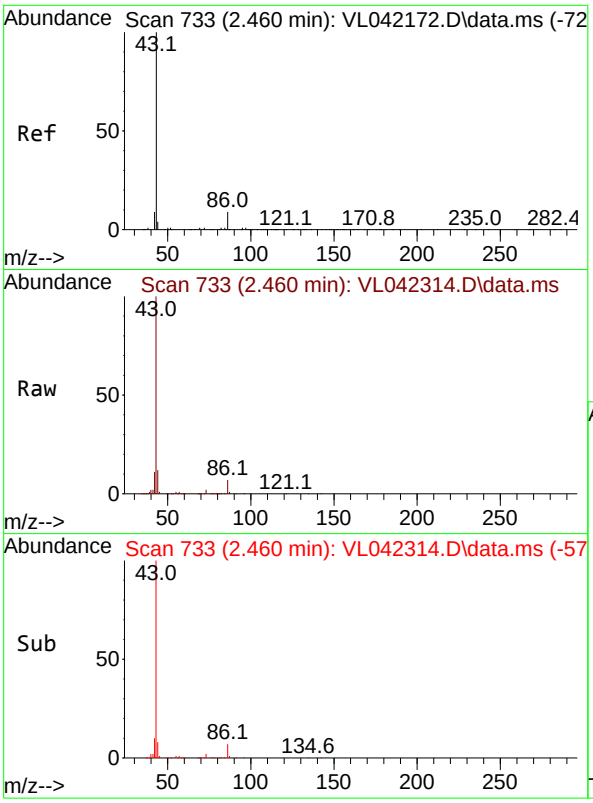


#22
trans-1,2-Dichloroethene
Concen: 8.674 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 96 Resp: 98769

Ion	Ratio	Lower	Upper
96	100		
61	173.9	136.6	204.8
98	56.3	49.4	74.2



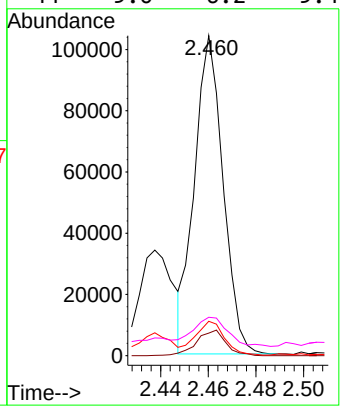


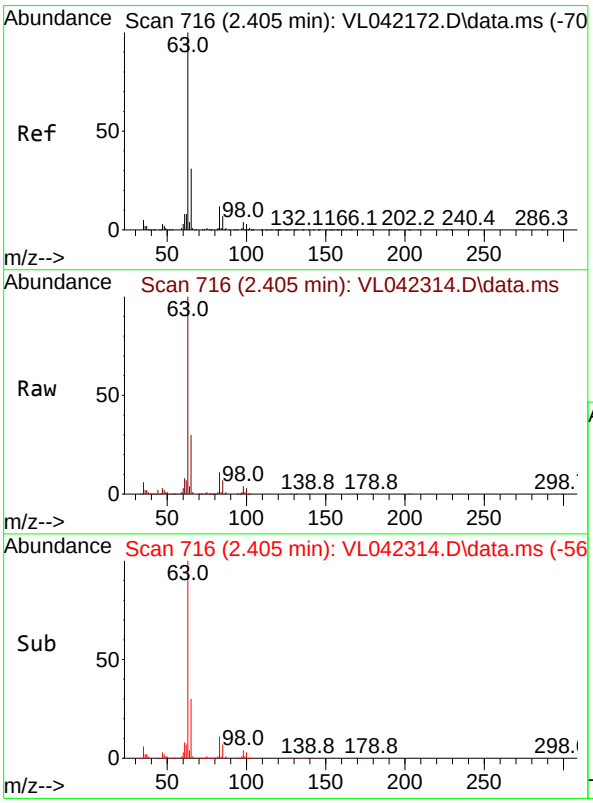
#23
Vinyl Acetate
Concen: 8.014 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 43 Resp: 86563

Ion	Ratio	Lower	Upper
43	100		
86	7.1	5.5	8.3
42	9.9	8.6	13.0
44	9.0	6.2	9.4

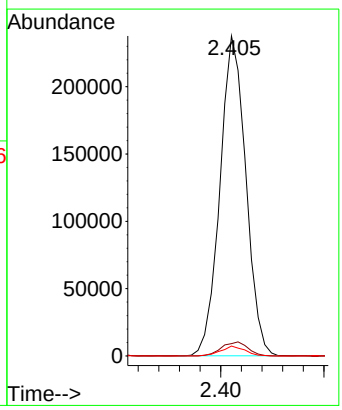


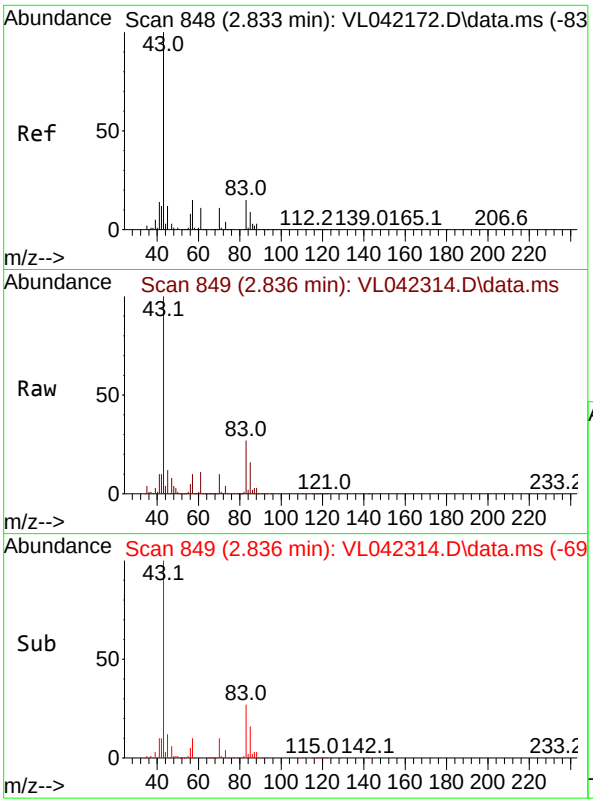


#24
1,1-Dichloroethane
Concen: 9.800 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 63 Resp: 206840

Ion	Ratio	Lower	Upper
63	100		
98	3.8	2.3	6.8
100	3.1	1.6	4.7



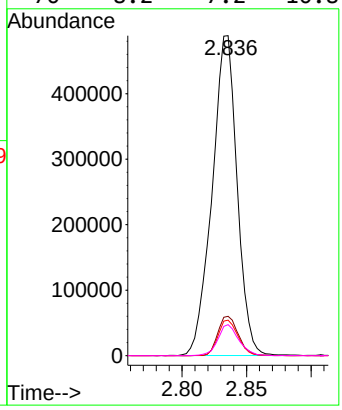


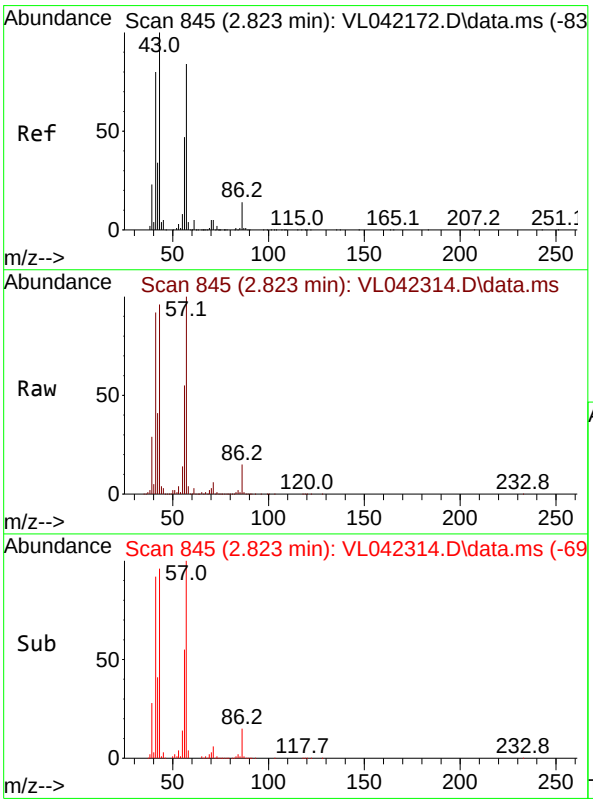
#25
Ethyl Acetate
Concen: 10.138 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 43 Resp: 656719

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.2	12.2
61	9.0	7.3	10.9
70	8.2	7.2	10.8

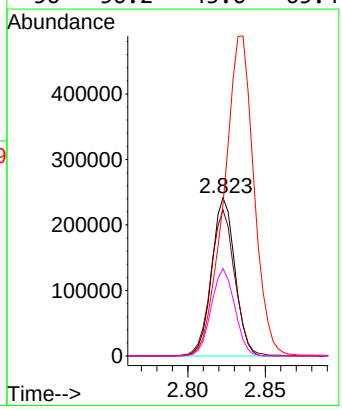


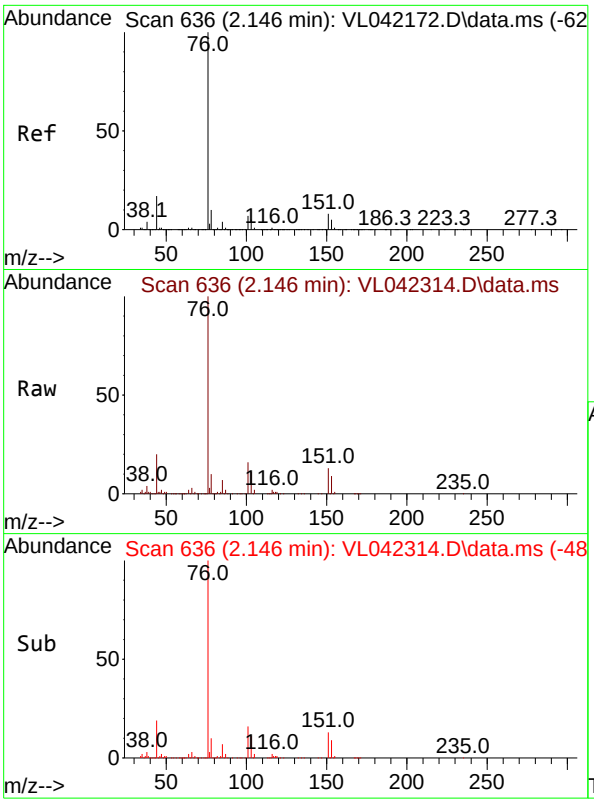


#26
Hexane
Concen: 9.986 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 57 Resp: 249860

Ion	Ratio	Lower	Upper
57	100		
41	97.2	76.6	114.8
43	264.3	207.8	311.8
56	56.2	43.6	65.4



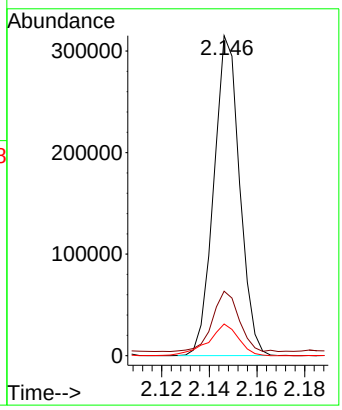


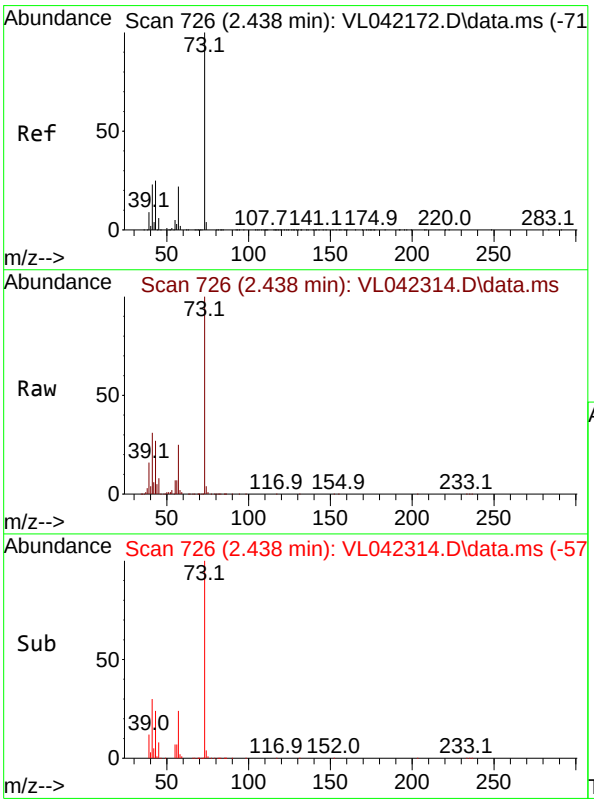
#27
Carbon Disulfide
Concen: 8.833 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 76 Resp: 236998

Ion	Ratio	Lower	Upper
76	100		
44	19.3	14.7	22.1
78	11.6	9.3	13.9

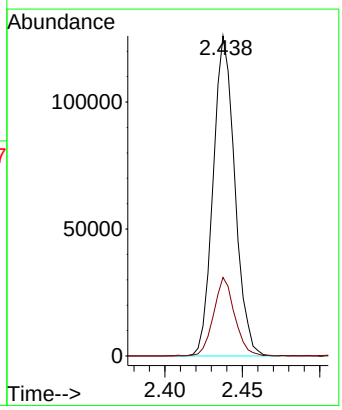


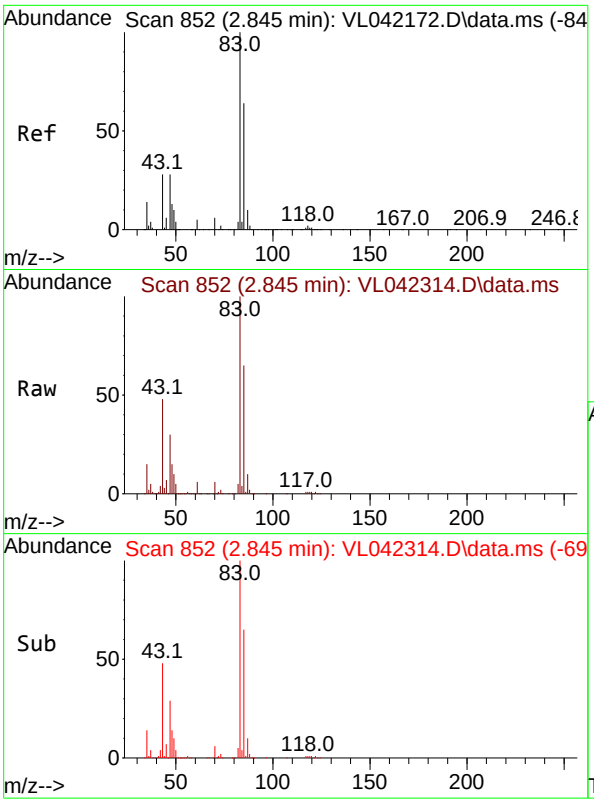


#28
Methyl tert-Butyl Ether
Concen: 7.884 ppbv
RT: 2.438 min Scan# 726
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 73 Resp: 122818

Ion	Ratio	Lower	Upper
73	100		
57	23.9	20.5	30.7



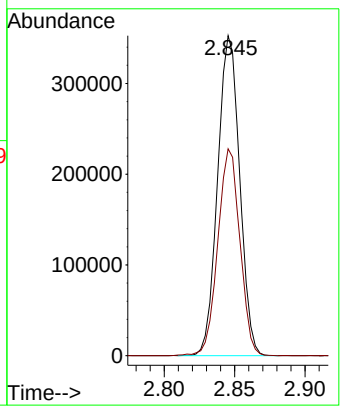


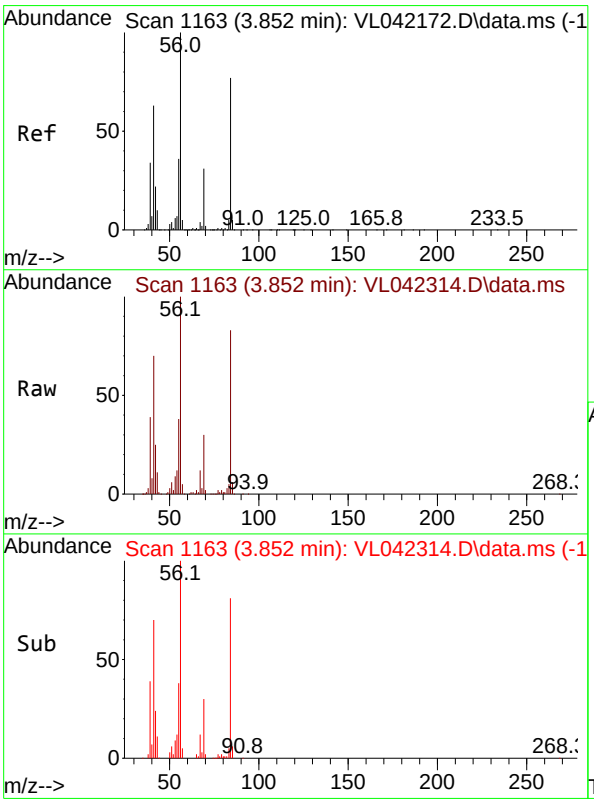
#29
Chloroform
Concen: 10.506 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 83 Resp: 384713

Ion	Ratio	Lower	Upper
83	100		
85	64.6	51.4	77.2

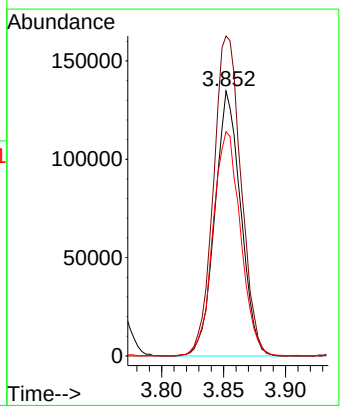


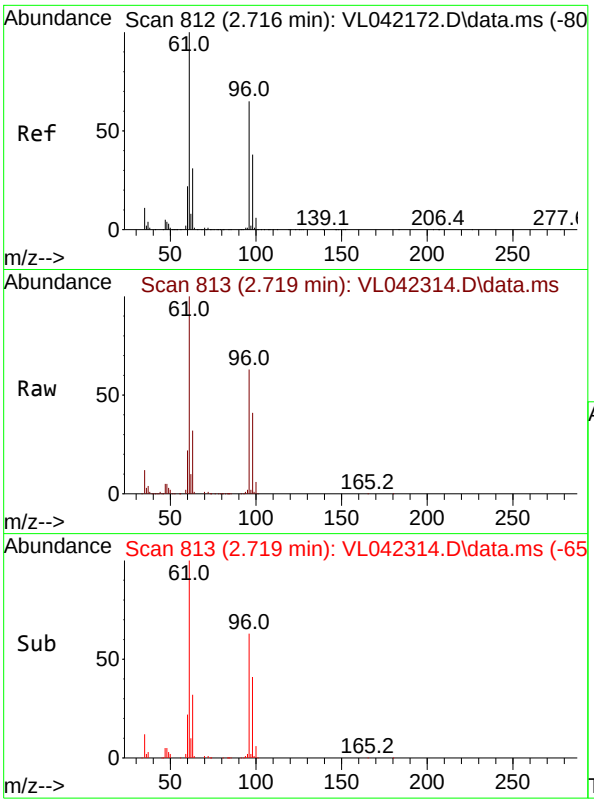


#30
Cyclohexane
Concen: 9.028 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 84 Resp: 196133

Ion	Ratio	Lower	Upper
84	100		
56	128.6	102.8	154.2
41	90.3	66.5	99.7



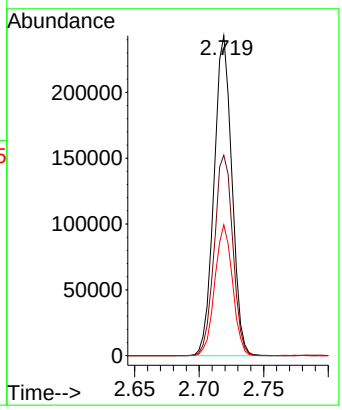


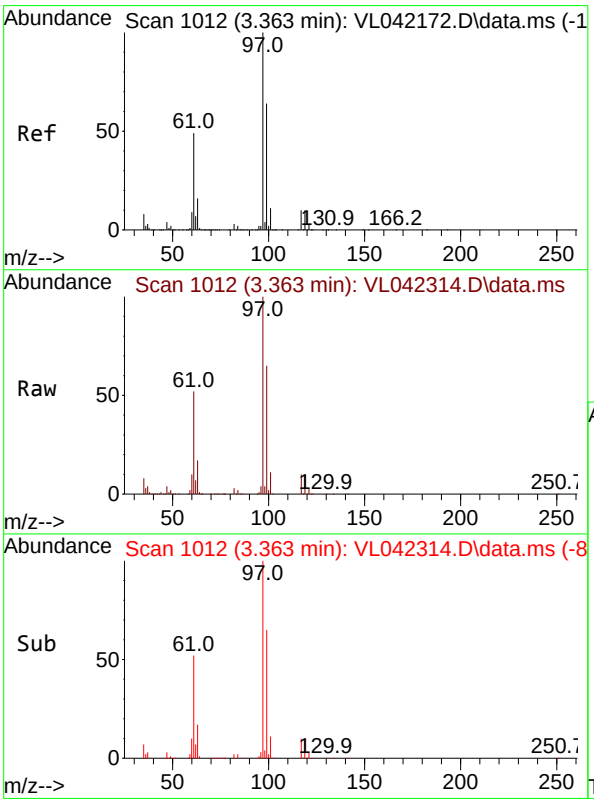
#31
cis-1,2-Dichloroethene
Concen: 9.187 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 61 Resp: 233371

Ion	Ratio	Lower	Upper
61	100		
96	62.7	51.8	77.8
98	40.9	30.6	46.0

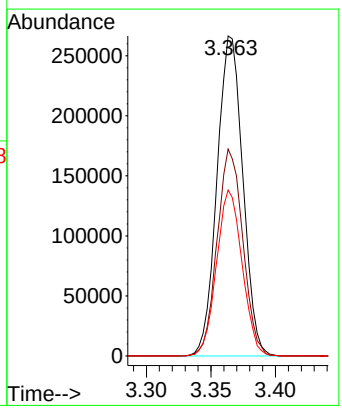


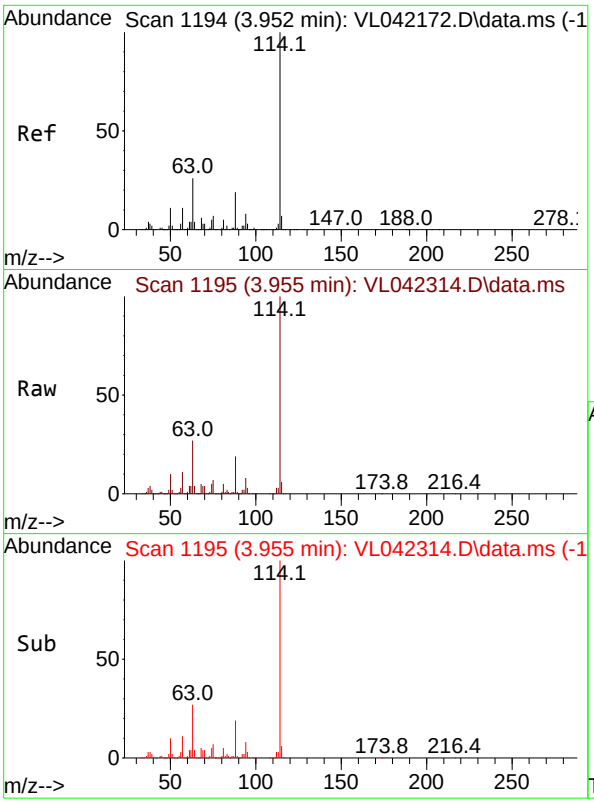


#32
1,1,1-Trichloroethane
Concen: 8.836 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 97 Resp: 370405

Ion	Ratio	Lower	Upper
97	100		
99	64.3	51.5	77.3
61	51.5	38.7	58.1



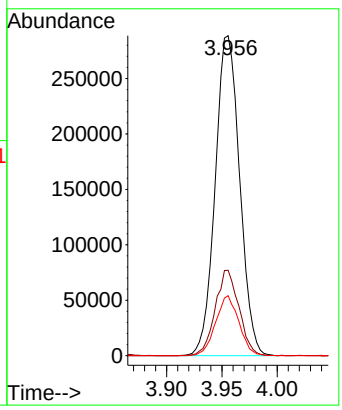


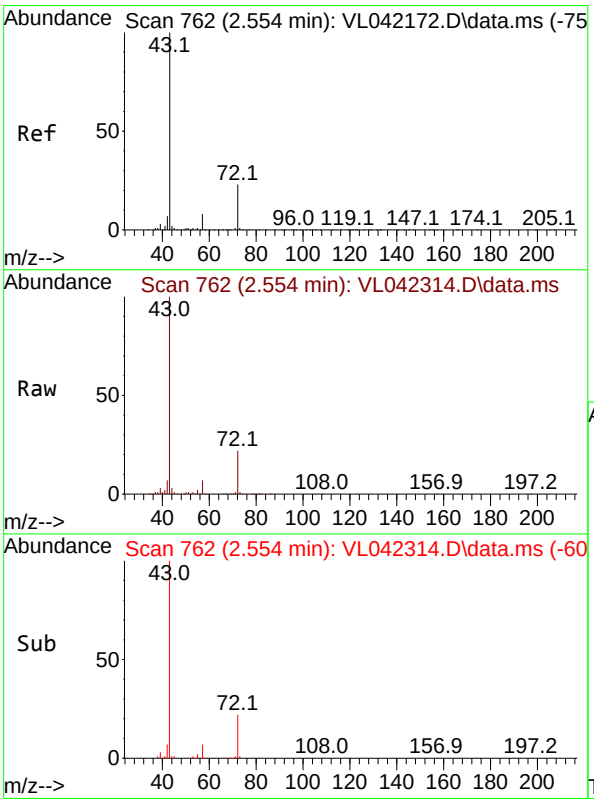
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:114 Resp: 444353

Ion	Ratio	Lower	Upper
114	100		
63	26.0	20.7	31.1
88	17.8	15.0	22.4

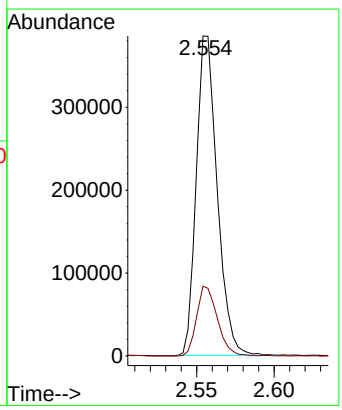


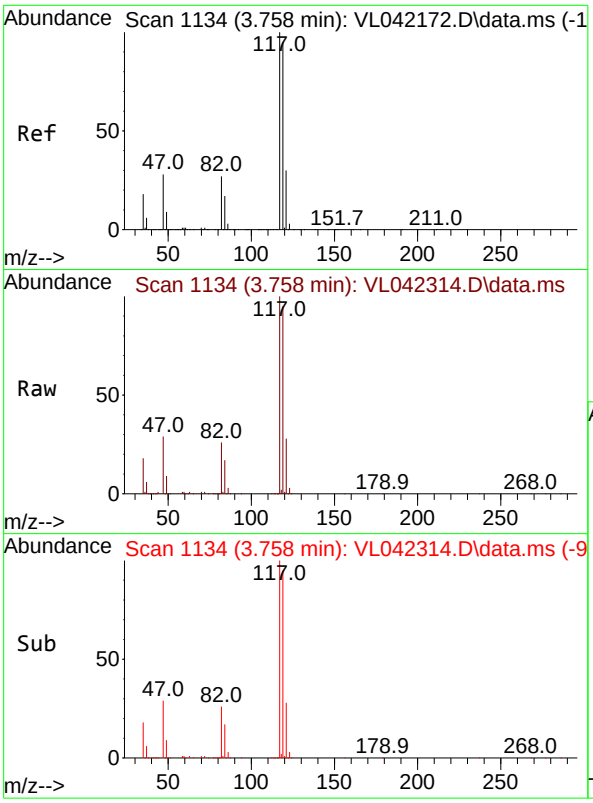


#34
2-Butanone
Concen: 11.254 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 362633

Ion	Ratio	Lower	Upper
43	100		
72	21.8	18.2	27.2



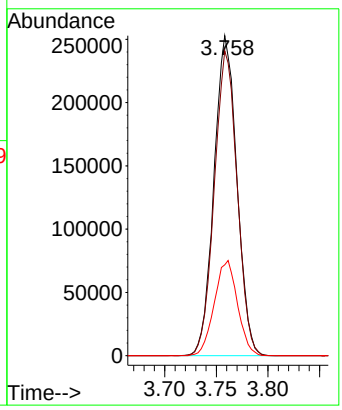


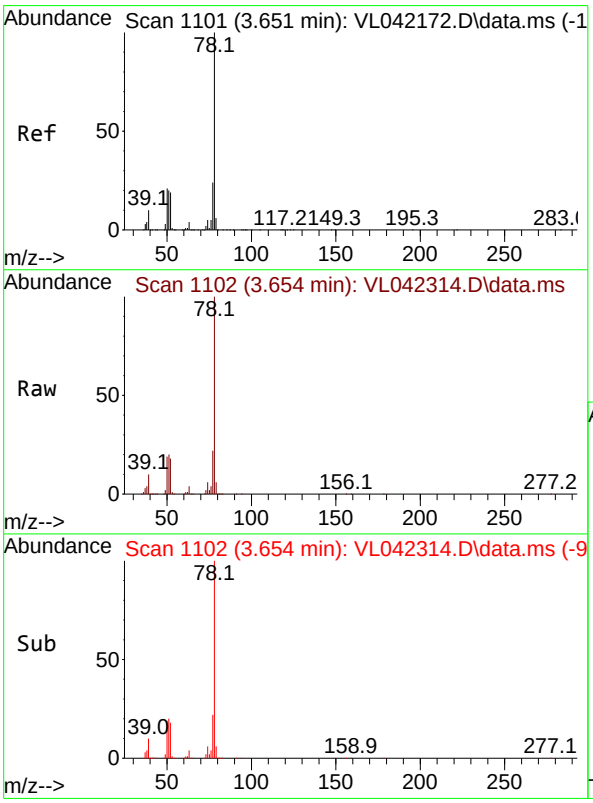
#35
Carbon Tetrachloride
Concen: 11.228 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:117 Resp: 389738

Ion	Ratio	Lower	Upper
117	100		
119	95.2	76.2	114.2
121	28.4	24.2	36.4

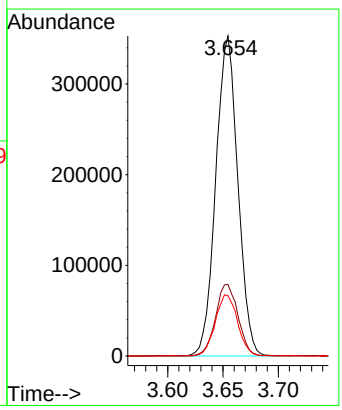


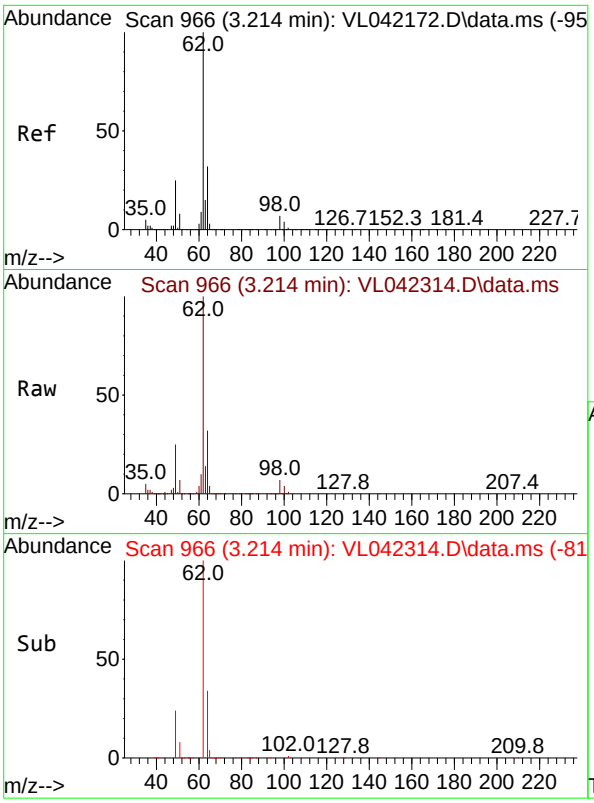


#36
Benzene
Concen: 11.131 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 78 Resp: 490339

Ion	Ratio	Lower	Upper
78	100		
77	22.3	19.1	28.7
50	18.8	16.6	24.8



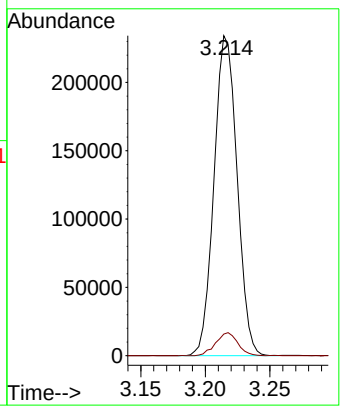


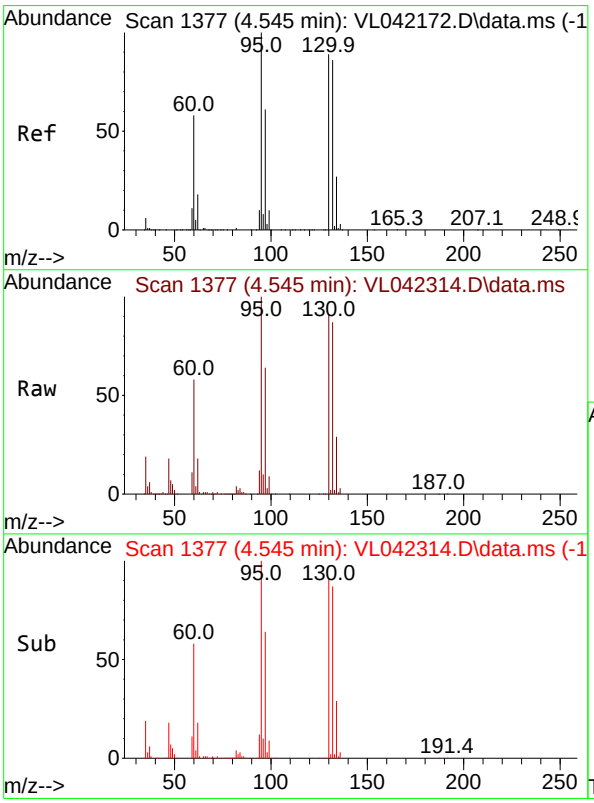
#37
1,2-Dichloroethane
Concen: 11.538 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 62 Resp: 290983

Ion	Ratio	Lower	Upper
62	100		
98	6.9	5.4	8.2

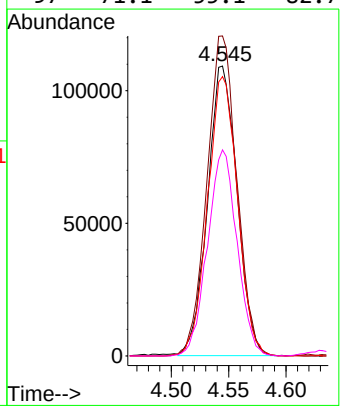


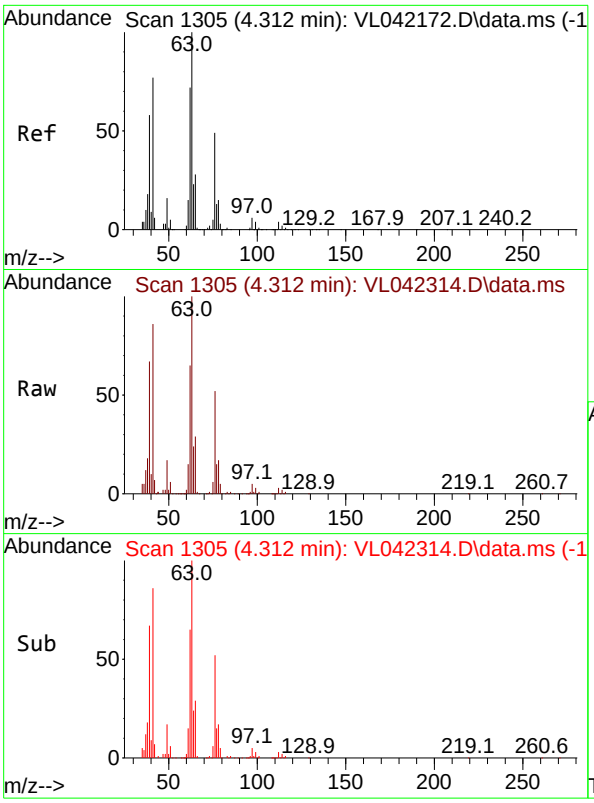


#38
Trichloroethene
Concen: 10.645 ppbv
RT: 4.545 min Scan# 1377
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:130 Resp: 195654

Ion	Ratio	Lower	Upper
130	100		
95	110.4	89.8	134.8
132	96.5	77.4	116.2
97	71.1	55.1	82.7



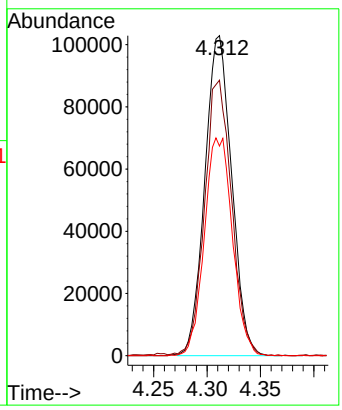


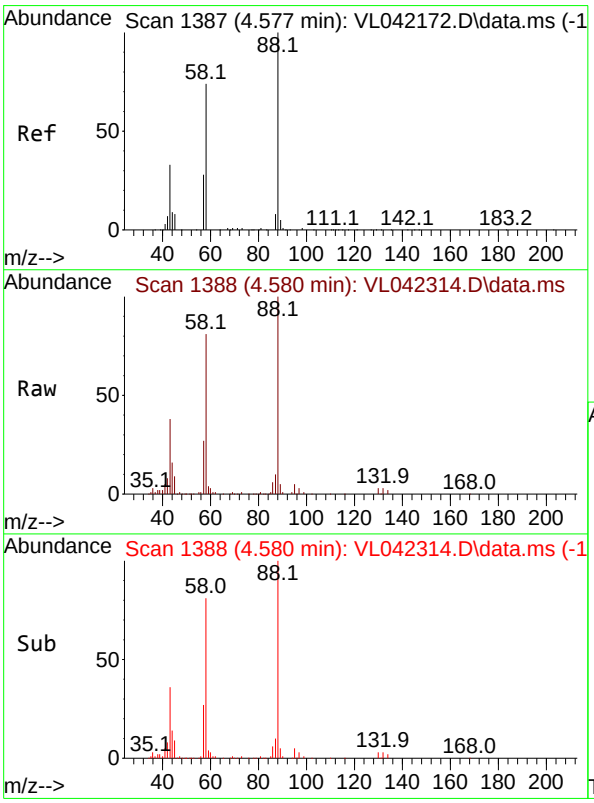
#39
1,2-Dichloropropane
Concen: 11.217 ppbv
RT: 4.312 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 63 Resp: 179954

Ion	Ratio	Lower	Upper
63	100		
41	85.9	61.7	92.5
62	65.3	57.6	86.4

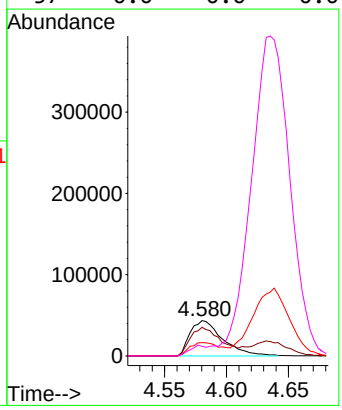


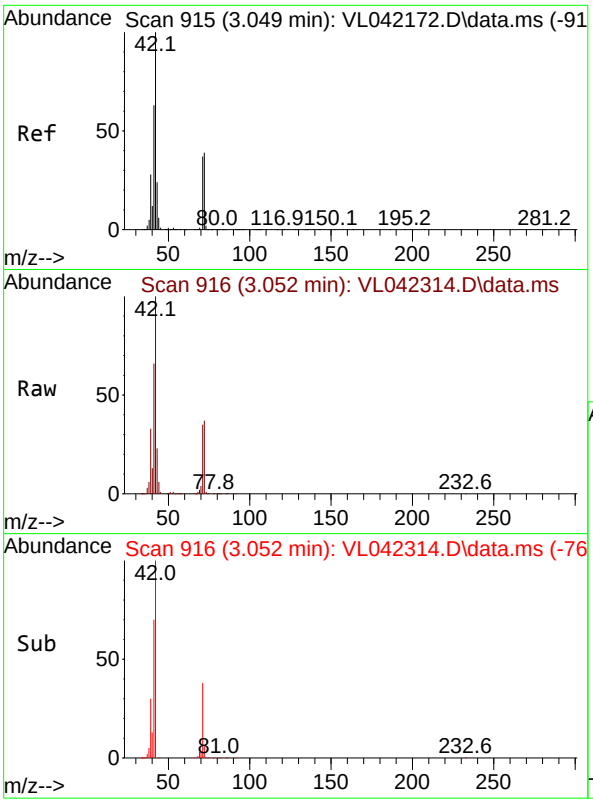


#40
1,4-Dioxane
Concen: 9.408 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 88 Resp: 80106

Ion	Ratio	Lower	Upper
88	100		
58	81.4	62.7	94.1
43	0.0	23.0	34.4#
57	0.0	0.0	0.0



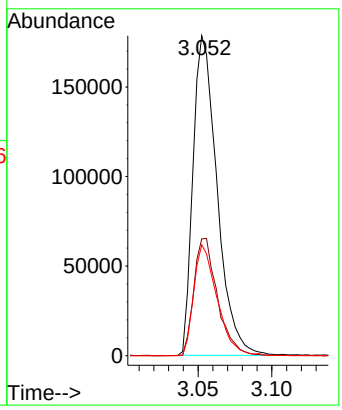


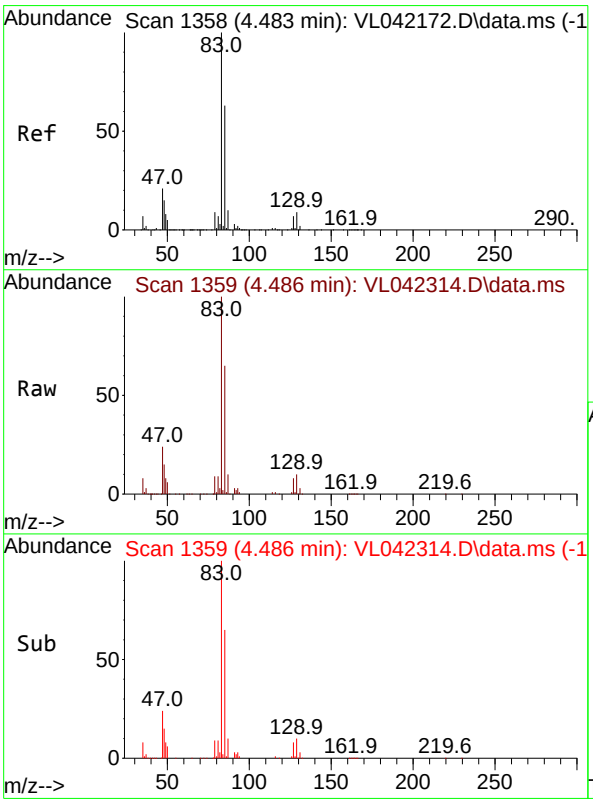
#41
Tetrahydrofuran
Concen: 10.930 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 42 Resp: 202793

Ion	Ratio	Lower	Upper
42	100		
72	36.0	31.4	47.0
71	33.5	30.2	45.4

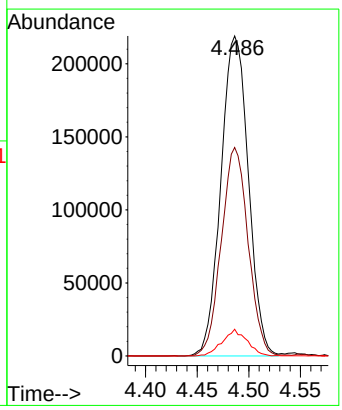


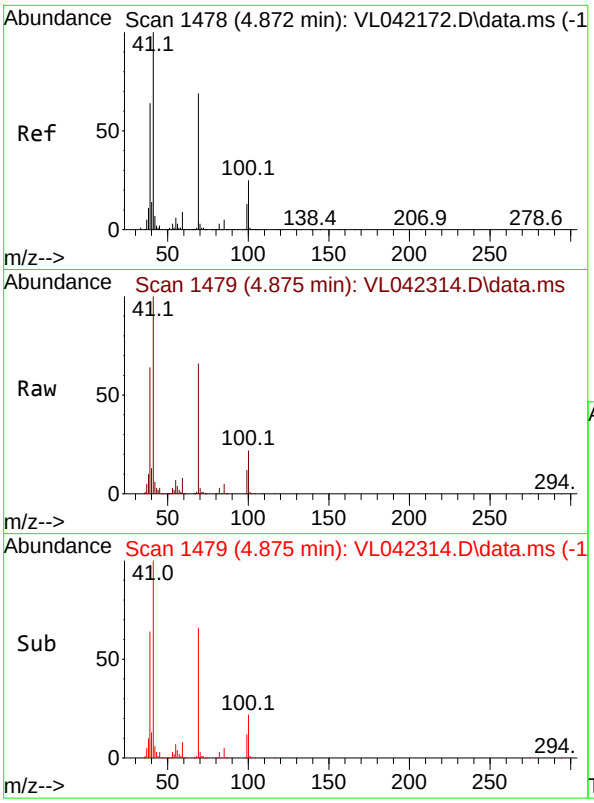


#42
Bromodichloromethane
Concen: 11.669 ppbv
RT: 4.486 min Scan# 1359
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 83 Resp: 405729

Ion	Ratio	Lower	Upper
83	100		
85	65.2	50.5	75.7
127	8.4	5.9	8.9



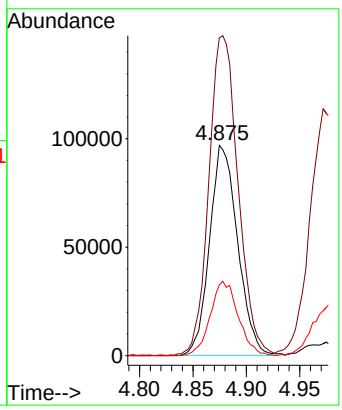


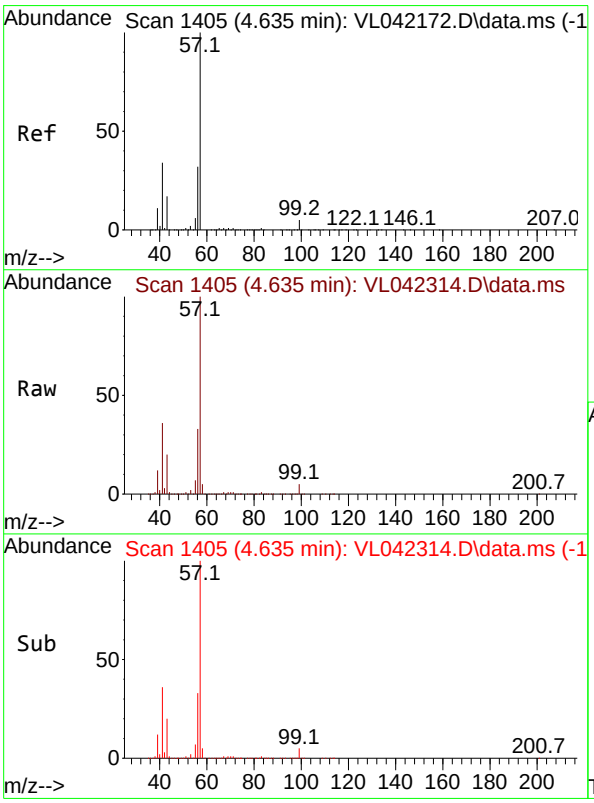
#43
Methyl Methacrylate
Concen: 9.514 ppbv
RT: 4.875 min Scan# 14
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 69 Resp: 177423

Ion	Ratio	Lower	Upper
69	100		
41	158.3	123.8	185.6
100	35.3	28.4	42.6

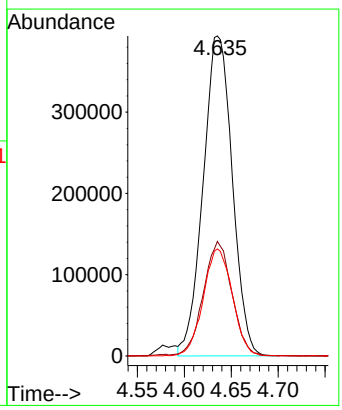


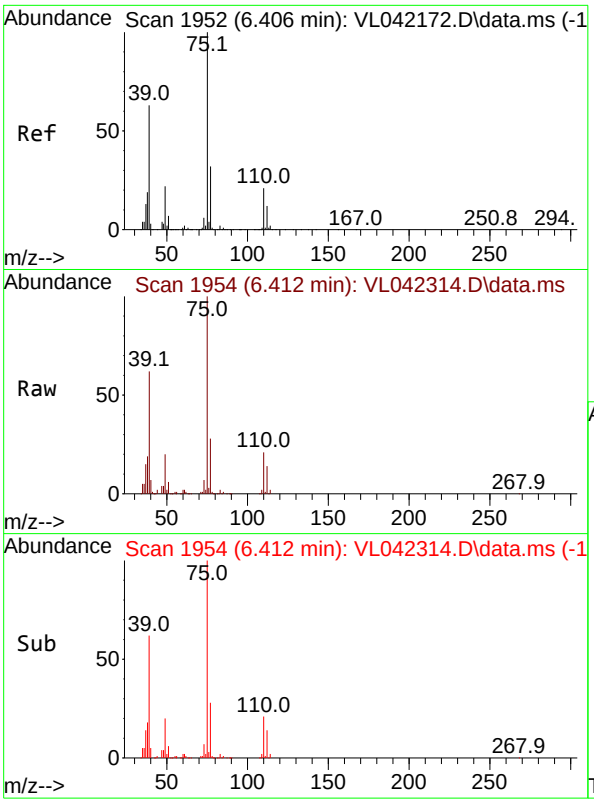


#44
2,2,4-Trimethylpentane
Concen: 11.431 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 57 Resp: 850971

Ion	Ratio	Lower	Upper
57	100		
41	35.3	26.8	40.2
56	33.4	25.6	38.4



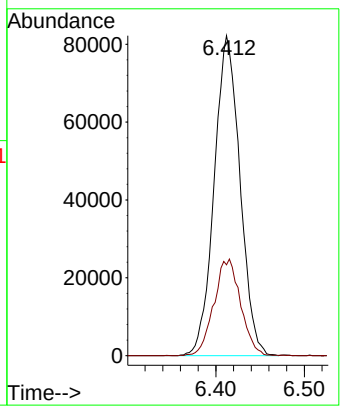


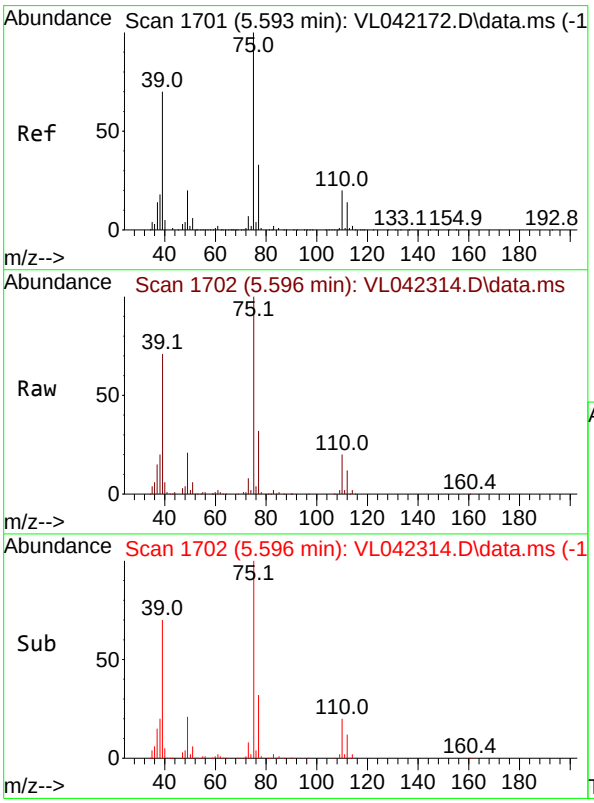
#45
t-1,3-Dichloropropene
Concen: 8.309 ppbv
RT: 6.412 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 75 Resp: 166246

Ion	Ratio	Lower	Upper
75	100		
77	28.4	26.0	39.0

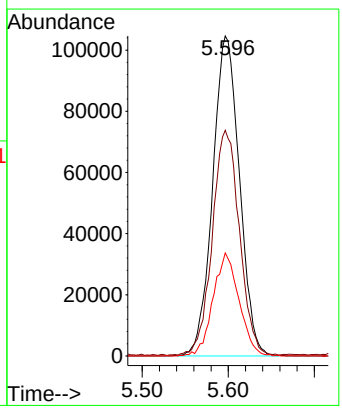


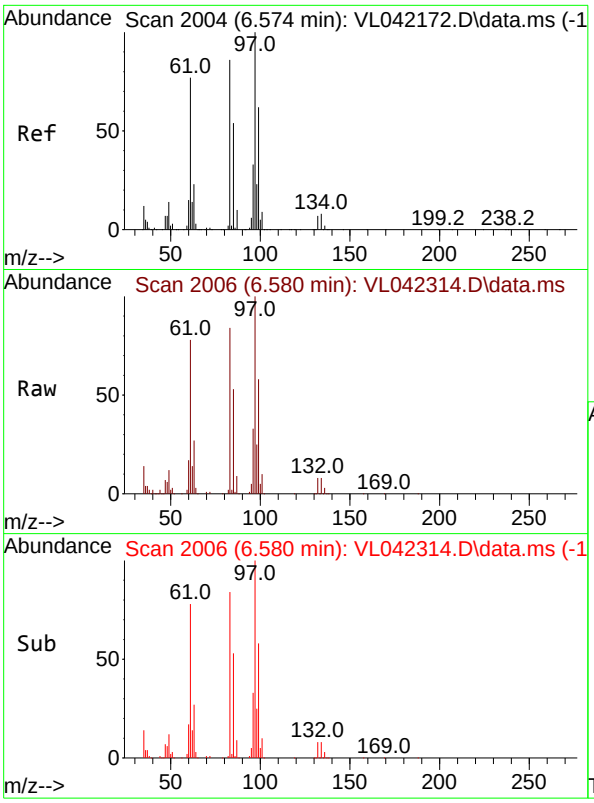


#46
cis-1,3-Dichloropropene
Concen: 9.213 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 75 Resp: 225952

Ion	Ratio	Lower	Upper
75	100		
39	70.2	55.8	83.6
77	32.1	26.0	39.0



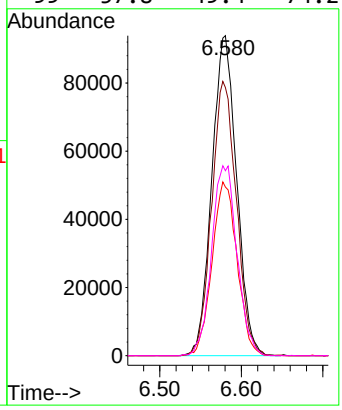


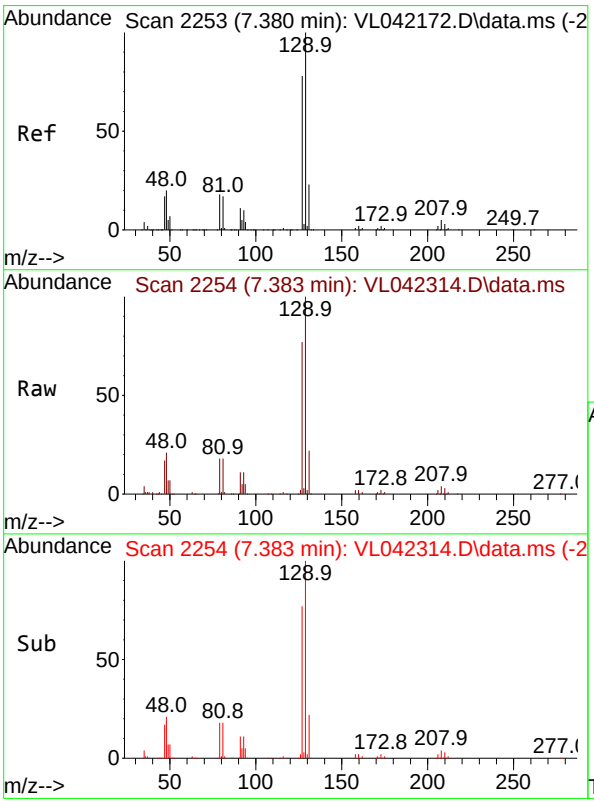
#47
1,1,2-Trichloroethane
Concen: 11.720 ppbv
RT: 6.580 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 97 Resp: 198762

Ion	Ratio	Lower	Upper
97	100		
83	83.8	69.2	103.8
85	52.7	43.1	64.7
99	57.8	49.4	74.2

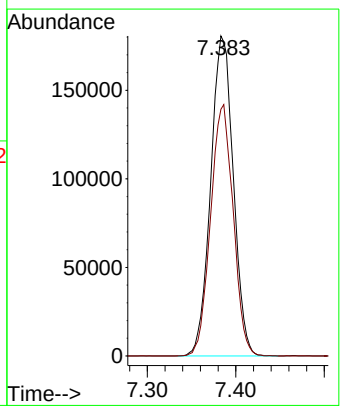


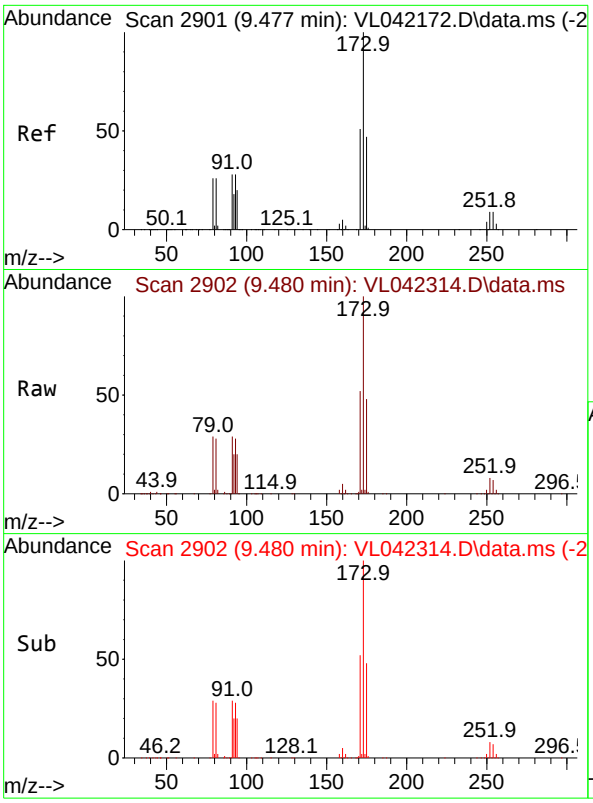


#48
Dibromochloromethane
Concen: 11.181 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:129 Resp: 321370

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.2



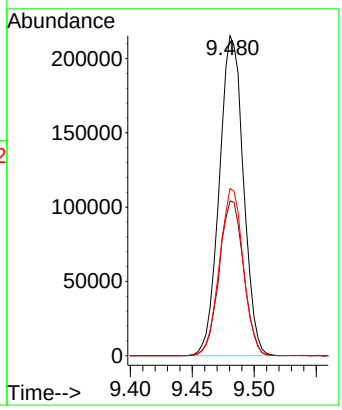


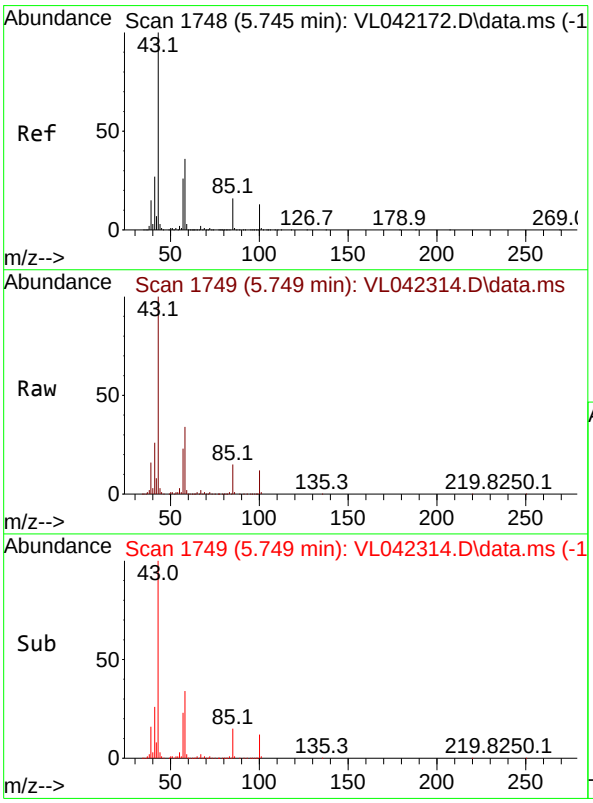
#49
Bromoform
Concen: 11.313 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:173 Resp: 291905

Ion	Ratio	Lower	Upper
173	100		
175	49.1	38.6	57.8
171	51.7	41.8	62.6

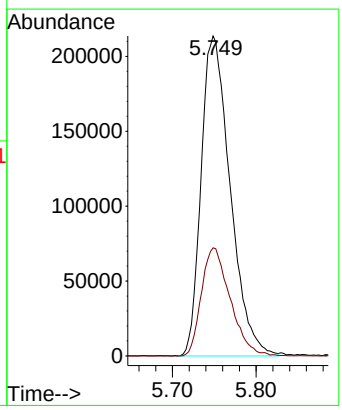


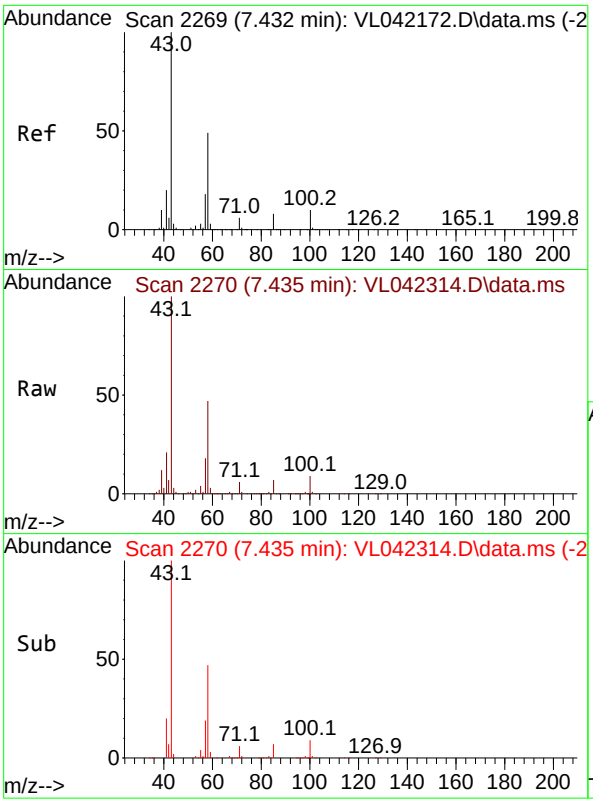


#50
4-Methyl-2-Pentanone
Concen: 10.084 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 43 Resp: 514910

Ion	Ratio	Lower	Upper
43	100		
58	33.6	29.0	43.6



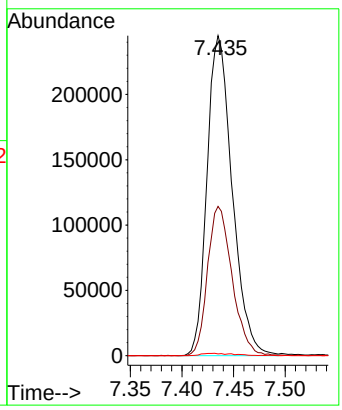


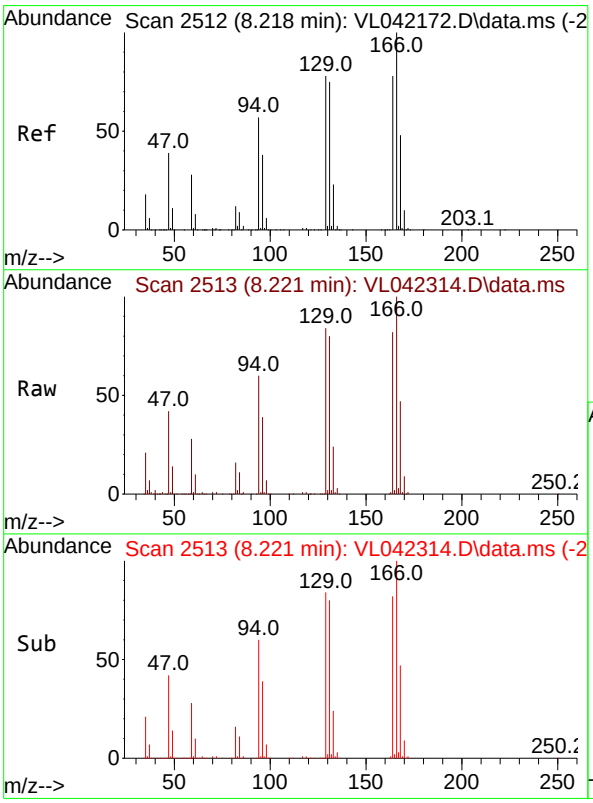
#51
2-Hexanone
Concen: 9.889 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 43 Resp: 414681

Ion	Ratio	Lower	Upper
43	100		
58	45.6	39.7	59.5
98	1.0	0.1	0.1#

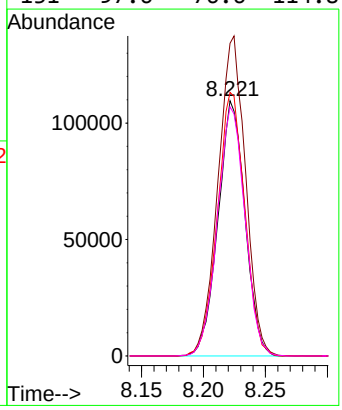


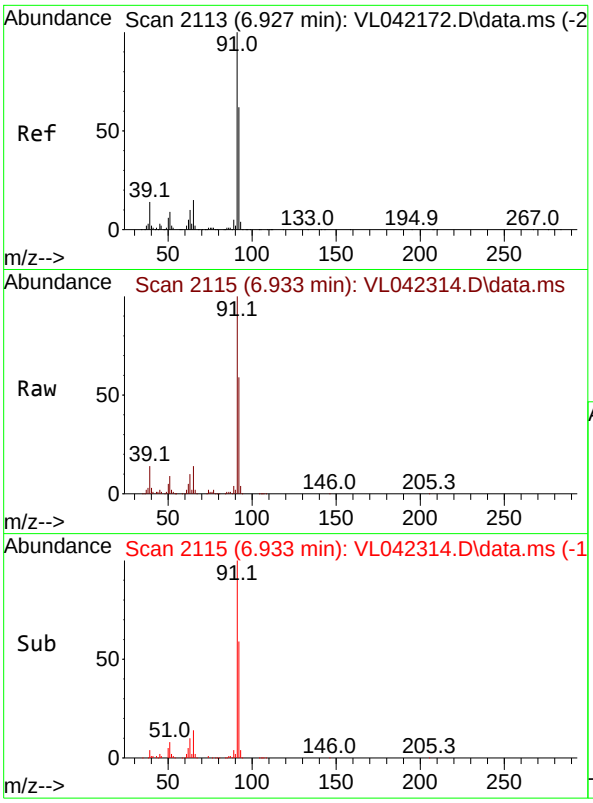


#52
Tetrachloroethene
Concen: 9.483 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:164 Resp: 165666

Ion	Ratio	Lower	Upper
164	100		
166	122.5	102.5	153.7
129	103.2	79.8	119.8
131	97.6	76.6	114.8



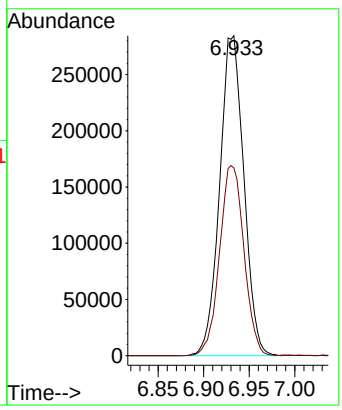


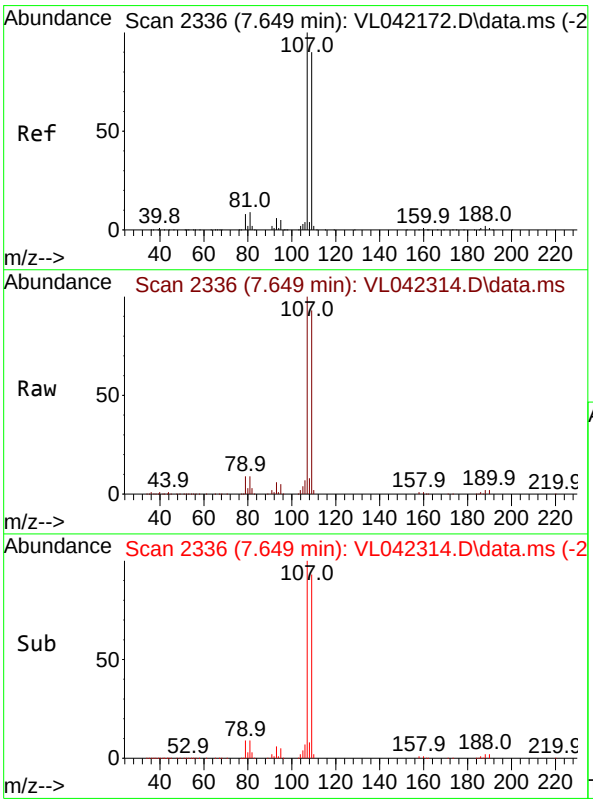
#53
Toluene
Concen: 10.079 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 91 Resp: 526341

Ion	Ratio	Lower	Upper
91	100		
92	59.9	48.4	72.6

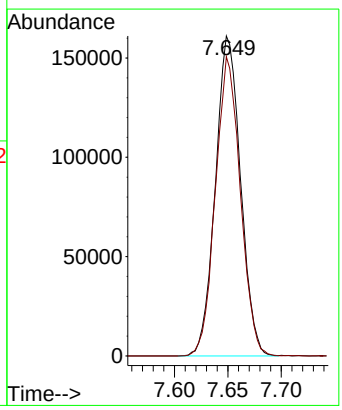


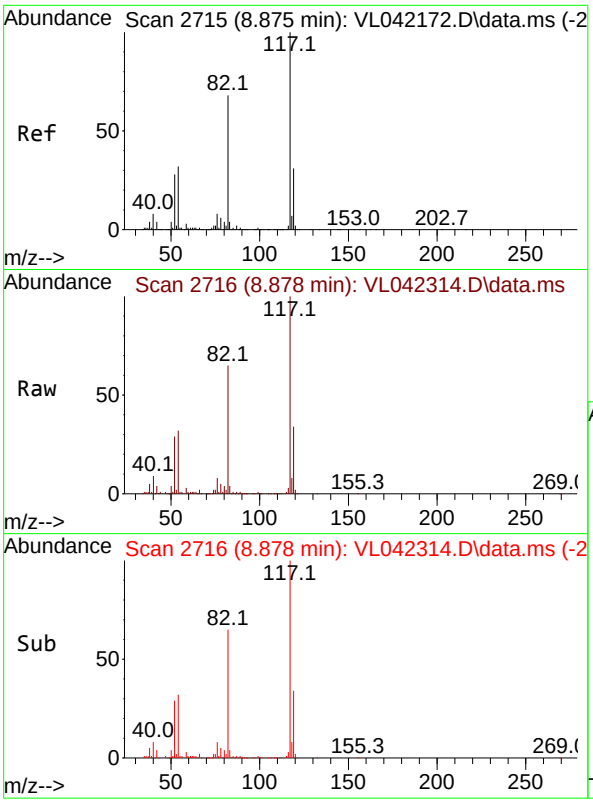


#54
1,2-Dibromoethane
Concen: 11.172 ppbv
RT: 7.649 min Scan# 2336
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:107 Resp: 264126

Ion	Ratio	Lower	Upper
107	100		
109	93.5	72.2	108.4



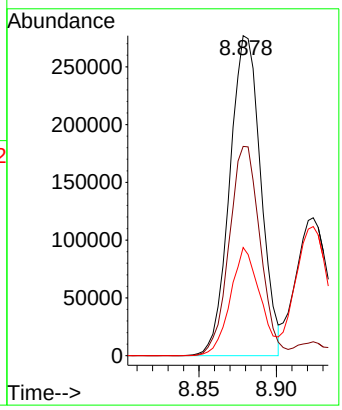


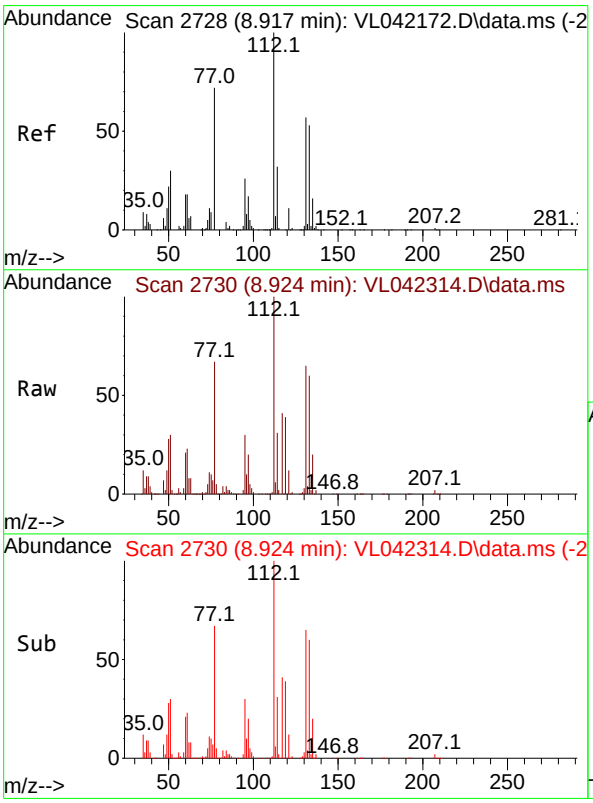
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:117 Resp: 386060

Ion	Ratio	Lower	Upper
117	100		
82	69.5	55.8	83.6
119	31.8	25.5	38.3

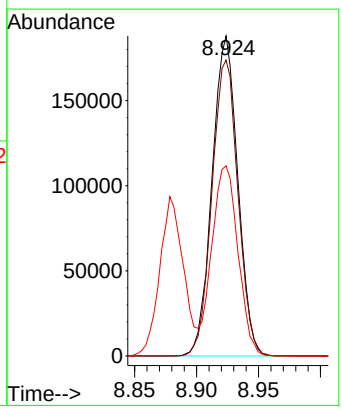


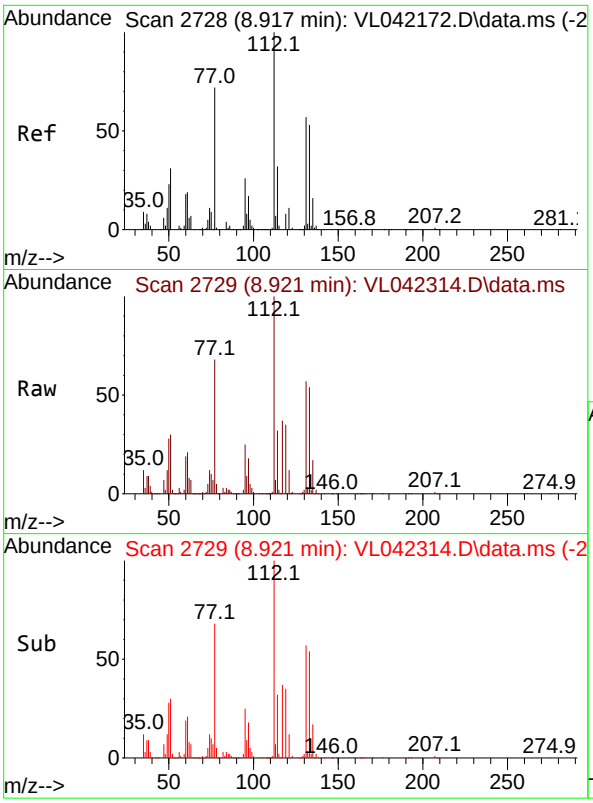


#56
1,1,1,2-Tetrachloroethane
Concen: 12.755 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:131 Resp: 271061

Ion	Ratio	Lower	Upper
131	100		
133	93.8	76.6	114.8
119	59.2	49.8	74.6



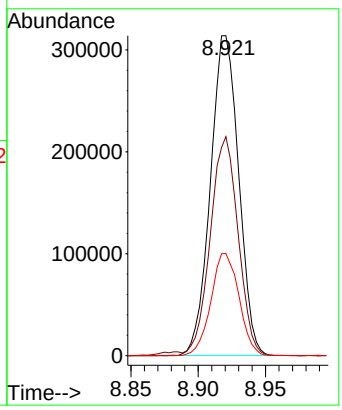


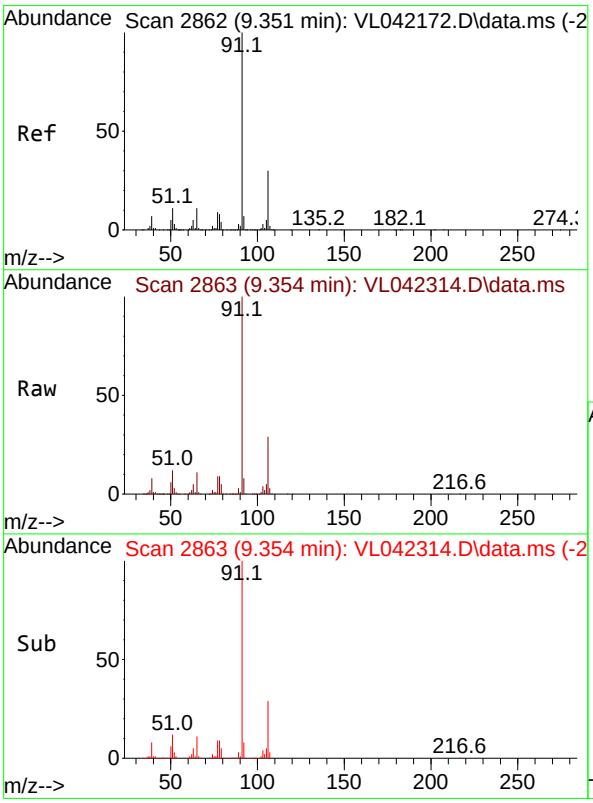
#57
Chlorobenzene
Concen: 12.486 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:112 Resp: 457204

Ion	Ratio	Lower	Upper
112	100		
77	68.4	58.2	87.2
114	31.9	29.1	35.5

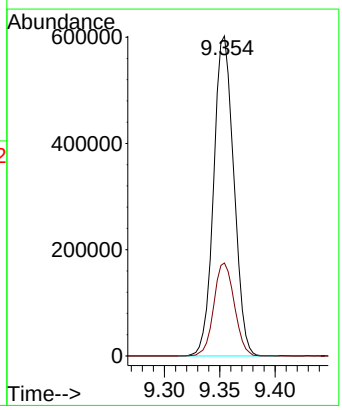


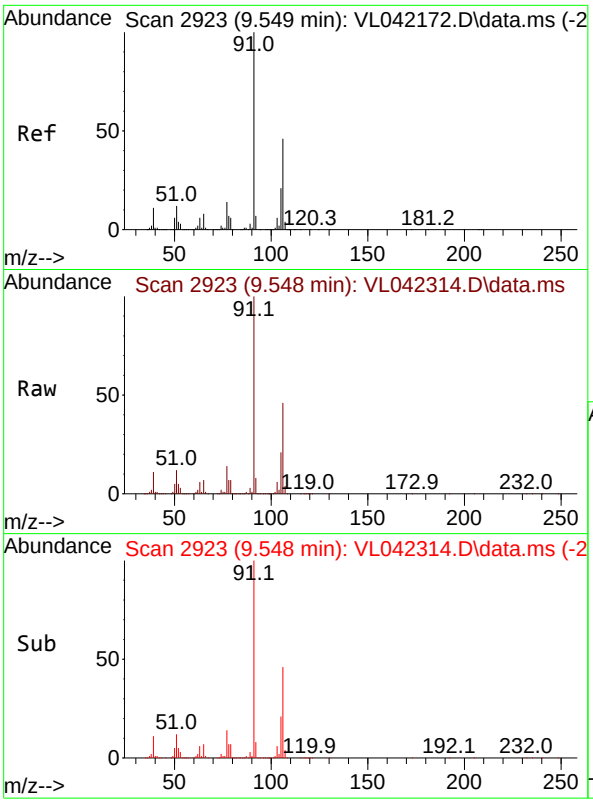


#58
Ethyl Benzene
Concen: 11.105 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 761549

Ion	Ratio	Lower	Upper
91	100		
106	29.1	24.2	36.2



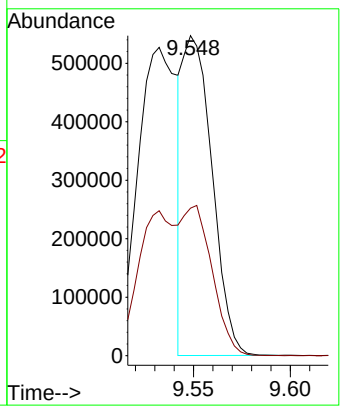


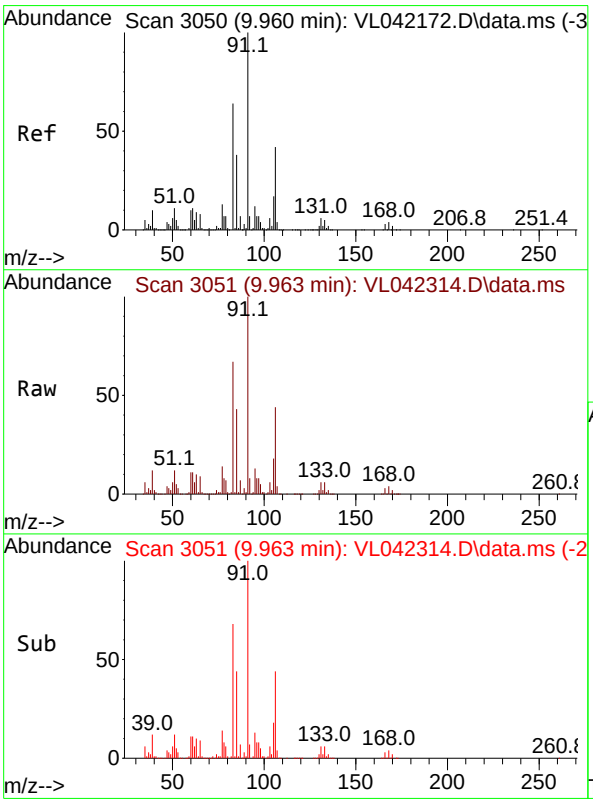
#59
m/p-Xylene
Concen: 10.514 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 91 Resp: 575744

Ion	Ratio	Lower	Upper
91	100		
106	107.0	36.4	54.6#

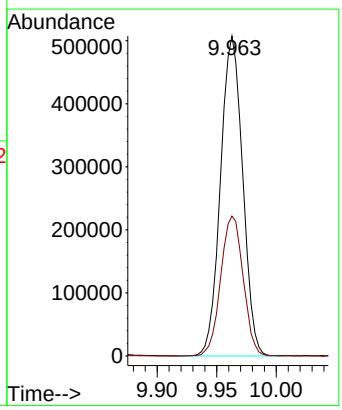


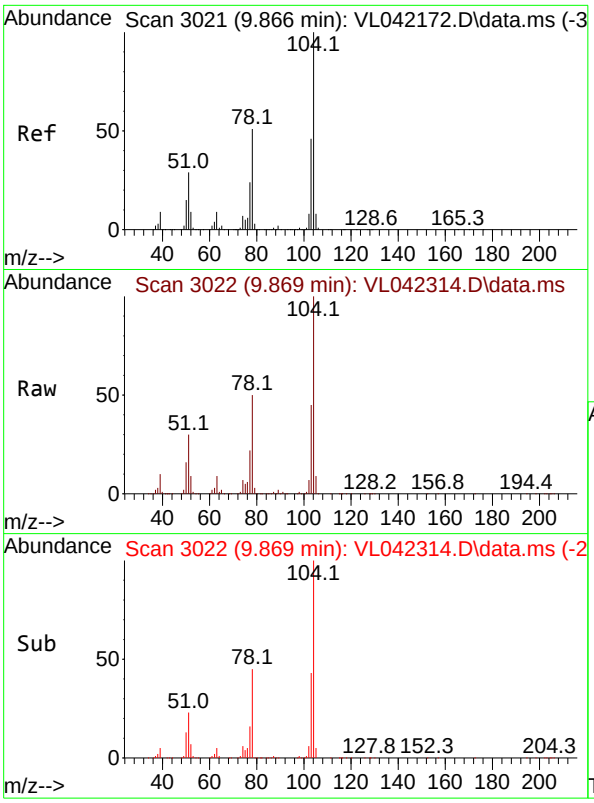


#60
o-Xylene
Concen: 11.929 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 654791

Ion	Ratio	Lower	Upper
91	100		
106	44.4	20.8	62.5



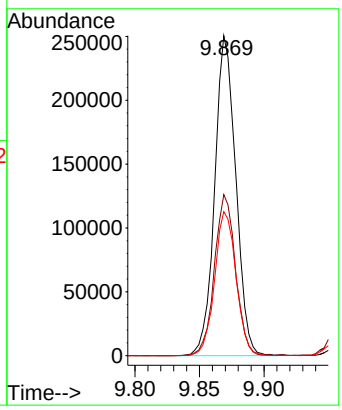


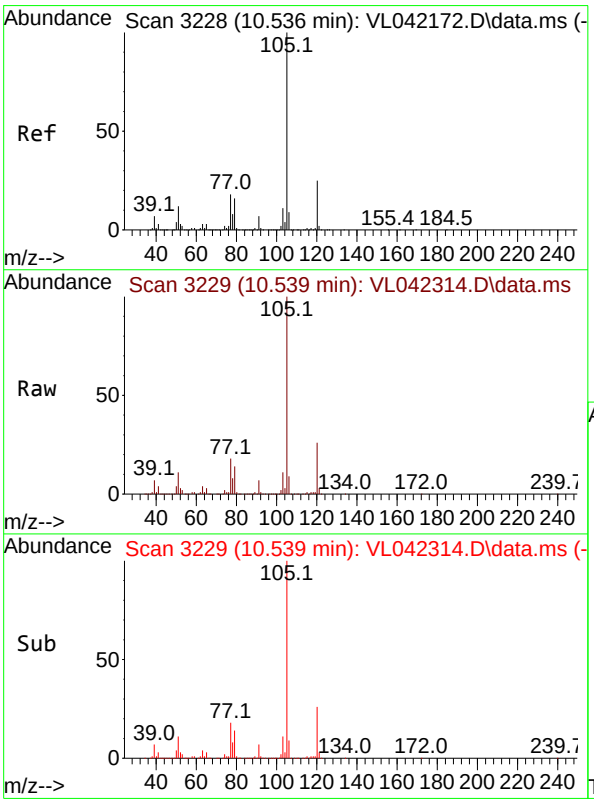
#61
Styrene
Concen: 10.470 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:104 Resp: 284318

Ion	Ratio	Lower	Upper
104	100		
78	50.5	41.8	62.6
103	45.9	37.0	55.4

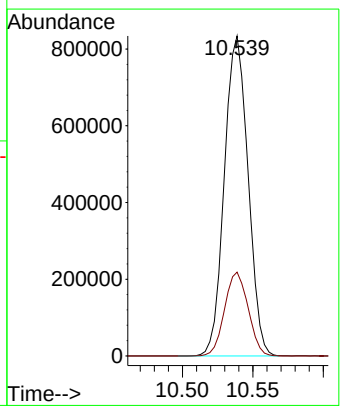


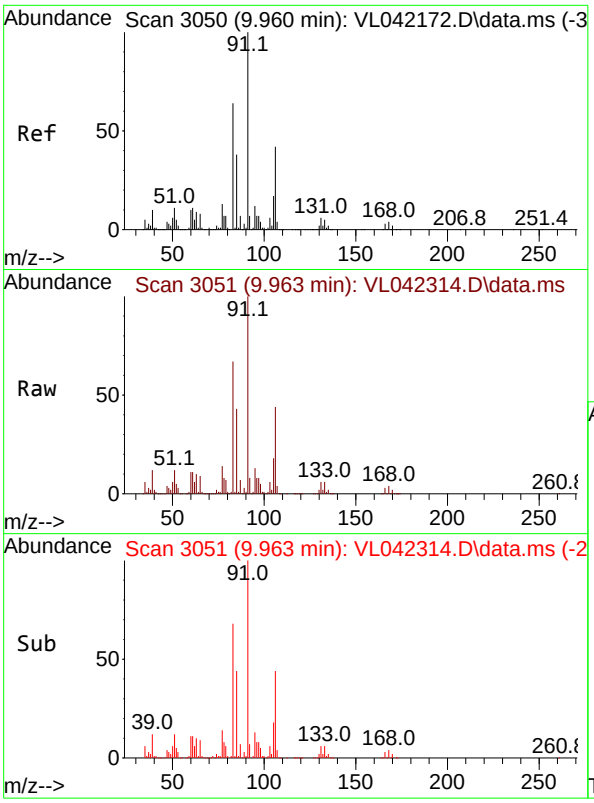


#62
Isopropylbenzene
Concen: 11.887 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 975799

Ion	Ratio	Lower	Upper
105	100		
120	26.1	19.9	29.9



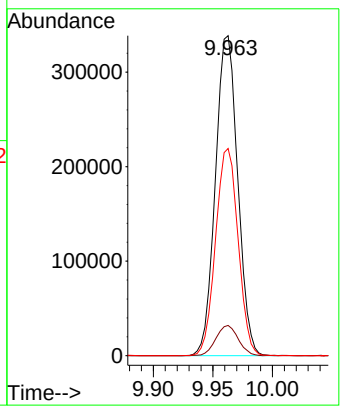


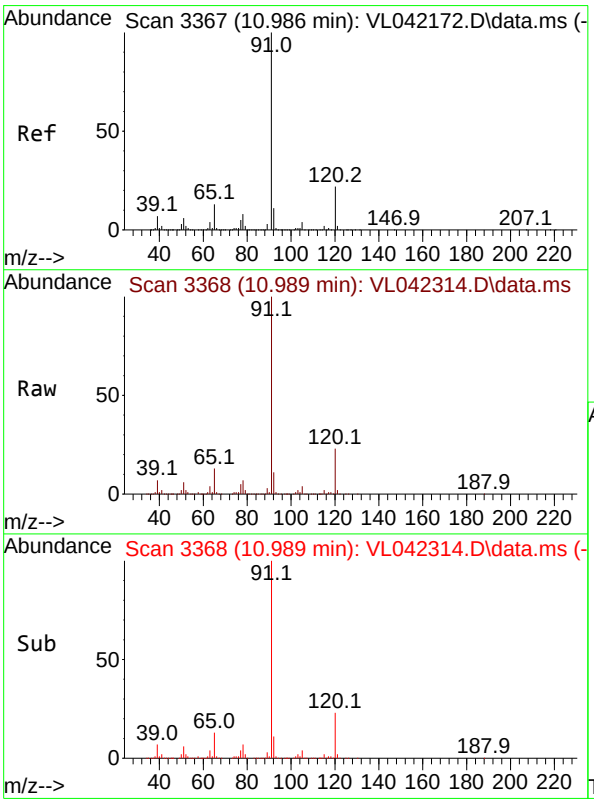
#63
1,1,2,2-Tetrachloroethane
Concen: 13.222 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 83 Resp: 440972

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.8	14.4
85	65.3	32.5	97.5

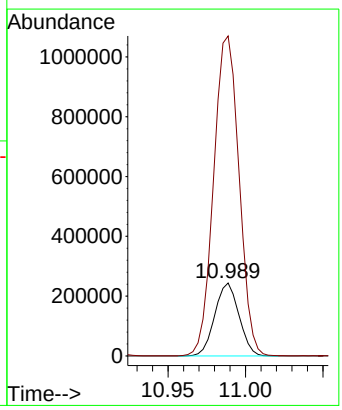


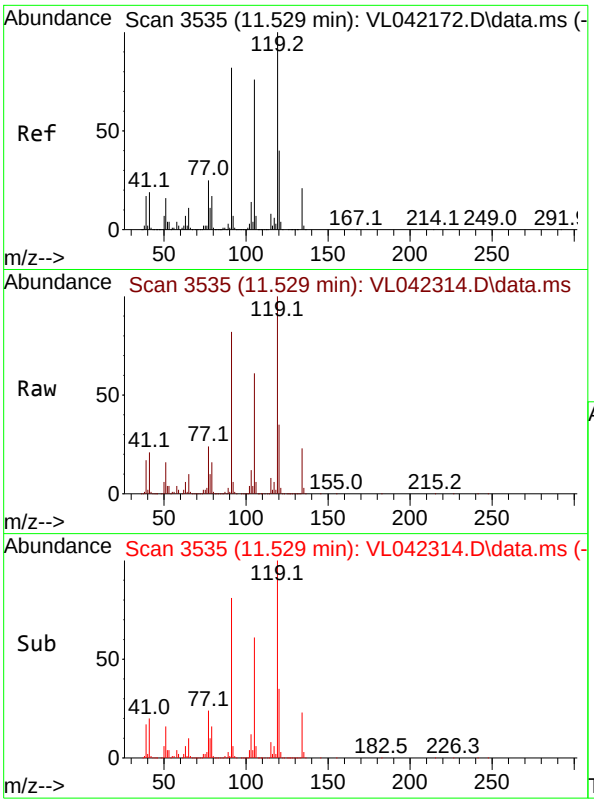


#64
n-propylbenzene
Concen: 12.518 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:120 Resp: 264518

Ion	Ratio	Lower	Upper
120	100		
91	461.4	376.9	565.3



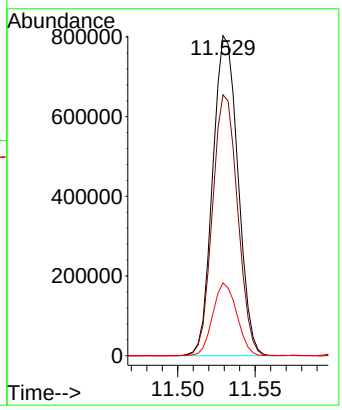


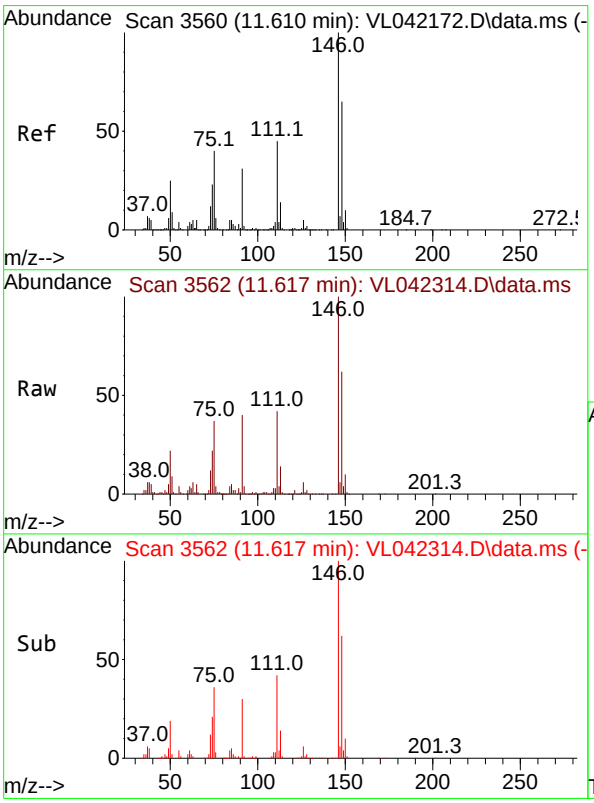
#65
tert-Butylbenzene
Concen: 11.973 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:119 Resp: 908946

Ion	Ratio	Lower	Upper
119	100		
91	81.4	66.0	99.0
134	21.7	16.7	25.1

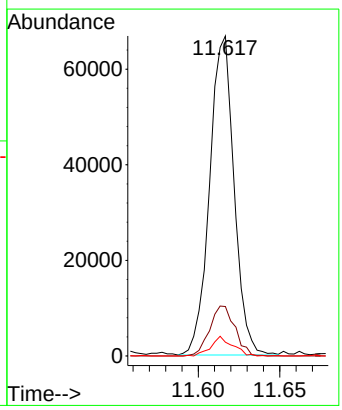


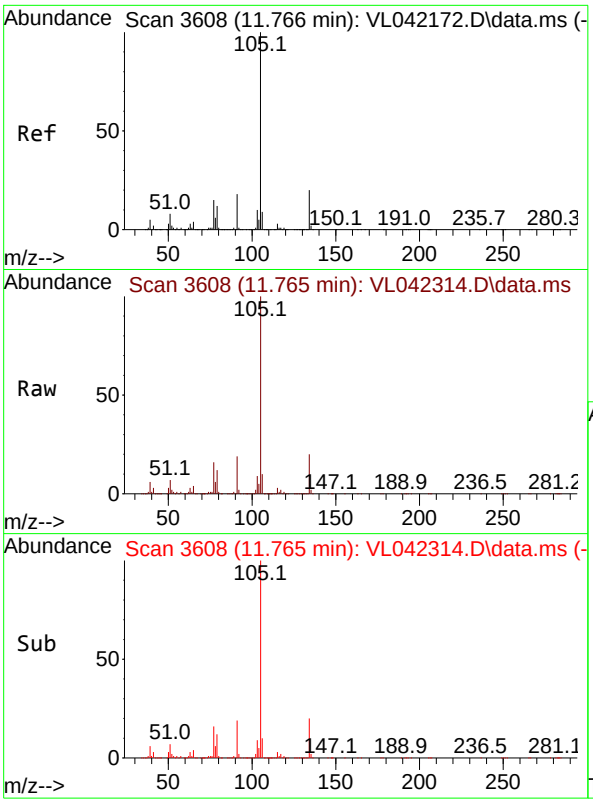


#66
Benzyl Chloride
Concen: 8.634 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.006 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 69548

Ion	Ratio	Lower	Upper
91	100		
126	16.1	13.8	20.6
128	5.5	4.5	6.7



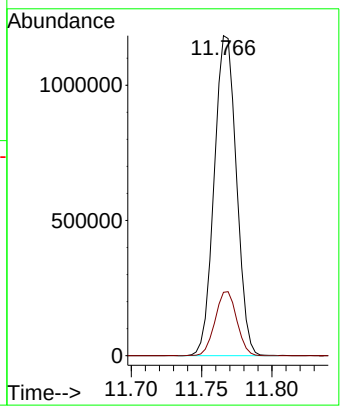


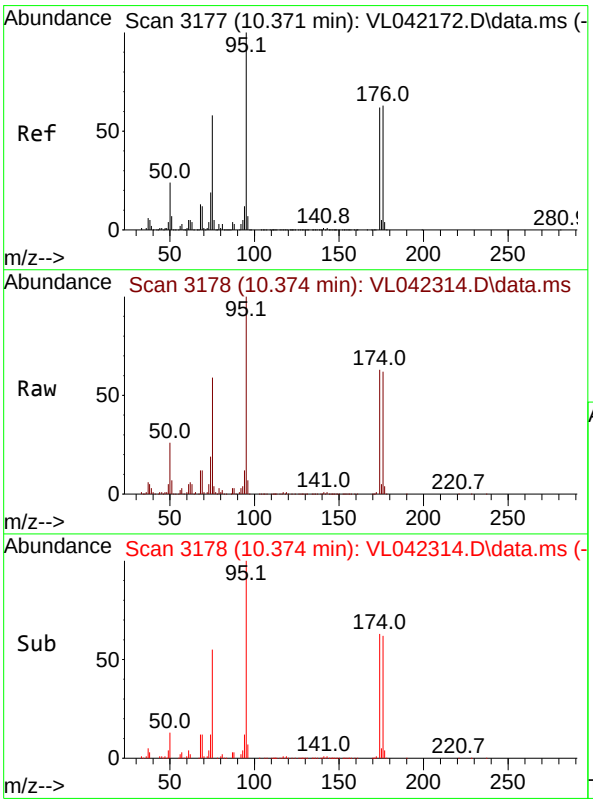
#67
sec-Butylbenzene
Concen: 12.320 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:105 Resp: 1300090

Ion	Ratio	Lower	Upper
105	100		
134	19.6	15.5	23.3

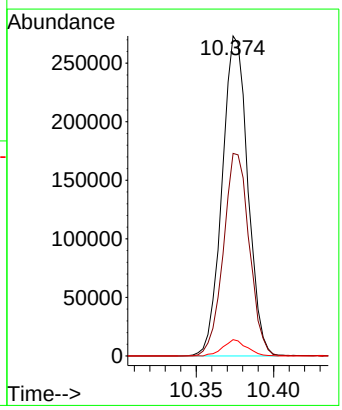


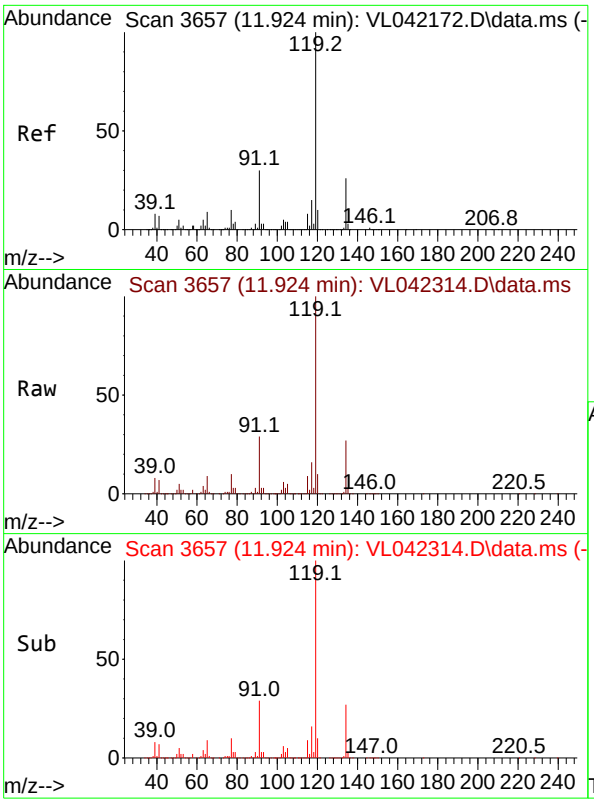


#68
1-Bromo-4-Fluorobenzene
Concen: 9.910 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 95 Resp: 314180

Ion	Ratio	Lower	Upper
95	100		
174	64.2	50.6	76.0
175	4.7	3.8	5.6



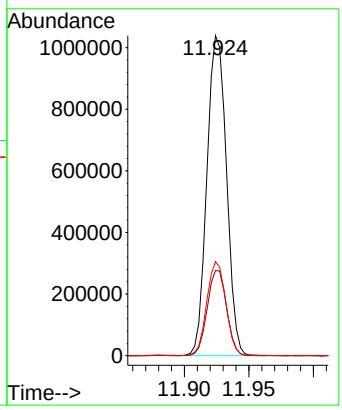


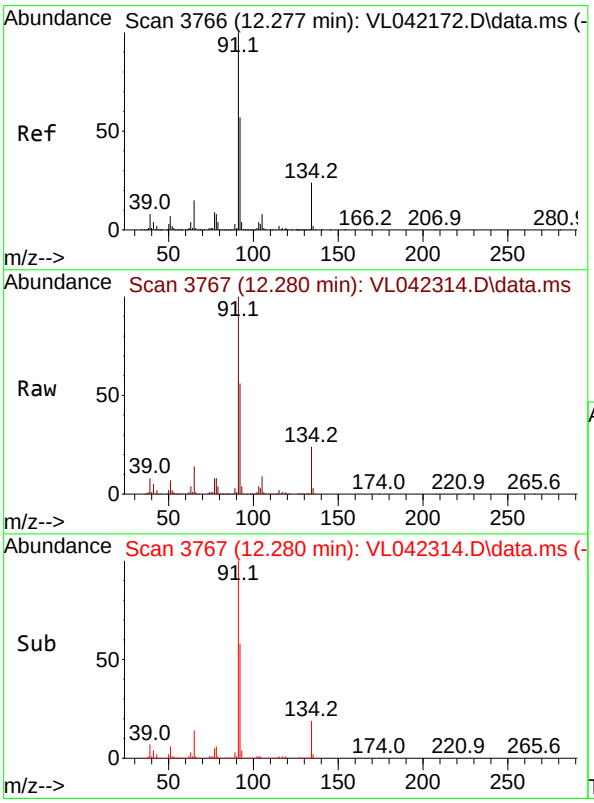
#69
p-Isopropyltoluene
Concen: 12.051 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:119 Resp: 1095041

Ion	Ratio	Lower	Upper
119	100		
134	26.3	20.4	30.6
91	28.5	23.7	35.5

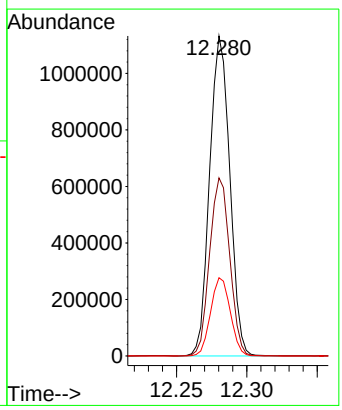


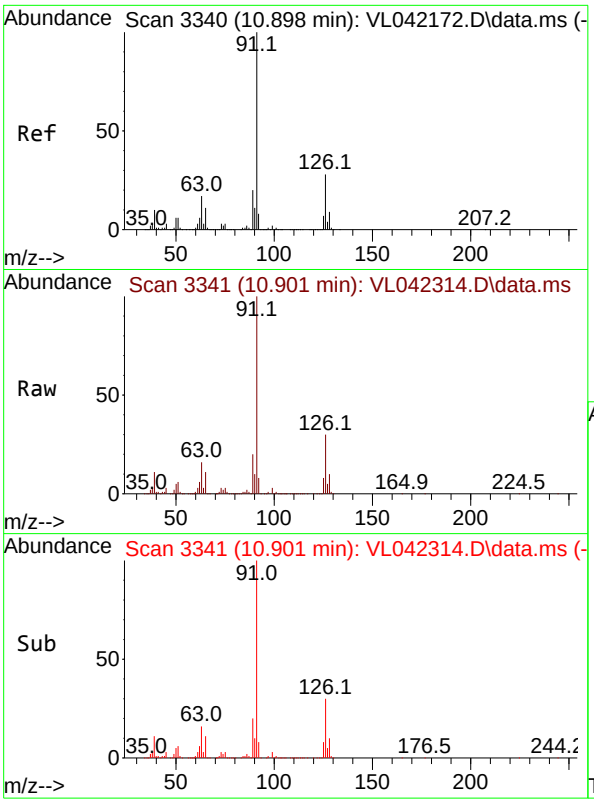


#70
n-Butylbenzene
Concen: 12.159 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion: 91 Resp: 1129853

Ion	Ratio	Lower	Upper
91	100		
92	55.7	44.9	67.3
134	23.9	19.2	28.8



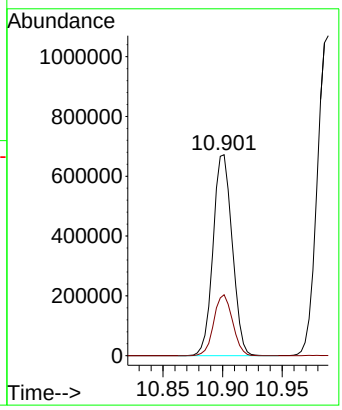


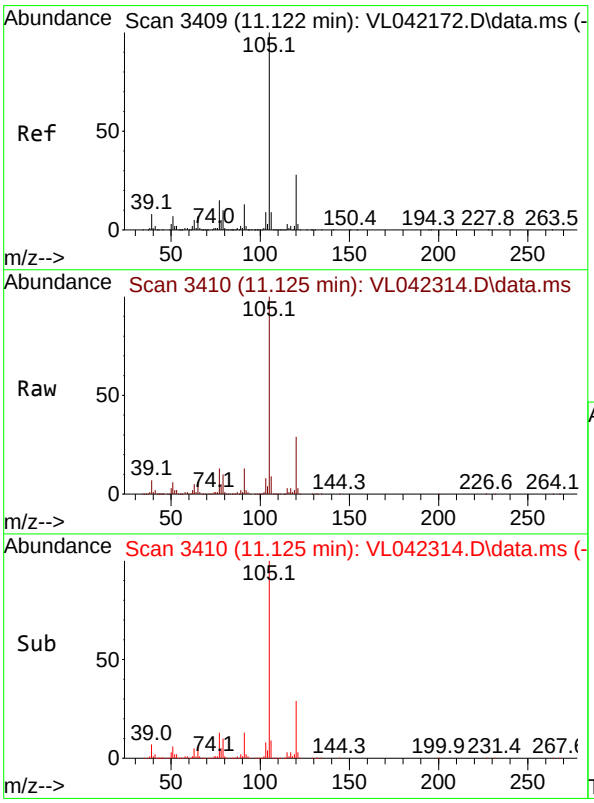
#71
2-Chlorotoluene
Concen: 11.768 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion: 91 Resp: 749737

Ion	Ratio	Lower	Upper
91	100		
126	29.7	11.6	46.4

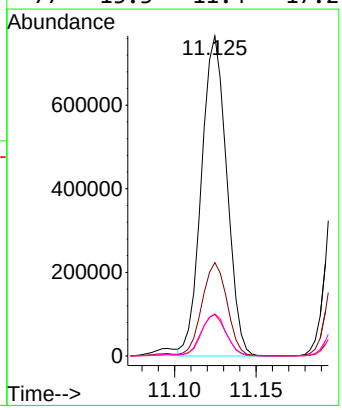


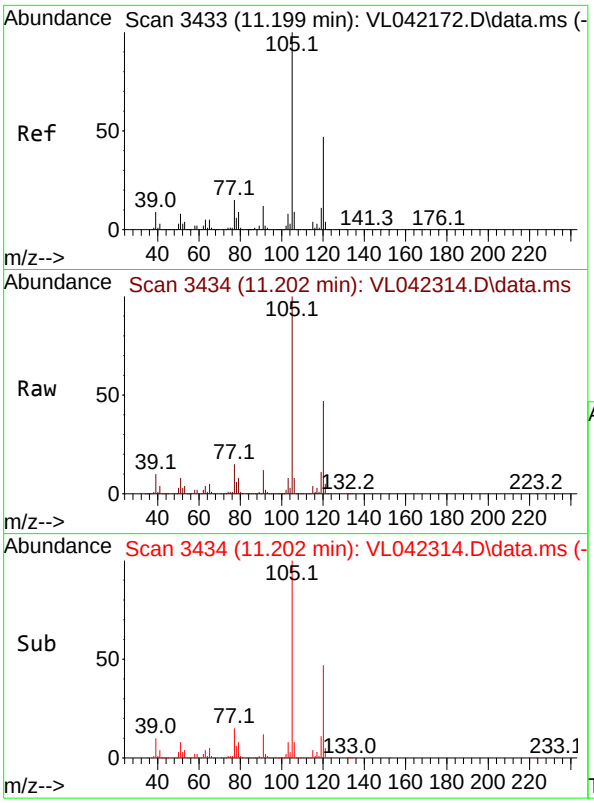


#72
4-Ethyltoluene
Concen: 12.071 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 825037

Ion	Ratio	Lower	Upper
105	100		
120	29.7	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2



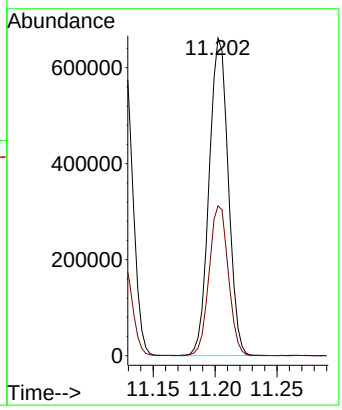


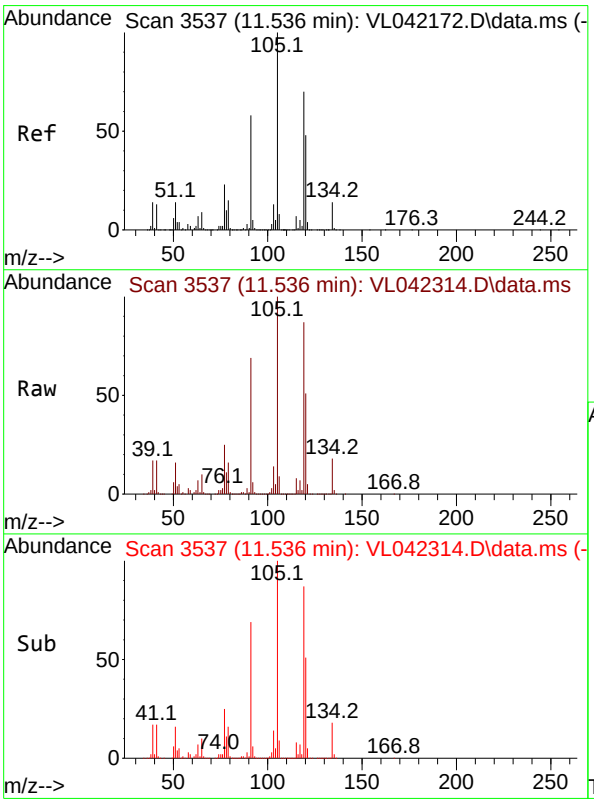
#73
1,3,5-Trimethylbenzene
Concen: 11.914 ppbv
RT: 11.202 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:105 Resp: 711175

Ion	Ratio	Lower	Upper
105	100		
120	47.2	37.4	56.0

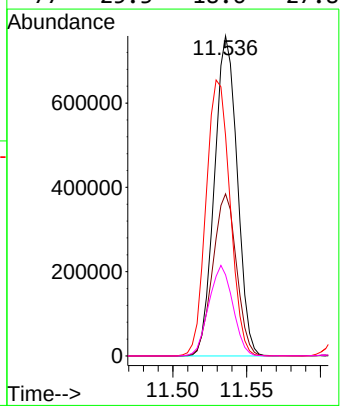


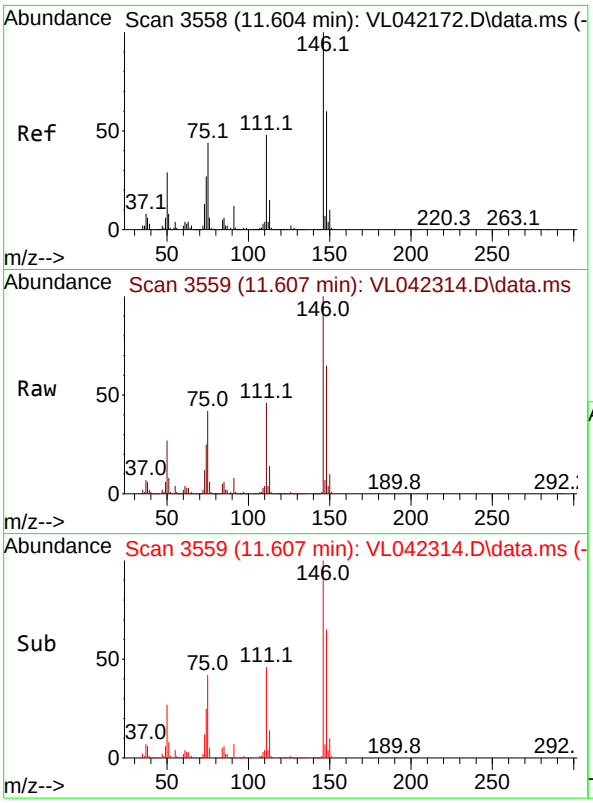


#74
1,2,4-Trimethylbenzene
Concen: 11.873 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:105 Resp: 816505

Ion	Ratio	Lower	Upper
105	100		
120	50.6	38.6	58.0
91	68.8	46.2	69.2
77	25.3	18.6	27.8



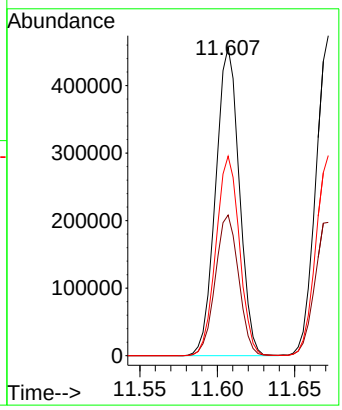


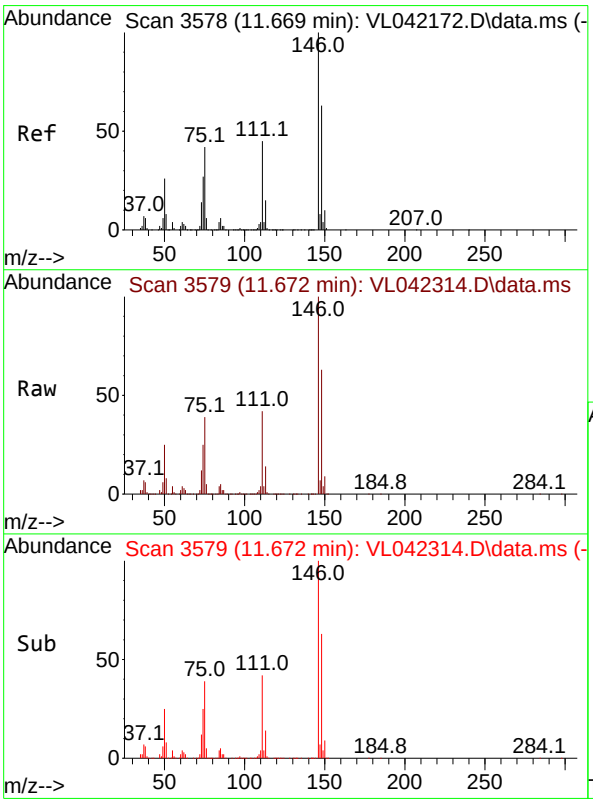
#75
1,3-Dichlorobenzene
Concen: 12.835 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:146 Resp: 484099

Ion	Ratio	Lower	Upper
146	100		
111	45.2	23.8	71.2
148	64.3	31.9	95.9

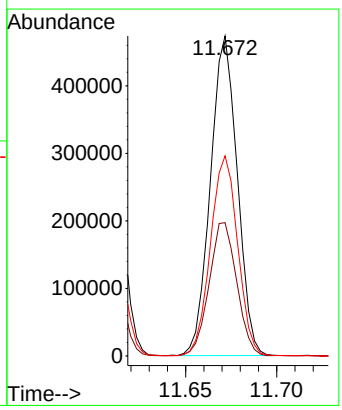


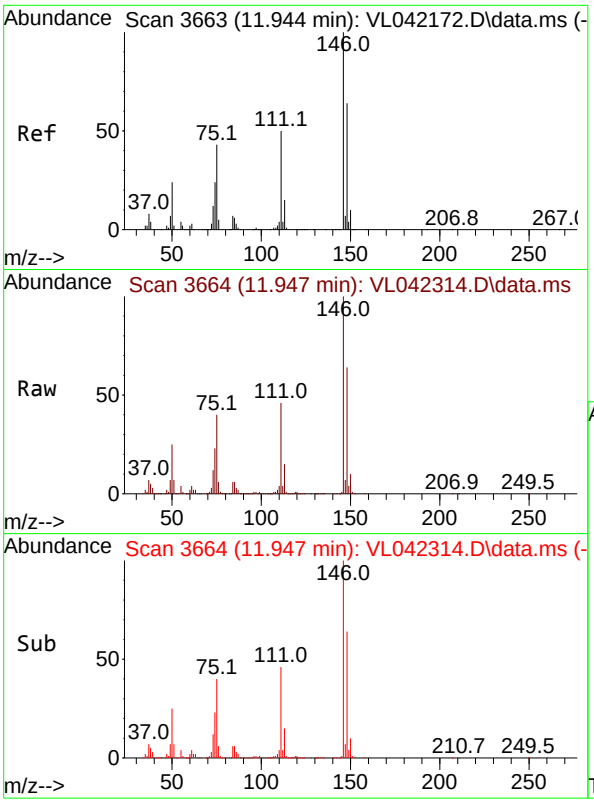


#76
1,4-Dichlorobenzene
Concen: 12.933 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:146 Resp: 485460

Ion	Ratio	Lower	Upper
146	100		
111	43.1	23.0	69.0
148	63.7	31.9	95.7



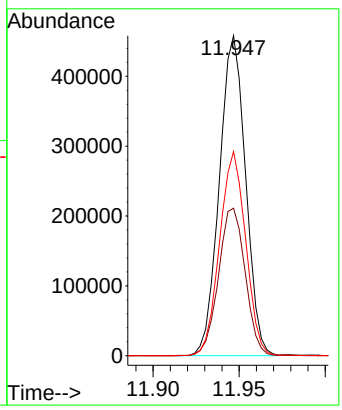


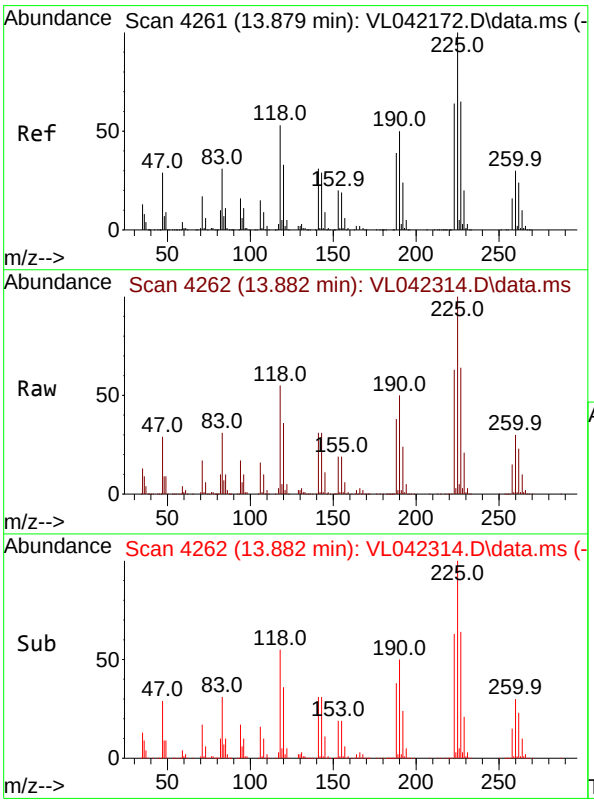
#77
1,2-Dichlorobenzene
Concen: 13.218 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:146 Resp: 485421

Ion	Ratio	Lower	Upper
146	100		
111	47.1	24.8	74.3
148	63.5	31.6	94.8

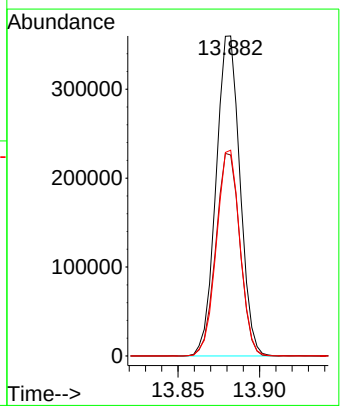


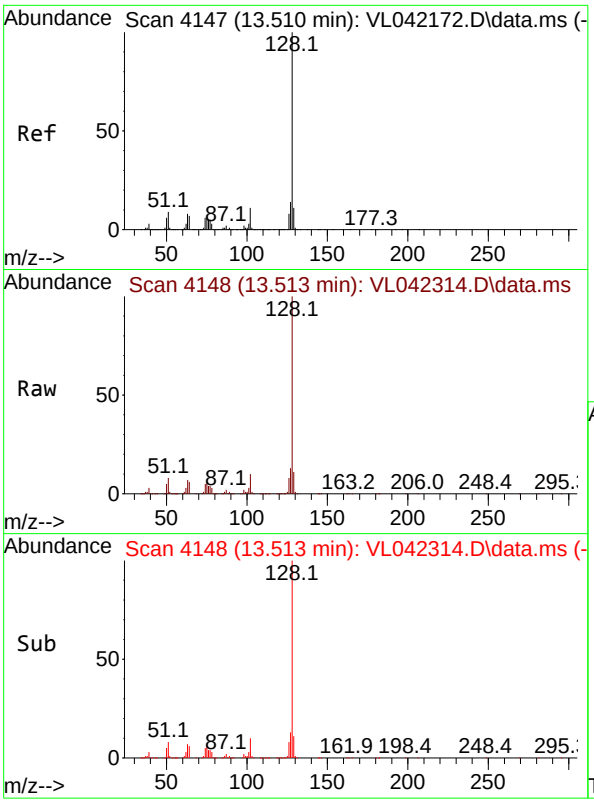


#78
Hexachloro-1,3-Butadiene
Concen: 9.814 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:225 Resp: 366850

Ion	Ratio	Lower	Upper
225	100		
223	63.5	50.6	76.0
227	63.2	51.2	76.8



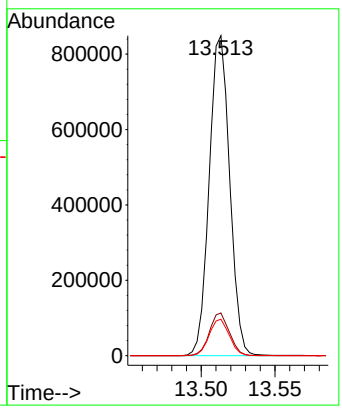


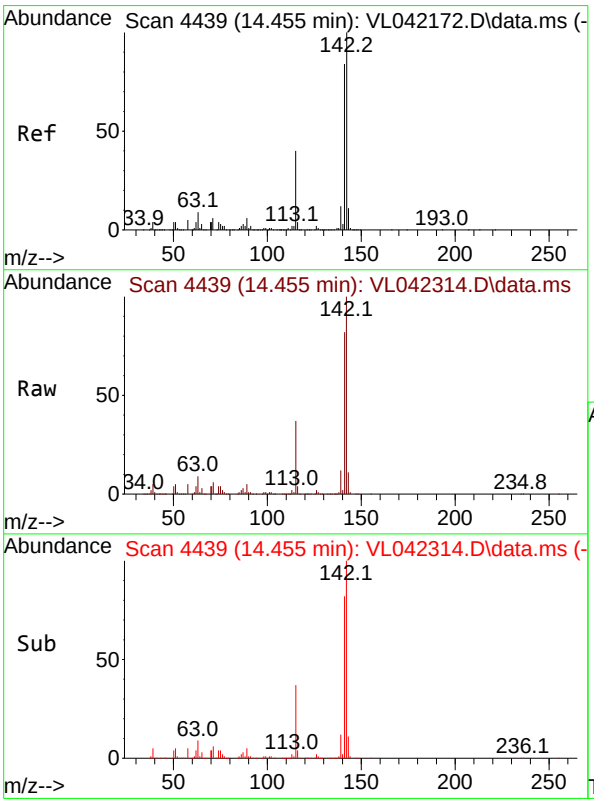
#79
Naphthalene
Concen: 10.904 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:128 Resp: 820200

Ion	Ratio	Lower	Upper
128	100		
127	13.3	10.8	16.2
129	11.4	9.0	13.4

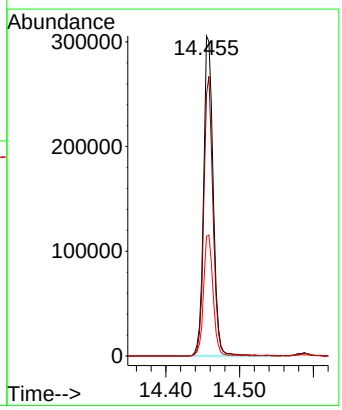


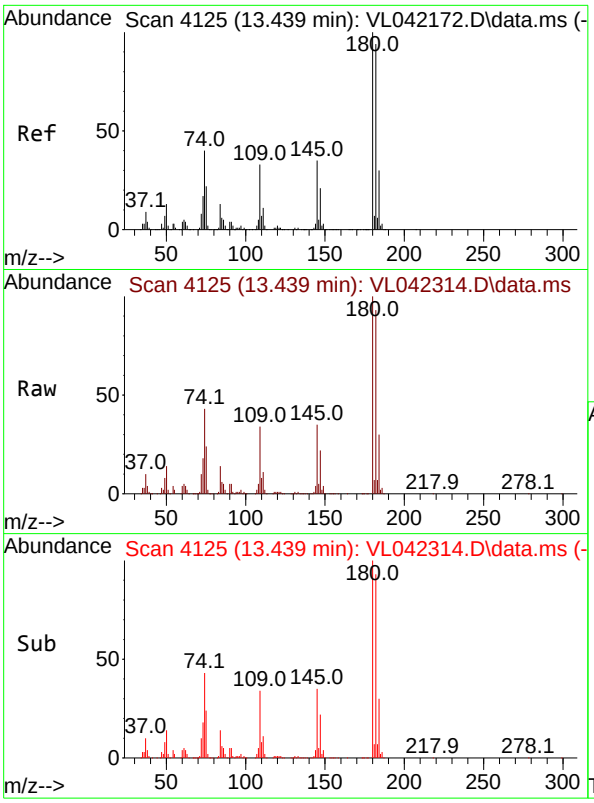


#80
Naphthalene,2-methyl-
Concen: 7.434 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Tgt Ion:142 Resp: 274227

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.3	99.5
115	37.9	31.6	47.4



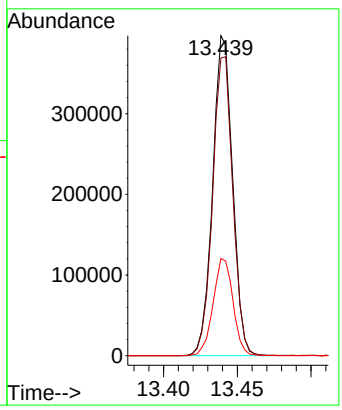


#81
1,2,4-Trichlorobenzene
Concen: 10.762 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042314.D
Acq: 11 Apr 2025 11:23

Instrument :
MSVOA_L
ClientSampleId :
VL0411ABS01

Tgt Ion:180 Resp: 373404

Ion	Ratio	Lower	Upper
180	100		
182	94.7	75.1	112.7
184	30.3	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Quant Time: Apr 11 22:59:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

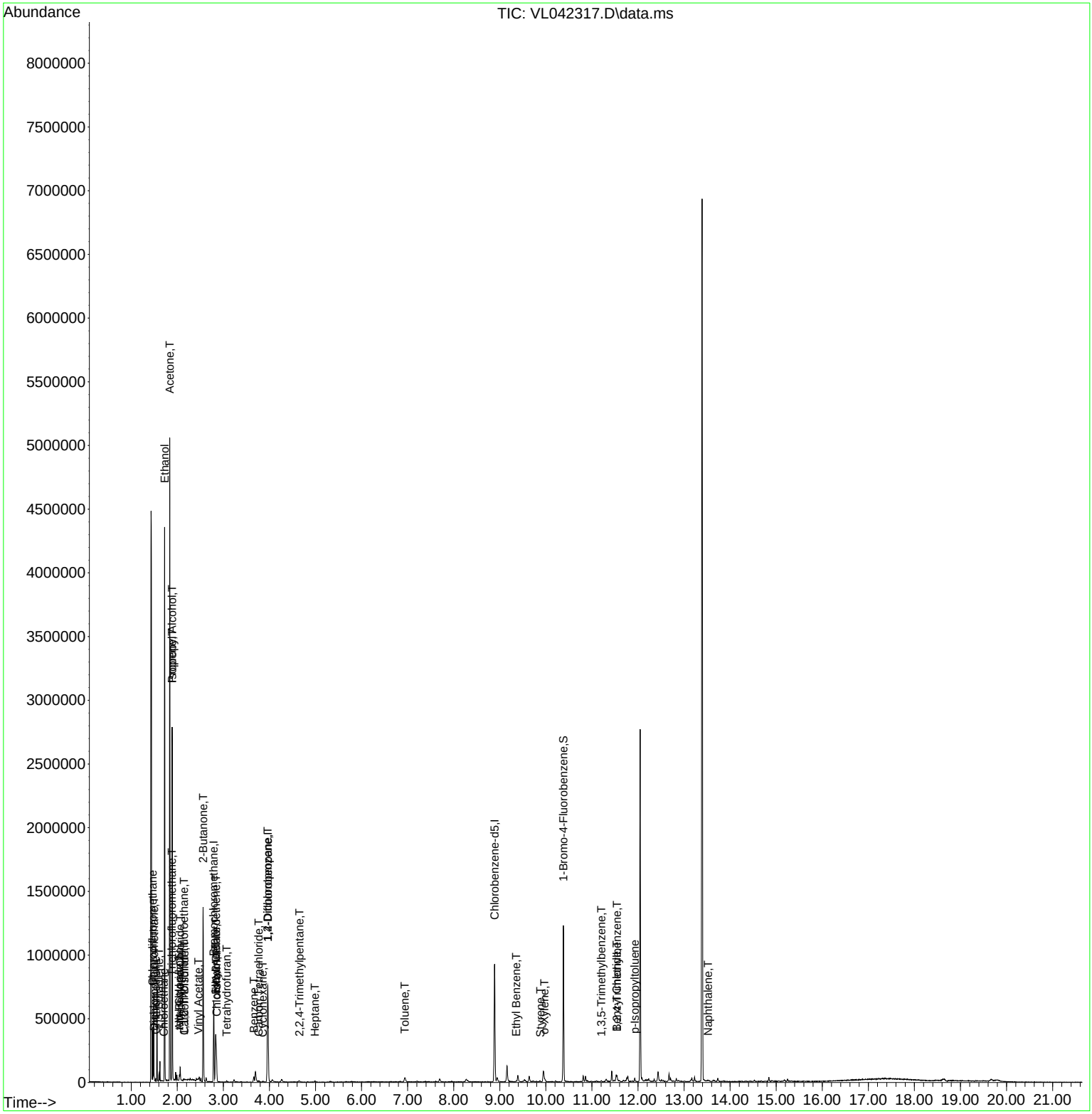
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	179309	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.965	114	422807	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.888	117	360993	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	291371	9.829	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 98.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10578	0.400	ppbv		98
3) Chlorodifluoromethane	1.466	51	93929	3.473	ppbv	#	62
4) Chloromethane	1.531	50	6409	0.592	ppbv		93
7) Chloroethane	1.706	64	240	0.055	ppbv		93
9) Propene	1.887	41	119548	9.644	ppbv		88
10) Heptane	4.988	43	1233	0.037	ppbv	#	28
11) Trichlorofluoromethane	1.881	101	5509	0.214	ppbv		86
12) 1,1,2-Trichlorotrifluo...	2.143	101	1509	0.071	ppbv		100
13) Ethanol	1.725	45	1540169	1314.265	ppbv		93
15) Acetone	1.835	43	2074699	82.732	ppbv	#	78
16) 1,3-Butadiene	1.602	39	6866	0.561	ppbv	#	34
17) tert-Butyl alcohol	2.046	59	14565	0.466	ppbv		97
19) Isopropyl Alcohol	1.887	45	1147205	81.079	ppbv	#	58
20) Methylene Chloride	2.065	84	14725	1.577	ppbv		90
21) Allyl Chloride	2.046	41	5543	0.313	ppbv	#	32
23) Vinyl Acetate	2.457	43	13063	1.204	ppbv	#	96
25) Ethyl Acetate	2.839	43	166820	2.563	ppbv		98
26) Hexane	2.829	57	64050	2.548	ppbv		93
27) Carbon Disulfide	2.152	76	1240	0.046	ppbv	#	58
29) Chloroform	2.855	83	50104	1.362	ppbv		95
30) Cyclohexane	3.855	84	856	0.039	ppbv	#	1
31) cis-1,2-Dichloroethene	2.842	61	14803	0.580	ppbv	#	25
34) 2-Butanone	2.560	43	822701	26.834	ppbv		98
35) Carbon Tetrachloride	3.768	117	2524	0.076	ppbv	#	88
36) Benzene	3.664	78	25066	0.598	ppbv	#	90
39) 1,2-Dichloropropane	3.962	63	108598	7.114	ppbv	#	23
41) Tetrahydrofuran	3.072	42	2277	0.129	ppbv	#	67
44) 2,2,4-Trimethylpentane	4.651	57	5375	0.076	ppbv	#	33
53) Toluene	6.939	91	24232	0.488	ppbv		99
58) Ethyl Benzene	9.357	91	4399	0.069	ppbv		91
60) o-Xylene	9.969	91	5940	0.116	ppbv		89
61) Styrene	9.878	104	838	0.033	ppbv	#	1
66) Benzyl Chloride	11.539	91	1109	0.147	ppbv	#	70
69) p-Isopropyltoluene	11.930	119	7802	0.092	ppbv	#	68
73) 1,3,5-Trimethylbenzene	11.205	105	1875	0.034	ppbv		96
74) 1,2,4-Trimethylbenzene	11.542	105	7764	0.121	ppbv	#	72
79) Naphthalene	13.520	128	3811	0.054	ppbv		98

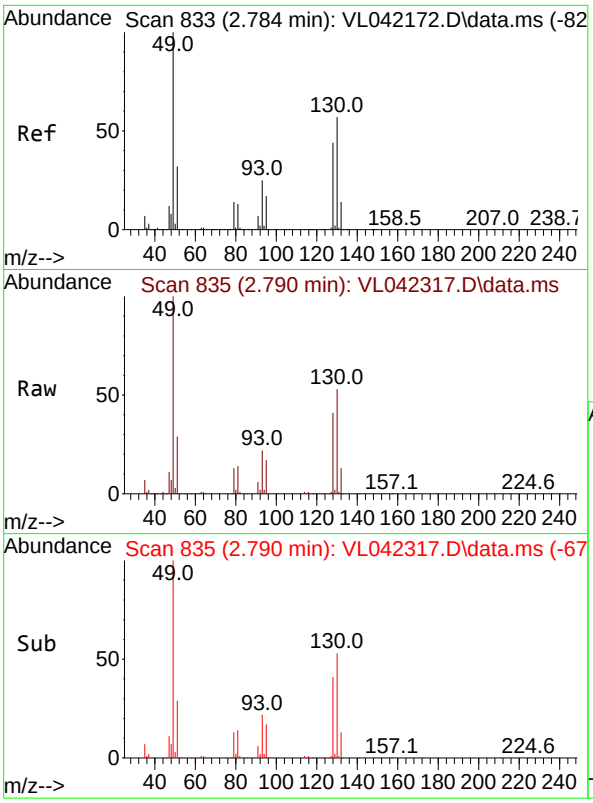
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042317.D
Acq On : 11 Apr 2025 13:15
Operator : SY/MD
Sample : Q1665-03
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Quant Time: Apr 11 22:59:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



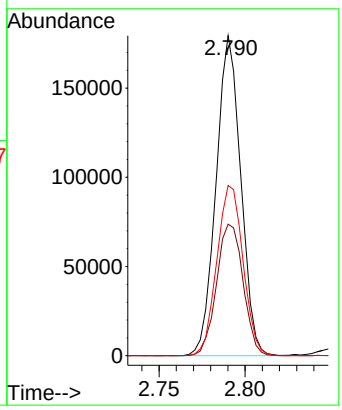


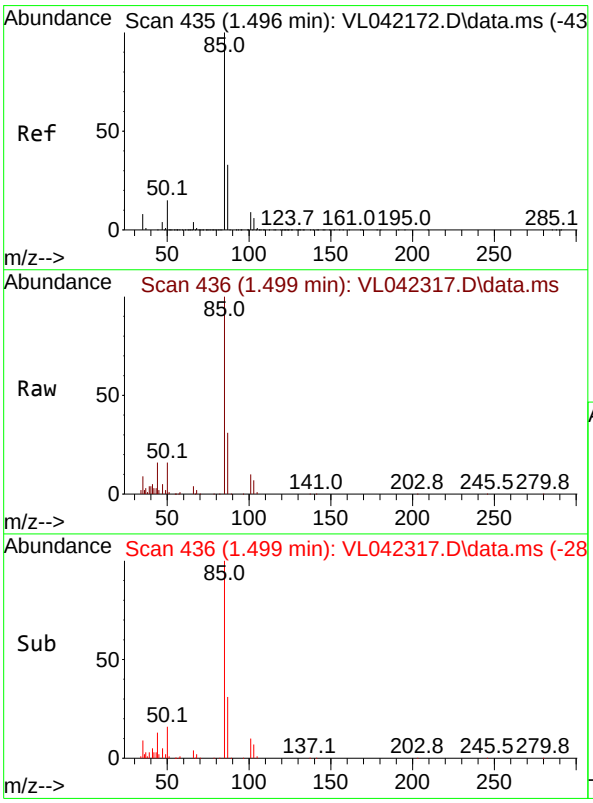
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 49 Resp: 179309

Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.9	68.5
130	56.5	28.8	86.4

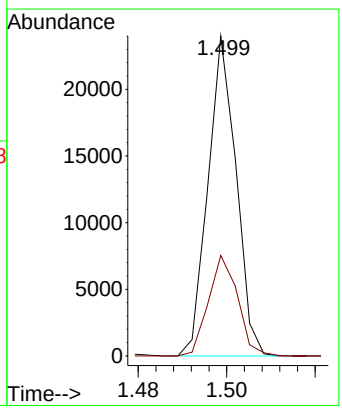


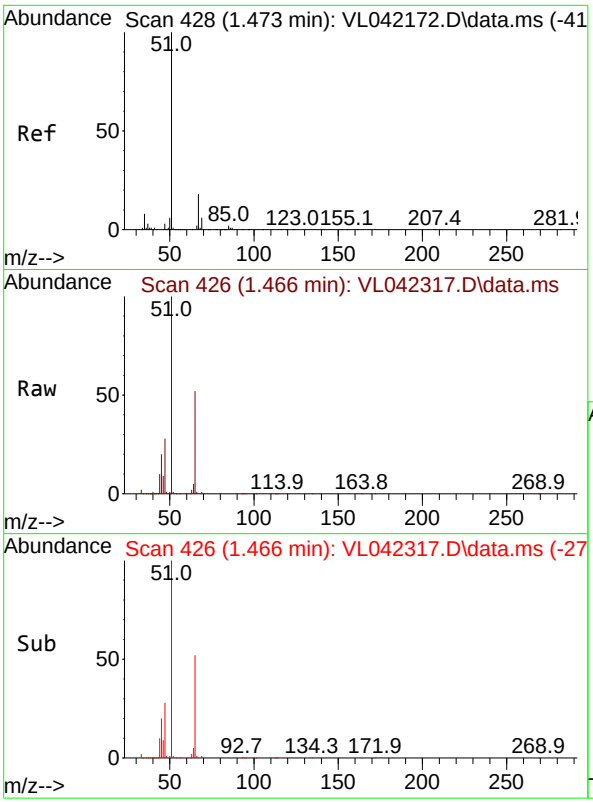


#2
Dichlorodifluoromethane
Concen: 0.400 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 85 Resp: 10578

Ion	Ratio	Lower	Upper
85	100		
87	31.4	26.1	39.1



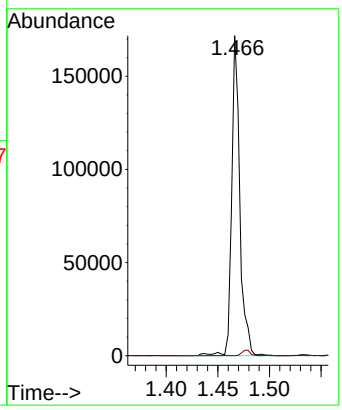


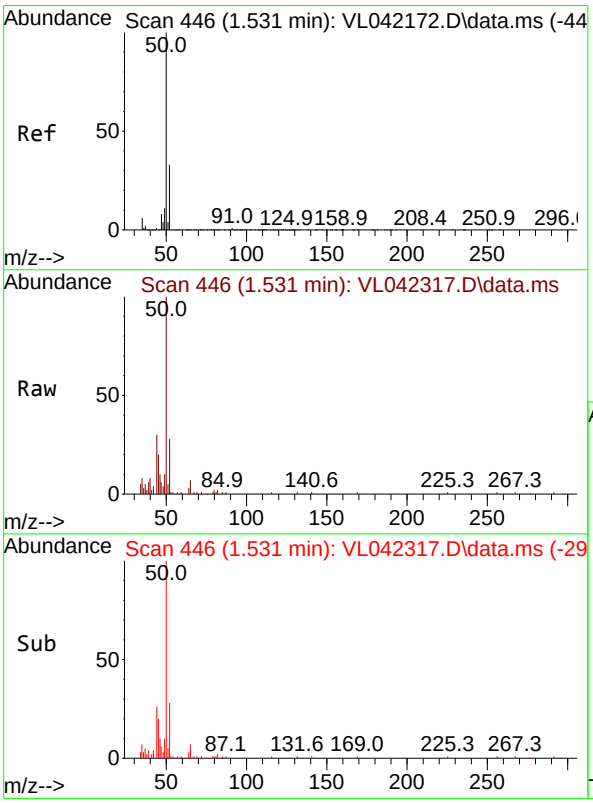
#3
Chlorodifluoromethane
Concen: 3.473 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 51 Resp: 93929

Ion	Ratio	Lower	Upper
51	100		
67	1.8	15.0	22.6#

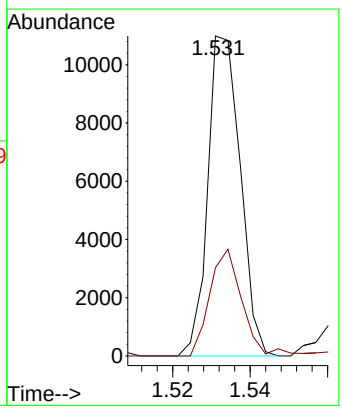


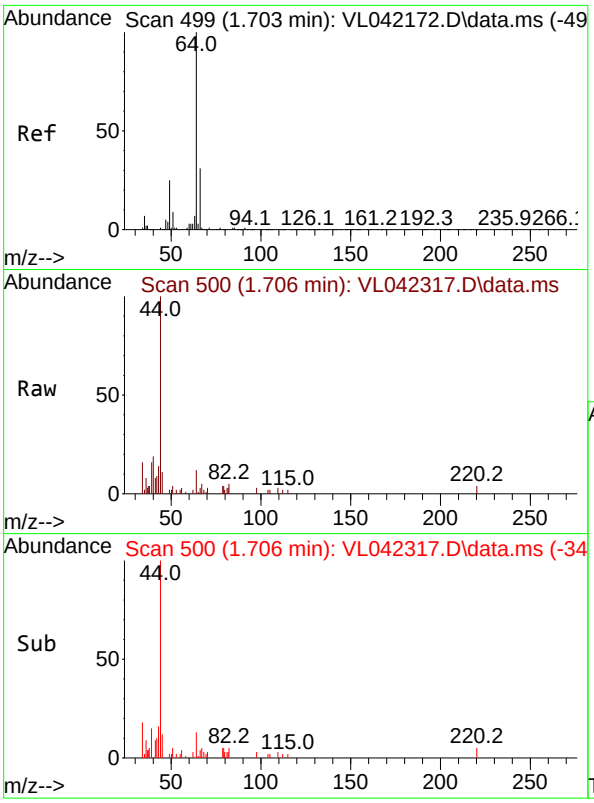


#4
Chloromethane
Concen: 0.592 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 50 Resp: 6409

Ion	Ratio	Lower	Upper
50	100		
52	28.9	26.1	39.1



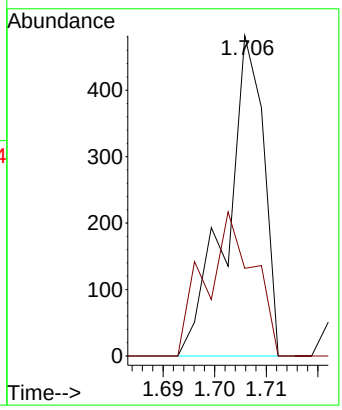


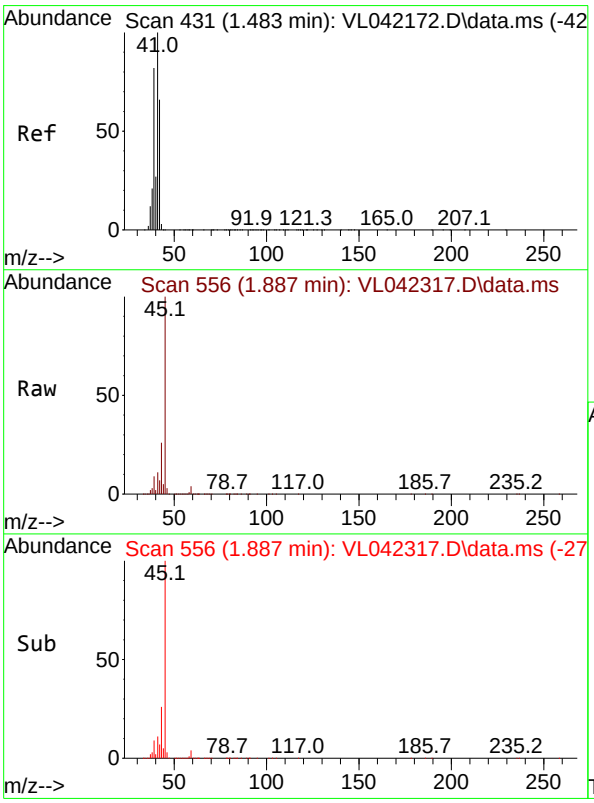
#7
Chloroethane
Concen: 0.055 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 64 Resp: 240

Ion	Ratio	Lower	Upper
64	100		
66	27.4	25.2	37.8

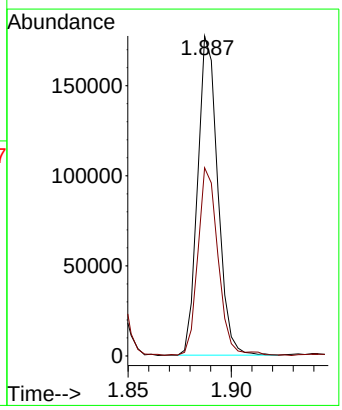


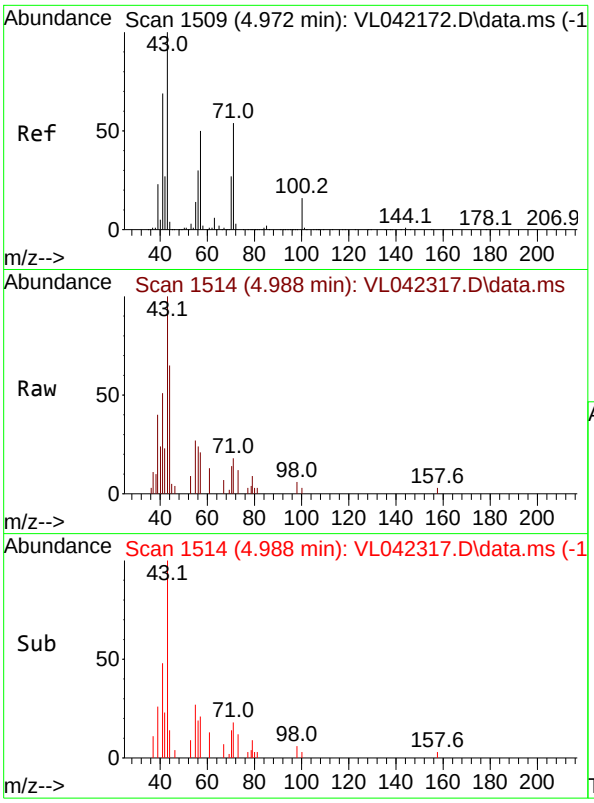


#9
Propene
Concen: 9.644 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.404 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 41 Resp: 119548

Ion	Ratio	Lower	Upper
41	100		
42	59.2	55.4	83.2



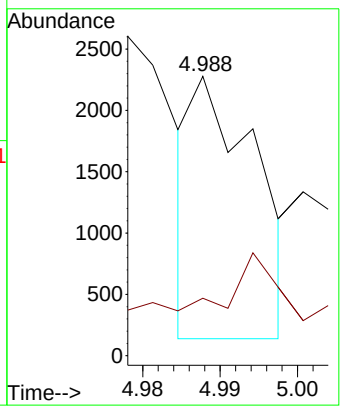


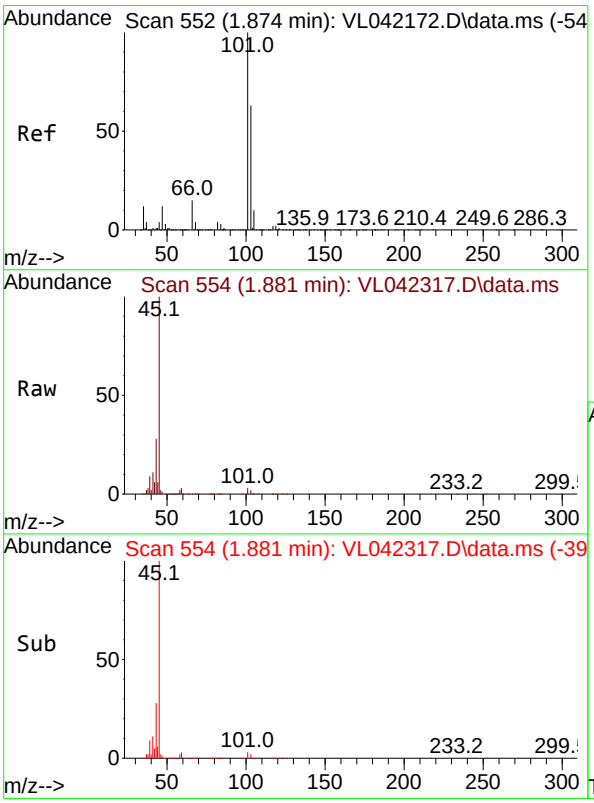
#10
Heptane
Concen: 0.037 ppbv
RT: 4.988 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 43 Resp: 1233

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#

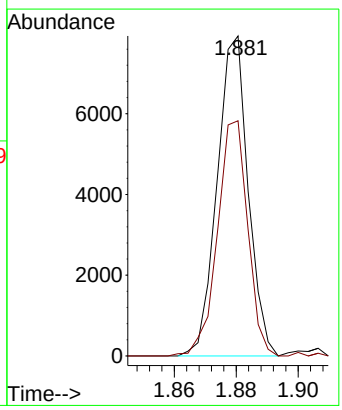


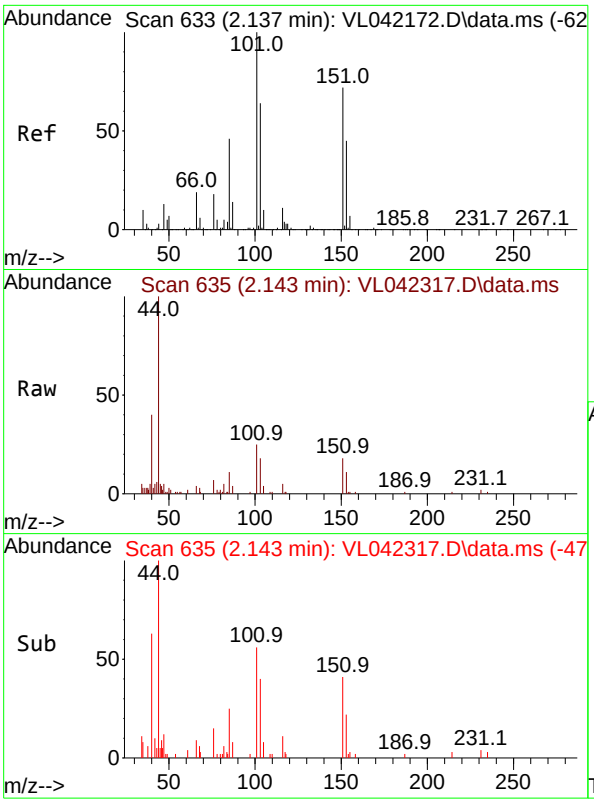


#11
Trichlorofluoromethane
Concen: 0.214 ppbv
RT: 1.881 min Scan# 554
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:101 Resp: 5509

Ion	Ratio	Lower	Upper
101	100		
103	73.5	50.2	75.2



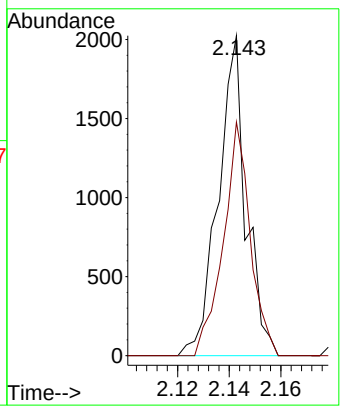


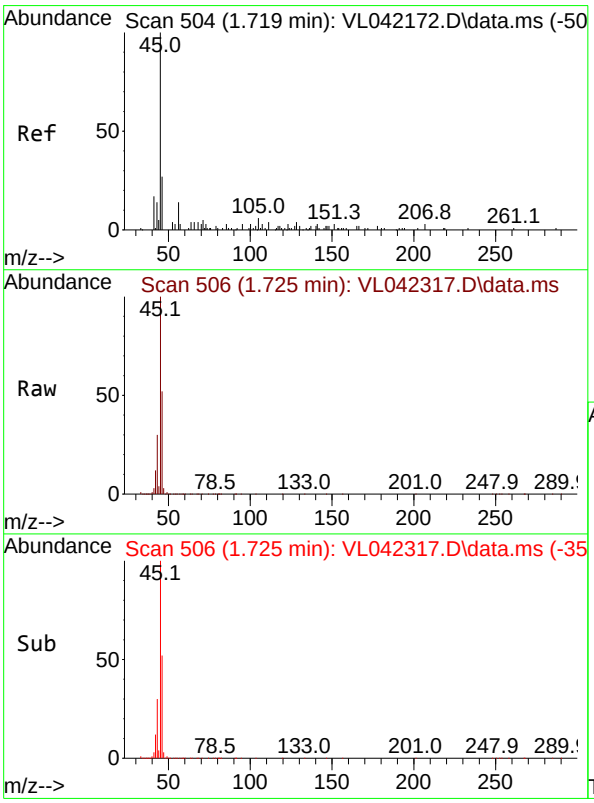
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.071 ppbv
RT: 2.143 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion:101 Resp: 1509

Ion	Ratio	Lower	Upper
101	100		
151	71.1	57.1	85.7

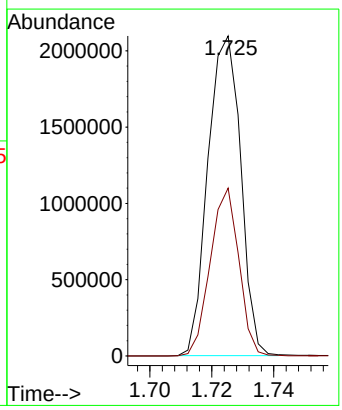


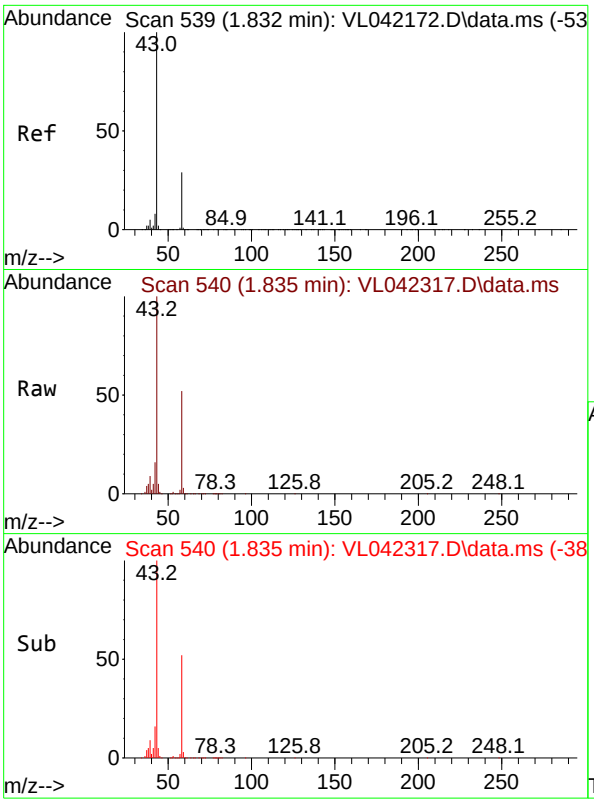


#13
Ethanol
Concen: 1314.265 ppbv
RT: 1.725 min Scan# 506
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 45 Resp: 1540169

Ion	Ratio	Lower	Upper
45	100		
46	45.9	20.2	80.8



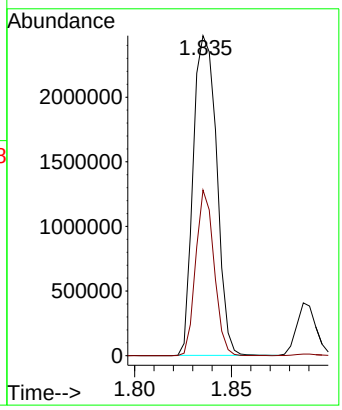


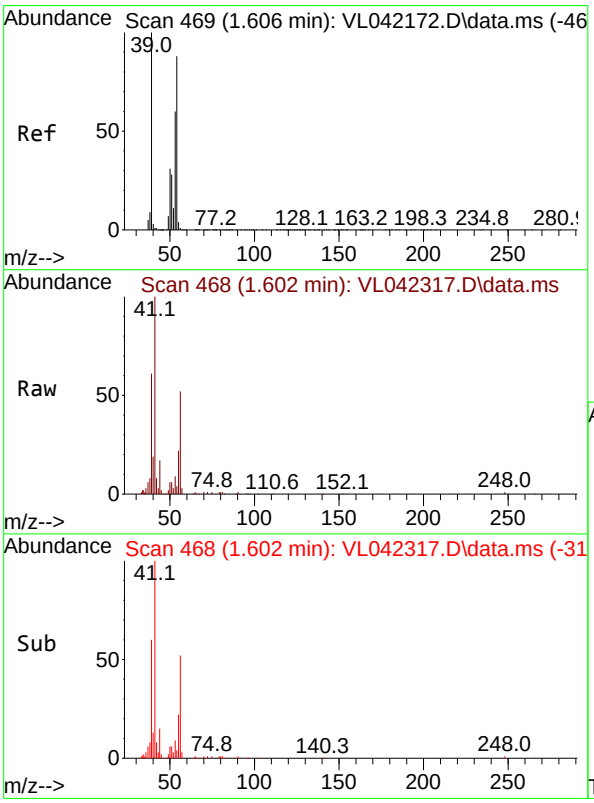
#15
Acetone
Concen: 82.732 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 43 Resp: 2074699

Ion	Ratio	Lower	Upper
43	100		
58	40.8	23.2	34.8#

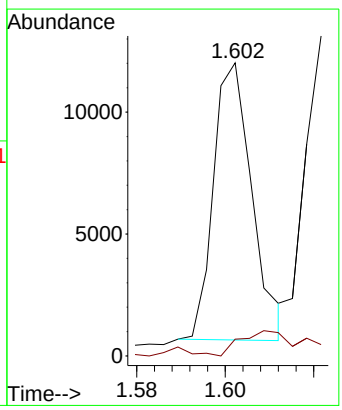


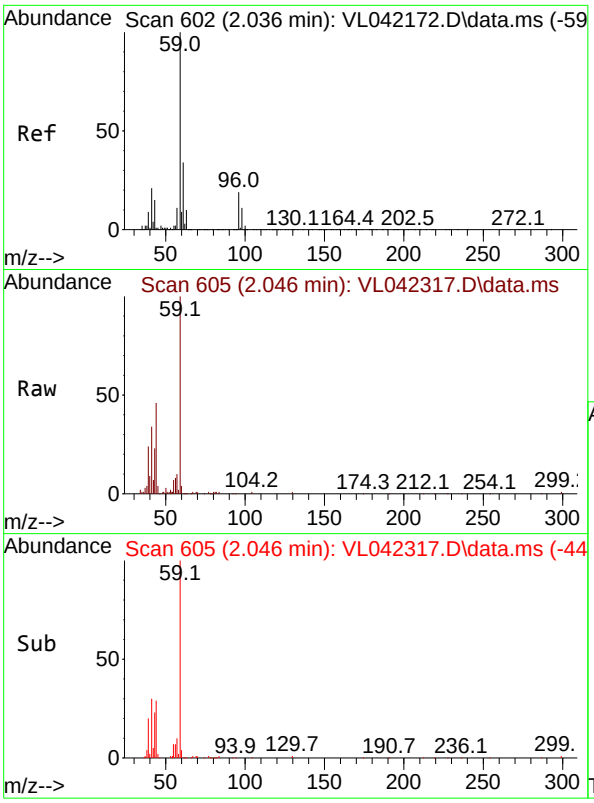


#16
1,3-Butadiene
Concen: 0.561 ppbv
RT: 1.602 min Scan# 468
Delta R.T. -0.004 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 39 Resp: 6866

Ion	Ratio	Lower	Upper
39	100		
54	19.3	60.7	91.1#



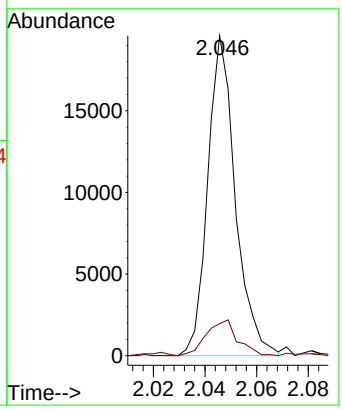


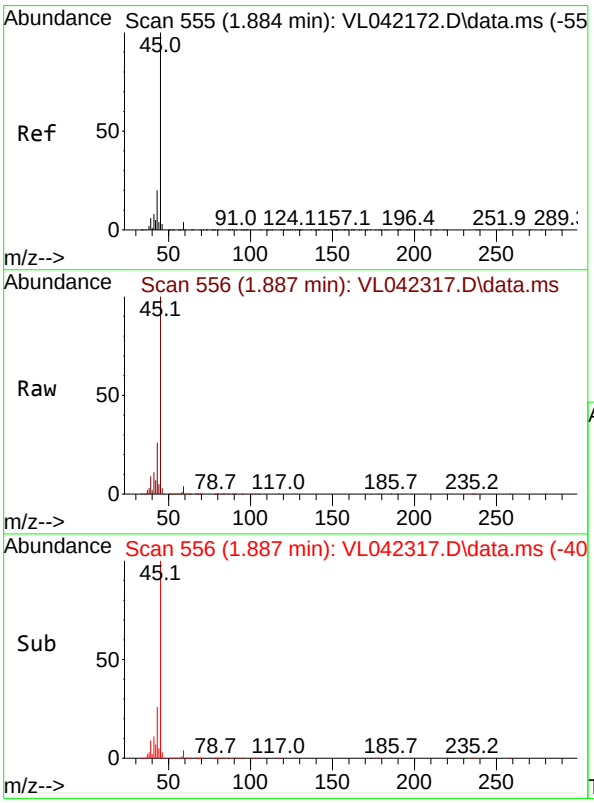
#17
tert-Butyl alcohol
Concen: 0.466 ppbv
RT: 2.046 min Scan# 6
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 59 Resp: 14565

Ion	Ratio	Lower	Upper
59	100		
57	12.2	8.9	13.3

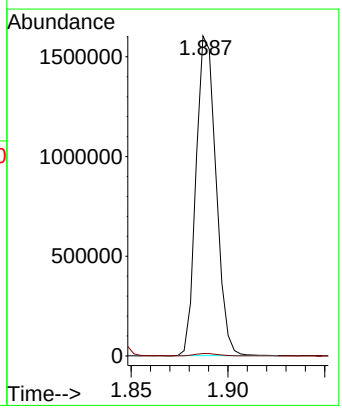


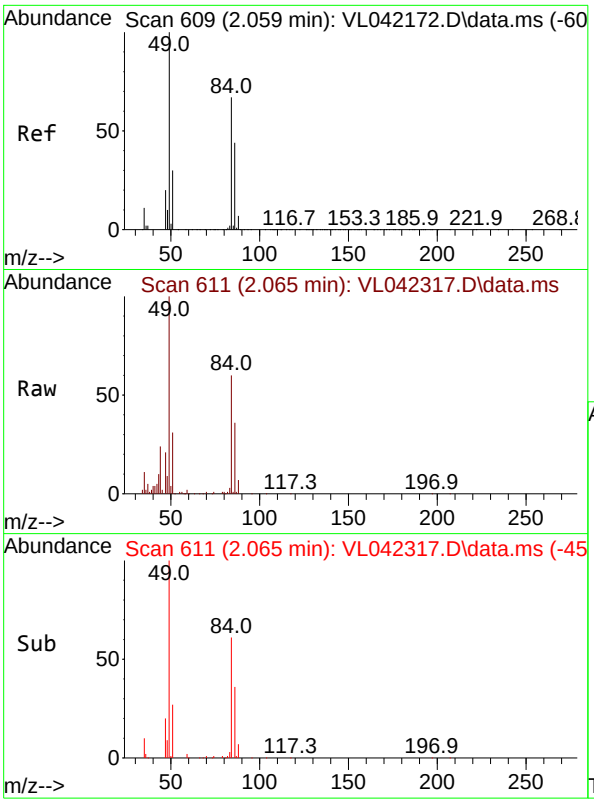


#19
Isopropyl Alcohol
Concen: 81.079 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 45 Resp: 1147205

Ion	Ratio	Lower	Upper
45	100		
58	73.9	36.9	55.3#



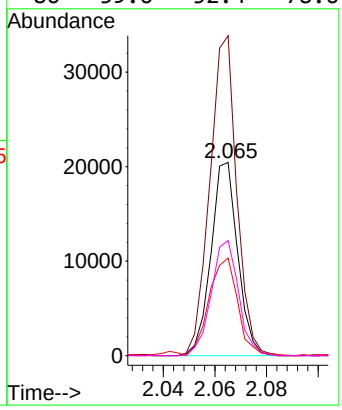


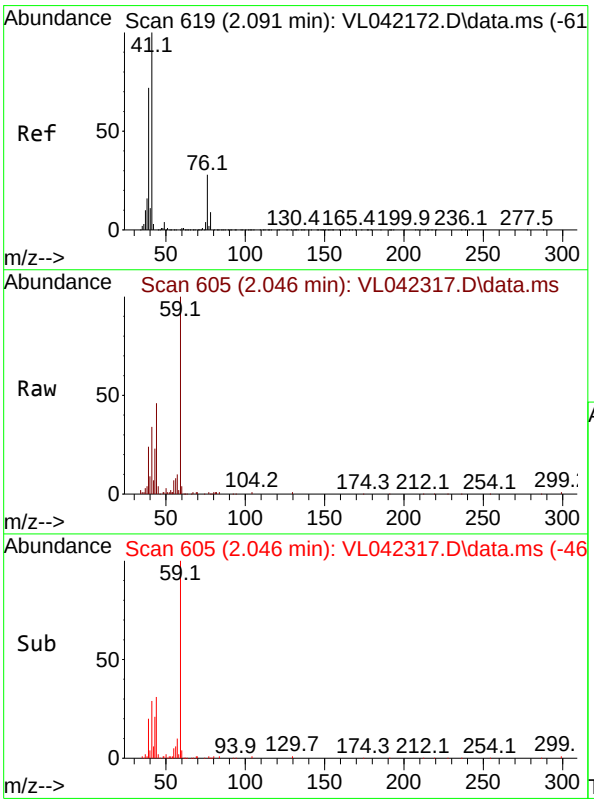
#20
Methylene Chloride
Concen: 1.577 ppbv
RT: 2.065 min Scan# 6
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 84 Resp: 14725

Ion	Ratio	Lower	Upper
84	100		
49	165.6	120.2	180.4
51	49.9	37.4	56.0
86	59.6	52.4	78.6

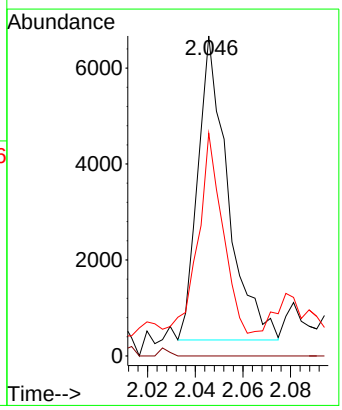


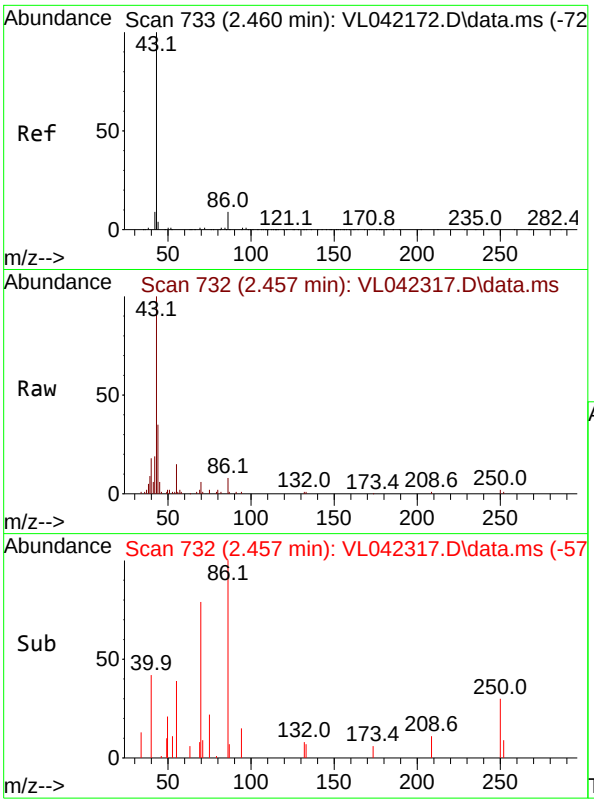


#21
Allyl Chloride
Concen: 0.313 ppbv
RT: 2.046 min Scan# 605
Delta R.T. -0.046 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 41 Resp: 5543

Ion	Ratio	Lower	Upper
41	100		
76	22.6	24.1	36.1#
39	0.0	61.1	91.7#



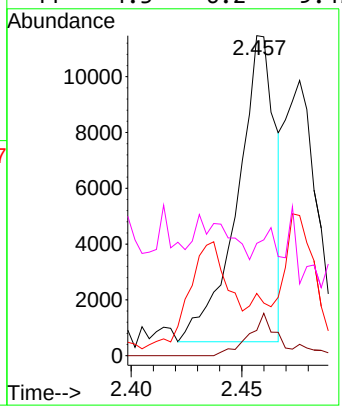


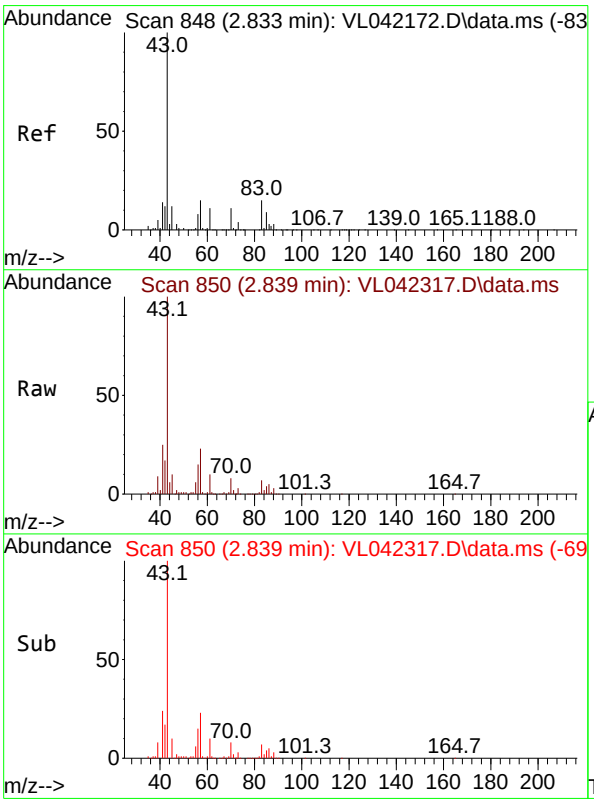
#23
Vinyl Acetate
Concen: 1.204 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.004 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 43 Resp: 13063

Ion	Ratio	Lower	Upper
43	100		
86	8.3	5.5	8.3
42	10.8	8.6	13.0
44	4.3	6.2	9.4#

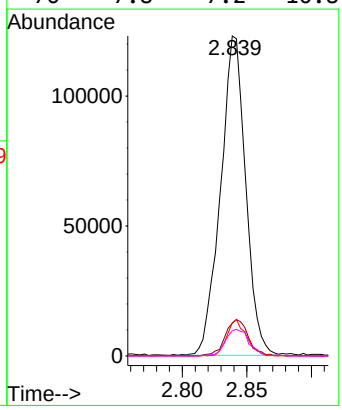


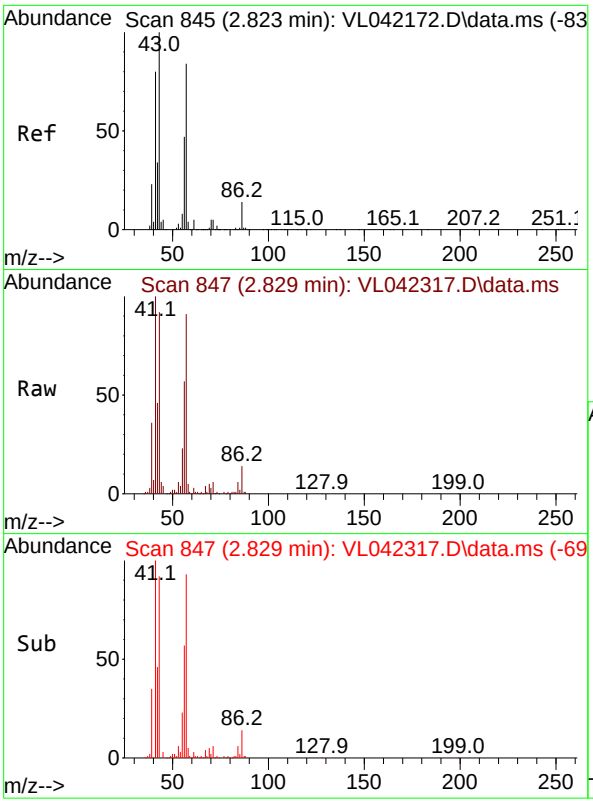


#25
Ethyl Acetate
Concen: 2.563 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 43 Resp: 166820

Ion	Ratio	Lower	Upper
43	100		
45	10.6	8.2	12.2
61	8.9	7.3	10.9
70	7.8	7.2	10.8



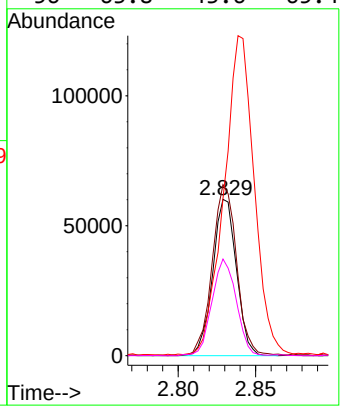


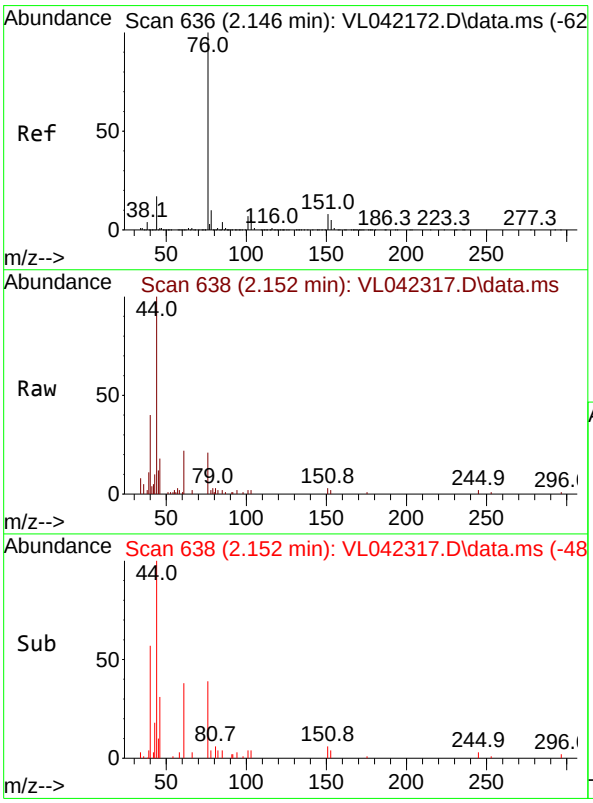
#26
Hexane
Concen: 2.548 ppbv
RT: 2.829 min Scan# 84
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 57 Resp: 64050

Ion	Ratio	Lower	Upper
57	100		
41	113.9	76.6	114.8
43	263.8	207.8	311.8
56	63.8	43.6	65.4

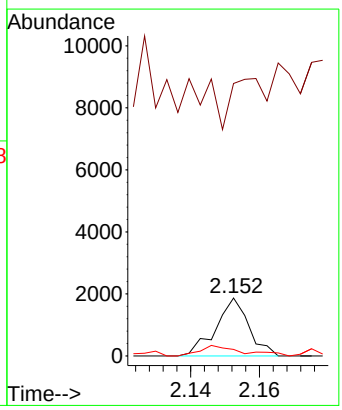


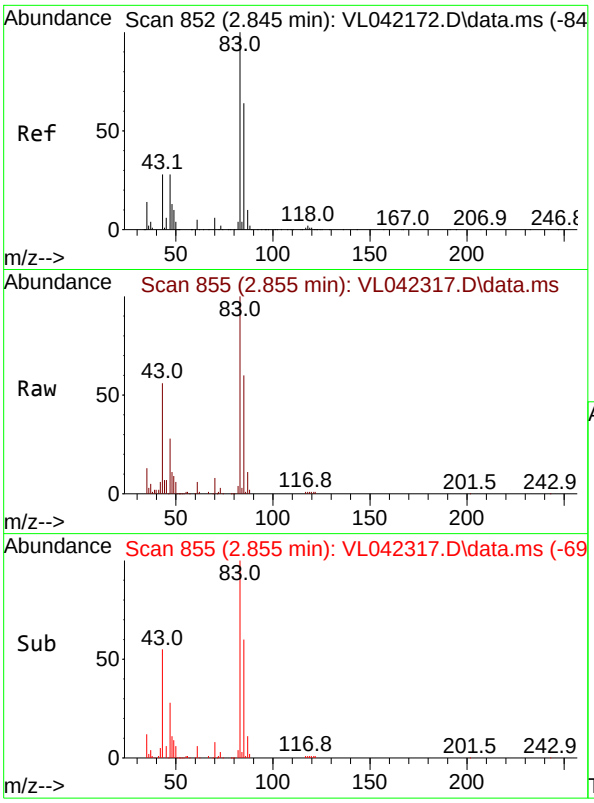


#27
Carbon Disulfide
Concen: 0.046 ppbv
RT: 2.152 min Scan# 638
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 76 Resp: 1240

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	27.7	9.3	13.9#



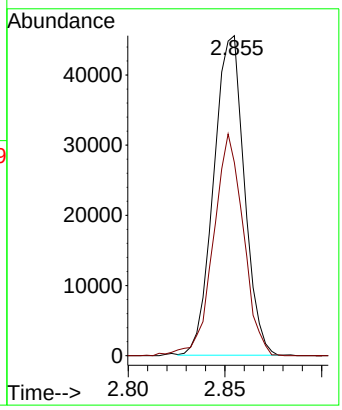


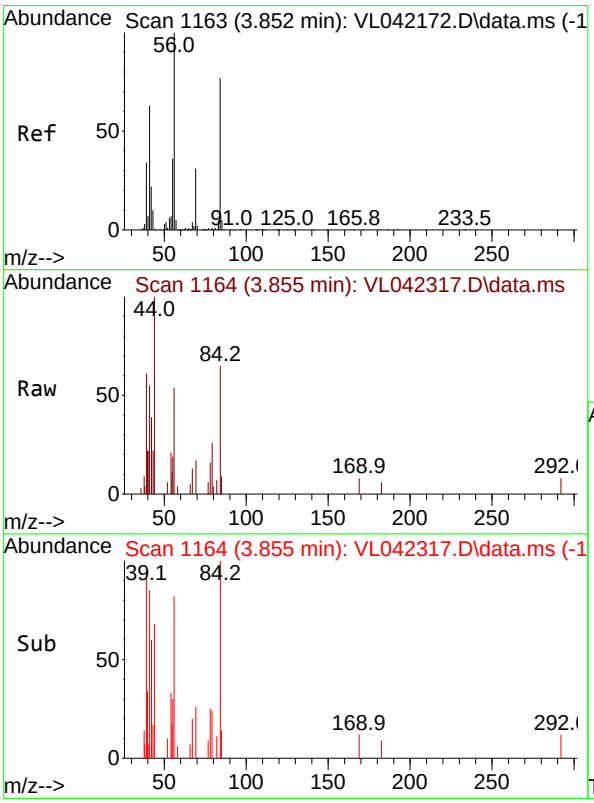
#29
Chloroform
Concen: 1.362 ppbv
RT: 2.855 min Scan# 8
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 83 Resp: 50104

Ion	Ratio	Lower	Upper
83	100		
85	60.2	51.4	77.2

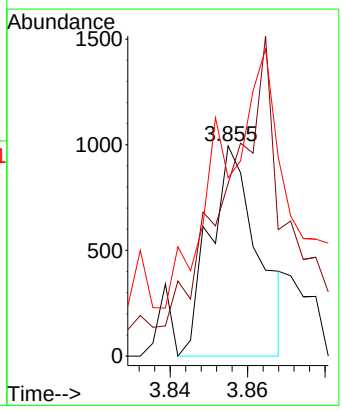


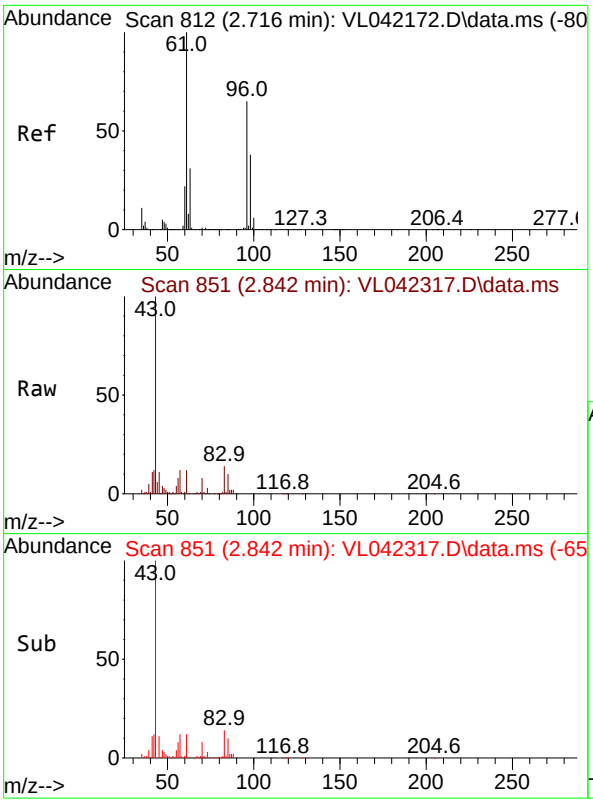


#30
Cyclohexane
Concen: 0.039 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.003 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 84 Resp: 856

Ion	Ratio	Lower	Upper
84	100		
56	233.3	102.8	154.2#
41	244.7	66.5	99.7#



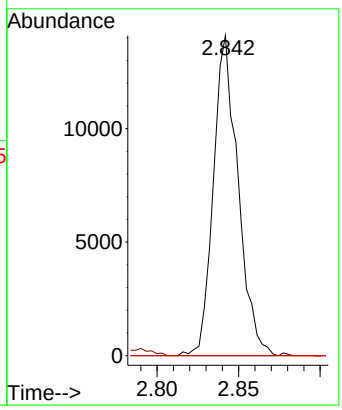


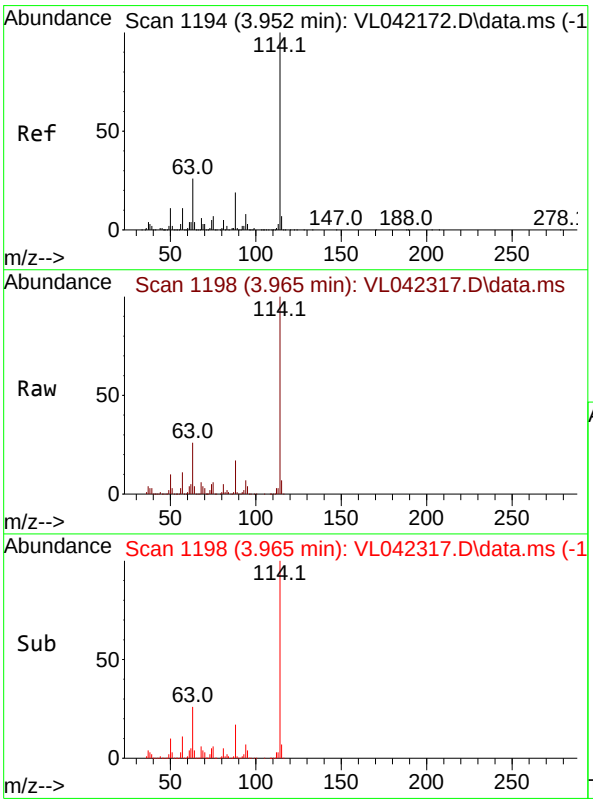
#31
cis-1,2-Dichloroethene
Concen: 0.580 ppbv
RT: 2.842 min Scan# 8
Delta R.T. 0.126 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 61 Resp: 14803

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.8	77.8#
98	0.0	30.6	46.0#

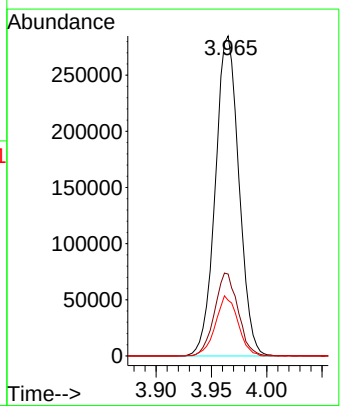


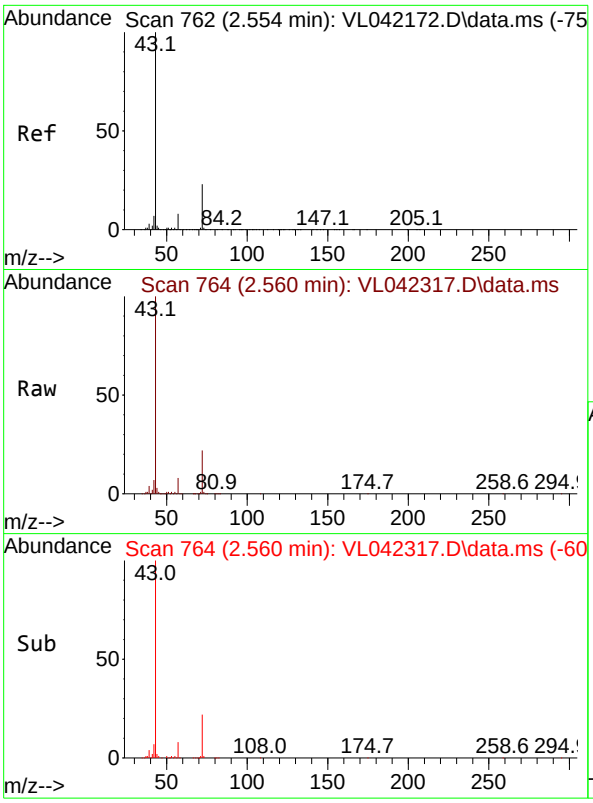


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:114 Resp: 422807

Ion	Ratio	Lower	Upper
114	100		
63	25.8	20.7	31.1
88	17.9	15.0	22.4



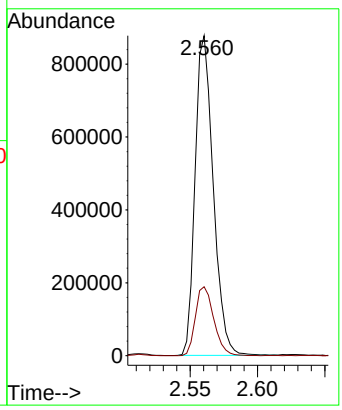


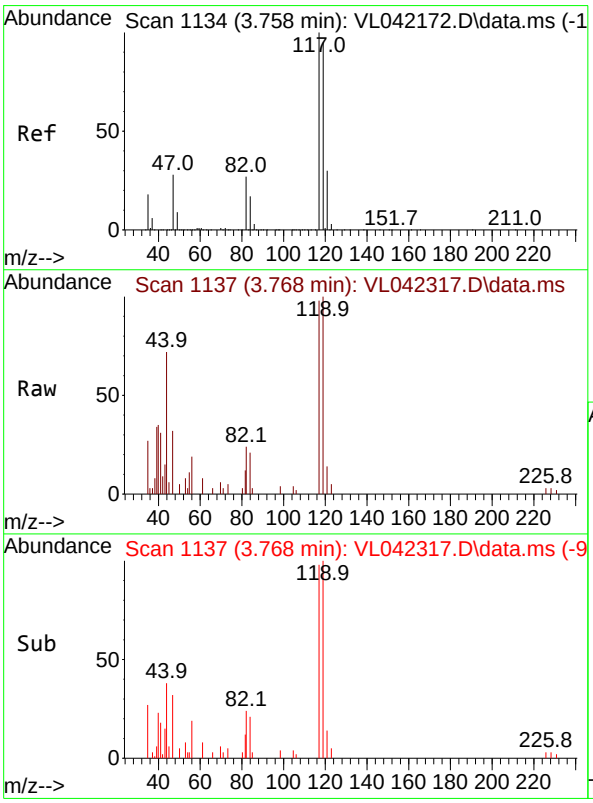
#34
2-Butanone
Concen: 26.834 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 43 Resp: 822701

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

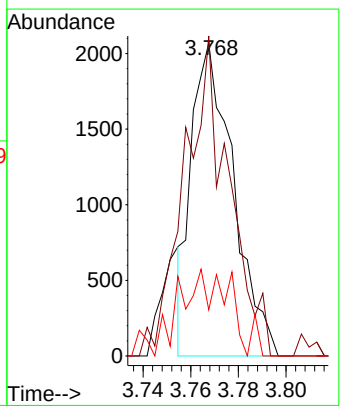


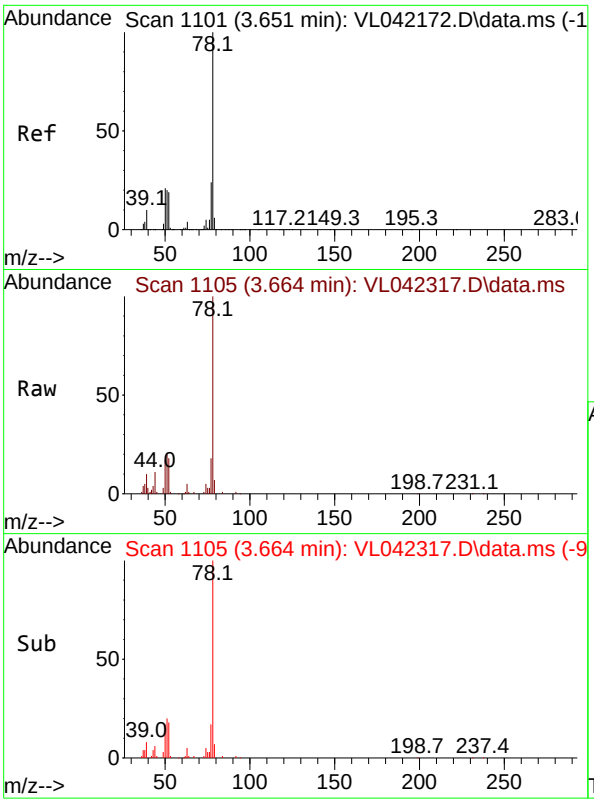


#35
Carbon Tetrachloride
Concen: 0.076 ppbv
RT: 3.768 min Scan# 1137
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:117 Resp: 2524

Ion	Ratio	Lower	Upper
117	100		
119	102.2	76.2	114.2
121	14.7	24.2	36.4#



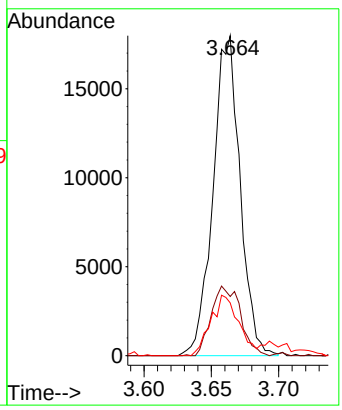


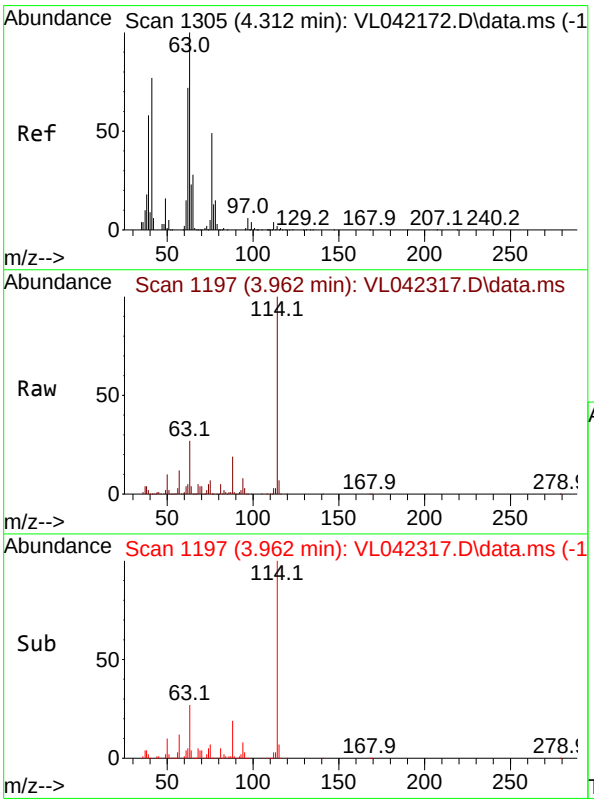
#36
Benzene
Concen: 0.598 ppbv
RT: 3.664 min Scan# 11
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 78 Resp: 25066

Ion	Ratio	Lower	Upper
78	100		
77	18.5	19.1	28.7#
50	16.5	16.6	24.8#

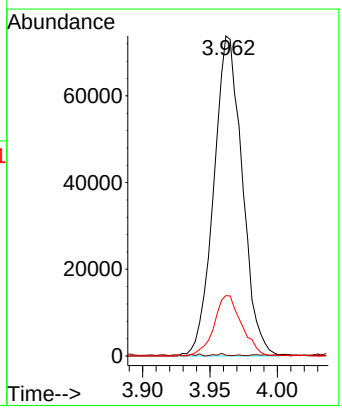


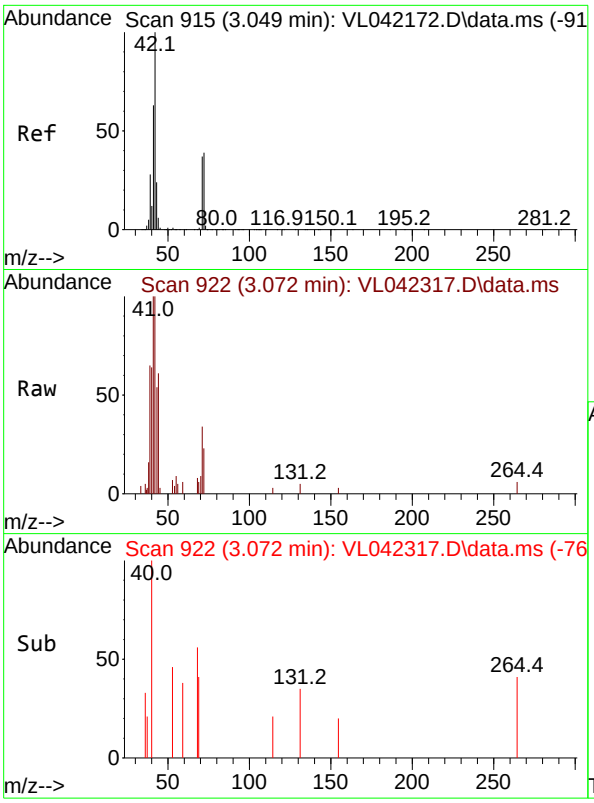


#39
1,2-Dichloropropane
Concen: 7.114 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.350 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 63 Resp: 108598

Ion	Ratio	Lower	Upper
63	100		
41	0.0	61.7	92.5#
62	18.5	57.6	86.4#



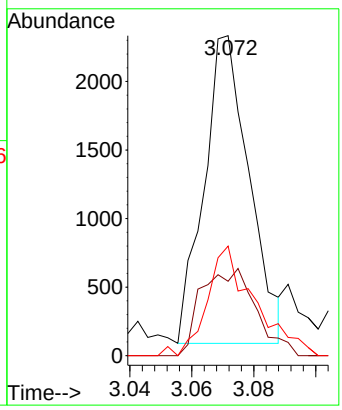


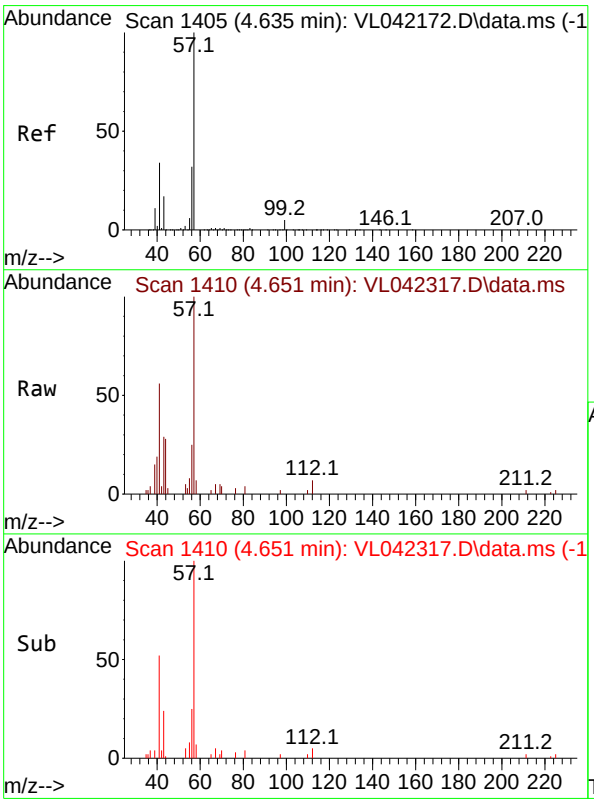
#41
Tetrahydrofuran
Concen: 0.129 ppbv
RT: 3.072 min Scan# 9
Delta R.T. 0.022 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 42 Resp: 2277

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	37.4	30.2	45.4

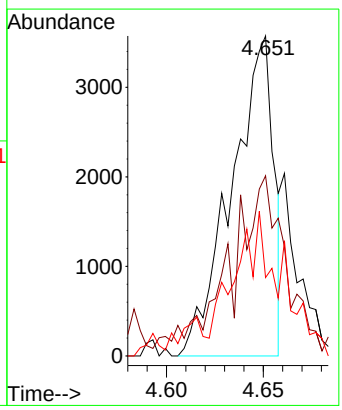


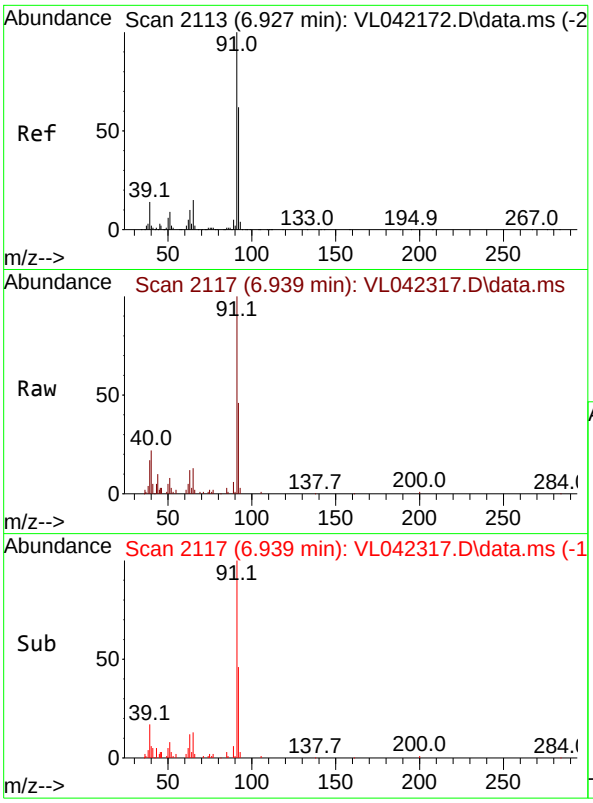


#44
2,2,4-Trimethylpentane
Concen: 0.076 ppbv
RT: 4.651 min Scan# 1410
Delta R.T. 0.016 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 57 Resp: 5375

Ion	Ratio	Lower	Upper
57	100		
41	81.3	26.8	40.2#
56	59.6	25.6	38.4#



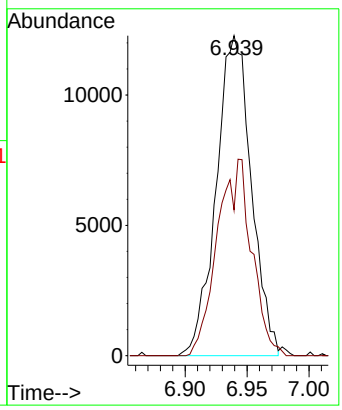


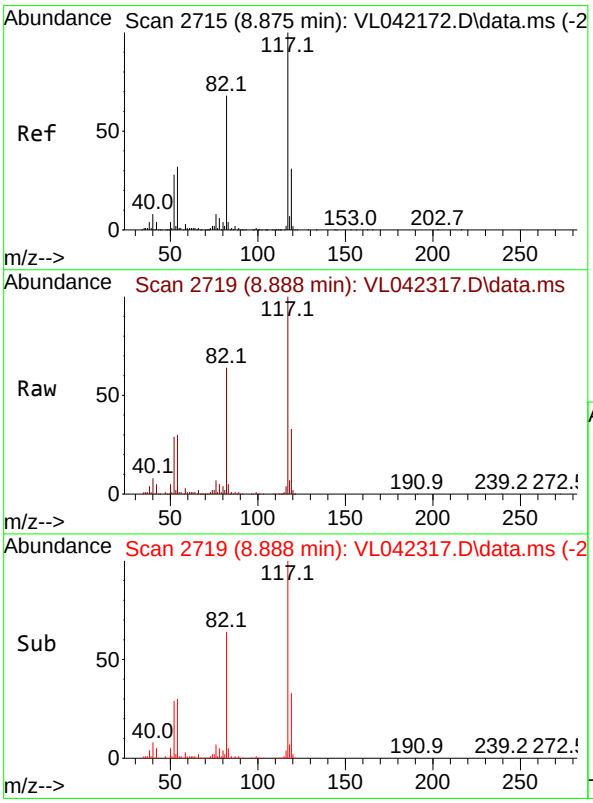
#53
Toluene
Concen: 0.488 ppbv
RT: 6.939 min Scan# 21
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 91 Resp: 24232

Ion	Ratio	Lower	Upper
91	100		
92	60.1	48.4	72.6

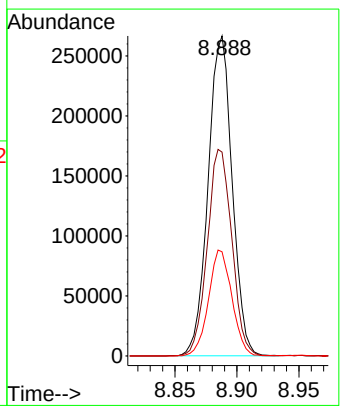


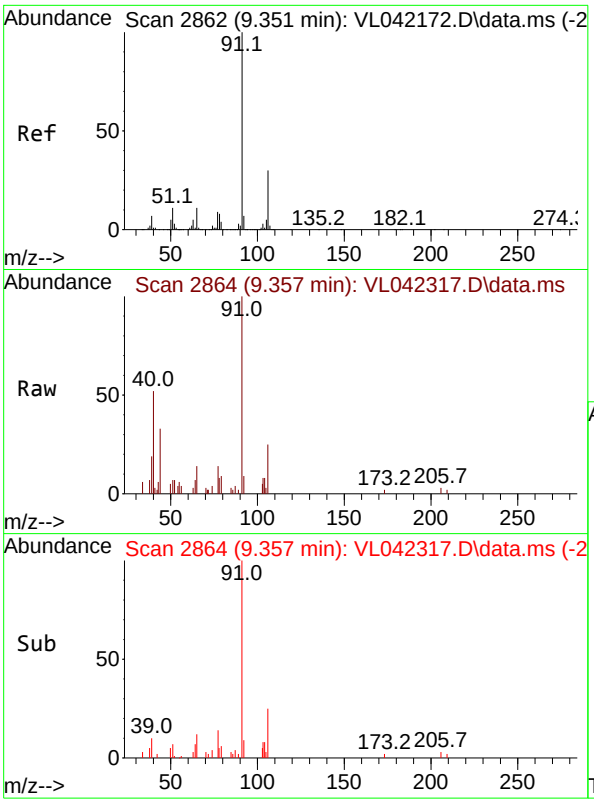


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:117 Resp: 360993

Ion	Ratio	Lower	Upper
117	100		
82	65.8	55.8	83.6
119	32.5	25.5	38.3



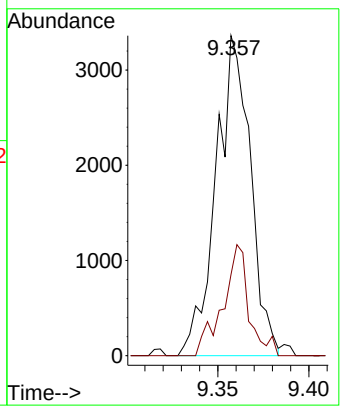


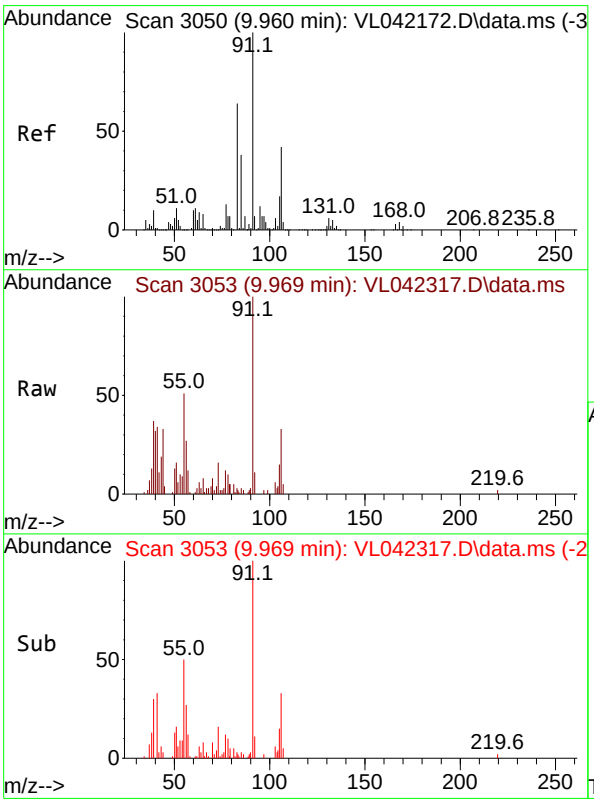
#58
Ethyl Benzene
Concen: 0.069 ppbv
RT: 9.357 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 91 Resp: 4399

Ion	Ratio	Lower	Upper
91	100		
106	25.4	24.2	36.2

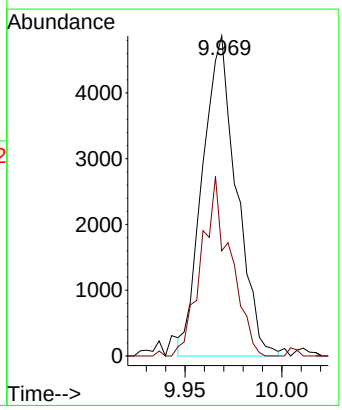


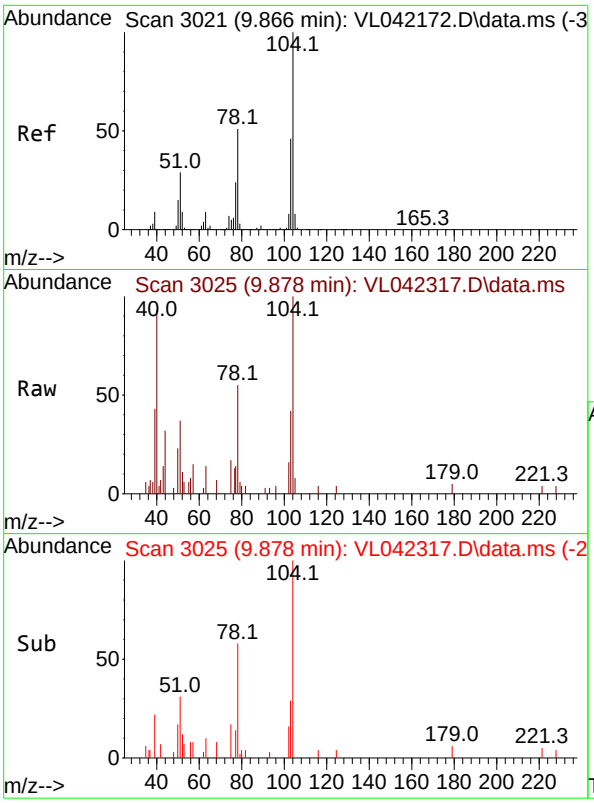


#60
o-Xylene
Concen: 0.116 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 91 Resp: 5940

Ion	Ratio	Lower	Upper
91	100		
106	48.4	20.8	62.5



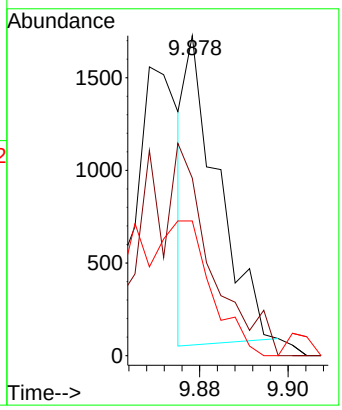


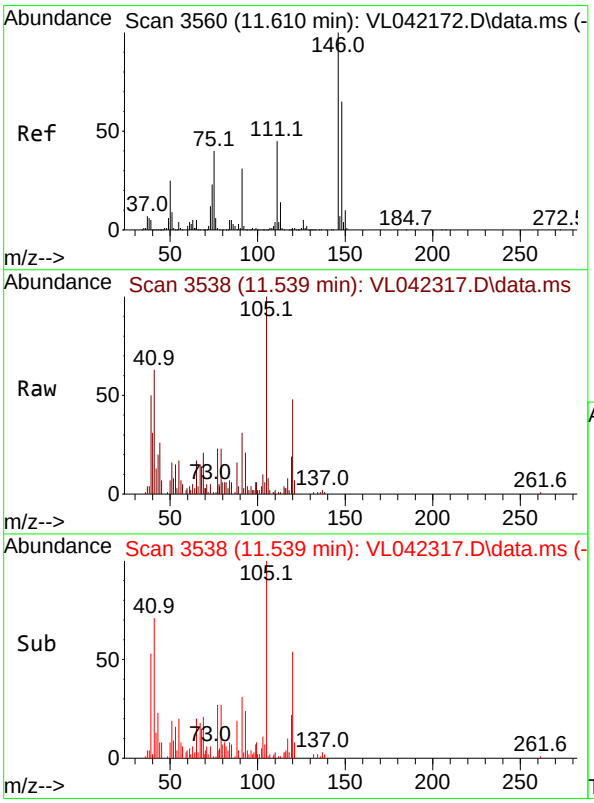
#61
Styrene
Concen: 0.033 ppbv
RT: 9.878 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion:104 Resp: 838

Ion	Ratio	Lower	Upper
104	100		
78	157.9	41.8	62.6#
103	121.6	37.0	55.4#

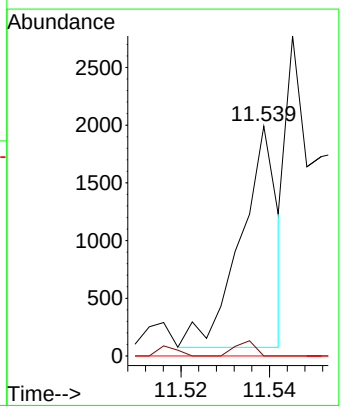


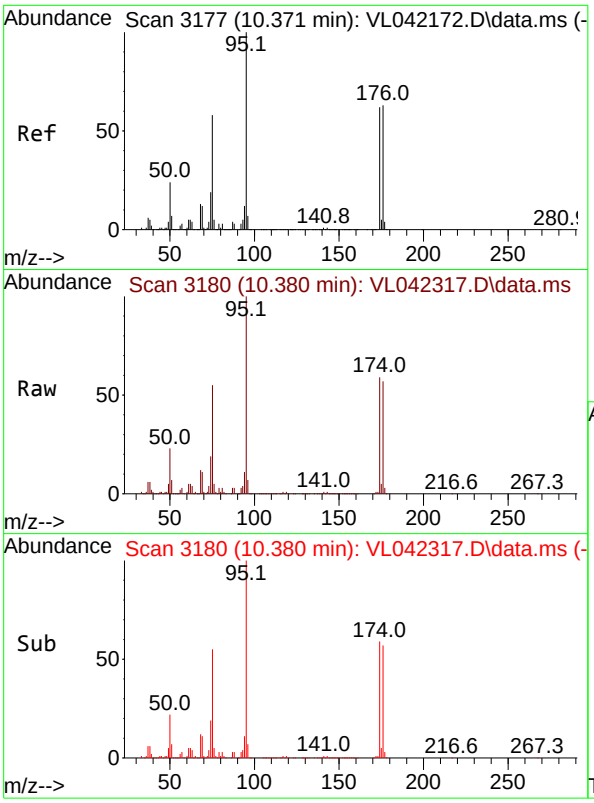


#66
Benzyl Chloride
Concen: 0.147 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.072 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion: 91 Resp: 1109

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	5.2	4.5	6.7



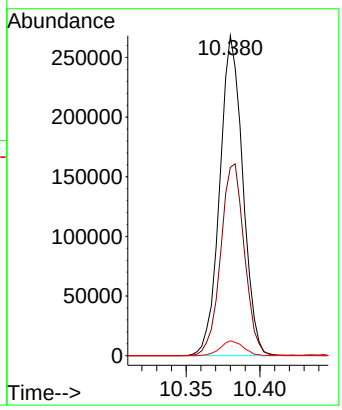


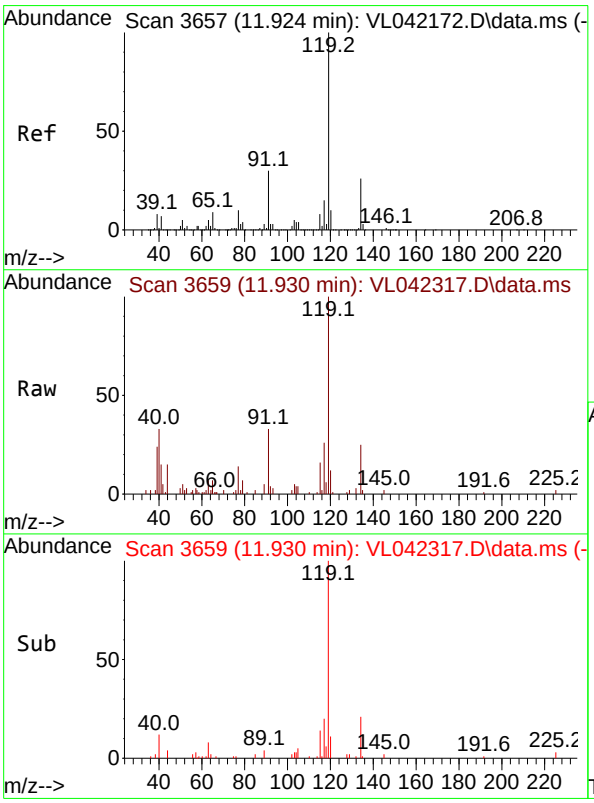
#68
1-Bromo-4-Fluorobenzene
Concen: 9.829 ppbv
RT: 10.380 min Scan# 3
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion: 95 Resp: 291371

Ion	Ratio	Lower	Upper
95	100		
174	62.0	50.6	76.0
175	4.7	3.8	5.6

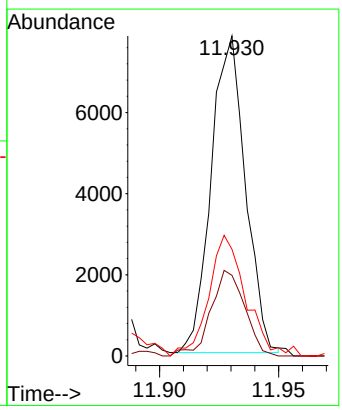


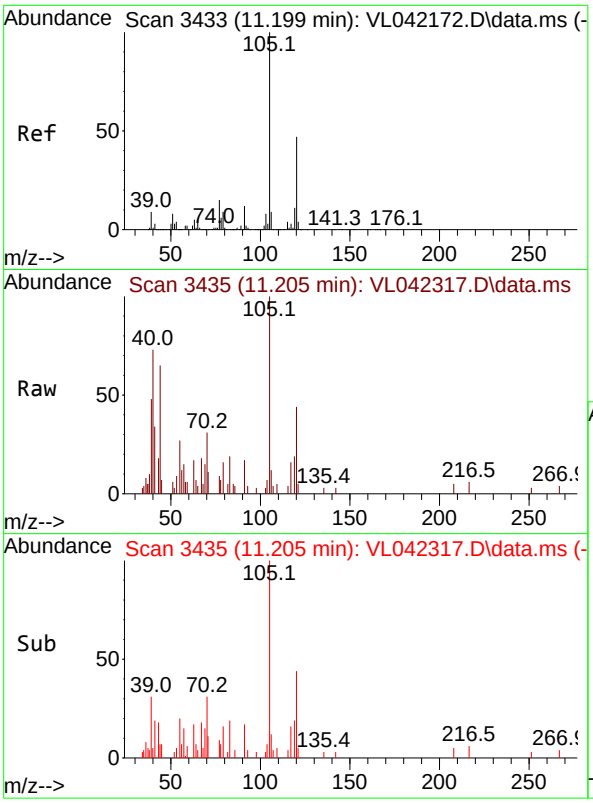


#69
p-Isopropyltoluene
Concen: 0.092 ppbv
RT: 11.930 min Scan# 3659
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:119 Resp: 7802

Ion	Ratio	Lower	Upper
119	100		
134	28.6	20.4	30.6
91	0.0	23.7	35.5#



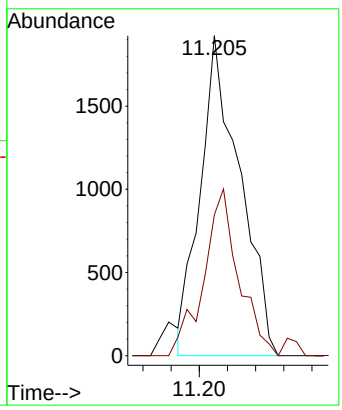


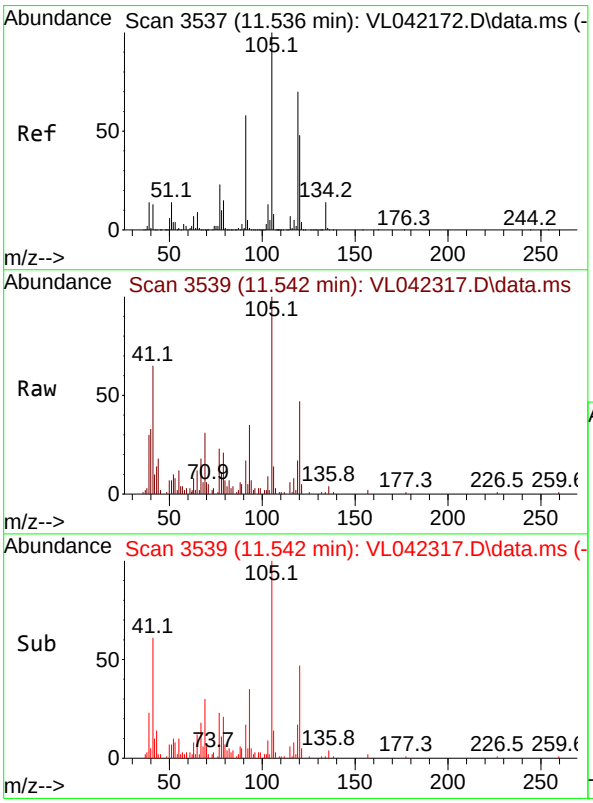
#73
1,3,5-Trimethylbenzene
Concen: 0.034 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion:105 Resp: 1875

Ion	Ratio	Lower	Upper
105	100		
120	44.0	37.4	56.0

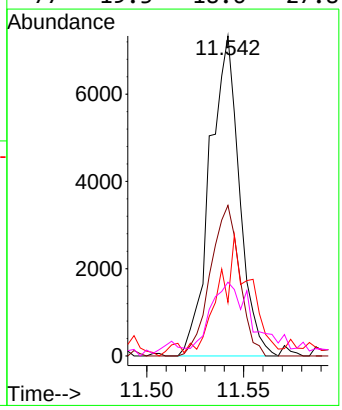


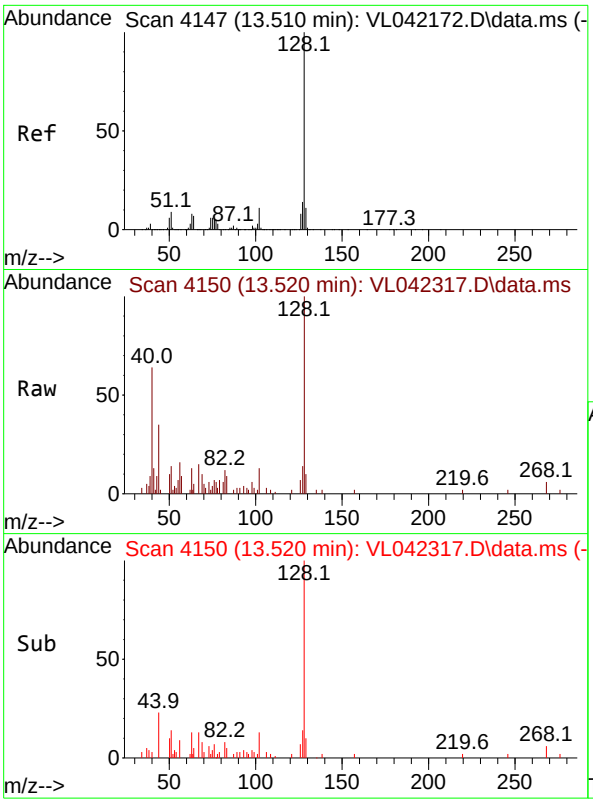


#74
1,2,4-Trimethylbenzene
Concen: 0.121 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.006 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Tgt Ion:105 Resp: 7764

Ion	Ratio	Lower	Upper
105	100		
120	47.1	38.6	58.0
91	14.6	46.2	69.2#
77	19.3	18.6	27.8



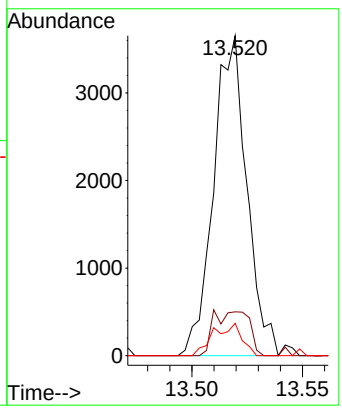


#79
Naphthalene
Concen: 0.054 ppbv
RT: 13.520 min Scan# 4
Delta R.T. 0.009 min
Lab File: VL042317.D
Acq: 11 Apr 2025 13:15

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025

Tgt Ion:128 Resp: 3811

Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.8	16.2
129	10.1	9.0	13.4



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042318.D
Acq On : 11 Apr 2025 13:52
Operator : SY/MD
Sample : Q1665-03DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Quant Time: Apr 11 22:59:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	183054	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.958	114	442590	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	380933	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	304733	9.741	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11308	0.418	ppbv		97
3) Chlorodifluoromethane	1.466	51	98497	3.567	ppbv	#	62
4) Chloromethane	1.531	50	6464	0.585	ppbv	#	84
9) Propene	1.887	41	122482	9.678	ppbv		88
10) Heptane	4.981	43	4536	0.135	ppbv	#	71
11) Trichlorofluoromethane	1.877	101	5756	0.219	ppbv		90
12) 1,1,2-Trichlorotrifluo...	2.140	101	1475	0.068	ppbv		88
13) Ethanol	1.722	45	1578950	1319.793	ppbv		94
15) Acetone	1.832	43	2101760	82.096	ppbv	#	77
16) 1,3-Butadiene	1.599	39	7285	0.583	ppbv	#	34
17) tert-Butyl alcohol	1.887	59	49370	1.548	ppbv		95
19) Isopropyl Alcohol	1.887	45	1201240	83.161	ppbv	#	60
20) Methylene Chloride	2.059	84	15544	1.630	ppbv		90
21) Allyl Chloride	2.042	41	5085	0.282	ppbv	#	22
23) Vinyl Acetate	2.453	43	8887	0.802	ppbv	#	79
25) Ethyl Acetate	2.835	43	171845	2.586	ppbv		98
26) Hexane	2.826	57	69684	2.715	ppbv		93
27) Carbon Disulfide	2.149	76	1389	0.050	ppbv	#	39
29) Chloroform	2.848	83	51580	1.373	ppbv		99
31) cis-1,2-Dichloroethene	2.839	61	15128	0.581	ppbv	#	25
34) 2-Butanone	2.557	43	853001	26.579	ppbv		99
35) Carbon Tetrachloride	3.768	117	2172	0.063	ppbv	#	55
36) Benzene	3.654	78	26349	0.601	ppbv		94
39) 1,2-Dichloropropane	3.958	63	115306	7.216	ppbv	#	23
41) Tetrahydrofuran	3.065	42	2536	0.137	ppbv	#	58
53) Toluene	6.936	91	13995	0.269	ppbv	#	33
58) Ethyl Benzene	9.357	91	3973	0.059	ppbv		91
59) m/p-Xylene	9.545	91	3275	0.061	ppbv	#	31
60) o-Xylene	9.962	91	4830	0.089	ppbv		76
61) Styrene	9.869	104	2313	0.086	ppbv	#	90
66) Benzyl Chloride	11.532	91	1364	0.172	ppbv	#	69
69) p-Isopropyltoluene	11.927	119	8784	0.098	ppbv	#	65
74) 1,2,4-Trimethylbenzene	11.535	105	8971	0.132	ppbv	#	75

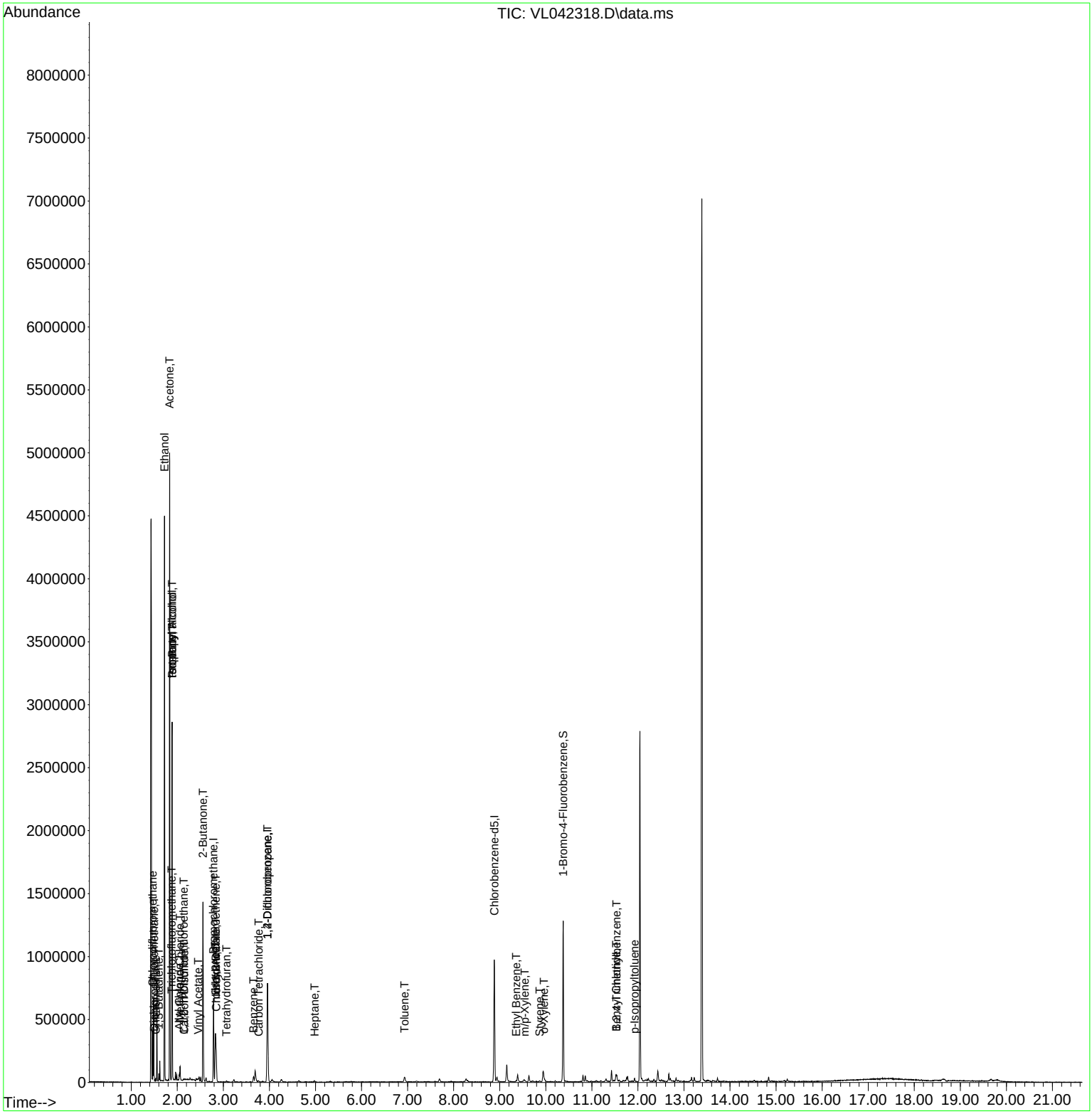
(#) = qualifier out of range (m) = manual integration (+) = signals summed

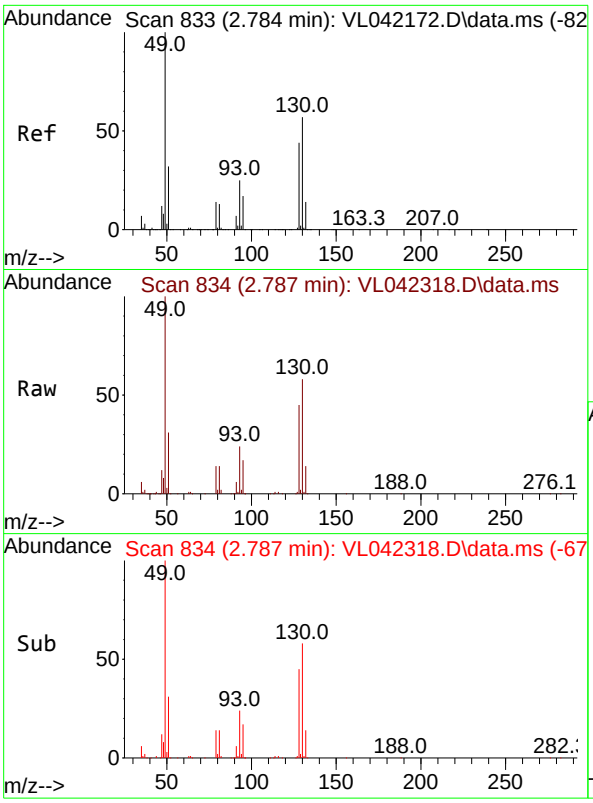
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042318.D
Acq On : 11 Apr 2025 13:52
Operator : SY/MD
Sample : Q1665-03DUP
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Quant Time: Apr 11 22:59:57 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



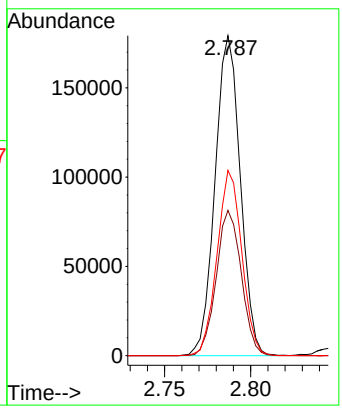


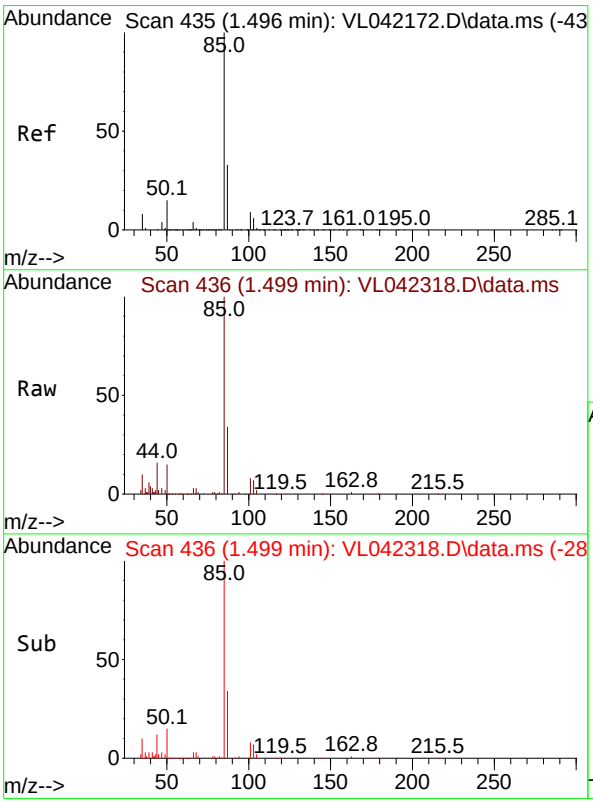
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 49 Resp: 183054

Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.9	68.5
130	56.7	28.8	86.4

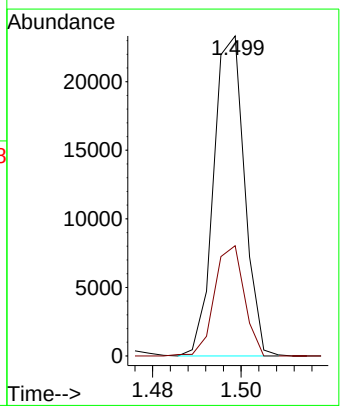


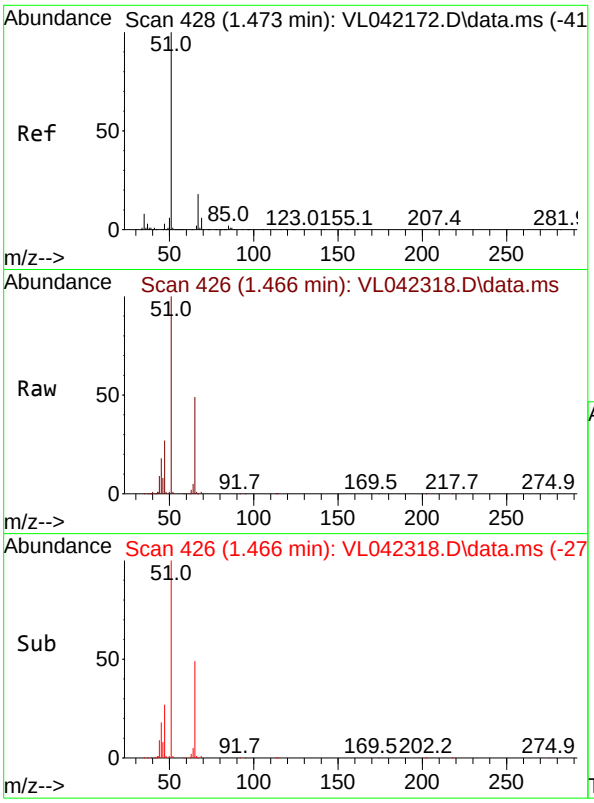


#2
Dichlorodifluoromethane
Concen: 0.418 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 85 Resp: 11308

Ion	Ratio	Lower	Upper
85	100		
87	34.5	26.1	39.1



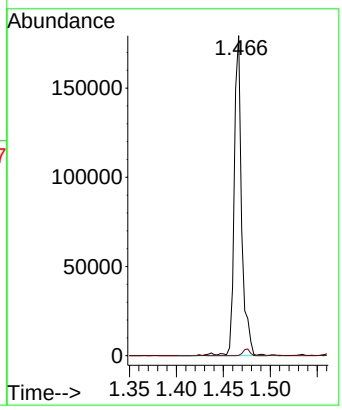


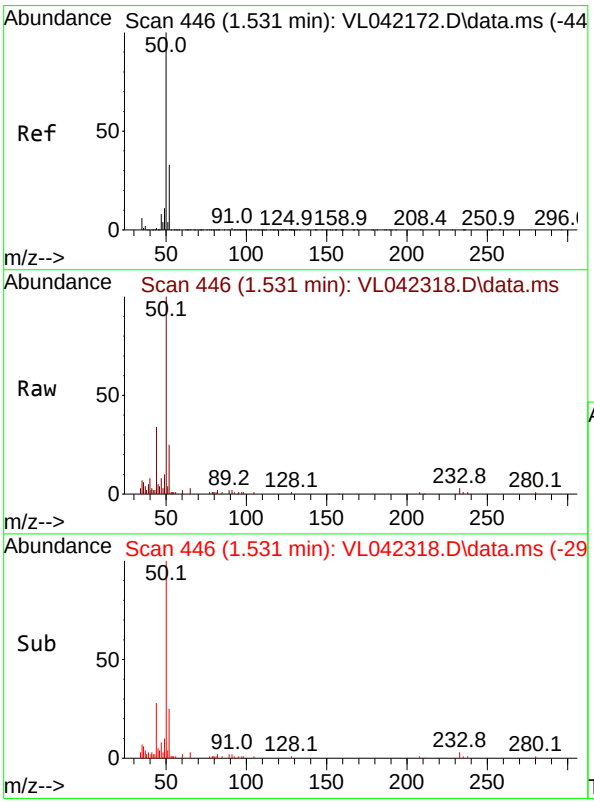
#3
Chlorodifluoromethane
Concen: 3.567 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 51 Resp: 98497

Ion	Ratio	Lower	Upper
51	100		
67	1.9	15.0	22.6#

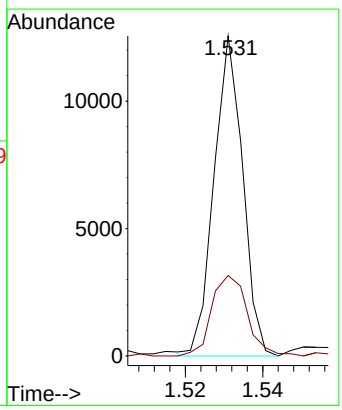


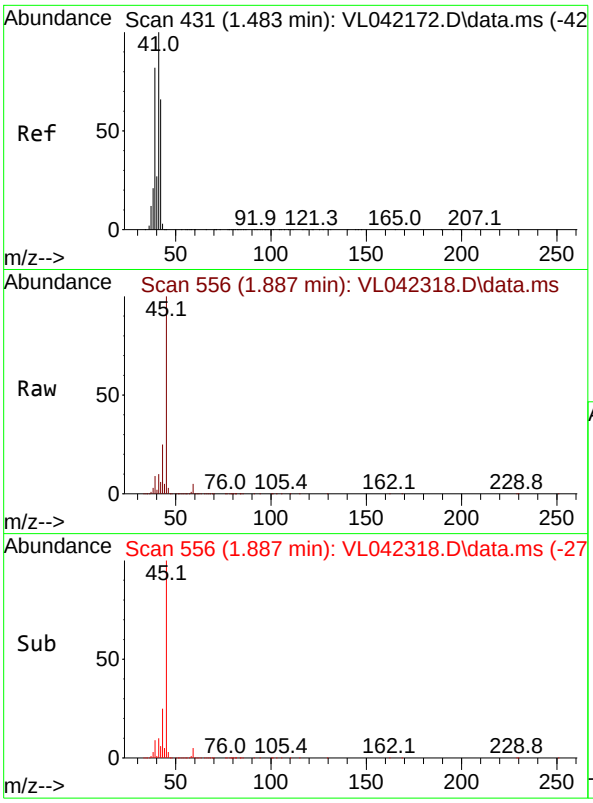


#4
Chloromethane
Concen: 0.585 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 50 Resp: 6464

Ion	Ratio	Lower	Upper
50	100		
52	23.7	26.1	39.1#



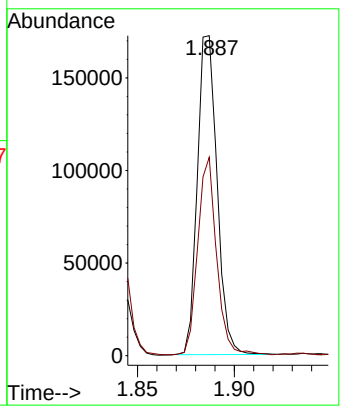


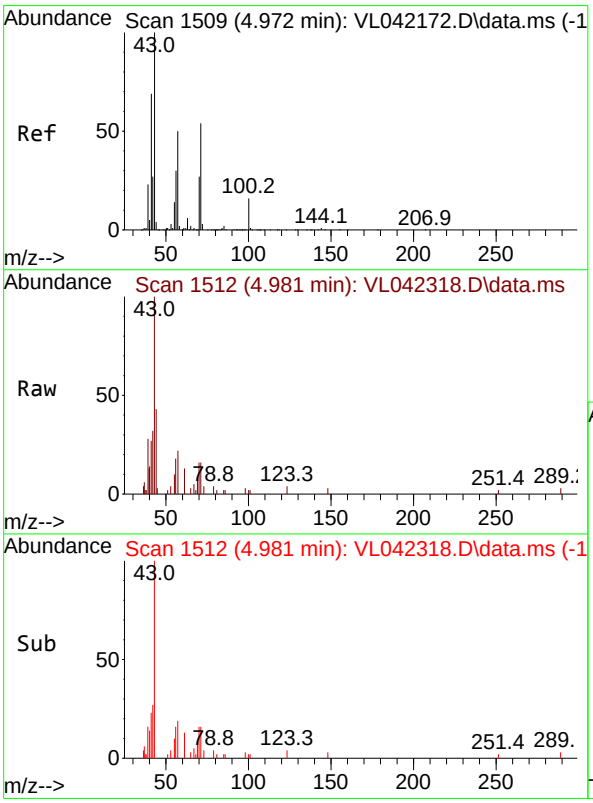
#9
Propene
Concen: 9.678 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.404 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 41 Resp: 122482

Ion	Ratio	Lower	Upper
41	100		
42	59.2	55.4	83.2

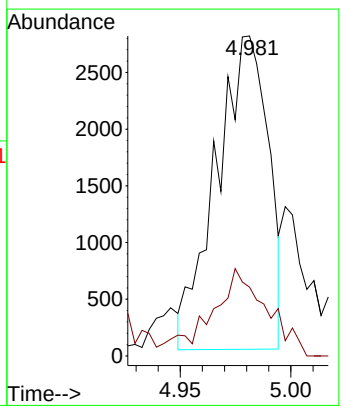


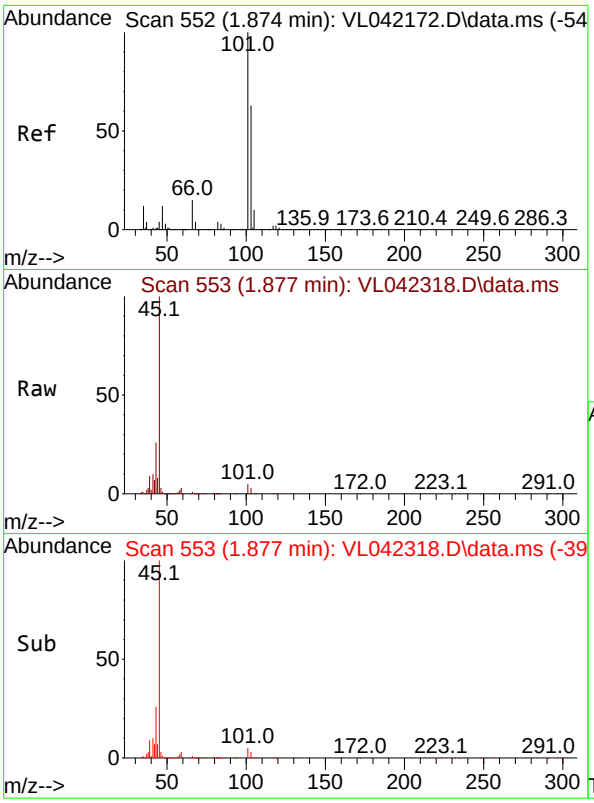


#10
Heptane
Concen: 0.135 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 4536

Ion	Ratio	Lower	Upper
43	100		
57	29.3	39.4	59.2#



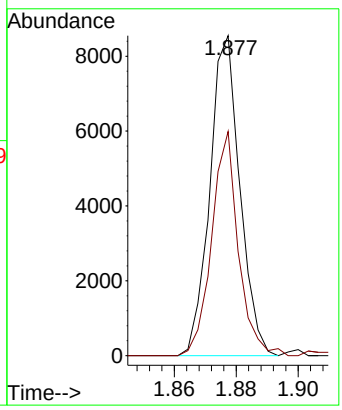


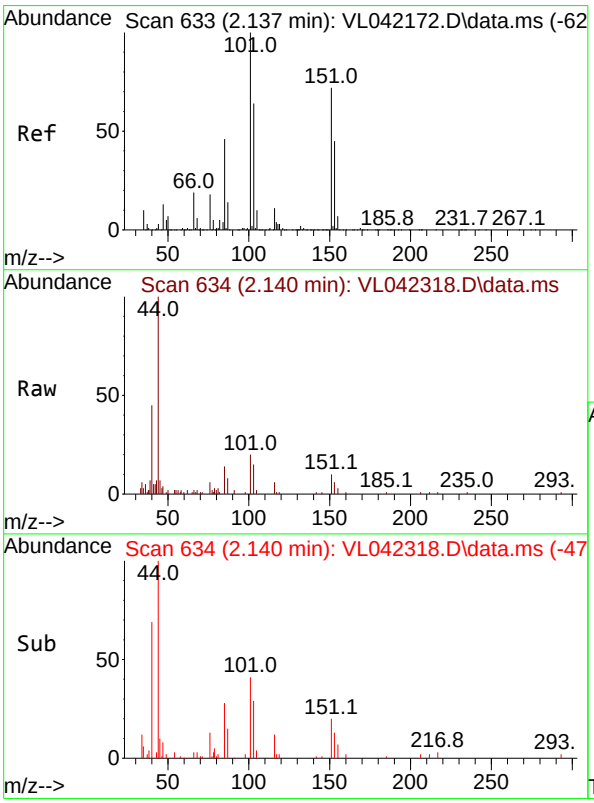
#11
Trichlorofluoromethane
Concen: 0.219 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion:101 Resp: 5756

Ion	Ratio	Lower	Upper
101	100		
103	70.1	50.2	75.2

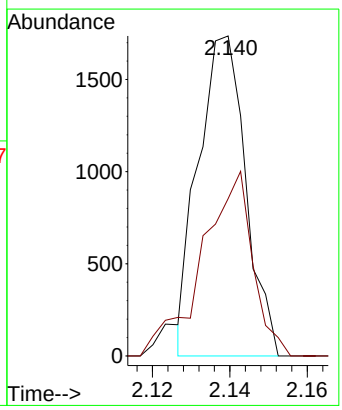


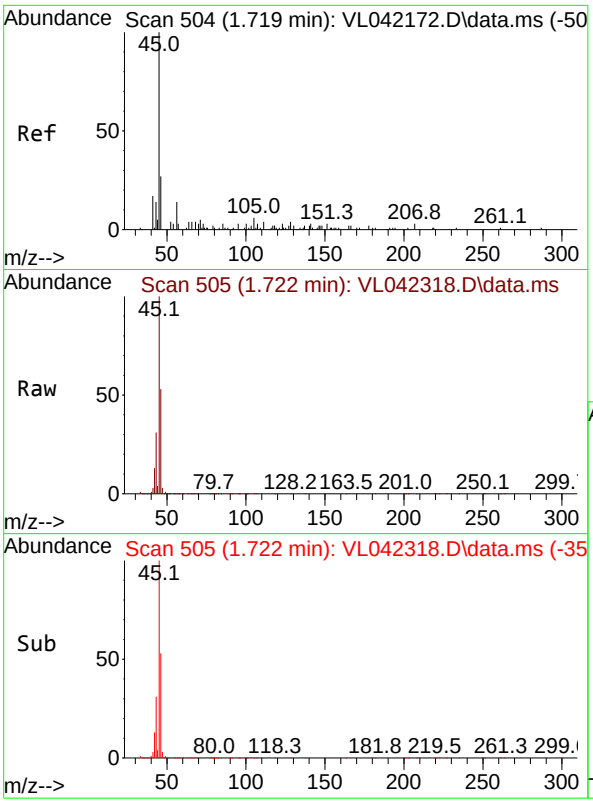


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.068 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:101 Resp: 1475

Ion	Ratio	Lower	Upper
101	100		
151	61.8	57.1	85.7



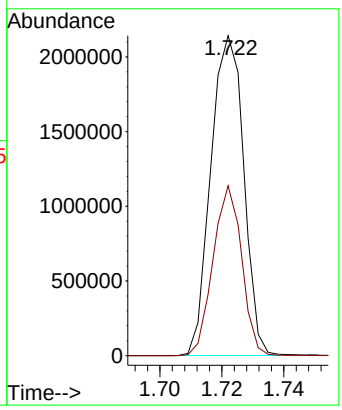


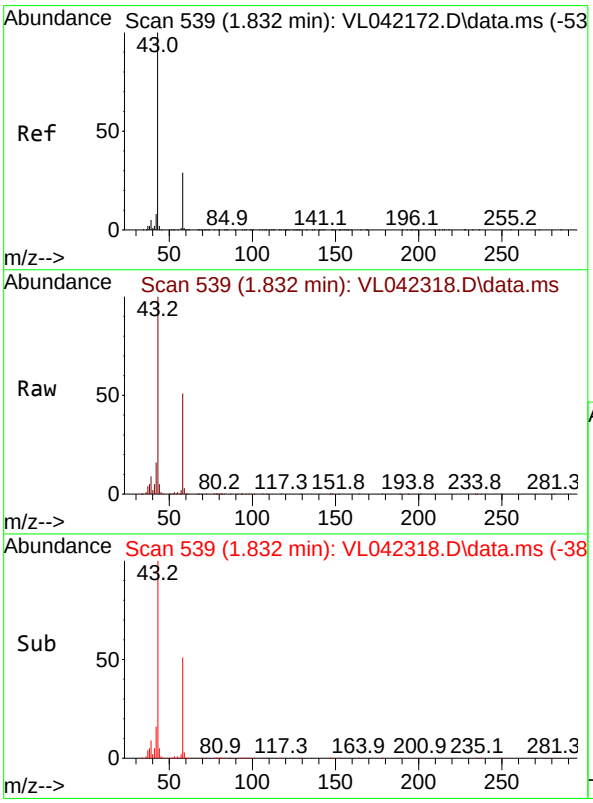
#13
Ethanol
Concen: 1319.793 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 45 Resp: 1578950

Ion	Ratio	Lower	Upper
45	100		
46	46.4	20.2	80.8

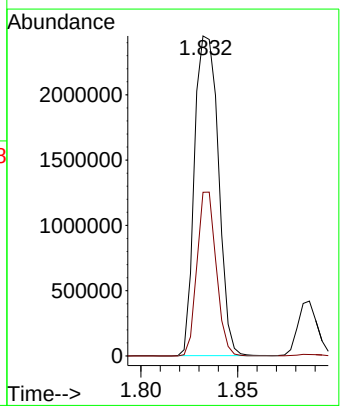


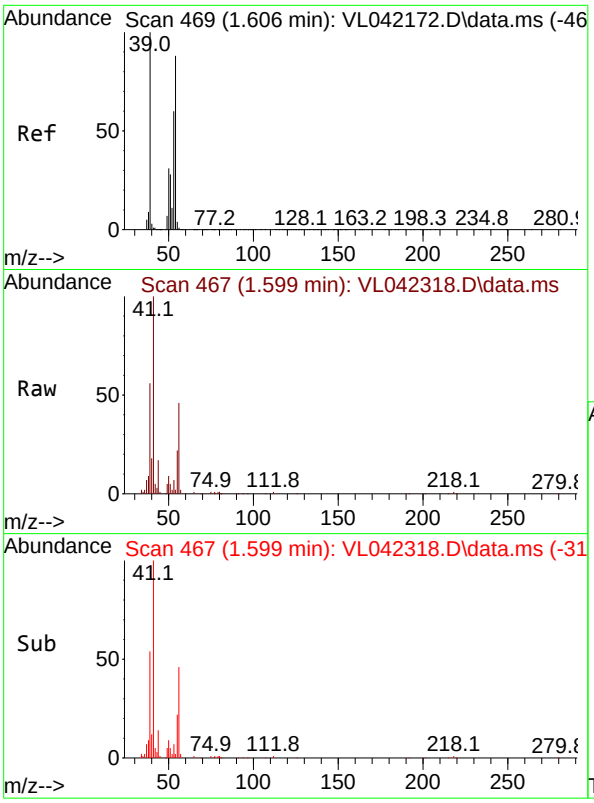


#15
Acetone
Concen: 82.096 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 2101760

Ion	Ratio	Lower	Upper
43	100		
58	41.3	23.2	34.8#



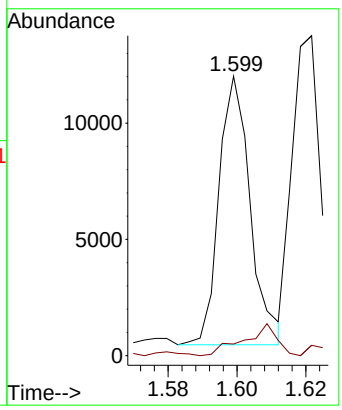


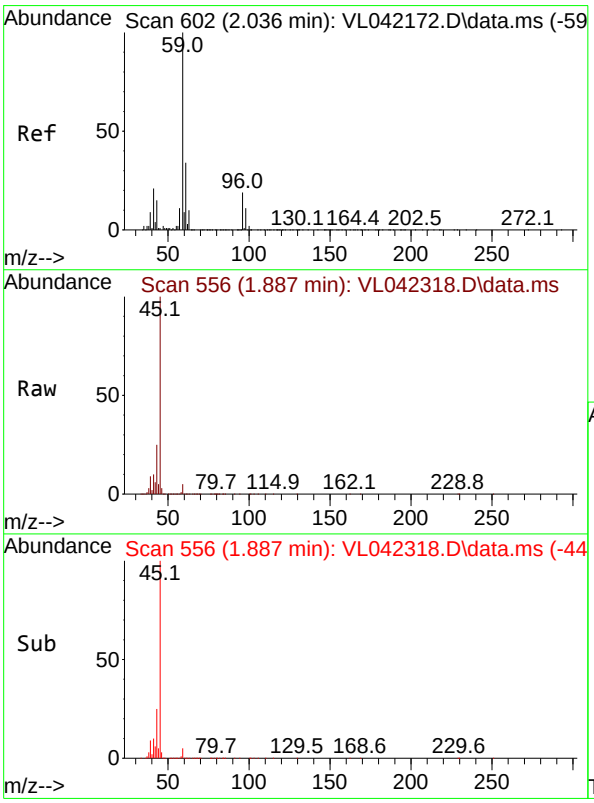
#16
1,3-Butadiene
Concen: 0.583 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 39 Resp: 7285

Ion	Ratio	Lower	Upper
39	100		
54	19.4	60.7	91.1#

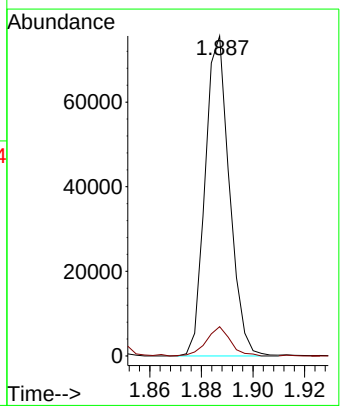


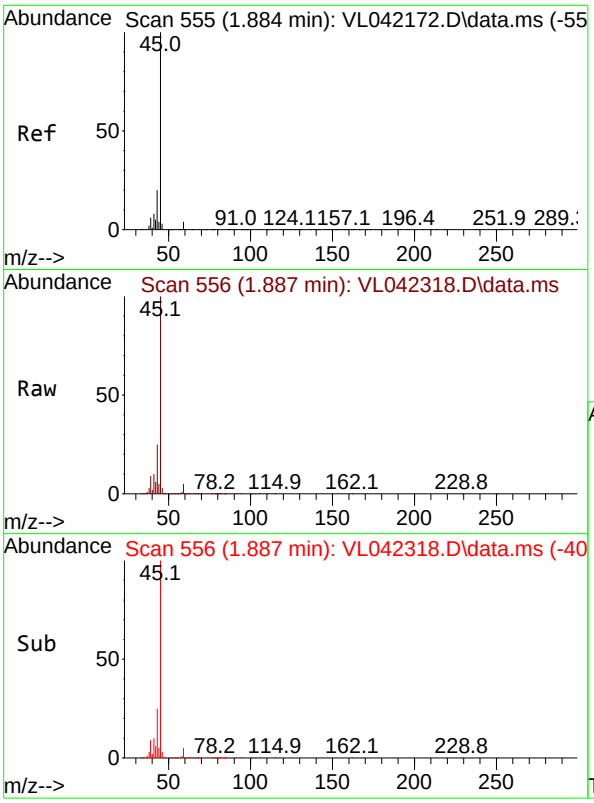


#17
tert-Butyl alcohol
Concen: 1.548 ppbv
RT: 1.887 min Scan# 556
Delta R.T. -0.149 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 59 Resp: 49370

Ion	Ratio	Lower	Upper
59	100		
57	9.1	8.9	13.3



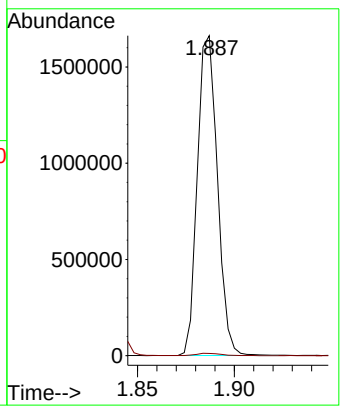


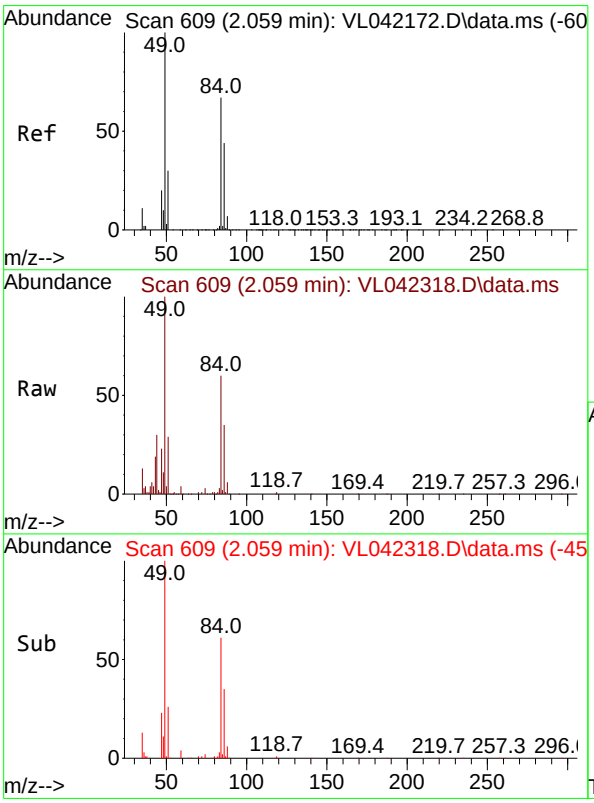
#19
Isopropyl Alcohol
Concen: 83.161 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 45 Resp: 1201240

Ion	Ratio	Lower	Upper
45	100		
58	72.3	36.9	55.3#

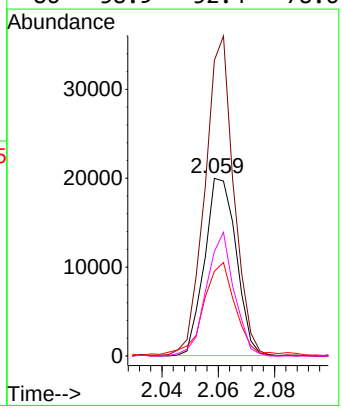


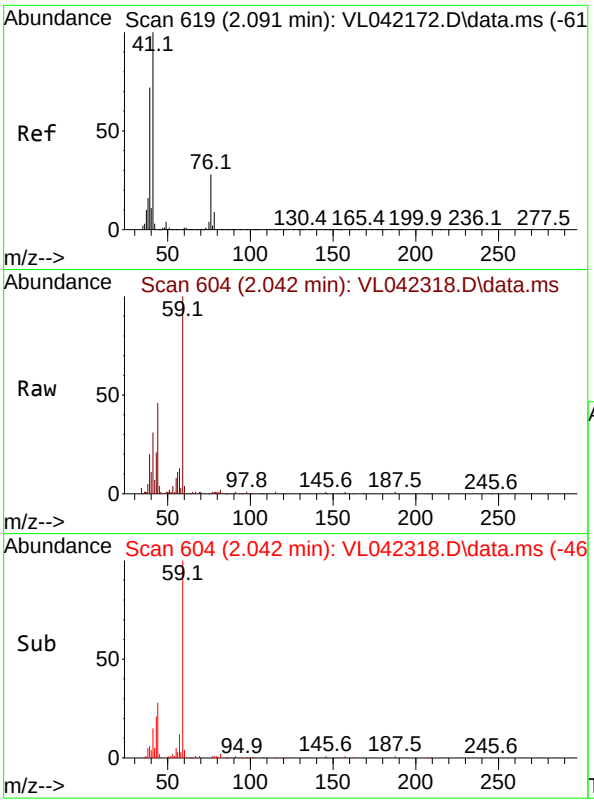


#20
Methylene Chloride
Concen: 1.630 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 84 Resp: 15544

Ion	Ratio	Lower	Upper
84	100		
49	166.8	120.2	180.4
51	46.4	37.4	56.0
86	58.9	52.4	78.6



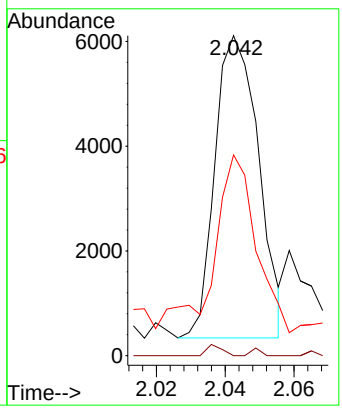


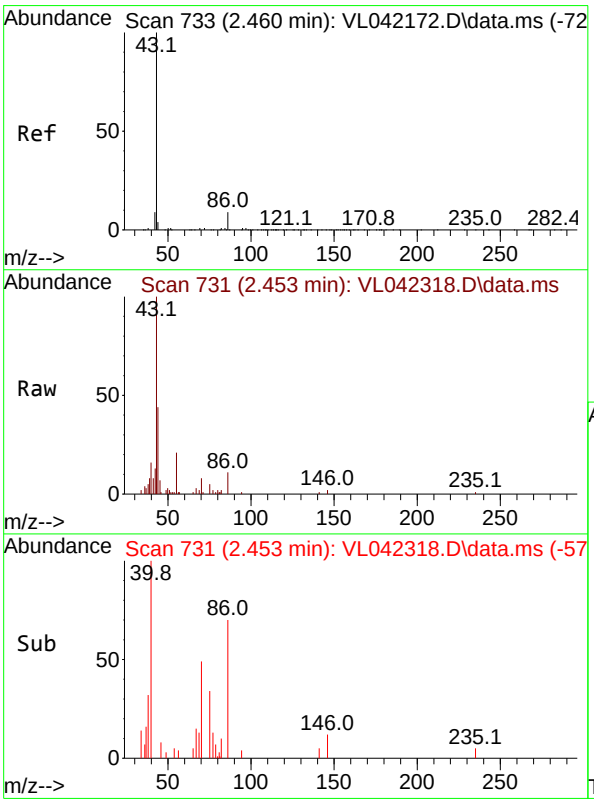
#21
Allyl Chloride
Concen: 0.282 ppbv
RT: 2.042 min Scan# 6
Delta R.T. -0.049 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 41 Resp: 5085

Ion	Ratio	Lower	Upper
41	100		
76	1.8	24.1	36.1#
39	0.0	61.1	91.7#

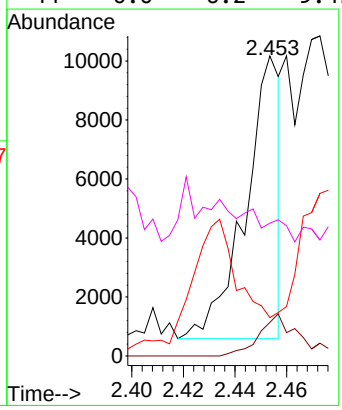


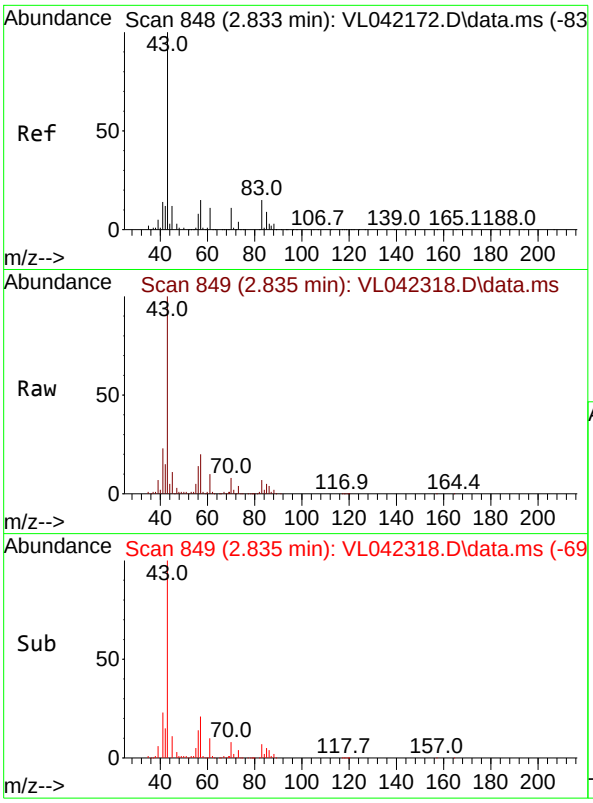


#23
Vinyl Acetate
Concen: 0.802 ppbv
RT: 2.453 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 43 Resp: 8887

Ion	Ratio	Lower	Upper
43	100		
86	11.0	5.5	8.3#
42	1.3	8.6	13.0#
44	0.0	6.2	9.4#



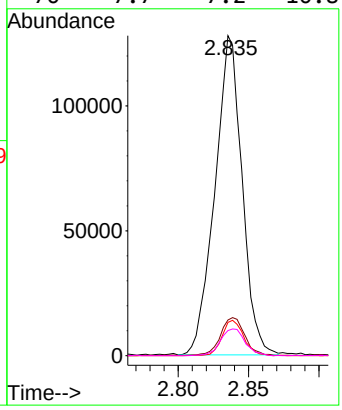


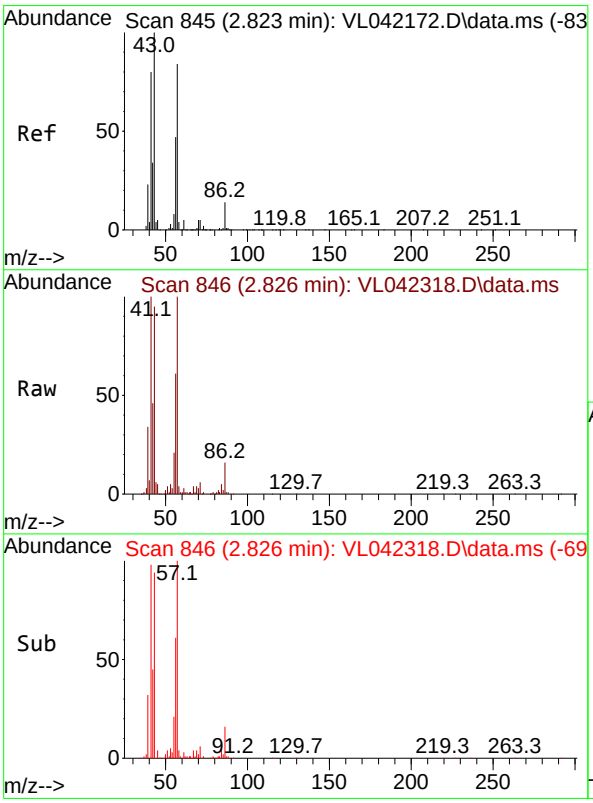
#25
Ethyl Acetate
Concen: 2.586 ppbv
RT: 2.835 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 43 Resp: 171845

Ion	Ratio	Lower	Upper
43	100		
45	11.0	8.2	12.2
61	8.9	7.3	10.9
70	7.7	7.2	10.8

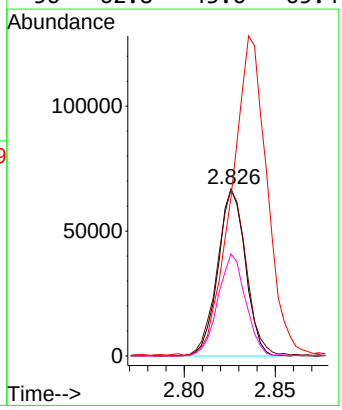


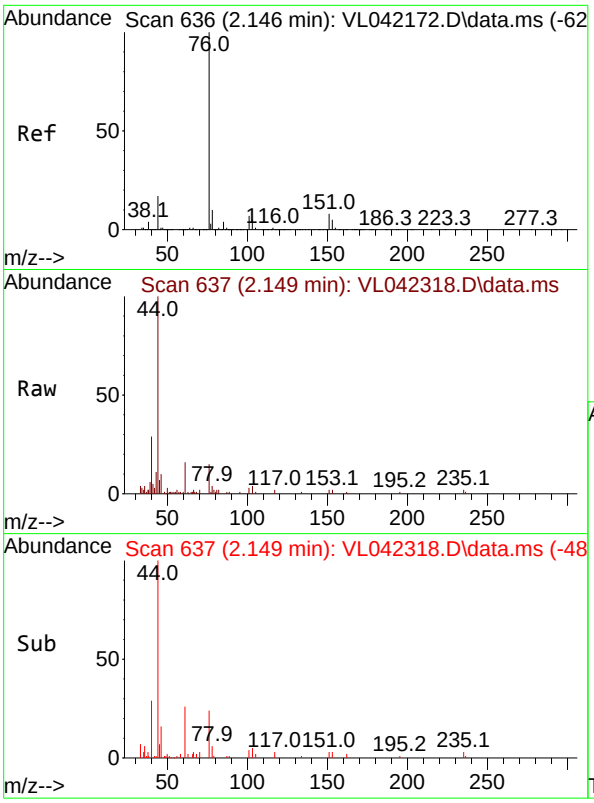


#26
Hexane
Concen: 2.715 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 57 Resp: 69684

Ion	Ratio	Lower	Upper
57	100		
41	105.3	76.6	114.8
43	249.9	207.8	311.8
56	62.8	43.6	65.4



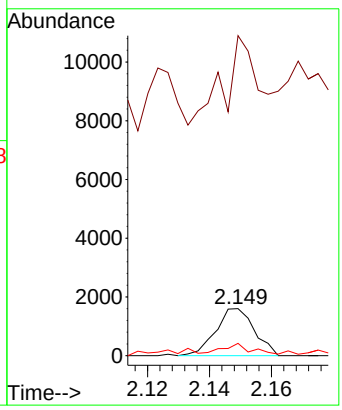


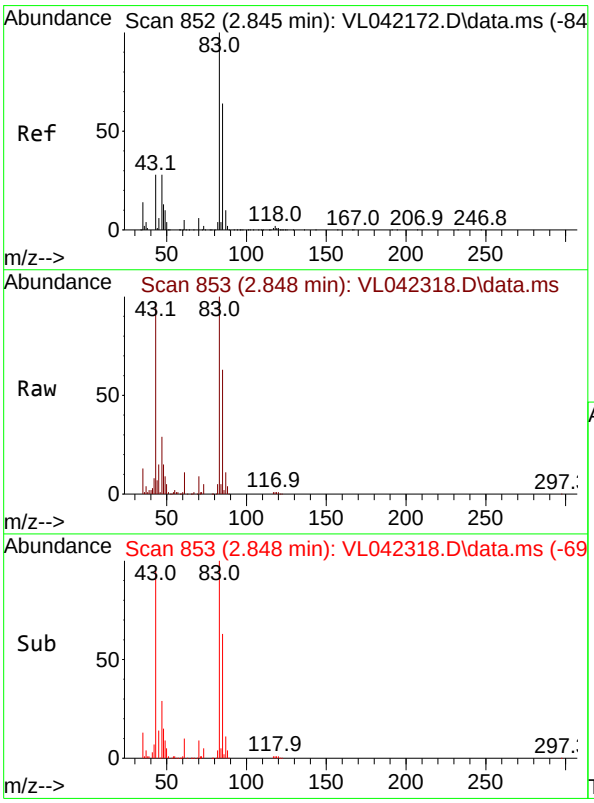
#27
Carbon Disulfide
Concen: 0.050 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 76 Resp: 1389

Ion	Ratio	Lower	Upper
76	100		
44	0.0	14.7	22.1#
78	46.8	9.3	13.9#

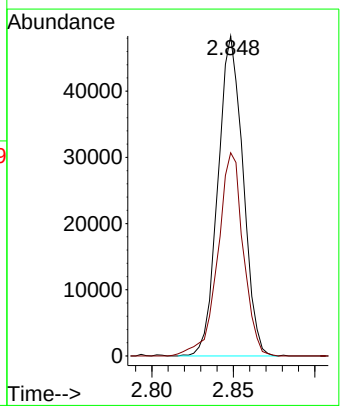


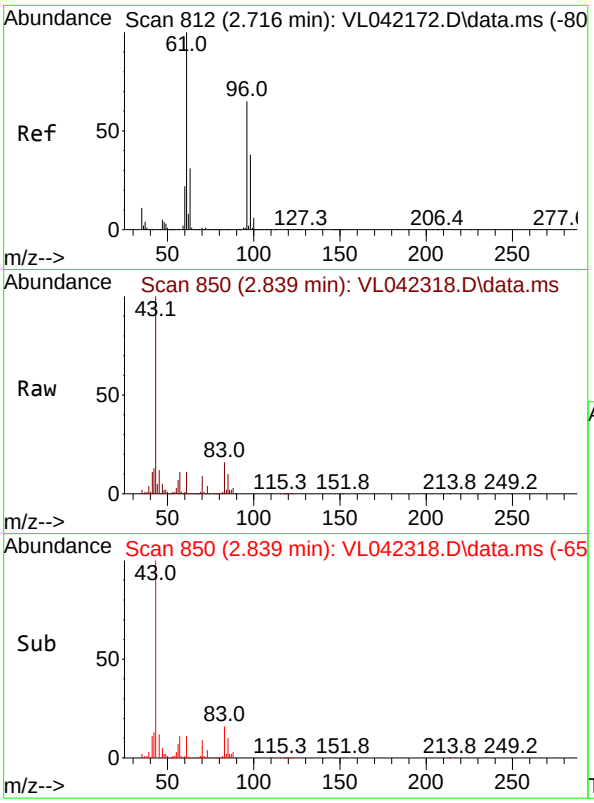


#29
Chloroform
Concen: 1.373 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 83 Resp: 51580

Ion	Ratio	Lower	Upper
83	100		
85	63.5	51.4	77.2



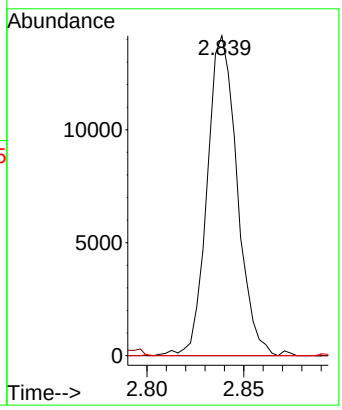


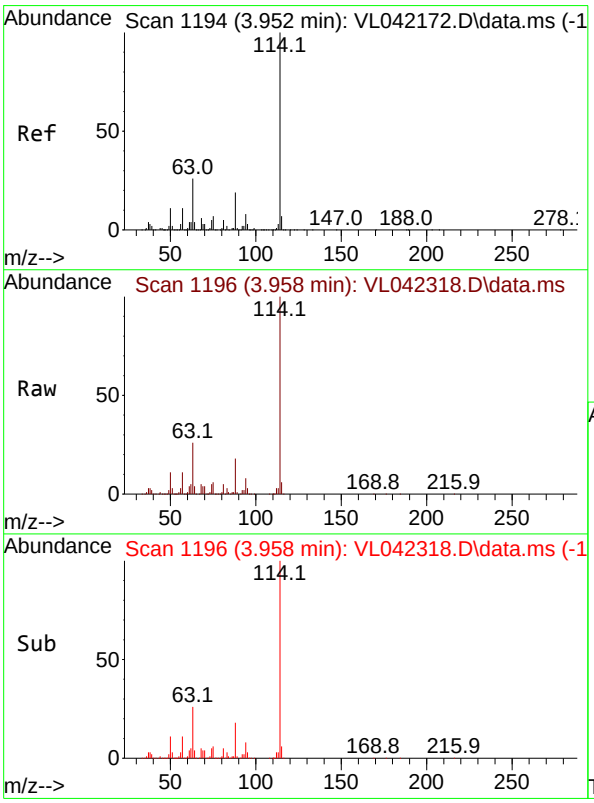
#31
cis-1,2-Dichloroethene
Concen: 0.581 ppbv
RT: 2.839 min Scan# 8
Delta R.T. 0.123 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 61 Resp: 15128

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.8	77.8#
98	0.0	30.6	46.0#

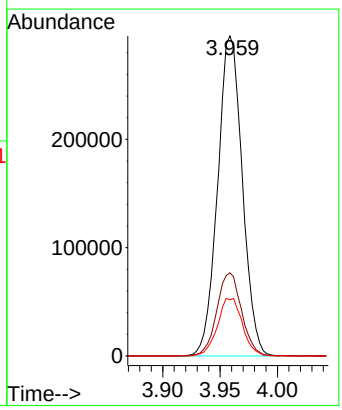


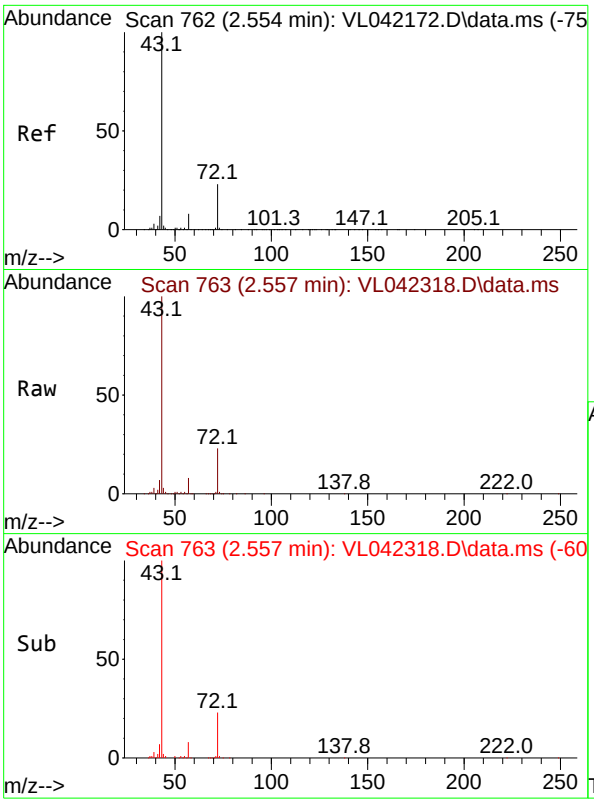


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.958 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:114 Resp: 442590

Ion	Ratio	Lower	Upper
114	100		
63	26.1	20.7	31.1
88	18.2	15.0	22.4



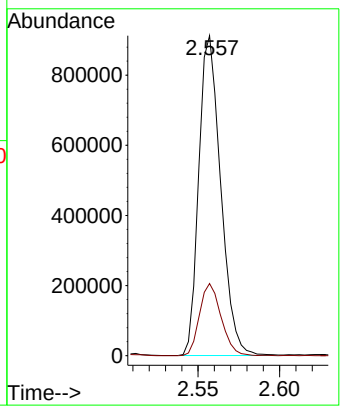


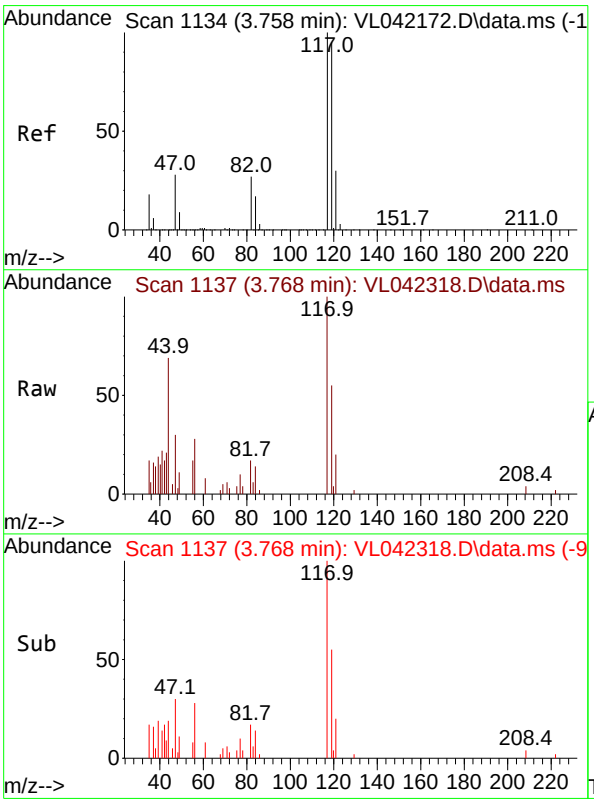
#34
2-Butanone
Concen: 26.579 ppbv
RT: 2.557 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 43 Resp: 853001

Ion	Ratio	Lower	Upper
43	100		
72	22.3	18.2	27.2

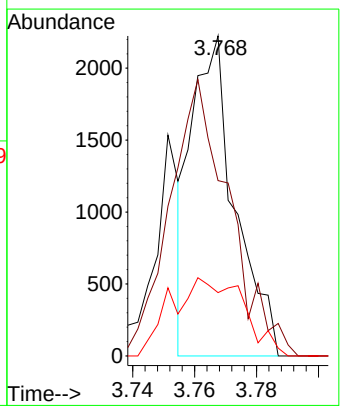


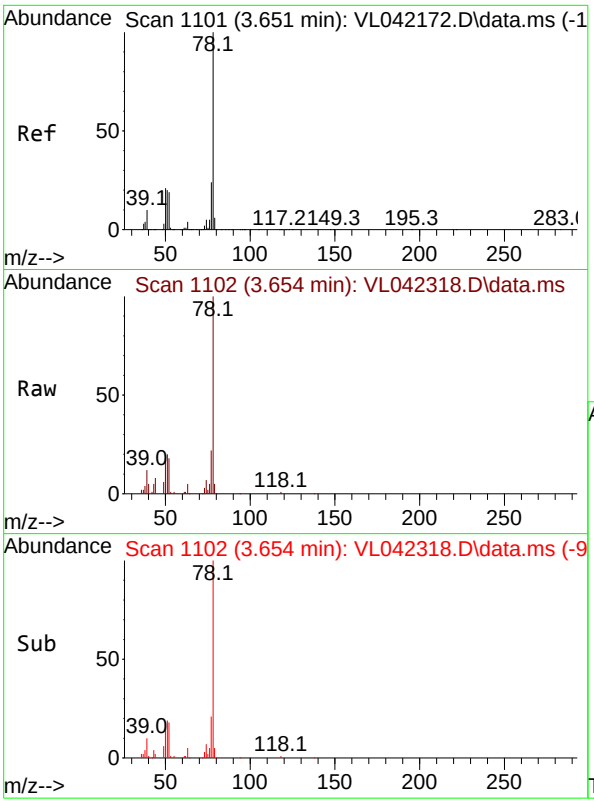


#35
Carbon Tetrachloride
Concen: 0.063 ppbv
RT: 3.768 min Scan# 1137
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:117 Resp: 2172

Ion	Ratio	Lower	Upper
117	100		
119	44.7	76.2	114.2#
121	17.4	24.2	36.4#



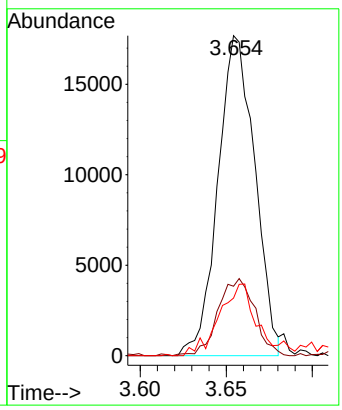


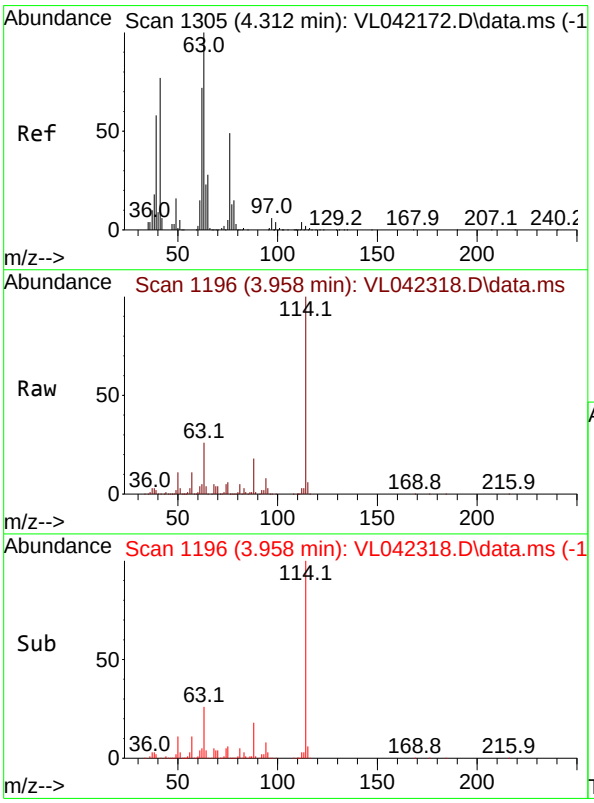
#36
Benzene
Concen: 0.601 ppbv
RT: 3.654 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 78 Resp: 26349

Ion	Ratio	Lower	Upper
78	100		
77	21.2	19.1	28.7
50	18.0	16.6	24.8

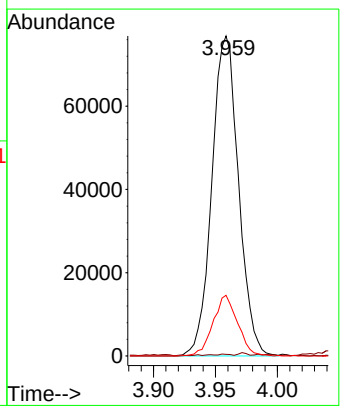


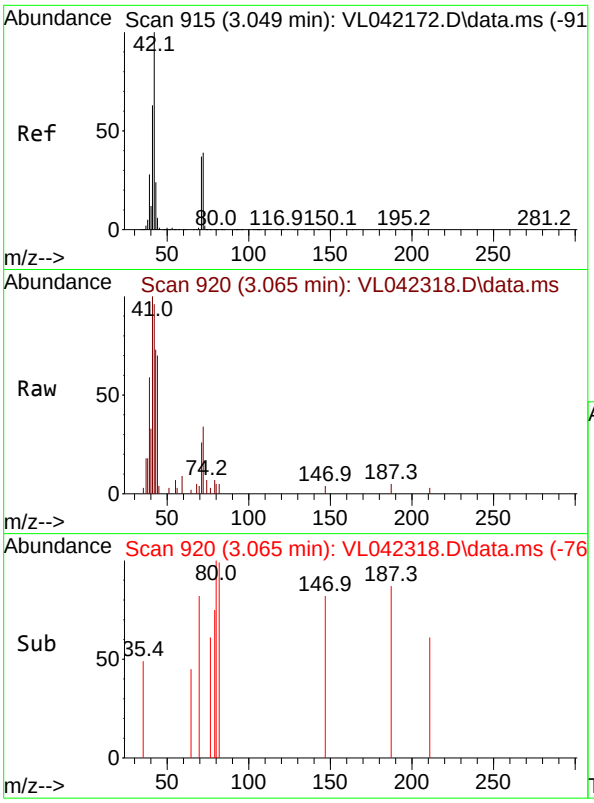


#39
1,2-Dichloropropane
Concen: 7.216 ppbv
RT: 3.958 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 63 Resp: 115306

Ion	Ratio	Lower	Upper
63	100		
41	0.4	61.7	92.5#
62	18.9	57.6	86.4#



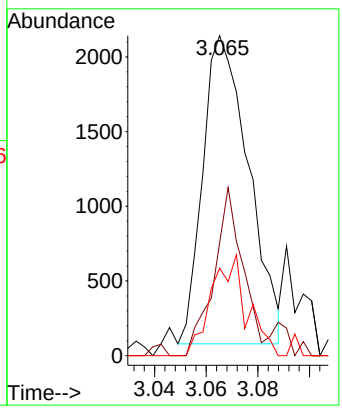


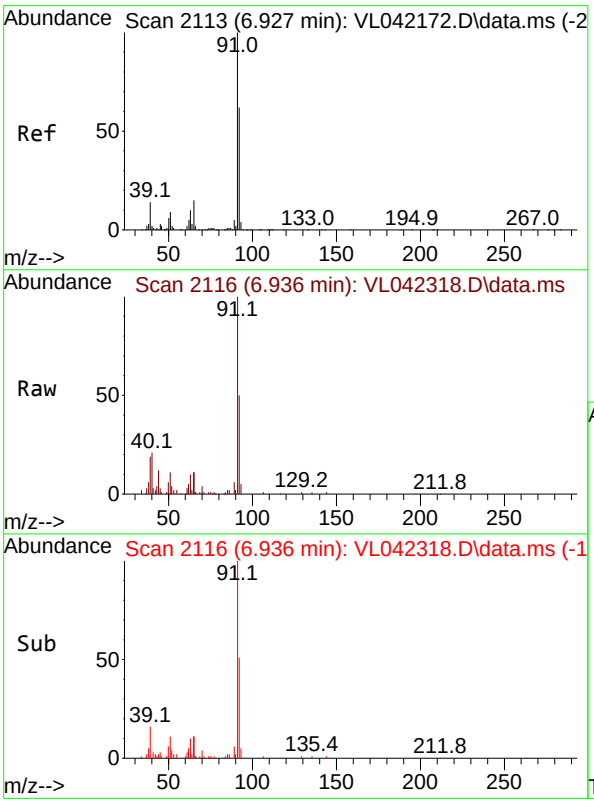
#41
Tetrahydrofuran
Concen: 0.137 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.016 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 42 Resp: 2536

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	26.5	30.2	45.4#

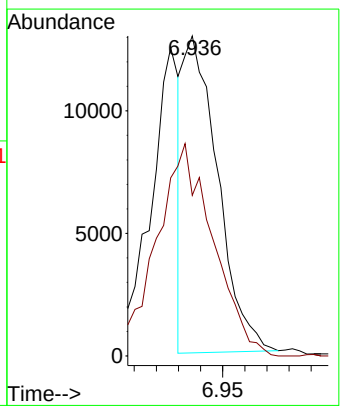


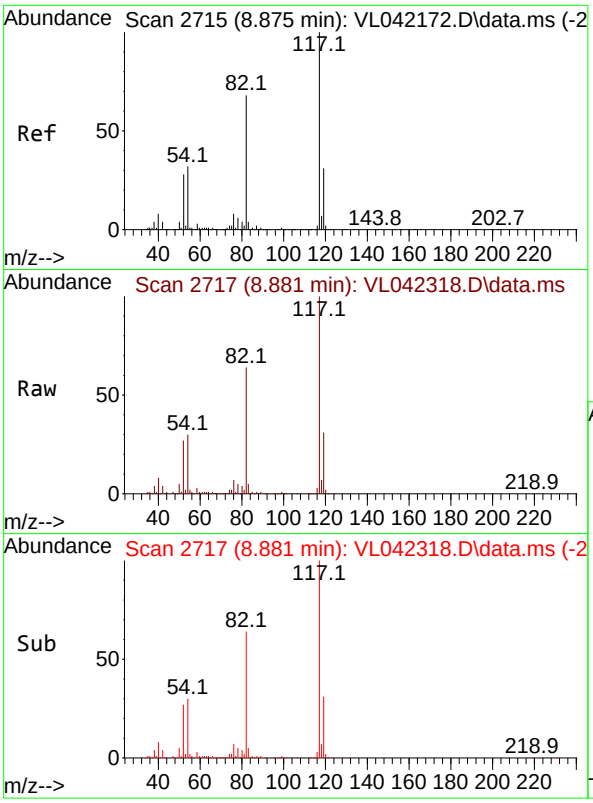


#53
Toluene
Concen: 0.269 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.009 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 13995

Ion	Ratio	Lower	Upper
91	100		
92	111.0	48.4	72.6#



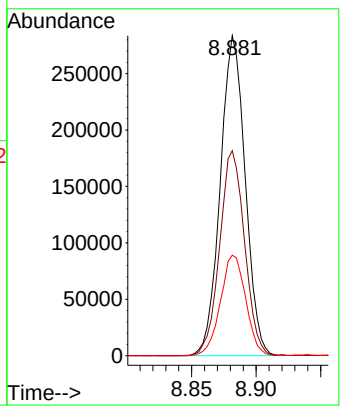


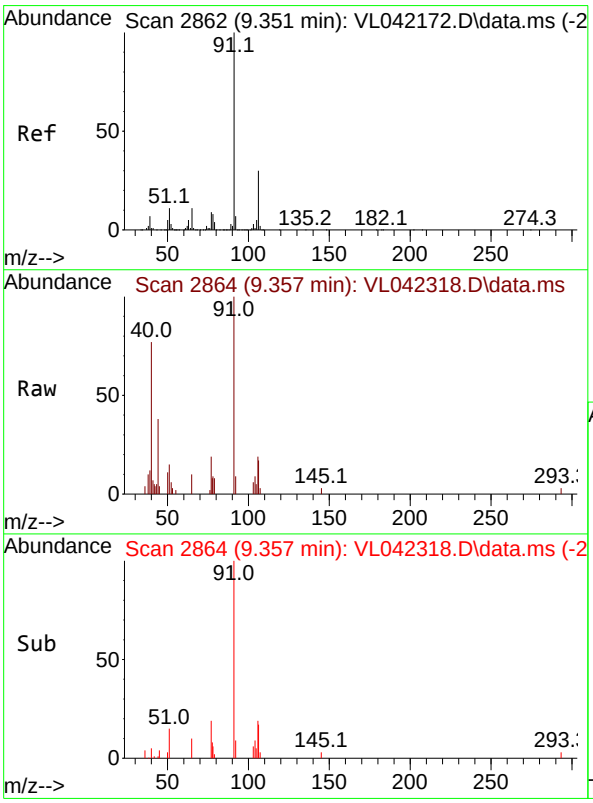
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion:117 Resp: 380933

Ion	Ratio	Lower	Upper
117	100		
82	64.2	55.8	83.6
119	31.9	25.5	38.3

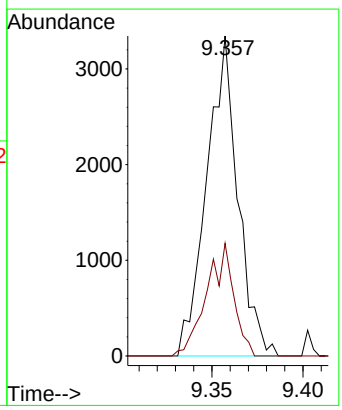


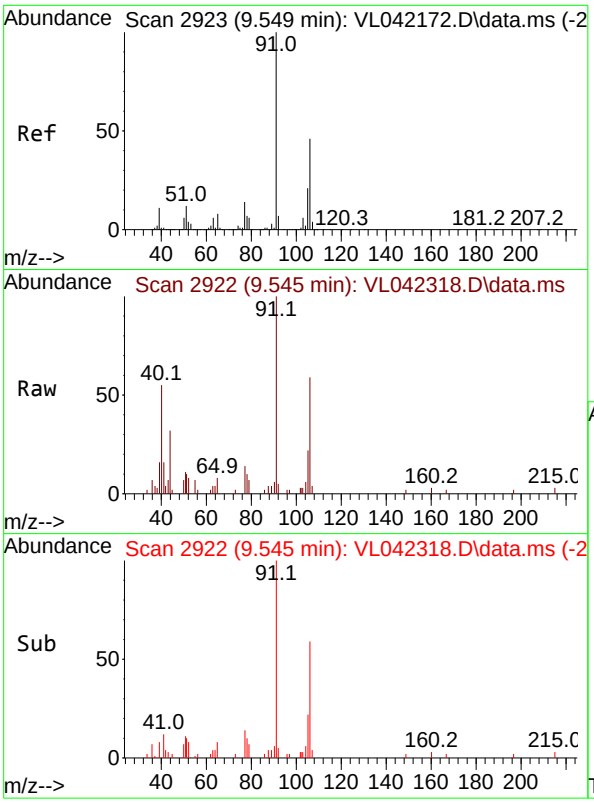


#58
Ethyl Benzene
Concen: 0.059 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 3973

Ion	Ratio	Lower	Upper
91	100		
106	35.2	24.2	36.2



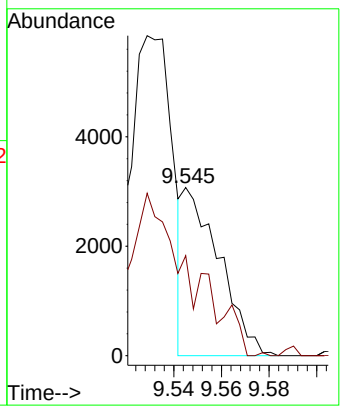


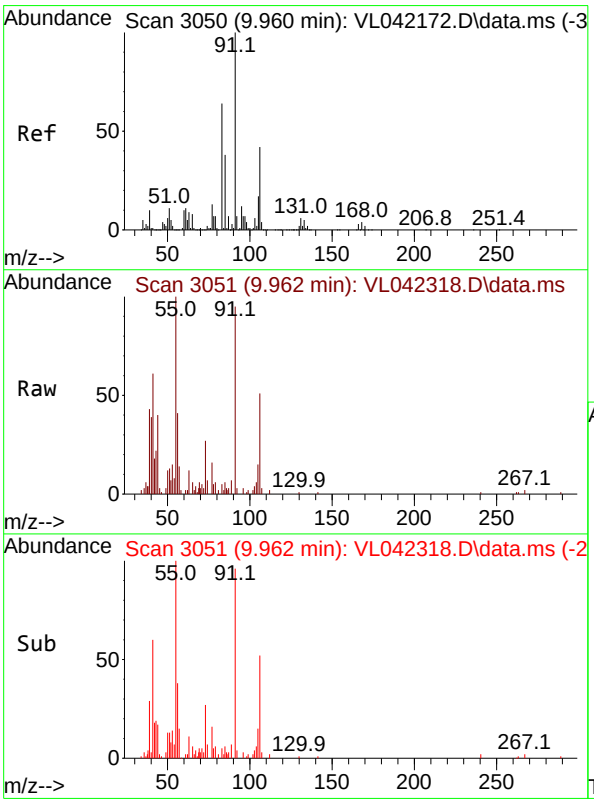
#59
m/p-Xylene
Concen: 0.061 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.004 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 91 Resp: 3275

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

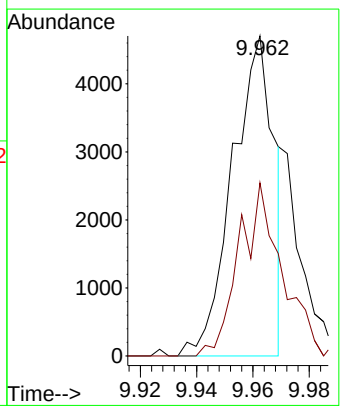


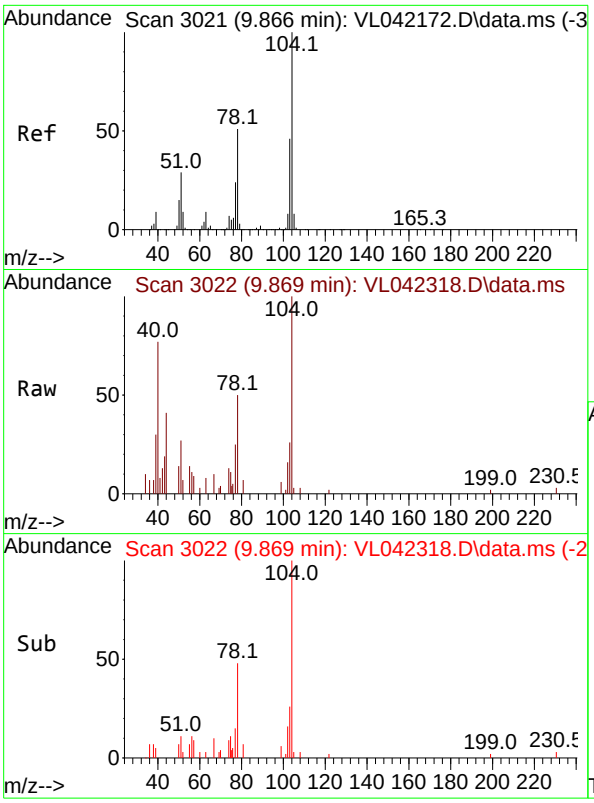


#60
o-Xylene
Concen: 0.089 ppbv
RT: 9.962 min Scan# 3051
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 4830

Ion	Ratio	Lower	Upper
91	100		
106	56.9	20.8	62.5



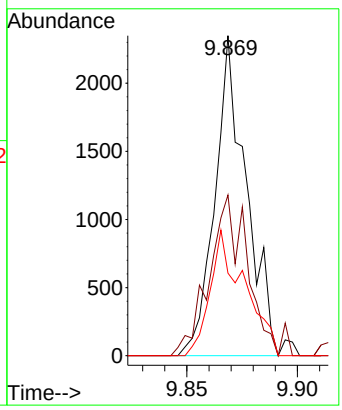


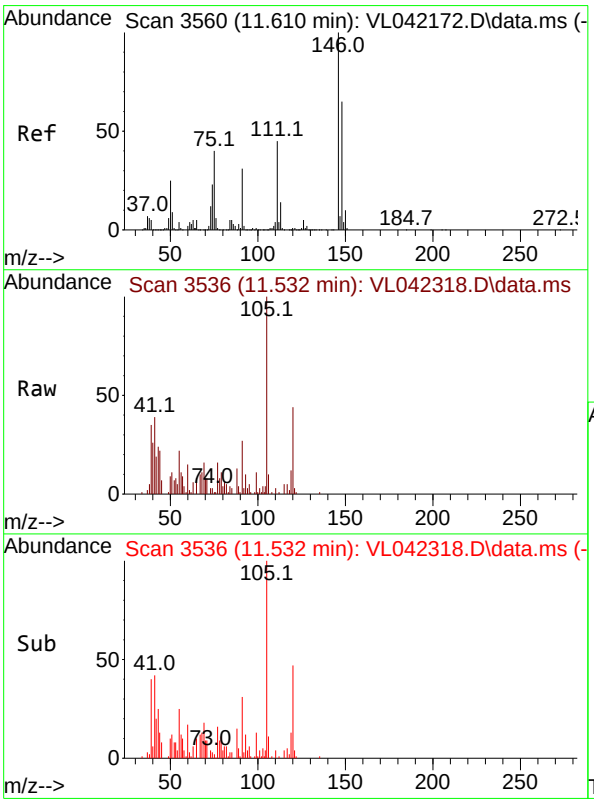
#61
Styrene
Concen: 0.086 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion:104 Resp: 2313

Ion	Ratio	Lower	Upper
104	100		
78	62.7	41.8	62.6#
103	43.0	37.0	55.4

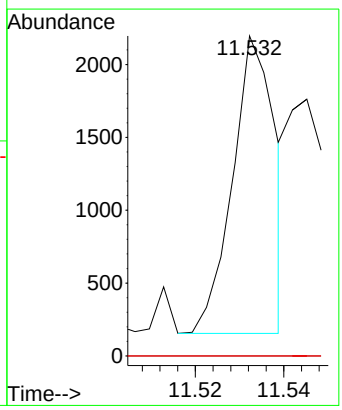


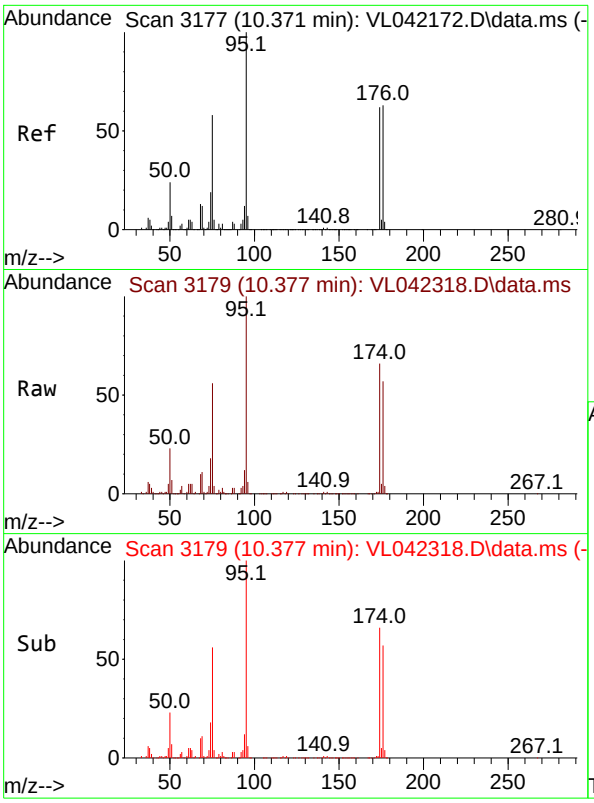


#66
Benzyl Chloride
Concen: 0.172 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.078 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion: 91 Resp: 1364

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	3.6	4.5	6.7#



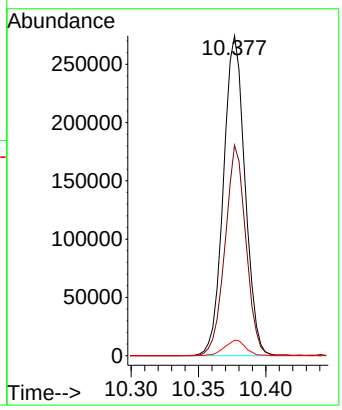


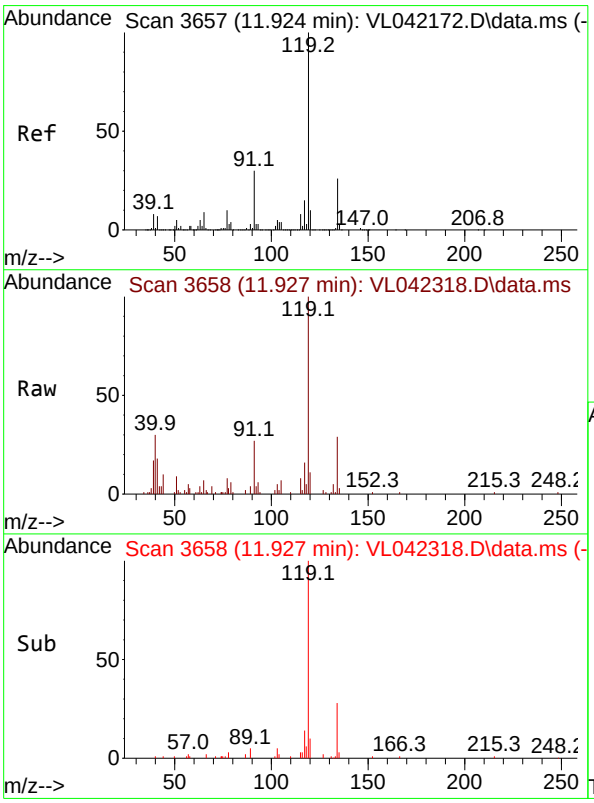
#68
1-Bromo-4-Fluorobenzene
Concen: 9.741 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion: 95 Resp: 304733

Ion	Ratio	Lower	Upper
95	100		
174	63.9	50.6	76.0
175	4.8	3.8	5.6

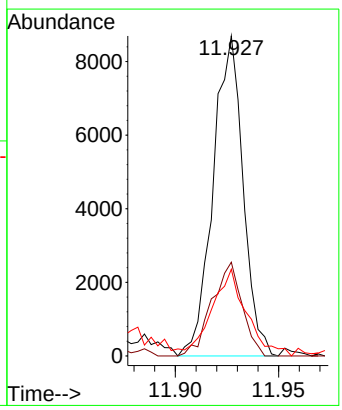


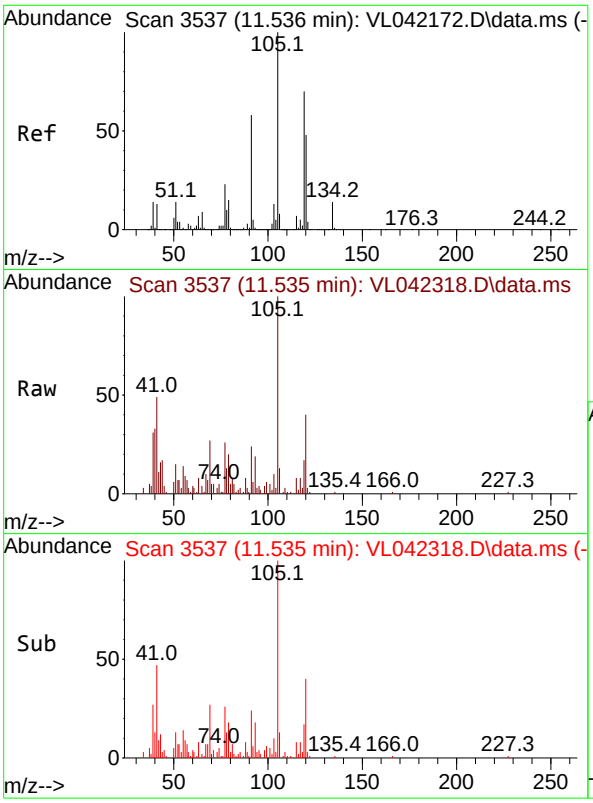


#69
p-Isopropyltoluene
Concen: 0.098 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. 0.003 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Tgt Ion:119 Resp: 8784

Ion	Ratio	Lower	Upper
119	100		
134	31.1	20.4	30.6#
91	0.0	23.7	35.5#



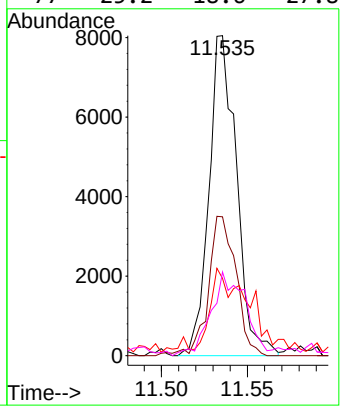


#74
1,2,4-Trimethylbenzene
Concen: 0.132 ppbv
RT: 11.535 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042318.D
Acq: 11 Apr 2025 13:52

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-2-3242025DUP

Tgt Ion:105 Resp: 8971

Ion	Ratio	Lower	Upper
105	100		
120	43.4	38.6	58.0
91	21.9	46.2	69.2#
77	25.2	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Quant Time: Apr 11 23:00:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

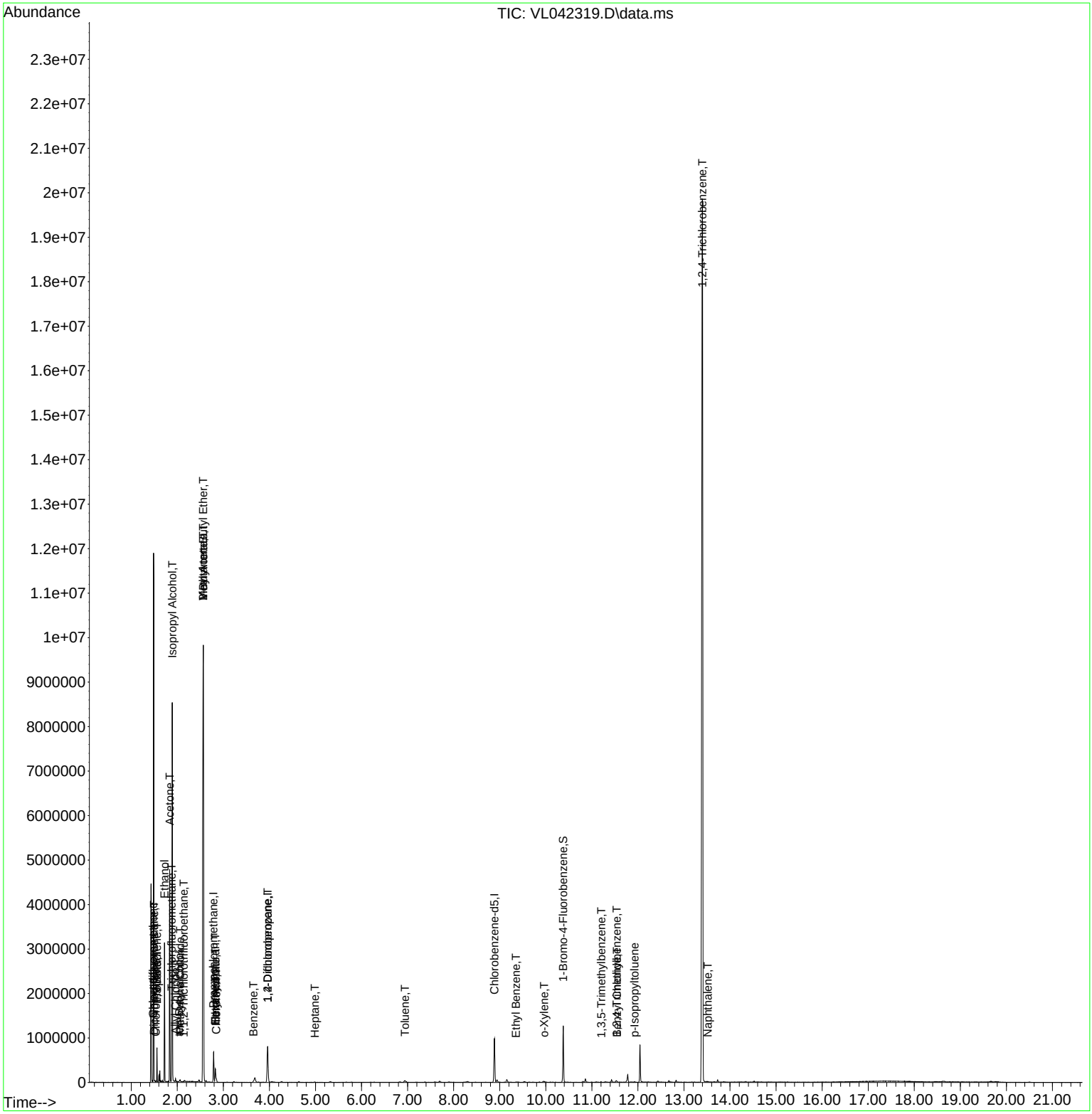
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	190778	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	461210	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	383940	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	301822	9.573	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 95.700%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10940	0.388	ppbv		100
3) Chlorodifluoromethane	1.476	51	18717	0.650	ppbv	#	84
4) Chloromethane	1.531	50	6976	0.606	ppbv		98
9) Propene	1.561	41	78643	5.962	ppbv		90
10) Heptane	4.985	43	2838	0.081	ppbv		98
11) Trichlorofluoromethane	1.878	101	5102	0.186	ppbv		87
12) 1,1,2-Trichlorotrifluo...	2.140	101	1629	0.072	ppbv		98
13) Ethanol	1.722	45	1088476	872.986	ppbv		86
15) Acetone	1.836	43	2047600	76.743	ppbv	#	79
16) 1,3-Butadiene	1.561	39	34457	2.644	ppbv	#	13
17) tert-Butyl alcohol	2.046	59	6995	0.210	ppbv	#	37
19) Isopropyl Alcohol	1.891	45	3151010	209.311	ppbv	#	32
20) Methylene Chloride	2.062	84	5890	0.593	ppbv		86
21) Allyl Chloride	1.962	41	8745	0.465	ppbv	#	21
23) Vinyl Acetate	2.564	43	5516146	477.676	ppbv	#	72
25) Ethyl Acetate	2.829	43	65016	0.939	ppbv	#	89
26) Hexane	2.826	57	60038	2.245	ppbv	#	4
28) Methyl tert-Butyl Ether	2.564	73	206262	12.386	ppbv	#	1
29) Chloroform	2.849	83	22740	0.581	ppbv		100
34) 2-Butanone	2.564	43	5516146	164.939	ppbv	#	36
36) Benzene	3.655	78	21386	0.468	ppbv	#	93
39) 1,2-Dichloropropane	3.962	63	118114	7.093	ppbv	#	24
41) Tetrahydrofuran	2.826	42	29308	1.522	ppbv	#	49
53) Toluene	6.946	91	6234	0.115	ppbv	#	20
58) Ethyl Benzene	9.354	91	3931	0.058	ppbv		95
60) o-Xylene	9.966	91	4483	0.082	ppbv		93
66) Benzyl Chloride	11.546	91	609	0.076	ppbv	#	69
69) p-Isopropyltoluene	11.927	119	3908	0.043	ppbv	#	87
73) 1,3,5-Trimethylbenzene	11.206	105	2285	0.038	ppbv		89
74) 1,2,4-Trimethylbenzene	11.539	105	7147	0.105	ppbv	#	67
79) Naphthalene	13.517	128	5078	0.068	ppbv	#	94
81) 1,2,4-Trichlorobenzene	13.400	180	82529	2.392	ppbv	#	19

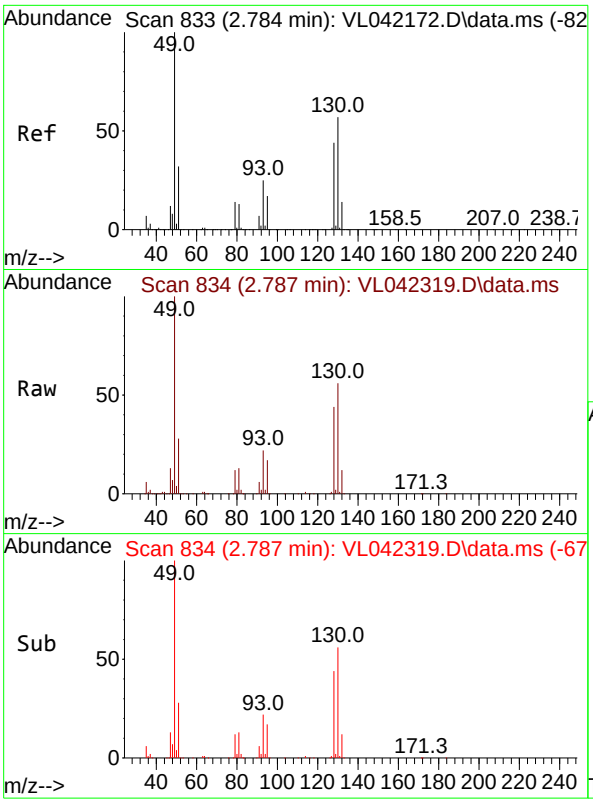
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042319.D
Acq On : 11 Apr 2025 14:27
Operator : SY/MD
Sample : Q1665-10
Misc : 400mL/MSVOA_L
ALS Vial : 2 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Quant Time: Apr 11 23:00:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



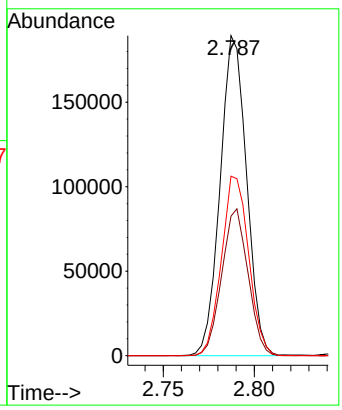


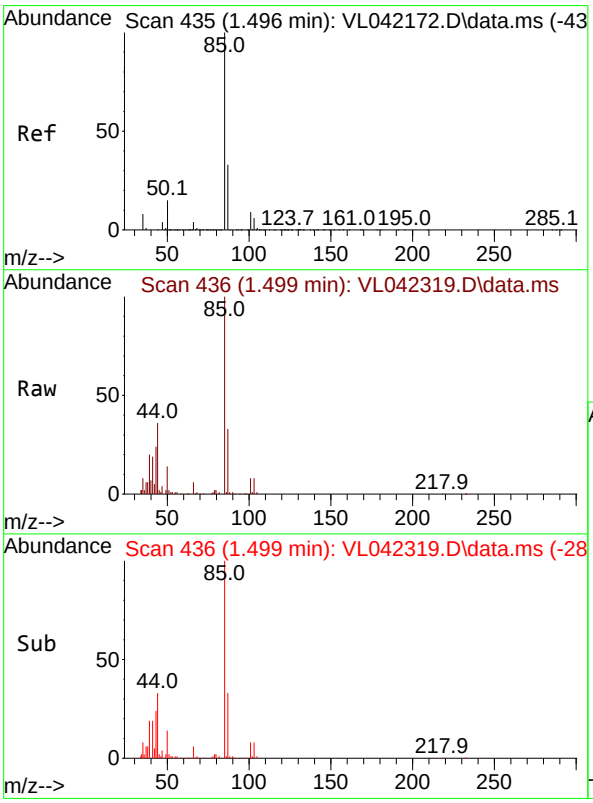
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 49 Resp: 190778

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.8	28.8	86.4

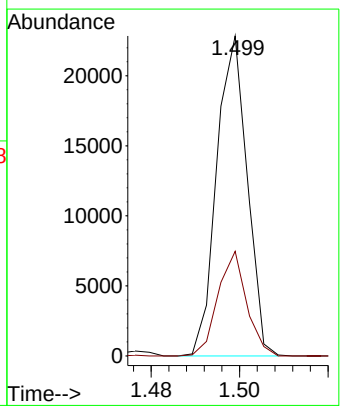


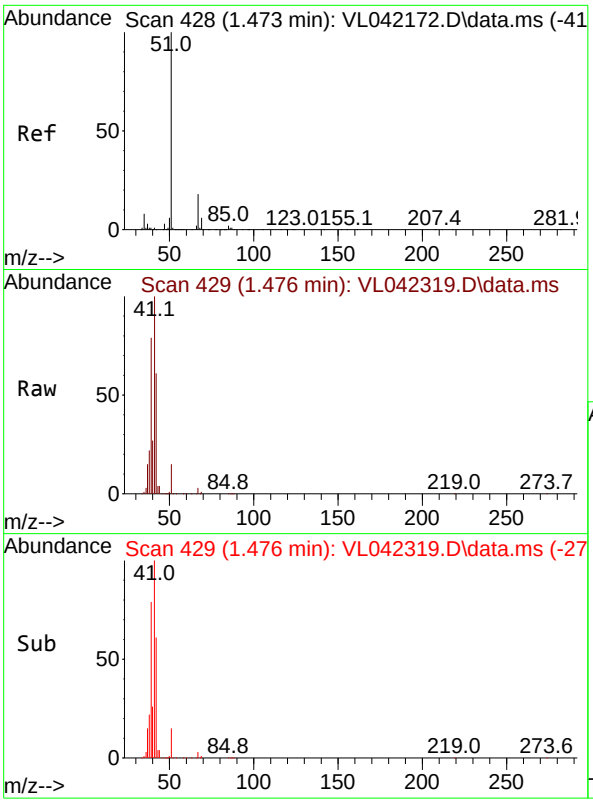


#2
Dichlorodifluoromethane
Concen: 0.388 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 85 Resp: 10940

Ion	Ratio	Lower	Upper
85	100		
87	32.7	26.1	39.1



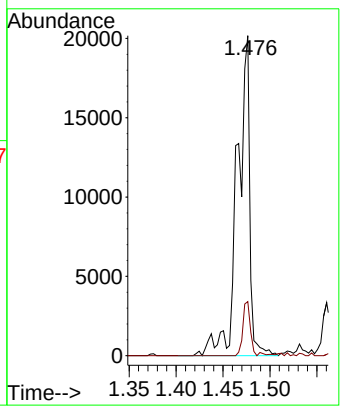


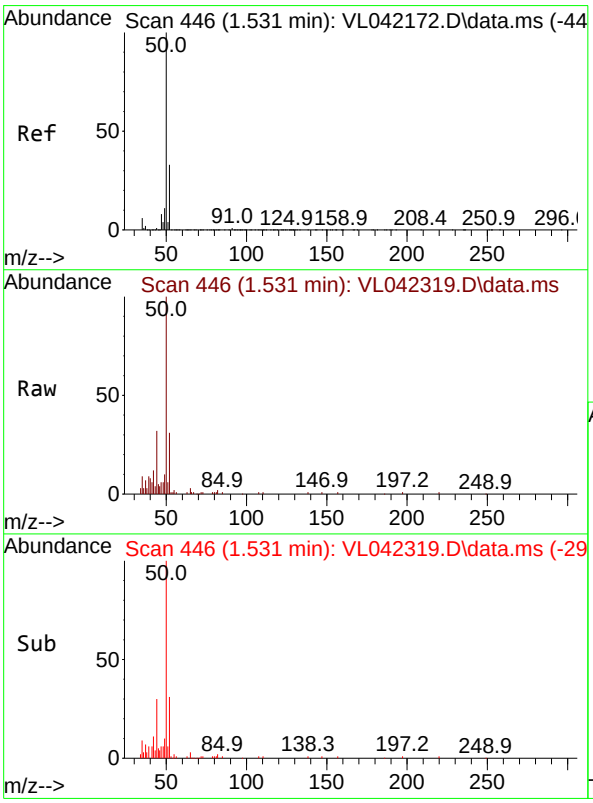
#3
Chlorodifluoromethane
Concen: 0.650 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 51 Resp: 18717

Ion	Ratio	Lower	Upper
51	100		
67	11.4	15.0	22.6#

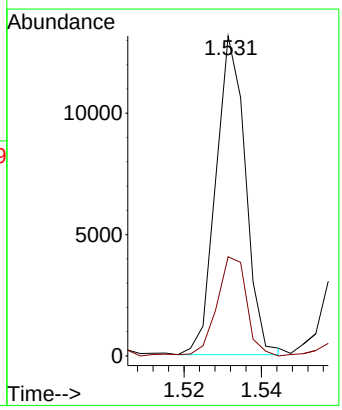


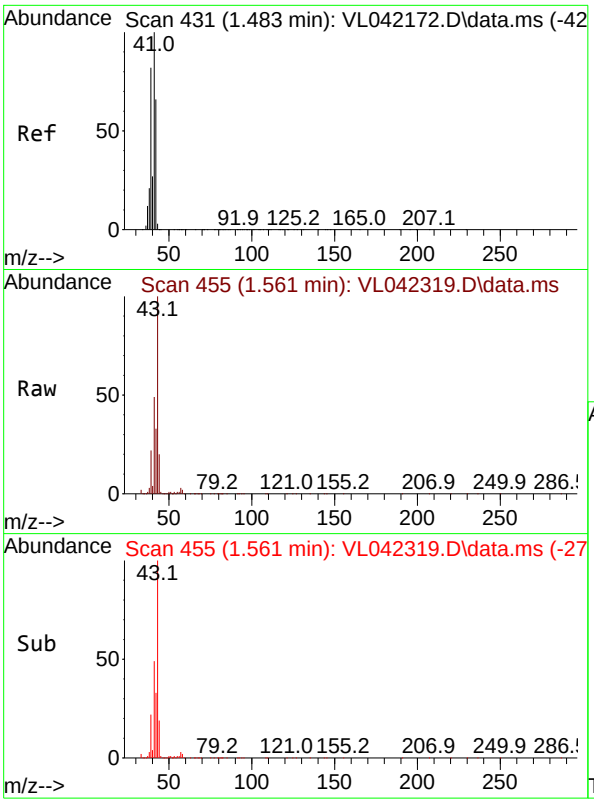


#4
Chloromethane
Concen: 0.606 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 50 Resp: 6976

Ion	Ratio	Lower	Upper
50	100		
52	31.5	26.1	39.1



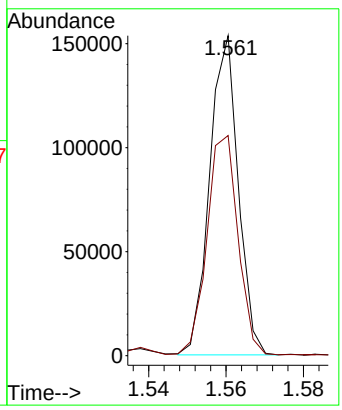


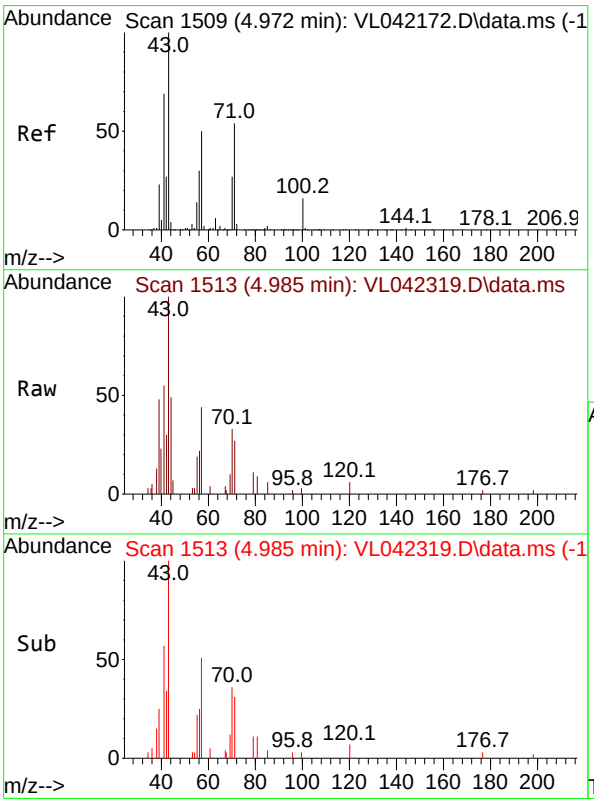
#9
Propene
Concen: 5.962 ppbv
RT: 1.561 min Scan# 4
Delta R.T. 0.078 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 41 Resp: 78643

Ion	Ratio	Lower	Upper
41	100		
42	77.3	55.4	83.2

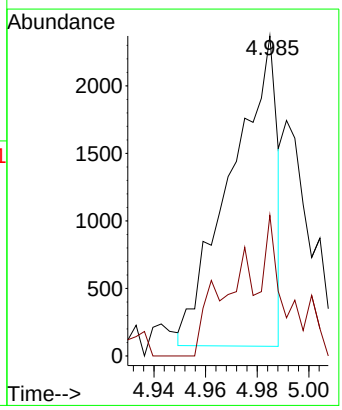


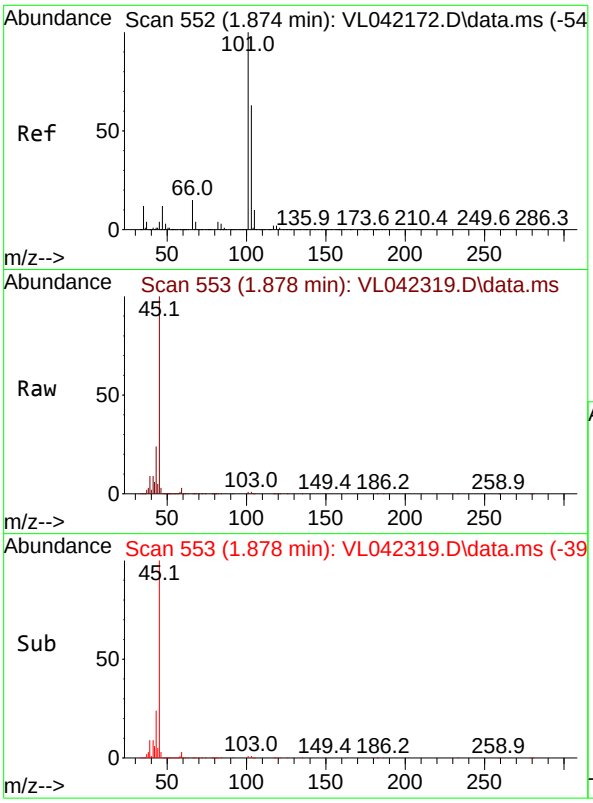


#10
Heptane
Concen: 0.081 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.013 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 2838

Ion	Ratio	Lower	Upper
43	100		
57	48.2	39.4	59.2



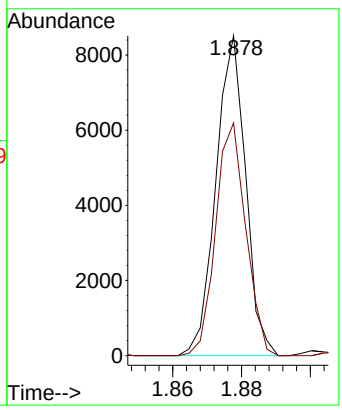


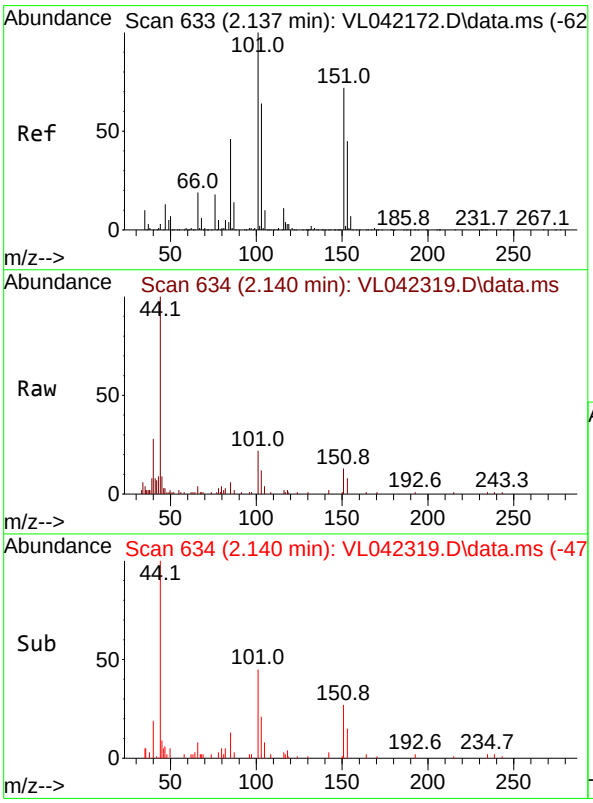
#11
Trichlorofluoromethane
Concen: 0.186 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion:101 Resp: 5102

Ion	Ratio	Lower	Upper
101	100		
103	72.7	50.2	75.2

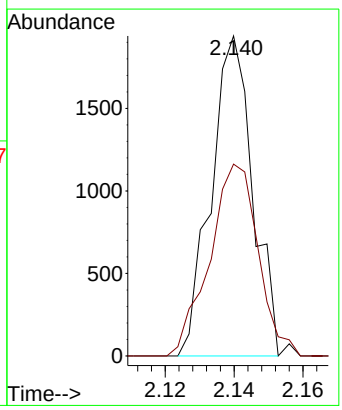


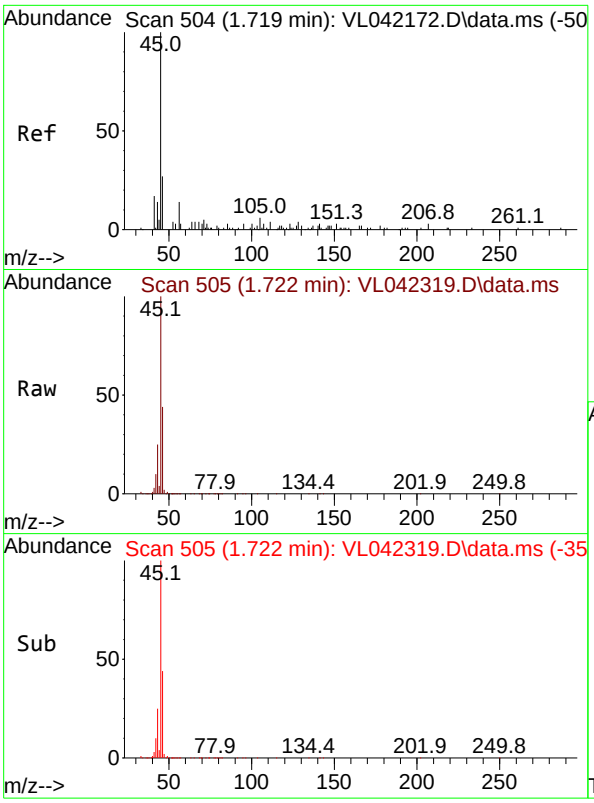


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.072 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:101 Resp: 1629

Ion	Ratio	Lower	Upper
101	100		
151	70.0	57.1	85.7



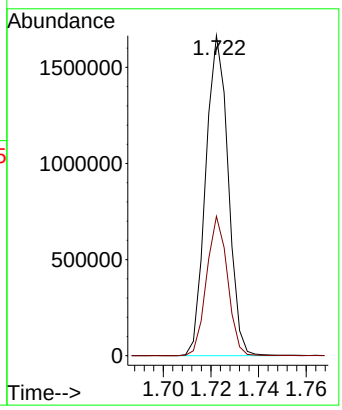


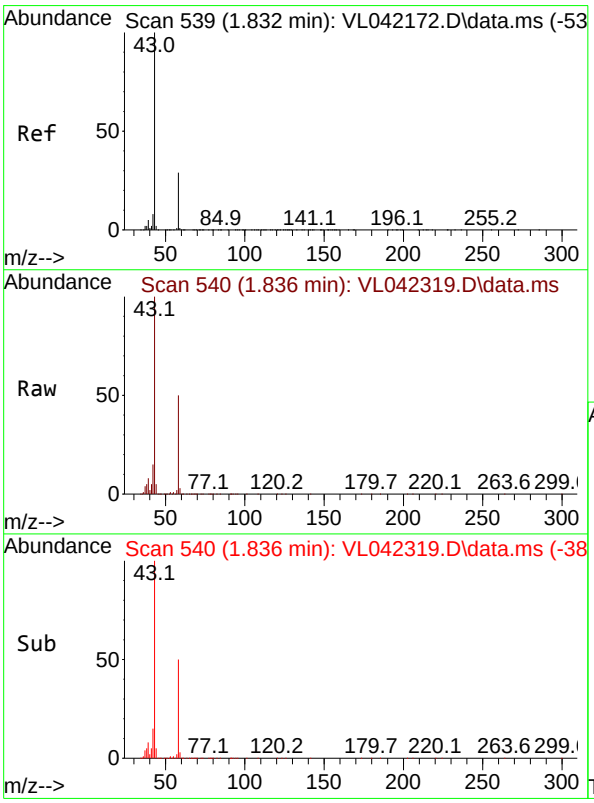
#13
Ethanol
Concen: 872.986 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 45 Resp: 1088476

Ion	Ratio	Lower	Upper
45	100		
46	40.7	20.2	80.8

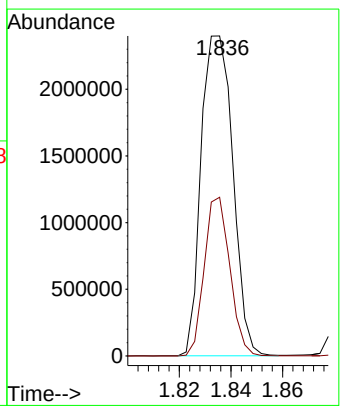


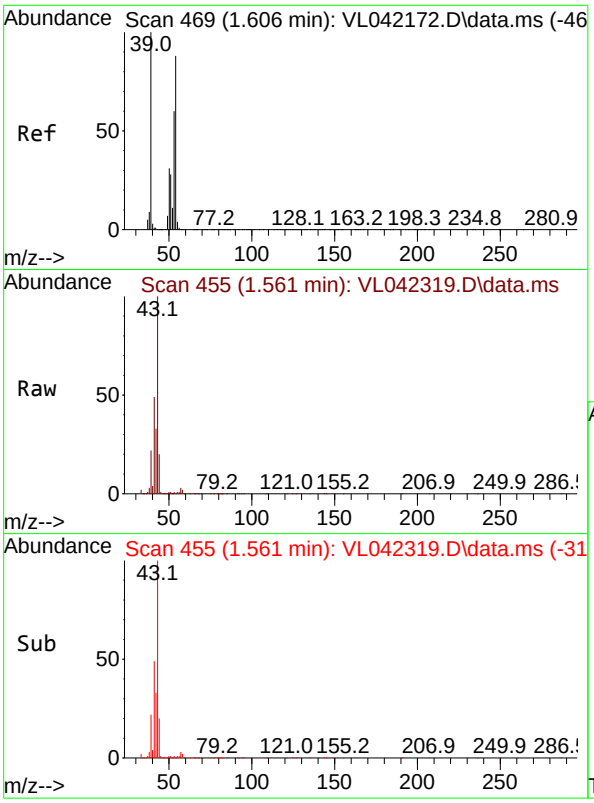


#15
Acetone
Concen: 76.743 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 2047600

Ion	Ratio	Lower	Upper
43	100		
58	40.0	23.2	34.8#



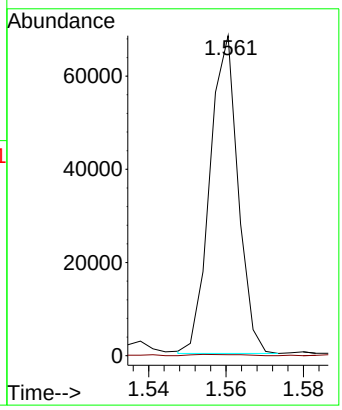


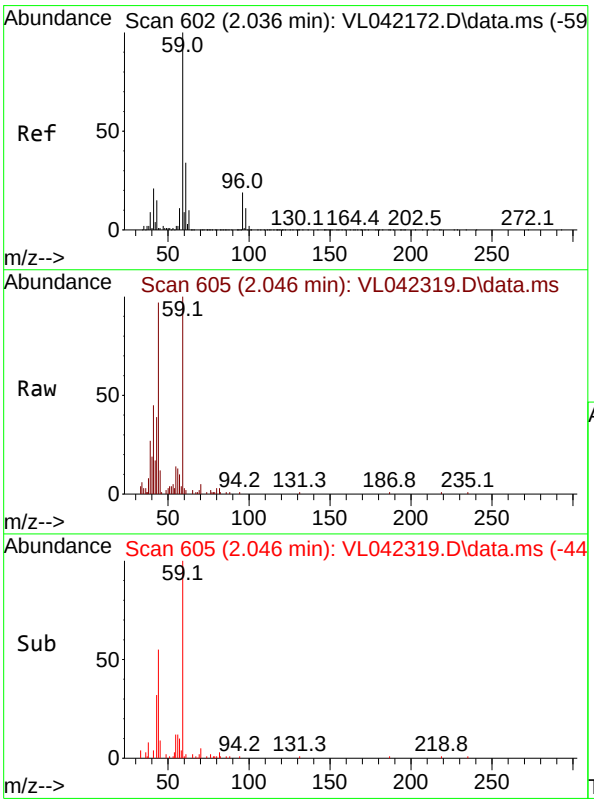
#16
1,3-Butadiene
Concen: 2.644 ppbv
RT: 1.561 min Scan# 4
Delta R.T. -0.045 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 39 Resp: 34457

Ion	Ratio	Lower	Upper
39	100		
54	0.9	60.7	91.1#

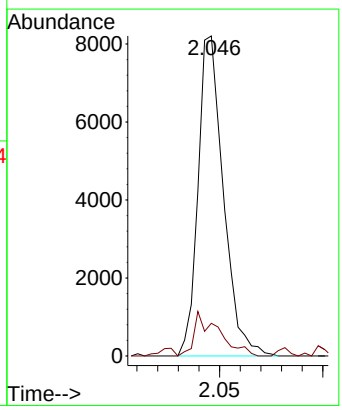


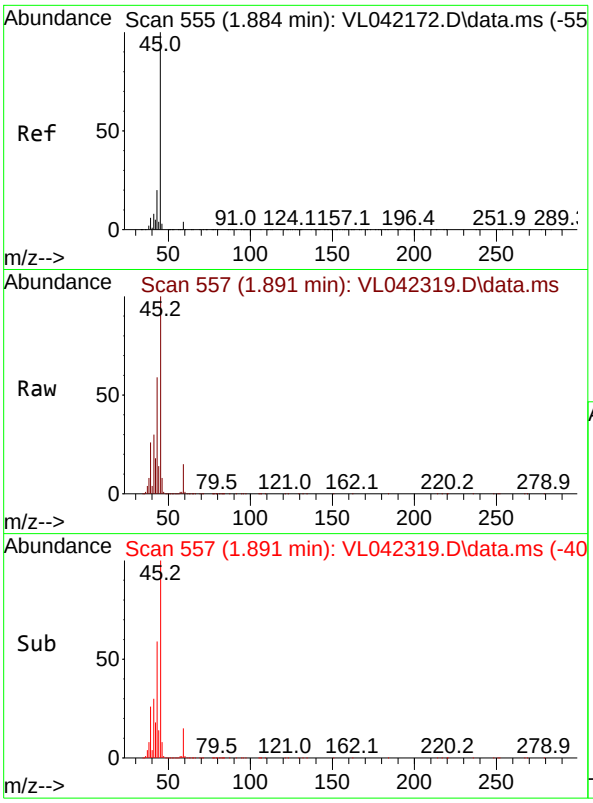


#17
tert-Butyl alcohol
Concen: 0.210 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 59 Resp: 6995

Ion	Ratio	Lower	Upper
59	100		
57	35.0	8.9	13.3#



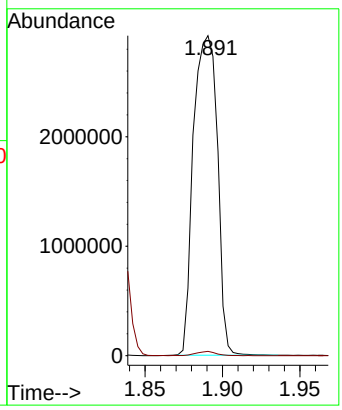


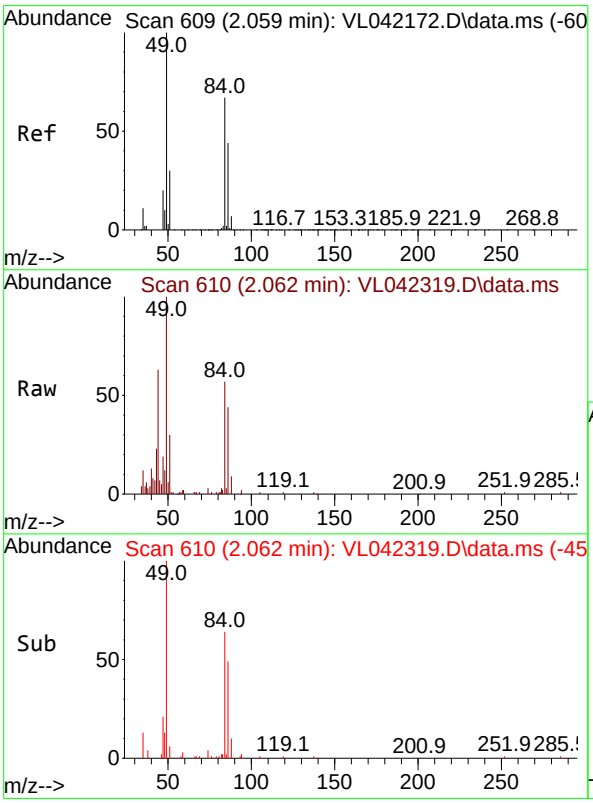
#19
Isopropyl Alcohol
Concen: 209.311 ppbv
RT: 1.891 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 45 Resp: 3151010

Ion	Ratio	Lower	Upper
45	100		
58	1.1	36.9	55.3#

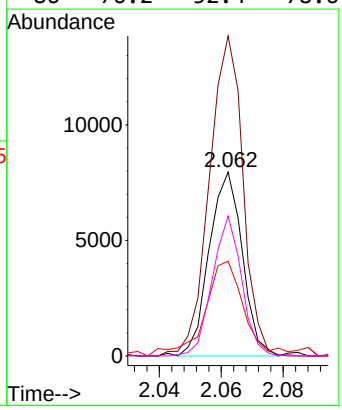


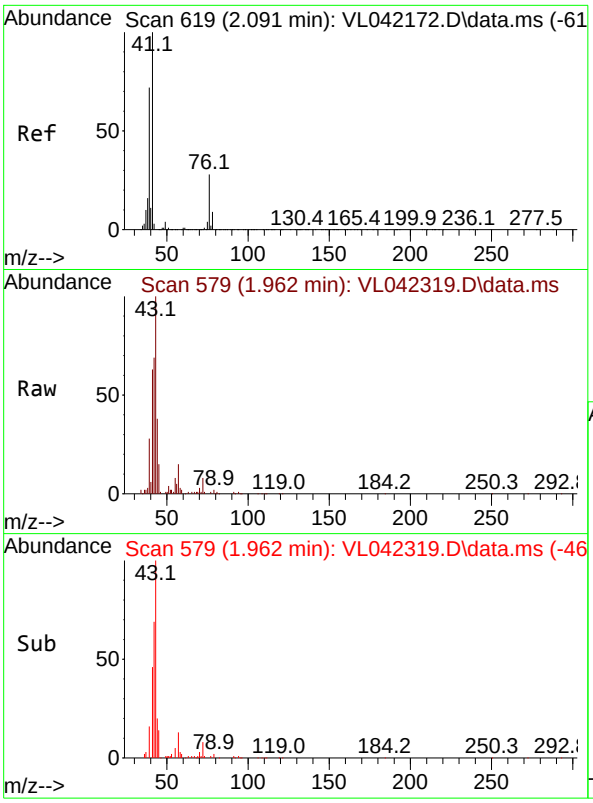


#20
Methylene Chloride
Concen: 0.593 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 84 Resp: 5890

Ion	Ratio	Lower	Upper
84	100		
49	173.3	120.2	180.4
51	47.2	37.4	56.0
86	76.2	52.4	78.6



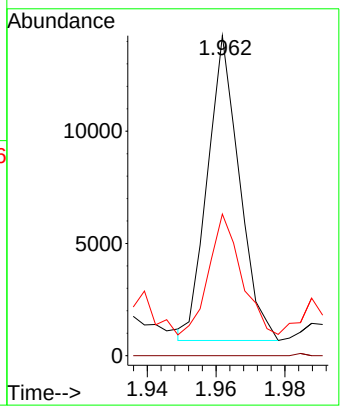


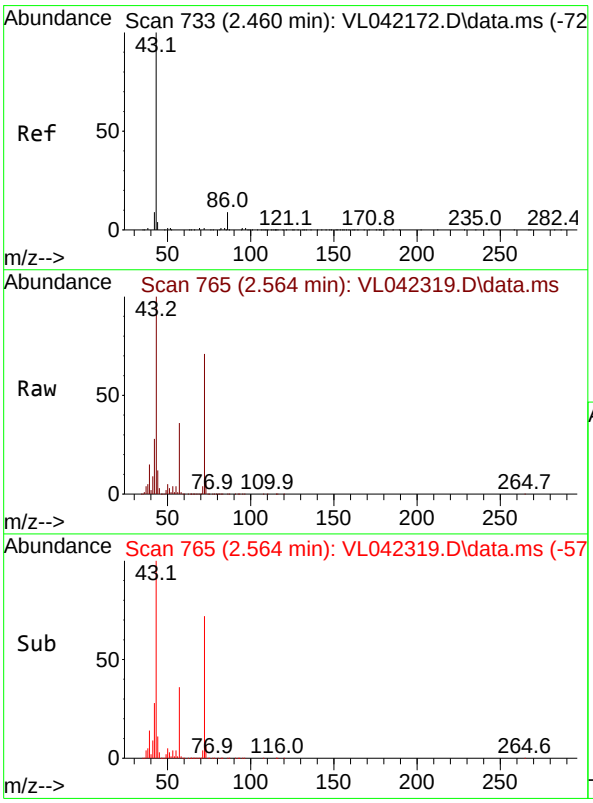
#21
Allyl Chloride
Concen: 0.465 ppbv
RT: 1.962 min Scan# 5
Delta R.T. -0.129 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 41 Resp: 8745

Ion	Ratio	Lower	Upper
41	100		
76	1.4	24.1	36.1#
39	0.0	61.1	91.7#

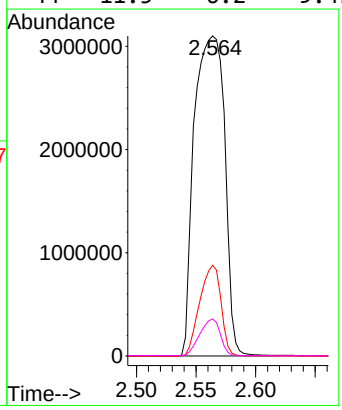


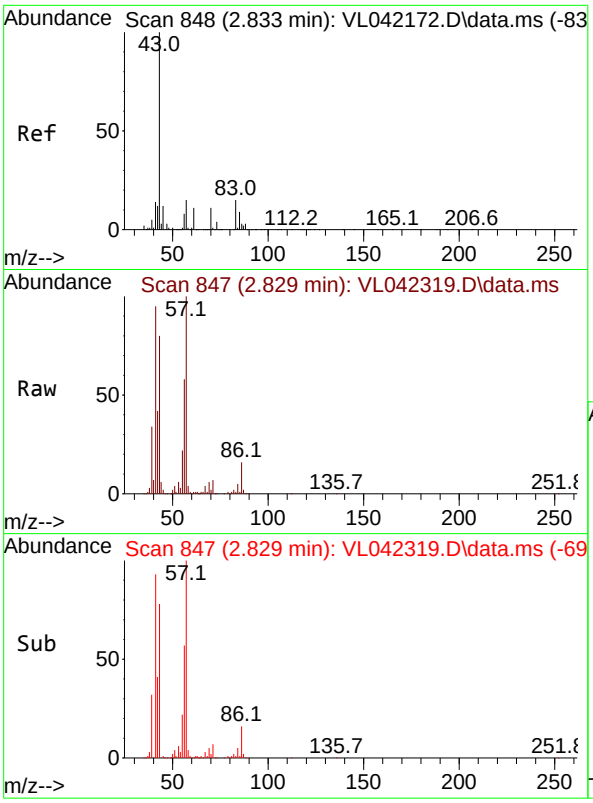


#23
Vinyl Acetate
Concen: 477.676 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.104 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 5516146

Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.5	8.3#
42	28.3	8.6	13.0#
44	11.5	6.2	9.4#



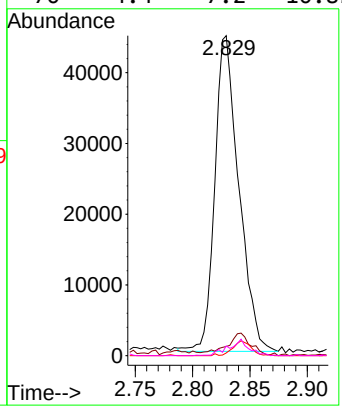


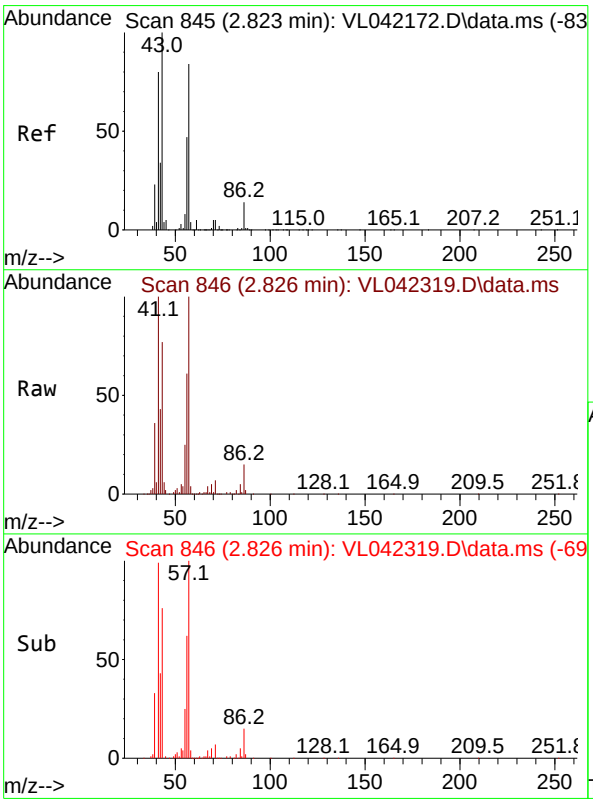
#25
Ethyl Acetate
Concen: 0.939 ppbv
RT: 2.829 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 43 Resp: 65016

Ion	Ratio	Lower	Upper
43	100		
45	8.3	8.2	12.2
61	3.6	7.3	10.9#
70	4.4	7.2	10.8#

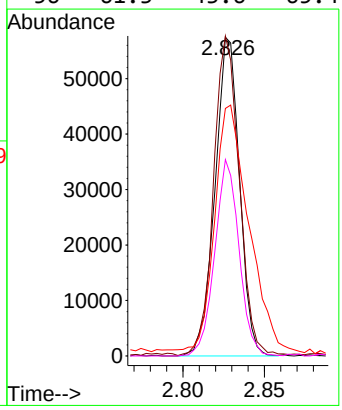


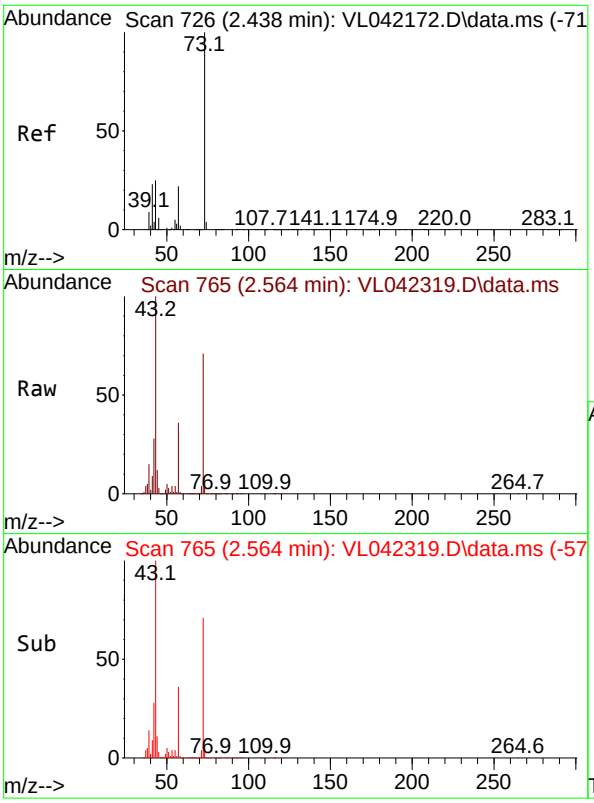


#26
Hexane
Concen: 2.245 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 57 Resp: 60038

Ion	Ratio	Lower	Upper
57	100		
41	106.2	76.6	114.8
43	0.0	207.8	311.8#
56	61.3	43.6	65.4



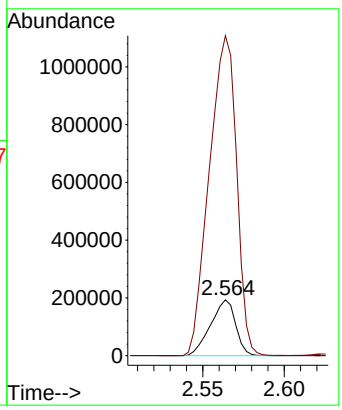


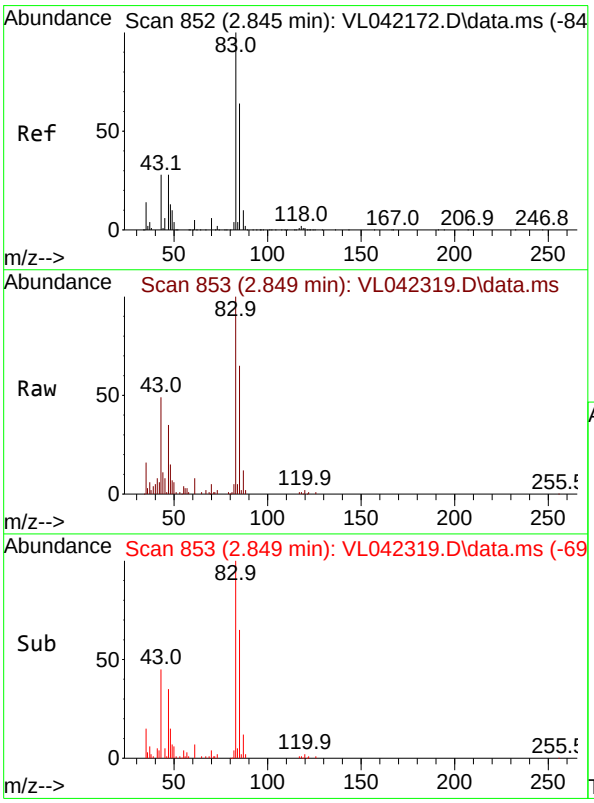
#28
Methyl tert-Butyl Ether
Concen: 12.386 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.126 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 73 Resp: 206262

Ion	Ratio	Lower	Upper
73	100		
57	627.1	20.5	30.7#

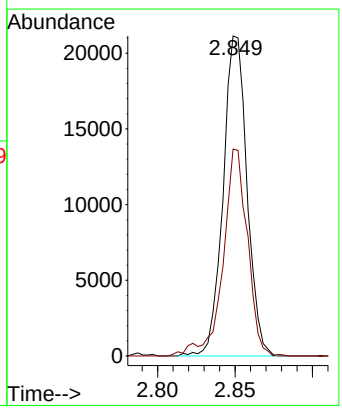


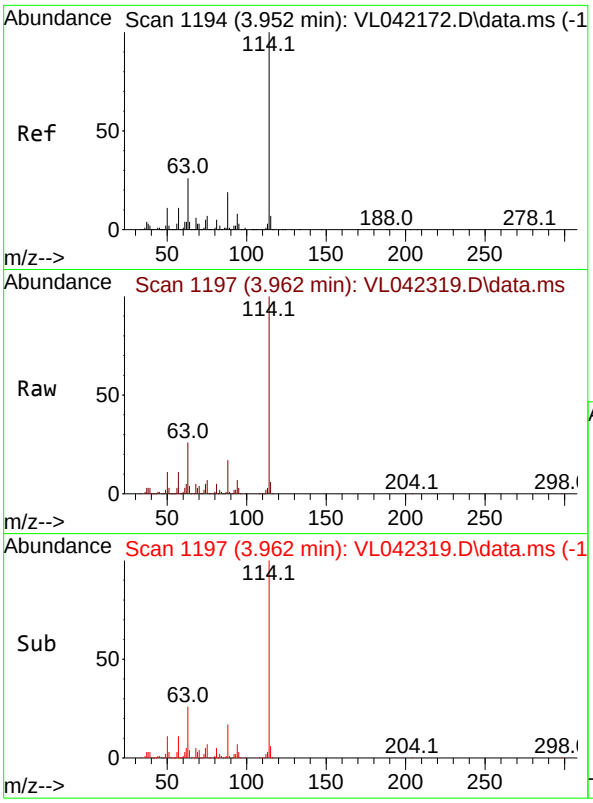


#29
Chloroform
Concen: 0.581 ppbv
RT: 2.849 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 83 Resp: 22740

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.4	77.2



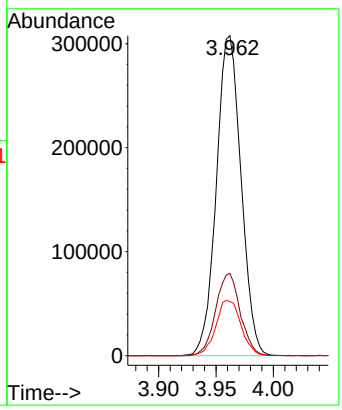


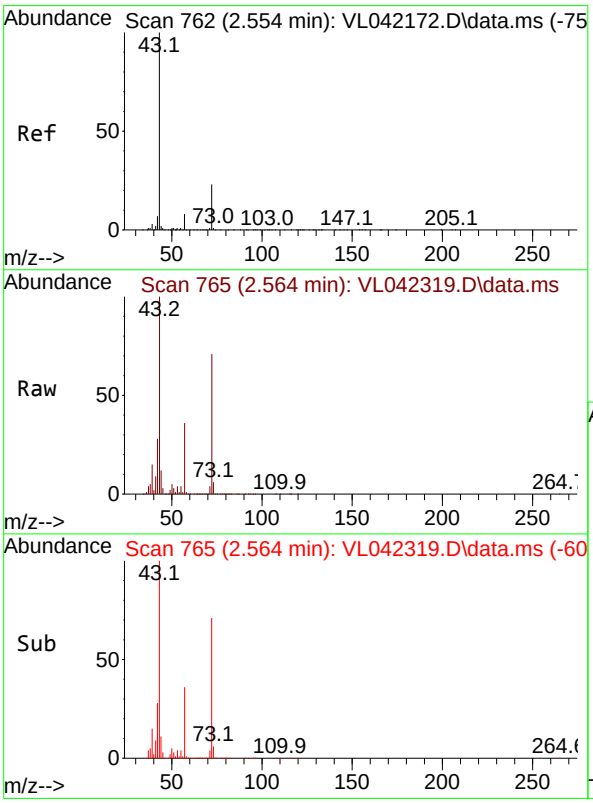
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion:114 Resp: 461210

Ion	Ratio	Lower	Upper
114	100		
63	25.6	20.7	31.1
88	17.7	15.0	22.4

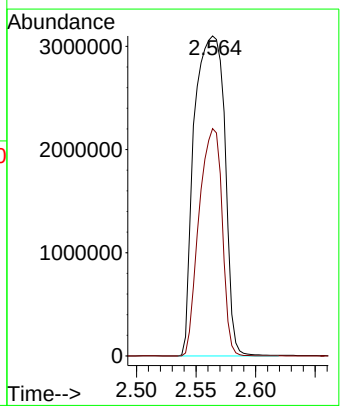


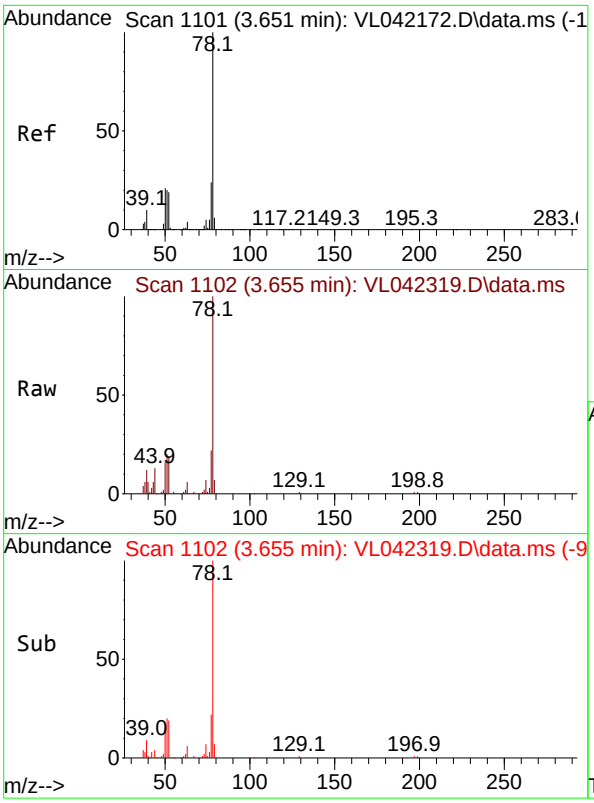


#34
2-Butanone
Concen: 164.939 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 43 Resp: 5516146

Ion	Ratio	Lower	Upper
43	100		
72	53.8	18.2	27.2#



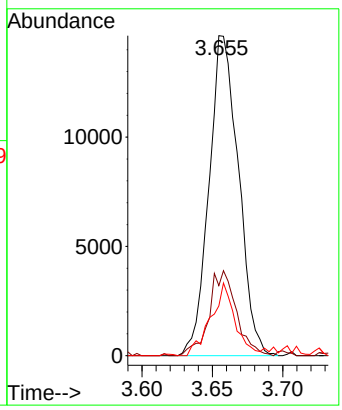


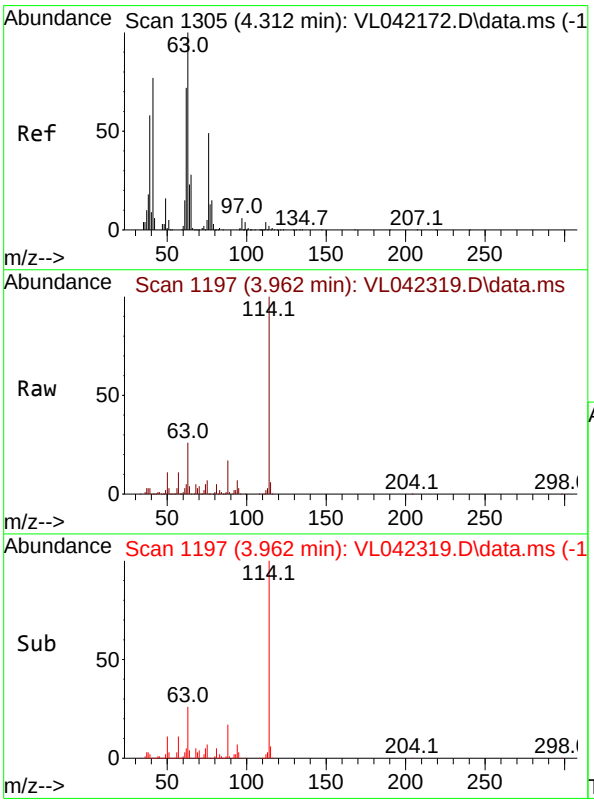
#36
Benzene
Concen: 0.468 ppbv
RT: 3.655 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 78 Resp: 21386

Ion	Ratio	Lower	Upper
78	100		
77	21.9	19.1	28.7
50	15.6	16.6	24.8#

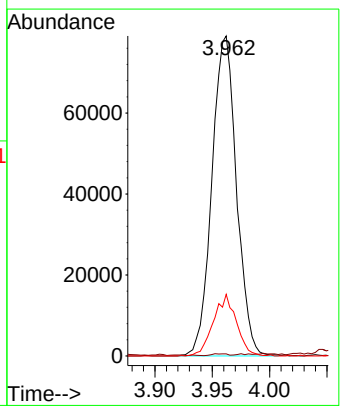


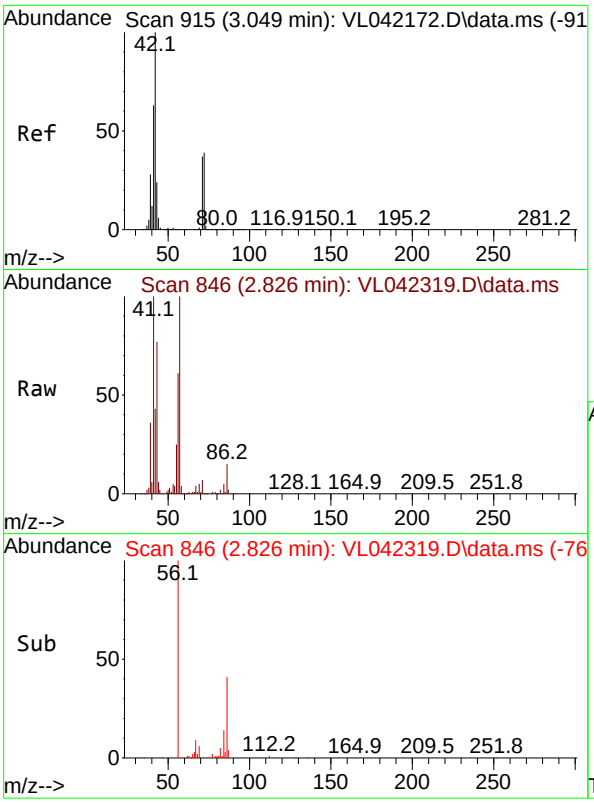


#39
1,2-Dichloropropane
Concen: 7.093 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.350 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 63 Resp: 118114

Ion	Ratio	Lower	Upper
63	100		
41	0.3	61.7	92.5#
62	19.2	57.6	86.4#



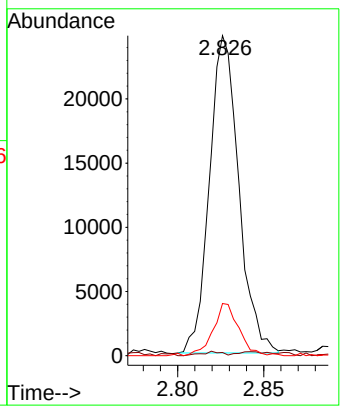


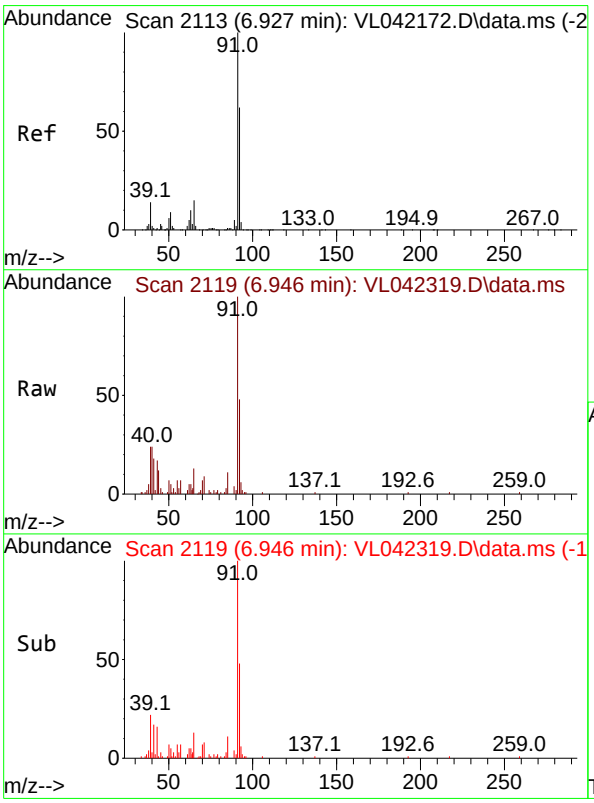
#41
Tetrahydrofuran
Concen: 1.522 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.223 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 42 Resp: 29308

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	14.7	30.2	45.4#

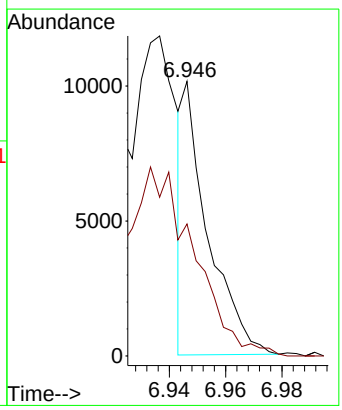


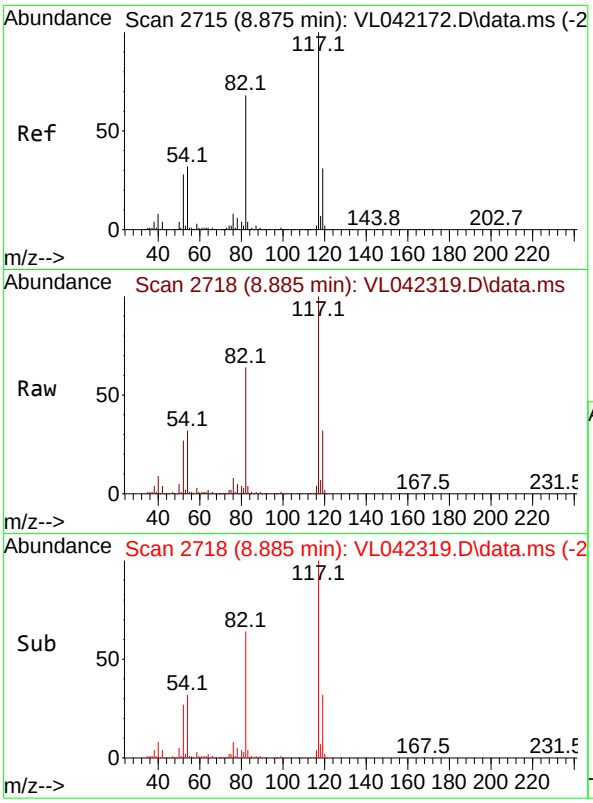


#53
Toluene
Concen: 0.115 ppbv
RT: 6.946 min Scan# 2119
Delta R.T. 0.019 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 6234

Ion	Ratio	Lower	Upper
91	100		
92	0.0	48.4	72.6#



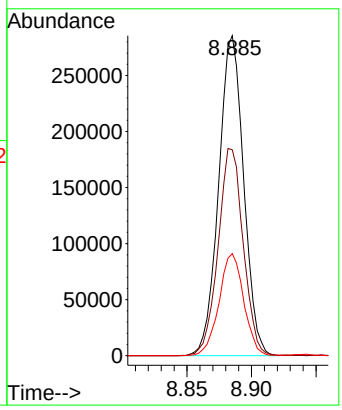


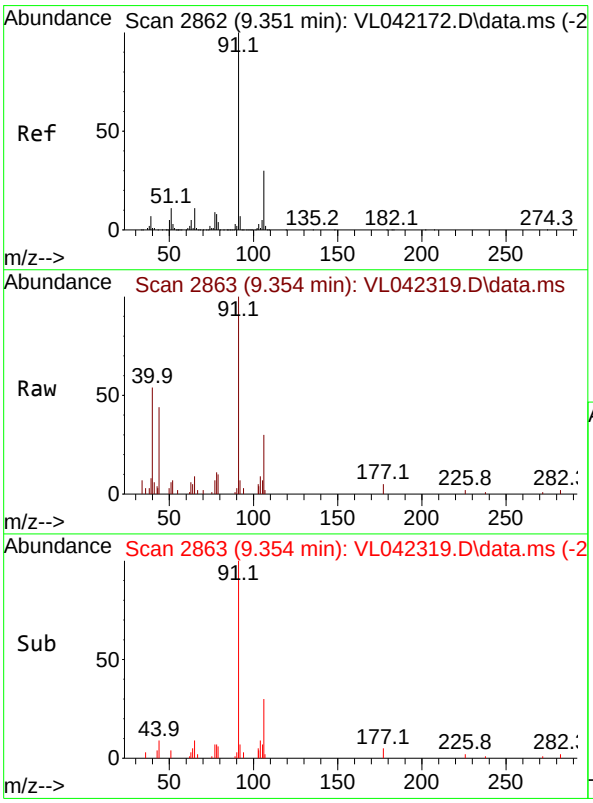
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion:117 Resp: 383940

Ion	Ratio	Lower	Upper
117	100		
82	65.1	55.8	83.6
119	31.7	25.5	38.3

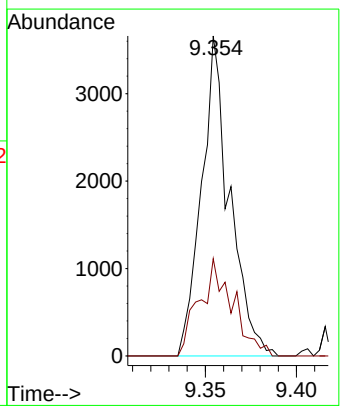


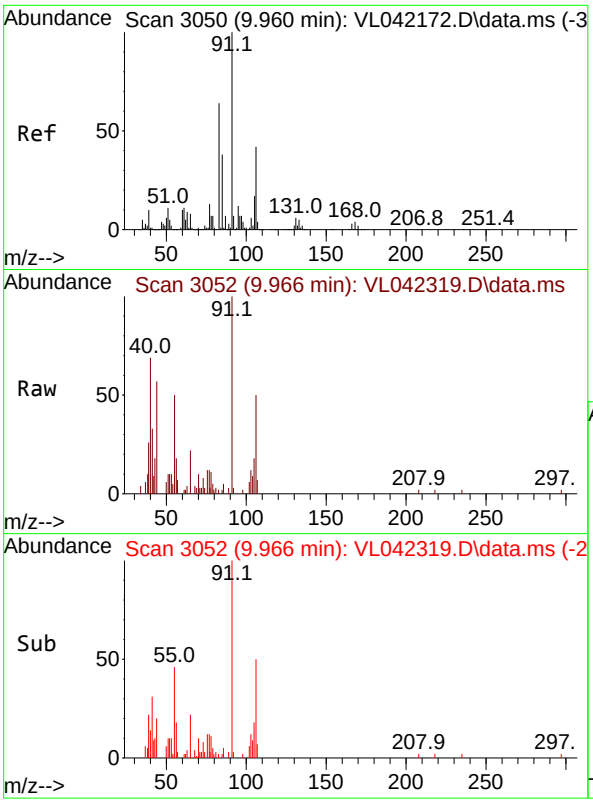


#58
Ethyl Benzene
Concen: 0.058 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 3931

Ion	Ratio	Lower	Upper
91	100		
106	32.7	24.2	36.2



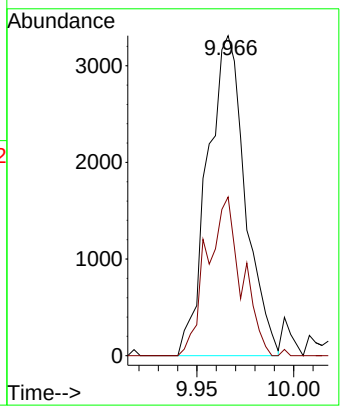


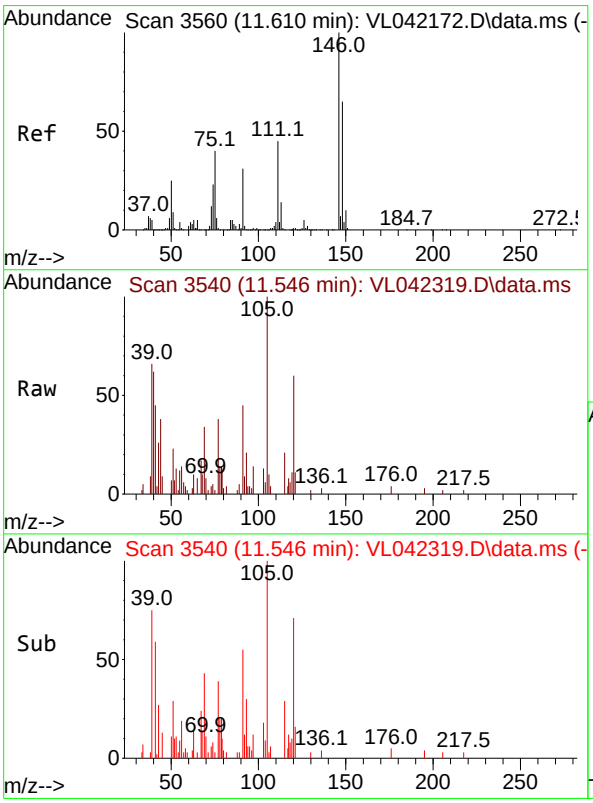
#60
o-Xylene
Concen: 0.082 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 91 Resp: 4483

Ion	Ratio	Lower	Upper
91	100		
106	46.1	20.8	62.5

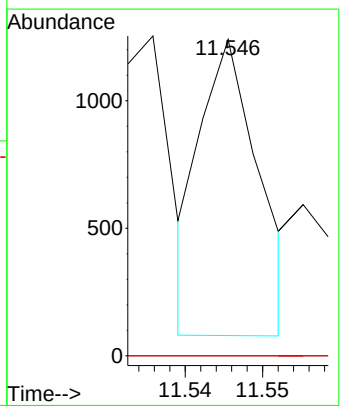


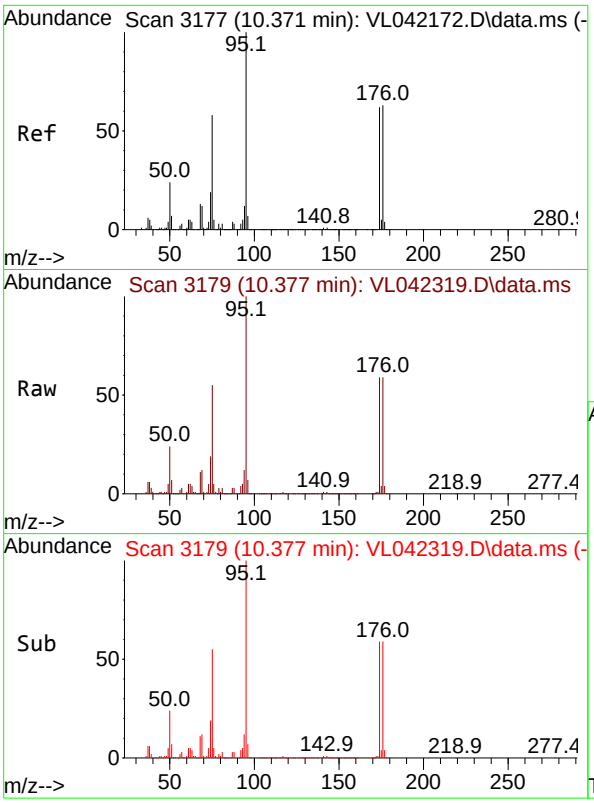


#66
Benzyl Chloride
Concen: 0.076 ppbv
RT: 11.546 min Scan# 3540
Delta R.T. -0.065 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion: 91 Resp: 609

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	3.4	4.5	6.7#



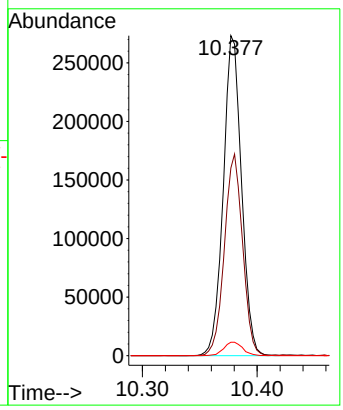


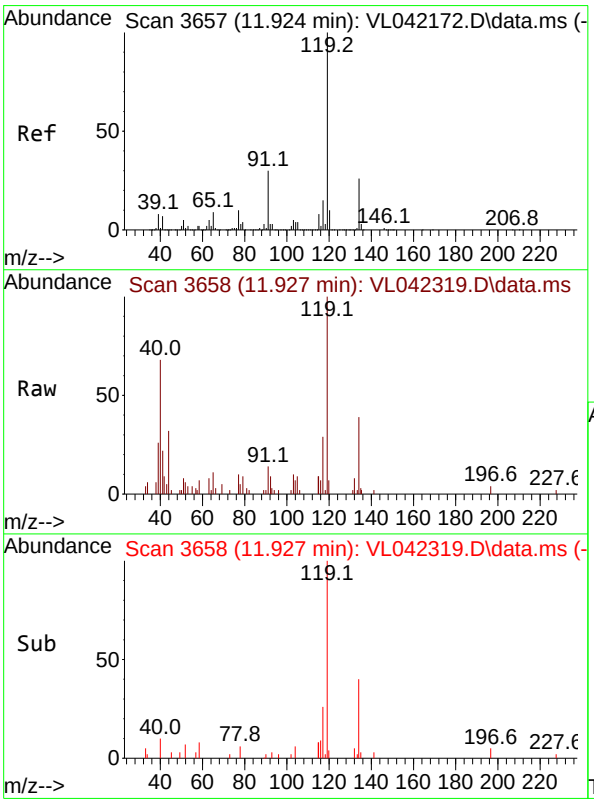
#68
1-Bromo-4-Fluorobenzene
Concen: 9.573 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion: 95 Resp: 301822

Ion	Ratio	Lower	Upper
95	100		
174	63.1	50.6	76.0
175	4.4	3.8	5.6

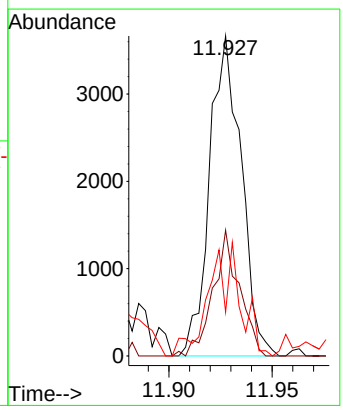


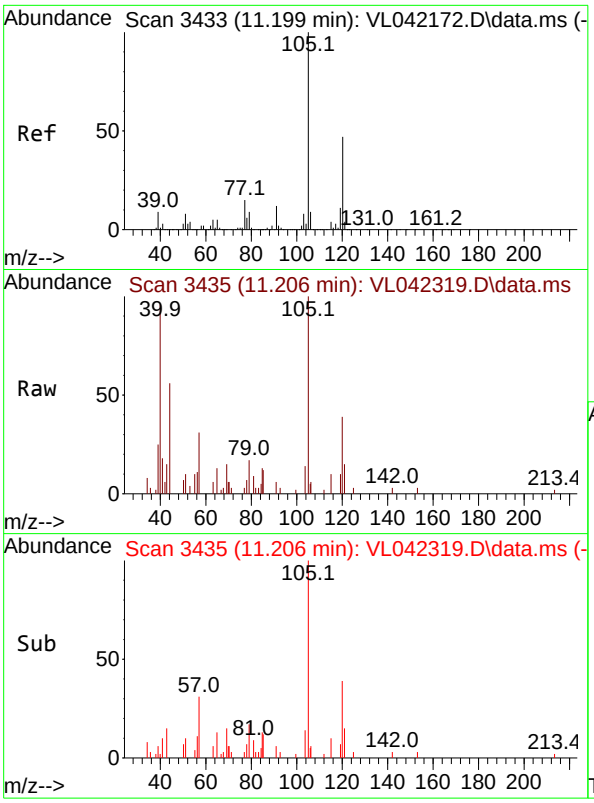


#69
p-Isopropyltoluene
Concen: 0.043 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:119 Resp: 3908

Ion	Ratio	Lower	Upper
119	100		
134	32.7	20.4	30.6#
91	36.4	23.7	35.5#



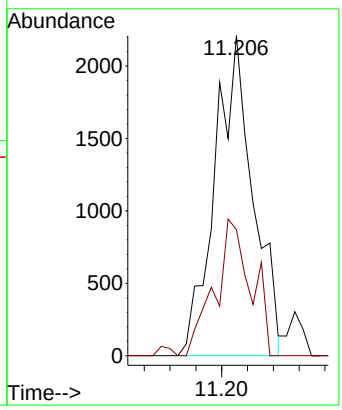


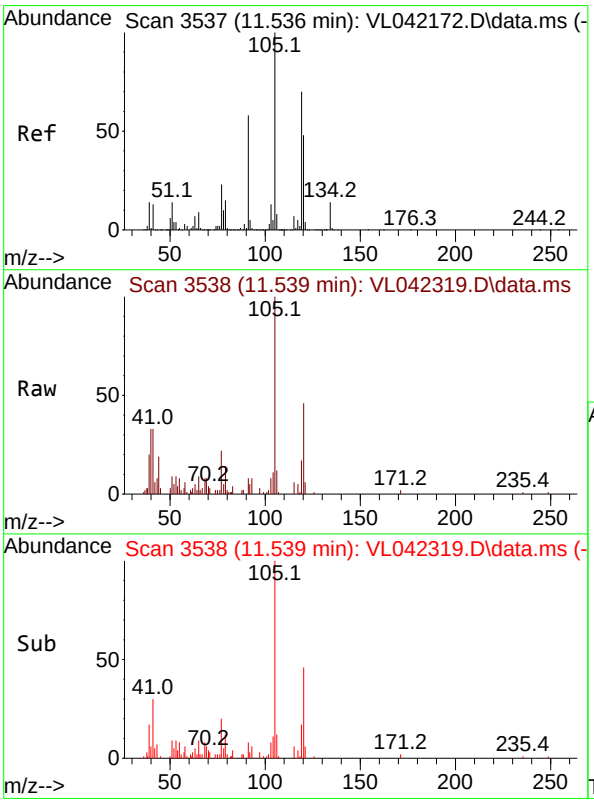
#73
1,3,5-Trimethylbenzene
Concen: 0.038 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion:105 Resp: 2285

Ion	Ratio	Lower	Upper
105	100		
120	39.4	37.4	56.0

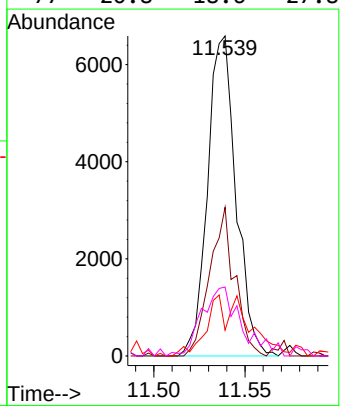


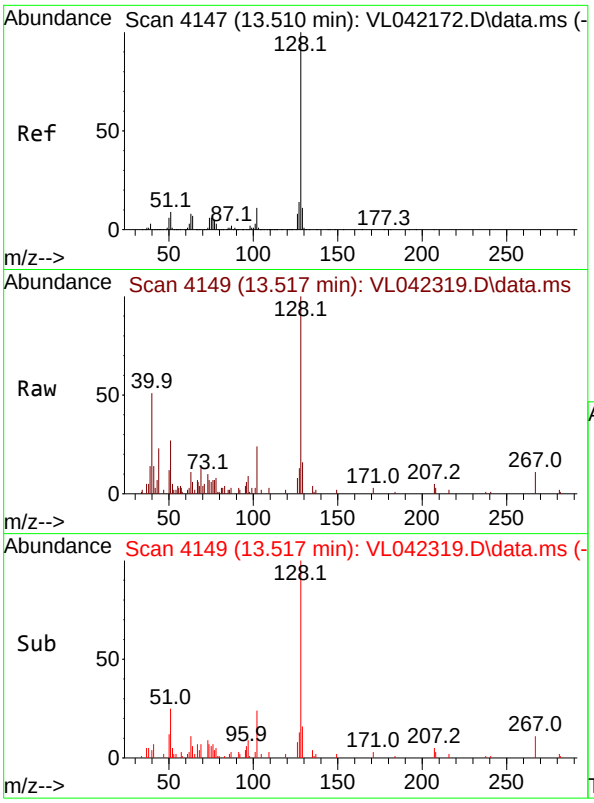


#74
1,2,4-Trimethylbenzene
Concen: 0.105 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.003 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:105 Resp: 7147

Ion	Ratio	Lower	Upper
105	100		
120	46.5	38.6	58.0
91	6.7	46.2	69.2#
77	20.8	18.6	27.8



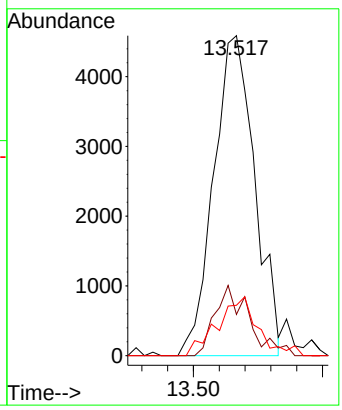


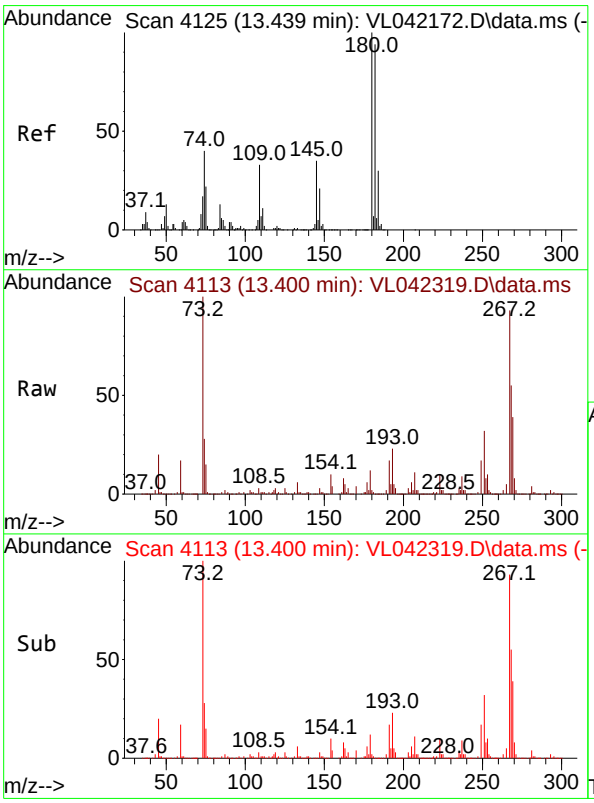
#79
Naphthalene
Concen: 0.068 ppbv
RT: 13.517 min Scan# 41
Delta R.T. 0.006 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025

Tgt Ion:128 Resp: 5078

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.8	16.2
129	15.7	9.0	13.4#

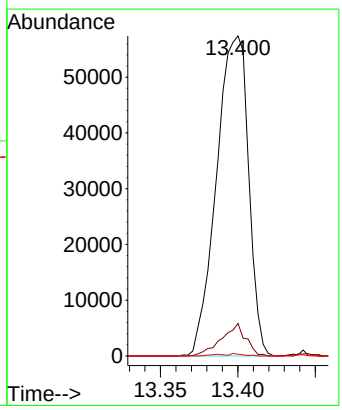




#81
1,2,4-Trichlorobenzene
Concen: 2.392 ppbv
RT: 13.400 min Scan# 4113
Delta R.T. -0.039 min
Lab File: VL042319.D
Acq: 11 Apr 2025 14:27

Tgt Ion:180 Resp: 82529

Ion	Ratio	Lower	Upper
180	100		
182	7.7	75.1	112.7#
184	0.5	24.4	36.6#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Quant Time: Apr 11 23:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

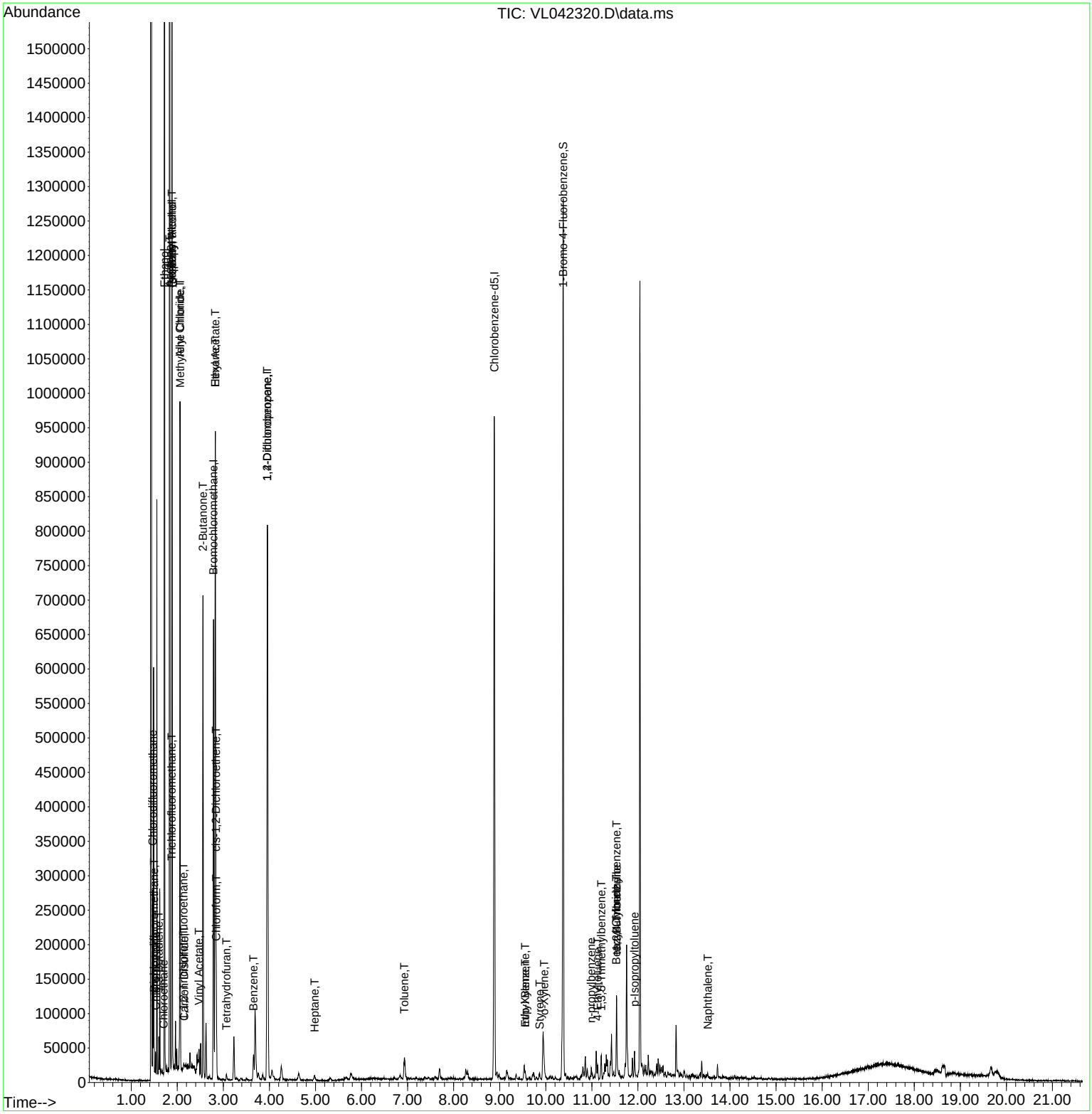
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	183875	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	460651	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	381290	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	314052	10.030	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11636	0.429	ppbv		90
3) Chlorodifluoromethane	1.466	51	68850	2.482	ppbv	#	64
4) Chloromethane	1.531	50	6489	0.585	ppbv	#	86
7) Chloroethane	1.703	64	241	0.054	ppbv	#	78
9) Propene	1.884	41	70001	5.507	ppbv		90
10) Heptane	4.981	43	1831	0.054	ppbv	#	73
11) Trichlorofluoromethane	1.877	101	5866	0.222	ppbv		100
12) 1,1,2-Trichlorotrifluo...	2.136	101	1596	0.074	ppbv		91
13) Ethanol	1.722	45	1300122	1081.877	ppbv		88
15) Acetone	1.832	43	2018088	78.476	ppbv	#	79
16) 1,3-Butadiene	1.599	39	5944	0.473	ppbv	#	38
17) tert-Butyl alcohol	1.887	59	28350	0.885	ppbv		96
19) Isopropyl Alcohol	1.884	45	743440	51.238	ppbv	#	5
20) Methylene Chloride	2.062	84	141997	14.826	ppbv		96
21) Allyl Chloride	2.059	41	5466	0.301	ppbv	#	21
23) Vinyl Acetate	2.470	43	9354	0.840	ppbv	#	55
25) Ethyl Acetate	2.826	43	195625	2.931	ppbv	#	85
26) Hexane	2.826	57	208675	8.094	ppbv	#	41
27) Carbon Disulfide	2.149	76	1070	0.039	ppbv	#	1
29) Chloroform	2.848	83	40045	1.061	ppbv		96
31) cis-1,2-Dichloroethene	2.839	61	6478	0.248	ppbv	#	25
34) 2-Butanone	2.557	43	411404	12.316	ppbv		98
36) Benzene	3.654	78	21158	0.463	ppbv		98
39) 1,2-Dichloropropane	3.955	63	115727	6.958	ppbv	#	22
41) Tetrahydrofuran	3.065	42	2565	0.133	ppbv	#	59
53) Toluene	6.930	91	14263	0.263	ppbv	#	59
58) Ethyl Benzene	9.552	91	2141	0.032	ppbv		95
59) m/p-Xylene	9.552	91	2141	0.040	ppbv	#	31
60) o-Xylene	9.966	91	7975	0.147	ppbv		99
61) Styrene	9.869	104	1381	0.051	ppbv	#	86
64) n-propylbenzene	10.985	120	1262	0.060	ppbv		77
65) tert-Butylbenzene	11.539	119	5633	0.075	ppbv	#	71
66) Benzyl Chloride	11.532	91	5835	0.733	ppbv	#	66
69) p-Isopropyltoluene	11.927	119	10393	0.116	ppbv	#	90
72) 4-Ethyltoluene	11.125	105	7507	0.111	ppbv	#	64
73) 1,3,5-Trimethylbenzene	11.205	105	9483	0.161	ppbv		96
74) 1,2,4-Trimethylbenzene	11.536	105	38801	0.571	ppbv	#	68
79) Naphthalene	13.516	128	2510	0.034	ppbv	#	88

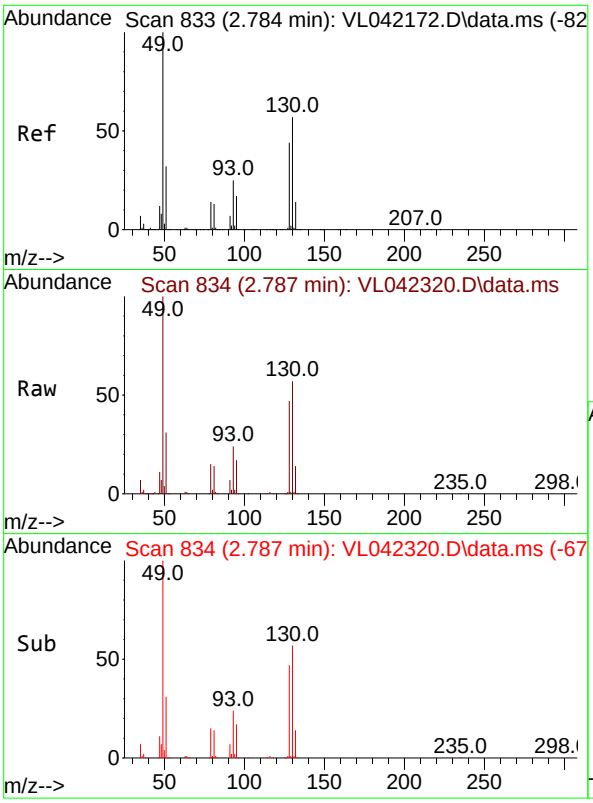
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042320.D
Acq On : 11 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-11
Misc : 400mL/MSVOA_L
ALS Vial : 3 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Quant Time: Apr 11 23:01:04 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



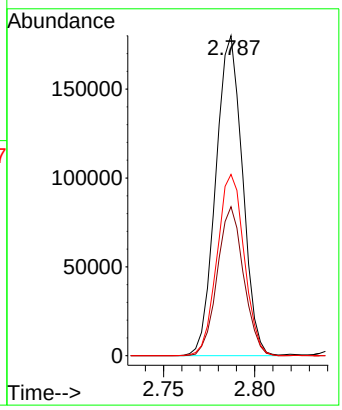


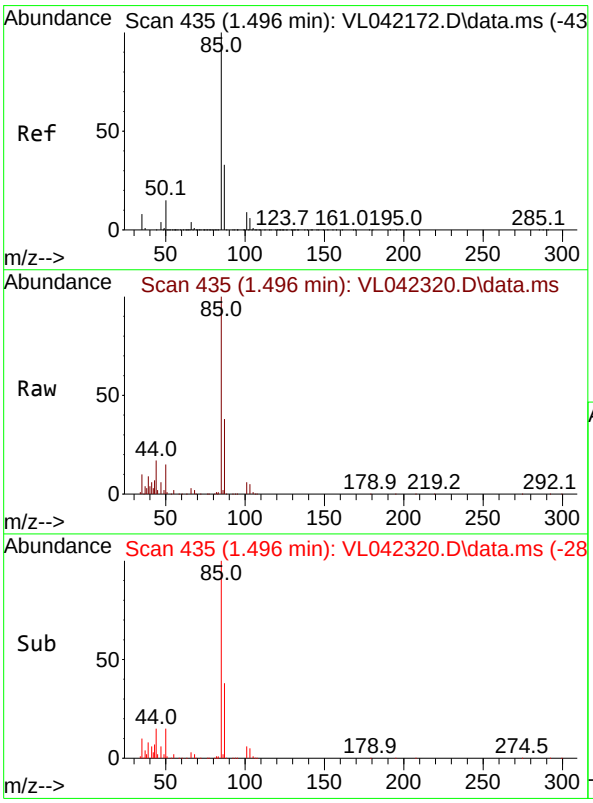
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 49 Resp: 183875

Ion	Ratio	Lower	Upper
49	100		
128	45.7	22.9	68.5
130	57.5	28.8	86.4

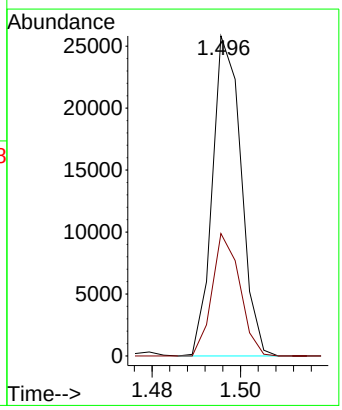


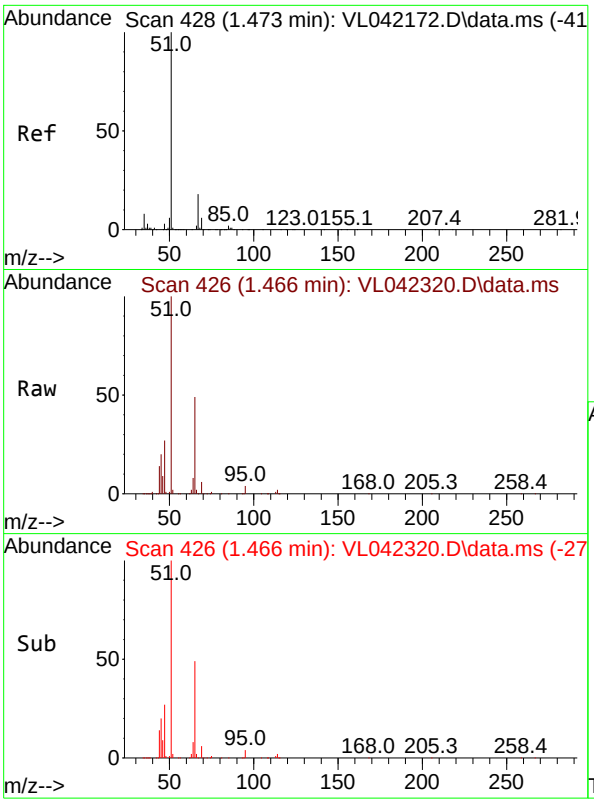


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 85 Resp: 11636

Ion	Ratio	Lower	Upper
85	100		
87	38.2	26.1	39.1



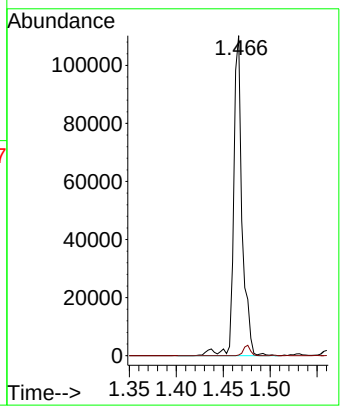


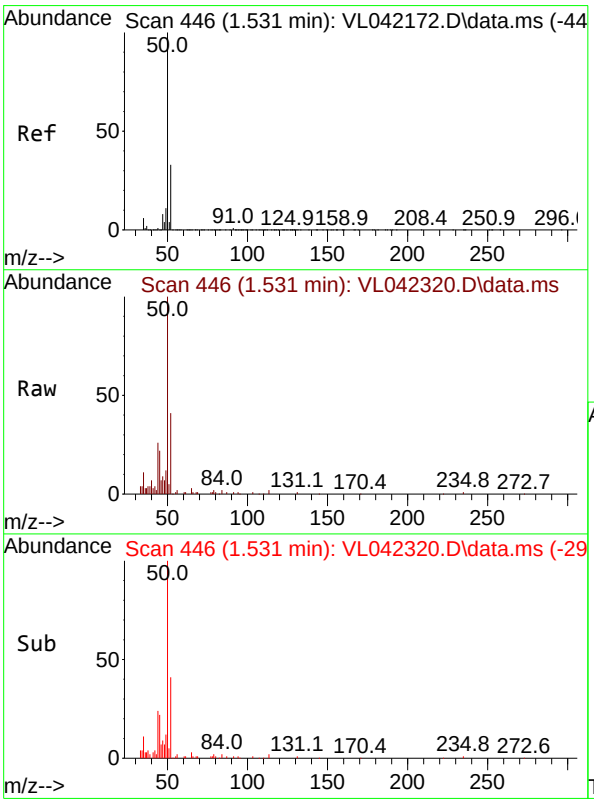
#3
Chlorodifluoromethane
Concen: 2.482 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 51 Resp: 68850

Ion	Ratio	Lower	Upper
51	100		
67	2.7	15.0	22.6#

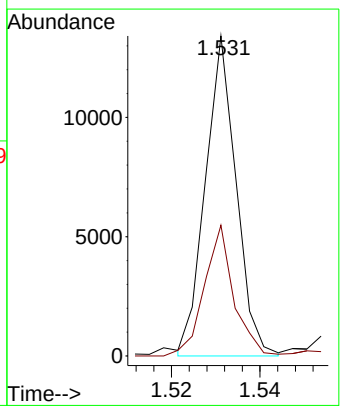


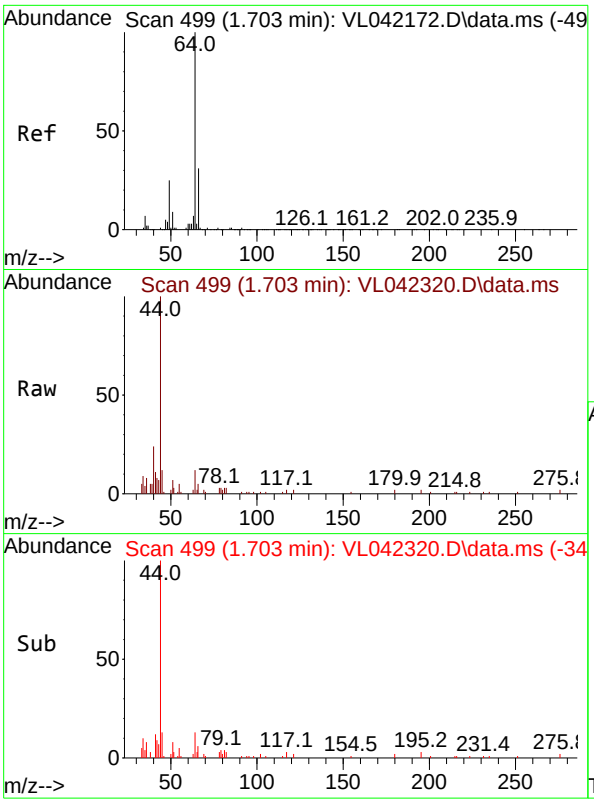


#4
Chloromethane
Concen: 0.585 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 50 Resp: 6489

Ion	Ratio	Lower	Upper
50	100		
52	40.7	26.1	39.1#



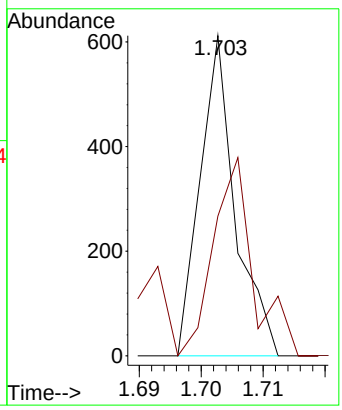


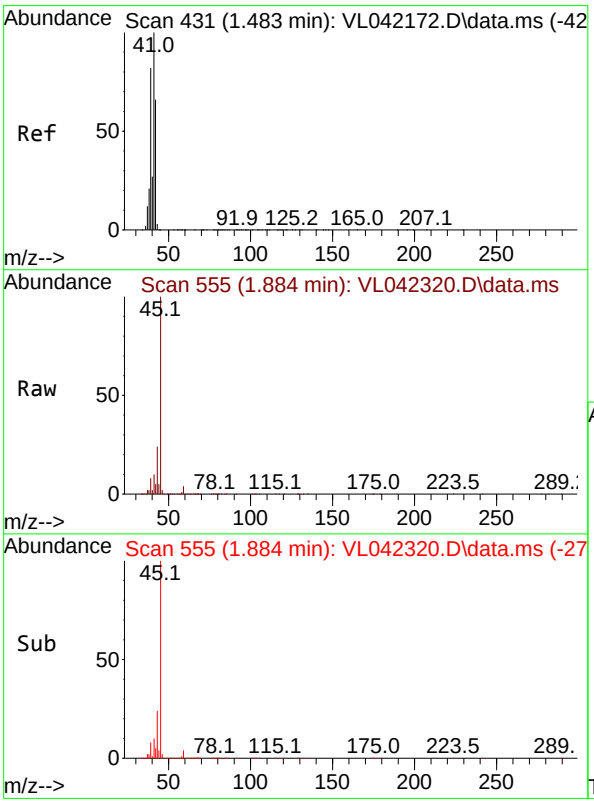
#7
Chloroethane
Concen: 0.054 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 64 Resp: 241

Ion	Ratio	Lower	Upper
64	100		
66	43.6	25.2	37.8#

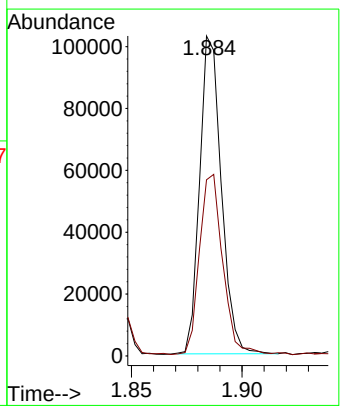


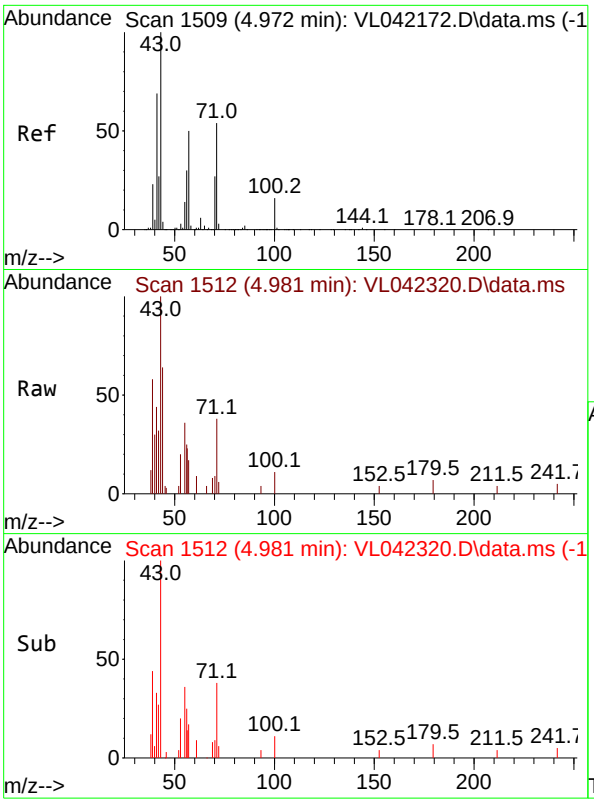


#9
Propene
Concen: 5.507 ppbv
RT: 1.884 min Scan# 555
Delta R.T. 0.401 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 41 Resp: 70001

Ion	Ratio	Lower	Upper
41	100		
42	61.0	55.4	83.2



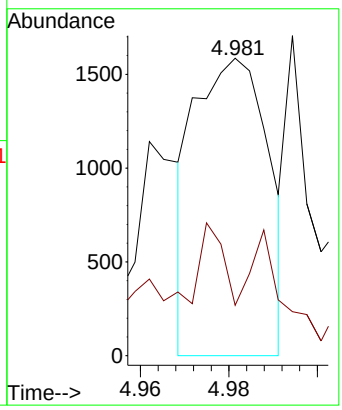


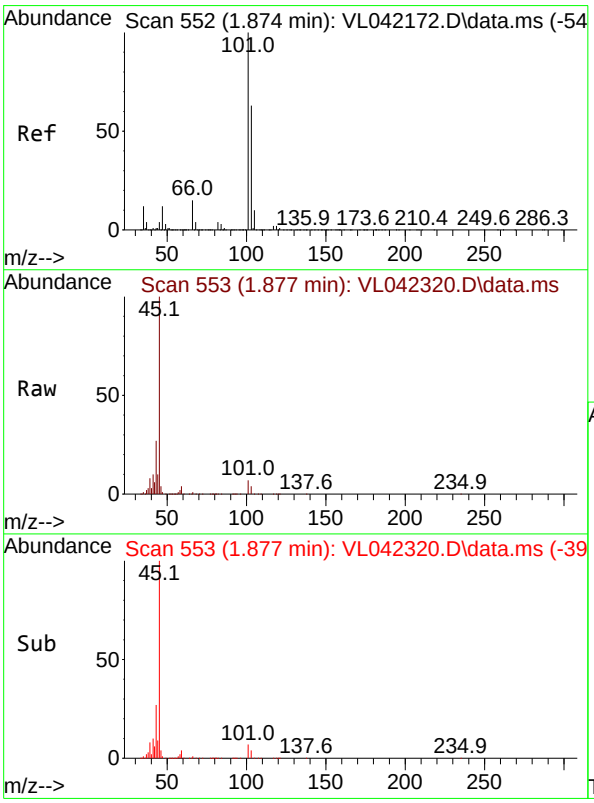
#10
Heptane
Concen: 0.054 ppbv
RT: 4.981 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 43 Resp: 1831

Ion	Ratio	Lower	Upper
43	100		
57	67.6	39.4	59.2#

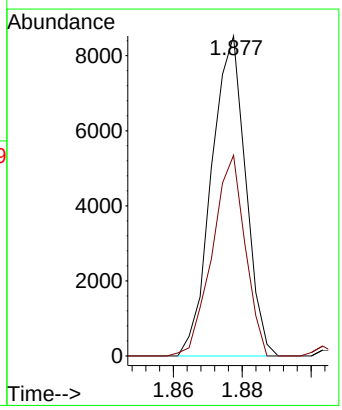


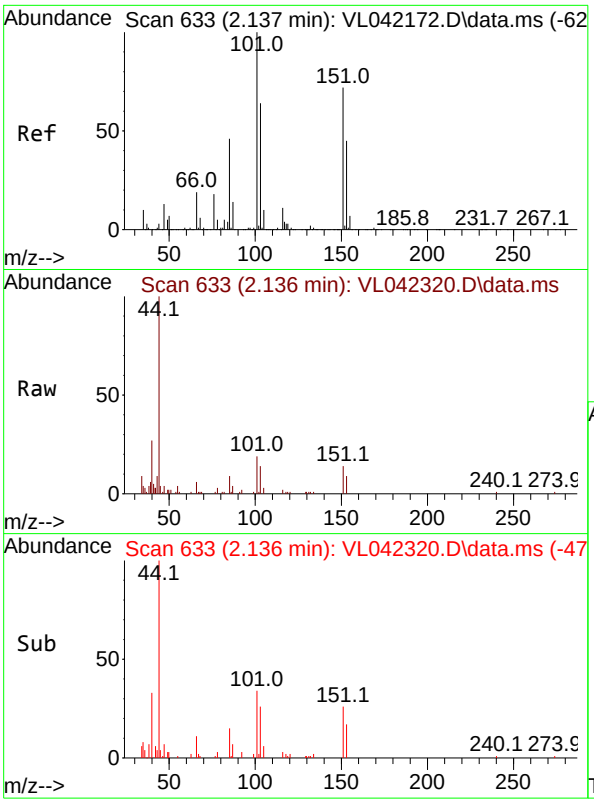


#11
Trichlorofluoromethane
Concen: 0.222 ppbv
RT: 1.877 min Scan# 553
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:101 Resp: 5866

Ion	Ratio	Lower	Upper
101	100		
103	62.7	50.2	75.2



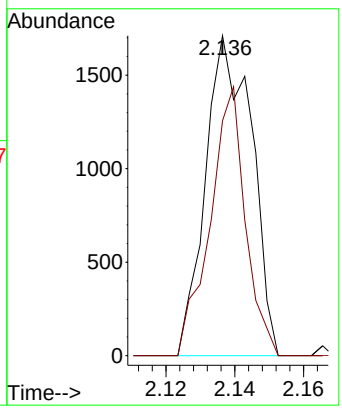


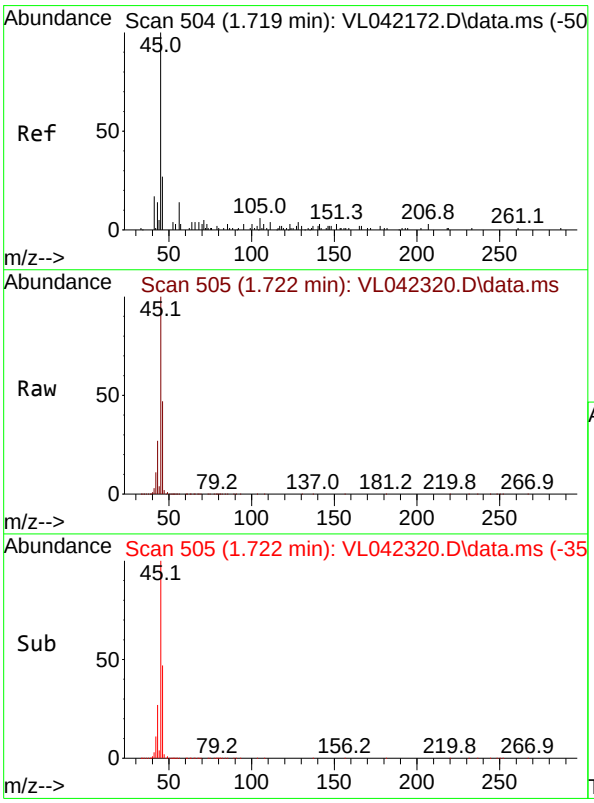
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.074 ppbv
RT: 2.136 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:101 Resp: 1596

Ion	Ratio	Lower	Upper
101	100		
151	64.2	57.1	85.7

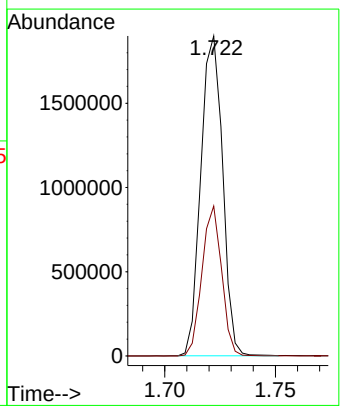


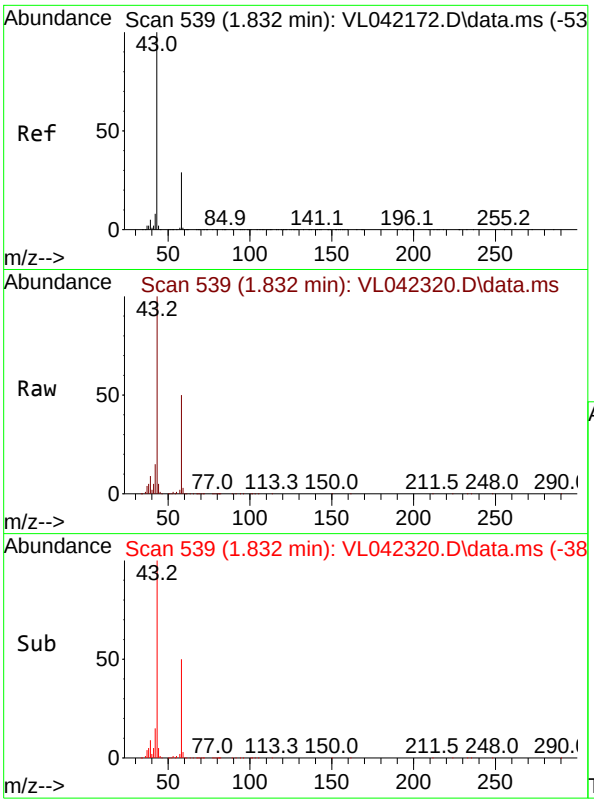


#13
Ethanol
Concen: 1081.877 ppbv
RT: 1.722 min Scan# 505
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 45 Resp: 1300122

Ion	Ratio	Lower	Upper
45	100		
46	42.5	20.2	80.8



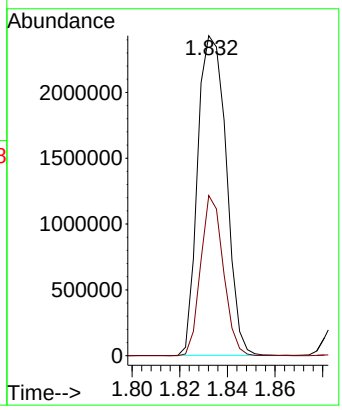


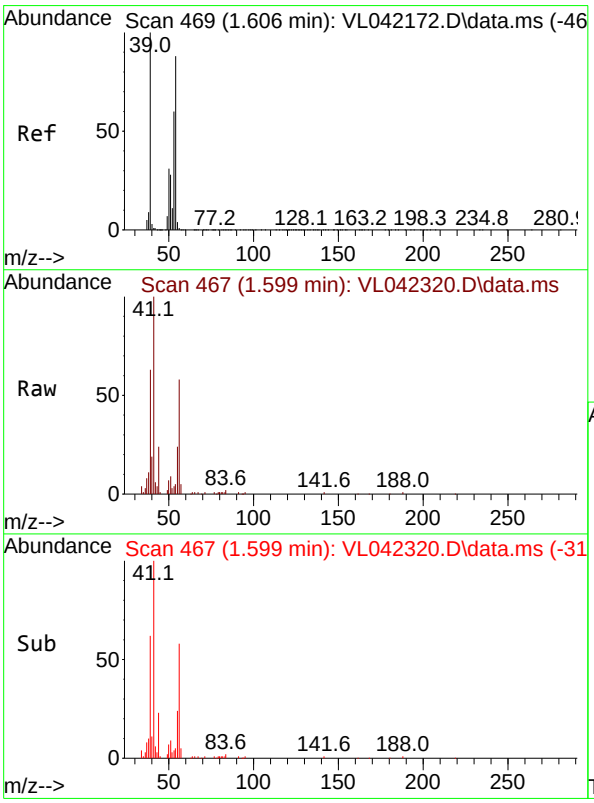
#15
Acetone
Concen: 78.476 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 43 Resp: 2018088

Ion	Ratio	Lower	Upper
43	100		
58	40.0	23.2	34.8#

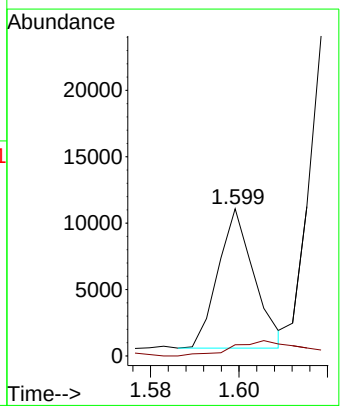


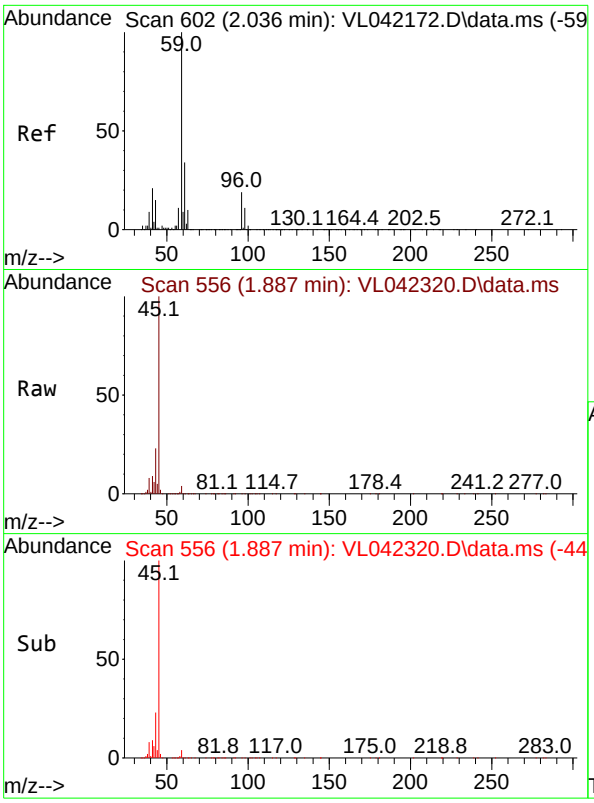


#16
1,3-Butadiene
Concen: 0.473 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.007 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 39 Resp: 5944

Ion	Ratio	Lower	Upper
39	100		
54	22.6	60.7	91.1#



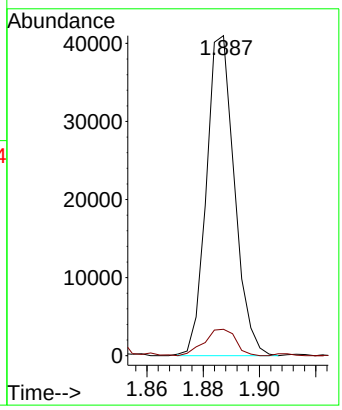


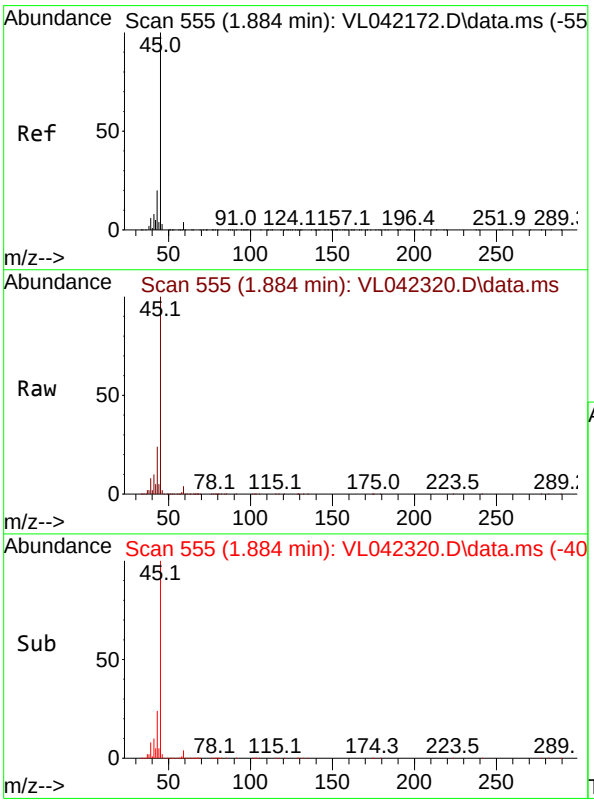
#17
tert-Butyl alcohol
Concen: 0.885 ppbv
RT: 1.887 min Scan# 5
Delta R.T. -0.149 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 59 Resp: 28350

Ion	Ratio	Lower	Upper
59	100		
57	9.6	8.9	13.3

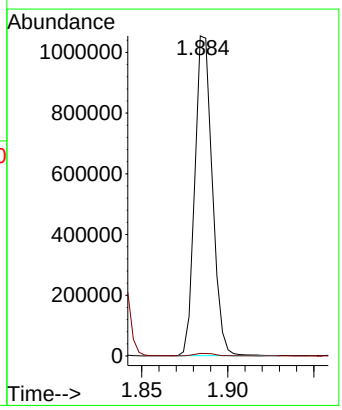


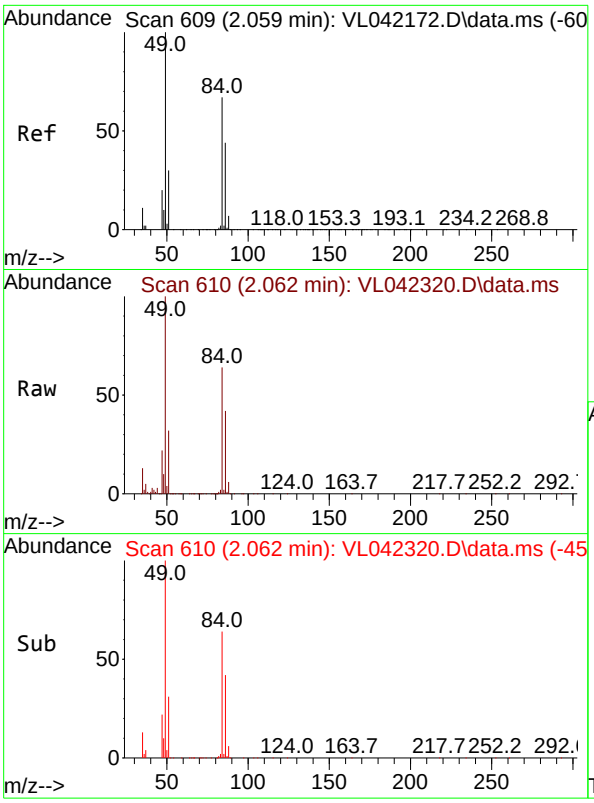


#19
Isopropyl Alcohol
Concen: 51.238 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 45 Resp: 743440

Ion	Ratio	Lower	Upper
45	100		
58	108.7	36.9	55.3#



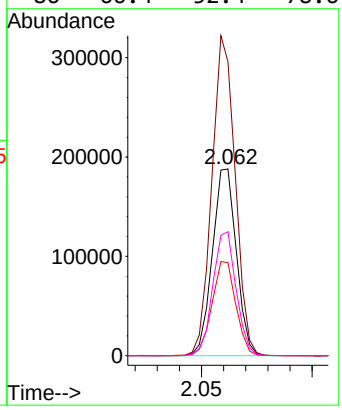


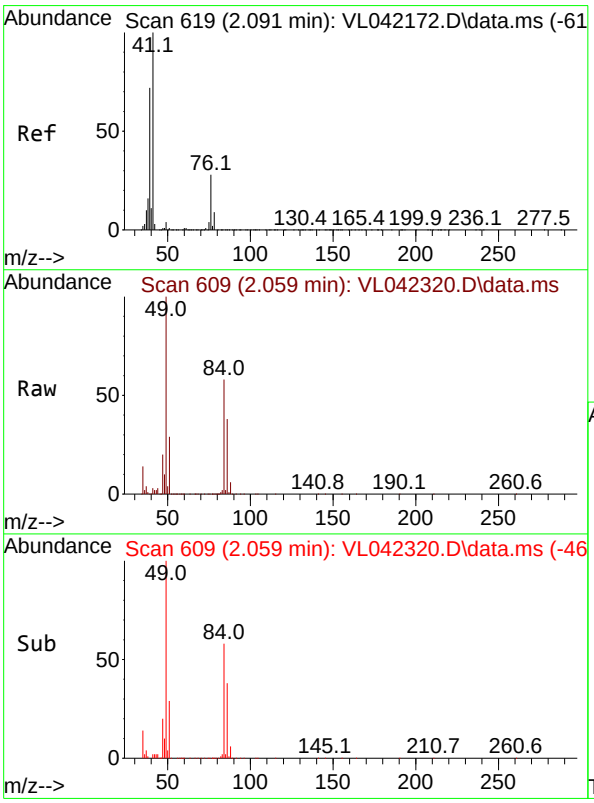
#20
Methylene Chloride
Concen: 14.826 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 84 Resp: 141997

Ion	Ratio	Lower	Upper
84	100		
49	157.4	120.2	180.4
51	49.9	37.4	56.0
86	66.4	52.4	78.6

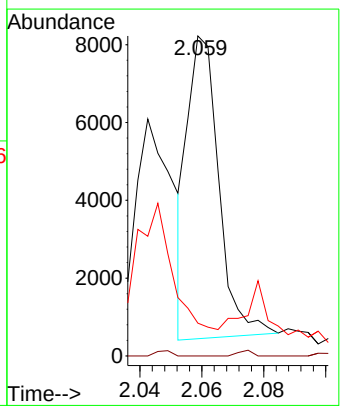


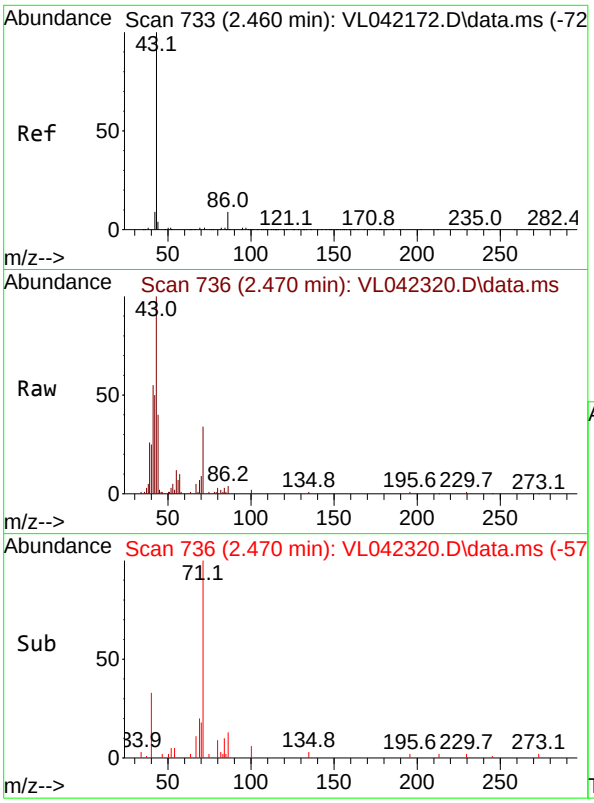


#21
Allyl Chloride
Concen: 0.301 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.033 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 41 Resp: 5466

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	0.0	61.1	91.7#



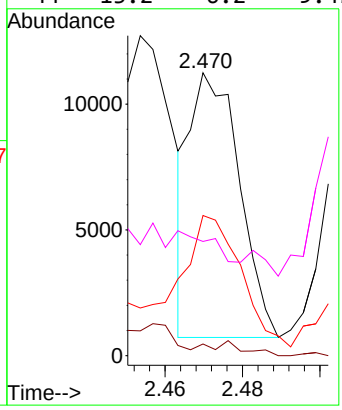


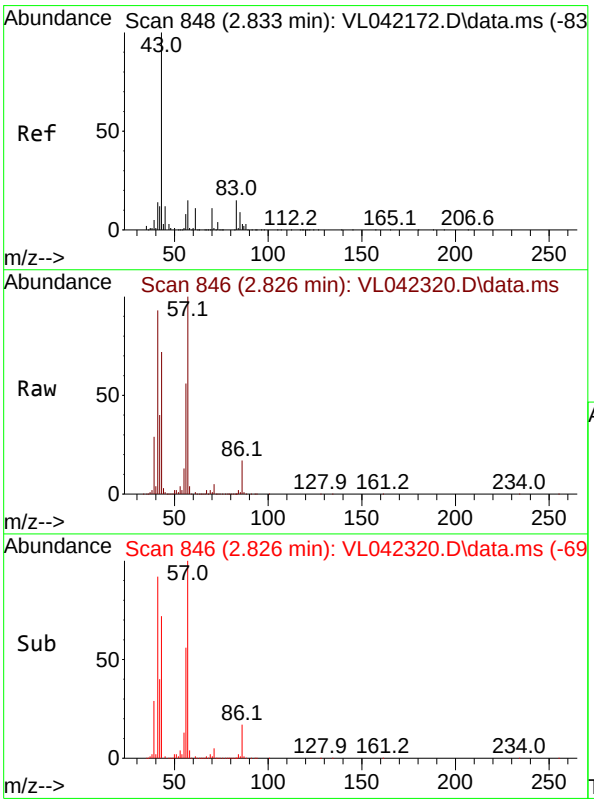
#23
Vinyl Acetate
Concen: 0.840 ppbv
RT: 2.470 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 43 Resp: 9354

Ion	Ratio	Lower	Upper
43	100		
86	4.4	5.5	8.3#
42	45.5	8.6	13.0#
44	13.2	6.2	9.4#

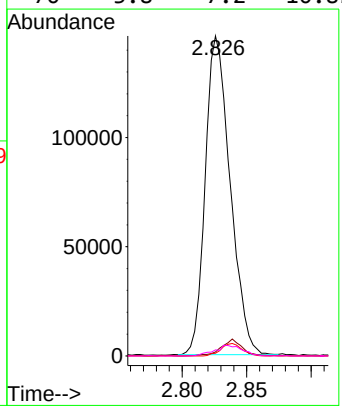


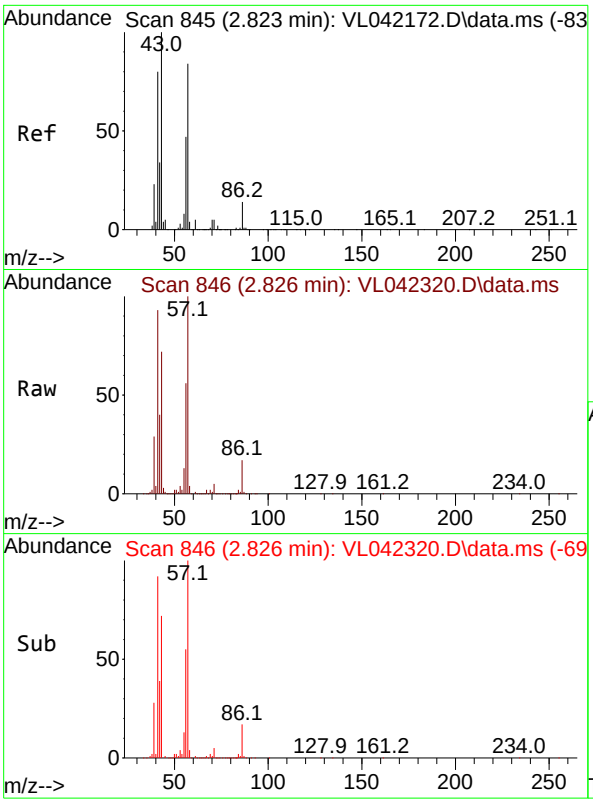


#25
Ethyl Acetate
Concen: 2.931 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.007 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 43 Resp: 195625

Ion	Ratio	Lower	Upper
43	100		
45	4.7	8.2	12.2#
61	3.3	7.3	10.9#
70	3.8	7.2	10.8#



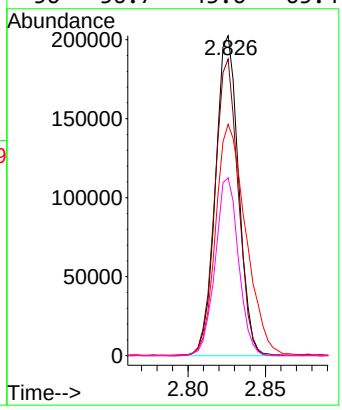


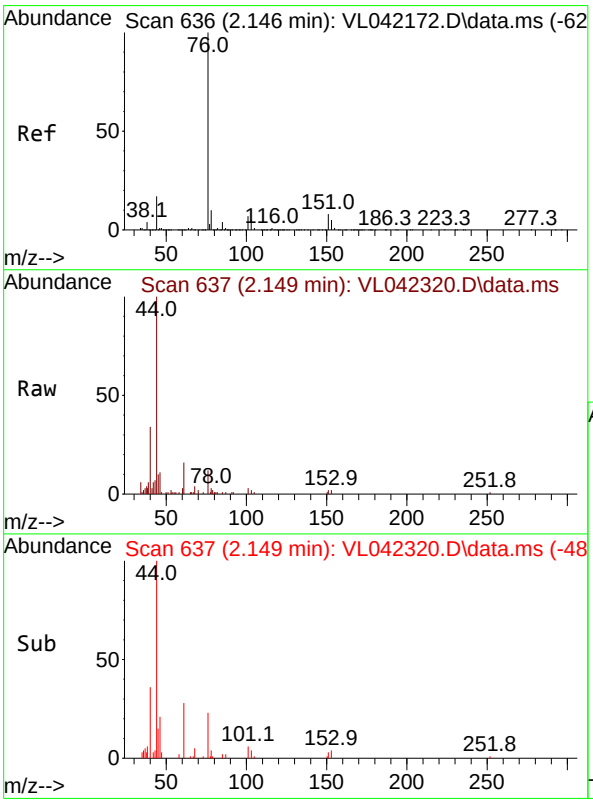
#26
Hexane
Concen: 8.094 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 57 Resp: 208675

Ion	Ratio	Lower	Upper
57	100		
41	94.9	76.6	114.8
43	94.7	207.8	311.8#
56	56.7	43.6	65.4

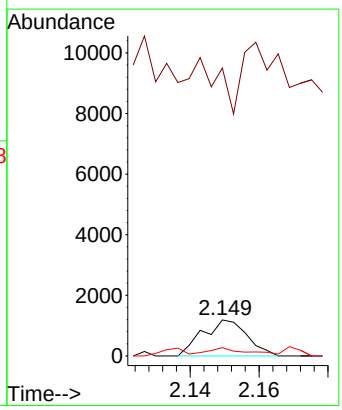


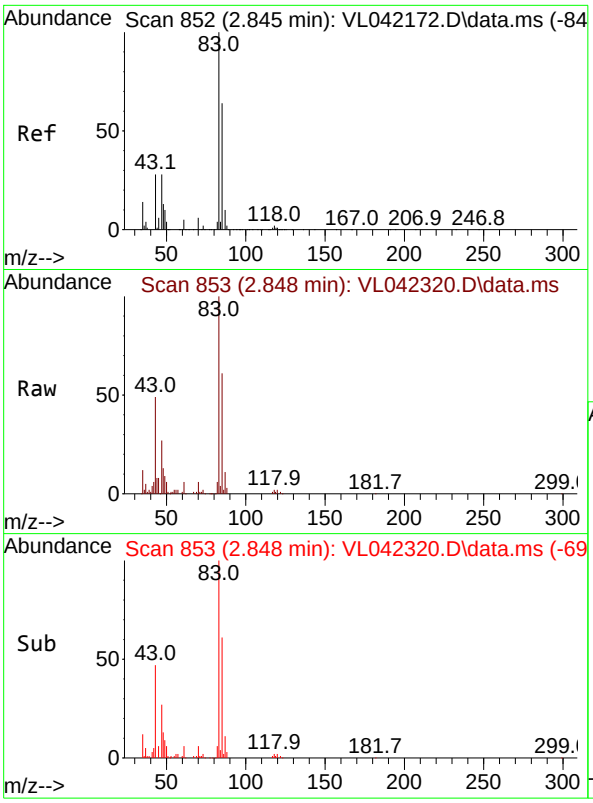


#27
Carbon Disulfide
Concen: 0.039 ppbv
RT: 2.149 min Scan# 637
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 76 Resp: 1070

Ion	Ratio	Lower	Upper
76	100		
44	350.6	14.7	22.1#
78	31.0	9.3	13.9#



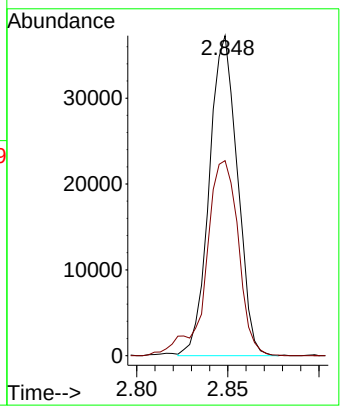


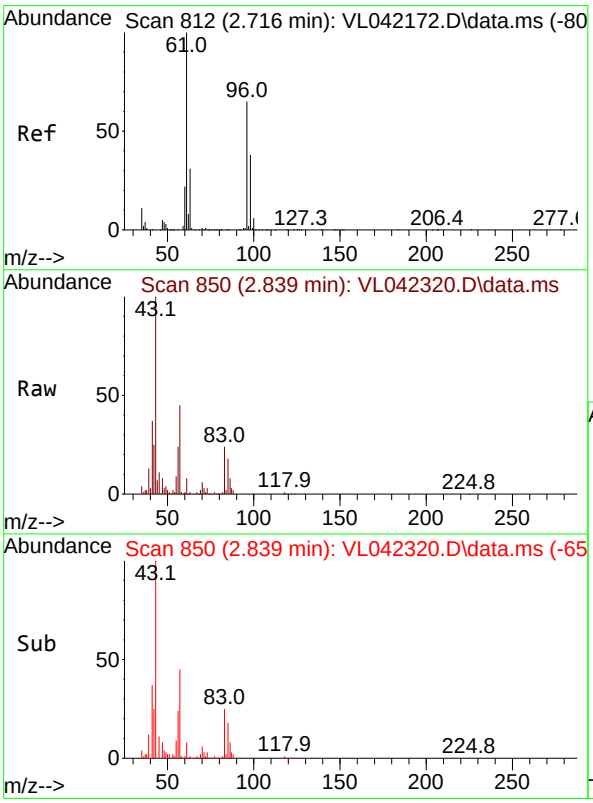
#29
Chloroform
Concen: 1.061 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 83 Resp: 40045

Ion	Ratio	Lower	Upper
83	100		
85	60.9	51.4	77.2

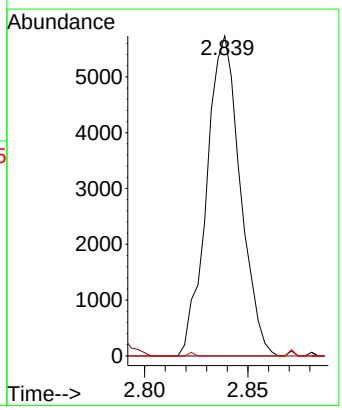


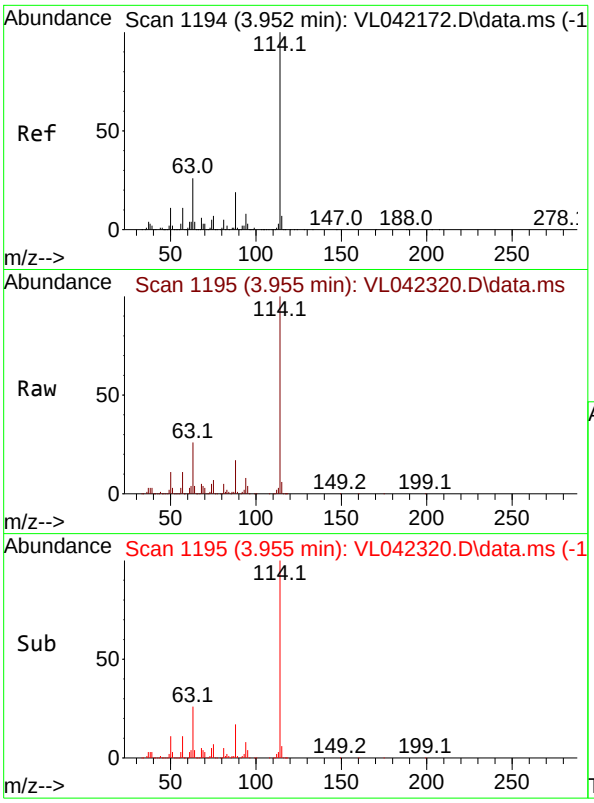


#31
cis-1,2-Dichloroethene
Concen: 0.248 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.123 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 61 Resp: 6478

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.8	77.8#
98	0.0	30.6	46.0#



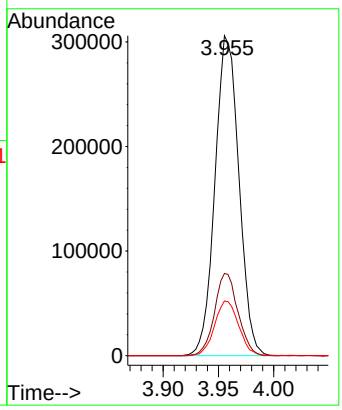


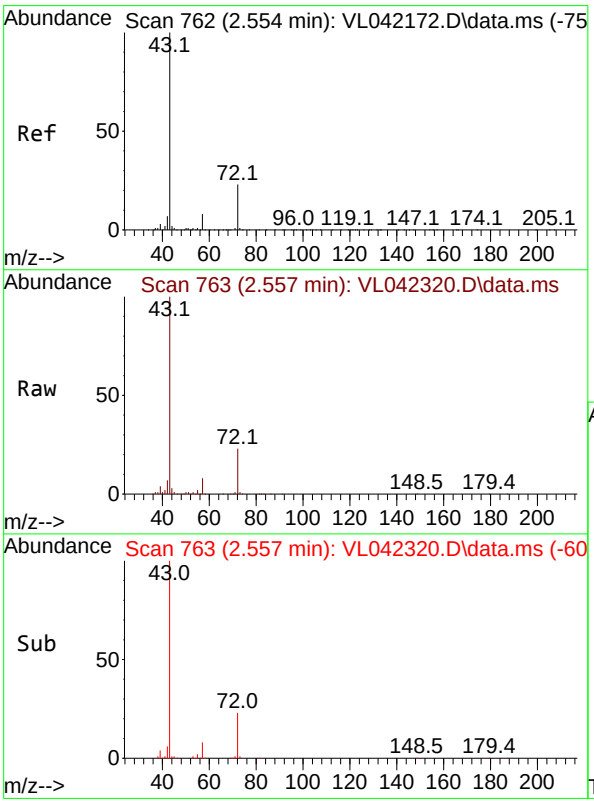
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:114 Resp: 460651

Ion	Ratio	Lower	Upper
114	100		
63	25.2	20.7	31.1
88	17.2	15.0	22.4

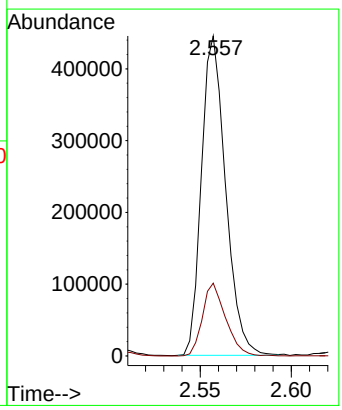


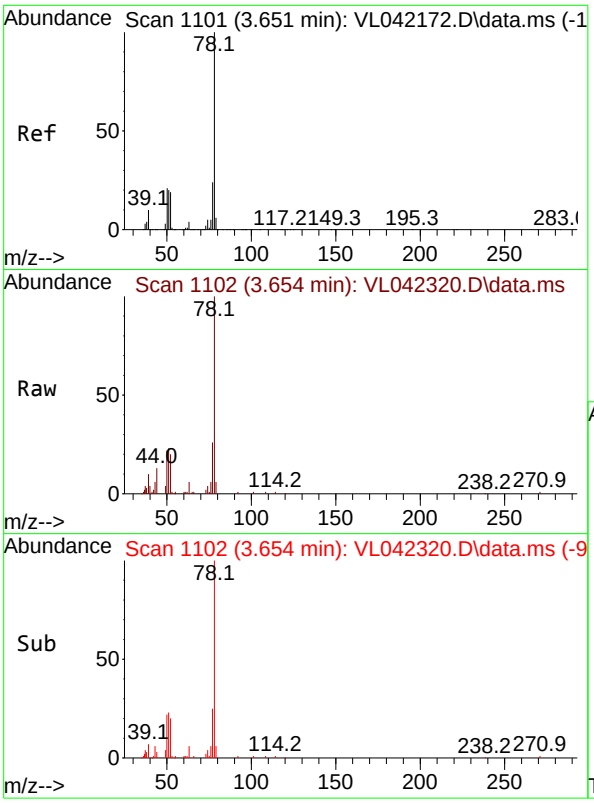


#34
2-Butanone
Concen: 12.316 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 43 Resp: 411404

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2



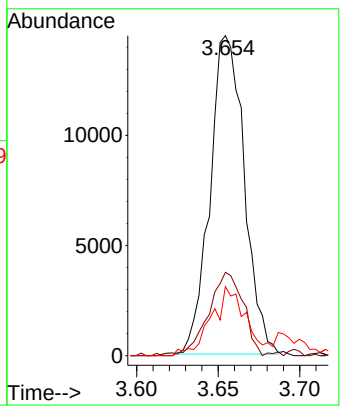


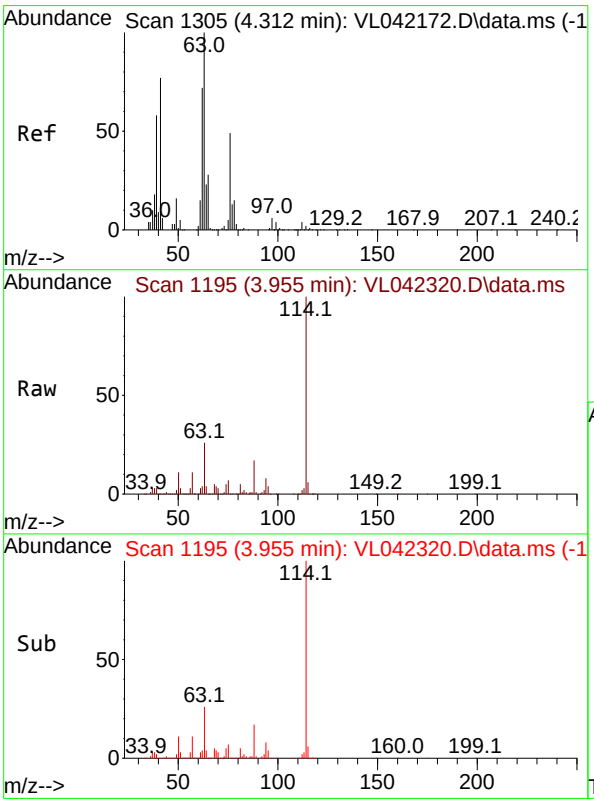
#36
Benzene
Concen: 0.463 ppbv
RT: 3.654 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 78 Resp: 21158

Ion	Ratio	Lower	Upper
78	100		
77	25.2	19.1	28.7
50	19.8	16.6	24.8

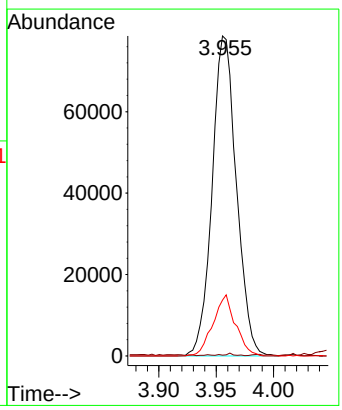


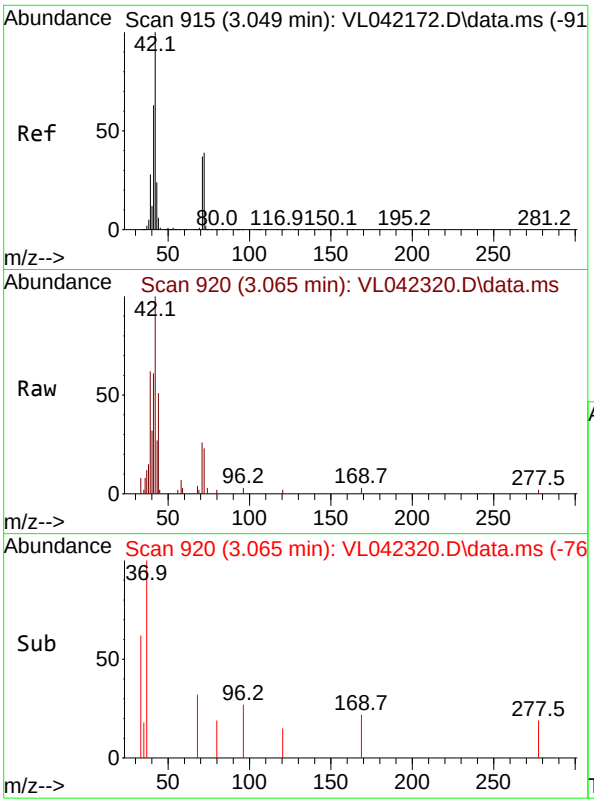


#39
1,2-Dichloropropane
Concen: 6.958 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 63 Resp: 115727

Ion	Ratio	Lower	Upper
63	100		
41	0.2	61.7	92.5#
62	17.4	57.6	86.4#



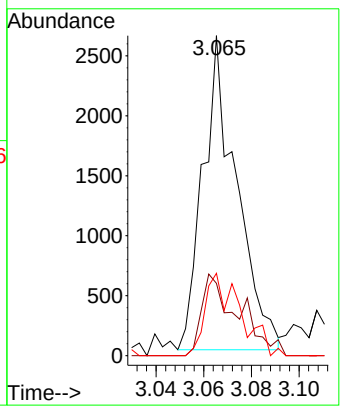


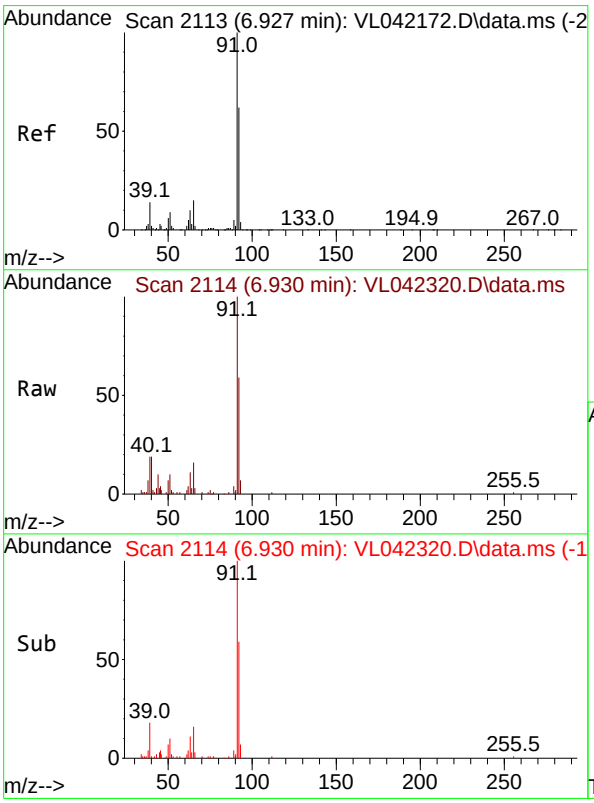
#41
Tetrahydrofuran
Concen: 0.133 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.016 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 42 Resp: 2565

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	27.4	30.2	45.4#

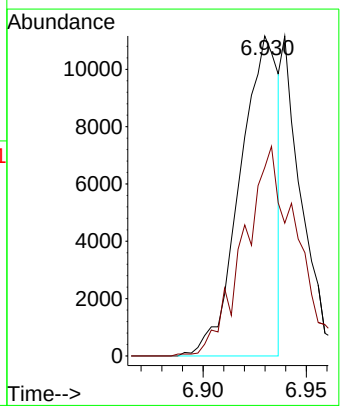


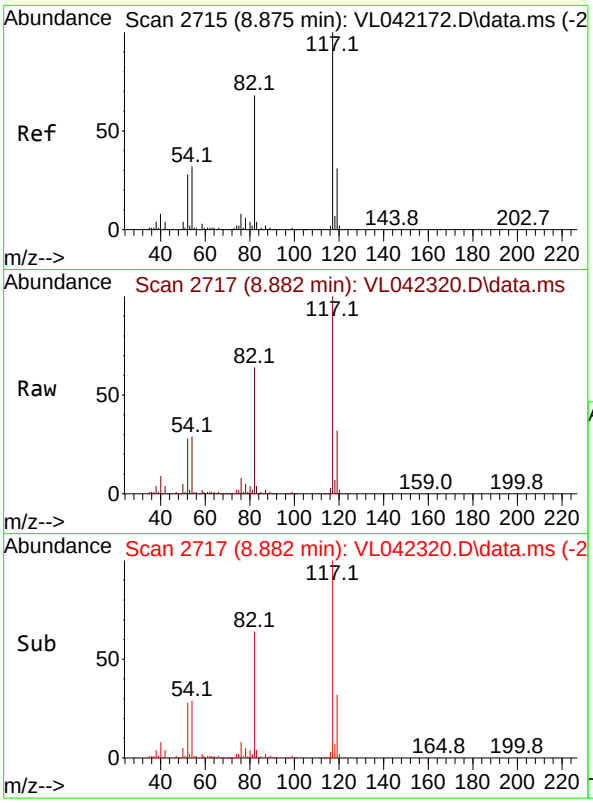


#53
Toluene
Concen: 0.263 ppbv
RT: 6.930 min Scan# 2114
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 14263

Ion	Ratio	Lower	Upper
91	100		
92	91.7	48.4	72.6#



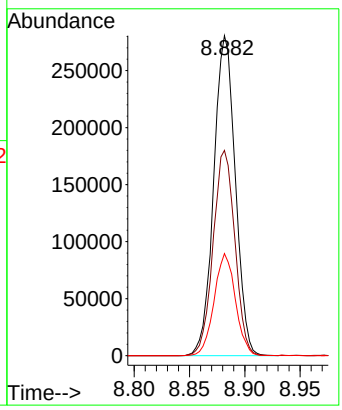


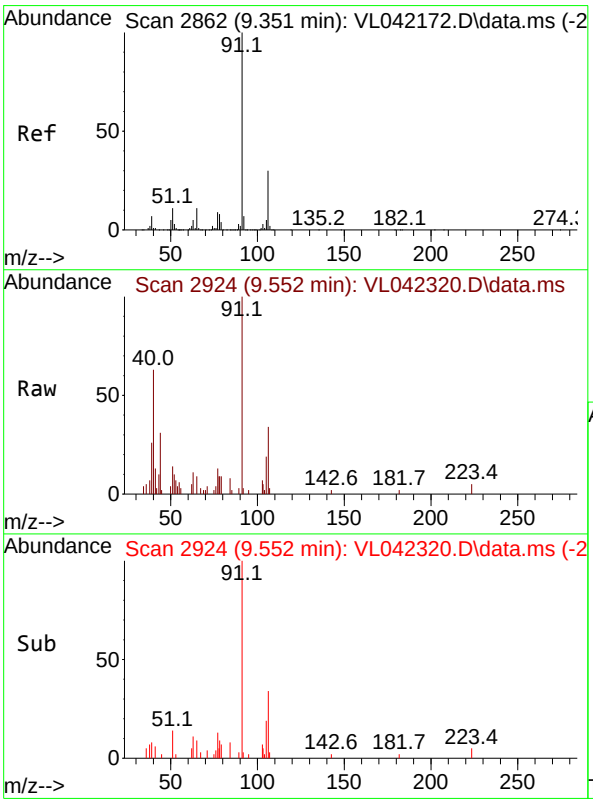
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:117 Resp: 381290

Ion	Ratio	Lower	Upper
117	100		
82	64.4	55.8	83.6
119	31.5	25.5	38.3

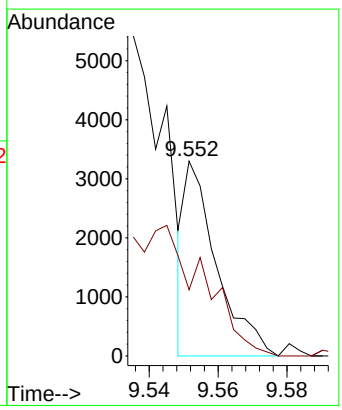


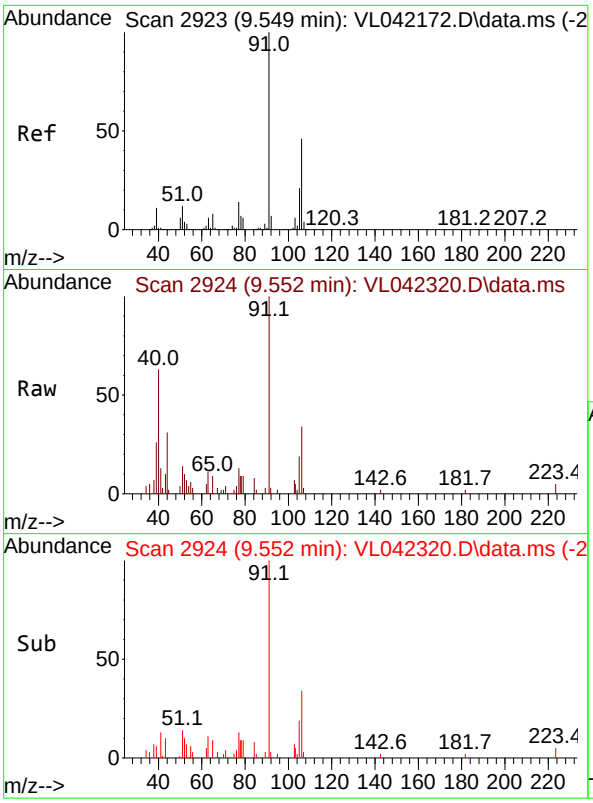


#58
Ethyl Benzene
Concen: 0.032 ppbv
RT: 9.552 min Scan# 2924
Delta R.T. 0.200 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 2141

Ion	Ratio	Lower	Upper
91	100		
106	32.9	24.2	36.2



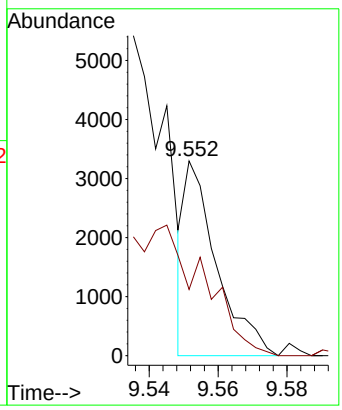


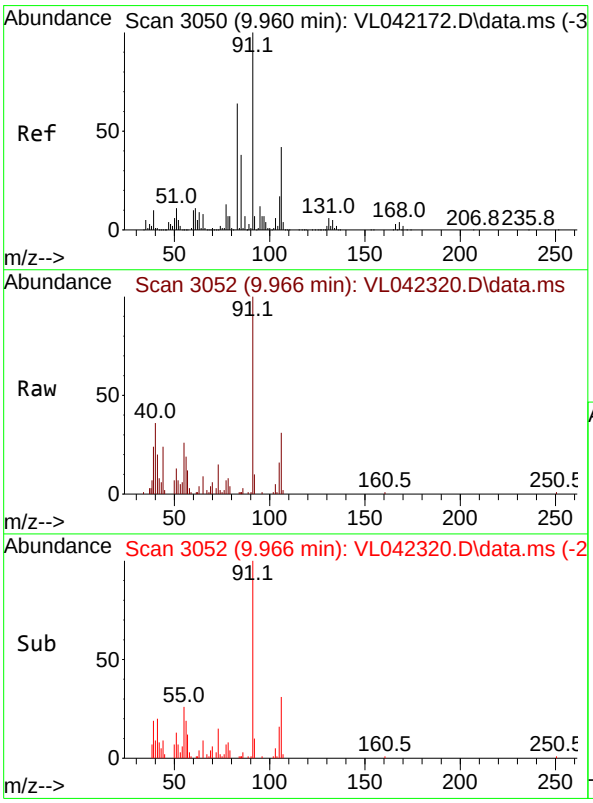
#59
m/p-Xylene
Concen: 0.040 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 91 Resp: 2141

Ion	Ratio	Lower	Upper
91	100		
106	0.0	36.4	54.6#

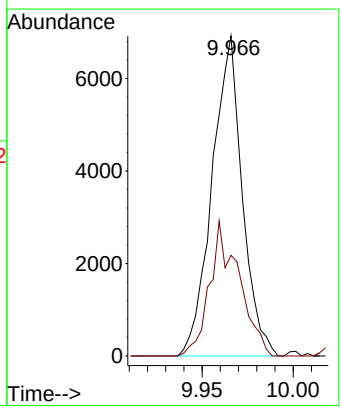


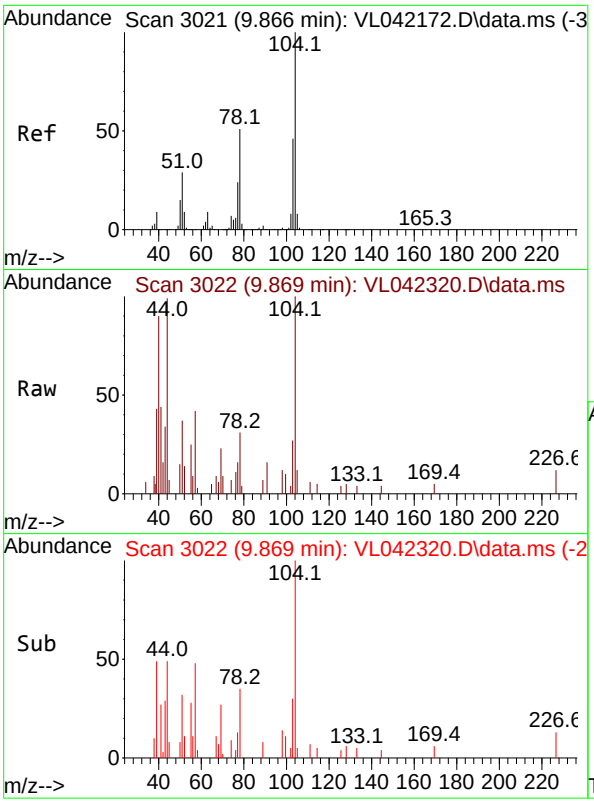


#60
o-Xylene
Concen: 0.147 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 7975

Ion	Ratio	Lower	Upper
91	100		
106	41.2	20.8	62.5



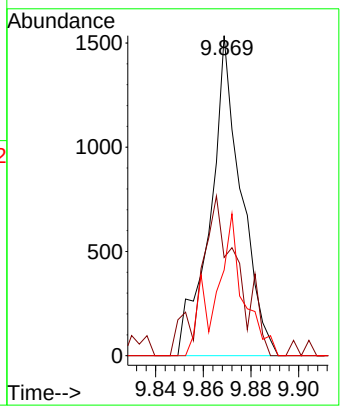


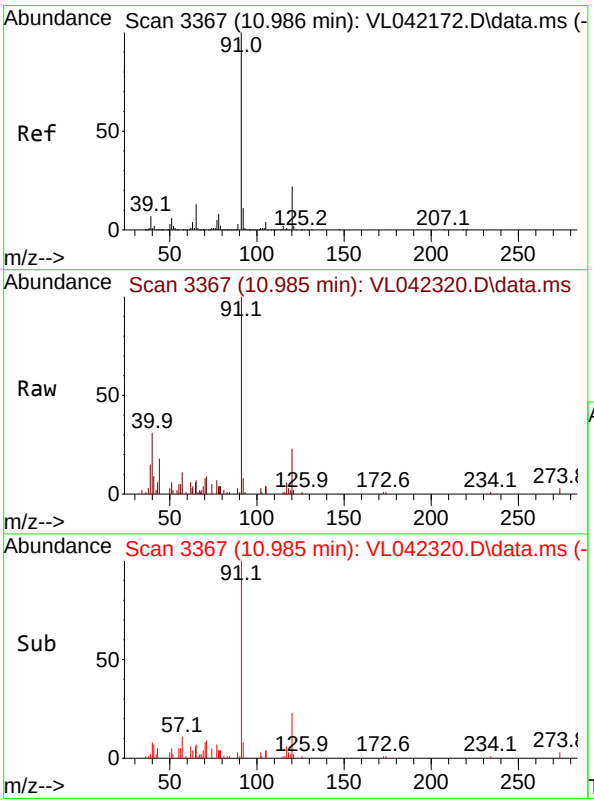
#61
Styrene
Concen: 0.051 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:104 Resp: 1381

Ion	Ratio	Lower	Upper
104	100		
78	65.4	41.8	62.6#
103	40.7	37.0	55.4

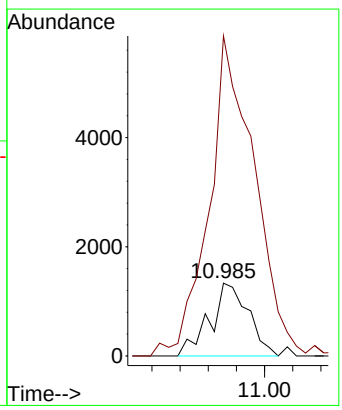


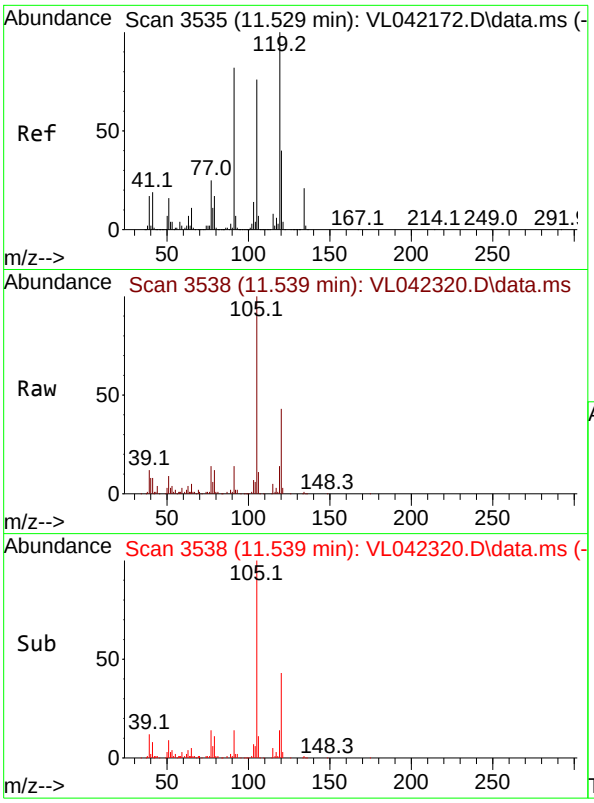


#64
n-propylbenzene
Concen: 0.060 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:120 Resp: 1262

Ion	Ratio	Lower	Upper
120	100		
91	530.8	376.9	565.3



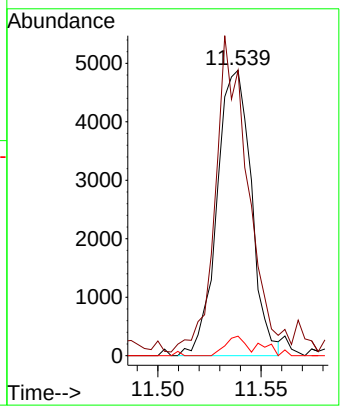


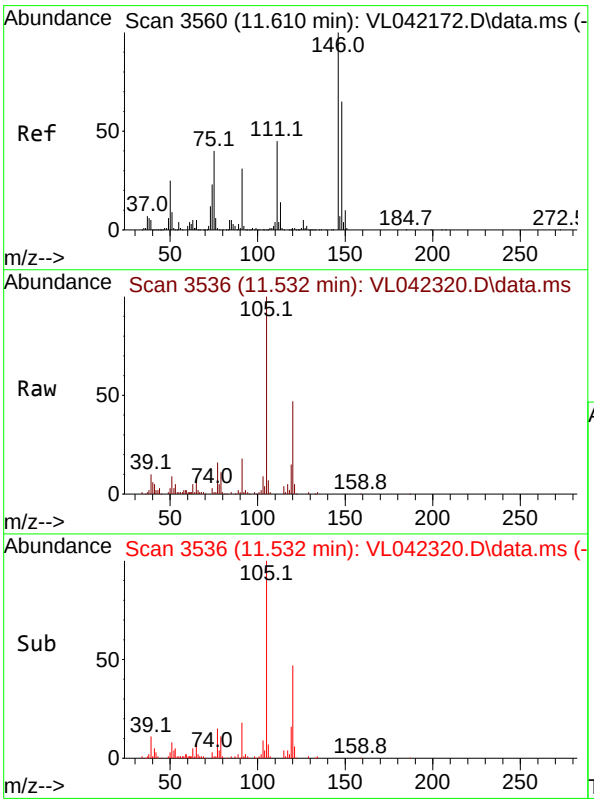
#65
tert-Butylbenzene
Concen: 0.075 ppbv
RT: 11.539 min Scan# 3
Delta R.T. 0.009 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:119 Resp: 5633

Ion	Ratio	Lower	Upper
119	100		
91	108.4	66.0	99.0#
134	6.2	16.7	25.1#

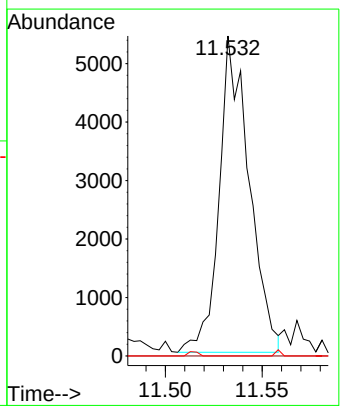


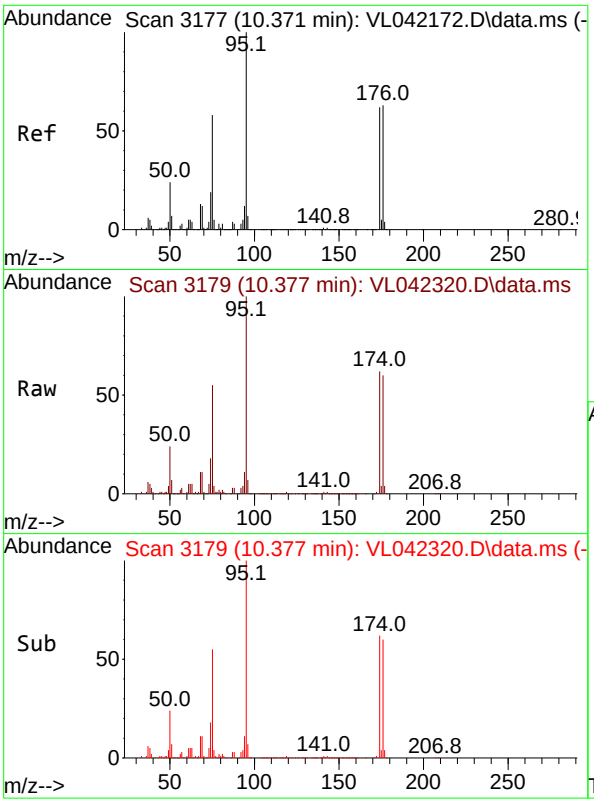


#66
Benzyl Chloride
Concen: 0.733 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.078 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion: 91 Resp: 5835

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	0.5	4.5	6.7#



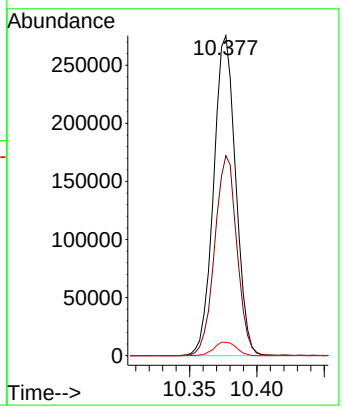


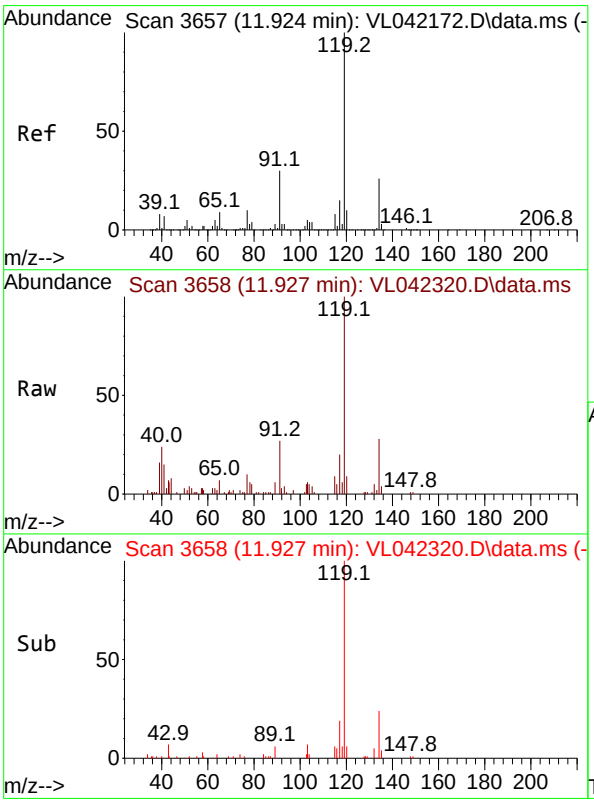
#68
1-Bromo-4-Fluorobenzene
Concen: 10.030 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion: 95 Resp: 314052

Ion	Ratio	Lower	Upper
95	100		
174	63.2	50.6	76.0
175	4.3	3.8	5.6

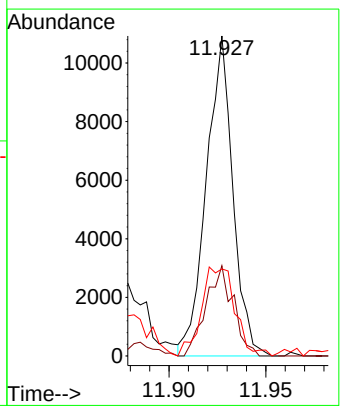


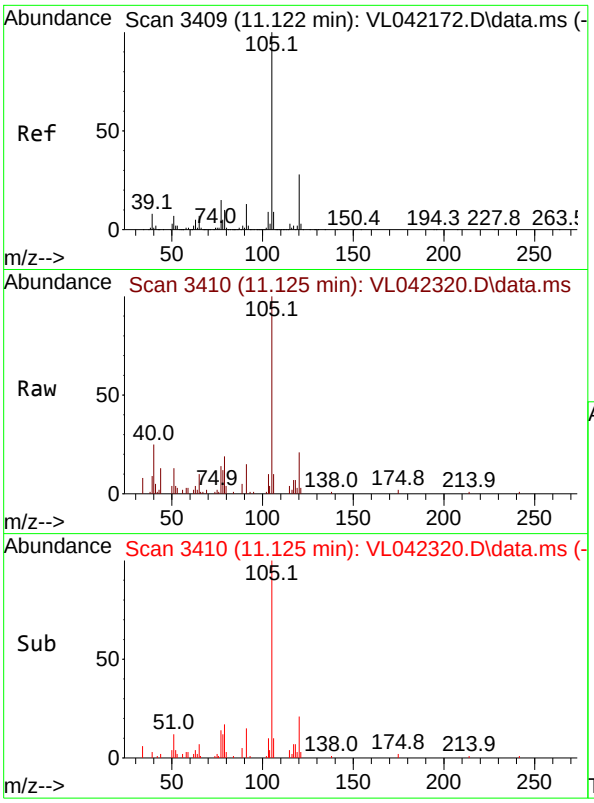


#69
p-Isopropyltoluene
Concen: 0.116 ppbv
RT: 11.927 min Scan# 3658
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:119 Resp: 10393

Ion	Ratio	Lower	Upper
119	100		
134	33.8	20.4	30.6#
91	32.3	23.7	35.5



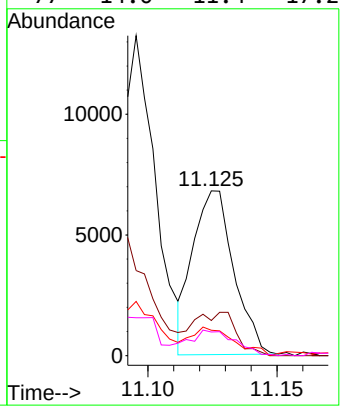


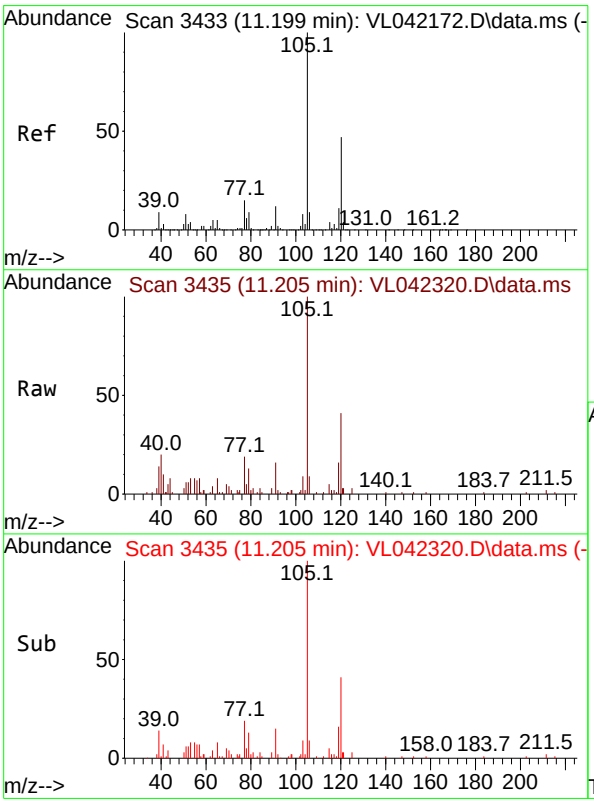
#72
4-Ethyltoluene
Concen: 0.111 ppbv
RT: 11.125 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:105 Resp: 7507

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.4	35.0#
91	0.0	10.3	15.5#
77	14.0	11.4	17.2

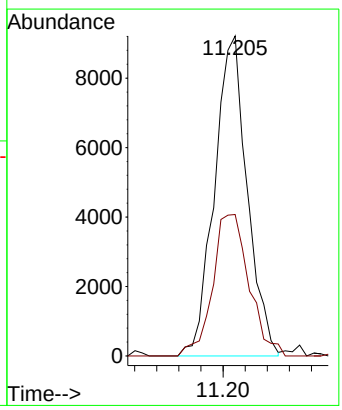


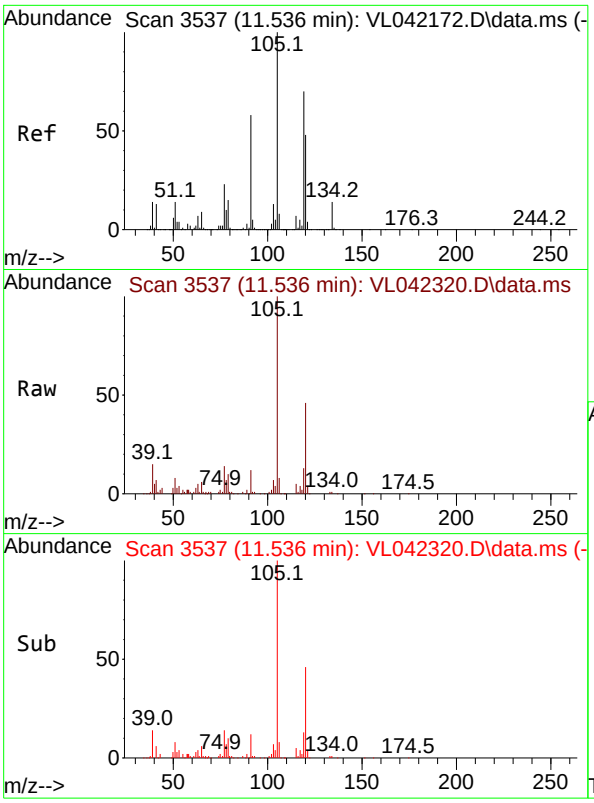


#73
1,3,5-Trimethylbenzene
Concen: 0.161 ppbv
RT: 11.205 min Scan# 3435
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:105 Resp: 9483

Ion	Ratio	Lower	Upper
105	100		
120	44.2	37.4	56.0



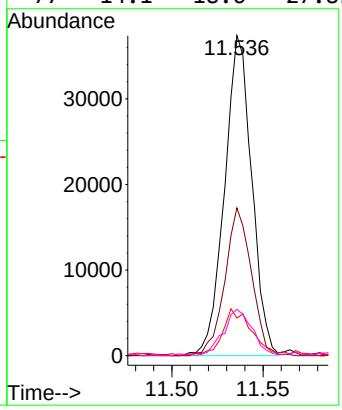


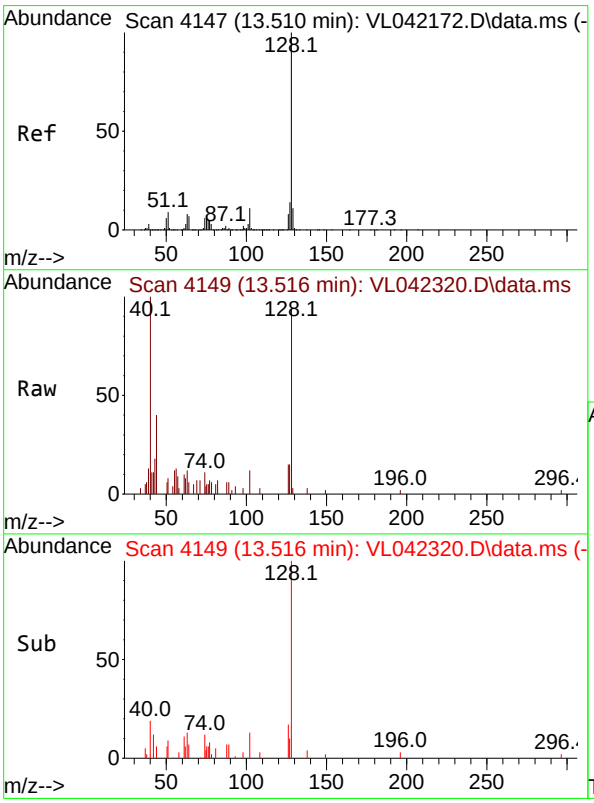
#74
1,2,4-Trimethylbenzene
Concen: 0.571 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025

Tgt Ion:105 Resp: 38801

Ion	Ratio	Lower	Upper
105	100		
120	46.2	38.6	58.0
91	11.5	46.2	69.2#
77	14.1	18.6	27.8#

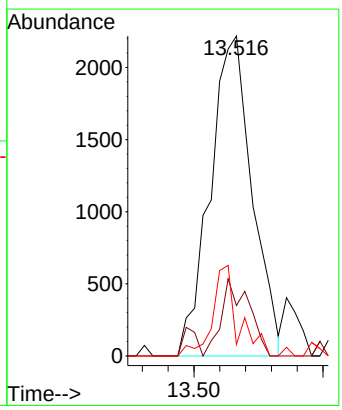




#79
Naphthalene
Concen: 0.034 ppbv
RT: 13.516 min Scan# 4149
Delta R.T. 0.006 min
Lab File: VL042320.D
Acq: 11 Apr 2025 15:01

Tgt Ion:128 Resp: 2510

Ion	Ratio	Lower	Upper
128	100		
127	15.7	10.8	16.2
129	3.6	9.0	13.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Quant Time: Apr 11 23:01:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

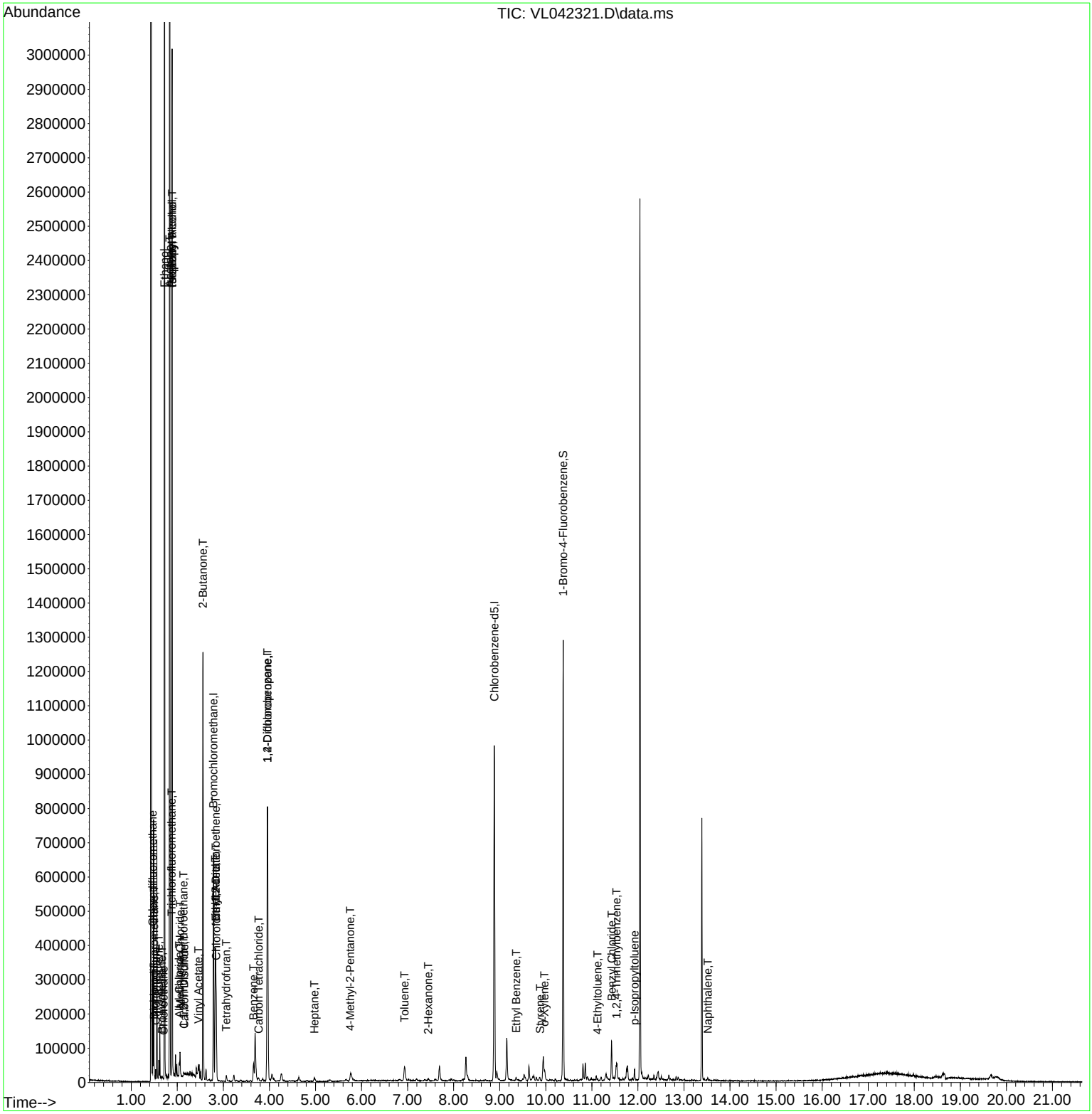
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	184452	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	454008	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.882	117	391031	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	301415	9.386	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.900%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11984	0.440	ppbv		90
3) Chlorodifluoromethane	1.466	51	80648	2.899	ppbv	#	63
4) Chloromethane	1.531	50	6779	0.609	ppbv		99
6) Bromomethane	1.667	94	157	0.031	ppbv	#	66
7) Chloroethane	1.703	64	318	0.071	ppbv	#	43
9) Propene	1.887	41	128515	10.078	ppbv		87
10) Heptane	4.975	43	3329	0.098	ppbv	#	28
11) Trichlorofluoromethane	1.877	101	5150	0.194	ppbv		94
12) 1,1,2-Trichlorotrifluo...	2.136	101	1356	0.062	ppbv		97
13) Ethanol	1.722	45	1721714	1428.217	ppbv		97
15) Acetone	1.832	43	2336283	90.565	ppbv	#	69
16) 1,3-Butadiene	1.599	39	7032	0.558	ppbv	#	35
17) tert-Butyl alcohol	1.887	59	51633	1.607	ppbv		95
19) Isopropyl Alcohol	1.887	45	1254135	86.165	ppbv	#	41
20) Methylene Chloride	2.062	84	8636	0.899	ppbv	#	76
21) Allyl Chloride	2.046	41	5656	0.311	ppbv	#	31
23) Vinyl Acetate	2.457	43	22621	2.026	ppbv	#	90
25) Ethyl Acetate	2.836	43	173110	2.586	ppbv		98
26) Hexane	2.826	57	70462	2.725	ppbv		92
27) Carbon Disulfide	2.149	76	1144	0.041	ppbv	#	1
29) Chloroform	2.848	83	55947	1.478	ppbv		100
31) cis-1,2-Dichloroethene	2.836	61	15260	0.581	ppbv	#	25
34) 2-Butanone	2.557	43	746435	22.673	ppbv		99
35) Carbon Tetrachloride	3.764	117	2821	0.080	ppbv	#	68
36) Benzene	3.654	78	30723	0.683	ppbv		95
39) 1,2-Dichloropropane	3.959	63	116117	7.084	ppbv	#	23
41) Tetrahydrofuran	3.062	42	3180	0.168	ppbv	#	54
50) 4-Methyl-2-Pentanone	5.755	43	6238	0.120	ppbv	#	39
51) 2-Hexanone	7.448	43	2209	0.052	ppbv	#	28
53) Toluene	6.933	91	28699	0.538	ppbv		98
58) Ethyl Benzene	9.357	91	4656	0.067	ppbv		98
60) o-Xylene	9.969	91	2749	0.049	ppbv	#	3
61) Styrene	9.875	104	2355	0.086	ppbv	#	83
66) Benzyl Chloride	11.432	91	3998	0.490	ppbv	#	69
69) p-Isopropyltoluene	11.927	119	10463	0.114	ppbv	#	93
72) 4-Ethyltoluene	11.125	105	2438	0.035	ppbv	#	83
74) 1,2,4-Trimethylbenzene	11.536	105	10882	0.156	ppbv	#	68
79) Naphthalene	13.516	128	3524	0.046	ppbv	#	92

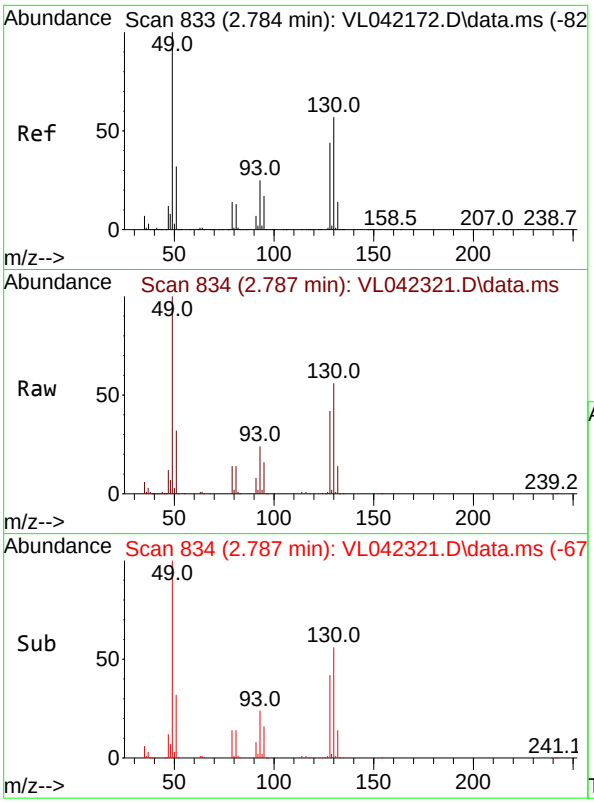
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042321.D
Acq On : 11 Apr 2025 15:36
Operator : SY/MD
Sample : Q1665-18
Misc : 400mL/MSVOA_L
ALS Vial : 4 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Quant Time: Apr 11 23:01:40 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



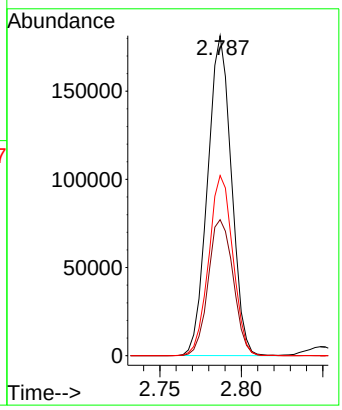


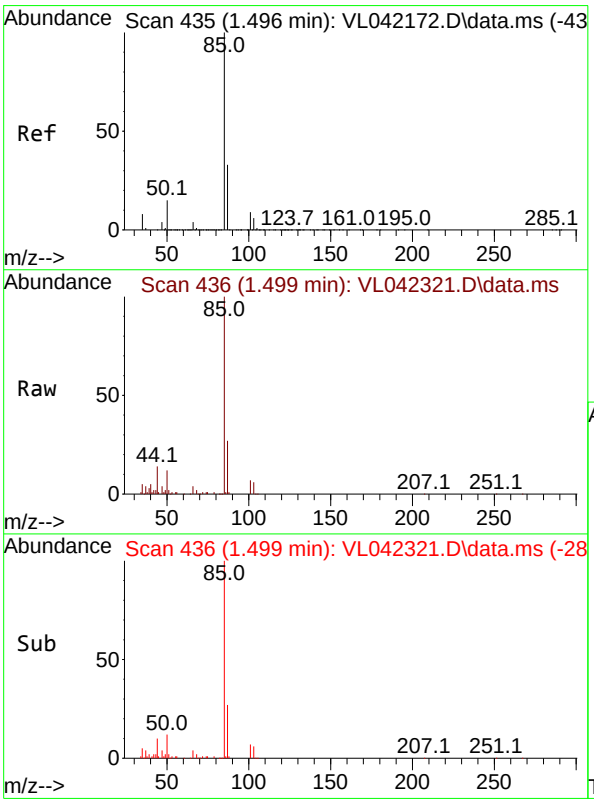
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 49 Resp: 184452

Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.9	68.5
130	57.1	28.8	86.4

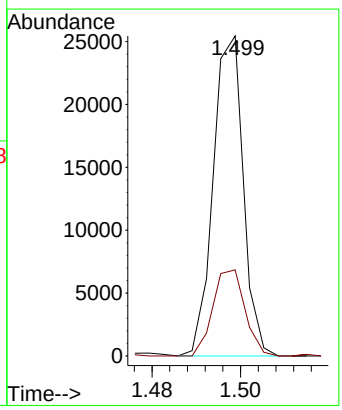


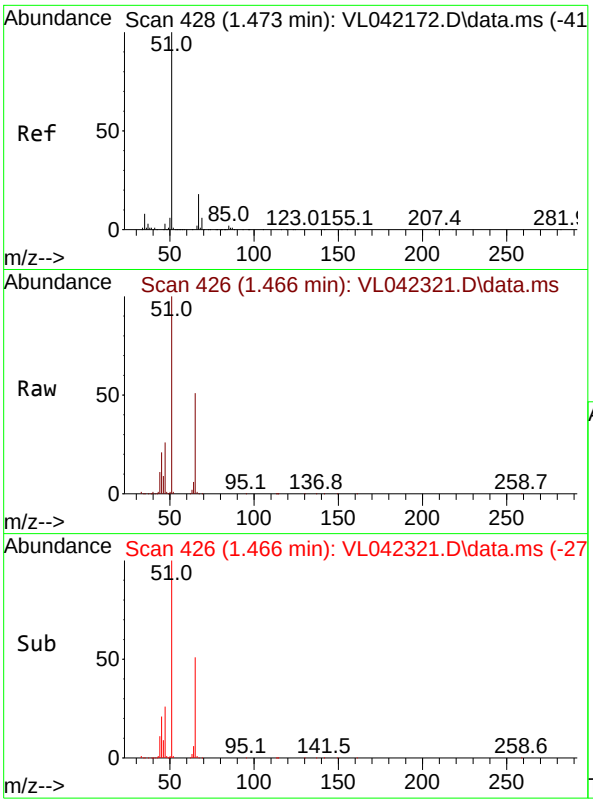


#2
Dichlorodifluoromethane
Concen: 0.440 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 85 Resp: 11984

Ion	Ratio	Lower	Upper
85	100		
87	26.9	26.1	39.1



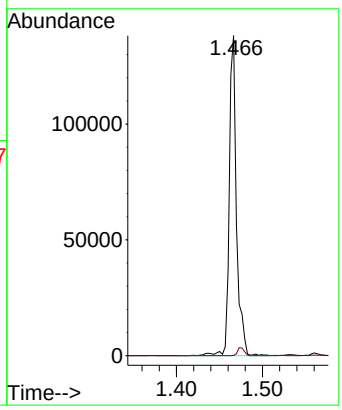


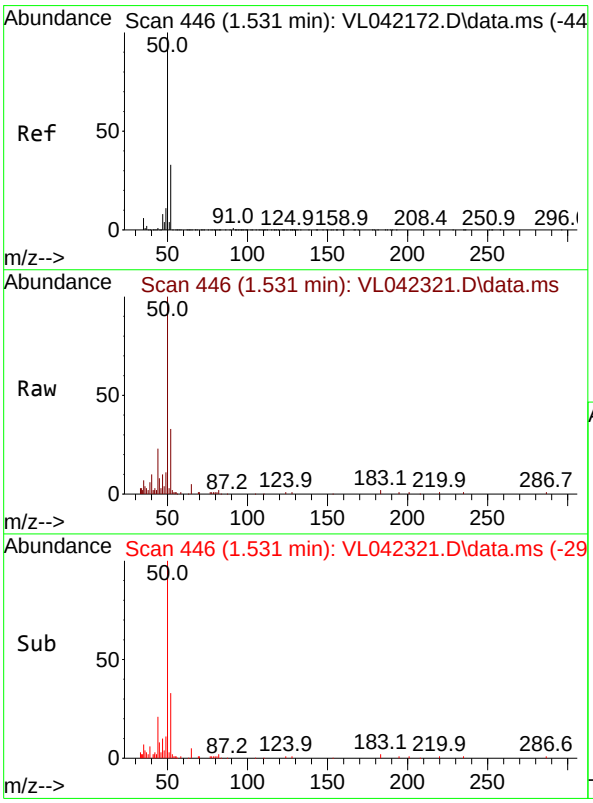
#3
Chlorodifluoromethane
Concen: 2.899 ppbv
RT: 1.466 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 51 Resp: 80648

Ion	Ratio	Lower	Upper
51	100		
67	2.3	15.0	22.6#

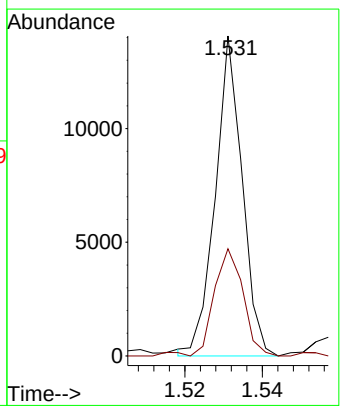


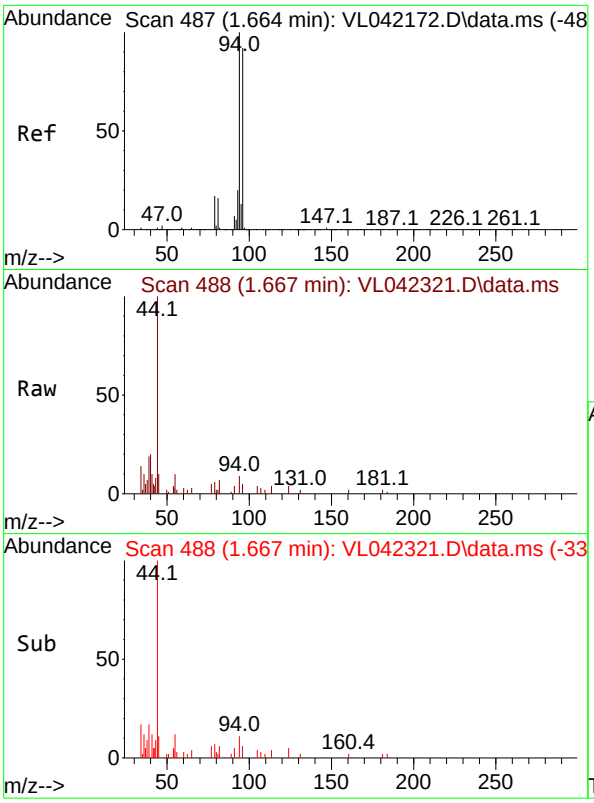


#4
Chloromethane
Concen: 0.609 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 50 Resp: 6779

Ion	Ratio	Lower	Upper
50	100		
52	33.0	26.1	39.1



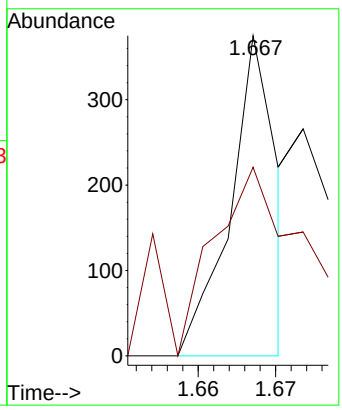


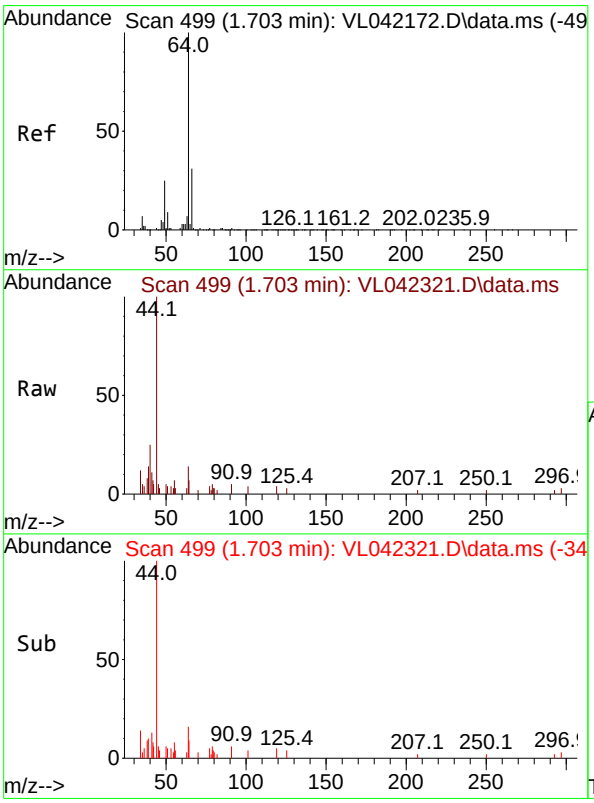
#6
Bromomethane
Concen: 0.031 ppbv
RT: 1.667 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 94 Resp: 157

Ion	Ratio	Lower	Upper
94	100		
96	58.9	73.1	109.7#

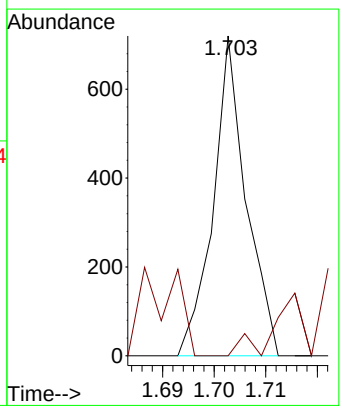


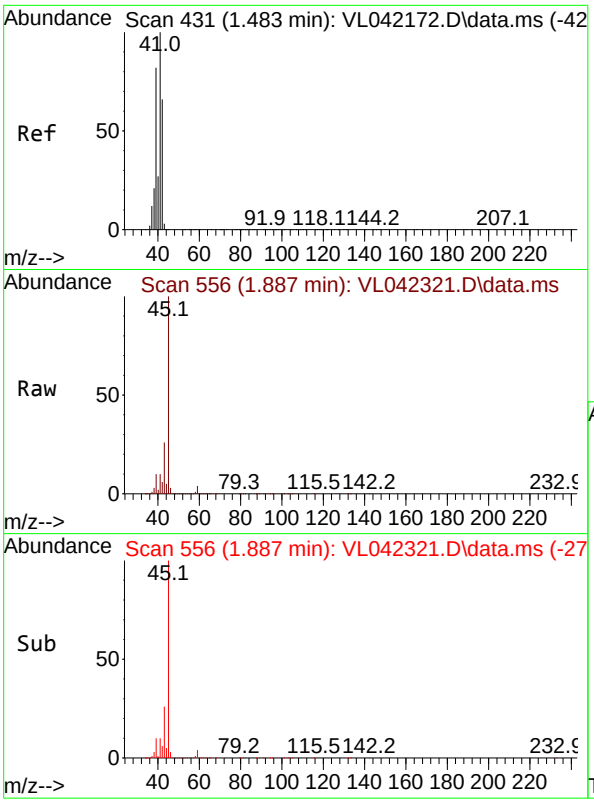


#7
Chloroethane
Concen: 0.071 ppbv
RT: 1.703 min Scan# 499
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 64 Resp: 318

Ion	Ratio	Lower	Upper
64	100		
66	0.0	25.2	37.8#



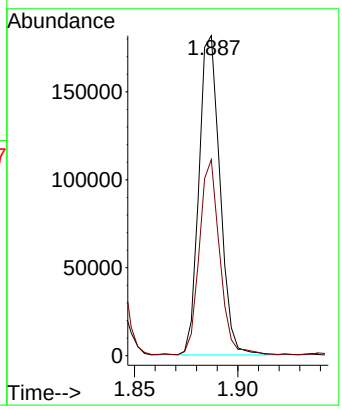


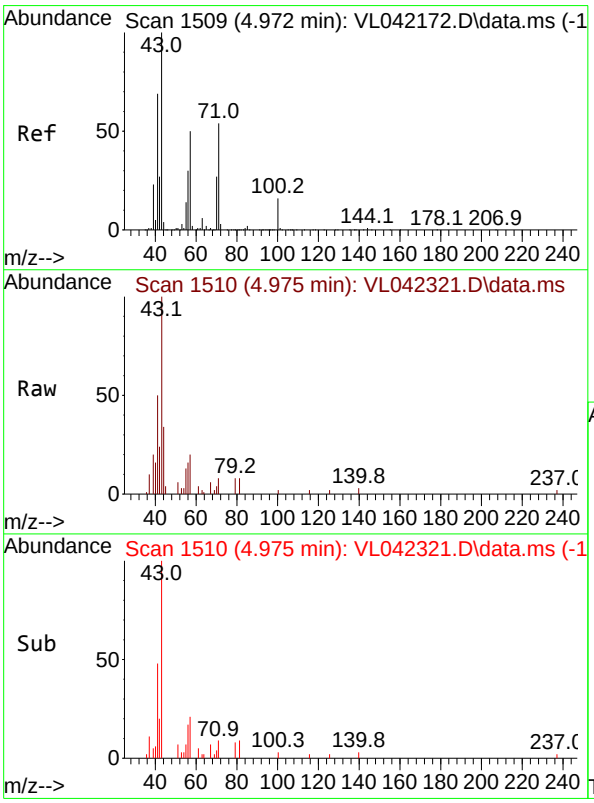
#9
Propene
Concen: 10.078 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.404 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 41 Resp: 128515

Ion	Ratio	Lower	Upper
41	100		
42	58.8	55.4	83.2

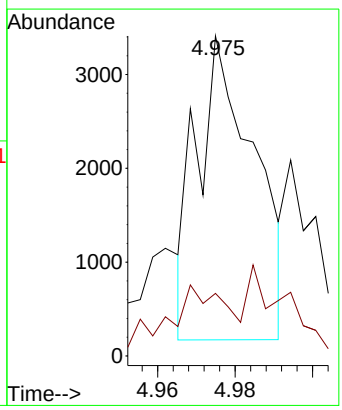


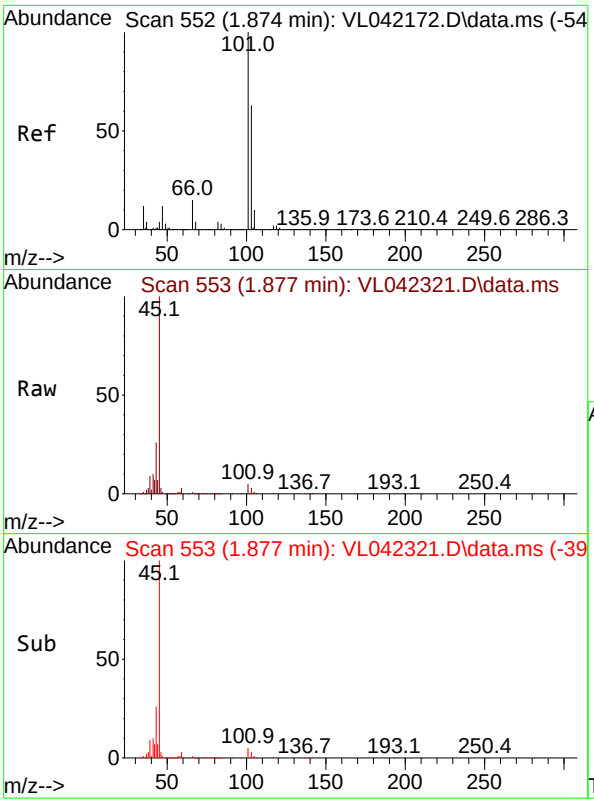


#10
Heptane
Concen: 0.098 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 3329

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.4	59.2#



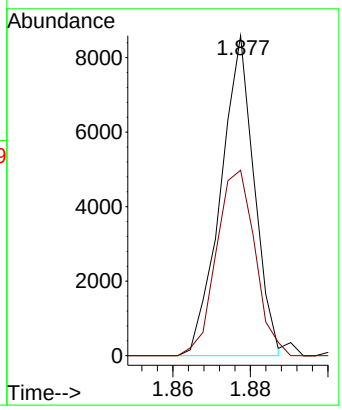


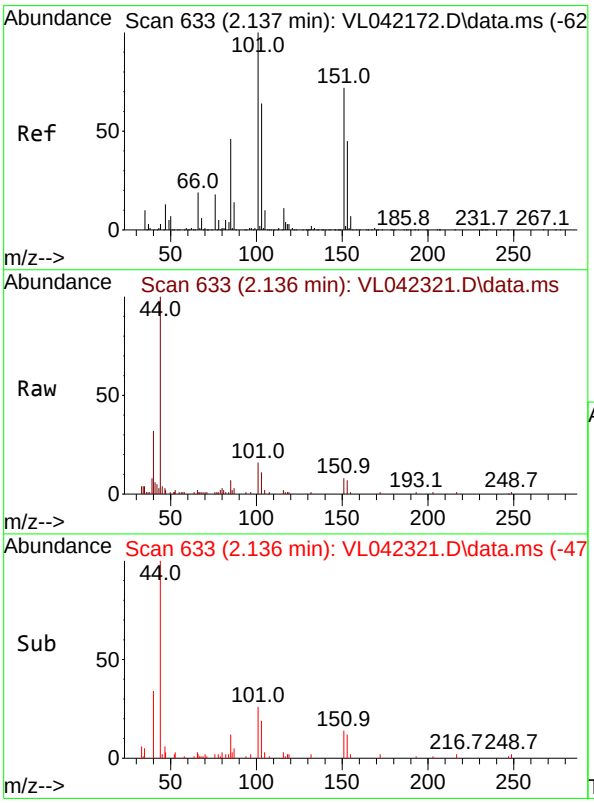
#11
Trichlorofluoromethane
Concen: 0.194 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion:101 Resp: 5150

Ion	Ratio	Lower	Upper
101	100		
103	58.0	50.2	75.2

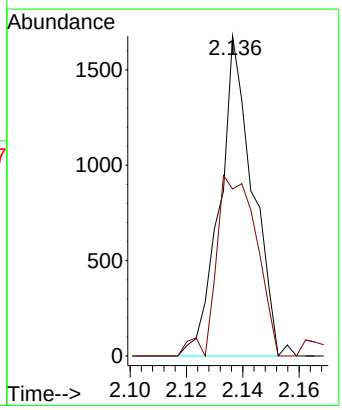


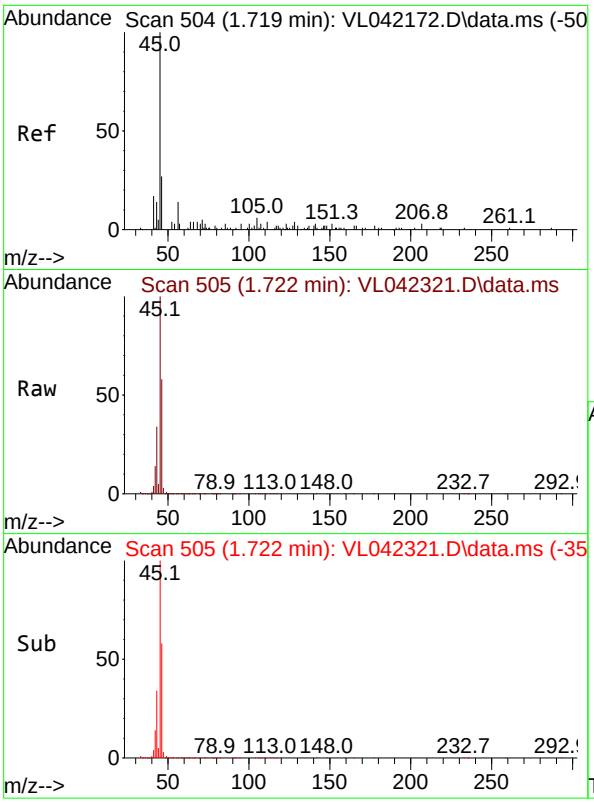


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.062 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:101 Resp: 1356

Ion	Ratio	Lower	Upper
101	100		
151	74.0	57.1	85.7



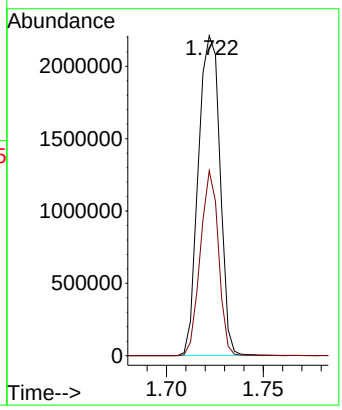


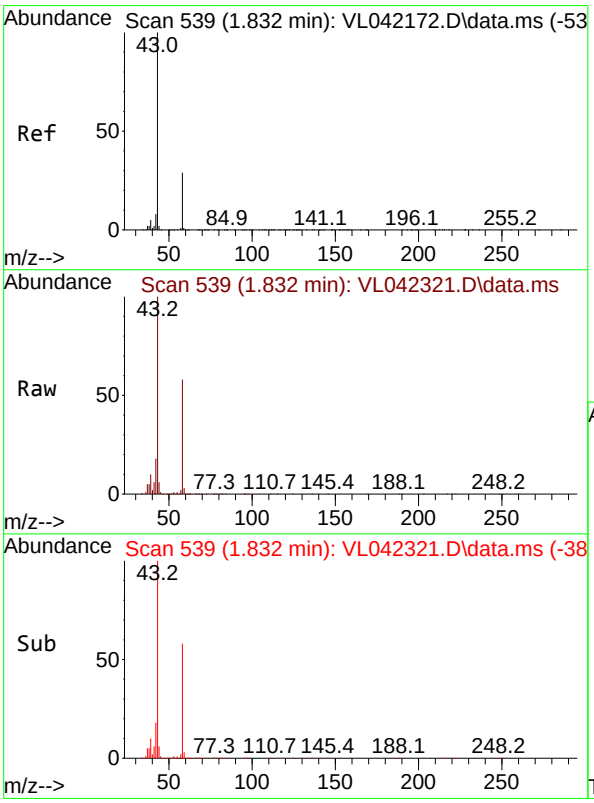
#13
Ethanol
Concen: 1428.217 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 45 Resp: 1721714

Ion	Ratio	Lower	Upper
45	100		
46	48.6	20.2	80.8

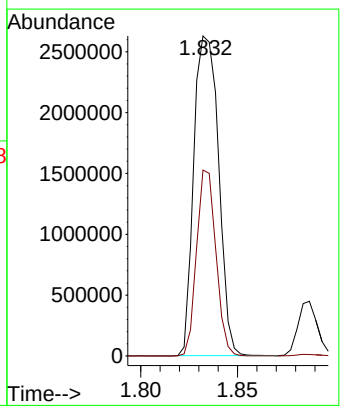


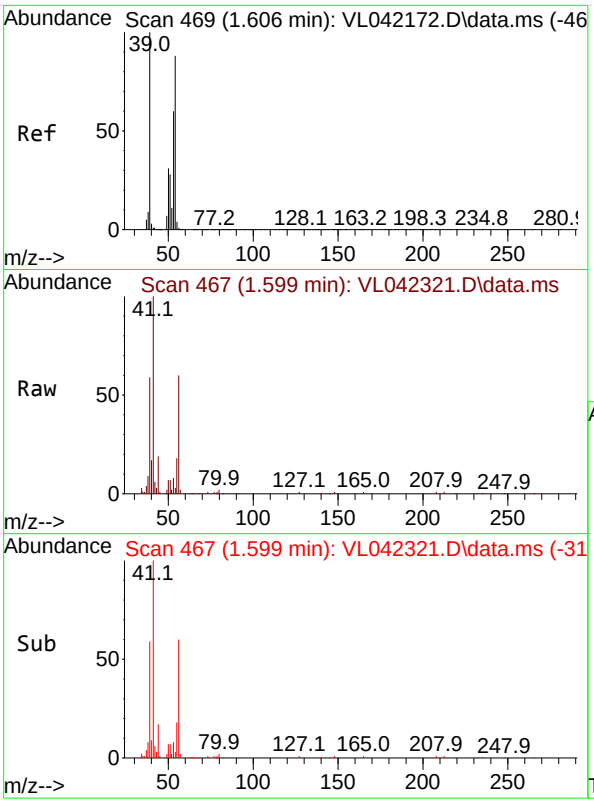


#15
Acetone
Concen: 90.565 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 2336283

Ion	Ratio	Lower	Upper
43	100		
58	45.7	23.2	34.8#



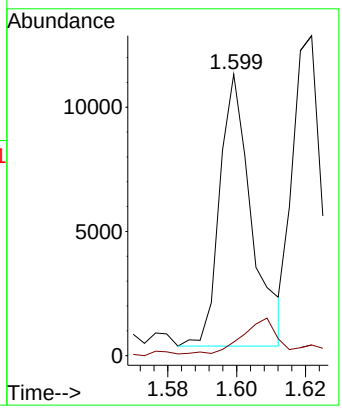


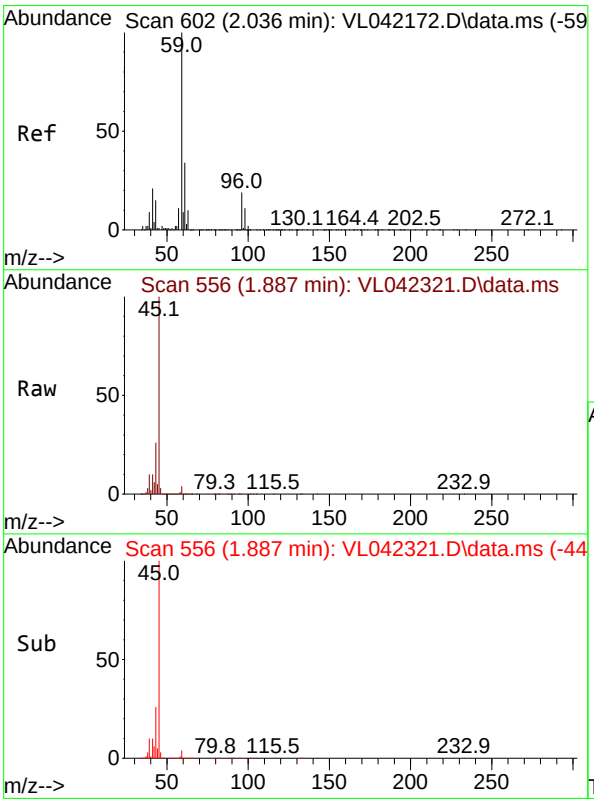
#16
1,3-Butadiene
Concen: 0.558 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 39 Resp: 7032

Ion	Ratio	Lower	Upper
39	100		
54	20.1	60.7	91.1#

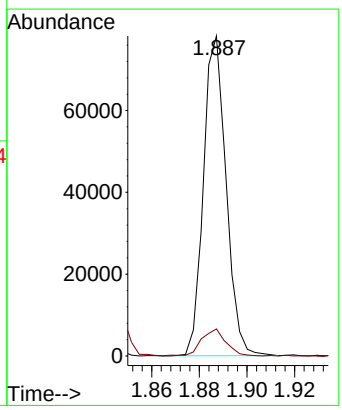


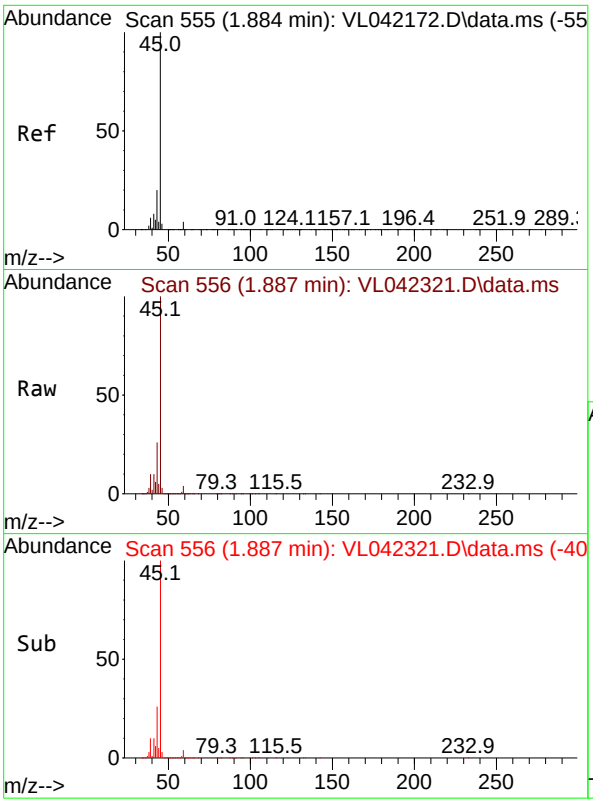


#17
tert-Butyl alcohol
Concen: 1.607 ppbv
RT: 1.887 min Scan# 556
Delta R.T. -0.149 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 59 Resp: 51633

Ion	Ratio	Lower	Upper
59	100		
57	9.3	8.9	13.3



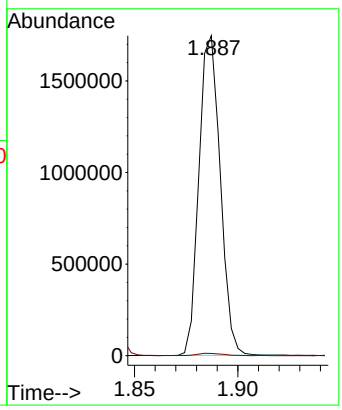


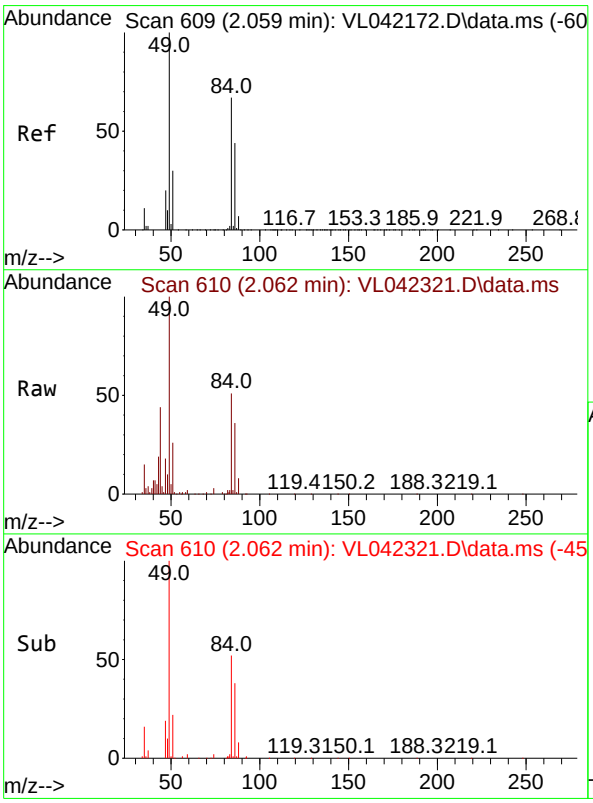
#19
Isopropyl Alcohol
Concen: 86.165 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 45 Resp: 1254135

Ion	Ratio	Lower	Upper
45	100		
58	85.1	36.9	55.3#

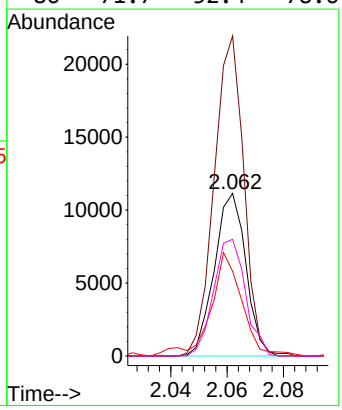


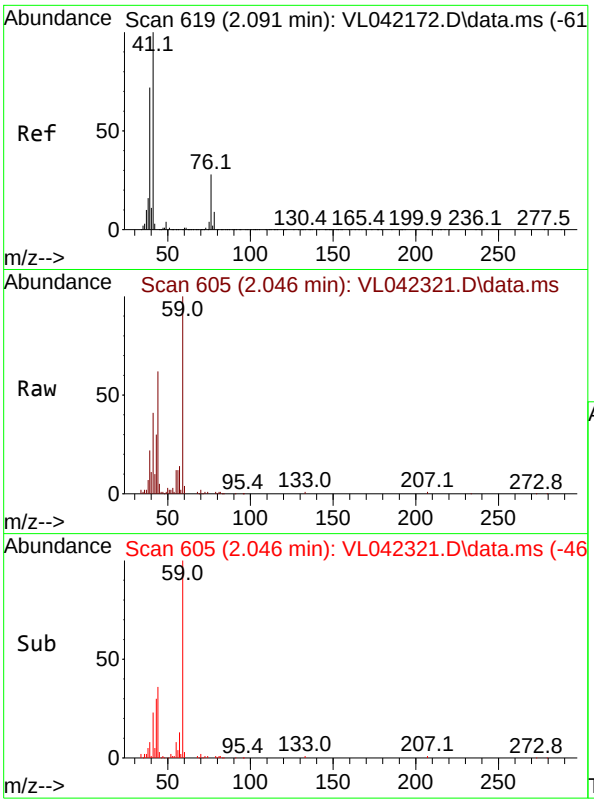


#20
Methylene Chloride
Concen: 0.899 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 84 Resp: 8636

Ion	Ratio	Lower	Upper
84	100		
49	196.9	120.2	180.4#
51	49.7	37.4	56.0
86	71.7	52.4	78.6



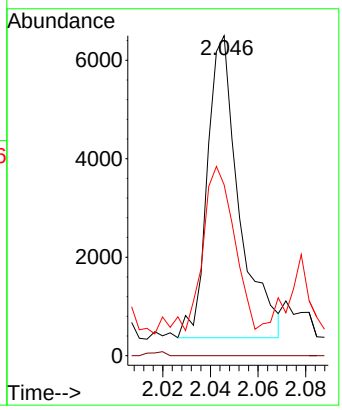


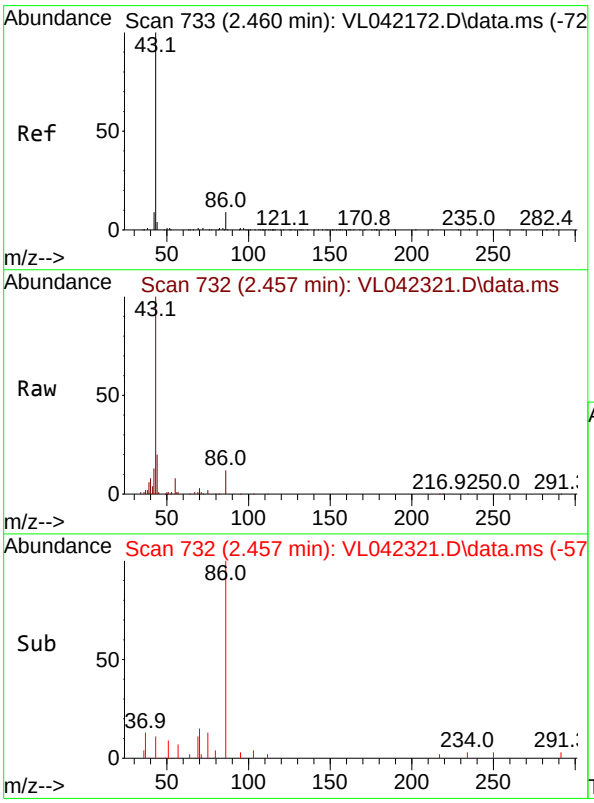
#21
Allyl Chloride
Concen: 0.311 ppbv
RT: 2.046 min Scan# 6
Delta R.T. -0.046 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 41 Resp: 5656

Ion	Ratio	Lower	Upper
41	100		
76	20.2	24.1	36.1#
39	0.0	61.1	91.7#

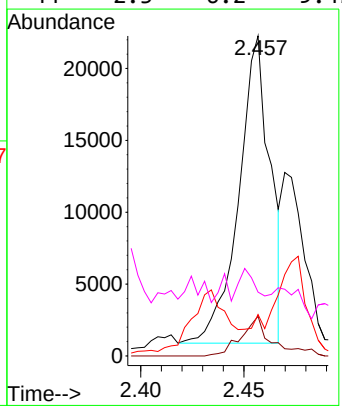


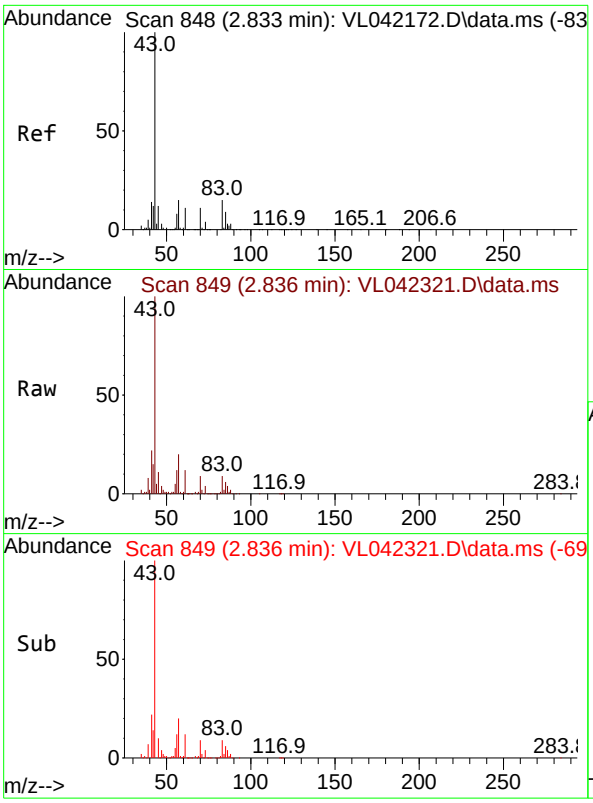


#23
Vinyl Acetate
Concen: 2.026 ppbv
RT: 2.457 min Scan# 732
Delta R.T. -0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 22621

Ion	Ratio	Lower	Upper
43	100		
86	12.9	5.5	8.3#
42	9.9	8.6	13.0
44	2.3	6.2	9.4#



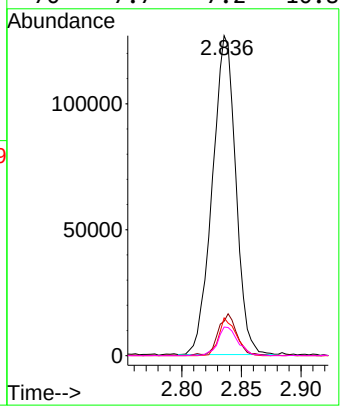


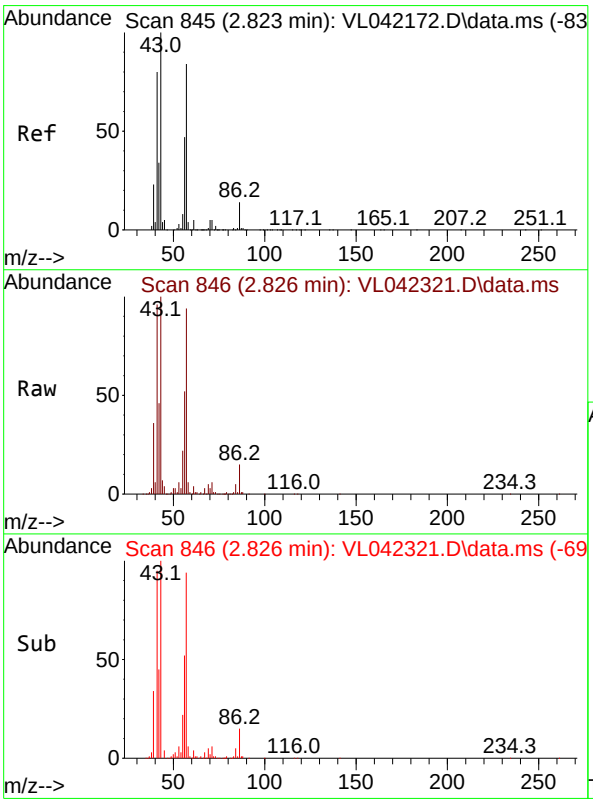
#25
Ethyl Acetate
Concen: 2.586 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 43 Resp: 173110

Ion	Ratio	Lower	Upper
43	100		
45	10.8	8.2	12.2
61	8.9	7.3	10.9
70	7.7	7.2	10.8

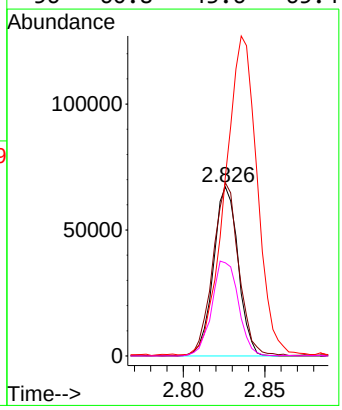


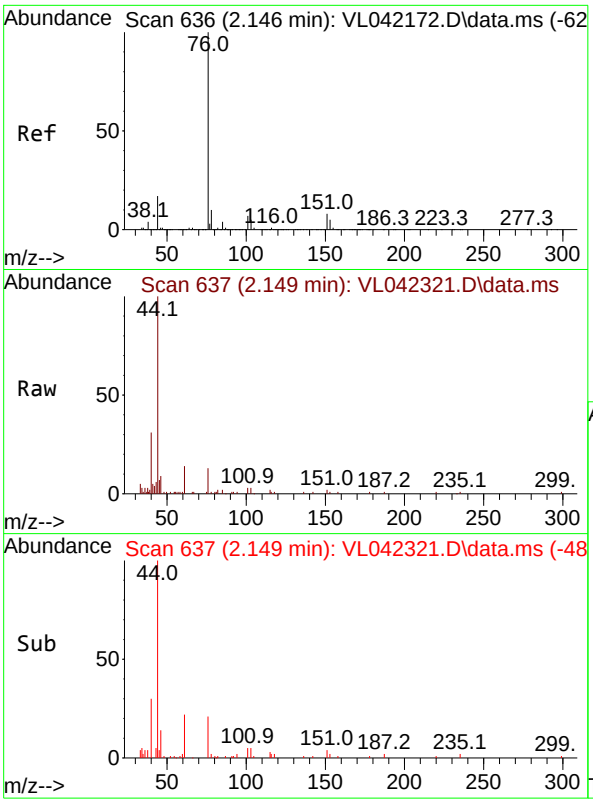


#26
Hexane
Concen: 2.725 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 57 Resp: 70462

Ion	Ratio	Lower	Upper
57	100		
41	107.0	76.6	114.8
43	249.4	207.8	311.8
56	60.8	43.6	65.4



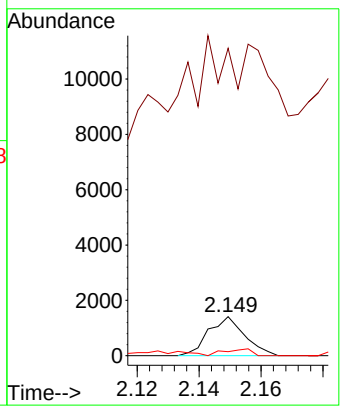


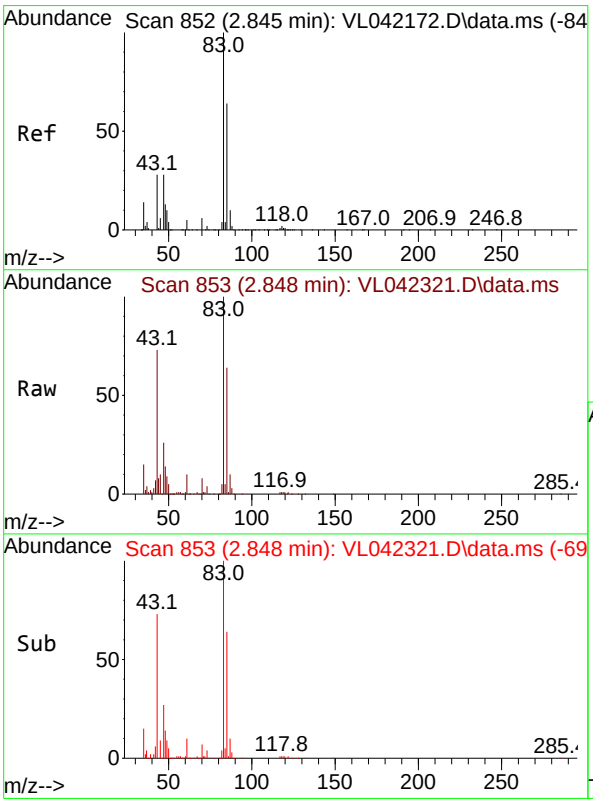
#27
Carbon Disulfide
Concen: 0.041 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 76 Resp: 1144

Ion	Ratio	Lower	Upper
76	100		
44	1169.8	14.7	22.1#
78	13.1	9.3	13.9

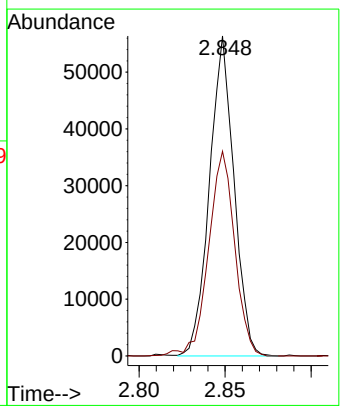


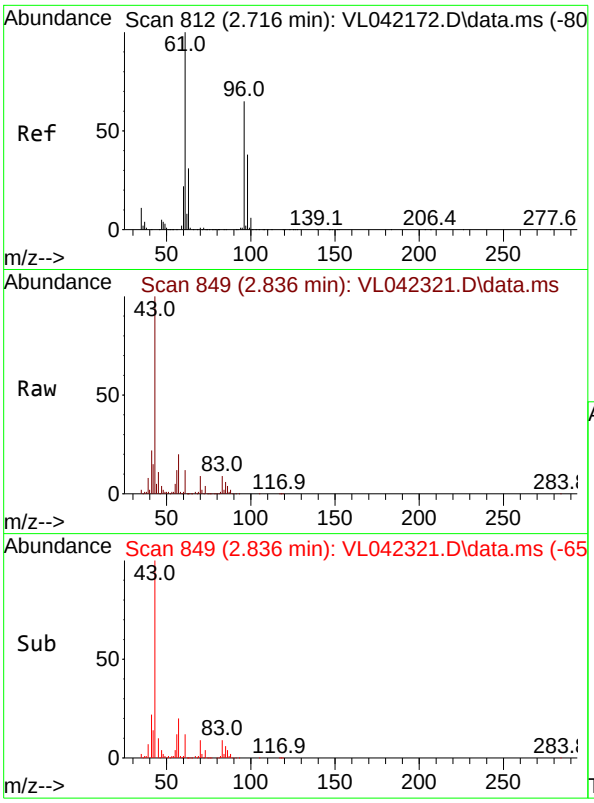


#29
Chloroform
Concen: 1.478 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 83 Resp: 55947

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2



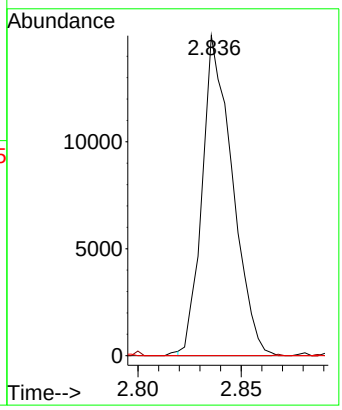


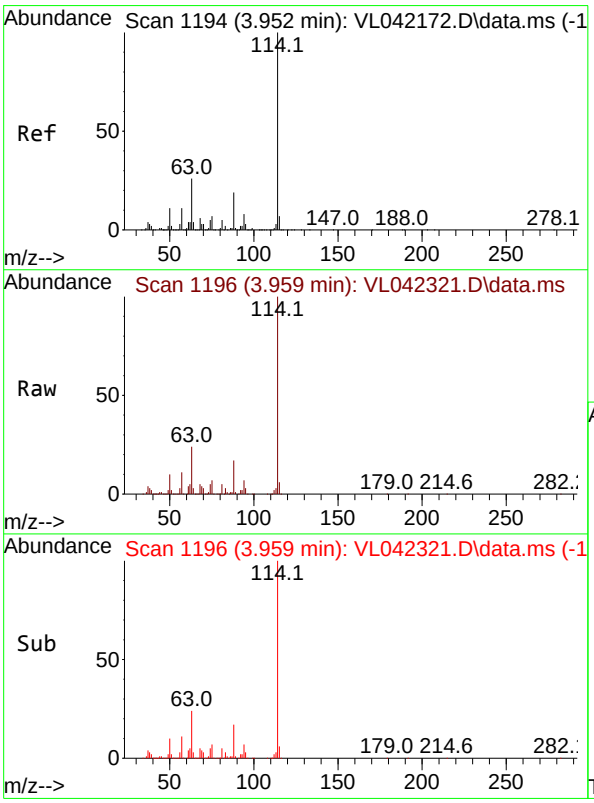
#31
cis-1,2-Dichloroethene
Concen: 0.581 ppbv
RT: 2.836 min Scan# 8
Delta R.T. 0.120 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 61 Resp: 15260

Ion	Ratio	Lower	Upper
61	100		
96	0.0	51.8	77.8#
98	0.0	30.6	46.0#

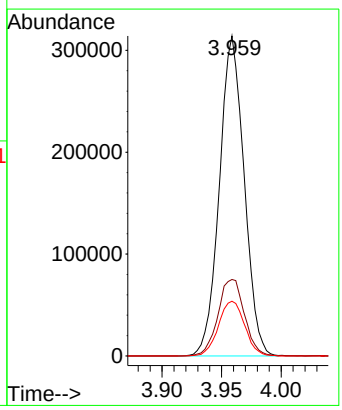


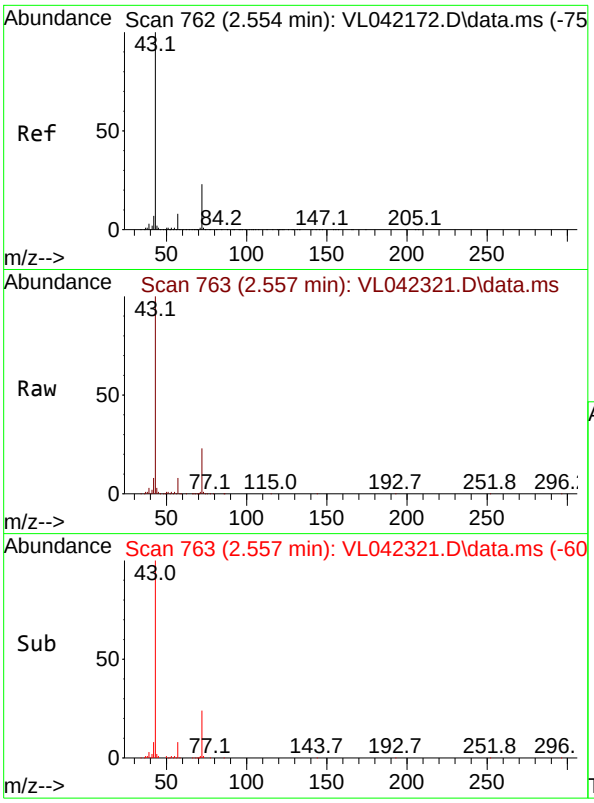


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:114 Resp: 454008

Ion	Ratio	Lower	Upper
114	100		
63	25.7	20.7	31.1
88	18.1	15.0	22.4



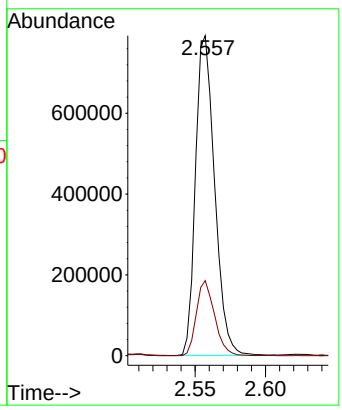


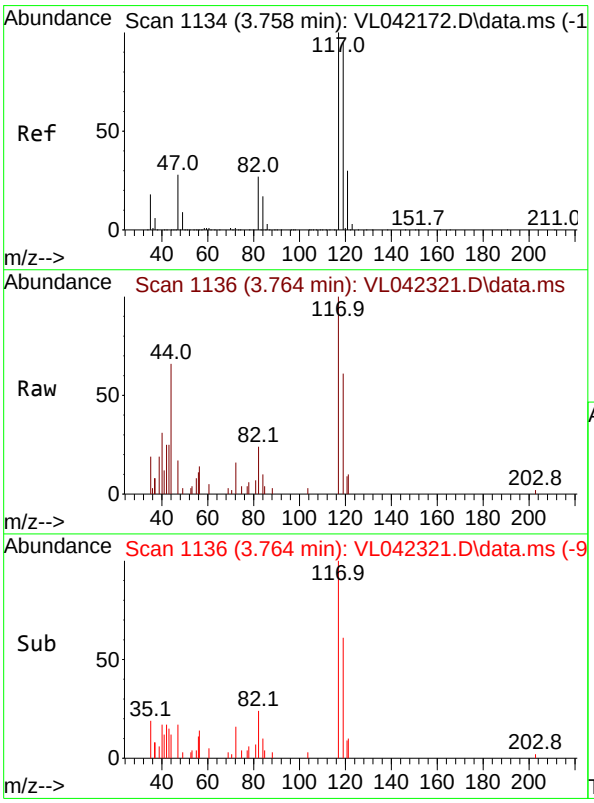
#34
2-Butanone
Concen: 22.673 ppbv
RT: 2.557 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 43 Resp: 746435

Ion	Ratio	Lower	Upper
43	100		
72	22.4	18.2	27.2

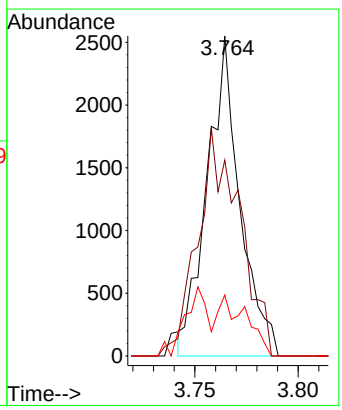


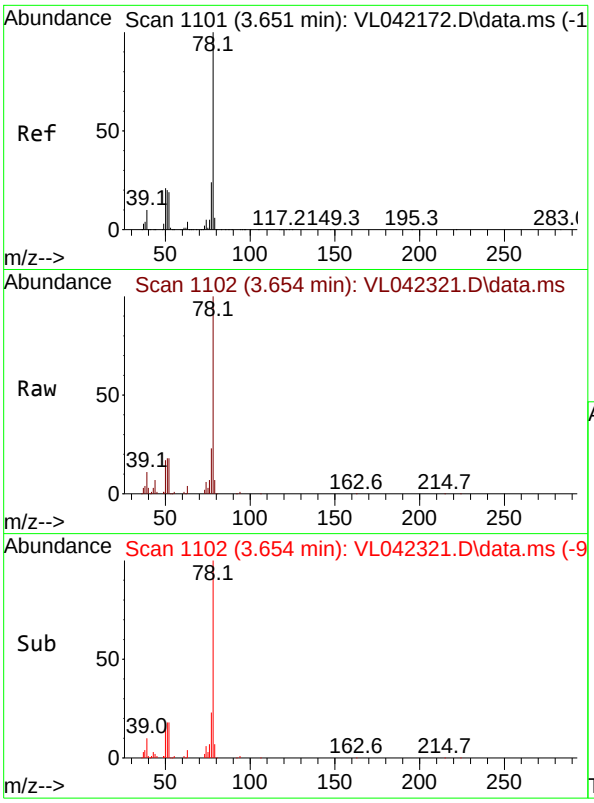


#35
Carbon Tetrachloride
Concen: 0.080 ppbv
RT: 3.764 min Scan# 1136
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:117 Resp: 2821

Ion	Ratio	Lower	Upper
117	100		
119	61.2	76.2	114.2#
121	19.1	24.2	36.4#



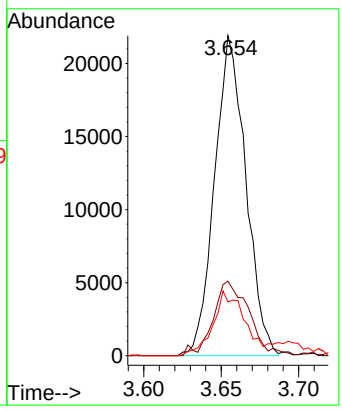


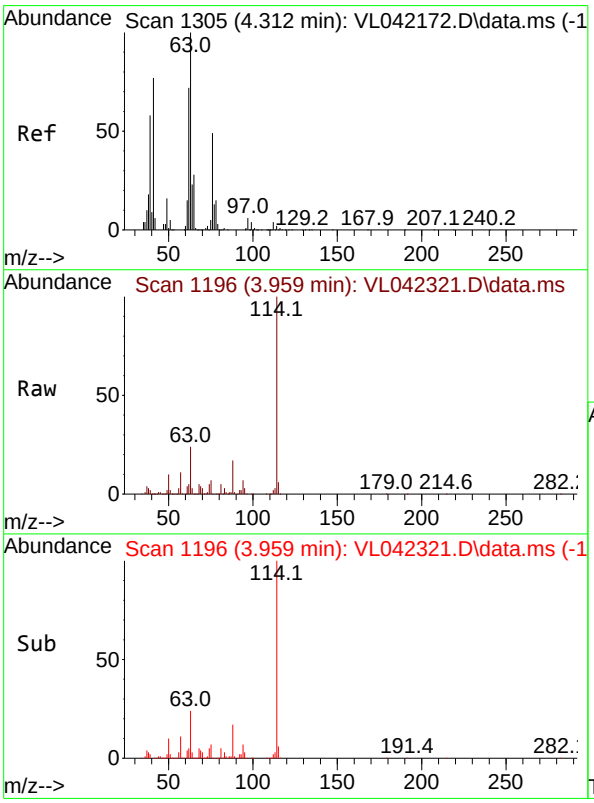
#36
Benzene
Concen: 0.683 ppbv
RT: 3.654 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 78 Resp: 30723

Ion	Ratio	Lower	Upper
78	100		
77	23.3	19.1	28.7
50	16.8	16.6	24.8

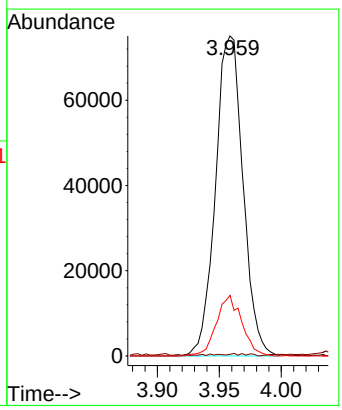


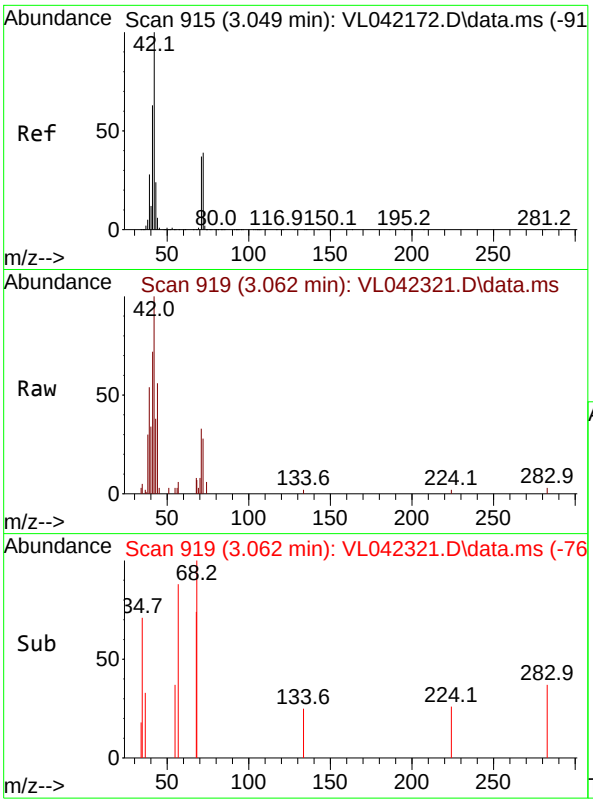


#39
1,2-Dichloropropane
Concen: 7.084 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 63 Resp: 116117

Ion	Ratio	Lower	Upper
63	100		
41	0.1	61.7	92.5#
62	19.0	57.6	86.4#



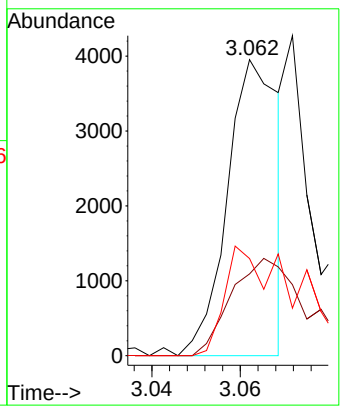


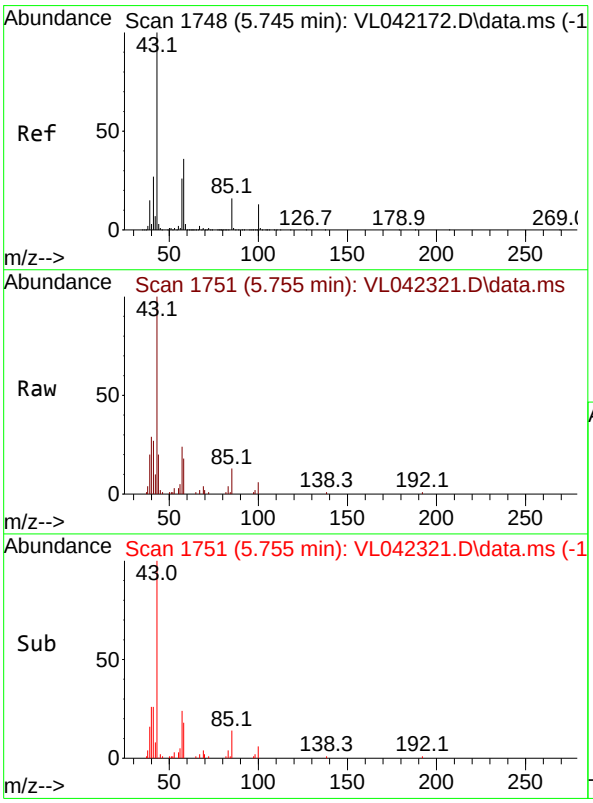
#41
Tetrahydrofuran
Concen: 0.168 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.013 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 42 Resp: 3180

Ion	Ratio	Lower	Upper
42	100		
72	0.0	31.4	47.0#
71	54.2	30.2	45.4#

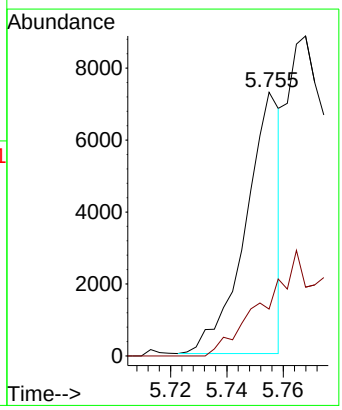


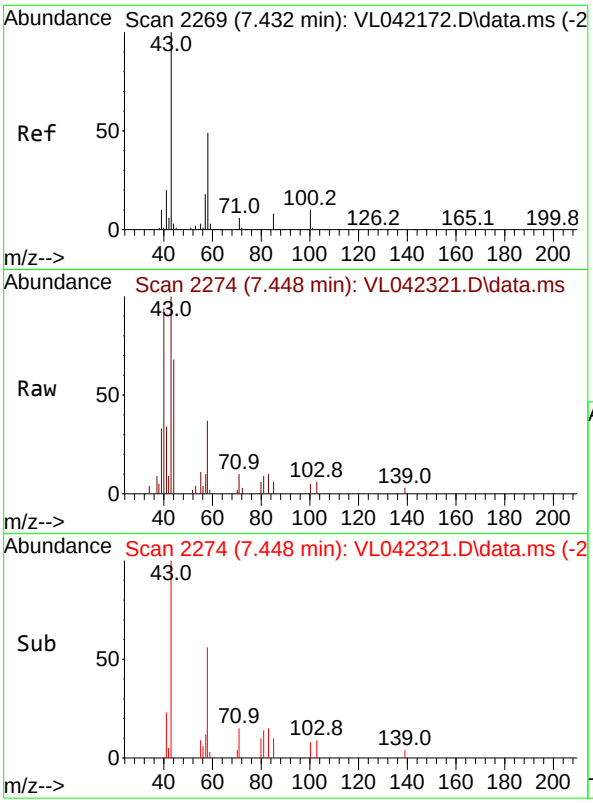


#50
4-Methyl-2-Pentanone
Concen: 0.120 ppbv
RT: 5.755 min Scan# 1751
Delta R.T. 0.009 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 43 Resp: 6238

Ion	Ratio	Lower	Upper
43	100		
58	0.0	29.0	43.6#



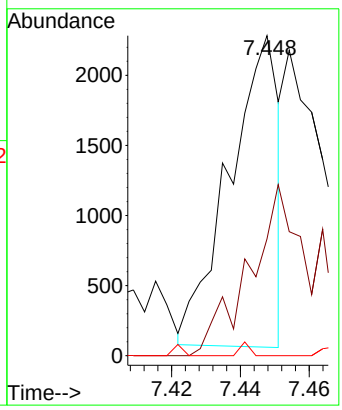


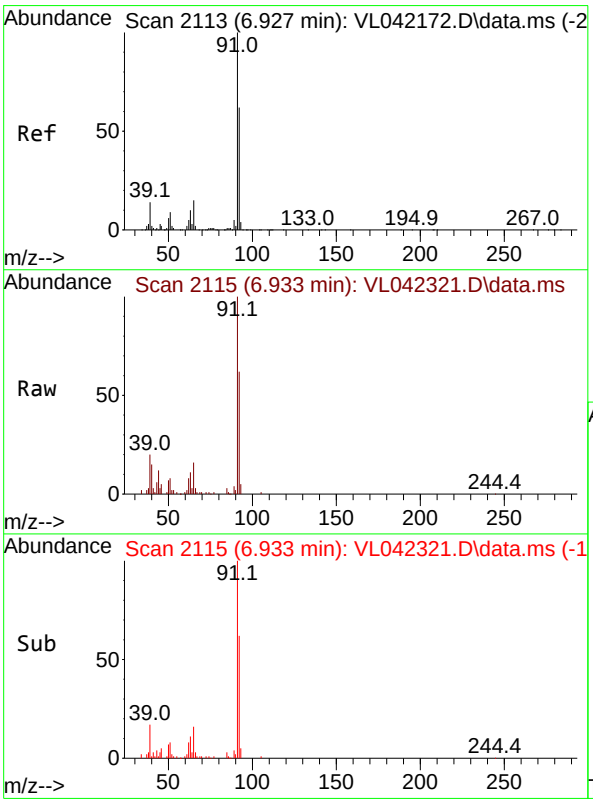
#51
2-Hexanone
Concen: 0.052 ppbv
RT: 7.448 min Scan# 2
Delta R.T. 0.016 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 43 Resp: 2209

Ion	Ratio	Lower	Upper
43	100		
58	0.0	39.7	59.5#
98	0.0	0.1	0.1#

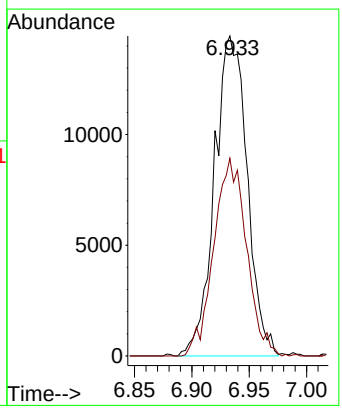


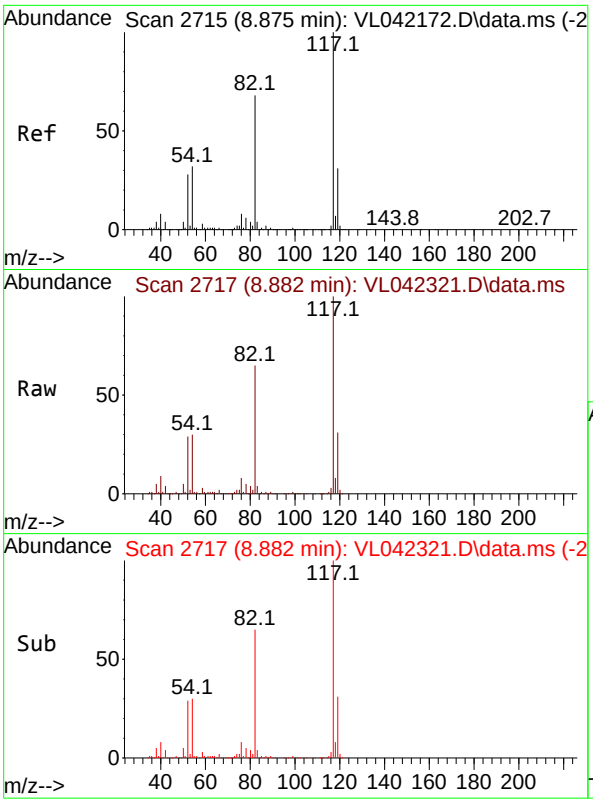


#53
Toluene
Concen: 0.538 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 91 Resp: 28699

Ion	Ratio	Lower	Upper
91	100		
92	61.8	48.4	72.6



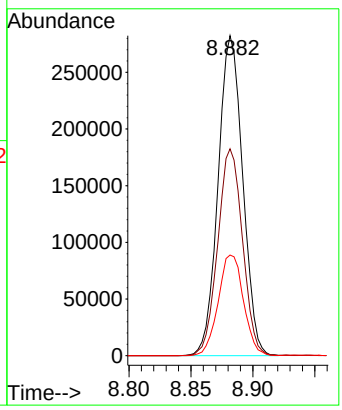


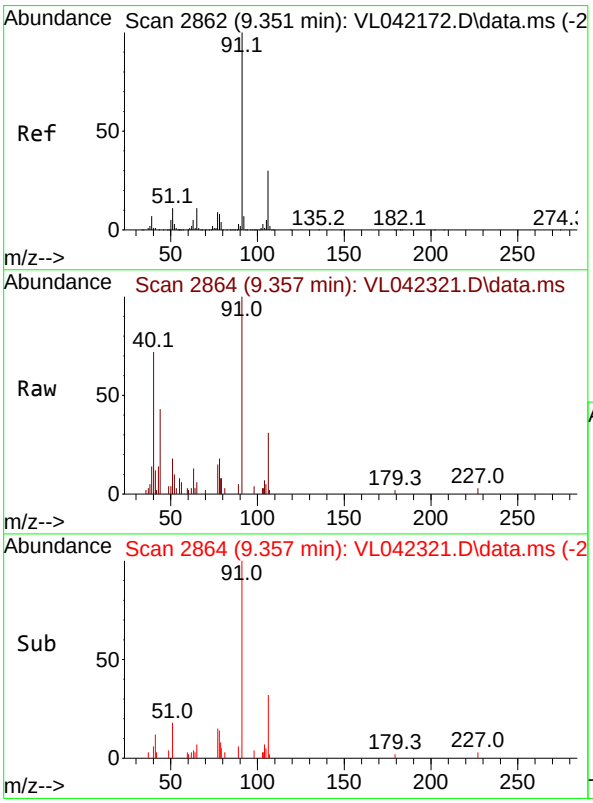
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion:117 Resp: 391031

Ion	Ratio	Lower	Upper
117	100		
82	65.2	55.8	83.6
119	32.4	25.5	38.3

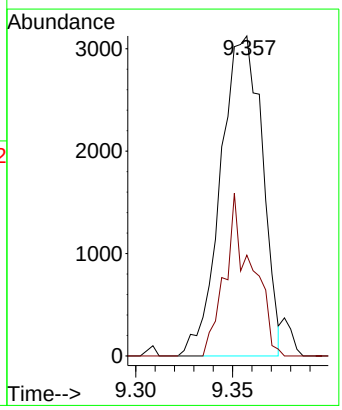


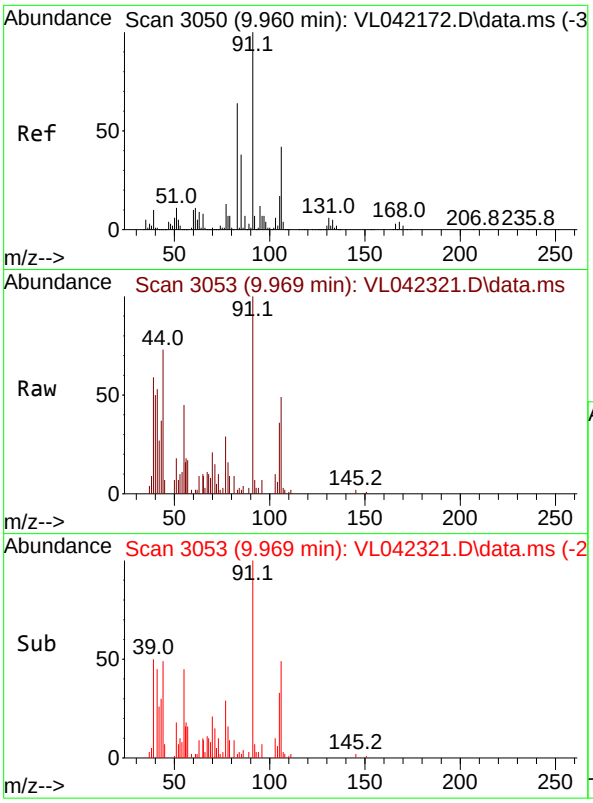


#58
Ethyl Benzene
Concen: 0.067 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 91 Resp: 4656

Ion	Ratio	Lower	Upper
91	100		
106	31.5	24.2	36.2



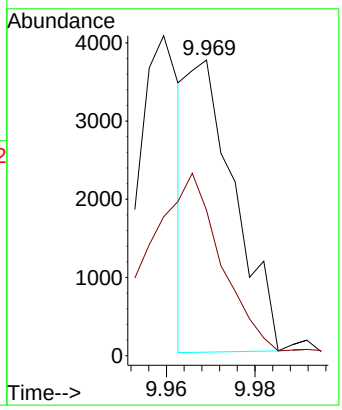


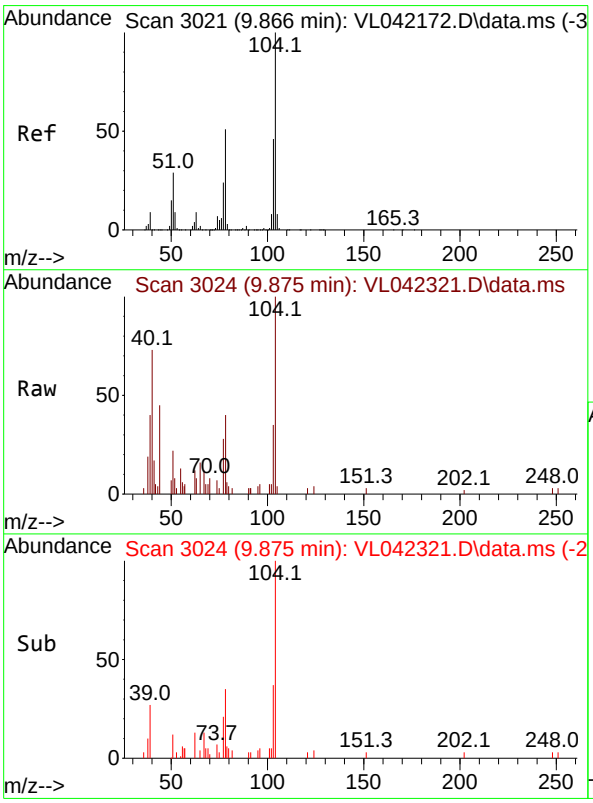
#60
o-Xylene
Concen: 0.049 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.009 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 91 Resp: 2749

Ion	Ratio	Lower	Upper
91	100		
106	102.7	20.8	62.5#

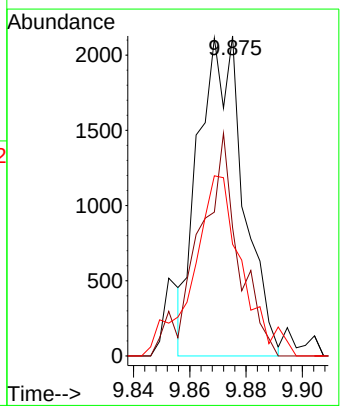


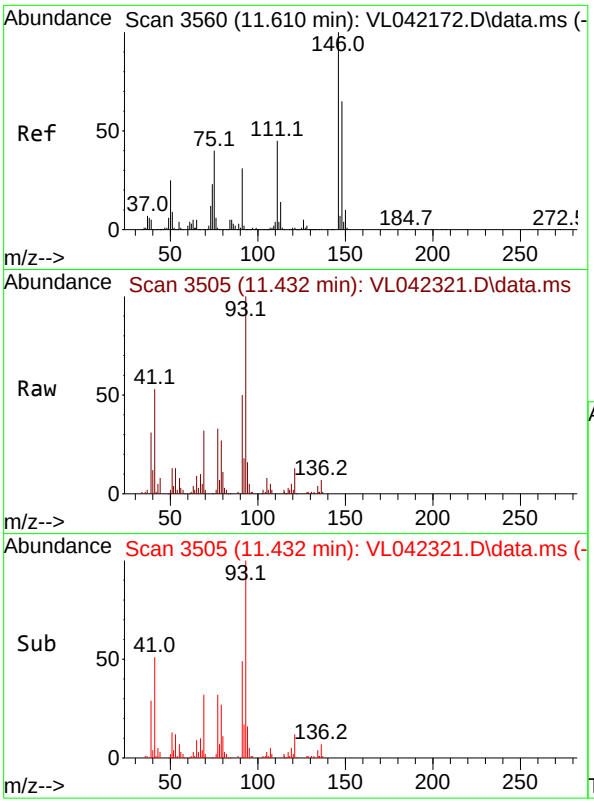


#61
Styrene
Concen: 0.086 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.009 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:104 Resp: 2355

Ion	Ratio	Lower	Upper
104	100		
78	61.0	41.8	62.6
103	61.4	37.0	55.4#



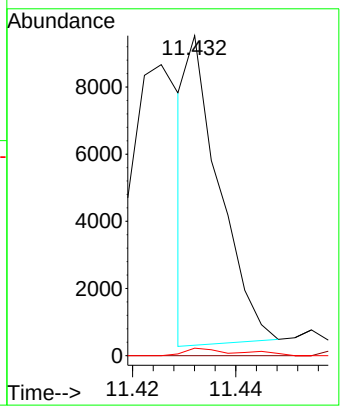


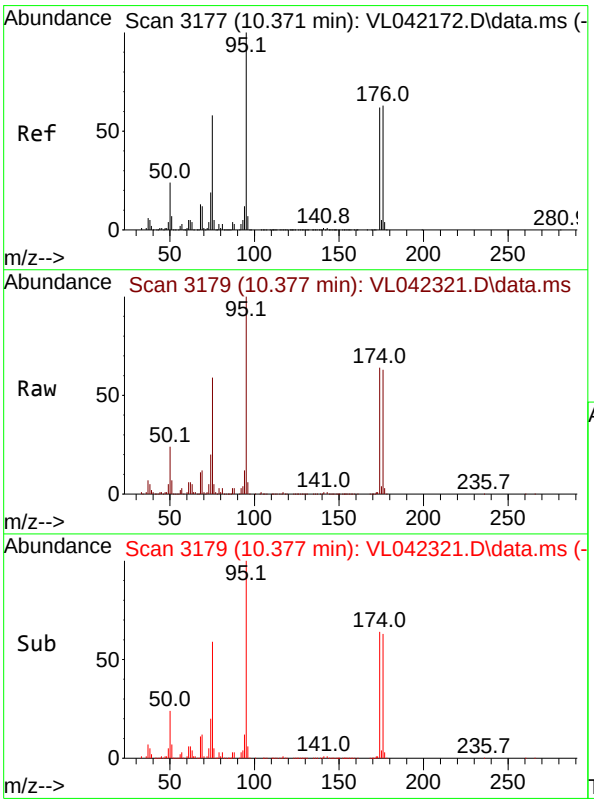
#66
Benzyl Chloride
Concen: 0.490 ppbv
RT: 11.432 min Scan# 3
Delta R.T. -0.178 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion: 91 Resp: 3998

Ion	Ratio	Lower	Upper
91	100		
126	0.0	13.8	20.6#
128	4.0	4.5	6.7#

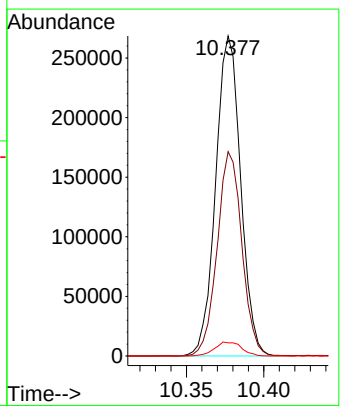


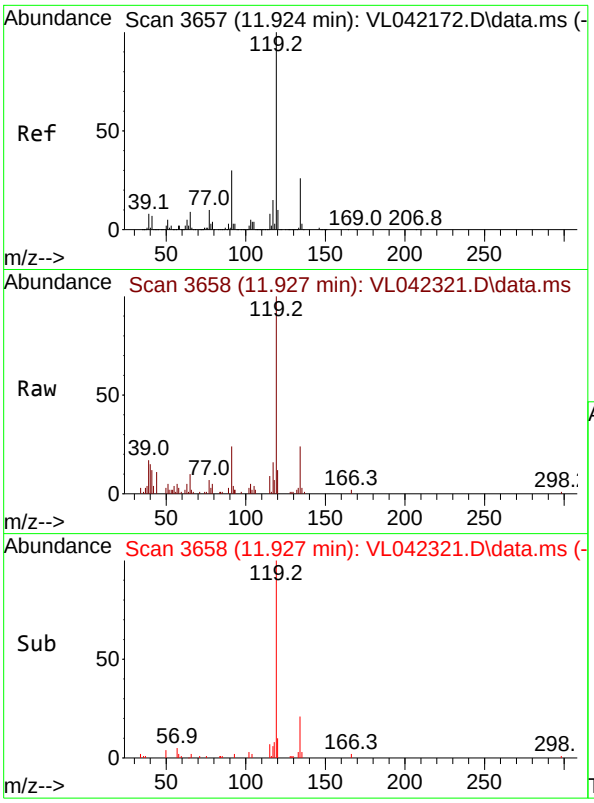


#68
1-Bromo-4-Fluorobenzene
Concen: 9.386 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion: 95 Resp: 301415

Ion	Ratio	Lower	Upper
95	100		
174	63.4	50.6	76.0
175	4.7	3.8	5.6



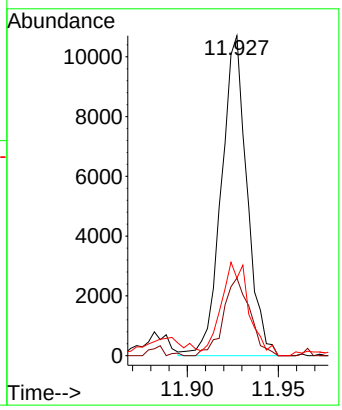


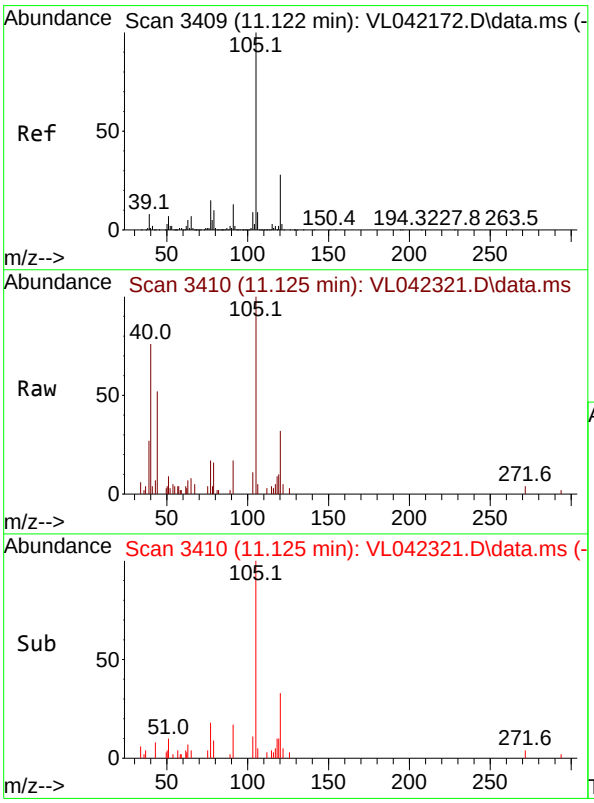
#69
p-Isopropyltoluene
Concen: 0.114 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion:119 Resp: 10463

Ion	Ratio	Lower	Upper
119	100		
134	25.2	20.4	30.6
91	36.3	23.7	35.5#

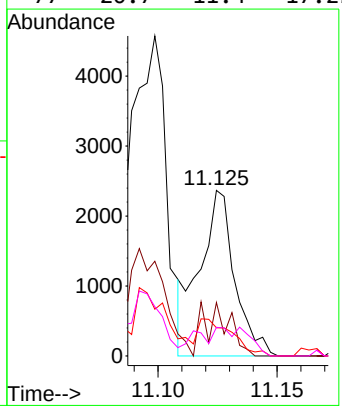


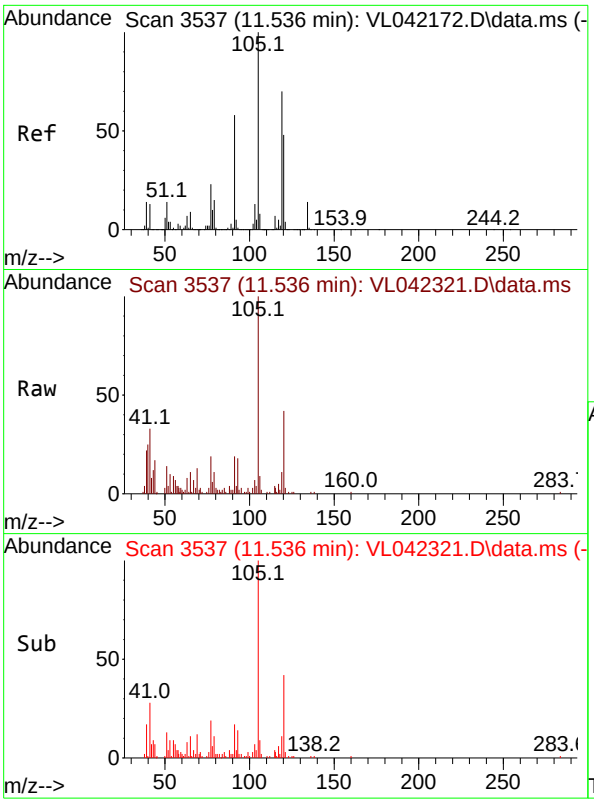


#72
4-Ethyltoluene
Concen: 0.035 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.003 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:105 Resp: 2438

Ion	Ratio	Lower	Upper
105	100		
120	23.2	23.4	35.0#
91	0.0	10.3	15.5#
77	20.7	11.4	17.2#



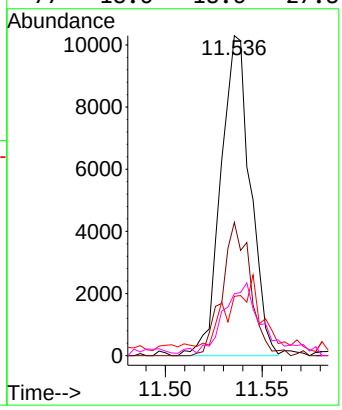


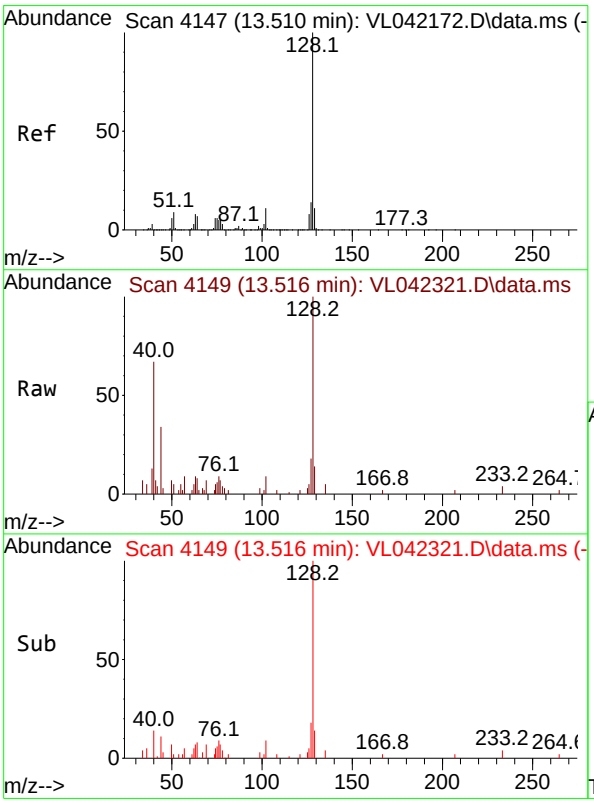
#74
1,2,4-Trimethylbenzene
Concen: 0.156 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-3-3242025

Tgt Ion:105 Resp: 10882

Ion	Ratio	Lower	Upper
105	100		
120	40.0	38.6	58.0
91	15.8	46.2	69.2#
77	18.6	18.6	27.8

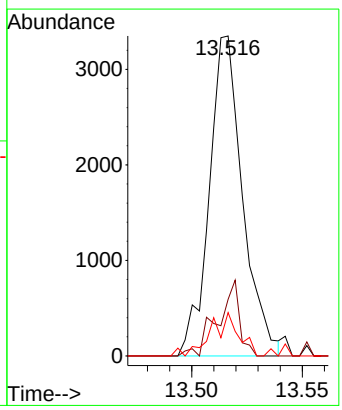




#79
Naphthalene
Concen: 0.046 ppbv
RT: 13.516 min Scan# 4149
Delta R.T. 0.006 min
Lab File: VL042321.D
Acq: 11 Apr 2025 15:36

Tgt Ion:128 Resp: 3524

Ion	Ratio	Lower	Upper
128	100		
127	17.7	10.8	16.2#
129	13.5	9.0	13.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042323.D
Acq On : 11 Apr 2025 16:39
Operator : SY/MD
Sample : Q1665-10DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Quant Time: Apr 11 23:02:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

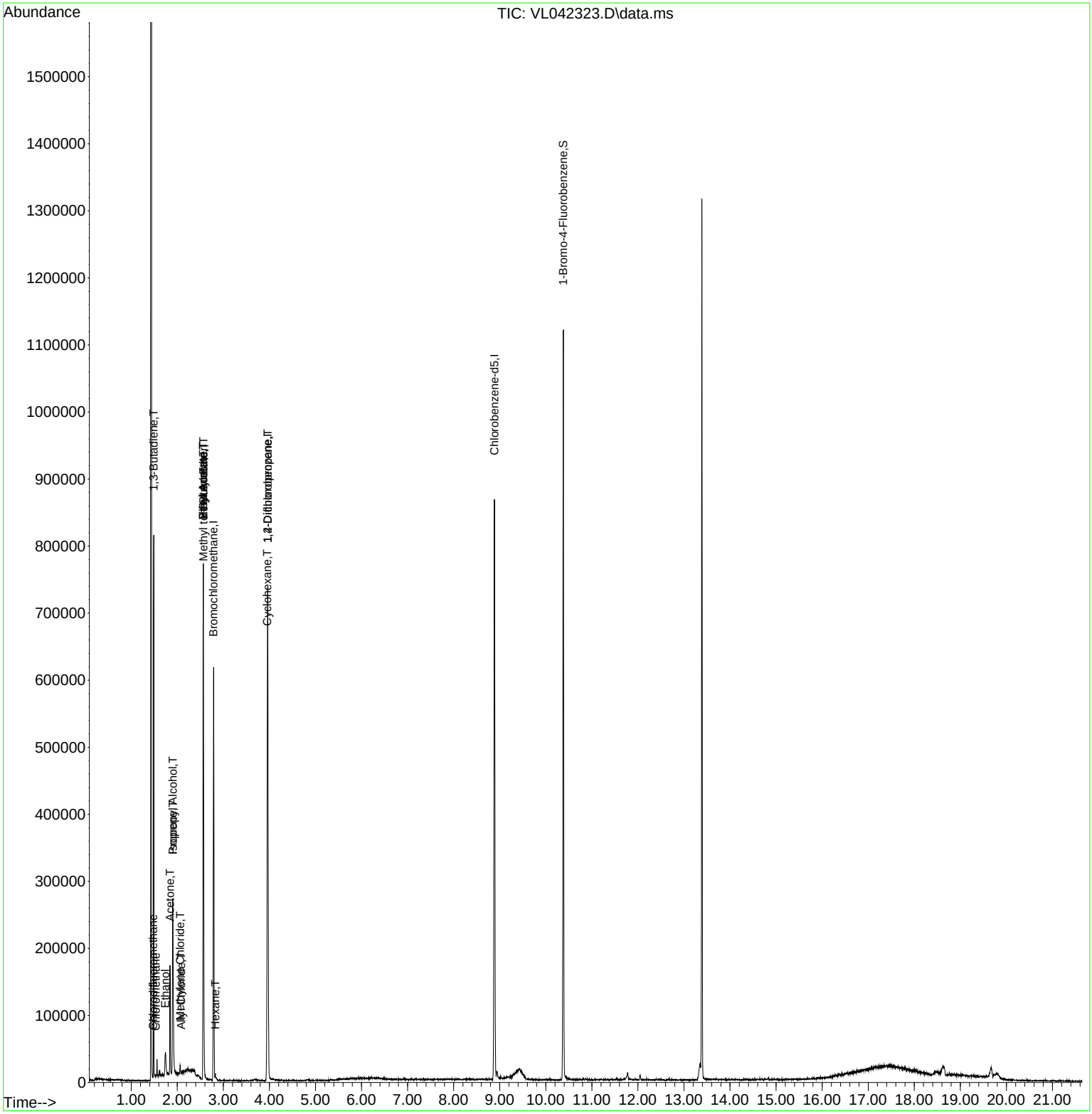
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	173105	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	400666	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	338211	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	253785	9.137	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 91.400%				
Target Compounds							Qvalue
3) Chlorodifluoromethane	1.476	51	950	0.036	ppbv	#	58
4) Chloromethane	1.531	50	389	0.037	ppbv		89
9) Propene	1.900	41	20921	1.748	ppbv		96
13) Ethanol	1.742	45	31113	27.501	ppbv		85
15) Acetone	1.842	43	84634	3.496	ppbv		95
16) 1,3-Butadiene	1.489	39	85279	7.213	ppbv	#	12
19) Isopropyl Alcohol	1.900	45	207505	15.191	ppbv	#	34
20) Methylene Chloride	2.062	84	1746	0.194	ppbv	#	71
21) Allyl Chloride	2.081	41	584	0.034	ppbv	#	21
23) Vinyl Acetate	2.564	43	510012	48.674	ppbv	#	87
25) Ethyl Acetate	2.564	43	510012	8.117	ppbv	#	76
26) Hexane	2.826	57	1035	0.043	ppbv	#	1
28) Methyl tert-Butyl Ether	2.567	73	4917	0.325	ppbv	#	1
30) Cyclohexane	3.955	84	3209	0.152	ppbv	#	1
34) 2-Butanone	2.564	43	510012	17.554	ppbv		98
39) 1,2-Dichloropropane	3.962	63	103631	7.164	ppbv	#	23

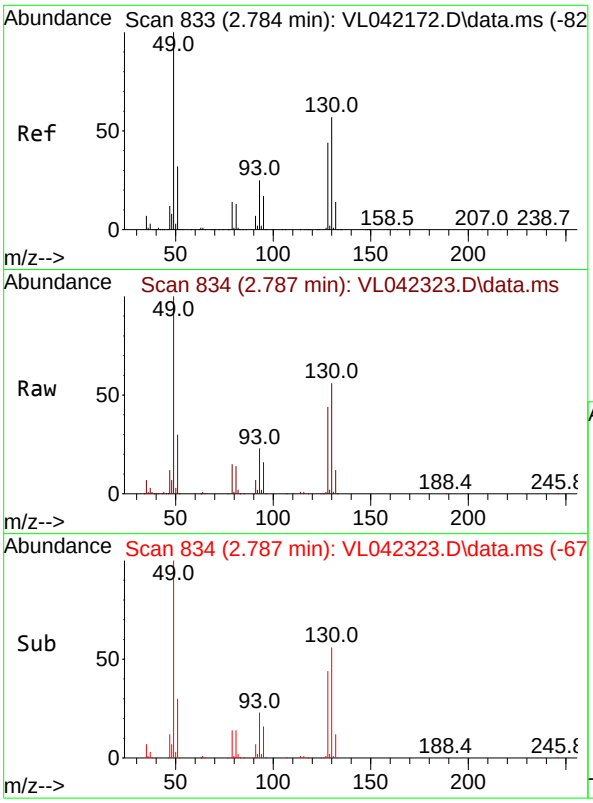
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042323.D
Acq On : 11 Apr 2025 16:39
Operator : SY/MD
Sample : Q1665-10DL 40X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Quant Time: Apr 11 23:02:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



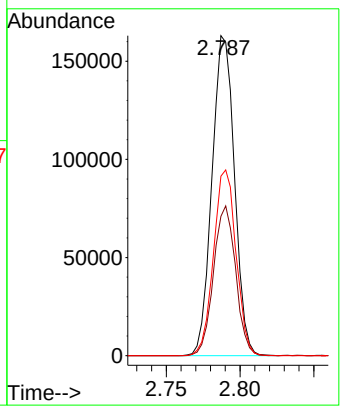


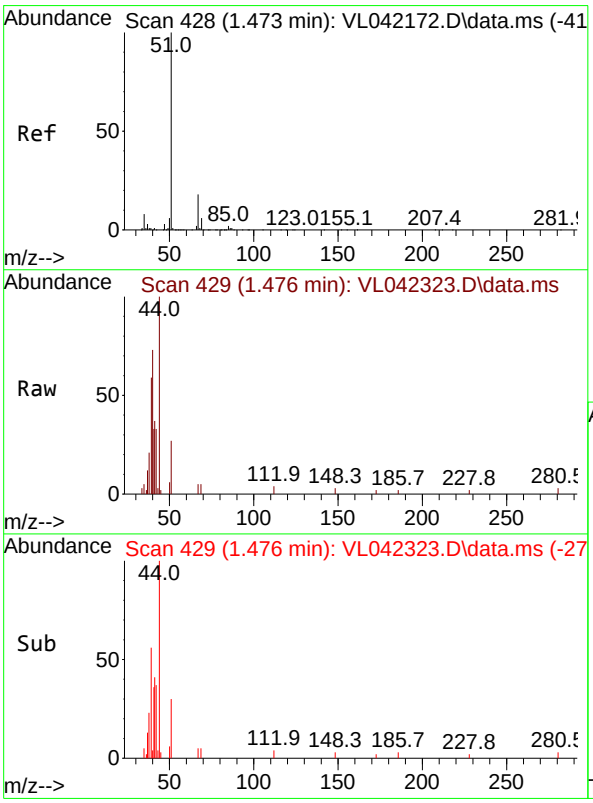
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 49 Resp: 173105

Ion	Ratio	Lower	Upper
49	100		
128	46.0	22.9	68.5
130	58.2	28.8	86.4

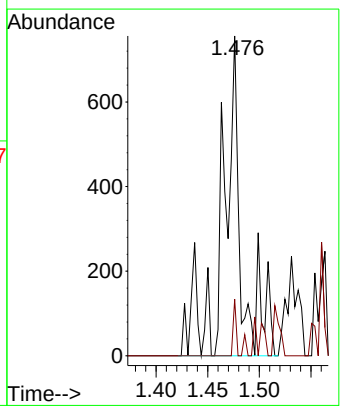


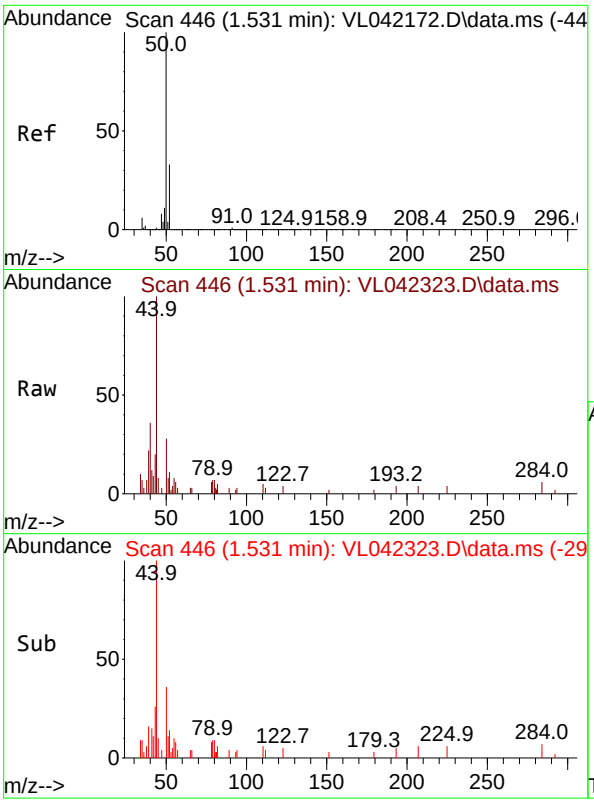


#3
Chlorodifluoromethane
Concen: 0.036 ppbv
RT: 1.476 min Scan# 429
Delta R.T. 0.003 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 51 Resp: 950

Ion	Ratio	Lower	Upper
51	100		
67	0.0	15.0	22.6#



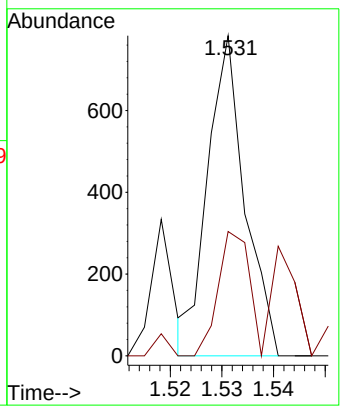


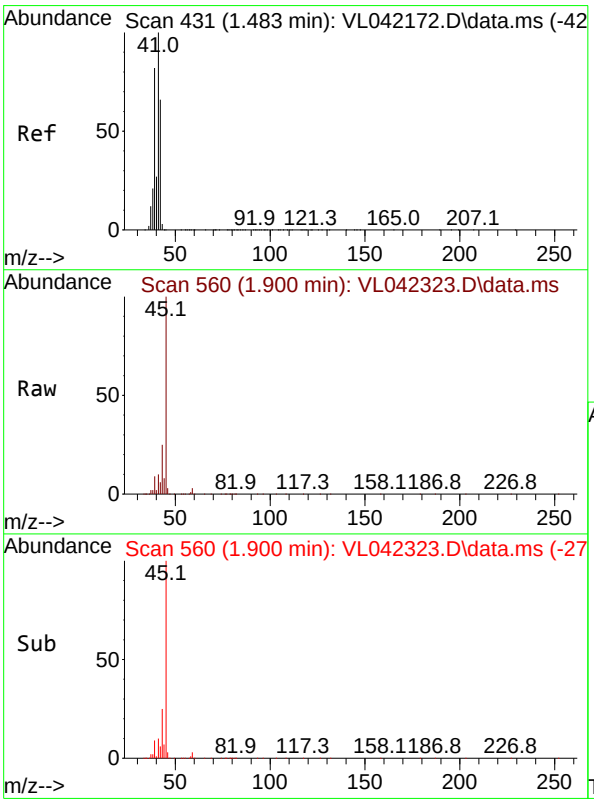
#4
Chloromethane
Concen: 0.037 ppbv
RT: 1.531 min Scan# 44
Delta R.T. -0.000 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 50 Resp: 389

Ion	Ratio	Lower	Upper
50	100		
52	38.8	26.1	39.1

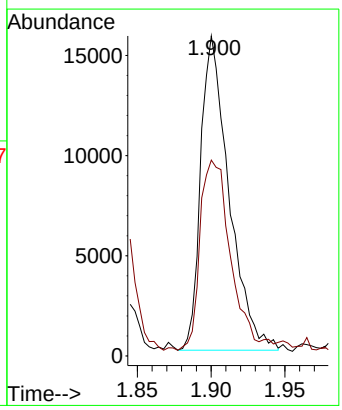


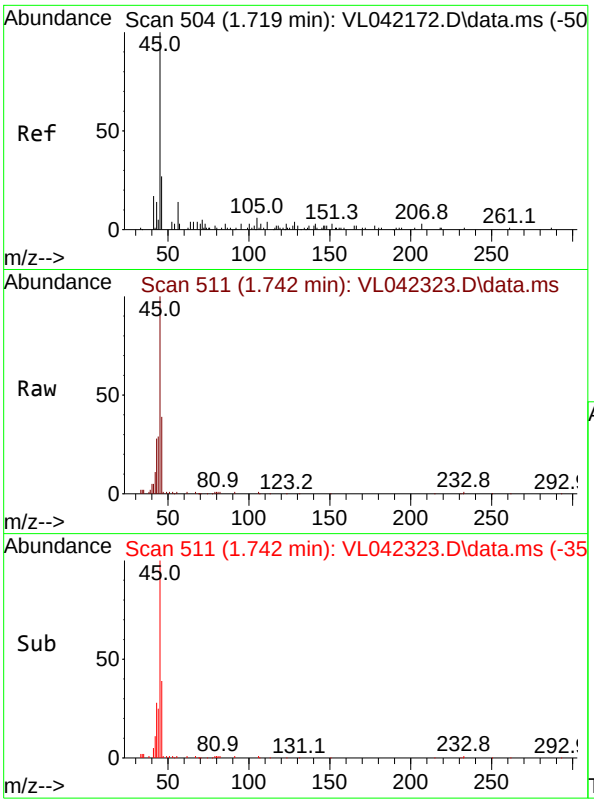


#9
Propene
Concen: 1.748 ppbv
RT: 1.900 min Scan# 560
Delta R.T. 0.417 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 41 Resp: 20921

Ion	Ratio	Lower	Upper
41	100		
42	65.9	55.4	83.2



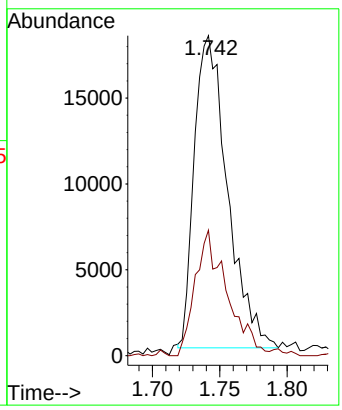


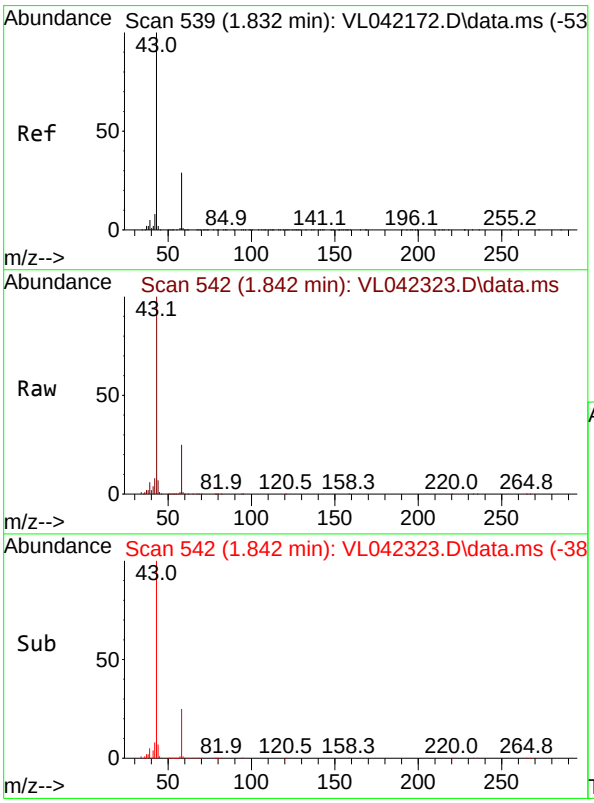
#13
Ethanol
Concen: 27.501 ppbv
RT: 1.742 min Scan# 5
Delta R.T. 0.022 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 45 Resp: 31113

Ion	Ratio	Lower	Upper
45	100		
46	40.0	20.2	80.8

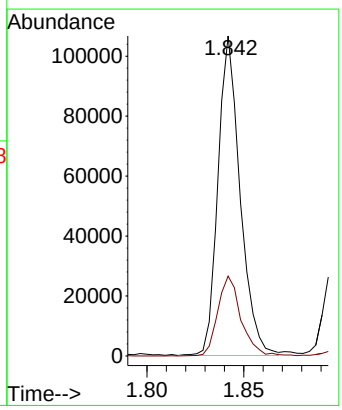


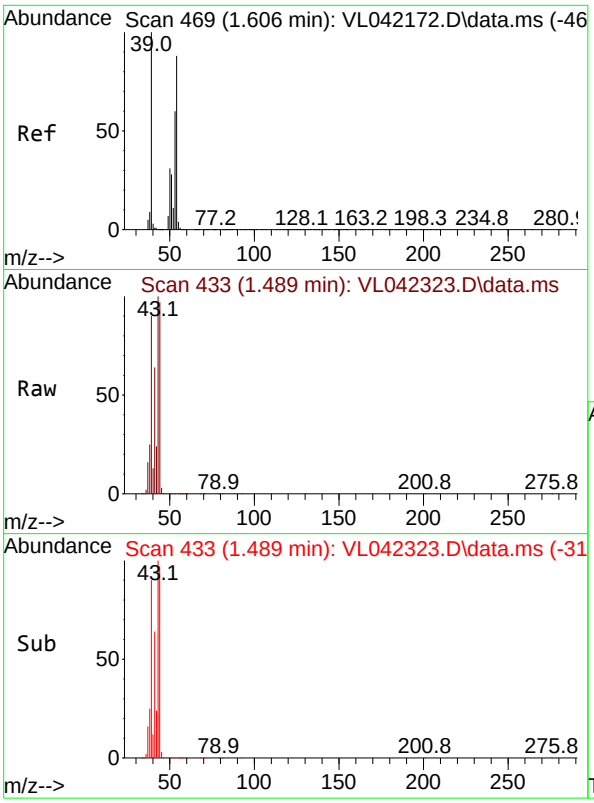


#15
Acetone
Concen: 3.496 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 43 Resp: 84634

Ion	Ratio	Lower	Upper
43	100		
58	26.3	23.2	34.8



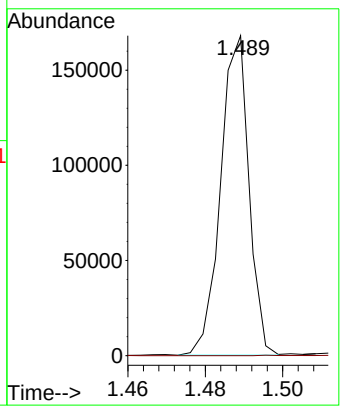


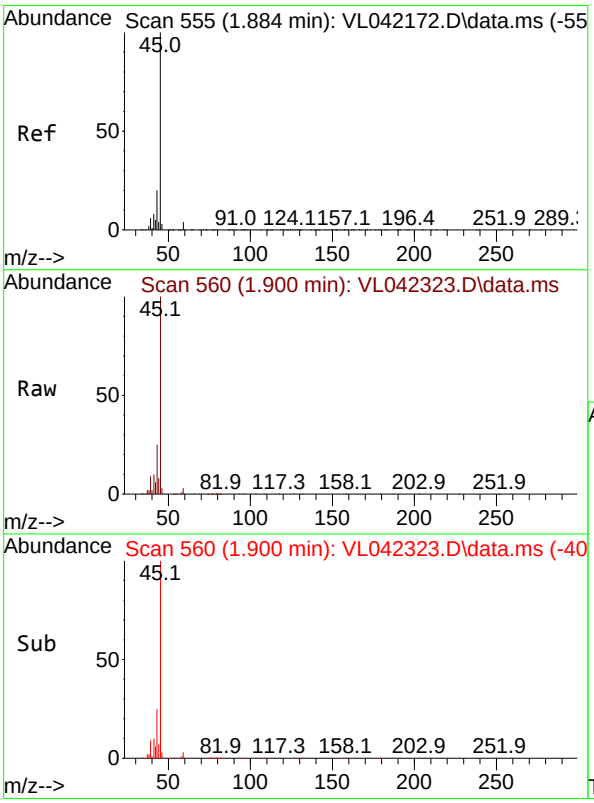
#16
1,3-Butadiene
Concen: 7.213 ppbv
RT: 1.489 min Scan# 4
Delta R.T. -0.117 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 39 Resp: 85279

Ion	Ratio	Lower	Upper
39	100		
54	0.2	60.7	91.1#

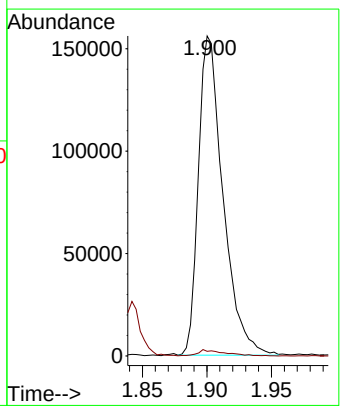


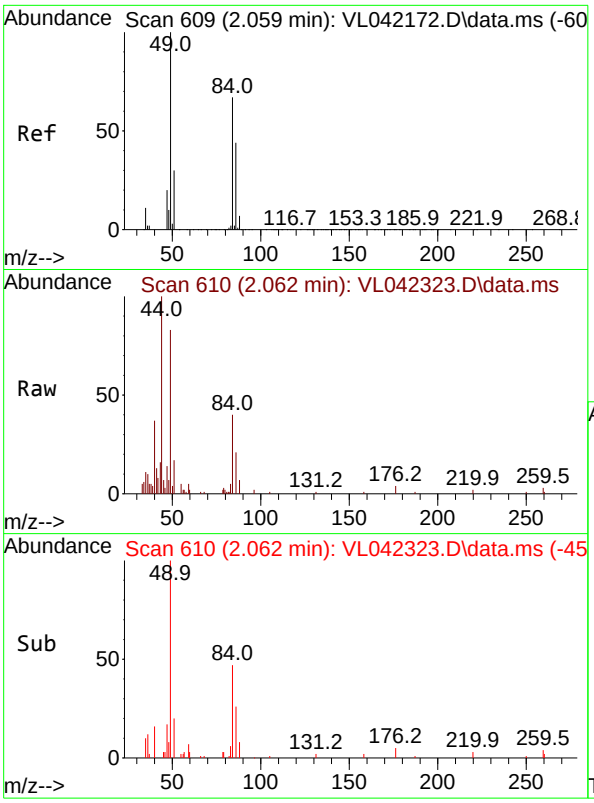


#19
Isopropyl Alcohol
Concen: 15.191 ppbv
RT: 1.900 min Scan# 560
Delta R.T. 0.016 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 45 Resp: 207505

Ion	Ratio	Lower	Upper
45	100		
58	2.1	36.9	55.3#



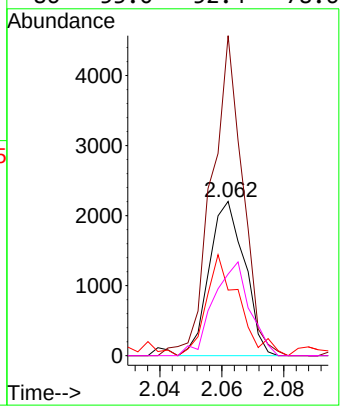


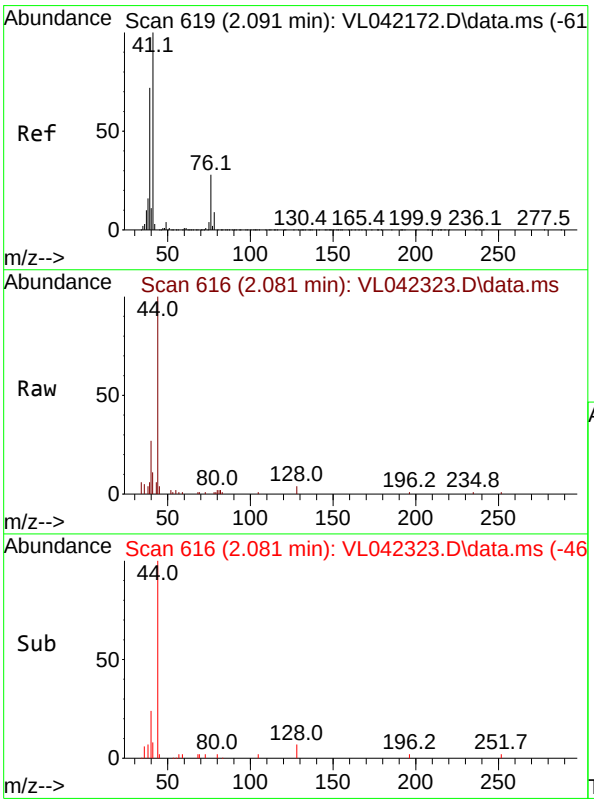
#20
Methylene Chloride
Concen: 0.194 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.003 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 84 Resp: 1746

Ion	Ratio	Lower	Upper
84	100		
49	202.1	120.2	180.4#
51	40.0	37.4	56.0
86	53.0	52.4	78.6

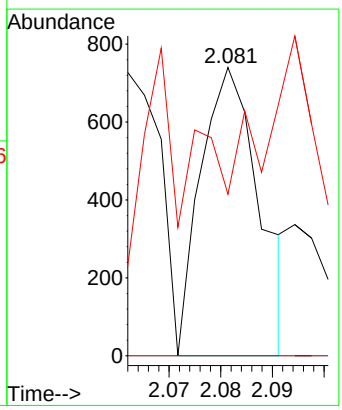


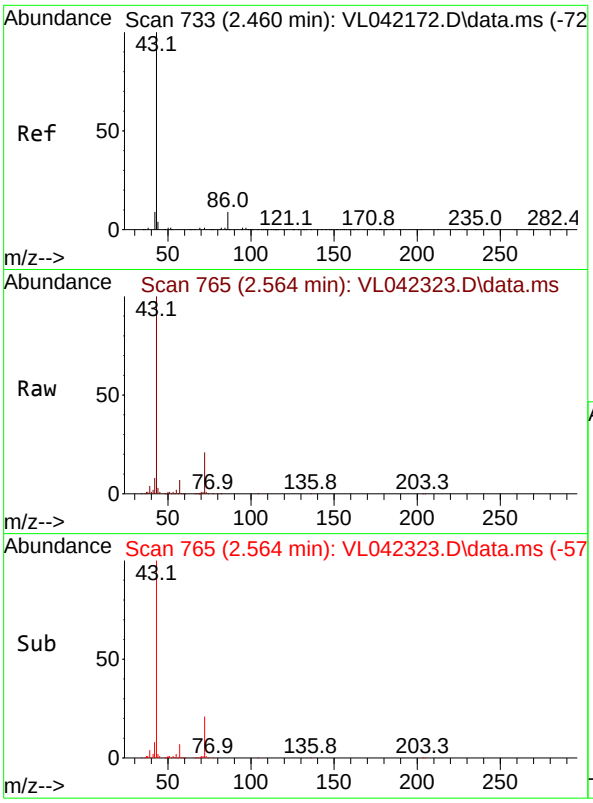


#21
Allyl Chloride
Concen: 0.034 ppbv
RT: 2.081 min Scan# 616
Delta R.T. -0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 41 Resp: 584

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.1	36.1#
39	0.0	61.1	91.7#



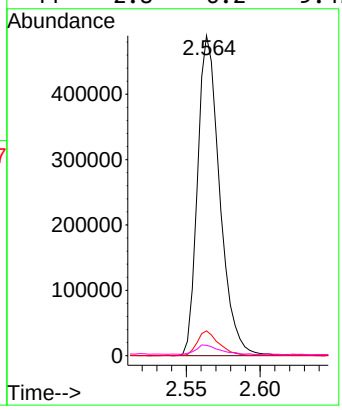


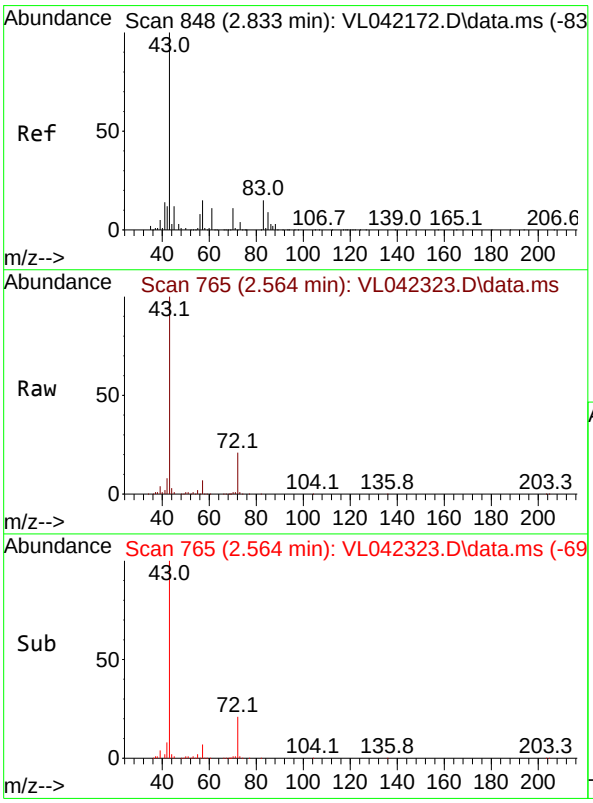
#23
Vinyl Acetate
Concen: 48.674 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.103 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 43 Resp: 510012

Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.5	8.3#
42	7.7	8.6	13.0#
44	2.8	6.2	9.4#

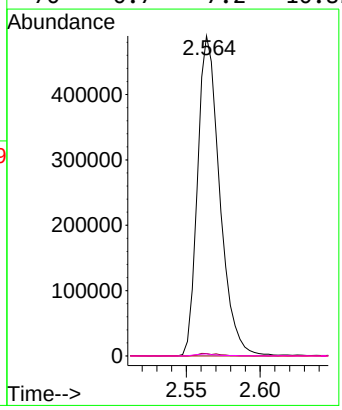


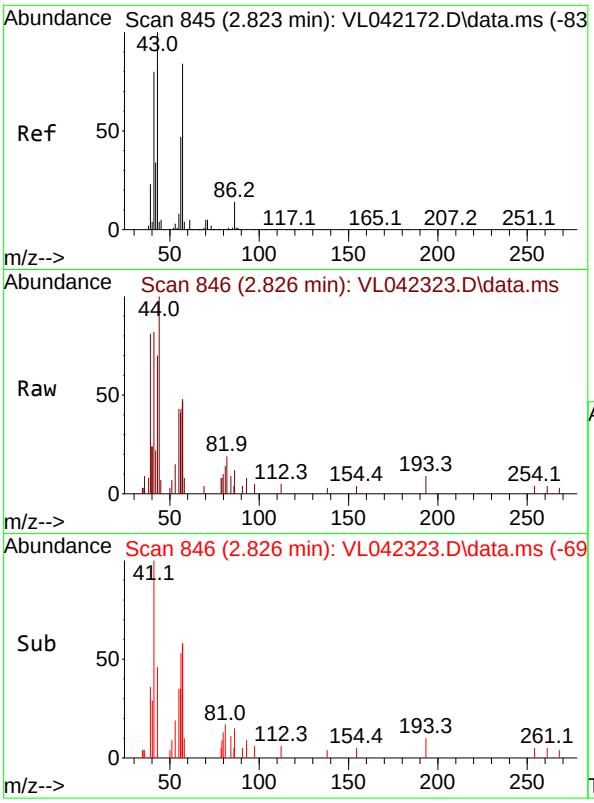


#25
Ethyl Acetate
Concen: 8.117 ppbv
RT: 2.564 min Scan# 765
Delta R.T. -0.269 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 43 Resp: 510012

Ion	Ratio	Lower	Upper
43	100		
45	0.8	8.2	12.2#
61	0.0	7.3	10.9#
70	0.7	7.2	10.8#



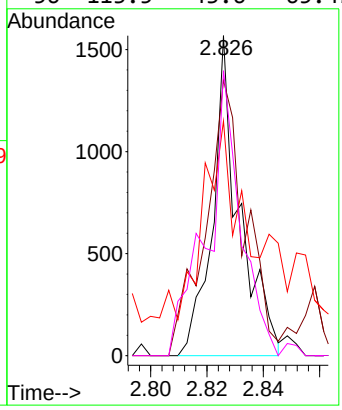


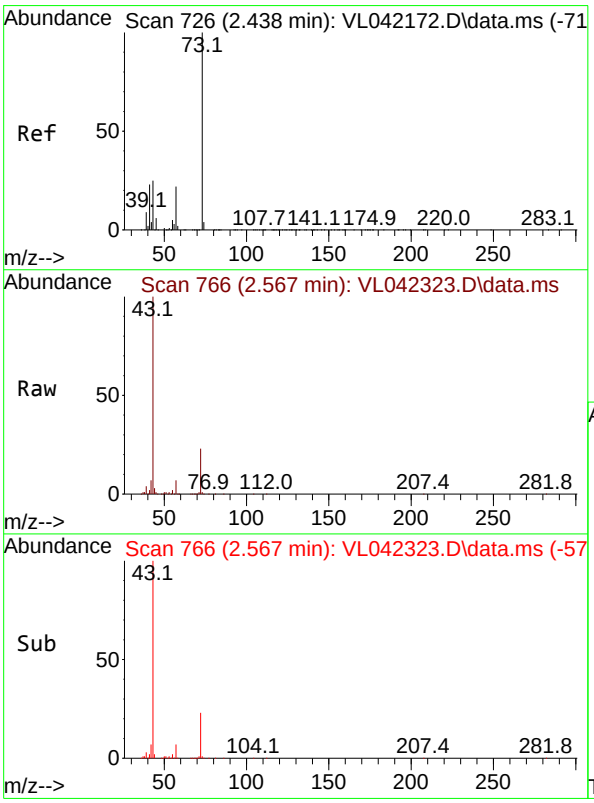
#26
Hexane
Concen: 0.043 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.003 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 57 Resp: 1035

Ion	Ratio	Lower	Upper
57	100		
41	146.8	76.6	114.8#
43	0.0	207.8	311.8#
56	113.5	43.6	65.4#

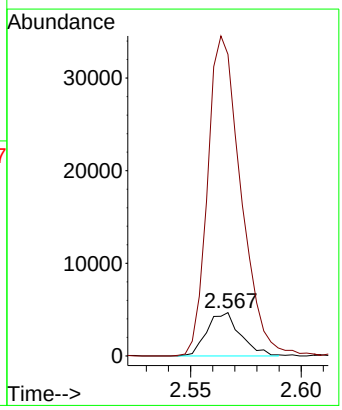


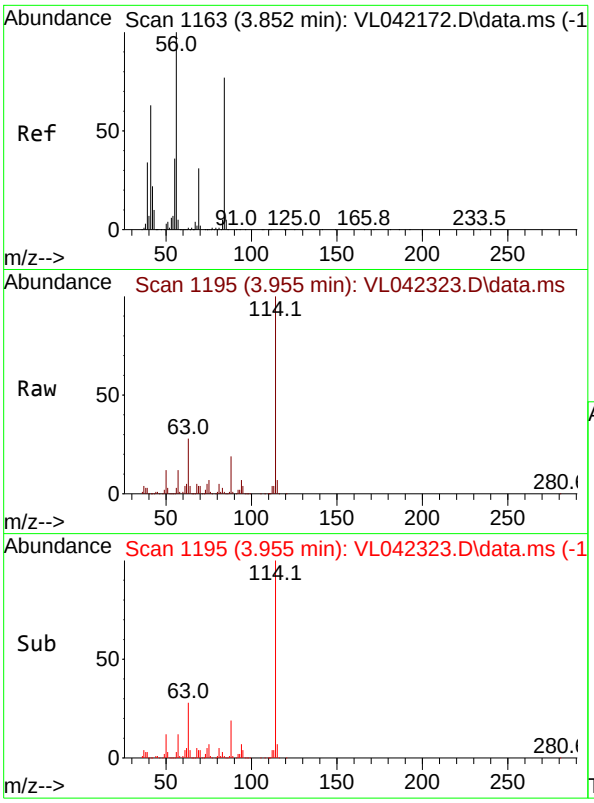


#28
Methyl tert-Butyl Ether
Concen: 0.325 ppbv
RT: 2.567 min Scan# 766
Delta R.T. 0.129 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 73 Resp: 4917

Ion	Ratio	Lower	Upper
73	100		
57	746.1	20.5	30.7#



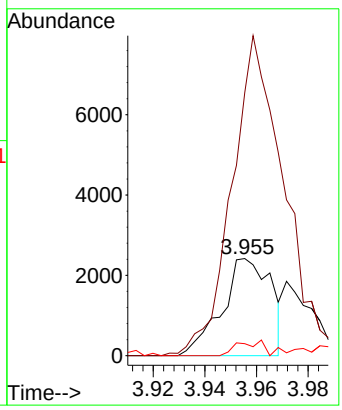


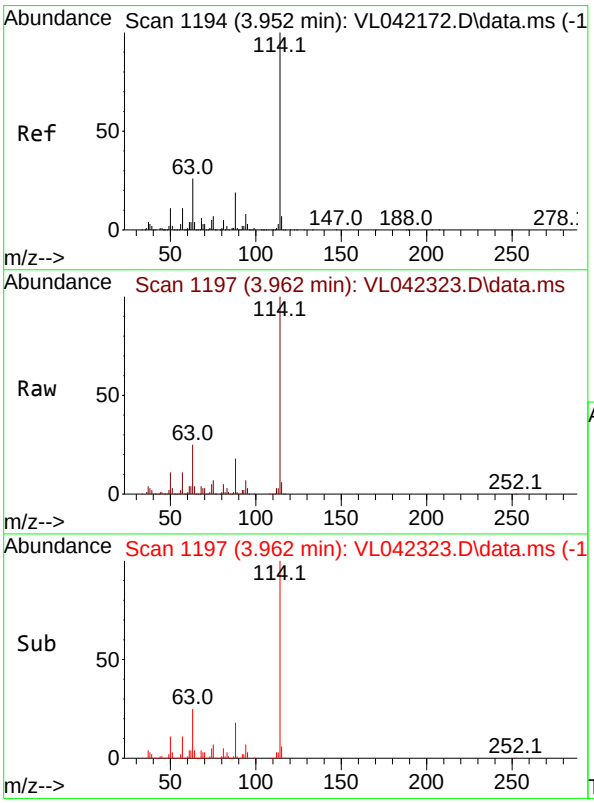
#30
Cyclohexane
Concen: 0.152 ppbv
RT: 3.955 min Scan# 11
Delta R.T. 0.103 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 84 Resp: 3209

Ion	Ratio	Lower	Upper
84	100		
56	356.4	102.8	154.2#
41	16.9	66.5	99.7#

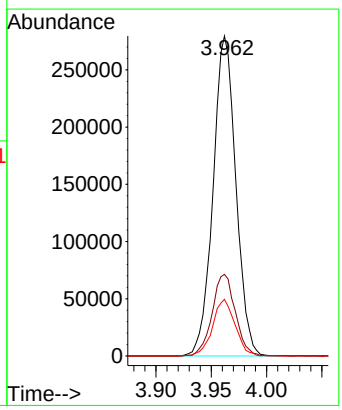


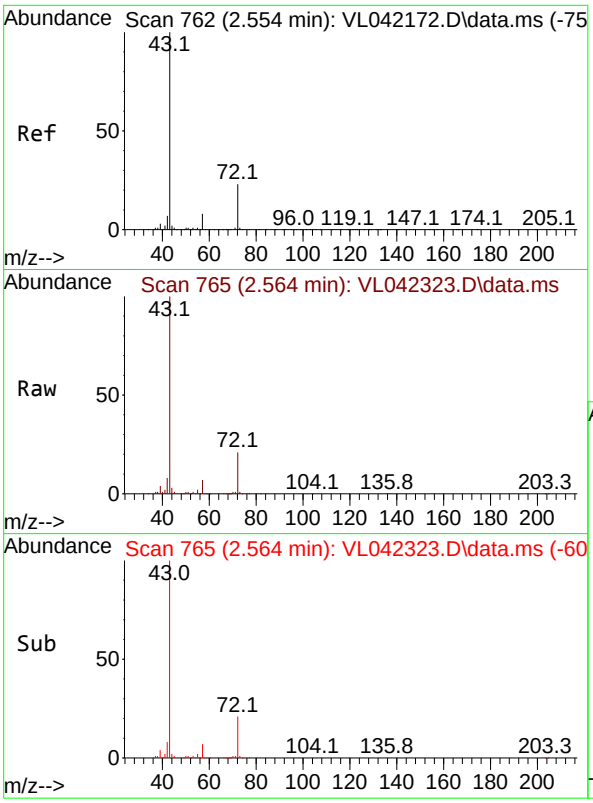


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion:114 Resp: 400666

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.4	15.0	22.4



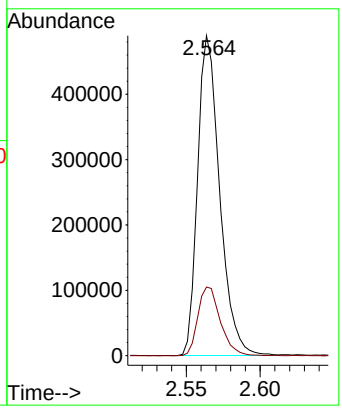


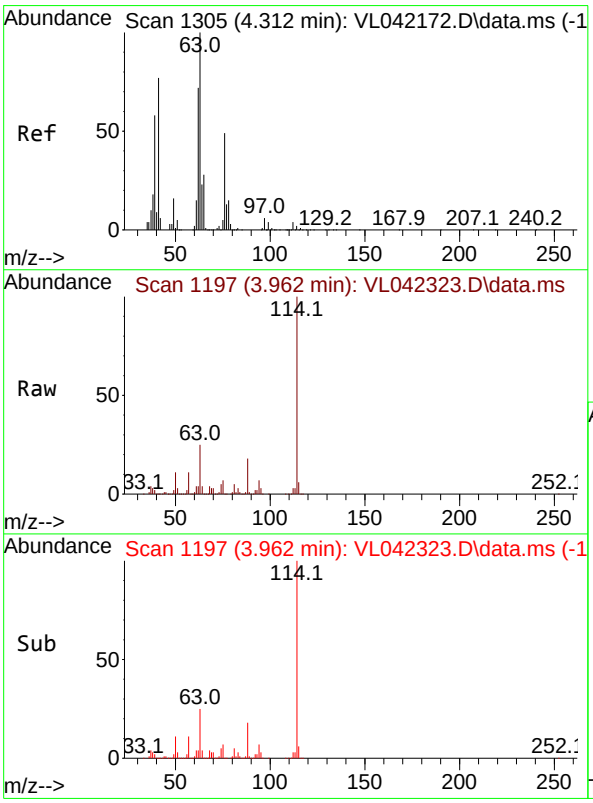
#34
2-Butanone
Concen: 17.554 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion: 43 Resp: 510012

Ion	Ratio	Lower	Upper
43	100		
72	21.9	18.2	27.2

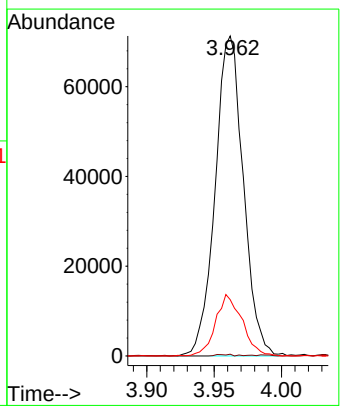


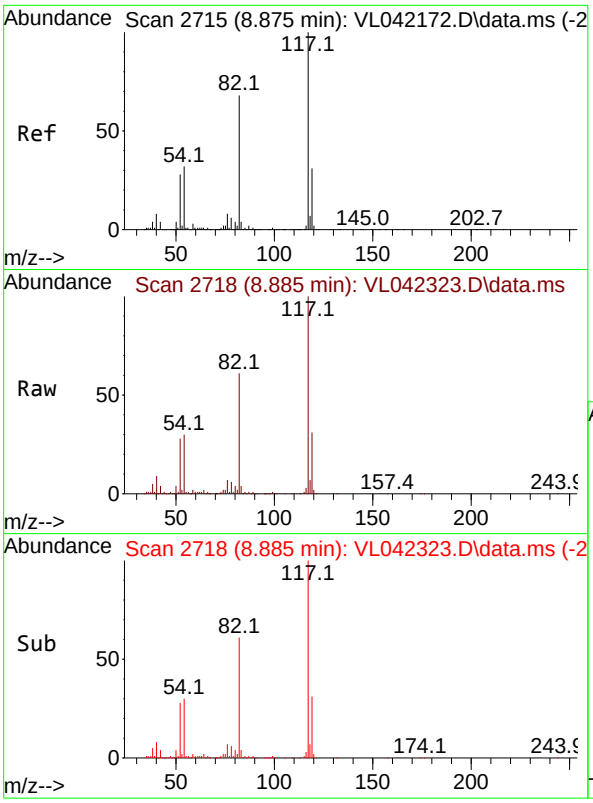


#39
1,2-Dichloropropane
Concen: 7.164 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. -0.350 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 63 Resp: 103631

Ion	Ratio	Lower	Upper
63	100		
41	0.5	61.7	92.5#
62	17.4	57.6	86.4#



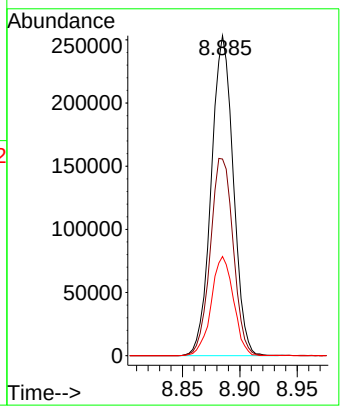


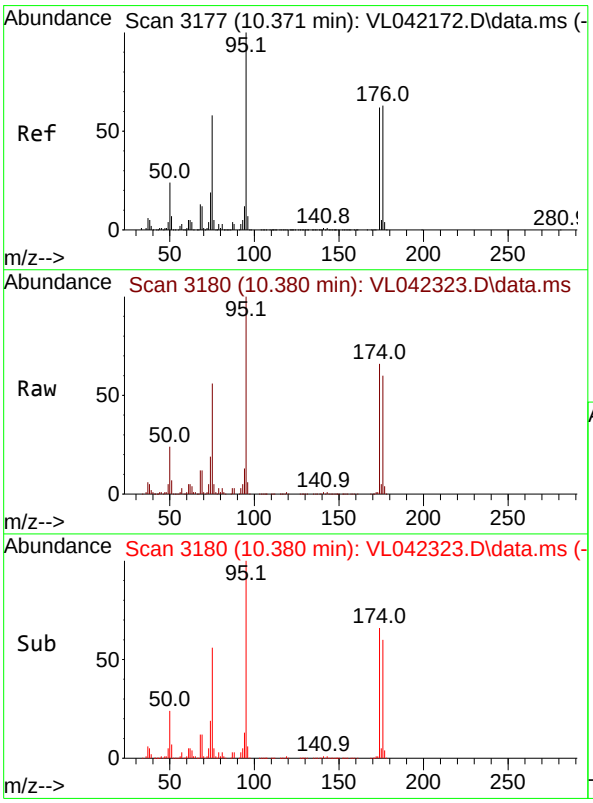
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL

Tgt Ion:117 Resp: 338211

Ion	Ratio	Lower	Upper
117	100		
82	64.2	55.8	83.6
119	31.4	25.5	38.3

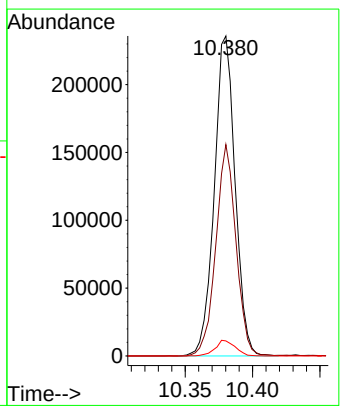




#68
1-Bromo-4-Fluorobenzene
Concen: 9.137 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.010 min
Lab File: VL042323.D
Acq: 11 Apr 2025 16:39

Tgt Ion: 95 Resp: 253785

Ion	Ratio	Lower	Upper
95	100		
174	64.4	50.6	76.0
175	4.7	3.8	5.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042324.D
Acq On : 11 Apr 2025 17:10
Operator : SY/MD
Sample : Q1665-11DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Quant Time: Apr 11 23:03:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

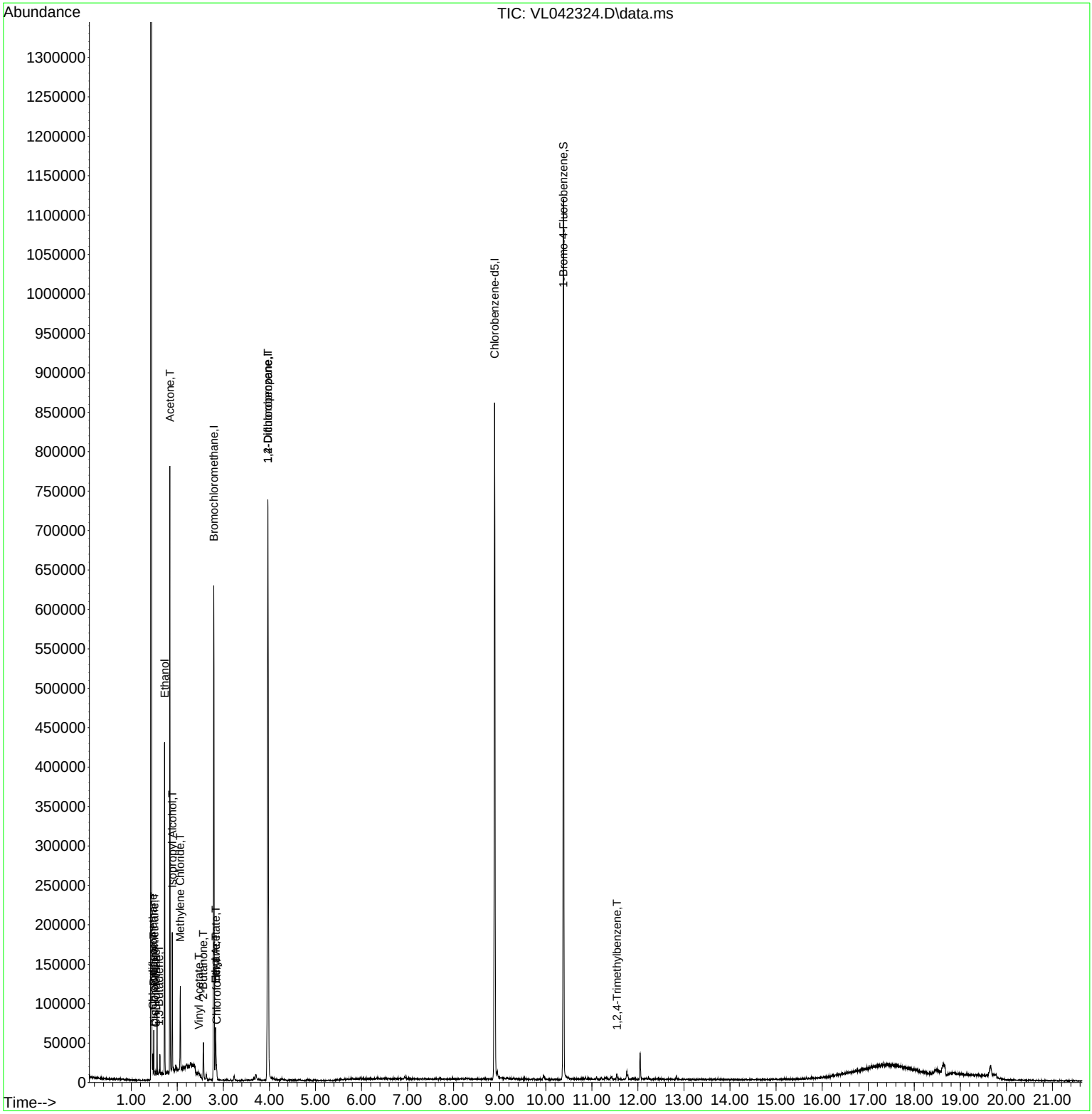
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.793	49	176603	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.968	114	398133	10.000	ppbv		0.02
55) Chlorobenzene-d5	8.888	117	325777	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.383	95	246592	9.217	ppbv		0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 92.200%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	1409	0.054	ppbv		100
3) Chlorodifluoromethane	1.470	51	7277	0.273	ppbv	#	64
4) Chloromethane	1.534	50	743	0.070	ppbv	#	29
9) Propene	1.489	41	4857	0.398	ppbv		87
13) Ethanol	1.725	45	151755	131.481	ppbv		81
15) Acetone	1.839	43	316091	12.798	ppbv		96
16) 1,3-Butadiene	1.602	39	1089	0.090	ppbv	#	58
19) Isopropyl Alcohol	1.890	45	67257	4.826	ppbv	#	1
20) Methylene Chloride	2.065	84	15039	1.635	ppbv		90
23) Vinyl Acetate	2.473	43	551	0.052	ppbv	#	38
25) Ethyl Acetate	2.832	43	12443	0.194	ppbv	#	90
26) Hexane	2.832	57	10875	0.439	ppbv	#	41
29) Chloroform	2.855	83	3694	0.102	ppbv		97
34) 2-Butanone	2.564	43	28789	0.997	ppbv		97
39) 1,2-Dichloropropane	3.968	63	104076	7.240	ppbv	#	21
74) 1,2,4-Trimethylbenzene	11.545	105	2245	0.039	ppbv	#	66

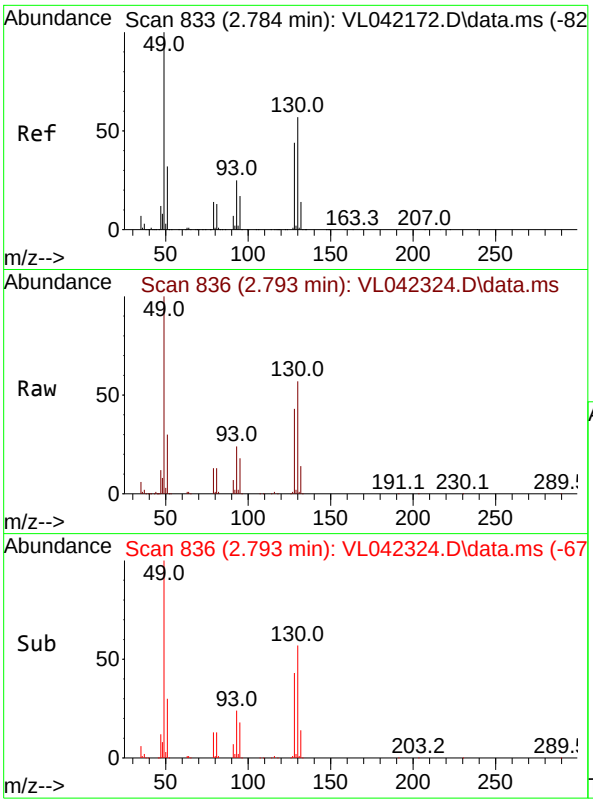
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041125\
Data File : VL042324.D
Acq On : 11 Apr 2025 17:10
Operator : SY/MD
Sample : Q1665-11DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 7 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Quant Time: Apr 11 23:03:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



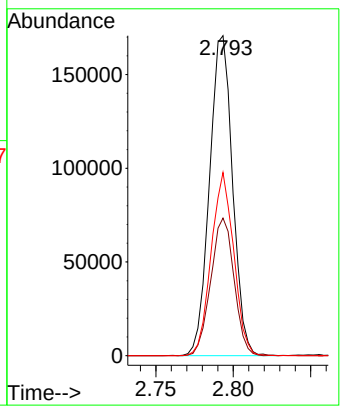


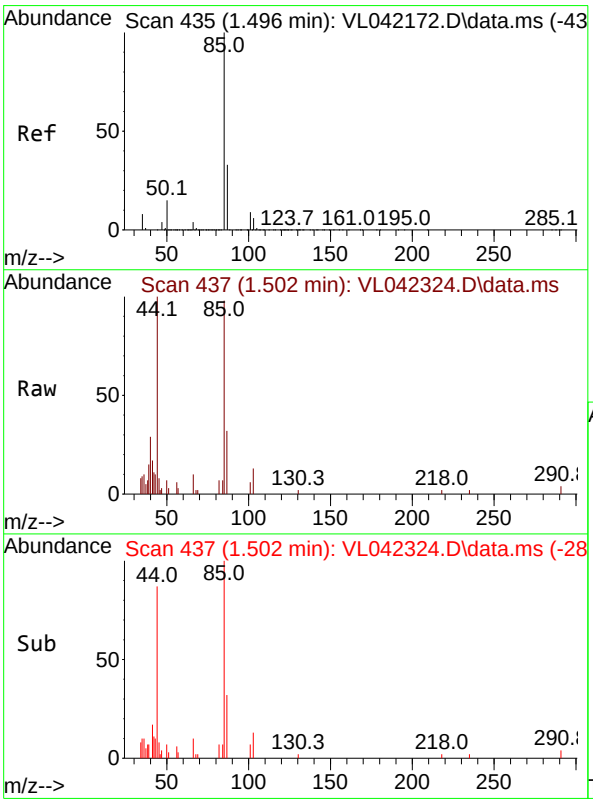
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.793 min Scan# 8
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 49 Resp: 176603

Ion	Ratio	Lower	Upper
49	100		
128	43.4	22.9	68.5
130	56.0	28.8	86.4

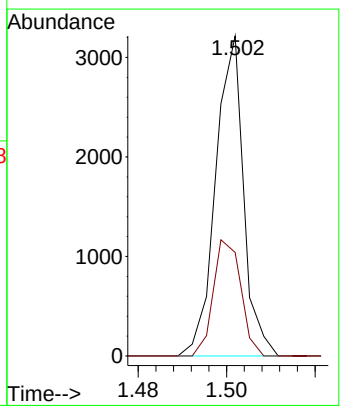


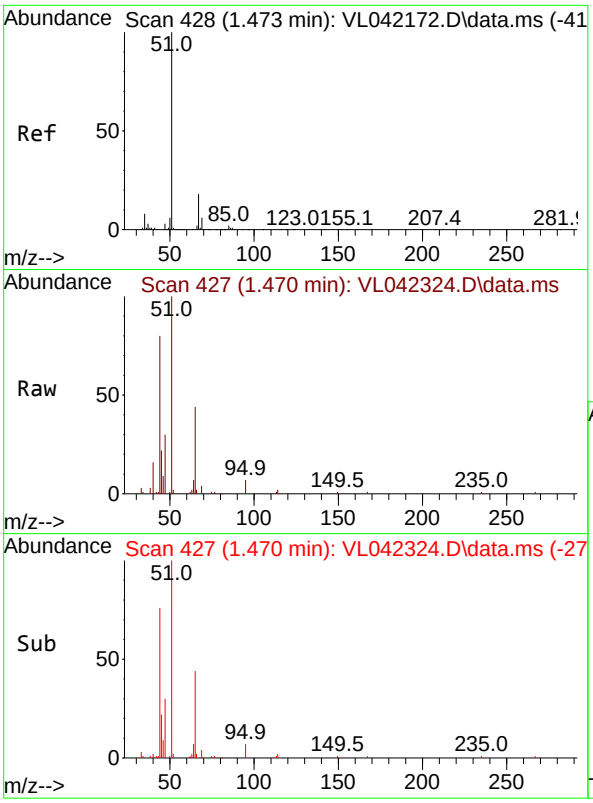


#2
Dichlorodifluoromethane
Concen: 0.054 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 85 Resp: 1409

Ion	Ratio	Lower	Upper
85	100		
87	32.4	26.1	39.1



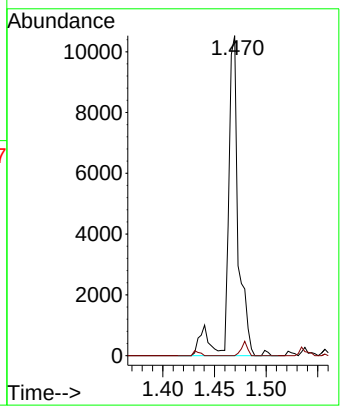


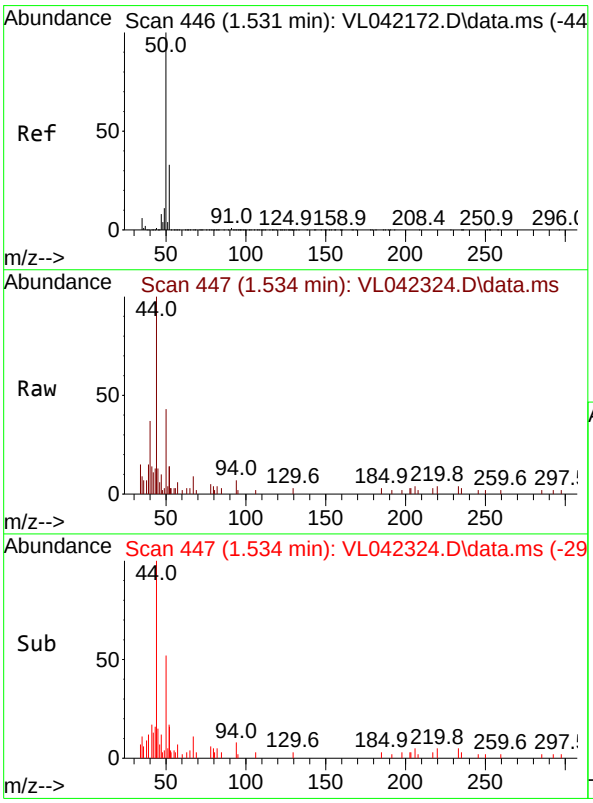
#3
Chlorodifluoromethane
Concen: 0.273 ppbv
RT: 1.470 min Scan# 4
Delta R.T. -0.004 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 51 Resp: 7277

Ion	Ratio	Lower	Upper
51	100		
67	2.6	15.0	22.6#

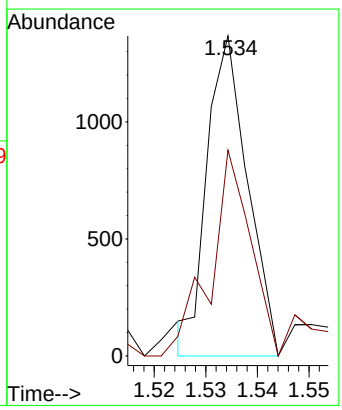


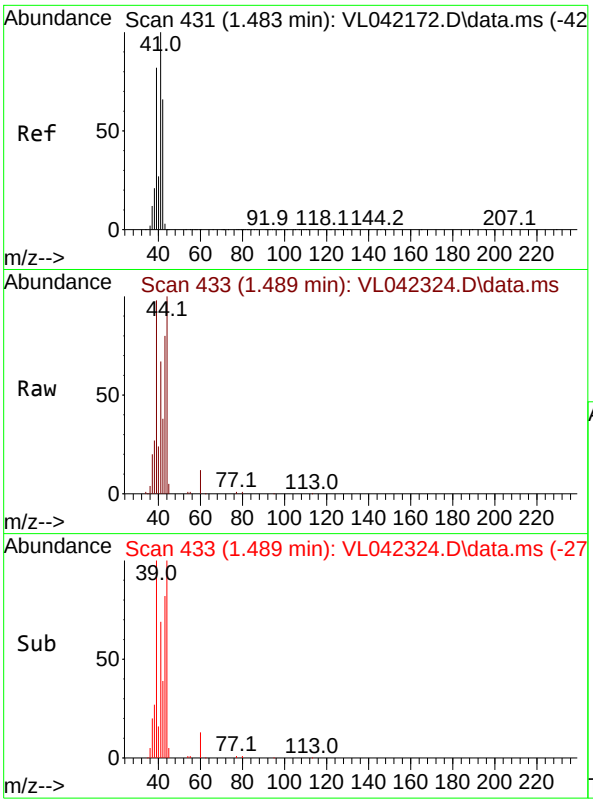


#4
Chloromethane
Concen: 0.070 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 50 Resp: 743

Ion	Ratio	Lower	Upper
50	100		
52	72.4	26.1	39.1#



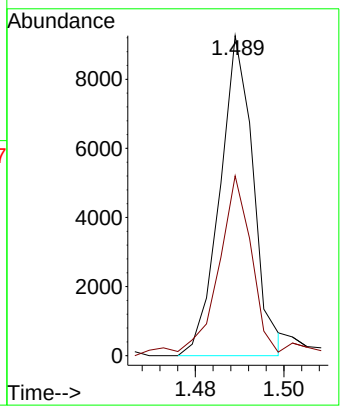


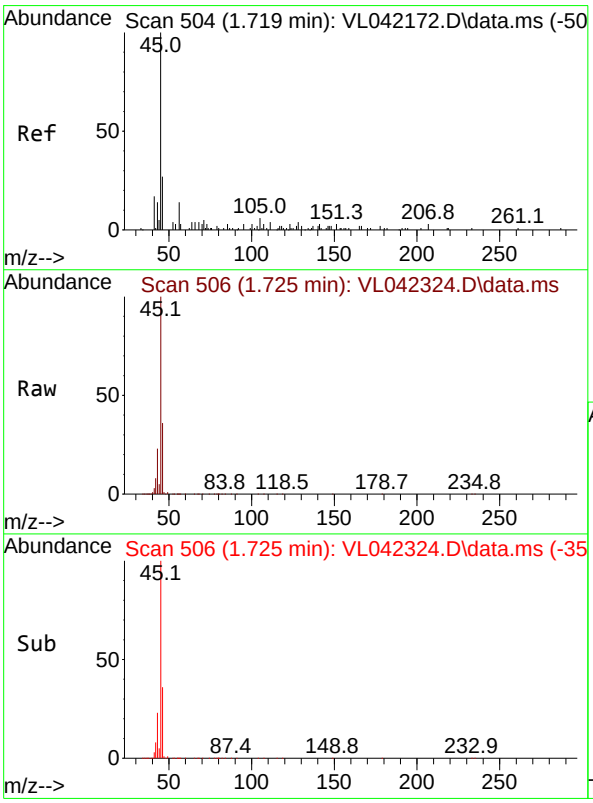
#9
Propene
Concen: 0.398 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 41 Resp: 4857

Ion	Ratio	Lower	Upper
41	100		
42	59.0	55.4	83.2

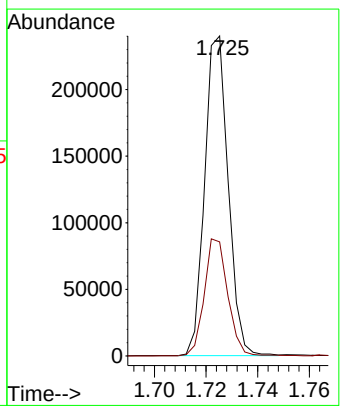


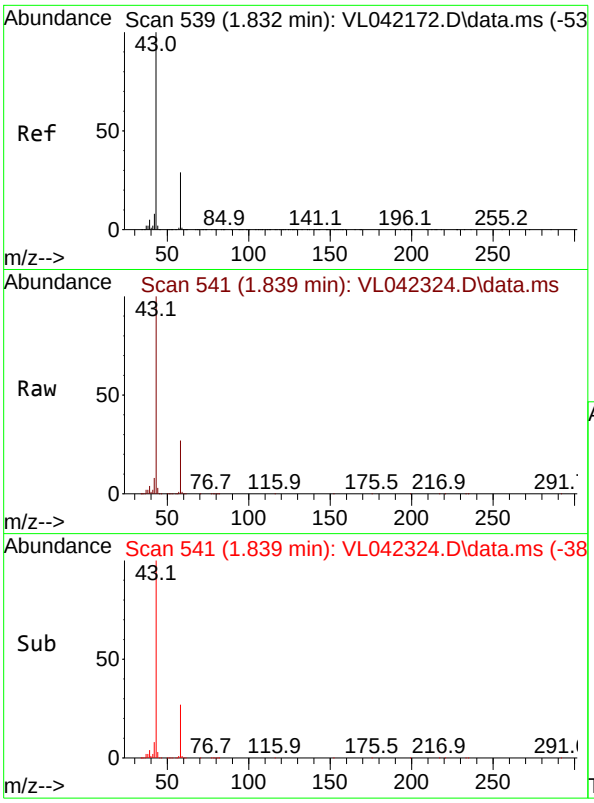


#13
Ethanol
Concen: 131.481 ppbv
RT: 1.725 min Scan# 506
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 45 Resp: 151755

Ion	Ratio	Lower	Upper
45	100		
46	37.0	20.2	80.8



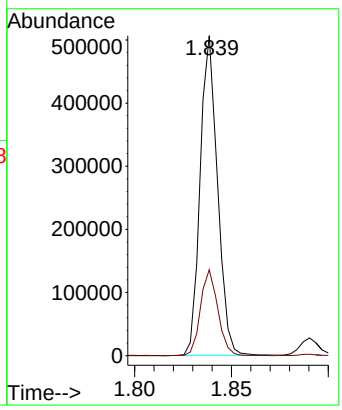


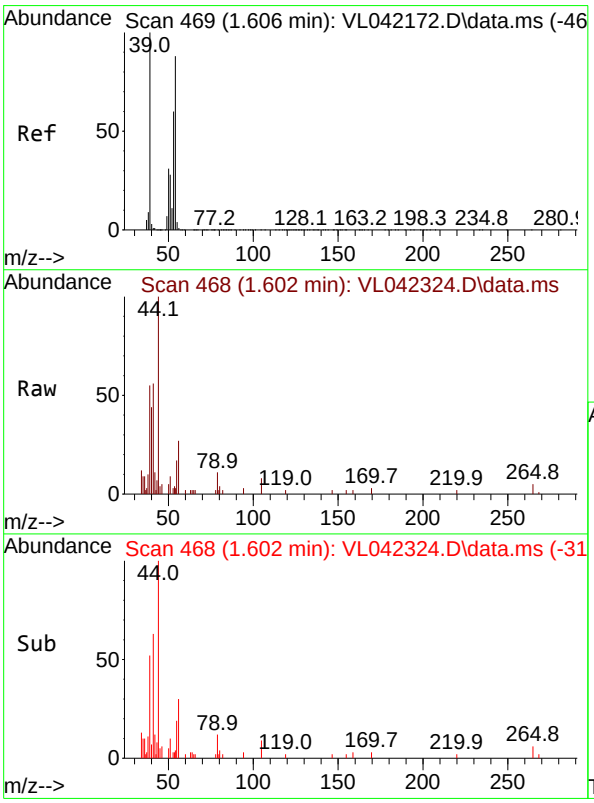
#15
Acetone
Concen: 12.798 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 43 Resp: 316091

Ion	Ratio	Lower	Upper
43	100		
58	26.9	23.2	34.8

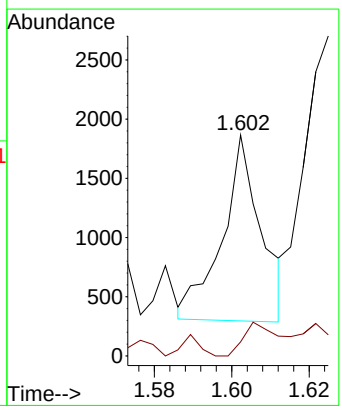


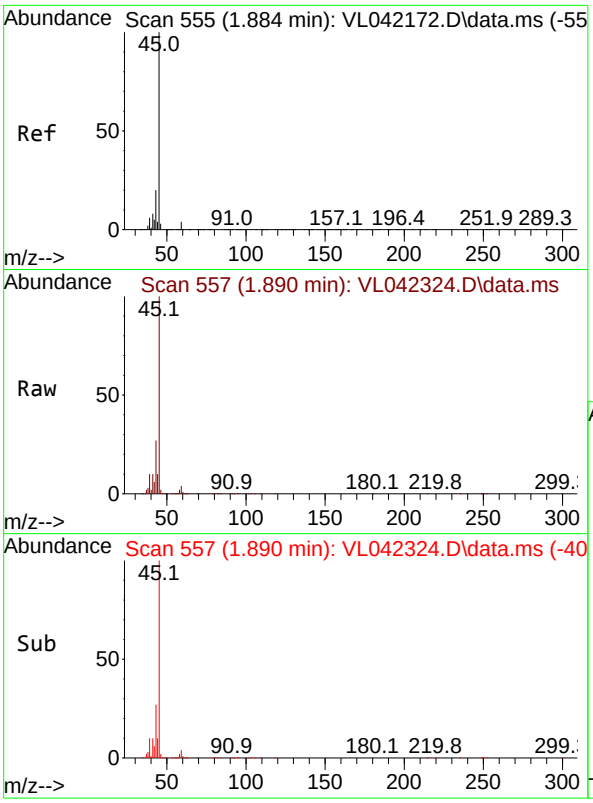


#16
1,3-Butadiene
Concen: 0.090 ppbv
RT: 1.602 min Scan# 468
Delta R.T. -0.004 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 39 Resp: 1089

Ion	Ratio	Lower	Upper
39	100		
54	40.1	60.7	91.1#



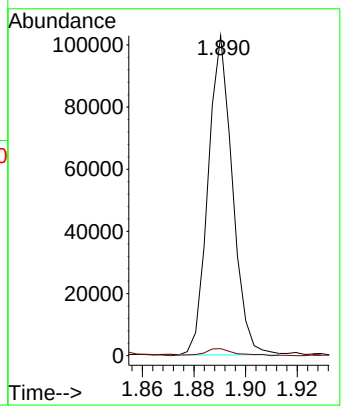


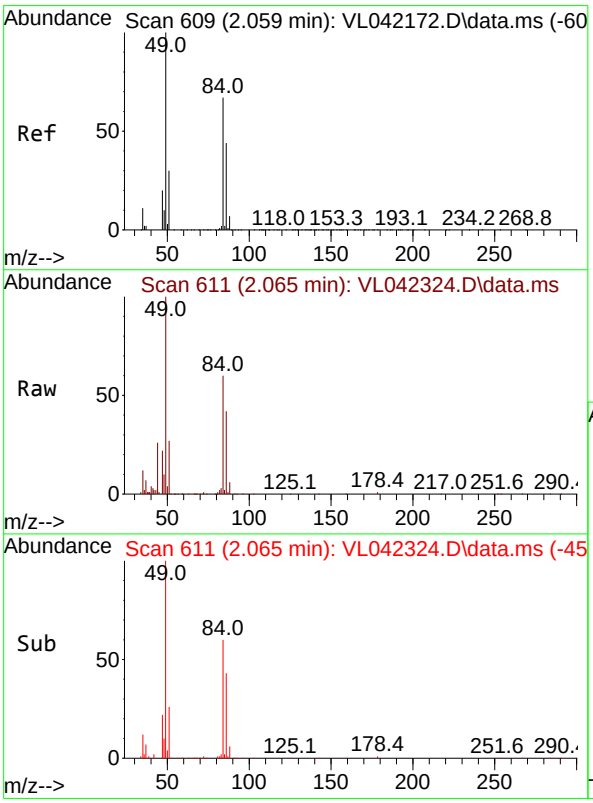
#19
Isopropyl Alcohol
Concen: 4.826 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 45 Resp: 67257

Ion	Ratio	Lower	Upper
45	100		
58	126.4	36.9	55.3#

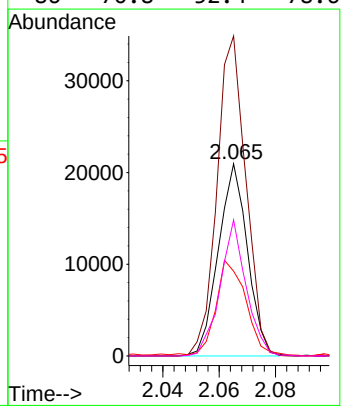


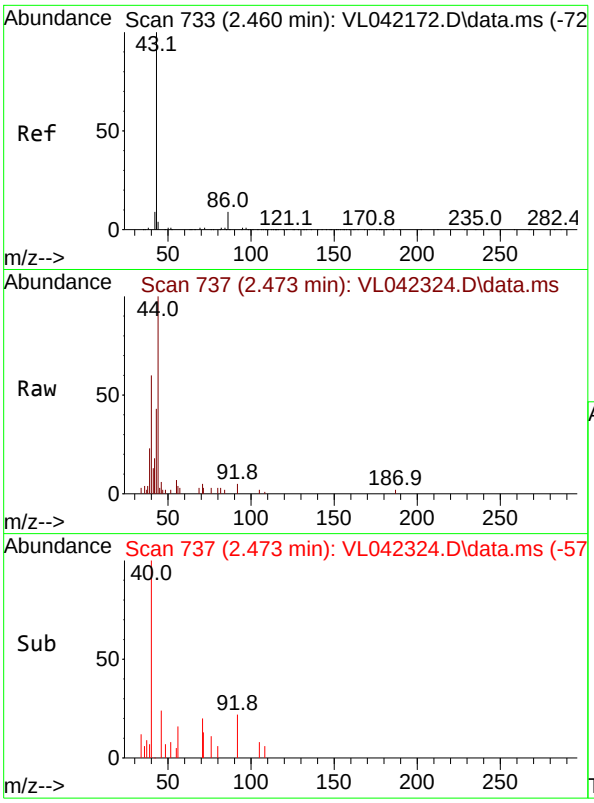


#20
Methylene Chloride
Concen: 1.635 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.006 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 84 Resp: 15039

Ion	Ratio	Lower	Upper
84	100		
49	166.5	120.2	180.4
51	42.7	37.4	56.0
86	70.8	52.4	78.6



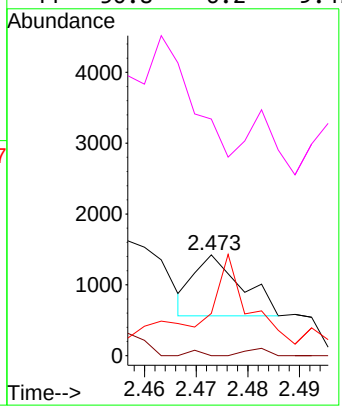


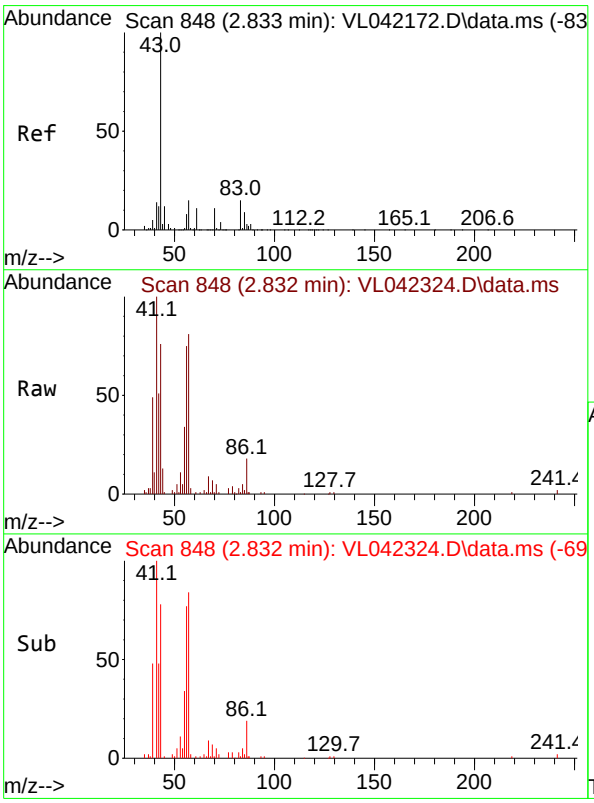
#23
Vinyl Acetate
Concen: 0.052 ppbv
RT: 2.473 min Scan# 7
Delta R.T. 0.013 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 43 Resp: 551

Ion	Ratio	Lower	Upper
43	100		
86	0.0	5.5	8.3#
42	27.6	8.6	13.0#
44	50.8	6.2	9.4#

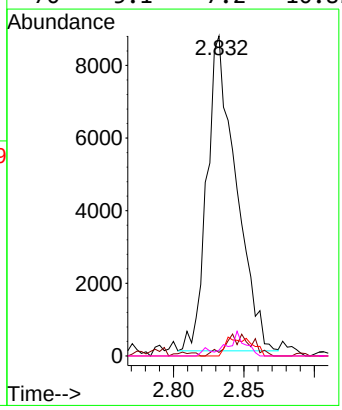


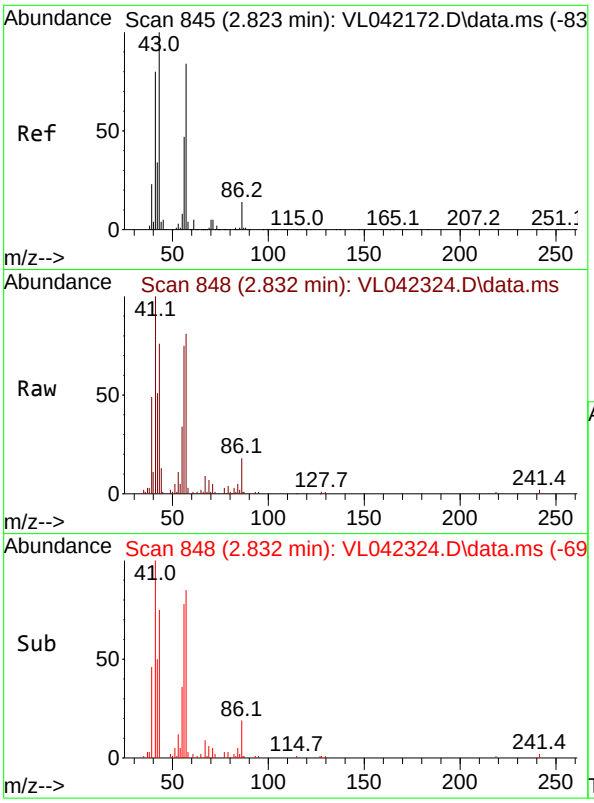


#25
Ethyl Acetate
Concen: 0.194 ppbv
RT: 2.832 min Scan# 848
Delta R.T. -0.000 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 43 Resp: 12443

Ion	Ratio	Lower	Upper
43	100		
45	6.9	8.2	12.2#
61	5.2	7.3	10.9#
70	5.1	7.2	10.8#



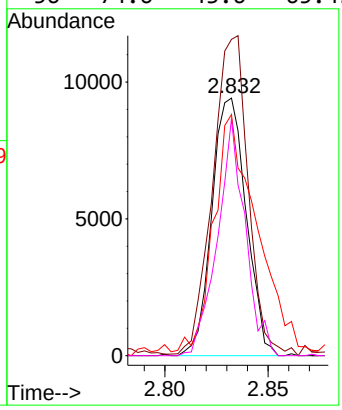


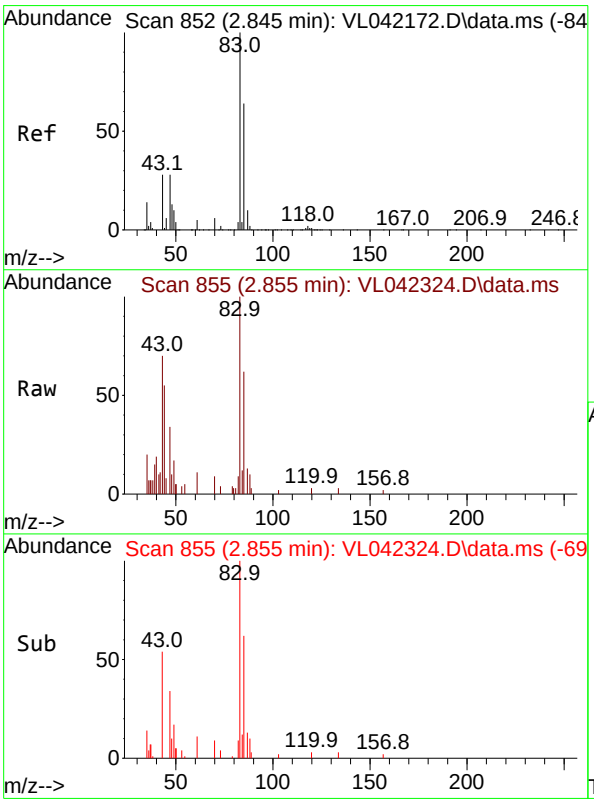
#26
Hexane
Concen: 0.439 ppbv
RT: 2.832 min Scan# 84
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 57 Resp: 10875

Ion	Ratio	Lower	Upper
57	100		
41	127.0	76.6	114.8#
43	125.5	207.8	311.8#
56	74.6	43.6	65.4#

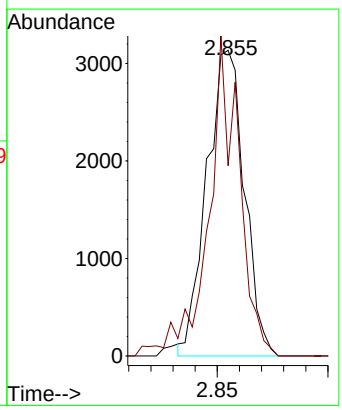


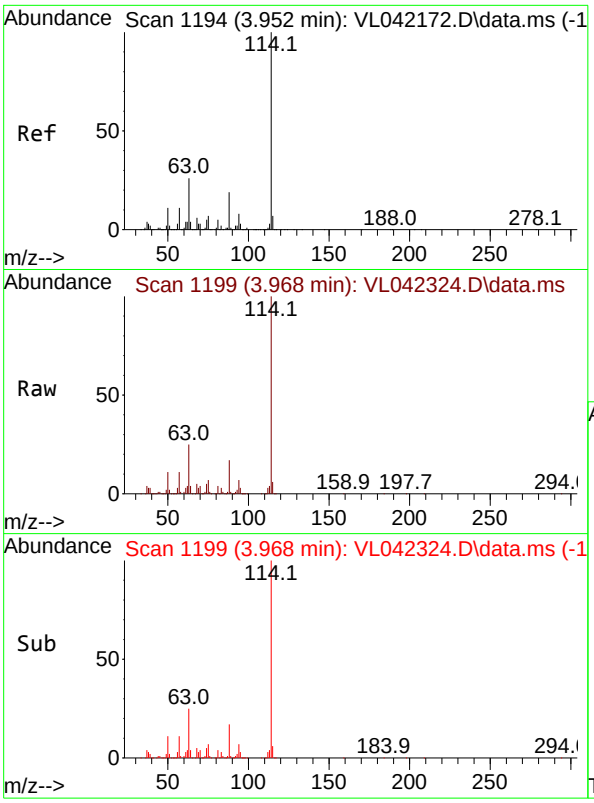


#29
Chloroform
Concen: 0.102 ppbv
RT: 2.855 min Scan# 855
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 83 Resp: 3694

Ion	Ratio	Lower	Upper
83	100		
85	62.2	51.4	77.2



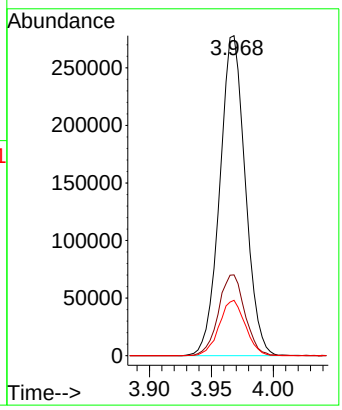


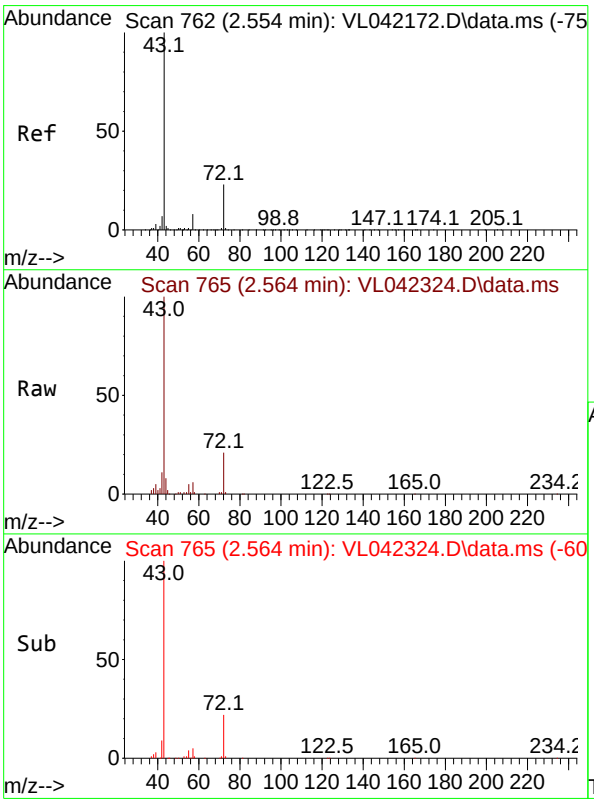
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.968 min Scan# 11
Delta R.T. 0.016 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion:114 Resp: 398133

Ion	Ratio	Lower	Upper
114	100		
63	26.2	20.7	31.1
88	17.7	15.0	22.4

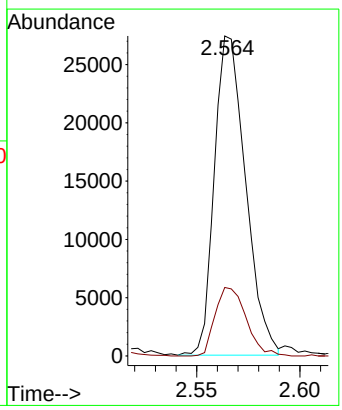


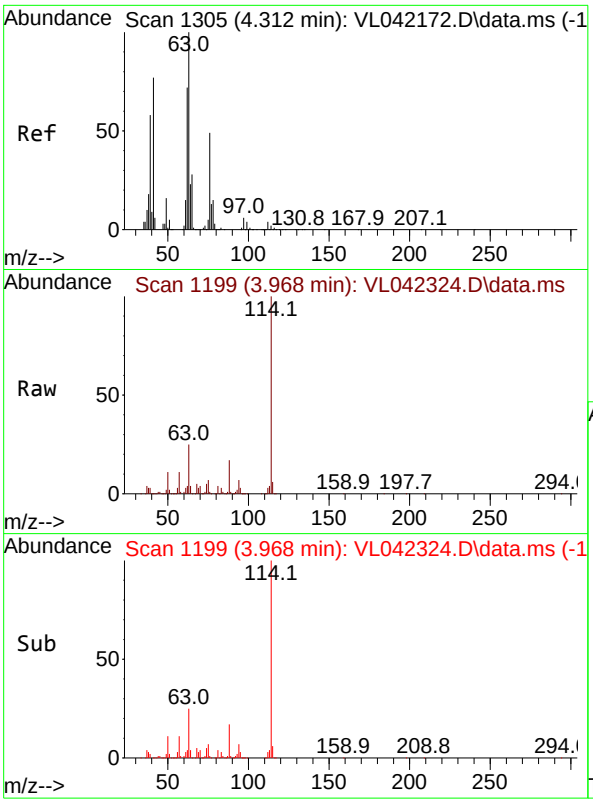


#34
2-Butanone
Concen: 0.997 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion: 43 Resp: 28789

Ion	Ratio	Lower	Upper
43	100		
72	21.4	18.2	27.2



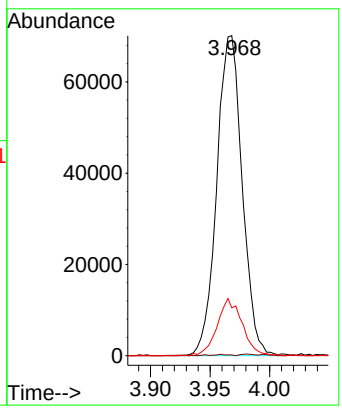


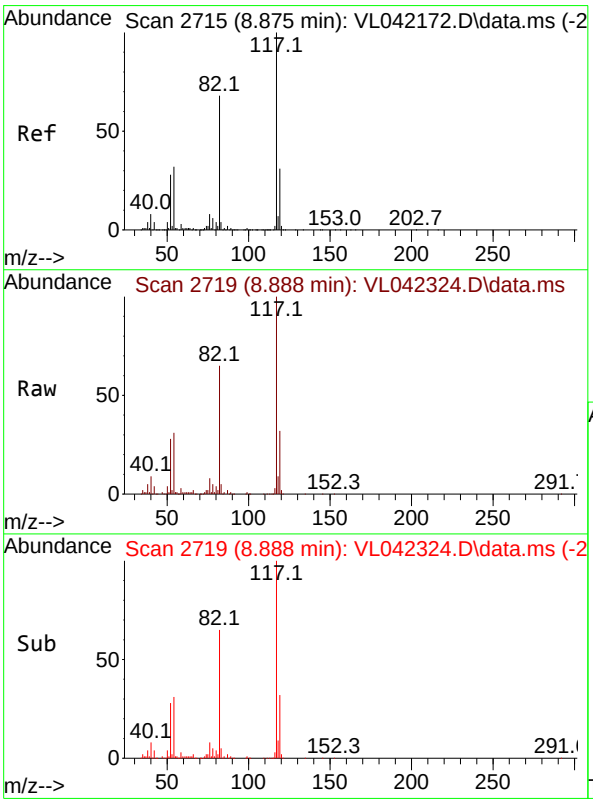
#39
1,2-Dichloropropane
Concen: 7.240 ppbv
RT: 3.968 min Scan# 11
Delta R.T. -0.343 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 63 Resp: 104076

Ion	Ratio	Lower	Upper
63	100		
41	0.5	61.7	92.5#
62	15.0	57.6	86.4#

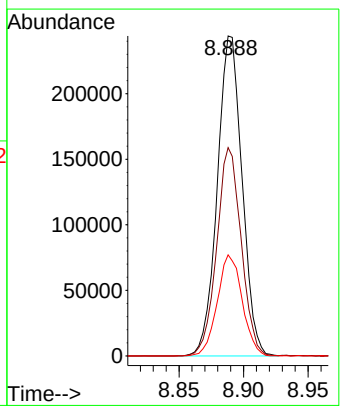


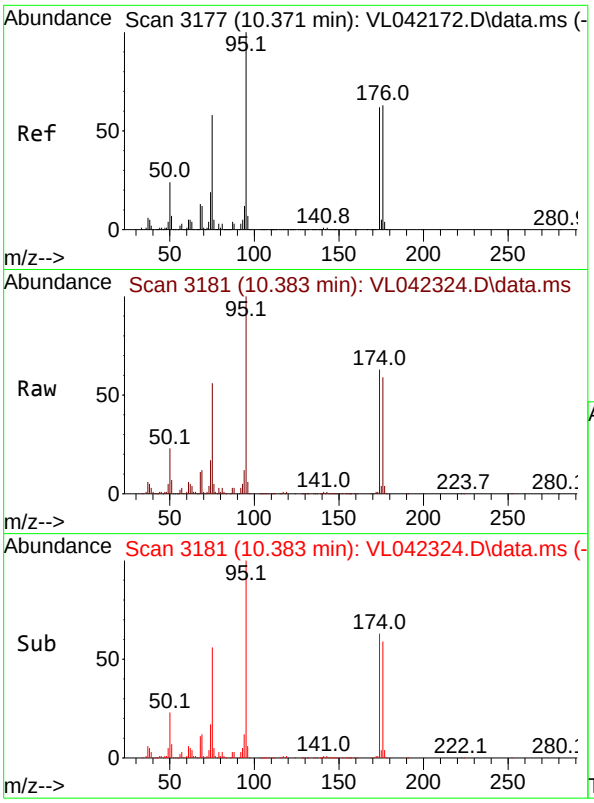


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2719
Delta R.T. 0.013 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion:117 Resp: 325777

Ion	Ratio	Lower	Upper
117	100		
82	64.5	55.8	83.6
119	31.8	25.5	38.3



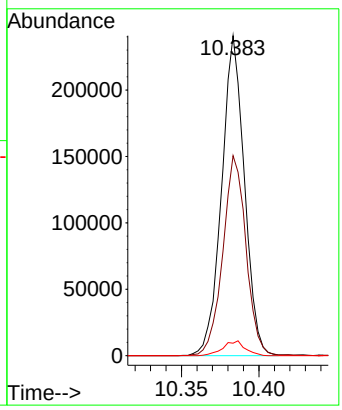


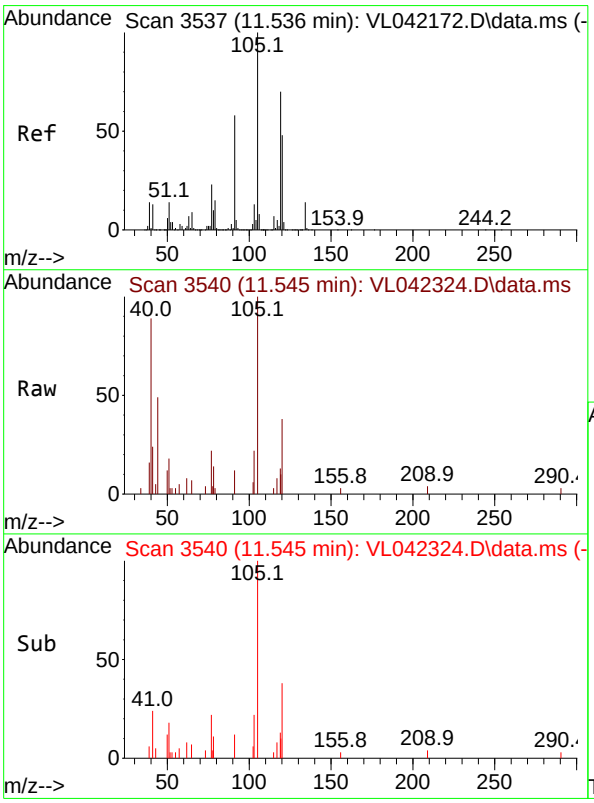
#68
1-Bromo-4-Fluorobenzene
Concen: 9.217 ppbv
RT: 10.383 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-1-3242025DL

Tgt Ion: 95 Resp: 246592

Ion	Ratio	Lower	Upper
95	100		
174	63.8	50.6	76.0
175	4.5	3.8	5.6

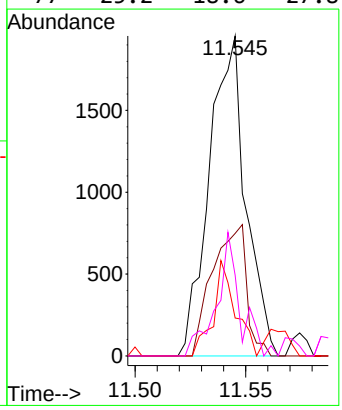




#74
1,2,4-Trimethylbenzene
Concen: 0.039 ppbv
RT: 11.545 min Scan# 3540
Delta R.T. 0.009 min
Lab File: VL042324.D
Acq: 11 Apr 2025 17:10

Tgt Ion:105 Resp: 2245

Ion	Ratio	Lower	Upper
105	100		
120	38.3	38.6	58.0#
91	11.8	46.2	69.2#
77	25.2	18.6	27.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.806	49	172263	10.000	ppbv	0.02
33) 1,4-Difluorobenzene	3.988	114	457227	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.911	117	411493	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.403	95	325960	9.646	ppbv	0.03
Spiked Amount 10.000	Range 65 - 135		Recovery = 96.500%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.505	85	214541	8.435	ppbv	99
3) Chlorodifluoromethane	1.483	51	235250	9.054	ppbv	98
4) Chloromethane	1.541	50	89653	8.625	ppbv	98
5) Vinyl Chloride	1.589	62	83204	7.554	ppbv	96
6) Bromomethane	1.677	94	36297	7.705	ppbv	99
7) Chloroethane	1.716	64	32145	7.704	ppbv	97
8) Dichlorotetrafluoroethane	1.564	85	182884	8.443	ppbv	94
9) Propene	1.492	41	101034	8.483	ppbv	98
10) Heptane	5.020	43	276748	8.736	ppbv	98
11) Trichlorofluoromethane	1.887	101	202387	8.178	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.153	101	157030	7.719	ppbv	98
13) Ethanol	1.732	45	4440	3.944	ppbv	93
14) Bromoethene	1.793	108	59588	7.646	ppbv	99
15) Acetone	1.845	43	183439	7.614	ppbv	96
16) 1,3-Butadiene	1.619	39	90954	7.731	ppbv	100
17) tert-Butyl alcohol	2.052	59	209737	6.990	ppbv	100
18) 1,1-Dichloroethene	2.046	96	72322	7.605	ppbv	96
19) Isopropyl Alcohol	1.897	45	104424	7.682	ppbv	98
20) Methylene Chloride	2.075	84	60337	6.725	ppbv	90
21) Allyl Chloride	2.111	41	132956	7.825	ppbv	98
22) trans-1,2-Dichloroethene	2.357	96	81572	7.422	ppbv	96
23) Vinyl Acetate	2.480	43	72160	6.920	ppbv	97
24) 1,1-Dichloroethane	2.425	63	169411	8.315	ppbv	100
25) Ethyl Acetate	2.855	43	564611	9.030	ppbv	99
26) Hexane	2.845	57	213782	8.851	ppbv	98
27) Carbon Disulfide	2.166	76	195452	7.547	ppbv	97
28) Methyl tert-Butyl Ether	2.457	73	116301	7.734	ppbv	96
29) Chloroform	2.868	83	314164	8.888	ppbv	100
30) Cyclohexane	3.884	84	173360	8.266	ppbv	98
31) cis-1,2-Dichloroethene	2.739	61	208160	8.490	ppbv	96
32) 1,1,1-Trichloroethane	3.392	97	311758	7.704	ppbv	98
34) 2-Butanone	2.577	43	317117	9.565	ppbv	97
35) Carbon Tetrachloride	3.790	117	317942	8.902	ppbv	99
36) Benzene	3.684	78	424254	9.360	ppbv	94
37) 1,2-Dichloroethane	3.243	62	239556	9.231	ppbv	100
38) Trichloroethene	4.583	130	172146	9.102	ppbv	96
39) 1,2-Dichloropropane	4.350	63	151707	9.190	ppbv	96
40) 1,4-Dioxane	4.622	88	72075	8.226	ppbv #	98
41) Tetrahydrofuran	3.075	42	181471	9.505	ppbv	95
42) Bromodichloromethane	4.525	83	333167	9.313	ppbv	97
43) Methyl Methacrylate	4.923	69	155399	8.098	ppbv	96
44) 2,2,4-Trimethylpentane	4.677	57	728571	9.511	ppbv	99
45) t-1,3-Dichloropropene	6.461	75	151063	7.338	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.648	75	204339	8.097	ppbv		98
47) 1,1,2-Trichloroethane	6.626	97	163132	9.348	ppbv		97
48) Dibromochloromethane	7.425	129	272592	9.217	ppbv		99
49) Bromoform	9.513	173	238880	8.997	ppbv		100
50) 4-Methyl-2-Pentanone	5.800	43	442851	8.428	ppbv		97
51) 2-Hexanone	7.474	43	353471	8.192	ppbv	#	97
52) Tetrachloroethene	8.260	164	144481	8.037	ppbv		98
53) Toluene	6.975	91	461854	8.595	ppbv		100
54) 1,2-Dibromoethane	7.687	107	220075	9.047	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.956	131	214175	9.455	ppbv		99
57) Chlorobenzene	8.953	112	375357	9.617	ppbv		97
58) Ethyl Benzene	9.383	91	639857	8.754	ppbv		99
59) m/p-Xylene	9.581	91	488646	8.372	ppbv	#	13
60) o-Xylene	9.992	91	528896	9.040	ppbv		95
61) Styrene	9.898	104	245300	8.474	ppbv		97
62) Isopropylbenzene	10.565	105	794408	9.079	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.992	83	343786	9.671	ppbv		100
64) n-propylbenzene	11.015	120	212879	9.452	ppbv		95
65) tert-Butylbenzene	11.555	119	721078	8.911	ppbv		97
66) Benzyl Chloride	11.639	91	54427	6.339	ppbv		98
67) sec-Butylbenzene	11.791	105	1026079	9.123	ppbv		99
69) p-Isopropyltoluene	11.947	119	865385	8.935	ppbv		99
70) n-Butylbenzene	12.303	91	884265	8.928	ppbv		99
71) 2-Chlorotoluene	10.927	91	599592	8.830	ppbv		98
72) 4-Ethyltoluene	11.147	105	657765	9.029	ppbv		99
73) 1,3,5-Trimethylbenzene	11.228	105	557593	8.764	ppbv		99
74) 1,2,4-Trimethylbenzene	11.558	105	623563	8.507	ppbv	#	86
75) 1,3-Dichlorobenzene	11.630	146	381572	9.492	ppbv		98
76) 1,4-Dichlorobenzene	11.694	146	380035	9.499	ppbv		98
77) 1,2-Dichlorobenzene	11.969	146	379896	9.706	ppbv		97
78) Hexachloro-1,3-Butadiene	13.902	225	311900	7.828	ppbv		99
79) Naphthalene	13.533	128	760876	9.490	ppbv		99
80) Naphthalene,2-methyl-	14.478	142	365398	9.294	ppbv		98
81) 1,2,4-Trichlorobenzene	13.461	180	337032	9.114	ppbv		99

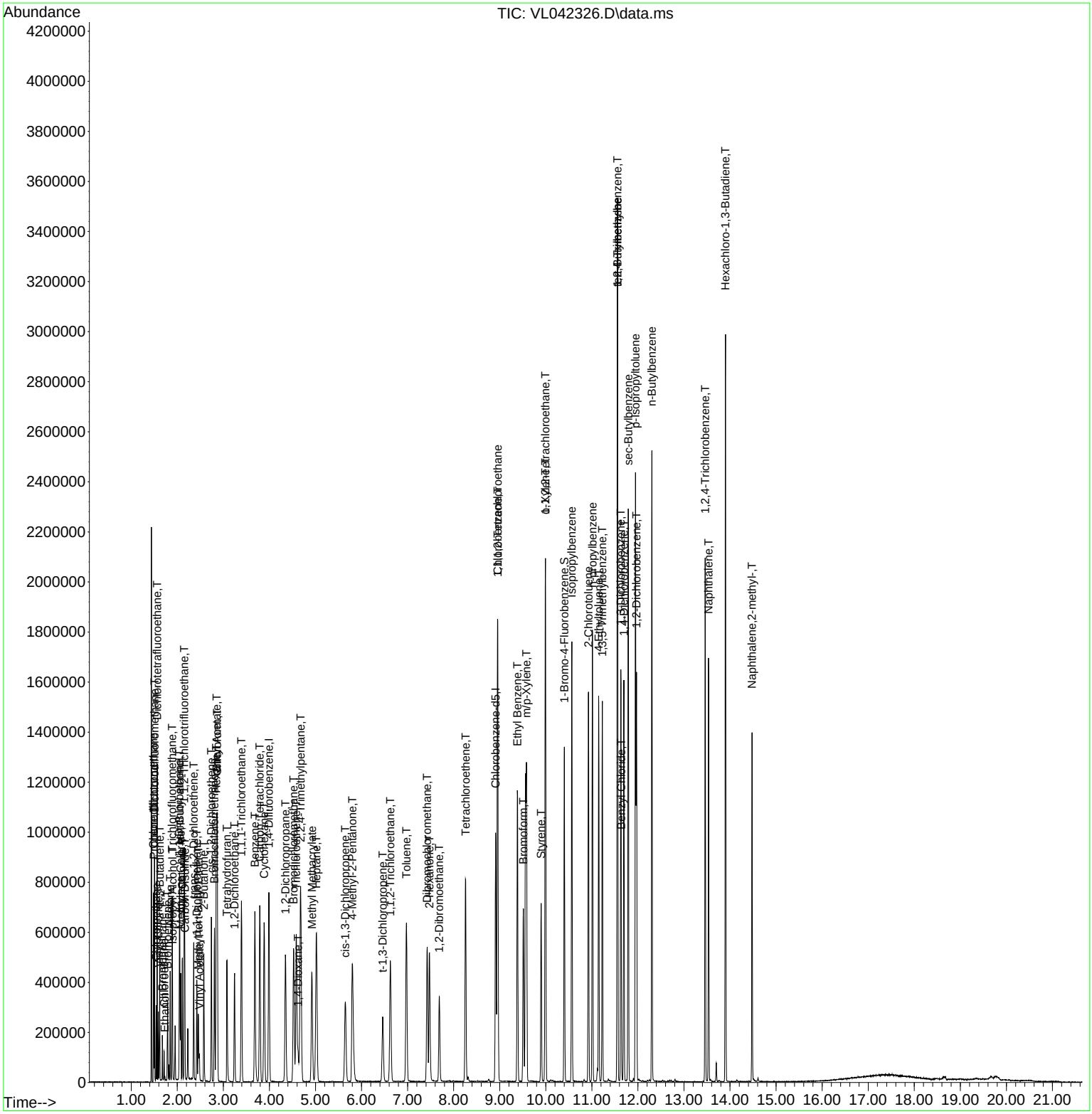
(#) = qualifier out of range (m) = manual integration (+) = signals summed

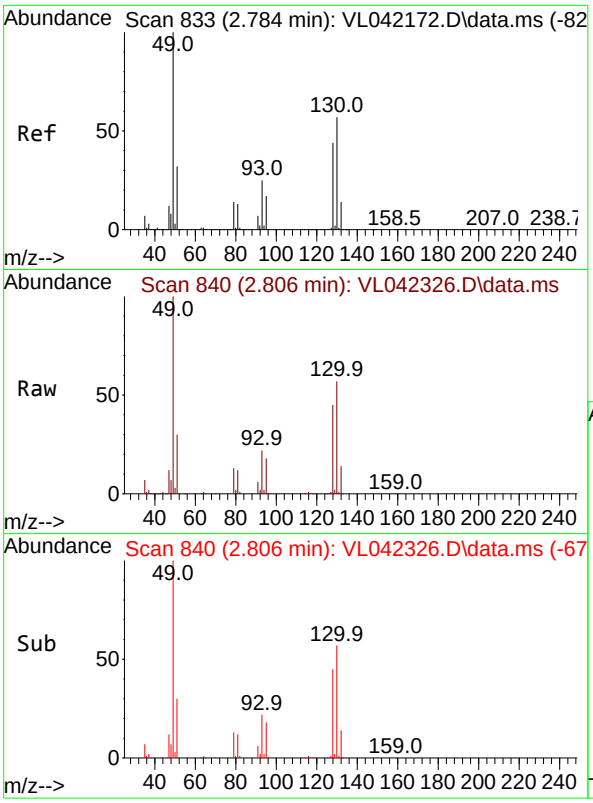
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042326.D
Acq On : 15 Apr 2025 11:30
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 16 01:29:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



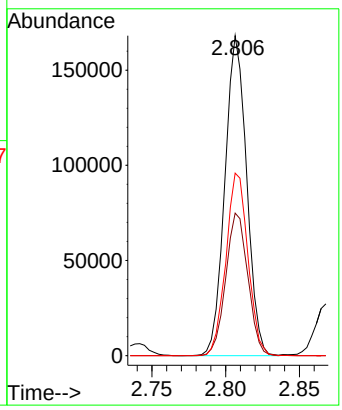


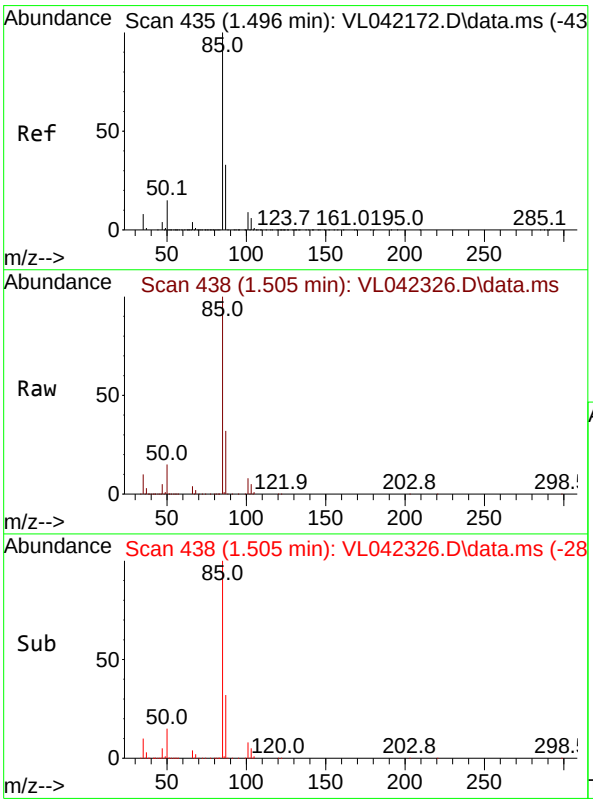
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.806 min Scan# 84
Delta R.T. 0.022 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 172263

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.9	68.5
130	57.8	28.8	86.4

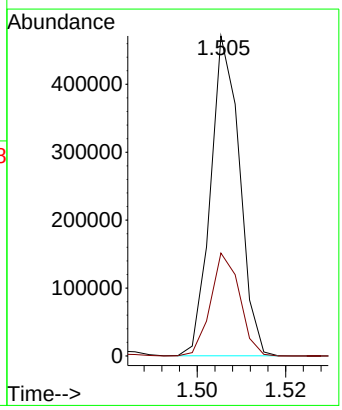


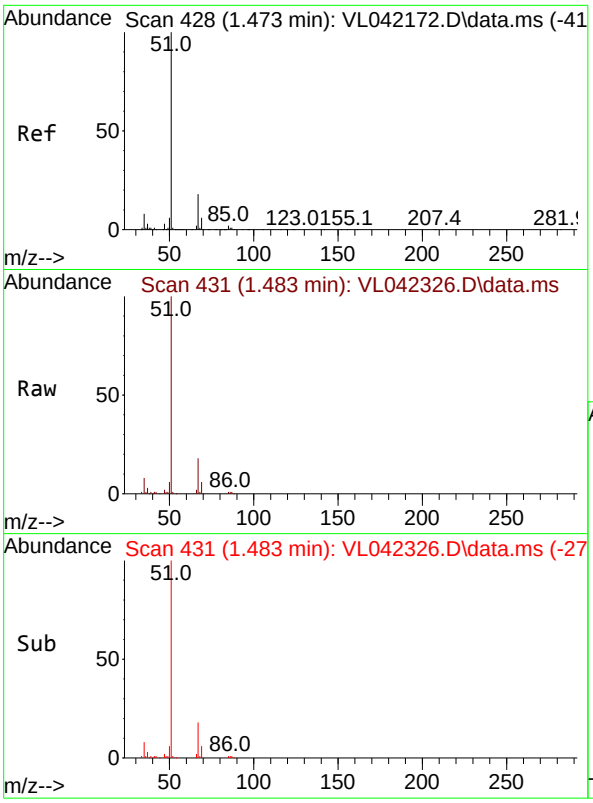


#2
Dichlorodifluoromethane
Concen: 8.435 ppbv
RT: 1.505 min Scan# 438
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 85 Resp: 214541

Ion	Ratio	Lower	Upper
85	100		
87	32.1	26.1	39.1



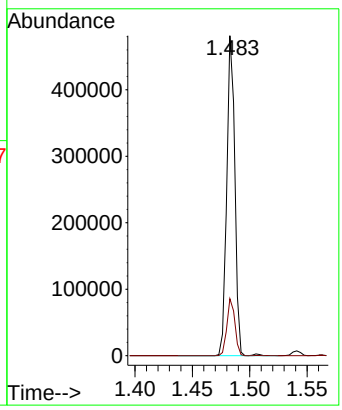


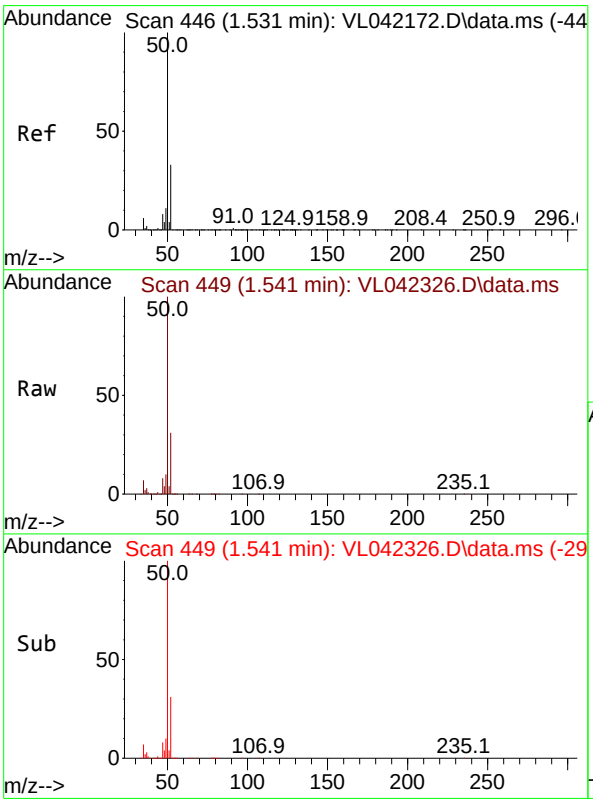
#3
Chlorodifluoromethane
Concen: 9.054 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 235250

Ion	Ratio	Lower	Upper
51	100		
67	17.7	15.0	22.6

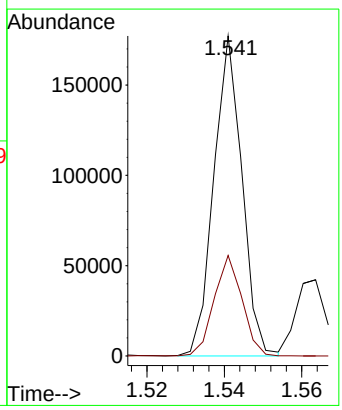


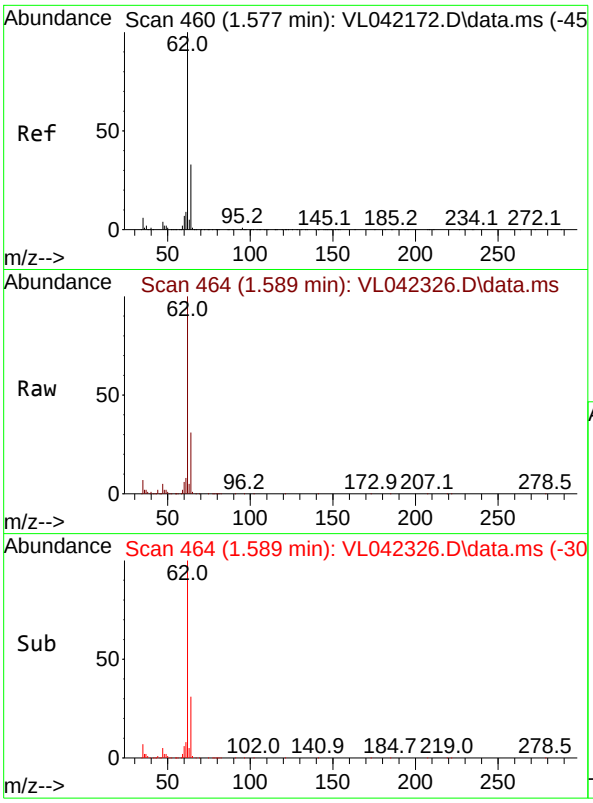


#4
Chloromethane
Concen: 8.625 ppbv
RT: 1.541 min Scan# 449
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 50 Resp: 89653

Ion	Ratio	Lower	Upper
50	100		
52	31.4	26.1	39.1



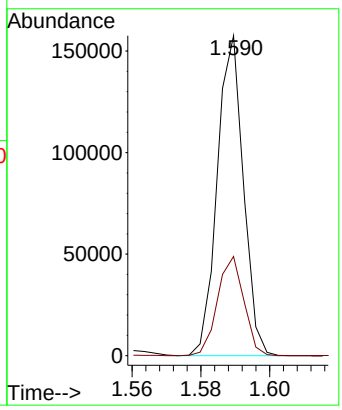


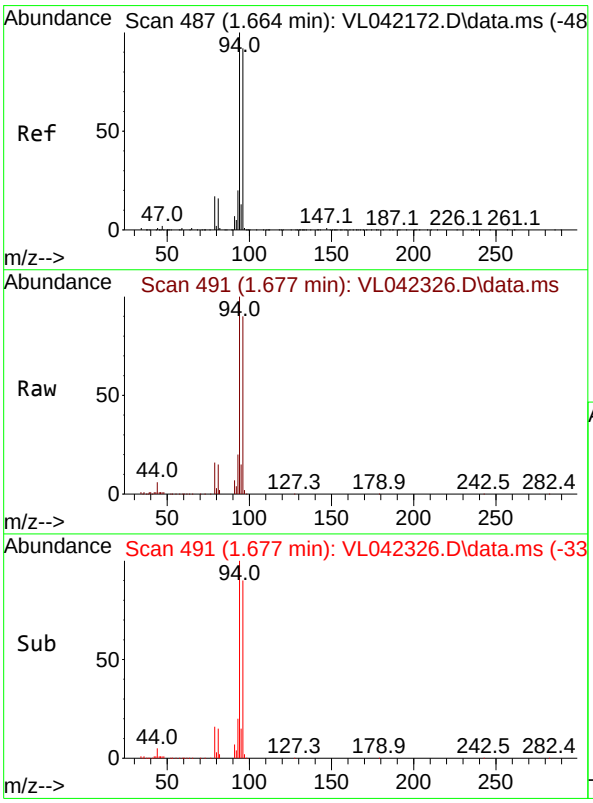
#5
Vinyl Chloride
Concen: 7.554 ppbv
RT: 1.589 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 83204

Ion	Ratio	Lower	Upper
62	100		
64	31.0	26.6	40.0

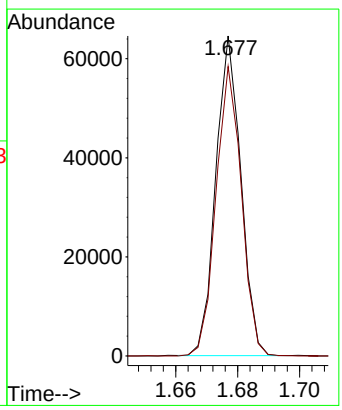


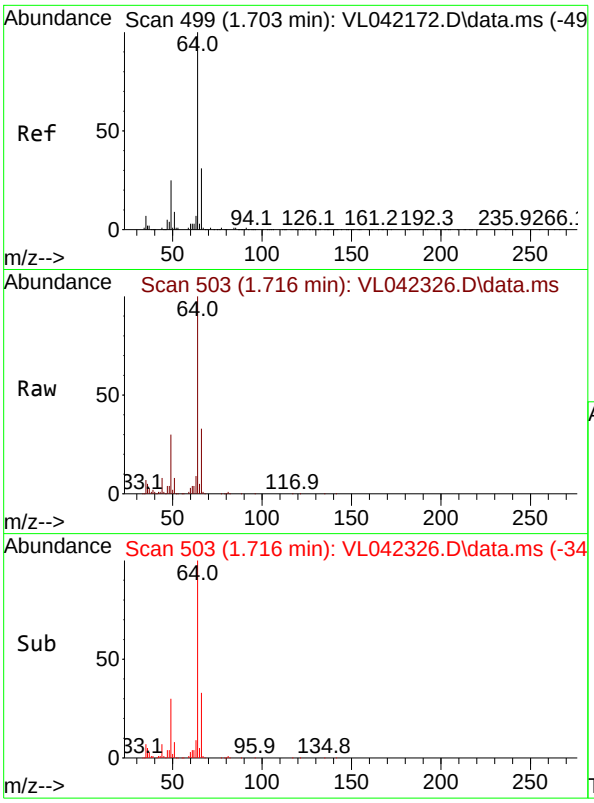


#6
Bromomethane
Concen: 7.705 ppbv
RT: 1.677 min Scan# 491
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 94 Resp: 36297

Ion	Ratio	Lower	Upper
94	100		
96	90.5	73.1	109.7



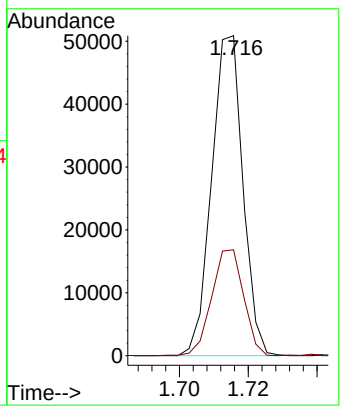


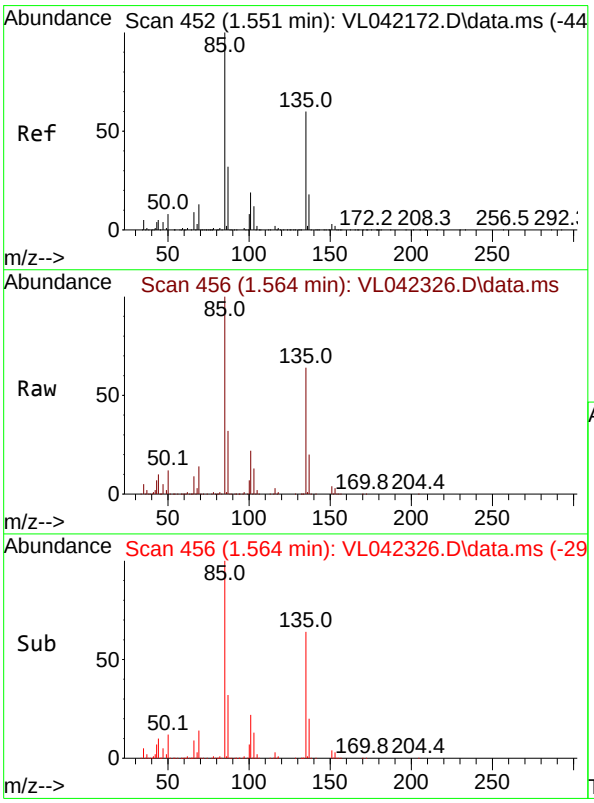
#7
Chloroethane
Concen: 7.704 ppbv
RT: 1.716 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 32145

Ion	Ratio	Lower	Upper
64	100		
66	33.1	25.2	37.8

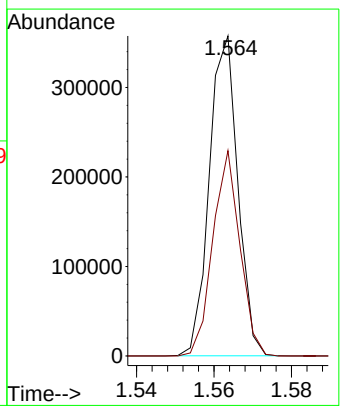


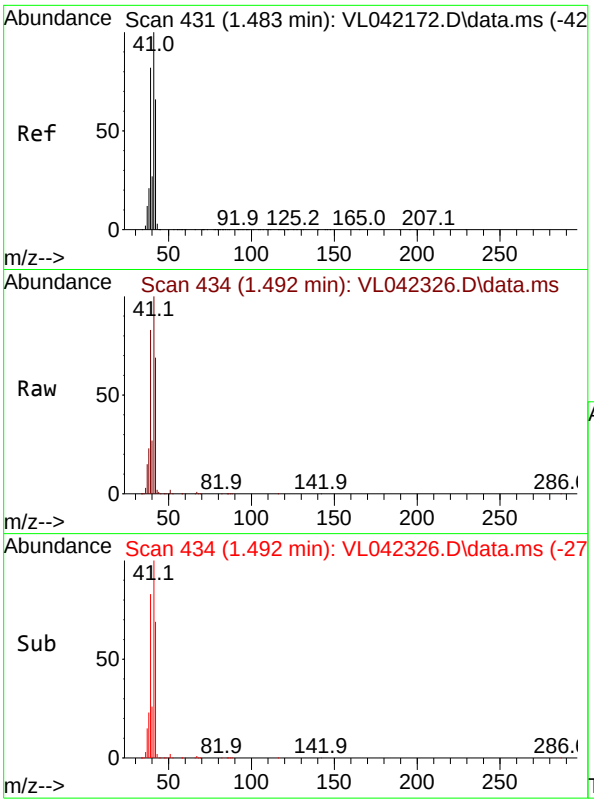


#8
Dichlorotetrafluoroethane
Concen: 8.443 ppbv
RT: 1.564 min Scan# 456
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 85 Resp: 182884

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.4	78.6



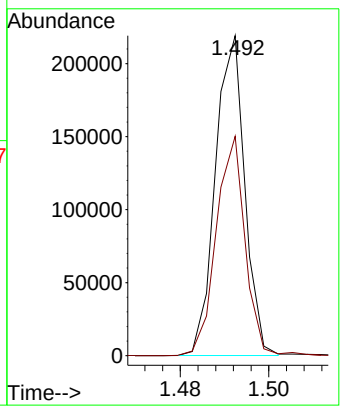


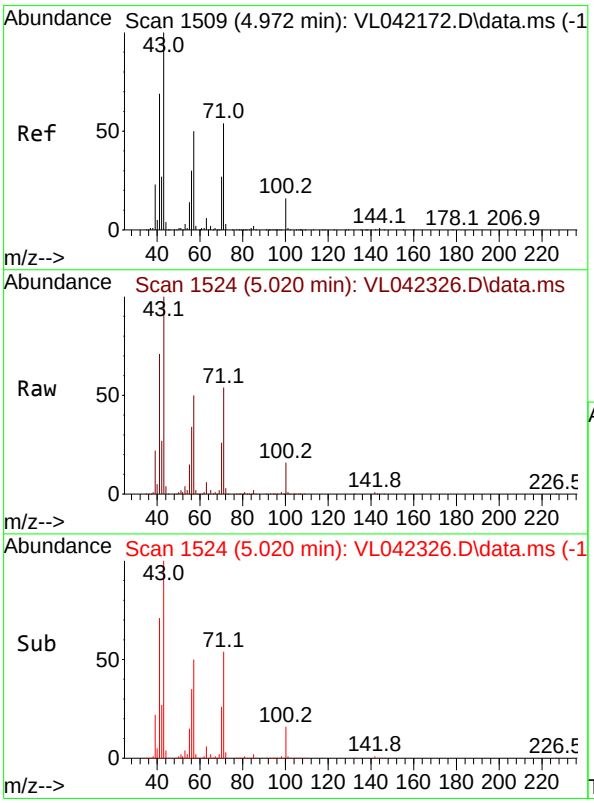
#9
Propene
Concen: 8.483 ppbv
RT: 1.492 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 101034

Ion	Ratio	Lower	Upper
41	100		
42	67.9	55.4	83.2

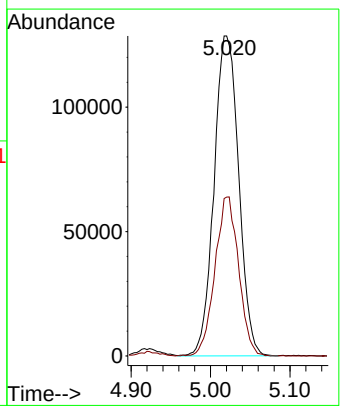


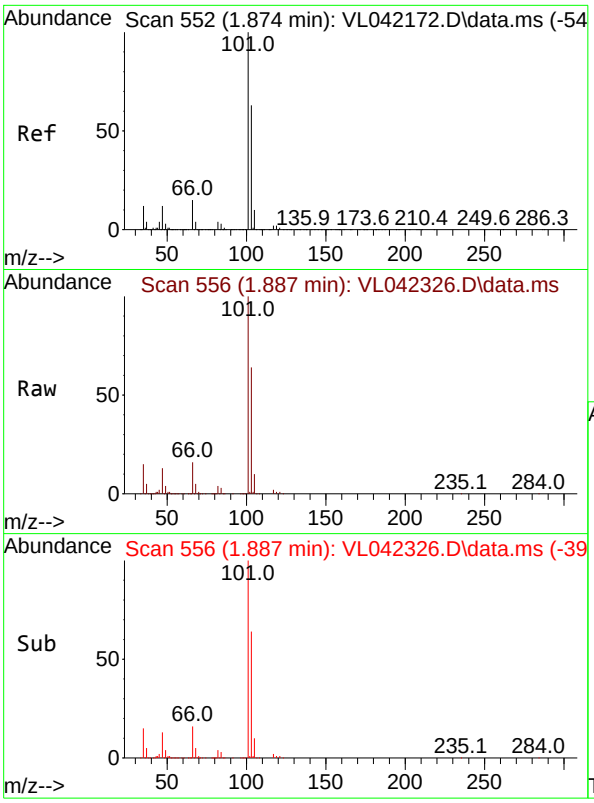


#10
Heptane
Concen: 8.736 ppbv
RT: 5.020 min Scan# 1524
Delta R.T. 0.048 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 276748

Ion	Ratio	Lower	Upper
43	100		
57	47.8	39.4	59.2



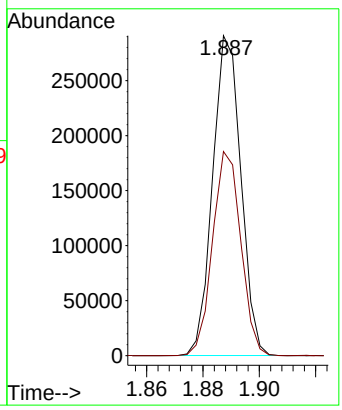


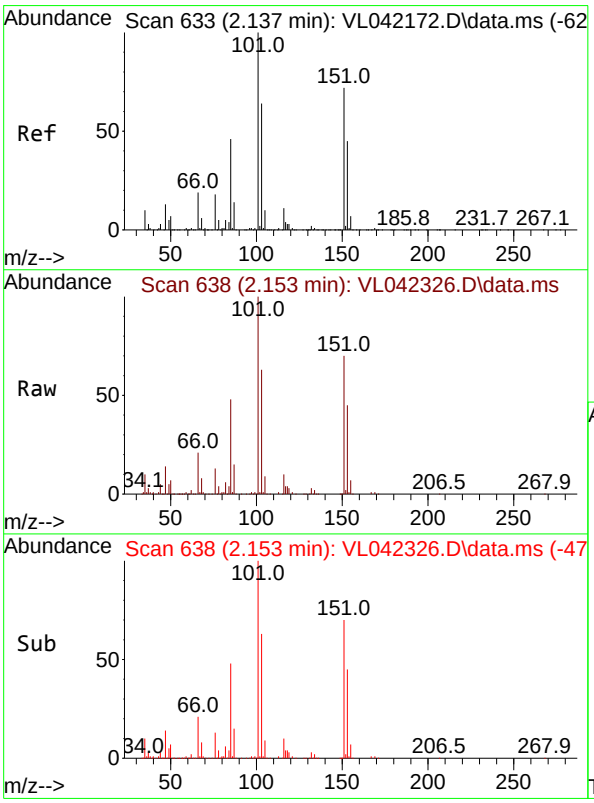
#11
Trichlorofluoromethane
Concen: 8.178 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 202387

Ion	Ratio	Lower	Upper
101	100		
103	63.8	50.2	75.2

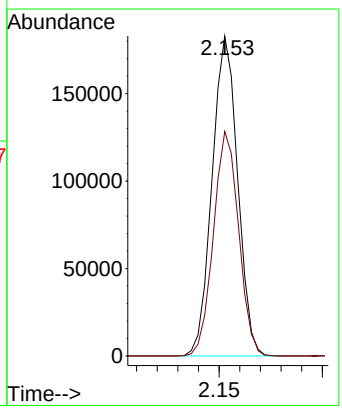


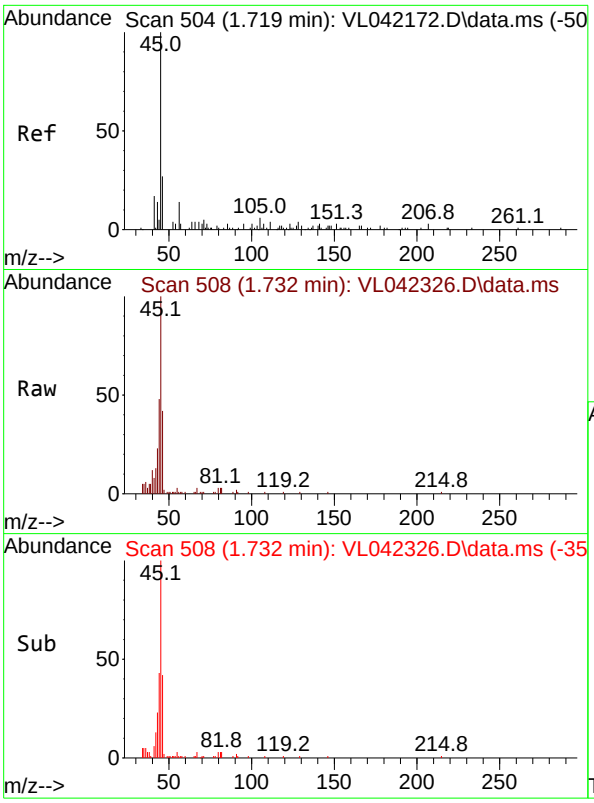


#12
1,1,2-Trichlorotrifluoroethane
Concen: 7.719 ppbv
RT: 2.153 min Scan# 638
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:101 Resp: 157030

Ion	Ratio	Lower	Upper
101	100		
151	69.5	57.1	85.7



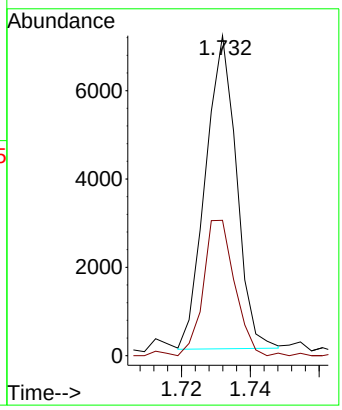


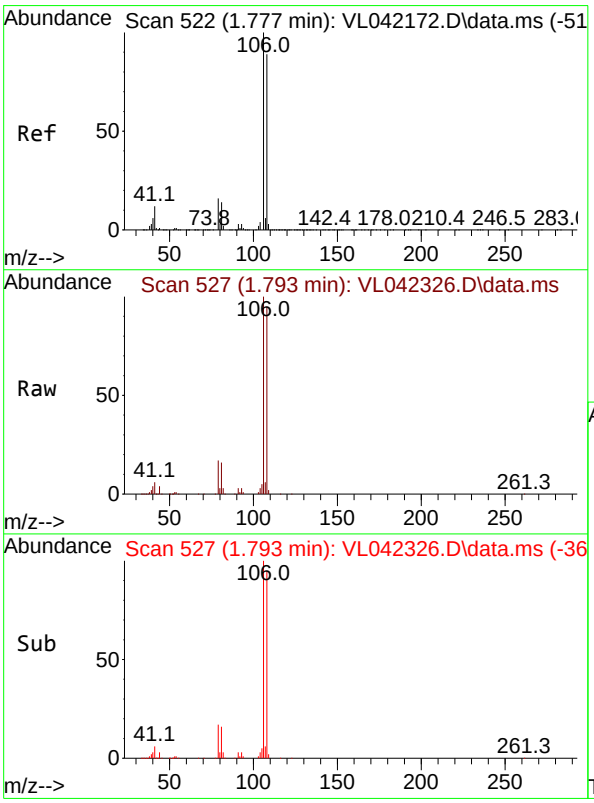
#13
Ethanol
Concen: 3.944 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 4440

Ion	Ratio	Lower	Upper
45	100		
46	45.7	20.2	80.8

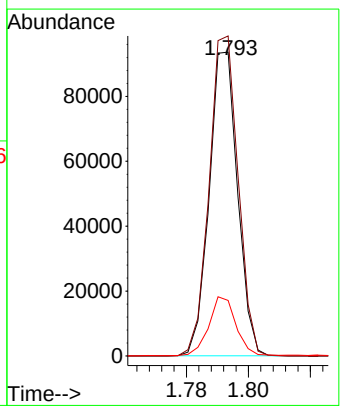


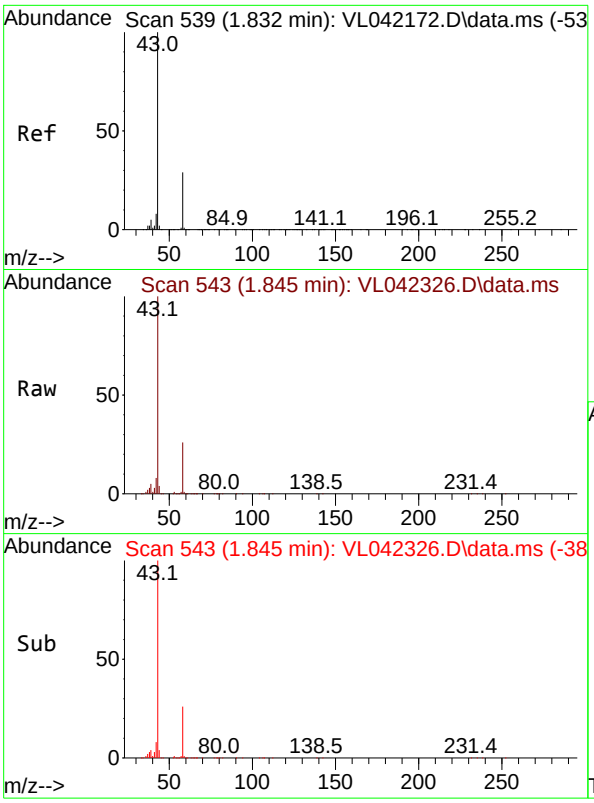


#14
Bromoethene
Concen: 7.646 ppbv
RT: 1.793 min Scan# 527
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:108 Resp: 59588

Ion	Ratio	Lower	Upper
108	100		
106	107.3	86.8	130.2
79	19.2	15.0	22.6



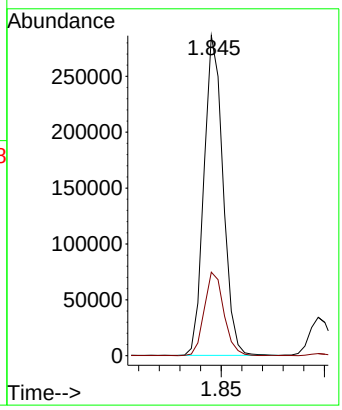


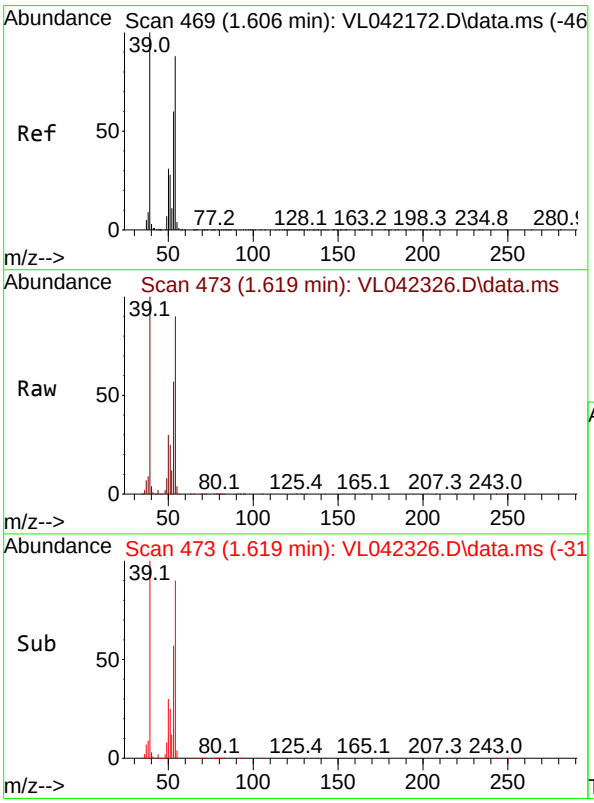
#15
Acetone
Concen: 7.614 ppbv
RT: 1.845 min Scan# 54
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 183439

Ion	Ratio	Lower	Upper
43	100		
58	27.0	23.2	34.8

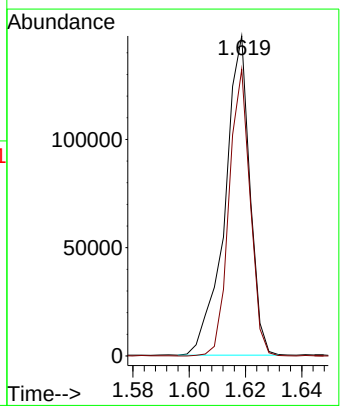


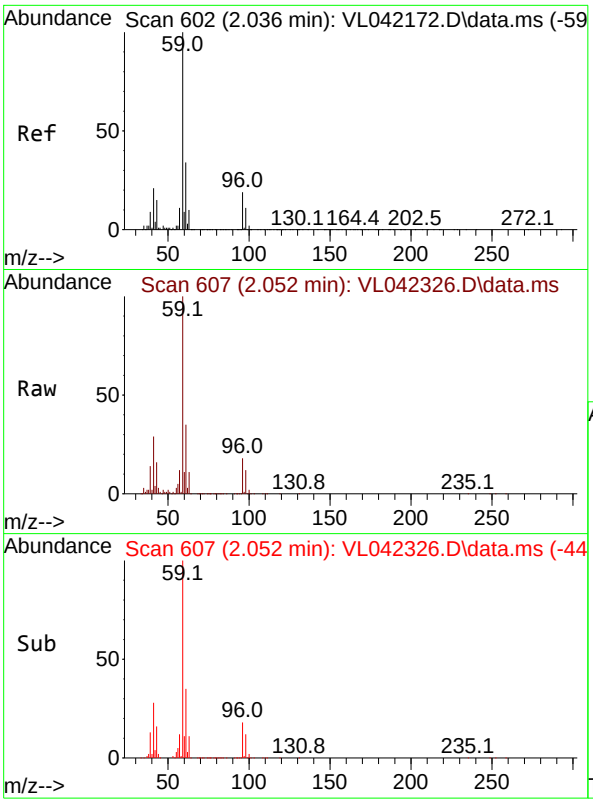


#16
1,3-Butadiene
Concen: 7.731 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 39 Resp: 90954

Ion	Ratio	Lower	Upper
39	100		
54	75.6	60.7	91.1



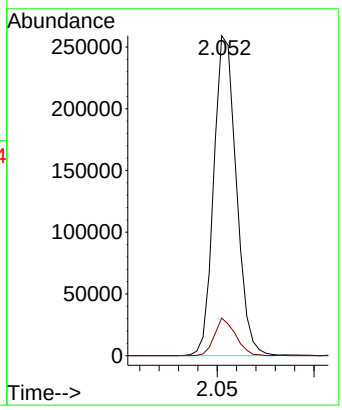


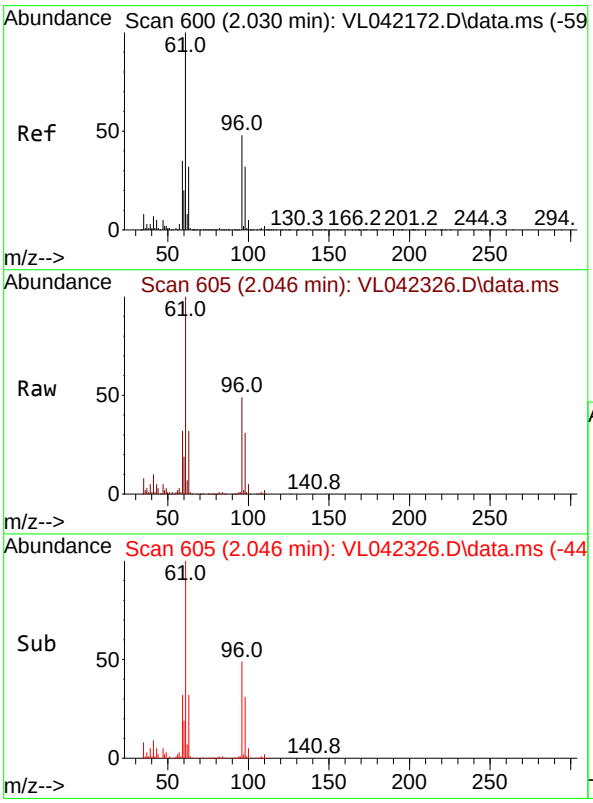
#17
tert-Butyl alcohol
Concen: 6.990 ppbv
RT: 2.052 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 209737

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.9	13.3

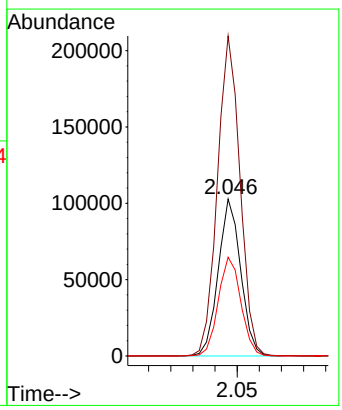


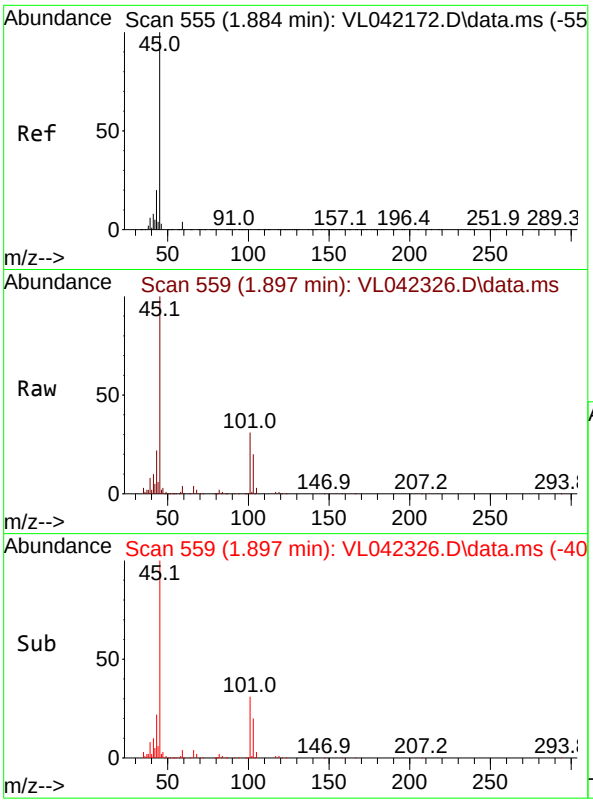


#18
1,1-Dichloroethene
Concen: 7.605 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 96 Resp: 72322

Ion	Ratio	Lower	Upper
96	100		
61	203.8	167.6	251.4
98	62.9	53.5	80.3



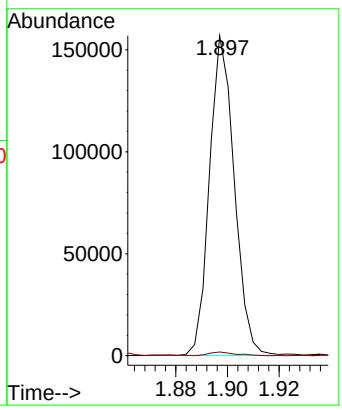


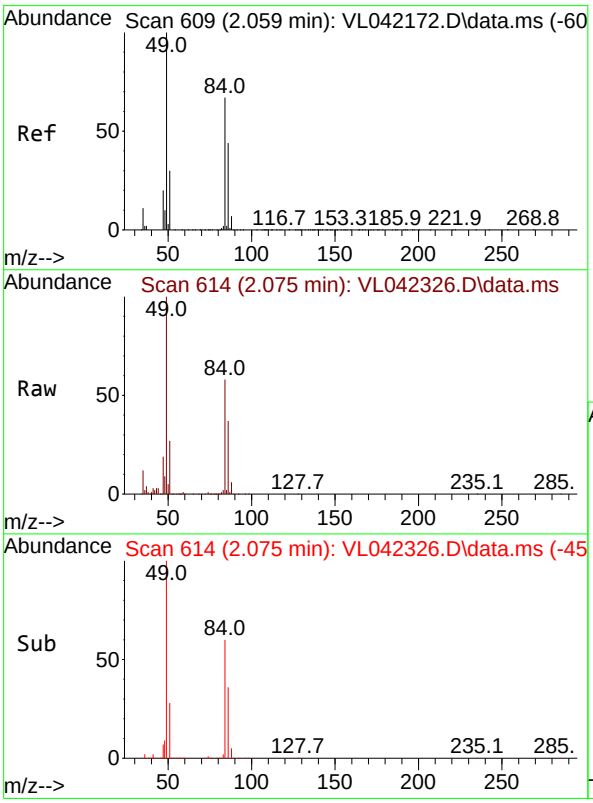
#19
Isopropyl Alcohol
Concen: 7.682 ppbv
RT: 1.897 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 104424

Ion	Ratio	Lower	Upper
45	100		
58	47.5	36.9	55.3

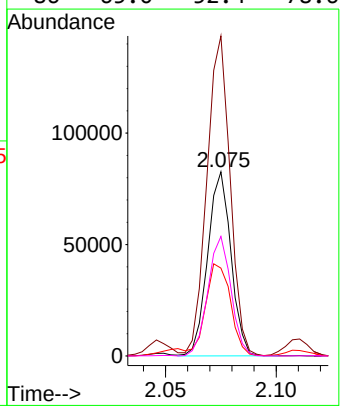


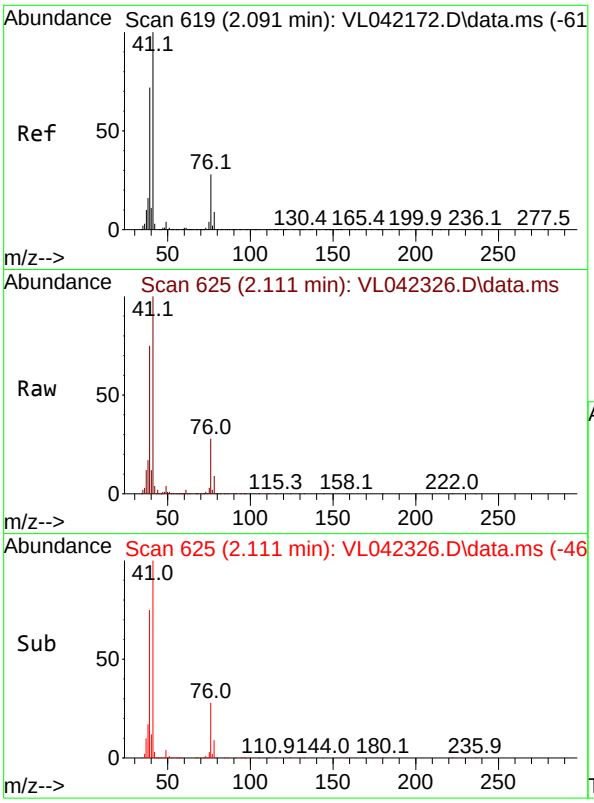


#20
Methylene Chloride
Concen: 6.725 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 84 Resp: 60337

Ion	Ratio	Lower	Upper
84	100		
49	172.1	120.2	180.4
51	47.0	37.4	56.0
86	65.0	52.4	78.6



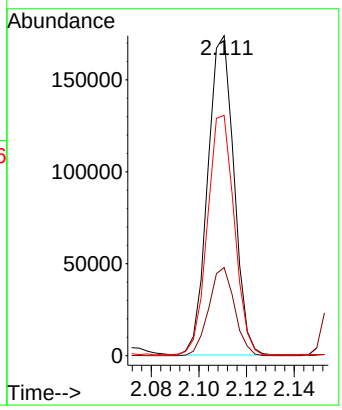


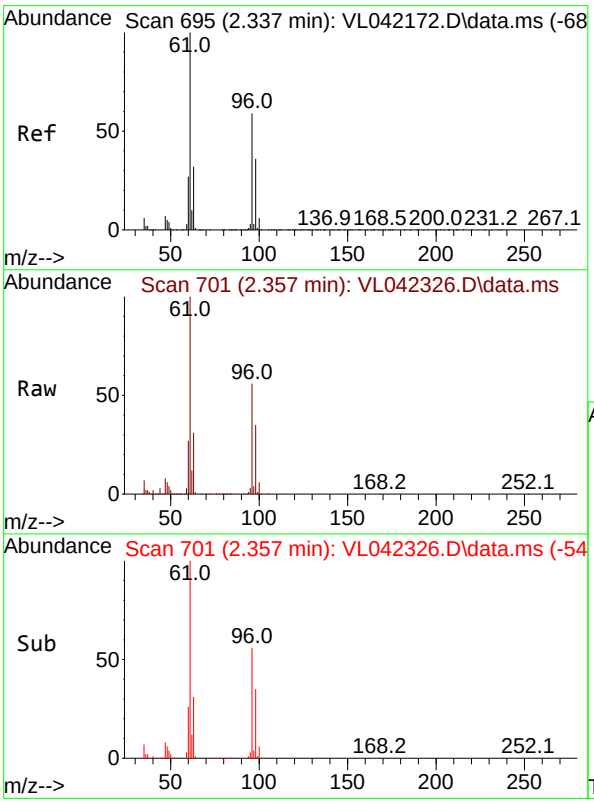
#21
Allyl Chloride
Concen: 7.825 ppbv
RT: 2.111 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 132956

Ion	Ratio	Lower	Upper
41	100		
76	27.1	24.1	36.1
39	76.9	61.1	91.7

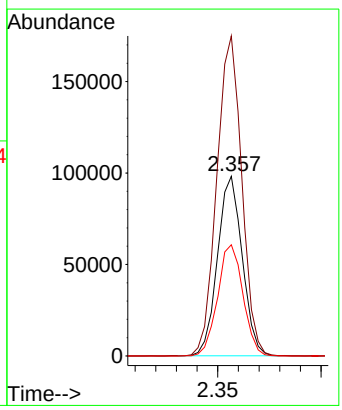


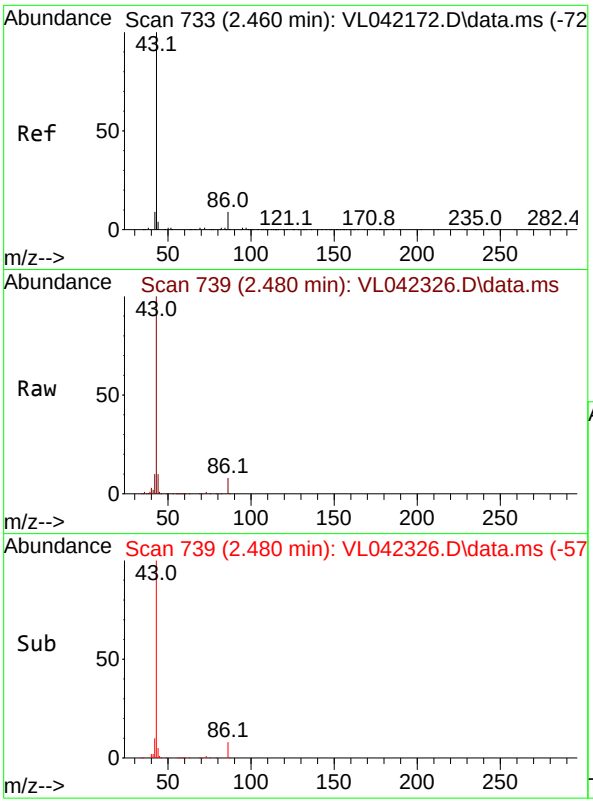


#22
trans-1,2-Dichloroethene
Concen: 7.422 ppbv
RT: 2.357 min Scan# 701
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 96 Resp: 81572

Ion	Ratio	Lower	Upper
96	100		
61	178.1	136.6	204.8
98	61.9	49.4	74.2



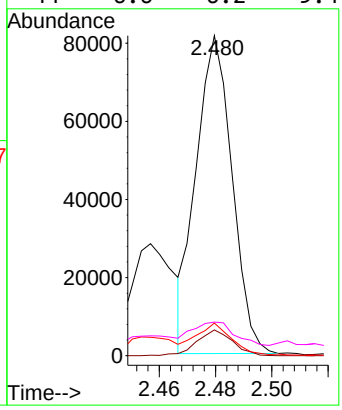


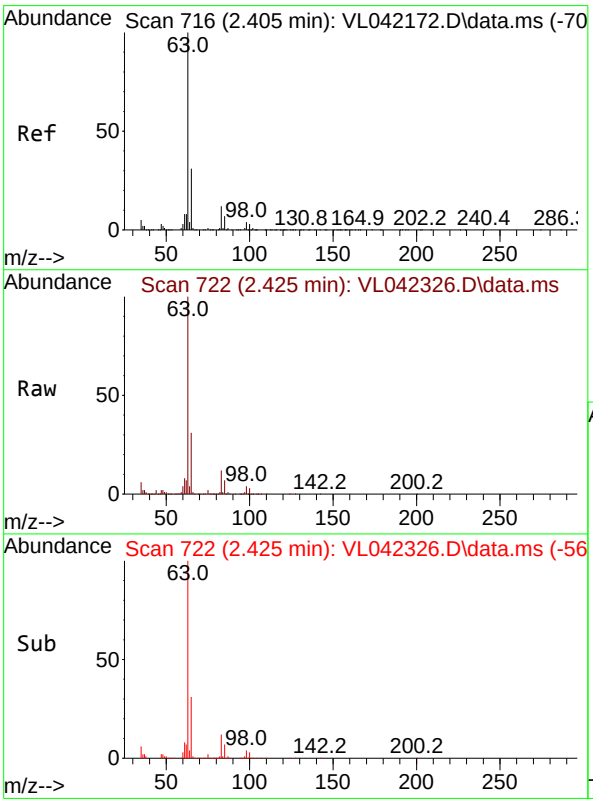
#23
Vinyl Acetate
Concen: 6.920 ppbv
RT: 2.480 min Scan# 7
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 72160

Ion	Ratio	Lower	Upper
43	100		
86	8.1	5.5	8.3
42	9.8	8.6	13.0
44	6.6	6.2	9.4

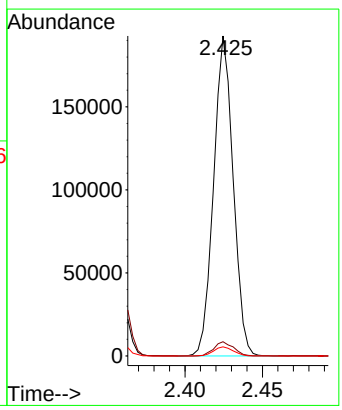


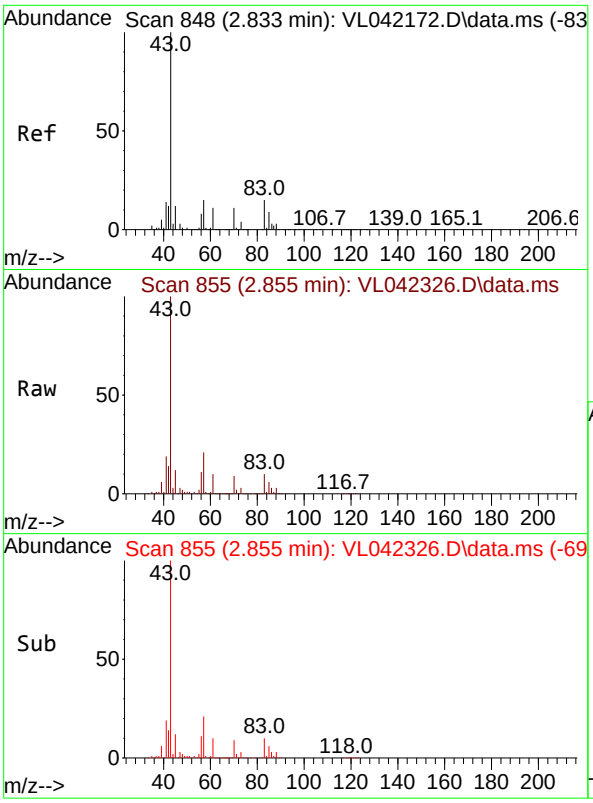


#24
1,1-Dichloroethane
Concen: 8.315 ppbv
RT: 2.425 min Scan# 722
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 63 Resp: 169411

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.3	6.8
100	2.8	1.6	4.7



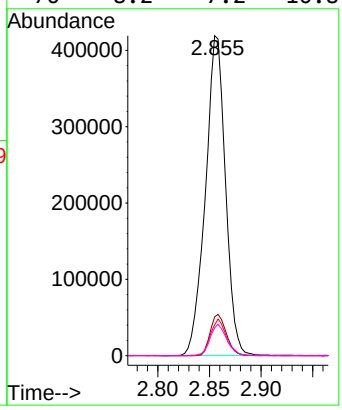


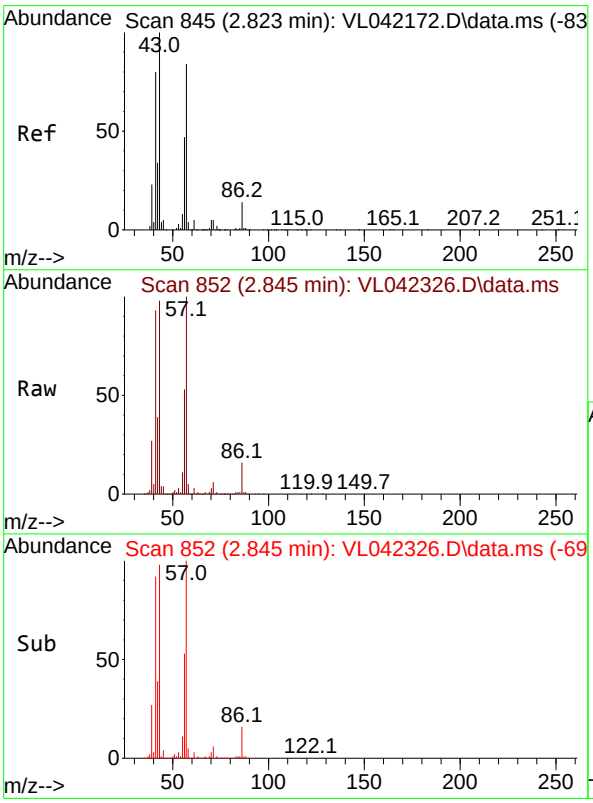
#25
Ethyl Acetate
Concen: 9.030 ppbv
RT: 2.855 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 564611

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.2	12.2
61	9.0	7.3	10.9
70	8.2	7.2	10.8

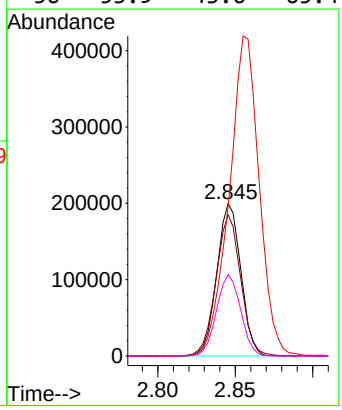


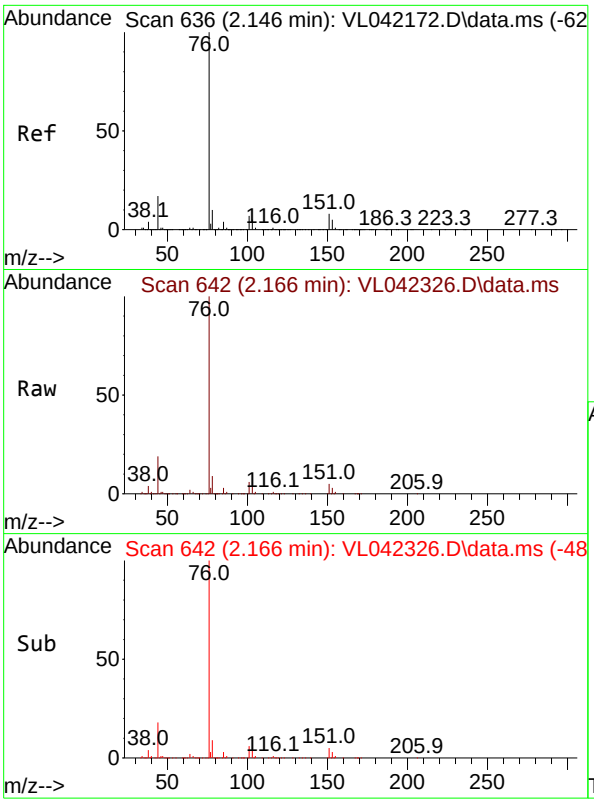


#26
Hexane
Concen: 8.851 ppbv
RT: 2.845 min Scan# 852
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 57 Resp: 213782

Ion	Ratio	Lower	Upper
57	100		
41	95.9	76.6	114.8
43	264.9	207.8	311.8
56	53.9	43.6	65.4



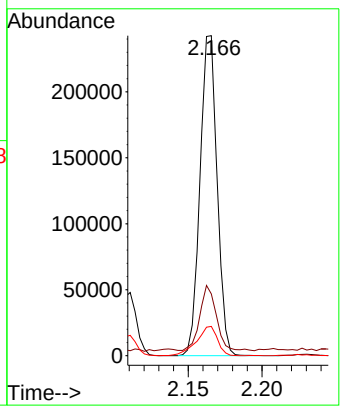


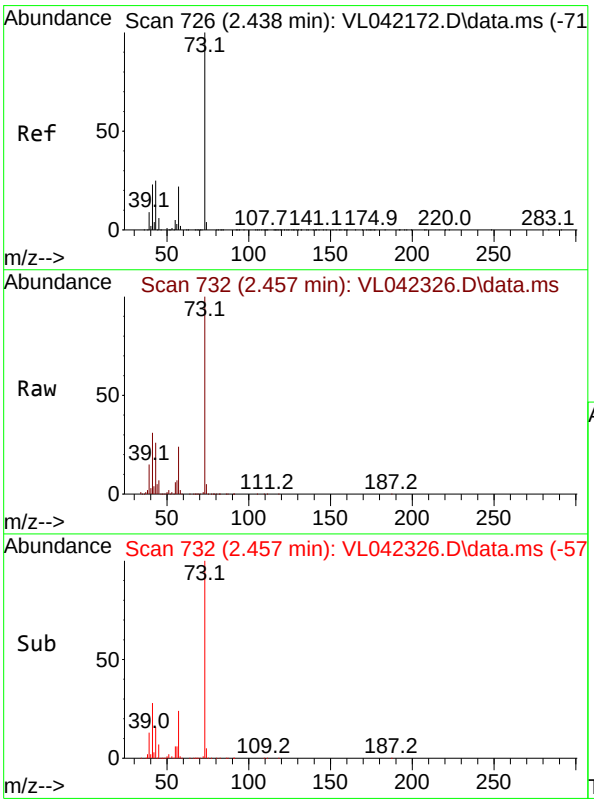
#27
Carbon Disulfide
Concen: 7.547 ppbv
RT: 2.166 min Scan# 64
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 195452

Ion	Ratio	Lower	Upper
76	100		
44	20.1	14.7	22.1
78	11.2	9.3	13.9

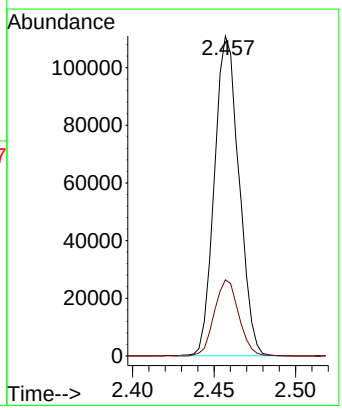


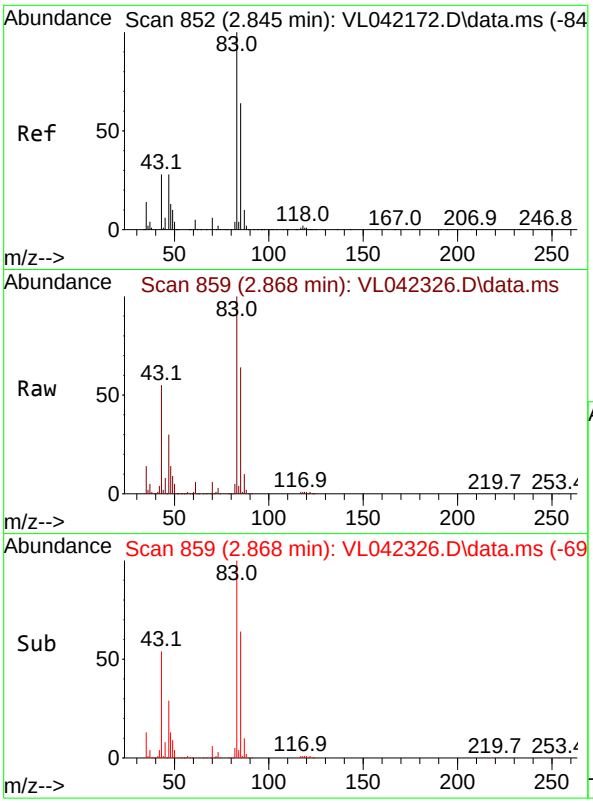


#28
Methyl tert-Butyl Ether
Concen: 7.734 ppbv
RT: 2.457 min Scan# 732
Delta R.T. 0.019 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 73 Resp: 116301

Ion	Ratio	Lower	Upper
73	100		
57	23.7	20.5	30.7



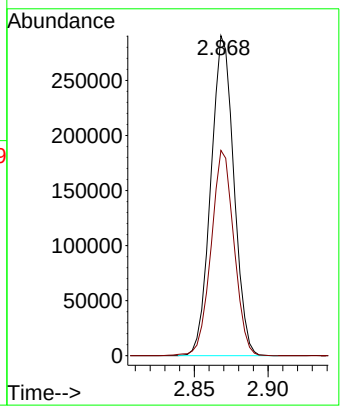


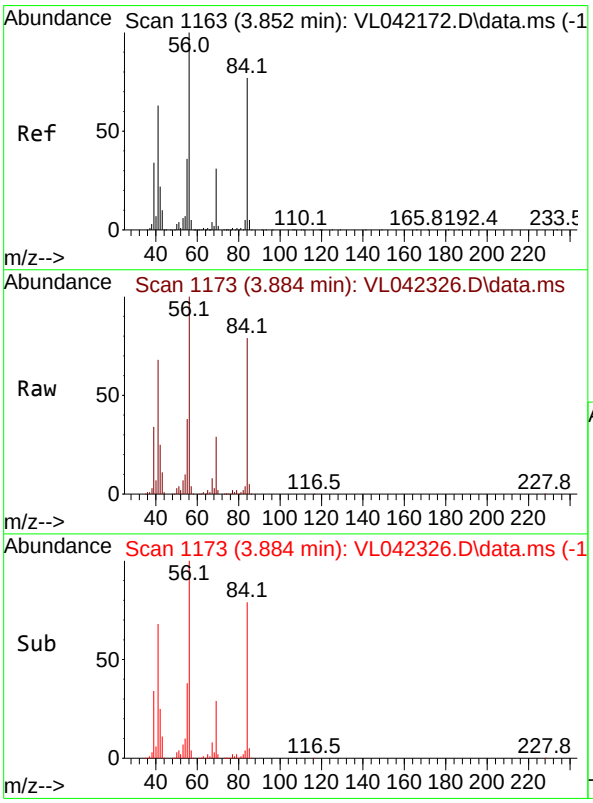
#29
Chloroform
Concen: 8.888 ppbv
RT: 2.868 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 314164

Ion	Ratio	Lower	Upper
83	100		
85	64.2	51.4	77.2

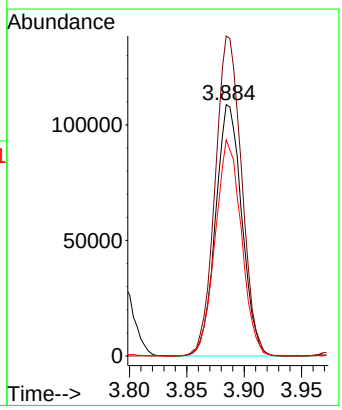


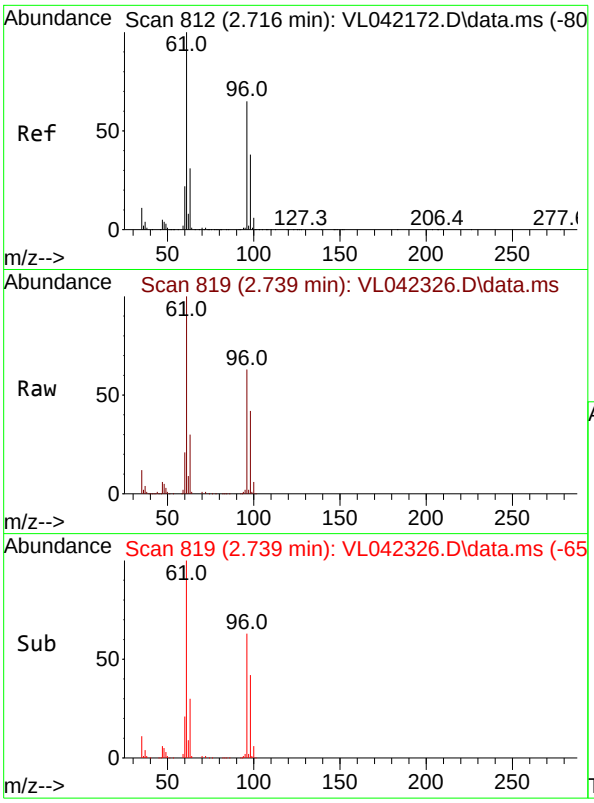


#30
Cyclohexane
Concen: 8.266 ppbv
RT: 3.884 min Scan# 1173
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 84 Resp: 173360

Ion	Ratio	Lower	Upper
84	100		
56	127.7	102.8	154.2
41	85.6	66.5	99.7



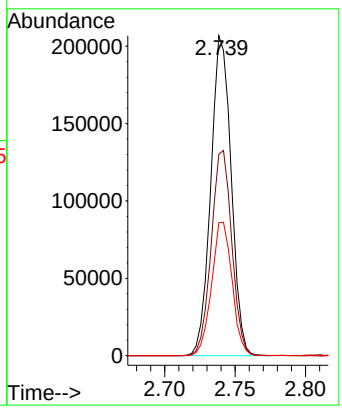


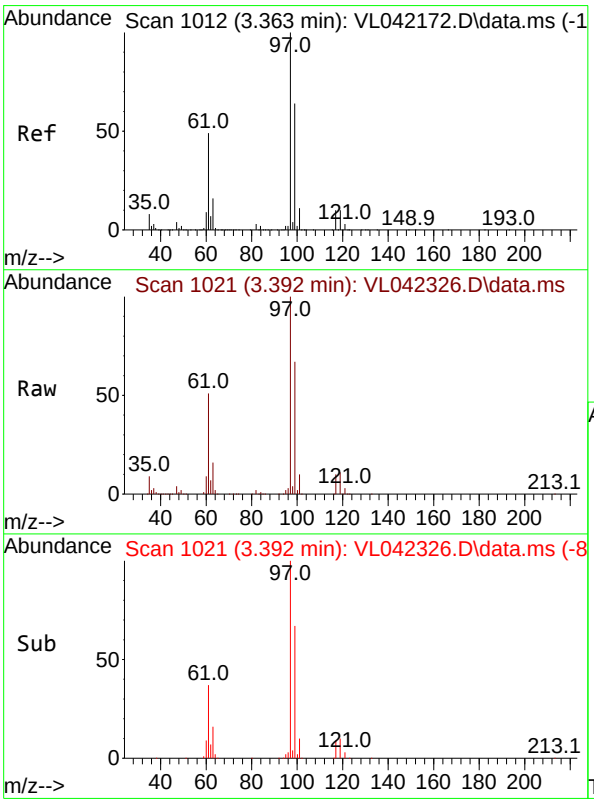
#31
cis-1,2-Dichloroethene
Concen: 8.490 ppbv
RT: 2.739 min Scan# 8
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 208160

Ion	Ratio	Lower	Upper
61	100		
96	62.9	51.8	77.8
98	41.5	30.6	46.0

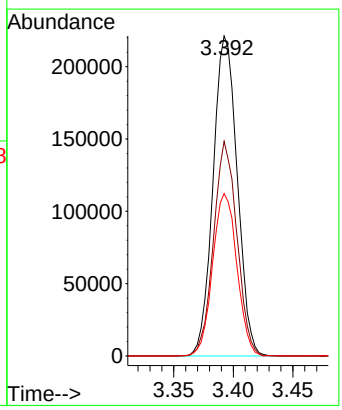


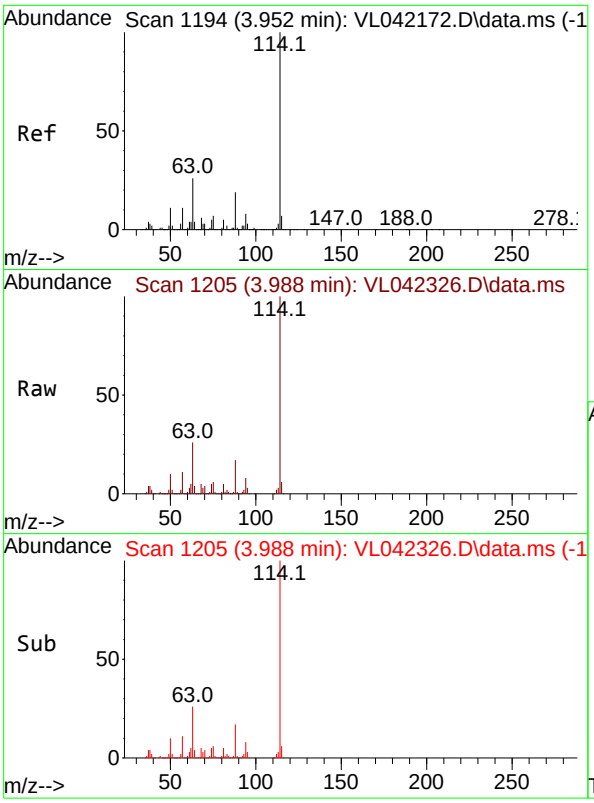


#32
1,1,1-Trichloroethane
Concen: 7.704 ppbv
RT: 3.392 min Scan# 1021
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 97 Resp: 311758

Ion	Ratio	Lower	Upper
97	100		
99	64.8	51.5	77.3
61	51.1	38.7	58.1



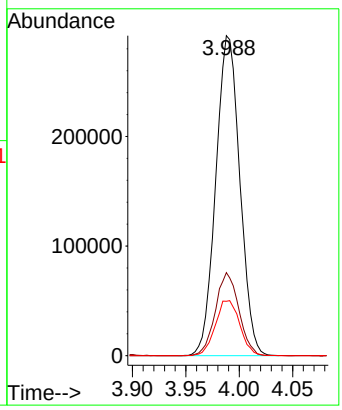


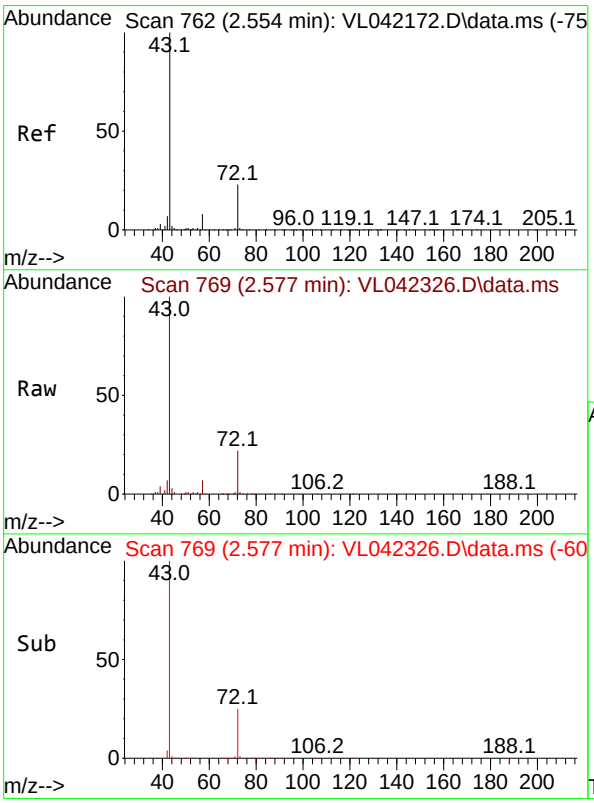
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.988 min Scan# 1
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 457227

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.7	15.0	22.4

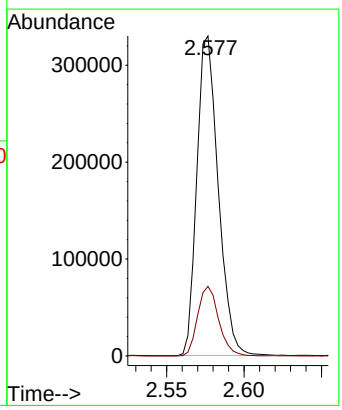


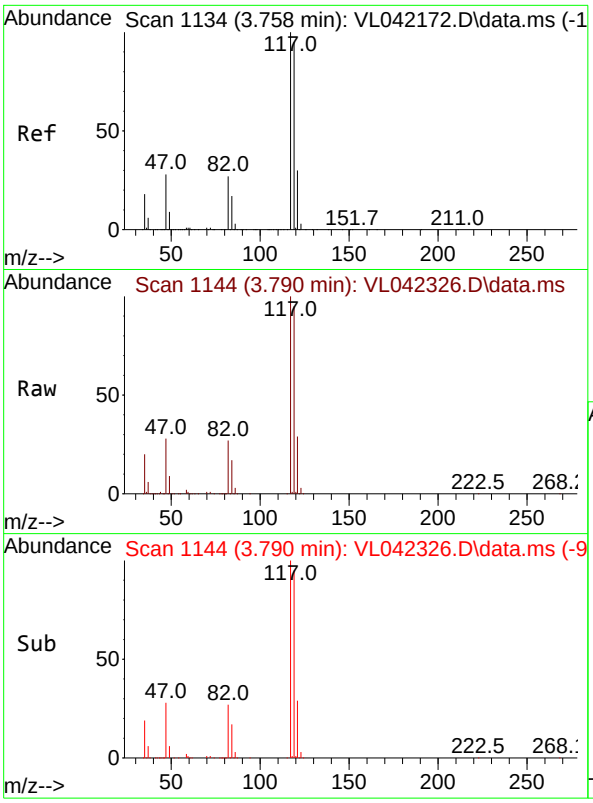


#34
2-Butanone
Concen: 9.565 ppbv
RT: 2.577 min Scan# 769
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 317117

Ion	Ratio	Lower	Upper
43	100		
72	21.5	18.2	27.2



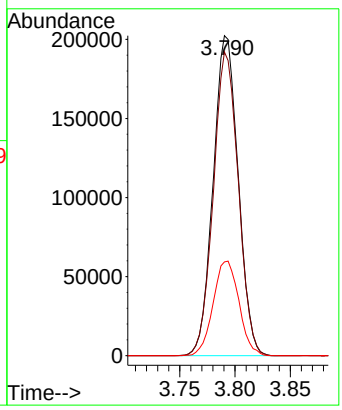


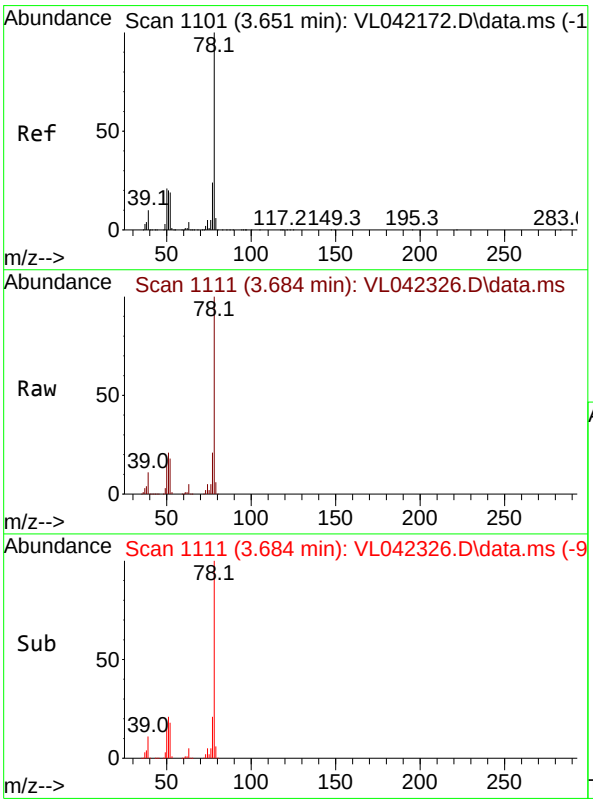
#35
Carbon Tetrachloride
Concen: 8.902 ppbv
RT: 3.790 min Scan# 11
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 317942

Ion	Ratio	Lower	Upper
117	100		
119	94.9	76.2	114.2
121	29.3	24.2	36.4

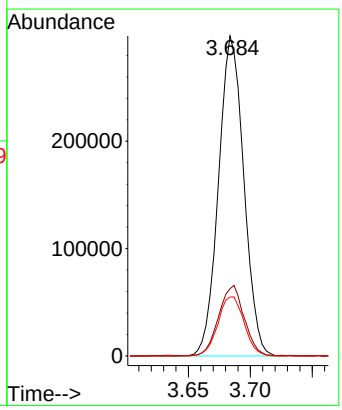


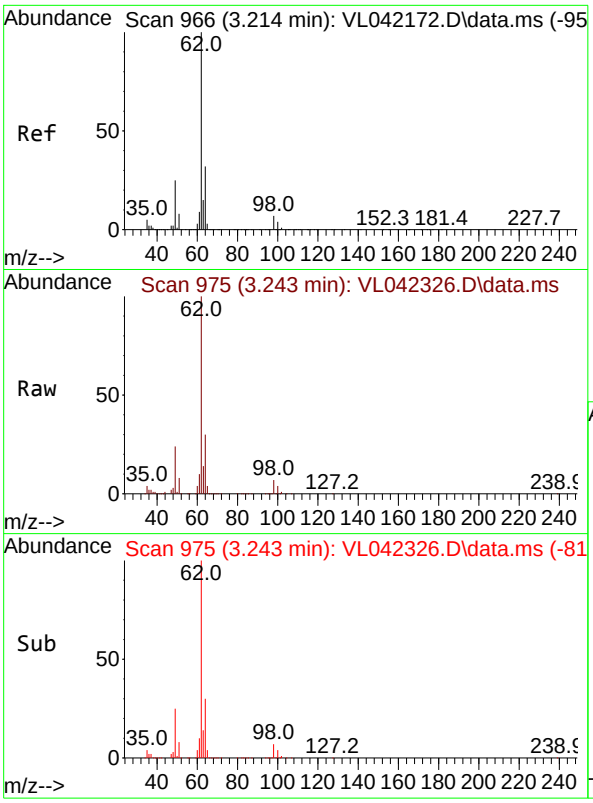


#36
Benzene
Concen: 9.360 ppbv
RT: 3.684 min Scan# 1111
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 78 Resp: 424254

Ion	Ratio	Lower	Upper
78	100		
77	20.9	19.1	28.7
50	18.4	16.6	24.8



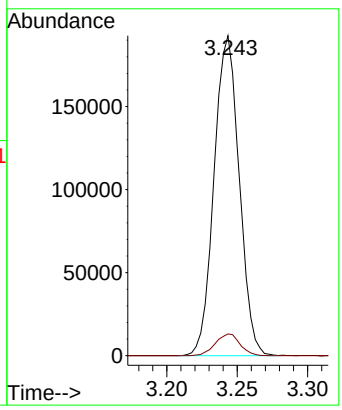


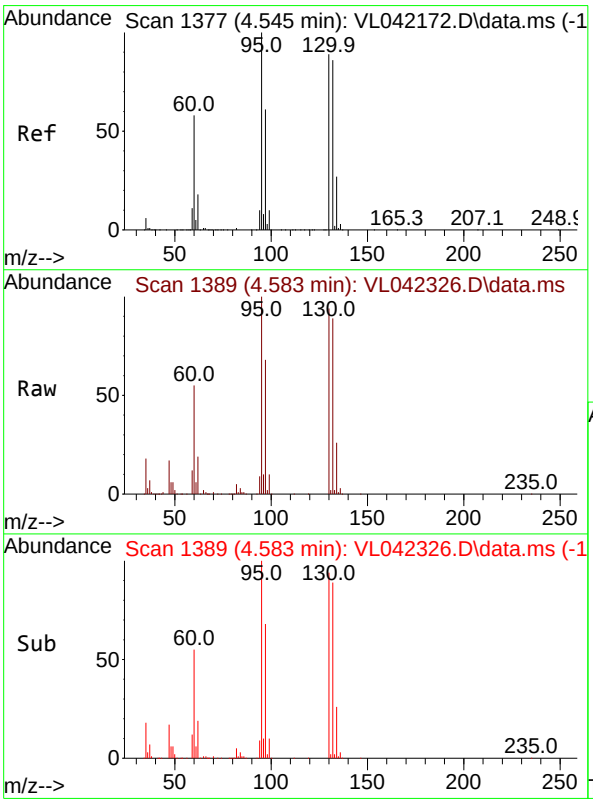
#37
1,2-Dichloroethane
Concen: 9.231 ppbv
RT: 3.243 min Scan# 9
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 239556

Ion	Ratio	Lower	Upper
62	100		
98	6.7	5.4	8.2

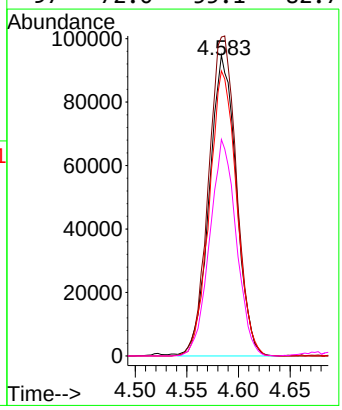


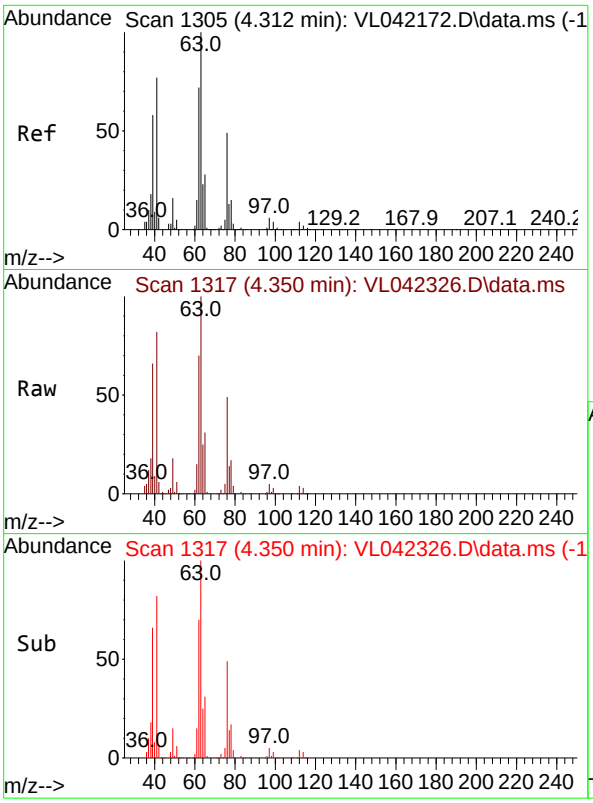


#38
Trichloroethene
Concen: 9.102 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:130 Resp: 172146

Ion	Ratio	Lower	Upper
130	100		
95	106.1	89.8	134.8
132	94.8	77.4	116.2
97	72.0	55.1	82.7



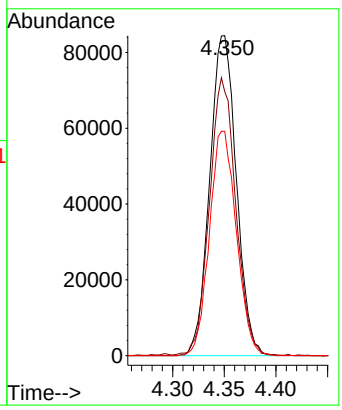


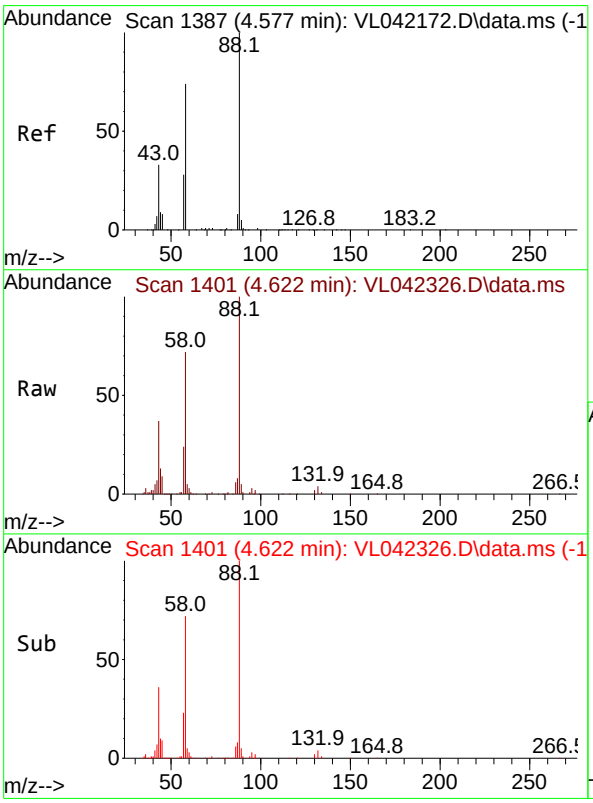
#39
1,2-Dichloropropane
Concen: 9.190 ppbv
RT: 4.350 min Scan# 1
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 151707

Ion	Ratio	Lower	Upper
63	100		
41	82.3	61.7	92.5
62	70.1	57.6	86.4

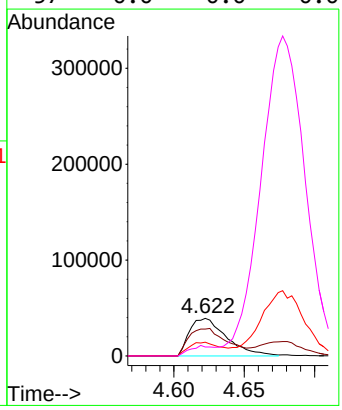


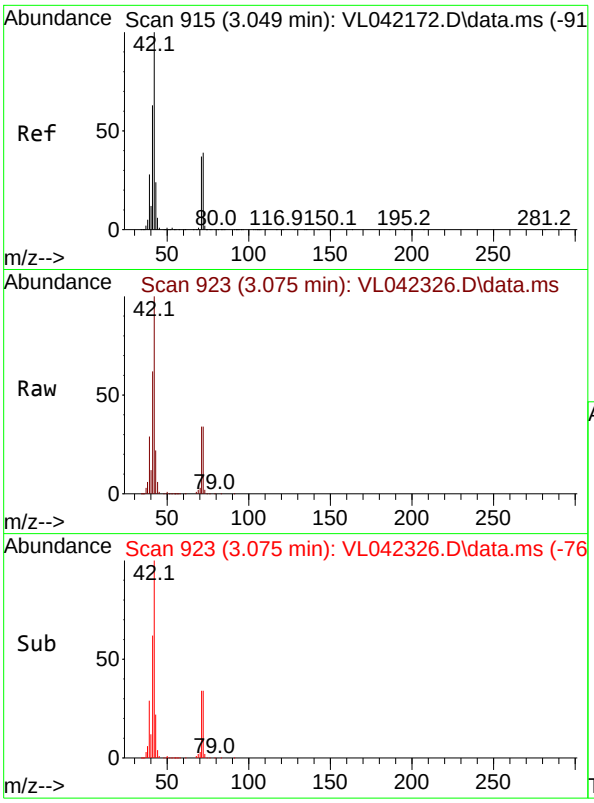


#40
1,4-Dioxane
Concen: 8.226 ppbv
RT: 4.622 min Scan# 1401
Delta R.T. 0.045 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 88 Resp: 72075

Ion	Ratio	Lower	Upper
88	100		
58	79.6	62.7	94.1
43	31.4	23.0	34.4
57	0.0	0.0	0.0



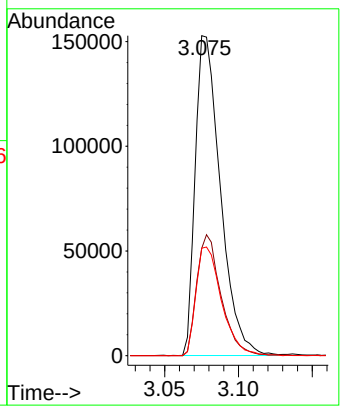


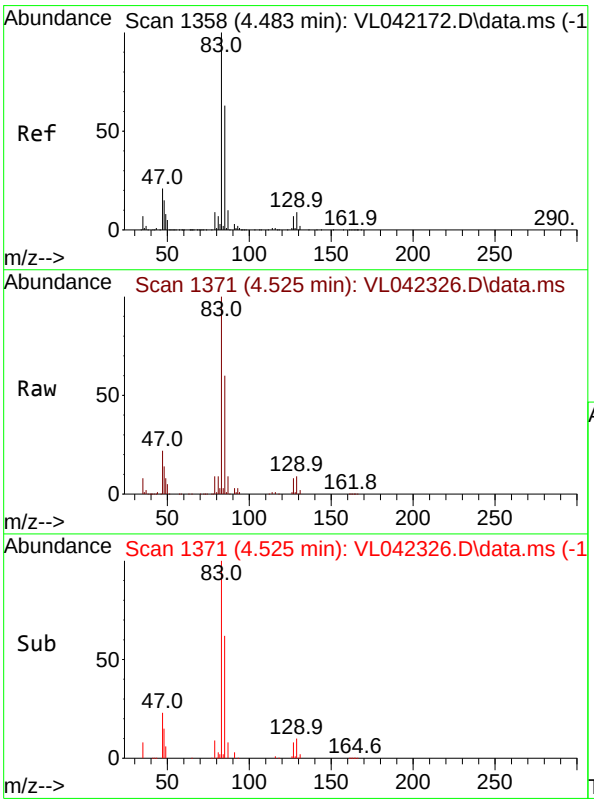
#41
Tetrahydrofuran
Concen: 9.505 ppbv
RT: 3.075 min Scan# 9
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 181471

Ion	Ratio	Lower	Upper
42	100		
72	36.5	31.4	47.0
71	34.6	30.2	45.4

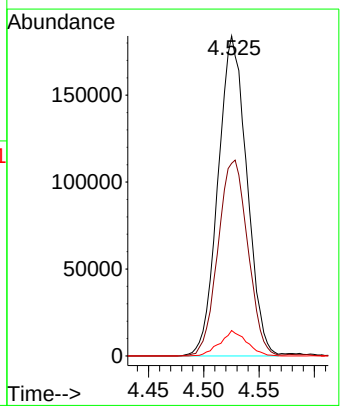


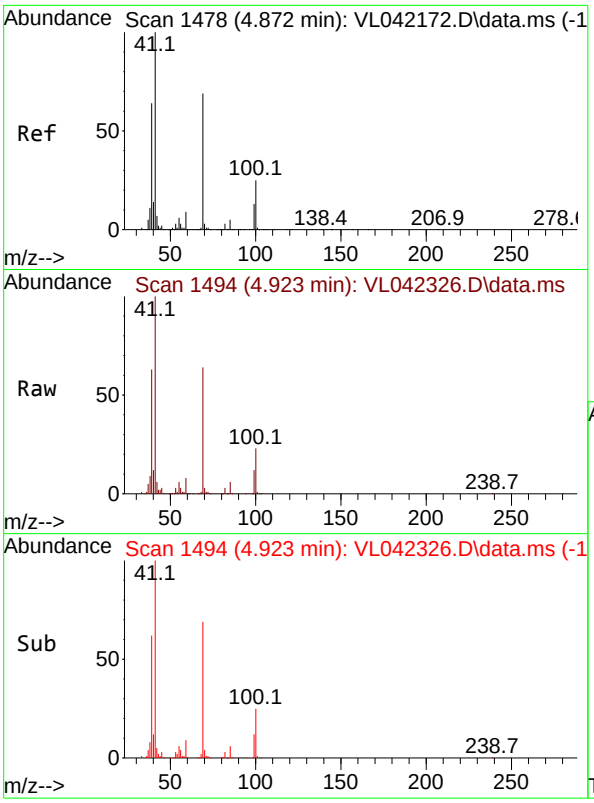


#42
Bromodichloromethane
Concen: 9.313 ppbv
RT: 4.525 min Scan# 1371
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 83 Resp: 333167

Ion	Ratio	Lower	Upper
83	100		
85	60.2	50.5	75.7
127	7.9	5.9	8.9



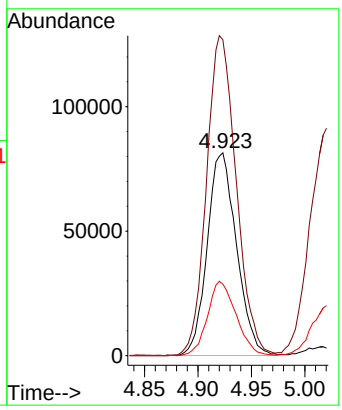


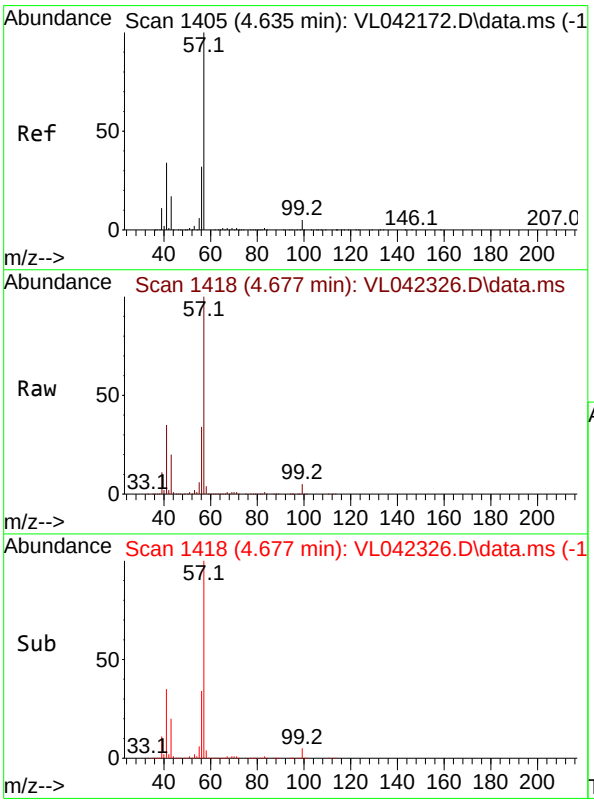
#43
Methyl Methacrylate
Concen: 8.098 ppbv
RT: 4.923 min Scan# 14
Delta R.T. 0.052 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 155399

Ion	Ratio	Lower	Upper
69	100		
41	160.2	123.8	185.6
100	35.9	28.4	42.6

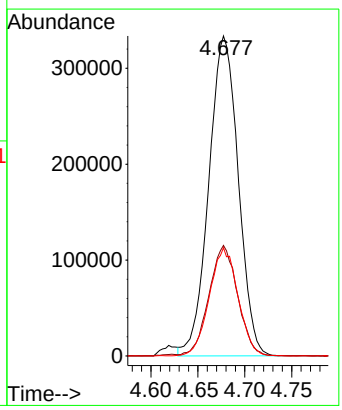


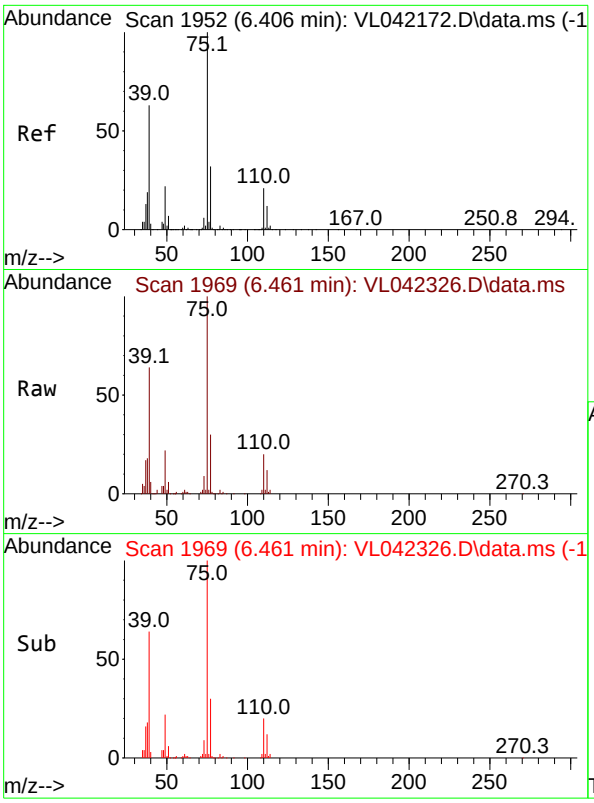


#44
2,2,4-Trimethylpentane
Concen: 9.511 ppbv
RT: 4.677 min Scan# 1418
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 57 Resp: 728571

Ion	Ratio	Lower	Upper
57	100		
41	33.8	26.8	40.2
56	32.8	25.6	38.4



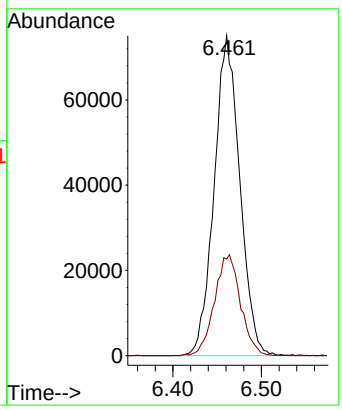


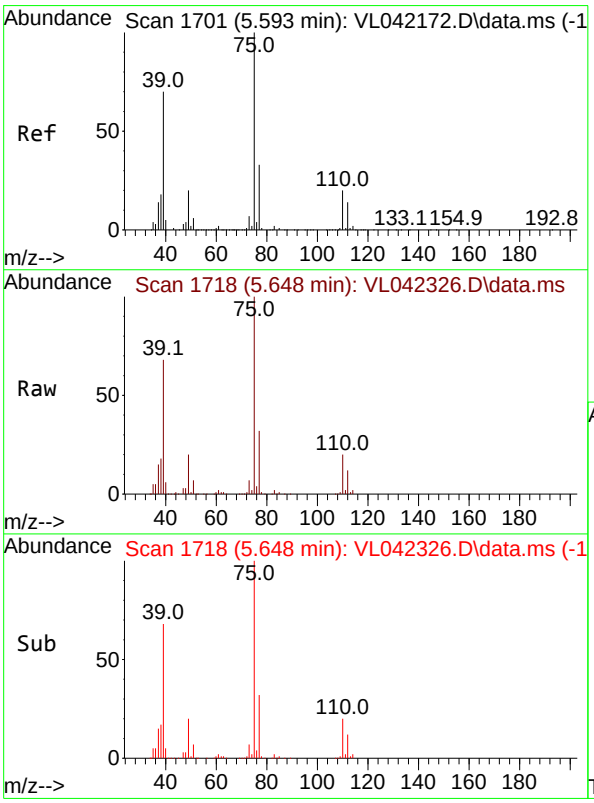
#45
t-1,3-Dichloropropene
Concen: 7.338 ppbv
RT: 6.461 min Scan# 1
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 151063

Ion	Ratio	Lower	Upper
75	100		
77	30.2	26.0	39.0

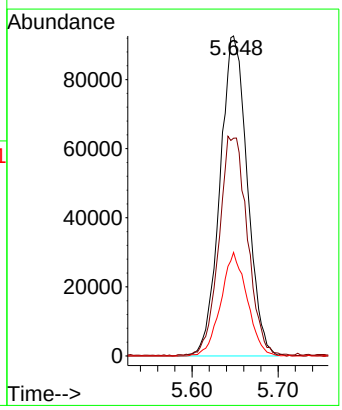


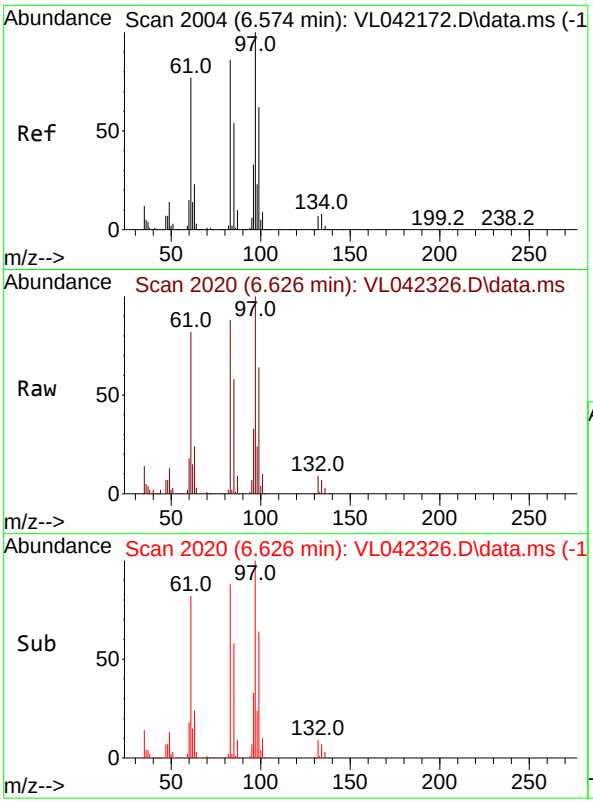


#46
cis-1,3-Dichloropropene
Concen: 8.097 ppbv
RT: 5.648 min Scan# 1718
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 75 Resp: 204339

Ion	Ratio	Lower	Upper
75	100		
39	67.6	55.8	83.6
77	32.3	26.0	39.0



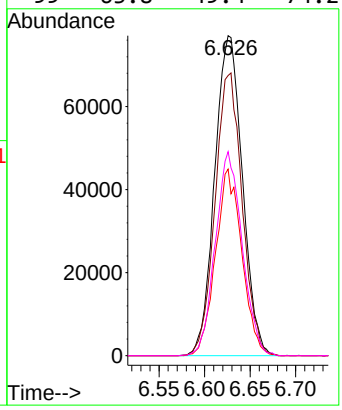


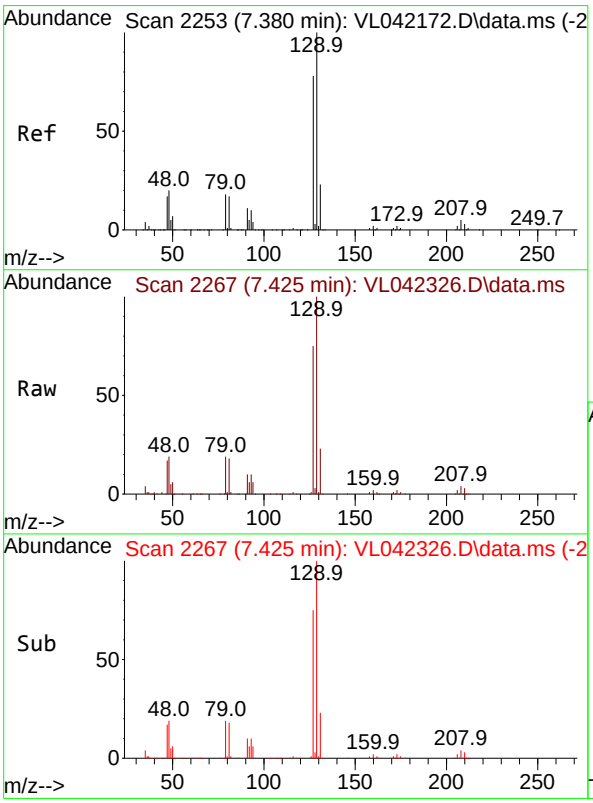
#47
1,1,2-Trichloroethane
Concen: 9.348 ppbv
RT: 6.626 min Scan# 2
Delta R.T. 0.052 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 163132

Ion	Ratio	Lower	Upper
97	100		
83	87.6	69.2	103.8
85	58.3	43.1	64.7
99	63.8	49.4	74.2

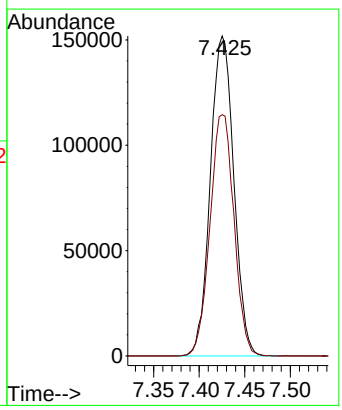


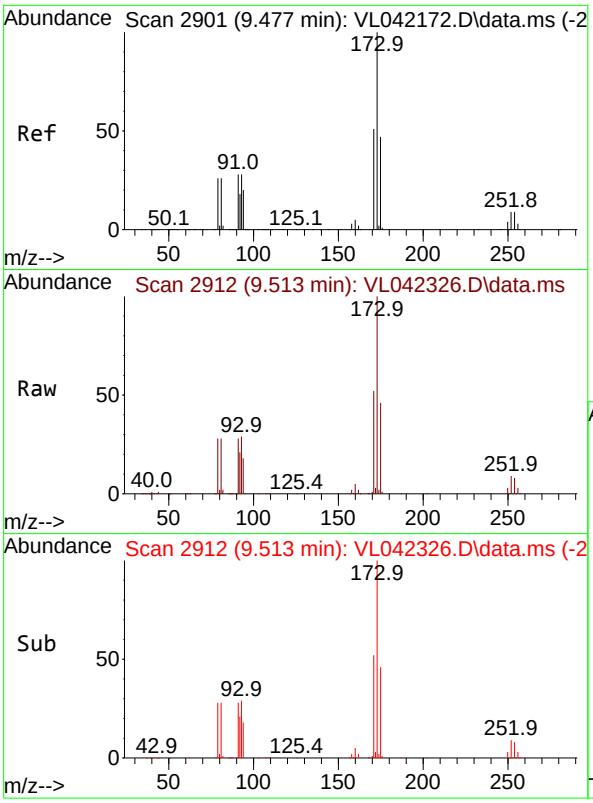


#48
Dibromochloromethane
Concen: 9.217 ppbv
RT: 7.425 min Scan# 2267
Delta R.T. 0.045 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:129 Resp: 272592

Ion	Ratio	Lower	Upper
129	100		
127	77.0	39.1	117.2



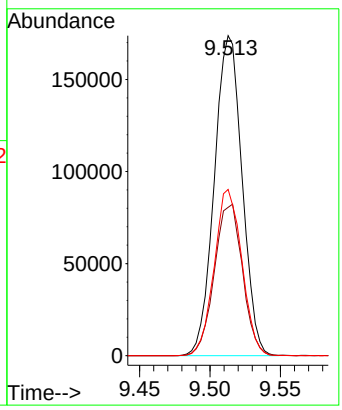


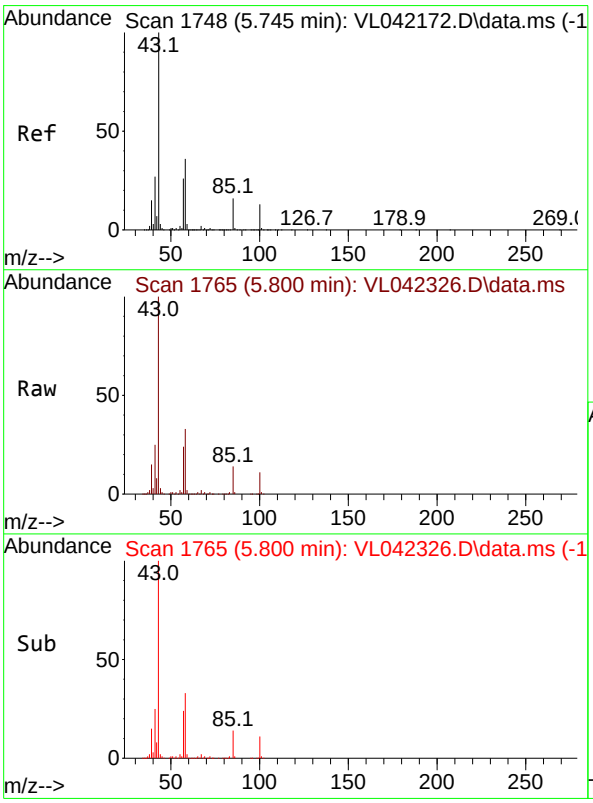
#49
Bromoform
Concen: 8.997 ppbv
RT: 9.513 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 238880

Ion	Ratio	Lower	Upper
173	100		
175	48.1	38.6	57.8
171	51.7	41.8	62.6

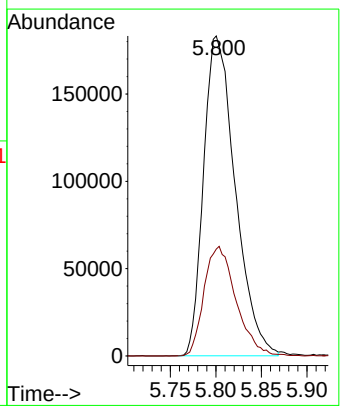


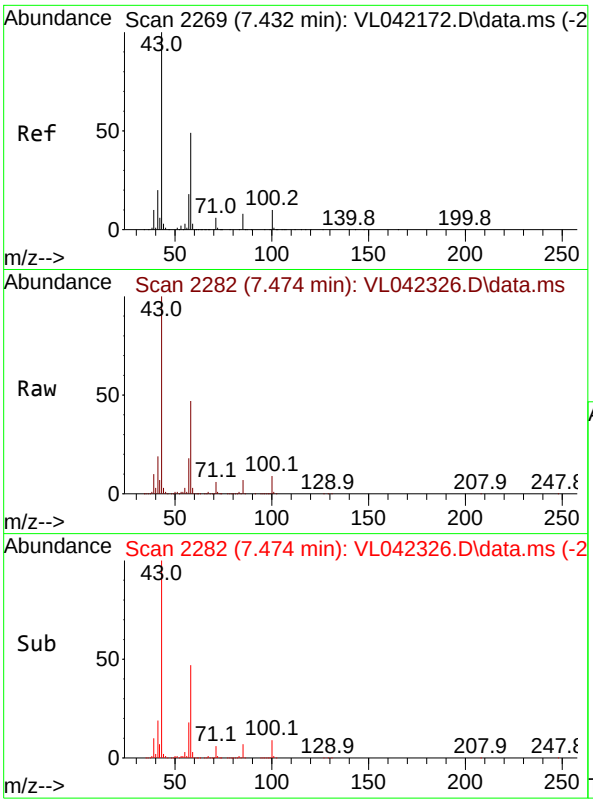


#50
4-Methyl-2-Pentanone
Concen: 8.428 ppbv
RT: 5.800 min Scan# 1765
Delta R.T. 0.055 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 43 Resp: 442851

Ion	Ratio	Lower	Upper
43	100		
58	34.6	29.0	43.6



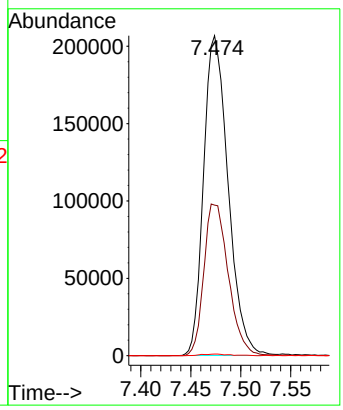


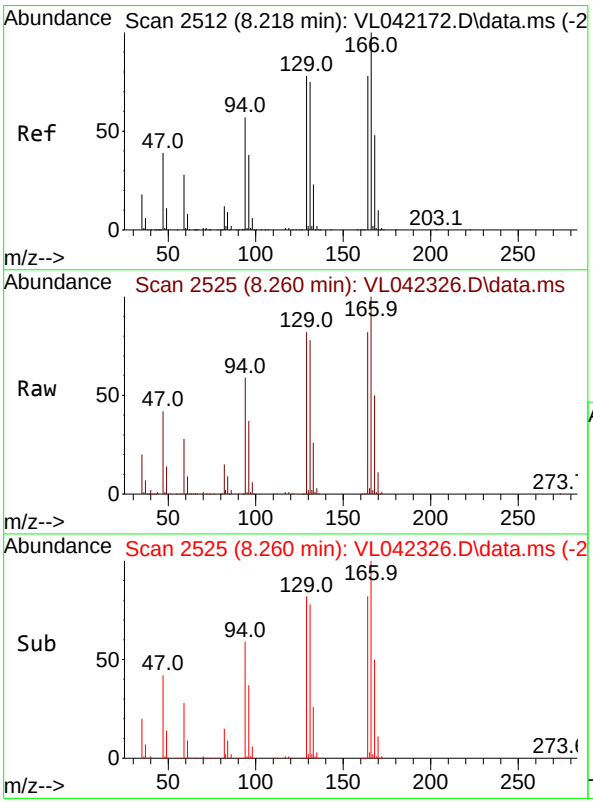
#51
2-Hexanone
Concen: 8.192 ppbv
RT: 7.474 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 353471

Ion	Ratio	Lower	Upper
43	100		
58	47.5	39.7	59.5
98	0.6	0.1	0.1#

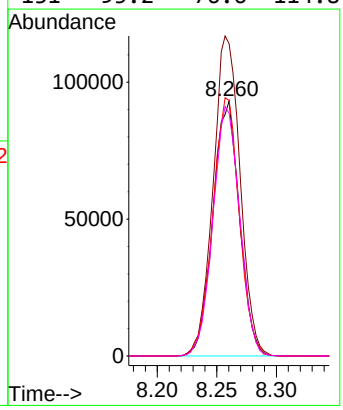


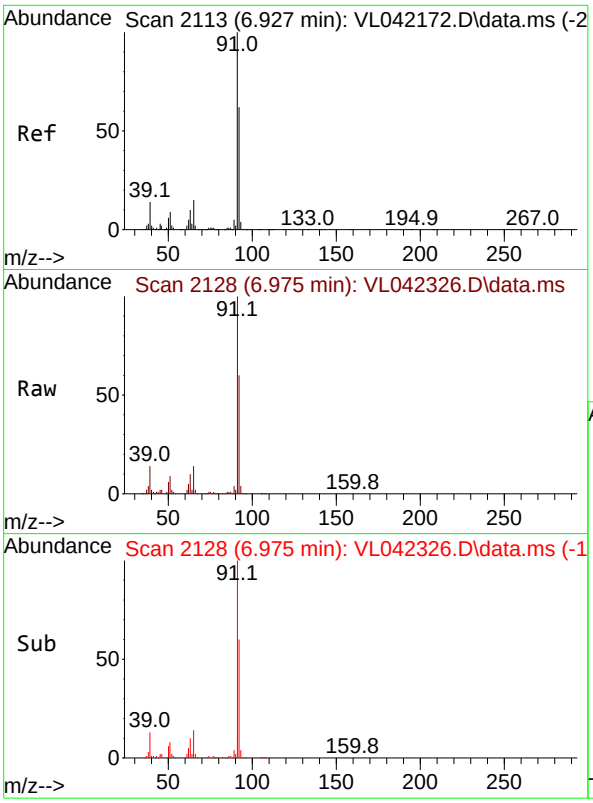


#52
Tetrachloroethene
Concen: 8.037 ppbv
RT: 8.260 min Scan# 2525
Delta R.T. 0.042 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:164 Resp: 144481

Ion	Ratio	Lower	Upper
164	100		
166	122.4	102.5	153.7
129	100.2	79.8	119.8
131	95.2	76.6	114.8



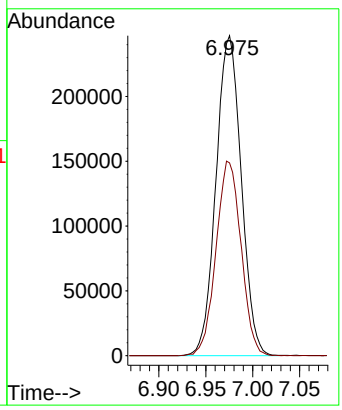


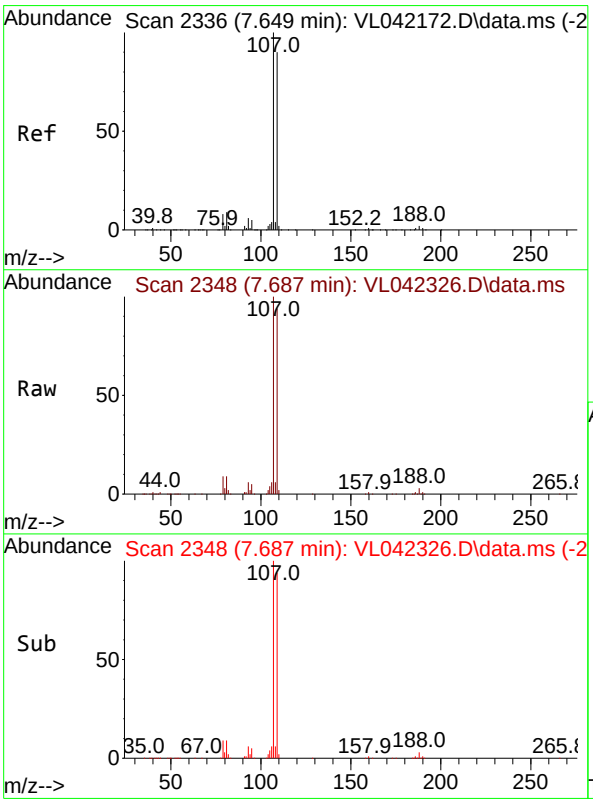
#53
Toluene
Concen: 8.595 ppbv
RT: 6.975 min Scan# 21
Delta R.T. 0.048 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 461854

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.4	72.6

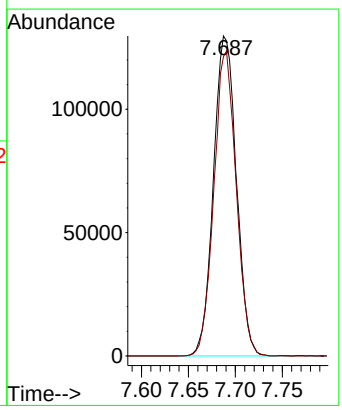


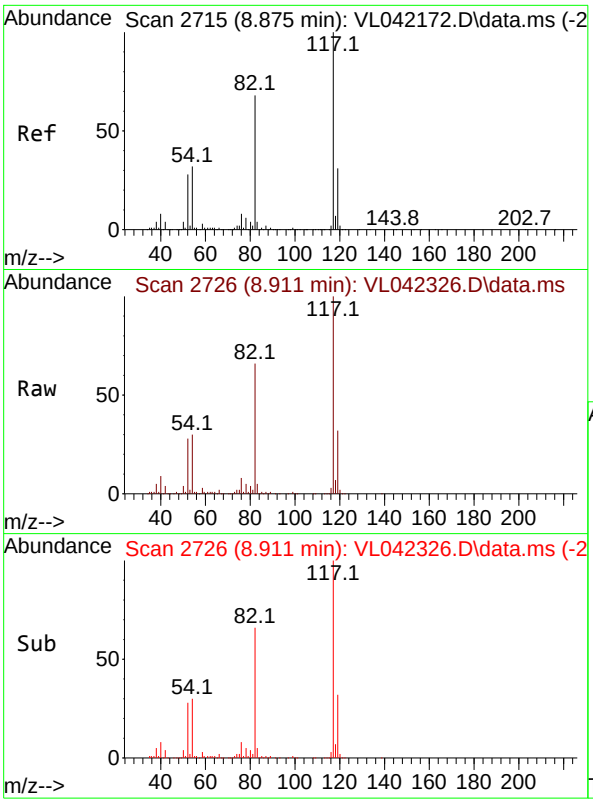


#54
1,2-Dibromoethane
Concen: 9.047 ppbv
RT: 7.687 min Scan# 2348
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:107 Resp: 220075

Ion	Ratio	Lower	Upper
107	100		
109	93.6	72.2	108.4



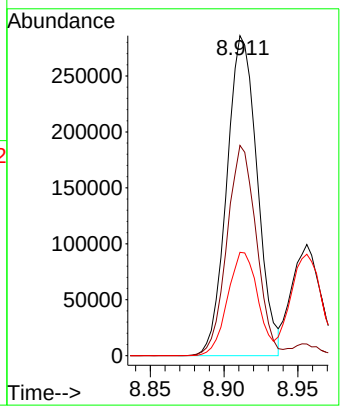


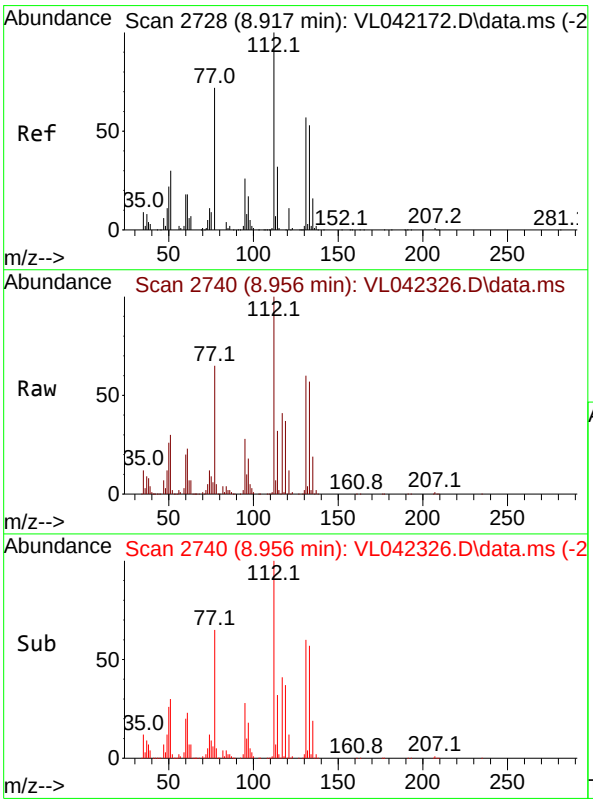
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.911 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 411493

Ion	Ratio	Lower	Upper
117	100		
82	67.0	55.8	83.6
119	33.0	25.5	38.3

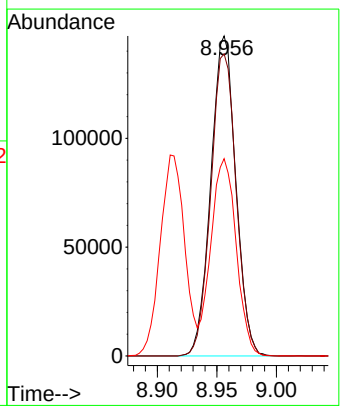


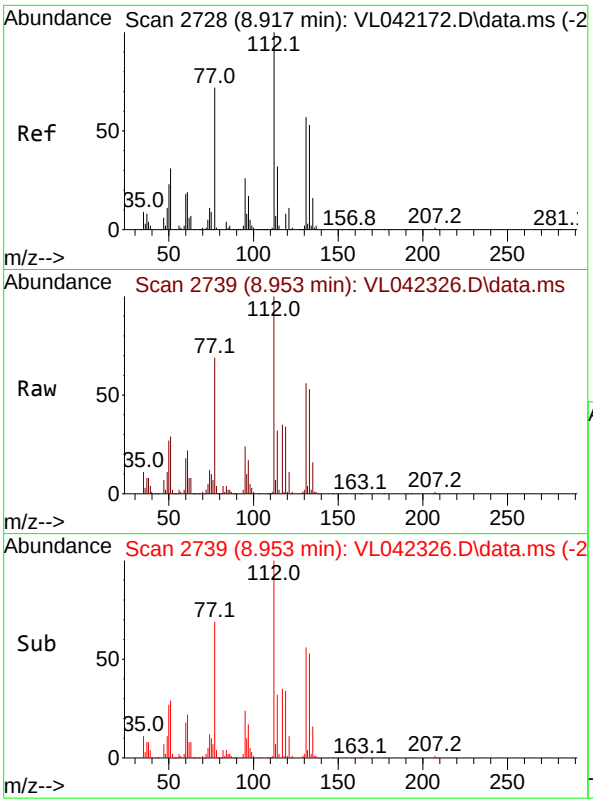


#56
1,1,1,2-Tetrachloroethane
Concen: 9.455 ppbv
RT: 8.956 min Scan# 2740
Delta R.T. 0.039 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:131 Resp: 214175

Ion	Ratio	Lower	Upper
131	100		
133	95.9	76.6	114.8
119	61.1	49.8	74.6



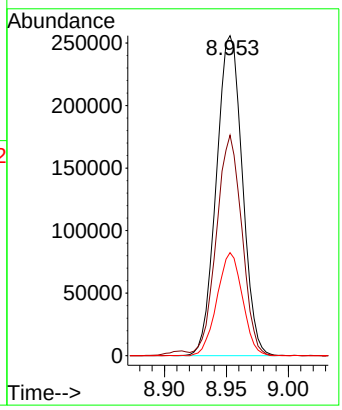


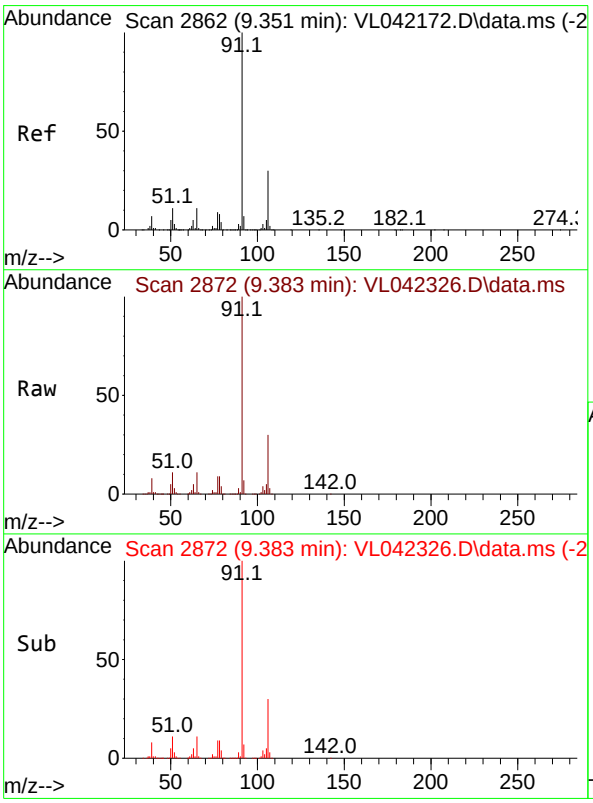
#57
Chlorobenzene
Concen: 9.617 ppbv
RT: 8.953 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 375357

Ion	Ratio	Lower	Upper
112	100		
77	68.8	58.2	87.2
114	32.2	29.1	35.5

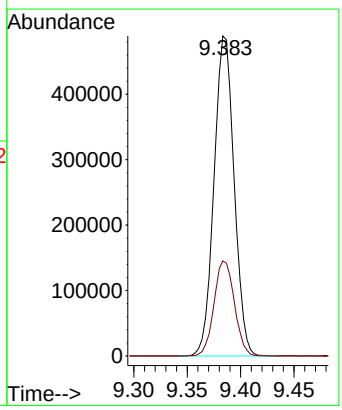


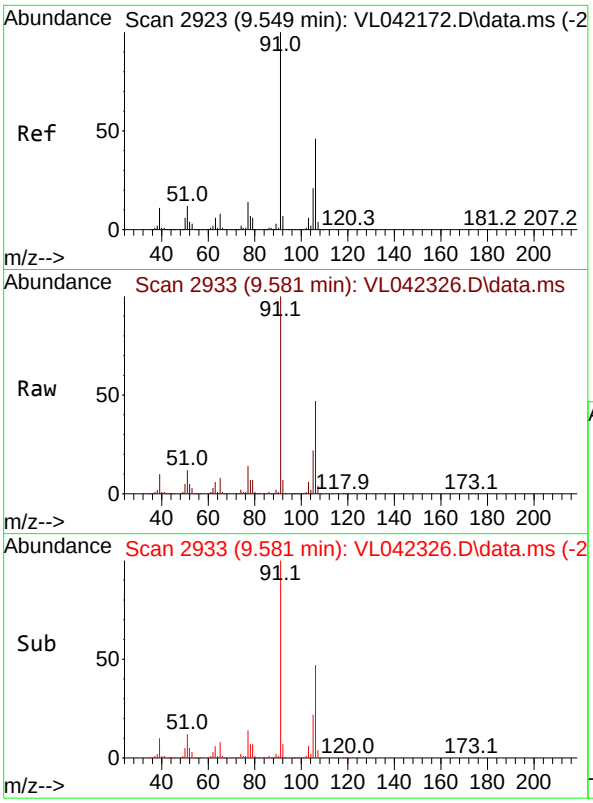


#58
Ethyl Benzene
Concen: 8.754 ppbv
RT: 9.383 min Scan# 2872
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 639857

Ion	Ratio	Lower	Upper
91	100		
106	29.7	24.2	36.2



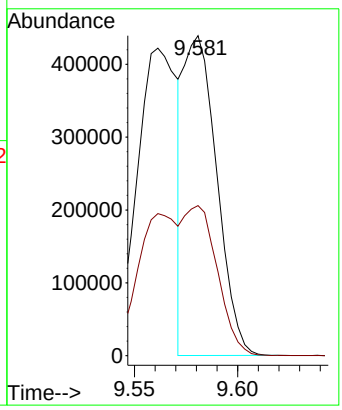


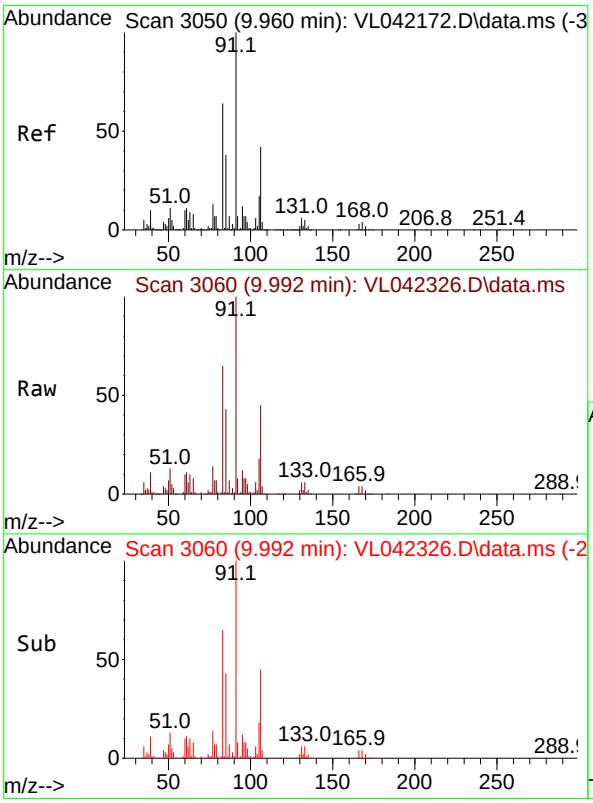
#59
m/p-Xylene
Concen: 8.372 ppbv
RT: 9.581 min Scan# 2
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 488646

Ion	Ratio	Lower	Upper
91	100		
106	102.5	36.4	54.6#

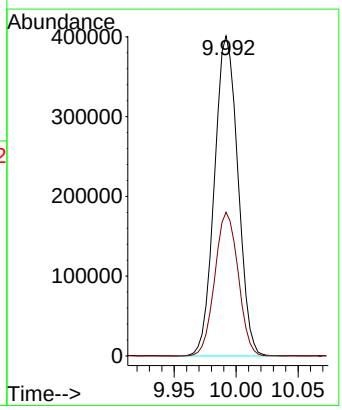


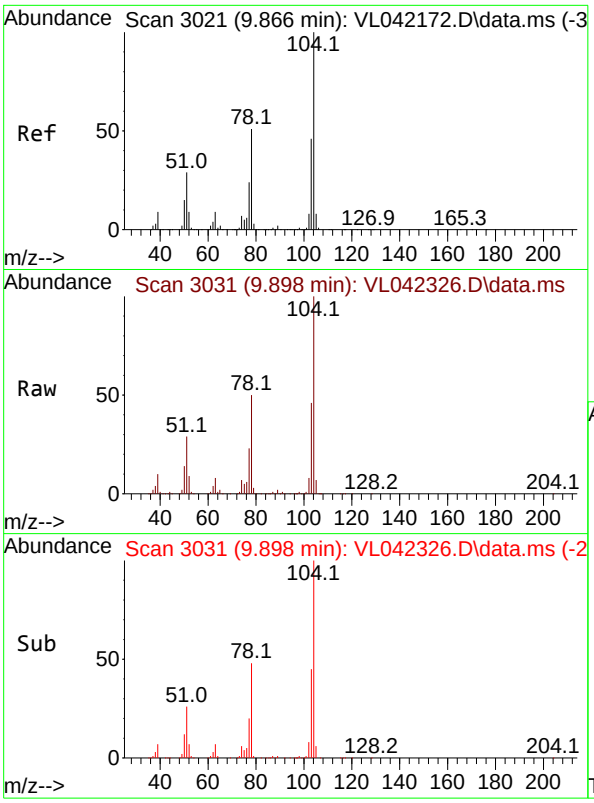


#60
o-Xylene
Concen: 9.040 ppbv
RT: 9.992 min Scan# 3060
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 528896

Ion	Ratio	Lower	Upper
91	100		
106	44.8	20.8	62.5



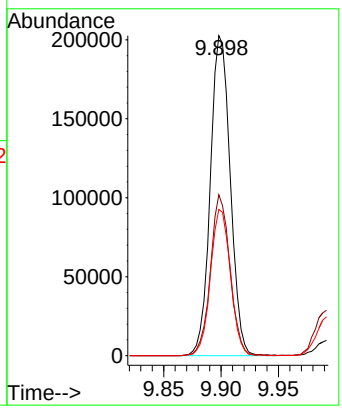


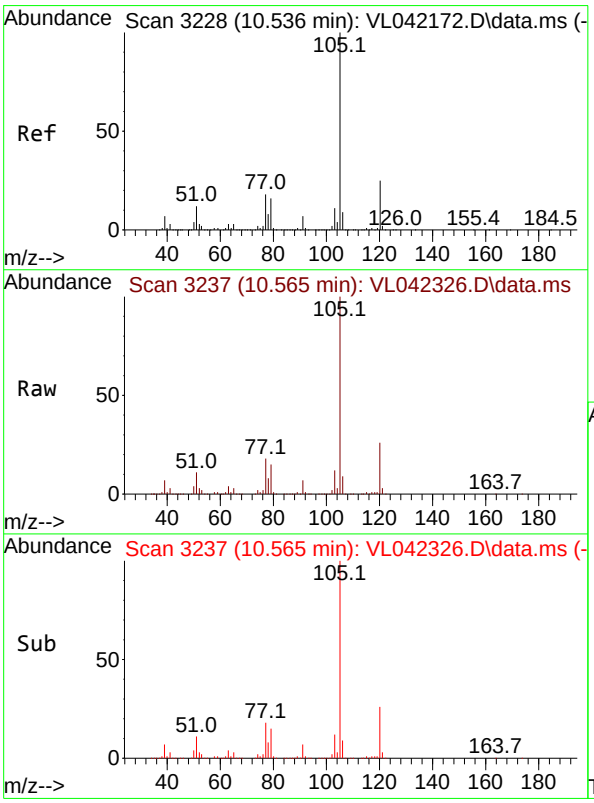
#61
Styrene
Concen: 8.474 ppbv
RT: 9.898 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 245300

Ion	Ratio	Lower	Upper
104	100		
78	49.0	41.8	62.6
103	46.0	37.0	55.4

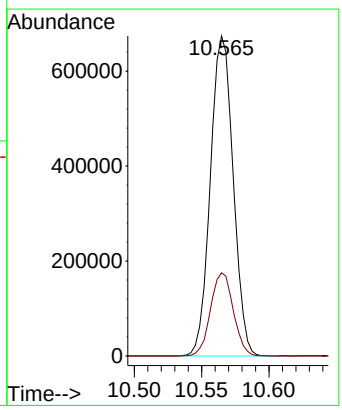


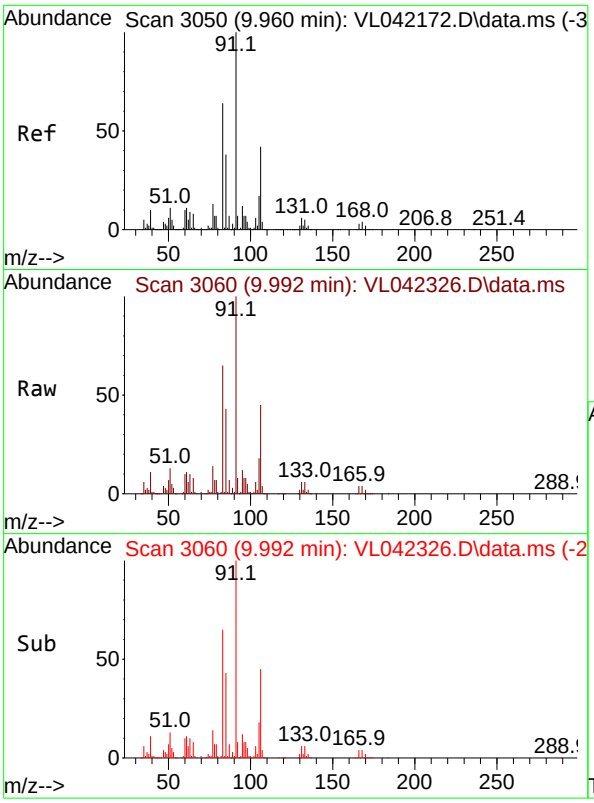


#62
Isopropylbenzene
Concen: 9.079 ppbv
RT: 10.565 min Scan# 3237
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 794408

Ion	Ratio	Lower	Upper
105	100		
120	25.9	19.9	29.9



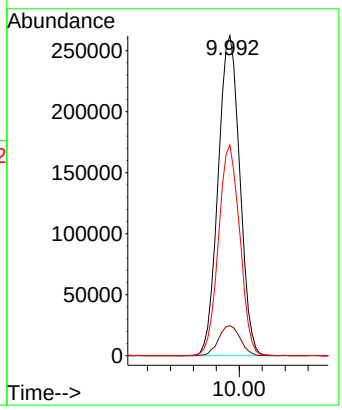


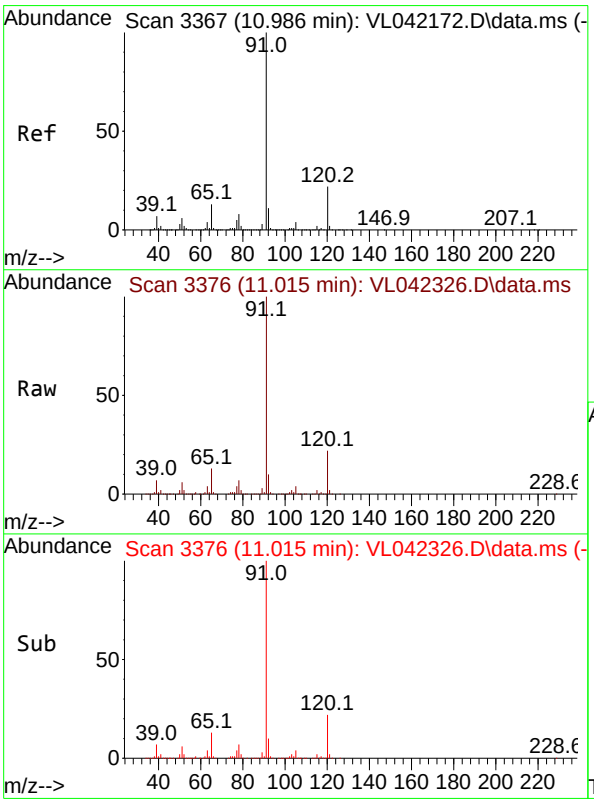
#63
1,1,2,2-Tetrachloroethane
Concen: 9.671 ppbv
RT: 9.992 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 343786

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	64.8	32.5	97.5

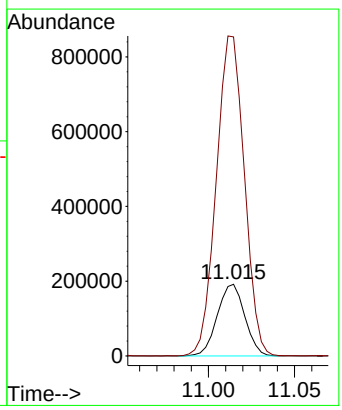


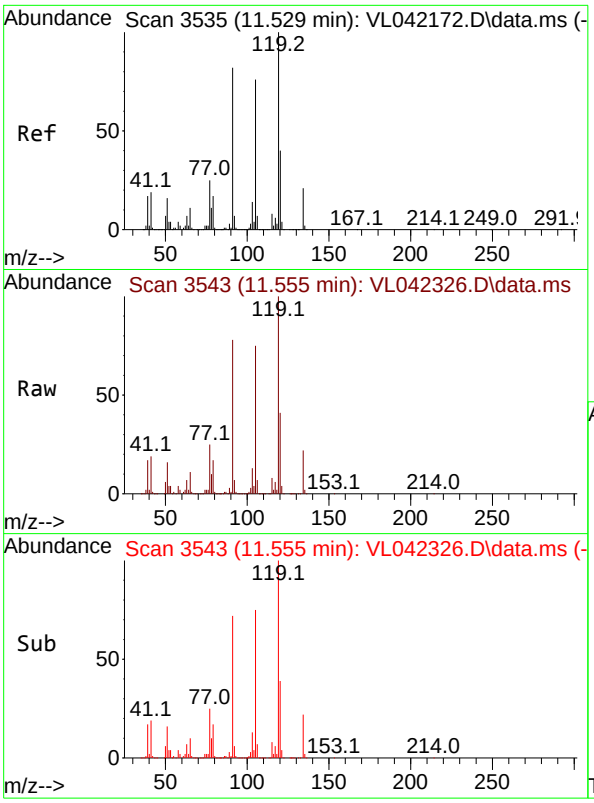


#64
n-propylbenzene
Concen: 9.452 ppbv
RT: 11.015 min Scan# 3376
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:120 Resp: 212879

Ion	Ratio	Lower	Upper
120	100		
91	456.6	376.9	565.3



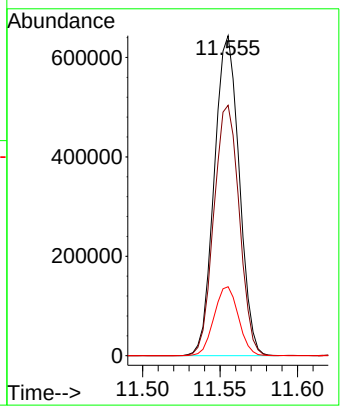


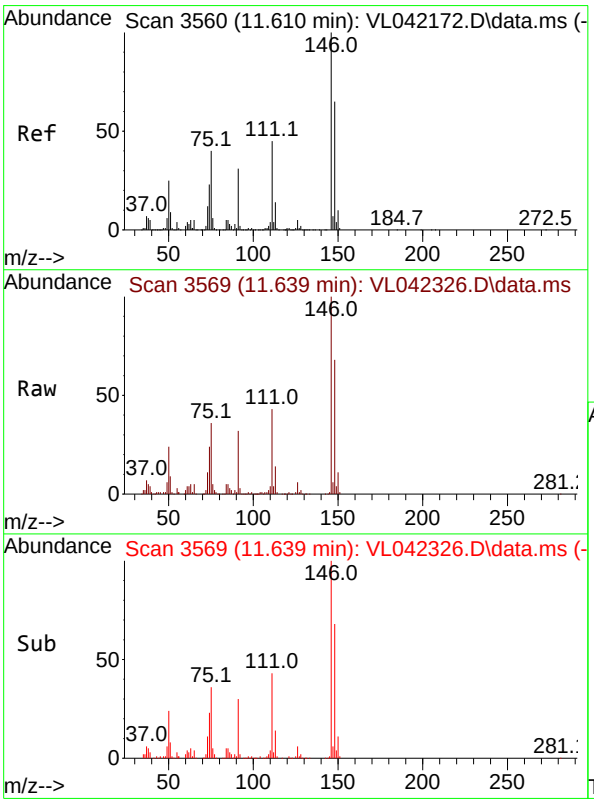
#65
tert-Butylbenzene
Concen: 8.911 ppbv
RT: 11.555 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 721078

Ion	Ratio	Lower	Upper
119	100		
91	79.7	66.0	99.0
134	21.1	16.7	25.1

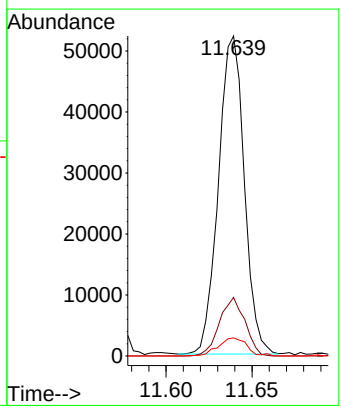


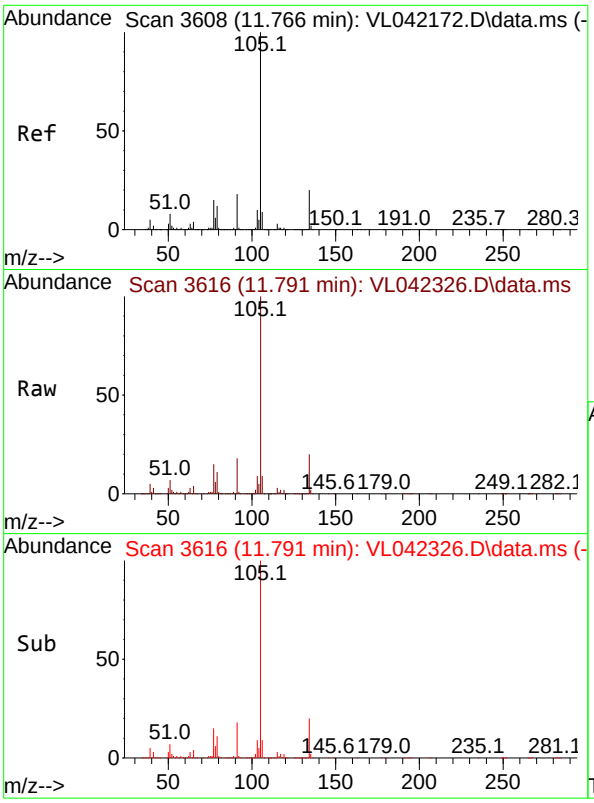


#66
Benzyl Chloride
Concen: 6.339 ppbv
RT: 11.639 min Scan# 3569
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 54427

Ion	Ratio	Lower	Upper
91	100		
126	18.2	13.8	20.6
128	6.3	4.5	6.7



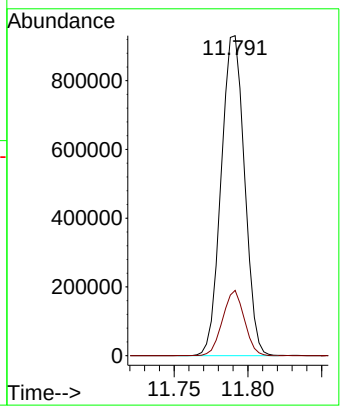


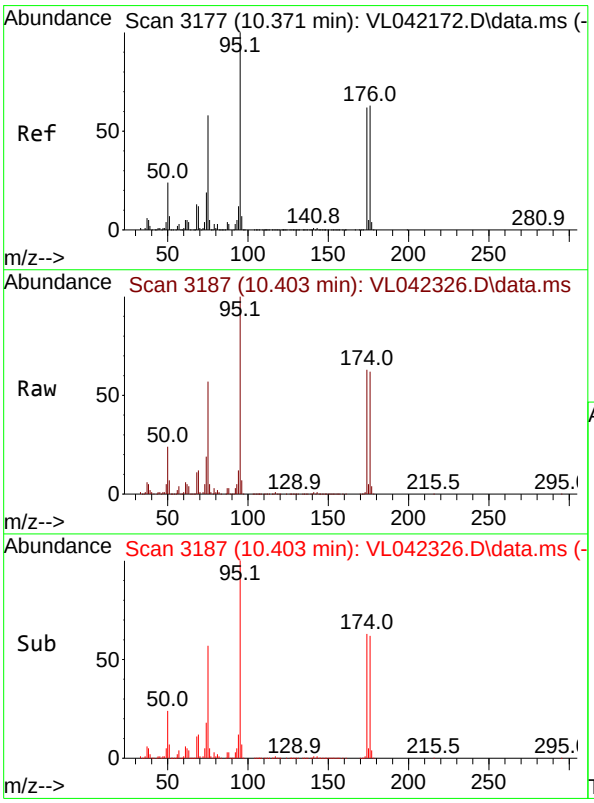
#67
sec-Butylbenzene
Concen: 9.123 ppbv
RT: 11.791 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 1026079

Ion	Ratio	Lower	Upper
105	100		
134	19.0	15.5	23.3

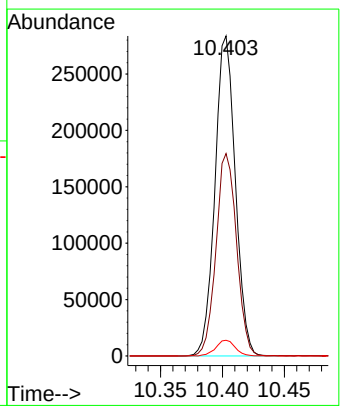


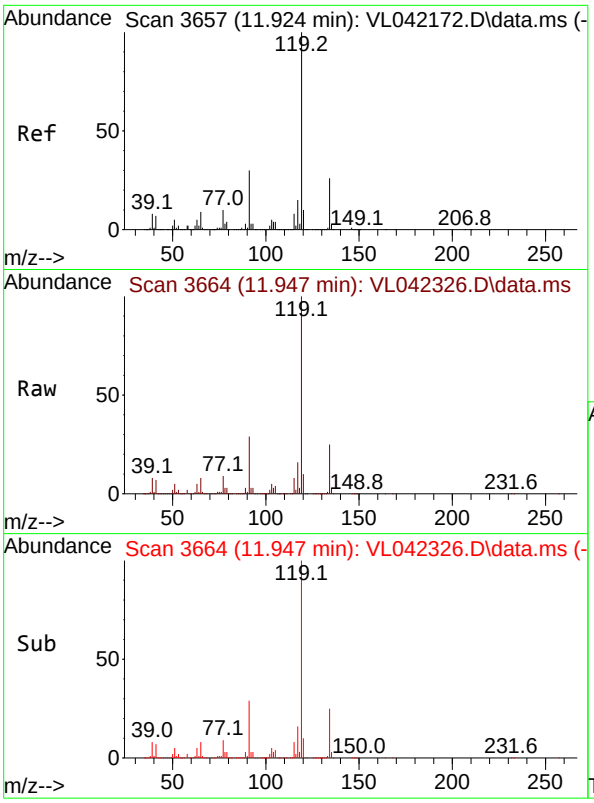


#68
1-Bromo-4-Fluorobenzene
Concen: 9.646 ppbv
RT: 10.403 min Scan# 3187
Delta R.T. 0.032 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 95 Resp: 325960

Ion	Ratio	Lower	Upper
95	100		
174	63.6	50.6	76.0
175	4.7	3.8	5.6



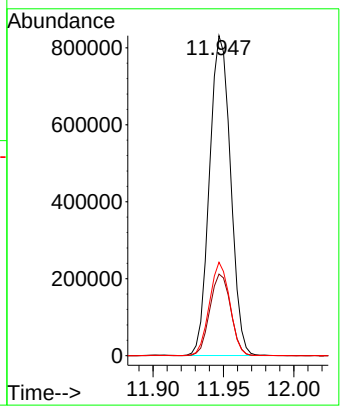


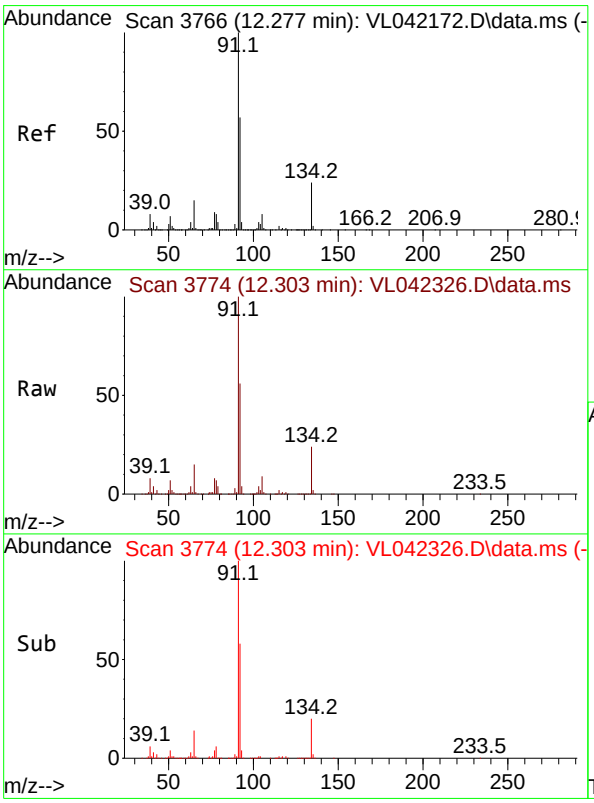
#69
p-Isopropyltoluene
Concen: 8.935 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 865385

Ion	Ratio	Lower	Upper
119	100		
134	25.4	20.4	30.6
91	28.4	23.7	35.5

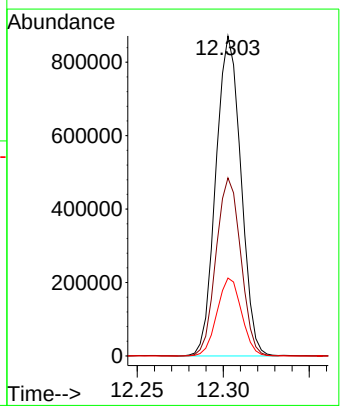


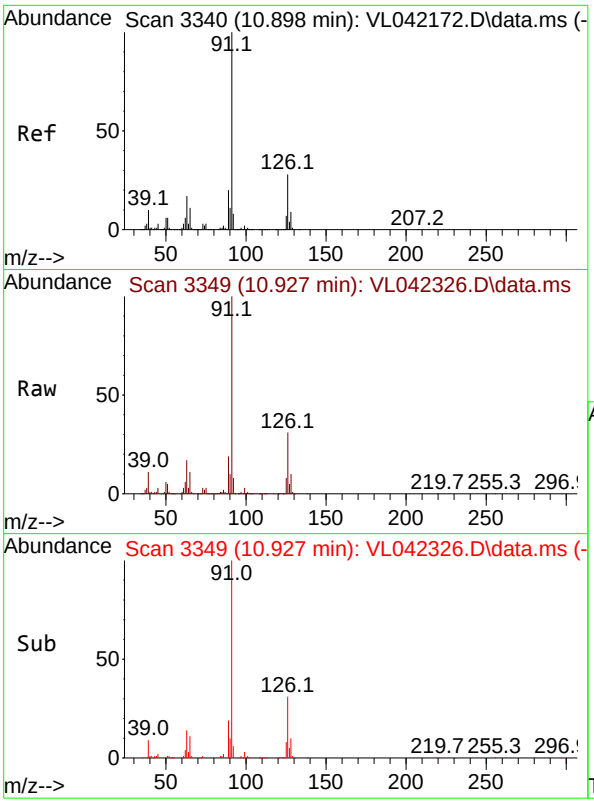


#70
n-Butylbenzene
Concen: 8.928 ppbv
RT: 12.303 min Scan# 3774
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion: 91 Resp: 884265

Ion	Ratio	Lower	Upper
91	100		
92	55.0	44.9	67.3
134	23.8	19.2	28.8



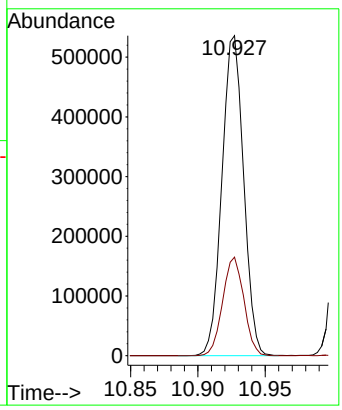


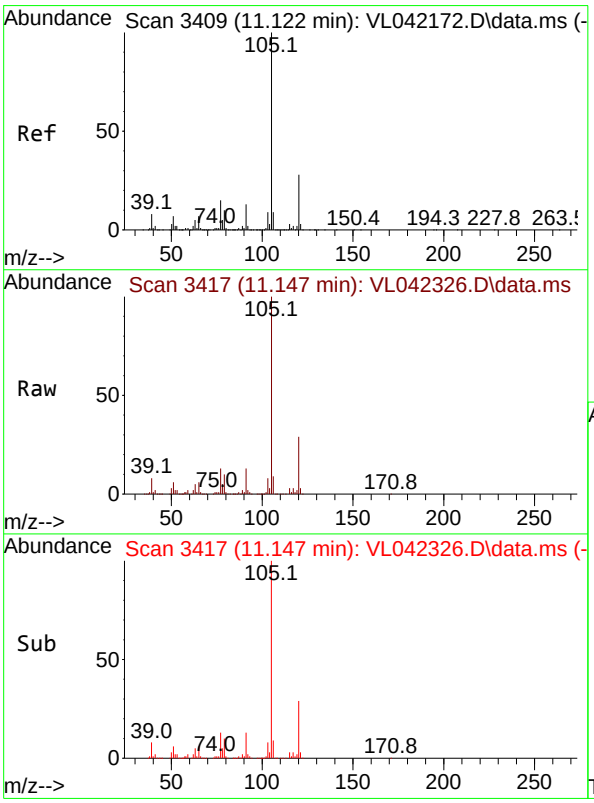
#71
2-Chlorotoluene
Concen: 8.830 ppbv
RT: 10.927 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 599592

Ion	Ratio	Lower	Upper
91	100		
126	30.1	11.6	46.4

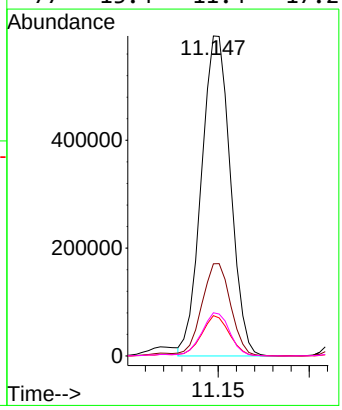


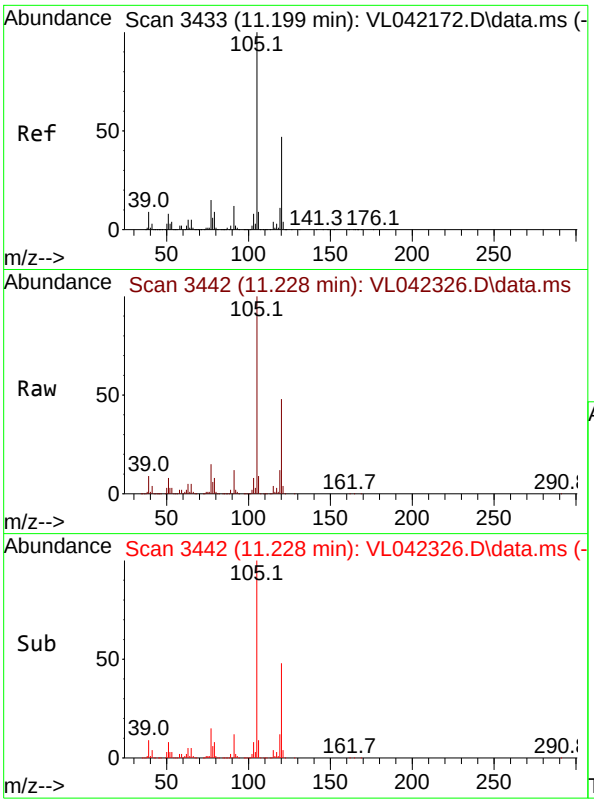


#72
4-Ethyltoluene
Concen: 9.029 ppbv
RT: 11.147 min Scan# 3417
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 657765

Ion	Ratio	Lower	Upper
105	100		
120	29.5	23.4	35.0
91	12.6	10.3	15.5
77	13.4	11.4	17.2



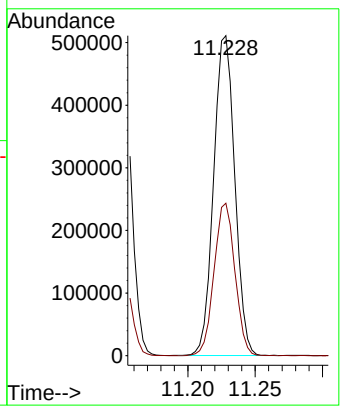


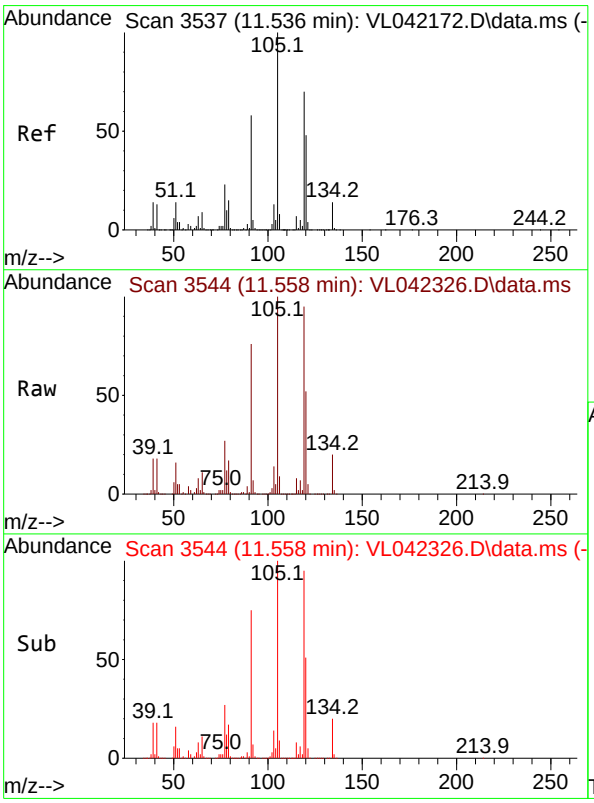
#73
1,3,5-Trimethylbenzene
Concen: 8.764 ppbv
RT: 11.228 min Scan# 34
Delta R.T. 0.029 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 557593

Ion	Ratio	Lower	Upper
105	100		
120	47.7	37.4	56.0

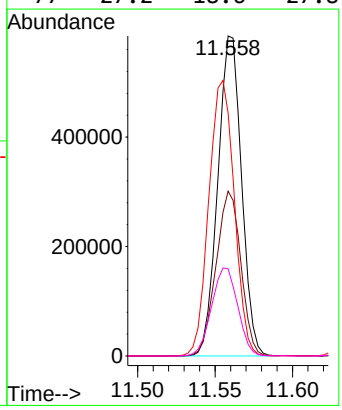


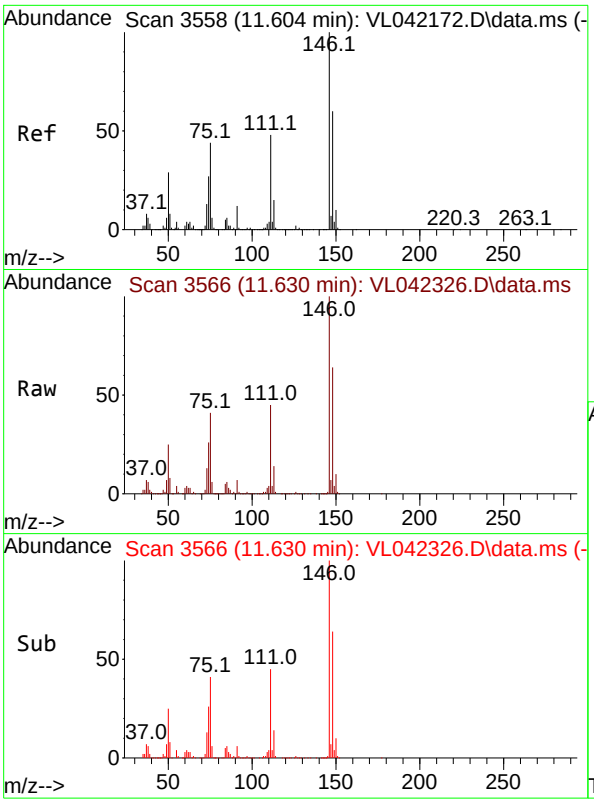


#74
1,2,4-Trimethylbenzene
Concen: 8.507 ppbv
RT: 11.558 min Scan# 3544
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:105 Resp: 623563

Ion	Ratio	Lower	Upper
105	100		
120	51.5	38.6	58.0
91	75.8	46.2	69.2#
77	27.2	18.6	27.8



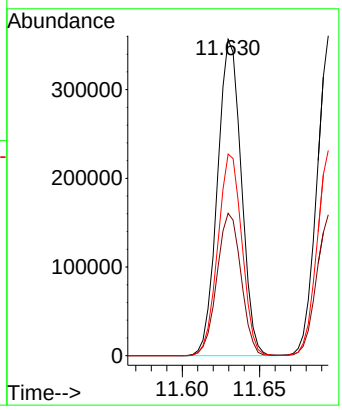


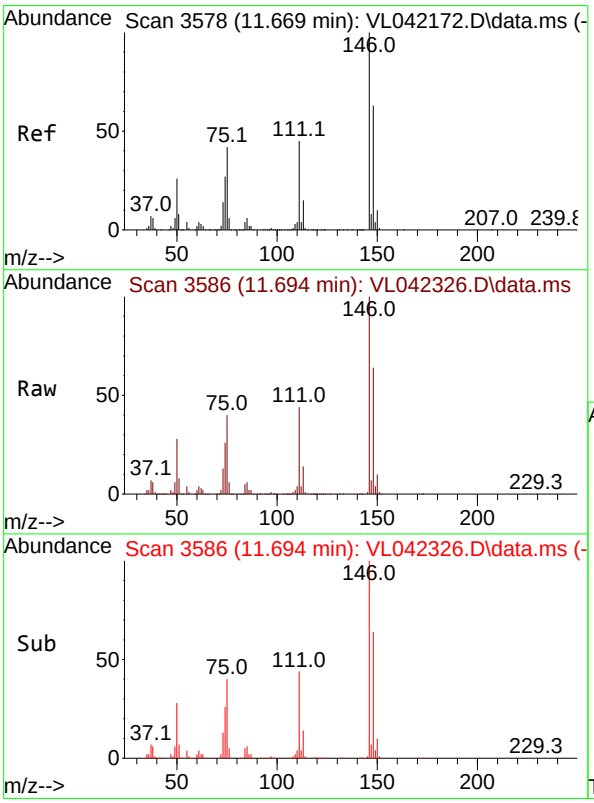
#75
1,3-Dichlorobenzene
Concen: 9.492 ppbv
RT: 11.630 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 381572

Ion	Ratio	Lower	Upper
146	100		
111	45.6	23.8	71.2
148	64.4	31.9	95.9

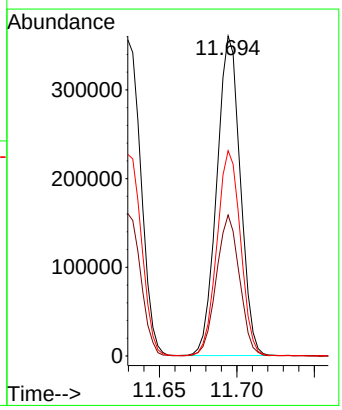


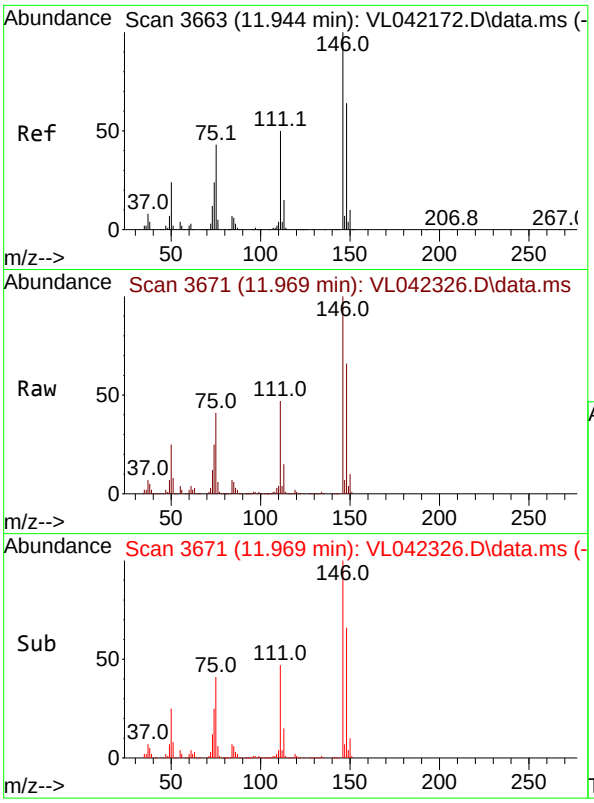


#76
1,4-Dichlorobenzene
Concen: 9.499 ppbv
RT: 11.694 min Scan# 3586
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:146 Resp: 380035

Ion	Ratio	Lower	Upper
146	100		
111	43.7	23.0	69.0
148	64.7	31.9	95.7



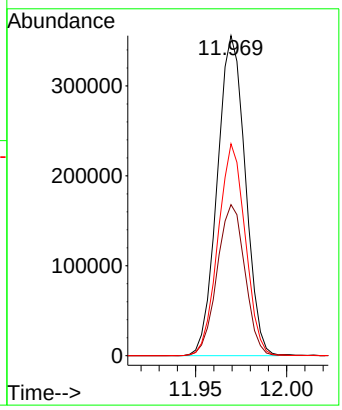


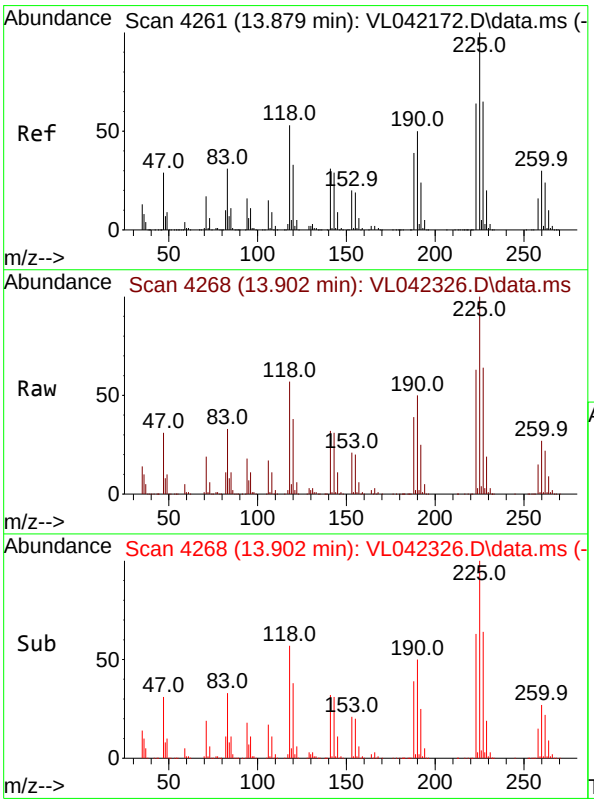
#77
1,2-Dichlorobenzene
Concen: 9.706 ppbv
RT: 11.969 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 379896

Ion	Ratio	Lower	Upper
146	100		
111	47.0	24.8	74.3
148	64.5	31.6	94.8

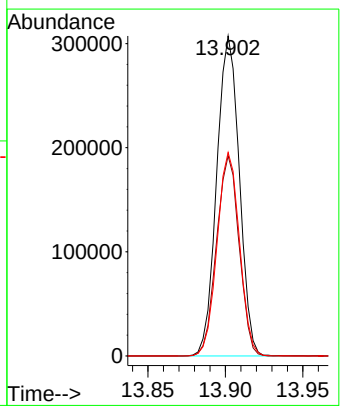


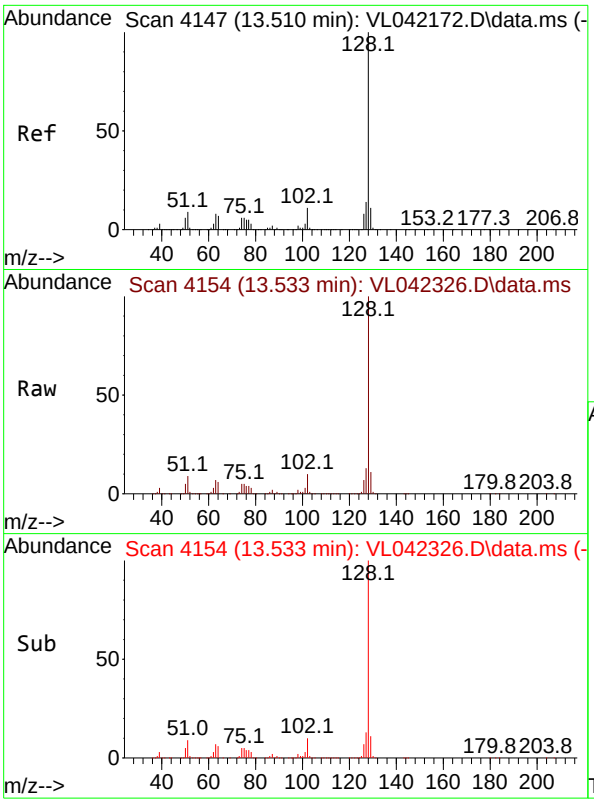


#78
Hexachloro-1,3-Butadiene
Concen: 7.828 ppbv
RT: 13.902 min Scan# 4268
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:225 Resp: 311900

Ion	Ratio	Lower	Upper
225	100		
223	62.4	50.6	76.0
227	63.0	51.2	76.8



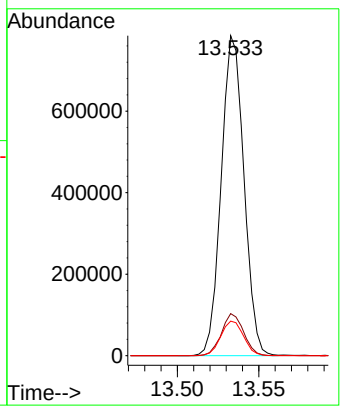


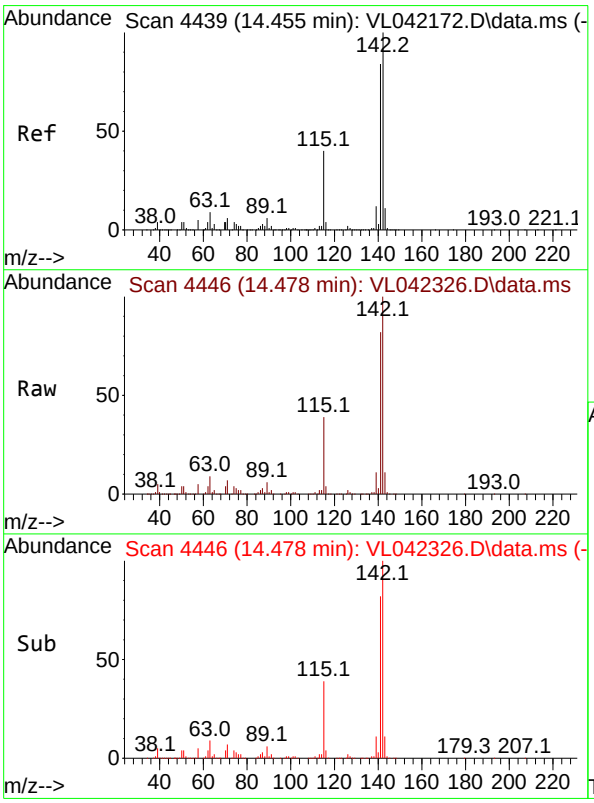
#79
Naphthalene
Concen: 9.490 ppbv
RT: 13.533 min Scan# 4
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 760876

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.8	16.2
129	10.8	9.0	13.4

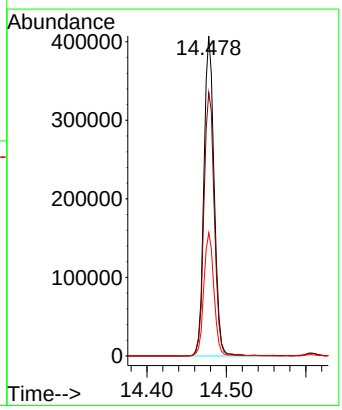


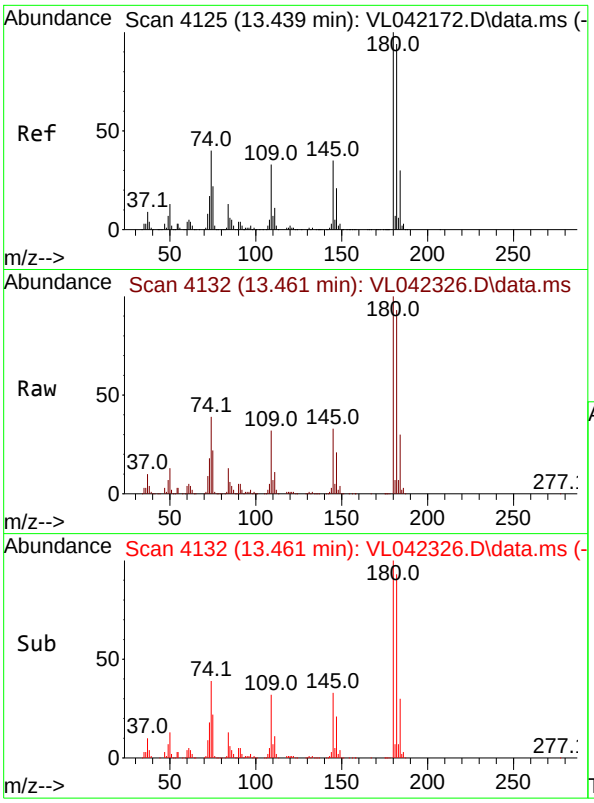


#80
Naphthalene,2-methyl-
Concen: 9.294 ppbv
RT: 14.478 min Scan# 4446
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Tgt Ion:142 Resp: 365398

Ion	Ratio	Lower	Upper
142	100		
141	84.6	66.3	99.5
115	38.5	31.6	47.4



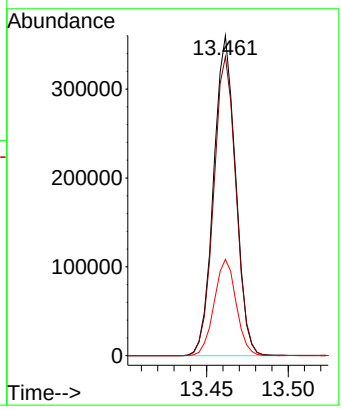


#81
1,2,4-Trichlorobenzene
Concen: 9.114 ppbv
RT: 13.461 min Scan# 4
Delta R.T. 0.023 min
Lab File: VL042326.D
Acq: 15 Apr 2025 11:30

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 337032

Ion	Ratio	Lower	Upper
180	100		
182	95.1	75.1	112.7
184	30.2	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.810	49	171986	10.000	ppbv	0.03
33) 1,4-Difluorobenzene	3.994	114	444595	10.000	ppbv	0.04
55) Chlorobenzene-d5	8.917	117	399604	10.000	ppbv	0.04
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.406	95	318902	9.718	ppbv	0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 97.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.509	85	214241	8.437	ppbv	99
3) Chlorodifluoromethane	1.486	51	234966	9.058	ppbv	97
4) Chloromethane	1.541	50	88230	8.502	ppbv	98
5) Vinyl Chloride	1.589	62	82221	7.476	ppbv	94
6) Bromomethane	1.680	94	36050	7.665	ppbv	100
7) Chloroethane	1.716	64	33039	7.931	ppbv	97
8) Dichlorotetrafluoroethane	1.564	85	178173	8.239	ppbv	95
9) Propene	1.492	41	94136	7.917	ppbv	99
10) Heptane	5.027	43	267288	8.451	ppbv	99
11) Trichlorofluoromethane	1.890	101	201665	8.162	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.156	101	154306	7.598	ppbv	98
13) Ethanol	1.732	45	4407	3.921	ppbv	97
14) Bromoethene	1.793	108	57635	7.408	ppbv	99
15) Acetone	1.848	43	178724	7.430	ppbv	96
16) 1,3-Butadiene	1.619	39	89479	7.617	ppbv	96
17) tert-Butyl alcohol	2.055	59	202421	6.757	ppbv	99
18) 1,1-Dichloroethene	2.049	96	69013	7.269	ppbv	97
19) Isopropyl Alcohol	1.900	45	100289	7.390	ppbv	97
20) Methylene Chloride	2.075	84	60054	6.704	ppbv	88
21) Allyl Chloride	2.111	41	127800	7.534	ppbv	98
22) trans-1,2-Dichloroethene	2.360	96	78991	7.198	ppbv	98
23) Vinyl Acetate	2.483	43	64777	6.222	ppbv	98
24) 1,1-Dichloroethane	2.428	63	168373	8.277	ppbv	99
25) Ethyl Acetate	2.861	43	545140	8.732	ppbv	99
26) Hexane	2.848	57	205629	8.528	ppbv	97
27) Carbon Disulfide	2.166	76	191388	7.402	ppbv	99
28) Methyl tert-Butyl Ether	2.460	73	107667	7.172	ppbv	96
29) Chloroform	2.874	83	309262	8.763	ppbv	100
30) Cyclohexane	3.891	84	165914	7.924	ppbv	98
31) cis-1,2-Dichloroethene	2.742	61	197651	8.074	ppbv	99
32) 1,1,1-Trichloroethane	3.395	97	304143	7.528	ppbv	97
34) 2-Butanone	2.580	43	300576	9.323	ppbv	98
35) Carbon Tetrachloride	3.797	117	314849	9.065	ppbv	99
36) Benzene	3.690	78	407959	9.256	ppbv	98
37) 1,2-Dichloroethane	3.247	62	235609	9.337	ppbv	99
38) Trichloroethene	4.590	130	164664	8.954	ppbv	96
39) 1,2-Dichloropropane	4.354	63	149260	9.299	ppbv	97
40) 1,4-Dioxane	4.625	88	68773	8.072	ppbv #	95
41) Tetrahydrofuran	3.082	42	173776	9.361	ppbv	95
42) Bromodichloromethane	4.532	83	327497	9.414	ppbv	99
43) Methyl Methacrylate	4.930	69	151531	8.121	ppbv	98
44) 2,2,4-Trimethylpentane	4.680	57	707832	9.503	ppbv	98
45) t-1,3-Dichloropropene	6.470	75	143714	7.179	ppbv	91

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.658	75	192419	7.841	ppbv		96
47) 1,1,2-Trichloroethane	6.635	97	163251	9.621	ppbv		98
48) Dibromochloromethane	7.428	129	266192	9.256	ppbv		100
49) Bromoform	9.519	173	236686	9.168	ppbv		99
50) 4-Methyl-2-Pentanone	5.807	43	429988	8.416	ppbv		95
51) 2-Hexanone	7.480	43	344172	8.203	ppbv	#	96
52) Tetrachloroethene	8.263	164	139845	8.000	ppbv		95
53) Toluene	6.978	91	447178	8.559	ppbv		99
54) 1,2-Dibromoethane	7.694	107	214982	9.089	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.959	131	216770	9.855	ppbv		98
57) Chlorobenzene	8.956	112	369132	9.739	ppbv		95
58) Ethyl Benzene	9.390	91	618669	8.716	ppbv		100
59) m/p-Xylene	9.584	91	510187	9.001	ppbv	#	21
60) o-Xylene	9.995	91	517471	9.107	ppbv		96
61) Styrene	9.904	104	229601	8.168	ppbv		97
62) Isopropylbenzene	10.568	105	785673	9.247	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.995	83	351308	10.176	ppbv		99
64) n-propylbenzene	11.018	120	210294	9.615	ppbv		98
65) tert-Butylbenzene	11.558	119	718948	9.149	ppbv		97
66) Benzyl Chloride	11.642	91	55150	6.614	ppbv		99
67) sec-Butylbenzene	11.795	105	1018861	9.328	ppbv		100
69) p-Isopropyltoluene	11.950	119	863264	9.179	ppbv		99
70) n-Butylbenzene	12.306	91	891883	9.273	ppbv		99
71) 2-Chlorotoluene	10.930	91	590408	8.953	ppbv		99
72) 4-Ethyltoluene	11.150	105	652962	9.230	ppbv		98
73) 1,3,5-Trimethylbenzene	11.231	105	559451	9.055	ppbv		100
74) 1,2,4-Trimethylbenzene	11.565	105	632271	8.883	ppbv		97
75) 1,3-Dichlorobenzene	11.633	146	381882	9.782	ppbv		98
76) 1,4-Dichlorobenzene	11.697	146	383116	9.861	ppbv		98
77) 1,2-Dichlorobenzene	11.973	146	386768	10.175	ppbv		98
78) Hexachloro-1,3-Butadiene	13.905	225	314860	8.138	ppbv		100
79) Naphthalene	13.539	128	777722	9.989	ppbv		99
80) Naphthalene,2-methyl-	14.481	142	375541	9.836	ppbv		98
81) 1,2,4-Trichlorobenzene	13.465	180	343011	9.551	ppbv		99

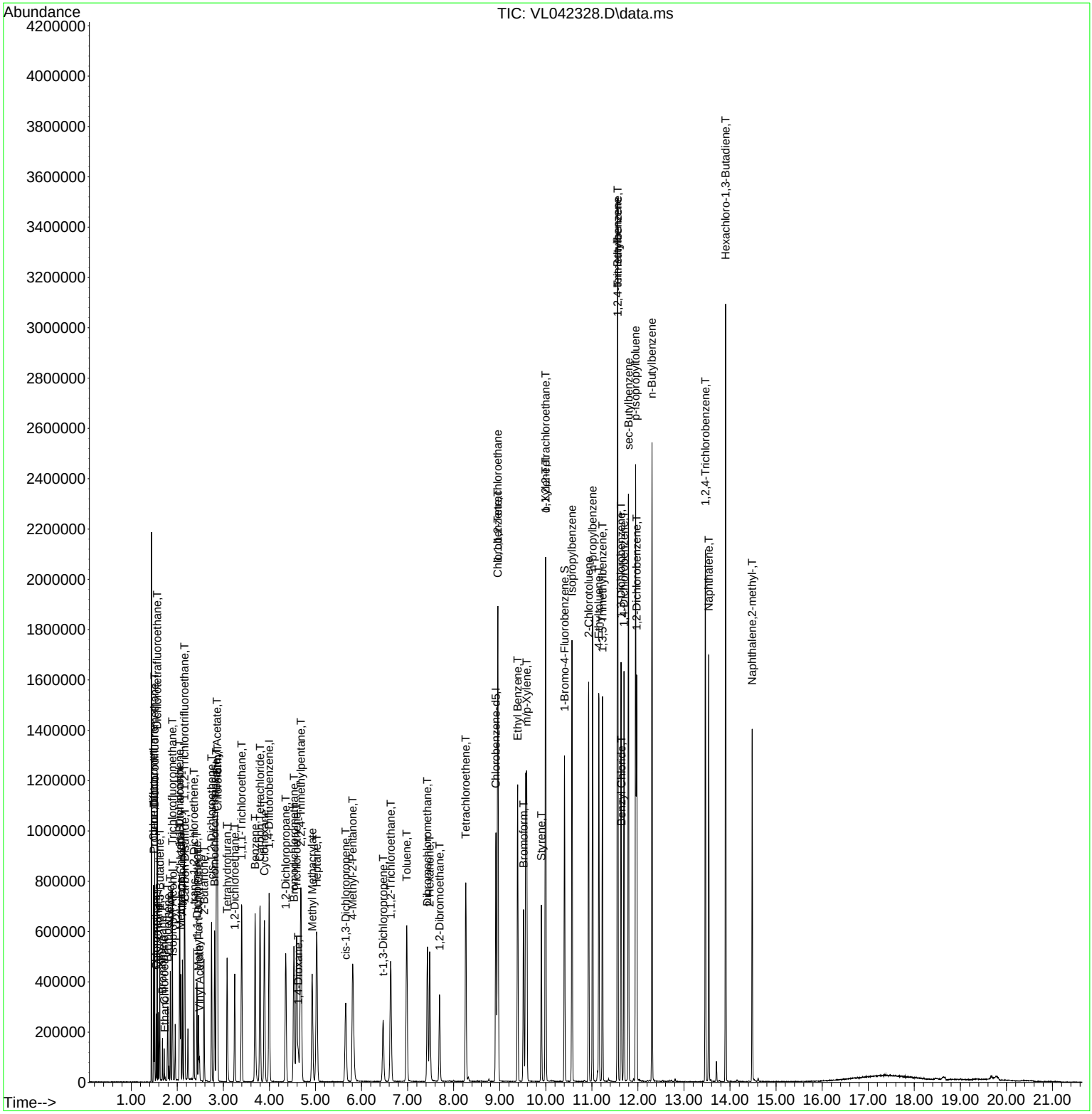
(#) = qualifier out of range (m) = manual integration (+) = signals summed

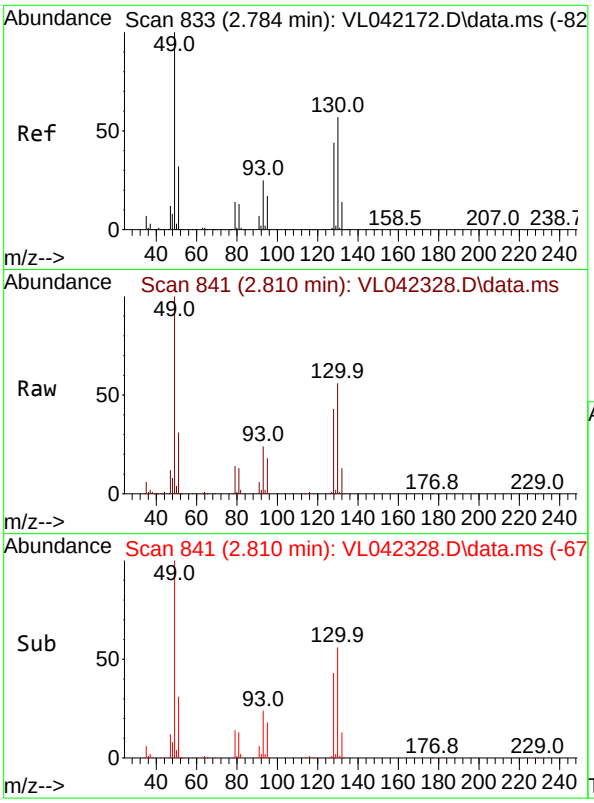
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042328.D
Acq On : 15 Apr 2025 12:54
Operator : SY/MD
Sample : VL0415ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Quant Time: Apr 16 01:30:27 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



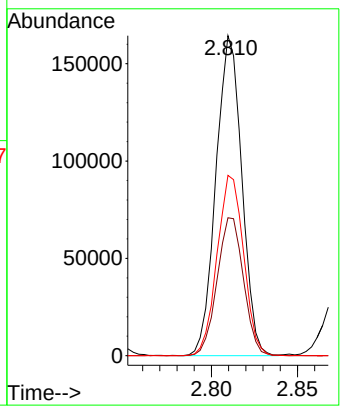


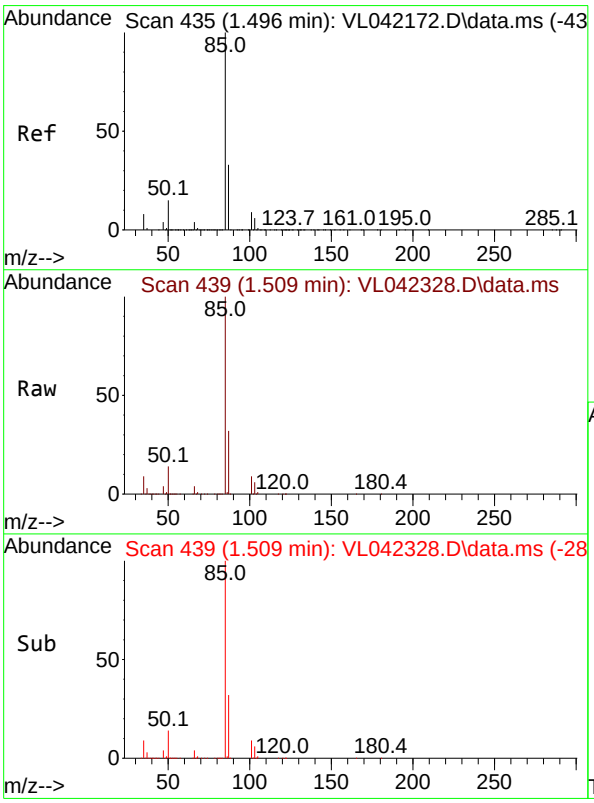
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.810 min Scan# 84
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 49 Resp: 171986

Ion	Ratio	Lower	Upper
49	100		
128	43.9	22.9	68.5
130	57.7	28.8	86.4

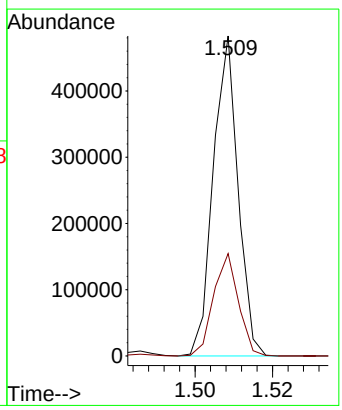


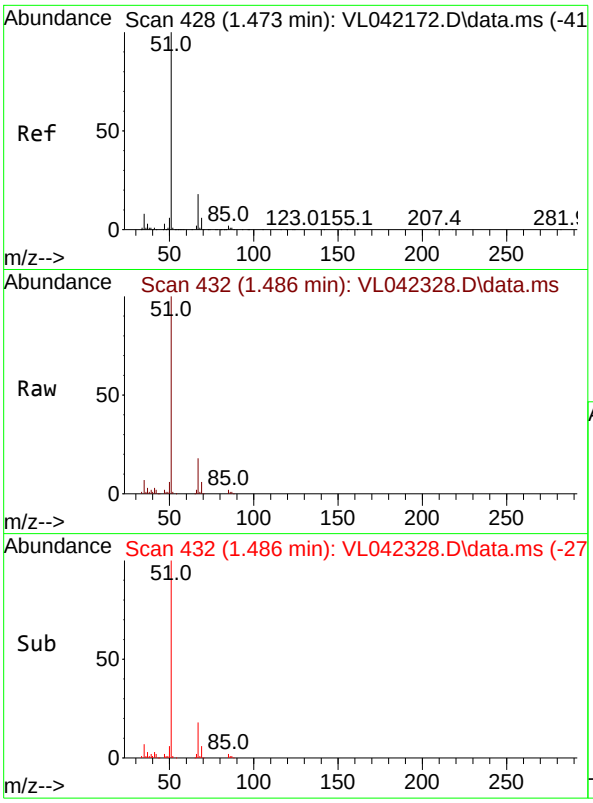


#2
Dichlorodifluoromethane
Concen: 8.437 ppbv
RT: 1.509 min Scan# 439
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 85 Resp: 214241

Ion	Ratio	Lower	Upper
85	100		
87	32.0	26.1	39.1



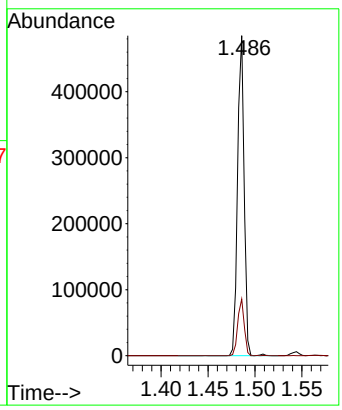


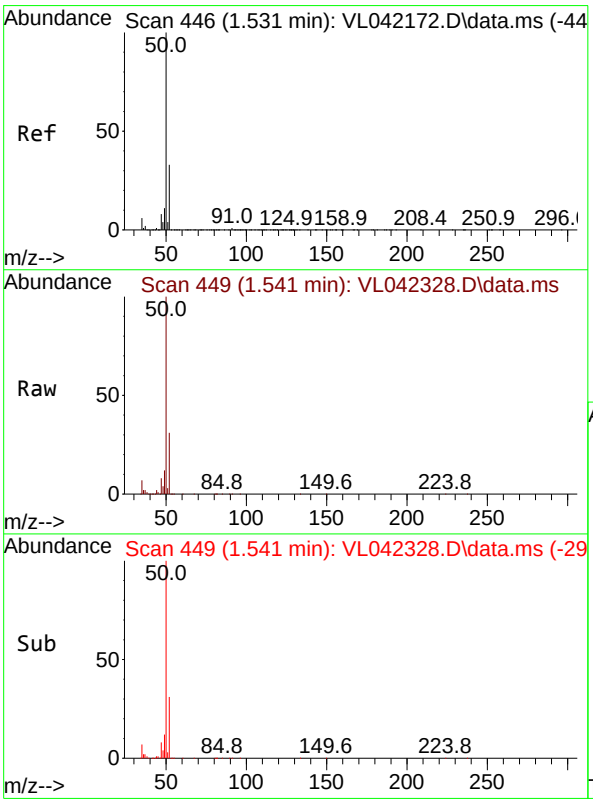
#3
Chlorodifluoromethane
Concen: 9.058 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 51 Resp: 234966

Ion	Ratio	Lower	Upper
51	100		
67	17.6	15.0	22.6

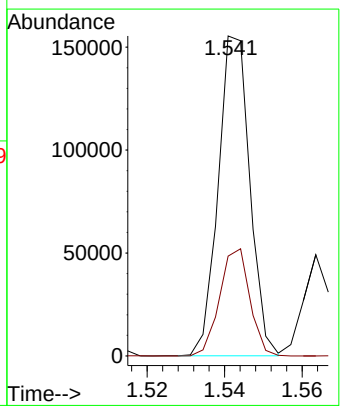


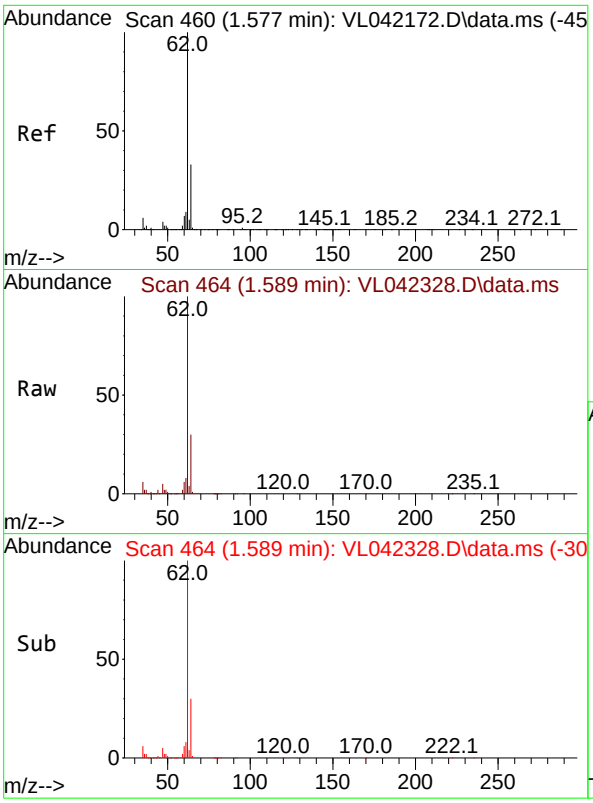


#4
Chloromethane
Concen: 8.502 ppbv
RT: 1.541 min Scan# 449
Delta R.T. 0.010 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 50 Resp: 88230

Ion	Ratio	Lower	Upper
50	100		
52	31.2	26.1	39.1



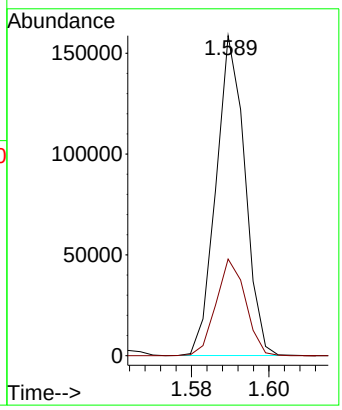


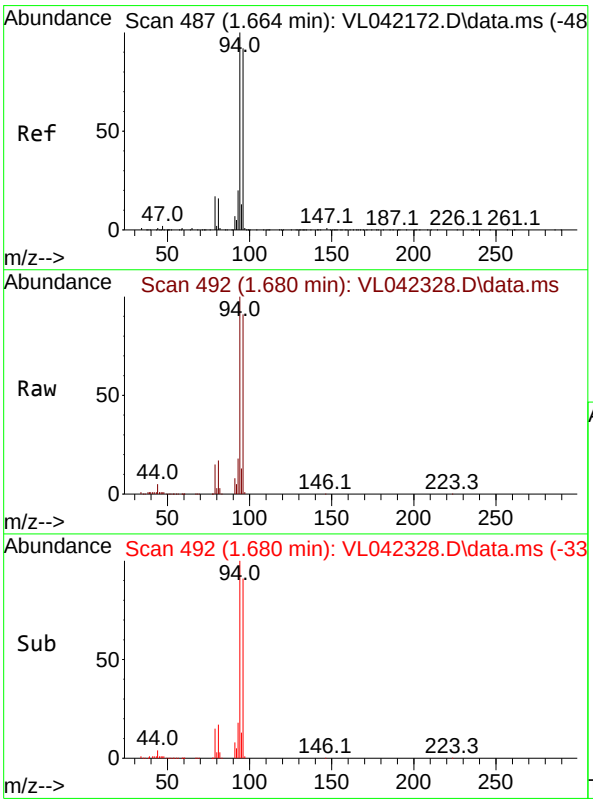
#5
Vinyl Chloride
Concen: 7.476 ppbv
RT: 1.589 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 62 Resp: 82221

Ion	Ratio	Lower	Upper
62	100		
64	30.2	26.6	40.0

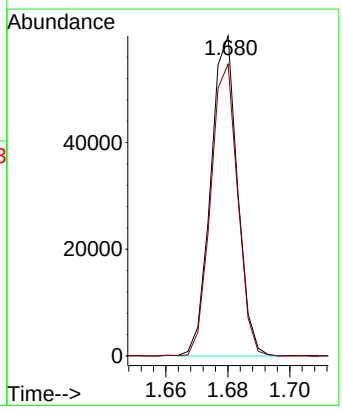


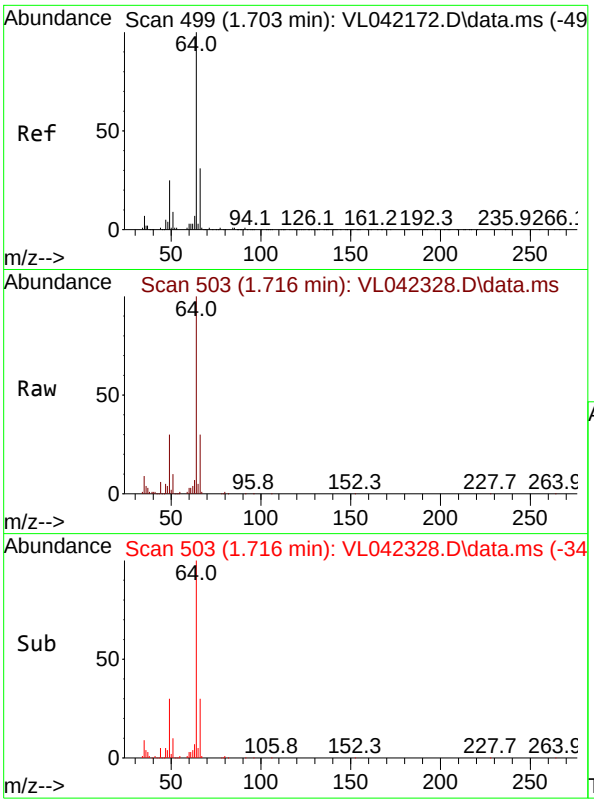


#6
Bromomethane
Concen: 7.665 ppbv
RT: 1.680 min Scan# 492
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 94 Resp: 36050

Ion	Ratio	Lower	Upper
94	100		
96	91.2	73.1	109.7



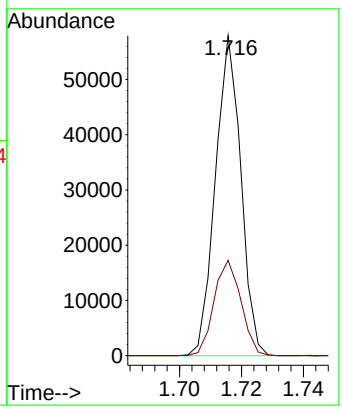


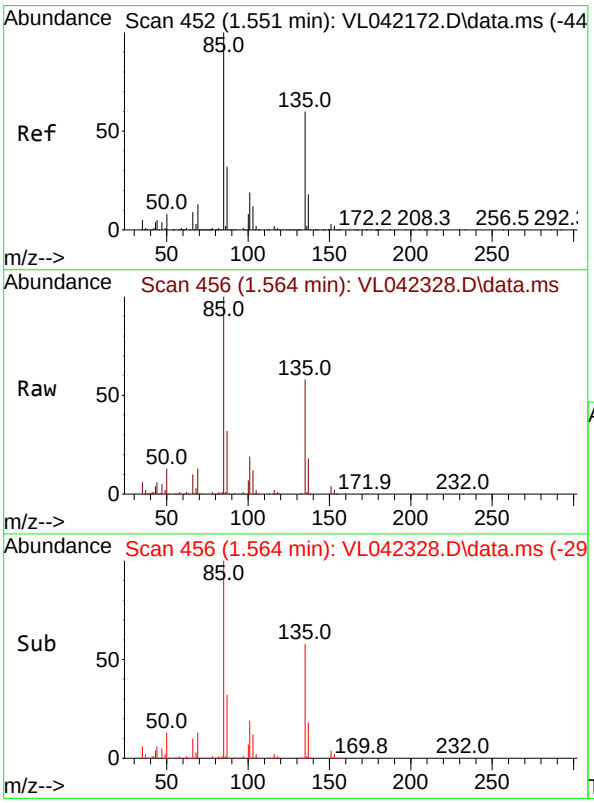
#7
Chloroethane
Concen: 7.931 ppbv
RT: 1.716 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 64 Resp: 33039

Ion	Ratio	Lower	Upper
64	100		
66	29.8	25.2	37.8

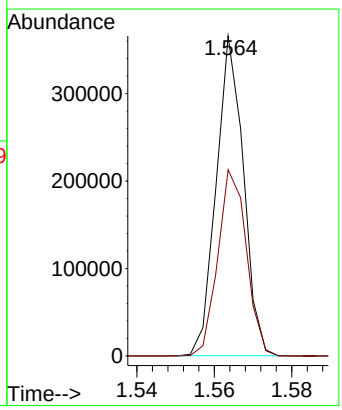


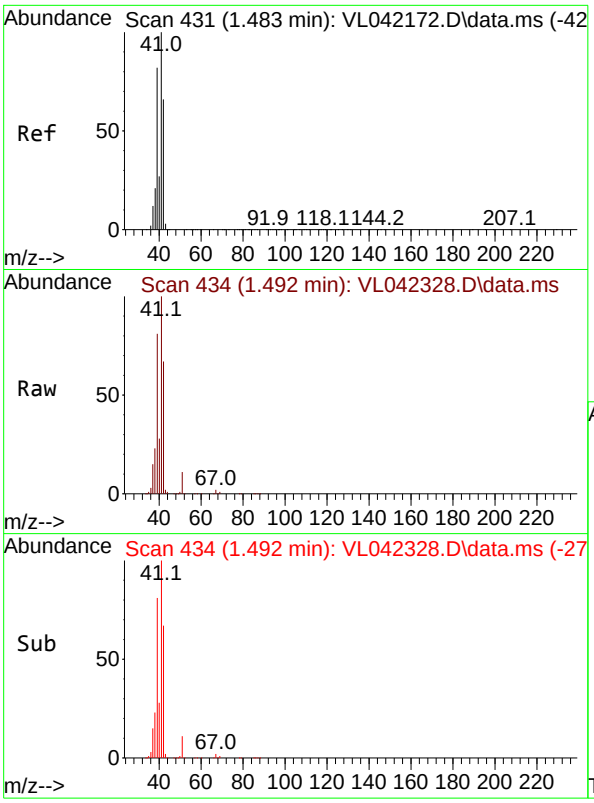


#8
Dichlorotetrafluoroethane
Concen: 8.239 ppbv
RT: 1.564 min Scan# 456
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 85 Resp: 178173

Ion	Ratio	Lower	Upper
85	100		
135	61.3	52.4	78.6



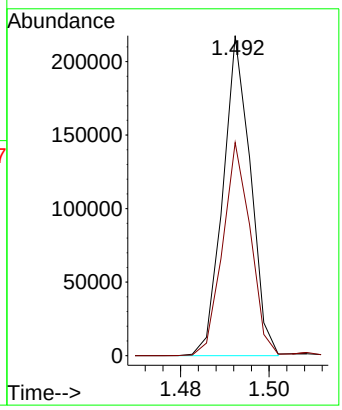


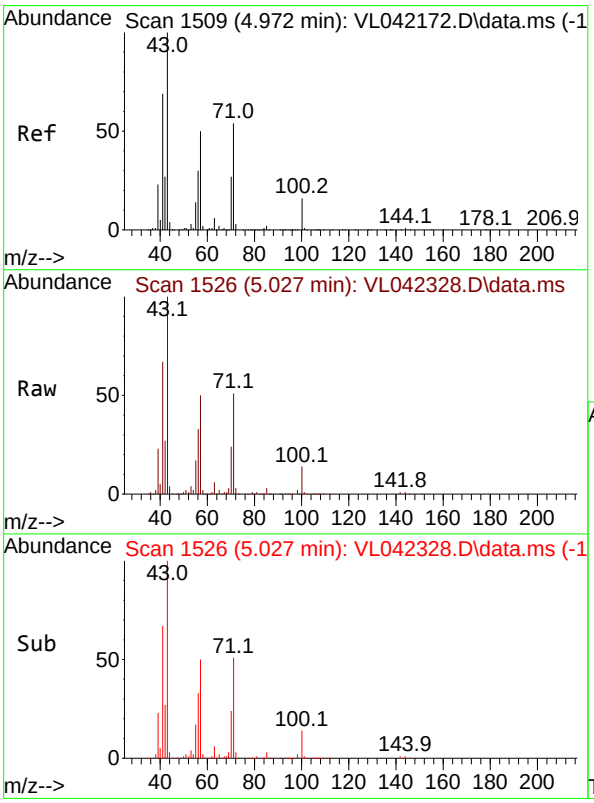
#9
Propene
Concen: 7.917 ppbv
RT: 1.492 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 41 Resp: 94136

Ion	Ratio	Lower	Upper
41	100		
42	68.2	55.4	83.2

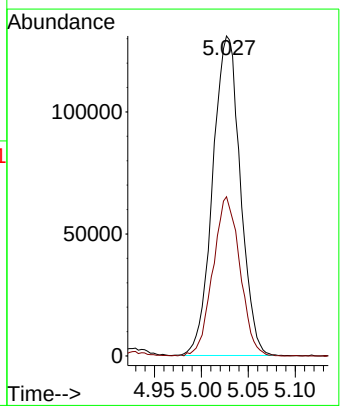


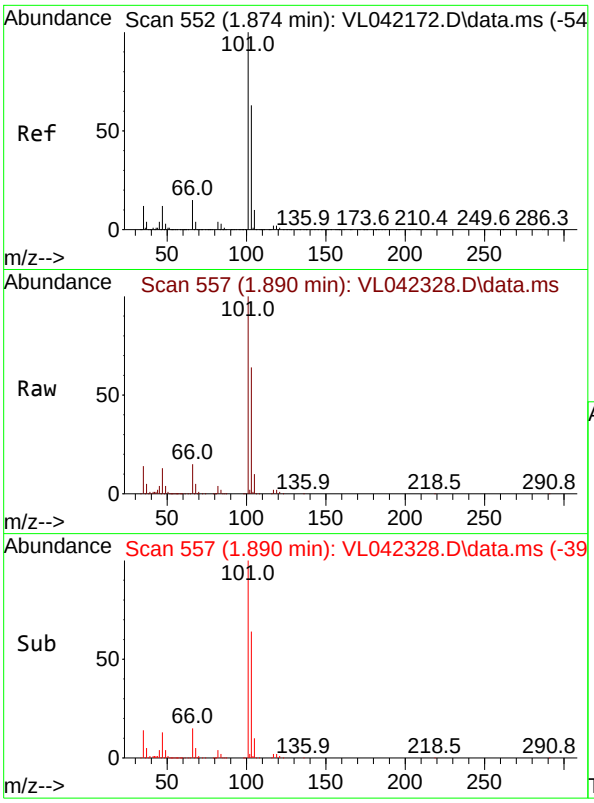


#10
Heptane
Concen: 8.451 ppbv
RT: 5.027 min Scan# 1526
Delta R.T. 0.055 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 267288

Ion	Ratio	Lower	Upper
43	100		
57	48.8	39.4	59.2



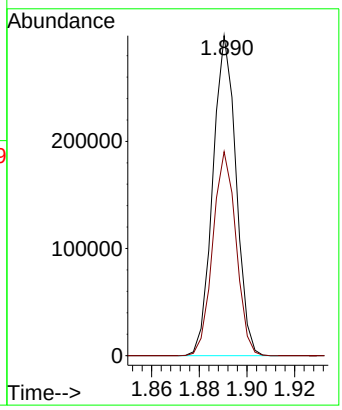


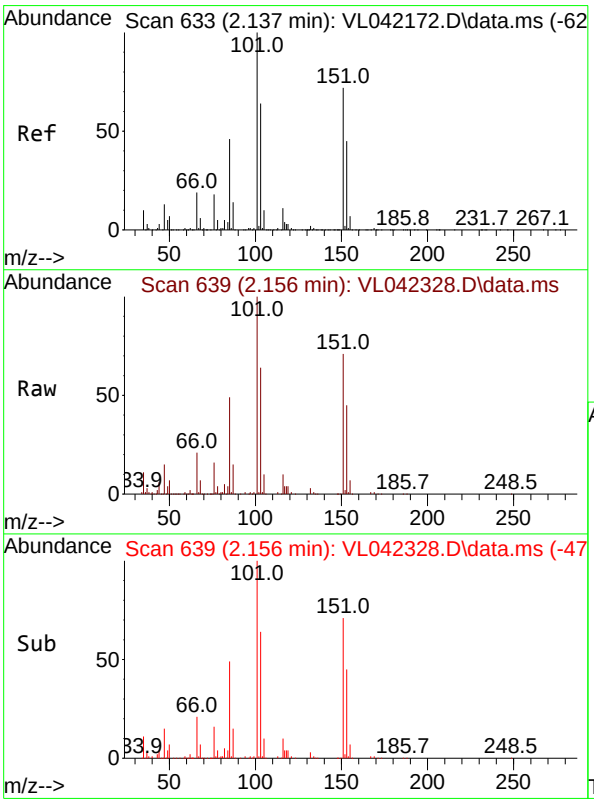
#11
Trichlorofluoromethane
Concen: 8.162 ppbv
RT: 1.890 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:101 Resp: 201665

Ion	Ratio	Lower	Upper
101	100		
103	63.7	50.2	75.2

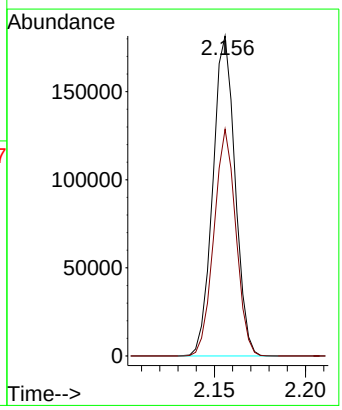


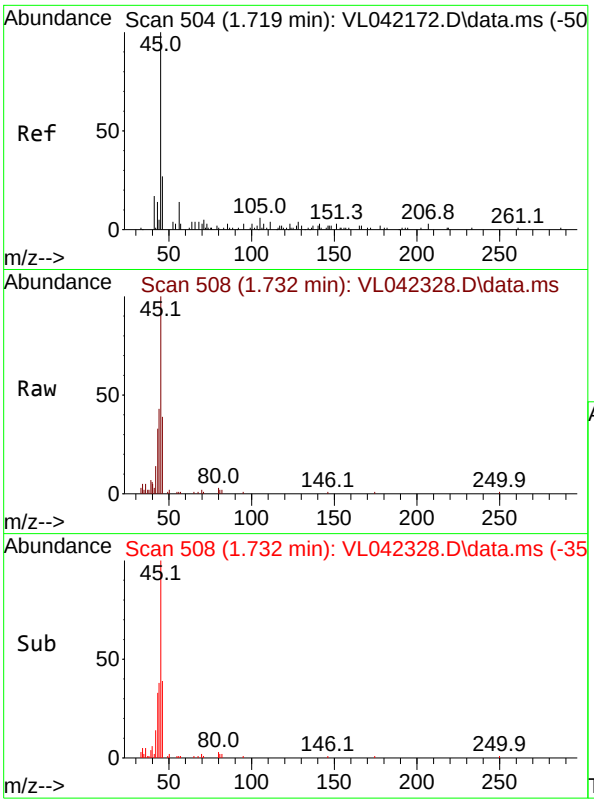


#12
1,1,2-Trichlorotrifluoroethane
Concen: 7.598 ppbv
RT: 2.156 min Scan# 639
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:101 Resp: 154306

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.1	85.7



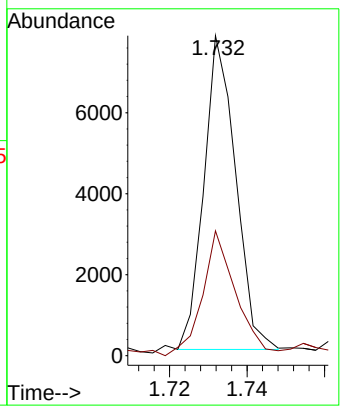


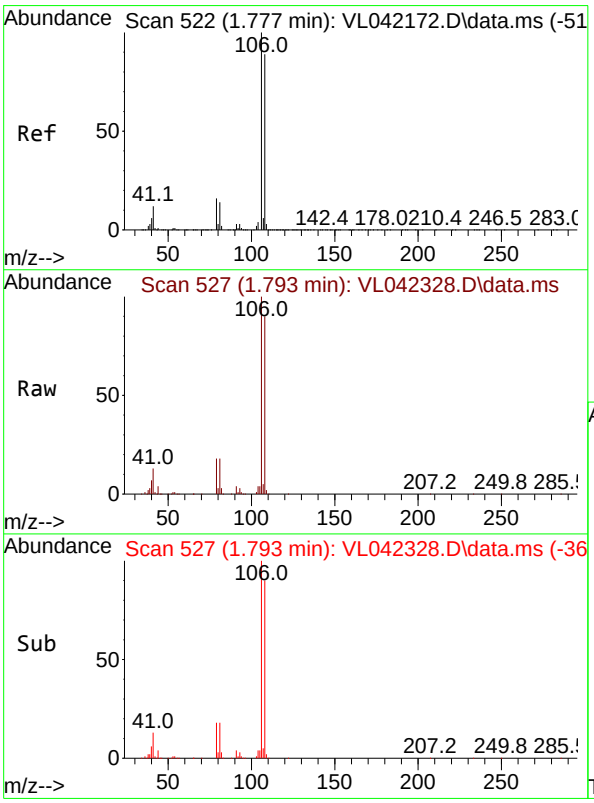
#13
Ethanol
Concen: 3.921 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 45 Resp: 4407

Ion	Ratio	Lower	Upper
45	100		
46	48.1	20.2	80.8

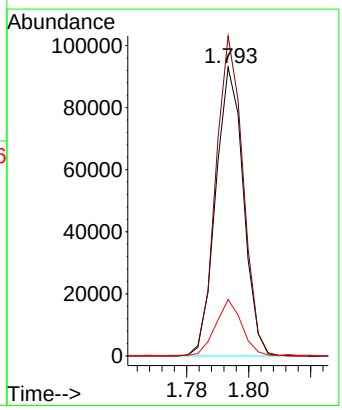


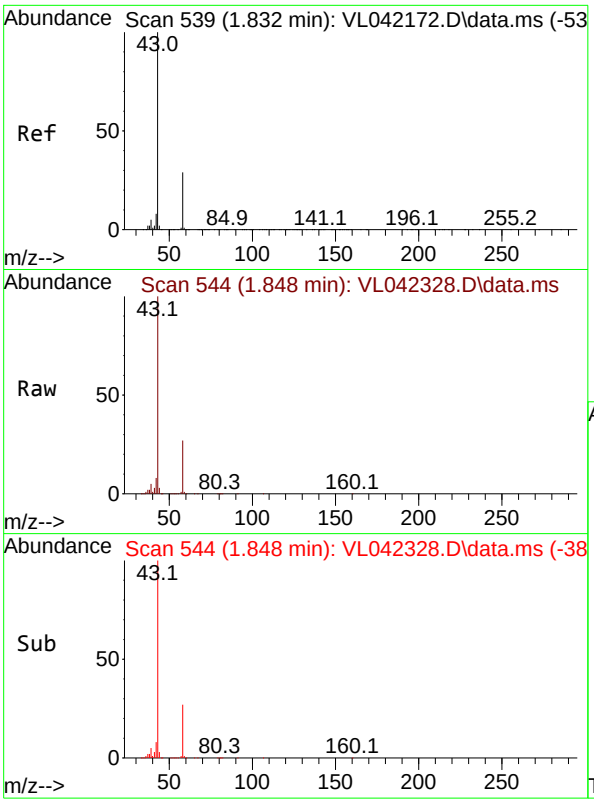


#14
Bromoethene
Concen: 7.408 ppbv
RT: 1.793 min Scan# 527
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:108 Resp: 57635

Ion	Ratio	Lower	Upper
108	100		
106	108.9	86.8	130.2
79	19.8	15.0	22.6



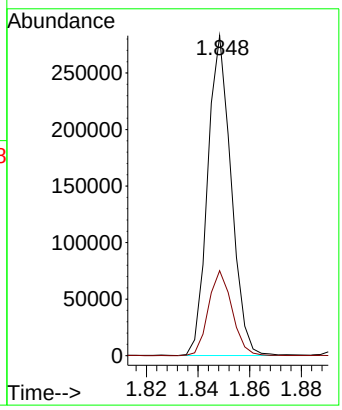


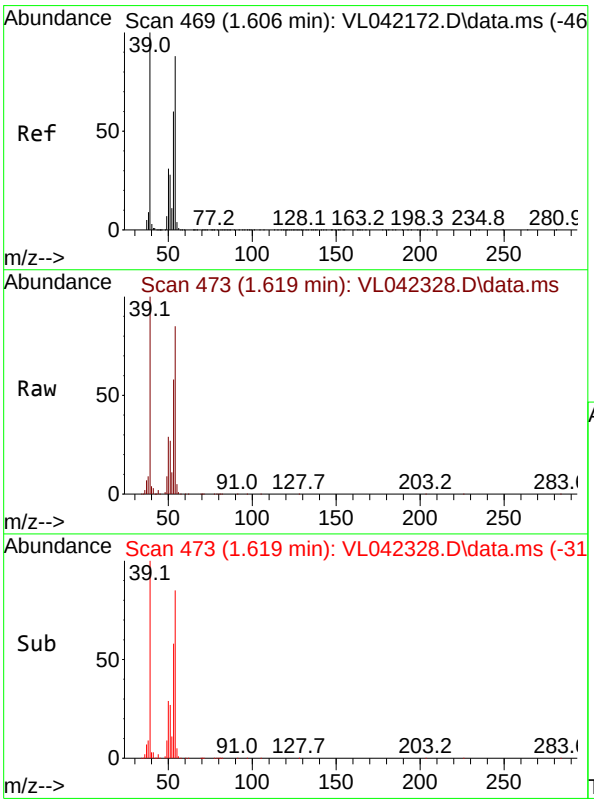
#15
Acetone
Concen: 7.430 ppbv
RT: 1.848 min Scan# 54
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 43 Resp: 178724

Ion	Ratio	Lower	Upper
43	100		
58	26.8	23.2	34.8

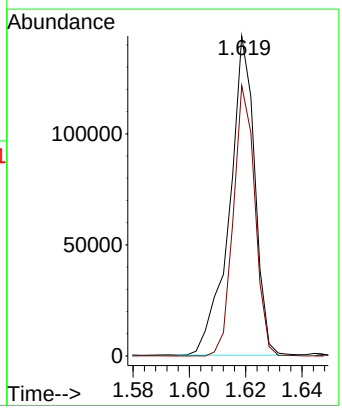


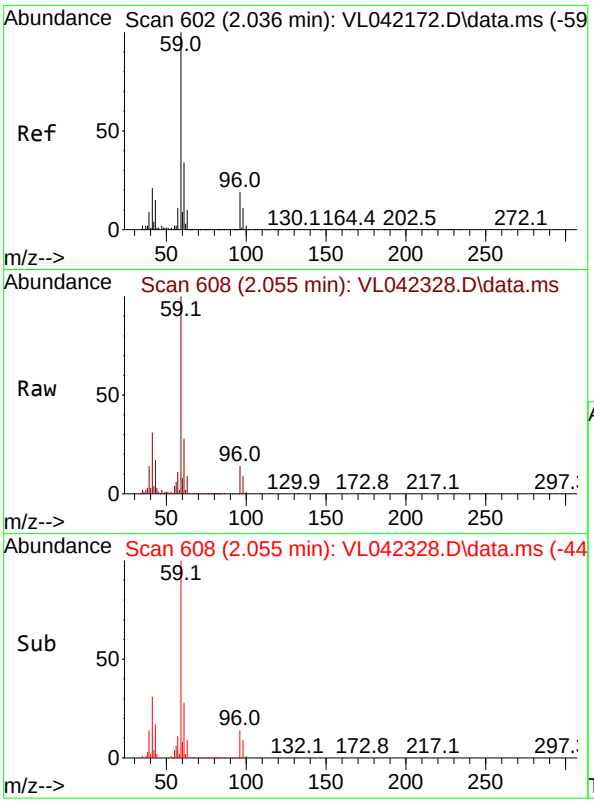


#16
1,3-Butadiene
Concen: 7.617 ppbv
RT: 1.619 min Scan# 473
Delta R.T. 0.013 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 39 Resp: 89479

Ion	Ratio	Lower	Upper
39	100		
54	72.1	60.7	91.1



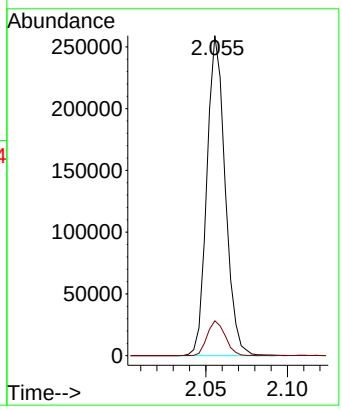


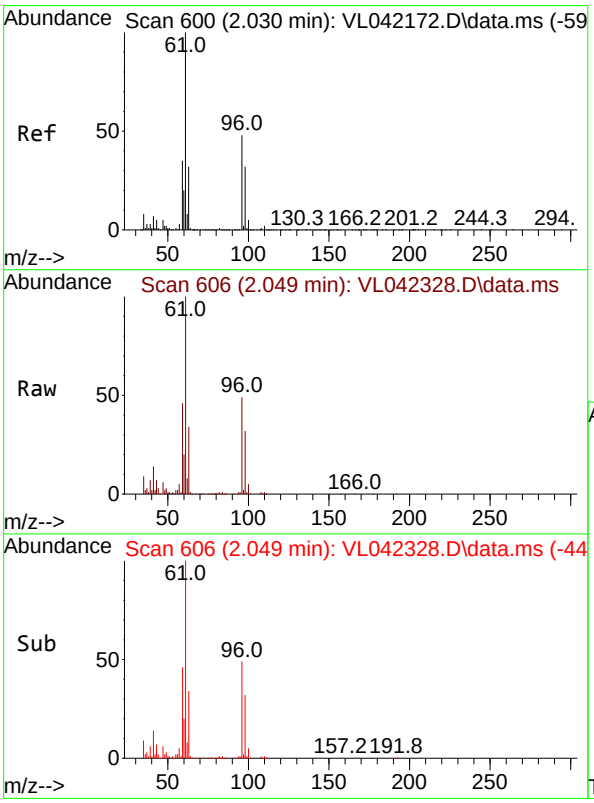
#17
tert-Butyl alcohol
Concen: 6.757 ppbv
RT: 2.055 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 59 Resp: 202421

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.9	13.3

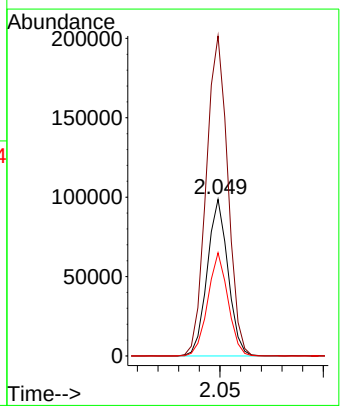


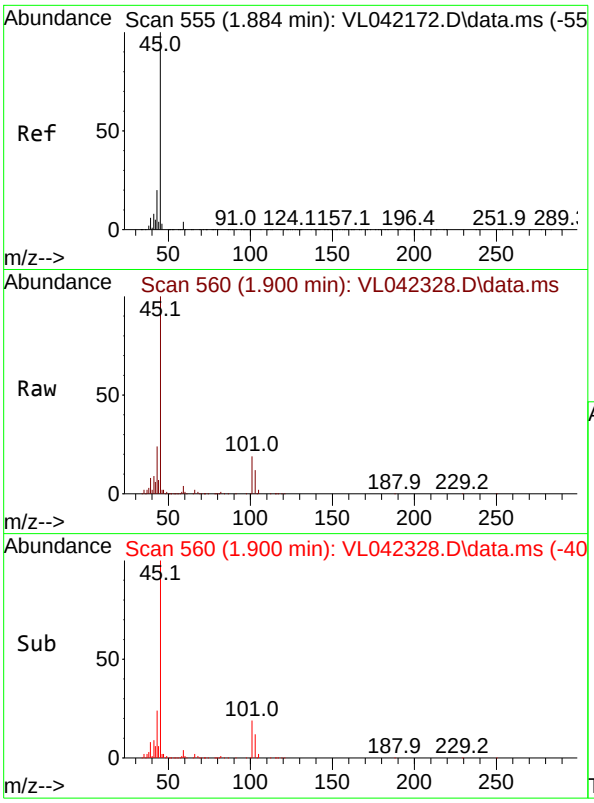


#18
1,1-Dichloroethene
Concen: 7.269 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 96 Resp: 69013

Ion	Ratio	Lower	Upper
96	100		
61	204.2	167.6	251.4
98	65.9	53.5	80.3



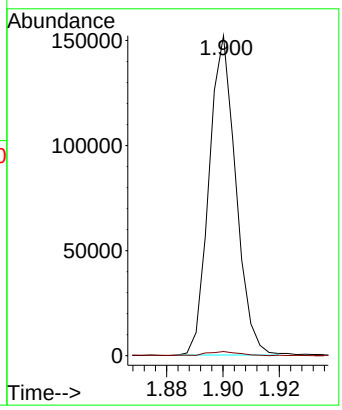


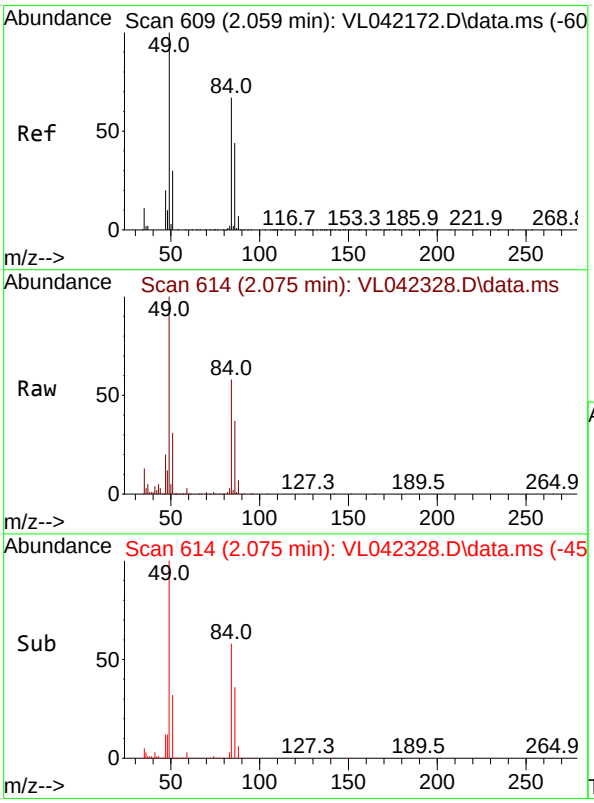
#19
Isopropyl Alcohol
Concen: 7.390 ppbv
RT: 1.900 min Scan# 5
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 45 Resp: 100289

Ion	Ratio	Lower	Upper
45	100		
58	47.9	36.9	55.3

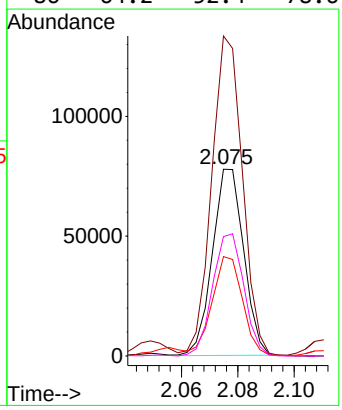


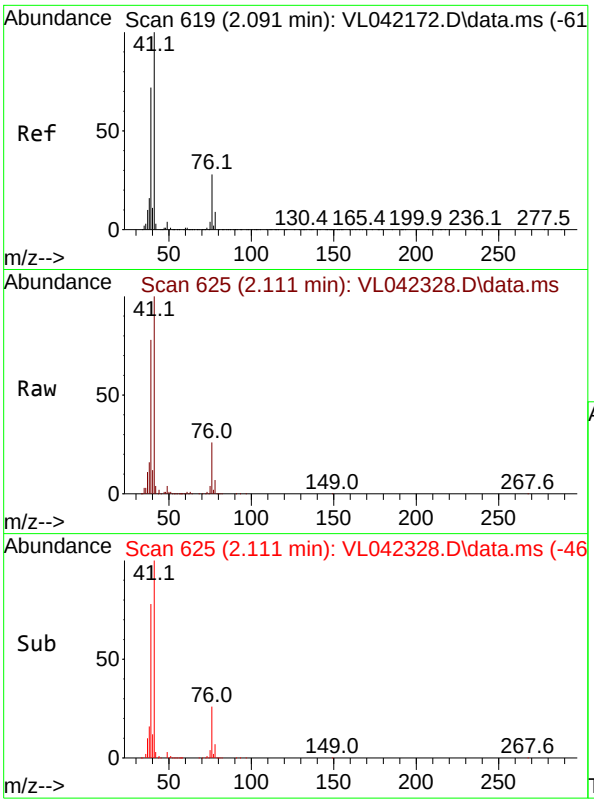


#20
Methylene Chloride
Concen: 6.704 ppbv
RT: 2.075 min Scan# 614
Delta R.T. 0.016 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 84 Resp: 60054

Ion	Ratio	Lower	Upper
84	100		
49	171.6	120.2	180.4
51	53.0	37.4	56.0
86	64.2	52.4	78.6



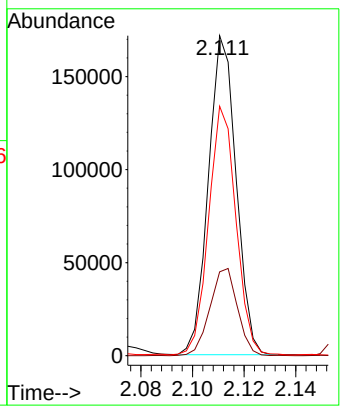


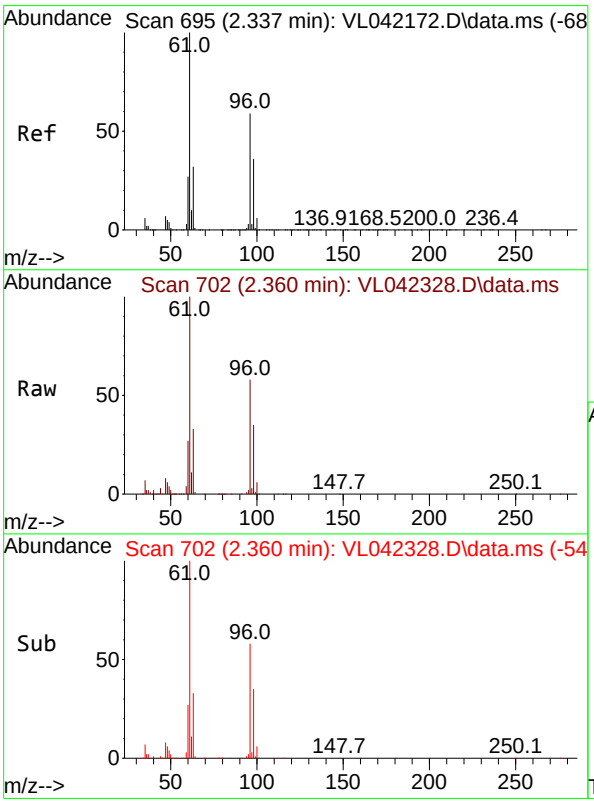
#21
Allyl Chloride
Concen: 7.534 ppbv
RT: 2.111 min Scan# 6
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 41 Resp: 127800

Ion	Ratio	Lower	Upper
41	100		
76	27.3	24.1	36.1
39	76.8	61.1	91.7

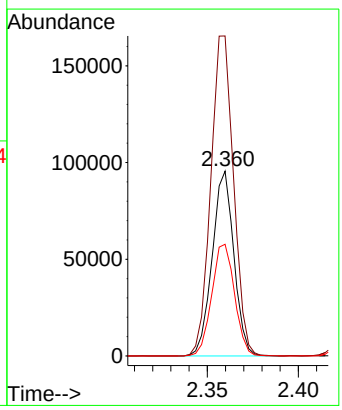


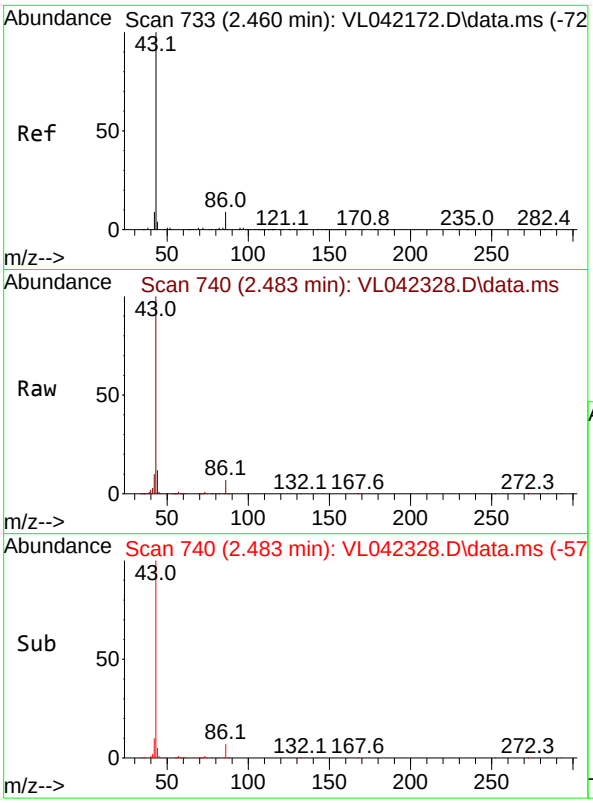


#22
trans-1,2-Dichloroethene
Concen: 7.198 ppbv
RT: 2.360 min Scan# 702
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 96 Resp: 78991

Ion	Ratio	Lower	Upper
96	100		
61	173.2	136.6	204.8
98	60.4	49.4	74.2



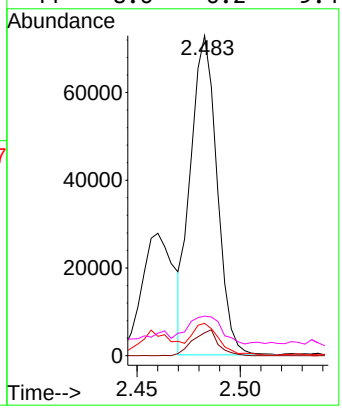


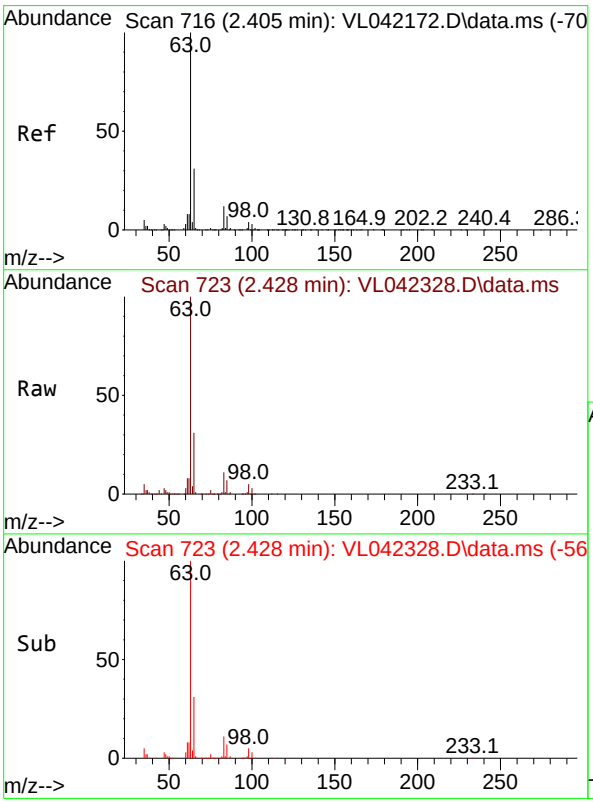
#23
Vinyl Acetate
Concen: 6.222 ppbv
RT: 2.483 min Scan# 74
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 43 Resp: 64777

Ion	Ratio	Lower	Upper
43	100		
86	7.2	5.5	8.3
42	9.9	8.6	13.0
44	8.6	6.2	9.4

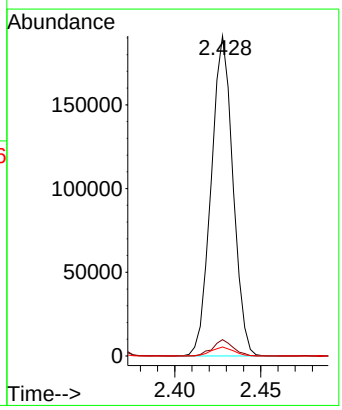


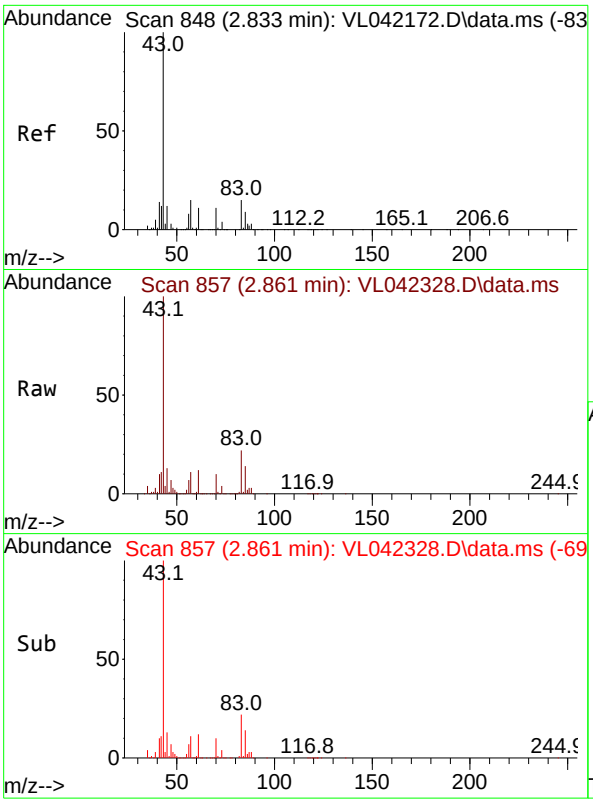


#24
1,1-Dichloroethane
Concen: 8.277 ppbv
RT: 2.428 min Scan# 723
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 63 Resp: 168373

Ion	Ratio	Lower	Upper
63	100		
98	5.1	2.3	6.8
100	2.8	1.6	4.7



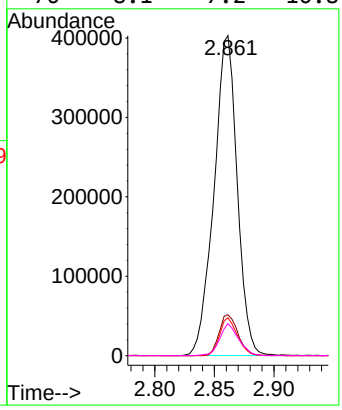


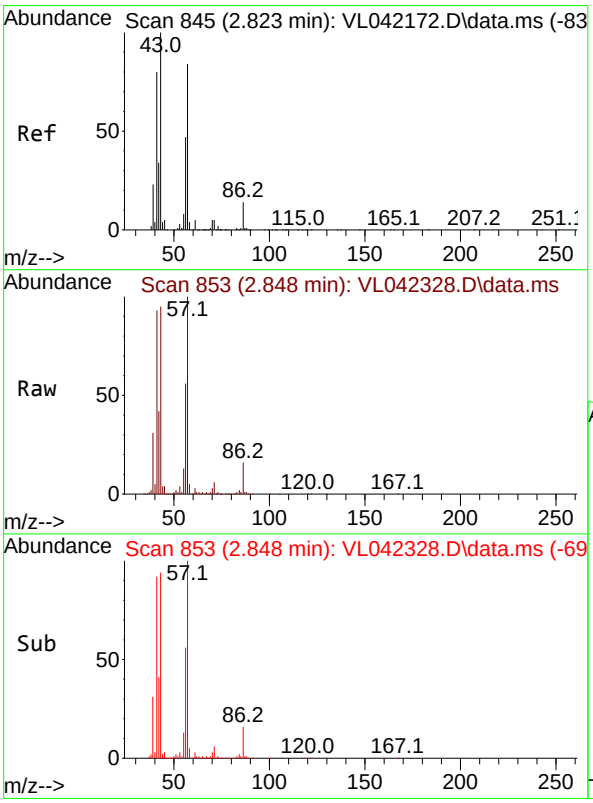
#25
Ethyl Acetate
Concen: 8.732 ppbv
RT: 2.861 min Scan# 8
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 43 Resp: 545140

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.2	12.2
61	9.1	7.3	10.9
70	8.1	7.2	10.8

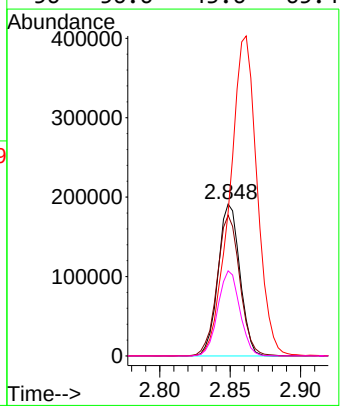


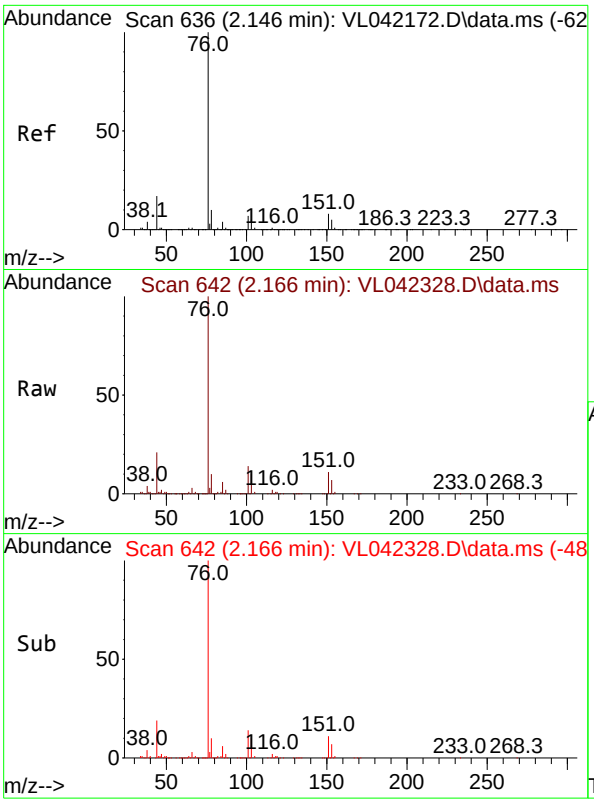


#26
Hexane
Concen: 8.528 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 57 Resp: 205629

Ion	Ratio	Lower	Upper
57	100		
41	97.2	76.6	114.8
43	265.7	207.8	311.8
56	56.6	43.6	65.4



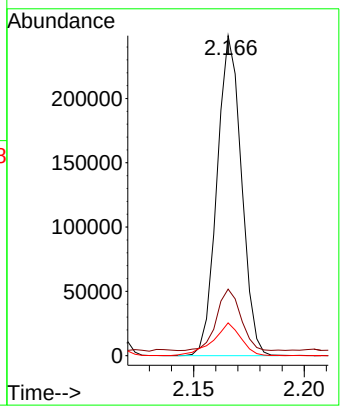


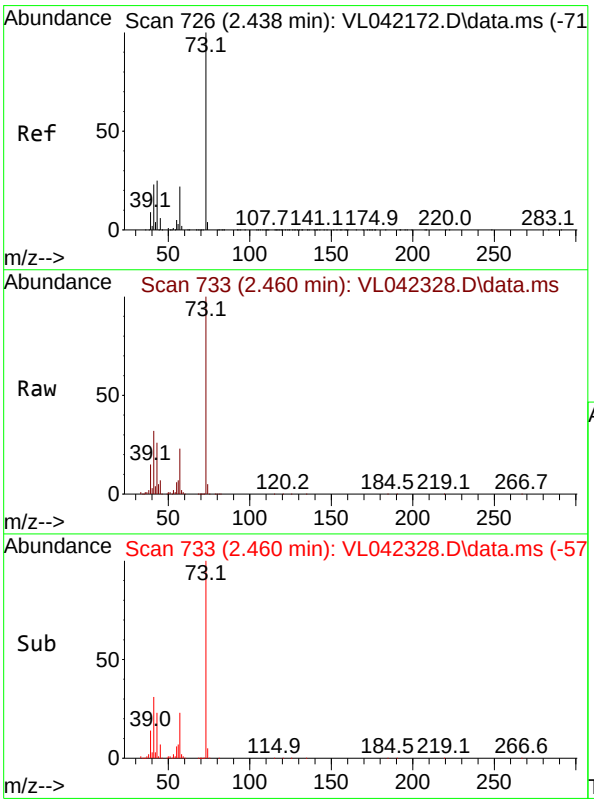
#27
Carbon Disulfide
Concen: 7.402 ppbv
RT: 2.166 min Scan# 64
Delta R.T. 0.019 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 76 Resp: 191388

Ion	Ratio	Lower	Upper
76	100		
44	19.3	14.7	22.1
78	11.6	9.3	13.9

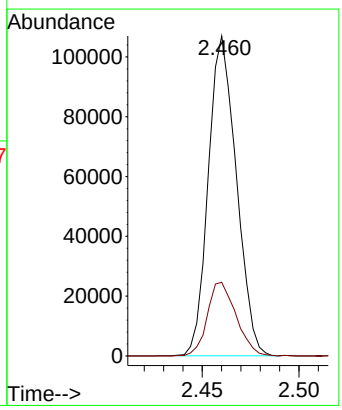


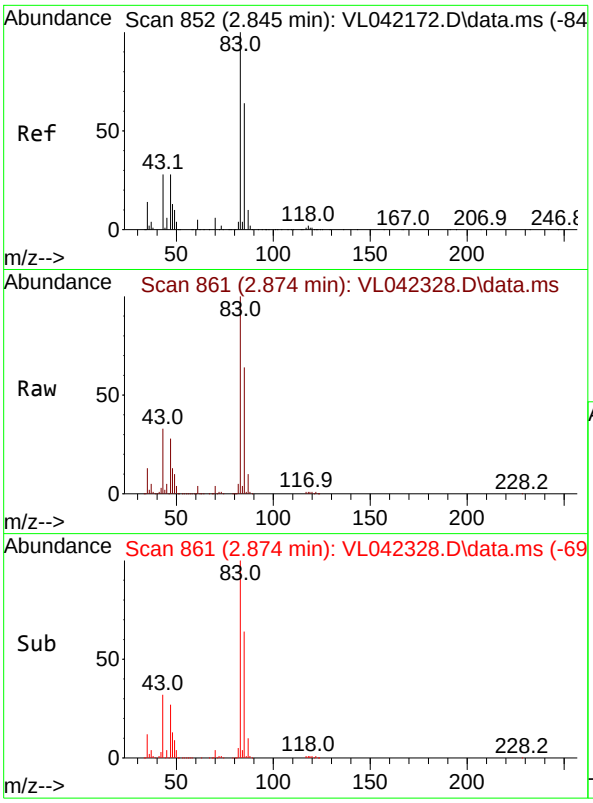


#28
Methyl tert-Butyl Ether
Concen: 7.172 ppbv
RT: 2.460 min Scan# 733
Delta R.T. 0.022 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 73 Resp: 107667

Ion	Ratio	Lower	Upper
73	100		
57	23.7	20.5	30.7



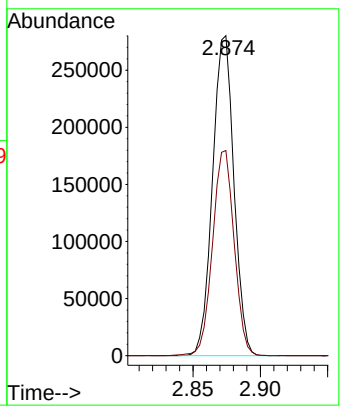


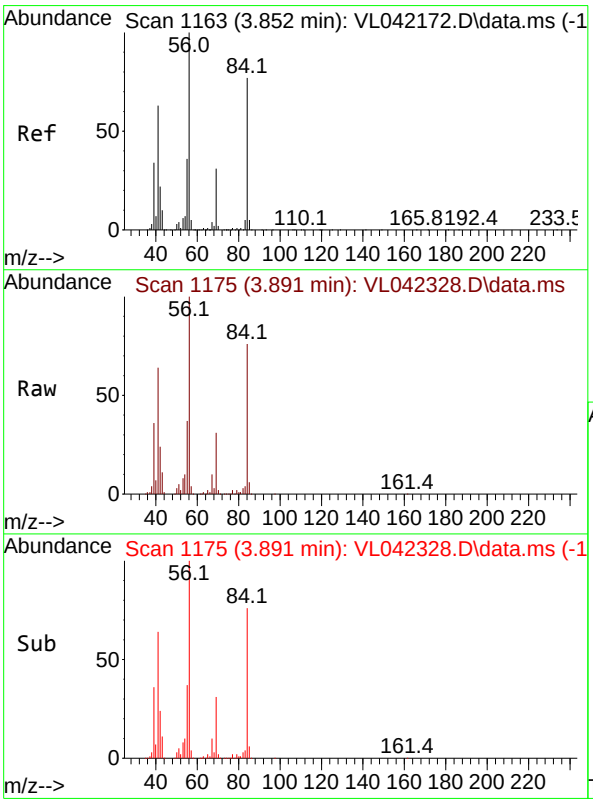
#29
Chloroform
Concen: 8.763 ppbv
RT: 2.874 min Scan# 8
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 83 Resp: 309262

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.4	77.2

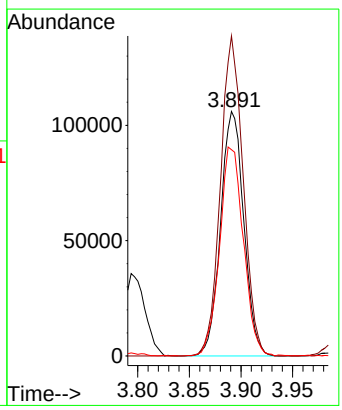


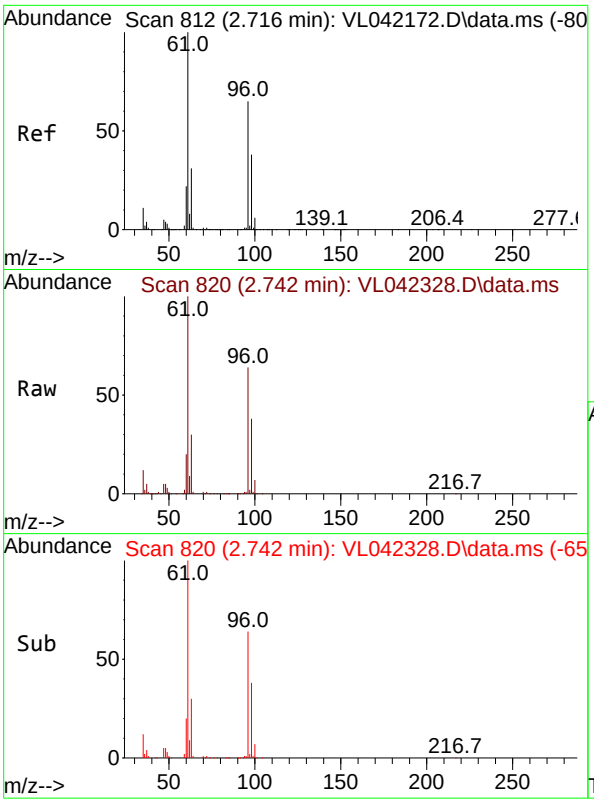


#30
Cyclohexane
Concen: 7.924 ppbv
RT: 3.891 min Scan# 1175
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 84 Resp: 165914

Ion	Ratio	Lower	Upper
84	100		
56	127.7	102.8	154.2
41	87.6	66.5	99.7



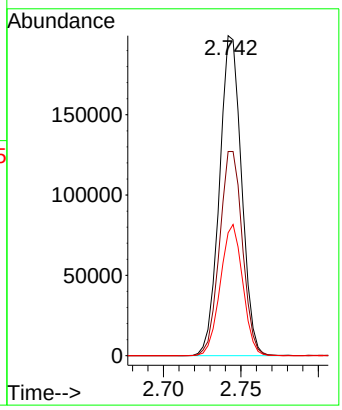


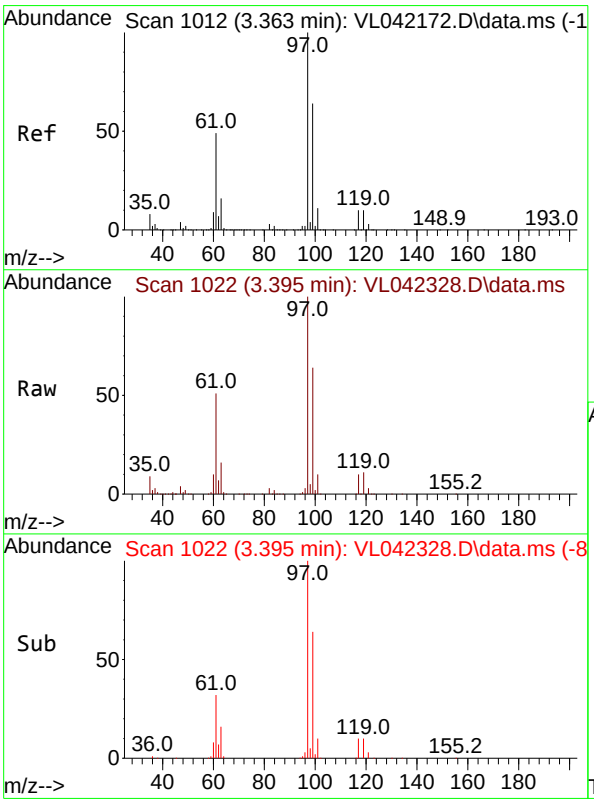
#31
cis-1,2-Dichloroethene
Concen: 8.074 ppbv
RT: 2.742 min Scan# 8
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 61 Resp: 197651

Ion	Ratio	Lower	Upper
61	100		
96	63.8	51.8	77.8
98	38.4	30.6	46.0

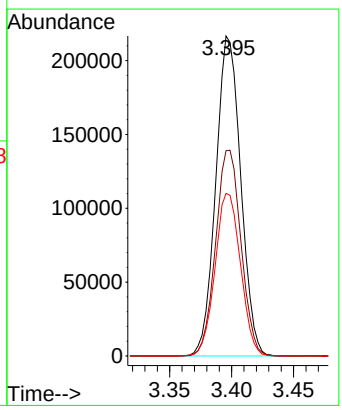


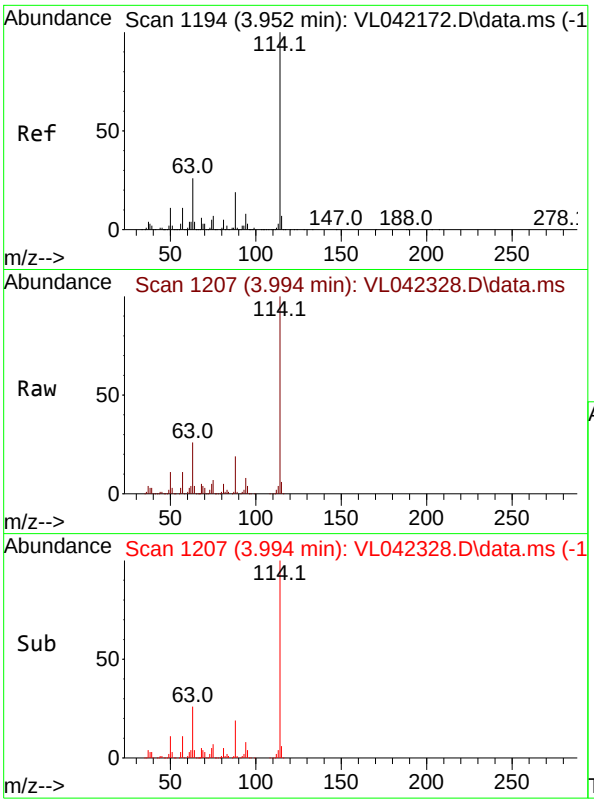


#32
1,1,1-Trichloroethane
Concen: 7.528 ppbv
RT: 3.395 min Scan# 1022
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 97 Resp: 304143

Ion	Ratio	Lower	Upper
97	100		
99	65.2	51.5	77.3
61	51.8	38.7	58.1



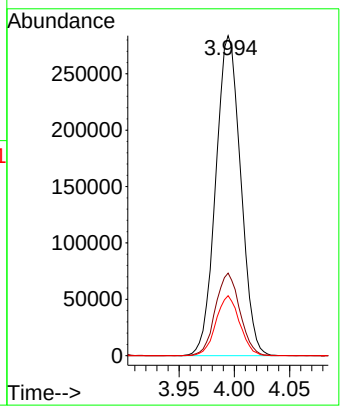


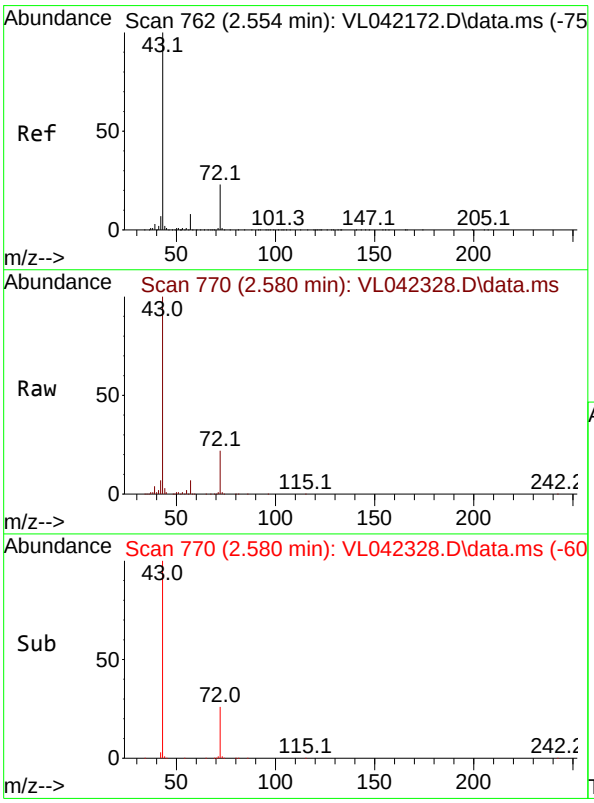
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.994 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:114 Resp: 444595

Ion	Ratio	Lower	Upper
114	100		
63	25.4	20.7	31.1
88	17.8	15.0	22.4

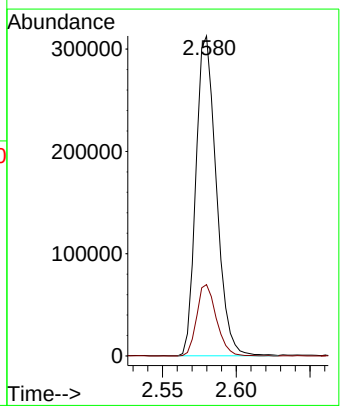


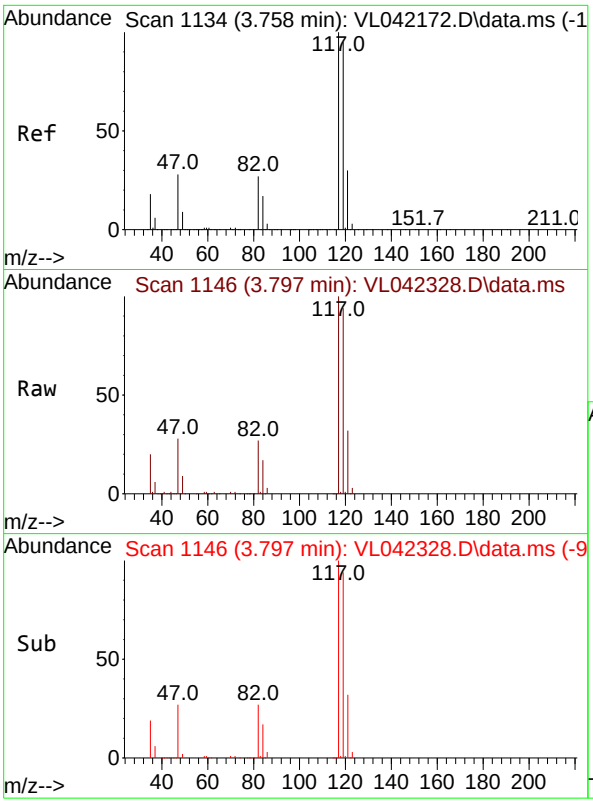


#34
2-Butanone
Concen: 9.323 ppbv
RT: 2.580 min Scan# 770
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 300576

Ion	Ratio	Lower	Upper
43	100		
72	21.6	18.2	27.2



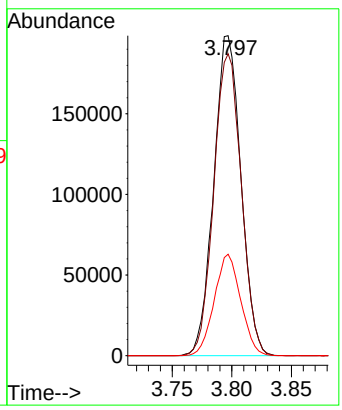


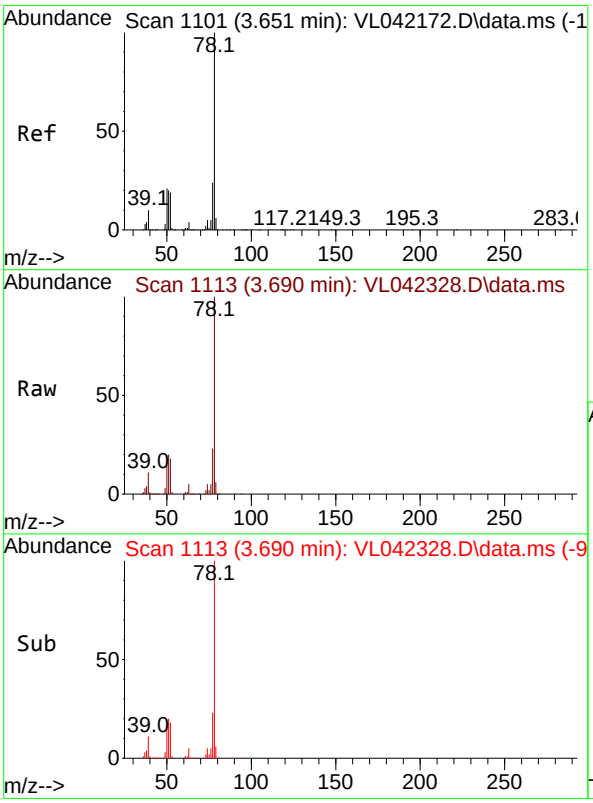
#35
Carbon Tetrachloride
Concen: 9.065 ppbv
RT: 3.797 min Scan# 11
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:117 Resp: 314849

Ion	Ratio	Lower	Upper
117	100		
119	94.3	76.2	114.2
121	31.7	24.2	36.4

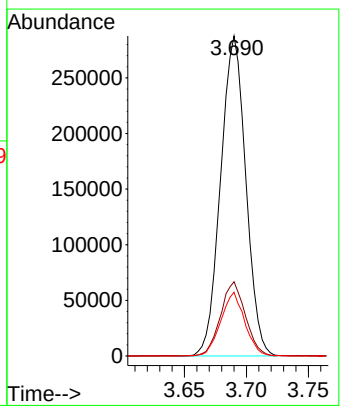


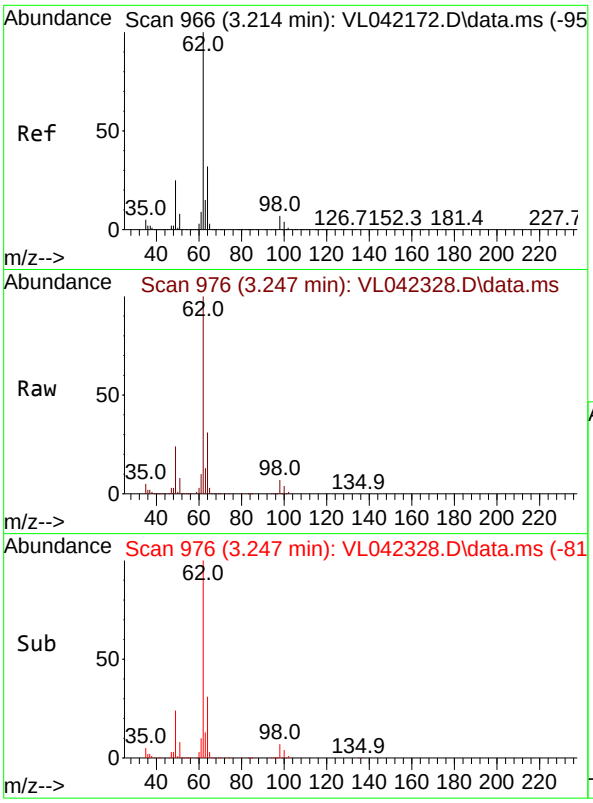


#36
Benzene
Concen: 9.256 ppbv
RT: 3.690 min Scan# 1113
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 78 Resp: 407959

Ion	Ratio	Lower	Upper
78	100		
77	23.1	19.1	28.7
50	19.9	16.6	24.8



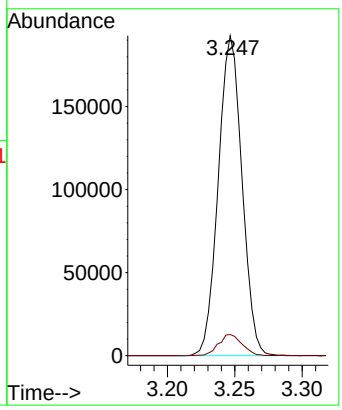


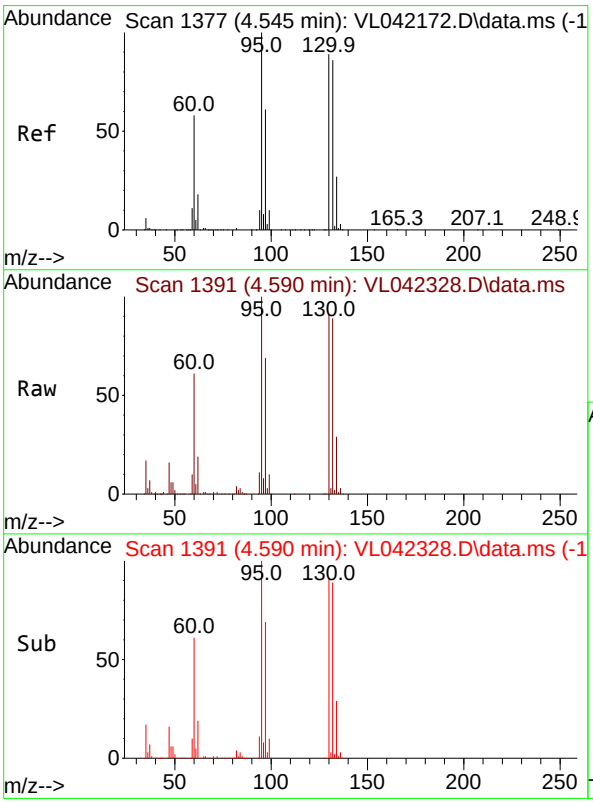
#37
1,2-Dichloroethane
Concen: 9.337 ppbv
RT: 3.247 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 62 Resp: 235609

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.4	8.2

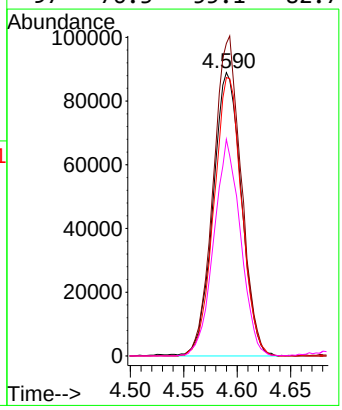


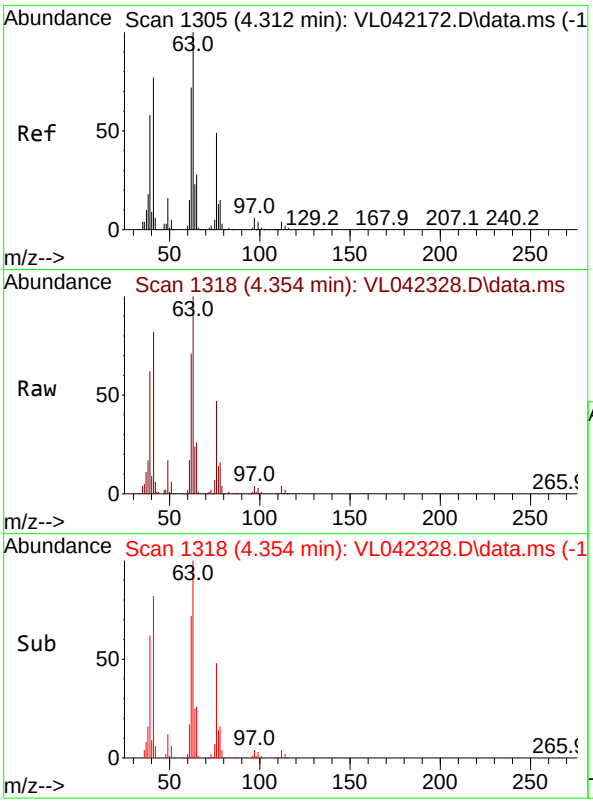


#38
Trichloroethene
Concen: 8.954 ppbv
RT: 4.590 min Scan# 1391
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:130 Resp: 164664

Ion	Ratio	Lower	Upper
130	100		
95	110.3	89.8	134.8
132	98.2	77.4	116.2
97	76.3	55.1	82.7



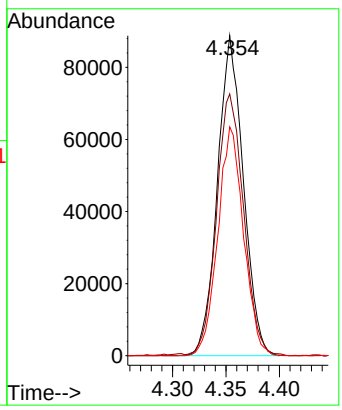


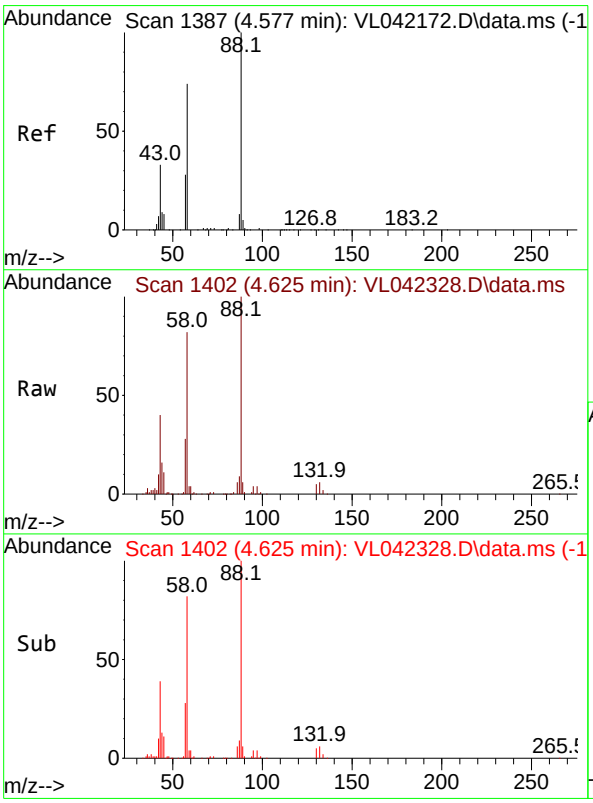
#39
1,2-Dichloropropane
Concen: 9.299 ppbv
RT: 4.354 min Scan# 1
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 63 Resp: 149260

Ion	Ratio	Lower	Upper
63	100		
41	81.2	61.7	92.5
62	71.5	57.6	86.4

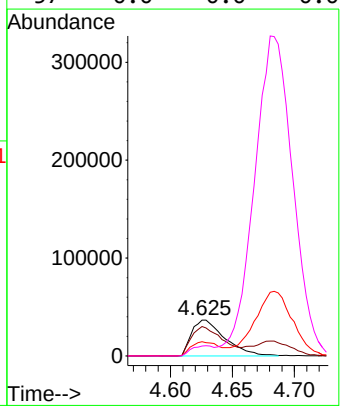


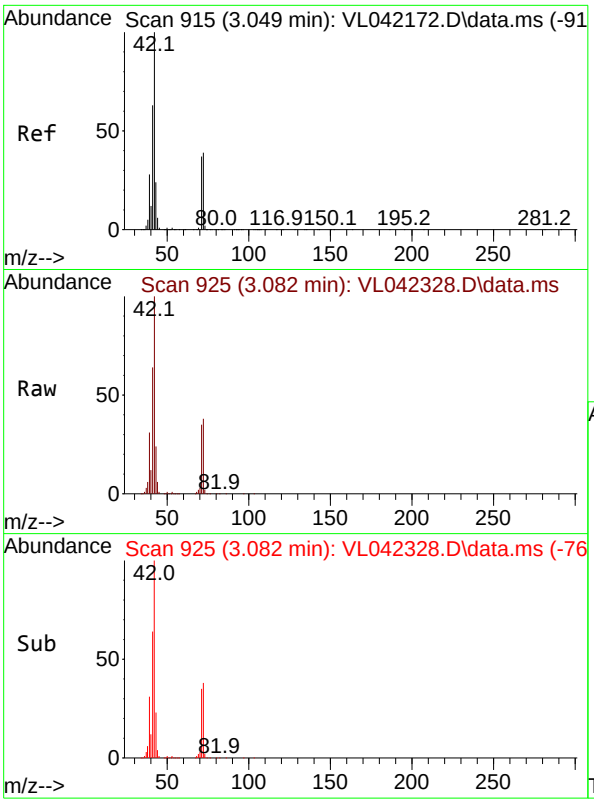


#40
1,4-Dioxane
Concen: 8.072 ppbv
RT: 4.625 min Scan# 1402
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 88 Resp: 68773

Ion	Ratio	Lower	Upper
88	100		
58	75.9	62.7	94.1
43	34.0	23.0	34.4
57	0.0	0.0	0.0



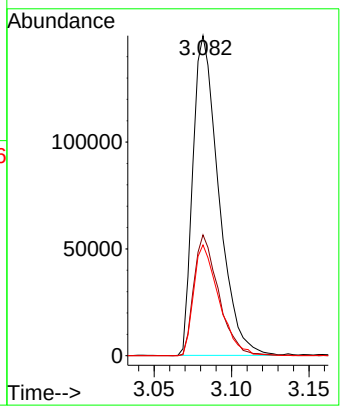


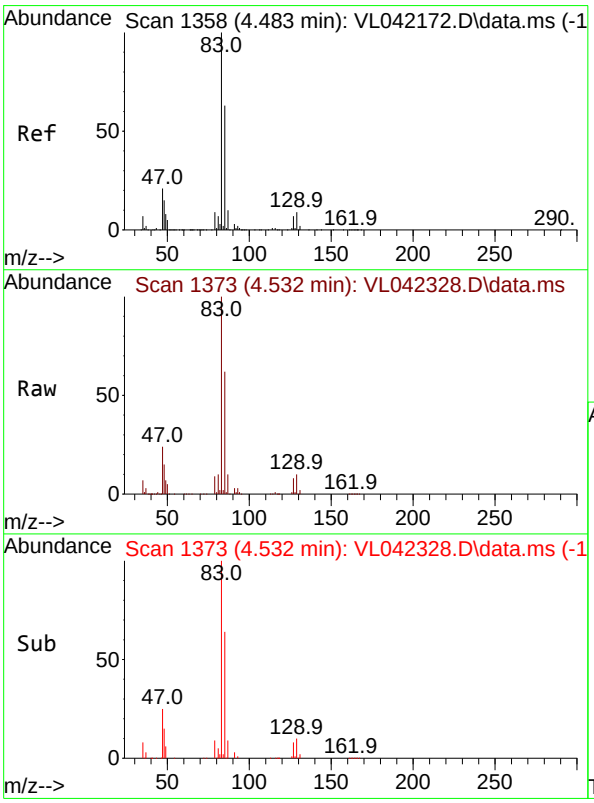
#41
Tetrahydrofuran
Concen: 9.361 ppbv
RT: 3.082 min Scan# 9
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 42 Resp: 173776

Ion	Ratio	Lower	Upper
42	100		
72	36.4	31.4	47.0
71	33.9	30.2	45.4

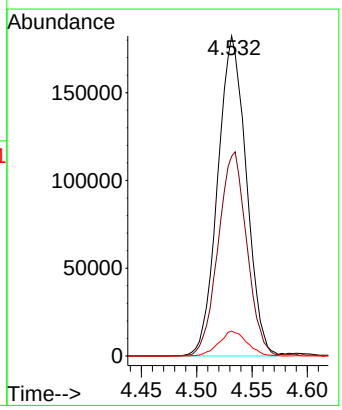


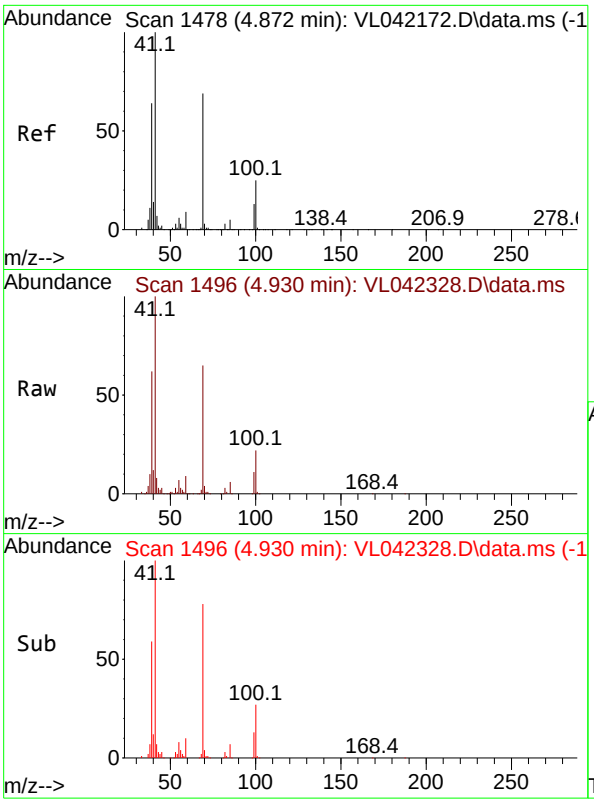


#42
Bromodichloromethane
Concen: 9.414 ppbv
RT: 4.532 min Scan# 1373
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 83 Resp: 327497

Ion	Ratio	Lower	Upper
83	100		
85	62.4	50.5	75.7
127	7.7	5.9	8.9



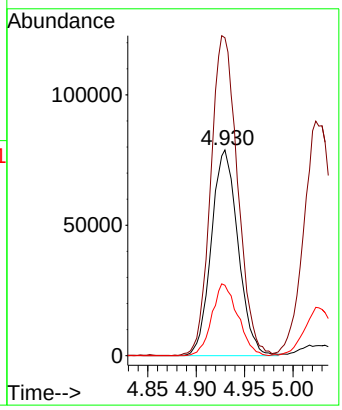


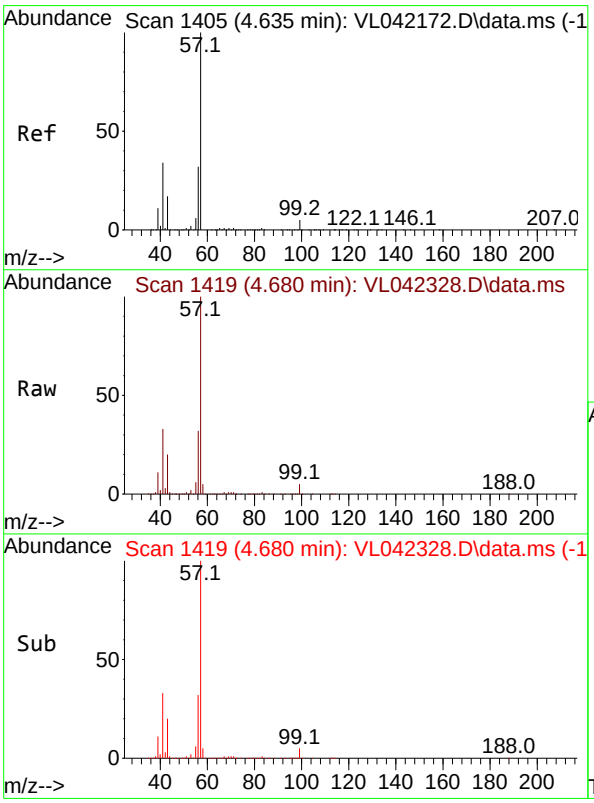
#43
Methyl Methacrylate
Concen: 8.121 ppbv
RT: 4.930 min Scan# 14
Delta R.T. 0.058 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 69 Resp: 151531

Ion	Ratio	Lower	Upper
69	100		
41	156.5	123.8	185.6
100	33.9	28.4	42.6

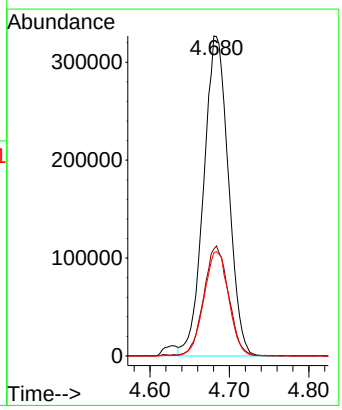


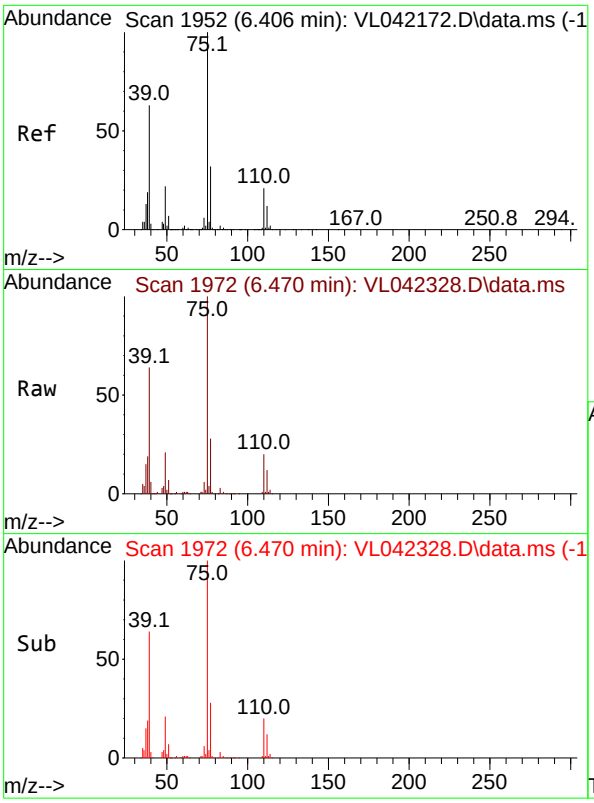


#44
2,2,4-Trimethylpentane
Concen: 9.503 ppbv
RT: 4.680 min Scan# 1419
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 57 Resp: 707832

Ion	Ratio	Lower	Upper
57	100		
41	34.7	26.8	40.2
56	32.7	25.6	38.4



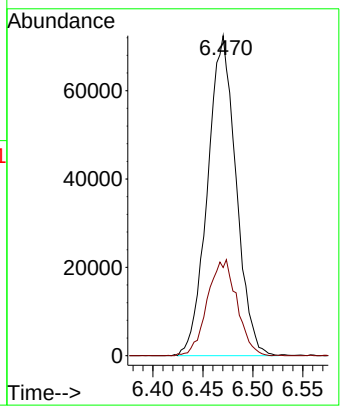


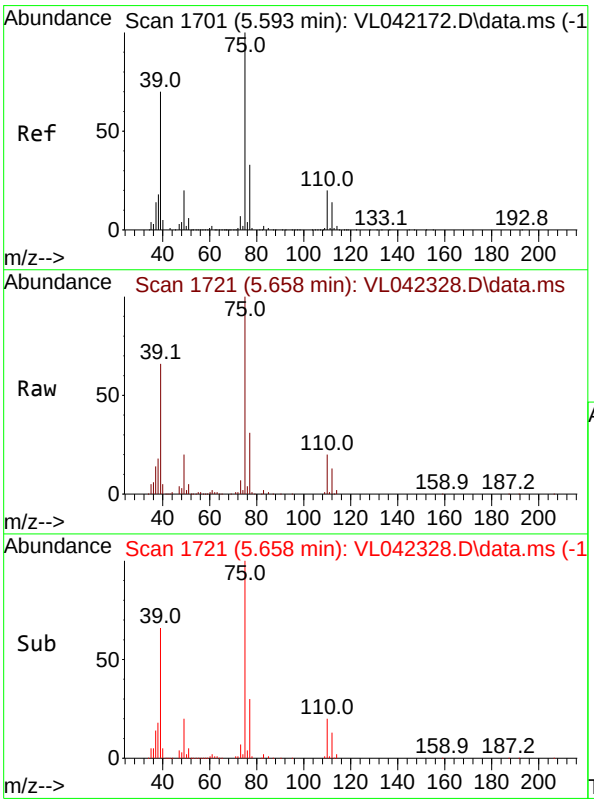
#45
t-1,3-Dichloropropene
Concen: 7.179 ppbv
RT: 6.470 min Scan# 1
Delta R.T. 0.065 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 75 Resp: 143714

Ion	Ratio	Lower	Upper
75	100		
77	27.5	26.0	39.0

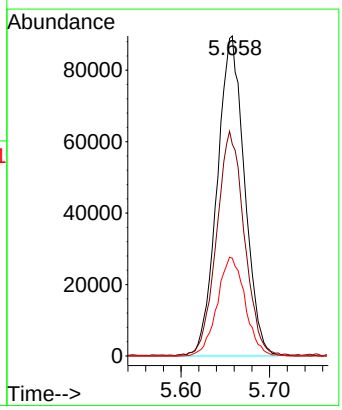


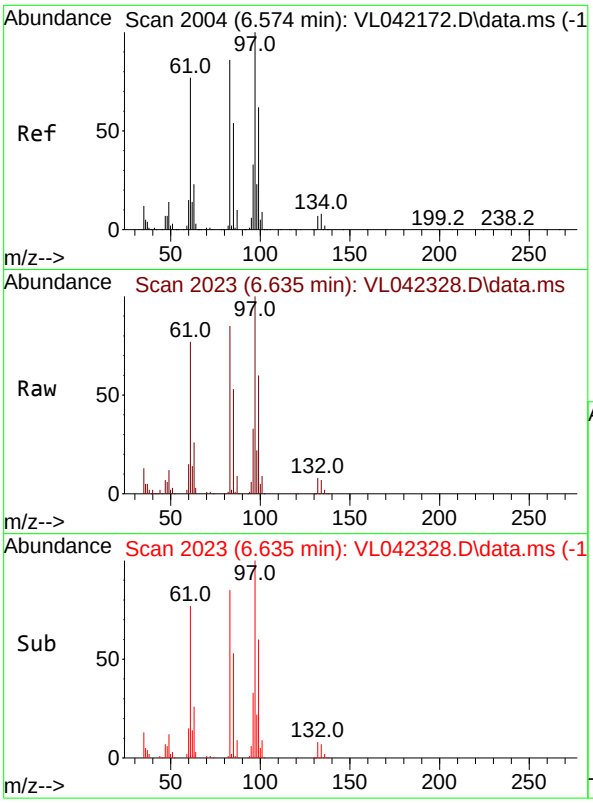


#46
cis-1,3-Dichloropropene
Concen: 7.841 ppbv
RT: 5.658 min Scan# 1721
Delta R.T. 0.065 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 75 Resp: 192419

Ion	Ratio	Lower	Upper
75	100		
39	65.8	55.8	83.6
77	30.6	26.0	39.0



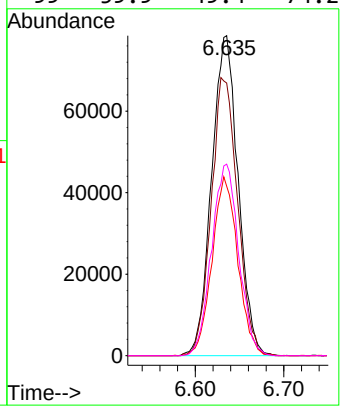


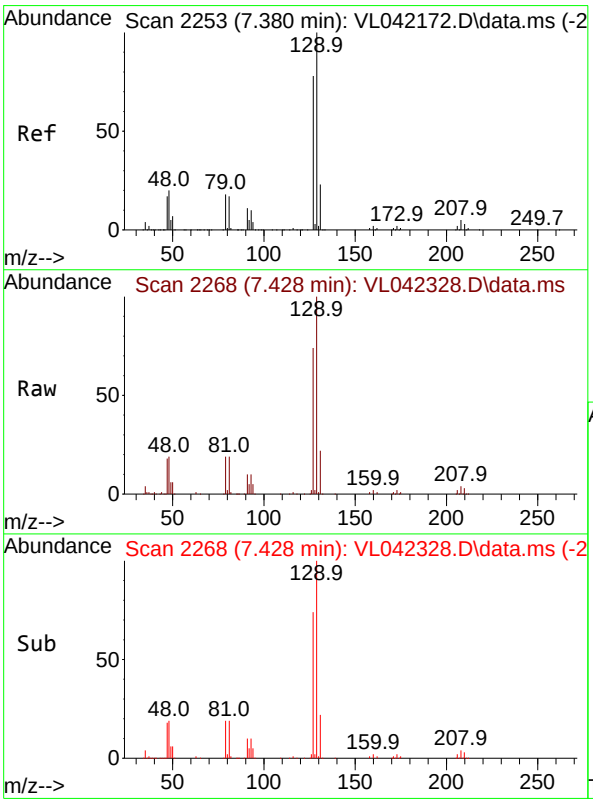
#47
1,1,2-Trichloroethane
Concen: 9.621 ppbv
RT: 6.635 min Scan# 2
Delta R.T. 0.061 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 97 Resp: 163251

Ion	Ratio	Lower	Upper
97	100		
83	85.2	69.2	103.8
85	52.9	43.1	64.7
99	59.9	49.4	74.2

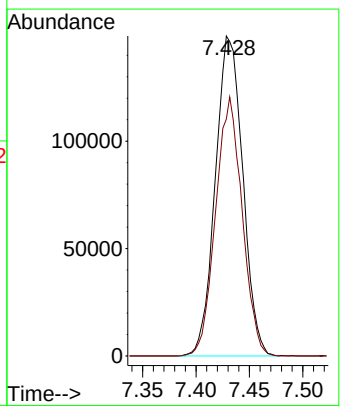


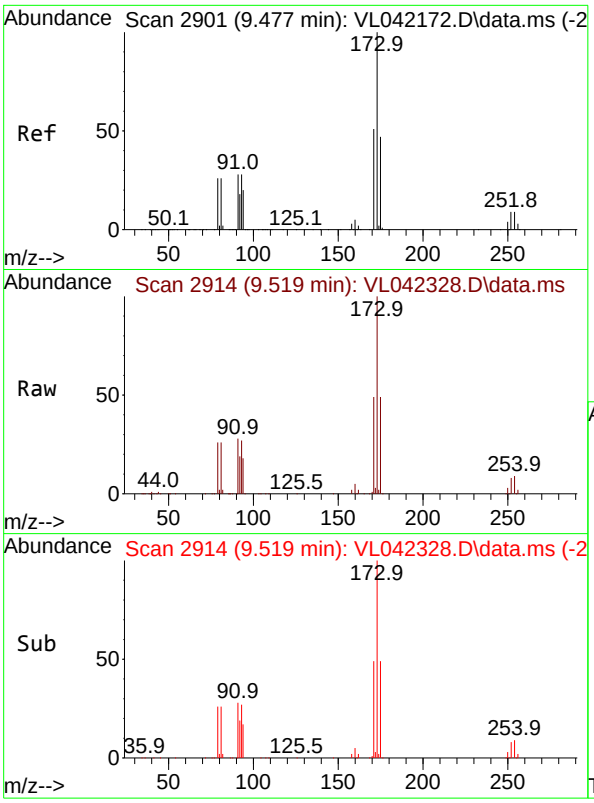


#48
Dibromochloromethane
Concen: 9.256 ppbv
RT: 7.428 min Scan# 2268
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:129 Resp: 266192

Ion	Ratio	Lower	Upper
129	100		
127	78.3	39.1	117.2



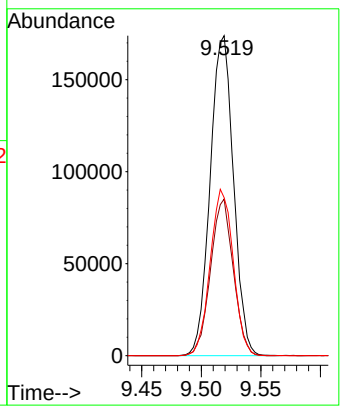


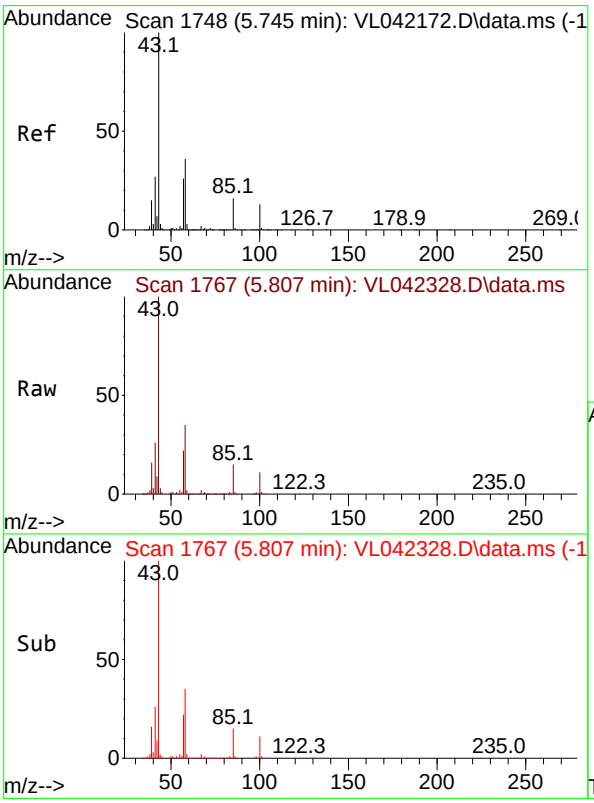
#49
Bromoform
Concen: 9.168 ppbv
RT: 9.519 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:173 Resp: 236686

Ion	Ratio	Lower	Upper
173	100		
175	47.8	38.6	57.8
171	51.4	41.8	62.6

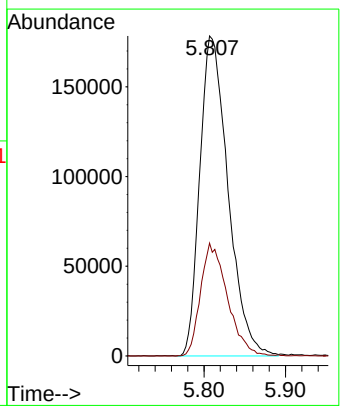


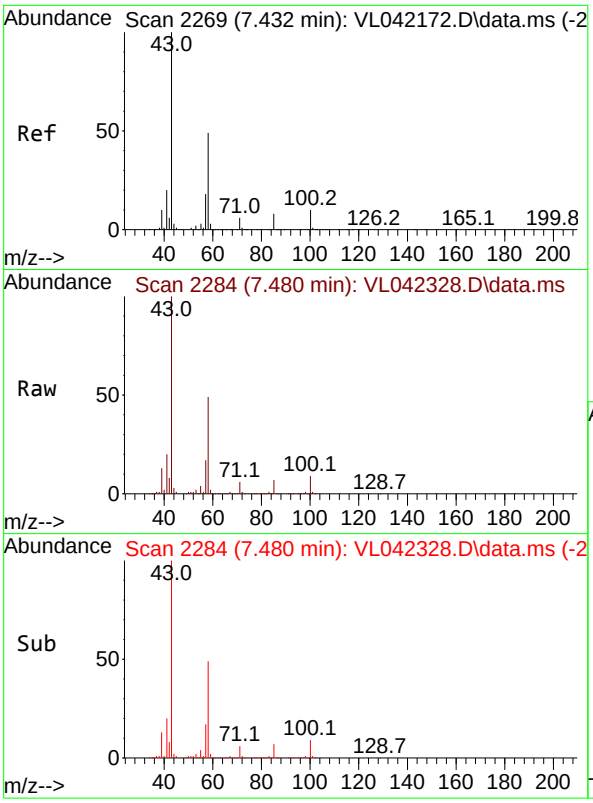


#50
4-Methyl-2-Pentanone
Concen: 8.416 ppbv
RT: 5.807 min Scan# 1767
Delta R.T. 0.061 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 43 Resp: 429988

Ion	Ratio	Lower	Upper
43	100		
58	33.5	29.0	43.6



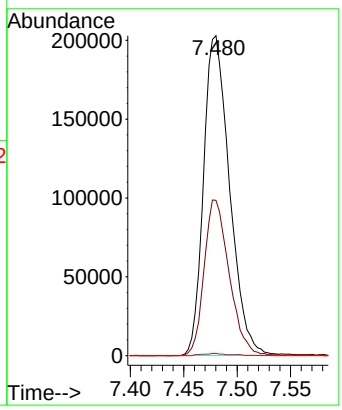


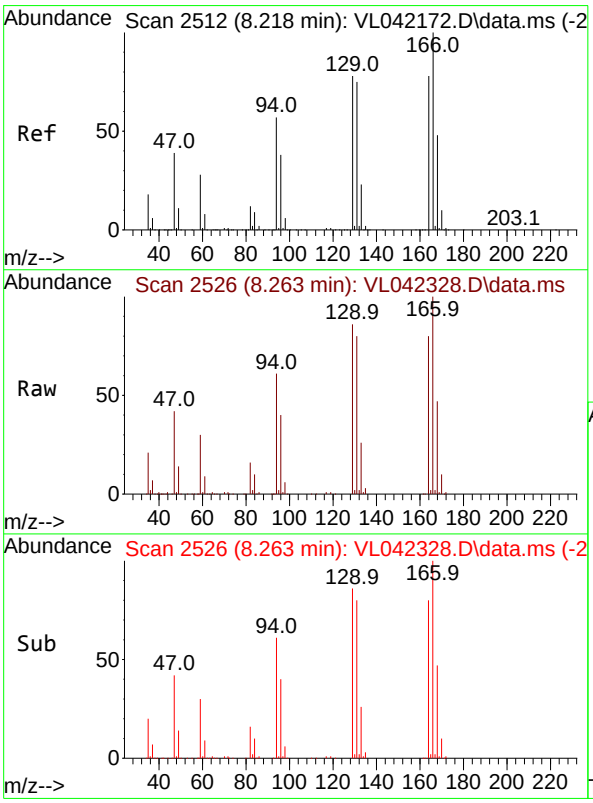
#51
2-Hexanone
Concen: 8.203 ppbv
RT: 7.480 min Scan# 2
Delta R.T. 0.048 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 43 Resp: 344172

Ion	Ratio	Lower	Upper
43	100		
58	47.1	39.7	59.5
98	0.8	0.1	0.1#

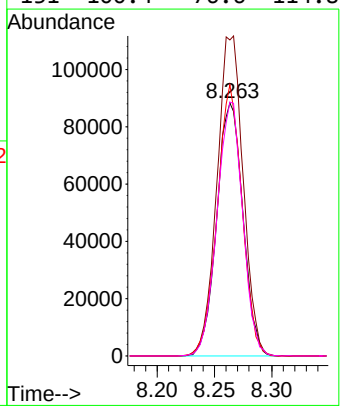


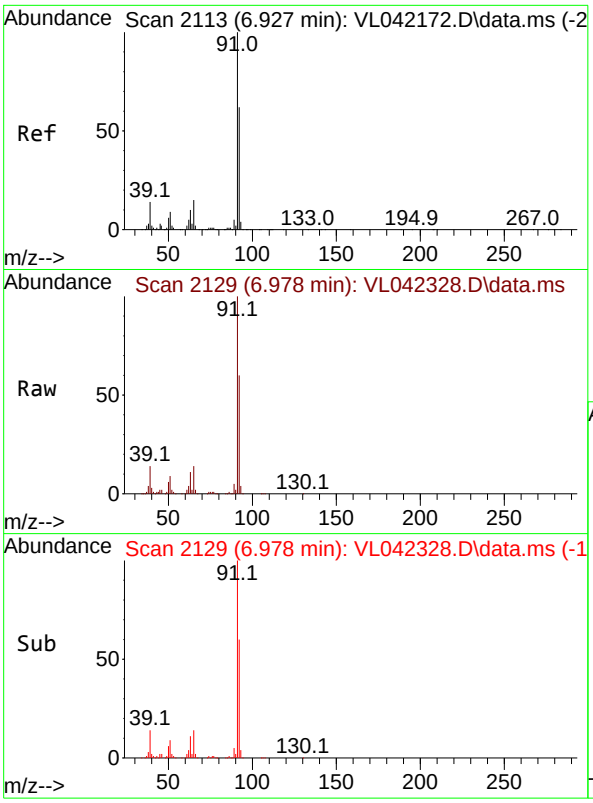


#52
Tetrachloroethene
Concen: 8.000 ppbv
RT: 8.263 min Scan# 2526
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:164 Resp: 139845

Ion	Ratio	Lower	Upper
164	100		
166	124.9	102.5	153.7
129	107.2	79.8	119.8
131	100.4	76.6	114.8



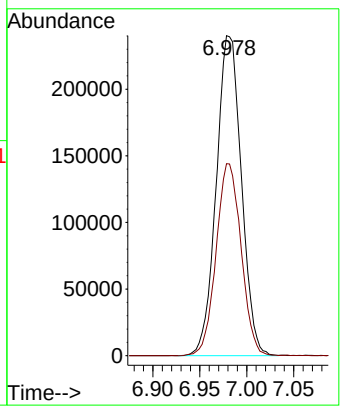


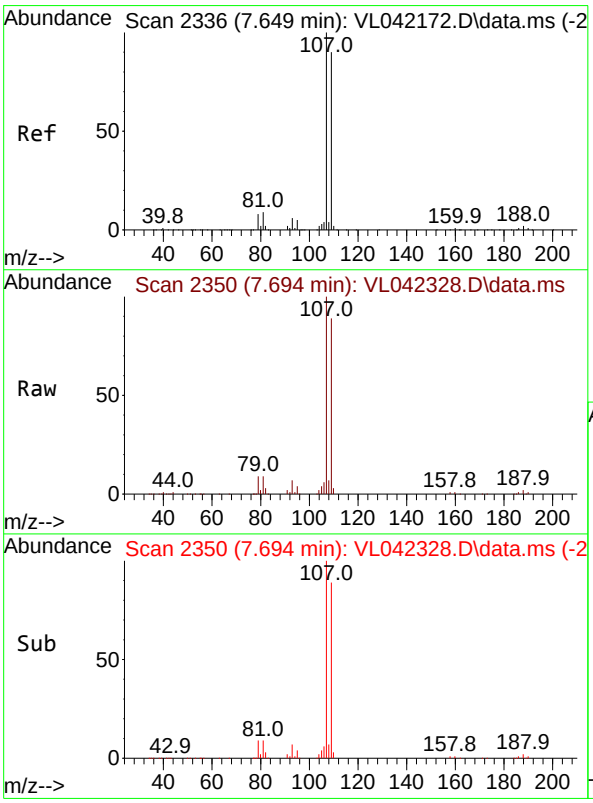
#53
Toluene
Concen: 8.559 ppbv
RT: 6.978 min Scan# 21
Delta R.T. 0.052 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 91 Resp: 447178

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.4	72.6

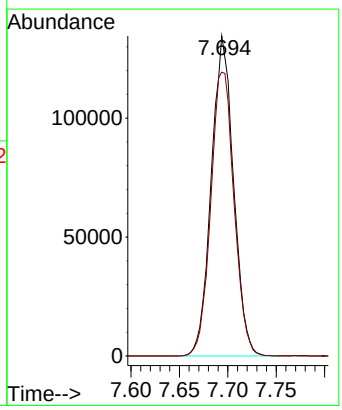


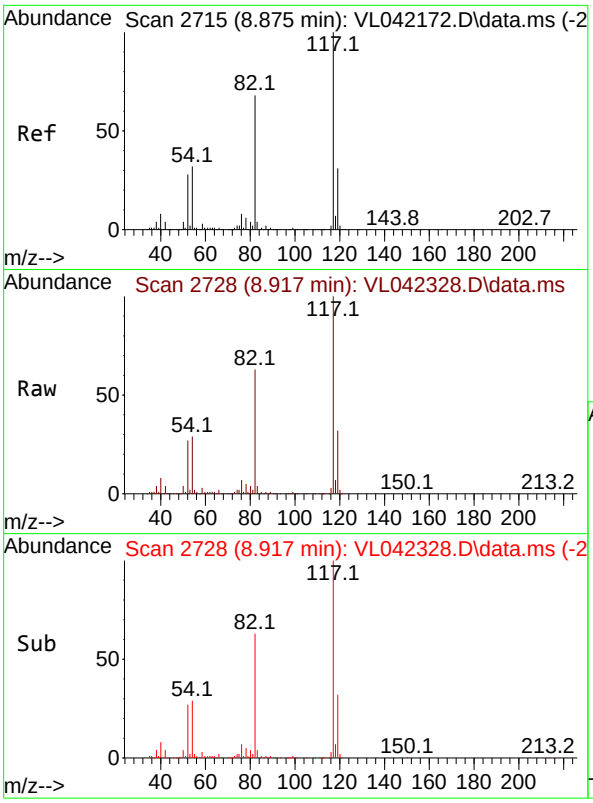


#54
1,2-Dibromoethane
Concen: 9.089 ppbv
RT: 7.694 min Scan# 2350
Delta R.T. 0.045 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:107 Resp: 214982

Ion	Ratio	Lower	Upper
107	100		
109	88.7	72.2	108.4



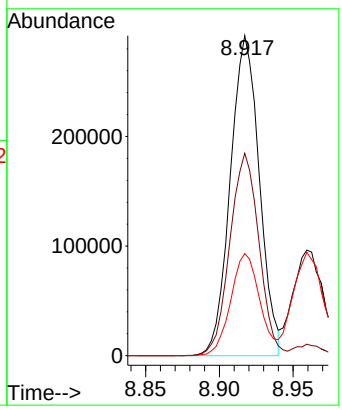


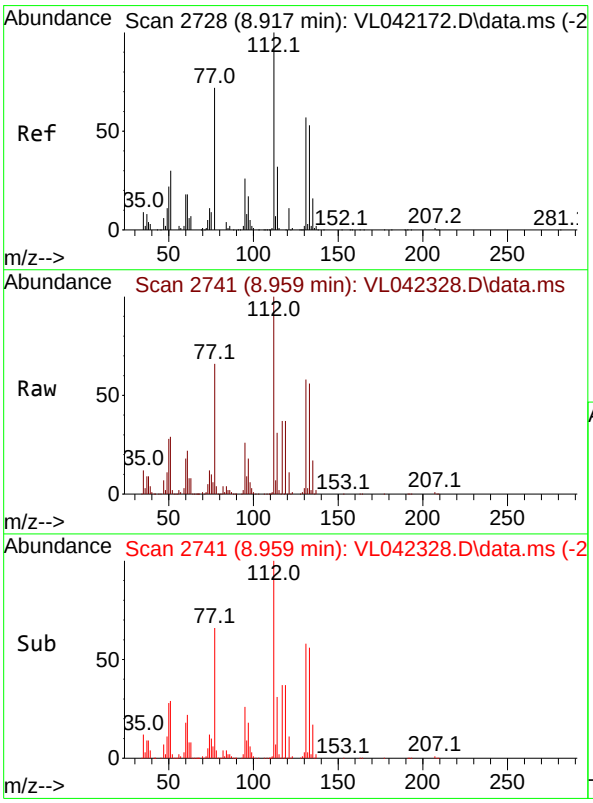
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.917 min Scan# 2
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:117 Resp: 399604

Ion	Ratio	Lower	Upper
117	100		
82	66.8	55.8	83.6
119	32.4	25.5	38.3

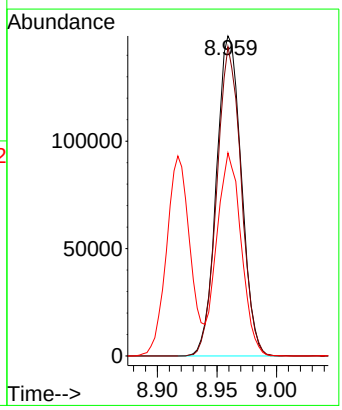


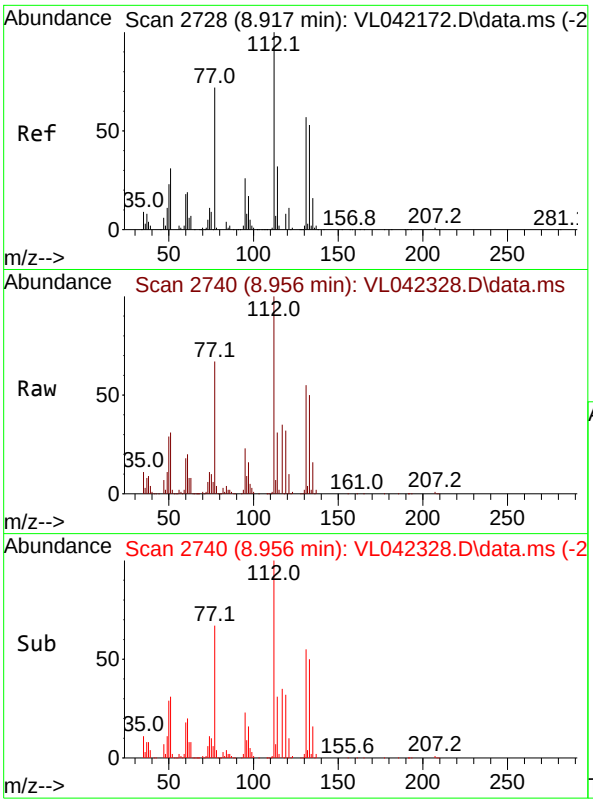


#56
1,1,1,2-Tetrachloroethane
Concen: 9.855 ppbv
RT: 8.959 min Scan# 2741
Delta R.T. 0.042 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:131 Resp: 216770

Ion	Ratio	Lower	Upper
131	100		
133	94.3	76.6	114.8
119	59.8	49.8	74.6



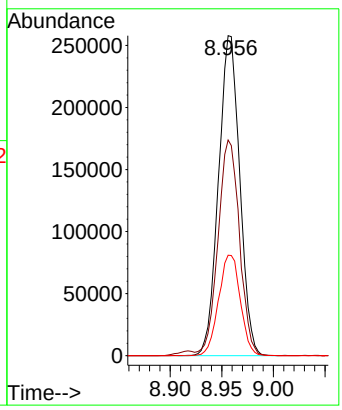


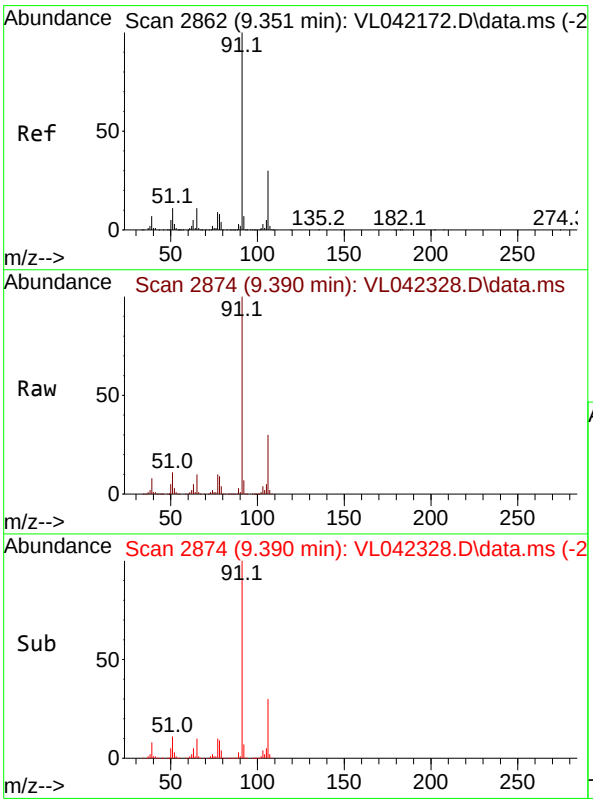
#57
Chlorobenzene
Concen: 9.739 ppbv
RT: 8.956 min Scan# 2
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:112 Resp: 369132

Ion	Ratio	Lower	Upper
112	100		
77	67.4	58.2	87.2
114	31.4	29.1	35.5

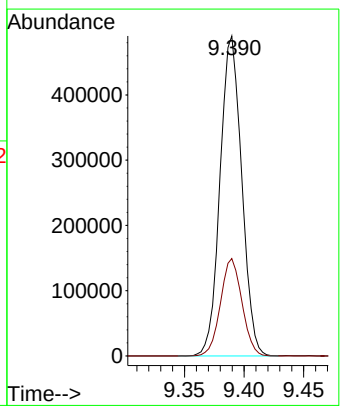


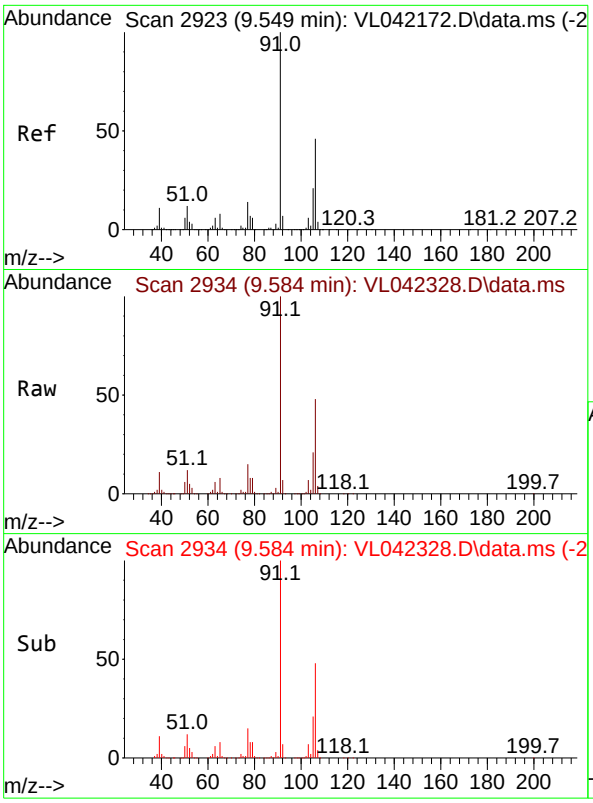


#58
Ethyl Benzene
Concen: 8.716 ppbv
RT: 9.390 min Scan# 2874
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 618669

Ion	Ratio	Lower	Upper
91	100		
106	30.4	24.2	36.2



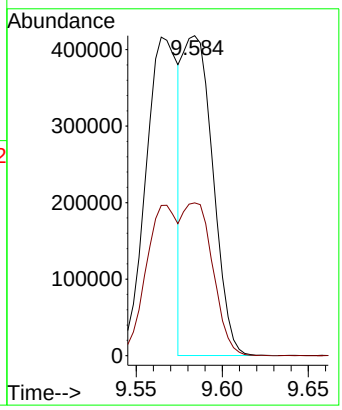


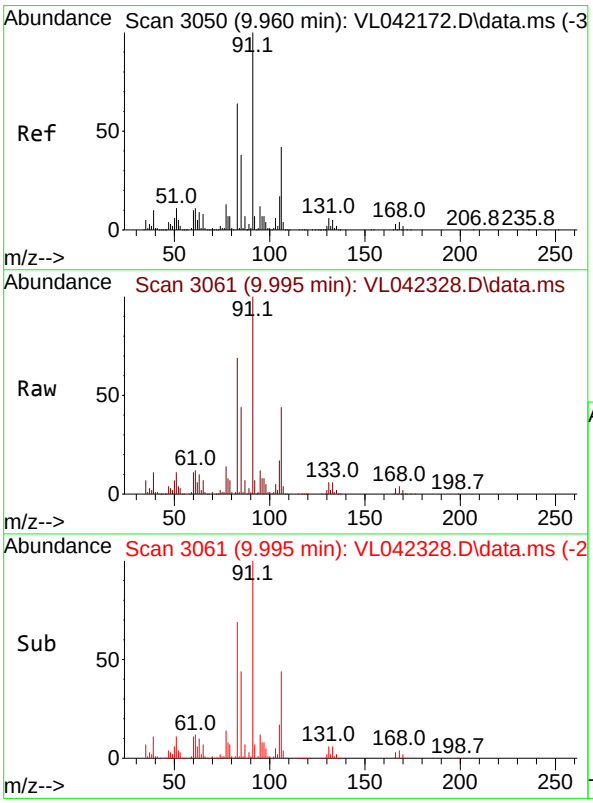
#59
m/p-Xylene
Concen: 9.001 ppbv
RT: 9.584 min Scan# 2
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 91 Resp: 510187

Ion	Ratio	Lower	Upper
91	100		
106	97.2	36.4	54.6#

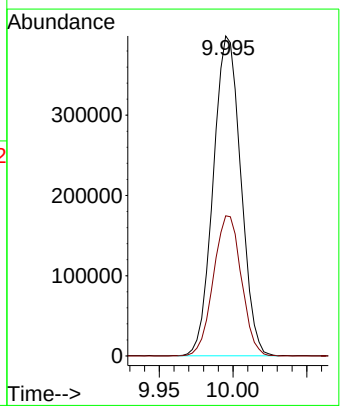


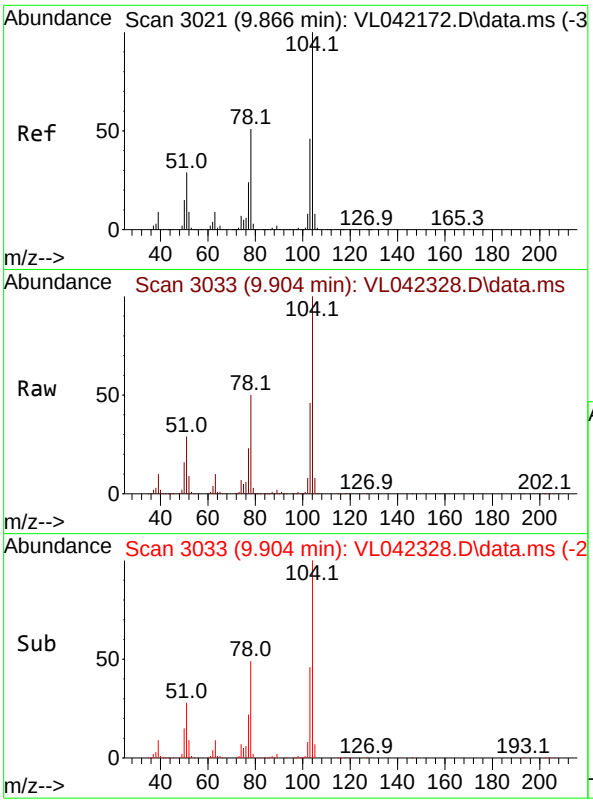


#60
o-Xylene
Concen: 9.107 ppbv
RT: 9.995 min Scan# 3061
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 517471

Ion	Ratio	Lower	Upper
91	100		
106	44.5	20.8	62.5



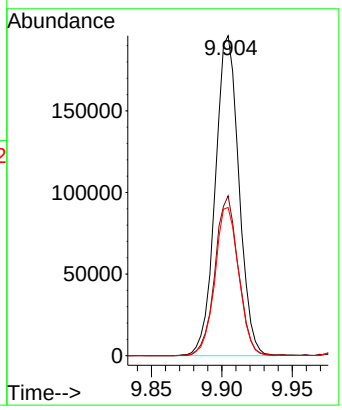


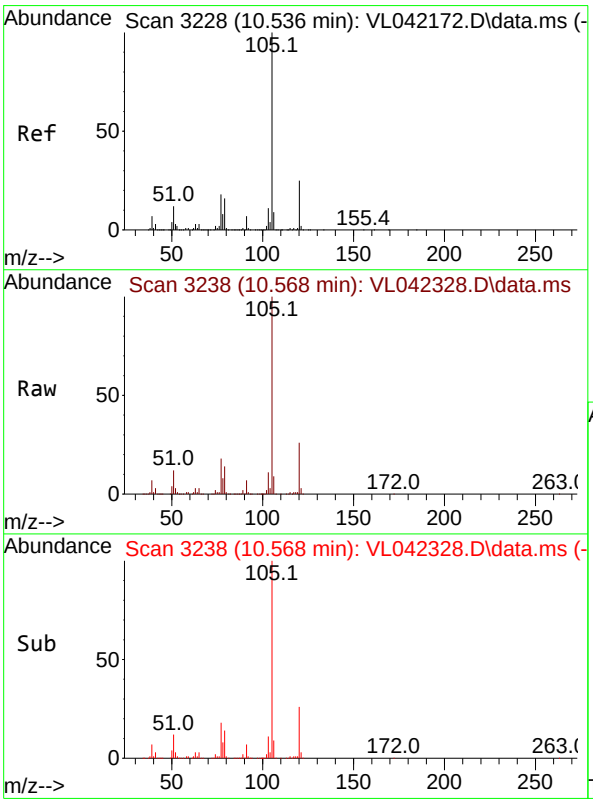
#61
Styrene
Concen: 8.168 ppbv
RT: 9.904 min Scan# 3
Delta R.T. 0.039 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:104 Resp: 229601

Ion	Ratio	Lower	Upper
104	100		
78	49.5	41.8	62.6
103	47.0	37.0	55.4

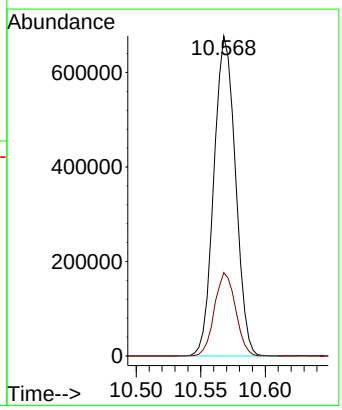


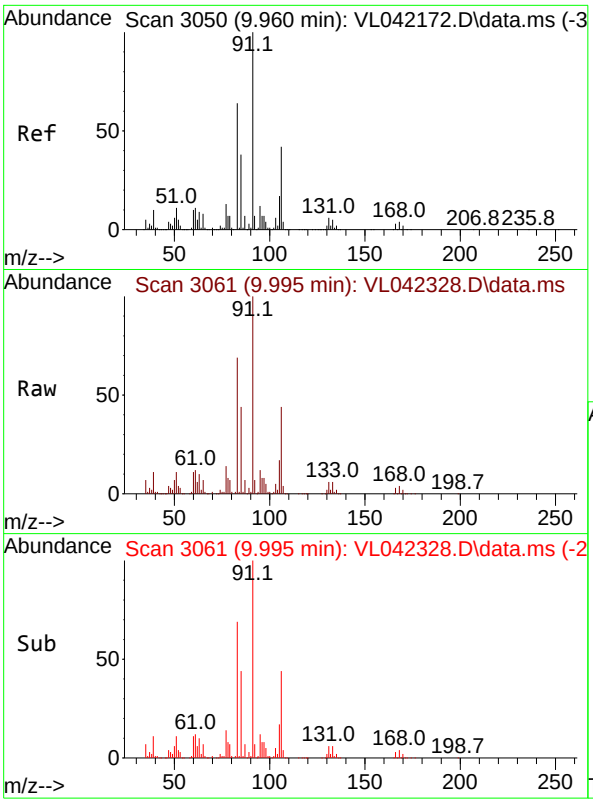


#62
Isopropylbenzene
Concen: 9.247 ppbv
RT: 10.568 min Scan# 3238
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 785673

Ion	Ratio	Lower	Upper
105	100		
120	25.5	19.9	29.9



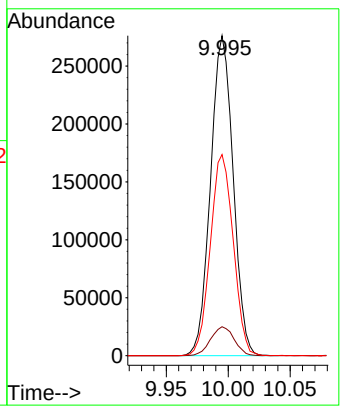


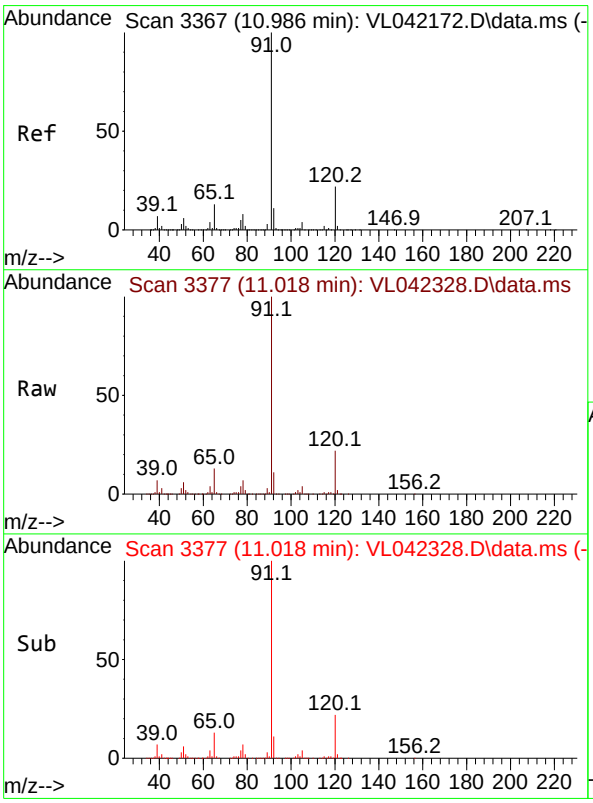
#63
1,1,2,2-Tetrachloroethane
Concen: 10.176 ppbv
RT: 9.995 min Scan# 3
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 83 Resp: 351308

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.8	14.4
85	63.9	32.5	97.5

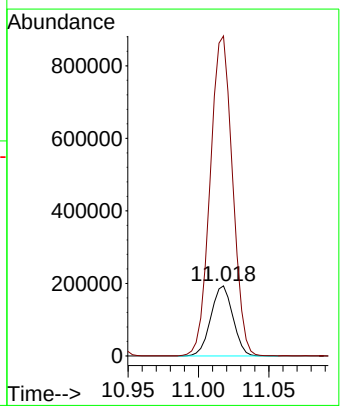


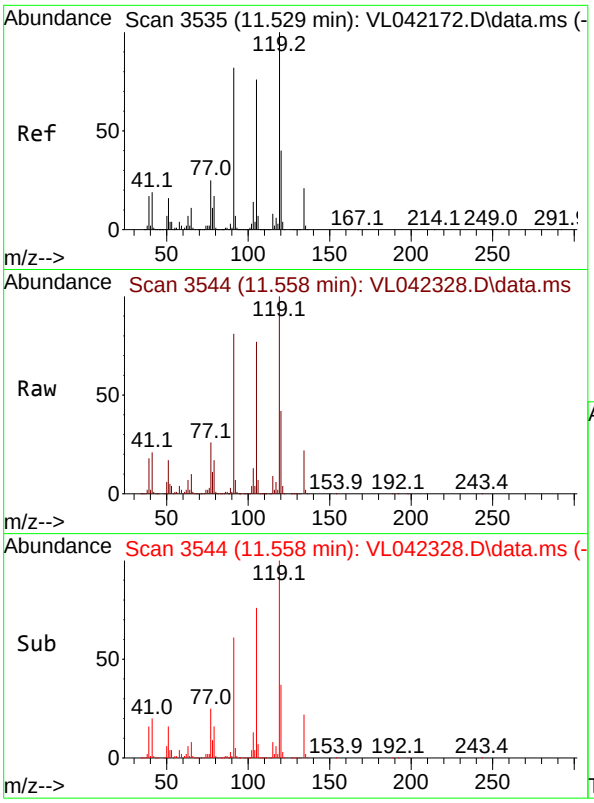


#64
n-propylbenzene
Concen: 9.615 ppbv
RT: 11.018 min Scan# 3377
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:120 Resp: 210294

Ion	Ratio	Lower	Upper
120	100		
91	465.9	376.9	565.3



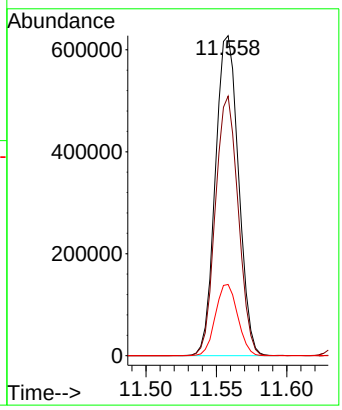


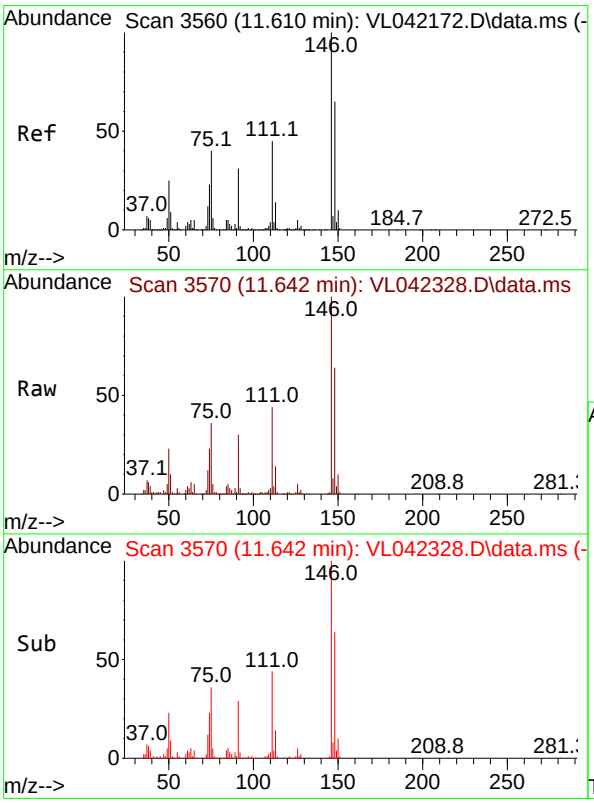
#65
tert-Butylbenzene
Concen: 9.149 ppbv
RT: 11.558 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:119 Resp: 718948

Ion	Ratio	Lower	Upper
119	100		
91	79.8	66.0	99.0
134	21.4	16.7	25.1

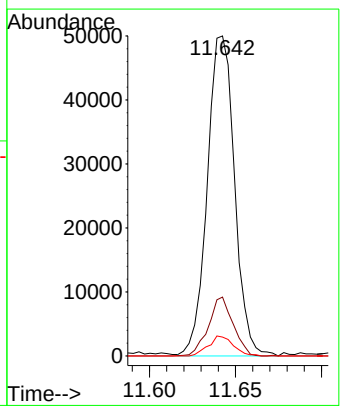


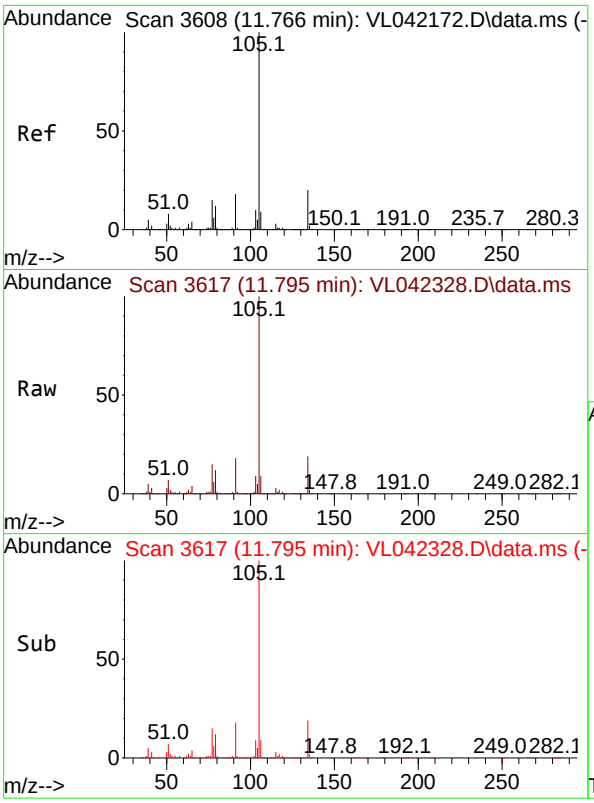


#66
Benzyl Chloride
Concen: 6.614 ppbv
RT: 11.642 min Scan# 3570
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 55150

Ion	Ratio	Lower	Upper
91	100		
126	16.6	13.8	20.6
128	5.7	4.5	6.7



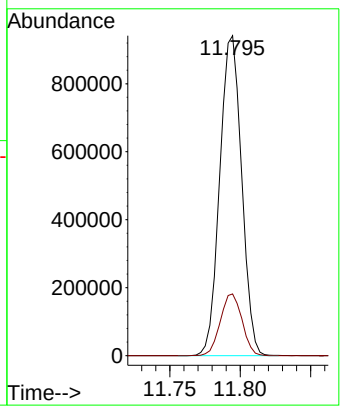


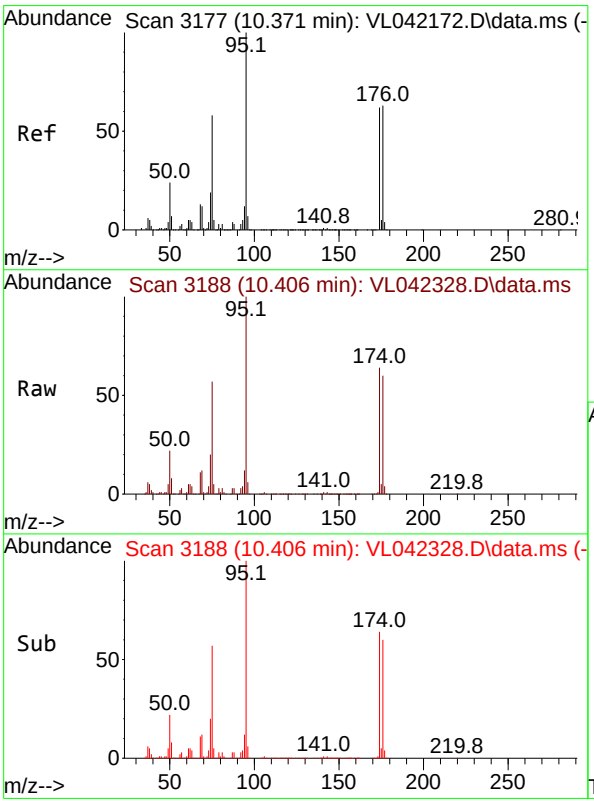
#67
sec-Butylbenzene
Concen: 9.328 ppbv
RT: 11.795 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:105 Resp: 1018861

Ion	Ratio	Lower	Upper
105	100		
134	19.2	15.5	23.3

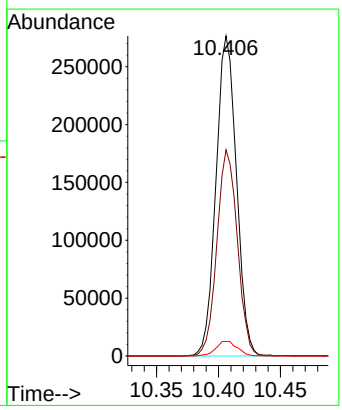


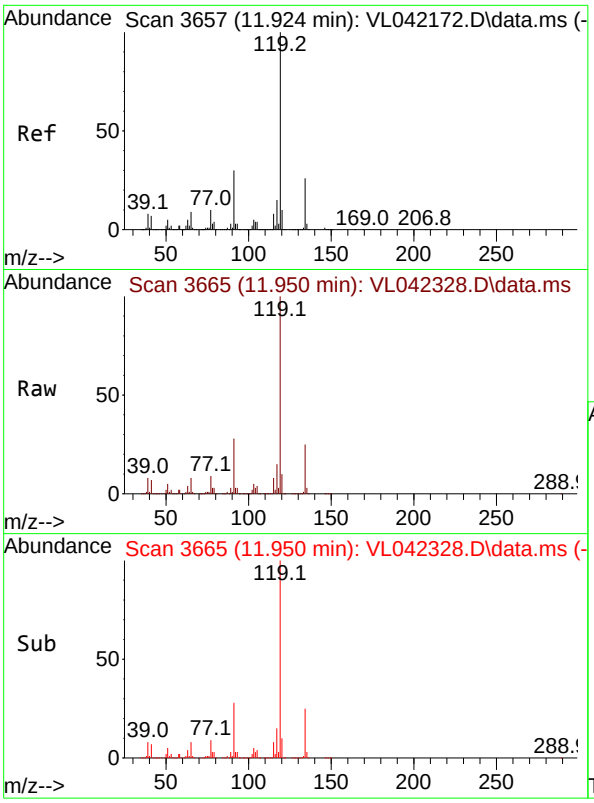


#68
1-Bromo-4-Fluorobenzene
Concen: 9.718 ppbv
RT: 10.406 min Scan# 3188
Delta R.T. 0.035 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 95 Resp: 318902

Ion	Ratio	Lower	Upper
95	100		
174	64.4	50.6	76.0
175	4.8	3.8	5.6



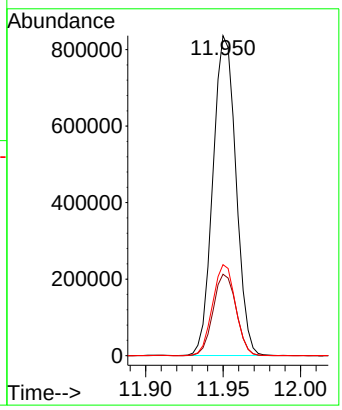


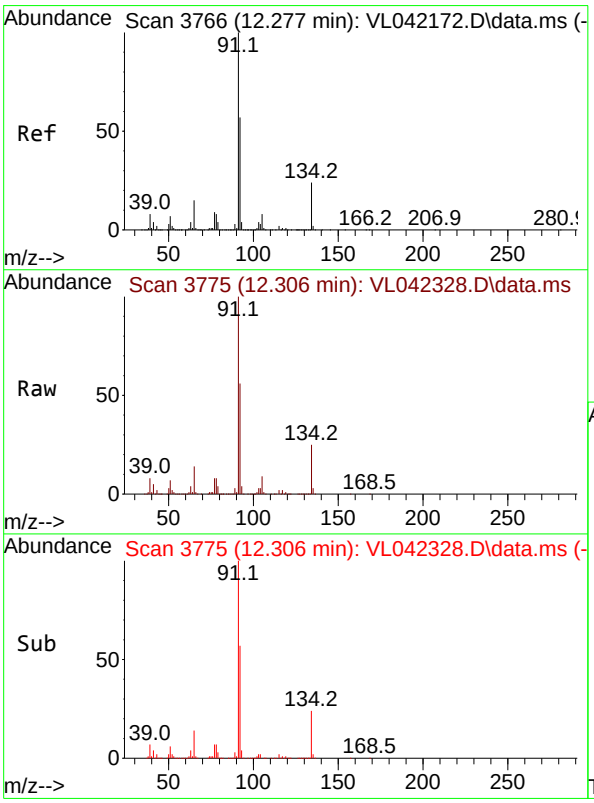
#69
p-Isopropyltoluene
Concen: 9.179 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:119 Resp: 863264

Ion	Ratio	Lower	Upper
119	100		
134	25.6	20.4	30.6
91	28.5	23.7	35.5

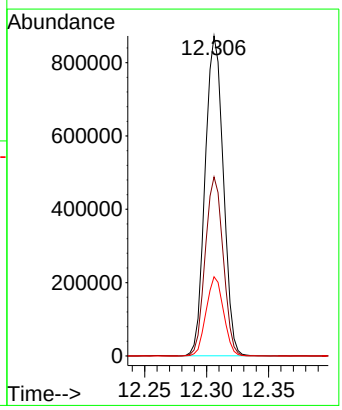


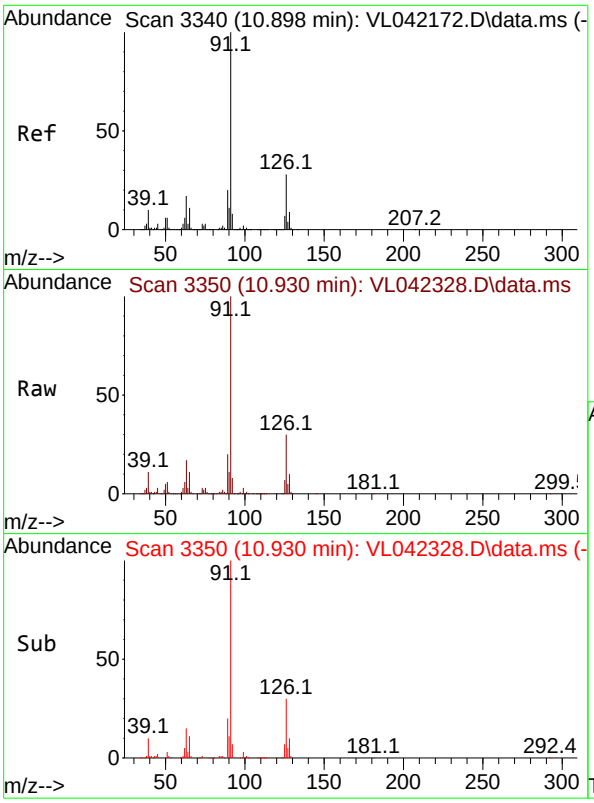


#70
n-Butylbenzene
Concen: 9.273 ppbv
RT: 12.306 min Scan# 3775
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion: 91 Resp: 891883

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.9	67.3
134	23.8	19.2	28.8



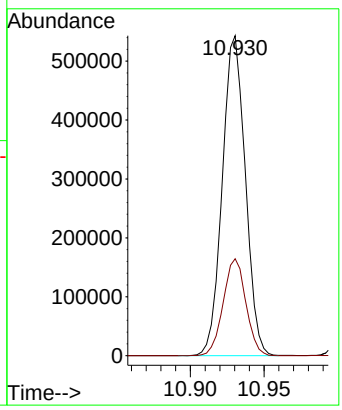


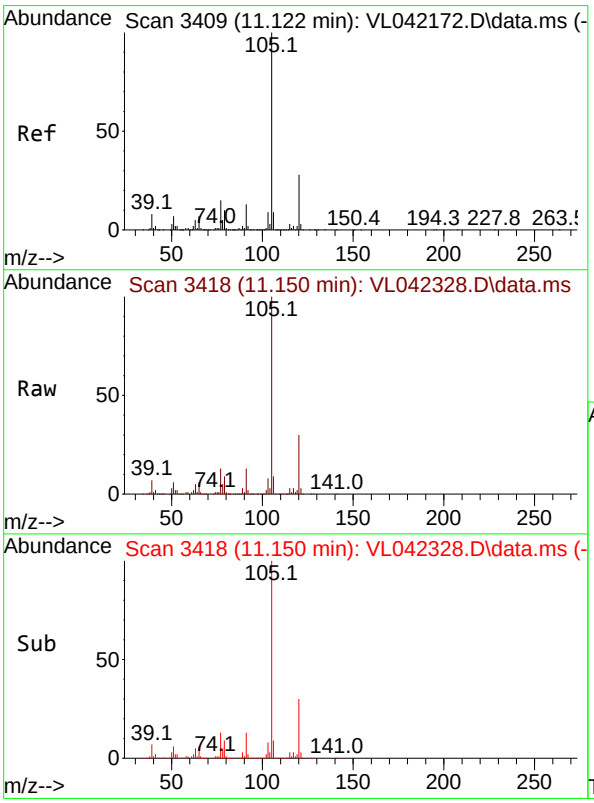
#71
2-Chlorotoluene
Concen: 8.953 ppbv
RT: 10.930 min Scan# 3
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion: 91 Resp: 590408

Ion	Ratio	Lower	Upper
91	100		
126	29.8	11.6	46.4

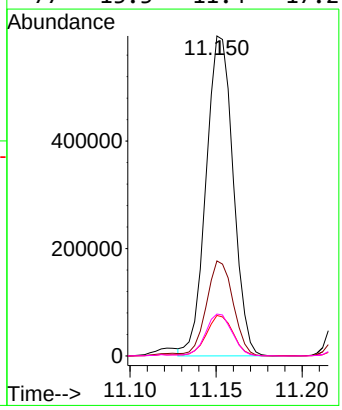


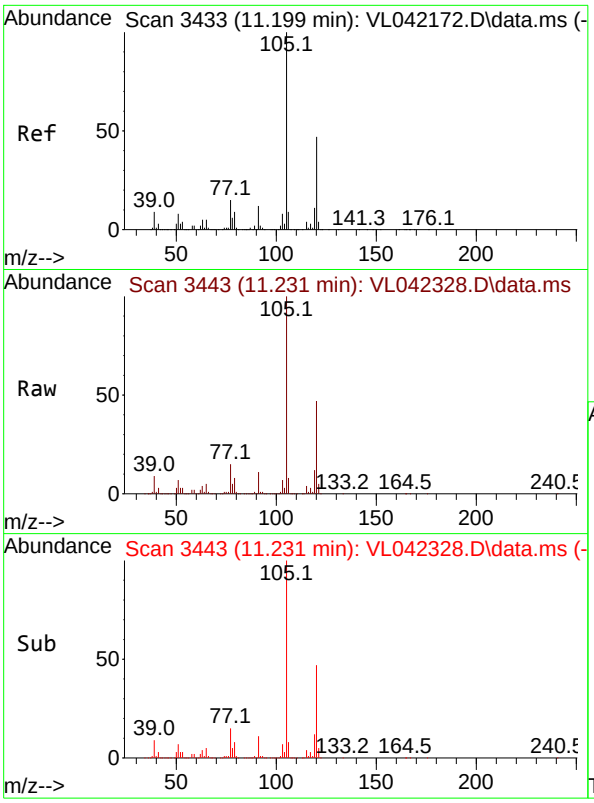


#72
4-Ethyltoluene
Concen: 9.230 ppbv
RT: 11.150 min Scan# 3418
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 652962

Ion	Ratio	Lower	Upper
105	100		
120	30.0	23.4	35.0
91	13.0	10.3	15.5
77	13.3	11.4	17.2



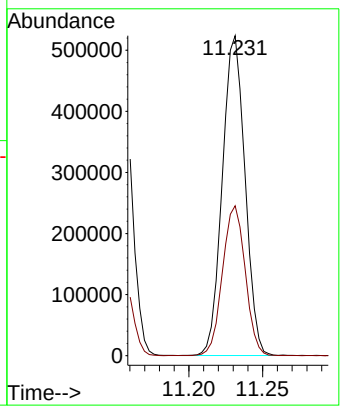


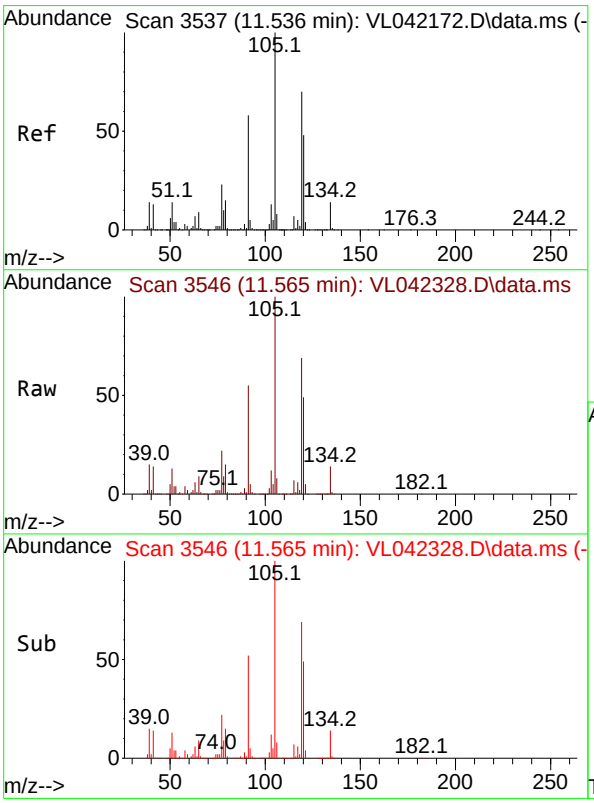
#73
1,3,5-Trimethylbenzene
Concen: 9.055 ppbv
RT: 11.231 min Scan# 34
Delta R.T. 0.032 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:105 Resp: 559451

Ion	Ratio	Lower	Upper
105	100		
120	46.8	37.4	56.0

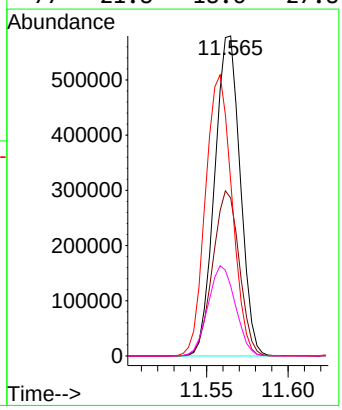


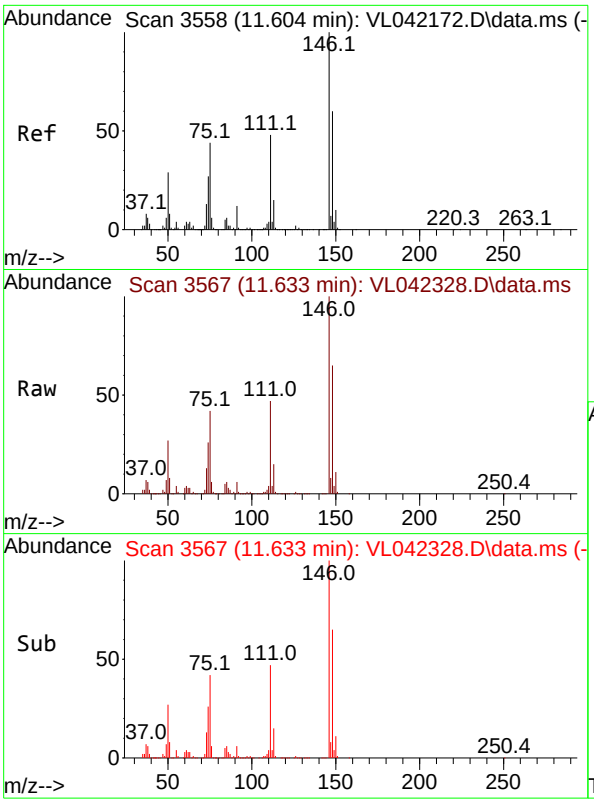


#74
1,2,4-Trimethylbenzene
Concen: 8.883 ppbv
RT: 11.565 min Scan# 3546
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:105 Resp: 632271

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.6	58.0
91	54.7	46.2	69.2
77	21.8	18.6	27.8



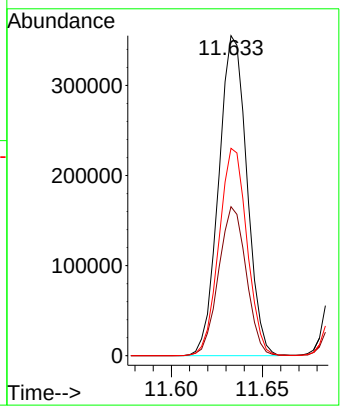


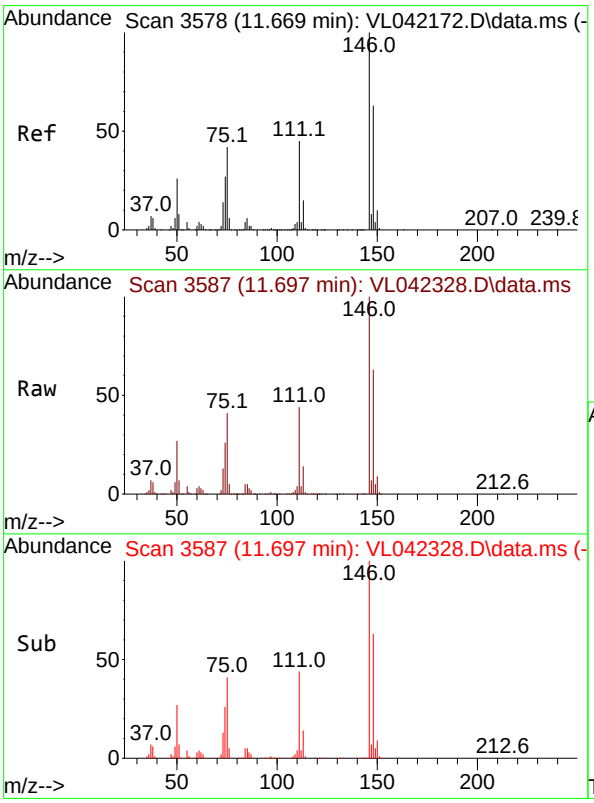
#75
1,3-Dichlorobenzene
Concen: 9.782 ppbv
RT: 11.633 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:146 Resp: 381882

Ion	Ratio	Lower	Upper
146	100		
111	45.7	23.8	71.2
148	64.5	31.9	95.9

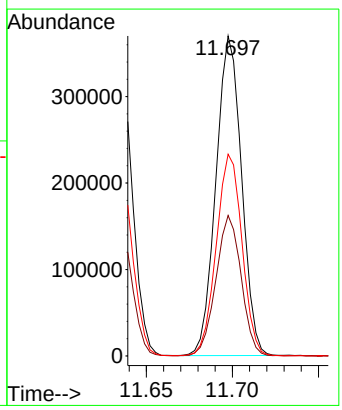


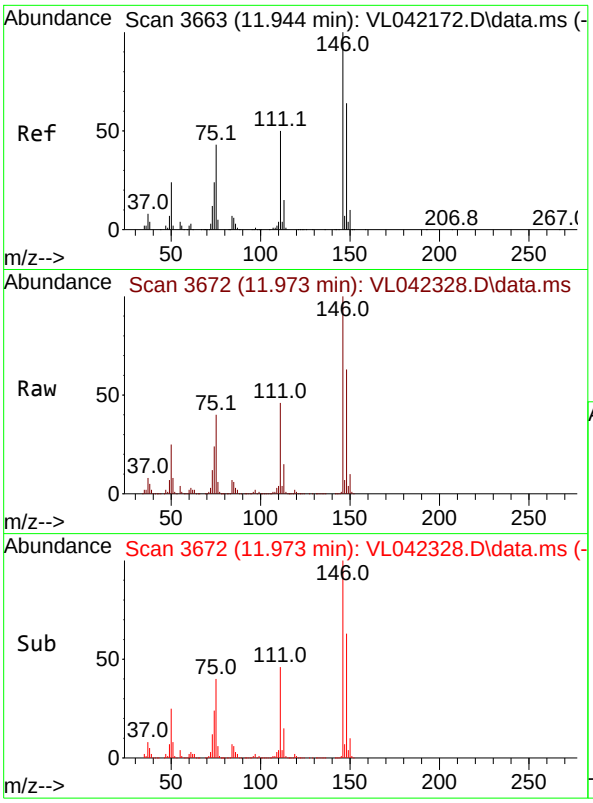


#76
1,4-Dichlorobenzene
Concen: 9.861 ppbv
RT: 11.697 min Scan# 3587
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:146 Resp: 383116

Ion	Ratio	Lower	Upper
146	100		
111	43.4	23.0	69.0
148	63.6	31.9	95.7



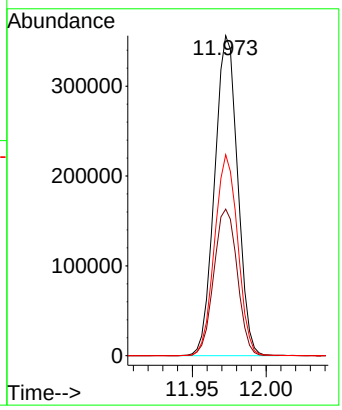


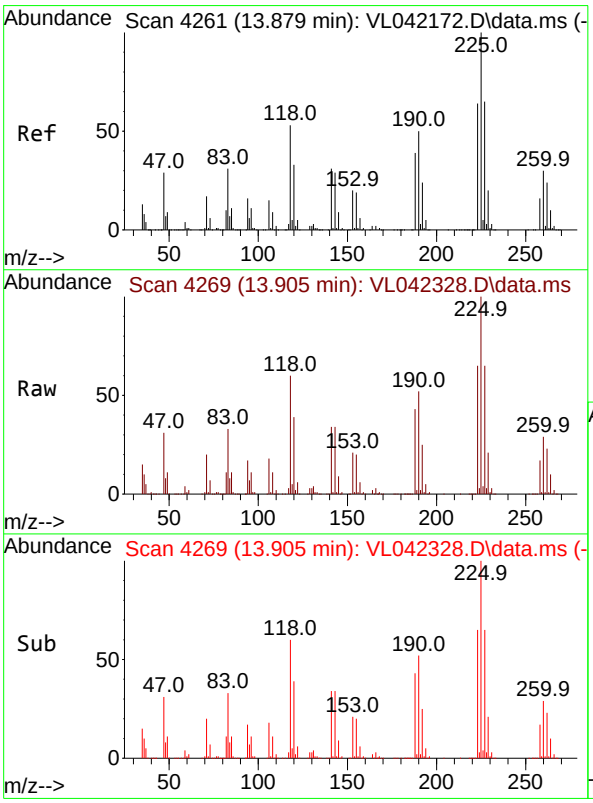
#77
1,2-Dichlorobenzene
Concen: 10.175 ppbv
RT: 11.973 min Scan# 3
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:146 Resp: 386768

Ion	Ratio	Lower	Upper
146	100		
111	46.7	24.8	74.3
148	63.1	31.6	94.8

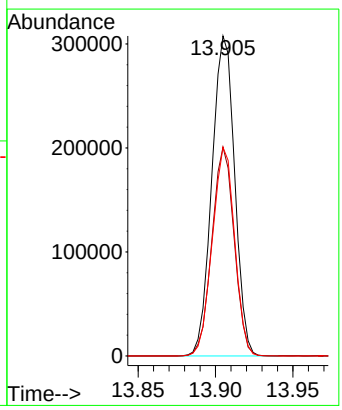


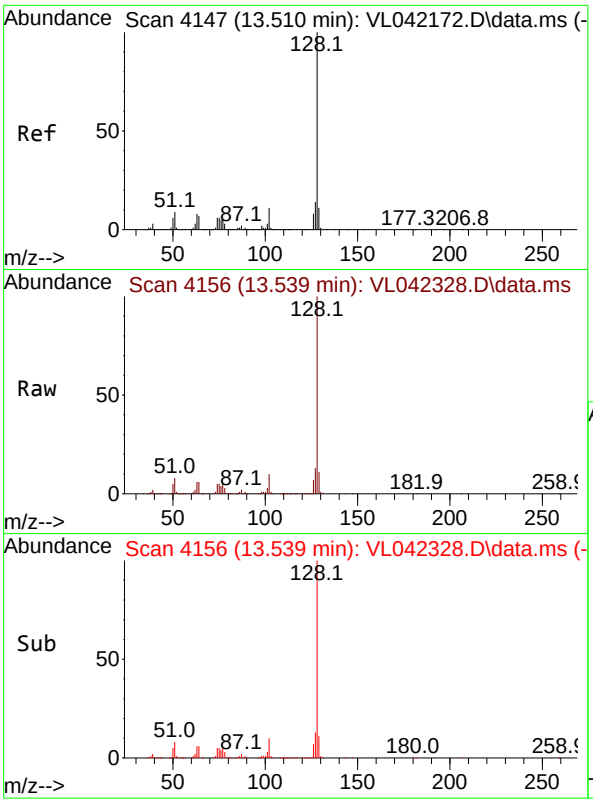


#78
Hexachloro-1,3-Butadiene
Concen: 8.138 ppbv
RT: 13.905 min Scan# 4269
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:225 Resp: 314860

Ion	Ratio	Lower	Upper
225	100		
223	63.7	50.6	76.0
227	64.0	51.2	76.8



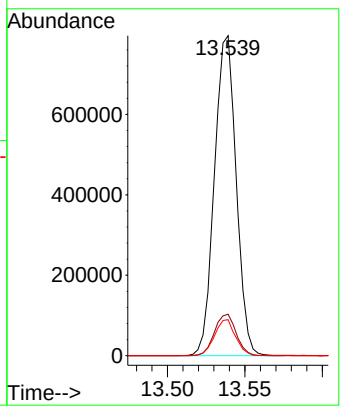


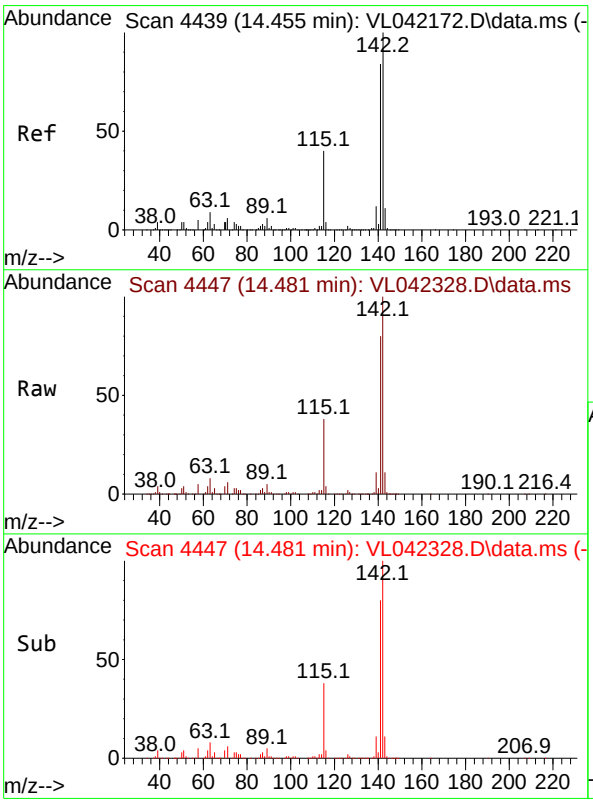
#79
Naphthalene
Concen: 9.989 ppbv
RT: 13.539 min Scan# 4
Delta R.T. 0.029 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:128 Resp: 777722

Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.8	16.2
129	11.2	9.0	13.4

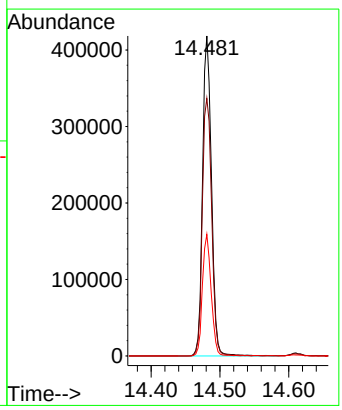


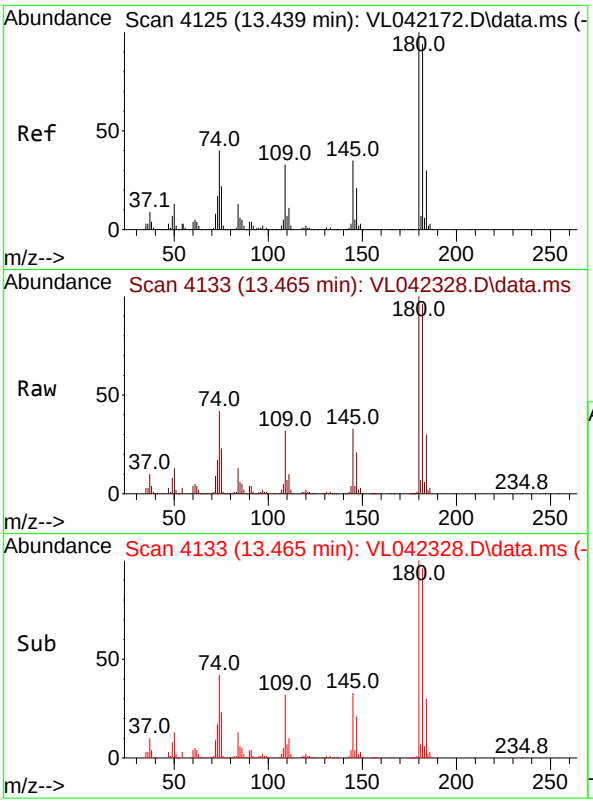


#80
Naphthalene,2-methyl-
Concen: 9.836 ppbv
RT: 14.481 min Scan# 4447
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Tgt Ion:142 Resp: 375541

Ion	Ratio	Lower	Upper
142	100		
141	84.5	66.3	99.5
115	37.5	31.6	47.4



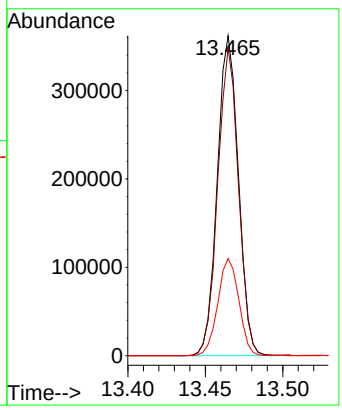


#81
1,2,4-Trichlorobenzene
Concen: 9.551 ppbv
RT: 13.465 min Scan# 4
Delta R.T. 0.026 min
Lab File: VL042328.D
Acq: 15 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VL0415ABS01

Tgt Ion:180 Resp: 343011

Ion	Ratio	Lower	Upper
180	100		
182	94.8	75.1	112.7
184	30.3	24.4	36.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042332.D
Acq On : 15 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-10DL2 100X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Quant Time: Apr 16 01:32:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.810	49	164444	10.000	ppbv		0.03
33) 1,4-Difluorobenzene	3.998	114	385228	10.000	ppbv		0.05
55) Chlorobenzene-d5	8.917	117	327587	10.000	ppbv		0.04
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.406	95	251001	9.330	ppbv		0.04
Spiked Amount 10.000	Range 65 - 135		Recovery = 93.300%				
Target Compounds							Qvalue
9) Propene	1.900	41	5702	0.502	ppbv		98
13) Ethanol	1.732	45	8531	7.938	ppbv		83
15) Acetone	1.848	43	26934	1.171	ppbv		95
16) 1,3-Butadiene	1.499	39	26482	2.358	ppbv	#	12
19) Isopropyl Alcohol	1.900	45	55262	4.259	ppbv	#	34
20) Methylene Chloride	2.075	84	1828	0.213	ppbv	#	78
23) Vinyl Acetate	2.580	43	135118	13.574	ppbv	#	87
25) Ethyl Acetate	2.580	43	135118	2.264	ppbv	#	76
28) Methyl tert-Butyl Ether	2.583	73	1168	0.081	ppbv	#	1
34) 2-Butanone	2.580	43	135118	4.837	ppbv		97
39) 1,2-Dichloropropane	3.994	63	99113	7.126	ppbv	#	23

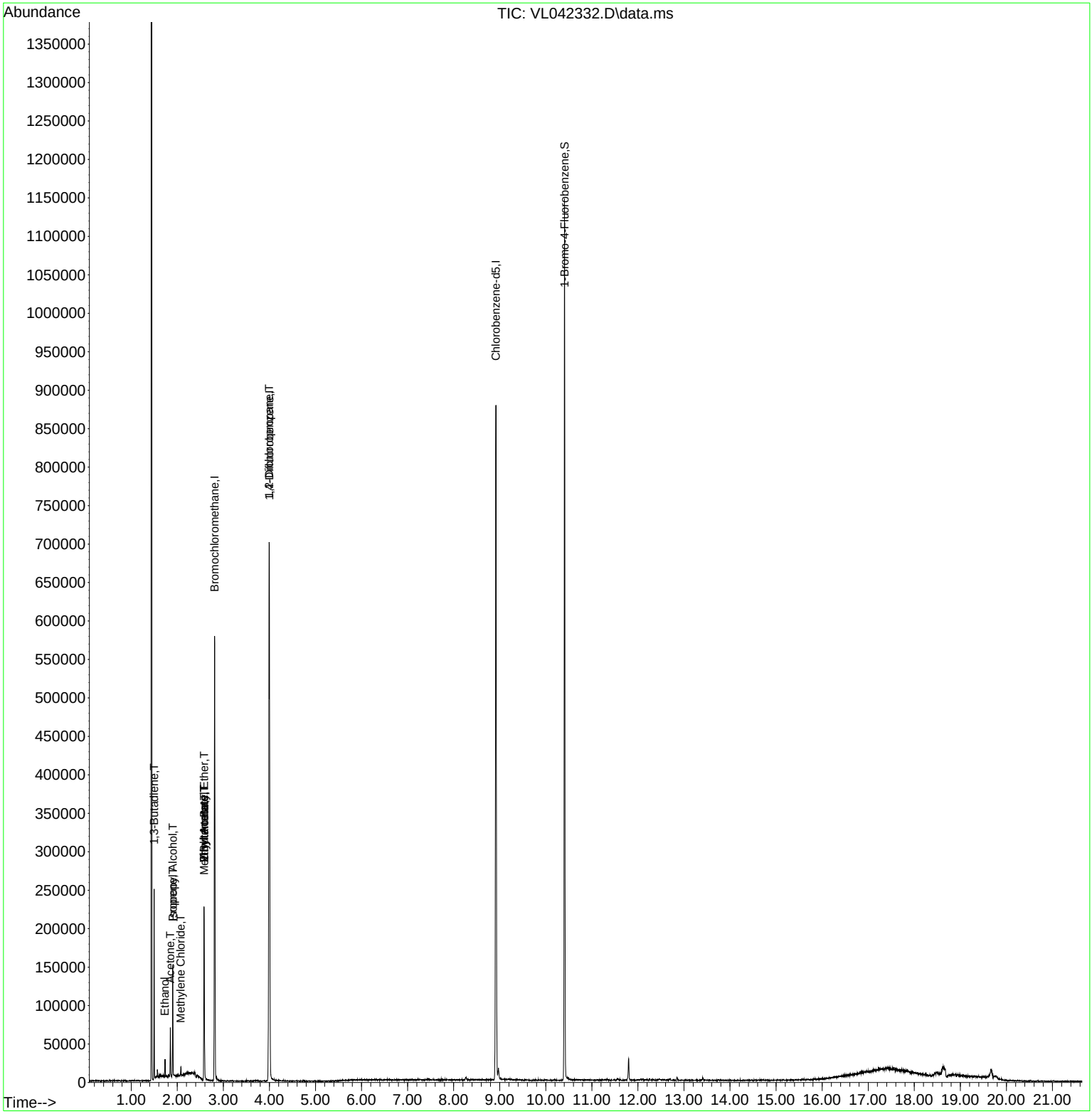
(#) = qualifier out of range (m) = manual integration (+) = signals summed

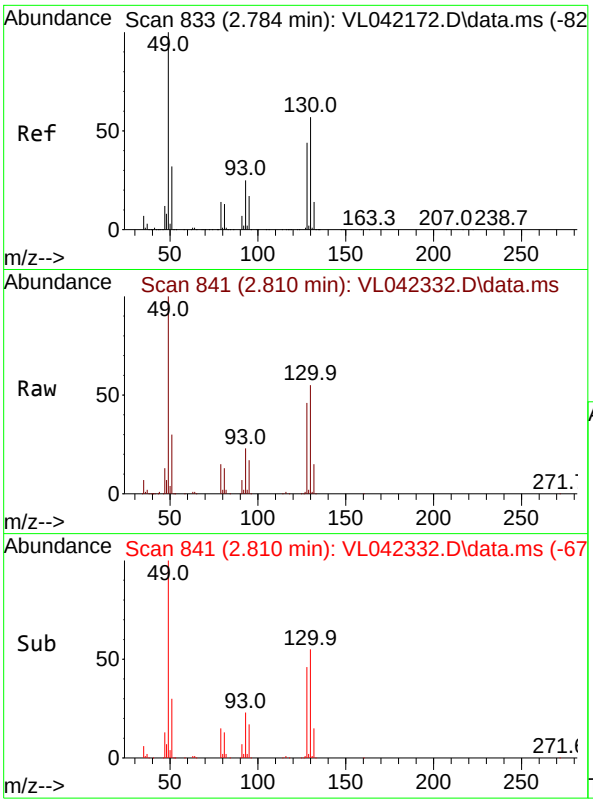
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041525\
Data File : VL042332.D
Acq On : 15 Apr 2025 15:01
Operator : SY/MD
Sample : Q1665-10DL2 100X
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Quant Time: Apr 16 01:32:29 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL032725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Mar 28 02:00:52 2025
Response via : Initial Calibration



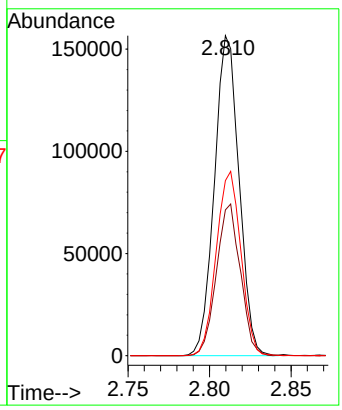


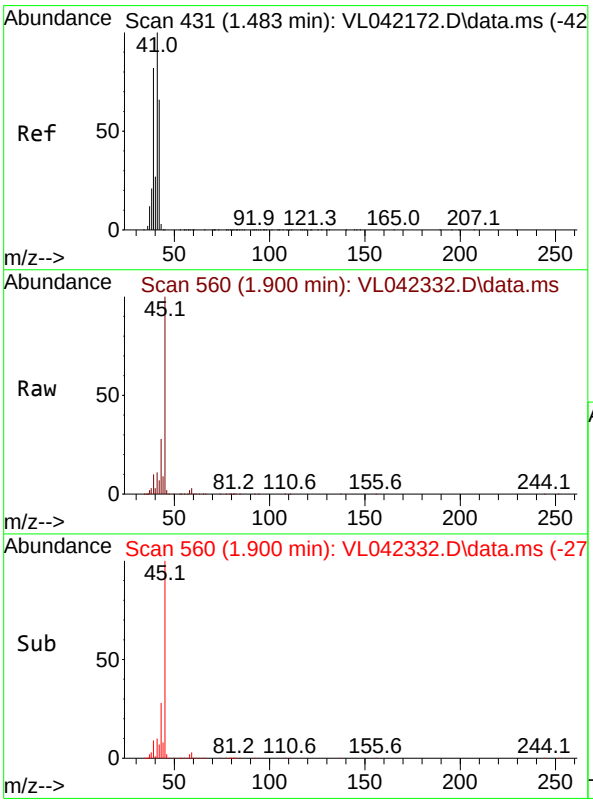
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.810 min Scan# 84
Delta R.T. 0.026 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 49 Resp: 164444

Ion	Ratio	Lower	Upper
49	100		
128	46.1	22.9	68.5
130	57.7	28.8	86.4

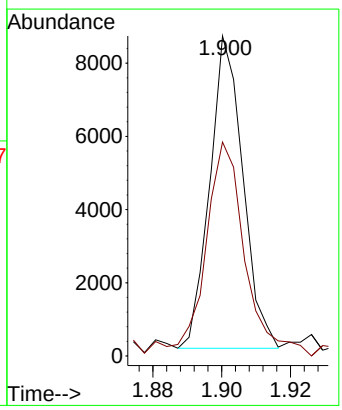


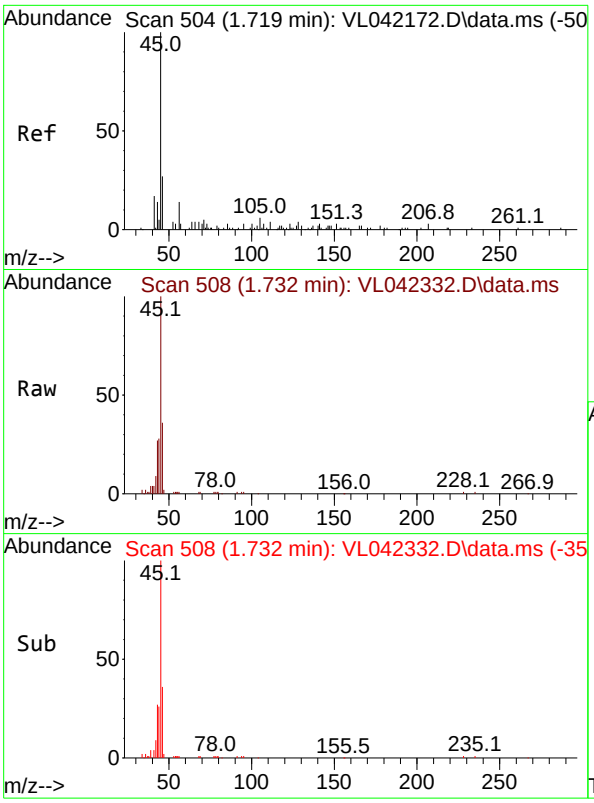


#9
Propene
Concen: 0.502 ppbv
RT: 1.900 min Scan# 560
Delta R.T. 0.417 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 41 Resp: 5702

Ion	Ratio	Lower	Upper
41	100		
42	70.7	55.4	83.2



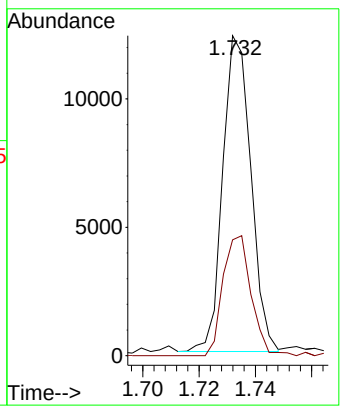


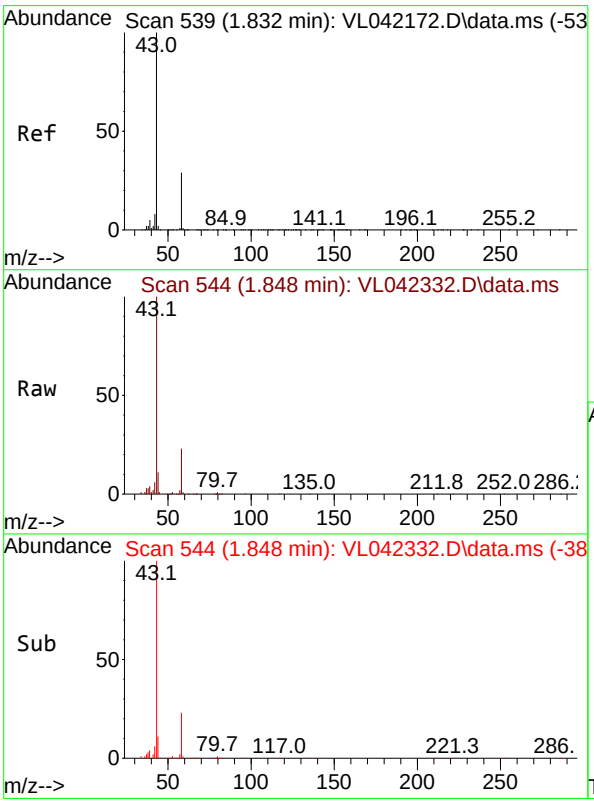
#13
Ethanol
Concen: 7.938 ppbv
RT: 1.732 min Scan# 5
Delta R.T. 0.013 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 45 Resp: 8531

Ion	Ratio	Lower	Upper
45	100		
46	39.0	20.2	80.8

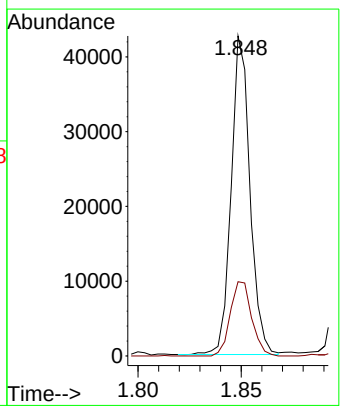


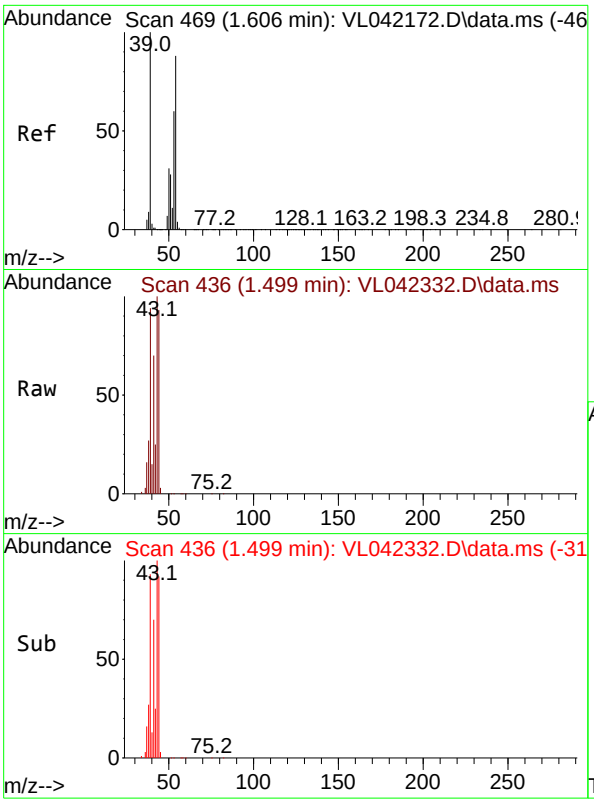


#15
Acetone
Concen: 1.171 ppbv
RT: 1.848 min Scan# 544
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 43 Resp: 26934

Ion	Ratio	Lower	Upper
43	100		
58	26.6	23.2	34.8



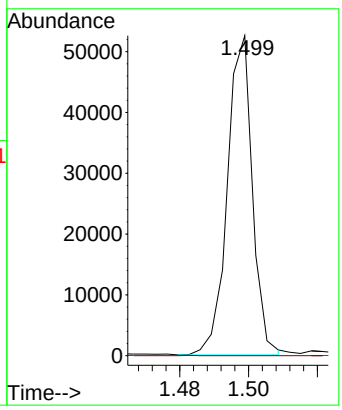


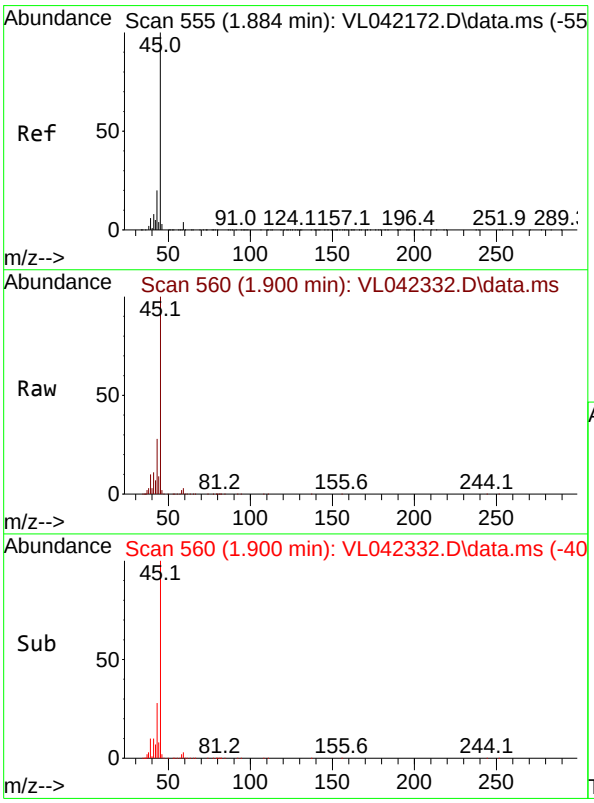
#16
1,3-Butadiene
Concen: 2.358 ppbv
RT: 1.499 min Scan# 4
Delta R.T. -0.107 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 39 Resp: 26482

Ion	Ratio	Lower	Upper
39	100		
54	0.1	60.7	91.1#

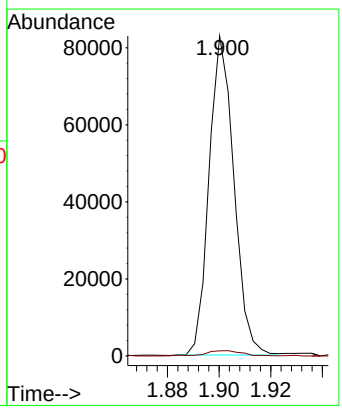


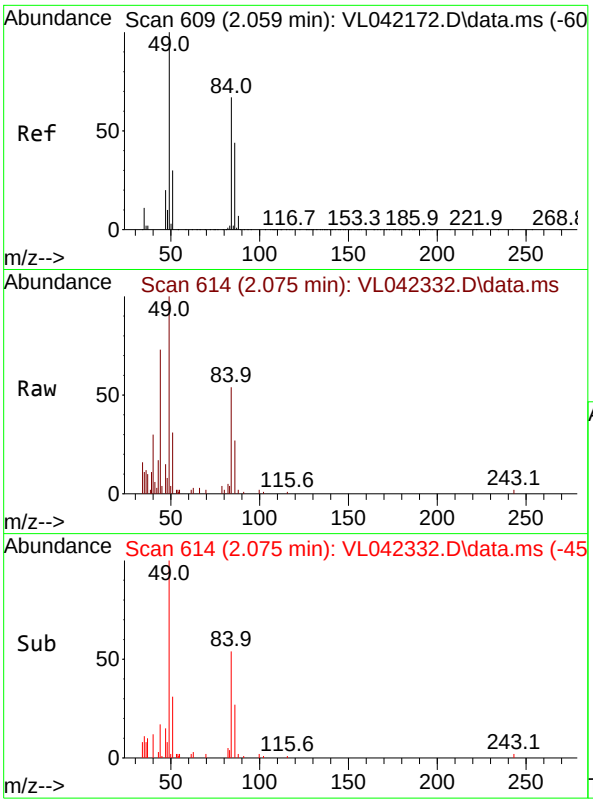


#19
Isopropyl Alcohol
Concen: 4.259 ppbv
RT: 1.900 min Scan# 560
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 45 Resp: 55262

Ion	Ratio	Lower	Upper
45	100		
58	2.5	36.9	55.3#



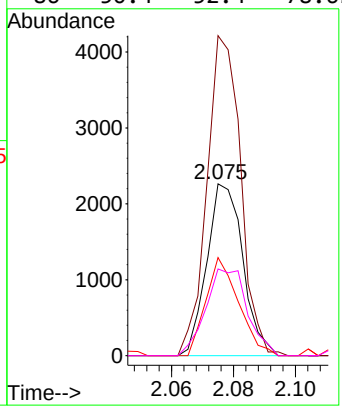


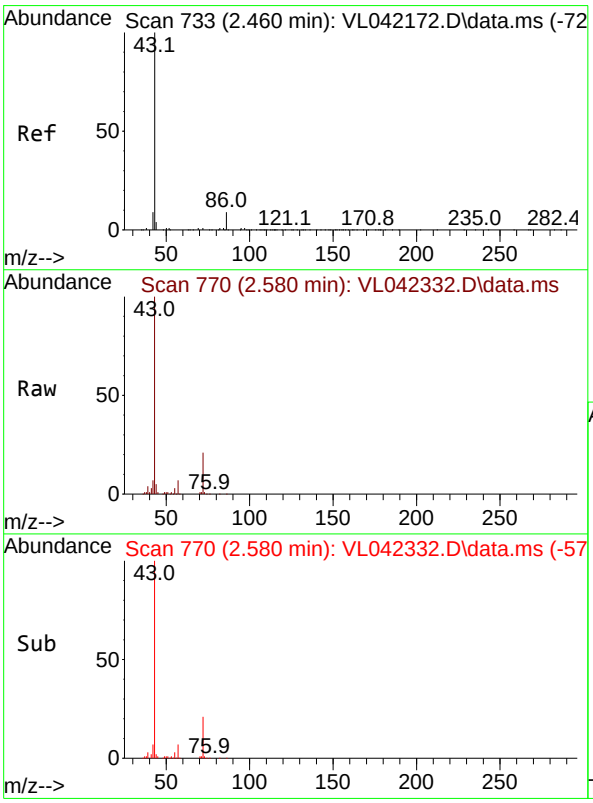
#20
Methylene Chloride
Concen: 0.213 ppbv
RT: 2.075 min Scan# 6
Delta R.T. 0.016 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 84 Resp: 1828

Ion	Ratio	Lower	Upper
84	100		
49	182.7	120.2	180.4#
51	57.1	37.4	56.0#
86	50.4	52.4	78.6#

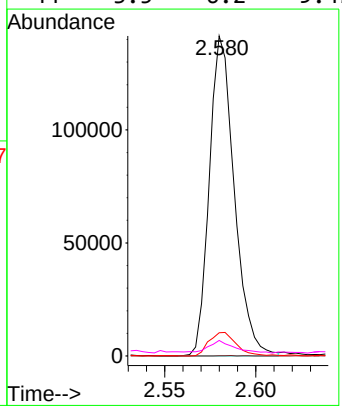


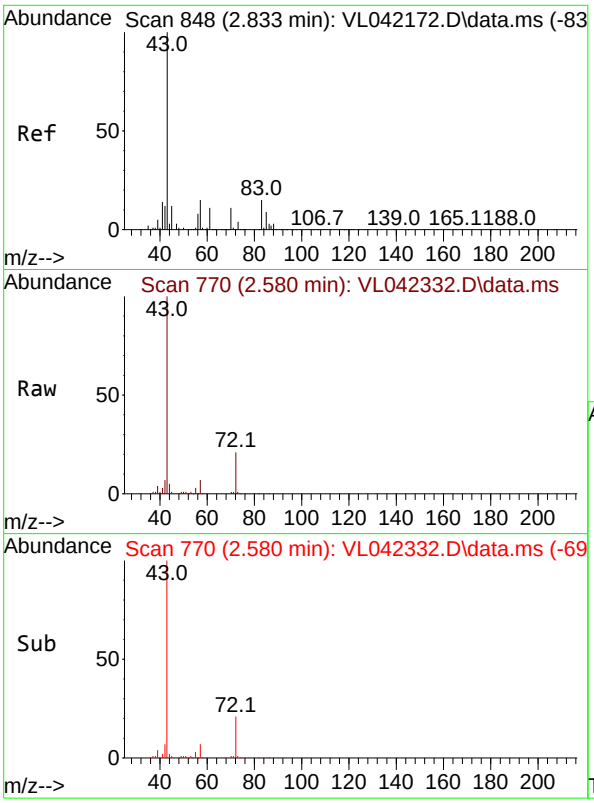


#23
Vinyl Acetate
Concen: 13.574 ppbv
RT: 2.580 min Scan# 770
Delta R.T. 0.120 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 43 Resp: 135118

Ion	Ratio	Lower	Upper
43	100		
86	0.1	5.5	8.3#
42	7.2	8.6	13.0#
44	3.5	6.2	9.4#



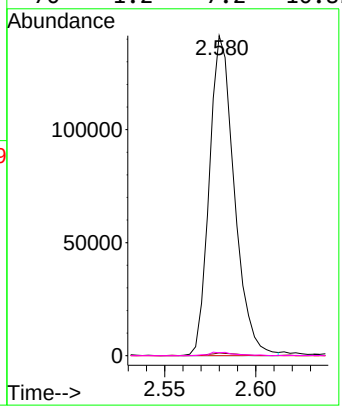


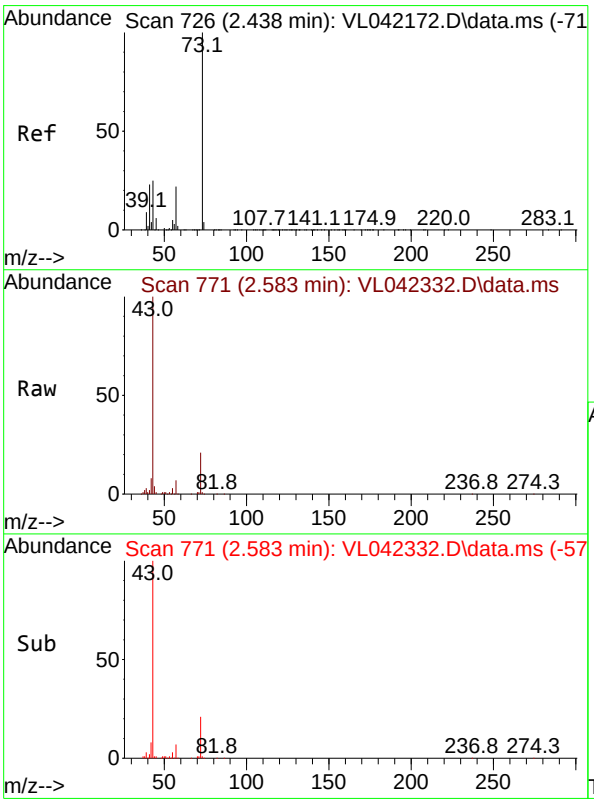
#25
Ethyl Acetate
Concen: 2.264 ppbv
RT: 2.580 min Scan# 7
Delta R.T. -0.253 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 43 Resp: 135118

Ion	Ratio	Lower	Upper
43	100		
45	1.1	8.2	12.2#
61	0.0	7.3	10.9#
70	1.2	7.2	10.8#

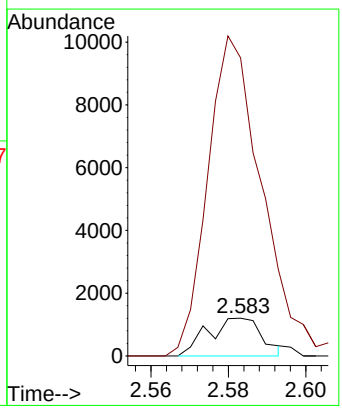


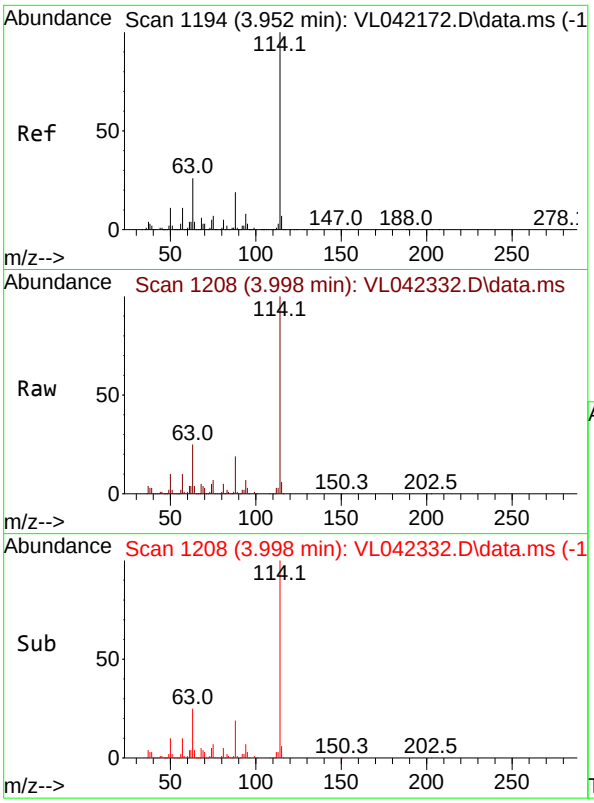


#28
Methyl tert-Butyl Ether
Concen: 0.081 ppbv
RT: 2.583 min Scan# 771
Delta R.T. 0.146 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 73 Resp: 1168

Ion	Ratio	Lower	Upper
73	100		
57	849.7	20.5	30.7#



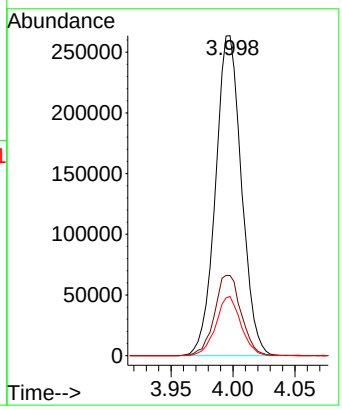


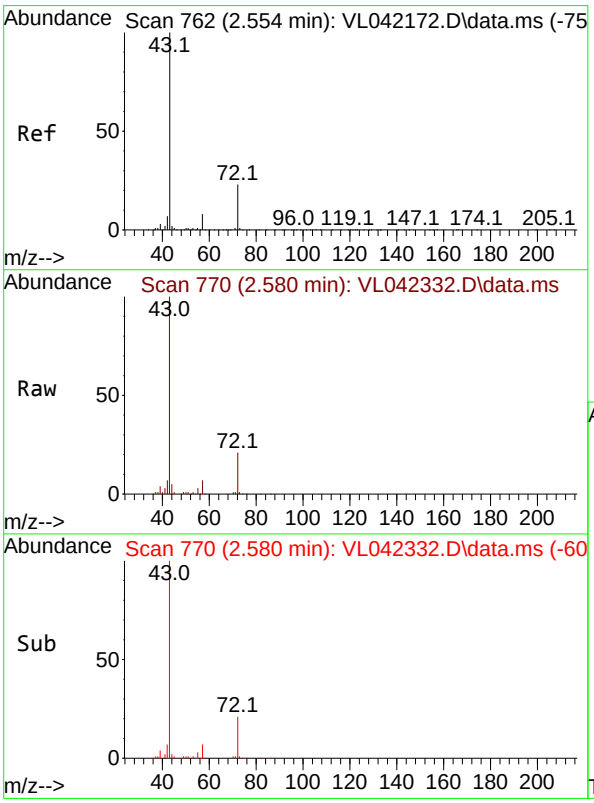
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.998 min Scan# 1
Delta R.T. 0.045 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion:114 Resp: 385228

Ion	Ratio	Lower	Upper
114	100		
63	25.9	20.7	31.1
88	17.9	15.0	22.4

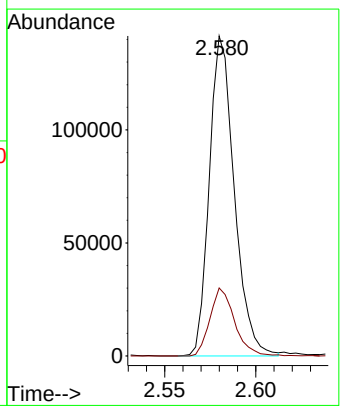


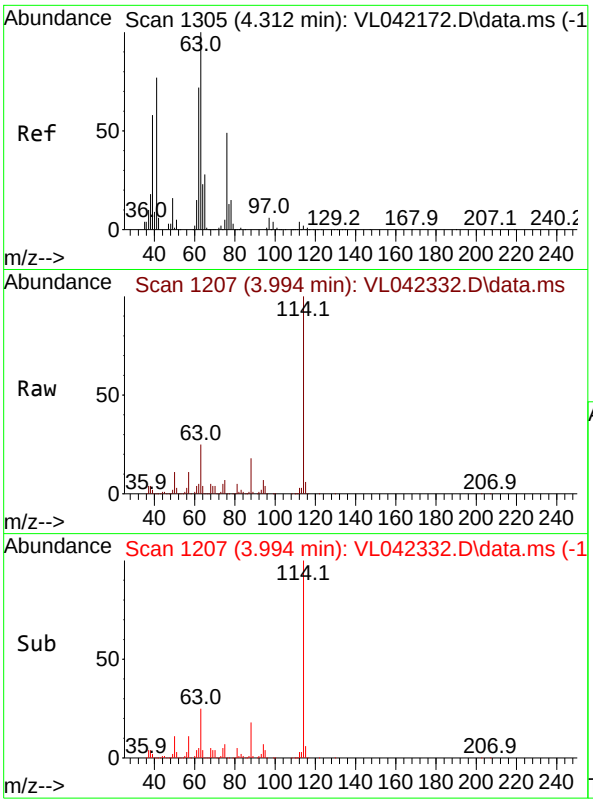


#34
2-Butanone
Concen: 4.837 ppbv
RT: 2.580 min Scan# 770
Delta R.T. 0.026 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion: 43 Resp: 135118

Ion	Ratio	Lower	Upper
43	100		
72	21.0	18.2	27.2



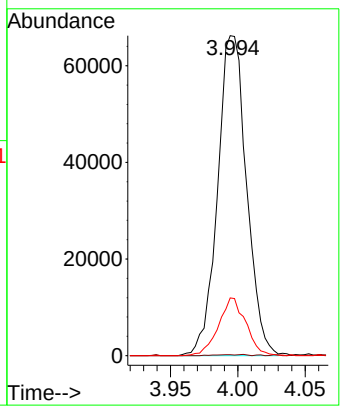


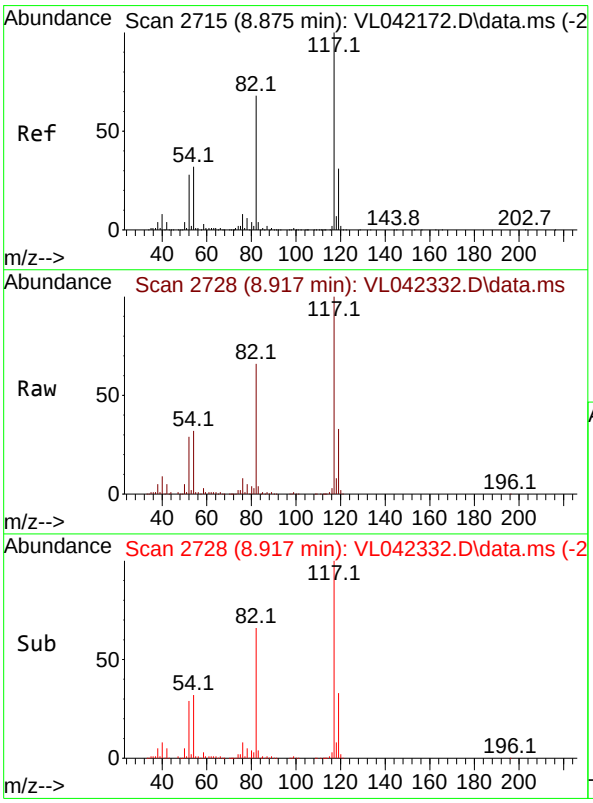
#39
1,2-Dichloropropane
Concen: 7.126 ppbv
RT: 3.994 min Scan# 1
Delta R.T. -0.317 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 63 Resp: 99113

Ion	Ratio	Lower	Upper
63	100		
41	0.6	61.7	92.5#
62	18.1	57.6	86.4#

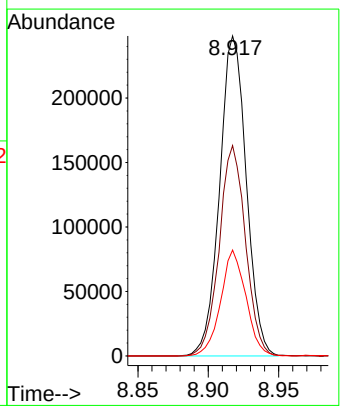


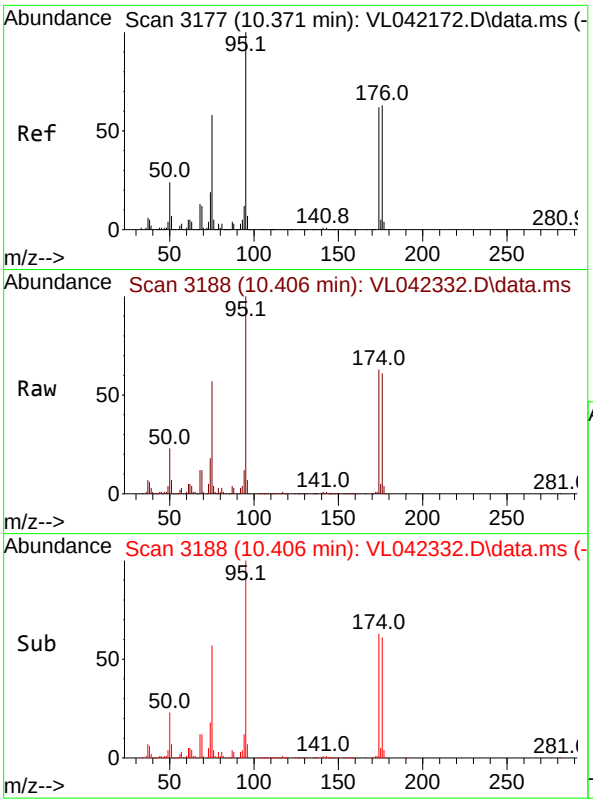


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. 0.042 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Tgt Ion:117 Resp: 327587

Ion	Ratio	Lower	Upper
117	100		
82	64.9	55.8	83.6
119	31.5	25.5	38.3



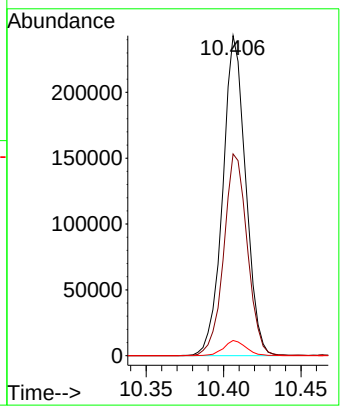


#68
1-Bromo-4-Fluorobenzene
Concen: 9.330 ppbv
RT: 10.406 min Scan# 3
Delta R.T. 0.035 min
Lab File: VL042332.D
Acq: 15 Apr 2025 15:01

Instrument :
MSVOA_L
ClientSampleId :
IA-B10-4-3242025DL2

Tgt Ion: 95 Resp: 251001

Ion	Ratio	Lower	Upper
95	100		
174	64.9	50.6	76.0
175	4.6	3.8	5.6



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	125455	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	366544	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	338126	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	281013	10.114	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	207962	9.382	ppbv	100
3) Chlorodifluoromethane	1.476	51	197334	9.350	ppbv	100
4) Chloromethane	1.531	50	81843	9.330	ppbv	100
5) Vinyl Chloride	1.580	62	80068	8.385	ppbv	100
6) Bromomethane	1.667	94	38128	9.219	ppbv	100
7) Chloroethane	1.703	64	31705	9.182	ppbv	100
8) Dichlorotetrafluoroethane	1.554	85	179696	9.442	ppbv	100
9) Propene	1.483	41	86530	9.002	ppbv	100
10) Heptane	4.978	43	236341	9.138	ppbv	100
11) Trichlorofluoromethane	1.877	101	196596	9.327	ppbv	100
12) 1,1,2-Trichlorotrifluo...	2.136	101	160682	9.323	ppbv	100
13) Ethanol	1.719	45	4439	5.651	ppbv	100
14) Bromoethene	1.780	108	61493	9.466	ppbv	100
15) Acetone	1.835	43	158490	7.717	ppbv	100
16) 1,3-Butadiene	1.609	39	81688	8.470	ppbv	100
17) tert-Butyl alcohol	2.039	59	226280	8.891	ppbv	100
18) 1,1-Dichloroethene	2.033	96	73186	8.833	ppbv	100
19) Isopropyl Alcohol	1.884	45	103029	9.031	ppbv	100
20) Methylene Chloride	2.062	84	62414	7.760	ppbv	100
21) Allyl Chloride	2.094	41	122115	8.611	ppbv	100
22) trans-1,2-Dichloroethene	2.340	96	83278	9.084	ppbv	100
23) Vinyl Acetate	2.460	43	69649	8.378	ppbv	100
24) 1,1-Dichloroethane	2.408	63	161102	9.251	ppbv	100
25) Ethyl Acetate	2.836	43	461315	9.110	ppbv	100
26) Hexane	2.826	57	178691	8.720	ppbv	100
27) Carbon Disulfide	2.149	76	209297	9.539	ppbv	100
28) Methyl tert-Butyl Ether	2.441	73	117924	8.783	ppbv	100
29) Chloroform	2.848	83	269088	9.290	ppbv	100
30) Cyclohexane	3.855	84	157035	9.517	ppbv	100
31) cis-1,2-Dichloroethene	2.719	61	183082	9.397	ppbv	100
32) 1,1,1-Trichloroethane	3.366	97	285336	9.187	ppbv	100
34) 2-Butanone	2.557	43	251704	8.683	ppbv	100
35) Carbon Tetrachloride	3.761	117	282402	8.513	ppbv	100
36) Benzene	3.654	78	367355	9.292	ppbv	100
37) 1,2-Dichloroethane	3.217	62	216999	9.145	ppbv	100
38) Trichloroethene	4.548	130	144767	8.352	ppbv	100
39) 1,2-Dichloropropane	4.311	63	135605	9.197	ppbv	100
40) 1,4-Dioxane	4.580	88	66662	8.348	ppbv #	100
41) Tetrahydrofuran	3.052	42	149905	8.950	ppbv	100
42) Bromodichloromethane	4.489	83	312268	9.456	ppbv	100
43) Methyl Methacrylate	4.881	69	157501	8.876	ppbv	100
44) 2,2,4-Trimethylpentane	4.642	57	626085	9.157	ppbv	100
45) t-1,3-Dichloropropene	6.415	75	168223	9.233	ppbv	100

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	208811	9.377	ppbv		100
47) 1,1,2-Trichloroethane	6.580	97	137898	9.181	ppbv		100
48) Dibromochloromethane	7.386	129	248954	9.388	ppbv		100
49) Bromoform	9.480	173	225706	9.734	ppbv		100
50) 4-Methyl-2-Pentanone	5.752	43	396548	8.215	ppbv		100
51) 2-Hexanone	7.435	43	327165	7.511	ppbv		100
52) Tetrachloroethene	8.225	164	130720	8.553	ppbv		100
53) Toluene	6.933	91	437258	9.216	ppbv		100
54) 1,2-Dibromoethane	7.652	107	197665	9.235	ppbv		100
56) 1,1,1,2-Tetrachloroethane	8.927	131	186041	9.091	ppbv		100
57) Chlorobenzene	8.920	112	323084	9.187	ppbv		100
58) Ethyl Benzene	9.354	91	619581	9.248	ppbv		100
59) m/p-Xylene	9.552	91	449222	8.299	ppbv	#	19
60) o-Xylene	9.963	91	487616	8.972	ppbv		100
61) Styrene	9.869	104	245487	9.464	ppbv		100
62) Isopropylbenzene	10.539	105	733788	9.197	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.963	83	295041	8.355	ppbv		100
64) n-propylbenzene	10.989	120	183390	9.144	ppbv		100
65) tert-Butylbenzene	11.532	119	644953	8.795	ppbv		100
66) Benzyl Chloride	11.617	91	83269	10.333	ppbv		100
67) sec-Butylbenzene	11.769	105	900074	8.824	ppbv		100
69) p-Isopropyltoluene	11.927	119	778987	8.790	ppbv		100
70) n-Butylbenzene	12.283	91	801364	8.682	ppbv		100
71) 2-Chlorotoluene	10.901	91	573039	9.157	ppbv		100
72) 4-Ethyltoluene	11.125	105	596757	8.982	ppbv		100
73) 1,3,5-Trimethylbenzene	11.205	105	512855	8.743	ppbv		100
74) 1,2,4-Trimethylbenzene	11.539	105	565064	8.248	ppbv		100
75) 1,3-Dichlorobenzene	11.607	146	320380	8.997	ppbv		100
76) 1,4-Dichlorobenzene	11.672	146	319089	8.915	ppbv		100
77) 1,2-Dichlorobenzene	11.947	146	305822	8.832	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	291833	8.346	ppbv		100
79) Naphthalene	13.513	128	677578	8.271	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	376995	8.074	ppbv		100
81) 1,2,4-Trichlorobenzene	13.442	180	306119	8.702	ppbv		100

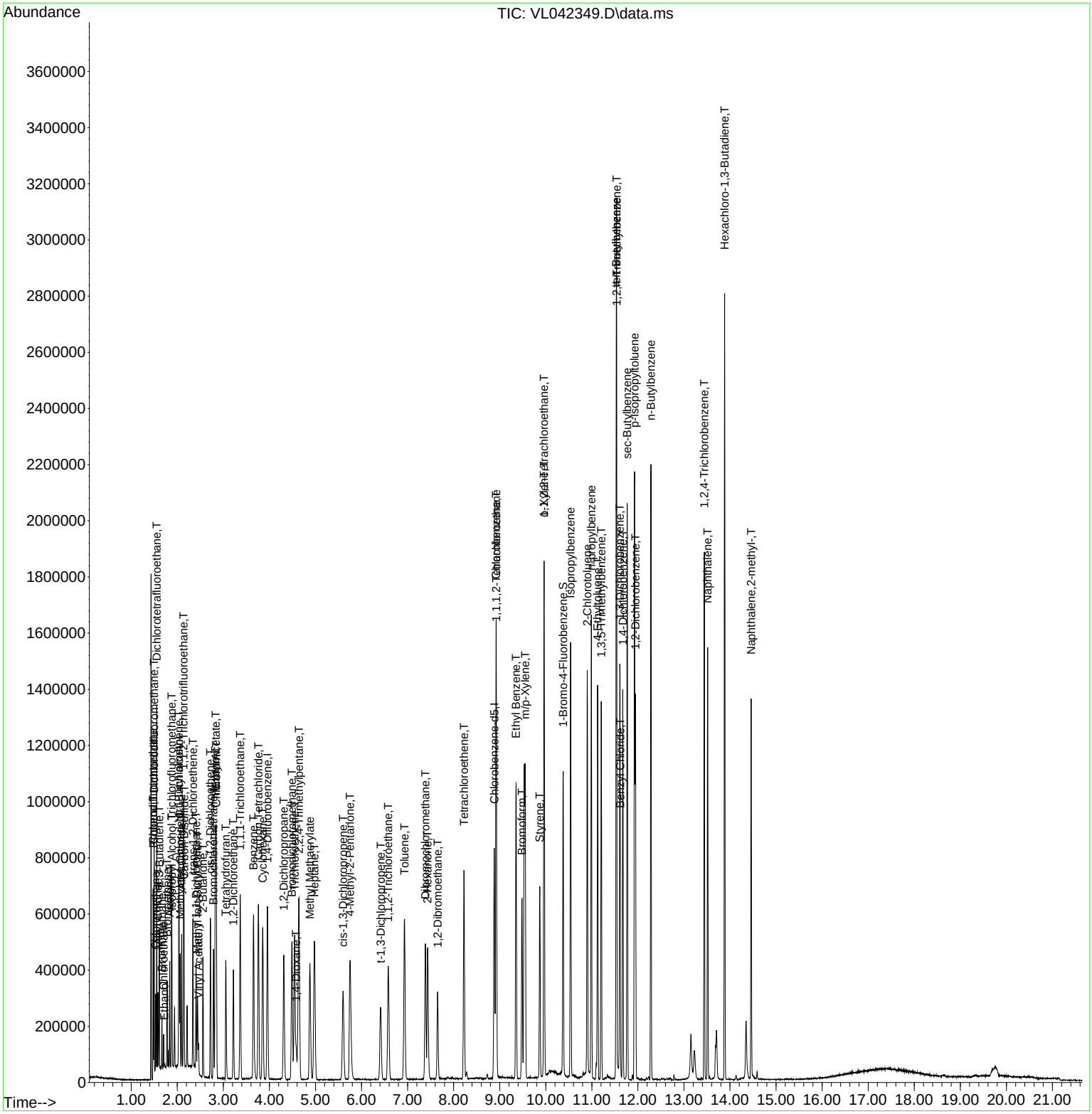
(#) = qualifier out of range (m) = manual integration (+) = signals summed

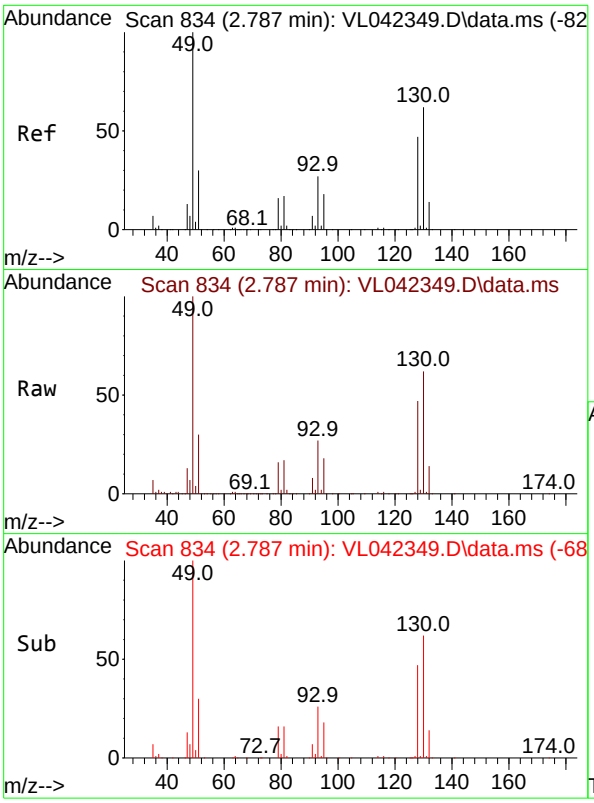
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042349.D
Acq On : 17 Apr 2025 09:44
Operator : SY/MD
Sample : VSTDICCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Quant Time: Apr 18 01:25:08 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



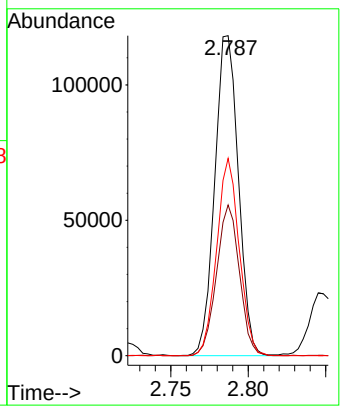


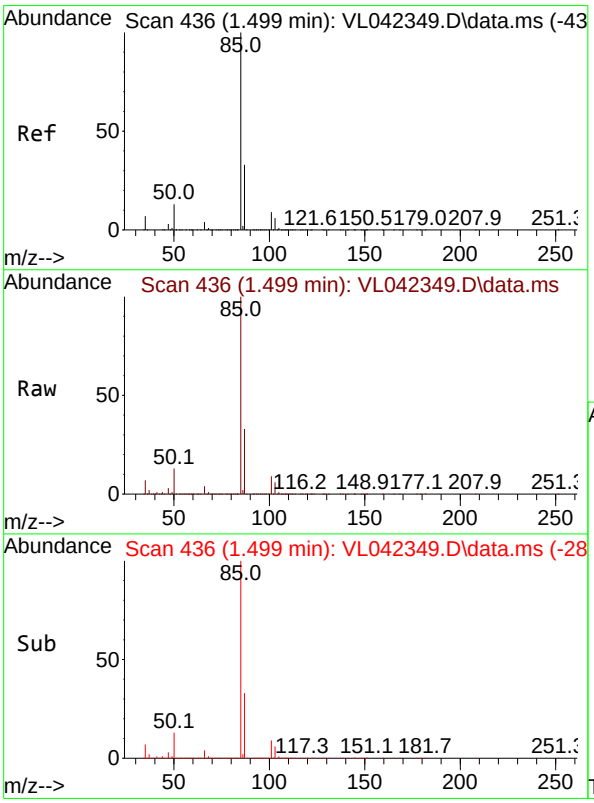
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 49 Resp: 125455

Ion	Ratio	Lower	Upper
49	100		
128	45.6	22.8	68.4
130	58.7	29.3	88.0

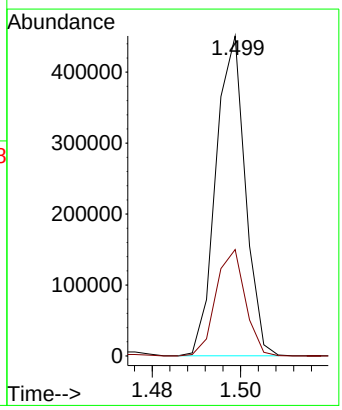


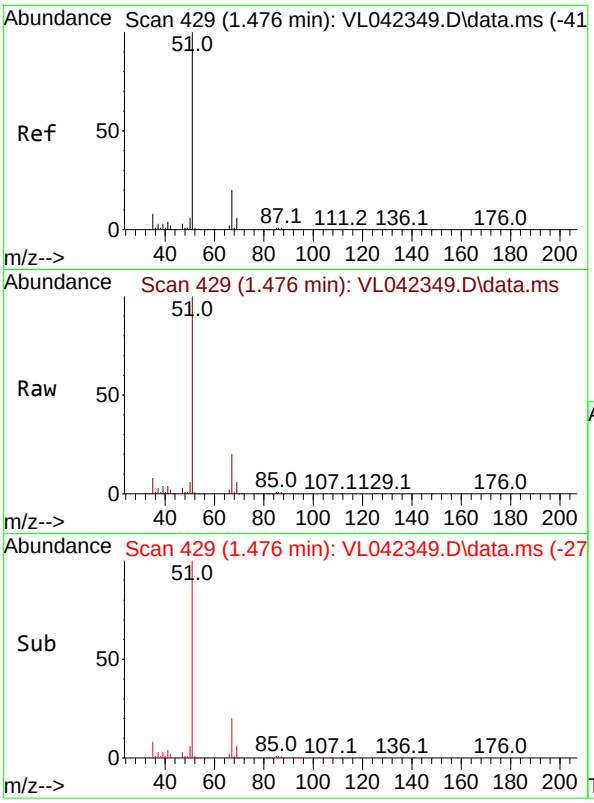


#2
Dichlorodifluoromethane
Concen: 9.382 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 85 Resp: 207962

Ion	Ratio	Lower	Upper
85	100		
87	33.2	26.6	39.8



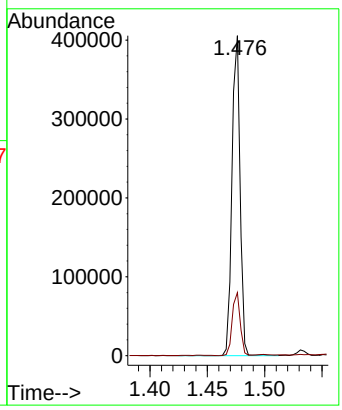


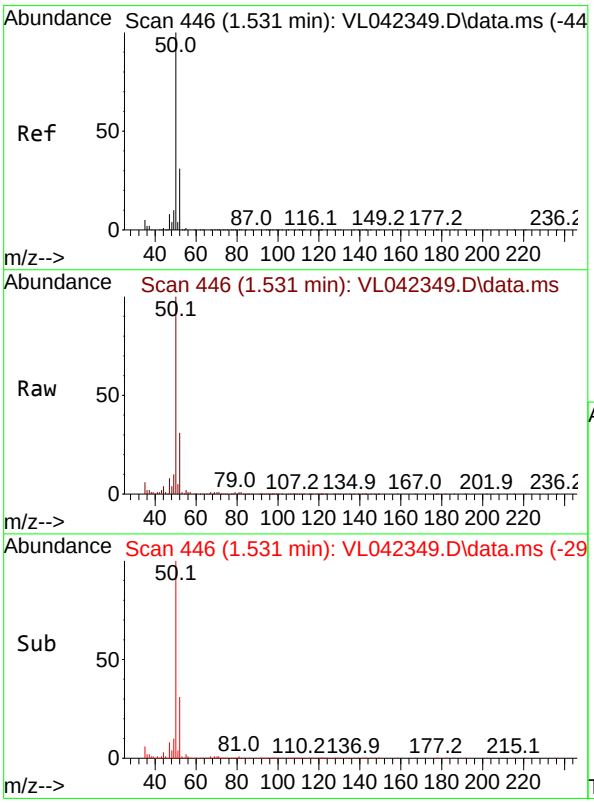
#3
Chlorodifluoromethane
Concen: 9.350 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 51 Resp: 197334

Ion	Ratio	Lower	Upper
51	100		
67	20.3	16.2	24.4

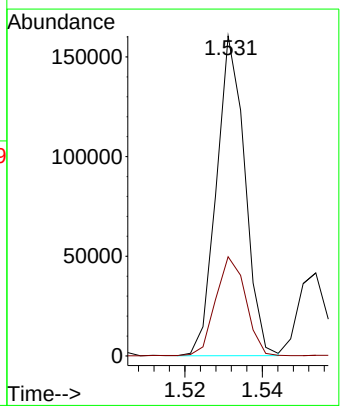


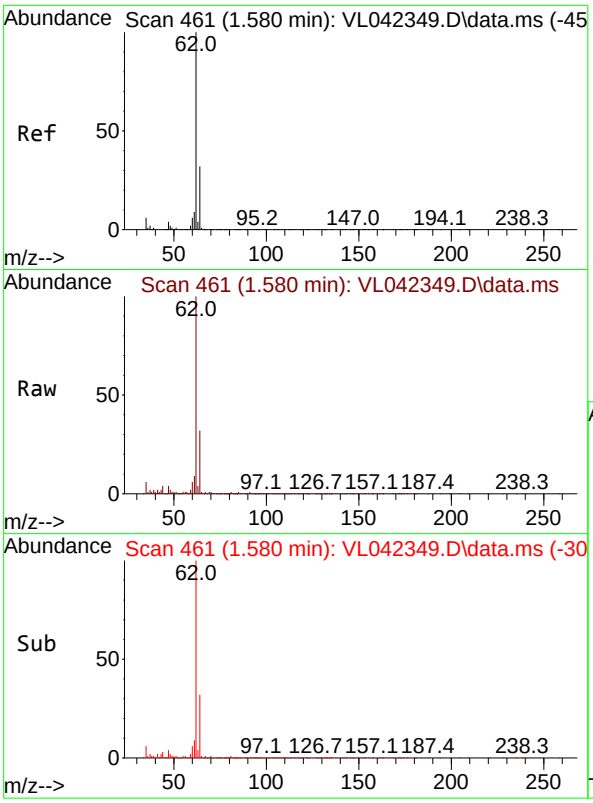


#4
Chloromethane
Concen: 9.330 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 50 Resp: 81843

Ion	Ratio	Lower	Upper
50	100		
52	30.9	24.7	37.1



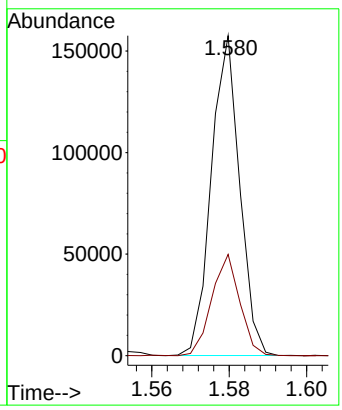


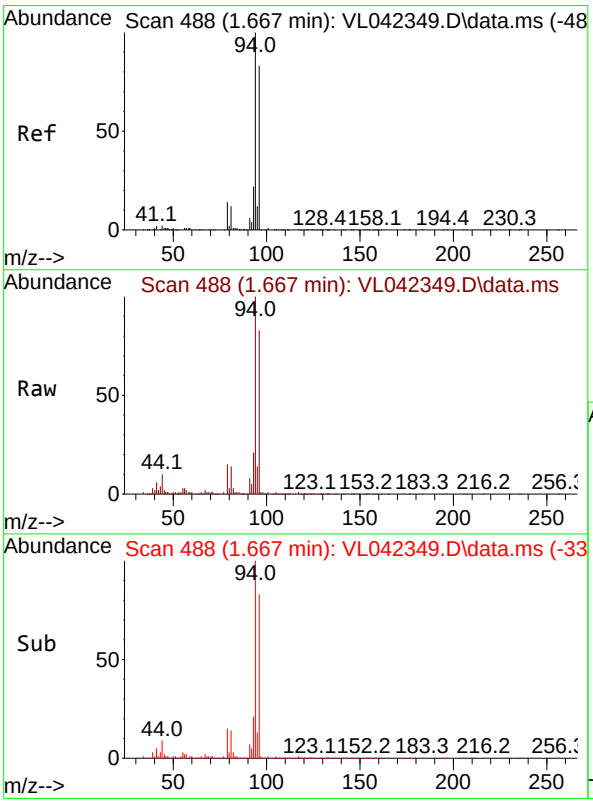
#5
Vinyl Chloride
Concen: 8.385 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 80068

Ion	Ratio	Lower	Upper
62	100		
64	31.7	25.4	38.0

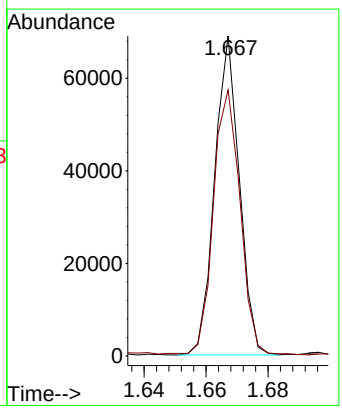


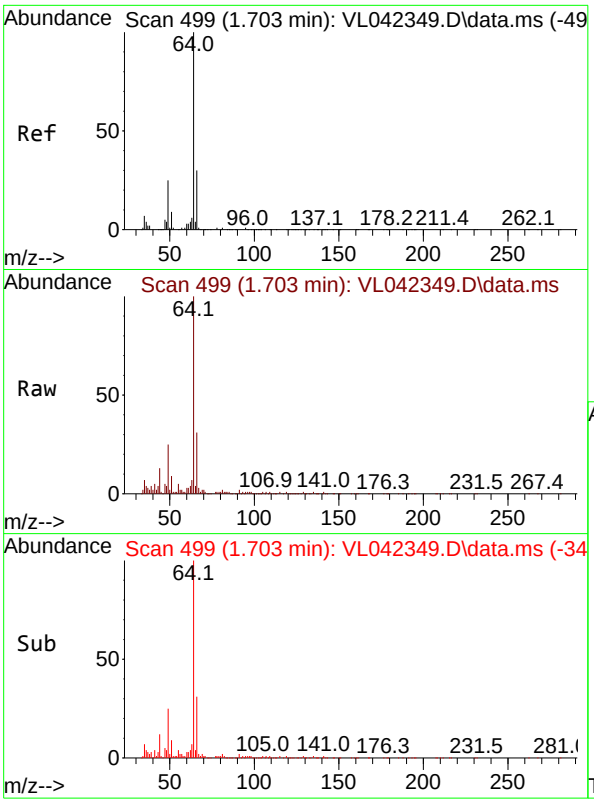


#6
Bromomethane
Concen: 9.219 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 94 Resp: 38128

Ion	Ratio	Lower	Upper
94	100		
96	82.7	66.2	99.2



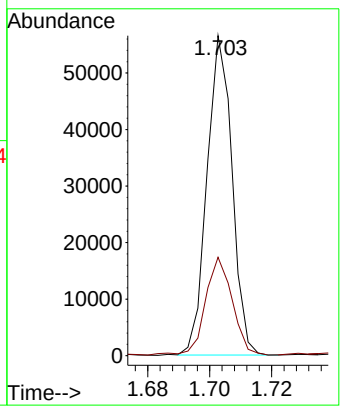


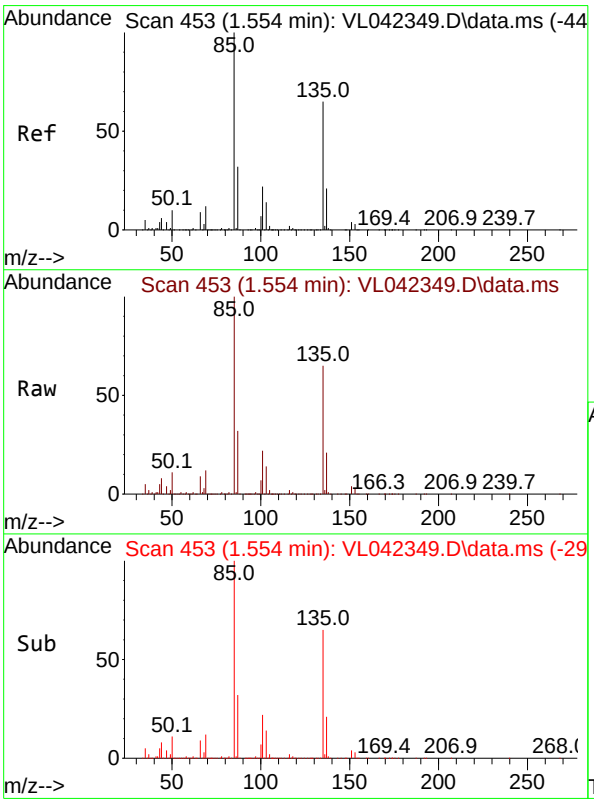
#7
Chloroethane
Concen: 9.182 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 64 Resp: 31705

Ion	Ratio	Lower	Upper
64	100		
66	30.8	24.6	37.0

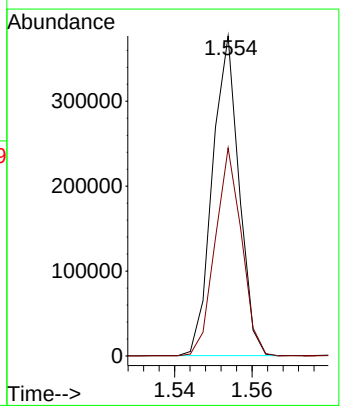


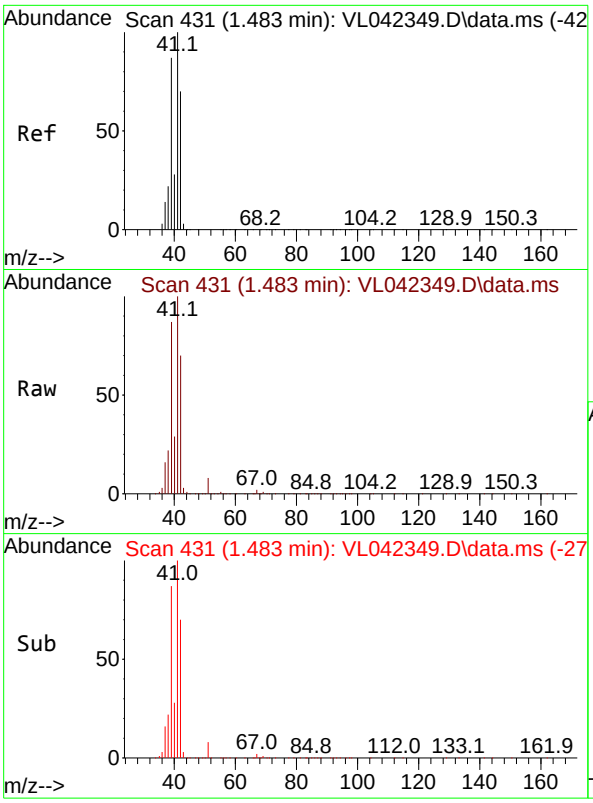


#8
Dichlorotetrafluoroethane
Concen: 9.442 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 85 Resp: 179696

Ion	Ratio	Lower	Upper
85	100		
135	65.2	52.2	78.2



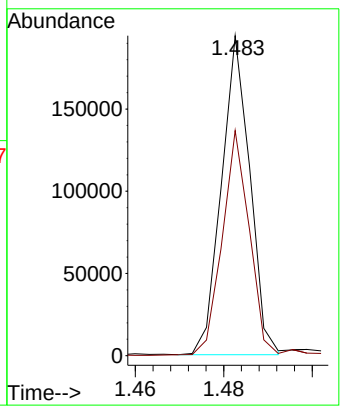


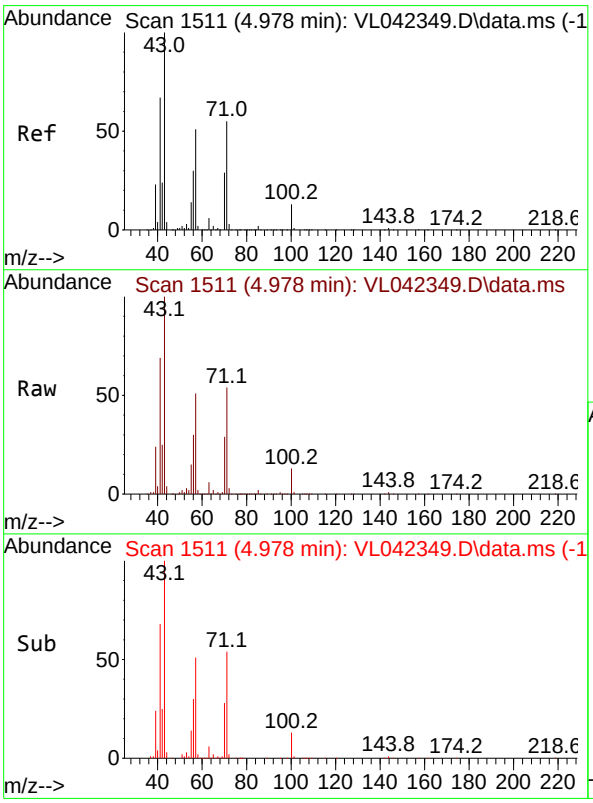
#9
Propene
Concen: 9.002 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 86530

Ion	Ratio	Lower	Upper
41	100		
42	70.3	56.2	84.4

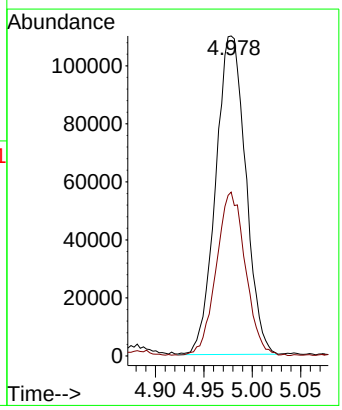


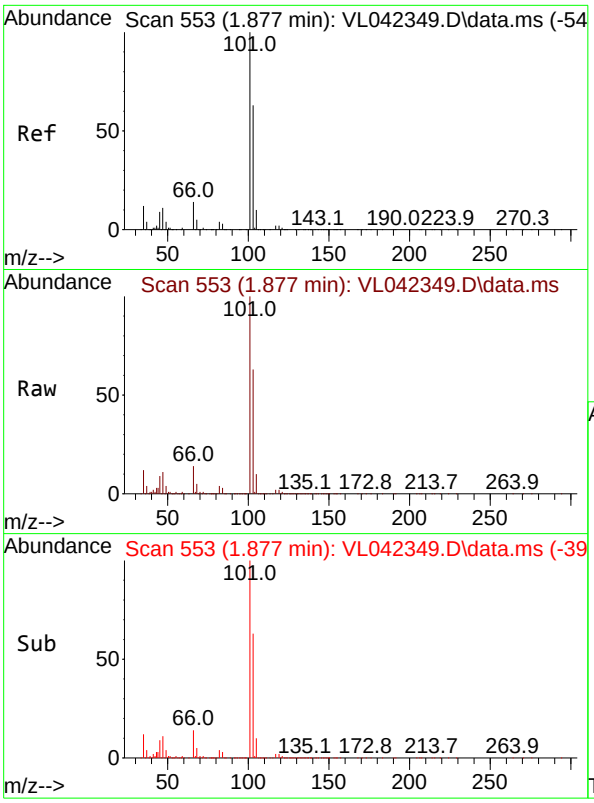


#10
Heptane
Concen: 9.138 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 236341

Ion	Ratio	Lower	Upper
43	100		
57	49.9	39.9	59.9



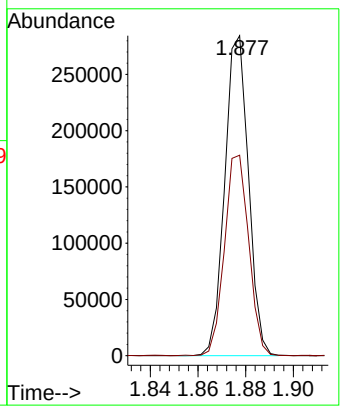


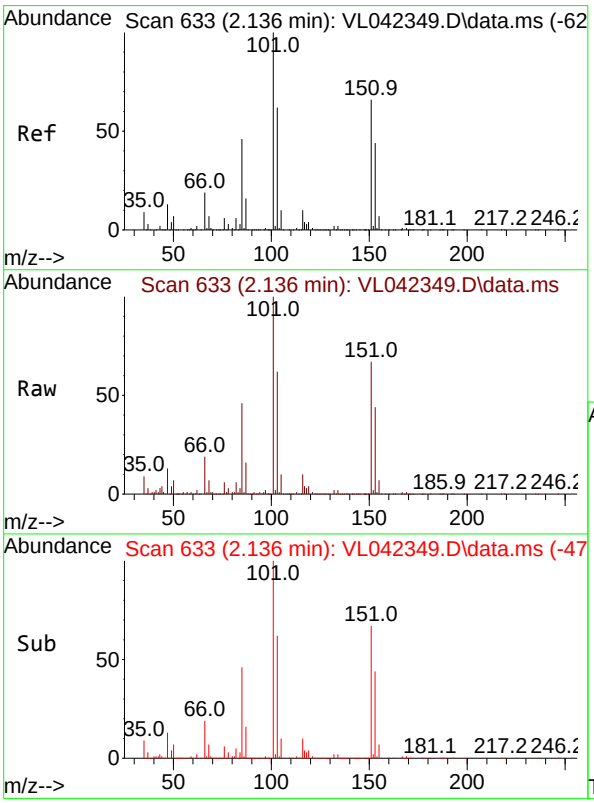
#11
Trichlorofluoromethane
Concen: 9.327 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:101 Resp: 196596

Ion	Ratio	Lower	Upper
101	100		
103	62.6	50.1	75.1

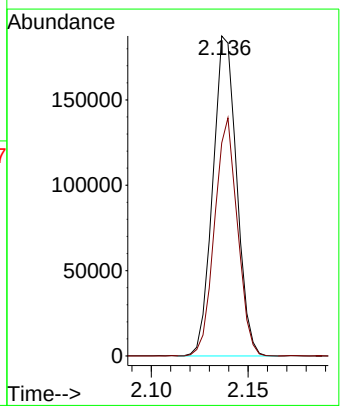


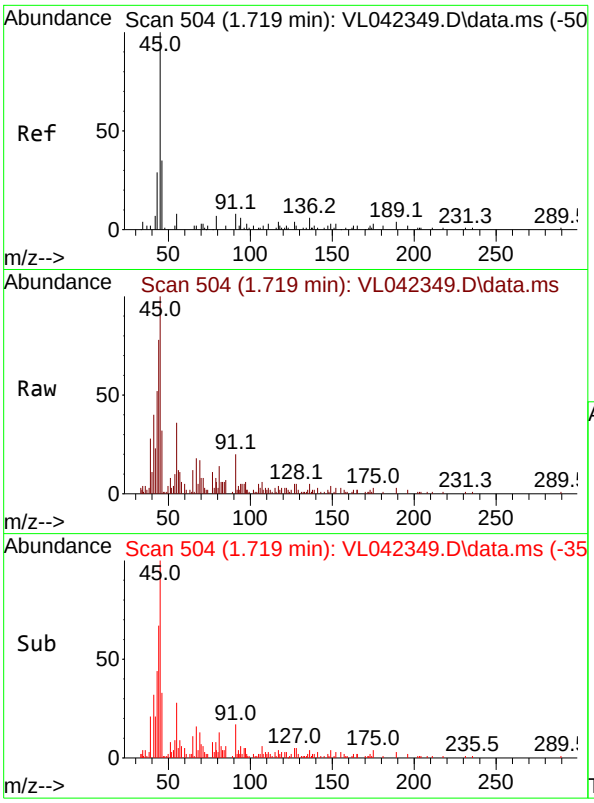


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.323 ppbv
RT: 2.136 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:101 Resp: 160682

Ion	Ratio	Lower	Upper
101	100		
151	71.3	57.0	85.6



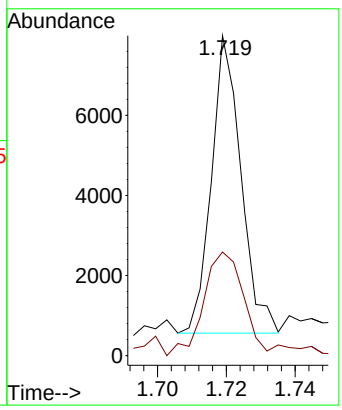


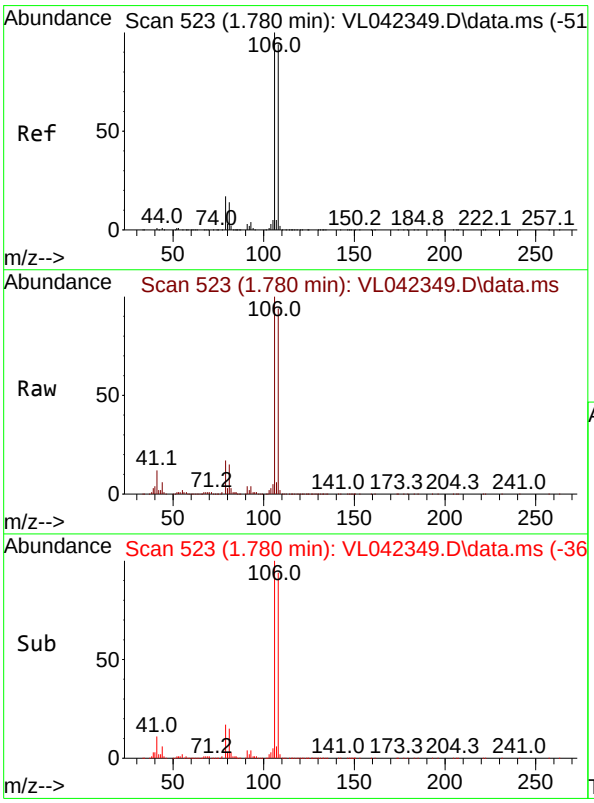
#13
Ethanol
Concen: 5.651 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 4439

Ion	Ratio	Lower	Upper
45	100		
46	54.8	21.9	87.7

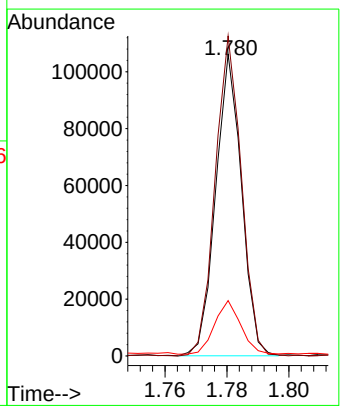


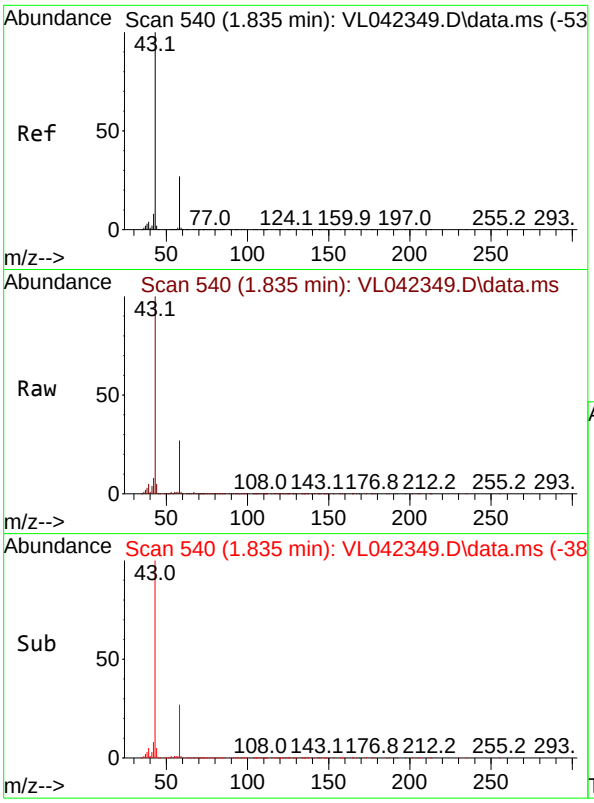


#14
Bromoethene
Concen: 9.466 ppbv
RT: 1.780 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:108 Resp: 61493

Ion	Ratio	Lower	Upper
108	100		
106	107.4	85.9	128.9
79	17.4	13.9	20.9



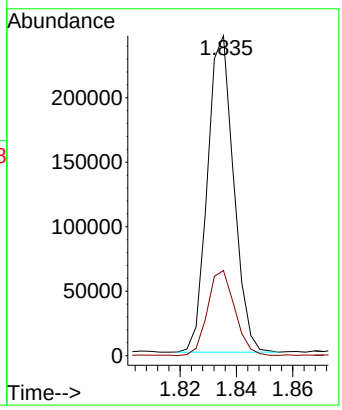


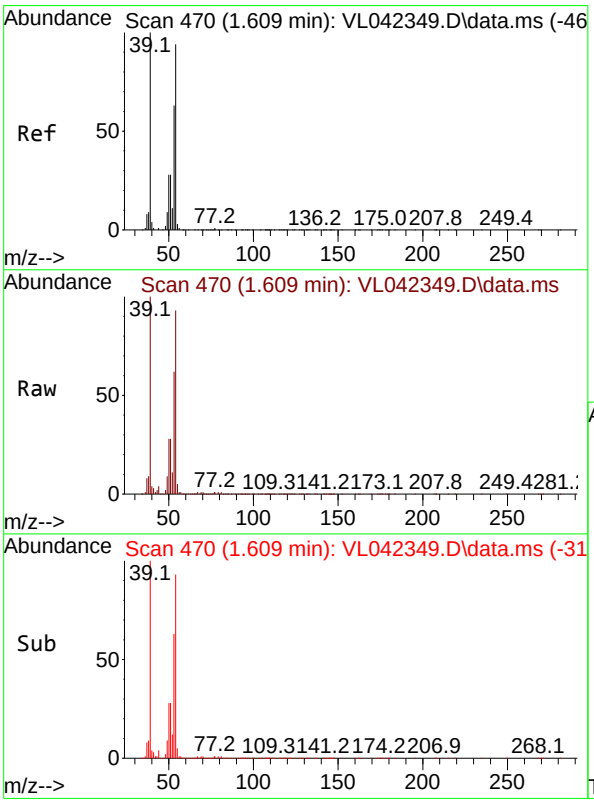
#15
Acetone
Concen: 7.717 ppbv
RT: 1.835 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 158490

Ion	Ratio	Lower	Upper
43	100		
58	28.0	22.4	33.6

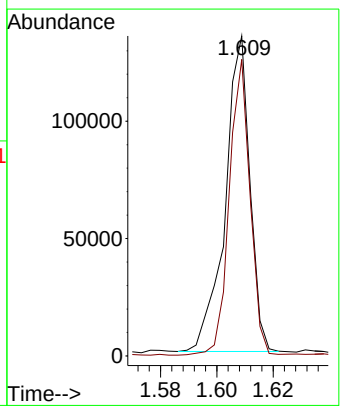


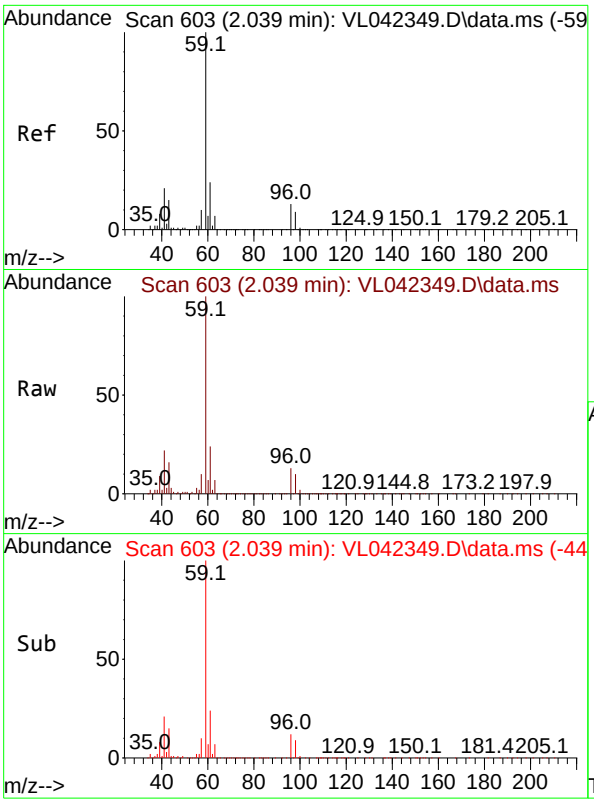


#16
1,3-Butadiene
Concen: 8.470 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 39 Resp: 81688

Ion	Ratio	Lower	Upper
39	100		
54	81.1	64.9	97.3



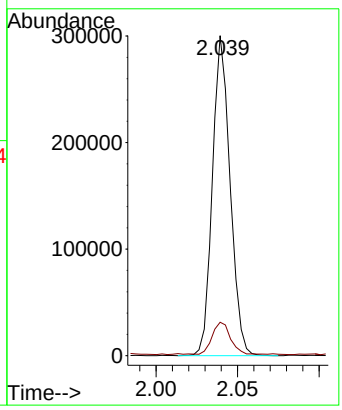


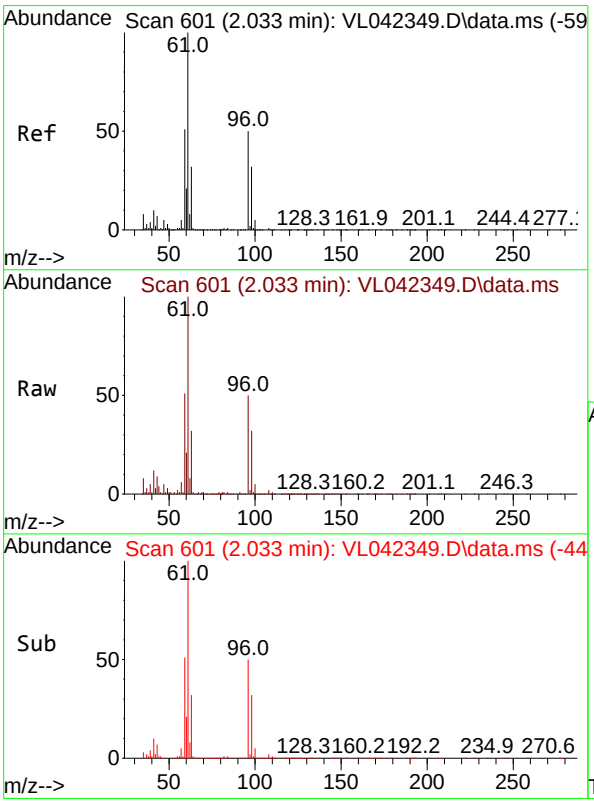
#17
tert-Butyl alcohol
Concen: 8.891 ppbv
RT: 2.039 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 59 Resp: 226280

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1

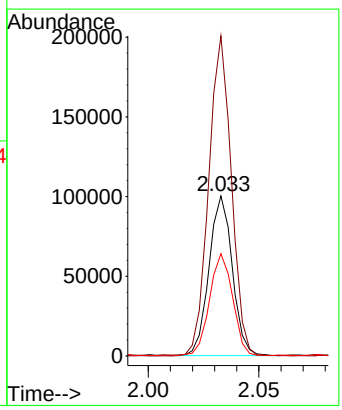


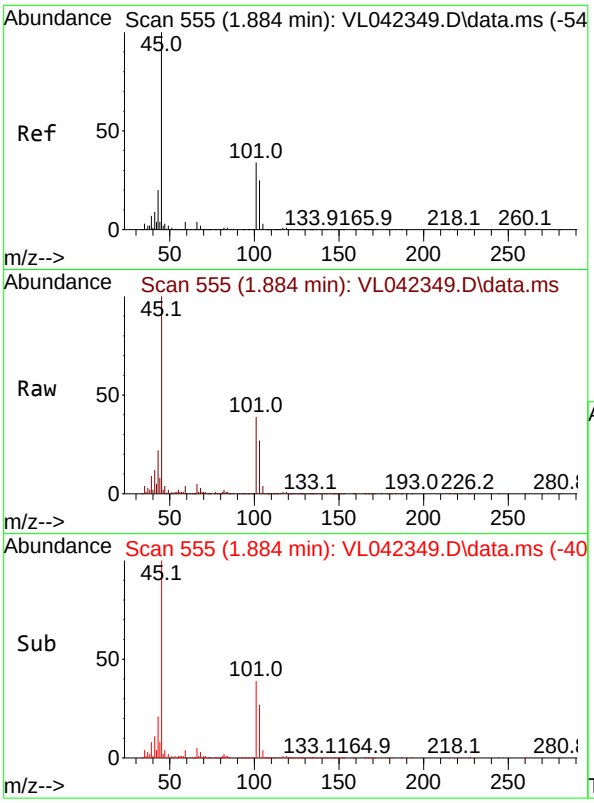


#18
1,1-Dichloroethene
Concen: 8.833 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 96 Resp: 73186

Ion	Ratio	Lower	Upper
96	100		
61	200.2	160.2	240.2
98	63.7	51.0	76.4



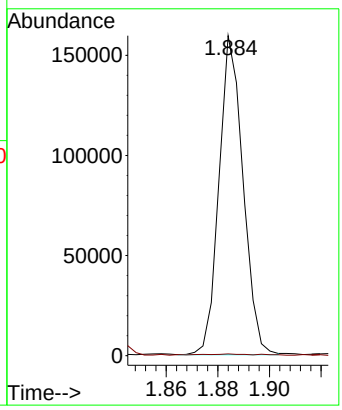


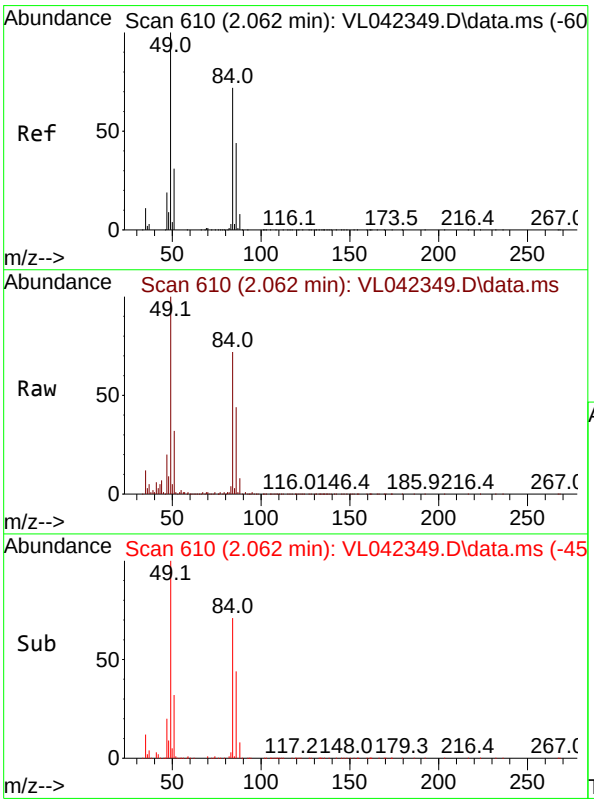
#19
Isopropyl Alcohol
Concen: 9.031 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 45 Resp: 103029

Ion	Ratio	Lower	Upper
45	100		
58	43.1	34.5	51.7

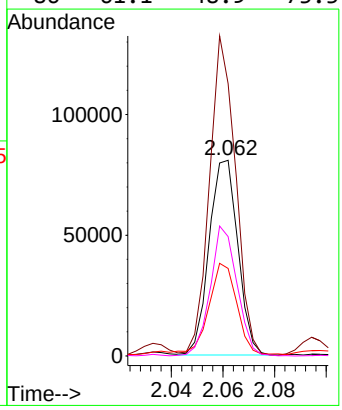


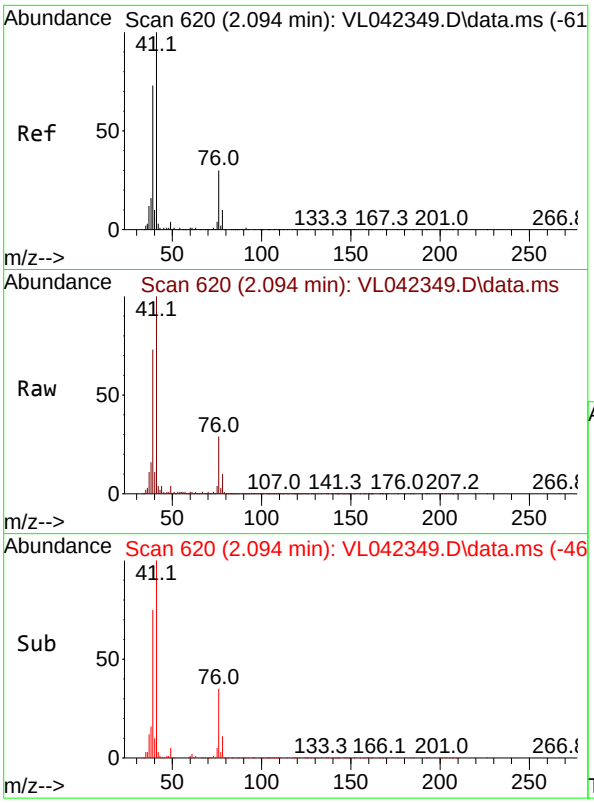


#20
Methylene Chloride
Concen: 7.760 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 84 Resp: 62414

Ion	Ratio	Lower	Upper
84	100		
49	139.5	111.6	167.4
51	43.9	35.1	52.7
86	61.1	48.9	73.3



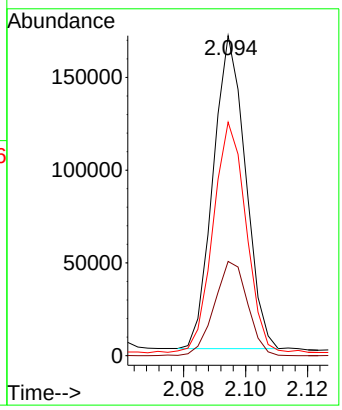


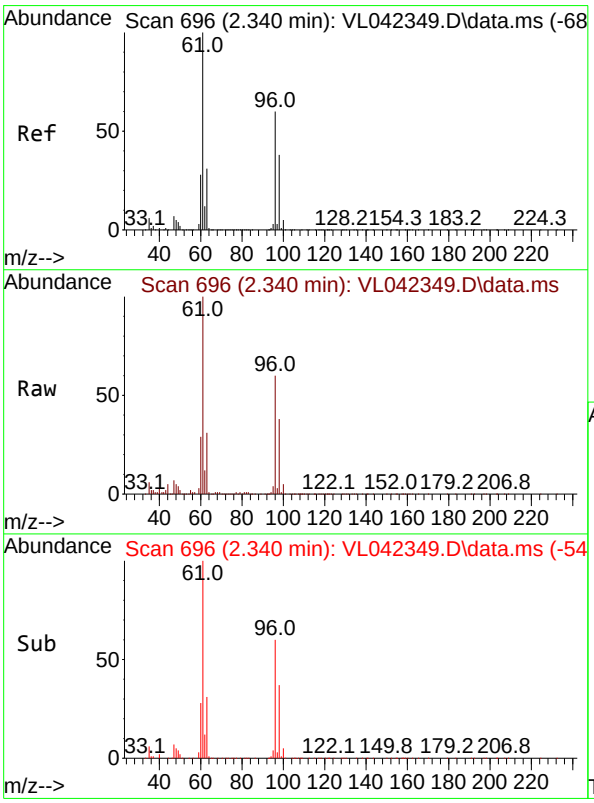
#21
Allyl Chloride
Concen: 8.611 ppbv
RT: 2.094 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 41 Resp: 122115

Ion	Ratio	Lower	Upper
41	100		
76	31.0	24.8	37.2
39	75.7	60.6	90.8

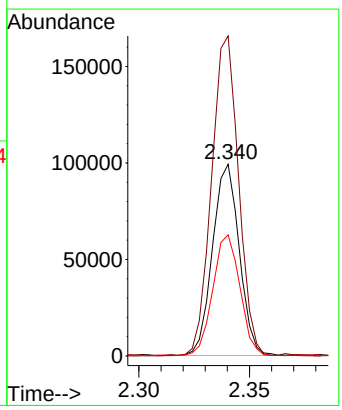


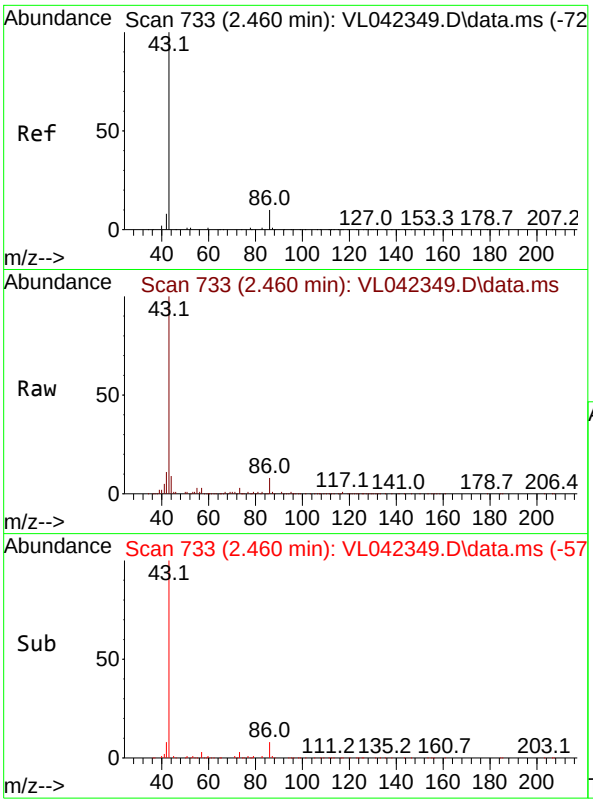


#22
trans-1,2-Dichloroethene
Concen: 9.084 ppbv
RT: 2.340 min Scan# 696
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 96 Resp: 83278

Ion	Ratio	Lower	Upper
96	100		
61	167.1	133.7	200.5
98	62.9	50.3	75.5



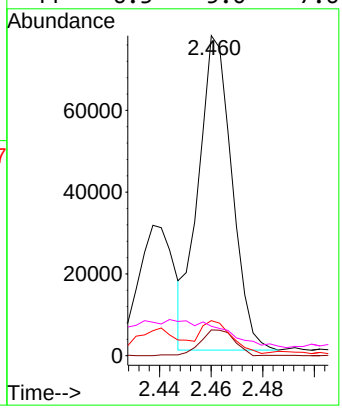


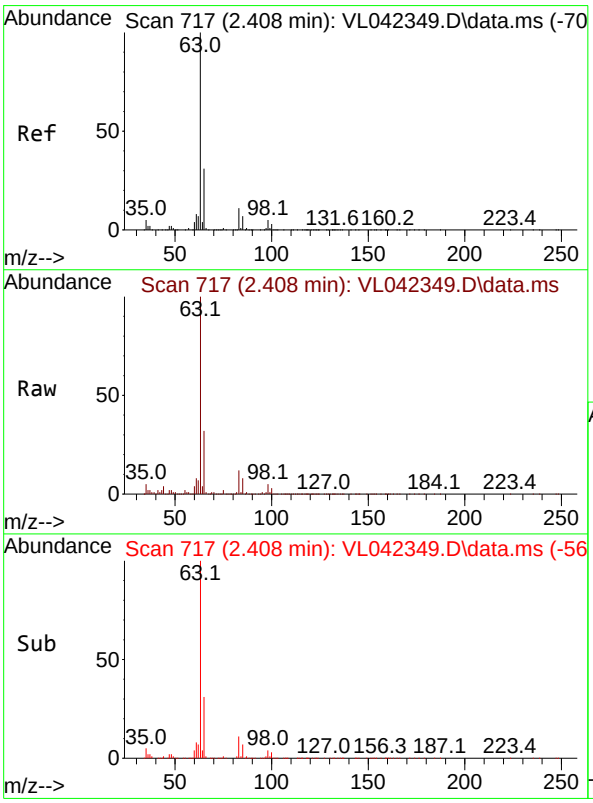
#23
Vinyl Acetate
Concen: 8.378 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 69649

Ion	Ratio	Lower	Upper
43	100		
86	8.1	6.5	9.7
42	9.8	7.8	11.8
44	6.3	5.0	7.6

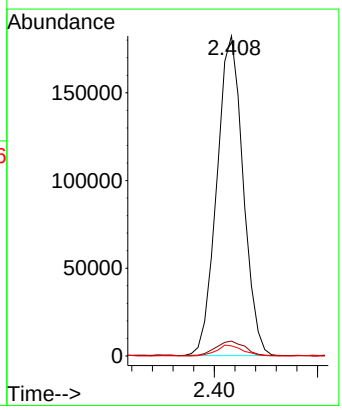


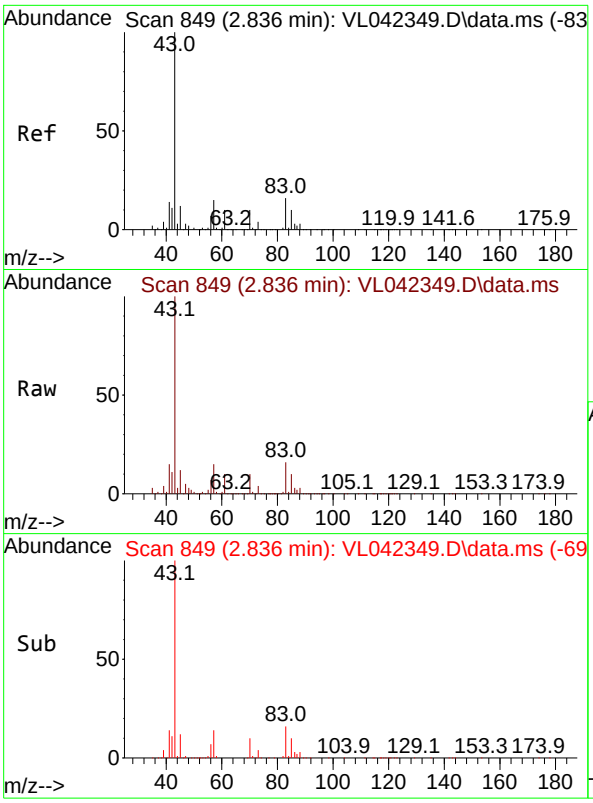


#24
1,1-Dichloroethane
Concen: 9.251 ppbv
RT: 2.408 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 63 Resp: 161102

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	3.2	1.6	4.8



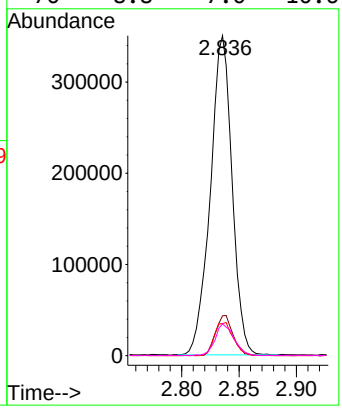


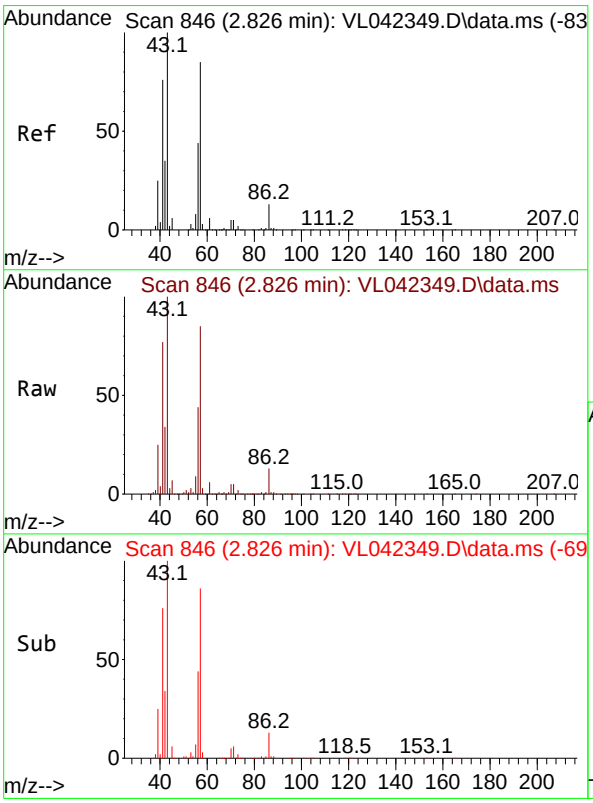
#25
Ethyl Acetate
Concen: 9.110 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 461315

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.1	7.3	10.9
70	8.8	7.0	10.6

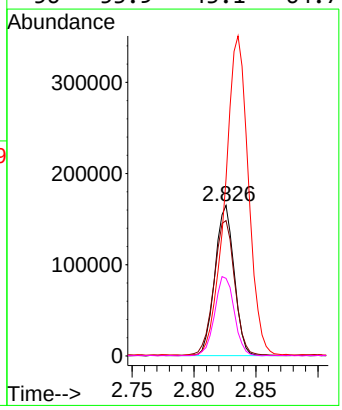


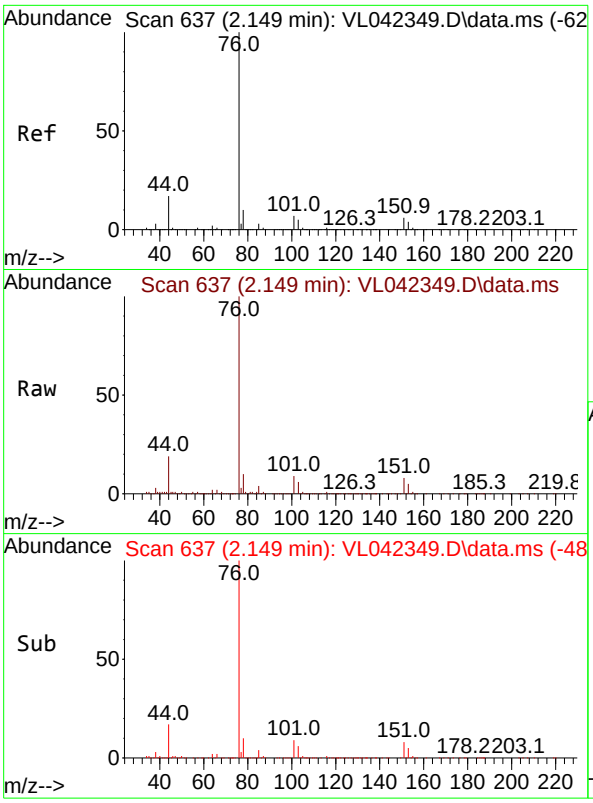


#26
Hexane
Concen: 8.720 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 57 Resp: 178691

Ion	Ratio	Lower	Upper
57	100		
41	97.4	77.9	116.9
43	260.5	208.4	312.6
56	53.9	43.1	64.7



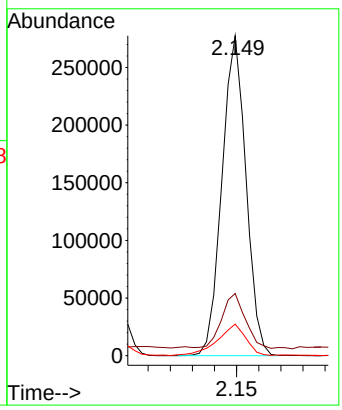


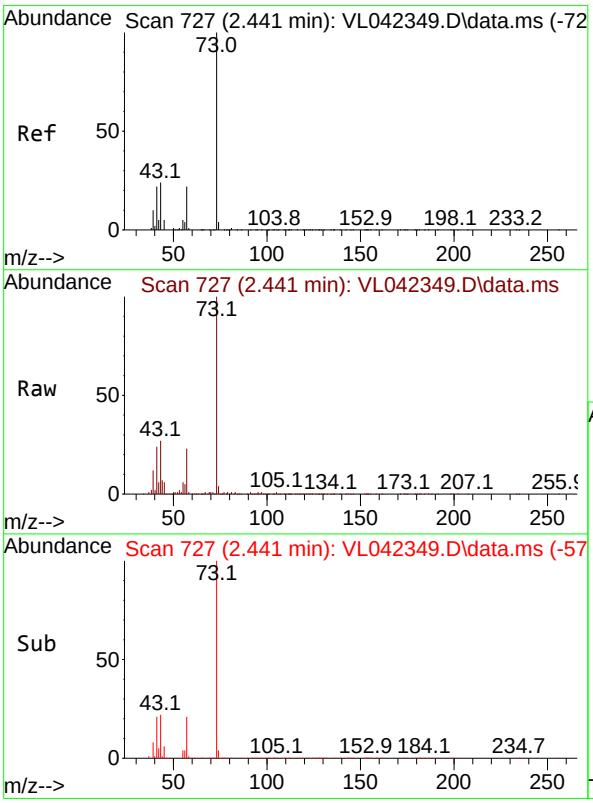
#27
Carbon Disulfide
Concen: 9.539 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 76 Resp: 209297

Ion	Ratio	Lower	Upper
76	100		
44	19.4	15.5	23.3
78	11.6	9.3	13.9

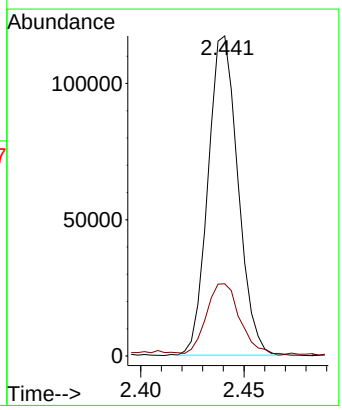


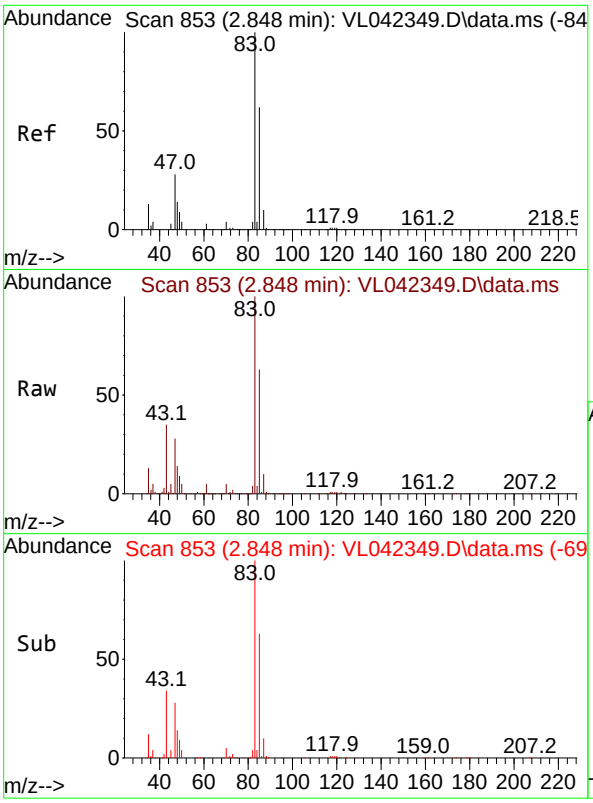


#28
Methyl tert-Butyl Ether
Concen: 8.783 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 73 Resp: 117924

Ion	Ratio	Lower	Upper
73	100		
57	26.6	21.3	31.9



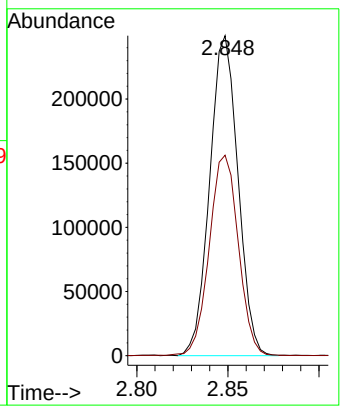


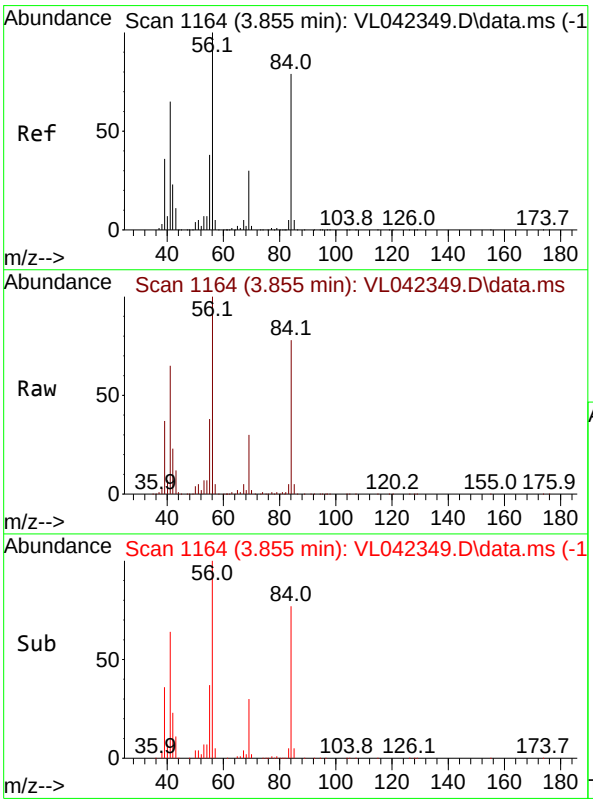
#29
Chloroform
Concen: 9.290 ppbv
RT: 2.848 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 269088

Ion	Ratio	Lower	Upper
83	100		
85	62.5	50.0	75.0

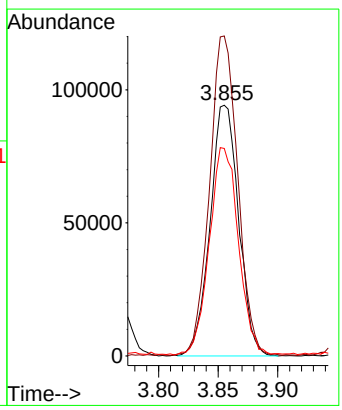


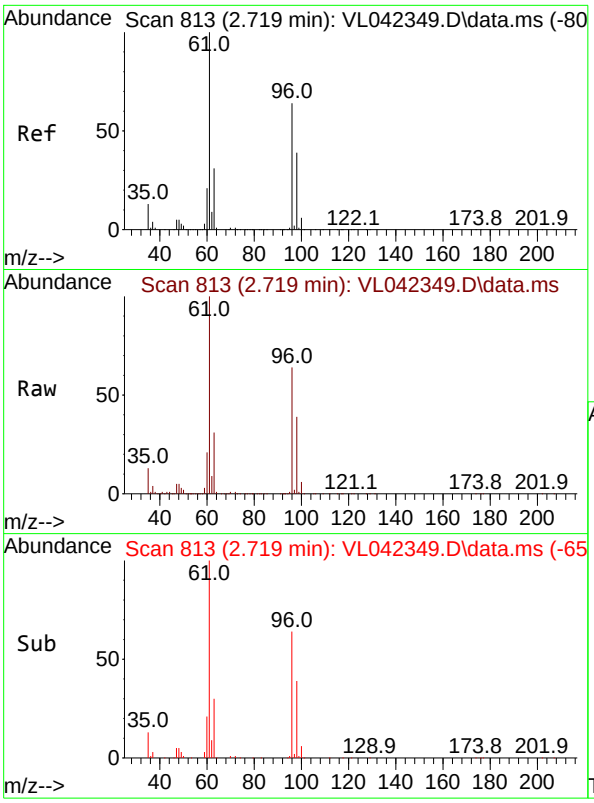


#30
Cyclohexane
Concen: 9.517 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 84 Resp: 157035

Ion	Ratio	Lower	Upper
84	100		
56	126.2	101.0	151.4
41	84.2	67.4	101.0



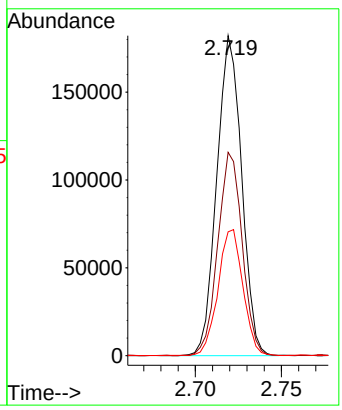


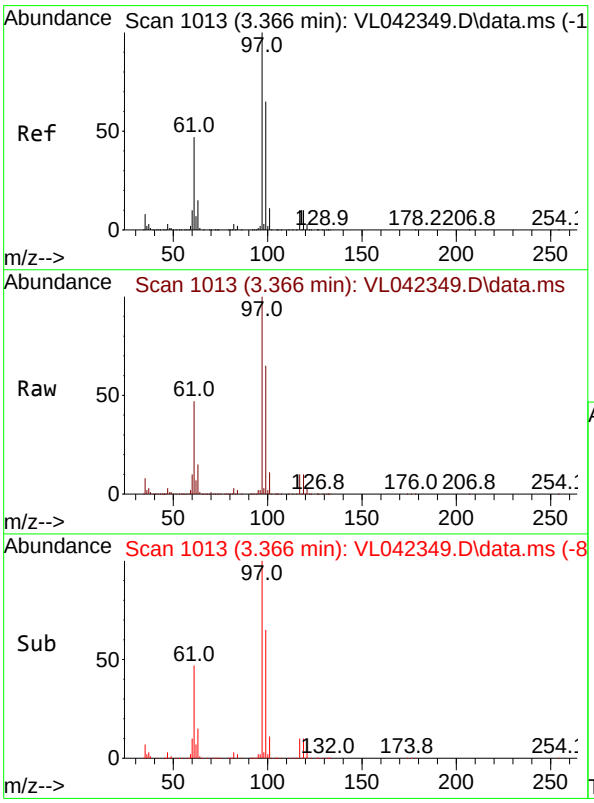
#31
cis-1,2-Dichloroethene
Concen: 9.397 ppbv
RT: 2.719 min Scan# 81
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 61 Resp: 183082

Ion	Ratio	Lower	Upper
61	100		
96	63.5	50.8	76.2
98	38.6	30.9	46.3

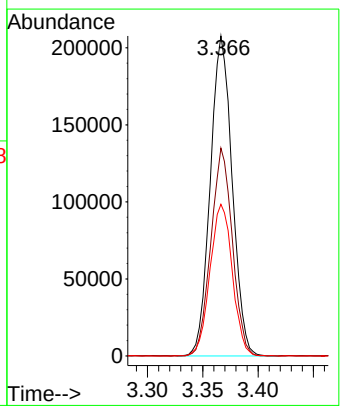


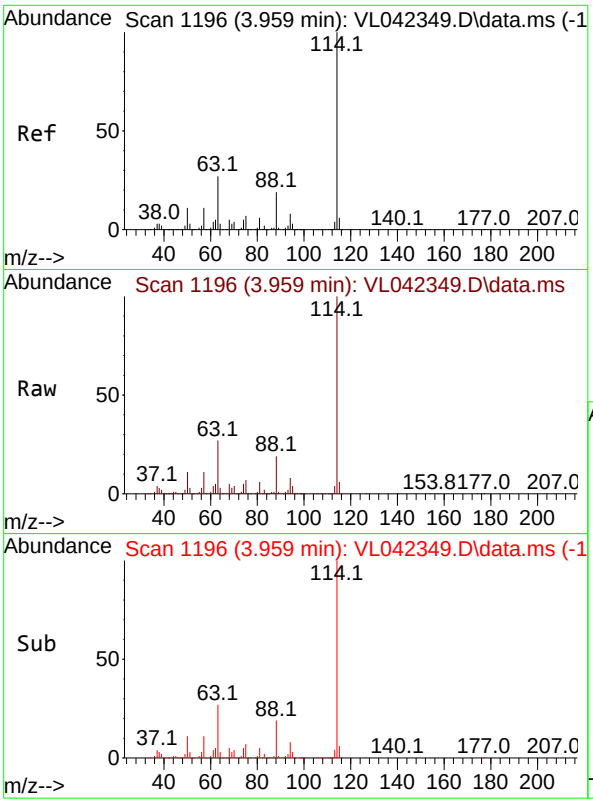


#32
1,1,1-Trichloroethane
Concen: 9.187 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 97 Resp: 285336

Ion	Ratio	Lower	Upper
97	100		
99	63.7	51.0	76.4
61	48.5	38.8	58.2



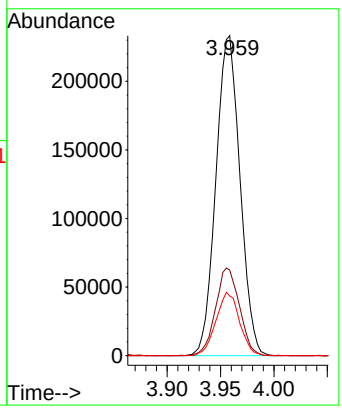


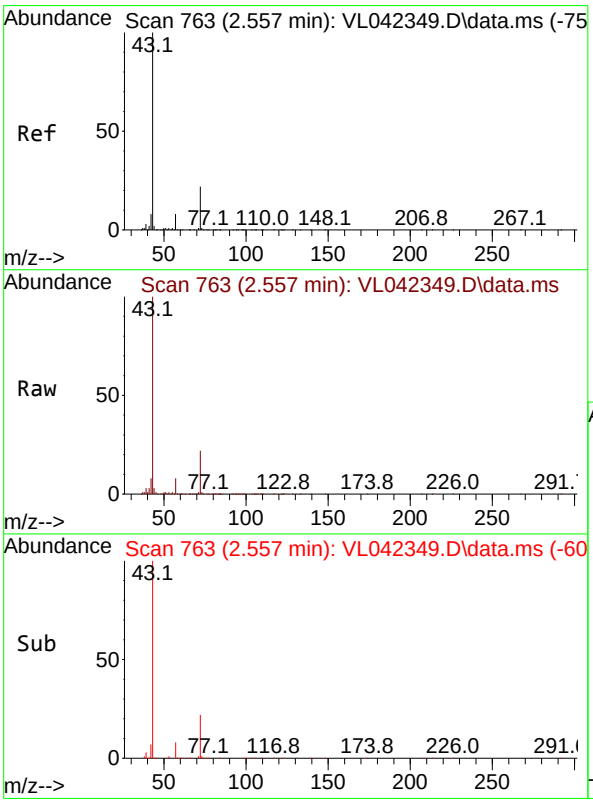
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:114 Resp: 366544

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.4	15.5	23.3

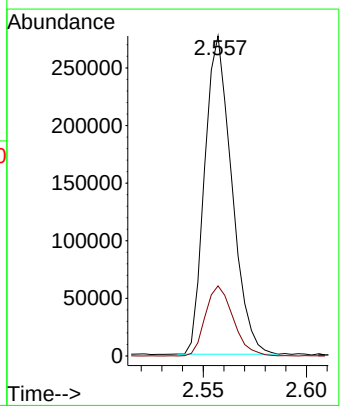


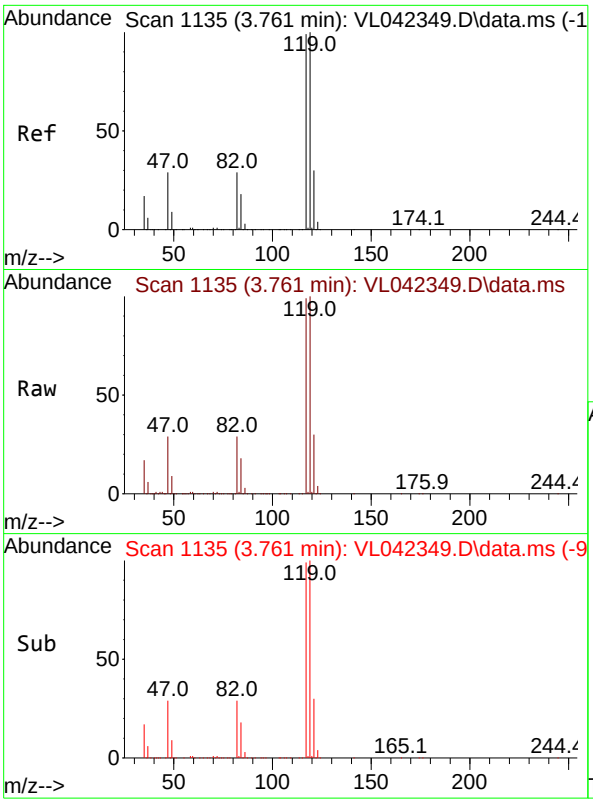


#34
2-Butanone
Concen: 8.683 ppbv
RT: 2.557 min Scan# 763
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 251704

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2



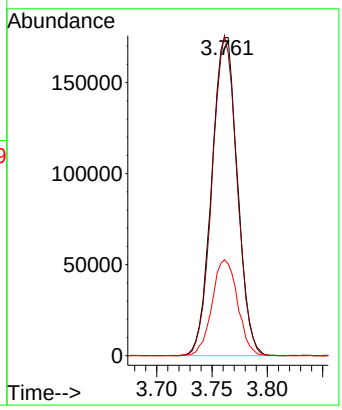


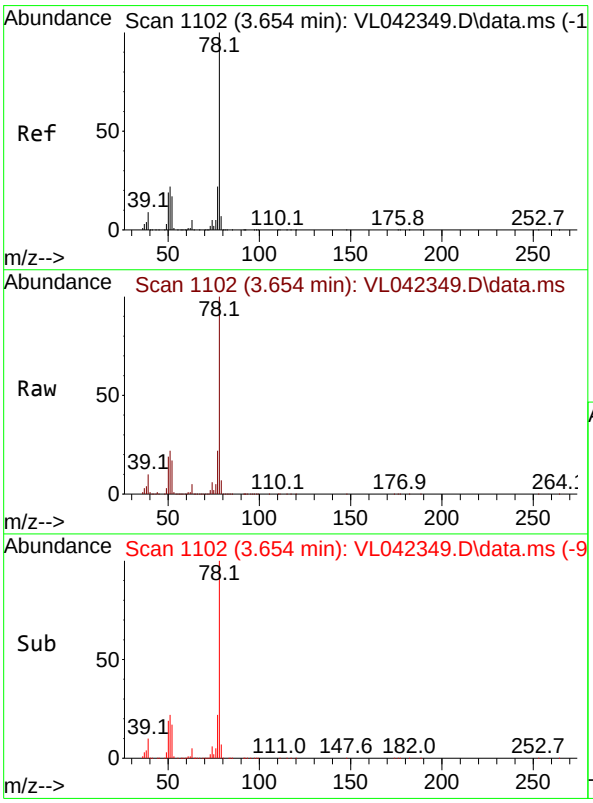
#35
Carbon Tetrachloride
Concen: 8.513 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 282402

Ion	Ratio	Lower	Upper
117	100		
119	100.6	80.5	120.7
121	30.2	24.2	36.2

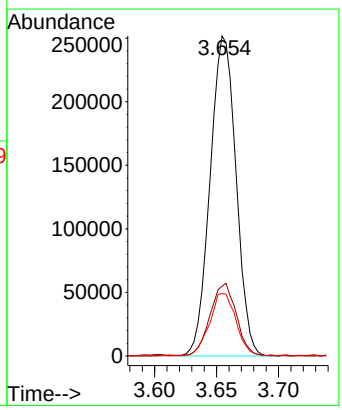


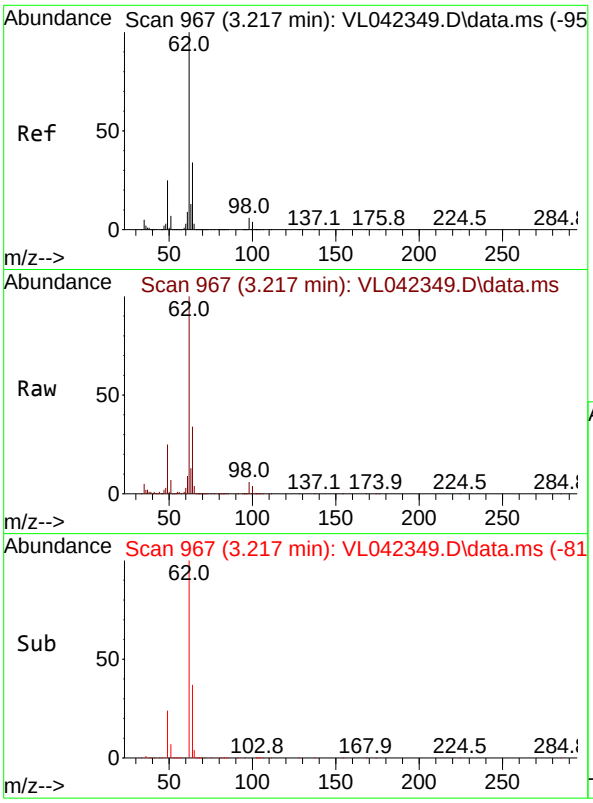


#36
Benzene
Concen: 9.292 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 78 Resp: 367355

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	19.4	15.5	23.3



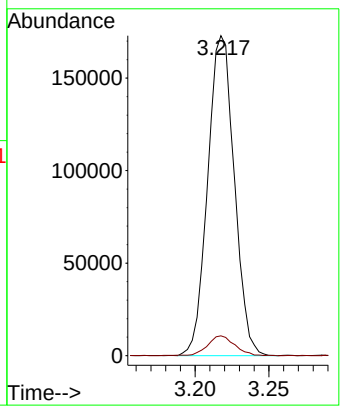


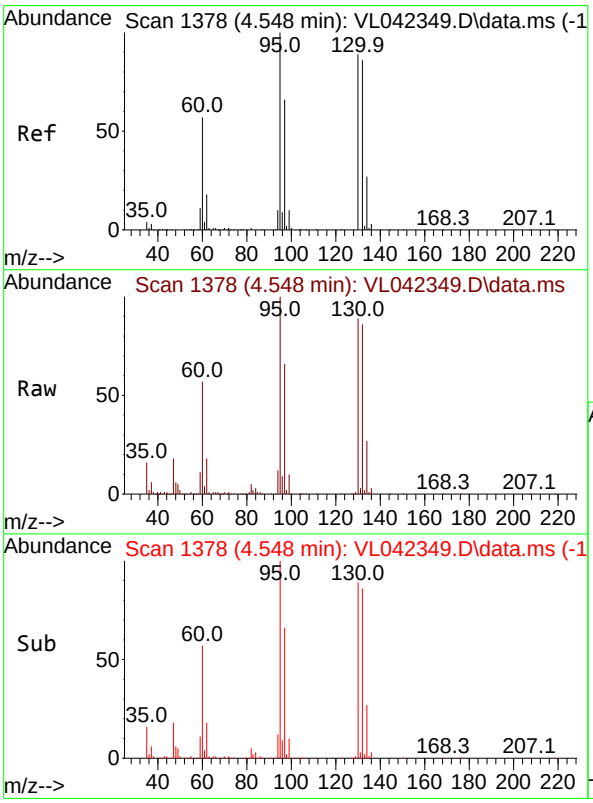
#37
1,2-Dichloroethane
Concen: 9.145 ppbv
RT: 3.217 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 62 Resp: 216999

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.1	7.7

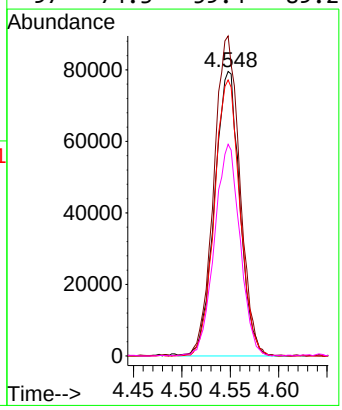


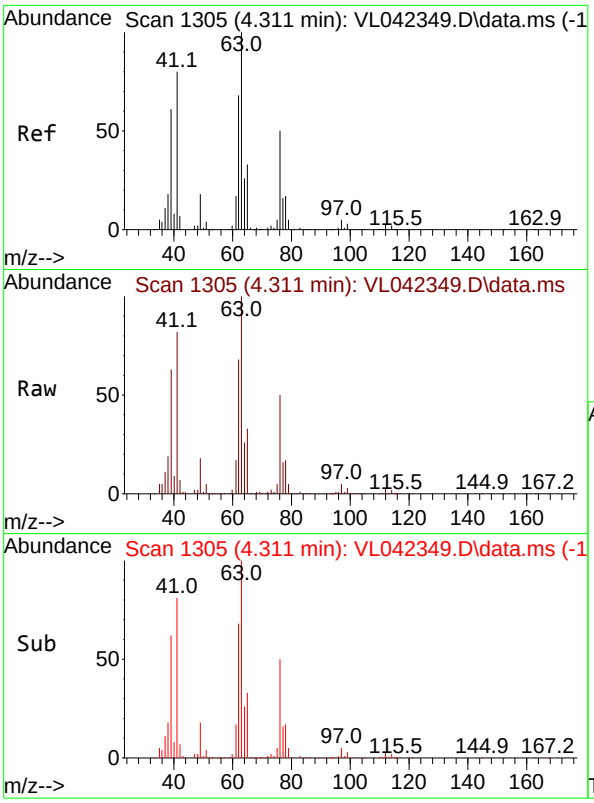


#38
Trichloroethene
Concen: 8.352 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:130 Resp: 144767

Ion	Ratio	Lower	Upper
130	100		
95	112.2	89.8	134.6
132	97.1	77.7	116.5
97	74.3	59.4	89.2



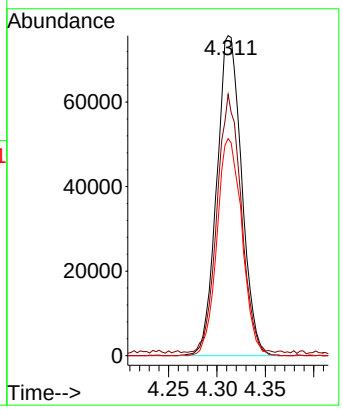


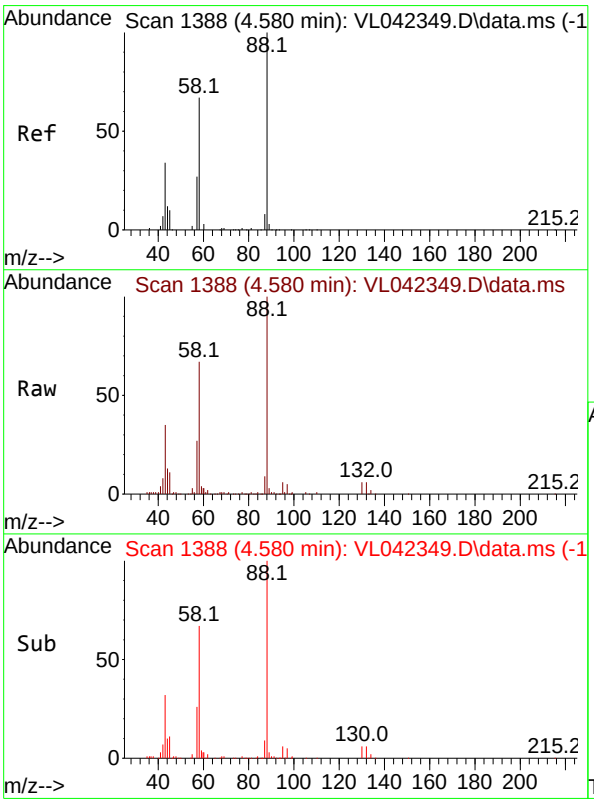
#39
1,2-Dichloropropane
Concen: 9.197 ppbv
RT: 4.311 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 63 Resp: 135605

Ion	Ratio	Lower	Upper
63	100		
41	80.2	64.2	96.2
62	67.9	54.3	81.5

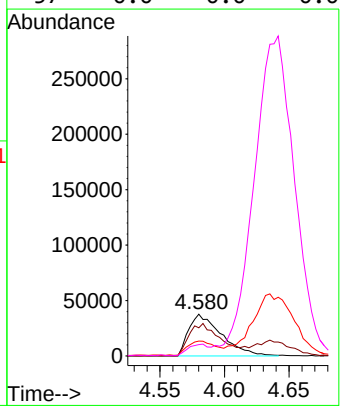


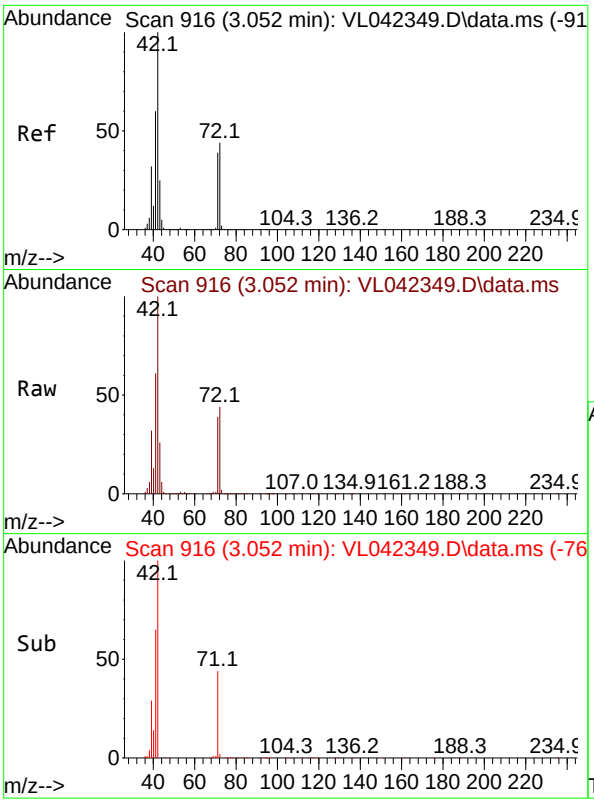


#40
1,4-Dioxane
Concen: 8.348 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 88 Resp: 66662

Ion	Ratio	Lower	Upper
88	100		
58	76.7	61.4	92.0
43	29.0	23.2	34.8
57	0.0	0.0	0.0



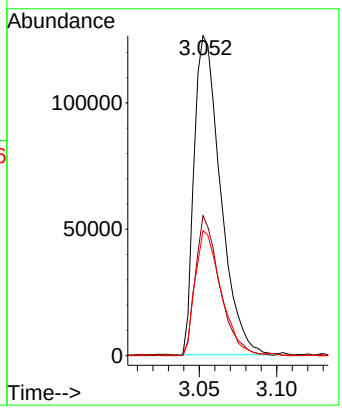


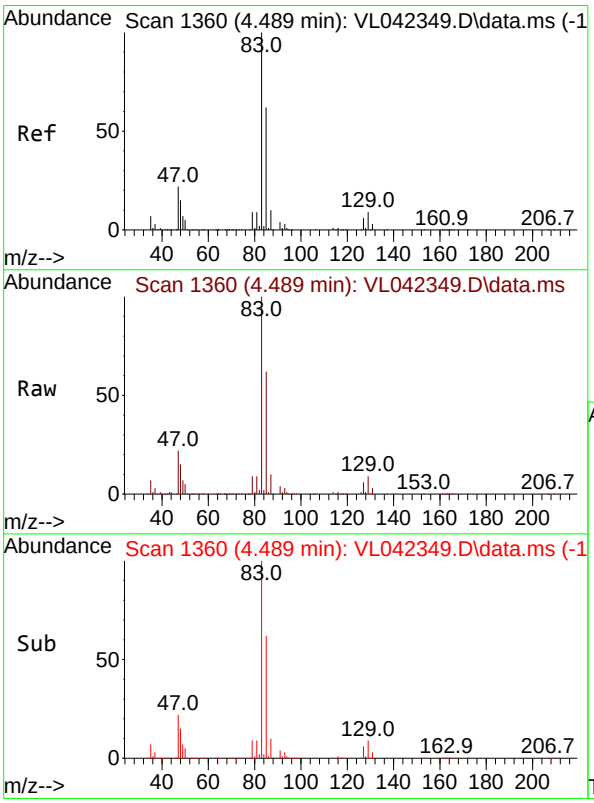
#41
Tetrahydrofuran
Concen: 8.950 ppbv
RT: 3.052 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 42 Resp: 149905

Ion	Ratio	Lower	Upper
42	100		
72	40.4	32.3	48.5
71	39.3	31.4	47.2

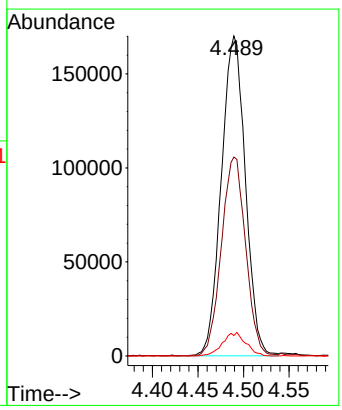


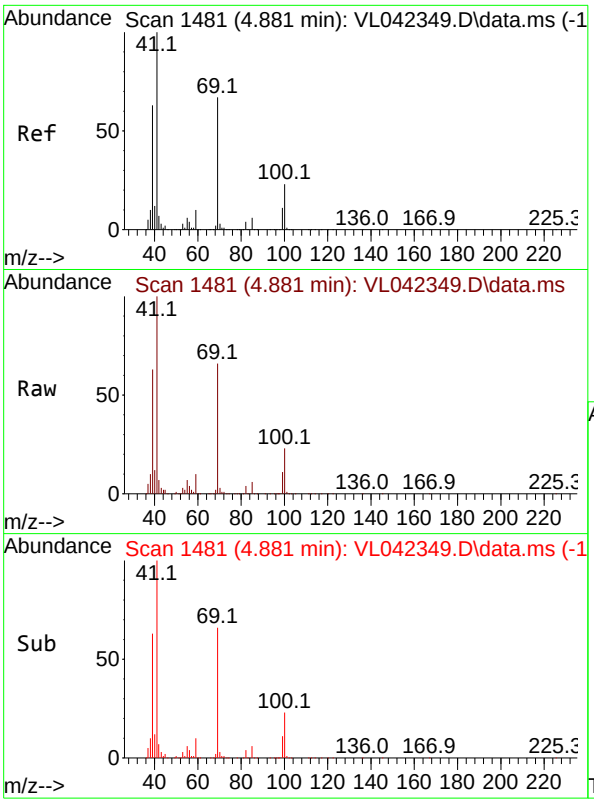


#42
Bromodichloromethane
Concen: 9.456 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 83 Resp: 312268

Ion	Ratio	Lower	Upper
83	100		
85	62.1	49.7	74.5
127	6.4	5.1	7.7



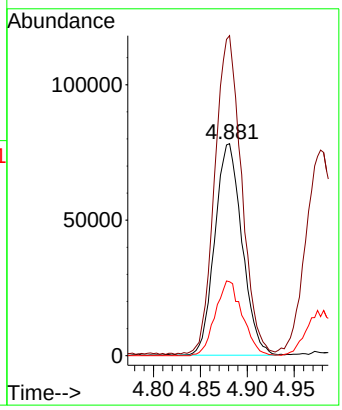


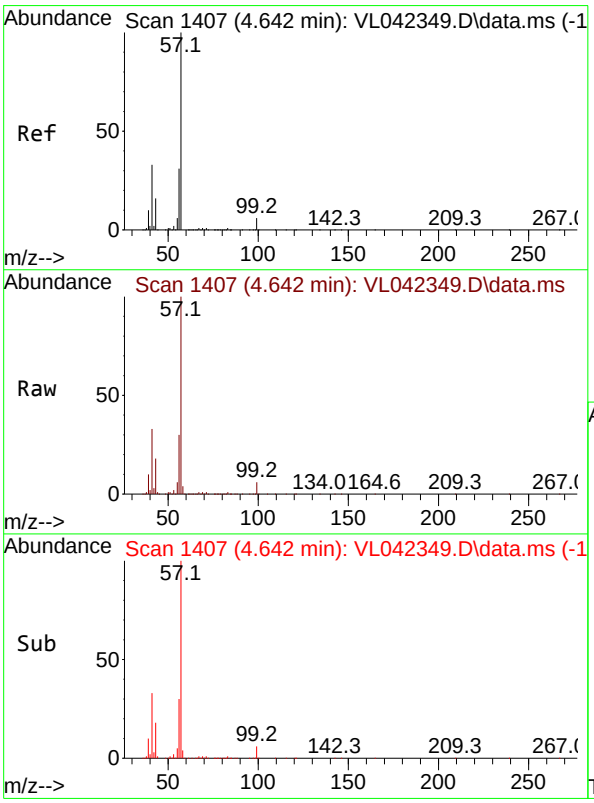
#43
Methyl Methacrylate
Concen: 8.876 ppbv
RT: 4.881 min Scan# 14
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 69 Resp: 157501

Ion	Ratio	Lower	Upper
69	100		
41	148.2	118.6	177.8
100	35.2	28.2	42.2

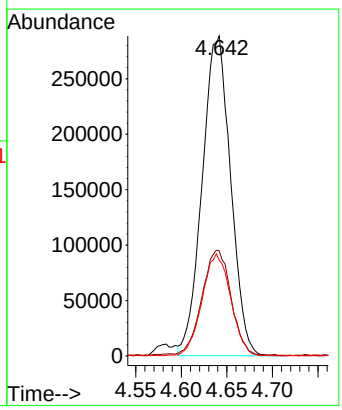


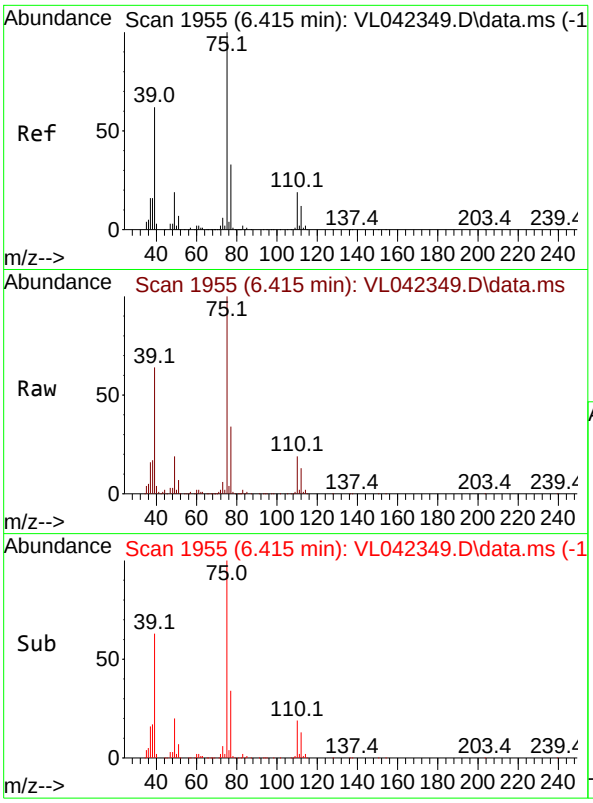


#44
2,2,4-Trimethylpentane
Concen: 9.157 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 57 Resp: 626085

Ion	Ratio	Lower	Upper
57	100		
41	34.0	27.2	40.8
56	32.1	25.7	38.5



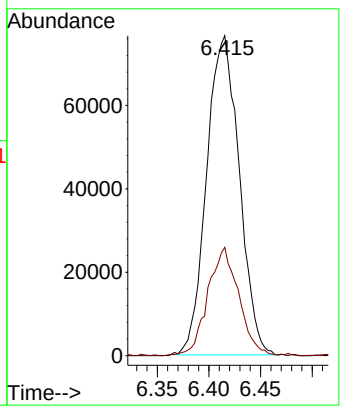


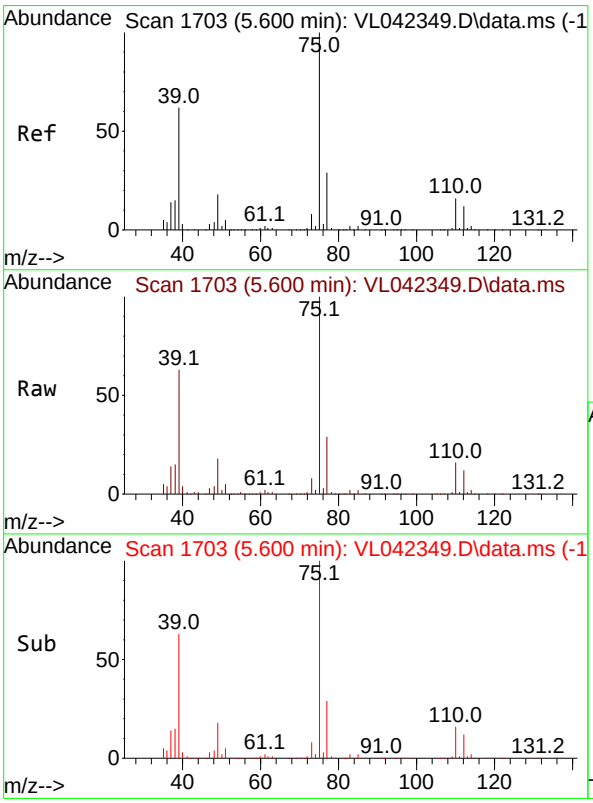
#45
t-1,3-Dichloropropene
Concen: 9.233 ppbv
RT: 6.415 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 75 Resp: 168223

Ion	Ratio	Lower	Upper
75	100		
77	33.8	27.0	40.6

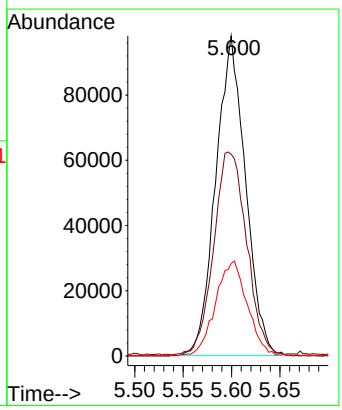


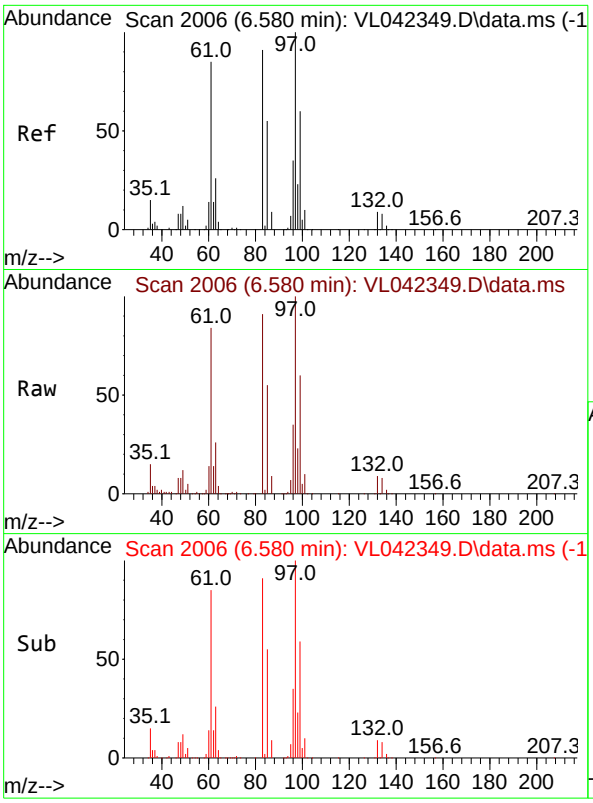


#46
cis-1,3-Dichloropropene
Concen: 9.377 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 75 Resp: 208811

Ion	Ratio	Lower	Upper
75	100		
39	62.5	50.0	75.0
77	28.8	23.0	34.6



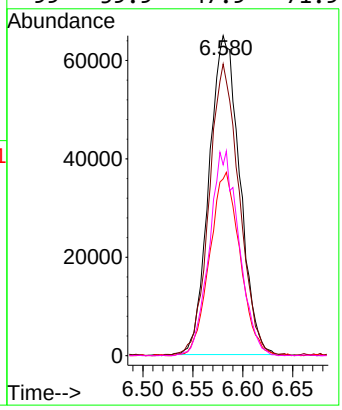


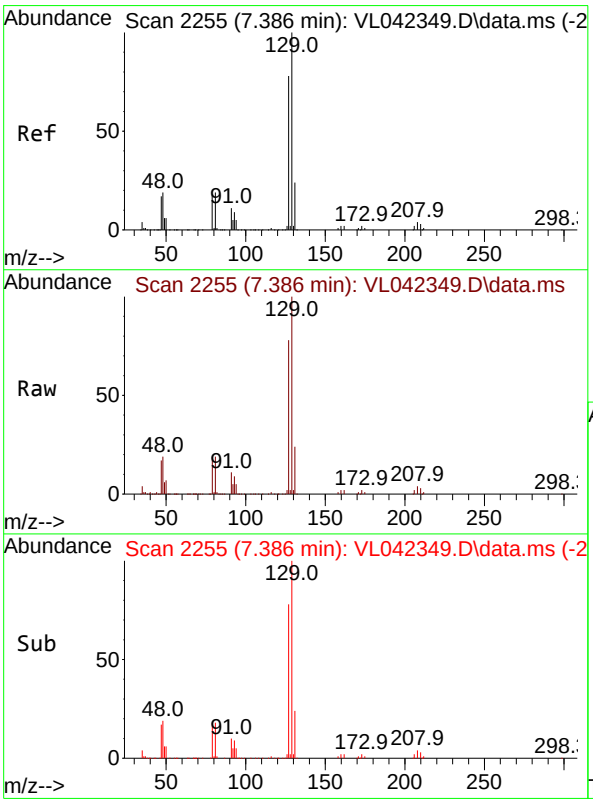
#47
1,1,2-Trichloroethane
Concen: 9.181 ppbv
RT: 6.580 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 97 Resp: 137898

Ion	Ratio	Lower	Upper
97	100		
83	91.0	72.8	109.2
85	55.3	44.2	66.4
99	59.9	47.9	71.9

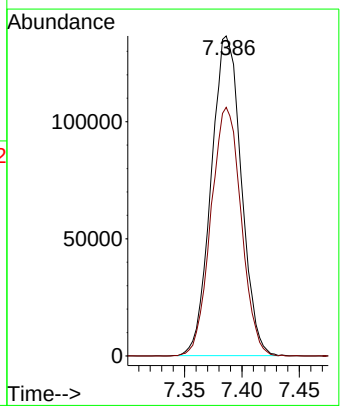


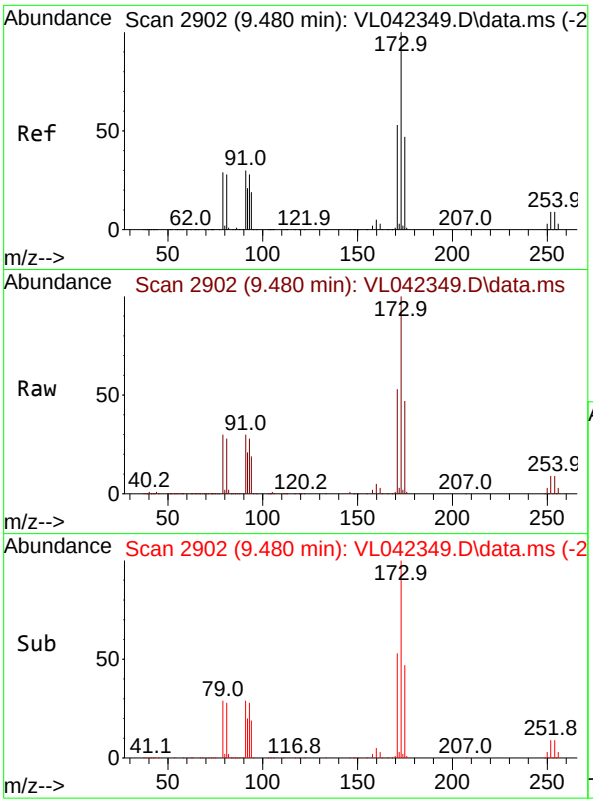


#48
Dibromochloromethane
Concen: 9.388 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:129 Resp: 248954

Ion	Ratio	Lower	Upper
129	100		
127	78.2	39.1	117.3



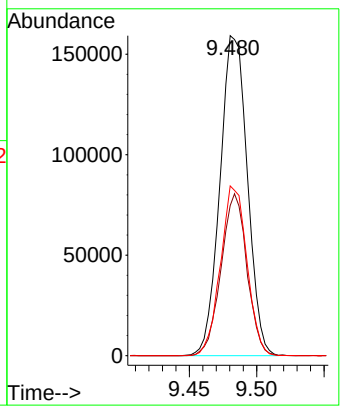


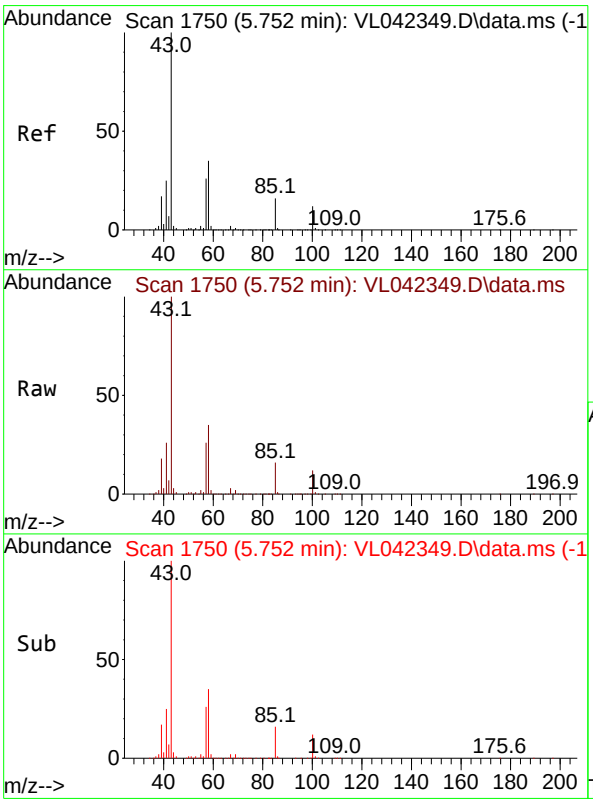
#49
Bromoform
Concen: 9.734 ppbv
RT: 9.480 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:173 Resp: 225706

Ion	Ratio	Lower	Upper
173	100		
175	47.7	38.2	57.2
171	51.1	40.9	61.3

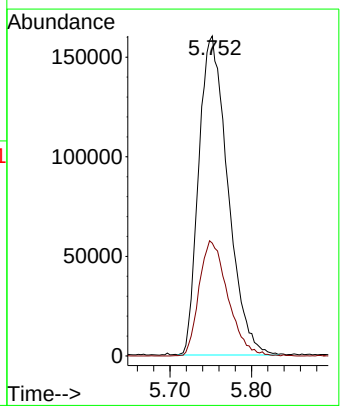


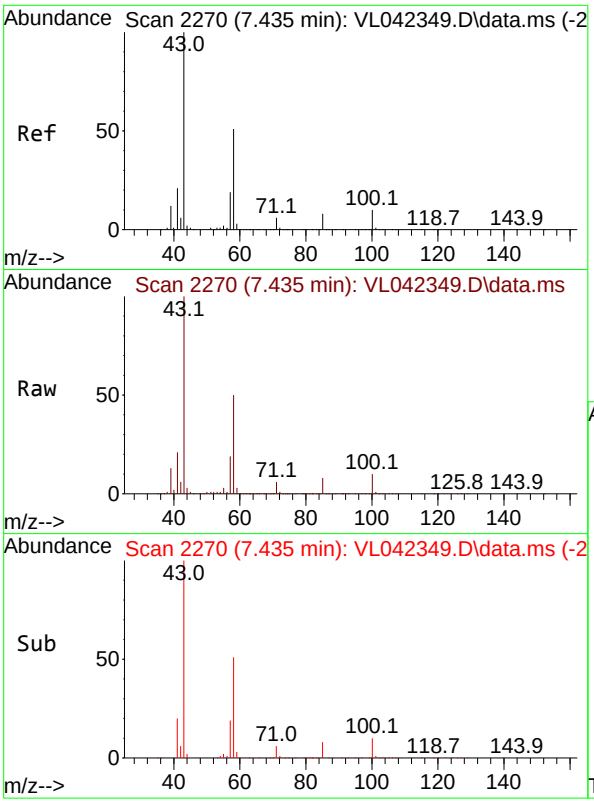


#50
4-Methyl-2-Pentanone
Concen: 8.215 ppbv
RT: 5.752 min Scan# 1750
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 43 Resp: 396548

Ion	Ratio	Lower	Upper
43	100		
58	35.8	28.6	43.0



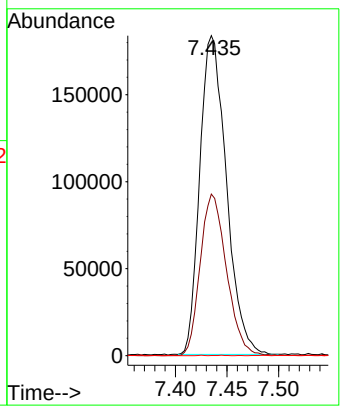


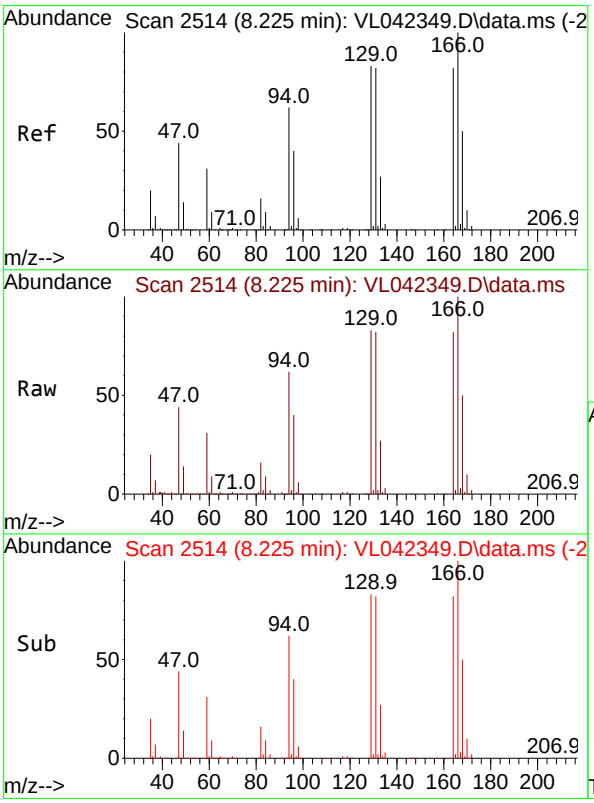
#51
2-Hexanone
Concen: 7.511 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 43 Resp: 327165

Ion	Ratio	Lower	Upper
43	100		
58	50.3	40.2	60.4
98	0.1	0.1	0.1

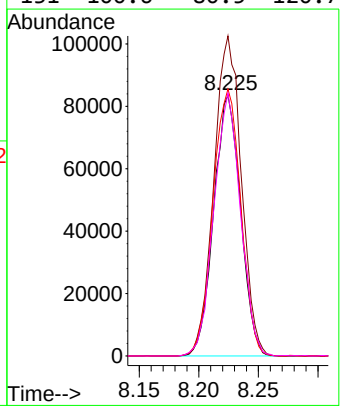


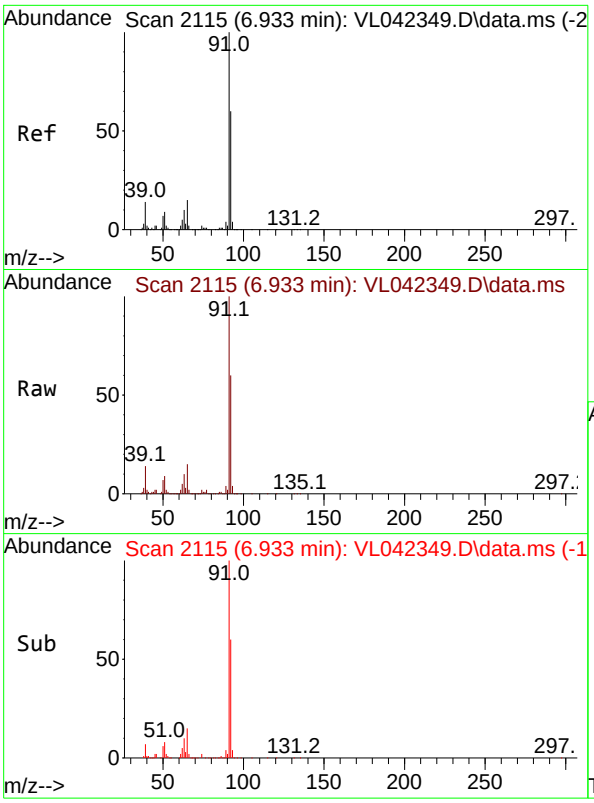


#52
Tetrachloroethene
Concen: 8.553 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:164 Resp: 130720

Ion	Ratio	Lower	Upper
164	100		
166	122.7	98.2	147.2
129	102.3	81.8	122.8
131	100.6	80.5	120.7



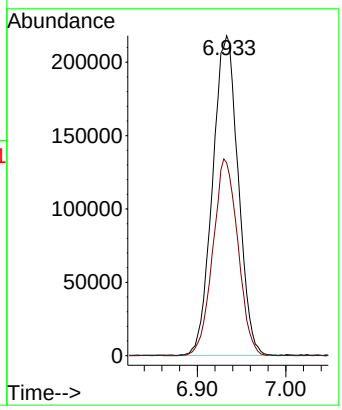


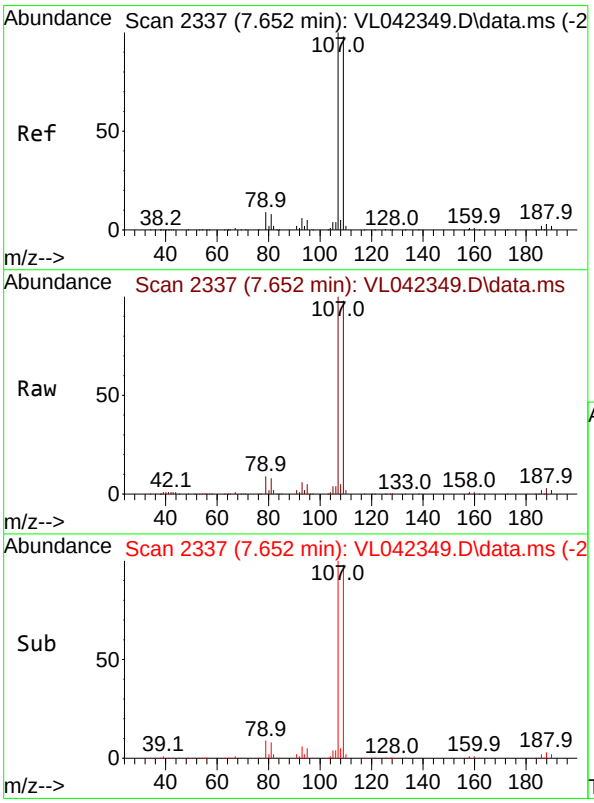
#53
Toluene
Concen: 9.216 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 437258

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.2	72.4

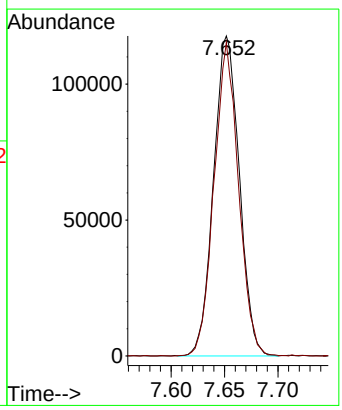


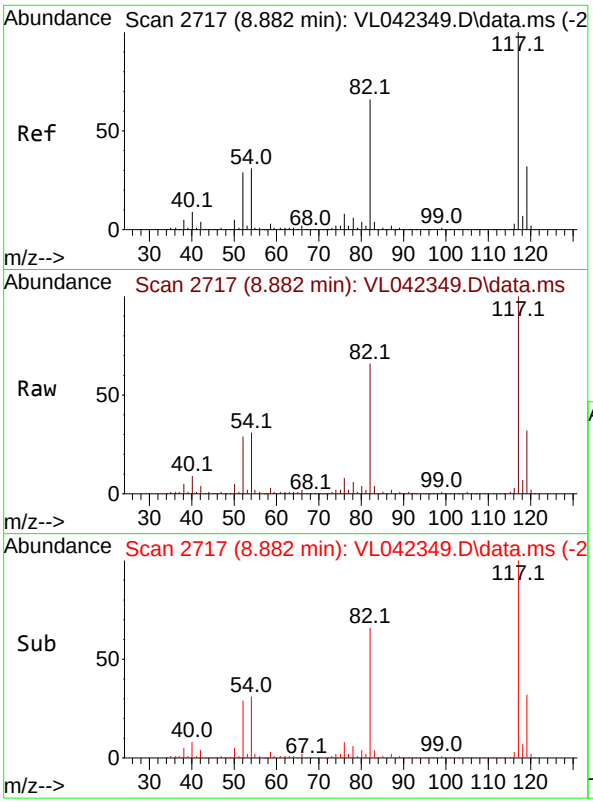


#54
1,2-Dibromoethane
Concen: 9.235 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:107 Resp: 197665

Ion	Ratio	Lower	Upper
107	100		
109	97.8	78.2	117.4



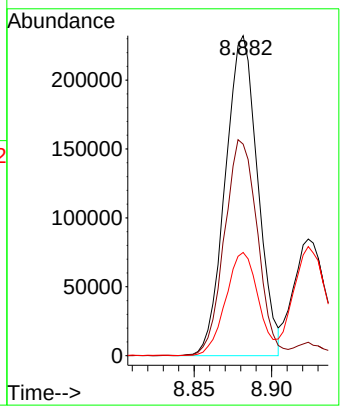


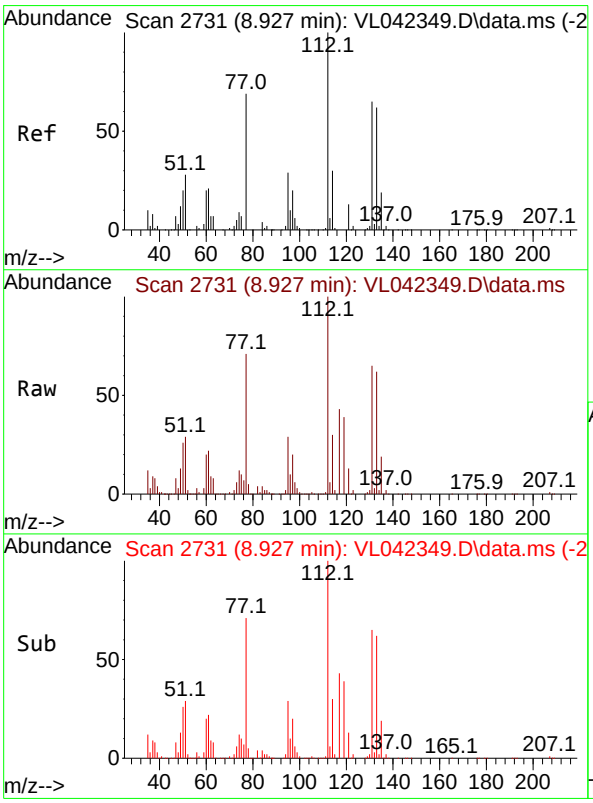
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:117 Resp: 338126

Ion	Ratio	Lower	Upper
117	100		
82	72.2	57.8	86.6
119	31.5	25.2	37.8

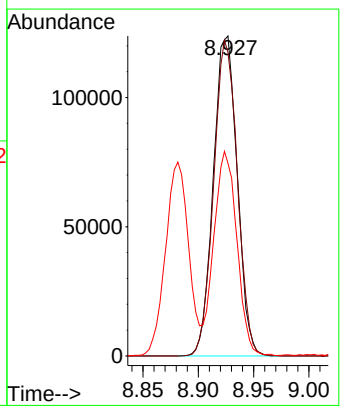


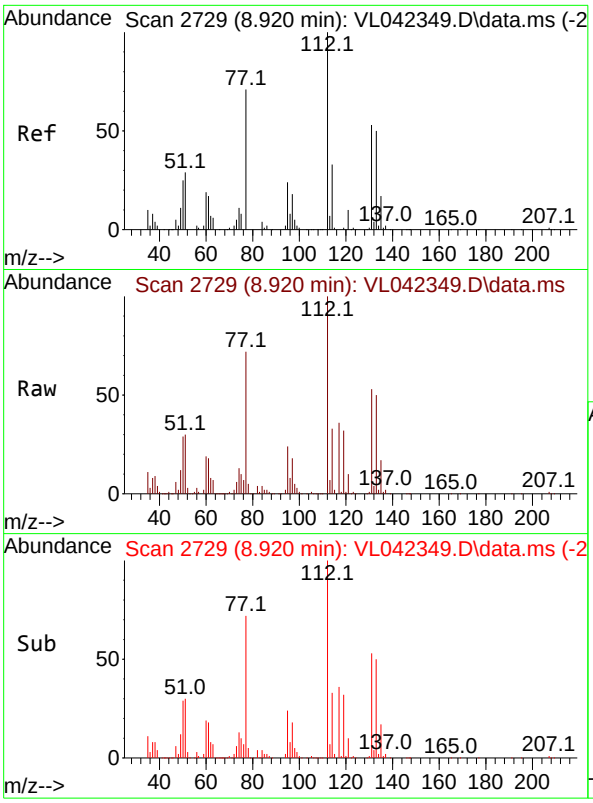


#56
1,1,1,2-Tetrachloroethane
Concen: 9.091 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:131 Resp: 186041

Ion	Ratio	Lower	Upper
131	100		
133	97.9	78.3	117.5
119	60.9	48.7	73.1



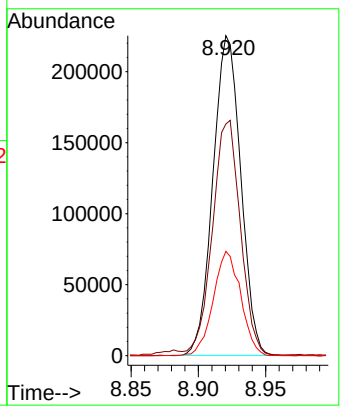


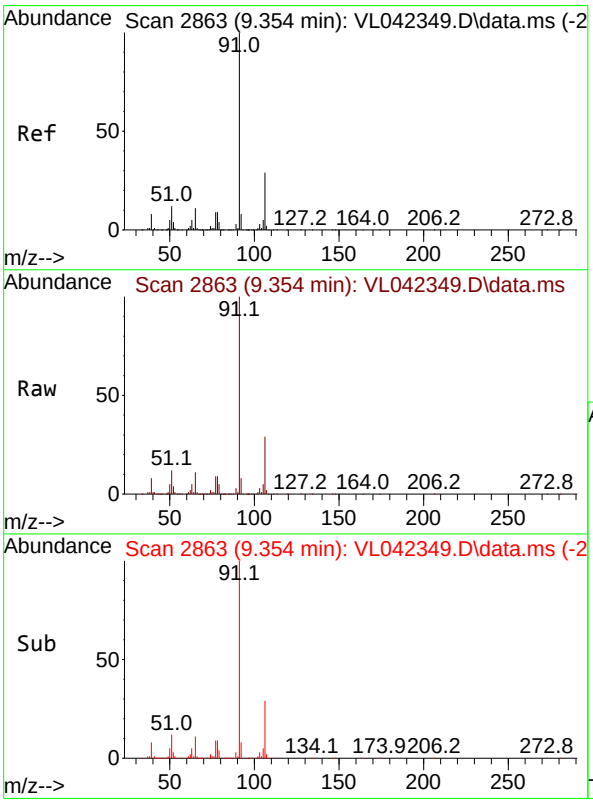
#57
Chlorobenzene
Concen: 9.187 ppbv
RT: 8.920 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:112 Resp: 323084

Ion	Ratio	Lower	Upper
112	100		
77	72.2	57.8	86.6
114	32.6	29.3	35.9

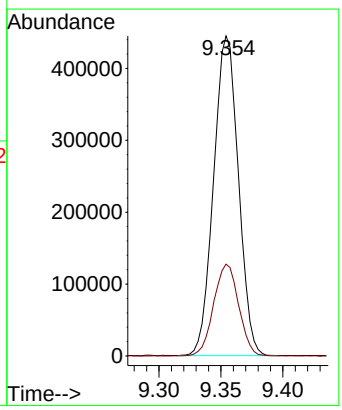


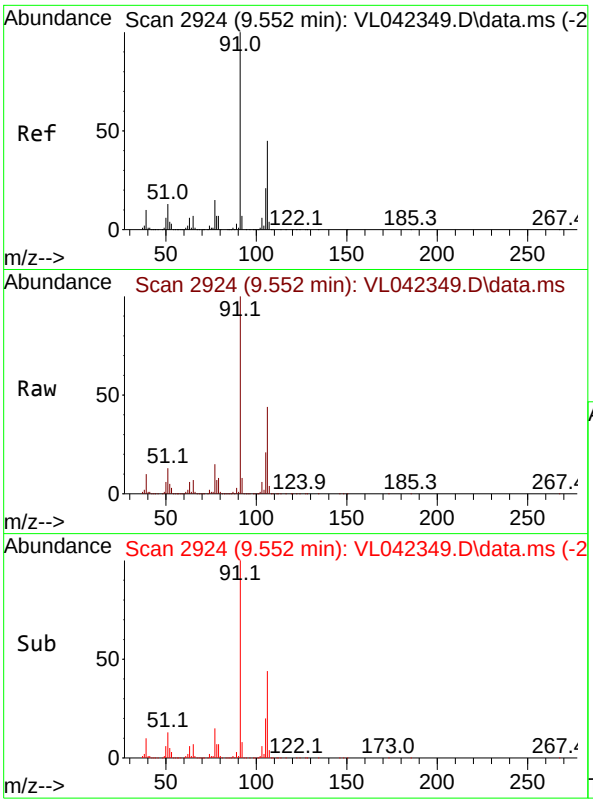


#58
Ethyl Benzene
Concen: 9.248 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 619581

Ion	Ratio	Lower	Upper
91	100		
106	28.7	23.0	34.4



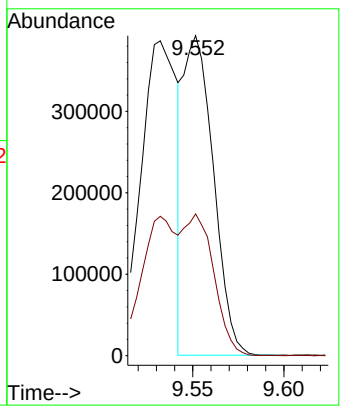


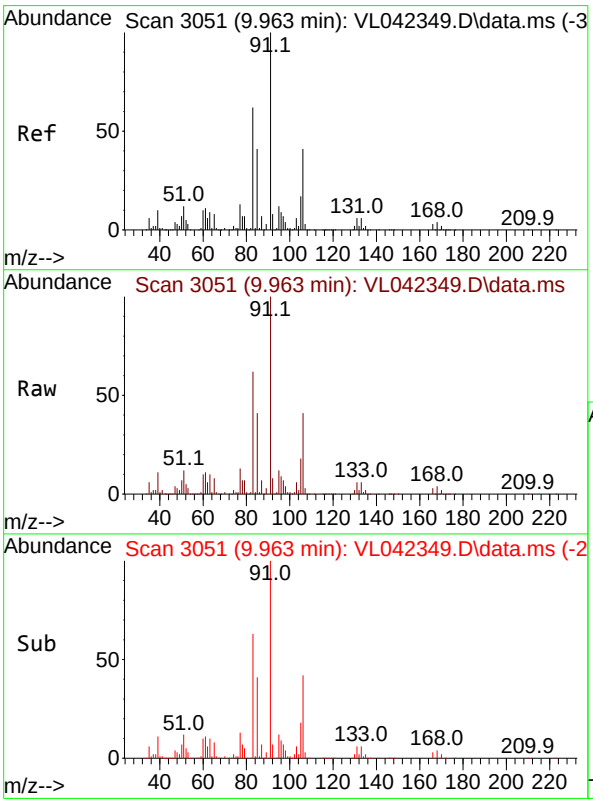
#59
m/p-Xylene
Concen: 8.299 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 449222

Ion	Ratio	Lower	Upper
91	100		
106	97.0	35.4	53.2#

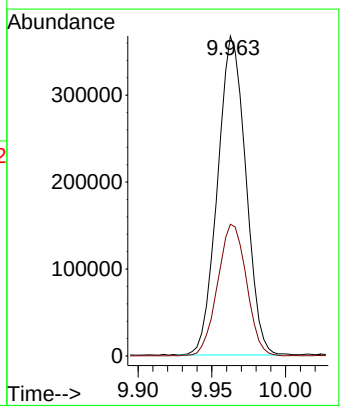


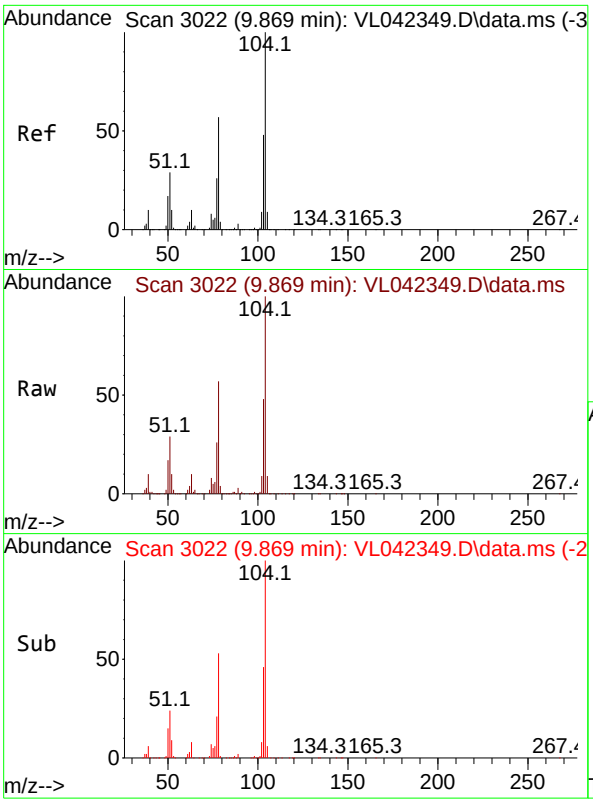


#60
o-Xylene
Concen: 8.972 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 487616

Ion	Ratio	Lower	Upper
91	100		
106	42.3	21.1	63.4



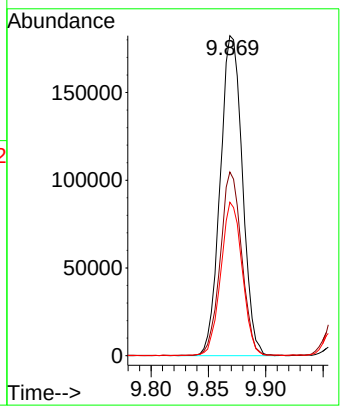


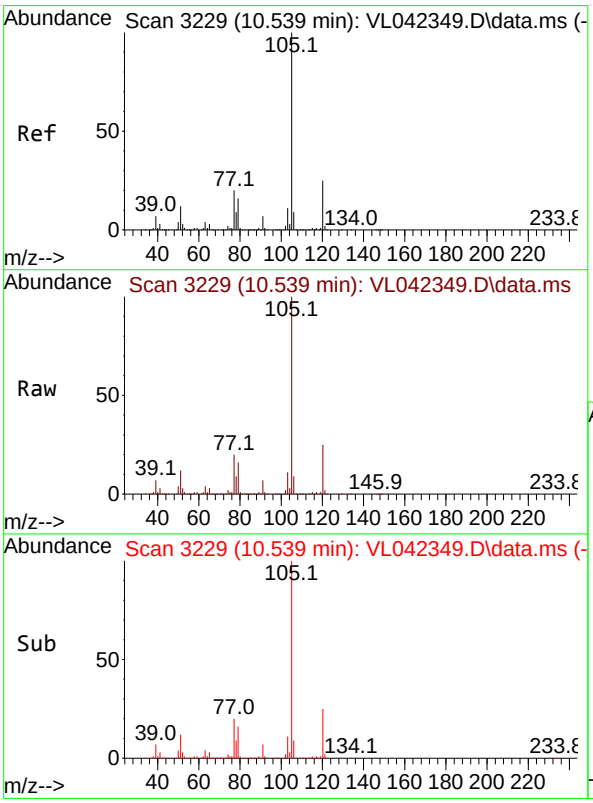
#61
Styrene
Concen: 9.464 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:104 Resp: 245487

Ion	Ratio	Lower	Upper
104	100		
78	55.7	44.6	66.8
103	46.7	37.4	56.0

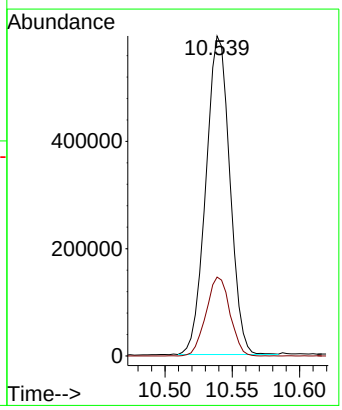


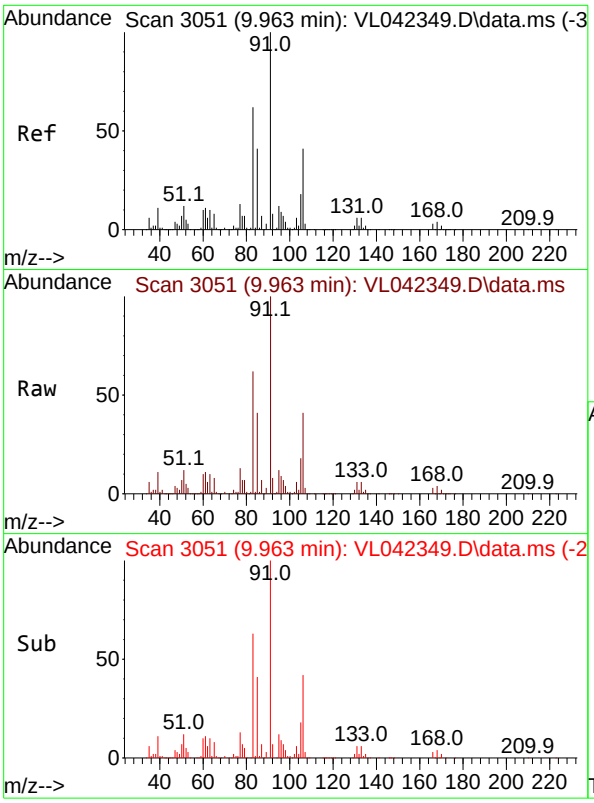


#62
Isopropylbenzene
Concen: 9.197 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 733788

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.8	29.8



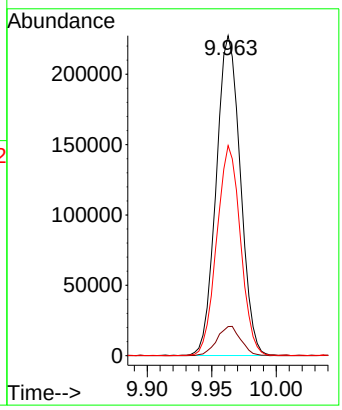


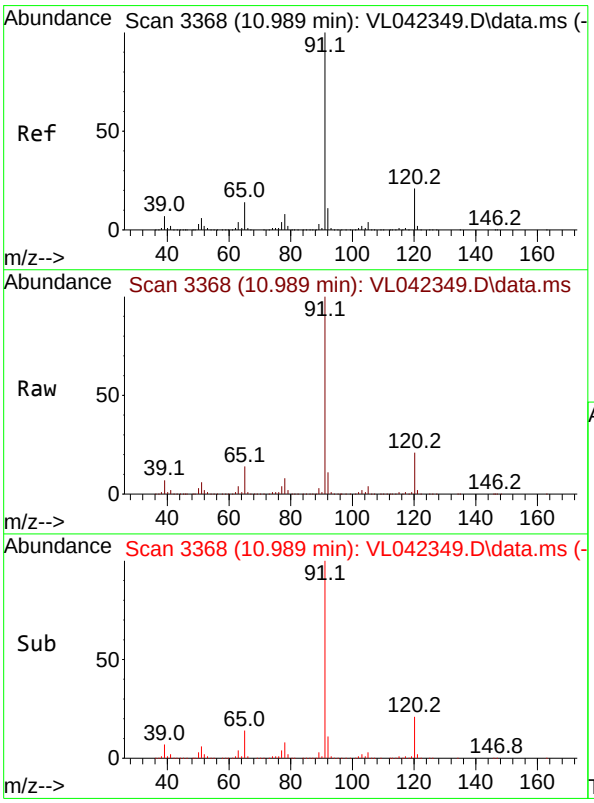
#63
1,1,2,2-Tetrachloroethane
Concen: 8.355 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 83 Resp: 295041

Ion	Ratio	Lower	Upper
83	100		
131	9.1	4.5	13.7
85	64.7	32.4	97.0

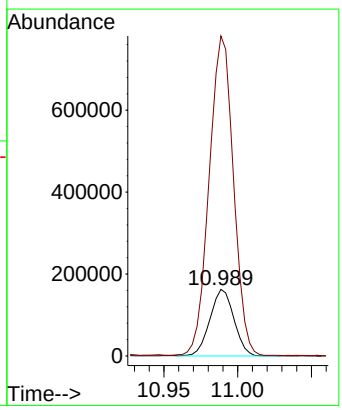


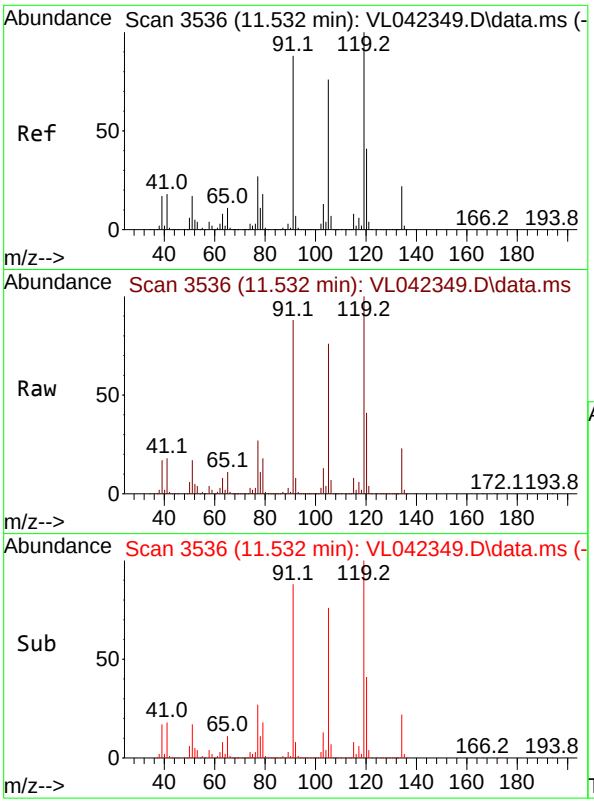


#64
n-propylbenzene
Concen: 9.144 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:120 Resp: 183390

Ion	Ratio	Lower	Upper
120	100		
91	490.5	392.4	588.6



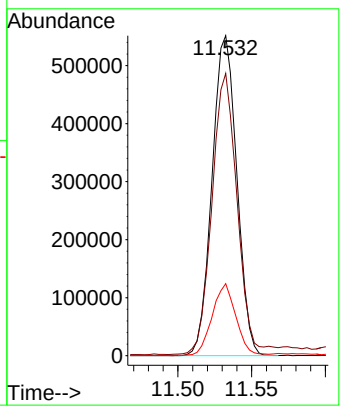


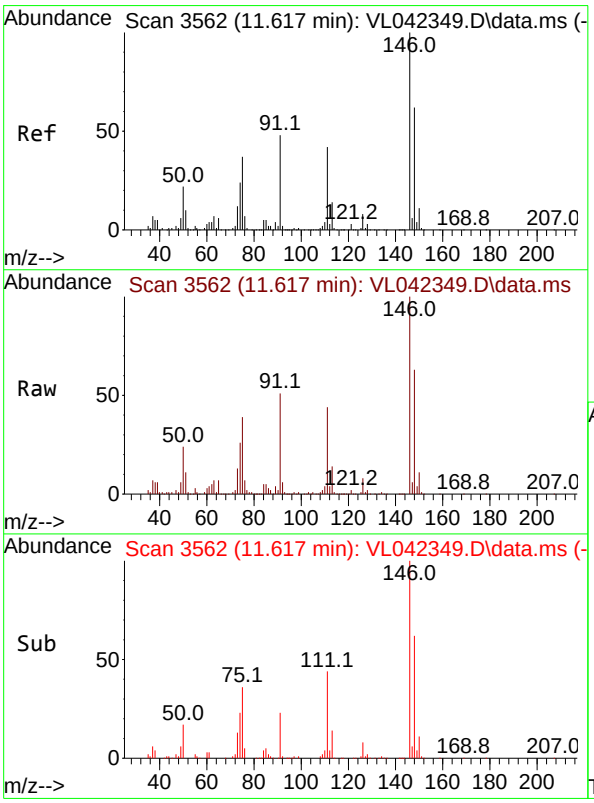
#65
tert-Butylbenzene
Concen: 8.795 ppbv
RT: 11.532 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 644953

Ion	Ratio	Lower	Upper
119	100		
91	93.2	74.6	111.8
134	23.5	18.8	28.2

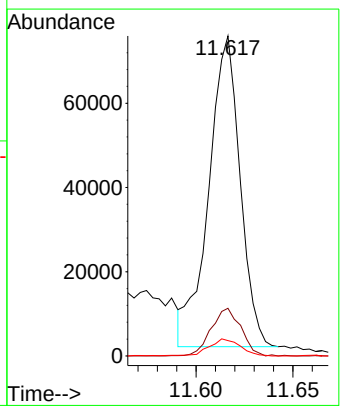


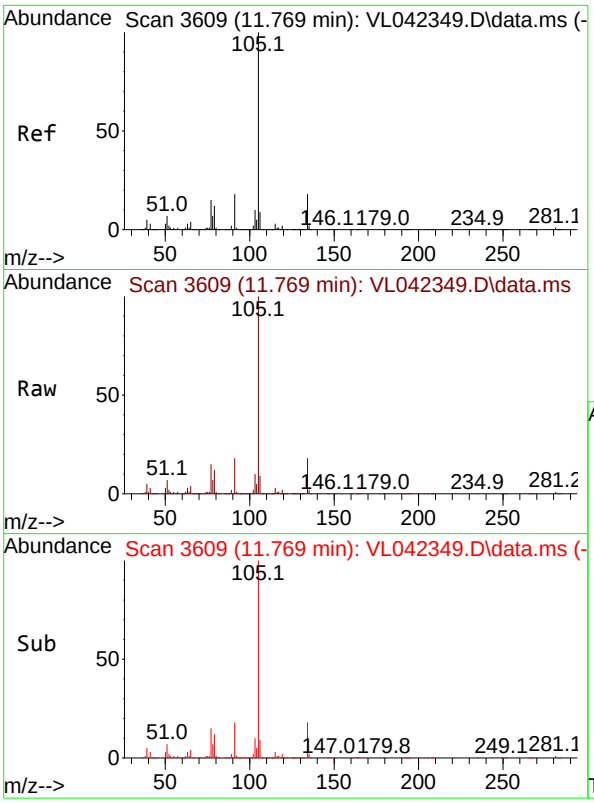


#66
Benzyl Chloride
Concen: 10.333 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 83269

Ion	Ratio	Lower	Upper
91	100		
126	14.7	11.8	17.6
128	5.6	4.5	6.7



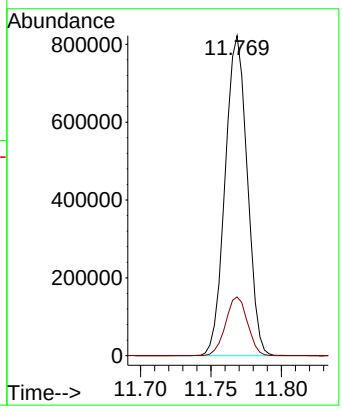


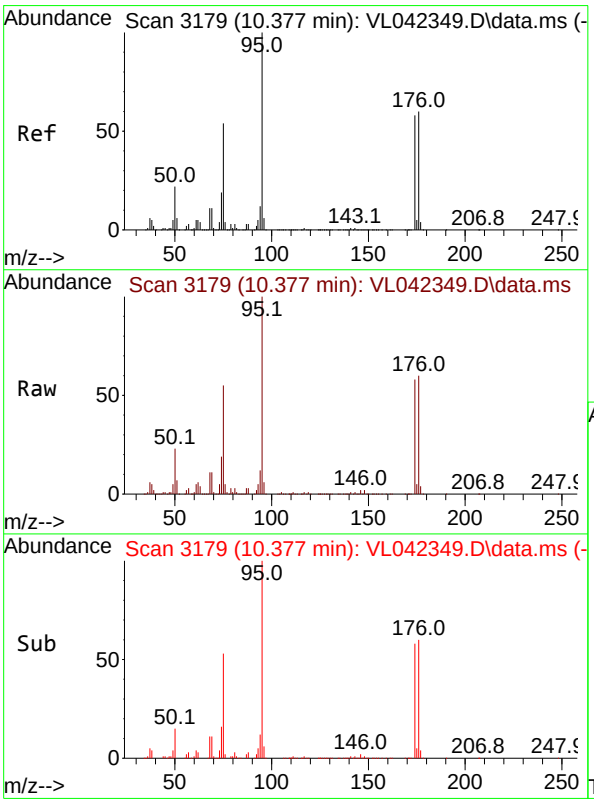
#67
sec-Butylbenzene
Concen: 8.824 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 900074

Ion	Ratio	Lower	Upper
105	100		
134	18.2	14.6	21.8

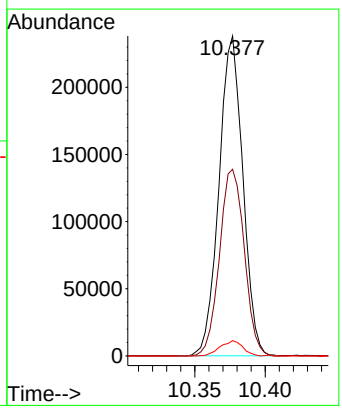


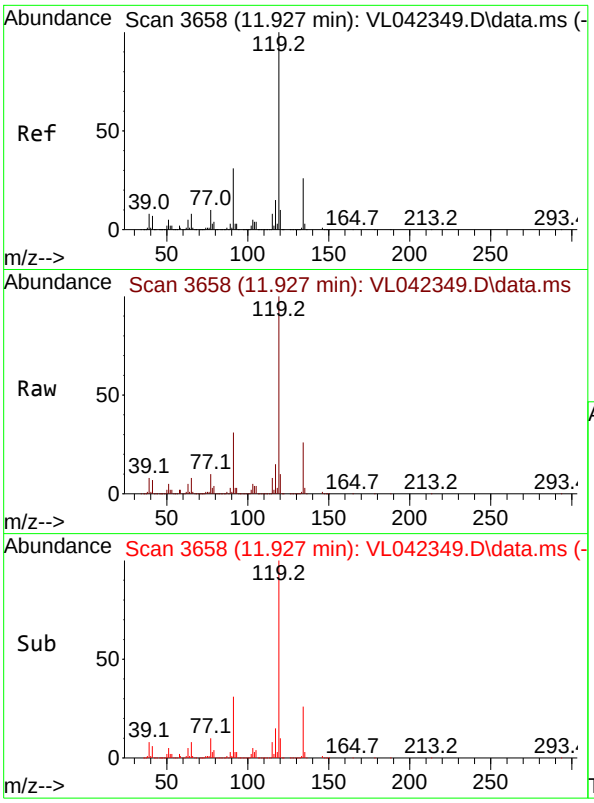


#68
1-Bromo-4-Fluorobenzene
Concen: 10.114 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 95 Resp: 281013

Ion	Ratio	Lower	Upper
95	100		
174	60.6	48.5	72.7
175	4.6	3.7	5.5



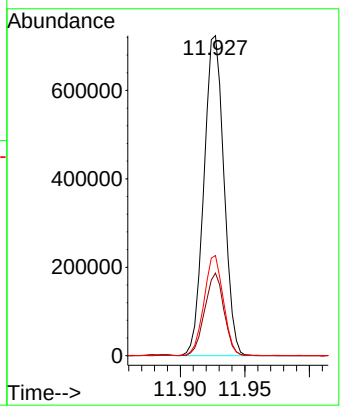


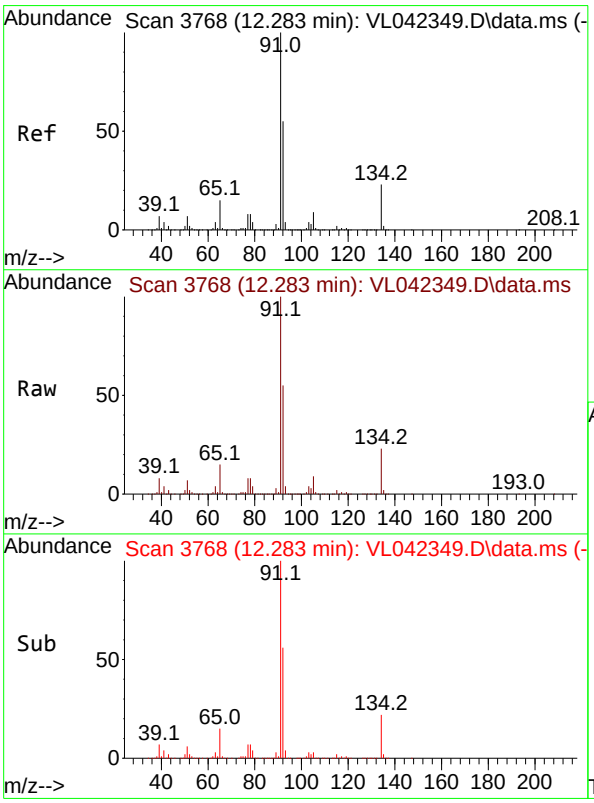
#69
p-Isopropyltoluene
Concen: 8.790 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:119 Resp: 778987

Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.0	30.0
91	30.5	24.4	36.6

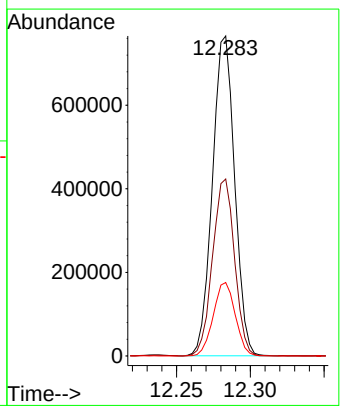


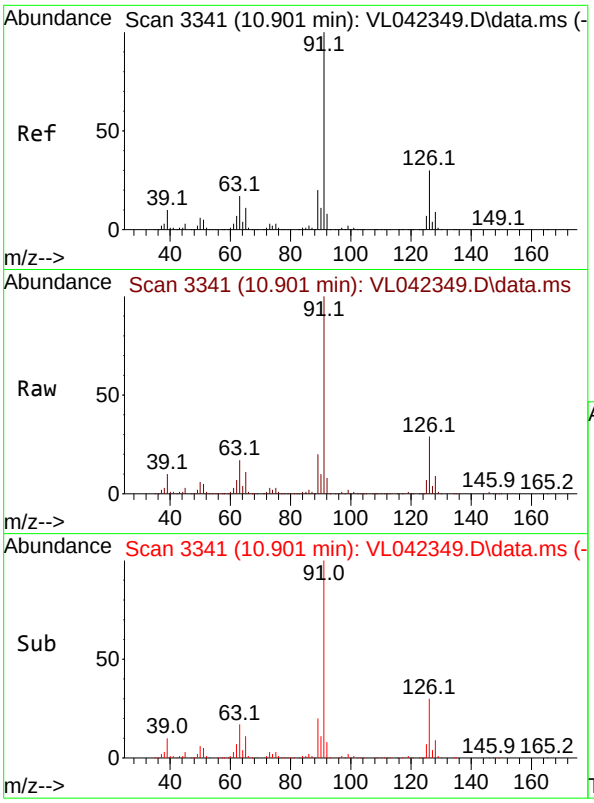


#70
n-Butylbenzene
Concen: 8.682 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion: 91 Resp: 801364

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.2	66.4
134	22.8	18.2	27.4



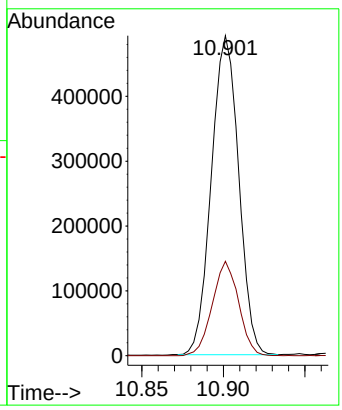


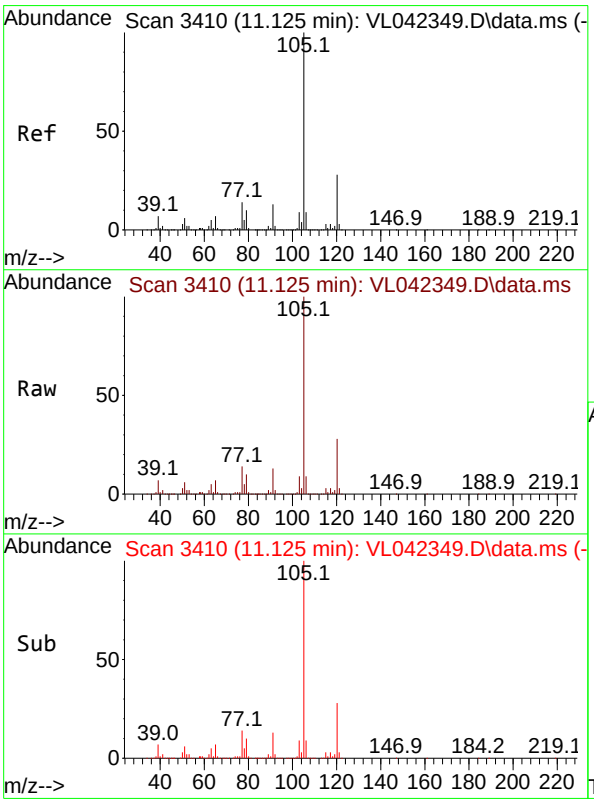
#71
2-Chlorotoluene
Concen: 9.157 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion: 91 Resp: 573039

Ion	Ratio	Lower	Upper
91	100		
126	28.4	11.4	45.4

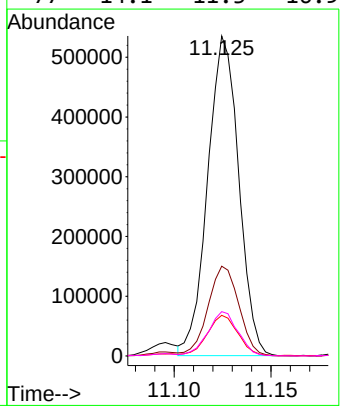


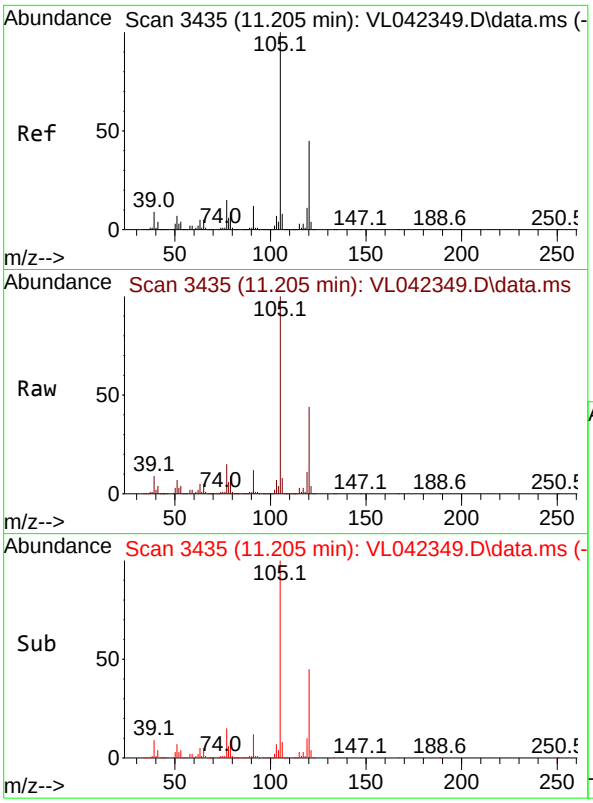


#72
4-Ethyltoluene
Concen: 8.982 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 596757

Ion	Ratio	Lower	Upper
105	100		
120	29.0	23.2	34.8
91	13.0	10.4	15.6
77	14.1	11.3	16.9



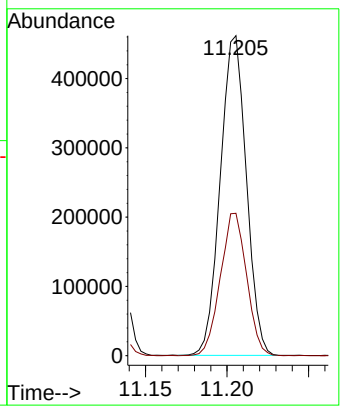


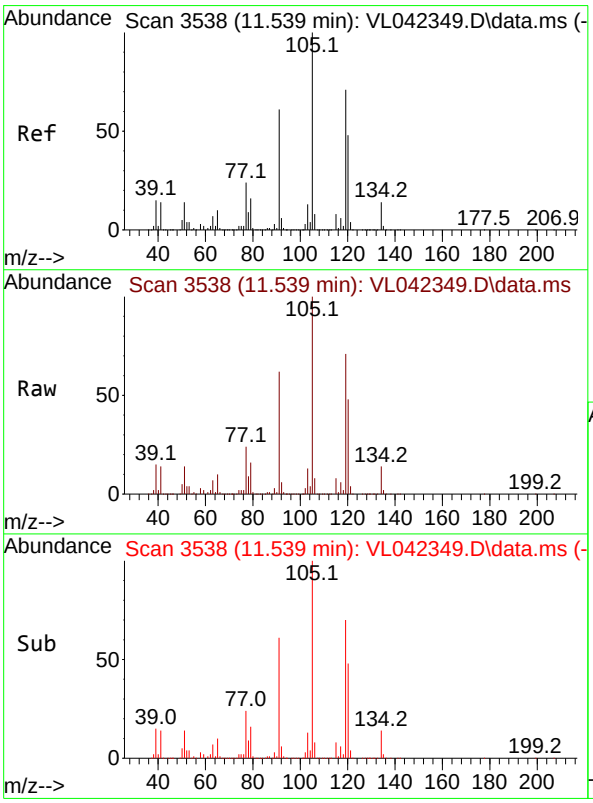
#73
1,3,5-Trimethylbenzene
Concen: 8.743 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:105 Resp: 512855

Ion	Ratio	Lower	Upper
105	100		
120	44.5	35.6	53.4

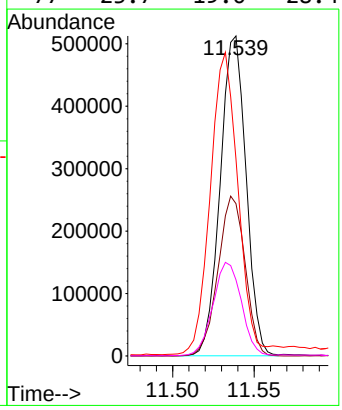


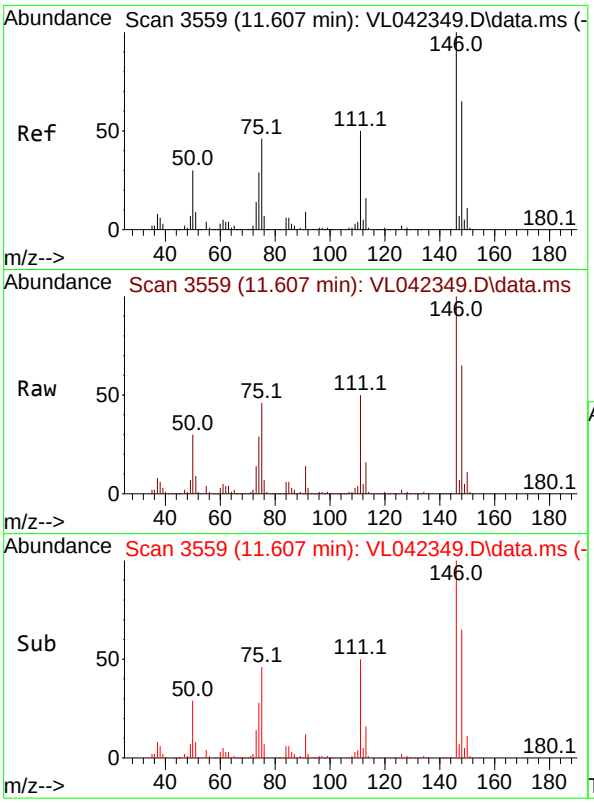


#74
1,2,4-Trimethylbenzene
Concen: 8.248 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:105 Resp: 565064

Ion	Ratio	Lower	Upper
105	100		
120	47.6	38.1	57.1
91	61.0	48.8	73.2
77	23.7	19.0	28.4



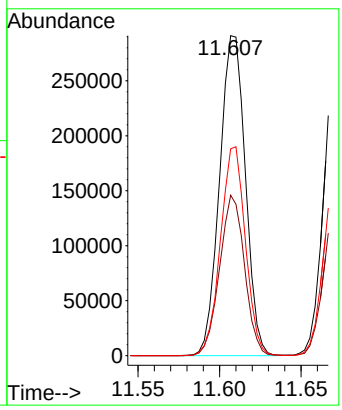


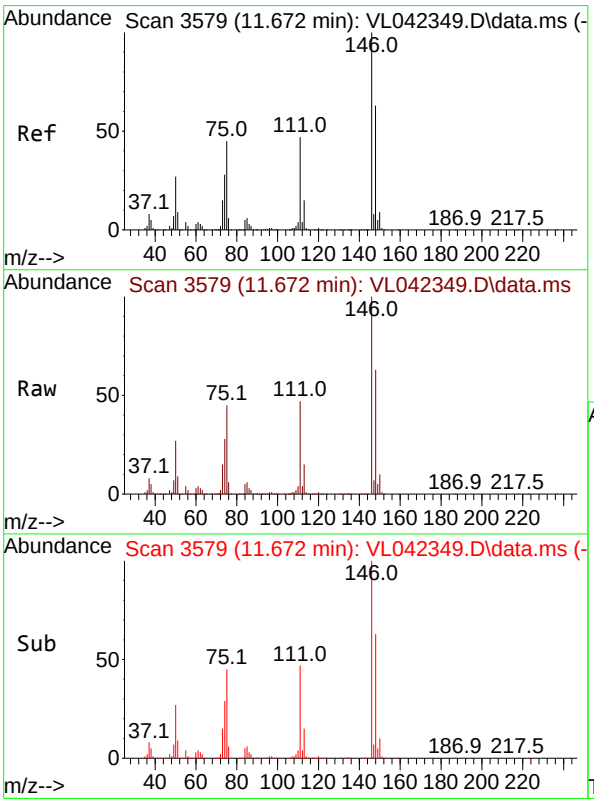
#75
1,3-Dichlorobenzene
Concen: 8.997 ppbv
RT: 11.607 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 320380

Ion	Ratio	Lower	Upper
146	100		
111	48.5	24.3	72.8
148	63.2	31.6	94.8

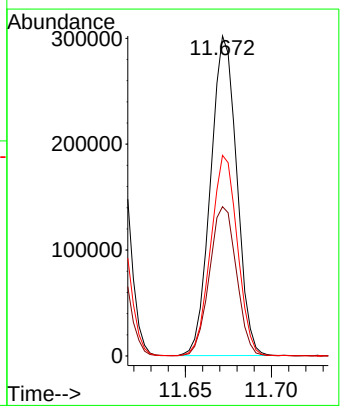


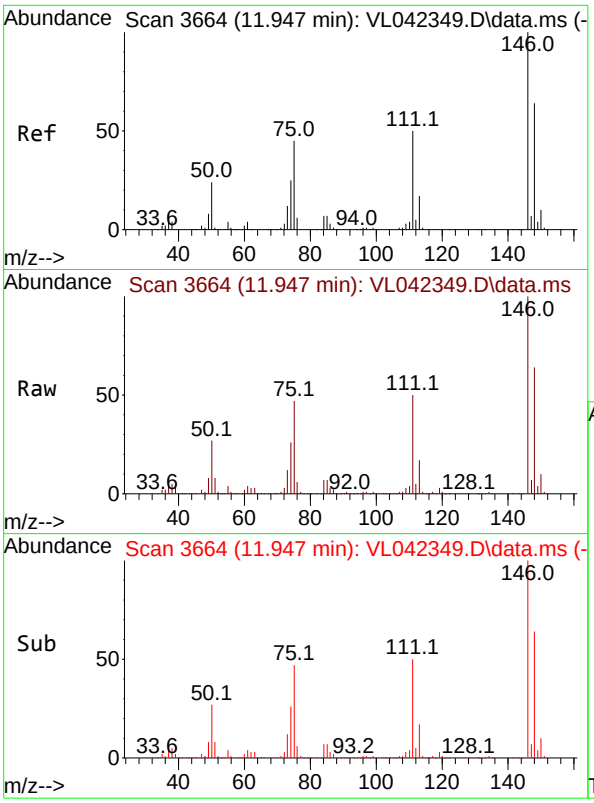


#76
1,4-Dichlorobenzene
Concen: 8.915 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:146 Resp: 319089

Ion	Ratio	Lower	Upper
146	100		
111	48.4	24.2	72.6
148	64.3	32.1	96.5



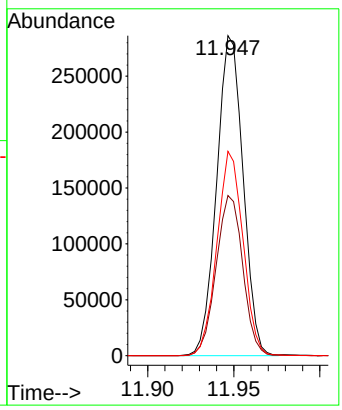


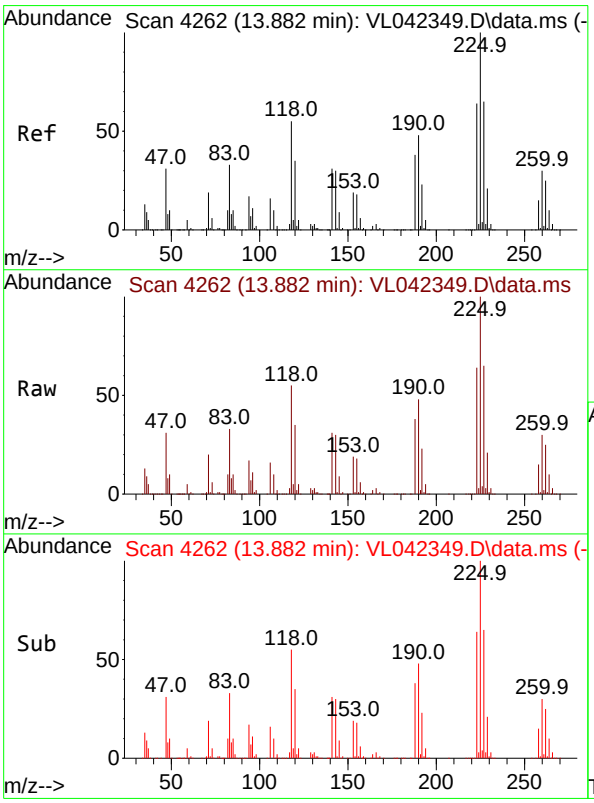
#77
1,2-Dichlorobenzene
Concen: 8.832 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:146 Resp: 305822

Ion	Ratio	Lower	Upper
146	100		
111	50.6	25.3	75.9
148	63.0	31.5	94.5

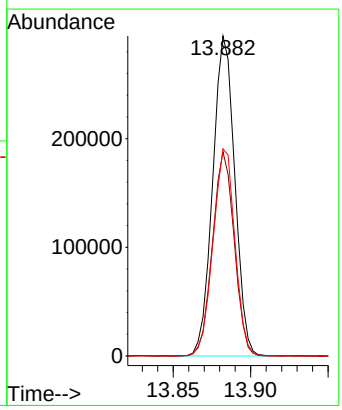


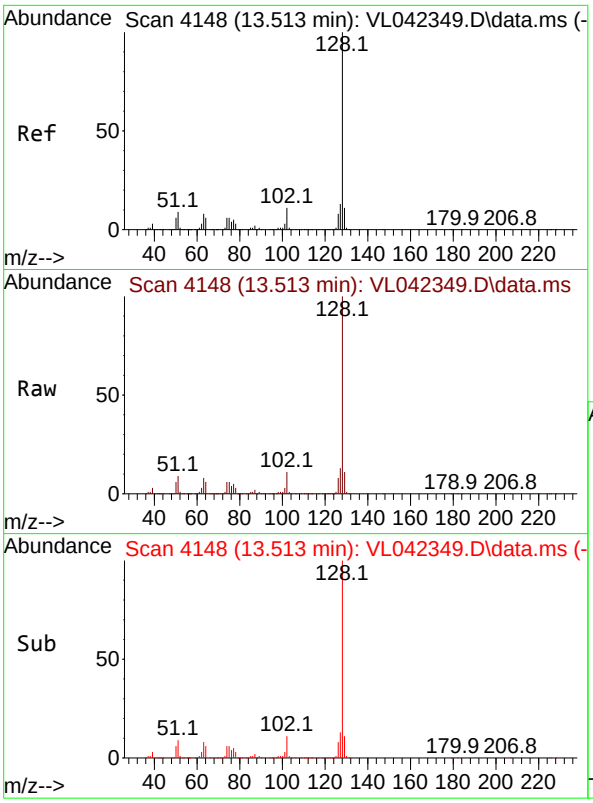


#78
Hexachloro-1,3-Butadiene
Concen: 8.346 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:225 Resp: 291833

Ion	Ratio	Lower	Upper
225	100		
223	62.9	50.3	75.5
227	64.4	51.5	77.3



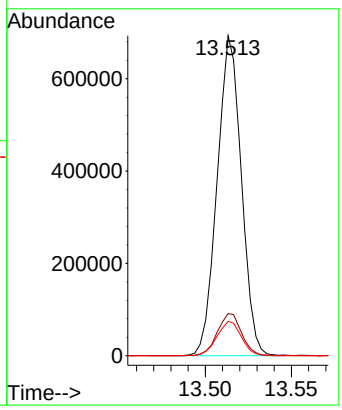


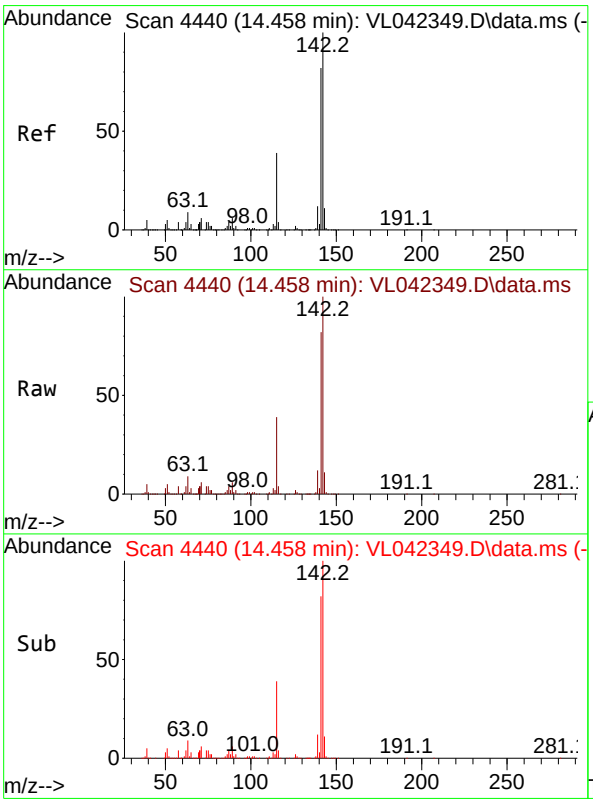
#79
Naphthalene
Concen: 8.271 ppbv
RT: 13.513 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:128 Resp: 677578

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	10.7	8.6	12.8

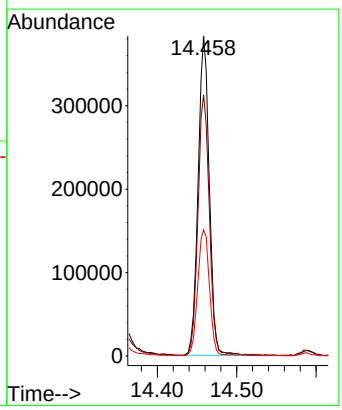


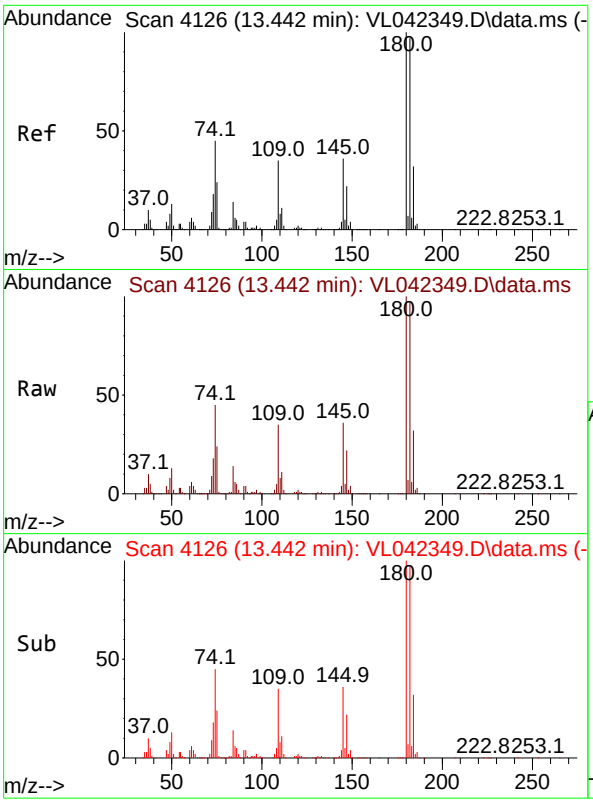


#80
Naphthalene,2-methyl-
Concen: 8.074 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Tgt Ion:142 Resp: 376995

Ion	Ratio	Lower	Upper
142	100		
141	83.5	66.8	100.2
115	41.8	33.4	50.2



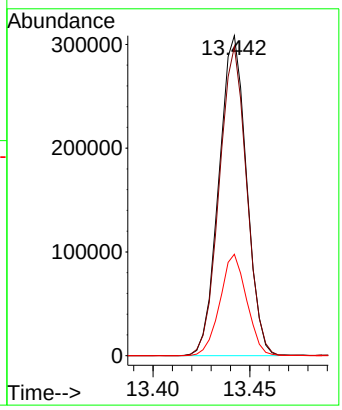


#81
1,2,4-Trichlorobenzene
Concen: 8.702 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042349.D
Acq: 17 Apr 2025 09:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDICCC010

Tgt Ion:180 Resp: 306119

Ion	Ratio	Lower	Upper
180	100		
182	96.0	76.8	115.2
184	30.7	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.787	49	123206	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.959	114	355918	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	335603	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	275715	9.998	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	45008	2.068	ppbv		95
3) Chlorodifluoromethane	1.476	51	41853	2.019	ppbv		97
4) Chloromethane	1.534	50	17272	2.005	ppbv		93
5) Vinyl Chloride	1.580	62	16979	1.811	ppbv		92
6) Bromomethane	1.667	94	7398	1.821	ppbv	#	80
7) Chloroethane	1.706	64	6889	2.031	ppbv		98
8) Dichlorotetrafluoroethane	1.554	85	38955	2.084	ppbv		98
9) Propene	1.483	41	18671	1.978	ppbv		97
10) Heptane	4.978	43	34658	1.364	ppbv	#	62
11) Trichlorofluoromethane	1.877	101	43035	2.079	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	35415	2.092	ppbv		100
13) Ethanol	1.722	45	1417	1.837	ppbv		59
14) Bromoethene	1.780	108	13049	2.045	ppbv	#	92
15) Acetone	1.835	43	42949	2.129	ppbv		93
16) 1,3-Butadiene	1.609	39	18110	1.912	ppbv		96
17) tert-Butyl alcohol	2.042	59	51829	2.074	ppbv	#	94
18) 1,1-Dichloroethene	2.036	96	15690	1.928	ppbv		87
19) Isopropyl Alcohol	1.887	45	22106	1.973	ppbv	#	38
20) Methylene Chloride	2.062	84	14329	1.814	ppbv	#	82
21) Allyl Chloride	2.098	41	27340	1.963	ppbv		95
22) trans-1,2-Dichloroethene	2.340	96	18142	2.015	ppbv		97
23) Vinyl Acetate	2.463	43	18454	2.260	ppbv	#	91
24) 1,1-Dichloroethane	2.411	63	34077	1.993	ppbv		96
25) Ethyl Acetate	2.835	43	101467	2.040	ppbv		99
26) Hexane	2.826	57	40046	1.990	ppbv		99
27) Carbon Disulfide	2.149	76	43975	2.041	ppbv	#	64
28) Methyl tert-Butyl Ether	2.441	73	27905	2.116	ppbv		97
29) Chloroform	2.848	83	58946	2.072	ppbv		100
30) Cyclohexane	3.858	84	33195	2.048	ppbv		94
31) cis-1,2-Dichloroethene	2.722	61	39249	2.051	ppbv		98
32) 1,1,1-Trichloroethane	3.366	97	61442	2.014	ppbv		99
34) 2-Butanone	2.560	43	58249	2.069	ppbv		100
35) Carbon Tetrachloride	3.761	117	60291	1.872	ppbv		88
36) Benzene	3.658	78	79814	2.079	ppbv		98
37) 1,2-Dichloroethane	3.217	62	47398	2.057	ppbv		100
38) Trichloroethene	4.544	130	16602	0.986	ppbv		94
39) 1,2-Dichloropropane	4.315	63	28806	2.012	ppbv		96
40) 1,4-Dioxane	4.593	88	16026	2.067	ppbv	#	81
41) Tetrahydrofuran	3.059	42	33298	2.047	ppbv		98
42) Bromodichloromethane	4.489	83	64941	2.025	ppbv		97
43) Methyl Methacrylate	4.881	69	35256	2.046	ppbv		97
44) 2,2,4-Trimethylpentane	4.645	57	139641	2.103	ppbv		99
45) t-1,3-Dichloropropene	6.415	75	36265	2.050	ppbv		94

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

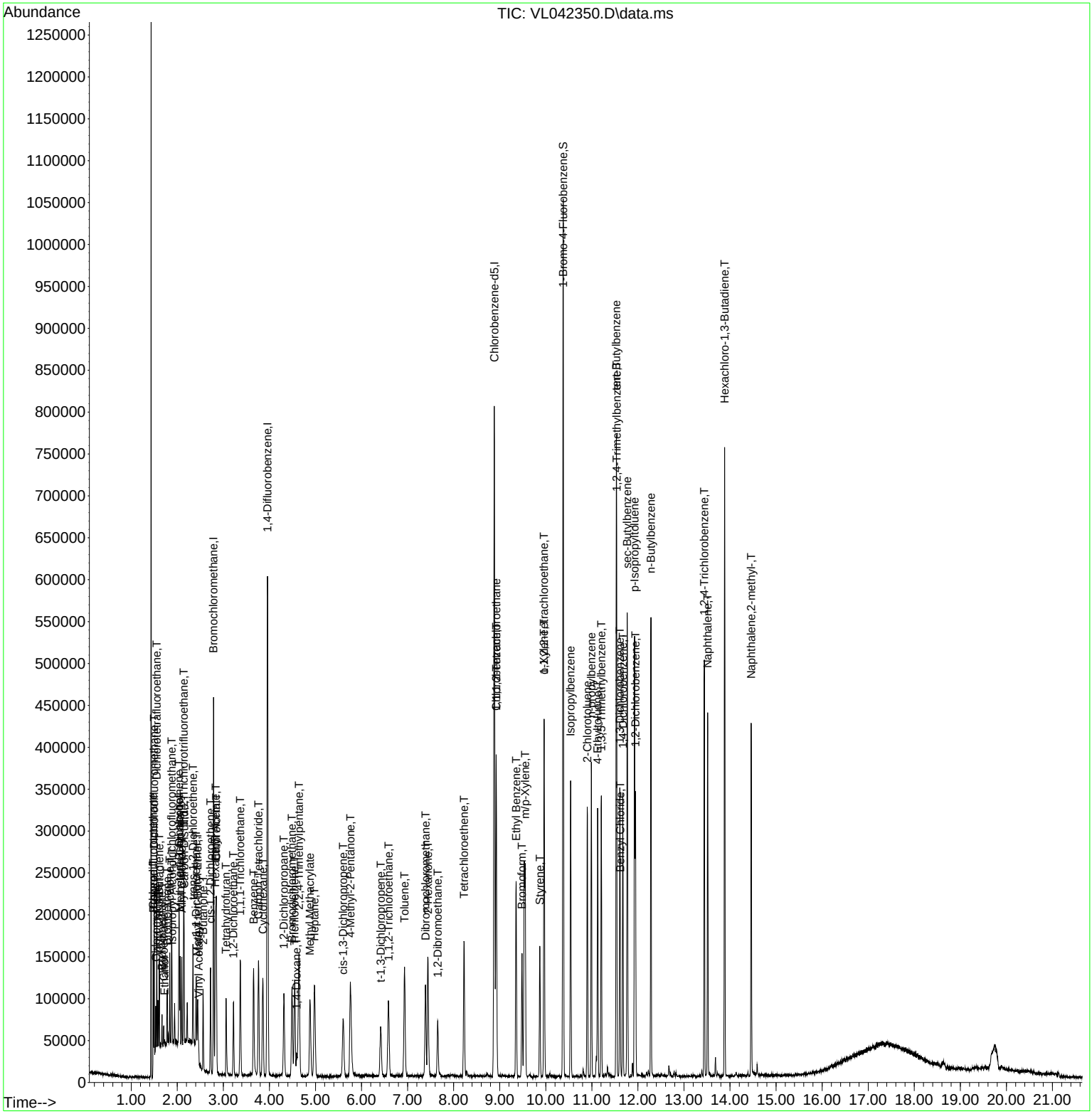
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	25569	1.183	ppbv		90
47) 1,1,2-Trichloroethane	6.590	97	29879	2.049	ppbv		88
48) Dibromochloromethane	7.389	129	53069	2.061	ppbv		100
49) Bromoform	9.483	173	48069	2.135	ppbv		97
50) 4-Methyl-2-Pentanone	5.758	43	102182	2.180	ppbv		99
51) 2-Hexanone	7.441	43	100443	2.375	ppbv		98
52) Tetrachloroethene	8.228	164	27854	1.877	ppbv		96
53) Toluene	6.933	91	97493	2.116	ppbv		98
54) 1,2-Dibromoethane	7.655	107	43153	2.076	ppbv		87
56) 1,1,1,2-Tetrachloroethane	8.924	131	42601	2.097	ppbv		95
57) Chlorobenzene	8.924	112	71685	2.054	ppbv		98
58) Ethyl Benzene	9.357	91	138810	2.088	ppbv		98
59) m/p-Xylene	9.551	91	103886	1.934	ppbv	#	32
60) o-Xylene	9.963	91	111972	2.076	ppbv		98
61) Styrene	9.872	104	54229	2.106	ppbv		98
62) Isopropylbenzene	10.539	105	163716	2.067	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.963	83	64952	1.853	ppbv		99
64) n-propylbenzene	10.989	120	40956	2.058	ppbv		96
65) tert-Butylbenzene	11.532	119	155401	2.135	ppbv		92
66) Benzyl Chloride	11.616	91	17300	2.163	ppbv		98
67) sec-Butylbenzene	11.769	105	218327	2.156	ppbv		100
69) p-Isopropyltoluene	11.927	119	188657	2.145	ppbv		99
70) n-Butylbenzene	12.283	91	198221	2.164	ppbv		99
71) 2-Chlorotoluene	10.901	91	128858	2.075	ppbv		98
72) 4-Ethyltoluene	11.124	105	137872	2.091	ppbv		97
73) 1,3,5-Trimethylbenzene	11.205	105	123580	2.123	ppbv		98
74) 1,2,4-Trimethylbenzene	11.539	105	145510	2.140	ppbv		92
75) 1,3-Dichlorobenzene	11.607	146	75082	2.124	ppbv		98
76) 1,4-Dichlorobenzene	11.671	146	75323	2.120	ppbv		99
77) 1,2-Dichlorobenzene	11.947	146	74786	2.176	ppbv		98
78) Hexachloro-1,3-Butadiene	13.882	225	76158	2.194	ppbv		100
79) Naphthalene	13.513	128	195233	2.401	ppbv		99
80) Naphthalene,2-methyl-	14.458	142	119262	2.574	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	82156	2.353	ppbv		99

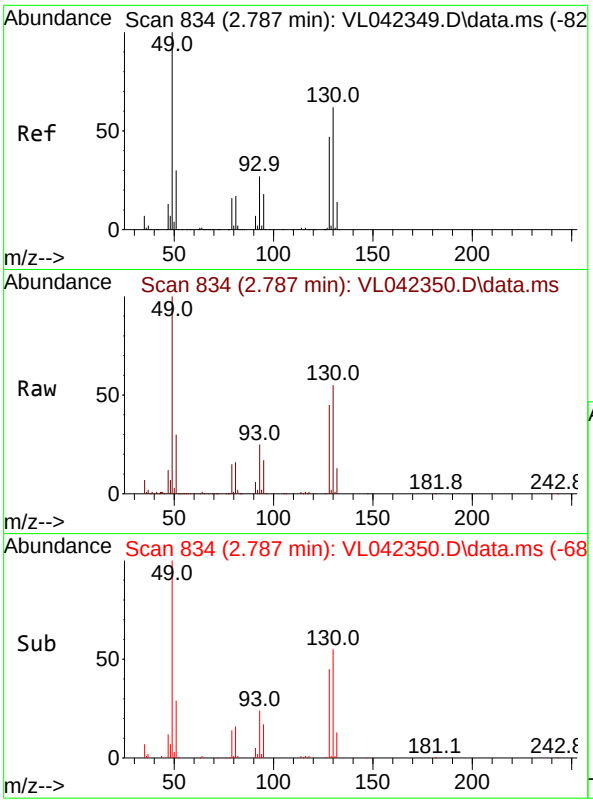
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042350.D
Acq On : 17 Apr 2025 10:17
Operator : SY/MD
Sample : VSTDICC002
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Quant Time: Apr 18 01:26:23 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



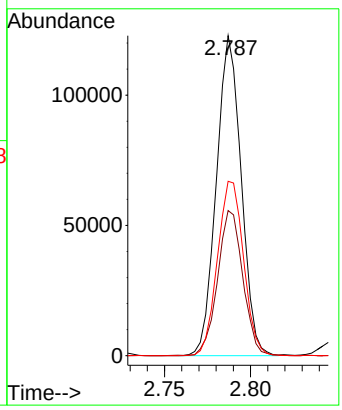


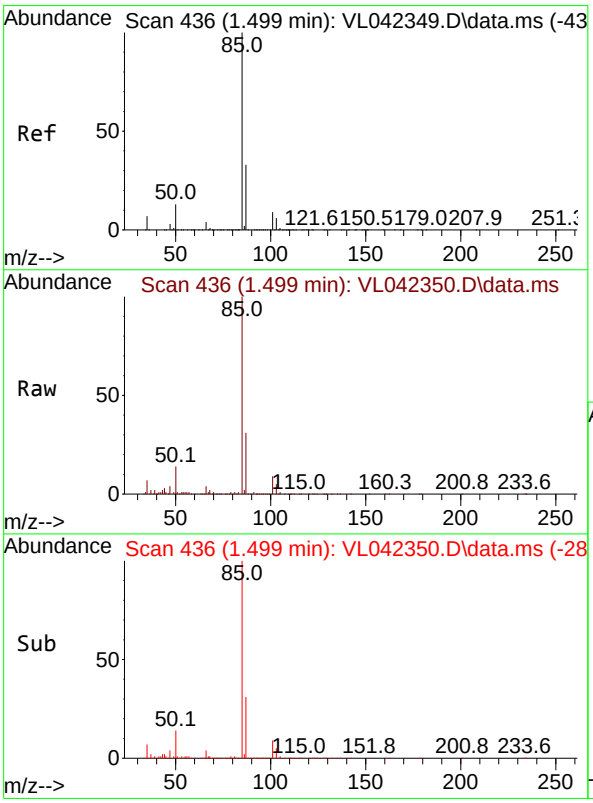
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 49 Resp: 123206

Ion	Ratio	Lower	Upper
49	100		
128	46.2	22.8	68.4
130	57.3	29.3	88.0

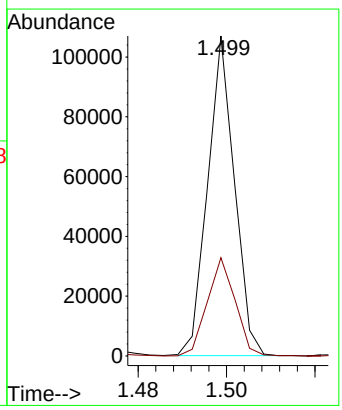


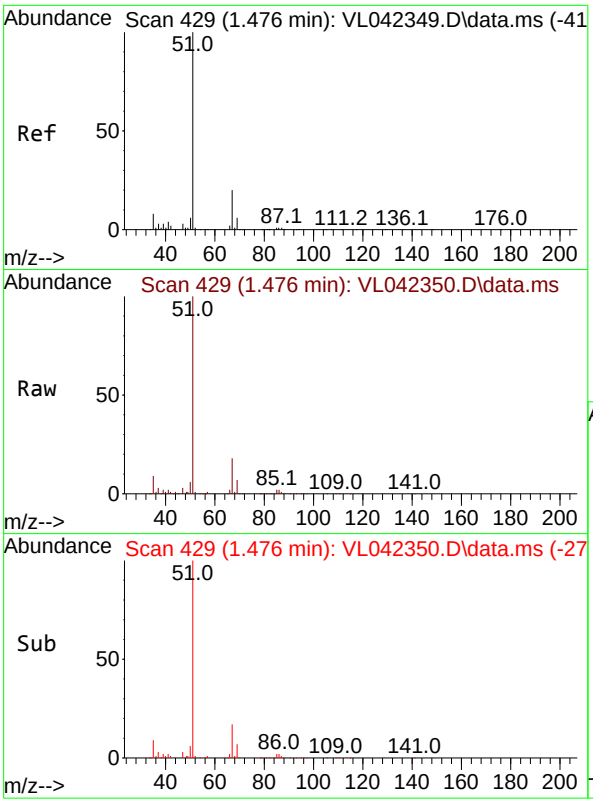


#2
Dichlorodifluoromethane
Concen: 2.068 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 85 Resp: 45008

Ion	Ratio	Lower	Upper
85	100		
87	30.6	26.6	39.8



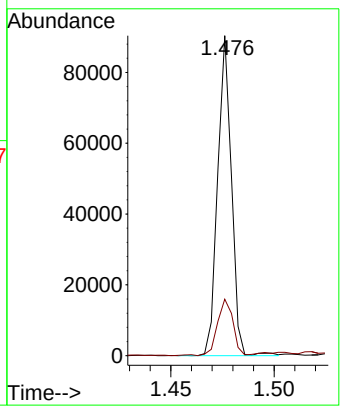


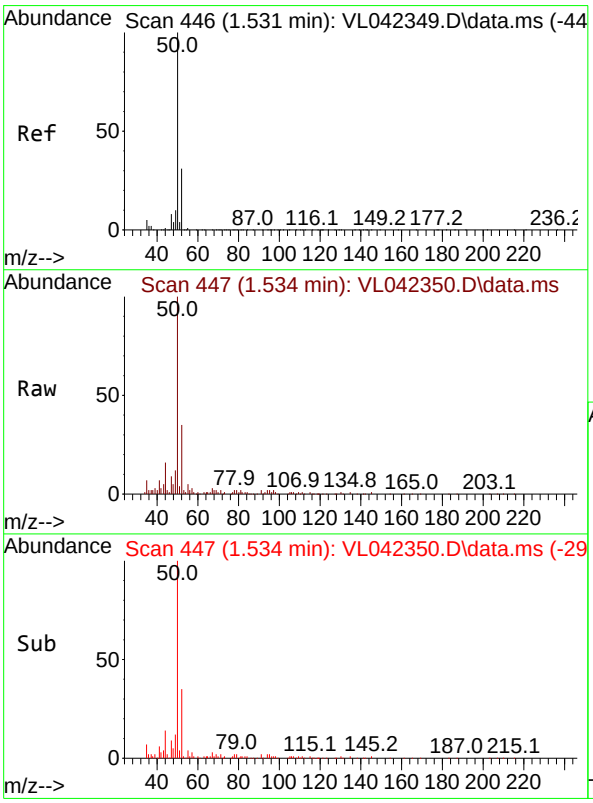
#3
Chlorodifluoromethane
Concen: 2.019 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 51 Resp: 41853

Ion	Ratio	Lower	Upper
51	100		
67	21.7	16.2	24.4

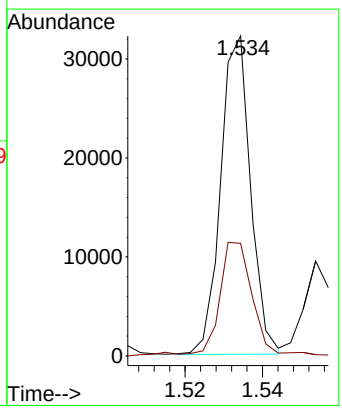


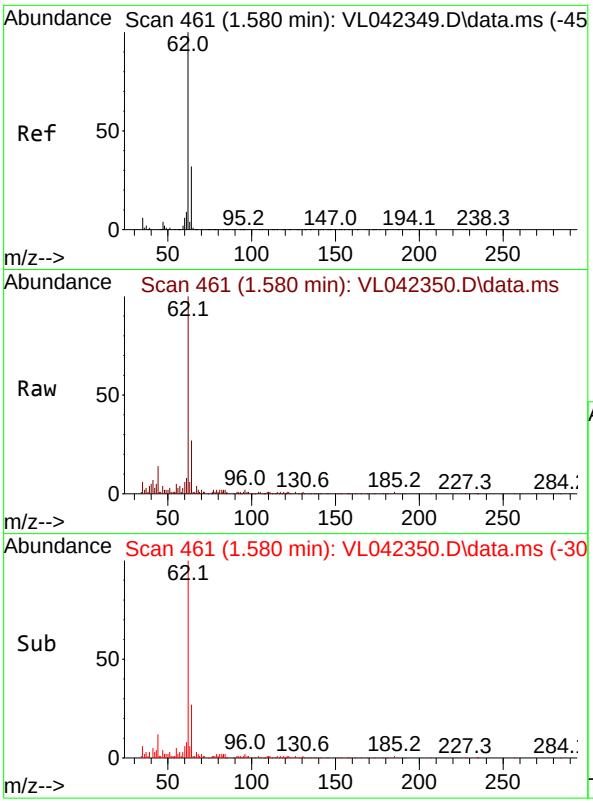


#4
Chloromethane
Concen: 2.005 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 50 Resp: 17272

Ion	Ratio	Lower	Upper
50	100		
52	34.9	24.7	37.1



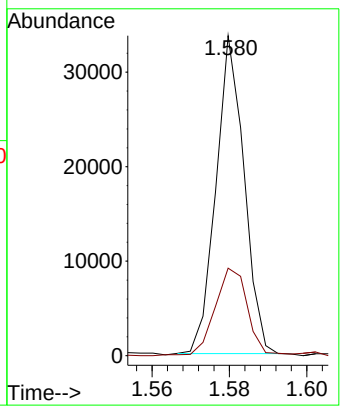


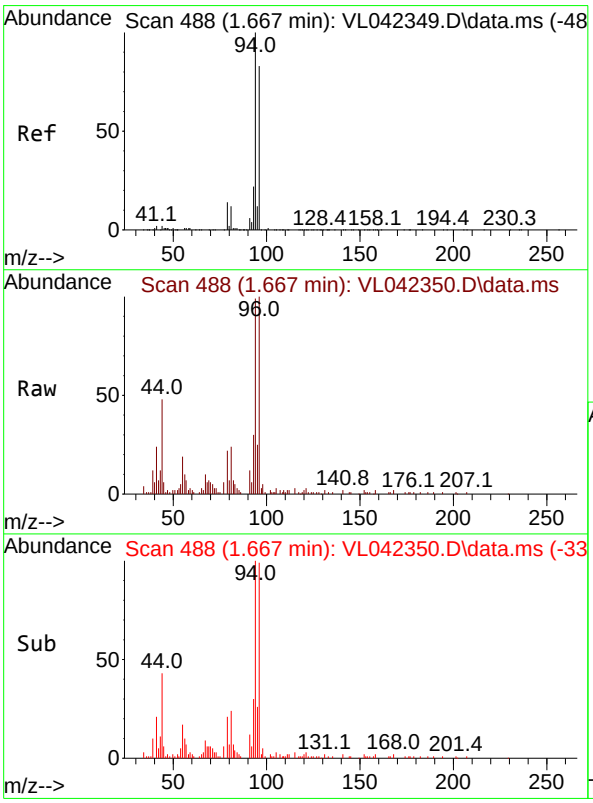
#5
Vinyl Chloride
Concen: 1.811 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 16979

Ion	Ratio	Lower	Upper
62	100		
64	27.2	25.4	38.0

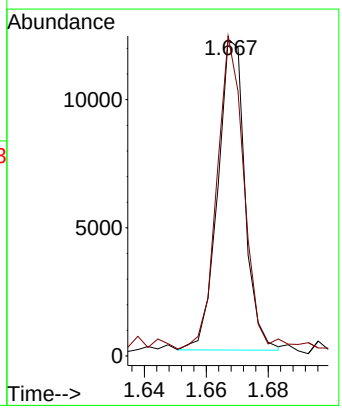


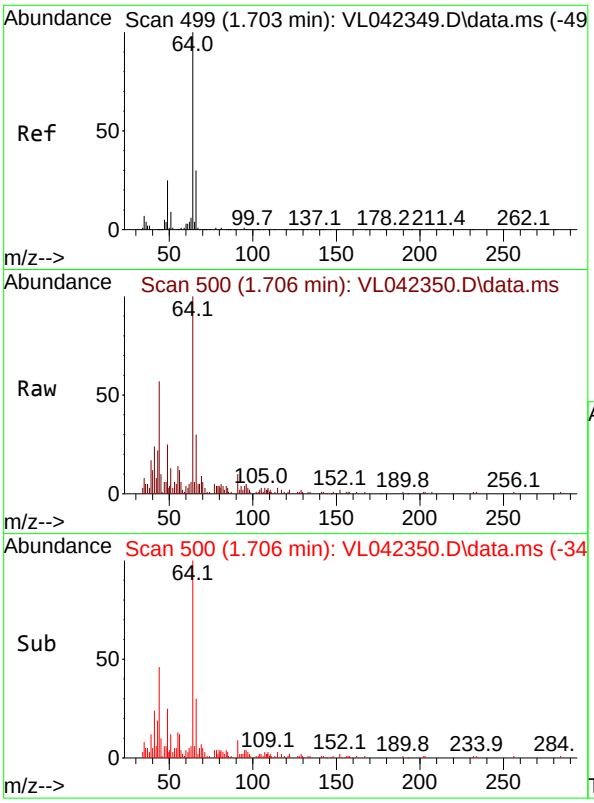


#6
Bromomethane
Concen: 1.821 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 94 Resp: 7398

Ion	Ratio	Lower	Upper
94	100		
96	100.8	66.2	99.2#



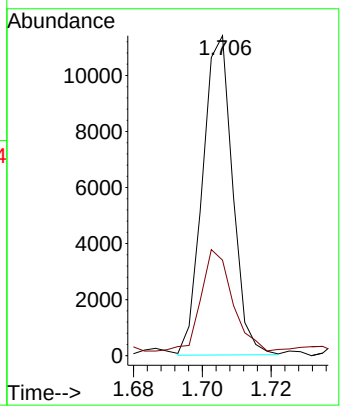


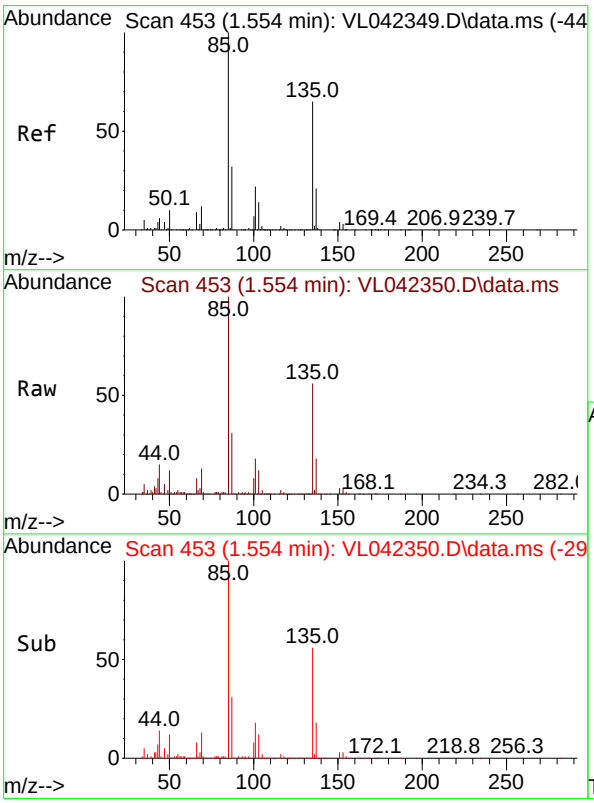
#7
Chloroethane
Concen: 2.031 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 64 Resp: 6889

Ion	Ratio	Lower	Upper
64	100		
66	29.8	24.6	37.0

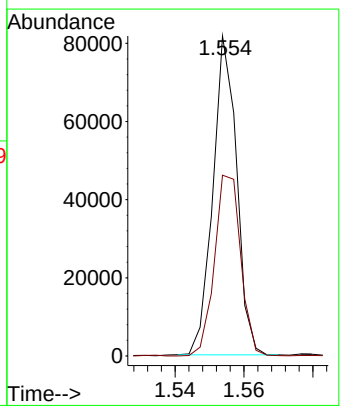


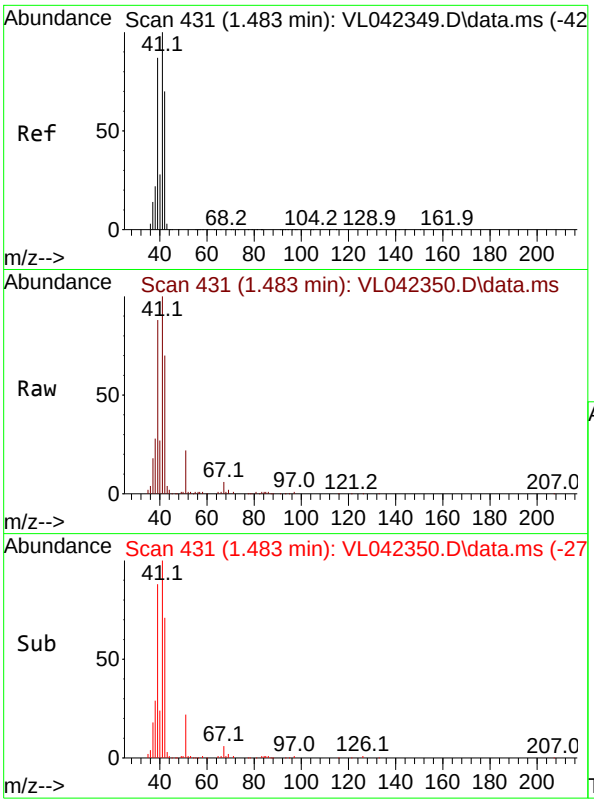


#8
Dichlorotetrafluoroethane
Concen: 2.084 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 85 Resp: 38955

Ion	Ratio	Lower	Upper
85	100		
135	63.3	52.2	78.2



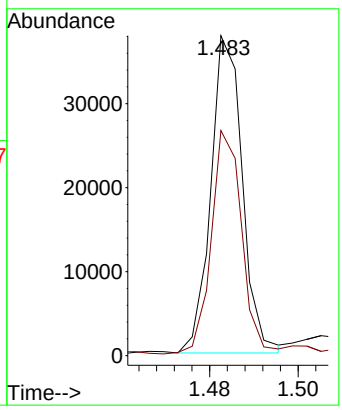


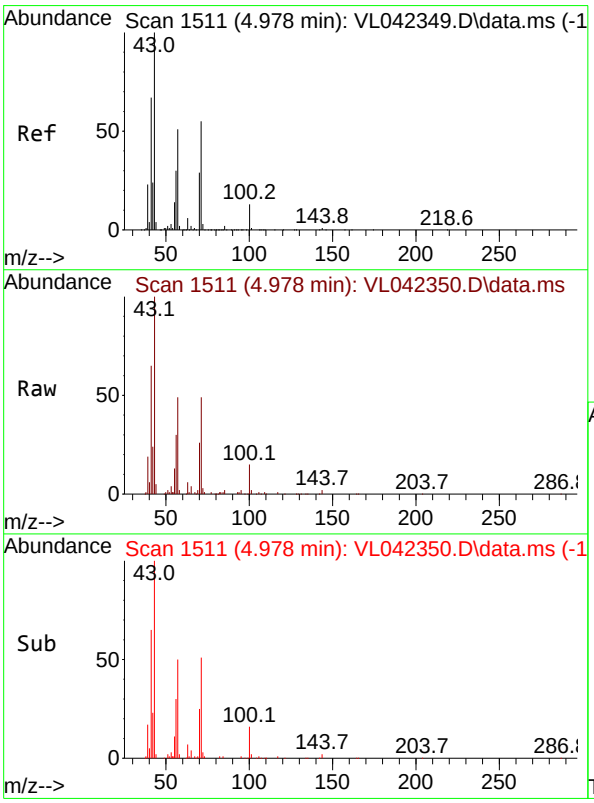
#9
Propene
Concen: 1.978 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 18671

Ion	Ratio	Lower	Upper
41	100		
42	72.7	56.2	84.4

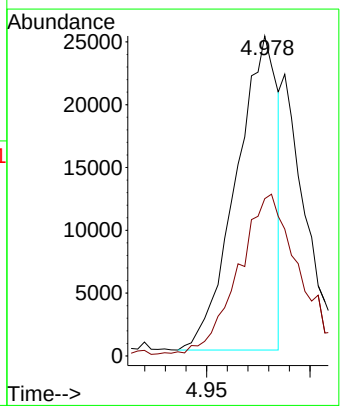


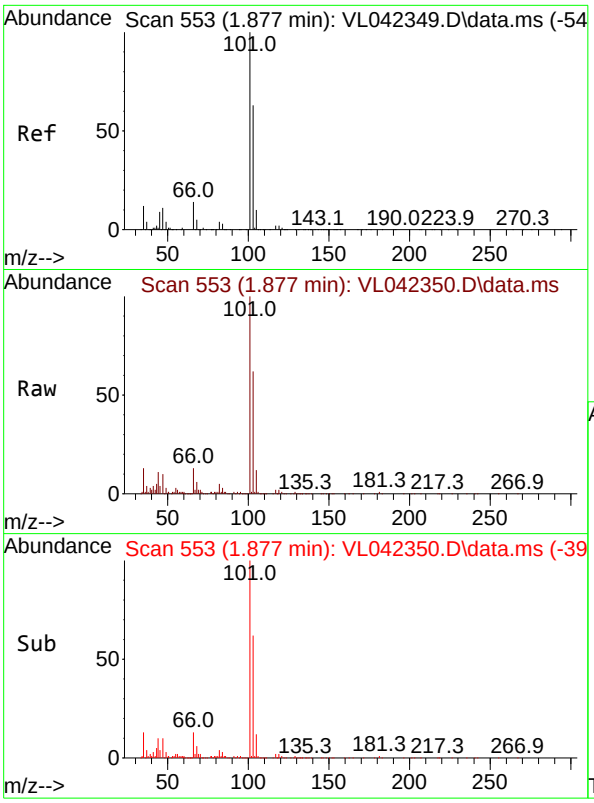


#10
Heptane
Concen: 1.364 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 34658

Ion	Ratio	Lower	Upper
43	100		
57	75.9	39.9	59.9#



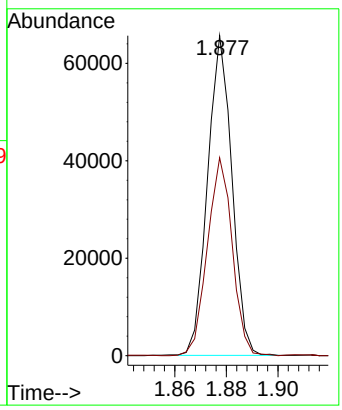


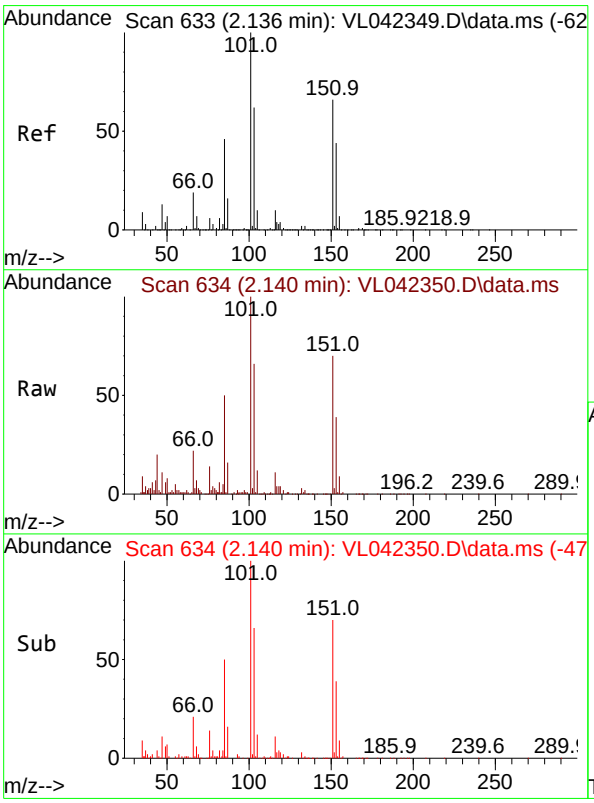
#11
Trichlorofluoromethane
Concen: 2.079 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:101 Resp: 43035

Ion	Ratio	Lower	Upper
101	100		
103	61.9	50.1	75.1

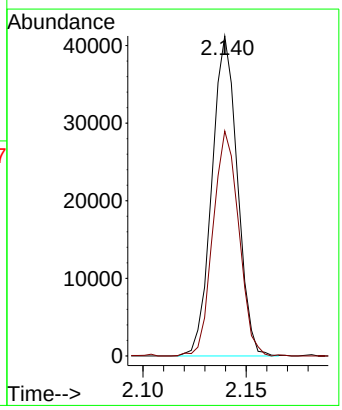


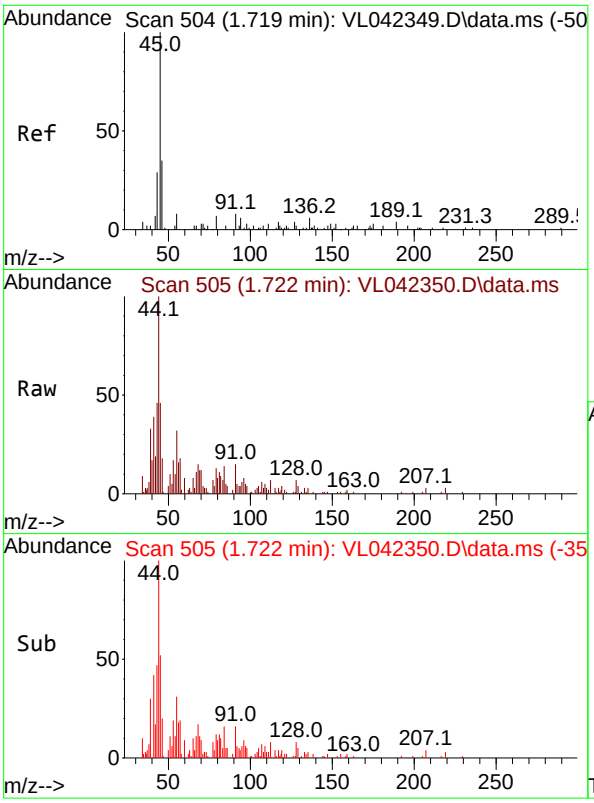


#12
1,1,2-Trichlorotrifluoroethane
Concen: 2.092 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:101 Resp: 35415

Ion	Ratio	Lower	Upper
101	100		
151	71.5	57.0	85.6



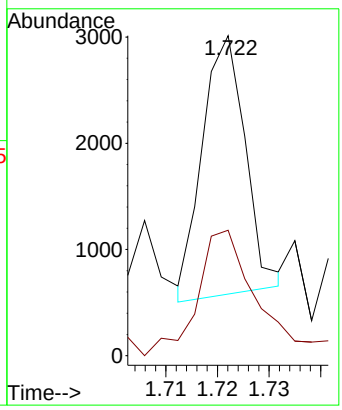


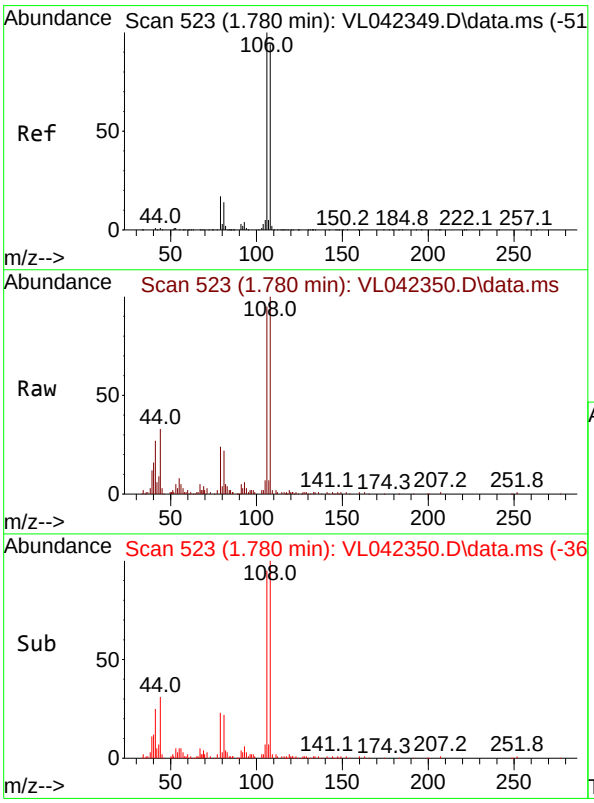
#13
Ethanol
Concen: 1.837 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 1417

Ion	Ratio	Lower	Upper
45	100		
46	84.1	21.9	87.7

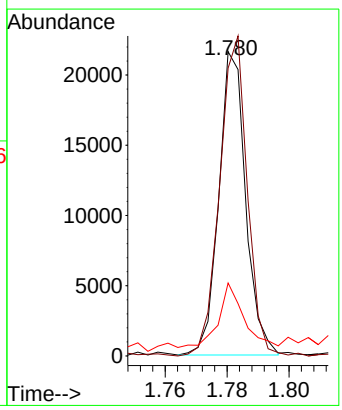


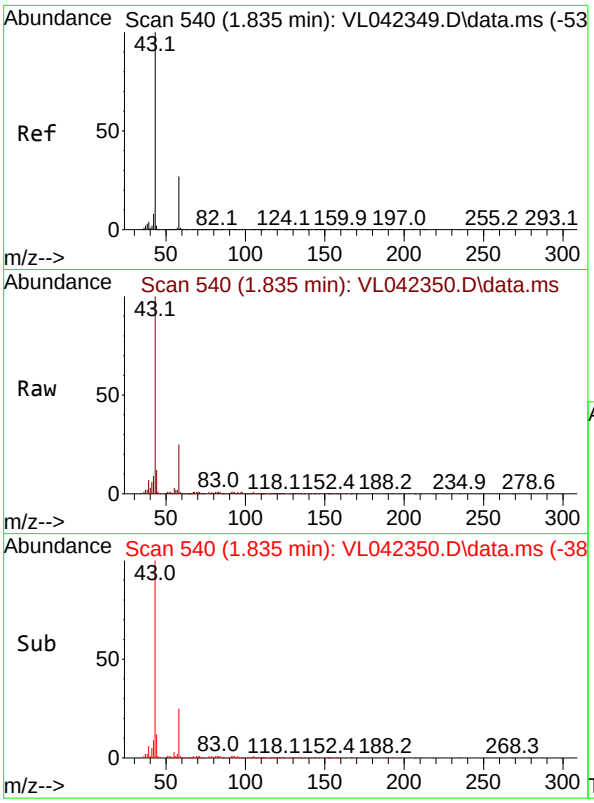


#14
Bromoethene
Concen: 2.045 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:108 Resp: 13049

Ion	Ratio	Lower	Upper
108	100		
106	110.2	85.9	128.9
79	34.0	13.9	20.9#



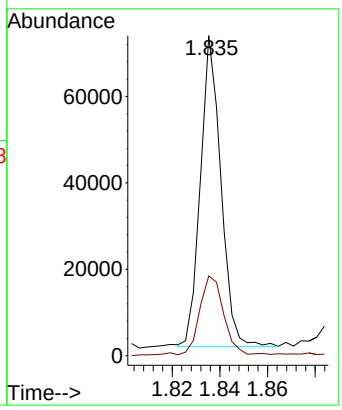


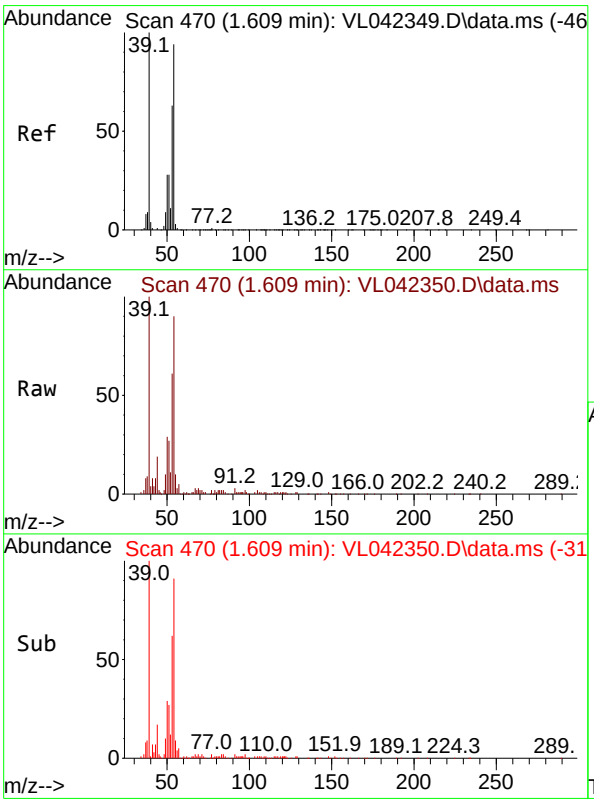
#15
Acetone
Concen: 2.129 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 42949

Ion	Ratio	Lower	Upper
43	100		
58	31.4	22.4	33.6

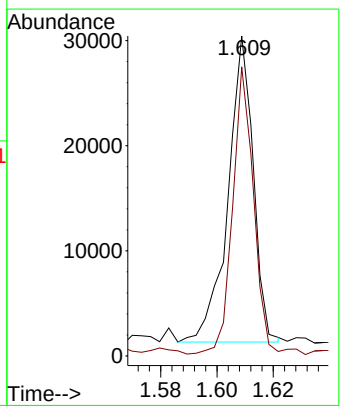


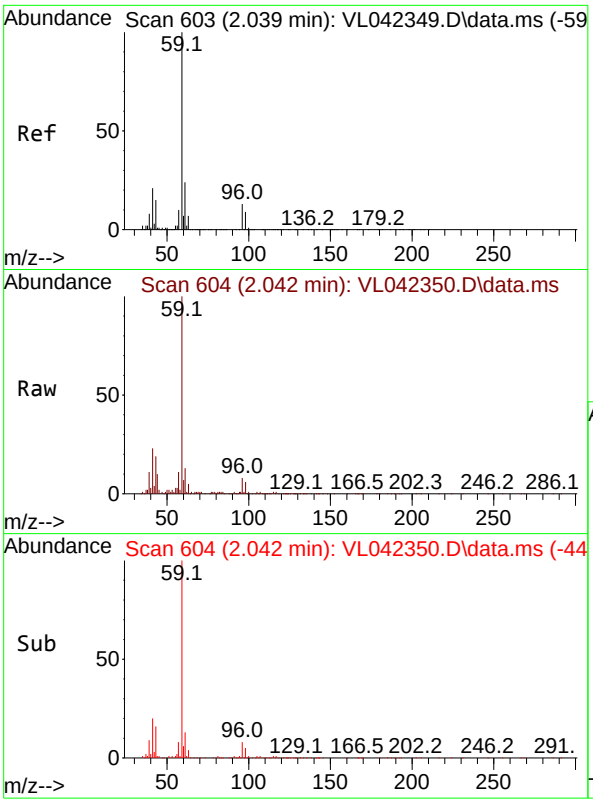


#16
1,3-Butadiene
Concen: 1.912 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 39 Resp: 18110

Ion	Ratio	Lower	Upper
39	100		
54	77.2	64.9	97.3



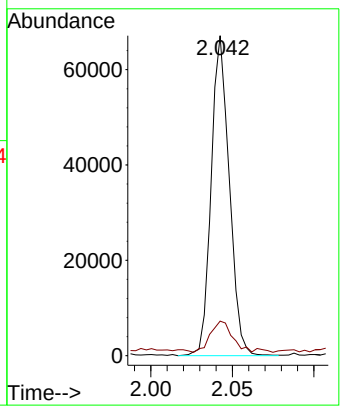


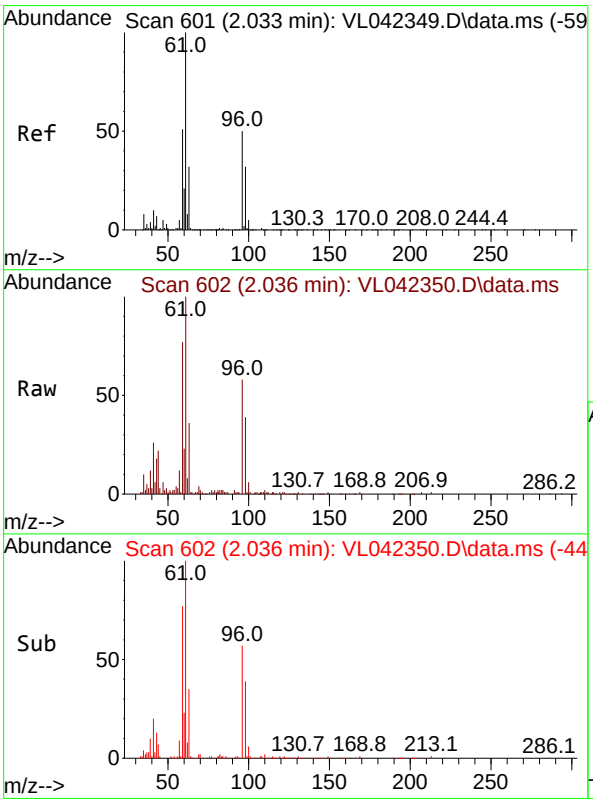
#17
tert-Butyl alcohol
Concen: 2.074 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 59 Resp: 51829

Ion	Ratio	Lower	Upper
59	100		
57	13.2	8.7	13.1#

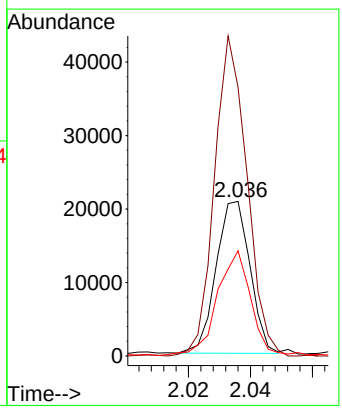


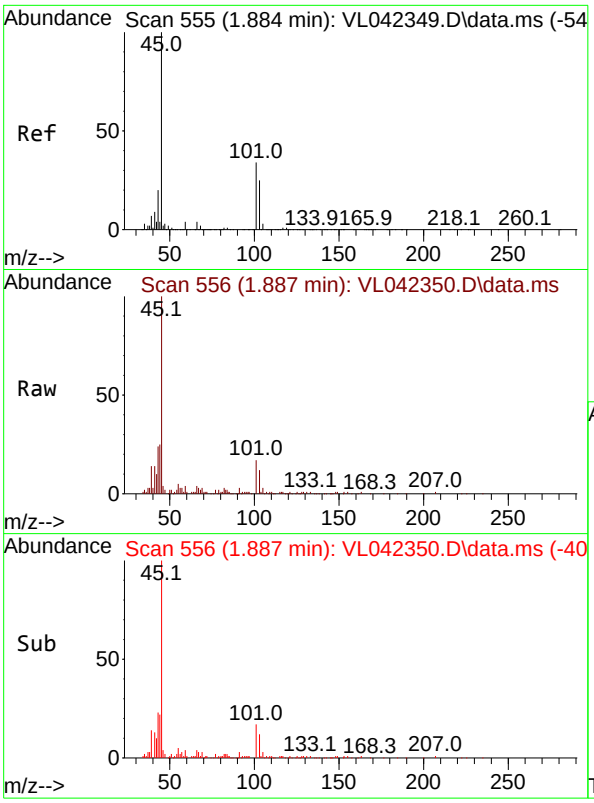


#18
1,1-Dichloroethene
Concen: 1.928 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 96 Resp: 15690

Ion	Ratio	Lower	Upper
96	100		
61	176.1	160.2	240.2
98	67.2	51.0	76.4



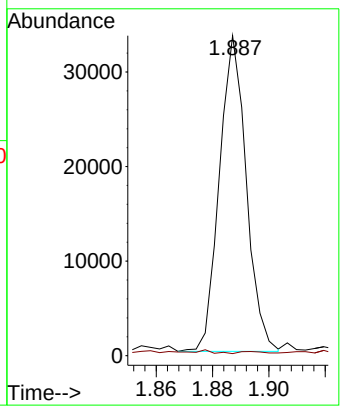


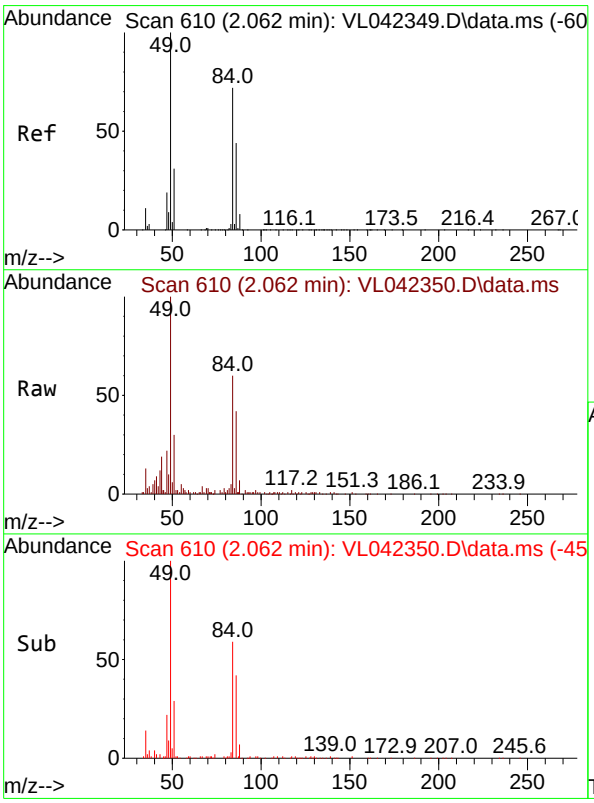
#19
Isopropyl Alcohol
Concen: 1.973 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 45 Resp: 22106

Ion	Ratio	Lower	Upper
45	100		
58	3.6	34.5	51.7#

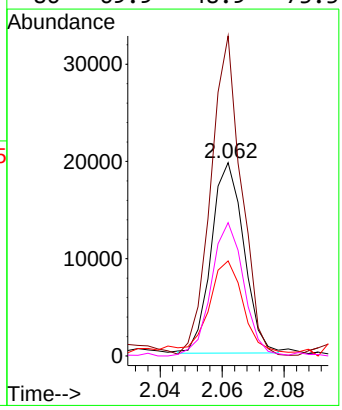


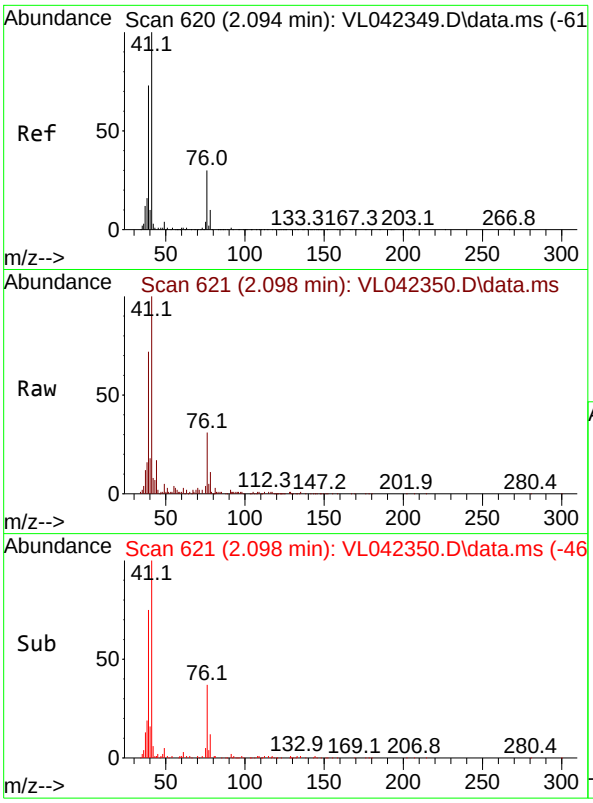


#20
Methylene Chloride
Concen: 1.814 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 84 Resp: 14329

Ion	Ratio	Lower	Upper
84	100		
49	169.1	111.6	167.4#
51	47.9	35.1	52.7
86	69.9	48.9	73.3



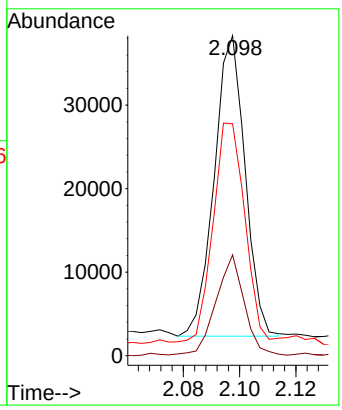


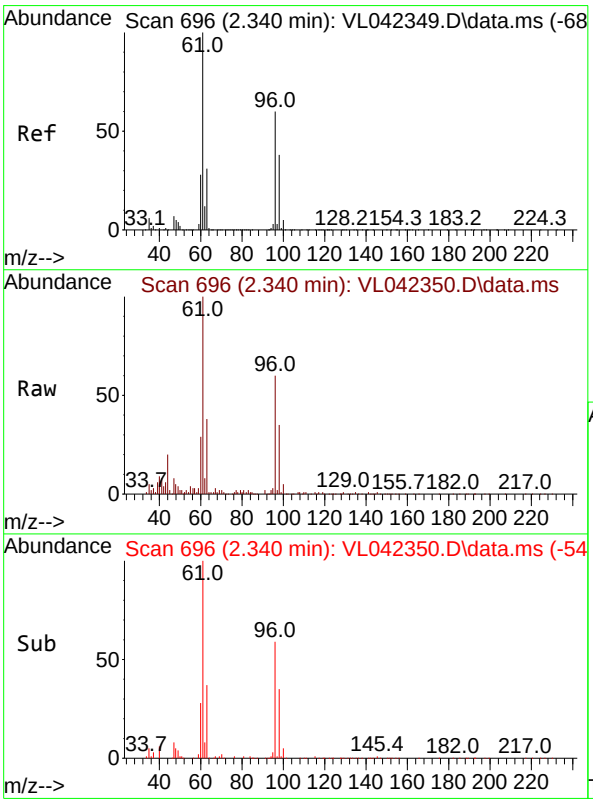
#21
Allyl Chloride
Concen: 1.963 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 41 Resp: 27340

Ion	Ratio	Lower	Upper
41	100		
76	31.9	24.8	37.2
39	81.2	60.6	90.8

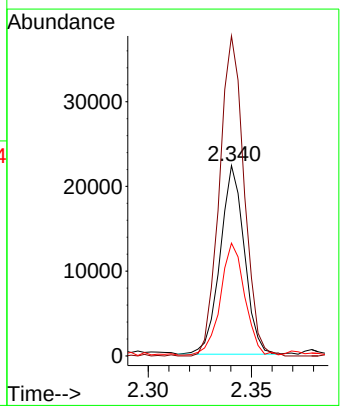


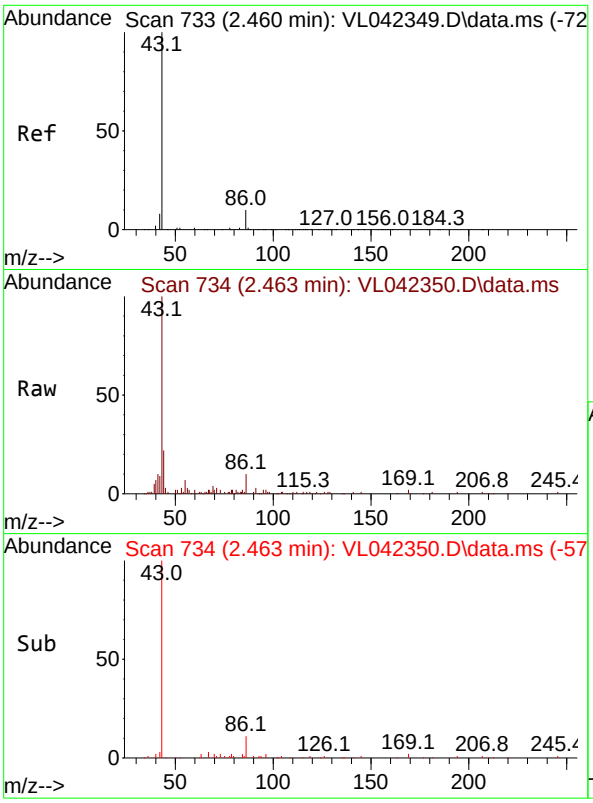


#22
trans-1,2-Dichloroethene
Concen: 2.015 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 96 Resp: 18142

Ion	Ratio	Lower	Upper
96	100		
61	169.6	133.7	200.5
98	59.3	50.3	75.5



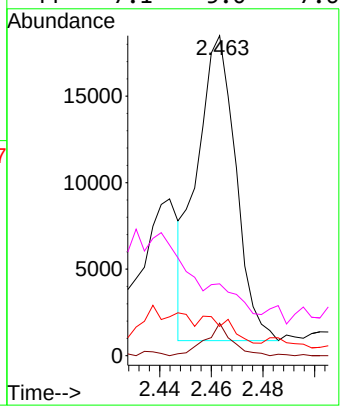


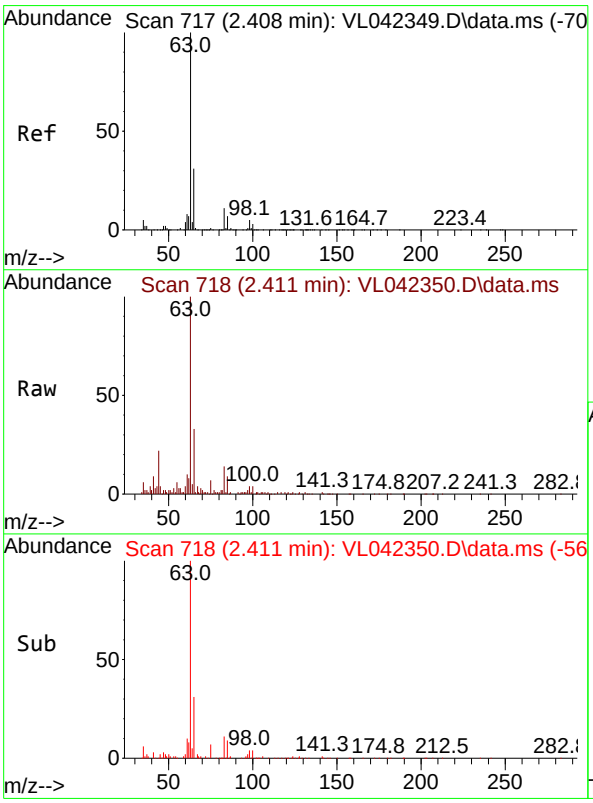
#23
Vinyl Acetate
Concen: 2.260 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 18454

Ion	Ratio	Lower	Upper
43	100		
86	10.2	6.5	9.7#
42	3.7	7.8	11.8#
44	7.1	5.0	7.6

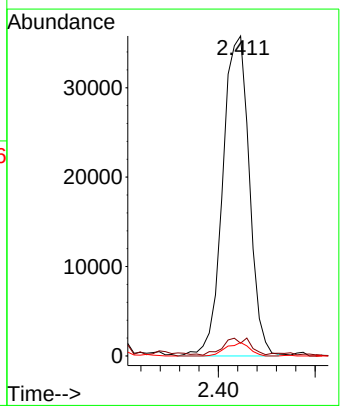


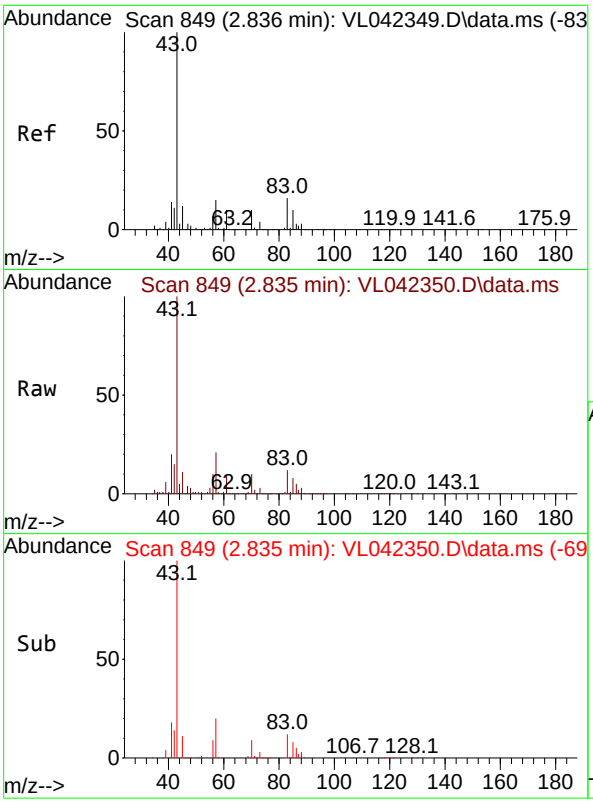


#24
1,1-Dichloroethane
Concen: 1.993 ppbv
RT: 2.411 min Scan# 718
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 63 Resp: 34077

Ion	Ratio	Lower	Upper
63	100		
98	3.1	2.3	6.8
100	4.2	1.6	4.8



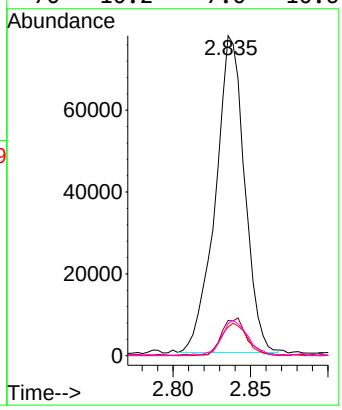


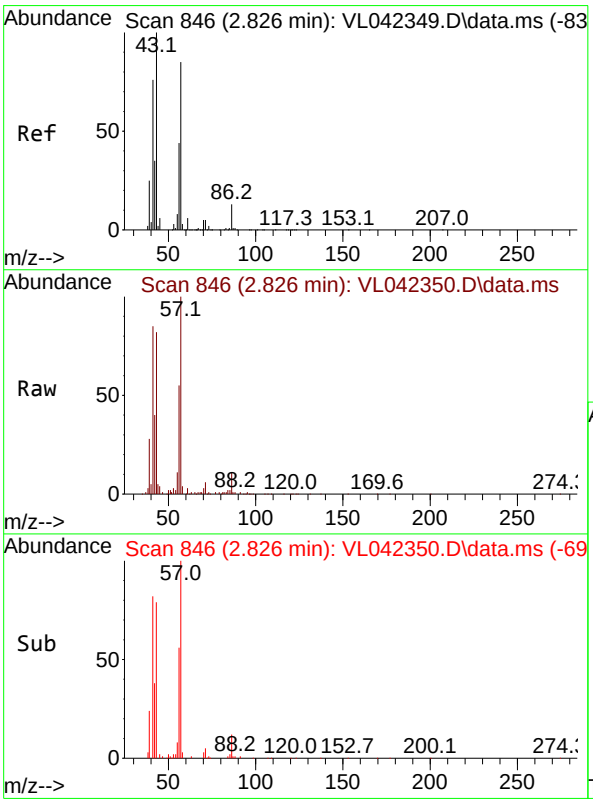
#25
Ethyl Acetate
Concen: 2.040 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 101467

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.2	7.3	10.9
70	10.2	7.0	10.6

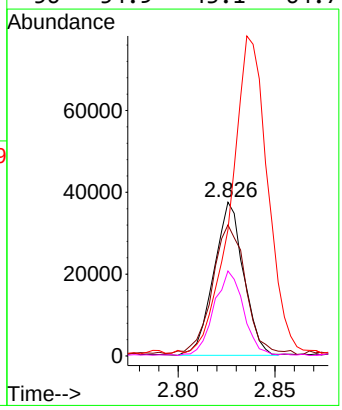


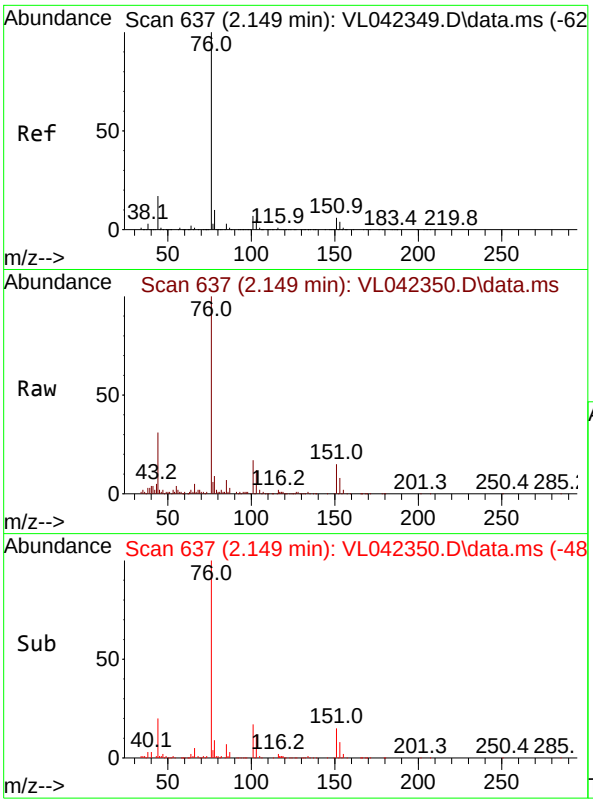


#26
Hexane
Concen: 1.990 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 57 Resp: 40046

Ion	Ratio	Lower	Upper
57	100		
41	94.1	77.9	116.9
43	260.7	208.4	312.6
56	54.9	43.1	64.7



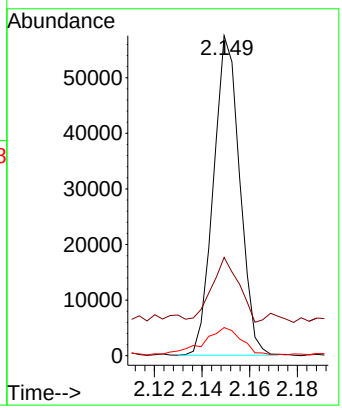


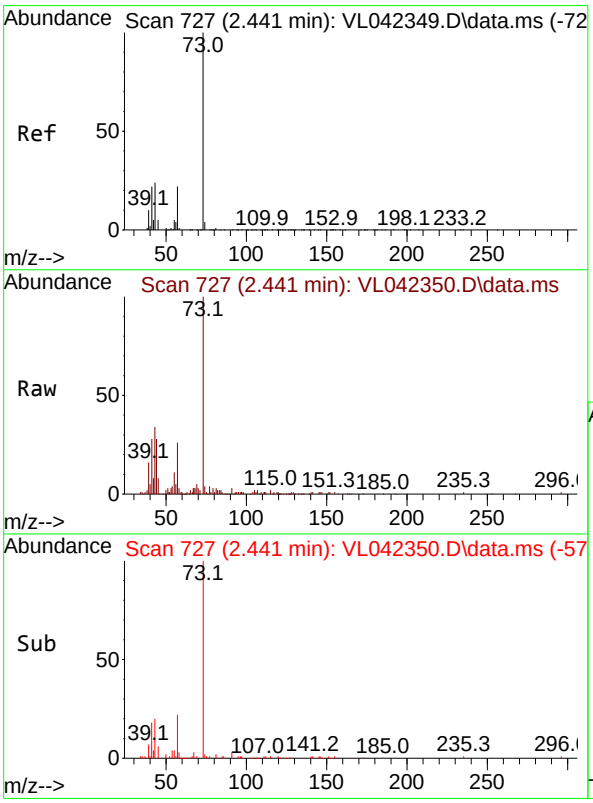
#27
Carbon Disulfide
Concen: 2.041 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 76 Resp: 43975

Ion	Ratio	Lower	Upper
76	100		
44	44.3	15.5	23.3#
78	13.6	9.3	13.9

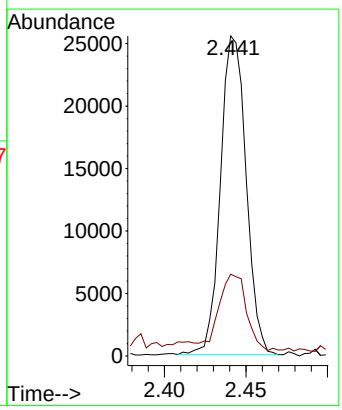


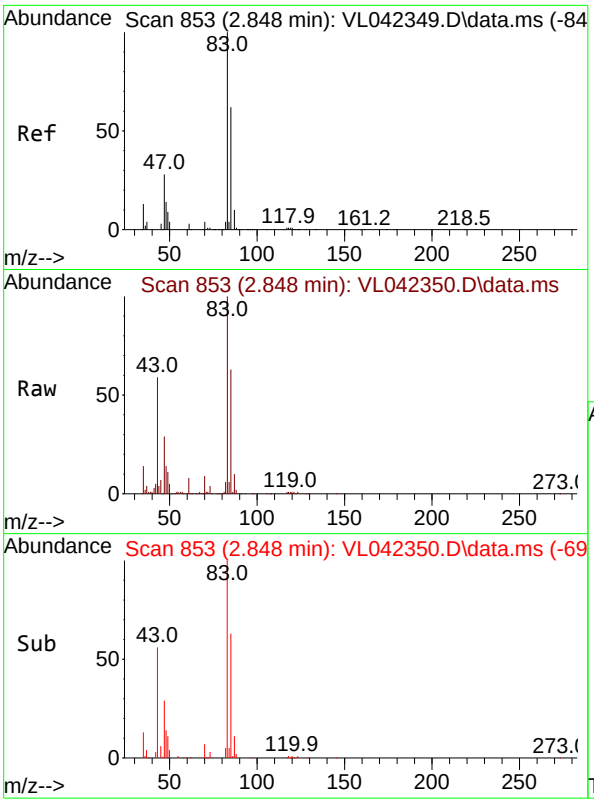


#28
Methyl tert-Butyl Ether
Concen: 2.116 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 73 Resp: 27905

Ion	Ratio	Lower	Upper
73	100		
57	28.1	21.3	31.9



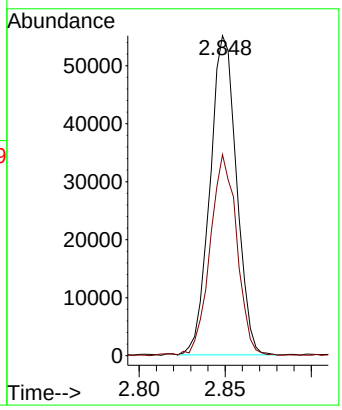


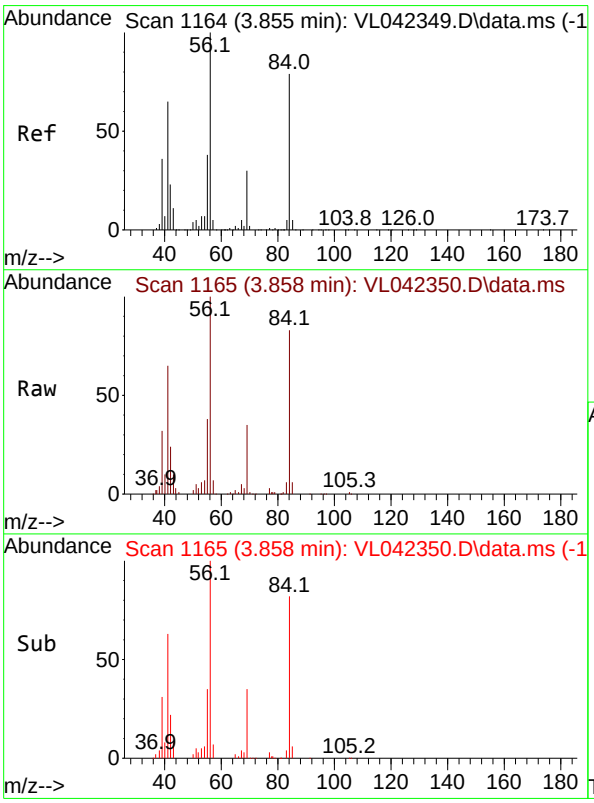
#29
Chloroform
Concen: 2.072 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 58946

Ion	Ratio	Lower	Upper
83	100		
85	62.9	50.0	75.0

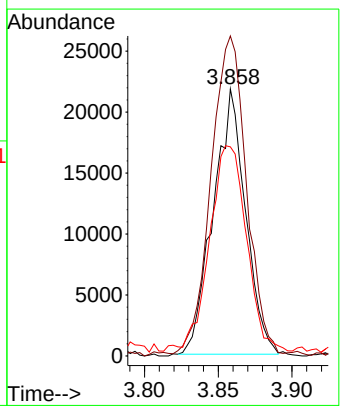


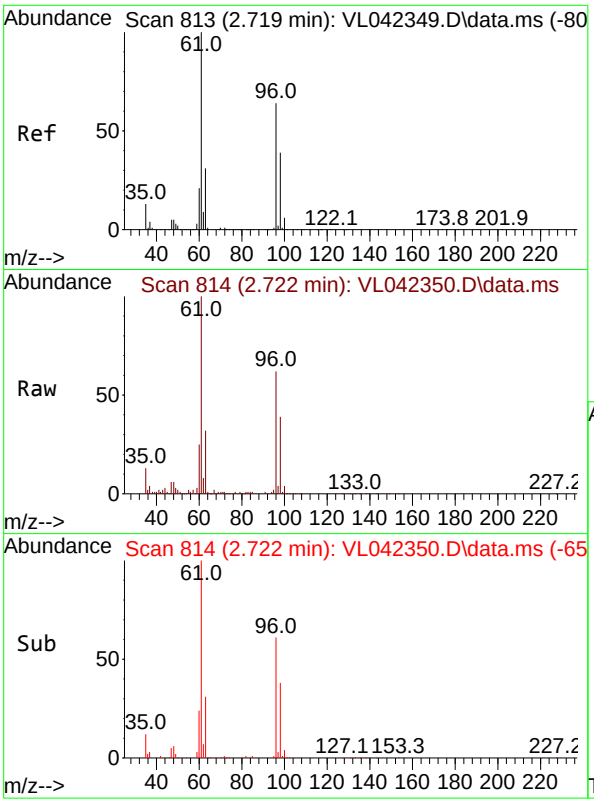


#30
Cyclohexane
Concen: 2.048 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 84 Resp: 33195

Ion	Ratio	Lower	Upper
84	100		
56	134.5	101.0	151.4
41	88.1	67.4	101.0



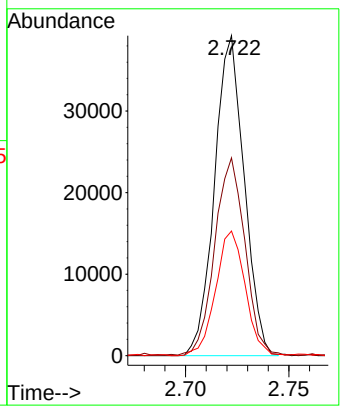


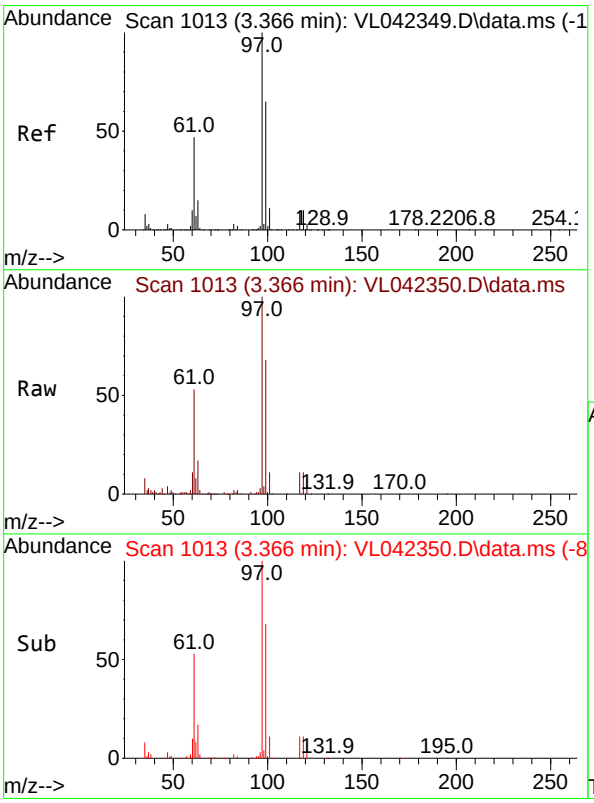
#31
cis-1,2-Dichloroethene
Concen: 2.051 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 61 Resp: 39249

Ion	Ratio	Lower	Upper
61	100		
96	61.6	50.8	76.2
98	39.0	30.9	46.3

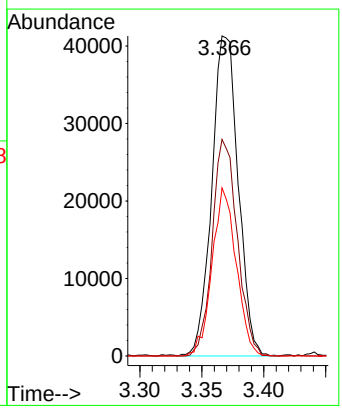


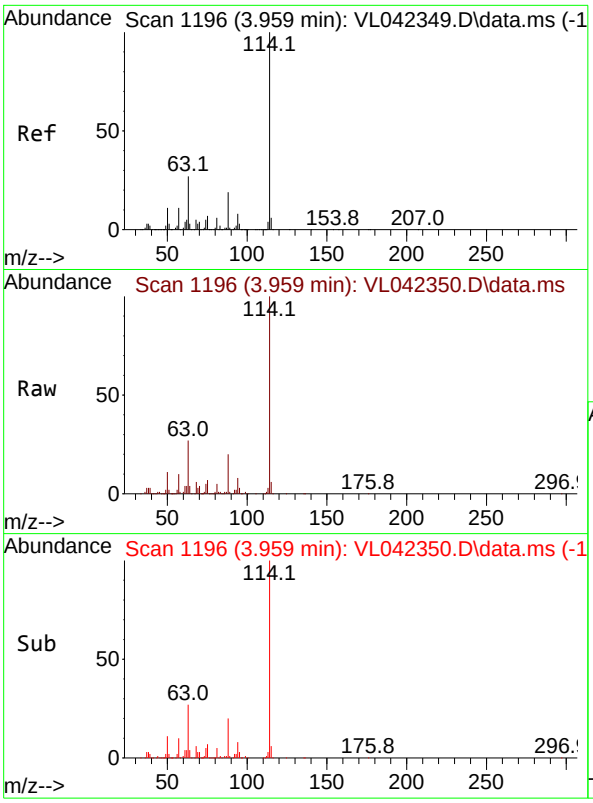


#32
1,1,1-Trichloroethane
Concen: 2.014 ppbv
RT: 3.366 min Scan# 1013
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 97 Resp: 61442

Ion	Ratio	Lower	Upper
97	100		
99	64.0	51.0	76.4
61	48.0	38.8	58.2



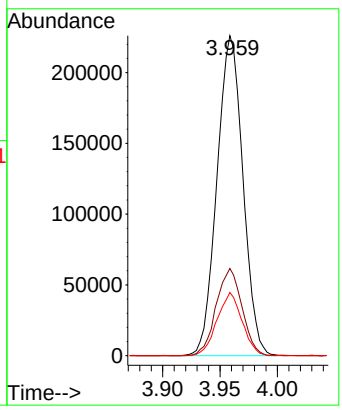


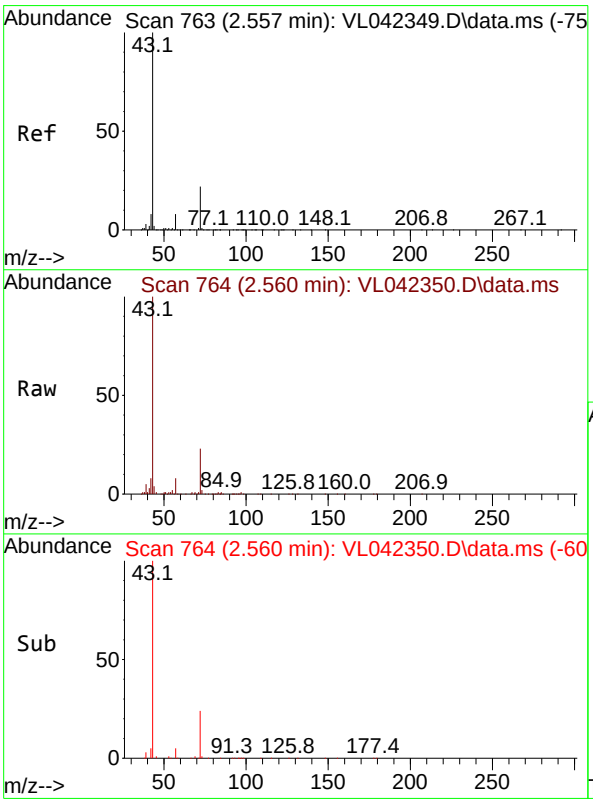
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:114 Resp: 355918

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.0	15.5	23.3

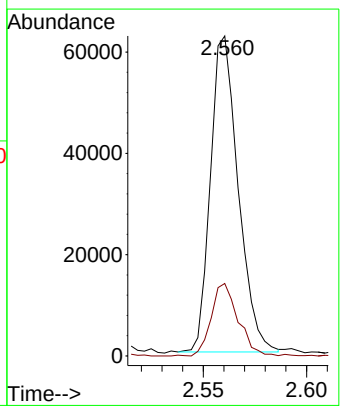


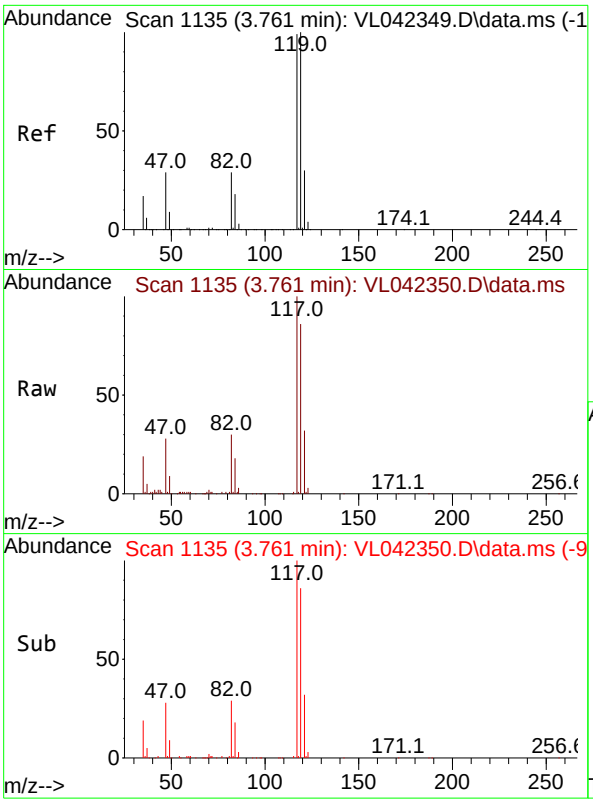


#34
2-Butanone
Concen: 2.069 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 58249

Ion	Ratio	Lower	Upper
43	100		
72	22.5	18.2	27.2



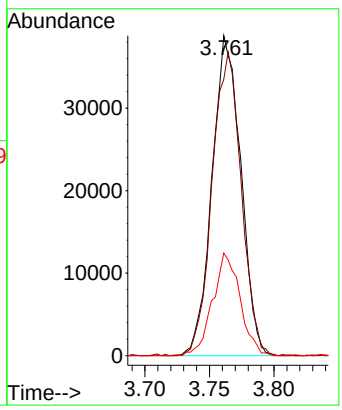


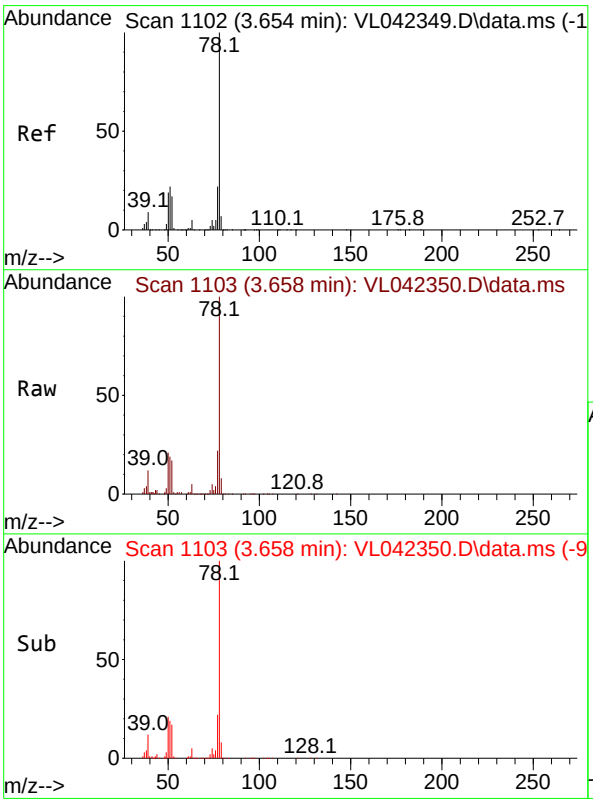
#35
Carbon Tetrachloride
Concen: 1.872 ppbv
RT: 3.761 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 60291

Ion	Ratio	Lower	Upper
117	100		
119	86.4	80.5	120.7
121	32.1	24.2	36.2

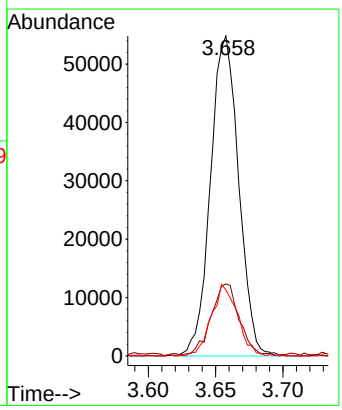


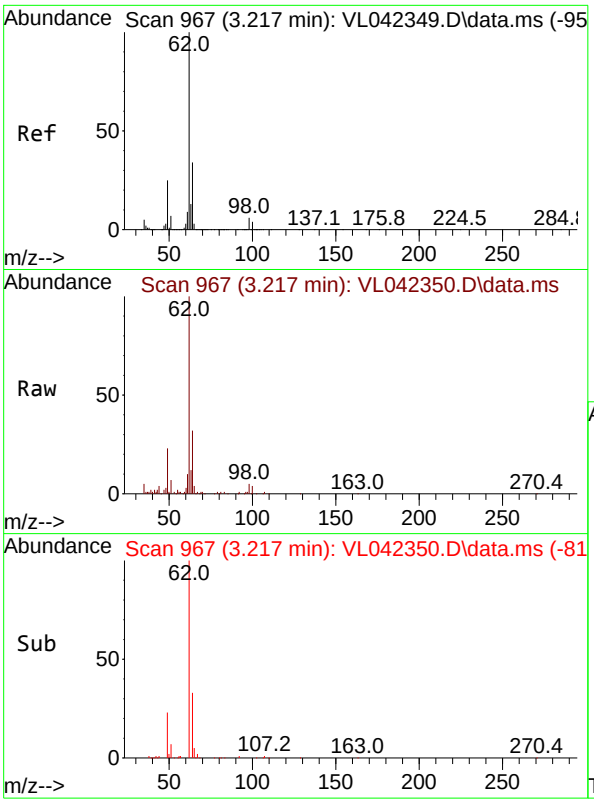


#36
Benzene
Concen: 2.079 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 78 Resp: 79814

Ion	Ratio	Lower	Upper
78	100		
77	22.0	17.4	26.0
50	20.6	15.5	23.3



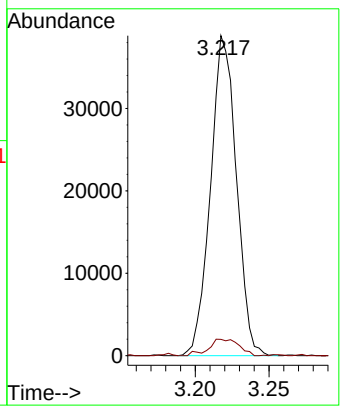


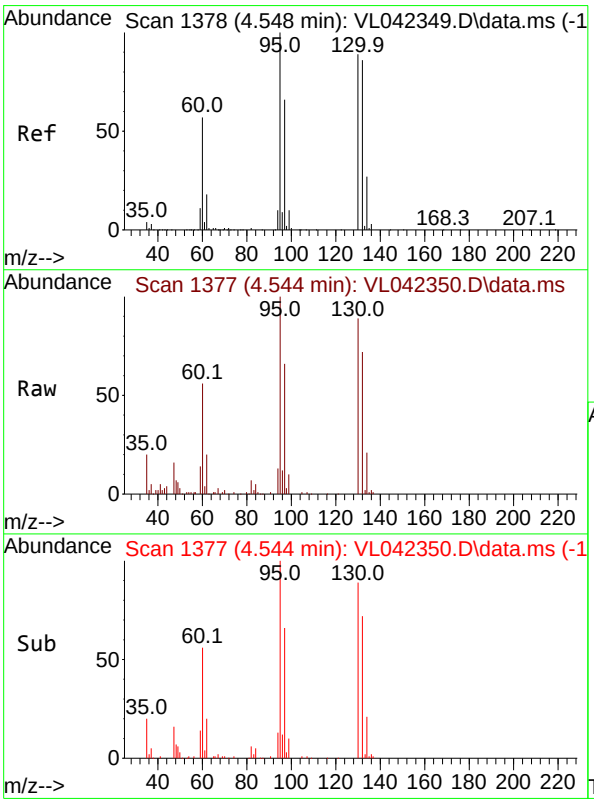
#37
1,2-Dichloroethane
Concen: 2.057 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 62 Resp: 47398

Ion	Ratio	Lower	Upper
62	100		
98	6.4	5.1	7.7

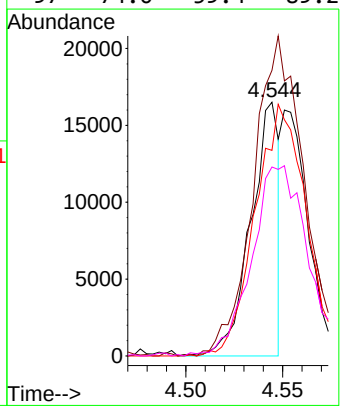


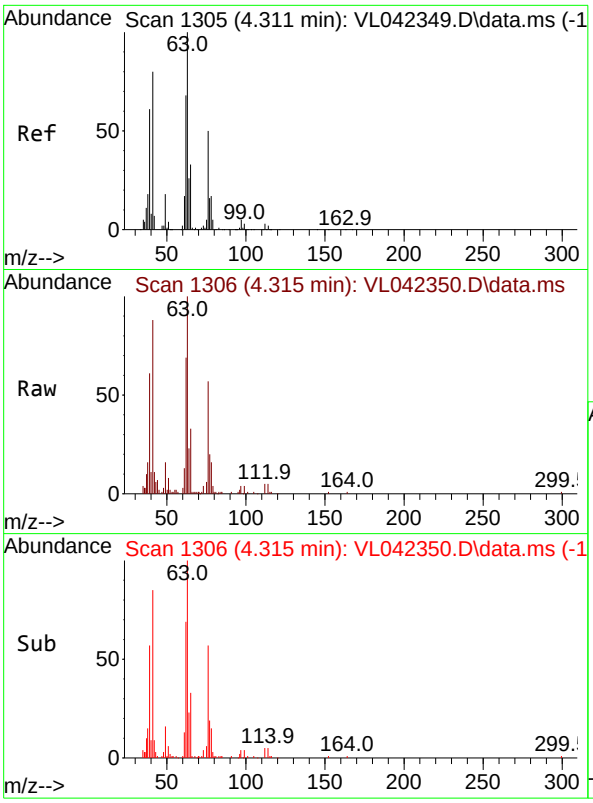


#38
Trichloroethene
Concen: 0.986 ppbv
RT: 4.544 min Scan# 1377
Delta R.T. -0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:130 Resp: 16602

Ion	Ratio	Lower	Upper
130	100		
95	112.6	89.8	134.6
132	81.1	77.7	116.5
97	74.0	59.4	89.2



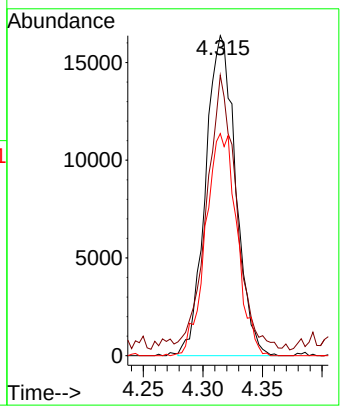


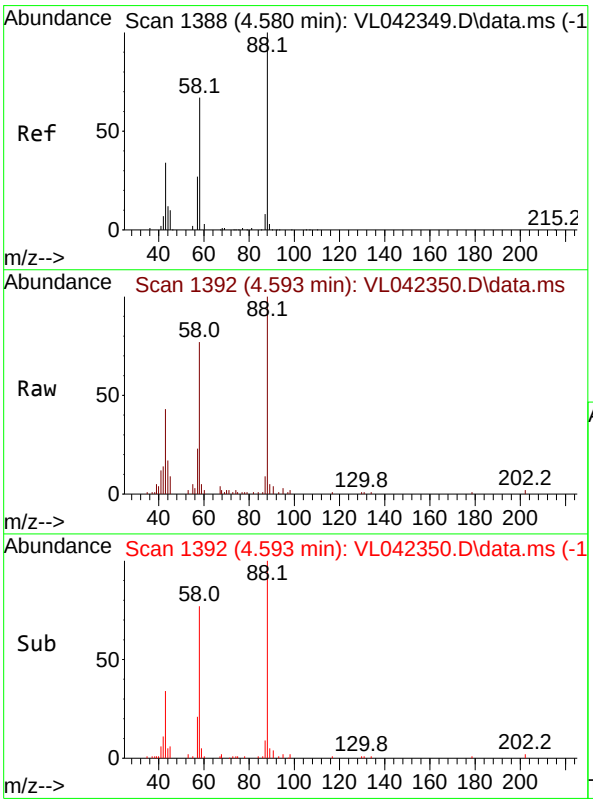
#39
1,2-Dichloropropane
Concen: 2.012 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 63 Resp: 28806

Ion	Ratio	Lower	Upper
63	100		
41	85.2	64.2	96.2
62	69.4	54.3	81.5

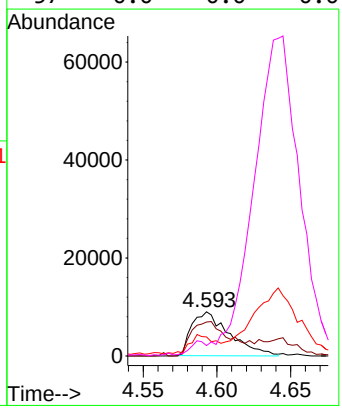


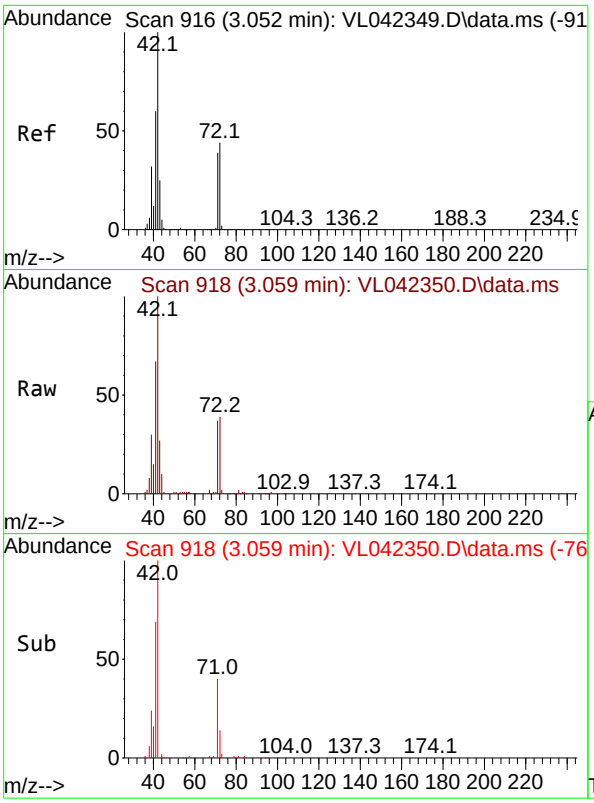


#40
1,4-Dioxane
Concen: 2.067 ppbv
RT: 4.593 min Scan# 1392
Delta R.T. 0.013 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 88 Resp: 16026

Ion	Ratio	Lower	Upper
88	100		
58	84.9	61.4	92.0
43	6.3	23.2	34.8#
57	0.0	0.0	0.0



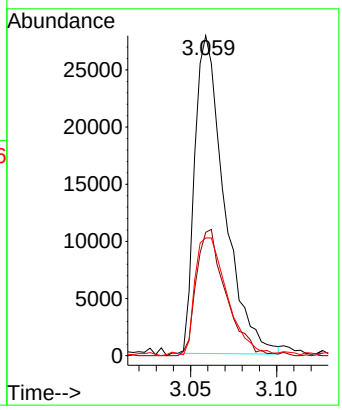


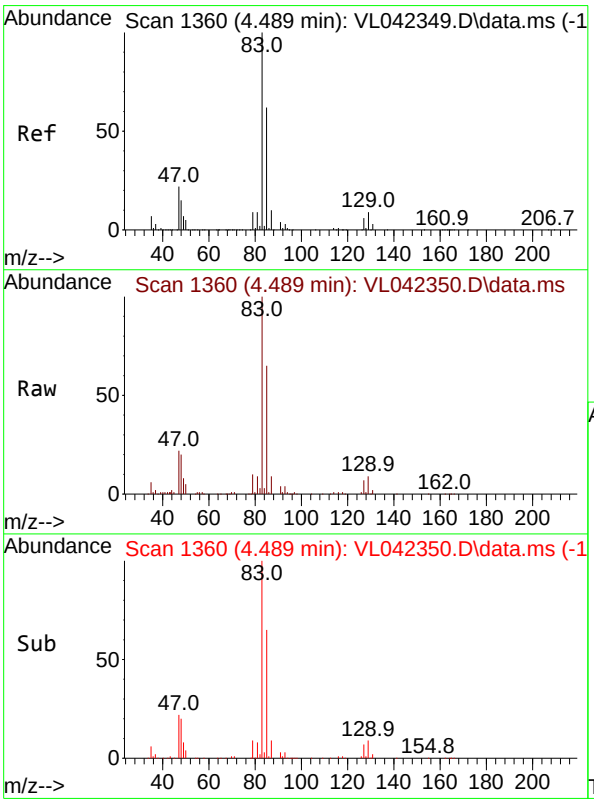
#41
Tetrahydrofuran
Concen: 2.047 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 42 Resp: 33298

Ion	Ratio	Lower	Upper
42	100		
72	39.9	32.3	48.5
71	41.5	31.4	47.2

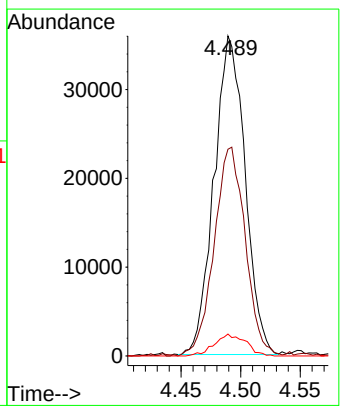


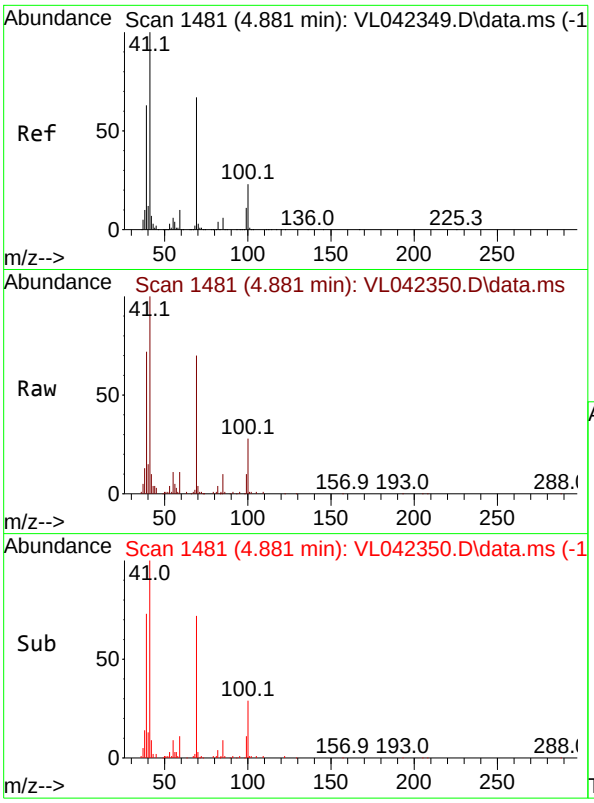


#42
Bromodichloromethane
Concen: 2.025 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 83 Resp: 64941

Ion	Ratio	Lower	Upper
83	100		
85	64.9	49.7	74.5
127	6.9	5.1	7.7



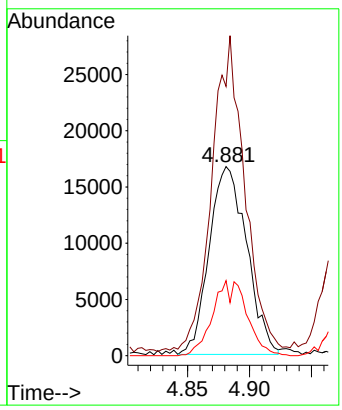


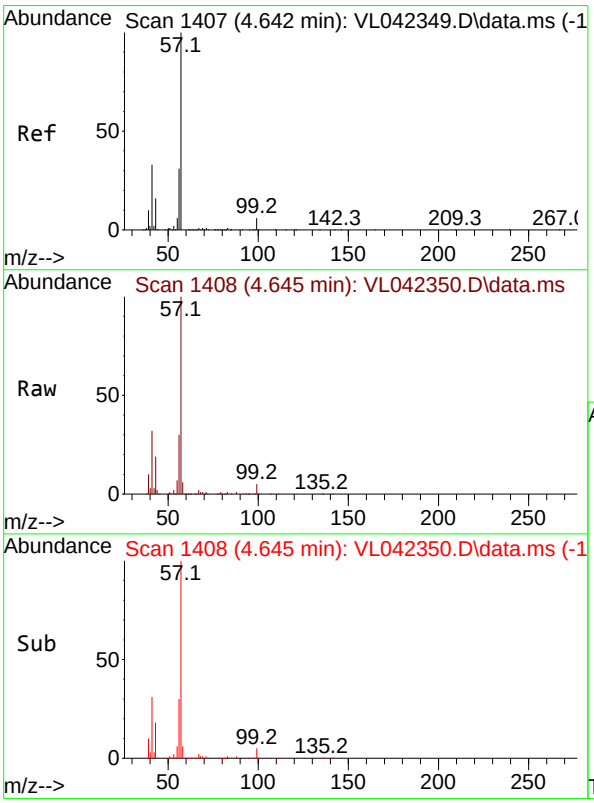
#43
Methyl Methacrylate
Concen: 2.046 ppbv
RT: 4.881 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 69 Resp: 35256

Ion	Ratio	Lower	Upper
69	100		
41	144.4	118.6	177.8
100	36.5	28.2	42.2

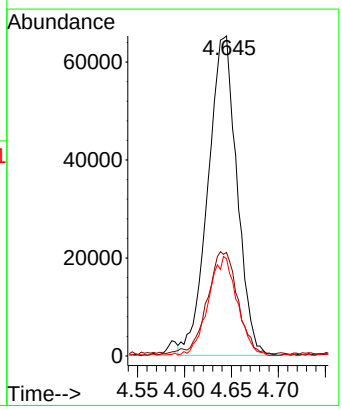


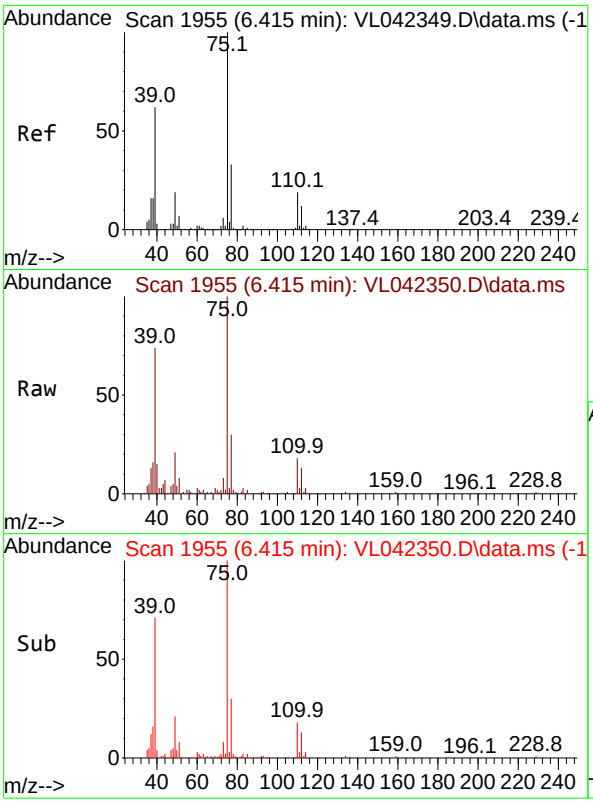


#44
2,2,4-Trimethylpentane
Concen: 2.103 ppbv
RT: 4.645 min Scan# 1408
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 57 Resp: 139641

Ion	Ratio	Lower	Upper
57	100		
41	34.4	27.2	40.8
56	31.3	25.7	38.5



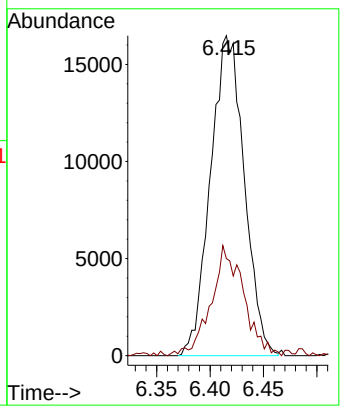


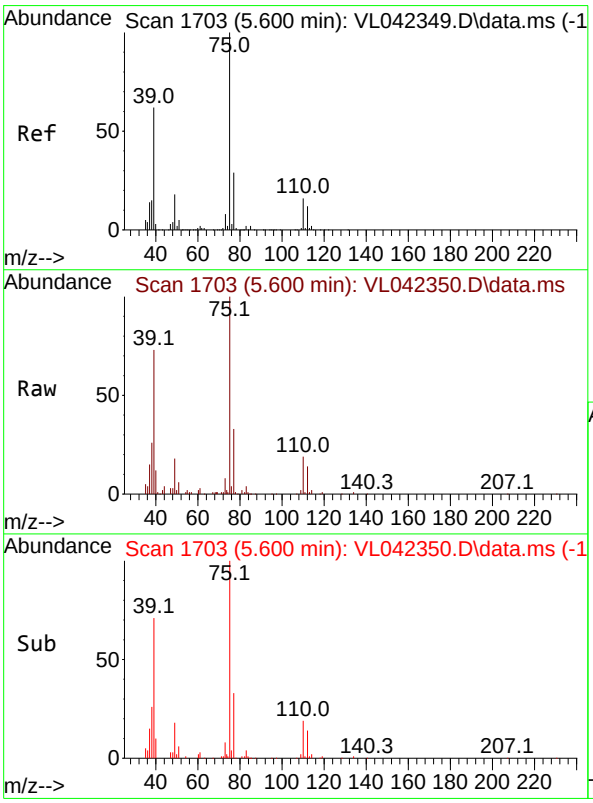
#45
t-1,3-Dichloropropene
Concen: 2.050 ppbv
RT: 6.415 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 75 Resp: 36265

Ion	Ratio	Lower	Upper
75	100		
77	30.4	27.0	40.6

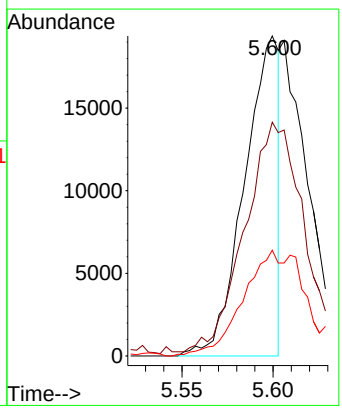


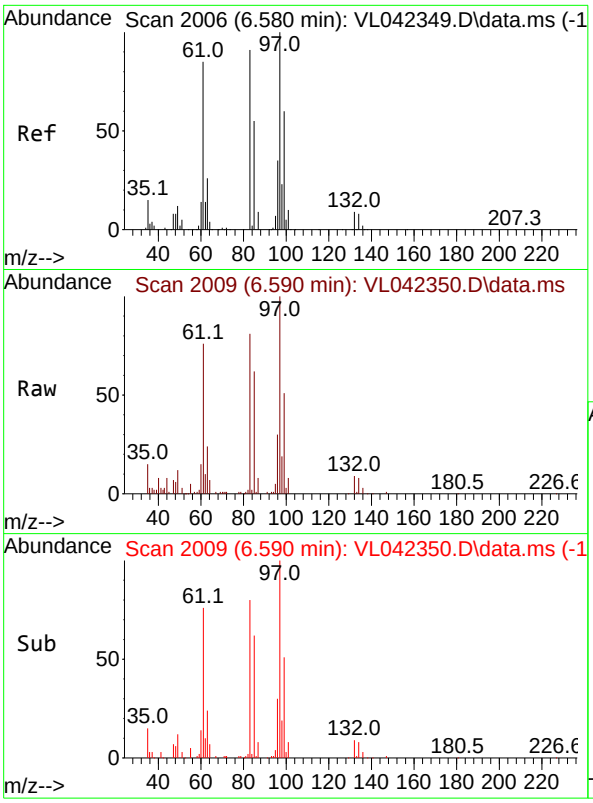


#46
cis-1,3-Dichloropropene
Concen: 1.183 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 75 Resp: 25569

Ion	Ratio	Lower	Upper
75	100		
39	71.8	50.0	75.0
77	32.5	23.0	34.6



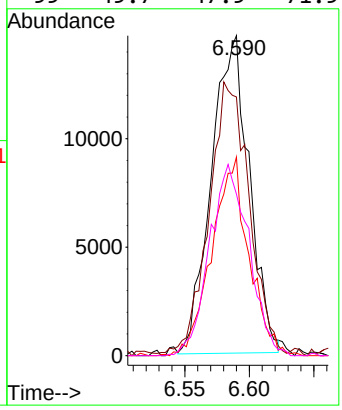


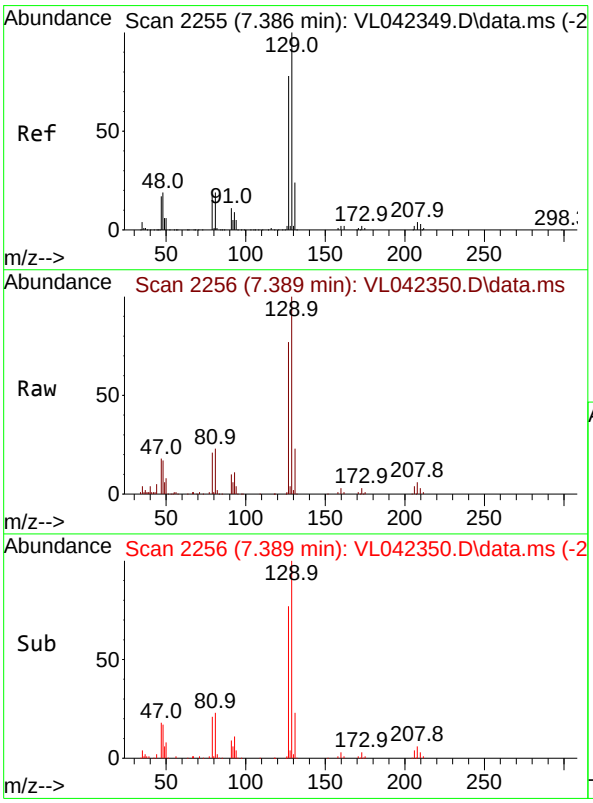
#47
1,1,2-Trichloroethane
Concen: 2.049 ppbv
RT: 6.590 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 97 Resp: 29879

Ion	Ratio	Lower	Upper
97	100		
83	78.8	72.8	109.2
85	61.7	44.2	66.4
99	49.7	47.9	71.9

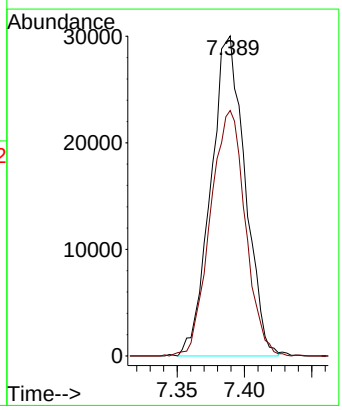


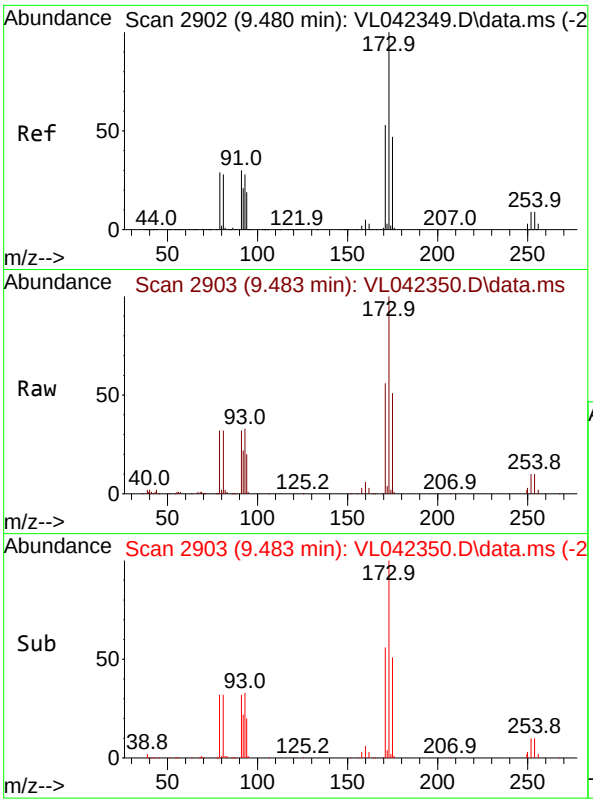


#48
Dibromochloromethane
Concen: 2.061 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:129 Resp: 53069

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3



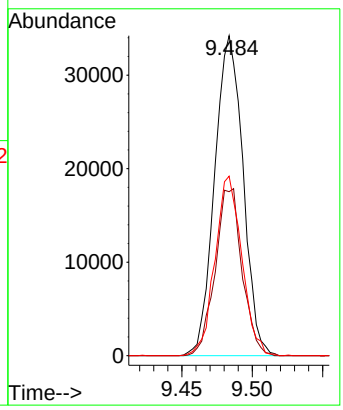


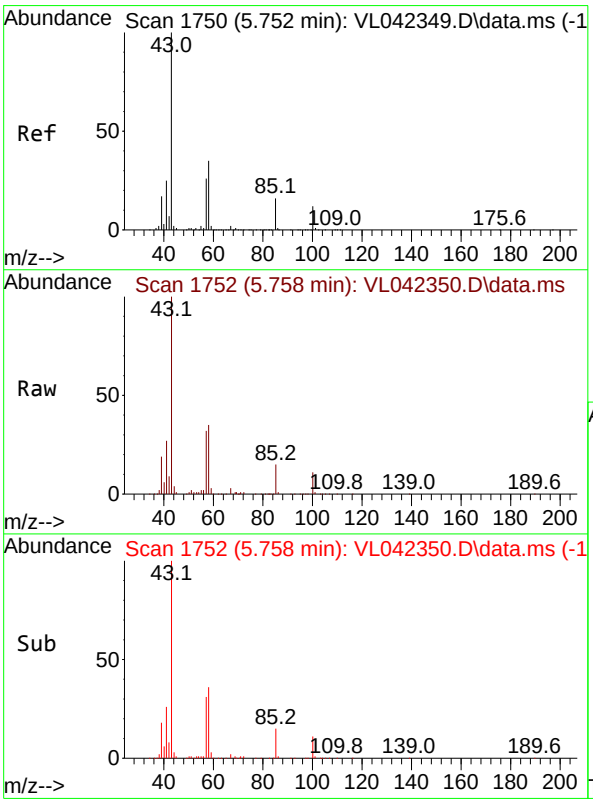
#49
Bromoform
Concen: 2.135 ppbv
RT: 9.483 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:173 Resp: 48069

Ion	Ratio	Lower	Upper
173	100		
175	49.4	38.2	57.2
171	53.0	40.9	61.3

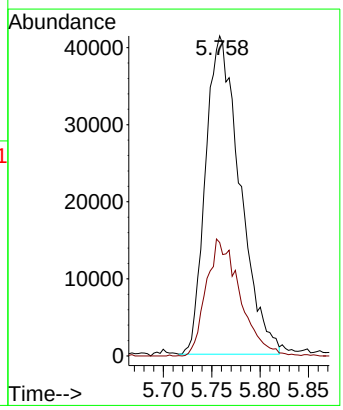


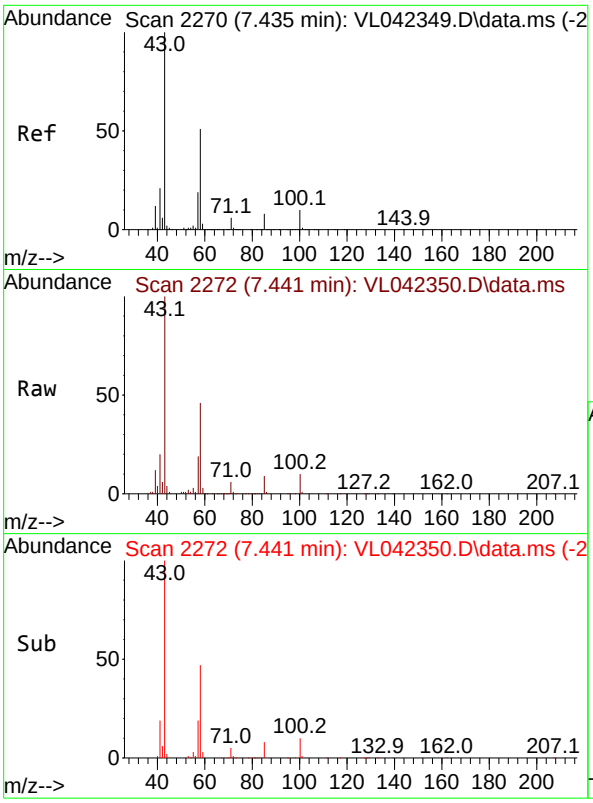


#50
4-Methyl-2-Pentanone
Concen: 2.180 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 43 Resp: 102182

Ion	Ratio	Lower	Upper
43	100		
58	36.3	28.6	43.0



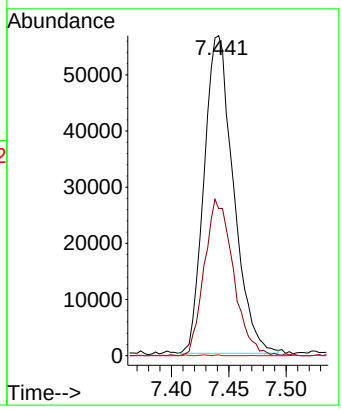


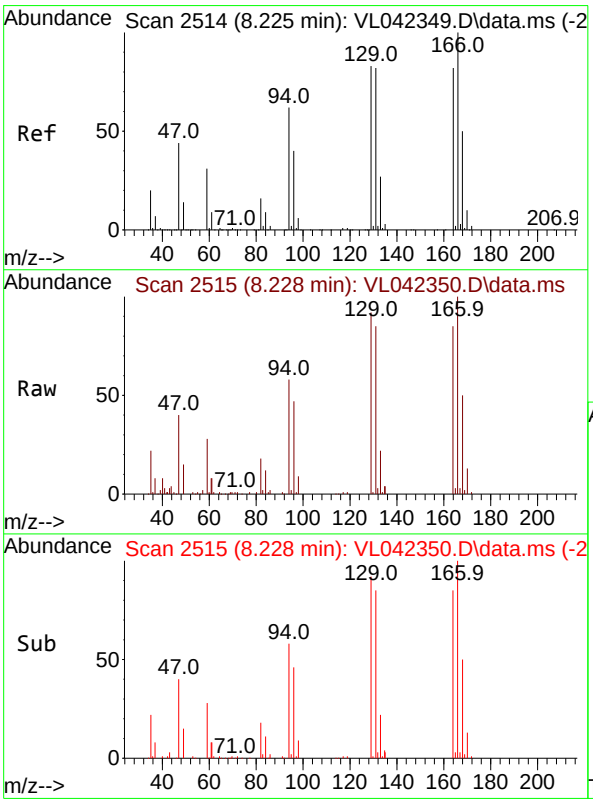
#51
2-Hexanone
Concen: 2.375 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 43 Resp: 100443

Ion	Ratio	Lower	Upper
43	100		
58	49.0	40.2	60.4
98	0.1	0.1	0.1

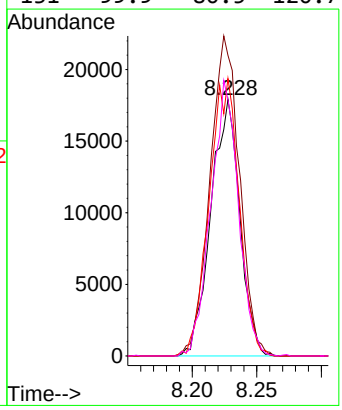


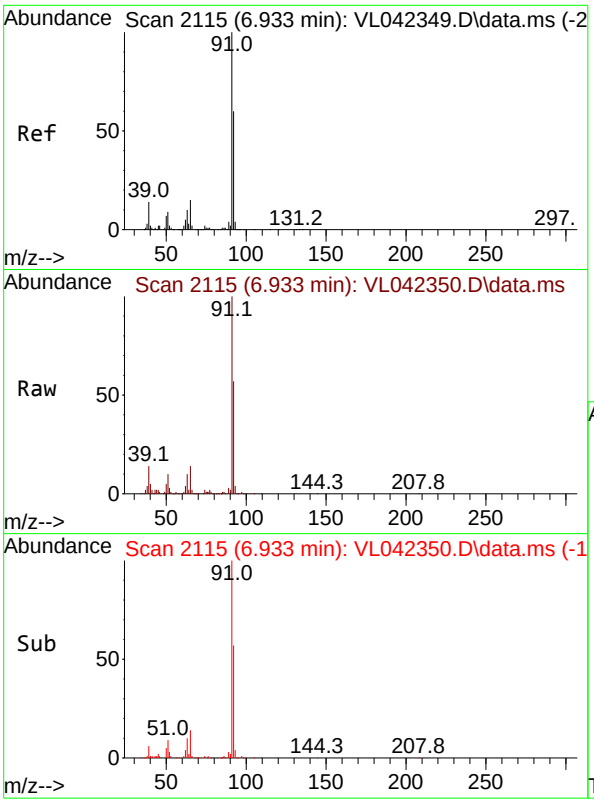


#52
Tetrachloroethene
Concen: 1.877 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:164 Resp: 27854

Ion	Ratio	Lower	Upper
164	100		
166	117.2	98.2	147.2
129	108.2	81.8	122.8
131	99.9	80.5	120.7



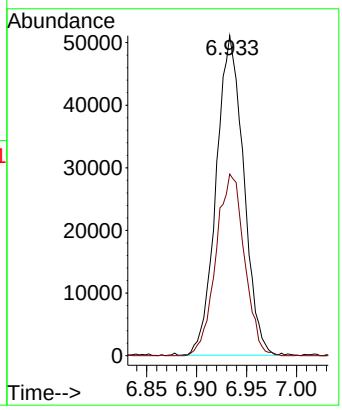


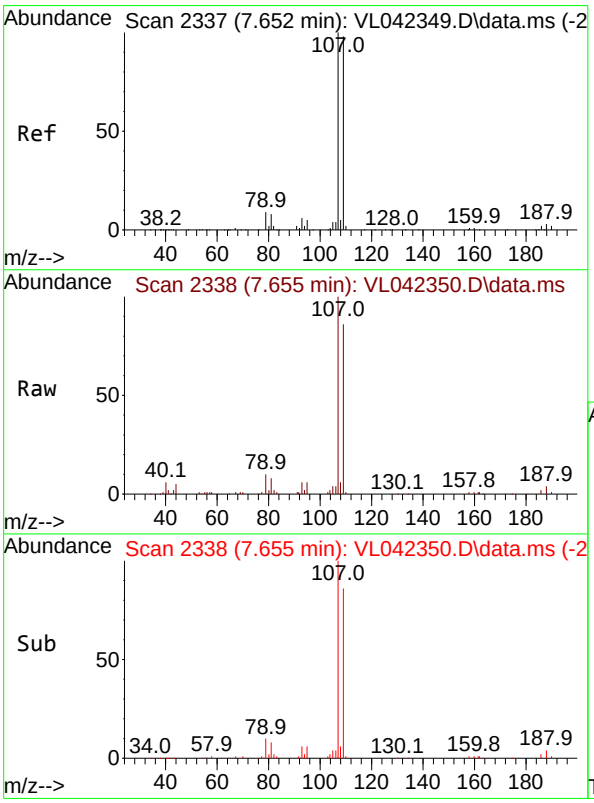
#53
Toluene
Concen: 2.116 ppbv
RT: 6.933 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 97493

Ion	Ratio	Lower	Upper
91	100		
92	59.1	48.2	72.4

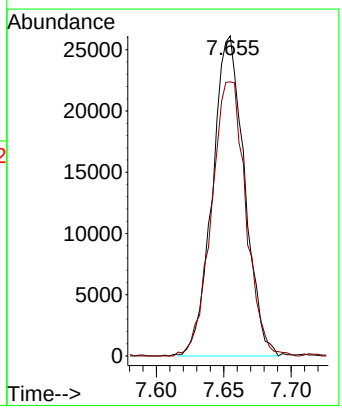


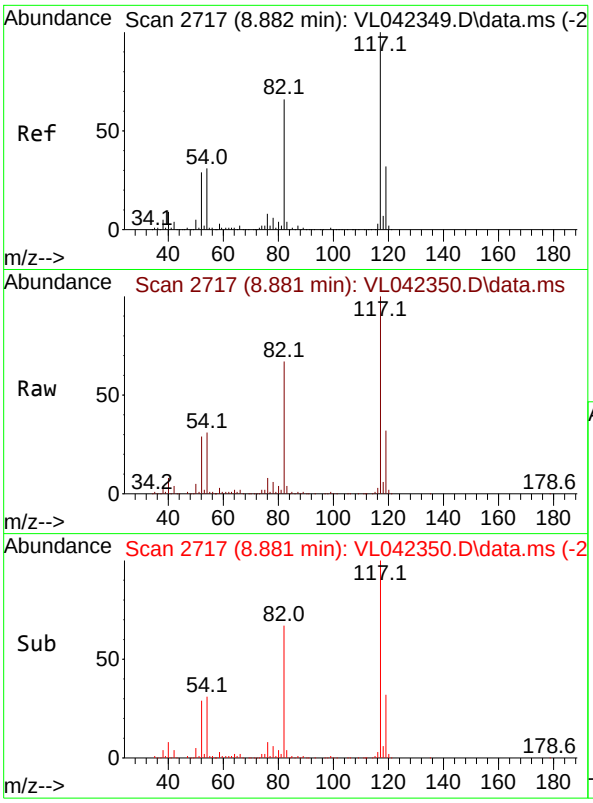


#54
1,2-Dibromoethane
Concen: 2.076 ppbv
RT: 7.655 min Scan# 2338
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:107 Resp: 43153

Ion	Ratio	Lower	Upper
107	100		
109	84.5	78.2	117.4



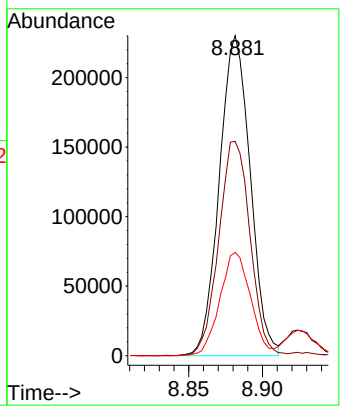


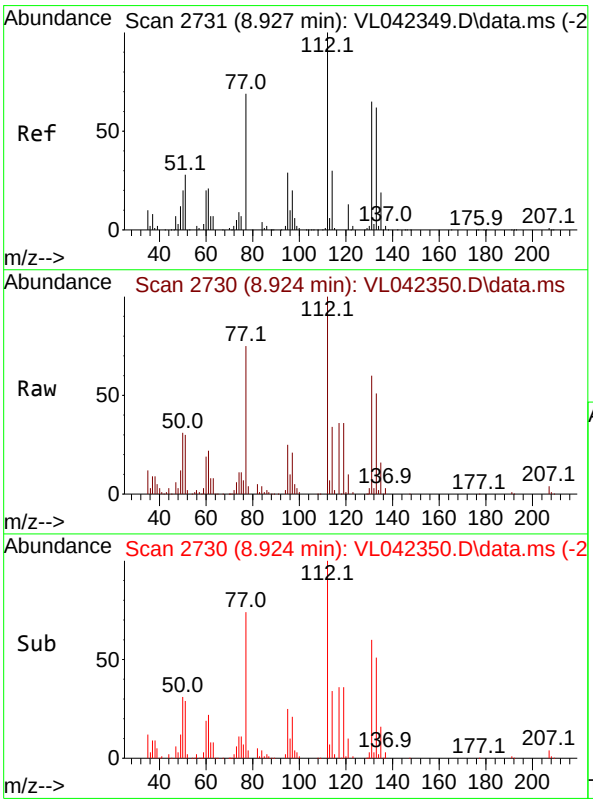
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:117 Resp: 335603

Ion	Ratio	Lower	Upper
117	100		
82	68.8	57.8	86.6
119	32.2	25.2	37.8

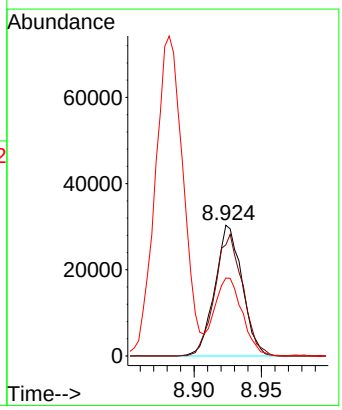


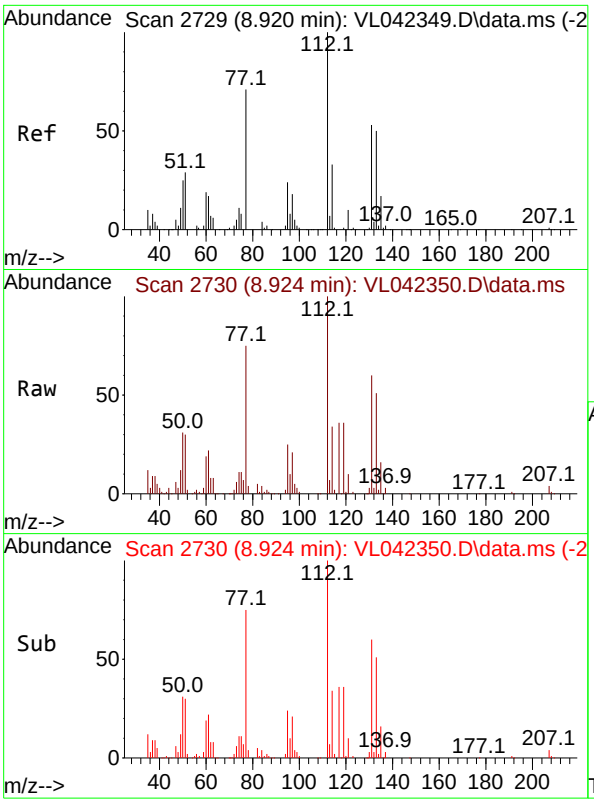


#56
1,1,1,2-Tetrachloroethane
Concen: 2.097 ppbv
RT: 8.924 min Scan# 2730
Delta R.T. -0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:131 Resp: 42601

Ion	Ratio	Lower	Upper
131	100		
133	95.3	78.3	117.5
119	53.8	48.7	73.1



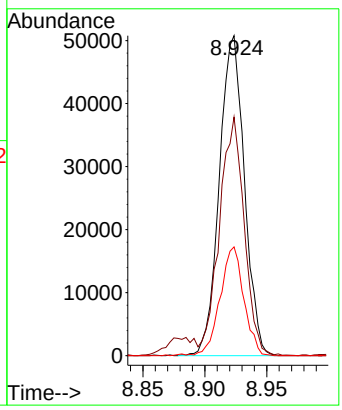


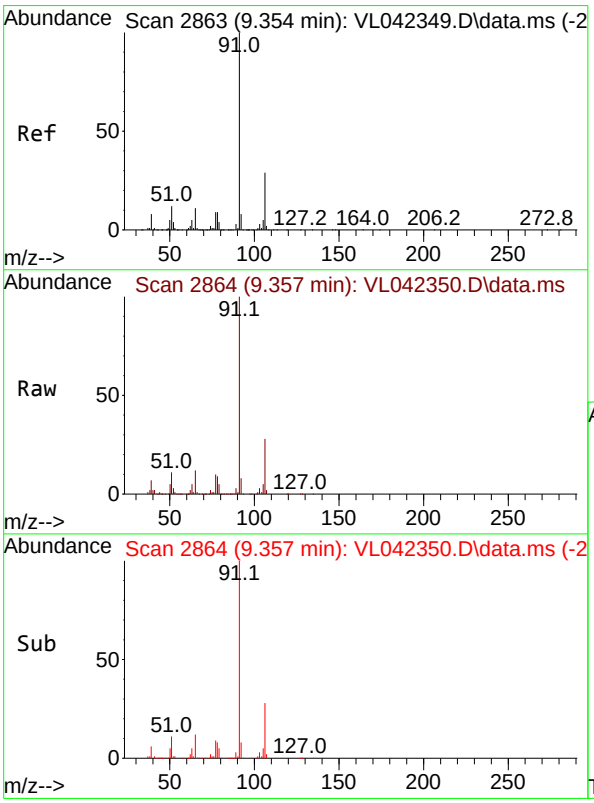
#57
Chlorobenzene
Concen: 2.054 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:112 Resp: 71685

Ion	Ratio	Lower	Upper
112	100		
77	74.0	57.8	86.6
114	34.0	29.3	35.9

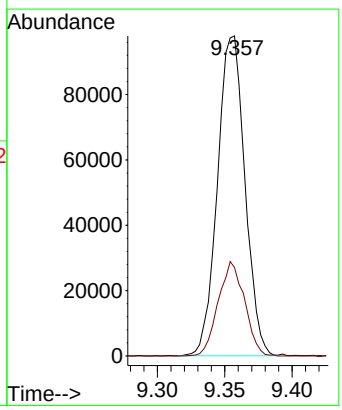


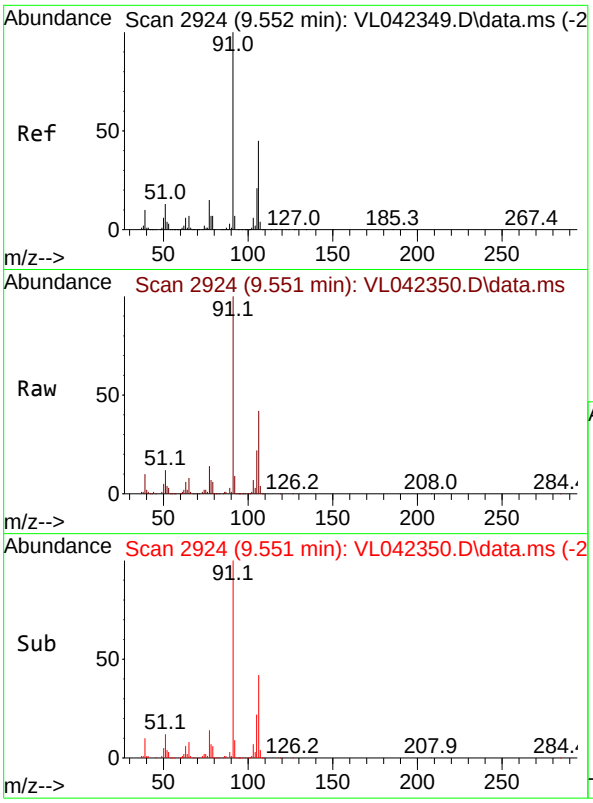


#58
Ethyl Benzene
Concen: 2.088 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 138810

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.0	34.4



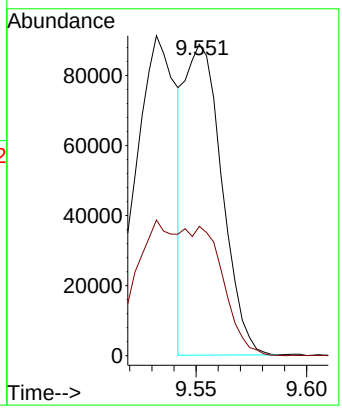


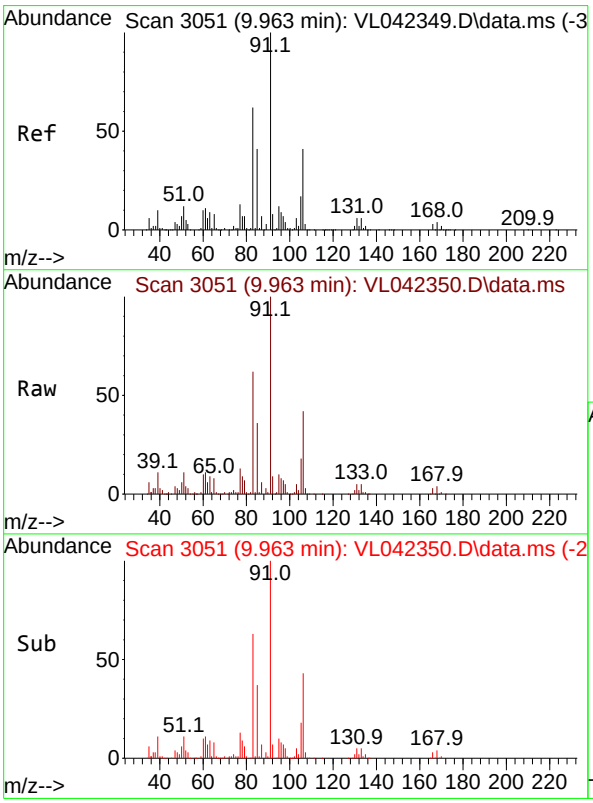
#59
m/p-Xylene
Concen: 1.934 ppbv
RT: 9.551 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 103886

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

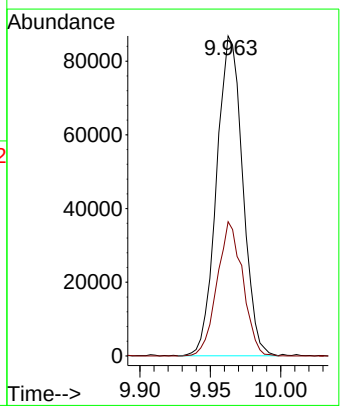


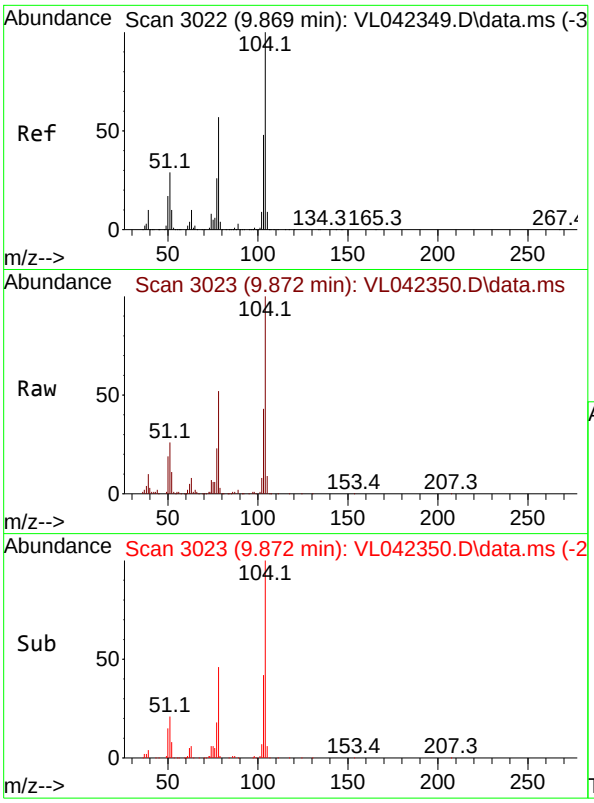


#60
o-Xylene
Concen: 2.076 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 111972

Ion	Ratio	Lower	Upper
91	100		
106	41.2	21.1	63.4



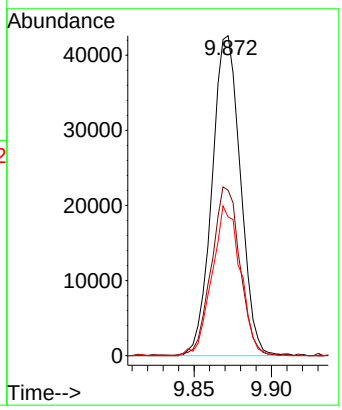


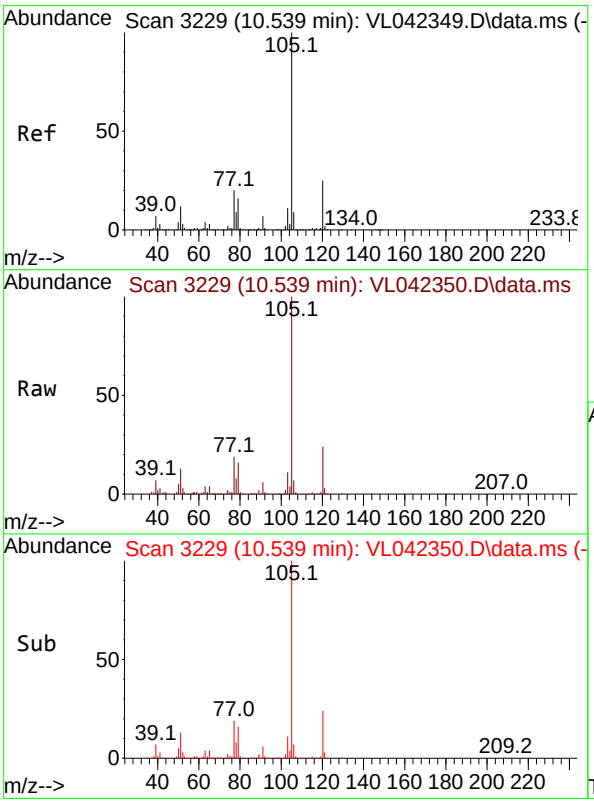
#61
Styrene
Concen: 2.106 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:104 Resp: 54229

Ion	Ratio	Lower	Upper
104	100		
78	53.4	44.6	66.8
103	47.1	37.4	56.0

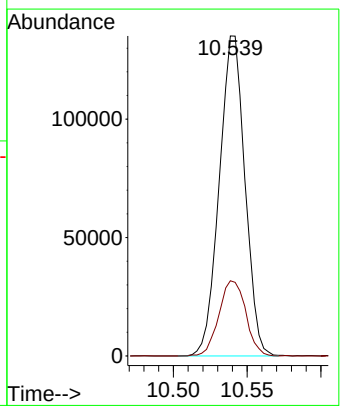


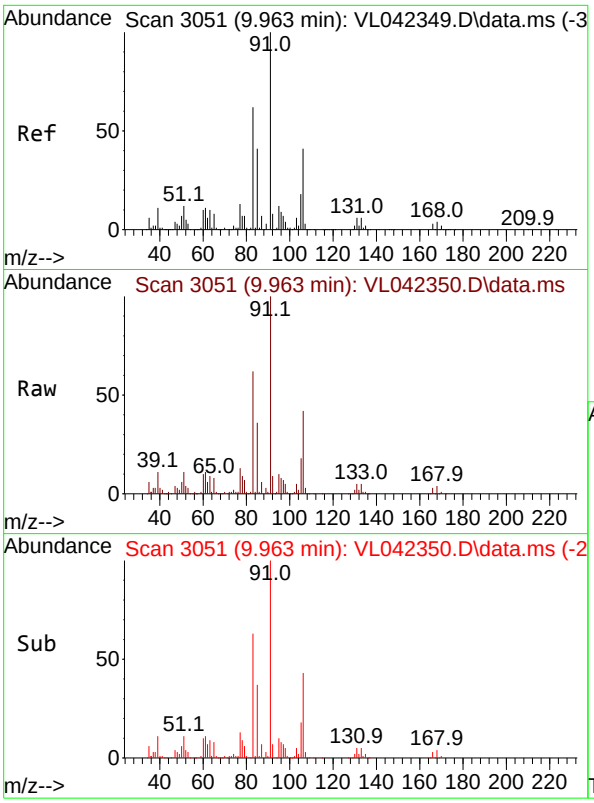


#62
Isopropylbenzene
Concen: 2.067 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 163716

Ion	Ratio	Lower	Upper
105	100		
120	24.6	19.8	29.8



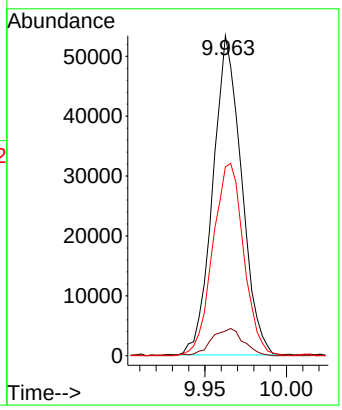


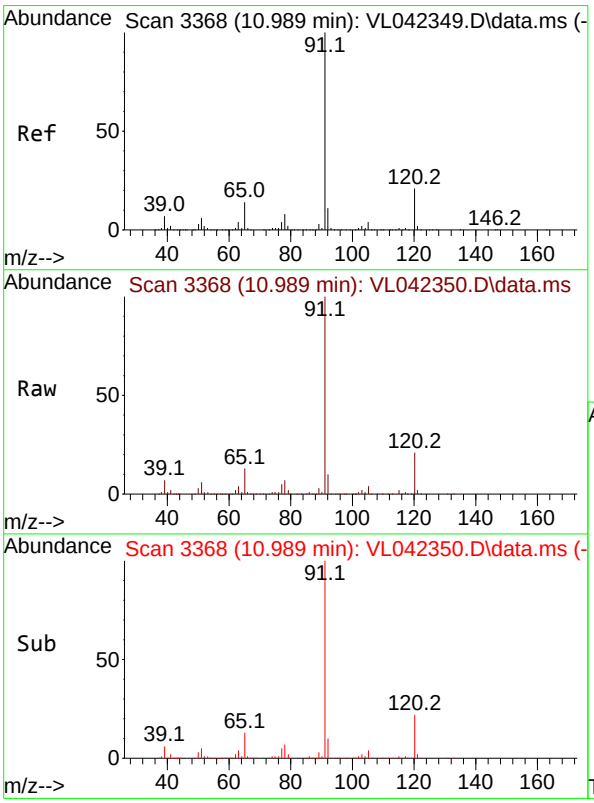
#63
1,1,2,2-Tetrachloroethane
Concen: 1.853 ppbv
RT: 9.963 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 83 Resp: 64952

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	65.4	32.4	97.0

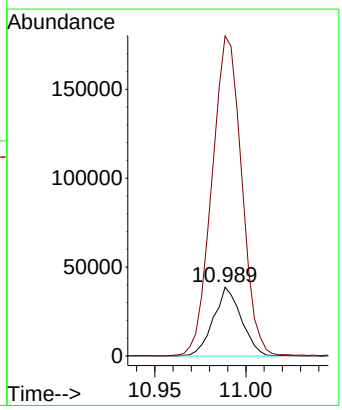


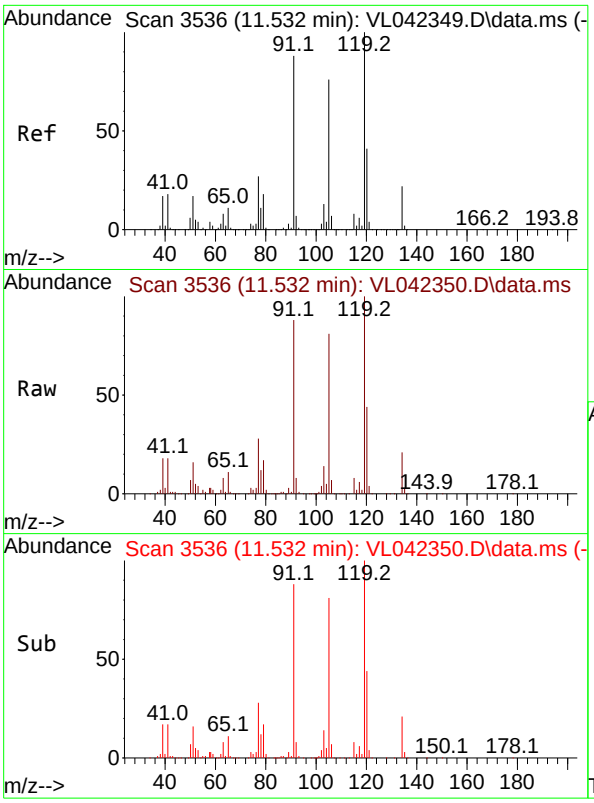


#64
n-propylbenzene
Concen: 2.058 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:120 Resp: 40956

Ion	Ratio	Lower	Upper
120	100		
91	502.0	392.4	588.6



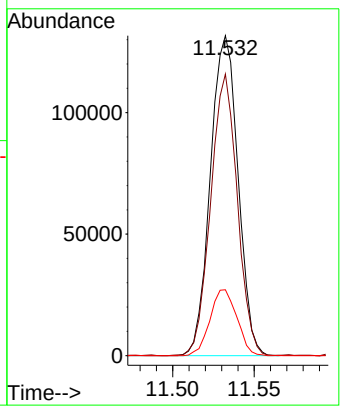


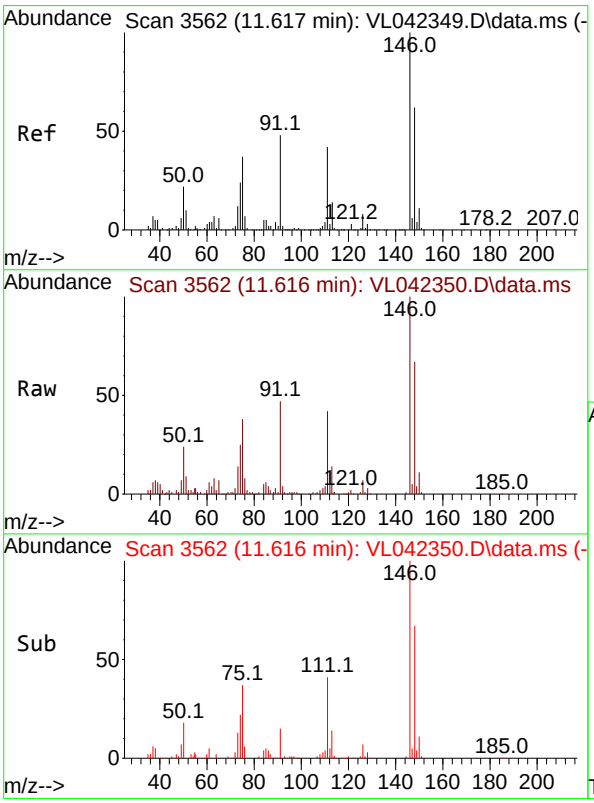
#65
tert-Butylbenzene
Concen: 2.135 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 155401

Ion	Ratio	Lower	Upper
119	100		
91	85.0	74.6	111.8
134	20.1	18.8	28.2

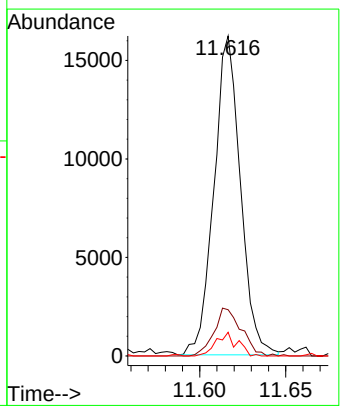


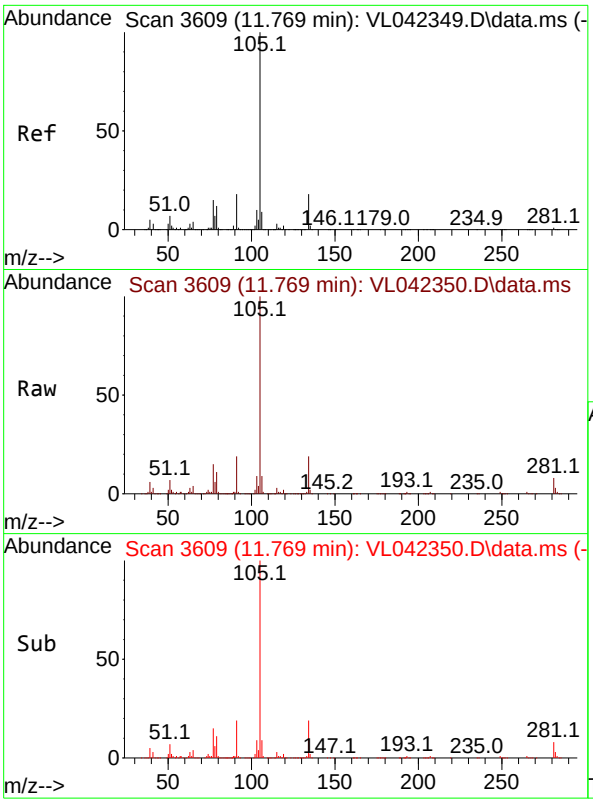


#66
Benzyl Chloride
Concen: 2.163 ppbv
RT: 11.616 min Scan# 3562
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 17300

Ion	Ratio	Lower	Upper
91	100		
126	15.6	11.8	17.6
128	6.1	4.5	6.7



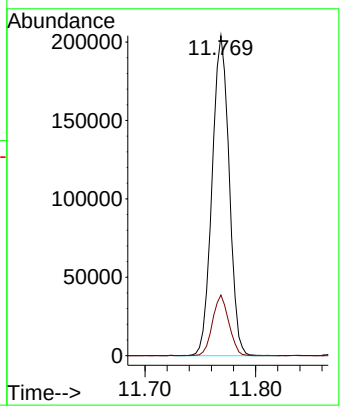


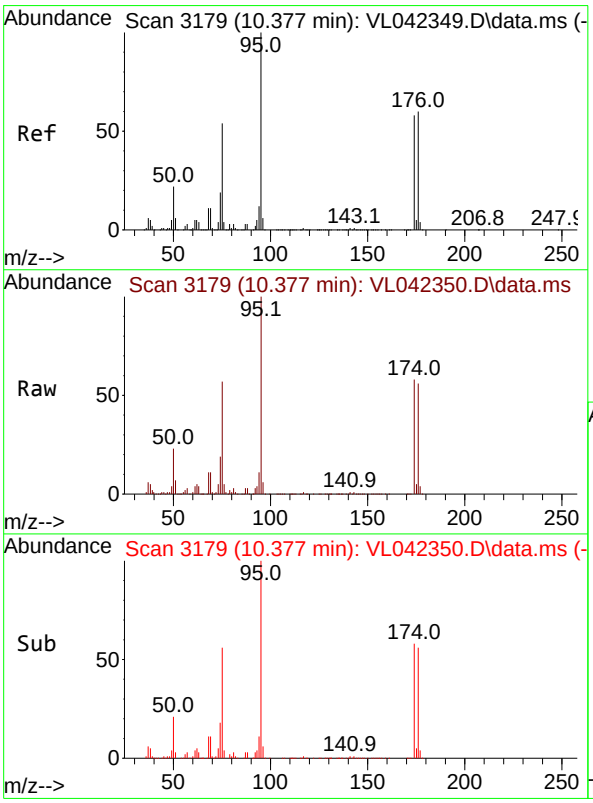
#67
sec-Butylbenzene
Concen: 2.156 ppbv
RT: 11.769 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 218327

Ion	Ratio	Lower	Upper
105	100		
134	18.1	14.6	21.8

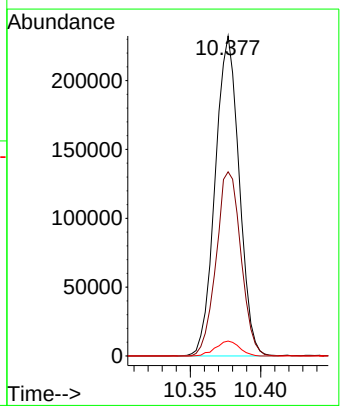


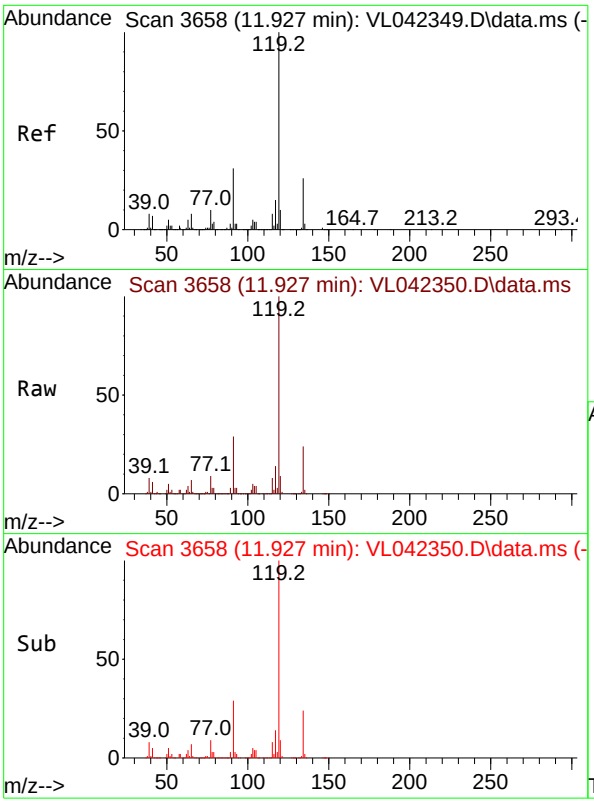


#68
1-Bromo-4-Fluorobenzene
Concen: 9.998 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 95 Resp: 275715

Ion	Ratio	Lower	Upper
95	100		
174	59.6	48.5	72.7
175	4.7	3.7	5.5



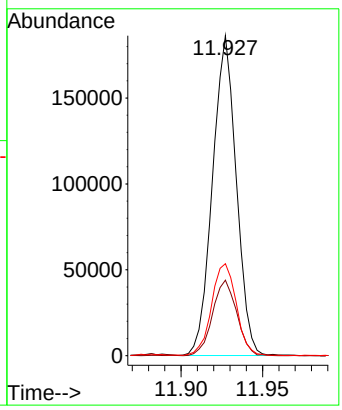


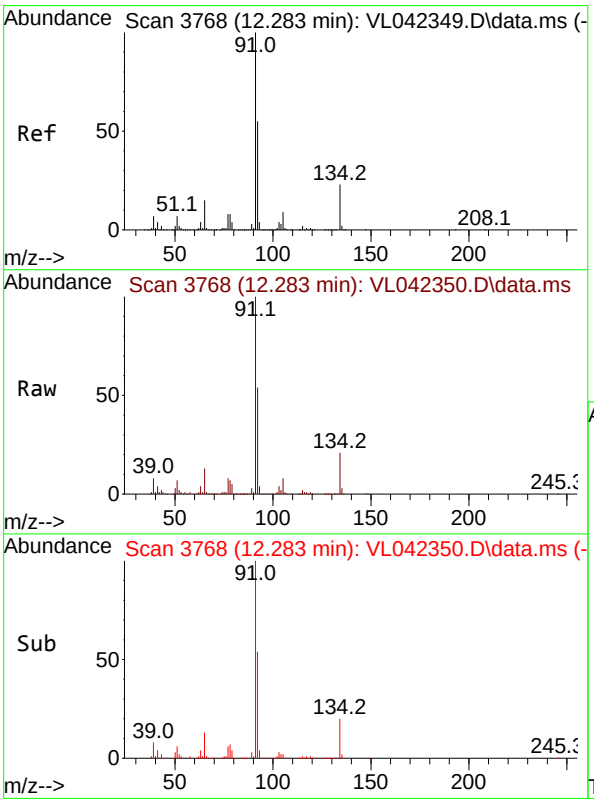
#69
p-Isopropyltoluene
Concen: 2.145 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:119 Resp: 188657

Ion	Ratio	Lower	Upper
119	100		
134	24.2	20.0	30.0
91	30.8	24.4	36.6

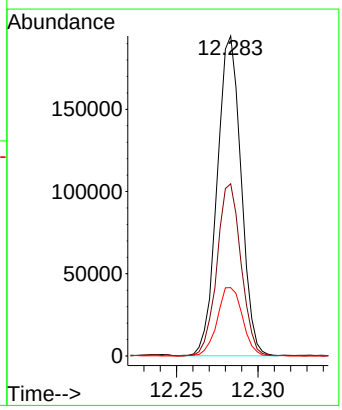


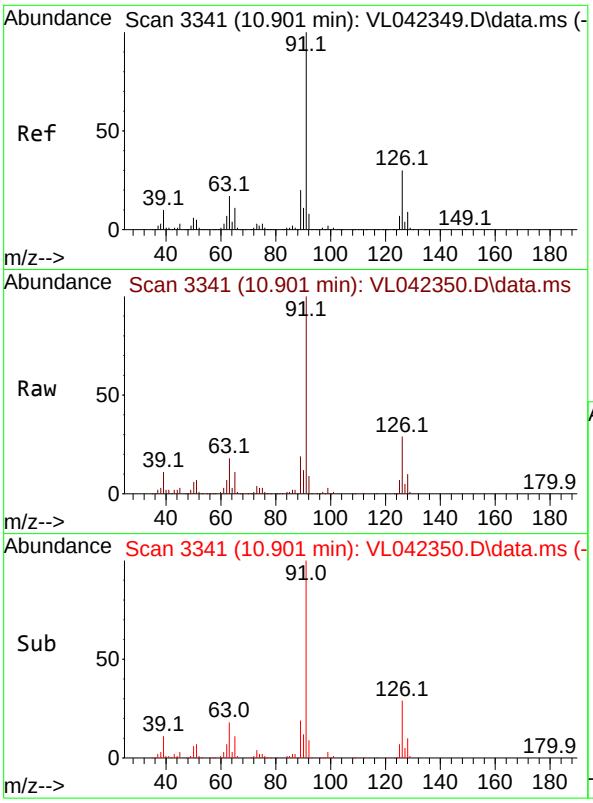


#70
n-Butylbenzene
Concen: 2.164 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion: 91 Resp: 198221

Ion	Ratio	Lower	Upper
91	100		
92	54.4	44.2	66.4
134	22.6	18.2	27.4



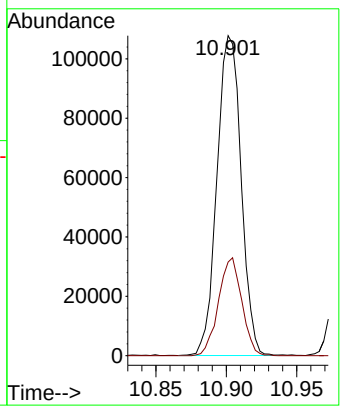


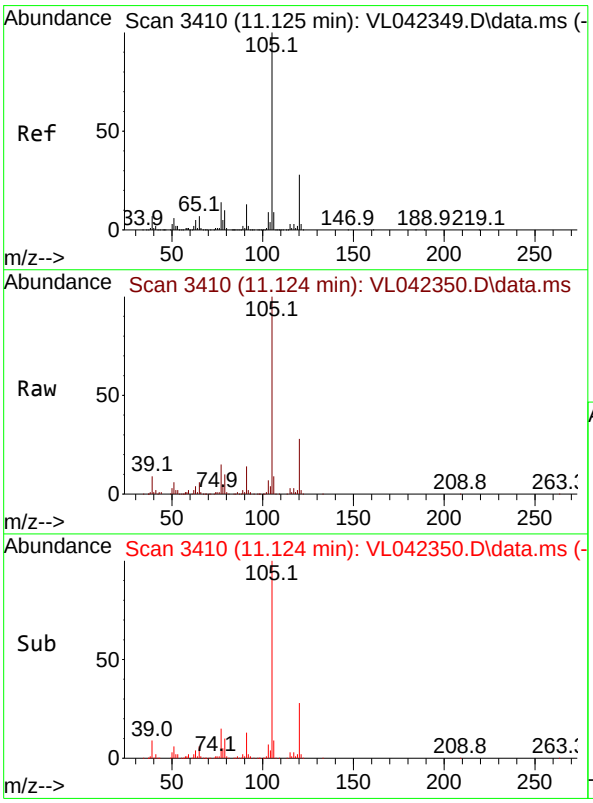
#71
2-Chlorotoluene
Concen: 2.075 ppbv
RT: 10.901 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion: 91 Resp: 128858

Ion	Ratio	Lower	Upper
91	100		
126	29.5	11.4	45.4

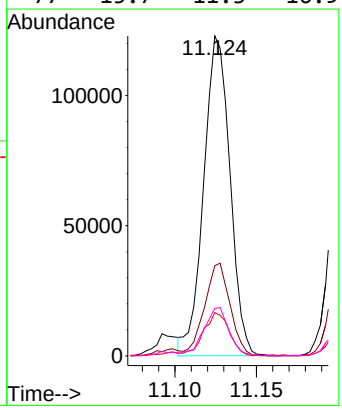


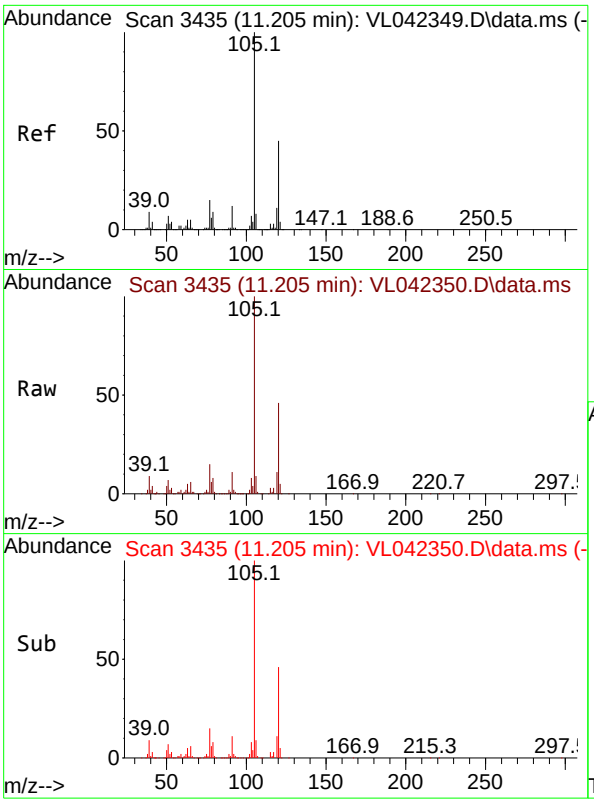


#72
4-Ethyltoluene
Concen: 2.091 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 137872

Ion	Ratio	Lower	Upper
105	100		
120	30.1	23.2	34.8
91	14.4	10.4	15.6
77	15.7	11.3	16.9



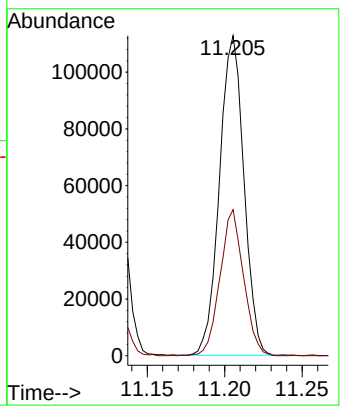


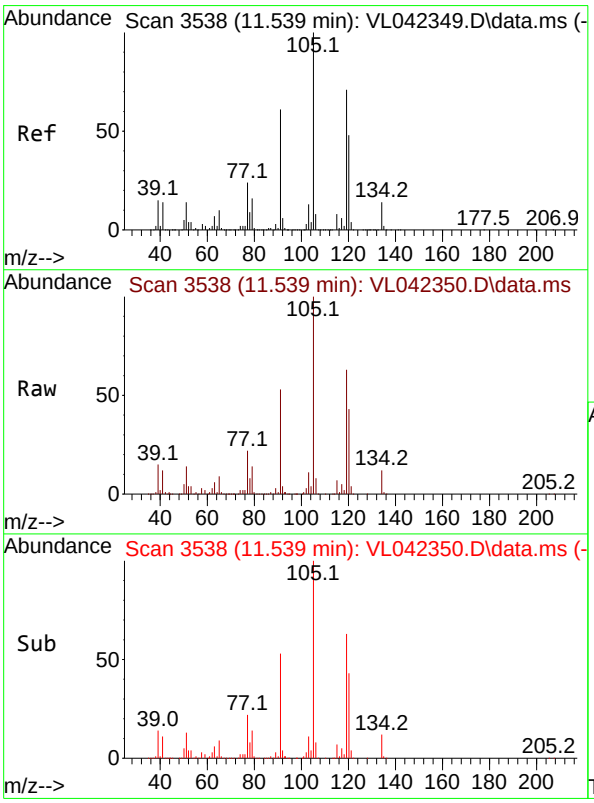
#73
1,3,5-Trimethylbenzene
Concen: 2.123 ppbv
RT: 11.205 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:105 Resp: 123580

Ion	Ratio	Lower	Upper
105	100		
120	45.7	35.6	53.4

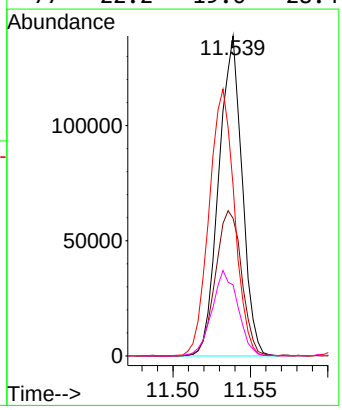


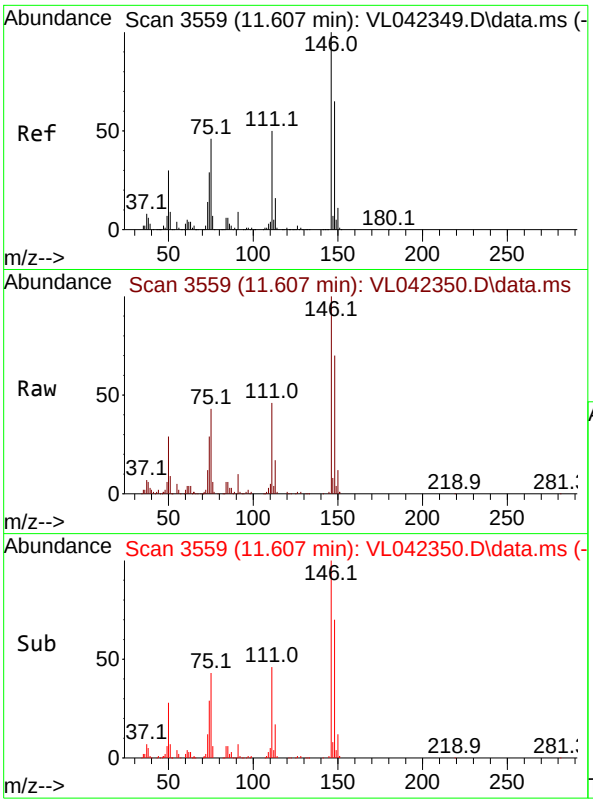


#74
1,2,4-Trimethylbenzene
Concen: 2.140 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:105 Resp: 145510

Ion	Ratio	Lower	Upper
105	100		
120	43.0	38.1	57.1
91	53.1	48.8	73.2
77	22.2	19.0	28.4



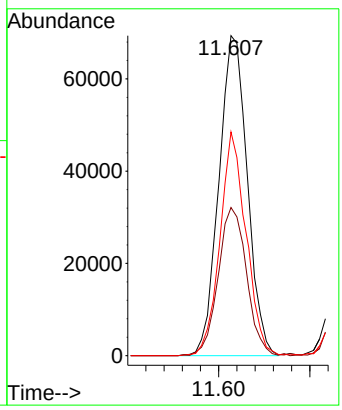


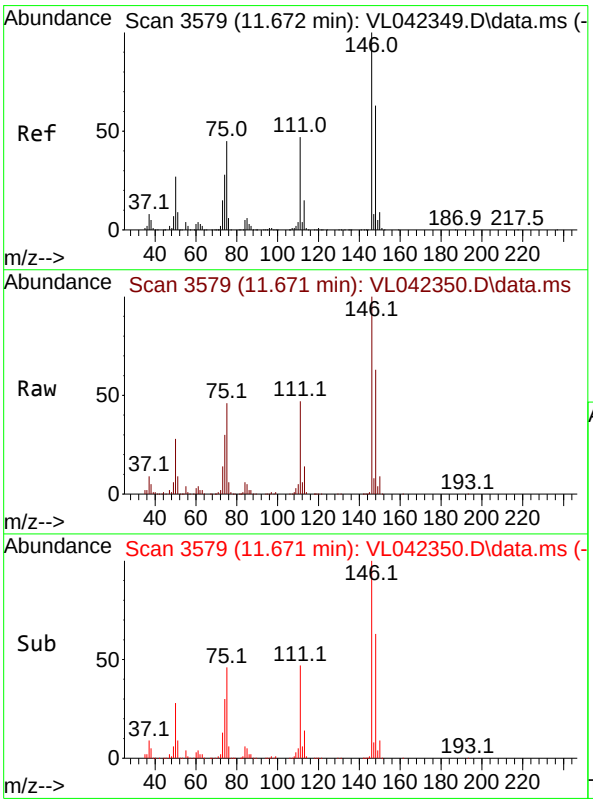
#75
1,3-Dichlorobenzene
Concen: 2.124 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 75082

Ion	Ratio	Lower	Upper
146	100		
111	46.3	24.3	72.8
148	64.3	31.6	94.8

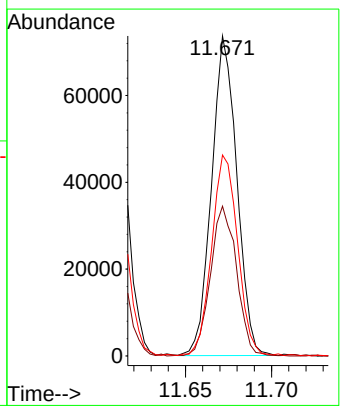


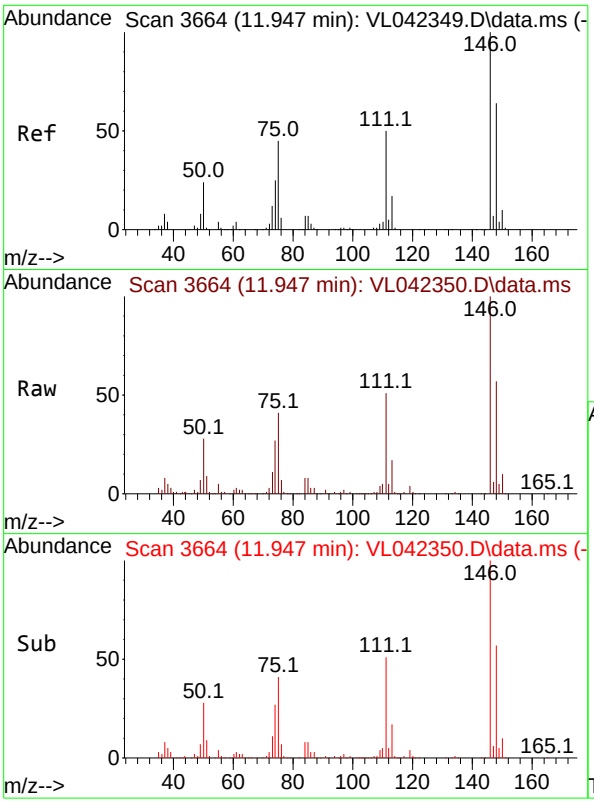


#76
1,4-Dichlorobenzene
Concen: 2.120 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:146 Resp: 75323

Ion	Ratio	Lower	Upper
146	100		
111	48.4	24.2	72.6
148	65.1	32.1	96.5



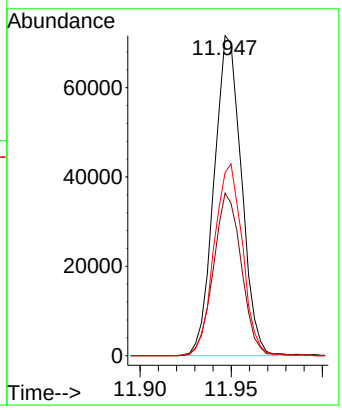


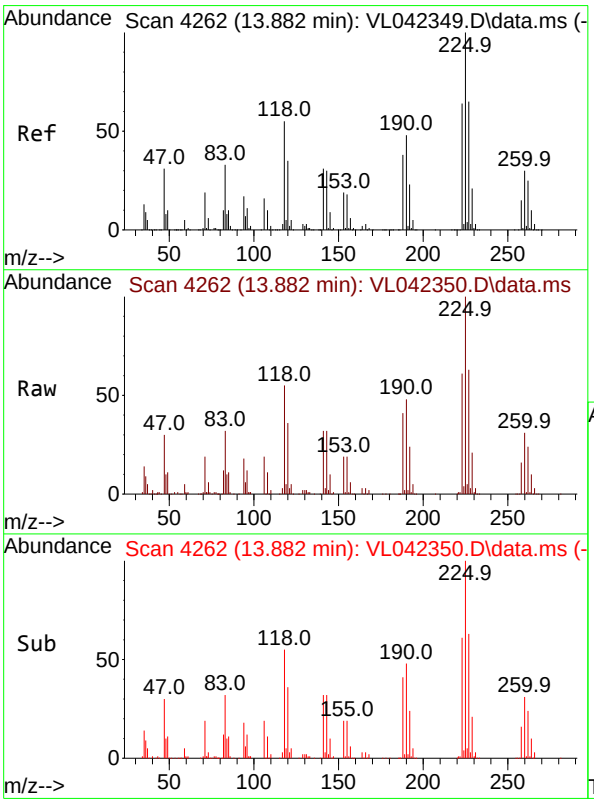
#77
1,2-Dichlorobenzene
Concen: 2.176 ppbv
RT: 11.947 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:146 Resp: 74786

Ion	Ratio	Lower	Upper
146	100		
111	52.0	25.3	75.9
148	61.8	31.5	94.5

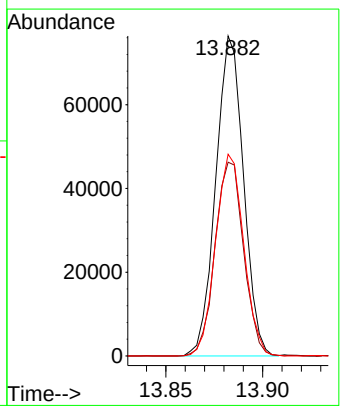


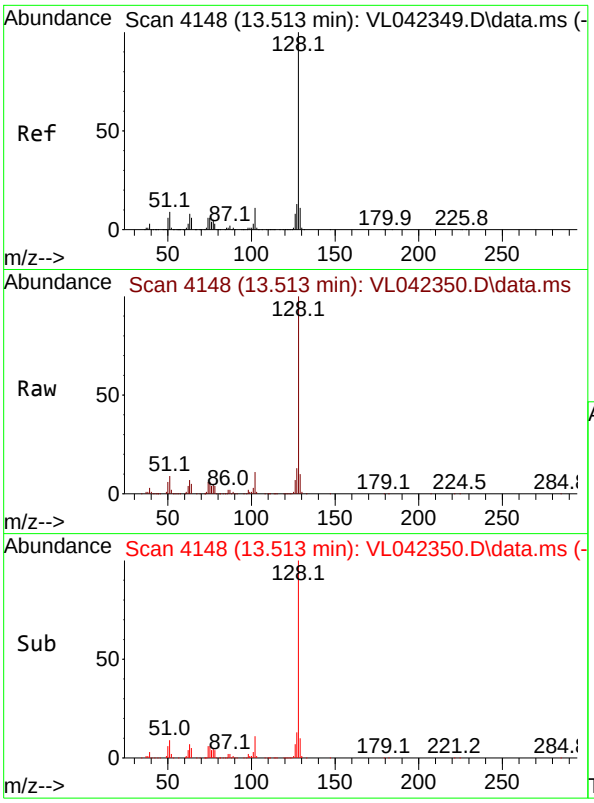


#78
Hexachloro-1,3-Butadiene
Concen: 2.194 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:225 Resp: 76158

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.3	75.5
227	64.1	51.5	77.3



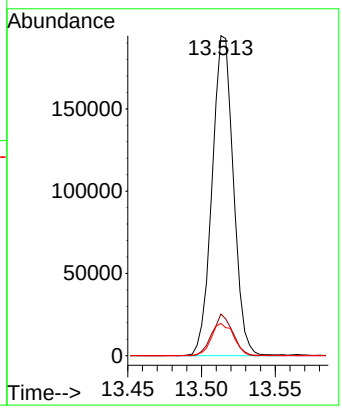


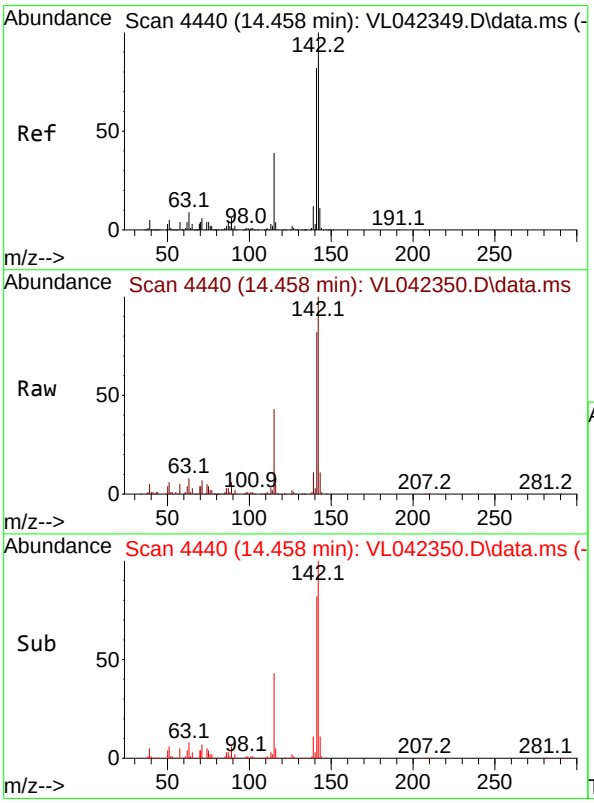
#79
Naphthalene
Concen: 2.401 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:128 Resp: 195233

Ion	Ratio	Lower	Upper
128	100		
127	13.0	10.6	15.8
129	10.1	8.6	12.8

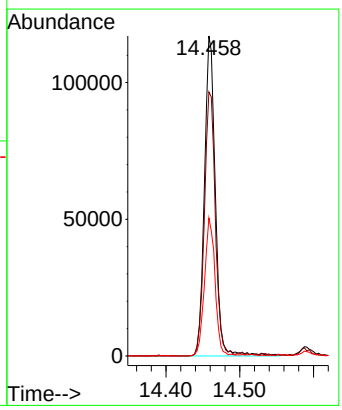


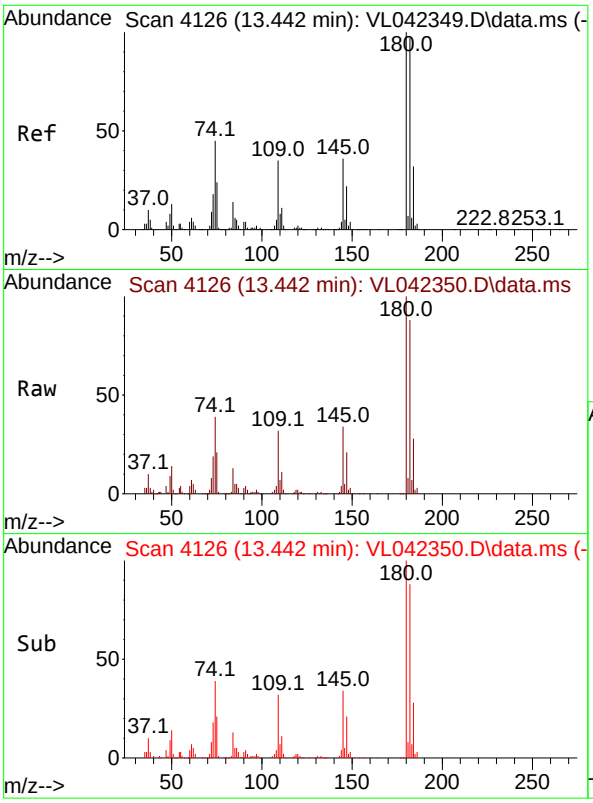


#80
Naphthalene,2-methyl-
Concen: 2.574 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Tgt Ion:142 Resp: 119262

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.8	100.2
115	42.2	33.4	50.2



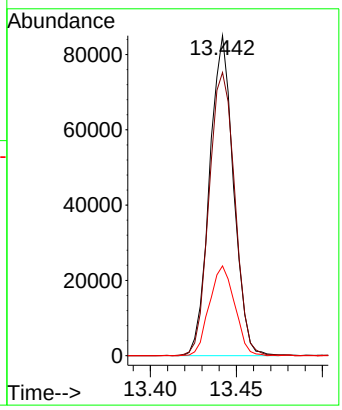


#81
1,2,4-Trichlorobenzene
Concen: 2.353 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042350.D
Acq: 17 Apr 2025 10:17

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC002

Tgt Ion:180 Resp: 82156

Ion	Ratio	Lower	Upper
180	100		
182	95.1	76.8	115.2
184	29.8	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.791	49	124177	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	359907	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.885	117	329090	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.377	95	269087	9.950	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.500%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	22816	1.040	ppbv		93
3) Chlorodifluoromethane	1.476	51	20573	0.985	ppbv		97
4) Chloromethane	1.535	50	9008	1.038	ppbv		99
5) Vinyl Chloride	1.580	62	8807	0.932	ppbv		98
6) Bromomethane	1.671	94	4099	1.001	ppbv		91
7) Chloroethane	1.706	64	3559	1.041	ppbv		90
8) Dichlorotetrafluoroethane	1.554	85	19251	1.022	ppbv		100
9) Propene	1.486	41	9892	1.040	ppbv		92
10) Heptane	4.982	43	16193	0.633	ppbv	#	49
11) Trichlorofluoromethane	1.878	101	22428	1.075	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	17865	1.047	ppbv		98
13) Ethanol	1.722	45	810	1.042	ppbv	#	43
14) Bromoethene	1.784	108	6766	1.052	ppbv	#	89
15) Acetone	1.839	43	23537	1.158	ppbv		97
16) 1,3-Butadiene	1.609	39	9495	0.995	ppbv		96
17) tert-Butyl alcohol	2.043	59	26477	1.051	ppbv	#	90
18) 1,1-Dichloroethene	2.036	96	7890	0.962	ppbv		94
19) Isopropyl Alcohol	1.888	45	12175	1.078	ppbv	#	39
20) Methylene Chloride	2.062	84	9046	1.136	ppbv		87
21) Allyl Chloride	2.098	41	15057	1.073	ppbv		91
22) trans-1,2-Dichloroethene	2.344	96	9421	1.038	ppbv		96
23) Vinyl Acetate	2.467	43	9234	1.122	ppbv	#	90
24) 1,1-Dichloroethane	2.409	63	18236	1.058	ppbv		99
25) Ethyl Acetate	2.842	43	51494	1.027	ppbv	#	97
26) Hexane	2.826	57	21350	1.053	ppbv		95
27) Carbon Disulfide	2.153	76	20739	0.955	ppbv	#	1
28) Methyl tert-Butyl Ether	2.444	73	14164	1.066	ppbv	#	85
29) Chloroform	2.852	83	28973	1.011	ppbv		100
30) Cyclohexane	3.862	84	8430	0.516	ppbv	#	1
31) cis-1,2-Dichloroethene	2.723	61	19904	1.032	ppbv		97
32) 1,1,1-Trichloroethane	3.376	97	31653	1.030	ppbv		98
34) 2-Butanone	2.564	43	29735	1.045	ppbv		99
35) Carbon Tetrachloride	3.768	117	29875	0.917	ppbv		94
36) Benzene	3.661	78	38707	0.997	ppbv		95
37) 1,2-Dichloroethane	3.224	62	23284	0.999	ppbv		97
38) Trichloroethene	4.551	130	16119	0.947	ppbv		96
39) 1,2-Dichloropropane	4.318	63	14866	1.027	ppbv		96
40) 1,4-Dioxane	4.603	88	967	0.123	ppbv	#	1
41) Tetrahydrofuran	3.062	42	17259	1.049	ppbv		96
42) Bromodichloromethane	4.490	83	32721	1.009	ppbv	#	98
43) Methyl Methacrylate	4.885	69	13084	0.751	ppbv	#	47
44) 2,2,4-Trimethylpentane	4.648	57	28653	0.427	ppbv	#	21
45) t-1,3-Dichloropropene	6.416	75	11763	0.658	ppbv		99

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

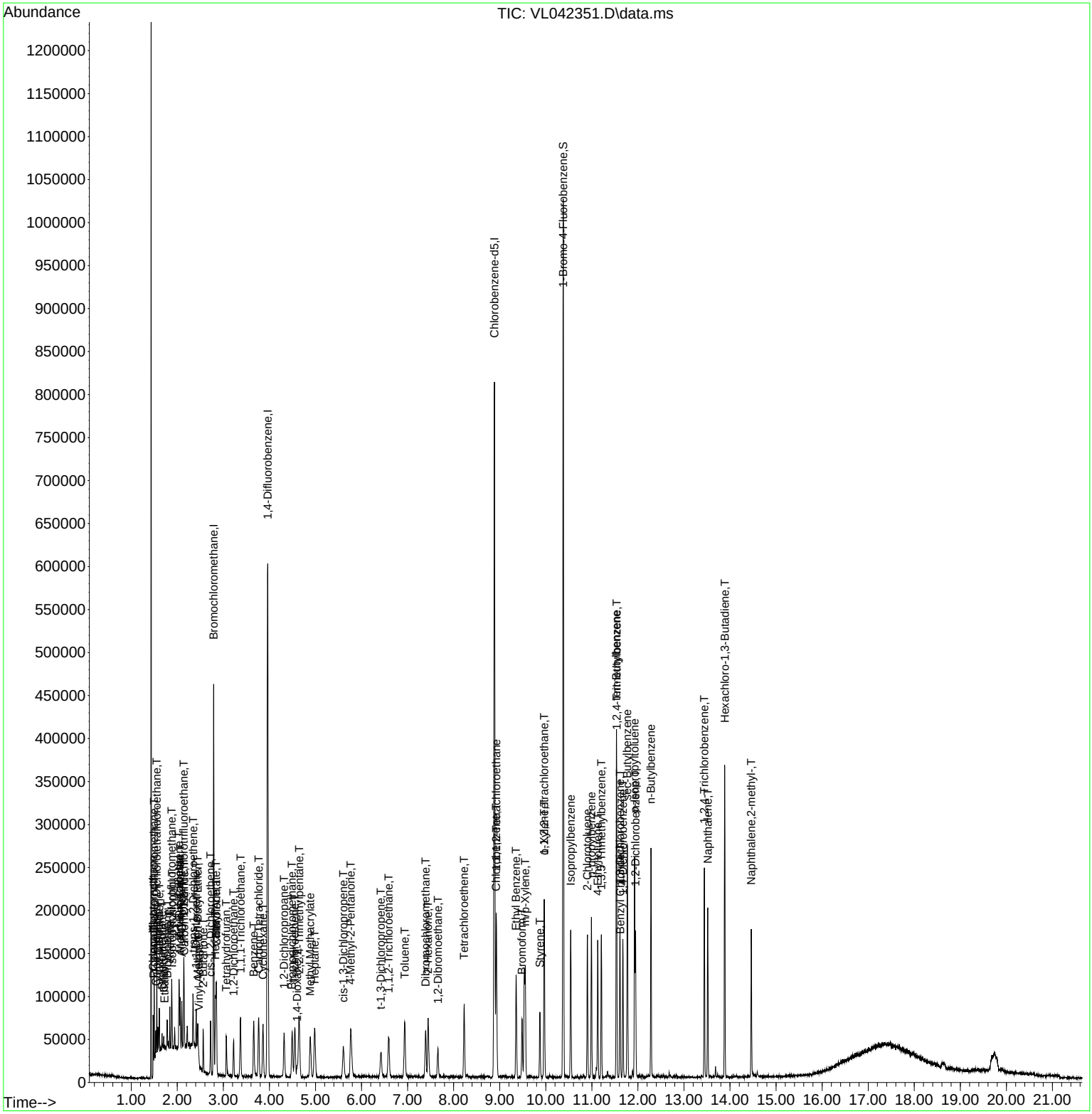
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.603	75	13028	0.596	ppbv		95
47) 1,1,2-Trichloroethane	6.587	97	7690	0.521	ppbv	#	78
48) Dibromochloromethane	7.390	129	25948	0.997	ppbv		100
49) Bromoform	9.484	173	22413	0.984	ppbv		98
50) 4-Methyl-2-Pentanone	5.765	43	49725	1.049	ppbv		97
51) 2-Hexanone	7.445	43	47178	1.103	ppbv		99
52) Tetrachloroethene	8.228	164	14154	0.943	ppbv		93
53) Toluene	6.940	91	46611	1.001	ppbv		100
54) 1,2-Dibromoethane	7.658	107	21780	1.036	ppbv		93
56) 1,1,1,2-Tetrachloroethane	8.927	131	21052	1.057	ppbv		95
57) Chlorobenzene	8.921	112	35113	1.026	ppbv	#	95
58) Ethyl Benzene	9.354	91	68703	1.054	ppbv		96
59) m/p-Xylene	9.552	91	48794	0.926	ppbv	#	32
60) o-Xylene	9.966	91	55831	1.056	ppbv		99
61) Styrene	9.872	104	25544	1.012	ppbv		100
62) Isopropylbenzene	10.542	105	81286	1.047	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.966	83	32410	0.943	ppbv		99
64) n-propylbenzene	10.989	120	19898	1.019	ppbv		90
65) tert-Butylbenzene	11.533	119	77598	1.087	ppbv		92
66) Benzyl Chloride	11.617	91	7864	1.003	ppbv	#	91
67) sec-Butylbenzene	11.769	105	105919	1.067	ppbv		97
69) p-Isopropyltoluene	11.928	119	92733	1.075	ppbv		97
70) n-Butylbenzene	12.284	91	96306	1.072	ppbv		99
71) 2-Chlorotoluene	10.905	91	63321	1.040	ppbv		99
72) 4-Ethyltoluene	11.128	105	69698	1.078	ppbv		99
73) 1,3,5-Trimethylbenzene	11.206	105	60927	1.067	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	73888	1.108	ppbv		95
75) 1,3-Dichlorobenzene	11.610	146	36877	1.064	ppbv		98
76) 1,4-Dichlorobenzene	11.675	146	36692	1.053	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	35977	1.068	ppbv		97
78) Hexachloro-1,3-Butadiene	13.886	225	37377	1.098	ppbv		99
79) Naphthalene	13.517	128	90710	1.138	ppbv		99
80) Naphthalene,2-methyl-	14.462	142	50487	1.111	ppbv		98
81) 1,2,4-Trichlorobenzene	13.442	180	36764	1.074	ppbv		99

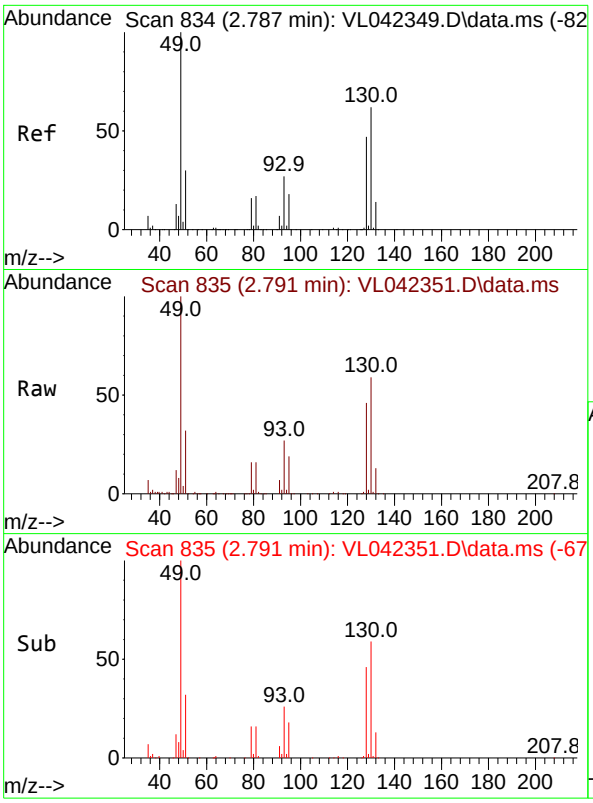
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042351.D
Acq On : 17 Apr 2025 10:48
Operator : SY/MD
Sample : VSTDICC001
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Quant Time: Apr 18 01:27:33 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



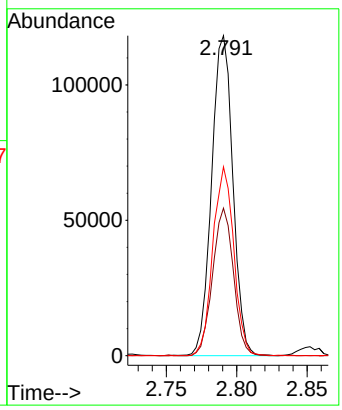


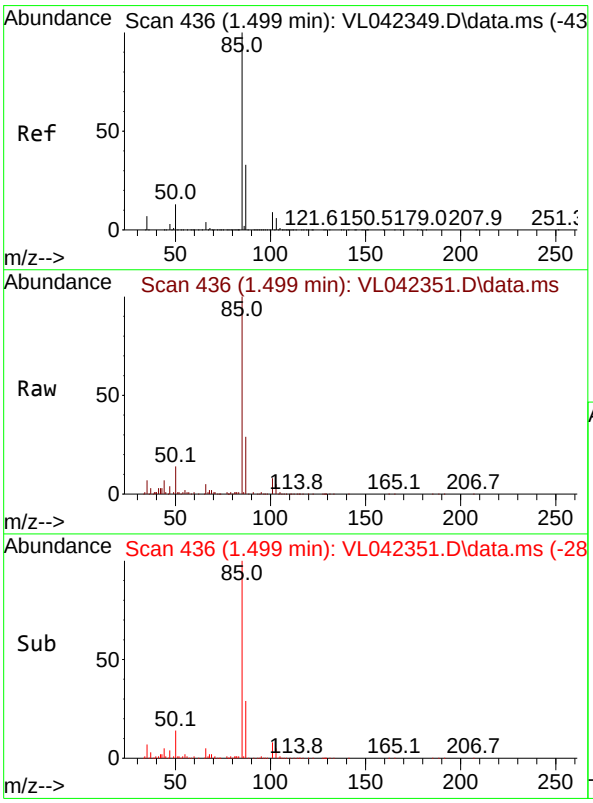
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 49 Resp: 124177

Ion	Ratio	Lower	Upper
49	100		
128	45.2	22.8	68.4
130	58.1	29.3	88.0

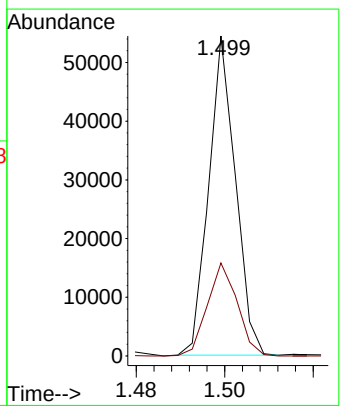


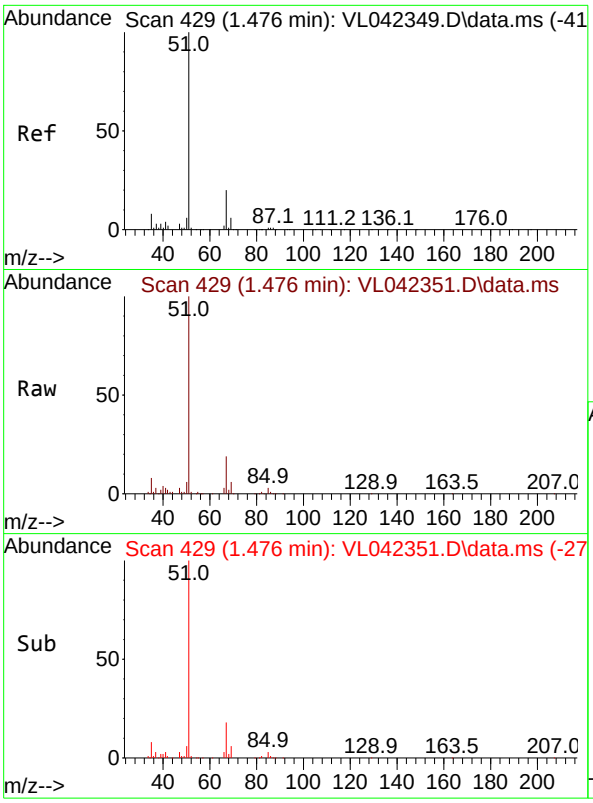


#2
Dichlorodifluoromethane
Concen: 1.040 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 85 Resp: 22816

Ion	Ratio	Lower	Upper
85	100		
87	29.1	26.6	39.8



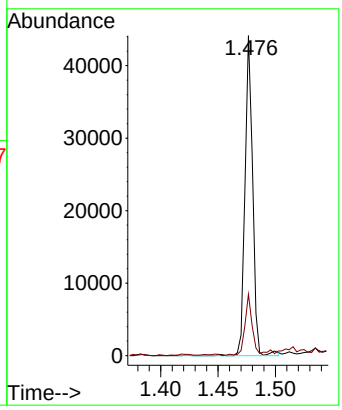


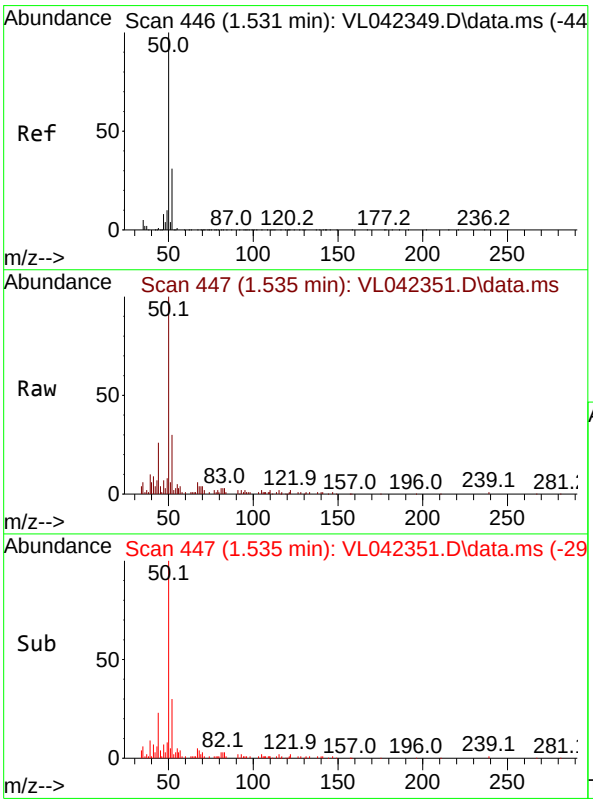
#3
Chlorodifluoromethane
Concen: 0.985 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 51 Resp: 20573

Ion	Ratio	Lower	Upper
51	100		
67	19.1	16.2	24.4

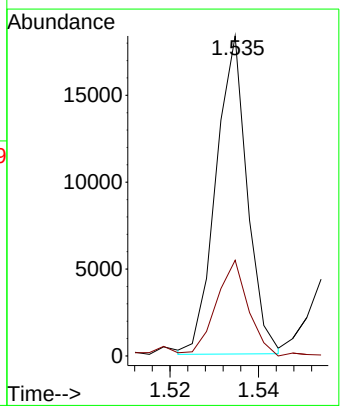


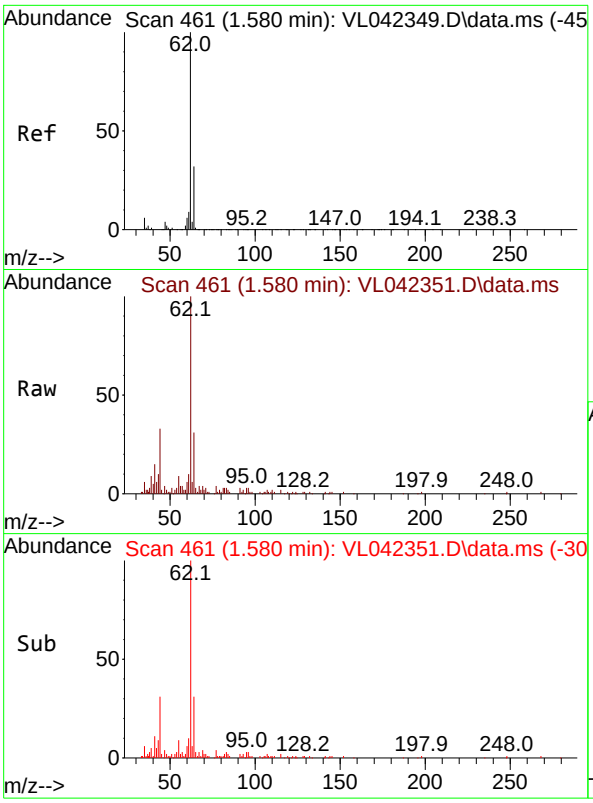


#4
Chloromethane
Concen: 1.038 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 50 Resp: 9008

Ion	Ratio	Lower	Upper
50	100		
52	30.4	24.7	37.1



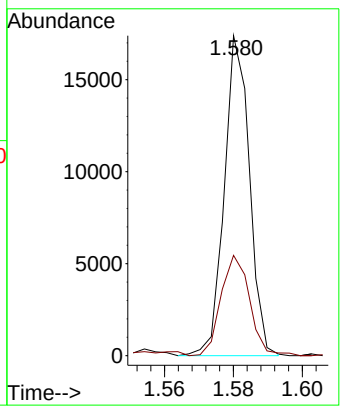


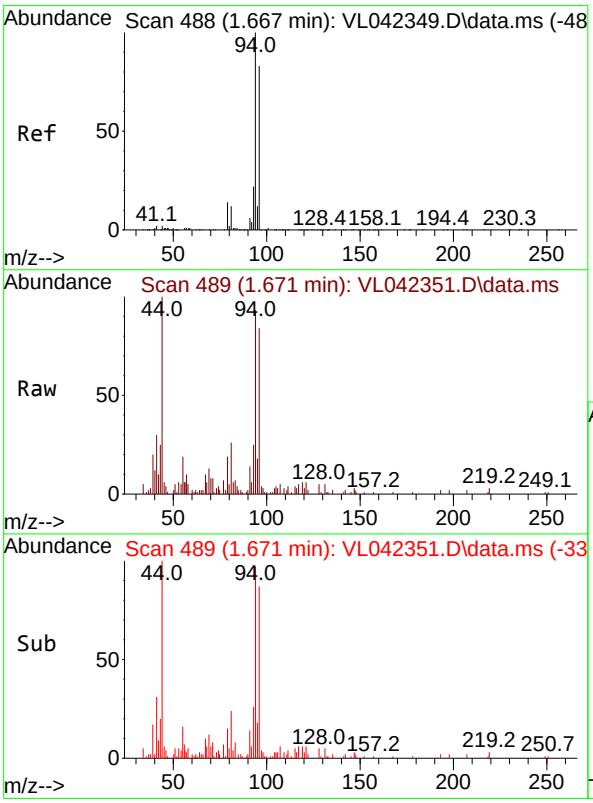
#5
Vinyl Chloride
Concen: 0.932 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 8807

Ion	Ratio	Lower	Upper
62	100		
64	30.5	25.4	38.0

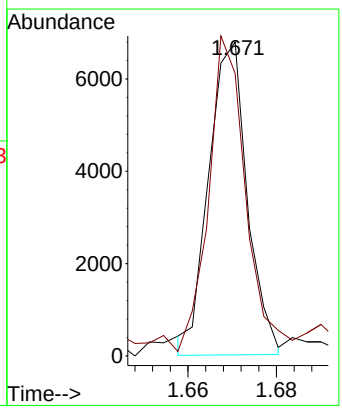


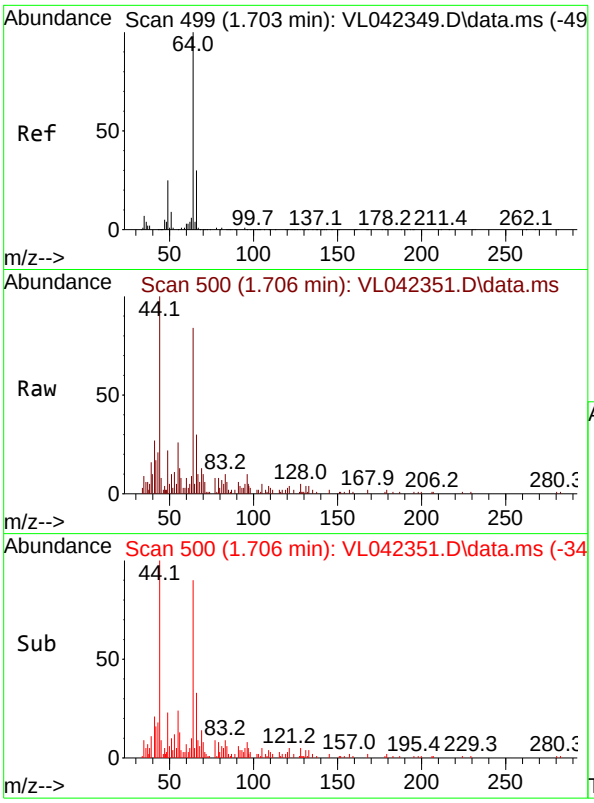


#6
Bromomethane
Concen: 1.001 ppbv
RT: 1.671 min Scan# 489
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 94 Resp: 4099

Ion	Ratio	Lower	Upper
94	100		
96	91.0	66.2	99.2



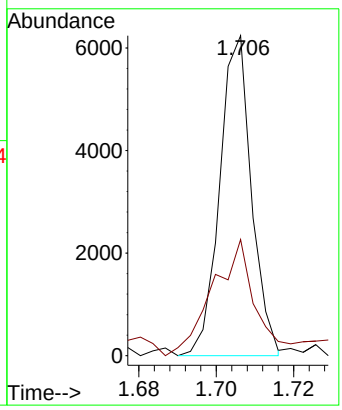


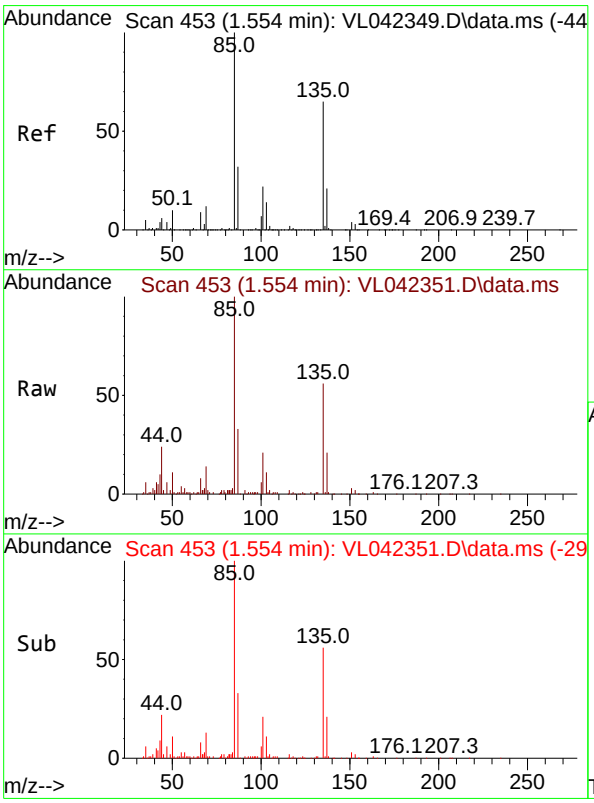
#7
Chloroethane
Concen: 1.041 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 64 Resp: 3559

Ion	Ratio	Lower	Upper
64	100		
66	36.3	24.6	37.0

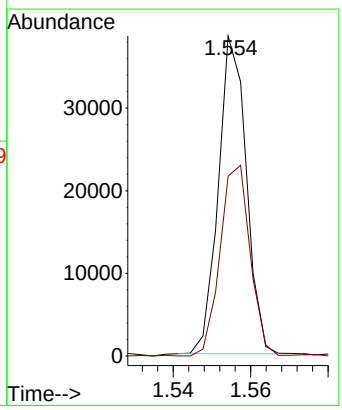


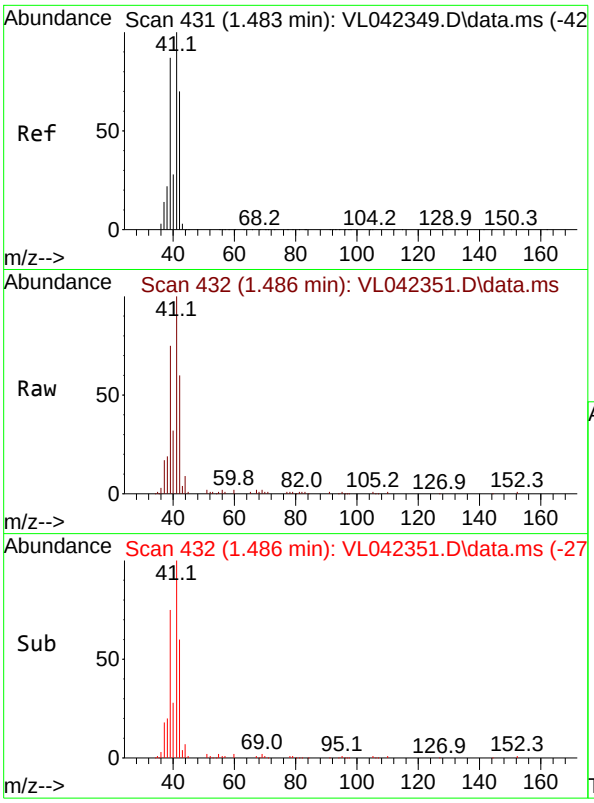


#8
Dichlorotetrafluoroethane
Concen: 1.022 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 85 Resp: 19251

Ion	Ratio	Lower	Upper
85	100		
135	65.2	52.2	78.2



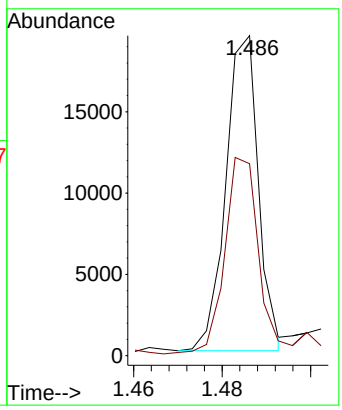


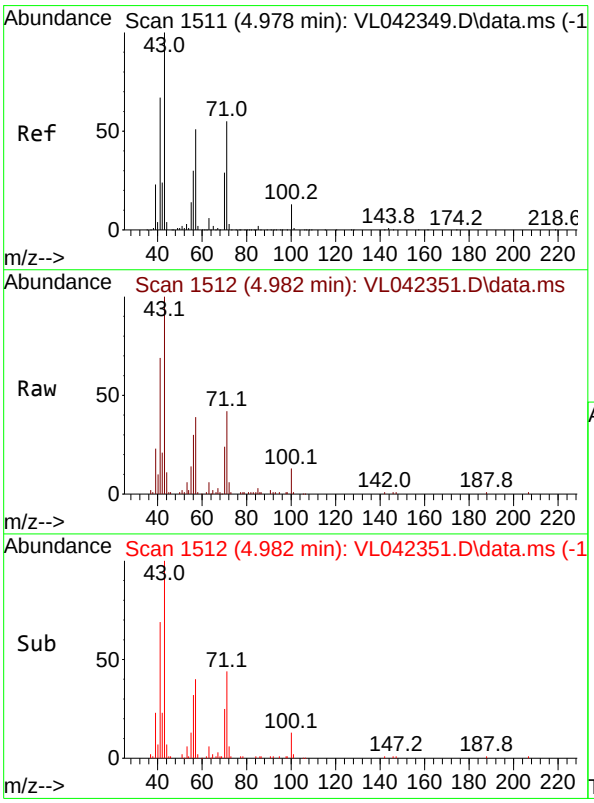
#9
Propene
Concen: 1.040 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 9892

Ion	Ratio	Lower	Upper
41	100		
42	77.2	56.2	84.4

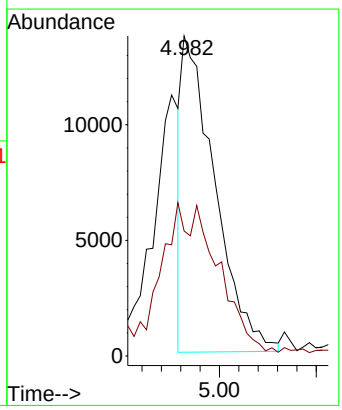


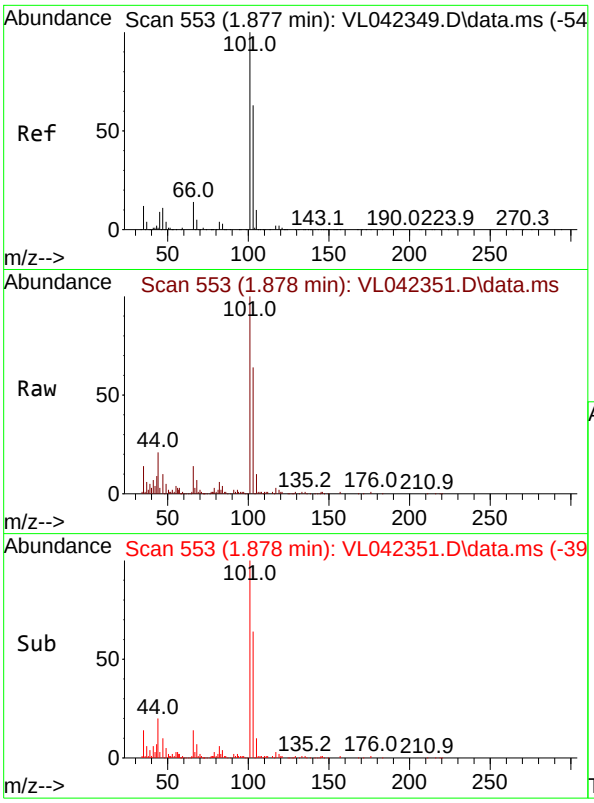


#10
Heptane
Concen: 0.633 ppbv
RT: 4.982 min Scan# 1512
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 16193

Ion	Ratio	Lower	Upper
43	100		
57	84.7	39.9	59.9#



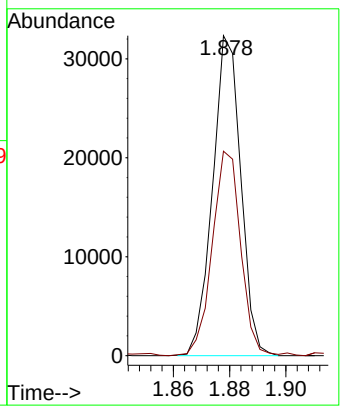


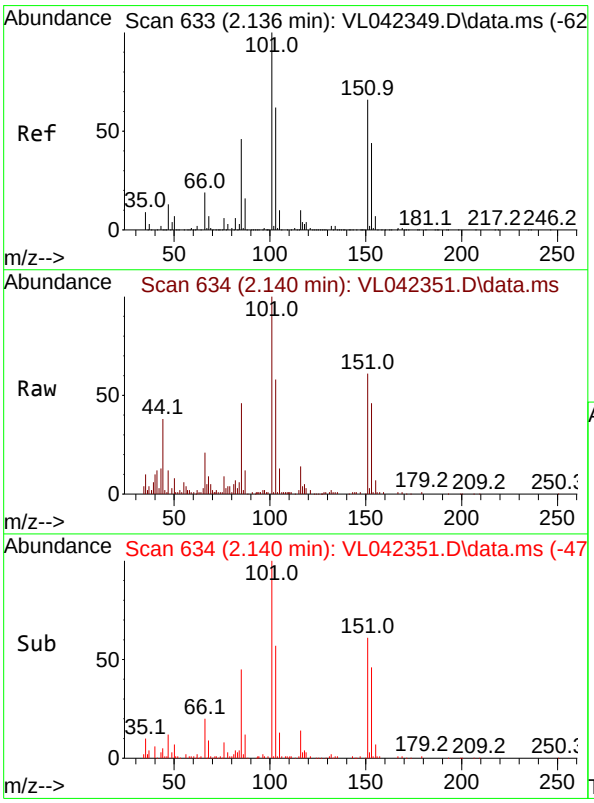
#11
Trichlorofluoromethane
Concen: 1.075 ppbv
RT: 1.878 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:101 Resp: 22428

Ion	Ratio	Lower	Upper
101	100		
103	63.6	50.1	75.1

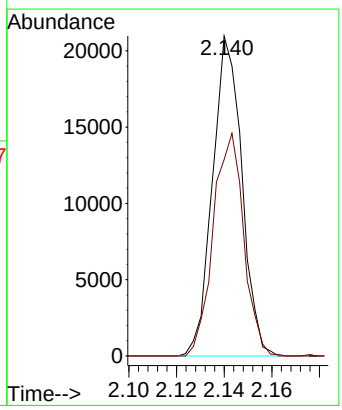


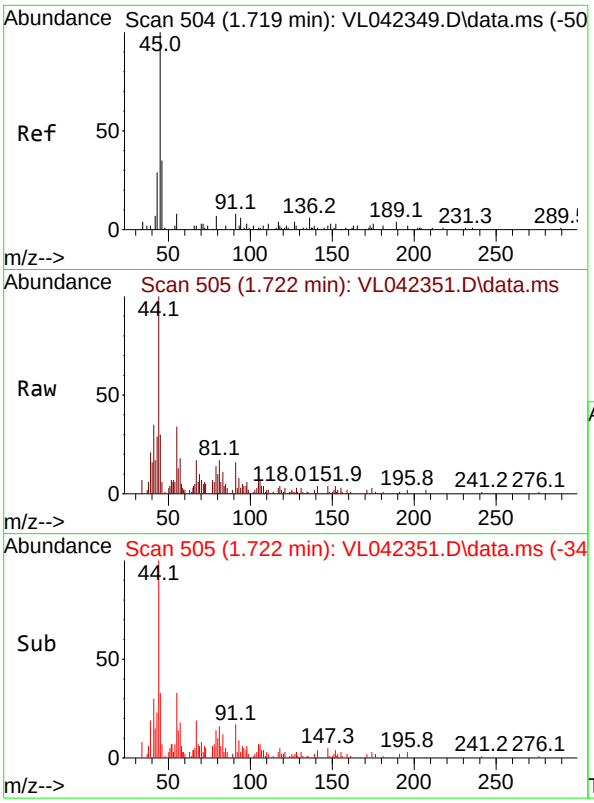


#12
1,1,2-Trichlorotrifluoroethane
Concen: 1.047 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:101 Resp: 17865

Ion	Ratio	Lower	Upper
101	100		
151	72.6	57.0	85.6



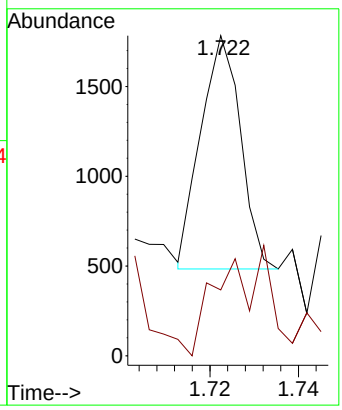


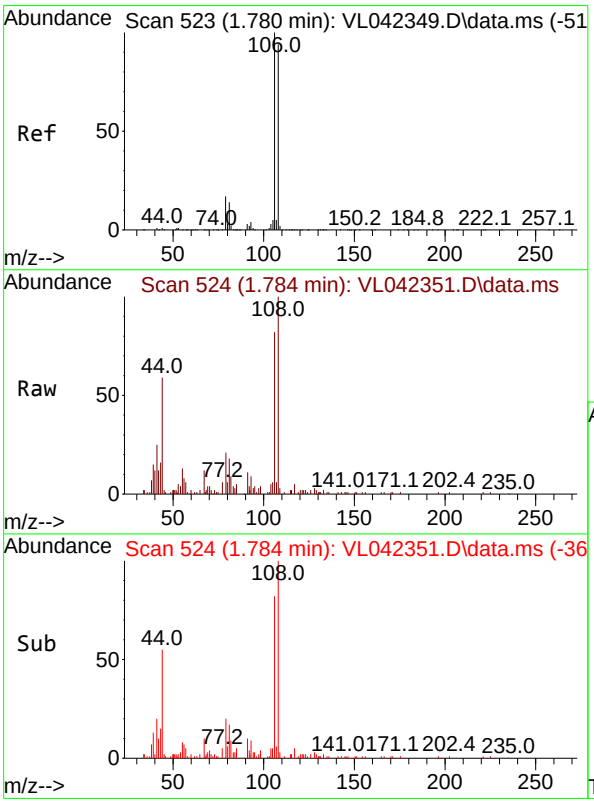
#13
Ethanol
Concen: 1.042 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 810

Ion	Ratio	Lower	Upper
45	100		
46	95.8	21.9	87.7#

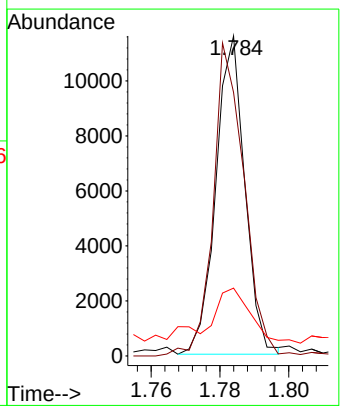


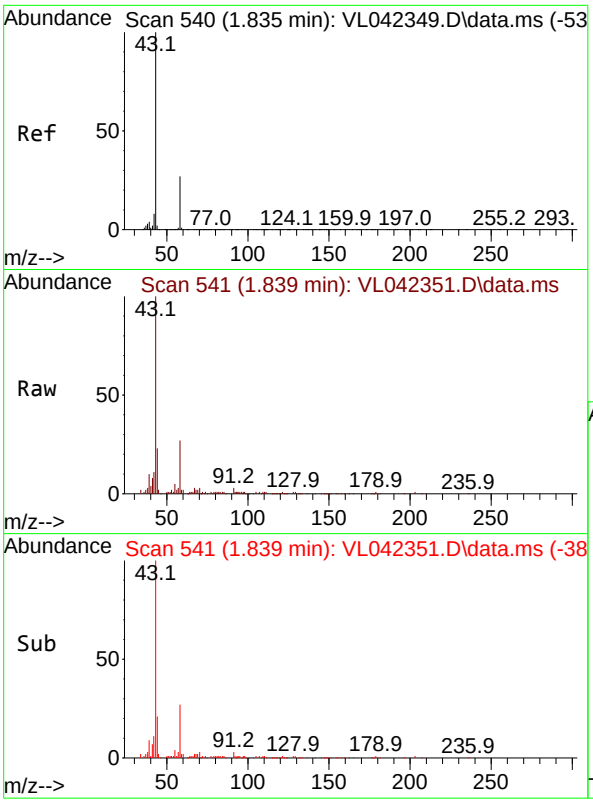


#14
Bromoethene
Concen: 1.052 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:108 Resp: 6766

Ion	Ratio	Lower	Upper
108	100		
106	104.7	85.9	128.9
79	45.4	13.9	20.9#



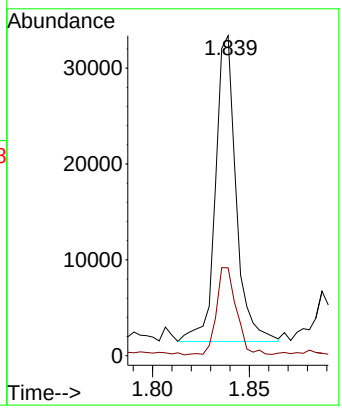


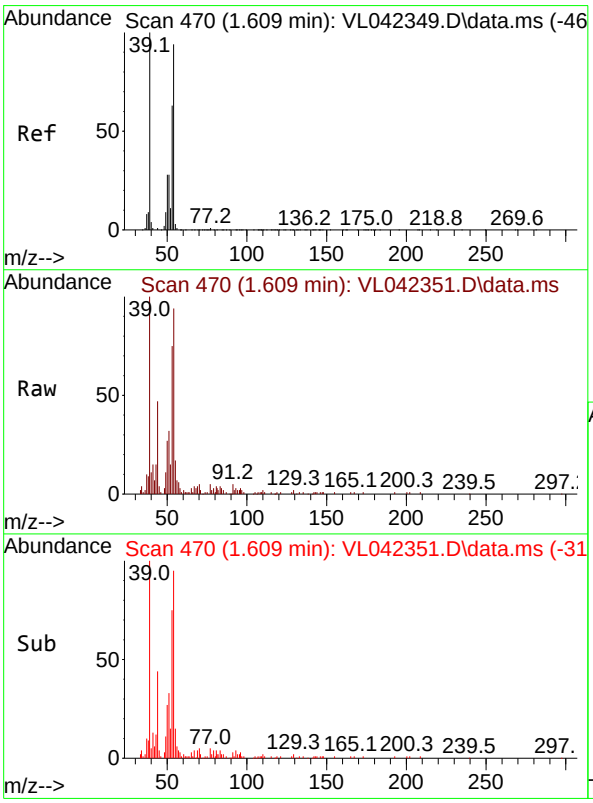
#15
Acetone
Concen: 1.158 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 23537

Ion	Ratio	Lower	Upper
43	100		
58	29.4	22.4	33.6

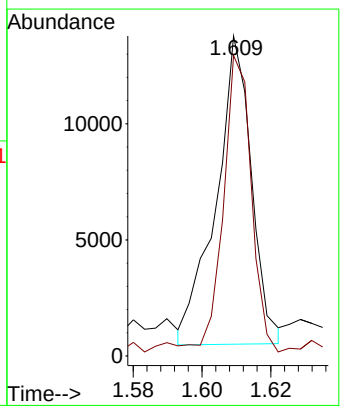


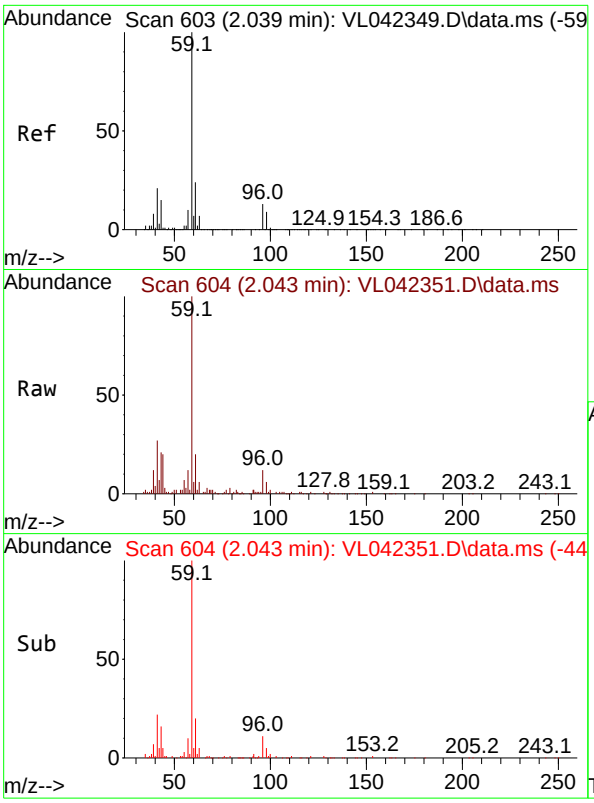


#16
1,3-Butadiene
Concen: 0.995 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 39 Resp: 9495

Ion	Ratio	Lower	Upper
39	100		
54	77.6	64.9	97.3



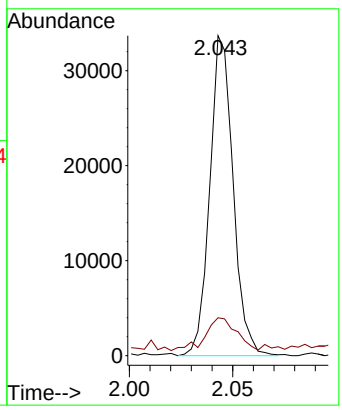


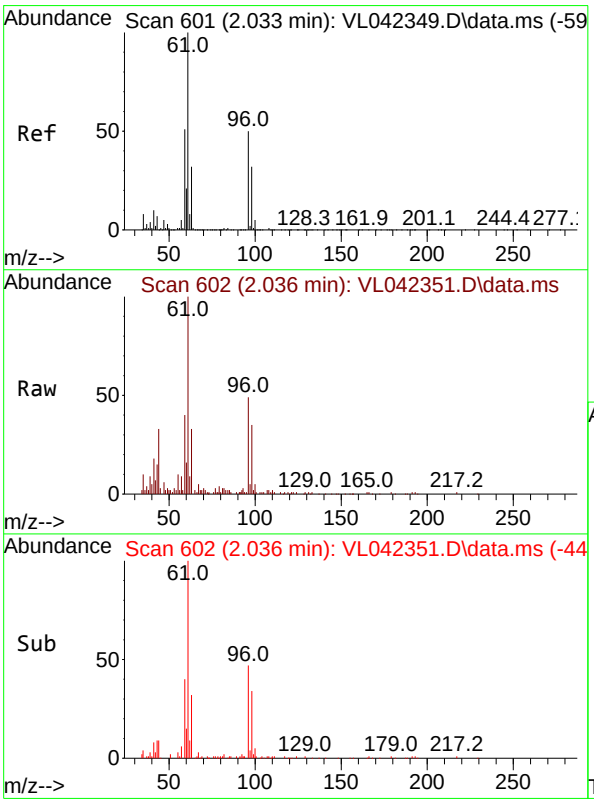
#17
tert-Butyl alcohol
Concen: 1.051 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 59 Resp: 26477

Ion	Ratio	Lower	Upper
59	100		
57	14.6	8.7	13.1#

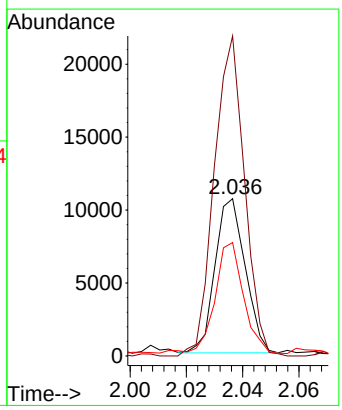


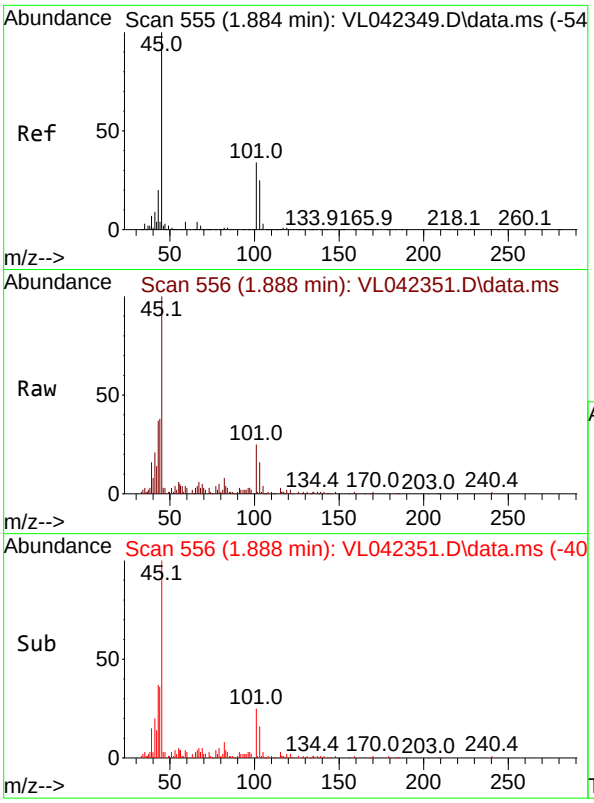


#18
1,1-Dichloroethene
Concen: 0.962 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 96 Resp: 7890

Ion	Ratio	Lower	Upper
96	100		
61	207.8	160.2	240.2
98	71.9	51.0	76.4



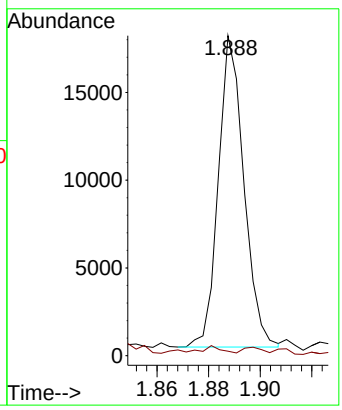


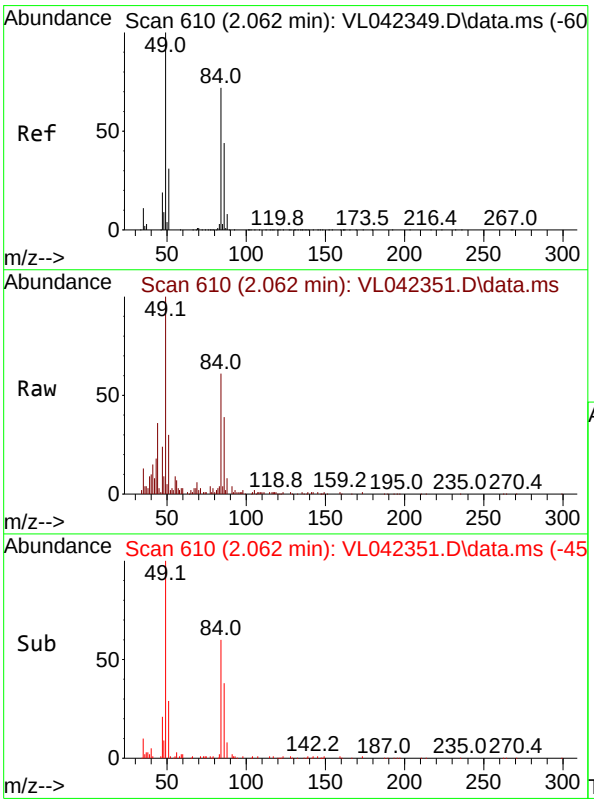
#19
Isopropyl Alcohol
Concen: 1.078 ppbv
RT: 1.888 min Scan# 5
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 45 Resp: 12175

Ion	Ratio	Lower	Upper
45	100		
58	3.8	34.5	51.7#

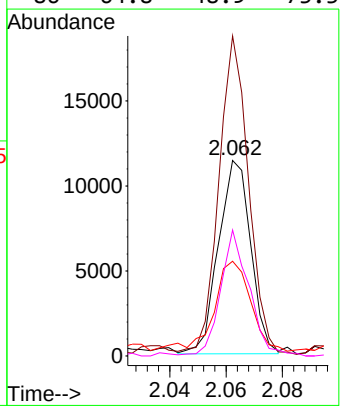


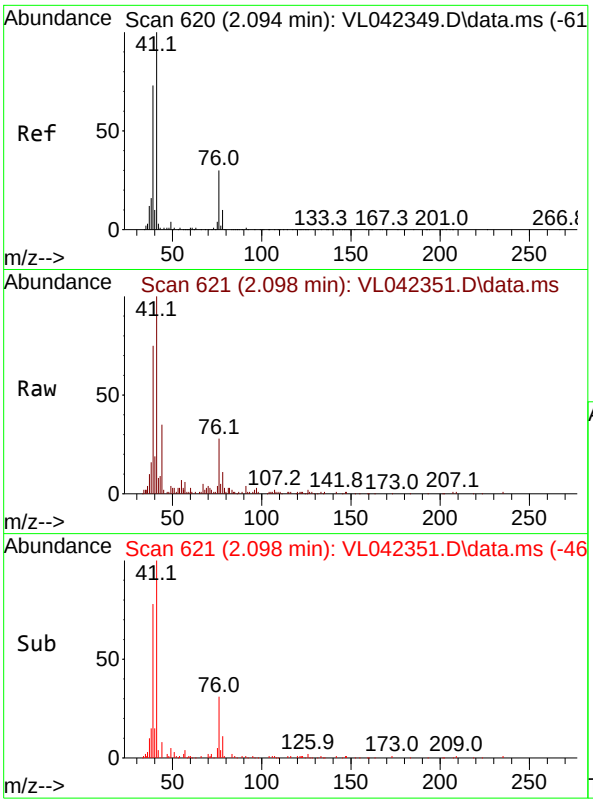


#20
Methylene Chloride
Concen: 1.136 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 84 Resp: 9046

Ion	Ratio	Lower	Upper
84	100		
49	164.4	111.6	167.4
51	44.4	35.1	52.7
86	64.8	48.9	73.3



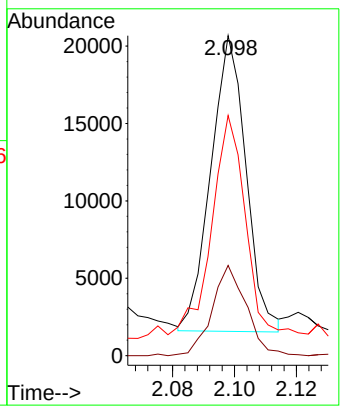


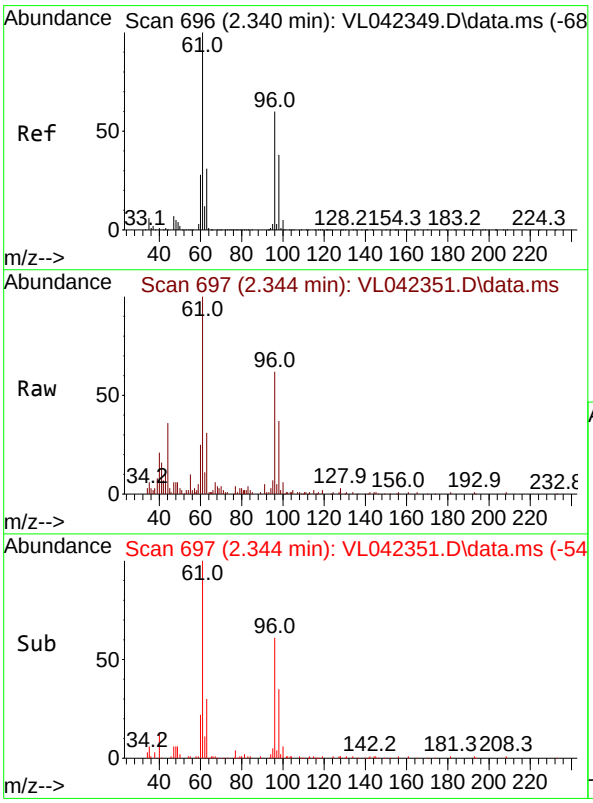
#21
Allyl Chloride
Concen: 1.073 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 41 Resp: 15057

Ion	Ratio	Lower	Upper
41	100		
76	29.8	24.8	37.2
39	86.1	60.6	90.8

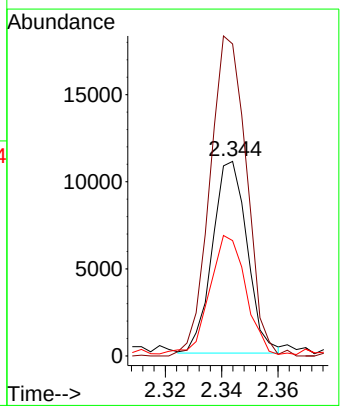


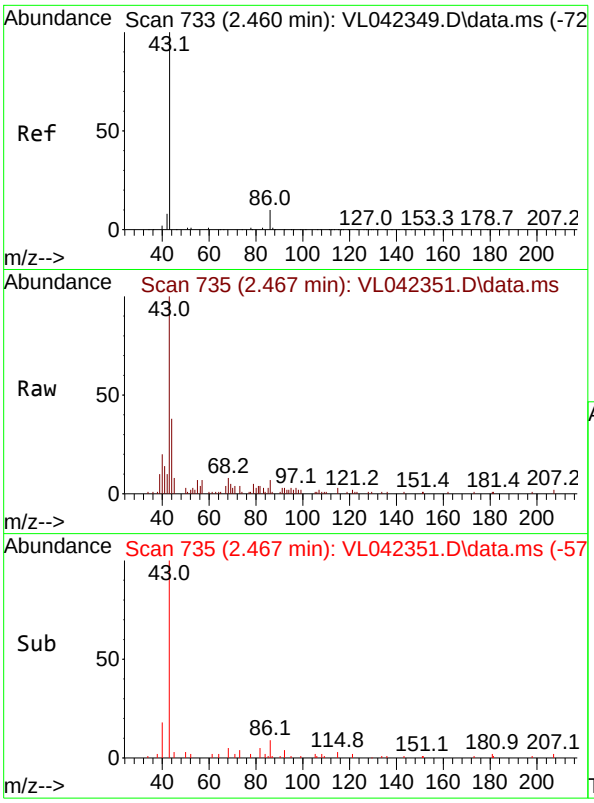


#22
trans-1,2-Dichloroethene
Concen: 1.038 ppbv
RT: 2.344 min Scan# 697
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 96 Resp: 9421

Ion	Ratio	Lower	Upper
96	100		
61	161.7	133.7	200.5
98	59.8	50.3	75.5



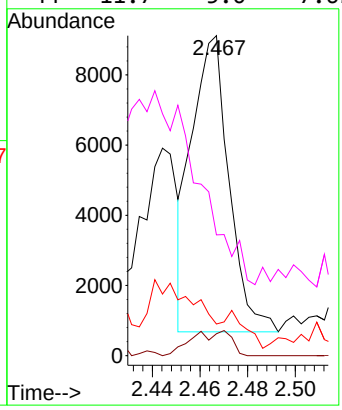


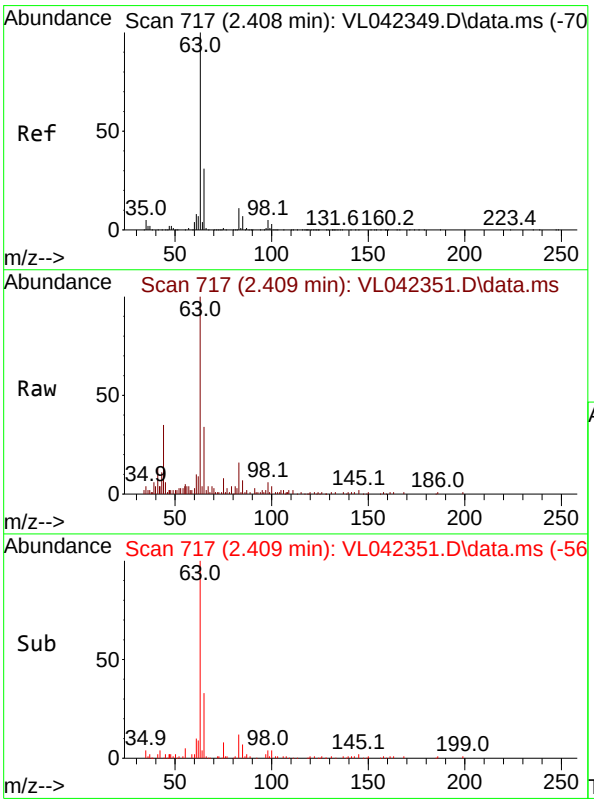
#23
Vinyl Acetate
Concen: 1.122 ppbv
RT: 2.467 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 9234

Ion	Ratio	Lower	Upper
43	100		
86	7.4	6.5	9.7
42	4.6	7.8	11.8#
44	11.7	5.0	7.6#

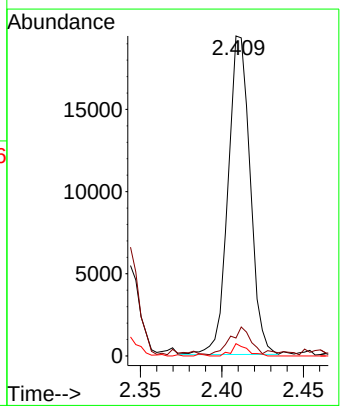


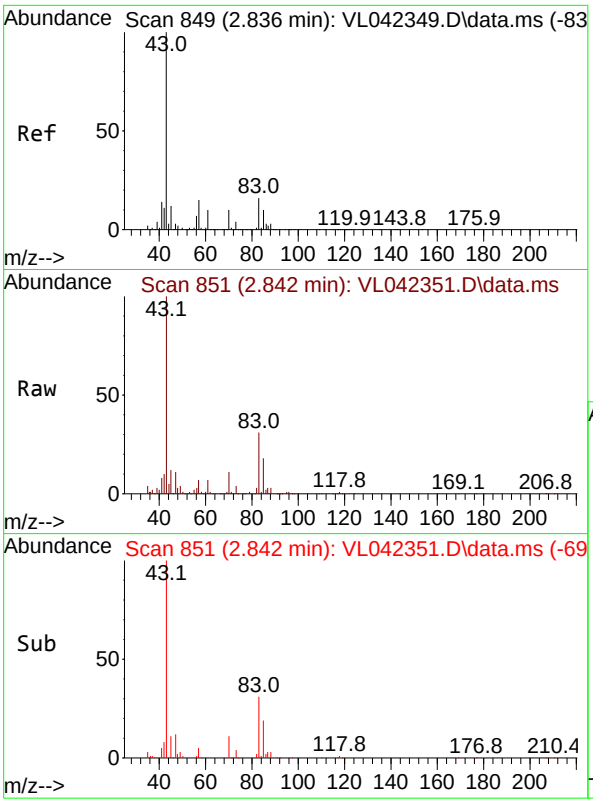


#24
1,1-Dichloroethane
Concen: 1.058 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 63 Resp: 18236

Ion	Ratio	Lower	Upper
63	100		
98	4.7	2.3	6.8
100	3.9	1.6	4.8



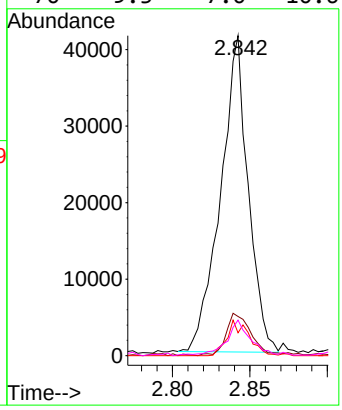


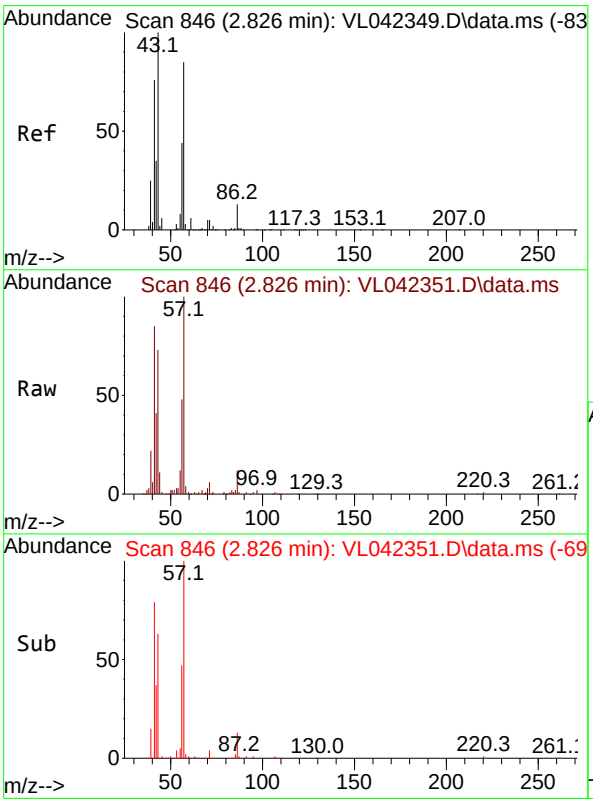
#25
Ethyl Acetate
Concen: 1.027 ppbv
RT: 2.842 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 51494

Ion	Ratio	Lower	Upper
43	100		
45	13.1	8.3	12.5#
61	9.0	7.3	10.9
70	9.3	7.0	10.6

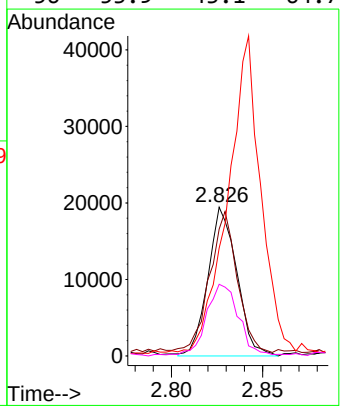


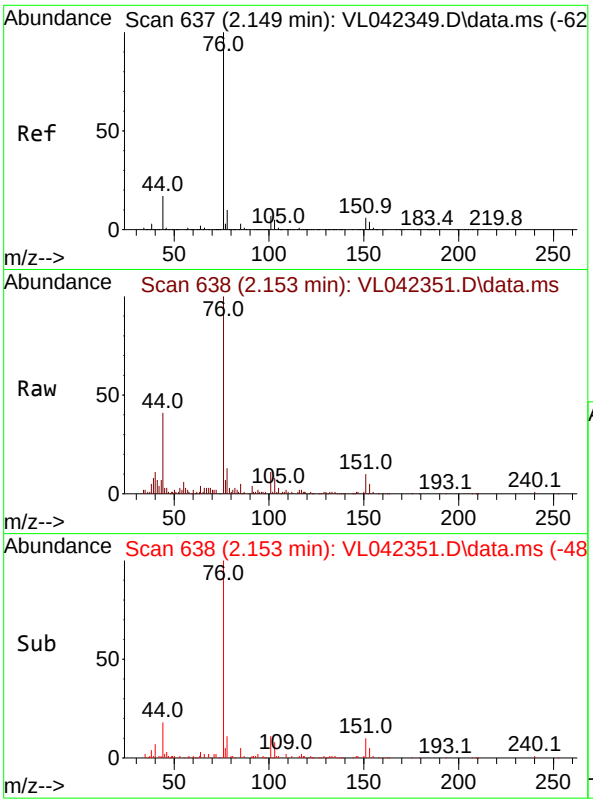


#26
Hexane
Concen: 1.053 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 57 Resp: 21350

Ion	Ratio	Lower	Upper
57	100		
41	95.3	77.9	116.9
43	247.5	208.4	312.6
56	53.9	43.1	64.7



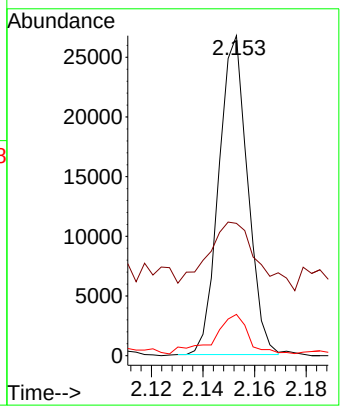


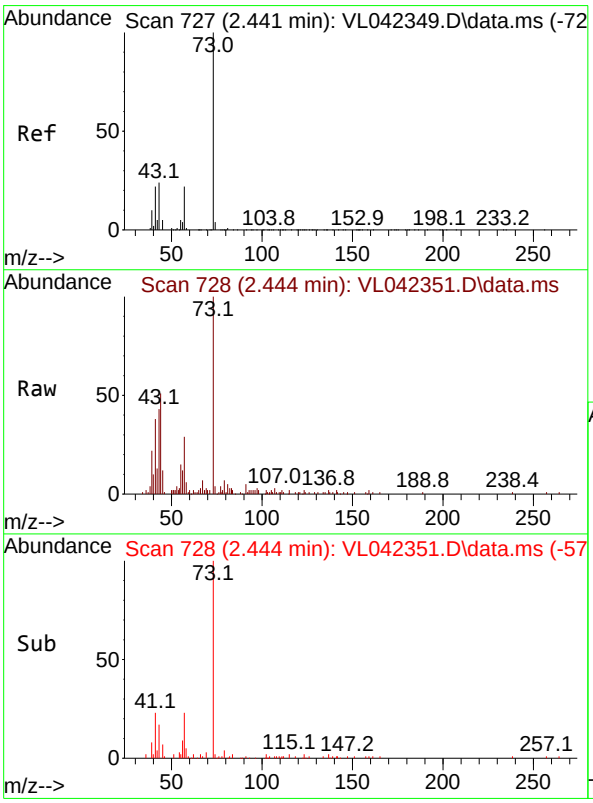
#27
Carbon Disulfide
Concen: 0.955 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 76 Resp: 20739

Ion	Ratio	Lower	Upper
76	100		
44	93.1	15.5	23.3#
78	19.8	9.3	13.9#

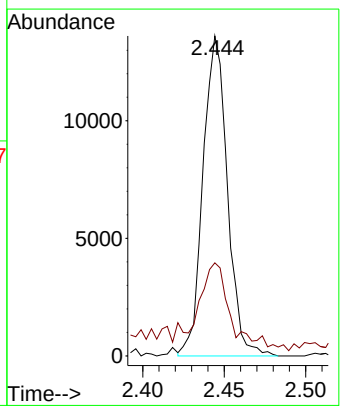


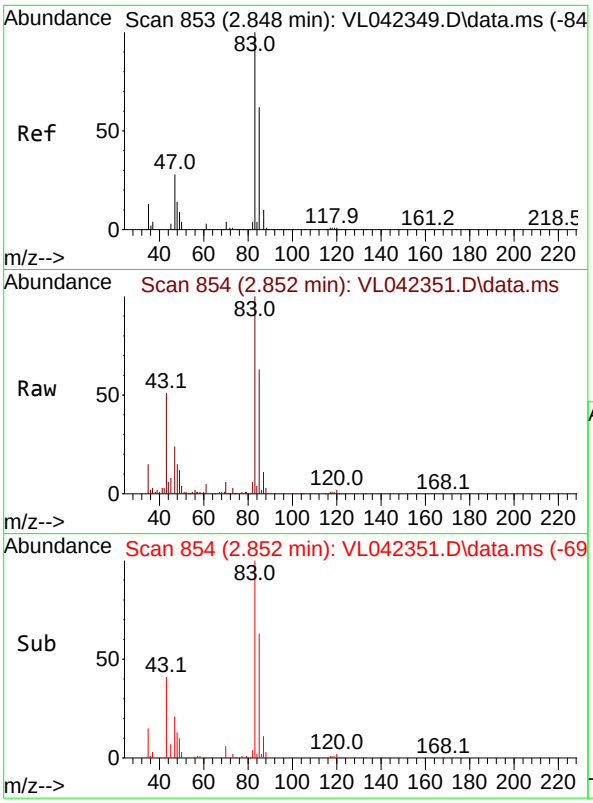


#28
Methyl tert-Butyl Ether
Concen: 1.066 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 73 Resp: 14164

Ion	Ratio	Lower	Upper
73	100		
57	34.2	21.3	31.9#



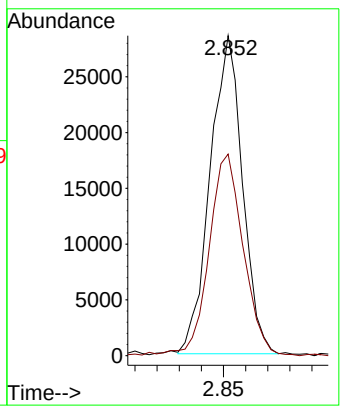


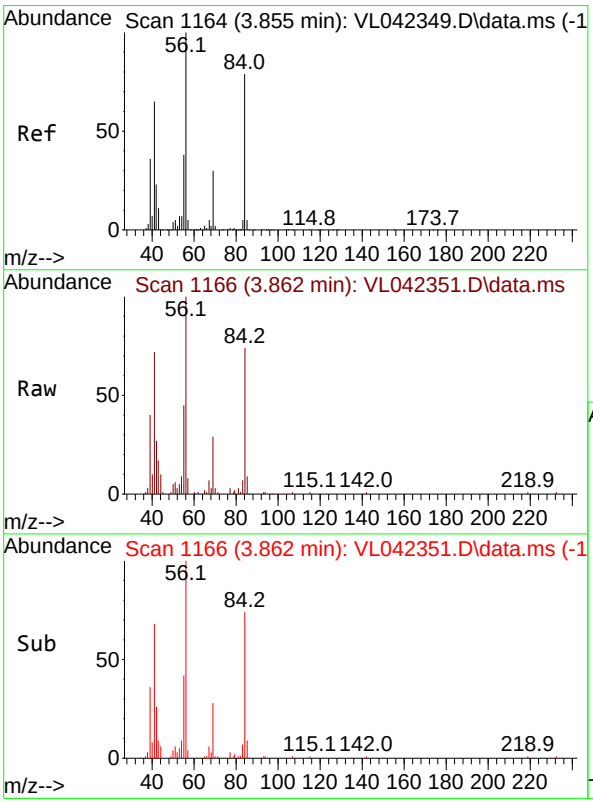
#29
Chloroform
Concen: 1.011 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 28973

Ion	Ratio	Lower	Upper
83	100		
85	62.6	50.0	75.0

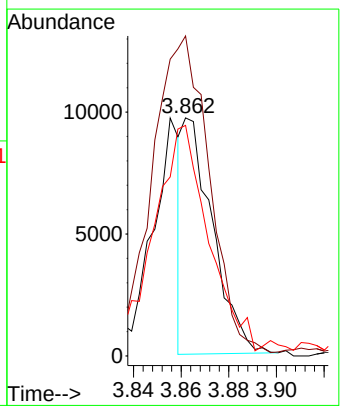


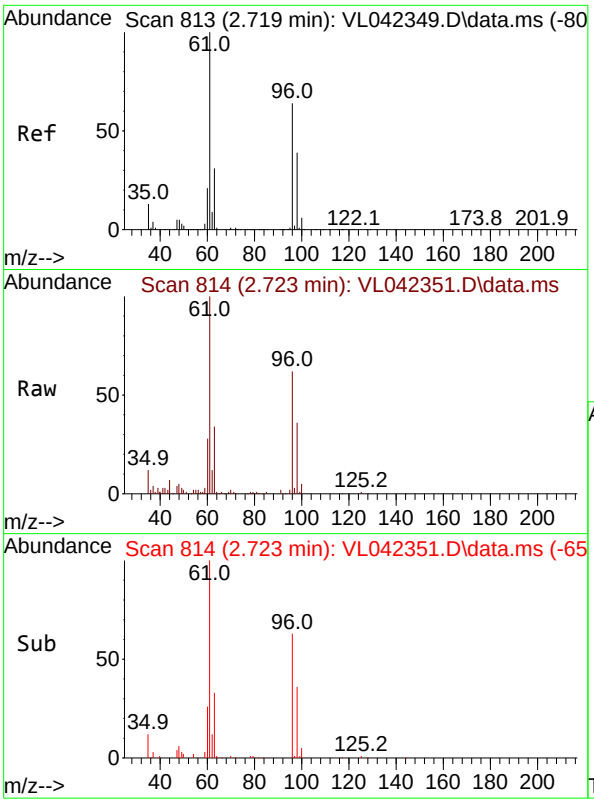


#30
Cyclohexane
Concen: 0.516 ppbv
RT: 3.862 min Scan# 1166
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 84 Resp: 8430

Ion	Ratio	Lower	Upper
84	100		
56	263.5	101.0	151.4#
41	167.0	67.4	101.0#



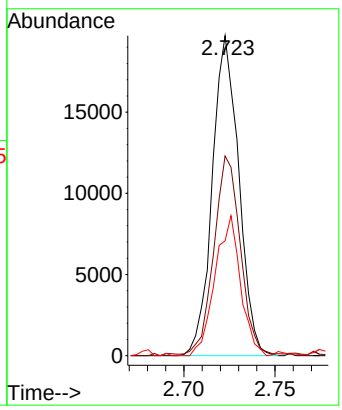


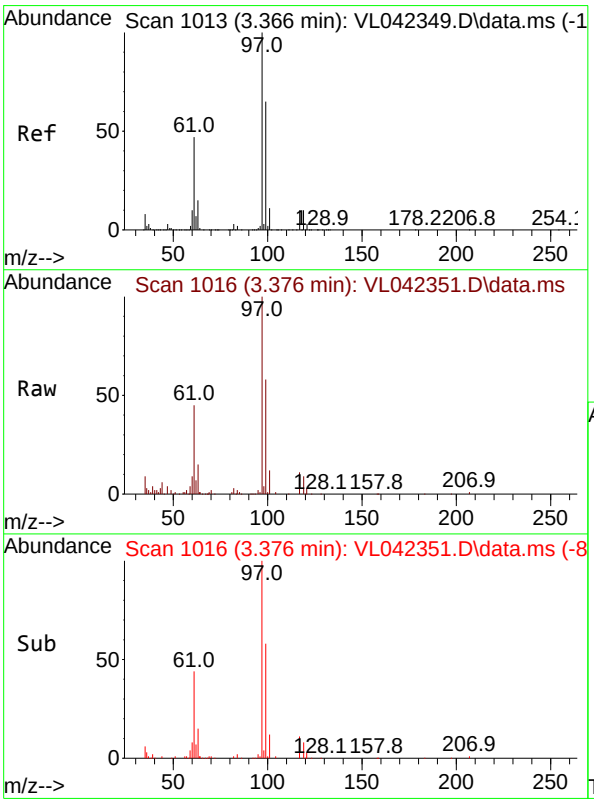
#31
cis-1,2-Dichloroethene
Concen: 1.032 ppbv
RT: 2.723 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 61 Resp: 19904

Ion	Ratio	Lower	Upper
61	100		
96	61.9	50.8	76.2
98	35.9	30.9	46.3

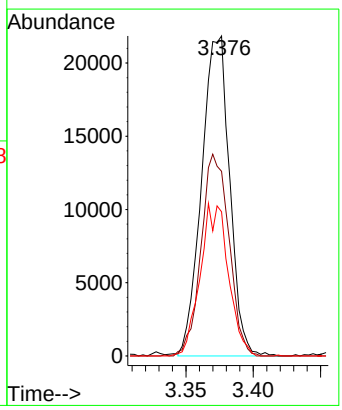


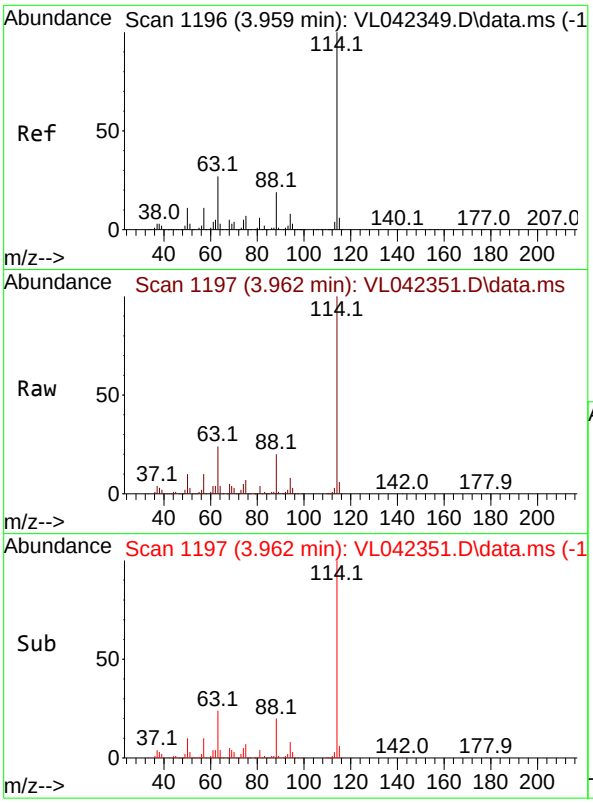


#32
1,1,1-Trichloroethane
Concen: 1.030 ppbv
RT: 3.376 min Scan# 1016
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 97 Resp: 31653

Ion	Ratio	Lower	Upper
97	100		
99	62.4	51.0	76.4
61	47.6	38.8	58.2



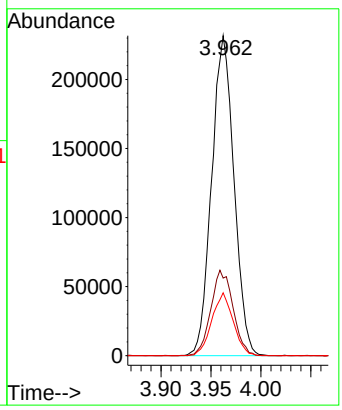


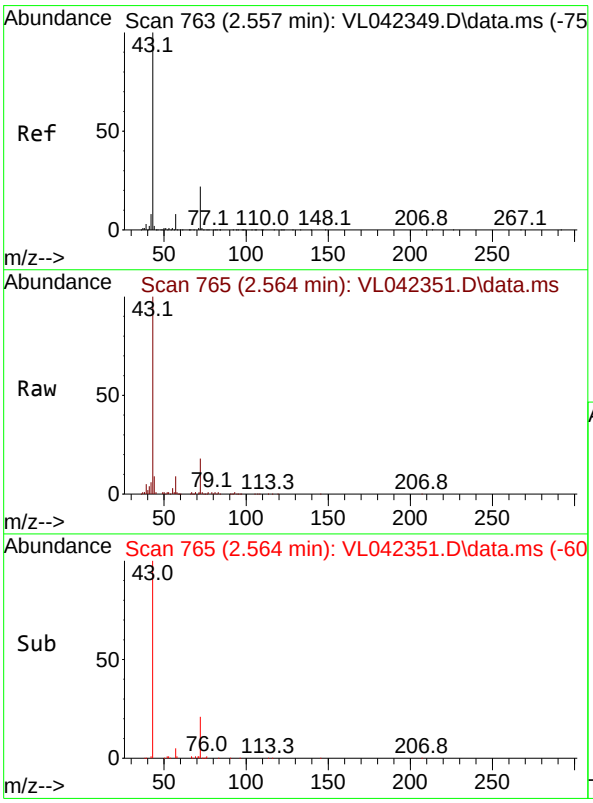
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:114 Resp: 359907

Ion	Ratio	Lower	Upper
114	100		
63	26.7	21.8	32.6
88	18.8	15.5	23.3

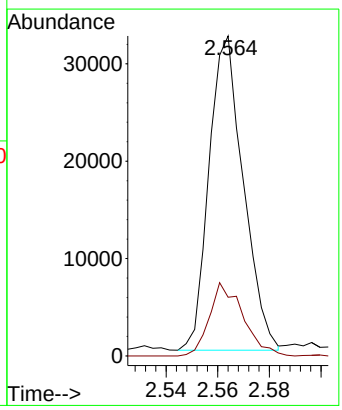


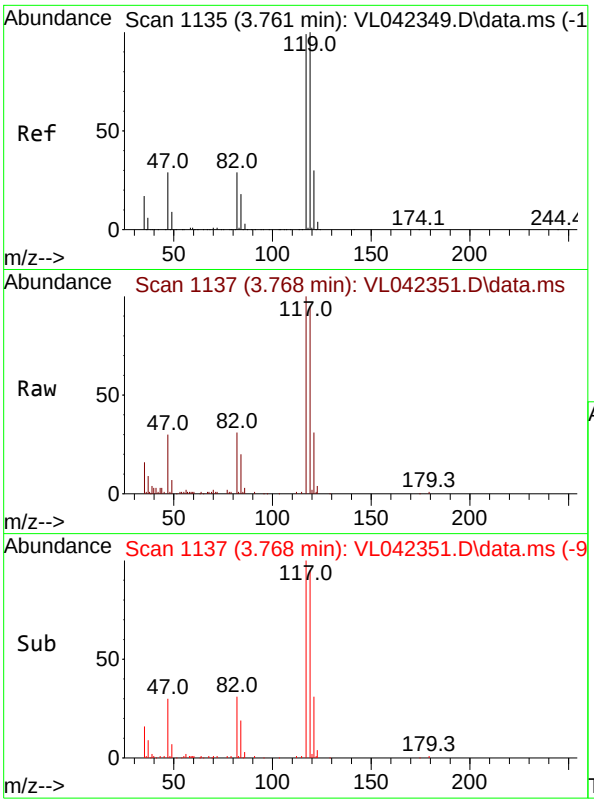


#34
2-Butanone
Concen: 1.045 ppbv
RT: 2.564 min Scan# 765
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 29735

Ion	Ratio	Lower	Upper
43	100		
72	23.1	18.2	27.2



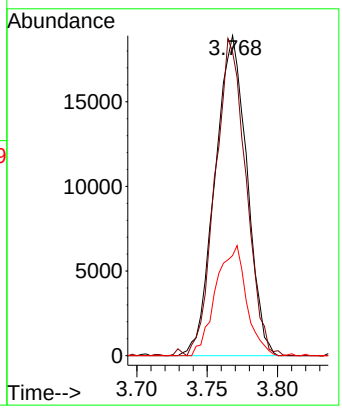


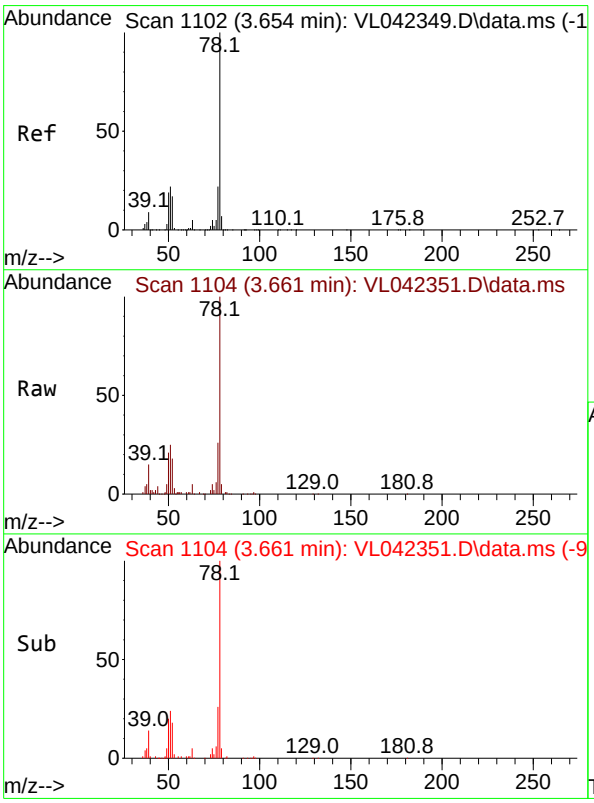
#35
Carbon Tetrachloride
Concen: 0.917 ppbv
RT: 3.768 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 29875

Ion	Ratio	Lower	Upper
117	100		
119	93.3	80.5	120.7
121	31.3	24.2	36.2

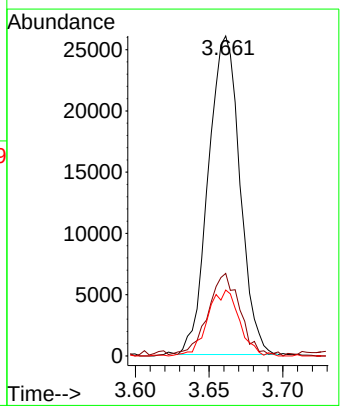


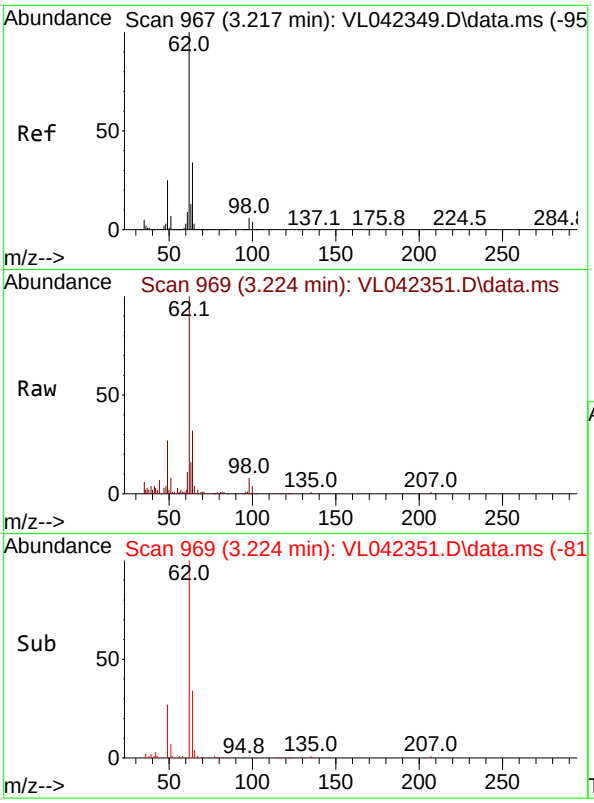


#36
Benzene
Concen: 0.997 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 78 Resp: 38707

Ion	Ratio	Lower	Upper
78	100		
77	24.7	17.4	26.0
50	20.7	15.5	23.3



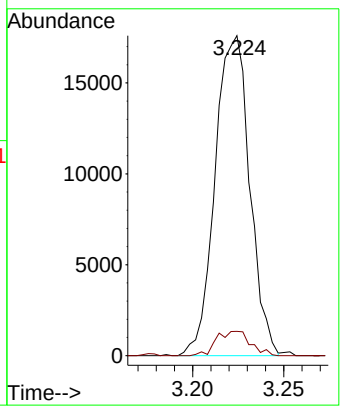


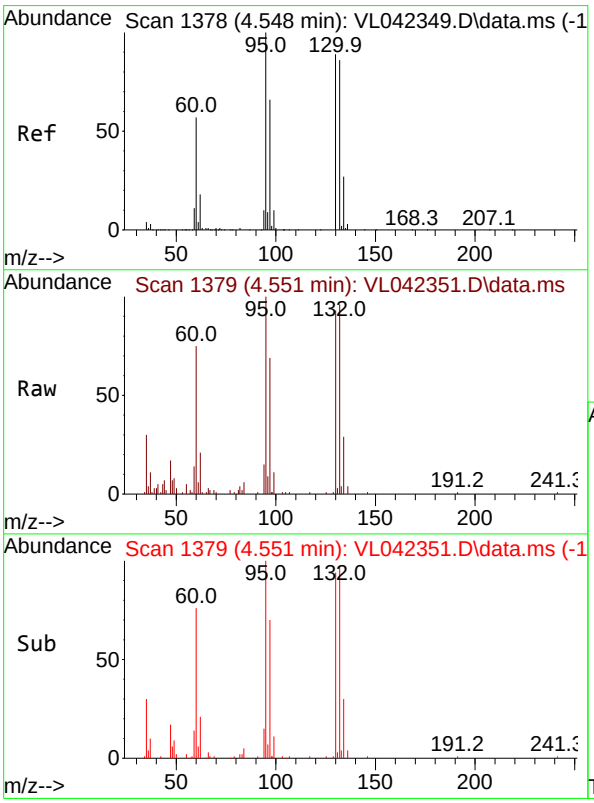
#37
1,2-Dichloroethane
Concen: 0.999 ppbv
RT: 3.224 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 62 Resp: 23284

Ion	Ratio	Lower	Upper
62	100		
98	7.5	5.1	7.7

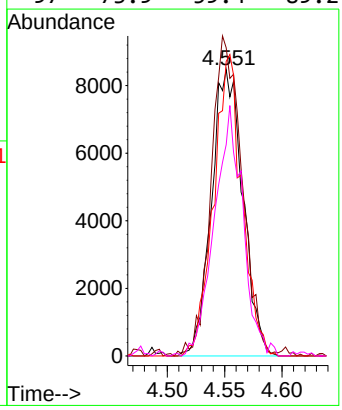


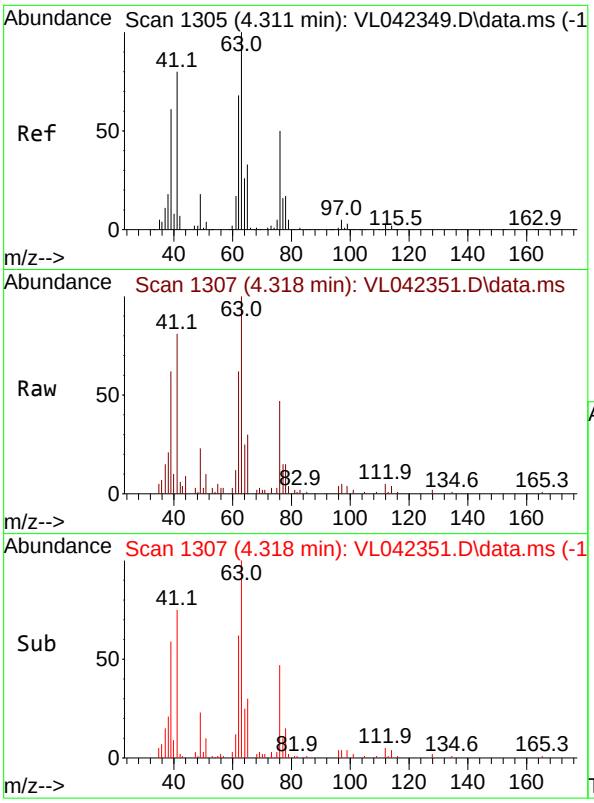


#38
Trichloroethene
Concen: 0.947 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:130 Resp: 16119

Ion	Ratio	Lower	Upper
130	100		
95	106.6	89.8	134.6
132	102.9	77.7	116.5
97	73.9	59.4	89.2



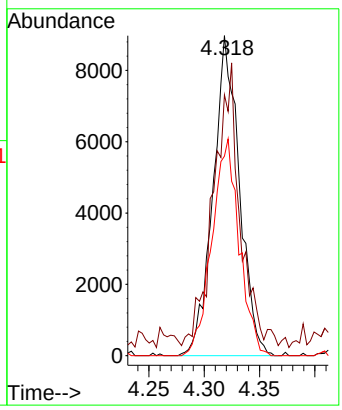


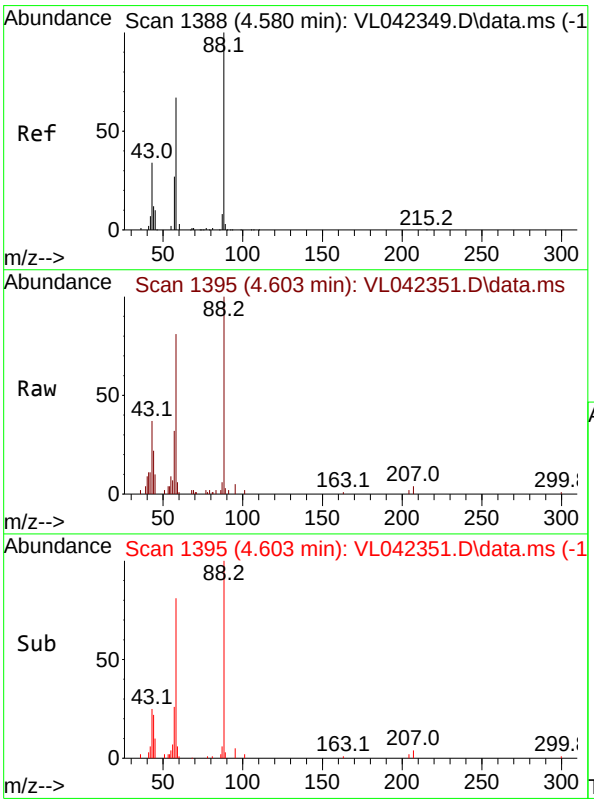
#39
1,2-Dichloropropane
Concen: 1.027 ppbv
RT: 4.318 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 63 Resp: 14866

Ion	Ratio	Lower	Upper
63	100		
41	78.3	64.2	96.2
62	62.3	54.3	81.5

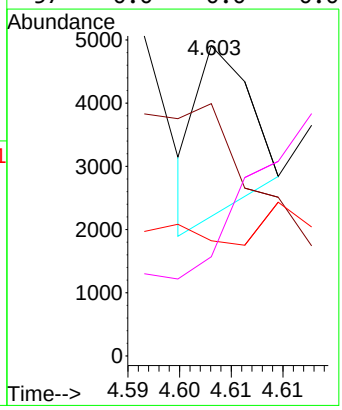


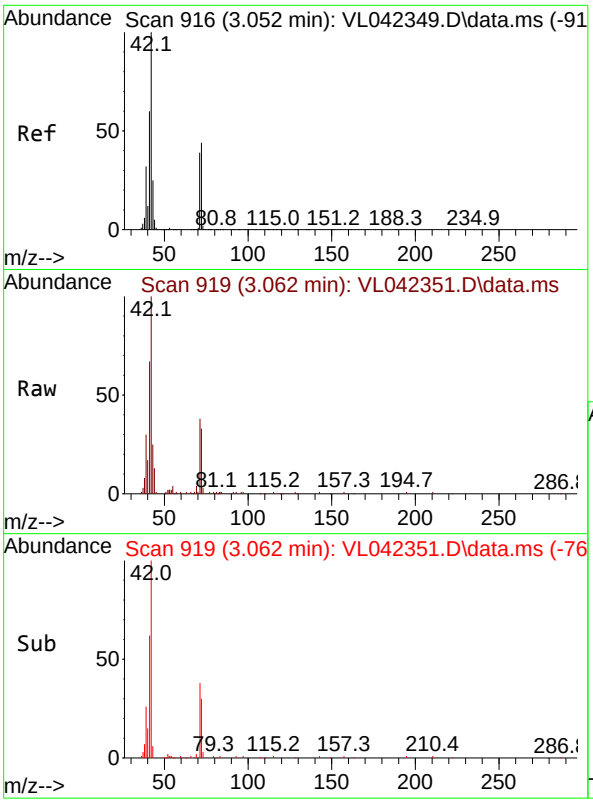


#40
1,4-Dioxane
Concen: 0.123 ppbv
RT: 4.603 min Scan# 1395
Delta R.T. 0.023 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 88 Resp: 967

Ion	Ratio	Lower	Upper
88	100		
58	998.9	61.4	92.0#
43	0.0	23.2	34.8#
57	0.0	0.0	0.0



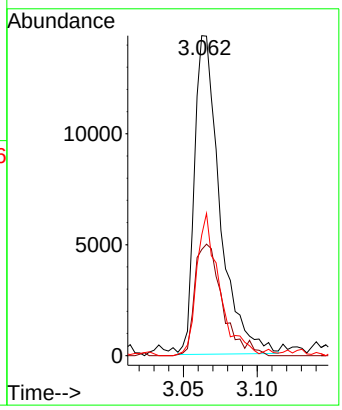


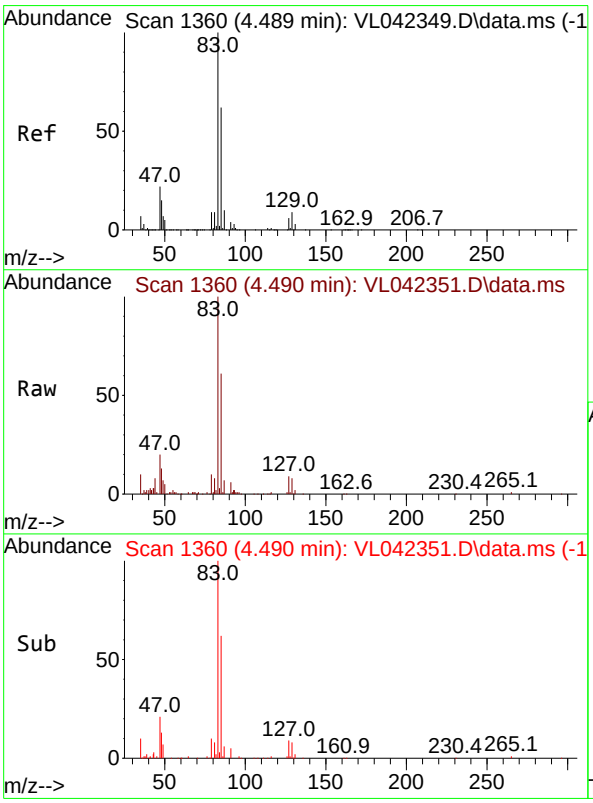
#41
Tetrahydrofuran
Concen: 1.049 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 42 Resp: 17259

Ion	Ratio	Lower	Upper
42	100		
72	38.1	32.3	48.5
71	42.3	31.4	47.2

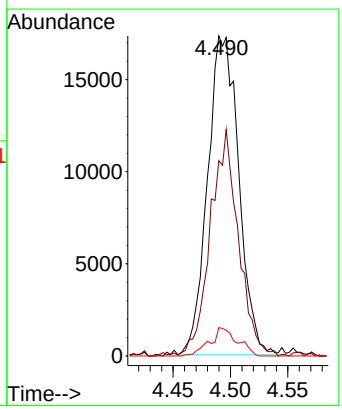


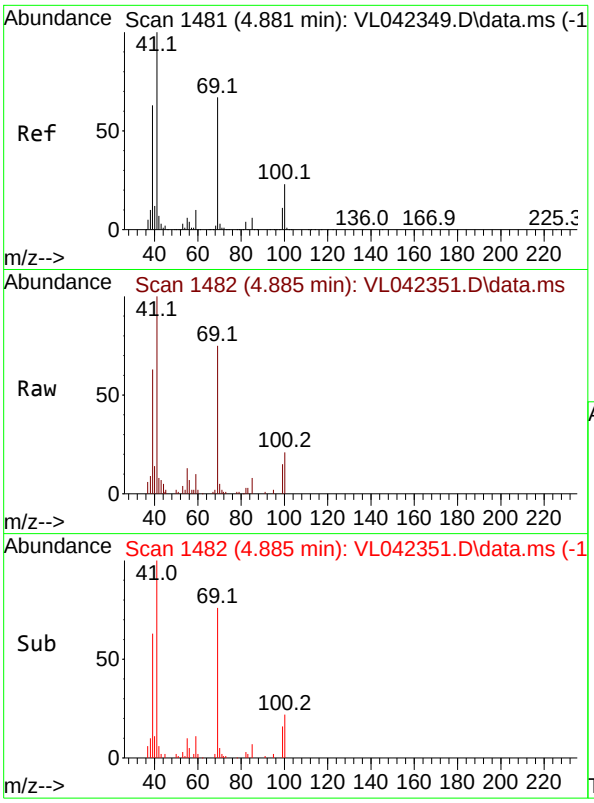


#42
Bromodichloromethane
Concen: 1.009 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 83 Resp: 32721

Ion	Ratio	Lower	Upper
83	100		
85	61.2	49.7	74.5
127	8.9	5.1	7.7#



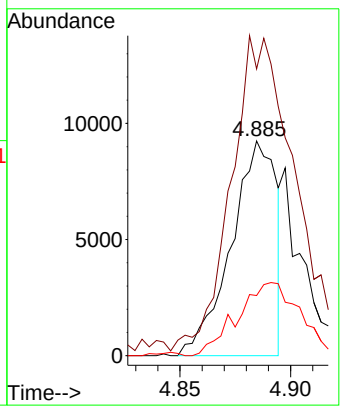


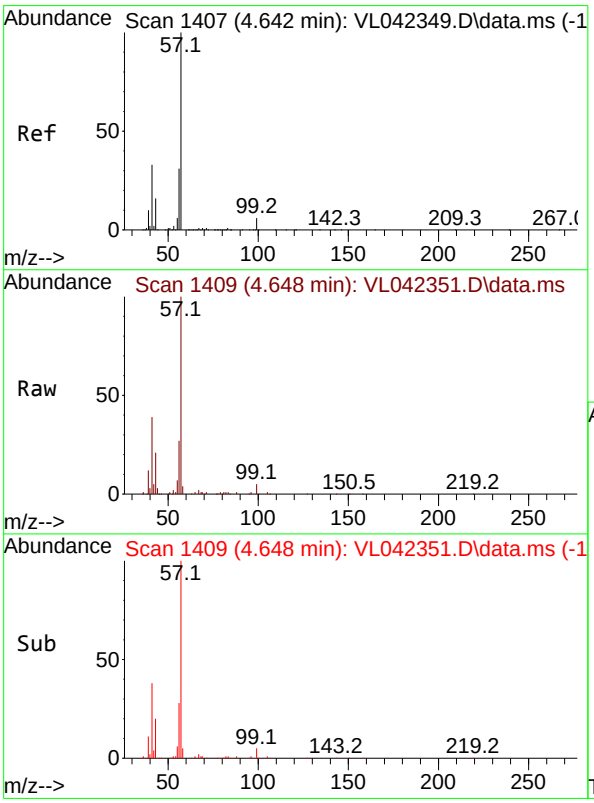
#43
Methyl Methacrylate
Concen: 0.751 ppbv
RT: 4.885 min Scan# 14
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 69 Resp: 13084

Ion	Ratio	Lower	Upper
69	100		
41	213.4	118.6	177.8#
100	0.0	28.2	42.2#

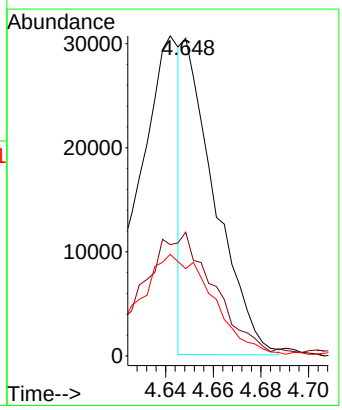


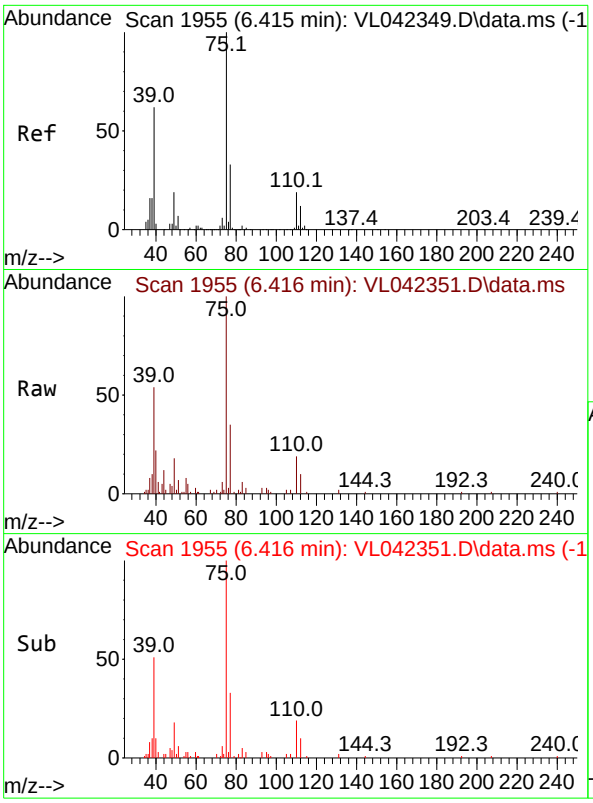


#44
2,2,4-Trimethylpentane
Concen: 0.427 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 57 Resp: 28653

Ion	Ratio	Lower	Upper
57	100		
41	91.3	27.2	40.8#
56	0.0	25.7	38.5#



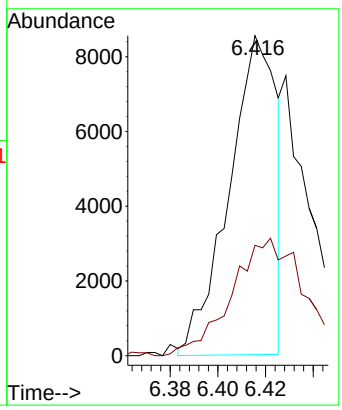


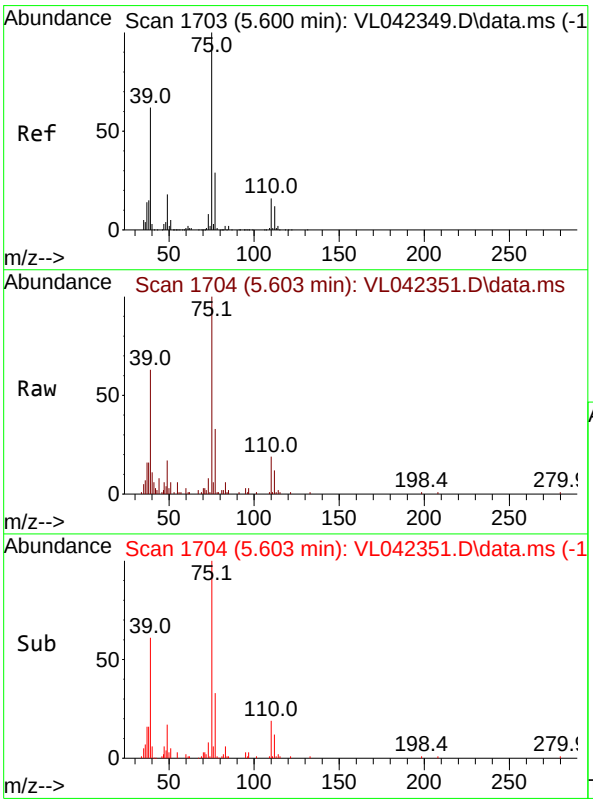
#45
t-1,3-Dichloropropene
Concen: 0.658 ppbv
RT: 6.416 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 75 Resp: 11763

Ion	Ratio	Lower	Upper
75	100		
77	34.5	27.0	40.6

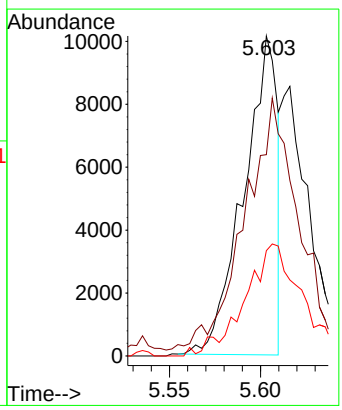


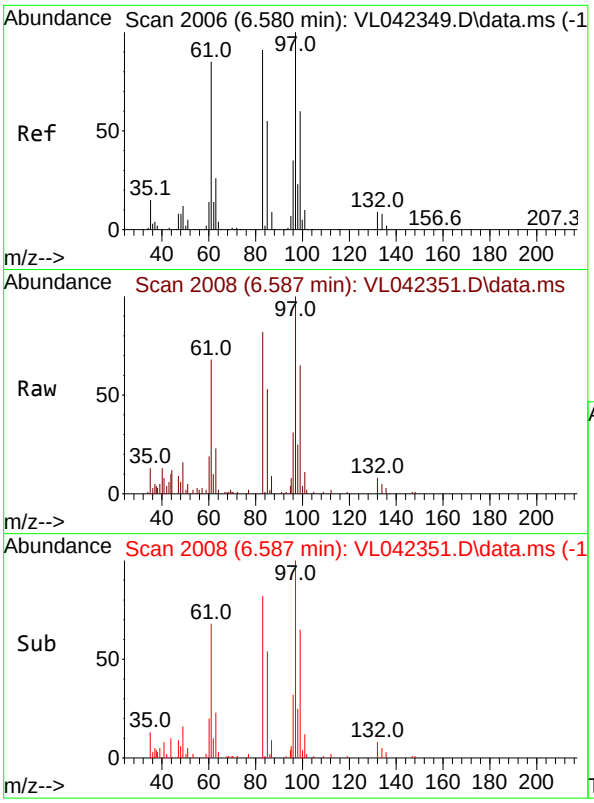


#46
cis-1,3-Dichloropropene
Concen: 0.596 ppbv
RT: 5.603 min Scan# 1704
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 75 Resp: 13028

Ion	Ratio	Lower	Upper
75	100		
39	59.7	50.0	75.0
77	33.1	23.0	34.6



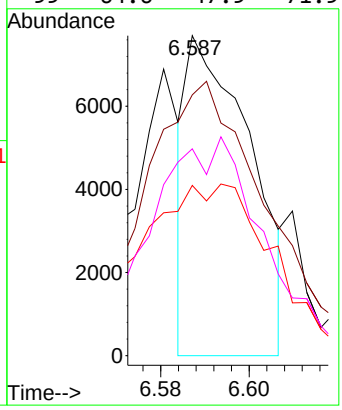


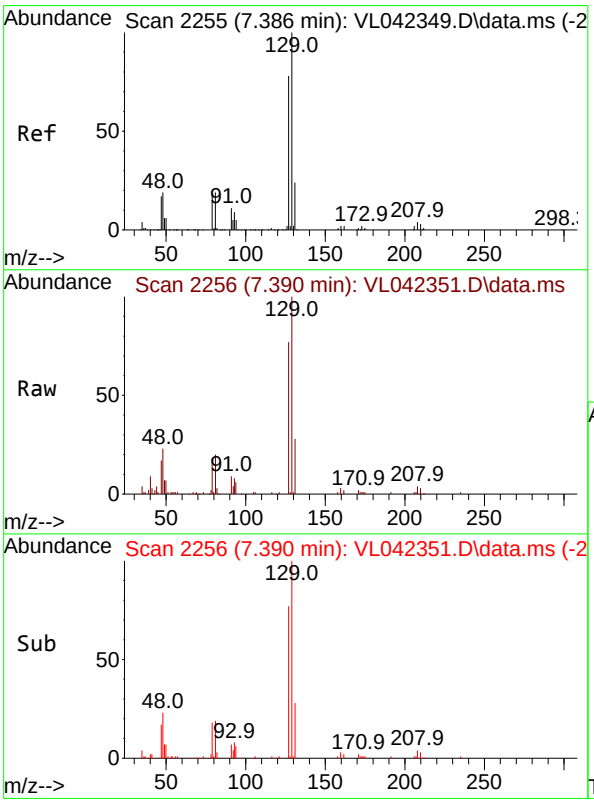
#47
1,1,2-Trichloroethane
Concen: 0.521 ppbv
RT: 6.587 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 97 Resp: 7690

Ion	Ratio	Lower	Upper
97	100		
83	67.7	72.8	109.2#
85	31.3	44.2	66.4#
99	64.6	47.9	71.9

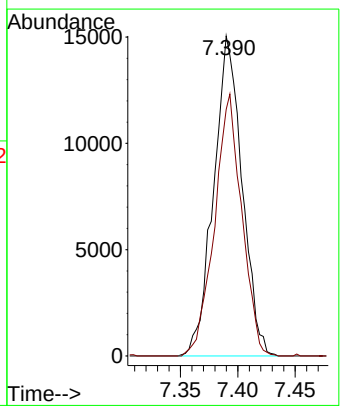


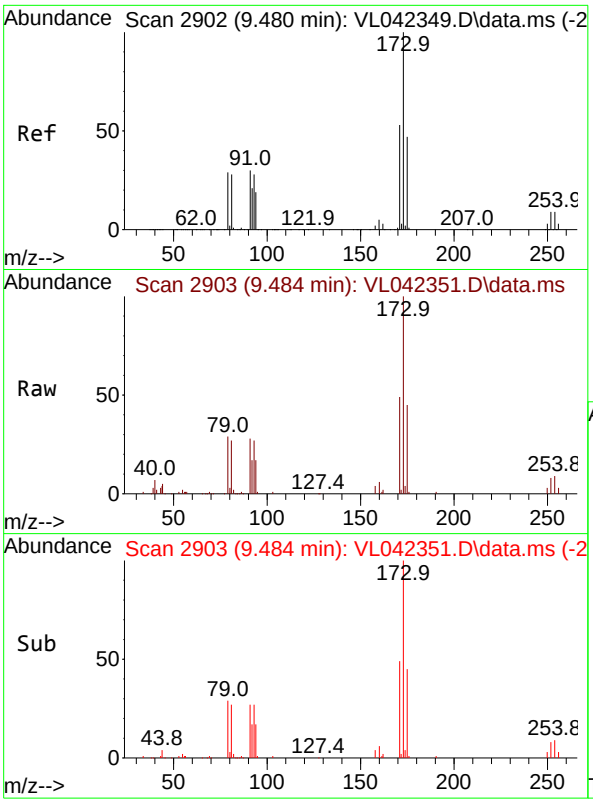


#48
Dibromochloromethane
Concen: 0.997 ppbv
RT: 7.390 min Scan# 2256
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:129 Resp: 25948

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3



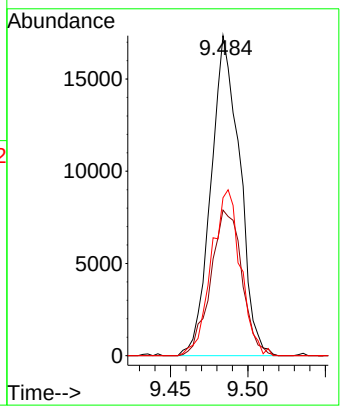


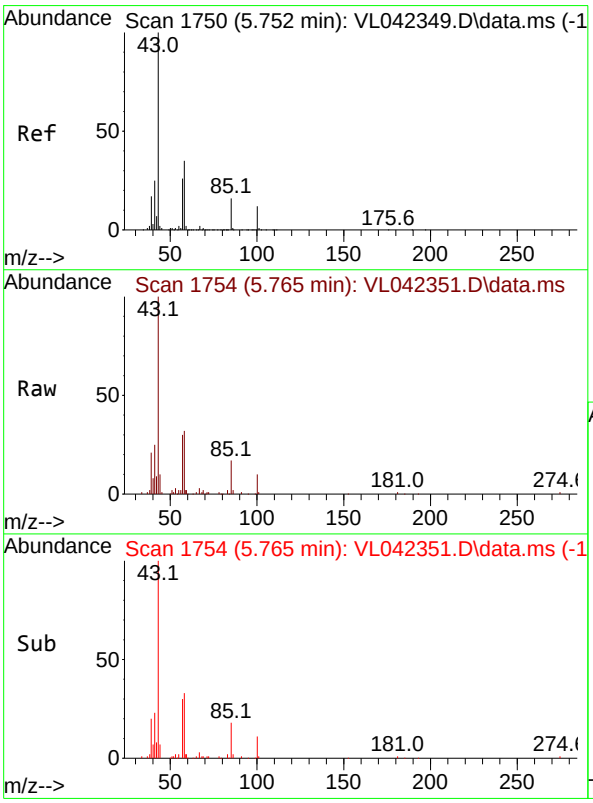
#49
Bromoform
Concen: 0.984 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:173 Resp: 22413

Ion	Ratio	Lower	Upper
173	100		
175	49.3	38.2	57.2
171	52.7	40.9	61.3

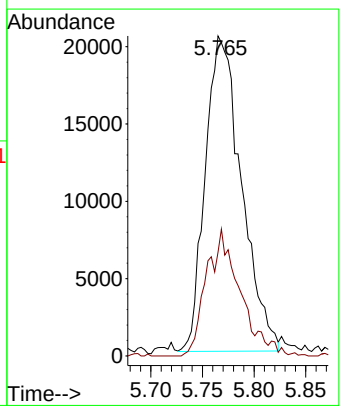


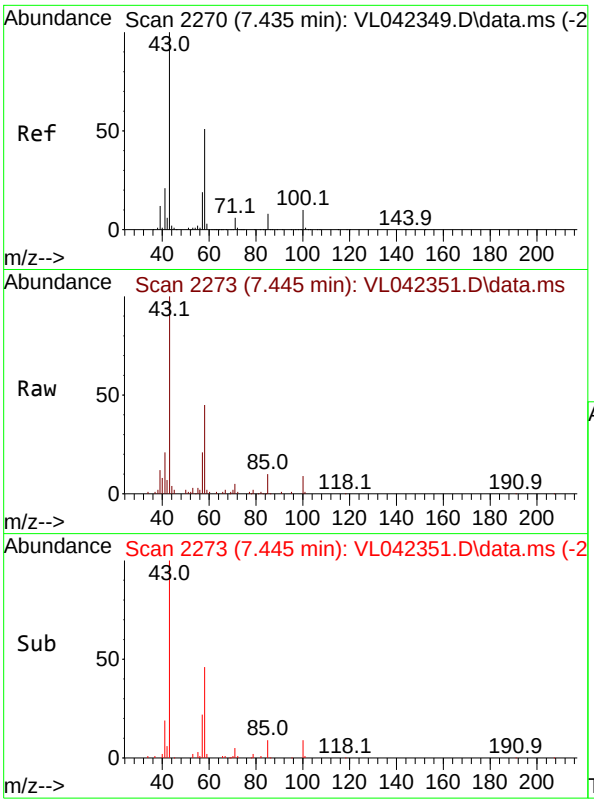


#50
4-Methyl-2-Pentanone
Concen: 1.049 ppbv
RT: 5.765 min Scan# 1754
Delta R.T. 0.013 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 43 Resp: 49725

Ion	Ratio	Lower	Upper
43	100		
58	37.7	28.6	43.0



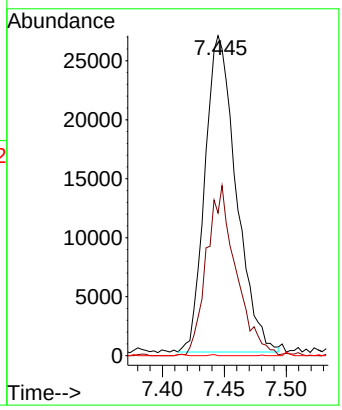


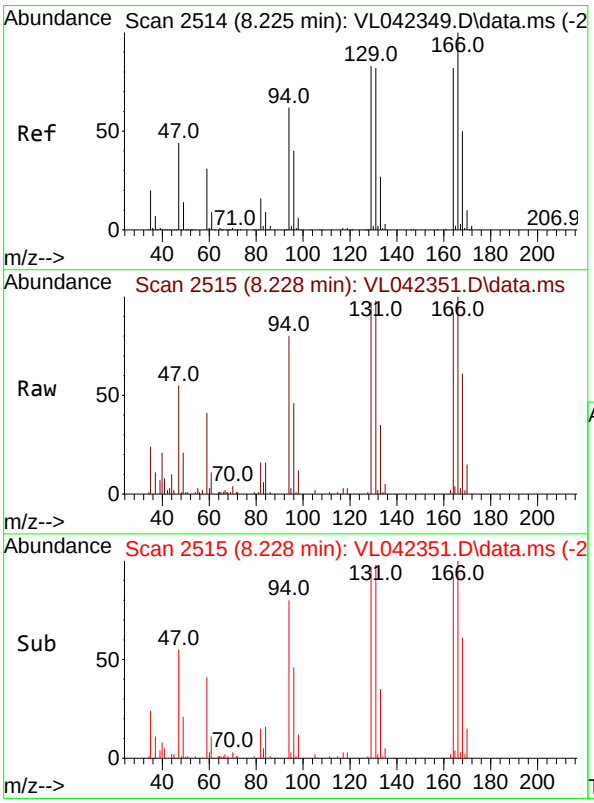
#51
2-Hexanone
Concen: 1.103 ppbv
RT: 7.445 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 43 Resp: 47178

Ion	Ratio	Lower	Upper
43	100		
58	50.8	40.2	60.4
98	0.1	0.1	0.1

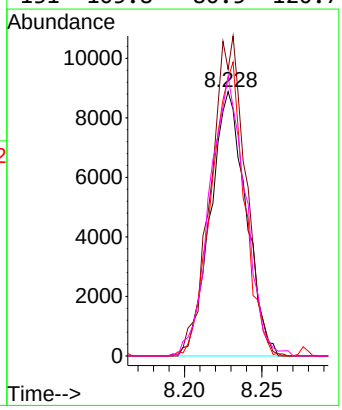


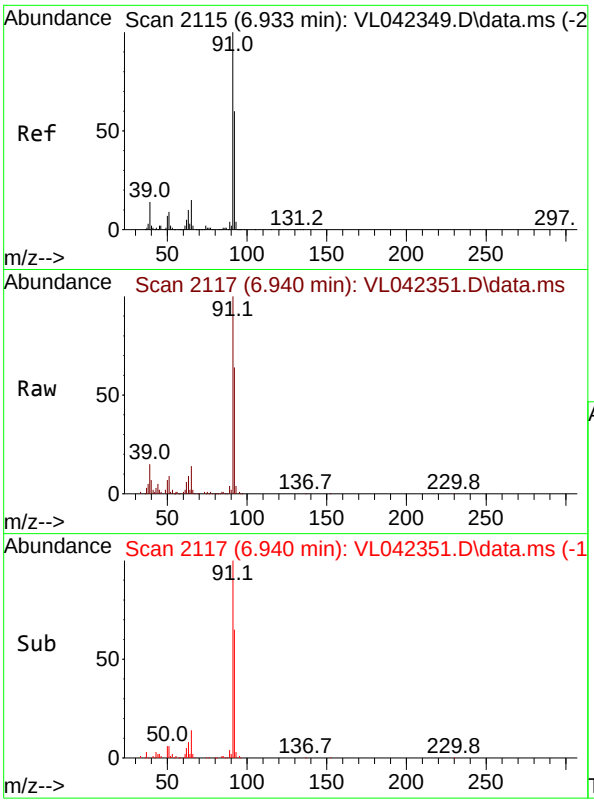


#52
Tetrachloroethene
Concen: 0.943 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:164 Resp: 14154

Ion	Ratio	Lower	Upper
164	100		
166	107.7	98.2	147.2
129	104.2	81.8	122.8
131	105.8	80.5	120.7



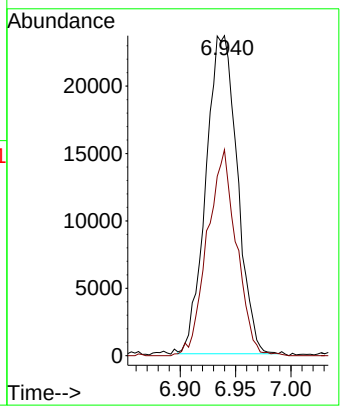


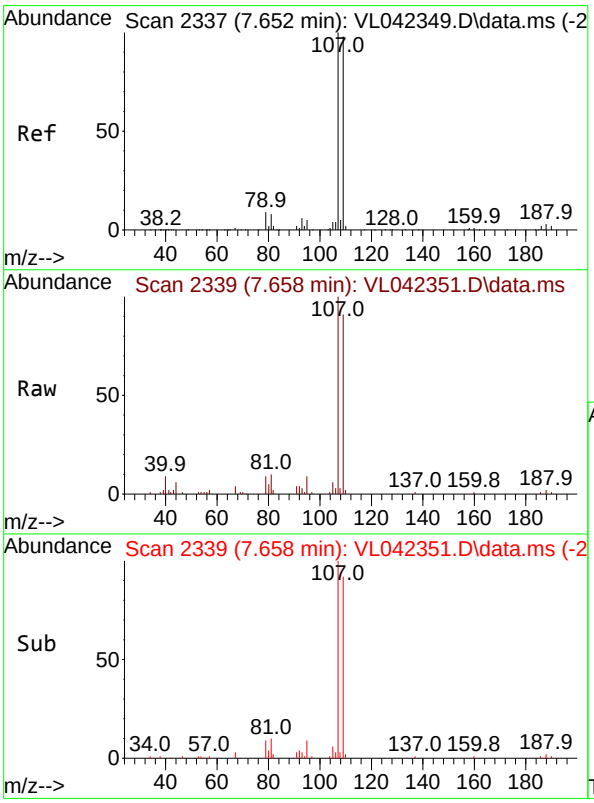
#53
Toluene
Concen: 1.001 ppbv
RT: 6.940 min Scan# 21
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 46611

Ion	Ratio	Lower	Upper
91	100		
92	60.4	48.2	72.4

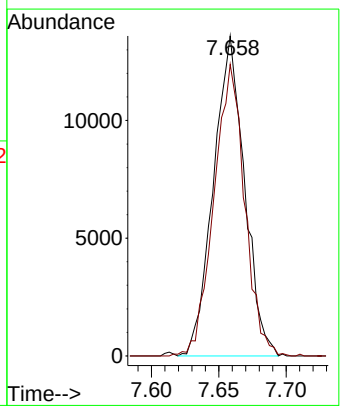


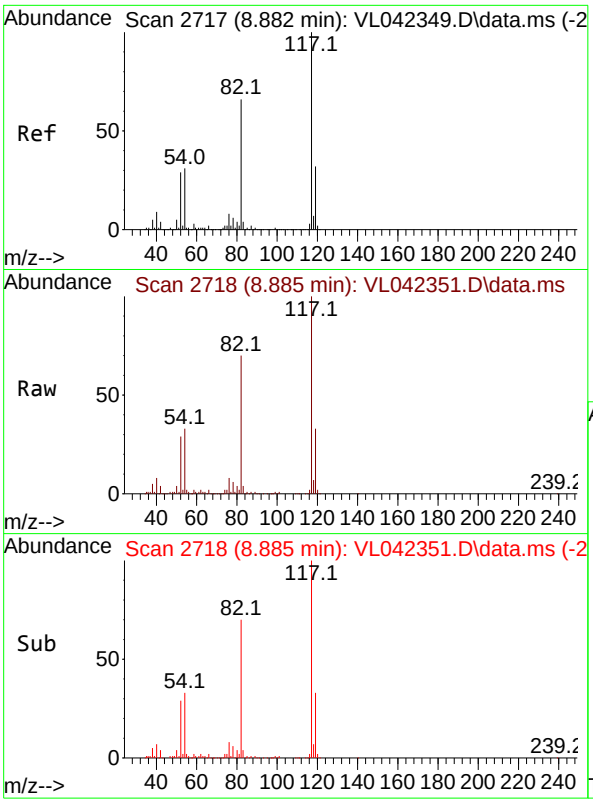


#54
1,2-Dibromoethane
Concen: 1.036 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.007 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:107 Resp: 21780

Ion	Ratio	Lower	Upper
107	100		
109	90.7	78.2	117.4



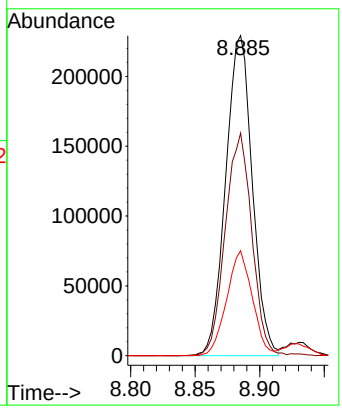


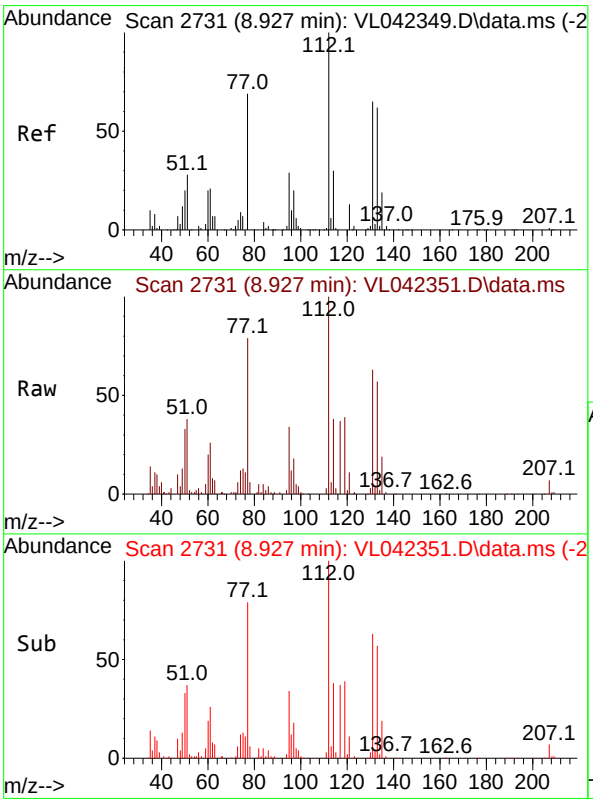
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:117 Resp: 329090

Ion	Ratio	Lower	Upper
117	100		
82	69.7	57.8	86.6
119	31.8	25.2	37.8

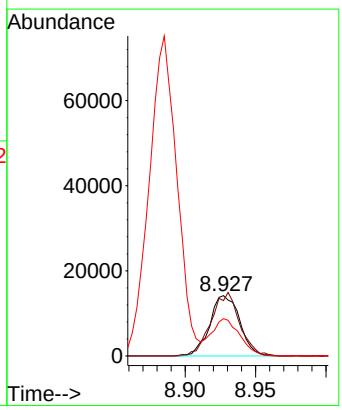


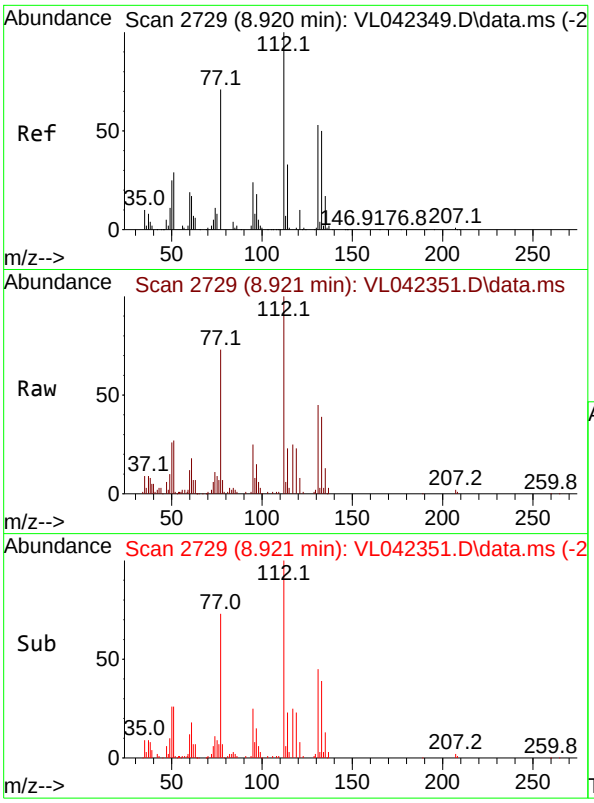


#56
1,1,1,2-Tetrachloroethane
Concen: 1.057 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:131 Resp: 21052

Ion	Ratio	Lower	Upper
131	100		
133	100.5	78.3	117.5
119	55.1	48.7	73.1



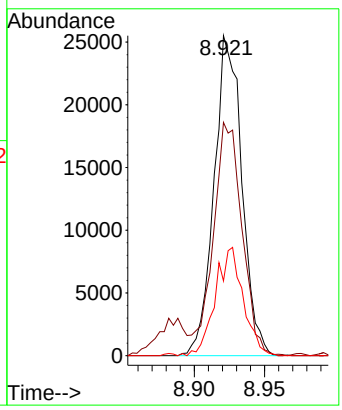


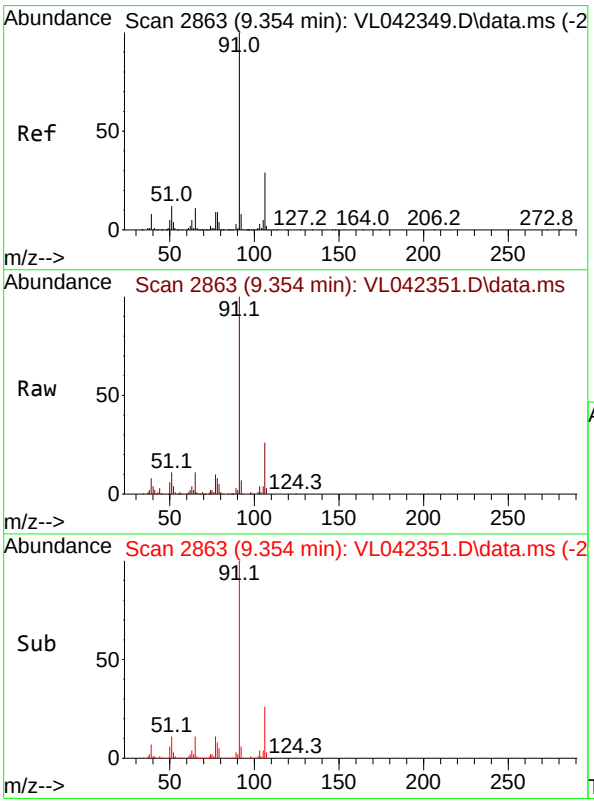
#57
Chlorobenzene
Concen: 1.026 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:112 Resp: 35113

Ion	Ratio	Lower	Upper
112	100		
77	72.4	57.8	86.6
114	23.3	29.3	35.9#

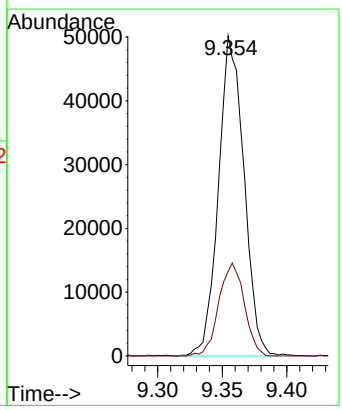


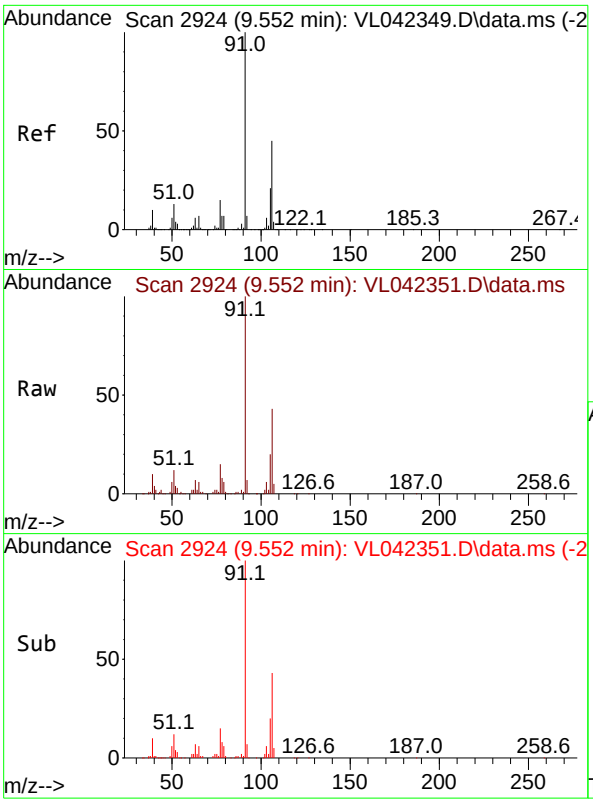


#58
Ethyl Benzene
Concen: 1.054 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 68703

Ion	Ratio	Lower	Upper
91	100		
106	26.5	23.0	34.4



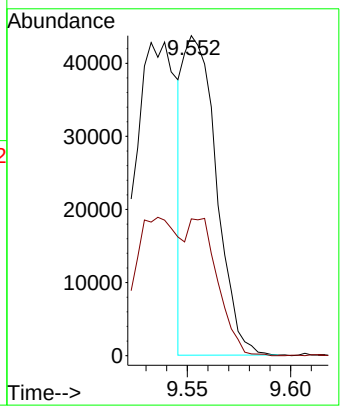


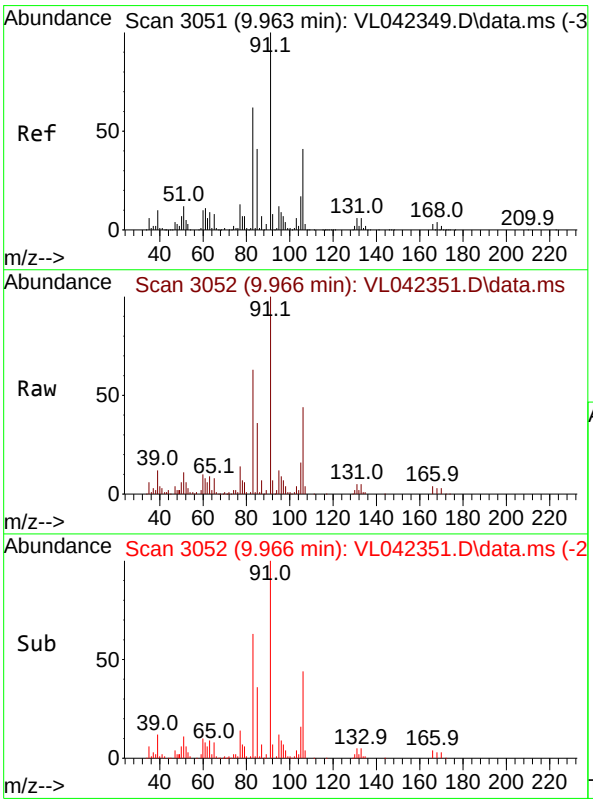
#59
m/p-Xylene
Concen: 0.926 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 48794

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

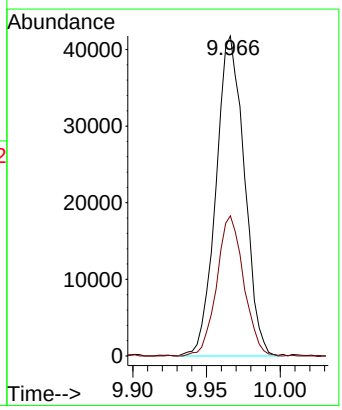


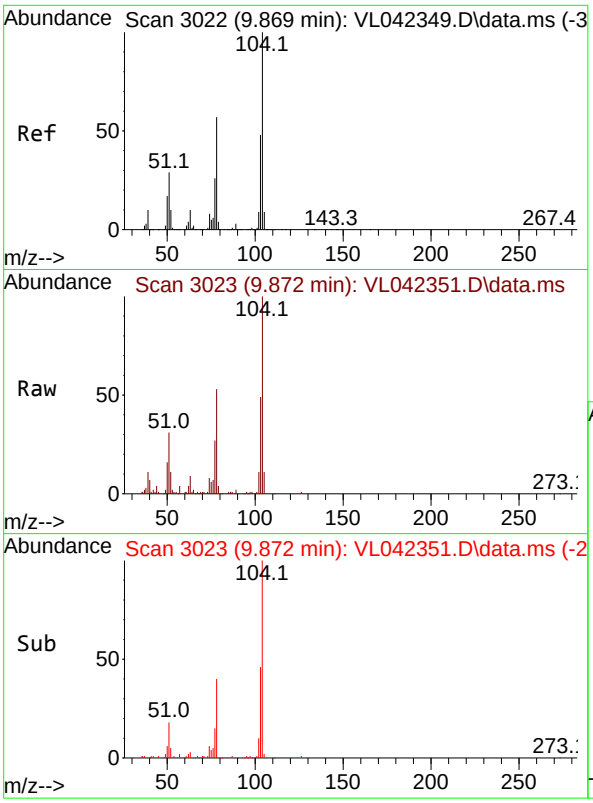


#60
o-Xylene
Concen: 1.056 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 55831

Ion	Ratio	Lower	Upper
91	100		
106	41.6	21.1	63.4



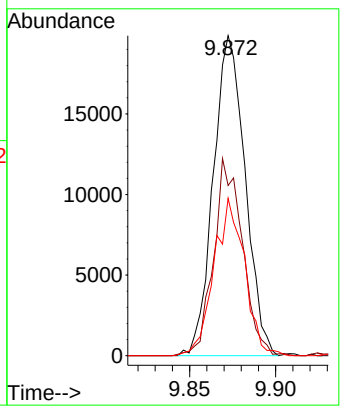


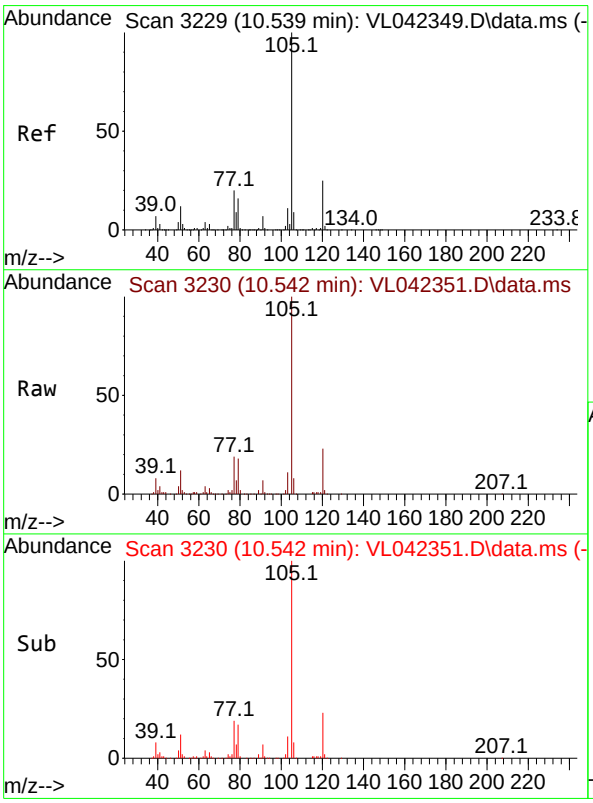
#61
Styrene
Concen: 1.012 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:104 Resp: 25544

Ion	Ratio	Lower	Upper
104	100		
78	55.7	44.6	66.8
103	47.2	37.4	56.0

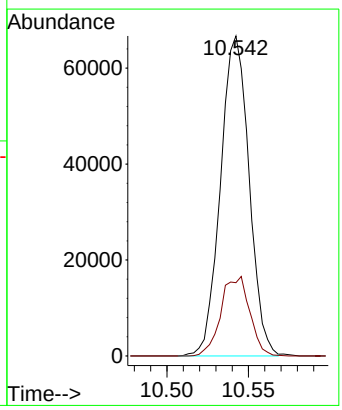


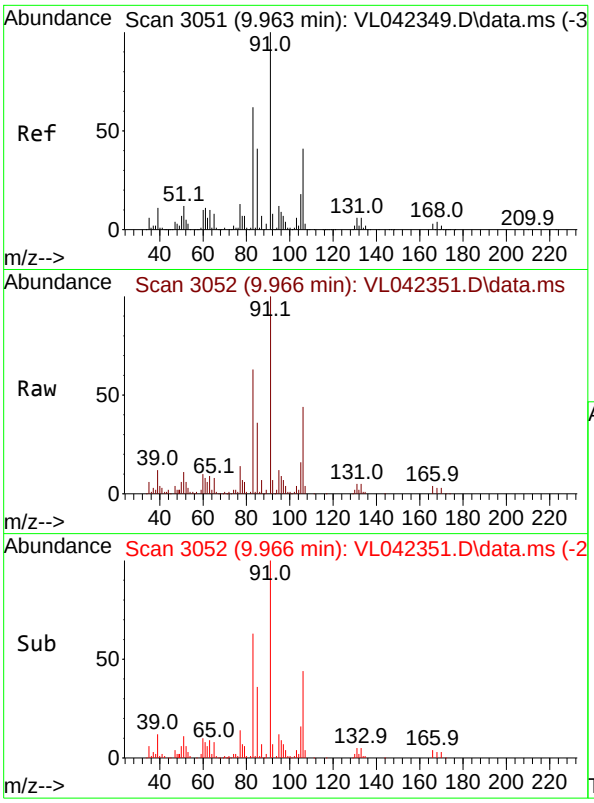


#62
Isopropylbenzene
Concen: 1.047 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 81286

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.8	29.8



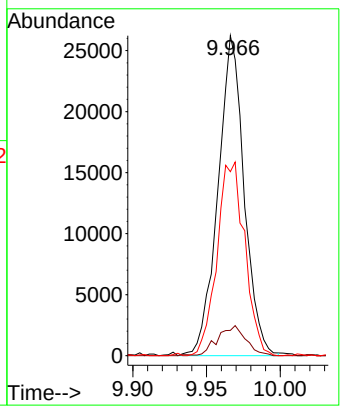


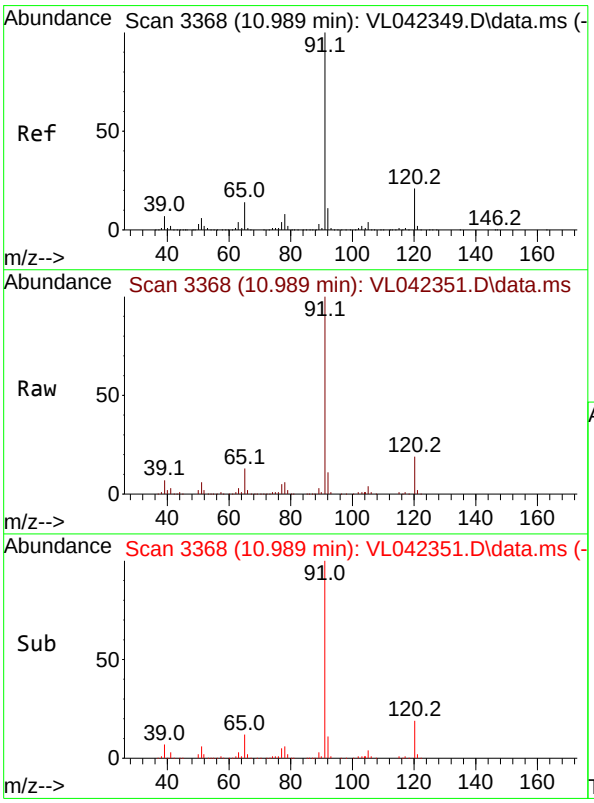
#63
1,1,2,2-Tetrachloroethane
Concen: 0.943 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 83 Resp: 32410

Ion	Ratio	Lower	Upper
83	100		
131	10.2	4.5	13.7
85	64.4	32.4	97.0

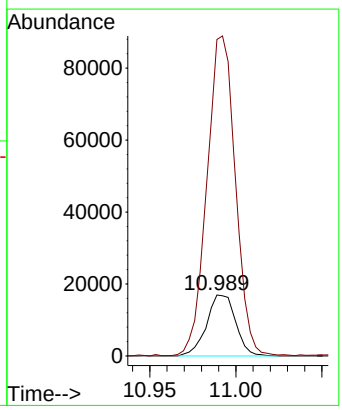


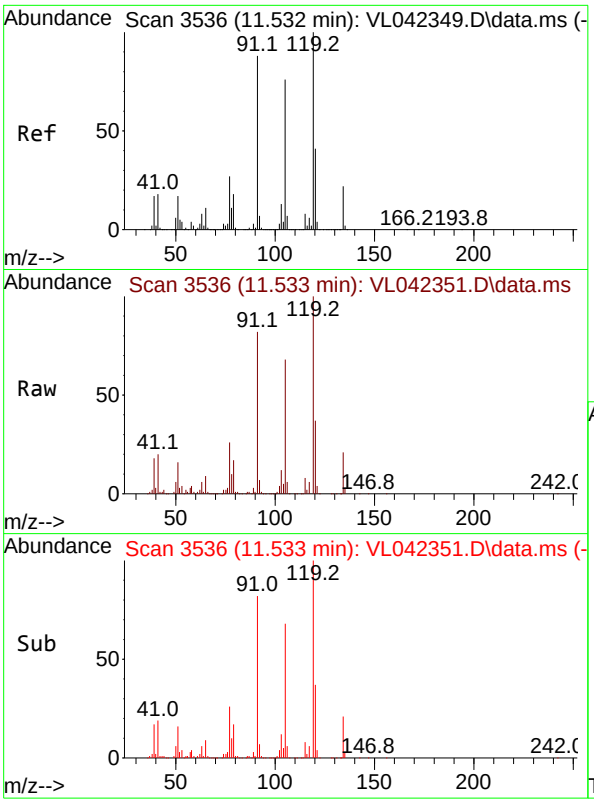


#64
n-propylbenzene
Concen: 1.019 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:120 Resp: 19898

Ion	Ratio	Lower	Upper
120	100		
91	517.6	392.4	588.6



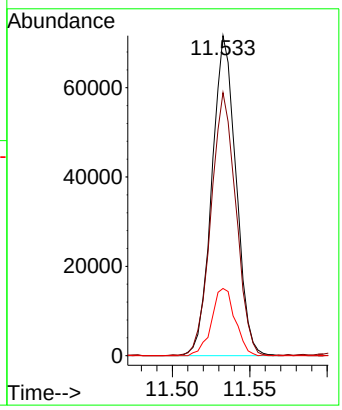


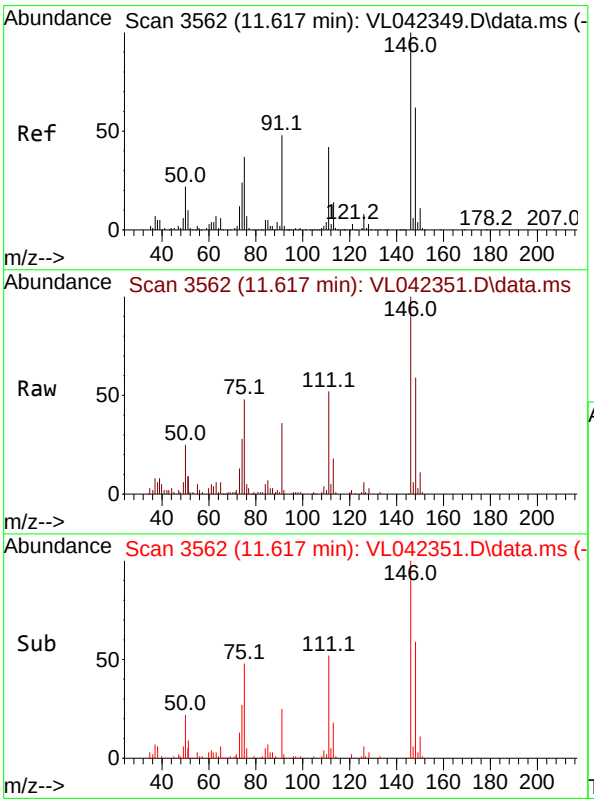
#65
tert-Butylbenzene
Concen: 1.087 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 77598

Ion	Ratio	Lower	Upper
119	100		
91	85.0	74.6	111.8
134	20.5	18.8	28.2

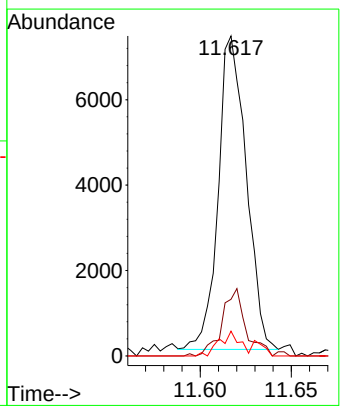


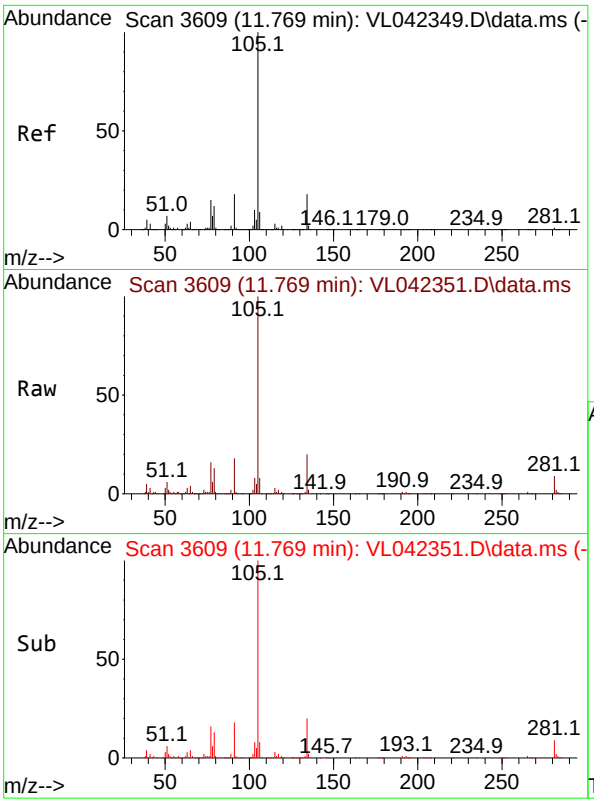


#66
Benzyl Chloride
Concen: 1.003 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 7864

Ion	Ratio	Lower	Upper
91	100		
126	18.6	11.8	17.6#
128	7.7	4.5	6.7#



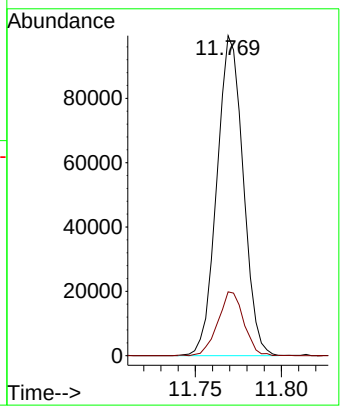


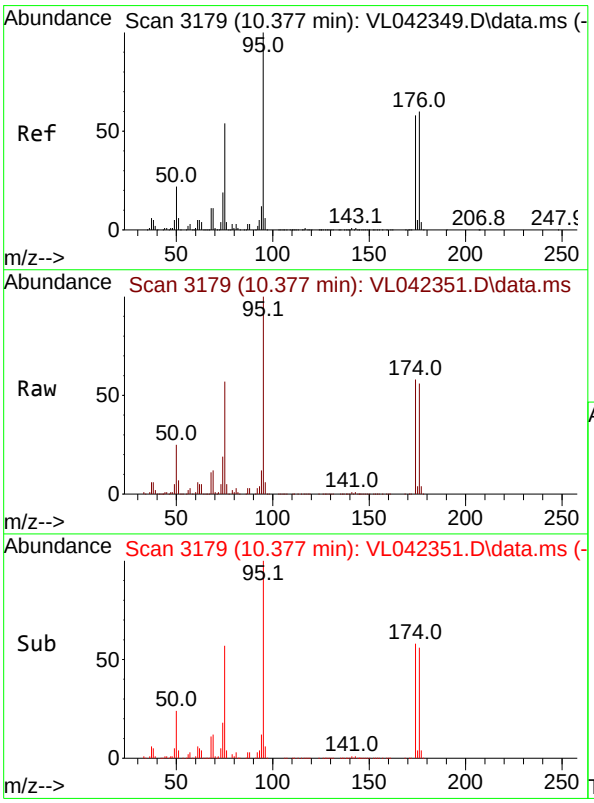
#67
sec-Butylbenzene
Concen: 1.067 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 105919

Ion	Ratio	Lower	Upper
105	100		
134	19.6	14.6	21.8

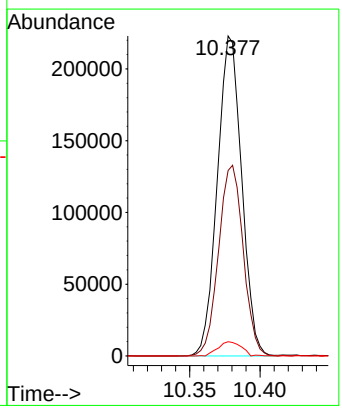


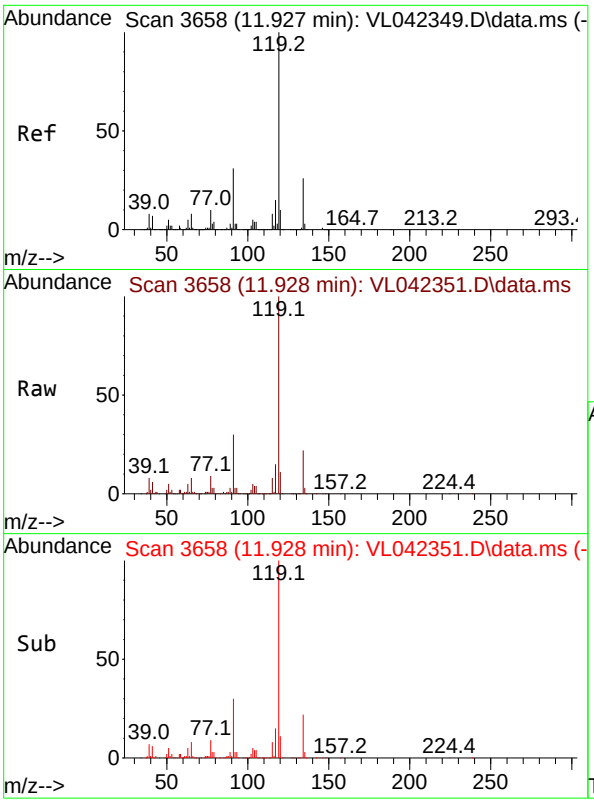


#68
1-Bromo-4-Fluorobenzene
Concen: 9.950 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 95 Resp: 269087

Ion	Ratio	Lower	Upper
95	100		
174	60.4	48.5	72.7
175	4.3	3.7	5.5



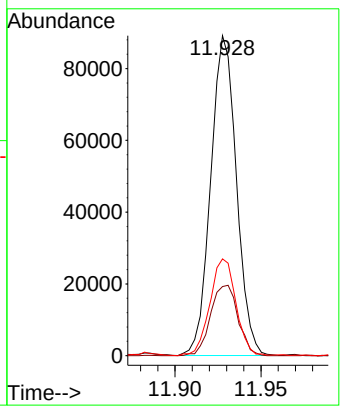


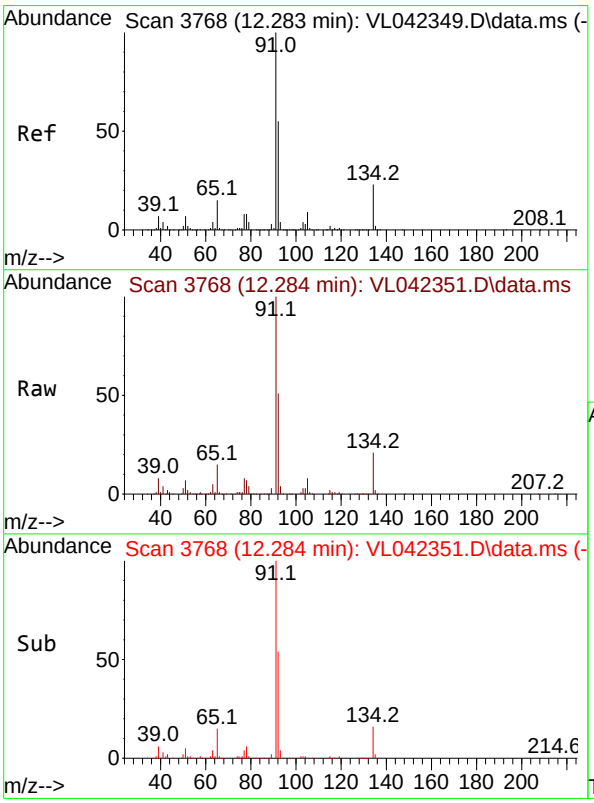
#69
p-Isopropyltoluene
Concen: 1.075 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:119 Resp: 92733

Ion	Ratio	Lower	Upper
119	100		
134	23.5	20.0	30.0
91	32.1	24.4	36.6

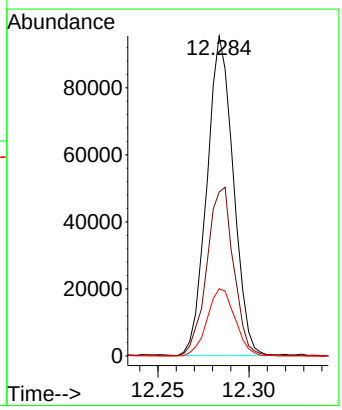


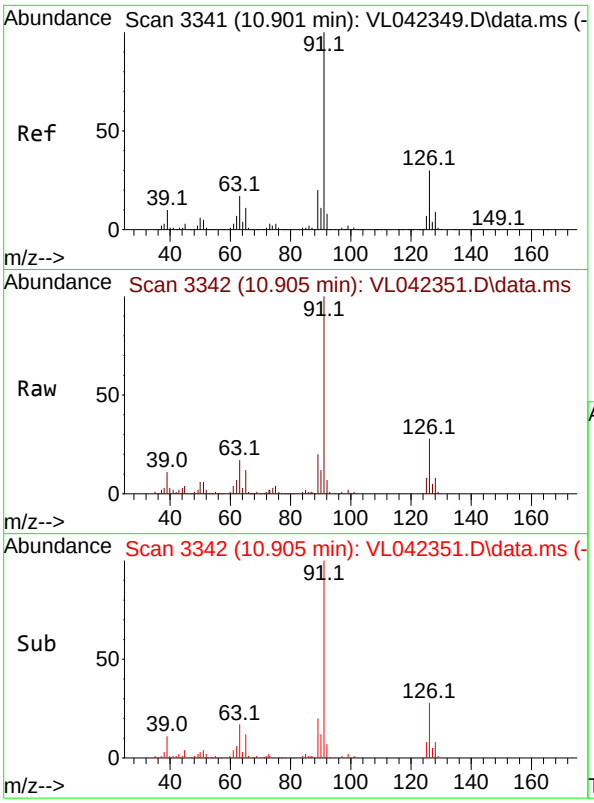


#70
n-Butylbenzene
Concen: 1.072 ppbv
RT: 12.284 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion: 91 Resp: 96306

Ion	Ratio	Lower	Upper
91	100		
92	54.2	44.2	66.4
134	22.1	18.2	27.4



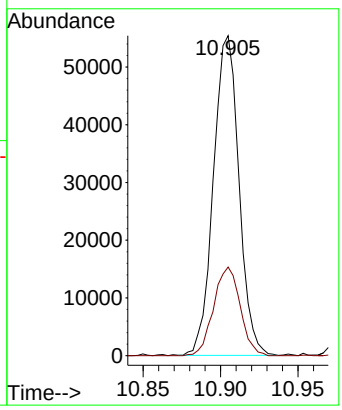


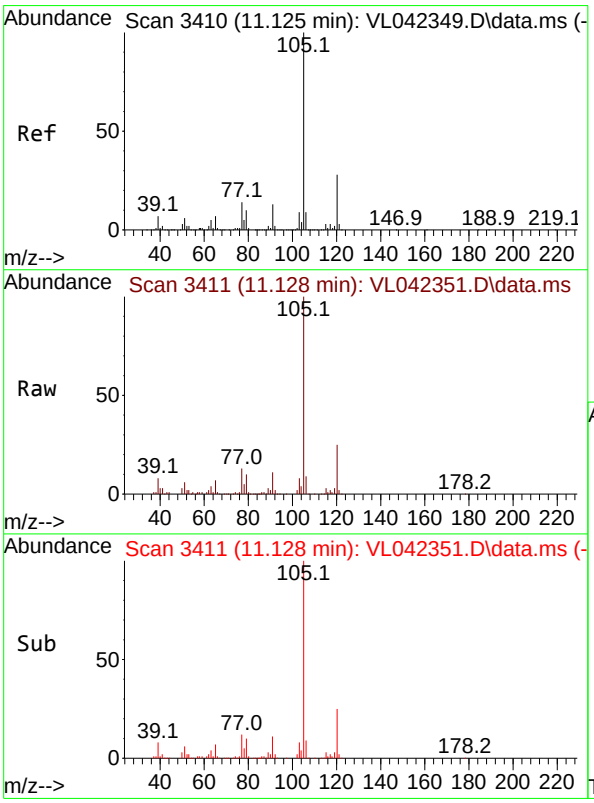
#71
2-Chlorotoluene
Concen: 1.040 ppbv
RT: 10.905 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion: 91 Resp: 63321

Ion	Ratio	Lower	Upper
91	100		
126	28.9	11.4	45.4

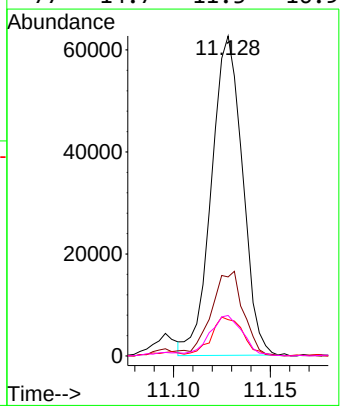


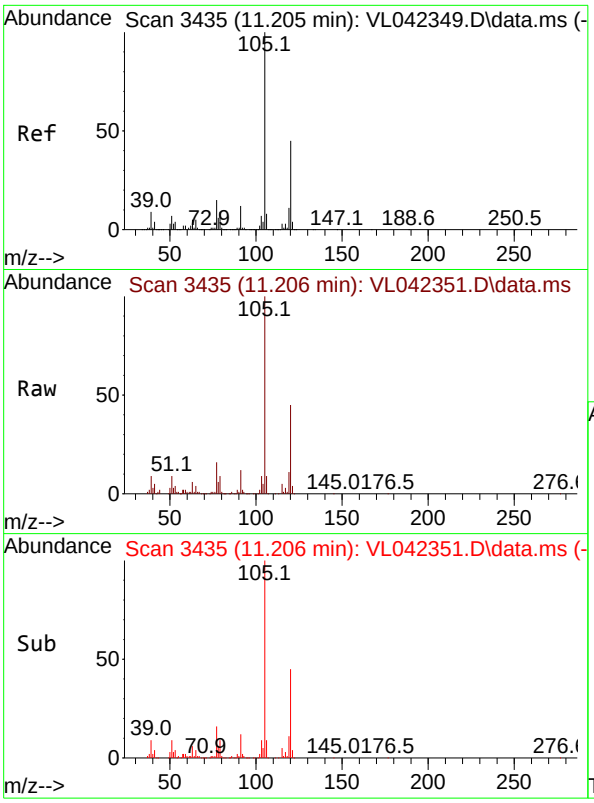


#72
4-Ethyltoluene
Concen: 1.078 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 69698

Ion	Ratio	Lower	Upper
105	100		
120	29.2	23.2	34.8
91	13.5	10.4	15.6
77	14.7	11.3	16.9



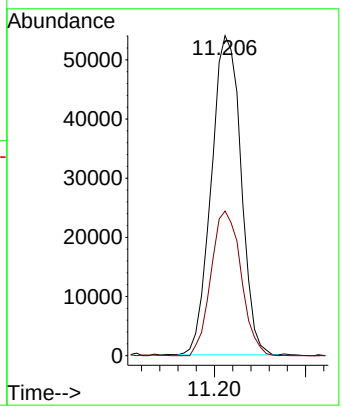


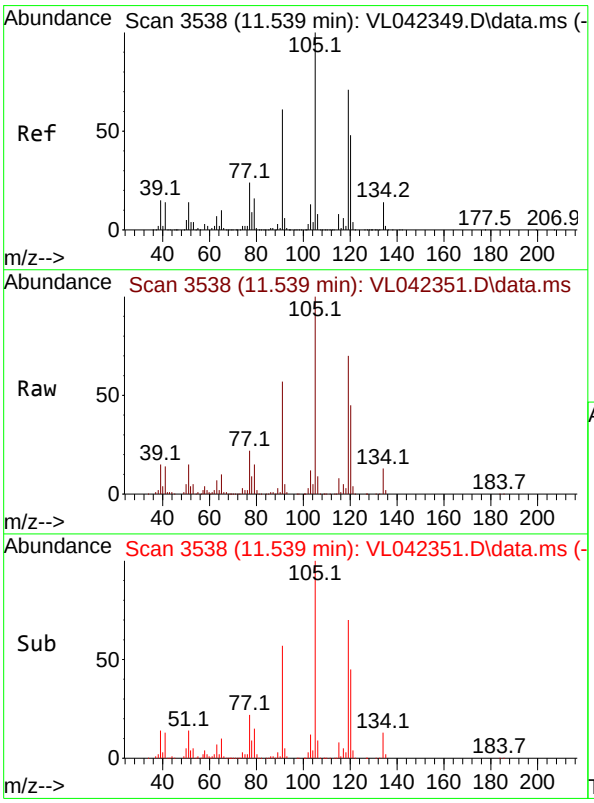
#73
1,3,5-Trimethylbenzene
Concen: 1.067 ppbv
RT: 11.206 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:105 Resp: 60927

Ion	Ratio	Lower	Upper
105	100		
120	45.3	35.6	53.4

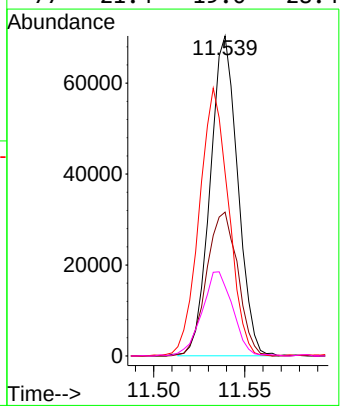


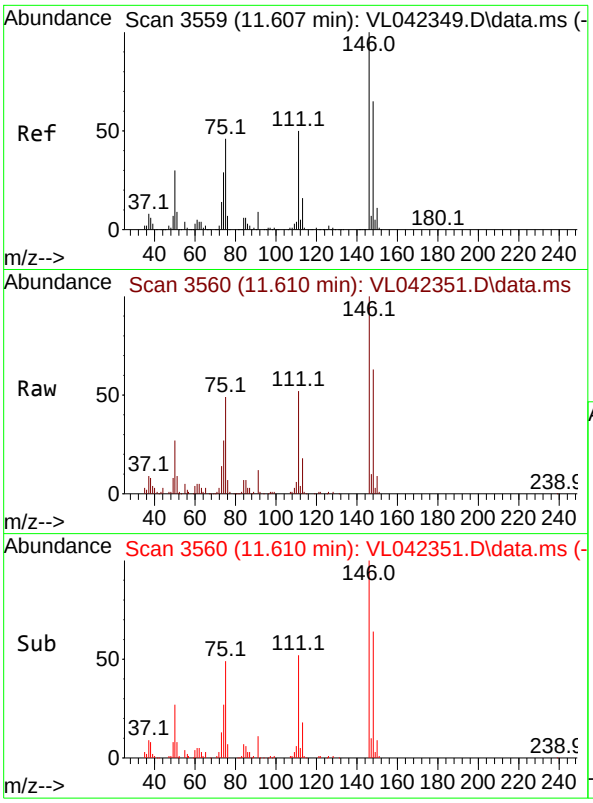


#74
1,2,4-Trimethylbenzene
Concen: 1.108 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:105 Resp: 73888

Ion	Ratio	Lower	Upper
105	100		
120	45.0	38.1	57.1
91	57.0	48.8	73.2
77	21.4	19.0	28.4



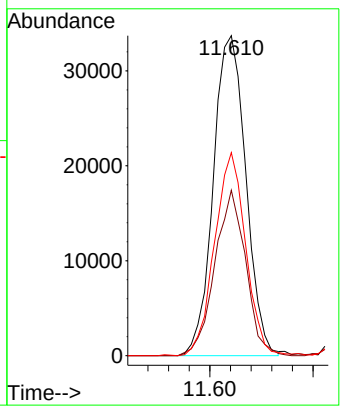


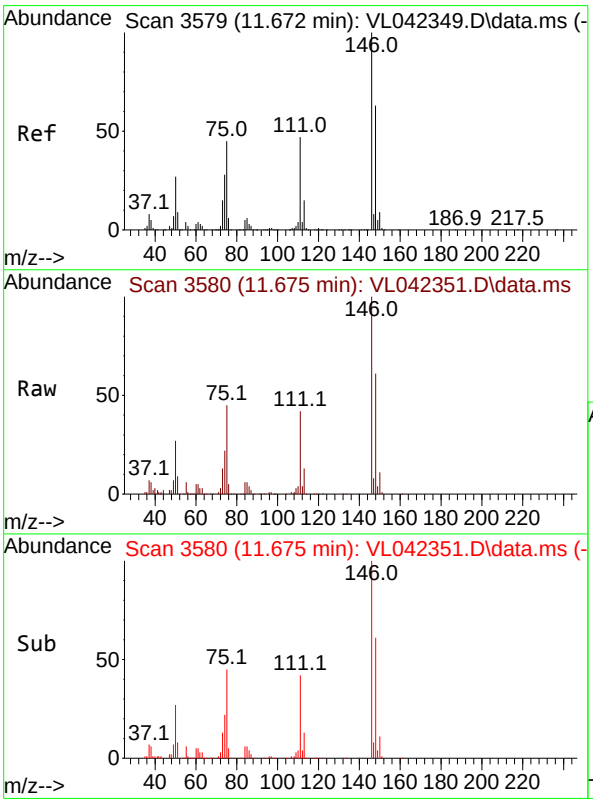
#75
1,3-Dichlorobenzene
Concen: 1.064 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 36877

Ion	Ratio	Lower	Upper
146	100		
111	48.9	24.3	72.8
148	60.8	31.6	94.8

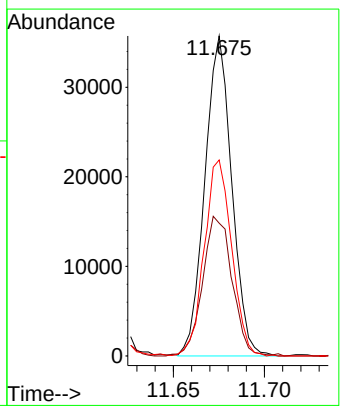


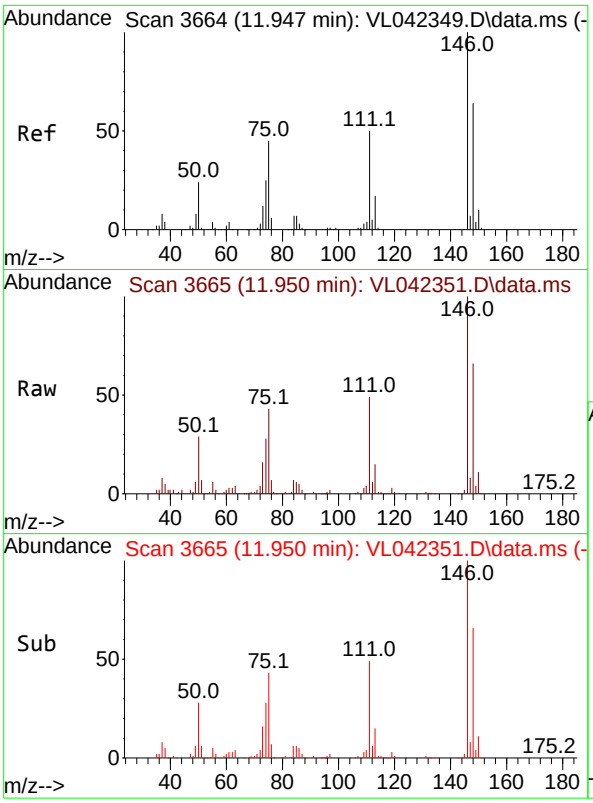


#76
1,4-Dichlorobenzene
Concen: 1.053 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:146 Resp: 36692

Ion	Ratio	Lower	Upper
146	100		
111	47.7	24.2	72.6
148	62.3	32.1	96.5



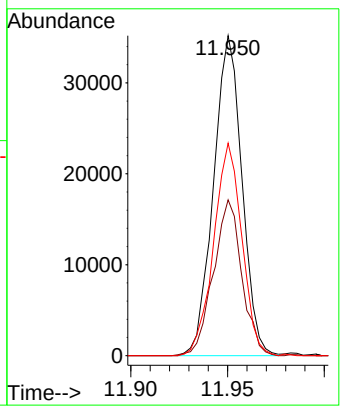


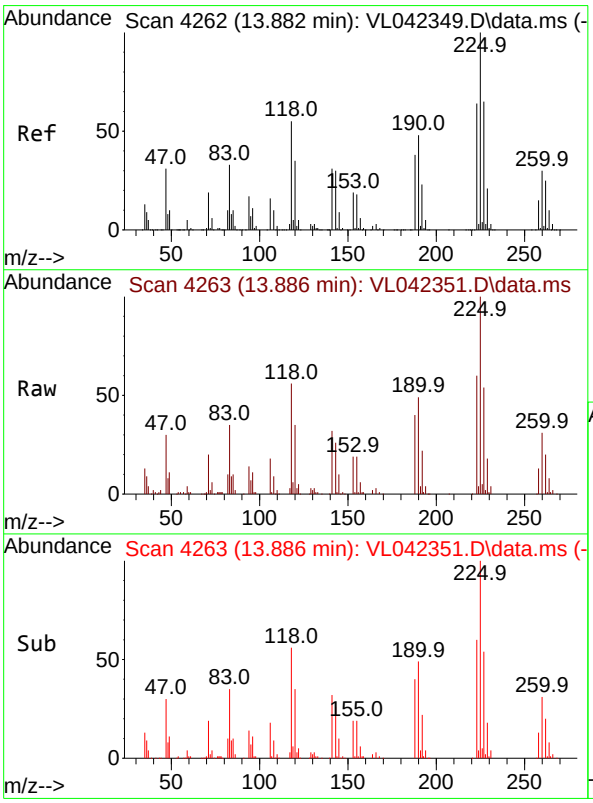
#77
1,2-Dichlorobenzene
Concen: 1.068 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:146 Resp: 35977

Ion	Ratio	Lower	Upper
146	100		
111	48.7	25.3	75.9
148	65.9	31.5	94.5

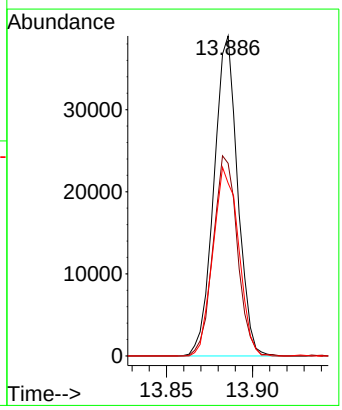


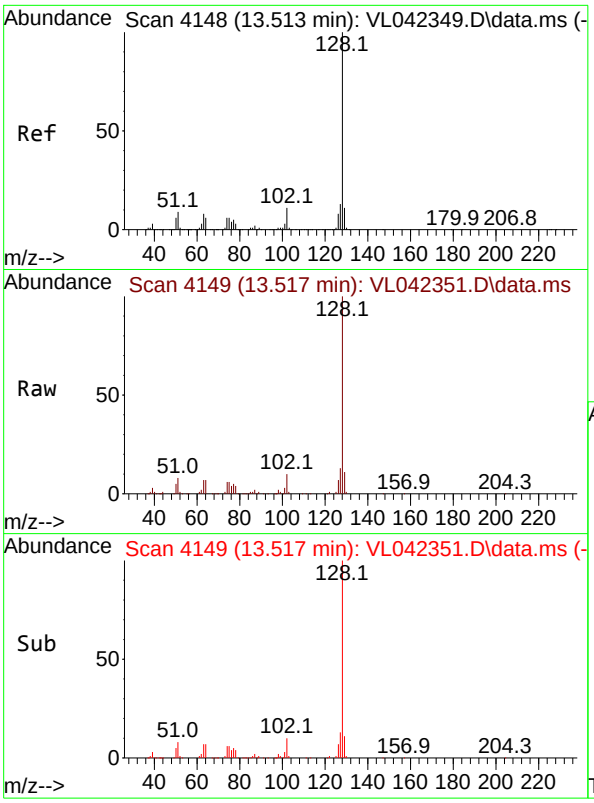


#78
Hexachloro-1,3-Butadiene
Concen: 1.098 ppbv
RT: 13.886 min Scan# 4263
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:225 Resp: 37377

Ion	Ratio	Lower	Upper
225	100		
223	64.1	50.3	75.5
227	63.6	51.5	77.3



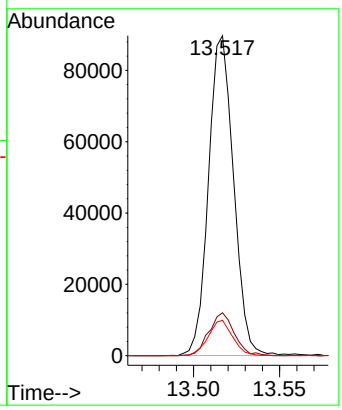


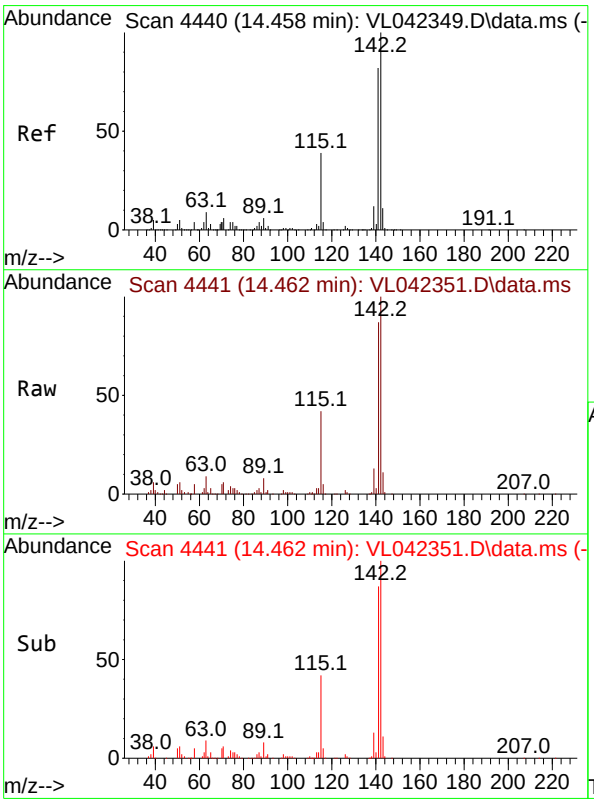
#79
Naphthalene
Concen: 1.138 ppbv
RT: 13.517 min Scan# 4
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:128 Resp: 90710

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	15.8
129	11.1	8.6	12.8

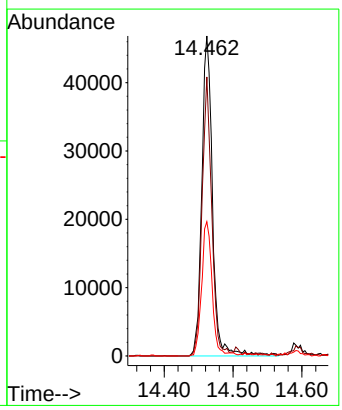


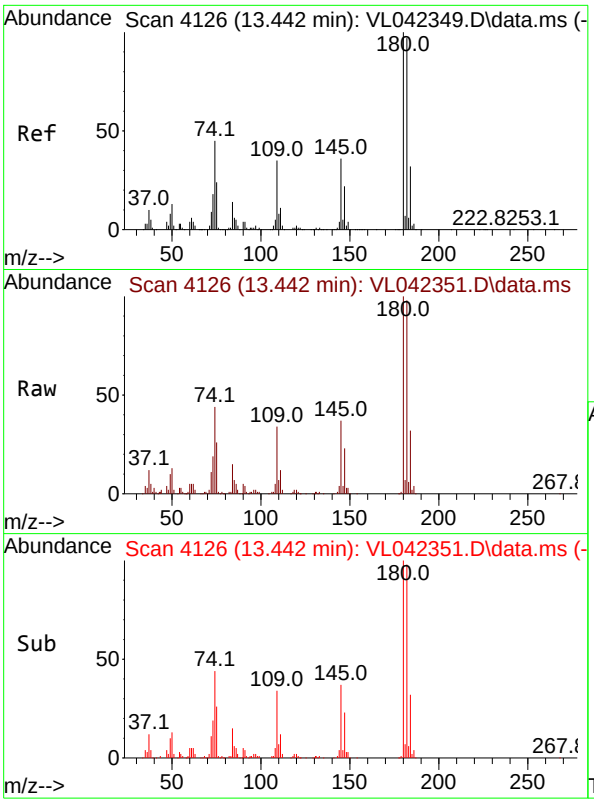


#80
Naphthalene,2-methyl-
Concen: 1.111 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.004 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Tgt Ion:142 Resp: 50487

Ion	Ratio	Lower	Upper
142	100		
141	80.9	66.8	100.2
115	41.2	33.4	50.2



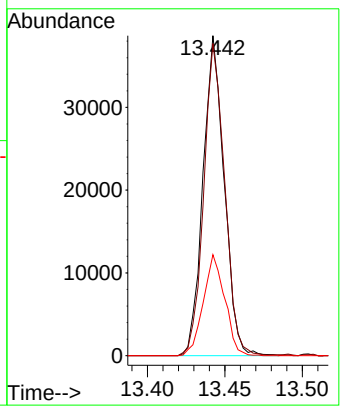


#81
1,2,4-Trichlorobenzene
Concen: 1.074 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042351.D
Acq: 17 Apr 2025 10:48

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC001

Tgt Ion:180 Resp: 36764

Ion	Ratio	Lower	Upper
180	100		
182	97.0	76.8	115.2
184	32.0	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	120542	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	353137	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	321644	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	265161	10.032	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	11036	0.518	ppbv		92
3) Chlorodifluoromethane	1.476	51	11304	0.557	ppbv	#	84
4) Chloromethane	1.531	50	4534	0.538	ppbv		97
5) Vinyl Chloride	1.580	62	4406	0.480	ppbv		97
6) Bromomethane	1.667	94	2394	0.602	ppbv		95
7) Chloroethane	1.703	64	1824	0.550	ppbv	#	87
8) Dichlorotetrafluoroethane	1.554	85	9381	0.513	ppbv		99
9) Propene	1.483	41	5303	0.574	ppbv		93
10) Heptane	4.978	43	5438	0.219	ppbv	#	1
11) Trichlorofluoromethane	1.877	101	10150	0.501	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.136	101	8371	0.506	ppbv		93
13) Ethanol	1.719	45	715	0.947	ppbv	#	24
14) Bromoethene	1.780	108	3238	0.519	ppbv	#	93
15) Acetone	1.835	43	11859	0.601	ppbv	#	74
16) 1,3-Butadiene	1.609	39	6120	0.660	ppbv	#	82
17) tert-Butyl alcohol	2.043	59	13640	0.558	ppbv	#	85
18) 1,1-Dichloroethene	2.033	96	4430	0.556	ppbv	#	87
19) Isopropyl Alcohol	1.884	45	6327	0.577	ppbv	#	39
20) Methylene Chloride	2.059	84	5273	0.682	ppbv		93
21) Allyl Chloride	2.094	41	7692	0.565	ppbv	#	81
22) trans-1,2-Dichloroethene	2.340	96	4908	0.557	ppbv		92
23) Vinyl Acetate	2.460	43	3953	0.495	ppbv	#	57
24) 1,1-Dichloroethane	2.408	63	8753	0.523	ppbv	#	94
25) Ethyl Acetate	2.835	43	26686	0.548	ppbv	#	93
26) Hexane	2.823	57	11448	0.581	ppbv		91
27) Carbon Disulfide	2.149	76	11472	0.544	ppbv	#	1
28) Methyl tert-Butyl Ether	2.441	73	6833	0.530	ppbv	#	32
29) Chloroform	2.848	83	14815	0.532	ppbv		93
30) Cyclohexane	3.852	84	8572	0.541	ppbv		94
31) cis-1,2-Dichloroethene	2.722	61	9571	0.511	ppbv		96
32) 1,1,1-Trichloroethane	3.370	97	15413	0.516	ppbv		97
34) 2-Butanone	2.560	43	15640	0.560	ppbv		97
35) Carbon Tetrachloride	3.761	117	14683	0.459	ppbv		87
36) Benzene	3.651	78	20233	0.531	ppbv		97
37) 1,2-Dichloroethane	3.217	62	12194	0.533	ppbv	#	95
38) Trichloroethene	4.551	130	7819	0.468	ppbv	#	78
39) 1,2-Dichloropropane	4.315	63	3195	0.225	ppbv		89
40) 1,4-Dioxane	4.599	88	2550	0.331	ppbv	#	1
41) Tetrahydrofuran	3.062	42	8773	0.544	ppbv		95
42) Bromodichloromethane	4.489	83	16642	0.523	ppbv	#	91
43) Methyl Methacrylate	4.871	69	1556	0.091	ppbv	#	1
44) 2,2,4-Trimethylpentane	4.635	57	34170	0.519	ppbv		91
45) t-1,3-Dichloropropene	6.393	75	1332	0.076	ppbv		92

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.596	75	7634	0.356	ppbv	#	91
47) 1,1,2-Trichloroethane	6.590	97	2374	0.164	ppbv		94
48) Dibromochloromethane	7.386	129	13122	0.514	ppbv		97
49) Bromoform	9.477	173	10988	0.492	ppbv		99
50) 4-Methyl-2-Pentanone	5.761	43	14380	0.309	ppbv	#	39
51) 2-Hexanone	7.441	43	23684	0.564	ppbv		98
52) Tetrachloroethene	8.221	164	7412	0.503	ppbv	#	88
53) Toluene	6.927	91	24200	0.529	ppbv		97
54) 1,2-Dibromoethane	7.645	107	10282	0.499	ppbv		84
56) 1,1,1,2-Tetrachloroethane	8.930	131	9987	0.513	ppbv	#	1
57) Chlorobenzene	8.924	112	6884	0.206	ppbv		90
58) Ethyl Benzene	9.351	91	32624	0.512	ppbv		97
59) m/p-Xylene	9.548	91	22598	0.439	ppbv	#	32
60) o-Xylene	9.963	91	27983	0.541	ppbv		99
61) Styrene	9.869	104	12736	0.516	ppbv		96
62) Isopropylbenzene	10.539	105	40481	0.533	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.959	83	15920	0.474	ppbv		99
64) n-propylbenzene	10.985	120	10369	0.544	ppbv		97
65) tert-Butylbenzene	11.529	119	37294	0.535	ppbv		93
66) Benzyl Chloride	11.613	91	3878	0.506	ppbv	#	91
67) sec-Butylbenzene	11.765	105	52139	0.537	ppbv		97
69) p-Isopropyltoluene	11.924	119	45574	0.541	ppbv		98
70) n-Butylbenzene	12.280	91	48004	0.547	ppbv		99
71) 2-Chlorotoluene	10.898	91	31709	0.533	ppbv		100
72) 4-Ethyltoluene	11.125	105	33048	0.523	ppbv	#	95
73) 1,3,5-Trimethylbenzene	11.202	105	30464	0.546	ppbv		99
74) 1,2,4-Trimethylbenzene	11.536	105	37765	0.579	ppbv	#	90
75) 1,3-Dichlorobenzene	11.607	146	18003	0.531	ppbv		99
76) 1,4-Dichlorobenzene	11.668	146	18300	0.537	ppbv		96
77) 1,2-Dichlorobenzene	11.947	146	17446	0.530	ppbv		95
78) Hexachloro-1,3-Butadiene	13.879	225	18705	0.562	ppbv		98
79) Naphthalene	13.513	128	38521	0.494	ppbv	#	92
80) Naphthalene,2-methyl-	14.458	142	21076	0.475	ppbv		96
81) 1,2,4-Trichlorobenzene	13.442	180	16504	0.493	ppbv		97

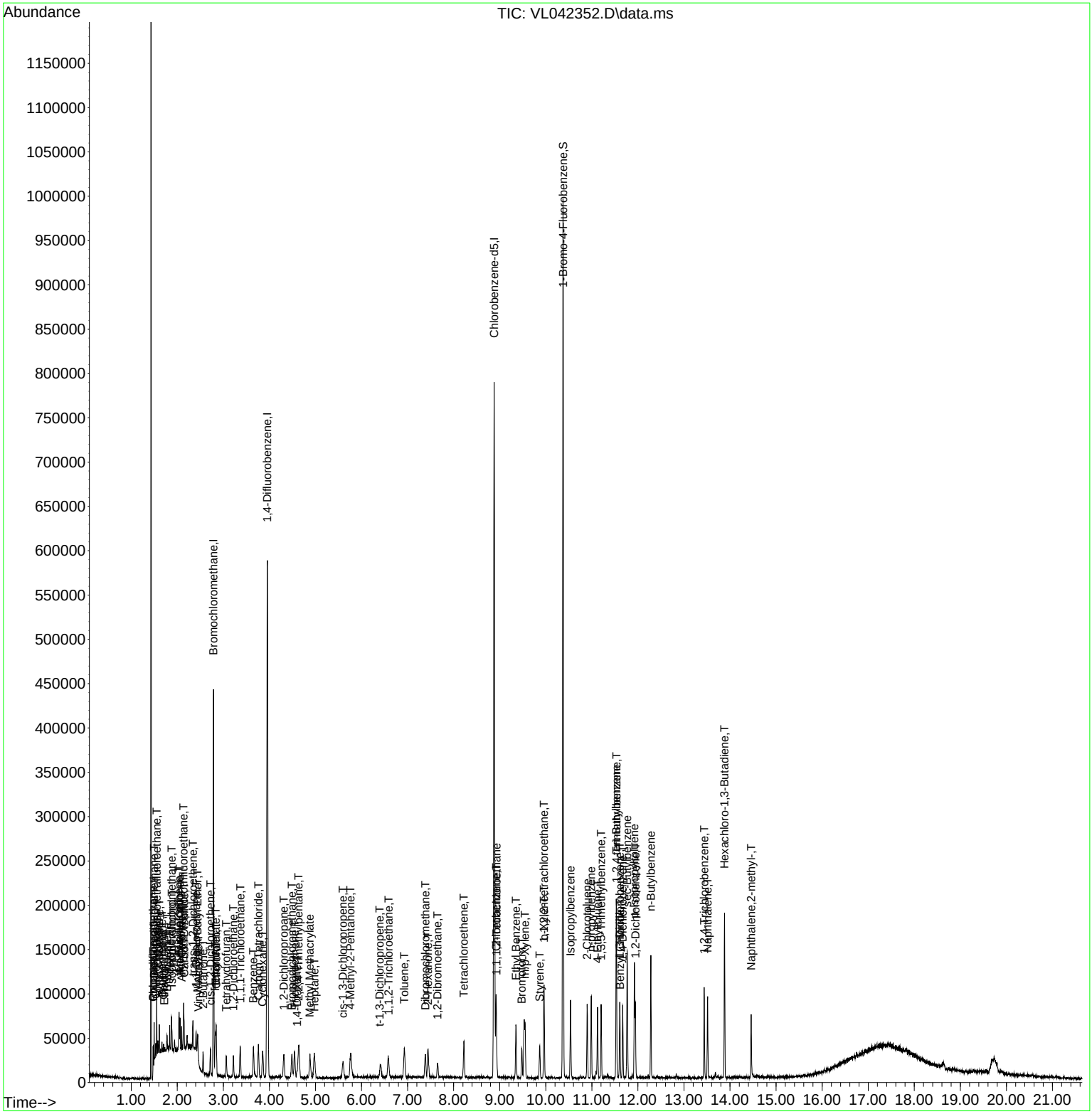
(#) = qualifier out of range (m) = manual integration (+) = signals summed

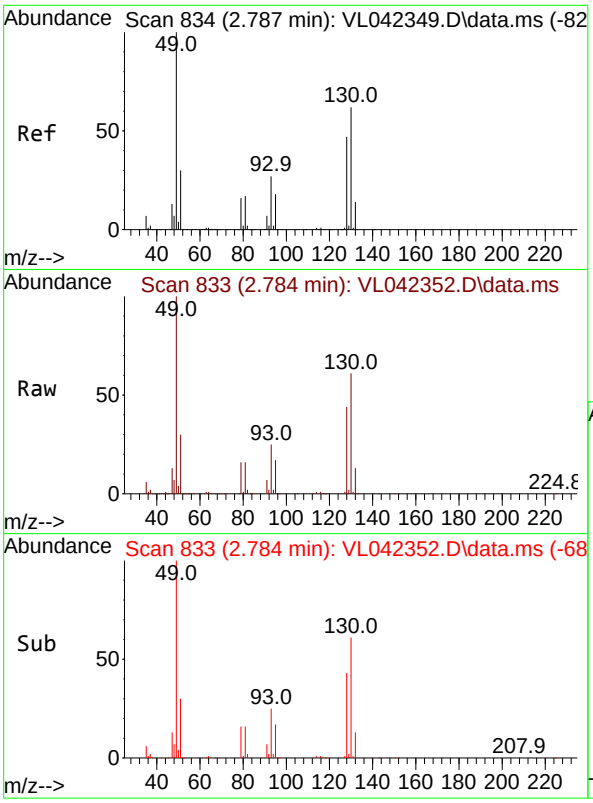
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042352.D
Acq On : 17 Apr 2025 11:19
Operator : SY/MD
Sample : VSTDICC0.5
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Quant Time: Apr 18 01:28:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



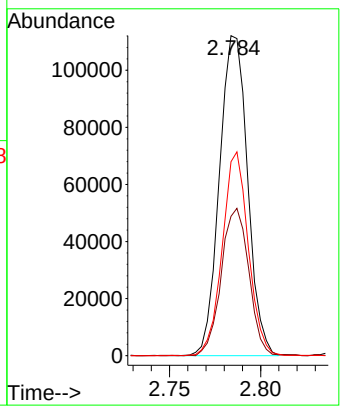


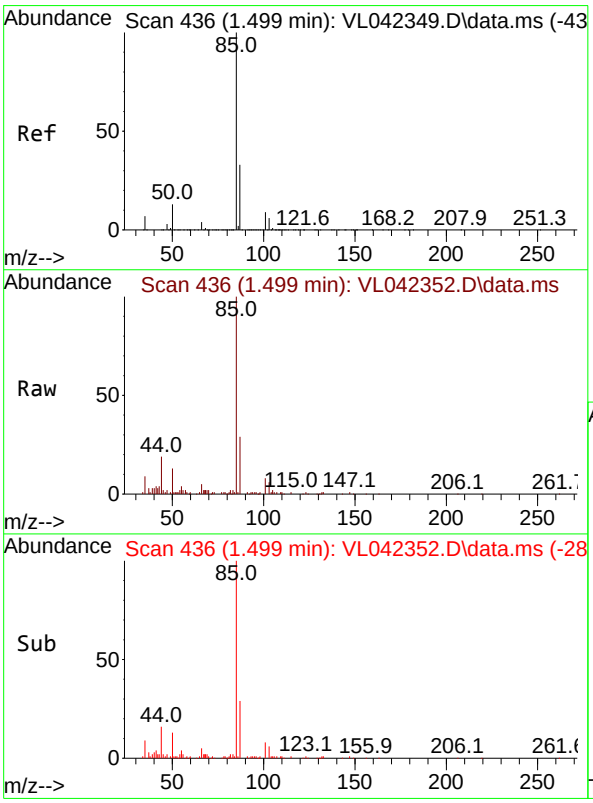
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 49 Resp: 120542

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	59.0	29.3	88.0

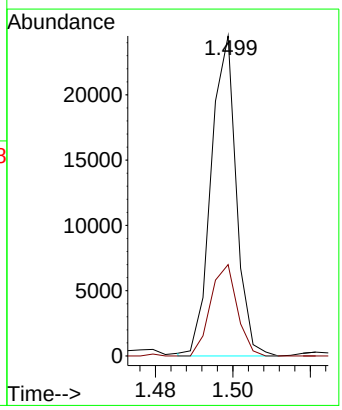


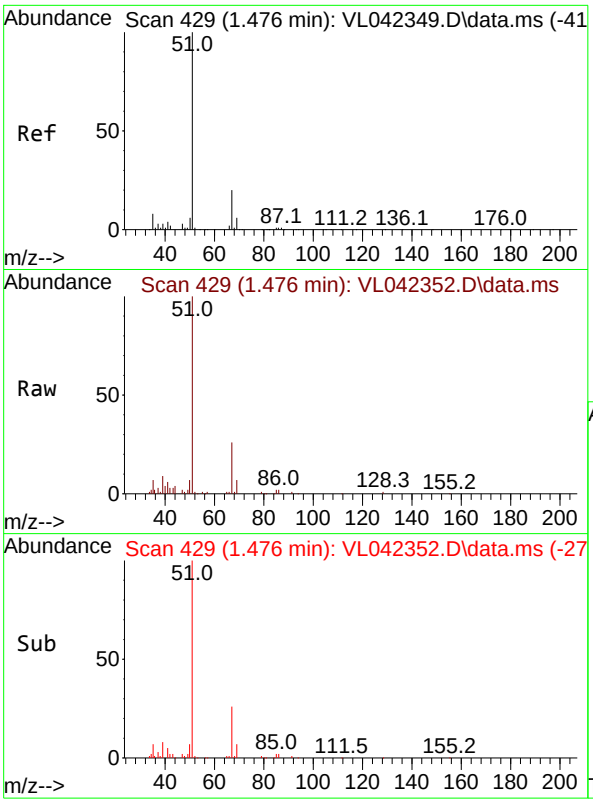


#2
Dichlorodifluoromethane
Concen: 0.518 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 85 Resp: 11036

Ion	Ratio	Lower	Upper
85	100		
87	28.6	26.6	39.8



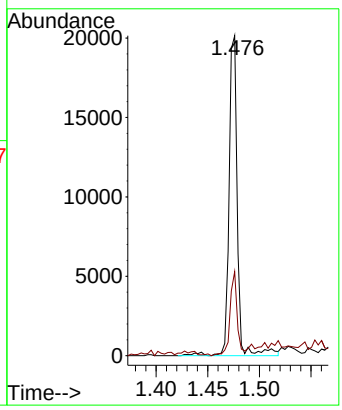


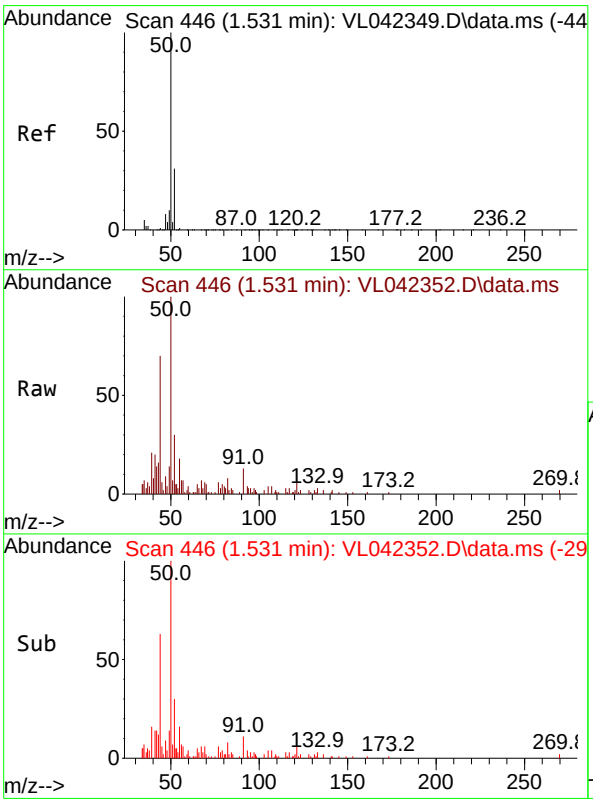
#3
Chlorodifluoromethane
Concen: 0.557 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 51 Resp: 11304

Ion	Ratio	Lower	Upper
51	100		
67	27.8	16.2	24.4#

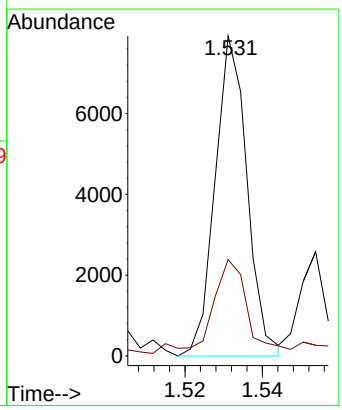


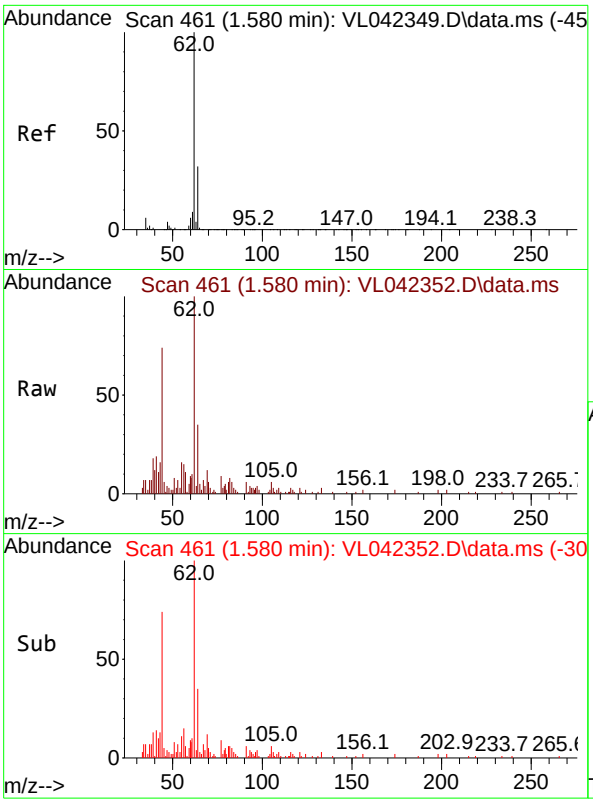


#4
Chloromethane
Concen: 0.538 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 50 Resp: 4534

Ion	Ratio	Lower	Upper
50	100		
52	32.8	24.7	37.1



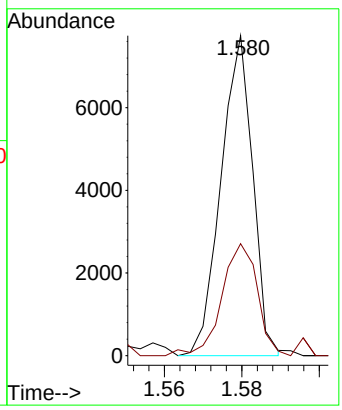


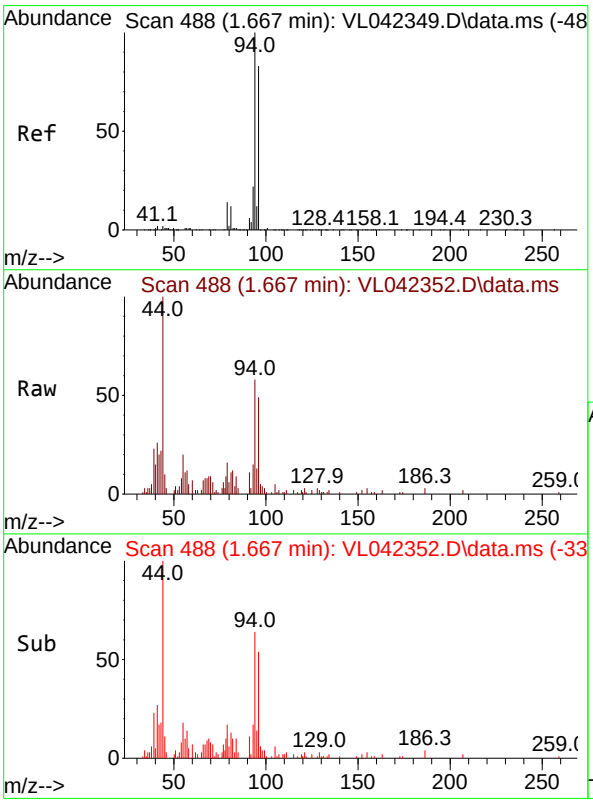
#5
Vinyl Chloride
Concen: 0.480 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 4406

Ion	Ratio	Lower	Upper
62	100		
64	33.5	25.4	38.0

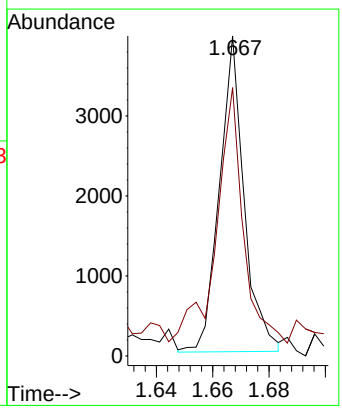


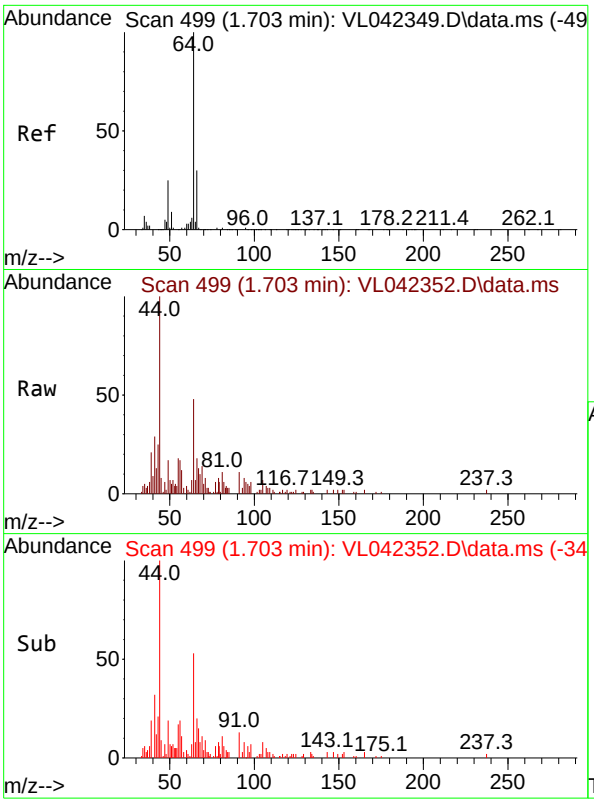


#6
Bromomethane
Concen: 0.602 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 94 Resp: 2394

Ion	Ratio	Lower	Upper
94	100		
96	78.1	66.2	99.2



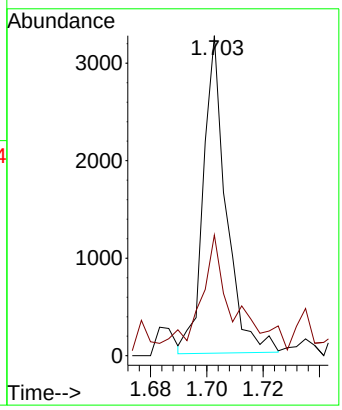


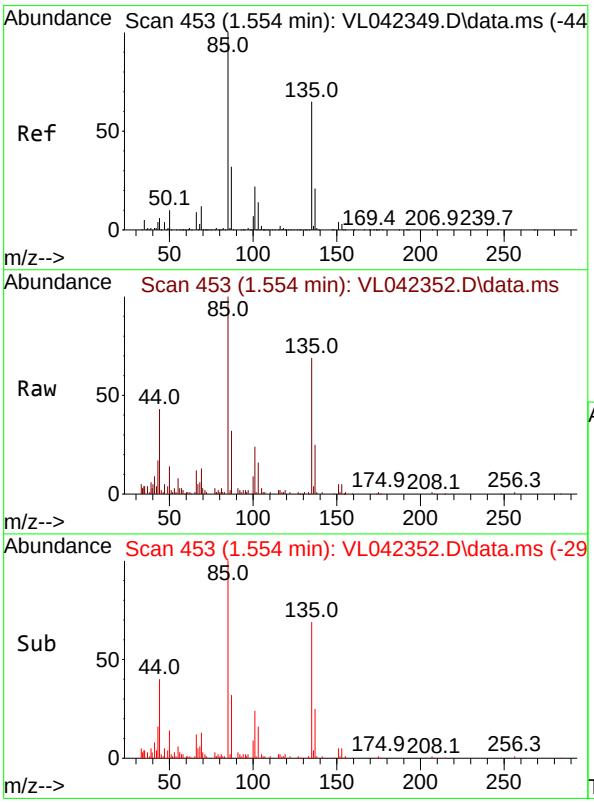
#7
Chloroethane
Concen: 0.550 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 64 Resp: 1824

Ion	Ratio	Lower	Upper
64	100		
66	37.7	24.6	37.0#

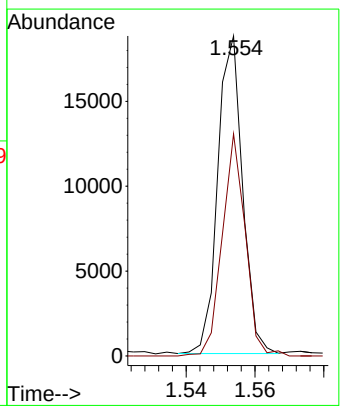


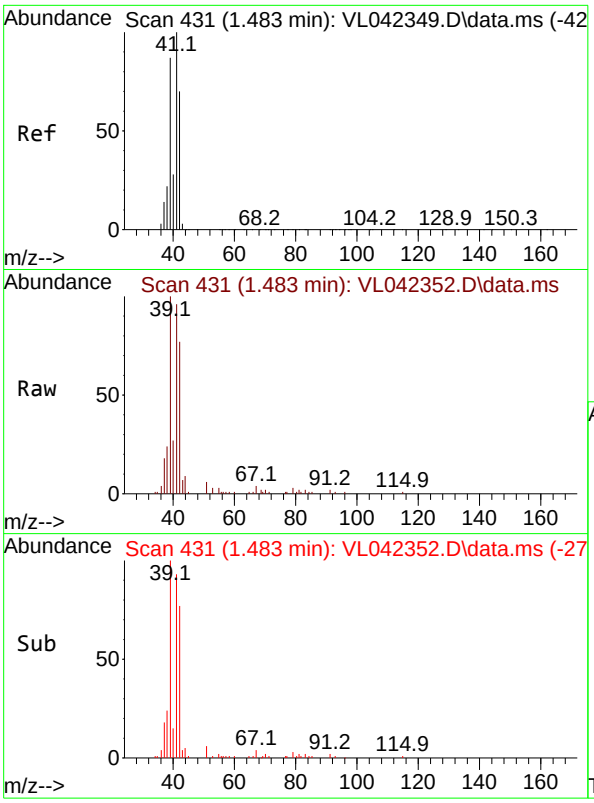


#8
Dichlorotetrafluoroethane
Concen: 0.513 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 85 Resp: 9381

Ion	Ratio	Lower	Upper
85	100		
135	66.2	52.2	78.2



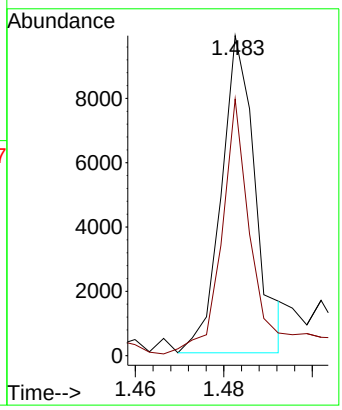


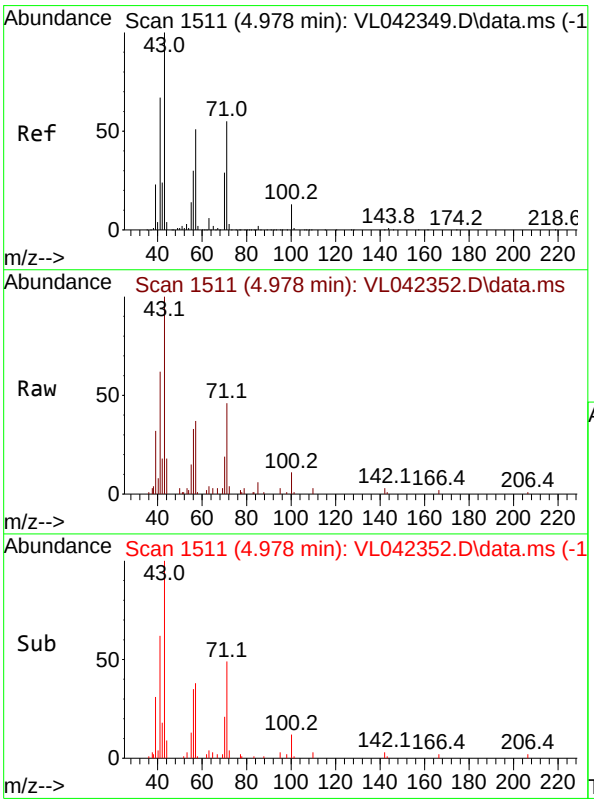
#9
Propene
Concen: 0.574 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 5303

Ion	Ratio	Lower	Upper
41	100		
42	64.8	56.2	84.4

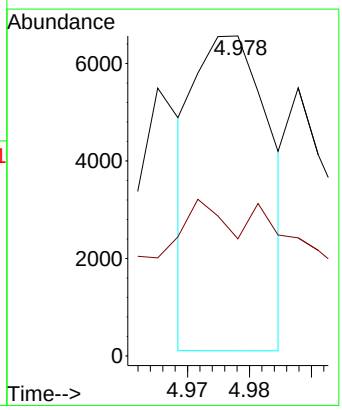


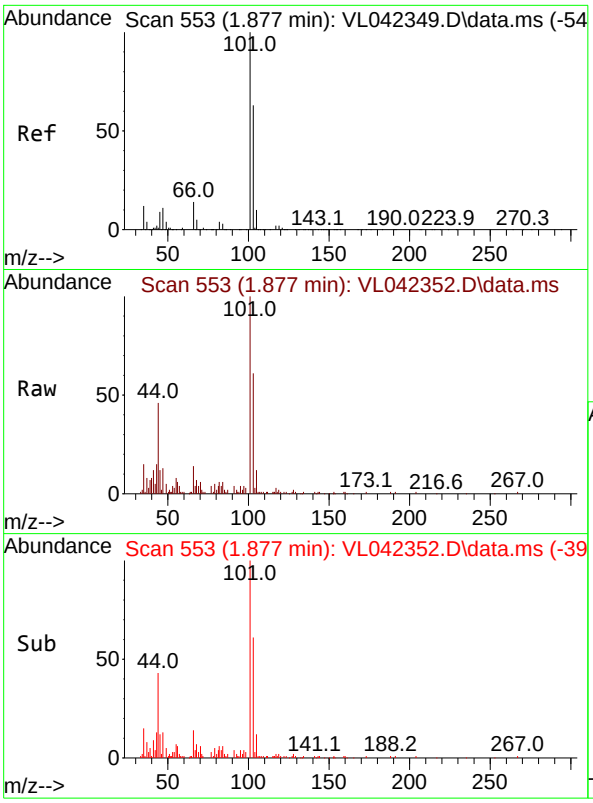


#10
Heptane
Concen: 0.219 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 5438

Ion	Ratio	Lower	Upper
43	100		
57	138.4	39.9	59.9#



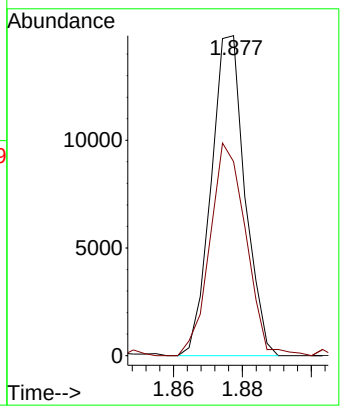


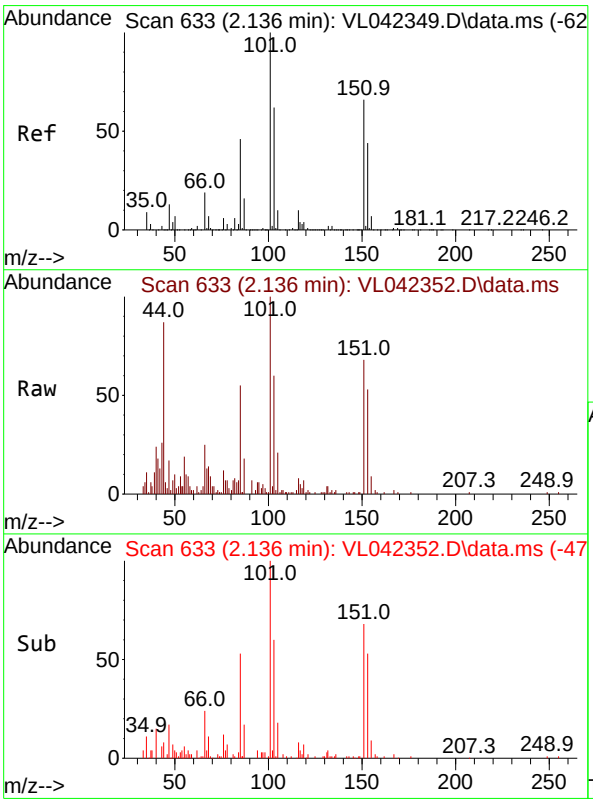
#11
Trichlorofluoromethane
Concen: 0.501 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:101 Resp: 10150

Ion	Ratio	Lower	Upper
101	100		
103	60.6	50.1	75.1

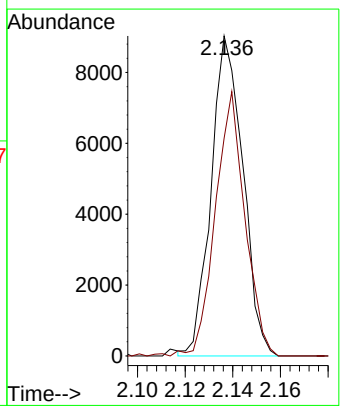


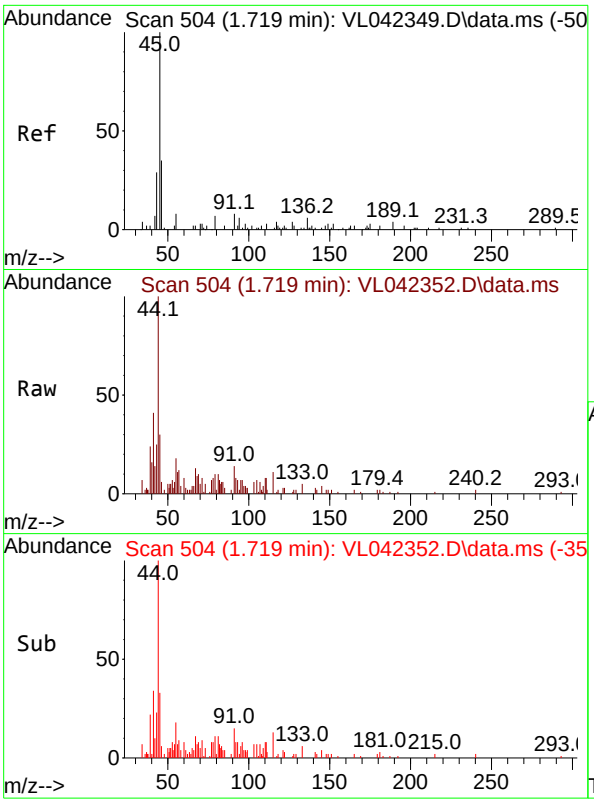


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.506 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:101 Resp: 8371

Ion	Ratio	Lower	Upper
101	100		
151	77.4	57.0	85.6



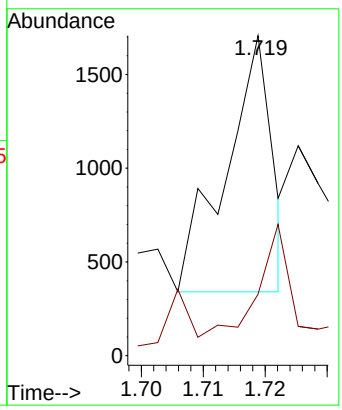


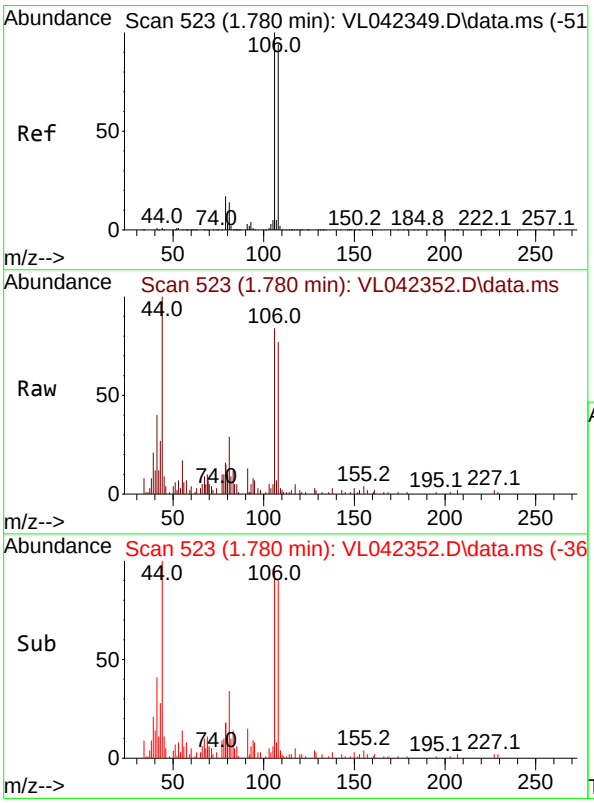
#13
Ethanol
Concen: 0.947 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 715

Ion	Ratio	Lower	Upper
45	100		
46	0.0	21.9	87.7#

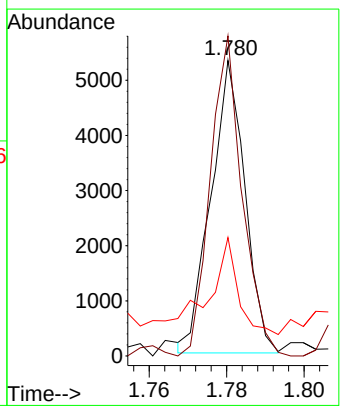


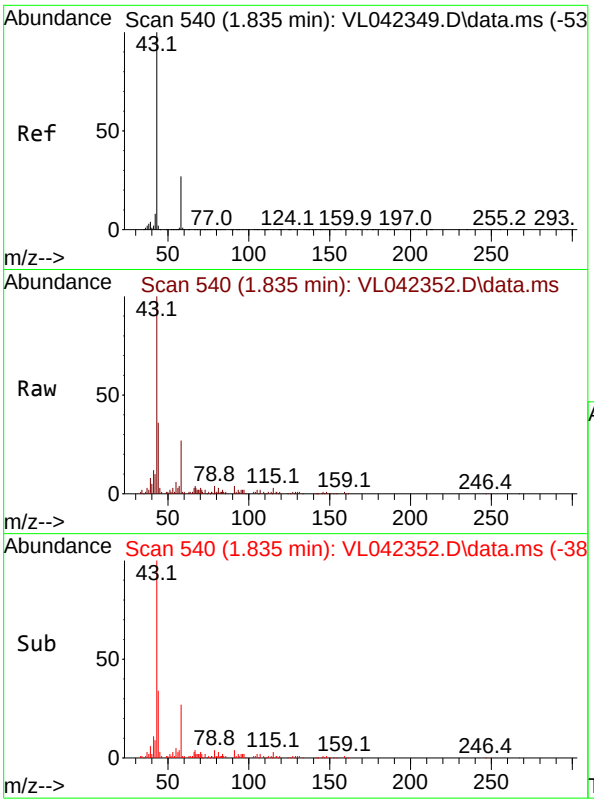


#14
Bromoethene
Concen: 0.519 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:108 Resp: 3238

Ion	Ratio	Lower	Upper
108	100		
106	110.3	85.9	128.9
79	33.0	13.9	20.9#



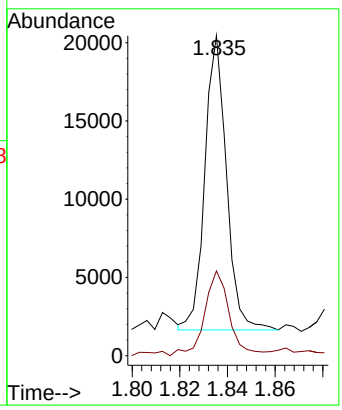


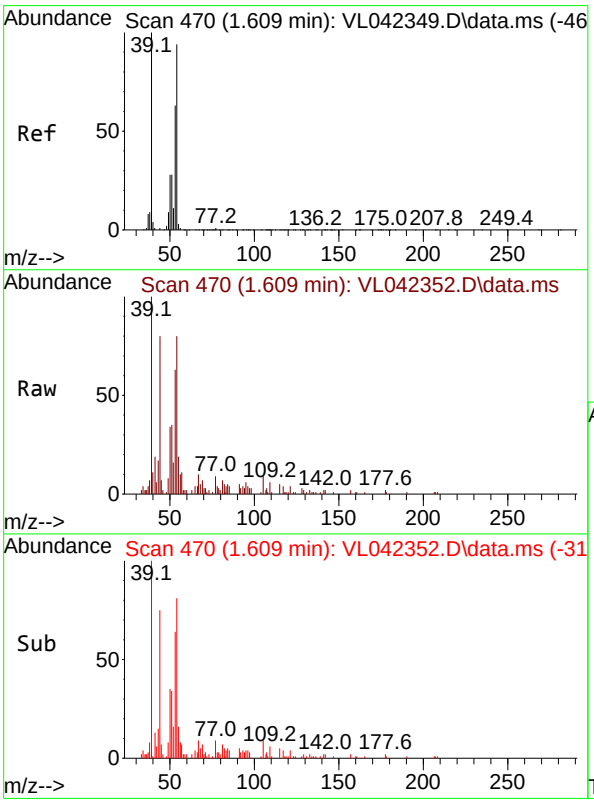
#15
Acetone
Concen: 0.601 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 11859

Ion	Ratio	Lower	Upper
43	100		
58	41.7	22.4	33.6#

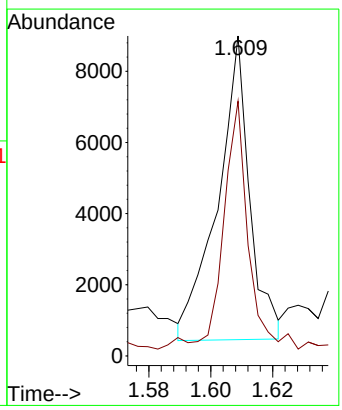


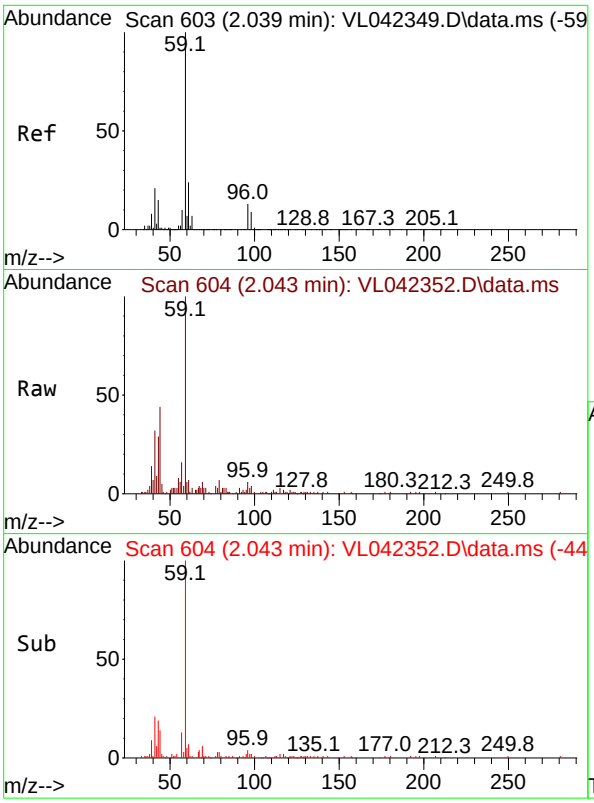


#16
1,3-Butadiene
Concen: 0.660 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 39 Resp: 6120

Ion	Ratio	Lower	Upper
39	100		
54	64.7	64.9	97.3#



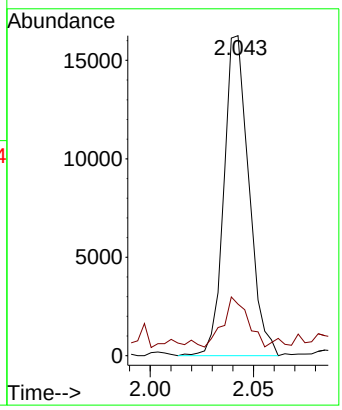


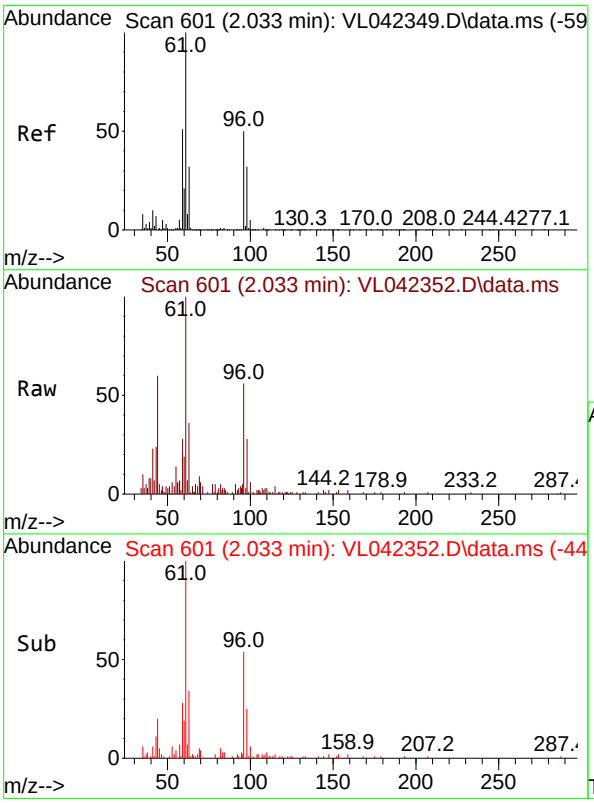
#17
tert-Butyl alcohol
Concen: 0.558 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 59 Resp: 13640

Ion	Ratio	Lower	Upper
59	100		
57	16.5	8.7	13.1#

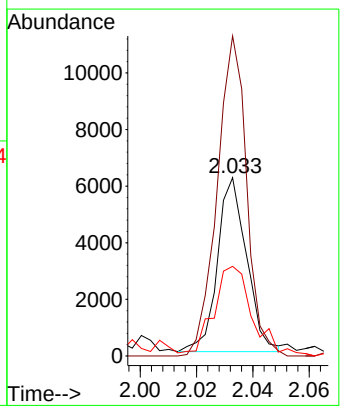


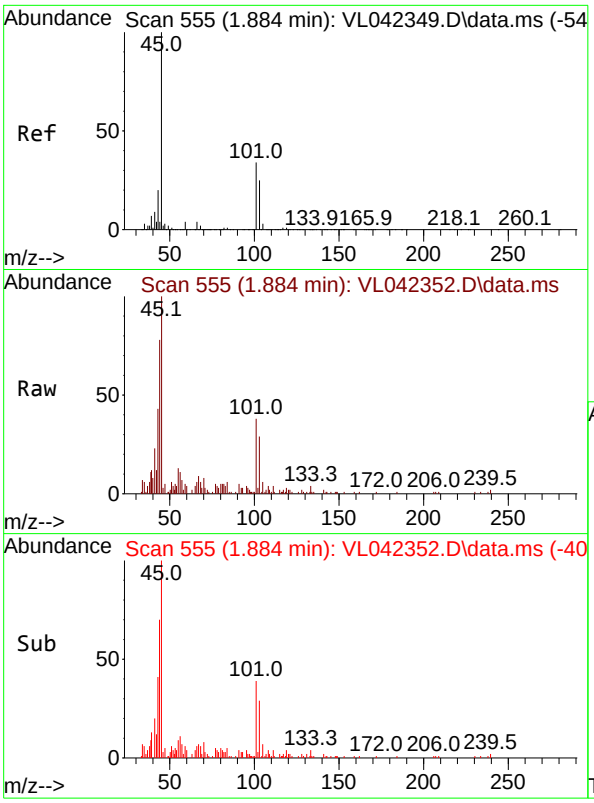


#18
1,1-Dichloroethene
Concen: 0.556 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 96 Resp: 4430

Ion	Ratio	Lower	Upper
96	100		
61	183.9	160.2	240.2
98	49.7	51.0	76.4#



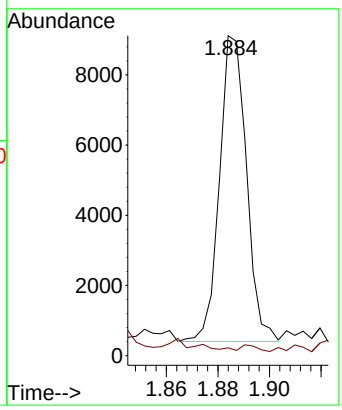


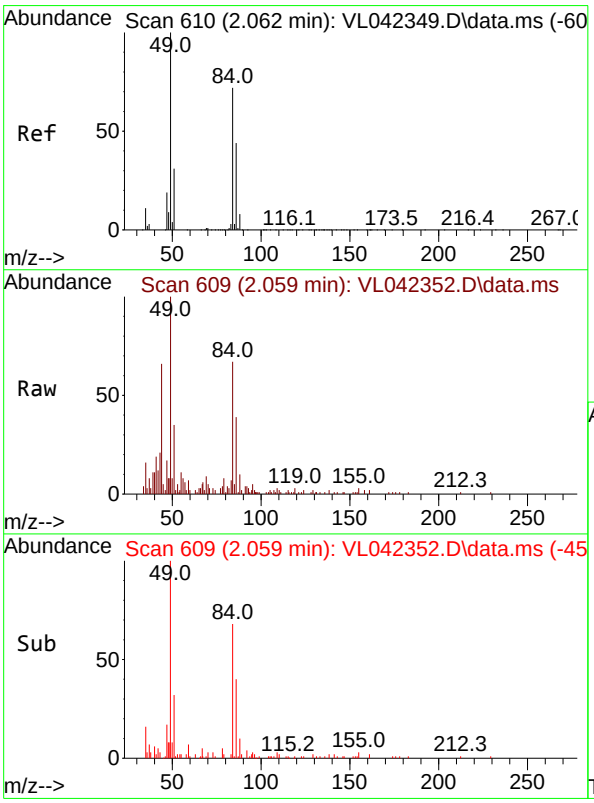
#19
Isopropyl Alcohol
Concen: 0.577 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 45 Resp: 6327

Ion	Ratio	Lower	Upper
45	100		
58	3.8	34.5	51.7#

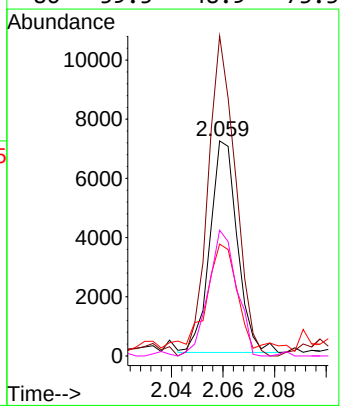


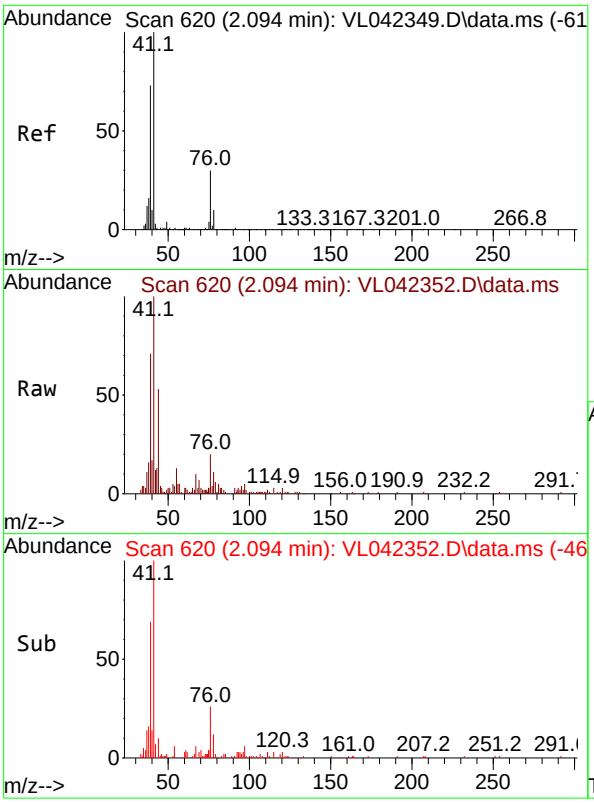


#20
Methylene Chloride
Concen: 0.682 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 84 Resp: 5273

Ion	Ratio	Lower	Upper
84	100		
49	151.3	111.6	167.4
51	48.1	35.1	52.7
86	59.5	48.9	73.3



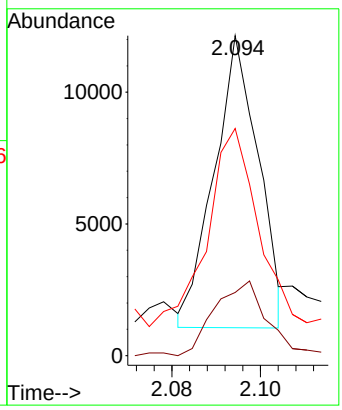


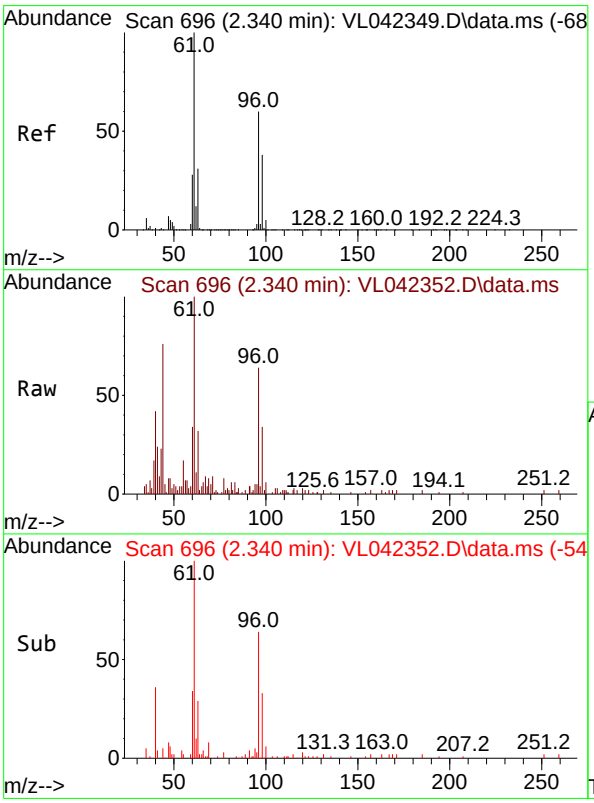
#21
Allyl Chloride
Concen: 0.565 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 41 Resp: 7692

Ion	Ratio	Lower	Upper
41	100		
76	31.1	24.8	37.2
39	98.8	60.6	90.8#

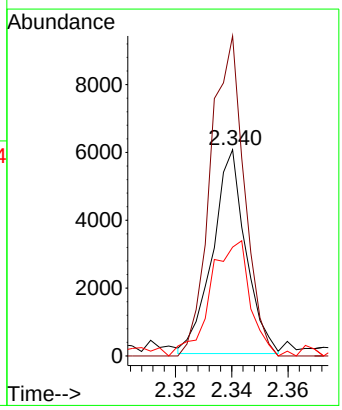


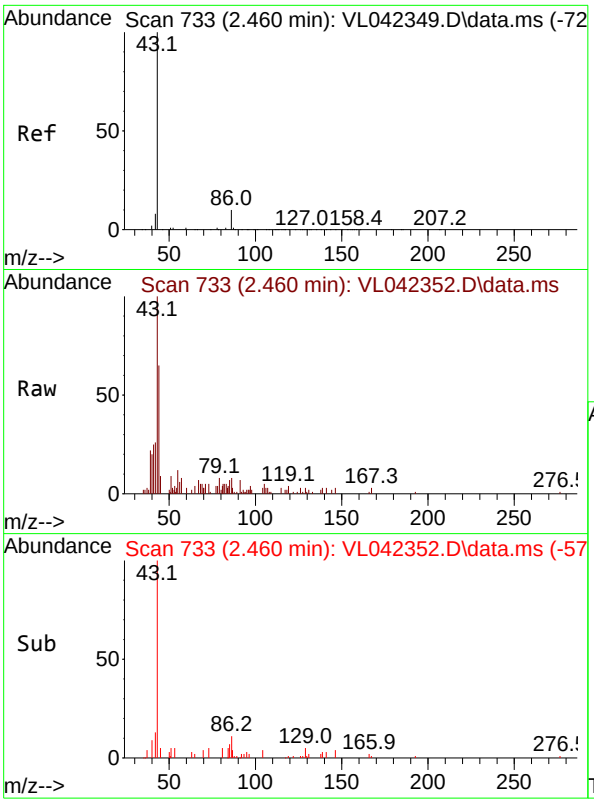


#22
trans-1,2-Dichloroethene
Concen: 0.557 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 96 Resp: 4908

Ion	Ratio	Lower	Upper
96	100		
61	158.7	133.7	200.5
98	54.0	50.3	75.5



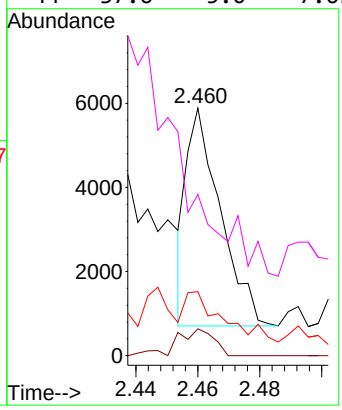


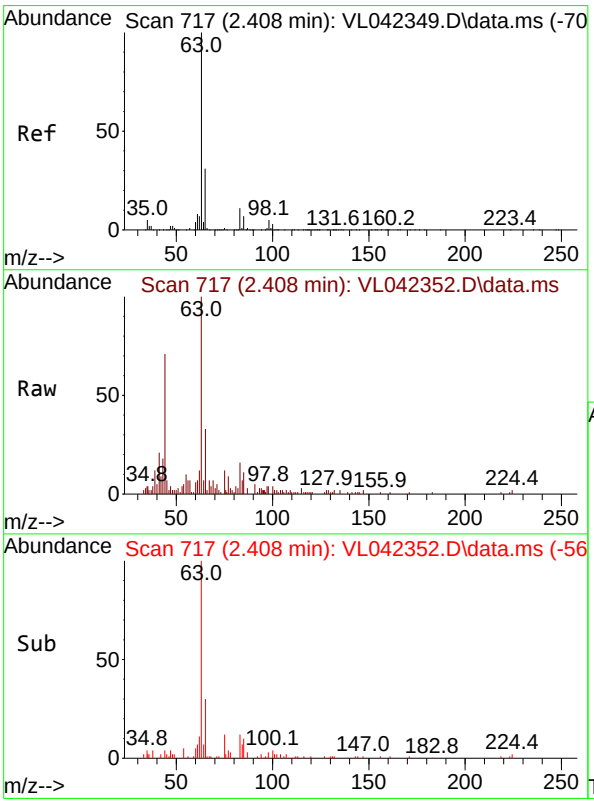
#23
Vinyl Acetate
Concen: 0.495 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 3953

Ion	Ratio	Lower	Upper
43	100		
86	12.4	6.5	9.7#
42	23.2	7.8	11.8#
44	37.6	5.0	7.6#

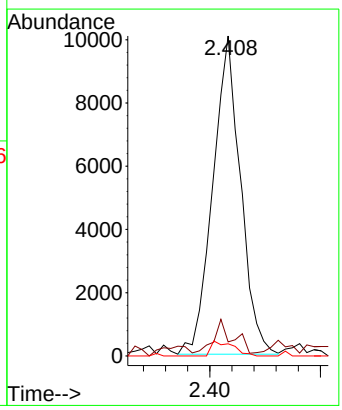


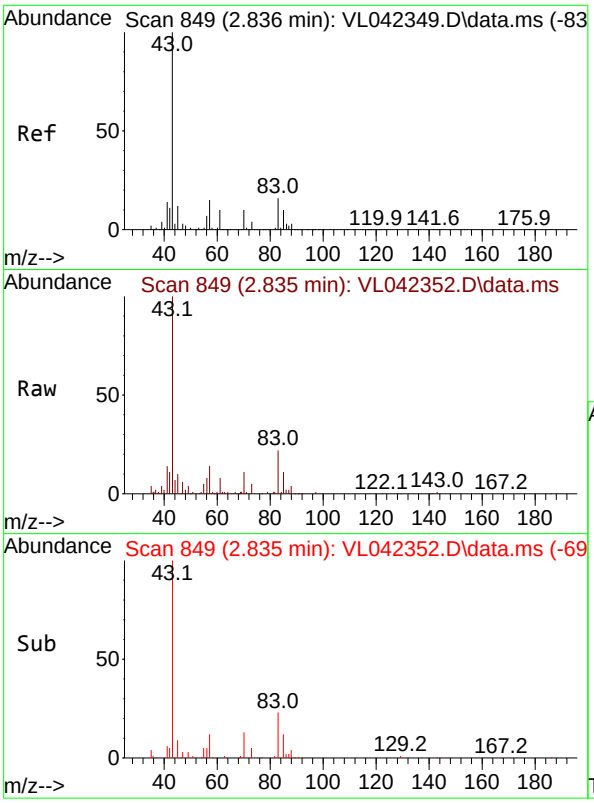


#24
1,1-Dichloroethane
Concen: 0.523 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 63 Resp: 8753

Ion	Ratio	Lower	Upper
63	100		
98	1.4	2.3	6.8#
100	3.8	1.6	4.8



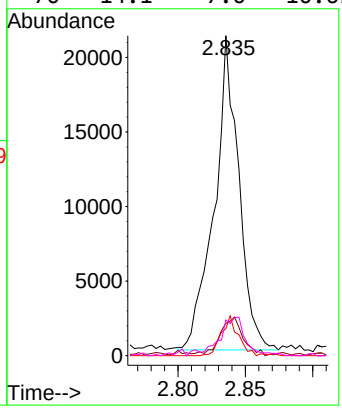


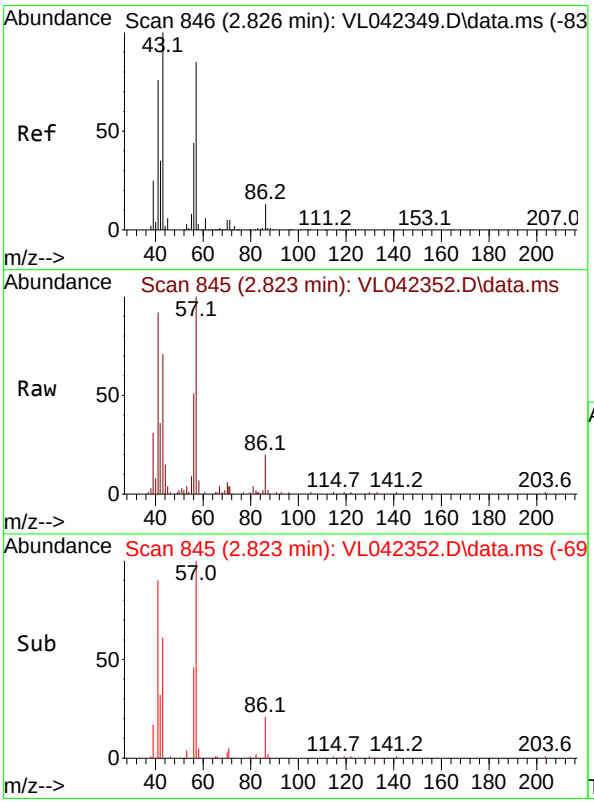
#25
Ethyl Acetate
Concen: 0.548 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 26686

Ion	Ratio	Lower	Upper
43	100		
45	13.3	8.3	12.5#
61	9.0	7.3	10.9
70	14.1	7.0	10.6#

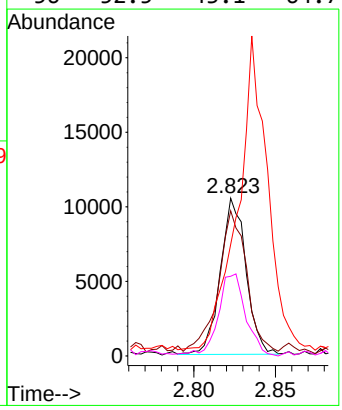


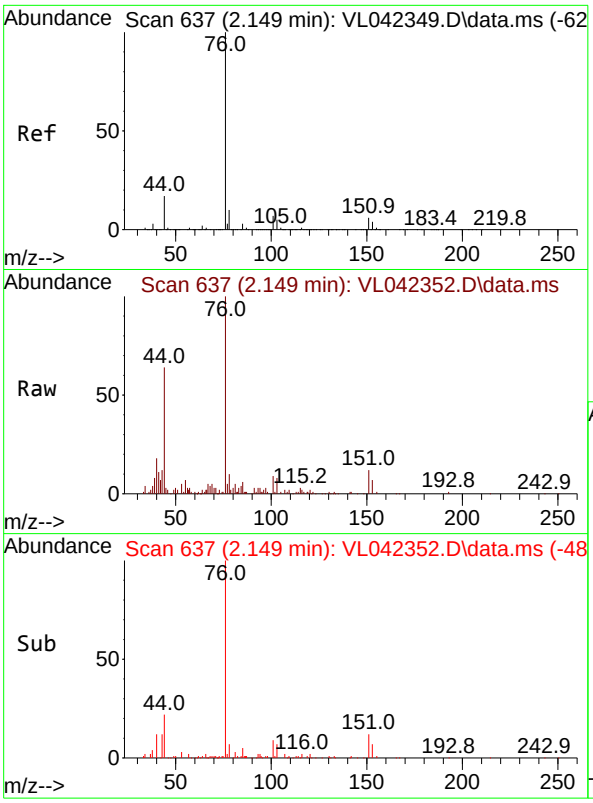


#26
Hexane
Concen: 0.581 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 57 Resp: 11448

Ion	Ratio	Lower	Upper
57	100		
41	103.5	77.9	116.9
43	240.0	208.4	312.6
56	52.5	43.1	64.7



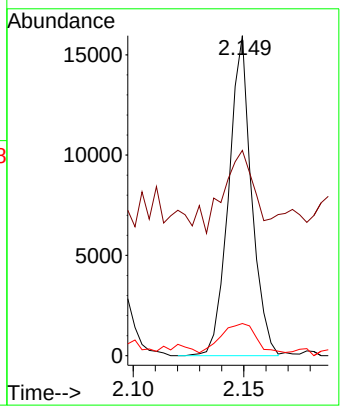


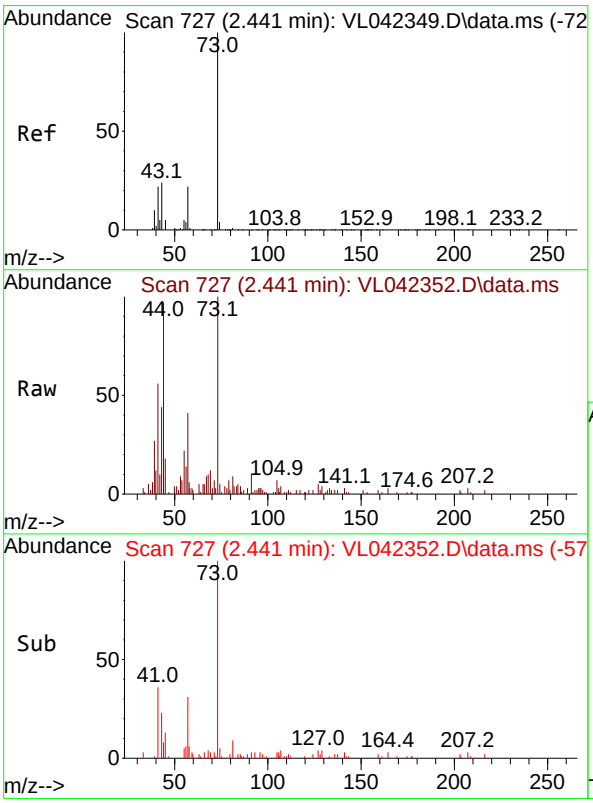
#27
Carbon Disulfide
Concen: 0.544 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 76 Resp: 11472

Ion	Ratio	Lower	Upper
76	100		
44	123.7	15.5	23.3#
78	18.8	9.3	13.9#

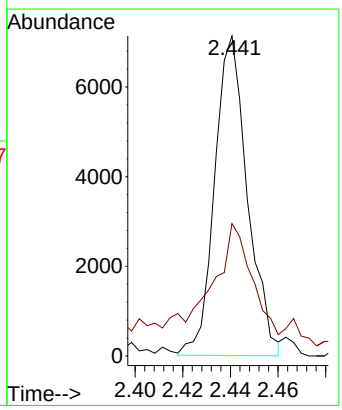


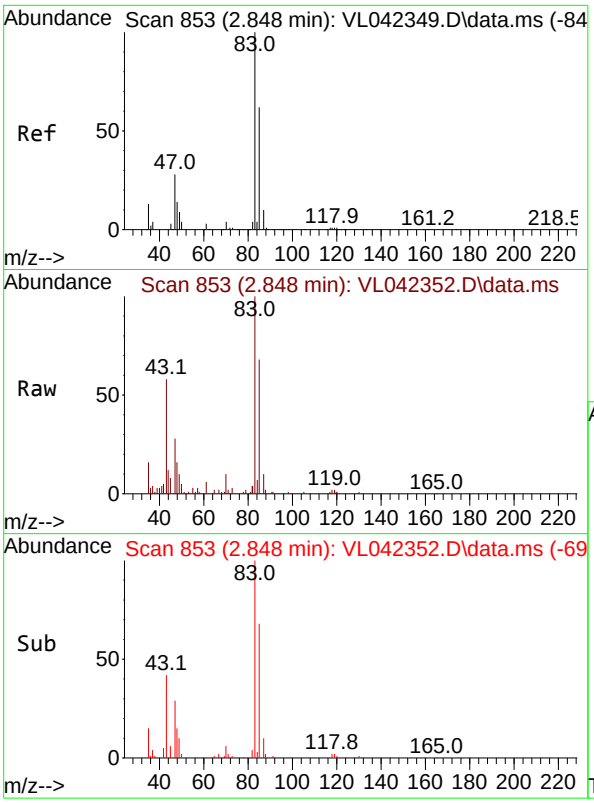


#28
Methyl tert-Butyl Ether
Concen: 0.530 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 73 Resp: 6833

Ion	Ratio	Lower	Upper
73	100		
57	61.8	21.3	31.9#



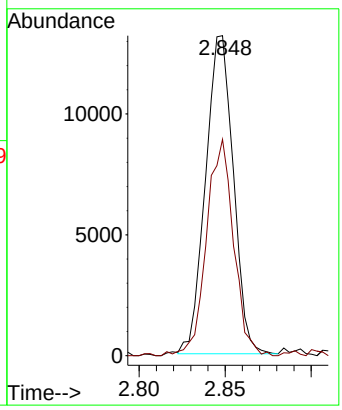


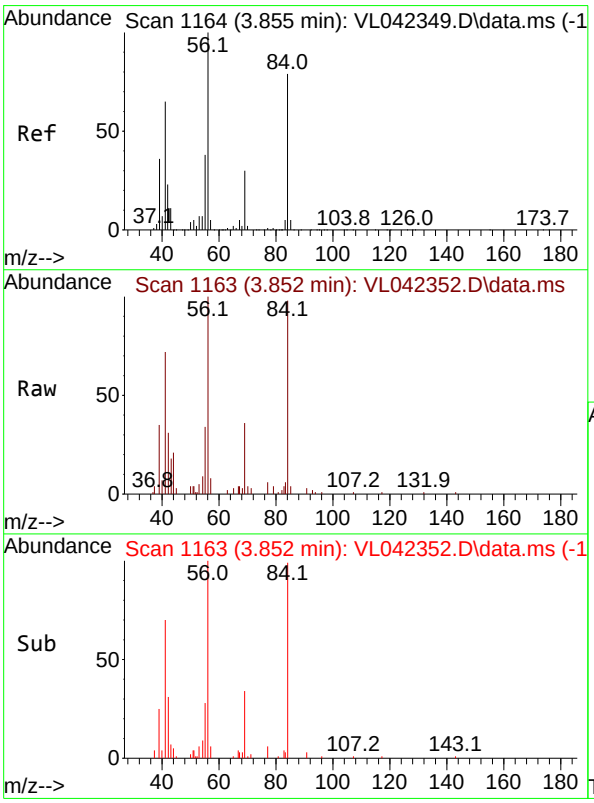
#29
Chloroform
Concen: 0.532 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 14815

Ion	Ratio	Lower	Upper
83	100		
85	68.0	50.0	75.0

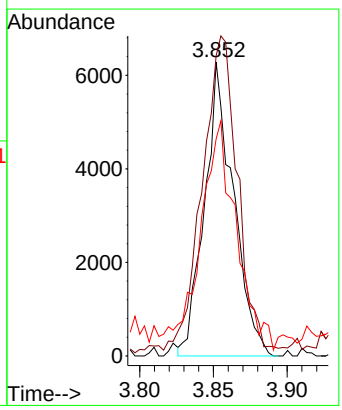


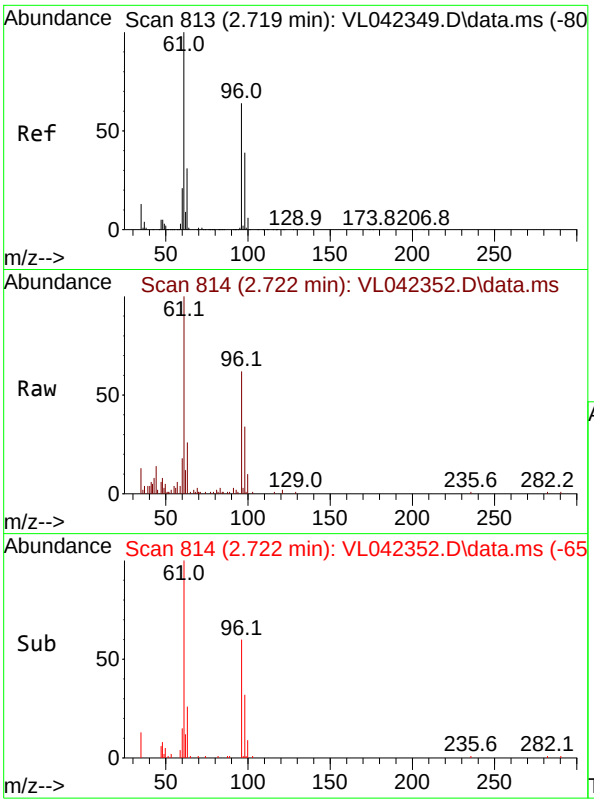


#30
Cyclohexane
Concen: 0.541 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 84 Resp: 8572

Ion	Ratio	Lower	Upper
84	100		
56	132.8	101.0	151.4
41	89.8	67.4	101.0



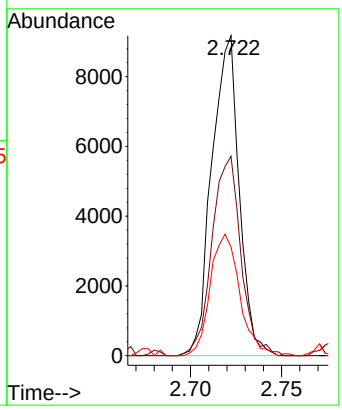


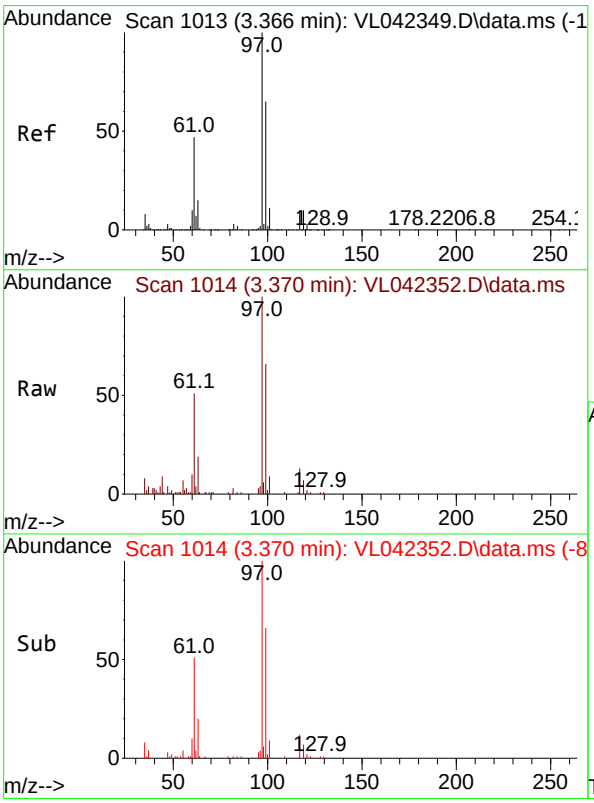
#31
cis-1,2-Dichloroethene
Concen: 0.511 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 61 Resp: 9571

Ion	Ratio	Lower	Upper
61	100		
96	62.3	50.8	76.2
98	34.0	30.9	46.3

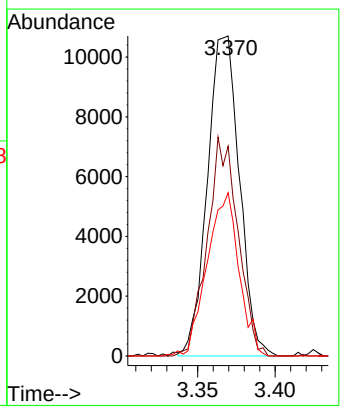


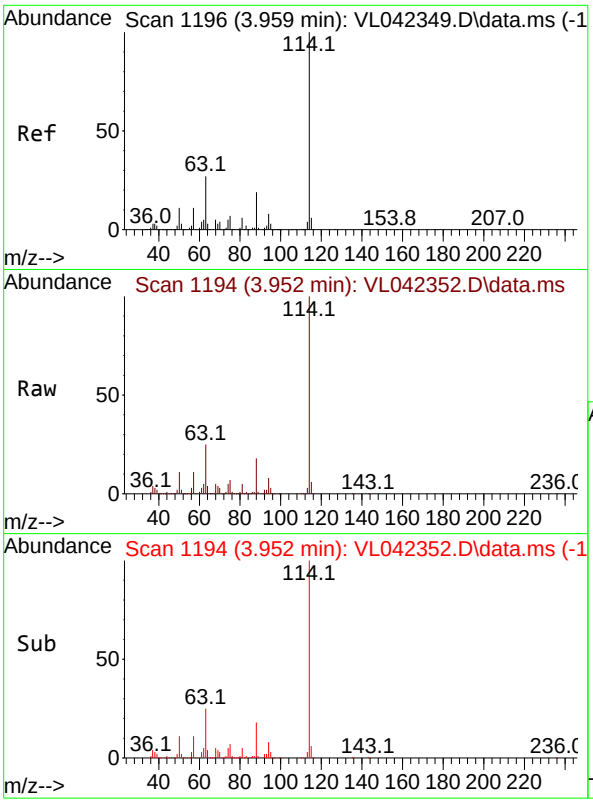


#32
1,1,1-Trichloroethane
Concen: 0.516 ppbv
RT: 3.370 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 97 Resp: 15413

Ion	Ratio	Lower	Upper
97	100		
99	65.6	51.0	76.4
61	50.8	38.8	58.2



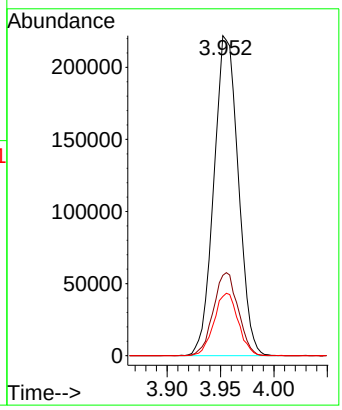


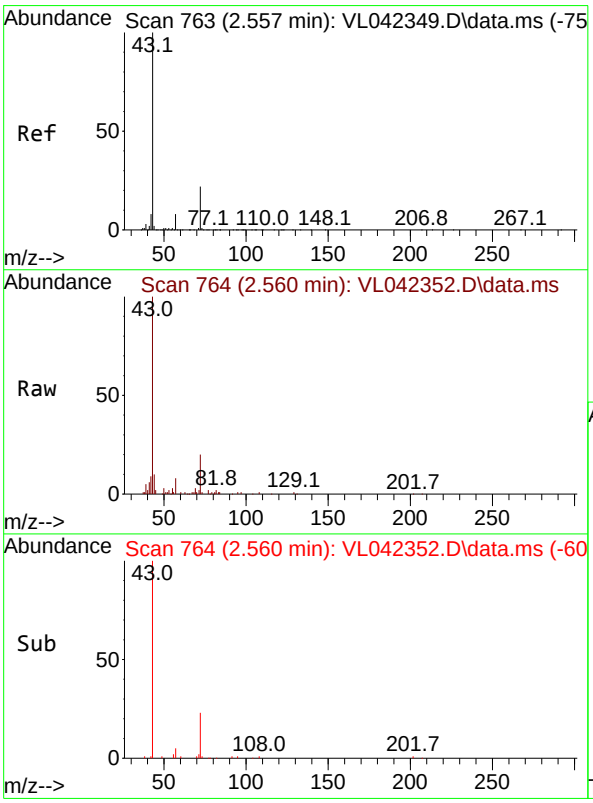
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:114 Resp: 353137

Ion	Ratio	Lower	Upper
114	100		
63	26.3	21.8	32.6
88	19.4	15.5	23.3

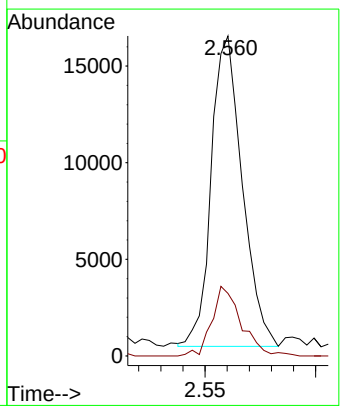


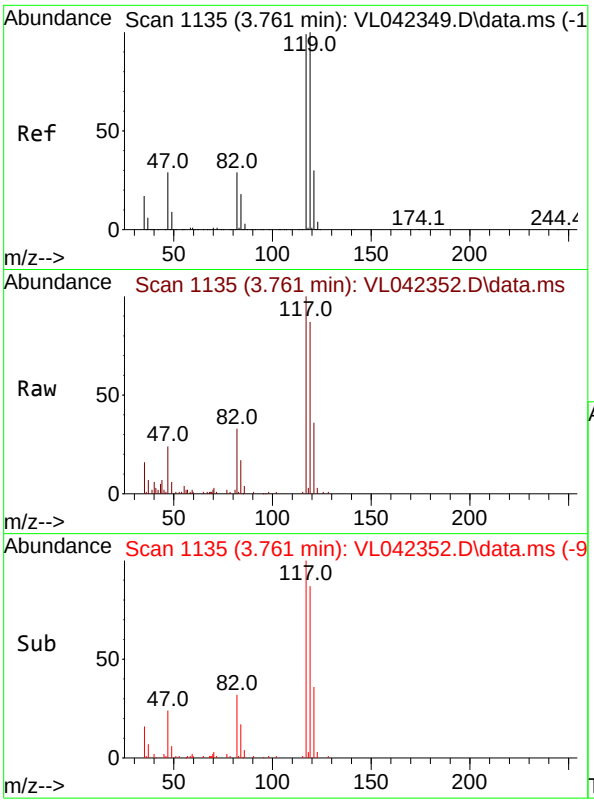


#34
2-Butanone
Concen: 0.560 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 15640

Ion	Ratio	Lower	Upper
43	100		
72	21.3	18.2	27.2



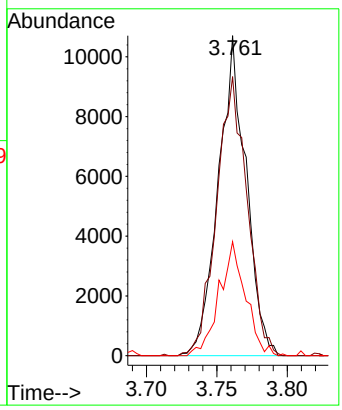


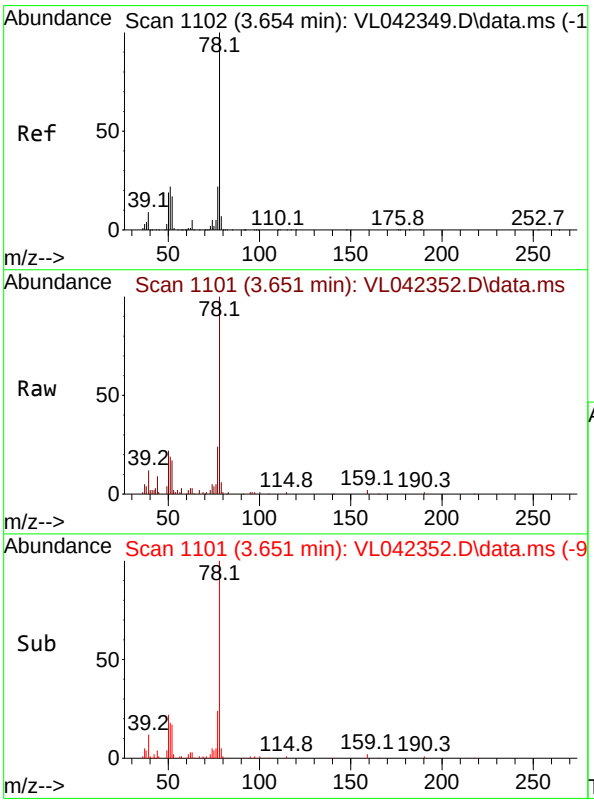
#35
Carbon Tetrachloride
Concen: 0.459 ppbv
RT: 3.761 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 14683

Ion	Ratio	Lower	Upper
117	100		
119	87.2	80.5	120.7
121	35.6	24.2	36.2

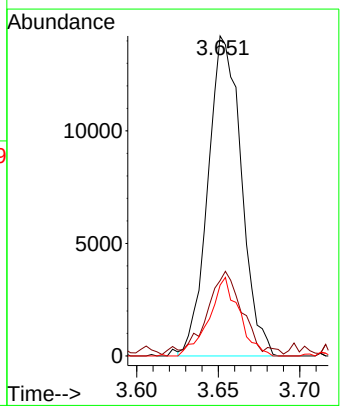


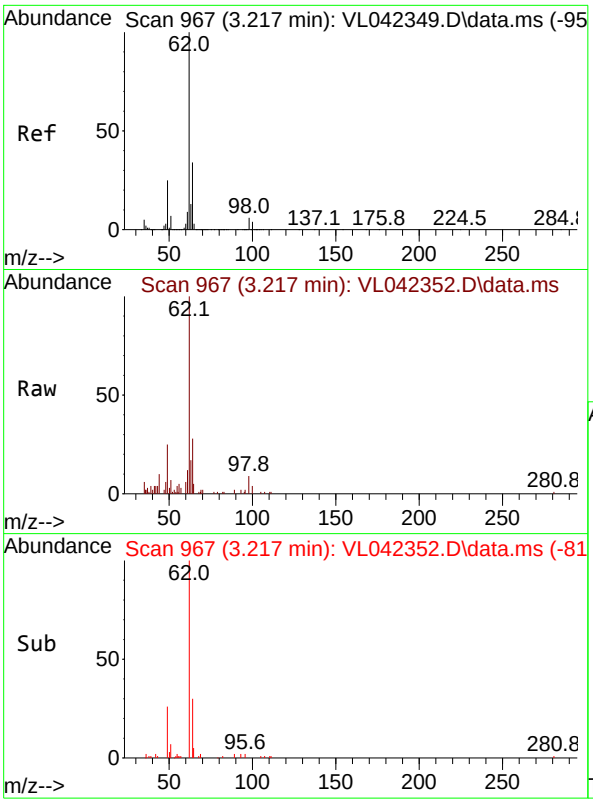


#36
Benzene
Concen: 0.531 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 78 Resp: 20233

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	22.1	15.5	23.3



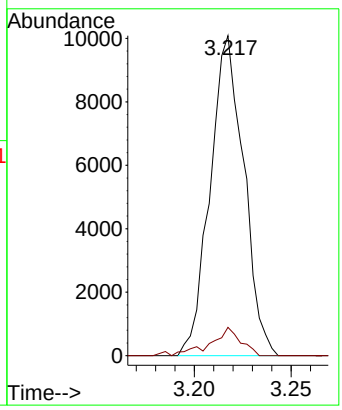


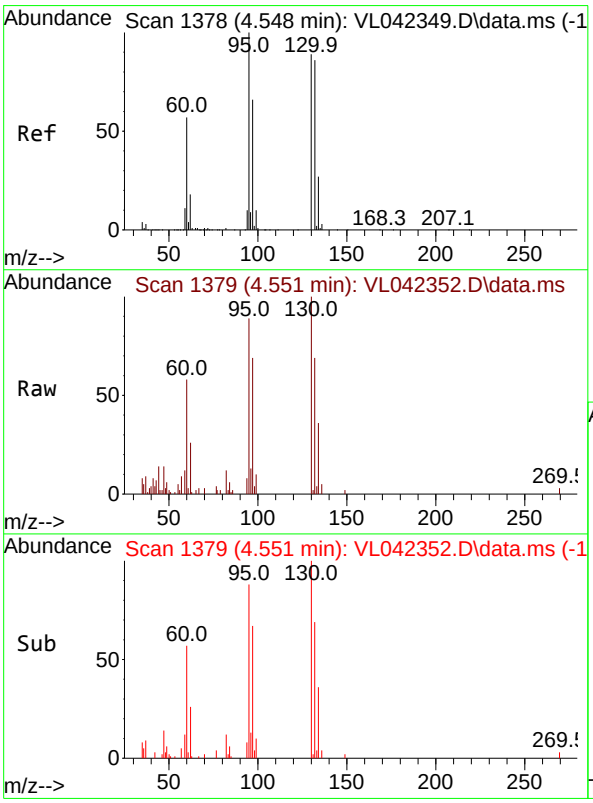
#37
1,2-Dichloroethane
Concen: 0.533 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 62 Resp: 12194

Ion	Ratio	Lower	Upper
62	100		
98	8.1	5.1	7.7#

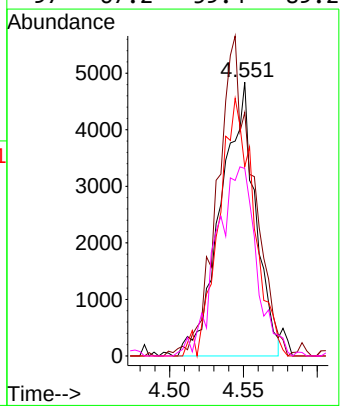


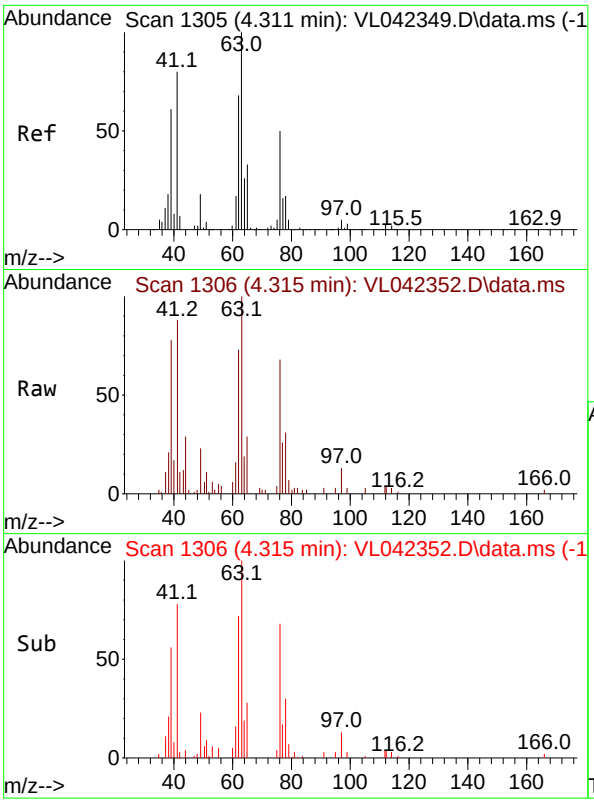


#38
Trichloroethene
Concen: 0.468 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:130 Resp: 7819

Ion	Ratio	Lower	Upper
130	100		
95	86.2	89.8	134.6#
132	69.1	77.7	116.5#
97	67.2	59.4	89.2



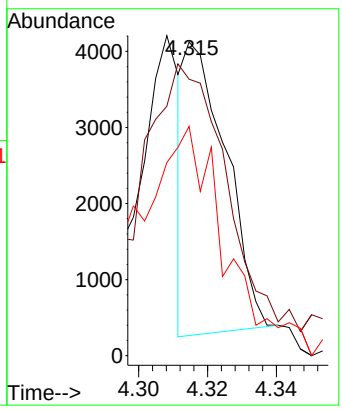


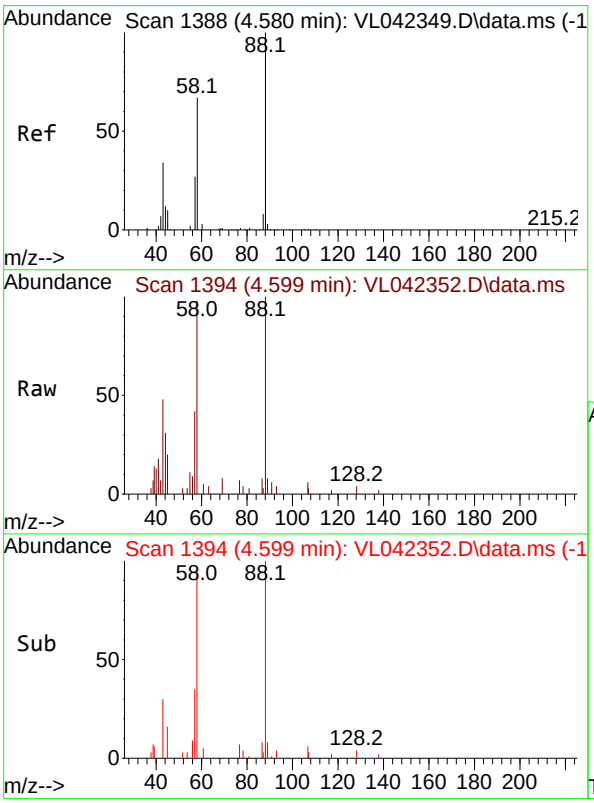
#39
1,2-Dichloropropane
Concen: 0.225 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 63 Resp: 3195

Ion	Ratio	Lower	Upper
63	100		
41	90.7	64.2	96.2
62	75.2	54.3	81.5

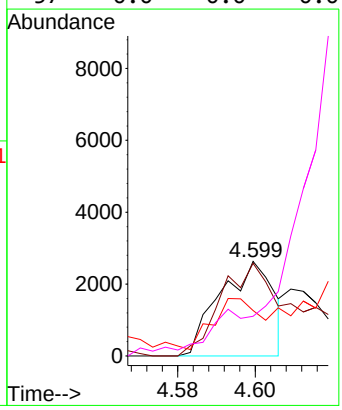


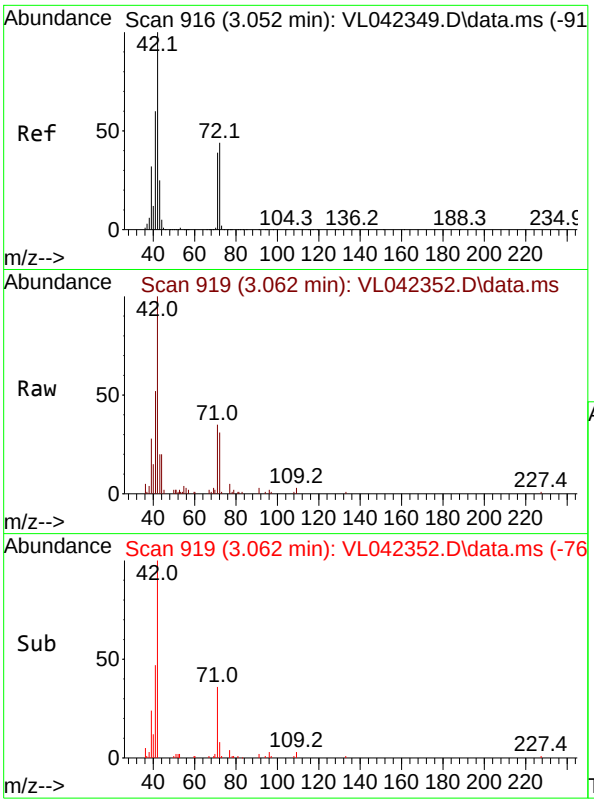


#40
1,4-Dioxane
Concen: 0.331 ppbv
RT: 4.599 min Scan# 1394
Delta R.T. 0.019 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 88 Resp: 2550

Ion	Ratio	Lower	Upper
88	100		
58	214.8	61.4	92.0#
43	0.0	23.2	34.8#
57	0.0	0.0	0.0



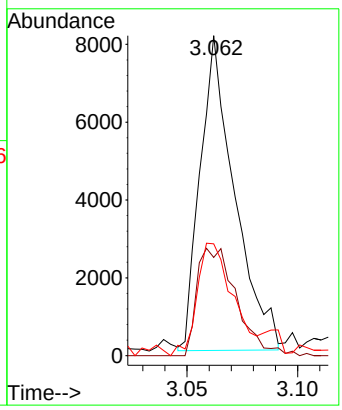


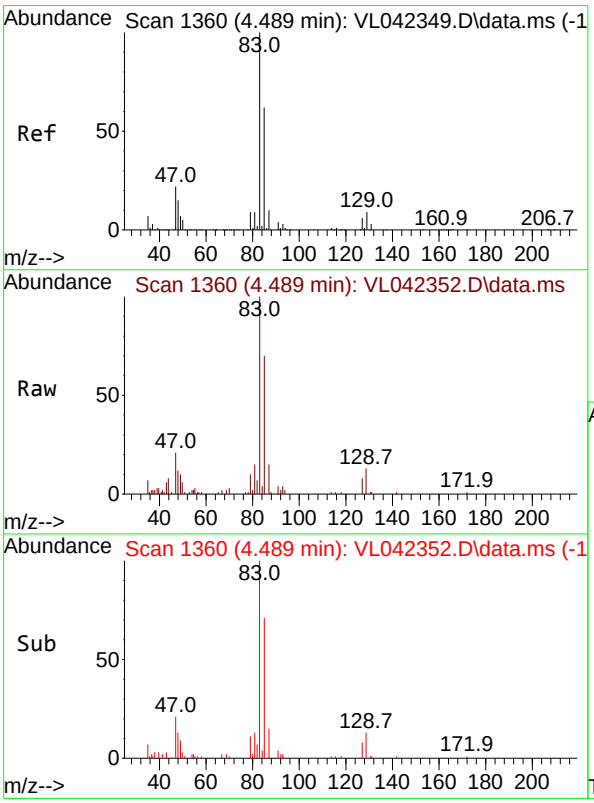
#41
Tetrahydrofuran
Concen: 0.544 ppbv
RT: 3.062 min Scan# 91
Delta R.T. 0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 42 Resp: 8773

Ion	Ratio	Lower	Upper
42	100		
72	39.3	32.3	48.5
71	44.9	31.4	47.2

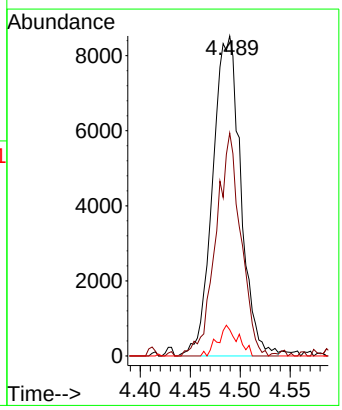


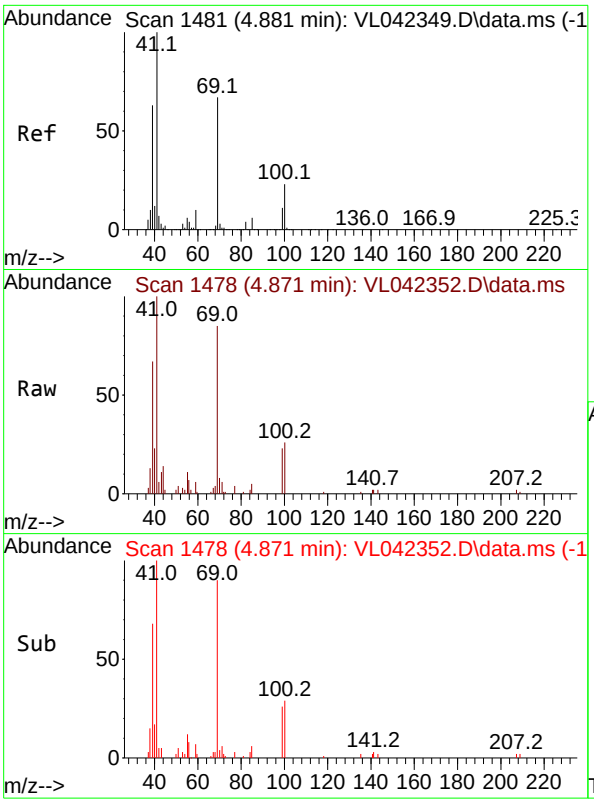


#42
Bromodichloromethane
Concen: 0.523 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 83 Resp: 16642

Ion	Ratio	Lower	Upper
83	100		
85	69.6	49.7	74.5
127	8.2	5.1	7.7#



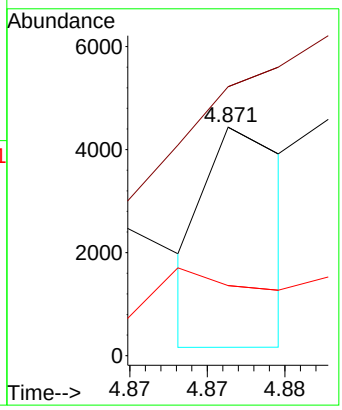


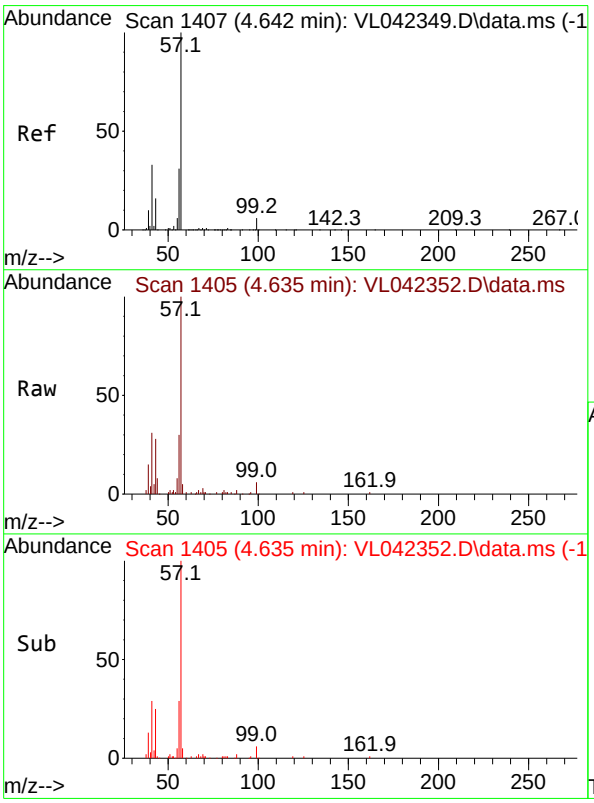
#43
Methyl Methacrylate
Concen: 0.091 ppbv
RT: 4.871 min Scan# 14
Delta R.T. -0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 69 Resp: 1556

Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.6	177.8#
100	0.0	28.2	42.2#

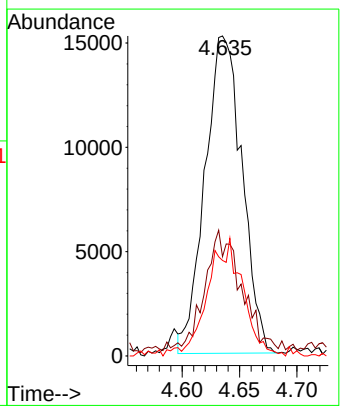


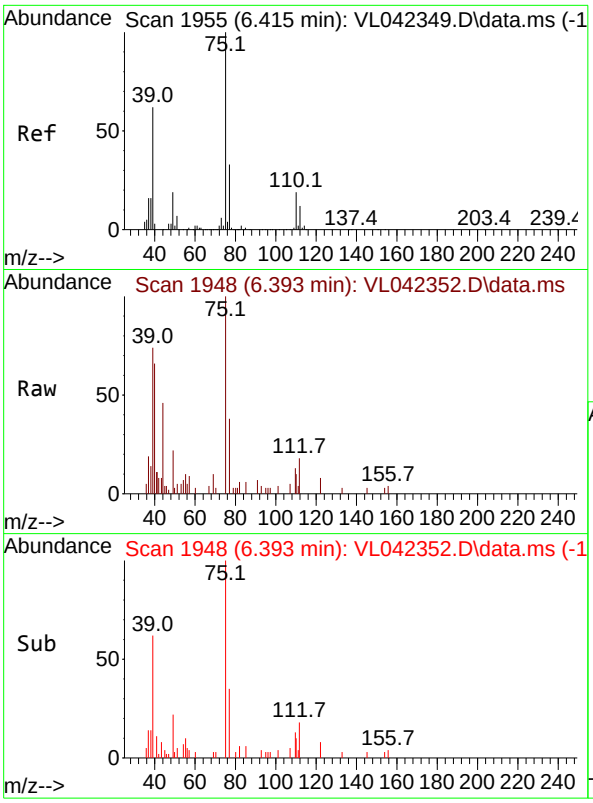


#44
2,2,4-Trimethylpentane
Concen: 0.519 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 57 Resp: 34170

Ion	Ratio	Lower	Upper
57	100		
41	39.1	27.2	40.8
56	37.1	25.7	38.5



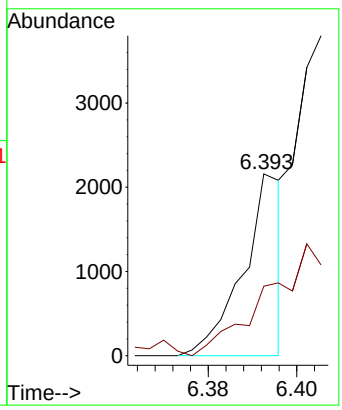


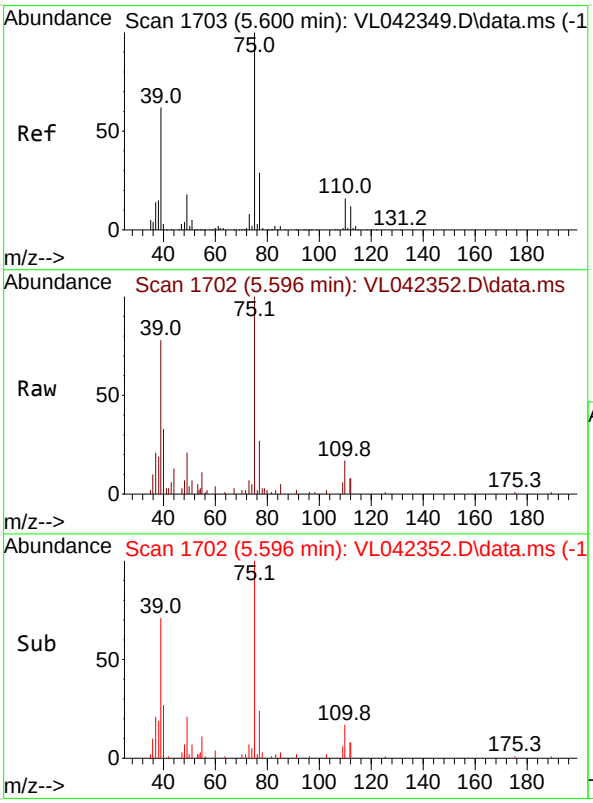
#45
t-1,3-Dichloropropene
Concen: 0.076 ppbv
RT: 6.393 min Scan# 1
Delta R.T. -0.023 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 75 Resp: 1332

Ion	Ratio	Lower	Upper
75	100		
77	38.2	27.0	40.6

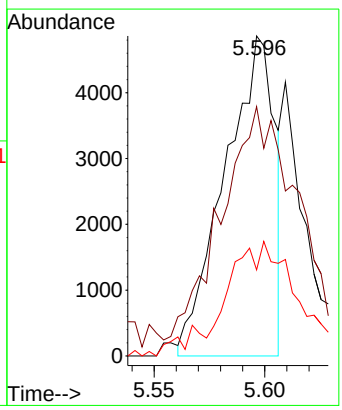


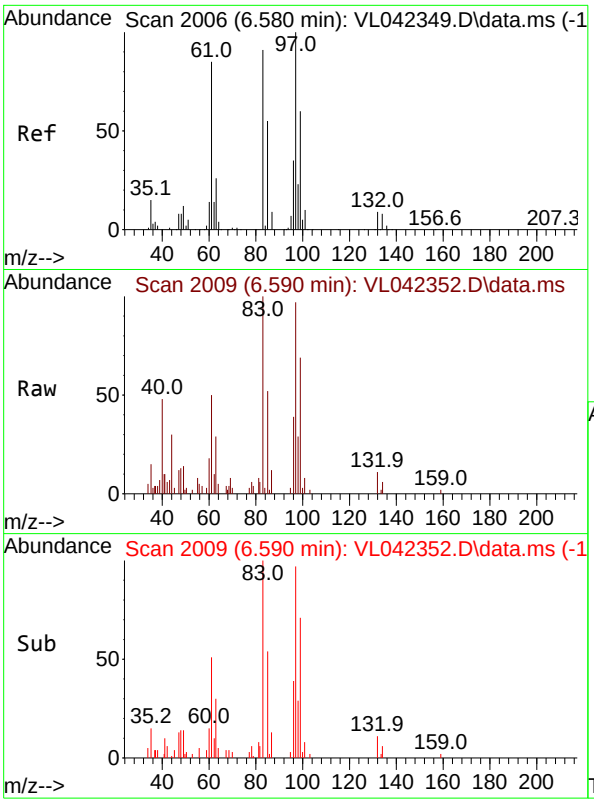


#46
cis-1,3-Dichloropropene
Concen: 0.356 ppbv
RT: 5.596 min Scan# 1702
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 75 Resp: 7634

Ion	Ratio	Lower	Upper
75	100		
39	67.9	50.0	75.0
77	21.6	23.0	34.6#



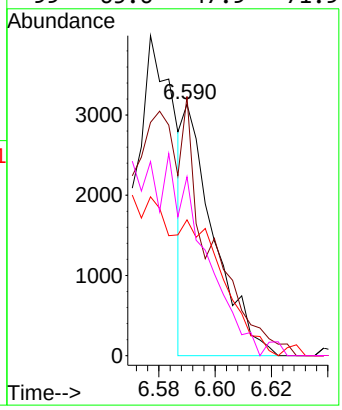


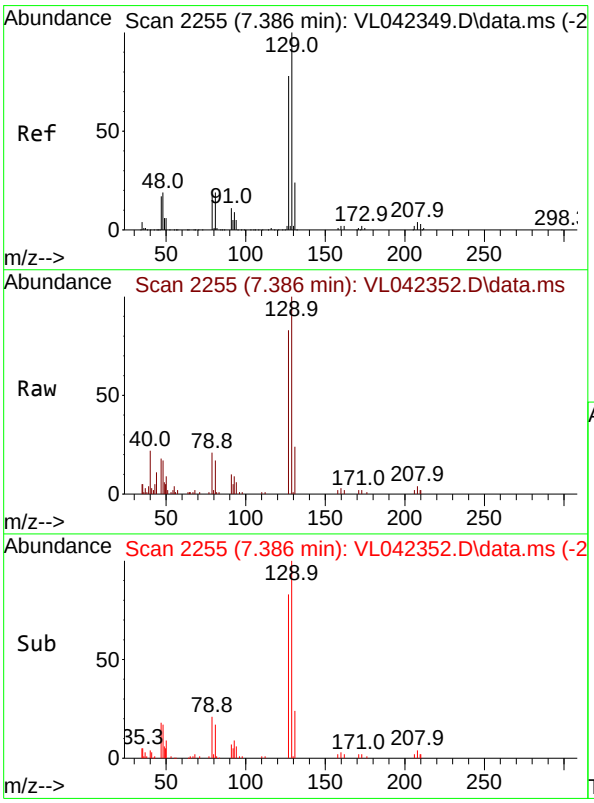
#47
1,1,2-Trichloroethane
Concen: 0.164 ppbv
RT: 6.590 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 97 Resp: 2374

Ion	Ratio	Lower	Upper
97	100		
83	98.5	72.8	109.2
85	54.0	44.2	66.4
99	65.6	47.9	71.9

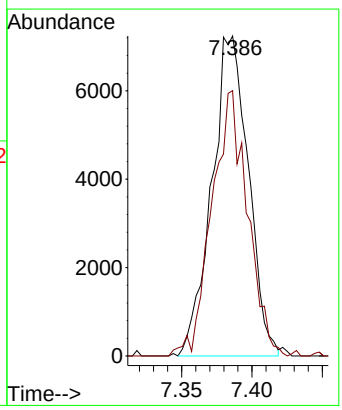


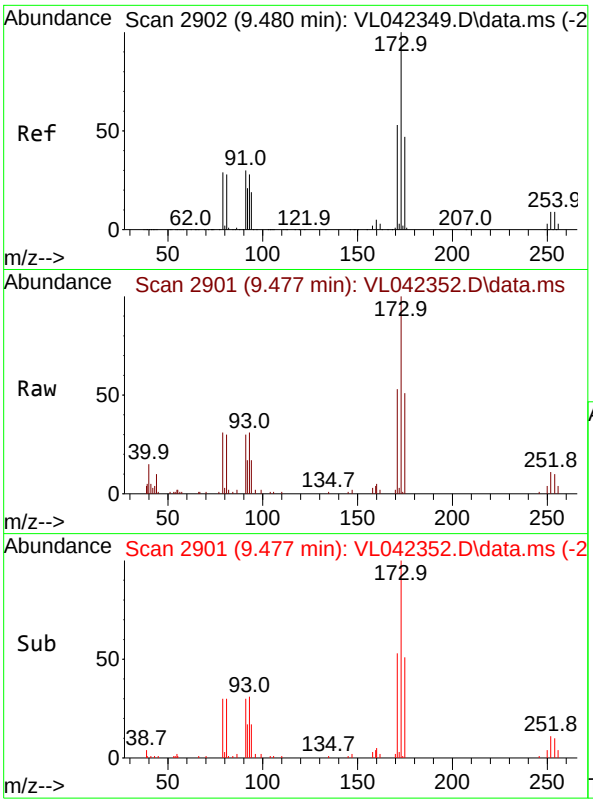


#48
Dibromochloromethane
Concen: 0.514 ppbv
RT: 7.386 min Scan# 2255
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:129 Resp: 13122

Ion	Ratio	Lower	Upper
129	100		
127	80.9	39.1	117.3



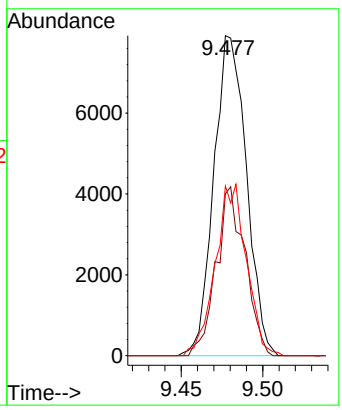


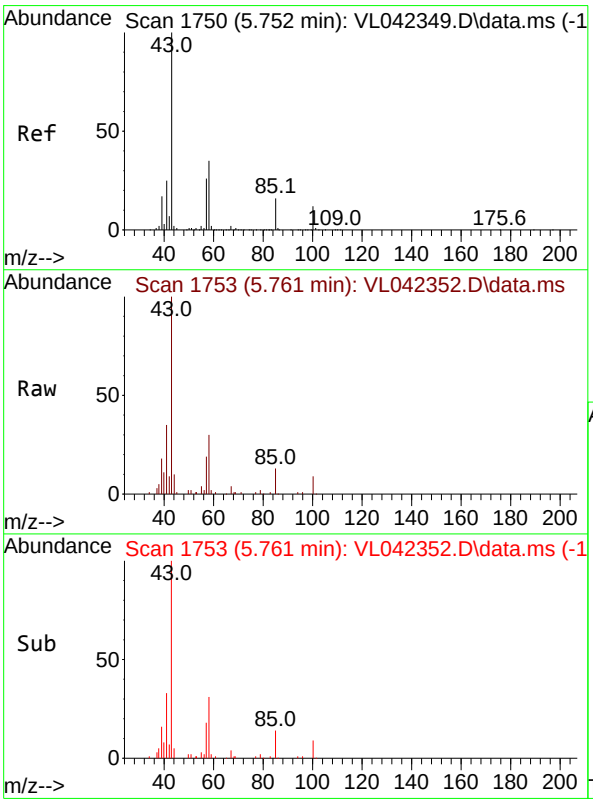
#49
Bromoform
Concen: 0.492 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:173 Resp: 10988

Ion	Ratio	Lower	Upper
173	100		
175	46.8	38.2	57.2
171	51.2	40.9	61.3

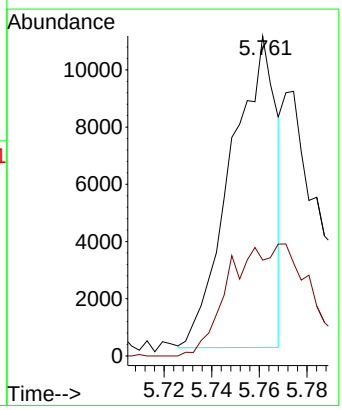


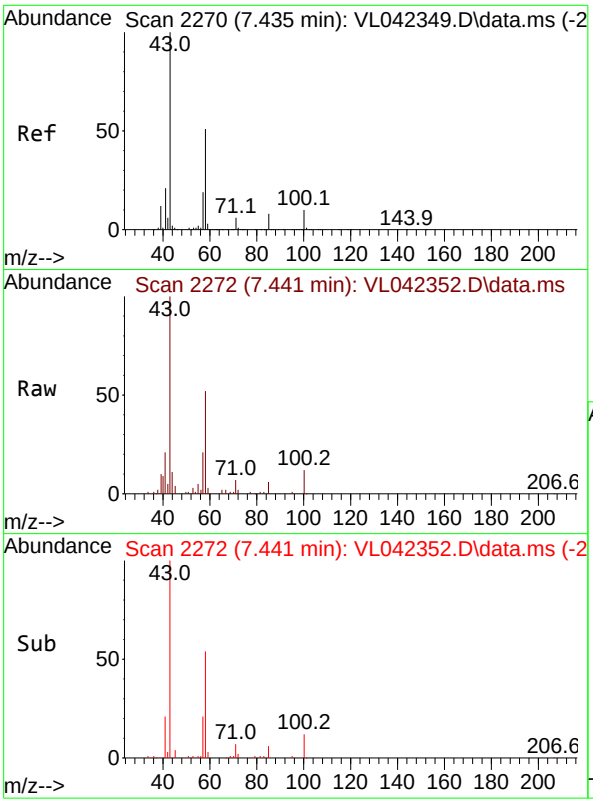


#50
4-Methyl-2-Pentanone
Concen: 0.309 ppbv
RT: 5.761 min Scan# 1753
Delta R.T. 0.010 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 43 Resp: 14380

Ion	Ratio	Lower	Upper
43	100		
58	0.0	28.6	43.0#



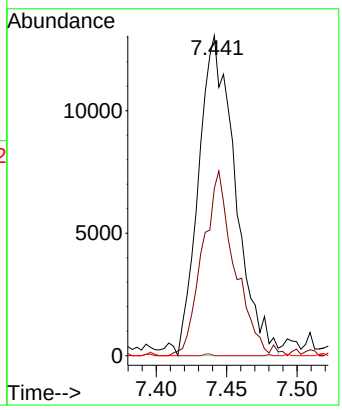


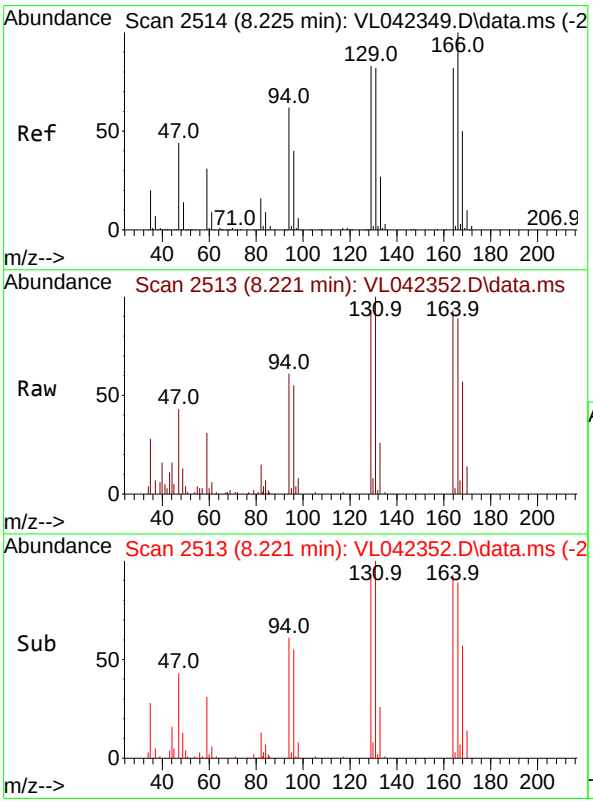
#51
2-Hexanone
Concen: 0.564 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 43 Resp: 23684

Ion	Ratio	Lower	Upper
43	100		
58	51.7	40.2	60.4
98	0.1	0.1	0.1

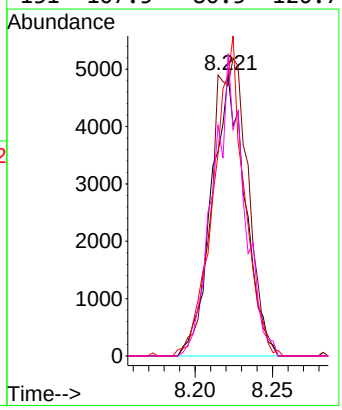


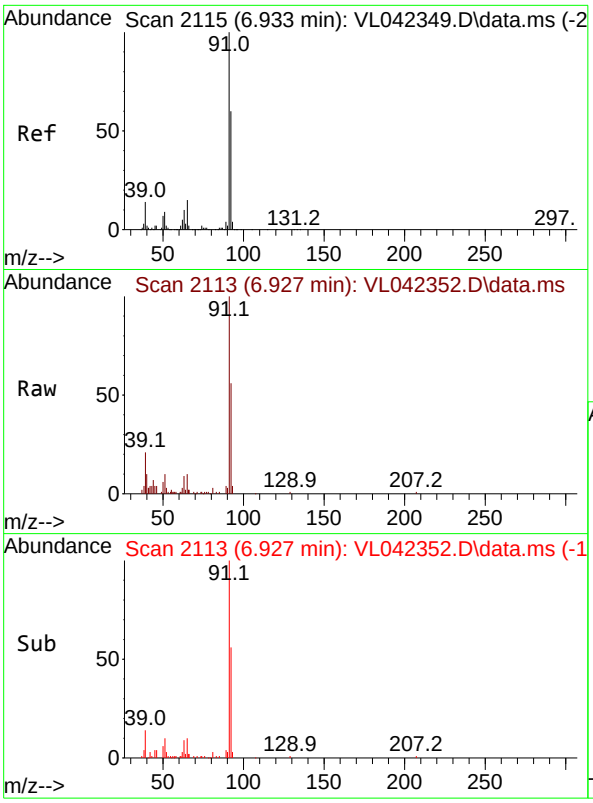


#52
Tetrachloroethene
Concen: 0.503 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:164 Resp: 7412

Ion	Ratio	Lower	Upper
164	100		
166	96.1	98.2	147.2#
129	97.8	81.8	122.8
131	107.5	80.5	120.7



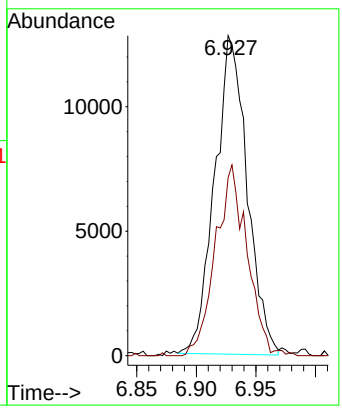


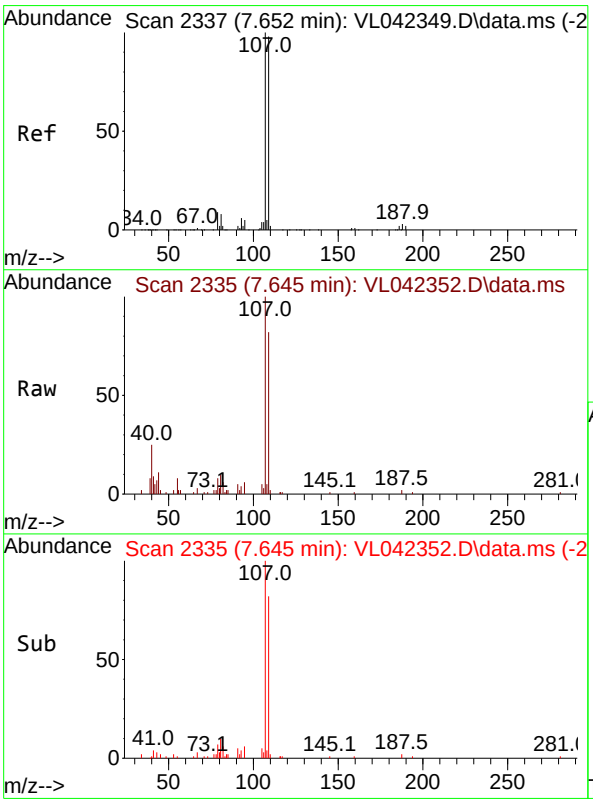
#53
Toluene
Concen: 0.529 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 24200

Ion	Ratio	Lower	Upper
91	100		
92	58.4	48.2	72.4

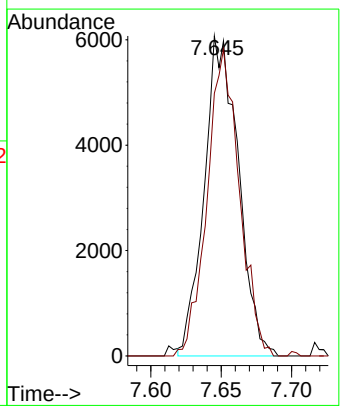


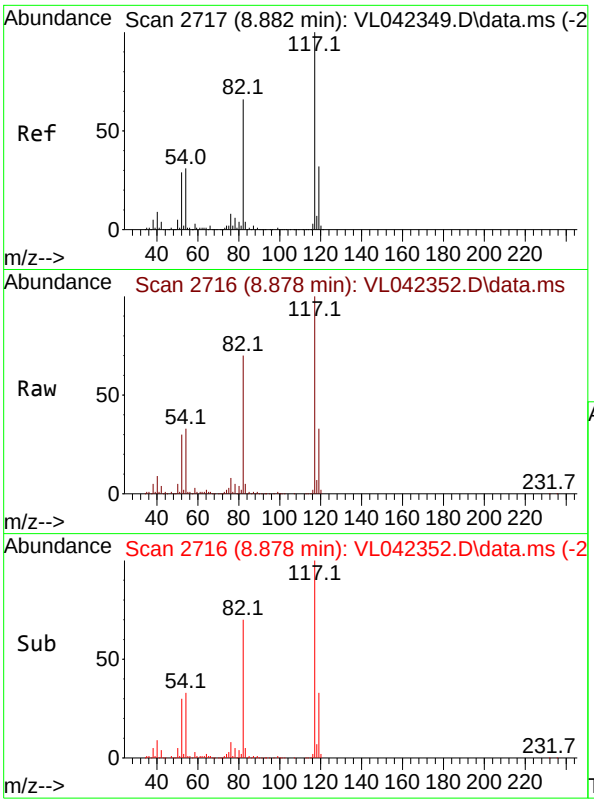


#54
1,2-Dibromoethane
Concen: 0.499 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.006 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:107 Resp: 10282

Ion	Ratio	Lower	Upper
107	100		
109	82.1	78.2	117.4



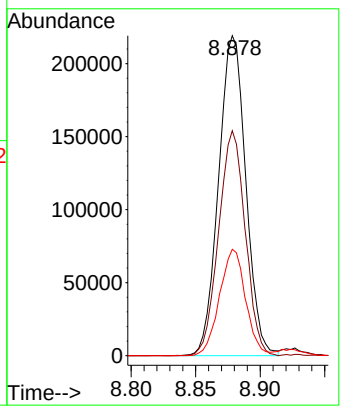


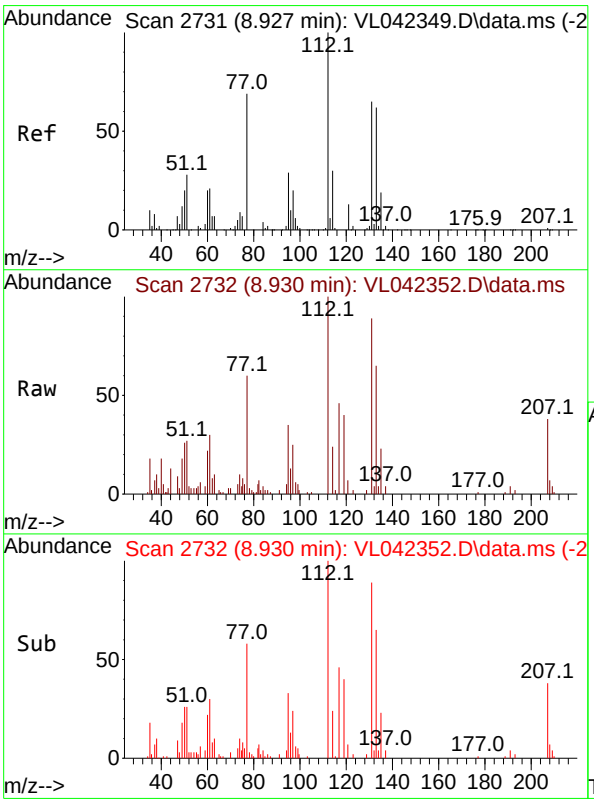
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:117 Resp: 321644

Ion	Ratio	Lower	Upper
117	100		
82	69.0	57.8	86.6
119	33.8	25.2	37.8

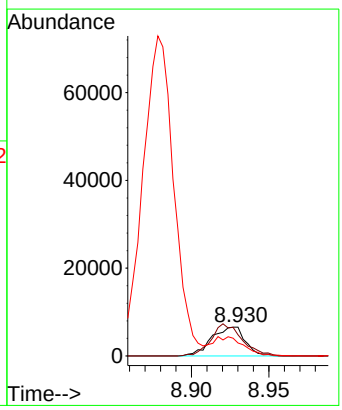


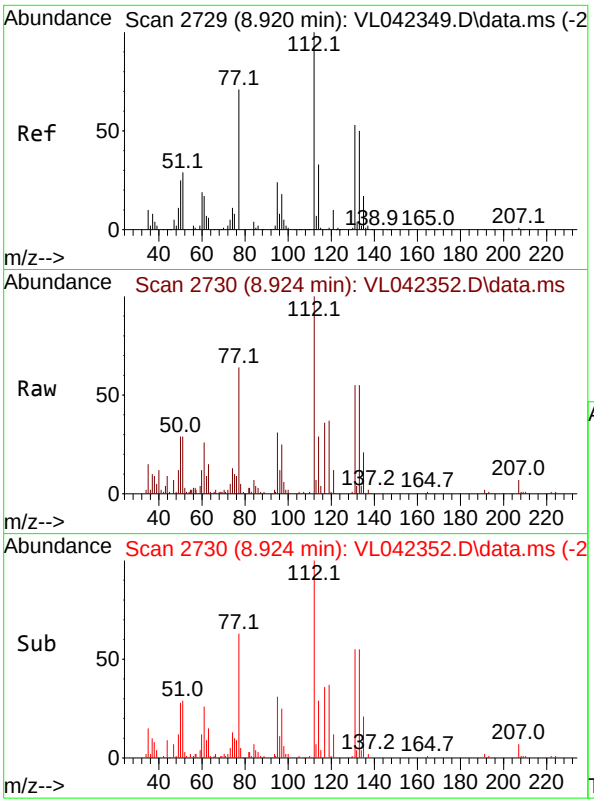


#56
1,1,1,2-Tetrachloroethane
Concen: 0.513 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:131 Resp: 9987

Ion	Ratio	Lower	Upper
131	100		
133	102.0	78.3	117.5
119	1087.9	48.7	73.1#



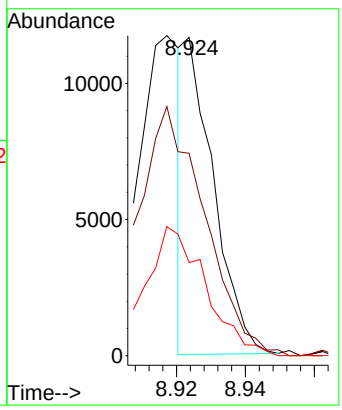


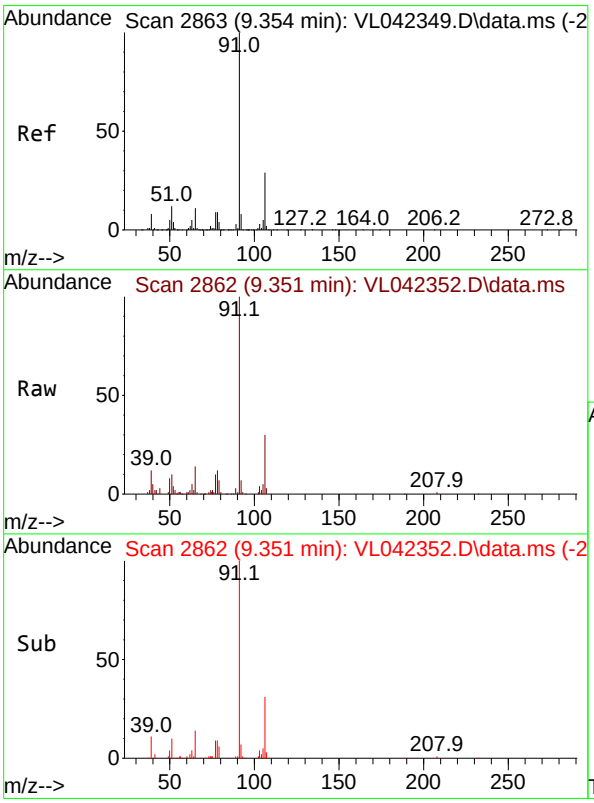
#57
Chlorobenzene
Concen: 0.206 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:112 Resp: 6884

Ion	Ratio	Lower	Upper
112	100		
77	62.1	57.8	86.6
114	29.5	29.3	35.9

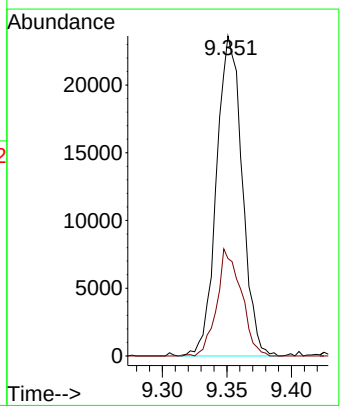


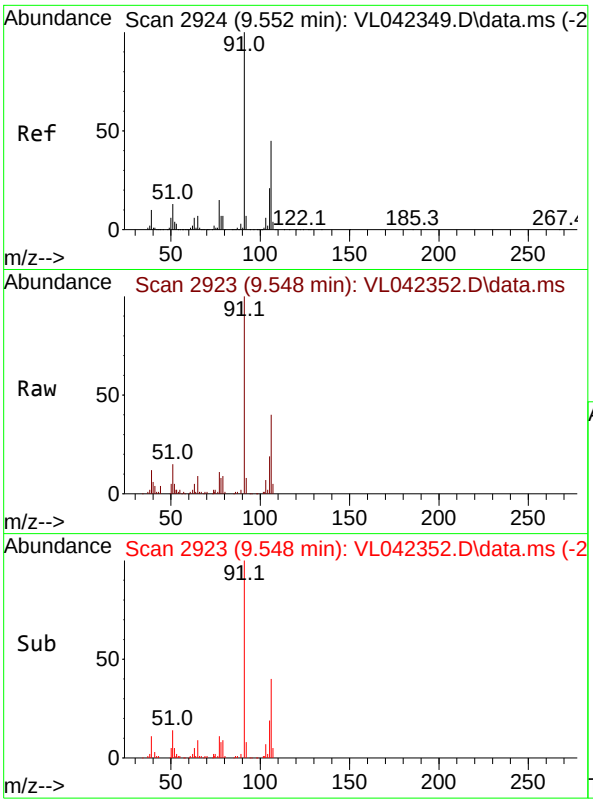


#58
Ethyl Benzene
Concen: 0.512 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 32624

Ion	Ratio	Lower	Upper
91	100		
106	30.5	23.0	34.4



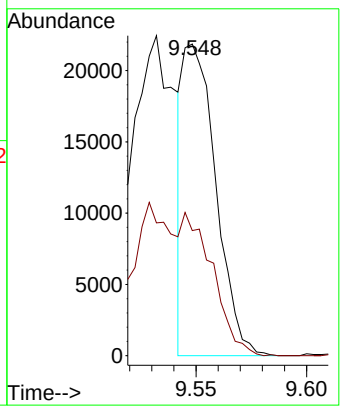


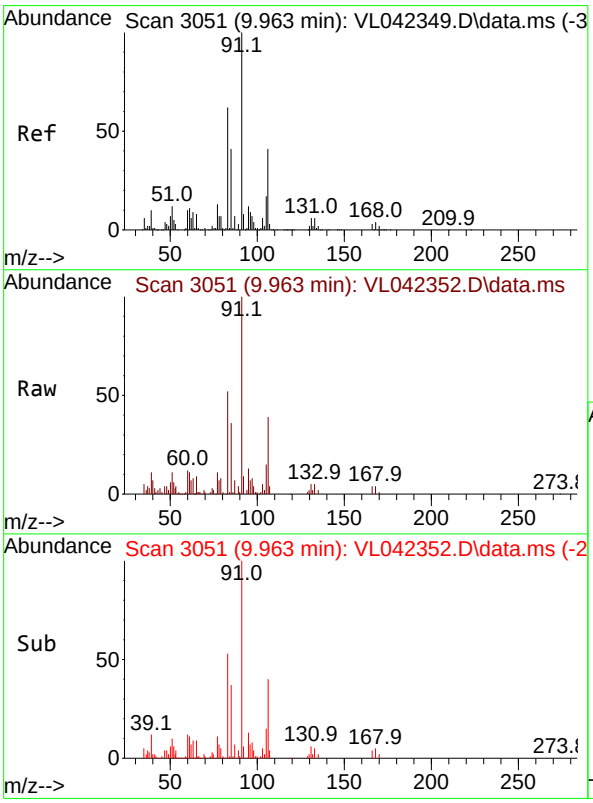
#59
m/p-Xylene
Concen: 0.439 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 22598

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

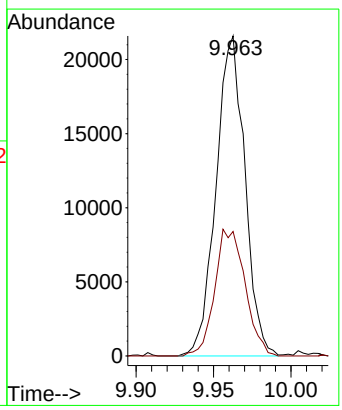


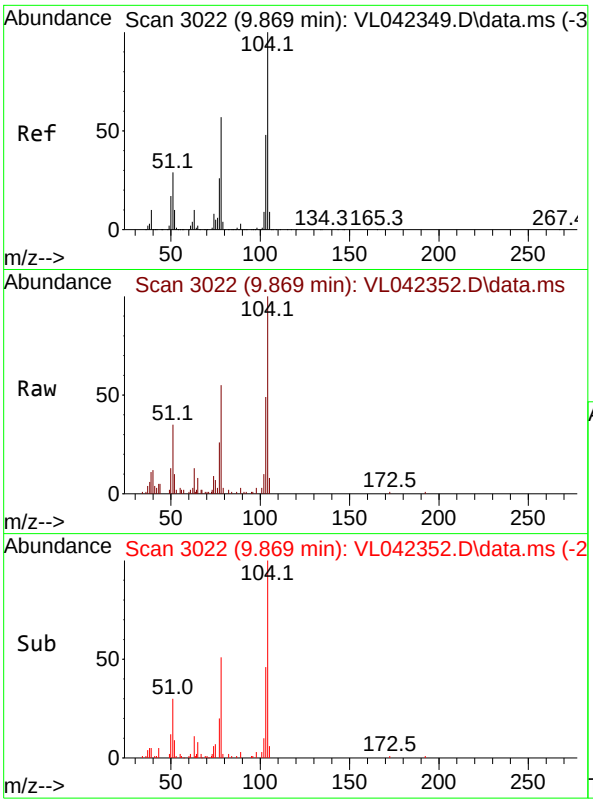


#60
o-Xylene
Concen: 0.541 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 27983

Ion	Ratio	Lower	Upper
91	100		
106	41.6	21.1	63.4



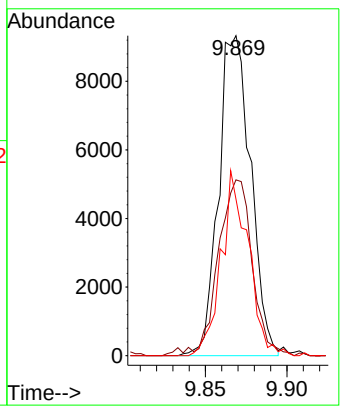


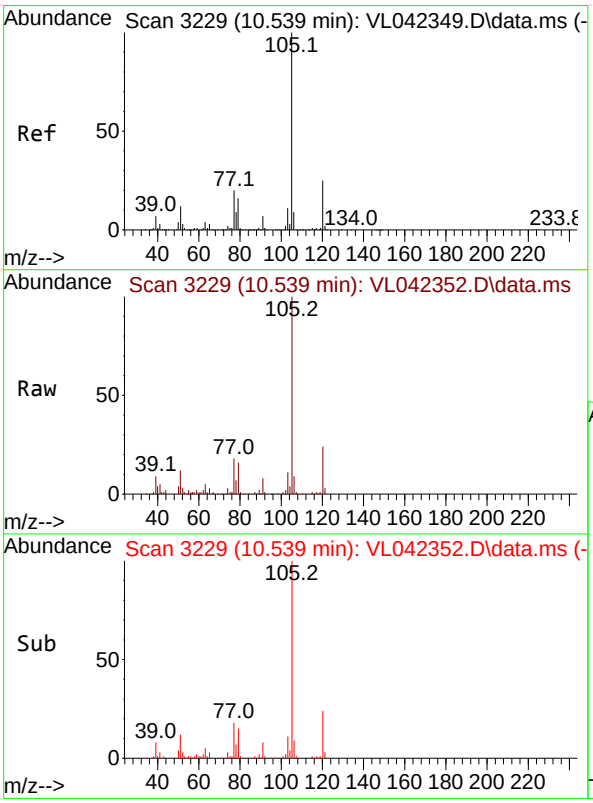
#61
Styrene
Concen: 0.516 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:104 Resp: 12736

Ion	Ratio	Lower	Upper
104	100		
78	58.6	44.6	66.8
103	49.2	37.4	56.0

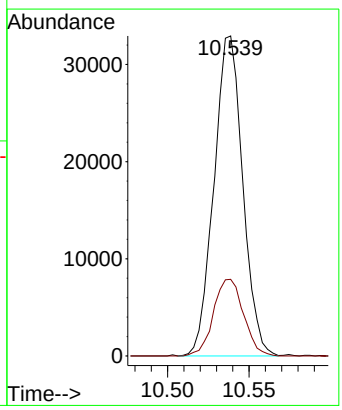


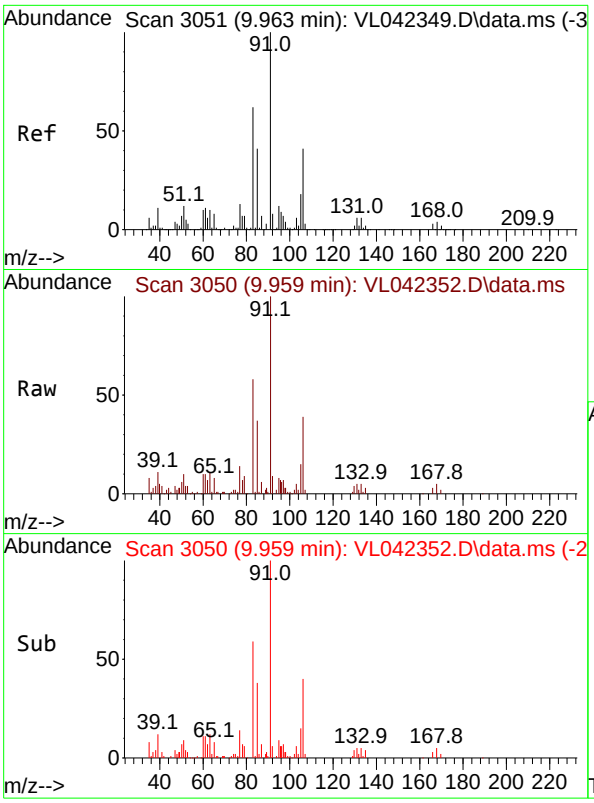


#62
Isopropylbenzene
Concen: 0.533 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 40481

Ion	Ratio	Lower	Upper
105	100		
120	24.9	19.8	29.8



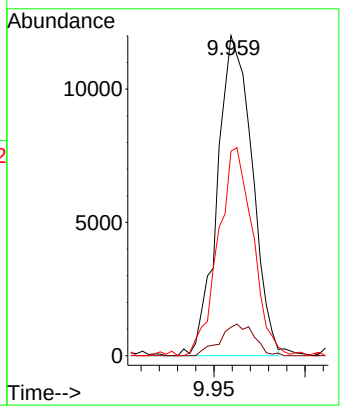


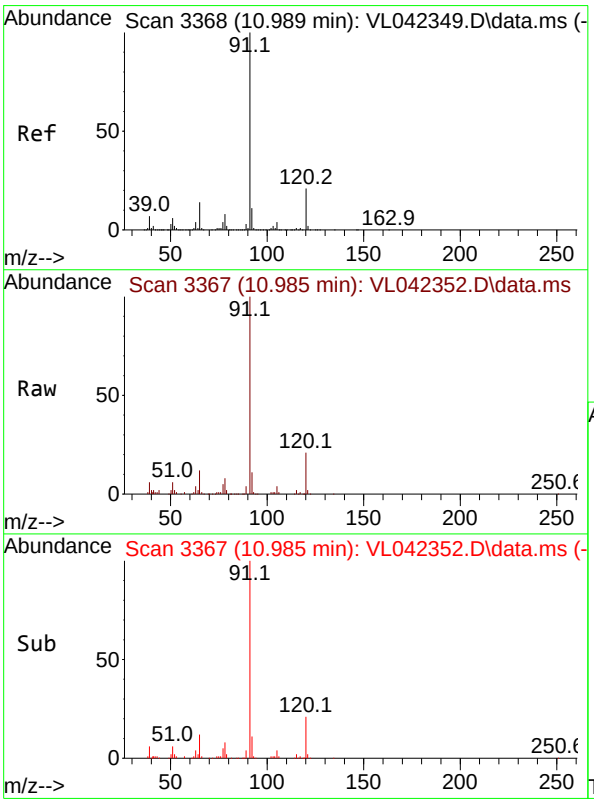
#63
1,1,2,2-Tetrachloroethane
Concen: 0.474 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 83 Resp: 15920

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	65.6	32.4	97.0

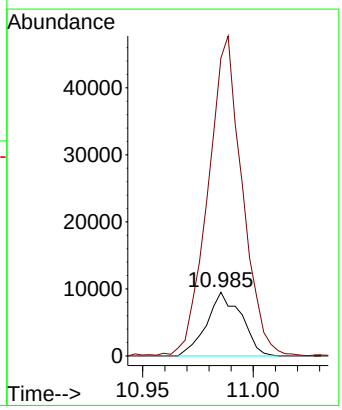


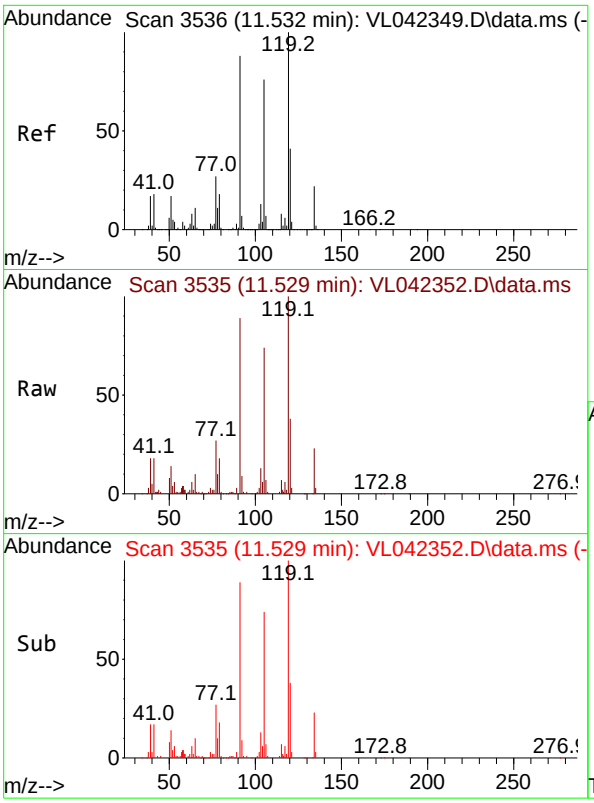


#64
n-propylbenzene
Concen: 0.544 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:120 Resp: 10369

Ion	Ratio	Lower	Upper
120	100		
91	499.6	392.4	588.6



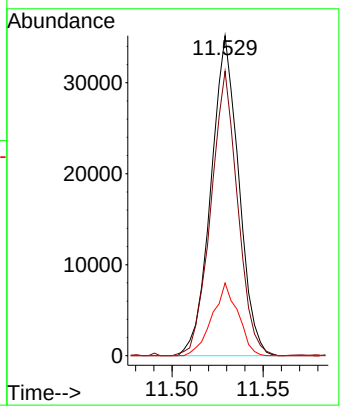


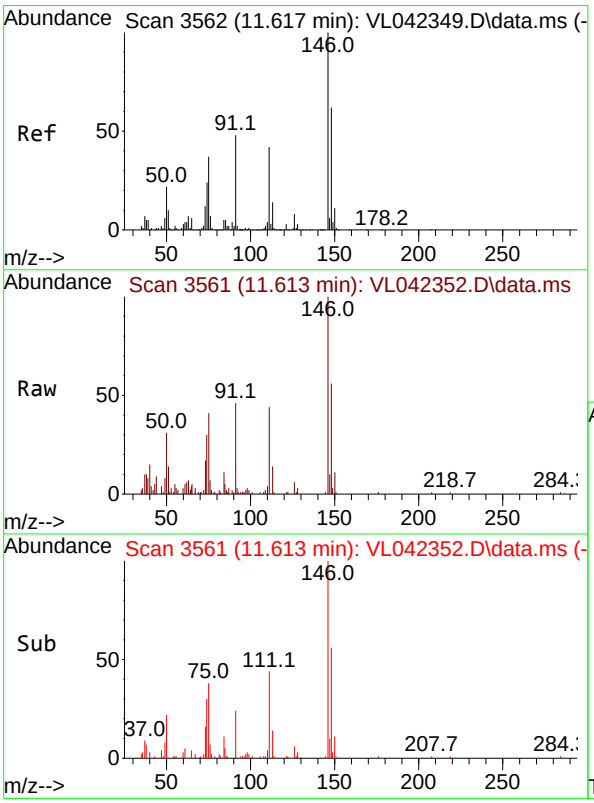
#65
tert-Butylbenzene
Concen: 0.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 37294

Ion	Ratio	Lower	Upper
119	100		
91	85.8	74.6	111.8
134	21.1	18.8	28.2

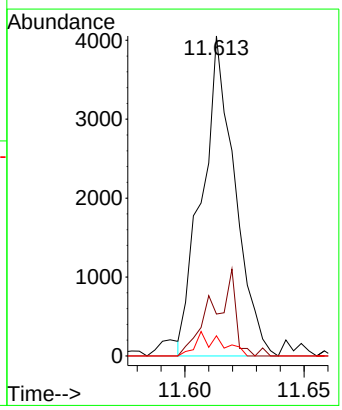


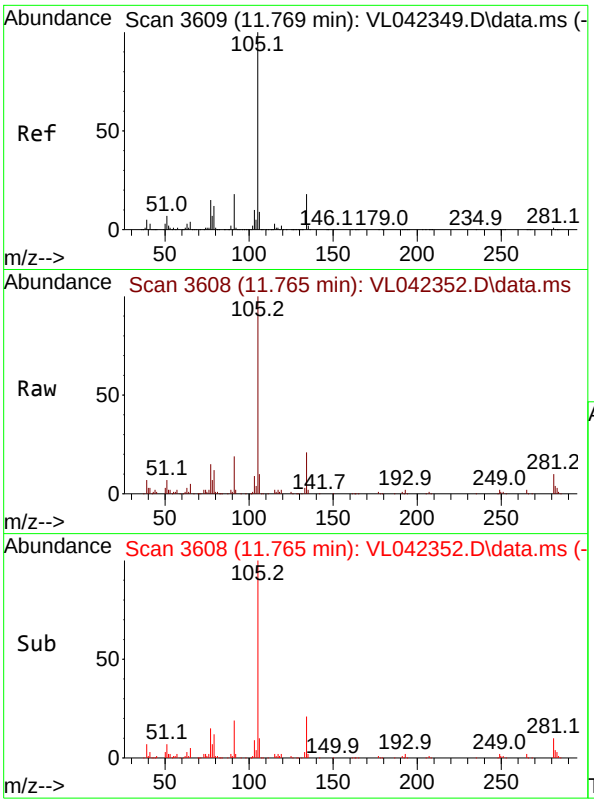


#66
Benzyl Chloride
Concen: 0.506 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 3878

Ion	Ratio	Lower	Upper
91	100		
126	19.8	11.8	17.6#
128	5.8	4.5	6.7



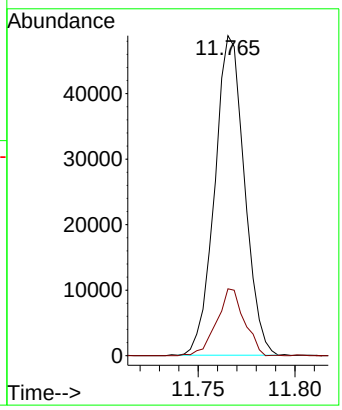


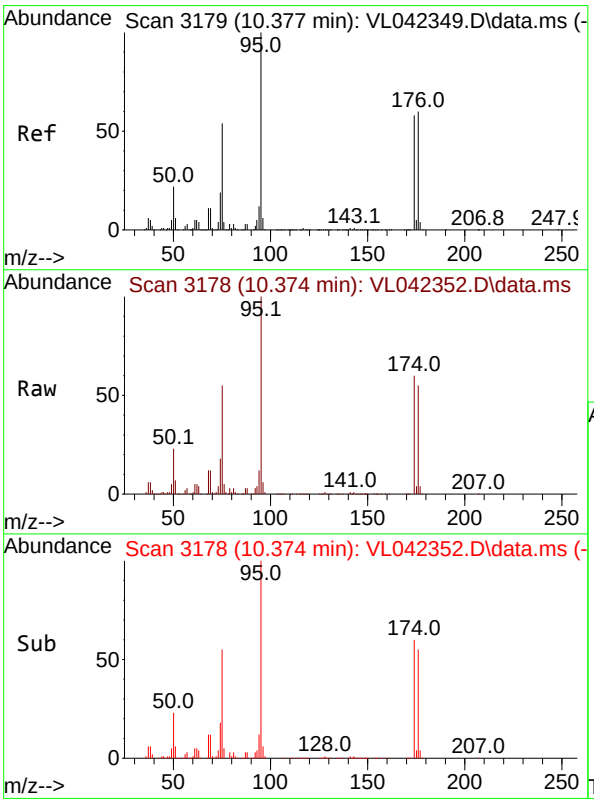
#67
sec-Butylbenzene
Concen: 0.537 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 52139

Ion	Ratio	Lower	Upper
105	100		
134	19.5	14.6	21.8

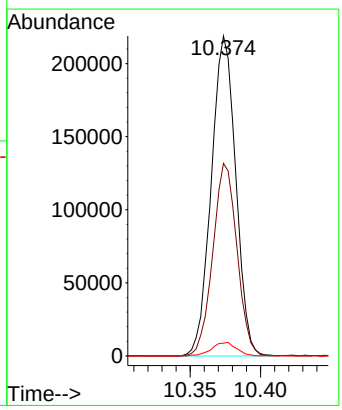


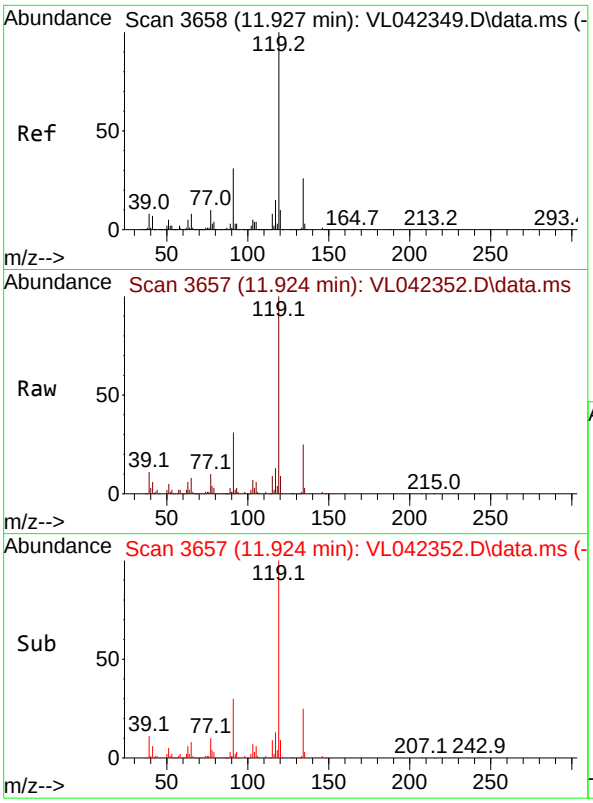


#68
1-Bromo-4-Fluorobenzene
Concen: 10.032 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 95 Resp: 265161

Ion	Ratio	Lower	Upper
95	100		
174	59.4	48.5	72.7
175	4.3	3.7	5.5



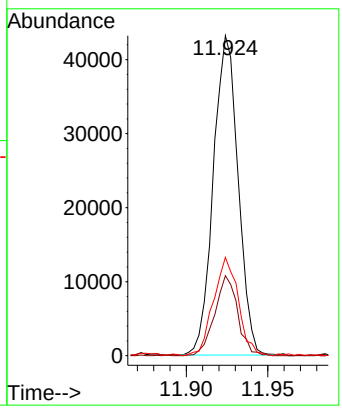


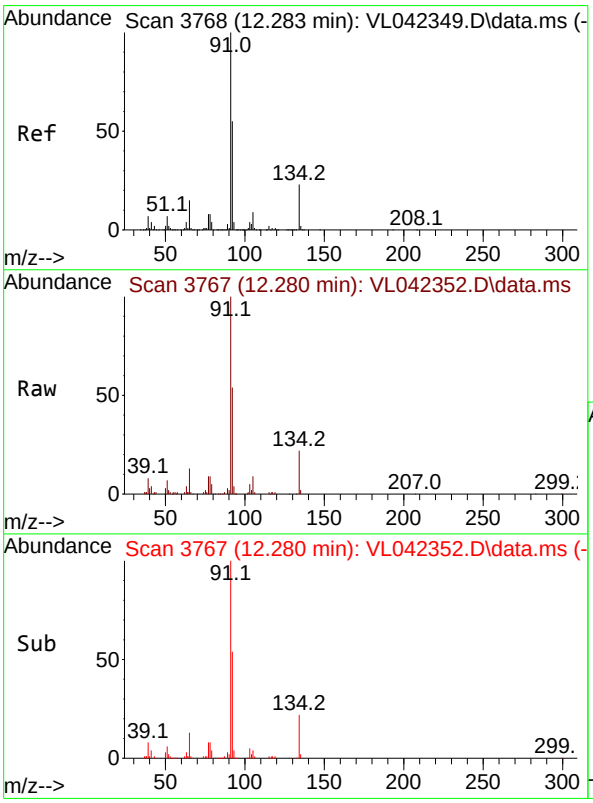
#69
p-Isopropyltoluene
Concen: 0.541 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:119 Resp: 45574

Ion	Ratio	Lower	Upper
119	100		
134	23.3	20.0	30.0
91	31.4	24.4	36.6

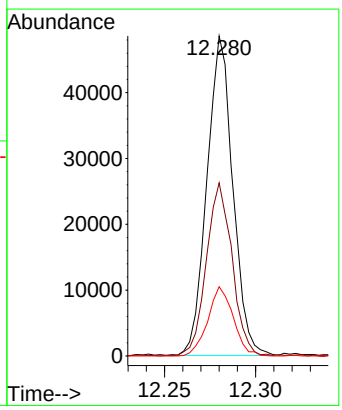


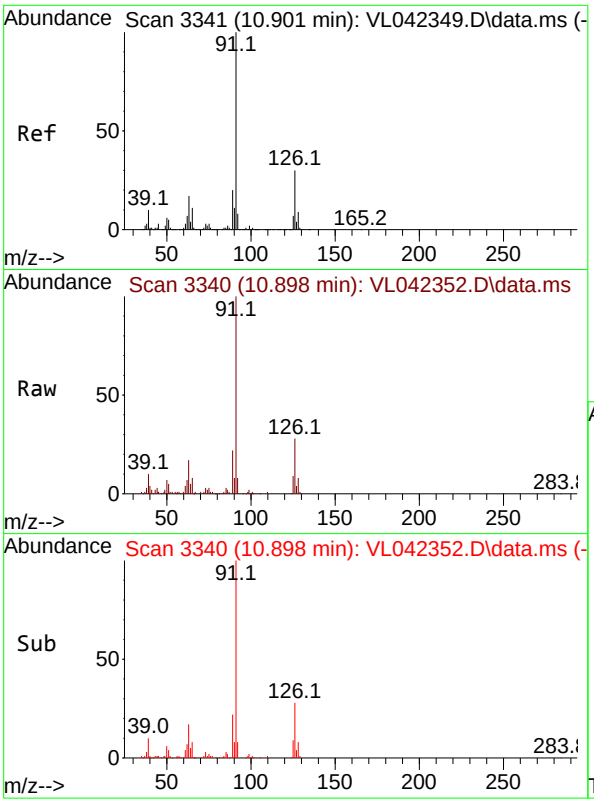


#70
n-Butylbenzene
Concen: 0.547 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion: 91 Resp: 48004

Ion	Ratio	Lower	Upper
91	100		
92	54.7	44.2	66.4
134	21.4	18.2	27.4



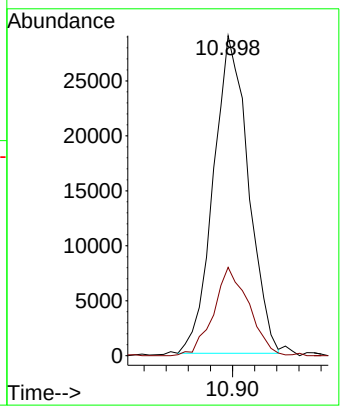


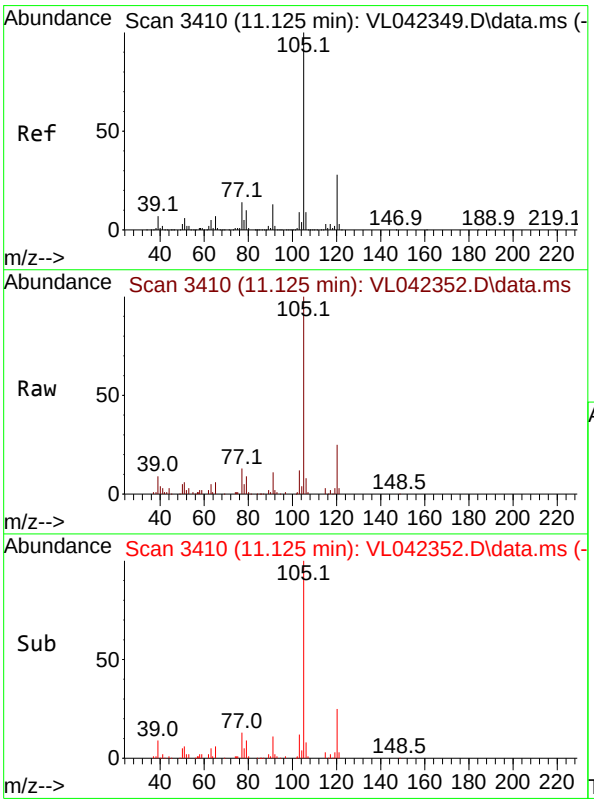
#71
2-Chlorotoluene
Concen: 0.533 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion: 91 Resp: 31709

Ion	Ratio	Lower	Upper
91	100		
126	28.3	11.4	45.4

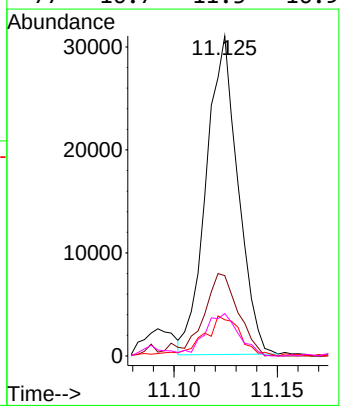


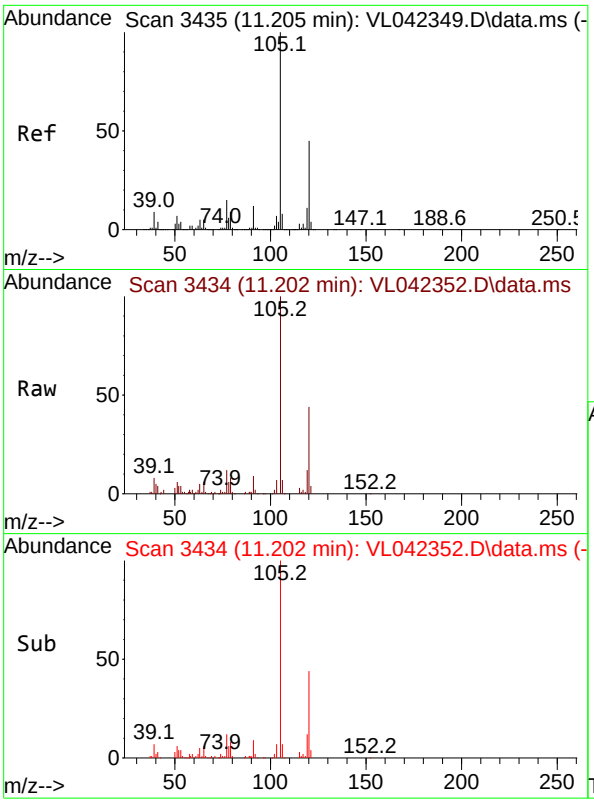


#72
4-Ethyltoluene
Concen: 0.523 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 33048

Ion	Ratio	Lower	Upper
105	100		
120	30.5	23.2	34.8
91	15.7	10.4	15.6#
77	16.7	11.3	16.9



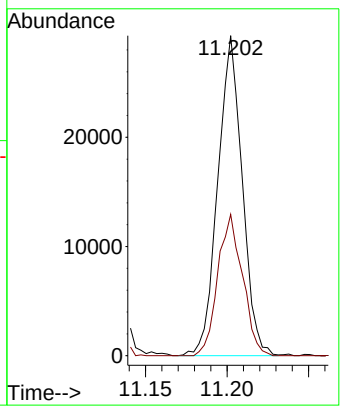


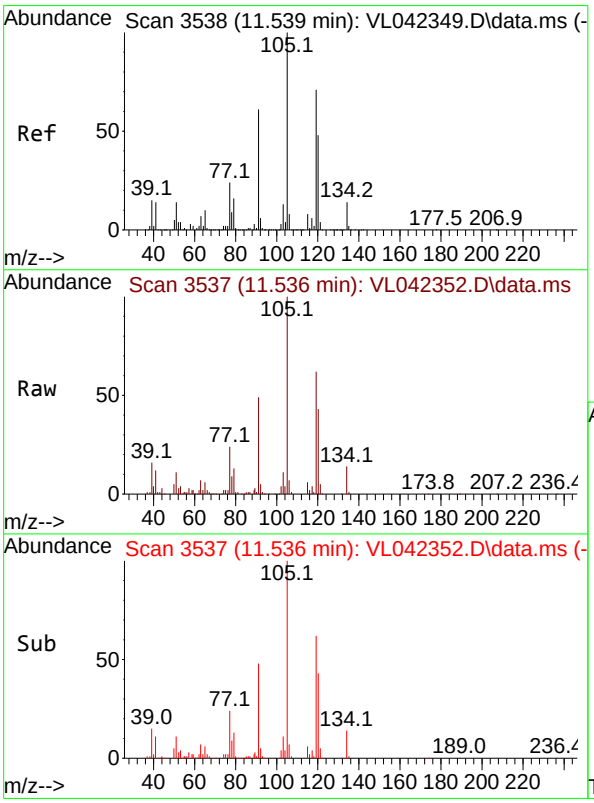
#73
1,3,5-Trimethylbenzene
Concen: 0.546 ppbv
RT: 11.202 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:105 Resp: 30464

Ion	Ratio	Lower	Upper
105	100		
120	44.1	35.6	53.4

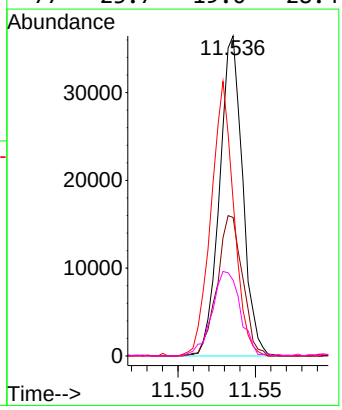


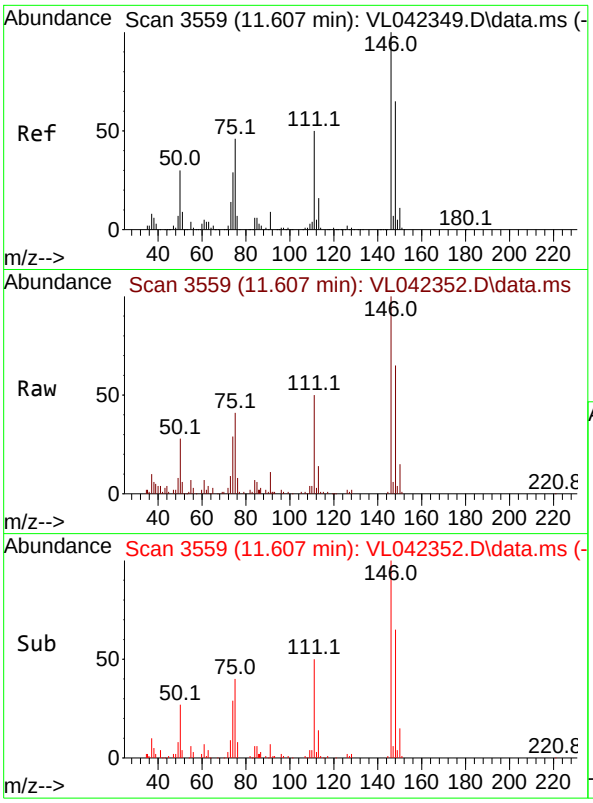


#74
1,2,4-Trimethylbenzene
Concen: 0.579 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:105 Resp: 37765

Ion	Ratio	Lower	Upper
105	100		
120	43.3	38.1	57.1
91	48.7	48.8	73.2#
77	23.7	19.0	28.4



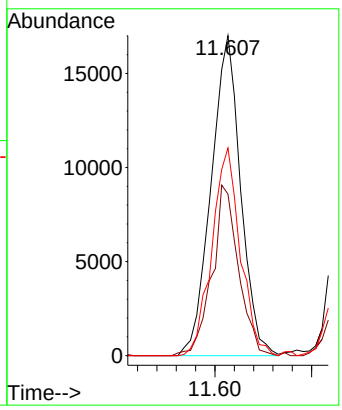


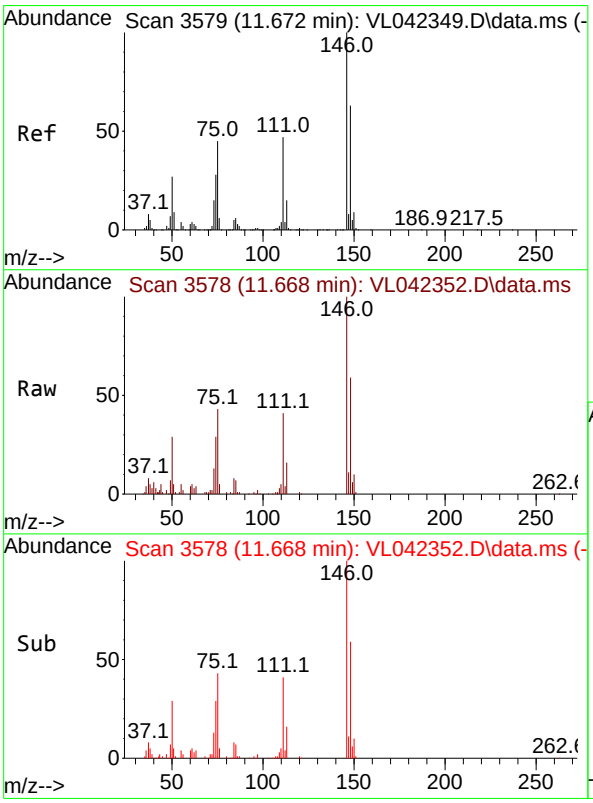
#75
1,3-Dichlorobenzene
Concen: 0.531 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 18003

Ion	Ratio	Lower	Upper
146	100		
111	47.9	24.3	72.8
148	62.9	31.6	94.8

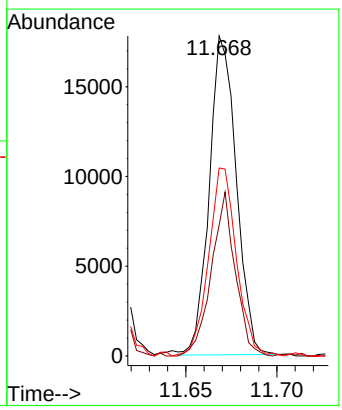


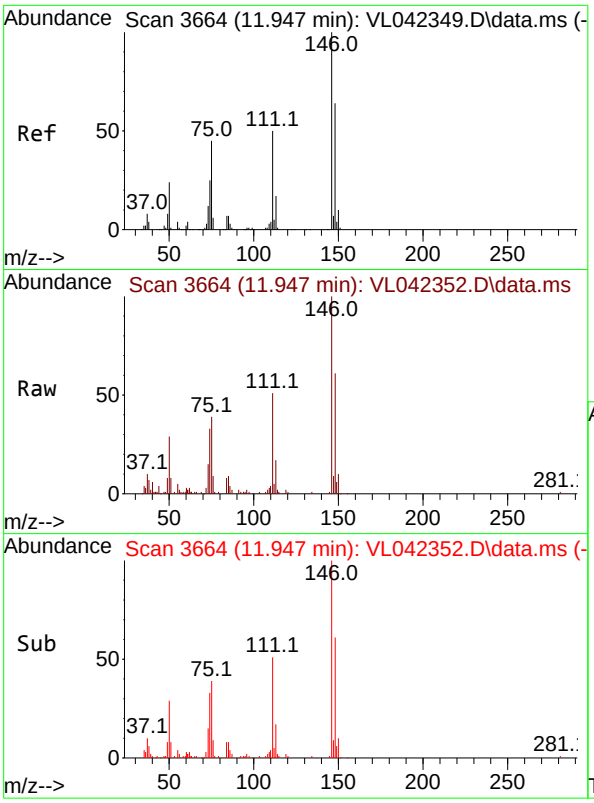


#76
1,4-Dichlorobenzene
Concen: 0.537 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:146 Resp: 18300

Ion	Ratio	Lower	Upper
146	100		
111	45.9	24.2	72.6
148	61.2	32.1	96.5



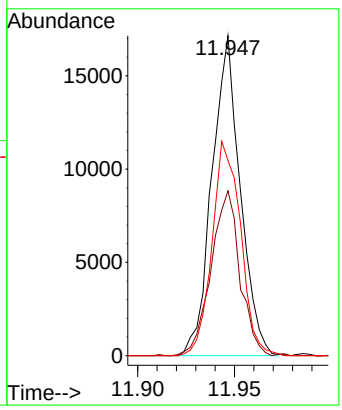


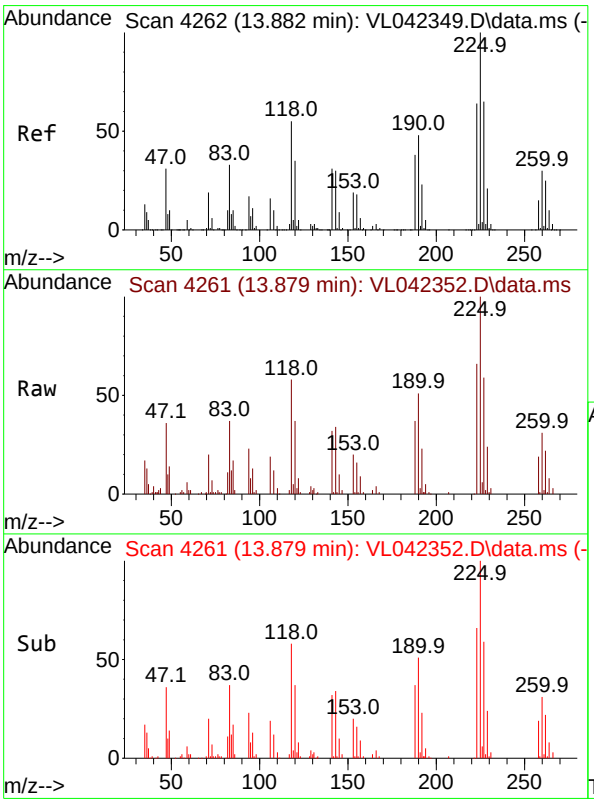
#77
1,2-Dichlorobenzene
Concen: 0.530 ppbv
RT: 11.947 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:146 Resp: 17446

Ion	Ratio	Lower	Upper
146	100		
111	52.6	25.3	75.9
148	67.5	31.5	94.5

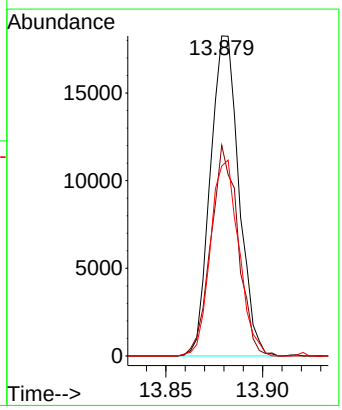


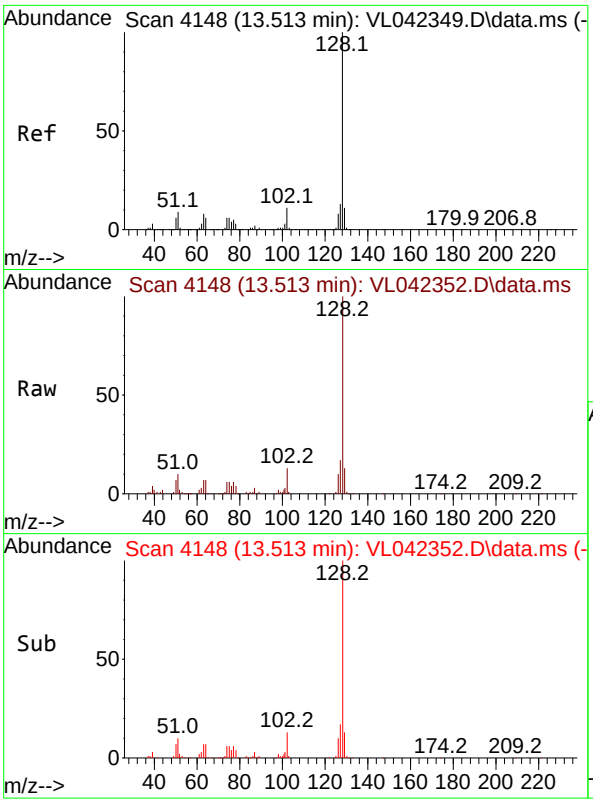


#78
Hexachloro-1,3-Butadiene
Concen: 0.562 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:225 Resp: 18705

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	61.1	51.5	77.3



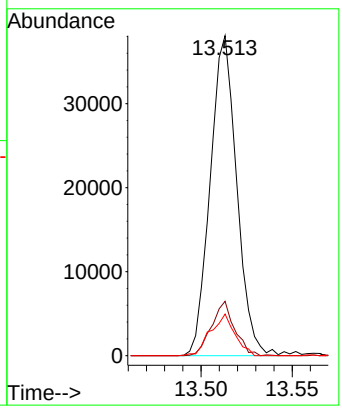


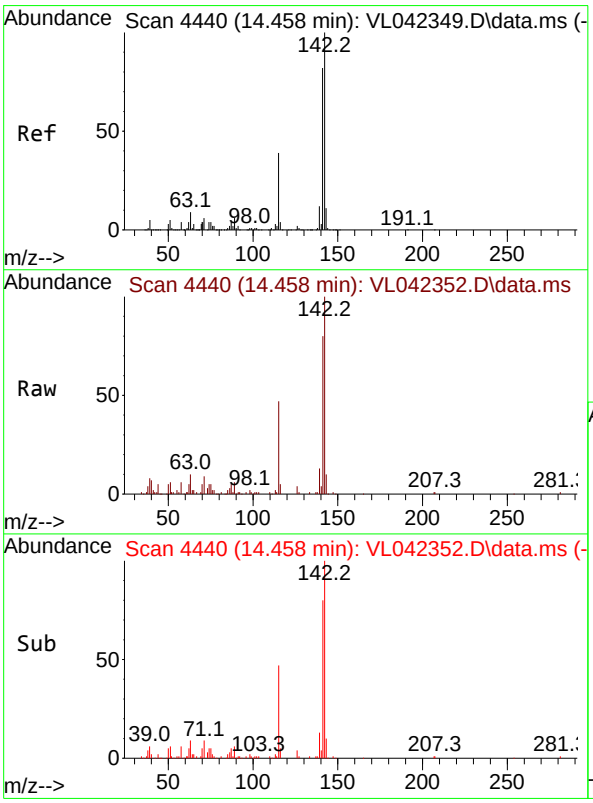
#79
Naphthalene
Concen: 0.494 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:128 Resp: 38521

Ion	Ratio	Lower	Upper
128	100		
127	17.0	10.6	15.8#
129	13.0	8.6	12.8#

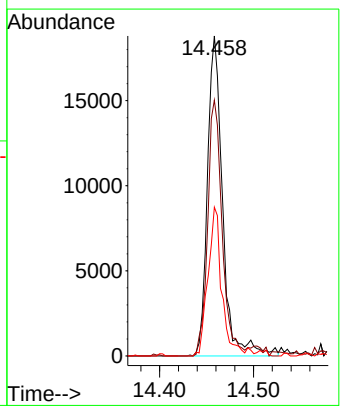


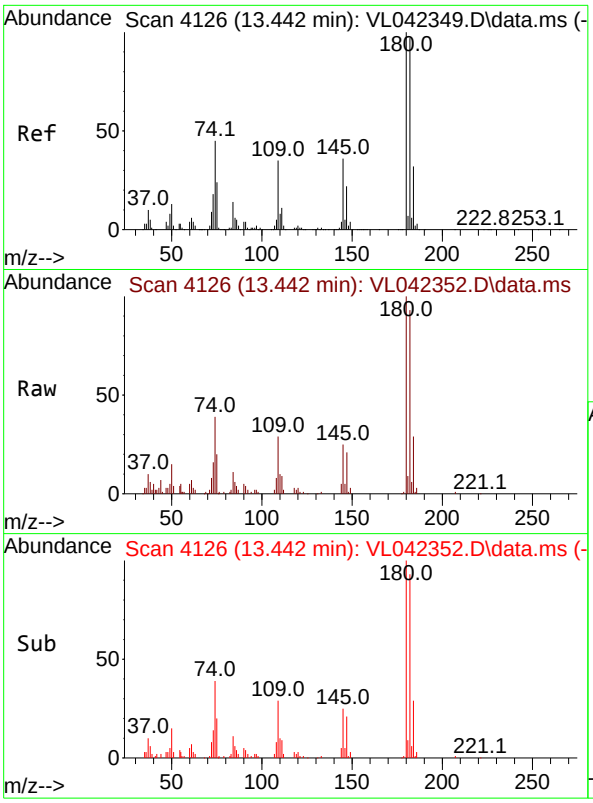


#80
Naphthalene,2-methyl-
Concen: 0.475 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Tgt Ion:142 Resp: 21076

Ion	Ratio	Lower	Upper
142	100		
141	79.2	66.8	100.2
115	44.1	33.4	50.2



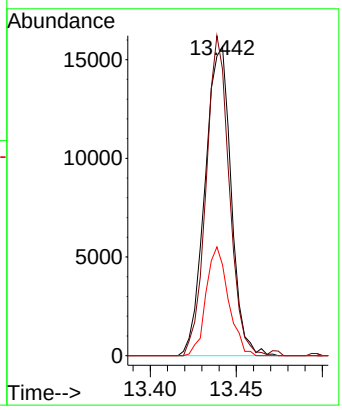


#81
1,2,4-Trichlorobenzene
Concen: 0.493 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042352.D
Acq: 17 Apr 2025 11:19

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.5

Tgt Ion:180 Resp: 16504

Ion	Ratio	Lower	Upper
180	100		
182	92.4	76.8	115.2
184	30.2	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042353.D
Acq On : 17 Apr 2025 11:50
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Apr 18 01:29:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.791	49	119461	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	350484	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	315004	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.381	95	256417	9.906	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.100%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	2857	0.135	ppbv	98
3) Chlorodifluoromethane	1.477	51	2706	0.135	ppbv #	91
4) Chloromethane	1.535	50	1225	0.147	ppbv #	85
5) Vinyl Chloride	1.580	62	1088	0.120	ppbv #	74
6) Bromomethane	1.668	94	663	0.168	ppbv #	72
7) Chloroethane	1.703	64	579	0.176	ppbv #	78
8) Dichlorotetrafluoroethane	1.557	85	2377	0.131	ppbv	94
9) Propene	1.435	41	314	0.034	ppbv	90
10) Heptane	4.988	43	1056	0.043	ppbv #	1
12) 1,1,2-Trichlorotrifluo...	2.140	101	2017	0.123	ppbv	94
13) Ethanol	1.891	45	1958	2.618	ppbv #	24
14) Bromoethene	1.781	108	1015	0.164	ppbv #	77
15) Acetone	1.839	43	4783	0.245	ppbv #	82
16) 1,3-Butadiene	1.609	39	1776	0.193	ppbv #	46
17) tert-Butyl alcohol	2.049	59	3130	0.129	ppbv #	6
18) 1,1-Dichloroethene	2.037	96	1074	0.136	ppbv	85
19) Isopropyl Alcohol	1.891	45	1958	0.180	ppbv	90
20) Methylene Chloride	2.066	84	2741	0.358	ppbv #	74
21) Allyl Chloride	2.098	41	2786	0.206	ppbv #	72
22) trans-1,2-Dichloroethene	2.347	96	1201	0.138	ppbv #	60
23) Vinyl Acetate	2.457	43	326	0.041	ppbv #	77
24) 1,1-Dichloroethane	2.412	63	2169	0.131	ppbv #	78
26) Hexane	2.833	57	3260	0.167	ppbv #	1
27) Carbon Disulfide	2.150	76	2396	0.115	ppbv #	1
28) Methyl tert-Butyl Ether	2.448	73	1460	0.114	ppbv #	1
29) Chloroform	2.849	83	3542	0.128	ppbv	100
30) Cyclohexane	3.859	84	1037	0.066	ppbv #	1
32) 1,1,1-Trichloroethane	3.373	97	1734	0.059	ppbv #	20
34) 2-Butanone	2.564	43	3506	0.126	ppbv #	79
35) Carbon Tetrachloride	3.771	117	3204	0.101	ppbv #	94
36) Benzene	3.665	78	4424	0.117	ppbv	97
37) 1,2-Dichloroethane	3.224	62	2523	0.111	ppbv #	81
38) Trichloroethene	4.551	130	1113	0.067	ppbv #	63
39) 1,2-Dichloropropane	4.315	63	1007	0.071	ppbv	96
40) 1,4-Dioxane	4.616	88	431	0.056	ppbv #	1
42) Bromodichloromethane	4.496	83	2443	0.077	ppbv #	89
43) Methyl Methacrylate	4.894	69	1683	0.099	ppbv #	60
44) 2,2,4-Trimethylpentane	4.648	57	2115	0.032	ppbv #	42
45) t-1,3-Dichloropropene	6.429	75	748	0.043	ppbv	98
46) cis-1,3-Dichloropropene	5.610	75	1032	0.048	ppbv	90
47) 1,1,2-Trichloroethane	6.584	97	540	0.038	ppbv #	39
48) Dibromochloromethane	7.393	129	1149	0.045	ppbv #	1
49) Bromoform	9.484	173	1973	0.089	ppbv #	86

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042353.D
Acq On : 17 Apr 2025 11:50
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Apr 18 01:29:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) 2-Hexanone	7.455	43	4915	0.118	ppbv	#	99
52) Tetrachloroethene	8.222	164	957	0.065	ppbv		88
54) 1,2-Dibromoethane	7.662	107	1470	0.072	ppbv	#	75
56) 1,1,1,2-Tetrachloroethane	8.934	131	2031	0.107	ppbv	#	47
57) Chlorobenzene	8.924	112	3842	0.117	ppbv	#	76
58) Ethyl Benzene	9.361	91	3105	0.050	ppbv		95
59) m/p-Xylene	9.552	91	4844	0.096	ppbv	#	32
60) o-Xylene	9.970	91	5359	0.106	ppbv		91
61) Styrene	9.872	104	1549	0.064	ppbv	#	26
62) Isopropylbenzene	10.542	105	8285	0.111	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.966	83	3646	0.111	ppbv		97
64) n-propylbenzene	10.996	120	2186	0.117	ppbv		93
65) tert-Butylbenzene	11.536	119	8656	0.127	ppbv		85
66) Benzyl Chloride	11.617	91	414	0.055	ppbv	#	81
67) sec-Butylbenzene	11.769	105	11126	0.117	ppbv		96
69) p-Isopropyltoluene	11.928	119	9534	0.115	ppbv		98
70) n-Butylbenzene	12.284	91	8684	0.101	ppbv		96
71) 2-Chlorotoluene	10.905	91	6703	0.115	ppbv		99
72) 4-Ethyltoluene	11.128	105	6463	0.104	ppbv	#	80
73) 1,3,5-Trimethylbenzene	11.206	105	6797	0.124	ppbv		96
74) 1,2,4-Trimethylbenzene	11.539	105	8745	0.137	ppbv	#	81
75) 1,3-Dichlorobenzene	11.610	146	3258	0.098	ppbv		85
76) 1,4-Dichlorobenzene	11.678	146	3366	0.101	ppbv		92
77) 1,2-Dichlorobenzene	11.950	146	3996	0.124	ppbv		93
78) Hexachloro-1,3-Butadiene	13.883	225	4030	0.124	ppbv		97
79) Naphthalene	13.517	128	7664	0.100	ppbv	#	92
80) Naphthalene,2-methyl-	14.468	142	3339	0.077	ppbv	#	92
81) 1,2,4-Trichlorobenzene	13.442	180	2245	0.069	ppbv	#	95

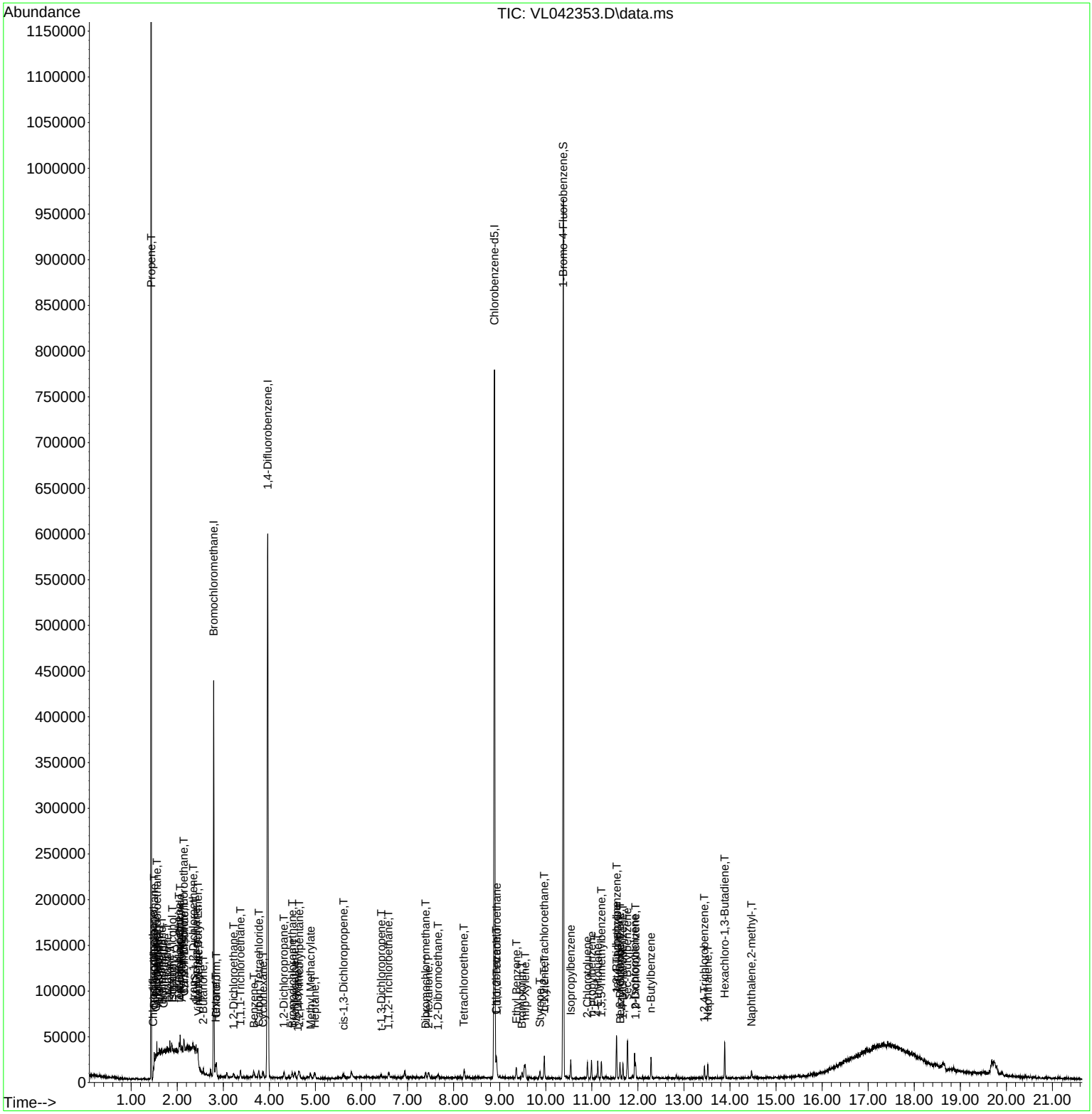
(#) = qualifier out of range (m) = manual integration (+) = signals summed

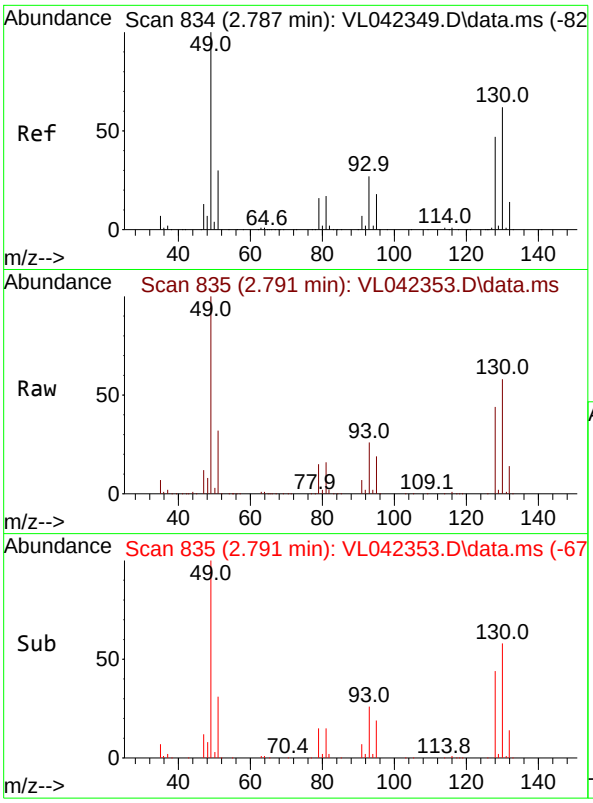
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042353.D
Acq On : 17 Apr 2025 11:50
Operator : SY/MD
Sample : VSTDICC0.1
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Quant Time: Apr 18 01:29:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



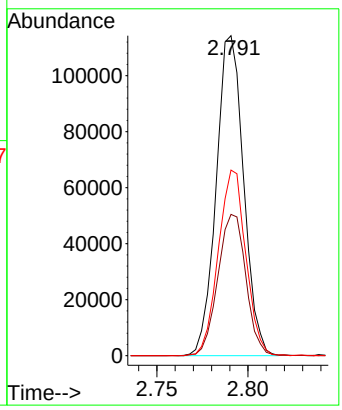


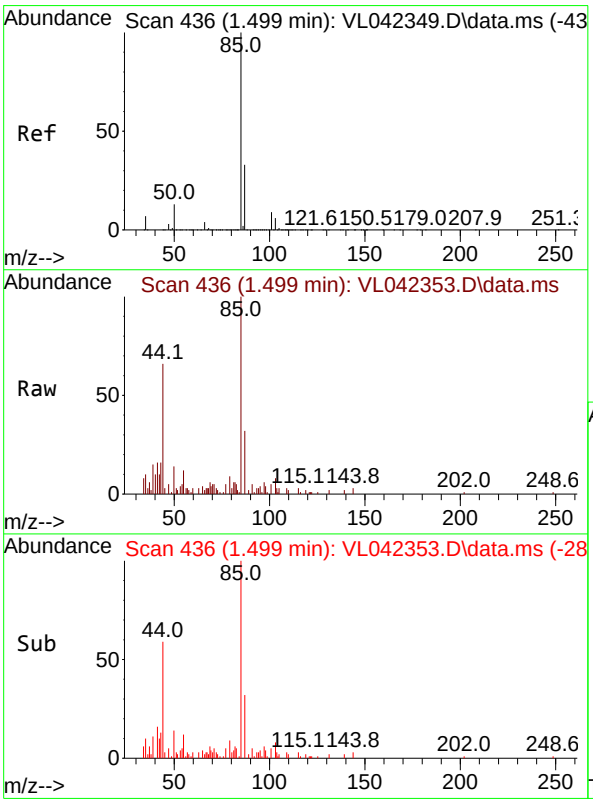
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.791 min Scan# 8
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 49 Resp: 119461

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	58.3	29.3	88.0

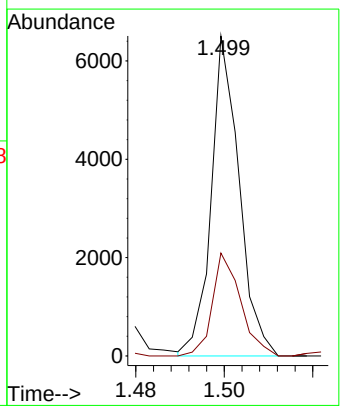


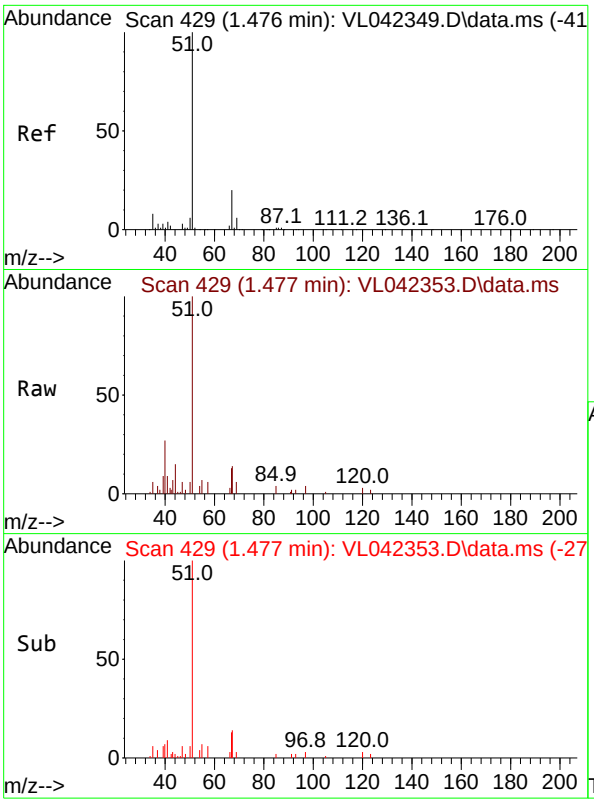


#2
Dichlorodifluoromethane
Concen: 0.135 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 85 Resp: 2857

Ion	Ratio	Lower	Upper
85	100		
87	32.2	26.6	39.8



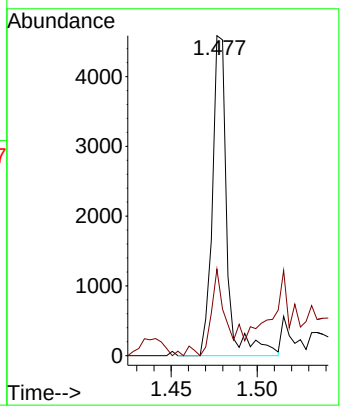


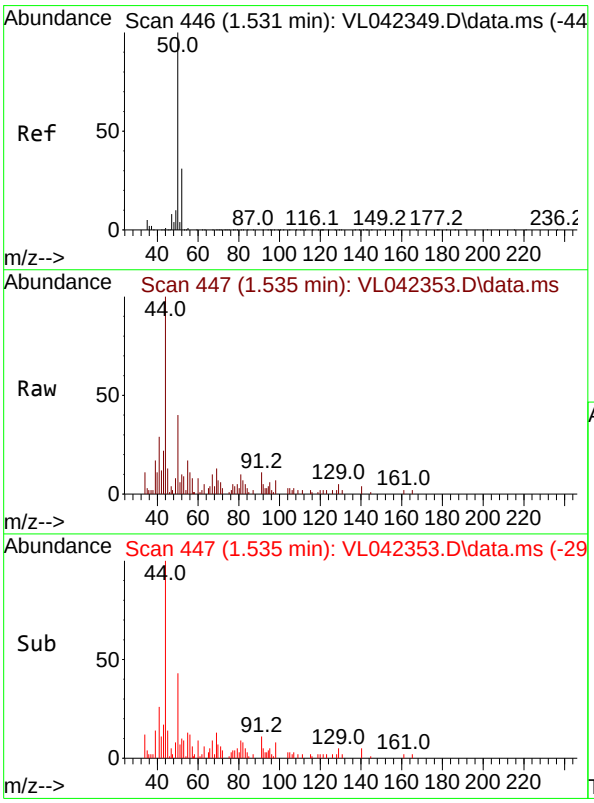
#3
Chlorodifluoromethane
Concen: 0.135 ppbv
RT: 1.477 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 51 Resp: 2706

Ion	Ratio	Lower	Upper
51	100		
67	24.5	16.2	24.4#

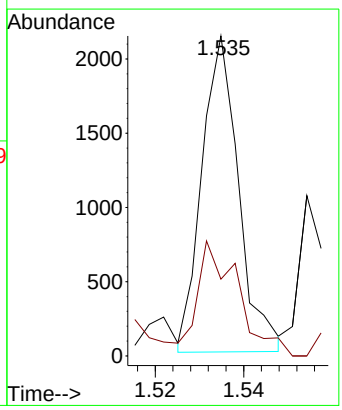


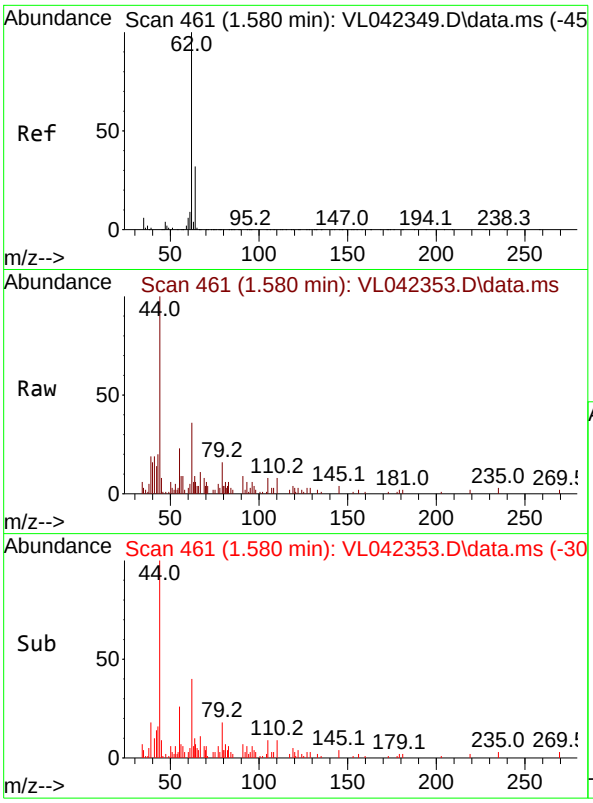


#4
Chloromethane
Concen: 0.147 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 50 Resp: 1225

Ion	Ratio	Lower	Upper
50	100		
52	22.9	24.7	37.1#



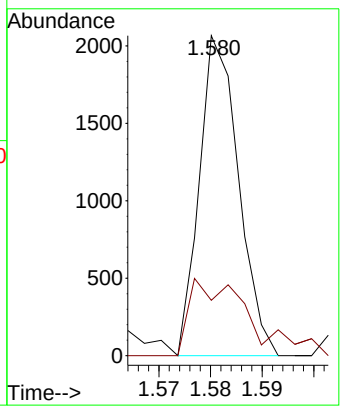


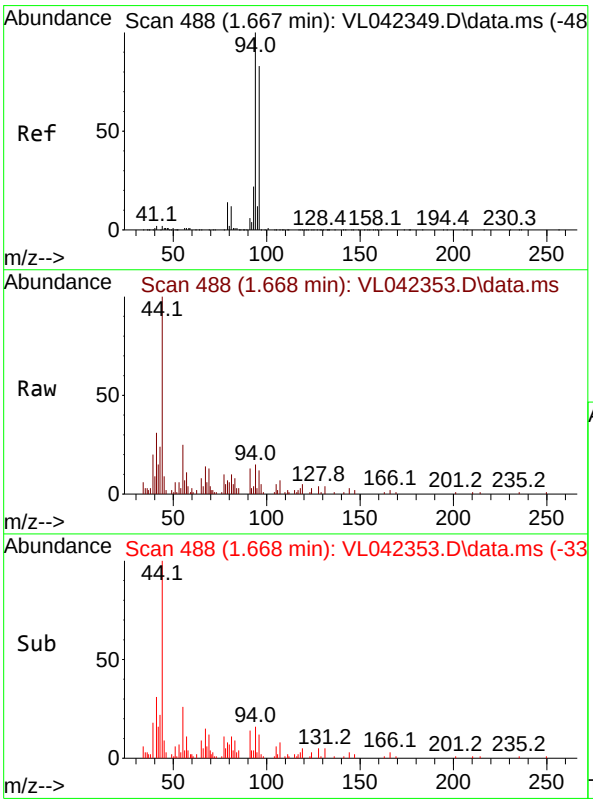
#5
Vinyl Chloride
Concen: 0.120 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 62 Resp: 1088

Ion	Ratio	Lower	Upper
62	100		
64	17.3	25.4	38.0#

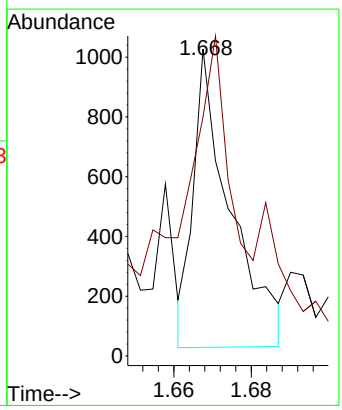


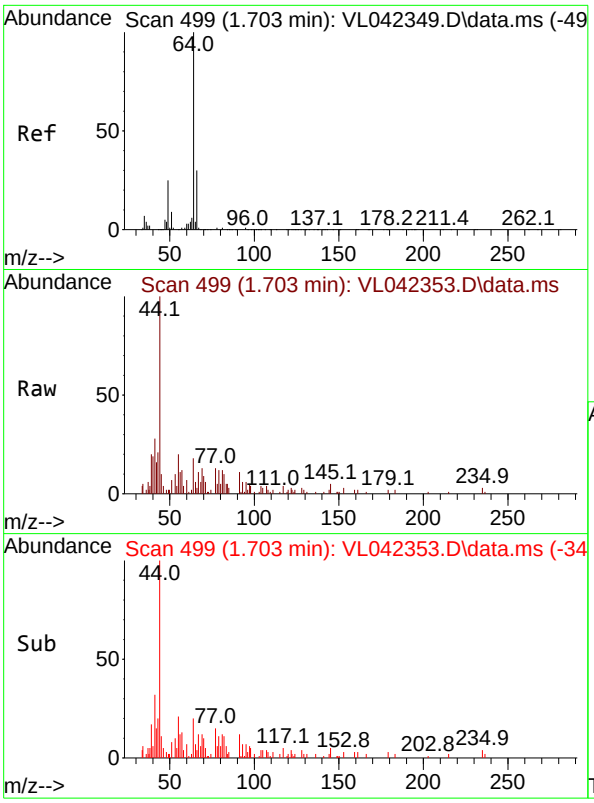


#6
Bromomethane
Concen: 0.168 ppbv
RT: 1.668 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 94 Resp: 663

Ion	Ratio	Lower	Upper
94	100		
96	57.5	66.2	99.2#



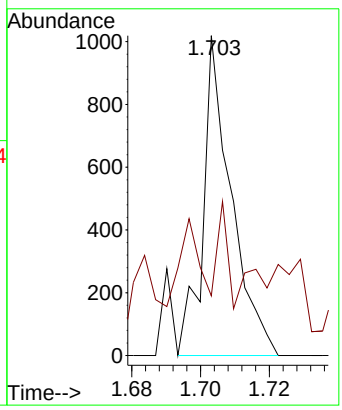


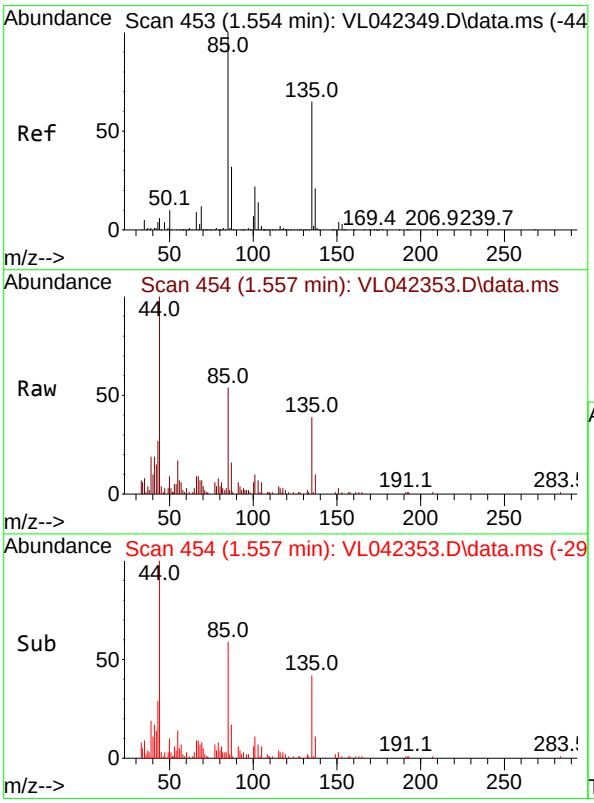
#7
Chloroethane
Concen: 0.176 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 64 Resp: 579

Ion	Ratio	Lower	Upper
64	100		
66	18.6	24.6	37.0#

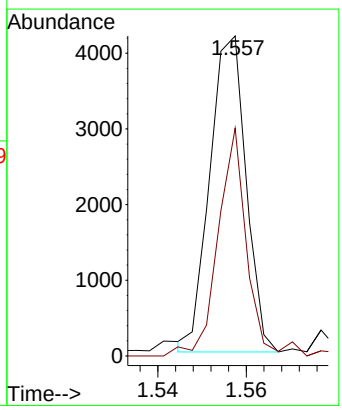


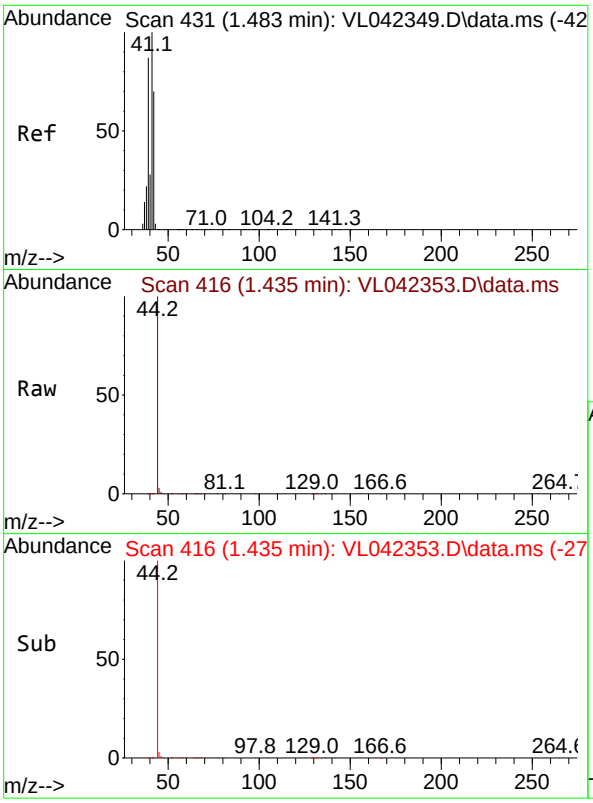


#8
Dichlorotetrafluoroethane
Concen: 0.131 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 85 Resp: 2377

Ion	Ratio	Lower	Upper
85	100		
135	60.3	52.2	78.2



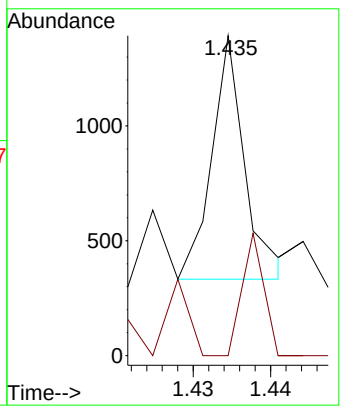


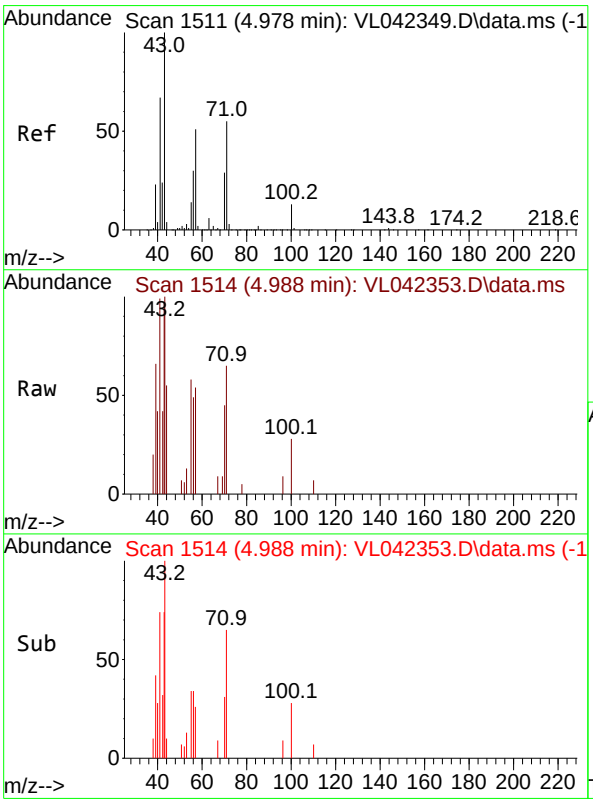
#9
Propene
Concen: 0.034 ppbv
RT: 1.435 min Scan# 4
Delta R.T. -0.048 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 41 Resp: 314

Ion	Ratio	Lower	Upper
41	100		
42	78.7	56.2	84.4

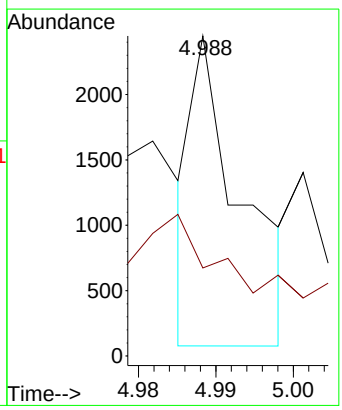


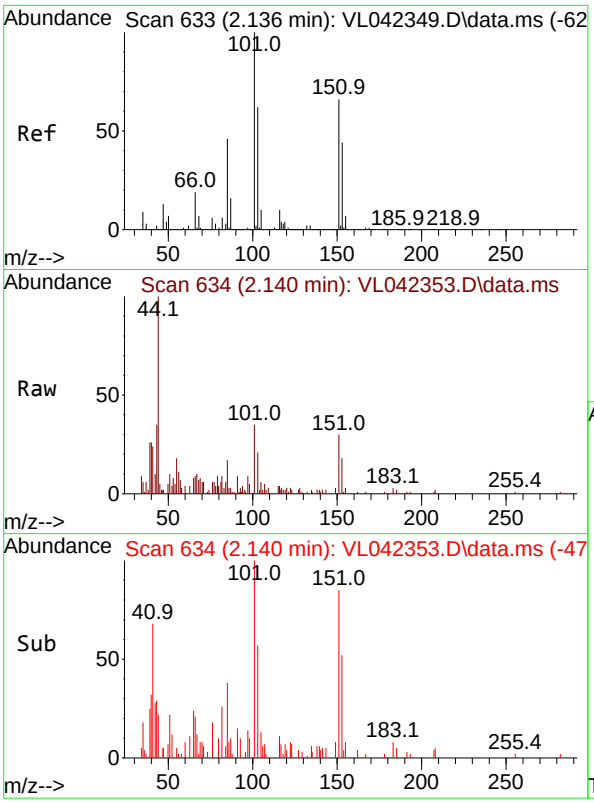


#10
Heptane
Concen: 0.043 ppbv
RT: 4.988 min Scan# 1514
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 43 Resp: 1056

Ion	Ratio	Lower	Upper
43	100		
57	220.7	39.9	59.9#



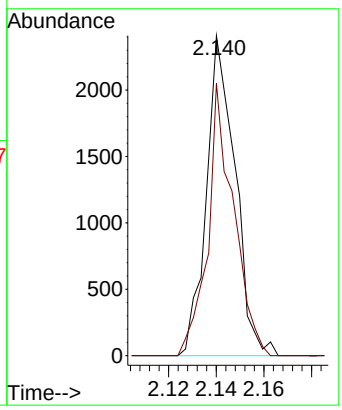


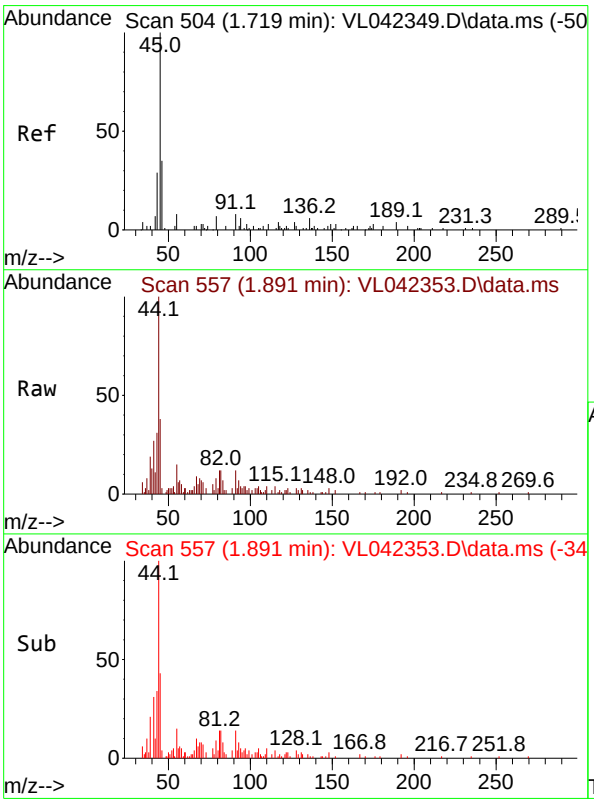
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.123 ppbv
RT: 2.140 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:101 Resp: 2017

Ion	Ratio	Lower	Upper
101	100		
151	76.2	57.0	85.6

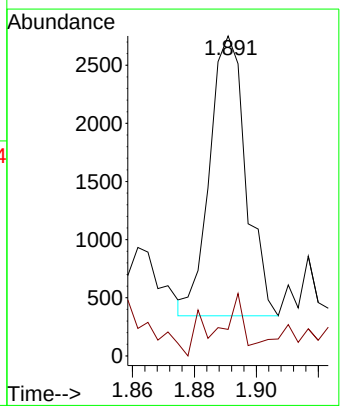


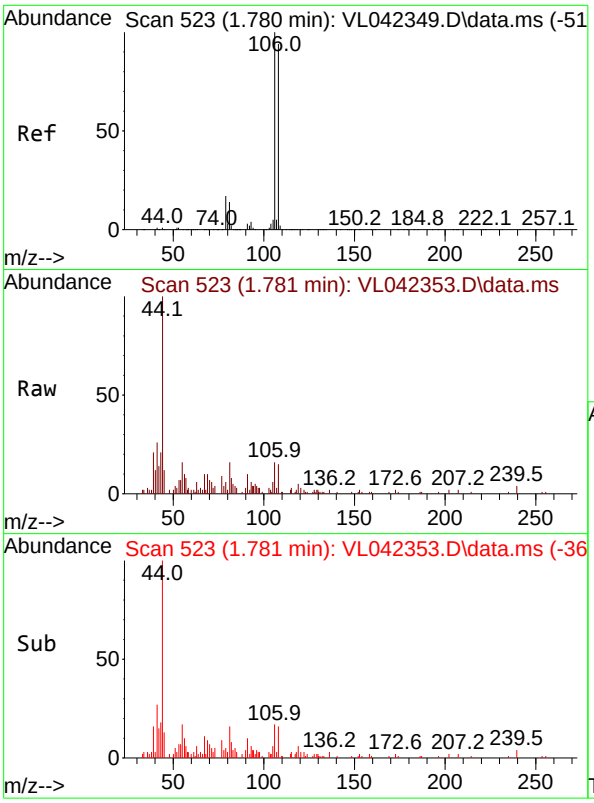


#13
Ethanol
Concen: 2.618 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.172 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 45 Resp: 1958

Ion	Ratio	Lower	Upper
45	100		
46	0.0	21.9	87.7#



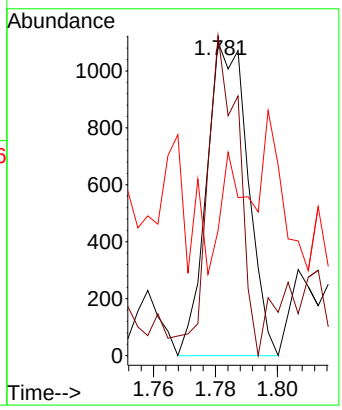


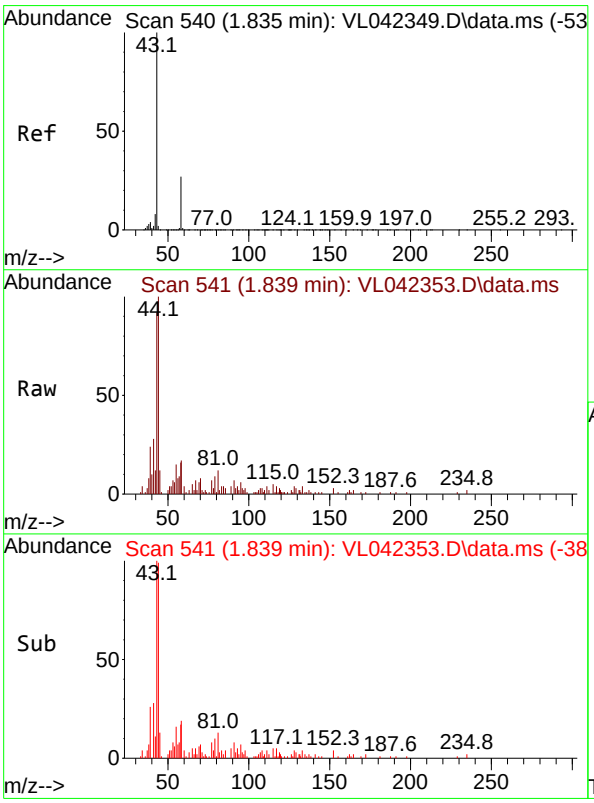
#14
Bromoethene
Concen: 0.164 ppbv
RT: 1.781 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:108 Resp: 1015

Ion	Ratio	Lower	Upper
108	100		
106	128.3	85.9	128.9
79	0.0	13.9	20.9#

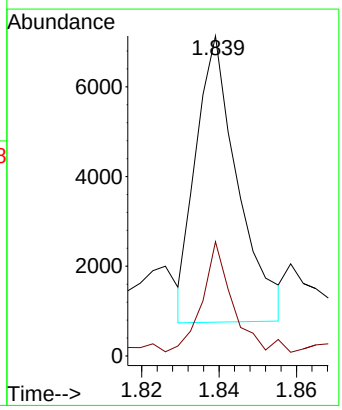


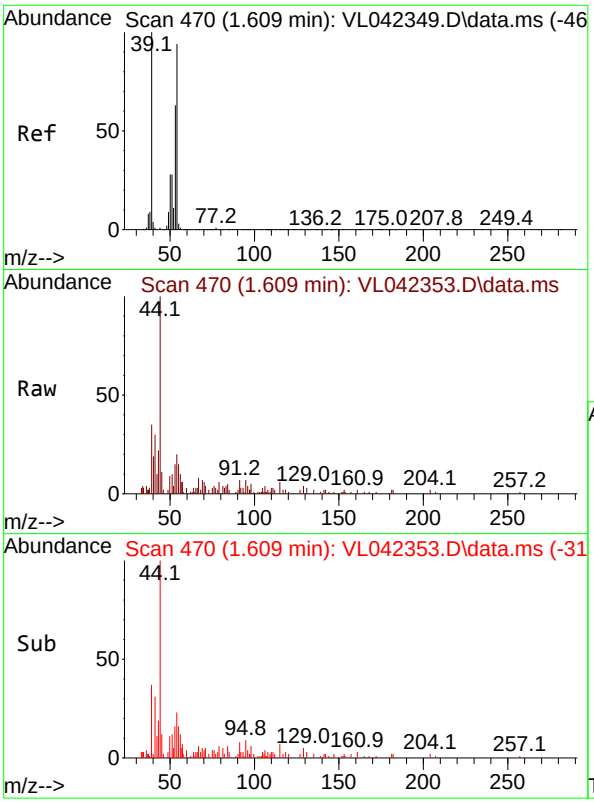


#15
Acetone
Concen: 0.245 ppbv
RT: 1.839 min Scan# 541
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 43 Resp: 4783

Ion	Ratio	Lower	Upper
43	100		
58	37.5	22.4	33.6#



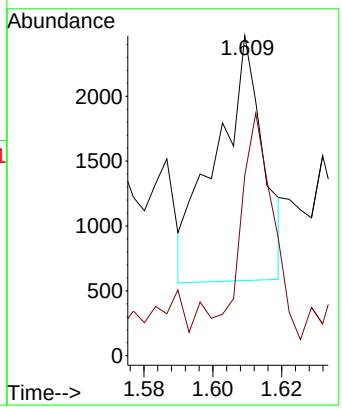


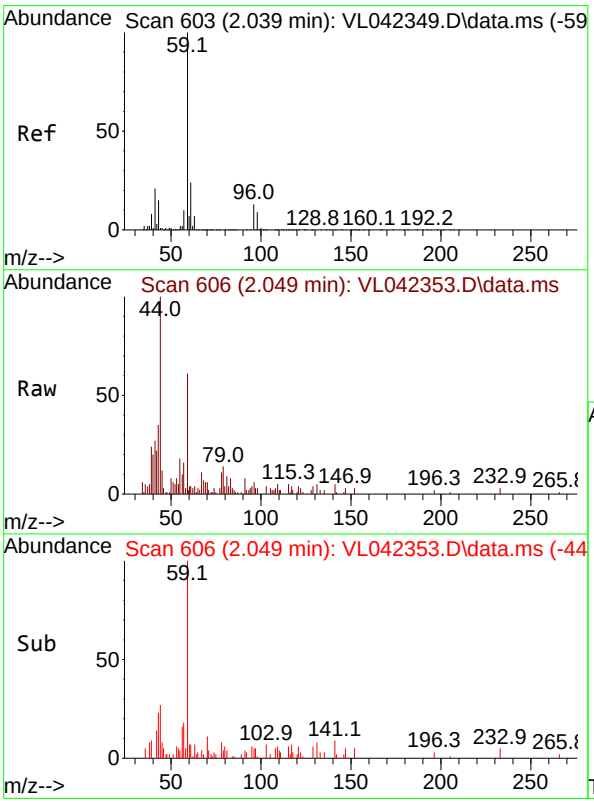
#16
1,3-Butadiene
Concen: 0.193 ppbv
RT: 1.609 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 39 Resp: 1776

Ion	Ratio	Lower	Upper
39	100		
54	128.7	64.9	97.3#

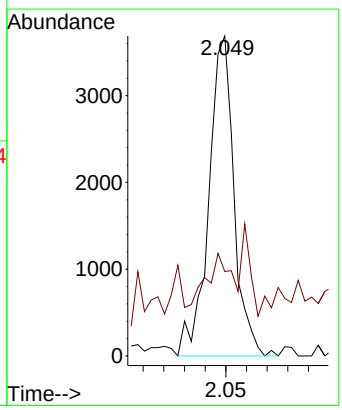


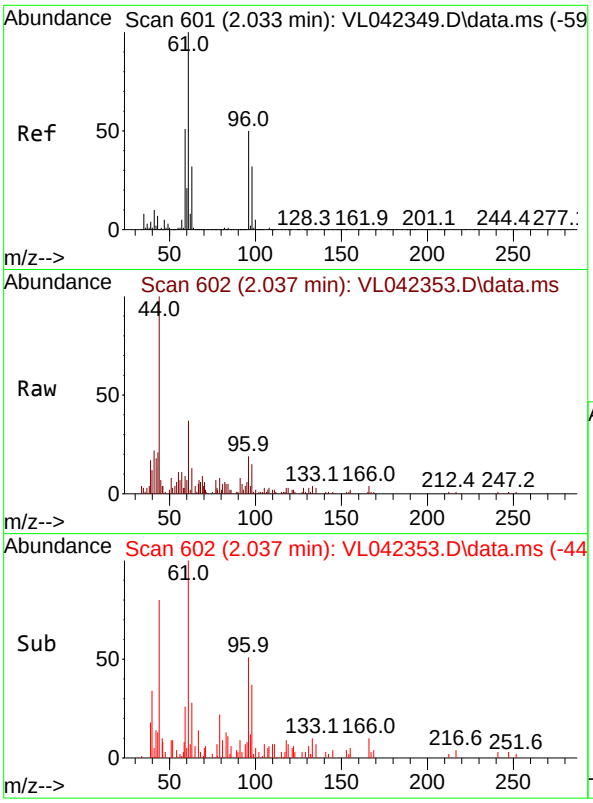


#17
tert-Butyl alcohol
Concen: 0.129 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 59 Resp: 3130

Ion	Ratio	Lower	Upper
59	100		
57	46.5	8.7	13.1#



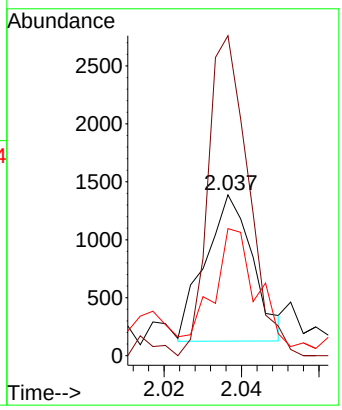


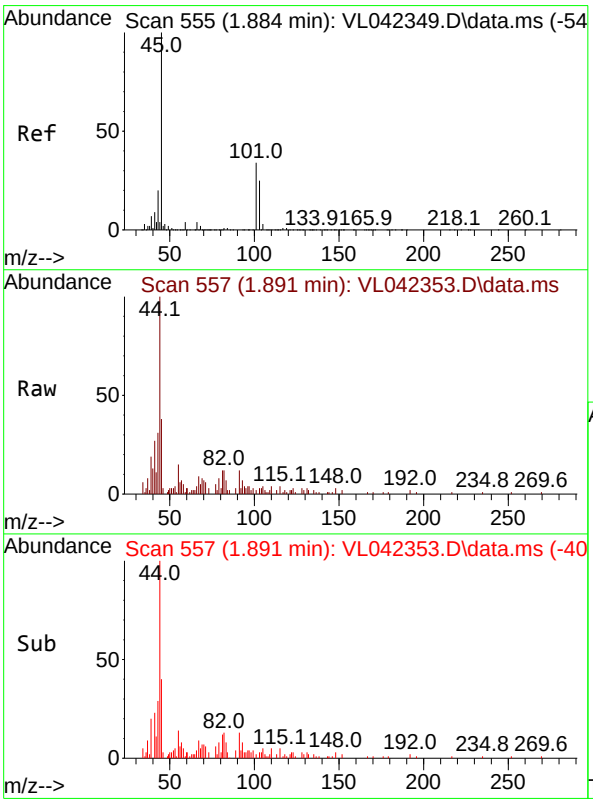
#18
1,1-Dichloroethene
Concen: 0.136 ppbv
RT: 2.037 min Scan# 6
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1074

Ion	Ratio	Lower	Upper
96	100		
61	222.5	160.2	240.2
98	75.2	51.0	76.4

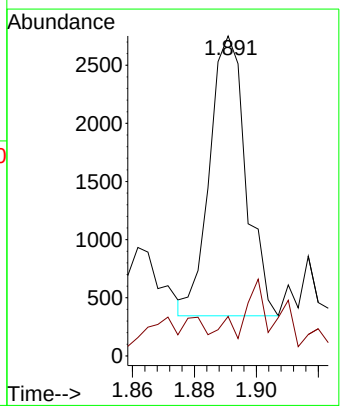


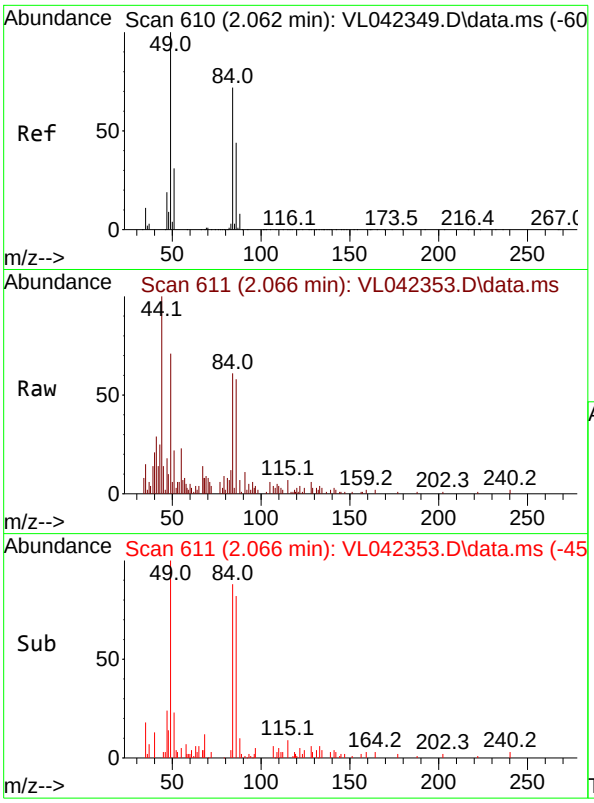


#19
Isopropyl Alcohol
Concen: 0.180 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 45 Resp: 1958

Ion	Ratio	Lower	Upper
45	100		
58	49.5	34.5	51.7



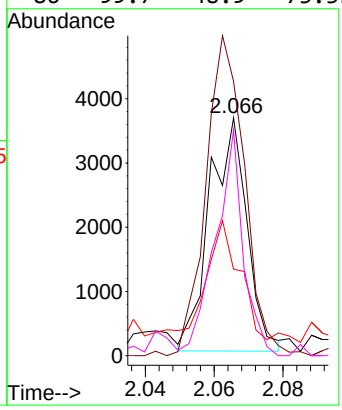


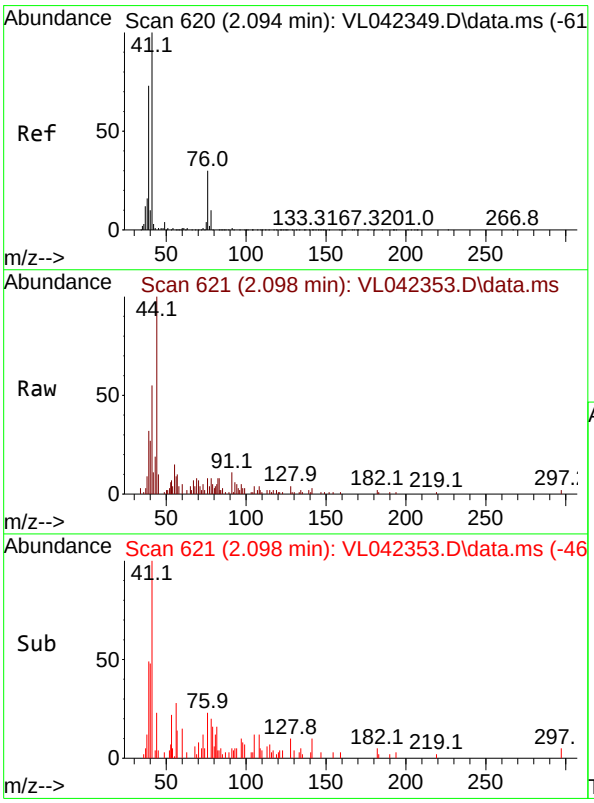
#20
Methylene Chloride
Concen: 0.358 ppbv
RT: 2.066 min Scan# 61
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 84 Resp: 2741

Ion	Ratio	Lower	Upper
84	100		
49	119.3	111.6	167.4
51	28.2	35.1	52.7#
86	99.7	48.9	73.3#

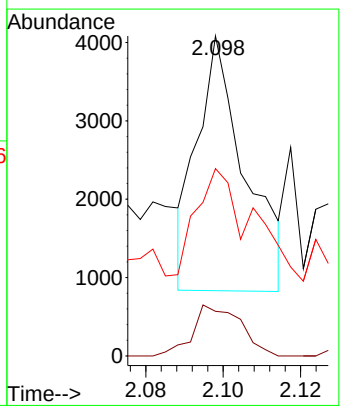


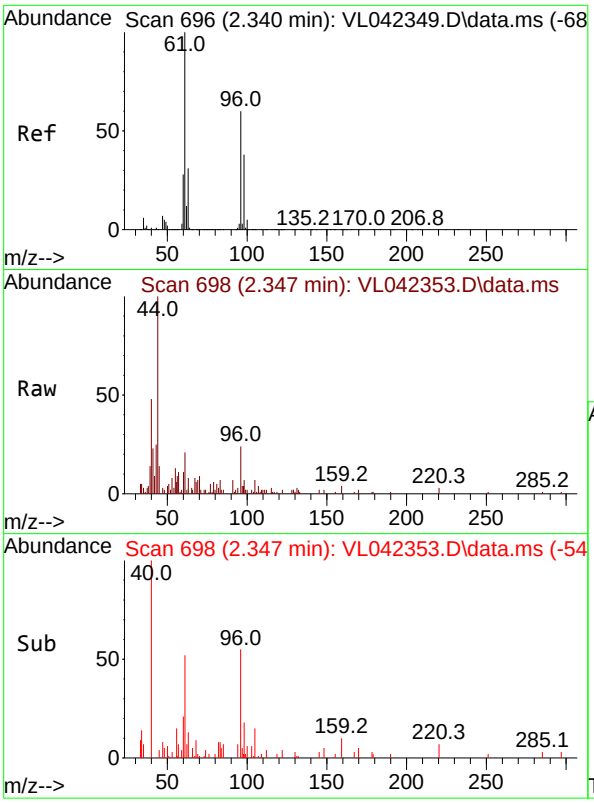


#21
Allyl Chloride
Concen: 0.206 ppbv
RT: 2.098 min Scan# 621
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 41 Resp: 2786

Ion	Ratio	Lower	Upper
41	100		
76	20.0	24.8	37.2#
39	102.2	60.6	90.8#



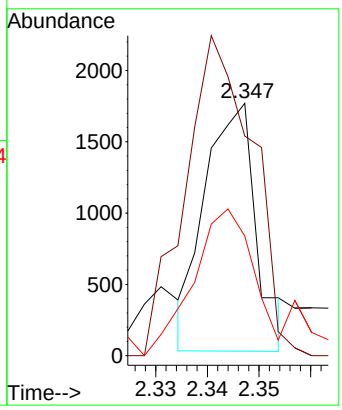


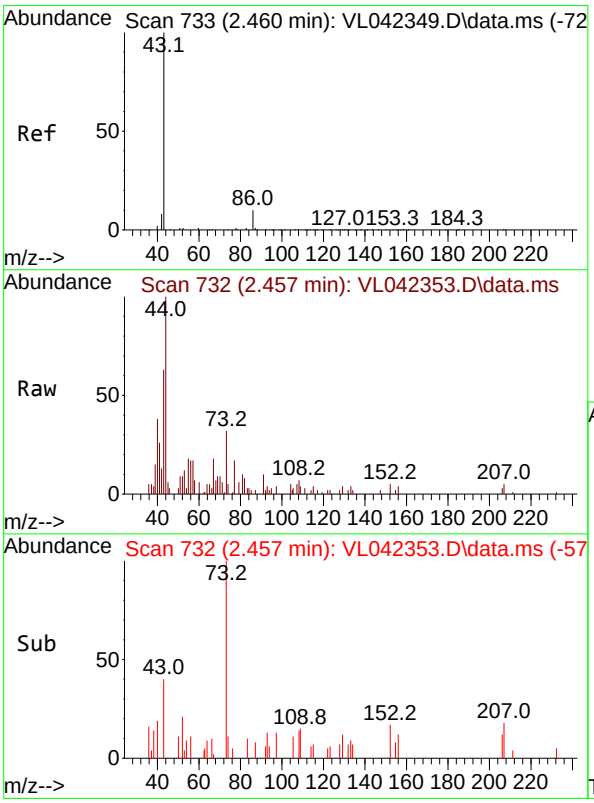
#22
trans-1,2-Dichloroethene
Concen: 0.138 ppbv
RT: 2.347 min Scan# 6
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 96 Resp: 1201

Ion	Ratio	Lower	Upper
96	100		
61	99.5	133.7	200.5#
98	52.9	50.3	75.5

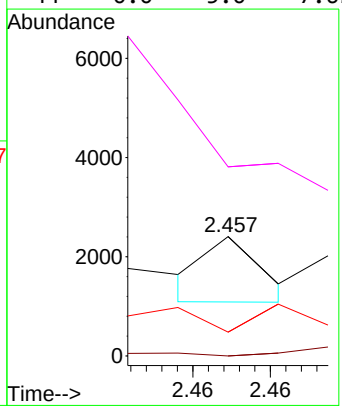


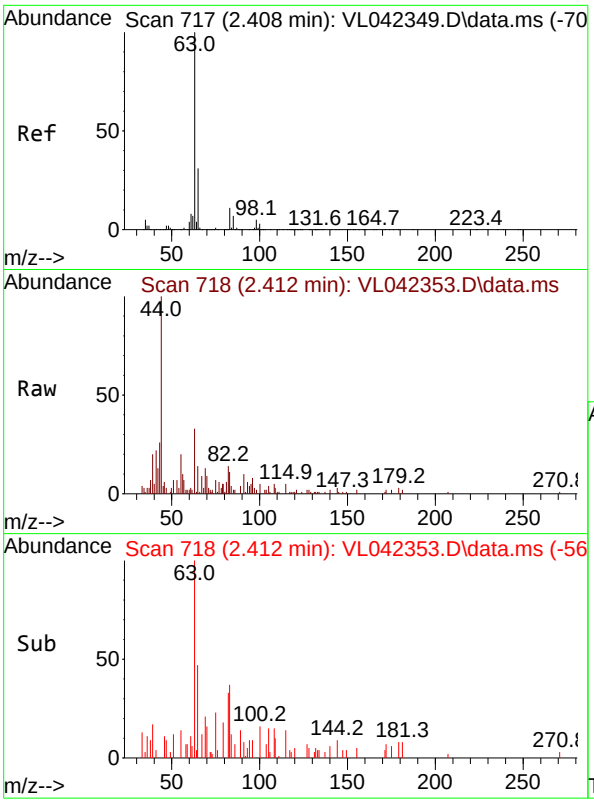


#23
Vinyl Acetate
Concen: 0.041 ppbv
RT: 2.457 min Scan# 732
Delta R.T. -0.003 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 43 Resp: 326

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.5	9.7#
42	0.0	7.8	11.8#
44	0.0	5.0	7.6#



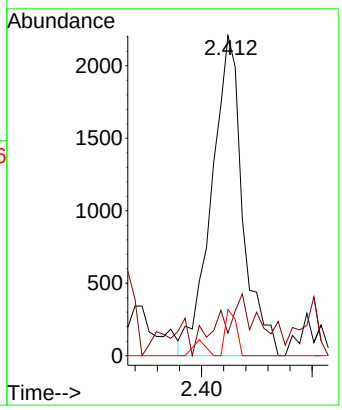


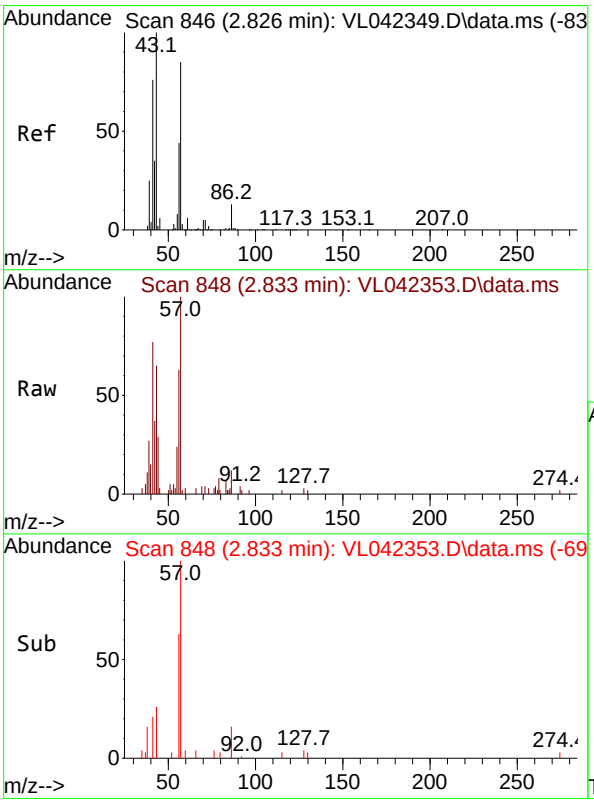
#24
1,1-Dichloroethane
Concen: 0.131 ppbv
RT: 2.412 min Scan# 7
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 63 Resp: 2169

Ion	Ratio	Lower	Upper
63	100		
98	0.0	2.3	6.8#
100	14.4	1.6	4.8#

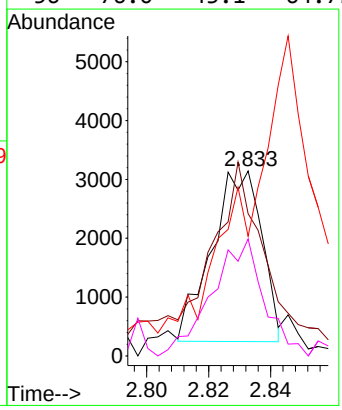


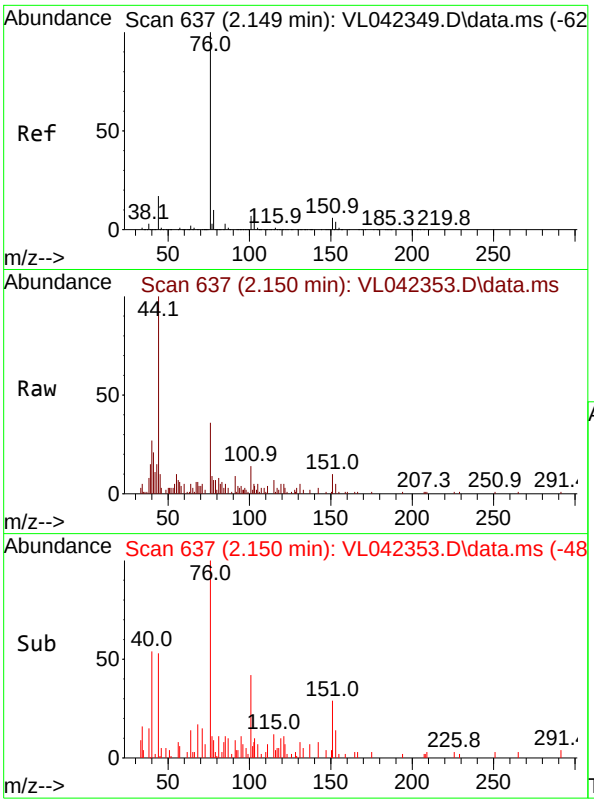


#26
Hexane
Concen: 0.167 ppbv
RT: 2.833 min Scan# 848
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 57 Resp: 3260

Ion	Ratio	Lower	Upper
57	100		
41	134.5	77.9	116.9#
43	0.0	208.4	312.6#
56	76.0	43.1	64.7#



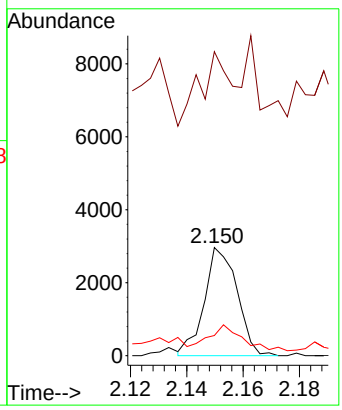


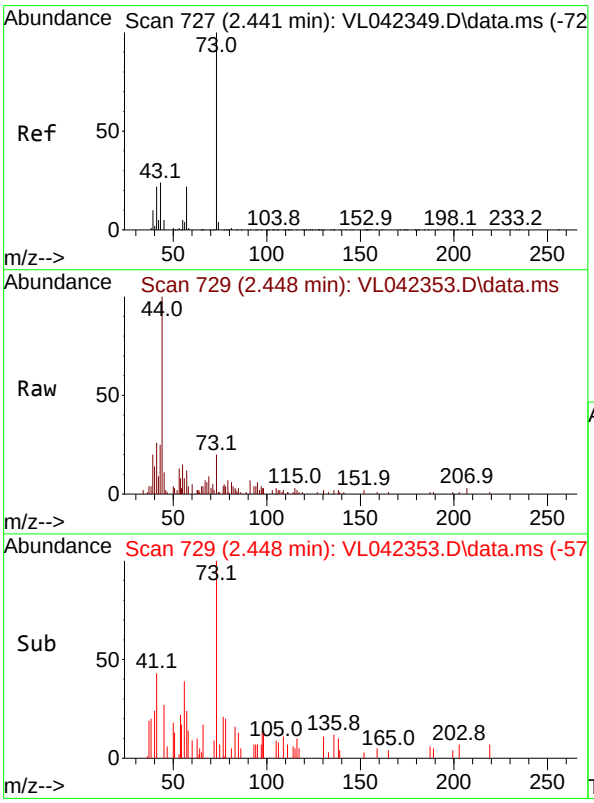
#27
Carbon Disulfide
Concen: 0.115 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 76 Resp: 2396

Ion	Ratio	Lower	Upper
76	100		
44	214.1	15.5	23.3#
78	41.9	9.3	13.9#

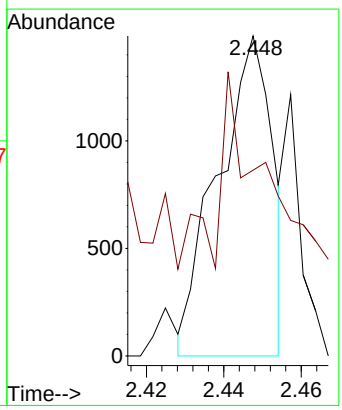


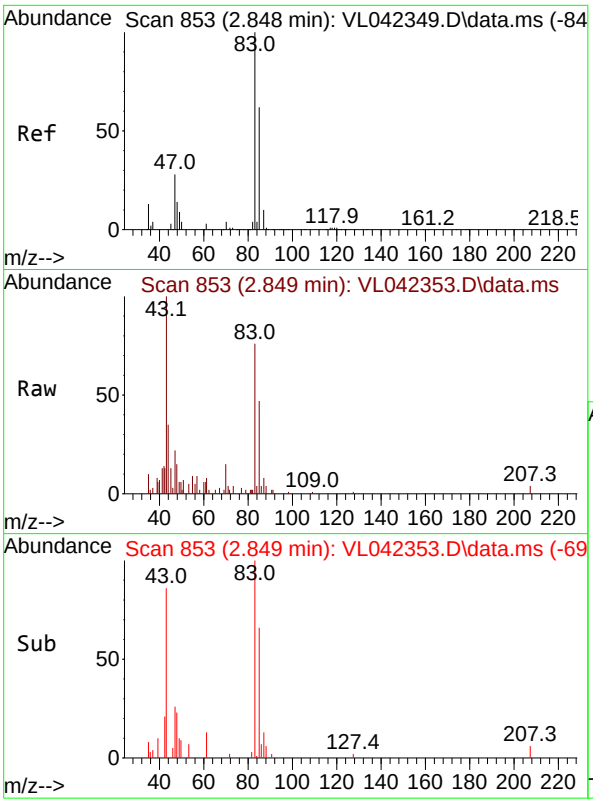


#28
Methyl tert-Butyl Ether
Concen: 0.114 ppbv
RT: 2.448 min Scan# 729
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 73 Resp: 1460

Ion	Ratio	Lower	Upper
73	100		
57	84.5	21.3	31.9#



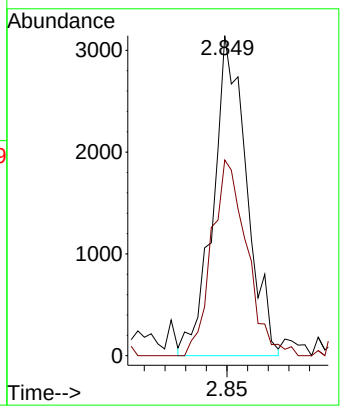


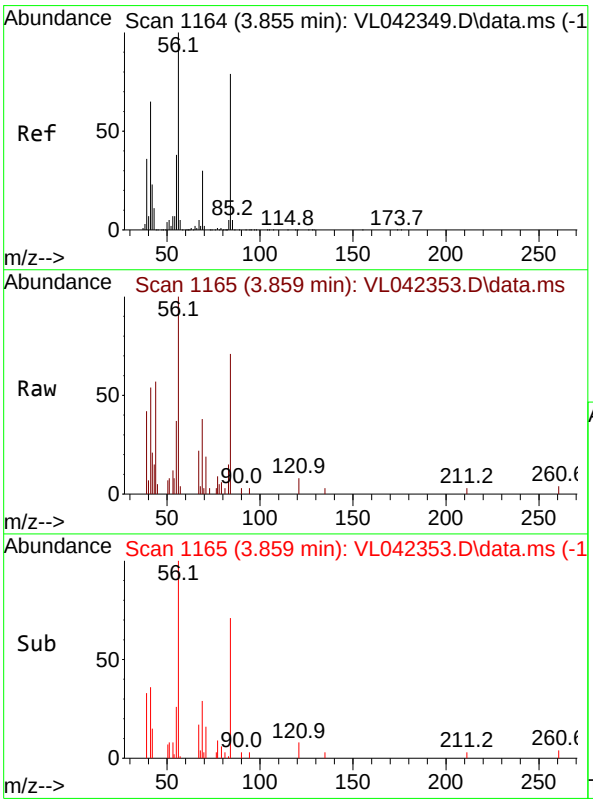
#29
Chloroform
Concen: 0.128 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 3542

Ion	Ratio	Lower	Upper
83	100		
85	62.5	50.0	75.0

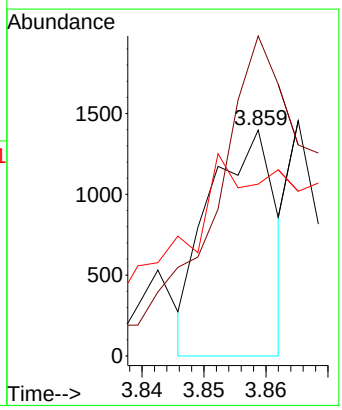


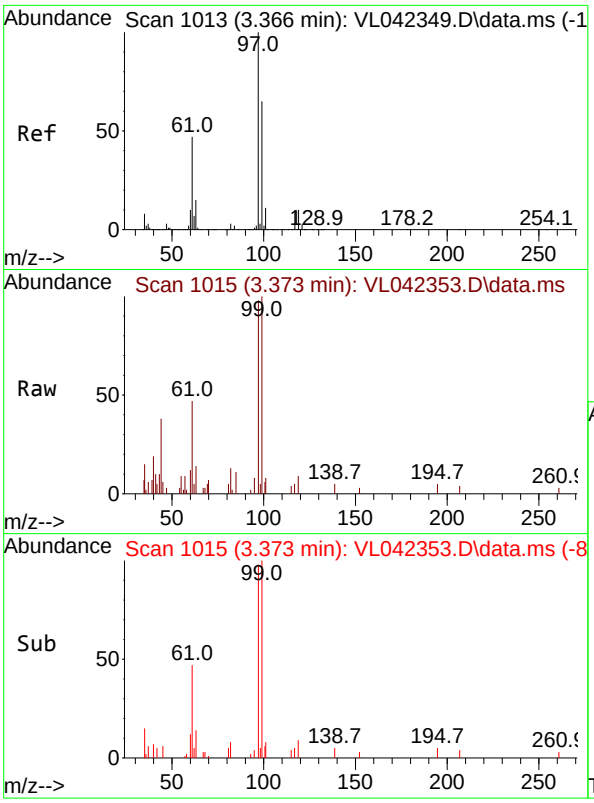


#30
Cyclohexane
Concen: 0.066 ppbv
RT: 3.859 min Scan# 1165
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 84 Resp: 1037

Ion	Ratio	Lower	Upper
84	100		
56	278.1	101.0	151.4#
41	346.5	67.4	101.0#



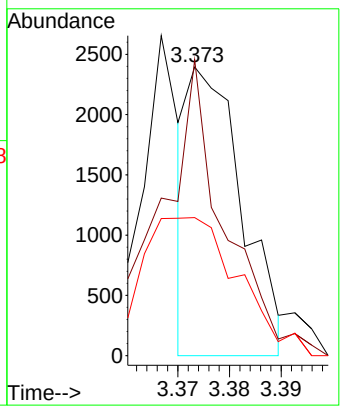


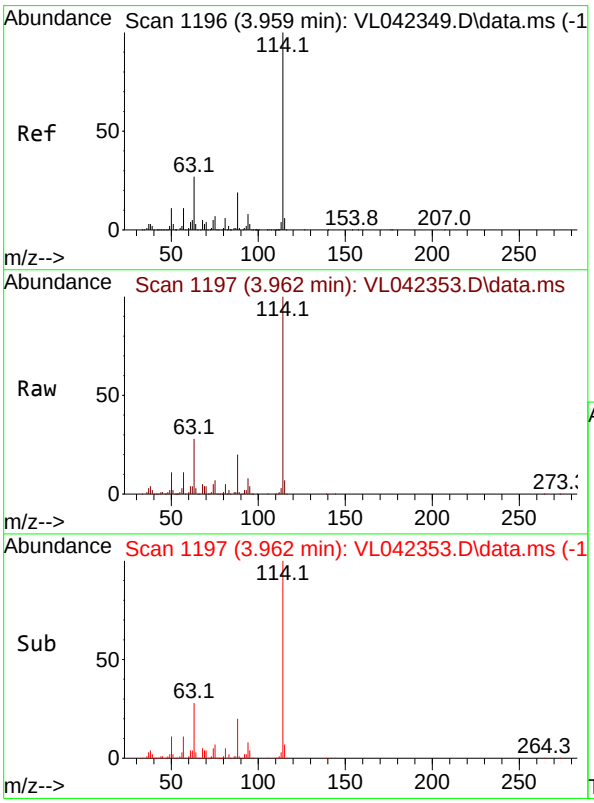
#32
1,1,1-Trichloroethane
Concen: 0.059 ppbv
RT: 3.373 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 97 Resp: 1734

Ion	Ratio	Lower	Upper
97	100		
99	133.4	51.0	76.4#
61	93.7	38.8	58.2#

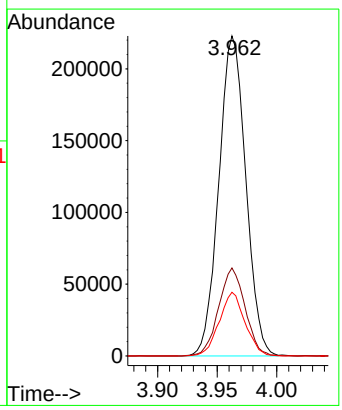


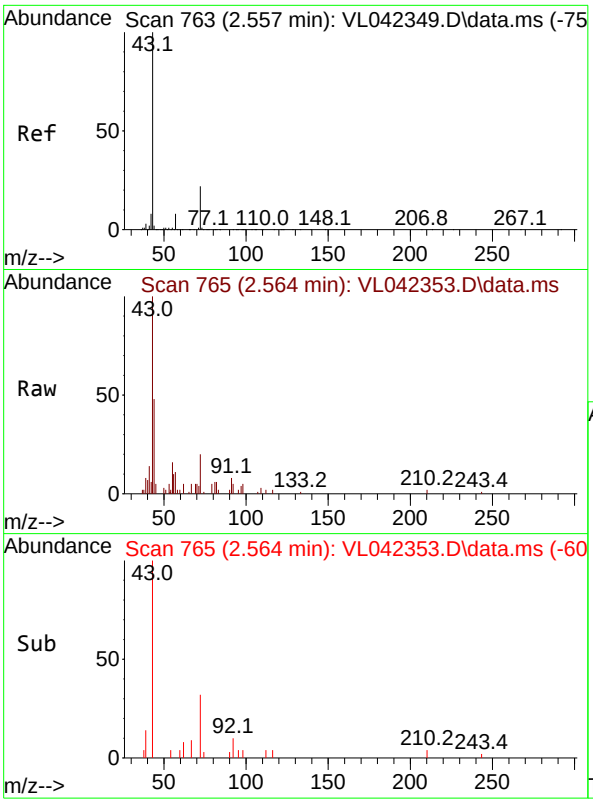


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:114 Resp: 350484

Ion	Ratio	Lower	Upper
114	100		
63	26.9	21.8	32.6
88	19.1	15.5	23.3



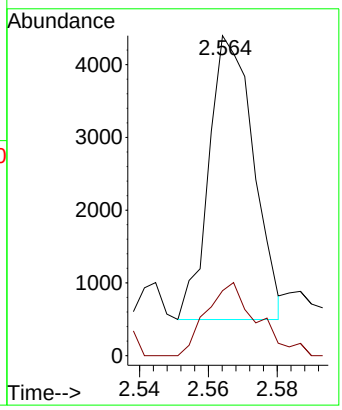


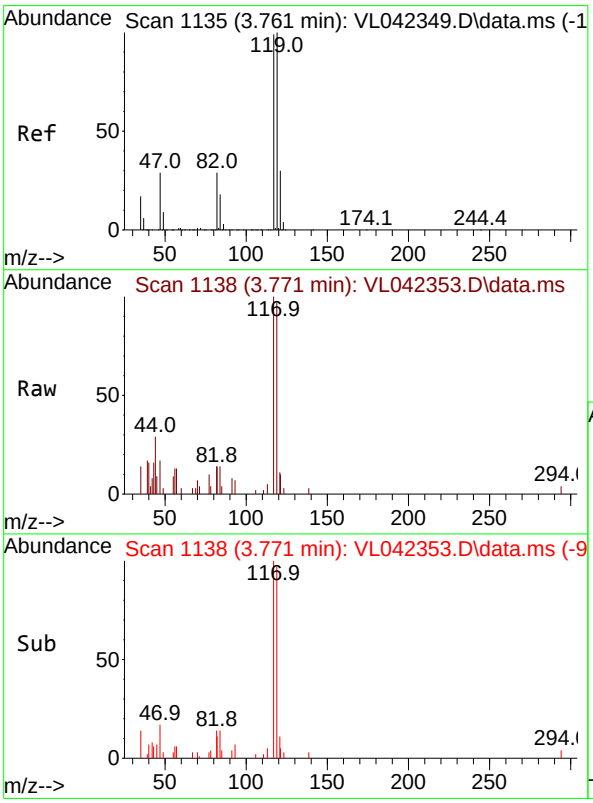
#34
2-Butanone
Concen: 0.126 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 43 Resp: 3506

Ion	Ratio	Lower	Upper
43	100		
72	32.7	18.2	27.2#

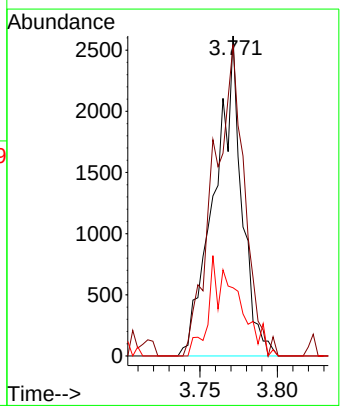


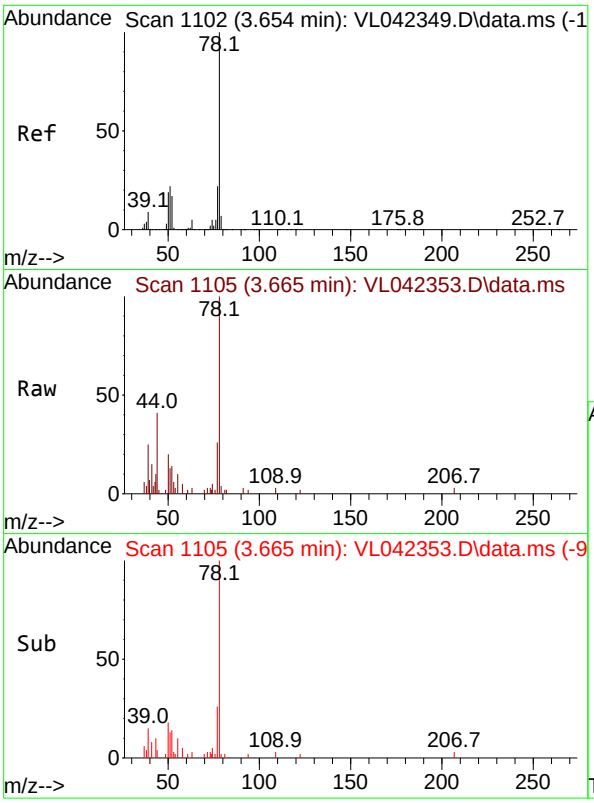


#35
Carbon Tetrachloride
Concen: 0.101 ppbv
RT: 3.771 min Scan# 1138
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:117 Resp: 3204

Ion	Ratio	Lower	Upper
117	100		
119	97.3	80.5	120.7
121	21.3	24.2	36.2#



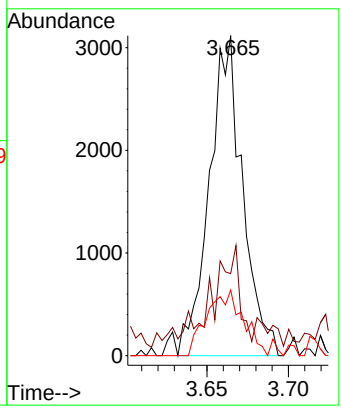


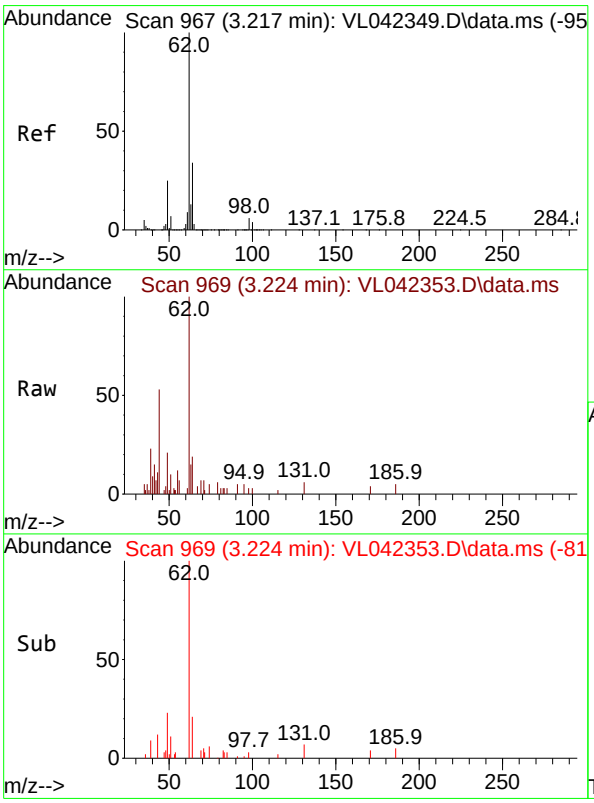
#36
Benzene
Concen: 0.117 ppbv
RT: 3.665 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 78 Resp: 4424

Ion	Ratio	Lower	Upper
78	100		
77	20.4	17.4	26.0
50	20.5	15.5	23.3

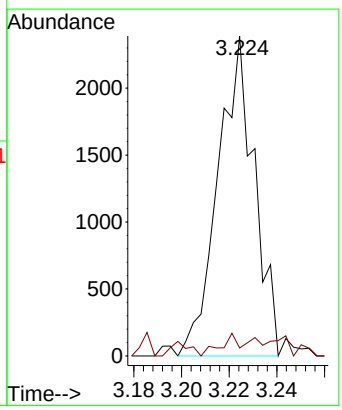


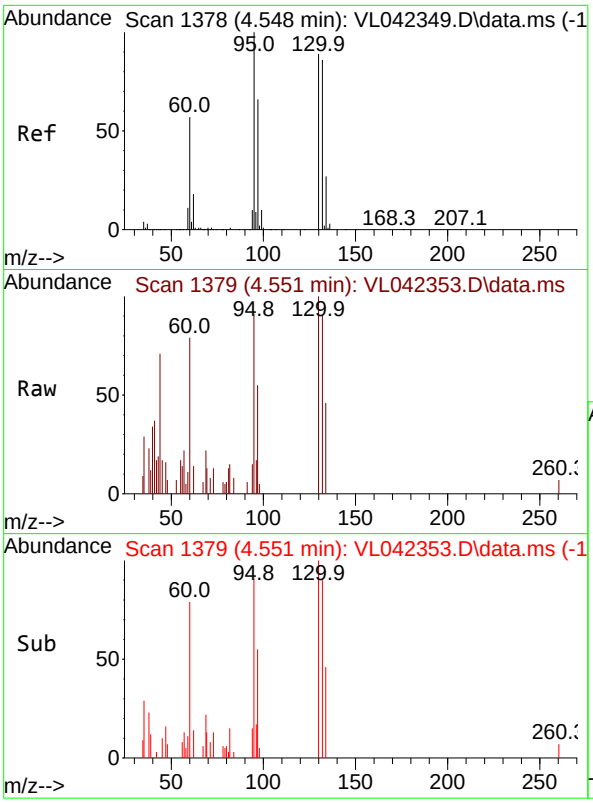


#37
1,2-Dichloroethane
Concen: 0.111 ppbv
RT: 3.224 min Scan# 969
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 62 Resp: 2523

Ion	Ratio	Lower	Upper
62	100		
98	0.0	5.1	7.7#



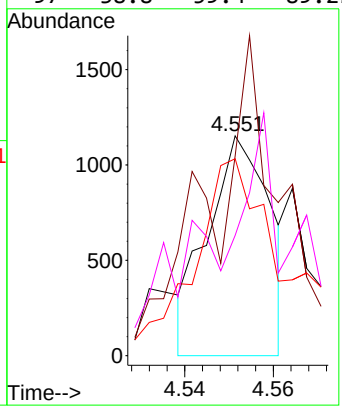


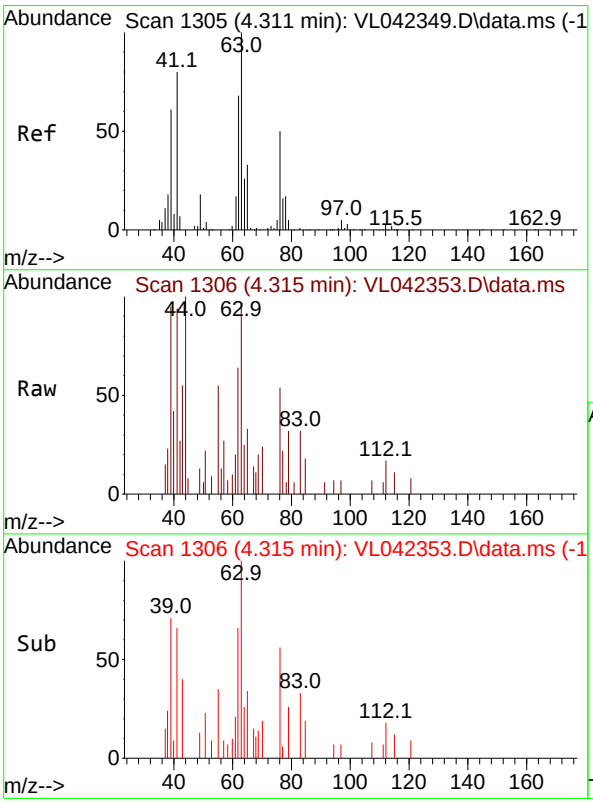
#38
Trichloroethene
Concen: 0.067 ppbv
RT: 4.551 min Scan# 1
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:130 Resp: 1113

Ion	Ratio	Lower	Upper
130	100		
95	60.4	89.8	134.6#
132	78.4	77.7	116.5
97	38.8	59.4	89.2#

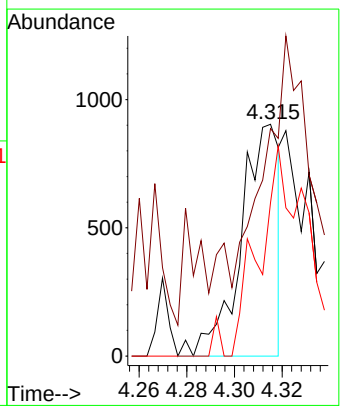


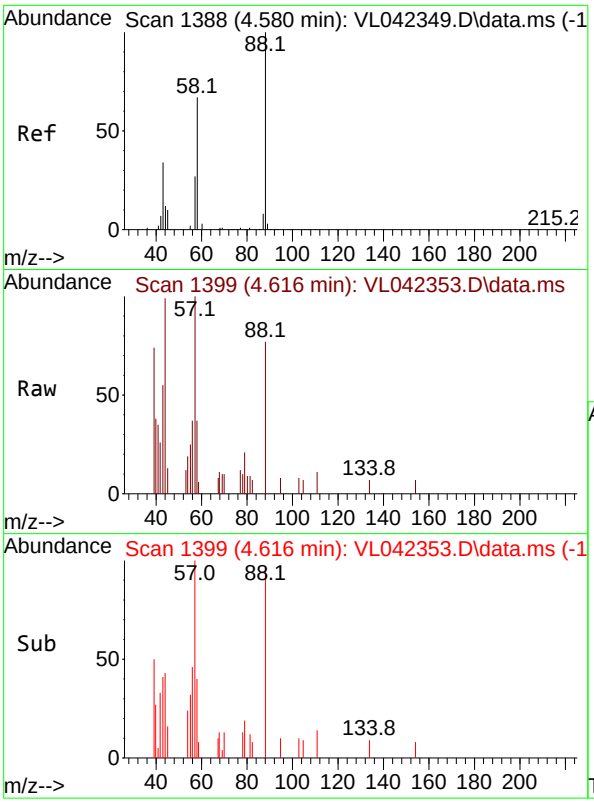


#39
1,2-Dichloropropane
Concen: 0.071 ppbv
RT: 4.315 min Scan# 1306
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 63 Resp: 1007

Ion	Ratio	Lower	Upper
63	100		
41	84.8	64.2	96.2
62	66.2	54.3	81.5



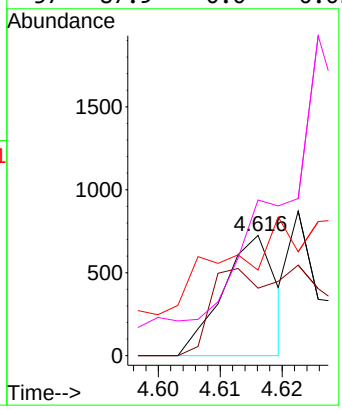


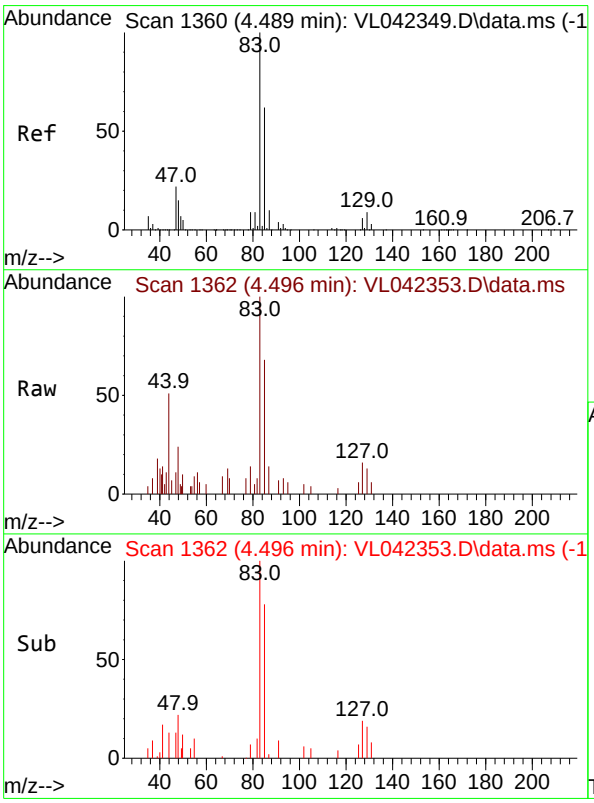
#40
1,4-Dioxane
Concen: 0.056 ppbv
RT: 4.616 min Scan# 1
Delta R.T. 0.036 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 88 Resp: 431

Ion	Ratio	Lower	Upper
88	100		
58	18.1	61.4	92.0#
43	247.6	23.2	34.8#
57	87.9	0.0	0.0#

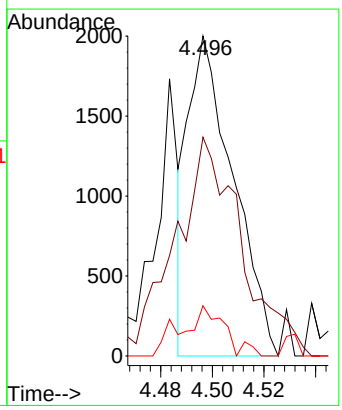


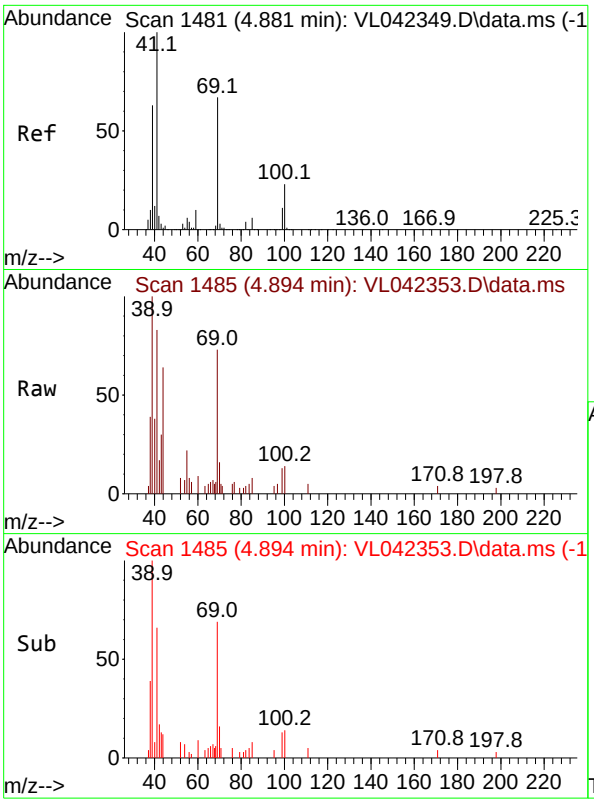


#42
Bromodichloromethane
Concen: 0.077 ppbv
RT: 4.496 min Scan# 1362
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 83 Resp: 2443

Ion	Ratio	Lower	Upper
83	100		
85	55.0	49.7	74.5
127	15.7	5.1	7.7#



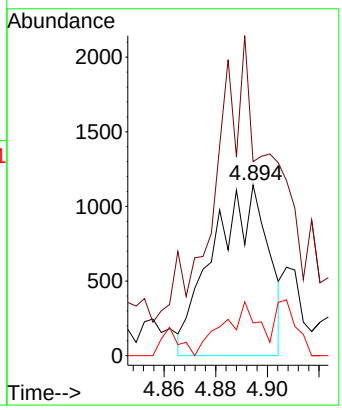


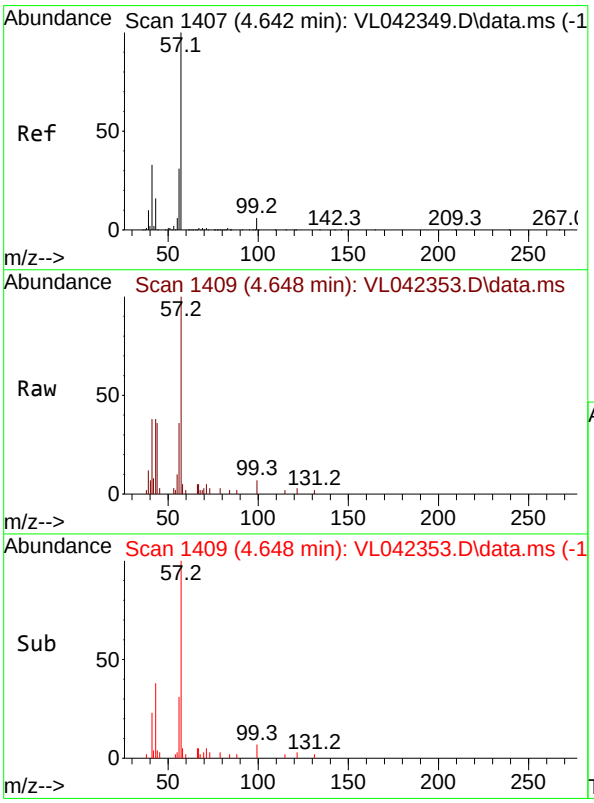
#43
Methyl Methacrylate
Concen: 0.099 ppbv
RT: 4.894 min Scan# 14
Delta R.T. 0.013 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 69 Resp: 1683

Ion	Ratio	Lower	Upper
69	100		
41	192.5	118.6	177.8#
100	0.0	28.2	42.2#

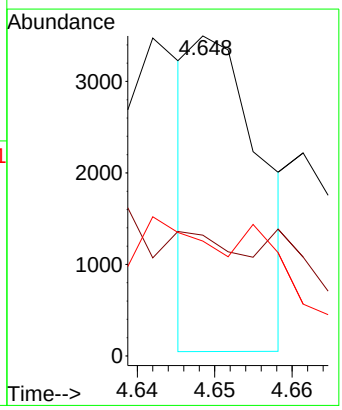


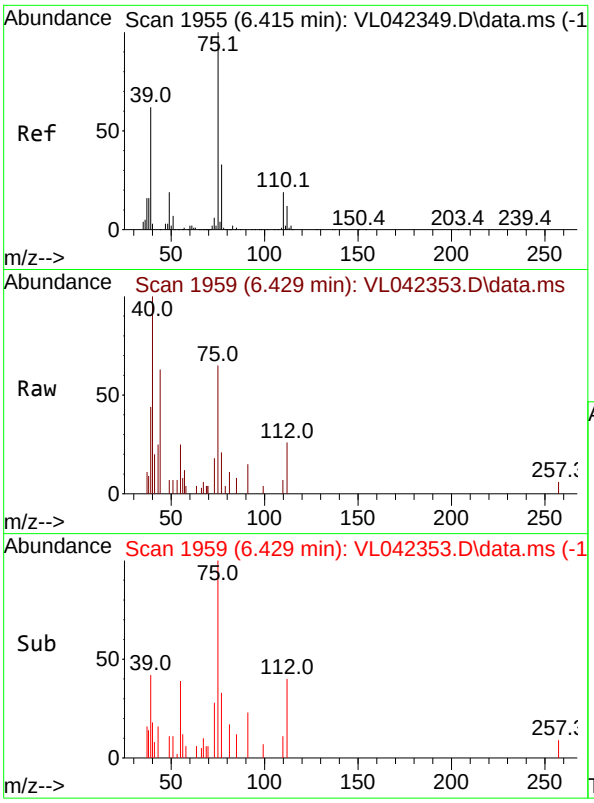


#44
2,2,4-Trimethylpentane
Concen: 0.032 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 57 Resp: 2115

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8#
56	0.0	25.7	38.5#



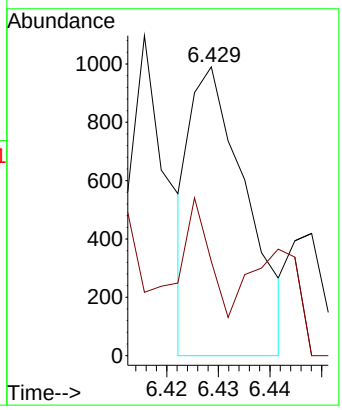


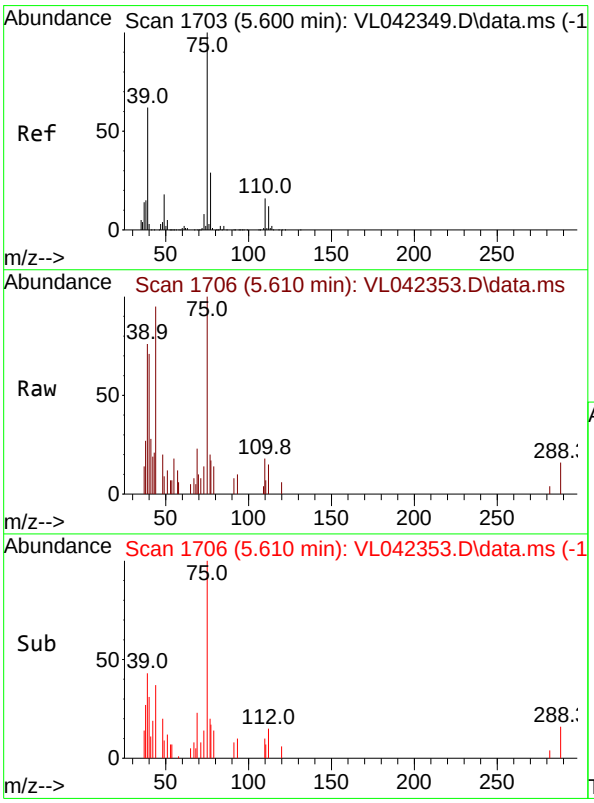
#45
t-1,3-Dichloropropene
Concen: 0.043 ppbv
RT: 6.429 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 75 Resp: 748

Ion	Ratio	Lower	Upper
75	100		
77	32.6	27.0	40.6

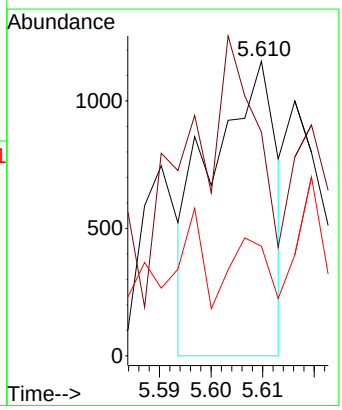


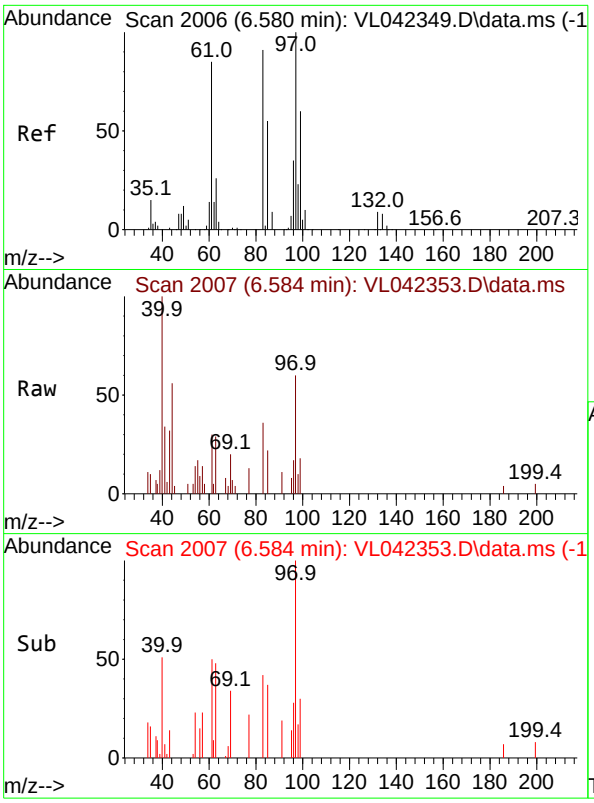


#46
cis-1,3-Dichloropropene
Concen: 0.048 ppbv
RT: 5.610 min Scan# 1706
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 75 Resp: 1032

Ion	Ratio	Lower	Upper
75	100		
39	71.3	50.0	75.0
77	32.3	23.0	34.6



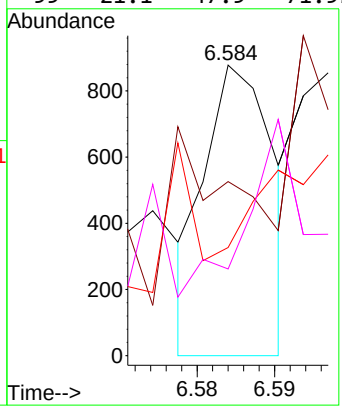


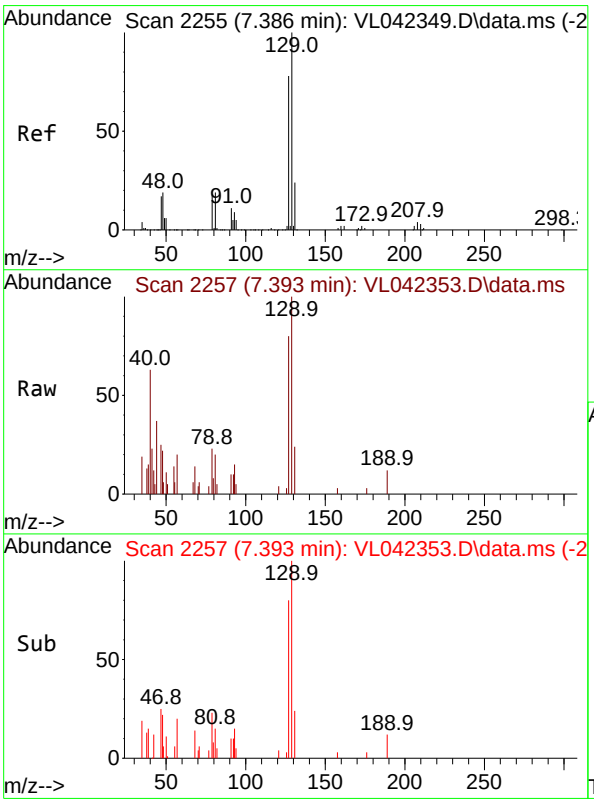
#47
1,1,2-Trichloroethane
Concen: 0.038 ppbv
RT: 6.584 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 97 Resp: 540

Ion	Ratio	Lower	Upper
97	100		
83	36.8	72.8	109.2#
85	0.0	44.2	66.4#
99	21.1	47.9	71.9#

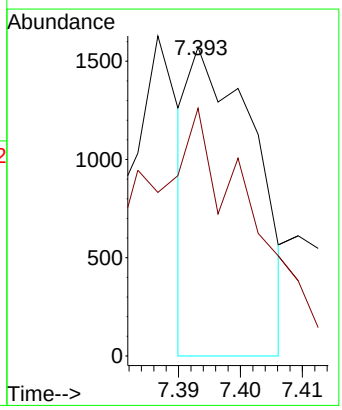


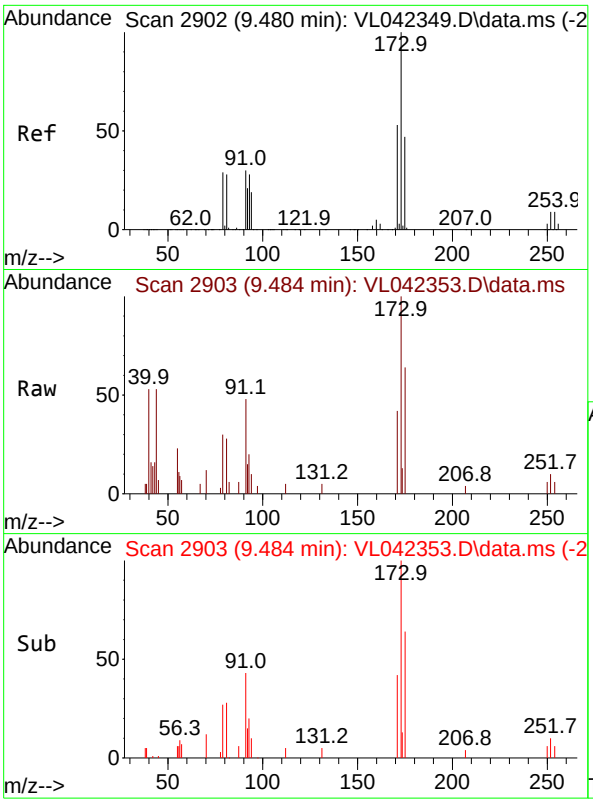


#48
Dibromochloromethane
Concen: 0.045 ppbv
RT: 7.393 min Scan# 2257
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:129 Resp: 1149

Ion	Ratio	Lower	Upper
129	100		
127	167.2	39.1	117.3#



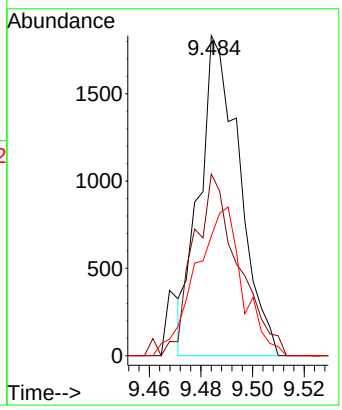


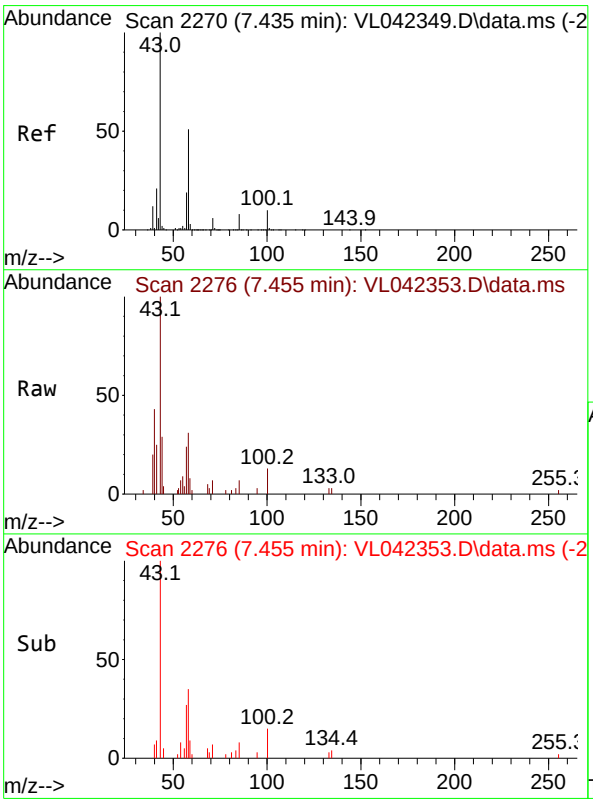
#49
Bromoform
Concen: 0.089 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:173 Resp: 1973

Ion	Ratio	Lower	Upper
173	100		
175	64.7	38.2	57.2#
171	54.2	40.9	61.3

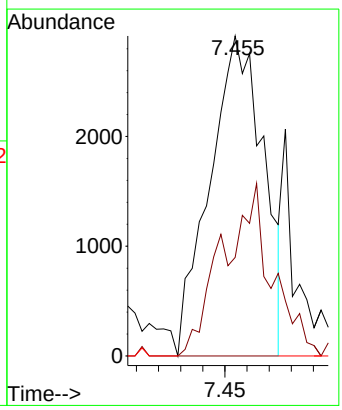


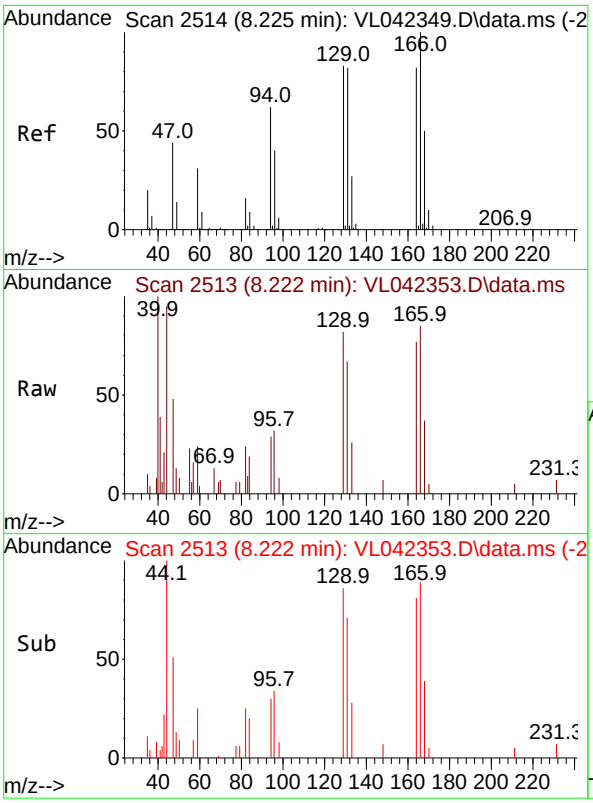


#51
2-Hexanone
Concen: 0.118 ppbv
RT: 7.455 min Scan# 2276
Delta R.T. 0.020 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 43 Resp: 4915

Ion	Ratio	Lower	Upper
43	100		
58	49.9	40.2	60.4
98	0.0	0.1	0.1#



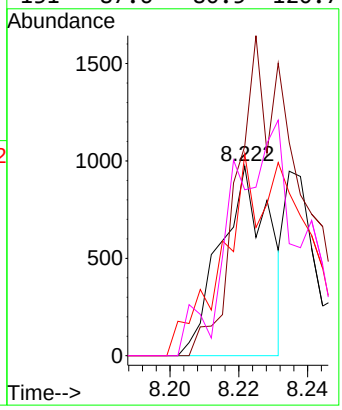


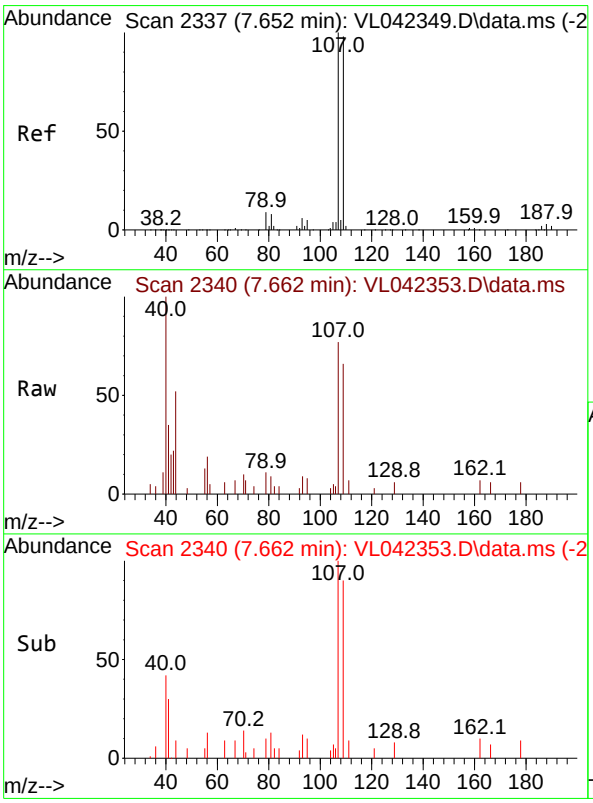
#52
Tetrachloroethene
Concen: 0.065 ppbv
RT: 8.222 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:164 Resp: 957

Ion	Ratio	Lower	Upper
164	100		
166	110.6	98.2	147.2
129	88.3	81.8	122.8
131	87.6	80.5	120.7

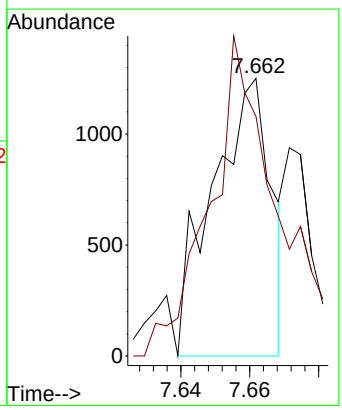


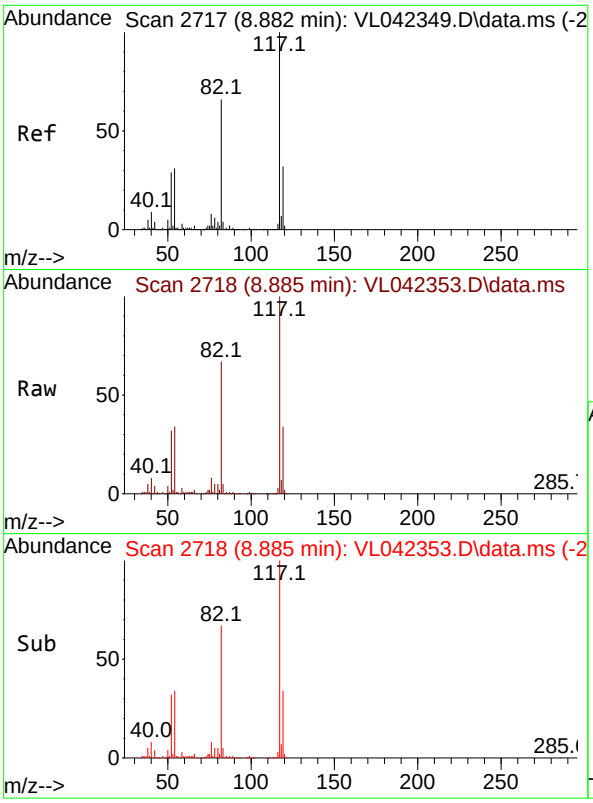


#54
1,2-Dibromoethane
Concen: 0.072 ppbv
RT: 7.662 min Scan# 2340
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:107 Resp: 1470

Ion	Ratio	Lower	Upper
107	100		
109	72.7	78.2	117.4#



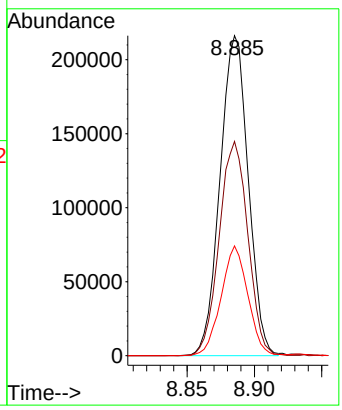


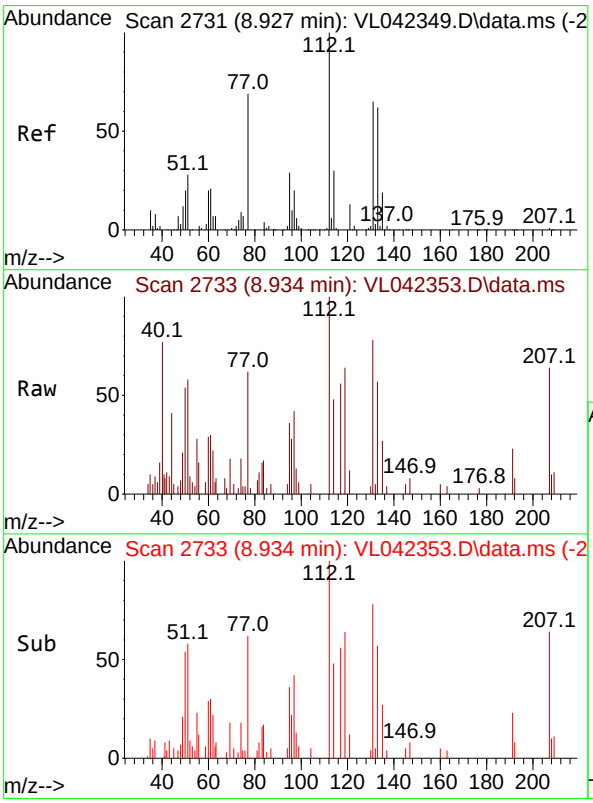
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:117 Resp: 315004

Ion	Ratio	Lower	Upper
117	100		
82	68.1	57.8	86.6
119	33.0	25.2	37.8

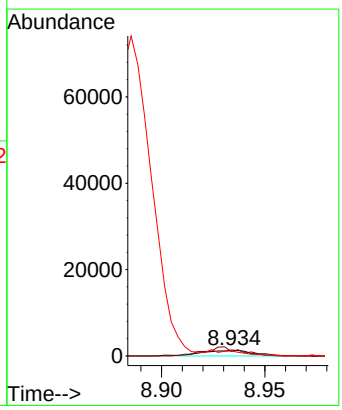


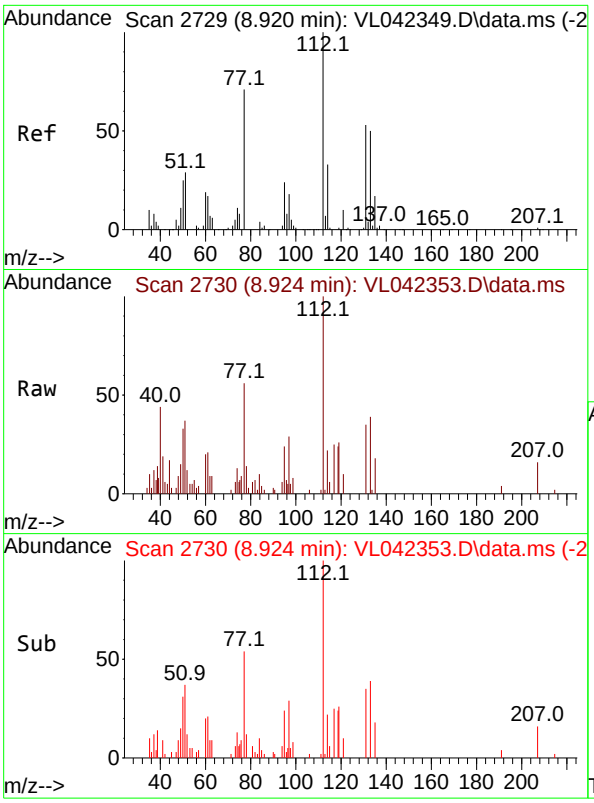


#56
1,1,1,2-Tetrachloroethane
Concen: 0.107 ppbv
RT: 8.934 min Scan# 2733
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:131 Resp: 2031

Ion	Ratio	Lower	Upper
131	100		
133	134.2	78.3	117.5#
119	0.0	48.7	73.1#



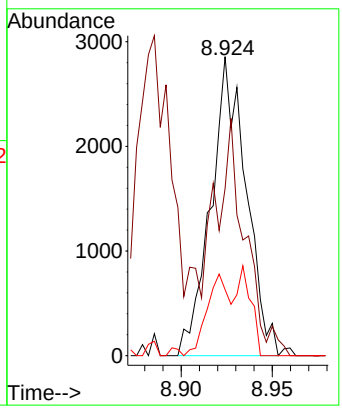


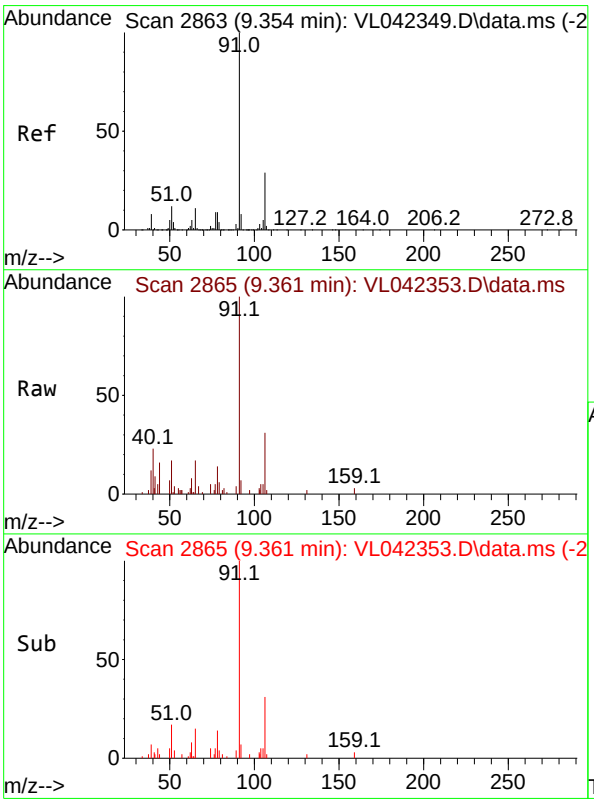
#57
Chlorobenzene
Concen: 0.117 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:112 Resp: 3842

Ion	Ratio	Lower	Upper
112	100		
77	50.6	57.8	86.6#
114	22.1	29.3	35.9#

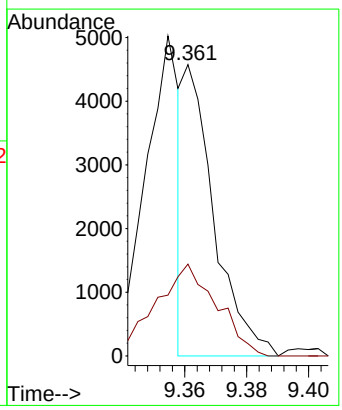


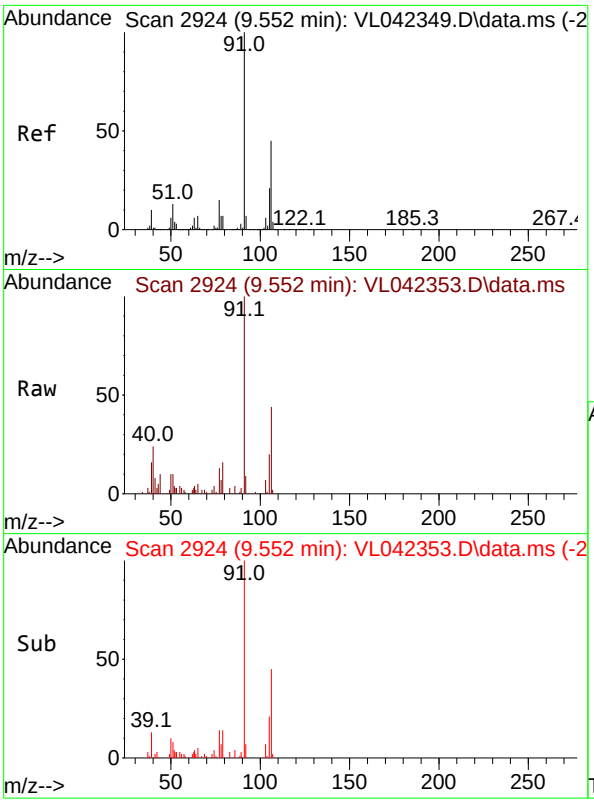


#58
Ethyl Benzene
Concen: 0.050 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 91 Resp: 3105

Ion	Ratio	Lower	Upper
91	100		
106	31.5	23.0	34.4



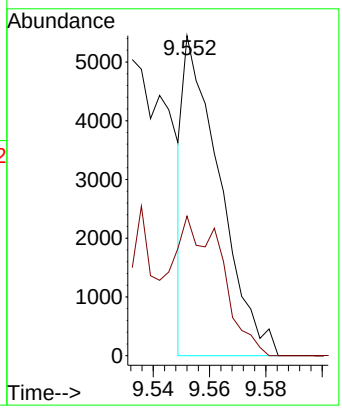


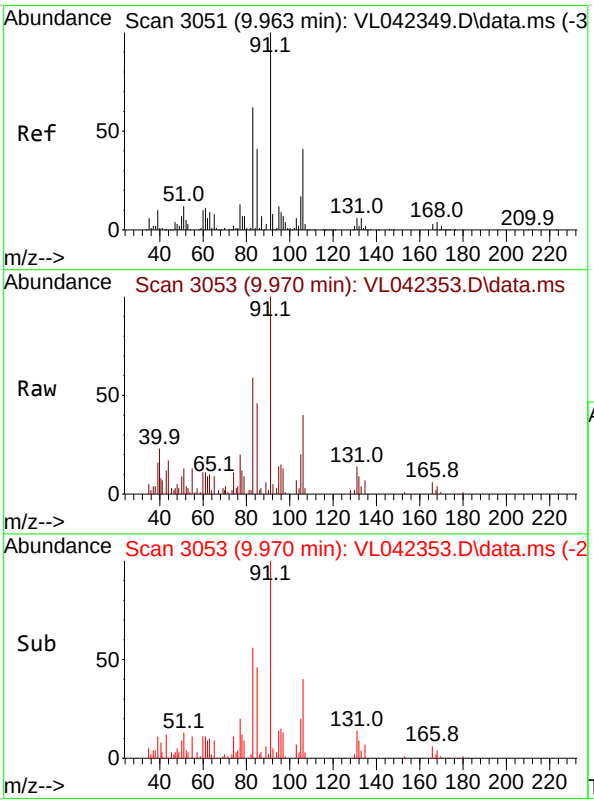
#59
m/p-Xylene
Concen: 0.096 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 4844

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

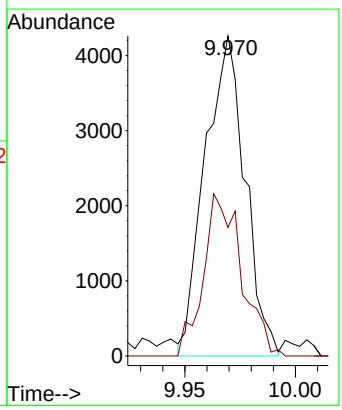


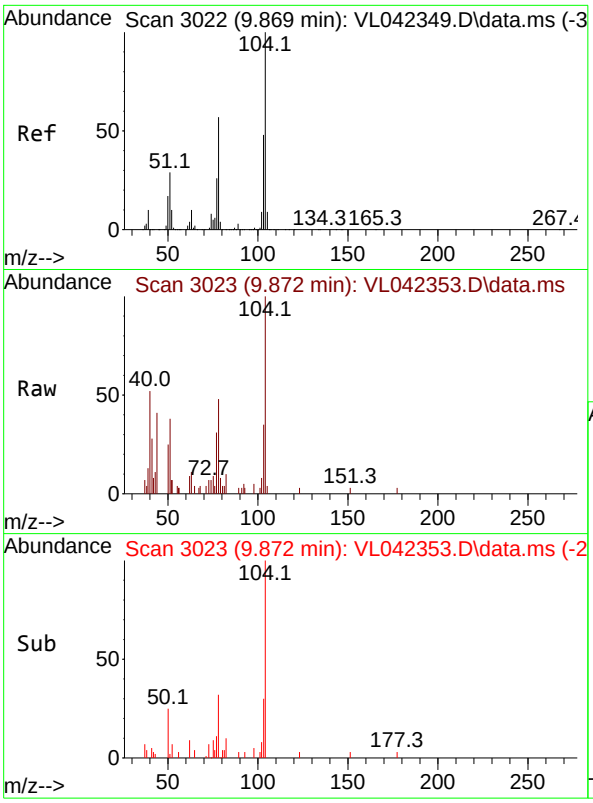


#60
o-Xylene
Concen: 0.106 ppbv
RT: 9.970 min Scan# 3053
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 91 Resp: 5359

Ion	Ratio	Lower	Upper
91	100		
106	48.3	21.1	63.4



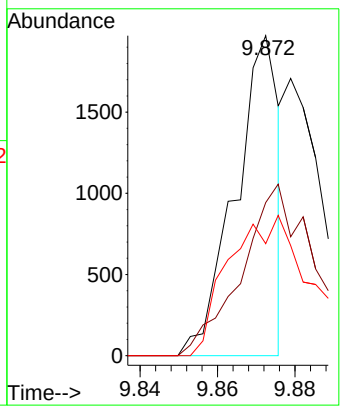


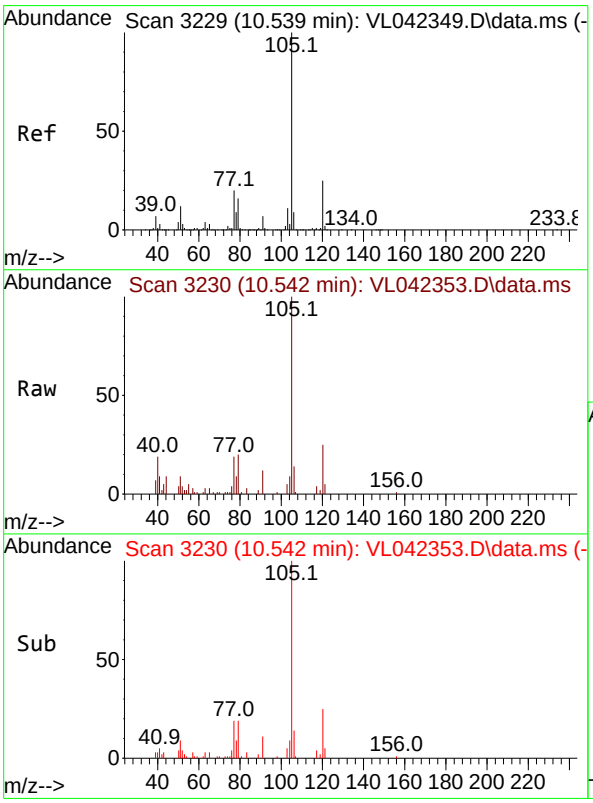
#61
Styrene
Concen: 0.064 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:104 Resp: 1549

Ion	Ratio	Lower	Upper
104	100		
78	0.0	44.6	66.8#
103	0.0	37.4	56.0#

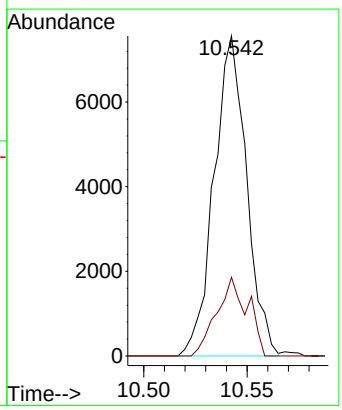


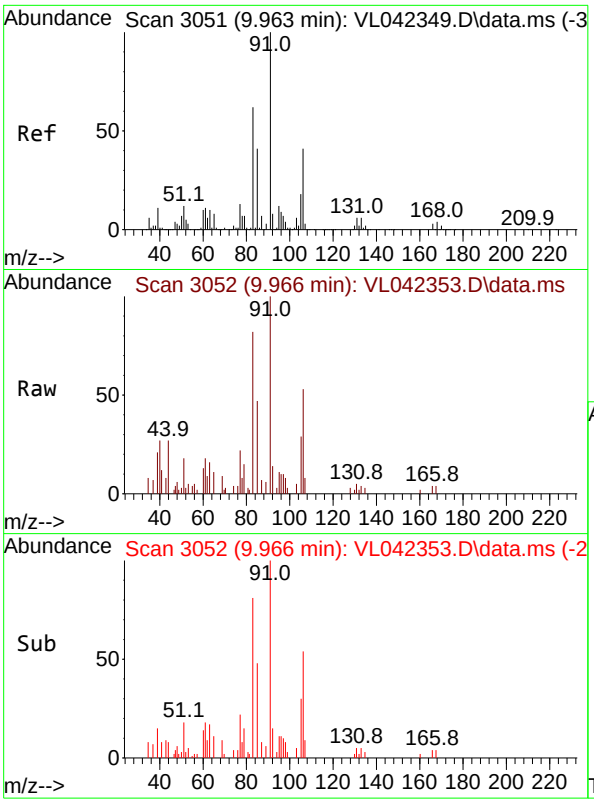


#62
Isopropylbenzene
Concen: 0.111 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:105 Resp: 8285

Ion	Ratio	Lower	Upper
105	100		
120	23.5	19.8	29.8



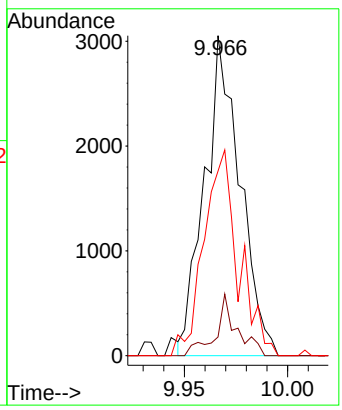


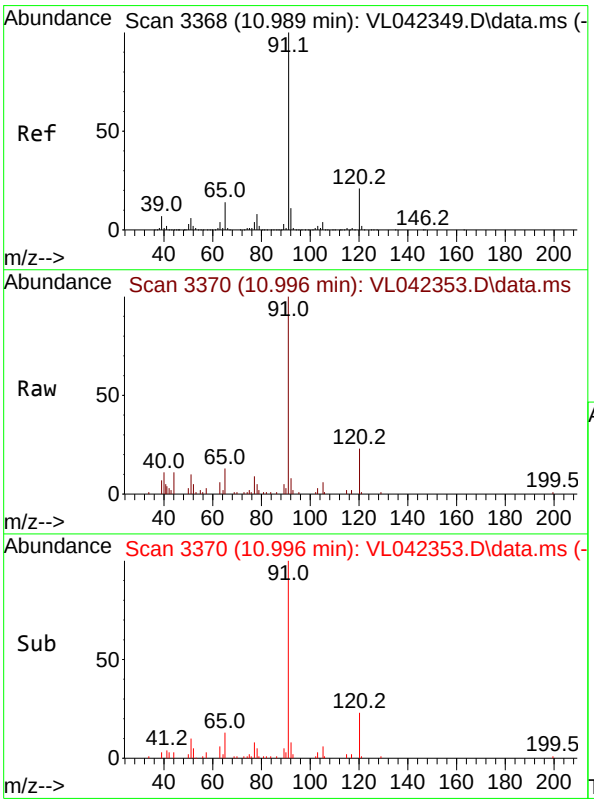
#63
1,1,2,2-Tetrachloroethane
Concen: 0.111 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 83 Resp: 3646

Ion	Ratio	Lower	Upper
83	100		
131	11.4	4.5	13.7
85	62.7	32.4	97.0

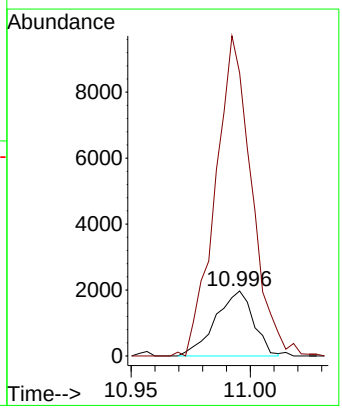


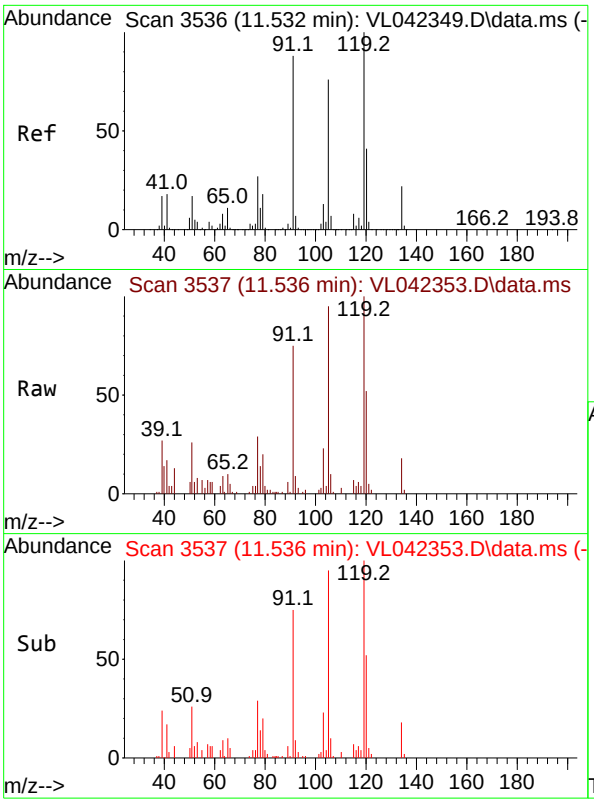


#64
n-propylbenzene
Concen: 0.117 ppbv
RT: 10.996 min Scan# 3370
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:120 Resp: 2186

Ion	Ratio	Lower	Upper
120	100		
91	471.4	392.4	588.6



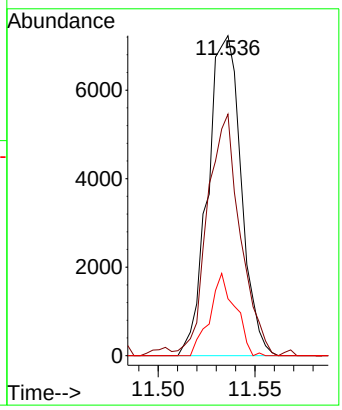


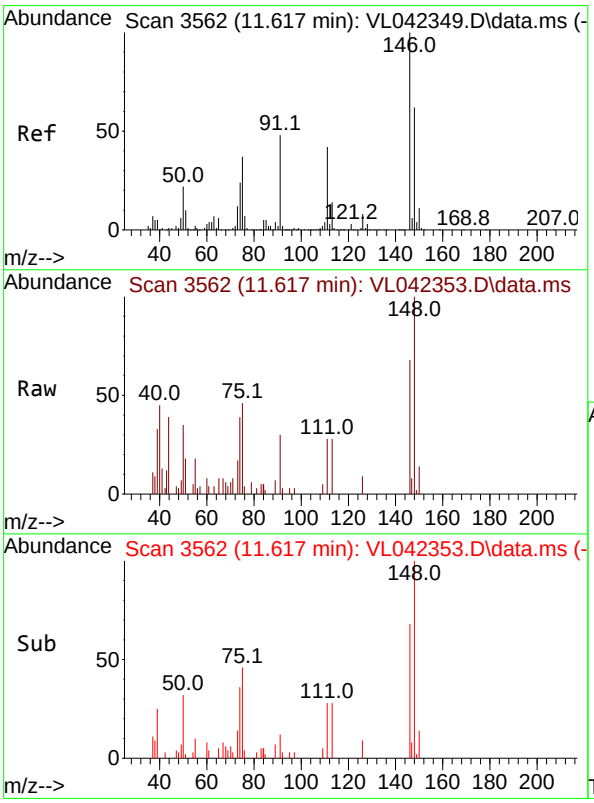
#65
tert-Butylbenzene
Concen: 0.127 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 8656

Ion	Ratio	Lower	Upper
119	100		
91	77.2	74.6	111.8
134	19.6	18.8	28.2

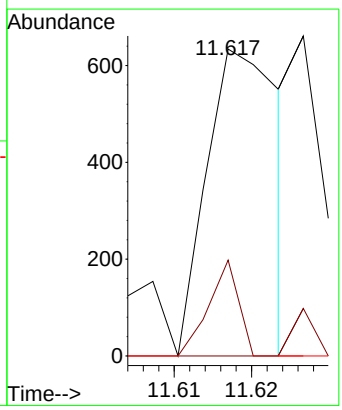


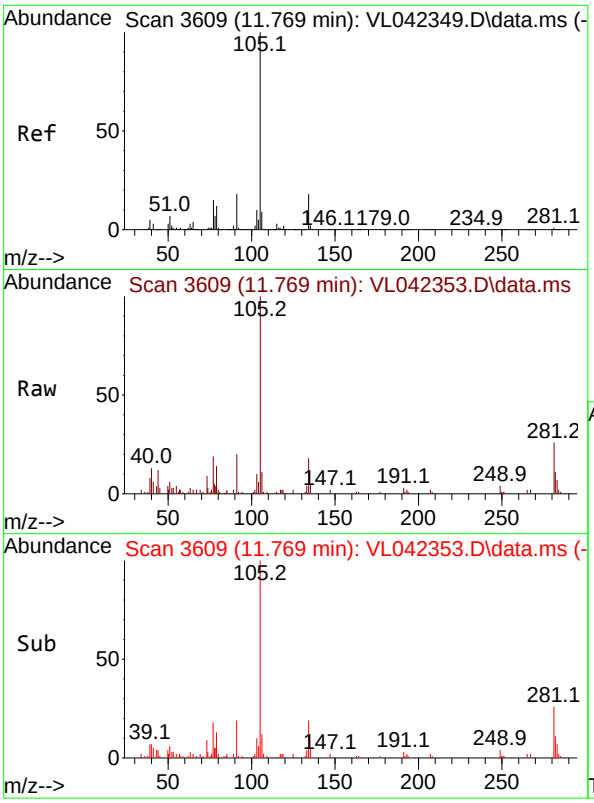


#66
Benzyl Chloride
Concen: 0.055 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 91 Resp: 414

Ion	Ratio	Lower	Upper
91	100		
126	23.2	11.8	17.6#
128	0.0	4.5	6.7#



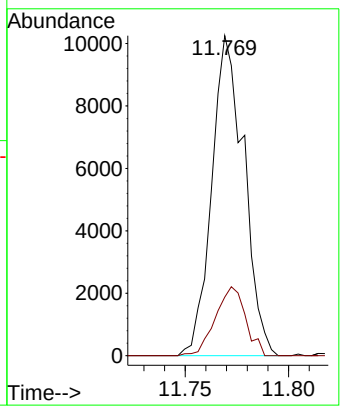


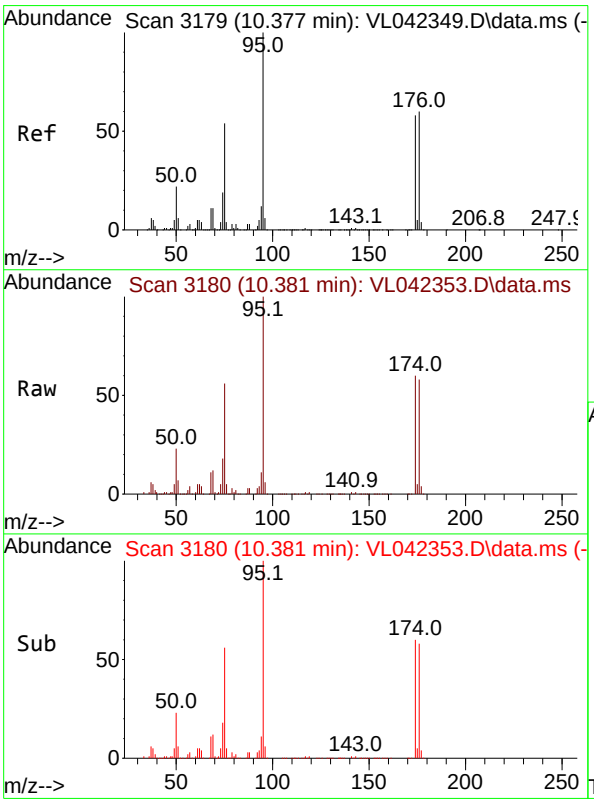
#67
sec-Butylbenzene
Concen: 0.117 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 11126

Ion	Ratio	Lower	Upper
105	100		
134	20.2	14.6	21.8

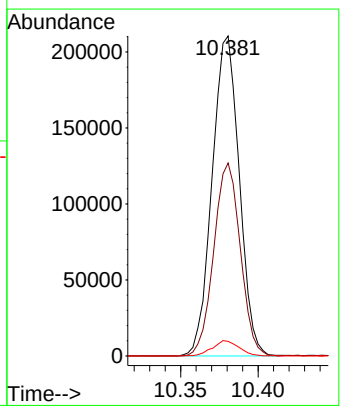


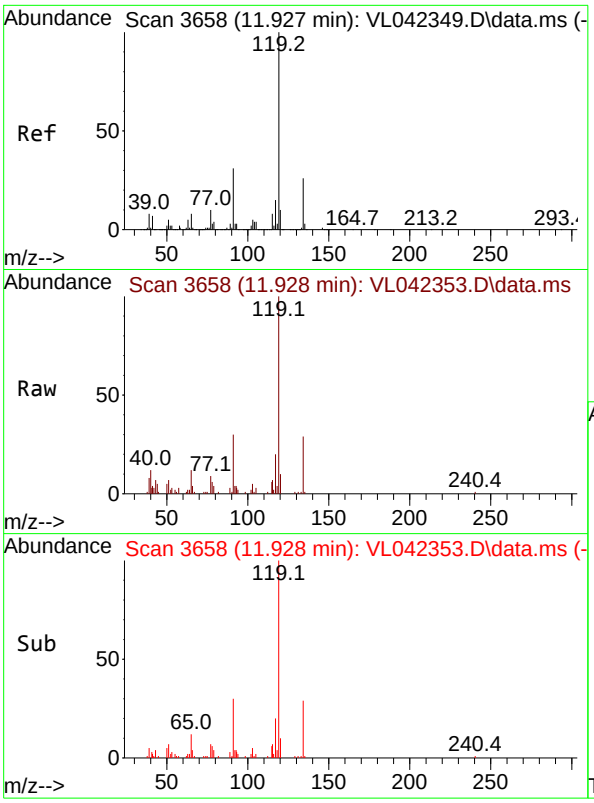


#68
1-Bromo-4-Fluorobenzene
Concen: 9.906 ppbv
RT: 10.381 min Scan# 3180
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 95 Resp: 256417

Ion	Ratio	Lower	Upper
95	100		
174	59.3	48.5	72.7
175	4.7	3.7	5.5



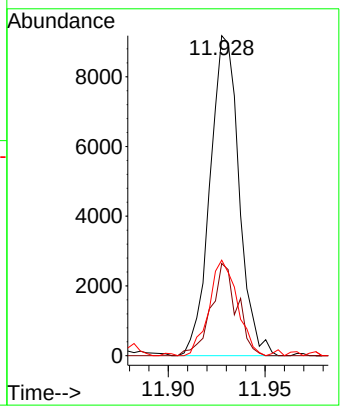


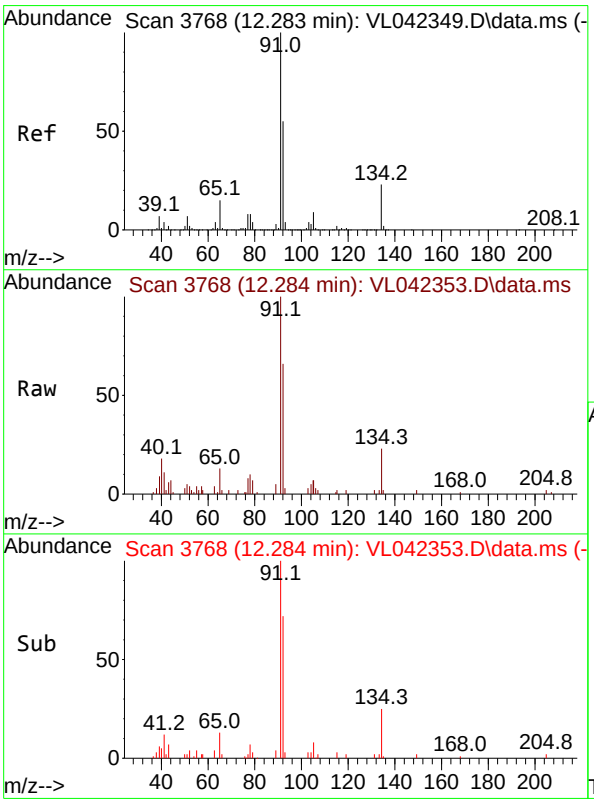
#69
p-Isopropyltoluene
Concen: 0.115 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:119 Resp: 9534

Ion	Ratio	Lower	Upper
119	100		
134	26.0	20.0	30.0
91	31.6	24.4	36.6

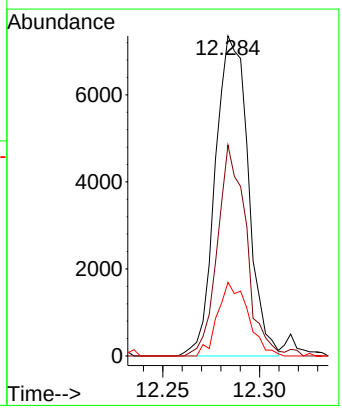


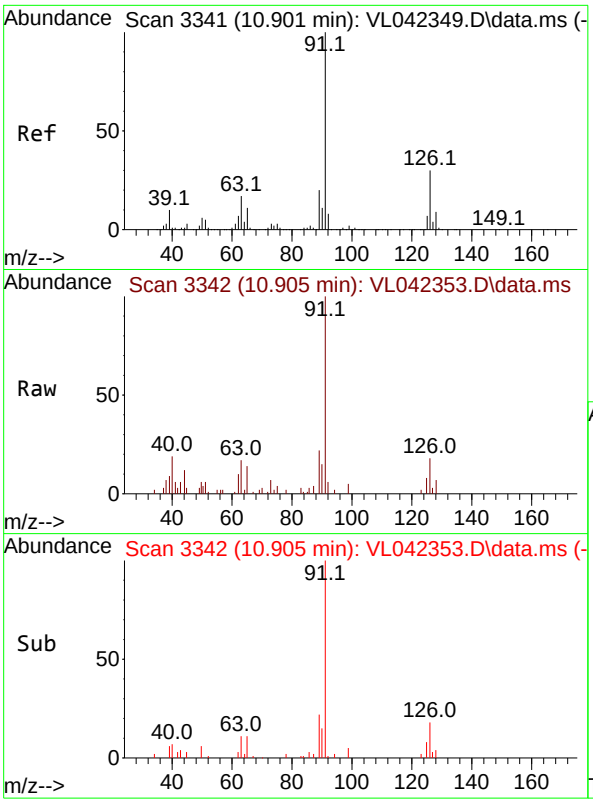


#70
n-Butylbenzene
Concen: 0.101 ppbv
RT: 12.284 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion: 91 Resp: 8684

Ion	Ratio	Lower	Upper
91	100		
92	58.0	44.2	66.4
134	21.3	18.2	27.4



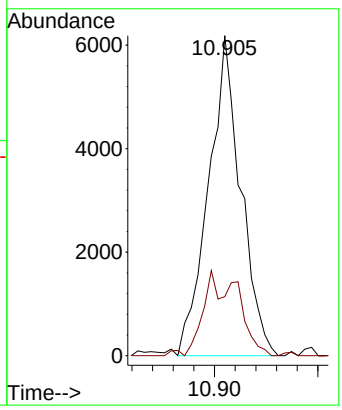


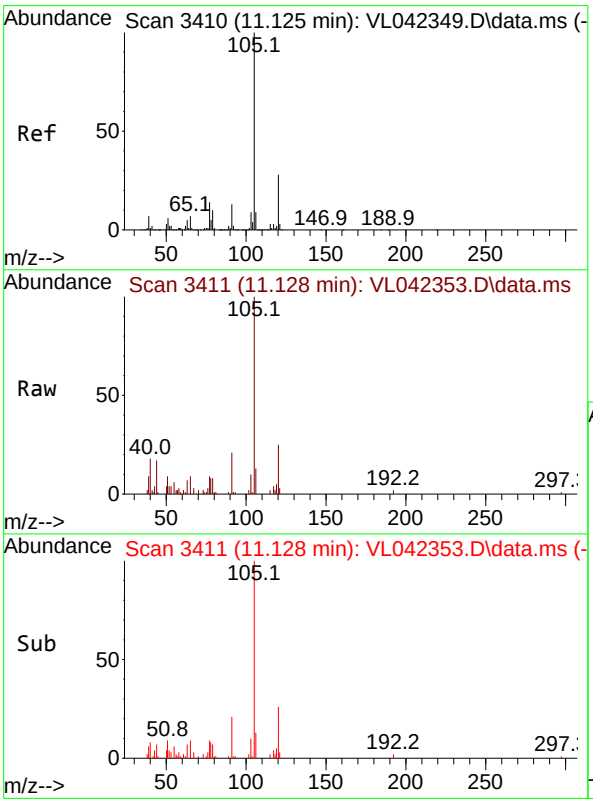
#71
2-Chlorotoluene
Concen: 0.115 ppbv
RT: 10.905 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion: 91 Resp: 6703

Ion	Ratio	Lower	Upper
91	100		
126	29.2	11.4	45.4

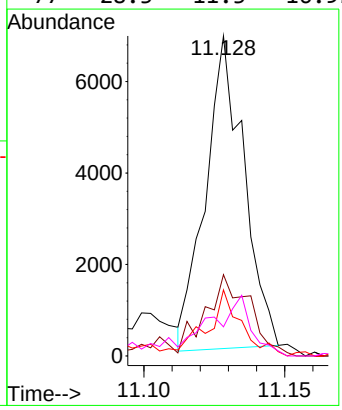


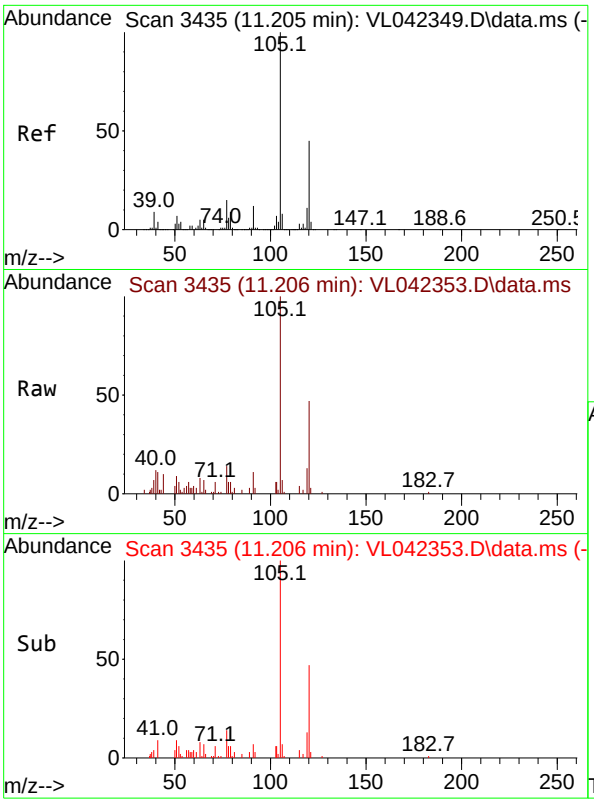


#72
4-Ethyltoluene
Concen: 0.104 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:105 Resp: 6463

Ion	Ratio	Lower	Upper
105	100		
120	34.1	23.2	34.8
91	24.5	10.4	15.6#
77	28.3	11.3	16.9#



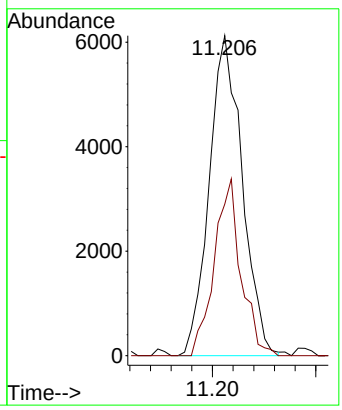


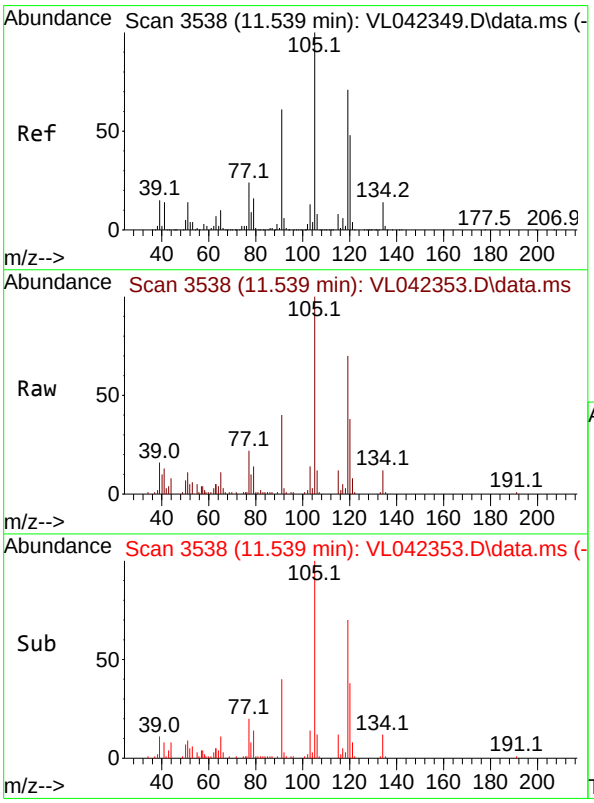
#73
1,3,5-Trimethylbenzene
Concen: 0.124 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:105 Resp: 6797

Ion	Ratio	Lower	Upper
105	100		
120	47.4	35.6	53.4

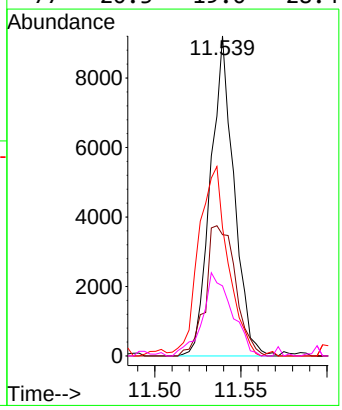


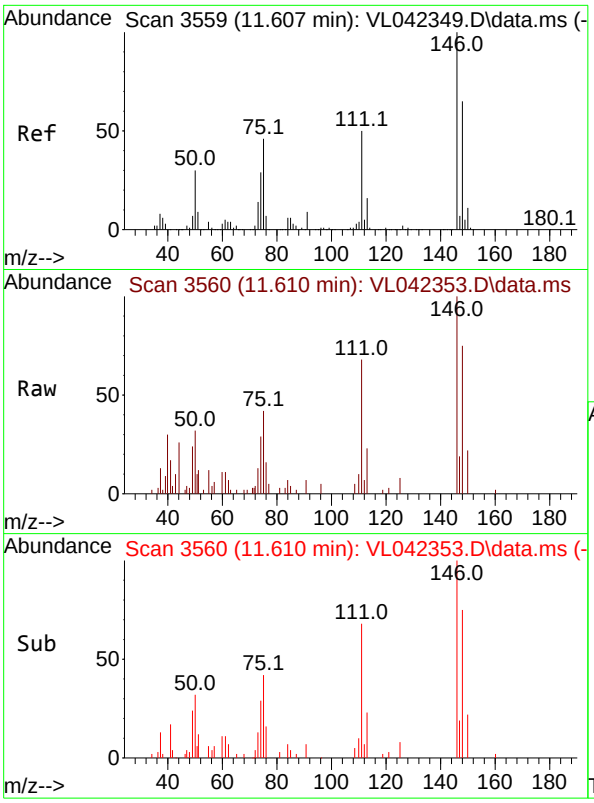


#74
1,2,4-Trimethylbenzene
Concen: 0.137 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:105 Resp: 8745

Ion	Ratio	Lower	Upper
105	100		
120	37.9	38.1	57.1#
91	40.1	48.8	73.2#
77	20.3	19.0	28.4



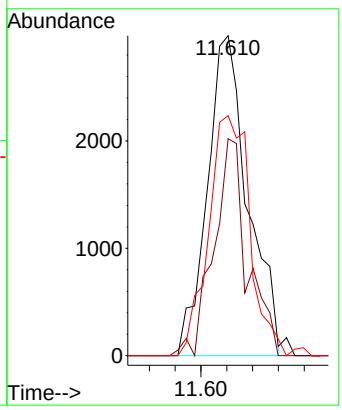


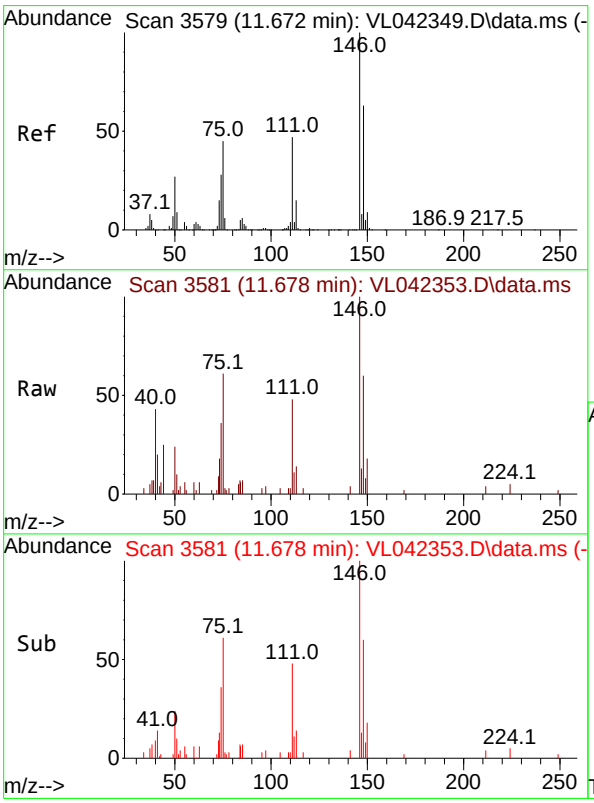
#75
1,3-Dichlorobenzene
Concen: 0.098 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 3258

Ion	Ratio	Lower	Upper
146	100		
111	55.9	24.3	72.8
148	77.0	31.6	94.8

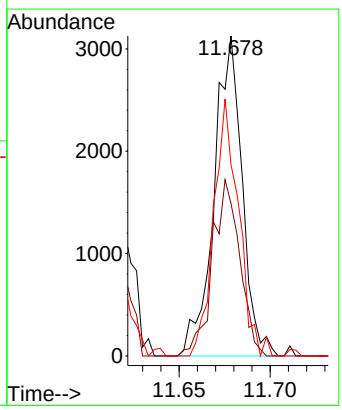


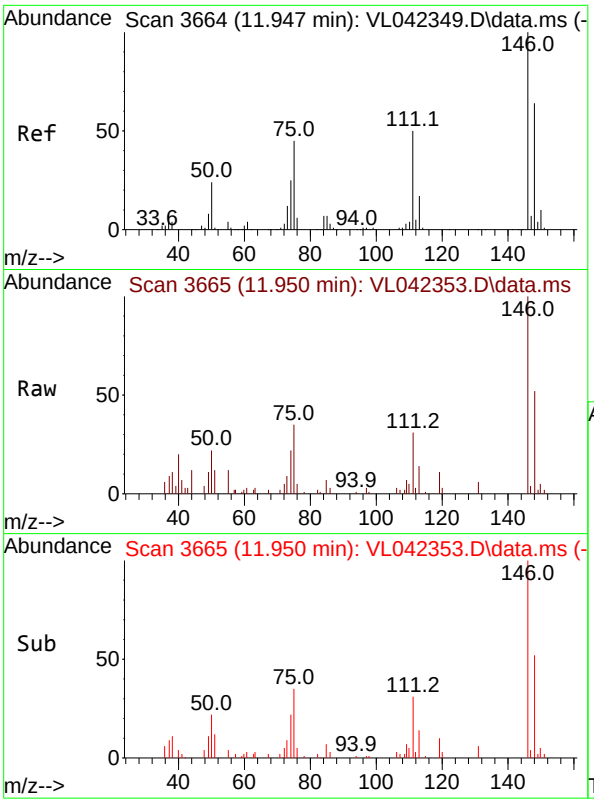


#76
1,4-Dichlorobenzene
Concen: 0.101 ppbv
RT: 11.678 min Scan# 3581
Delta R.T. 0.007 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:146 Resp: 3366

Ion	Ratio	Lower	Upper
146	100		
111	53.5	24.2	72.6
148	71.3	32.1	96.5



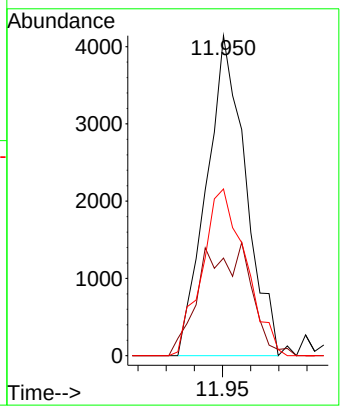


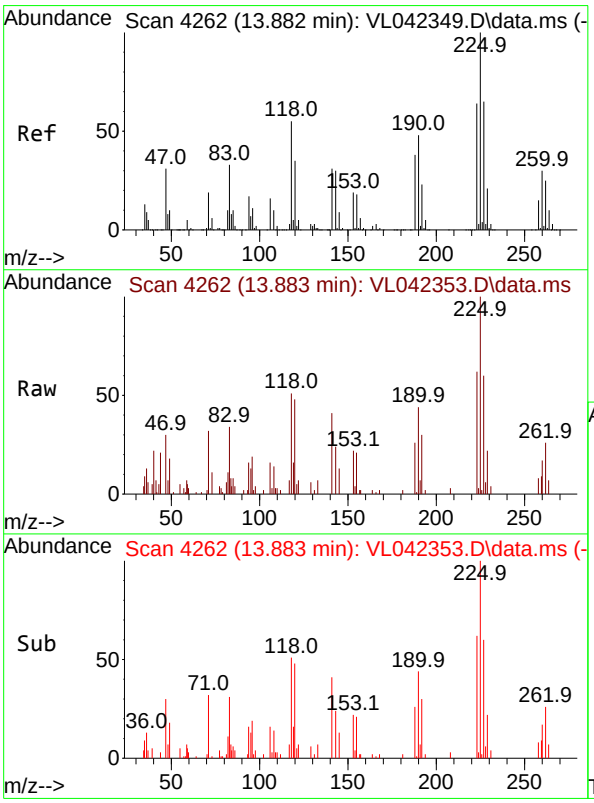
#77
1,2-Dichlorobenzene
Concen: 0.124 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:146 Resp: 3996

Ion	Ratio	Lower	Upper
146	100		
111	45.1	25.3	75.9
148	58.1	31.5	94.5

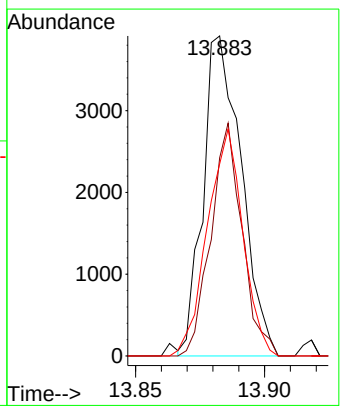


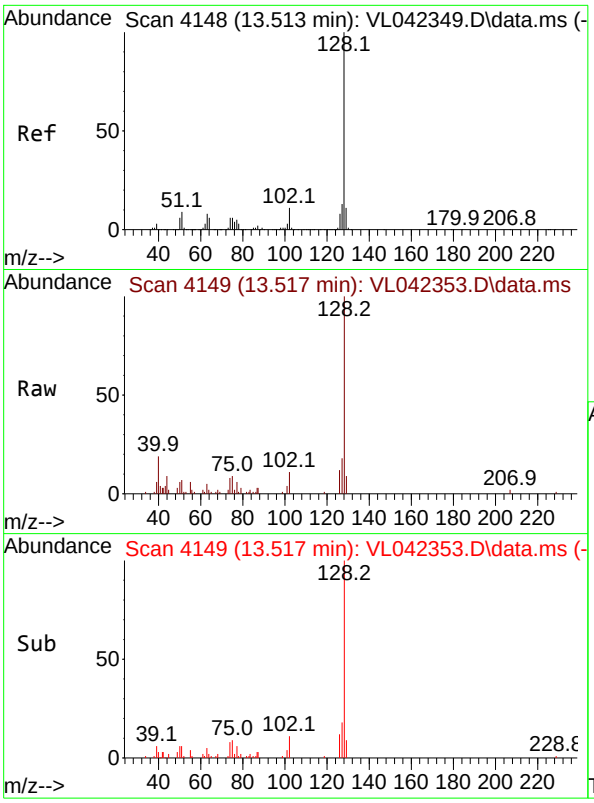


#78
Hexachloro-1,3-Butadiene
Concen: 0.124 ppbv
RT: 13.883 min Scan# 4262
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:225 Resp: 4030

Ion	Ratio	Lower	Upper
225	100		
223	59.5	50.3	75.5
227	65.9	51.5	77.3



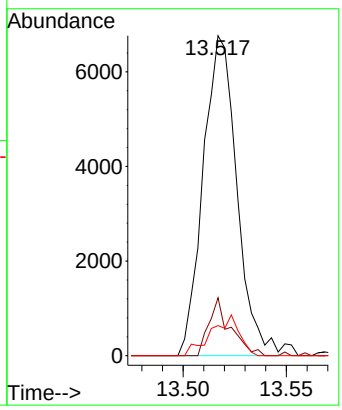


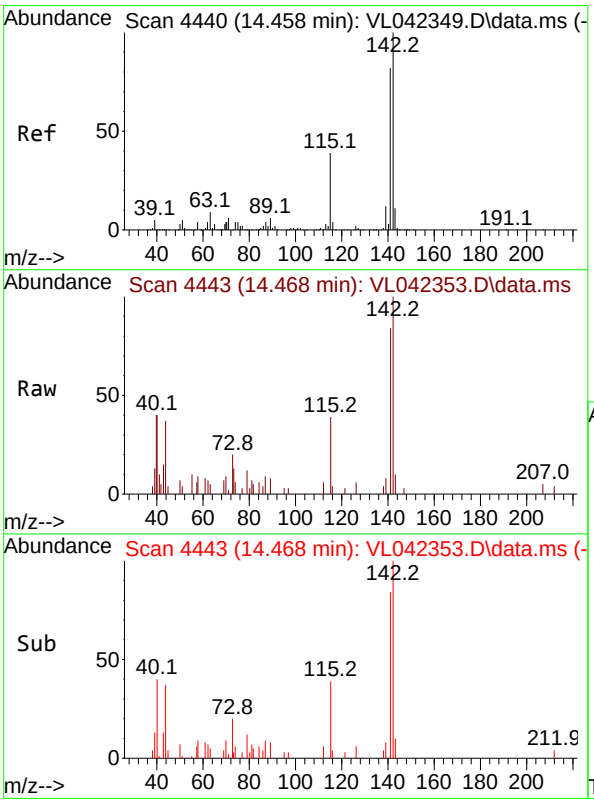
#79
Naphthalene
Concen: 0.100 ppbv
RT: 13.517 min Scan# 41
Delta R.T. 0.004 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:128 Resp: 7664

Ion	Ratio	Lower	Upper
128	100		
127	18.1	10.6	15.8#
129	9.4	8.6	12.8

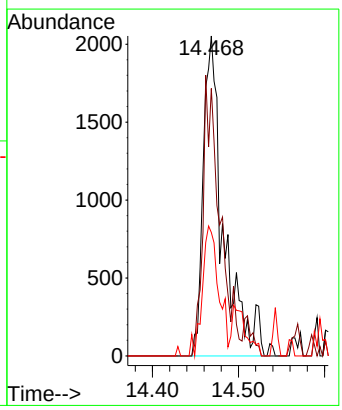


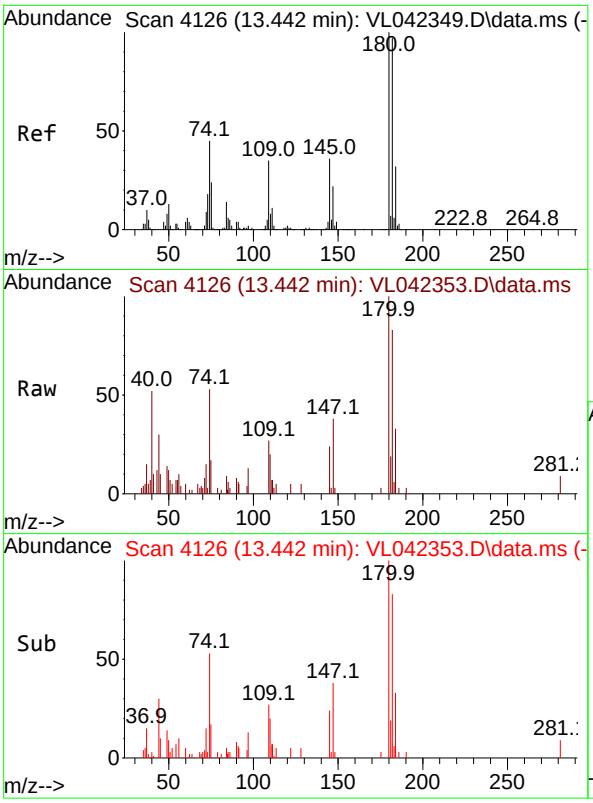


#80
Naphthalene,2-methyl-
Concen: 0.077 ppbv
RT: 14.468 min Scan# 4443
Delta R.T. 0.010 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Tgt Ion:142 Resp: 3339

Ion	Ratio	Lower	Upper
142	100		
141	78.4	66.8	100.2
115	33.1	33.4	50.2#



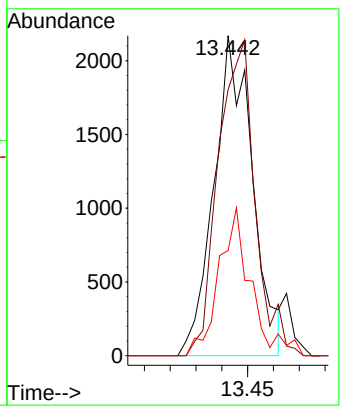


#81
1,2,4-Trichlorobenzene
Concen: 0.069 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042353.D
Acq: 17 Apr 2025 11:50

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.1

Tgt Ion:180 Resp: 2245

Ion	Ratio	Lower	Upper
180	100		
182	94.3	76.8	115.2
184	38.4	24.6	36.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042354.D
Acq On : 17 Apr 2025 12:22
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Apr 18 02:07:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	120042	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	349264	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.885	117	312999	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	256230	9.962	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.600%			
Target Compounds						Qvalue
3) Chlorodifluoromethane	1.479	51	1404	0.070	ppbv #	78
4) Chloromethane	1.534	50	773	0.092	ppbv #	72
5) Vinyl Chloride	1.583	62	361	0.040	ppbv #	76
6) Bromomethane	1.667	94	232	0.059	ppbv #	8
7) Chloroethane	1.699	64	237	0.072	ppbv #	46
8) Dichlorotetrafluoroethane	1.554	85	823	0.045	ppbv	95
9) Propene	1.486	41	508	0.055	ppbv #	15
10) Heptane	4.981	43	435	0.018	ppbv #	1
12) 1,1,2-Trichlorotrifluo...	2.143	101	793	0.048	ppbv #	73
13) Ethanol	1.434	45	60931	81.065	ppbv	74
14) Bromoethene	1.787	108	207	0.033	ppbv #	1
15) Acetone	1.839	43	3597	0.183	ppbv #	89
16) 1,3-Butadiene	1.609	39	573	0.062	ppbv #	1
17) tert-Butyl alcohol	2.049	59	991	0.041	ppbv #	1
18) 1,1-Dichloroethene	2.036	96	455	0.057	ppbv #	43
19) Isopropyl Alcohol	1.434	45	60931	5.582	ppbv #	33
20) Methylene Chloride	2.065	84	2904	0.377	ppbv	86
21) Allyl Chloride	2.097	41	1132	0.083	ppbv #	1
22) trans-1,2-Dichloroethene	2.340	96	287	0.033	ppbv #	32
23) Vinyl Acetate	2.466	43	490	0.062	ppbv #	86
24) 1,1-Dichloroethane	2.415	63	1030	0.062	ppbv #	74
25) Ethyl Acetate	2.835	43	2744	0.057	ppbv #	75
26) Hexane	2.832	57	2398	0.122	ppbv #	65
27) Carbon Disulfide	2.152	76	984	0.047	ppbv #	1
28) Methyl tert-Butyl Ether	2.447	73	426	0.033	ppbv #	48
30) Cyclohexane	3.855	84	311	0.020	ppbv #	1
31) cis-1,2-Dichloroethene	2.725	61	831	0.045	ppbv #	86
32) 1,1,1-Trichloroethane	3.373	97	809	0.027	ppbv #	52
34) 2-Butanone	2.564	43	510	0.018	ppbv #	53
35) Carbon Tetrachloride	3.768	117	862	0.027	ppbv #	45
36) Benzene	3.667	78	1629	0.043	ppbv #	75
38) Trichloroethene	4.557	130	271	0.016	ppbv #	27
39) 1,2-Dichloropropane	3.965	63	90827	6.465	ppbv #	22
40) 1,4-Dioxane	4.625	88	139	0.018	ppbv #	1
42) Bromodichloromethane	4.496	83	1093	0.035	ppbv #	82
43) Methyl Methacrylate	4.891	69	354	0.021	ppbv #	3
44) 2,2,4-Trimethylpentane	4.641	57	1377	0.021	ppbv #	1
45) t-1,3-Dichloropropene	6.415	75	183	0.011	ppbv	100
46) cis-1,3-Dichloropropene	5.606	75	546	0.026	ppbv #	37
47) 1,1,2-Trichloroethane	6.590	97	225	0.016	ppbv #	40
48) Dibromochloromethane	7.399	129	258	0.010	ppbv #	10
49) Bromoform	9.493	173	285	0.013	ppbv #	1
53) Toluene	6.943	91	464	0.010	ppbv #	1

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042354.D
Acq On : 17 Apr 2025 12:22
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Apr 18 02:07:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

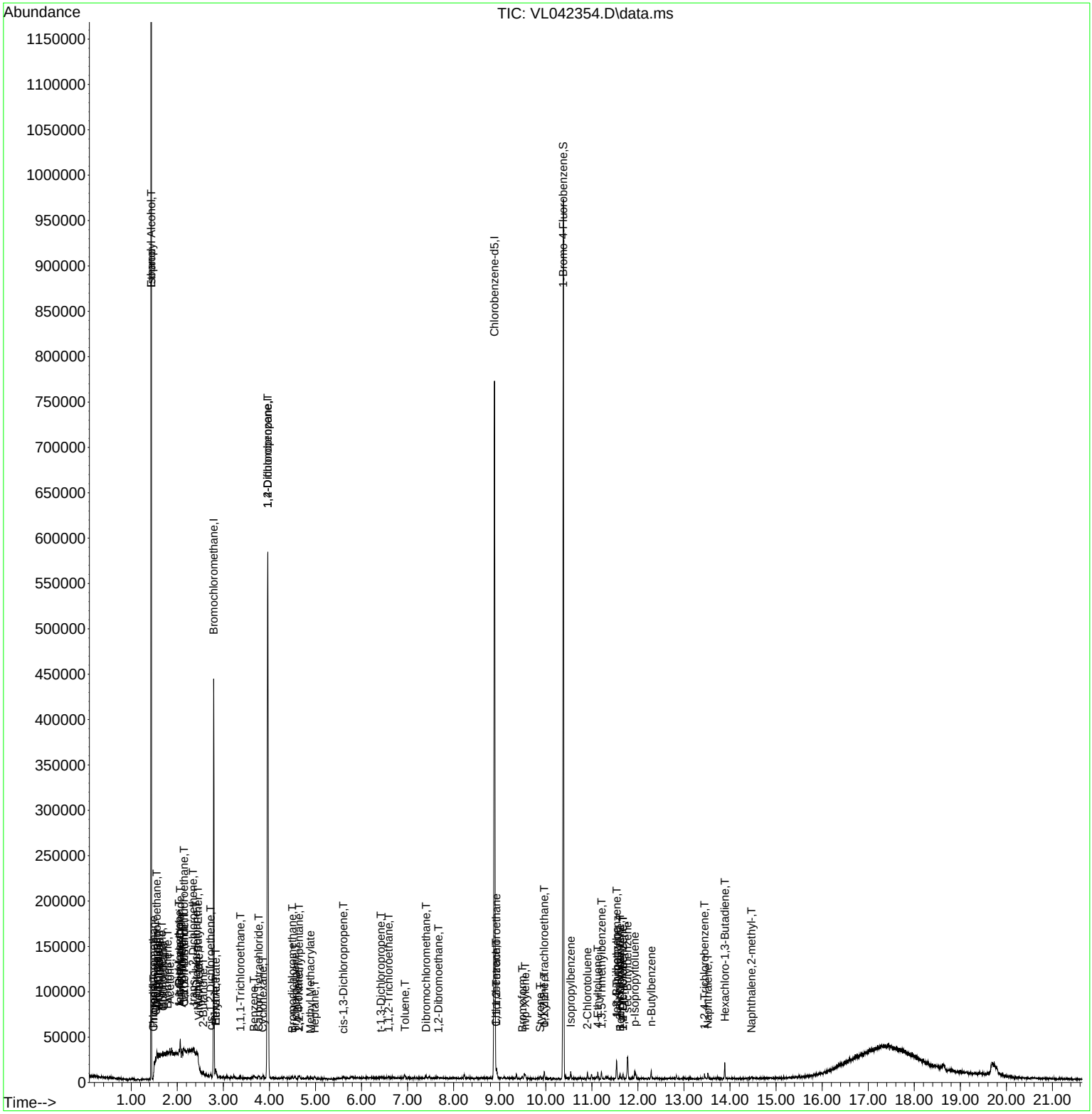
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
54) 1,2-Dibromoethane	7.668	107	422	0.021	ppbv	#	12
56) 1,1,1,2-Tetrachloroethane	8.927	131	589	0.031	ppbv	#	1
57) Chlorobenzene	8.920	112	567	0.017	ppbv	#	74
59) m/p-Xylene	9.555	91	1648	0.033	ppbv	#	32
60) o-Xylene	9.966	91	1938	0.039	ppbv		84
61) Styrene	9.875	104	813	0.034	ppbv		93
62) Isopropylbenzene	10.542	105	2934	0.040	ppbv		92
63) 1,1,2,2-Tetrachloroethane	9.966	83	826	0.025	ppbv	#	58
65) tert-Butylbenzene	11.536	119	2656	0.039	ppbv		90
66) Benzyl Chloride	11.620	91	130	0.017	ppbv	#	70
67) sec-Butylbenzene	11.772	105	3658	0.039	ppbv	#	85
69) p-Isopropyltoluene	11.930	119	3139	0.038	ppbv		94
70) n-Butylbenzene	12.290	91	2516	0.029	ppbv	#	81
71) 2-Chlorotoluene	10.901	91	2537	0.044	ppbv		99
72) 4-Ethyltoluene	11.128	105	2221	0.036	ppbv	#	69
73) 1,3,5-Trimethylbenzene	11.212	105	2473	0.046	ppbv	#	86
74) 1,2,4-Trimethylbenzene	11.539	105	4320	0.068	ppbv	#	80
75) 1,3-Dichlorobenzene	11.613	146	1056	0.032	ppbv		91
76) 1,4-Dichlorobenzene	11.671	146	1180	0.036	ppbv		95
77) 1,2-Dichlorobenzene	11.671	146	1180	0.037	ppbv		93
78) Hexachloro-1,3-Butadiene	13.889	225	1879	0.058	ppbv		92
79) Naphthalene	13.516	128	2354	0.031	ppbv	#	84
80) Naphthalene,2-methyl-	14.468	142	594	0.014	ppbv	#	52
81) 1,2,4-Trichlorobenzene	13.445	180	614	0.019	ppbv	#	71

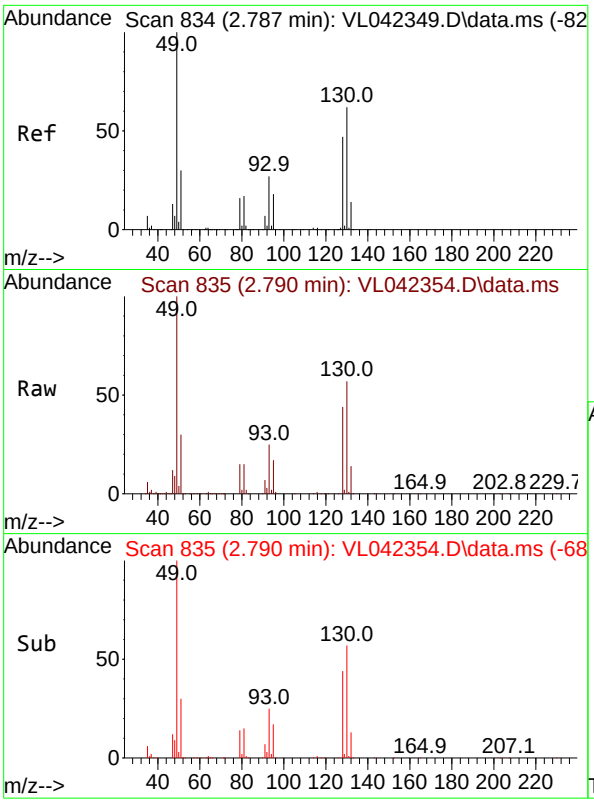
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042354.D
Acq On : 17 Apr 2025 12:22
Operator : SY/MD
Sample : VSTDICC0.03
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Quant Time: Apr 18 02:07:48 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



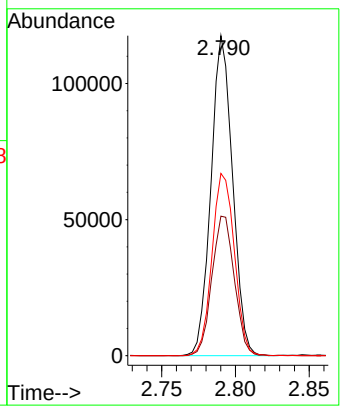


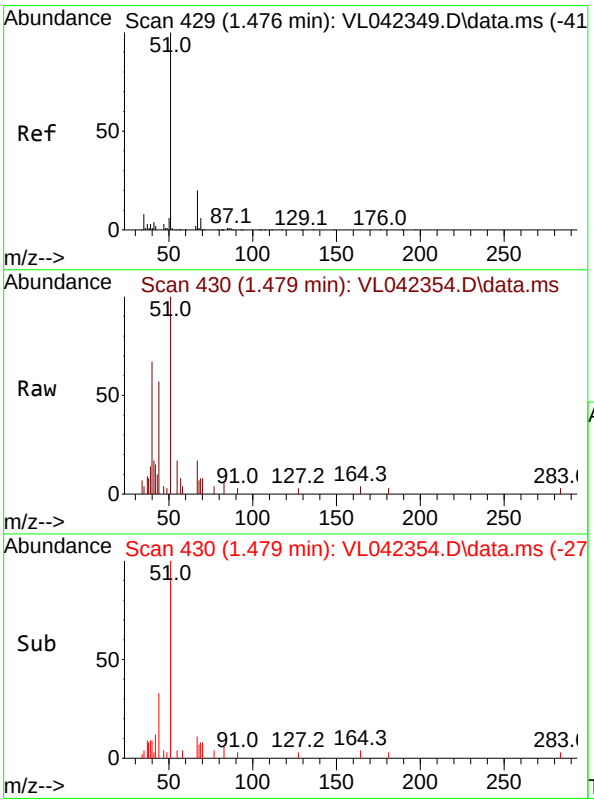
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 49 Resp: 120042

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	59.0	29.3	88.0

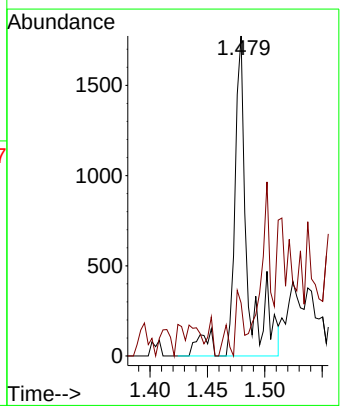


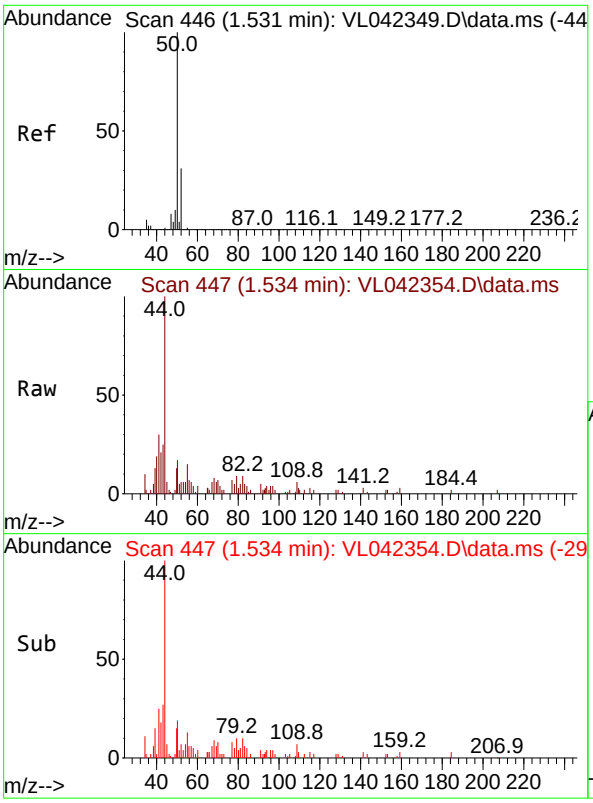


#3
Chlorodifluoromethane
Concen: 0.070 ppbv
RT: 1.479 min Scan# 430
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 51 Resp: 1404

Ion	Ratio	Lower	Upper
51	100		
67	30.7	16.2	24.4#



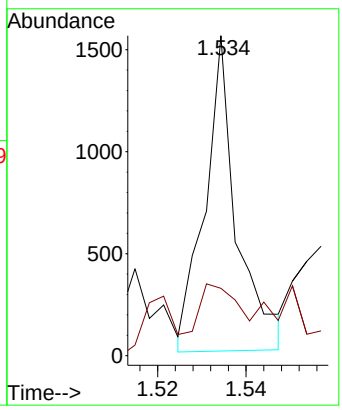


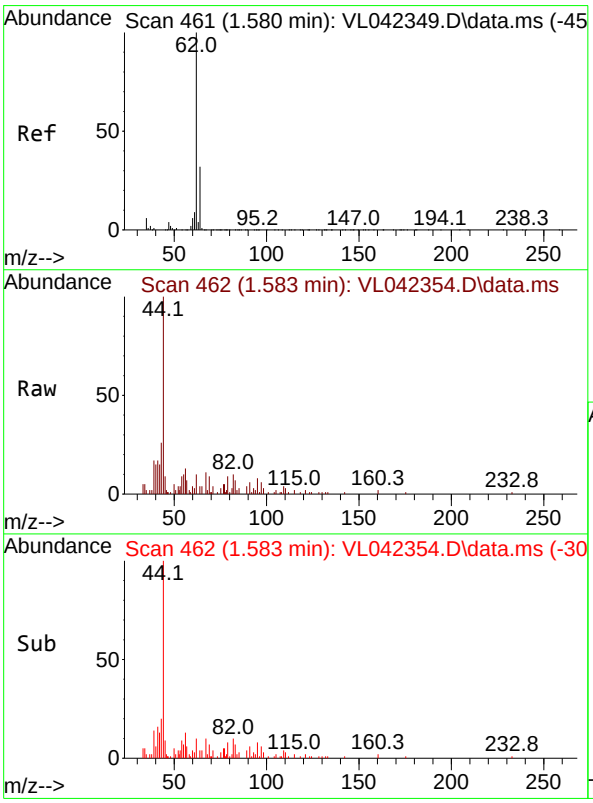
#4
Chloromethane
Concen: 0.092 ppbv
RT: 1.534 min Scan# 44
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 50 Resp: 773

Ion	Ratio	Lower	Upper
50	100		
52	15.3	24.7	37.1#

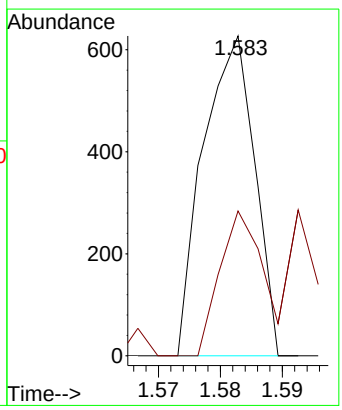


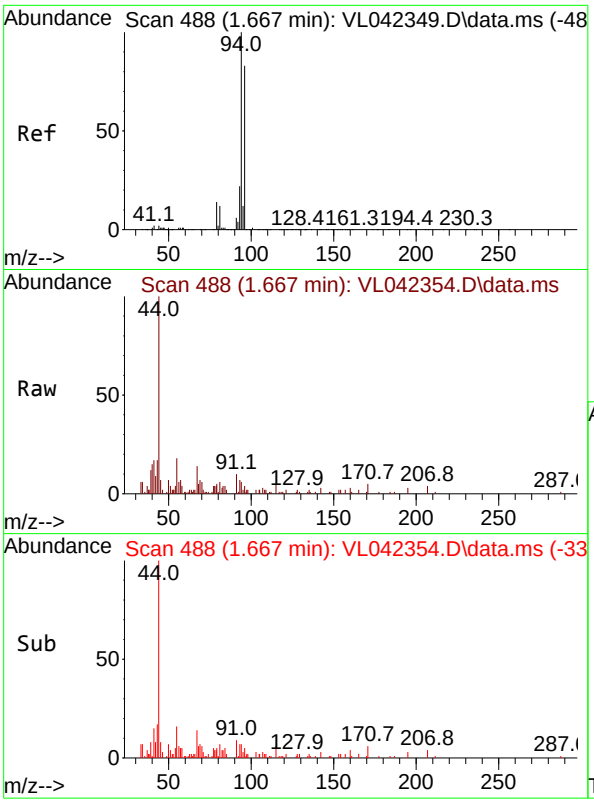


#5
Vinyl Chloride
Concen: 0.040 ppbv
RT: 1.583 min Scan# 462
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 62 Resp: 361

Ion	Ratio	Lower	Upper
62	100		
64	45.3	25.4	38.0#



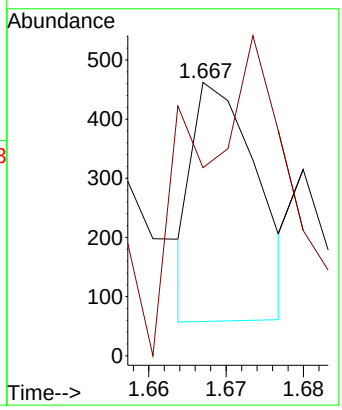


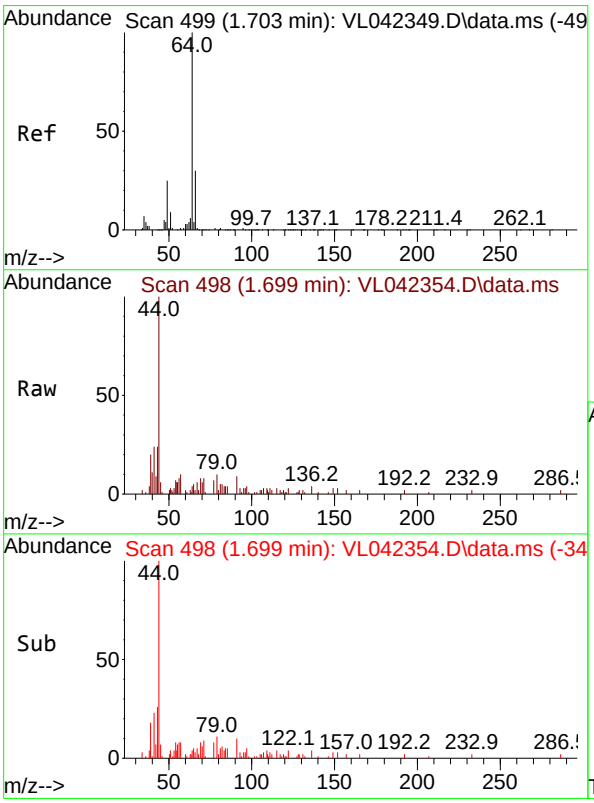
#6
Bromomethane
Concen: 0.059 ppbv
RT: 1.667 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 94 Resp: 232

Ion	Ratio	Lower	Upper
94	100		
96	0.0	66.2	99.2#

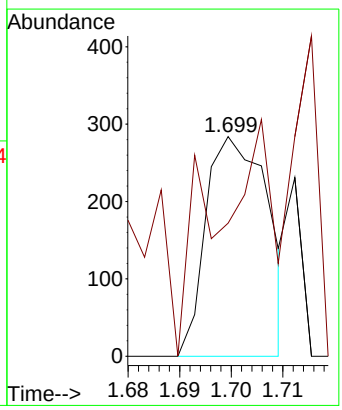


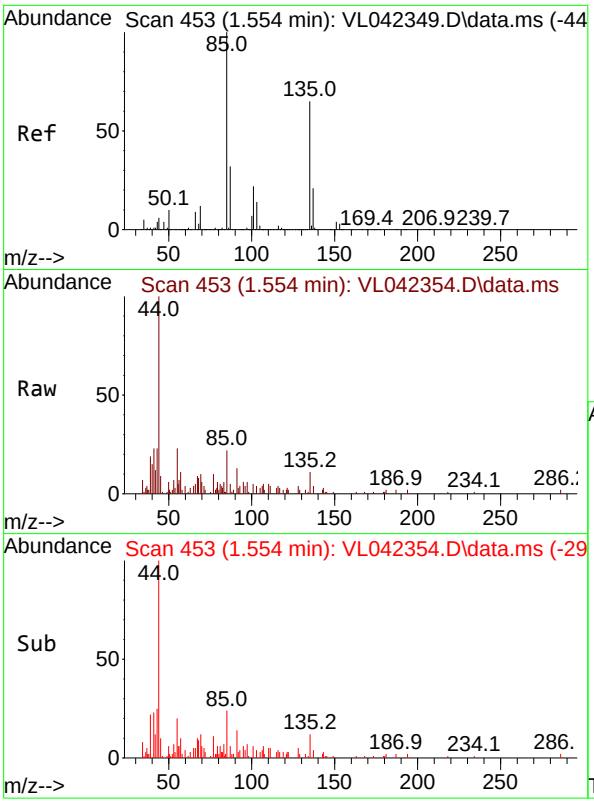


#7
Chloroethane
Concen: 0.072 ppbv
RT: 1.699 min Scan# 498
Delta R.T. -0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 64 Resp: 237

Ion	Ratio	Lower	Upper
64	100		
66	60.6	24.6	37.0#



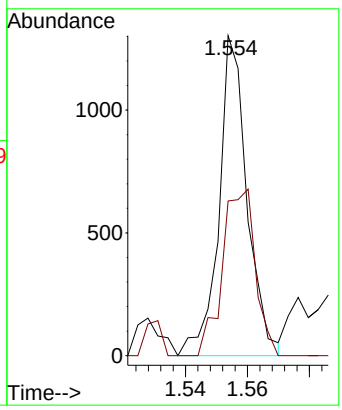


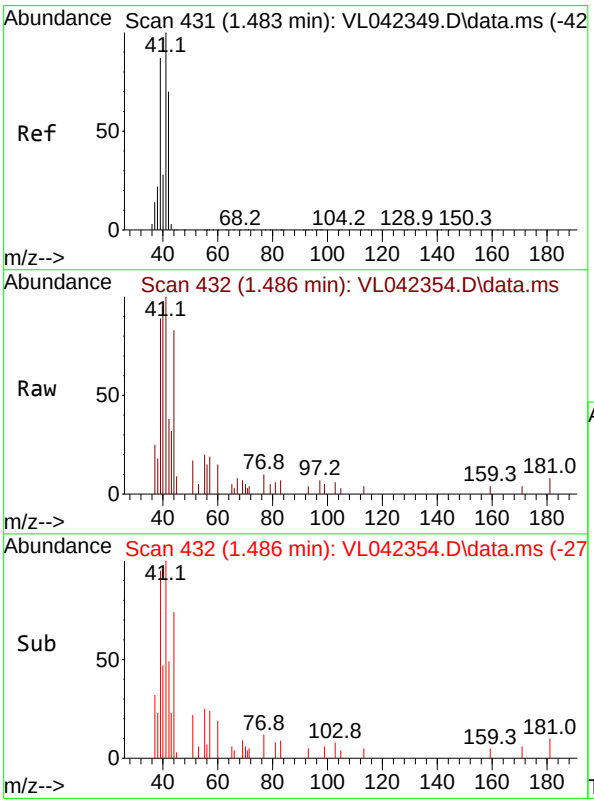
#8
Dichlorotetrafluoroethane
Concen: 0.045 ppbv
RT: 1.554 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 85 Resp: 823

Ion	Ratio	Lower	Upper
85	100		
135	69.1	52.2	78.2

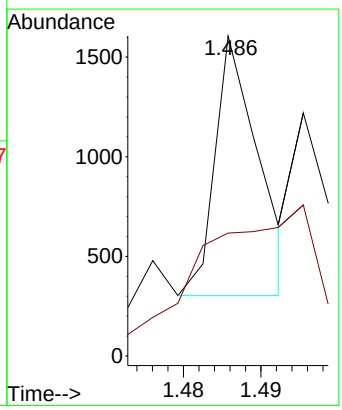


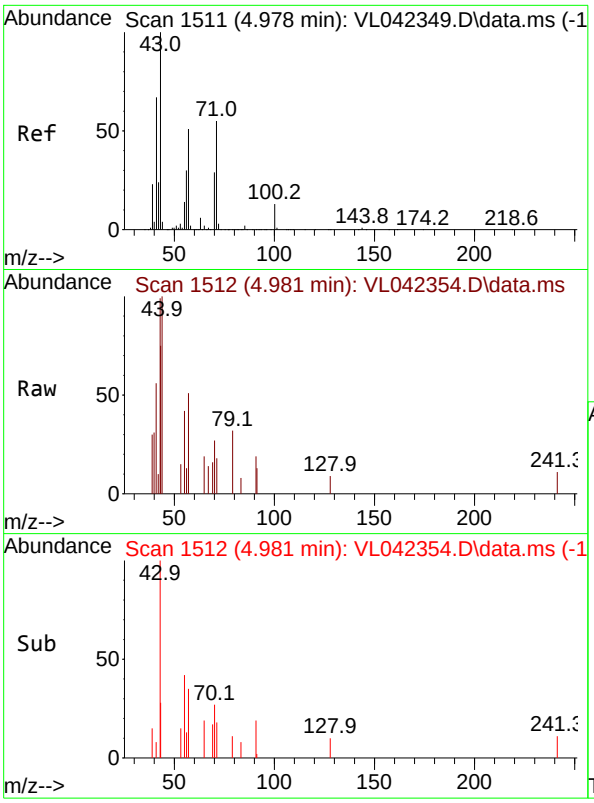


#9
Propene
Concen: 0.055 ppbv
RT: 1.486 min Scan# 432
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 41 Resp: 508

Ion	Ratio	Lower	Upper
41	100		
42	0.0	56.2	84.4#



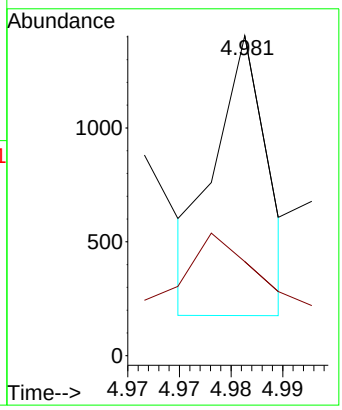


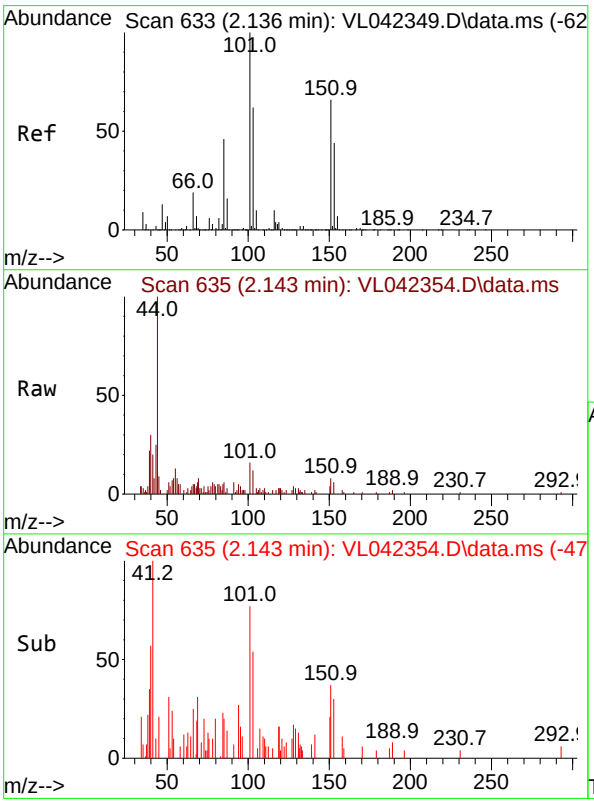
#10
Heptane
Concen: 0.018 ppbv
RT: 4.981 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 435

Ion	Ratio	Lower	Upper
43	100		
57	283.4	39.9	59.9#

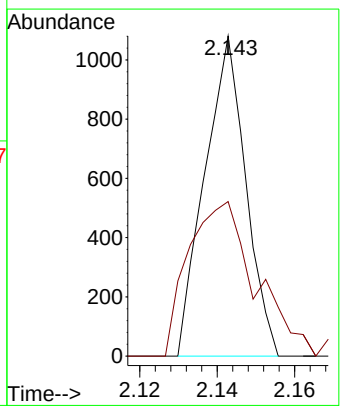


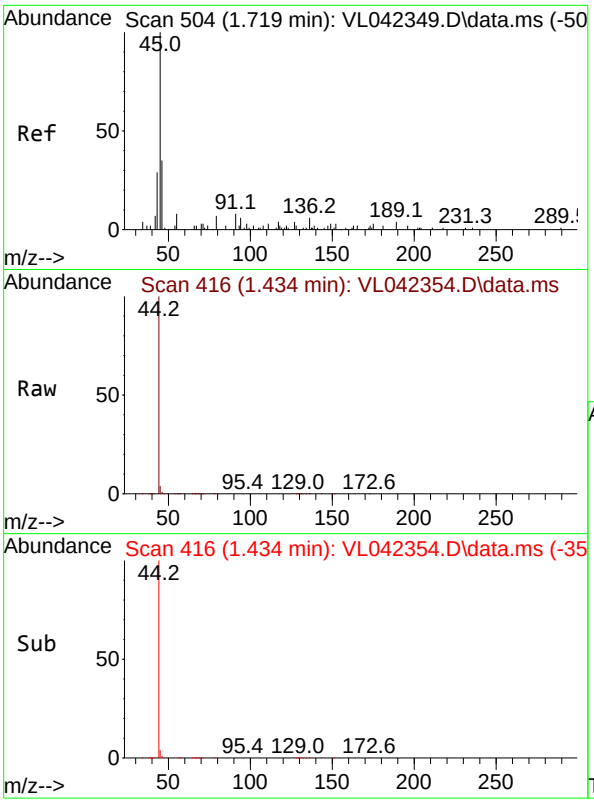


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.048 ppbv
RT: 2.143 min Scan# 635
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:101 Resp: 793

Ion	Ratio	Lower	Upper
101	100		
151	93.3	57.0	85.6#



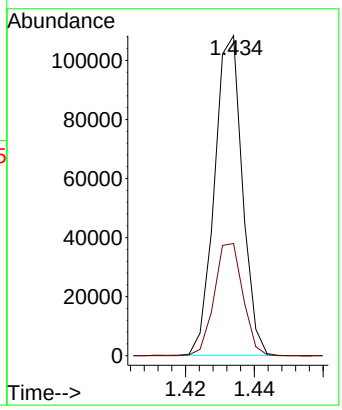


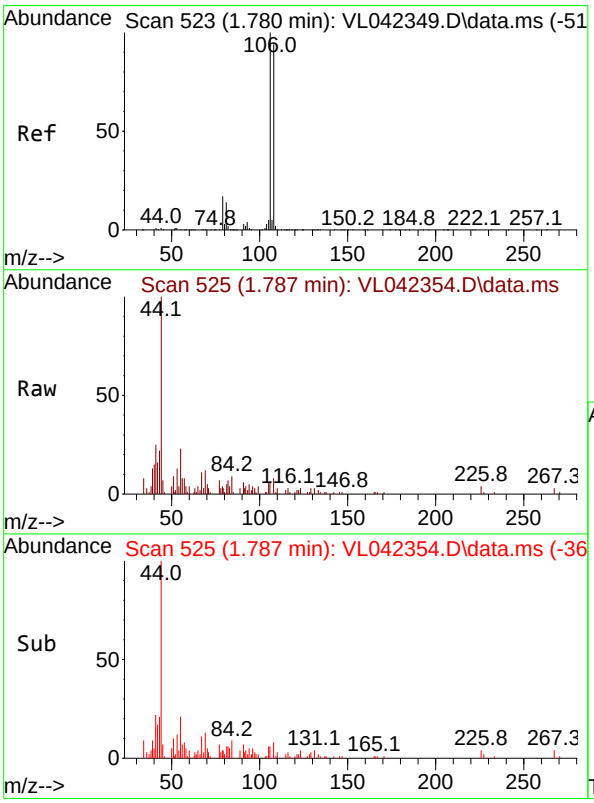
#13
Ethanol
Concen: 81.065 ppbv
RT: 1.434 min Scan# 4
Delta R.T. -0.285 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 60931

Ion	Ratio	Lower	Upper
45	100		
46	36.1	21.9	87.7

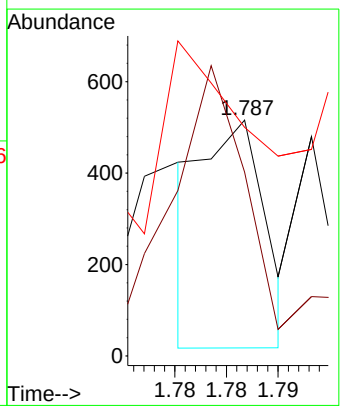


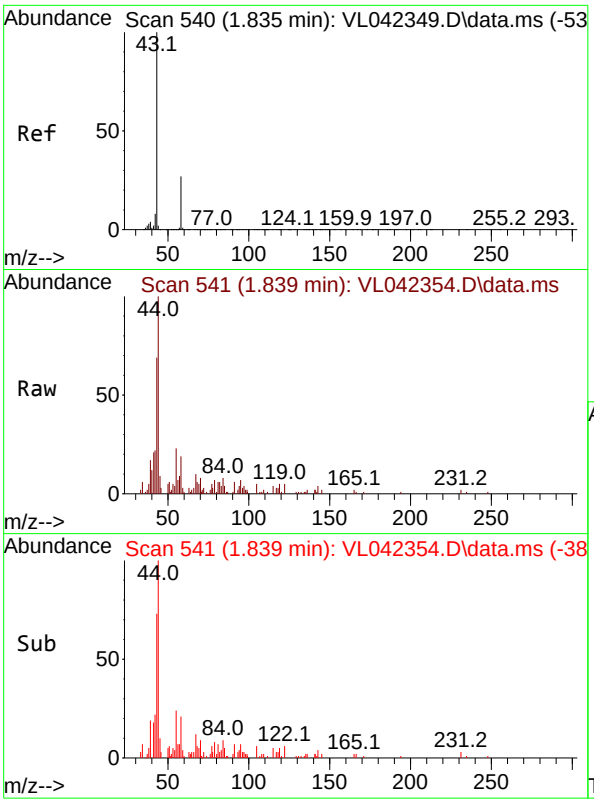


#14
Bromoethene
Concen: 0.033 ppbv
RT: 1.787 min Scan# 525
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:108 Resp: 207

Ion	Ratio	Lower	Upper
108	100		
106	248.3	85.9	128.9#
79	0.0	13.9	20.9#



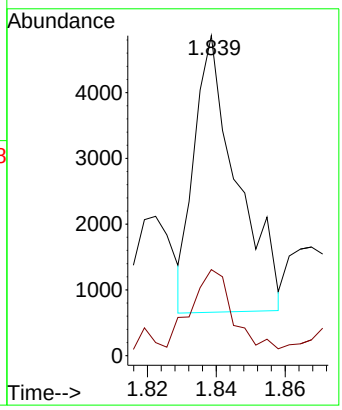


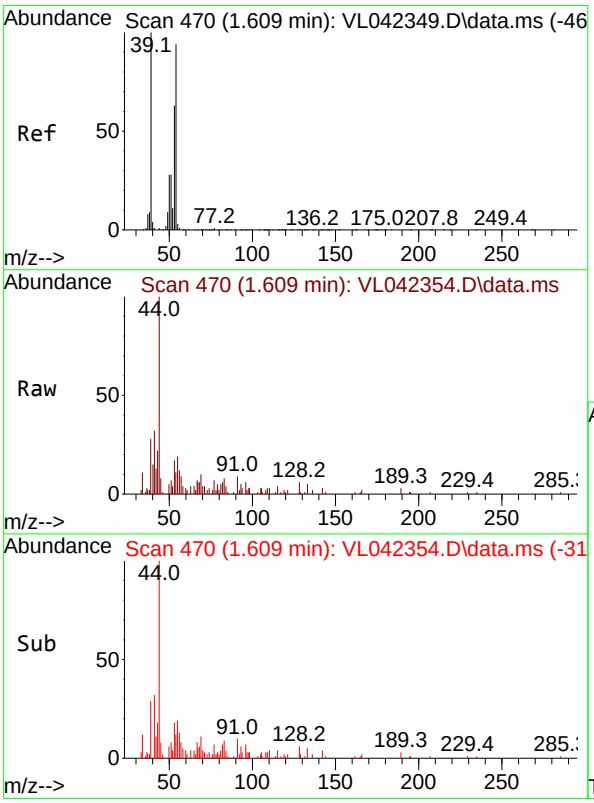
#15
Acetone
Concen: 0.183 ppbv
RT: 1.839 min Scan# 54
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 3597

Ion	Ratio	Lower	Upper
43	100		
58	33.7	22.4	33.6#

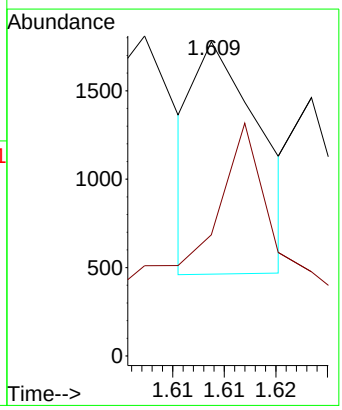


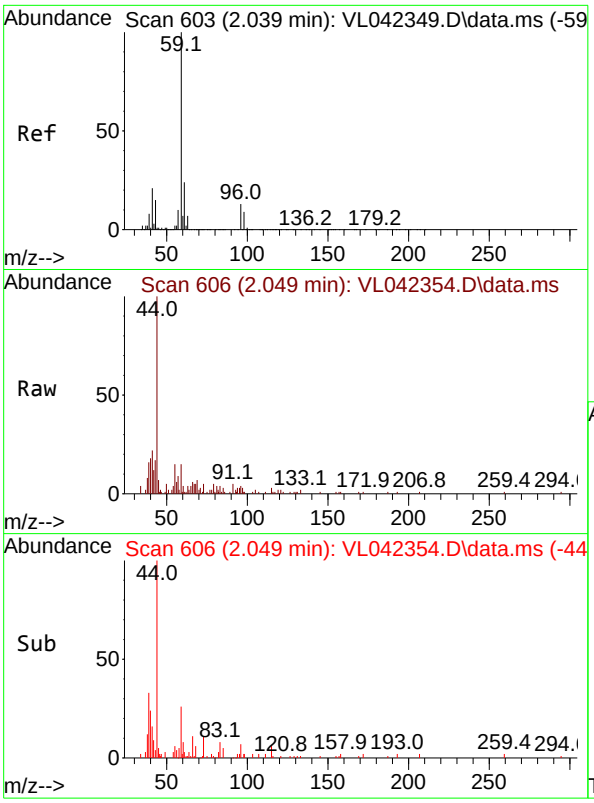


#16
1,3-Butadiene
Concen: 0.062 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 39 Resp: 573

Ion	Ratio	Lower	Upper
39	100		
54	377.0	64.9	97.3#



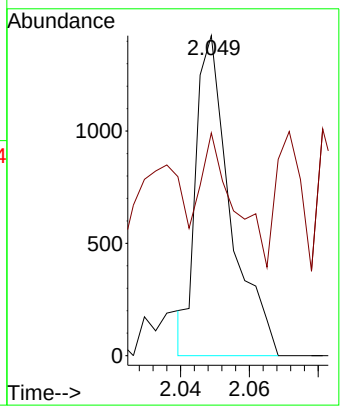


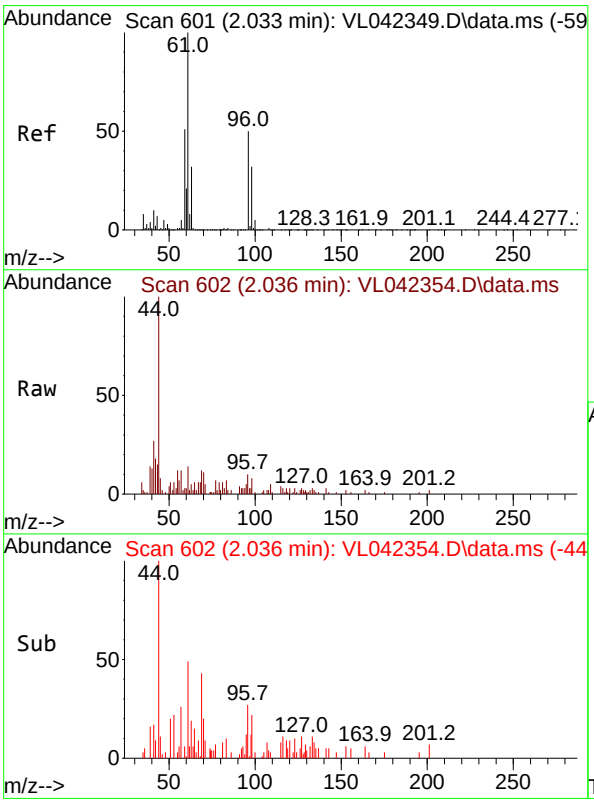
#17
tert-Butyl alcohol
Concen: 0.041 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 59 Resp: 991

Ion	Ratio	Lower	Upper
59	100		
57	113.2	8.7	13.1#

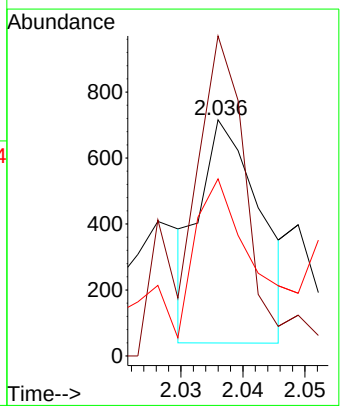


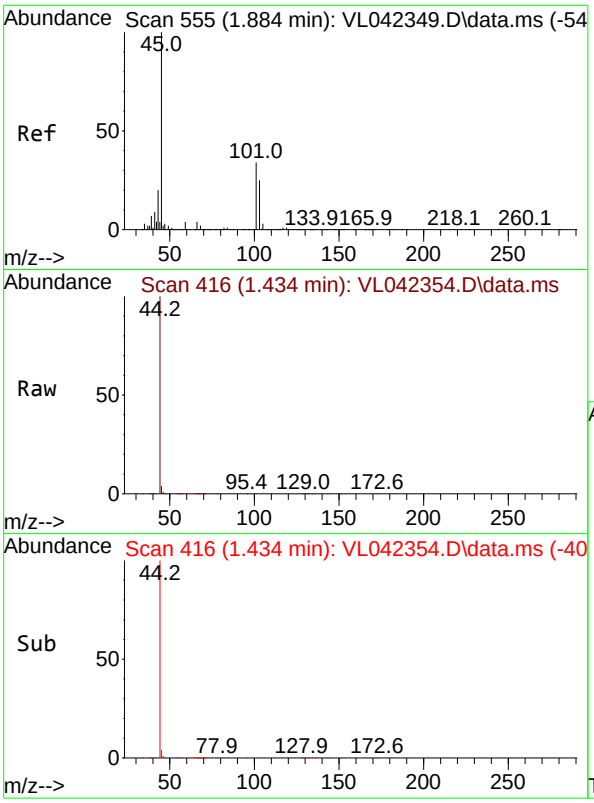


#18
1,1-Dichloroethene
Concen: 0.057 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 96 Resp: 455

Ion	Ratio	Lower	Upper
96	100		
61	271.0	160.2	240.2#
98	132.1	51.0	76.4#



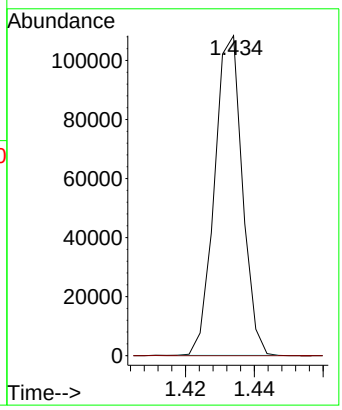


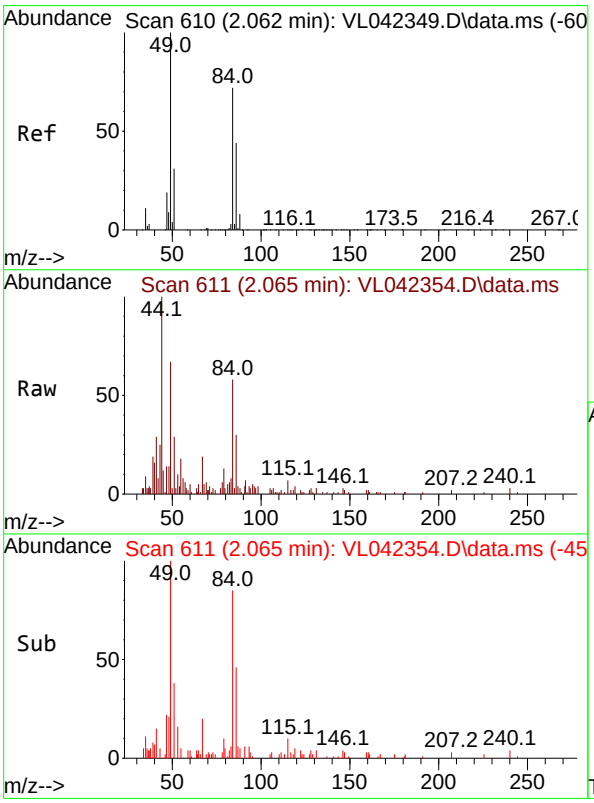
#19
Isopropyl Alcohol
Concen: 5.582 ppbv
RT: 1.434 min Scan# 4
Delta R.T. -0.450 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 45 Resp: 60931

Ion	Ratio	Lower	Upper
45	100		
58	0.2	34.5	51.7#

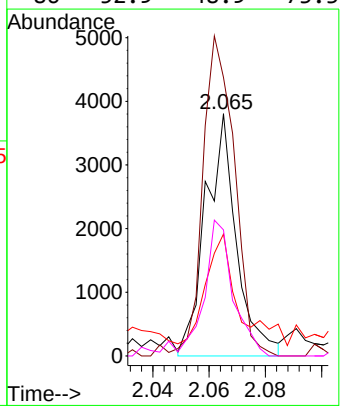


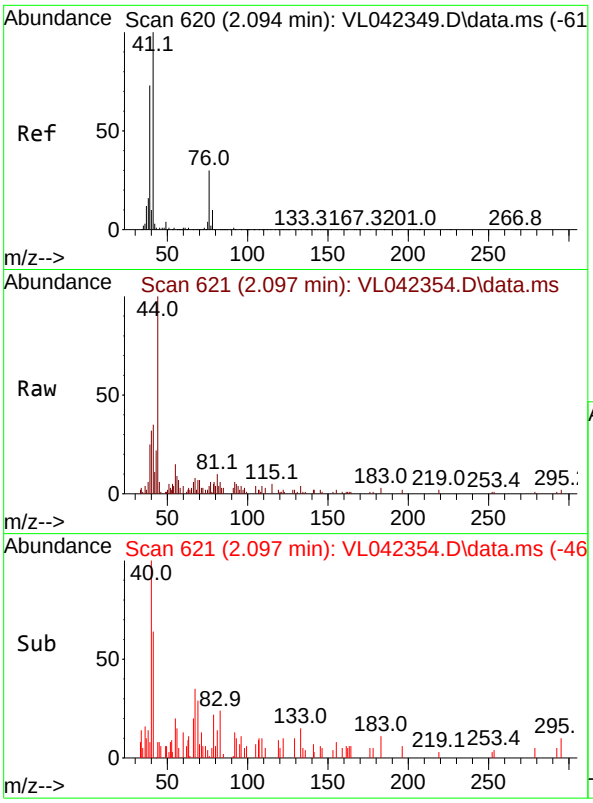


#20
Methylene Chloride
Concen: 0.377 ppbv
RT: 2.065 min Scan# 611
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 84 Resp: 2904

Ion	Ratio	Lower	Upper
84	100		
49	116.9	111.6	167.4
51	46.1	35.1	52.7
86	52.9	48.9	73.3



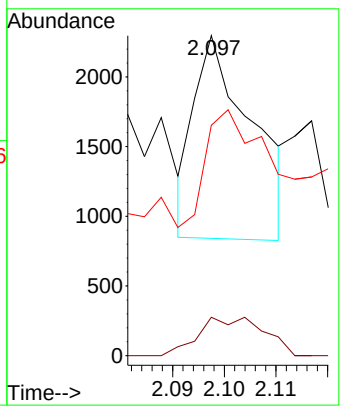


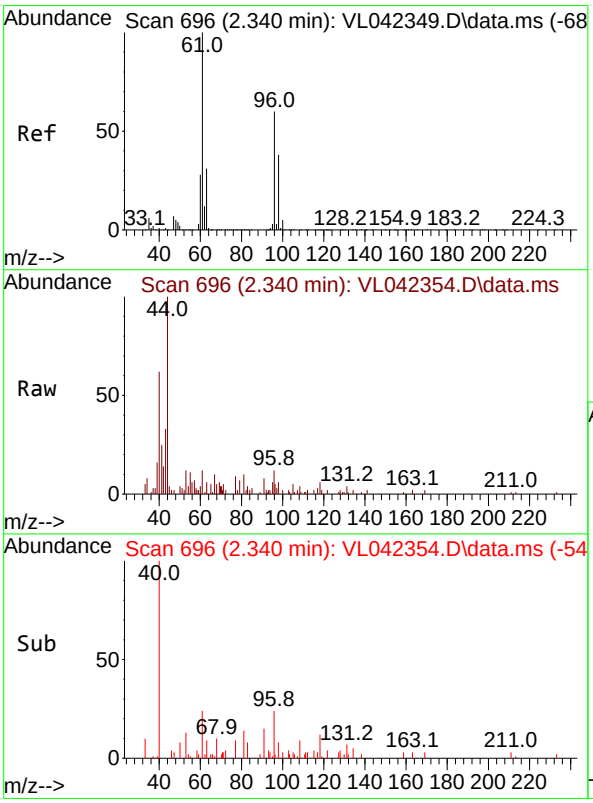
#21
Allyl Chloride
Concen: 0.083 ppbv
RT: 2.097 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 41 Resp: 1132

Ion	Ratio	Lower	Upper
41	100		
76	21.5	24.8	37.2#
39	407.5	60.6	90.8#

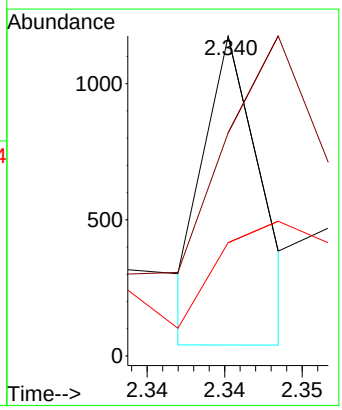


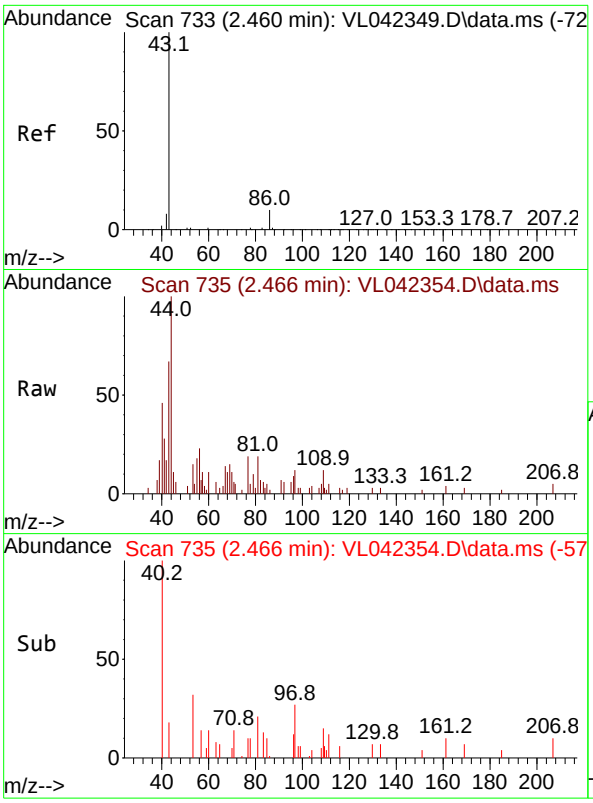


#22
trans-1,2-Dichloroethene
Concen: 0.033 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 96 Resp: 287

Ion	Ratio	Lower	Upper
96	100		
61	58.7	133.7	200.5#
98	36.0	50.3	75.5#



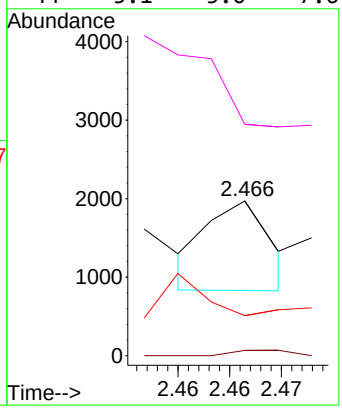


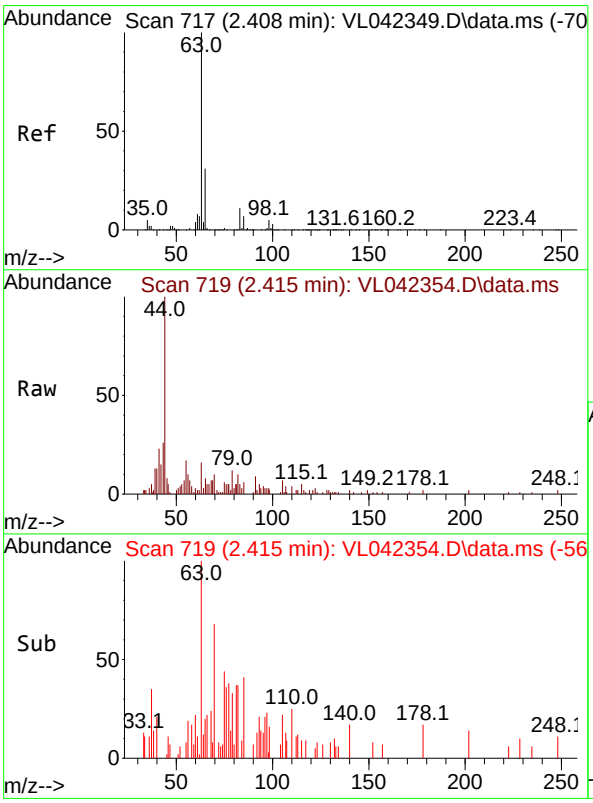
#23
Vinyl Acetate
Concen: 0.062 ppbv
RT: 2.466 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 490

Ion	Ratio	Lower	Upper
43	100		
86	10.1	6.5	9.7#
42	0.0	7.8	11.8#
44	5.1	5.0	7.6

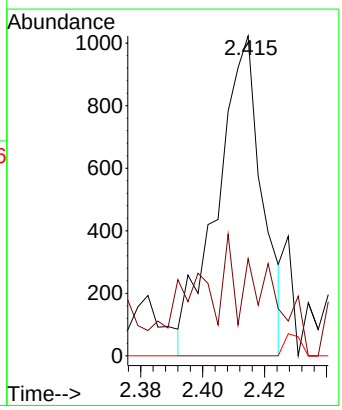


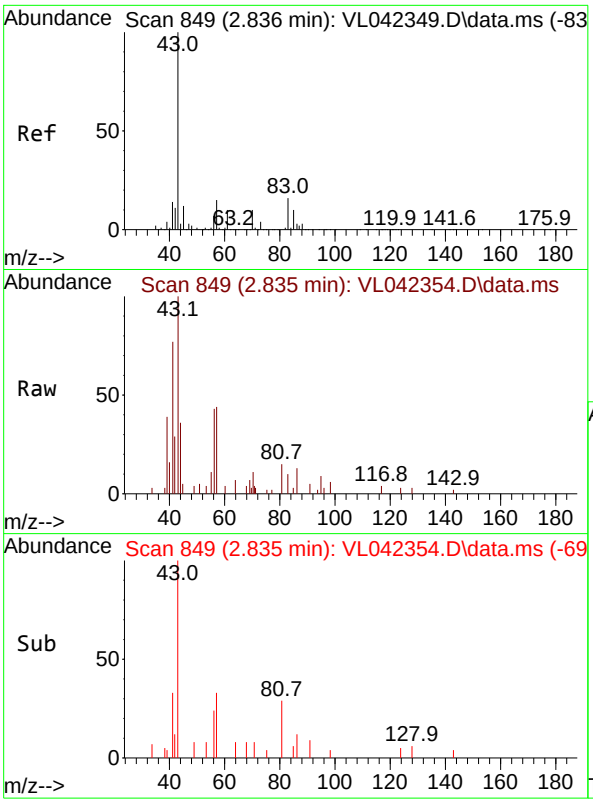


#24
1,1-Dichloroethane
Concen: 0.062 ppbv
RT: 2.415 min Scan# 719
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 63 Resp: 1030

Ion	Ratio	Lower	Upper
63	100		
98	17.1	2.3	6.8#
100	0.0	1.6	4.8#



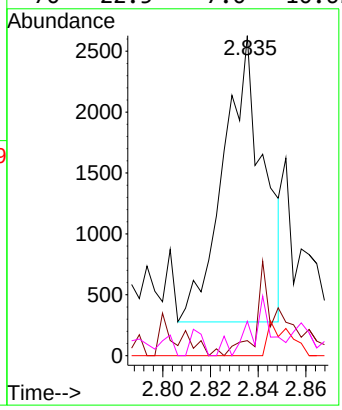


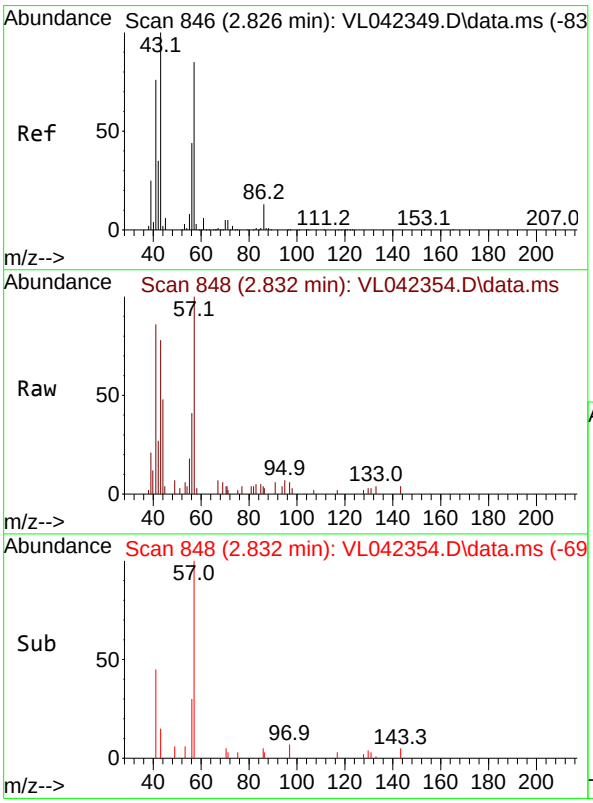
#25
Ethyl Acetate
Concen: 0.057 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 2744

Ion	Ratio	Lower	Upper
43	100		
45	21.1	8.3	12.5#
61	6.4	7.3	10.9#
70	22.5	7.0	10.6#

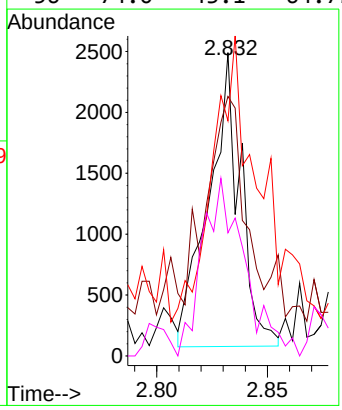


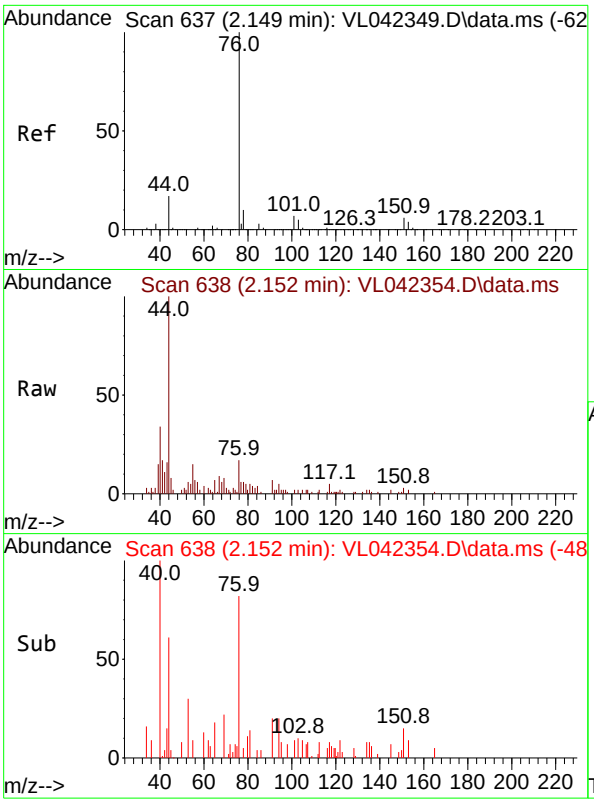


#26
Hexane
Concen: 0.122 ppbv
RT: 2.832 min Scan# 848
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 57 Resp: 2398

Ion	Ratio	Lower	Upper
57	100		
41	125.7	77.9	116.9#
43	191.2	208.4	312.6#
56	74.0	43.1	64.7#



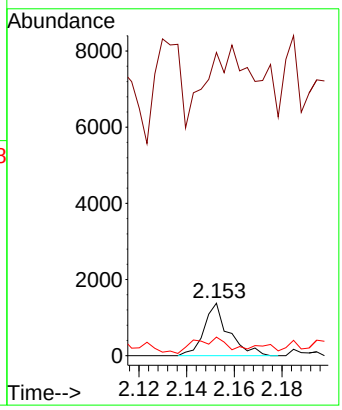


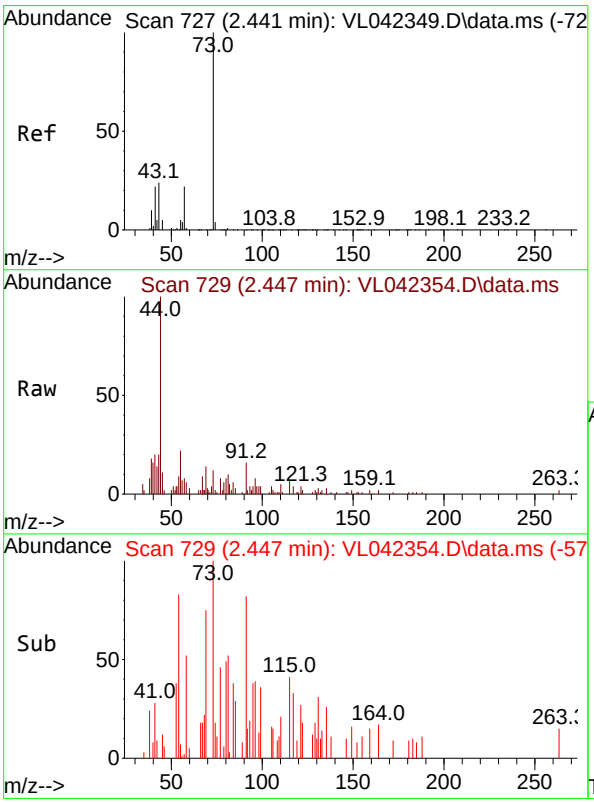
#27
Carbon Disulfide
Concen: 0.047 ppbv
RT: 2.152 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 76 Resp: 984

Ion	Ratio	Lower	Upper
76	100		
44	1141.4	15.5	23.3#
78	54.0	9.3	13.9#

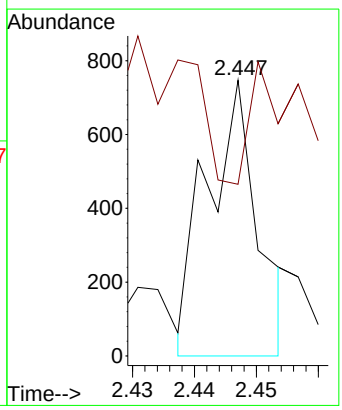


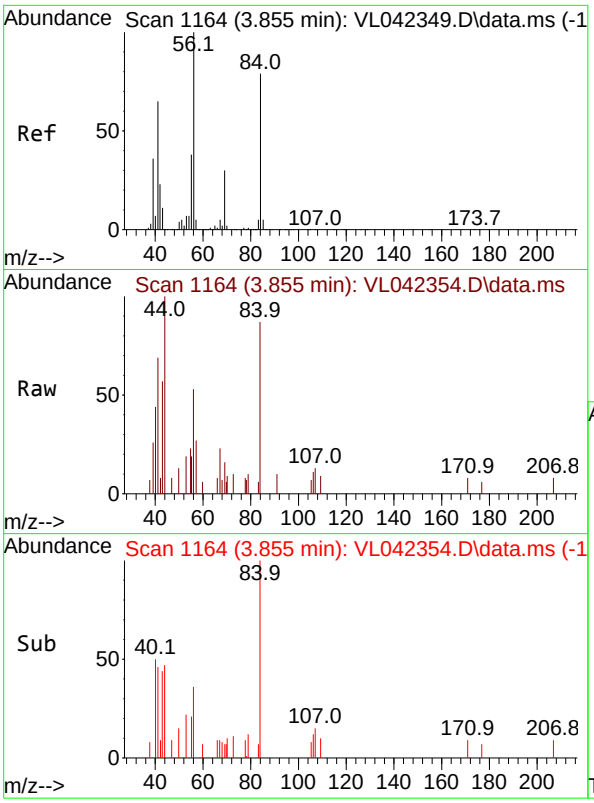


#28
Methyl tert-Butyl Ether
Concen: 0.033 ppbv
RT: 2.447 min Scan# 729
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 73 Resp: 426

Ion	Ratio	Lower	Upper
73	100		
57	0.0	21.3	31.9#



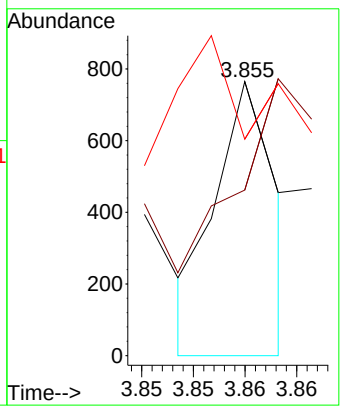


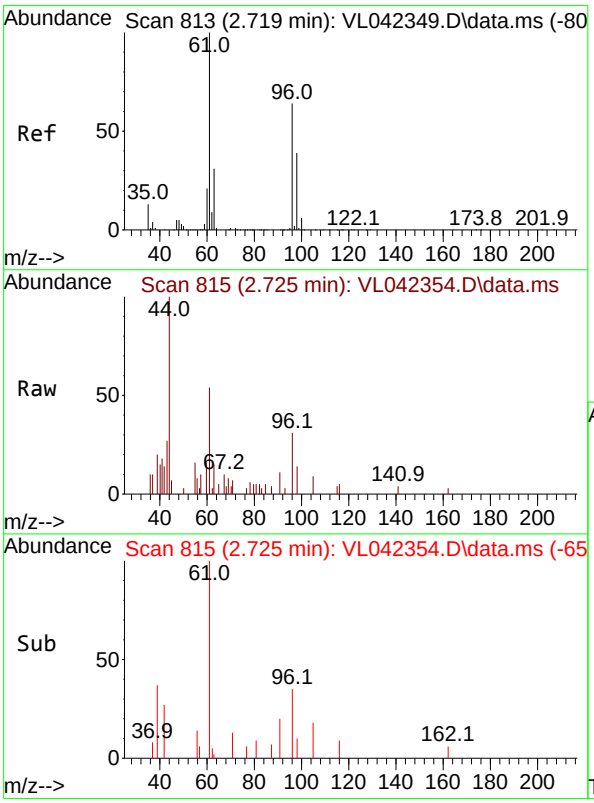
#30
Cyclohexane
Concen: 0.020 ppbv
RT: 3.855 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 84 Resp: 311

Ion	Ratio	Lower	Upper
84	100		
56	0.0	101.0	151.4#
41	0.0	67.4	101.0#

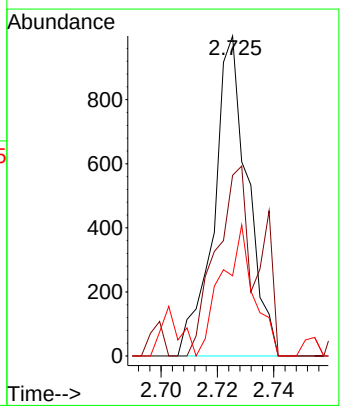


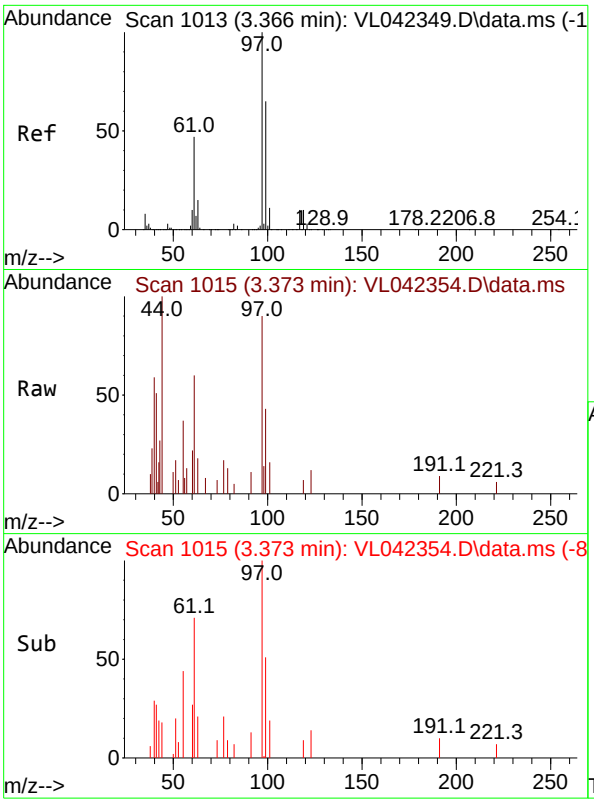


#31
cis-1,2-Dichloroethene
Concen: 0.045 ppbv
RT: 2.725 min Scan# 815
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 61 Resp: 831

Ion	Ratio	Lower	Upper
61	100		
96	56.5	50.8	76.2
98	25.0	30.9	46.3#



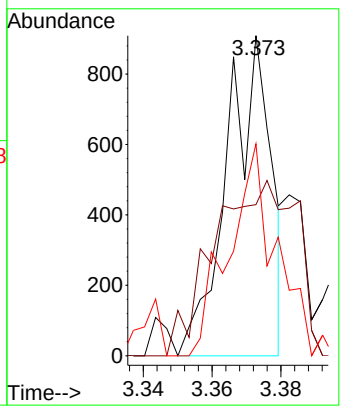


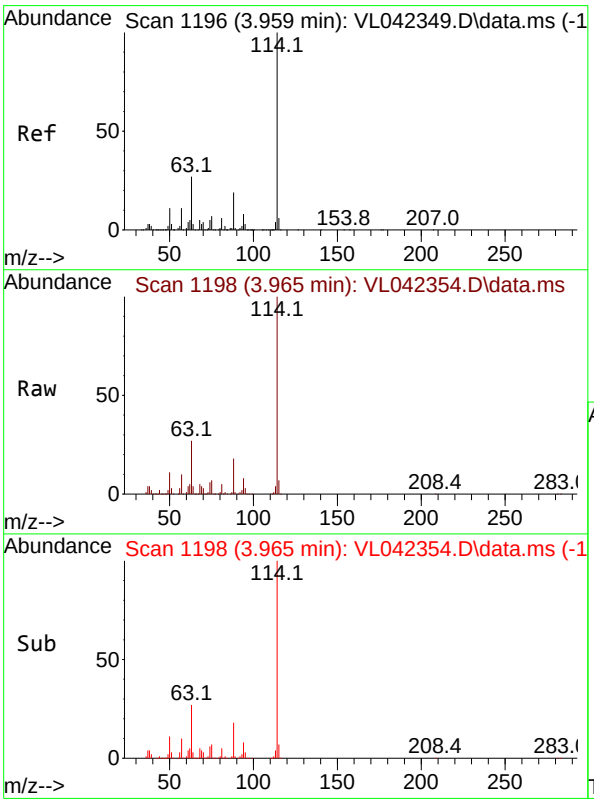
#32
1,1,1-Trichloroethane
Concen: 0.027 ppbv
RT: 3.373 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 97 Resp: 809

Ion	Ratio	Lower	Upper
97	100		
99	103.0	51.0	76.4#
61	78.7	38.8	58.2#

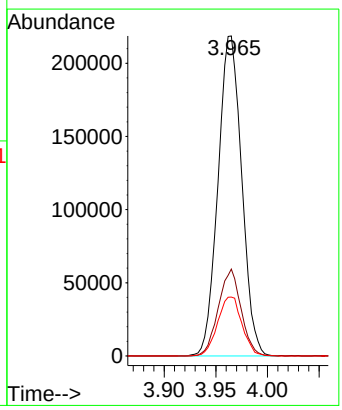


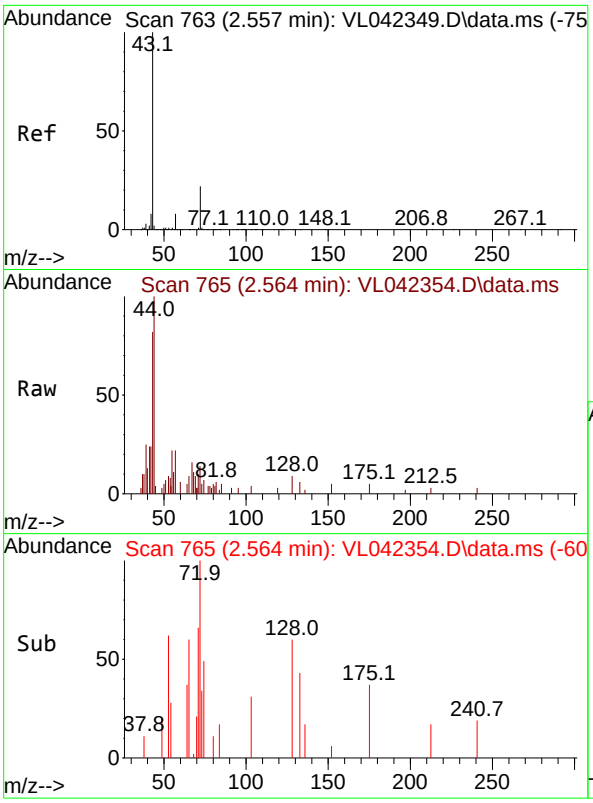


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 1198
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:114 Resp: 349264

Ion	Ratio	Lower	Upper
114	100		
63	26.0	21.8	32.6
88	19.0	15.5	23.3



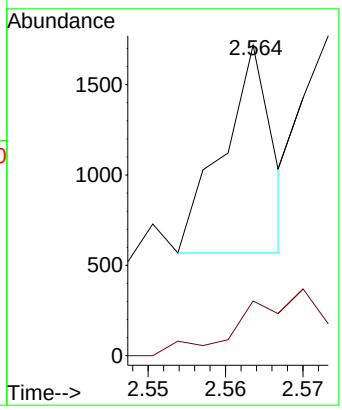


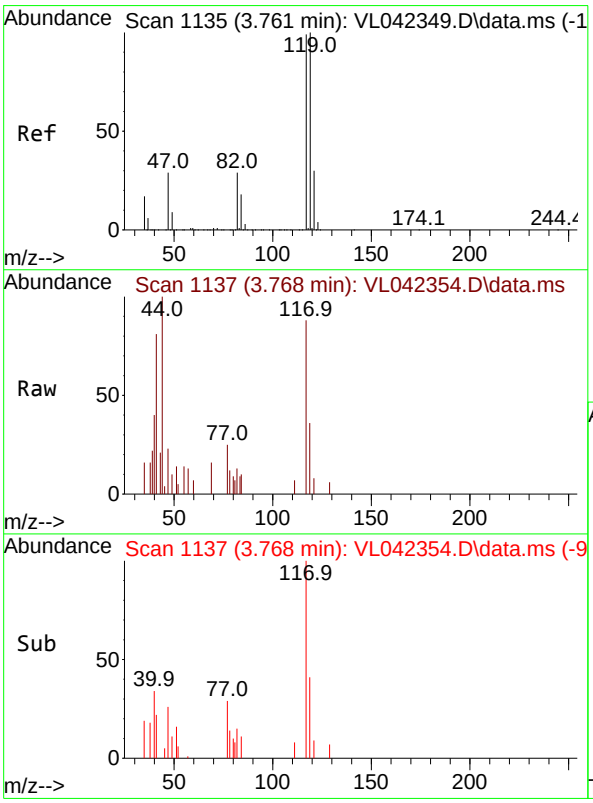
#34
2-Butanone
Concen: 0.018 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 43 Resp: 510

Ion	Ratio	Lower	Upper
43	100		
72	0.0	18.2	27.2#

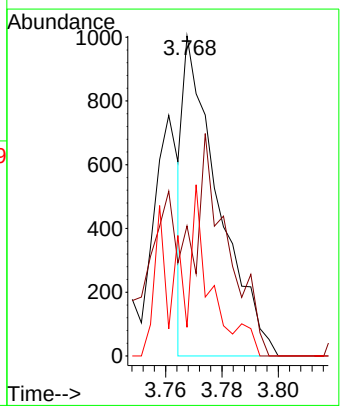


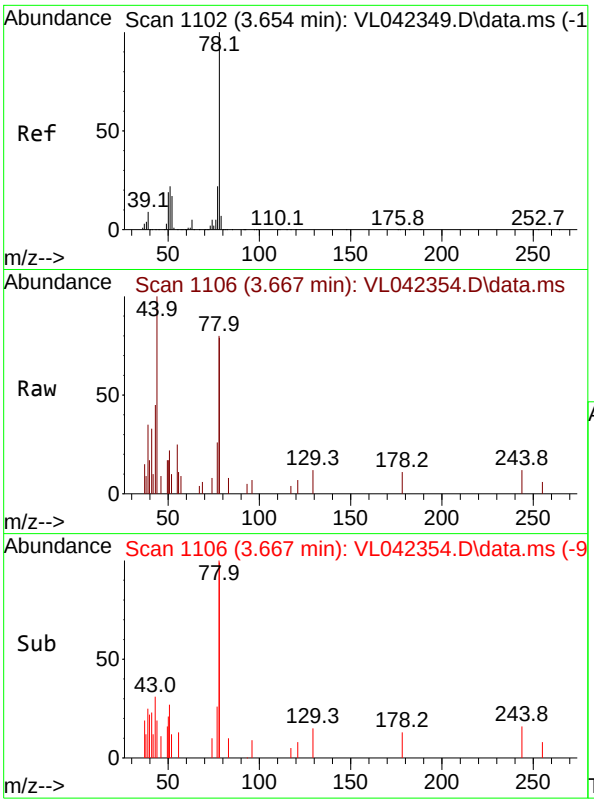


#35
Carbon Tetrachloride
Concen: 0.027 ppbv
RT: 3.768 min Scan# 1137
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:117 Resp: 862

Ion	Ratio	Lower	Upper
117	100		
119	40.6	80.5	120.7#
121	9.0	24.2	36.2#



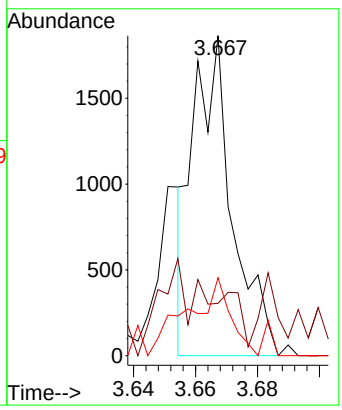


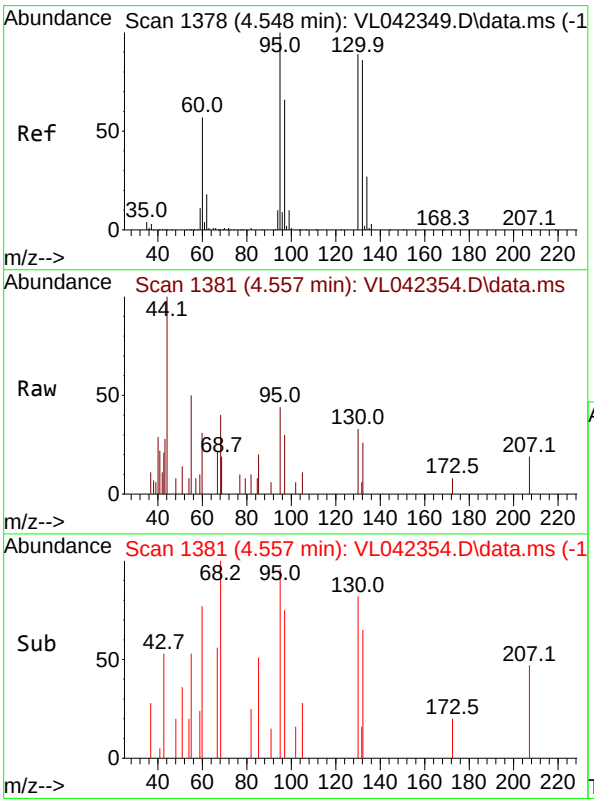
#36
Benzene
Concen: 0.043 ppbv
RT: 3.667 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 78 Resp: 1629

Ion	Ratio	Lower	Upper
78	100		
77	4.6	17.4	26.0#
50	25.2	15.5	23.3#

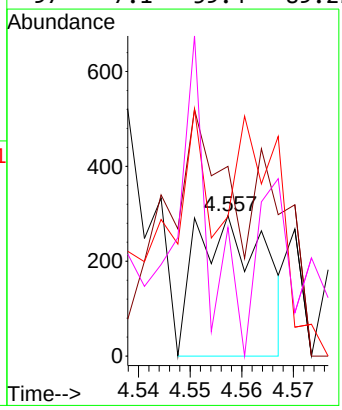


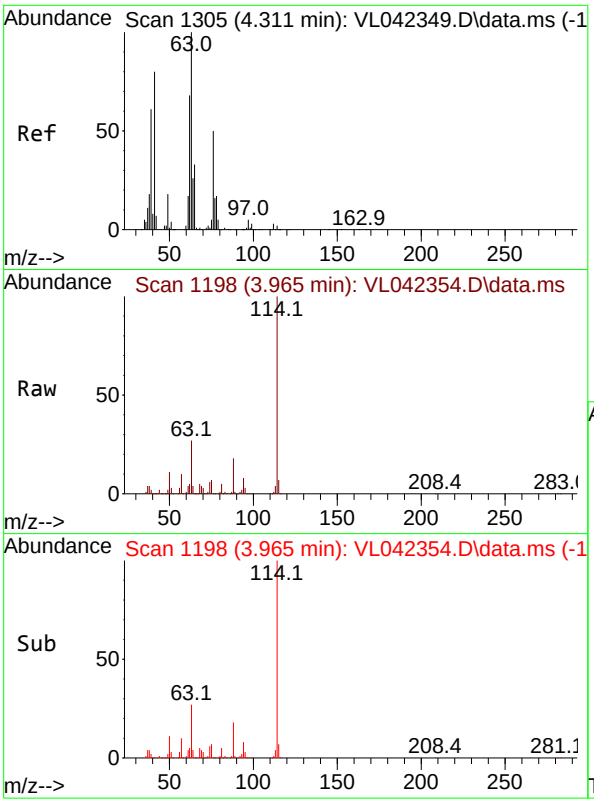


#38
Trichloroethene
Concen: 0.016 ppbv
RT: 4.557 min Scan# 1381
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:130 Resp: 271

Ion	Ratio	Lower	Upper
130	100		
95	44.6	89.8	134.6#
132	19.6	77.7	116.5#
97	7.1	59.4	89.2#



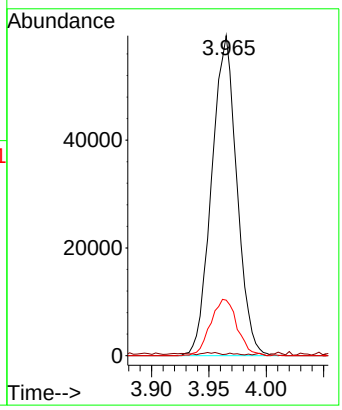


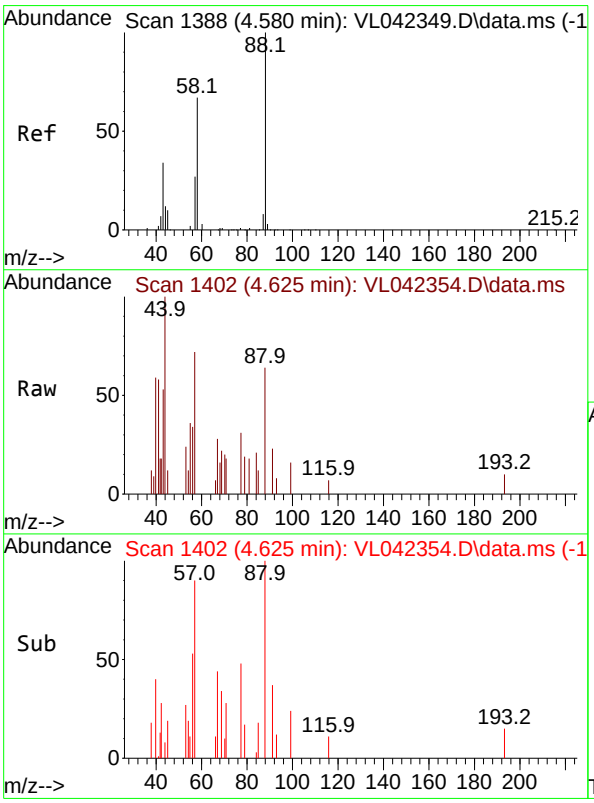
#39
1,2-Dichloropropane
Concen: 6.465 ppbv
RT: 3.965 min Scan# 1
Delta R.T. -0.346 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 63 Resp: 90827

Ion	Ratio	Lower	Upper
63	100		
41	0.0	64.2	96.2#
62	17.4	54.3	81.5#

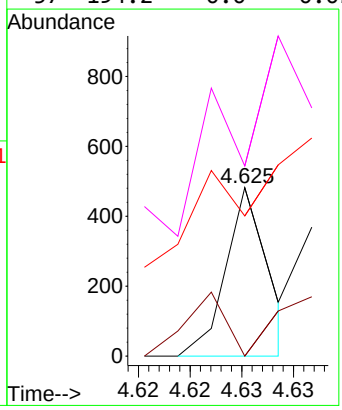


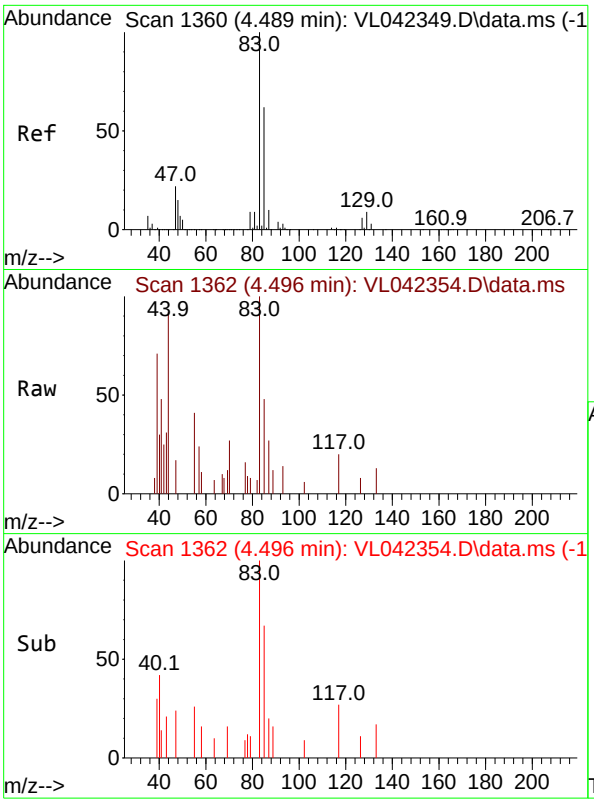


#40
1,4-Dioxane
Concen: 0.018 ppbv
RT: 4.625 min Scan# 1402
Delta R.T. 0.045 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 88 Resp: 139

Ion	Ratio	Lower	Upper
88	100		
58	0.0	61.4	92.0#
43	251.8	23.2	34.8#
57	194.2	0.0	0.0#



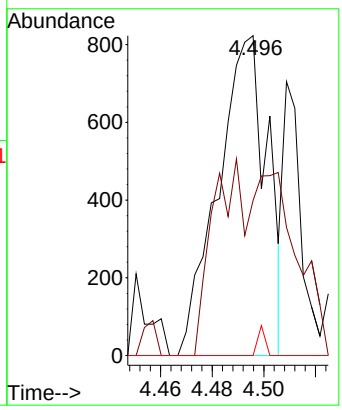


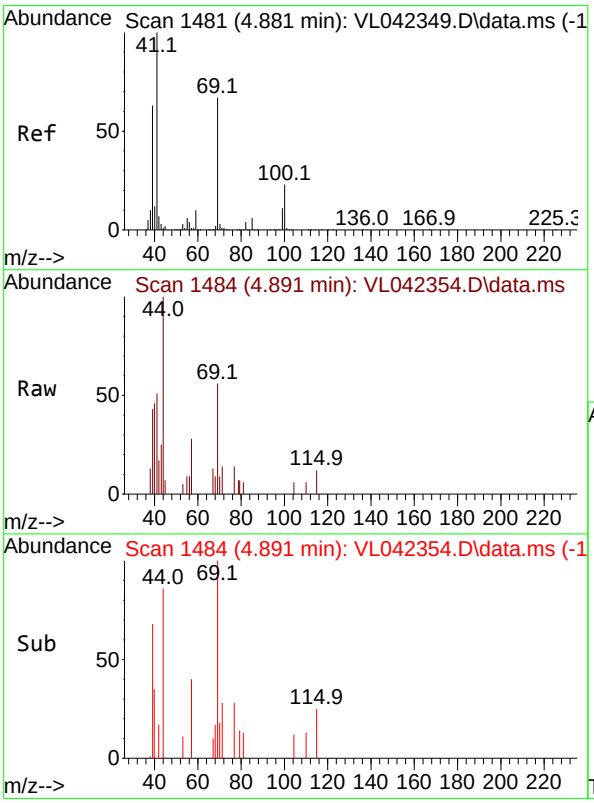
#42
Bromodichloromethane
Concen: 0.035 ppbv
RT: 4.496 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 83 Resp: 1093

Ion	Ratio	Lower	Upper
83	100		
85	48.5	49.7	74.5#
127	0.0	5.1	7.7#

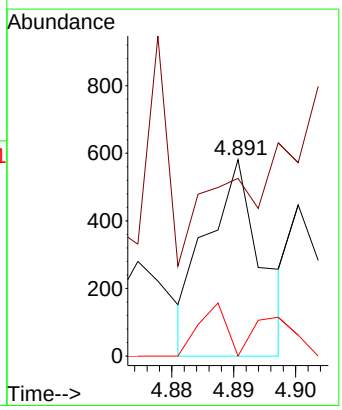


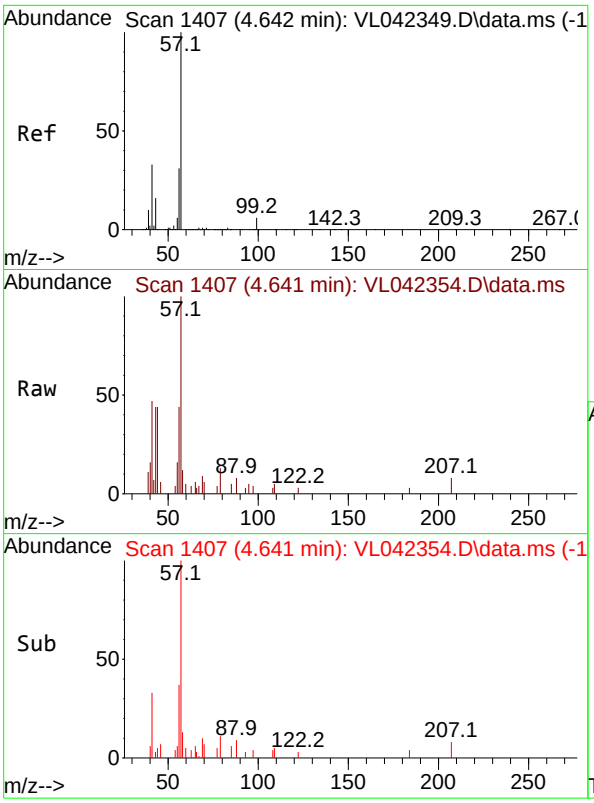


#43
Methyl Methacrylate
Concen: 0.021 ppbv
RT: 4.891 min Scan# 1484
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 69 Resp: 354

Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.6	177.8#
100	40.7	28.2	42.2



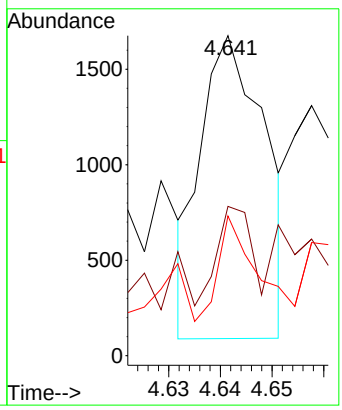


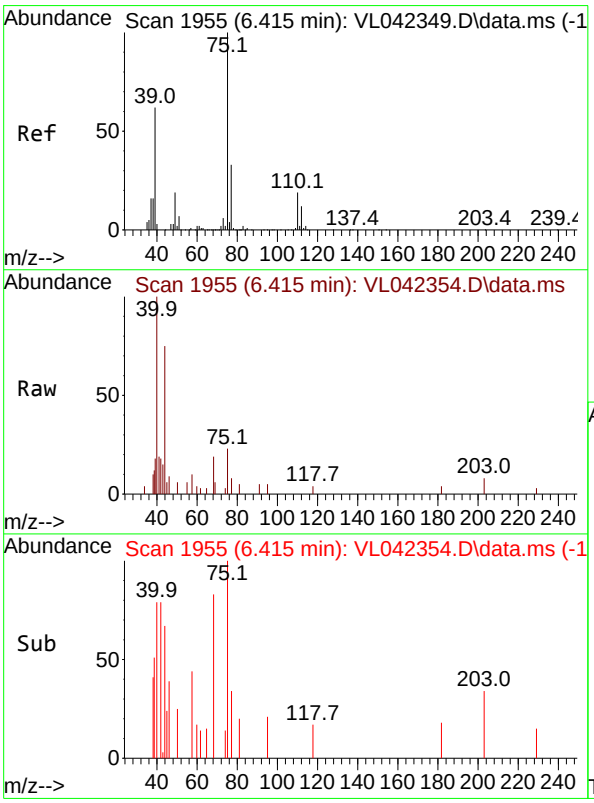
#44
2,2,4-Trimethylpentane
Concen: 0.021 ppbv
RT: 4.641 min Scan# 14
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 57 Resp: 1377

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8#
56	139.0	25.7	38.5#

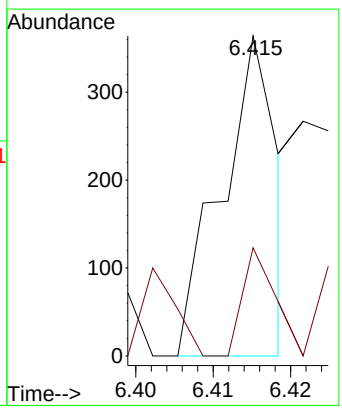


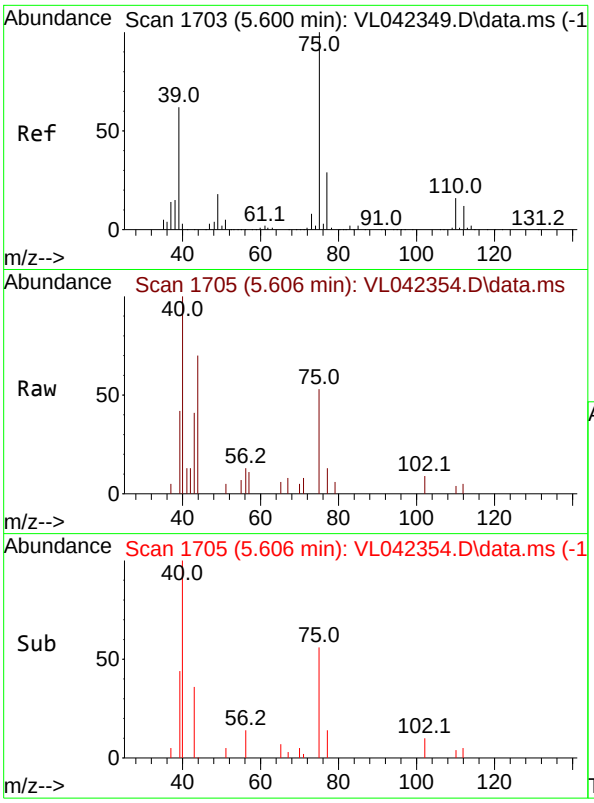


#45
t-1,3-Dichloropropene
Concen: 0.011 ppbv
RT: 6.415 min Scan# 1955
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 75 Resp: 183

Ion	Ratio	Lower	Upper
75	100		
77	33.8	27.0	40.6



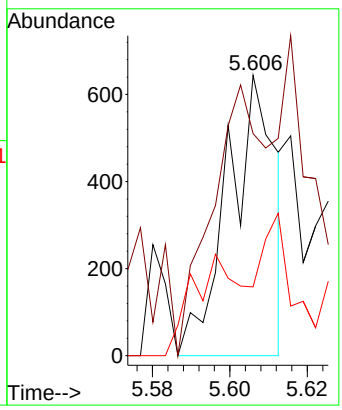


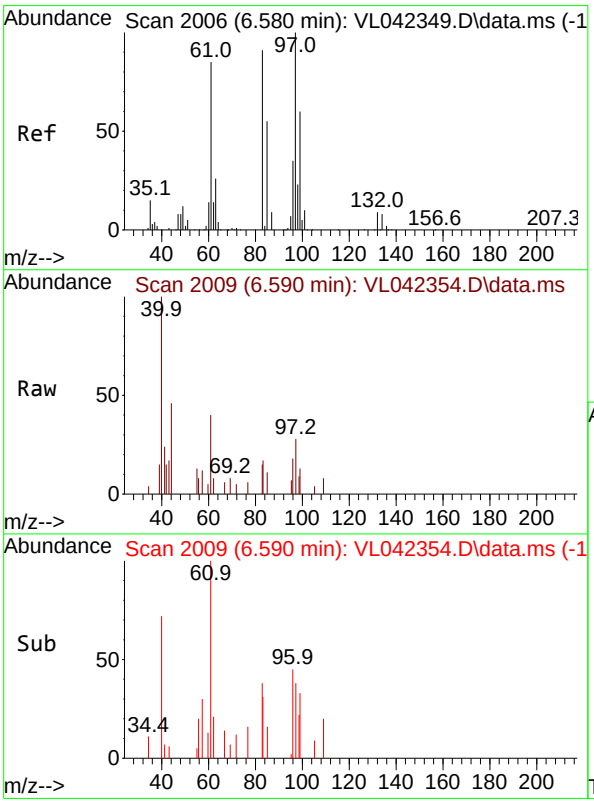
#46
cis-1,3-Dichloropropene
Concen: 0.026 ppbv
RT: 5.606 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 75 Resp: 546

Ion	Ratio	Lower	Upper
75	100		
39	1.7	50.0	75.0#
77	13.7	23.0	34.6#

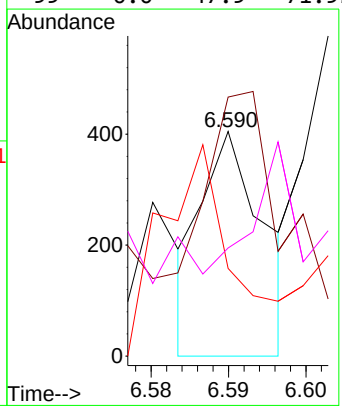


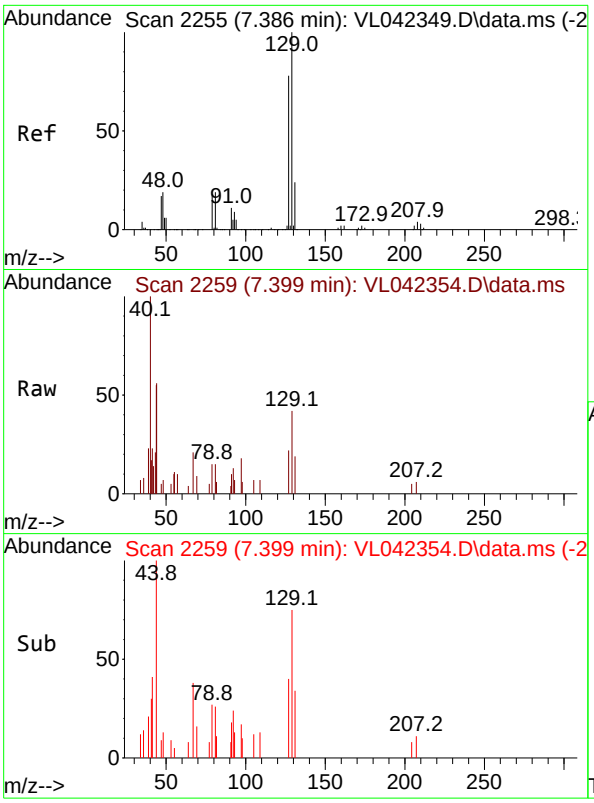


#47
1,1,2-Trichloroethane
Concen: 0.016 ppbv
RT: 6.590 min Scan# 2009
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 97 Resp: 225

Ion	Ratio	Lower	Upper
97	100		
83	149.5	72.8	109.2#
85	27.8	44.2	66.4#
99	0.0	47.9	71.9#



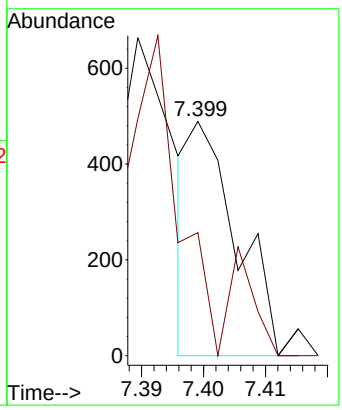


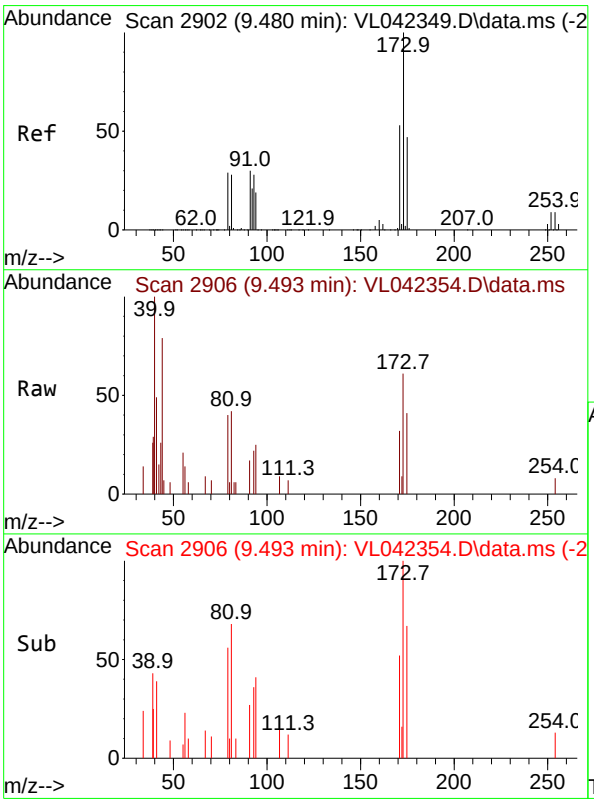
#48
Dibromochloromethane
Concen: 0.010 ppbv
RT: 7.399 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:129 Resp: 258

Ion	Ratio	Lower	Upper
129	100		
127	0.0	39.1	117.3#

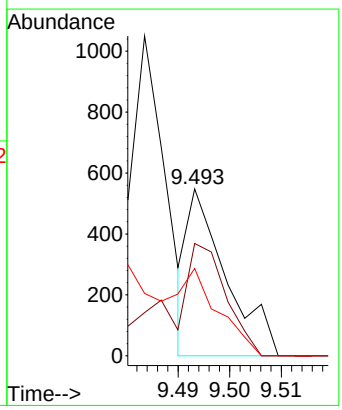


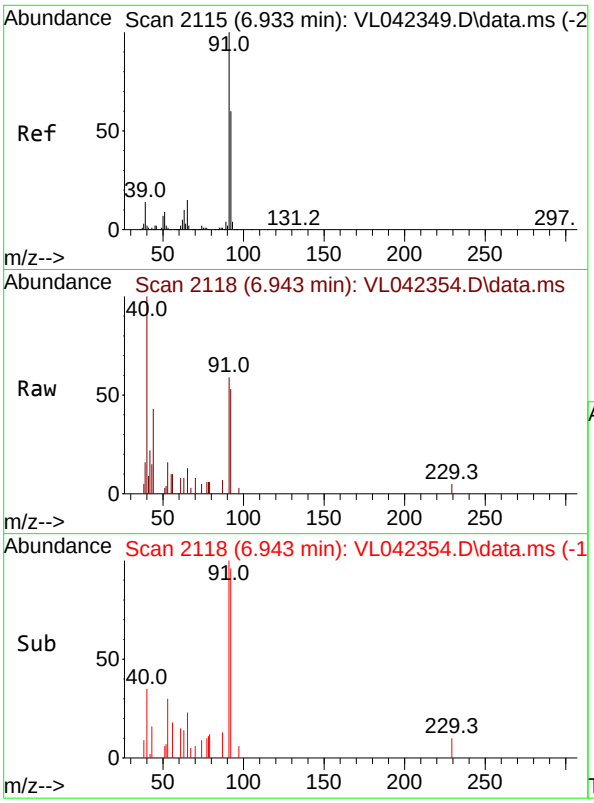


#49
Bromoform
Concen: 0.013 ppbv
RT: 9.493 min Scan# 2906
Delta R.T. 0.013 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:173 Resp: 285

Ion	Ratio	Lower	Upper
173	100		
175	145.3	38.2	57.2#
171	11.9	40.9	61.3#



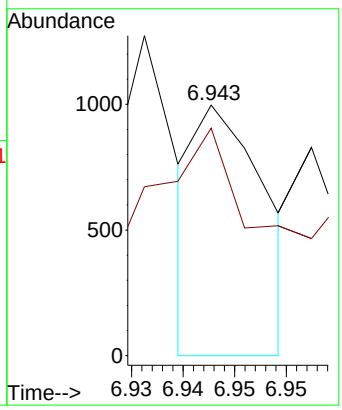


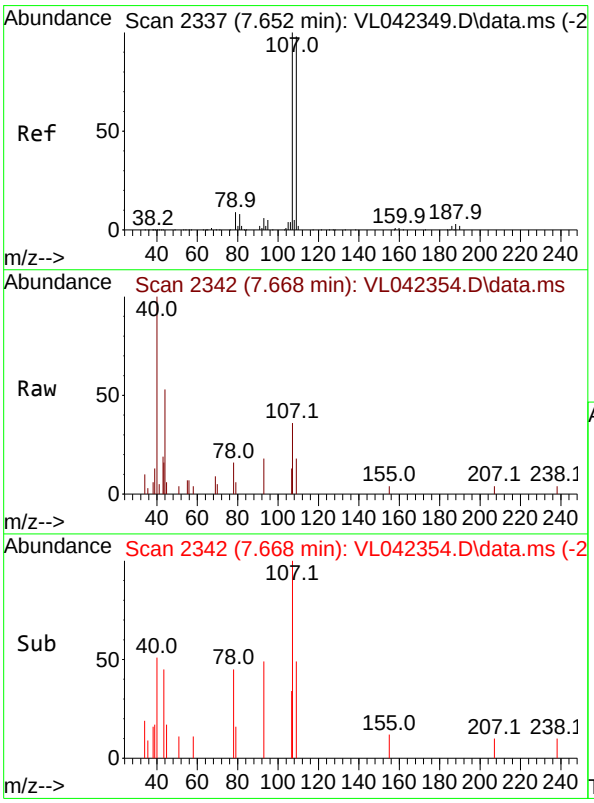
#53
Toluene
Concen: 0.010 ppbv
RT: 6.943 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 464

Ion	Ratio	Lower	Upper
91	100		
92	289.2	48.2	72.4#

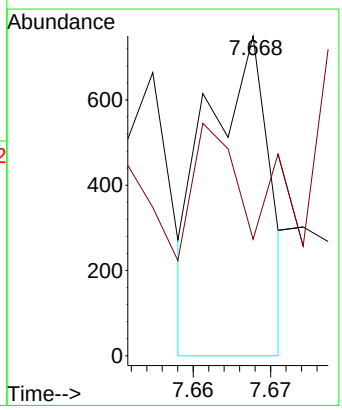


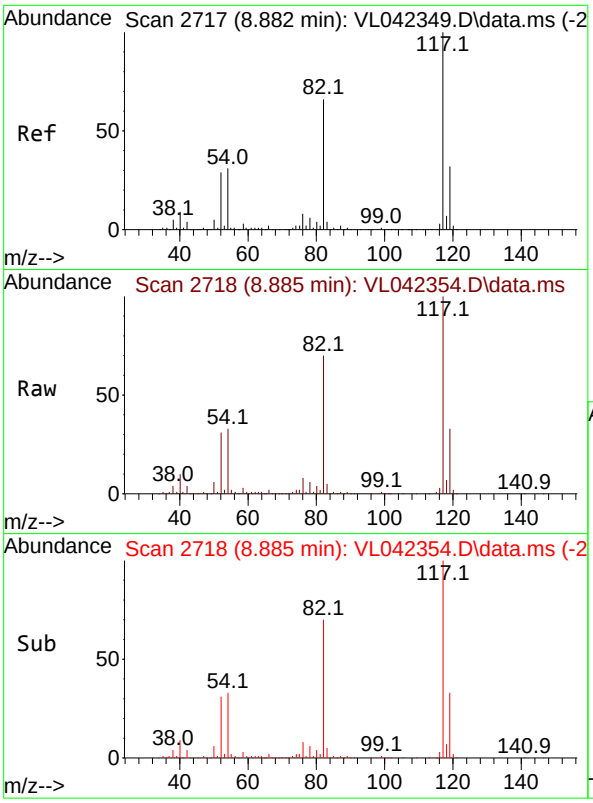


#54
1,2-Dibromoethane
Concen: 0.021 ppbv
RT: 7.668 min Scan# 2342
Delta R.T. 0.016 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:107 Resp: 422

Ion	Ratio	Lower	Upper
107	100		
109	10.4	78.2	117.4#



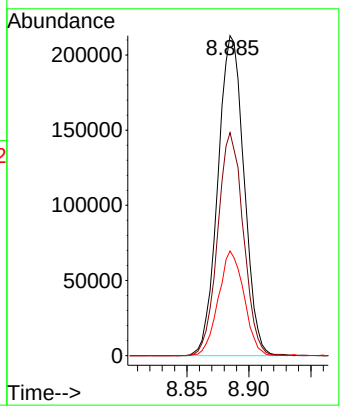


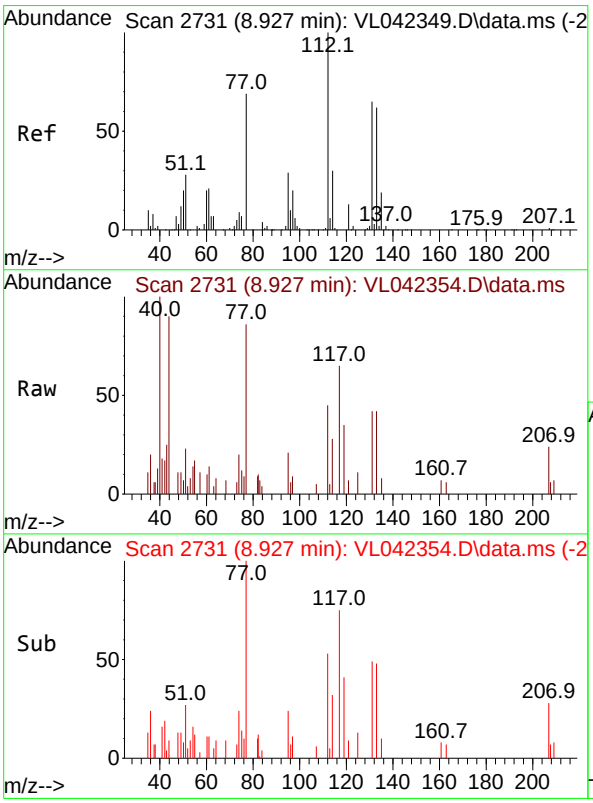
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.885 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:117 Resp: 312999

Ion	Ratio	Lower	Upper
117	100		
82	68.5	57.8	86.6
119	32.2	25.2	37.8

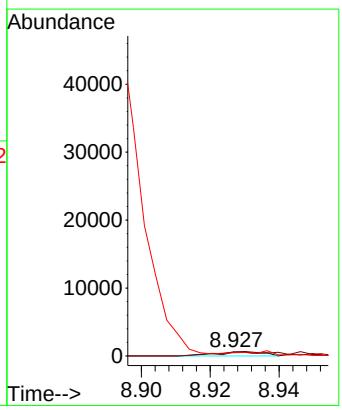


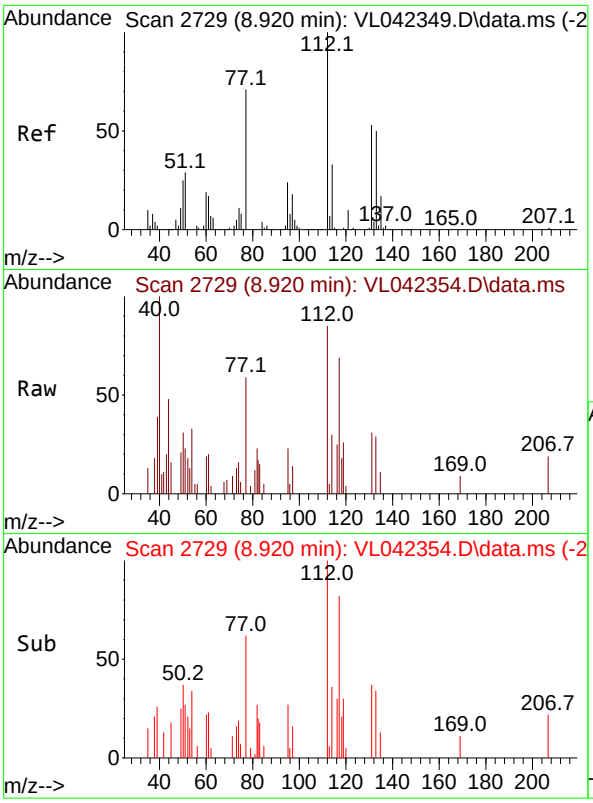


#56
1,1,1,2-Tetrachloroethane
Concen: 0.031 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:131 Resp: 589

Ion	Ratio	Lower	Upper
131	100		
133	185.9	78.3	117.5#
119	17165.0	48.7	73.1#



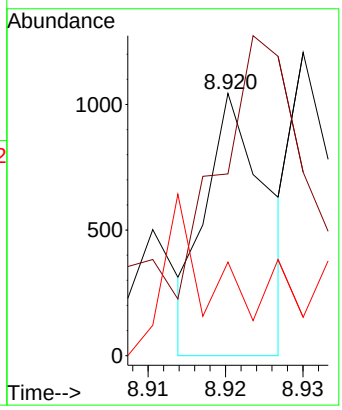


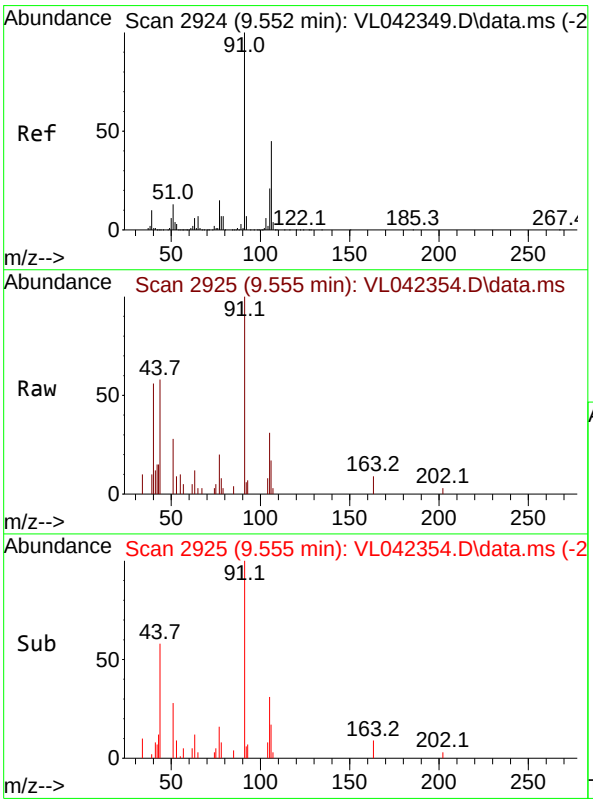
#57
Chlorobenzene
Concen: 0.017 ppbv
RT: 8.920 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:112 Resp: 567

Ion	Ratio	Lower	Upper
112	100		
77	62.5	57.8	86.6
114	0.0	29.3	35.9#

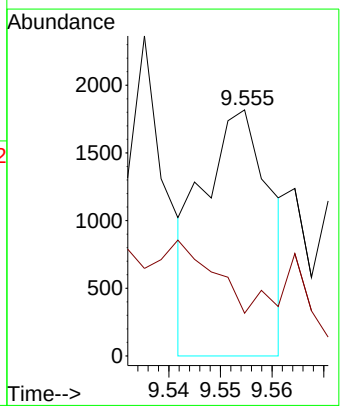


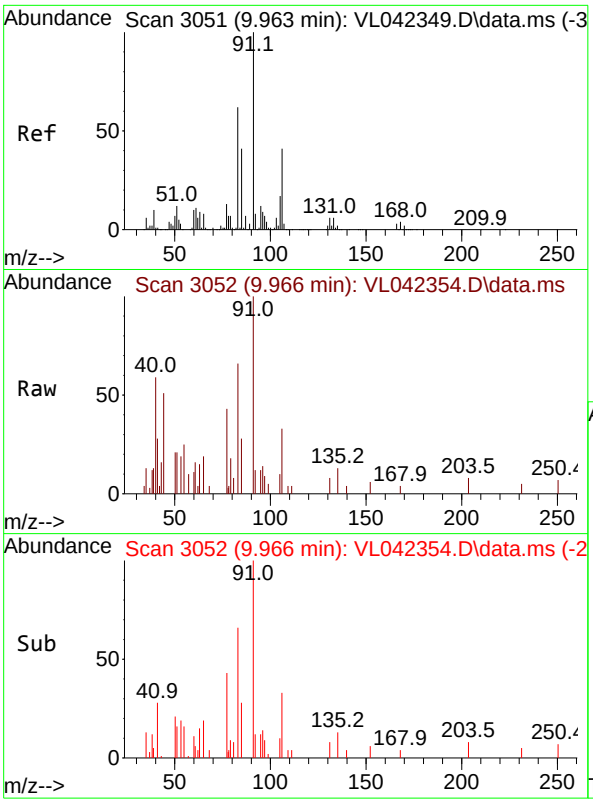


#59
m/p-Xylene
Concen: 0.033 ppbv
RT: 9.555 min Scan# 2925
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 91 Resp: 1648

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#



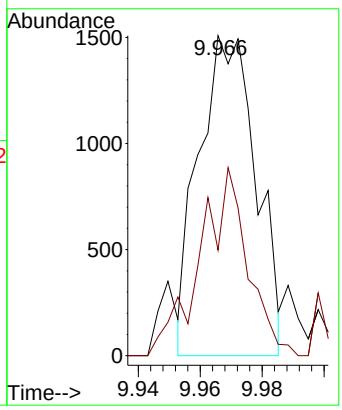


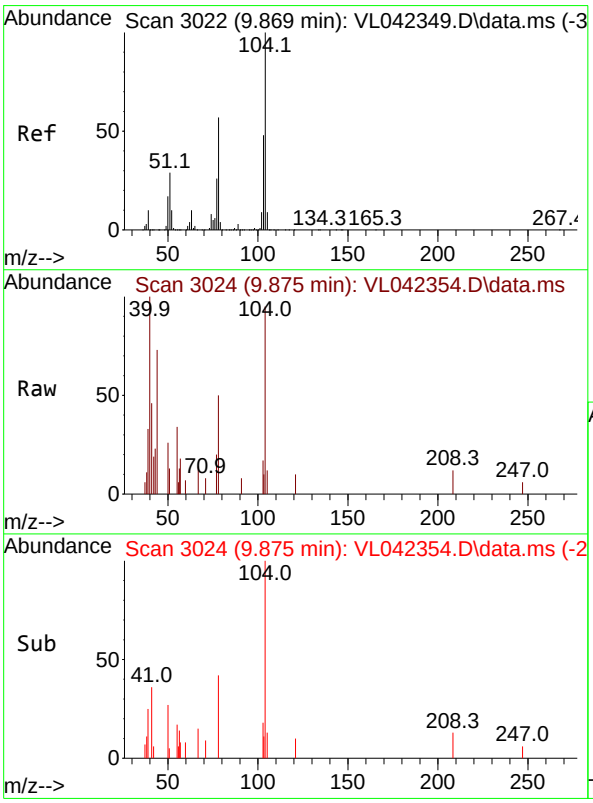
#60
o-Xylene
Concen: 0.039 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 1938

Ion	Ratio	Lower	Upper
91	100		
106	52.6	21.1	63.4

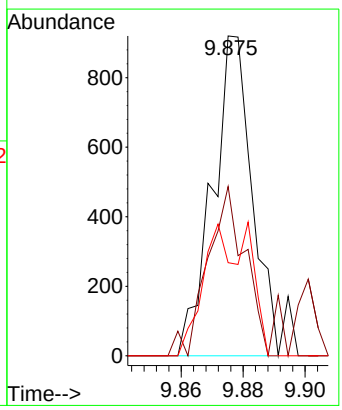


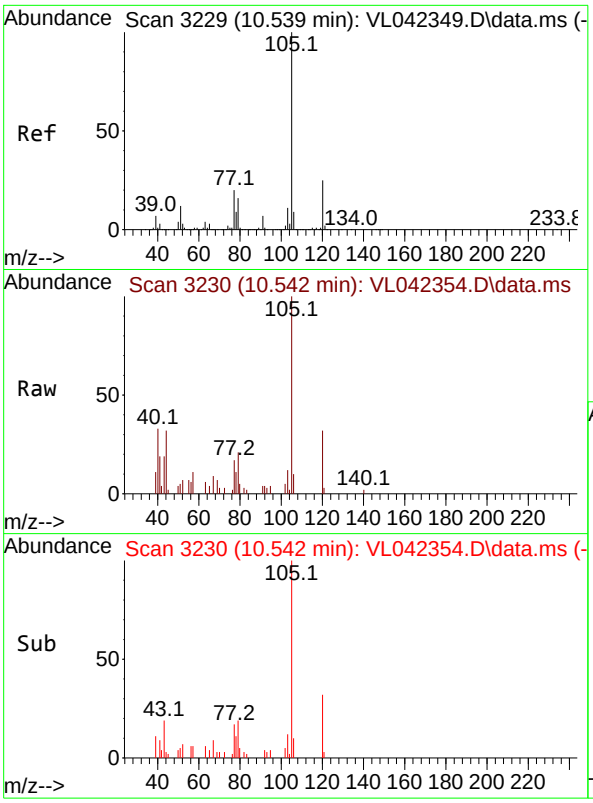


#61
Styrene
Concen: 0.034 ppbv
RT: 9.875 min Scan# 3024
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:104 Resp: 813

Ion	Ratio	Lower	Upper
104	100		
78	64.9	44.6	66.8
103	47.1	37.4	56.0



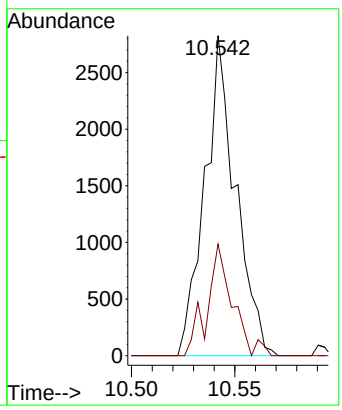


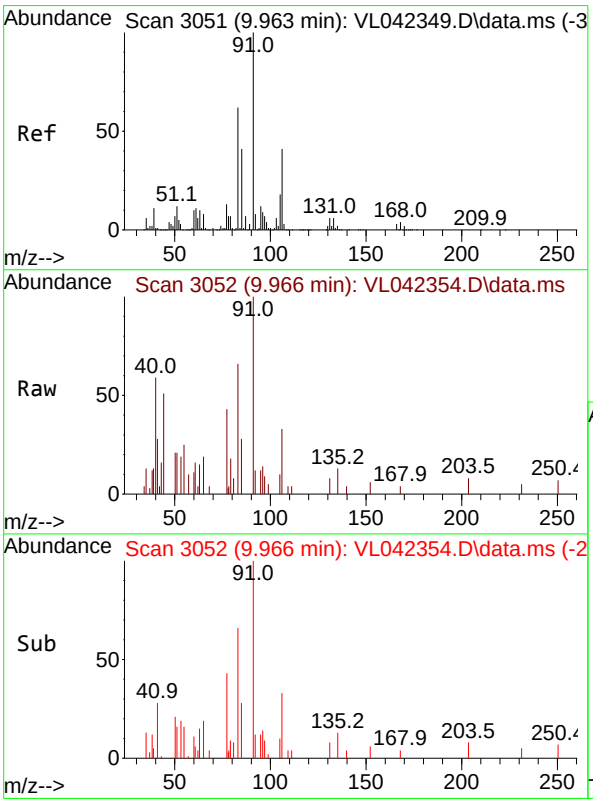
#62
Isopropylbenzene
Concen: 0.040 ppbv
RT: 10.542 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 2934

Ion	Ratio	Lower	Upper
105	100		
120	28.8	19.8	29.8

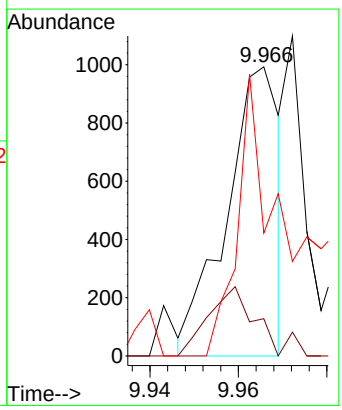


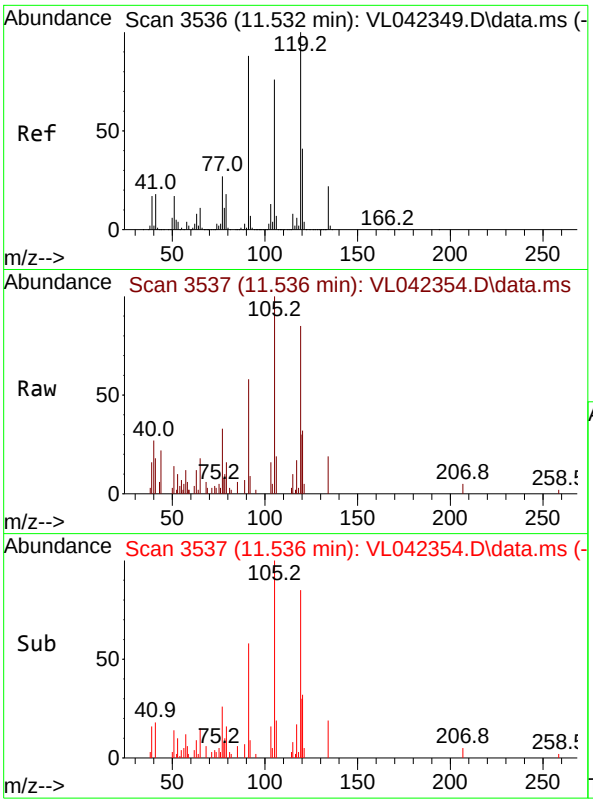


#63
1,1,2,2-Tetrachloroethane
Concen: 0.025 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 83 Resp: 826

Ion	Ratio	Lower	Upper
83	100		
131	22.3	4.5	13.7#
85	98.2	32.4	97.0#



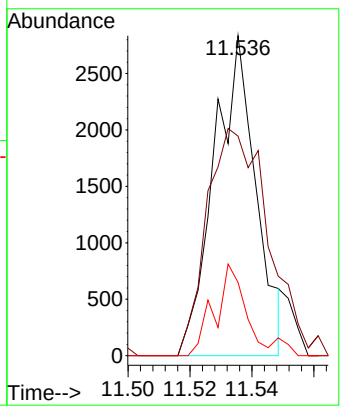


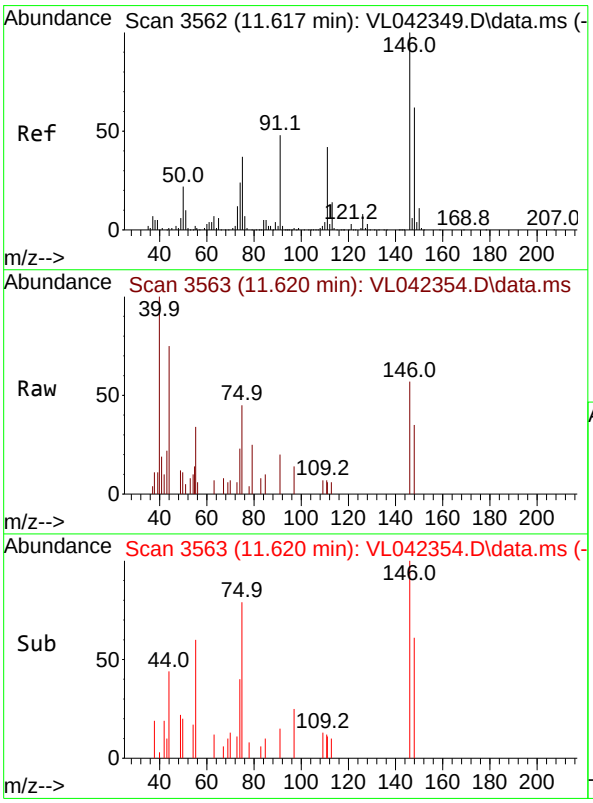
#65
tert-Butylbenzene
Concen: 0.039 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 2656

Ion	Ratio	Lower	Upper
119	100		
91	104.4	74.6	111.8
134	22.5	18.8	28.2

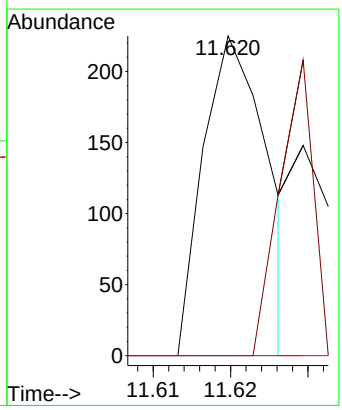


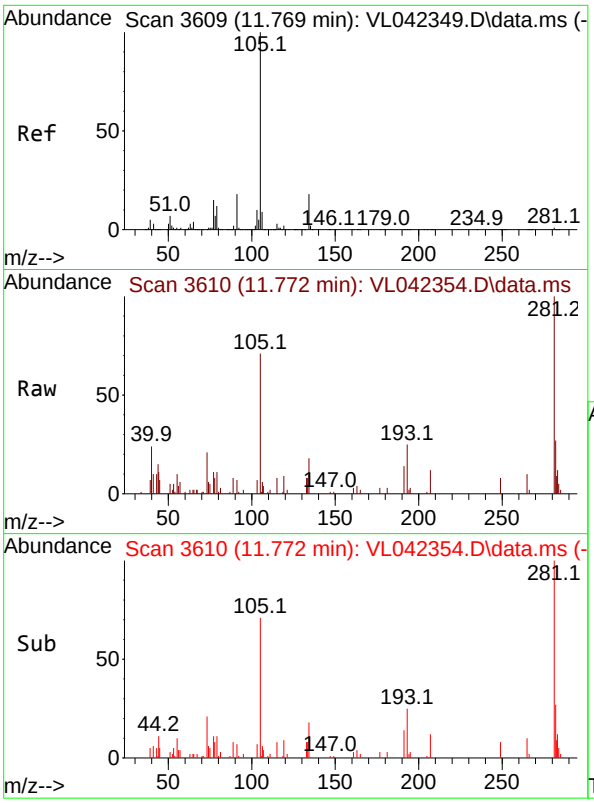


#66
Benzyl Chloride
Concen: 0.017 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 91 Resp: 130

Ion	Ratio	Lower	Upper
91	100		
126	0.0	11.8	17.6#
128	0.0	4.5	6.7#



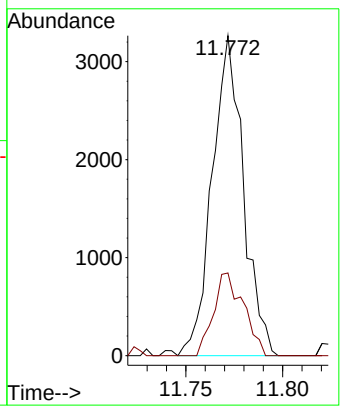


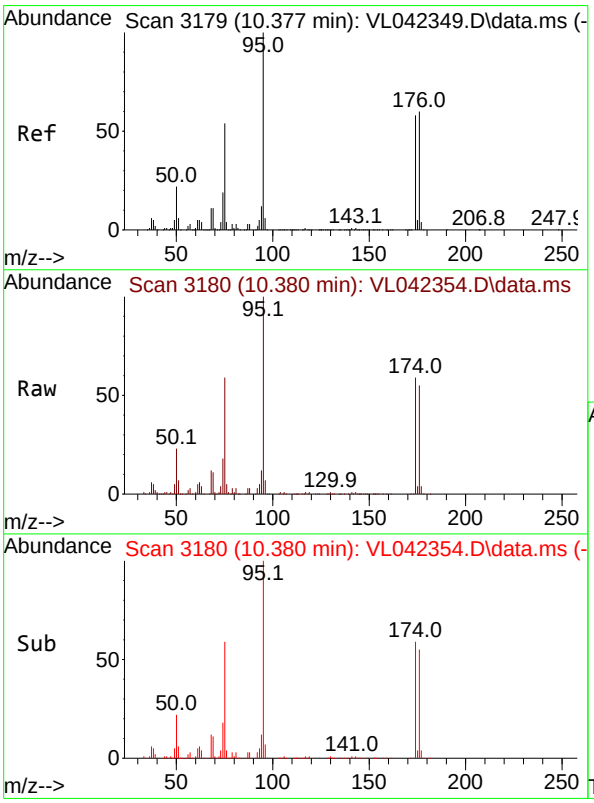
#67
sec-Butylbenzene
Concen: 0.039 ppbv
RT: 11.772 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 3658

Ion	Ratio	Lower	Upper
105	100		
134	24.8	14.6	21.8#

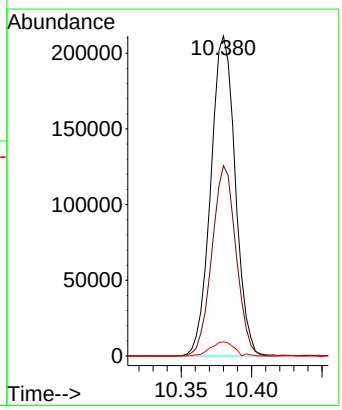


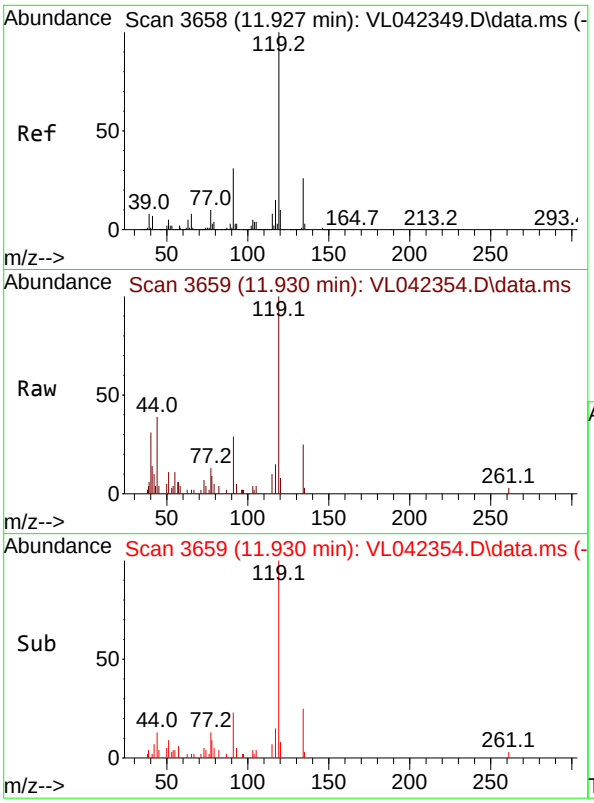


#68
1-Bromo-4-Fluorobenzene
Concen: 9.962 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 95 Resp: 256230

Ion	Ratio	Lower	Upper
95	100		
174	58.6	48.5	72.7
175	4.3	3.7	5.5



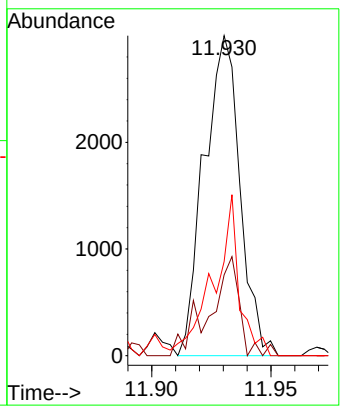


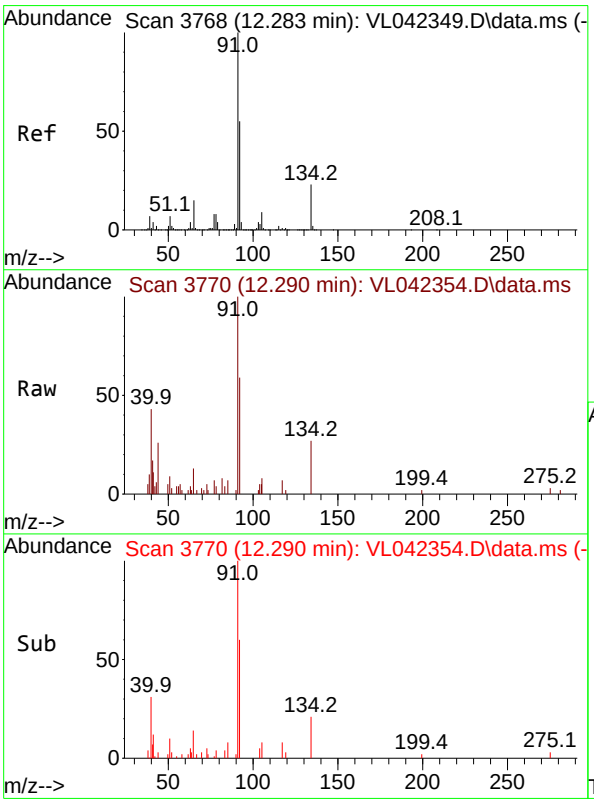
#69
p-Isopropyltoluene
Concen: 0.038 ppbv
RT: 11.930 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:119 Resp: 3139

Ion	Ratio	Lower	Upper
119	100		
134	25.9	20.0	30.0
91	35.7	24.4	36.6

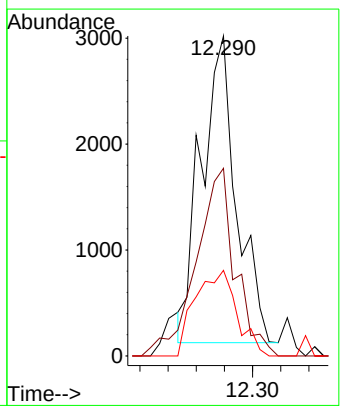


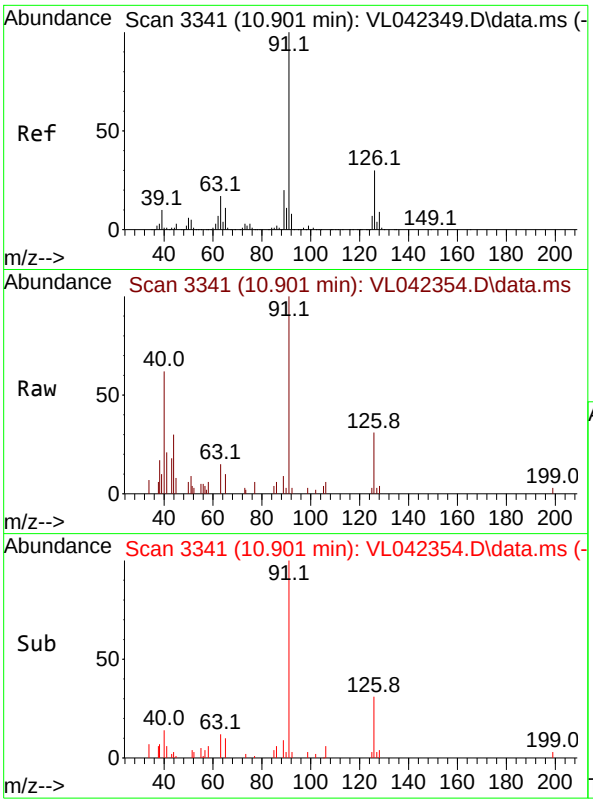


#70
n-Butylbenzene
Concen: 0.029 ppbv
RT: 12.290 min Scan# 3770
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion: 91 Resp: 2516

Ion	Ratio	Lower	Upper
91	100		
92	67.4	44.2	66.4#
134	34.4	18.2	27.4#



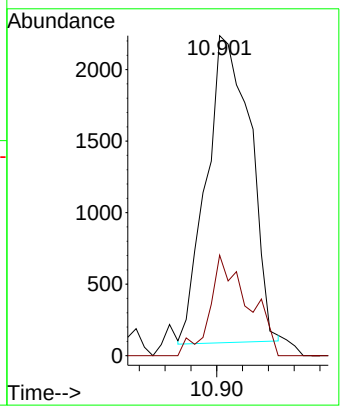


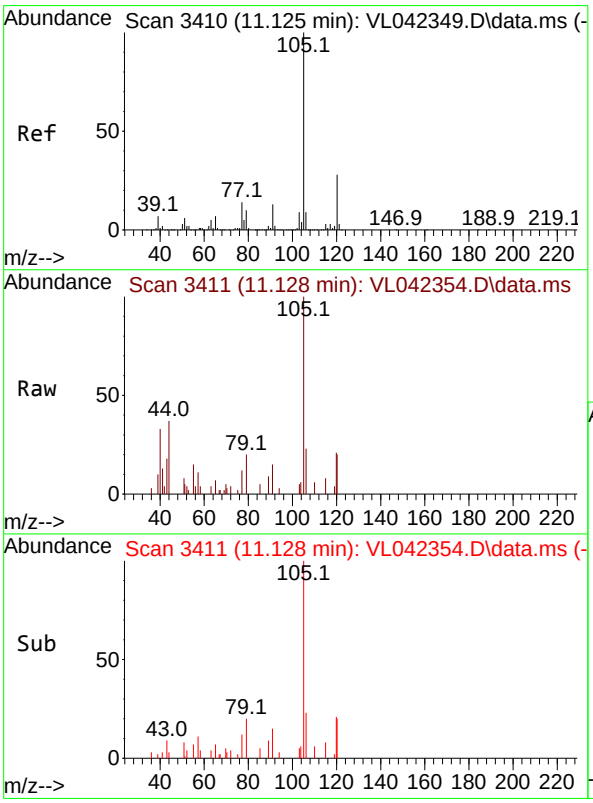
#71
2-Chlorotoluene
Concen: 0.044 ppbv
RT: 10.901 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion: 91 Resp: 2537

Ion	Ratio	Lower	Upper
91	100		
126	28.7	11.4	45.4

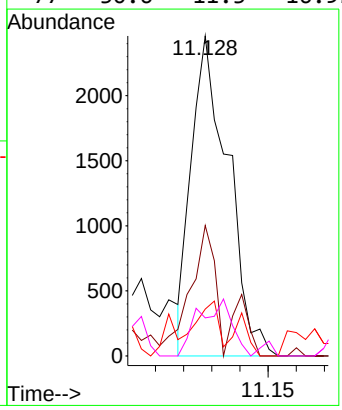


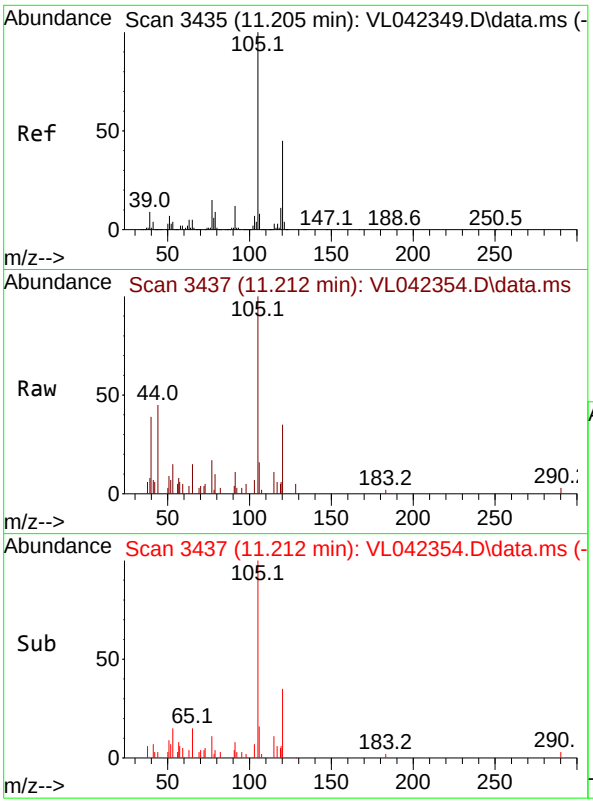


#72
4-Ethyltoluene
Concen: 0.036 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:105 Resp: 2221

Ion	Ratio	Lower	Upper
105	100		
120	47.5	23.2	34.8#
91	8.3	10.4	15.6#
77	30.6	11.3	16.9#



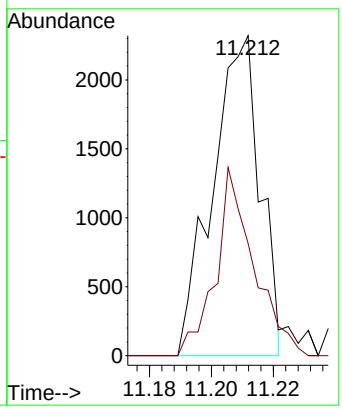


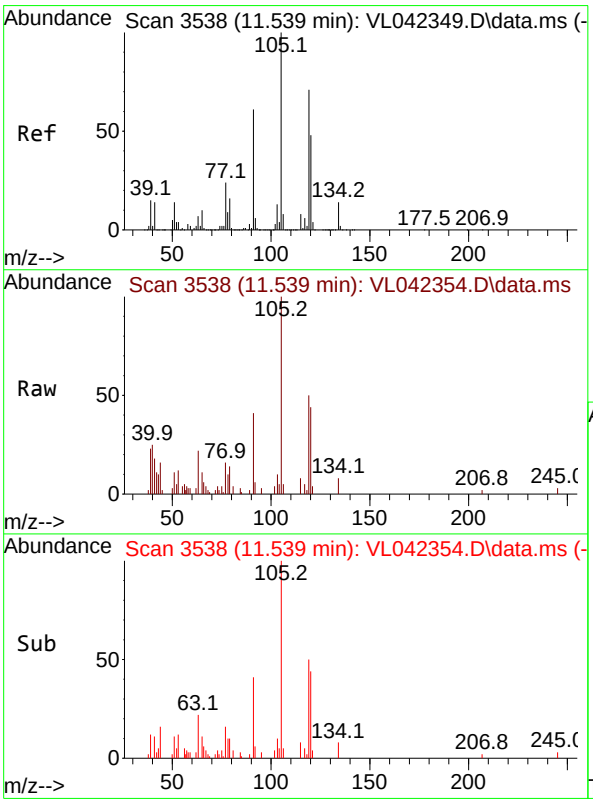
#73
1,3,5-Trimethylbenzene
Concen: 0.046 ppbv
RT: 11.212 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:105 Resp: 2473

Ion	Ratio	Lower	Upper
105	100		
120	35.1	35.6	53.4#

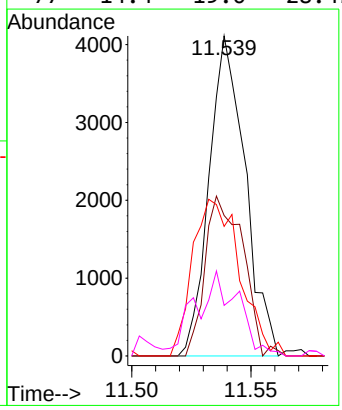


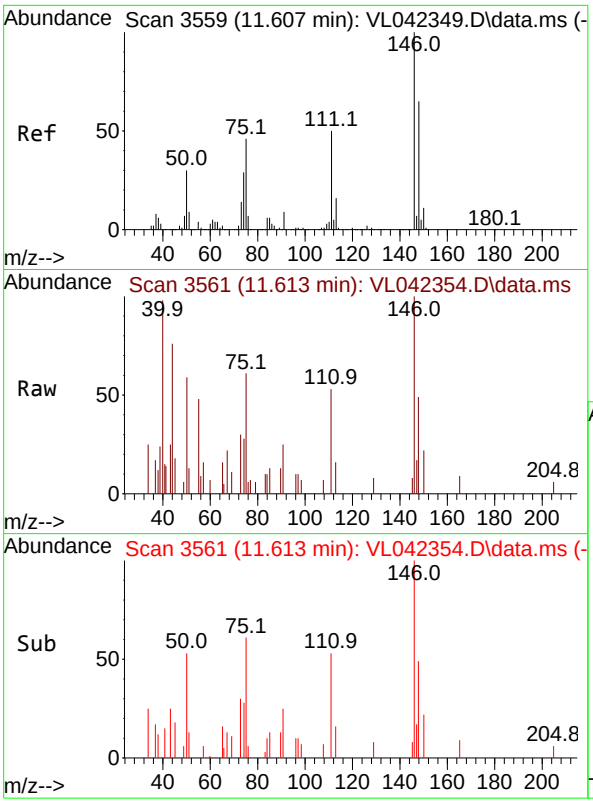


#74
1,2,4-Trimethylbenzene
Concen: 0.068 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:105 Resp: 4320

Ion	Ratio	Lower	Upper
105	100		
120	43.9	38.1	57.1
91	36.2	48.8	73.2#
77	14.4	19.0	28.4#



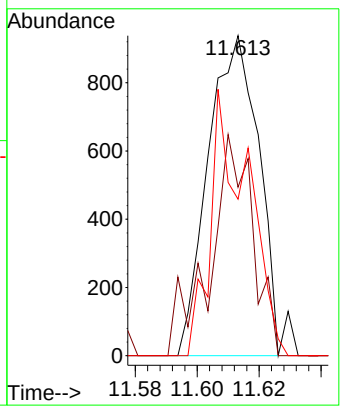


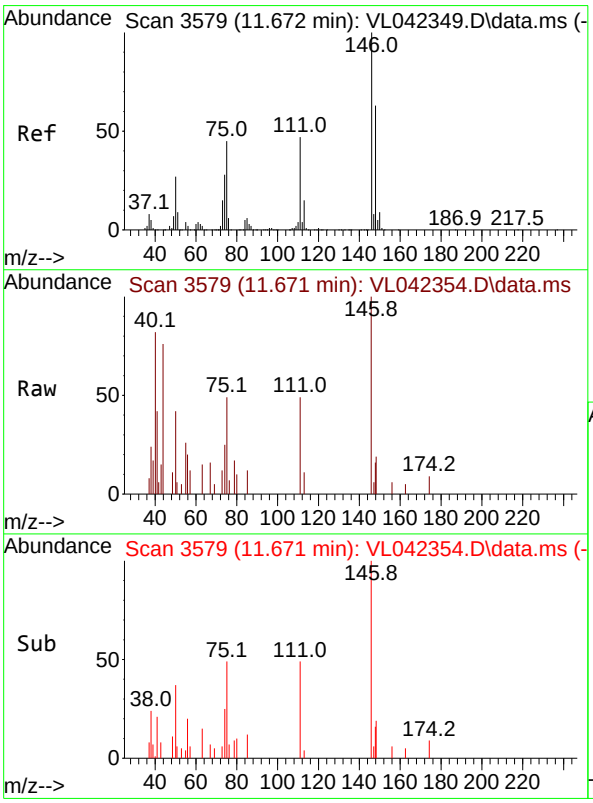
#75
1,3-Dichlorobenzene
Concen: 0.032 ppbv
RT: 11.613 min Scan# 3
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1056

Ion	Ratio	Lower	Upper
146	100		
111	61.1	24.3	72.8
148	62.4	31.6	94.8

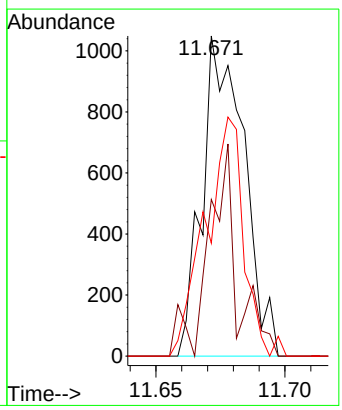


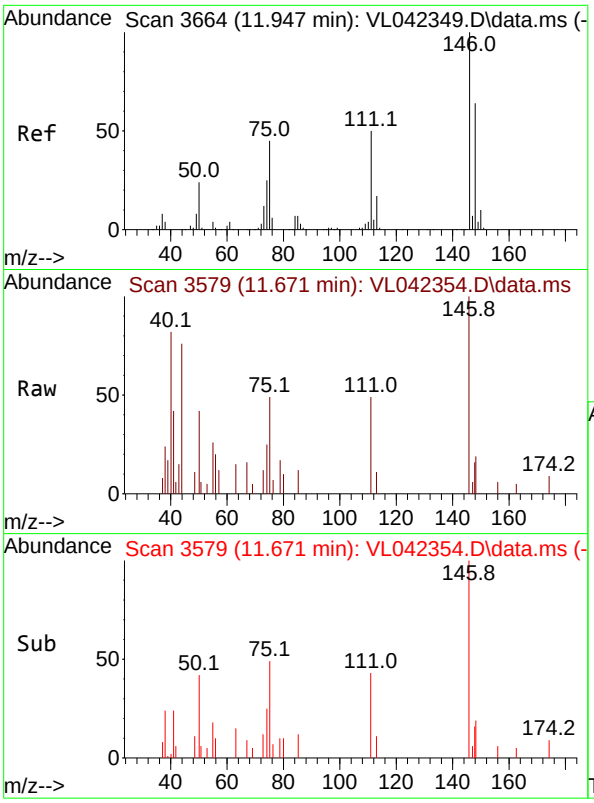


#76
1,4-Dichlorobenzene
Concen: 0.036 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:146 Resp: 1180

Ion	Ratio	Lower	Upper
146	100		
111	45.4	24.2	72.6
148	68.3	32.1	96.5



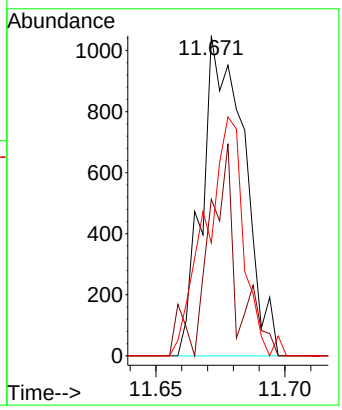


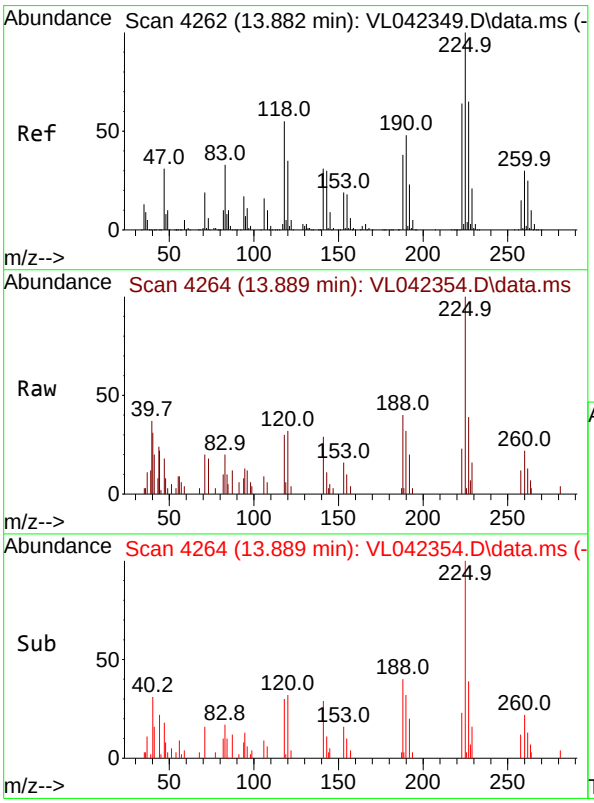
#77
1,2-Dichlorobenzene
Concen: 0.037 ppbv
RT: 11.671 min Scan# 3
Delta R.T. -0.275 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:146 Resp: 1180

Ion	Ratio	Lower	Upper
146	100		
111	45.4	25.3	75.9
148	68.3	31.5	94.5

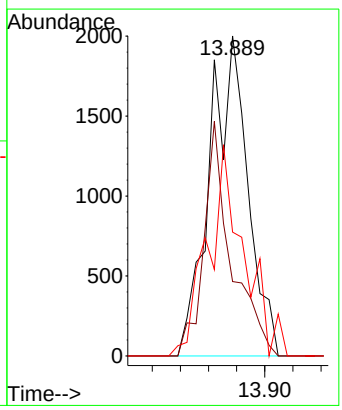


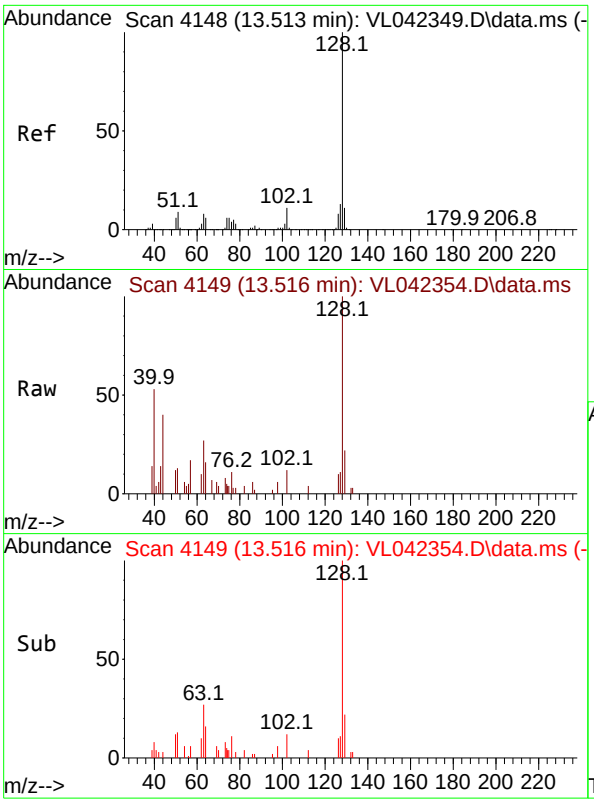


#78
Hexachloro-1,3-Butadiene
Concen: 0.058 ppbv
RT: 13.889 min Scan# 4264
Delta R.T. 0.006 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:225 Resp: 1879

Ion	Ratio	Lower	Upper
225	100		
223	52.2	50.3	75.5
227	62.5	51.5	77.3



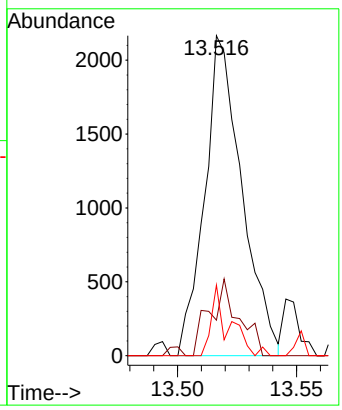


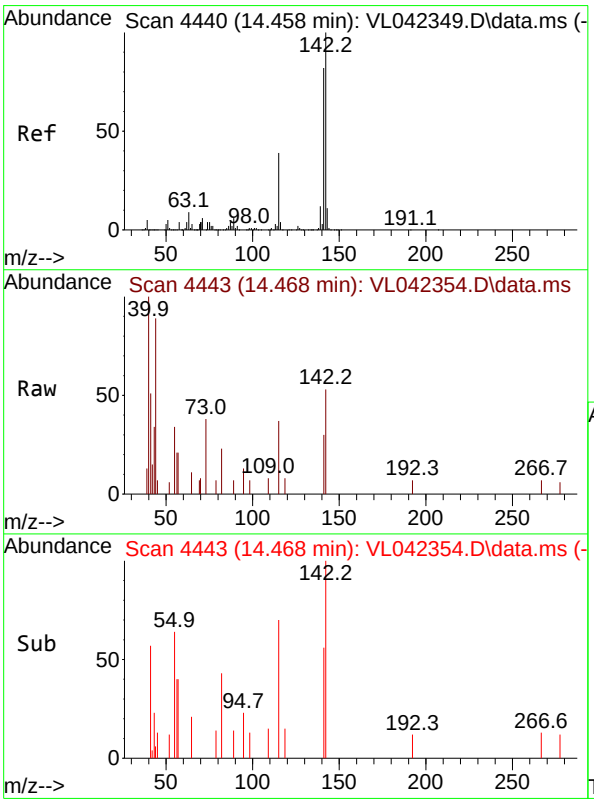
#79
Naphthalene
Concen: 0.031 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:128 Resp: 2354

Ion	Ratio	Lower	Upper
128	100		
127	11.1	10.6	15.8
129	22.1	8.6	12.8#

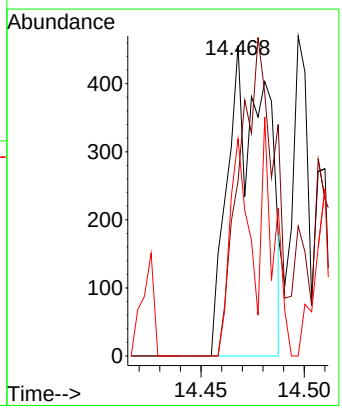


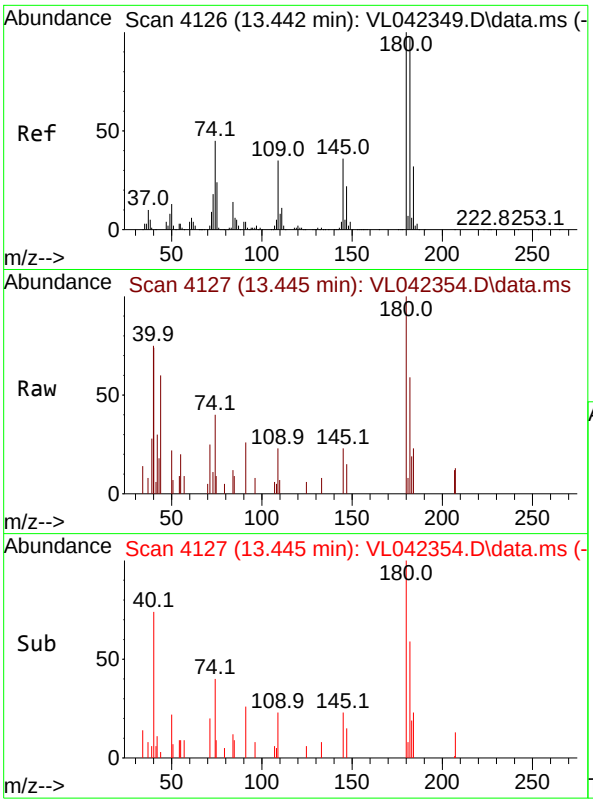


#80
Naphthalene,2-methyl-
Concen: 0.014 ppbv
RT: 14.468 min Scan# 4443
Delta R.T. 0.010 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Tgt Ion:142 Resp: 594

Ion	Ratio	Lower	Upper
142	100		
141	136.0	66.8	100.2#
115	59.1	33.4	50.2#



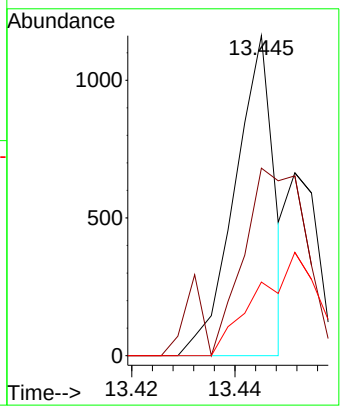


#81
1,2,4-Trichlorobenzene
Concen: 0.019 ppbv
RT: 13.445 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042354.D
Acq: 17 Apr 2025 12:22

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC0.03

Tgt Ion:180 Resp: 614

Ion	Ratio	Lower	Upper
180	100		
182	116.4	76.8	115.2#
184	0.0	24.6	36.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	116071	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.959	114	332080	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	308463	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	254437	10.038	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 100.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	292784	14.277	ppbv	99
3) Chlorodifluoromethane	1.477	51	280042	14.341	ppbv	98
4) Chloromethane	1.532	50	115775	14.266	ppbv	99
5) Vinyl Chloride	1.580	62	112650	12.752	ppbv	100
6) Bromomethane	1.667	94	52805	13.800	ppbv	88
7) Chloroethane	1.703	64	44347	13.881	ppbv	98
8) Dichlorotetrafluoroethane	1.554	85	255029	14.484	ppbv	98
9) Propene	1.483	41	123102	13.842	ppbv	95
10) Heptane	4.979	43	336134	14.047	ppbv	100
11) Trichlorofluoromethane	1.875	101	278059	14.258	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.137	101	230366	14.447	ppbv	99
13) Ethanol	1.719	45	6324	8.702	ppbv	76
14) Bromoethene	1.781	108	84851	14.117	ppbv	99
15) Acetone	1.833	43	229086	12.056	ppbv	99
16) 1,3-Butadiene	1.609	39	117997	13.224	ppbv	96
17) tert-Butyl alcohol	2.040	59	320605	13.615	ppbv	99
18) 1,1-Dichloroethene	2.033	96	107666	14.045	ppbv	99
19) Isopropyl Alcohol	1.884	45	139004	13.169	ppbv	94
20) Methylene Chloride	2.059	84	91093	12.241	ppbv	90
21) Allyl Chloride	2.095	41	187995	14.329	ppbv	99
22) trans-1,2-Dichloroethene	2.341	96	118492	13.970	ppbv	94
23) Vinyl Acetate	2.460	43	106135	13.799	ppbv #	98
24) 1,1-Dichloroethane	2.409	63	235466	14.615	ppbv	99
25) Ethyl Acetate	2.836	43	663644	14.166	ppbv	100
26) Hexane	2.826	57	260975	13.765	ppbv	97
27) Carbon Disulfide	2.150	76	299098	14.734	ppbv	97
28) Methyl tert-Butyl Ether	2.438	73	174855	14.076	ppbv	95
29) Chloroform	2.849	83	385686	14.393	ppbv	99
30) Cyclohexane	3.855	84	217375	14.238	ppbv	98
31) cis-1,2-Dichloroethene	2.719	61	264972	14.700	ppbv	98
32) 1,1,1-Trichloroethane	3.367	97	412537	14.357	ppbv	99
34) 2-Butanone	2.558	43	367315	13.986	ppbv	100
35) Carbon Tetrachloride	3.762	117	409916	13.639	ppbv	94
36) Benzene	3.655	78	522156	14.578	ppbv	97
37) 1,2-Dichloroethane	3.218	62	319517	14.863	ppbv	100
38) Trichloroethene	4.548	130	208508	13.278	ppbv	98
39) 1,2-Dichloropropane	4.312	63	189697	14.201	ppbv	97
40) 1,4-Dioxane	4.580	88	92114	12.733	ppbv #	95
41) Tetrahydrofuran	3.053	42	214949	14.166	ppbv	98
42) Bromodichloromethane	4.490	83	442735	14.798	ppbv	95
43) Methyl Methacrylate	4.878	69	219757	13.670	ppbv	95
44) 2,2,4-Trimethylpentane	4.642	57	893529	14.425	ppbv	99
45) t-1,3-Dichloropropene	6.412	75	244470	14.810	ppbv	94

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.600	75	300145	14.878	ppbv		90
47) 1,1,2-Trichloroethane	6.581	97	198874	14.615	ppbv		98
48) Dibromochloromethane	7.390	129	362887	15.105	ppbv		98
49) Bromoform	9.484	173	312282	14.865	ppbv		99
50) 4-Methyl-2-Pentanone	5.749	43	563658	12.889	ppbv		99
51) 2-Hexanone	7.435	43	467001	11.834	ppbv	#	98
52) Tetrachloroethene	8.225	164	180631	13.046	ppbv		97
53) Toluene	6.933	91	619420	14.411	ppbv		99
54) 1,2-Dibromoethane	7.652	107	280071	14.442	ppbv		92
56) 1,1,1,2-Tetrachloroethane	8.927	131	268626	14.389	ppbv		97
57) Chlorobenzene	8.921	112	454017	14.151	ppbv		97
58) Ethyl Benzene	9.354	91	874424	14.308	ppbv		100
59) m/p-Xylene	9.552	91	645250	13.067	ppbv	#	21
60) o-Xylene	9.963	91	689246	13.902	ppbv		99
61) Styrene	9.872	104	339508	14.347	ppbv		99
62) Isopropylbenzene	10.539	105	1018968	13.999	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.963	83	412898	12.816	ppbv		100
64) n-propylbenzene	10.989	120	260812	14.255	ppbv		94
65) tert-Butylbenzene	11.533	119	899720	13.449	ppbv		93
66) Benzyl Chloride	11.617	91	96016	13.061	ppbv		96
67) sec-Butylbenzene	11.769	105	1253263	13.468	ppbv		100
69) p-Isopropyltoluene	11.928	119	1081850	13.382	ppbv		99
70) n-Butylbenzene	12.284	91	1117042	13.266	ppbv		100
71) 2-Chlorotoluene	10.902	91	806728	14.131	ppbv		100
72) 4-Ethyltoluene	11.125	105	848077	13.992	ppbv		99
73) 1,3,5-Trimethylbenzene	11.206	105	726558	13.578	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	785772	12.572	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	444086	13.670	ppbv		99
76) 1,4-Dichlorobenzene	11.672	146	450662	13.802	ppbv		98
77) 1,2-Dichlorobenzene	11.947	146	427372	13.529	ppbv		99
78) Hexachloro-1,3-Butadiene	13.883	225	404441	12.679	ppbv		100
79) Naphthalene	13.514	128	944085	12.632	ppbv		98
80) Naphthalene,2-methyl-	14.459	142	540339	12.686	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	429982	13.398	ppbv		98

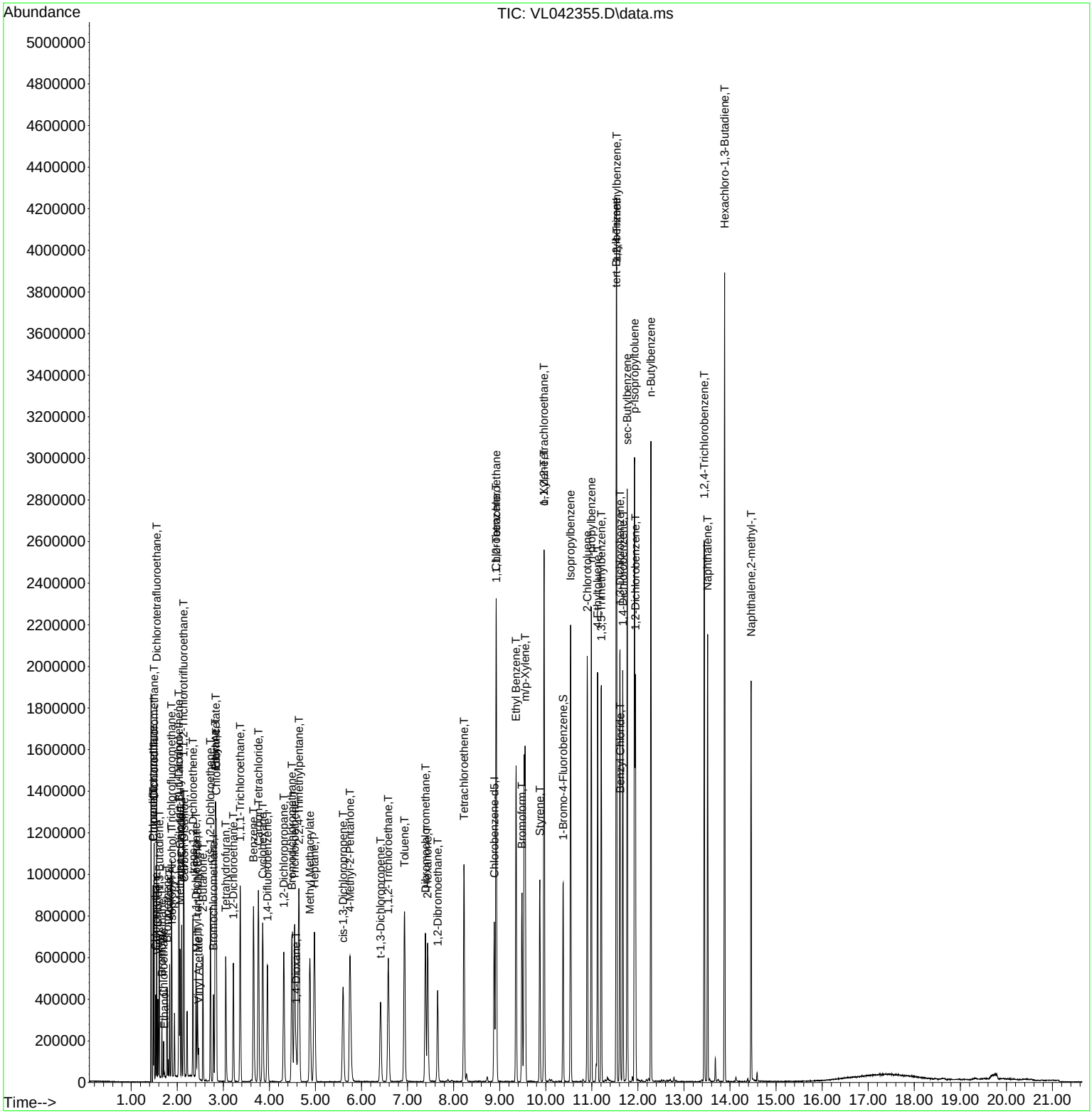
(#) = qualifier out of range (m) = manual integration (+) = signals summed

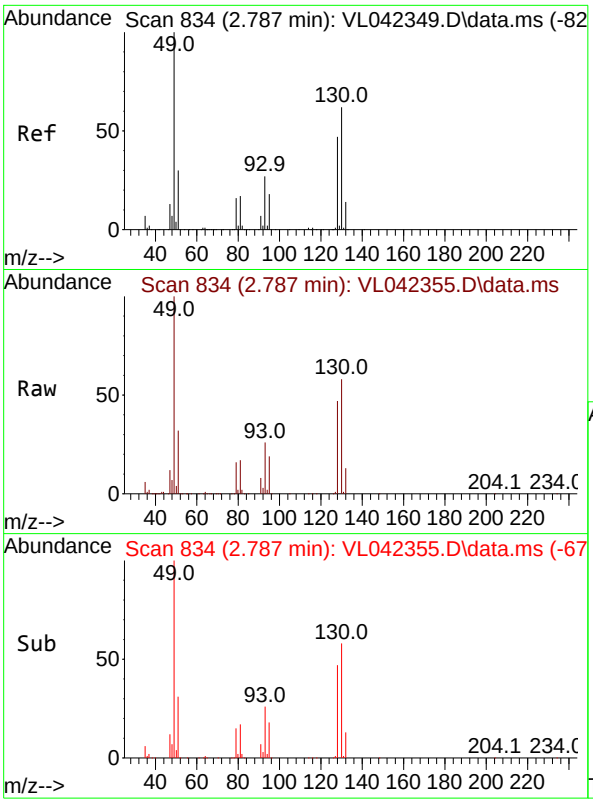
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042355.D
Acq On : 17 Apr 2025 12:54
Operator : SY/MD
Sample : VSTDICC015
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Quant Time: Apr 18 01:31:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 01:24:29 2025
Response via : Initial Calibration



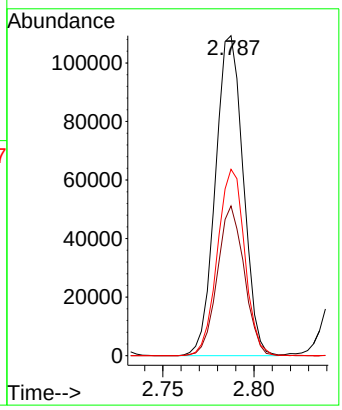


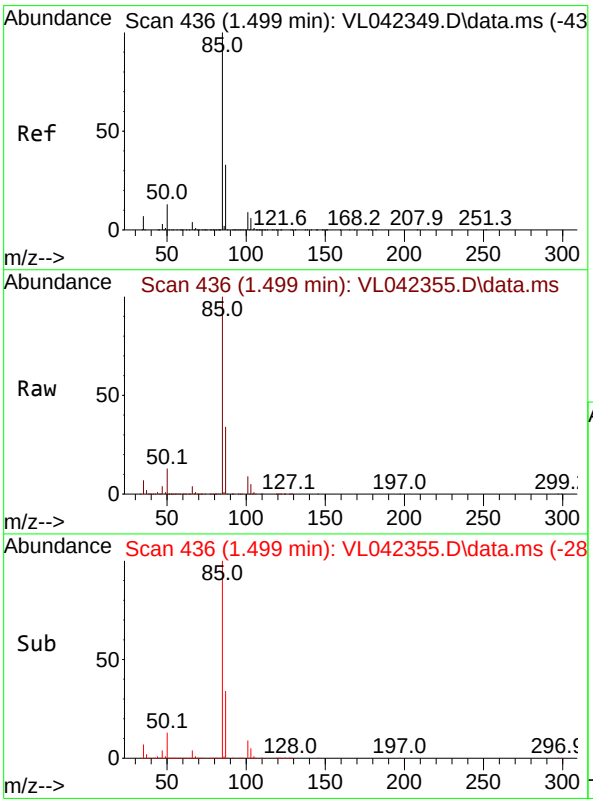
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 49 Resp: 116071

Ion	Ratio	Lower	Upper
49	100		
128	45.1	22.8	68.4
130	57.1	29.3	88.0

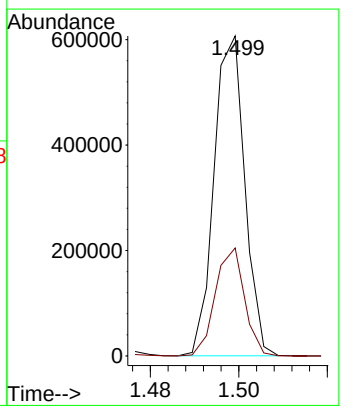


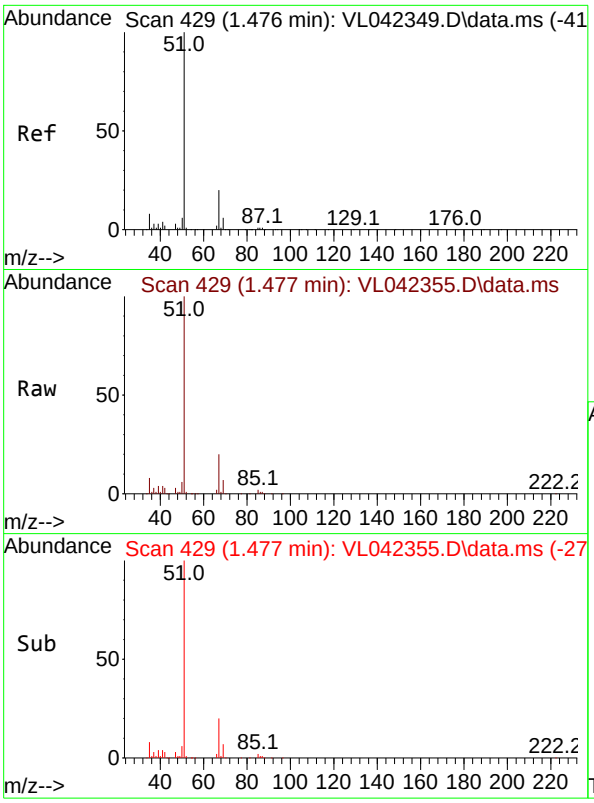


#2
Dichlorodifluoromethane
Concen: 14.277 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 85 Resp: 292784

Ion	Ratio	Lower	Upper
85	100		
87	33.8	26.6	39.8



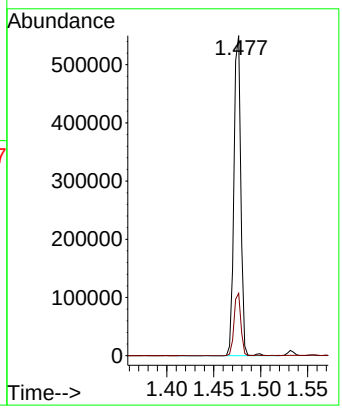


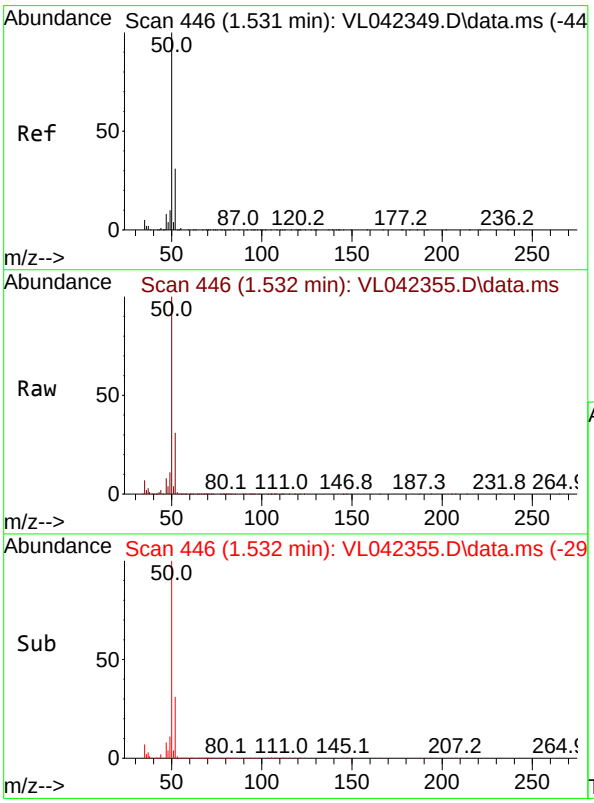
#3
Chlorodifluoromethane
Concen: 14.341 ppbv
RT: 1.477 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 51 Resp: 280042

Ion	Ratio	Lower	Upper
51	100		
67	19.5	16.2	24.4

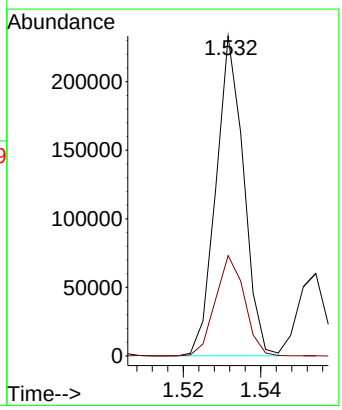


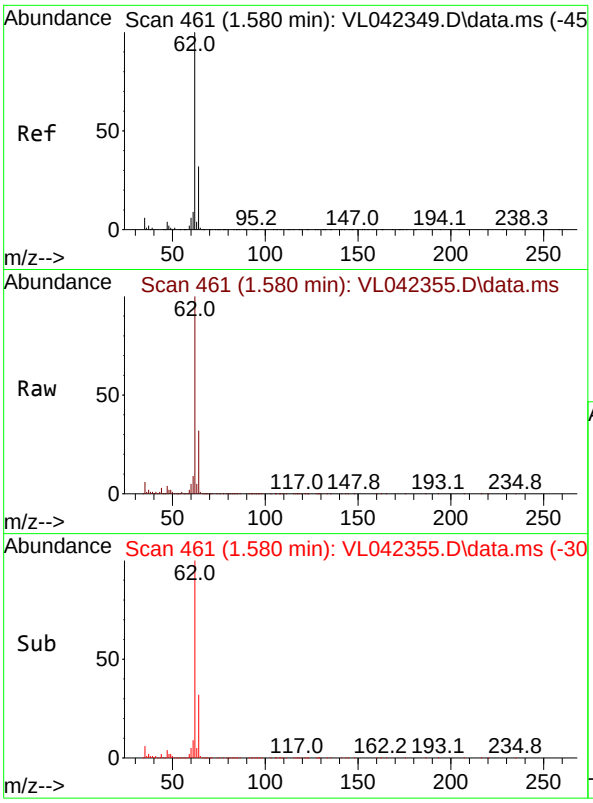


#4
Chloromethane
Concen: 14.266 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 50 Resp: 115775

Ion	Ratio	Lower	Upper
50	100		
52	31.3	24.7	37.1



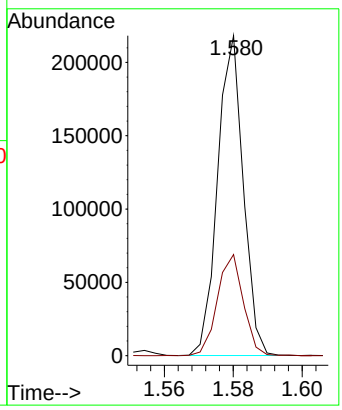


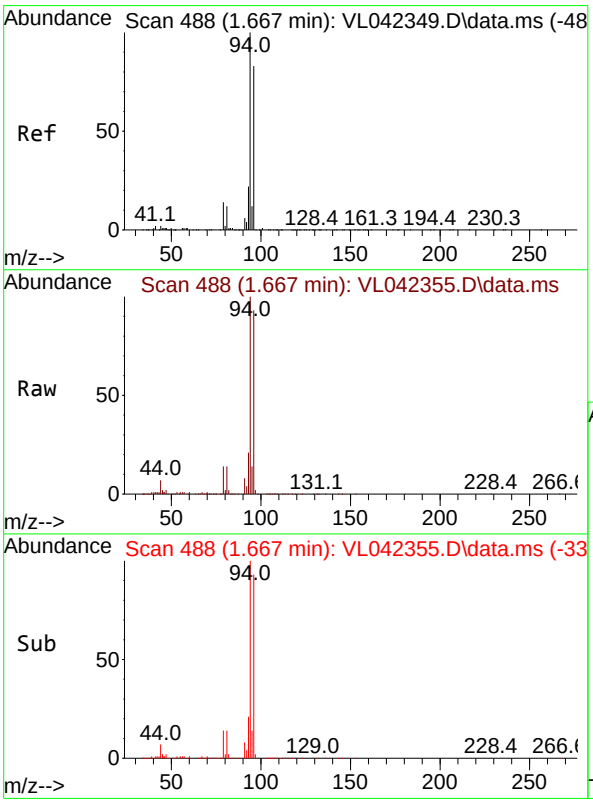
#5
Vinyl Chloride
Concen: 12.752 ppbv
RT: 1.580 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 112650

Ion	Ratio	Lower	Upper
62	100		
64	31.6	25.4	38.0

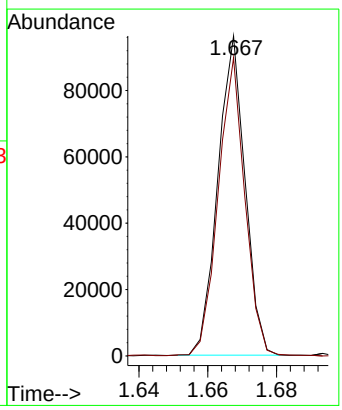


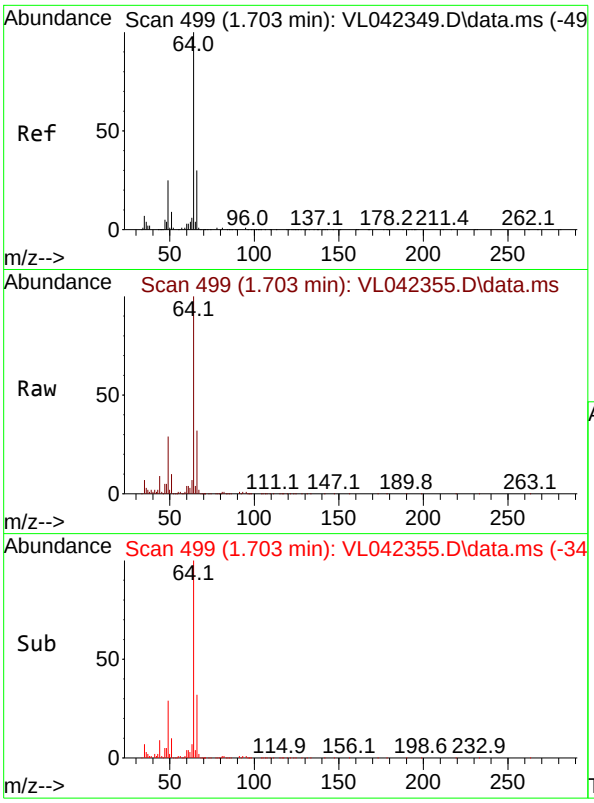


#6
Bromomethane
Concen: 13.800 ppbv
RT: 1.667 min Scan# 488
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 94 Resp: 52805

Ion	Ratio	Lower	Upper
94	100		
96	93.1	66.2	99.2



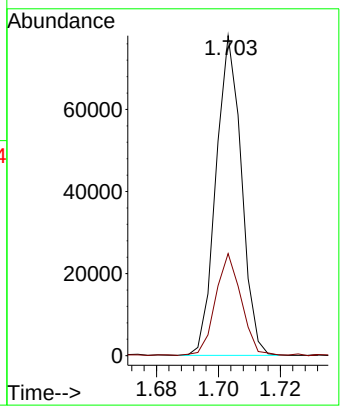


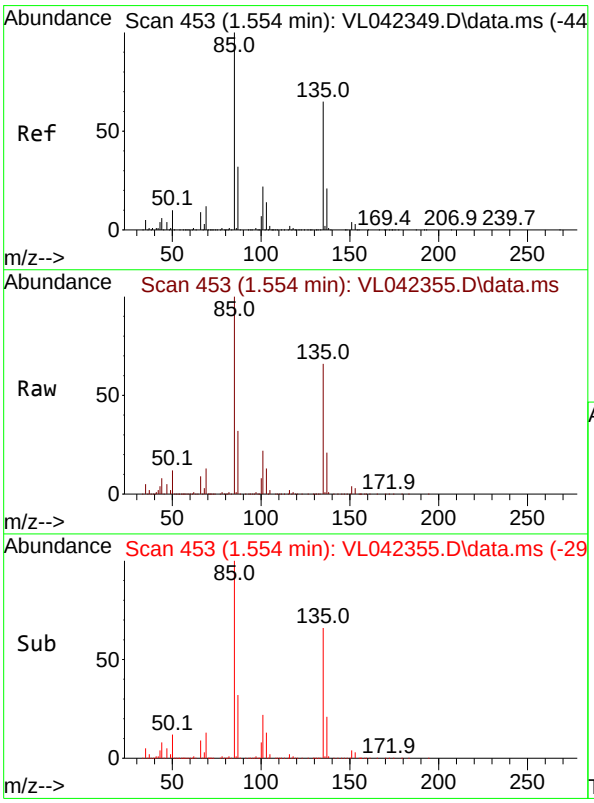
#7
Chloroethane
Concen: 13.881 ppbv
RT: 1.703 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 64 Resp: 44347

Ion	Ratio	Lower	Upper
64	100		
66	31.9	24.6	37.0

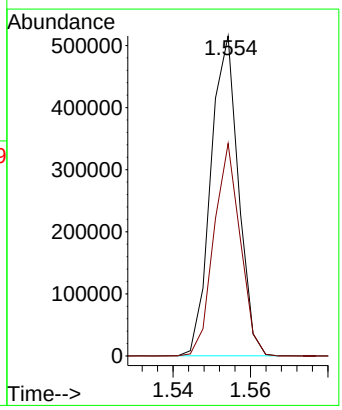


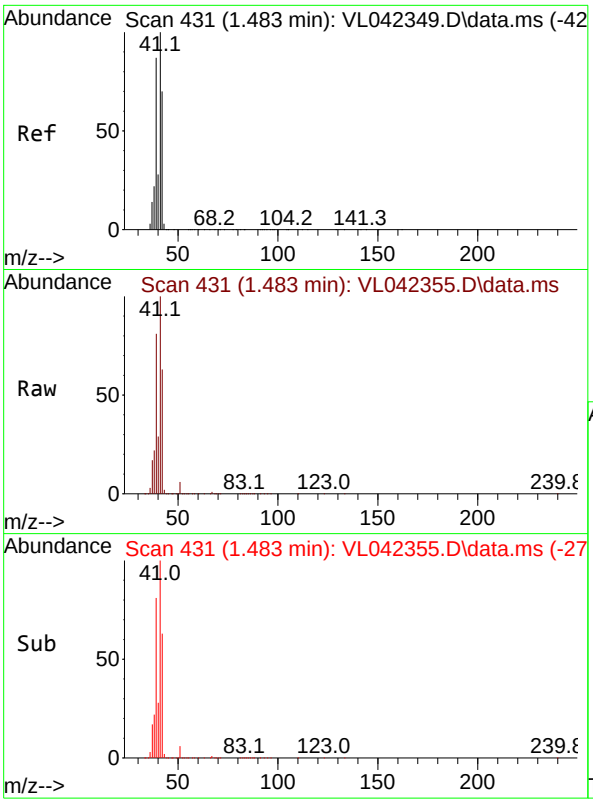


#8
Dichlorotetrafluoroethane
Concen: 14.484 ppbv
RT: 1.554 min Scan# 453
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 85 Resp: 255029

Ion	Ratio	Lower	Upper
85	100		
135	63.6	52.2	78.2



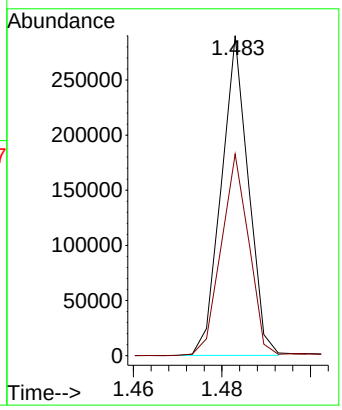


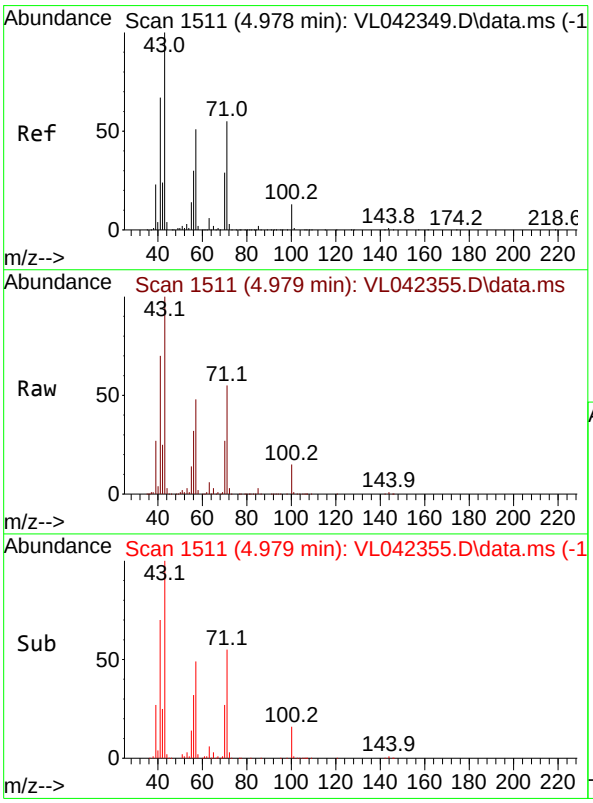
#9
Propene
Concen: 13.842 ppbv
RT: 1.483 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 123102

Ion	Ratio	Lower	Upper
41	100		
42	66.0	56.2	84.4

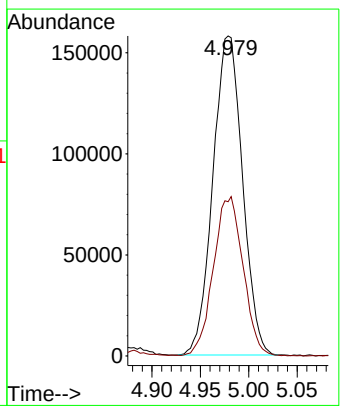


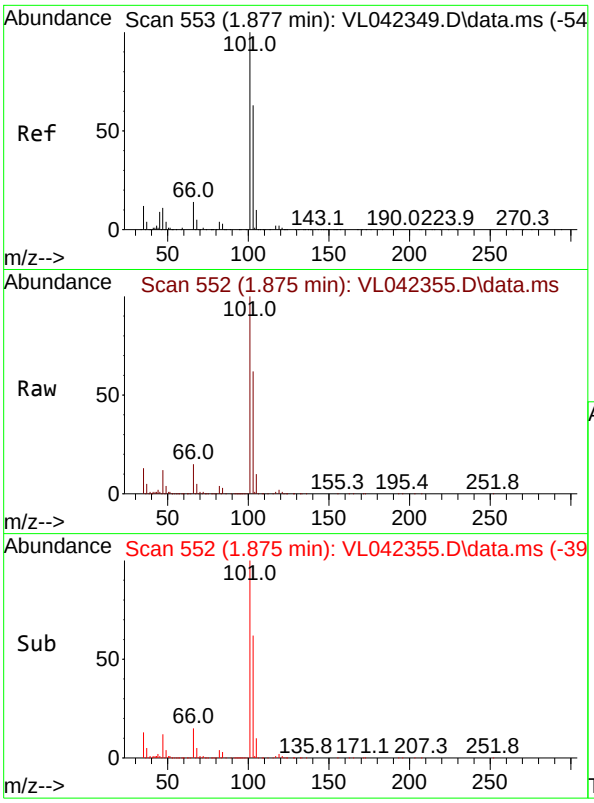


#10
Heptane
Concen: 14.047 ppbv
RT: 4.979 min Scan# 1511
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 336134

Ion	Ratio	Lower	Upper
43	100		
57	50.0	39.9	59.9



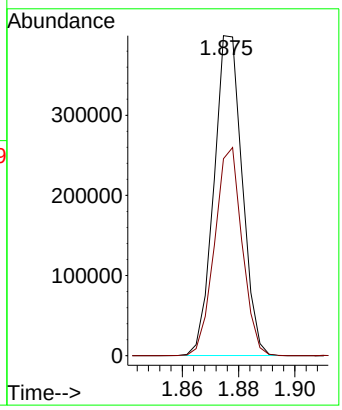


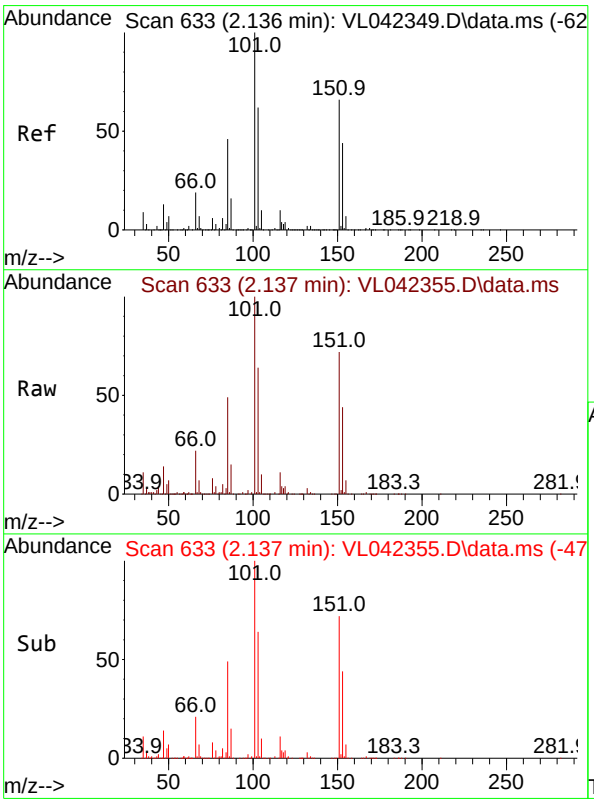
#11
Trichlorofluoromethane
Concen: 14.258 ppbv
RT: 1.875 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:101 Resp: 278059

Ion	Ratio	Lower	Upper
101	100		
103	61.6	50.1	75.1

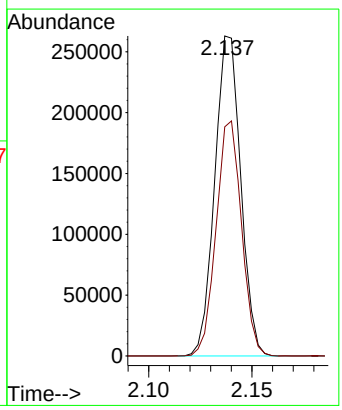


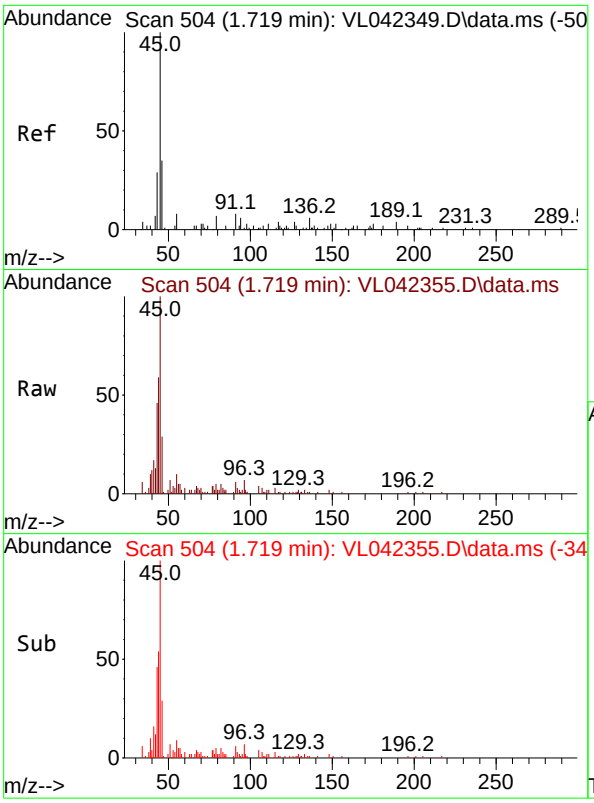


#12
1,1,2-Trichlorotrifluoroethane
Concen: 14.447 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:101 Resp: 230366

Ion	Ratio	Lower	Upper
101	100		
151	71.8	57.0	85.6



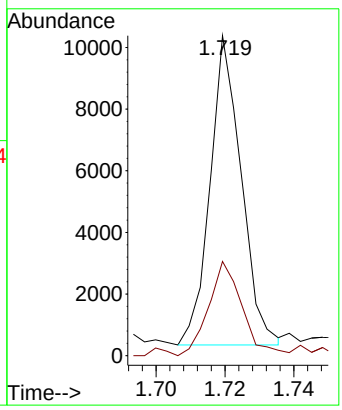


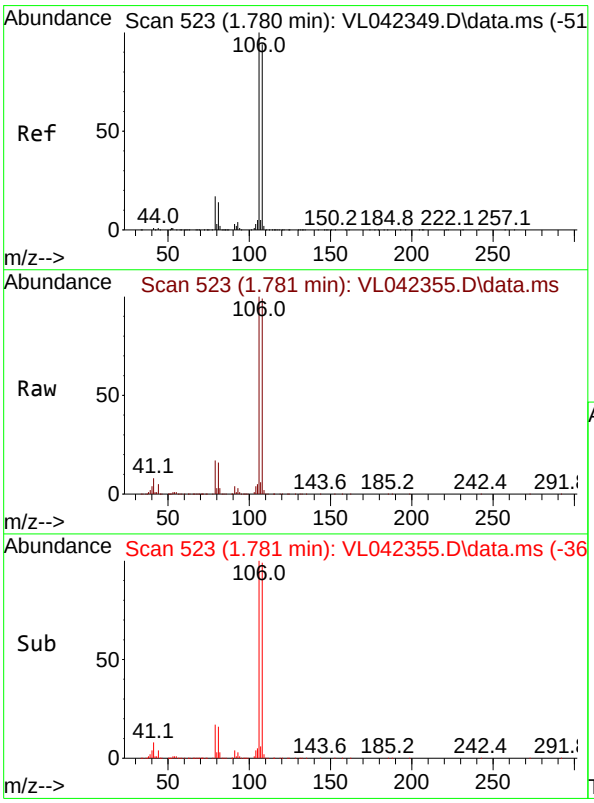
#13
Ethanol
Concen: 8.702 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 6324

Ion	Ratio	Lower	Upper
45	100		
46	37.6	21.9	87.7

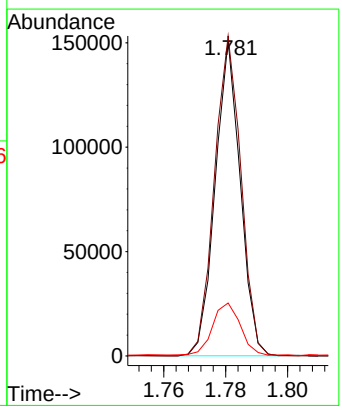


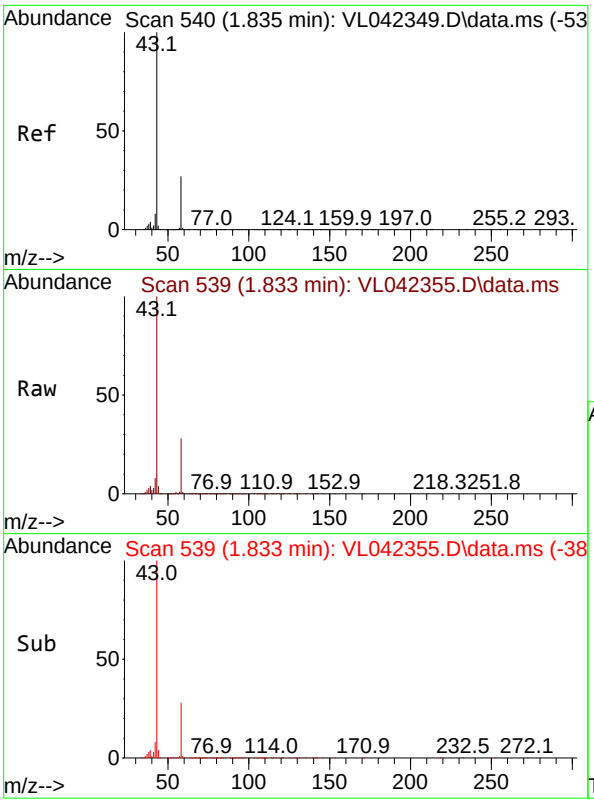


#14
Bromoethene
Concen: 14.117 ppbv
RT: 1.781 min Scan# 523
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:108 Resp: 84851

Ion	Ratio	Lower	Upper
108	100		
106	107.5	85.9	128.9
79	19.3	13.9	20.9



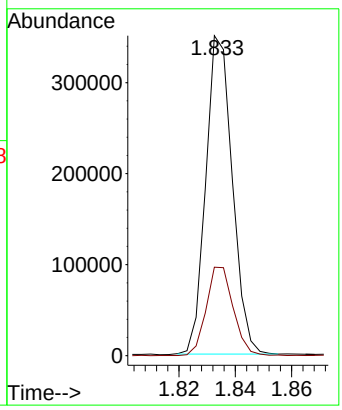


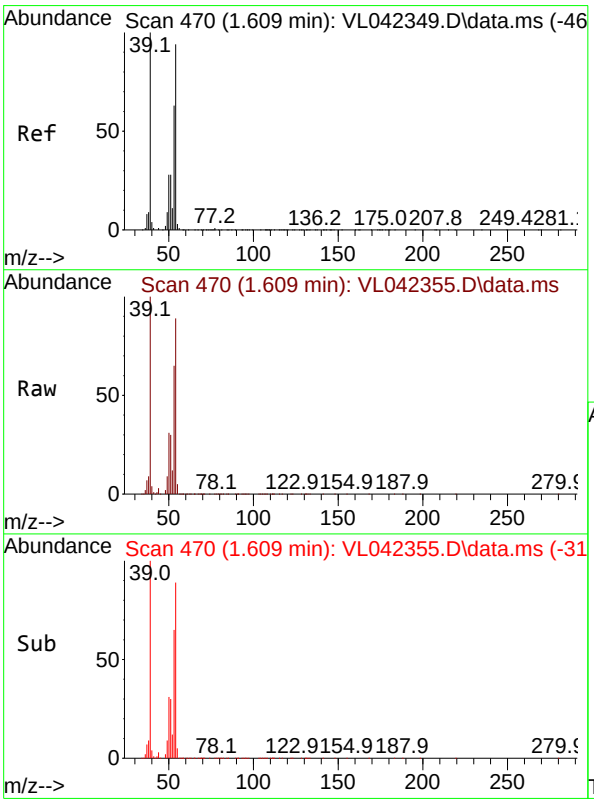
#15
Acetone
Concen: 12.056 ppbv
RT: 1.833 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 229086

Ion	Ratio	Lower	Upper
43	100		
58	28.4	22.4	33.6

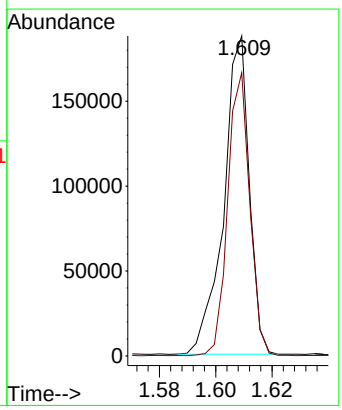


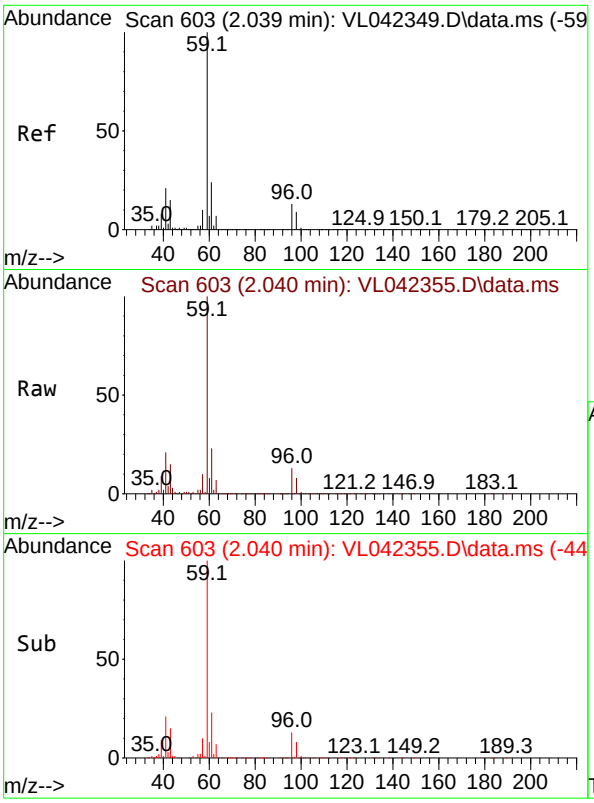


#16
1,3-Butadiene
Concen: 13.224 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 39 Resp: 117997

Ion	Ratio	Lower	Upper
39	100		
54	77.2	64.9	97.3



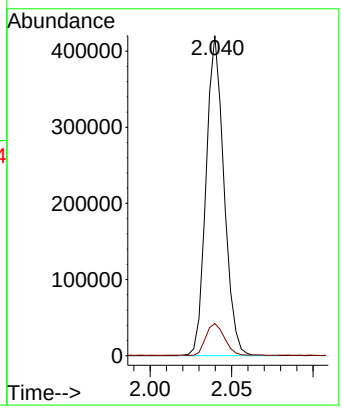


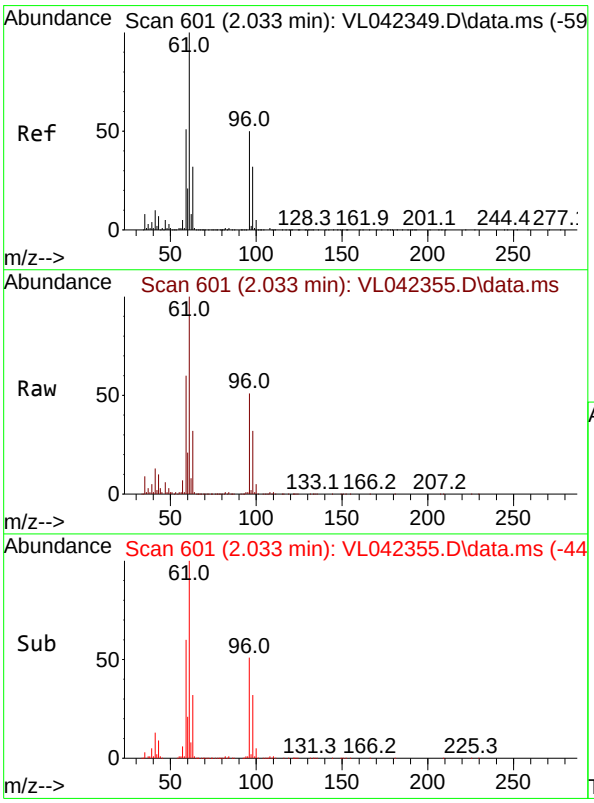
#17
tert-Butyl alcohol
Concen: 13.615 ppbv
RT: 2.040 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 59 Resp: 320605

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.7	13.1

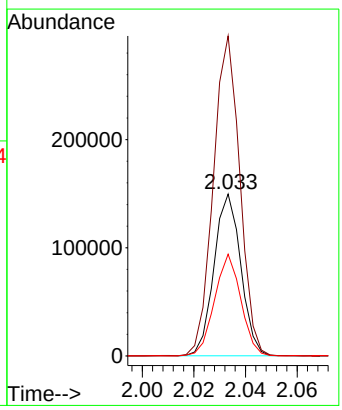


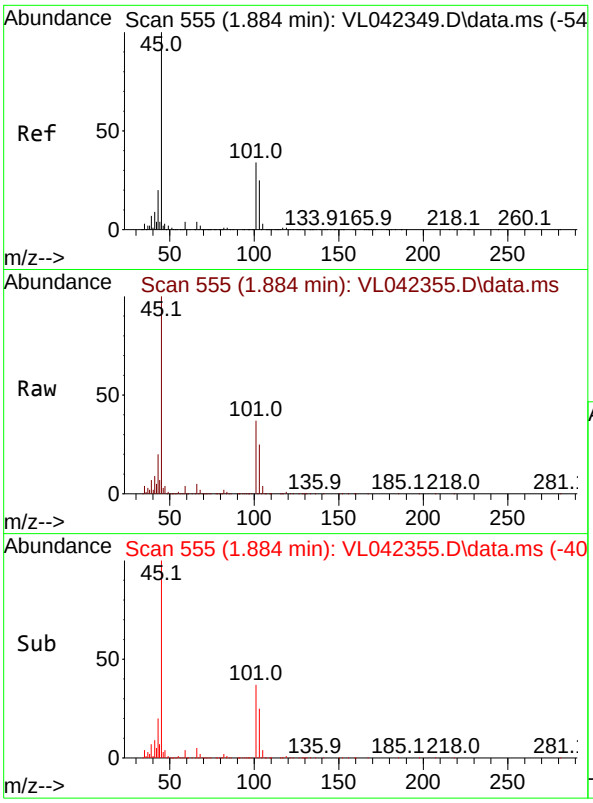


#18
1,1-Dichloroethene
Concen: 14.045 ppbv
RT: 2.033 min Scan# 601
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 96 Resp: 107666

Ion	Ratio	Lower	Upper
96	100		
61	197.8	160.2	240.2
98	62.9	51.0	76.4



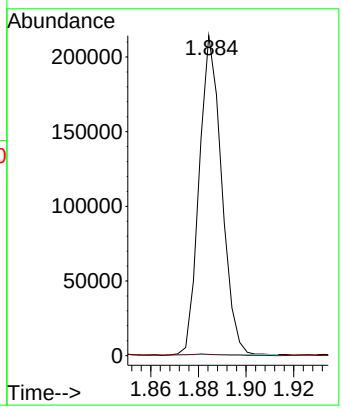


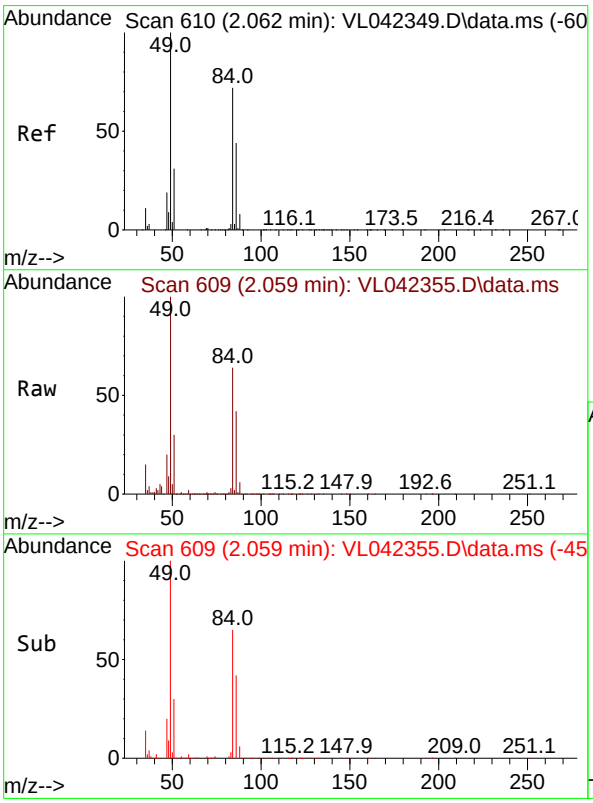
#19
Isopropyl Alcohol
Concen: 13.169 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 45 Resp: 139004

Ion	Ratio	Lower	Upper
45	100		
58	46.9	34.5	51.7

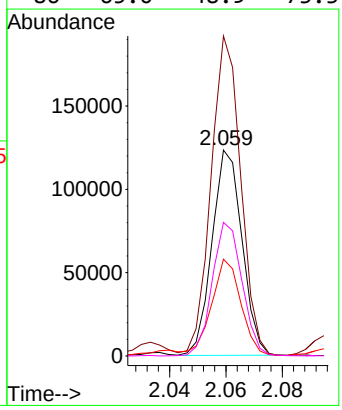


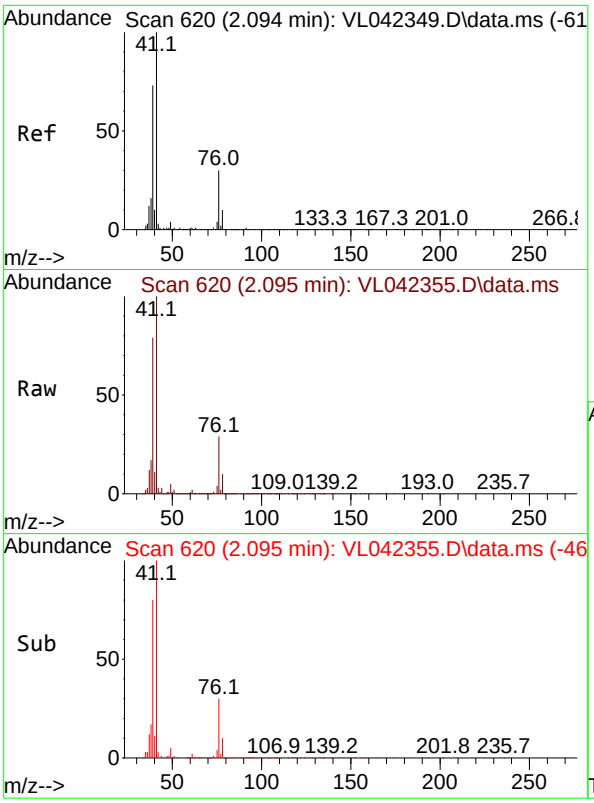


#20
Methylene Chloride
Concen: 12.241 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 84 Resp: 91093

Ion	Ratio	Lower	Upper
84	100		
49	155.7	111.6	167.4
51	46.8	35.1	52.7
86	65.0	48.9	73.3



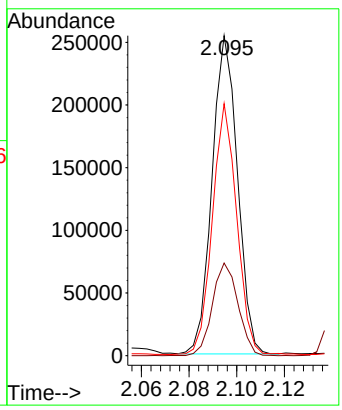


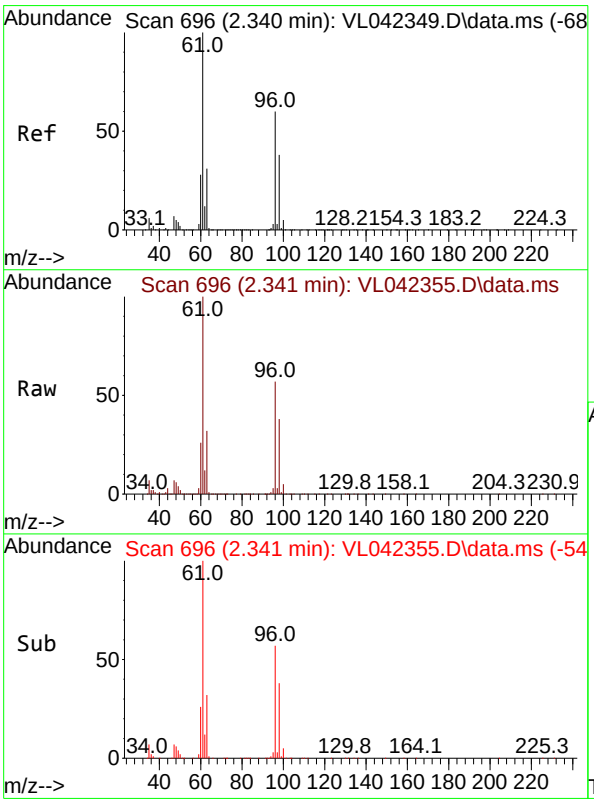
#21
Allyl Chloride
Concen: 14.329 ppbv
RT: 2.095 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 41 Resp: 187995

Ion	Ratio	Lower	Upper
41	100		
76	29.3	24.8	37.2
39	75.2	60.6	90.8

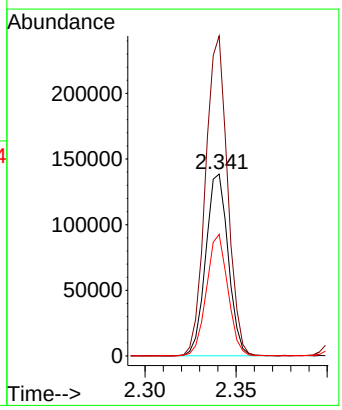


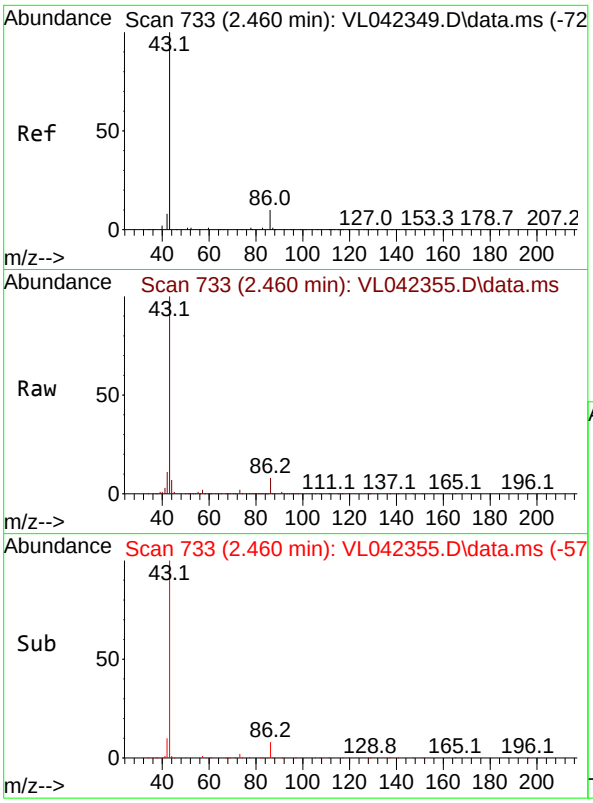


#22
trans-1,2-Dichloroethene
Concen: 13.970 ppbv
RT: 2.341 min Scan# 696
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 96 Resp: 118492

Ion	Ratio	Lower	Upper
96	100		
61	176.1	133.7	200.5
98	66.8	50.3	75.5



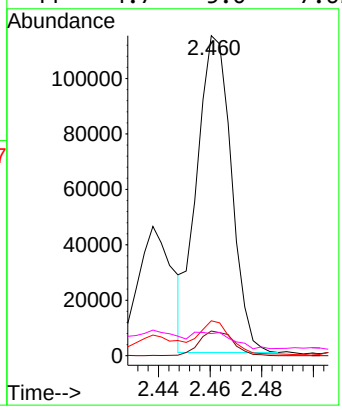


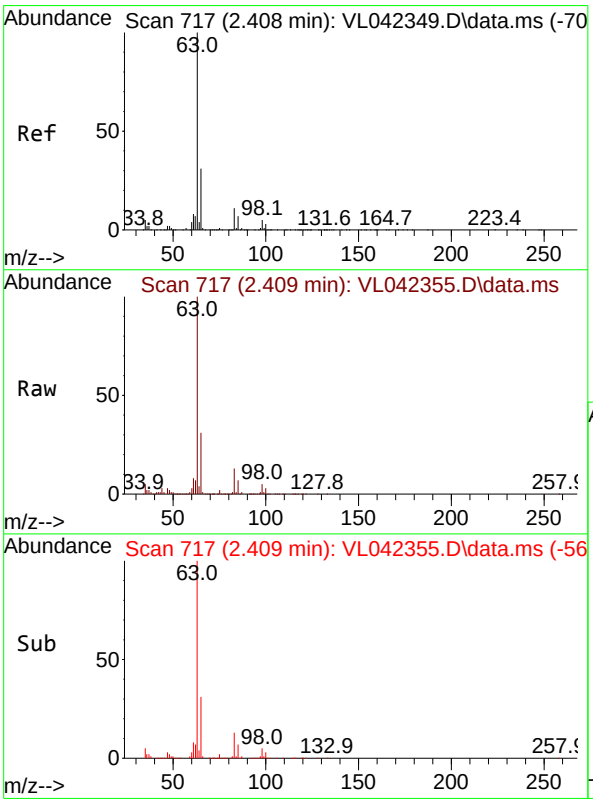
#23
Vinyl Acetate
Concen: 13.799 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 106135

Ion	Ratio	Lower	Upper
43	100		
86	7.8	6.5	9.7
42	10.4	7.8	11.8
44	4.7	5.0	7.6#

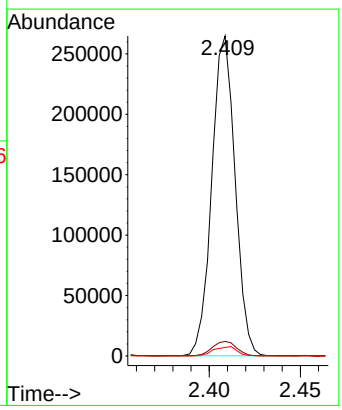


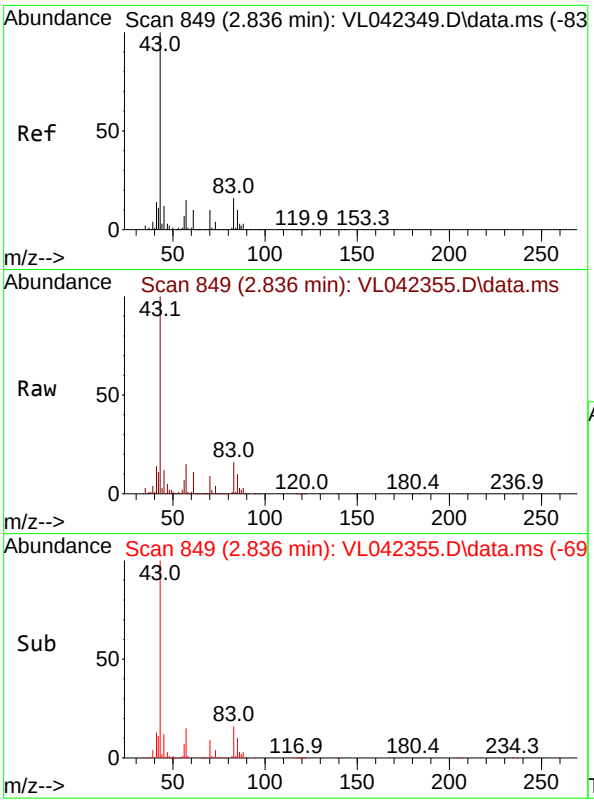


#24
1,1-Dichloroethane
Concen: 14.615 ppbv
RT: 2.409 min Scan# 717
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 63 Resp: 235466

Ion	Ratio	Lower	Upper
63	100		
98	4.5	2.3	6.8
100	2.6	1.6	4.8



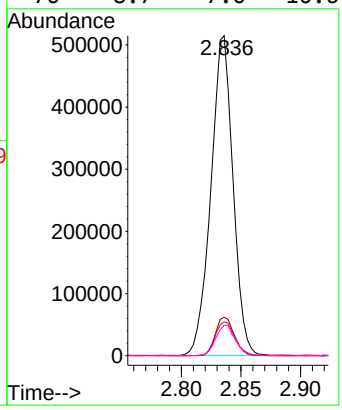


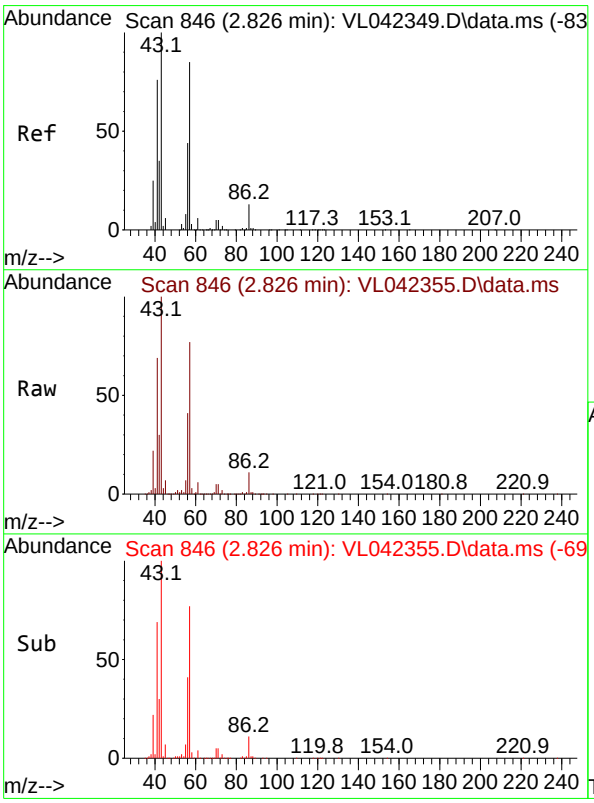
#25
Ethyl Acetate
Concen: 14.166 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 663644

Ion	Ratio	Lower	Upper
43	100		
45	10.4	8.3	12.5
61	9.2	7.3	10.9
70	8.7	7.0	10.6

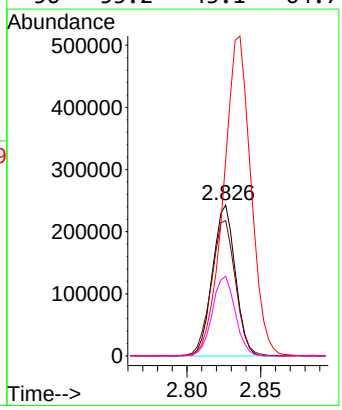


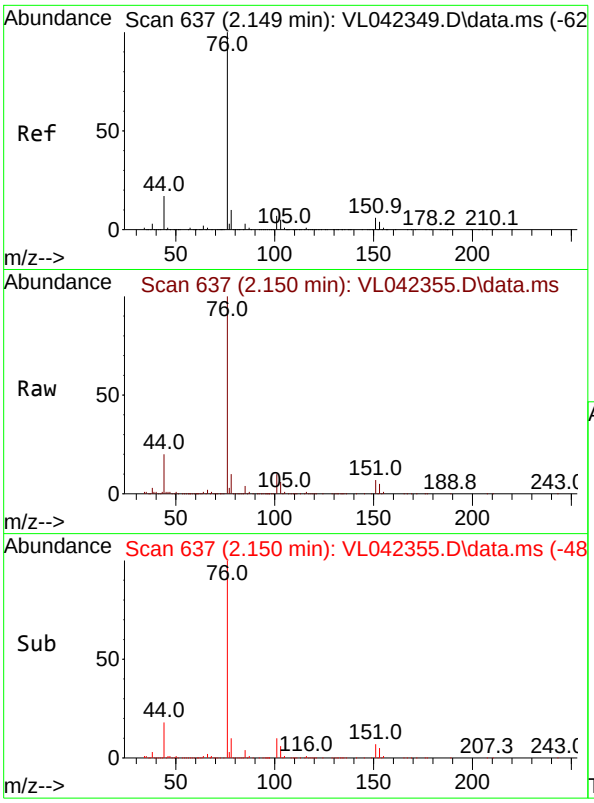


#26
Hexane
Concen: 13.765 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 57 Resp: 260975

Ion	Ratio	Lower	Upper
57	100		
41	95.3	77.9	116.9
43	254.5	208.4	312.6
56	53.2	43.1	64.7



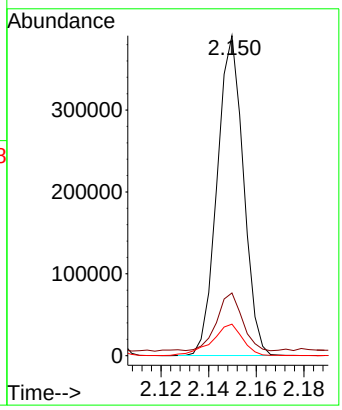


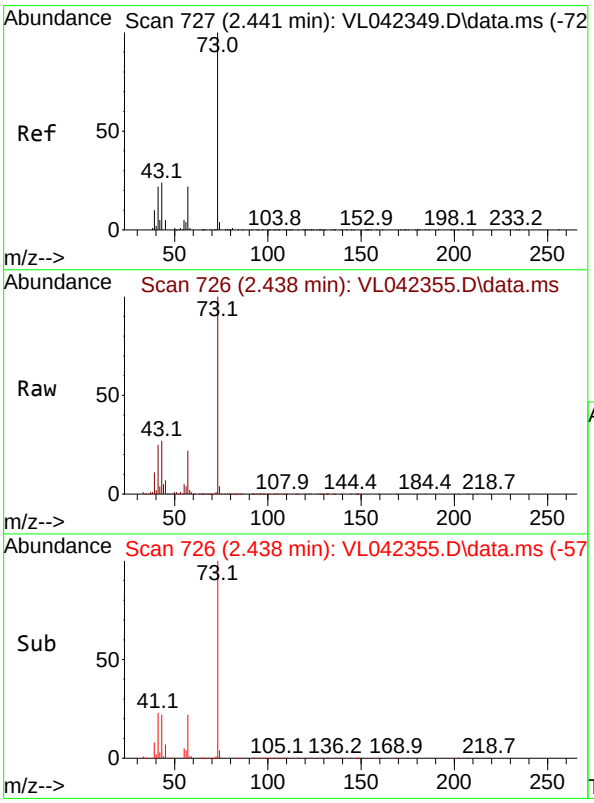
#27
Carbon Disulfide
Concen: 14.734 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 76 Resp: 299098

Ion	Ratio	Lower	Upper
76	100		
44	17.3	15.5	23.3
78	11.4	9.3	13.9

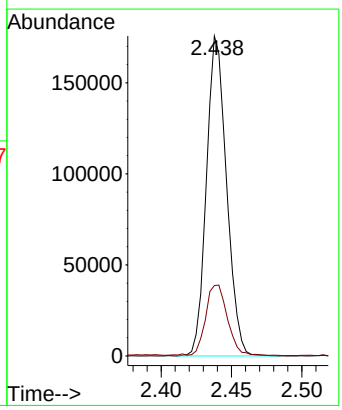


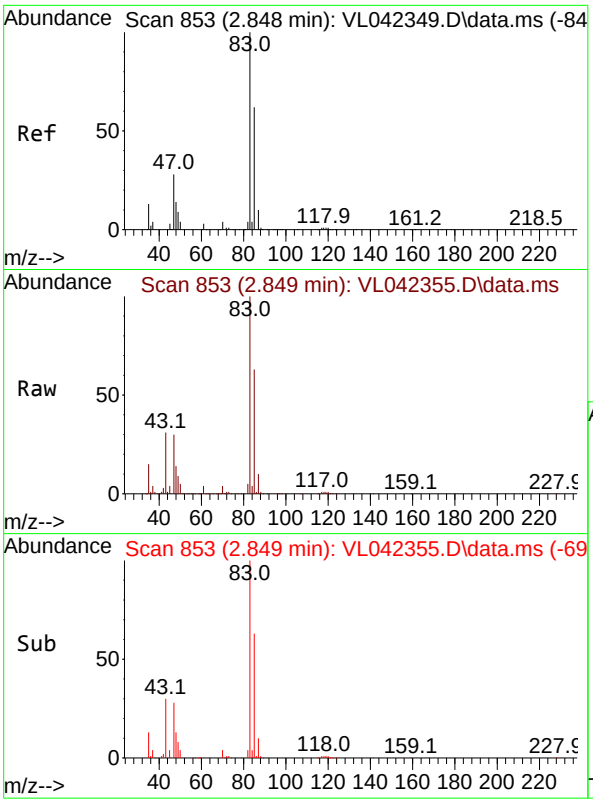


#28
Methyl tert-Butyl Ether
Concen: 14.076 ppbv
RT: 2.438 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 73 Resp: 174855

Ion	Ratio	Lower	Upper
73	100		
57	24.3	21.3	31.9



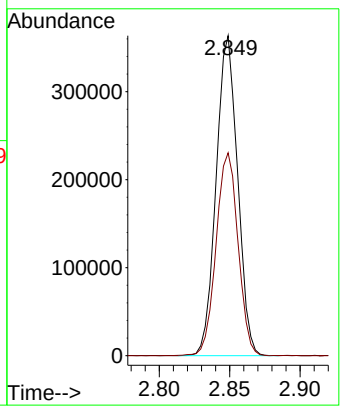


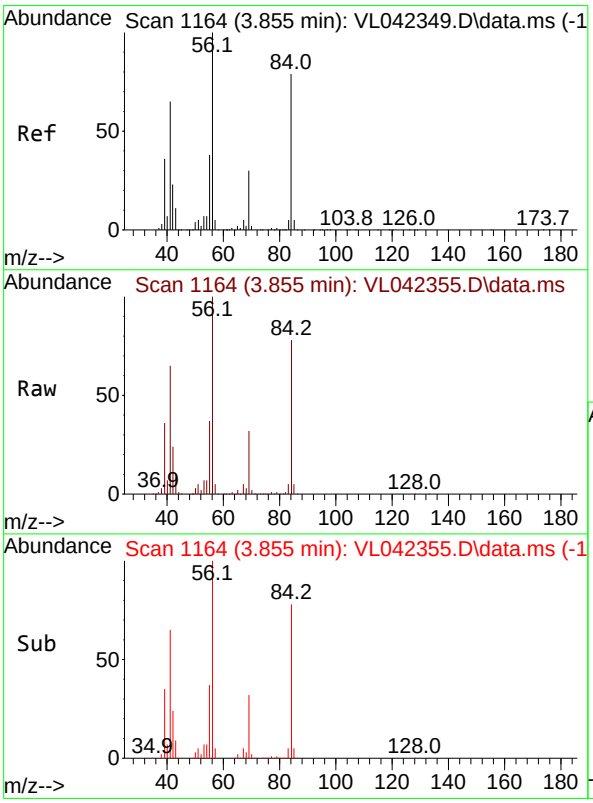
#29
Chloroform
Concen: 14.393 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 385686

Ion	Ratio	Lower	Upper
83	100		
85	63.4	50.0	75.0

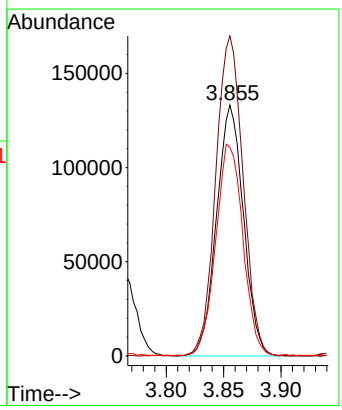


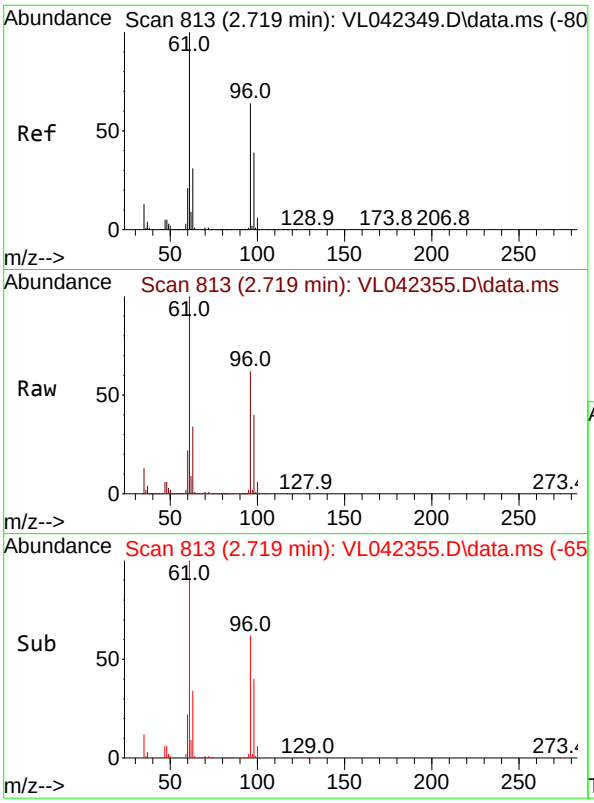


#30
Cyclohexane
Concen: 14.238 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 84 Resp: 217375

Ion	Ratio	Lower	Upper
84	100		
56	129.4	101.0	151.4
41	85.3	67.4	101.0



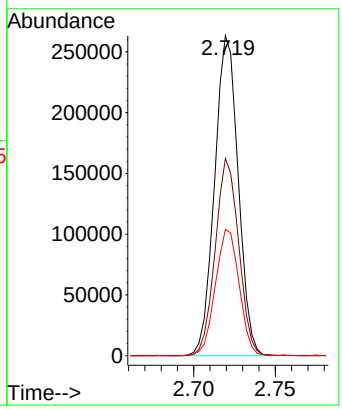


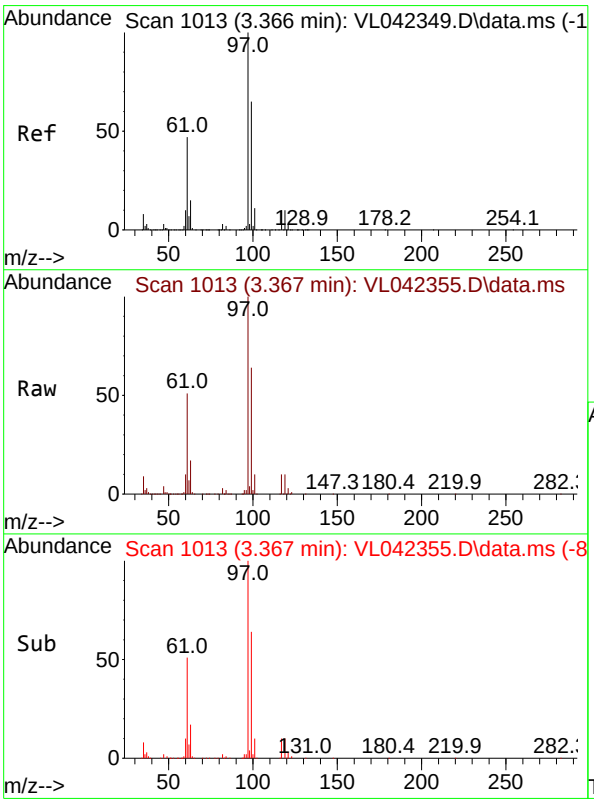
#31
cis-1,2-Dichloroethene
Concen: 14.700 ppbv
RT: 2.719 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 61 Resp: 264972

Ion	Ratio	Lower	Upper
61	100		
96	61.6	50.8	76.2
98	39.5	30.9	46.3

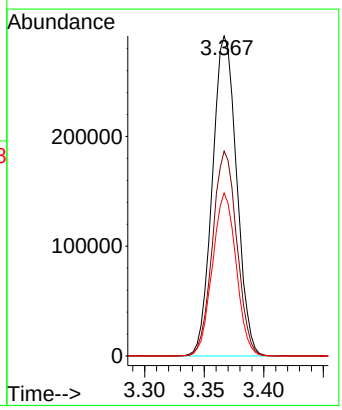


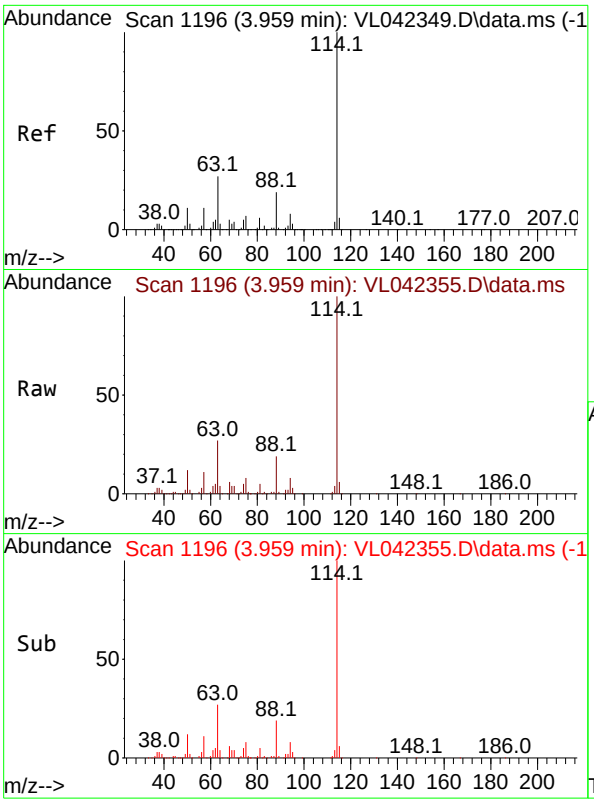


#32
1,1,1-Trichloroethane
Concen: 14.357 ppbv
RT: 3.367 min Scan# 1013
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 97 Resp: 412537

Ion	Ratio	Lower	Upper
97	100		
99	64.1	51.0	76.4
61	49.8	38.8	58.2



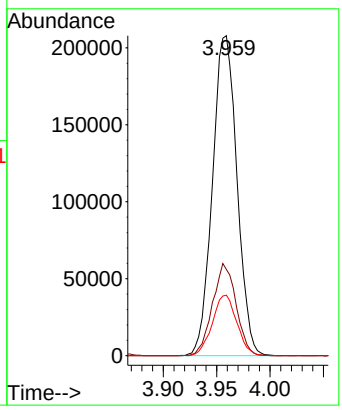


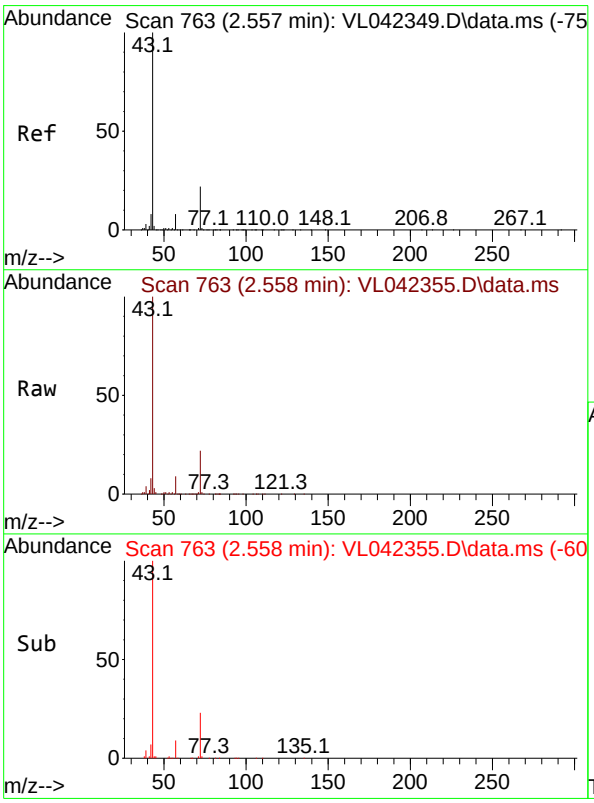
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.959 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:114 Resp: 332080

Ion	Ratio	Lower	Upper
114	100		
63	27.7	21.8	32.6
88	18.9	15.5	23.3

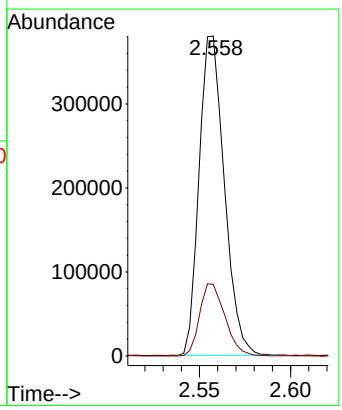


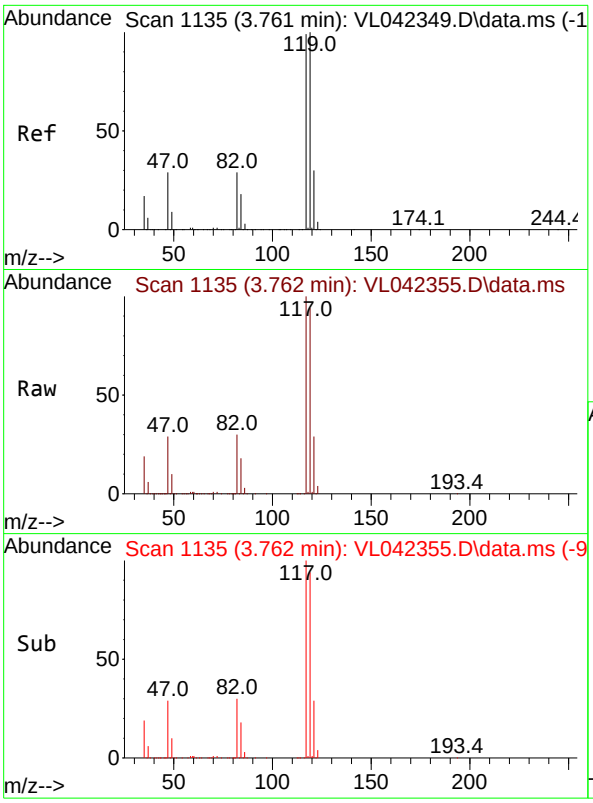


#34
2-Butanone
Concen: 13.986 ppbv
RT: 2.558 min Scan# 763
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 367315

Ion	Ratio	Lower	Upper
43	100		
72	22.7	18.2	27.2



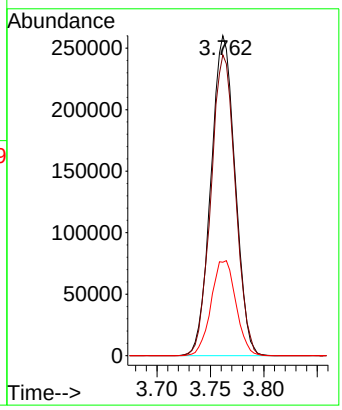


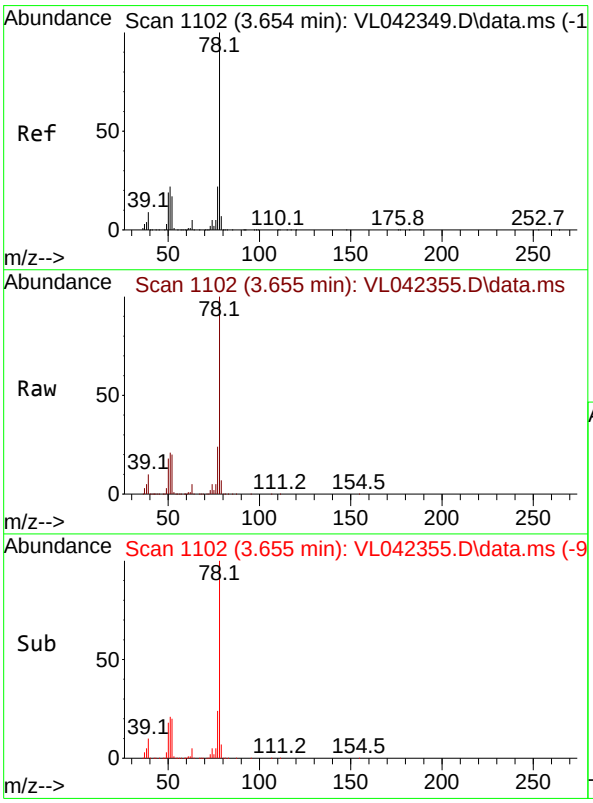
#35
Carbon Tetrachloride
Concen: 13.639 ppbv
RT: 3.762 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 409916

Ion	Ratio	Lower	Upper
117	100		
119	94.0	80.5	120.7
121	29.2	24.2	36.2

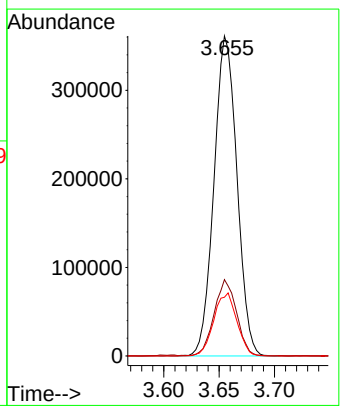


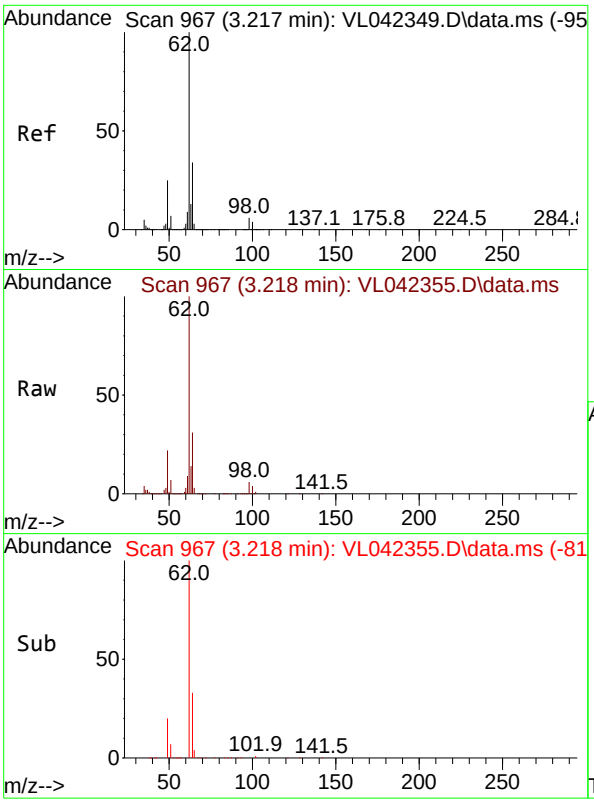


#36
Benzene
Concen: 14.578 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 78 Resp: 522156

Ion	Ratio	Lower	Upper
78	100		
77	23.8	17.4	26.0
50	18.3	15.5	23.3



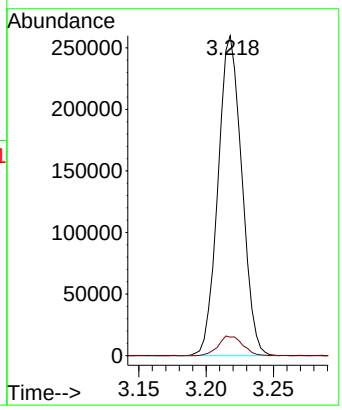


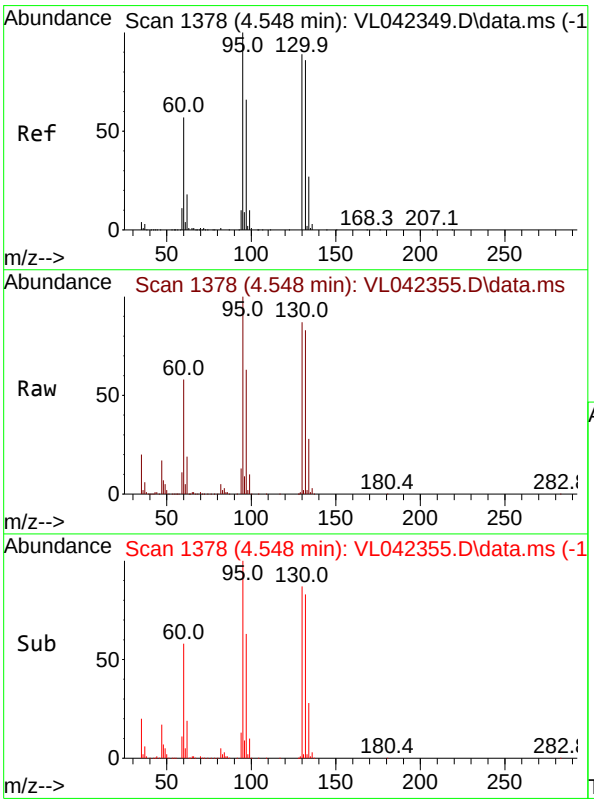
#37
1,2-Dichloroethane
Concen: 14.863 ppbv
RT: 3.218 min Scan# 9
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 62 Resp: 319517

Ion	Ratio	Lower	Upper
62	100		
98	6.3	5.1	7.7

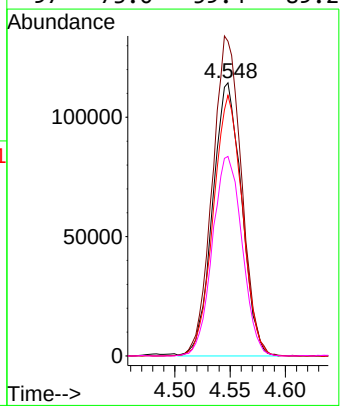


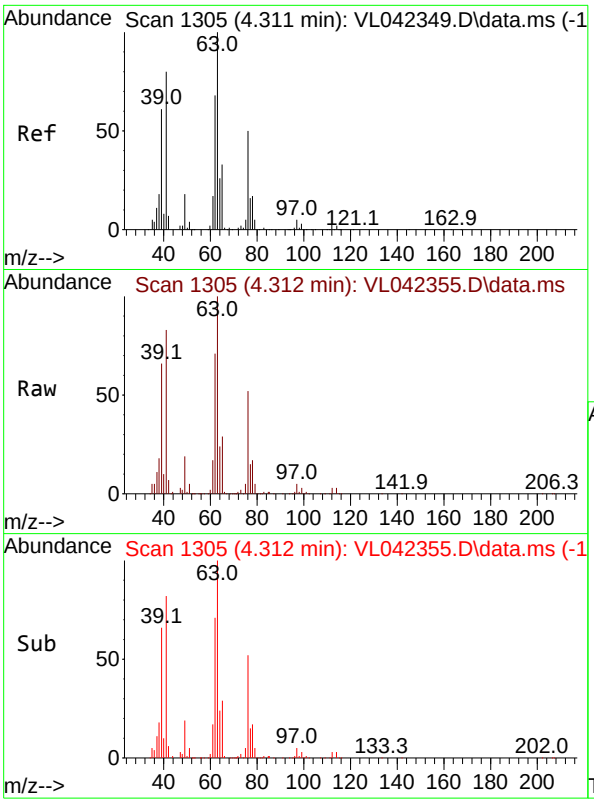


#38
Trichloroethene
Concen: 13.278 ppbv
RT: 4.548 min Scan# 1378
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:130 Resp: 208508

Ion	Ratio	Lower	Upper
130	100		
95	115.0	89.8	134.6
132	95.3	77.7	116.5
97	73.0	59.4	89.2



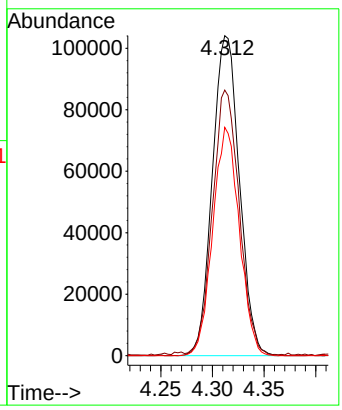


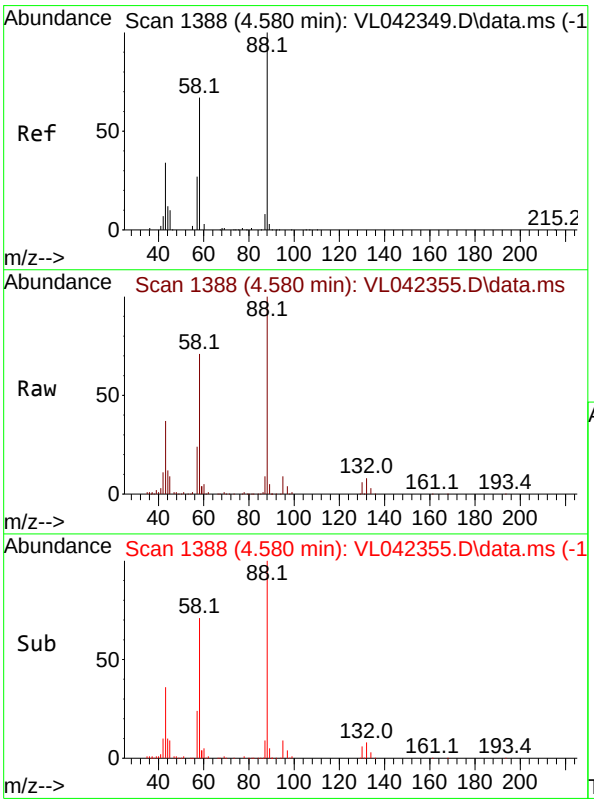
#39
1,2-Dichloropropane
Concen: 14.201 ppbv
RT: 4.312 min Scan# 1
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 63 Resp: 189697

Ion	Ratio	Lower	Upper
63	100		
41	82.7	64.2	96.2
62	71.4	54.3	81.5

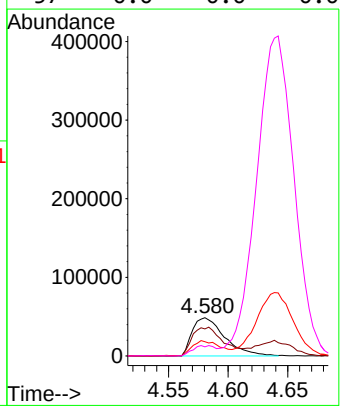


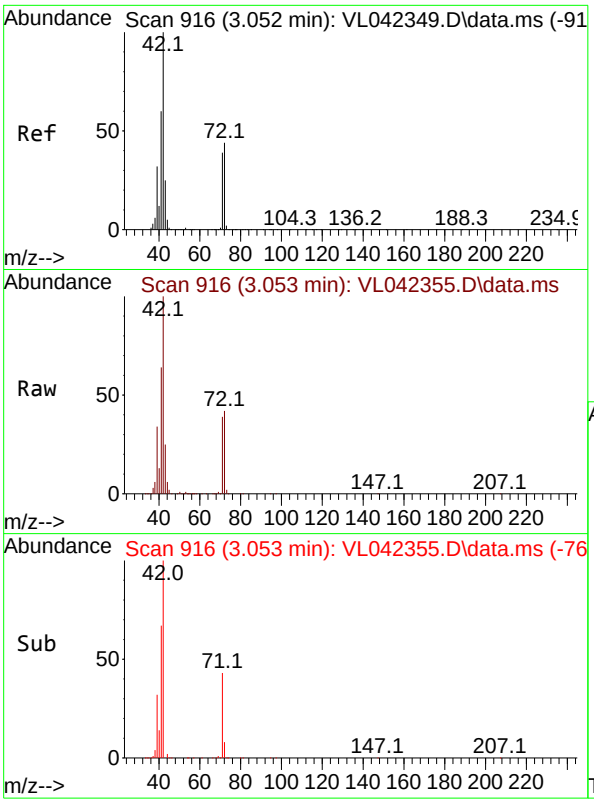


#40
1,4-Dioxane
Concen: 12.733 ppbv
RT: 4.580 min Scan# 1388
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 88 Resp: 92114

Ion	Ratio	Lower	Upper
88	100		
58	75.2	61.4	92.0
43	36.8	23.2	34.8#
57	0.0	0.0	0.0



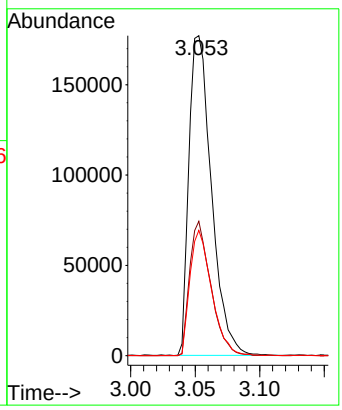


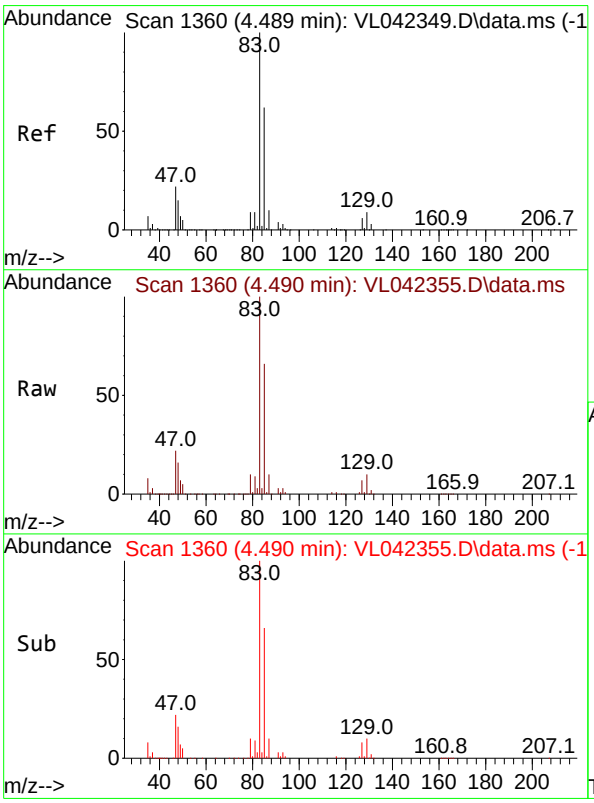
#41
Tetrahydrofuran
Concen: 14.166 ppbv
RT: 3.053 min Scan# 91
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 42 Resp: 214949

Ion	Ratio	Lower	Upper
42	100		
72	39.7	32.3	48.5
71	37.9	31.4	47.2

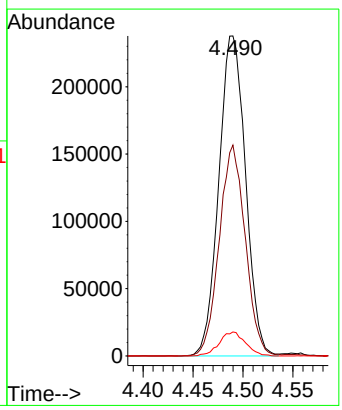


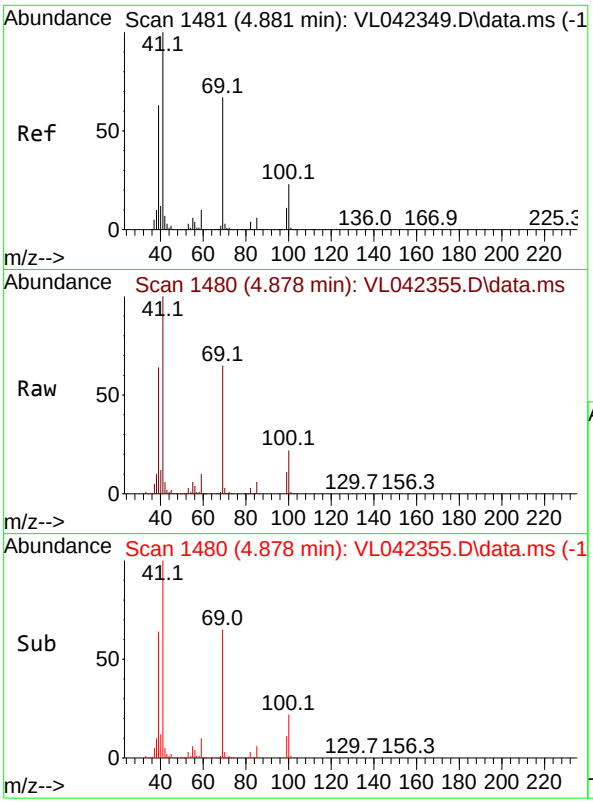


#42
Bromodichloromethane
Concen: 14.798 ppbv
RT: 4.490 min Scan# 1360
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 83 Resp: 442735

Ion	Ratio	Lower	Upper
83	100		
85	65.9	49.7	74.5
127	7.5	5.1	7.7



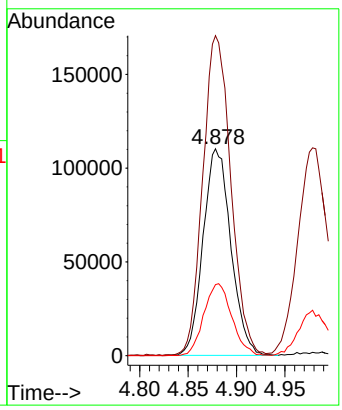


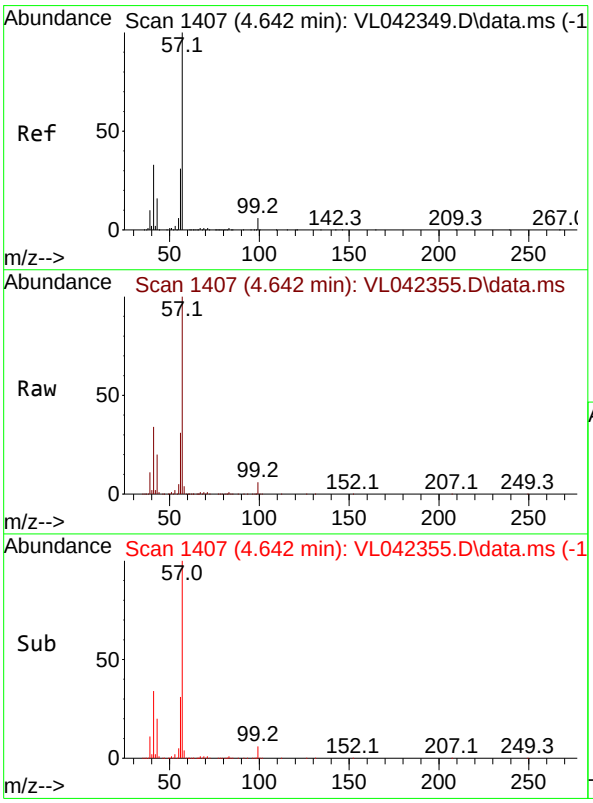
#43
Methyl Methacrylate
Concen: 13.670 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 69 Resp: 219757

Ion	Ratio	Lower	Upper
69	100		
41	156.6	118.6	177.8
100	35.2	28.2	42.2

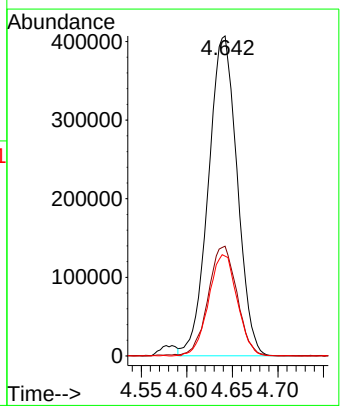


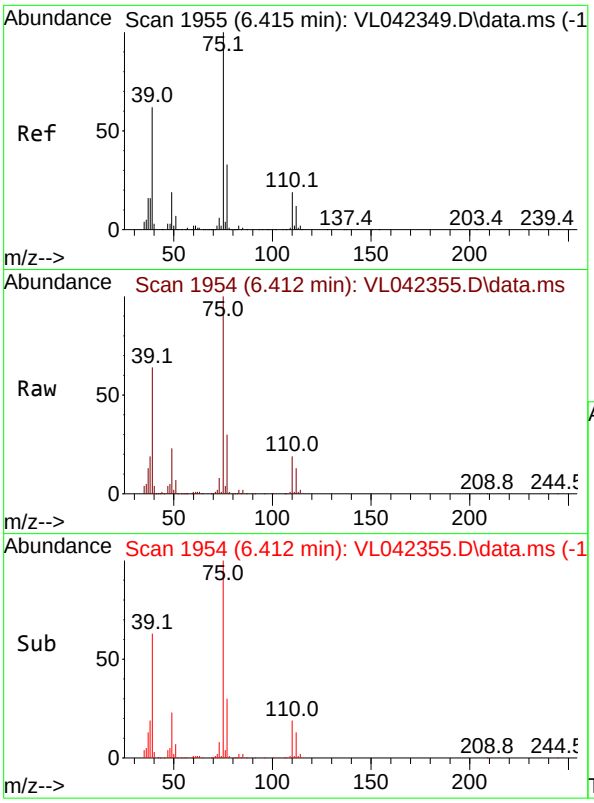


#44
2,2,4-Trimethylpentane
Concen: 14.425 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 57 Resp: 893529

Ion	Ratio	Lower	Upper
57	100		
41	34.4	27.2	40.8
56	31.6	25.7	38.5



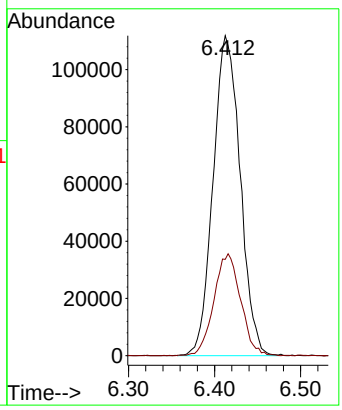


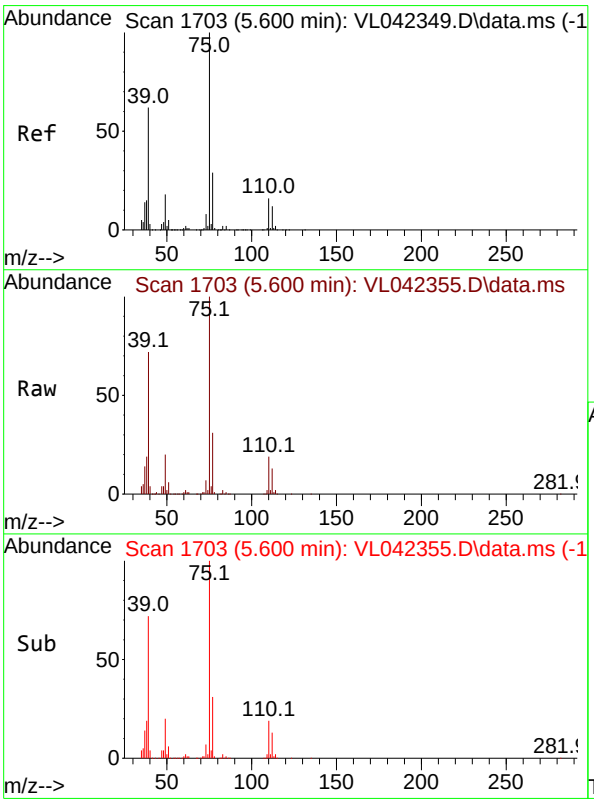
#45
t-1,3-Dichloropropene
Concen: 14.810 ppbv
RT: 6.412 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 75 Resp: 244470

Ion	Ratio	Lower	Upper
75	100		
77	30.1	27.0	40.6

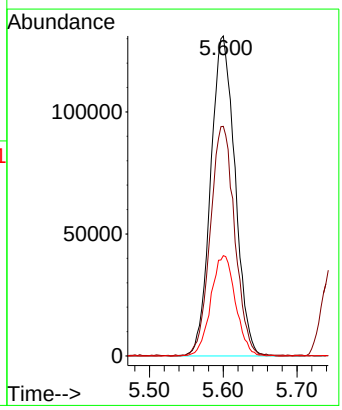


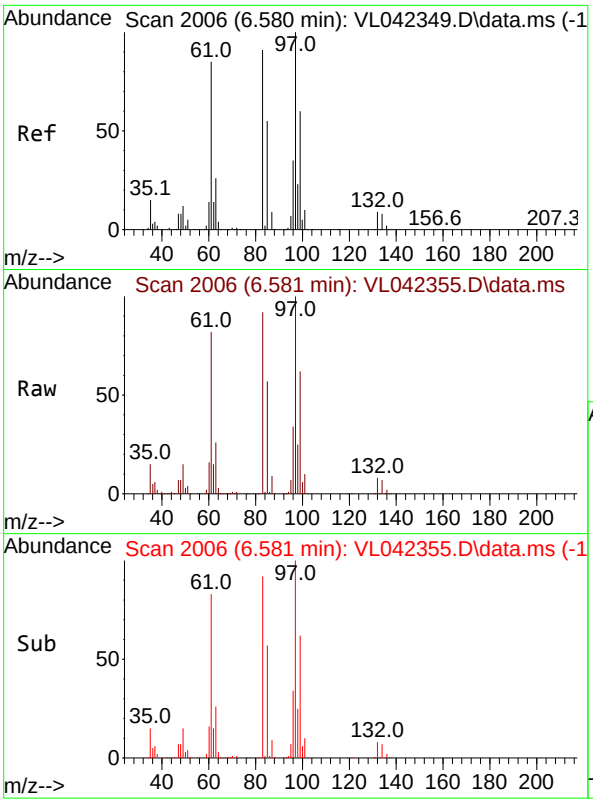


#46
cis-1,3-Dichloropropene
Concen: 14.878 ppbv
RT: 5.600 min Scan# 1703
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 75 Resp: 300145

Ion	Ratio	Lower	Upper
75	100		
39	71.6	50.0	75.0
77	31.3	23.0	34.6



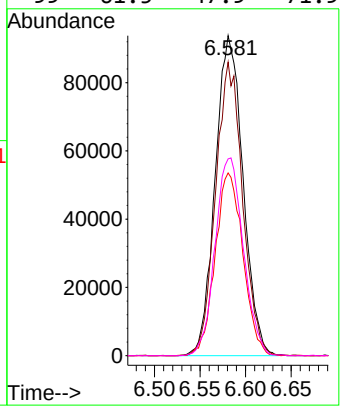


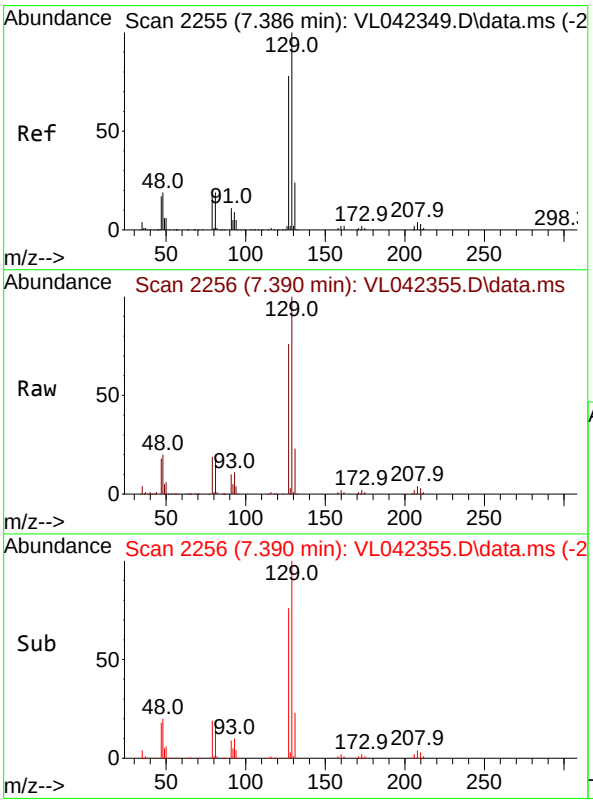
#47
1,1,2-Trichloroethane
Concen: 14.615 ppbv
RT: 6.581 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 97 Resp: 198874

Ion	Ratio	Lower	Upper
97	100		
83	91.7	72.8	109.2
85	57.0	44.2	66.4
99	61.5	47.9	71.9

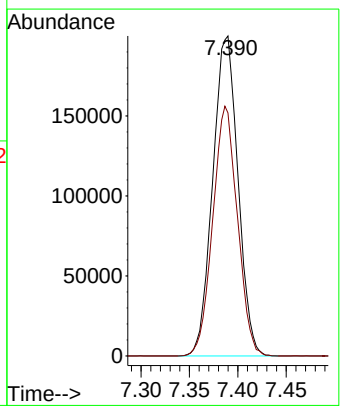


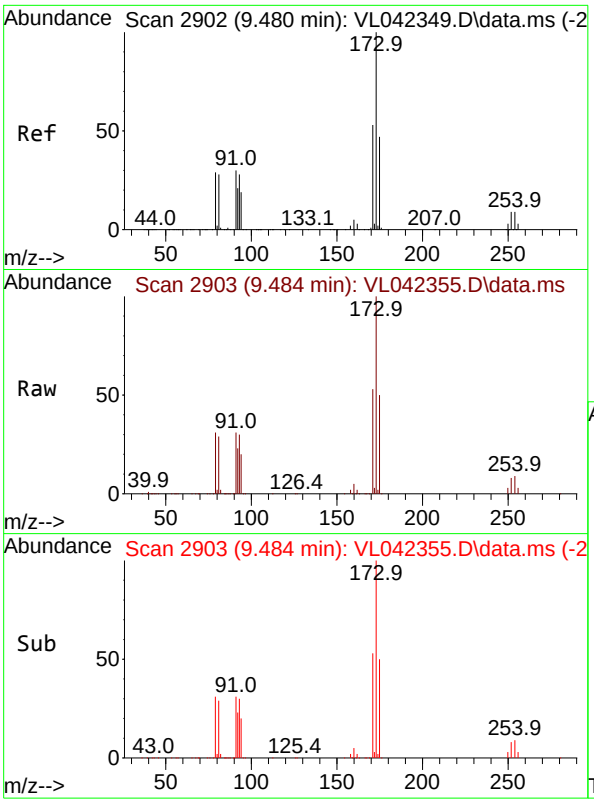


#48
Dibromochloromethane
Concen: 15.105 ppbv
RT: 7.390 min Scan# 2256
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:129 Resp: 362887

Ion	Ratio	Lower	Upper
129	100		
127	76.3	39.1	117.3



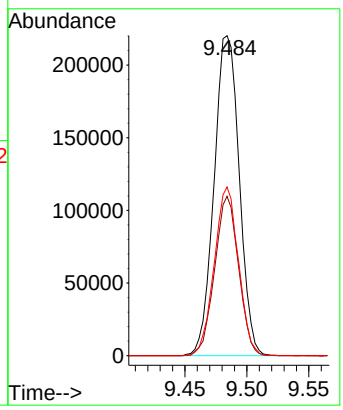


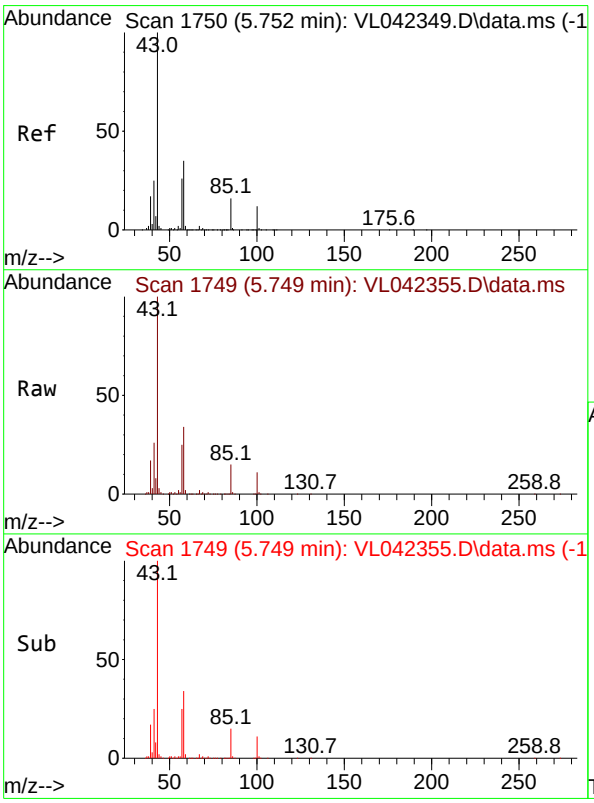
#49
Bromoform
Concen: 14.865 ppbv
RT: 9.484 min Scan# 2
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:173 Resp: 312282

Ion	Ratio	Lower	Upper
173	100		
175	47.3	38.2	57.2
171	50.6	40.9	61.3

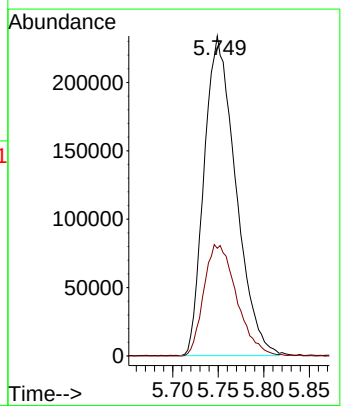


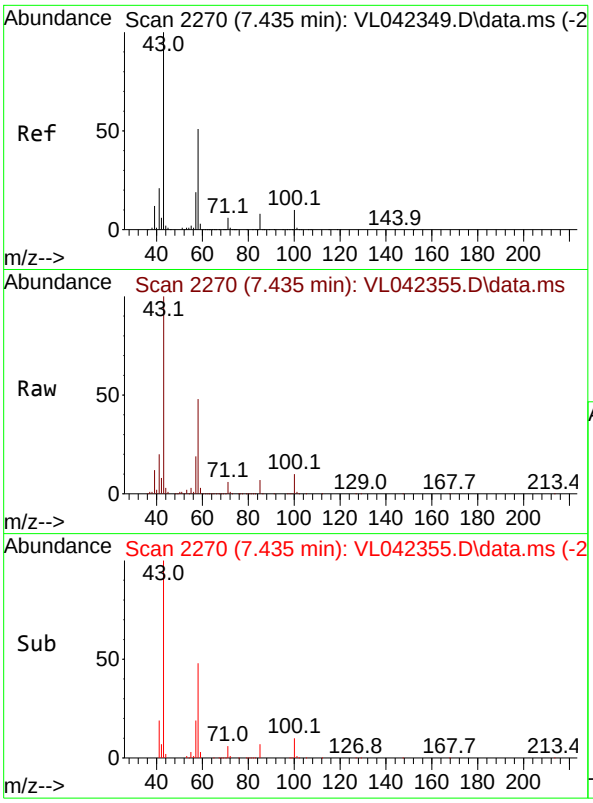


#50
4-Methyl-2-Pentanone
Concen: 12.889 ppbv
RT: 5.749 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 43 Resp: 563658

Ion	Ratio	Lower	Upper
43	100		
58	36.3	28.6	43.0



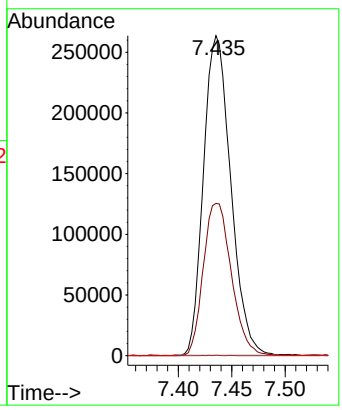


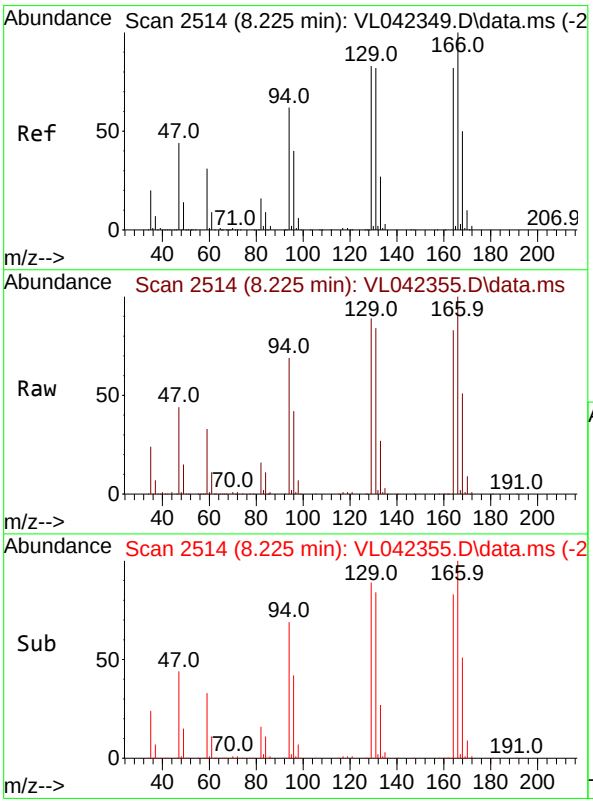
#51
2-Hexanone
Concen: 11.834 ppbv
RT: 7.435 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 43 Resp: 467001

Ion	Ratio	Lower	Upper
43	100		
58	49.2	40.2	60.4
98	0.0	0.1	0.1#

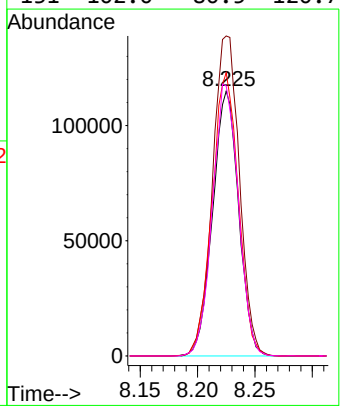


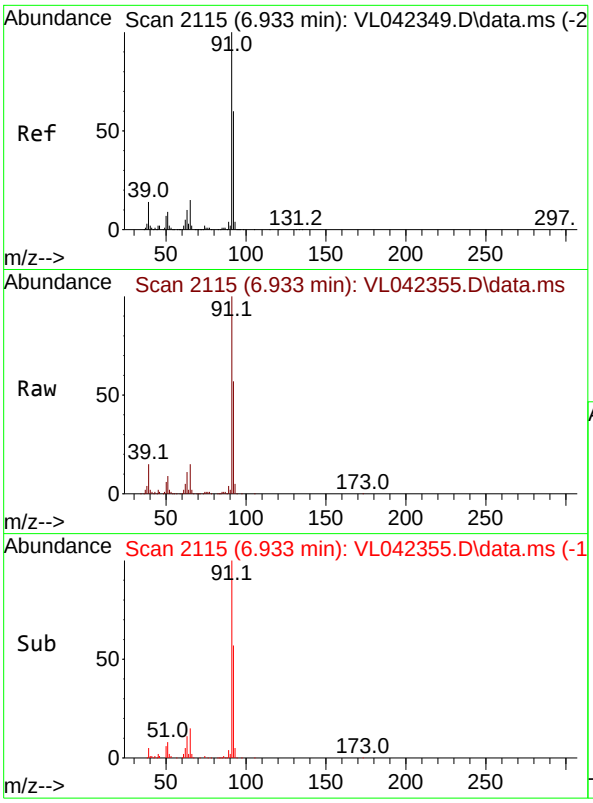


#52
Tetrachloroethene
Concen: 13.046 ppbv
RT: 8.225 min Scan# 2514
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:164 Resp: 180631

Ion	Ratio	Lower	Upper
164	100		
166	120.8	98.2	147.2
129	107.0	81.8	122.8
131	102.0	80.5	120.7



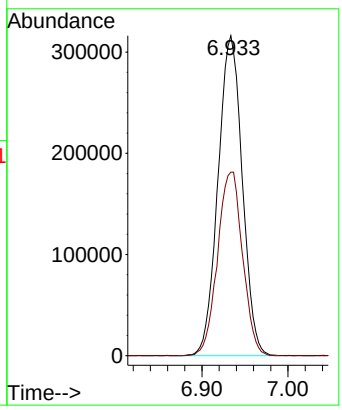


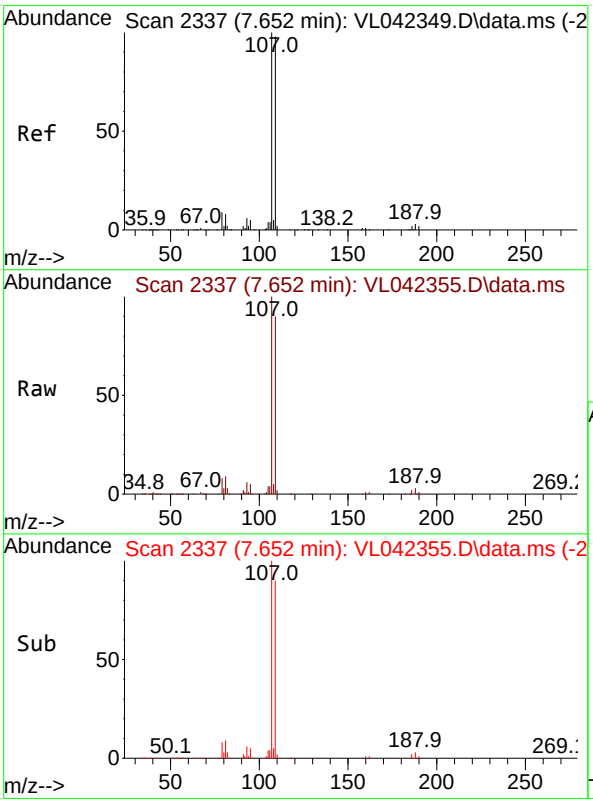
#53
Toluene
Concen: 14.411 ppbv
RT: 6.933 min Scan# 21
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 619420

Ion	Ratio	Lower	Upper
91	100		
92	59.3	48.2	72.4

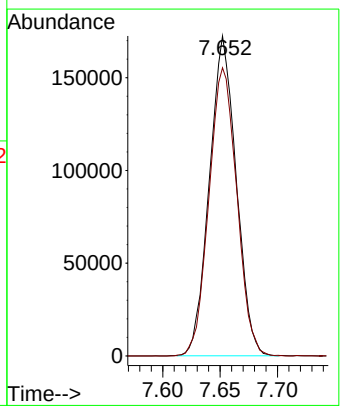


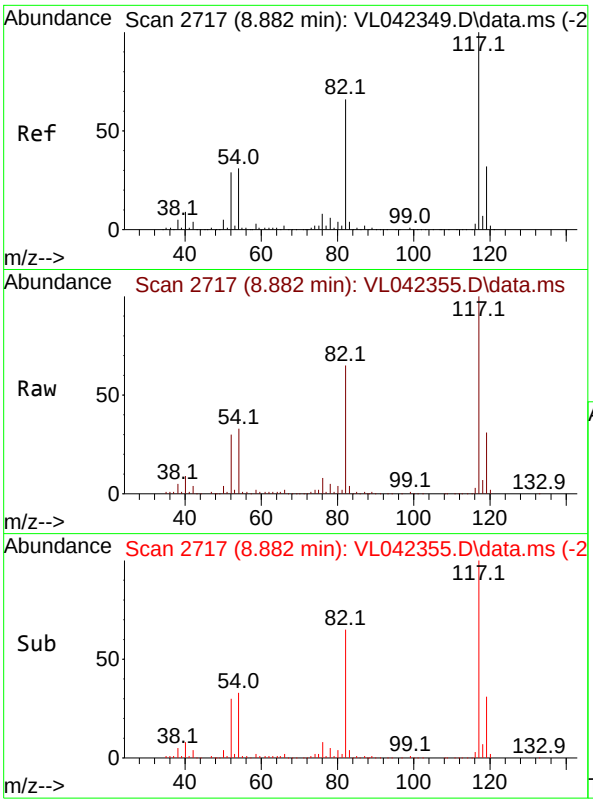


#54
1,2-Dibromoethane
Concen: 14.442 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:107 Resp: 280071

Ion	Ratio	Lower	Upper
107	100		
109	89.9	78.2	117.4



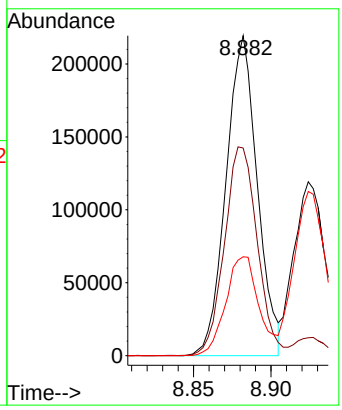


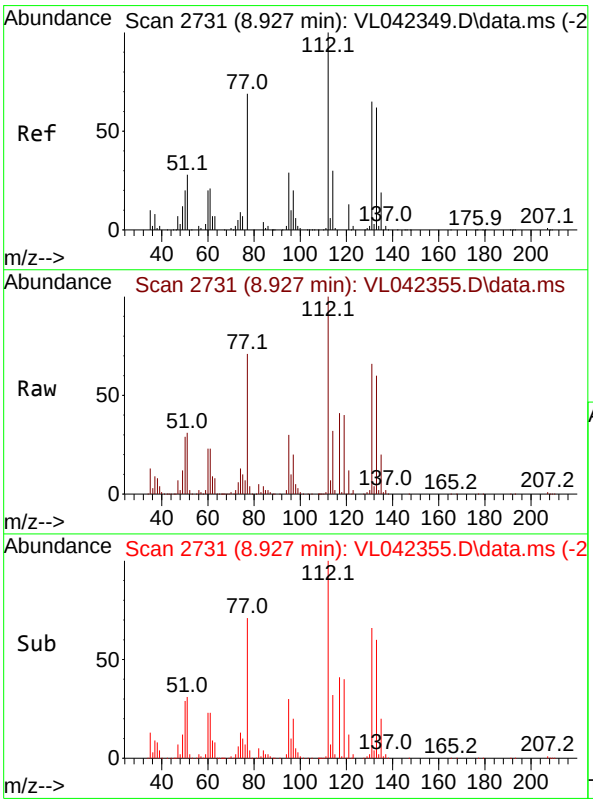
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:117 Resp: 308463

Ion	Ratio	Lower	Upper
117	100		
82	74.2	57.8	86.6
119	31.4	25.2	37.8

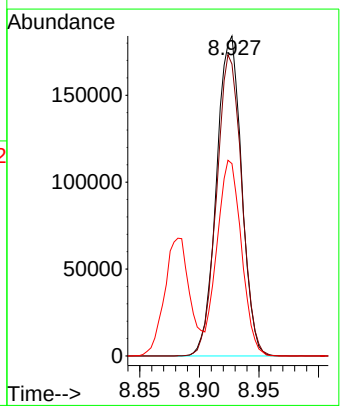


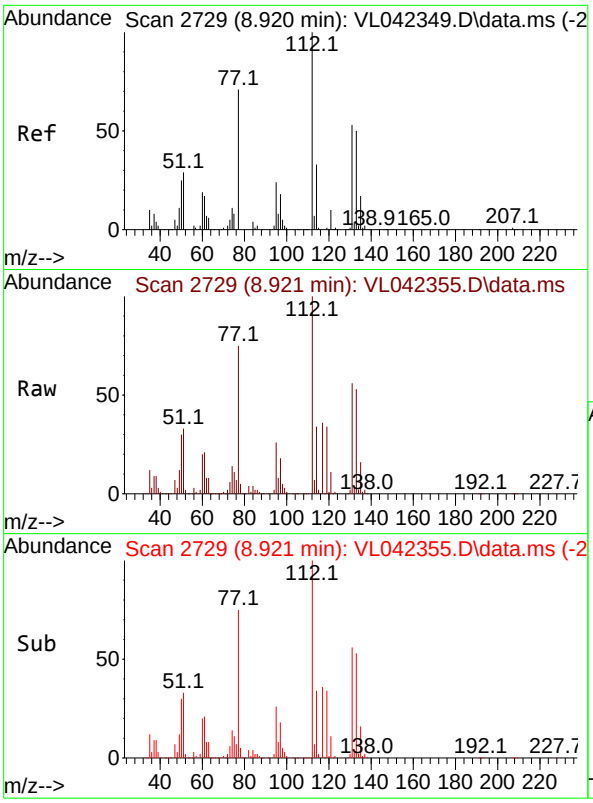


#56
1,1,1,2-Tetrachloroethane
Concen: 14.389 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:131 Resp: 268626

Ion	Ratio	Lower	Upper
131	100		
133	94.6	78.3	117.5
119	59.4	48.7	73.1



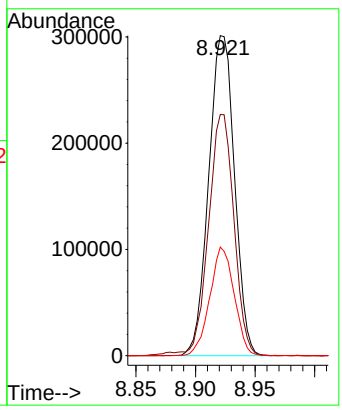


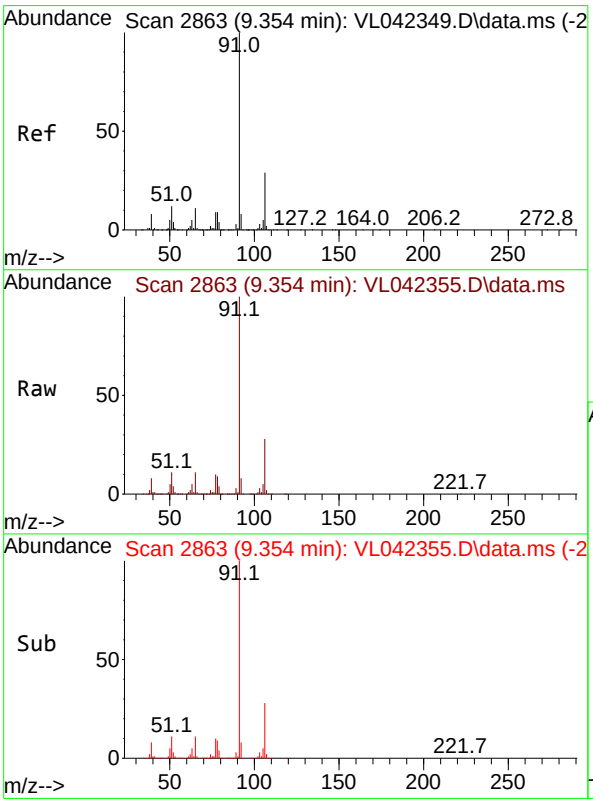
#57
Chlorobenzene
Concen: 14.151 ppbv
RT: 8.921 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:112 Resp: 454017

Ion	Ratio	Lower	Upper
112	100		
77	75.3	57.8	86.6
114	33.9	29.3	35.9

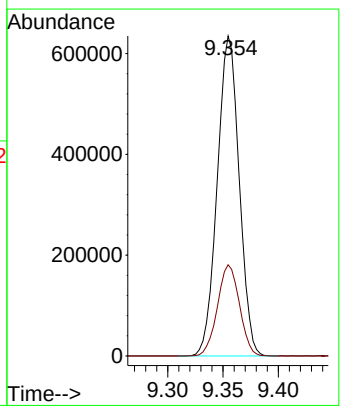


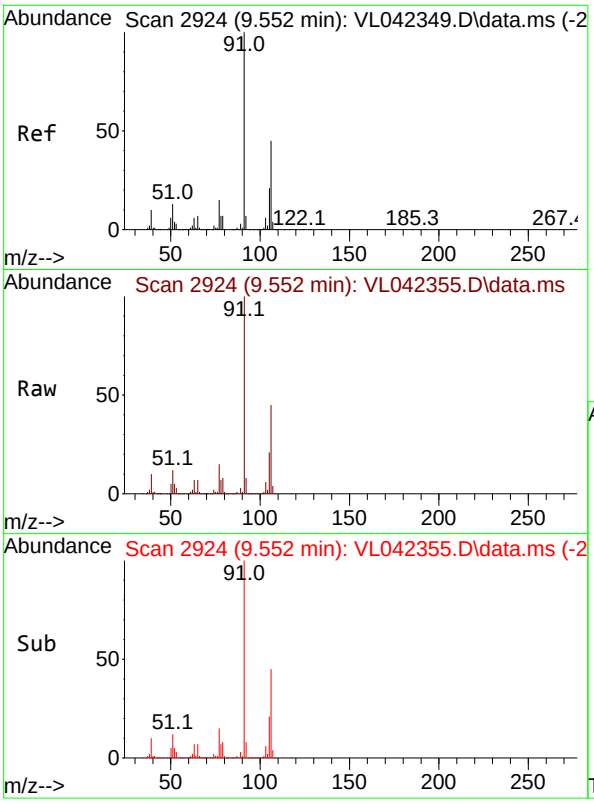


#58
Ethyl Benzene
Concen: 14.308 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 874424

Ion	Ratio	Lower	Upper
91	100		
106	28.5	23.0	34.4



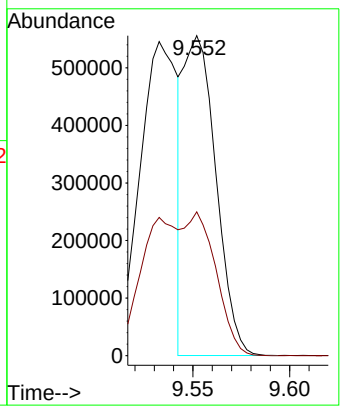


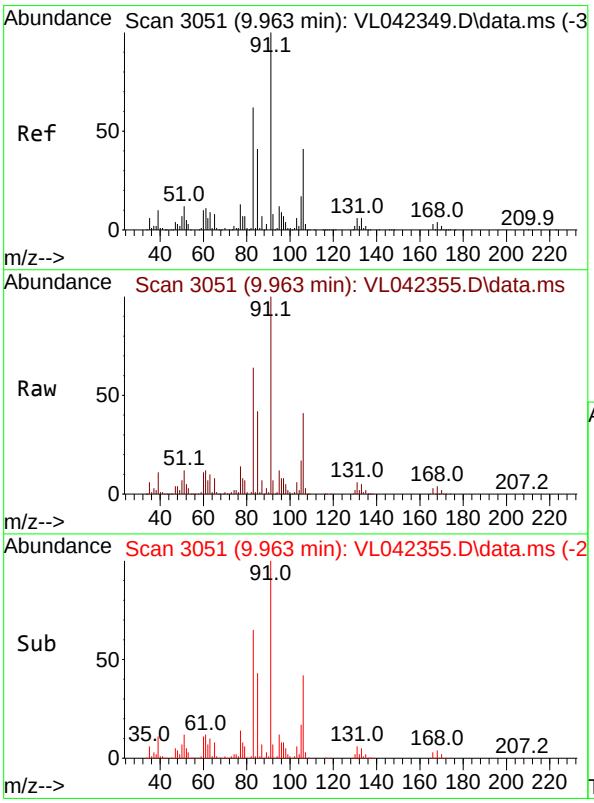
#59
m/p-Xylene
Concen: 13.067 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 645250

Ion	Ratio	Lower	Upper
91	100		
106	95.8	35.4	53.2#

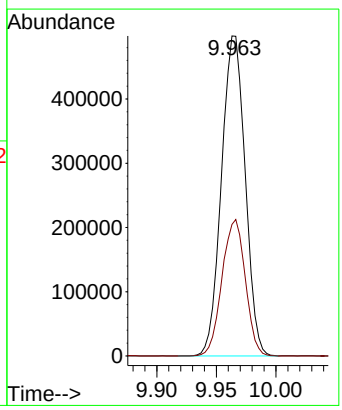


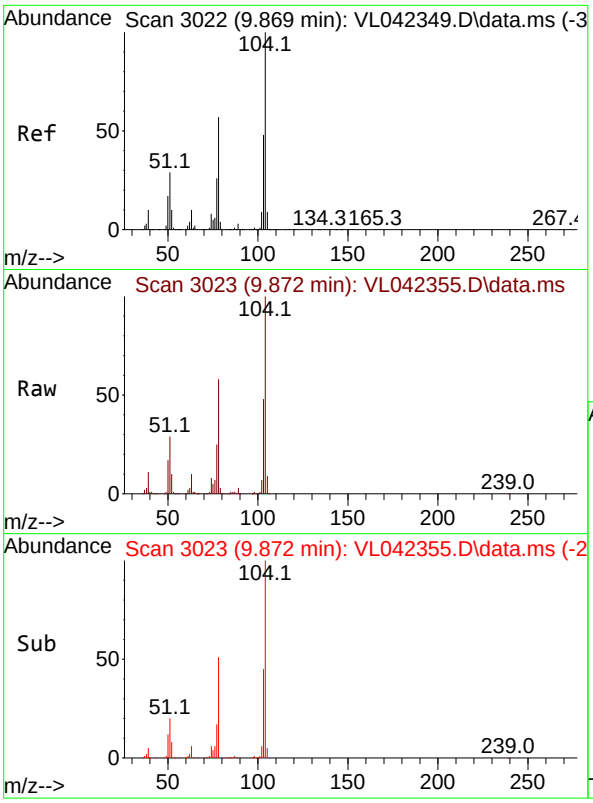


#60
o-Xylene
Concen: 13.902 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 689246

Ion	Ratio	Lower	Upper
91	100		
106	41.9	21.1	63.4



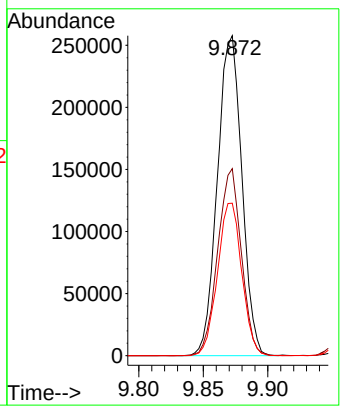


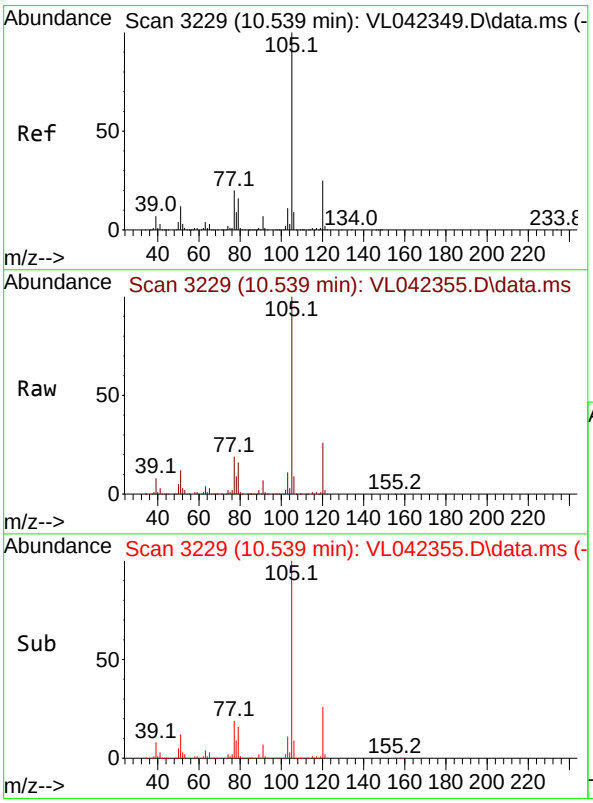
#61
Styrene
Concen: 14.347 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:104 Resp: 339508

Ion	Ratio	Lower	Upper
104	100		
78	56.4	44.6	66.8
103	47.3	37.4	56.0

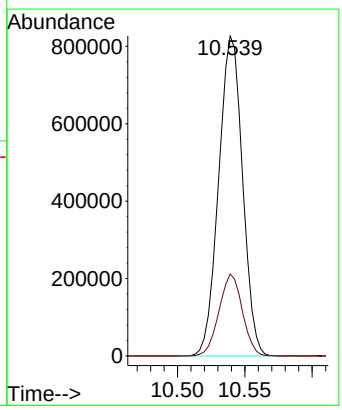


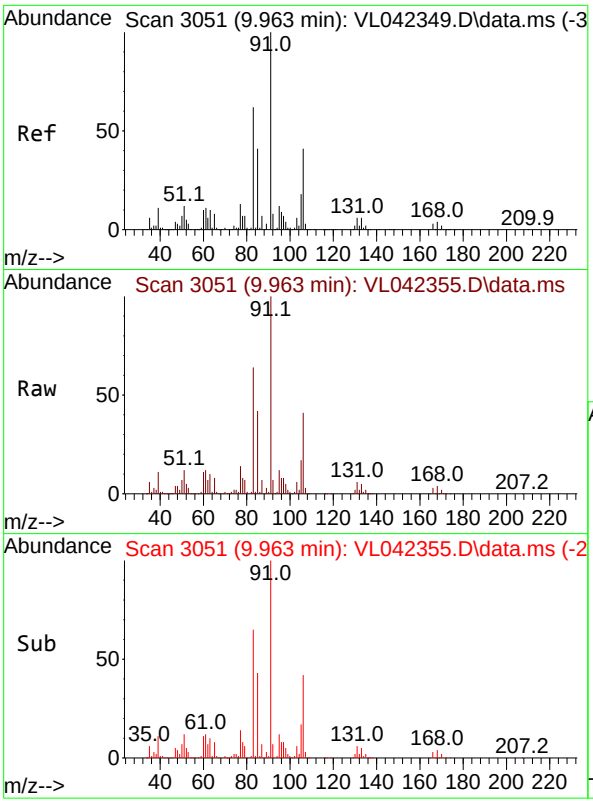


#62
Isopropylbenzene
Concen: 13.999 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 1018968

Ion	Ratio	Lower	Upper
105	100		
120	25.0	19.8	29.8



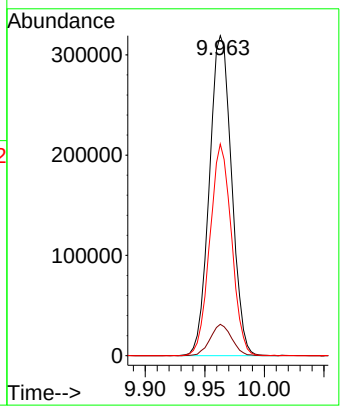


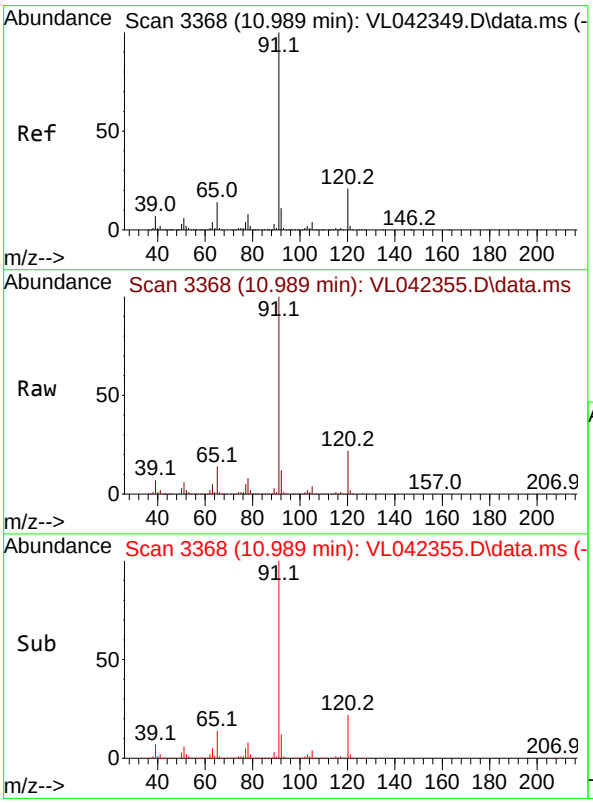
#63
1,1,2,2-Tetrachloroethane
Concen: 12.816 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 83 Resp: 412898

Ion	Ratio	Lower	Upper
83	100		
131	9.5	4.5	13.7
85	64.5	32.4	97.0

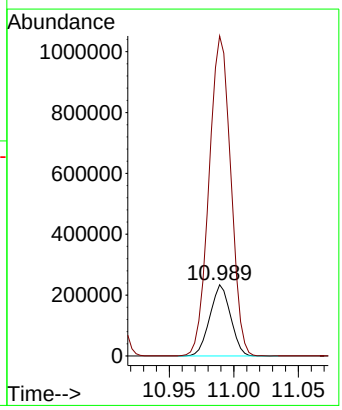


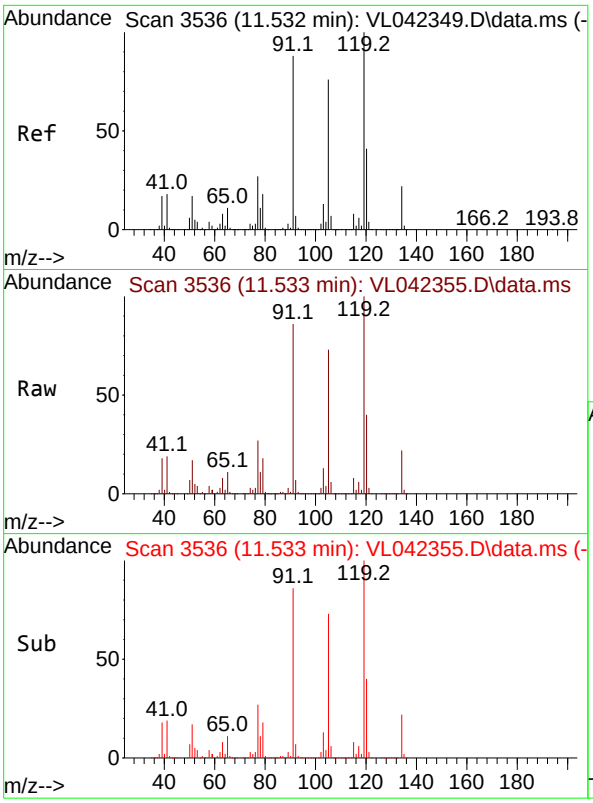


#64
n-propylbenzene
Concen: 14.255 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:120 Resp: 260812

Ion	Ratio	Lower	Upper
120	100		
91	473.2	392.4	588.6



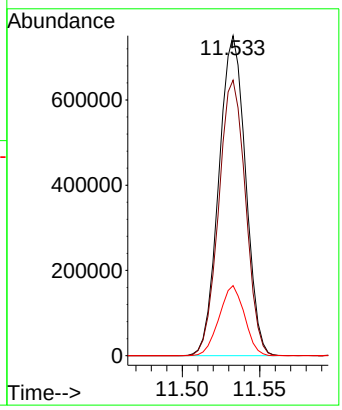


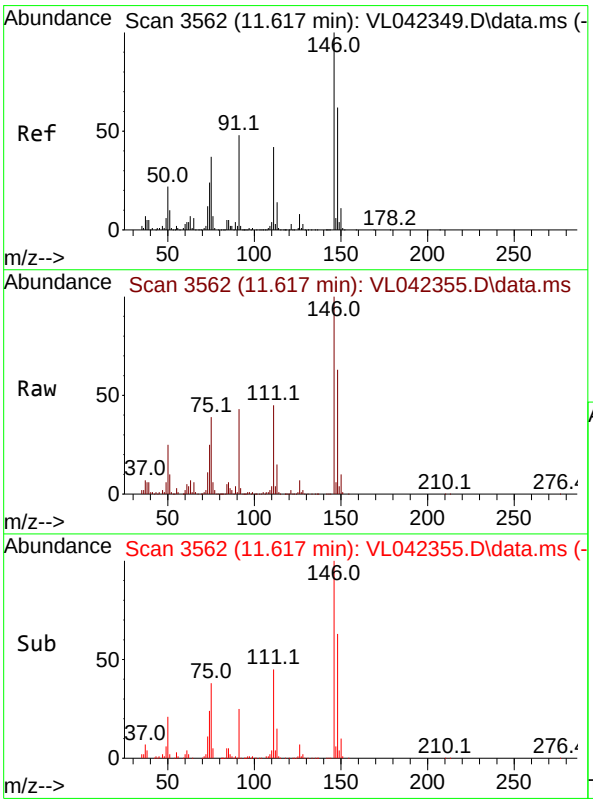
#65
tert-Butylbenzene
Concen: 13.449 ppbv
RT: 11.533 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 899720

Ion	Ratio	Lower	Upper
119	100		
91	86.2	74.6	111.8
134	20.8	18.8	28.2

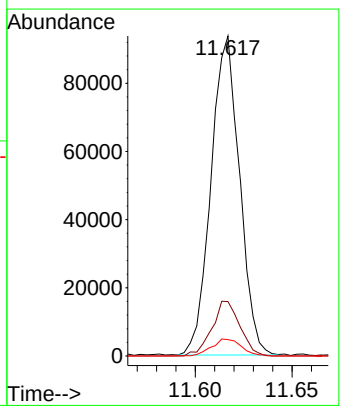


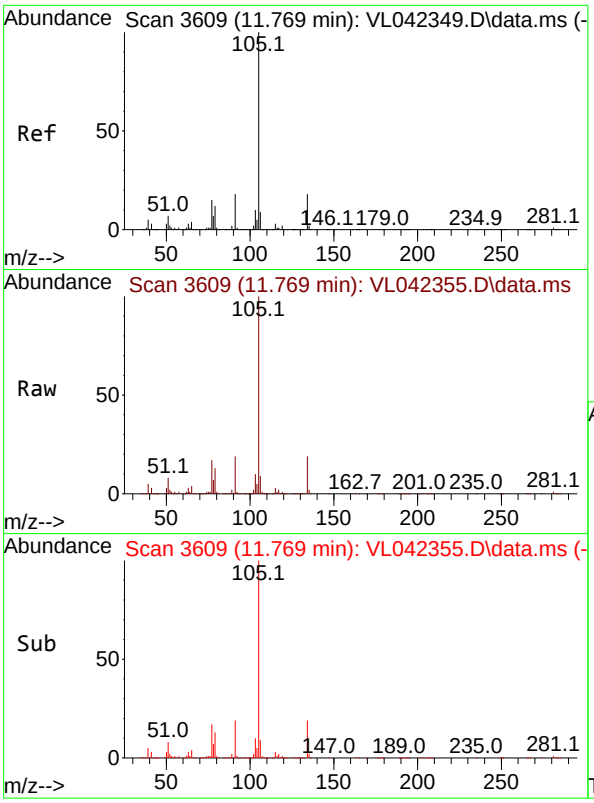


#66
Benzyl Chloride
Concen: 13.061 ppbv
RT: 11.617 min Scan# 3562
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 96016

Ion	Ratio	Lower	Upper
91	100		
126	16.8	11.8	17.6
128	5.5	4.5	6.7



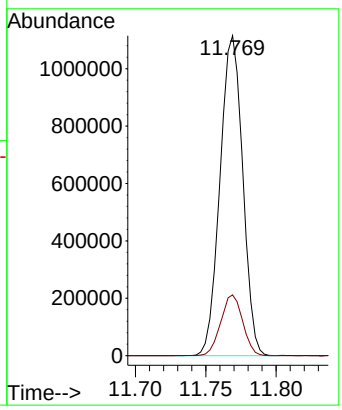


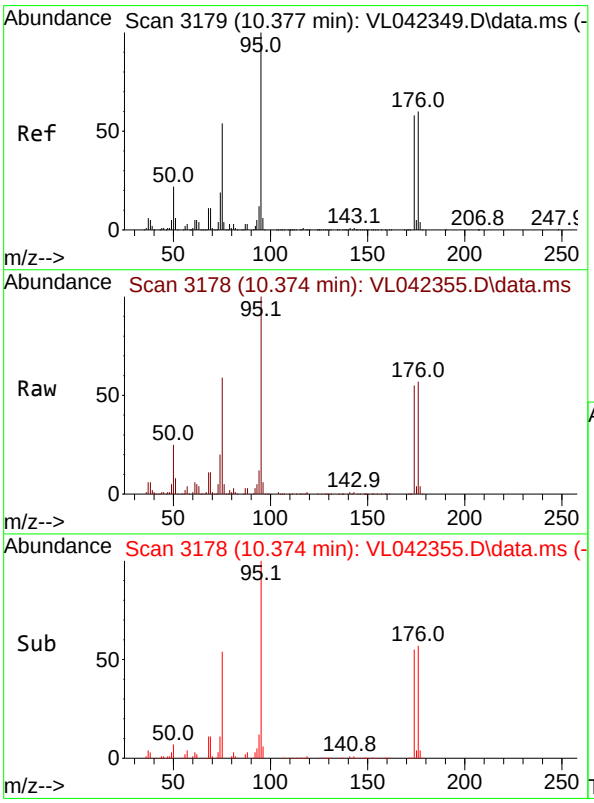
#67
sec-Butylbenzene
Concen: 13.468 ppbv
RT: 11.769 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 1253263

Ion	Ratio	Lower	Upper
105	100		
134	18.4	14.6	21.8

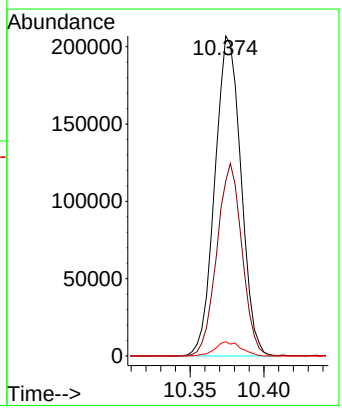


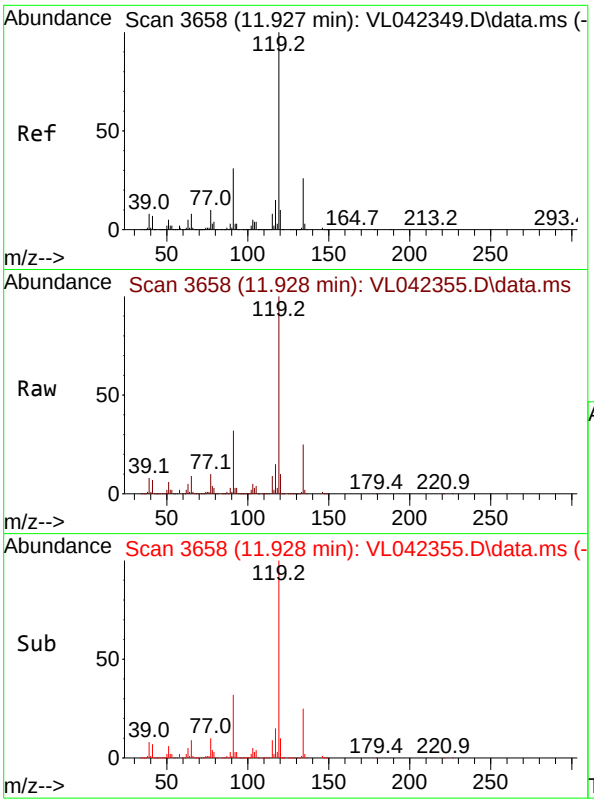


#68
1-Bromo-4-Fluorobenzene
Concen: 10.038 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 95 Resp: 254437

Ion	Ratio	Lower	Upper
95	100		
174	58.1	48.5	72.7
175	4.4	3.7	5.5



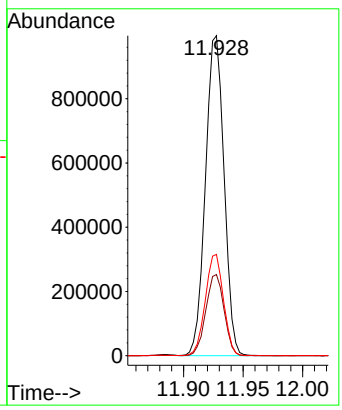


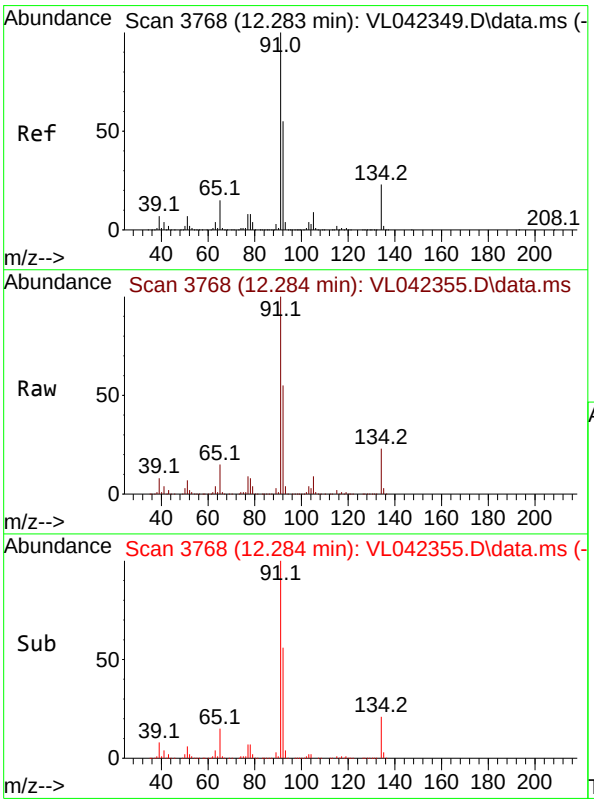
#69
p-Isopropyltoluene
Concen: 13.382 ppbv
RT: 11.928 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:119 Resp: 1081850

Ion	Ratio	Lower	Upper
119	100		
134	25.0	20.0	30.0
91	31.1	24.4	36.6

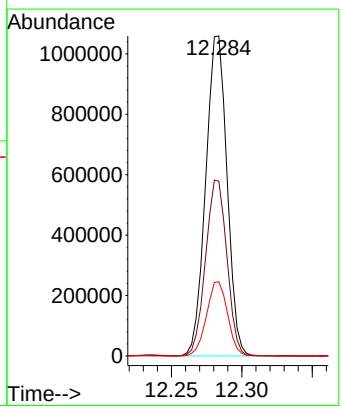


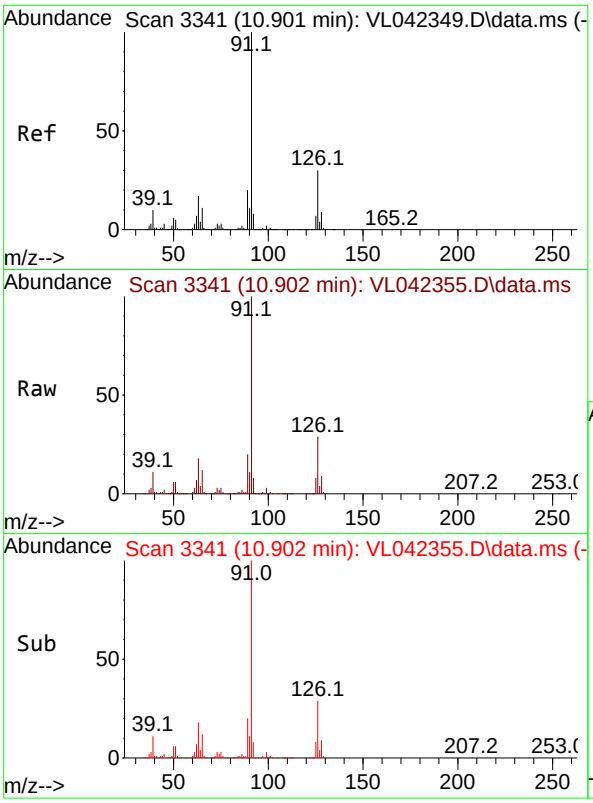


#70
n-Butylbenzene
Concen: 13.266 ppbv
RT: 12.284 min Scan# 3768
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion: 91 Resp: 1117042

Ion	Ratio	Lower	Upper
91	100		
92	55.3	44.2	66.4
134	23.0	18.2	27.4



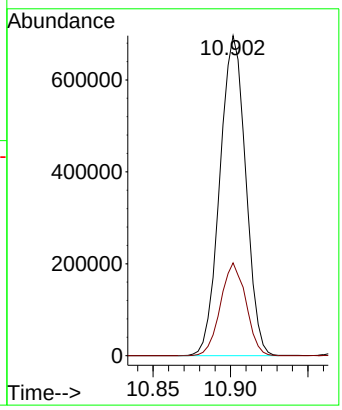


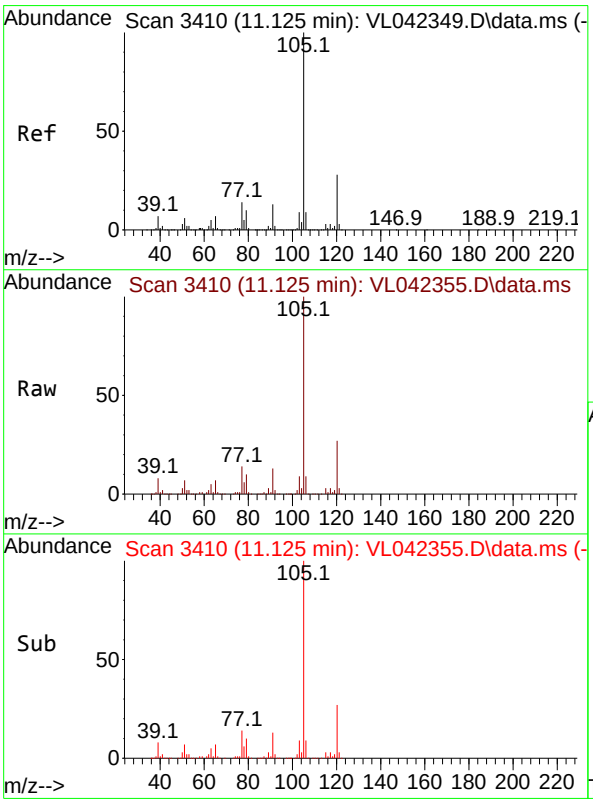
#71
2-Chlorotoluene
Concen: 14.131 ppbv
RT: 10.902 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion: 91 Resp: 806728

Ion	Ratio	Lower	Upper
91	100		
126	28.4	11.4	45.4

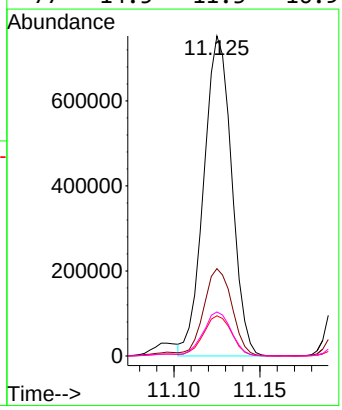


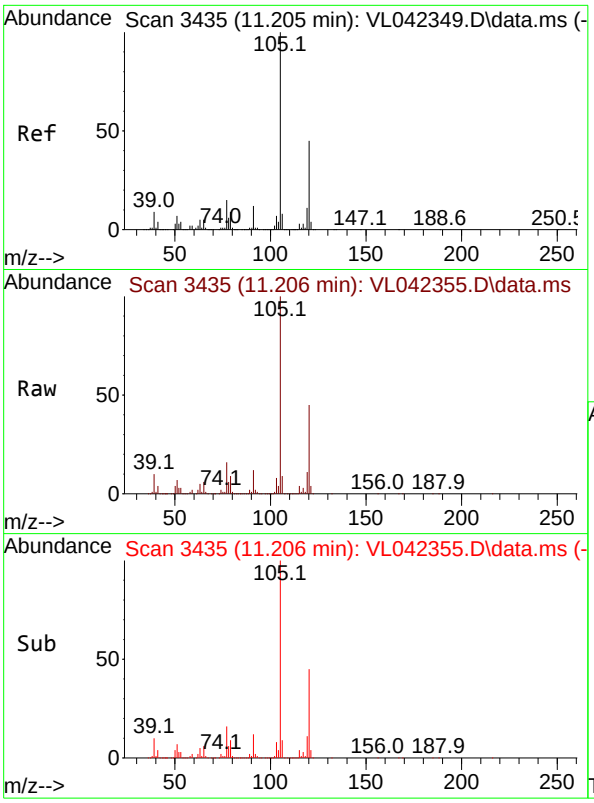


#72
4-Ethyltoluene
Concen: 13.992 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 848077

Ion	Ratio	Lower	Upper
105	100		
120	28.7	23.2	34.8
91	13.5	10.4	15.6
77	14.5	11.3	16.9



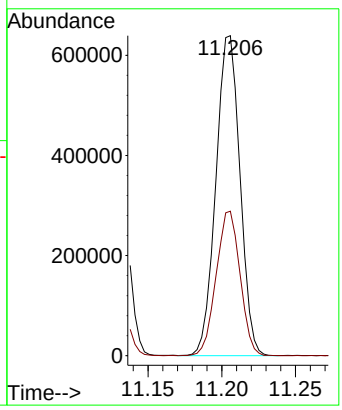


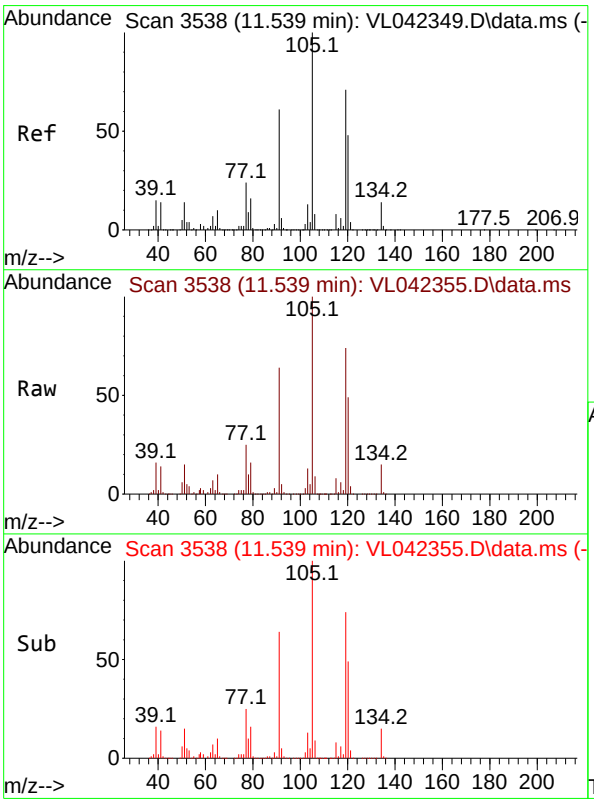
#73
1,3,5-Trimethylbenzene
Concen: 13.578 ppbv
RT: 11.206 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:105 Resp: 726558

Ion	Ratio	Lower	Upper
105	100		
120	45.1	35.6	53.4

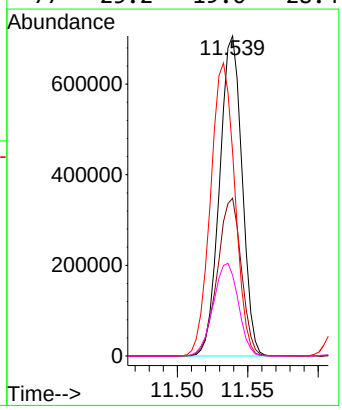


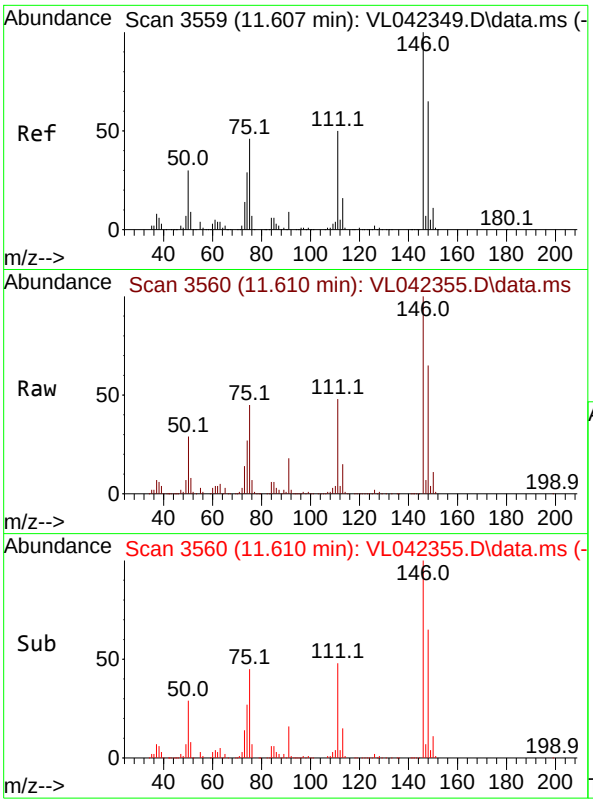


#74
1,2,4-Trimethylbenzene
Concen: 12.572 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:105 Resp: 785772

Ion	Ratio	Lower	Upper
105	100		
120	49.3	38.1	57.1
91	63.7	48.8	73.2
77	25.2	19.0	28.4



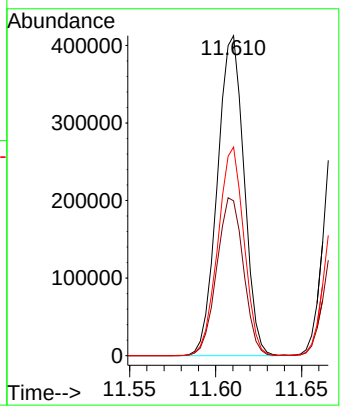


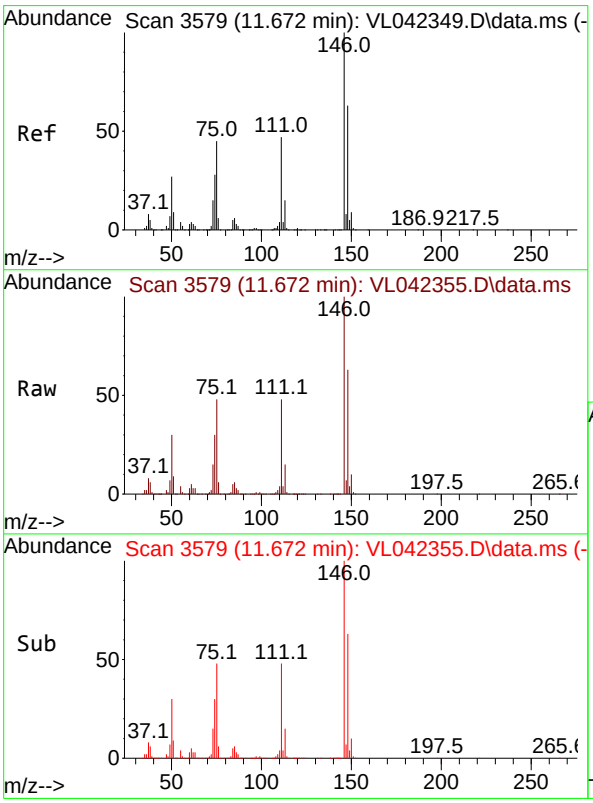
#75
1,3-Dichlorobenzene
Concen: 13.670 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 444086

Ion	Ratio	Lower	Upper
146	100		
111	49.6	24.3	72.8
148	63.9	31.6	94.8

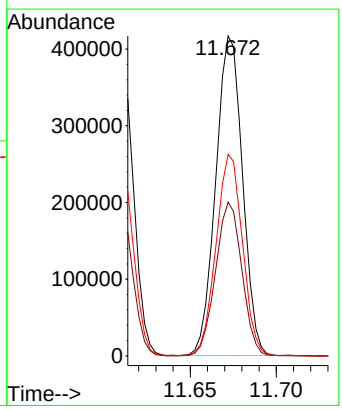


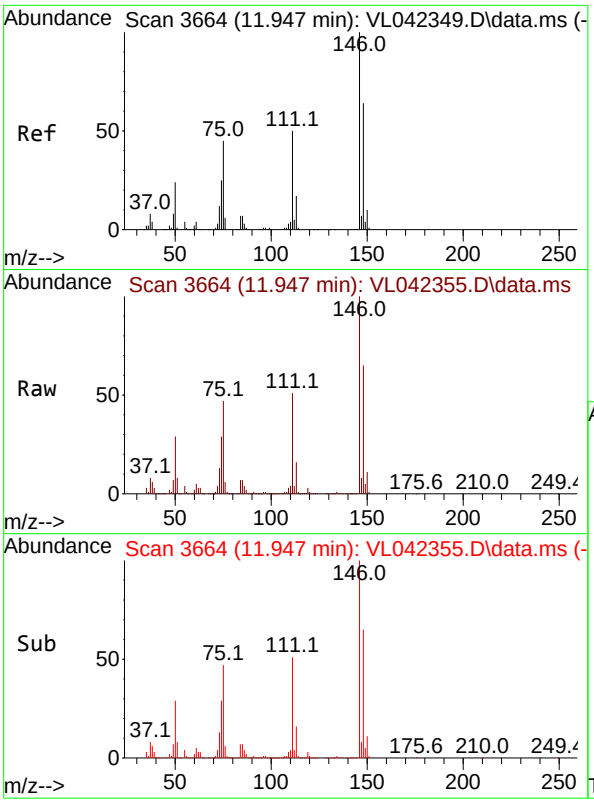


#76
1,4-Dichlorobenzene
Concen: 13.802 ppbv
RT: 11.672 min Scan# 3579
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:146 Resp: 450662

Ion	Ratio	Lower	Upper
146	100		
111	47.4	24.2	72.6
148	62.6	32.1	96.5



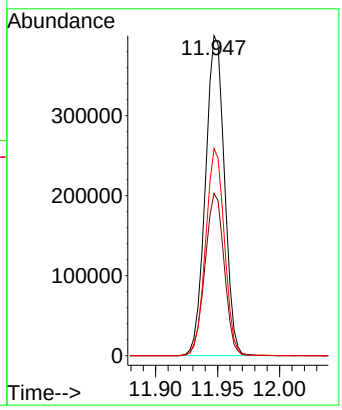


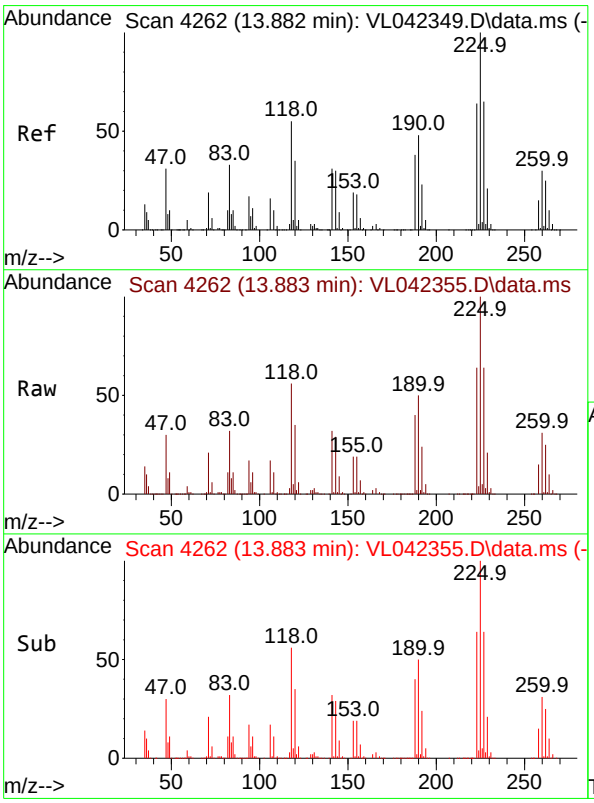
#77
1,2-Dichlorobenzene
Concen: 13.529 ppbv
RT: 11.947 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:146 Resp: 427372

Ion	Ratio	Lower	Upper
146	100		
111	51.3	25.3	75.9
148	63.8	31.5	94.5

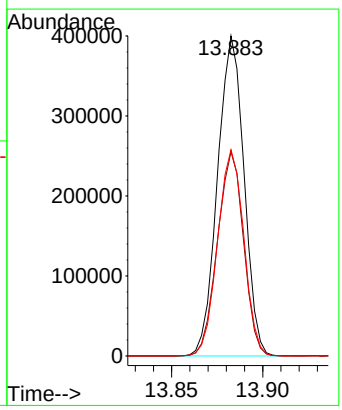


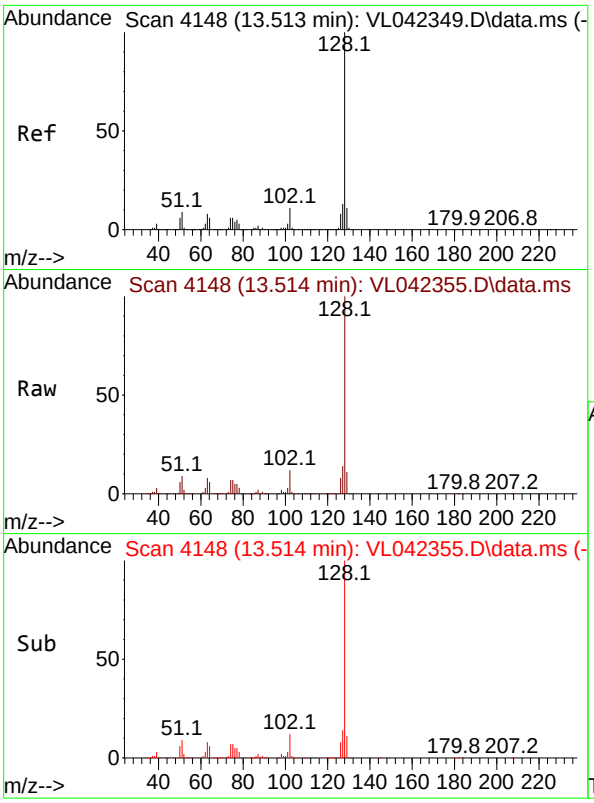


#78
Hexachloro-1,3-Butadiene
Concen: 12.679 ppbv
RT: 13.883 min Scan# 4262
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:225 Resp: 404441

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	63.8	51.5	77.3



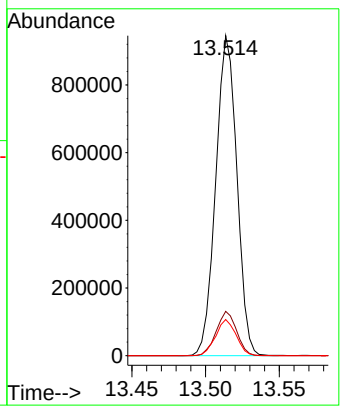


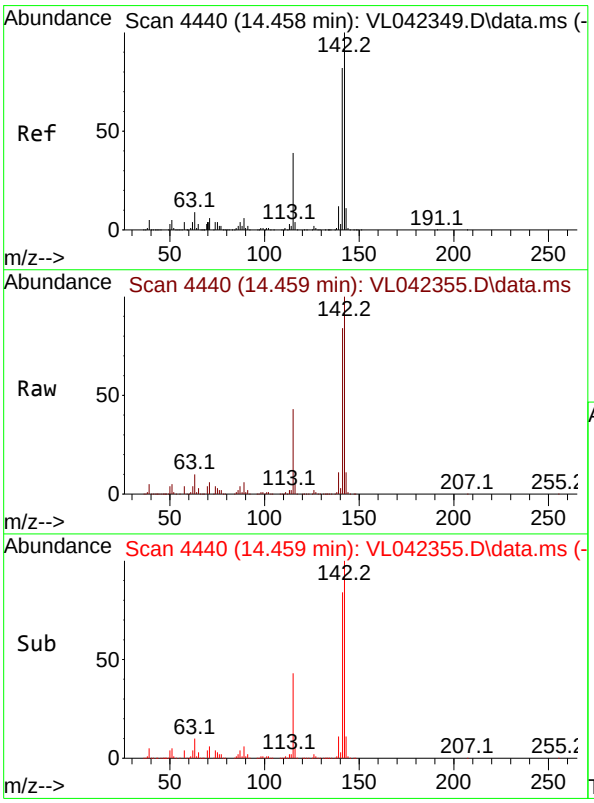
#79
Naphthalene
Concen: 12.632 ppbv
RT: 13.514 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:128 Resp: 944085

Ion	Ratio	Lower	Upper
128	100		
127	13.9	10.6	15.8
129	11.3	8.6	12.8

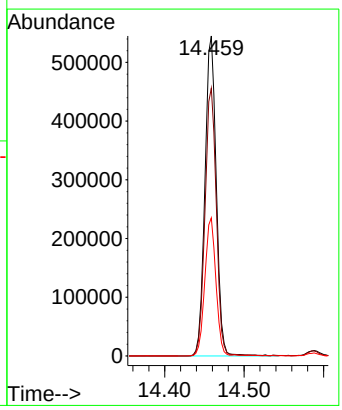


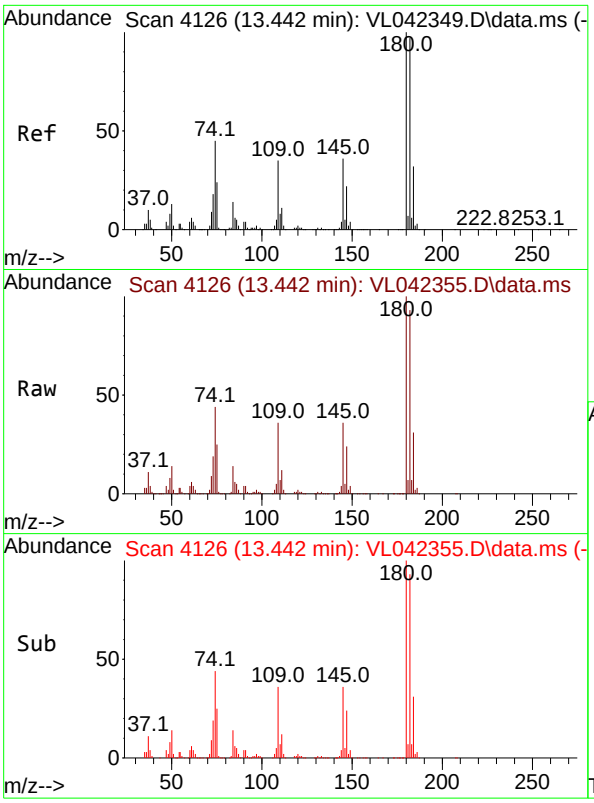


#80
Naphthalene,2-methyl-
Concen: 12.686 ppbv
RT: 14.459 min Scan# 4440
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Tgt Ion:142 Resp: 540339

Ion	Ratio	Lower	Upper
142	100		
141	84.3	66.8	100.2
115	43.0	33.4	50.2



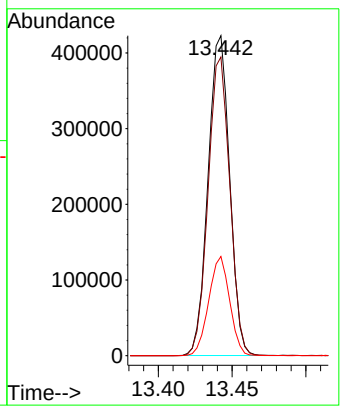


#81
1,2,4-Trichlorobenzene
Concen: 13.398 ppbv
RT: 13.442 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042355.D
Acq: 17 Apr 2025 12:54

Instrument :
MSVOA_L
ClientSampleId :
VSTDICC015

Tgt Ion:180 Resp: 429982

Ion	Ratio	Lower	Upper
180	100		
182	94.3	76.8	115.2
184	30.2	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	113992	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.958	114	324528	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.881	117	305357	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	250149	9.969	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 99.700%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	197623	9.812	ppbv	100
3) Chlorodifluoromethane	1.476	51	191010	9.960	ppbv	99
4) Chloromethane	1.531	50	78080	9.796	ppbv	98
5) Vinyl Chloride	1.580	62	75628	8.717	ppbv	97
6) Bromomethane	1.667	94	35115	9.422	ppbv	84
7) Chloroethane	1.703	64	30158	9.612	ppbv	99
8) Dichlorotetrafluoroethane	1.554	85	172863	9.997	ppbv	98
9) Propene	1.482	41	84636	9.690	ppbv	95
10) Heptane	4.978	43	221840	9.041	ppbv	98
11) Trichlorofluoromethane	1.877	101	187827	9.807	ppbv	99
12) 1,1,2-Trichlorotrifluo...	2.140	101	148485	9.482	ppbv	100
13) Ethanol	1.722	45	4171	3.005	ppbv	97
14) Bromoethene	1.780	108	58320	9.880	ppbv	99
15) Acetone	1.835	43	158708	8.505	ppbv	100
16) 1,3-Butadiene	1.609	39	78804	8.829	ppbv	95
17) tert-Butyl alcohol	2.039	59	218954	9.468	ppbv	99
18) 1,1-Dichloroethene	2.033	96	67940	9.287	ppbv	94
19) Isopropyl Alcohol	1.887	45	96365	9.296	ppbv	95
20) Methylene Chloride	2.062	84	59203	8.101	ppbv	91
21) Allyl Chloride	2.094	41	120704	9.368	ppbv	98
22) trans-1,2-Dichloroethene	2.340	96	78070	9.373	ppbv	99
23) Vinyl Acetate	2.463	43	73373	9.714	ppbv	99
24) 1,1-Dichloroethane	2.408	63	155571	9.832	ppbv	100
25) Ethyl Acetate	2.835	43	449014	9.759	ppbv	99
26) Hexane	2.826	57	175752	9.439	ppbv	98
27) Carbon Disulfide	2.149	76	191117	9.587	ppbv	100
28) Methyl tert-Butyl Ether	2.441	73	115190	9.442	ppbv	94
29) Chloroform	2.848	83	260855	9.912	ppbv	98
30) Cyclohexane	3.855	84	148246	9.849	ppbv	99
31) cis-1,2-Dichloroethene	2.719	61	179993	10.167	ppbv	99
32) 1,1,1-Trichloroethane	3.369	97	276599	9.336	ppbv	98
34) 2-Butanone	2.557	43	248969	9.700	ppbv	99
35) Carbon Tetrachloride	3.764	117	271862	9.256	ppbv	98
36) Benzene	3.657	78	350545	10.014	ppbv	99
37) 1,2-Dichloroethane	3.217	62	211790	10.081	ppbv	99
38) Trichloroethene	4.551	130	139872	9.143	ppbv	96
39) 1,2-Dichloropropane	4.315	63	129239	9.908	ppbv	99
40) 1,4-Dioxane	4.583	88	61587	8.591	ppbv #	96
41) Tetrahydrofuran	3.052	42	141861	9.479	ppbv	99
42) Bromodichloromethane	4.489	83	296946	10.156	ppbv	96
43) Methyl Methacrylate	4.878	69	149209	9.458	ppbv	96
44) 2,2,4-Trimethylpentane	4.641	57	606376	10.030	ppbv	99
45) t-1,3-Dichloropropene	6.412	75	160750	9.975	ppbv	99

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.599	75	200144	10.148	ppbv		88
47) 1,1,2-Trichloroethane	6.583	97	135575	10.202	ppbv		95
48) Dibromochloromethane	7.389	129	237206	10.103	ppbv		100
49) Bromoform	9.483	173	205630	10.016	ppbv		99
50) 4-Methyl-2-Pentanone	5.748	43	376145	8.819	ppbv		99
51) 2-Hexanone	7.435	43	310521	8.118	ppbv	#	99
52) Tetrachloroethene	8.224	164	119424	8.827	ppbv		94
53) Toluene	6.933	91	419462	9.986	ppbv		99
54) 1,2-Dibromoethane	7.652	107	186231	9.792	ppbv		98
56) 1,1,1,2-Tetrachloroethane	8.927	131	182712	9.886	ppbv		97
57) Chlorobenzene	8.920	112	304533	9.589	ppbv		96
58) Ethyl Benzene	9.354	91	583515	9.645	ppbv		99
59) m/p-Xylene	9.551	91	442744	9.084	ppbv	#	26
60) o-Xylene	9.966	91	464522	9.465	ppbv		99
61) Styrene	9.872	104	229869	9.813	ppbv		98
62) Isopropylbenzene	10.539	105	685965	9.520	ppbv		100
63) 1,1,2,2-Tetrachloroethane	9.962	83	279007	8.773	ppbv		100
64) n-propylbenzene	10.992	120	172654	9.533	ppbv		99
65) tert-Butylbenzene	11.532	119	609500	9.203	ppbv		93
66) Benzyl Chloride	11.613	91	63051	8.664	ppbv		95
67) sec-Butylbenzene	11.769	105	853807	9.268	ppbv		99
69) p-Isopropyltoluene	11.927	119	737861	9.220	ppbv		99
70) n-Butylbenzene	12.283	91	771461	9.255	ppbv		100
71) 2-Chlorotoluene	10.901	91	543794	9.622	ppbv		98
72) 4-Ethyltoluene	11.124	105	563136	9.385	ppbv		100
73) 1,3,5-Trimethylbenzene	11.205	105	486583	9.186	ppbv		99
74) 1,2,4-Trimethylbenzene	11.539	105	531576	8.592	ppbv		97
75) 1,3-Dichlorobenzene	11.610	146	297157	9.240	ppbv		99
76) 1,4-Dichlorobenzene	11.671	146	297697	9.210	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	289284	9.251	ppbv		100
78) Hexachloro-1,3-Butadiene	13.882	225	276960	8.771	ppbv		100
79) Naphthalene	13.513	128	647349	8.750	ppbv		99
80) Naphthalene,2-methyl-	14.458	142	350259	8.307	ppbv		99
81) 1,2,4-Trichlorobenzene	13.442	180	290260	9.136	ppbv		99

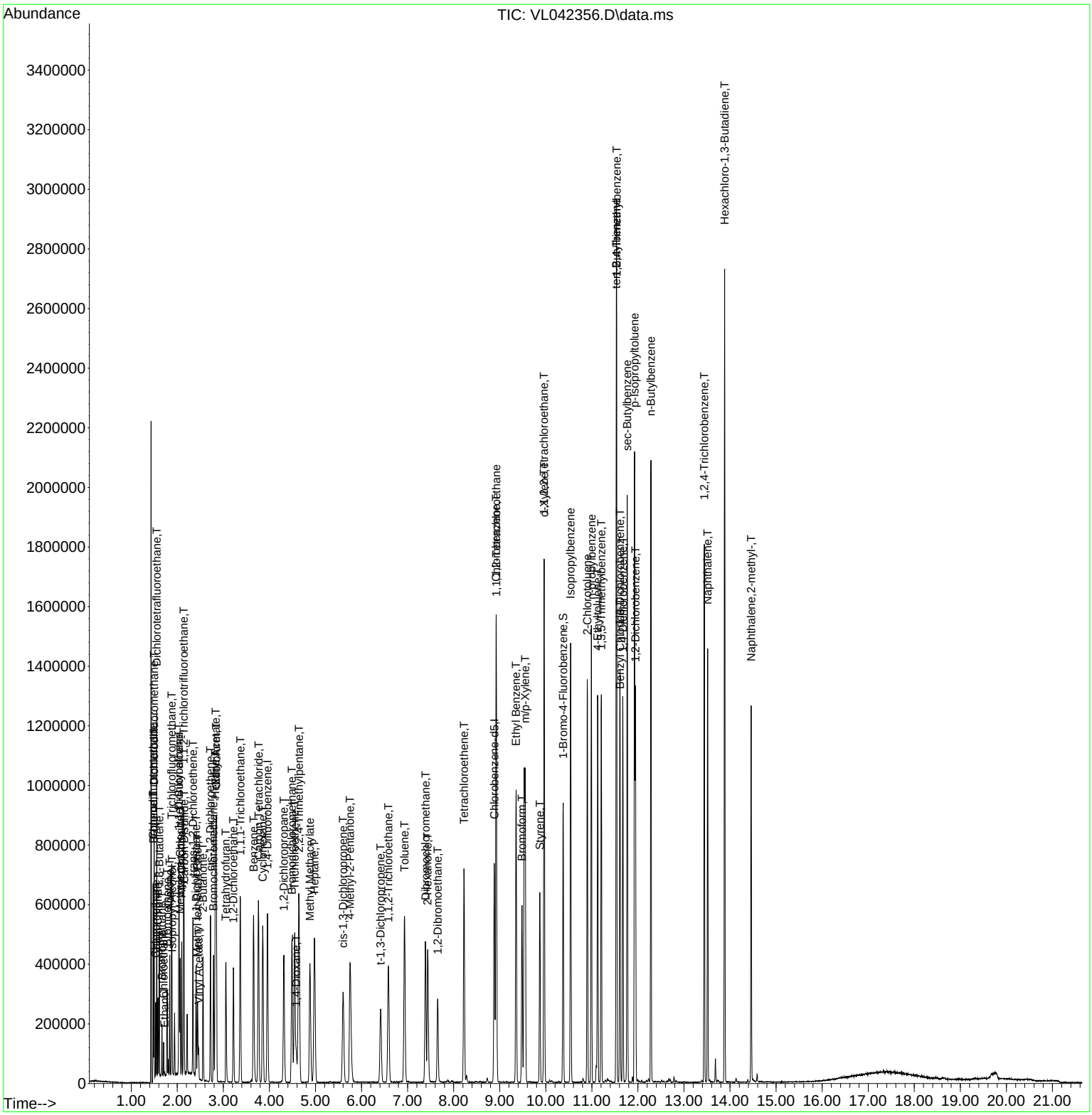
(#) = qualifier out of range (m) = manual integration (+) = signals summed

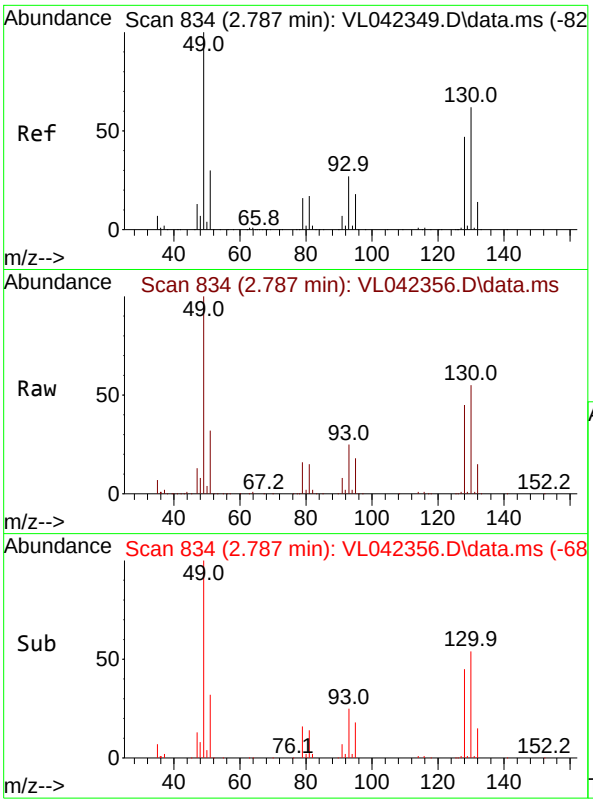
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042356.D
Acq On : 17 Apr 2025 13:43
Operator : SY/MD
Sample : VSTDICV010
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Quant Time: Apr 18 02:15:19 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



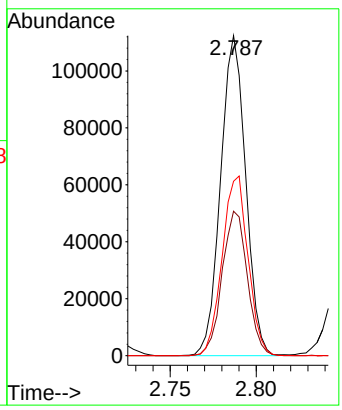


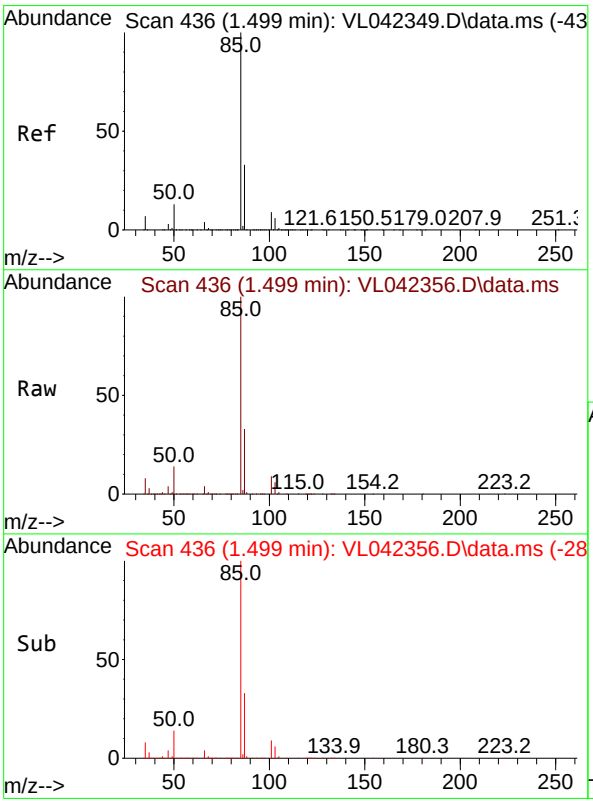
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 49 Resp: 113992

Ion	Ratio	Lower	Upper
49	100		
128	45.5	22.8	68.4
130	57.8	29.3	88.0

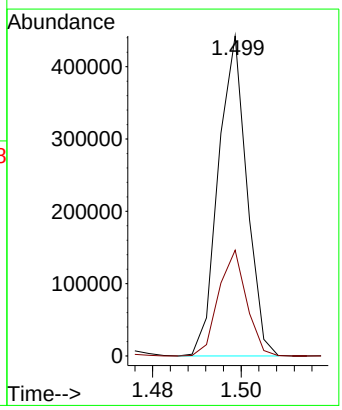


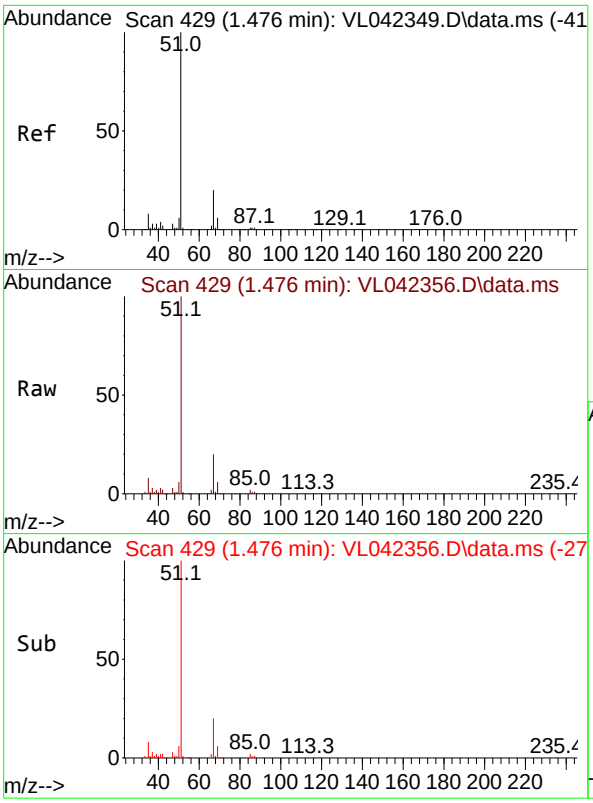


#2
Dichlorodifluoromethane
Concen: 9.812 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 85 Resp: 197623

Ion	Ratio	Lower	Upper
85	100		
87	33.1	26.6	39.8



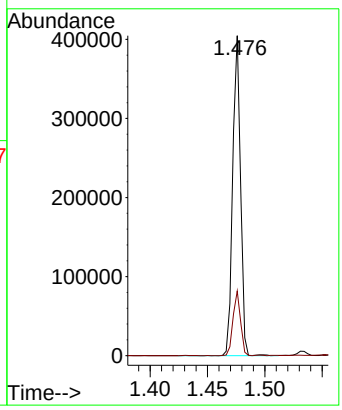


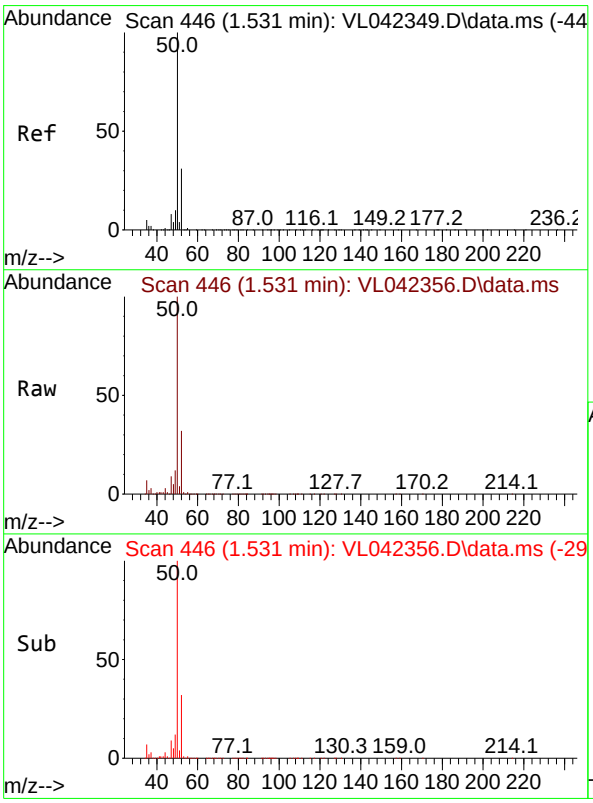
#3
Chlorodifluoromethane
Concen: 9.960 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 51 Resp: 191010

Ion	Ratio	Lower	Upper
51	100		
67	19.6	16.2	24.4

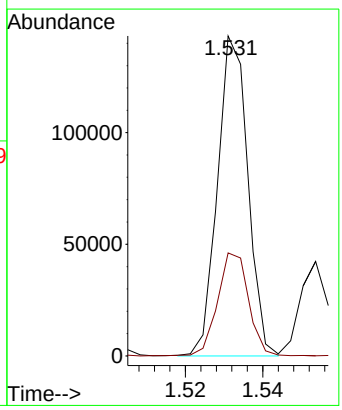


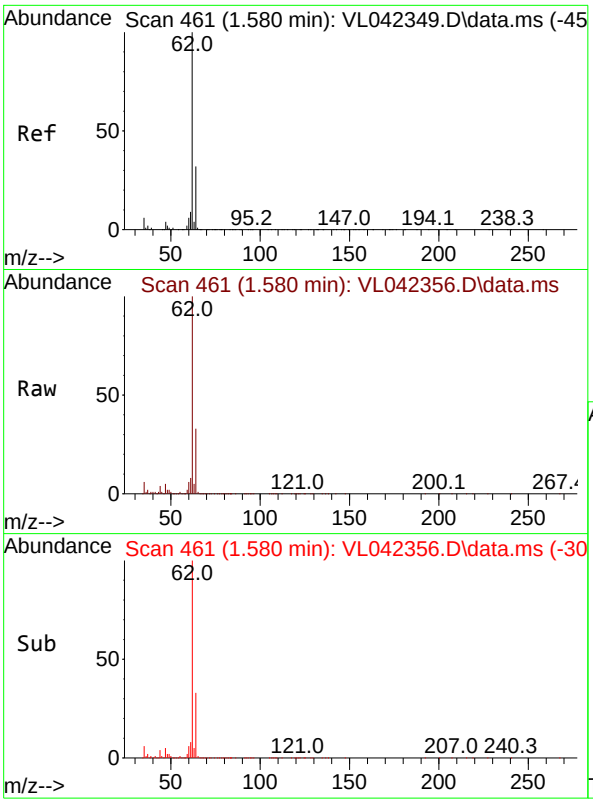


#4
Chloromethane
Concen: 9.796 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 50 Resp: 78080

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1



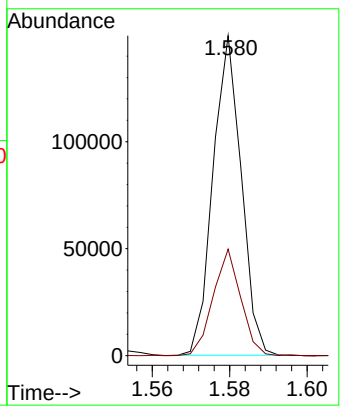


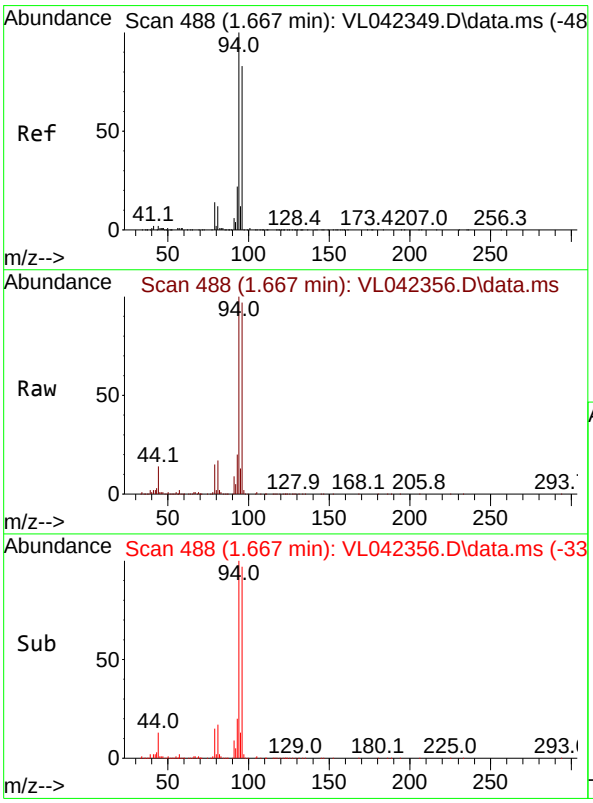
#5
Vinyl Chloride
Concen: 8.717 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 62 Resp: 75628

Ion	Ratio	Lower	Upper
62	100		
64	33.3	25.4	38.0

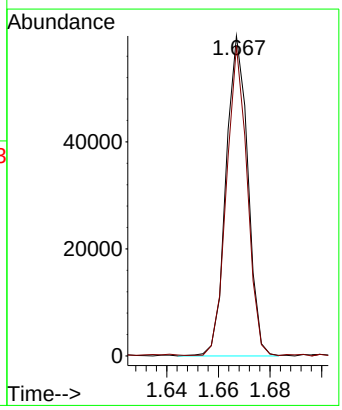


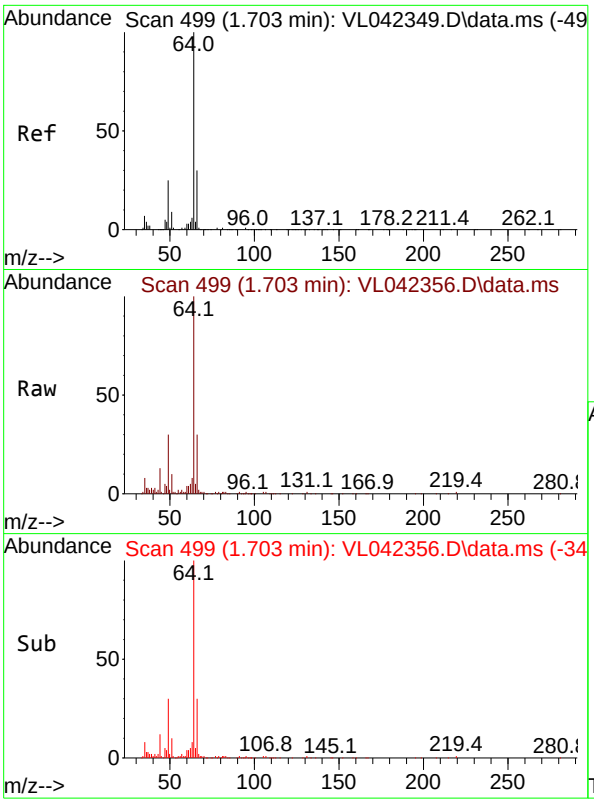


#6
Bromomethane
Concen: 9.422 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 94 Resp: 35115

Ion	Ratio	Lower	Upper
94	100		
96	96.8	66.2	99.2



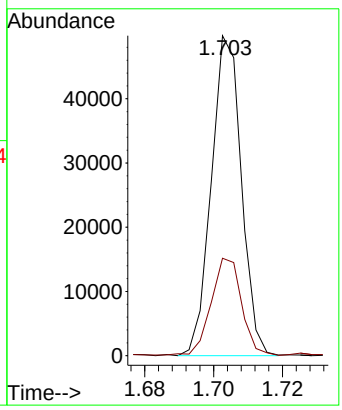


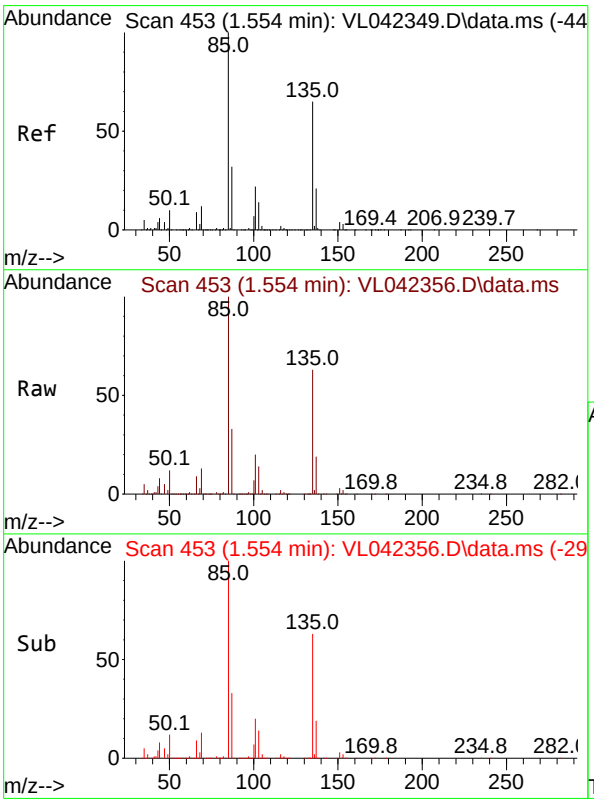
#7
Chloroethane
Concen: 9.612 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 64 Resp: 30158

Ion	Ratio	Lower	Upper
64	100		
66	30.4	24.6	37.0

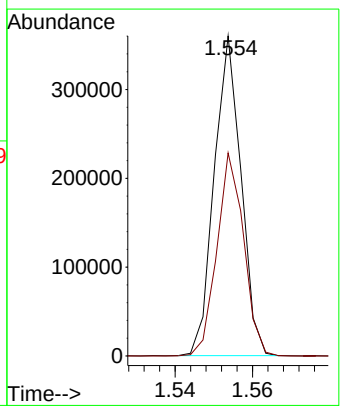


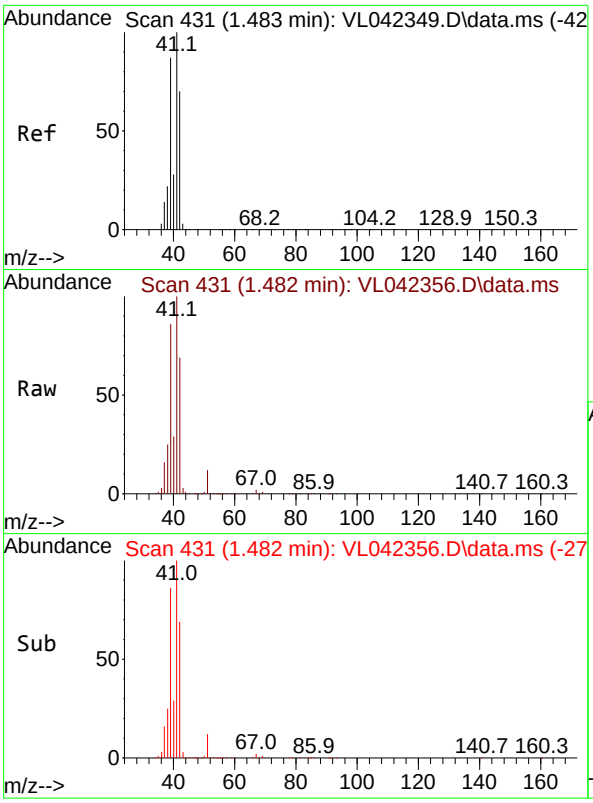


#8
Dichlorotetrafluoroethane
Concen: 9.997 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 85 Resp: 172863

Ion	Ratio	Lower	Upper
85	100		
135	63.5	52.2	78.2



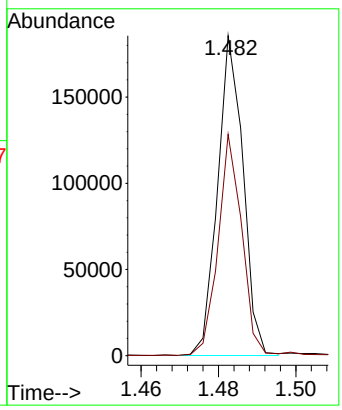


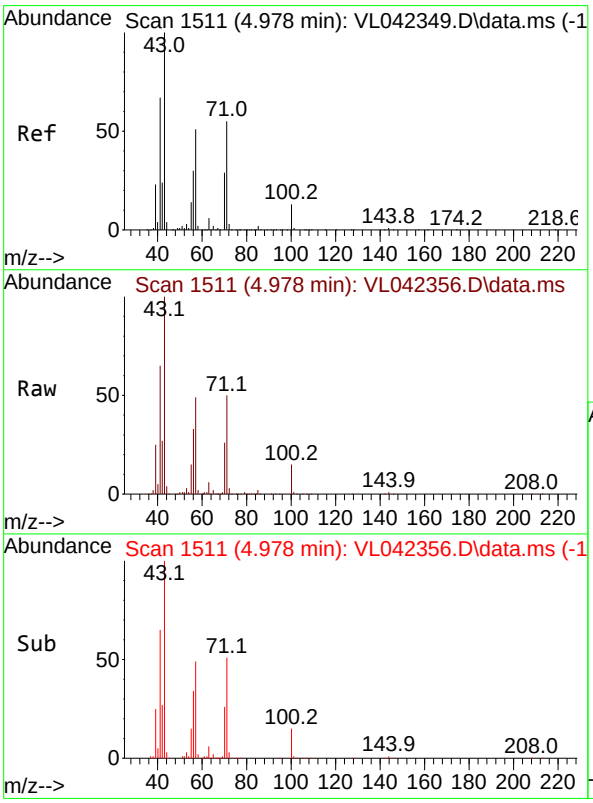
#9
Propene
Concen: 9.690 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 41 Resp: 84636

Ion	Ratio	Lower	Upper
41	100		
42	65.8	56.2	84.4

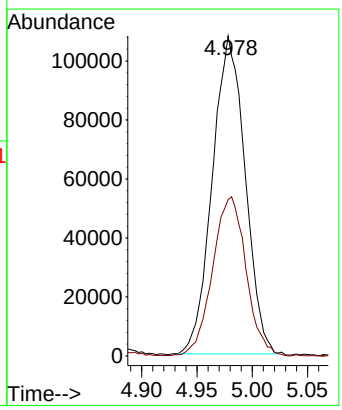


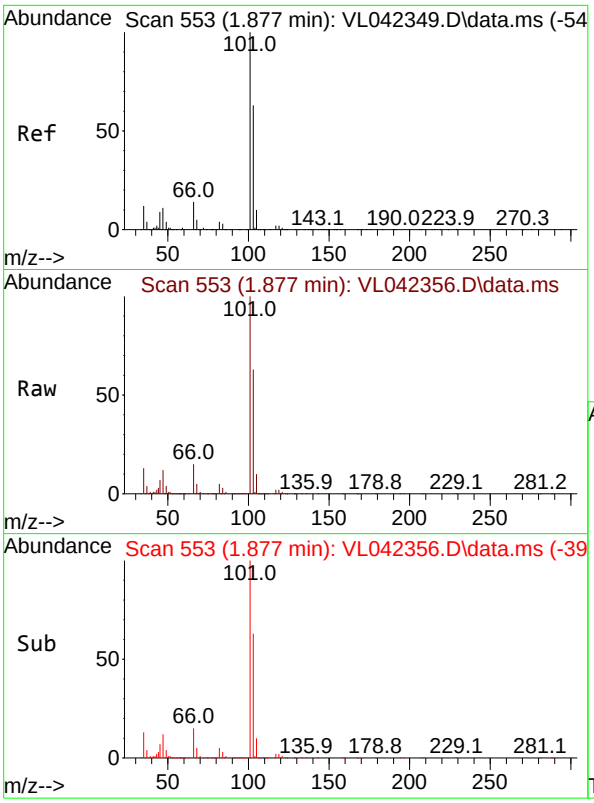


#10
Heptane
Concen: 9.041 ppbv
RT: 4.978 min Scan# 1511
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 221840

Ion	Ratio	Lower	Upper
43	100		
57	51.4	39.9	59.9



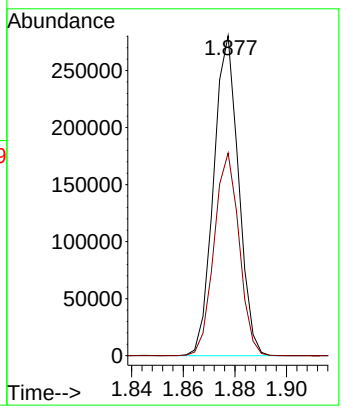


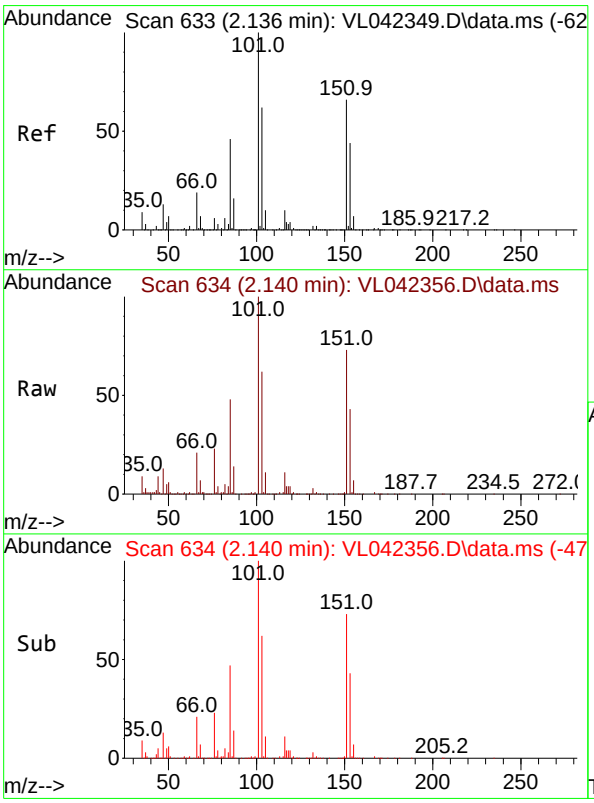
#11
Trichlorofluoromethane
Concen: 9.807 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:101 Resp: 187827

Ion	Ratio	Lower	Upper
101	100		
103	63.3	50.1	75.1

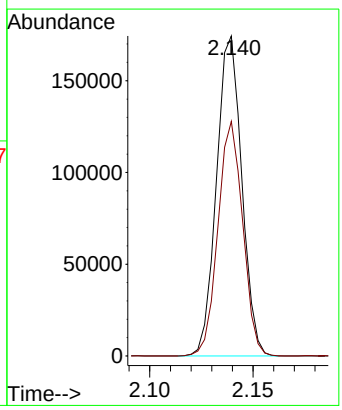


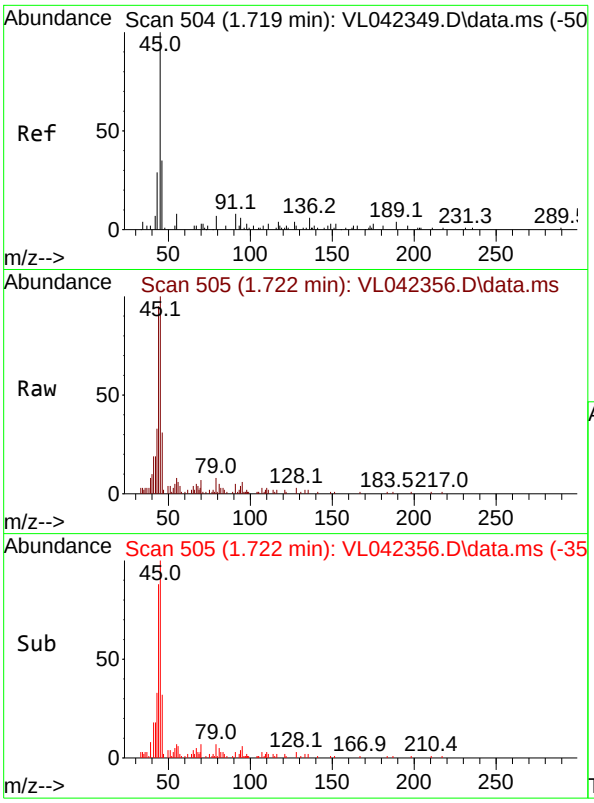


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.482 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:101 Resp: 148485

Ion	Ratio	Lower	Upper
101	100		
151	71.7	57.0	85.6



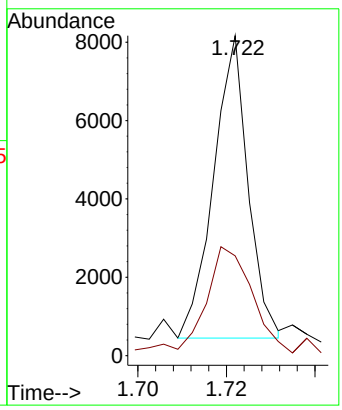


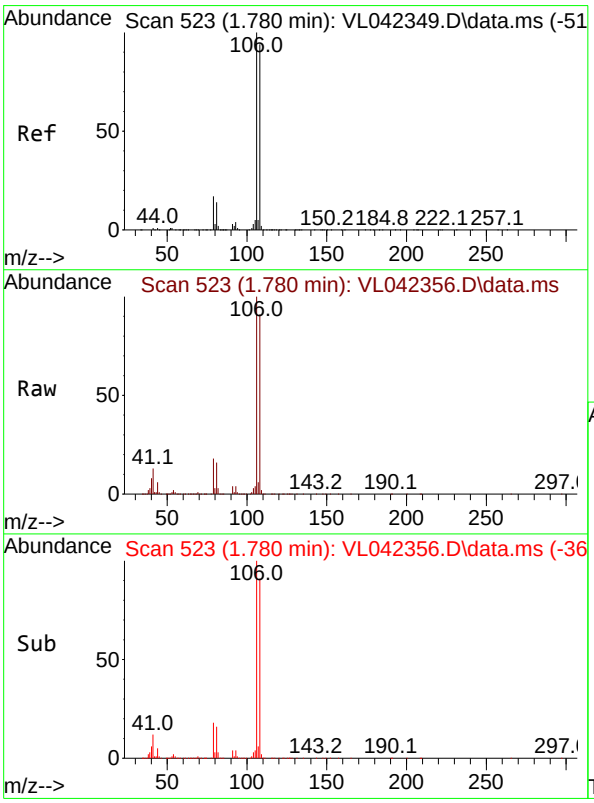
#13
Ethanol
Concen: 3.005 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 45 Resp: 4171

Ion	Ratio	Lower	Upper
45	100		
46	57.0	21.9	87.7

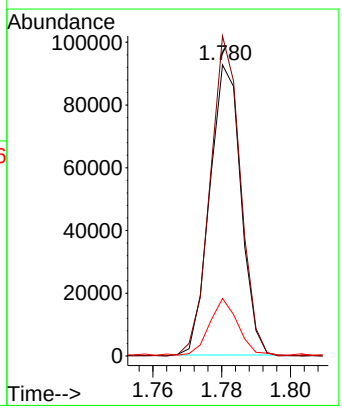


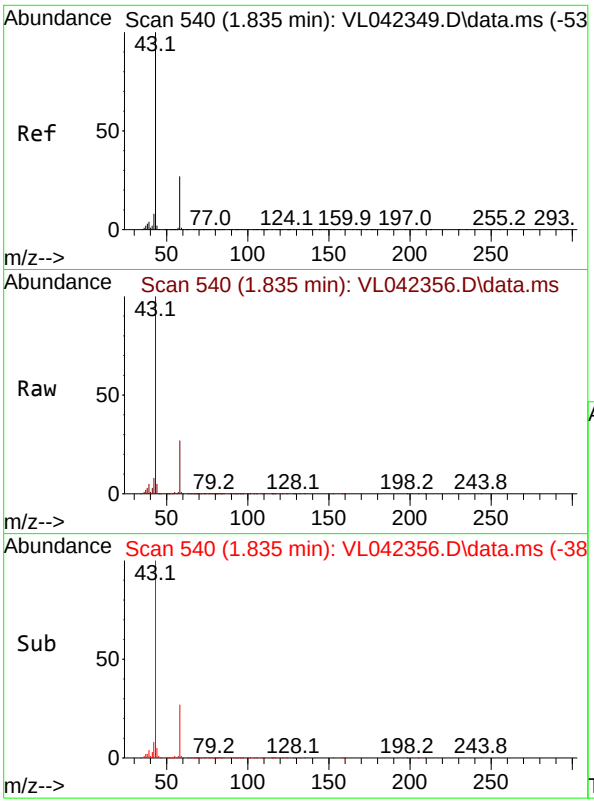


#14
Bromoethene
Concen: 9.880 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:108 Resp: 58320

Ion	Ratio	Lower	Upper
108	100		
106	107.1	85.9	128.9
79	18.4	13.9	20.9



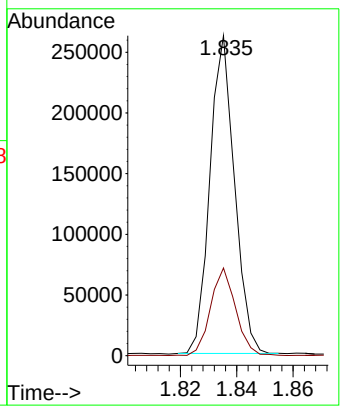


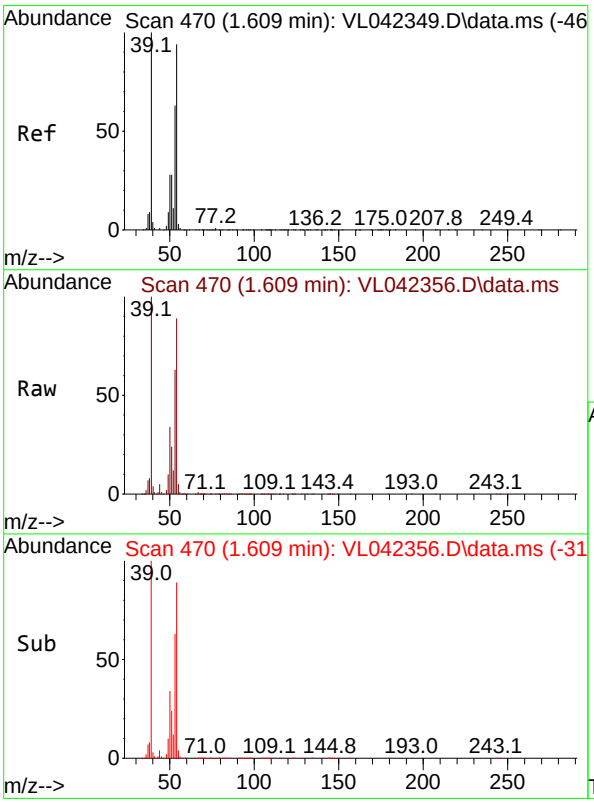
#15
Acetone
Concen: 8.505 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 43 Resp: 158708

Ion	Ratio	Lower	Upper
43	100		
58	28.0	22.4	33.6

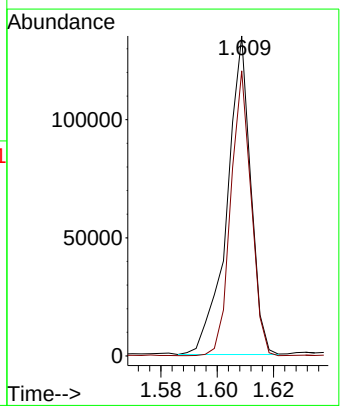


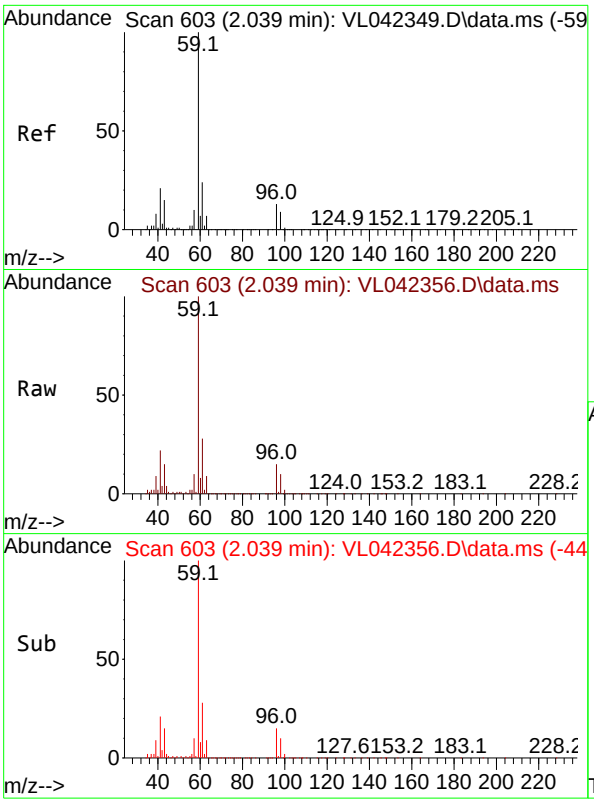


#16
1,3-Butadiene
Concen: 8.829 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 39 Resp: 78804

Ion	Ratio	Lower	Upper
39	100		
54	77.1	64.9	97.3



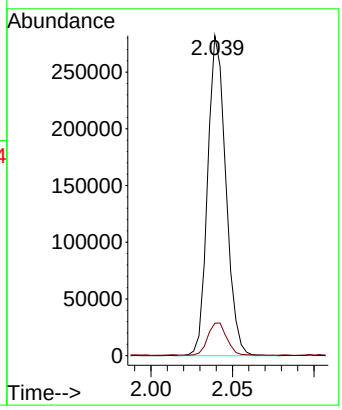


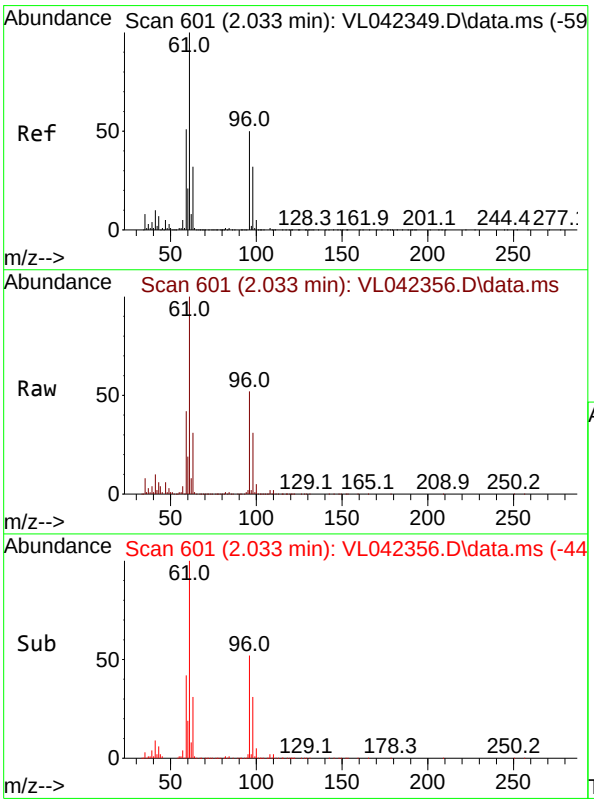
#17
tert-Butyl alcohol
Concen: 9.468 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 59 Resp: 218954

Ion	Ratio	Lower	Upper
59	100		
57	10.6	8.7	13.1

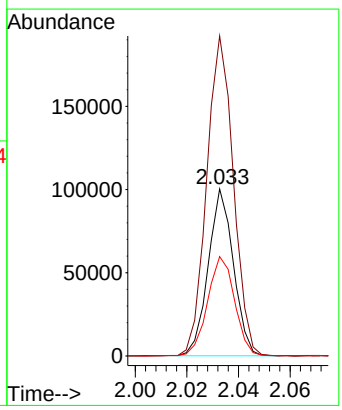


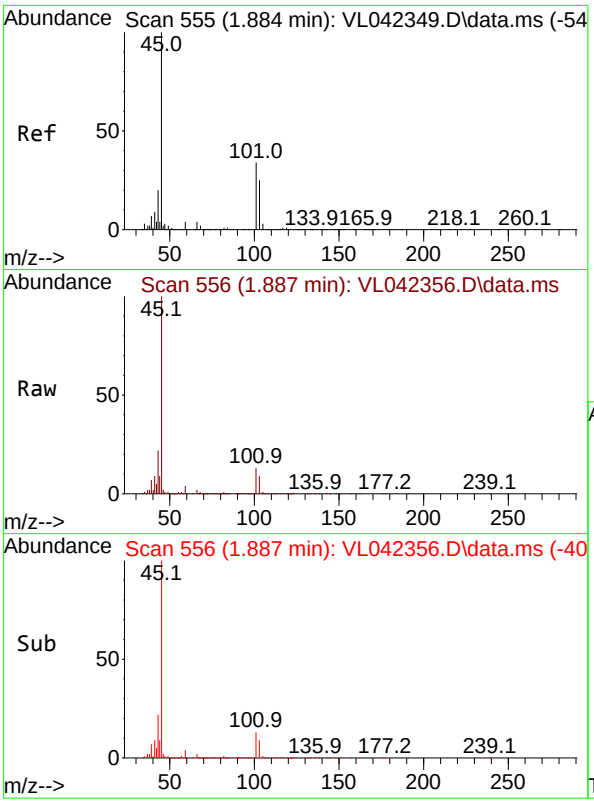


#18
1,1-Dichloroethene
Concen: 9.287 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 96 Resp: 67940

Ion	Ratio	Lower	Upper
96	100		
61	191.6	160.2	240.2
98	59.4	51.0	76.4



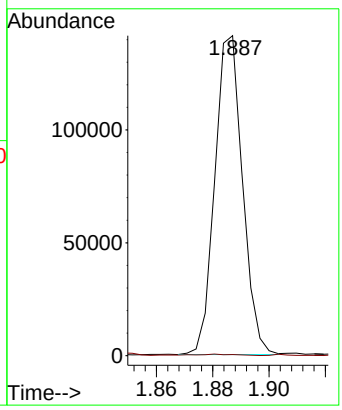


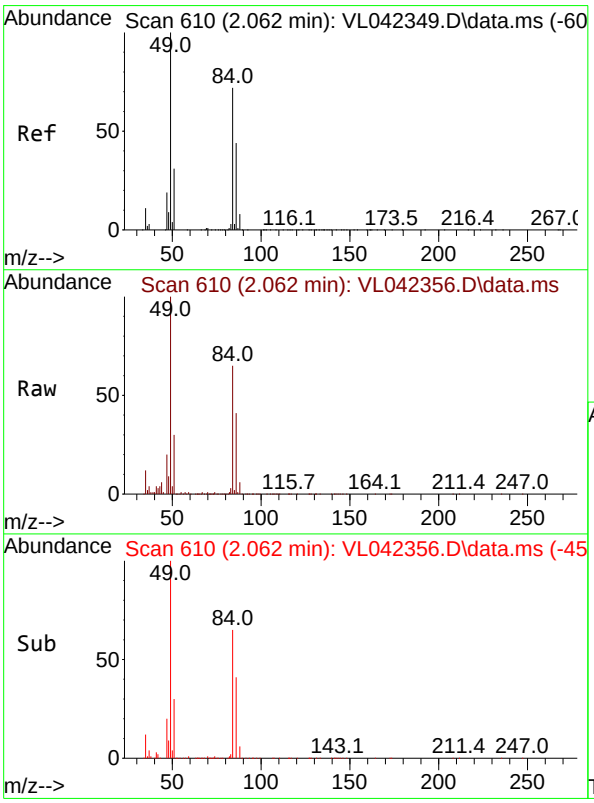
#19
Isopropyl Alcohol
Concen: 9.296 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 45 Resp: 96365

Ion	Ratio	Lower	Upper
45	100		
58	46.1	34.5	51.7

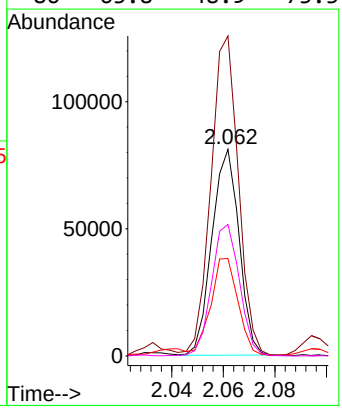


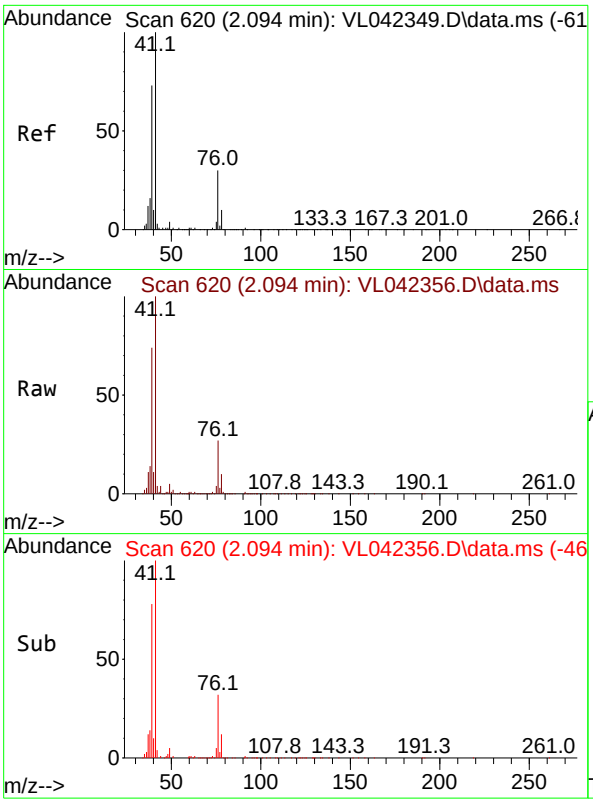


#20
Methylene Chloride
Concen: 8.101 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 84 Resp: 59203

Ion	Ratio	Lower	Upper
84	100		
49	155.3	111.6	167.4
51	47.0	35.1	52.7
86	63.8	48.9	73.3



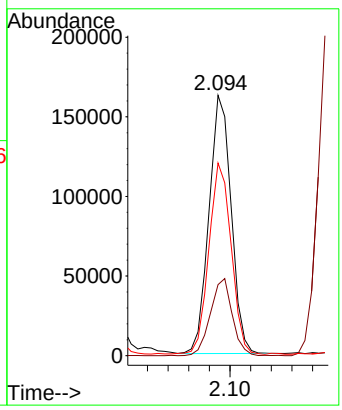


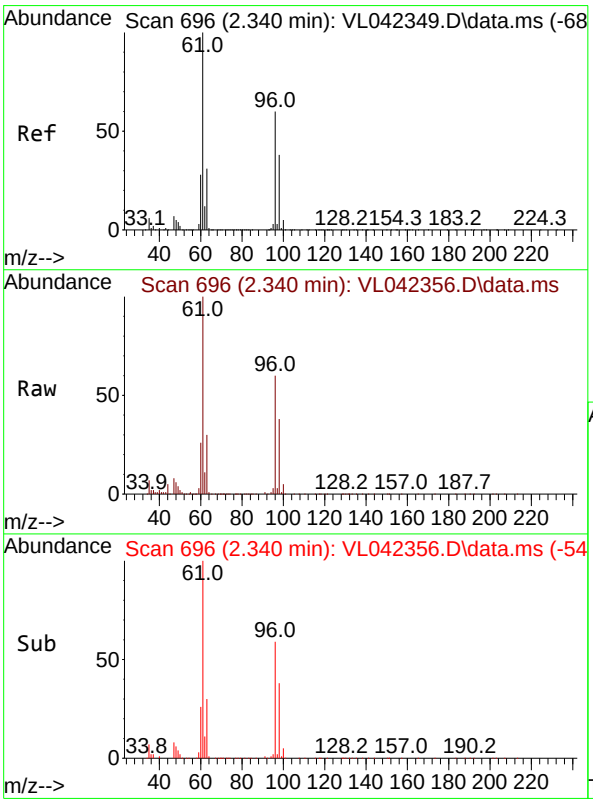
#21
Allyl Chloride
Concen: 9.368 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 41 Resp: 120704

Ion	Ratio	Lower	Upper
41	100		
76	29.5	24.8	37.2
39	74.5	60.6	90.8

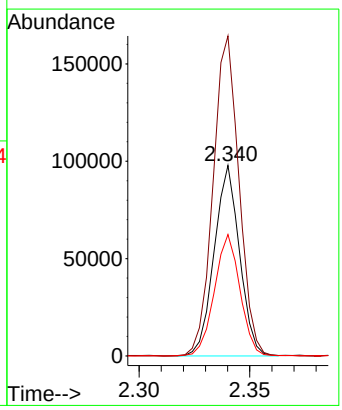


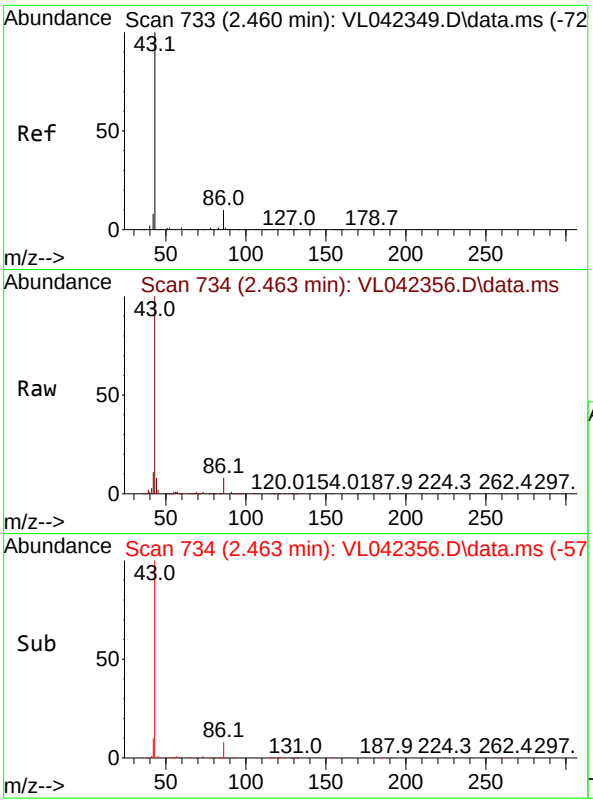


#22
trans-1,2-Dichloroethene
Concen: 9.373 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 96 Resp: 78070

Ion	Ratio	Lower	Upper
96	100		
61	167.7	133.7	200.5
98	63.5	50.3	75.5



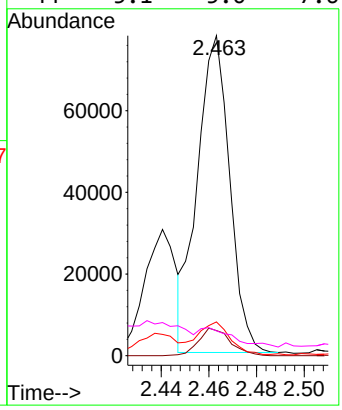


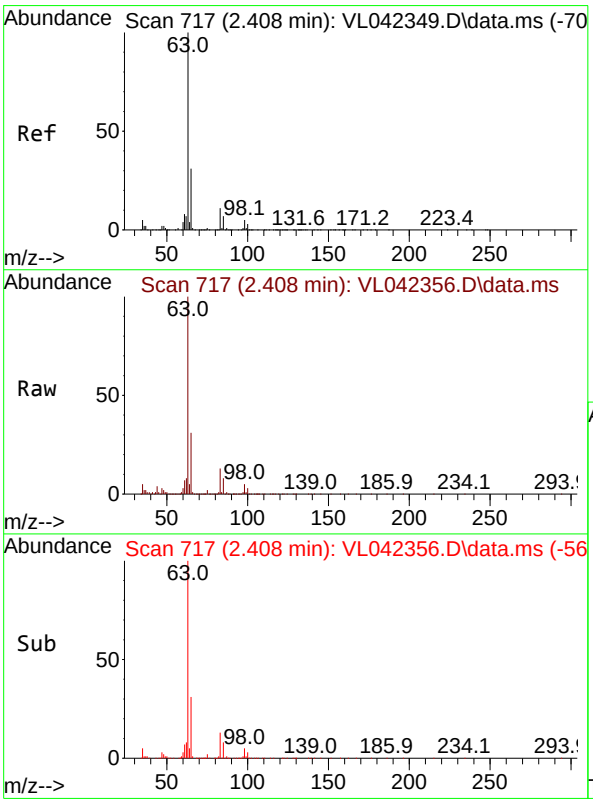
#23
Vinyl Acetate
Concen: 9.714 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 43 Resp: 73373

Ion	Ratio	Lower	Upper
43	100		
86	8.0	6.5	9.7
42	10.0	7.8	11.8
44	5.1	5.0	7.6

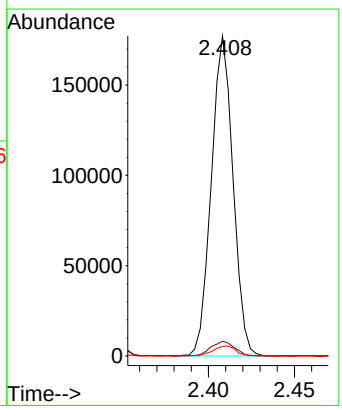


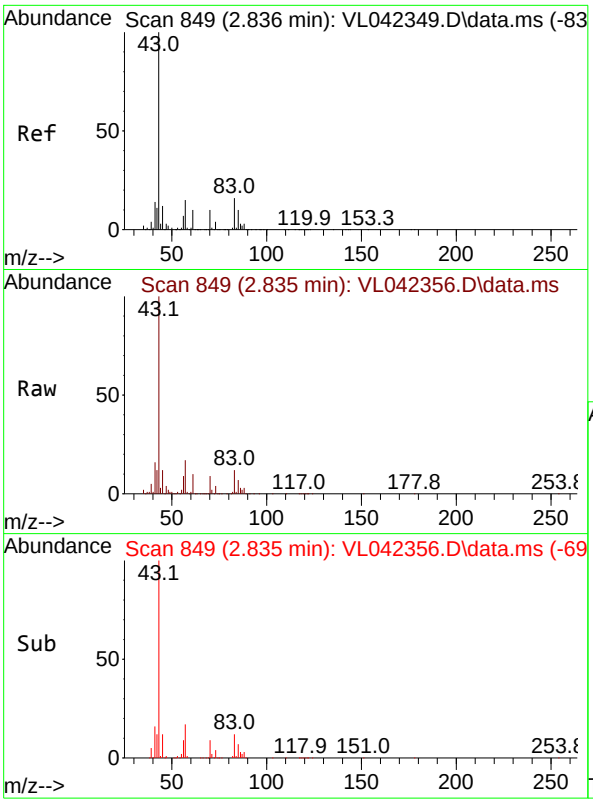


#24
1,1-Dichloroethane
Concen: 9.832 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 63 Resp: 155571

Ion	Ratio	Lower	Upper
63	100		
98	4.6	2.3	6.8
100	3.0	1.6	4.8



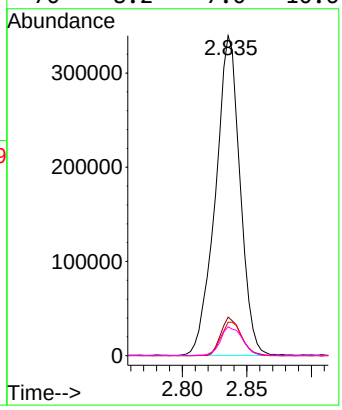


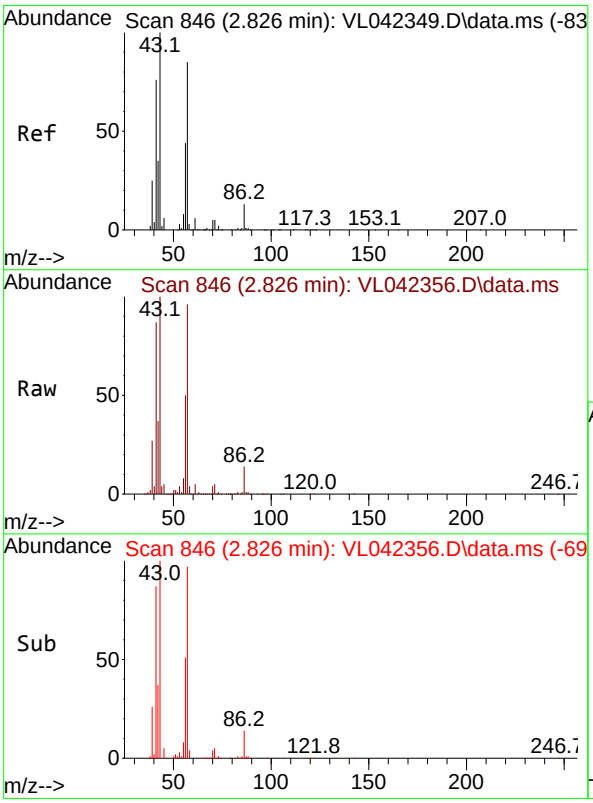
#25
Ethyl Acetate
Concen: 9.759 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 43 Resp: 449014

Ion	Ratio	Lower	Upper
43	100		
45	9.9	8.3	12.5
61	9.0	7.3	10.9
70	8.2	7.0	10.6

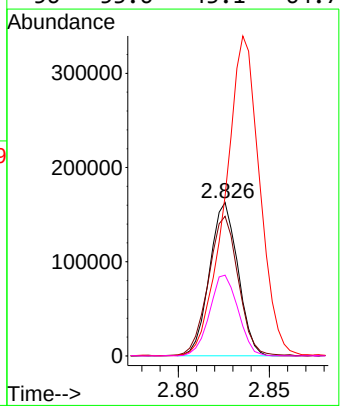


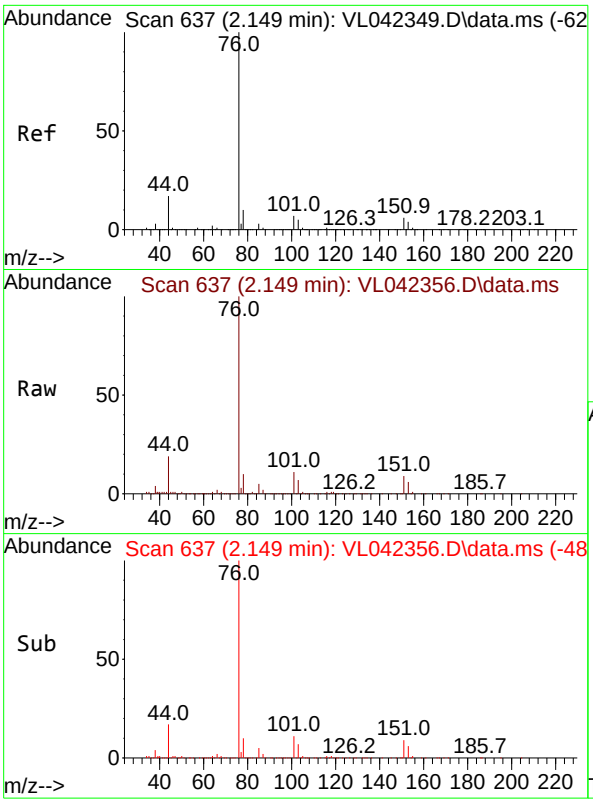


#26
Hexane
Concen: 9.439 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 57 Resp: 175752

Ion	Ratio	Lower	Upper
57	100		
41	96.6	77.9	116.9
43	256.0	208.4	312.6
56	53.6	43.1	64.7



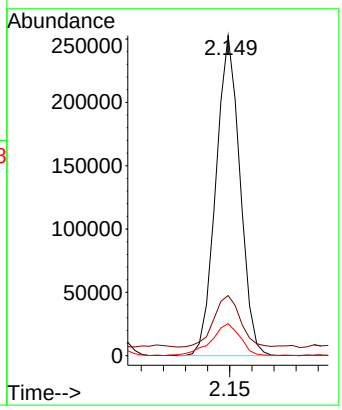


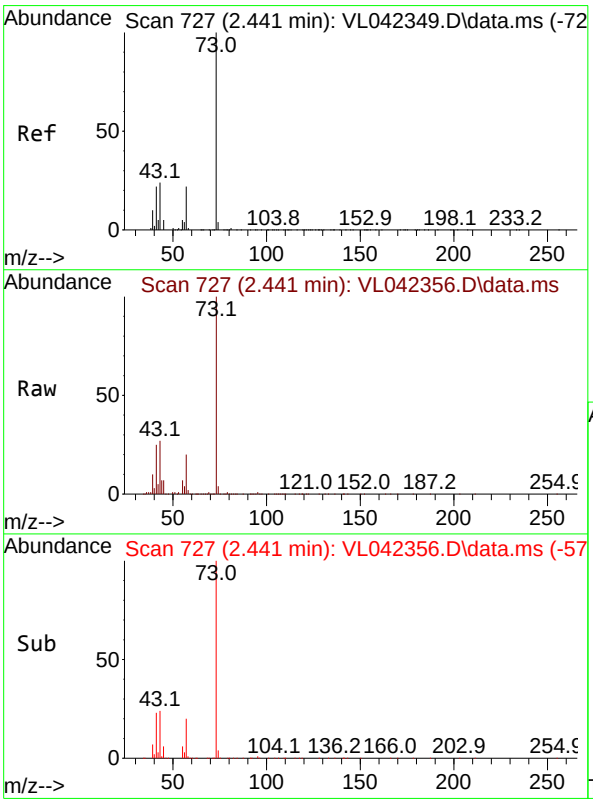
#27
Carbon Disulfide
Concen: 9.587 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 76 Resp: 191117

Ion	Ratio	Lower	Upper
76	100		
44	19.3	15.5	23.3
78	11.9	9.3	13.9

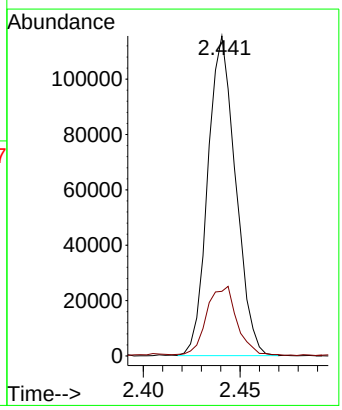


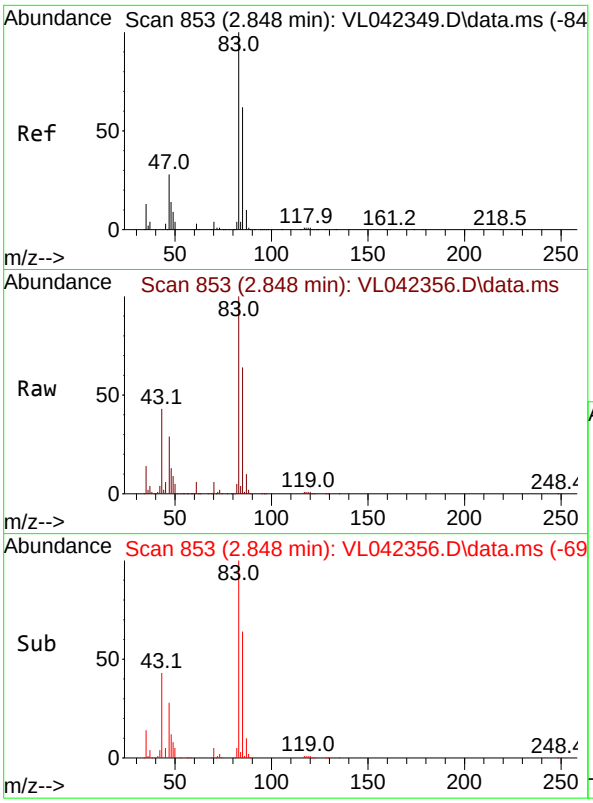


#28
Methyl tert-Butyl Ether
Concen: 9.442 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 73 Resp: 115190

Ion	Ratio	Lower	Upper
73	100		
57	23.4	21.3	31.9



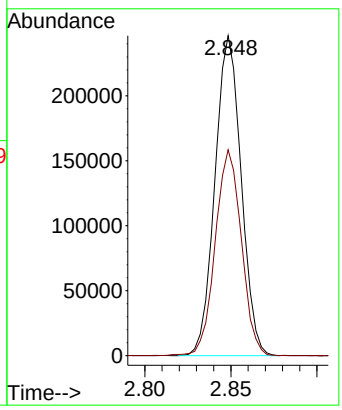


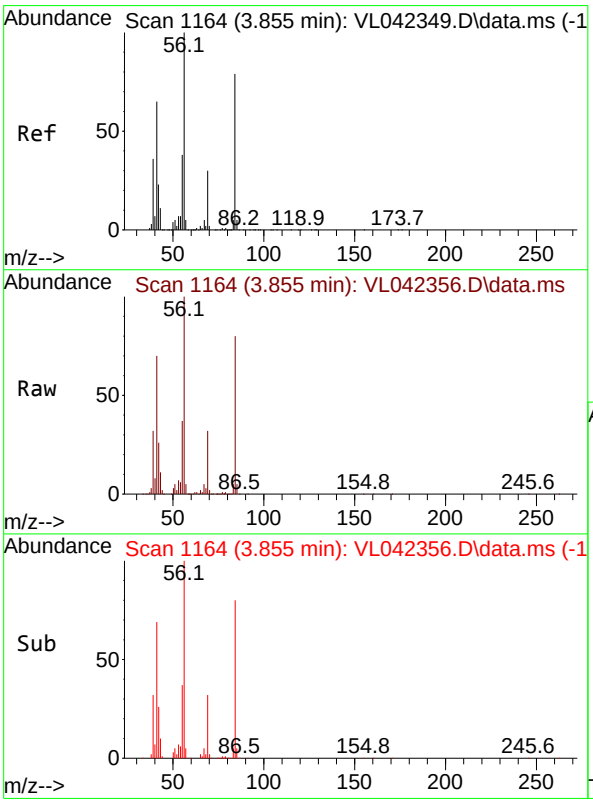
#29
Chloroform
Concen: 9.912 ppbv
RT: 2.848 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 83 Resp: 260855

Ion	Ratio	Lower	Upper
83	100		
85	64.3	50.0	75.0

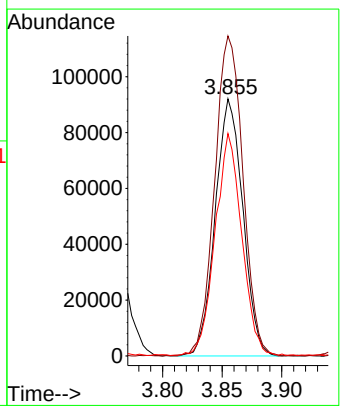


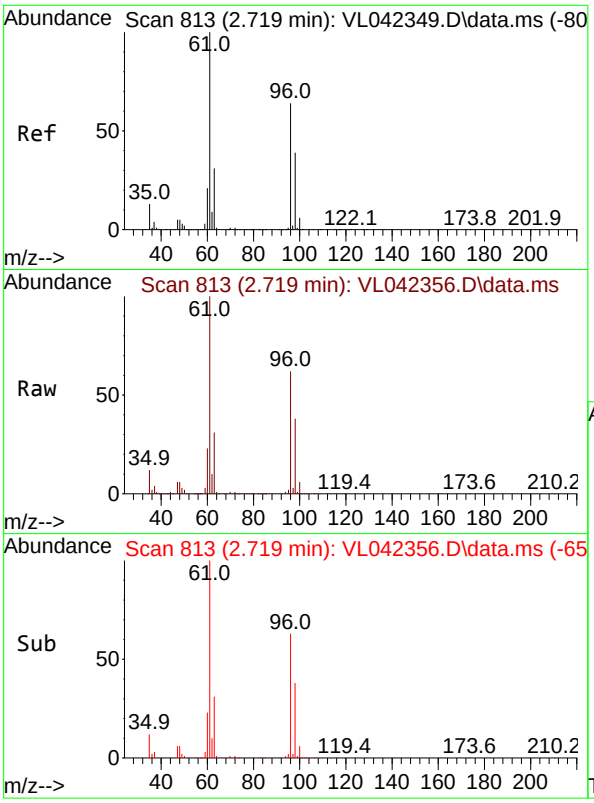


#30
Cyclohexane
Concen: 9.849 ppbv
RT: 3.855 min Scan# 1164
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 84 Resp: 148246

Ion	Ratio	Lower	Upper
84	100		
56	127.7	101.0	151.4
41	83.2	67.4	101.0



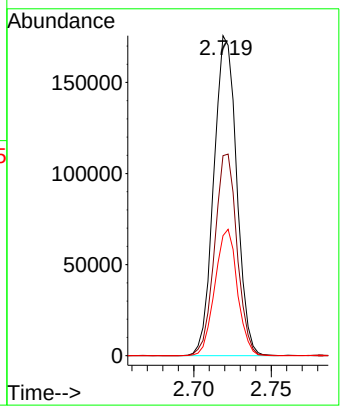


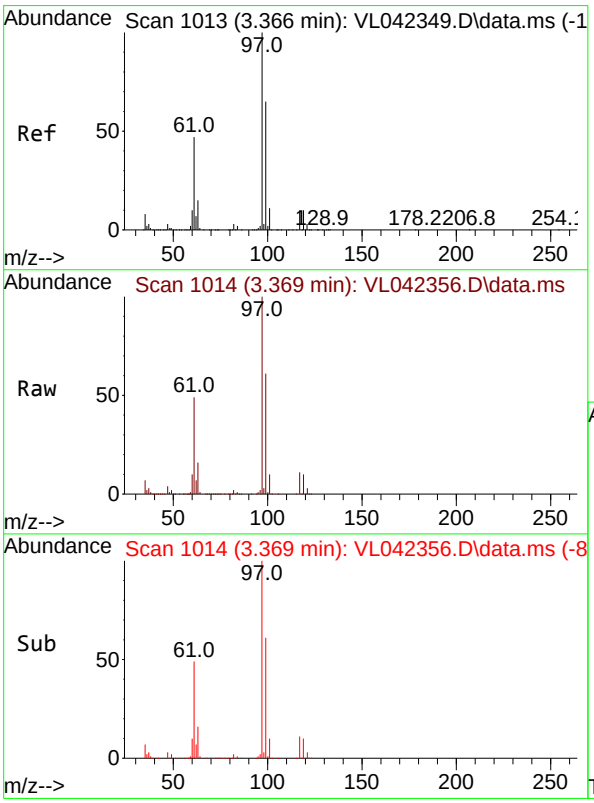
#31
cis-1,2-Dichloroethene
Concen: 10.167 ppbv
RT: 2.719 min Scan# 81
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 61 Resp: 179993

Ion	Ratio	Lower	Upper
61	100		
96	62.5	50.8	76.2
98	37.5	30.9	46.3

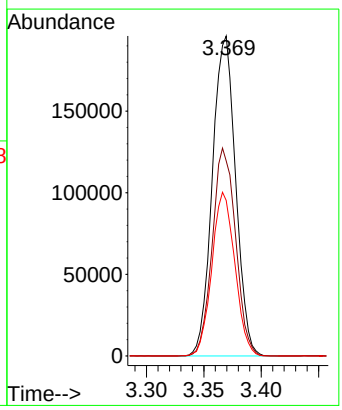


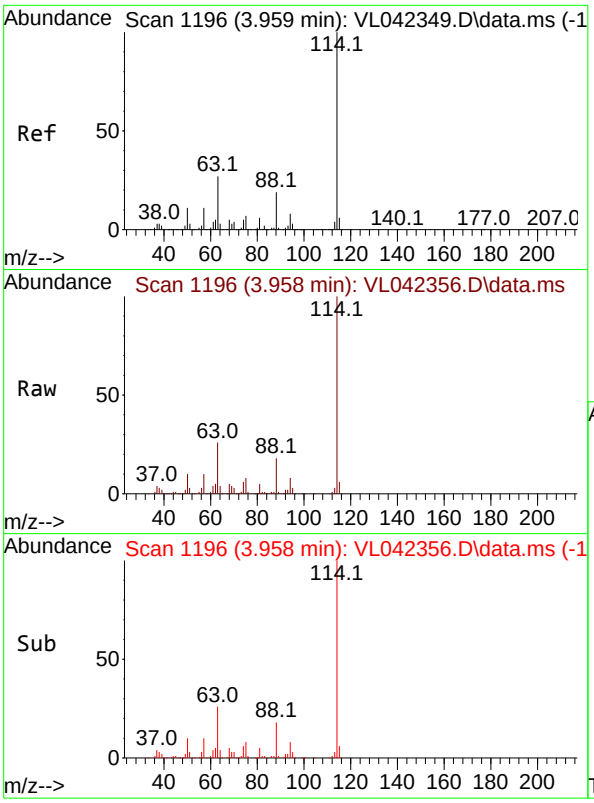


#32
1,1,1-Trichloroethane
Concen: 9.336 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 97 Resp: 276599

Ion	Ratio	Lower	Upper
97	100		
99	65.0	51.0	76.4
61	50.7	38.8	58.2



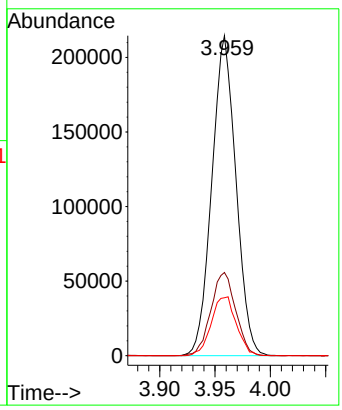


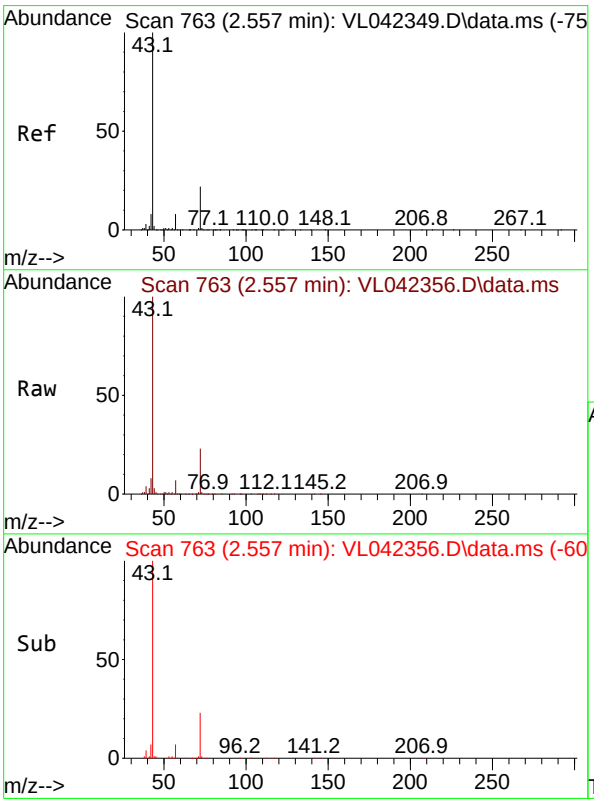
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.958 min Scan# 1
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:114 Resp: 324528

Ion	Ratio	Lower	Upper
114	100		
63	26.8	21.8	32.6
88	19.2	15.5	23.3

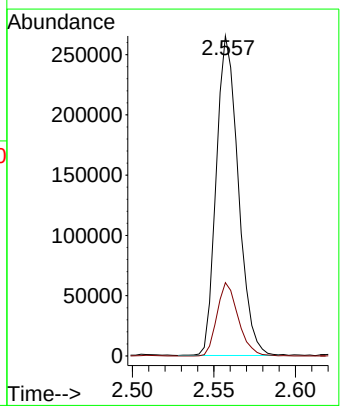


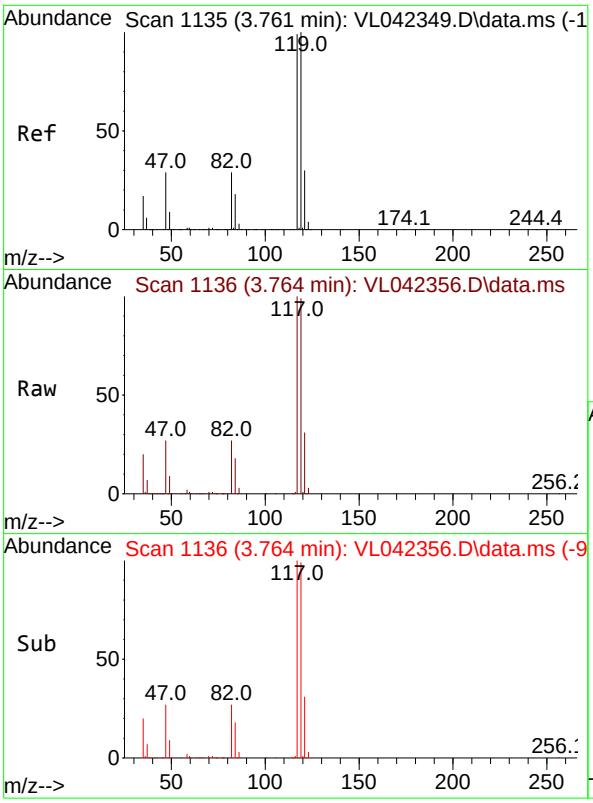


#34
2-Butanone
Concen: 9.700 ppbv
RT: 2.557 min Scan# 763
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 248969

Ion	Ratio	Lower	Upper
43	100		
72	22.1	18.2	27.2



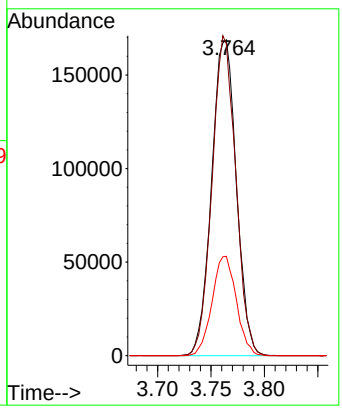


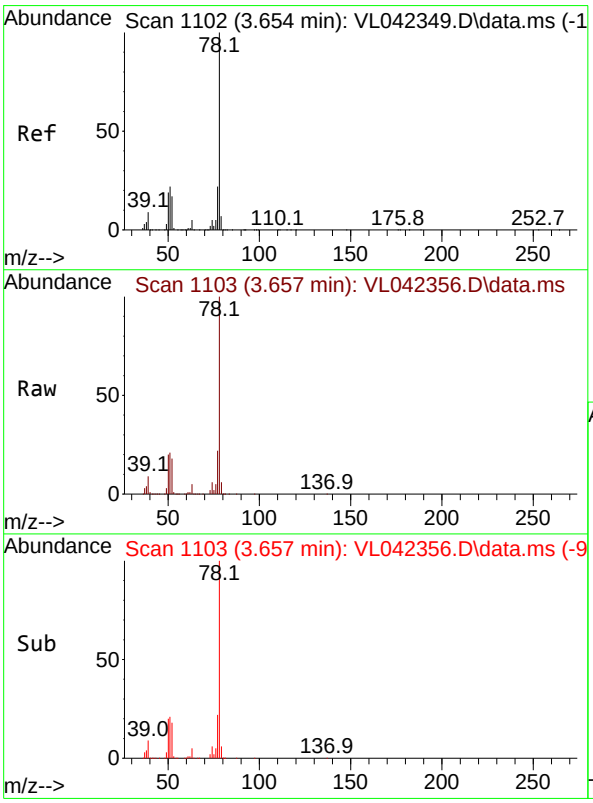
#35
Carbon Tetrachloride
Concen: 9.256 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:117 Resp: 271862

Ion	Ratio	Lower	Upper
117	100		
119	98.7	80.5	120.7
121	31.5	24.2	36.2

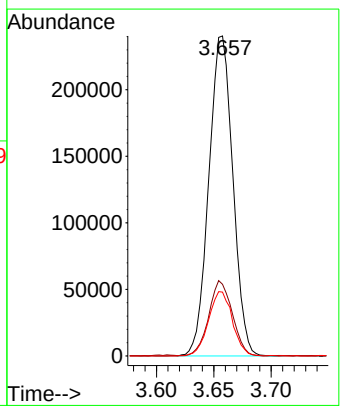


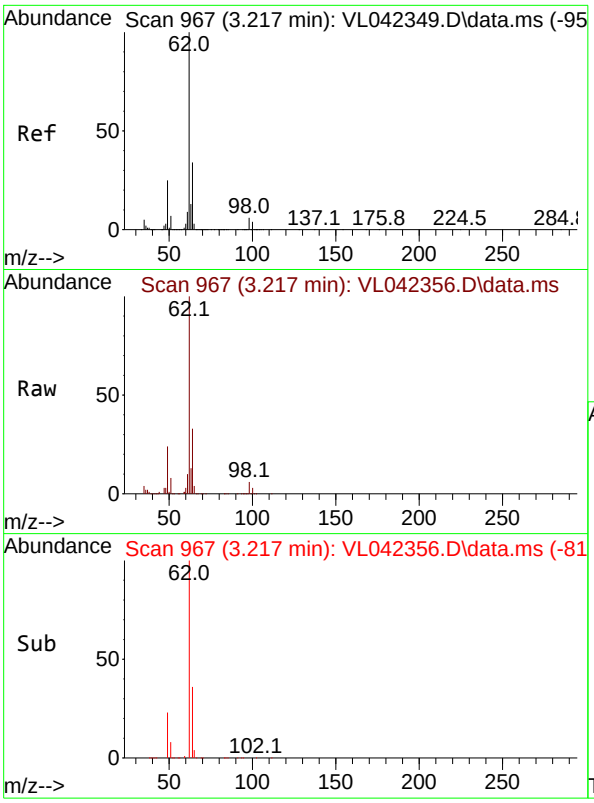


#36
Benzene
Concen: 10.014 ppbv
RT: 3.657 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 78 Resp: 350545

Ion	Ratio	Lower	Upper
78	100		
77	22.3	17.4	26.0
50	19.9	15.5	23.3



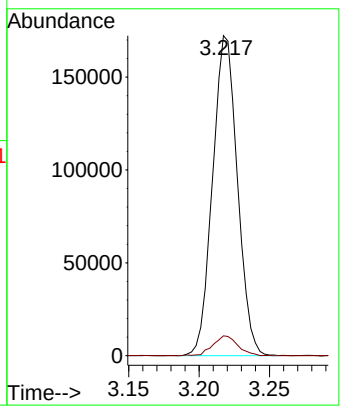


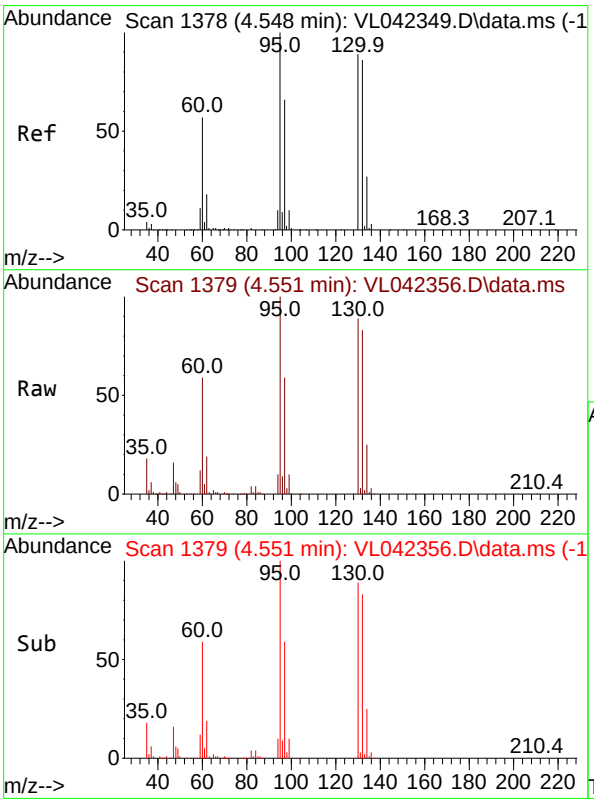
#37
1,2-Dichloroethane
Concen: 10.081 ppbv
RT: 3.217 min Scan# 9
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 62 Resp: 211790

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.1	7.7

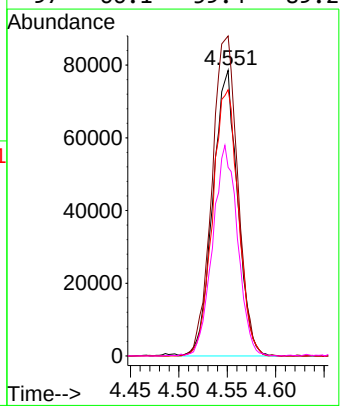


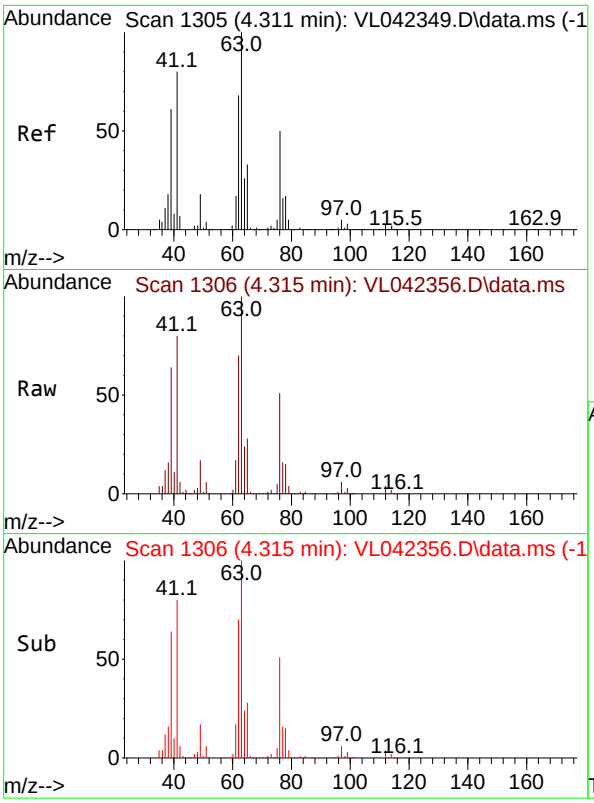


#38
Trichloroethene
Concen: 9.143 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:130 Resp: 139872

Ion	Ratio	Lower	Upper
130	100		
95	112.0	89.8	134.6
132	93.2	77.7	116.5
97	66.1	59.4	89.2



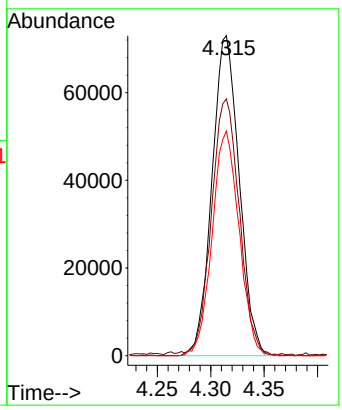


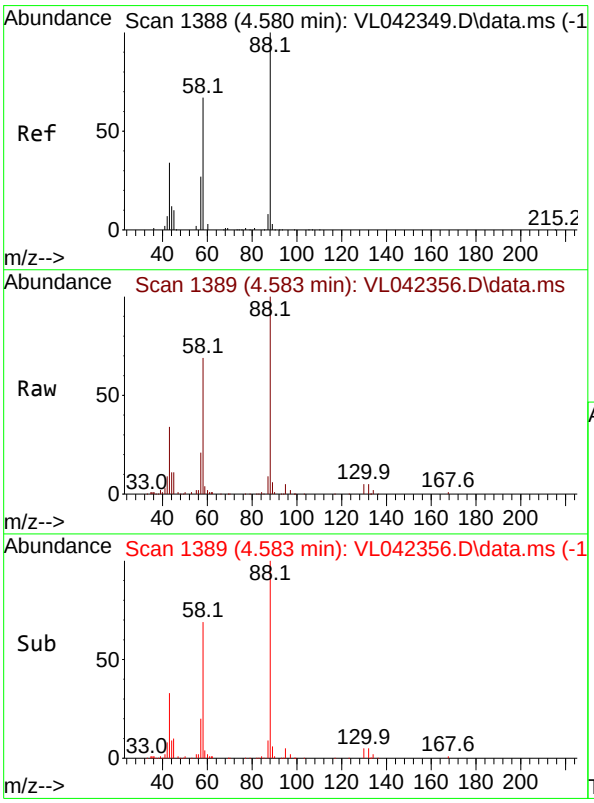
#39
1,2-Dichloropropane
Concen: 9.908 ppbv
RT: 4.315 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 63 Resp: 129239

Ion	Ratio	Lower	Upper
63	100		
41	79.9	64.2	96.2
62	70.2	54.3	81.5

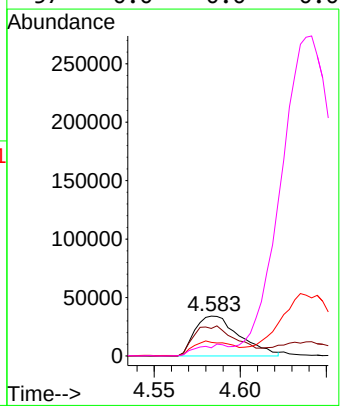


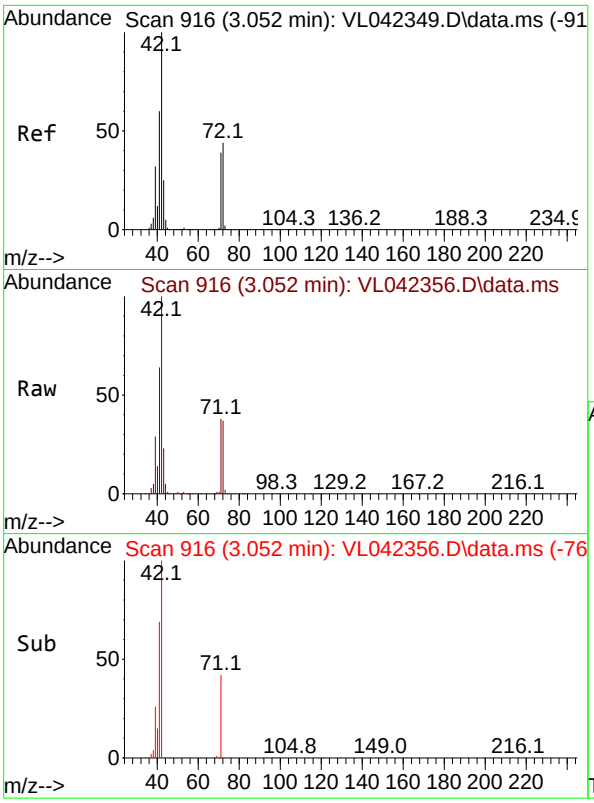


#40
1,4-Dioxane
Concen: 8.591 ppbv
RT: 4.583 min Scan# 1389
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 88 Resp: 61587

Ion	Ratio	Lower	Upper
88	100		
58	76.1	61.4	92.0
43	35.9	23.2	34.8#
57	0.0	0.0	0.0



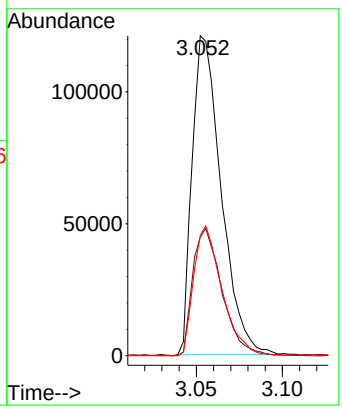


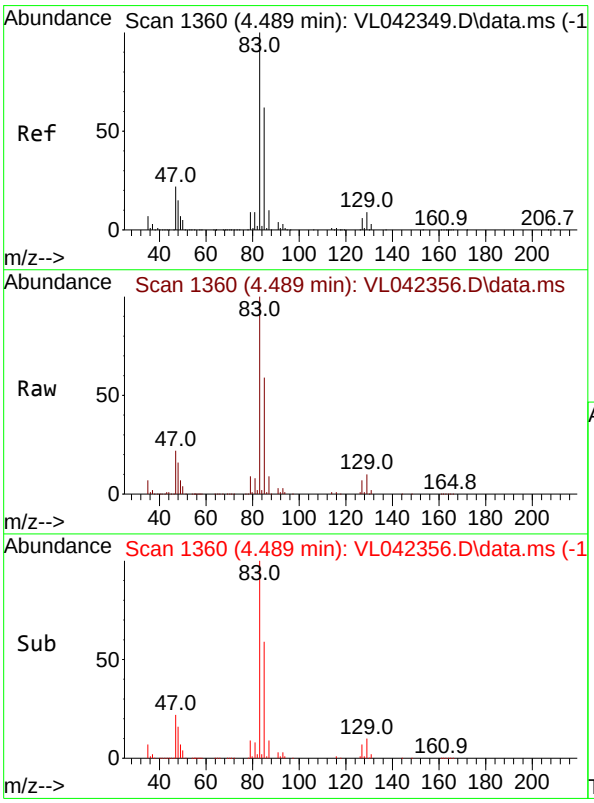
#41
Tetrahydrofuran
Concen: 9.479 ppbv
RT: 3.052 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 42 Resp: 141861

Ion	Ratio	Lower	Upper
42	100		
72	40.2	32.3	48.5
71	39.8	31.4	47.2

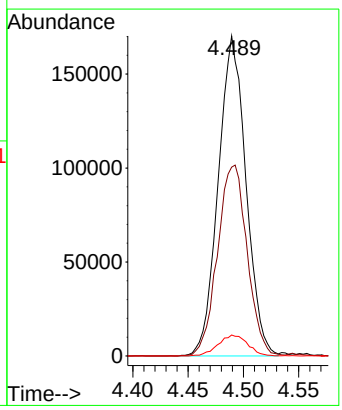


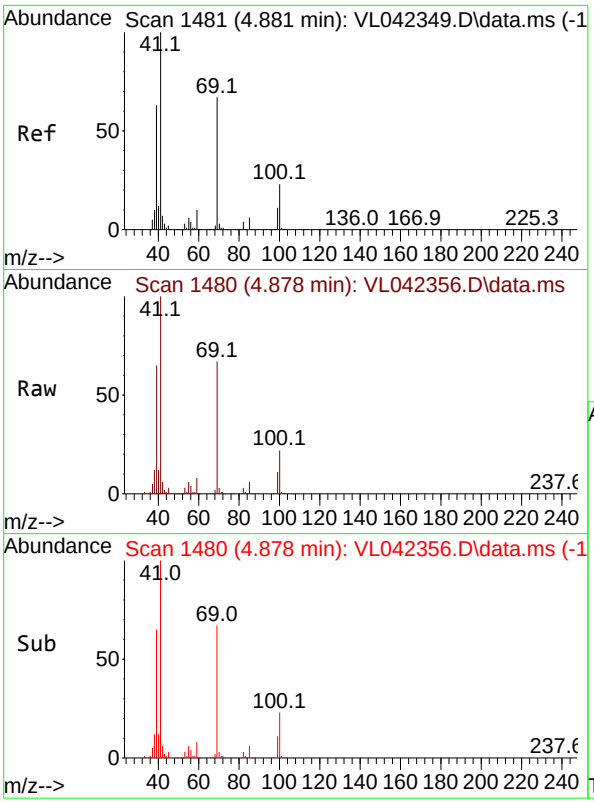


#42
Bromodichloromethane
Concen: 10.156 ppbv
RT: 4.489 min Scan# 1360
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 83 Resp: 296946

Ion	Ratio	Lower	Upper
83	100		
85	59.0	49.7	74.5
127	6.6	5.1	7.7



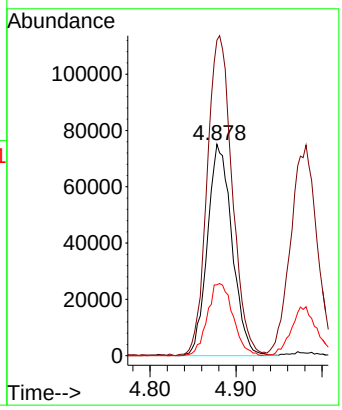


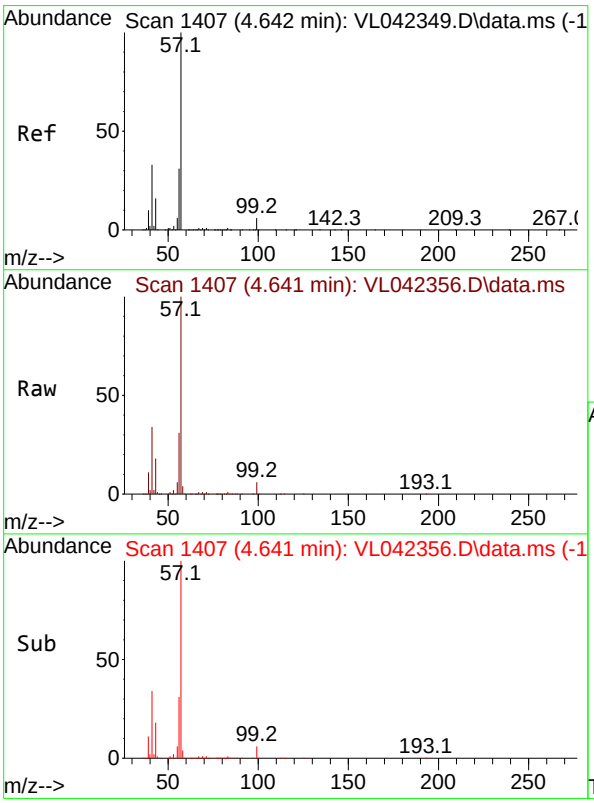
#43
Methyl Methacrylate
Concen: 9.458 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 69 Resp: 149209

Ion	Ratio	Lower	Upper
69	100		
41	154.1	118.6	177.8
100	35.5	28.2	42.2

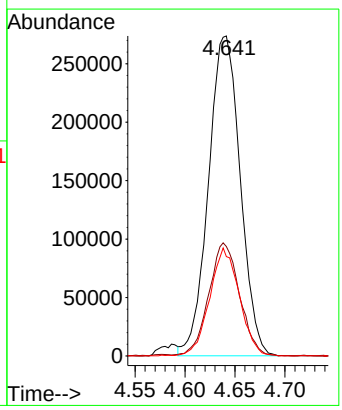


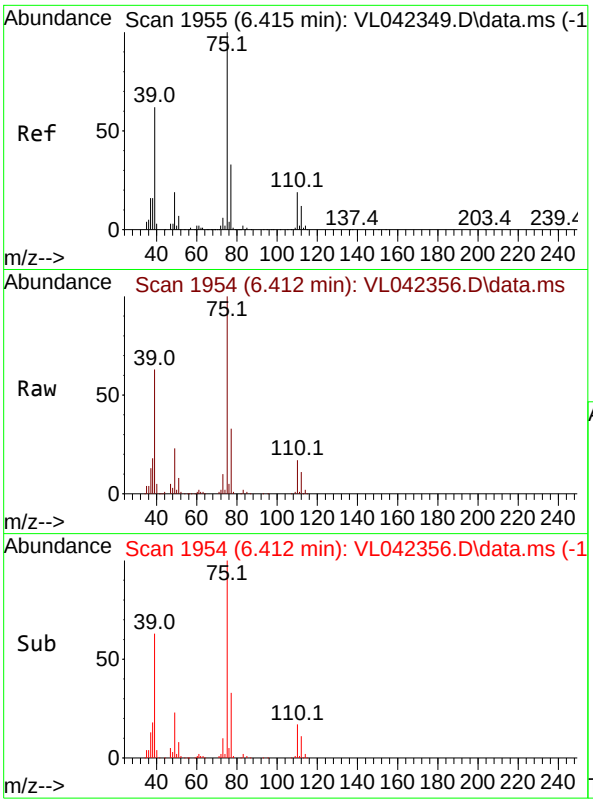


#44
2,2,4-Trimethylpentane
Concen: 10.030 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 57 Resp: 606376

Ion	Ratio	Lower	Upper
57	100		
41	34.3	27.2	40.8
56	31.6	25.7	38.5



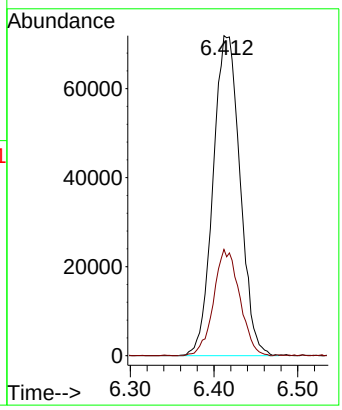


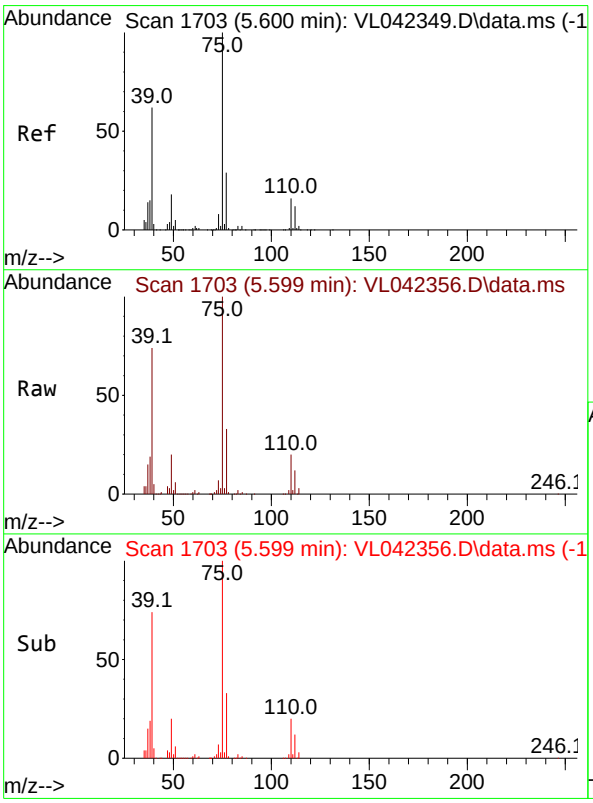
#45
t-1,3-Dichloropropene
Concen: 9.975 ppbv
RT: 6.412 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 75 Resp: 160750

Ion	Ratio	Lower	Upper
75	100		
77	33.2	27.0	40.6

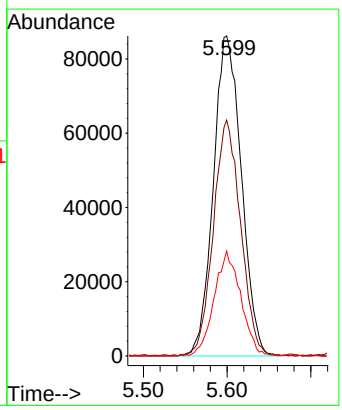


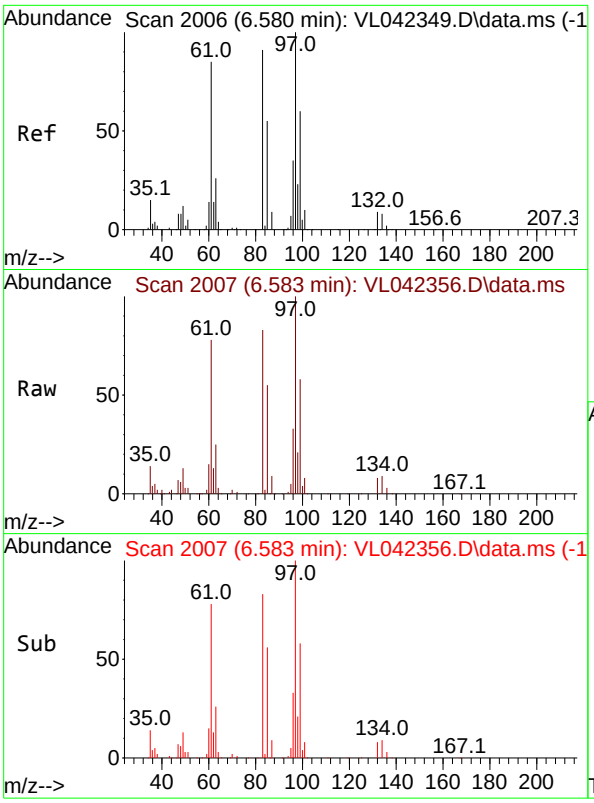


#46
cis-1,3-Dichloropropene
Concen: 10.148 ppbv
RT: 5.599 min Scan# 1703
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 75 Resp: 200144

Ion	Ratio	Lower	Upper
75	100		
39	73.7	50.0	75.0
77	32.7	23.0	34.6



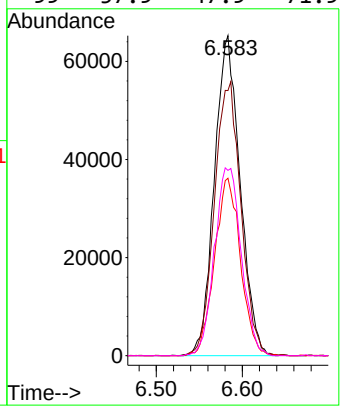


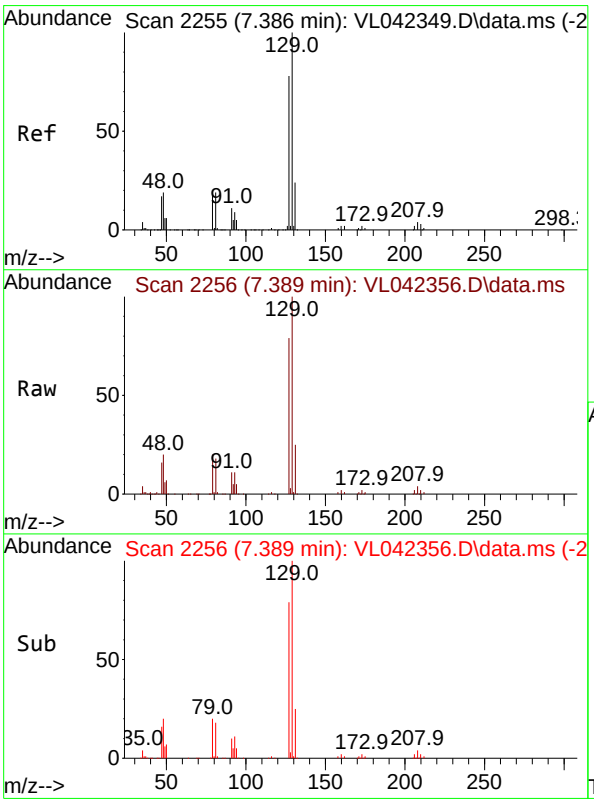
#47
1,1,2-Trichloroethane
Concen: 10.202 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 97 Resp: 135575

Ion	Ratio	Lower	Upper
97	100		
83	82.8	72.8	109.2
85	55.5	44.2	66.4
99	57.9	47.9	71.9

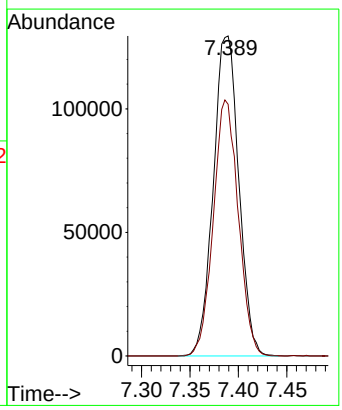


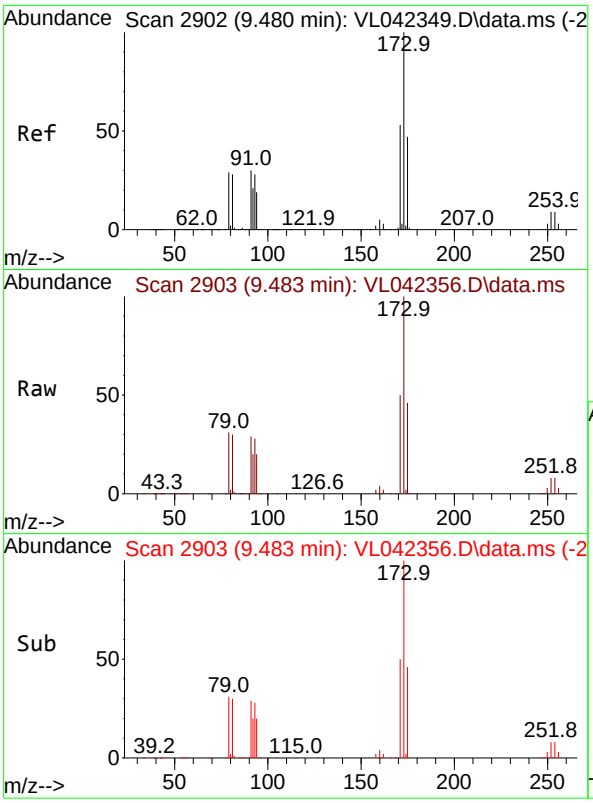


#48
Dibromochloromethane
Concen: 10.103 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:129 Resp: 237206

Ion	Ratio	Lower	Upper
129	100		
127	78.4	39.1	117.3



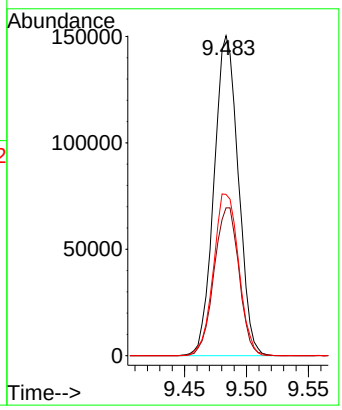


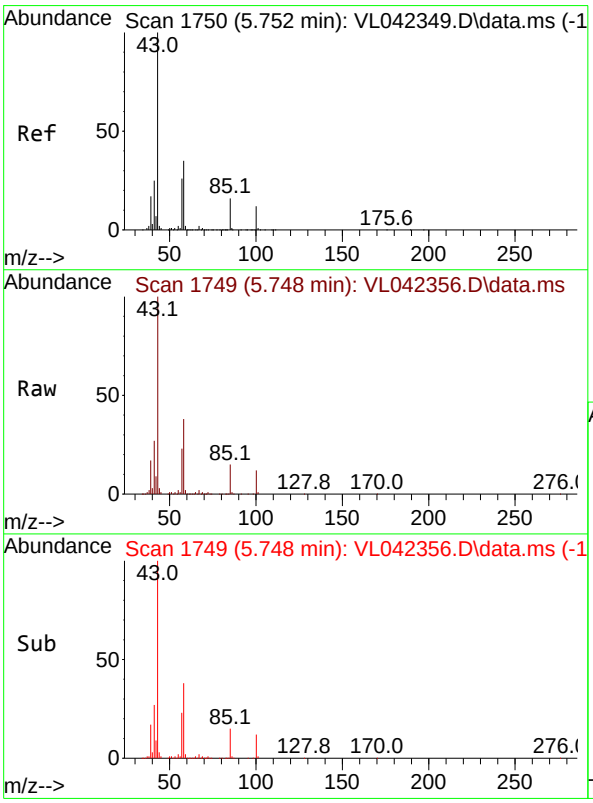
#49
Bromoform
Concen: 10.016 ppbv
RT: 9.483 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:173 Resp: 205630

Ion	Ratio	Lower	Upper
173	100		
175	47.6	38.2	57.2
171	52.5	40.9	61.3

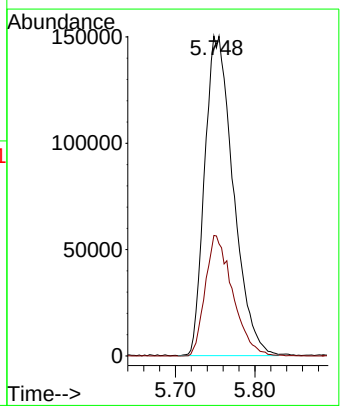


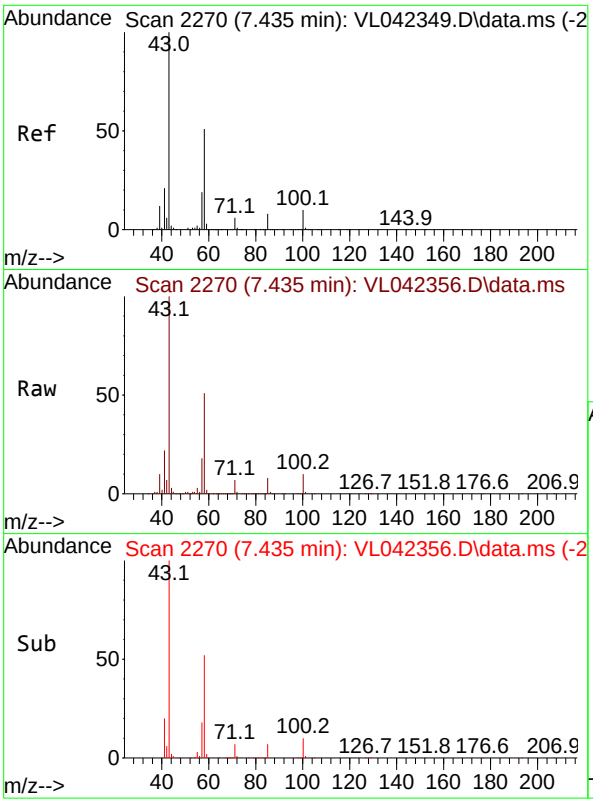


#50
4-Methyl-2-Pentanone
Concen: 8.819 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 43 Resp: 376145

Ion	Ratio	Lower	Upper
43	100		
58	36.2	28.6	43.0



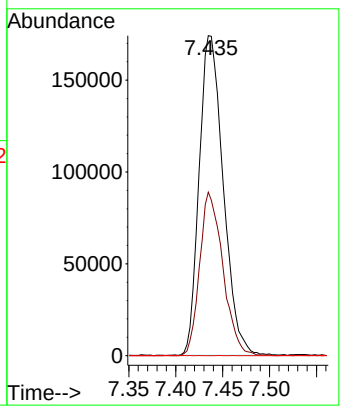


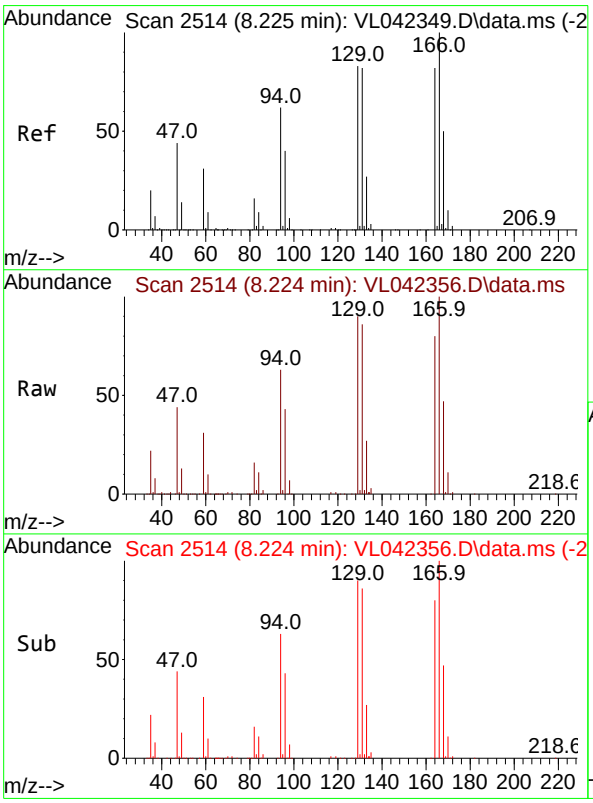
#51
2-Hexanone
Concen: 8.118 ppbv
RT: 7.435 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 43 Resp: 310521

Ion	Ratio	Lower	Upper
43	100		
58	49.3	40.2	60.4
98	0.0	0.1	0.1#

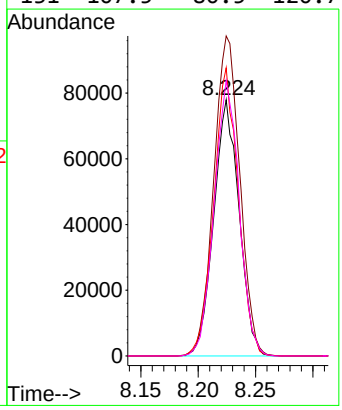


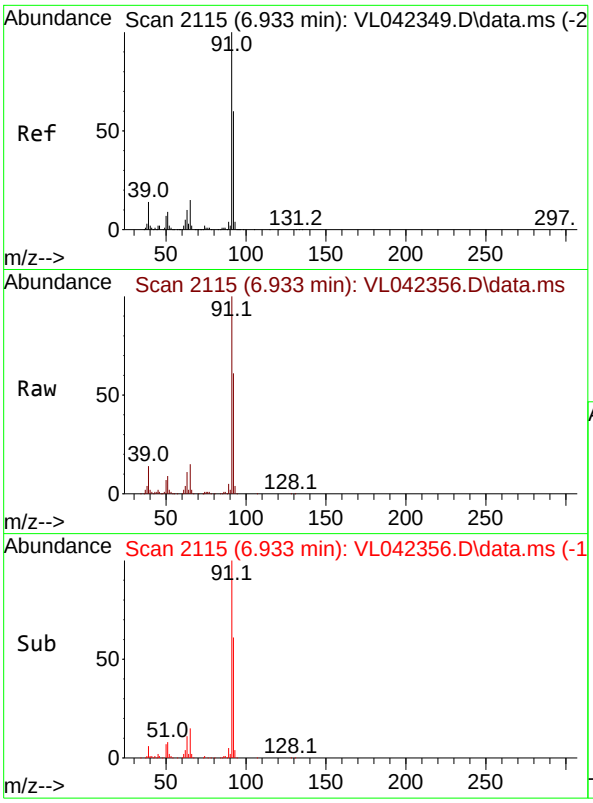


#52
Tetrachloroethene
Concen: 8.827 ppbv
RT: 8.224 min Scan# 2514
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:164 Resp: 119424

Ion	Ratio	Lower	Upper
164	100		
166	124.9	98.2	147.2
129	112.5	81.8	122.8
131	107.5	80.5	120.7



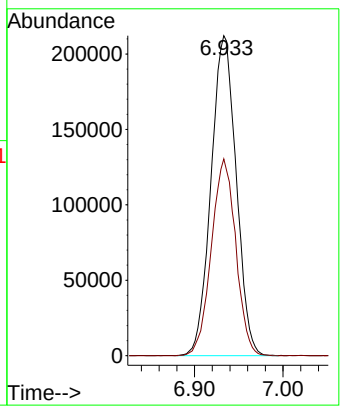


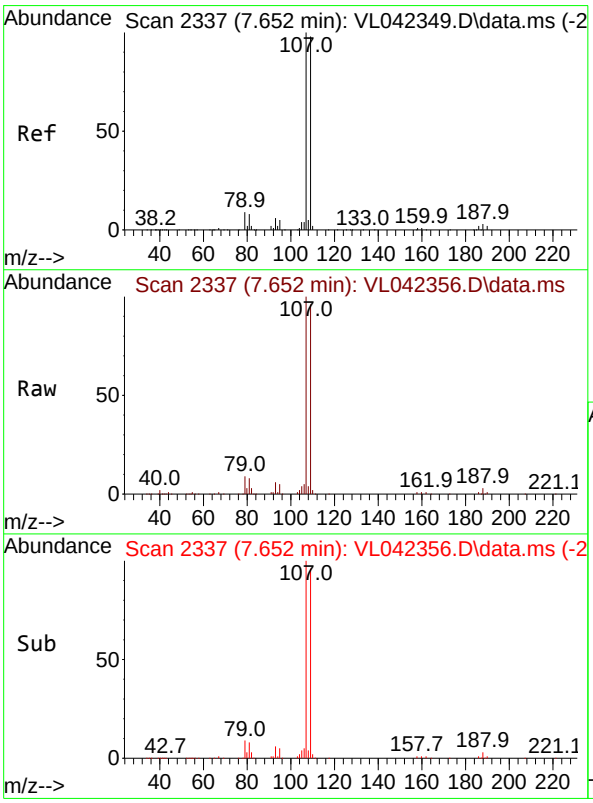
#53
Toluene
Concen: 9.986 ppbv
RT: 6.933 min Scan# 21
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 91 Resp: 419462

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4

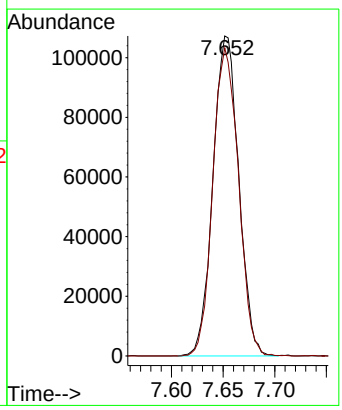


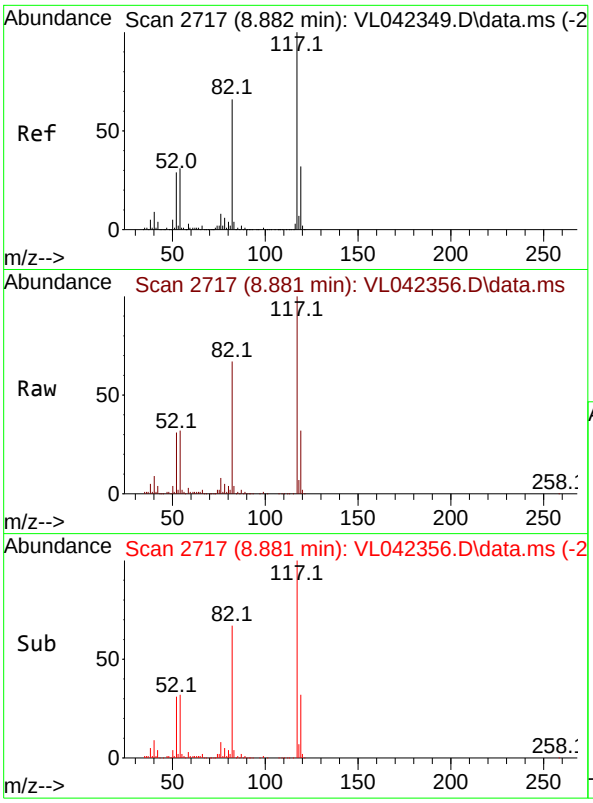


#54
1,2-Dibromoethane
Concen: 9.792 ppbv
RT: 7.652 min Scan# 2337
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:107 Resp: 186231

Ion	Ratio	Lower	Upper
107	100		
109	96.3	78.2	117.4



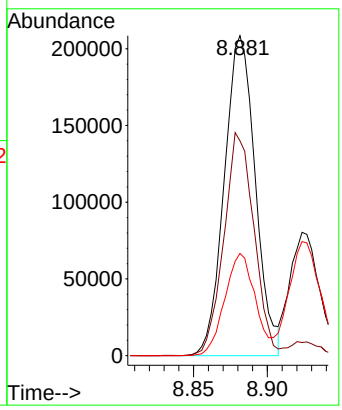


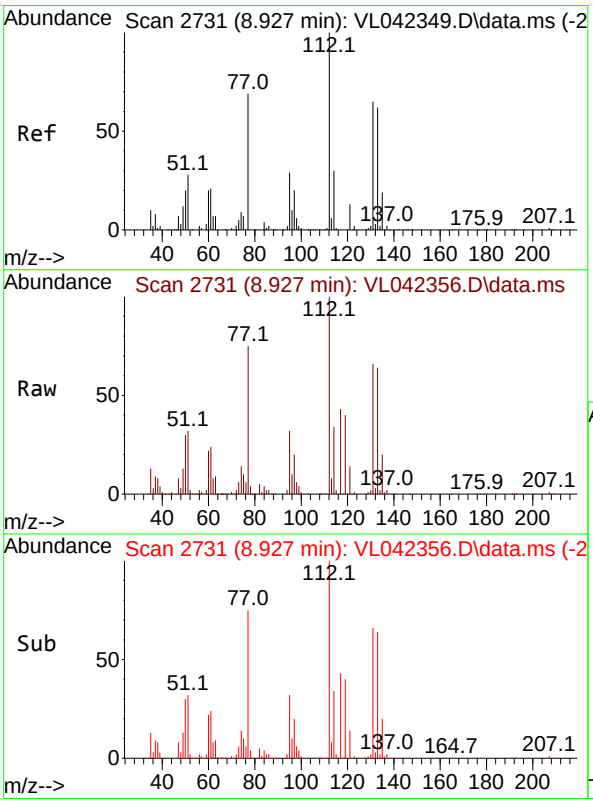
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:117 Resp: 305357

Ion	Ratio	Lower	Upper
117	100		
82	68.3	57.8	86.6
119	31.8	25.2	37.8

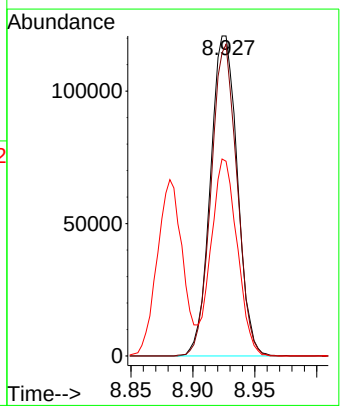


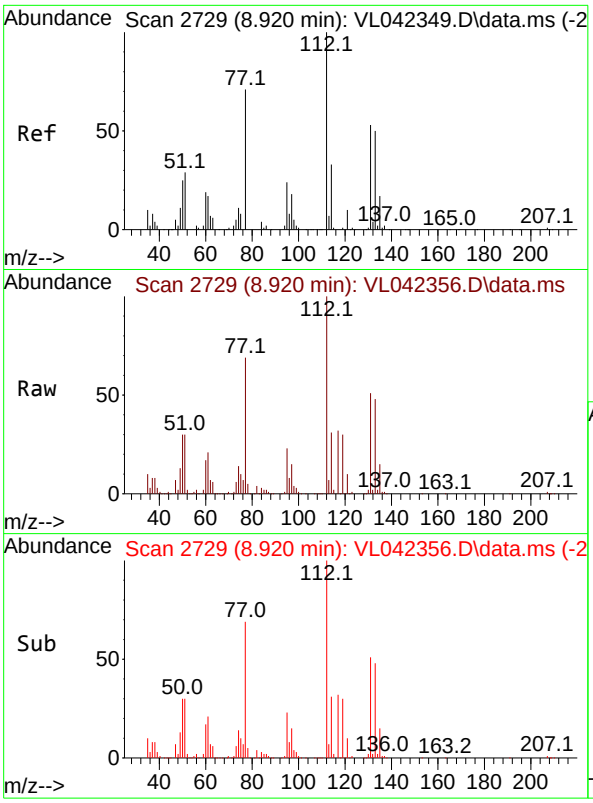


#56
1,1,1,2-Tetrachloroethane
Concen: 9.886 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:131 Resp: 182712

Ion	Ratio	Lower	Upper
131	100		
133	93.9	78.3	117.5
119	59.4	48.7	73.1



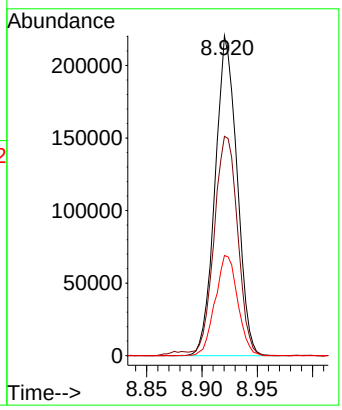


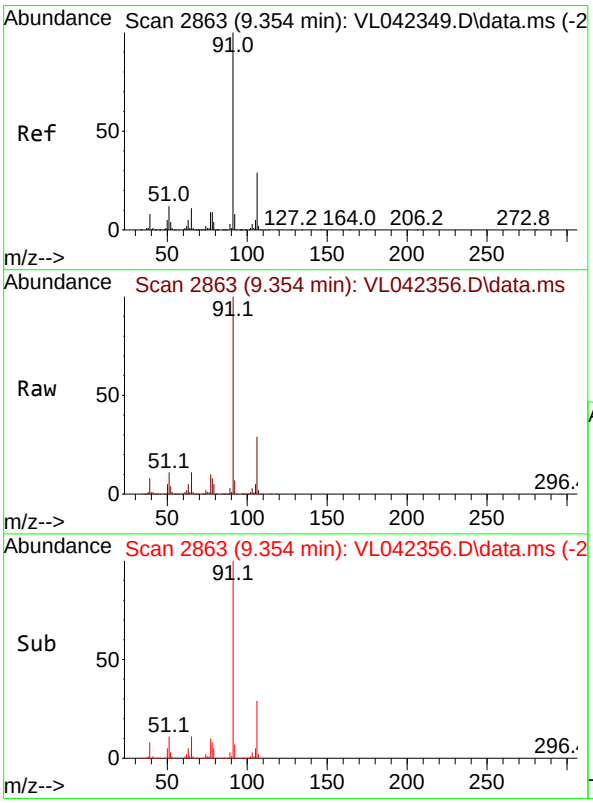
#57
Chlorobenzene
Concen: 9.589 ppbv
RT: 8.920 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:112 Resp: 304533

Ion	Ratio	Lower	Upper
112	100		
77	68.5	57.8	86.6
114	31.3	29.3	35.9

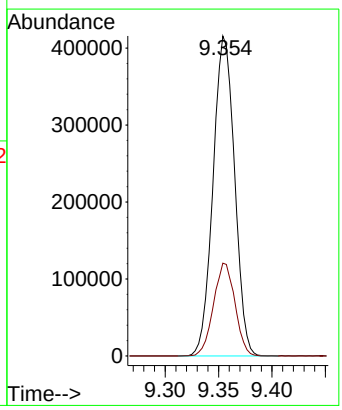


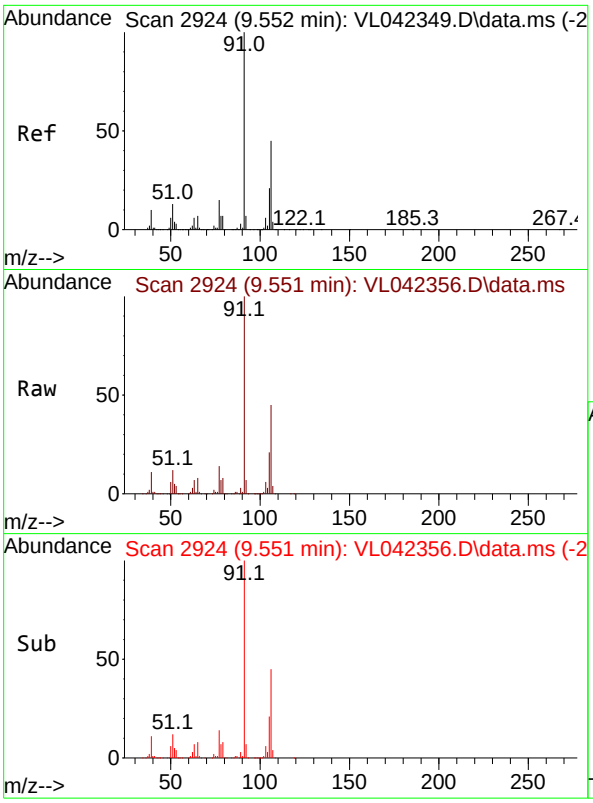


#58
Ethyl Benzene
Concen: 9.645 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 583515

Ion	Ratio	Lower	Upper
91	100		
106	29.0	23.0	34.4



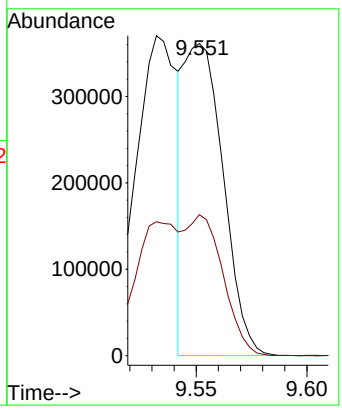


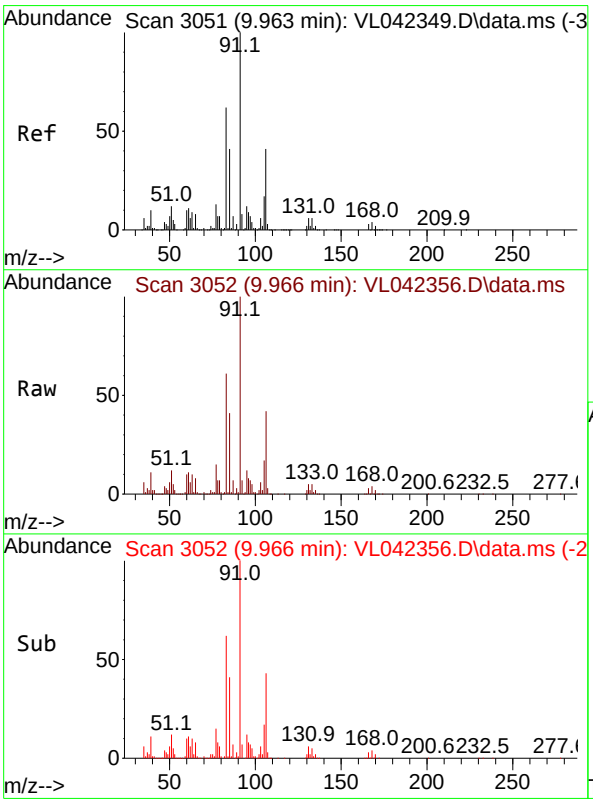
#59
m/p-Xylene
Concen: 9.084 ppbv
RT: 9.551 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 91 Resp: 442744

Ion	Ratio	Lower	Upper
91	100		
106	92.1	35.4	53.2#

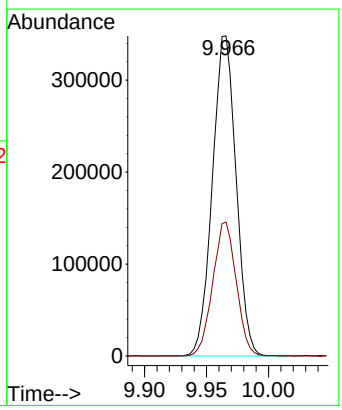


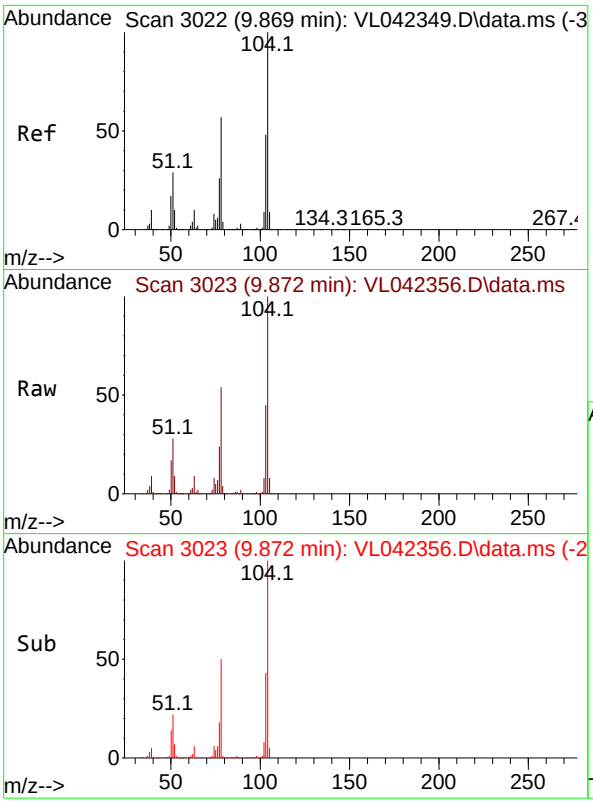


#60
o-Xylene
Concen: 9.465 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 464522

Ion	Ratio	Lower	Upper
91	100		
106	41.4	21.1	63.4



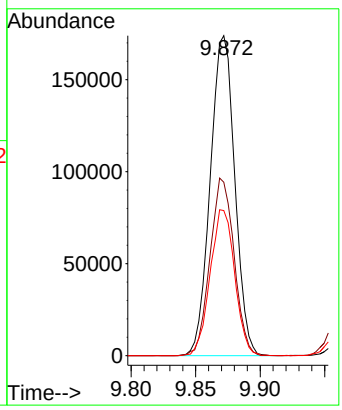


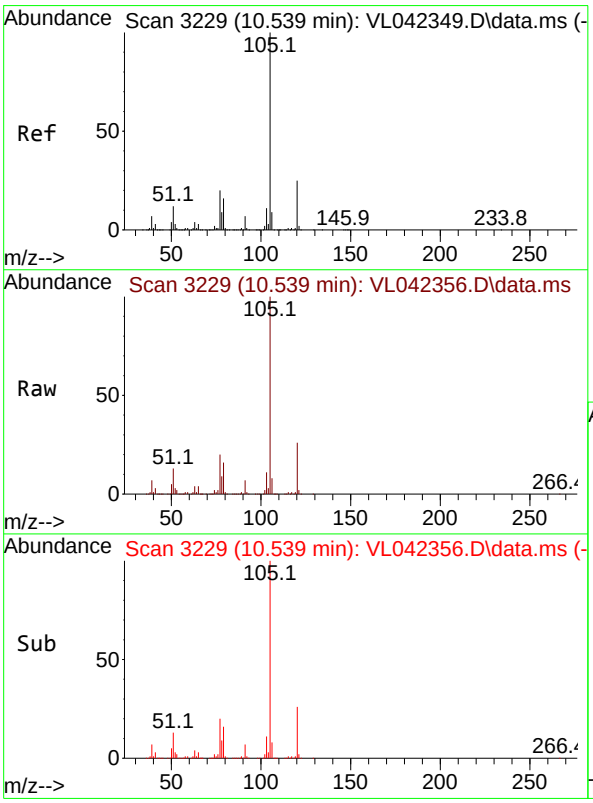
#61
Styrene
Concen: 9.813 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:104 Resp: 229869

Ion	Ratio	Lower	Upper
104	100		
78	54.5	44.6	66.8
103	45.7	37.4	56.0

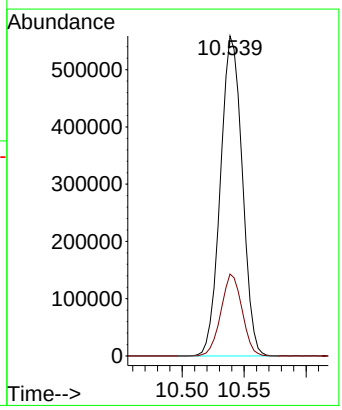


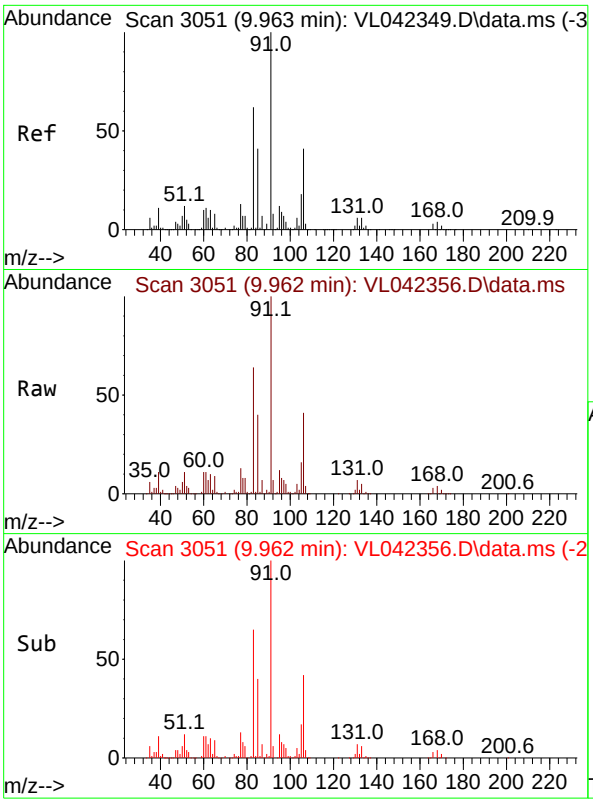


#62
Isopropylbenzene
Concen: 9.520 ppbv
RT: 10.539 min Scan# 3229
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 685965

Ion	Ratio	Lower	Upper
105	100		
120	24.8	19.8	29.8



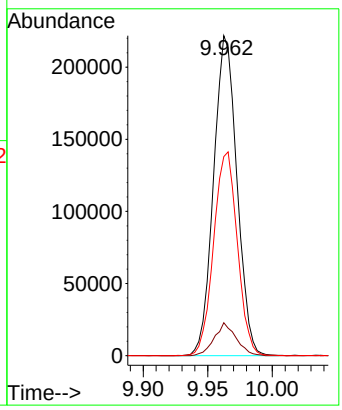


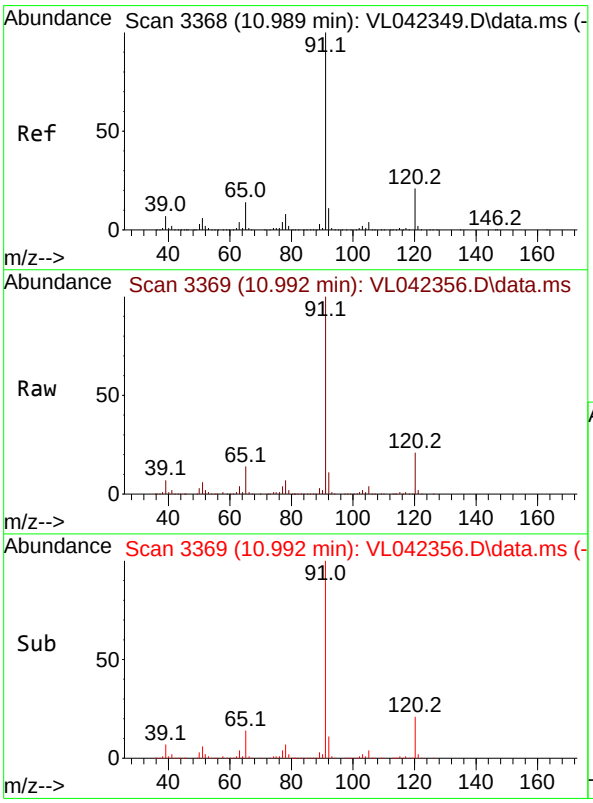
#63
1,1,2,2-Tetrachloroethane
Concen: 8.773 ppbv
RT: 9.962 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 83 Resp: 279007

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	64.6	32.4	97.0

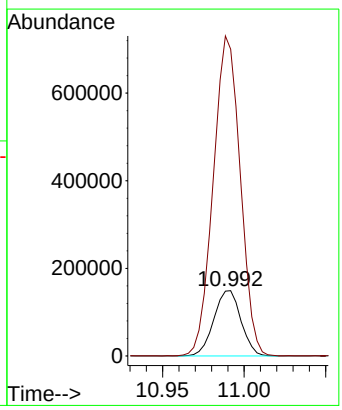


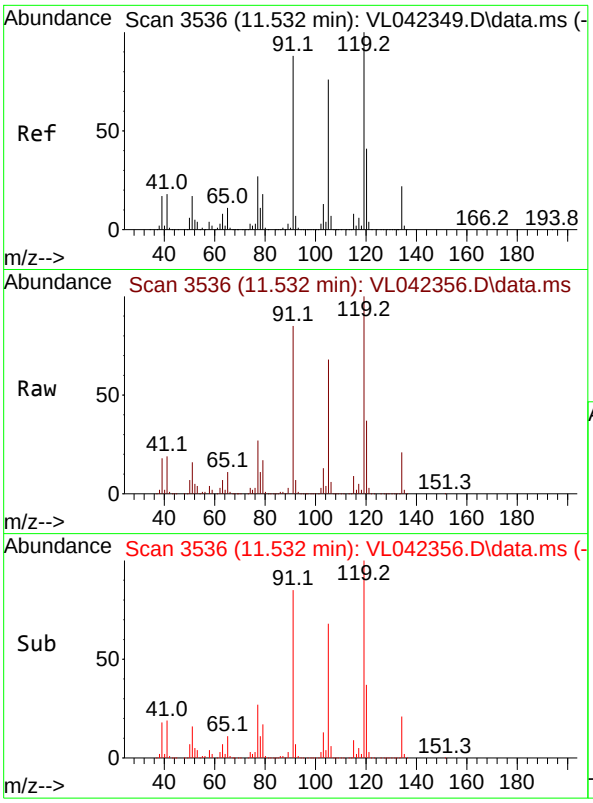


#64
n-propylbenzene
Concen: 9.533 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:120 Resp: 172654

Ion	Ratio	Lower	Upper
120	100		
91	487.7	392.4	588.6



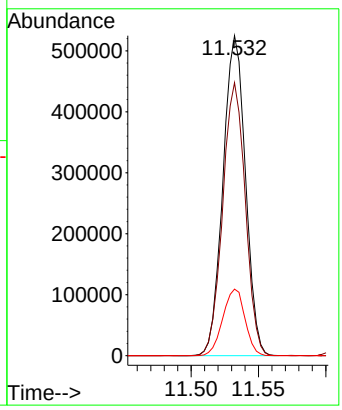


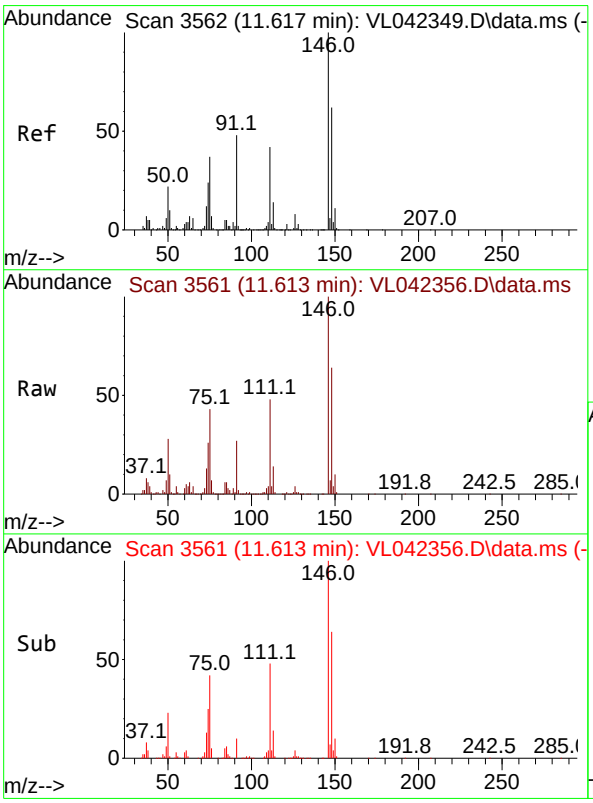
#65
tert-Butylbenzene
Concen: 9.203 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:119 Resp: 609500

Ion	Ratio	Lower	Upper
119	100		
91	85.8	74.6	111.8
134	20.5	18.8	28.2

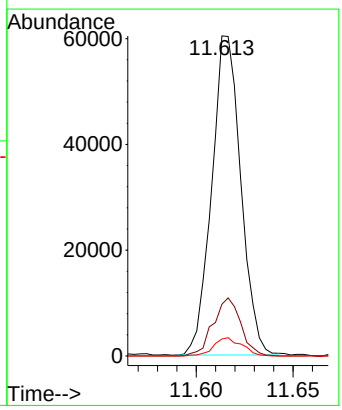


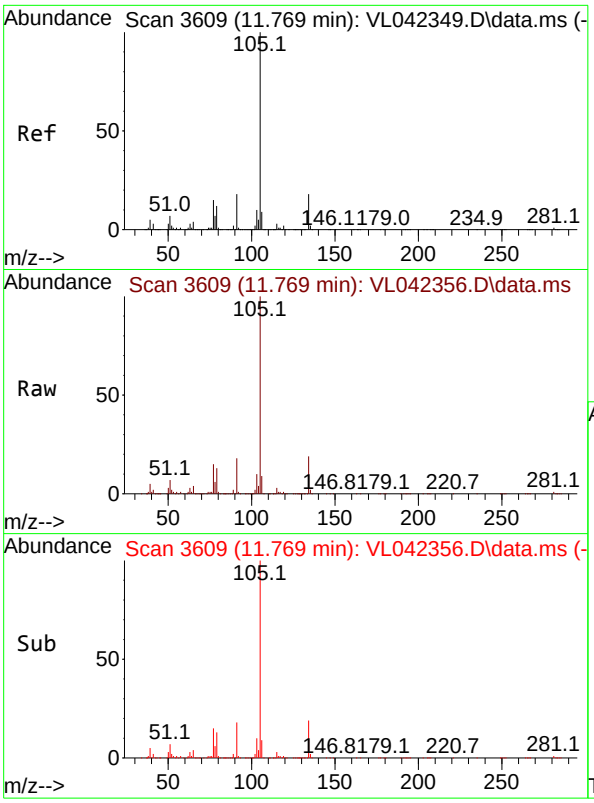


#66
Benzyl Chloride
Concen: 8.664 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 63051

Ion	Ratio	Lower	Upper
91	100		
126	17.3	11.8	17.6
128	5.6	4.5	6.7



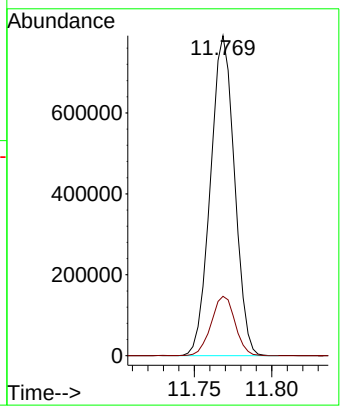


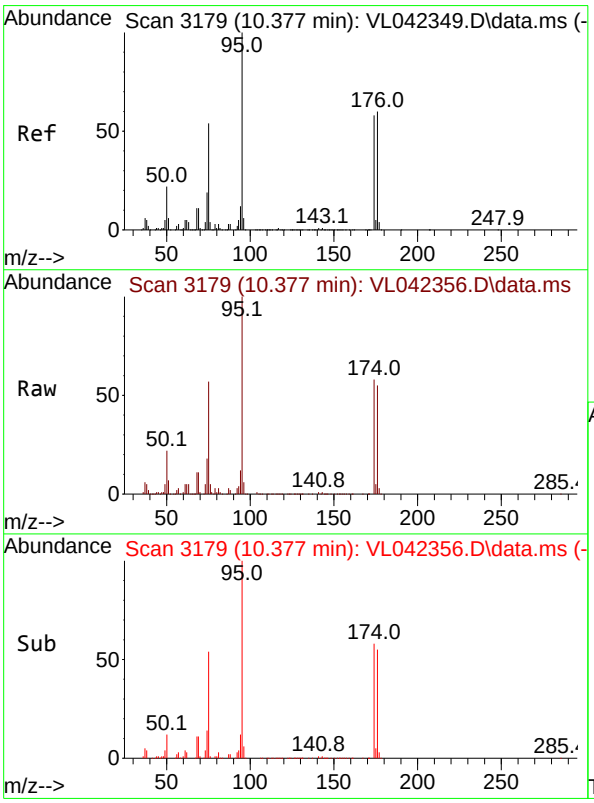
#67
sec-Butylbenzene
Concen: 9.268 ppbv
RT: 11.769 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:105 Resp: 853807

Ion	Ratio	Lower	Upper
105	100		
134	18.5	14.6	21.8

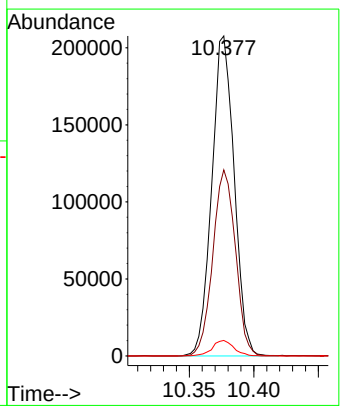


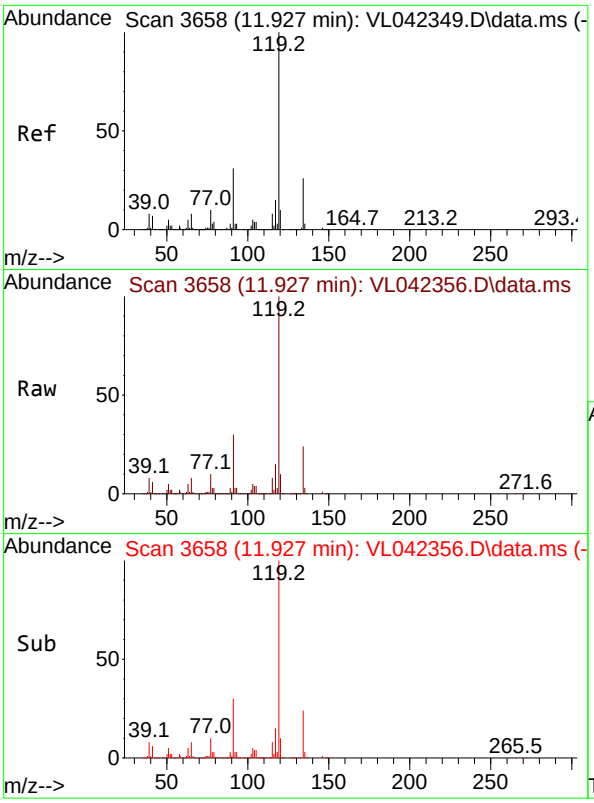


#68
1-Bromo-4-Fluorobenzene
Concen: 9.969 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 95 Resp: 250149

Ion	Ratio	Lower	Upper
95	100		
174	58.7	48.5	72.7
175	4.7	3.7	5.5



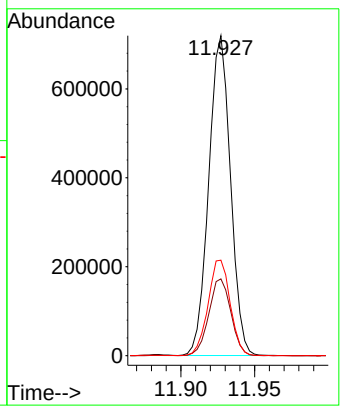


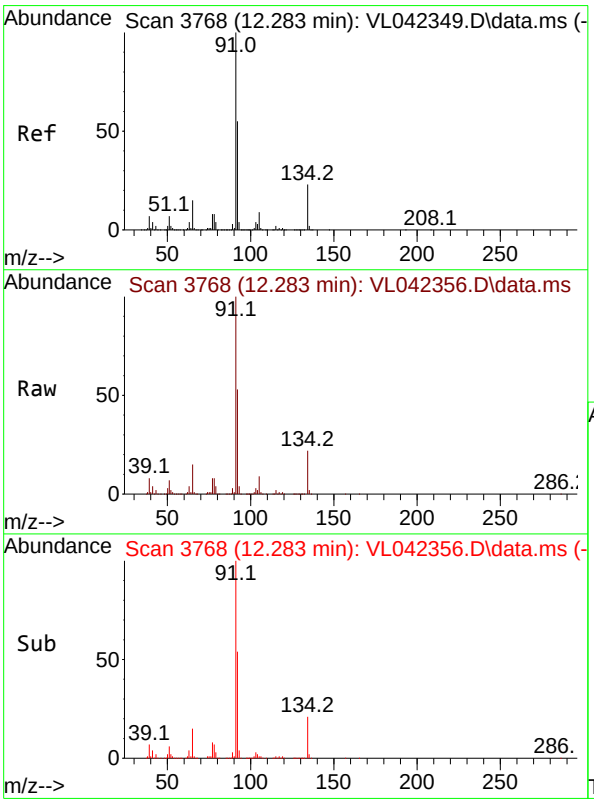
#69
p-Isopropyltoluene
Concen: 9.220 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:119 Resp: 737861

Ion	Ratio	Lower	Upper
119	100		
134	24.5	20.0	30.0
91	30.6	24.4	36.6

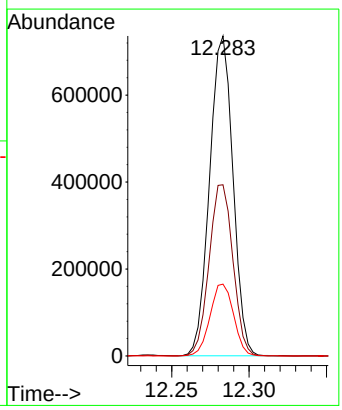


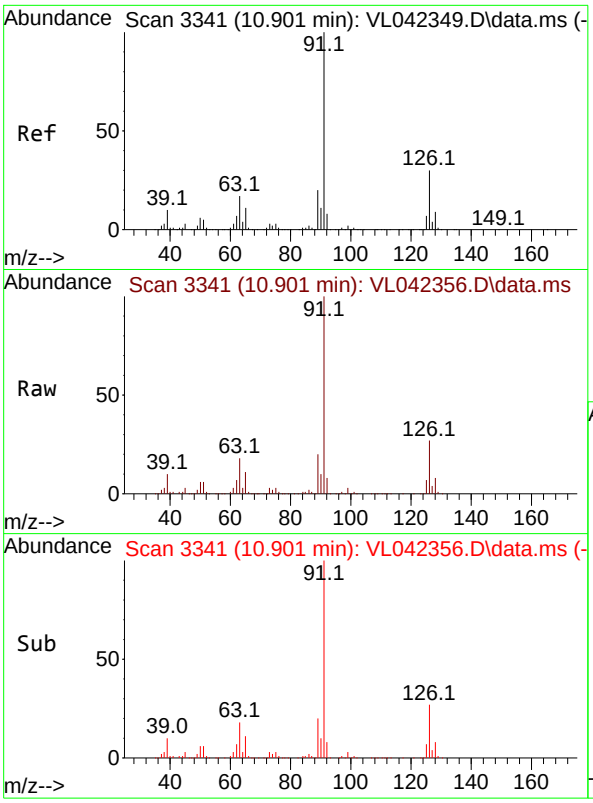


#70
n-Butylbenzene
Concen: 9.255 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion: 91 Resp: 771461

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.2	66.4
134	22.7	18.2	27.4



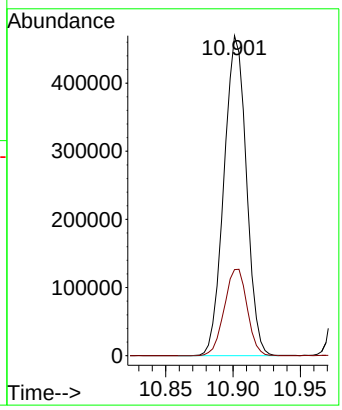


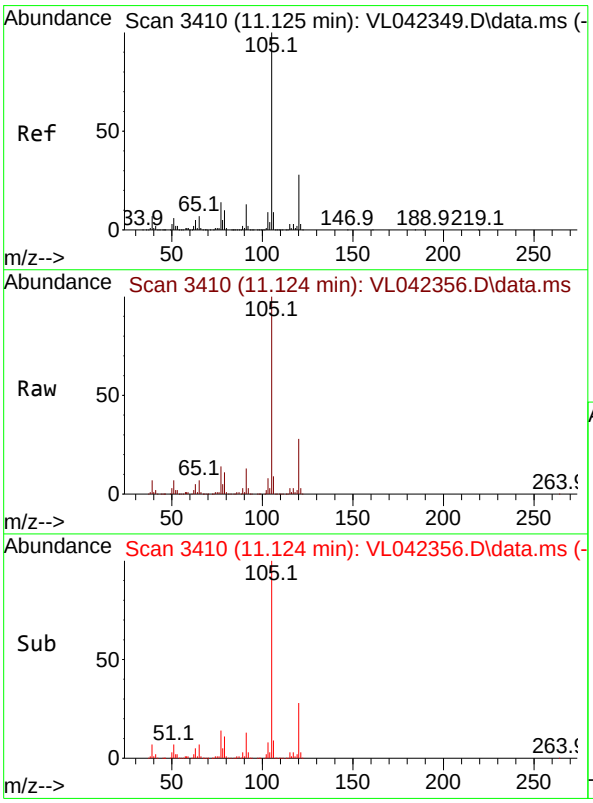
#71
2-Chlorotoluene
Concen: 9.622 ppbv
RT: 10.901 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion: 91 Resp: 543794

Ion	Ratio	Lower	Upper
91	100		
126	27.5	11.4	45.4

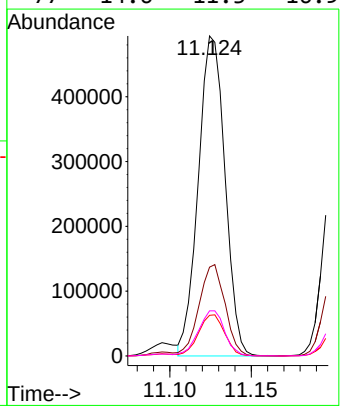


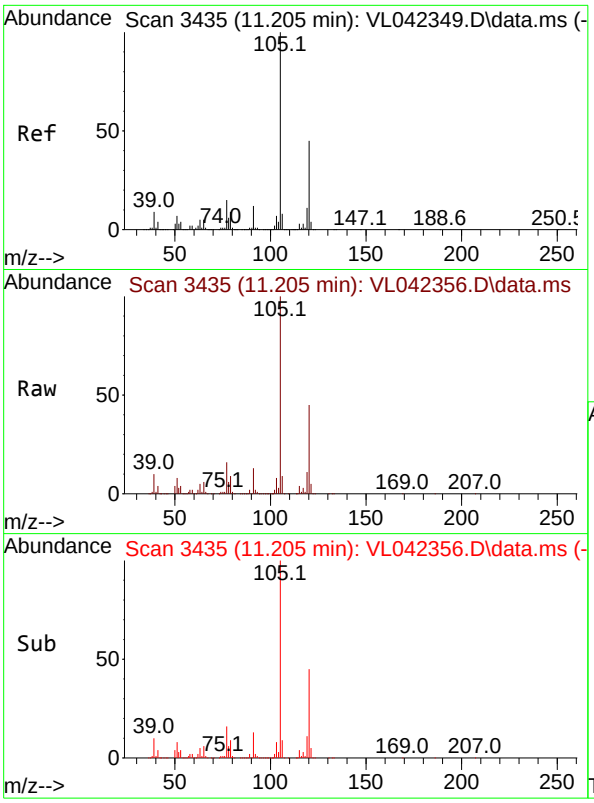


#72
4-Ethyltoluene
Concen: 9.385 ppbv
RT: 11.124 min Scan# 3410
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 563136

Ion	Ratio	Lower	Upper
105	100		
120	28.9	23.2	34.8
91	13.2	10.4	15.6
77	14.6	11.3	16.9



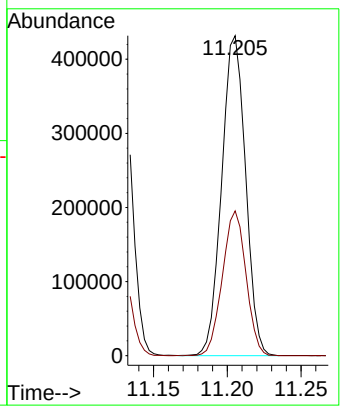


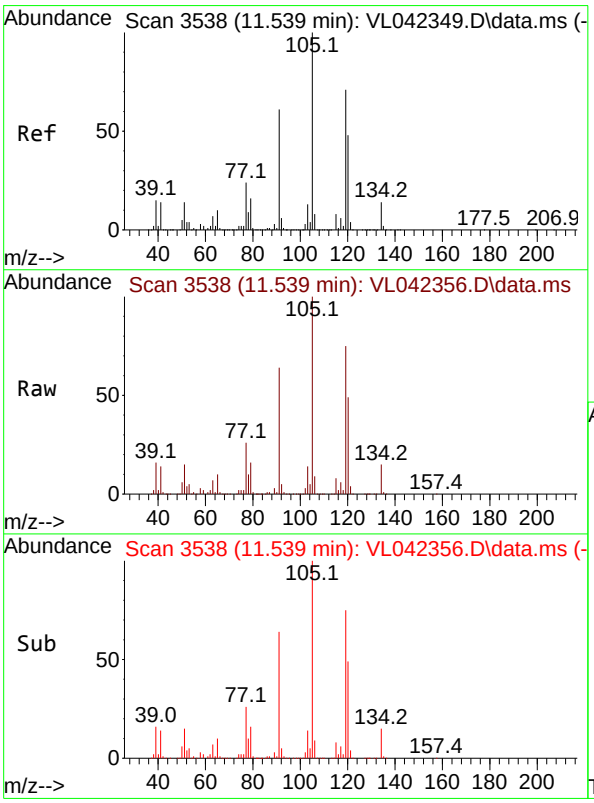
#73
1,3,5-Trimethylbenzene
Concen: 9.186 ppbv
RT: 11.205 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:105 Resp: 486583

Ion	Ratio	Lower	Upper
105	100		
120	45.2	35.6	53.4

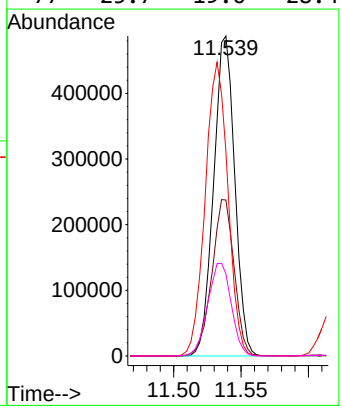


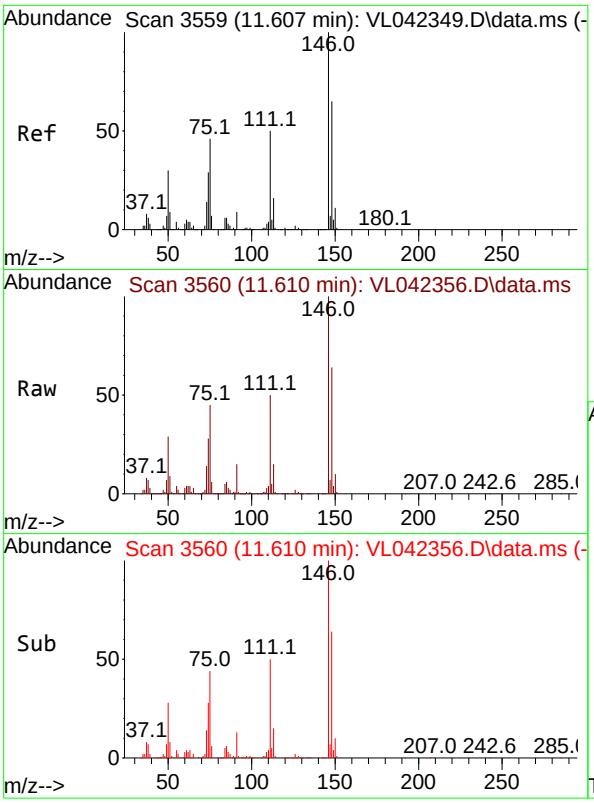


#74
1,2,4-Trimethylbenzene
Concen: 8.592 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:105 Resp: 531576

Ion	Ratio	Lower	Upper
105	100		
120	48.7	38.1	57.1
91	64.0	48.8	73.2
77	25.7	19.0	28.4



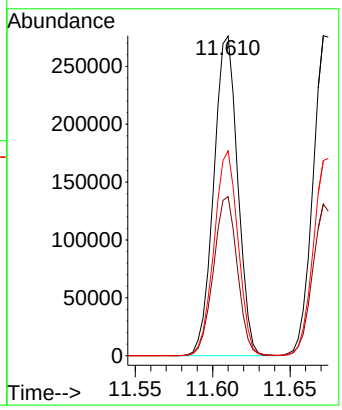


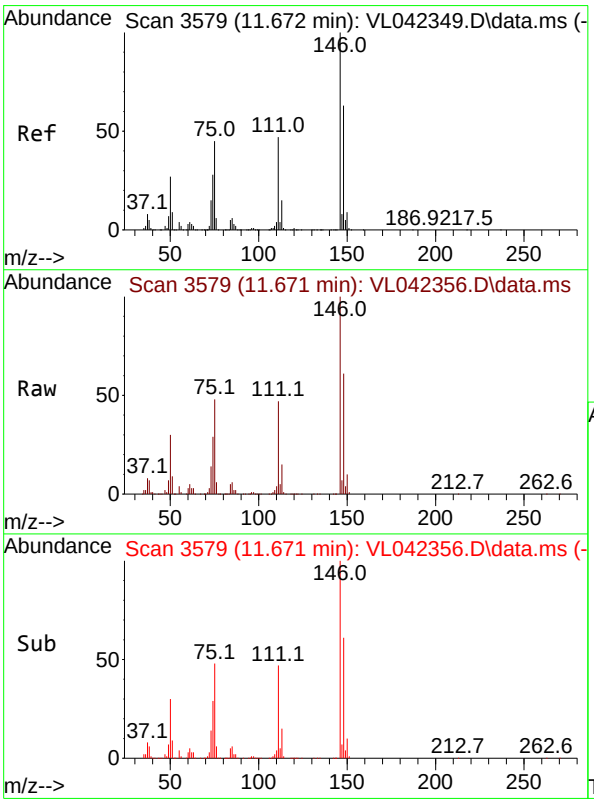
#75
1,3-Dichlorobenzene
Concen: 9.240 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:146 Resp: 297157

Ion	Ratio	Lower	Upper
146	100		
111	49.5	24.3	72.8
148	64.1	31.6	94.8

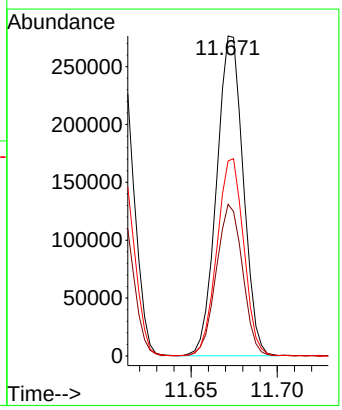


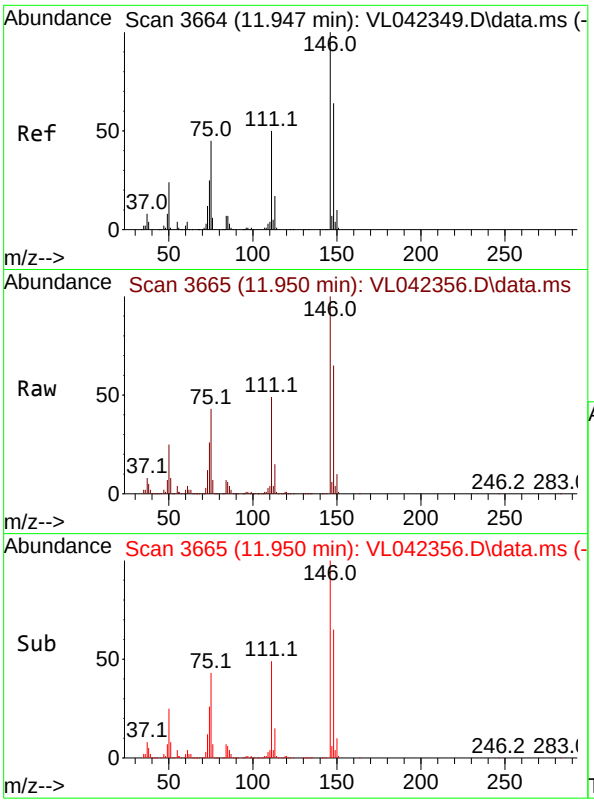


#76
1,4-Dichlorobenzene
Concen: 9.210 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:146 Resp: 297697

Ion	Ratio	Lower	Upper
146	100		
111	47.1	24.2	72.6
148	62.3	32.1	96.5



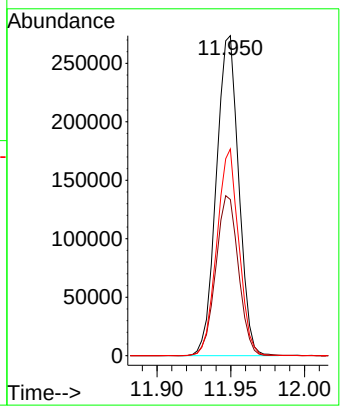


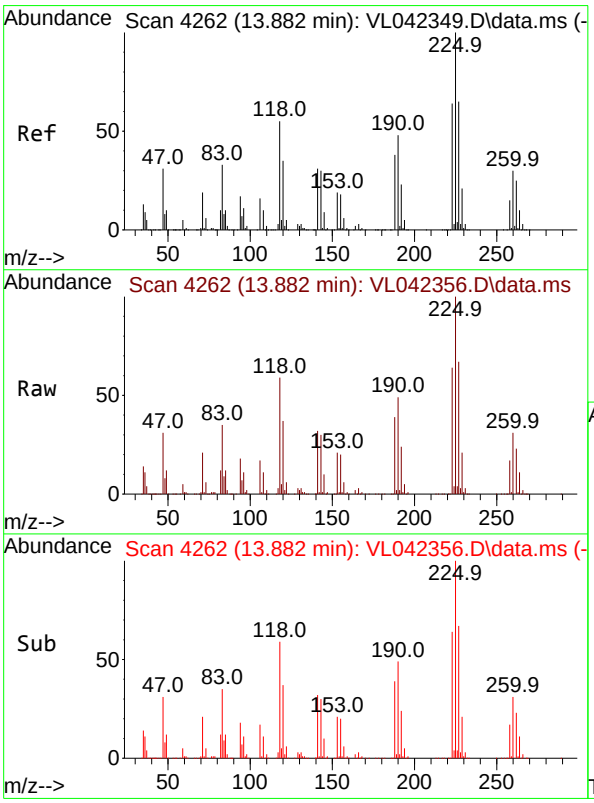
#77
1,2-Dichlorobenzene
Concen: 9.251 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:146 Resp: 289284

Ion	Ratio	Lower	Upper
146	100		
111	50.8	25.3	75.9
148	63.4	31.5	94.5

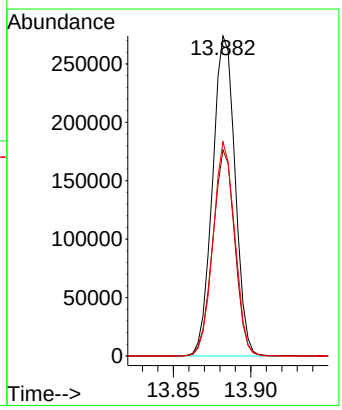


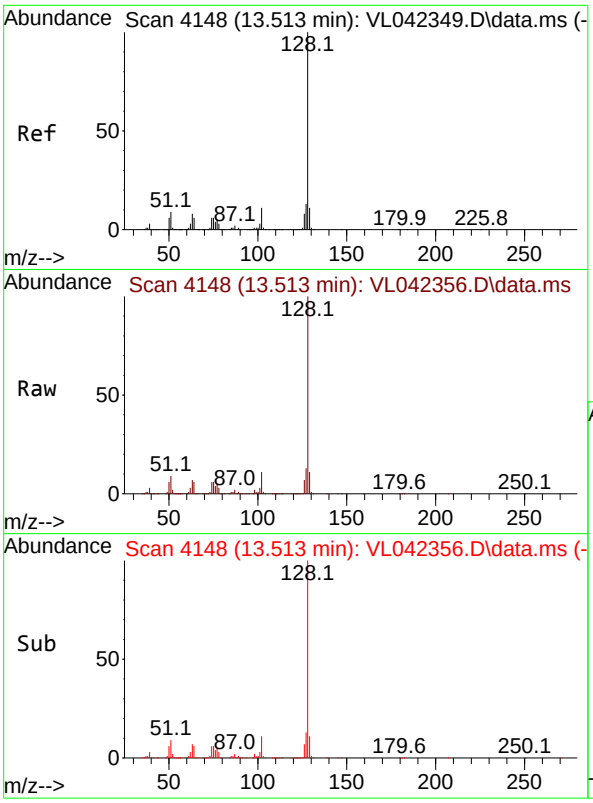


#78
Hexachloro-1,3-Butadiene
Concen: 8.771 ppbv
RT: 13.882 min Scan# 4262
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:225 Resp: 276960

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.3	75.5
227	64.5	51.5	77.3



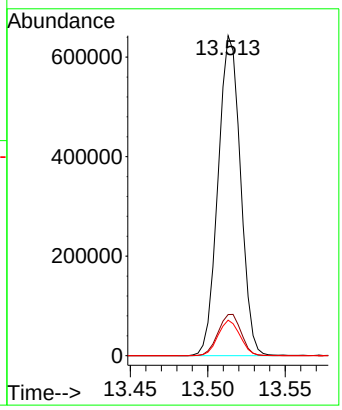


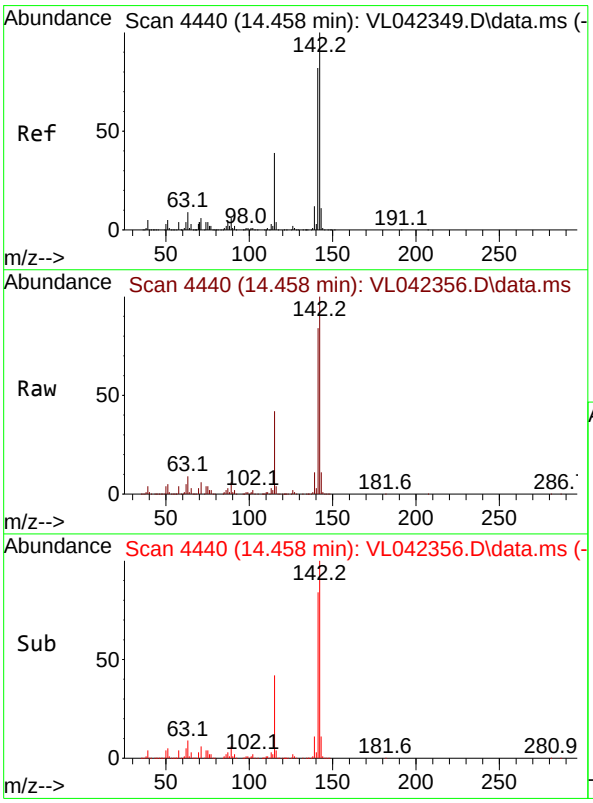
#79
Naphthalene
Concen: 8.750 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:128 Resp: 647349

Ion	Ratio	Lower	Upper
128	100		
127	12.9	10.6	15.8
129	11.1	8.6	12.8

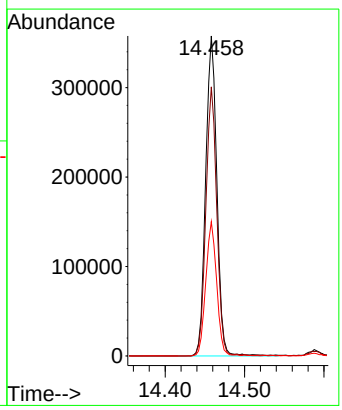


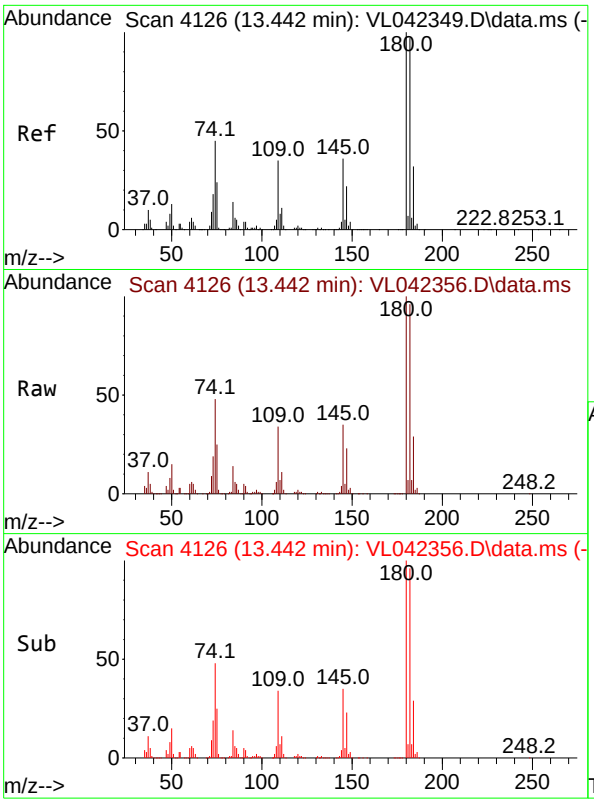


#80
Naphthalene,2-methyl-
Concen: 8.307 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Tgt Ion:142 Resp: 350259

Ion	Ratio	Lower	Upper
142	100		
141	83.0	66.8	100.2
115	41.4	33.4	50.2



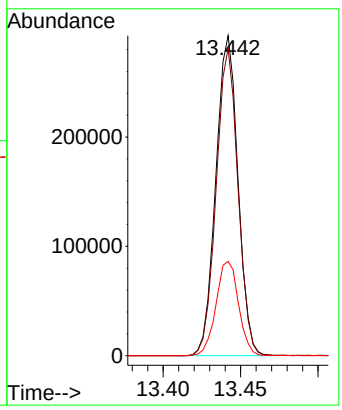


#81
1,2,4-Trichlorobenzene
Concen: 9.136 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042356.D
Acq: 17 Apr 2025 13:43

Instrument :
MSVOA_L
ClientSampleId :
ICVVL041725

Tgt Ion:180 Resp: 290260

Ion	Ratio	Lower	Upper
180	100		
182	94.7	76.8	115.2
184	30.1	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.790	49	122375	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.965	114	352201	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.888	117	321521	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.380	95	266757	10.096	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	223505	10.337	ppbv	97
3) Chlorodifluoromethane	1.476	51	206172	10.014	ppbv	100
4) Chloromethane	1.535	50	86675	10.130	ppbv	98
5) Vinyl Chloride	1.583	62	83419	8.956	ppbv	98
6) Bromomethane	1.670	94	36951	9.235	ppbv	83
7) Chloroethane	1.706	64	33936	10.075	ppbv	100
8) Dichlorotetrafluoroethane	1.557	85	189924	10.231	ppbv	95
9) Propene	1.486	41	88088	9.395	ppbv	98
10) Heptane	4.985	43	243501	9.244	ppbv	99
11) Trichlorofluoromethane	1.881	101	206645	10.050	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.140	101	169501	10.083	ppbv	98
13) Ethanol	1.722	45	4837	3.246	ppbv	88
14) Bromoethene	1.784	108	62214	9.818	ppbv	98
15) Acetone	1.836	43	175153	8.743	ppbv	100
16) 1,3-Butadiene	1.609	39	86965	9.076	ppbv	96
17) tert-Butyl alcohol	2.043	59	242154	9.754	ppbv	100
18) 1,1-Dichloroethene	2.036	96	77247	9.836	ppbv	99
19) Isopropyl Alcohol	1.887	45	104123	9.356	ppbv	94
20) Methylene Chloride	2.062	84	69548	8.865	ppbv	91
21) Allyl Chloride	2.098	41	134221	9.704	ppbv	99
22) trans-1,2-Dichloroethene	2.344	96	86323	9.653	ppbv	97
23) Vinyl Acetate	2.467	43	68337	8.427	ppbv #	97
24) 1,1-Dichloroethane	2.412	63	173238	10.199	ppbv	99
25) Ethyl Acetate	2.839	43	488686	9.894	ppbv	100
26) Hexane	2.829	57	195124	9.761	ppbv	97
27) Carbon Disulfide	2.153	76	218345	10.202	ppbv	97
28) Methyl tert-Butyl Ether	2.444	73	124554	9.510	ppbv	96
29) Chloroform	2.852	83	289294	10.239	ppbv	99
30) Cyclohexane	3.862	84	163017	10.088	ppbv	100
31) cis-1,2-Dichloroethene	2.726	61	198108	10.424	ppbv	98
32) 1,1,1-Trichloroethane	3.373	97	309460	9.729	ppbv	99
34) 2-Butanone	2.561	43	272600	9.787	ppbv	99
35) Carbon Tetrachloride	3.768	117	305245	9.576	ppbv	92
36) Benzene	3.661	78	383239	10.088	ppbv	98
37) 1,2-Dichloroethane	3.224	62	236611	10.377	ppbv	99
38) Trichloroethene	4.558	130	153596	9.251	ppbv	98
39) 1,2-Dichloropropane	4.321	63	139669	9.866	ppbv	95
40) 1,4-Dioxane	4.590	88	67808	8.716	ppbv #	95
41) Tetrahydrofuran	3.059	42	157777	9.715	ppbv	99
42) Bromodichloromethane	4.496	83	327652	10.326	ppbv	98
43) Methyl Methacrylate	4.888	69	159292	9.304	ppbv	95
44) 2,2,4-Trimethylpentane	4.648	57	657377	10.019	ppbv	99
45) t-1,3-Dichloropropene	6.422	75	172514	9.864	ppbv	91

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	216901	10.133	ppbv		91
47) 1,1,2-Trichloroethane	6.590	97	146547	10.161	ppbv		96
48) Dibromochloromethane	7.396	129	261470	10.261	ppbv		100
49) Bromoform	9.487	173	221372	9.936	ppbv		99
50) 4-Methyl-2-Pentanone	5.758	43	407804	8.810	ppbv		99
51) 2-Hexanone	7.441	43	332646	8.013	ppbv	#	98
52) Tetrachloroethene	8.231	164	128670	8.763	ppbv		96
53) Toluene	6.943	91	447581	9.818	ppbv		100
54) 1,2-Dibromoethane	7.658	107	204328	9.899	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.930	131	199945	10.275	ppbv		96
57) Chlorobenzene	8.927	112	335143	10.022	ppbv		99
58) Ethyl Benzene	9.361	91	635446	9.975	ppbv		97
59) m/p-Xylene	9.555	91	513237	10.001	ppbv	#	33
60) o-Xylene	9.969	91	506535	9.802	ppbv		99
61) Styrene	9.875	104	248022	10.055	ppbv		99
62) Isopropylbenzene	10.545	105	745571	9.827	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.969	83	298581	8.916	ppbv		100
64) n-propylbenzene	10.995	120	188310	9.875	ppbv		95
65) tert-Butylbenzene	11.536	119	668687	9.589	ppbv		93
66) Benzyl Chloride	11.620	91	69058	9.012	ppbv		96
67) sec-Butylbenzene	11.772	105	930426	9.592	ppbv		100
69) p-Isopropyltoluene	11.931	119	795532	9.441	ppbv		99
70) n-Butylbenzene	12.287	91	846427	9.644	ppbv		100
71) 2-Chlorotoluene	10.905	91	591154	9.934	ppbv		99
72) 4-Ethyltoluene	11.131	105	606879	9.606	ppbv		99
73) 1,3,5-Trimethylbenzene	11.209	105	533060	9.557	ppbv		98
74) 1,2,4-Trimethylbenzene	11.542	105	584747	8.976	ppbv		96
75) 1,3-Dichlorobenzene	11.613	146	320811	9.474	ppbv		99
76) 1,4-Dichlorobenzene	11.675	146	319376	9.384	ppbv		100
77) 1,2-Dichlorobenzene	11.953	146	311460	9.459	ppbv		99
78) Hexachloro-1,3-Butadiene	13.886	225	303379	9.124	ppbv		99
79) Naphthalene	13.517	128	701010	8.999	ppbv		99
80) Naphthalene,2-methyl-	14.462	142	369891	8.331	ppbv		98
81) 1,2,4-Trichlorobenzene	13.445	180	315002	9.417	ppbv		99

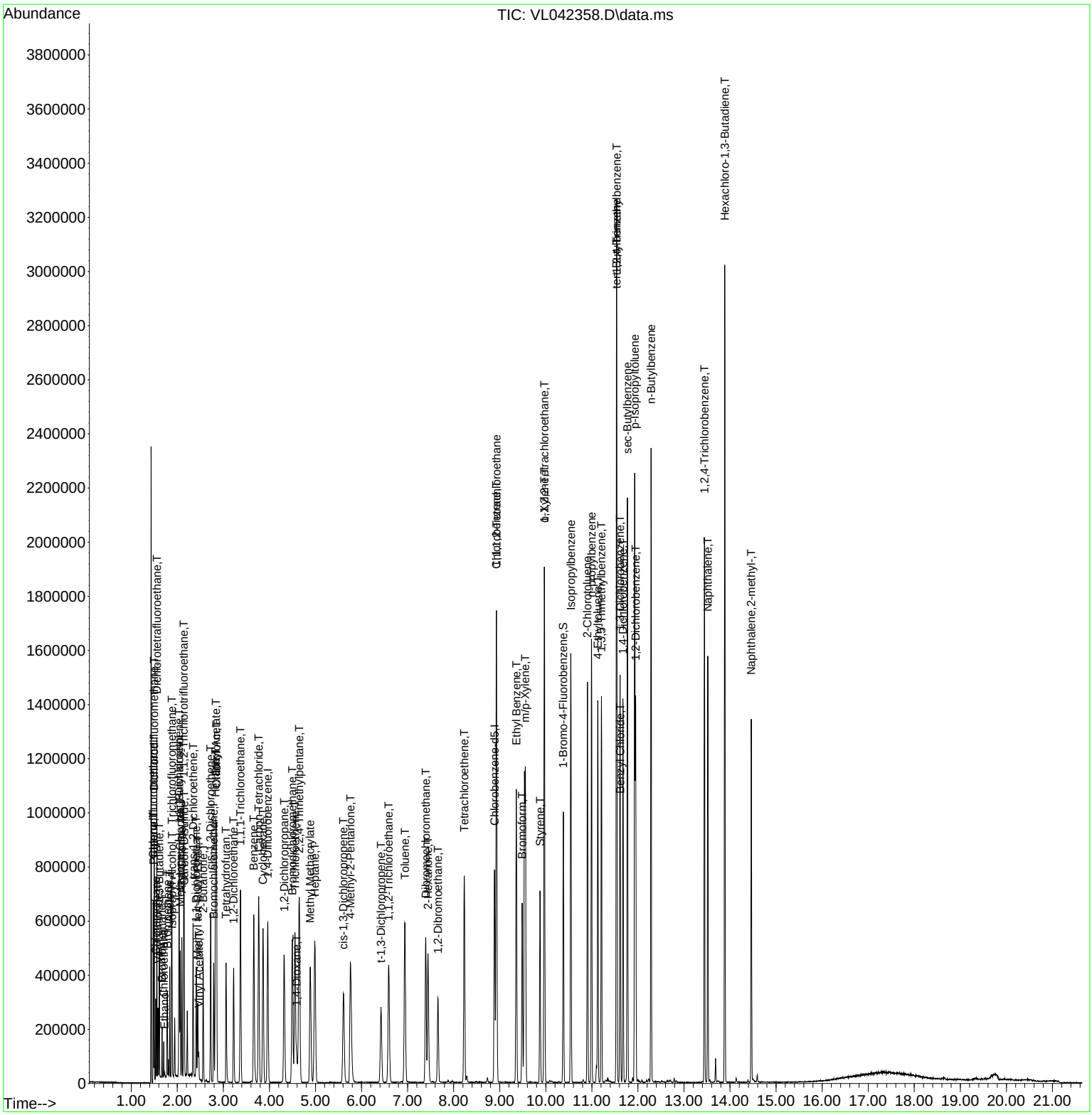
(#) = qualifier out of range (m) = manual integration (+) = signals summed

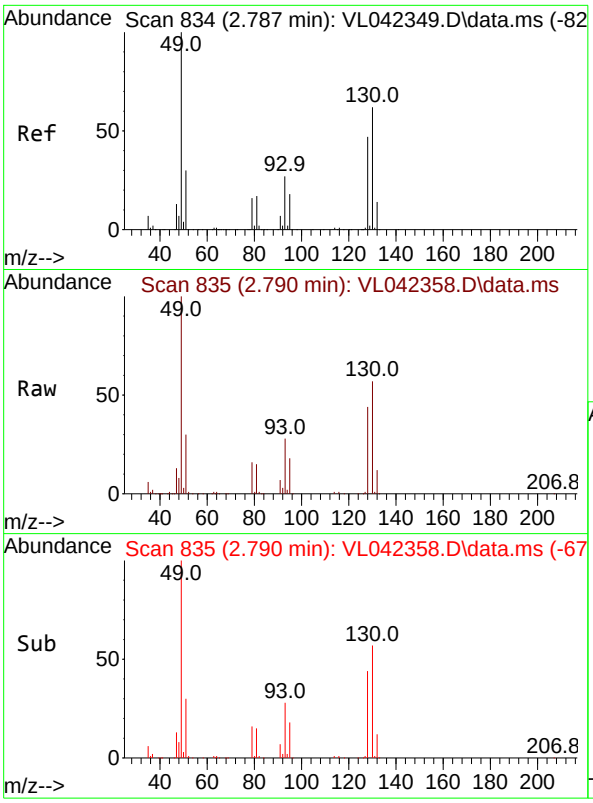
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042358.D
Acq On : 17 Apr 2025 15:39
Operator : SY/MD
Sample : VL0417ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Quant Time: Apr 18 02:36:58 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



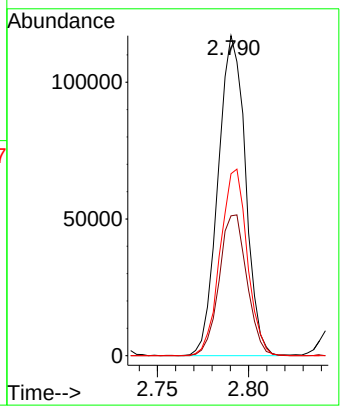


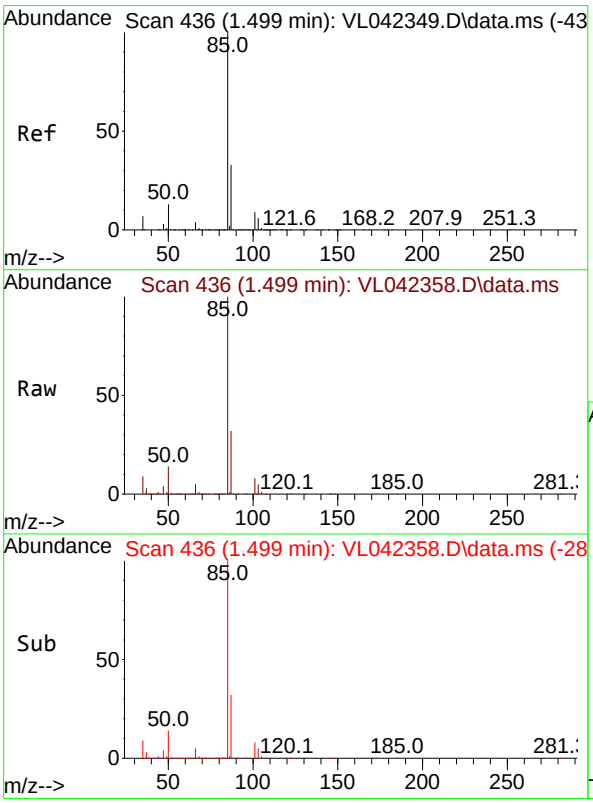
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 49 Resp: 122375

Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.8	68.4
130	57.6	29.3	88.0

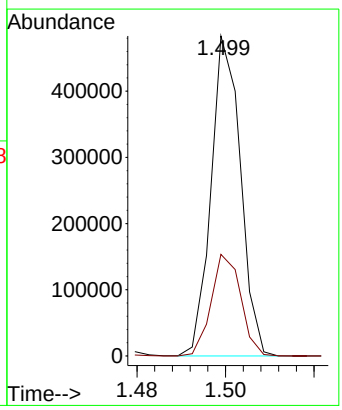


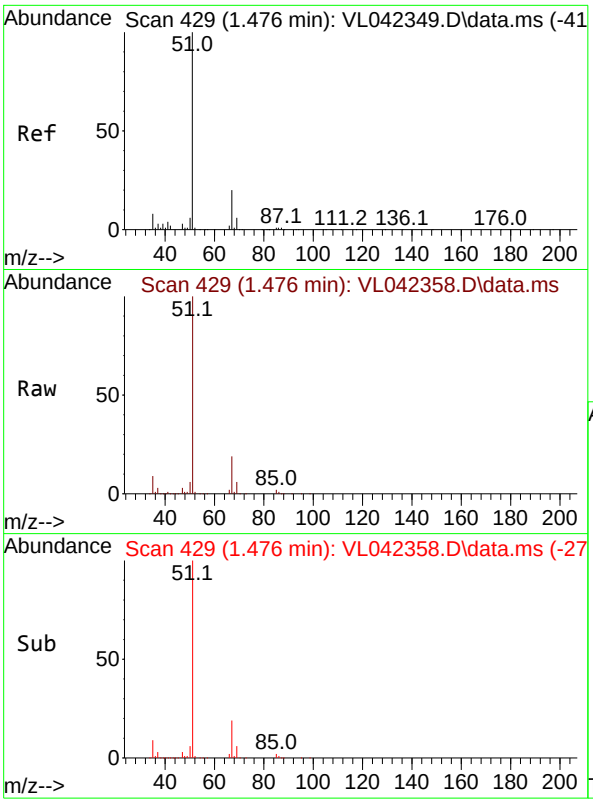


#2
Dichlorodifluoromethane
Concen: 10.337 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 85 Resp: 223505

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.6	39.8



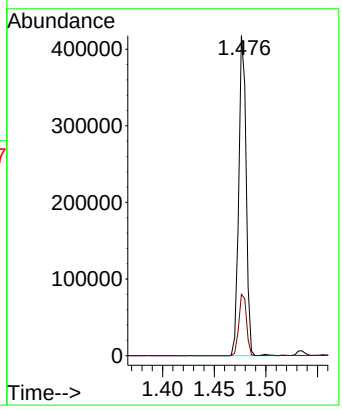


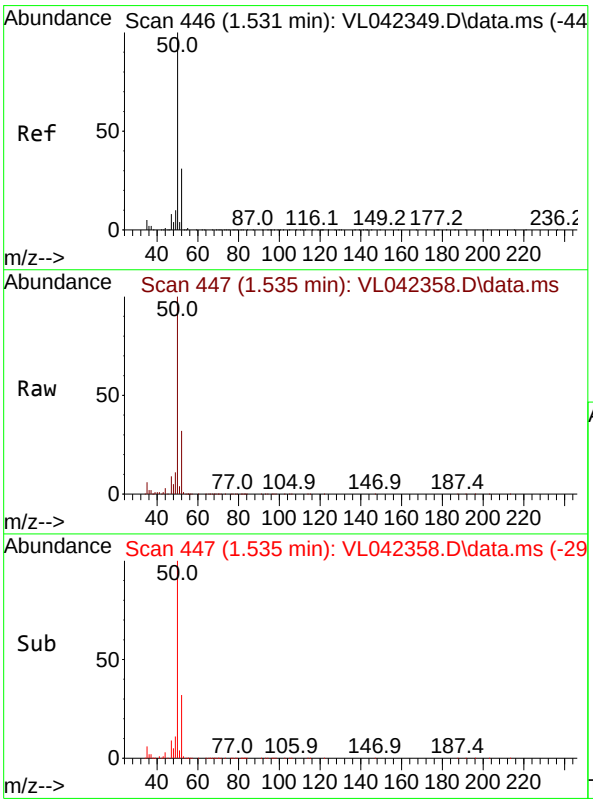
#3
Chlorodifluoromethane
Concen: 10.014 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 51 Resp: 206172

Ion	Ratio	Lower	Upper
51	100		
67	20.2	16.2	24.4

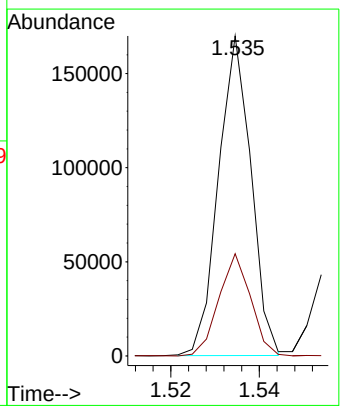


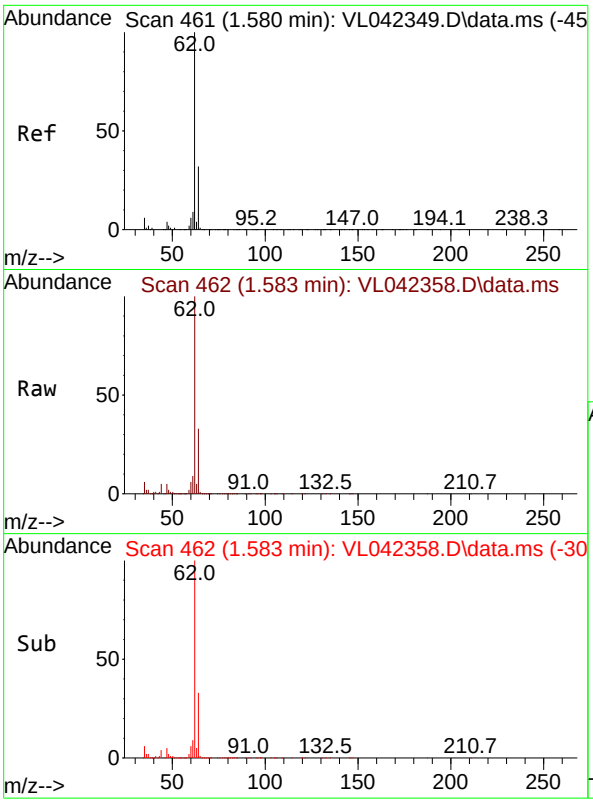


#4
Chloromethane
Concen: 10.130 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 50 Resp: 86675

Ion	Ratio	Lower	Upper
50	100		
52	32.1	24.7	37.1



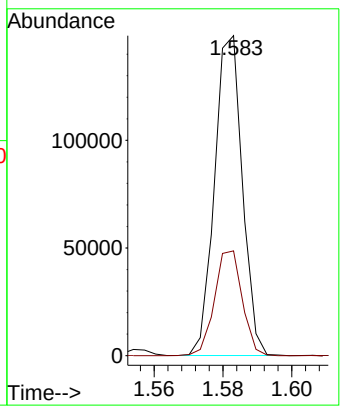


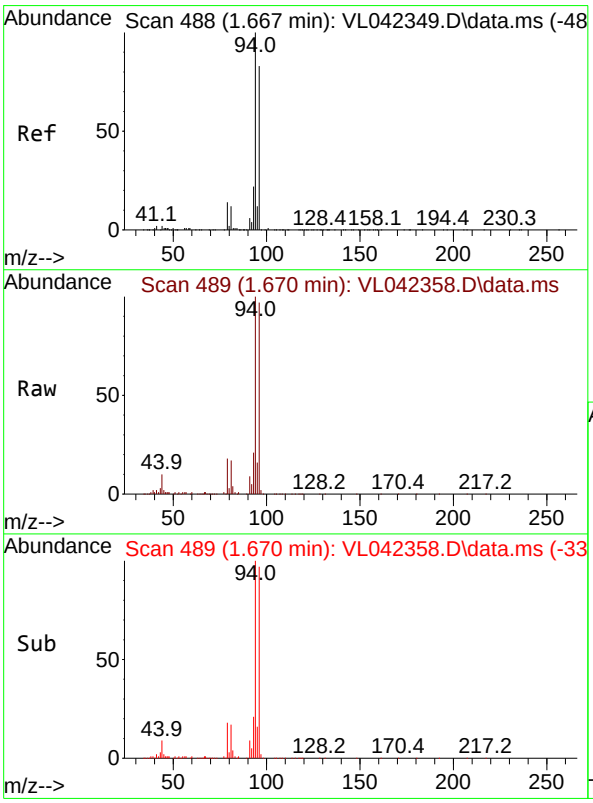
#5
Vinyl Chloride
Concen: 8.956 ppbv
RT: 1.583 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 62 Resp: 83419

Ion	Ratio	Lower	Upper
62	100		
64	32.8	25.4	38.0

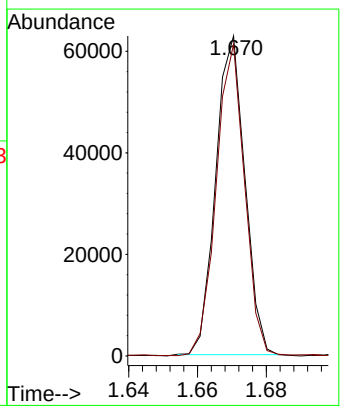


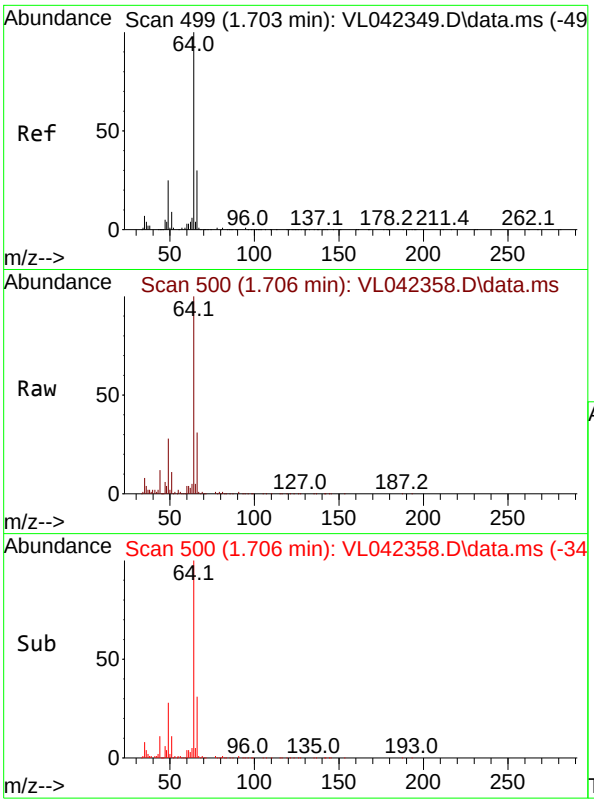


#6
Bromomethane
Concen: 9.235 ppbv
RT: 1.670 min Scan# 489
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 94 Resp: 36951

Ion	Ratio	Lower	Upper
94	100		
96	97.7	66.2	99.2



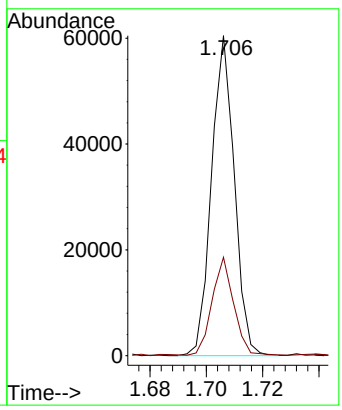


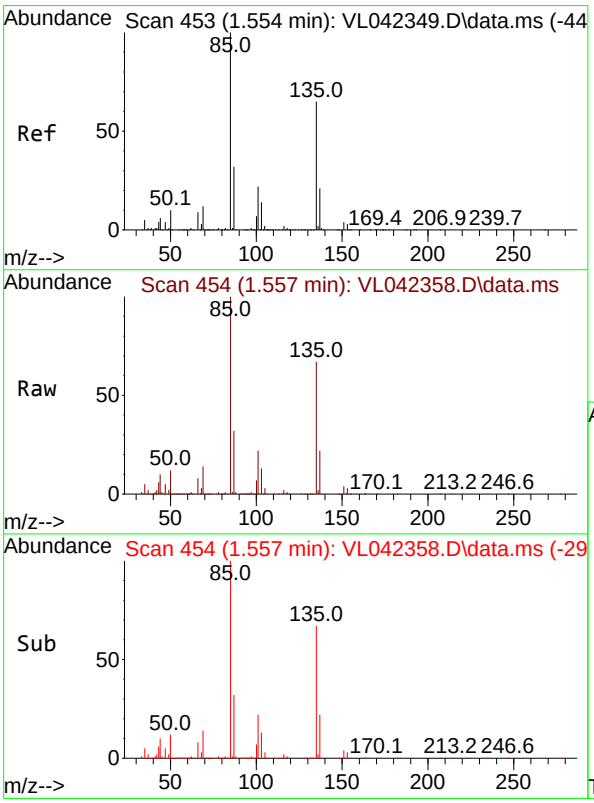
#7
Chloroethane
Concen: 10.075 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 64 Resp: 33936

Ion	Ratio	Lower	Upper
64	100		
66	30.7	24.6	37.0

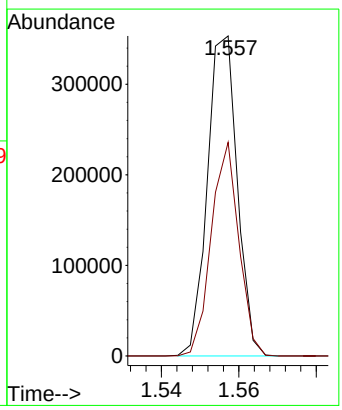


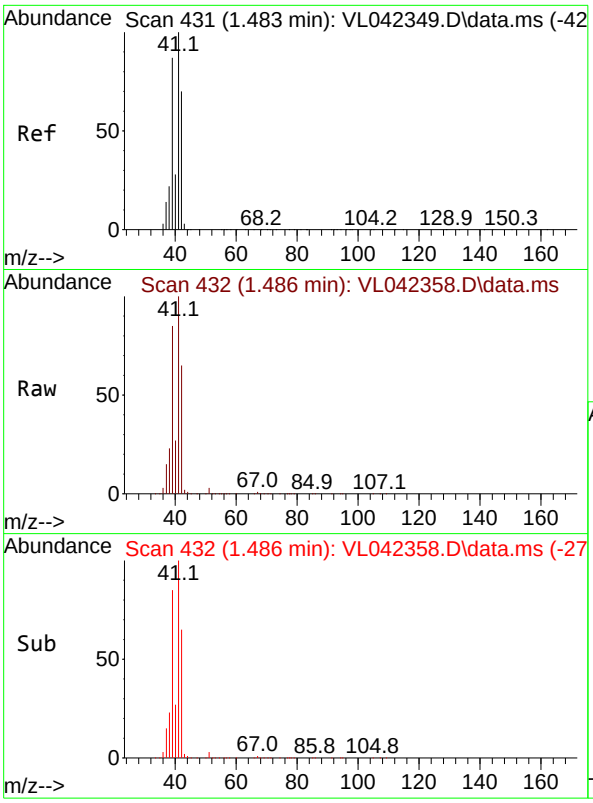


#8
Dichlorotetrafluoroethane
Concen: 10.231 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 85 Resp: 189924

Ion	Ratio	Lower	Upper
85	100		
135	61.4	52.2	78.2



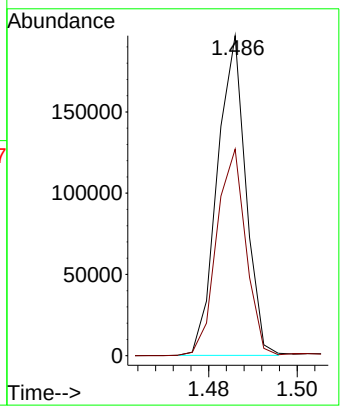


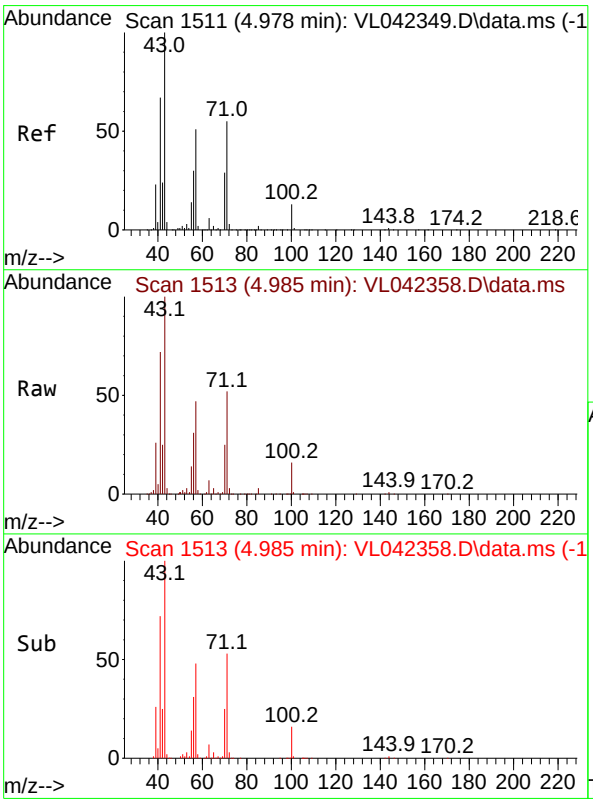
#9
Propene
Concen: 9.395 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 41 Resp: 88088

Ion	Ratio	Lower	Upper
41	100		
42	68.4	56.2	84.4

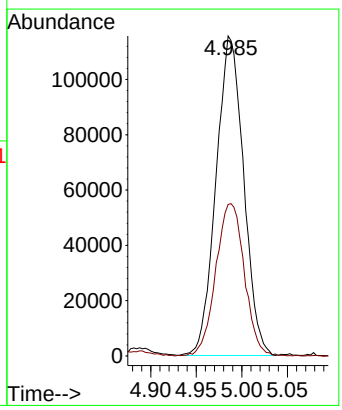


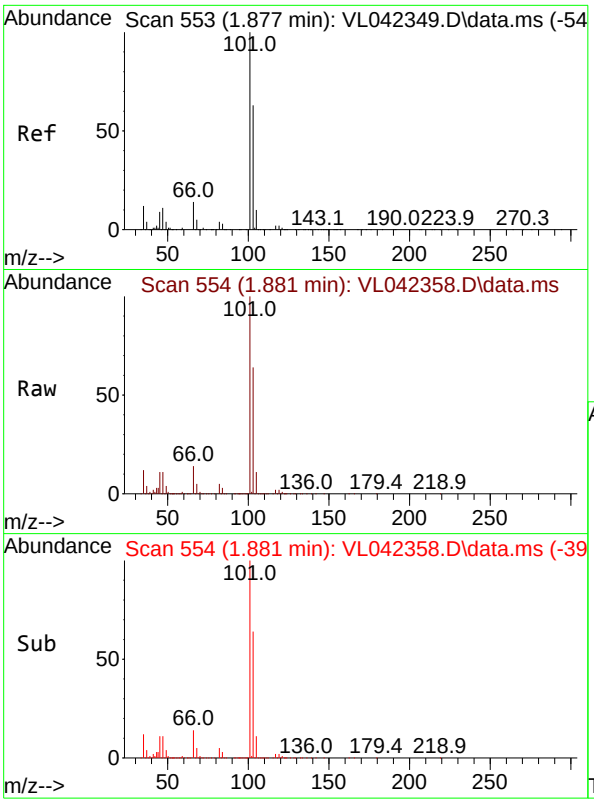


#10
Heptane
Concen: 9.244 ppbv
RT: 4.985 min Scan# 1513
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 243501

Ion	Ratio	Lower	Upper
43	100		
57	49.4	39.9	59.9



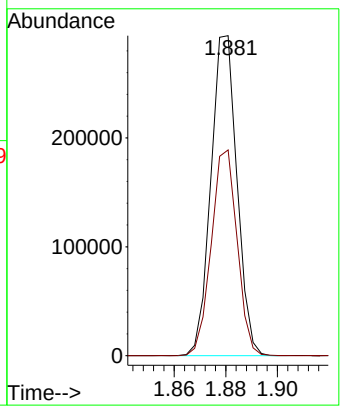


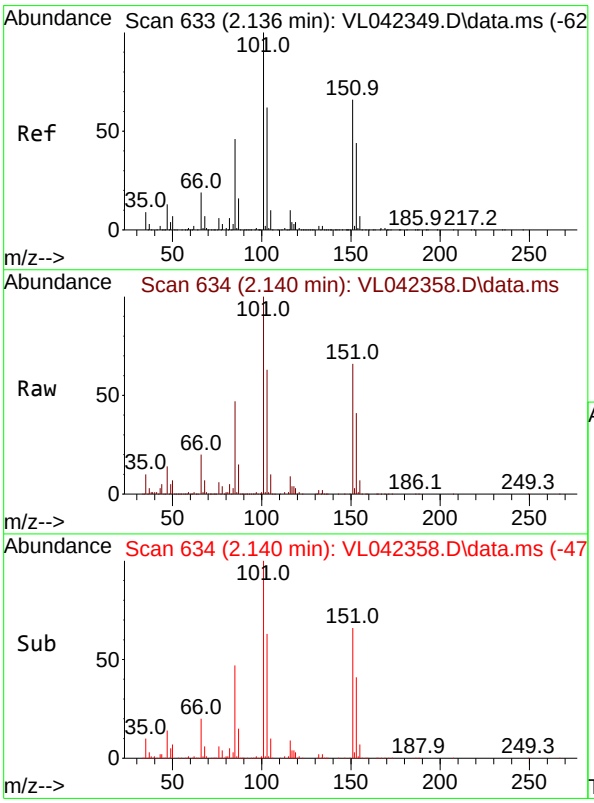
#11
Trichlorofluoromethane
Concen: 10.050 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:101 Resp: 206645

Ion	Ratio	Lower	Upper
101	100		
103	64.3	50.1	75.1

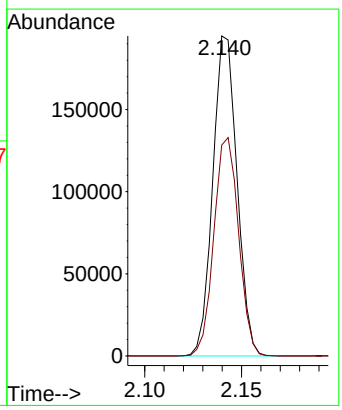


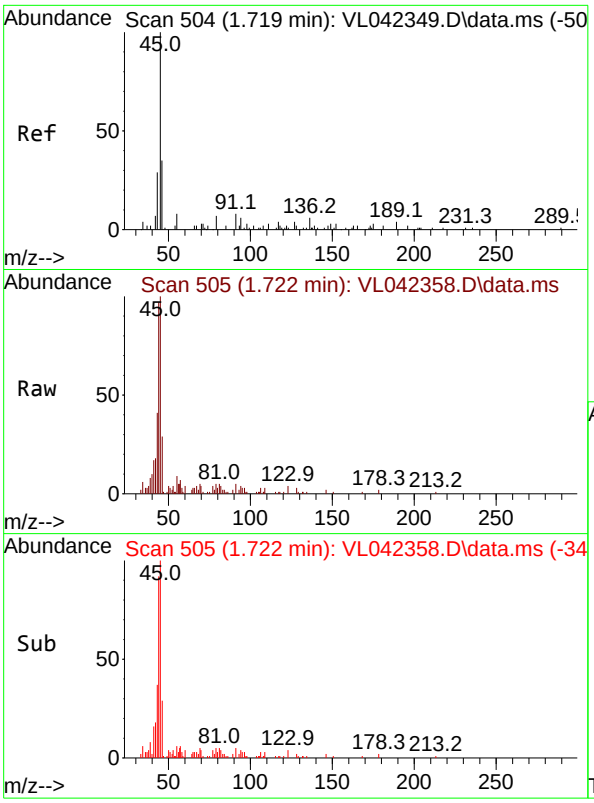


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.083 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:101 Resp: 169501

Ion	Ratio	Lower	Upper
101	100		
151	69.6	57.0	85.6



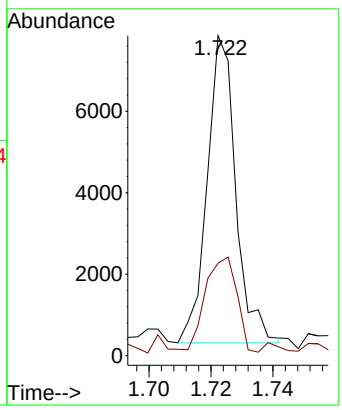


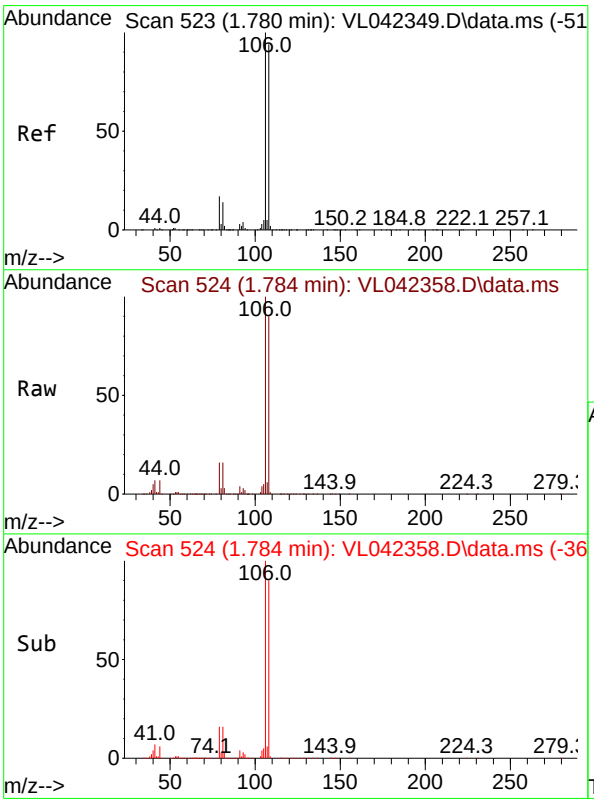
#13
Ethanol
Concen: 3.246 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 45 Resp: 4837

Ion	Ratio	Lower	Upper
45	100		
46	45.8	21.9	87.7

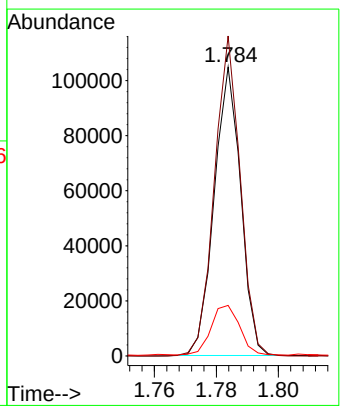


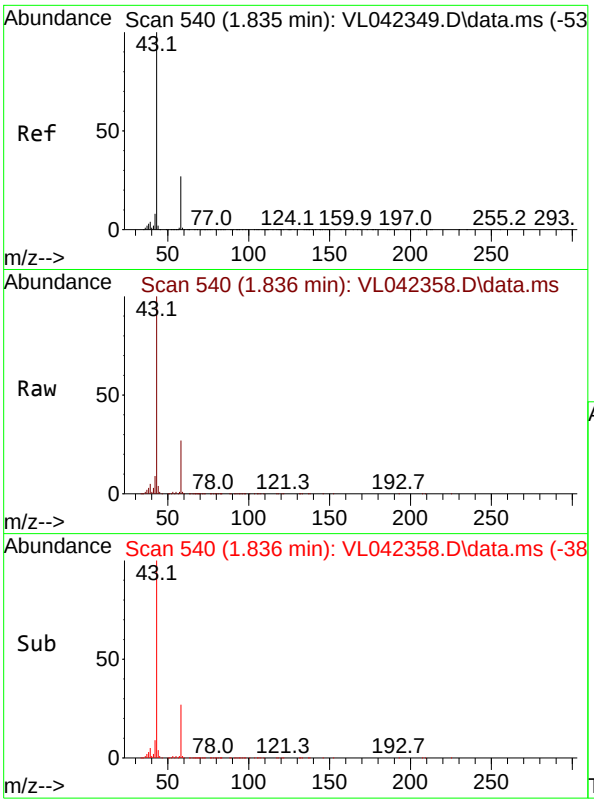


#14
Bromoethene
Concen: 9.818 ppbv
RT: 1.784 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:108 Resp: 62214

Ion	Ratio	Lower	Upper
108	100		
106	108.2	85.9	128.9
79	20.6	13.9	20.9



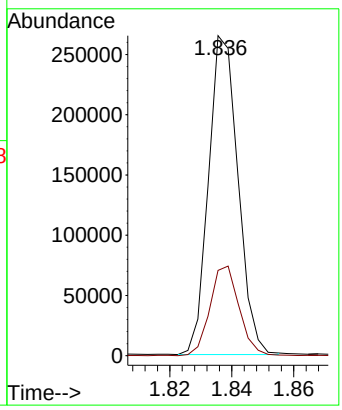


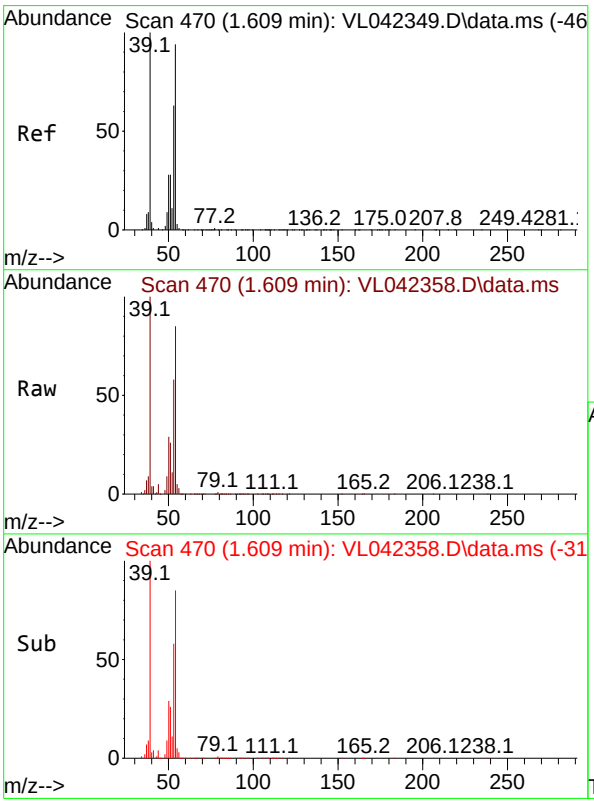
#15
Acetone
Concen: 8.743 ppbv
RT: 1.836 min Scan# 54
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 43 Resp: 175153

Ion	Ratio	Lower	Upper
43	100		
58	27.9	22.4	33.6

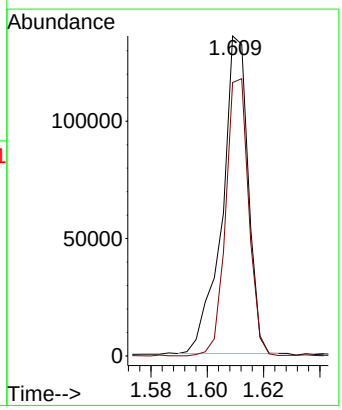


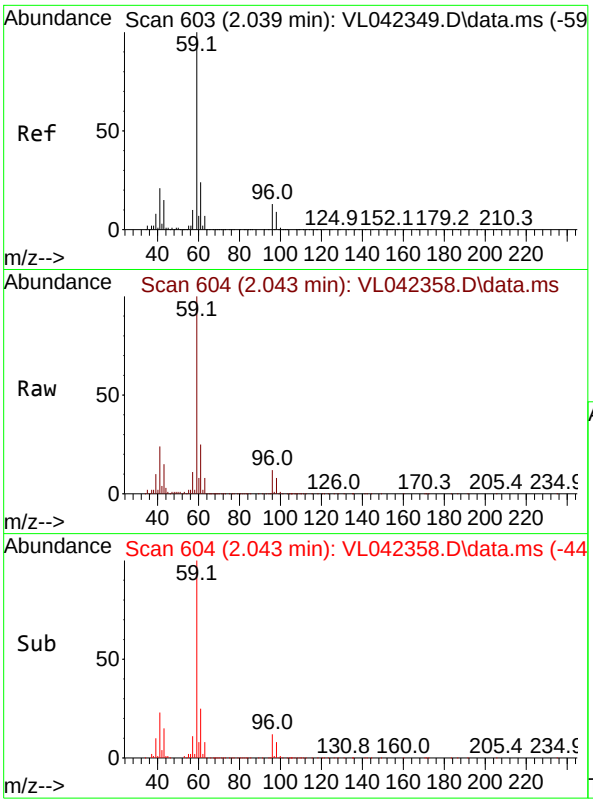


#16
1,3-Butadiene
Concen: 9.076 ppbv
RT: 1.609 min Scan# 470
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 39 Resp: 86965

Ion	Ratio	Lower	Upper
39	100		
54	77.9	64.9	97.3



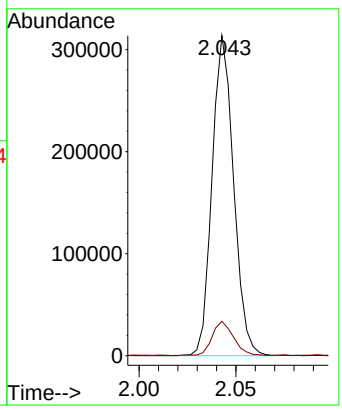


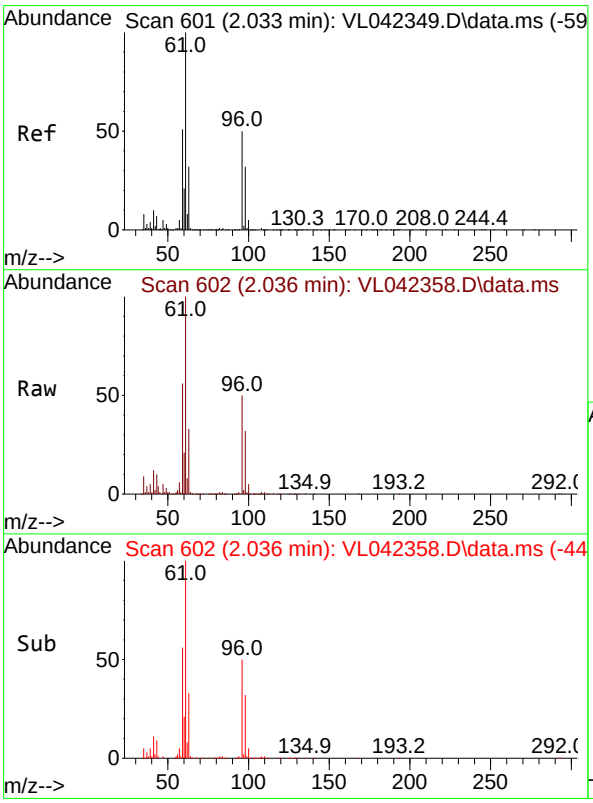
#17
tert-Butyl alcohol
Concen: 9.754 ppbv
RT: 2.043 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 59 Resp: 242154

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1

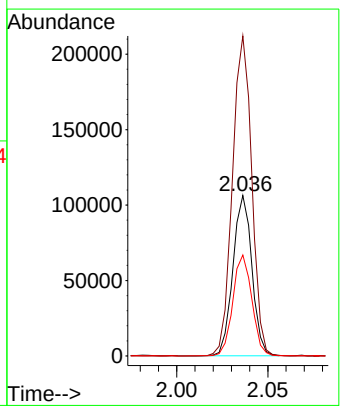


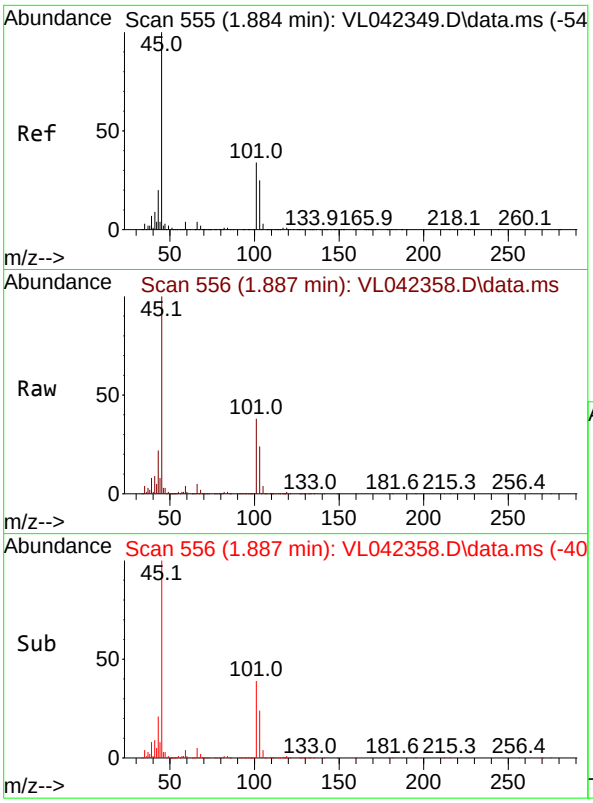


#18
1,1-Dichloroethene
Concen: 9.836 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 96 Resp: 77247

Ion	Ratio	Lower	Upper
96	100		
61	199.6	160.2	240.2
98	63.0	51.0	76.4



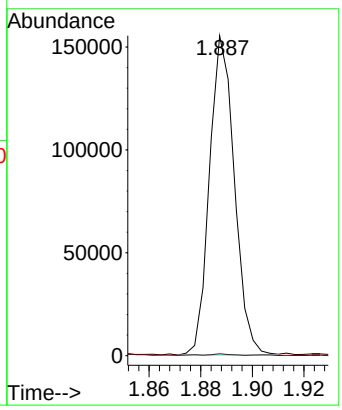


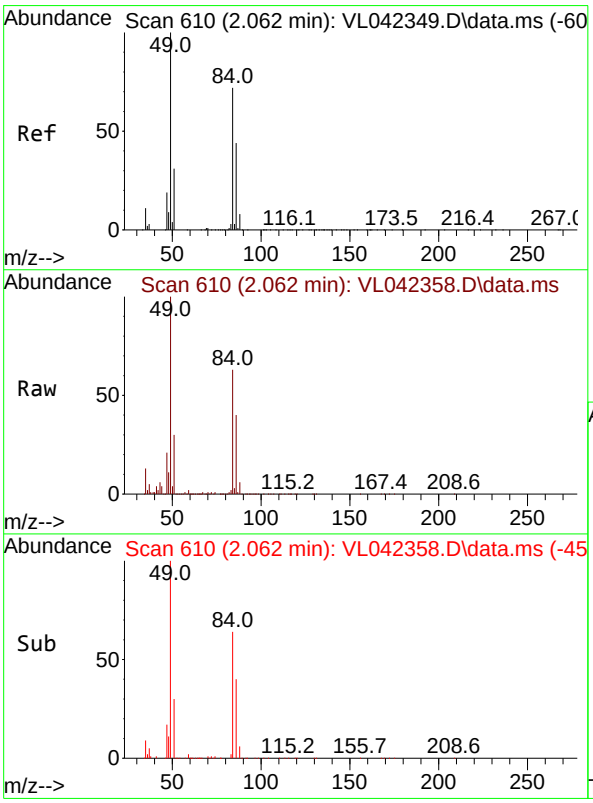
#19
Isopropyl Alcohol
Concen: 9.356 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 45 Resp: 104123

Ion	Ratio	Lower	Upper
45	100		
58	46.9	34.5	51.7

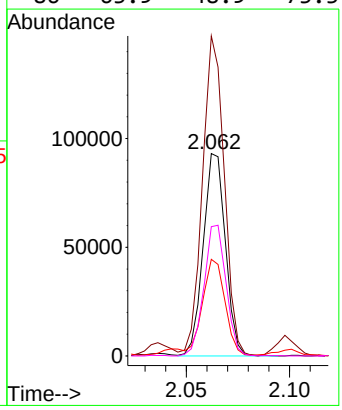


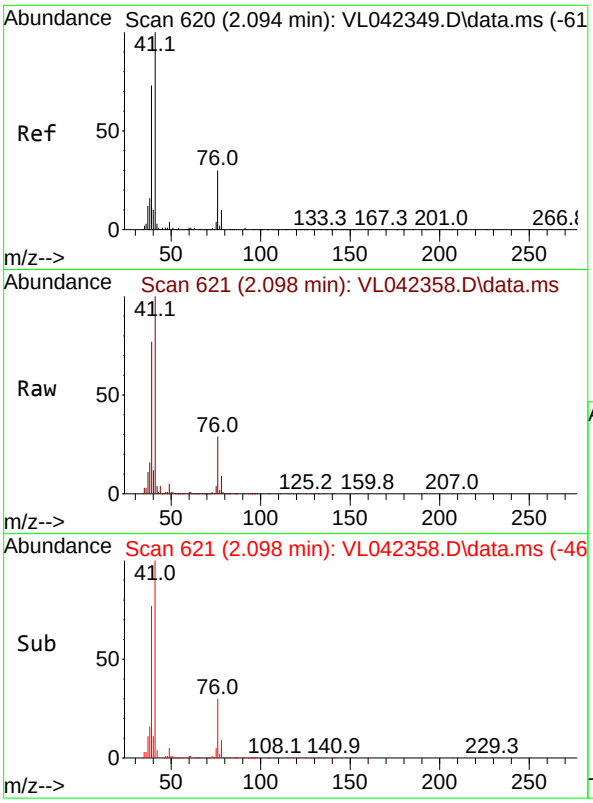


#20
Methylene Chloride
Concen: 8.865 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 84 Resp: 69548

Ion	Ratio	Lower	Upper
84	100		
49	156.3	111.6	167.4
51	45.9	35.1	52.7
86	63.9	48.9	73.3



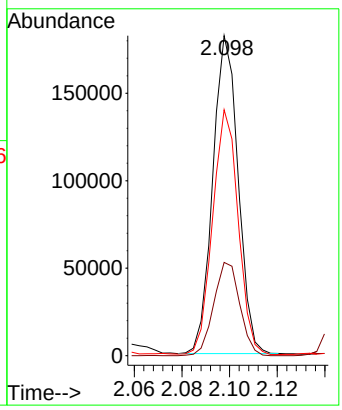


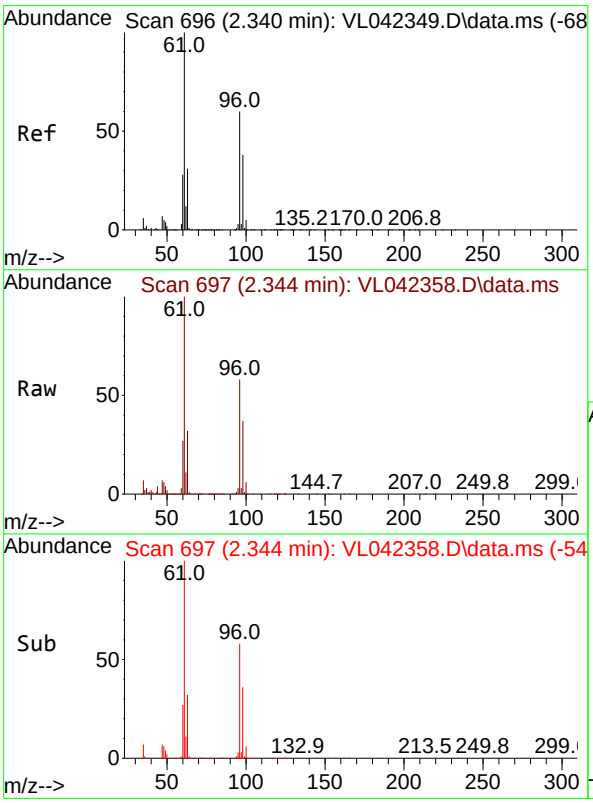
#21
Allyl Chloride
Concen: 9.704 ppbv
RT: 2.098 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 41 Resp: 134221

Ion	Ratio	Lower	Upper
41	100		
76	30.1	24.8	37.2
39	76.8	60.6	90.8

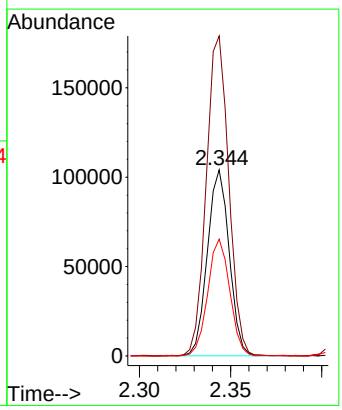


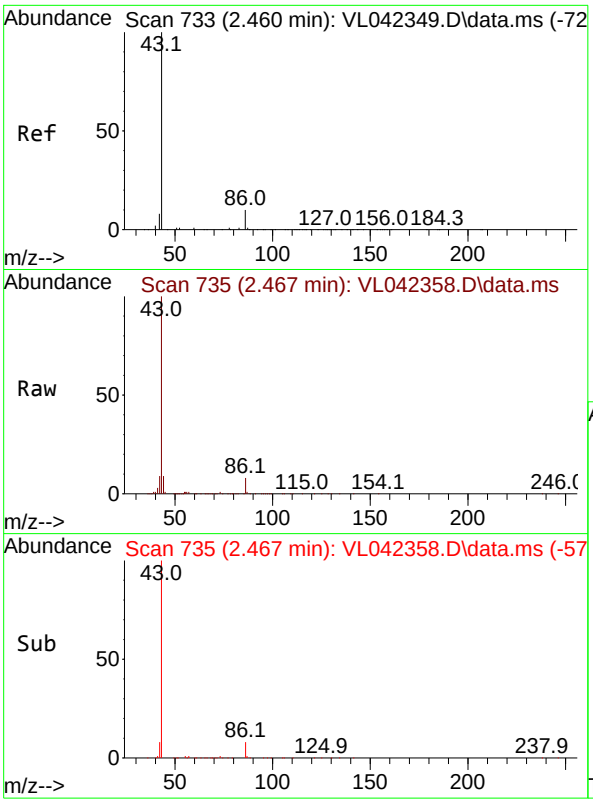


#22
trans-1,2-Dichloroethene
Concen: 9.653 ppbv
RT: 2.344 min Scan# 697
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 96 Resp: 86323

Ion	Ratio	Lower	Upper
96	100		
61	172.1	133.7	200.5
98	62.9	50.3	75.5



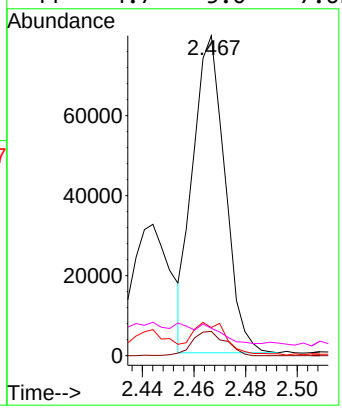


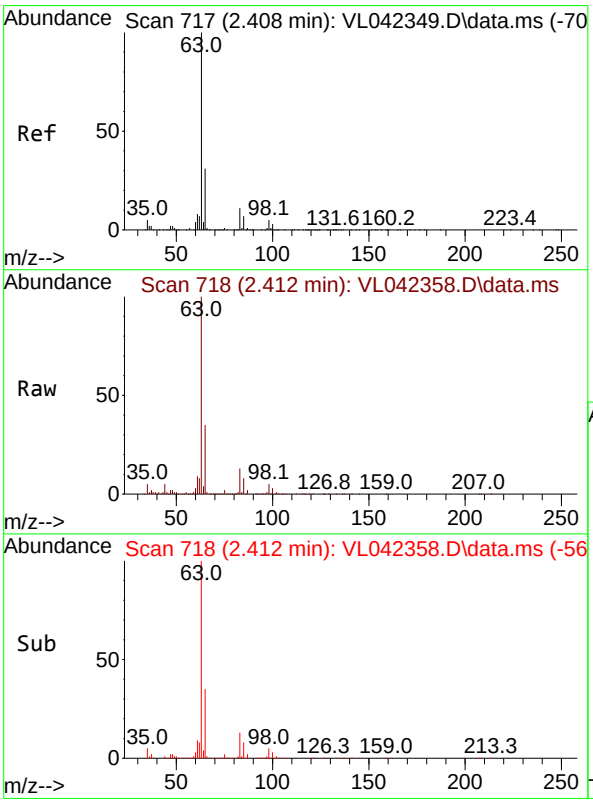
#23
Vinyl Acetate
Concen: 8.427 ppbv
RT: 2.467 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 43 Resp: 68337

Ion	Ratio	Lower	Upper
43	100		
86	7.7	6.5	9.7
42	8.3	7.8	11.8
44	4.7	5.0	7.6#

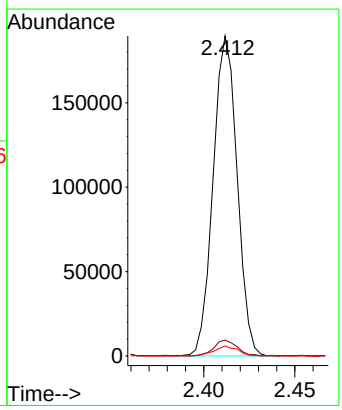


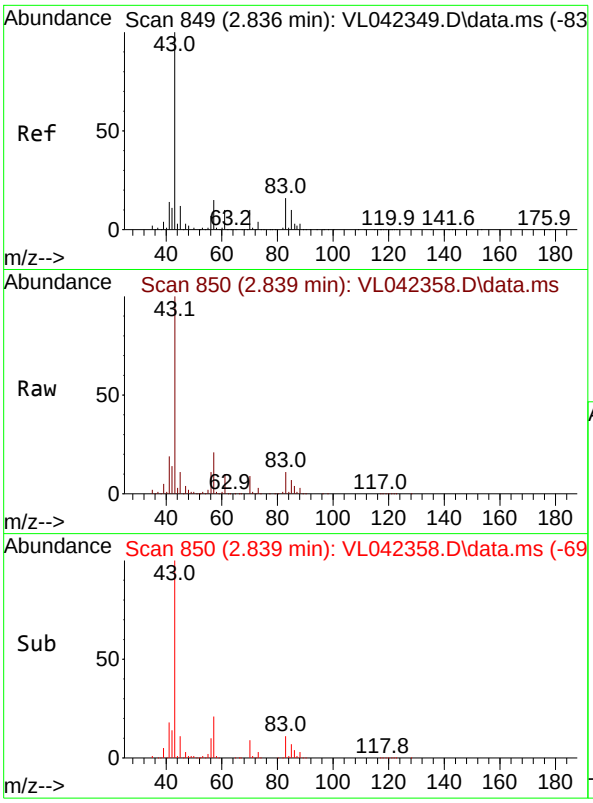


#24
1,1-Dichloroethane
Concen: 10.199 ppbv
RT: 2.412 min Scan# 718
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 63 Resp: 173238

Ion	Ratio	Lower	Upper
63	100		
98	4.9	2.3	6.8
100	3.1	1.6	4.8



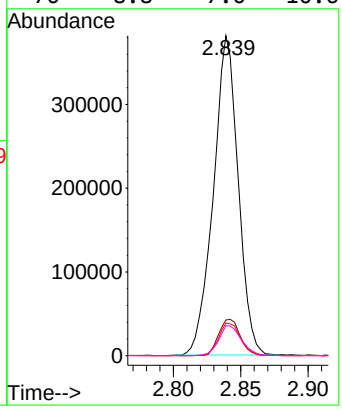


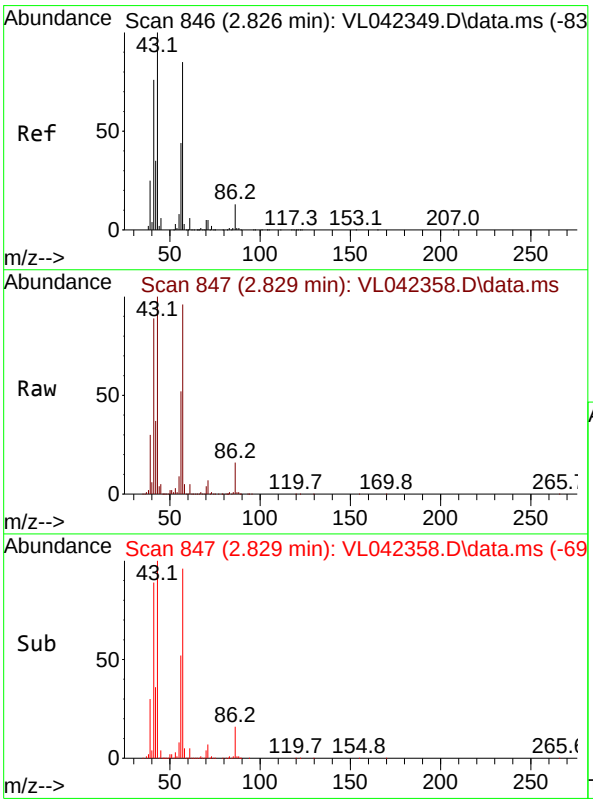
#25
Ethyl Acetate
Concen: 9.894 ppbv
RT: 2.839 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 43 Resp: 488686

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.3	12.5
61	9.0	7.3	10.9
70	8.8	7.0	10.6

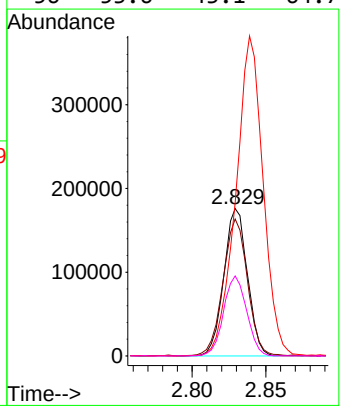


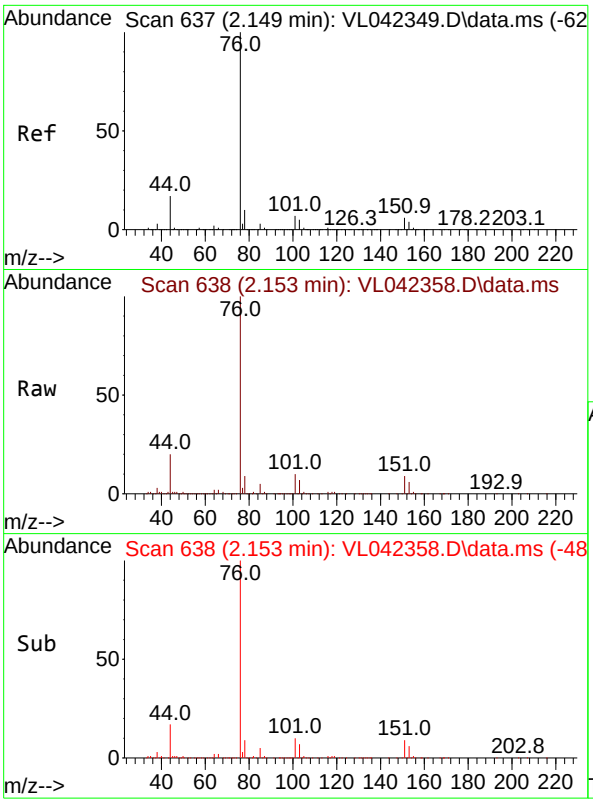


#26
Hexane
Concen: 9.761 ppbv
RT: 2.829 min Scan# 847
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 57 Resp: 195124

Ion	Ratio	Lower	Upper
57	100		
41	96.9	77.9	116.9
43	251.9	208.4	312.6
56	53.6	43.1	64.7



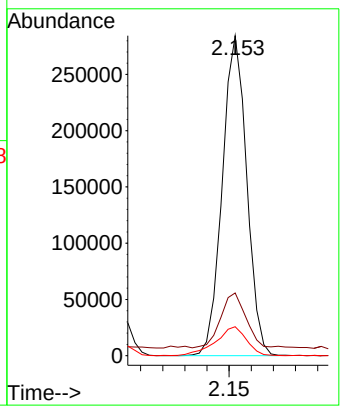


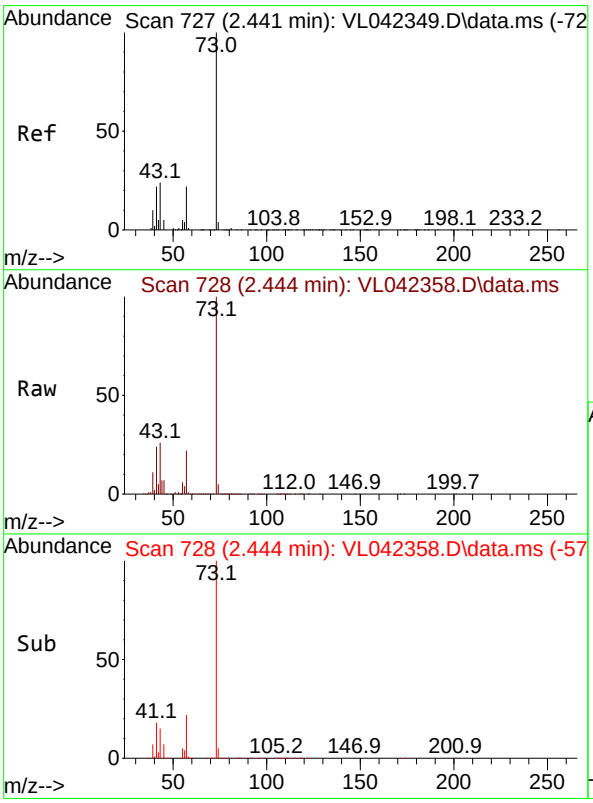
#27
Carbon Disulfide
Concen: 10.202 ppbv
RT: 2.153 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 76 Resp: 218345

Ion	Ratio	Lower	Upper
76	100		
44	21.6	15.5	23.3
78	11.4	9.3	13.9

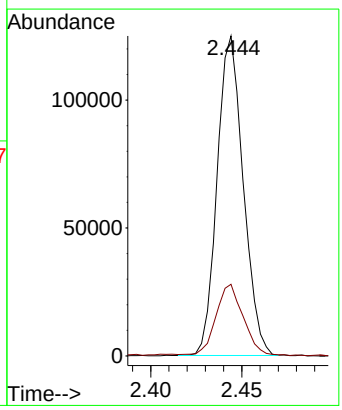


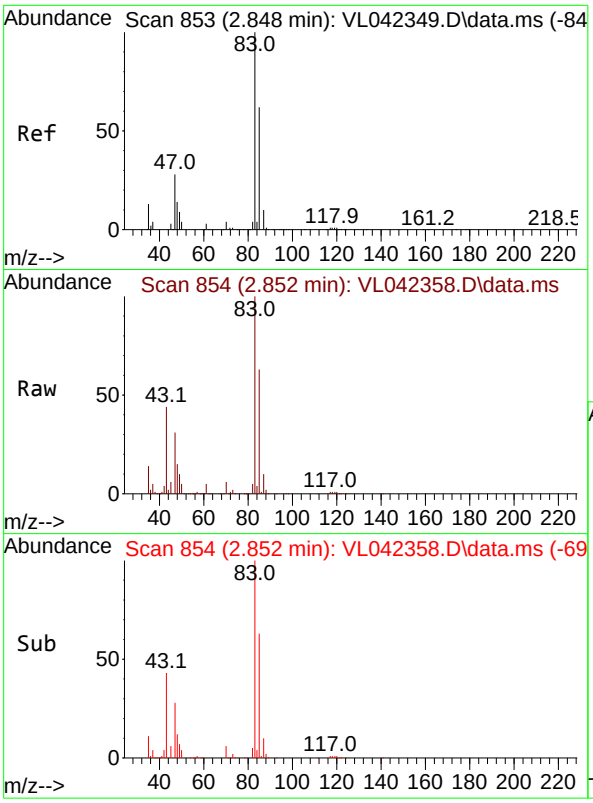


#28
Methyl tert-Butyl Ether
Concen: 9.510 ppbv
RT: 2.444 min Scan# 728
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 73 Resp: 124554

Ion	Ratio	Lower	Upper
73	100		
57	24.5	21.3	31.9



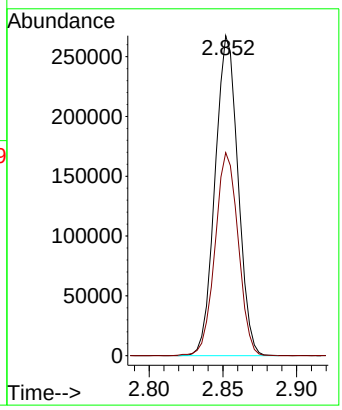


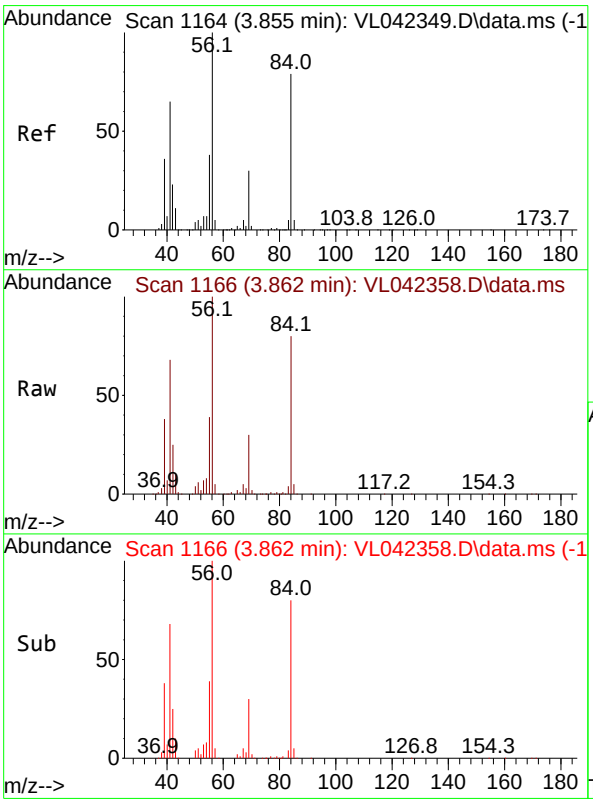
#29
Chloroform
Concen: 10.239 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 83 Resp: 289294

Ion	Ratio	Lower	Upper
83	100		
85	63.4	50.0	75.0

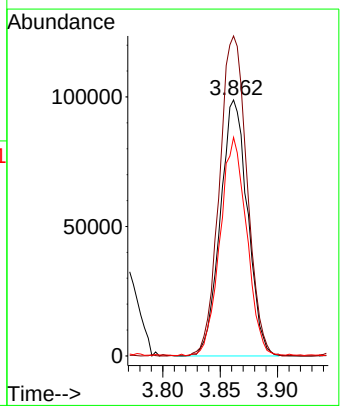


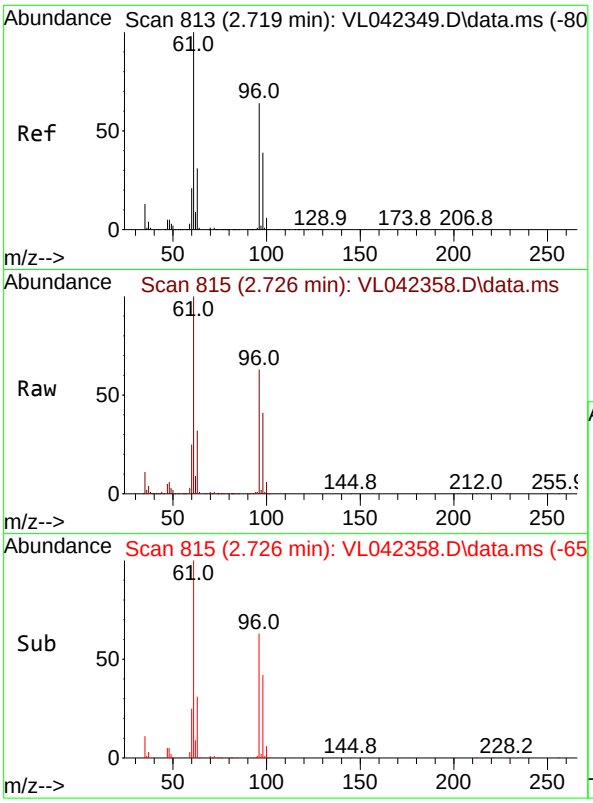


#30
Cyclohexane
Concen: 10.088 ppbv
RT: 3.862 min Scan# 1166
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 84 Resp: 163017

Ion	Ratio	Lower	Upper
84	100		
56	126.7	101.0	151.4
41	83.8	67.4	101.0



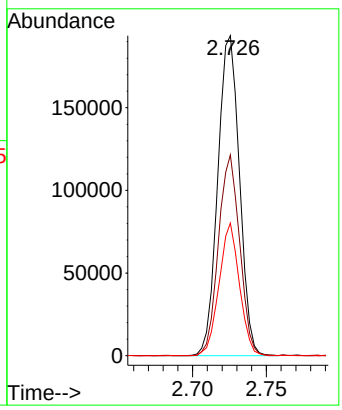


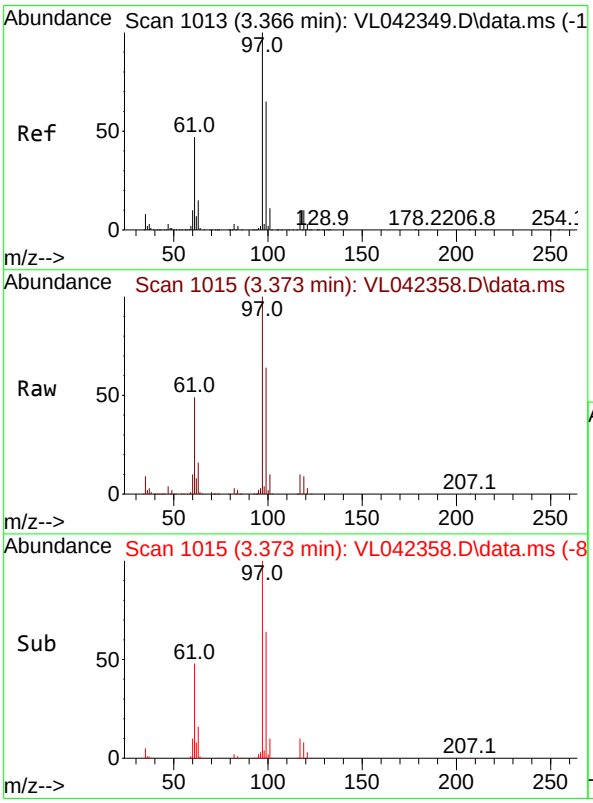
#31
cis-1,2-Dichloroethene
Concen: 10.424 ppbv
RT: 2.726 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 61 Resp: 198108

Ion	Ratio	Lower	Upper
61	100		
96	62.8	50.8	76.2
98	41.4	30.9	46.3

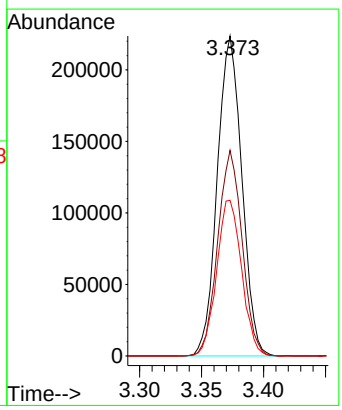


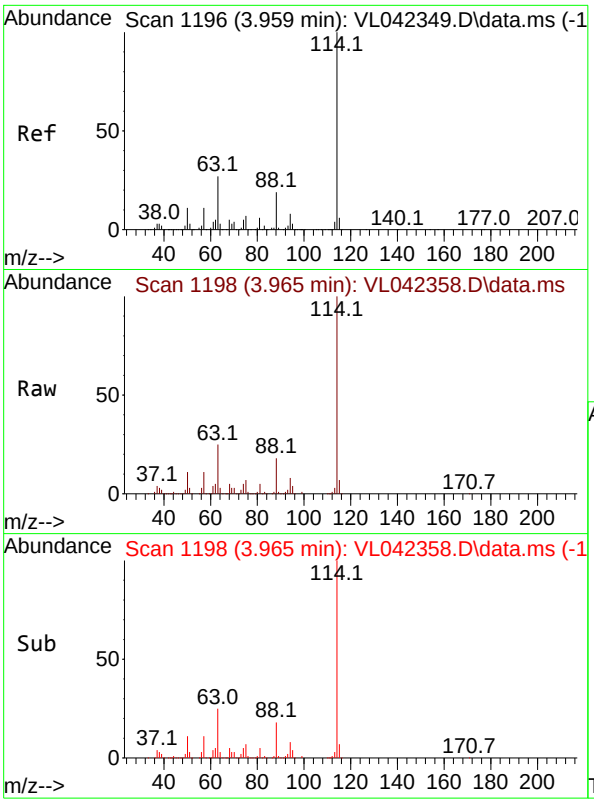


#32
1,1,1-Trichloroethane
Concen: 9.729 ppbv
RT: 3.373 min Scan# 1015
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 97 Resp: 309460

Ion	Ratio	Lower	Upper
97	100		
99	63.7	51.0	76.4
61	49.5	38.8	58.2



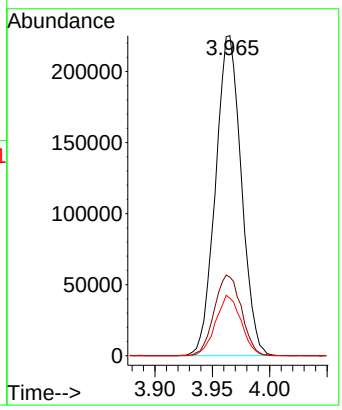


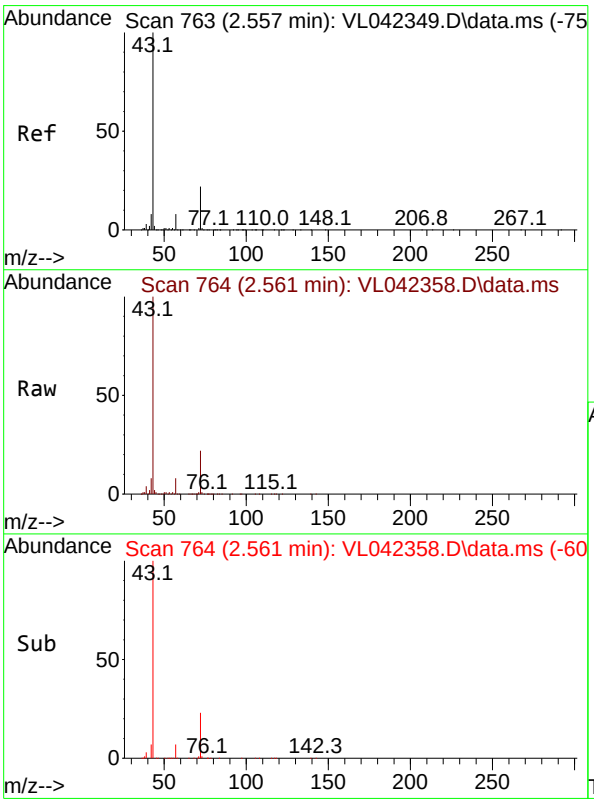
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.965 min Scan# 11
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:114 Resp: 352201

Ion	Ratio	Lower	Upper
114	100		
63	26.4	21.8	32.6
88	18.6	15.5	23.3

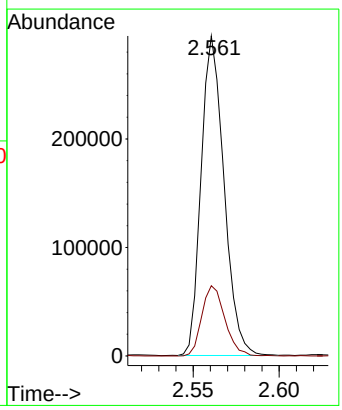


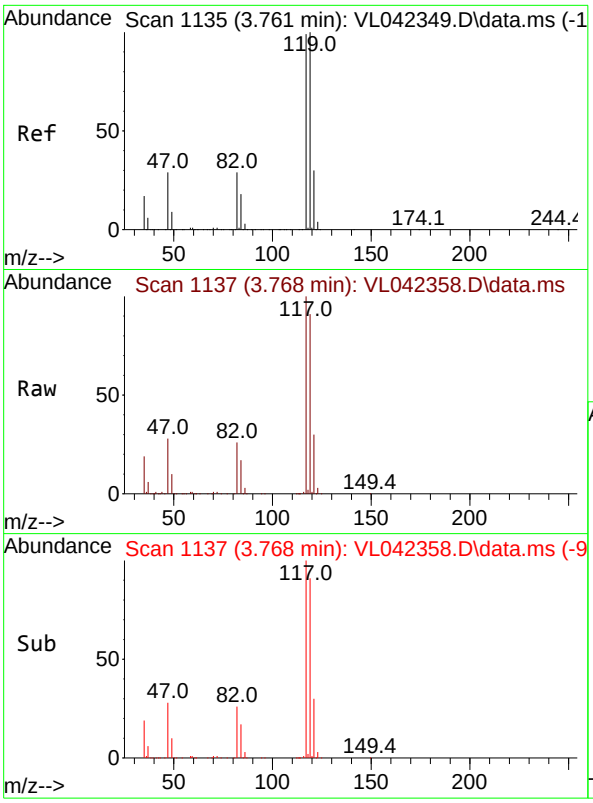


#34
2-Butanone
Concen: 9.787 ppbv
RT: 2.561 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 272600

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2



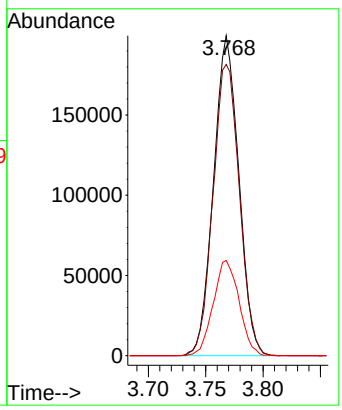


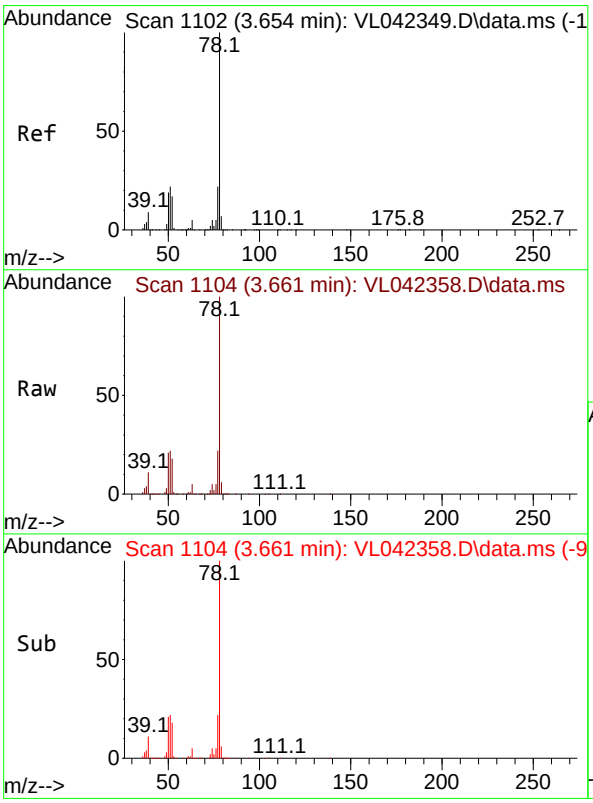
#35
Carbon Tetrachloride
Concen: 9.576 ppbv
RT: 3.768 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:117 Resp: 305245

Ion	Ratio	Lower	Upper
117	100		
119	91.0	80.5	120.7
121	29.8	24.2	36.2

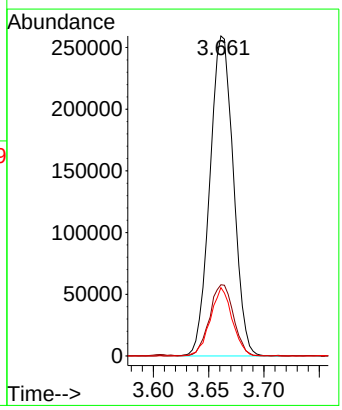


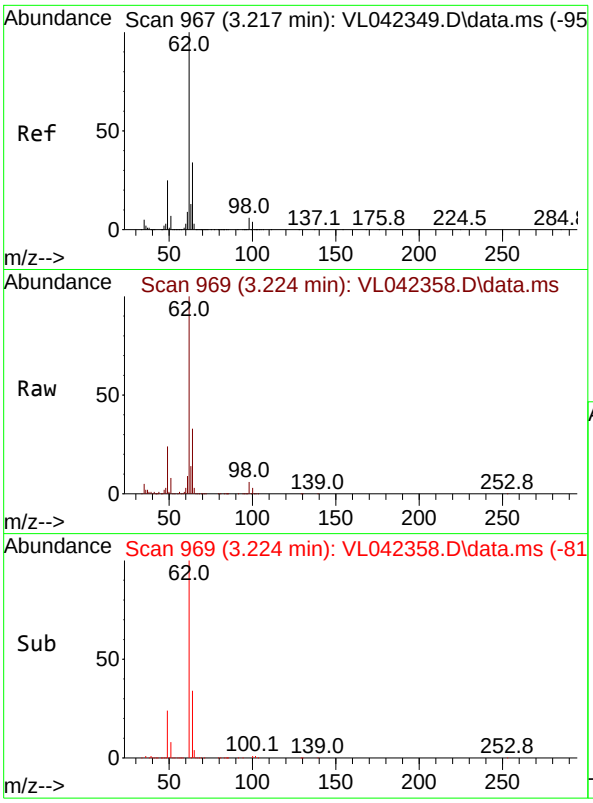


#36
Benzene
Concen: 10.088 ppbv
RT: 3.661 min Scan# 1104
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 78 Resp: 383239

Ion	Ratio	Lower	Upper
78	100		
77	22.1	17.4	26.0
50	21.3	15.5	23.3



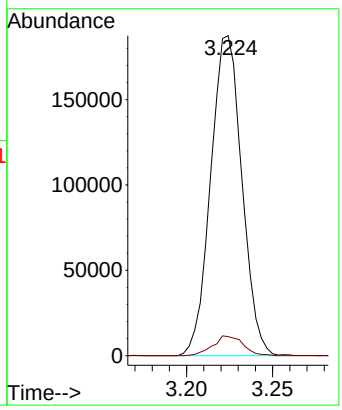


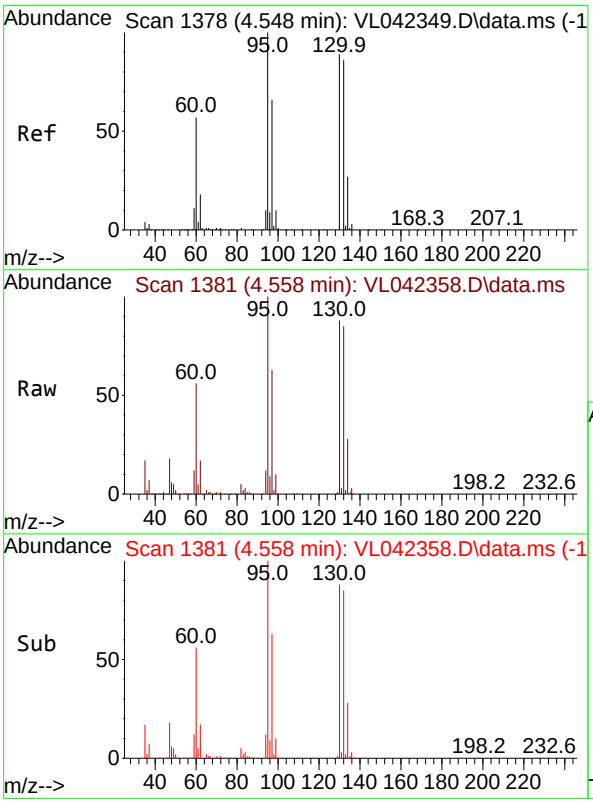
#37
1,2-Dichloroethane
Concen: 10.377 ppbv
RT: 3.224 min Scan# 9
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 62 Resp: 236611

Ion	Ratio	Lower	Upper
62	100		
98	6.0	5.1	7.7

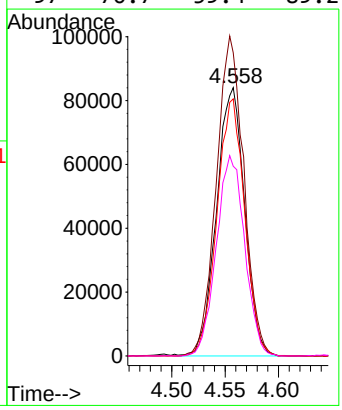


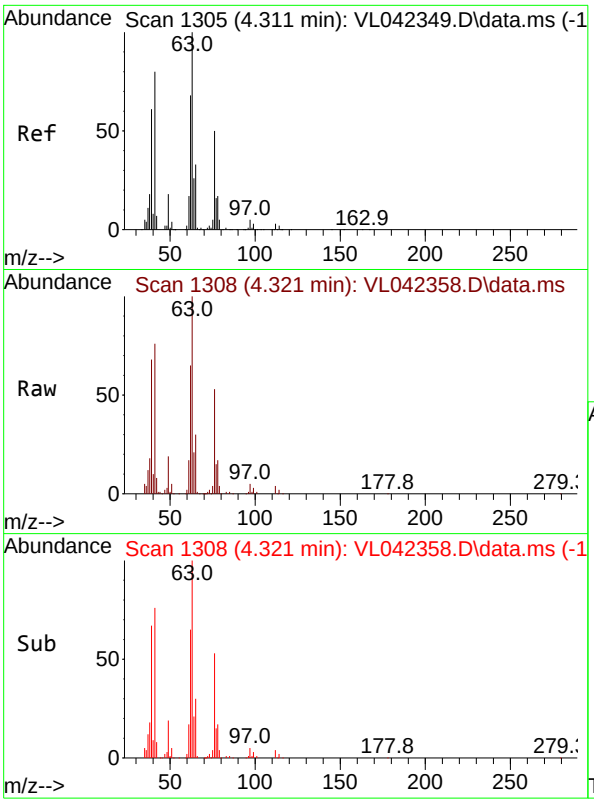


#38
Trichloroethene
Concen: 9.251 ppbv
RT: 4.558 min Scan# 1381
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:130 Resp: 153596

Ion	Ratio	Lower	Upper
130	100		
95	113.0	89.8	134.6
132	95.8	77.7	116.5
97	70.7	59.4	89.2



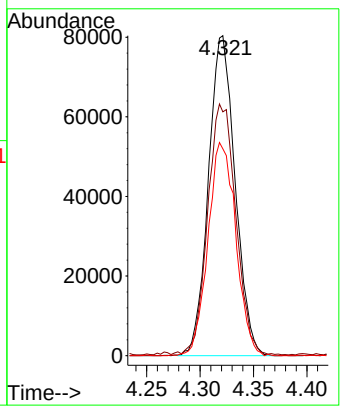


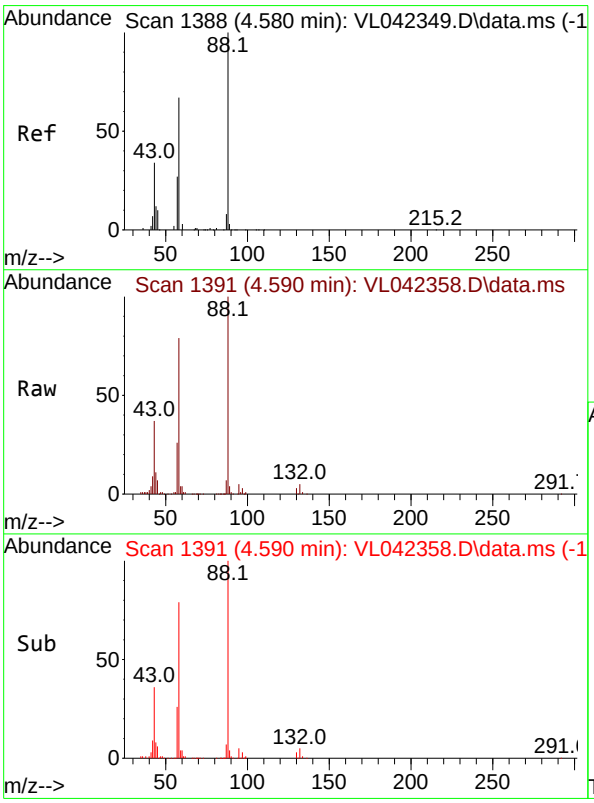
#39
1,2-Dichloropropane
Concen: 9.866 ppbv
RT: 4.321 min Scan# 1
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 63 Resp: 139669

Ion	Ratio	Lower	Upper
63	100		
41	75.7	64.2	96.2
62	64.6	54.3	81.5

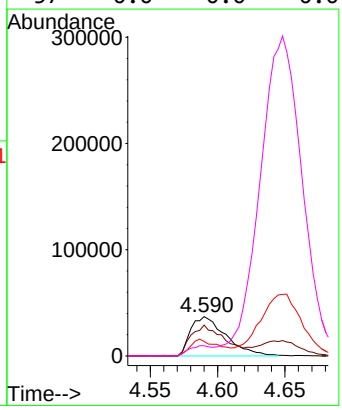


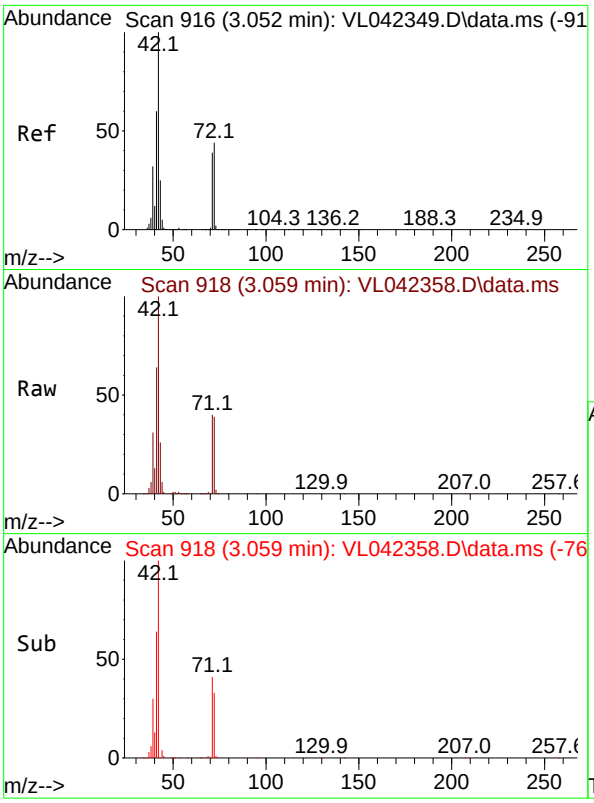


#40
1,4-Dioxane
Concen: 8.716 ppbv
RT: 4.590 min Scan# 1391
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 88 Resp: 67808

Ion	Ratio	Lower	Upper
88	100		
58	75.4	61.4	92.0
43	37.1	23.2	34.8#
57	0.0	0.0	0.0



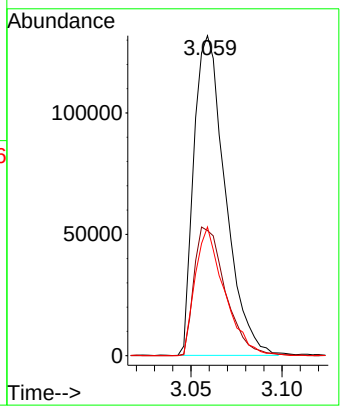


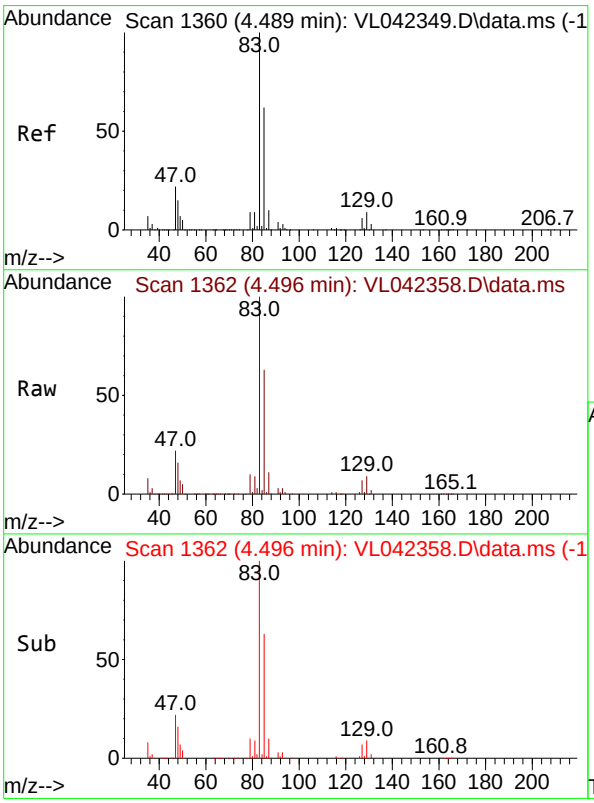
#41
Tetrahydrofuran
Concen: 9.715 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 42 Resp: 157777

Ion	Ratio	Lower	Upper
42	100		
72	40.3	32.3	48.5
71	37.7	31.4	47.2

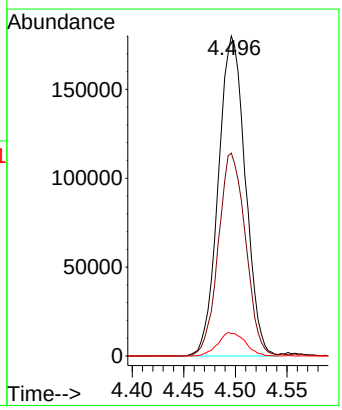


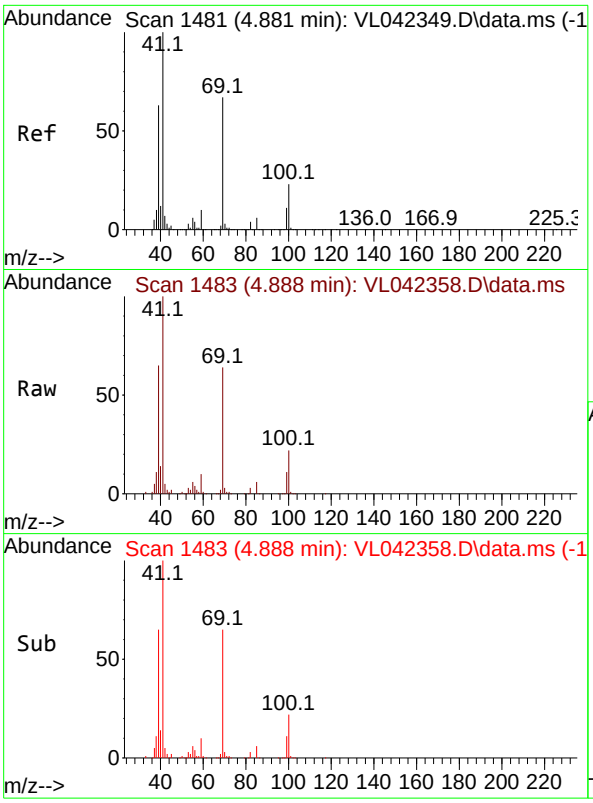


#42
Bromodichloromethane
Concen: 10.326 ppbv
RT: 4.496 min Scan# 1362
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 83 Resp: 327652

Ion	Ratio	Lower	Upper
83	100		
85	63.3	49.7	74.5
127	7.0	5.1	7.7



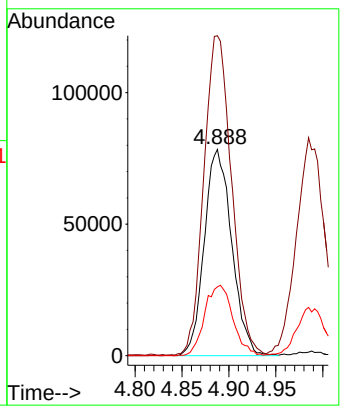


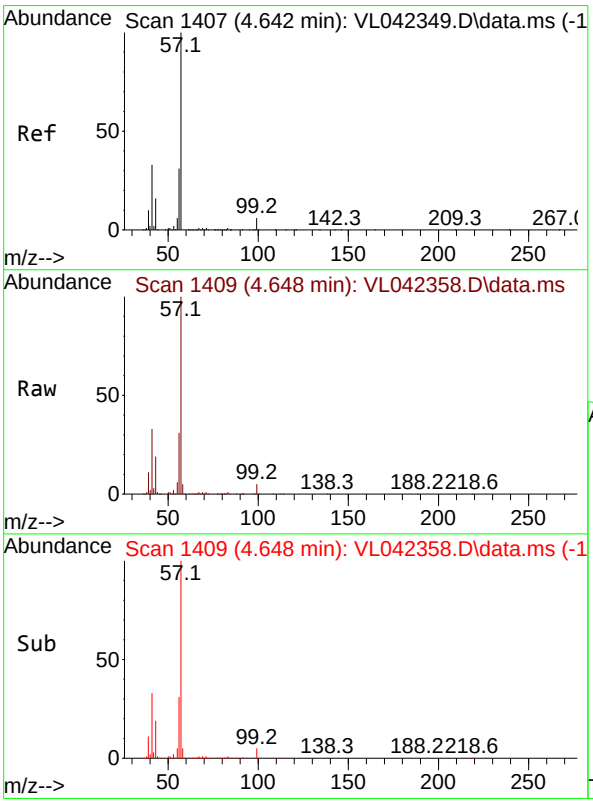
#43
Methyl Methacrylate
Concen: 9.304 ppbv
RT: 4.888 min Scan# 14
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 69 Resp: 159292

Ion	Ratio	Lower	Upper
69	100		
41	155.9	118.6	177.8
100	35.1	28.2	42.2

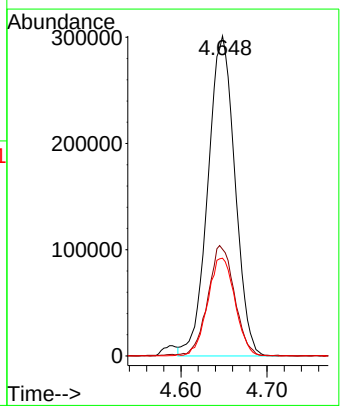


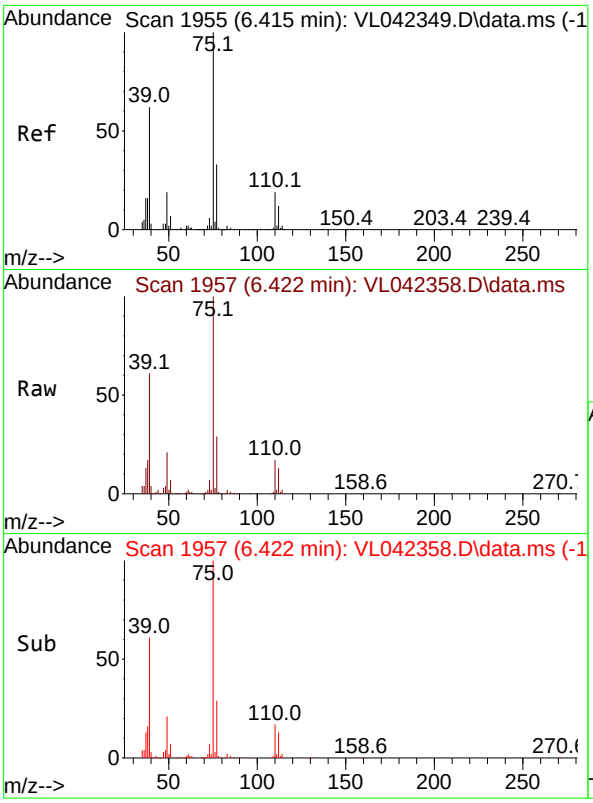


#44
2,2,4-Trimethylpentane
Concen: 10.019 ppbv
RT: 4.648 min Scan# 1409
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 57 Resp: 657377

Ion	Ratio	Lower	Upper
57	100		
41	34.2	27.2	40.8
56	31.1	25.7	38.5



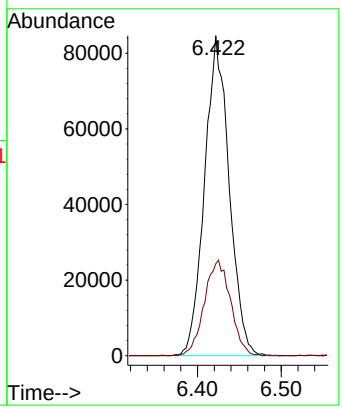


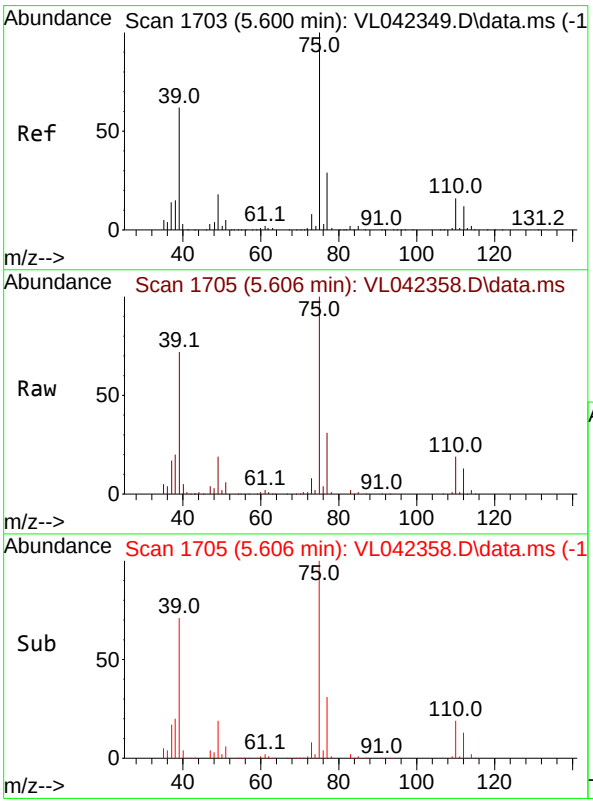
#45
t-1,3-Dichloropropene
Concen: 9.864 ppbv
RT: 6.422 min Scan# 1
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 75 Resp: 172514

Ion	Ratio	Lower	Upper
75	100		
77	28.7	27.0	40.6

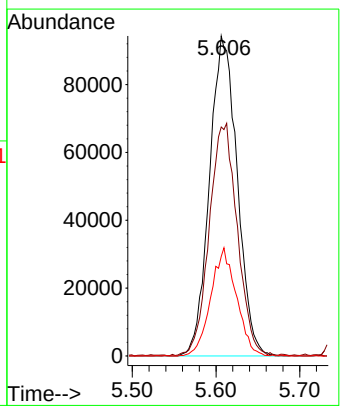


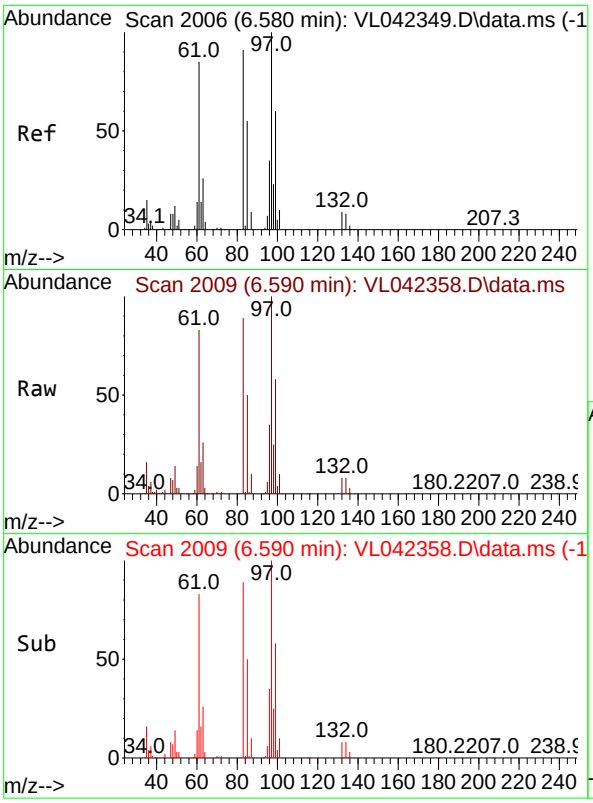


#46
cis-1,3-Dichloropropene
Concen: 10.133 ppbv
RT: 5.606 min Scan# 1705
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 75 Resp: 216901

Ion	Ratio	Lower	Upper
75	100		
39	71.3	50.0	75.0
77	31.1	23.0	34.6



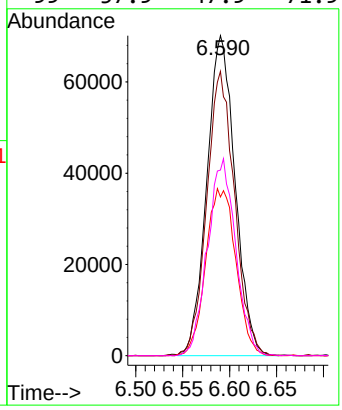


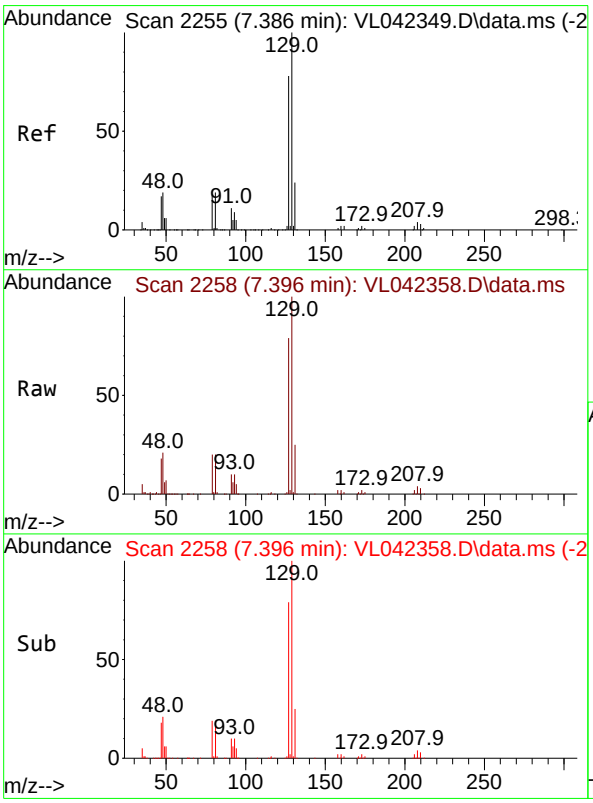
#47
1,1,2-Trichloroethane
Concen: 10.161 ppbv
RT: 6.590 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 97 Resp: 146547

Ion	Ratio	Lower	Upper
97	100		
83	88.7	72.8	109.2
85	49.6	44.2	66.4
99	57.9	47.9	71.9

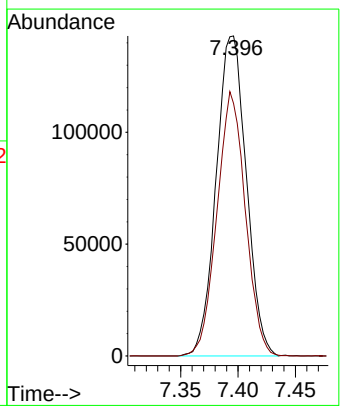


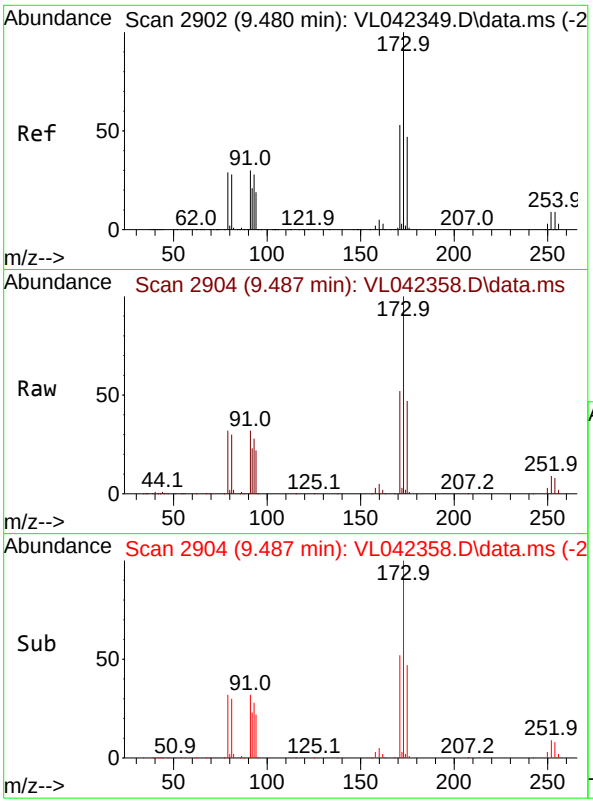


#48
Dibromochloromethane
Concen: 10.261 ppbv
RT: 7.396 min Scan# 2258
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:129 Resp: 261470

Ion	Ratio	Lower	Upper
129	100		
127	77.9	39.1	117.3



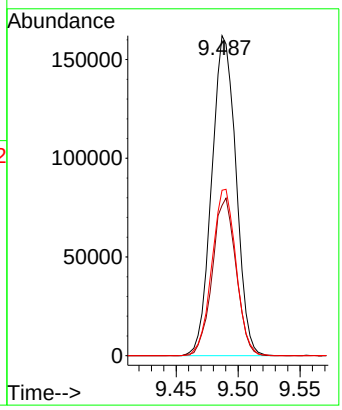


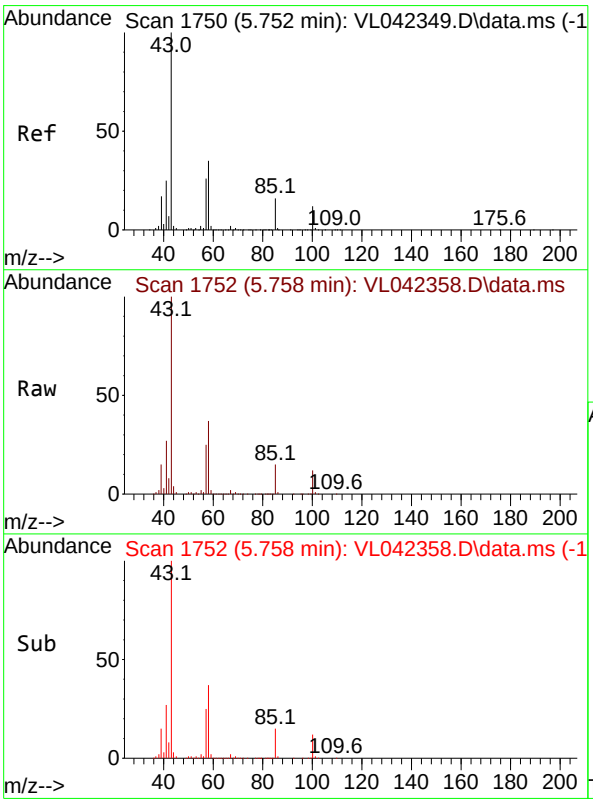
#49
Bromoform
Concen: 9.936 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:173 Resp: 221372

Ion	Ratio	Lower	Upper
173	100		
175	48.0	38.2	57.2
171	51.7	40.9	61.3

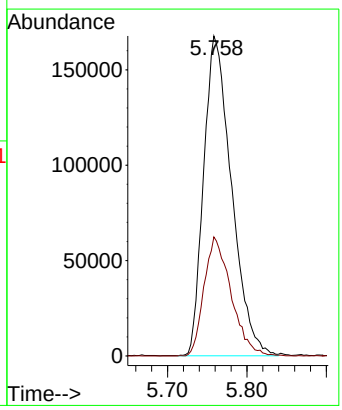


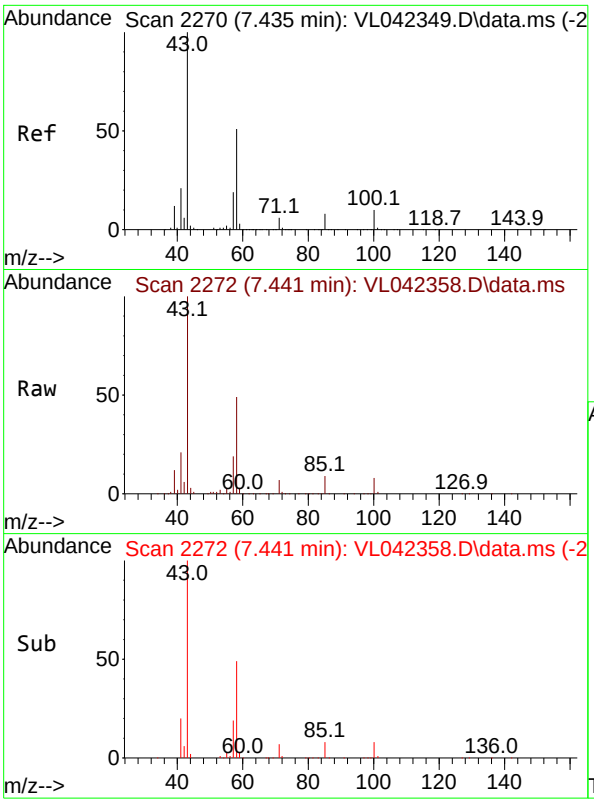


#50
4-Methyl-2-Pentanone
Concen: 8.810 ppbv
RT: 5.758 min Scan# 1752
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 43 Resp: 407804

Ion	Ratio	Lower	Upper
43	100		
58	36.2	28.6	43.0



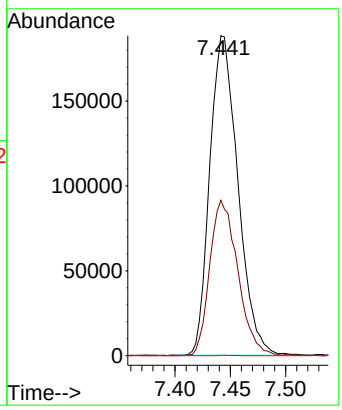


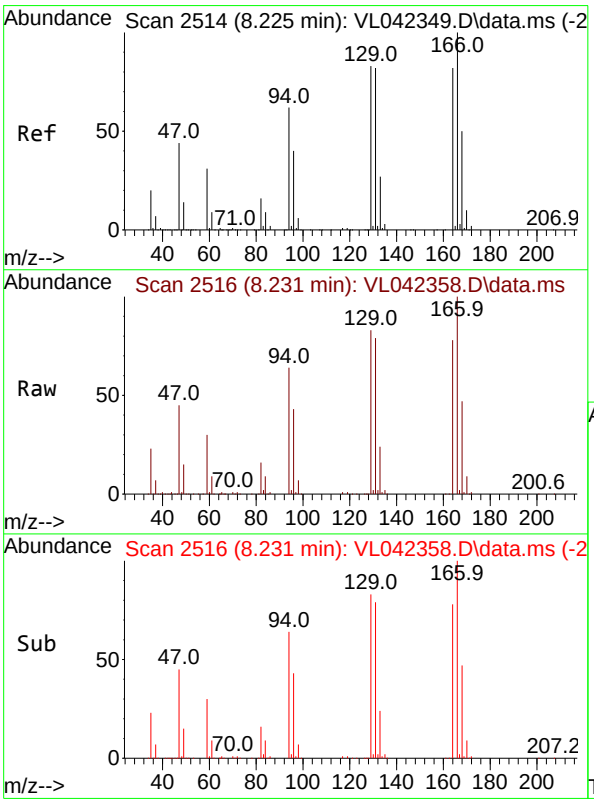
#51
2-Hexanone
Concen: 8.013 ppbv
RT: 7.441 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 43 Resp: 332646

Ion	Ratio	Lower	Upper
43	100		
58	48.6	40.2	60.4
98	0.1	0.1	0.1#

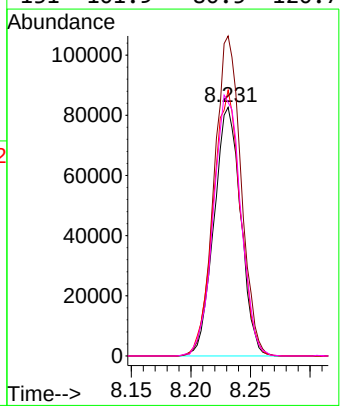


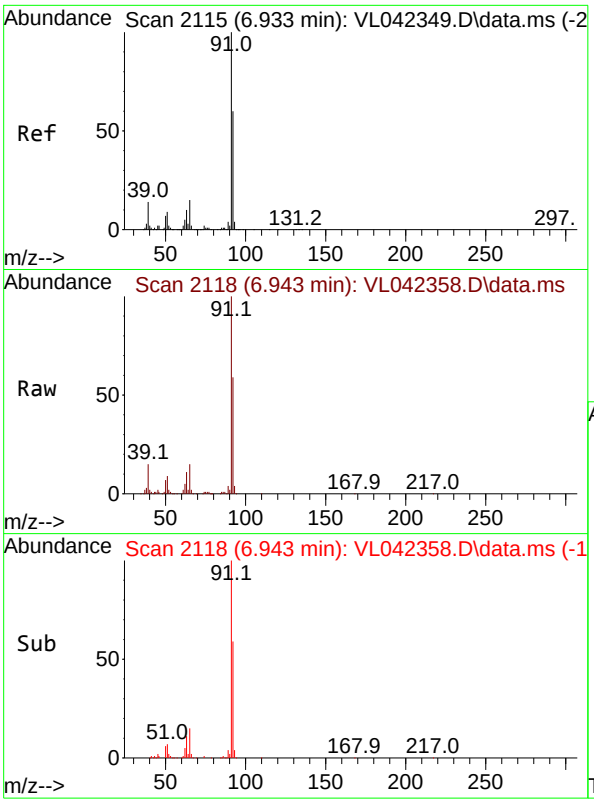


#52
Tetrachloroethene
Concen: 8.763 ppbv
RT: 8.231 min Scan# 2516
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:164 Resp: 128670

Ion	Ratio	Lower	Upper
164	100		
166	128.7	98.2	147.2
129	106.9	81.8	122.8
131	101.9	80.5	120.7



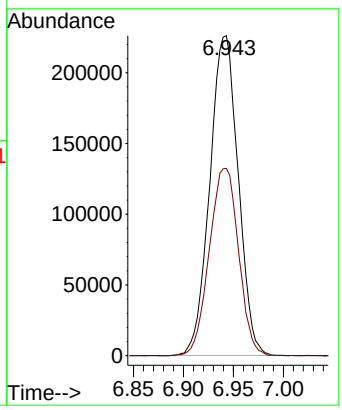


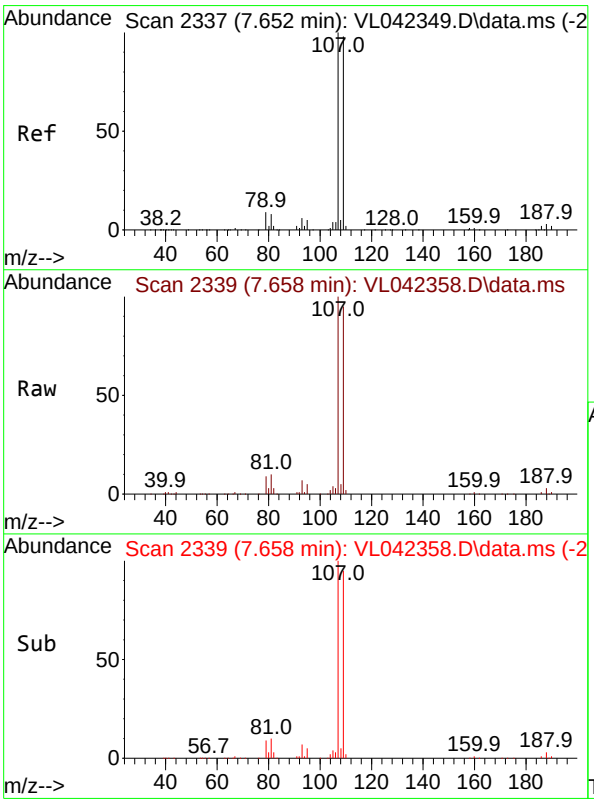
#53
Toluene
Concen: 9.818 ppbv
RT: 6.943 min Scan# 21
Delta R.T. 0.010 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 91 Resp: 447581

Ion	Ratio	Lower	Upper
91	100		
92	60.3	48.2	72.4

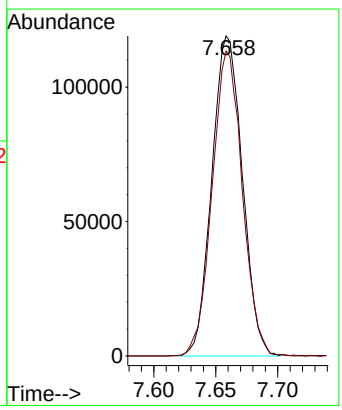


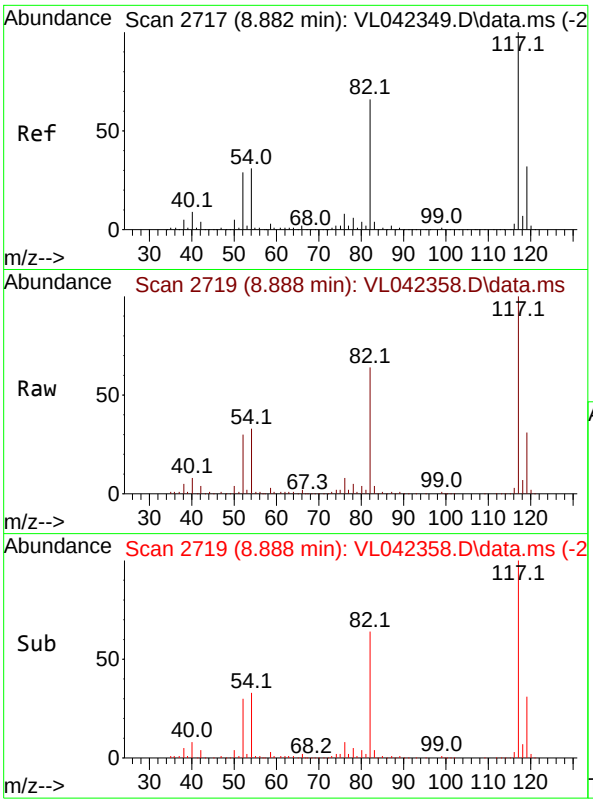


#54
1,2-Dibromoethane
Concen: 9.899 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:107 Resp: 204328

Ion	Ratio	Lower	Upper
107	100		
109	95.1	78.2	117.4



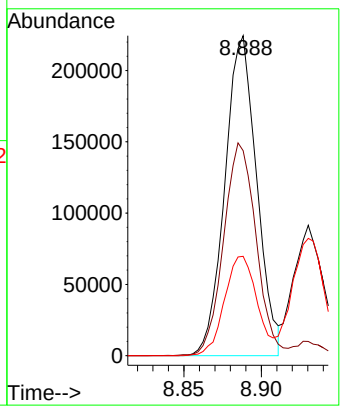


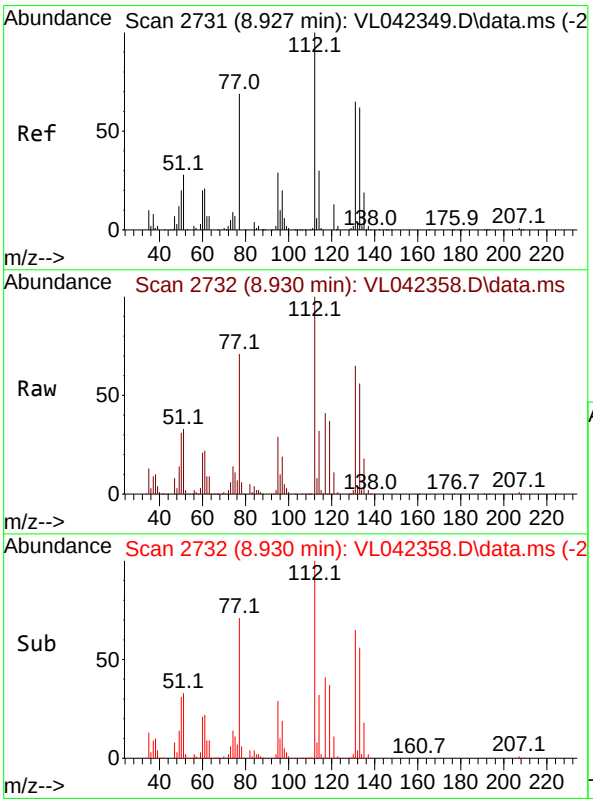
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.888 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:117 Resp: 321521

Ion	Ratio	Lower	Upper
117	100		
82	71.8	57.8	86.6
119	32.5	25.2	37.8

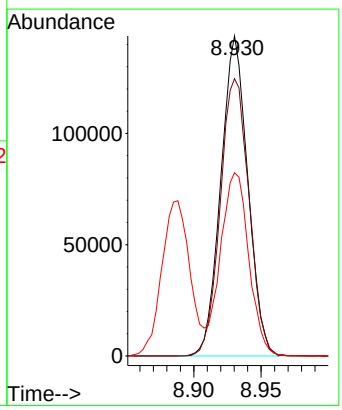


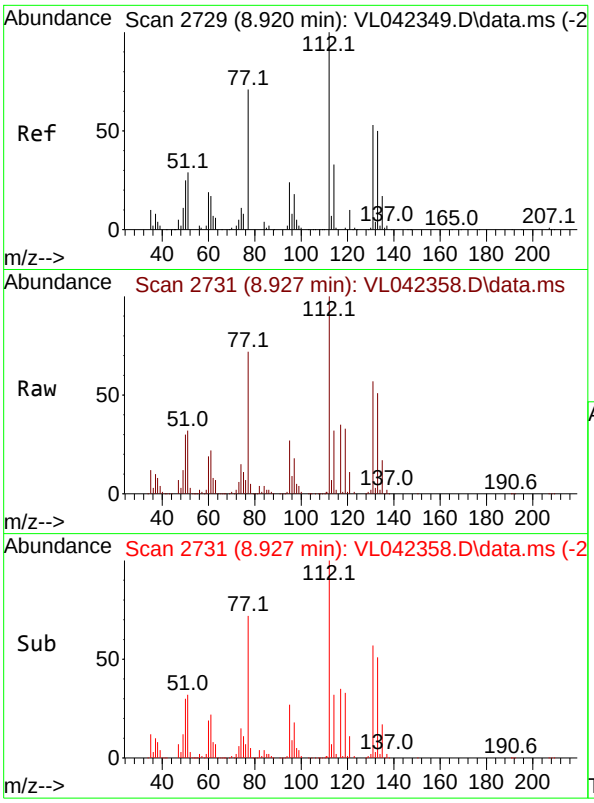


#56
1,1,1,2-Tetrachloroethane
Concen: 10.275 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:131 Resp: 199945

Ion	Ratio	Lower	Upper
131	100		
133	92.5	78.3	117.5
119	60.2	48.7	73.1



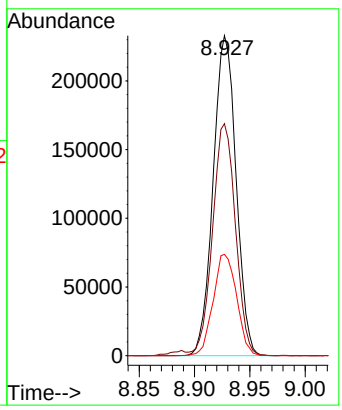


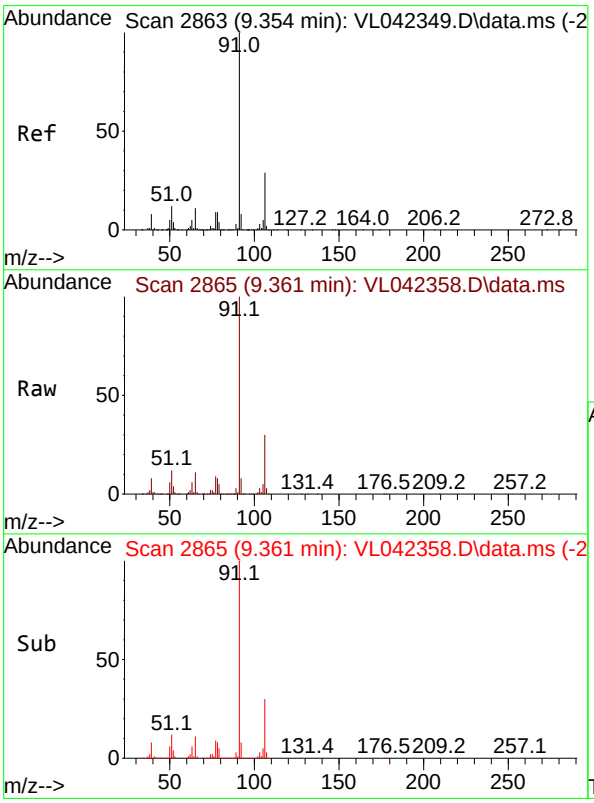
#57
Chlorobenzene
Concen: 10.022 ppbv
RT: 8.927 min Scan# 2
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:112 Resp: 335143

Ion	Ratio	Lower	Upper
112	100		
77	72.4	57.8	86.6
114	31.7	29.3	35.9

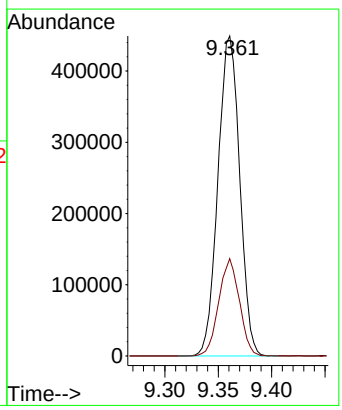


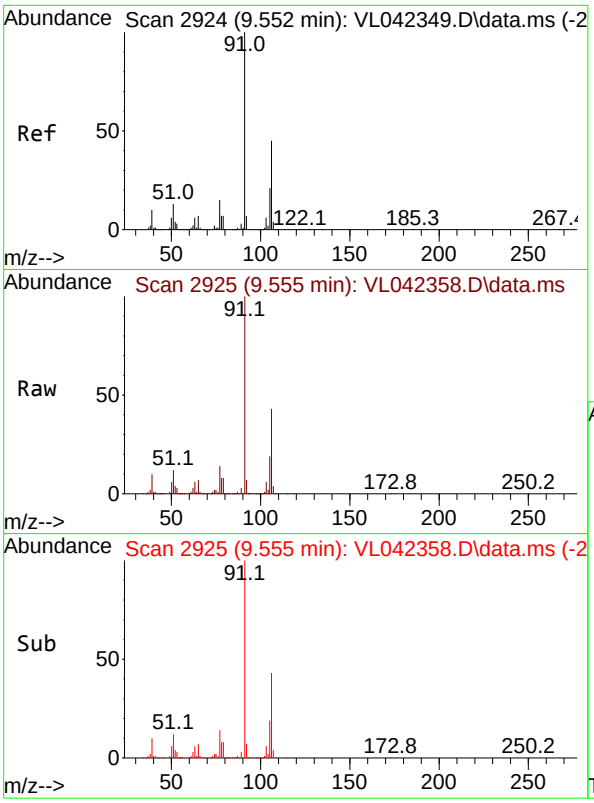


#58
Ethyl Benzene
Concen: 9.975 ppbv
RT: 9.361 min Scan# 2865
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 635446

Ion	Ratio	Lower	Upper
91	100		
106	30.4	23.0	34.4



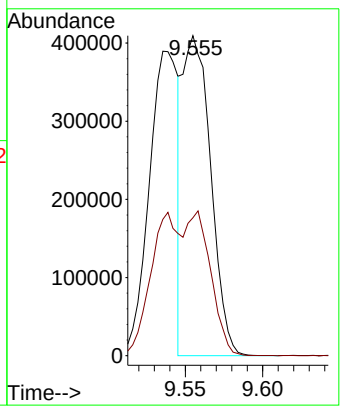


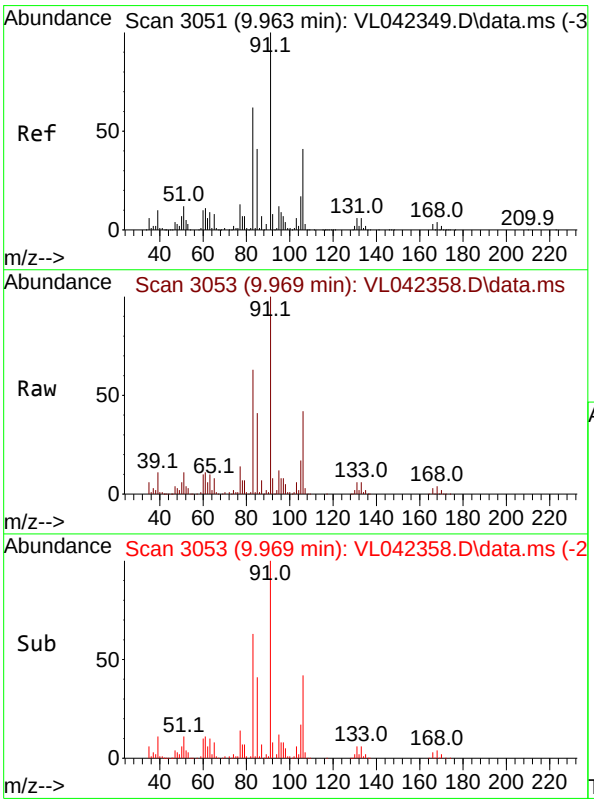
#59
m/p-Xylene
Concen: 10.001 ppbv
RT: 9.555 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 91 Resp: 513237

Ion	Ratio	Lower	Upper
91	100		
106	87.8	35.4	53.2#

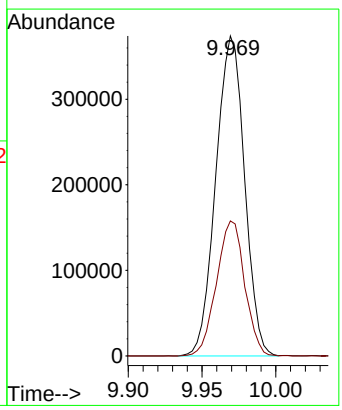


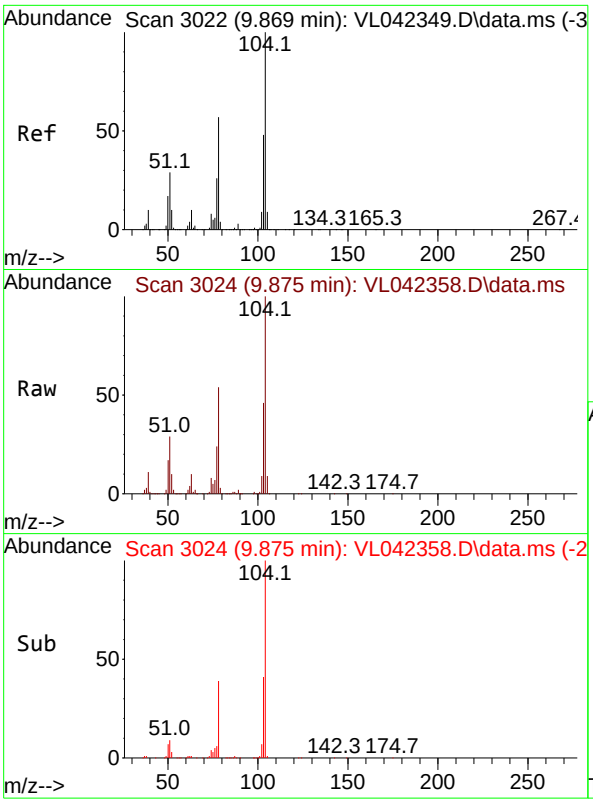


#60
o-Xylene
Concen: 9.802 ppbv
RT: 9.969 min Scan# 3053
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 506535

Ion	Ratio	Lower	Upper
91	100		
106	41.4	21.1	63.4



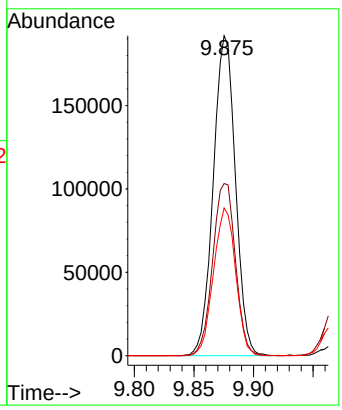


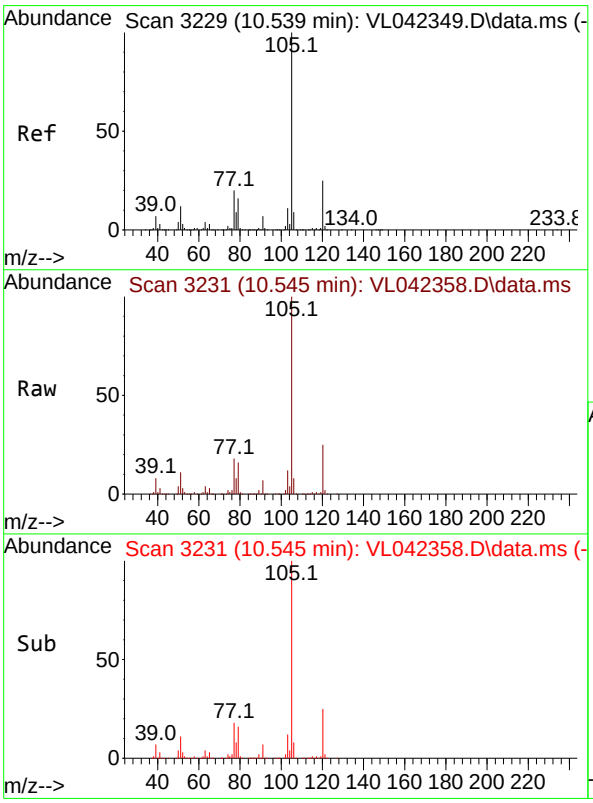
#61
Styrene
Concen: 10.055 ppbv
RT: 9.875 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:104 Resp: 248022

Ion	Ratio	Lower	Upper
104	100		
78	55.3	44.6	66.8
103	46.2	37.4	56.0

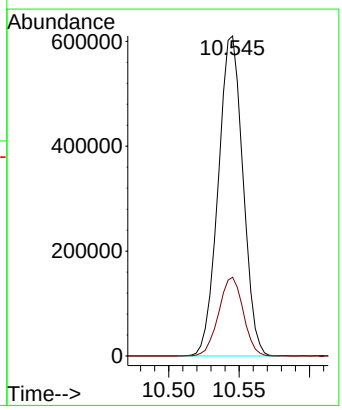


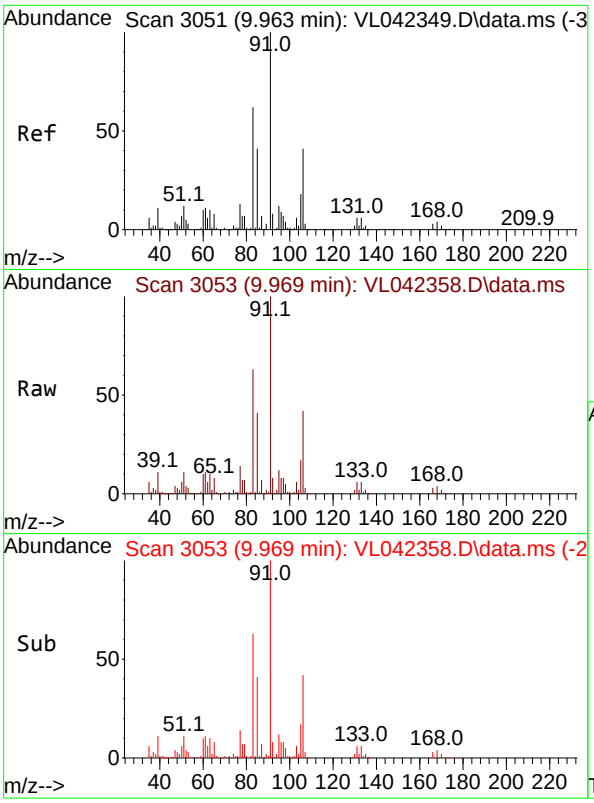


#62
Isopropylbenzene
Concen: 9.827 ppbv
RT: 10.545 min Scan# 3231
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 745571

Ion	Ratio	Lower	Upper
105	100		
120	24.5	19.8	29.8



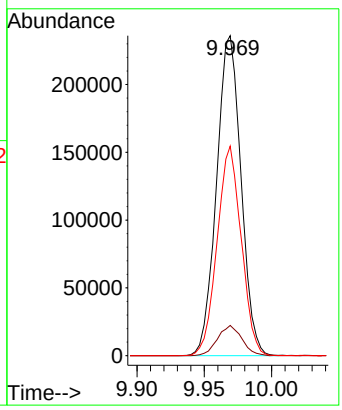


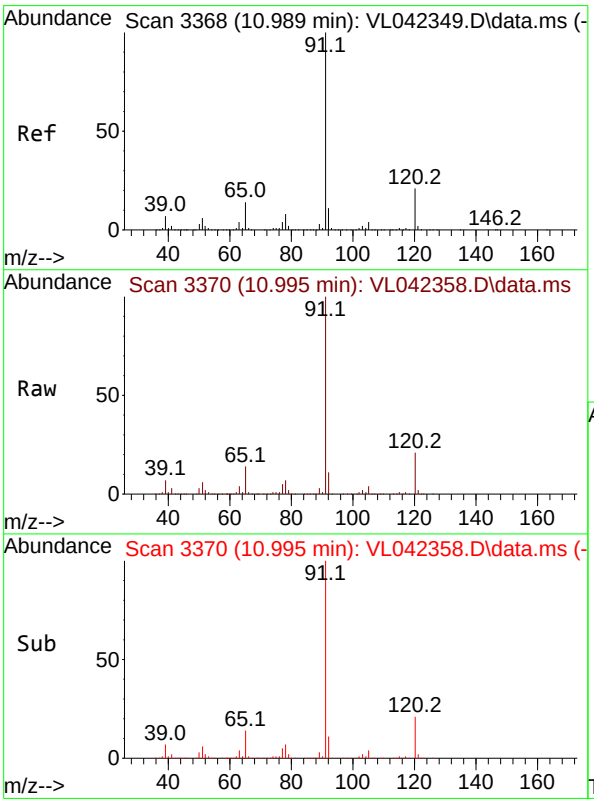
#63
1,1,2,2-Tetrachloroethane
Concen: 8.916 ppbv
RT: 9.969 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 83 Resp: 298581

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.5	13.7
85	64.5	32.4	97.0

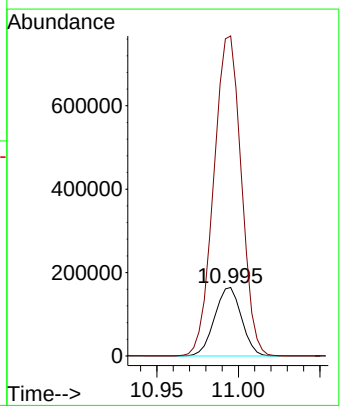


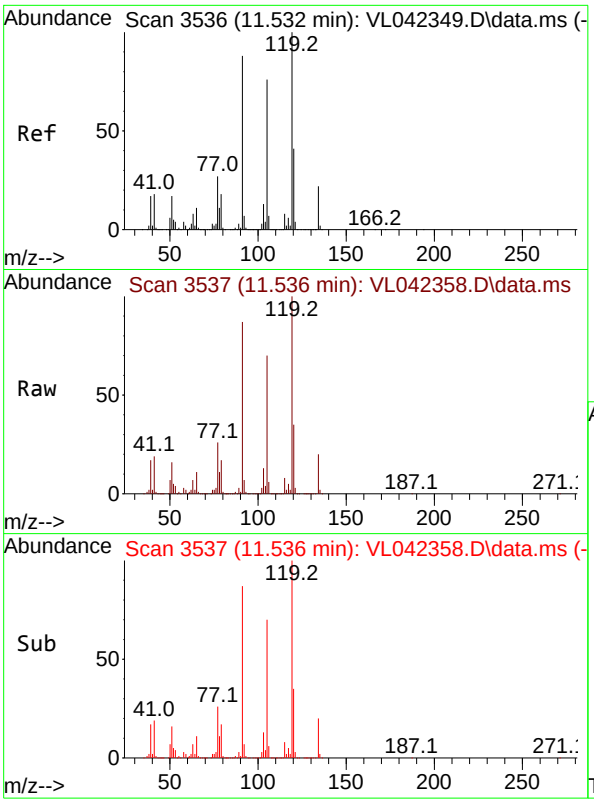


#64
n-propylbenzene
Concen: 9.875 ppbv
RT: 10.995 min Scan# 3370
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:120 Resp: 188310

Ion	Ratio	Lower	Upper
120	100		
91	478.2	392.4	588.6



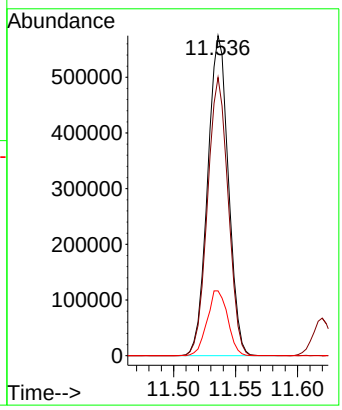


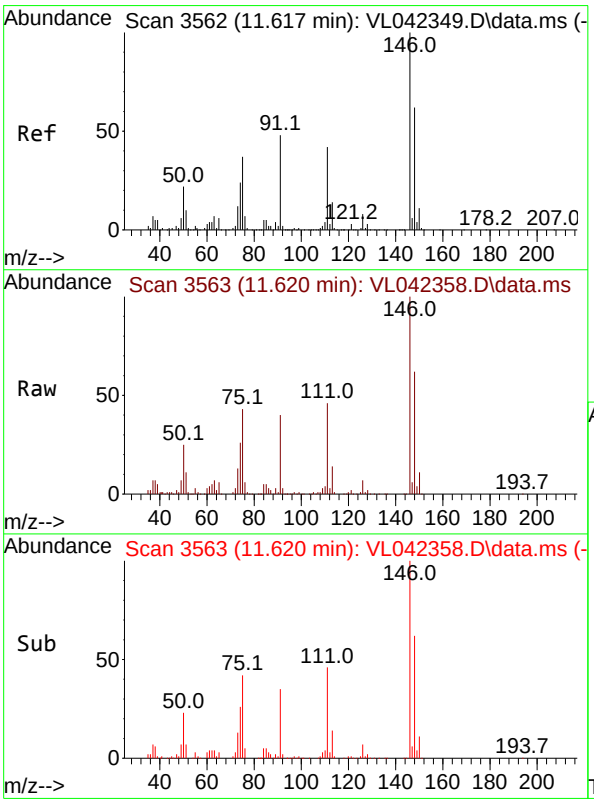
#65
tert-Butylbenzene
Concen: 9.589 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:119 Resp: 668687

Ion	Ratio	Lower	Upper
119	100		
91	86.7	74.6	111.8
134	20.2	18.8	28.2

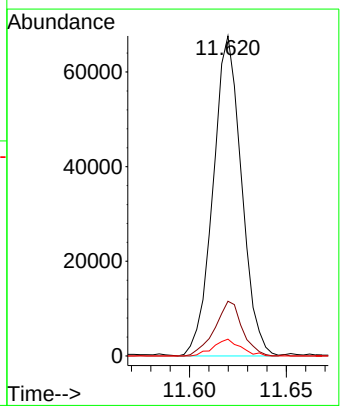


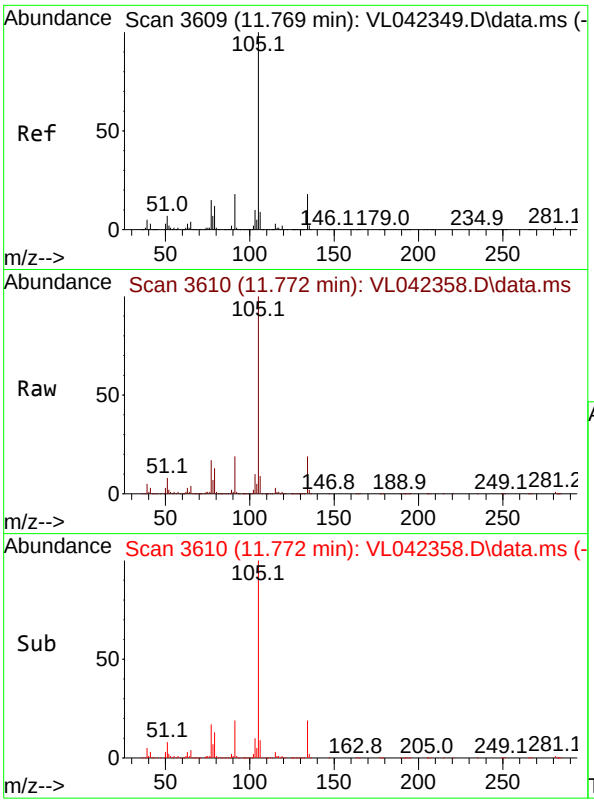


#66
Benzyl Chloride
Concen: 9.012 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 69058

Ion	Ratio	Lower	Upper
91	100		
126	16.5	11.8	17.6
128	5.0	4.5	6.7



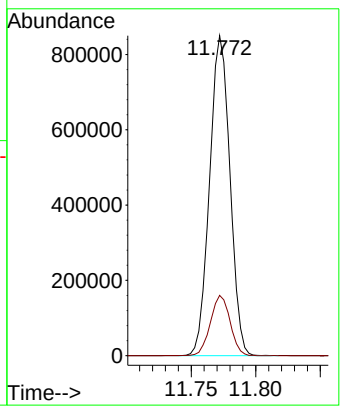


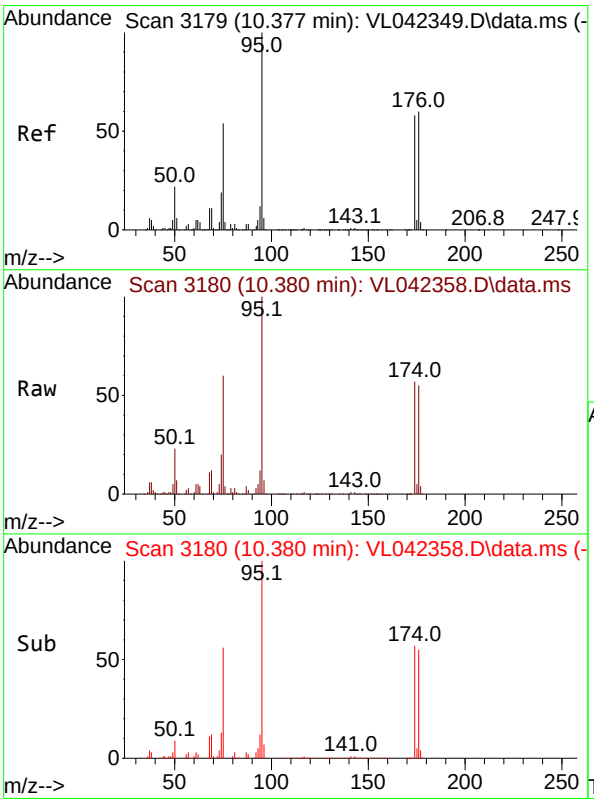
#67
sec-Butylbenzene
Concen: 9.592 ppbv
RT: 11.772 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:105 Resp: 930426

Ion	Ratio	Lower	Upper
105	100		
134	18.3	14.6	21.8

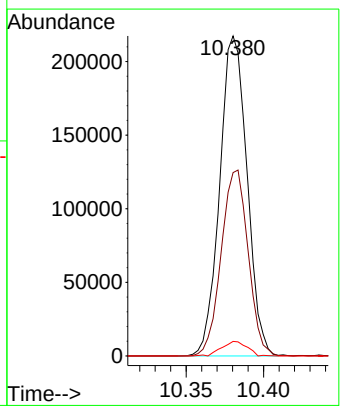


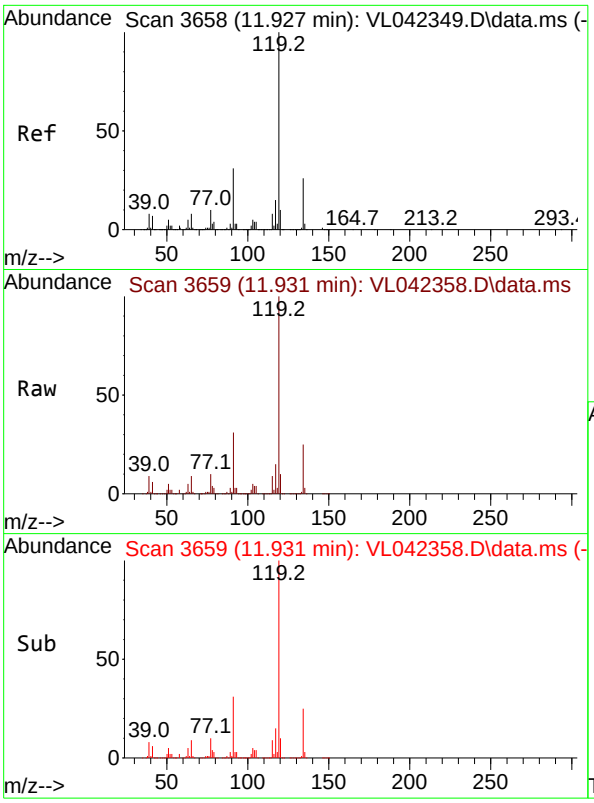


#68
1-Bromo-4-Fluorobenzene
Concen: 10.096 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 95 Resp: 266757

Ion	Ratio	Lower	Upper
95	100		
174	57.3	48.5	72.7
175	4.3	3.7	5.5



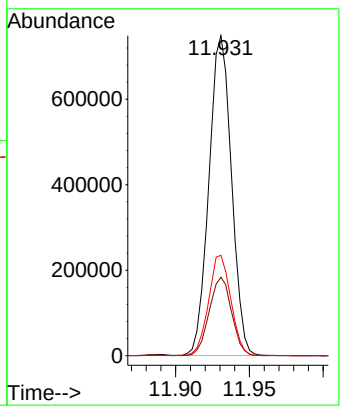


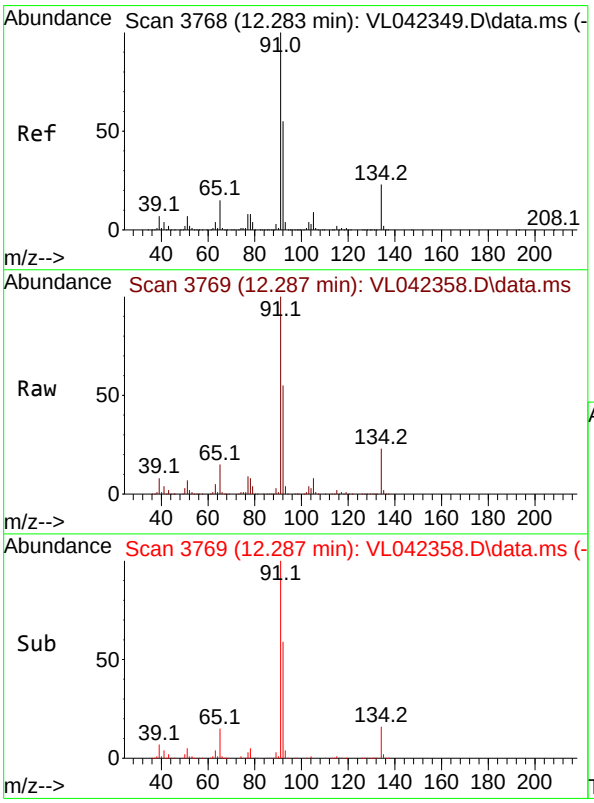
#69
p-Isopropyltoluene
Concen: 9.441 ppbv
RT: 11.931 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:119 Resp: 795532

Ion	Ratio	Lower	Upper
119	100		
134	24.5	20.0	30.0
91	31.2	24.4	36.6

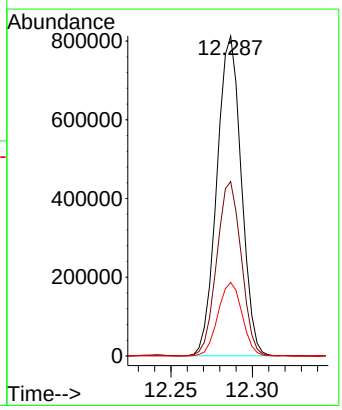


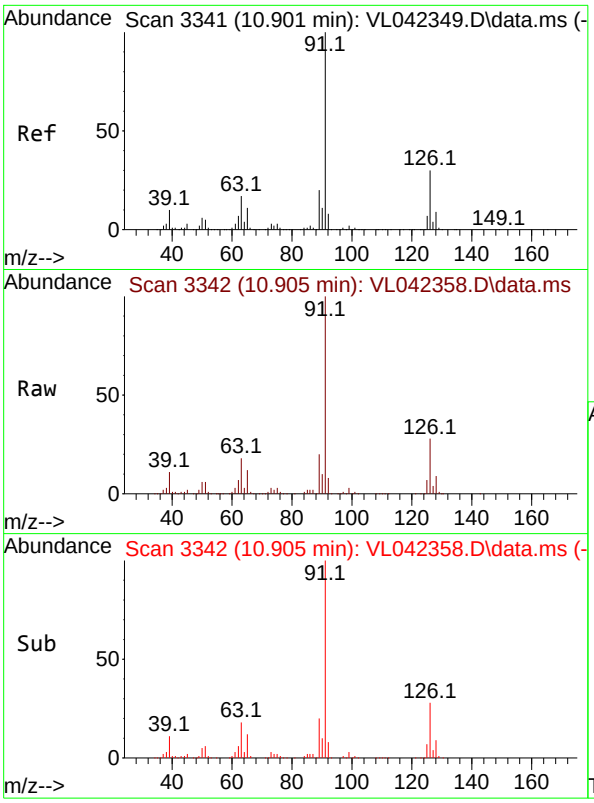


#70
n-Butylbenzene
Concen: 9.644 ppbv
RT: 12.287 min Scan# 3769
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion: 91 Resp: 846427

Ion	Ratio	Lower	Upper
91	100		
92	54.9	44.2	66.4
134	22.7	18.2	27.4



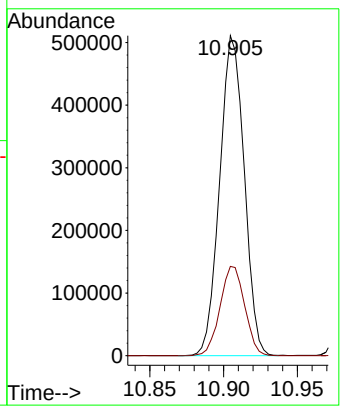


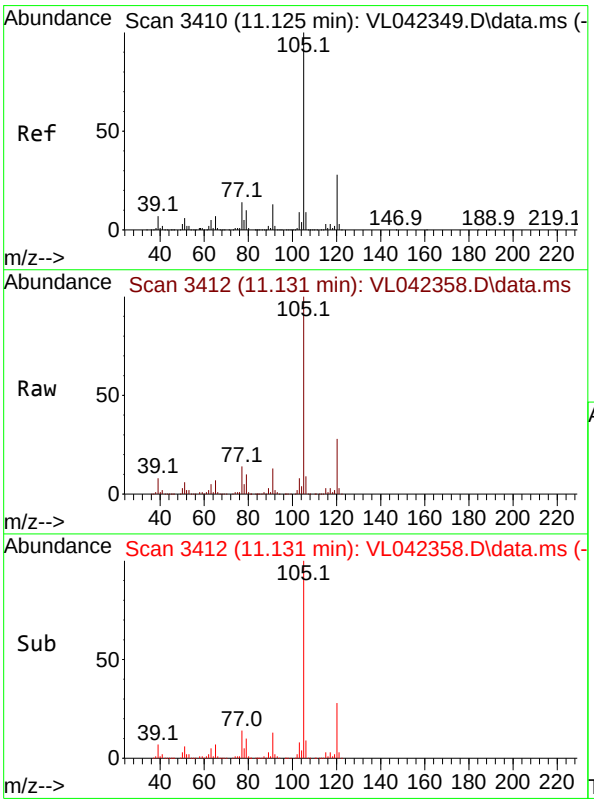
#71
2-Chlorotoluene
Concen: 9.934 ppbv
RT: 10.905 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion: 91 Resp: 591154

Ion	Ratio	Lower	Upper
91	100		
126	27.9	11.4	45.4

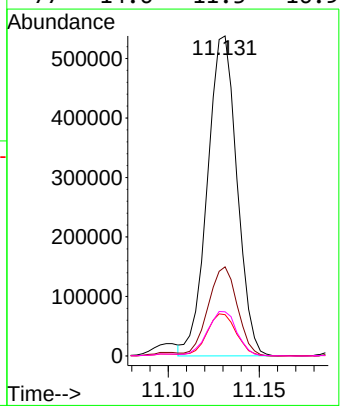


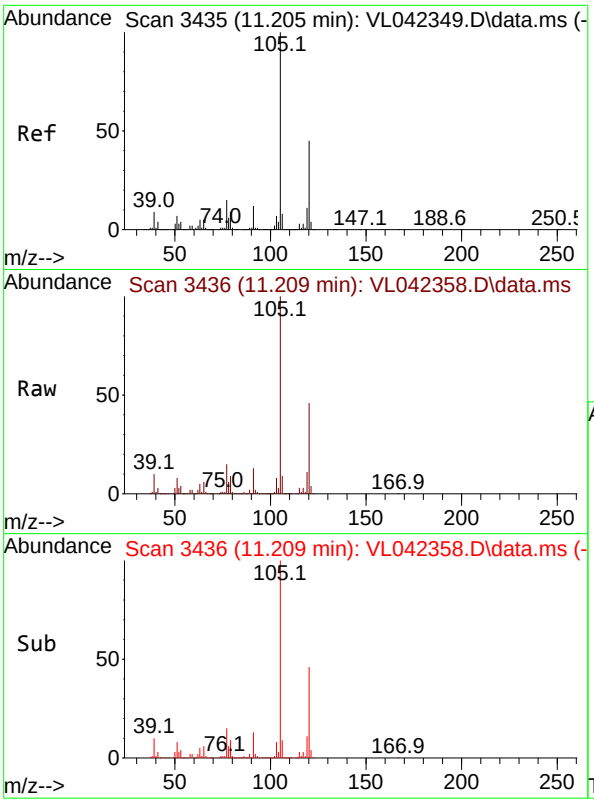


#72
4-Ethyltoluene
Concen: 9.606 ppbv
RT: 11.131 min Scan# 3412
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 606879

Ion	Ratio	Lower	Upper
105	100		
120	28.6	23.2	34.8
91	13.5	10.4	15.6
77	14.6	11.3	16.9



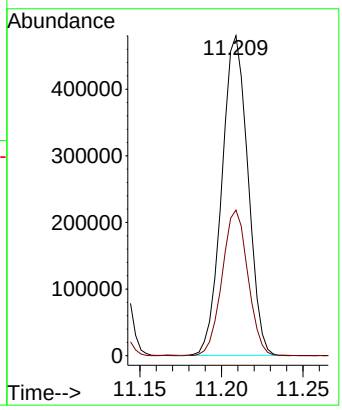


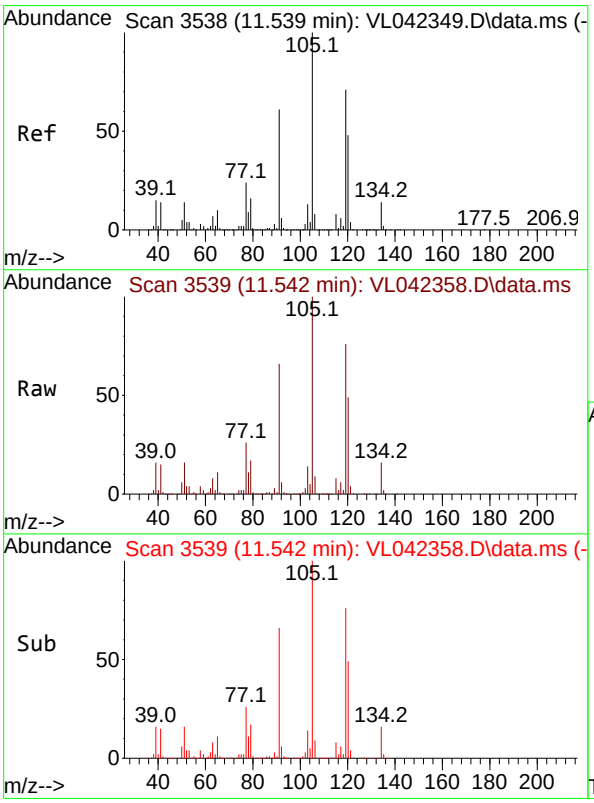
#73
1,3,5-Trimethylbenzene
Concen: 9.557 ppbv
RT: 11.209 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:105 Resp: 533060

Ion	Ratio	Lower	Upper
105	100		
120	45.6	35.6	53.4

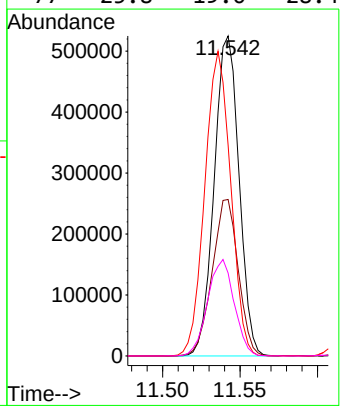


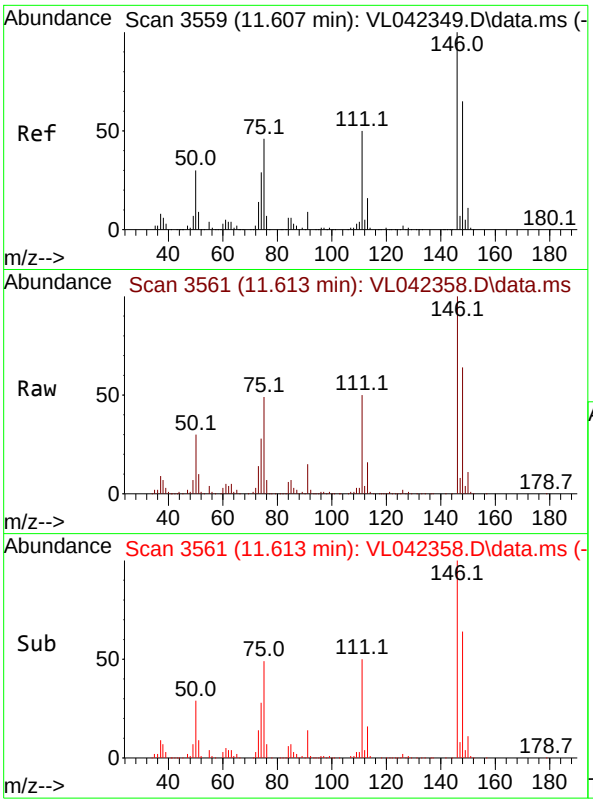


#74
1,2,4-Trimethylbenzene
Concen: 8.976 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:105 Resp: 584747

Ion	Ratio	Lower	Upper
105	100		
120	48.9	38.1	57.1
91	65.8	48.8	73.2
77	25.8	19.0	28.4



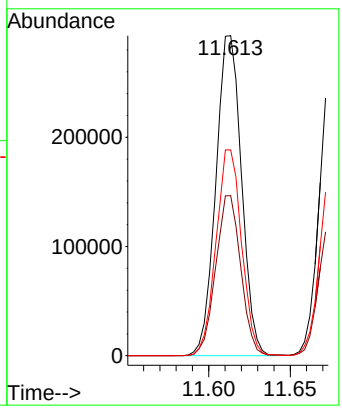


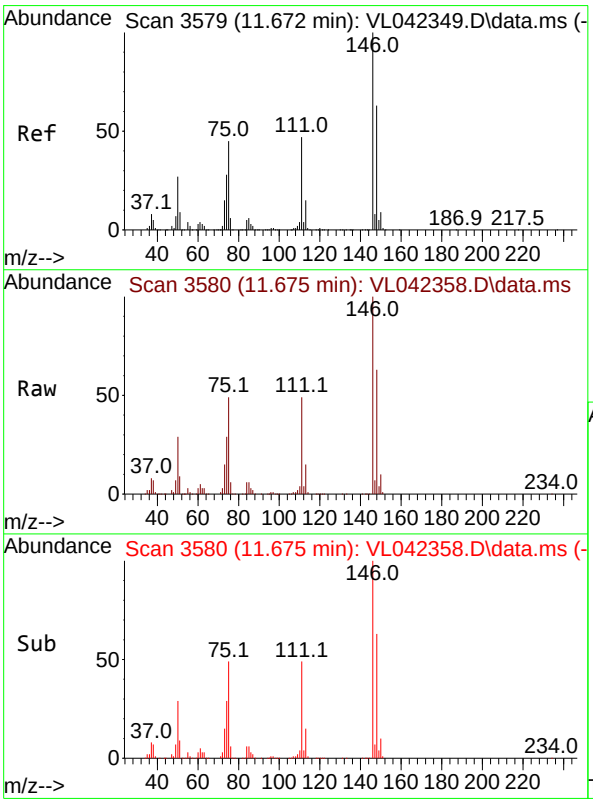
#75
1,3-Dichlorobenzene
Concen: 9.474 ppbv
RT: 11.613 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:146 Resp: 320811

Ion	Ratio	Lower	Upper
146	100		
111	48.8	24.3	72.8
148	64.0	31.6	94.8

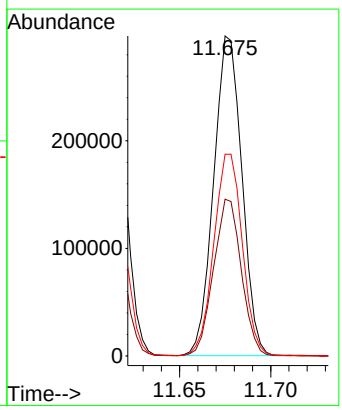


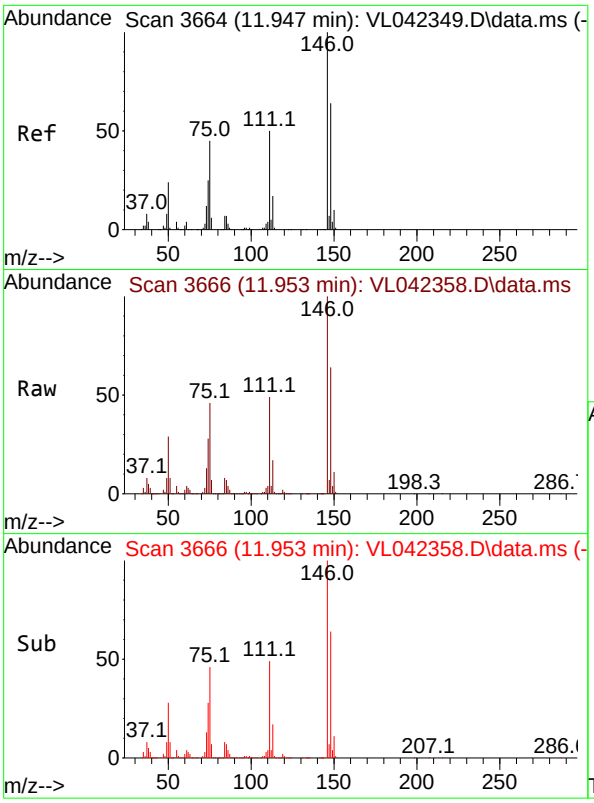


#76
1,4-Dichlorobenzene
Concen: 9.384 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:146 Resp: 319376

Ion	Ratio	Lower	Upper
146	100		
111	48.6	24.2	72.6
148	64.1	32.1	96.5



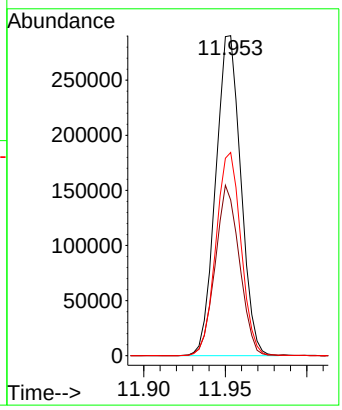


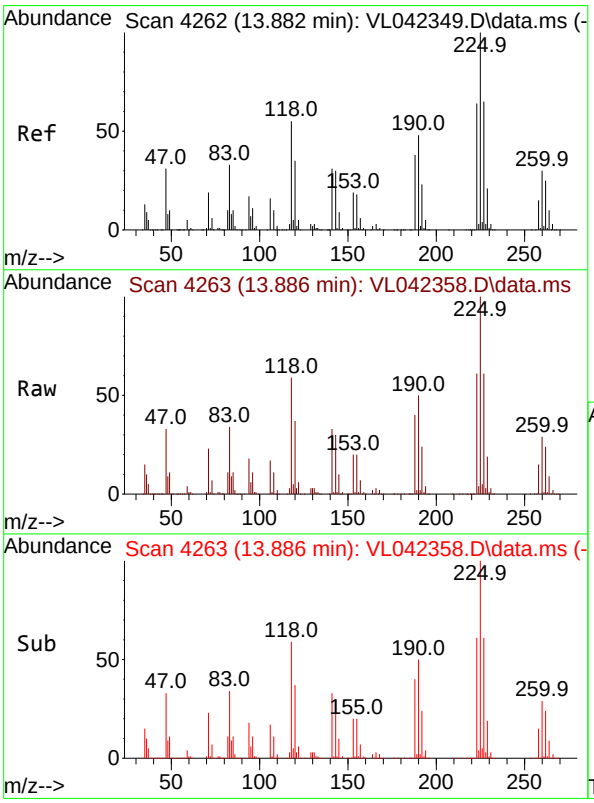
#77
1,2-Dichlorobenzene
Concen: 9.459 ppbv
RT: 11.953 min Scan# 3
Delta R.T. 0.007 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:146 Resp: 311460

Ion	Ratio	Lower	Upper
146	100		
111	51.4	25.3	75.9
148	63.4	31.5	94.5

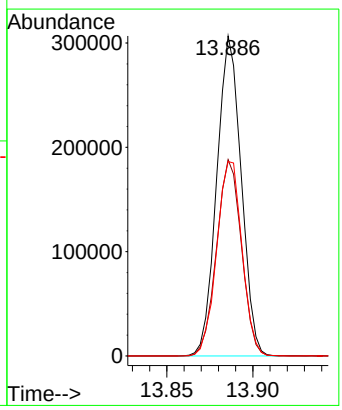


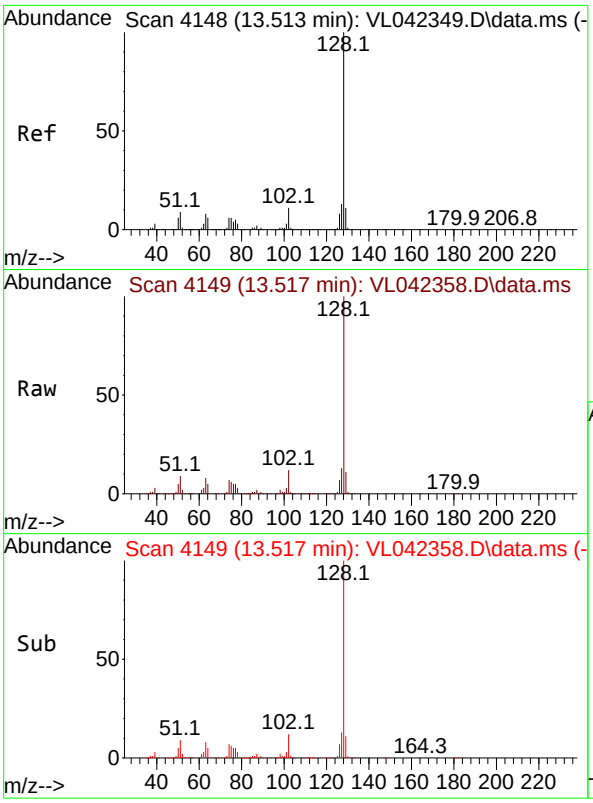


#78
Hexachloro-1,3-Butadiene
Concen: 9.124 ppbv
RT: 13.886 min Scan# 4263
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:225 Resp: 303379

Ion	Ratio	Lower	Upper
225	100		
223	62.3	50.3	75.5
227	62.9	51.5	77.3



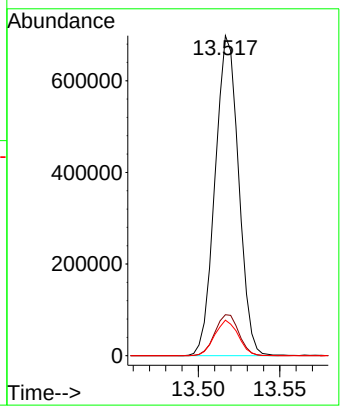


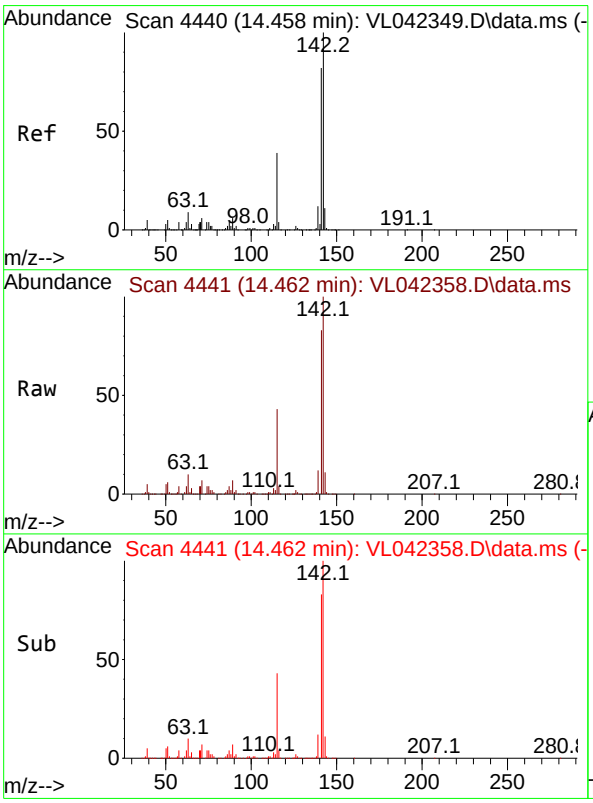
#79
Naphthalene
Concen: 8.999 ppbv
RT: 13.517 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:128 Resp: 701010

Ion	Ratio	Lower	Upper
128	100		
127	12.8	10.6	15.8
129	11.1	8.6	12.8

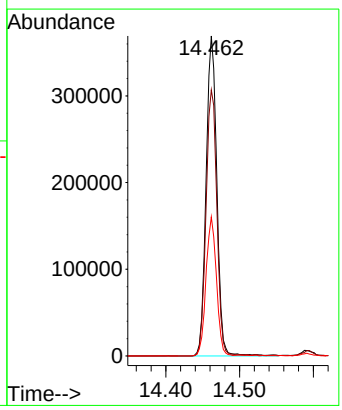


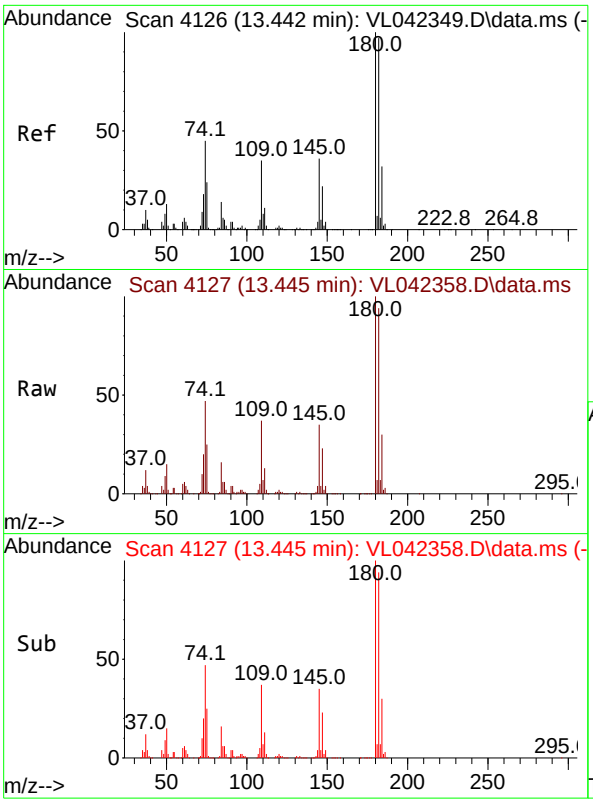


#80
Naphthalene,2-methyl-
Concen: 8.331 ppbv
RT: 14.462 min Scan# 4441
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Tgt Ion:142 Resp: 369891

Ion	Ratio	Lower	Upper
142	100		
141	85.0	66.8	100.2
115	42.8	33.4	50.2



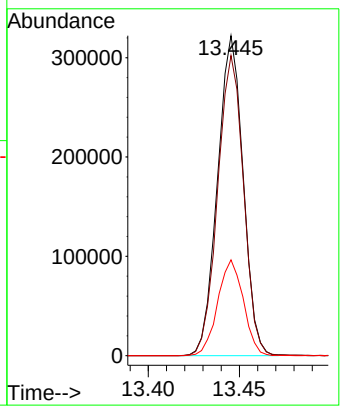


#81
1,2,4-Trichlorobenzene
Concen: 9.417 ppbv
RT: 13.445 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042358.D
Acq: 17 Apr 2025 15:39

Instrument :
MSVOA_L
ClientSampleId :
VL0417ABS01

Tgt Ion:180 Resp: 315002

Ion	Ratio	Lower	Upper
180	100		
182	94.8	76.8	115.2
184	30.1	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Time: Apr 18 02:37:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	123457	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	354157	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	318284	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	265265	10.142	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 101.400%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	9411	0.431	ppbv	90
3) Chlorodifluoromethane	1.787	51	2267	0.109	ppbv	94
4) Chloromethane	1.531	50	5667	0.657	ppbv	96
6) Bromomethane	1.674	94	376	0.093	ppbv #	23
7) Chloroethane	1.703	64	369	0.109	ppbv #	44
9) Propene	1.489	41	15185	1.605	ppbv	84
10) Heptane	4.981	43	1318	0.050	ppbv #	1
11) Trichlorofluoromethane	1.877	101	4367	0.211	ppbv	92
12) 1,1,2-Trichlorotrifluo...	2.136	101	1357	0.080	ppbv	86
13) Ethanol	1.722	45	25940	17.253	ppbv	75
15) Acetone	1.835	43	775779	38.385	ppbv	99
16) 1,3-Butadiene	1.599	39	2667	0.276	ppbv #	75
17) tert-Butyl alcohol	2.046	59	3528	0.141	ppbv #	74
19) Isopropyl Alcohol	1.887	45	1485068	132.276	ppbv #	56
20) Methylene Chloride	2.062	84	9718	1.228	ppbv #	92
21) Allyl Chloride	1.962	41	7172	0.514	ppbv #	23
23) Vinyl Acetate	2.454	43	17524	2.142	ppbv #	82
25) Ethyl Acetate	2.826	43	36321	0.729	ppbv #	83
26) Hexane	2.826	57	54108	2.683	ppbv #	32
27) Carbon Disulfide	2.149	76	930	0.043	ppbv #	2
29) Chloroform	2.852	83	5846	0.205	ppbv	85
32) 1,1,1-Trichloroethane	3.370	97	1105	0.034	ppbv #	77
34) 2-Butanone	2.560	43	20685	0.739	ppbv	98
35) Carbon Tetrachloride	3.761	117	2133	0.067	ppbv #	67
36) Benzene	3.658	78	6728	0.176	ppbv #	92
37) 1,2-Dichloroethane	3.217	62	697	0.030	ppbv	99
39) 1,2-Dichloropropane	3.959	63	94322	6.626	ppbv #	22
40) 1,4-Dioxane	4.596	88	4501	0.575	ppbv #	34
41) Tetrahydrofuran	3.072	42	1092	0.067	ppbv	91
44) 2,2,4-Trimethylpentane	4.642	57	7803	0.118	ppbv #	56
51) 2-Hexanone	7.438	43	31778	0.761	ppbv #	27
53) Toluene	6.936	91	40500	0.884	ppbv	97
58) Ethyl Benzene	9.354	91	315931	5.010	ppbv	99
59) m/p-Xylene	9.532	91	1082733	21.313	ppbv	100
60) o-Xylene	9.963	91	207265	4.051	ppbv	98
61) Styrene	9.869	104	1788	0.073	ppbv #	26
64) n-propylbenzene	10.992	120	602	0.032	ppbv #	17
65) tert-Butylbenzene	11.536	119	3938	0.057	ppbv #	92
69) p-Isopropyltoluene	11.927	119	5290	0.063	ppbv #	86
70) n-Butylbenzene	12.287	91	2923	0.034	ppbv #	72
72) 4-Ethyltoluene	11.128	105	2922	0.047	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.202	105	6133	0.111	ppbv	90
74) 1,2,4-Trimethylbenzene	11.536	105	17646	0.274	ppbv #	70

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Time: Apr 18 02:37:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

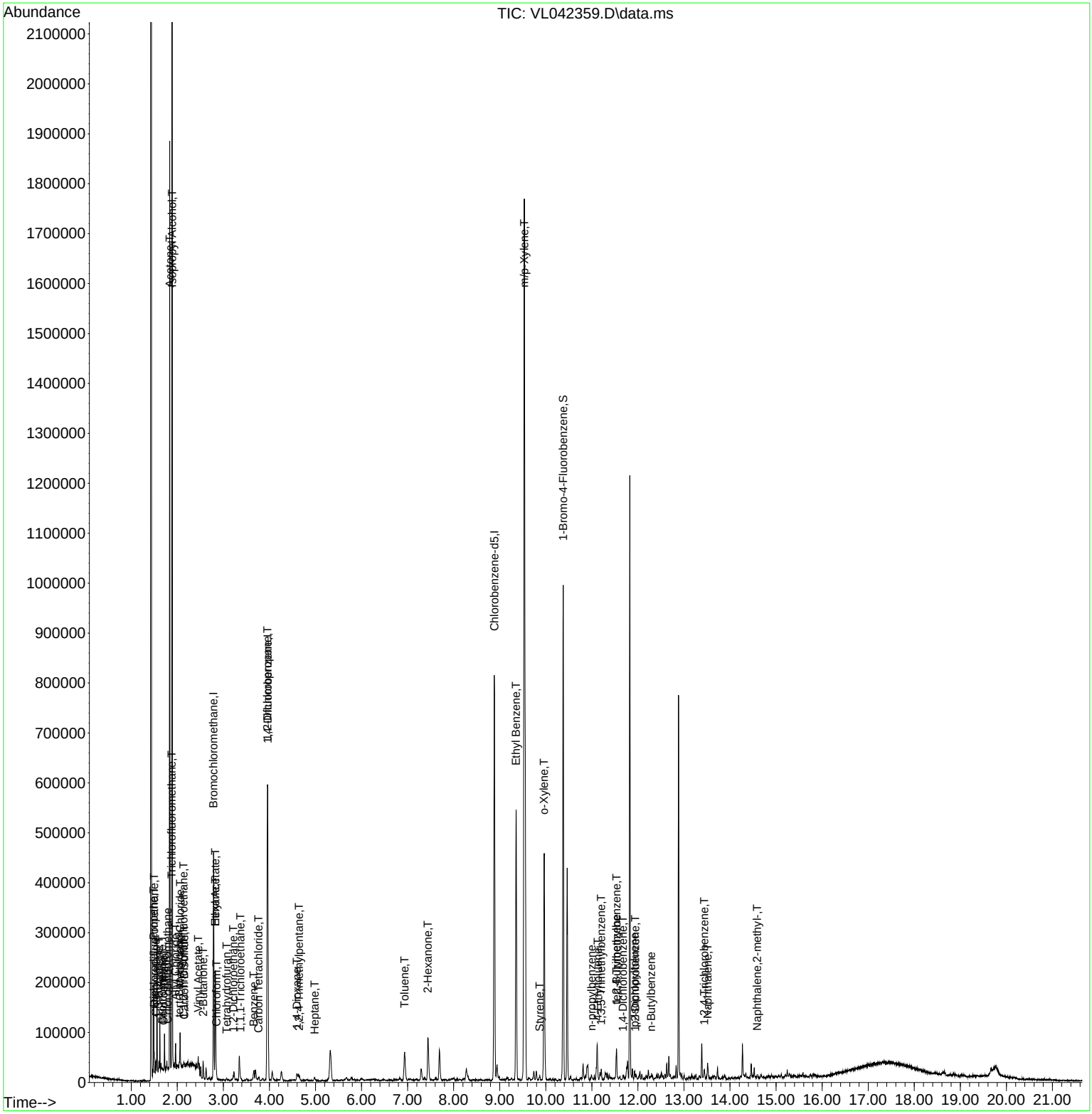
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) 1,4-Dichlorobenzene	11.675	146	1179	0.035	ppbv	82
77) 1,2-Dichlorobenzene	11.943	146	1149	0.035	ppbv	86
79) Naphthalene	13.513	128	10816	0.140	ppbv	97
80) Naphthalene,2-methyl-	14.588	142	1898	0.043	ppbv	92
81) 1,2,4-Trichlorobenzene	13.442	180	2886	0.087	ppbv	92

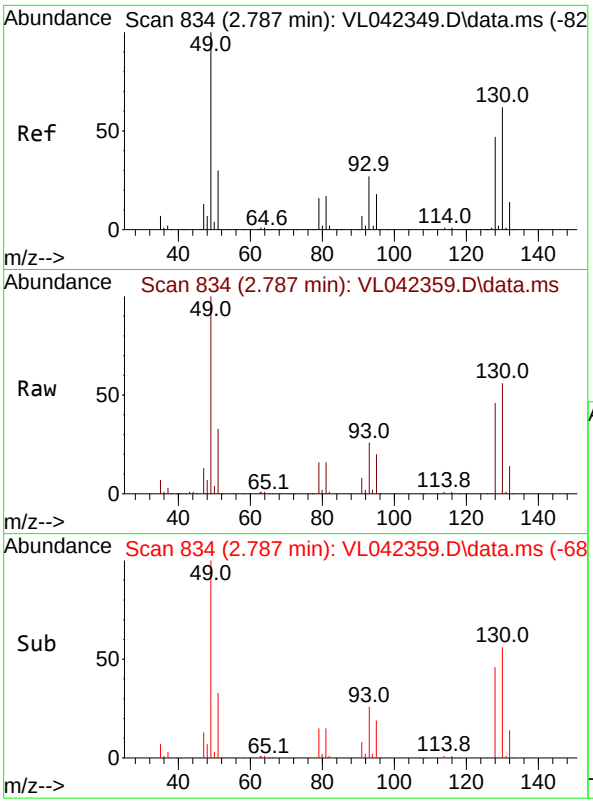
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042359.D
Acq On : 17 Apr 2025 16:12
Operator : SY/MD
Sample : Q1665-15
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Quant Time: Apr 18 02:37:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



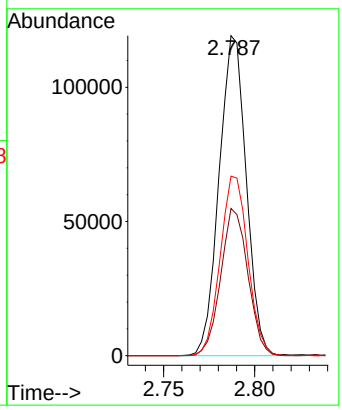


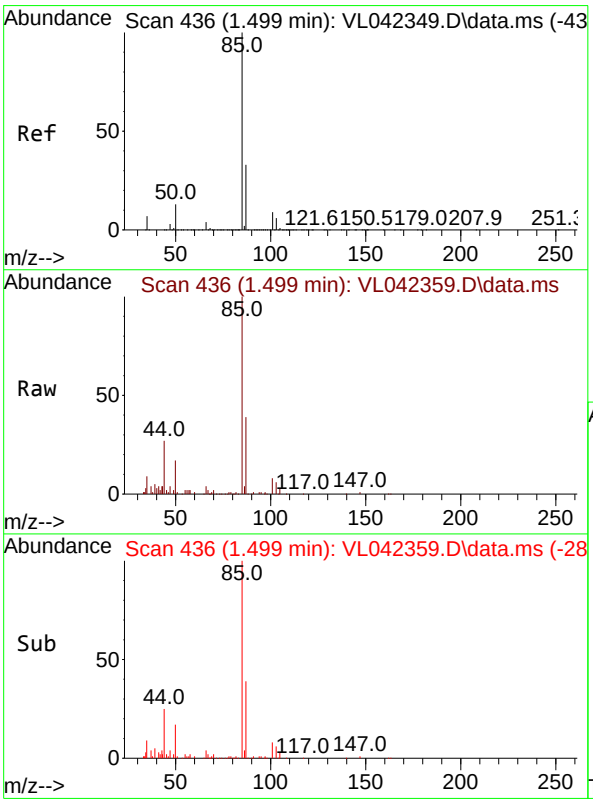
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 49 Resp: 123457

Ion	Ratio	Lower	Upper
49	100		
128	46.0	22.8	68.4
130	57.2	29.3	88.0

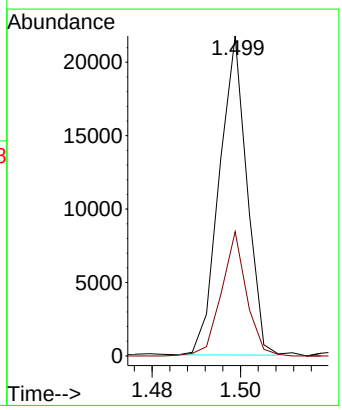


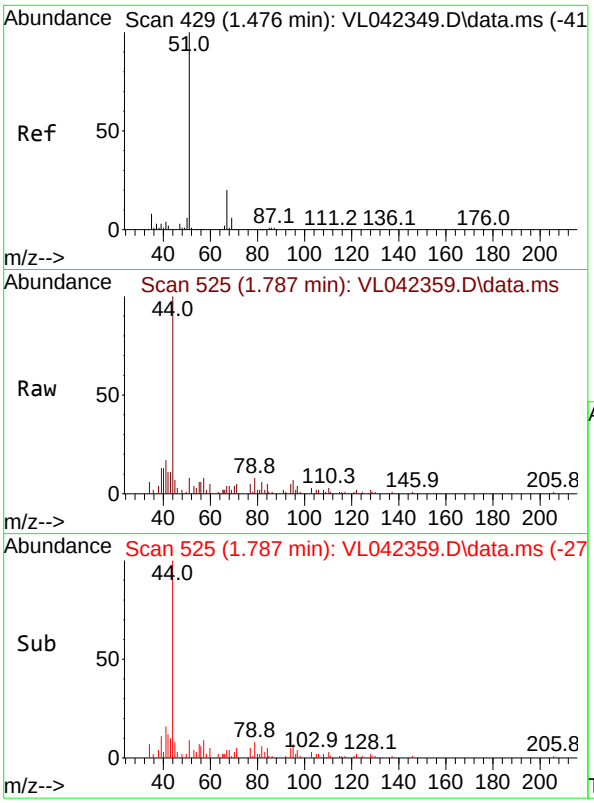


#2
Dichlorodifluoromethane
Concen: 0.431 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 85 Resp: 9411

Ion	Ratio	Lower	Upper
85	100		
87	38.7	26.6	39.8



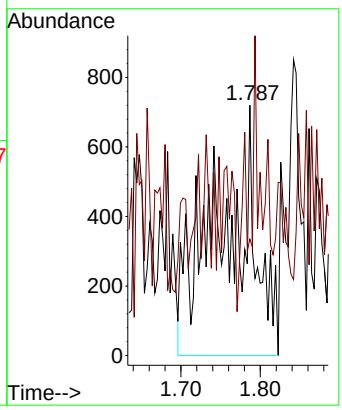


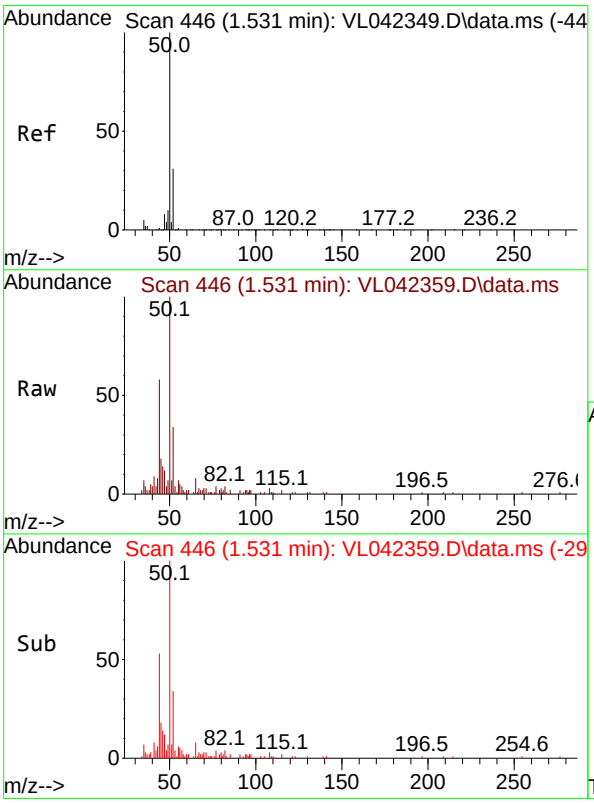
#3
Chlorodifluoromethane
Concen: 0.109 ppbv
RT: 1.787 min Scan# 5
Delta R.T. 0.311 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 51 Resp: 2267

Ion	Ratio	Lower	Upper
51	100		
67	23.0	16.2	24.4

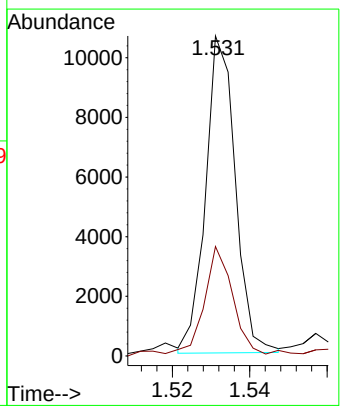


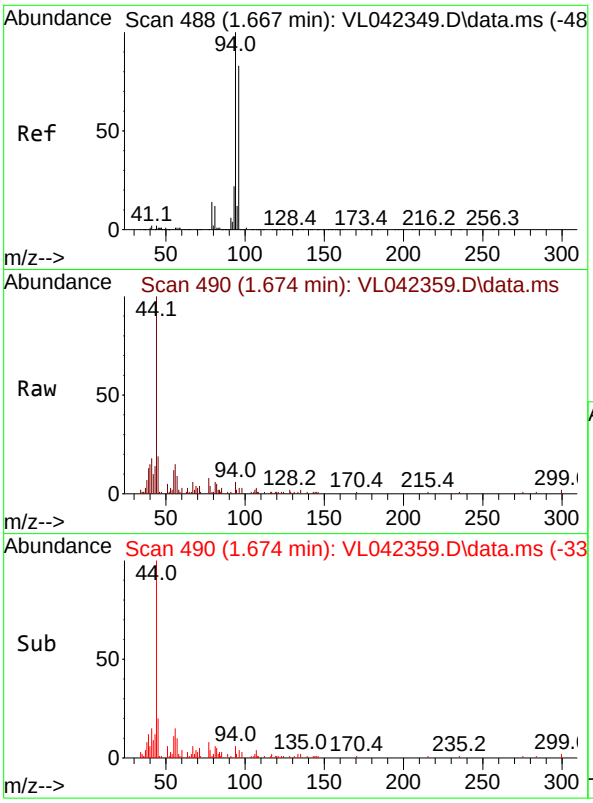


#4
Chloromethane
Concen: 0.657 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 50 Resp: 5667

Ion	Ratio	Lower	Upper
50	100		
52	33.3	24.7	37.1



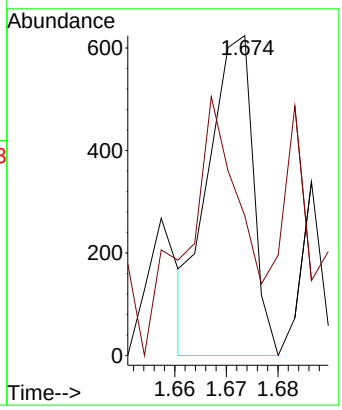


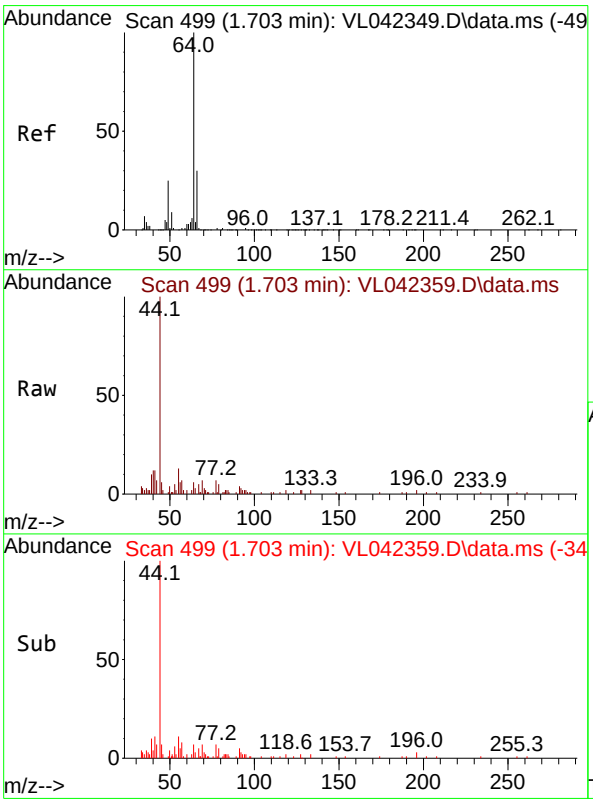
#6
Bromomethane
Concen: 0.093 ppbv
RT: 1.674 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 94 Resp: 376

Ion	Ratio	Lower	Upper
94	100		
96	13.9	66.2	99.2#

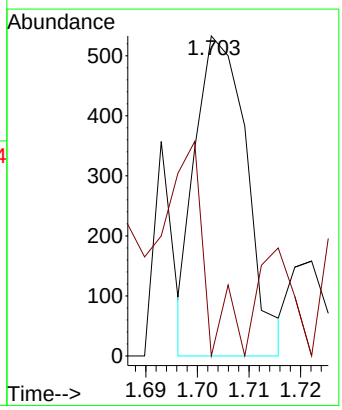


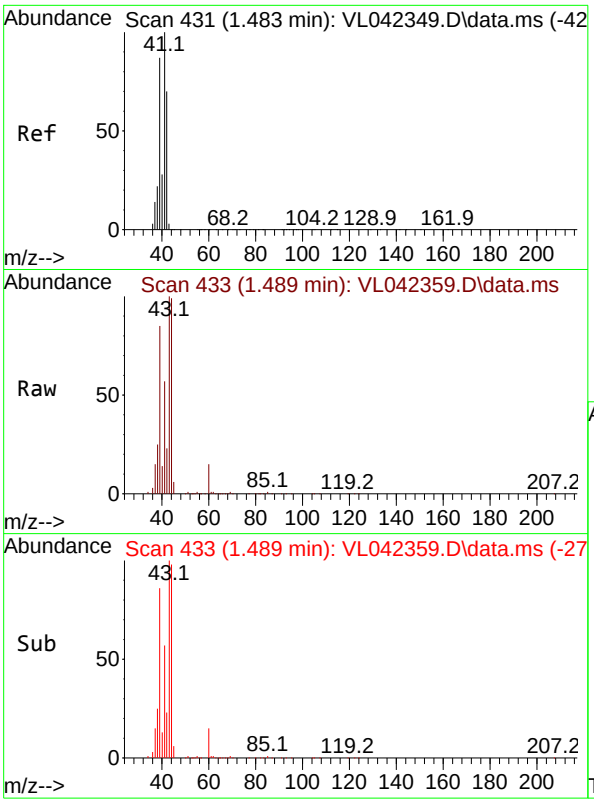


#7
Chloroethane
Concen: 0.109 ppbv
RT: 1.703 min Scan# 499
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 64 Resp: 369

Ion	Ratio	Lower	Upper
64	100		
66	0.0	24.6	37.0#



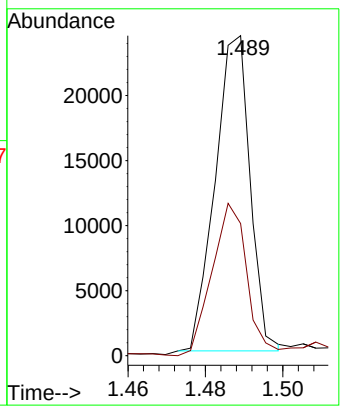


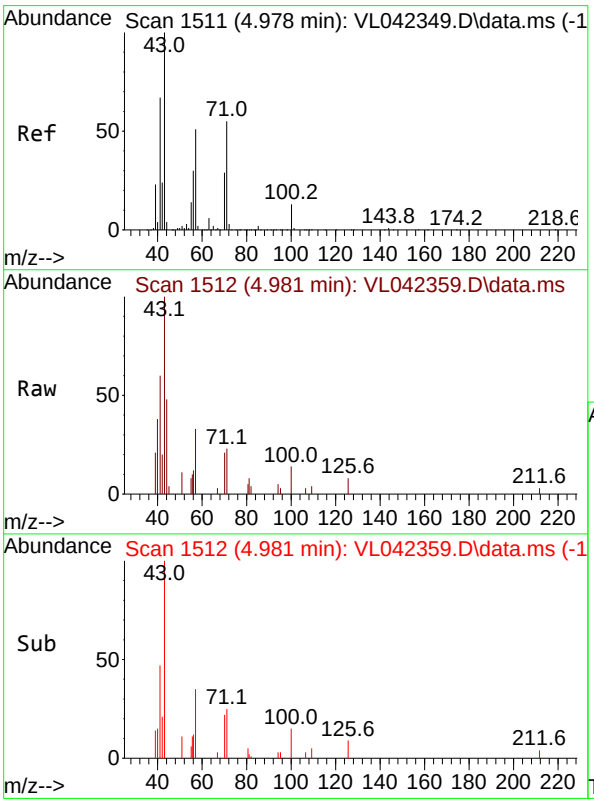
#9
Propene
Concen: 1.605 ppbv
RT: 1.489 min Scan# 4
Delta R.T. 0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 41 Resp: 15185

Ion	Ratio	Lower	Upper
41	100		
42	57.1	56.2	84.4

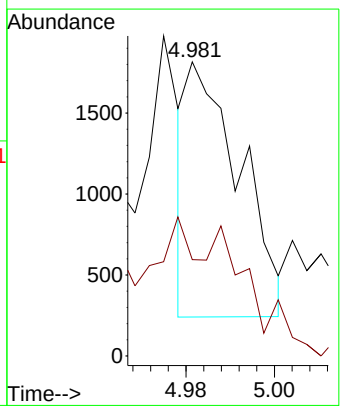


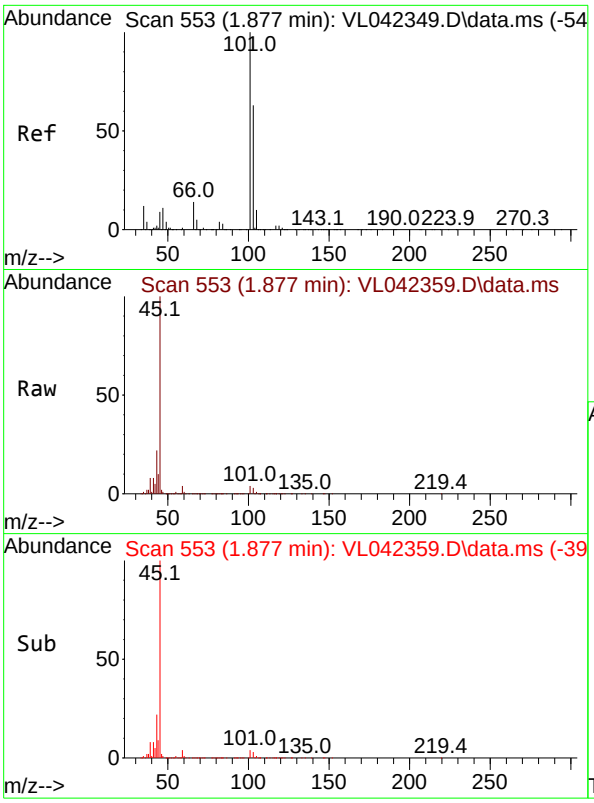


#10
Heptane
Concen: 0.050 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 1318

Ion	Ratio	Lower	Upper
43	100		
57	135.1	39.9	59.9#



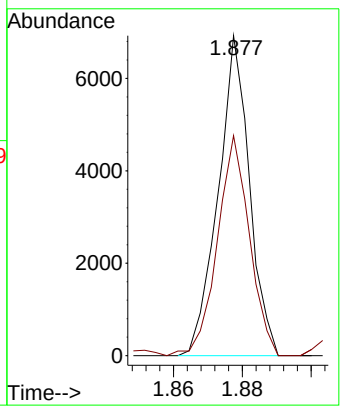


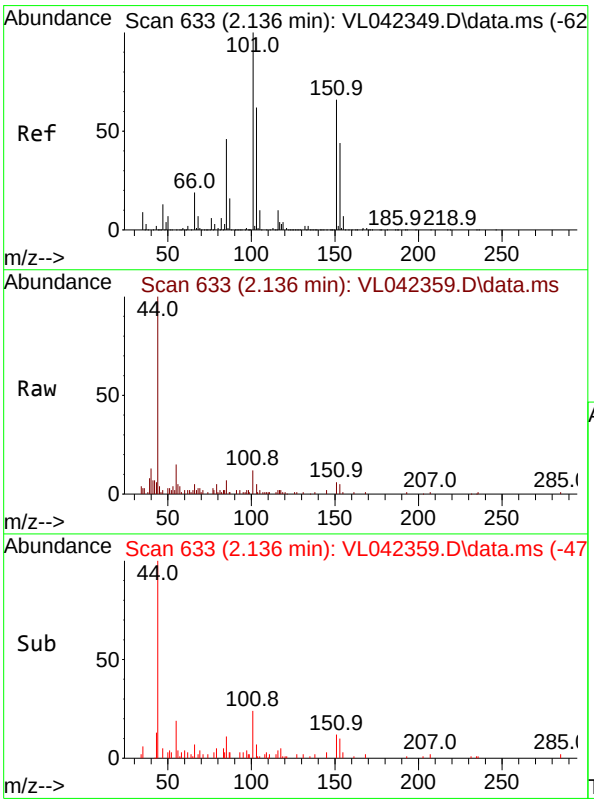
#11
Trichlorofluoromethane
Concen: 0.211 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:101 Resp: 4367

Ion	Ratio	Lower	Upper
101	100		
103	68.8	50.1	75.1

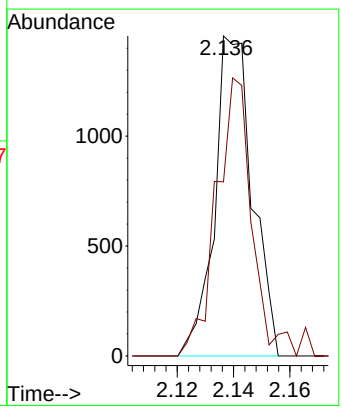


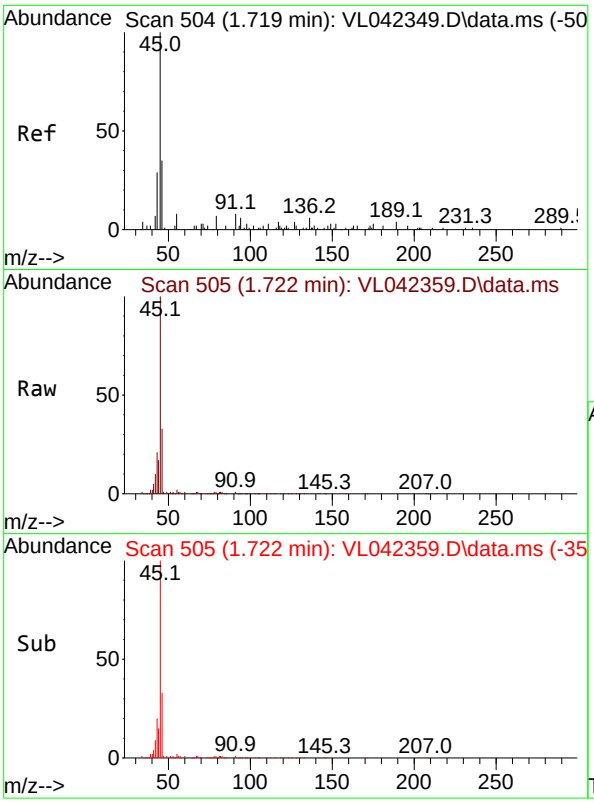


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.080 ppbv
RT: 2.136 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:101 Resp: 1357

Ion	Ratio	Lower	Upper
101	100		
151	83.0	57.0	85.6



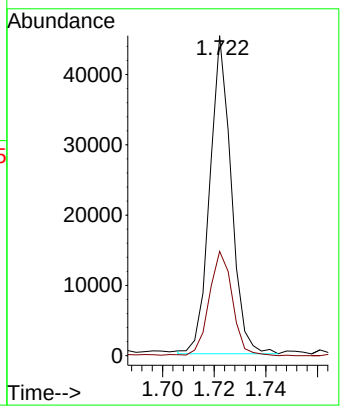


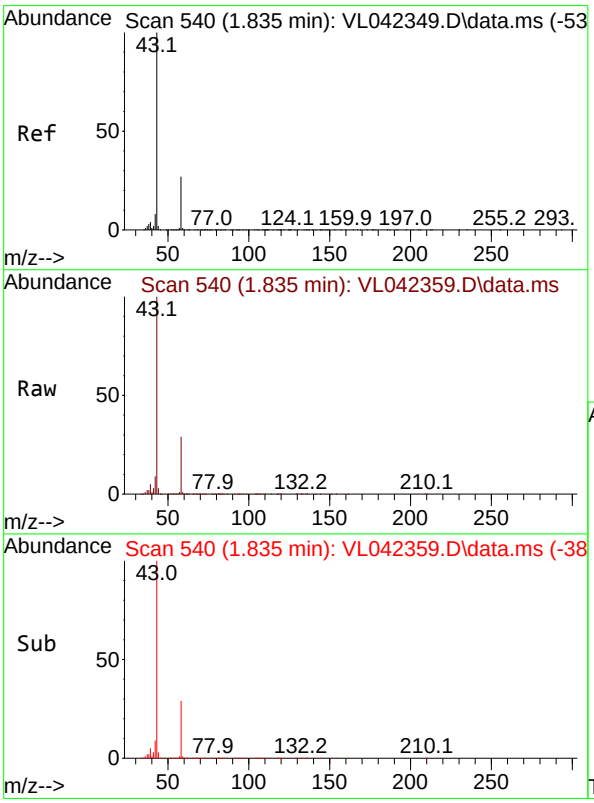
#13
Ethanol
Concen: 17.253 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 45 Resp: 25940

Ion	Ratio	Lower	Upper
45	100		
46	36.5	21.9	87.7

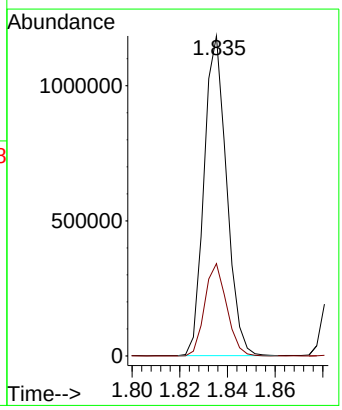


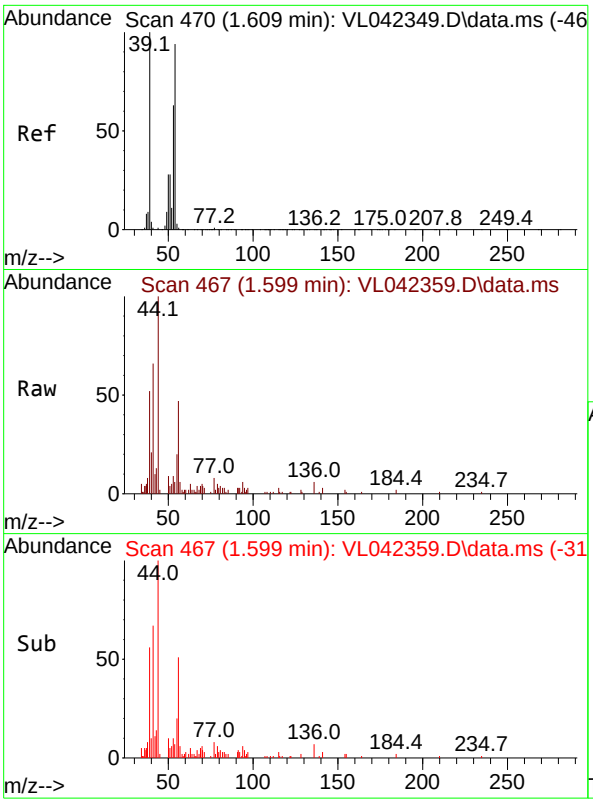


#15
Acetone
Concen: 38.385 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 775779

Ion	Ratio	Lower	Upper
43	100		
58	28.3	22.4	33.6



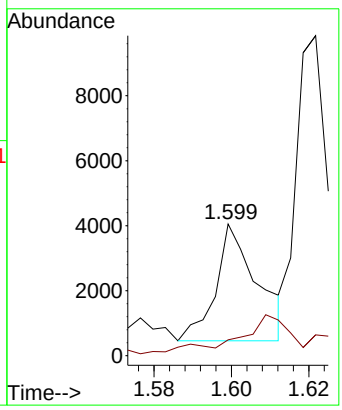


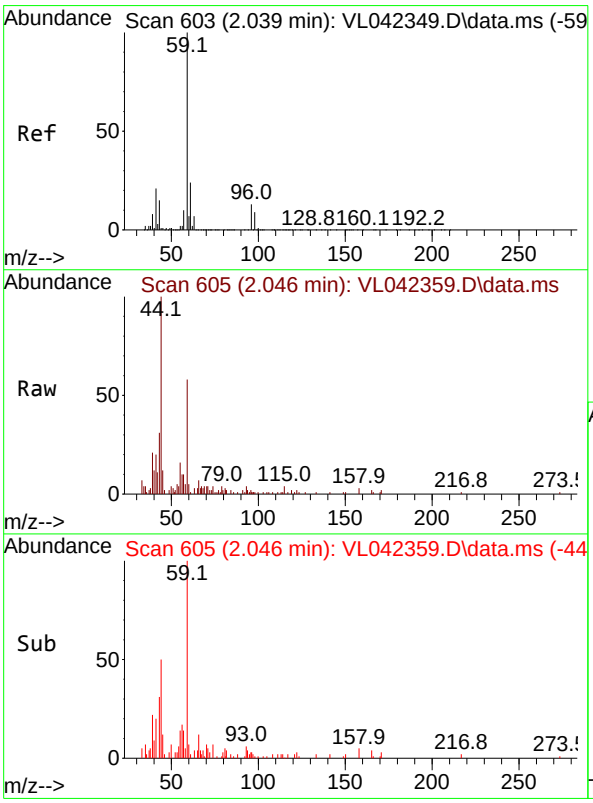
#16
1,3-Butadiene
Concen: 0.276 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.010 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 39 Resp: 2667

Ion	Ratio	Lower	Upper
39	100		
54	59.2	64.9	97.3#

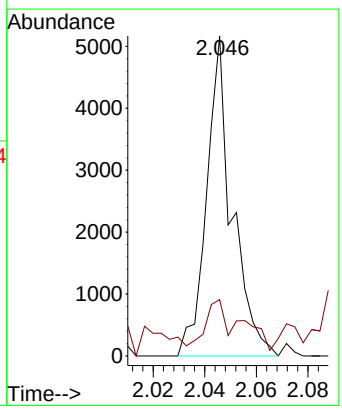


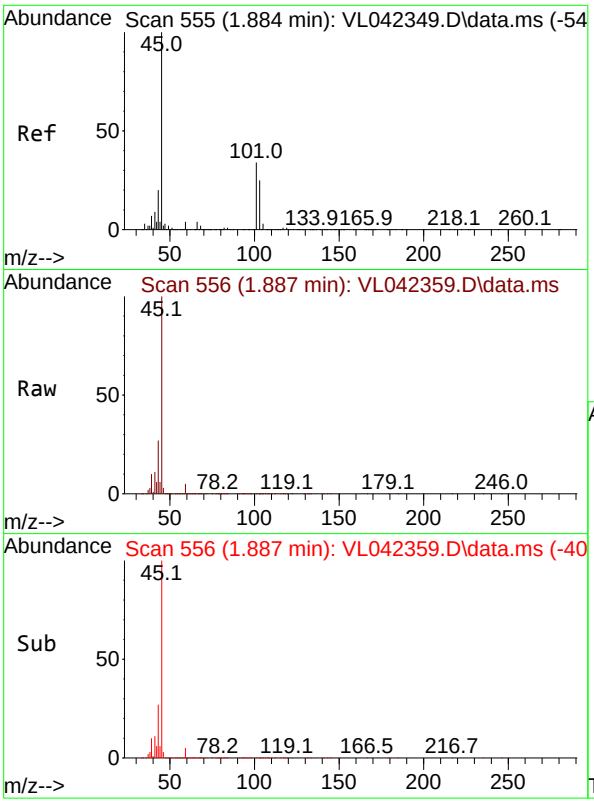


#17
tert-Butyl alcohol
Concen: 0.141 ppbv
RT: 2.046 min Scan# 605
Delta R.T. 0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 59 Resp: 3528

Ion	Ratio	Lower	Upper
59	100		
57	20.6	8.7	13.1#



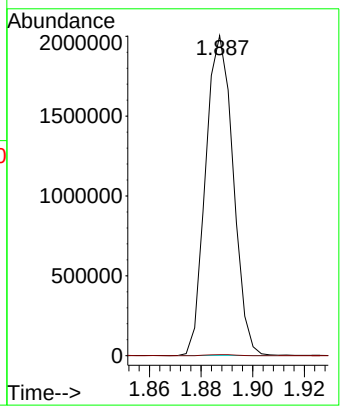


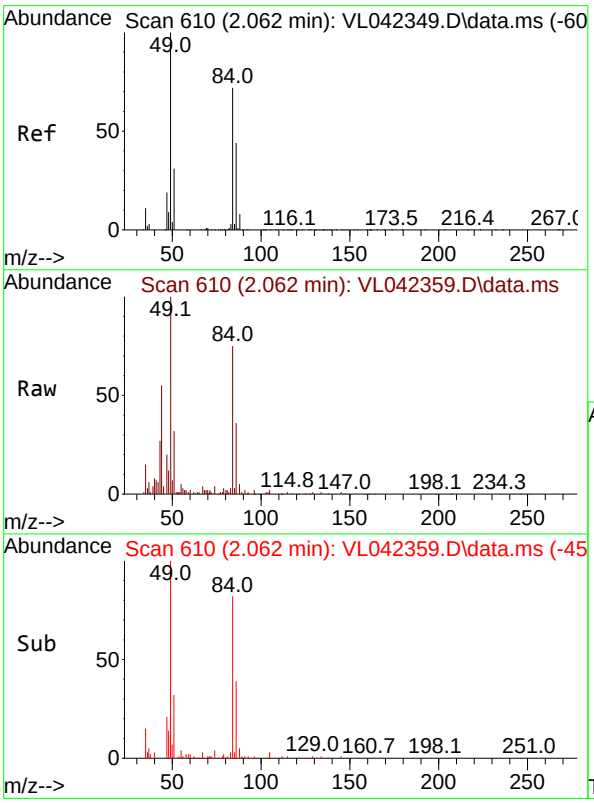
#19
Isopropyl Alcohol
Concen: 132.276 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 45 Resp: 1485068

Ion	Ratio	Lower	Upper
45	100		
58	14.8	34.5	51.7#

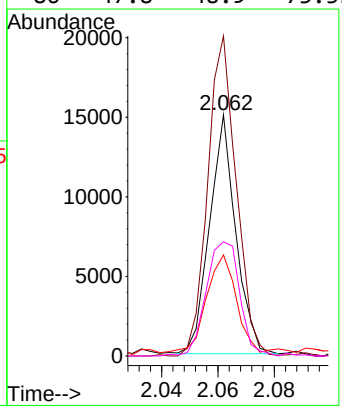


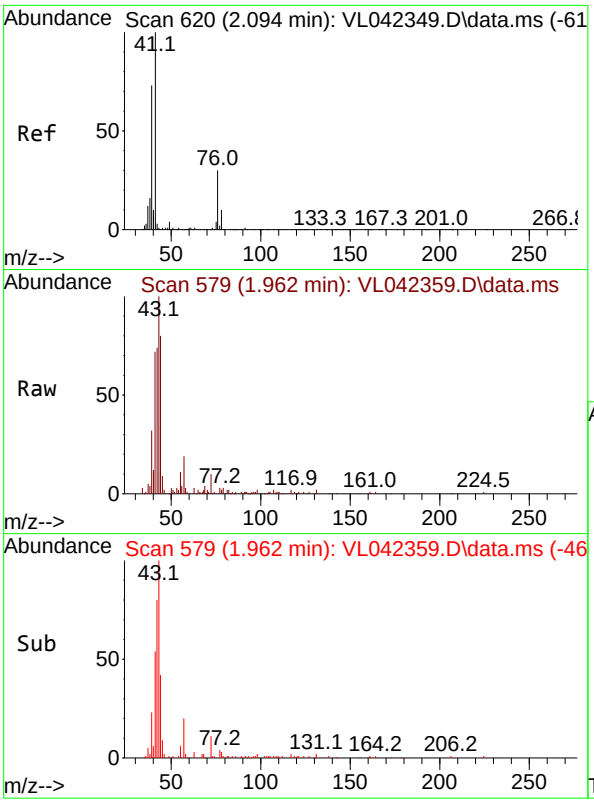


#20
Methylene Chloride
Concen: 1.228 ppbv
RT: 2.062 min Scan# 610
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 84 Resp: 9718

Ion	Ratio	Lower	Upper
84	100		
49	134.0	111.6	167.4
51	39.7	35.1	52.7
86	47.8	48.9	73.3#



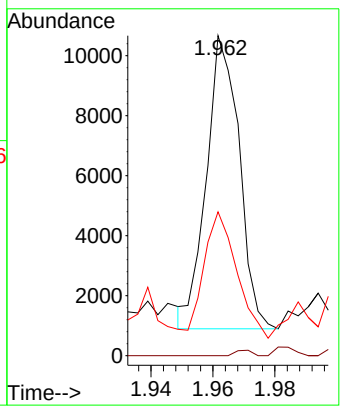


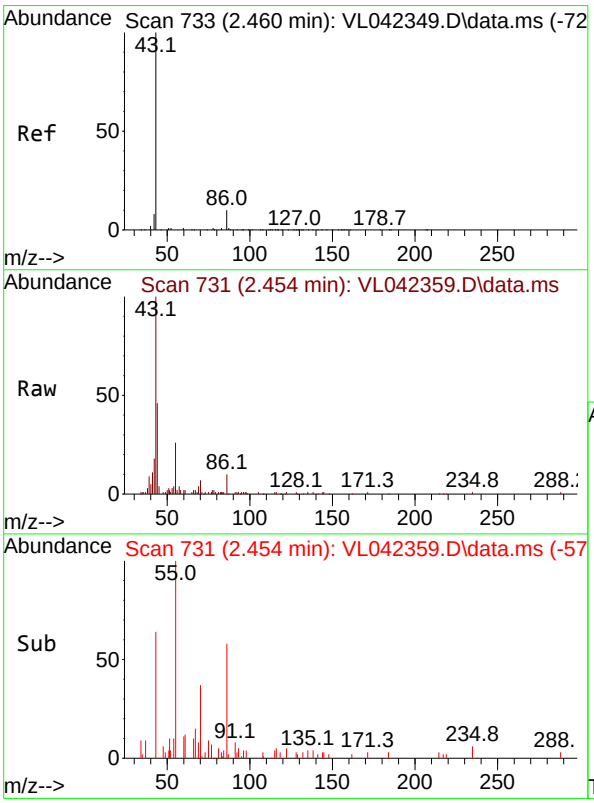
#21
Allyl Chloride
Concen: 0.514 ppbv
RT: 1.962 min Scan# 5
Delta R.T. -0.133 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 41 Resp: 7172

Ion	Ratio	Lower	Upper
41	100		
76	3.6	24.8	37.2#
39	0.0	60.6	90.8#

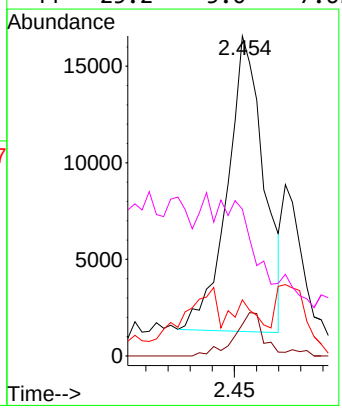


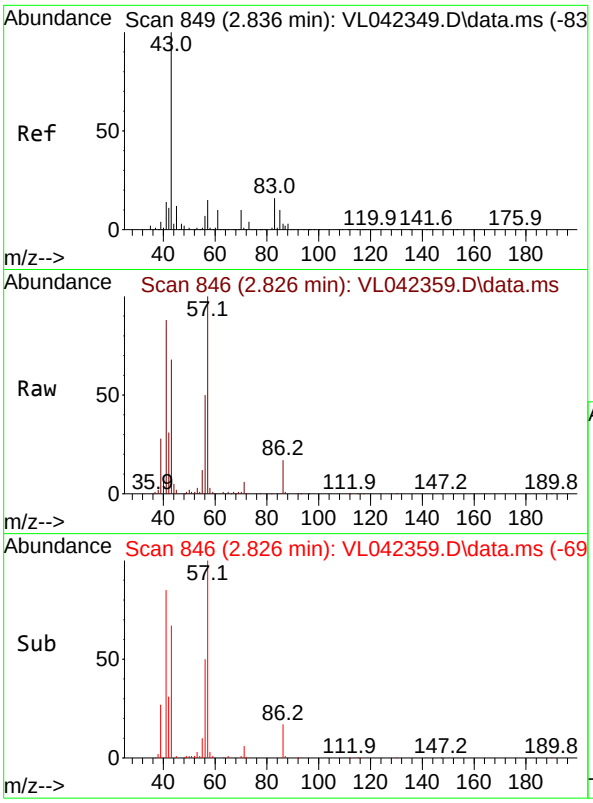


#23
Vinyl Acetate
Concen: 2.142 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.006 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 43 Resp: 17524

Ion	Ratio	Lower	Upper
43	100		
86	10.8	6.5	9.7#
42	9.4	7.8	11.8
44	25.2	5.0	7.6#



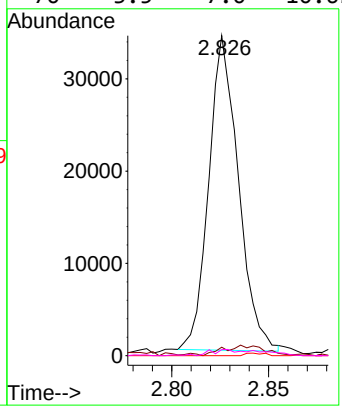


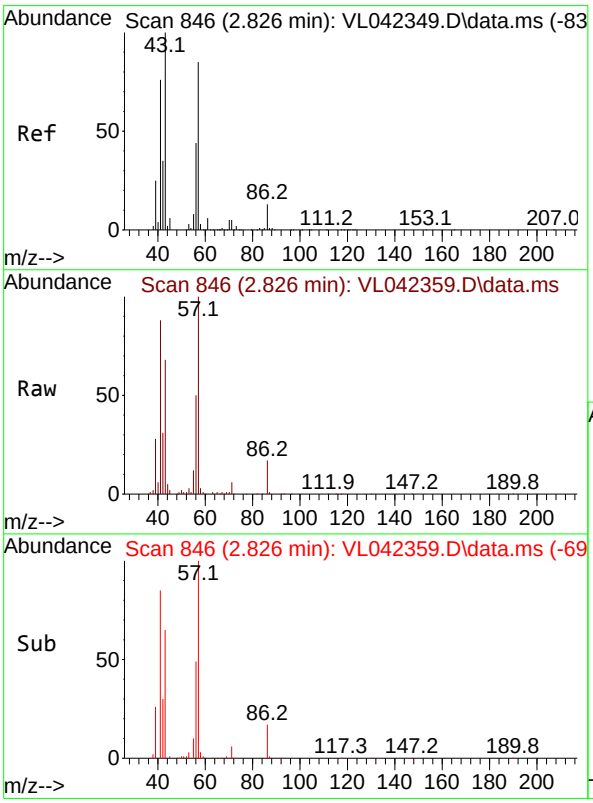
#25
Ethyl Acetate
Concen: 0.729 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 43 Resp: 36321

Ion	Ratio	Lower	Upper
43	100		
45	5.5	8.3	12.5#
61	0.5	7.3	10.9#
70	3.5	7.0	10.6#

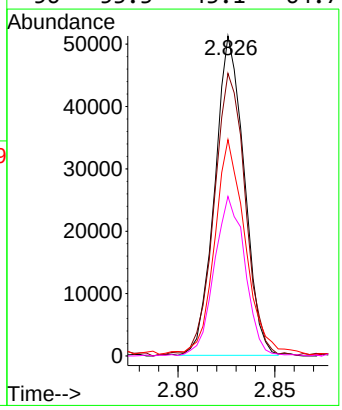


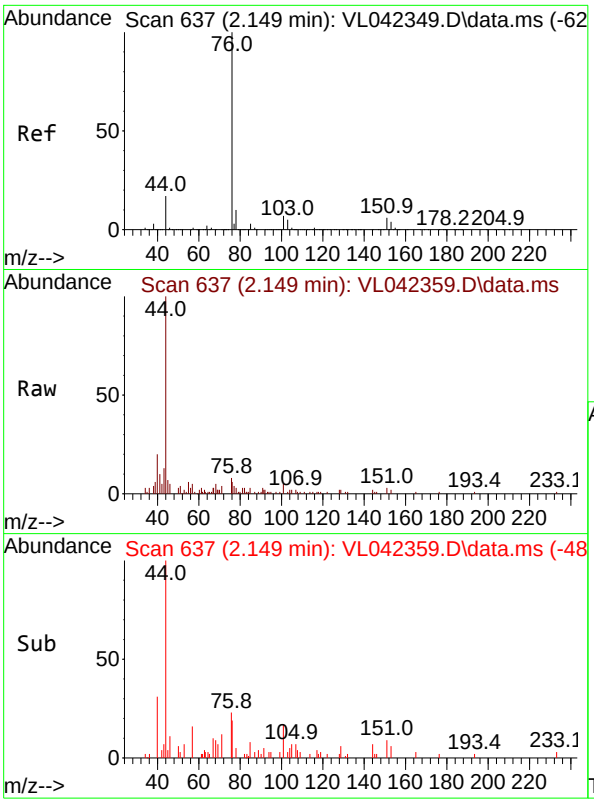


#26
Hexane
Concen: 2.683 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 57 Resp: 54108

Ion	Ratio	Lower	Upper
57	100		
41	93.4	77.9	116.9
43	70.0	208.4	312.6#
56	53.3	43.1	64.7



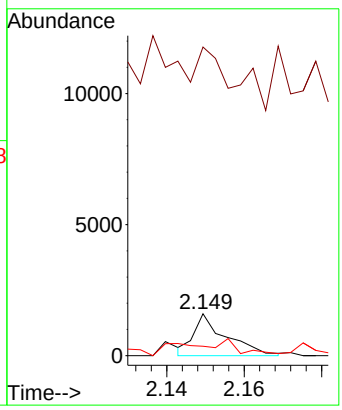


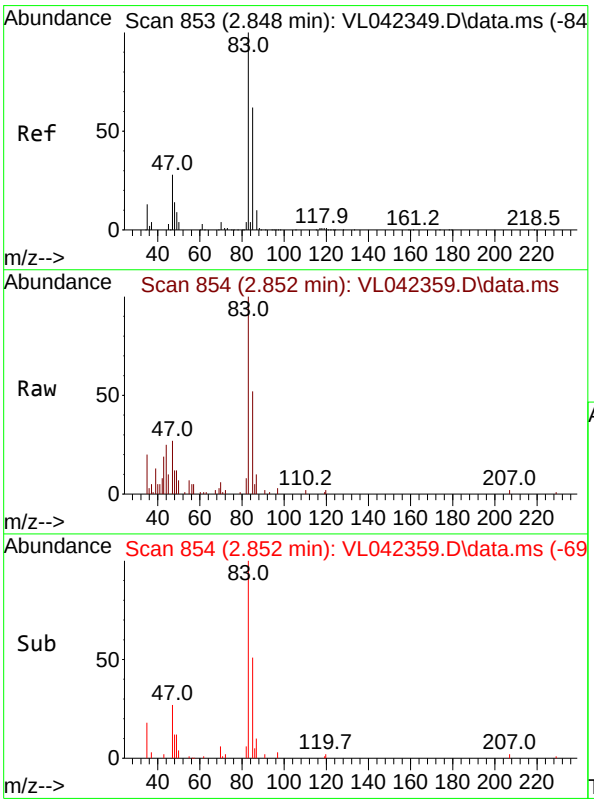
#27
Carbon Disulfide
Concen: 0.043 ppbv
RT: 2.149 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 76 Resp: 930

Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.5	23.3#
78	84.5	9.3	13.9#

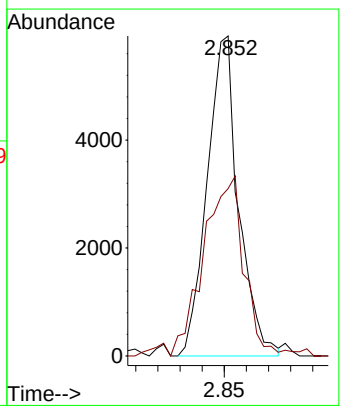


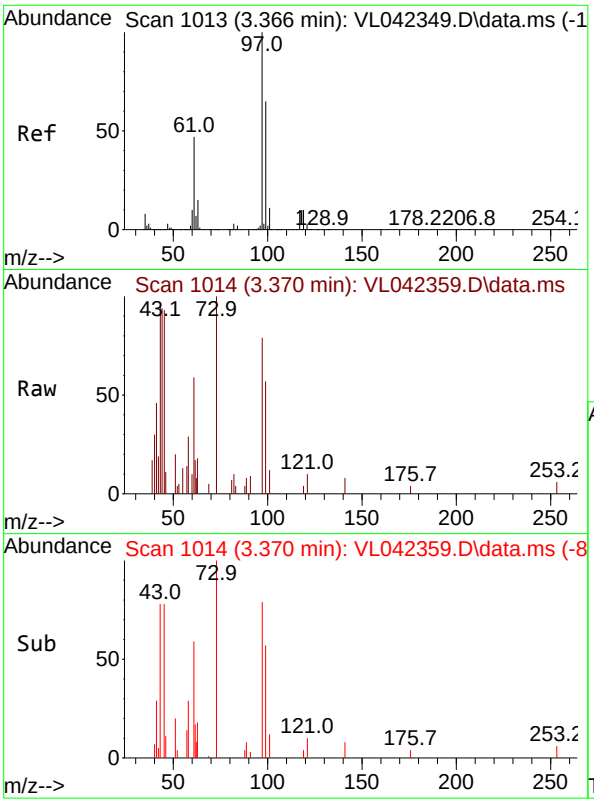


#29
Chloroform
Concen: 0.205 ppbv
RT: 2.852 min Scan# 854
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 83 Resp: 5846

Ion	Ratio	Lower	Upper
83	100		
85	51.1	50.0	75.0



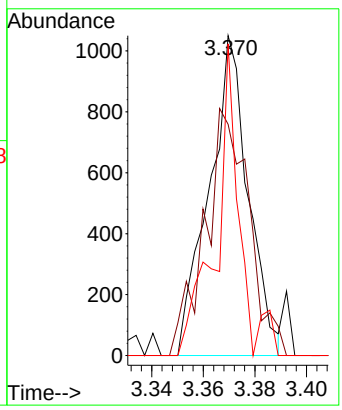


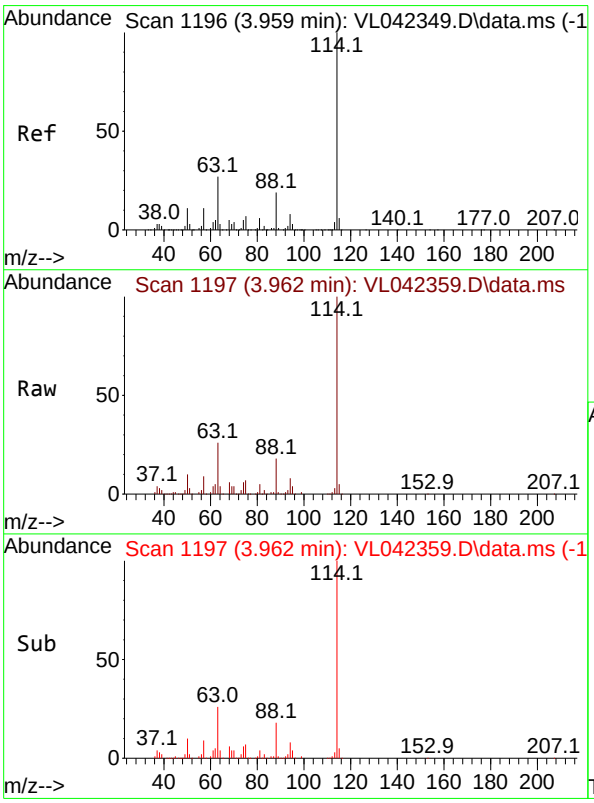
#32
1,1,1-Trichloroethane
Concen: 0.034 ppbv
RT: 3.370 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 97 Resp: 1105

Ion	Ratio	Lower	Upper
97	100		
99	86.6	51.0	76.4#
61	58.4	38.8	58.2#

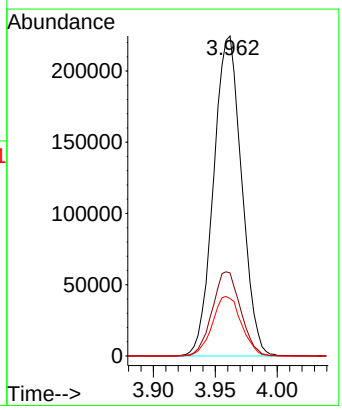


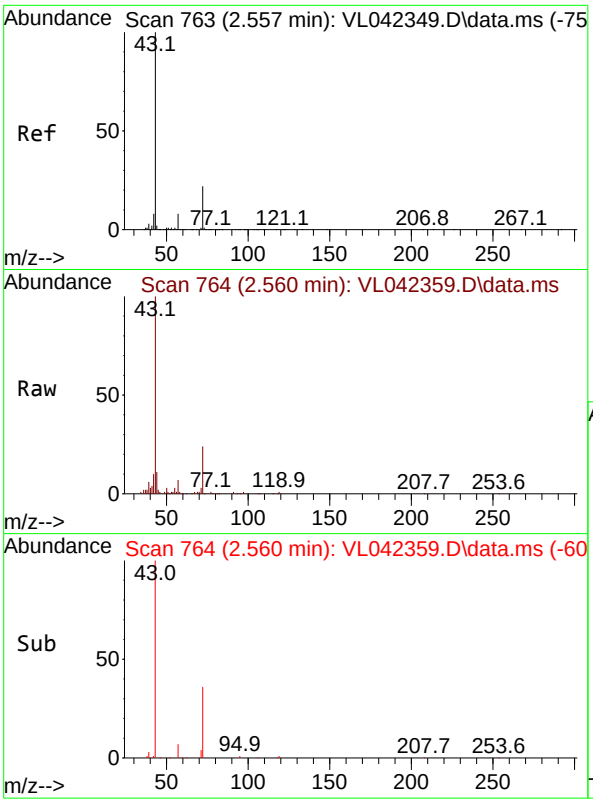


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:114 Resp: 354157

Ion	Ratio	Lower	Upper
114	100		
63	26.6	21.8	32.6
88	19.2	15.5	23.3



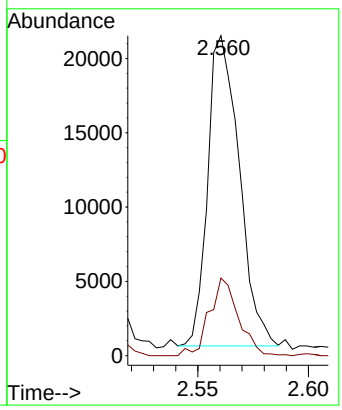


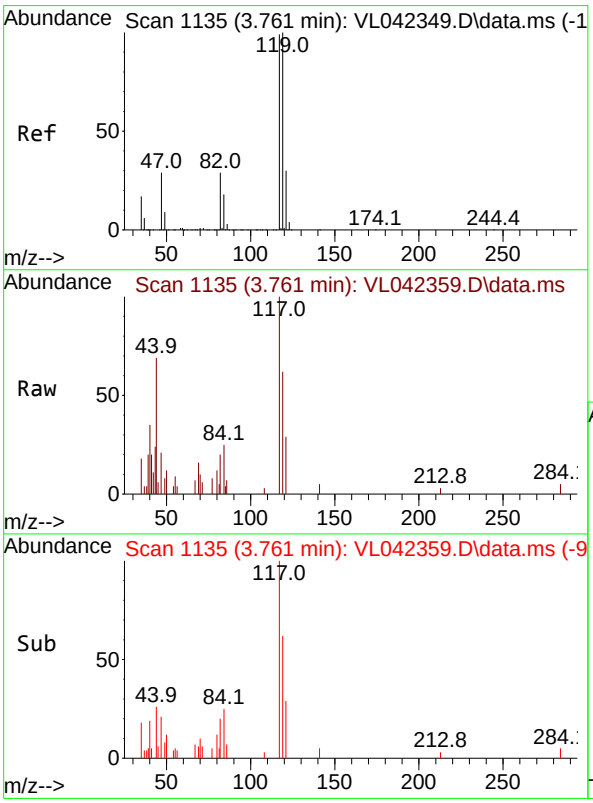
#34
2-Butanone
Concen: 0.739 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 43 Resp: 20685

Ion	Ratio	Lower	Upper
43	100		
72	23.5	18.2	27.2

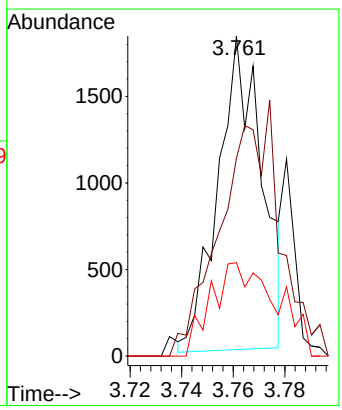


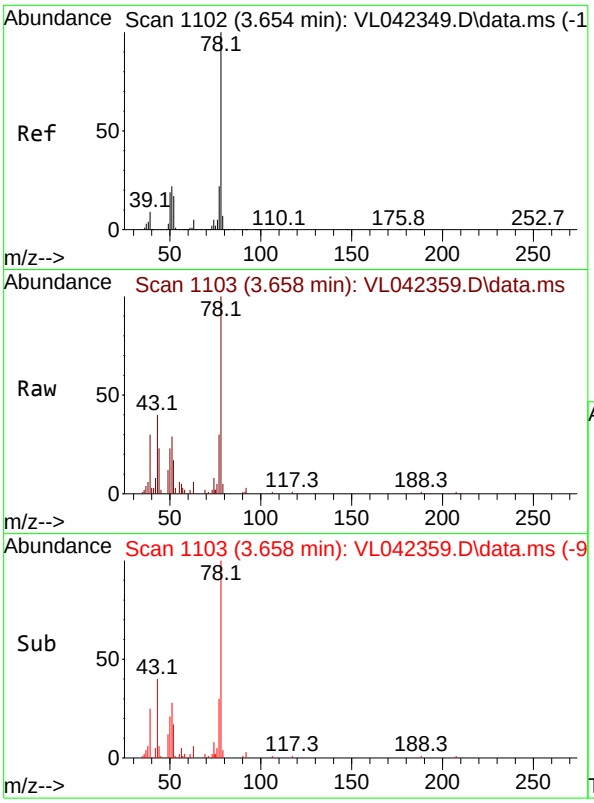


#35
Carbon Tetrachloride
Concen: 0.067 ppbv
RT: 3.761 min Scan# 1135
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:117 Resp: 2133

Ion	Ratio	Lower	Upper
117	100		
119	57.3	80.5	120.7#
121	30.5	24.2	36.2



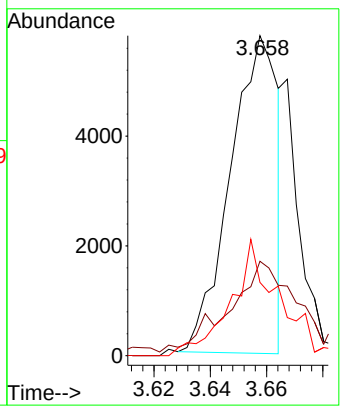


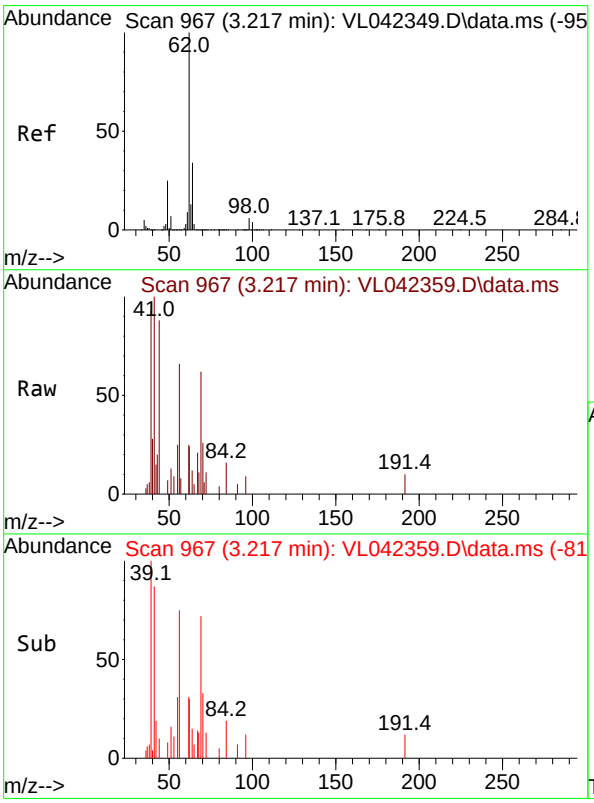
#36
Benzene
Concen: 0.176 ppbv
RT: 3.658 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 78 Resp: 6728

Ion	Ratio	Lower	Upper
78	100		
77	27.2	17.4	26.0#
50	20.8	15.5	23.3

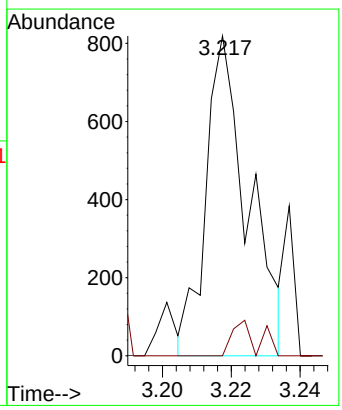


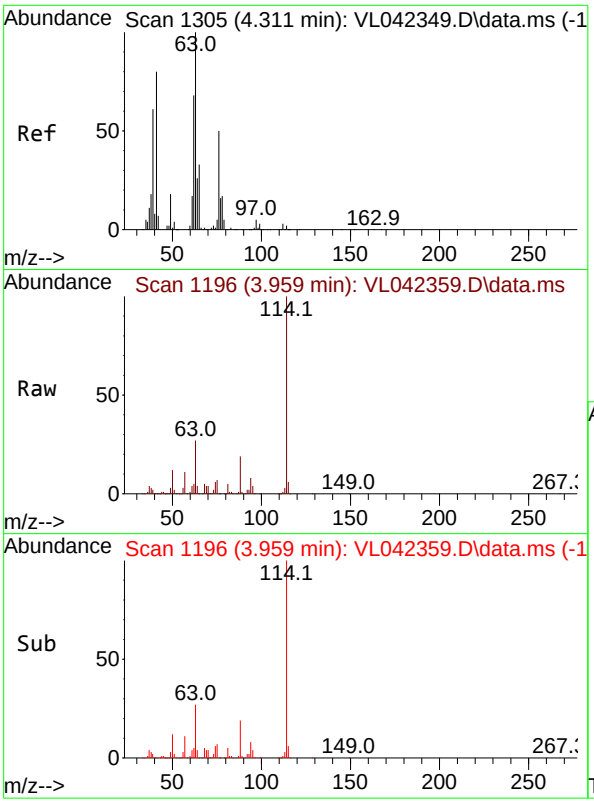


#37
1,2-Dichloroethane
Concen: 0.030 ppbv
RT: 3.217 min Scan# 967
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 62 Resp: 697

Ion	Ratio	Lower	Upper
62	100		
98	6.6	5.1	7.7



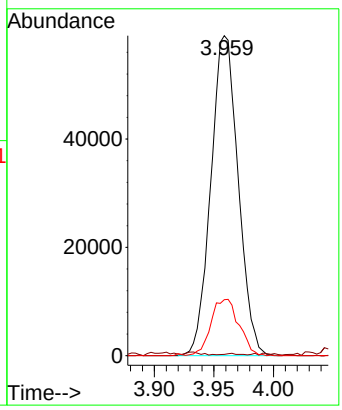


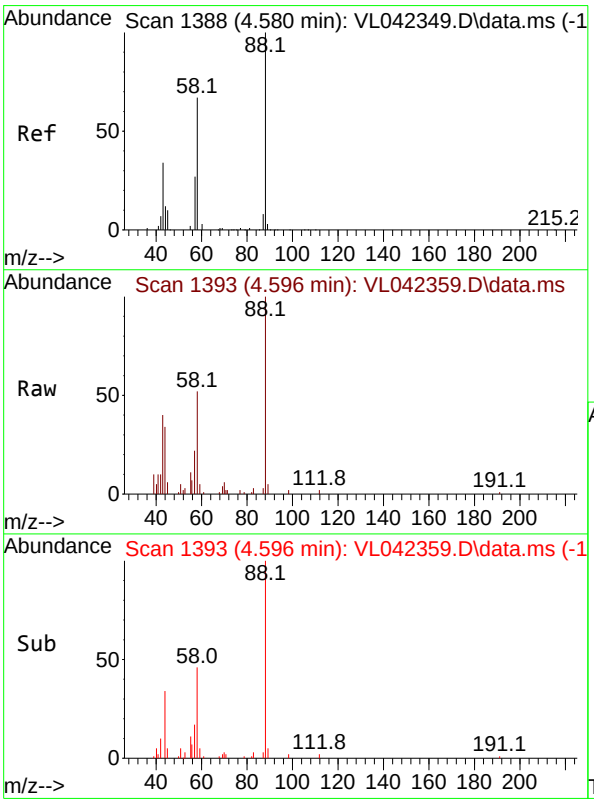
#39
1,2-Dichloropropane
Concen: 6.626 ppbv
RT: 3.959 min Scan# 1
Delta R.T. -0.353 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 63 Resp: 94322

Ion	Ratio	Lower	Upper
63	100		
41	0.1	64.2	96.2#
62	17.5	54.3	81.5#

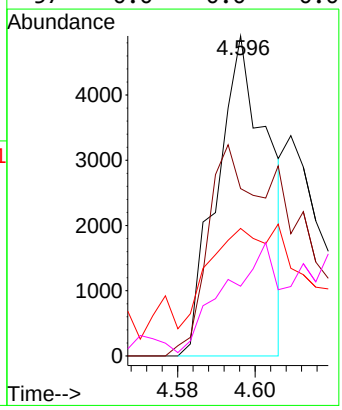


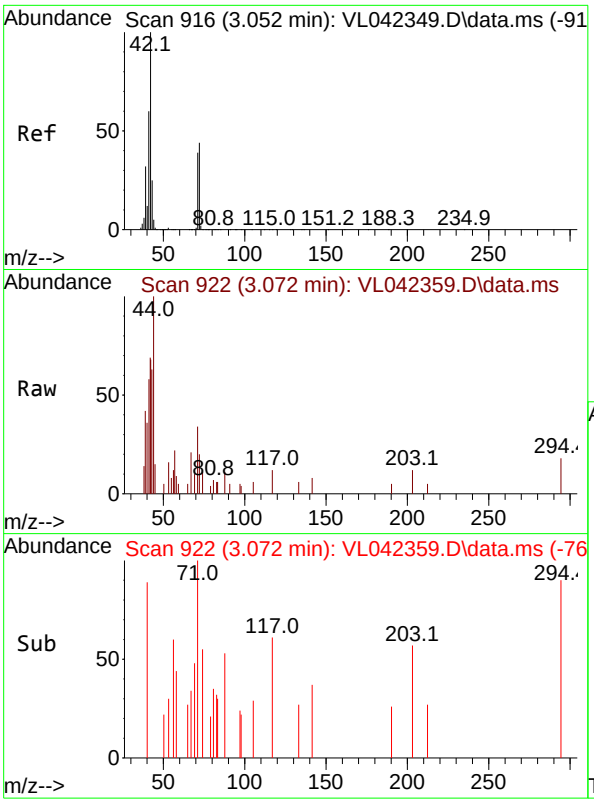


#40
1,4-Dioxane
Concen: 0.575 ppbv
RT: 4.596 min Scan# 1393
Delta R.T. 0.016 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 88 Resp: 4501

Ion	Ratio	Lower	Upper
88	100		
58	140.6	61.4	92.0#
43	5.9	23.2	34.8#
57	0.0	0.0	0.0



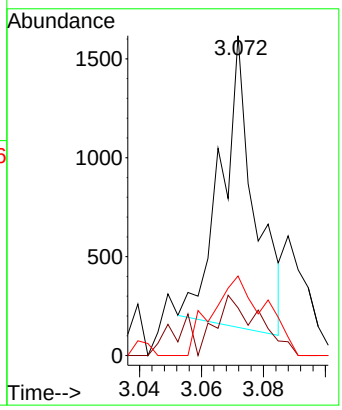


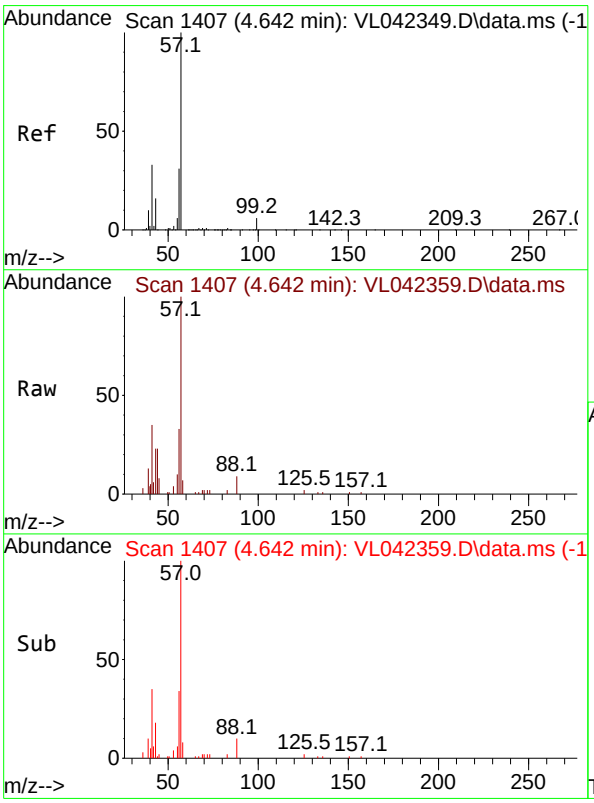
#41
Tetrahydrofuran
Concen: 0.067 ppbv
RT: 3.072 min Scan# 9
Delta R.T. 0.019 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 42 Resp: 1092

Ion	Ratio	Lower	Upper
42	100		
72	35.8	32.3	48.5
71	46.2	31.4	47.2

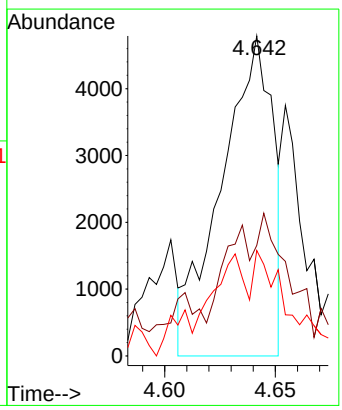


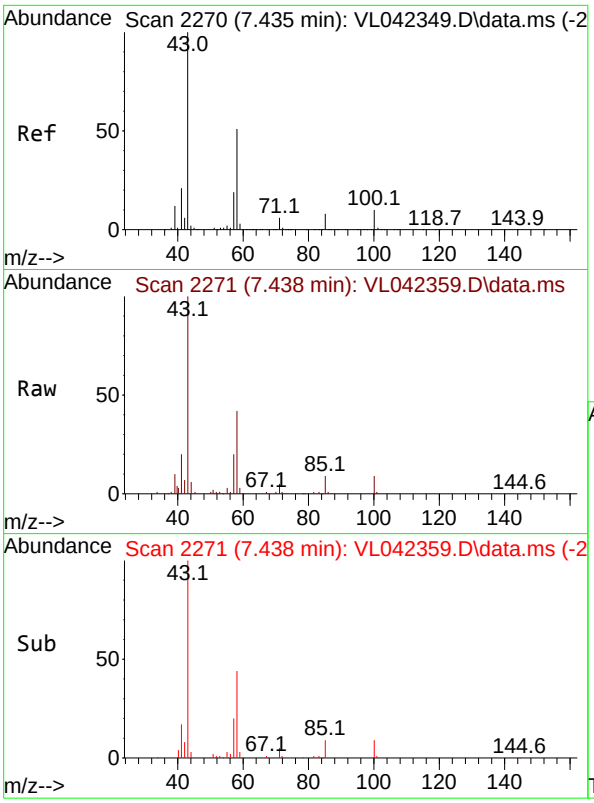


#44
2,2,4-Trimethylpentane
Concen: 0.118 ppbv
RT: 4.642 min Scan# 1407
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 57 Resp: 7803

Ion	Ratio	Lower	Upper
57	100		
41	60.9	27.2	40.8#
56	54.8	25.7	38.5#



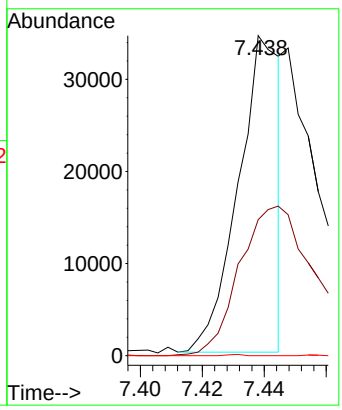


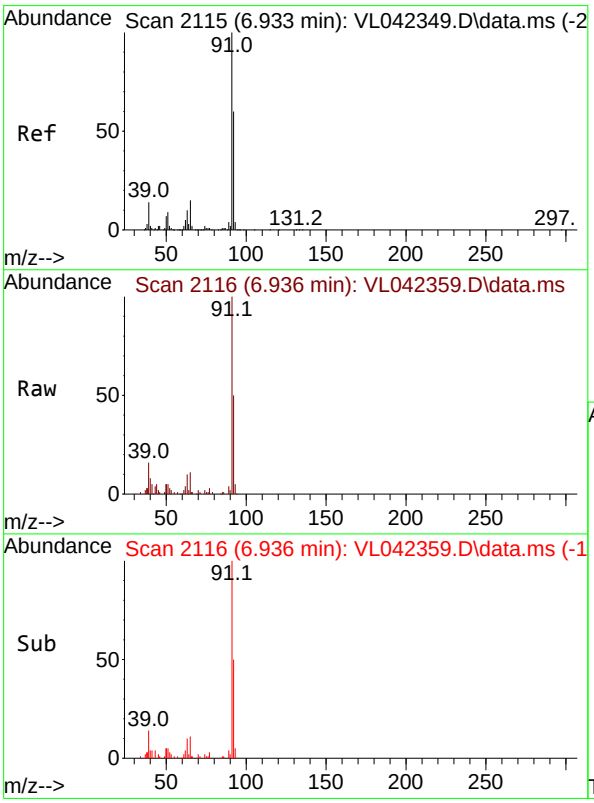
#51
2-Hexanone
Concen: 0.761 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 43 Resp: 31778

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.2	60.4#
98	0.0	0.1	0.1#

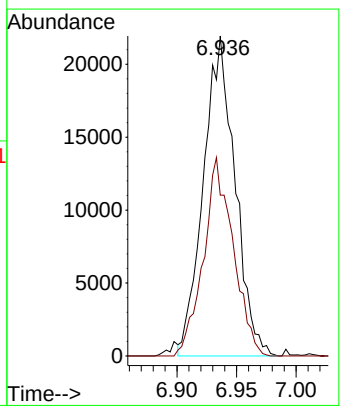


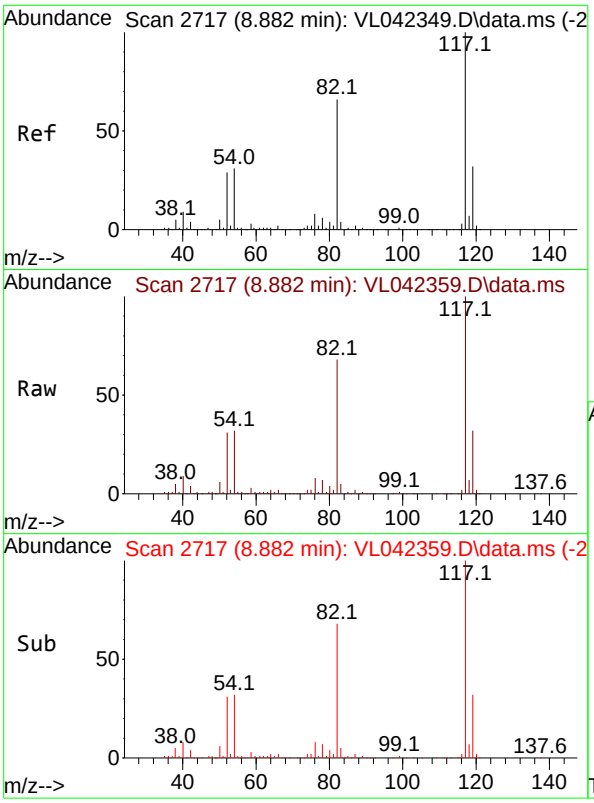


#53
Toluene
Concen: 0.884 ppbv
RT: 6.936 min Scan# 2116
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 40500

Ion	Ratio	Lower	Upper
91	100		
92	58.2	48.2	72.4



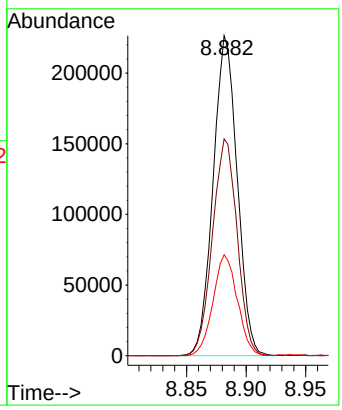


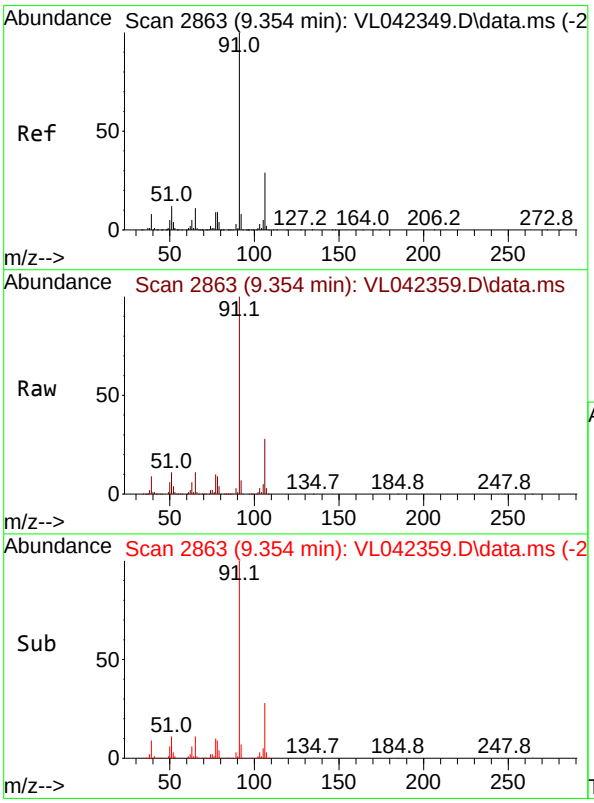
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:117 Resp: 318284

Ion	Ratio	Lower	Upper
117	100		
82	69.4	57.8	86.6
119	31.8	25.2	37.8

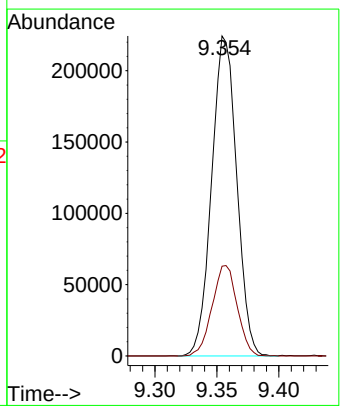


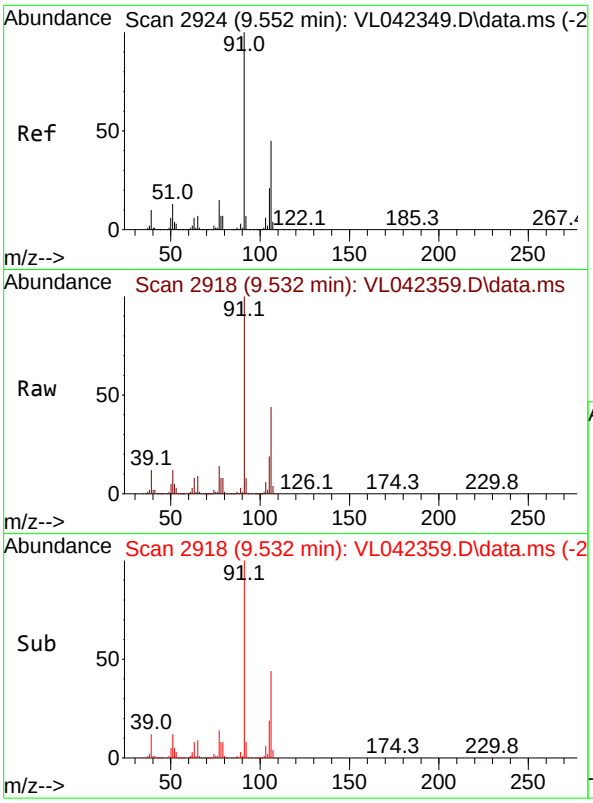


#58
Ethyl Benzene
Concen: 5.010 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 315931

Ion	Ratio	Lower	Upper
91	100		
106	28.1	23.0	34.4



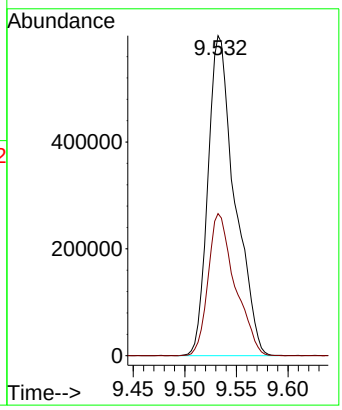


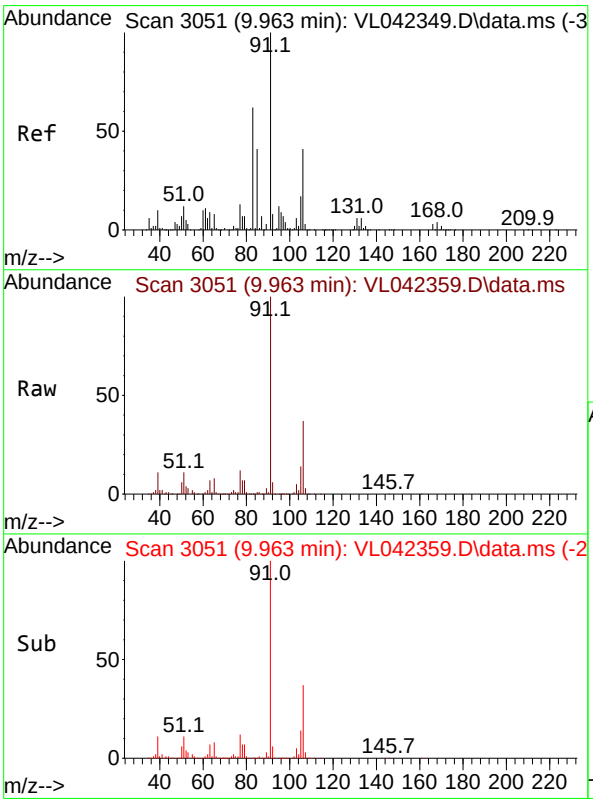
#59
m/p-Xylene
Concen: 21.313 ppbv
RT: 9.532 min Scan# 2
Delta R.T. -0.019 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion: 91 Resp: 1082733

Ion	Ratio	Lower	Upper
91	100		
106	44.4	35.4	53.2

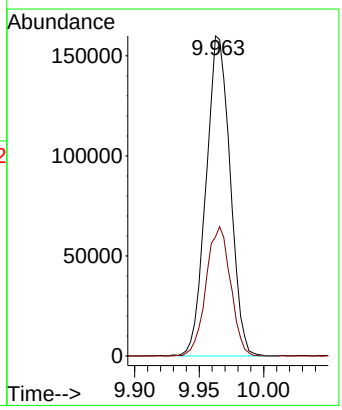


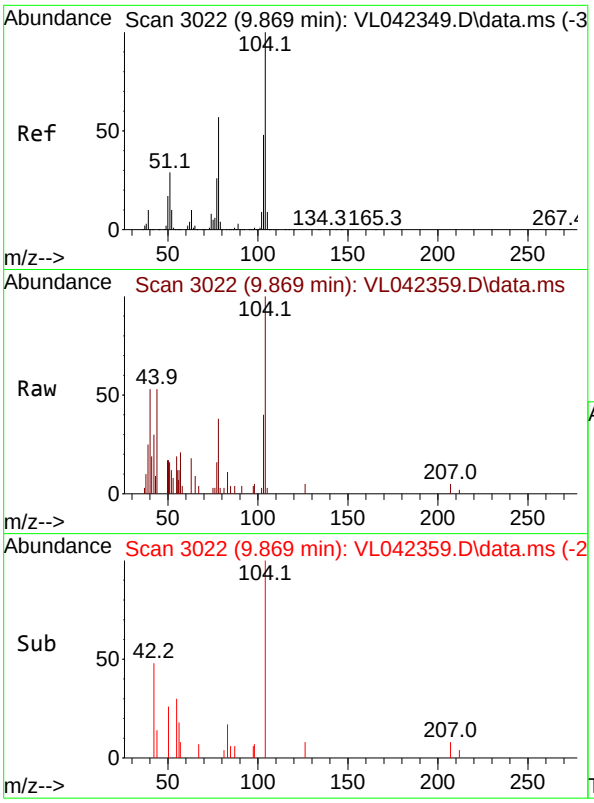


#60
o-Xylene
Concen: 4.051 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 207265

Ion	Ratio	Lower	Upper
91	100		
106	41.1	21.1	63.4



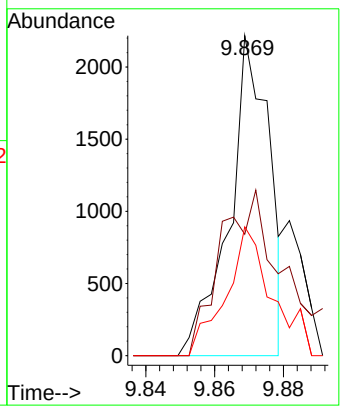


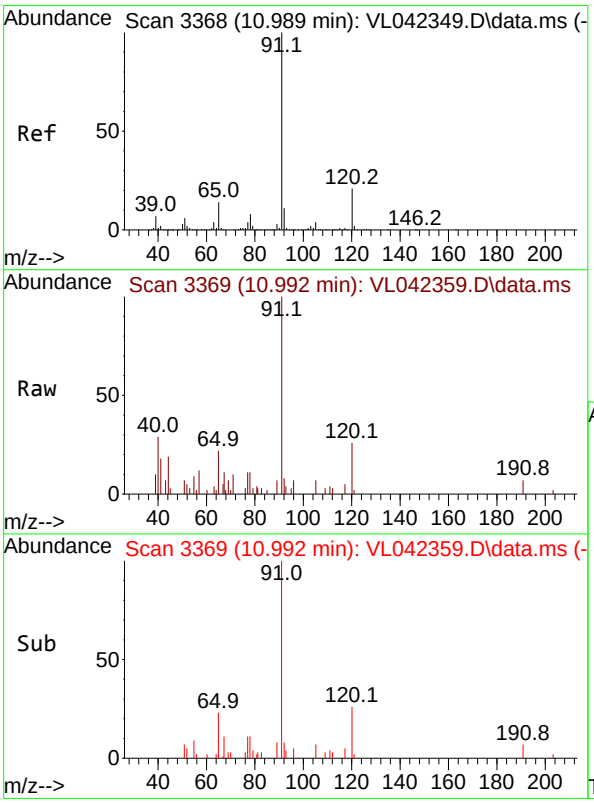
#61
Styrene
Concen: 0.073 ppbv
RT: 9.869 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:104 Resp: 1788

Ion	Ratio	Lower	Upper
104	100		
78	0.0	44.6	66.8#
103	0.0	37.4	56.0#

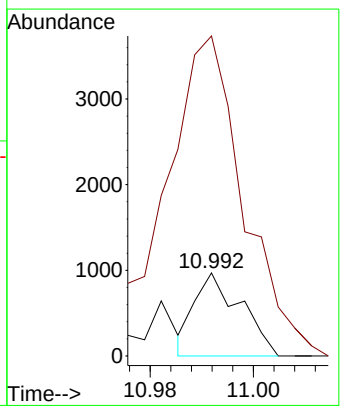


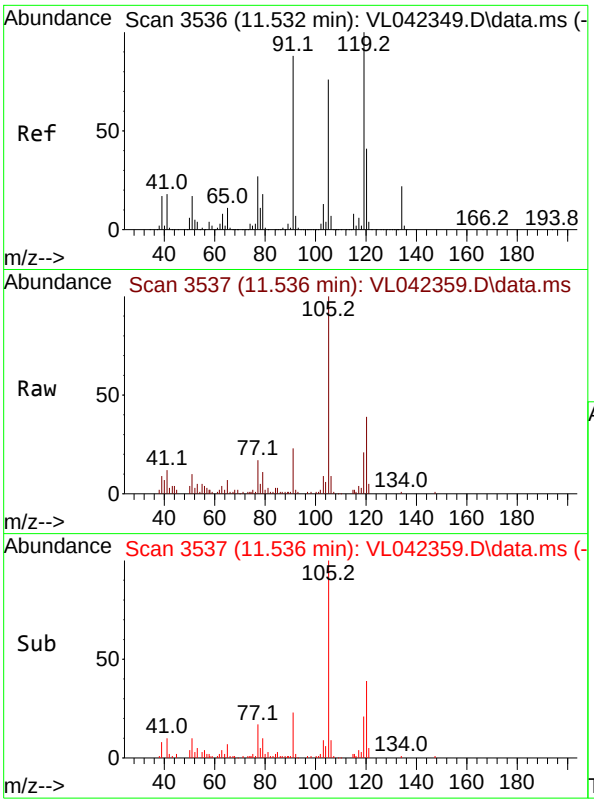


#64
n-propylbenzene
Concen: 0.032 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:120 Resp: 602

Ion	Ratio	Lower	Upper
120	100		
91	715.9	392.4	588.6#



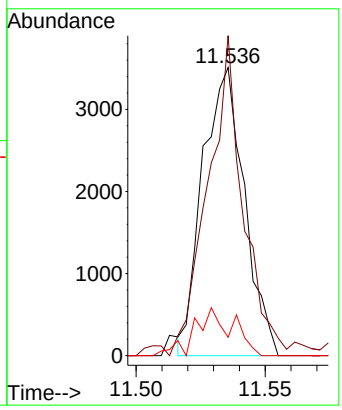


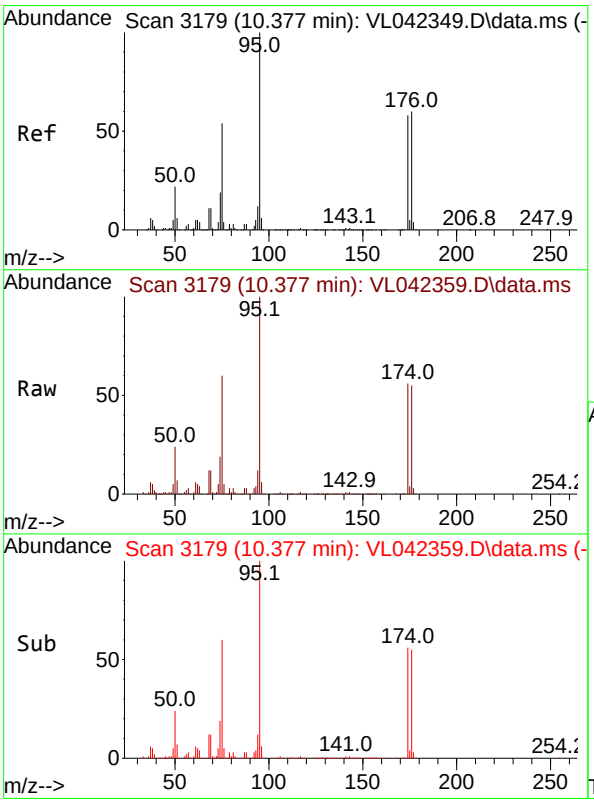
#65
tert-Butylbenzene
Concen: 0.057 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:119 Resp: 3938

Ion	Ratio	Lower	Upper
119	100		
91	98.7	74.6	111.8
134	15.2	18.8	28.2#

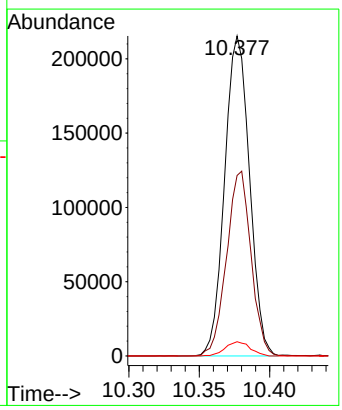


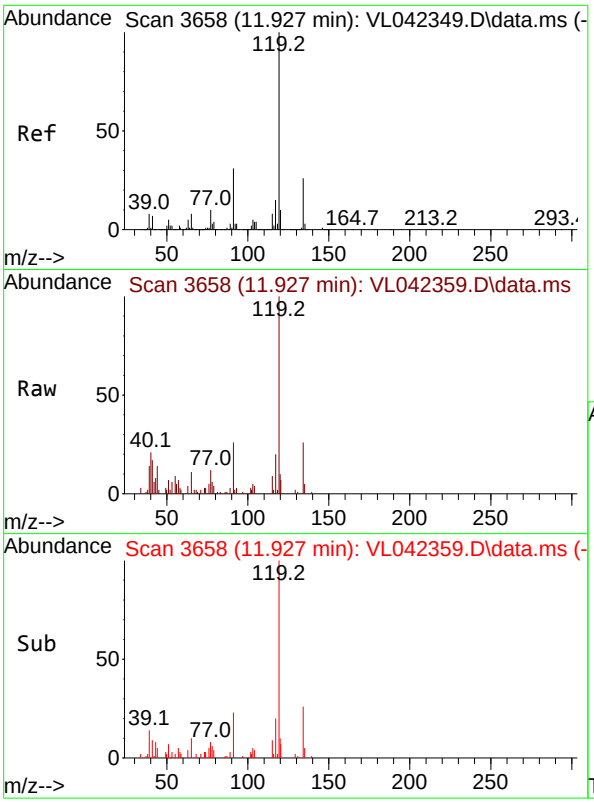


#68
1-Bromo-4-Fluorobenzene
Concen: 10.142 ppbv
RT: 10.377 min Scan# 3179
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 95 Resp: 265265

Ion	Ratio	Lower	Upper
95	100		
174	56.8	48.5	72.7
175	4.4	3.7	5.5



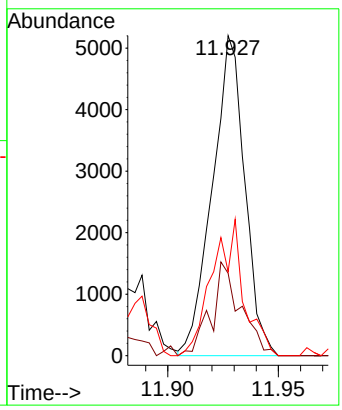


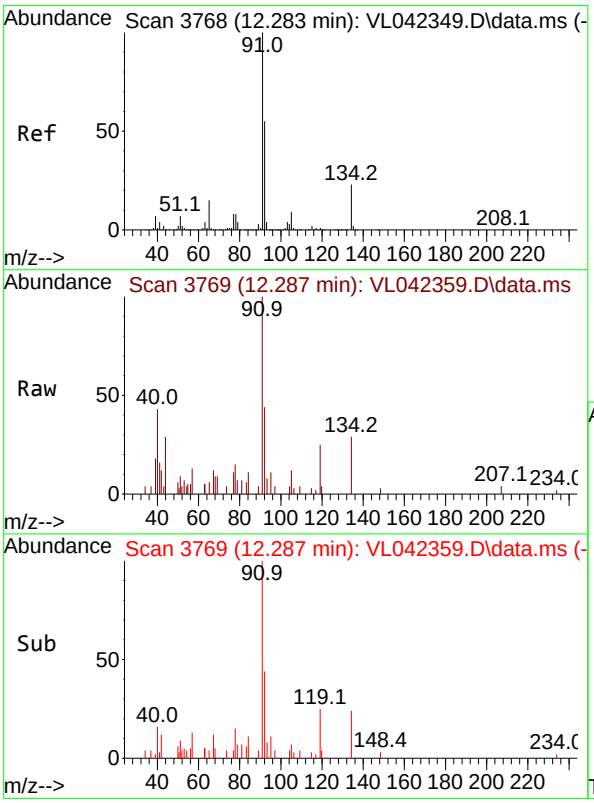
#69
p-Isopropyltoluene
Concen: 0.063 ppbv
RT: 11.927 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:119 Resp: 5290

Ion	Ratio	Lower	Upper
119	100		
134	26.7	20.0	30.0
91	42.6	24.4	36.6#

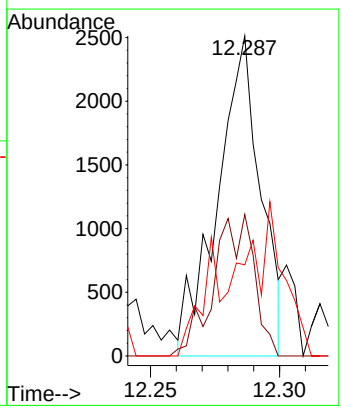


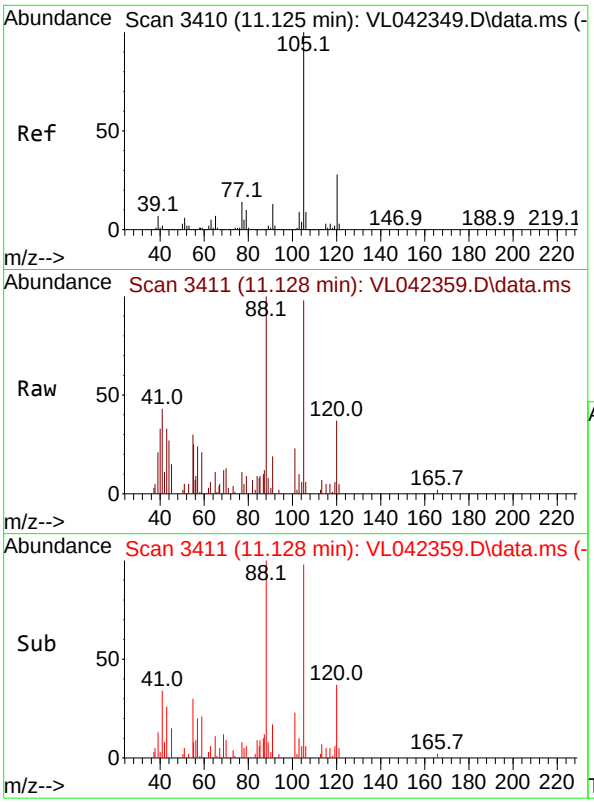


#70
n-Butylbenzene
Concen: 0.034 ppbv
RT: 12.287 min Scan# 3769
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion: 91 Resp: 2923

Ion	Ratio	Lower	Upper
91	100		
92	41.2	44.2	66.4#
134	0.0	18.2	27.4#



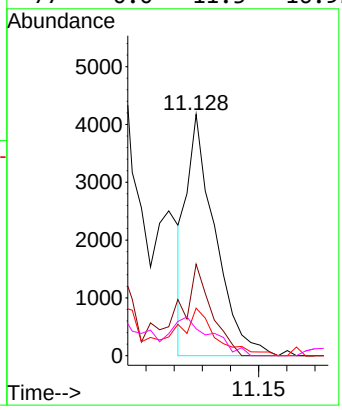


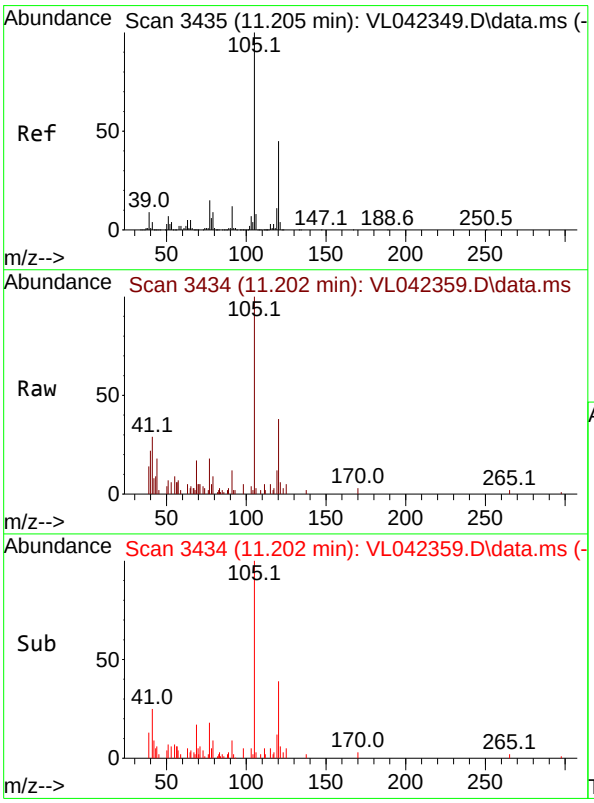
#72
4-Ethyltoluene
Concen: 0.047 ppbv
RT: 11.128 min Scan# 34
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:105 Resp: 2922

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

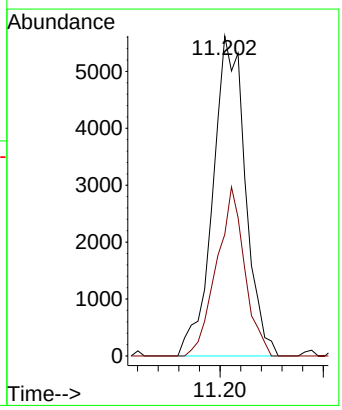


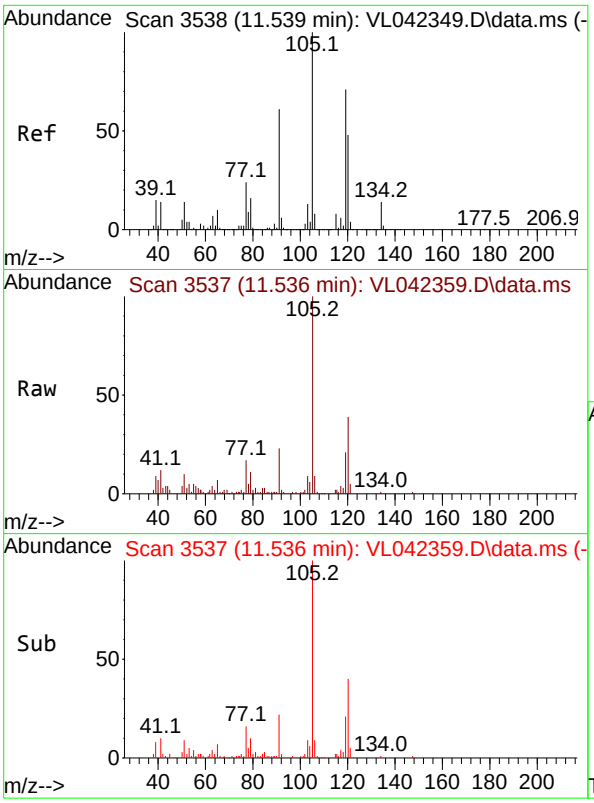


#73
1,3,5-Trimethylbenzene
Concen: 0.111 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:105 Resp: 6133

Ion	Ratio	Lower	Upper
105	100		
120	38.0	35.6	53.4



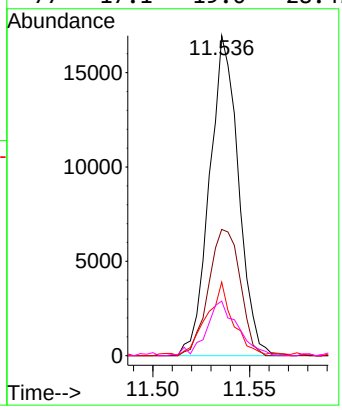


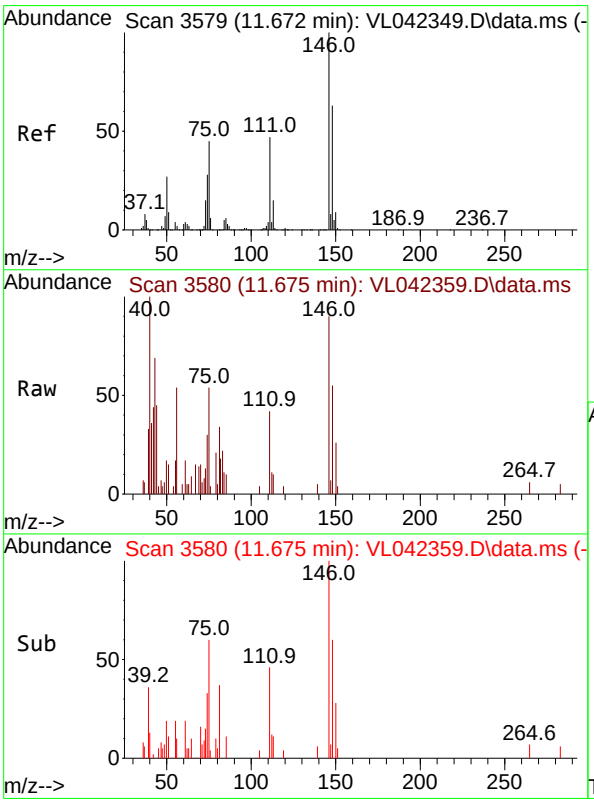
#74
1,2,4-Trimethylbenzene
Concen: 0.274 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:105 Resp: 17646

Ion	Ratio	Lower	Upper
105	100		
120	39.5	38.1	57.1
91	23.0	48.8	73.2#
77	17.1	19.0	28.4#

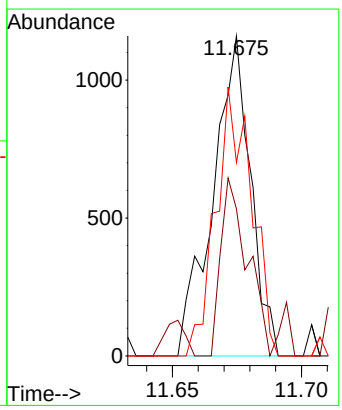


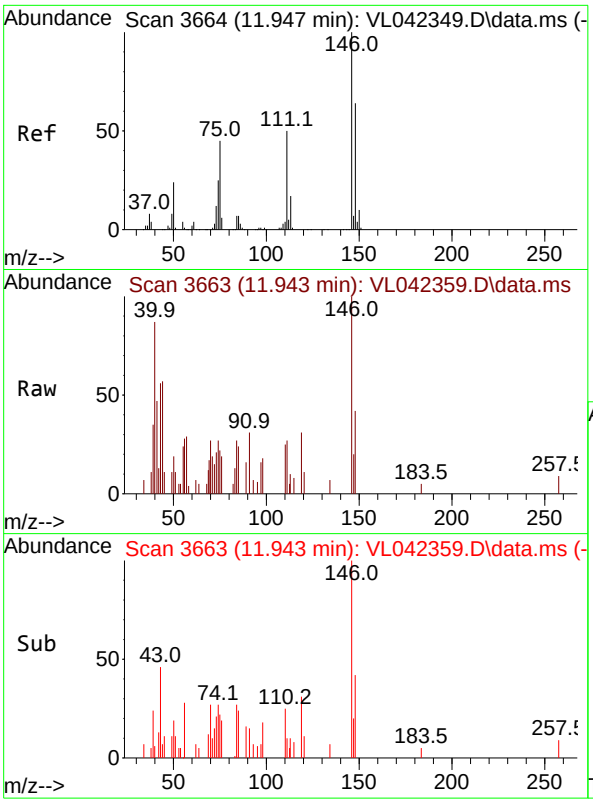


#76
1,4-Dichlorobenzene
Concen: 0.035 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:146 Resp: 1179

Ion	Ratio	Lower	Upper
146	100		
111	50.0	24.2	72.6
148	86.9	32.1	96.5



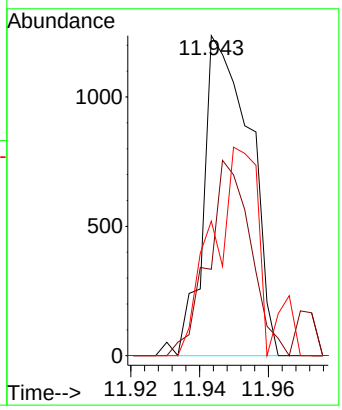


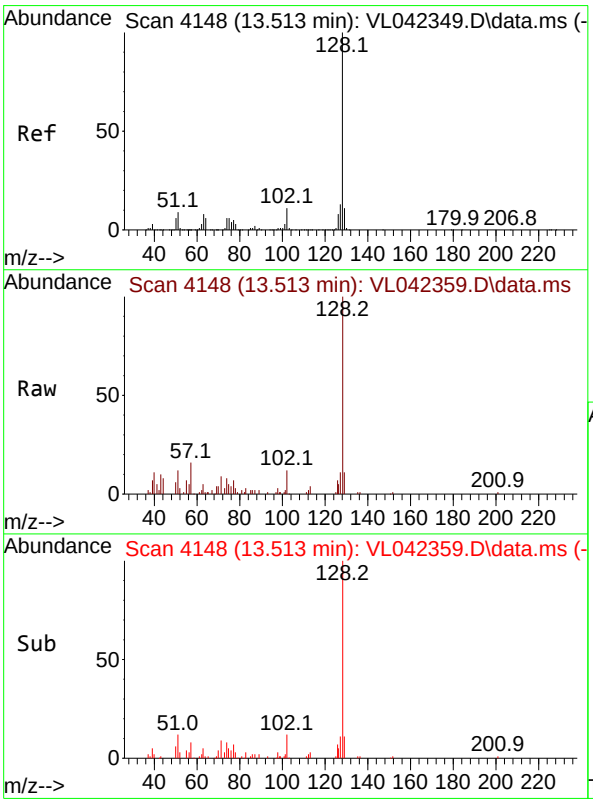
#77
1,2-Dichlorobenzene
Concen: 0.035 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:146 Resp: 1149

Ion	Ratio	Lower	Upper
146	100		
111	65.6	25.3	75.9
148	69.1	31.5	94.5

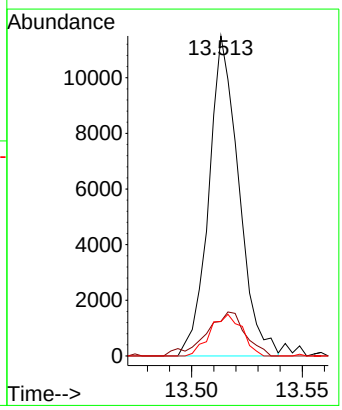


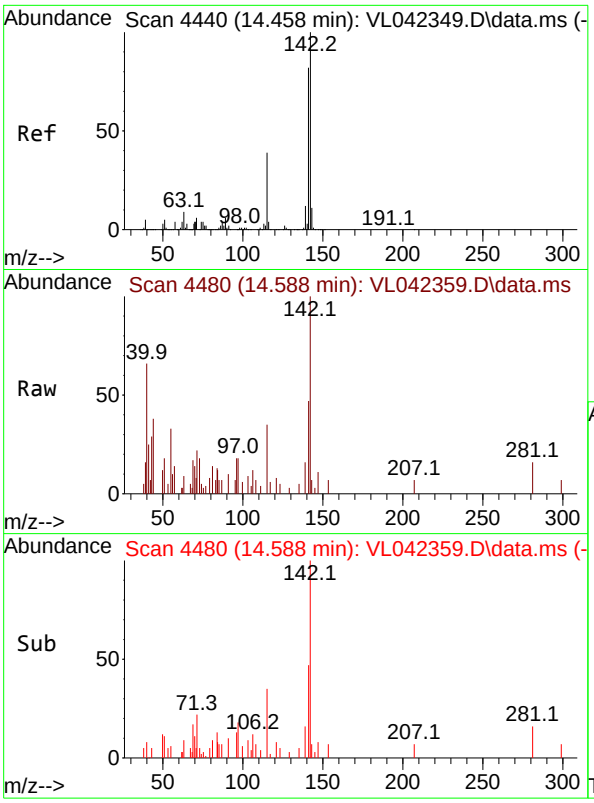


#79
Naphthalene
Concen: 0.140 ppbv
RT: 13.513 min Scan# 4148
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:128 Resp: 10816

Ion	Ratio	Lower	Upper
128	100		
127	10.8	10.6	15.8
129	10.8	8.6	12.8



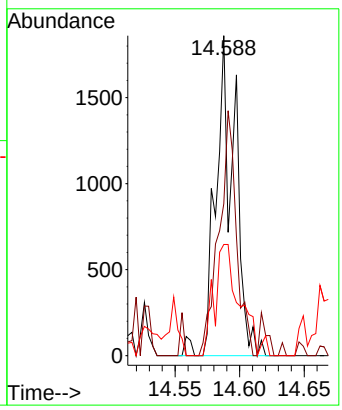


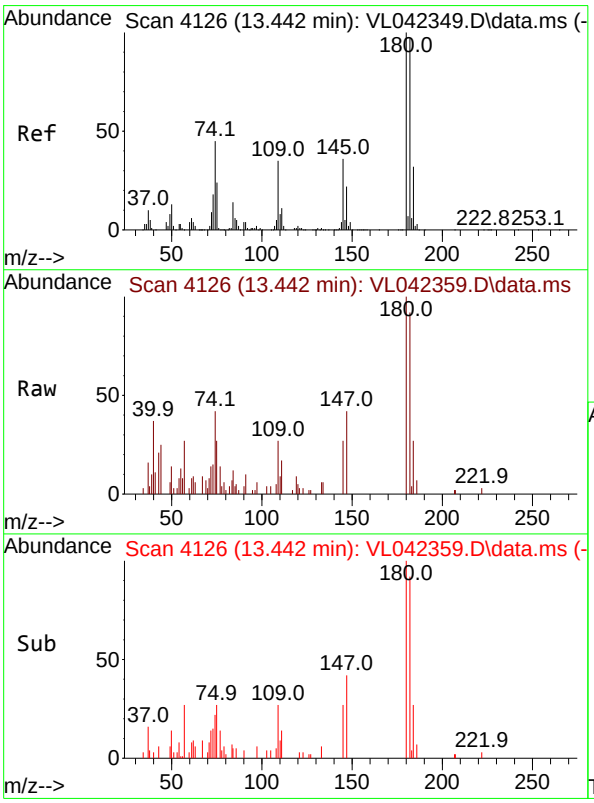
#80
Naphthalene,2-methyl-
Concen: 0.043 ppbv
RT: 14.588 min Scan# 4
Delta R.T. 0.129 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025

Tgt Ion:142 Resp: 1898

Ion	Ratio	Lower	Upper
142	100		
141	76.4	66.8	100.2
115	46.7	33.4	50.2

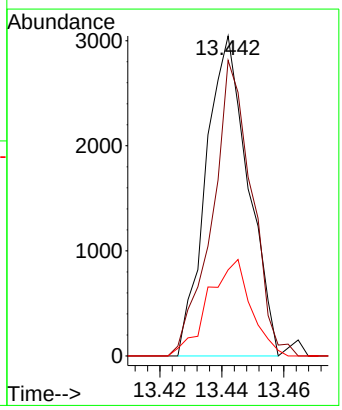




#81
1,2,4-Trichlorobenzene
Concen: 0.087 ppbv
RT: 13.442 min Scan# 4126
Delta R.T. 0.000 min
Lab File: VL042359.D
Acq: 17 Apr 2025 16:12

Tgt Ion:180 Resp: 2886

Ion	Ratio	Lower	Upper
180	100		
182	86.5	76.8	115.2
184	30.4	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042360.D
Acq On : 17 Apr 2025 16:44
Operator : SY/MD
Sample : Q1665-15DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Quant Time: Apr 18 02:38:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

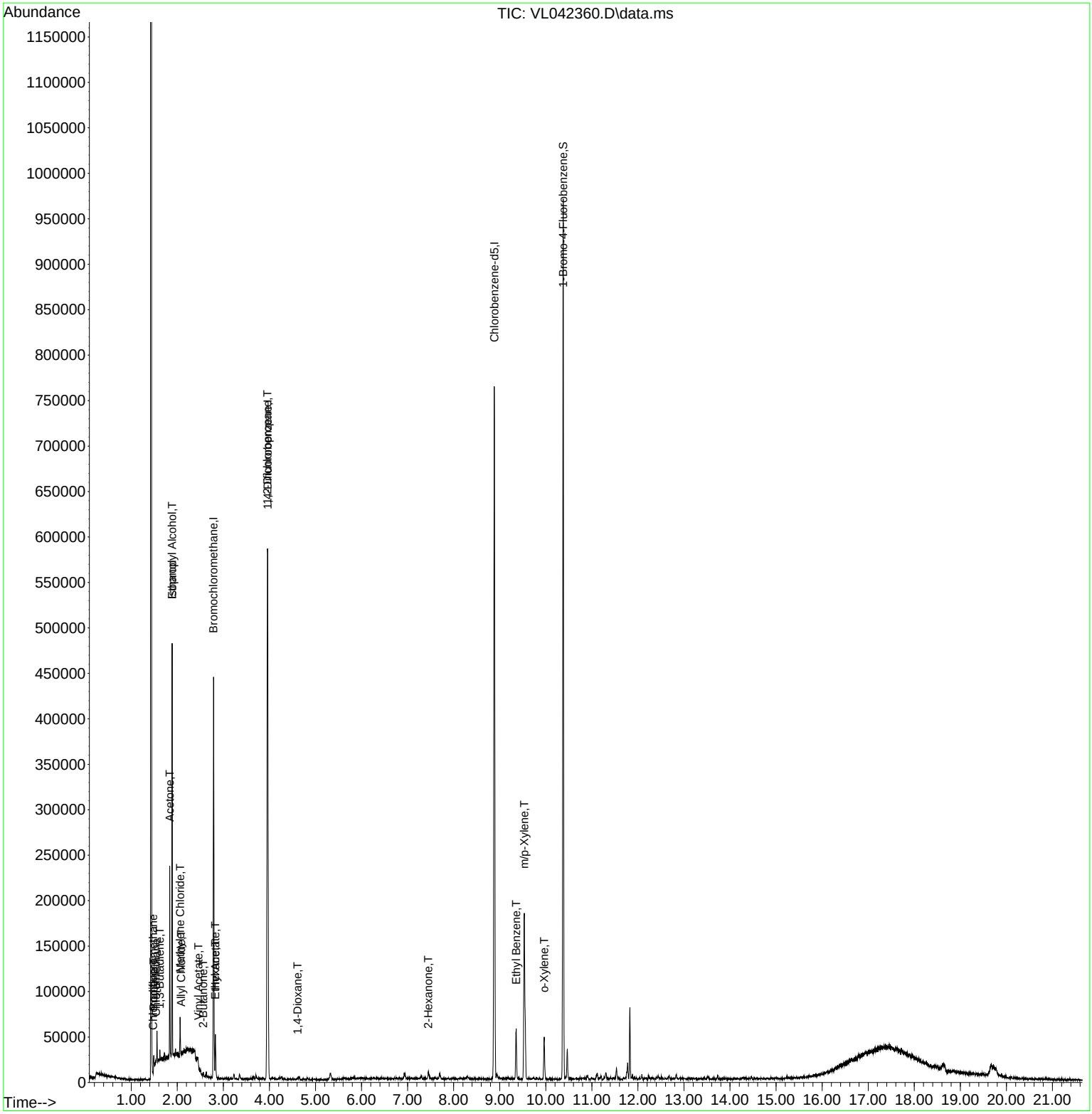
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.787	49	121918	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.962	114	347081	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.882	117	308280	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.377	95	259047	10.226	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 102.300%			
Target Compounds						Qvalue
3) Chlorodifluoromethane	1.476	51	1686	0.082	ppbv #	88
4) Chloromethane	1.535	50	771	0.090	ppbv #	65
9) Propene	1.489	41	2087	0.223	ppbv	85
13) Ethanol	1.887	45	188363	126.866	ppbv #	24
15) Acetone	1.836	43	84869	4.252	ppbv	100
16) 1,3-Butadiene	1.619	39	934	0.098	ppbv #	9
19) Isopropyl Alcohol	1.887	45	188363	16.989	ppbv #	52
20) Methylene Chloride	2.062	84	5840	0.747	ppbv #	59
21) Allyl Chloride	2.085	41	610	0.044	ppbv #	1
23) Vinyl Acetate	2.460	43	887	0.110	ppbv #	1
25) Ethyl Acetate	2.823	43	7846	0.159	ppbv #	77
26) Hexane	2.826	57	10934	0.549	ppbv #	34
34) 2-Butanone	2.564	43	2970	0.108	ppbv	91
39) 1,2-Dichloropropane	3.959	63	93853	6.728	ppbv #	21
40) 1,4-Dioxane	4.613	88	360	0.047	ppbv #	1
51) 2-Hexanone	7.448	43	5539	0.135	ppbv #	96
58) Ethyl Benzene	9.358	91	30946	0.507	ppbv	93
59) m/p-Xylene	9.532	91	89850	1.826	ppbv #	86
60) o-Xylene	9.966	91	20222	0.408	ppbv	97

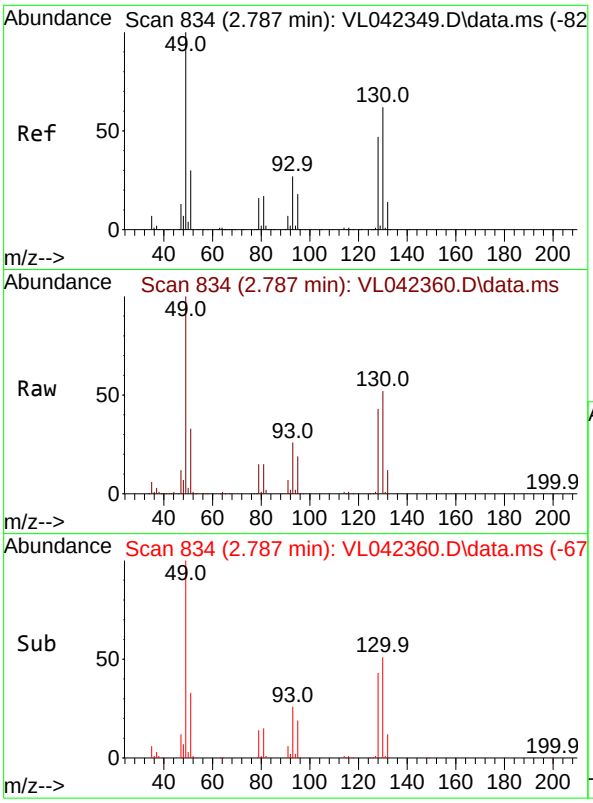
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL041725\
Data File : VL042360.D
Acq On : 17 Apr 2025 16:44
Operator : SY/MD
Sample : Q1665-15DL 10X
Misc : 400mL/MSVOA_L
ALS Vial : 6 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Quant Time: Apr 18 02:38:31 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



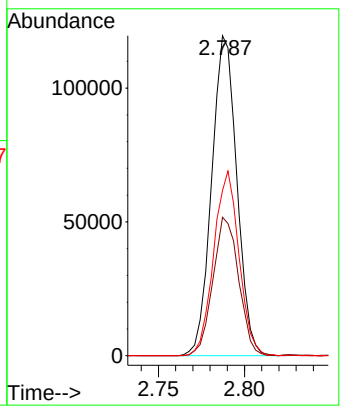


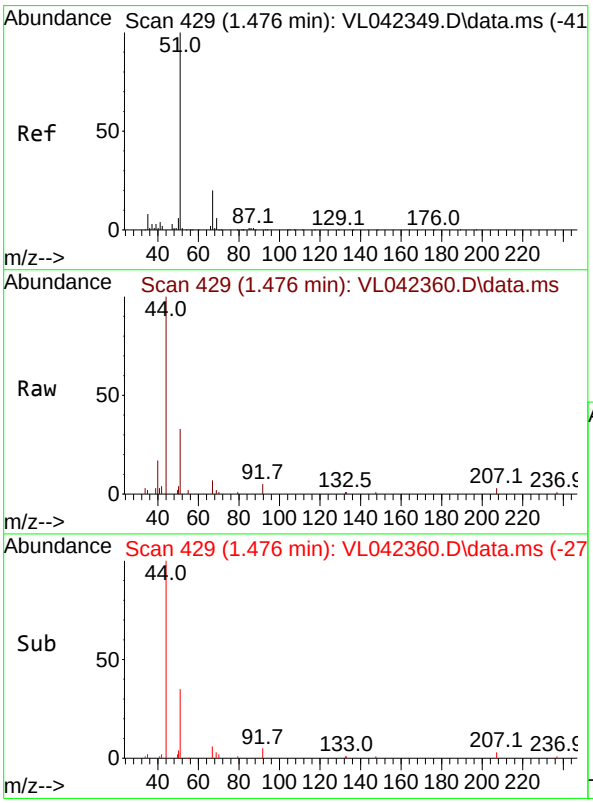
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.787 min Scan# 8
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 49 Resp: 121918

Ion	Ratio	Lower	Upper
49	100		
128	44.1	22.8	68.4
130	57.9	29.3	88.0

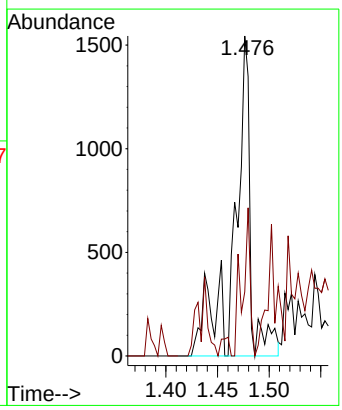


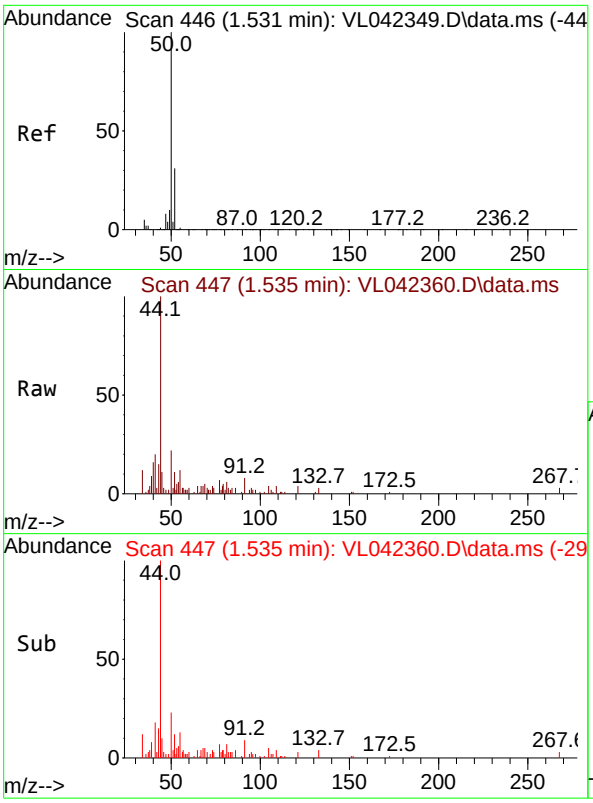


#3
Chlorodifluoromethane
Concen: 0.082 ppbv
RT: 1.476 min Scan# 429
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 51 Resp: 1686

Ion	Ratio	Lower	Upper
51	100		
67	25.6	16.2	24.4#



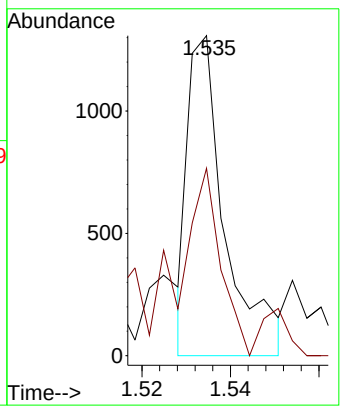


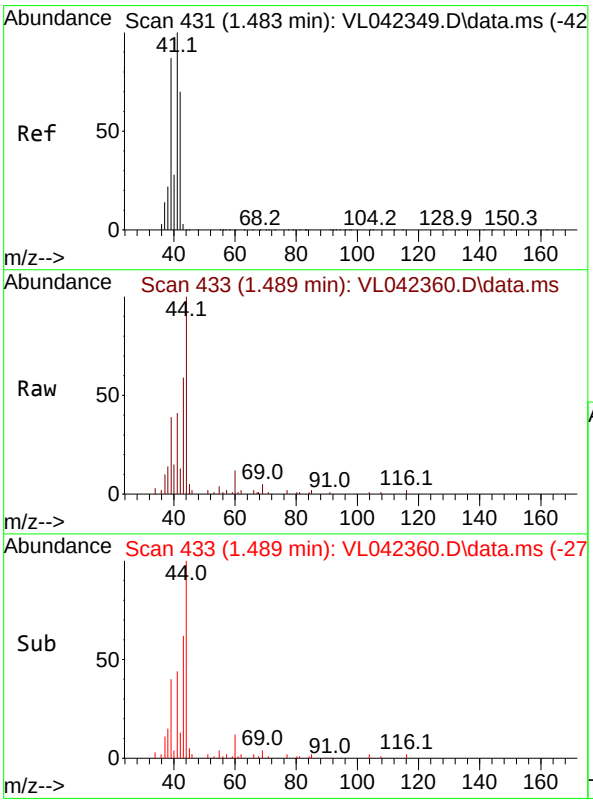
#4
Chloromethane
Concen: 0.090 ppbv
RT: 1.535 min Scan# 44
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 50 Resp: 771

Ion	Ratio	Lower	Upper
50	100		
52	49.9	24.7	37.1#

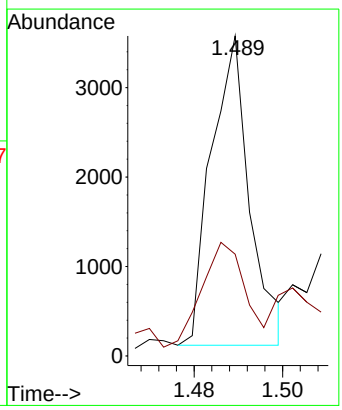


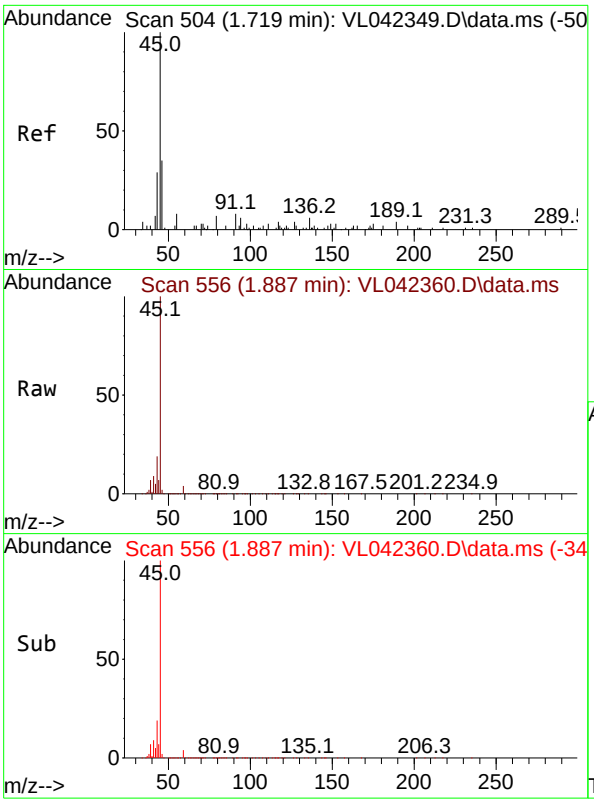


#9
Propene
Concen: 0.223 ppbv
RT: 1.489 min Scan# 433
Delta R.T. 0.007 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 41 Resp: 2087

Ion	Ratio	Lower	Upper
41	100		
42	82.3	56.2	84.4



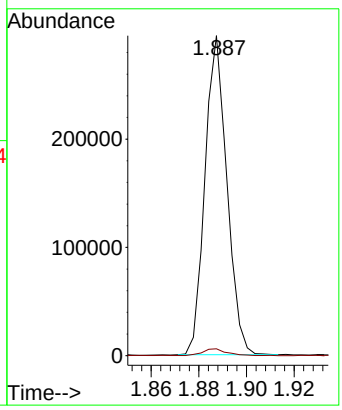


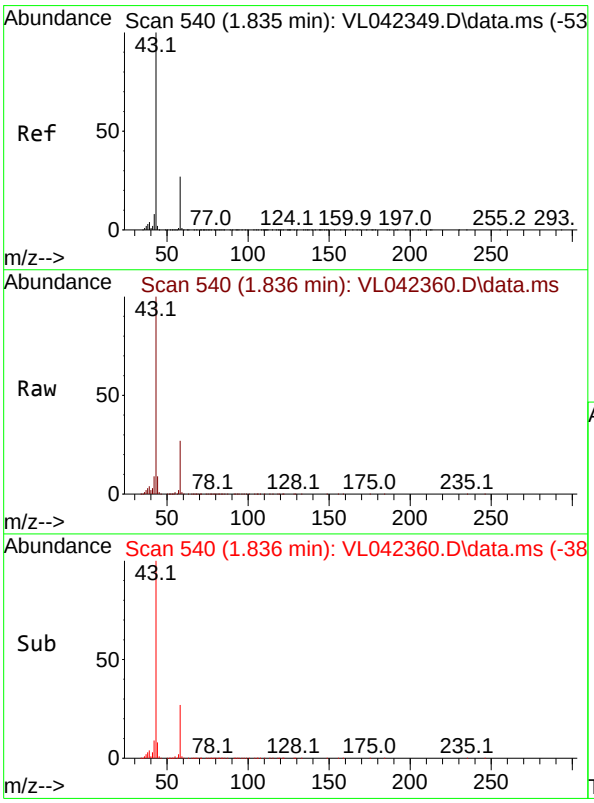
#13
Ethanol
Concen: 126.866 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.169 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 45 Resp: 188363

Ion	Ratio	Lower	Upper
45	100		
46	0.0	21.9	87.7#

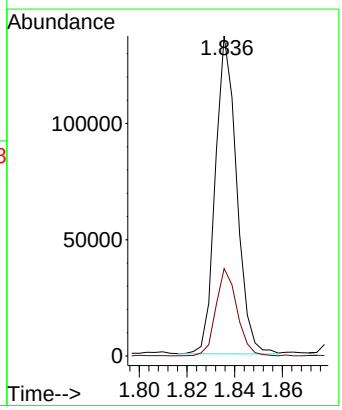


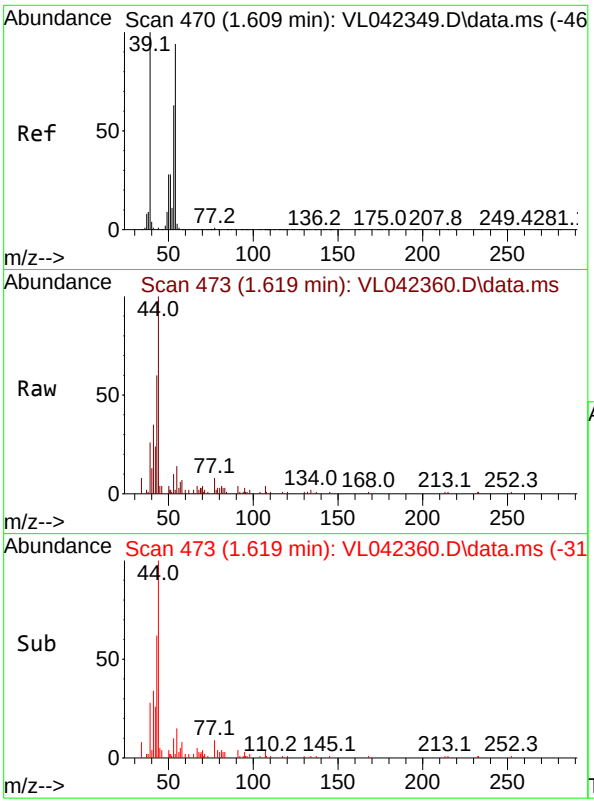


#15
Acetone
Concen: 4.252 ppbv
RT: 1.836 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 43 Resp: 84869

Ion	Ratio	Lower	Upper
43	100		
58	27.8	22.4	33.6



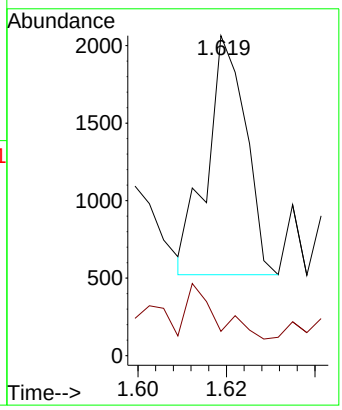


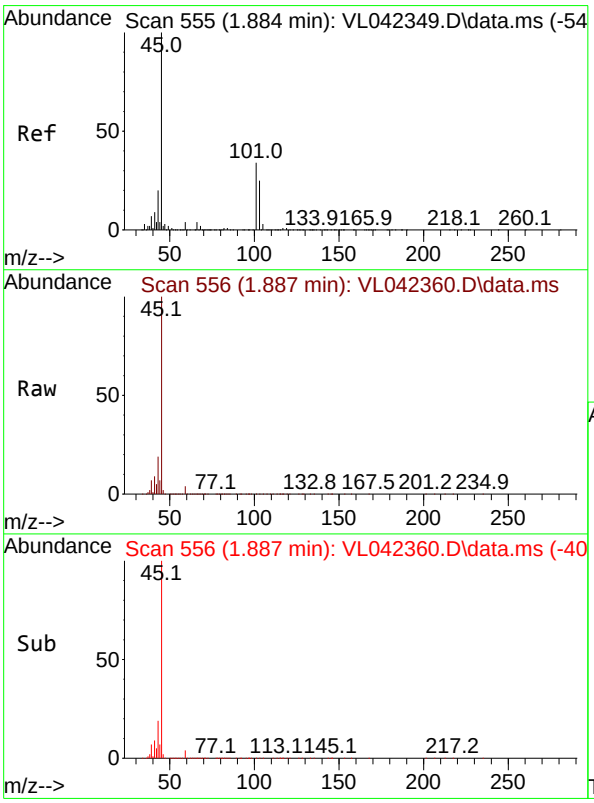
#16
1,3-Butadiene
Concen: 0.098 ppbv
RT: 1.619 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 39 Resp: 934

Ion	Ratio	Lower	Upper
39	100		
54	0.0	64.9	97.3#

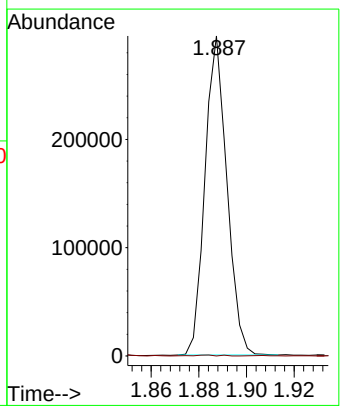


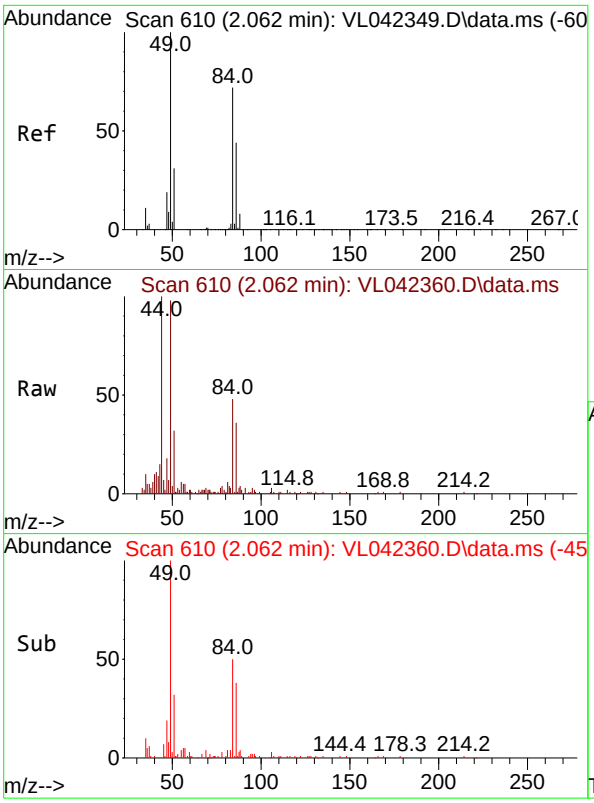


#19
Isopropyl Alcohol
Concen: 16.989 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 45 Resp: 188363

Ion	Ratio	Lower	Upper
45	100		
58	12.5	34.5	51.7#



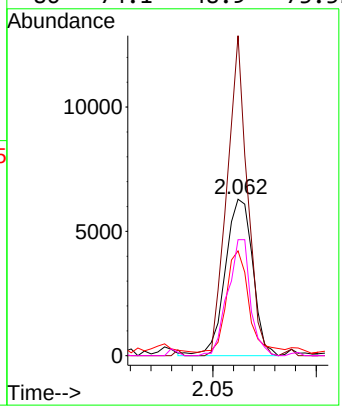


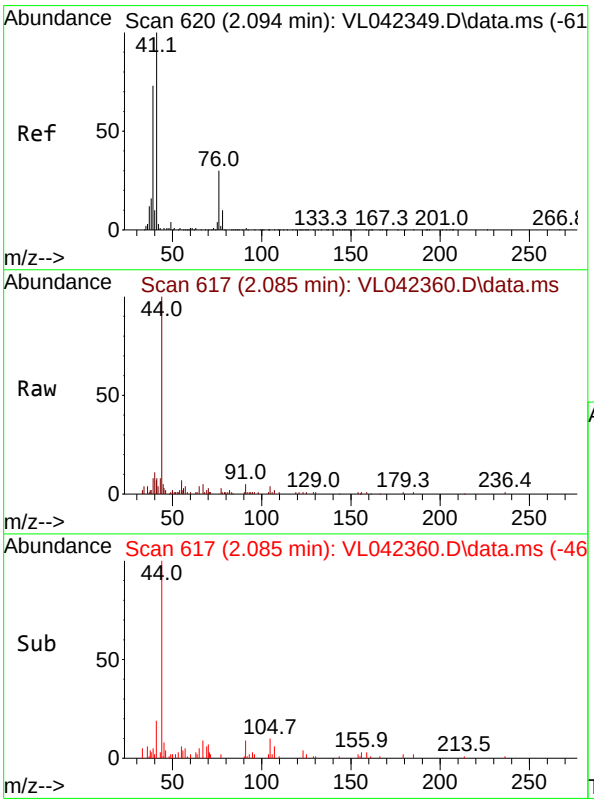
#20
Methylene Chloride
Concen: 0.747 ppbv
RT: 2.062 min Scan# 61
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 84 Resp: 5840

Ion	Ratio	Lower	Upper
84	100		
49	204.5	111.6	167.4#
51	66.1	35.1	52.7#
86	74.1	48.9	73.3#

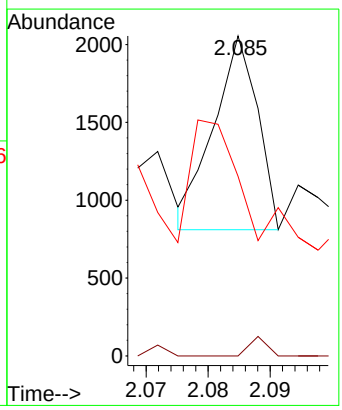


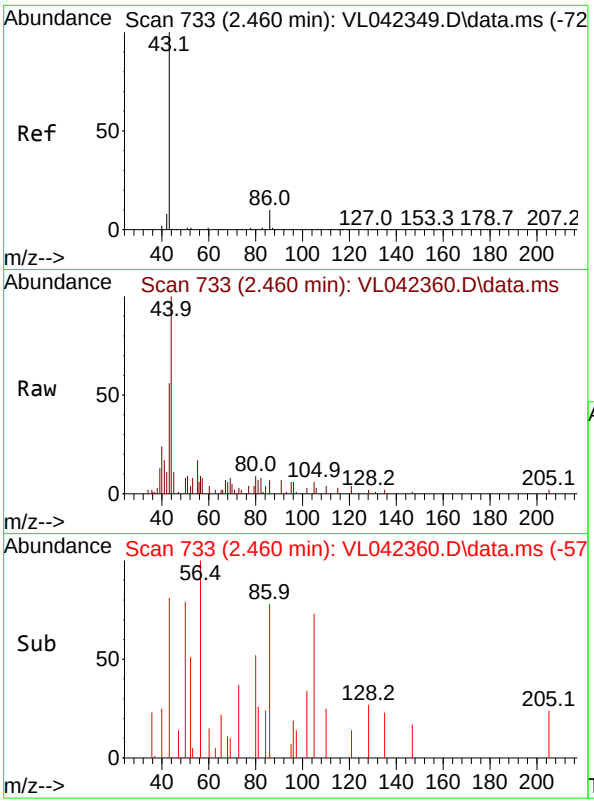


#21
Allyl Chloride
Concen: 0.044 ppbv
RT: 2.085 min Scan# 617
Delta R.T. -0.010 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 41 Resp: 610

Ion	Ratio	Lower	Upper
41	100		
76	3.9	24.8	37.2#
39	190.5	60.6	90.8#



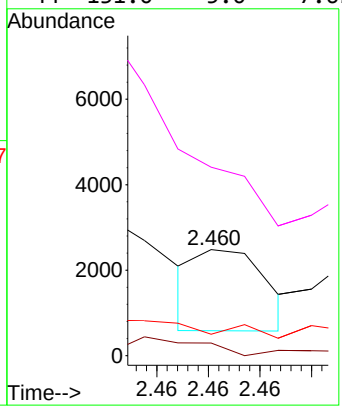


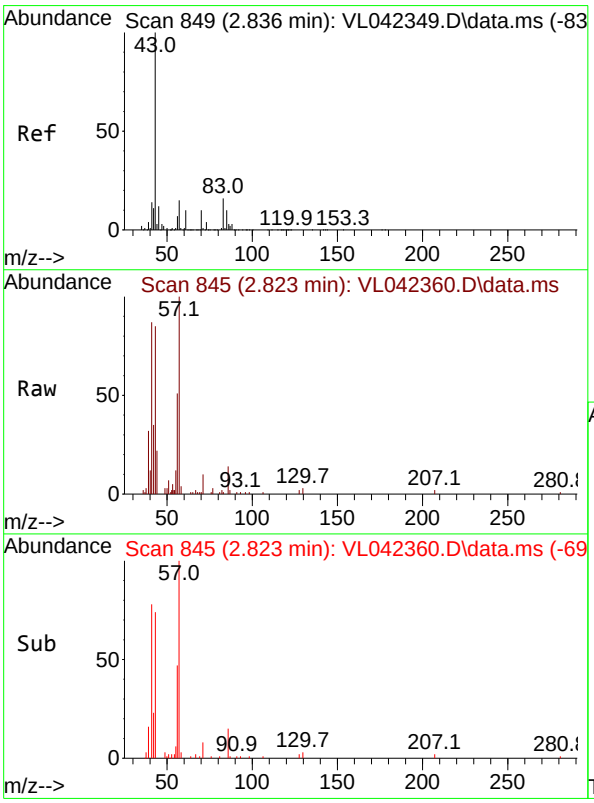
#23
Vinyl Acetate
Concen: 0.110 ppbv
RT: 2.460 min Scan# 7
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 43 Resp: 887

Ion	Ratio	Lower	Upper
43	100		
86	10.6	6.5	9.7#
42	9.0	7.8	11.8
44	131.0	5.0	7.6#

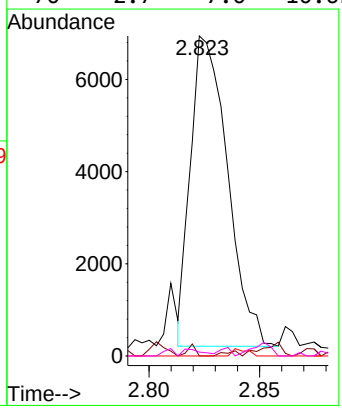


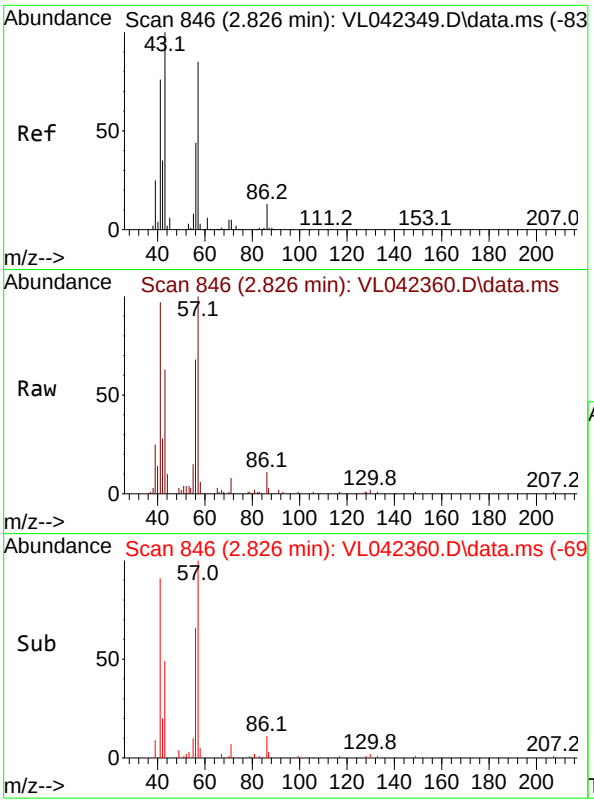


#25
Ethyl Acetate
Concen: 0.159 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.013 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 43 Resp: 7846

Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.3	12.5#
61	0.9	7.3	10.9#
70	2.7	7.0	10.6#



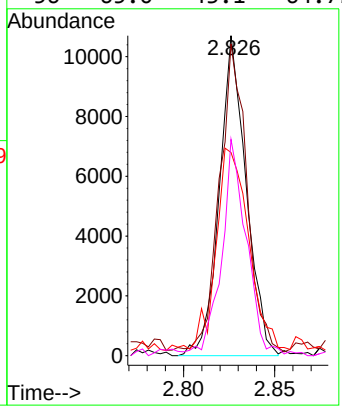


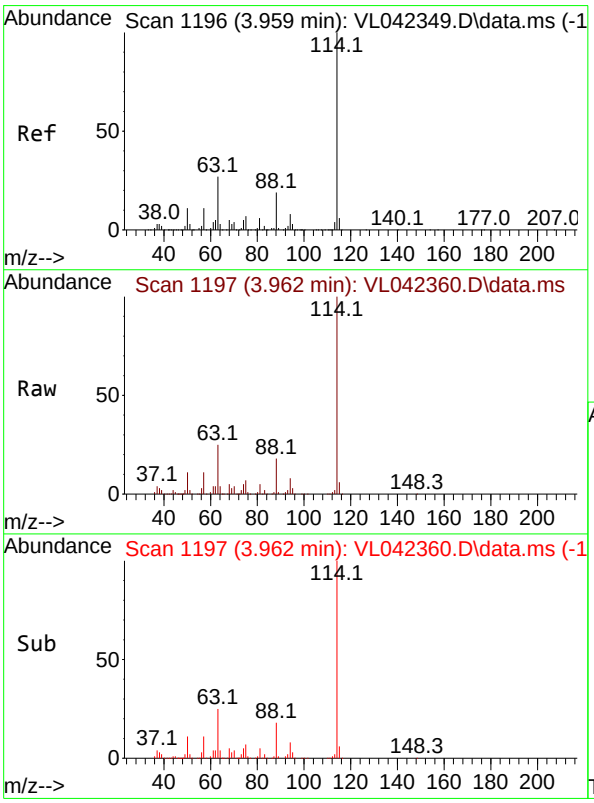
#26
Hexane
Concen: 0.549 ppbv
RT: 2.826 min Scan# 84
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 57 Resp: 10934

Ion	Ratio	Lower	Upper
57	100		
41	97.0	77.9	116.9
43	80.3	208.4	312.6#
56	65.0	43.1	64.7#

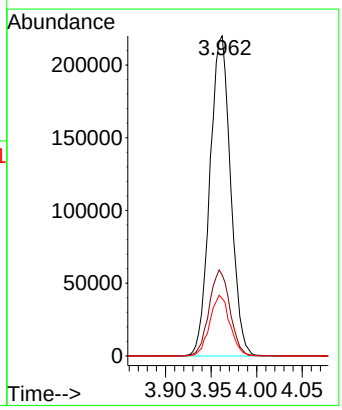


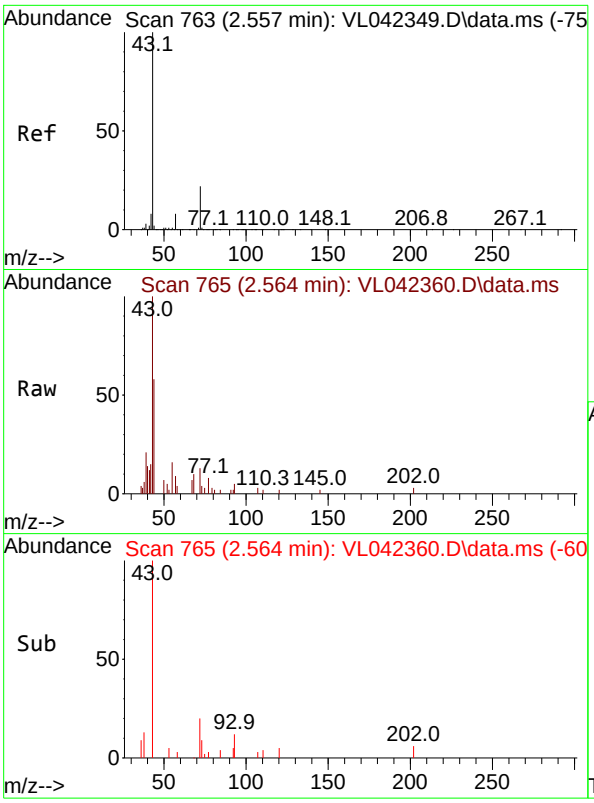


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 1197
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion:114 Resp: 347081

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	18.4	15.5	23.3



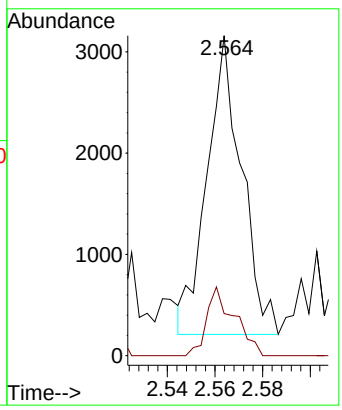


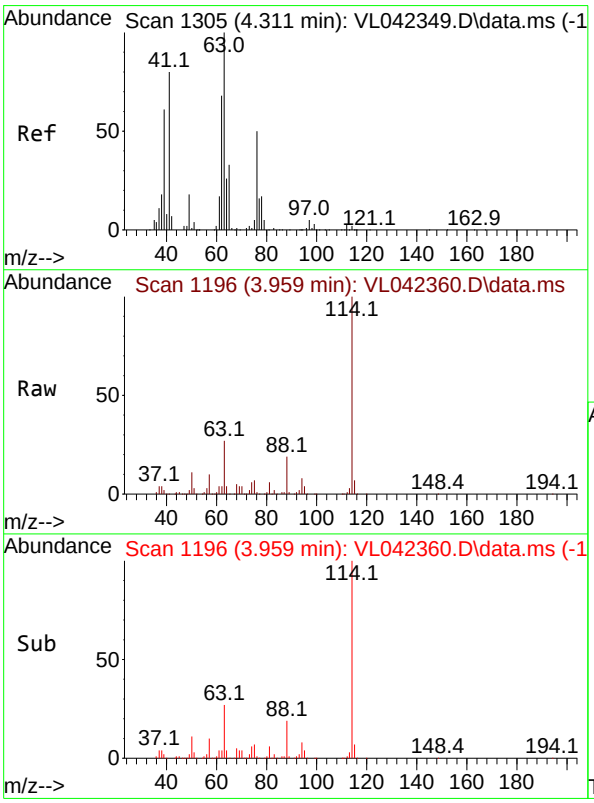
#34
2-Butanone
Concen: 0.108 ppbv
RT: 2.564 min Scan# 7
Delta R.T. 0.007 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 43 Resp: 2970

Ion	Ratio	Lower	Upper
43	100		
72	18.6	18.2	27.2

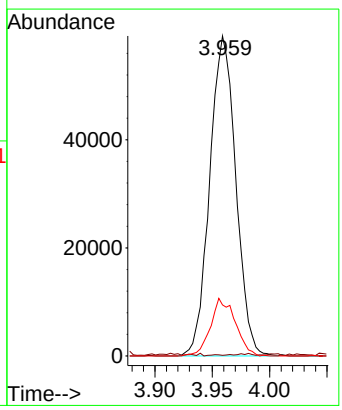


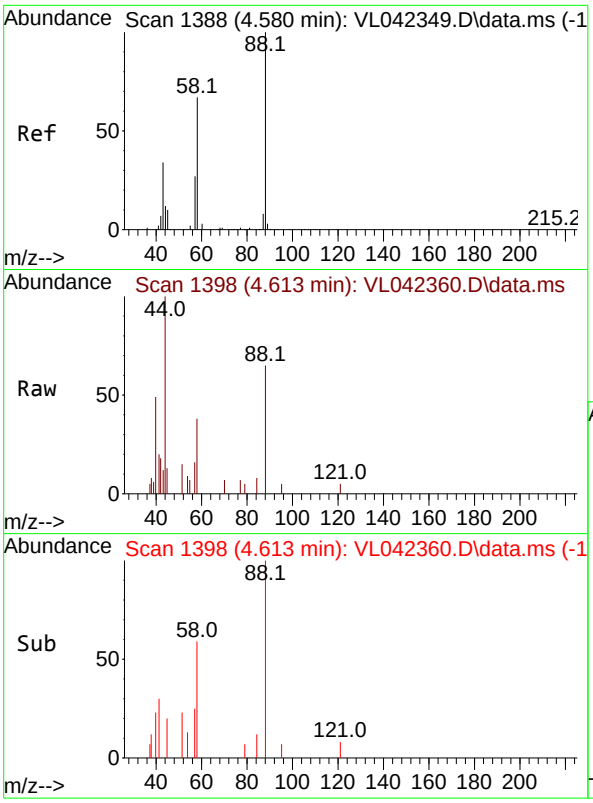


#39
1,2-Dichloropropane
Concen: 6.728 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 63 Resp: 93853

Ion	Ratio	Lower	Upper
63	100		
41	0.0	64.2	96.2#
62	15.9	54.3	81.5#



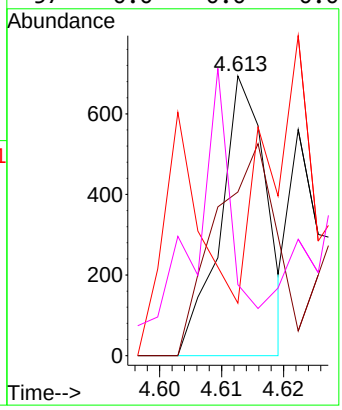


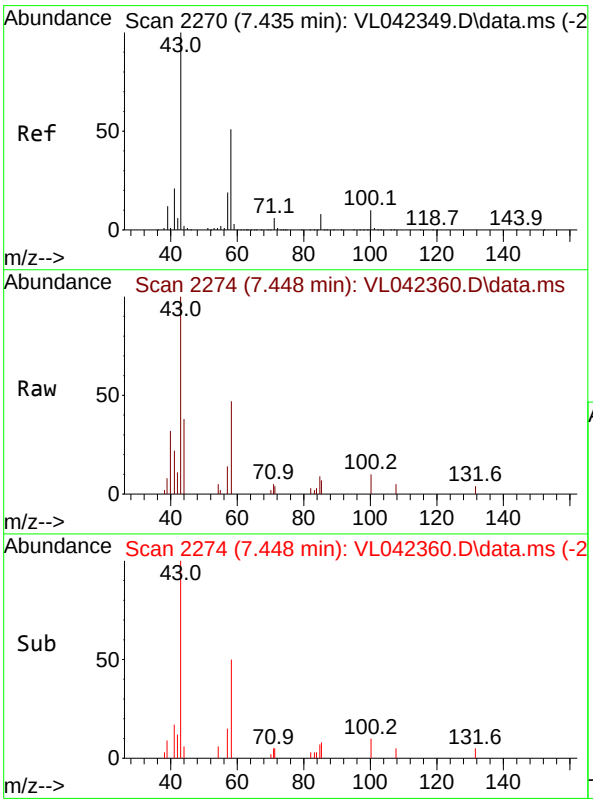
#40
1,4-Dioxane
Concen: 0.047 ppbv
RT: 4.613 min Scan# 1
Delta R.T. 0.033 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 88 Resp: 360

Ion	Ratio	Lower	Upper
88	100		
58	190.3	61.4	92.0#
43	135.3	23.2	34.8#
57	0.0	0.0	0.0

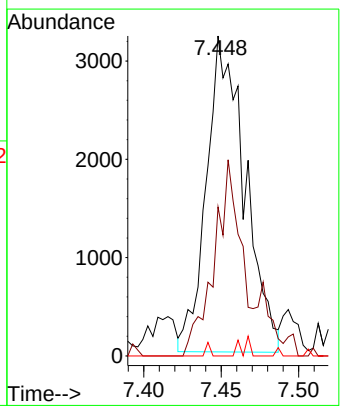


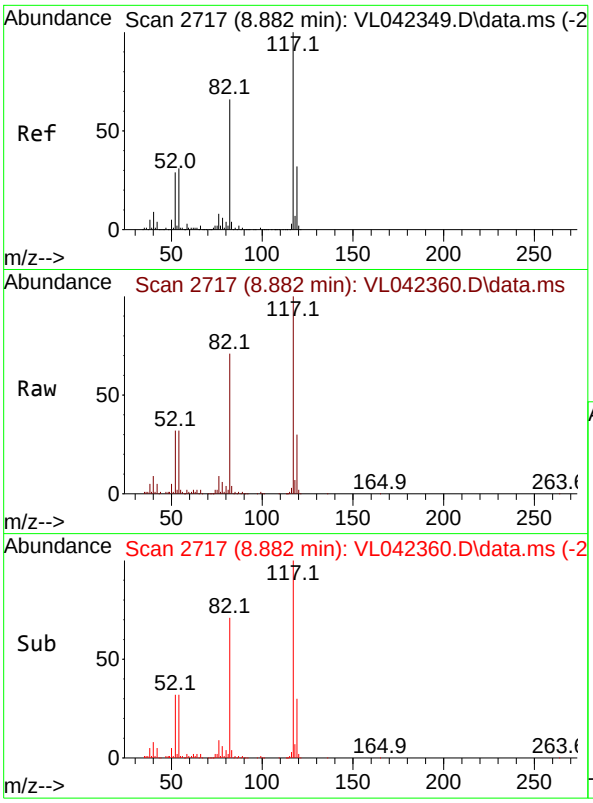


#51
2-Hexanone
Concen: 0.135 ppbv
RT: 7.448 min Scan# 2274
Delta R.T. 0.013 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 43 Resp: 5539

Ion	Ratio	Lower	Upper
43	100		
58	53.1	40.2	60.4
98	0.0	0.1	0.1#



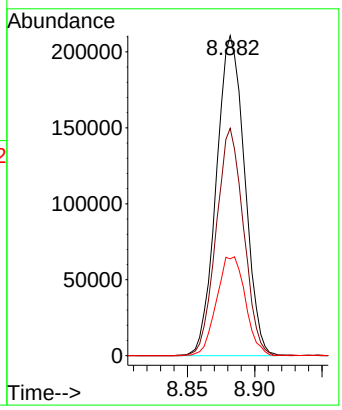


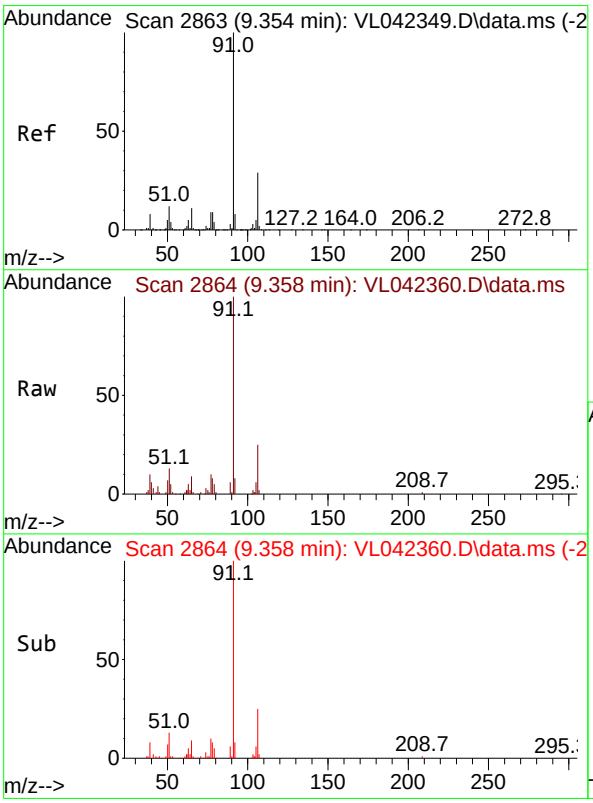
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.882 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion:117 Resp: 308280

Ion	Ratio	Lower	Upper
117	100		
82	68.8	57.8	86.6
119	31.5	25.2	37.8

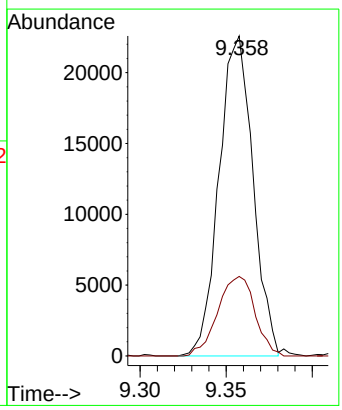


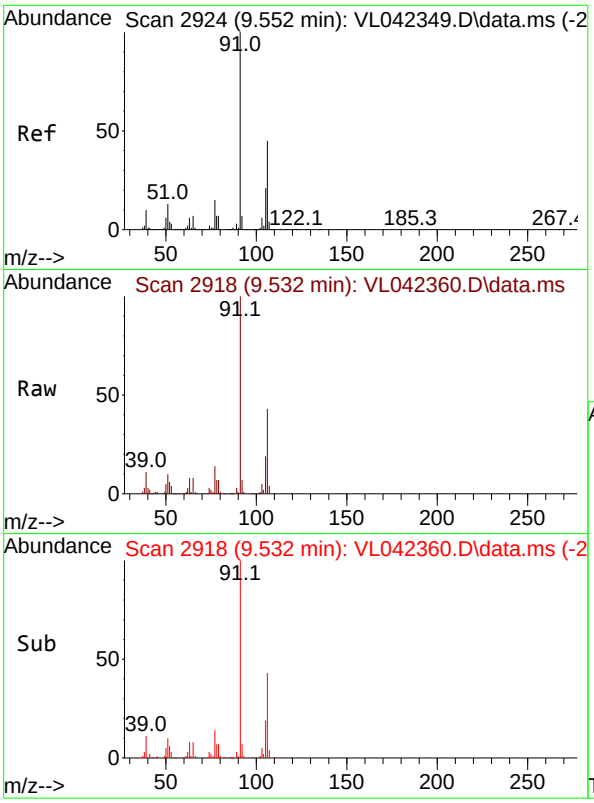


#58
Ethyl Benzene
Concen: 0.507 ppbv
RT: 9.358 min Scan# 2864
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 91 Resp: 30946

Ion	Ratio	Lower	Upper
91	100		
106	24.8	23.0	34.4



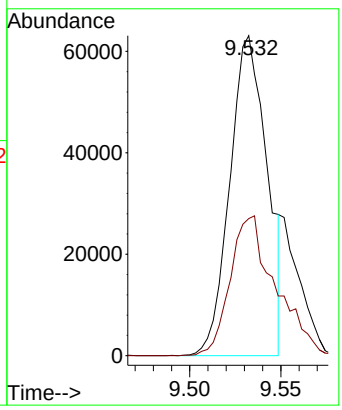


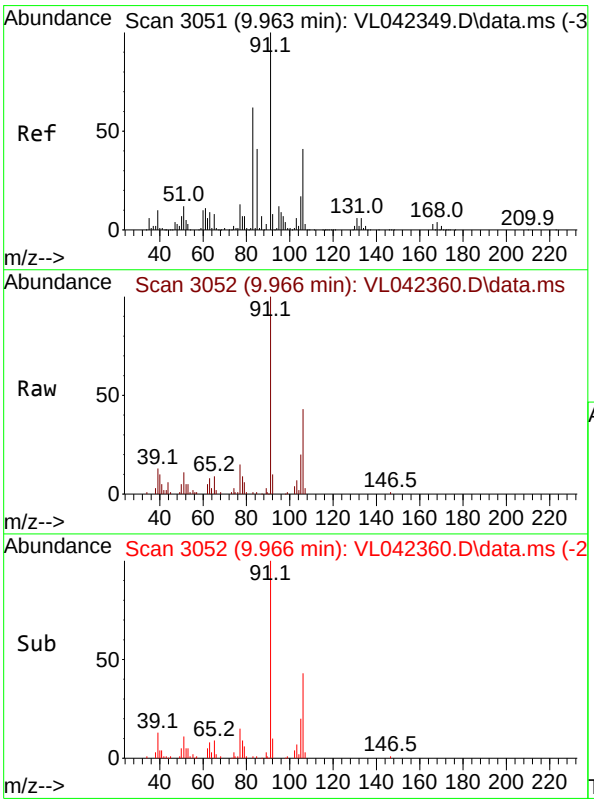
#59
m/p-Xylene
Concen: 1.826 ppbv
RT: 9.532 min Scan# 2
Delta R.T. -0.019 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 91 Resp: 89850

Ion	Ratio	Lower	Upper
91	100		
106	53.4	35.4	53.2#

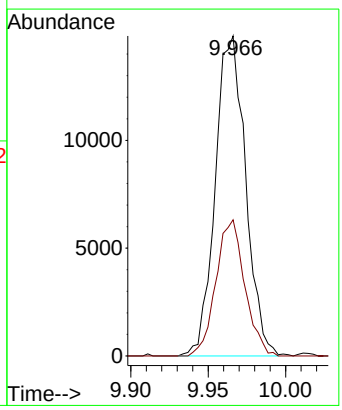


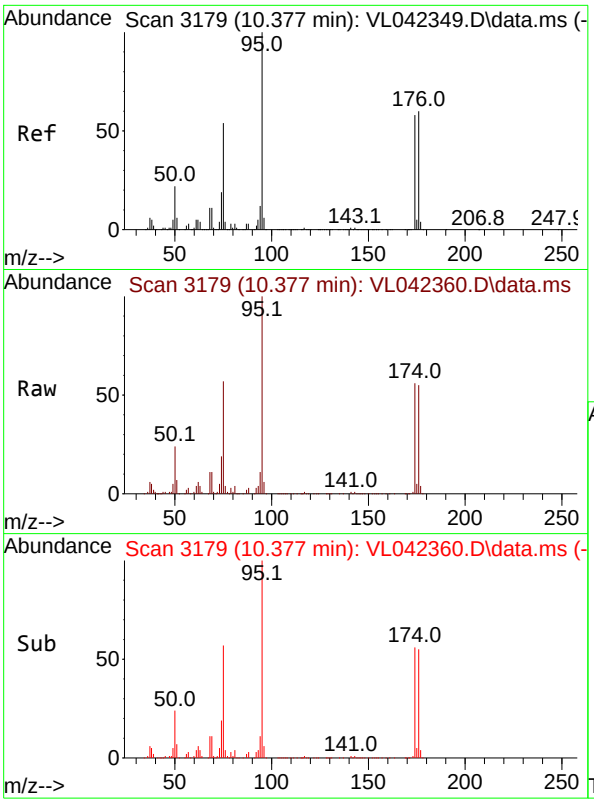


#60
o-Xylene
Concen: 0.408 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Tgt Ion: 91 Resp: 20222

Ion	Ratio	Lower	Upper
91	100		
106	40.4	21.1	63.4



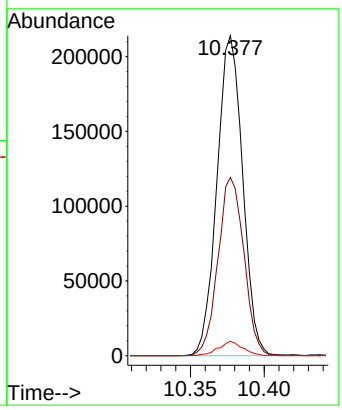


#68
1-Bromo-4-Fluorobenzene
Concen: 10.226 ppbv
RT: 10.377 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042360.D
Acq: 17 Apr 2025 16:44

Instrument :
MSVOA_L
ClientSampleId :
IA-B14-1-3242025DL

Tgt Ion: 95 Resp: 259047

Ion	Ratio	Lower	Upper
95	100		
174	56.2	48.5	72.7
175	4.3	3.7	5.5



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	121989	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	345031	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	305240	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	264197	10.533	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	219089	10.165	ppbv		98
3) Chlorodifluoromethane	1.476	51	192111	9.360	ppbv		99
4) Chloromethane	1.531	50	85195	9.988	ppbv		98
5) Vinyl Chloride	1.580	62	82863	8.925	ppbv		100
6) Bromomethane	1.667	94	37396	9.376	ppbv		83
7) Chloroethane	1.703	64	32235	9.600	ppbv		99
8) Dichlorotetrafluoroethane	1.554	85	189174	10.223	ppbv		95
9) Propene	1.483	41	75996	8.131	ppbv		98
10) Heptane	4.975	43	205785	7.837	ppbv		98
11) Trichlorofluoromethane	1.874	101	210830	10.286	ppbv		95
12) 1,1,2-Trichlorotrifluo...	2.136	101	163109	9.733	ppbv		97
13) Ethanol	1.719	45	4612	3.104	ppbv		98
14) Bromoethene	1.780	108	63235	10.010	ppbv		97
15) Acetone	1.832	43	172207	8.623	ppbv		100
16) 1,3-Butadiene	1.609	39	84816	8.880	ppbv		98
17) tert-Butyl alcohol	2.039	59	226804	9.164	ppbv		100
18) 1,1-Dichloroethene	2.033	96	73751	9.420	ppbv		96
19) Isopropyl Alcohol	1.884	45	101011	9.105	ppbv		93
20) Methylene Chloride	2.059	84	62506	7.992	ppbv		90
21) Allyl Chloride	2.094	41	125215	9.081	ppbv		97
22) trans-1,2-Dichloroethene	2.337	96	81589	9.153	ppbv		94
23) Vinyl Acetate	2.460	43	64907	8.030	ppbv		97
24) 1,1-Dichloroethane	2.405	63	163124	9.634	ppbv		99
25) Ethyl Acetate	2.835	43	425121	8.634	ppbv		99
26) Hexane	2.823	57	166789	8.370	ppbv		98
27) Carbon Disulfide	2.146	76	205605	9.637	ppbv		96
28) Methyl tert-Butyl Ether	2.437	73	116474	8.922	ppbv		93
29) Chloroform	2.845	83	280938	9.975	ppbv		99
30) Cyclohexane	3.852	84	142532	8.849	ppbv		98
31) cis-1,2-Dichloroethene	2.719	61	181514	9.581	ppbv		96
32) 1,1,1-Trichloroethane	3.363	97	301259	9.501	ppbv		99
34) 2-Butanone	2.554	43	241047	8.834	ppbv		99
35) Carbon Tetrachloride	3.758	117	305477	9.783	ppbv		96
36) Benzene	3.654	78	338736	9.102	ppbv		97
37) 1,2-Dichloroethane	3.214	62	235966	10.564	ppbv		97
38) Trichloroethene	4.541	130	136731	8.406	ppbv		95
39) 1,2-Dichloropropane	4.308	63	122213	8.813	ppbv		97
40) 1,4-Dioxane	4.577	88	58837	7.720	ppbv	#	95
41) Tetrahydrofuran	3.052	42	133063	8.363	ppbv		99
42) Bromodichloromethane	4.483	83	310726	9.996	ppbv	#	96
43) Methyl Methacrylate	4.878	69	138030	8.230	ppbv		94
44) 2,2,4-Trimethylpentane	4.635	57	562403	8.750	ppbv		96
45) t-1,3-Dichloropropene	6.409	75	157191	9.175	ppbv		95

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.593	75	191165	9.117	ppbv	#	88
47) 1,1,2-Trichloroethane	6.574	97	133821	9.471	ppbv		96
48) Dibromochloromethane	7.383	129	245439	9.832	ppbv		99
49) Bromoform	9.480	173	198991	9.117	ppbv		100
50) 4-Methyl-2-Pentanone	5.748	43	356129	7.854	ppbv		99
51) 2-Hexanone	7.431	43	287045	7.058	ppbv		98
52) Tetrachloroethene	8.221	164	114038	7.928	ppbv		91
53) Toluene	6.927	91	398162	8.916	ppbv		100
54) 1,2-Dibromoethane	7.648	107	189639	9.378	ppbv		92
56) 1,1,1,2-Tetrachloroethane	8.920	131	184161	9.969	ppbv		97
57) Chlorobenzene	8.917	112	300677	9.471	ppbv		98
58) Ethyl Benzene	9.354	91	568129	9.394	ppbv		98
59) m/p-Xylene	9.548	91	438382	8.998	ppbv	#	29
60) o-Xylene	9.963	91	466411	9.507	ppbv		97
61) Styrene	9.865	104	213119	9.101	ppbv		98
62) Isopropylbenzene	10.535	105	680837	9.452	ppbv		99
63) 1,1,2,2-Tetrachloroethane	9.959	83	274653	8.639	ppbv		99
64) n-propylbenzene	10.989	120	166984	9.223	ppbv		98
65) tert-Butylbenzene	11.529	119	610304	9.219	ppbv		95
66) Benzyl Chloride	11.613	91	59187	8.136	ppbv		99
67) sec-Butylbenzene	11.765	105	854169	9.276	ppbv		99
69) p-Isopropyltoluene	11.924	119	732365	9.155	ppbv		97
70) n-Butylbenzene	12.280	91	765539	9.188	ppbv		99
71) 2-Chlorotoluene	10.898	91	534834	9.467	ppbv		98
72) 4-Ethyltoluene	11.121	105	556591	9.280	ppbv		97
73) 1,3,5-Trimethylbenzene	11.202	105	487223	9.201	ppbv		98
74) 1,2,4-Trimethylbenzene	11.536	105	541720	8.759	ppbv		94
75) 1,3-Dichlorobenzene	11.607	146	287285	8.936	ppbv		97
76) 1,4-Dichlorobenzene	11.671	146	290512	8.991	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	279962	8.956	ppbv		98
78) Hexachloro-1,3-Butadiene	13.879	225	265745	8.419	ppbv		100
79) Naphthalene	13.513	128	622606	8.418	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	328047	7.783	ppbv		95
81) 1,2,4-Trichlorobenzene	13.439	180	269711	8.493	ppbv		99

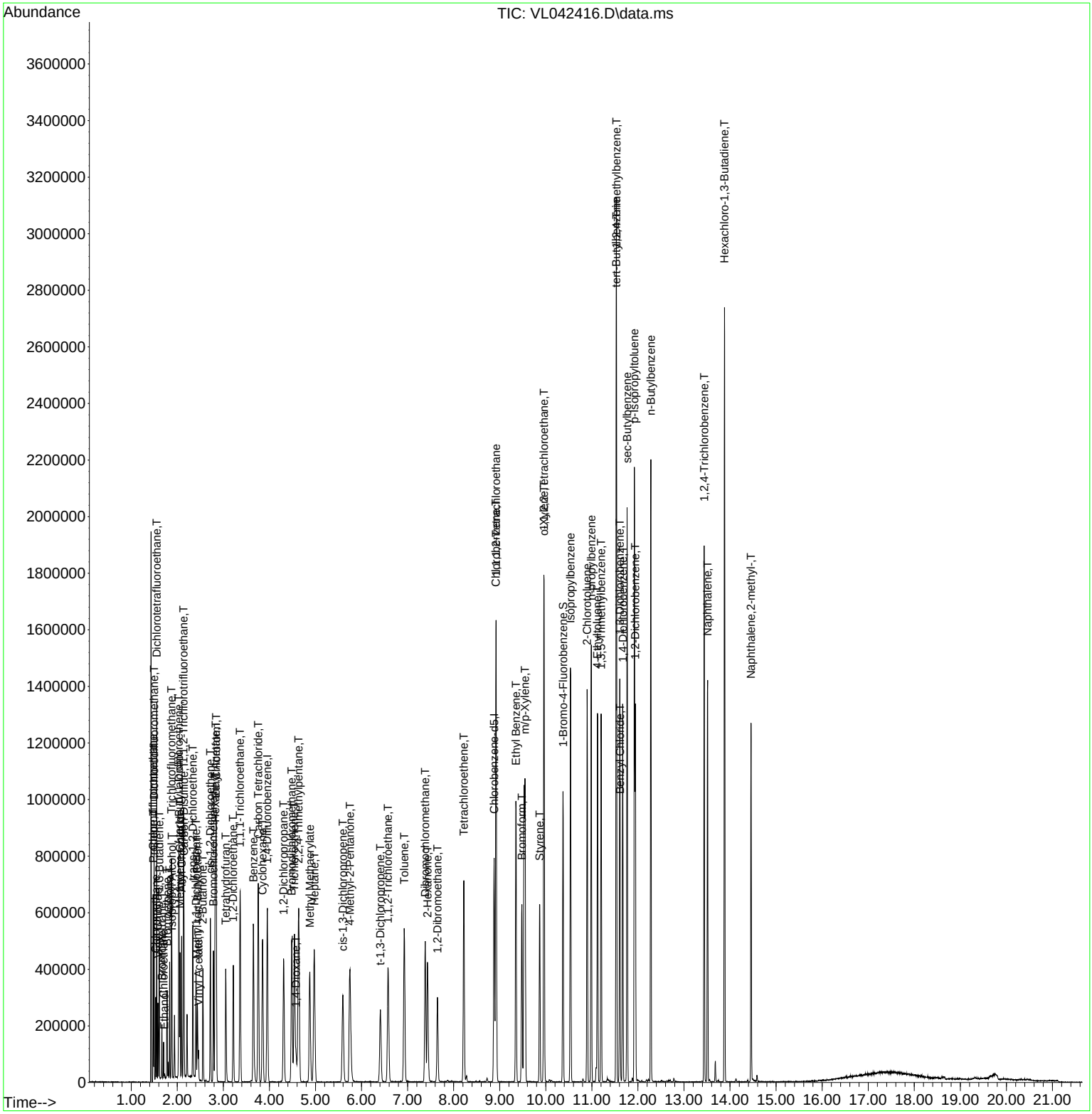
(#) = qualifier out of range (m) = manual integration (+) = signals summed

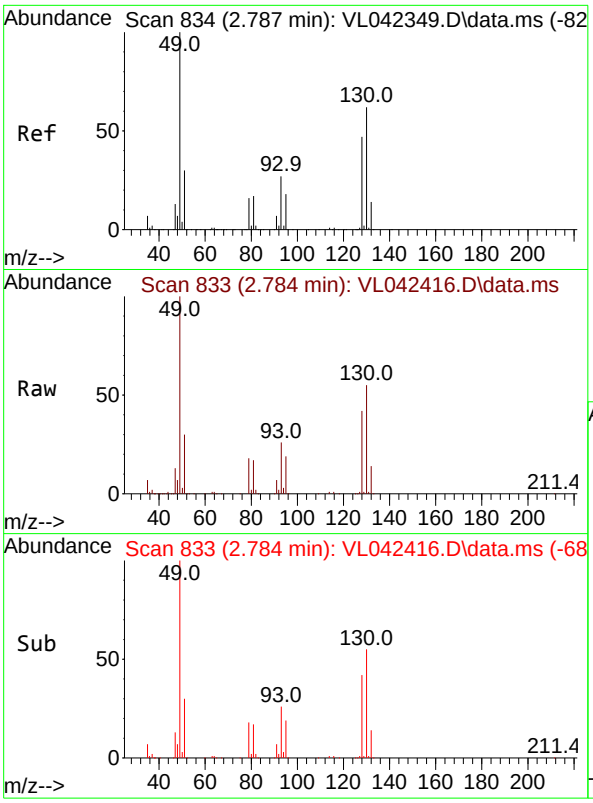
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042416.D
Acq On : 28 Apr 2025 08:44
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 29 01:31:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



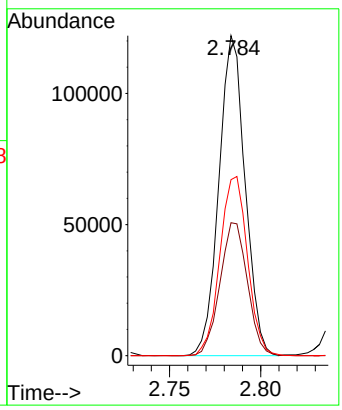


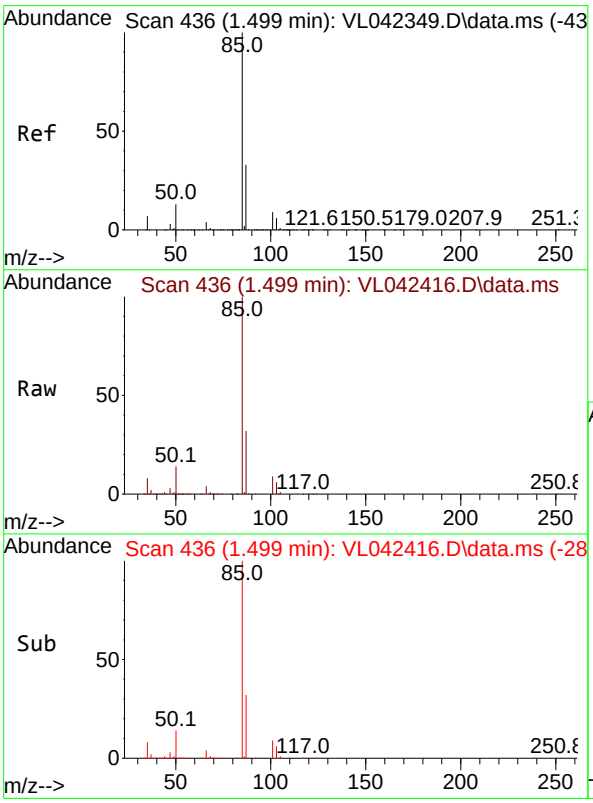
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 121989

Ion	Ratio	Lower	Upper
49	100		
128	43.6	22.8	68.4
130	59.0	29.3	88.0

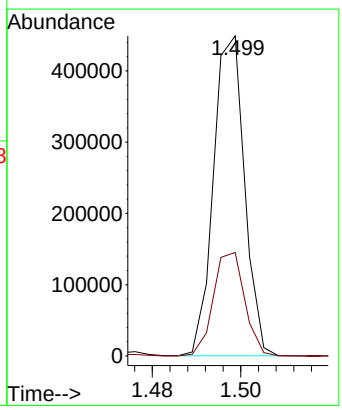


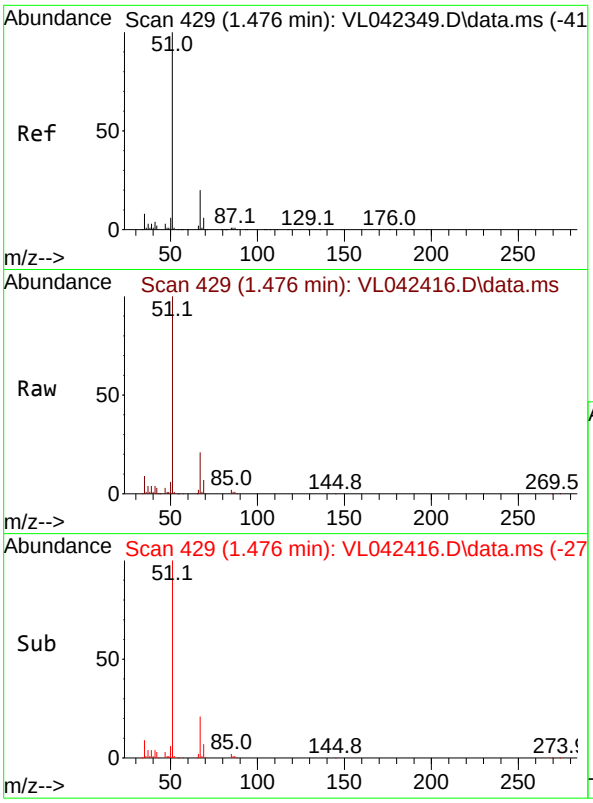


#2
Dichlorodifluoromethane
Concen: 10.165 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 85 Resp: 219089

Ion	Ratio	Lower	Upper
85	100		
87	32.3	26.6	39.8



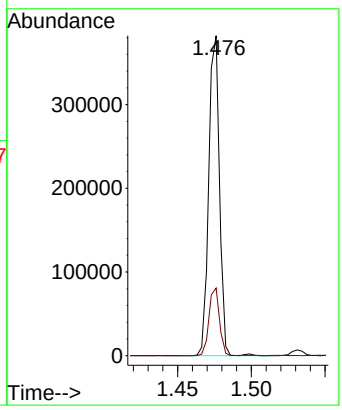


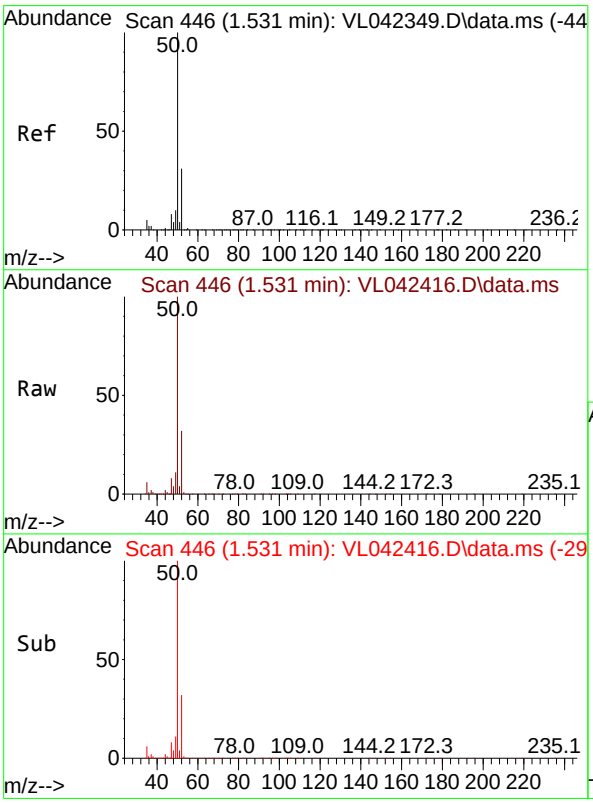
#3
Chlorodifluoromethane
Concen: 9.360 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 192111

Ion	Ratio	Lower	Upper
51	100		
67	21.0	16.2	24.4

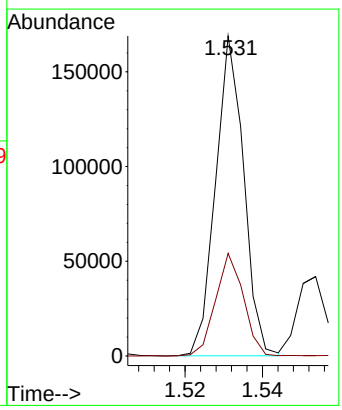


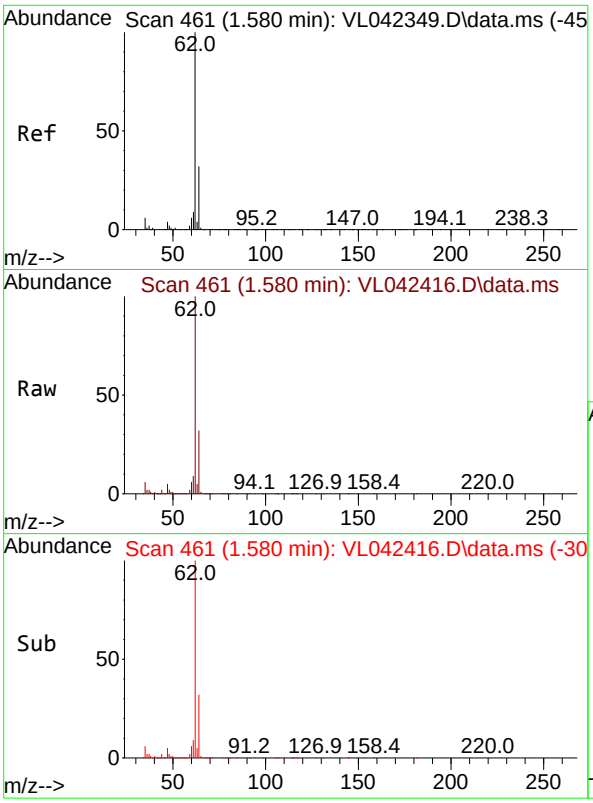


#4
Chloromethane
Concen: 9.988 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 50 Resp: 85195

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1



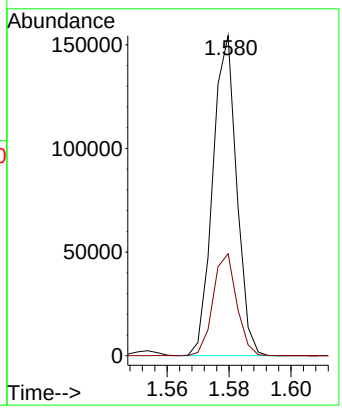


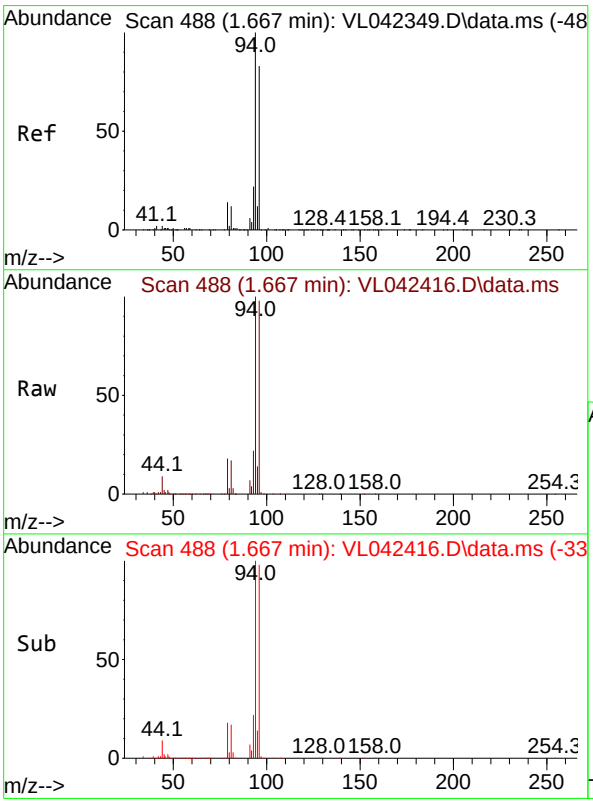
#5
Vinyl Chloride
Concen: 8.925 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 82863

Ion	Ratio	Lower	Upper
62	100		
64	31.8	25.4	38.0

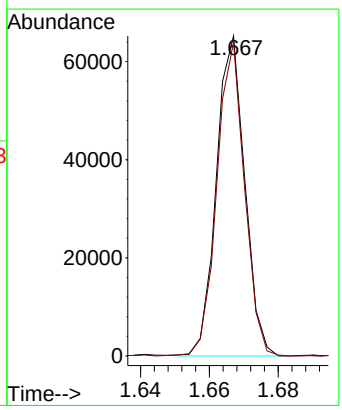


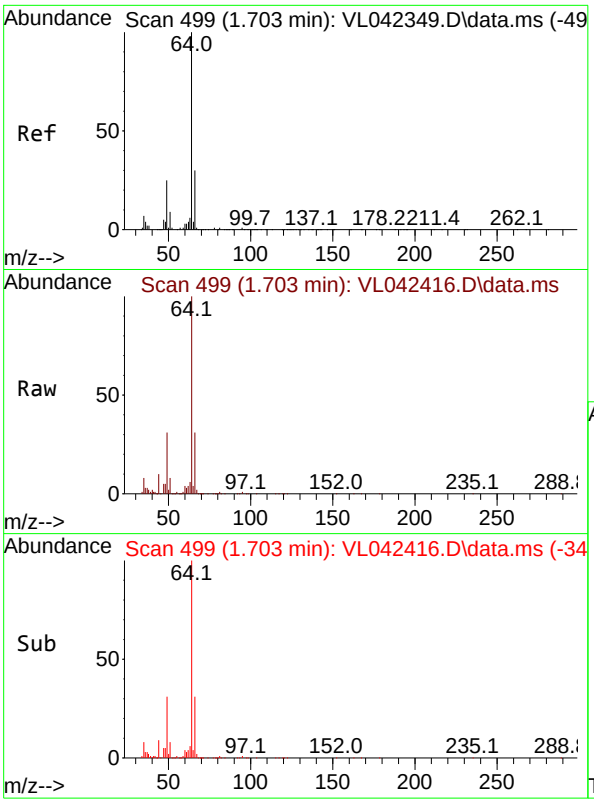


#6
Bromomethane
Concen: 9.376 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 94 Resp: 37396

Ion	Ratio	Lower	Upper
94	100		
96	97.7	66.2	99.2



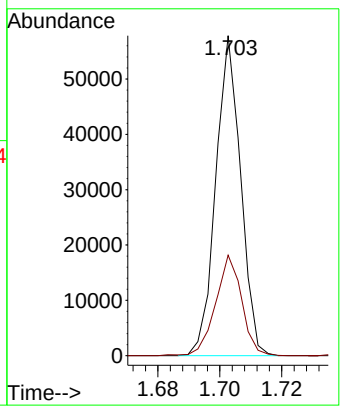


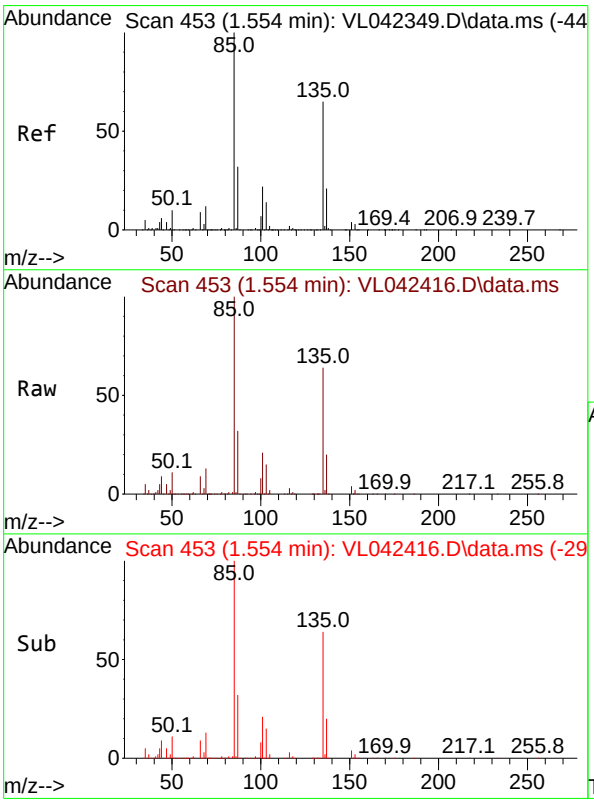
#7
Chloroethane
Concen: 9.600 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 32235

Ion	Ratio	Lower	Upper
64	100		
66	31.4	24.6	37.0

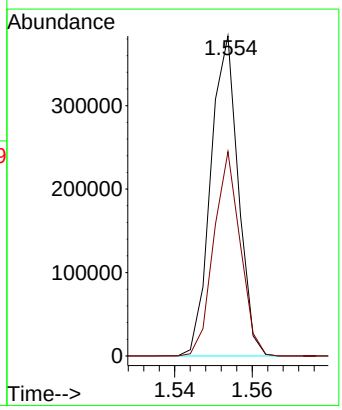


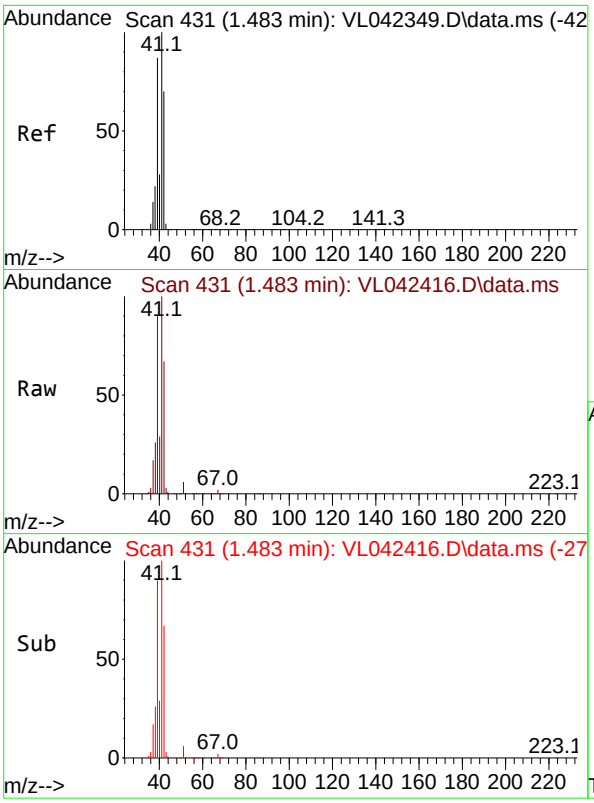


#8
Dichlorotetrafluoroethane
Concen: 10.223 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 85 Resp: 189174

Ion	Ratio	Lower	Upper
85	100		
135	61.6	52.2	78.2



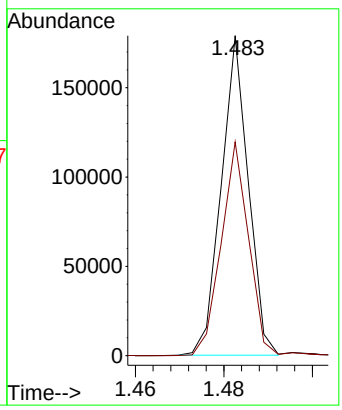


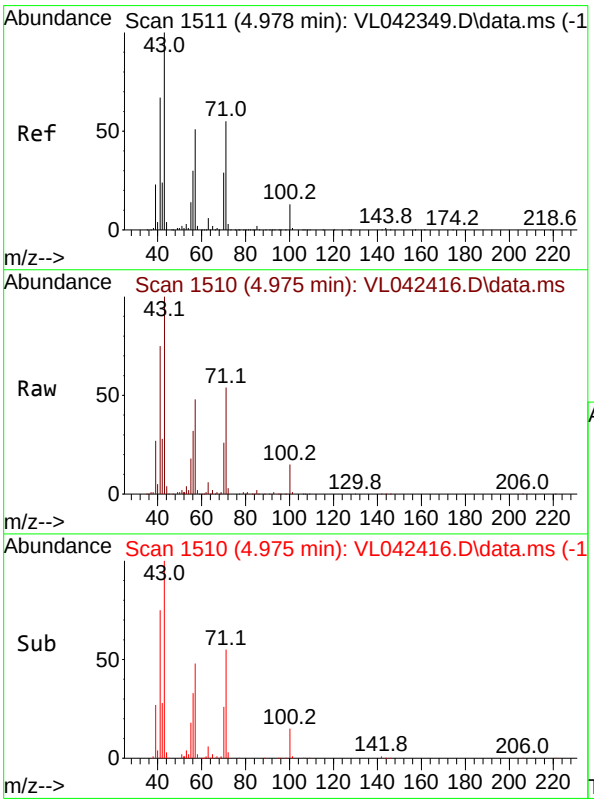
#9
Propene
Concen: 8.131 ppbv
RT: 1.483 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 75996

Ion	Ratio	Lower	Upper
41	100		
42	69.0	56.2	84.4

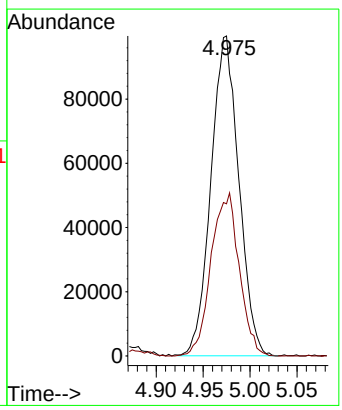


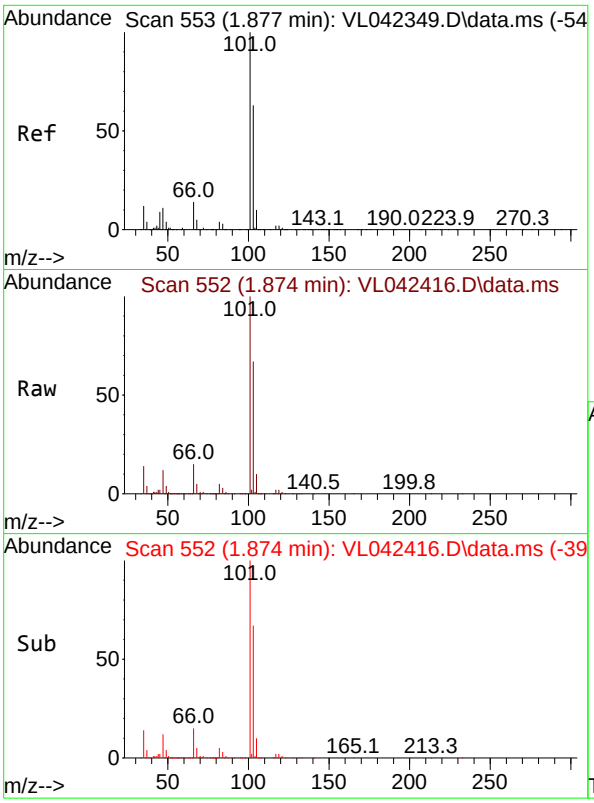


#10
Heptane
Concen: 7.837 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 205785

Ion	Ratio	Lower	Upper
43	100		
57	51.3	39.9	59.9



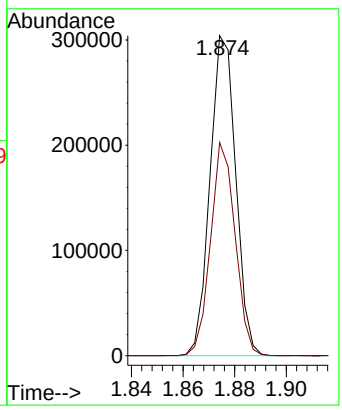


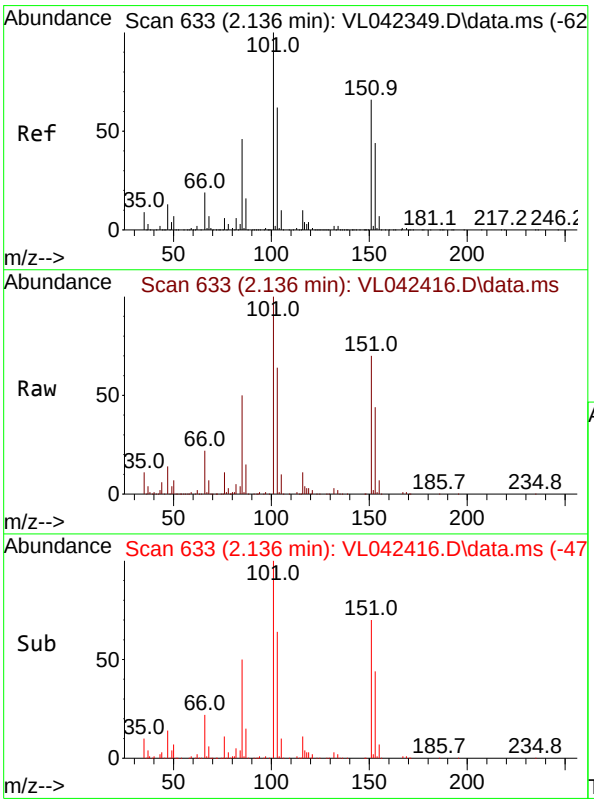
#11
Trichlorofluoromethane
Concen: 10.286 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 210830

Ion	Ratio	Lower	Upper
101	100		
103	66.6	50.1	75.1

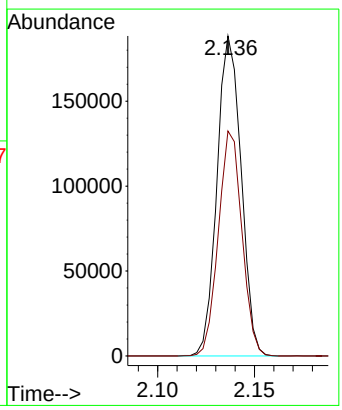


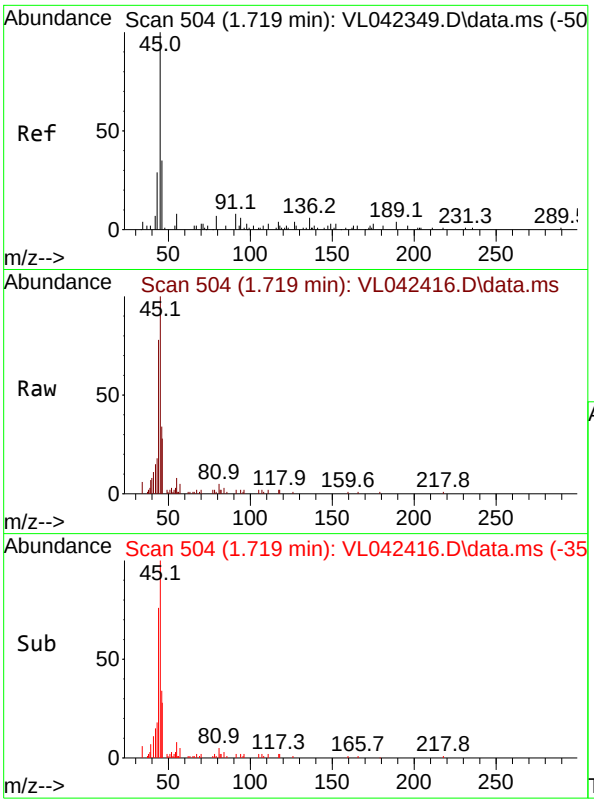


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.733 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:101 Resp: 163109

Ion	Ratio	Lower	Upper
101	100		
151	68.6	57.0	85.6



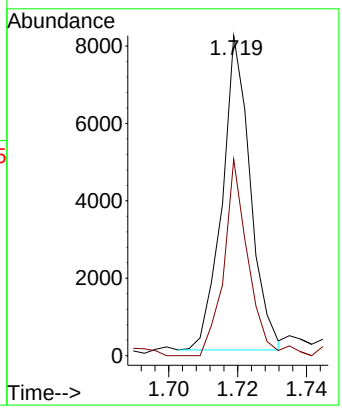


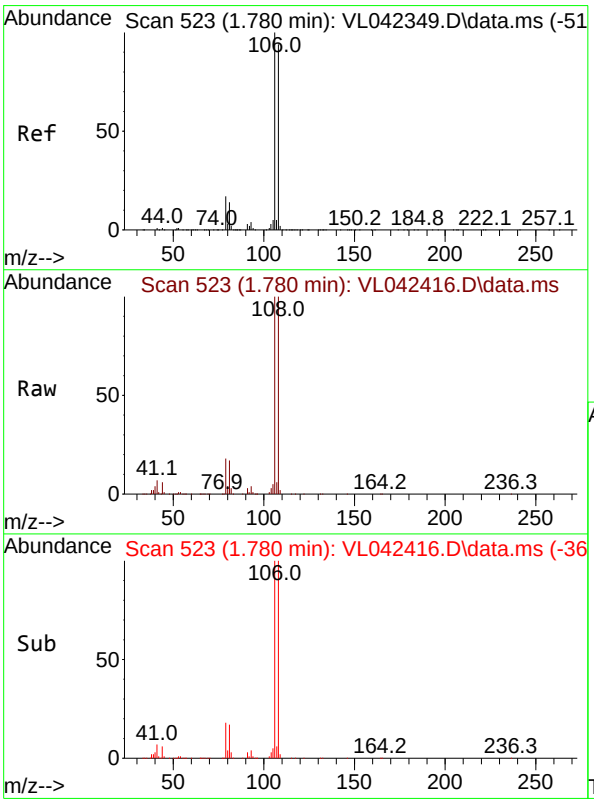
#13
Ethanol
Concen: 3.104 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 4612

Ion	Ratio	Lower	Upper
45	100		
46	56.4	21.9	87.7

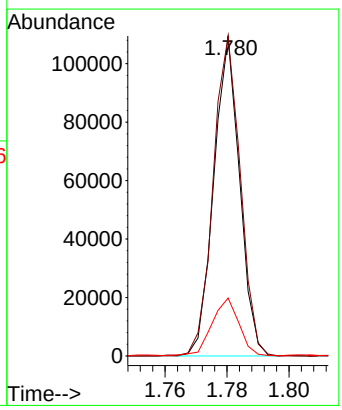


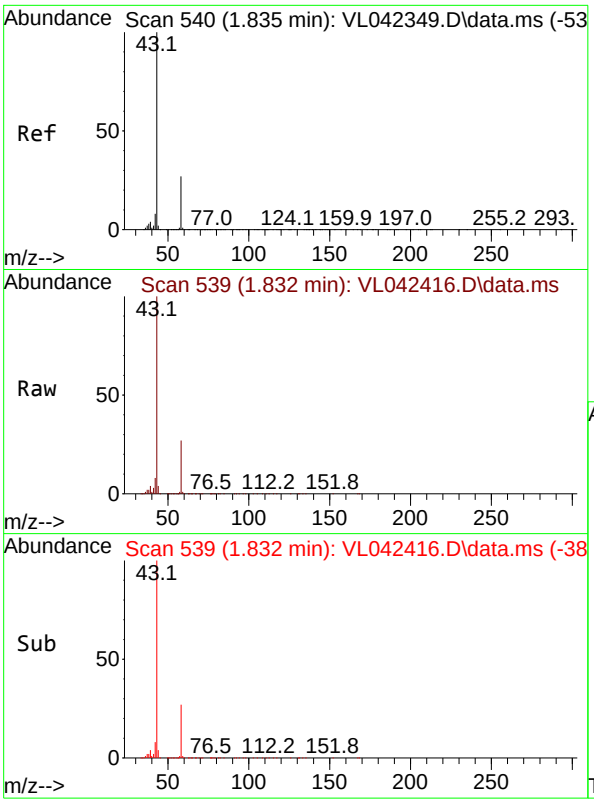


#14
Bromoethene
Concen: 10.010 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:108 Resp: 63235

Ion	Ratio	Lower	Upper
108	100		
106	105.2	85.9	128.9
79	20.7	13.9	20.9



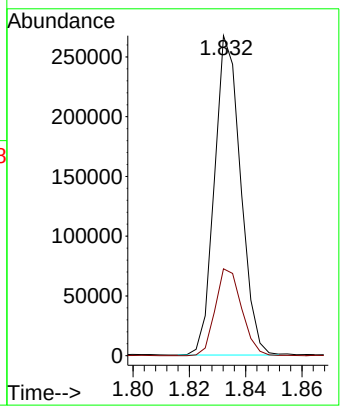


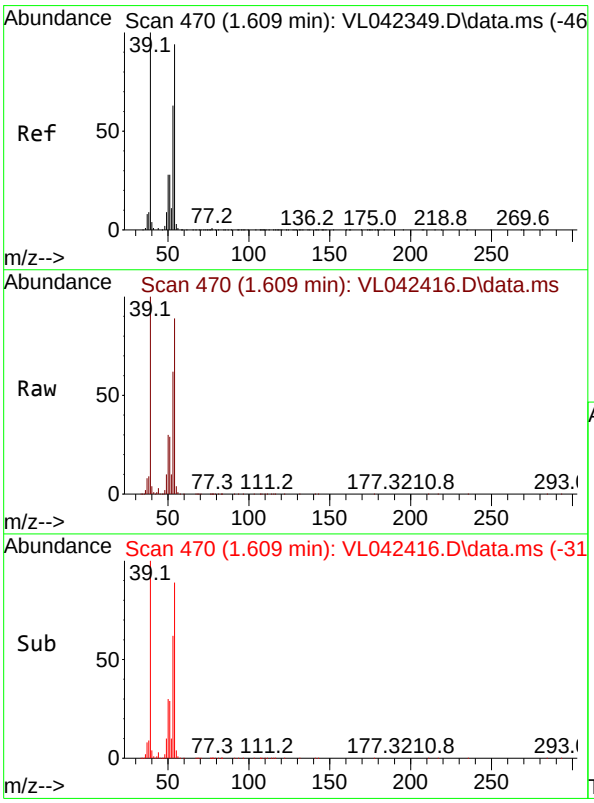
#15
Acetone
Concen: 8.623 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 172207

Ion	Ratio	Lower	Upper
43	100		
58	27.7	22.4	33.6

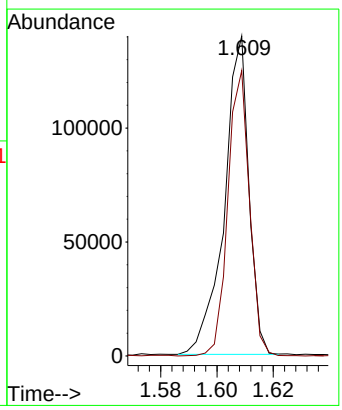


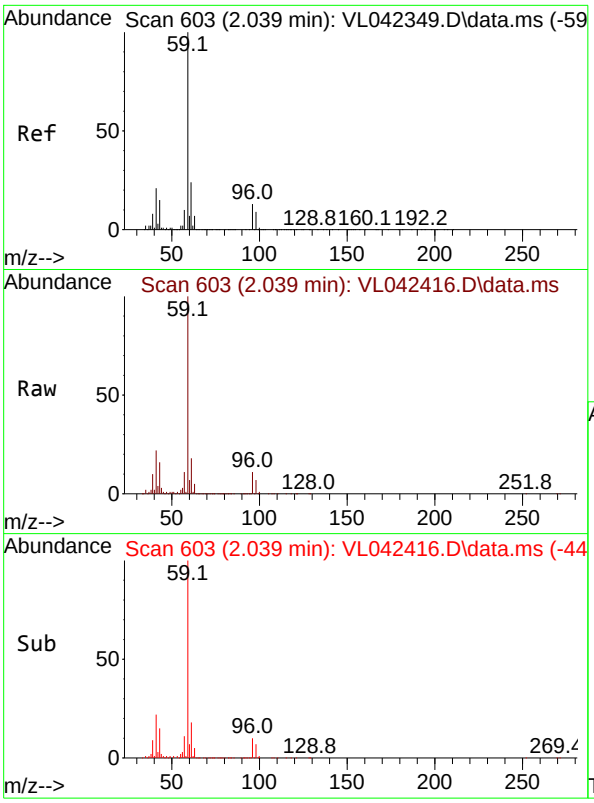


#16
1,3-Butadiene
Concen: 8.880 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 39 Resp: 84816

Ion	Ratio	Lower	Upper
39	100		
54	79.2	64.9	97.3



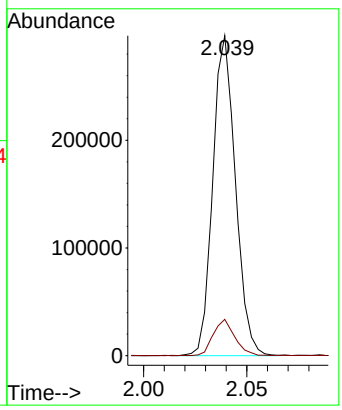


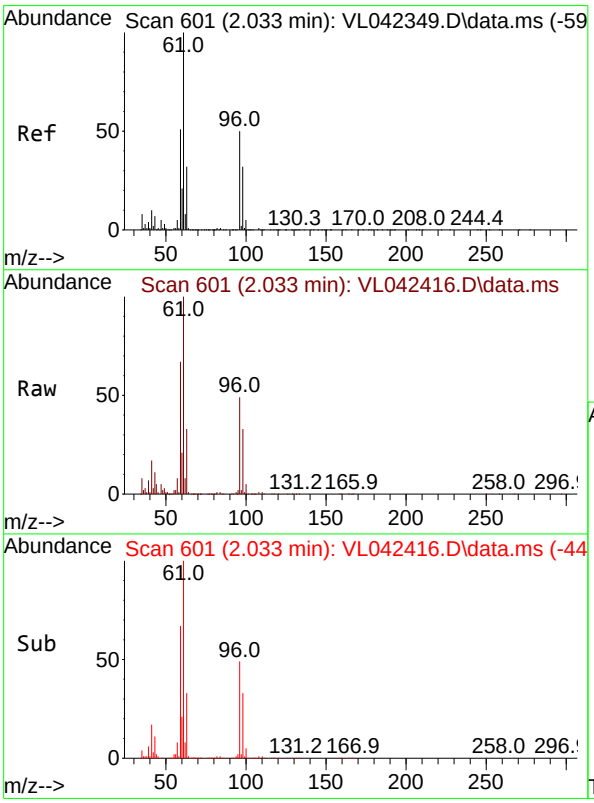
#17
tert-Butyl alcohol
Concen: 9.164 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 226804

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.7	13.1

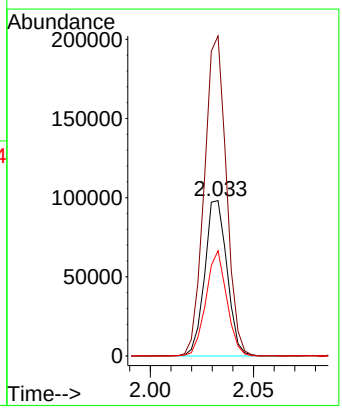


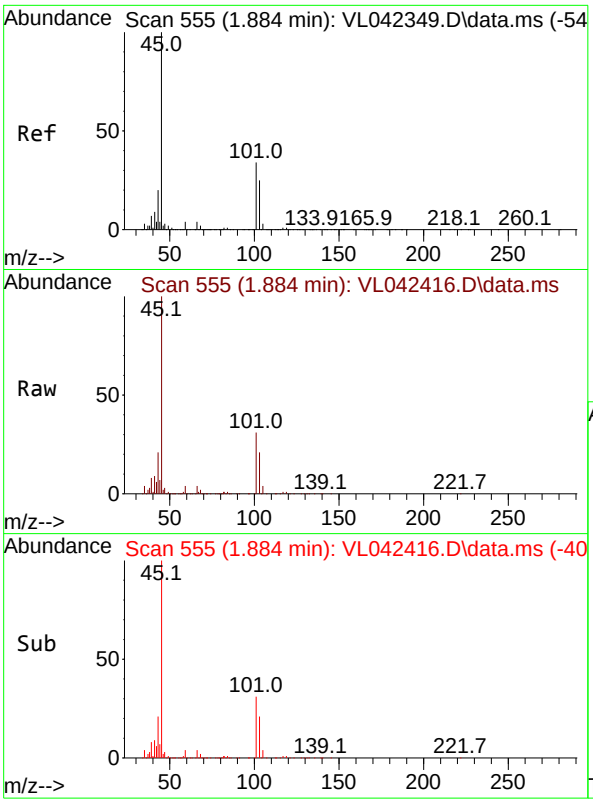


#18
1,1-Dichloroethene
Concen: 9.420 ppbv
RT: 2.033 min Scan# 601
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 96 Resp: 73751

Ion	Ratio	Lower	Upper
96	100		
61	205.9	160.2	240.2
98	67.8	51.0	76.4



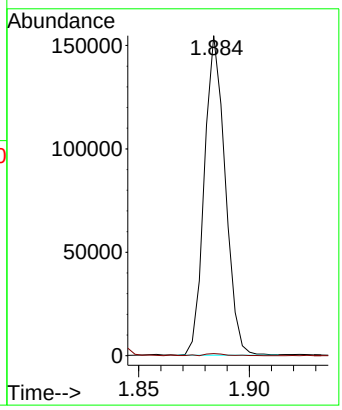


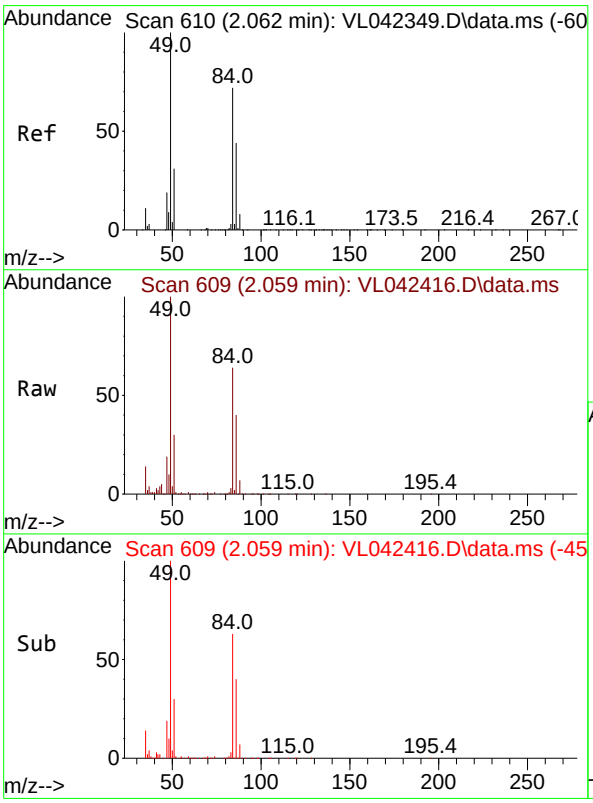
#19
Isopropyl Alcohol
Concen: 9.105 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 101011

Ion	Ratio	Lower	Upper
45	100		
58	47.3	34.5	51.7

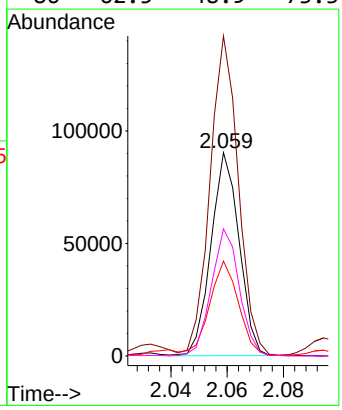


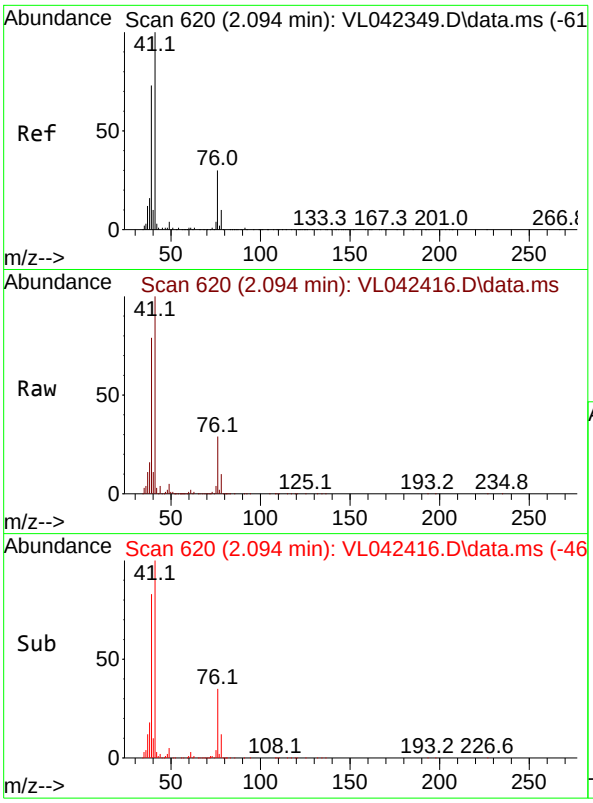


#20
Methylene Chloride
Concen: 7.992 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 84 Resp: 62506

Ion	Ratio	Lower	Upper
84	100		
49	157.3	111.6	167.4
51	46.5	35.1	52.7
86	62.5	48.9	73.3



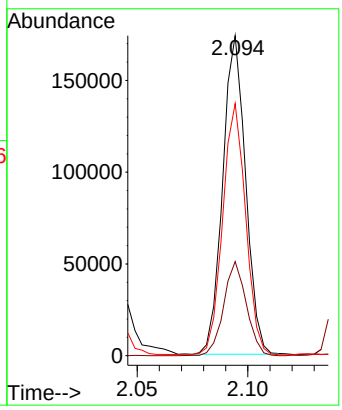


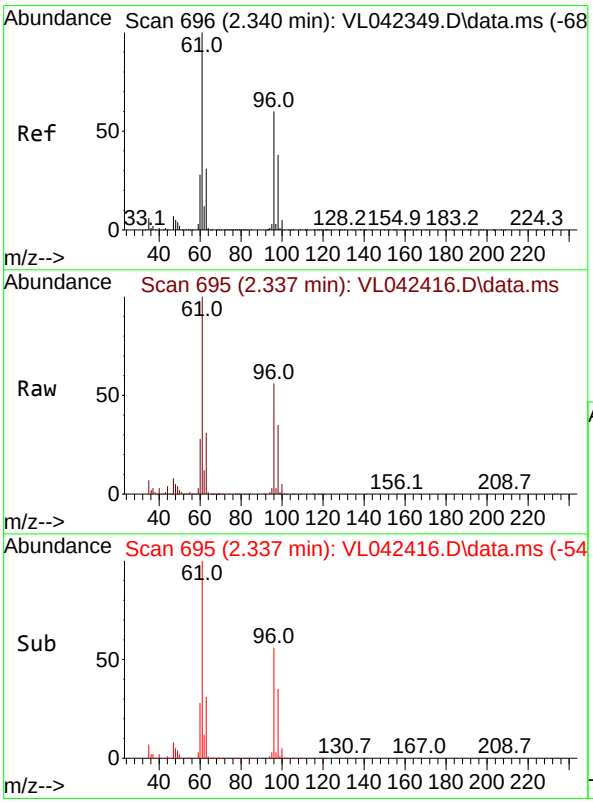
#21
Allyl Chloride
Concen: 9.081 ppbv
RT: 2.094 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 125215

Ion	Ratio	Lower	Upper
41	100		
76	29.2	24.8	37.2
39	78.4	60.6	90.8

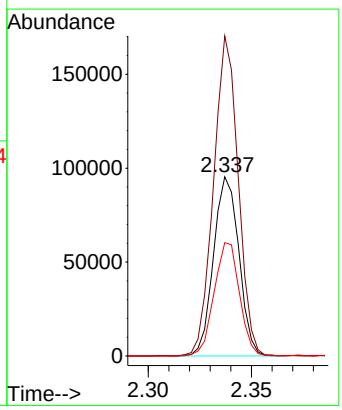


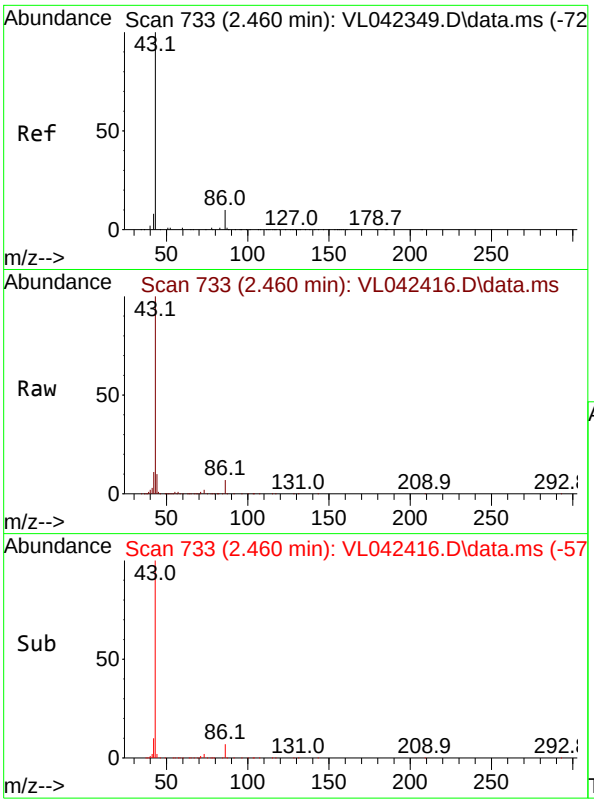


#22
trans-1,2-Dichloroethene
Concen: 9.153 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 96 Resp: 81589

Ion	Ratio	Lower	Upper
96	100		
61	178.4	133.7	200.5
98	63.2	50.3	75.5



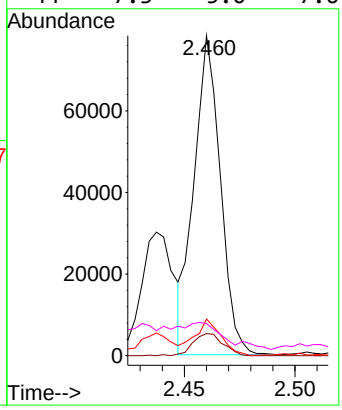


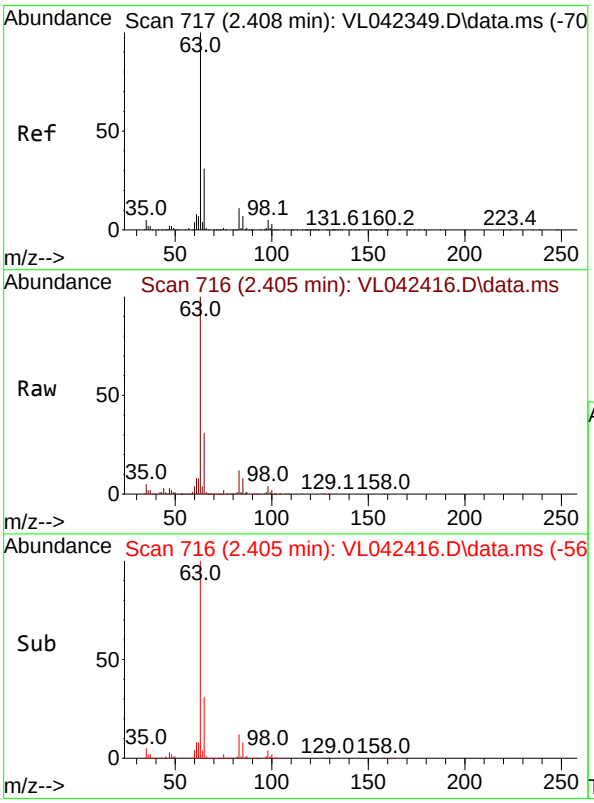
#23
Vinyl Acetate
Concen: 8.030 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 64907

Ion	Ratio	Lower	Upper
43	100		
86	6.9	6.5	9.7
42	11.1	7.8	11.8
44	7.3	5.0	7.6

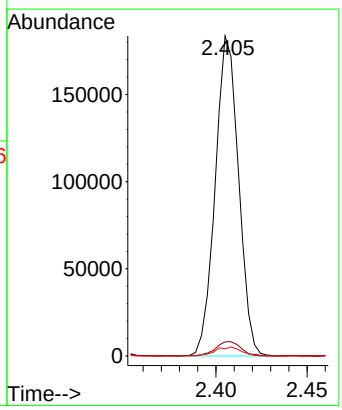


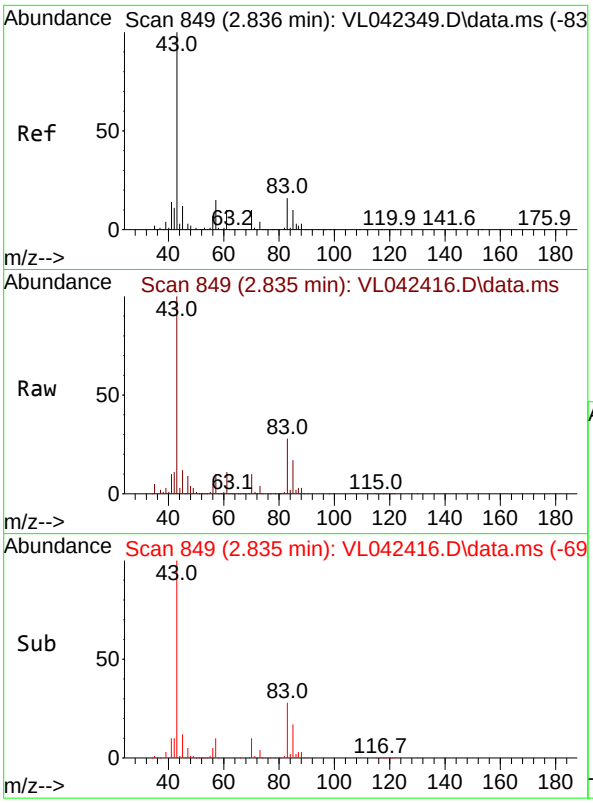


#24
1,1-Dichloroethane
Concen: 9.634 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 63 Resp: 163124

Ion	Ratio	Lower	Upper
63	100		
98	4.4	2.3	6.8
100	2.2	1.6	4.8



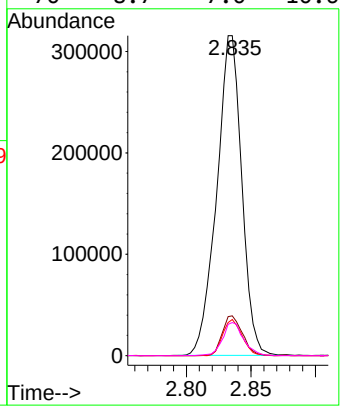


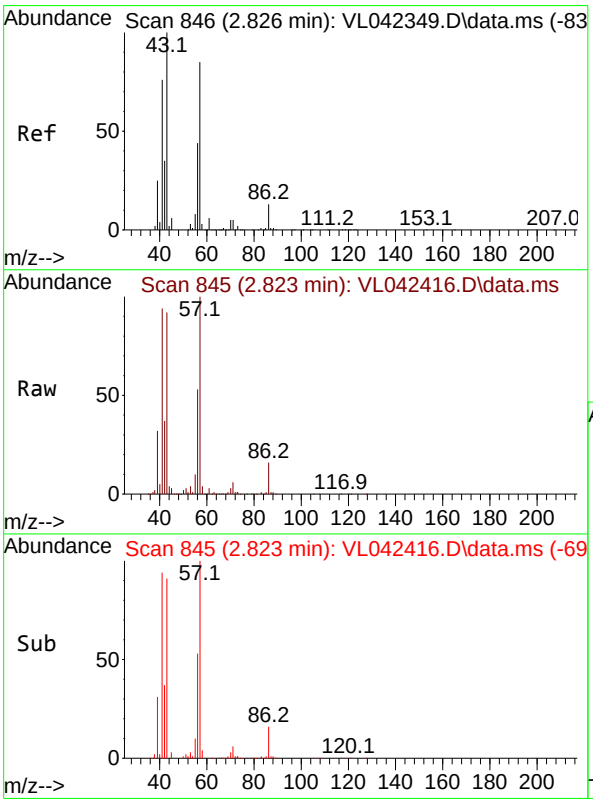
#25
Ethyl Acetate
Concen: 8.634 ppbv
RT: 2.835 min Scan# 84
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 425121

Ion	Ratio	Lower	Upper
43	100		
45	10.1	8.3	12.5
61	8.9	7.3	10.9
70	8.7	7.0	10.6

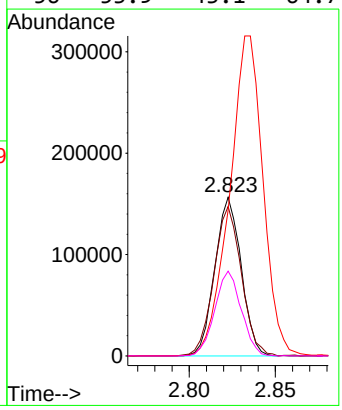


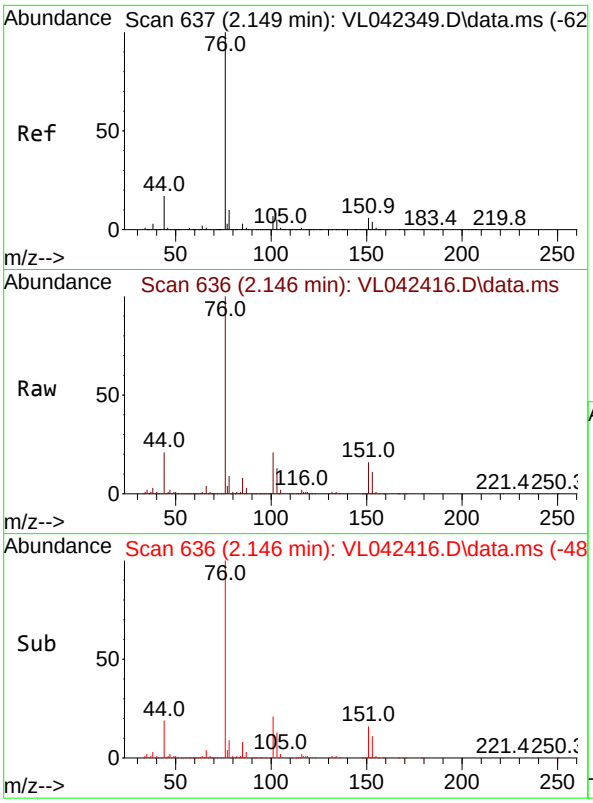


#26
Hexane
Concen: 8.370 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 57 Resp: 166789

Ion	Ratio	Lower	Upper
57	100		
41	98.4	77.9	116.9
43	256.1	208.4	312.6
56	53.9	43.1	64.7



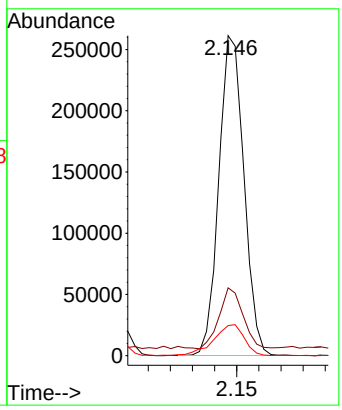


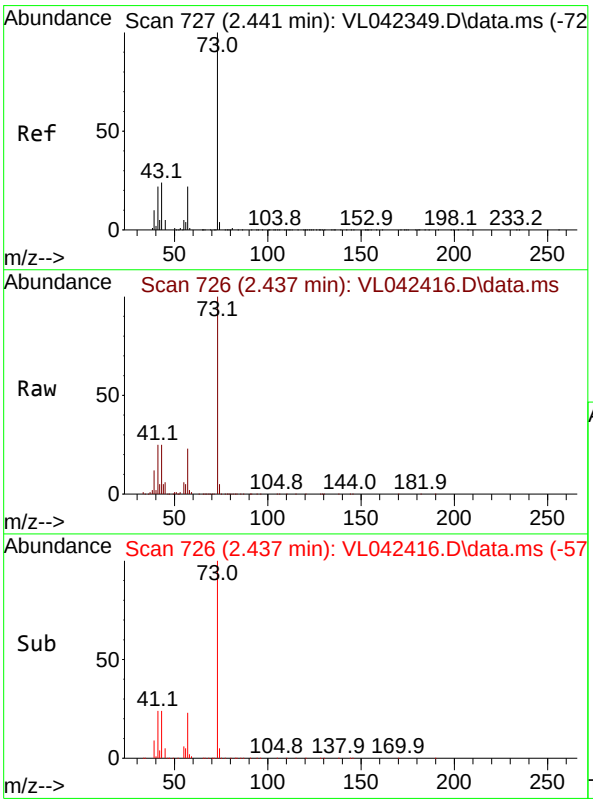
#27
Carbon Disulfide
Concen: 9.637 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 205605

Ion	Ratio	Lower	Upper
76	100		
44	22.2	15.5	23.3
78	12.1	9.3	13.9

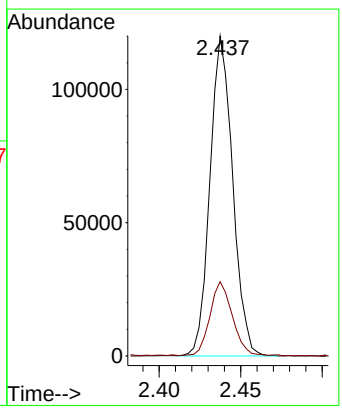


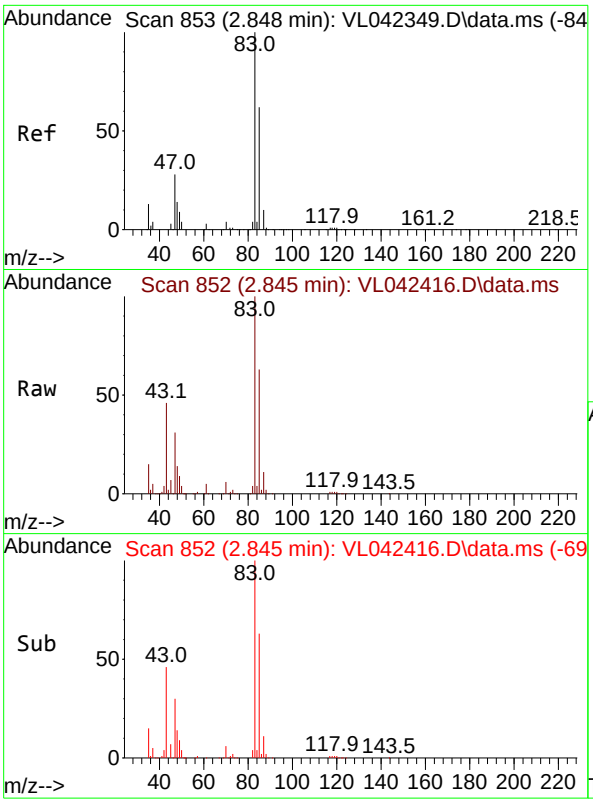


#28
Methyl tert-Butyl Ether
Concen: 8.922 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 73 Resp: 116474

Ion	Ratio	Lower	Upper
73	100		
57	23.1	21.3	31.9



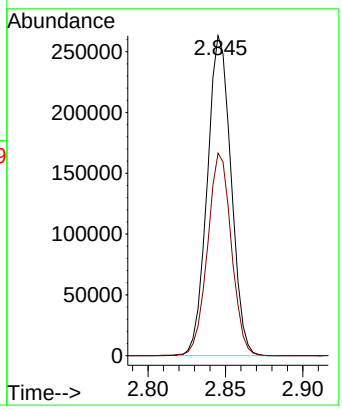


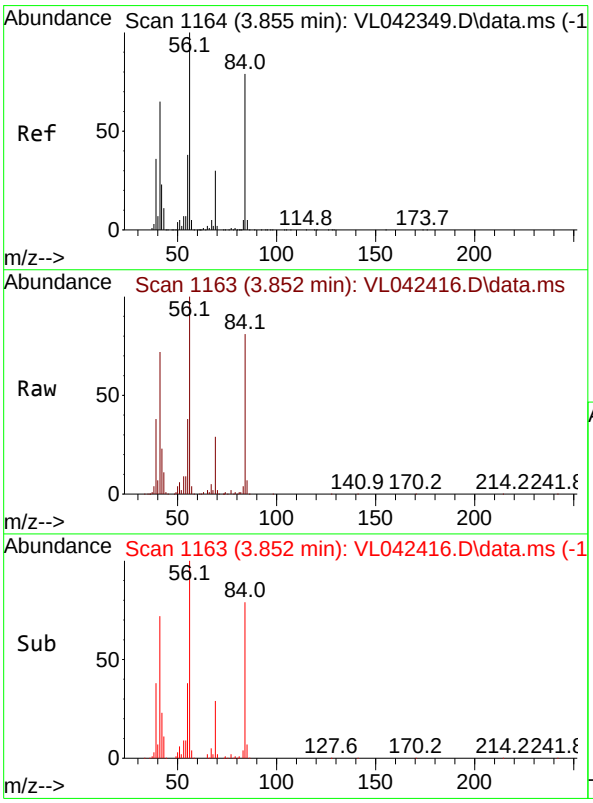
#29
Chloroform
Concen: 9.975 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 280938

Ion	Ratio	Lower	Upper
83	100		
85	63.3	50.0	75.0

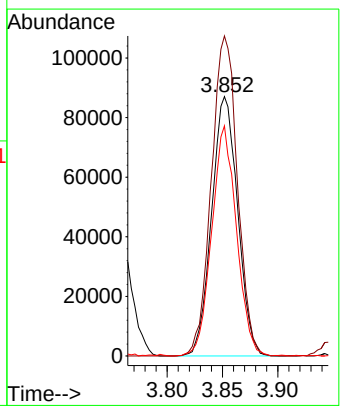


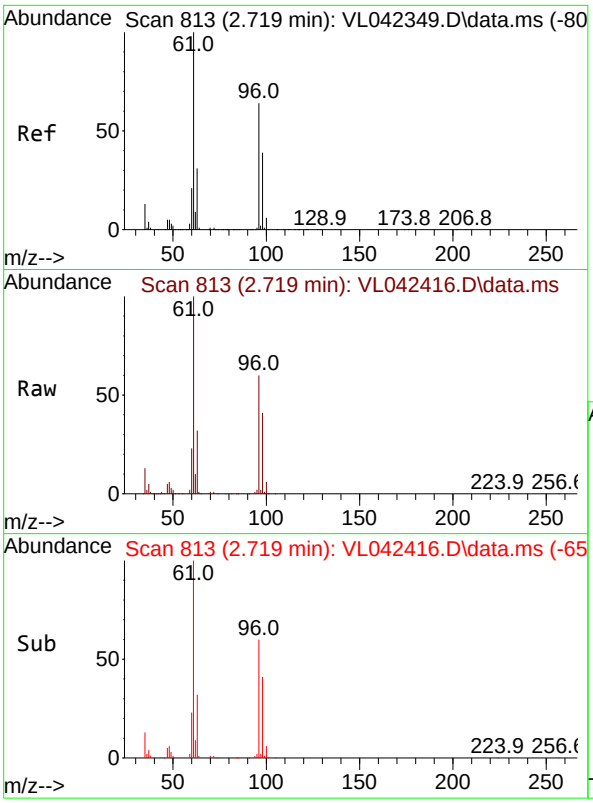


#30
Cyclohexane
Concen: 8.849 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 84 Resp: 142532

Ion	Ratio	Lower	Upper
84	100		
56	123.7	101.0	151.4
41	84.7	67.4	101.0



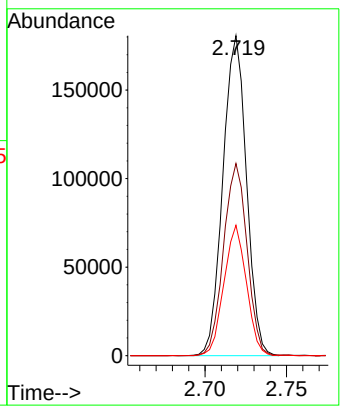


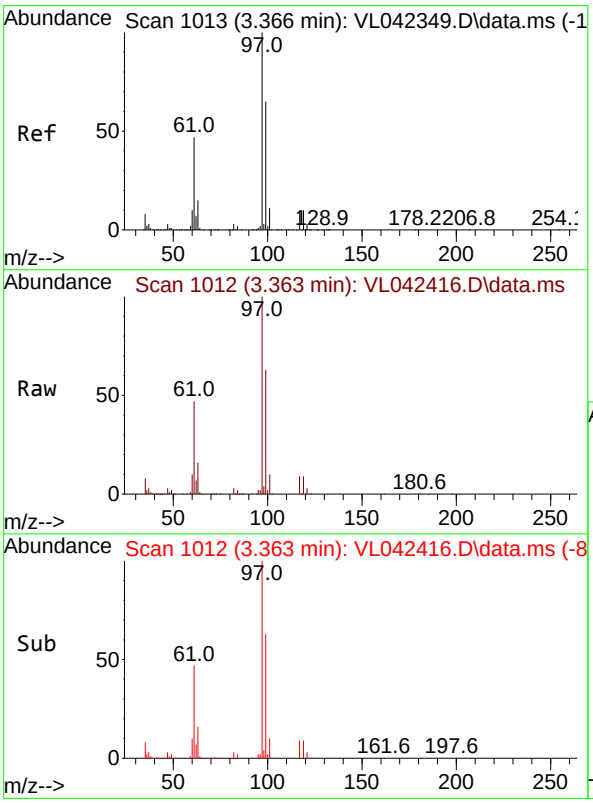
#31
cis-1,2-Dichloroethene
Concen: 9.581 ppbv
RT: 2.719 min Scan# 8
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 181514

Ion	Ratio	Lower	Upper
61	100		
96	60.1	50.8	76.2
98	40.8	30.9	46.3

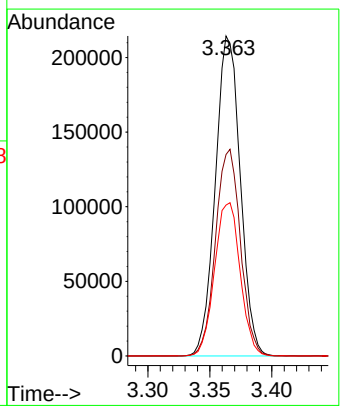


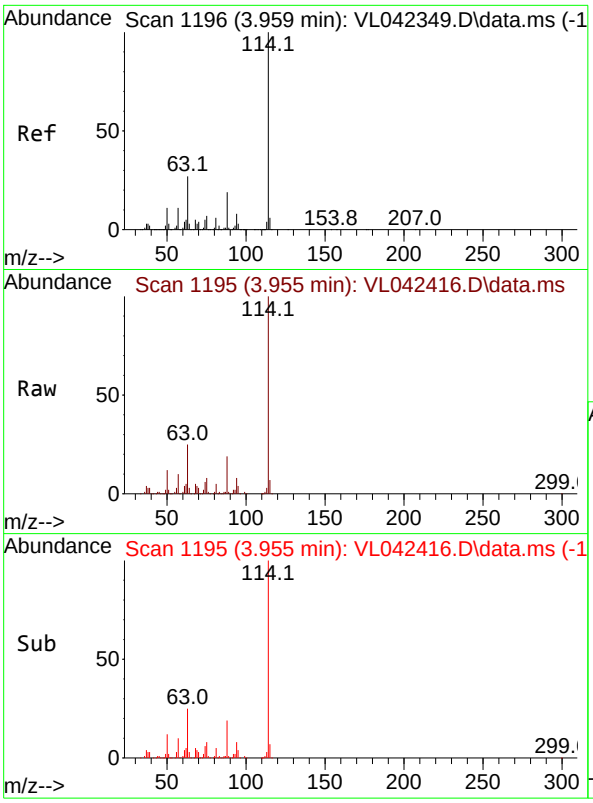


#32
1,1,1-Trichloroethane
Concen: 9.501 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 97 Resp: 301259

Ion	Ratio	Lower	Upper
97	100		
99	64.6	51.0	76.4
61	49.3	38.8	58.2



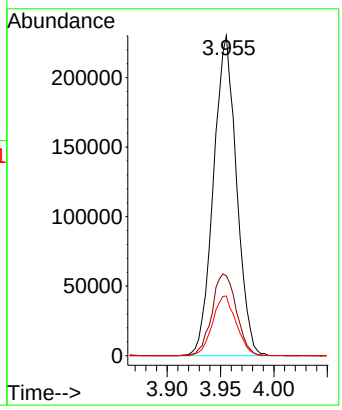


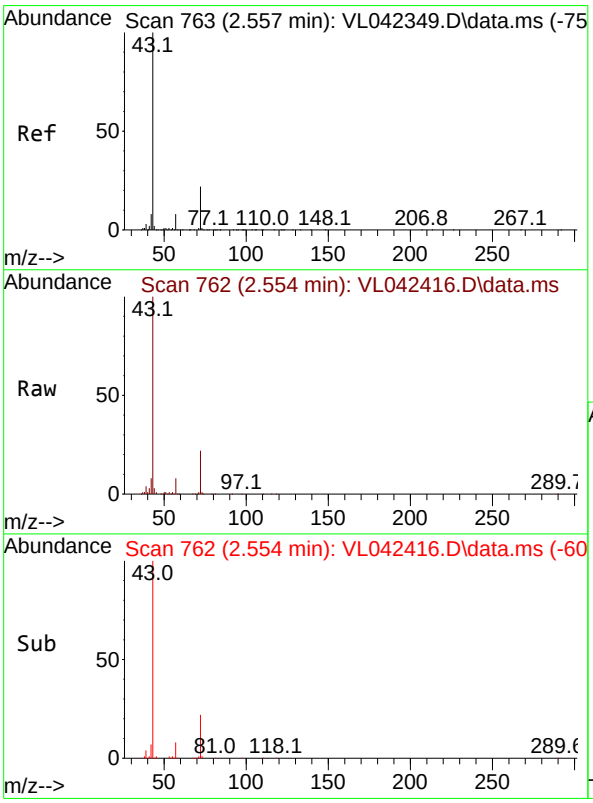
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 345031

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.2	15.5	23.3

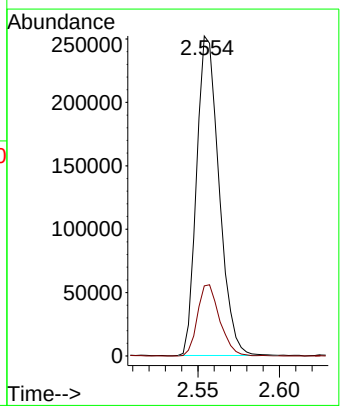


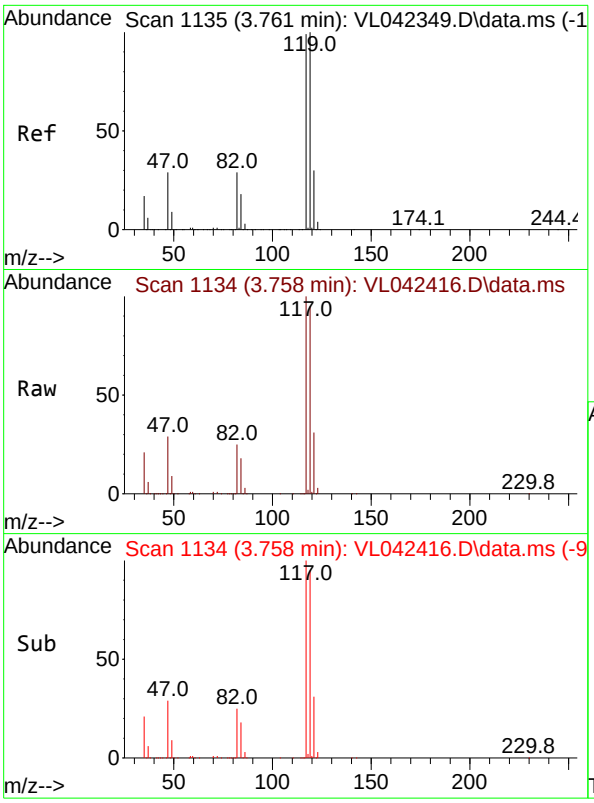


#34
2-Butanone
Concen: 8.834 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 241047

Ion	Ratio	Lower	Upper
43	100		
72	22.1	18.2	27.2



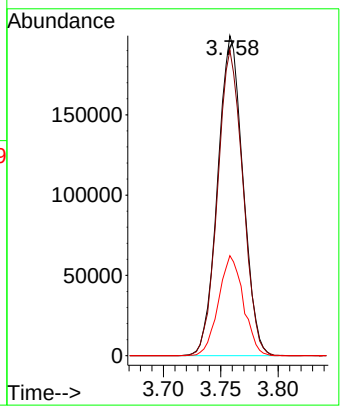


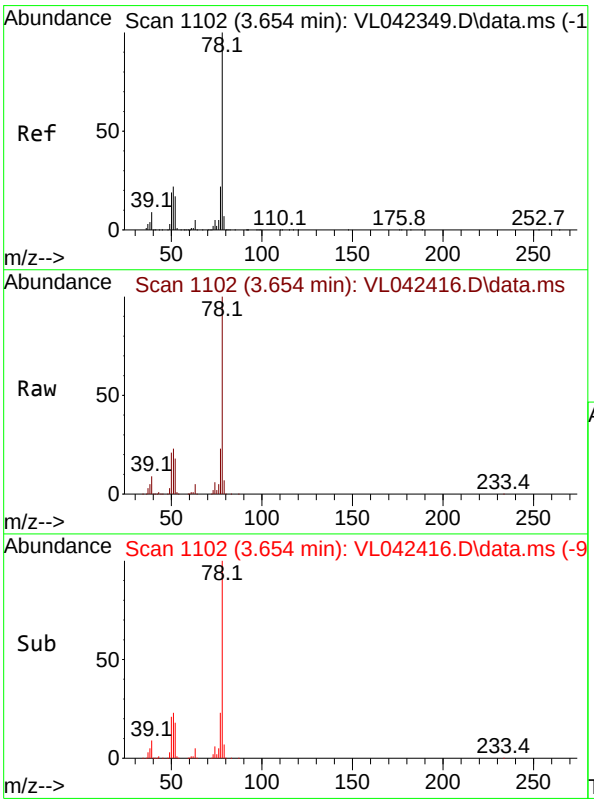
#35
Carbon Tetrachloride
Concen: 9.783 ppbv
RT: 3.758 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 305477

Ion	Ratio	Lower	Upper
117	100		
119	95.4	80.5	120.7
121	31.3	24.2	36.2

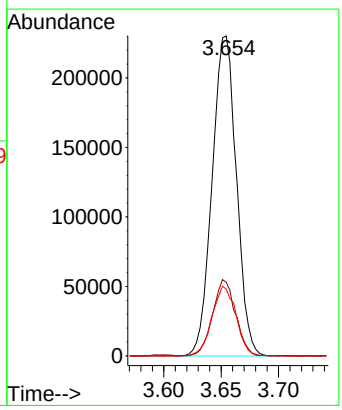


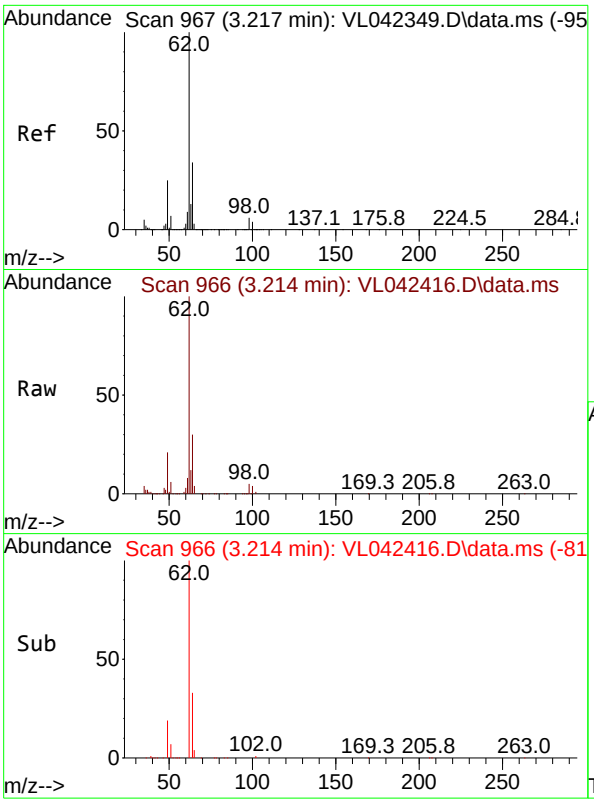


#36
Benzene
Concen: 9.102 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 78 Resp: 338736

Ion	Ratio	Lower	Upper
78	100		
77	23.0	17.4	26.0
50	20.9	15.5	23.3



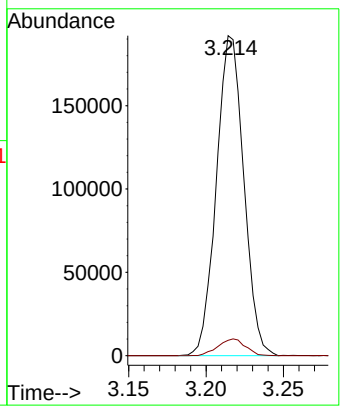


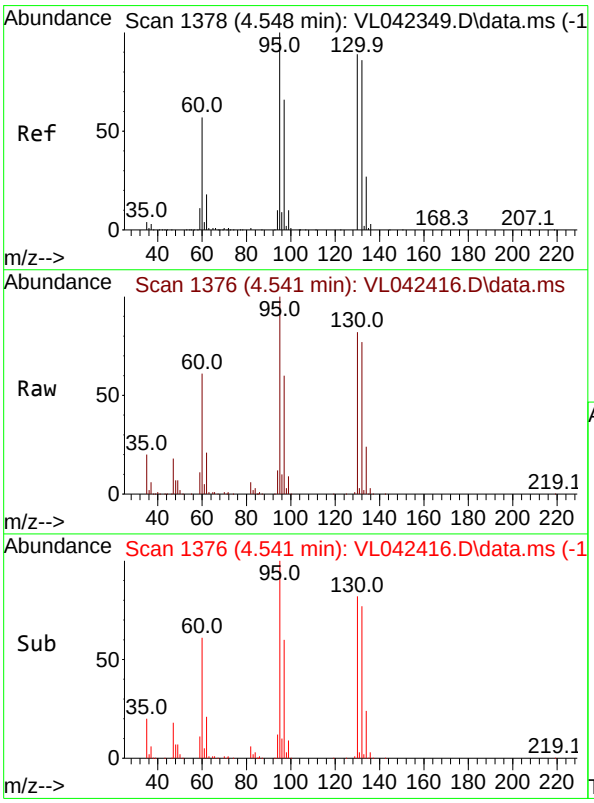
#37
1,2-Dichloroethane
Concen: 10.564 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 235966

Ion	Ratio	Lower	Upper
62	100		
98	5.3	5.1	7.7

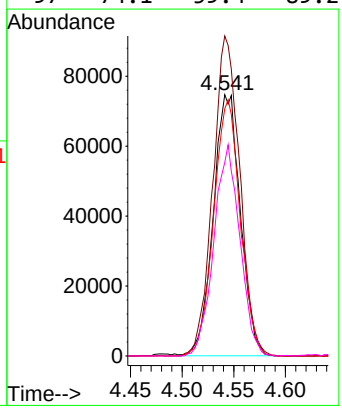


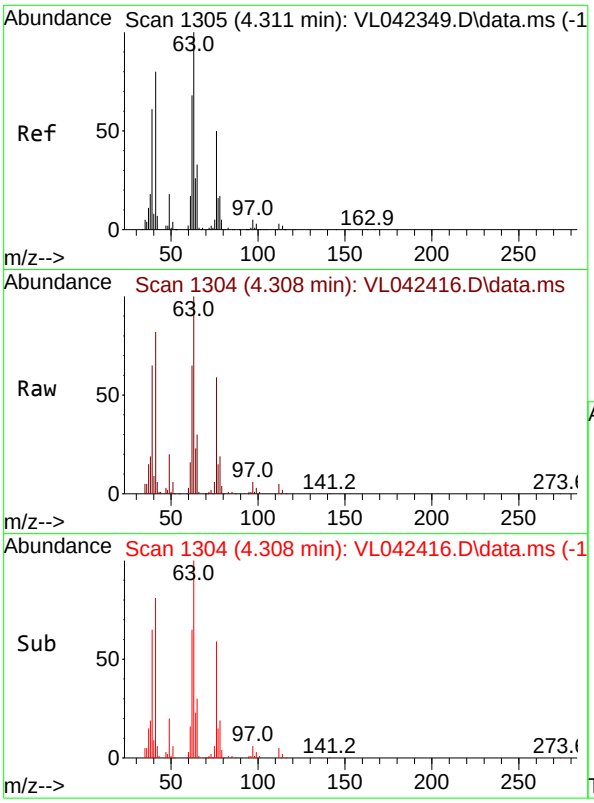


#38
Trichloroethene
Concen: 8.406 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:130 Resp: 136731

Ion	Ratio	Lower	Upper
130	100		
95	122.5	89.8	134.6
132	94.7	77.7	116.5
97	74.1	59.4	89.2



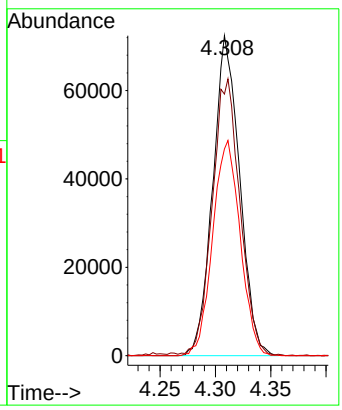


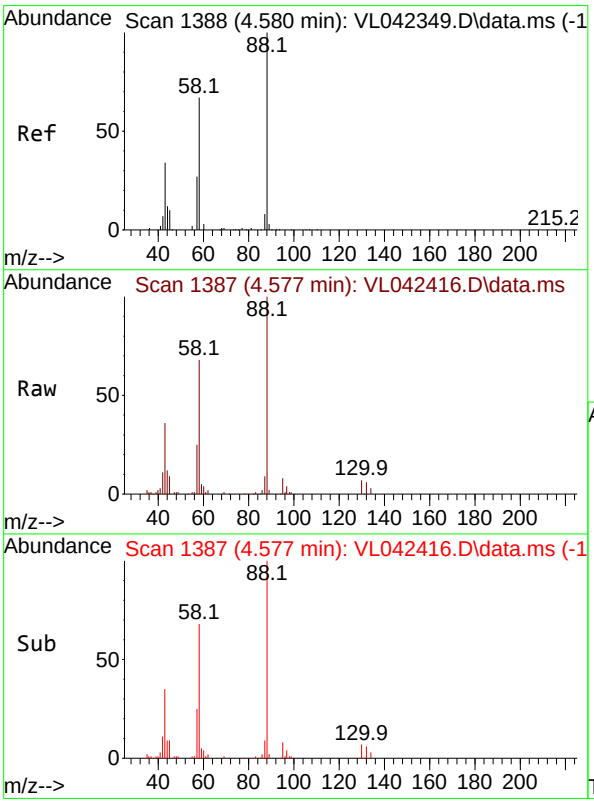
#39
1,2-Dichloropropane
Concen: 8.813 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 122213

Ion	Ratio	Lower	Upper
63	100		
41	81.2	64.2	96.2
62	64.6	54.3	81.5

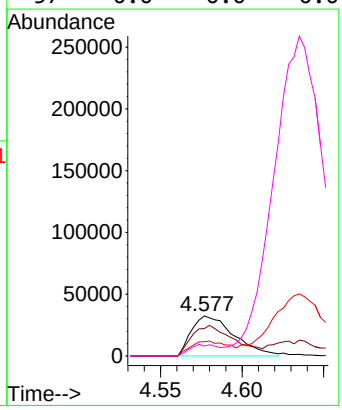


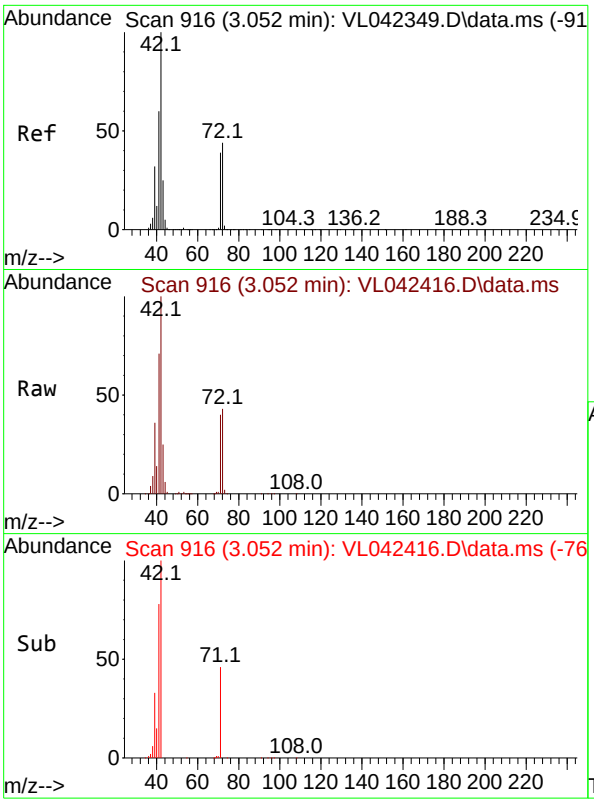


#40
1,4-Dioxane
Concen: 7.720 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 88 Resp: 58837

Ion	Ratio	Lower	Upper
88	100		
58	74.2	61.4	92.0
43	35.3	23.2	34.8#
57	0.0	0.0	0.0



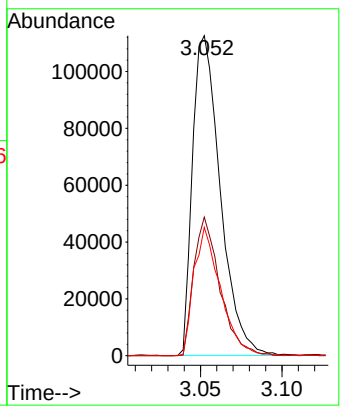


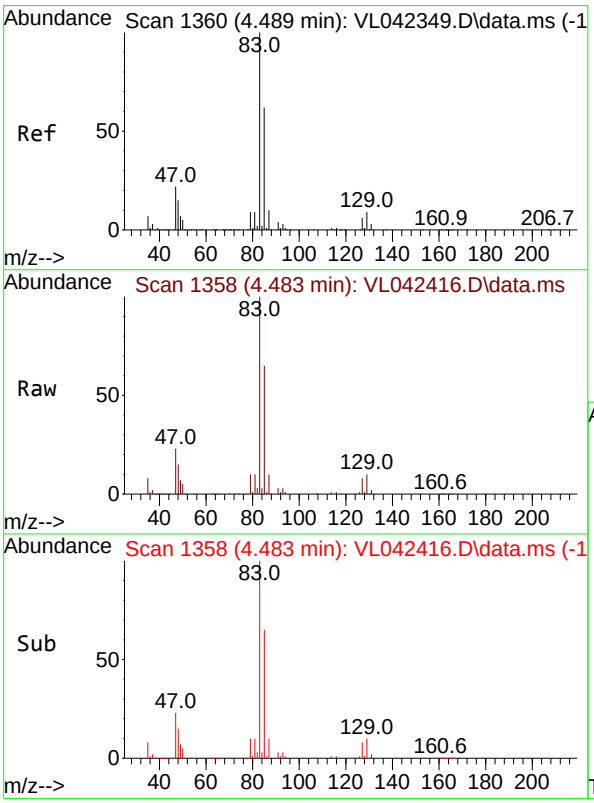
#41
Tetrahydrofuran
Concen: 8.363 ppbv
RT: 3.052 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 133063

Ion	Ratio	Lower	Upper
42	100		
72	41.2	32.3	48.5
71	38.8	31.4	47.2

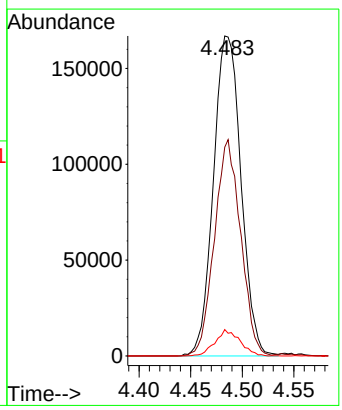


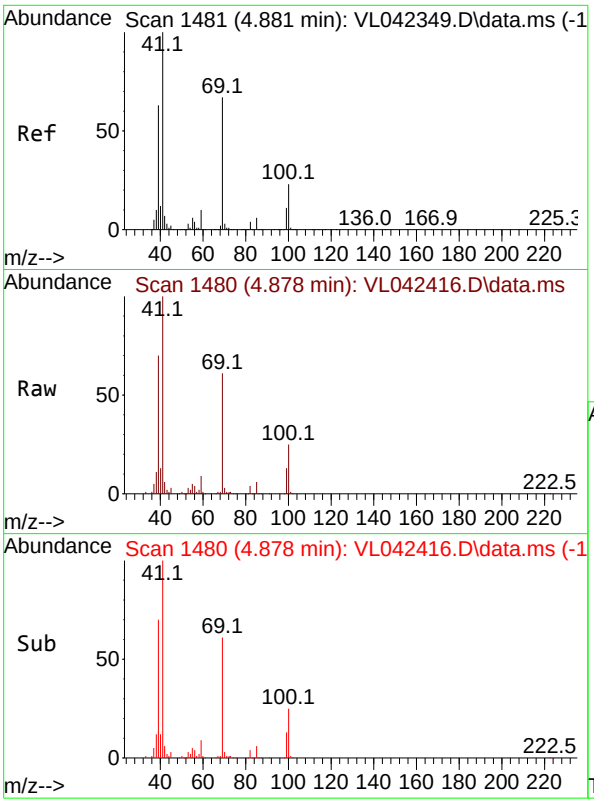


#42
Bromodichloromethane
Concen: 9.996 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 83 Resp: 310726

Ion	Ratio	Lower	Upper
83	100		
85	65.3	49.7	74.5
127	8.3	5.1	7.7#



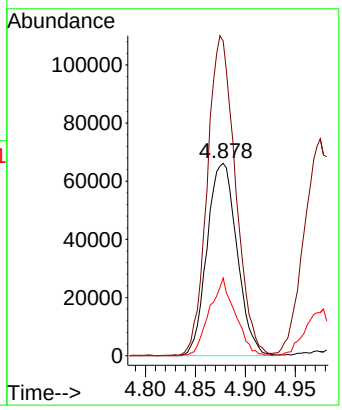


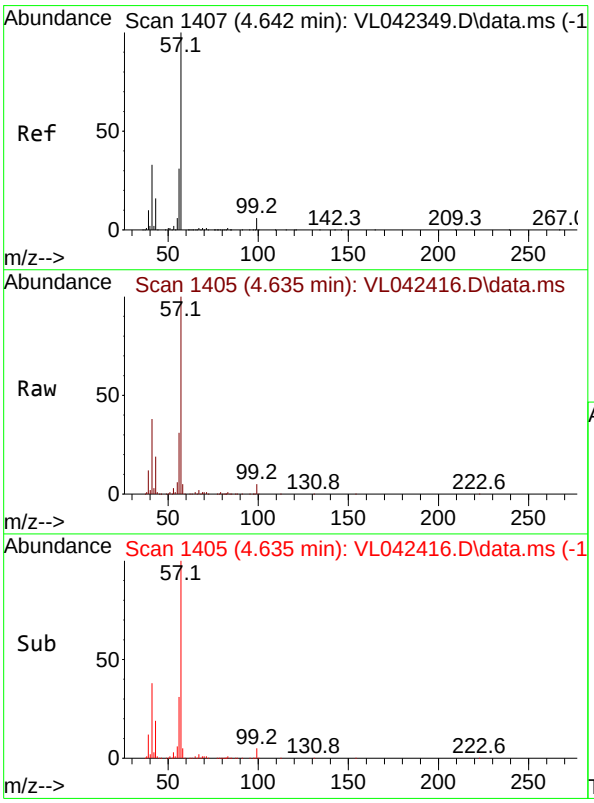
#43
Methyl Methacrylate
Concen: 8.230 ppbv
RT: 4.878 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 138030

Ion	Ratio	Lower	Upper
69	100		
41	156.8	118.6	177.8
100	34.8	28.2	42.2

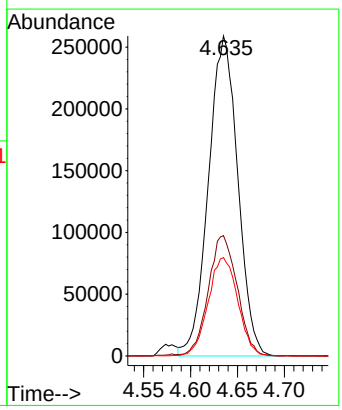


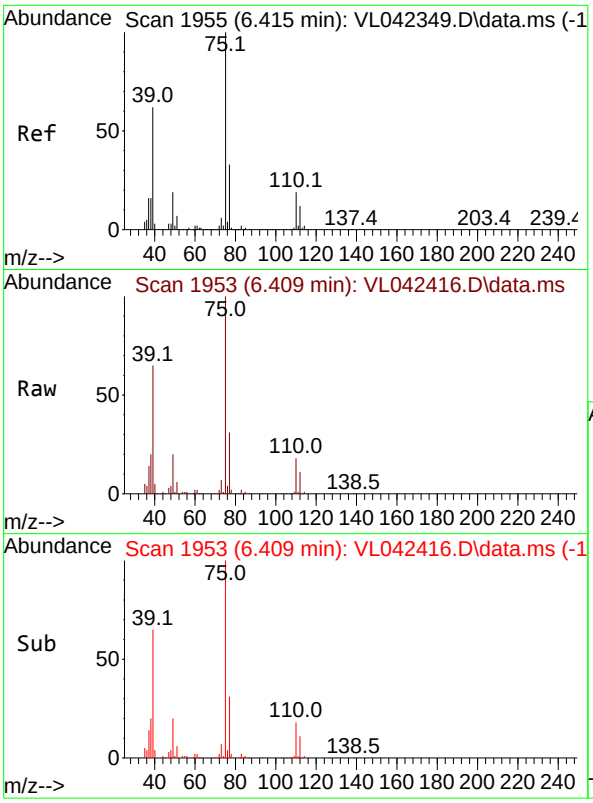


#44
2,2,4-Trimethylpentane
Concen: 8.750 ppbv
RT: 4.635 min Scan# 1405
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 57 Resp: 562403

Ion	Ratio	Lower	Upper
57	100		
41	37.4	27.2	40.8
56	31.1	25.7	38.5



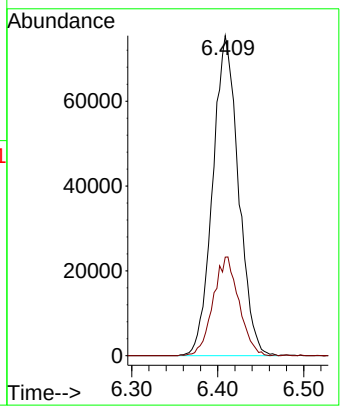


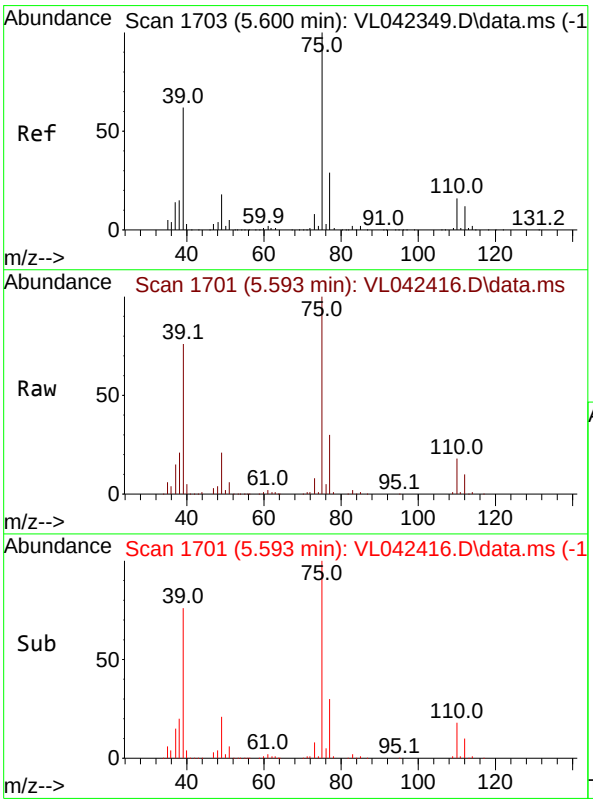
#45
t-1,3-Dichloropropene
Concen: 9.175 ppbv
RT: 6.409 min Scan# 1
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 157191

Ion	Ratio	Lower	Upper
75	100		
77	30.8	27.0	40.6

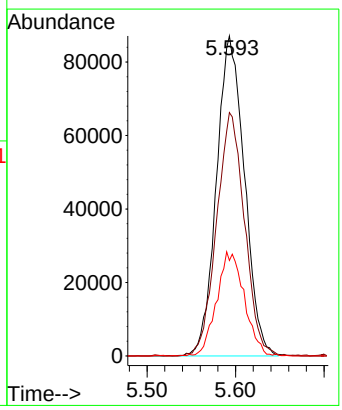


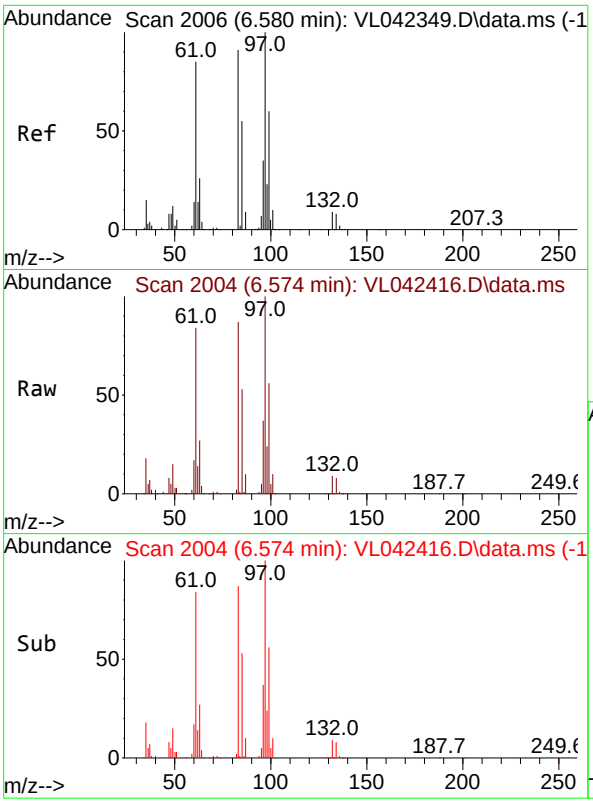


#46
cis-1,3-Dichloropropene
Concen: 9.117 ppbv
RT: 5.593 min Scan# 1701
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 75 Resp: 191165

Ion	Ratio	Lower	Upper
75	100		
39	75.9	50.0	75.0#
77	29.8	23.0	34.6



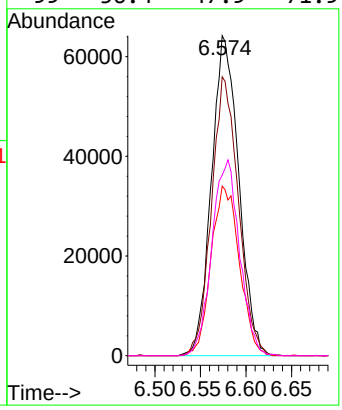


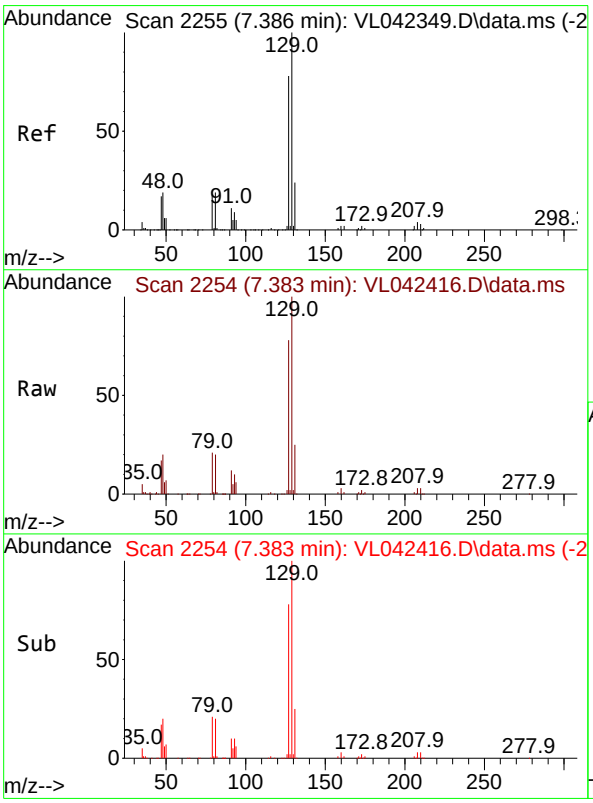
#47
1,1,2-Trichloroethane
Concen: 9.471 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 133821

Ion	Ratio	Lower	Upper
97	100		
83	87.2	72.8	109.2
85	53.0	44.2	66.4
99	56.4	47.9	71.9

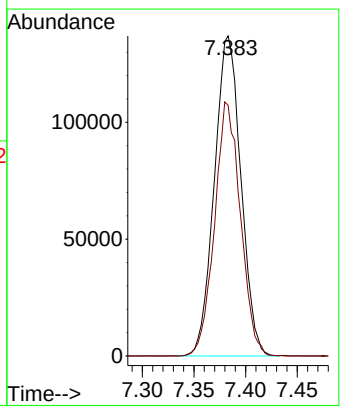


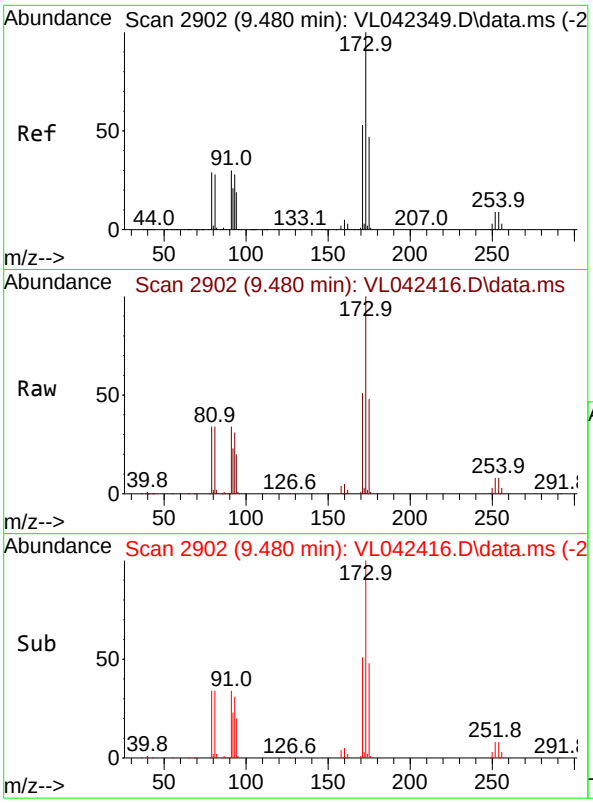


#48
Dibromochloromethane
Concen: 9.832 ppbv
RT: 7.383 min Scan# 2254
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:129 Resp: 245439

Ion	Ratio	Lower	Upper
129	100		
127	77.0	39.1	117.3



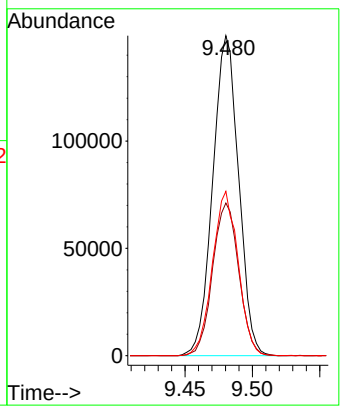


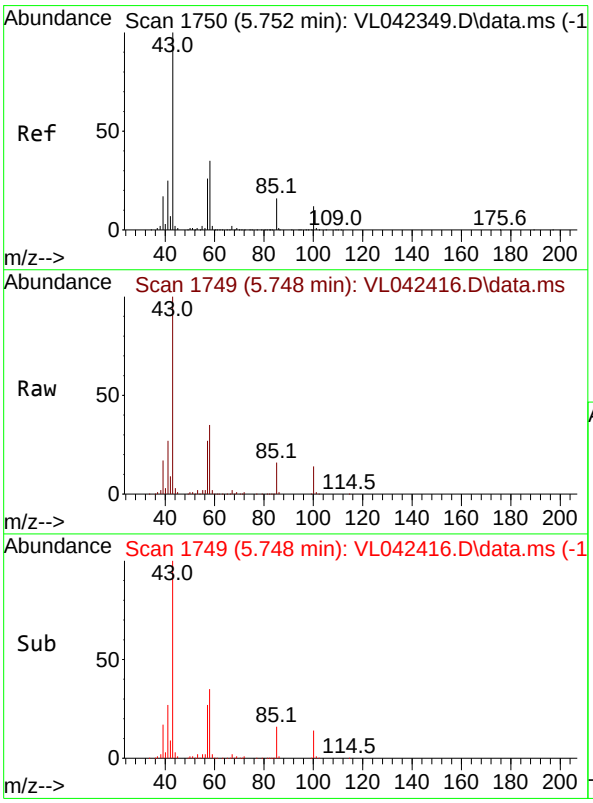
#49
Bromoform
Concen: 9.117 ppbv
RT: 9.480 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 198991

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.2	57.2
171	51.0	40.9	61.3

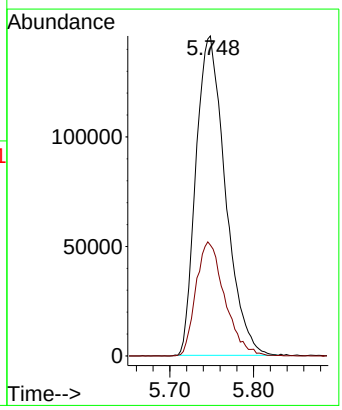


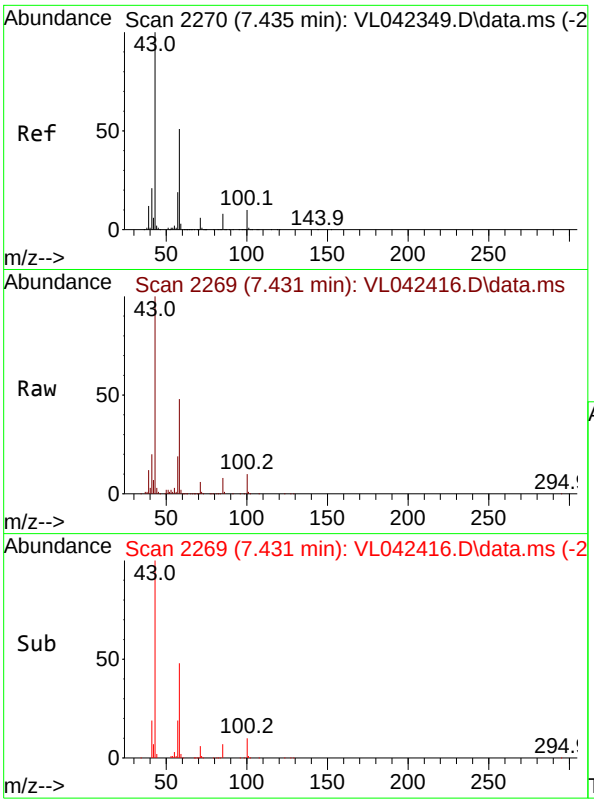


#50
4-Methyl-2-Pentanone
Concen: 7.854 ppbv
RT: 5.748 min Scan# 1749
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 43 Resp: 356129

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.6	43.0



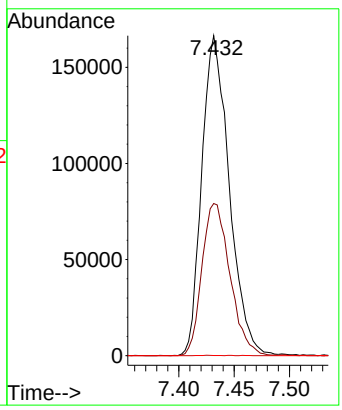


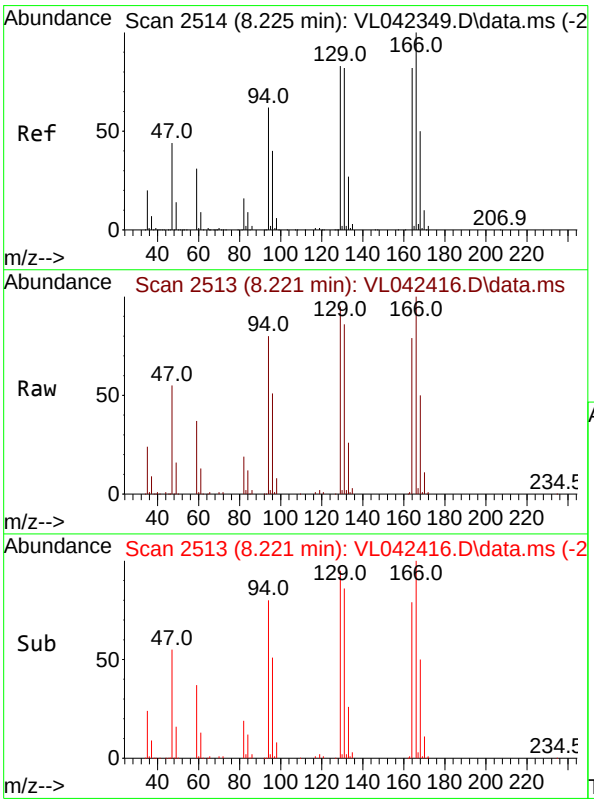
#51
2-Hexanone
Concen: 7.058 ppbv
RT: 7.431 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 287045

Ion	Ratio	Lower	Upper
43	100		
58	48.8	40.2	60.4
98	0.1	0.1	0.1

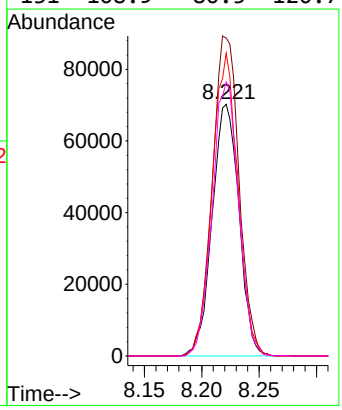


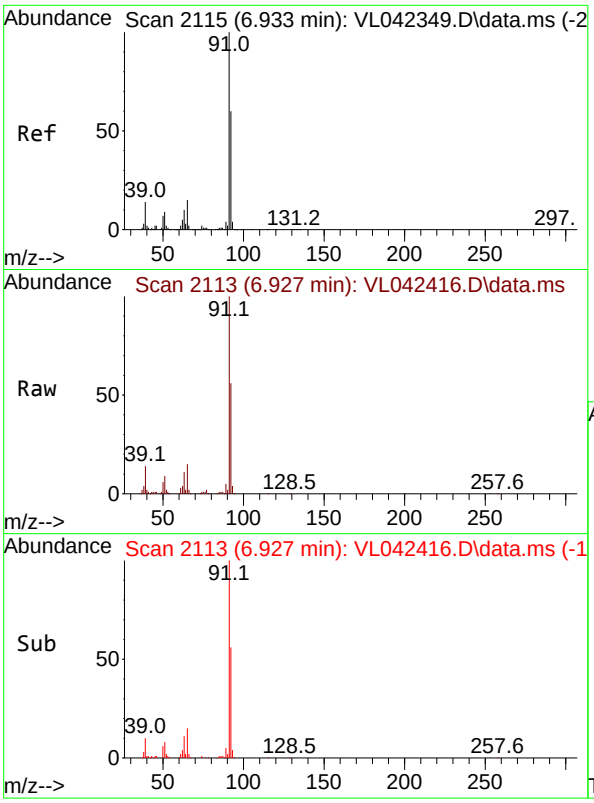


#52
Tetrachloroethene
Concen: 7.928 ppbv
RT: 8.221 min Scan# 2513
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:164 Resp: 114038

Ion	Ratio	Lower	Upper
164	100		
166	126.3	98.2	147.2
129	120.3	81.8	122.8
131	108.9	80.5	120.7



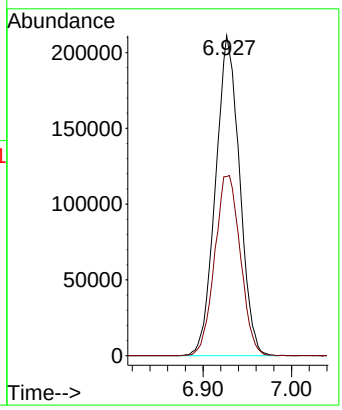


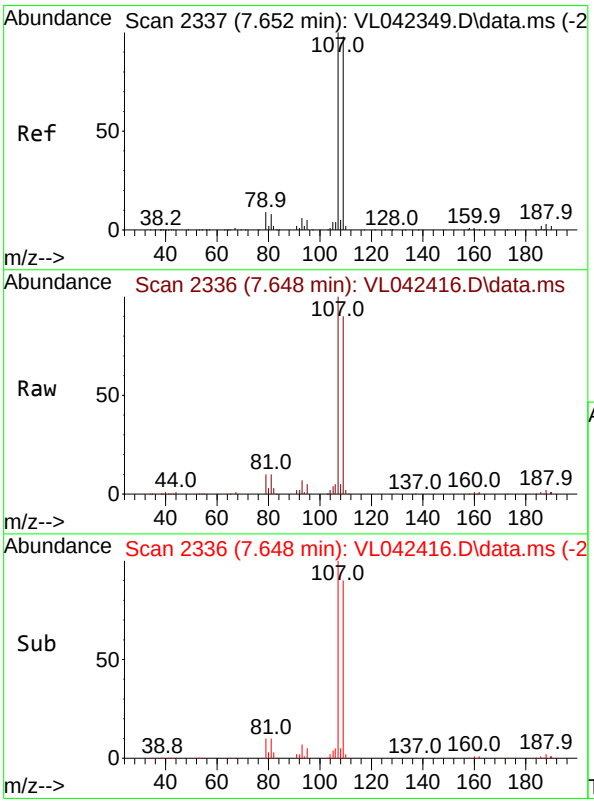
#53
Toluene
Concen: 8.916 ppbv
RT: 6.927 min Scan# 21
Delta R.T. -0.006 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 398162

Ion	Ratio	Lower	Upper
91	100		
92	60.2	48.2	72.4

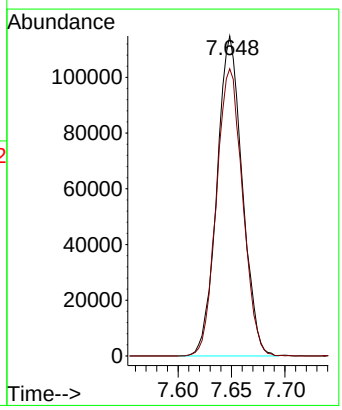


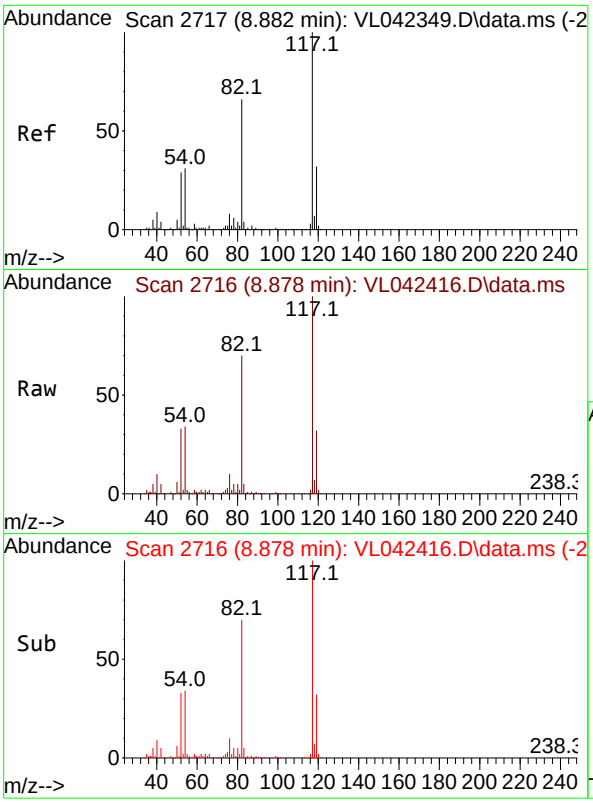


#54
1,2-Dibromoethane
Concen: 9.378 ppbv
RT: 7.648 min Scan# 2336
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:107 Resp: 189639

Ion	Ratio	Lower	Upper
107	100		
109	89.8	78.2	117.4



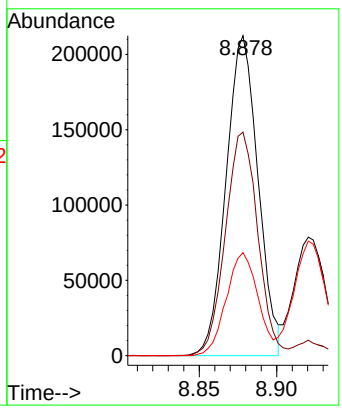


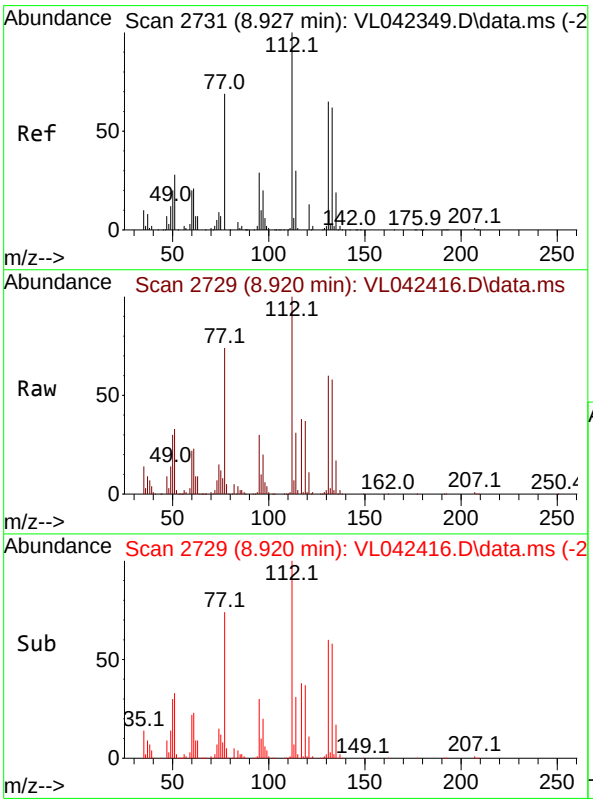
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 305240

Ion	Ratio	Lower	Upper
117	100		
82	75.0	57.8	86.6
119	31.9	25.2	37.8

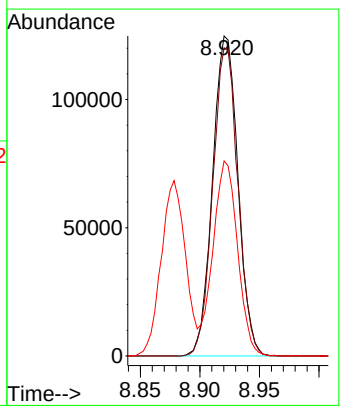


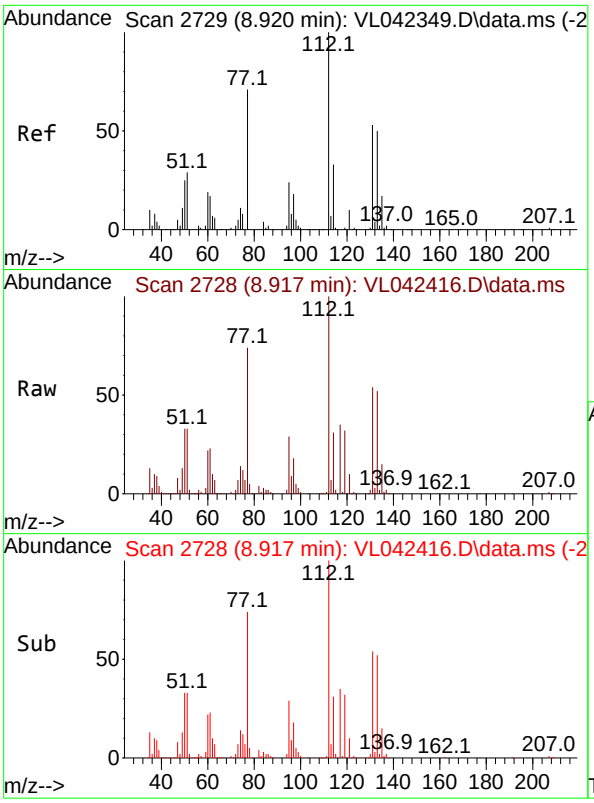


#56
1,1,1,2-Tetrachloroethane
Concen: 9.969 ppbv
RT: 8.920 min Scan# 2729
Delta R.T. -0.007 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:131 Resp: 184161

Ion	Ratio	Lower	Upper
131	100		
133	95.8	78.3	117.5
119	58.3	48.7	73.1



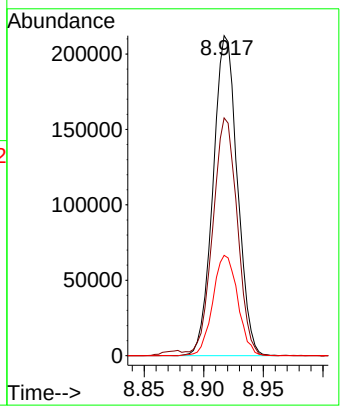


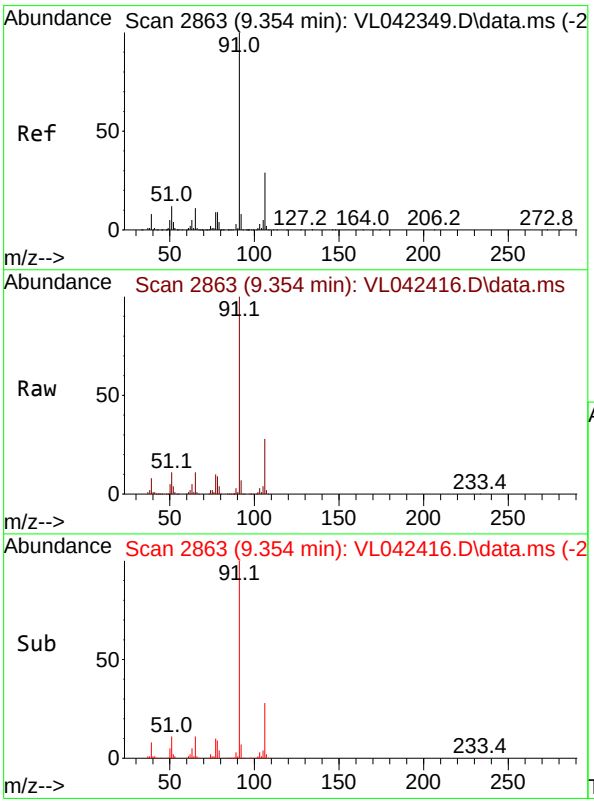
#57
Chlorobenzene
Concen: 9.471 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 300677

Ion	Ratio	Lower	Upper
112	100		
77	74.3	57.8	86.6
114	31.4	29.3	35.9

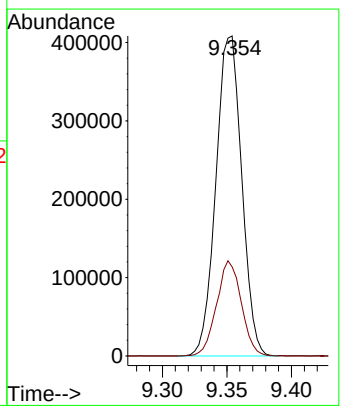


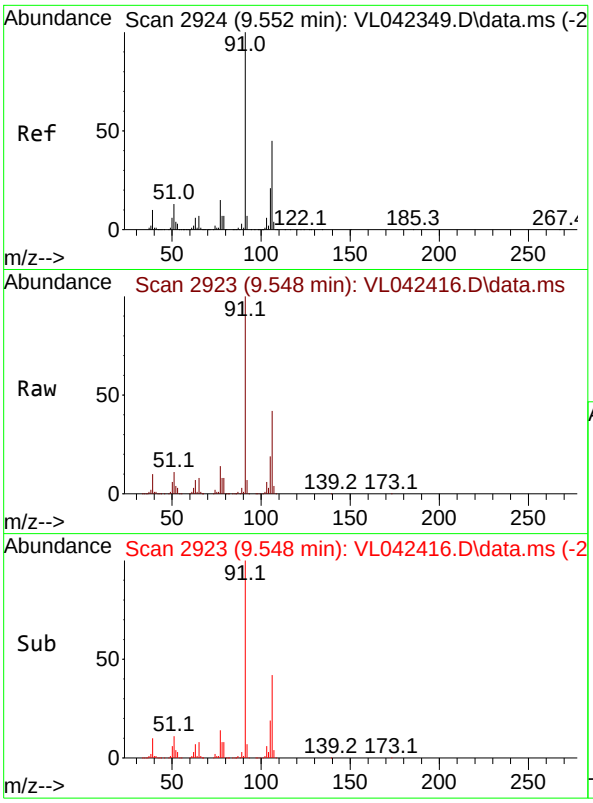


#58
Ethyl Benzene
Concen: 9.394 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 568129

Ion	Ratio	Lower	Upper
91	100		
106	27.8	23.0	34.4



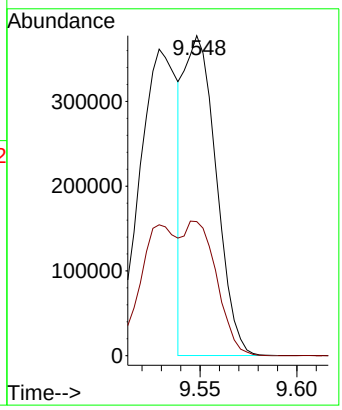


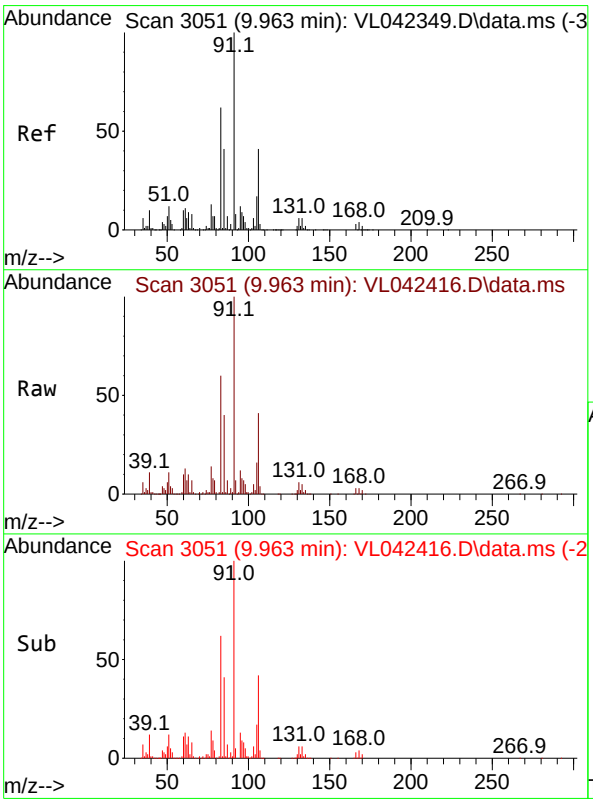
#59
m/p-Xylene
Concen: 8.998 ppbv
RT: 9.548 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 438382

Ion	Ratio	Lower	Upper
91	100		
106	90.5	35.4	53.2#

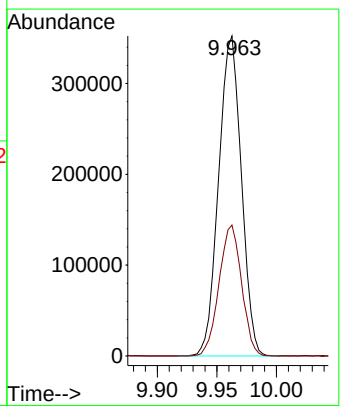


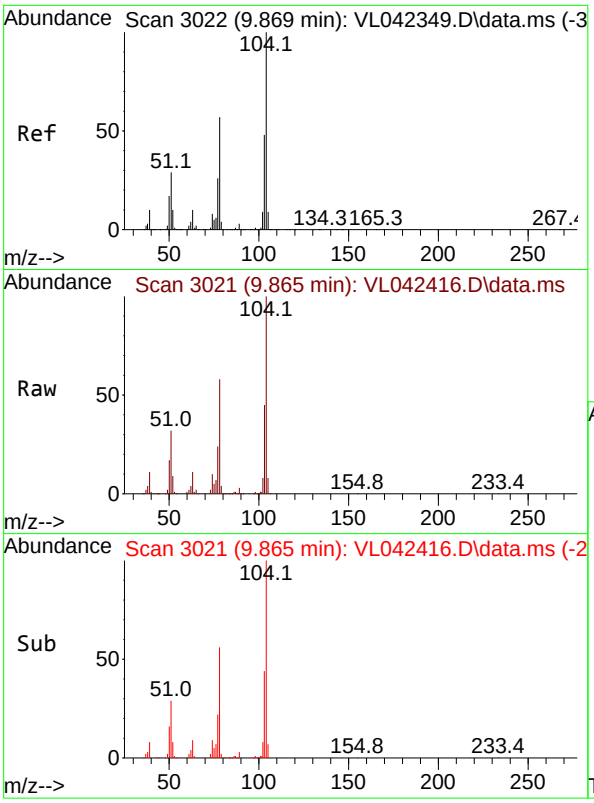


#60
o-Xylene
Concen: 9.507 ppbv
RT: 9.963 min Scan# 3051
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 466411

Ion	Ratio	Lower	Upper
91	100		
106	40.6	21.1	63.4



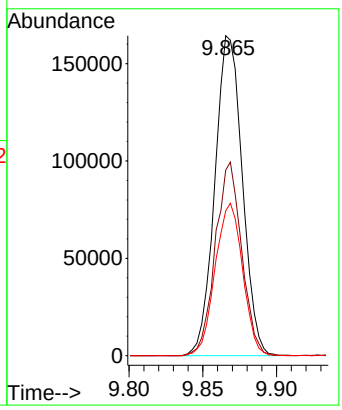


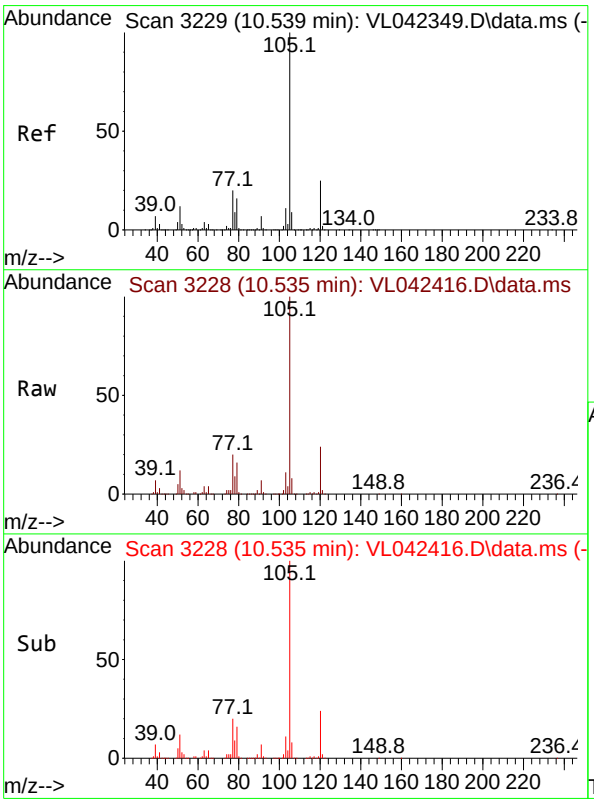
#61
Styrene
Concen: 9.101 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 213119

Ion	Ratio	Lower	Upper
104	100		
78	57.9	44.6	66.8
103	47.6	37.4	56.0

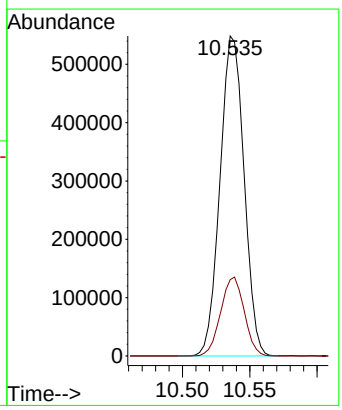


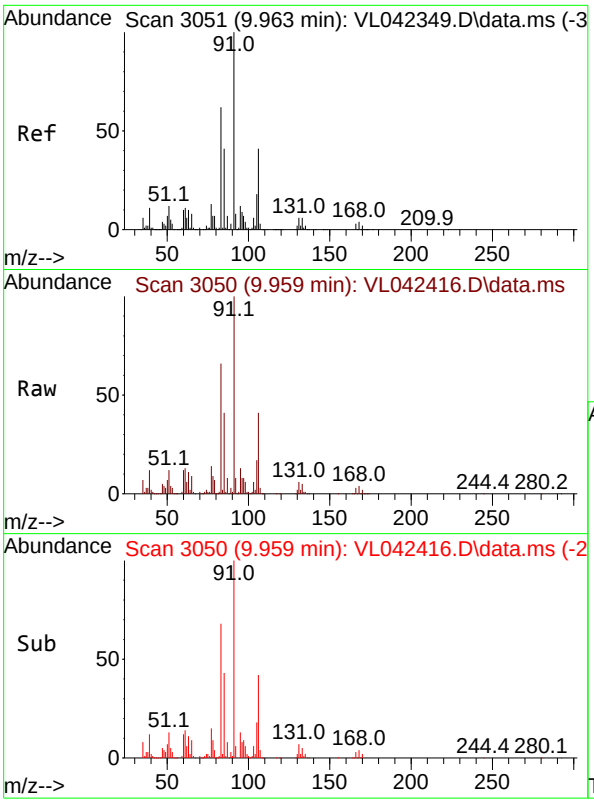


#62
Isopropylbenzene
Concen: 9.452 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 680837

Ion	Ratio	Lower	Upper
105	100		
120	24.1	19.8	29.8



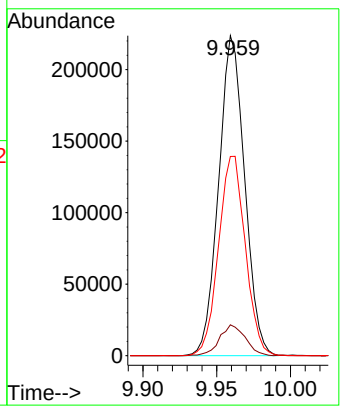


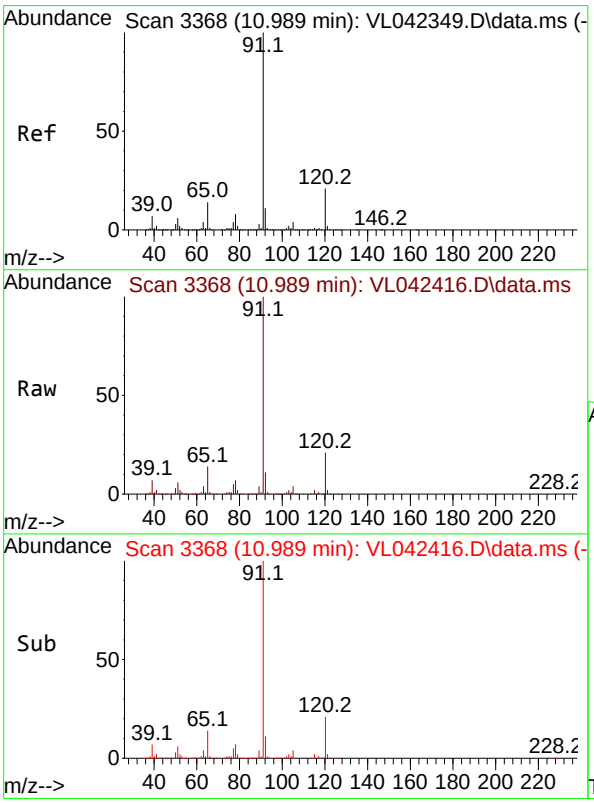
#63
1,1,2,2-Tetrachloroethane
Concen: 8.639 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 274653

Ion	Ratio	Lower	Upper
83	100		
131	9.6	4.5	13.7
85	64.2	32.4	97.0

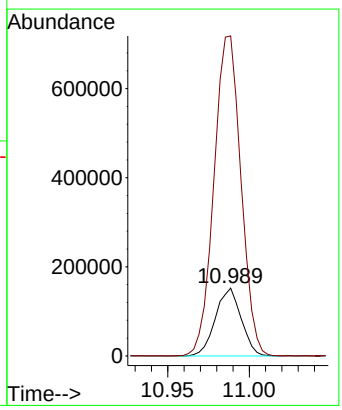


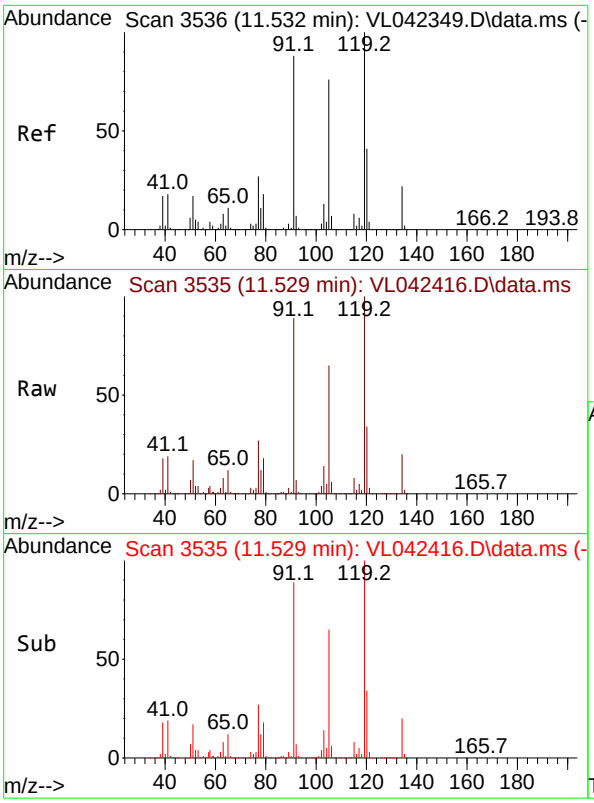


#64
n-propylbenzene
Concen: 9.223 ppbv
RT: 10.989 min Scan# 3368
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:120 Resp: 166984

Ion	Ratio	Lower	Upper
120	100		
91	495.0	392.4	588.6



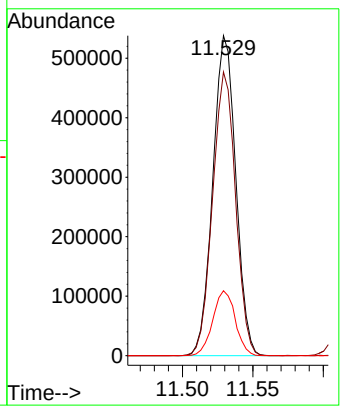


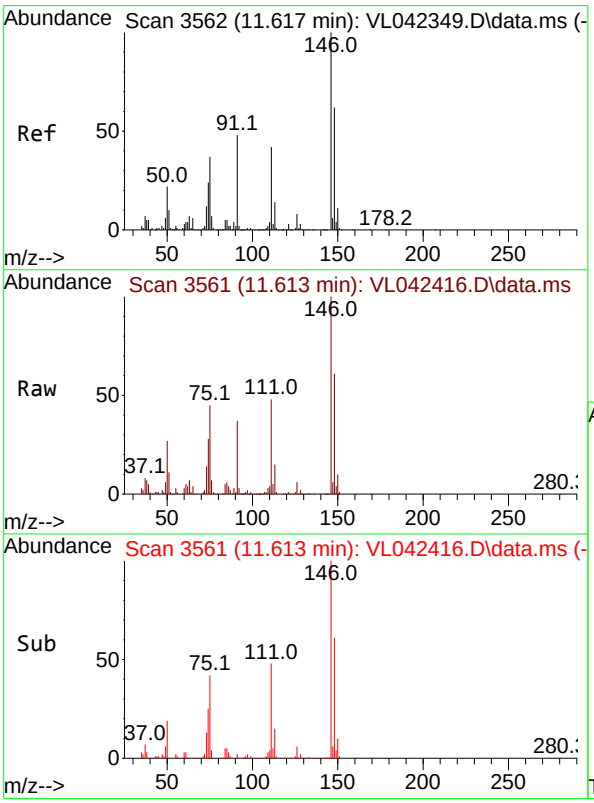
#65
tert-Butylbenzene
Concen: 9.219 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 610304

Ion	Ratio	Lower	Upper
119	100		
91	88.8	74.6	111.8
134	19.9	18.8	28.2

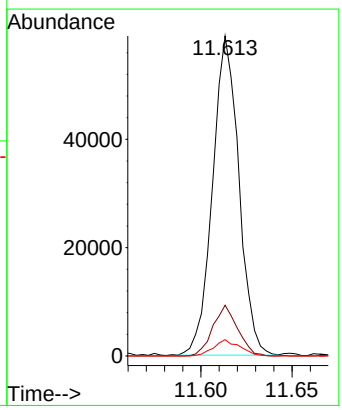


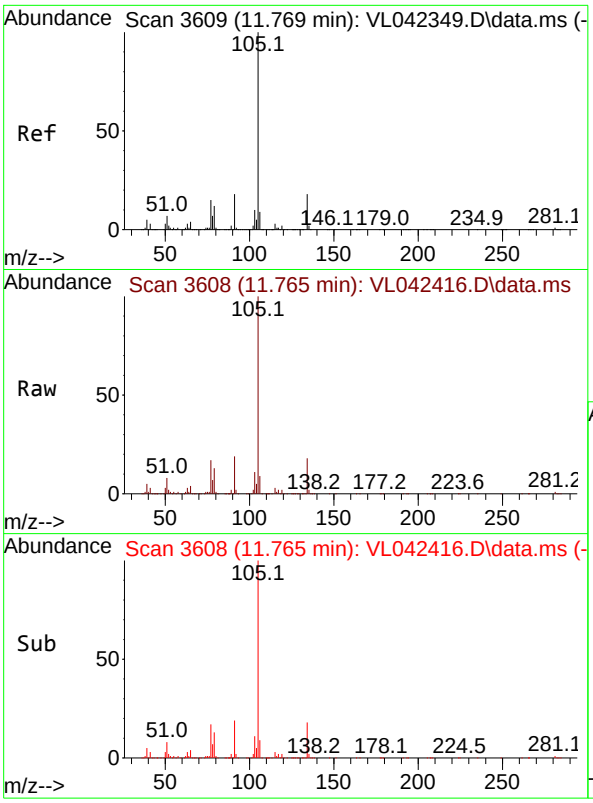


#66
Benzyl Chloride
Concen: 8.136 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 59187

Ion	Ratio	Lower	Upper
91	100		
126	15.1	11.8	17.6
128	5.1	4.5	6.7



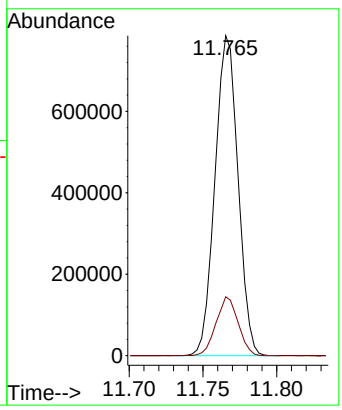


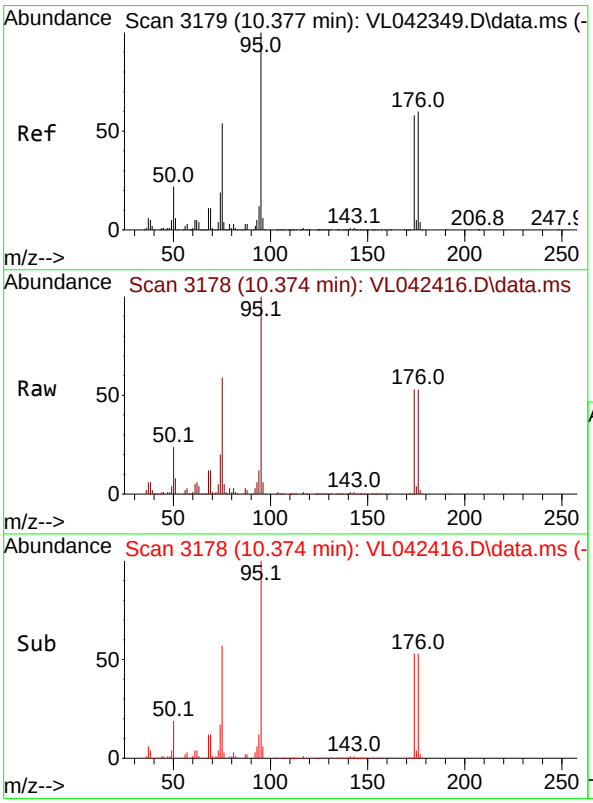
#67
sec-Butylbenzene
Concen: 9.276 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 854169

Ion	Ratio	Lower	Upper
105	100		
134	17.7	14.6	21.8

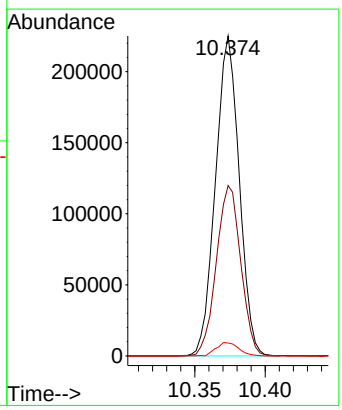


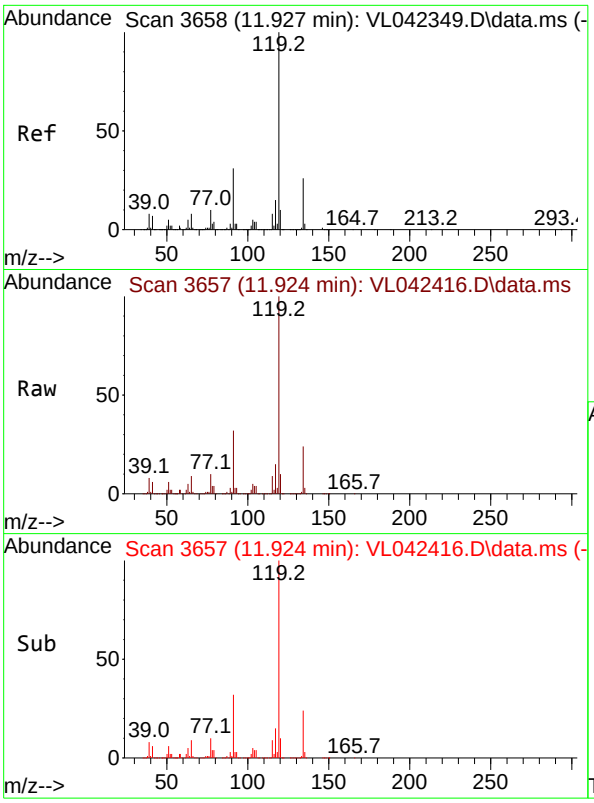


#68
1-Bromo-4-Fluorobenzene
Concen: 10.533 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 95 Resp: 264197

Ion	Ratio	Lower	Upper
95	100		
174	54.7	48.5	72.7
175	4.0	3.7	5.5



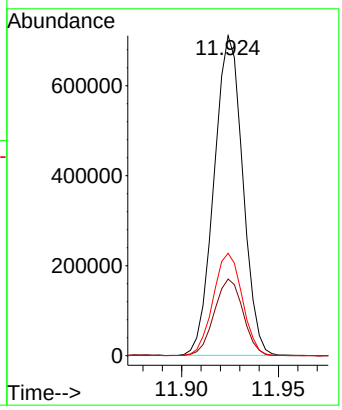


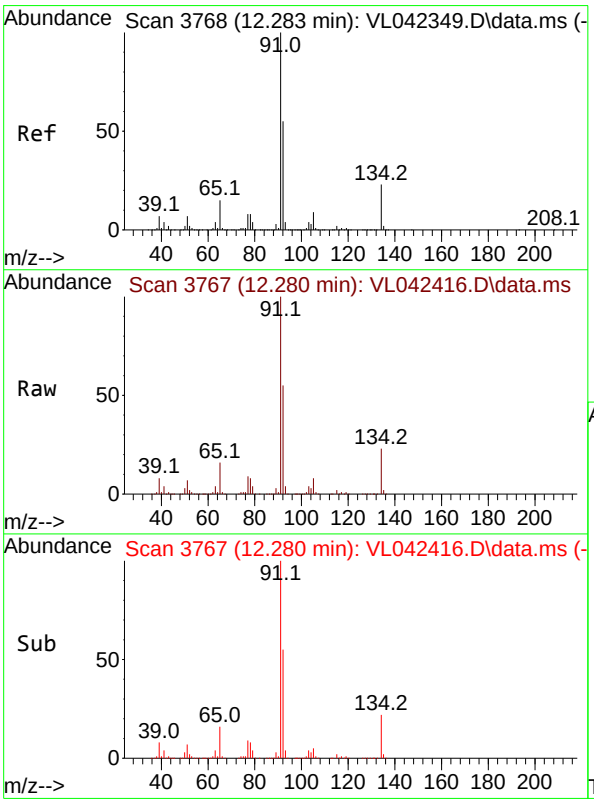
#69
p-Isopropyltoluene
Concen: 9.155 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 732365

Ion	Ratio	Lower	Upper
119	100		
134	24.2	20.0	30.0
91	32.7	24.4	36.6

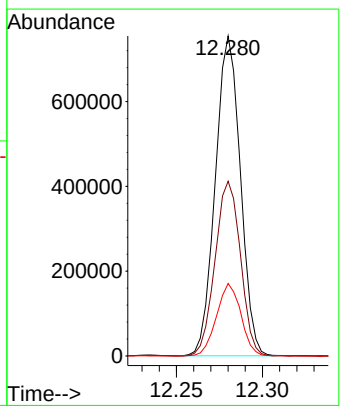


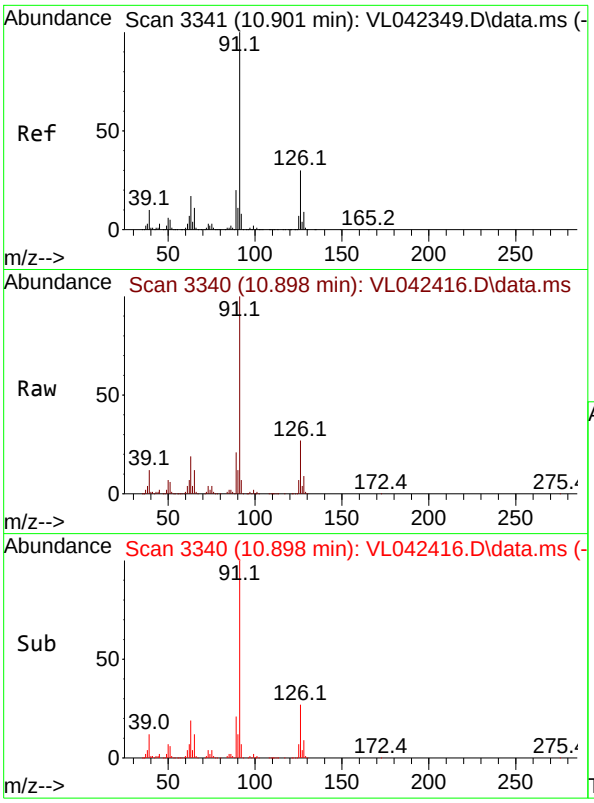


#70
n-Butylbenzene
Concen: 9.188 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion: 91 Resp: 765539

Ion	Ratio	Lower	Upper
91	100		
92	55.5	44.2	66.4
134	22.1	18.2	27.4



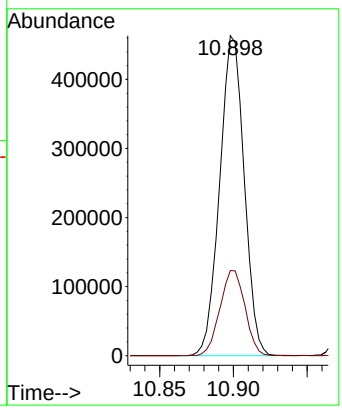


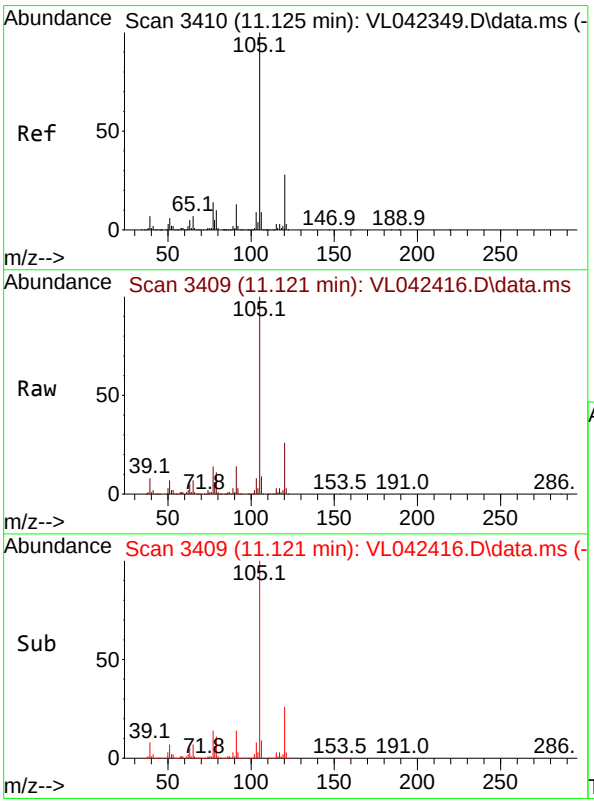
#71
2-Chlorotoluene
Concen: 9.467 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 534834

Ion	Ratio	Lower	Upper
91	100		
126	27.2	11.4	45.4

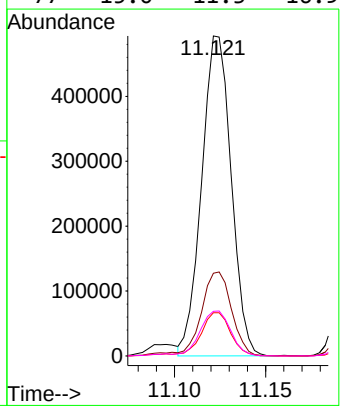


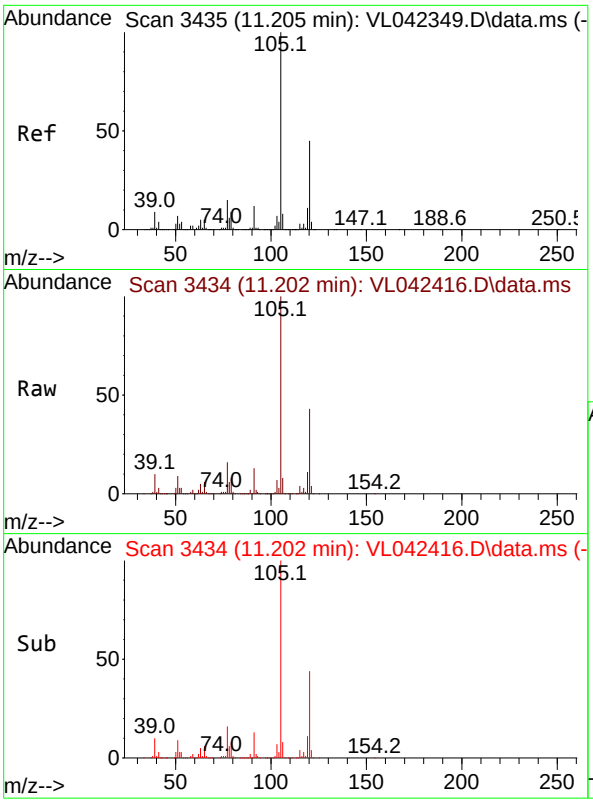


#72
4-Ethyltoluene
Concen: 9.280 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 556591

Ion	Ratio	Lower	Upper
105	100		
120	27.4	23.2	34.8
91	13.9	10.4	15.6
77	15.0	11.3	16.9



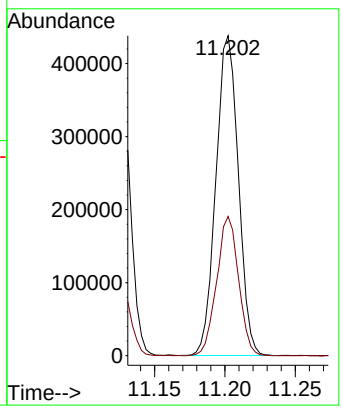


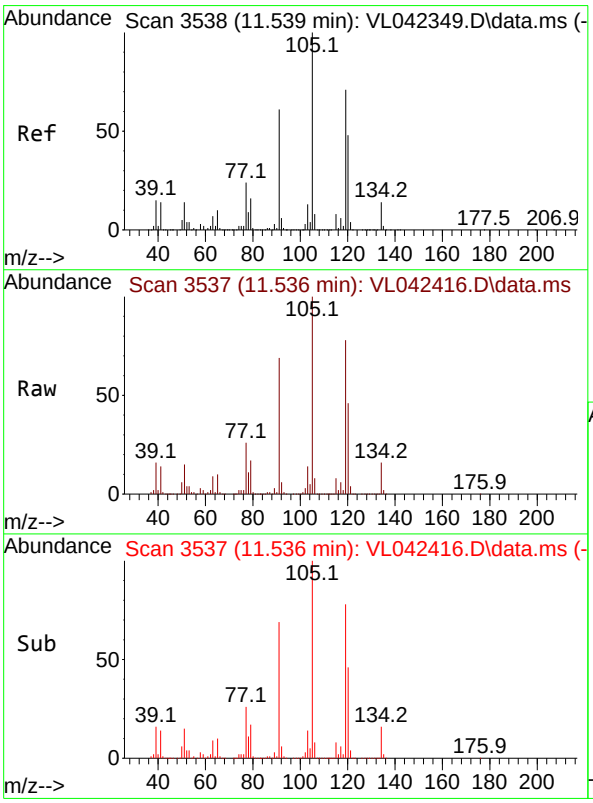
#73
1,3,5-Trimethylbenzene
Concen: 9.201 ppbv
RT: 11.202 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 487223

Ion	Ratio	Lower	Upper
105	100		
120	43.5	35.6	53.4

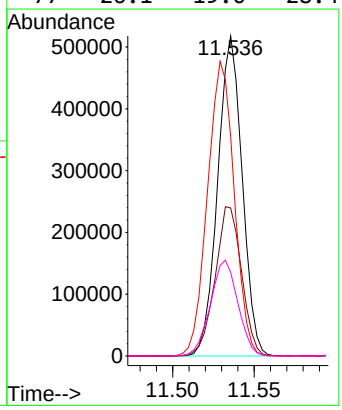


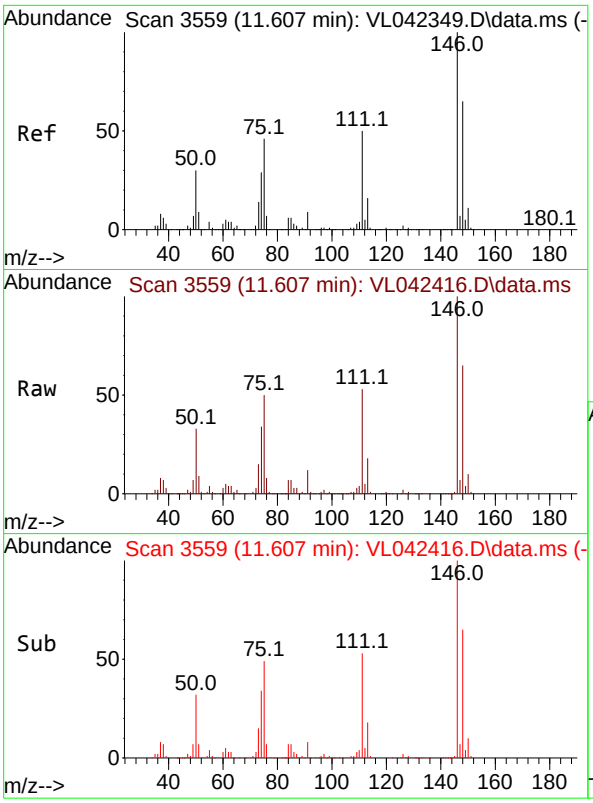


#74
1,2,4-Trimethylbenzene
Concen: 8.759 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:105 Resp: 541720

Ion	Ratio	Lower	Upper
105	100		
120	46.2	38.1	57.1
91	68.6	48.8	73.2
77	26.1	19.0	28.4



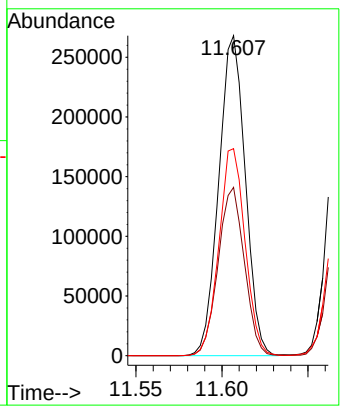


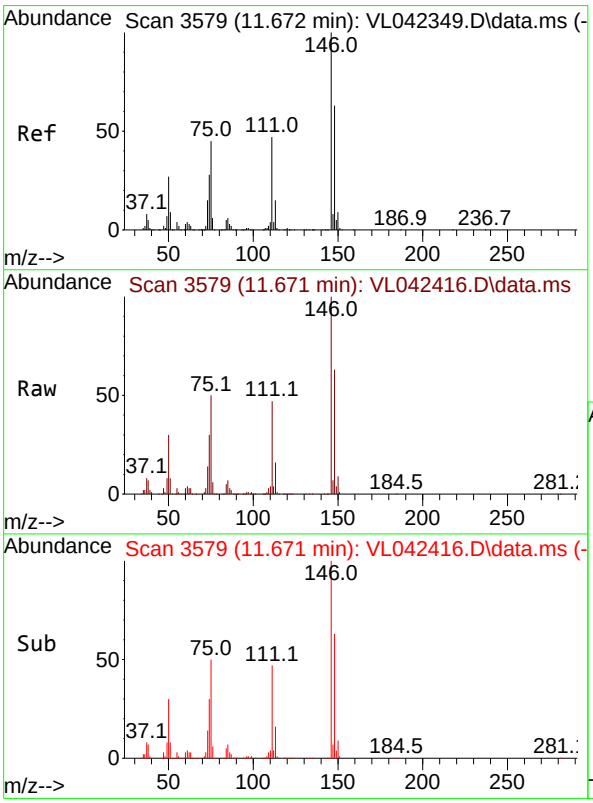
#75
1,3-Dichlorobenzene
Concen: 8.936 ppbv
RT: 11.607 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 287285

Ion	Ratio	Lower	Upper
146	100		
111	52.1	24.3	72.8
148	63.9	31.6	94.8

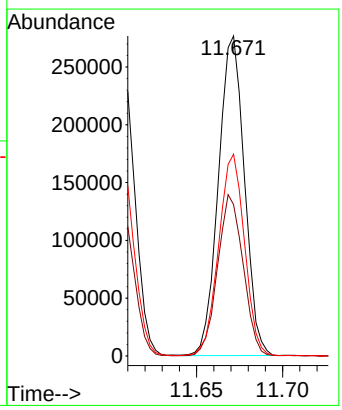


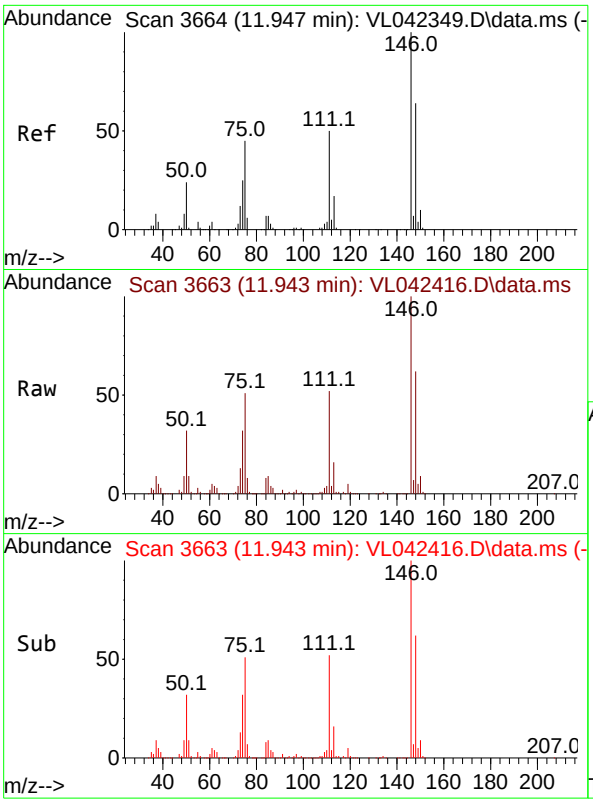


#76
1,4-Dichlorobenzene
Concen: 8.991 ppbv
RT: 11.671 min Scan# 3579
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:146 Resp: 290512

Ion	Ratio	Lower	Upper
146	100		
111	49.8	24.2	72.6
148	63.2	32.1	96.5



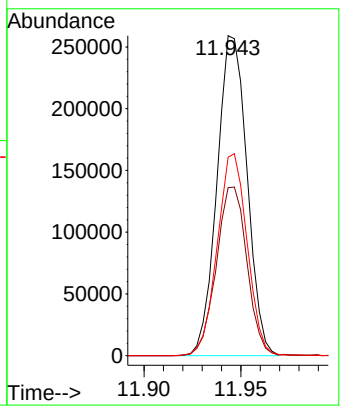


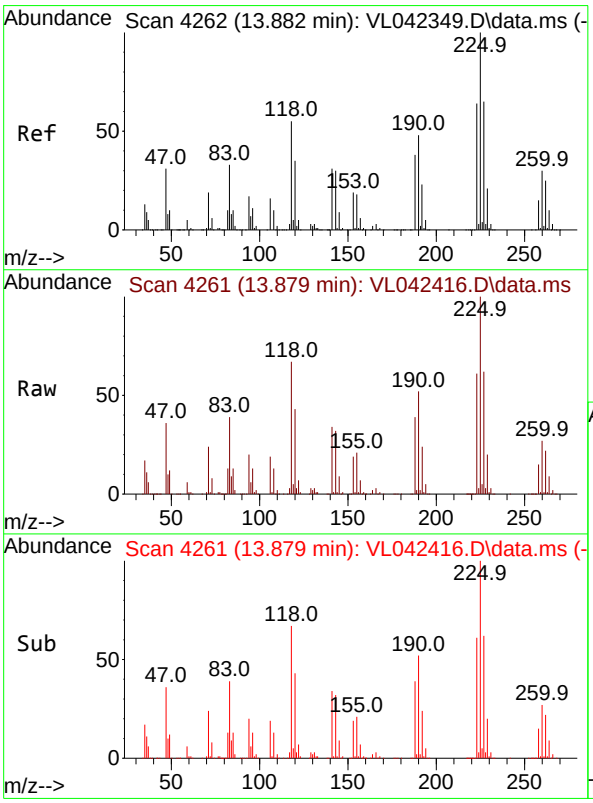
#77
1,2-Dichlorobenzene
Concen: 8.956 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 279962

Ion	Ratio	Lower	Upper
146	100		
111	53.8	25.3	75.9
148	62.9	31.5	94.5

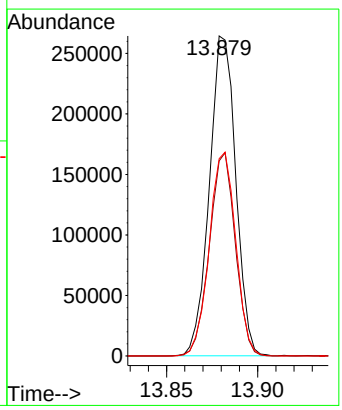


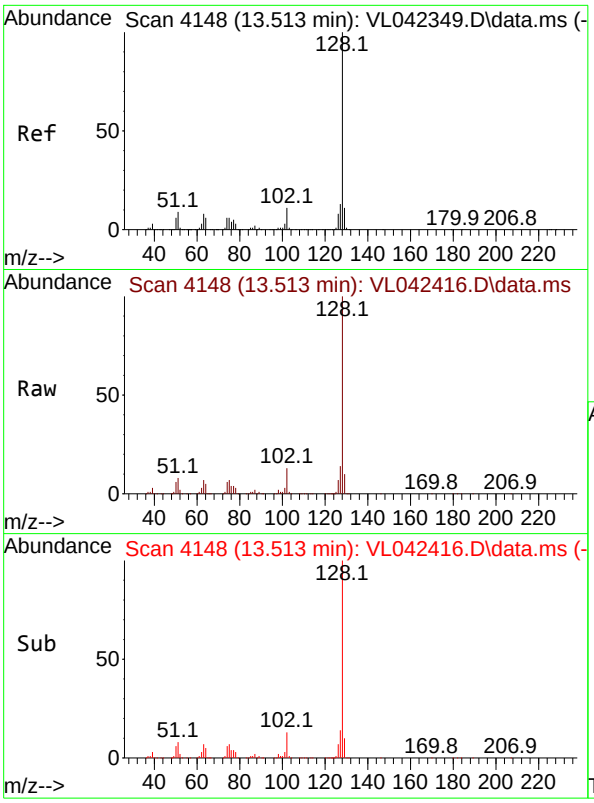


#78
Hexachloro-1,3-Butadiene
Concen: 8.419 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:225 Resp: 265745

Ion	Ratio	Lower	Upper
225	100		
223	62.5	50.3	75.5
227	64.0	51.5	77.3



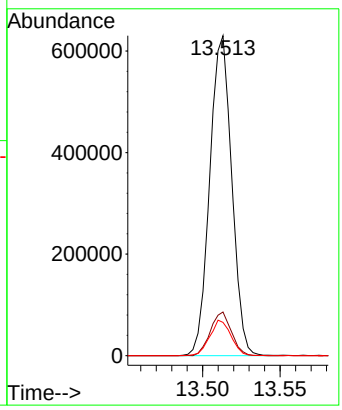


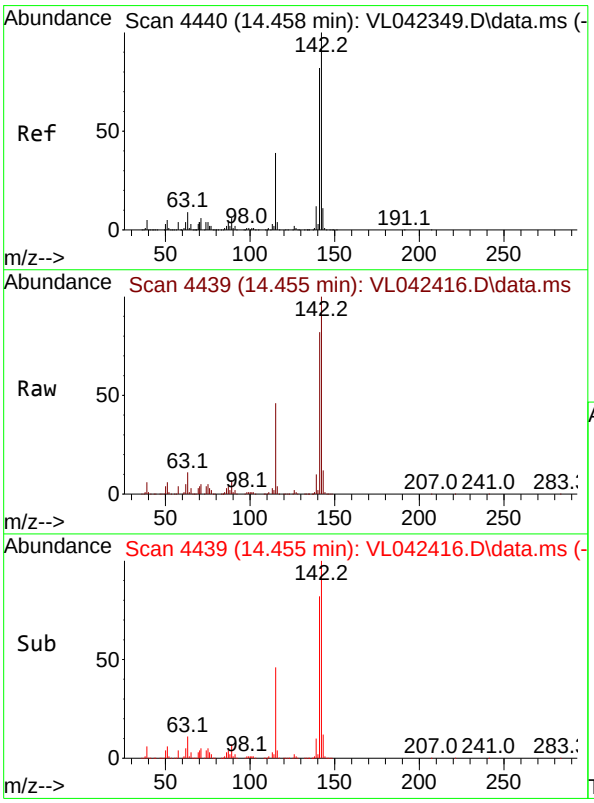
#79
Naphthalene
Concen: 8.418 ppbv
RT: 13.513 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 622606

Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.6	15.8
129	10.4	8.6	12.8

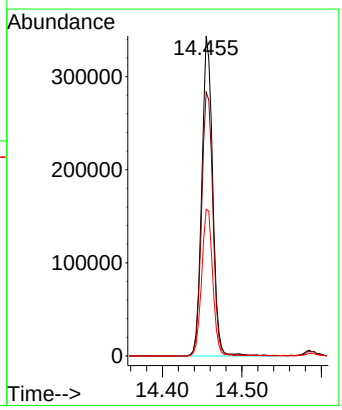


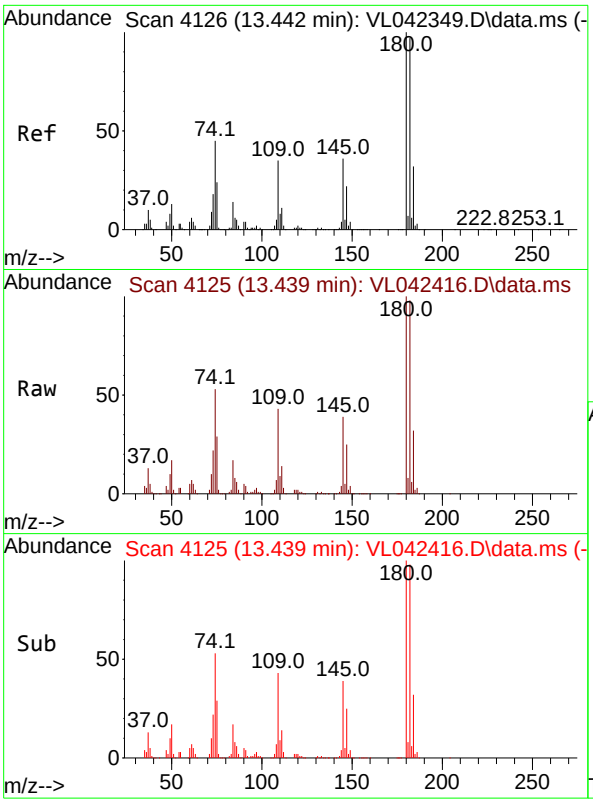


#80
Naphthalene,2-methyl-
Concen: 7.783 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Tgt Ion:142 Resp: 328047

Ion	Ratio	Lower	Upper
142	100		
141	86.0	66.8	100.2
115	47.0	33.4	50.2



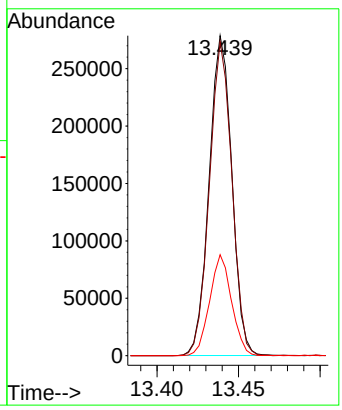


#81
1,2,4-Trichlorobenzene
Concen: 8.493 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042416.D
Acq: 28 Apr 2025 08:44

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 269711

Ion	Ratio	Lower	Upper
180	100		
182	97.0	76.8	115.2
184	30.6	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042418.D
Acq On : 28 Apr 2025 10:10
Operator : SY/MD
Sample : VL0428ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Quant Time: Apr 29 01:32:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.780	49	122448	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.952	114	337202	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.875	117	299130	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.370	95	258626	10.521	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.200%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.495	85	216893	10.025	ppbv	99
3) Chlorodifluoromethane	1.473	51	187830	9.117	ppbv	97
4) Chloromethane	1.531	50	82976	9.692	ppbv	98
5) Vinyl Chloride	1.576	62	81506	8.746	ppbv	96
6) Bromomethane	1.664	94	37549	9.379	ppbv	86
7) Chloroethane	1.703	64	31924	9.472	ppbv	98
8) Dichlorotetrafluoroethane	1.550	85	184850	9.952	ppbv	95
9) Propene	1.482	41	74980	7.992	ppbv	95
10) Heptane	4.968	43	199403	7.565	ppbv	99
11) Trichlorofluoromethane	1.874	101	205815	10.004	ppbv	95
12) 1,1,2-Trichlorotrifluo...	2.136	101	161799	9.619	ppbv	97
13) Ethanol	1.719	45	4439	2.977	ppbv	81
14) Bromoethene	1.780	108	60748	9.581	ppbv	97
15) Acetone	1.832	43	172651	8.613	ppbv	99
16) 1,3-Butadiene	1.605	39	86553	9.028	ppbv	94
17) tert-Butyl alcohol	2.036	59	221069	8.899	ppbv	100
18) 1,1-Dichloroethene	2.029	96	72496	9.225	ppbv	98
19) Isopropyl Alcohol	1.884	45	97525	8.758	ppbv	88
20) Methylene Chloride	2.059	84	62175	7.920	ppbv	89
21) Allyl Chloride	2.091	41	124058	8.964	ppbv	97
22) trans-1,2-Dichloroethene	2.337	96	82175	9.184	ppbv	97
23) Vinyl Acetate	2.457	43	67206	8.283	ppbv #	99
24) 1,1-Dichloroethane	2.405	63	159644	9.393	ppbv	99
25) Ethyl Acetate	2.832	43	419372	8.485	ppbv	99
26) Hexane	2.819	57	162255	8.112	ppbv	99
27) Carbon Disulfide	2.146	76	200806	9.377	ppbv	97
28) Methyl tert-Butyl Ether	2.437	73	114239	8.718	ppbv	92
29) Chloroform	2.842	83	275655	9.751	ppbv	100
30) Cyclohexane	3.848	84	138766	8.583	ppbv	98
31) cis-1,2-Dichloroethene	2.716	61	179960	9.464	ppbv	97
32) 1,1,1-Trichloroethane	3.363	97	301358	9.469	ppbv	100
34) 2-Butanone	2.554	43	230104	8.628	ppbv	99
35) Carbon Tetrachloride	3.755	117	302298	9.906	ppbv	96
36) Benzene	3.648	78	329117	9.049	ppbv	94
37) 1,2-Dichloroethane	3.214	62	232279	10.641	ppbv	97
38) Trichloroethene	4.541	130	131178	8.252	ppbv	93
39) 1,2-Dichloropropane	4.308	63	119692	8.831	ppbv	93
40) 1,4-Dioxane	4.577	88	59666	8.010	ppbv #	91
41) Tetrahydrofuran	3.049	42	131046	8.428	ppbv	98
42) Bromodichloromethane	4.480	83	310553	10.222	ppbv #	99
43) Methyl Methacrylate	4.871	69	136249	8.312	ppbv	97
44) 2,2,4-Trimethylpentane	4.628	57	546967	8.707	ppbv	97
45) t-1,3-Dichloropropene	6.402	75	152930	9.133	ppbv	96

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042418.D
Acq On : 28 Apr 2025 10:10
Operator : SY/MD
Sample : VL0428ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Quant Time: Apr 29 01:32:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.587	75	185557	9.055	ppbv		91
47) 1,1,2-Trichloroethane	6.574	97	130821	9.474	ppbv		95
48) Dibromochloromethane	7.376	129	237927	9.753	ppbv		100
49) Bromoform	9.477	173	196872	9.229	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	342379	7.726	ppbv		98
51) 2-Hexanone	7.428	43	280580	7.060	ppbv	#	95
52) Tetrachloroethene	8.218	164	113273	8.058	ppbv		95
53) Toluene	6.923	91	388626	8.904	ppbv		99
54) 1,2-Dibromoethane	7.642	107	181632	9.191	ppbv		92
56) 1,1,1,2-Tetrachloroethane	8.917	131	180122	9.949	ppbv		96
57) Chlorobenzene	8.917	112	294922	9.480	ppbv		97
58) Ethyl Benzene	9.347	91	552423	9.321	ppbv		100
59) m/p-Xylene	9.545	91	434048	9.091	ppbv	#	31
60) o-Xylene	9.959	91	457491	9.515	ppbv		98
61) Styrene	9.865	104	208517	9.086	ppbv		97
62) Isopropylbenzene	10.535	105	673842	9.546	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.956	83	273641	8.783	ppbv		100
64) n-propylbenzene	10.985	120	164482	9.271	ppbv		98
65) tert-Butylbenzene	11.526	119	612519	9.441	ppbv		95
66) Benzyl Chloride	11.610	91	54781	7.684	ppbv		98
67) sec-Butylbenzene	11.765	105	846457	9.380	ppbv		99
69) p-Isopropyltoluene	11.921	119	722909	9.221	ppbv		97
70) n-Butylbenzene	12.277	91	771835	9.452	ppbv		98
71) 2-Chlorotoluene	10.898	91	532755	9.623	ppbv		96
72) 4-Ethyltoluene	11.121	105	554770	9.438	ppbv		97
73) 1,3,5-Trimethylbenzene	11.199	105	481697	9.283	ppbv		94
74) 1,2,4-Trimethylbenzene	11.532	105	537510	8.869	ppbv	#	89
75) 1,3-Dichlorobenzene	11.603	146	284652	9.035	ppbv		98
76) 1,4-Dichlorobenzene	11.668	146	284740	8.992	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	278619	9.095	ppbv		98
78) Hexachloro-1,3-Butadiene	13.876	225	271569	8.779	ppbv		99
79) Naphthalene	13.510	128	614768	8.482	ppbv		100
80) Naphthalene,2-methyl-	14.455	142	316027	7.651	ppbv		96
81) 1,2,4-Trichlorobenzene	13.435	180	271657	8.729	ppbv		98

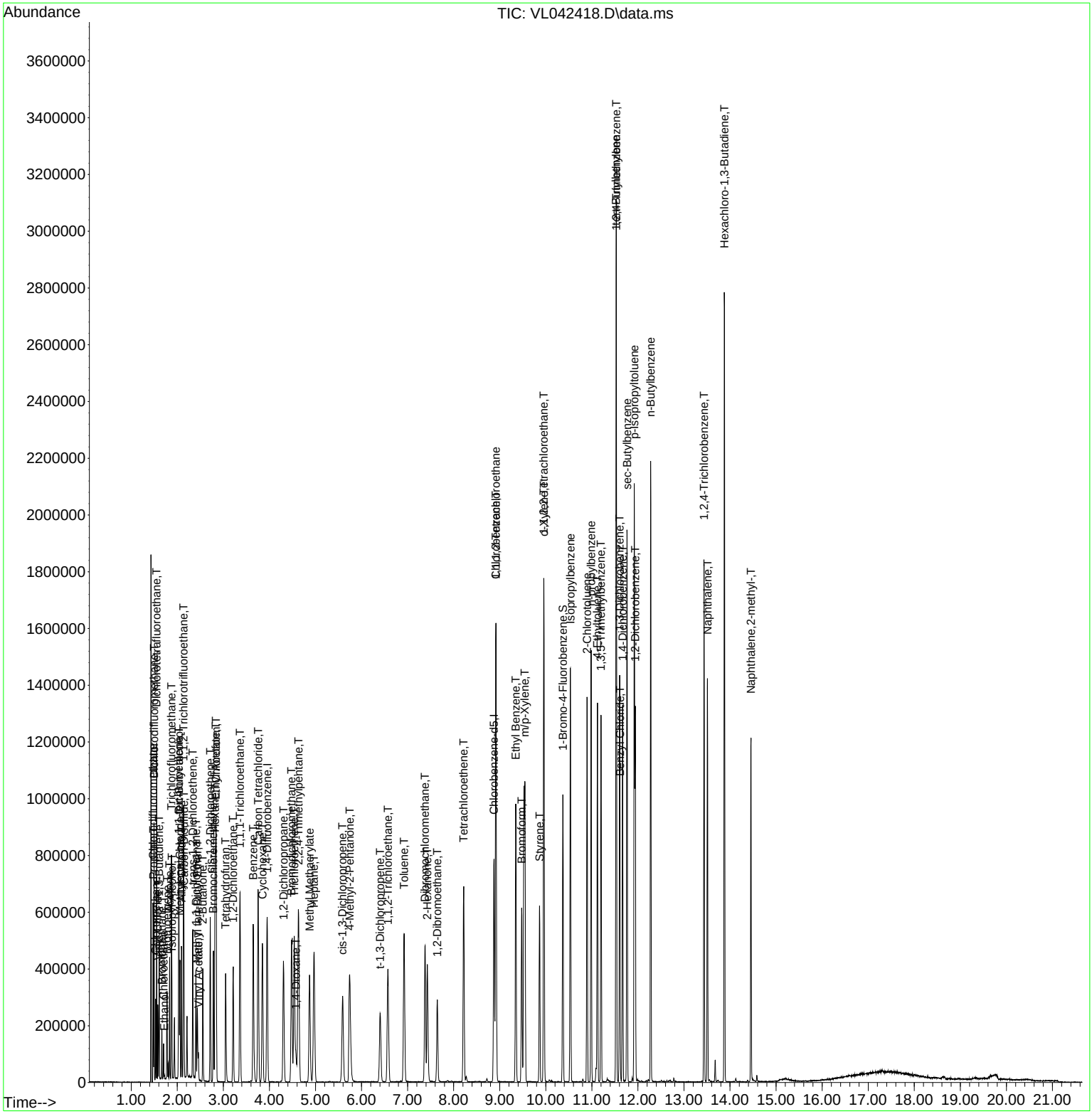
(#) = qualifier out of range (m) = manual integration (+) = signals summed

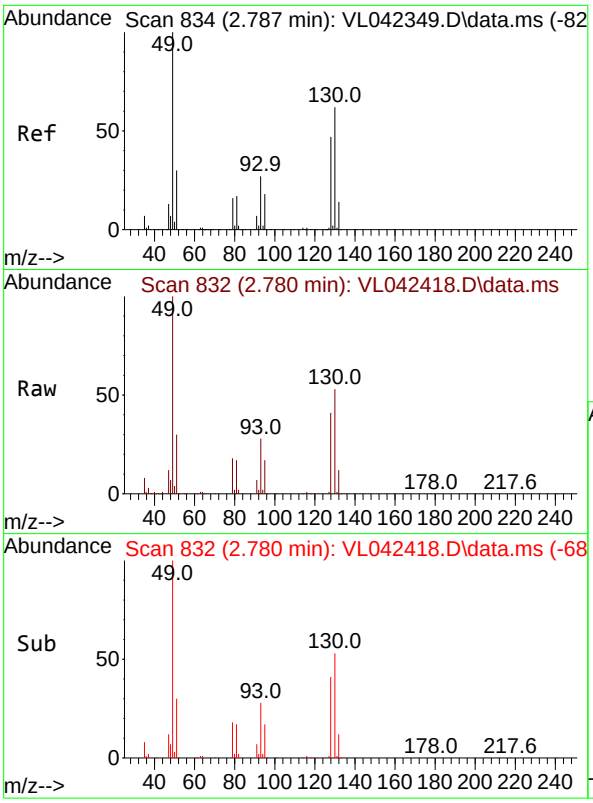
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042418.D
Acq On : 28 Apr 2025 10:10
Operator : SY/MD
Sample : VL0428ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Quant Time: Apr 29 01:32:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



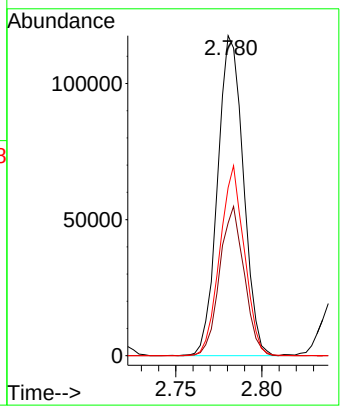


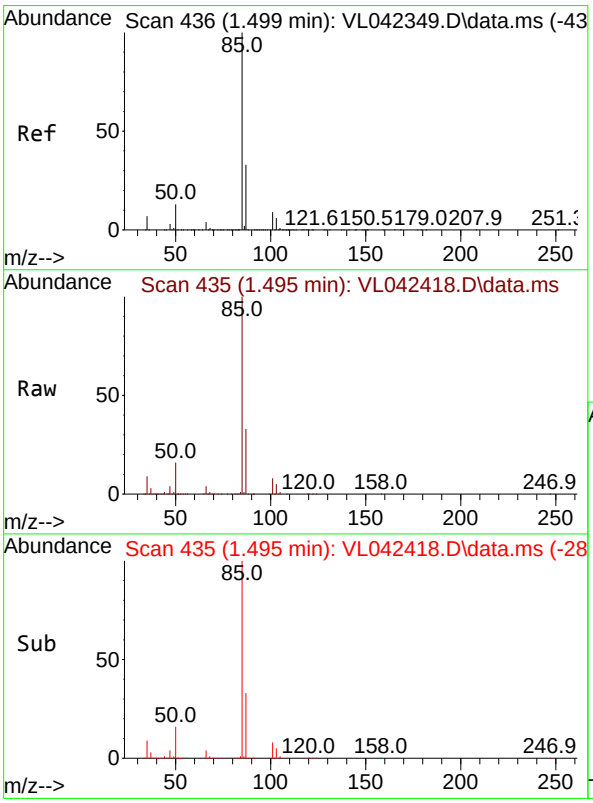
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 49 Resp: 122448

Ion	Ratio	Lower	Upper
49	100		
128	44.3	22.8	68.4
130	56.4	29.3	88.0

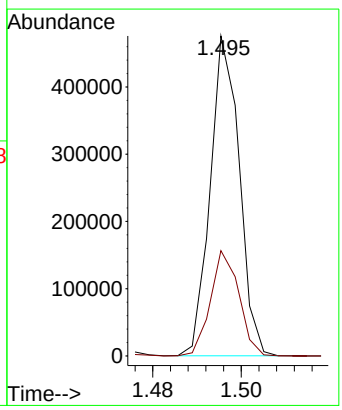


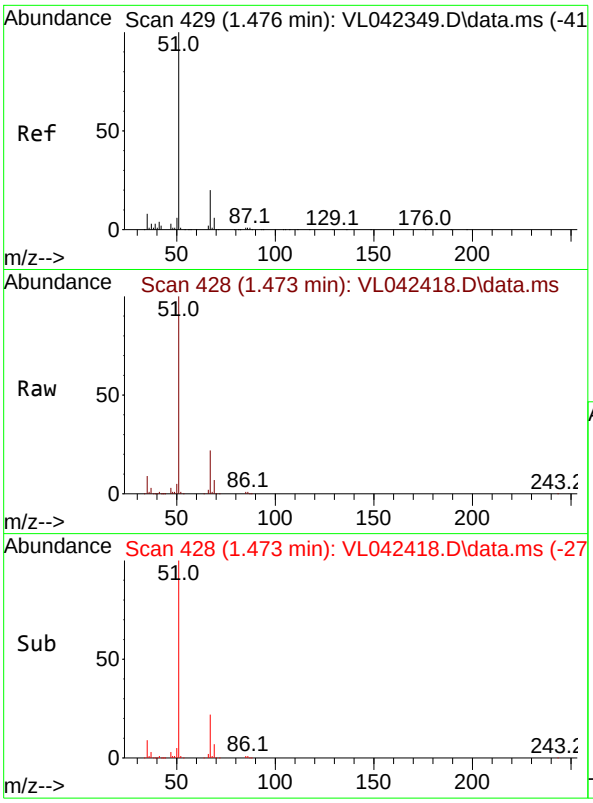


#2
Dichlorodifluoromethane
Concen: 10.025 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 85 Resp: 216893

Ion	Ratio	Lower	Upper
85	100		
87	32.9	26.6	39.8



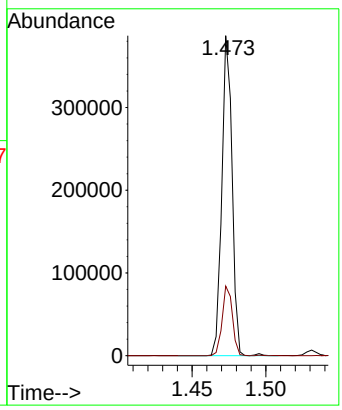


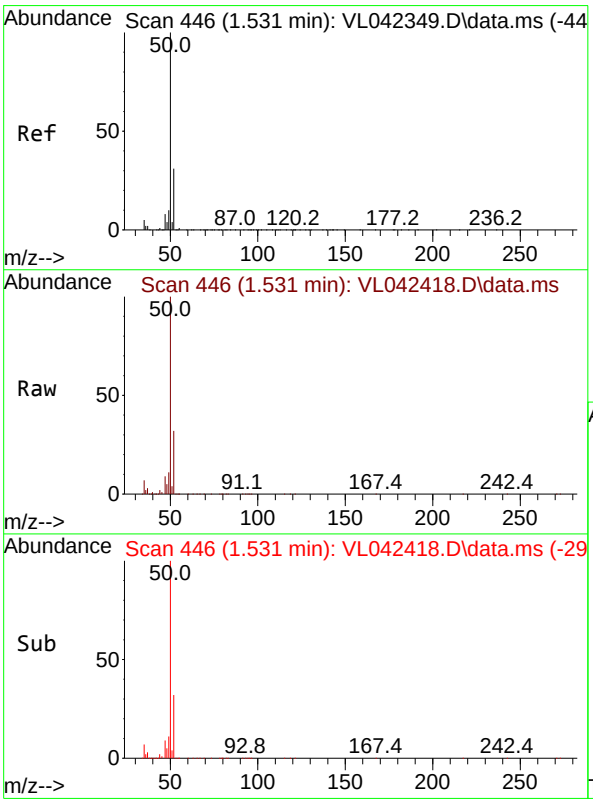
#3
Chlorodifluoromethane
Concen: 9.117 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 51 Resp: 187830

Ion	Ratio	Lower	Upper
51	100		
67	21.8	16.2	24.4

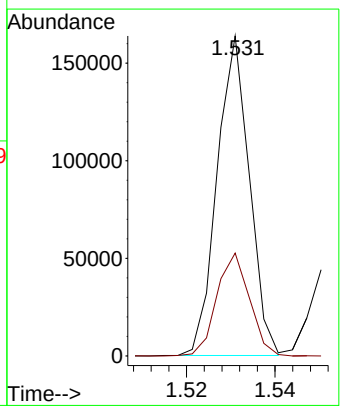


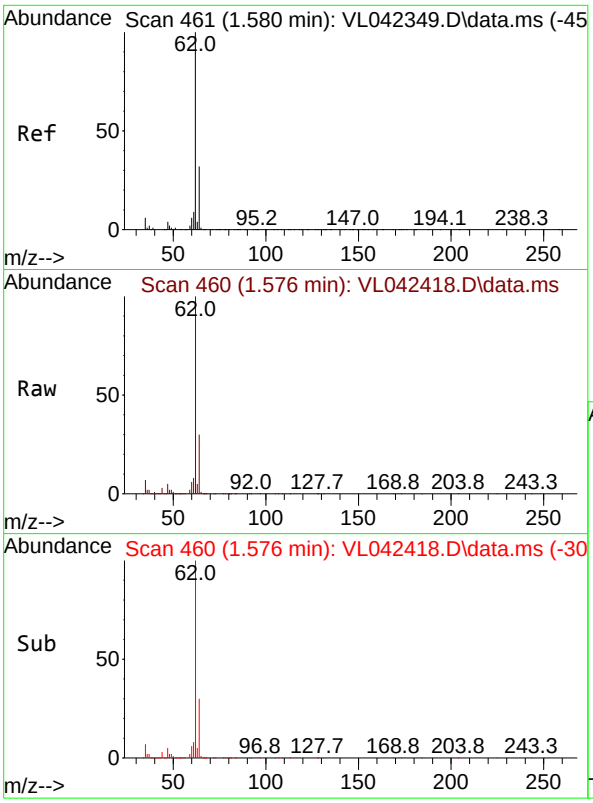


#4
Chloromethane
Concen: 9.692 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 50 Resp: 82976

Ion	Ratio	Lower	Upper
50	100		
52	32.0	24.7	37.1



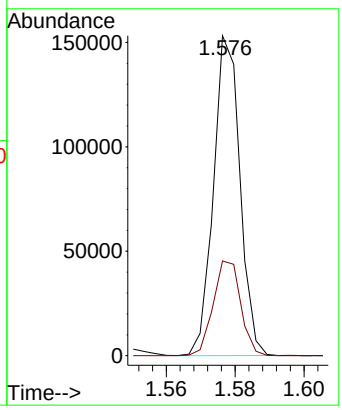


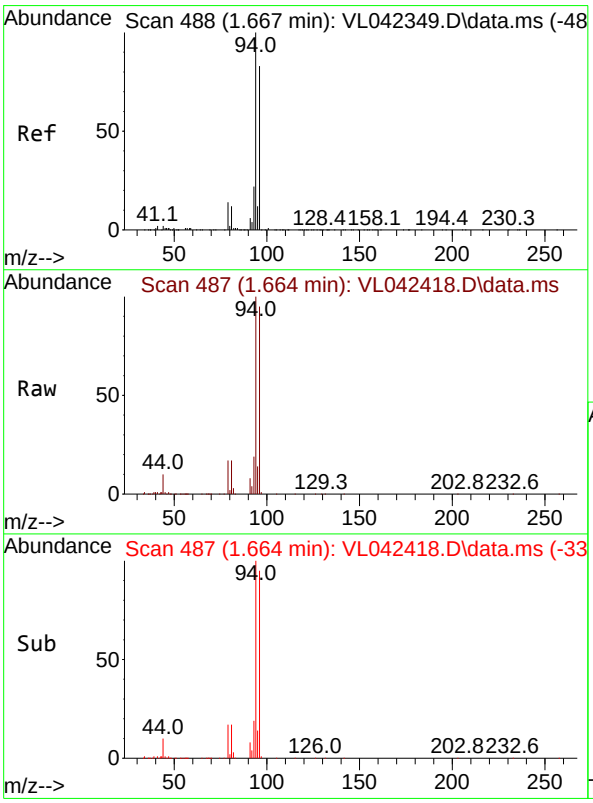
#5
Vinyl Chloride
Concen: 8.746 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 62 Resp: 81506

Ion	Ratio	Lower	Upper
62	100		
64	29.6	25.4	38.0

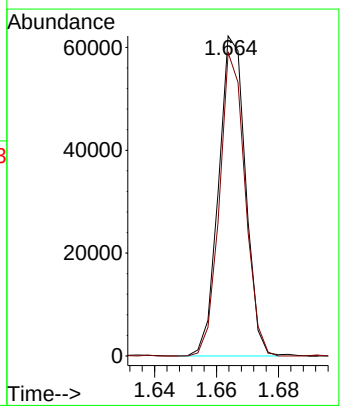


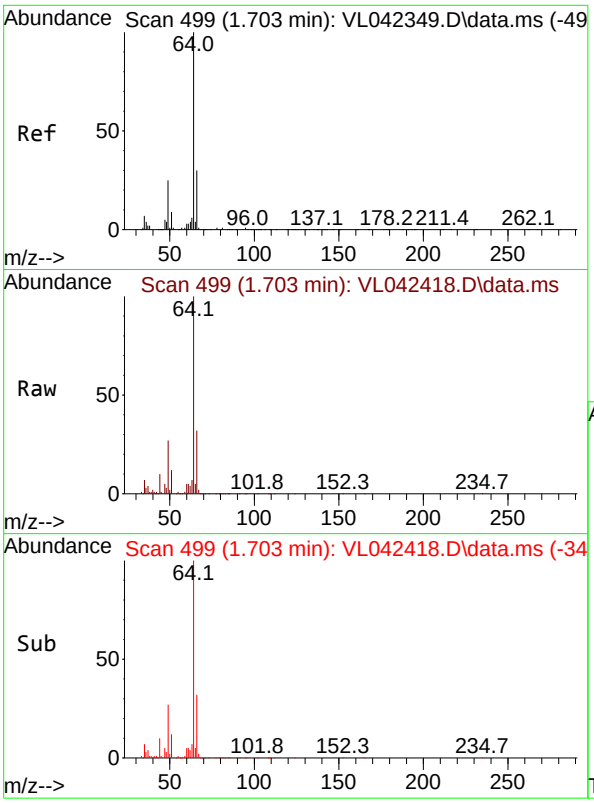


#6
Bromomethane
Concen: 9.379 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 94 Resp: 37549

Ion	Ratio	Lower	Upper
94	100		
96	94.8	66.2	99.2



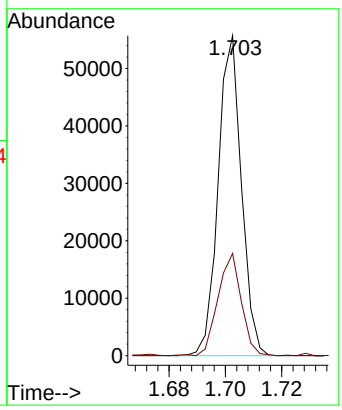


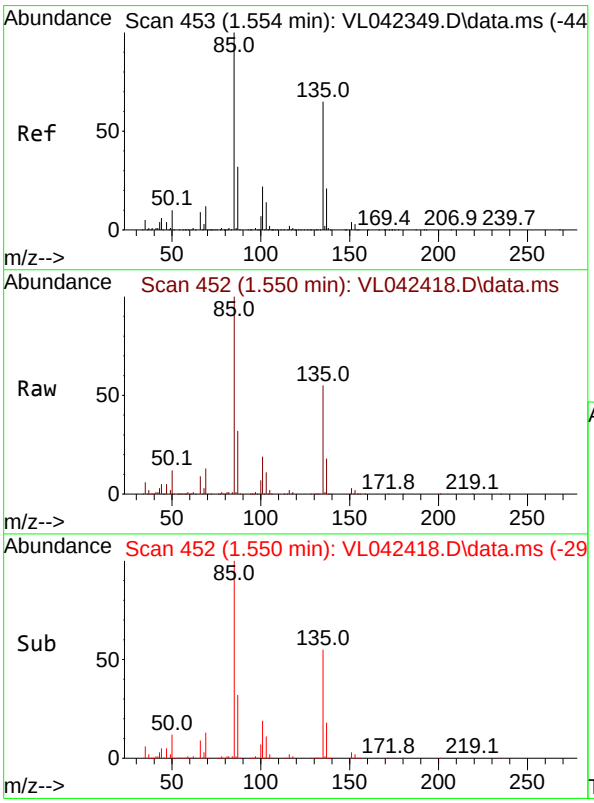
#7
Chloroethane
Concen: 9.472 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 64 Resp: 31924

Ion	Ratio	Lower	Upper
64	100		
66	31.9	24.6	37.0

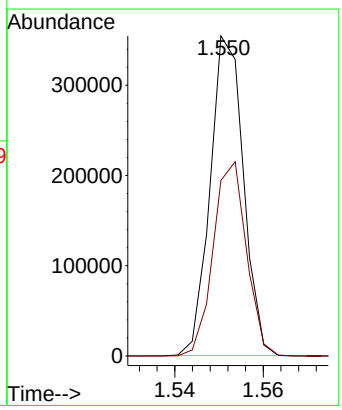


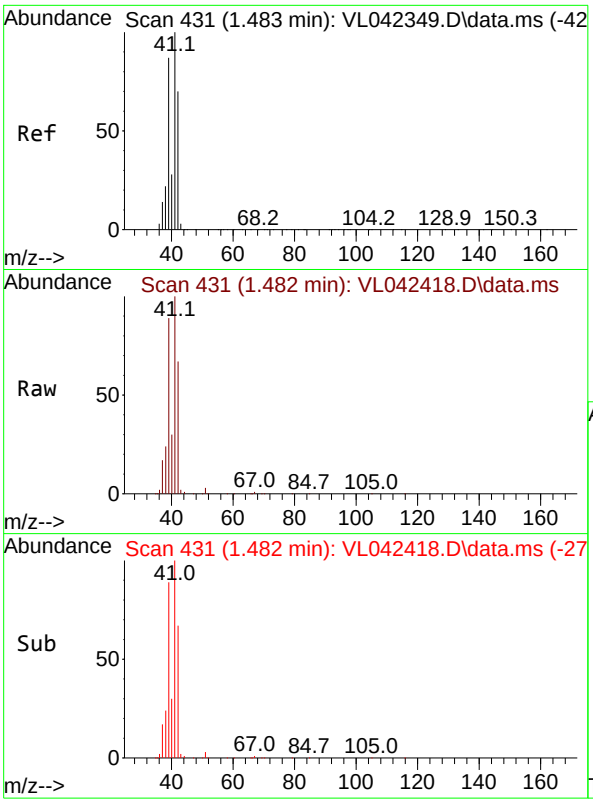


#8
Dichlorotetrafluoroethane
Concen: 9.952 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 85 Resp: 184850

Ion	Ratio	Lower	Upper
85	100		
135	60.9	52.2	78.2



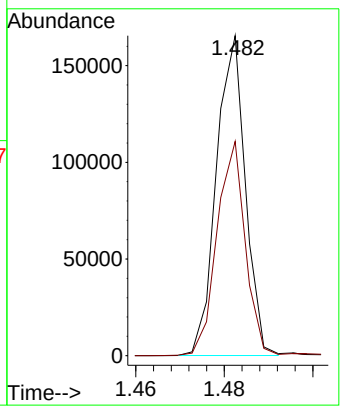


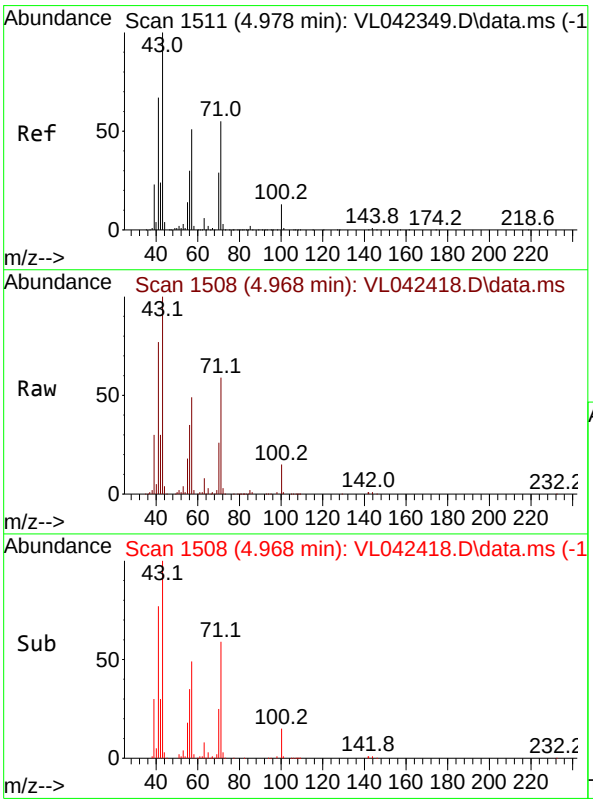
#9
Propene
Concen: 7.992 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 41 Resp: 74980

Ion	Ratio	Lower	Upper
41	100		
42	66.3	56.2	84.4

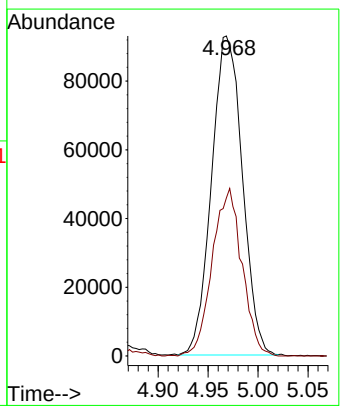


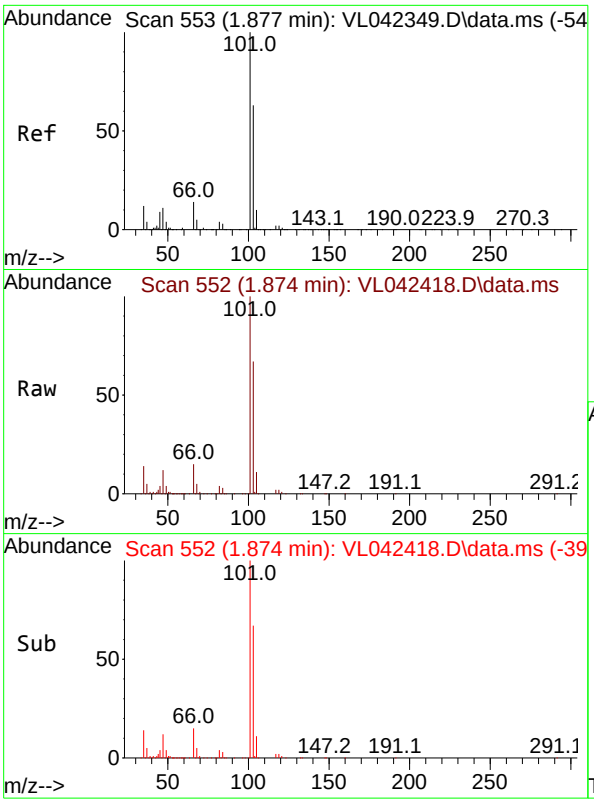


#10
Heptane
Concen: 7.565 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 199403

Ion	Ratio	Lower	Upper
43	100		
57	50.6	39.9	59.9



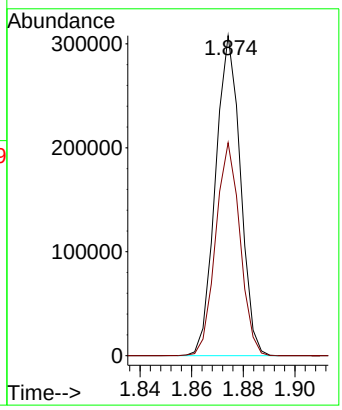


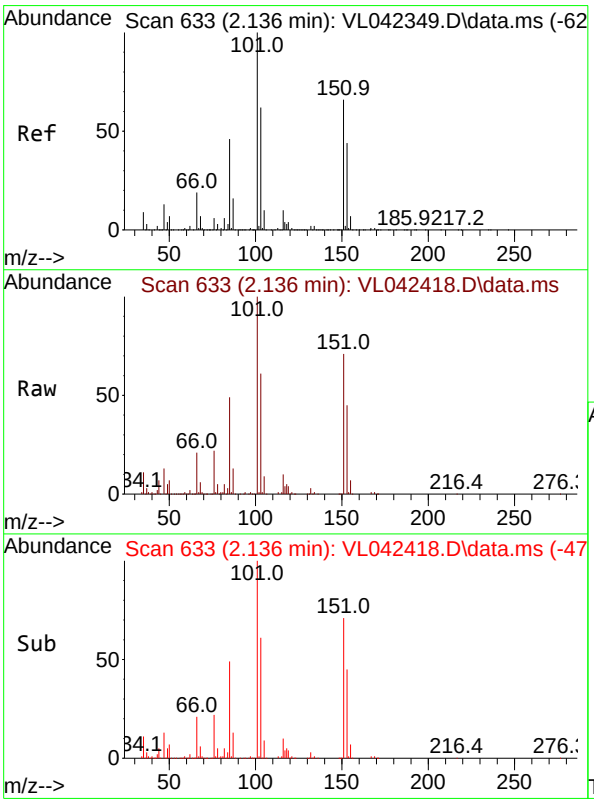
#11
Trichlorofluoromethane
Concen: 10.004 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:101 Resp: 205815

Ion	Ratio	Lower	Upper
101	100		
103	66.5	50.1	75.1

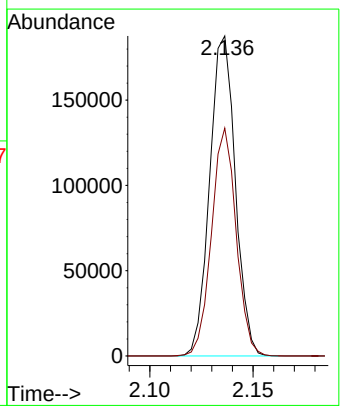


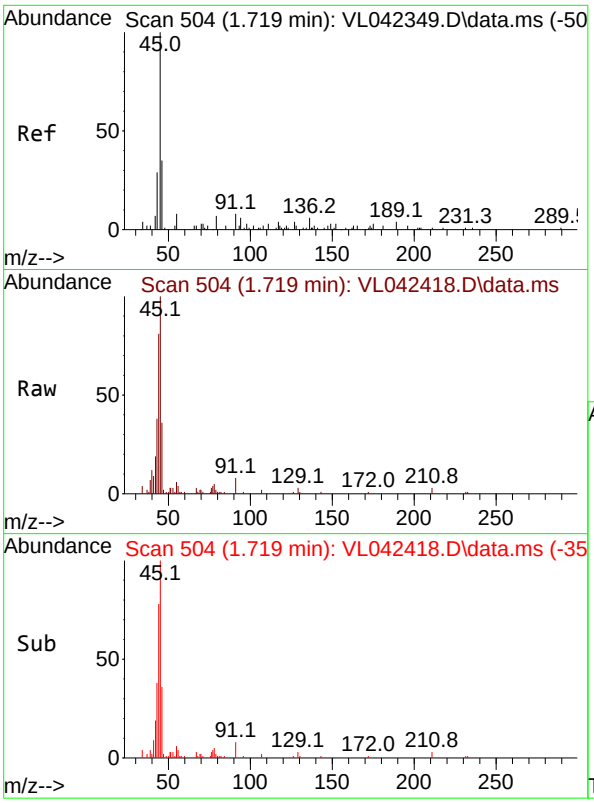


#12
1,1,2-Trichlorotrifluoroethane
Concen: 9.619 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:101 Resp: 161799

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.0	85.6



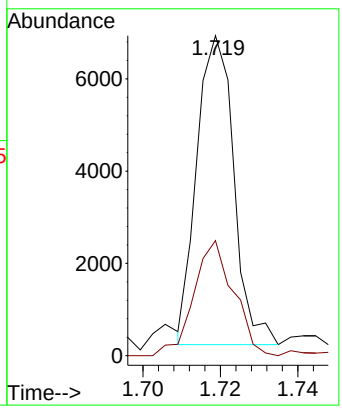


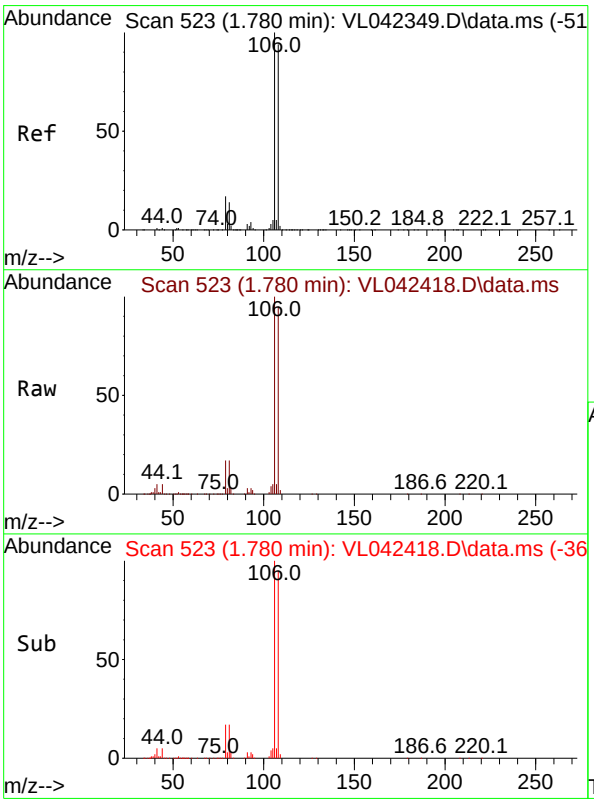
#13
Ethanol
Concen: 2.977 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 45 Resp: 4439

Ion	Ratio	Lower	Upper
45	100		
46	41.4	21.9	87.7

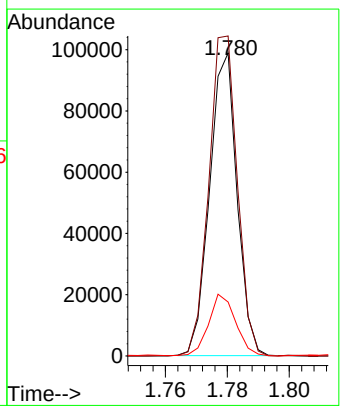


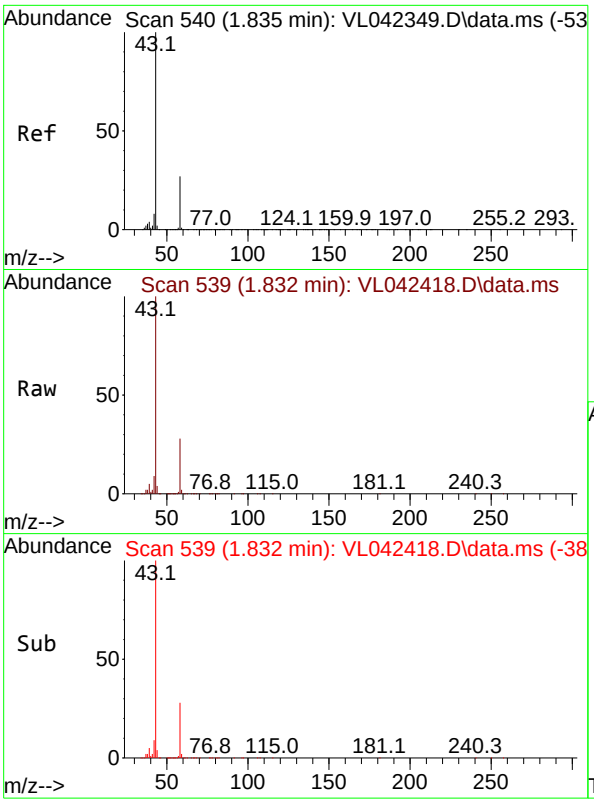


#14
Bromoethene
Concen: 9.581 ppbv
RT: 1.780 min Scan# 523
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:108 Resp: 60748

Ion	Ratio	Lower	Upper
108	100		
106	110.0	85.9	128.9
79	20.2	13.9	20.9



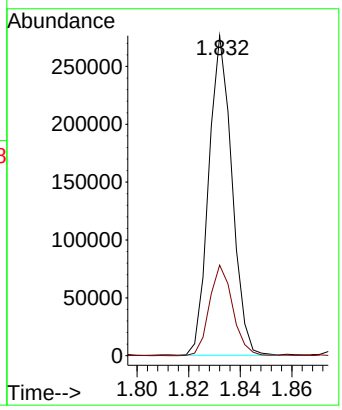


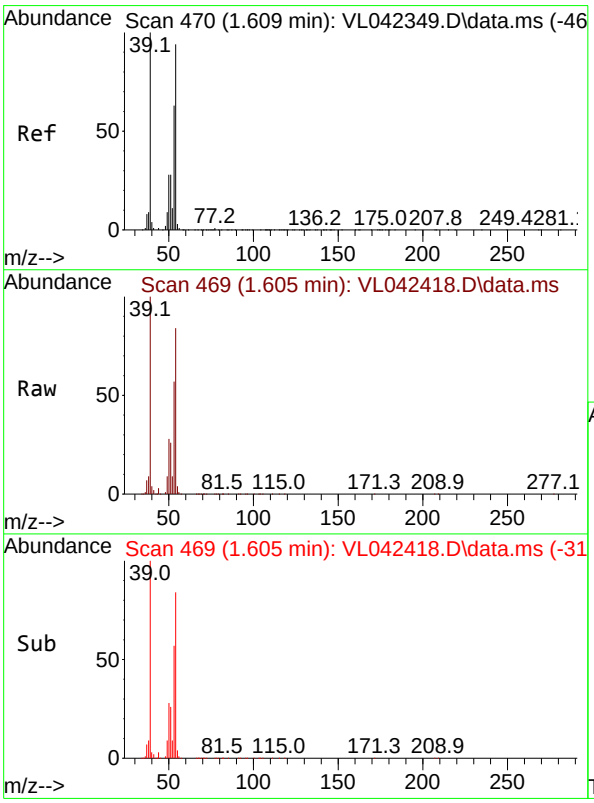
#15
Acetone
Concen: 8.613 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 43 Resp: 172651

Ion	Ratio	Lower	Upper
43	100		
58	28.8	22.4	33.6

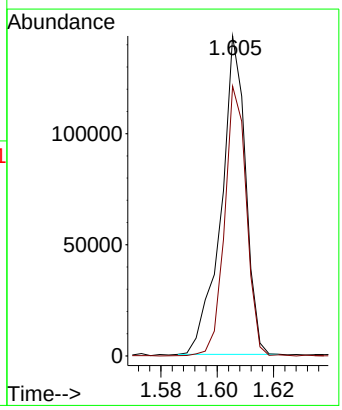


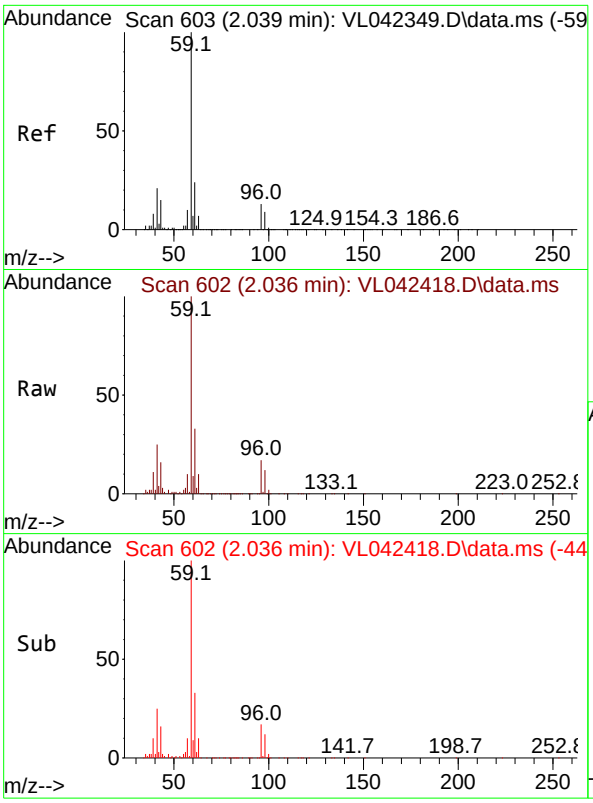


#16
1,3-Butadiene
Concen: 9.028 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 39 Resp: 86553

Ion	Ratio	Lower	Upper
39	100		
54	75.3	64.9	97.3



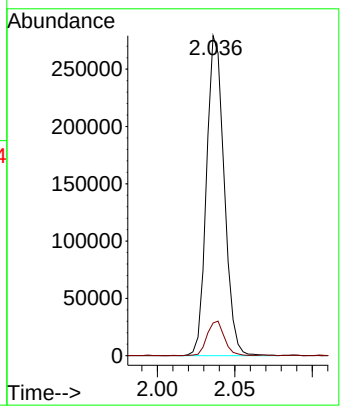


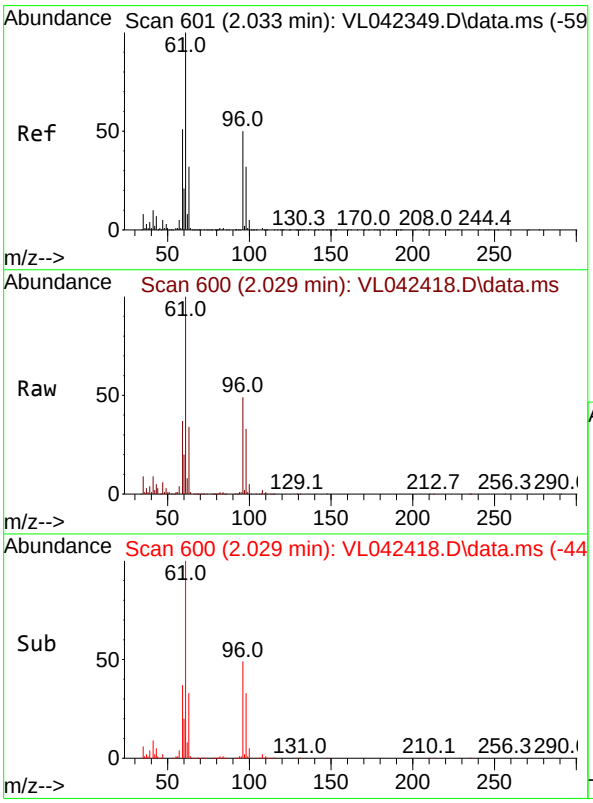
#17
tert-Butyl alcohol
Concen: 8.899 ppbv
RT: 2.036 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 59 Resp: 221069

Ion	Ratio	Lower	Upper
59	100		
57	10.8	8.7	13.1

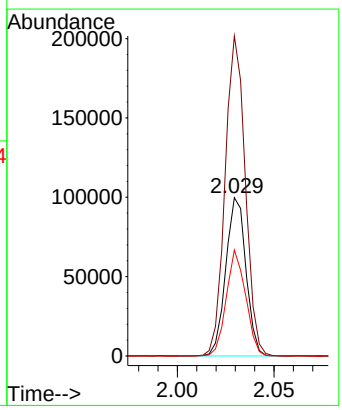


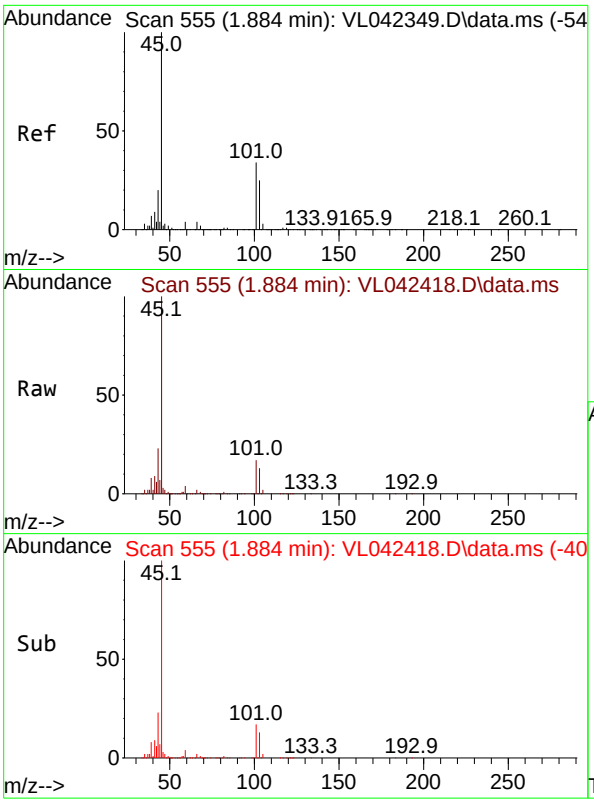


#18
1,1-Dichloroethene
Concen: 9.225 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 96 Resp: 72496

Ion	Ratio	Lower	Upper
96	100		
61	202.1	160.2	240.2
98	66.9	51.0	76.4



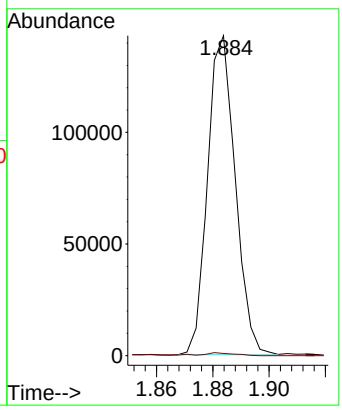


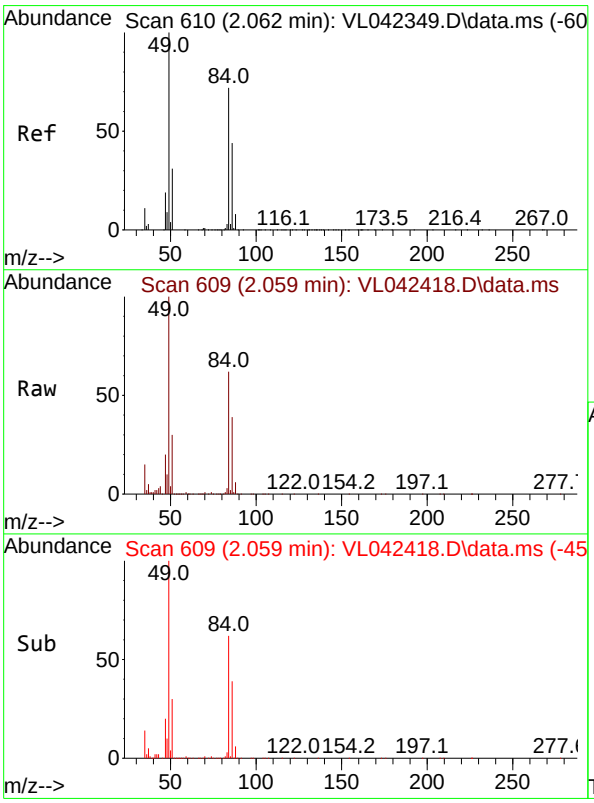
#19
Isopropyl Alcohol
Concen: 8.758 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 45 Resp: 97525

Ion	Ratio	Lower	Upper
45	100		
58	51.0	34.5	51.7

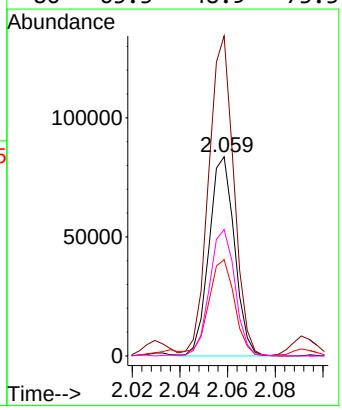


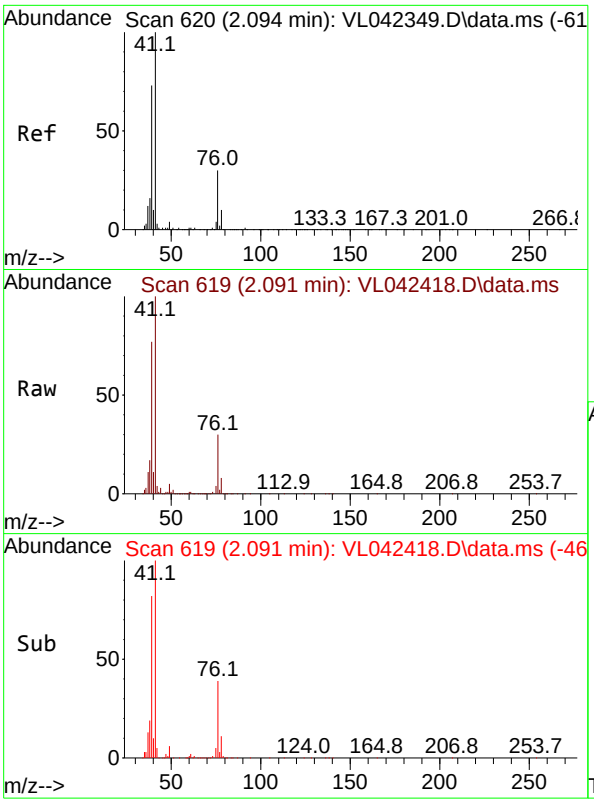


#20
Methylene Chloride
Concen: 7.920 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 84 Resp: 62175

Ion	Ratio	Lower	Upper
84	100		
49	159.9	111.6	167.4
51	47.8	35.1	52.7
86	63.3	48.9	73.3



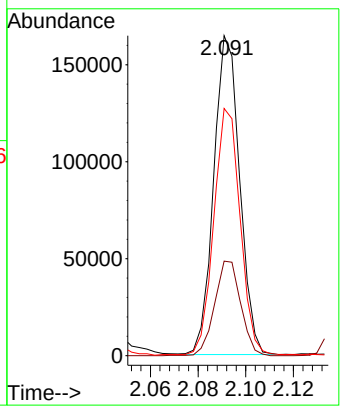


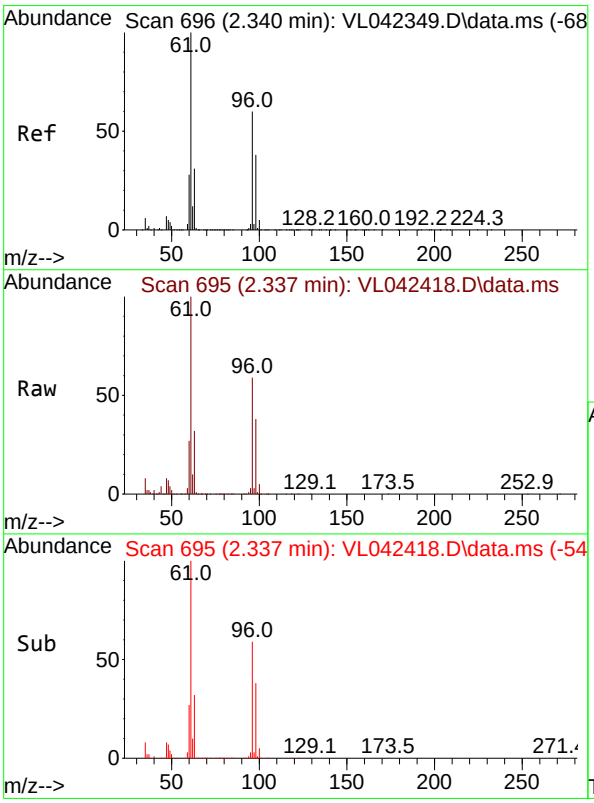
#21
Allyl Chloride
Concen: 8.964 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 41 Resp: 124058

Ion	Ratio	Lower	Upper
41	100		
76	29.9	24.8	37.2
39	78.6	60.6	90.8

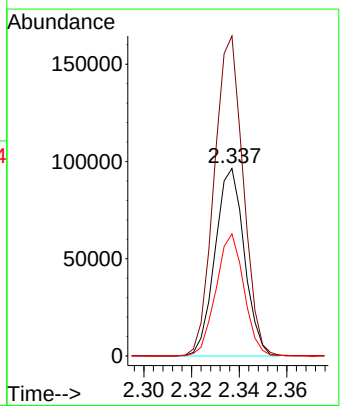


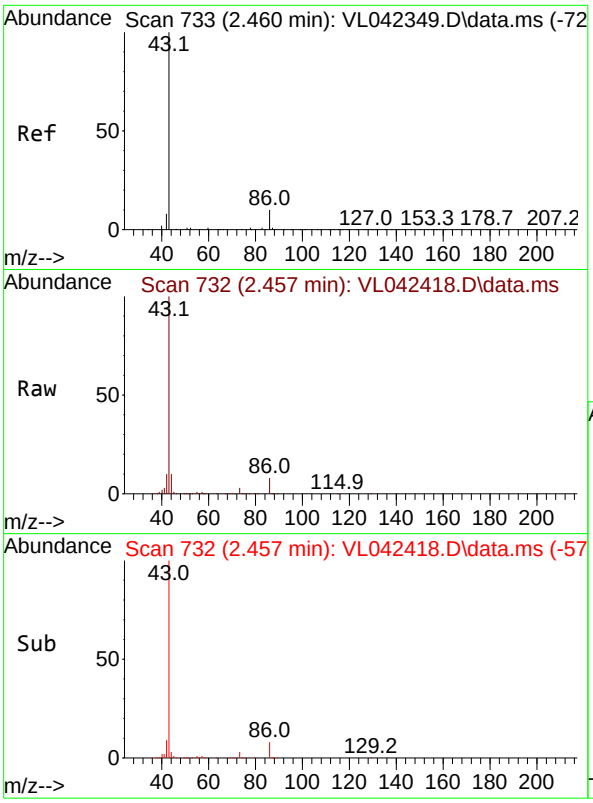


#22
trans-1,2-Dichloroethene
Concen: 9.184 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 96 Resp: 82175

Ion	Ratio	Lower	Upper
96	100		
61	170.5	133.7	200.5
98	65.0	50.3	75.5



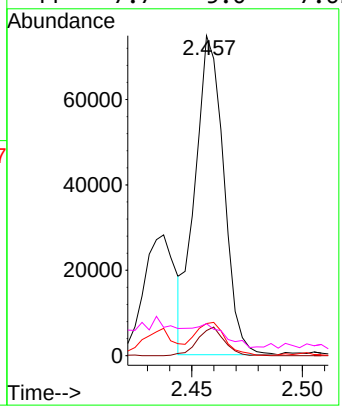


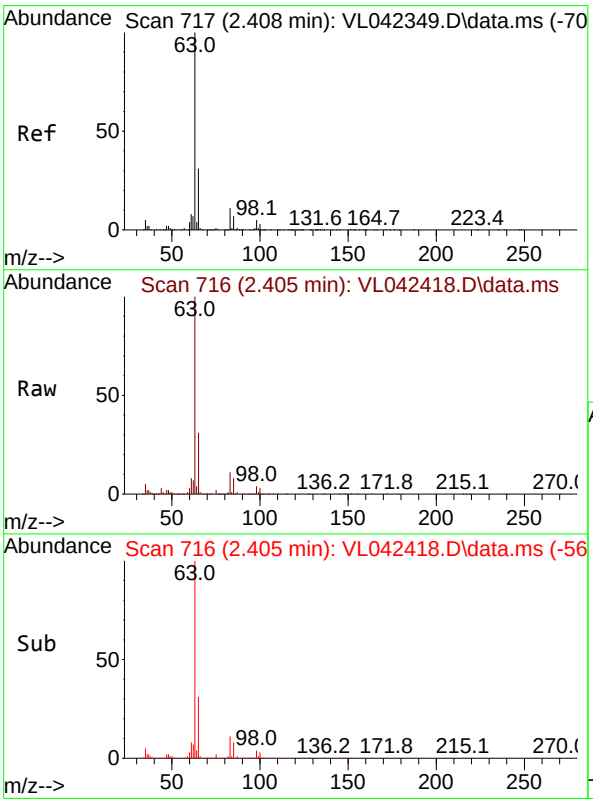
#23
Vinyl Acetate
Concen: 8.283 ppbv
RT: 2.457 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 43 Resp: 67206

Ion	Ratio	Lower	Upper
43	100		
86	7.9	6.5	9.7
42	9.8	7.8	11.8
44	7.7	5.0	7.6#

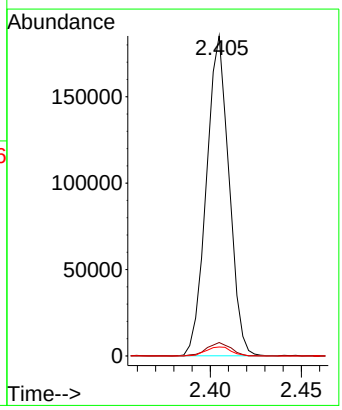


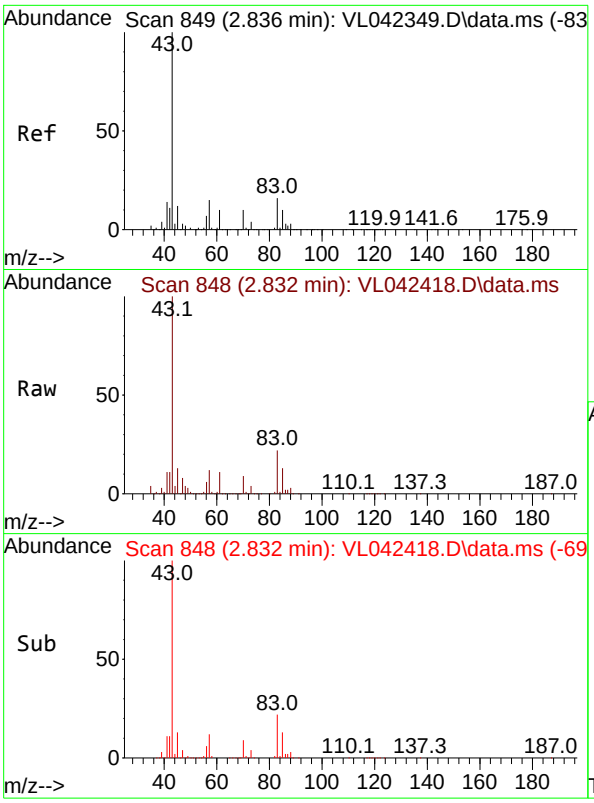


#24
1,1-Dichloroethane
Concen: 9.393 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 63 Resp: 159644

Ion	Ratio	Lower	Upper
63	100		
98	4.2	2.3	6.8
100	2.8	1.6	4.8



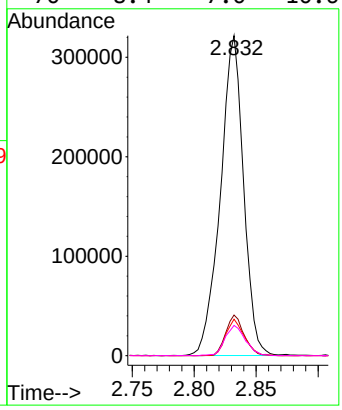


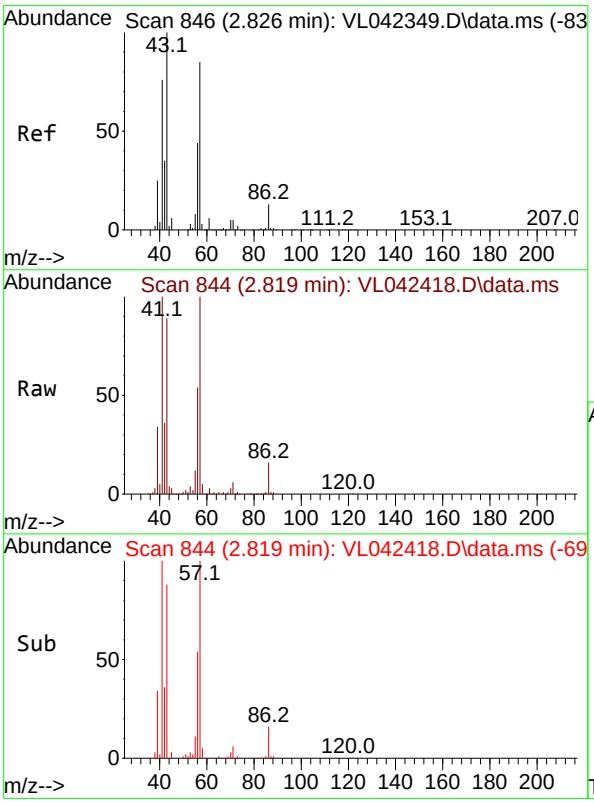
#25
Ethyl Acetate
Concen: 8.485 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 43 Resp: 419372

Ion	Ratio	Lower	Upper
43	100		
45	10.2	8.3	12.5
61	9.1	7.3	10.9
70	8.4	7.0	10.6

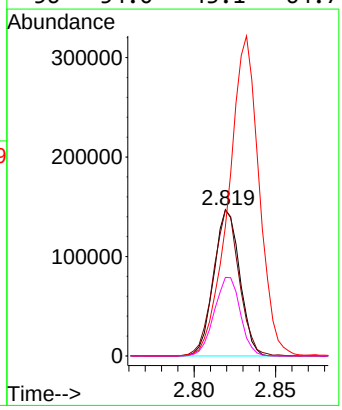


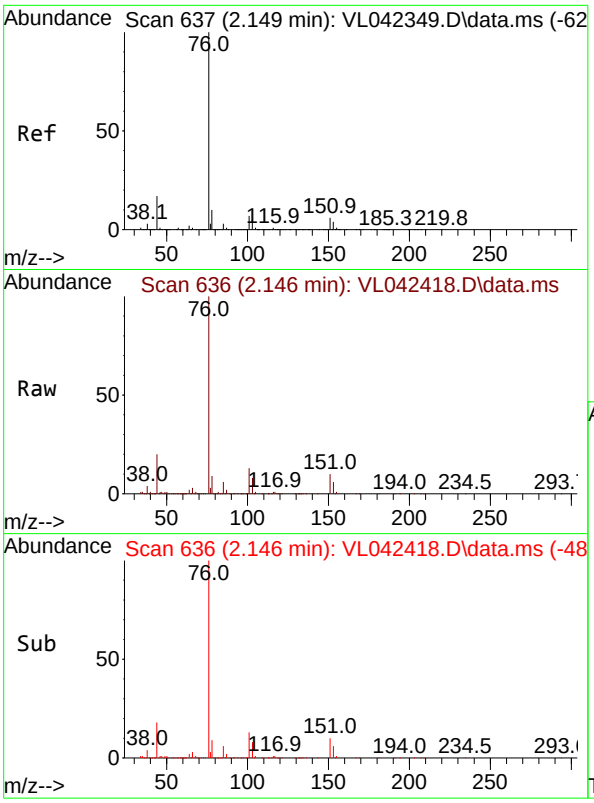


#26
Hexane
Concen: 8.112 ppbv
RT: 2.819 min Scan# 844
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 57 Resp: 162255

Ion	Ratio	Lower	Upper
57	100		
41	100.5	77.9	116.9
43	258.8	208.4	312.6
56	54.0	43.1	64.7



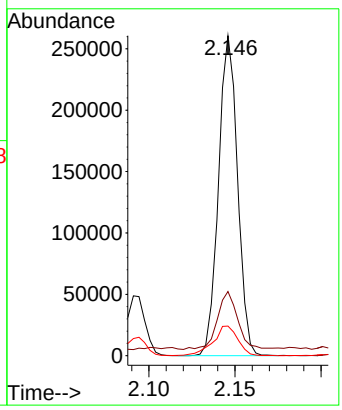


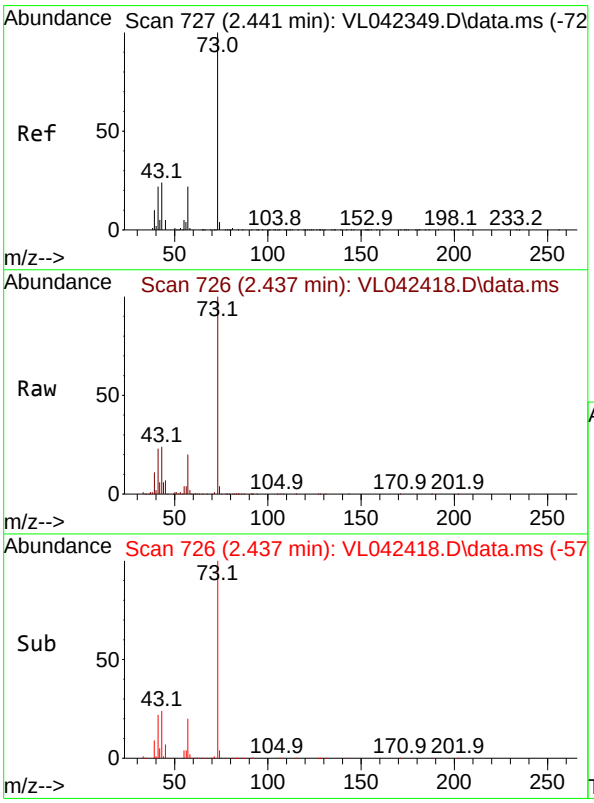
#27
Carbon Disulfide
Concen: 9.377 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 76 Resp: 200806

Ion	Ratio	Lower	Upper
76	100		
44	21.3	15.5	23.3
78	12.0	9.3	13.9

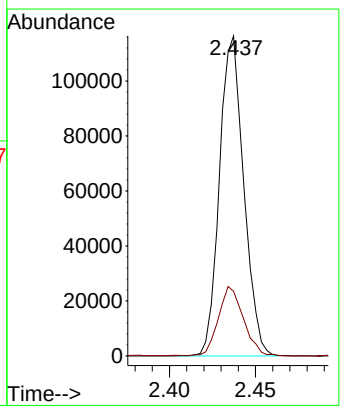


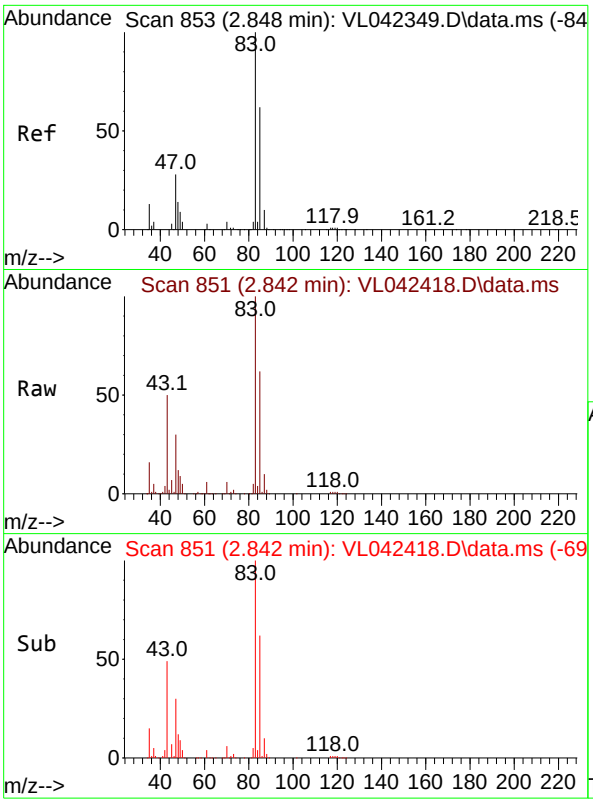


#28
Methyl tert-Butyl Ether
Concen: 8.718 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 73 Resp: 114239

Ion	Ratio	Lower	Upper
73	100		
57	22.6	21.3	31.9



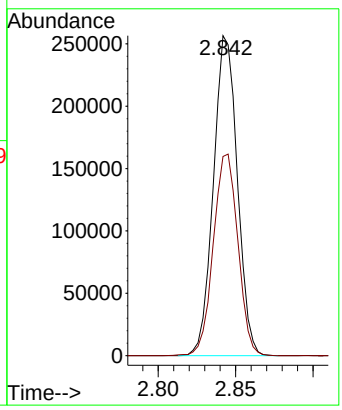


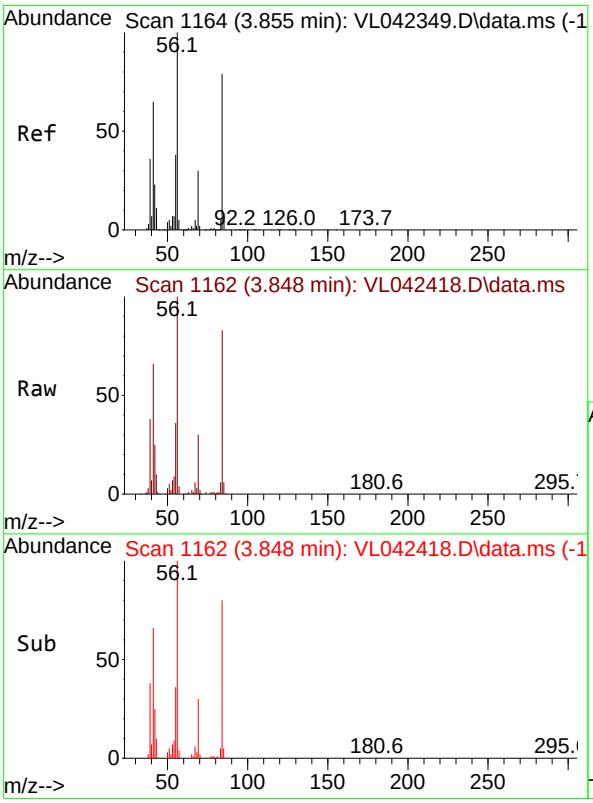
#29
Chloroform
Concen: 9.751 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 83 Resp: 275655

Ion	Ratio	Lower	Upper
83	100		
85	62.3	50.0	75.0

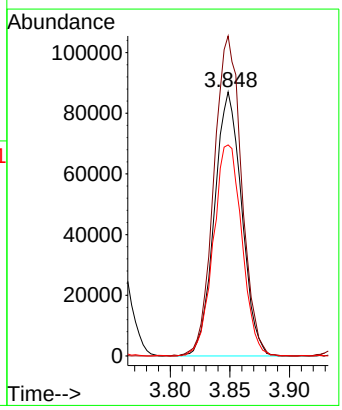


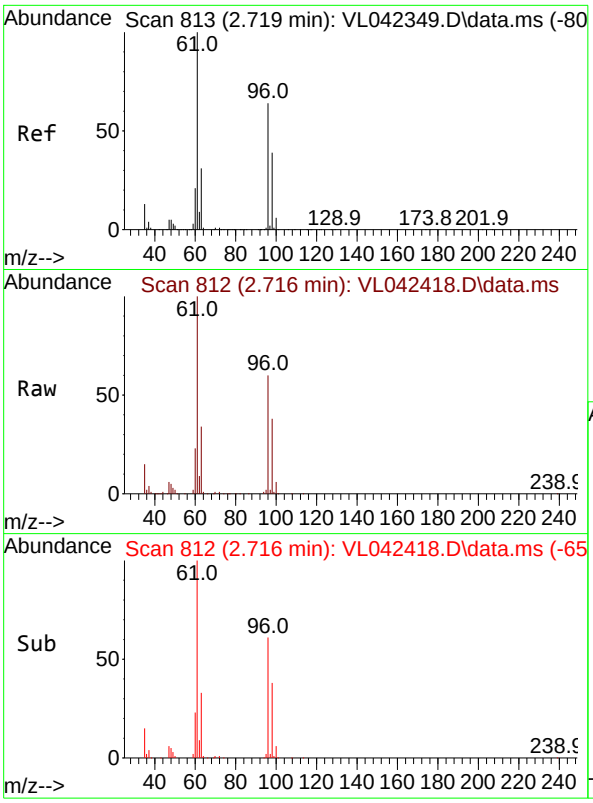


#30
Cyclohexane
Concen: 8.583 ppbv
RT: 3.848 min Scan# 1162
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 84 Resp: 138766

Ion	Ratio	Lower	Upper
84	100		
56	122.9	101.0	151.4
41	83.5	67.4	101.0



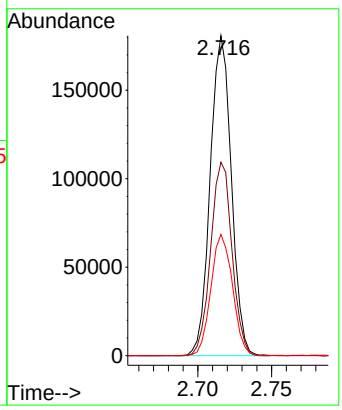


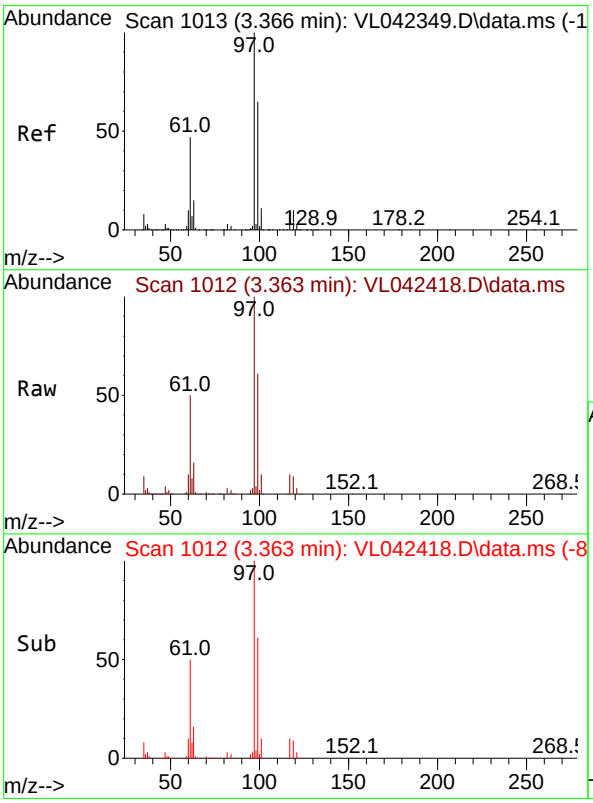
#31
cis-1,2-Dichloroethene
Concen: 9.464 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 61 Resp: 179960

Ion	Ratio	Lower	Upper
61	100		
96	60.5	50.8	76.2
98	37.9	30.9	46.3

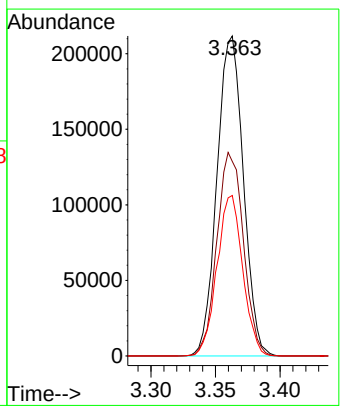


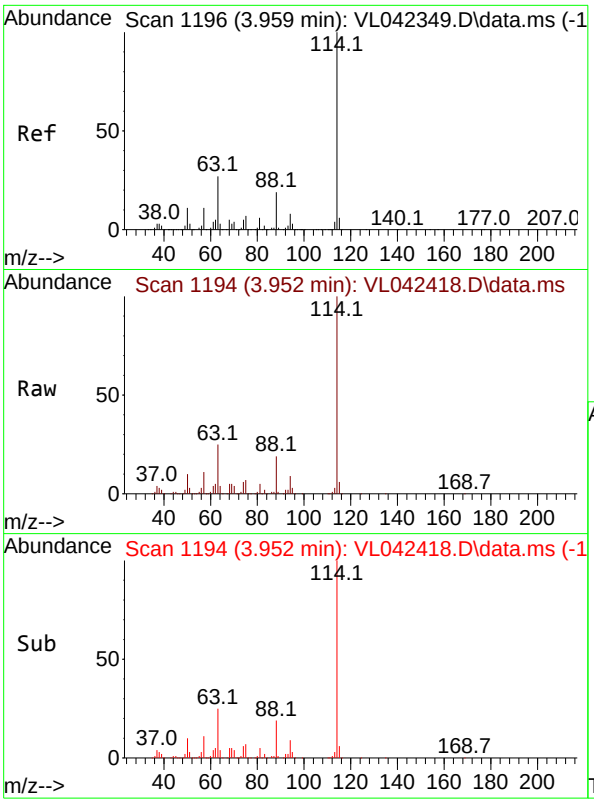


#32
1,1,1-Trichloroethane
Concen: 9.469 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 97 Resp: 301358

Ion	Ratio	Lower	Upper
97	100		
99	63.9	51.0	76.4
61	48.9	38.8	58.2



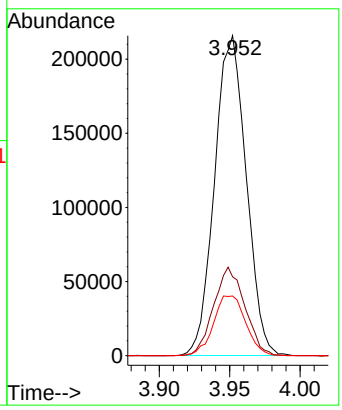


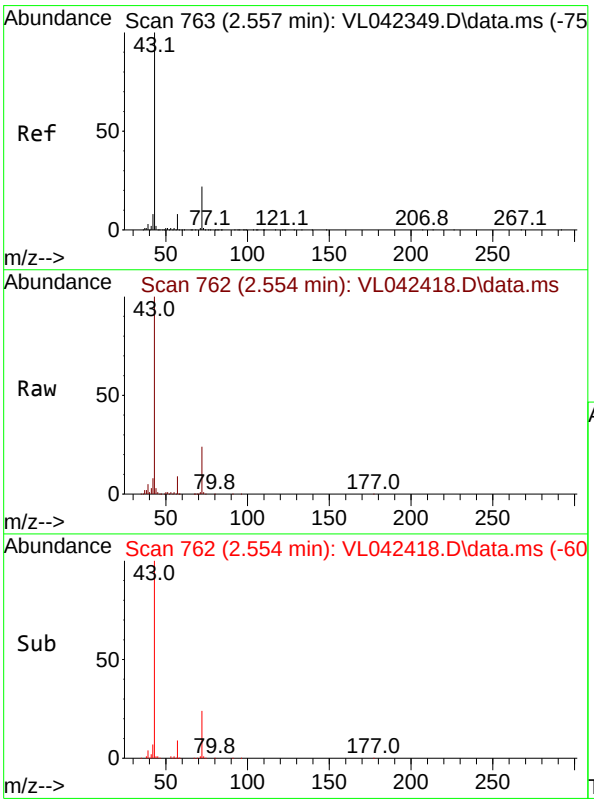
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:114 Resp: 337202

Ion	Ratio	Lower	Upper
114	100		
63	27.4	21.8	32.6
88	19.2	15.5	23.3

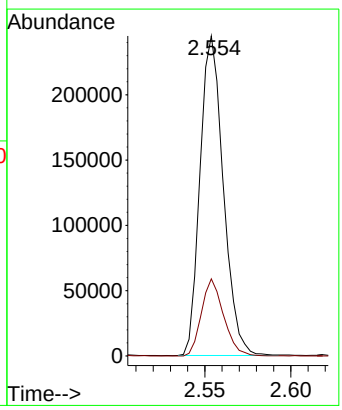


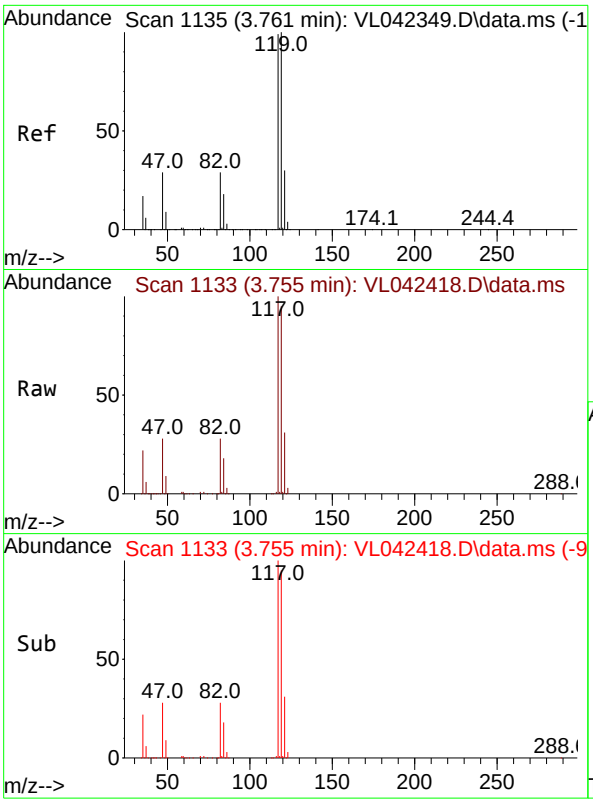


#34
2-Butanone
Concen: 8.628 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 230104

Ion	Ratio	Lower	Upper
43	100		
72	23.0	18.2	27.2



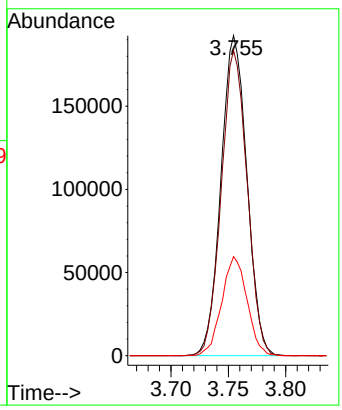


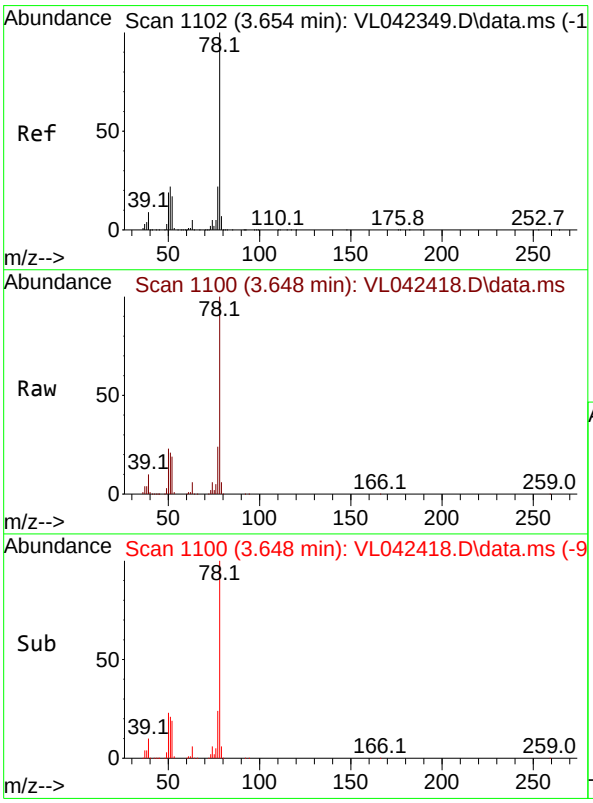
#35
Carbon Tetrachloride
Concen: 9.906 ppbv
RT: 3.755 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:117 Resp: 302298

Ion	Ratio	Lower	Upper
117	100		
119	95.4	80.5	120.7
121	30.9	24.2	36.2

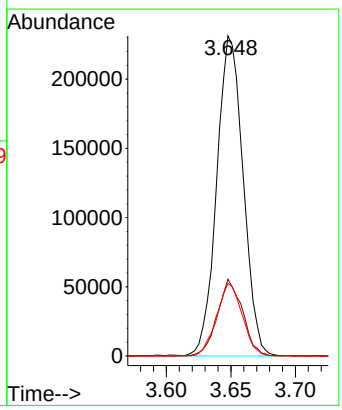


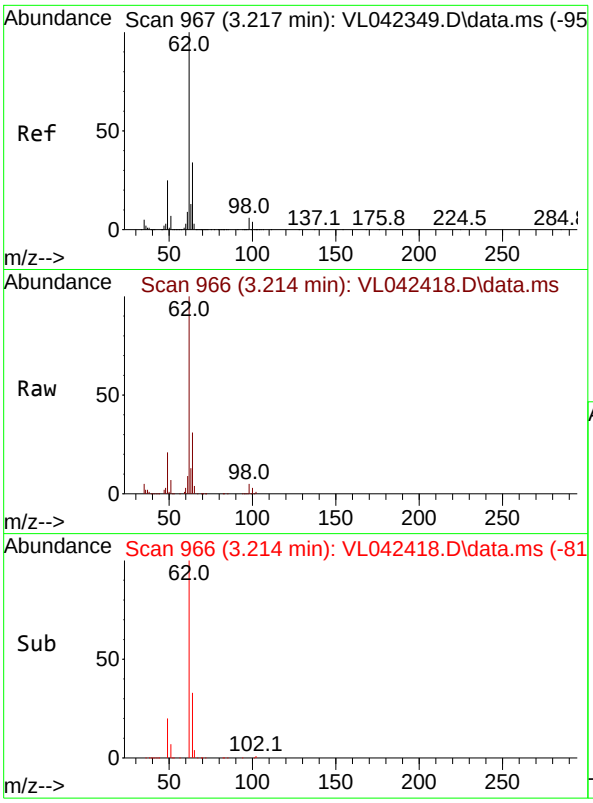


#36
Benzene
Concen: 9.049 ppbv
RT: 3.648 min Scan# 1100
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 78 Resp: 329117

Ion	Ratio	Lower	Upper
78	100		
77	23.8	17.4	26.0
50	22.7	15.5	23.3



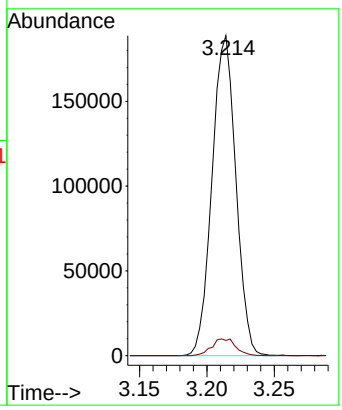


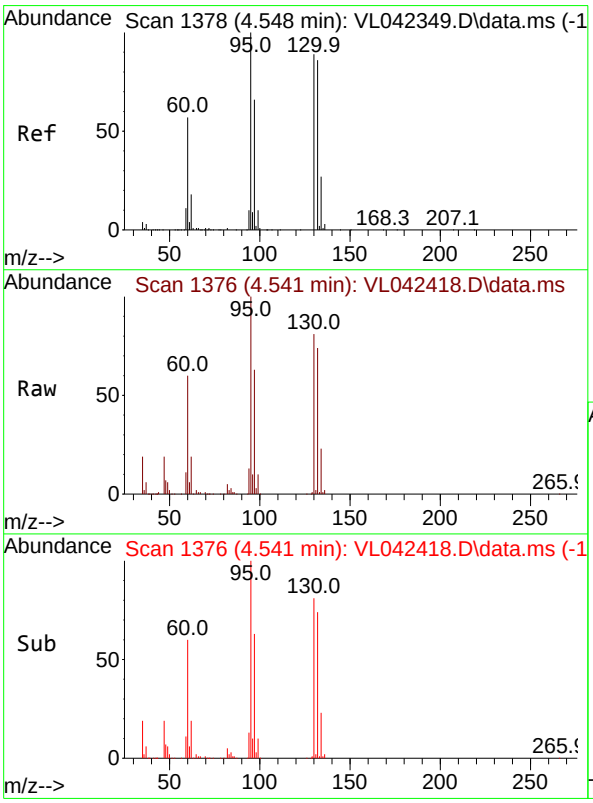
#37
1,2-Dichloroethane
Concen: 10.641 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 62 Resp: 232279

Ion	Ratio	Lower	Upper
62	100		
98	5.4	5.1	7.7

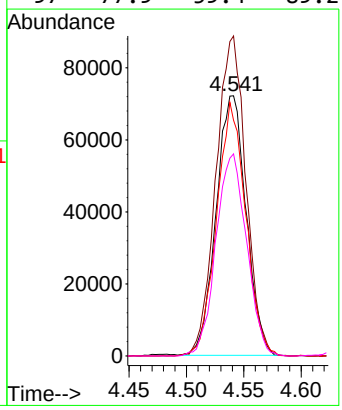


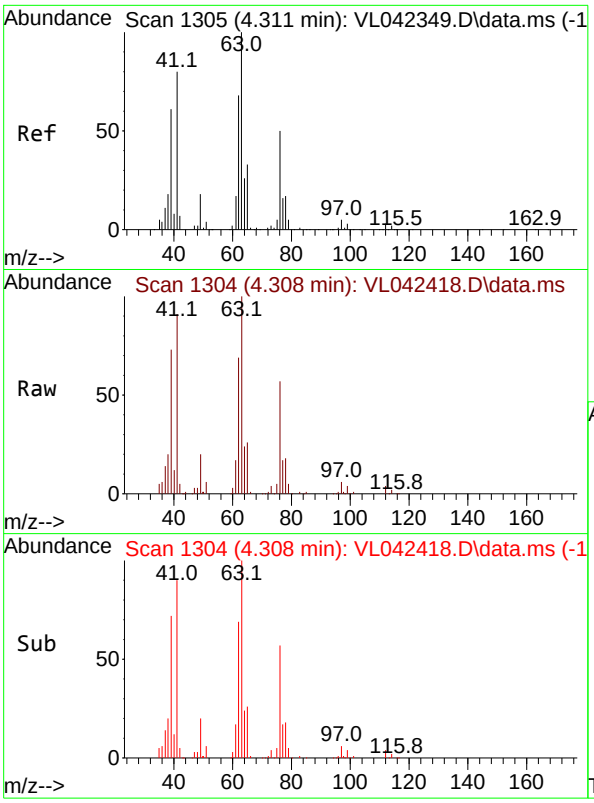


#38
Trichloroethene
Concen: 8.252 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:130 Resp: 131178

Ion	Ratio	Lower	Upper
130	100		
95	123.1	89.8	134.6
132	90.7	77.7	116.5
97	77.9	59.4	89.2



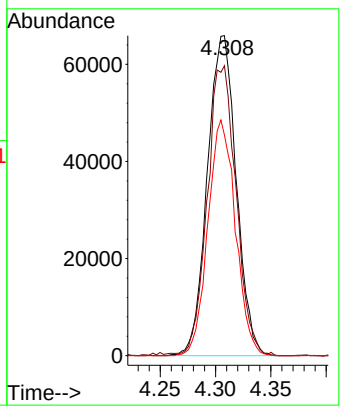


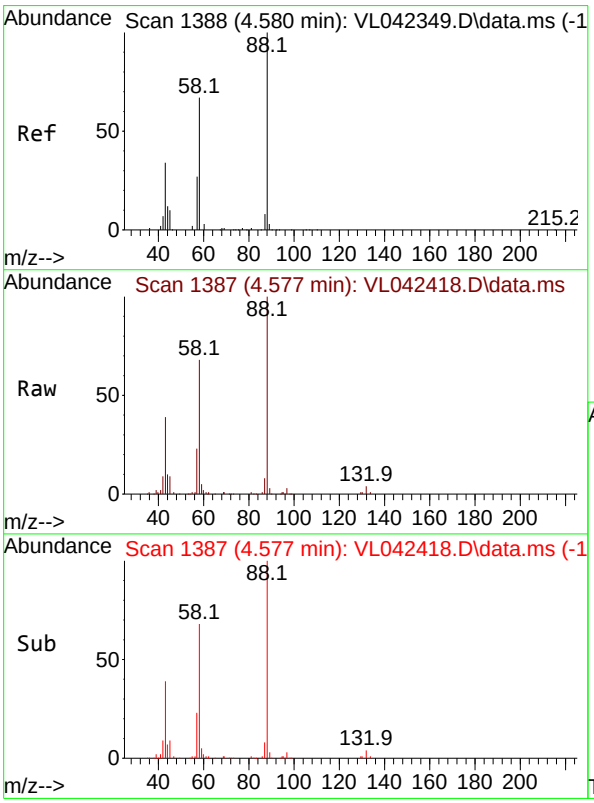
#39
1,2-Dichloropropane
Concen: 8.831 ppbv
RT: 4.308 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 63 Resp: 119692

Ion	Ratio	Lower	Upper
63	100		
41	90.6	64.2	96.2
62	69.0	54.3	81.5

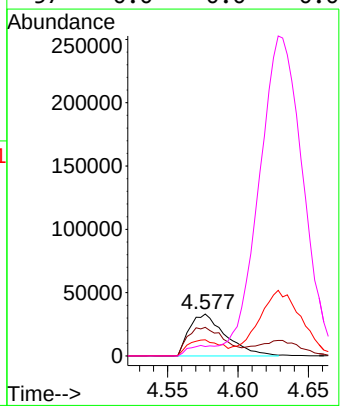


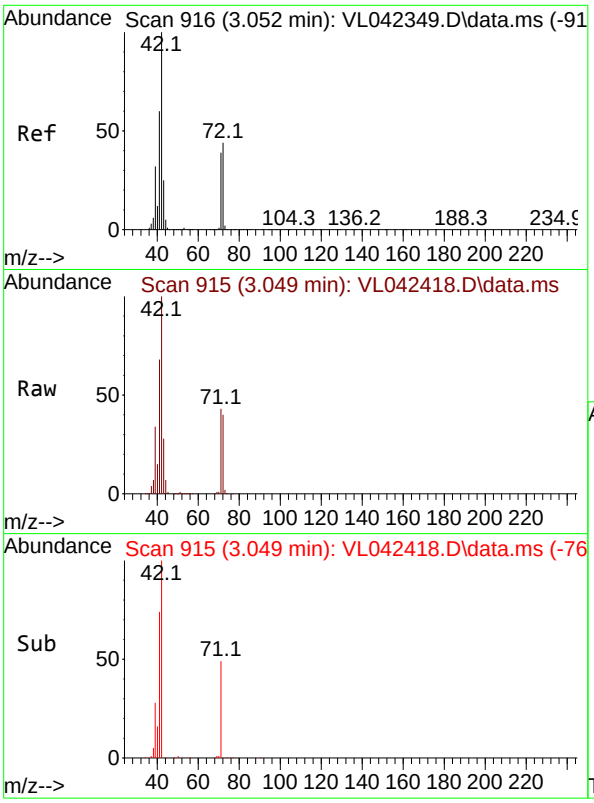


#40
1,4-Dioxane
Concen: 8.010 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 88 Resp: 59666

Ion	Ratio	Lower	Upper
88	100		
58	71.2	61.4	92.0
43	37.7	23.2	34.8#
57	0.0	0.0	0.0



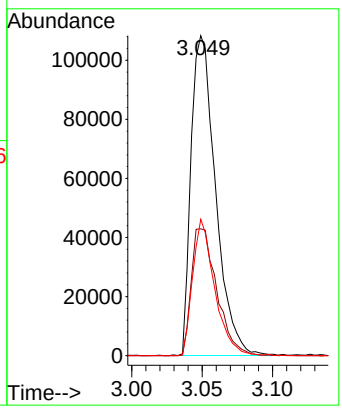


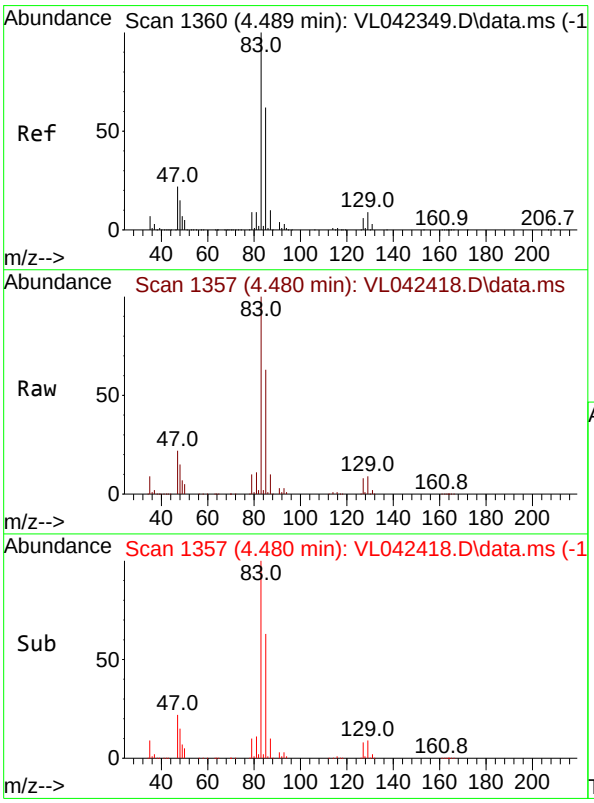
#41
Tetrahydrofuran
Concen: 8.428 ppbv
RT: 3.049 min Scan# 91
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 42 Resp: 131046

Ion	Ratio	Lower	Upper
42	100		
72	41.4	32.3	48.5
71	38.3	31.4	47.2

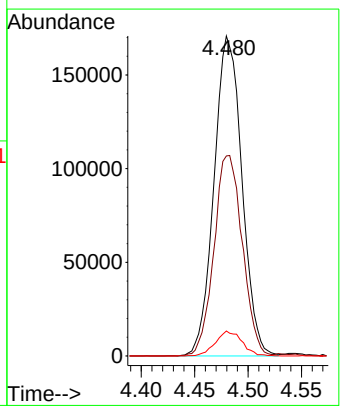


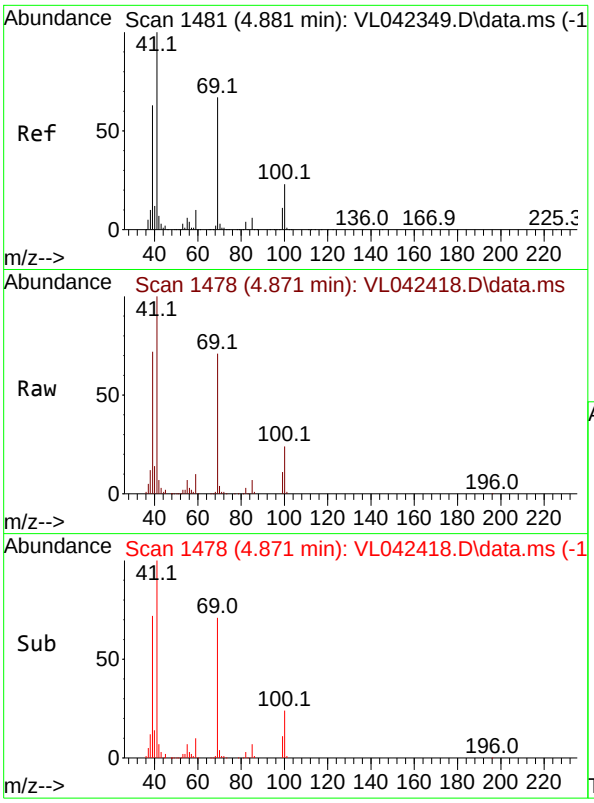


#42
Bromodichloromethane
Concen: 10.222 ppbv
RT: 4.480 min Scan# 1357
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 83 Resp: 310553

Ion	Ratio	Lower	Upper
83	100		
85	62.5	49.7	74.5
127	7.8	5.1	7.7#



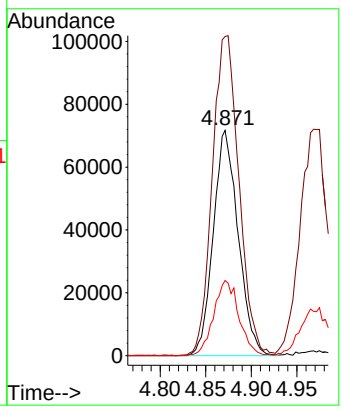


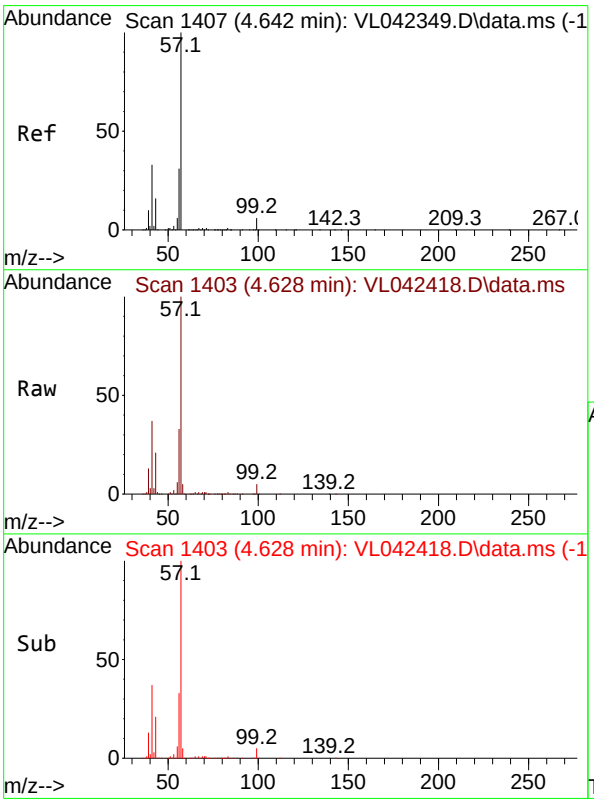
#43
Methyl Methacrylate
Concen: 8.312 ppbv
RT: 4.871 min Scan# 14
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 69 Resp: 136249

Ion	Ratio	Lower	Upper
69	100		
41	151.8	118.6	177.8
100	33.8	28.2	42.2

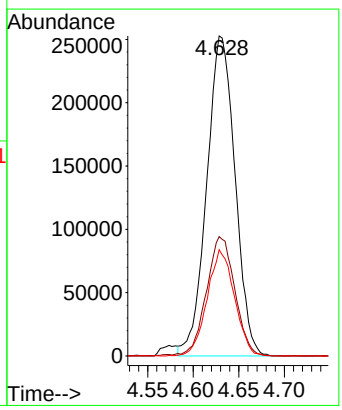


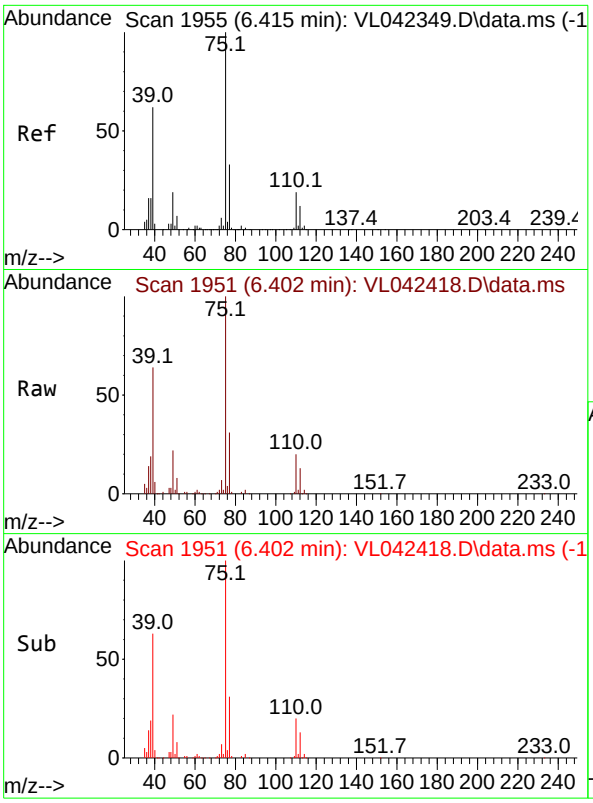


#44
2,2,4-Trimethylpentane
Concen: 8.707 ppbv
RT: 4.628 min Scan# 1403
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 57 Resp: 546967

Ion	Ratio	Lower	Upper
57	100		
41	37.6	27.2	40.8
56	31.9	25.7	38.5



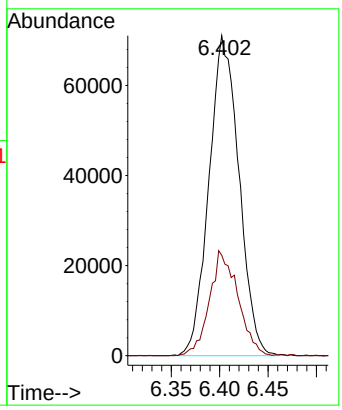


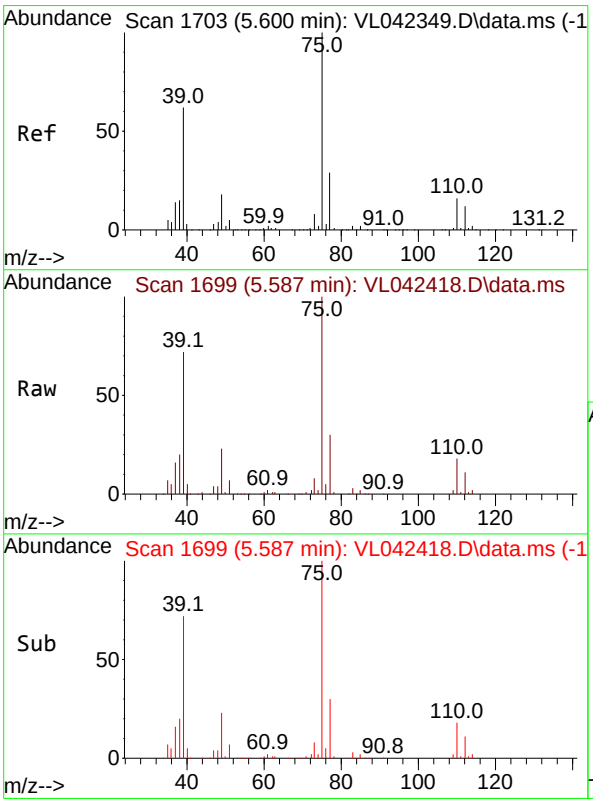
#45
t-1,3-Dichloropropene
Concen: 9.133 ppbv
RT: 6.402 min Scan# 1
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 75 Resp: 152930

Ion	Ratio	Lower	Upper
75	100		
77	31.4	27.0	40.6

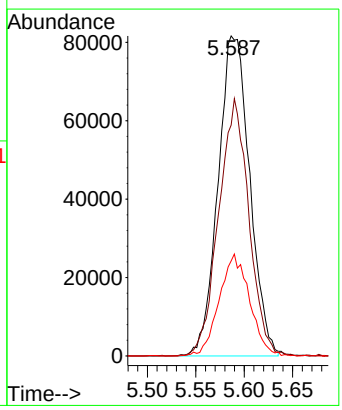


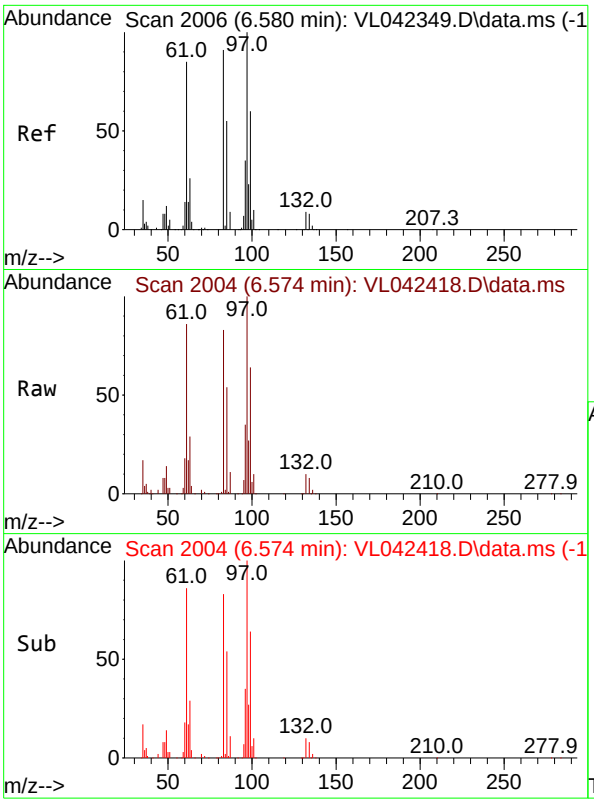


#46
cis-1,3-Dichloropropene
Concen: 9.055 ppbv
RT: 5.587 min Scan# 1699
Delta R.T. -0.013 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 75 Resp: 185557

Ion	Ratio	Lower	Upper
75	100		
39	72.0	50.0	75.0
77	29.7	23.0	34.6



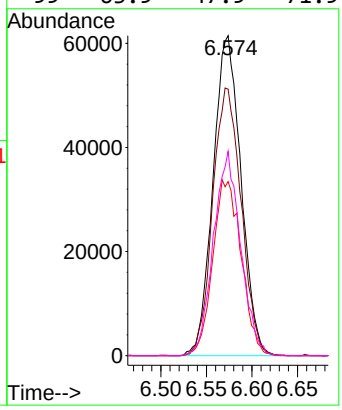


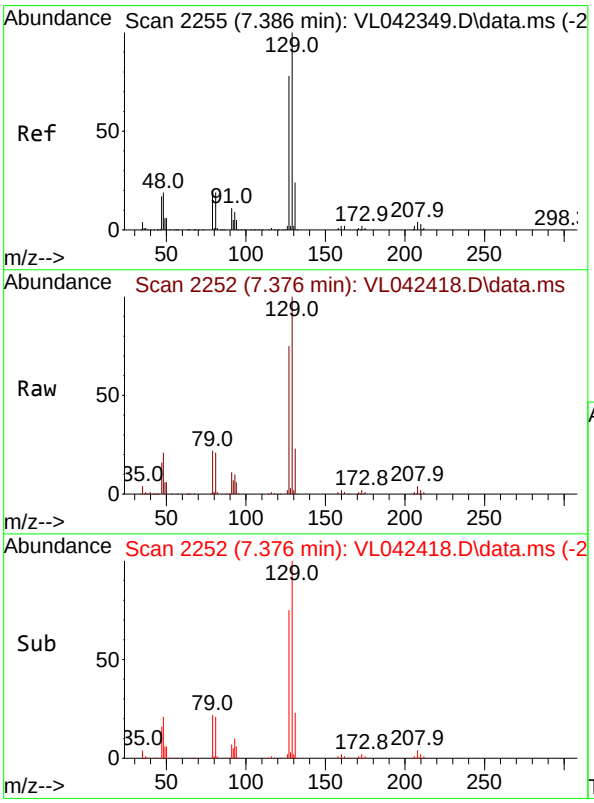
#47
1,1,2-Trichloroethane
Concen: 9.474 ppbv
RT: 6.574 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 97 Resp: 130821

Ion	Ratio	Lower	Upper
97	100		
83	83.3	72.8	109.2
85	54.4	44.2	66.4
99	63.9	47.9	71.9

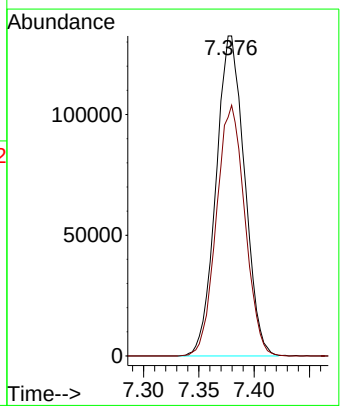


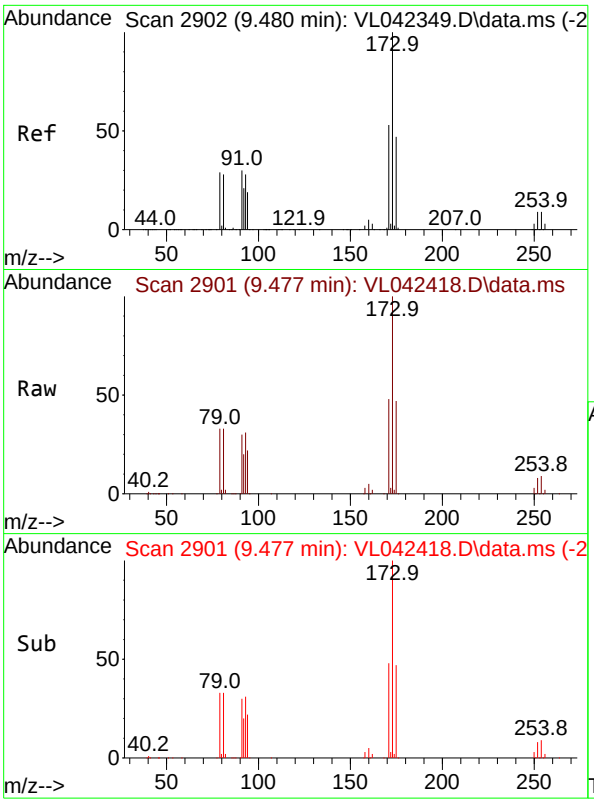


#48
Dibromochloromethane
Concen: 9.753 ppbv
RT: 7.376 min Scan# 2252
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:129 Resp: 237927

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3



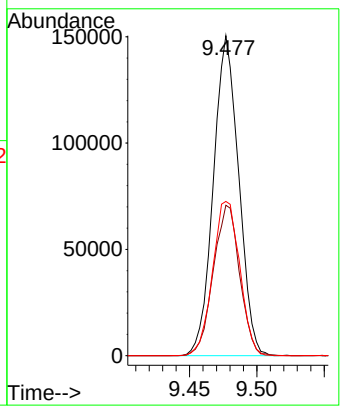


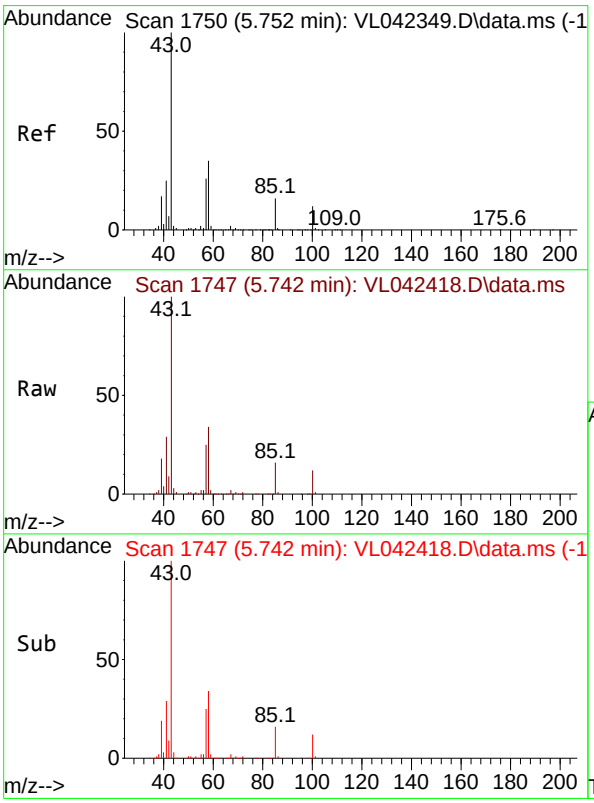
#49
Bromoform
Concen: 9.229 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:173 Resp: 196872

Ion	Ratio	Lower	Upper
173	100		
175	48.8	38.2	57.2
171	51.7	40.9	61.3

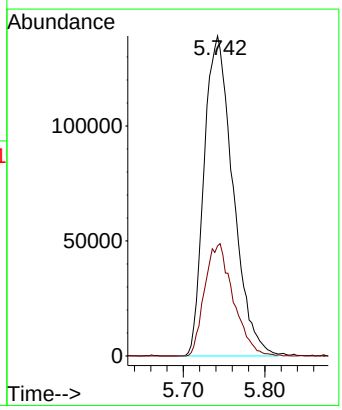


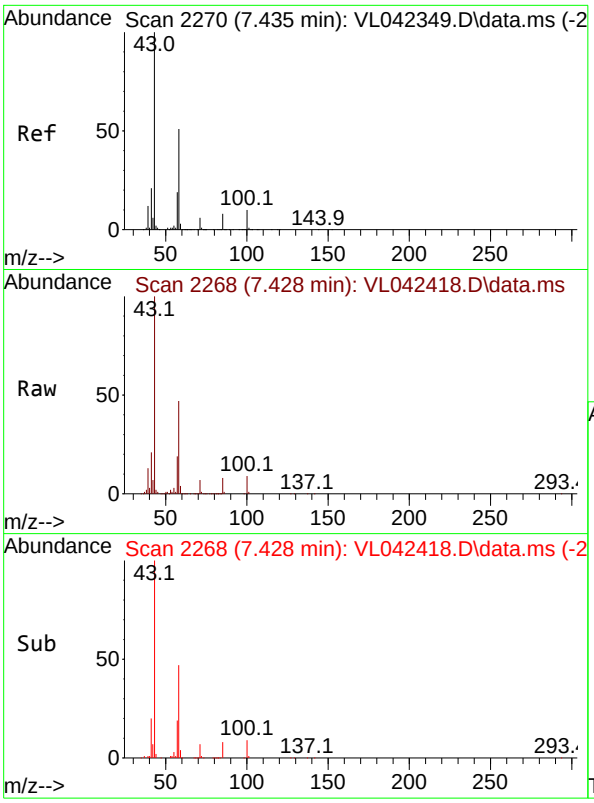


#50
4-Methyl-2-Pentanone
Concen: 7.726 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 43 Resp: 342379

Ion	Ratio	Lower	Upper
43	100		
58	34.9	28.6	43.0



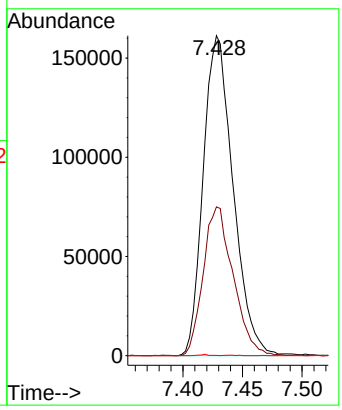


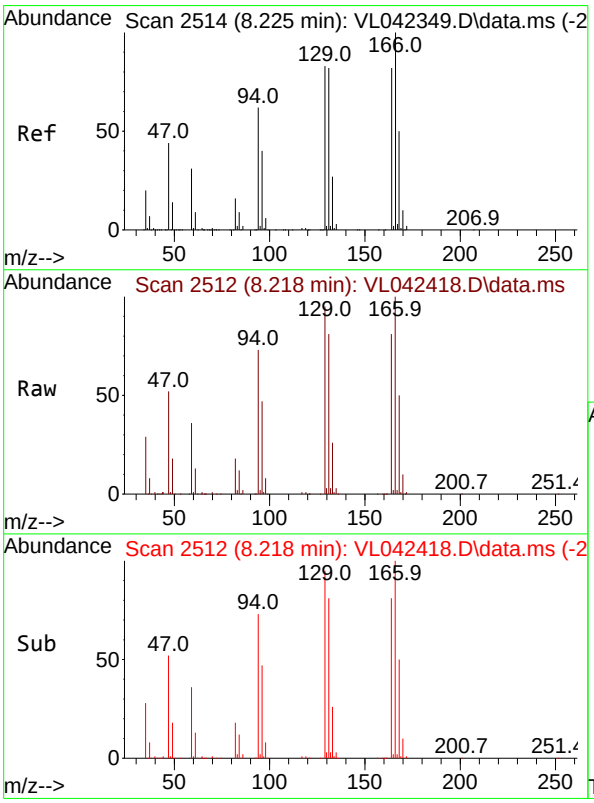
#51
2-Hexanone
Concen: 7.060 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 43 Resp: 280580

Ion	Ratio	Lower	Upper
43	100		
58	46.8	40.2	60.4
98	0.2	0.1	0.1#

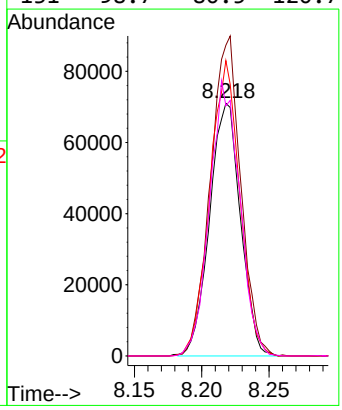


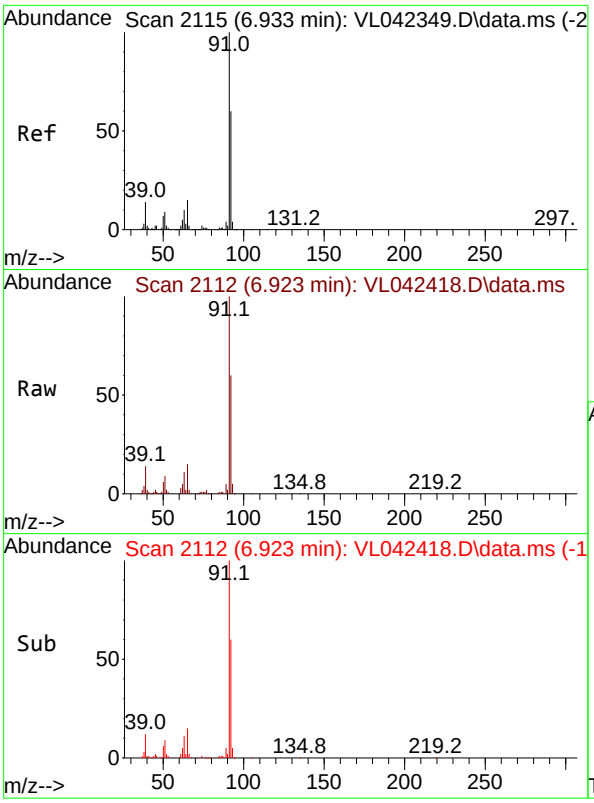


#52
Tetrachloroethene
Concen: 8.058 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:164 Resp: 113273

Ion	Ratio	Lower	Upper
164	100		
166	122.8	98.2	147.2
129	116.9	81.8	122.8
131	98.7	80.5	120.7



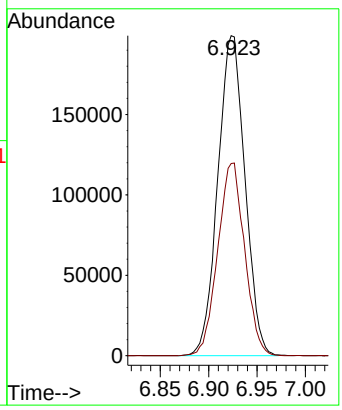


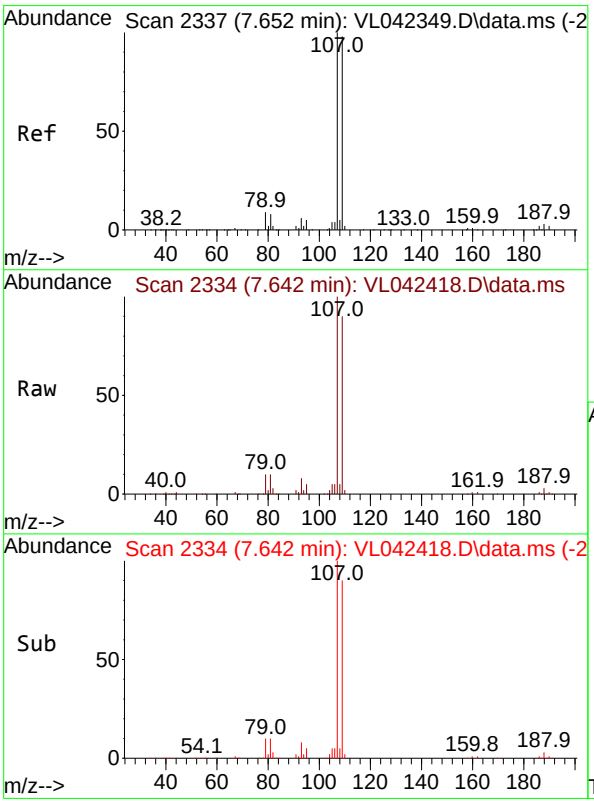
#53
Toluene
Concen: 8.904 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 91 Resp: 388626

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4

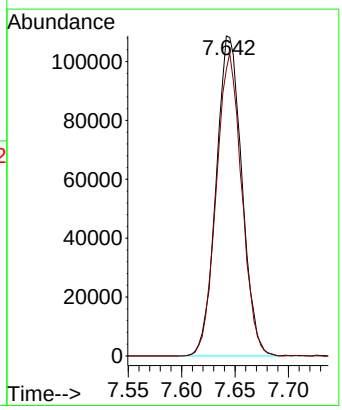


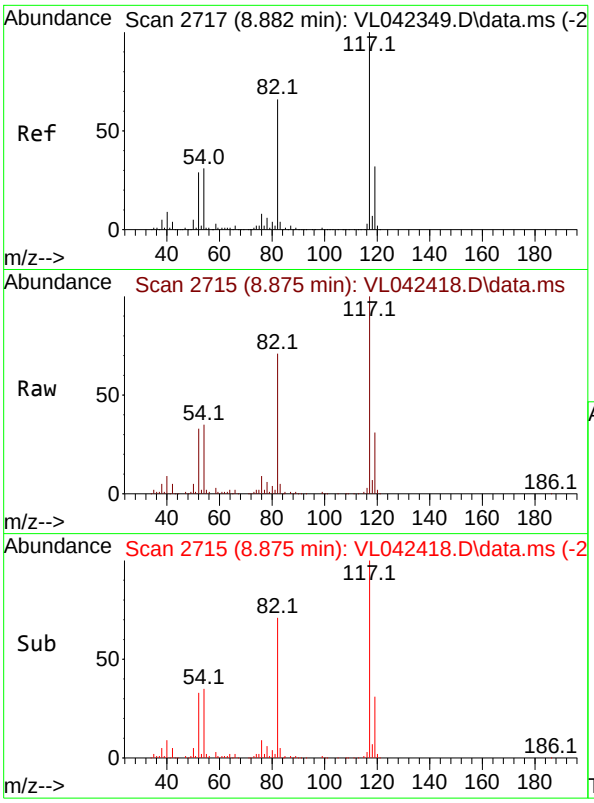


#54
1,2-Dibromoethane
Concen: 9.191 ppbv
RT: 7.642 min Scan# 2334
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:107 Resp: 181632

Ion	Ratio	Lower	Upper
107	100		
109	89.6	78.2	117.4



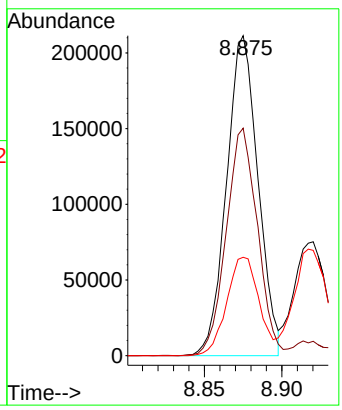


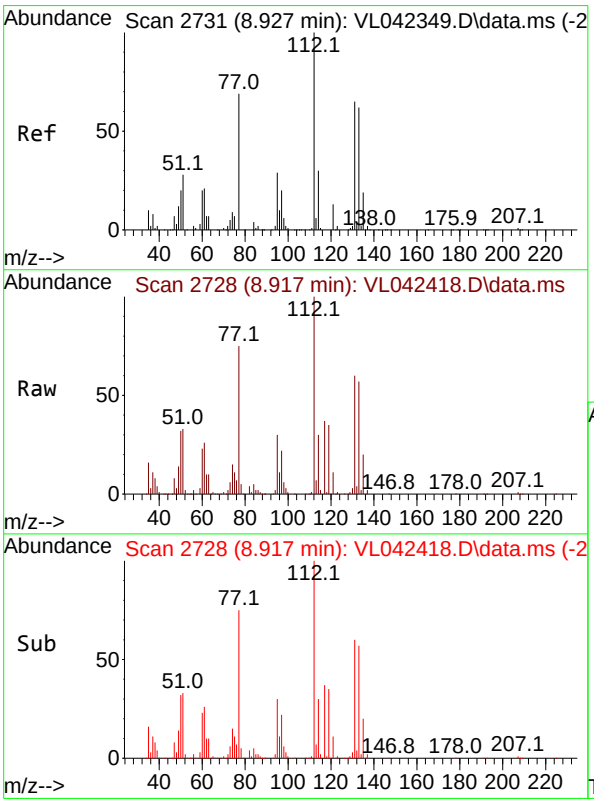
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:117 Resp: 299130

Ion	Ratio	Lower	Upper
117	100		
82	75.2	57.8	86.6
119	33.3	25.2	37.8

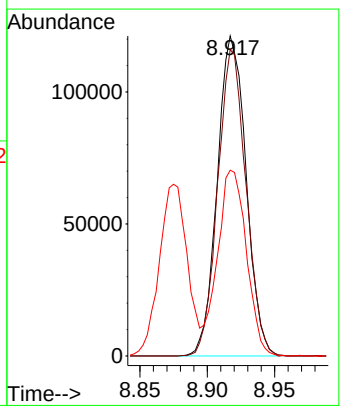


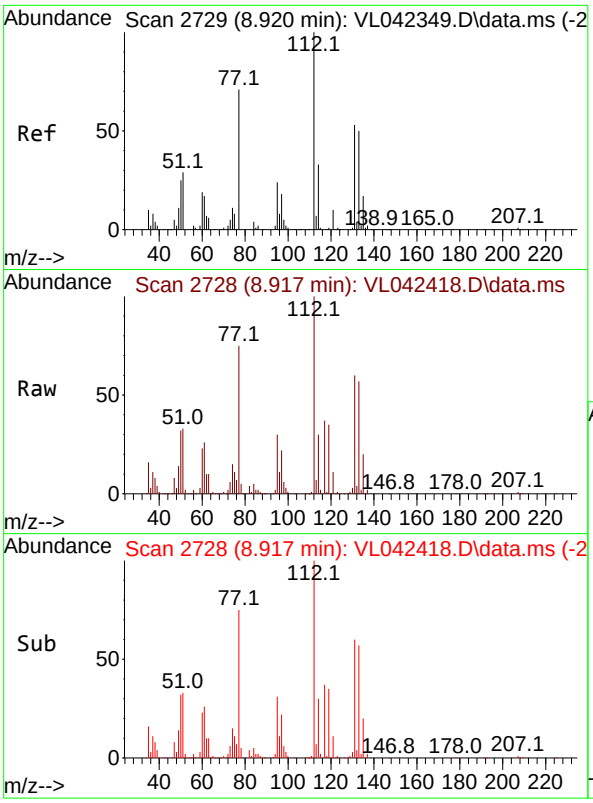


#56
1,1,1,2-Tetrachloroethane
Concen: 9.949 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. -0.010 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:131 Resp: 180122

Ion	Ratio	Lower	Upper
131	100		
133	94.3	78.3	117.5
119	57.4	48.7	73.1



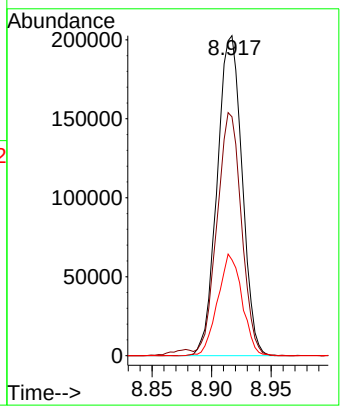


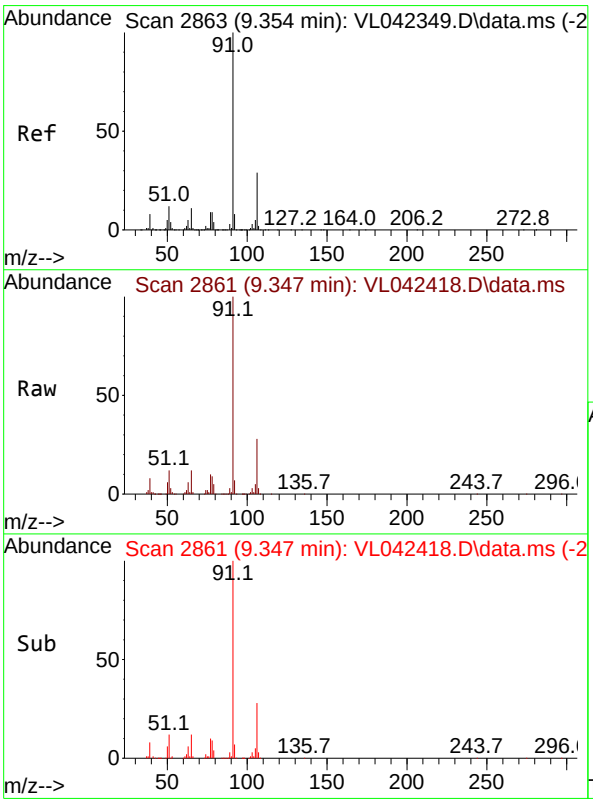
#57
Chlorobenzene
Concen: 9.480 ppbv
RT: 8.917 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:112 Resp: 294922

Ion	Ratio	Lower	Upper
112	100		
77	74.6	57.8	86.6
114	29.9	29.3	35.9

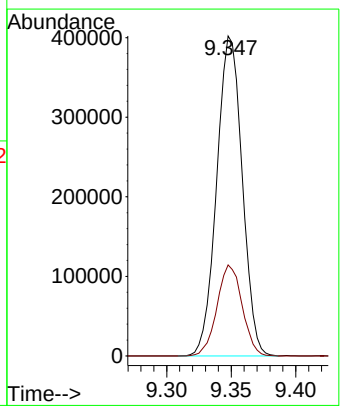


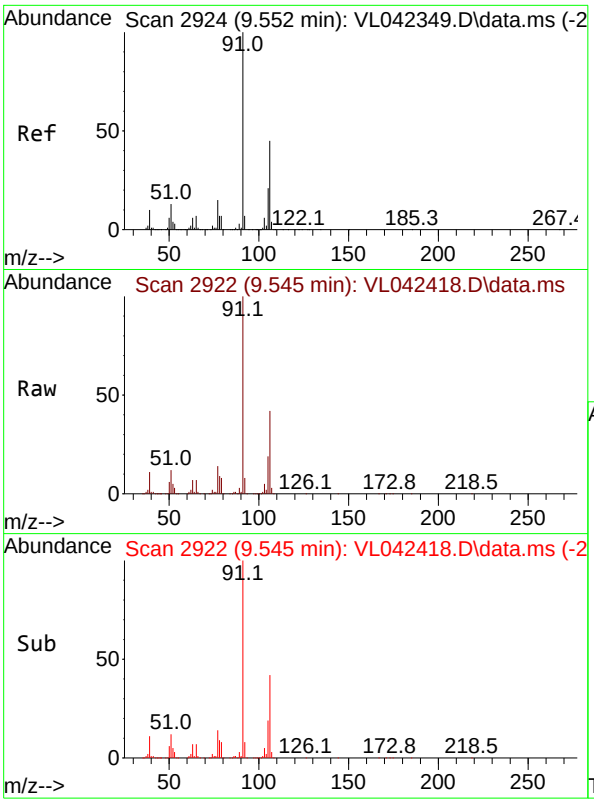


#58
Ethyl Benzene
Concen: 9.321 ppbv
RT: 9.347 min Scan# 2861
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 552423

Ion	Ratio	Lower	Upper
91	100		
106	28.5	23.0	34.4



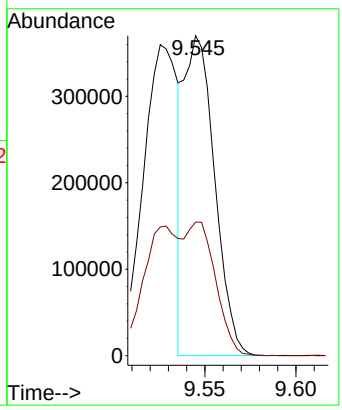


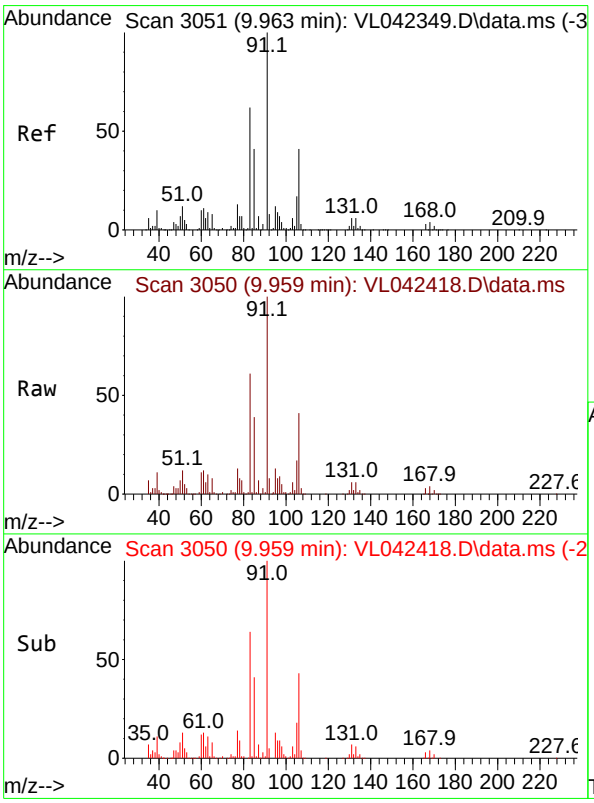
#59
m/p-Xylene
Concen: 9.091 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 91 Resp: 434048

Ion	Ratio	Lower	Upper
91	100		
106	89.1	35.4	53.2#

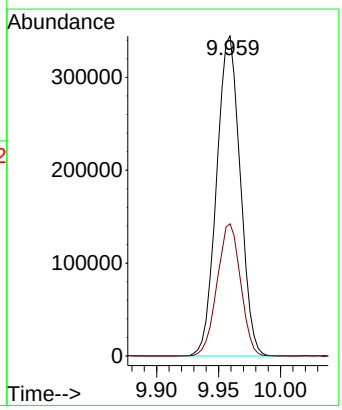


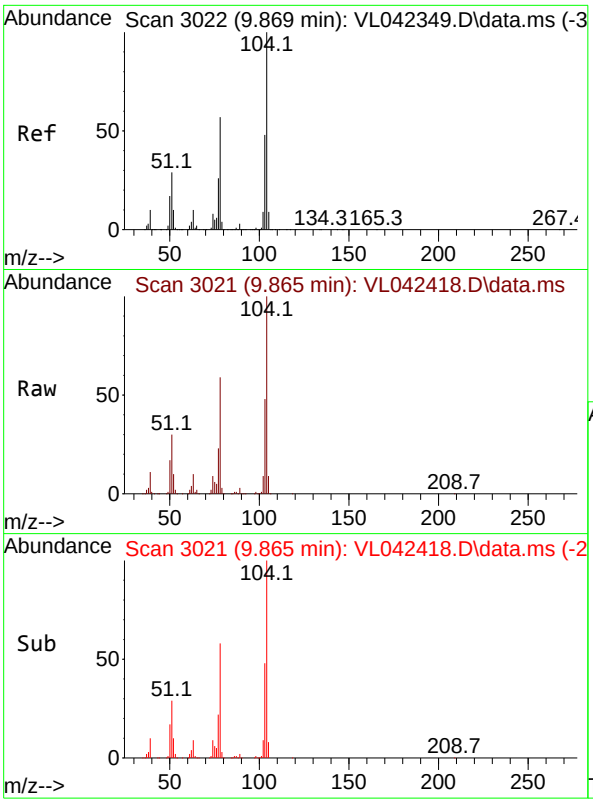


#60
o-Xylene
Concen: 9.515 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 457491

Ion	Ratio	Lower	Upper
91	100		
106	41.1	21.1	63.4



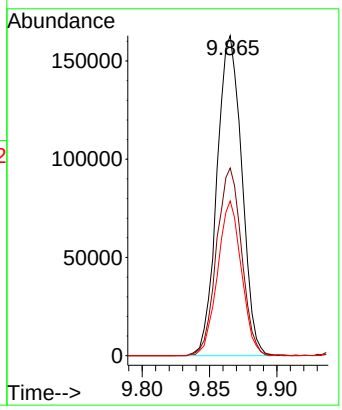


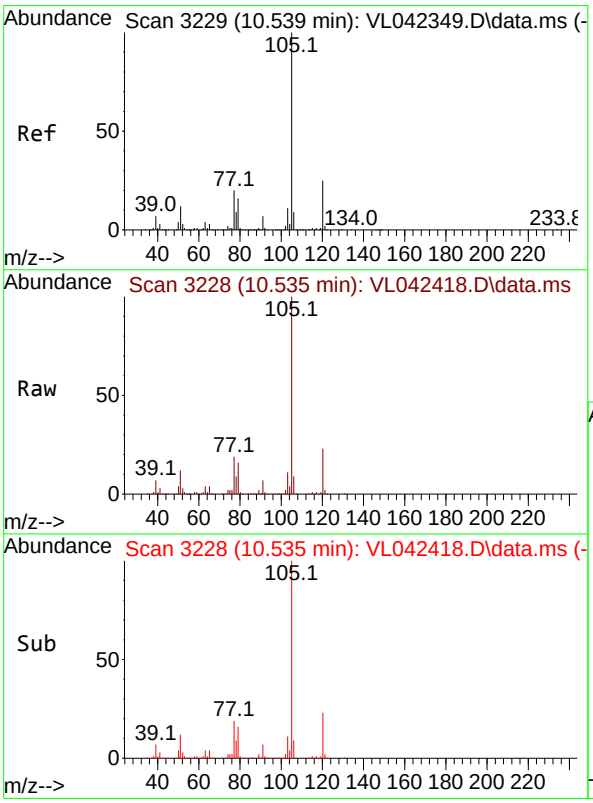
#61
Styrene
Concen: 9.086 ppbv
RT: 9.865 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:104 Resp: 208517

Ion	Ratio	Lower	Upper
104	100		
78	59.1	44.6	66.8
103	46.5	37.4	56.0

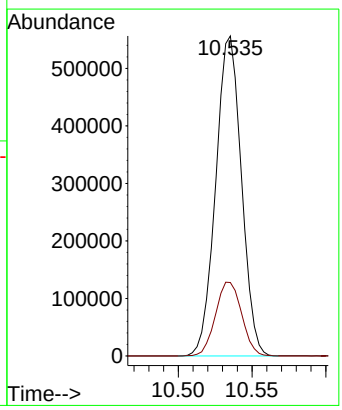


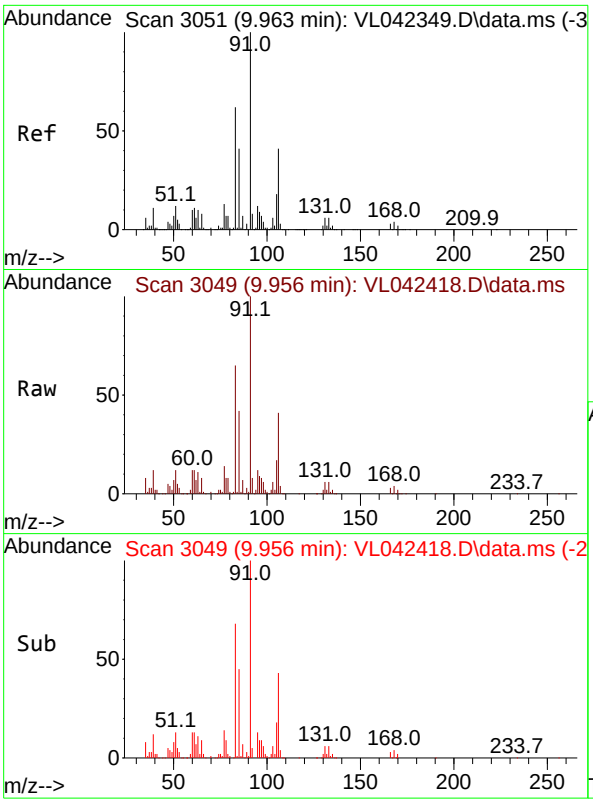


#62
Isopropylbenzene
Concen: 9.546 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 673842

Ion	Ratio	Lower	Upper
105	100		
120	23.5	19.8	29.8



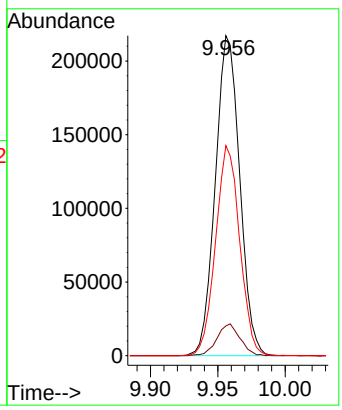


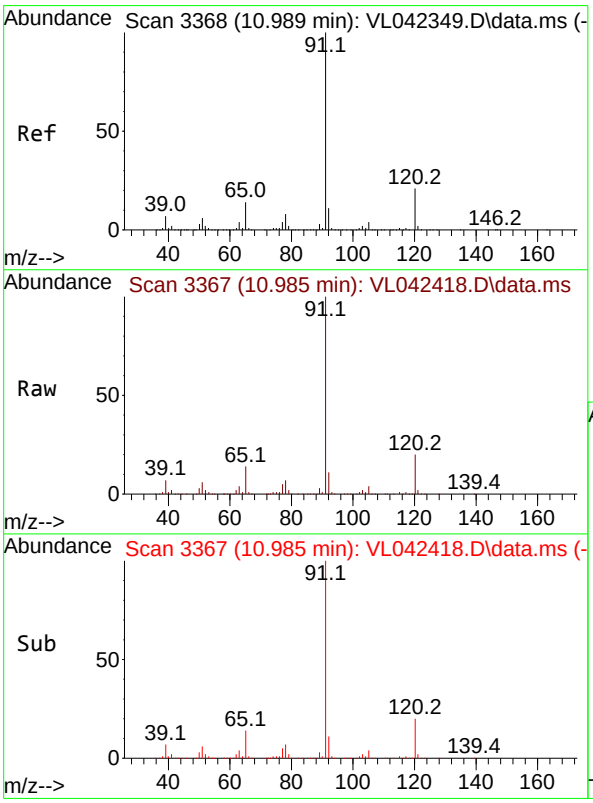
#63
1,1,2,2-Tetrachloroethane
Concen: 8.783 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 83 Resp: 273641

Ion	Ratio	Lower	Upper
83	100		
131	9.4	4.5	13.7
85	64.8	32.4	97.0

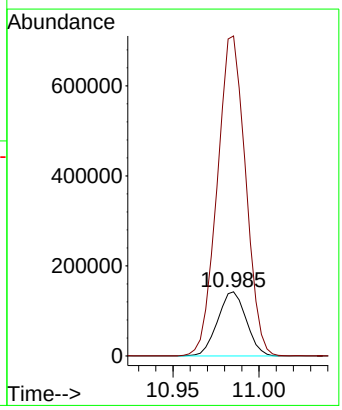


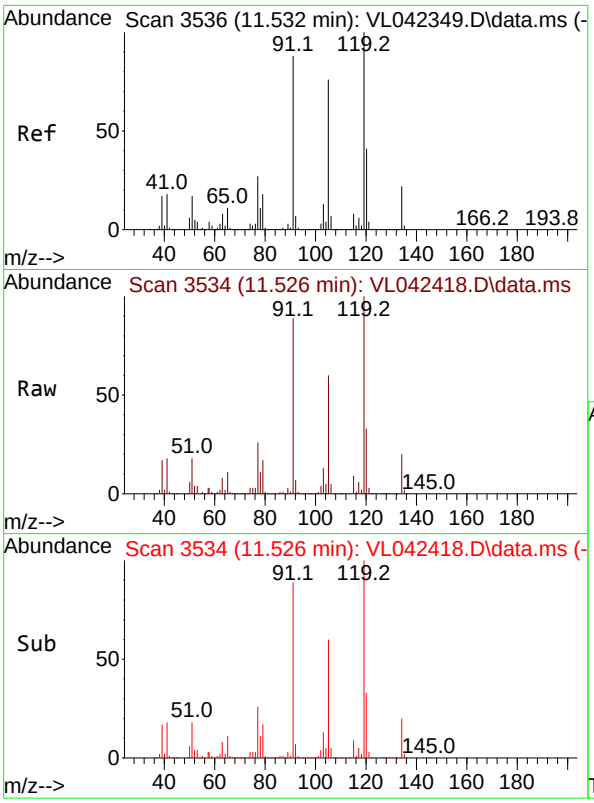


#64
n-propylbenzene
Concen: 9.271 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:120 Resp: 164482

Ion	Ratio	Lower	Upper
120	100		
91	497.0	392.4	588.6



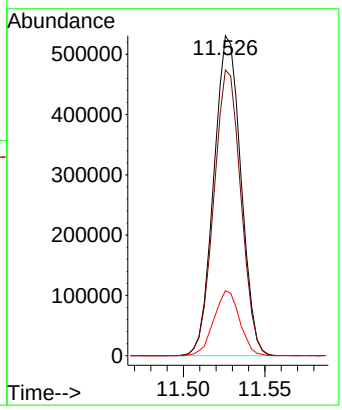


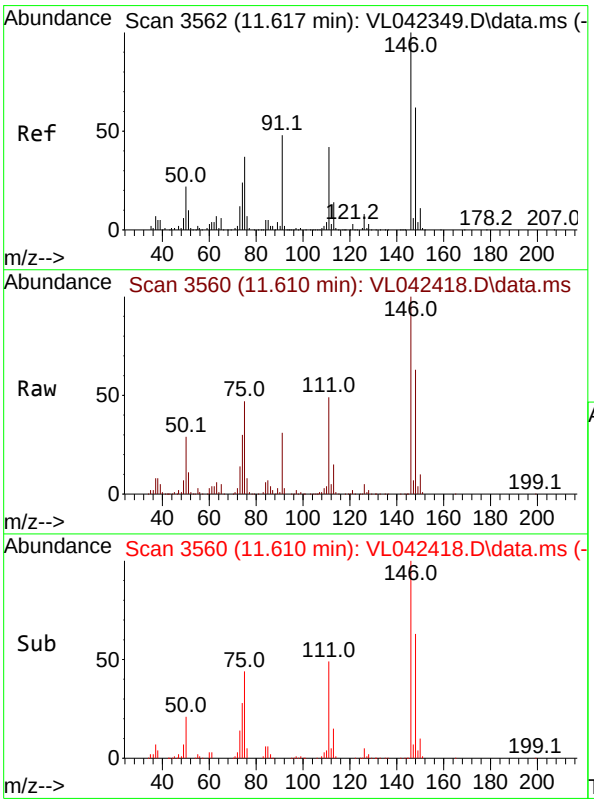
#65
tert-Butylbenzene
Concen: 9.441 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:119 Resp: 612519

Ion	Ratio	Lower	Upper
119	100		
91	89.2	74.6	111.8
134	19.3	18.8	28.2

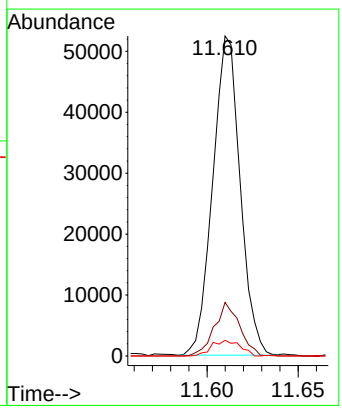


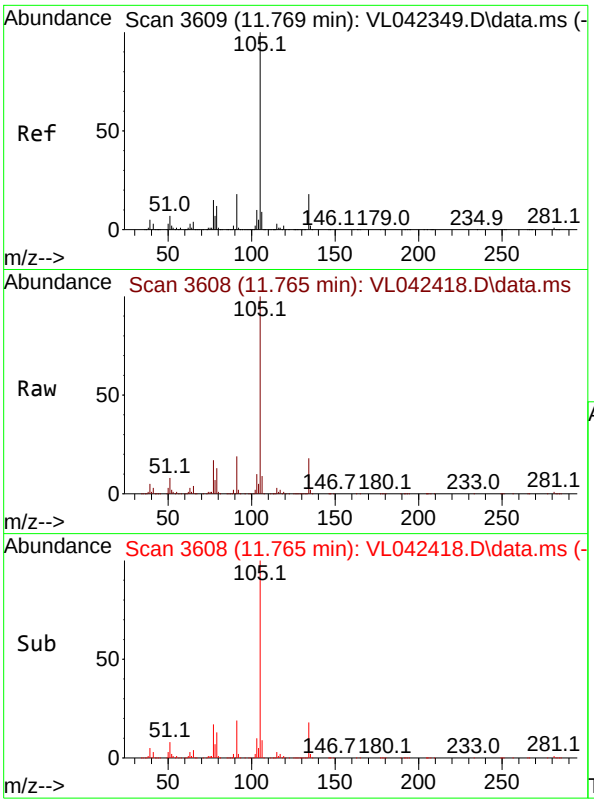


#66
Benzyl Chloride
Concen: 7.684 ppbv
RT: 11.610 min Scan# 3560
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 54781

Ion	Ratio	Lower	Upper
91	100		
126	15.5	11.8	17.6
128	5.1	4.5	6.7



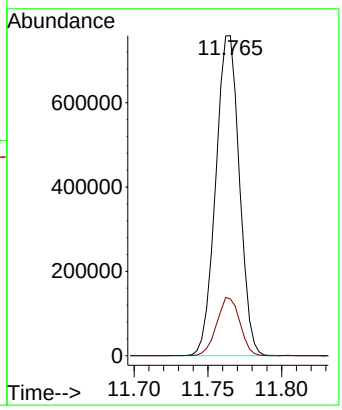


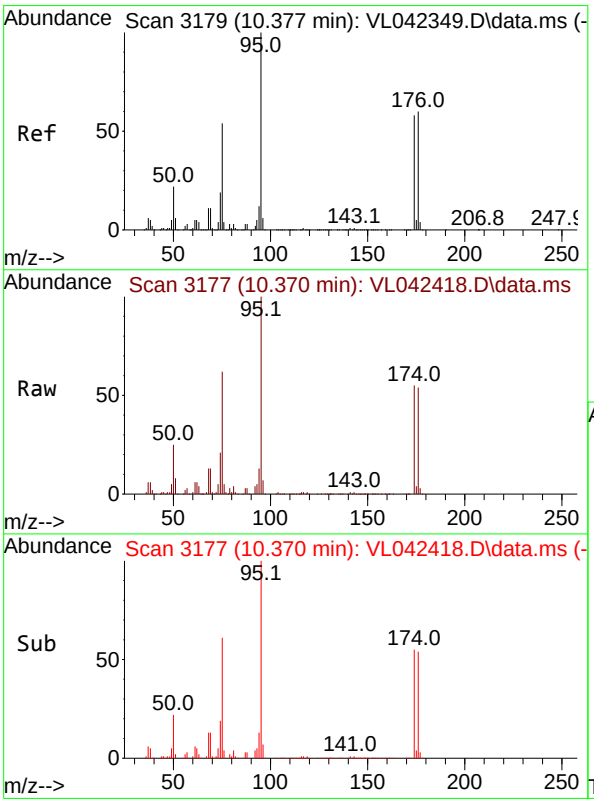
#67
sec-Butylbenzene
Concen: 9.380 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:105 Resp: 846457

Ion	Ratio	Lower	Upper
105	100		
134	17.8	14.6	21.8

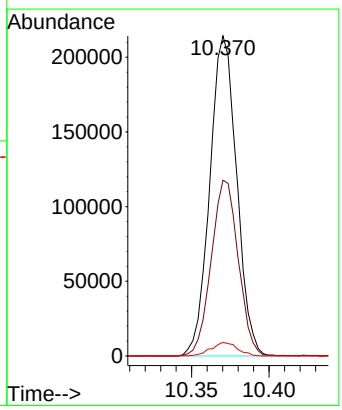


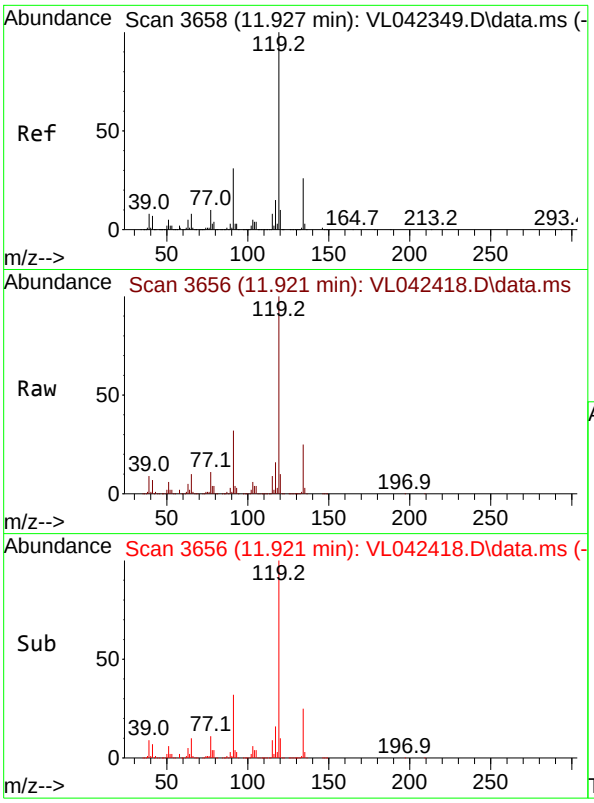


#68
1-Bromo-4-Fluorobenzene
Concen: 10.521 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 95 Resp: 258626

Ion	Ratio	Lower	Upper
95	100		
174	55.3	48.5	72.7
175	4.1	3.7	5.5



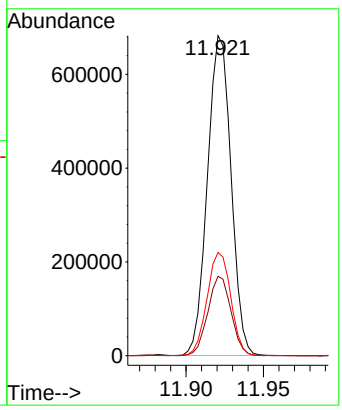


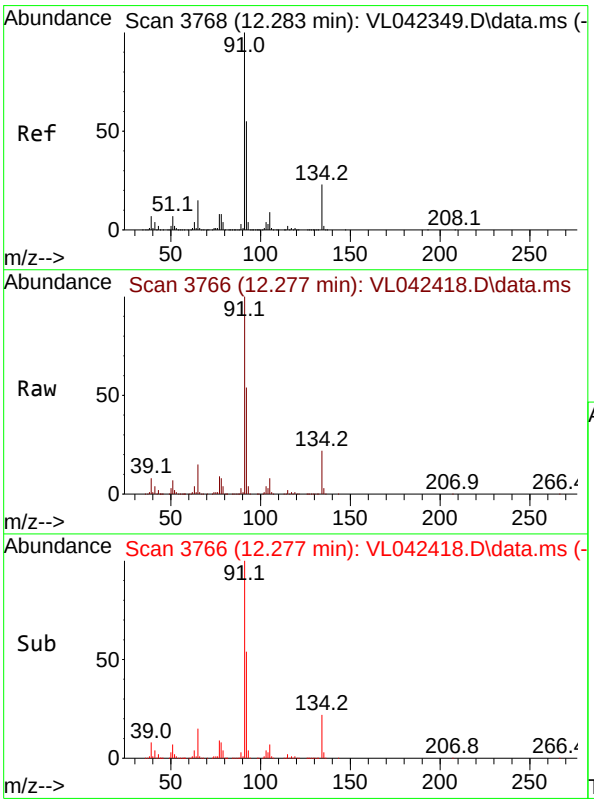
#69
p-Isopropyltoluene
Concen: 9.221 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:119 Resp: 722909

Ion	Ratio	Lower	Upper
119	100		
134	24.4	20.0	30.0
91	32.5	24.4	36.6

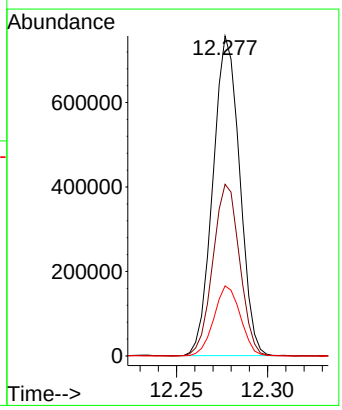


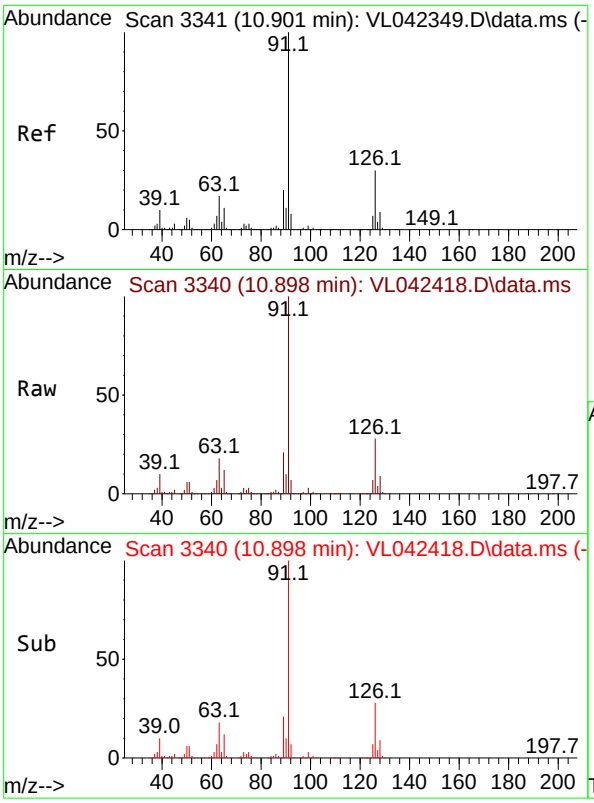


#70
n-Butylbenzene
Concen: 9.452 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion: 91 Resp: 771835

Ion	Ratio	Lower	Upper
91	100		
92	54.2	44.2	66.4
134	21.8	18.2	27.4



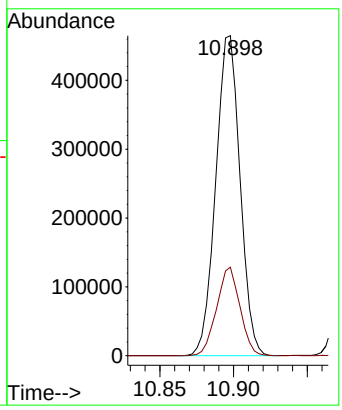


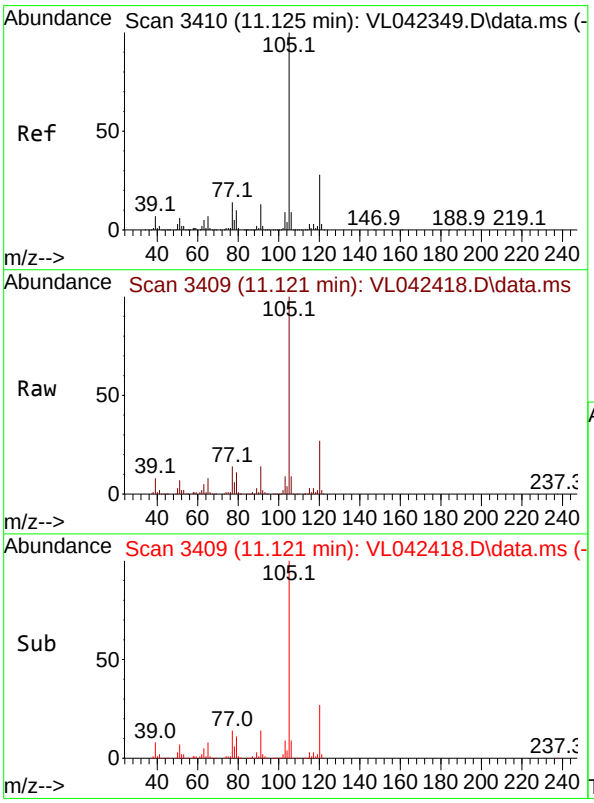
#71
2-Chlorotoluene
Concen: 9.623 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion: 91 Resp: 532755

Ion	Ratio	Lower	Upper
91	100		
126	26.5	11.4	45.4

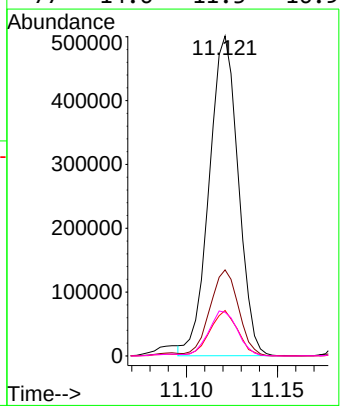


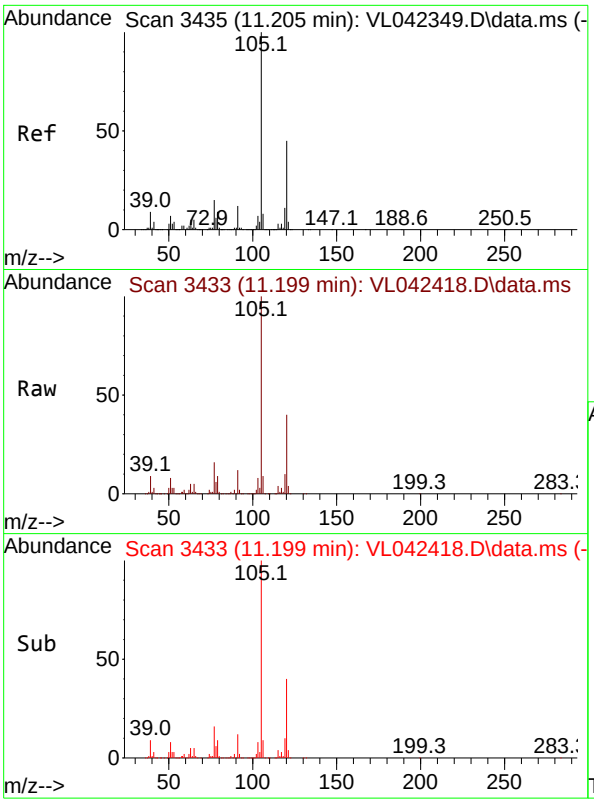


#72
4-Ethyltoluene
Concen: 9.438 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 554770

Ion	Ratio	Lower	Upper
105	100		
120	27.4	23.2	34.8
91	14.2	10.4	15.6
77	14.6	11.3	16.9



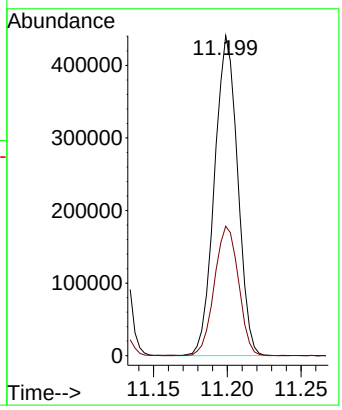


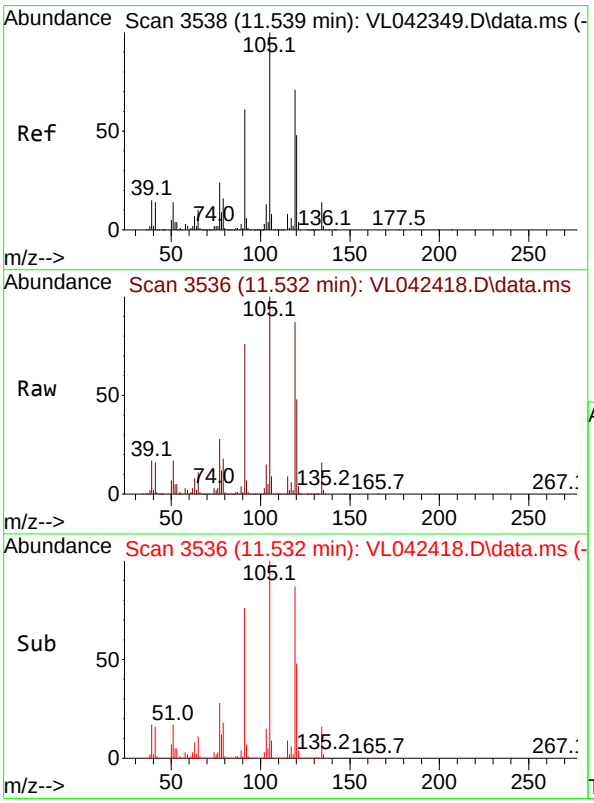
#73
1,3,5-Trimethylbenzene
Concen: 9.283 ppbv
RT: 11.199 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:105 Resp: 481697

Ion	Ratio	Lower	Upper
105	100		
120	40.5	35.6	53.4

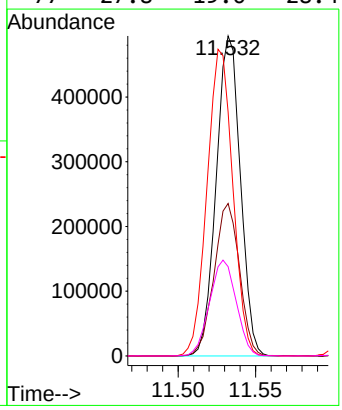


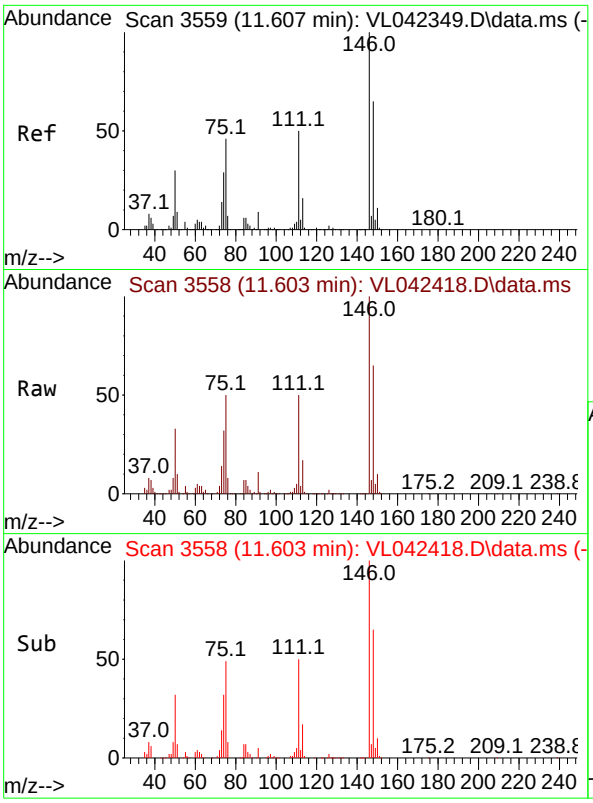


#74
1,2,4-Trimethylbenzene
Concen: 8.869 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:105 Resp: 537510

Ion	Ratio	Lower	Upper
105	100		
120	47.6	38.1	57.1
91	76.2	48.8	73.2#
77	27.8	19.0	28.4



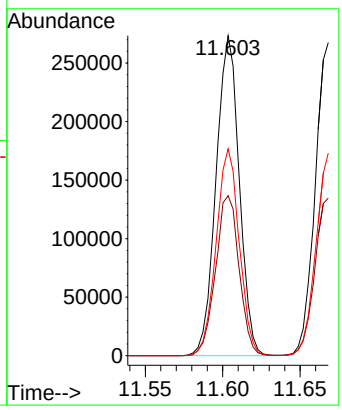


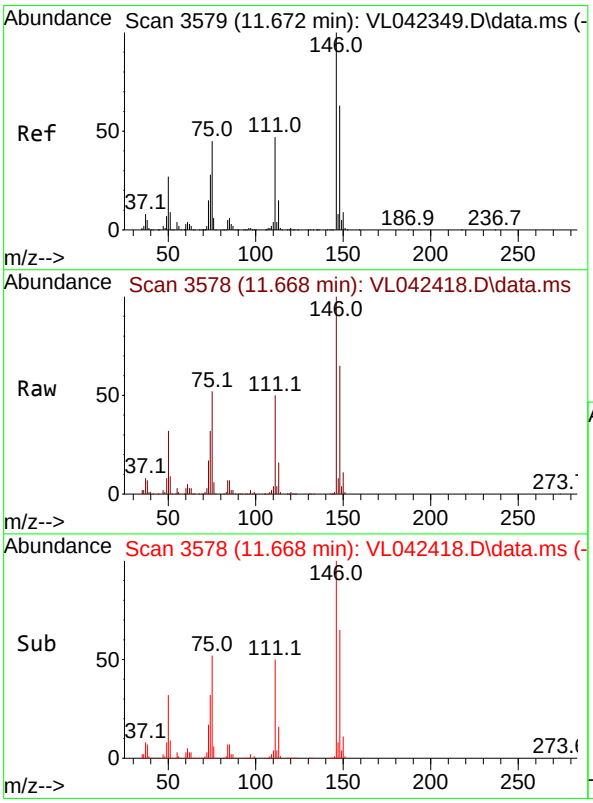
#75
1,3-Dichlorobenzene
Concen: 9.035 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:146 Resp: 284652

Ion	Ratio	Lower	Upper
146	100		
111	50.9	24.3	72.8
148	64.3	31.6	94.8

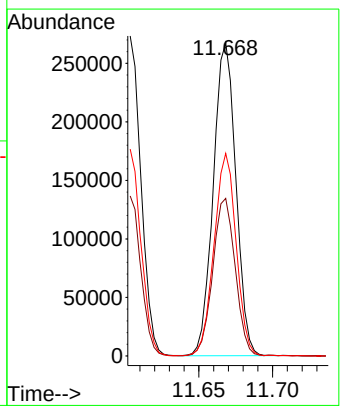


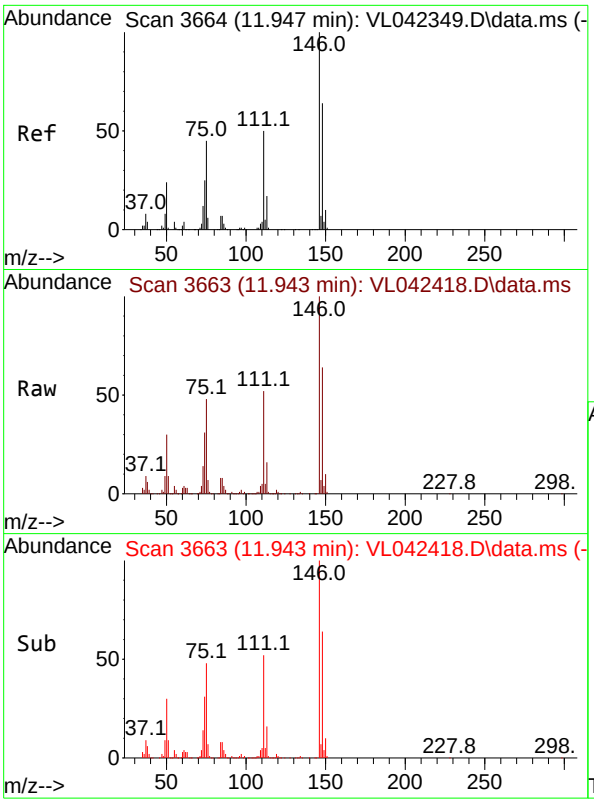


#76
1,4-Dichlorobenzene
Concen: 8.992 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:146 Resp: 284740

Ion	Ratio	Lower	Upper
146	100		
111	50.4	24.2	72.6
148	63.7	32.1	96.5



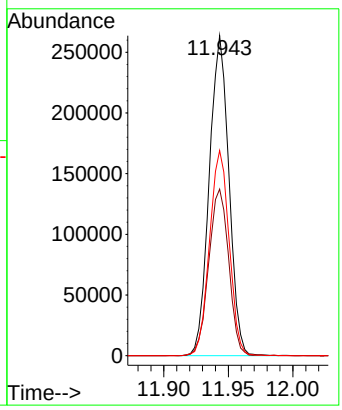


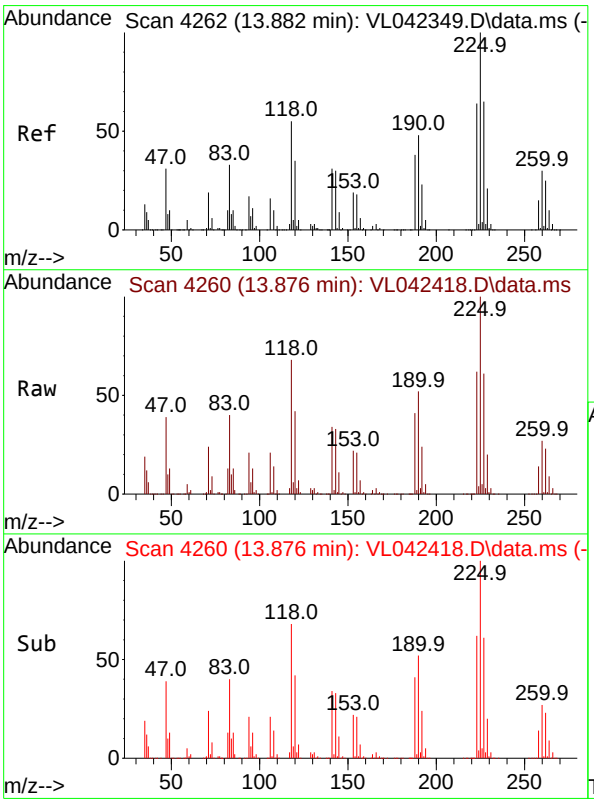
#77
1,2-Dichlorobenzene
Concen: 9.095 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:146 Resp: 278619

Ion	Ratio	Lower	Upper
146	100		
111	53.0	25.3	75.9
148	64.0	31.5	94.5

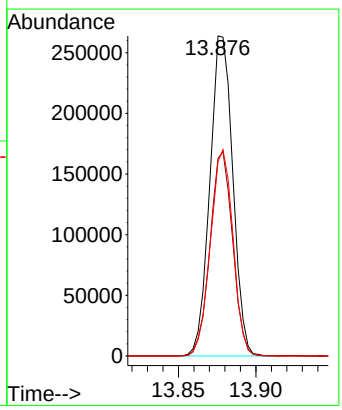


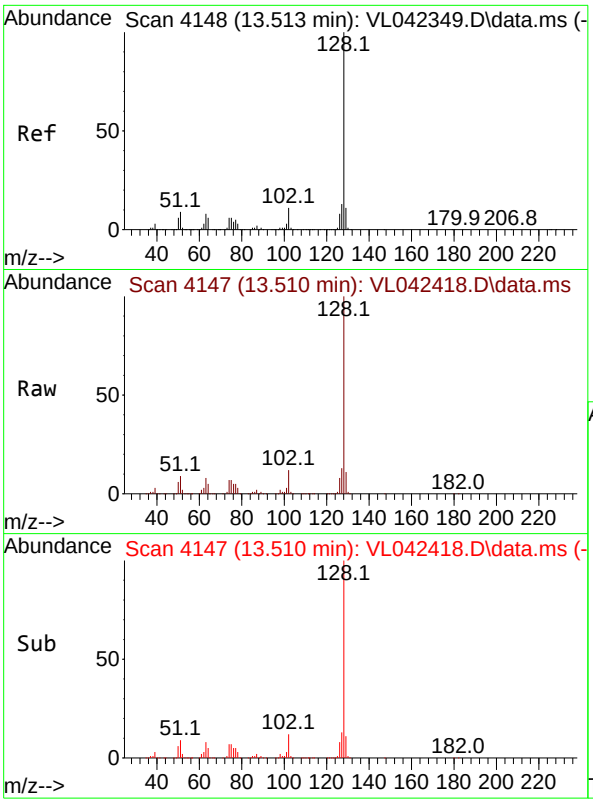


#78
Hexachloro-1,3-Butadiene
Concen: 8.779 ppbv
RT: 13.876 min Scan# 4260
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:225 Resp: 271569

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.3	75.5
227	63.3	51.5	77.3



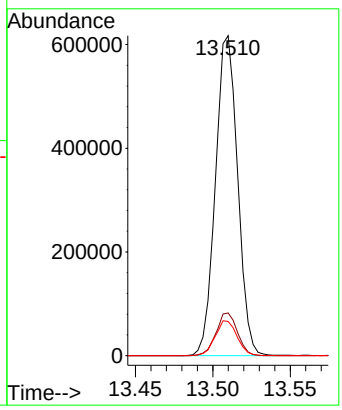


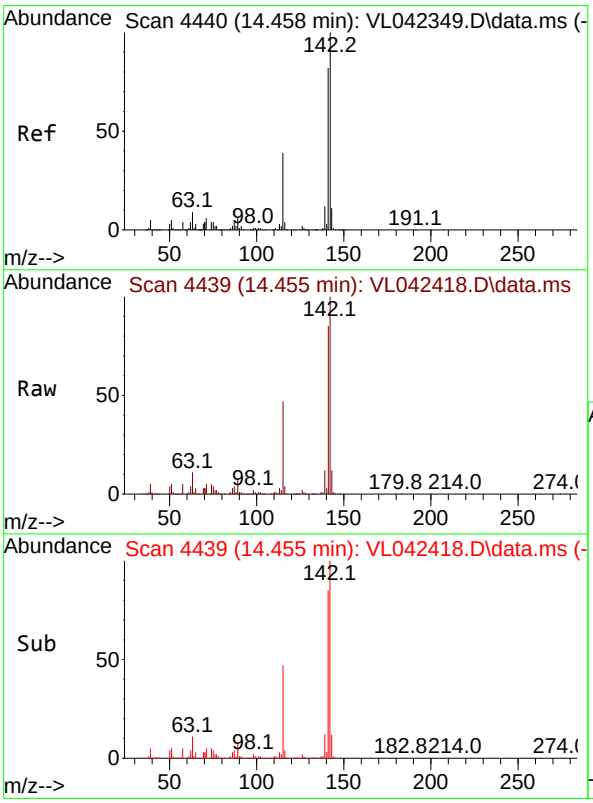
#79
Naphthalene
Concen: 8.482 ppbv
RT: 13.510 min Scan# 41
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:128 Resp: 614768

Ion	Ratio	Lower	Upper
128	100		
127	13.4	10.6	15.8
129	10.7	8.6	12.8

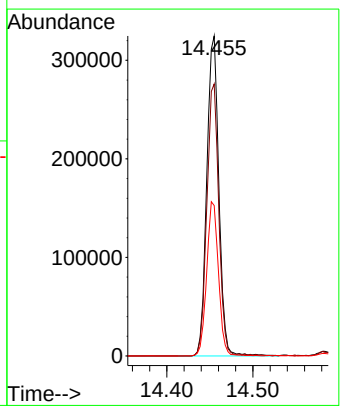


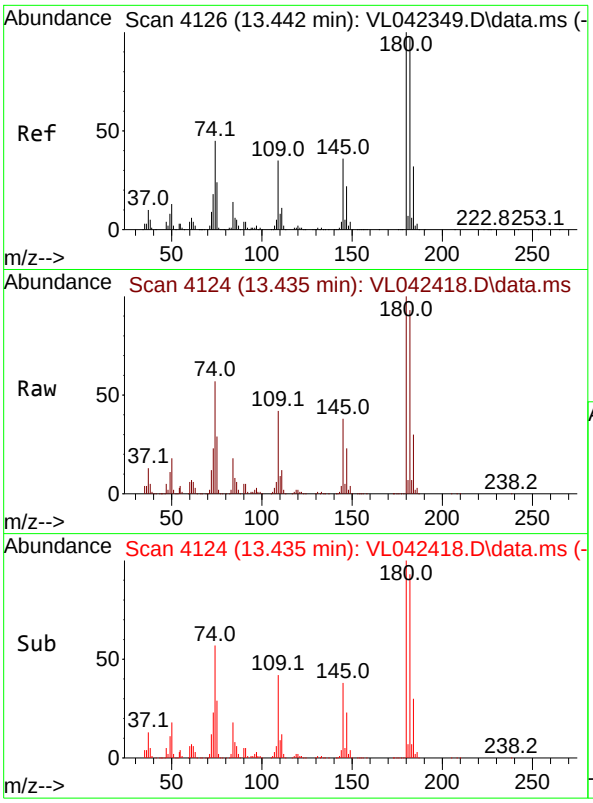


#80
Naphthalene,2-methyl-
Concen: 7.651 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Tgt Ion:142 Resp: 316027

Ion	Ratio	Lower	Upper
142	100		
141	84.7	66.8	100.2
115	47.3	33.4	50.2



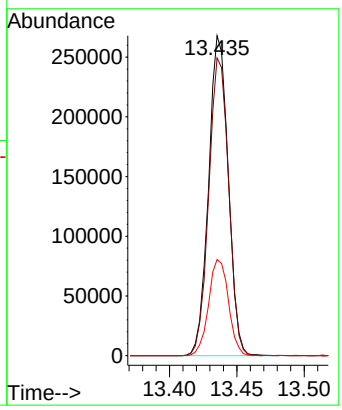


#81
1,2,4-Trichlorobenzene
Concen: 8.729 ppbv
RT: 13.435 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042418.D
Acq: 28 Apr 2025 10:10

Instrument :
MSVOA_L
ClientSampleId :
VL0428ABS01

Tgt Ion:180 Resp: 271657

Ion	Ratio	Lower	Upper
180	100		
182	94.2	76.8	115.2
184	30.4	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Time: Apr 29 01:33:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	141298	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	401917	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	351139	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.370	95	302429	10.481	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	11370	0.455	ppbv		96
3) Chlorodifluoromethane	1.842	51	6601	0.278	ppbv		98
4) Chloromethane	1.531	50	4722	0.478	ppbv	#	79
7) Chloroethane	1.489	64	154	0.040	ppbv	#	44
9) Propene	1.557	41	266169	24.586	ppbv		98
10) Heptane	4.965	43	9317	0.306	ppbv	#	63
11) Trichlorofluoromethane	1.874	101	5024	0.212	ppbv		97
12) 1,1,2-Trichlorotrifluo...	2.136	101	1181	0.061	ppbv	#	76
13) Ethanol	1.719	45	460303	267.501	ppbv		76
15) Acetone	1.832	43	493322	21.327	ppbv	#	81
16) 1,3-Butadiene	1.599	39	5437	0.491	ppbv	#	50
17) tert-Butyl alcohol	2.039	59	88272	3.079	ppbv		99
19) Isopropyl Alcohol	1.884	45	414153	32.231	ppbv	#	66
20) Methylene Chloride	2.059	84	10525	1.162	ppbv		85
21) Allyl Chloride	2.039	41	19969	1.250	ppbv	#	72
23) Vinyl Acetate	2.463	43	40479	4.323	ppbv	#	73
25) Ethyl Acetate	2.826	43	51192	0.898	ppbv	#	81
26) Hexane	2.819	57	52451	2.273	ppbv	#	43
27) Carbon Disulfide	2.149	76	1231	0.050	ppbv	#	1
28) Methyl tert-Butyl Ether	2.441	73	580	0.038	ppbv	#	48
29) Chloroform	2.842	83	1773	0.054	ppbv		88
30) Cyclohexane	3.849	84	3366	0.180	ppbv	#	39
34) 2-Butanone	2.557	43	27638	0.869	ppbv		99
35) Carbon Tetrachloride	3.755	117	1663	0.046	ppbv	#	74
36) Benzene	3.648	78	21233	0.490	ppbv		98
37) 1,2-Dichloroethane	3.211	62	11865	0.456	ppbv		100
39) 1,2-Dichloropropane	3.952	63	110449	6.837	ppbv	#	22
41) Tetrahydrofuran	3.056	42	927	0.050	ppbv	#	35
44) 2,2,4-Trimethylpentane	4.635	57	26094	0.349	ppbv	#	42
51) 2-Hexanone	7.419	43	2761	0.058	ppbv	#	27
52) Tetrachloroethene	8.211	164	664	0.040	ppbv	#	41
53) Toluene	6.923	91	241564	4.644	ppbv		99
58) Ethyl Benzene	9.348	91	39060	0.561	ppbv		95
59) m/p-Xylene	9.526	91	78855	1.407	ppbv		100
60) o-Xylene	9.959	91	32637	0.578	ppbv		97
61) Styrene	9.869	104	12396	0.460	ppbv		94
62) Isopropylbenzene	10.529	105	3245	0.039	ppbv	#	50
64) n-propylbenzene	10.985	120	2557	0.123	ppbv		89
65) tert-Butylbenzene	11.532	119	4429	0.058	ppbv	#	58
67) sec-Butylbenzene	11.769	105	9075	0.086	ppbv	#	1
69) p-Isopropyltoluene	11.924	119	6420	0.070	ppbv		94
70) n-Butylbenzene	12.277	91	3378	0.035	ppbv	#	83
72) 4-Ethyltoluene	11.121	105	9307	0.135	ppbv	#	56

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Time: Apr 29 01:33:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

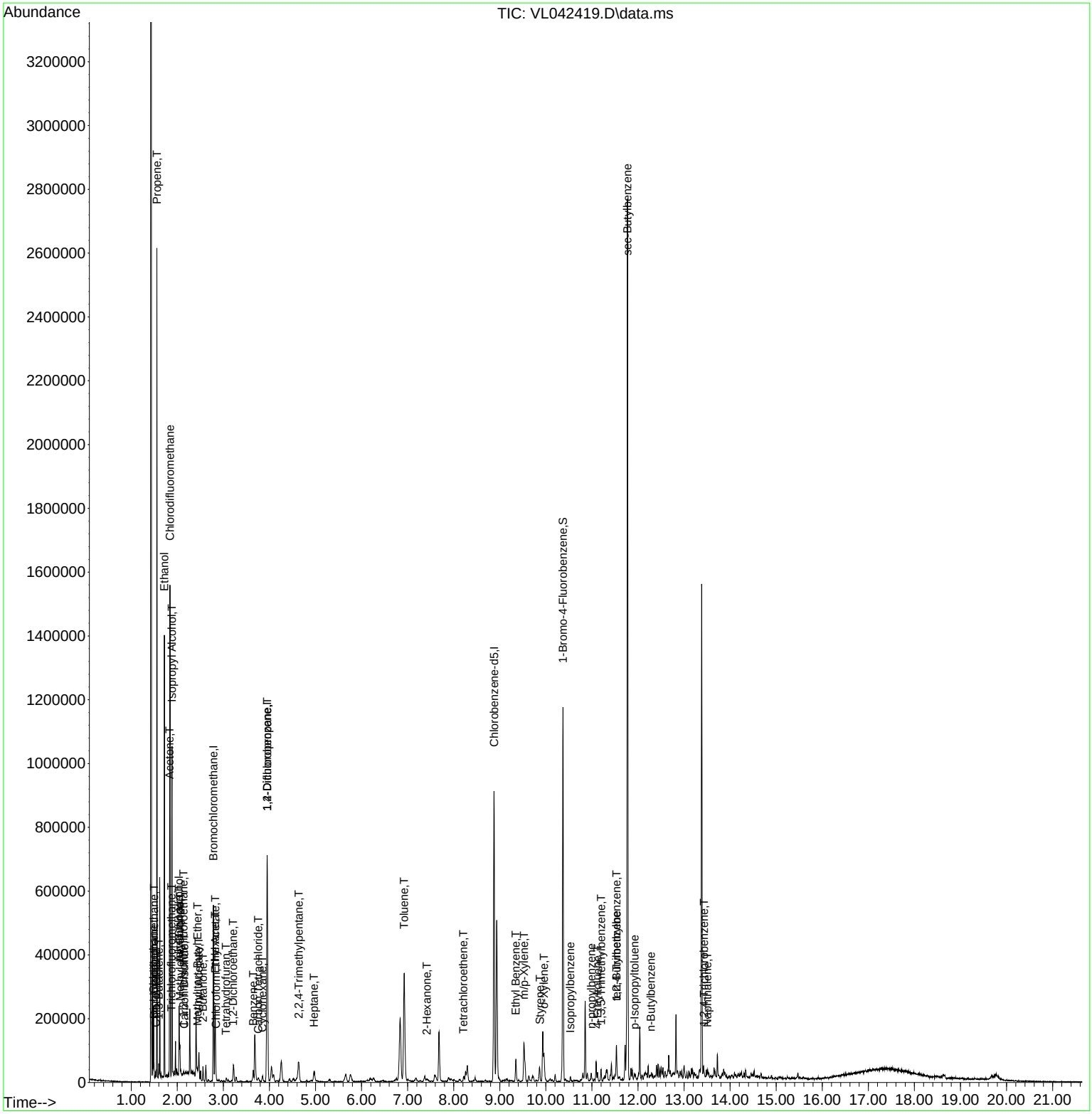
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
73) 1,3,5-Trimethylbenzene	11.199	105	10799	0.177	ppbv		90
74) 1,2,4-Trimethylbenzene	11.532	105	33801	0.475	ppbv	#	61
79) Naphthalene	13.507	128	9645	0.113	ppbv		99
81) 1,2,4-Trichlorobenzene	13.432	180	1680	0.046	ppbv	#	93

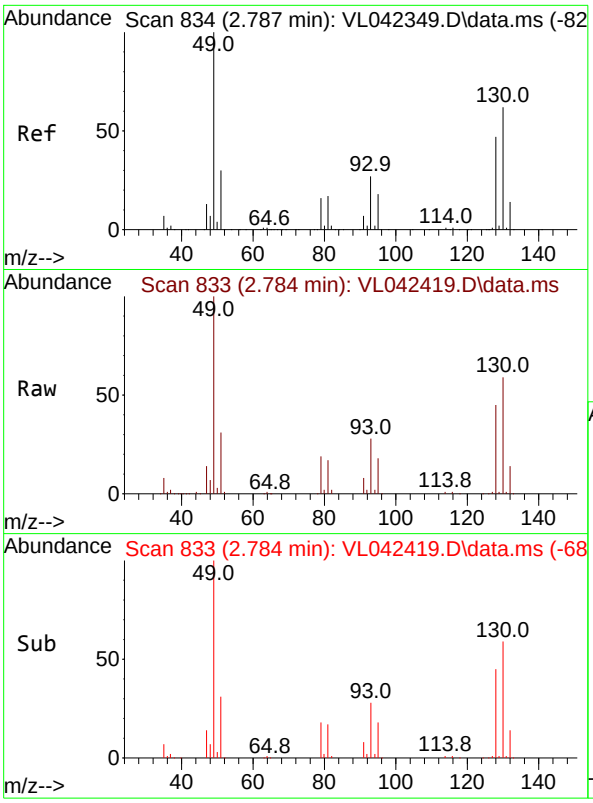
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042419.D
Acq On : 28 Apr 2025 10:59
Operator : SY/MD
Sample : Q1665-05
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Quant Time: Apr 29 01:33:38 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



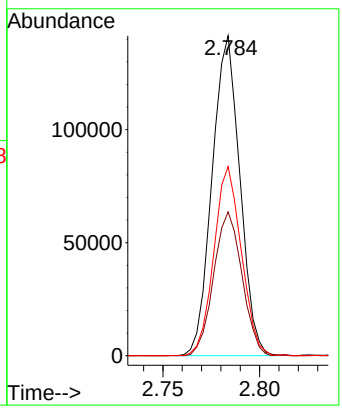


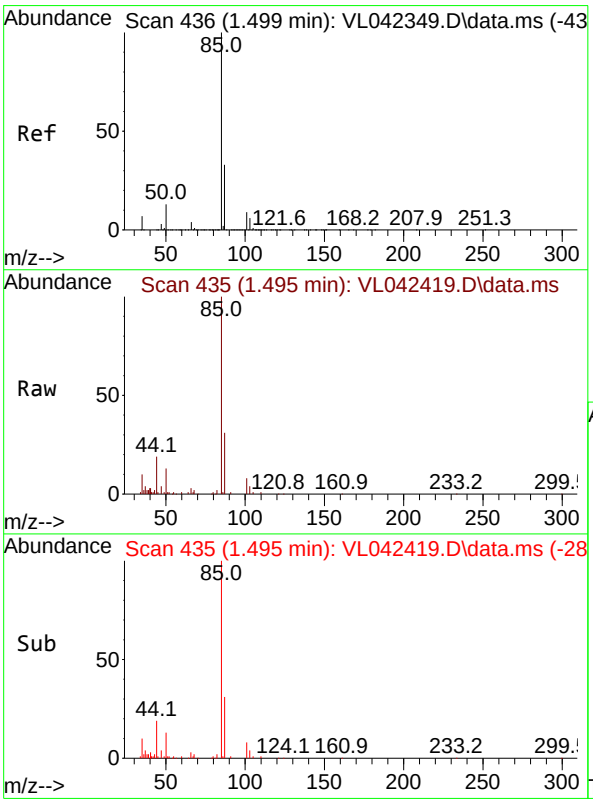
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 49 Resp: 141298

Ion	Ratio	Lower	Upper
49	100		
128	45.8	22.8	68.4
130	58.6	29.3	88.0

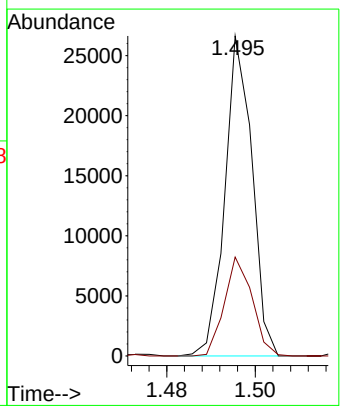


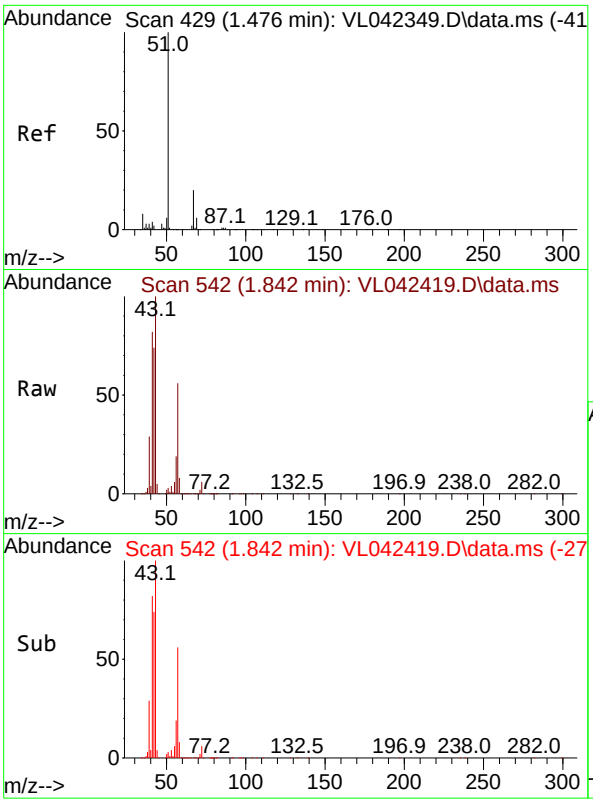


#2
Dichlorodifluoromethane
Concen: 0.455 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 85 Resp: 11370

Ion	Ratio	Lower	Upper
85	100		
87	30.9	26.6	39.8



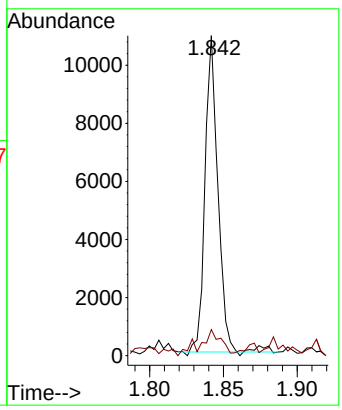


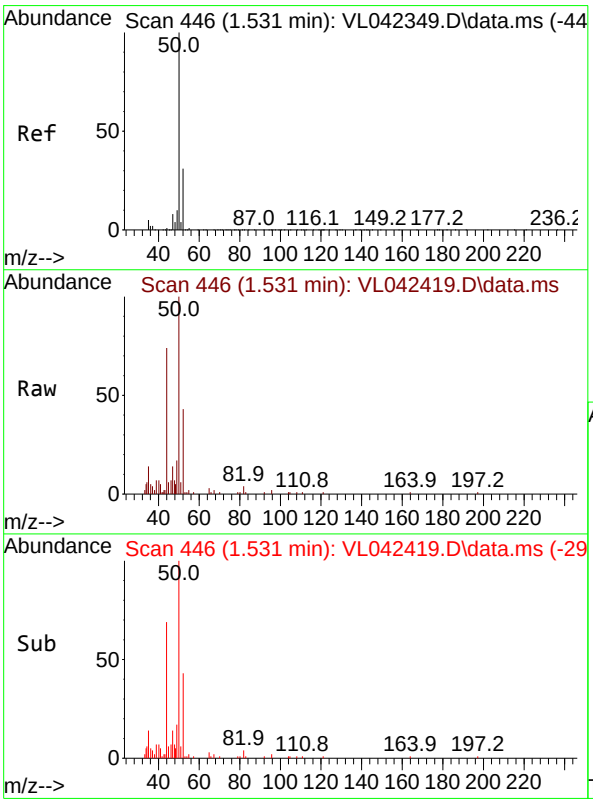
#3
Chlorodifluoromethane
Concen: 0.278 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.366 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 51 Resp: 6601

Ion	Ratio	Lower	Upper
51	100		
67	21.3	16.2	24.4

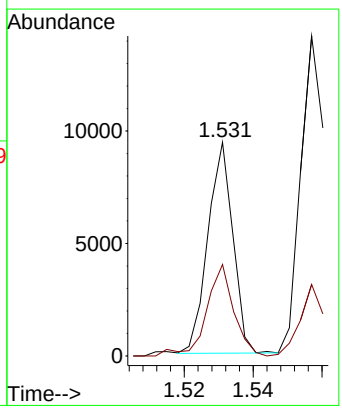


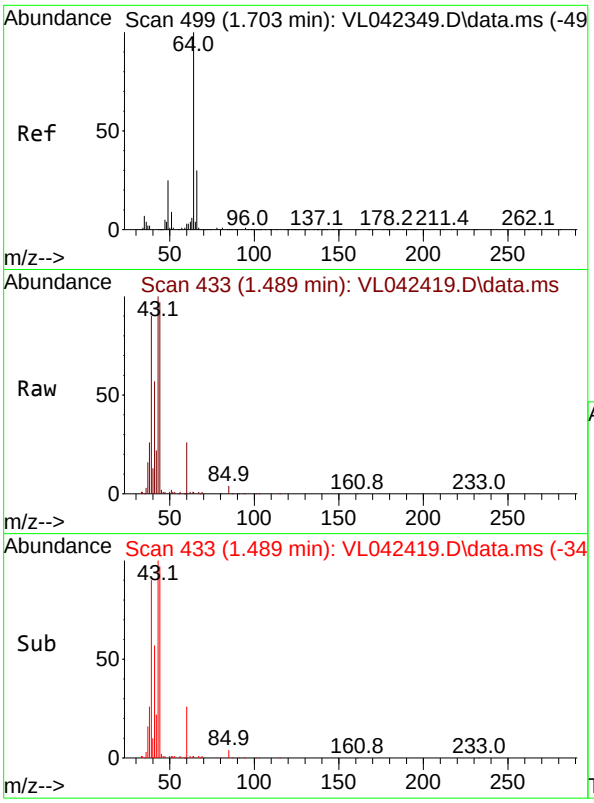


#4
Chloromethane
Concen: 0.478 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 50 Resp: 4722

Ion	Ratio	Lower	Upper
50	100		
52	42.6	24.7	37.1#



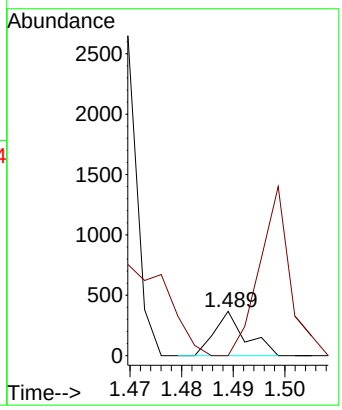


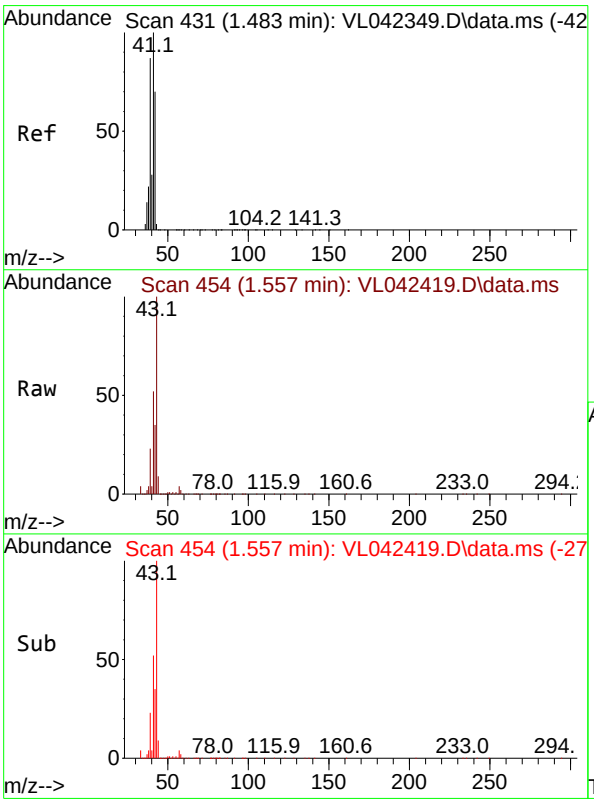
#7
Chloroethane
Concen: 0.040 ppbv
RT: 1.489 min Scan# 4
Delta R.T. -0.214 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 64 Resp: 154

Ion	Ratio	Lower	Upper
64	100		
66	0.0	24.6	37.0#

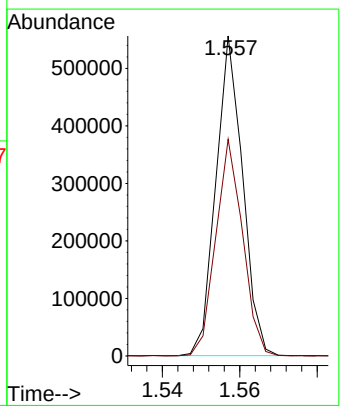


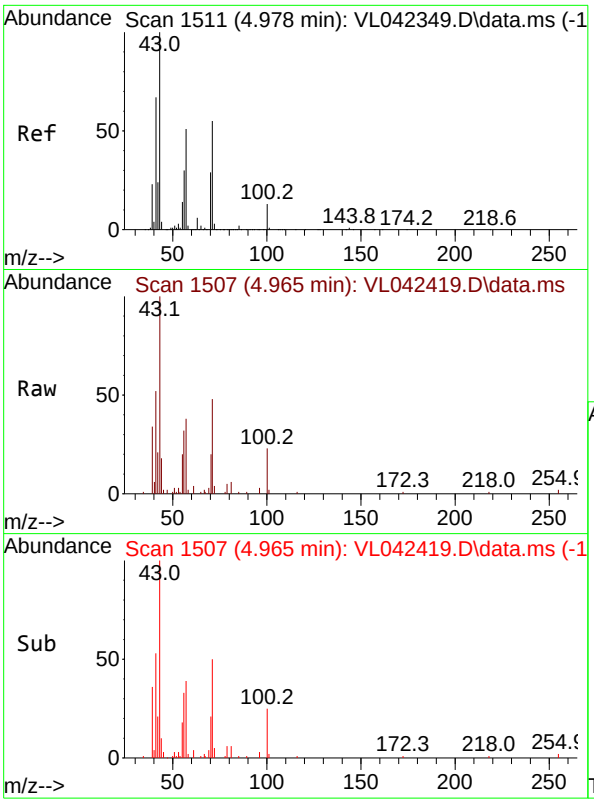


#9
Propene
Concen: 24.586 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.074 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 41 Resp: 266169

Ion	Ratio	Lower	Upper
41	100		
42	68.3	56.2	84.4



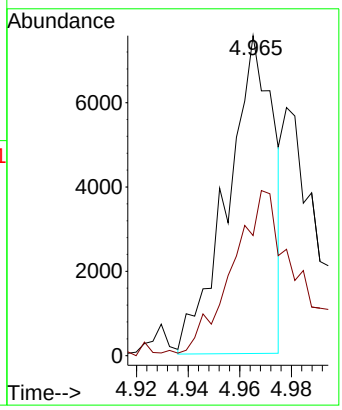


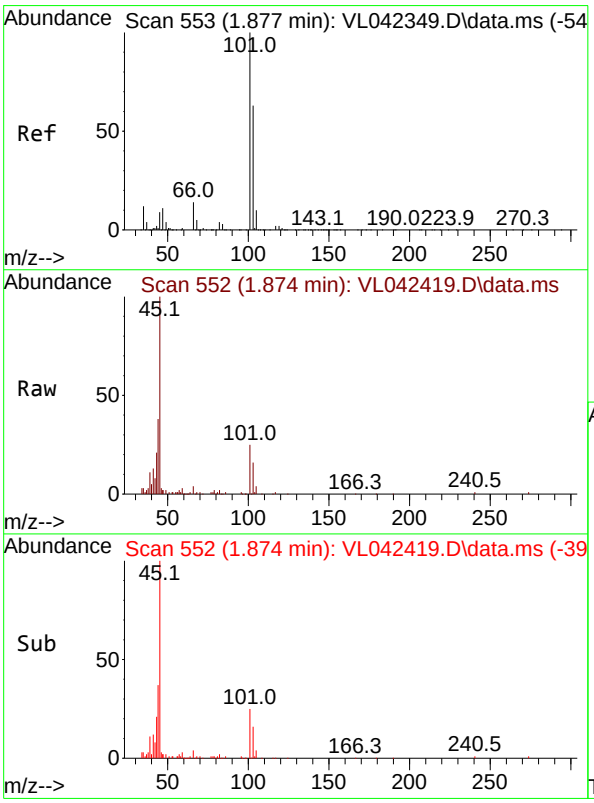
#10
Heptane
Concen: 0.306 ppbv
RT: 4.965 min Scan# 1
Delta R.T. -0.013 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 43 Resp: 9317

Ion	Ratio	Lower	Upper
43	100		
57	75.1	39.9	59.9#

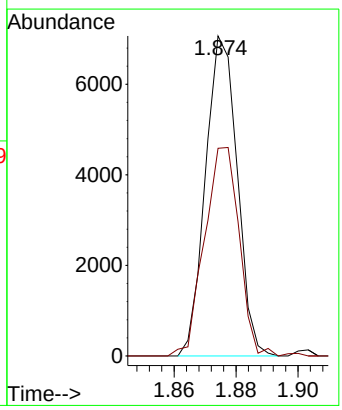


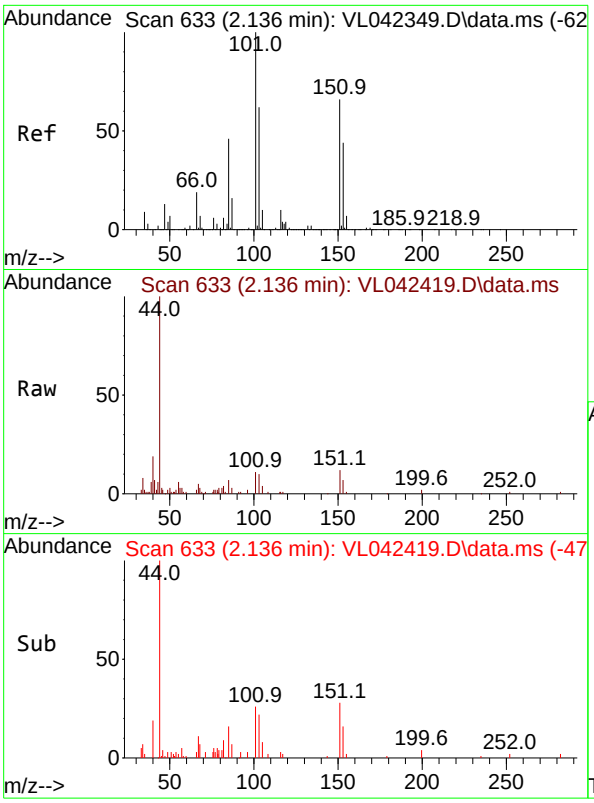


#11
Trichlorofluoromethane
Concen: 0.212 ppbv
RT: 1.874 min Scan# 552
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:101 Resp: 5024

Ion	Ratio	Lower	Upper
101	100		
103	64.9	50.1	75.1



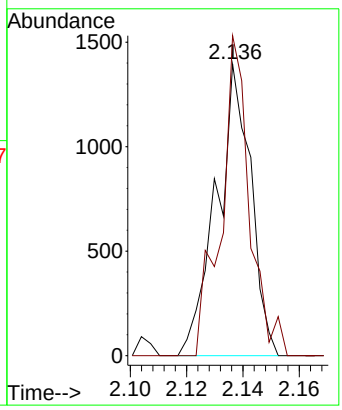


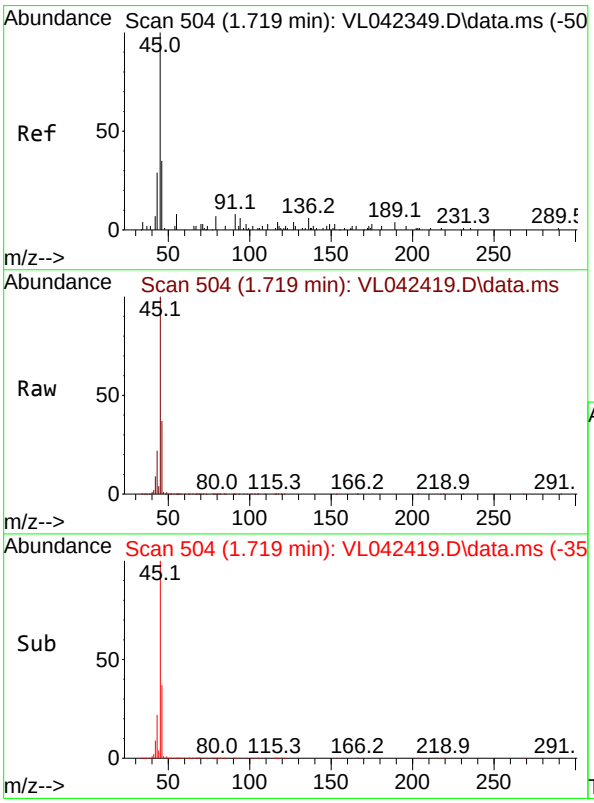
#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.061 ppbv
RT: 2.136 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:101 Resp: 1181

Ion	Ratio	Lower	Upper
101	100		
151	90.9	57.0	85.6#

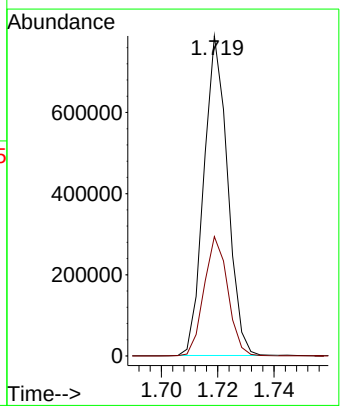


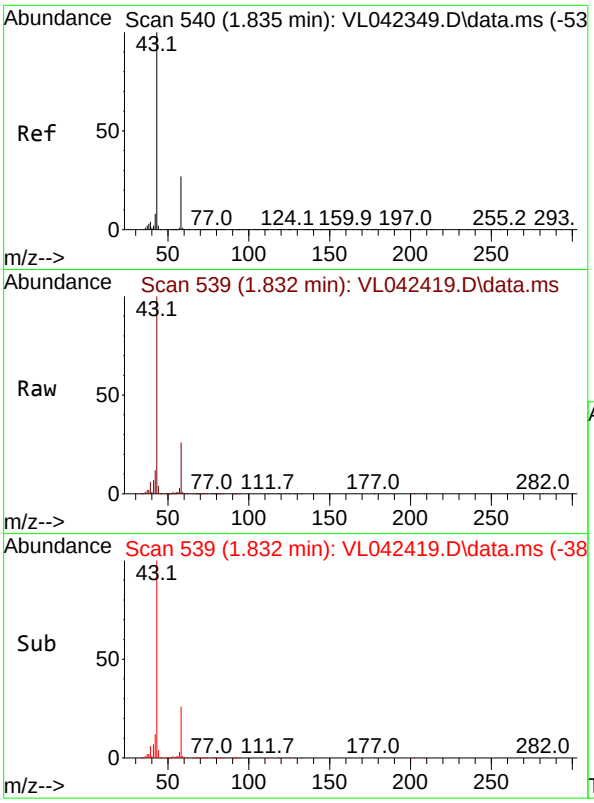


#13
Ethanol
Concen: 267.501 ppbv
RT: 1.719 min Scan# 504
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 45 Resp: 460303

Ion	Ratio	Lower	Upper
45	100		
46	37.6	21.9	87.7



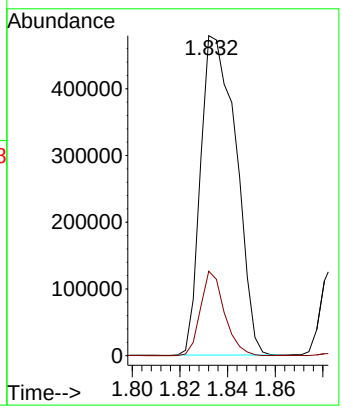


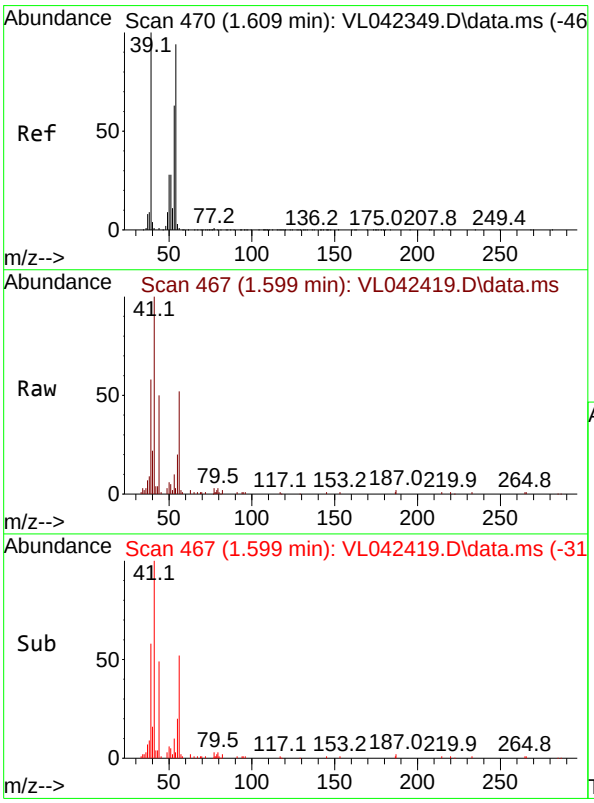
#15
Acetone
Concen: 21.327 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 43 Resp: 493322

Ion	Ratio	Lower	Upper
43	100		
58	18.0	22.4	33.6#

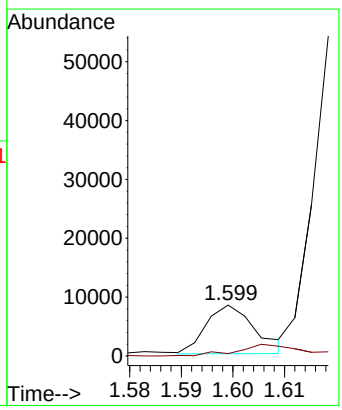


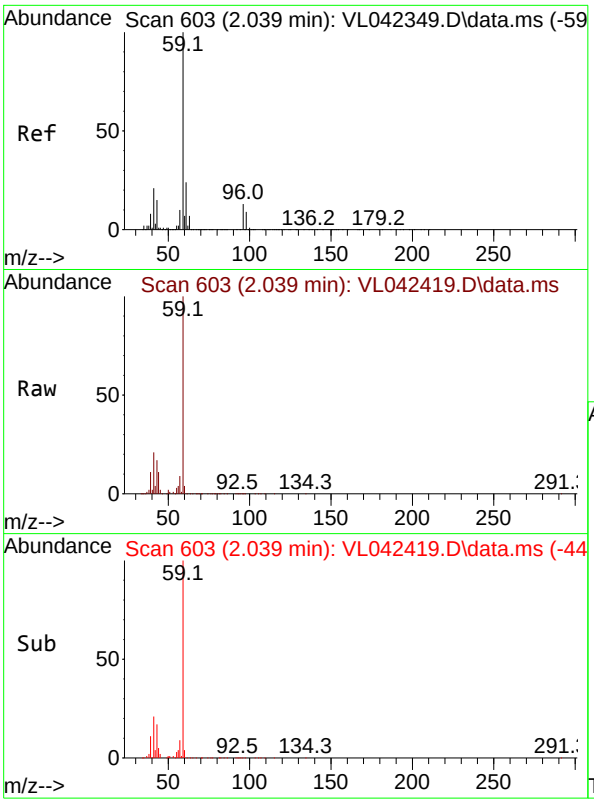


#16
1,3-Butadiene
Concen: 0.491 ppbv
RT: 1.599 min Scan# 467
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 39 Resp: 5437

Ion	Ratio	Lower	Upper
39	100		
54	37.1	64.9	97.3#



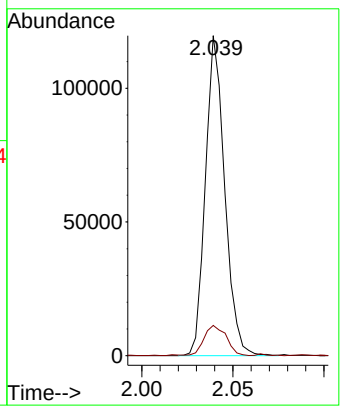


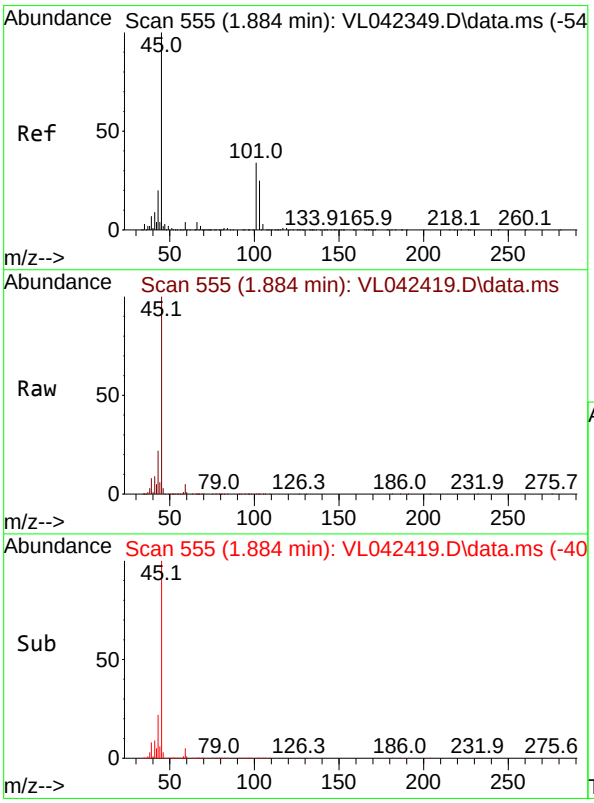
#17
tert-Butyl alcohol
Concen: 3.079 ppbv
RT: 2.039 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 59 Resp: 88272

Ion	Ratio	Lower	Upper
59	100		
57	11.2	8.7	13.1

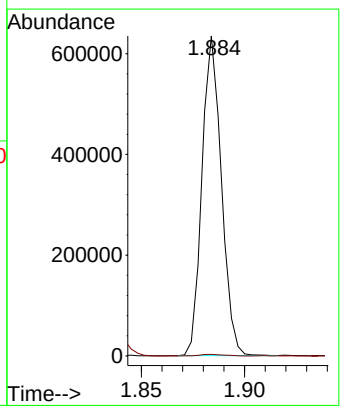


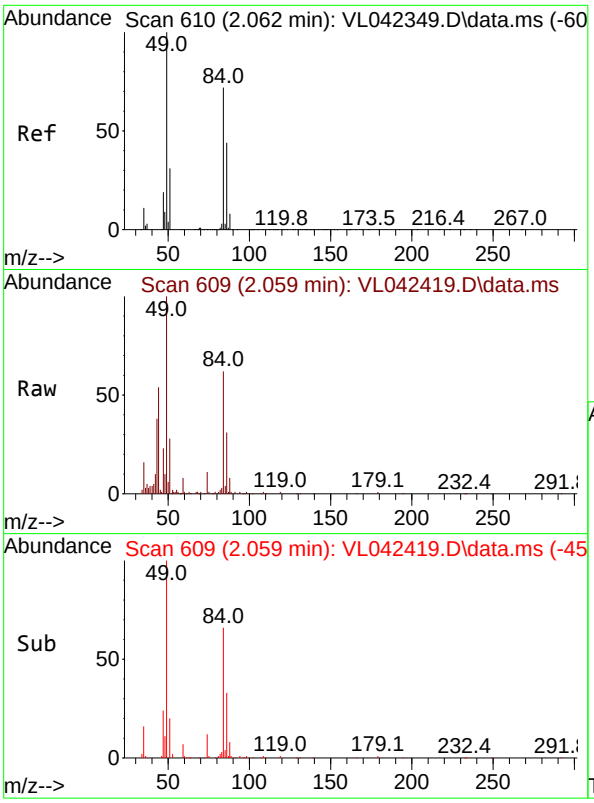


#19
Isopropyl Alcohol
Concen: 32.231 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 45 Resp: 414153

Ion	Ratio	Lower	Upper
45	100		
58	21.5	34.5	51.7#



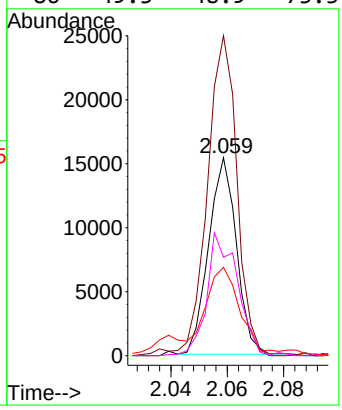


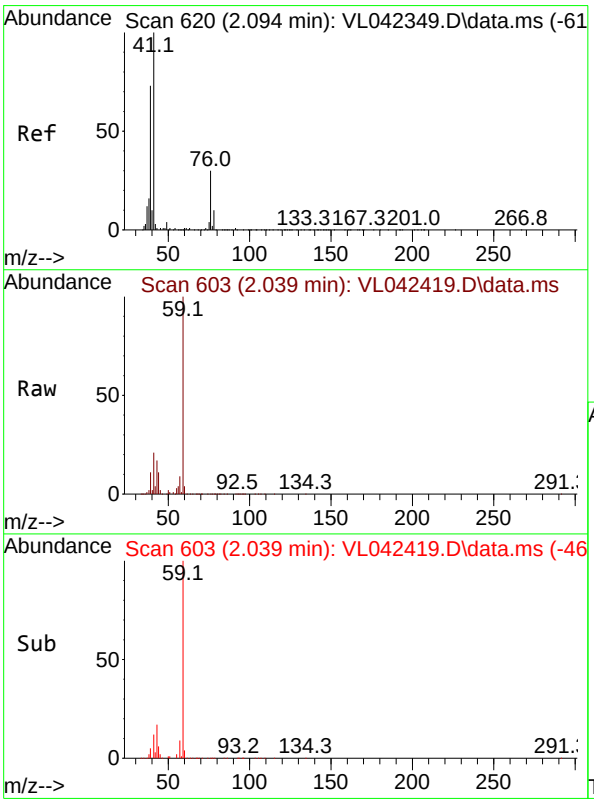
#20
Methylene Chloride
Concen: 1.162 ppbv
RT: 2.059 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 84 Resp: 10525

Ion	Ratio	Lower	Upper
84	100		
49	162.9	111.6	167.4
51	42.8	35.1	52.7
86	49.3	48.9	73.3

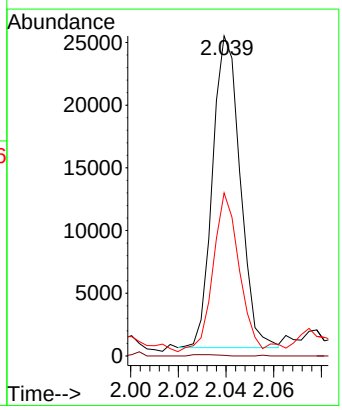


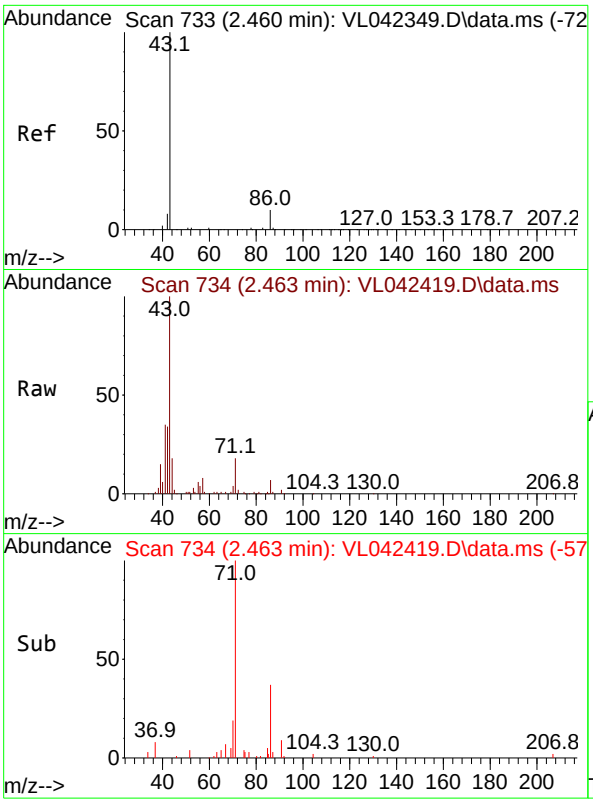


#21
Allyl Chloride
Concen: 1.250 ppbv
RT: 2.039 min Scan# 603
Delta R.T. -0.055 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 41 Resp: 19969

Ion	Ratio	Lower	Upper
41	100		
76	6.8	24.8	37.2#
39	57.5	60.6	90.8#



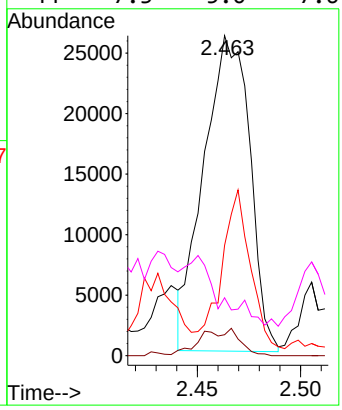


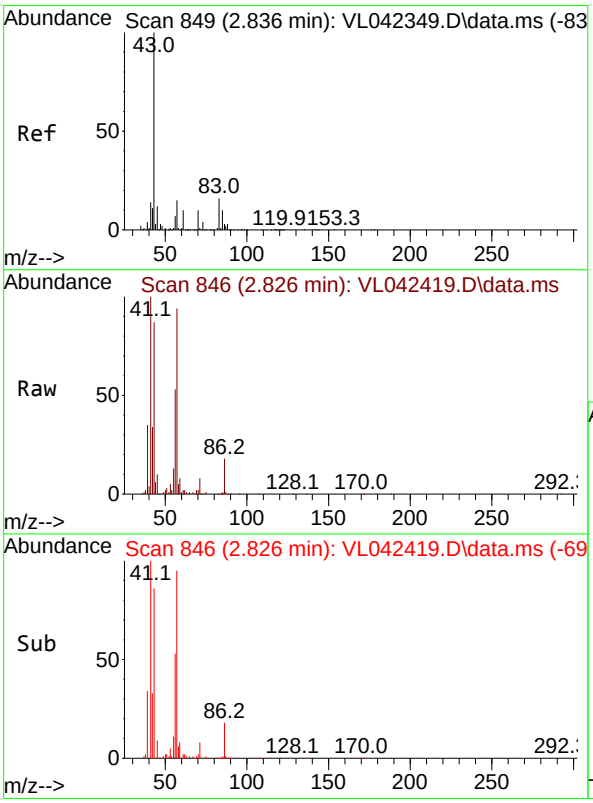
#23
Vinyl Acetate
Concen: 4.323 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 43 Resp: 40479

Ion	Ratio	Lower	Upper
43	100		
86	6.8	6.5	9.7
42	32.6	7.8	11.8#
44	7.3	5.0	7.6

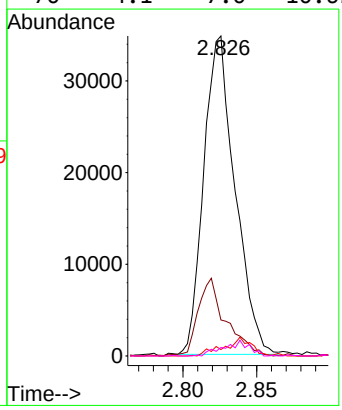


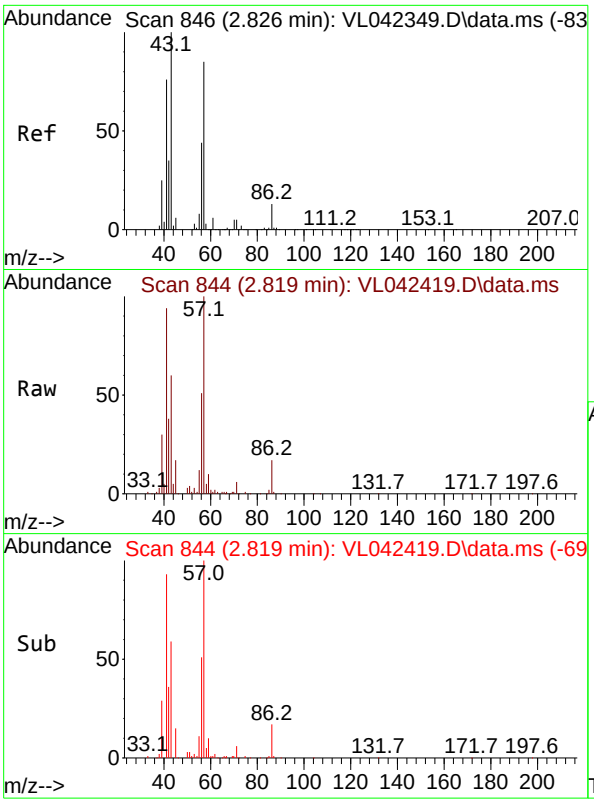


#25
Ethyl Acetate
Concen: 0.898 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 51192

Ion	Ratio	Lower	Upper
43	100		
45	22.1	8.3	12.5#
61	5.2	7.3	10.9#
70	4.1	7.0	10.6#



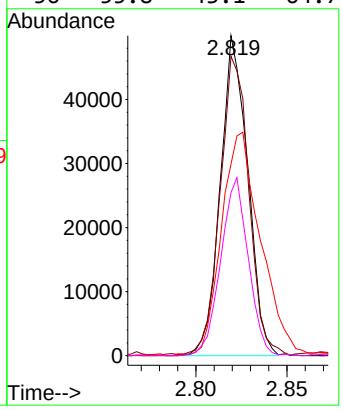


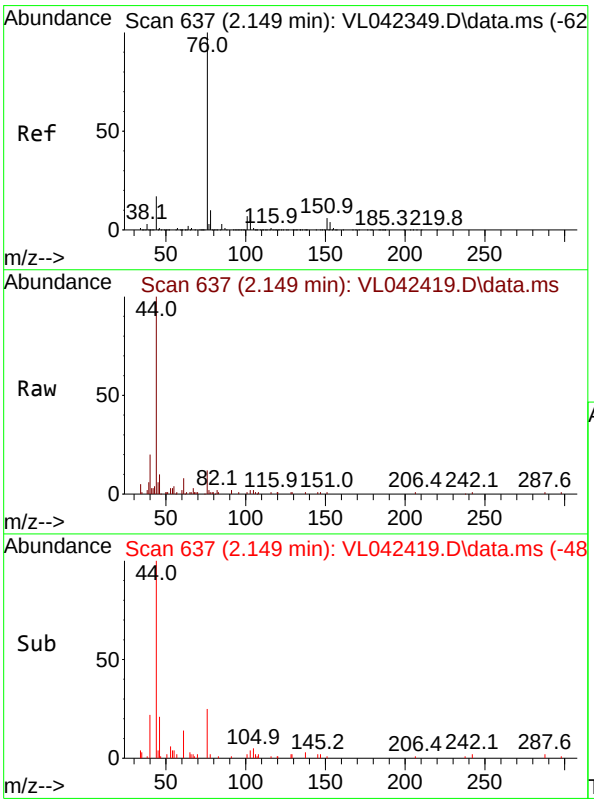
#26
Hexane
Concen: 2.273 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 57 Resp: 52451

Ion	Ratio	Lower	Upper
57	100		
41	97.9	77.9	116.9
43	99.2	208.4	312.6#
56	55.8	43.1	64.7

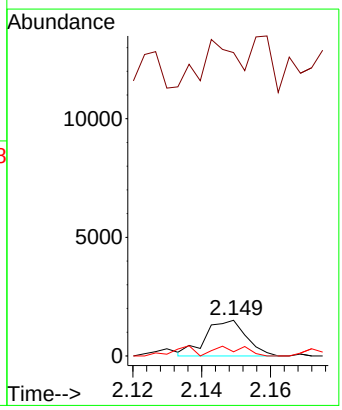


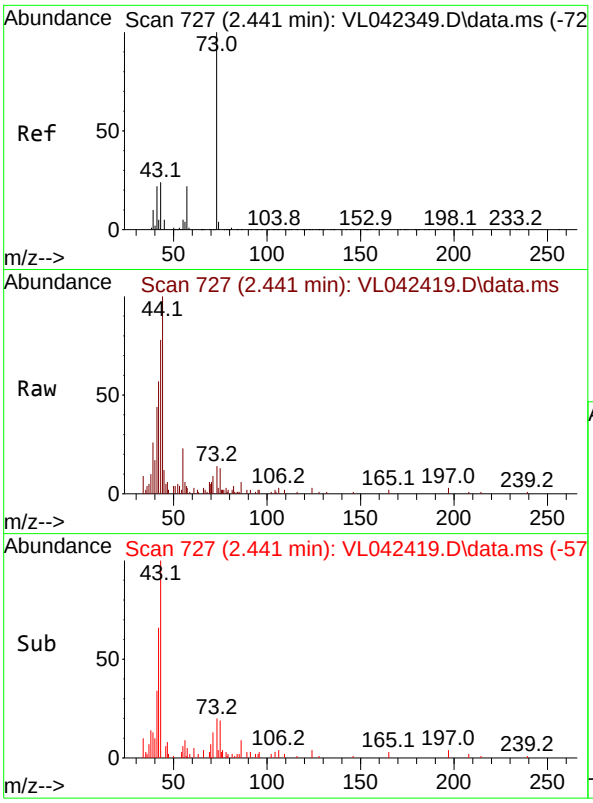


#27
Carbon Disulfide
Concen: 0.050 ppbv
RT: 2.149 min Scan# 637
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 76 Resp: 1231

Ion	Ratio	Lower	Upper
76	100		
44	2114.8	15.5	23.3#
78	0.0	9.3	13.9#



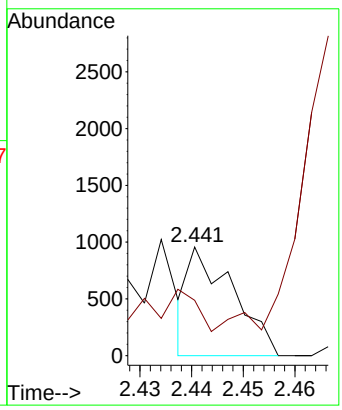


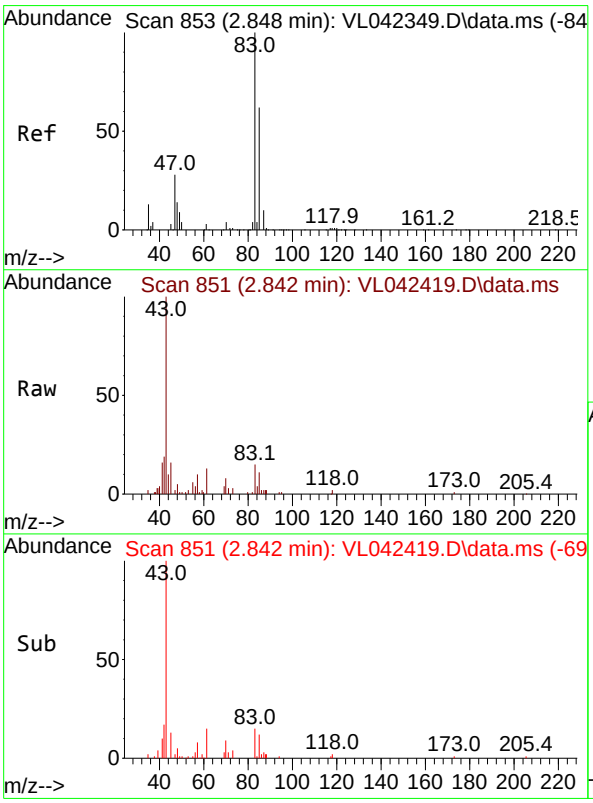
#28
Methyl tert-Butyl Ether
Concen: 0.038 ppbv
RT: 2.441 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 73 Resp: 580

Ion	Ratio	Lower	Upper
73	100		
57	0.0	21.3	31.9#

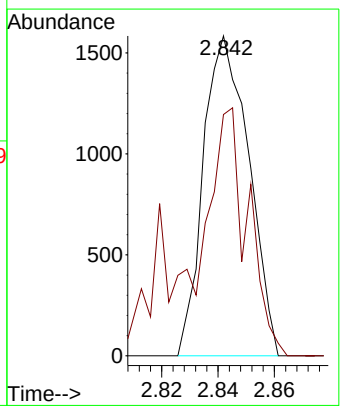


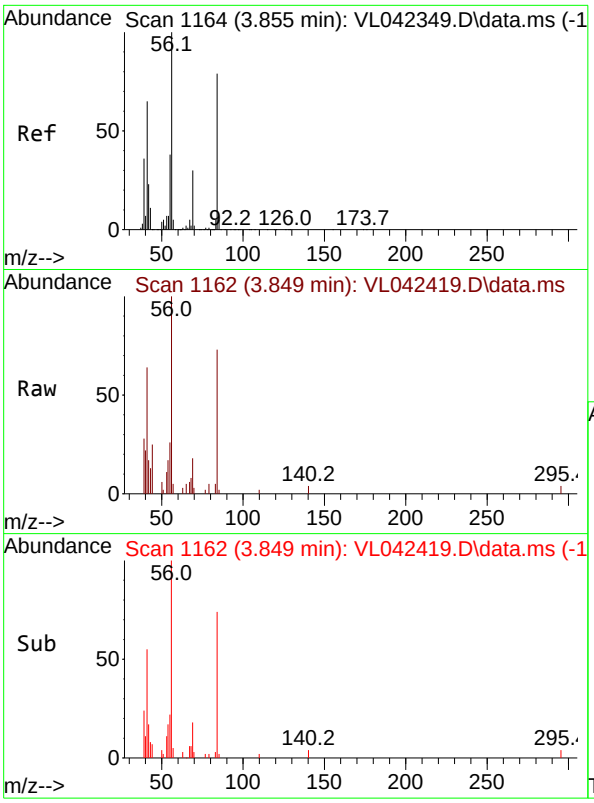


#29
Chloroform
Concen: 0.054 ppbv
RT: 2.842 min Scan# 851
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 83 Resp: 1773

Ion	Ratio	Lower	Upper
83	100		
85	71.5	50.0	75.0



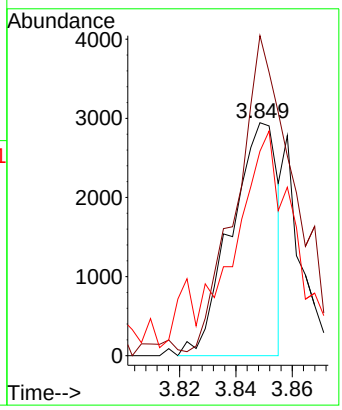


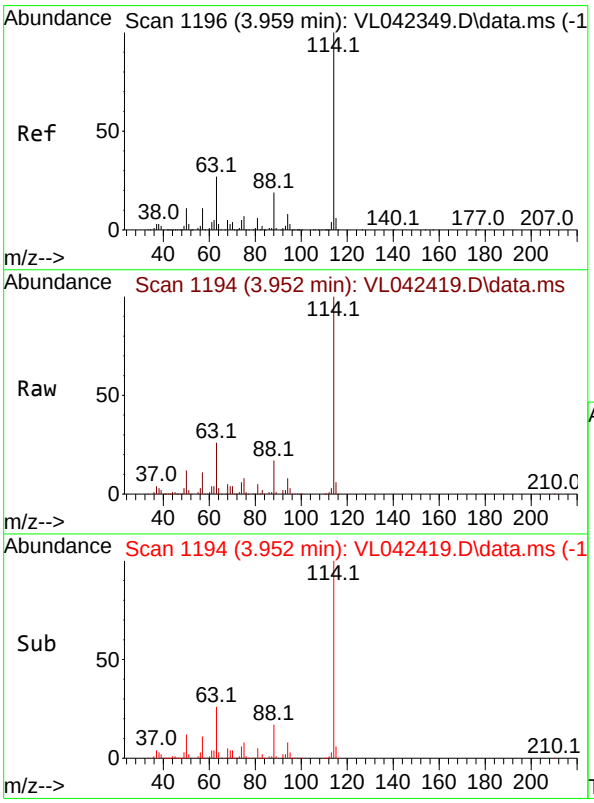
#30
Cyclohexane
Concen: 0.180 ppbv
RT: 3.849 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 84 Resp: 3366

Ion	Ratio	Lower	Upper
84	100		
56	183.2	101.0	151.4#
41	154.2	67.4	101.0#

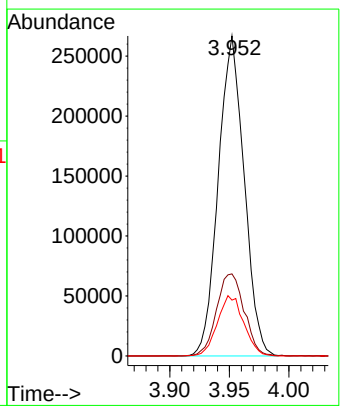


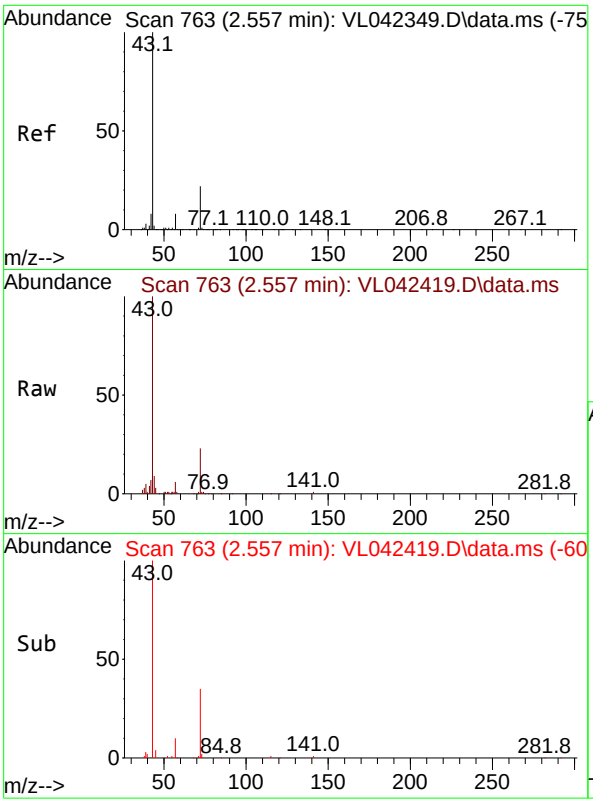


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 1194
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:114 Resp: 401917

Ion	Ratio	Lower	Upper
114	100		
63	27.5	21.8	32.6
88	19.2	15.5	23.3



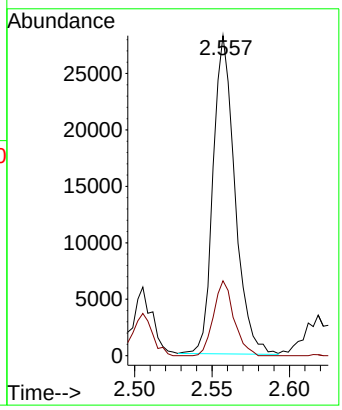


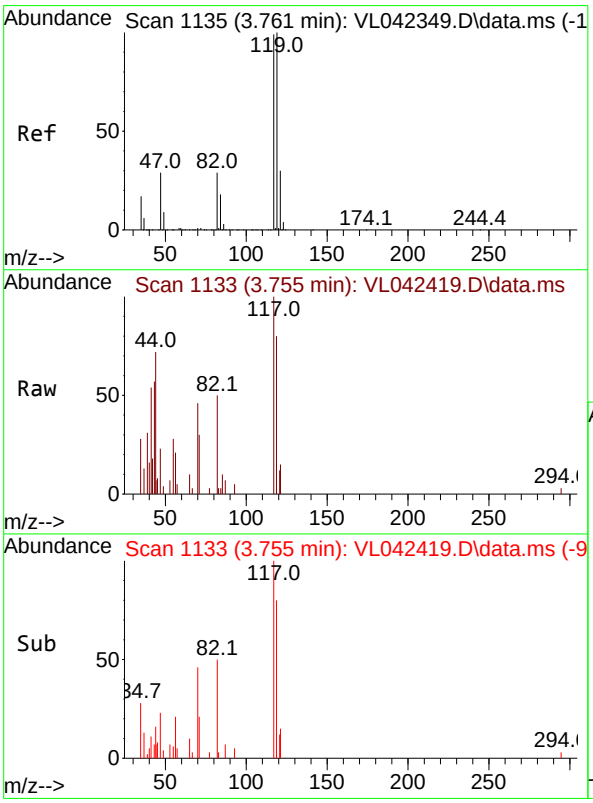
#34
2-Butanone
Concen: 0.869 ppbv
RT: 2.557 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 43 Resp: 27638

Ion	Ratio	Lower	Upper
43	100		
72	22.0	18.2	27.2

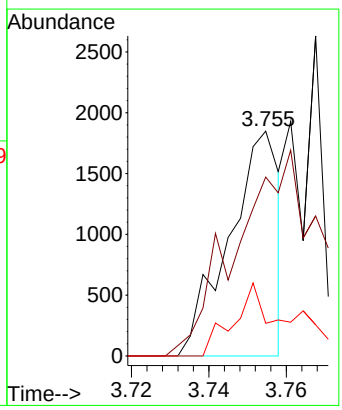


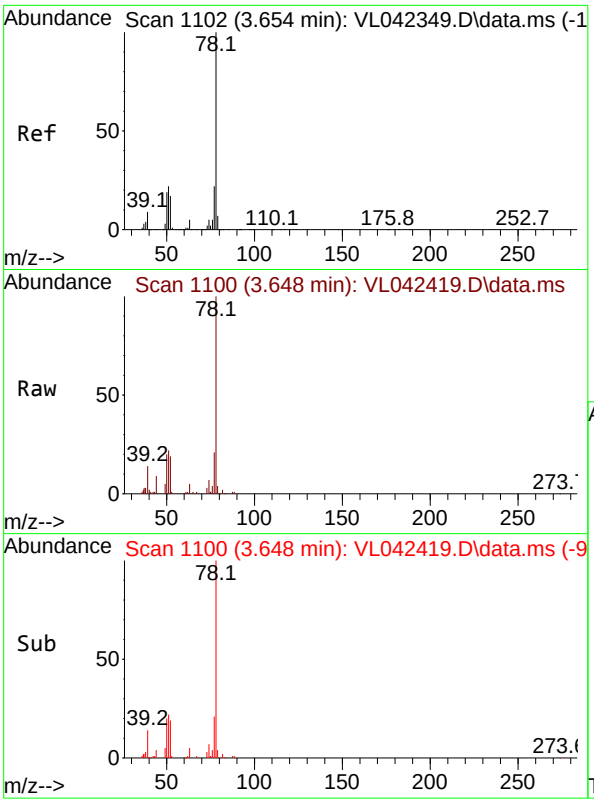


#35
Carbon Tetrachloride
Concen: 0.046 ppbv
RT: 3.755 min Scan# 1133
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:117 Resp: 1663

Ion	Ratio	Lower	Upper
117	100		
119	75.0	80.5	120.7#
121	14.5	24.2	36.2#



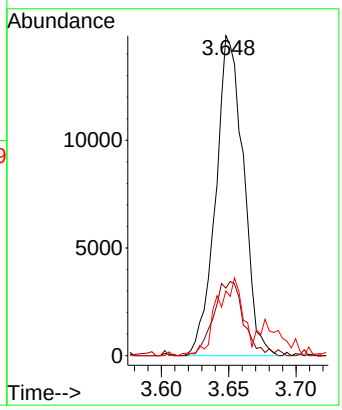


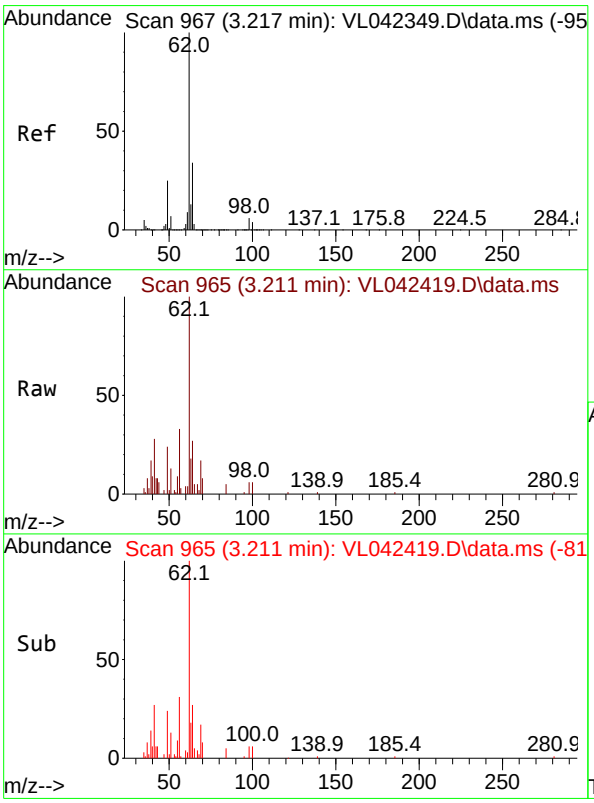
#36
Benzene
Concen: 0.490 ppbv
RT: 3.648 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 78 Resp: 21233

Ion	Ratio	Lower	Upper
78	100		
77	21.1	17.4	26.0
50	20.2	15.5	23.3

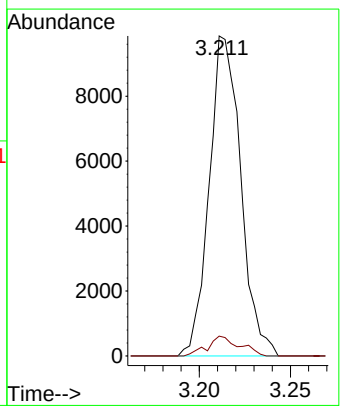


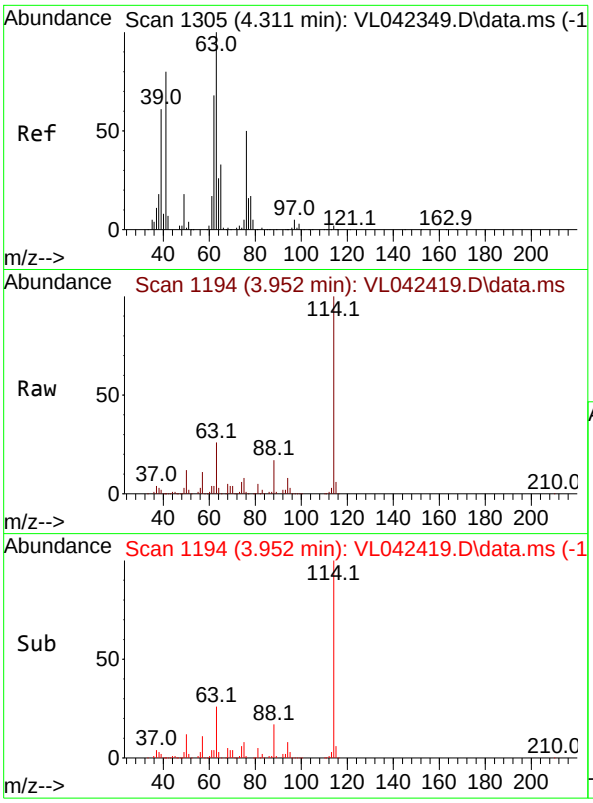


#37
1,2-Dichloroethane
Concen: 0.456 ppbv
RT: 3.211 min Scan# 965
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 62 Resp: 11865

Ion	Ratio	Lower	Upper
62	100		
98	6.2	5.1	7.7



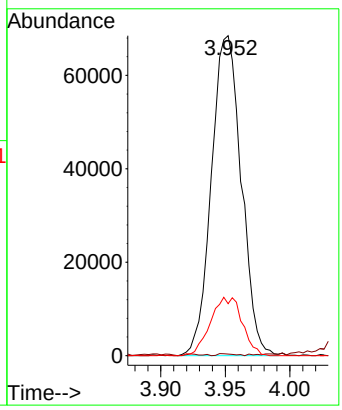


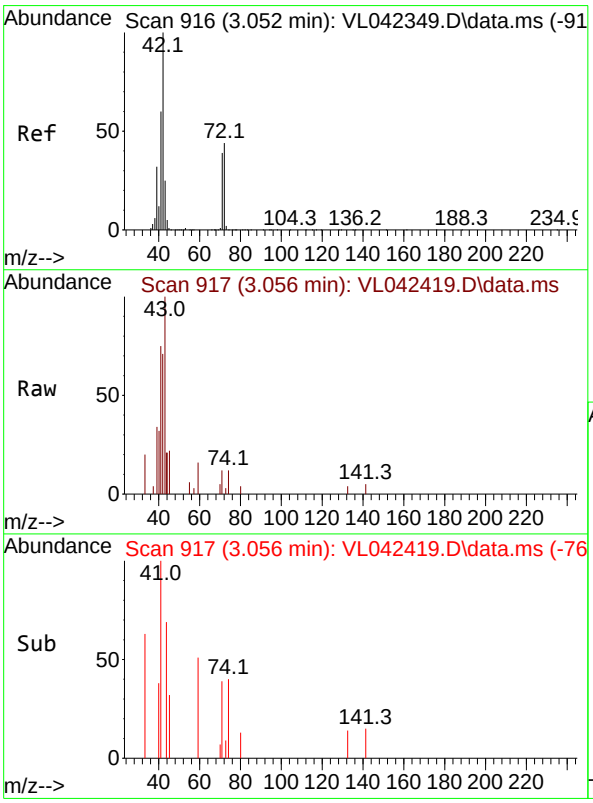
#39
1,2-Dichloropropane
Concen: 6.837 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.359 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 63 Resp: 110449

Ion	Ratio	Lower	Upper
63	100		
41	0.3	64.2	96.2#
62	16.3	54.3	81.5#

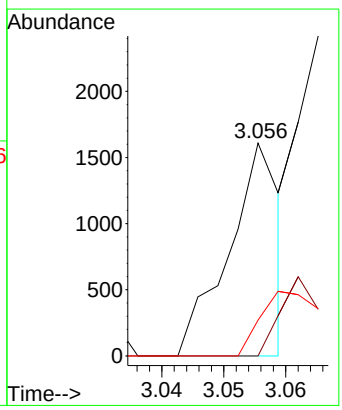


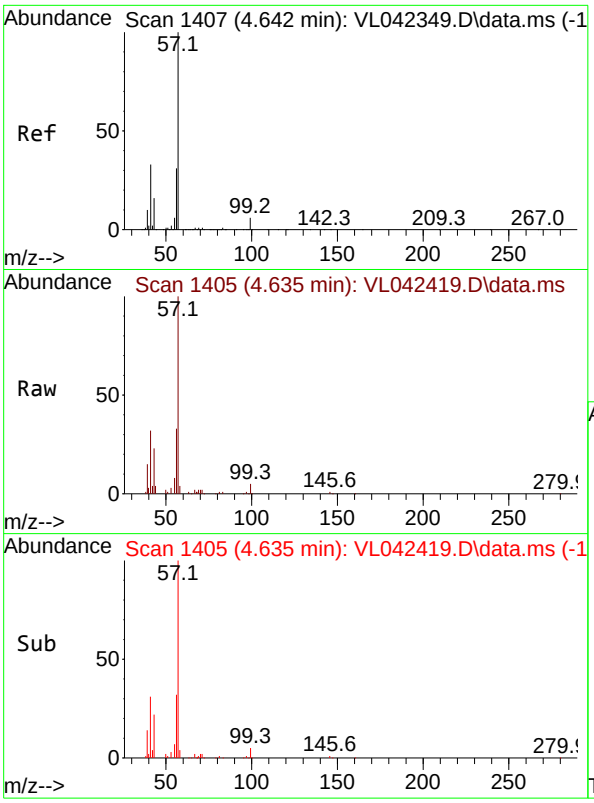


#41
Tetrahydrofuran
Concen: 0.050 ppbv
RT: 3.056 min Scan# 917
Delta R.T. 0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 42 Resp: 927

Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.3	48.5#
71	0.0	31.4	47.2#



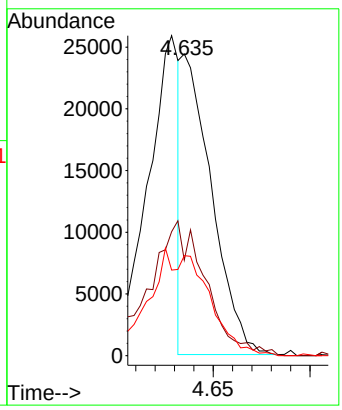


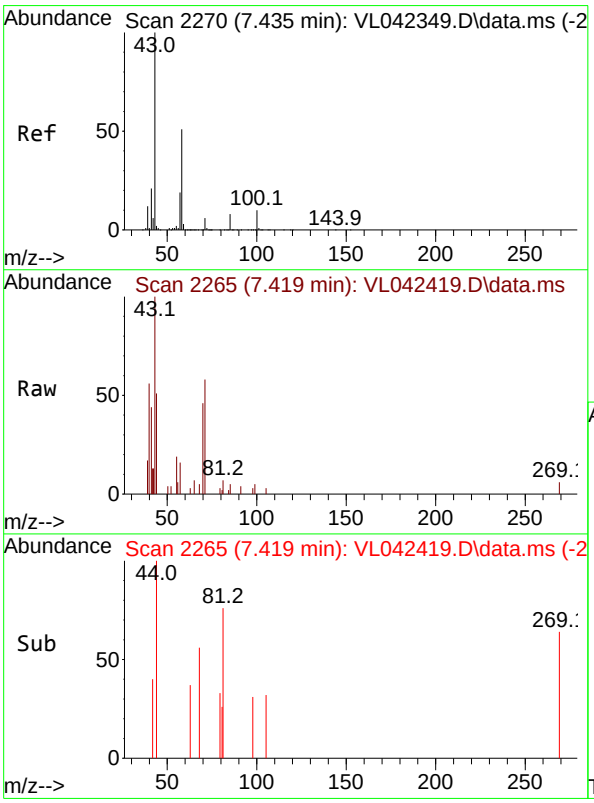
#44
2,2,4-Trimethylpentane
Concen: 0.349 ppbv
RT: 4.635 min Scan# 14
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 57 Resp: 26094

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8#
56	0.0	25.7	38.5#

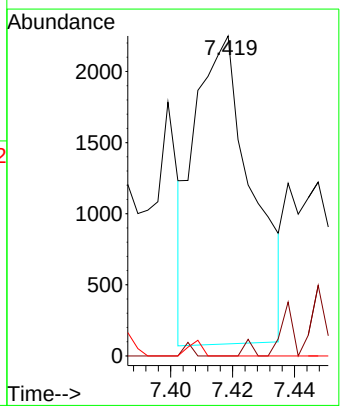


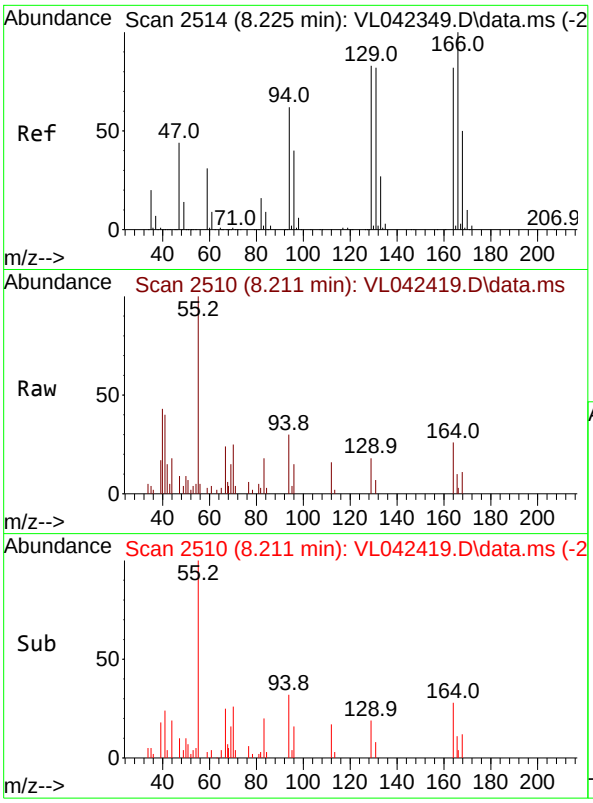


#51
2-Hexanone
Concen: 0.058 ppbv
RT: 7.419 min Scan# 2265
Delta R.T. -0.016 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 43 Resp: 2761

Ion	Ratio	Lower	Upper
43	100		
58	0.0	40.2	60.4#
98	0.0	0.1	0.1#



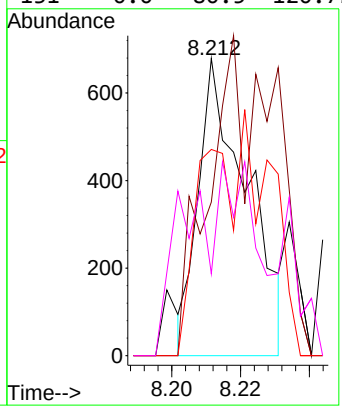


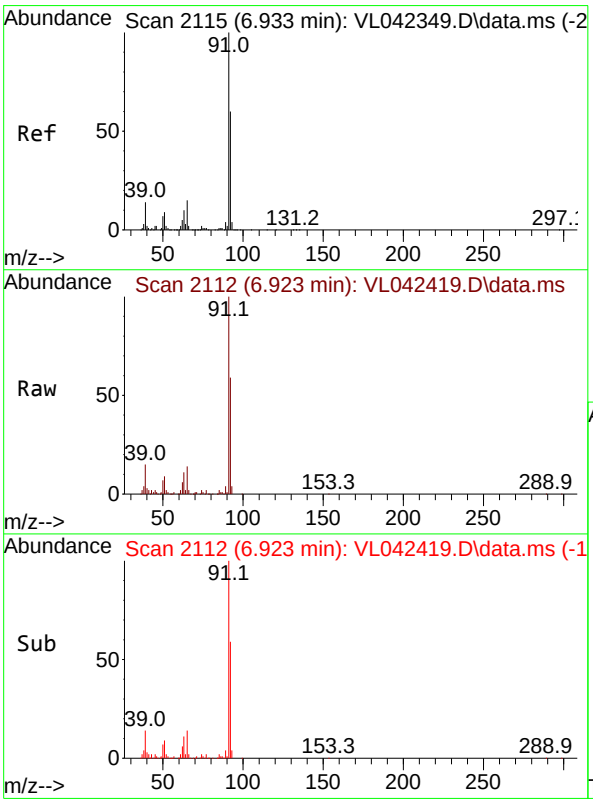
#52
Tetrachloroethene
Concen: 0.040 ppbv
RT: 8.211 min Scan# 2
Delta R.T. -0.013 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:164 Resp: 664

Ion	Ratio	Lower	Upper
164	100		
166	60.0	98.2	147.2#
129	80.5	81.8	122.8#
131	0.0	80.5	120.7#

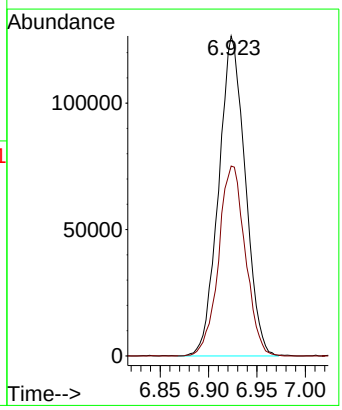


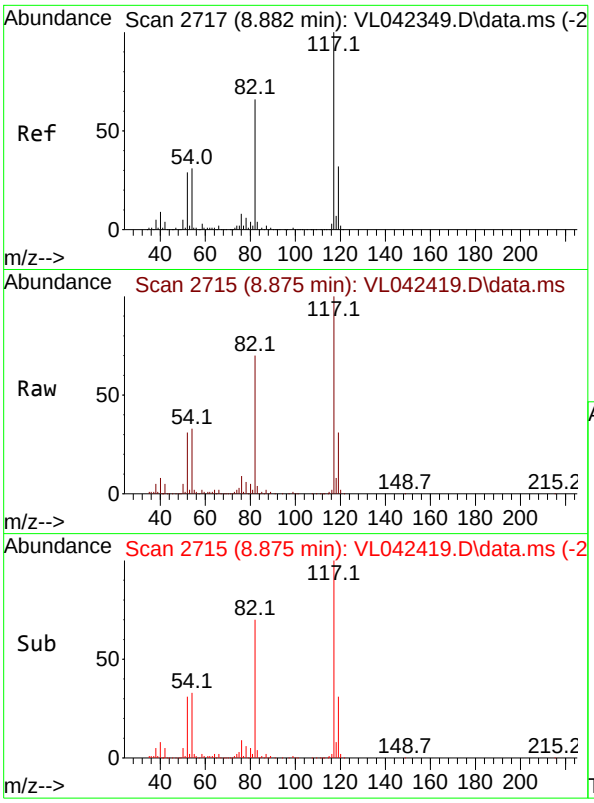


#53
Toluene
Concen: 4.644 ppbv
RT: 6.923 min Scan# 2112
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 241564

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4



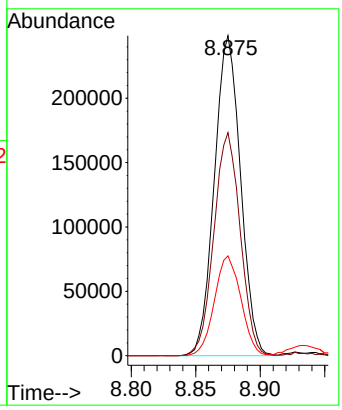


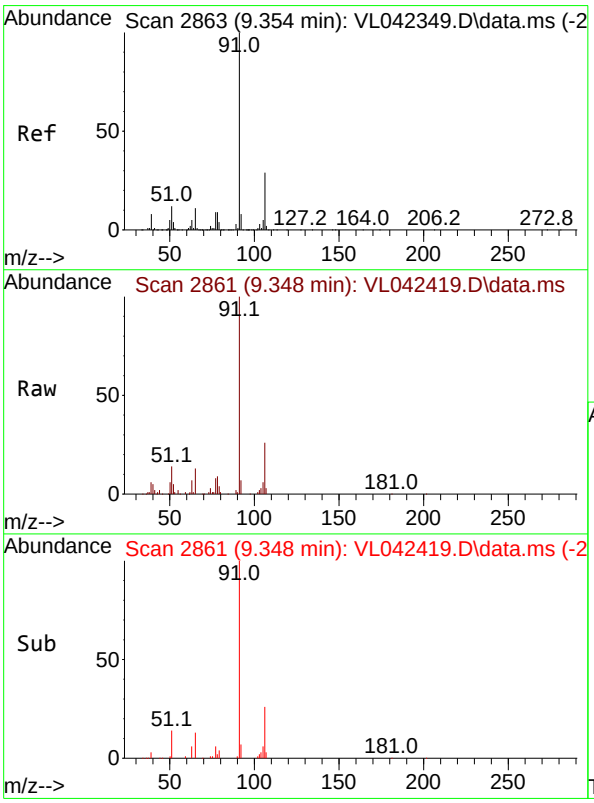
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:117 Resp: 351139

Ion	Ratio	Lower	Upper
117	100		
82	70.1	57.8	86.6
119	31.6	25.2	37.8

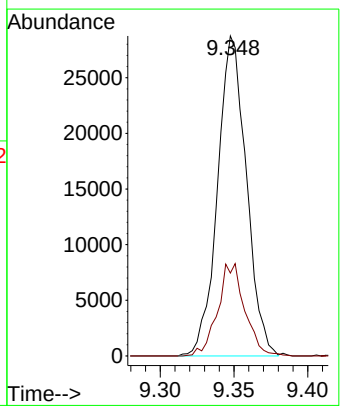


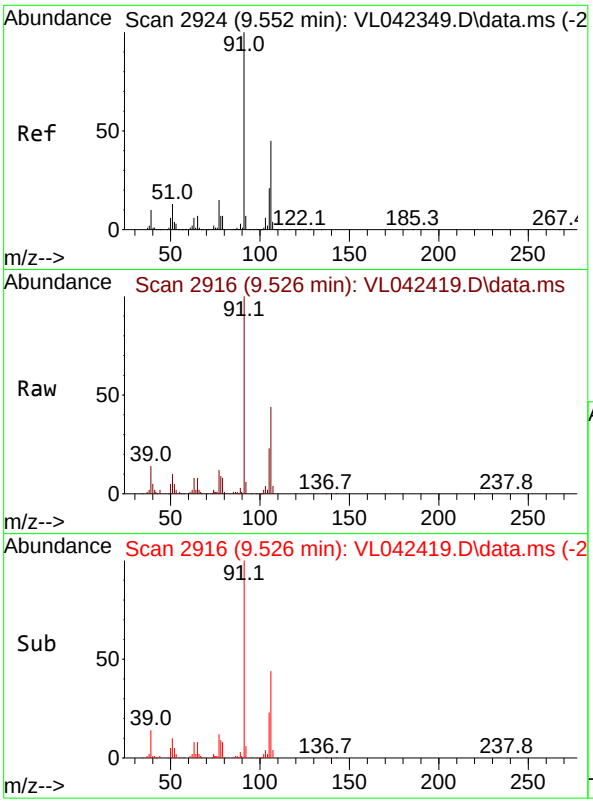


#58
Ethyl Benzene
Concen: 0.561 ppbv
RT: 9.348 min Scan# 2861
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 39060

Ion	Ratio	Lower	Upper
91	100		
106	25.9	23.0	34.4



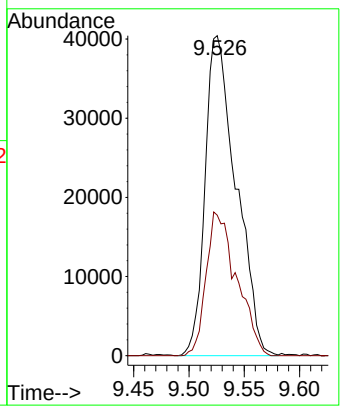


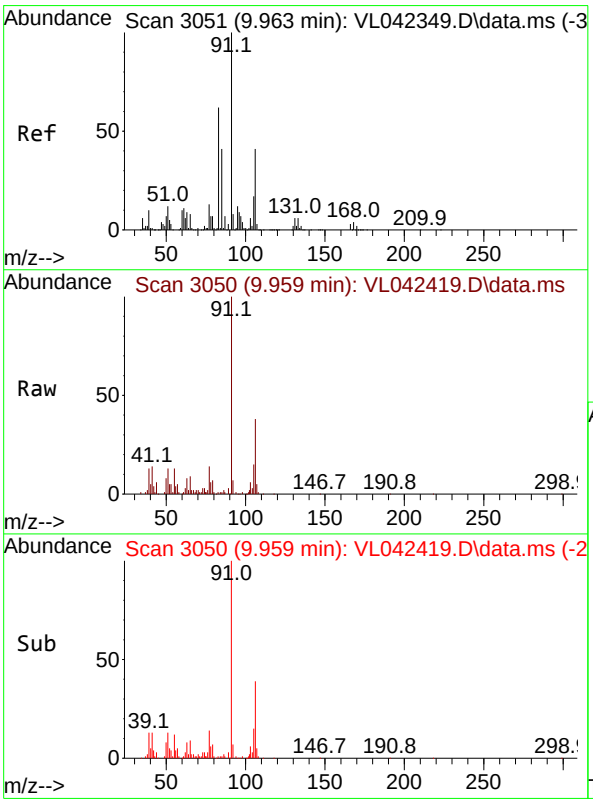
#59
m/p-Xylene
Concen: 1.407 ppbv
RT: 9.526 min Scan# 2
Delta R.T. -0.026 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion: 91 Resp: 78855

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2

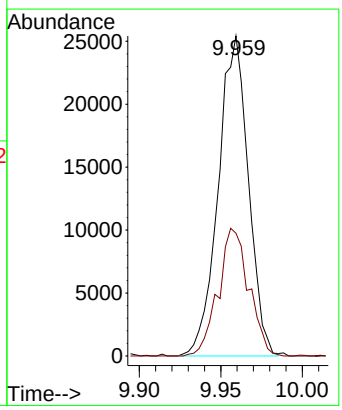


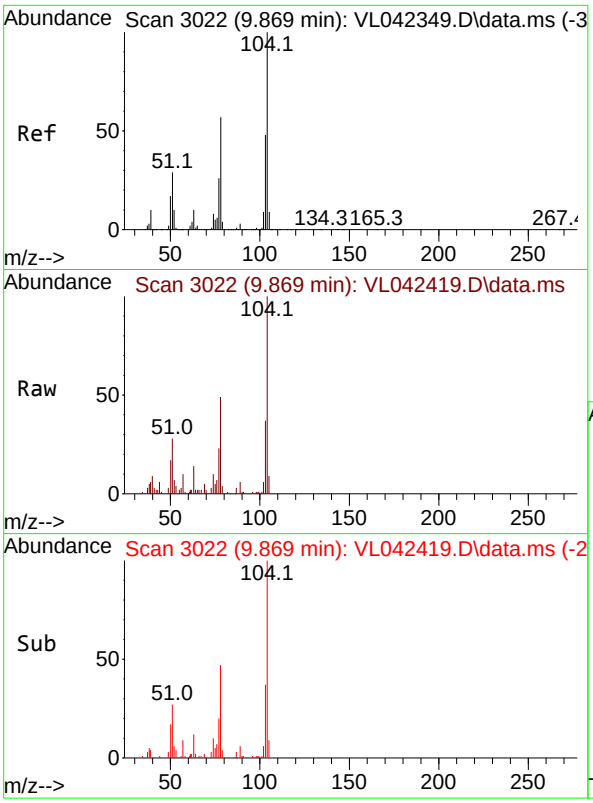


#60
o-Xylene
Concen: 0.578 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 32637

Ion	Ratio	Lower	Upper
91	100		
106	40.6	21.1	63.4



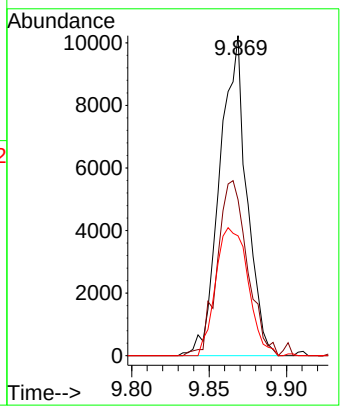


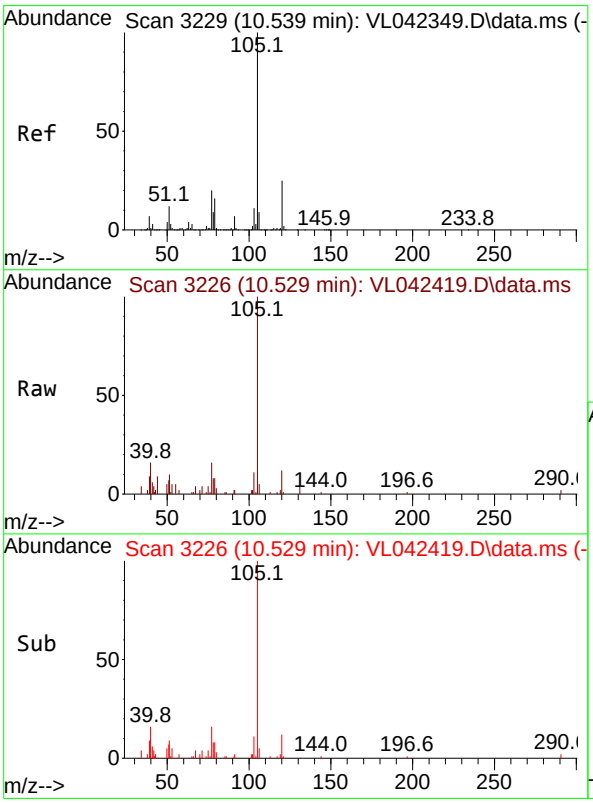
#61
Styrene
Concen: 0.460 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:104 Resp: 12396

Ion	Ratio	Lower	Upper
104	100		
78	62.2	44.6	66.8
103	48.4	37.4	56.0

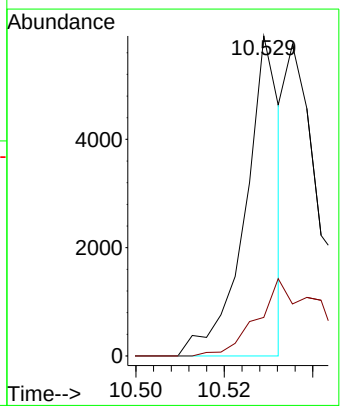


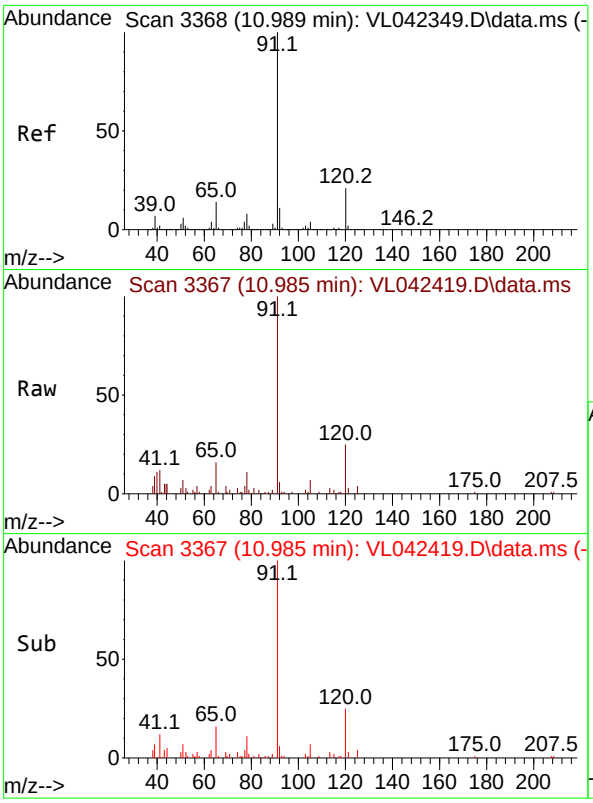


#62
Isopropylbenzene
Concen: 0.039 ppbv
RT: 10.529 min Scan# 3226
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:105 Resp: 3245

Ion	Ratio	Lower	Upper
105	100		
120	0.0	19.8	29.8#



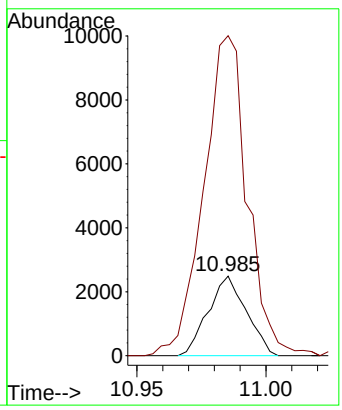


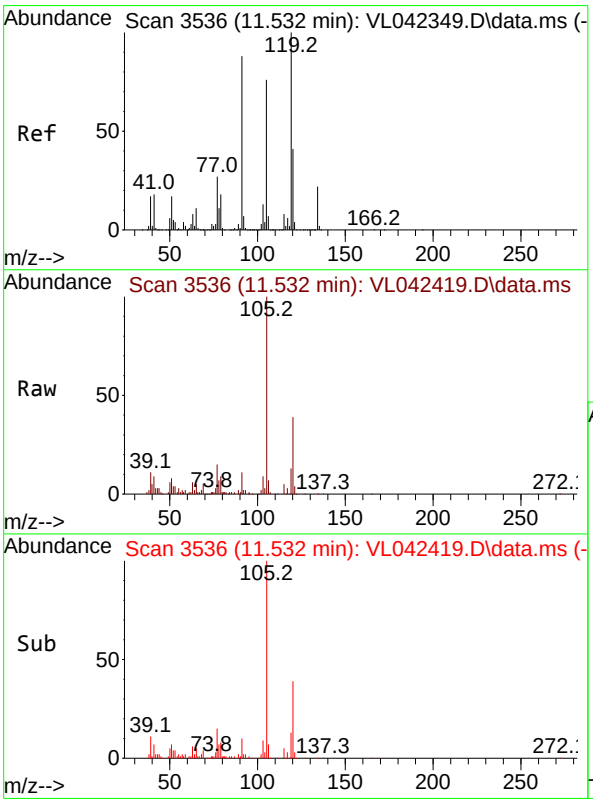
#64
n-propylbenzene
Concen: 0.123 ppbv
RT: 10.985 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:120 Resp: 2557

Ion	Ratio	Lower	Upper
120	100		
91	461.4	392.4	588.6

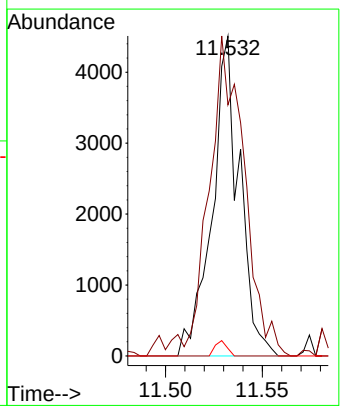


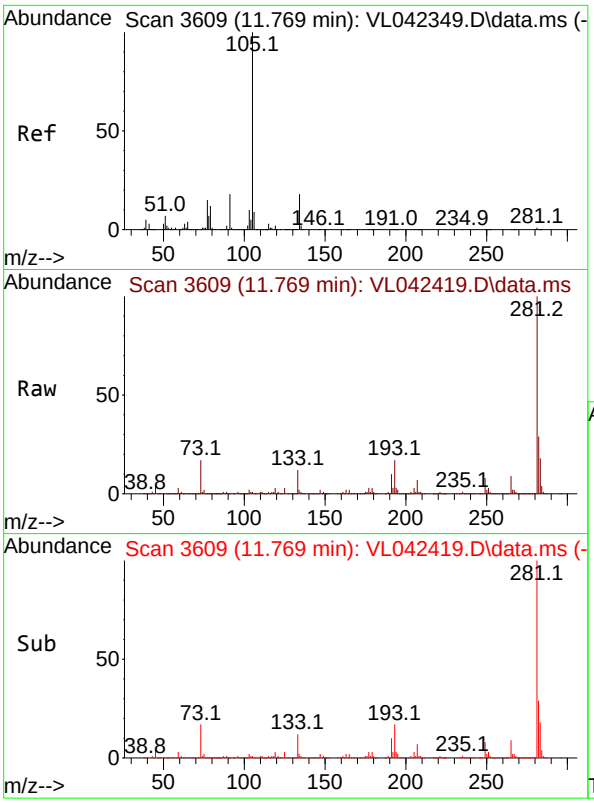


#65
tert-Butylbenzene
Concen: 0.058 ppbv
RT: 11.532 min Scan# 3536
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:119 Resp: 4429

Ion	Ratio	Lower	Upper
119	100		
91	132.1	74.6	111.8#
134	0.0	18.8	28.2#



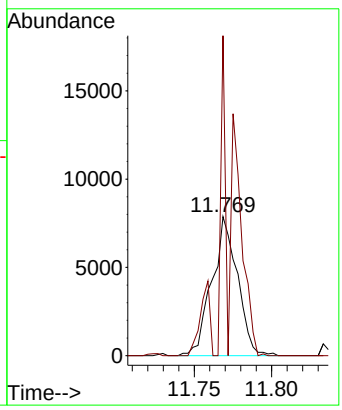


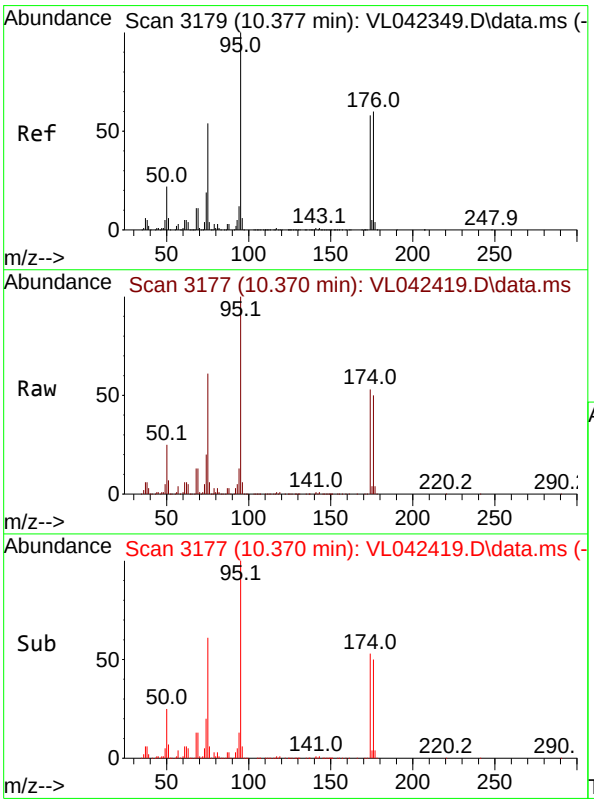
#67
sec-Butylbenzene
Concen: 0.086 ppbv
RT: 11.769 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:105 Resp: 9075

Ion	Ratio	Lower	Upper
105	100		
134	134.4	14.6	21.8#

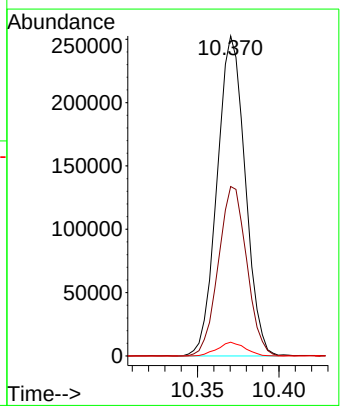


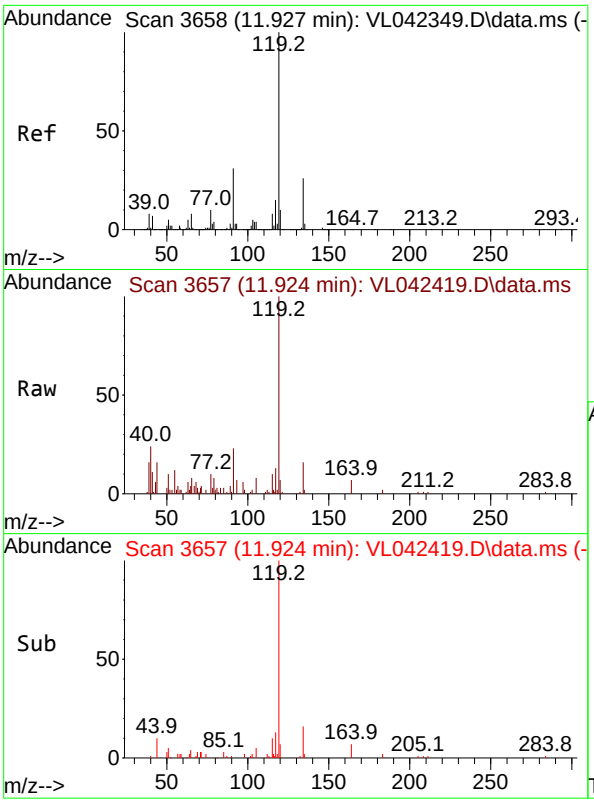


#68
1-Bromo-4-Fluorobenzene
Concen: 10.481 ppbv
RT: 10.370 min Scan# 3177
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 95 Resp: 302429

Ion	Ratio	Lower	Upper
95	100		
174	53.5	48.5	72.7
175	4.2	3.7	5.5



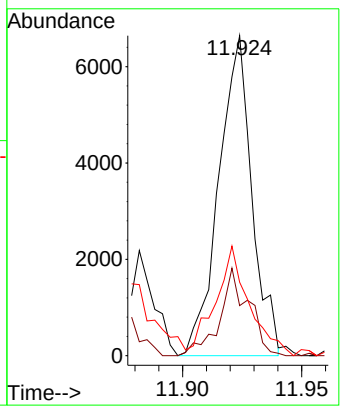


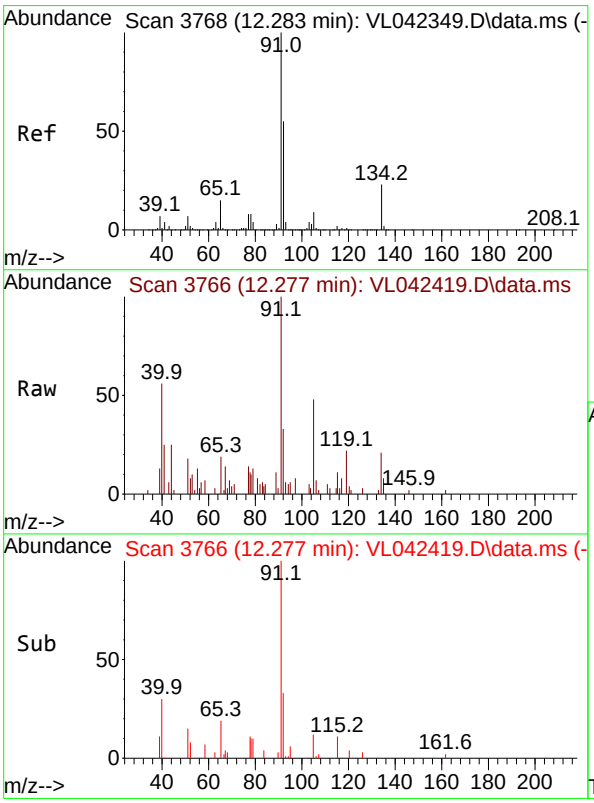
#69
p-Isopropyltoluene
Concen: 0.070 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:119 Resp: 6420

Ion	Ratio	Lower	Upper
119	100		
134	24.2	20.0	30.0
91	35.6	24.4	36.6

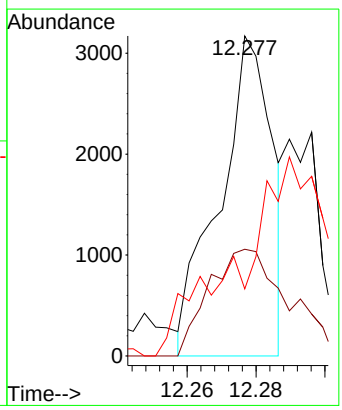


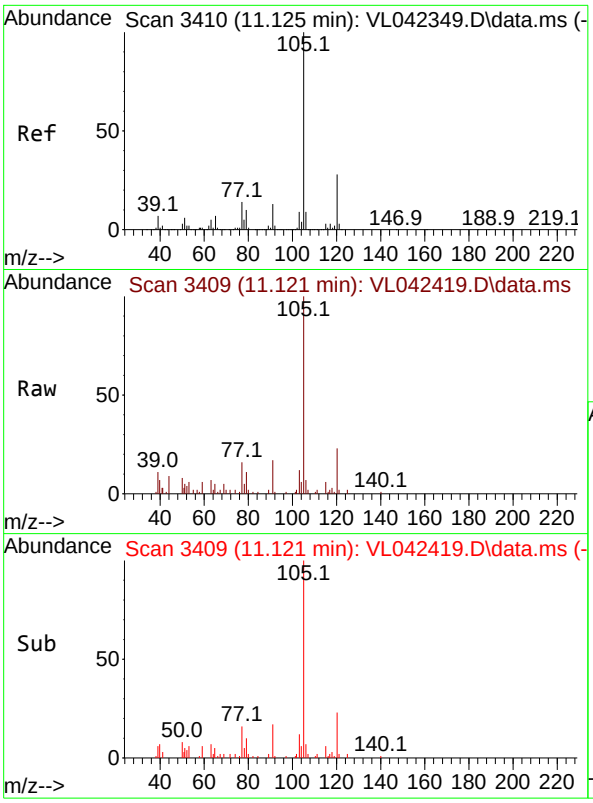


#70
n-Butylbenzene
Concen: 0.035 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion: 91 Resp: 3378

Ion	Ratio	Lower	Upper
91	100		
92	52.4	44.2	66.4
134	0.0	18.2	27.4#



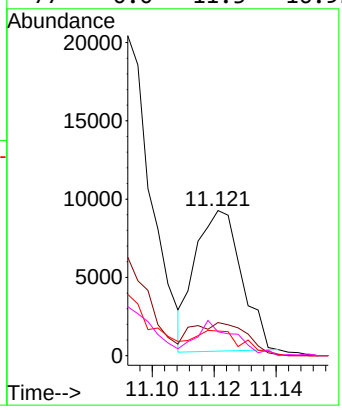


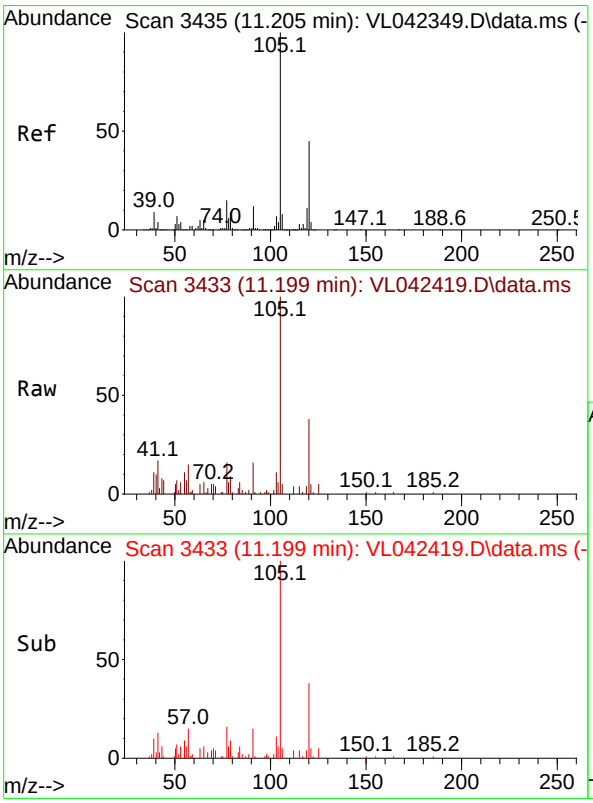
#72
4-Ethyltoluene
Concen: 0.135 ppbv
RT: 11.121 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:105 Resp: 9307

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

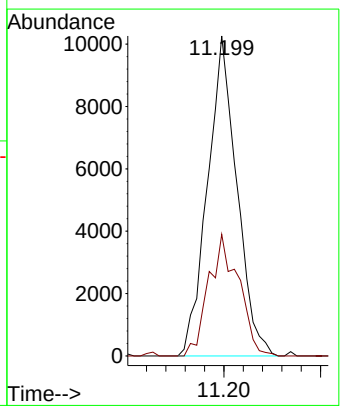


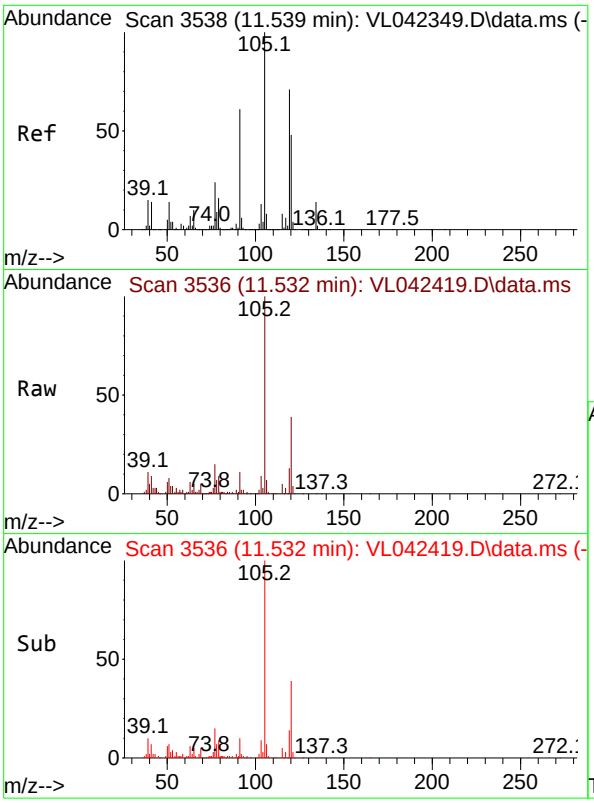


#73
1,3,5-Trimethylbenzene
Concen: 0.177 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:105 Resp: 10799

Ion	Ratio	Lower	Upper
105	100		
120	38.0	35.6	53.4



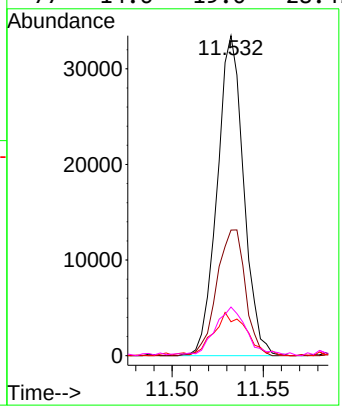


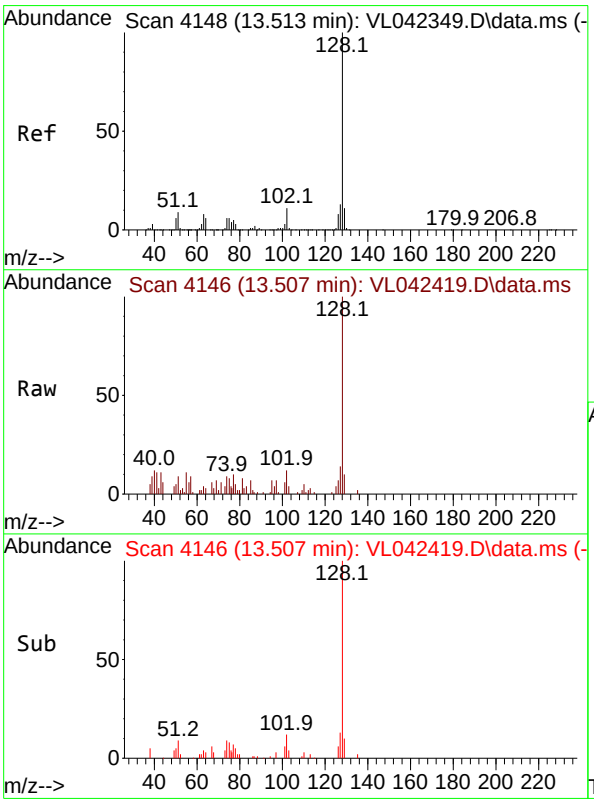
#74
1,2,4-Trimethylbenzene
Concen: 0.475 ppbv
RT: 11.532 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:105 Resp: 33801

Ion	Ratio	Lower	Upper
105	100		
120	39.3	38.1	57.1
91	10.1	48.8	73.2#
77	14.6	19.0	28.4#

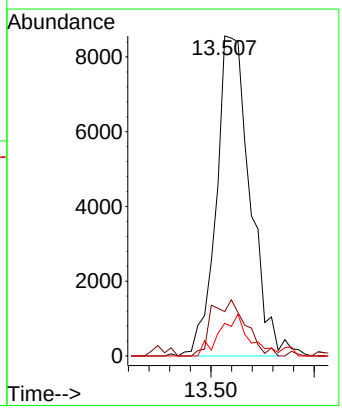


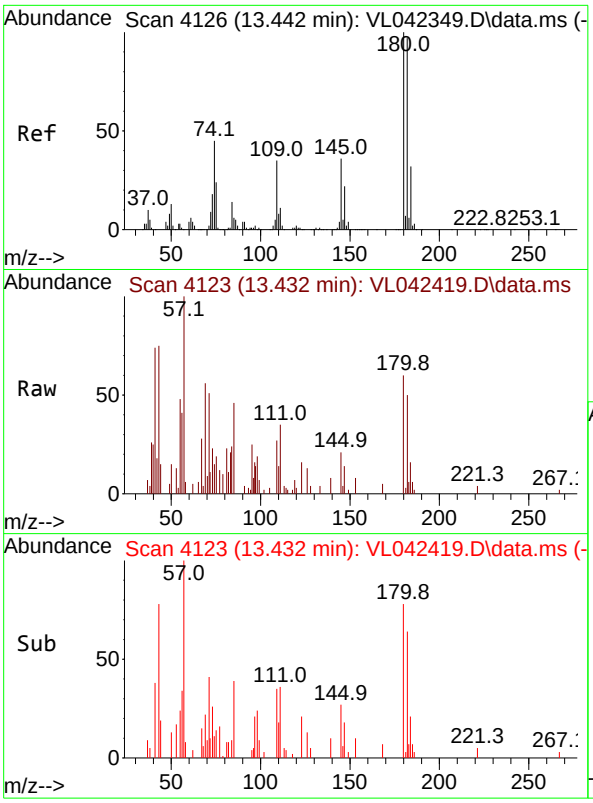


#79
Naphthalene
Concen: 0.113 ppbv
RT: 13.507 min Scan# 4146
Delta R.T. -0.007 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Tgt Ion:128 Resp: 9645

Ion	Ratio	Lower	Upper
128	100		
127	13.8	10.6	15.8
129	10.2	8.6	12.8



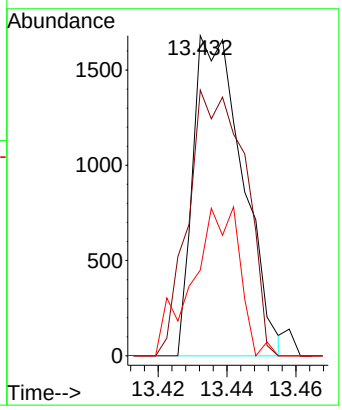


#81
1,2,4-Trichlorobenzene
Concen: 0.046 ppbv
RT: 13.432 min Scan# 4
Delta R.T. -0.010 min
Lab File: VL042419.D
Acq: 28 Apr 2025 10:59

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-3-3242025

Tgt Ion:180 Resp: 1680

Ion	Ratio	Lower	Upper
180	100		
182	95.2	76.8	115.2
184	44.6	24.6	36.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Time: Apr 29 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.777	49	141186	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.949	114	402115	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.868	117	352885	10.000	ppbv		-0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.367	95	302328	10.426	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10705	0.429	ppbv		100
3) Chlorodifluoromethane	1.463	51	93097	3.919	ppbv	#	60
4) Chloromethane	1.528	50	5568	0.564	ppbv		99
6) Bromomethane	1.664	94	139	0.030	ppbv	#	39
9) Propene	1.557	41	267054	24.687	ppbv		100
10) Heptane	4.965	43	10944	0.360	ppbv	#	80
11) Trichlorofluoromethane	1.871	101	4925	0.208	ppbv		88
13) Ethanol	1.719	45	472110	274.580	ppbv		77
15) Acetone	1.832	43	502160	21.727	ppbv	#	82
16) 1,3-Butadiene	1.596	39	7088	0.641	ppbv	#	43
17) tert-Butyl alcohol	2.039	59	85888	2.999	ppbv		100
19) Isopropyl Alcohol	1.881	45	428440	33.369	ppbv	#	66
20) Methylene Chloride	2.055	84	8914	0.985	ppbv		95
21) Allyl Chloride	2.036	41	21270	1.333	ppbv	#	63
23) Vinyl Acetate	2.463	43	27871	2.979	ppbv	#	57
25) Ethyl Acetate	2.819	43	50759	0.891	ppbv	#	80
26) Hexane	2.816	57	53184	2.306	ppbv	#	41
27) Carbon Disulfide	2.149	76	1195	0.048	ppbv	#	40
28) Methyl tert-Butyl Ether	2.434	73	916	0.061	ppbv	#	1
30) Cyclohexane	3.842	84	4557	0.244	ppbv	#	88
34) 2-Butanone	2.554	43	26974	0.848	ppbv		98
36) Benzene	3.641	78	11344	0.262	ppbv		95
37) 1,2-Dichloroethane	3.208	62	12506	0.480	ppbv		98
39) 1,2-Dichloropropane	3.946	63	109025	6.746	ppbv	#	24
41) Tetrahydrofuran	3.059	42	2829	0.153	ppbv	#	67
44) 2,2,4-Trimethylpentane	4.625	57	47245	0.631	ppbv	#	85
50) 4-Methyl-2-Pentanone	5.748	43	18997	0.359	ppbv		100
53) Toluene	6.920	91	226903	4.360	ppbv		99
56) 1,1,1,2-Tetrachloroethane	8.927	131	786	0.037	ppbv	#	8
58) Ethyl Benzene	9.344	91	36433	0.521	ppbv		97
59) m/p-Xylene	9.542	91	13197	0.234	ppbv	#	32
60) o-Xylene	9.956	91	28805	0.508	ppbv		99
61) Styrene	9.859	104	11652	0.430	ppbv		93
62) Isopropylbenzene	10.532	105	6243	0.075	ppbv		95
64) n-propylbenzene	10.979	120	2601	0.124	ppbv		72
65) tert-Butylbenzene	11.526	119	3906	0.051	ppbv	#	56
67) sec-Butylbenzene	11.772	105	9253	0.087	ppbv	#	1
69) p-Isopropyltoluene	11.917	119	5675	0.061	ppbv	#	86
71) 2-Chlorotoluene	10.895	91	2387	0.037	ppbv		94
72) 4-Ethyltoluene	11.118	105	9487	0.137	ppbv	#	64
73) 1,3,5-Trimethylbenzene	11.196	105	9349	0.153	ppbv	#	77
74) 1,2,4-Trimethylbenzene	11.529	105	32107	0.449	ppbv	#	65
79) Naphthalene	13.507	128	5874	0.069	ppbv		97

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Time: Apr 29 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

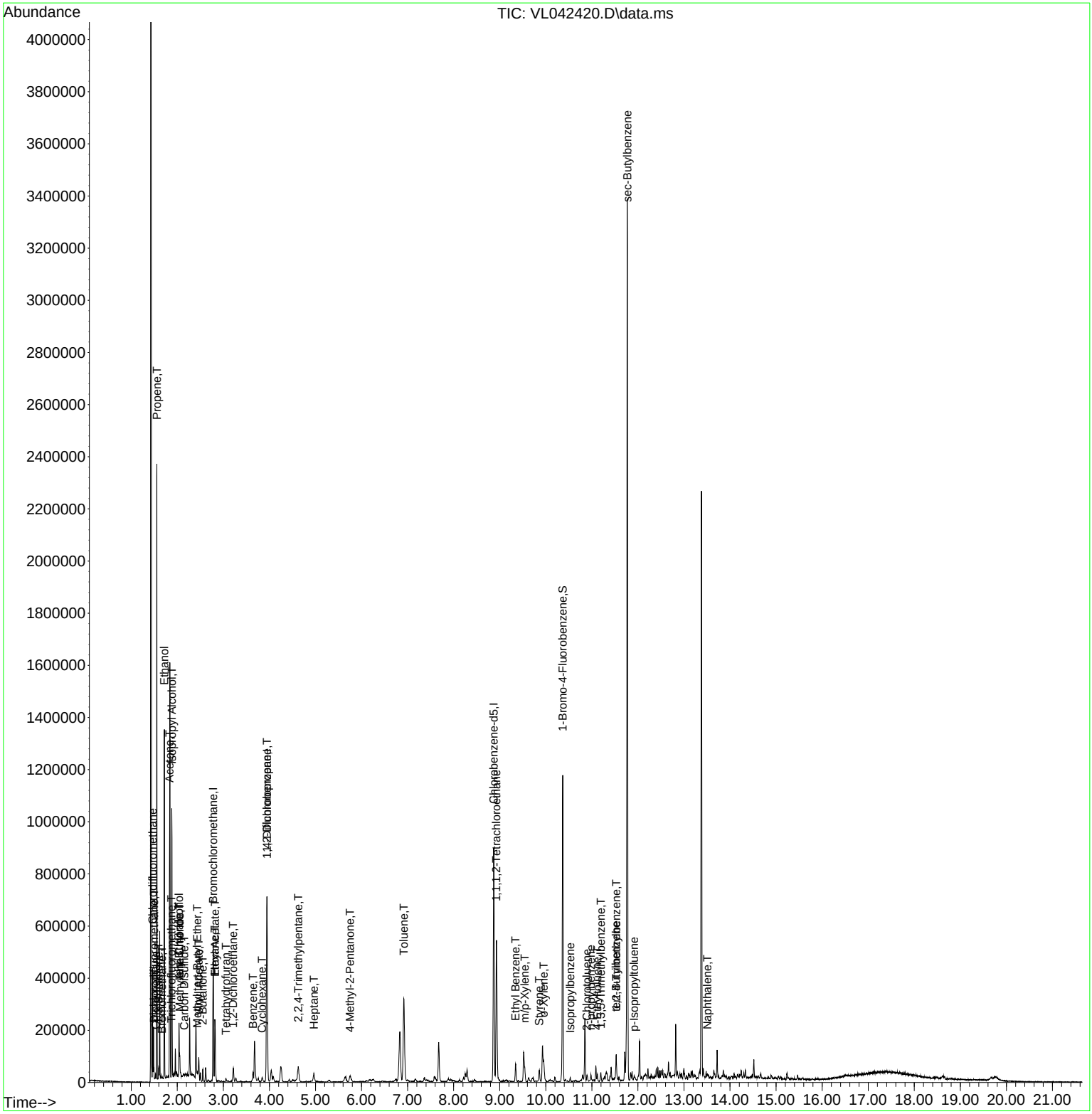
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

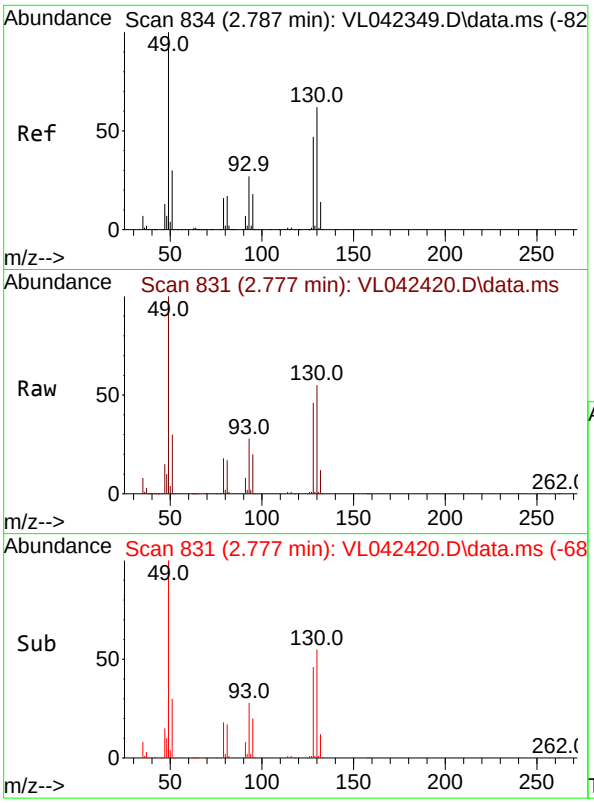
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042420.D
Acq On : 28 Apr 2025 11:33
Operator : SY/MD
Sample : Q1665-07
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Quant Time: Apr 29 01:34:21 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



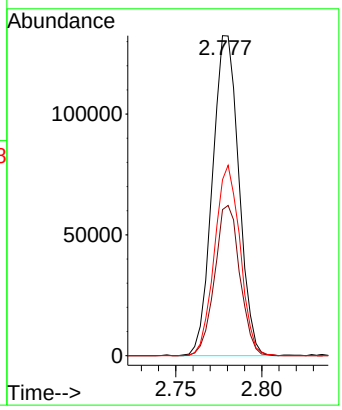


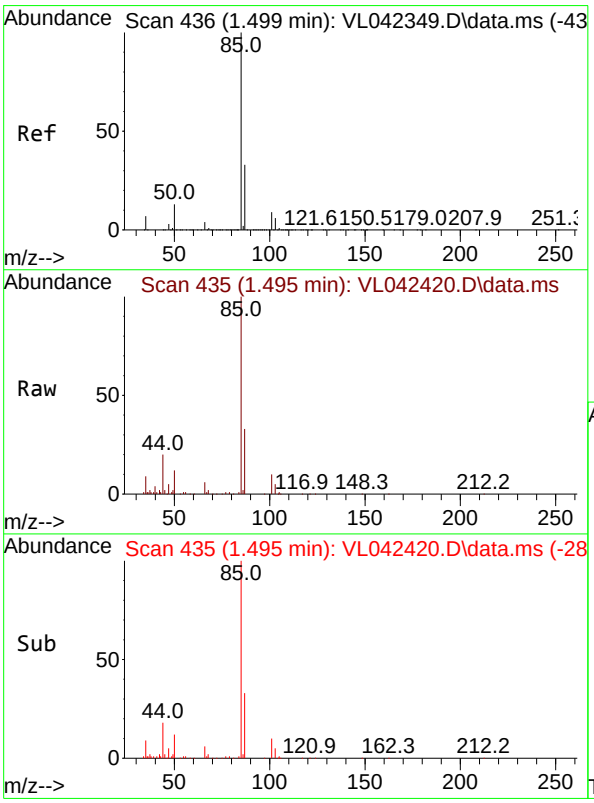
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.777 min Scan# 8
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 49 Resp: 141186

Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.8	68.4
130	57.5	29.3	88.0

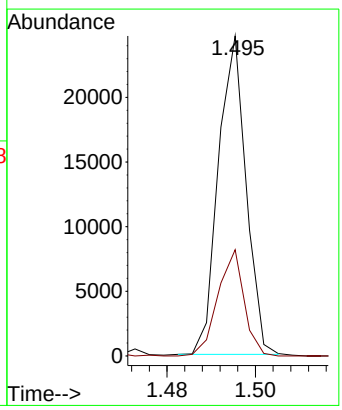


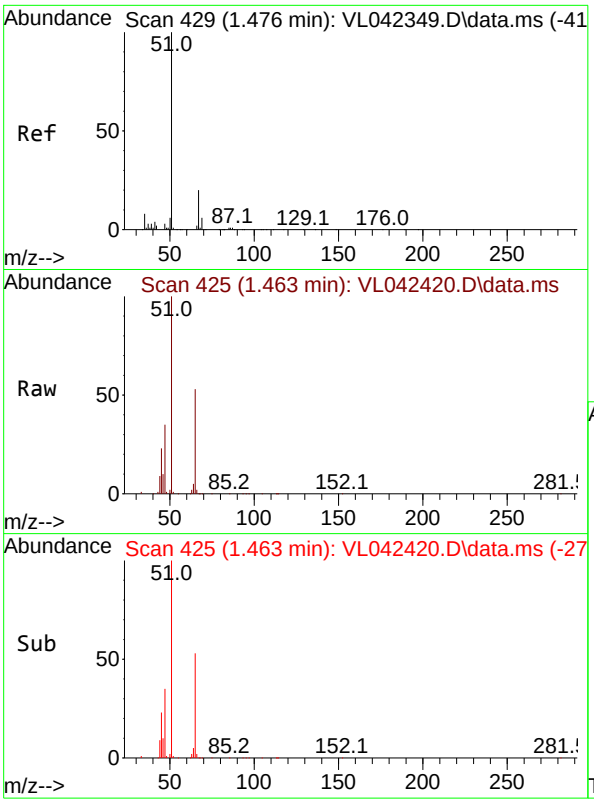


#2
Dichlorodifluoromethane
Concen: 0.429 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 85 Resp: 10705

Ion	Ratio	Lower	Upper
85	100		
87	33.4	26.6	39.8



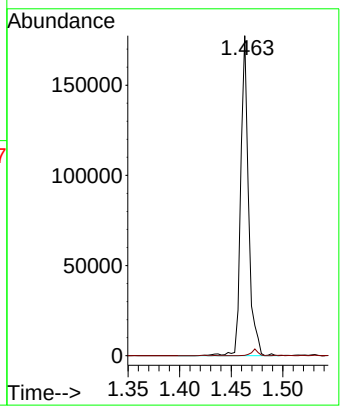


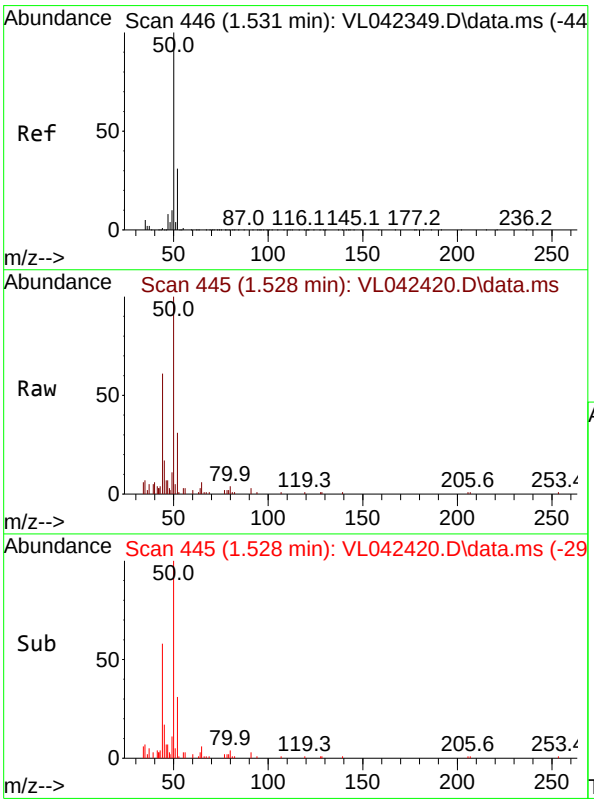
#3
Chlorodifluoromethane
Concen: 3.919 ppbv
RT: 1.463 min Scan# 4
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 51 Resp: 93097

Ion	Ratio	Lower	Upper
51	100		
67	1.9	16.2	24.4#

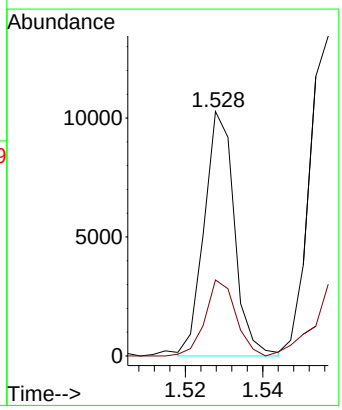


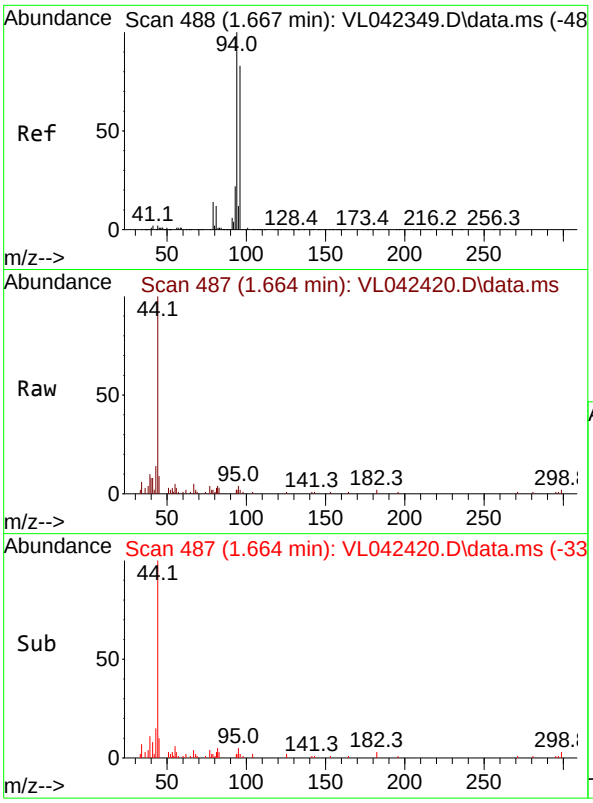


#4
Chloromethane
Concen: 0.564 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 50 Resp: 5568

Ion	Ratio	Lower	Upper
50	100		
52	30.2	24.7	37.1



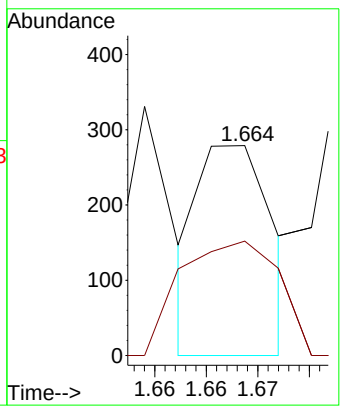


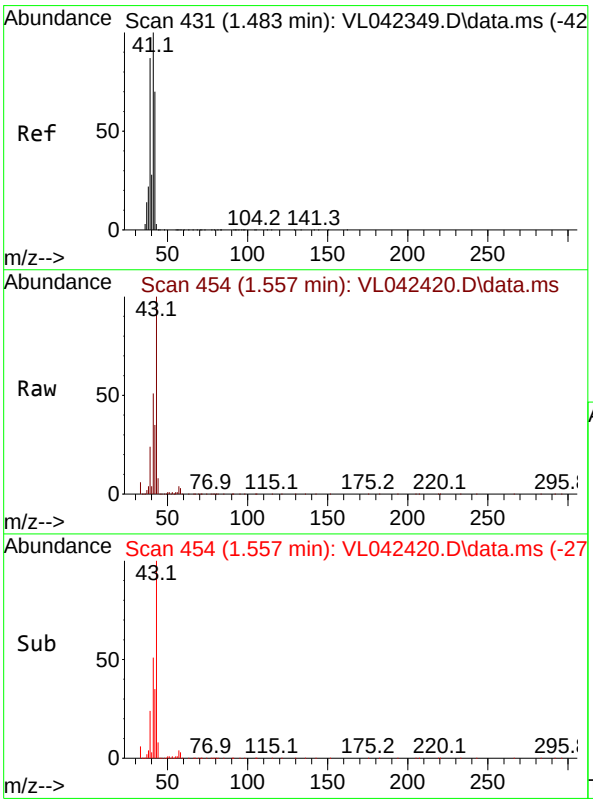
#6
Bromomethane
Concen: 0.030 ppbv
RT: 1.664 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 94 Resp: 139

Ion	Ratio	Lower	Upper
94	100		
96	28.0	66.2	99.2#

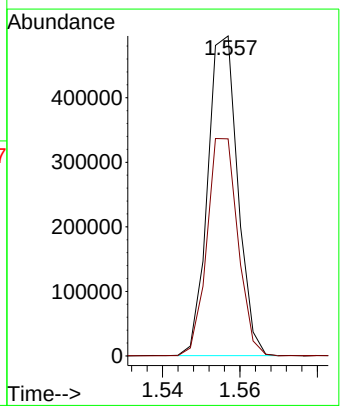


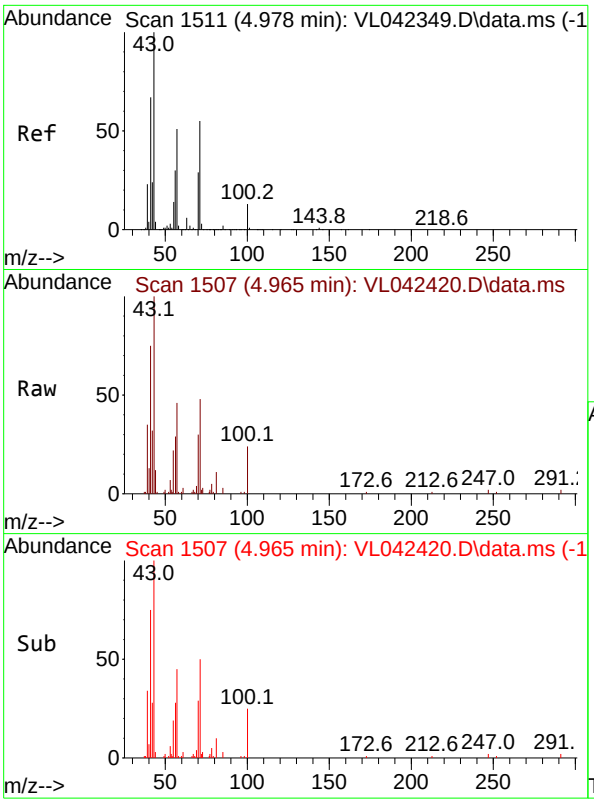


#9
Propene
Concen: 24.687 ppbv
RT: 1.557 min Scan# 454
Delta R.T. 0.074 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 41 Resp: 267054

Ion	Ratio	Lower	Upper
41	100		
42	70.1	56.2	84.4



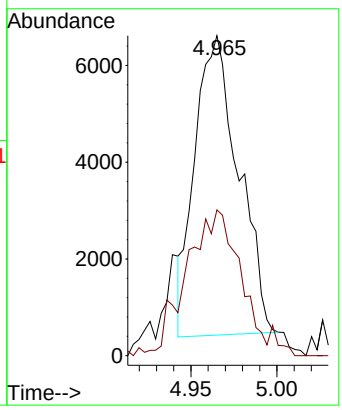


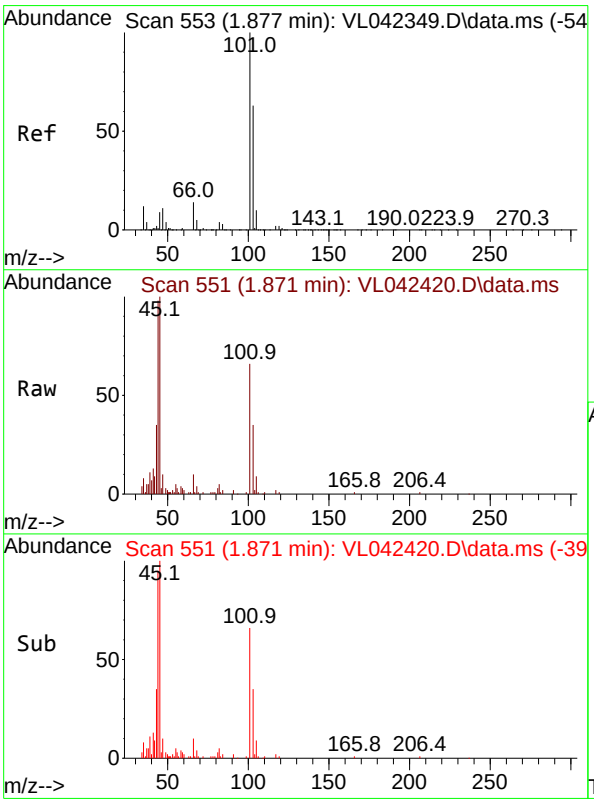
#10
Heptane
Concen: 0.360 ppbv
RT: 4.965 min Scan# 1
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 43 Resp: 10944

Ion	Ratio	Lower	Upper
43	100		
57	63.6	39.9	59.9#

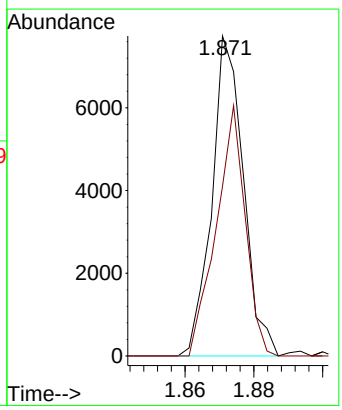


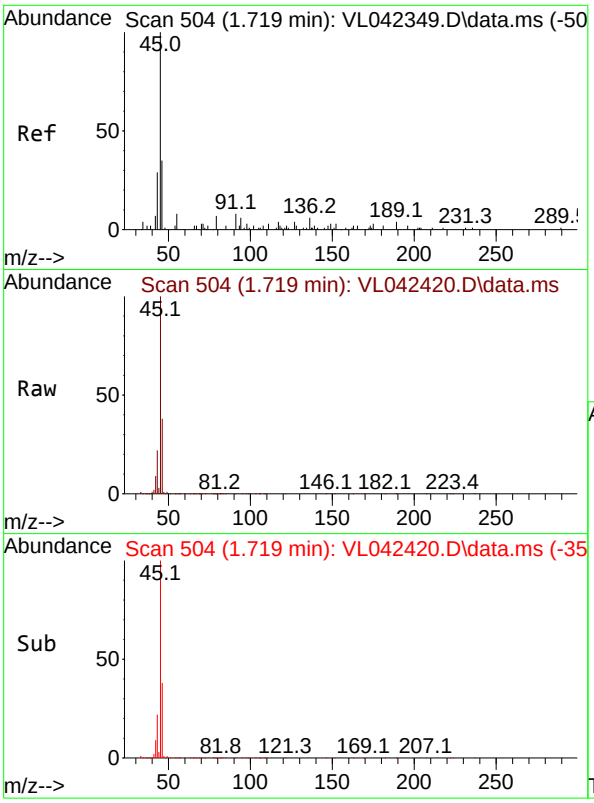


#11
Trichlorofluoromethane
Concen: 0.208 ppbv
RT: 1.871 min Scan# 551
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:101 Resp: 4925

Ion	Ratio	Lower	Upper
101	100		
103	53.0	50.1	75.1



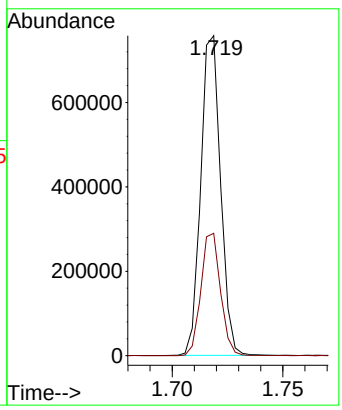


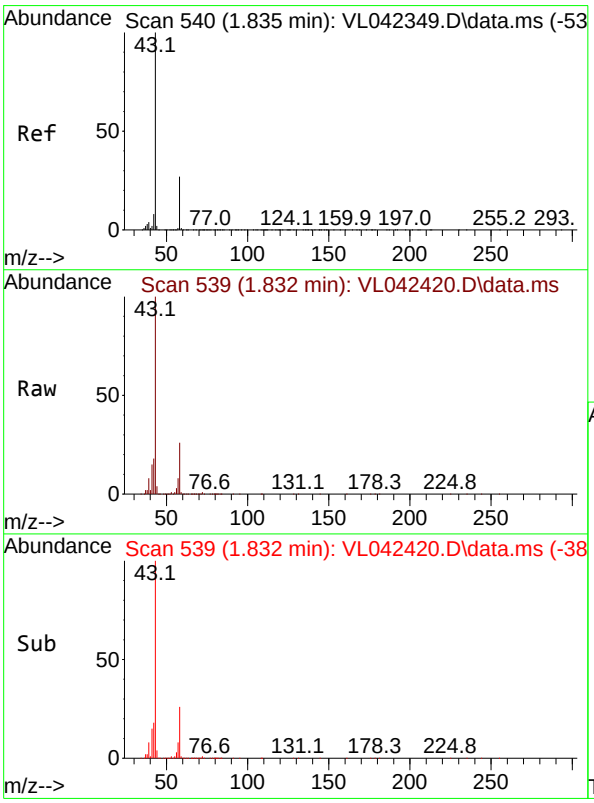
#13
Ethanol
Concen: 274.580 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 45 Resp: 472110

Ion	Ratio	Lower	Upper
45	100		
46	38.1	21.9	87.7

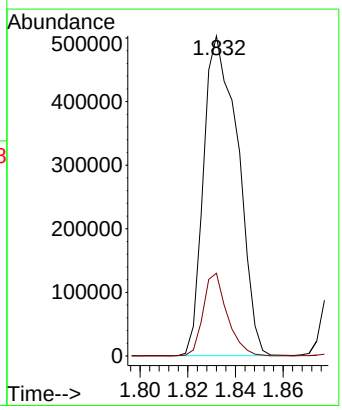


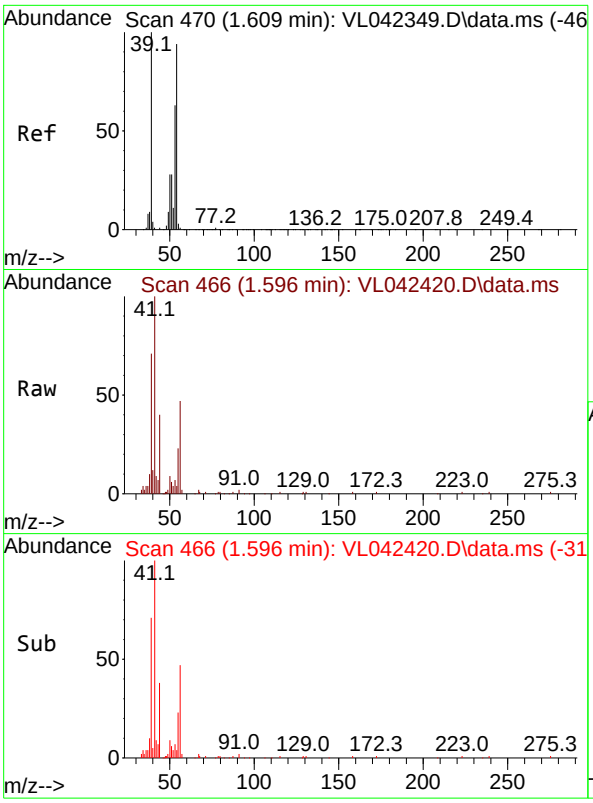


#15
Acetone
Concen: 21.727 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 502160

Ion	Ratio	Lower	Upper
43	100		
58	18.3	22.4	33.6#



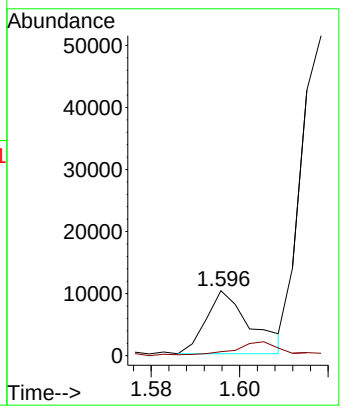


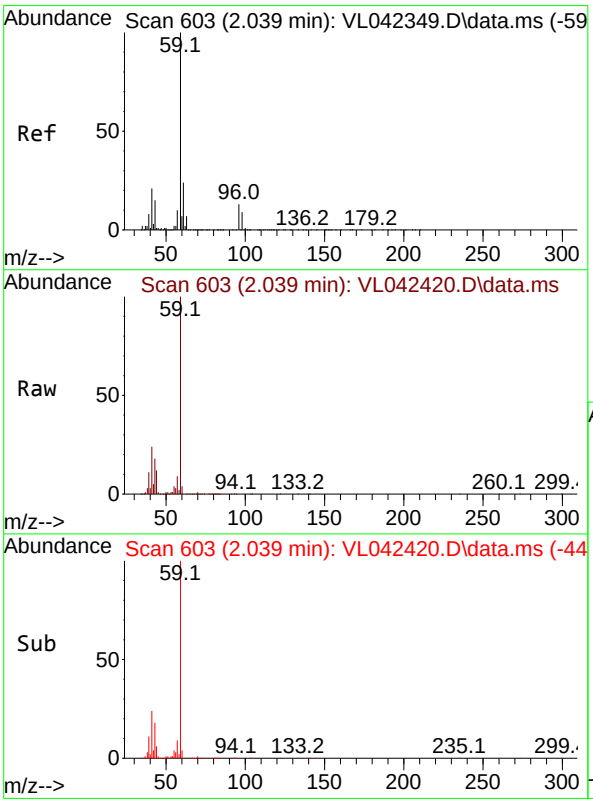
#16
1,3-Butadiene
Concen: 0.641 ppbv
RT: 1.596 min Scan# 4
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 39 Resp: 7088

Ion	Ratio	Lower	Upper
39	100		
54	30.3	64.9	97.3#

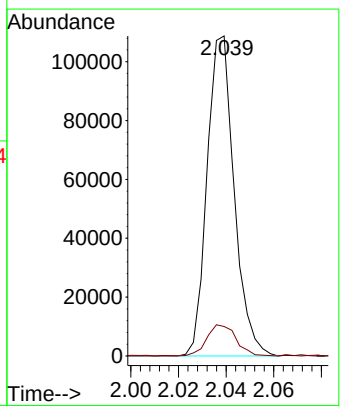


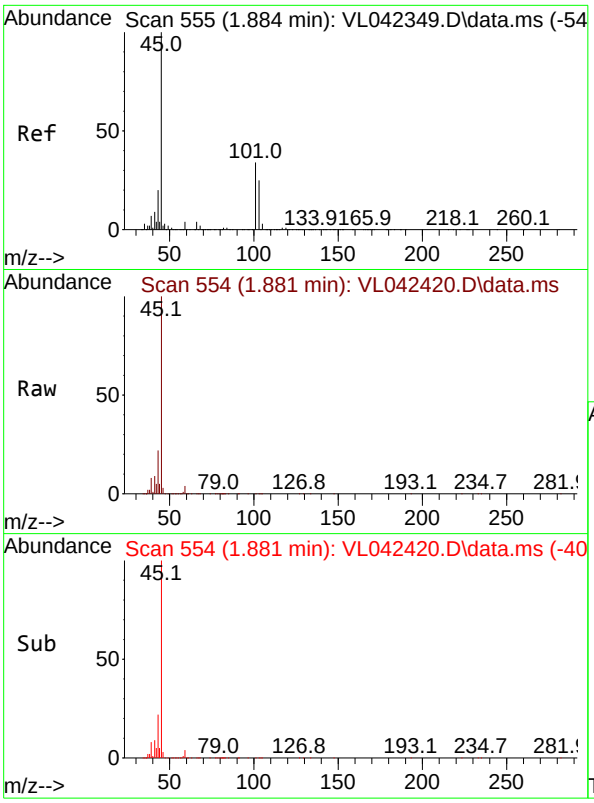


#17
tert-Butyl alcohol
Concen: 2.999 ppbv
RT: 2.039 min Scan# 603
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 59 Resp: 85888

Ion	Ratio	Lower	Upper
59	100		
57	10.9	8.7	13.1



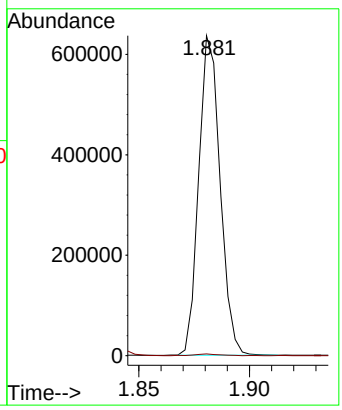


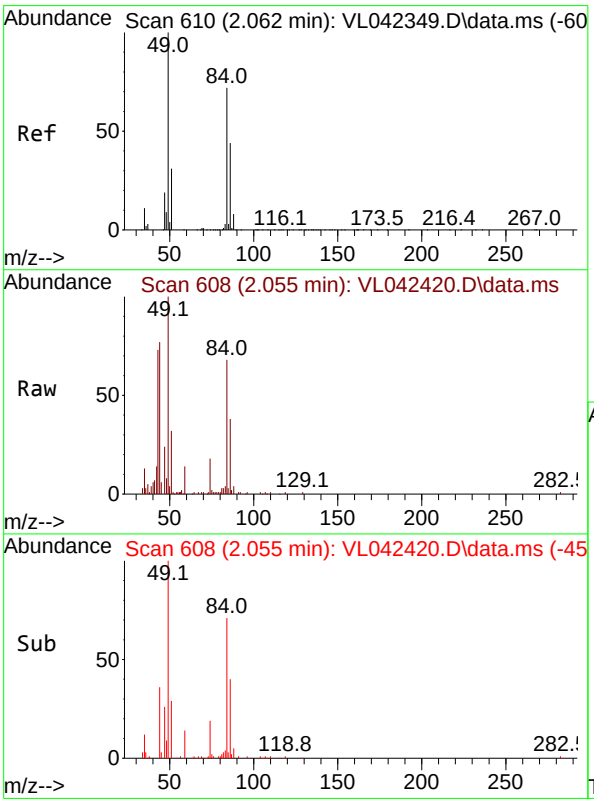
#19
Isopropyl Alcohol
Concen: 33.369 ppbv
RT: 1.881 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 45 Resp: 428440

Ion	Ratio	Lower	Upper
45	100		
58	21.4	34.5	51.7#

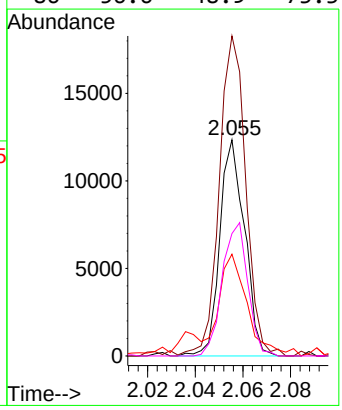


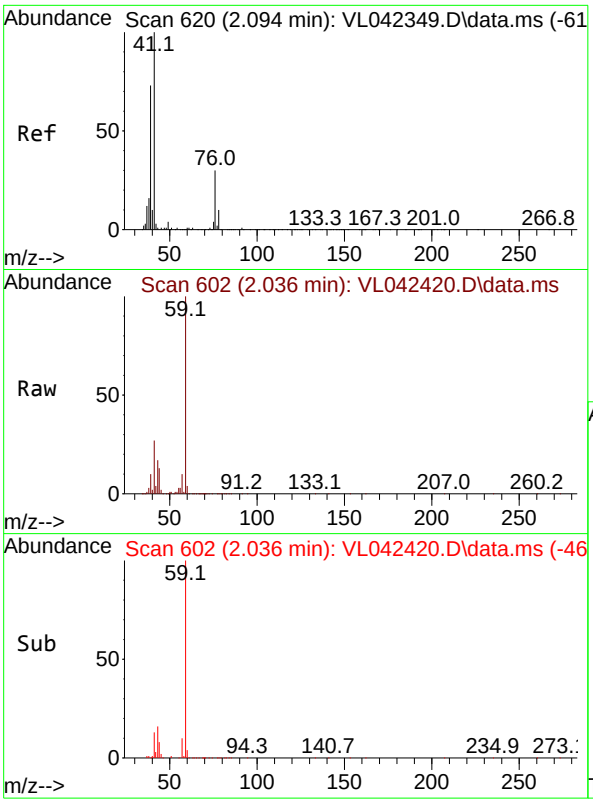


#20
Methylene Chloride
Concen: 0.985 ppbv
RT: 2.055 min Scan# 608
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 84 Resp: 8914

Ion	Ratio	Lower	Upper
84	100		
49	147.6	111.6	167.4
51	44.3	35.1	52.7
86	56.6	48.9	73.3



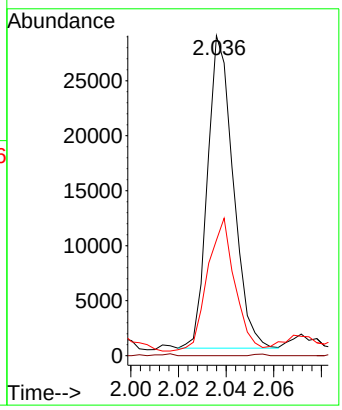


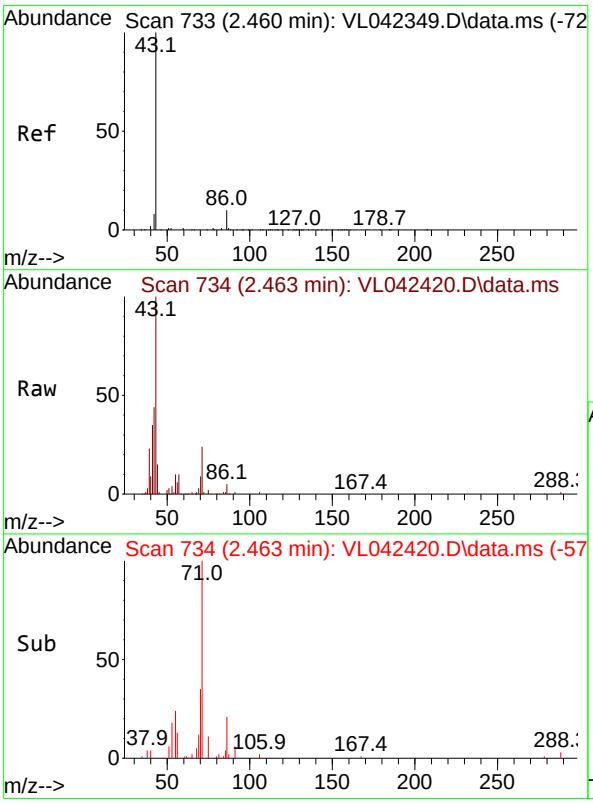
#21
Allyl Chloride
Concen: 1.333 ppbv
RT: 2.036 min Scan# 6
Delta R.T. -0.058 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 41 Resp: 21270

Ion	Ratio	Lower	Upper
41	100		
76	5.8	24.8	37.2#
39	47.2	60.6	90.8#

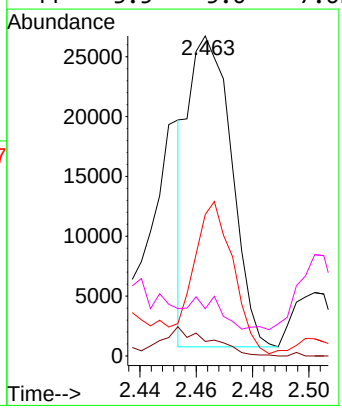


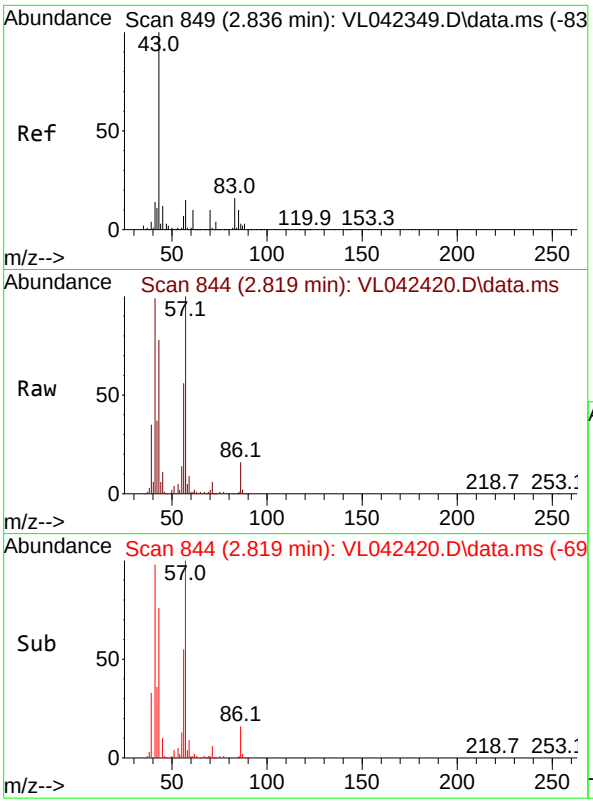


#23
Vinyl Acetate
Concen: 2.979 ppbv
RT: 2.463 min Scan# 734
Delta R.T. 0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 43 Resp: 27871

Ion	Ratio	Lower	Upper
43	100		
86	4.7	6.5	9.7#
42	43.7	7.8	11.8#
44	3.5	5.0	7.6#



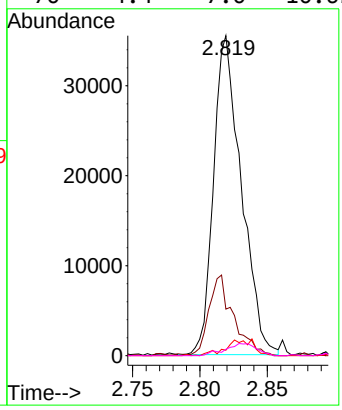


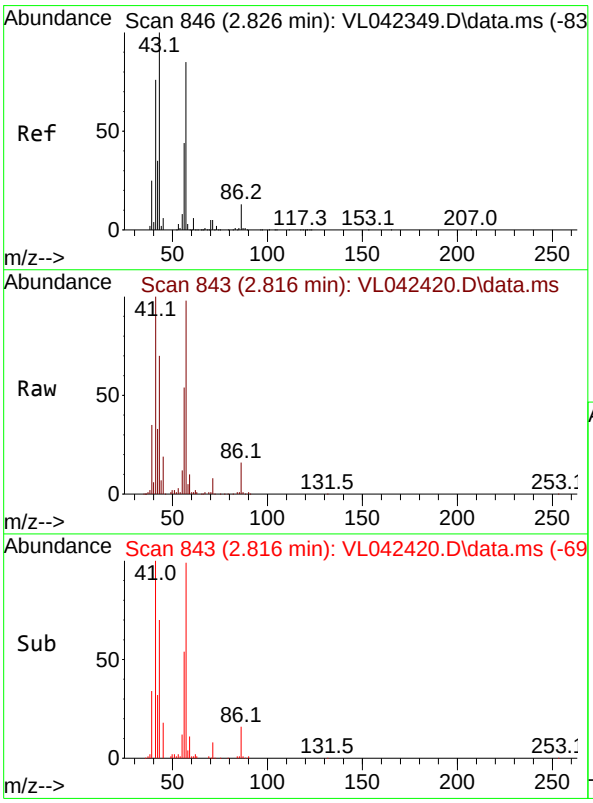
#25
Ethyl Acetate
Concen: 0.891 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.016 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 43 Resp: 50759

Ion	Ratio	Lower	Upper
43	100		
45	22.9	8.3	12.5#
61	5.2	7.3	10.9#
70	4.4	7.0	10.6#

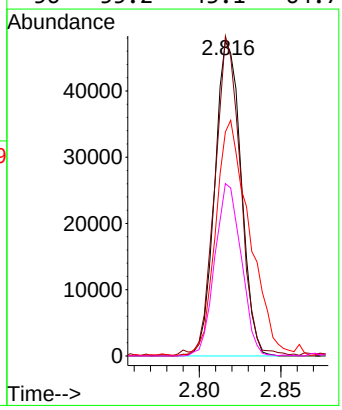


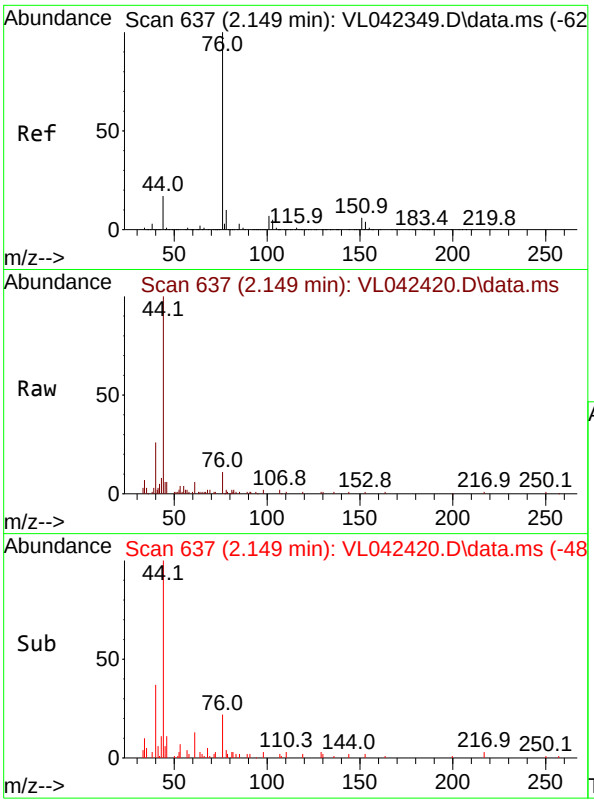


#26
Hexane
Concen: 2.306 ppbv
RT: 2.816 min Scan# 843
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 57 Resp: 53184

Ion	Ratio	Lower	Upper
57	100		
41	100.2	77.9	116.9
43	97.0	208.4	312.6#
56	55.2	43.1	64.7



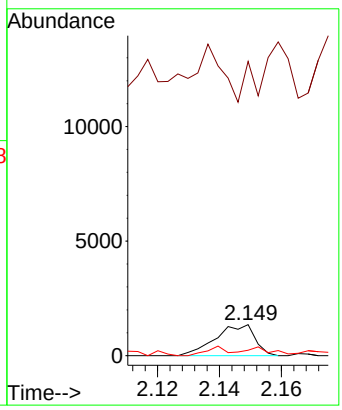


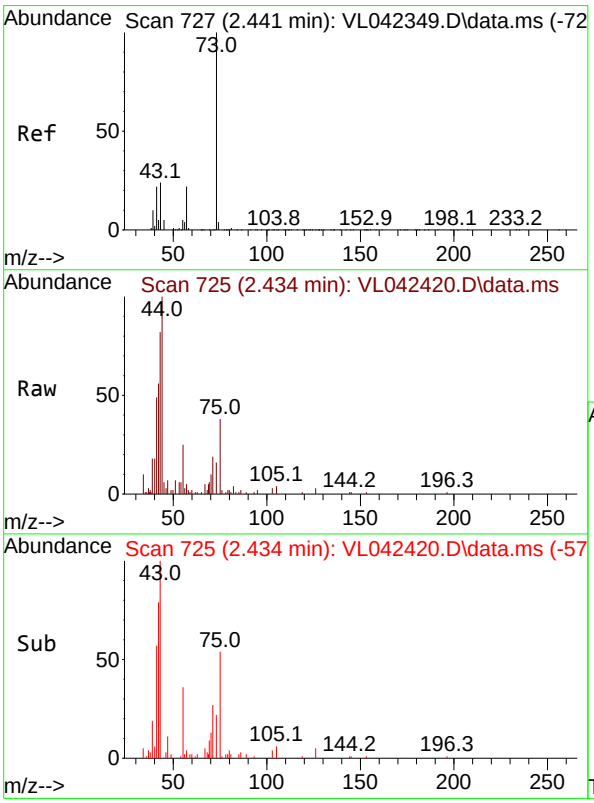
#27
Carbon Disulfide
Concen: 0.048 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 76 Resp: 1195

Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.5	23.3#
78	45.8	9.3	13.9#

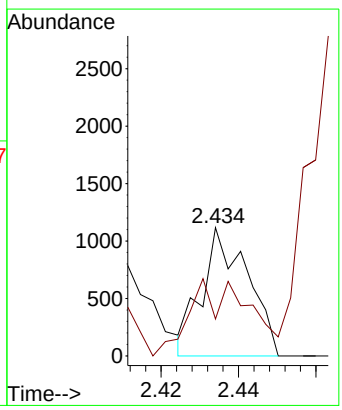


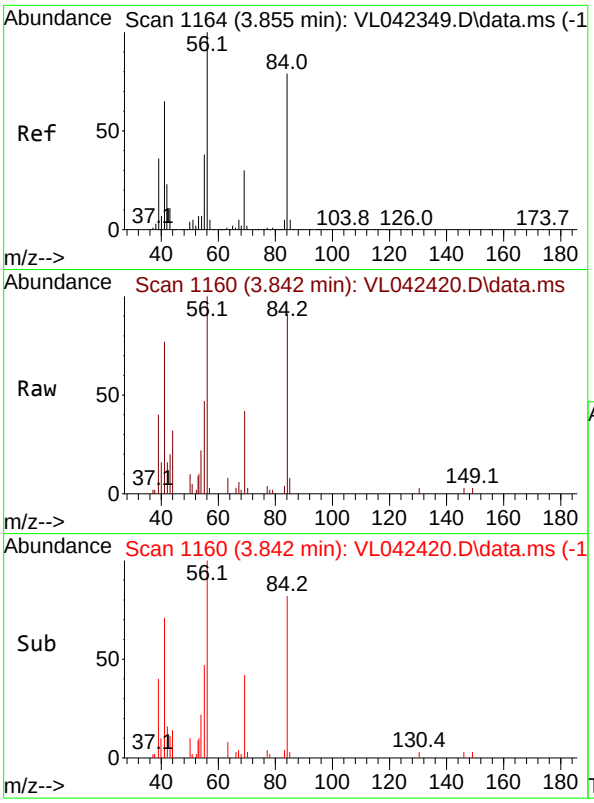


#28
Methyl tert-Butyl Ether
Concen: 0.061 ppbv
RT: 2.434 min Scan# 725
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 73 Resp: 916

Ion	Ratio	Lower	Upper
73	100		
57	420.7	21.3	31.9#



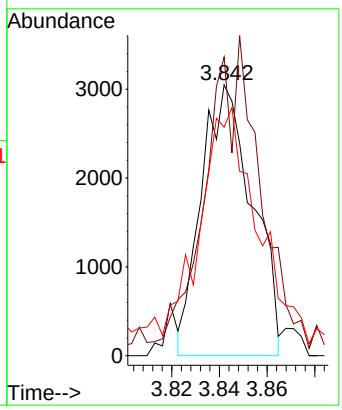


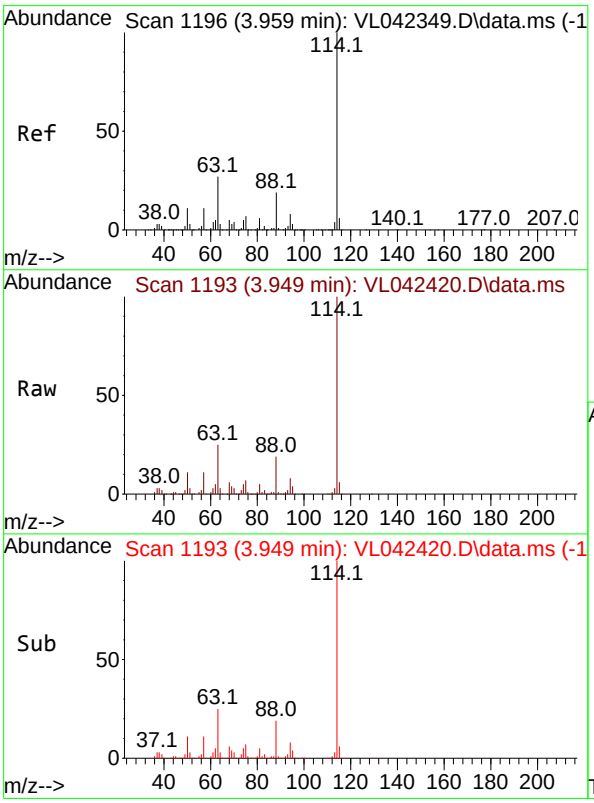
#30
Cyclohexane
Concen: 0.244 ppbv
RT: 3.842 min Scan# 11
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 84 Resp: 4557

Ion	Ratio	Lower	Upper
84	100		
56	131.8	101.0	151.4
41	104.1	67.4	101.0#

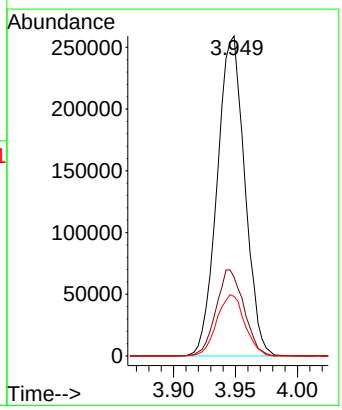


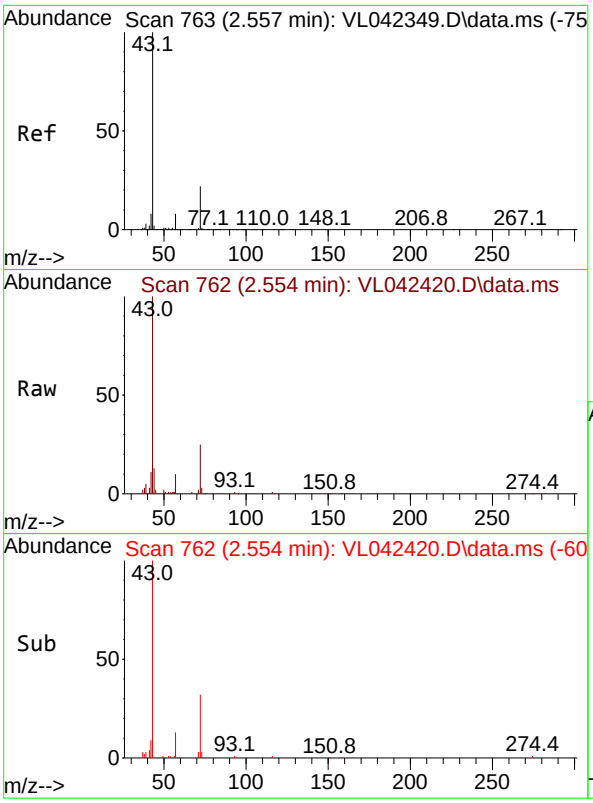


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:114 Resp: 402115

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.4	15.5	23.3



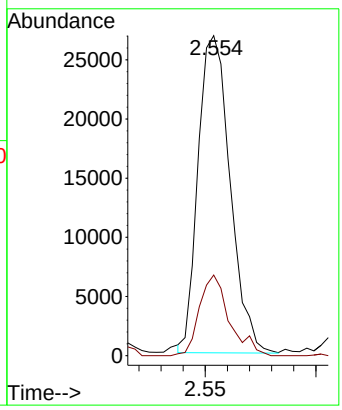


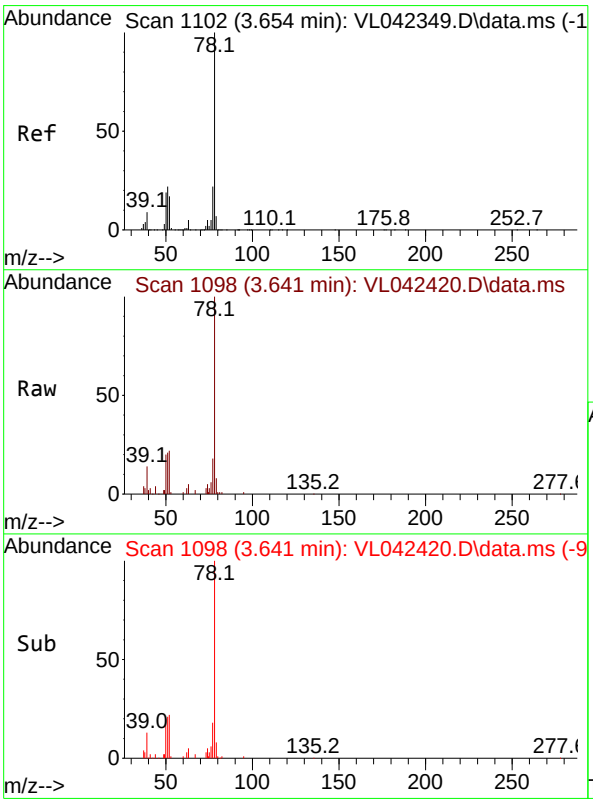
#34
2-Butanone
Concen: 0.848 ppbv
RT: 2.554 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 43 Resp: 26974

Ion	Ratio	Lower	Upper
43	100		
72	23.7	18.2	27.2

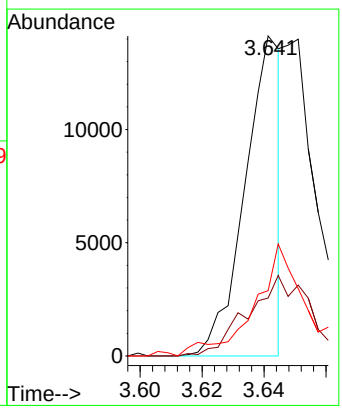


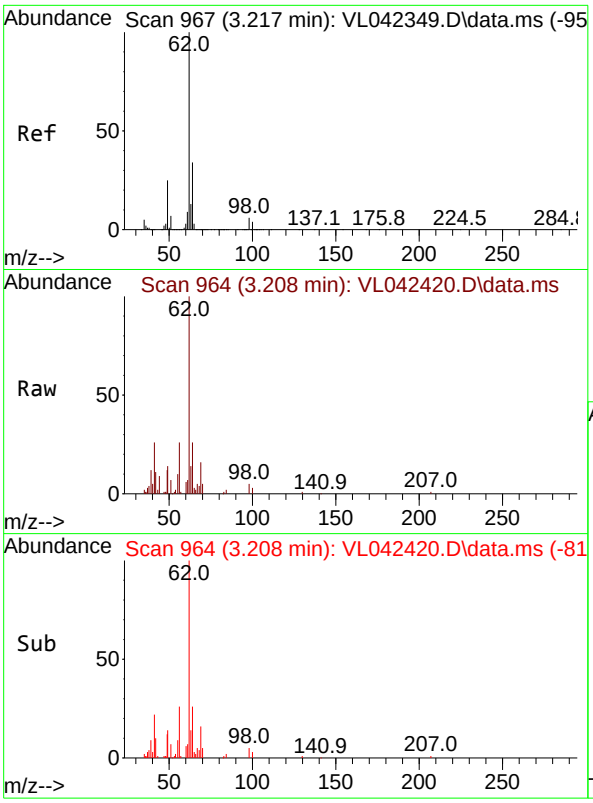


#36
Benzene
Concen: 0.262 ppbv
RT: 3.641 min Scan# 1098
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 78 Resp: 11344

Ion	Ratio	Lower	Upper
78	100		
77	18.1	17.4	26.0
50	20.4	15.5	23.3



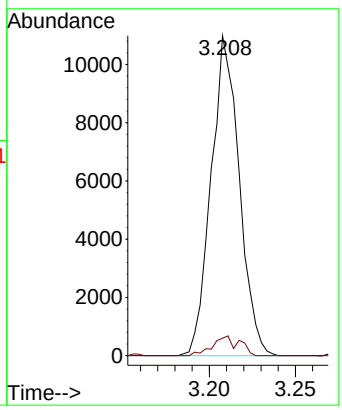


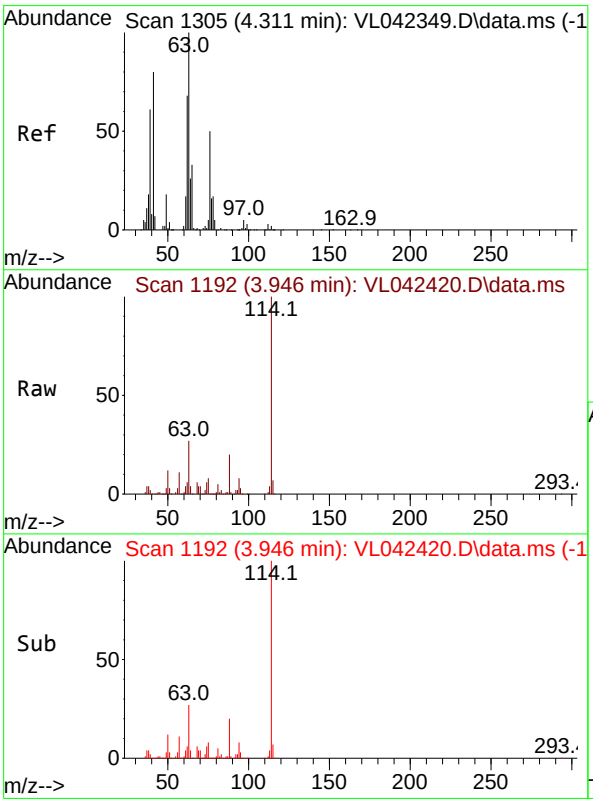
#37
1,2-Dichloroethane
Concen: 0.480 ppbv
RT: 3.208 min Scan# 9
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 62 Resp: 12506

Ion	Ratio	Lower	Upper
62	100		
98	5.9	5.1	7.7

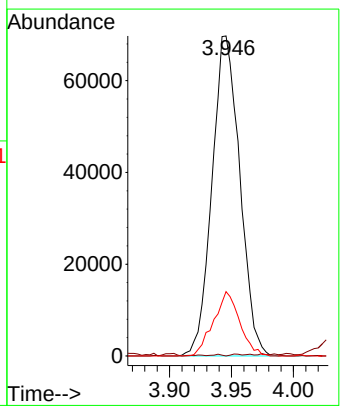


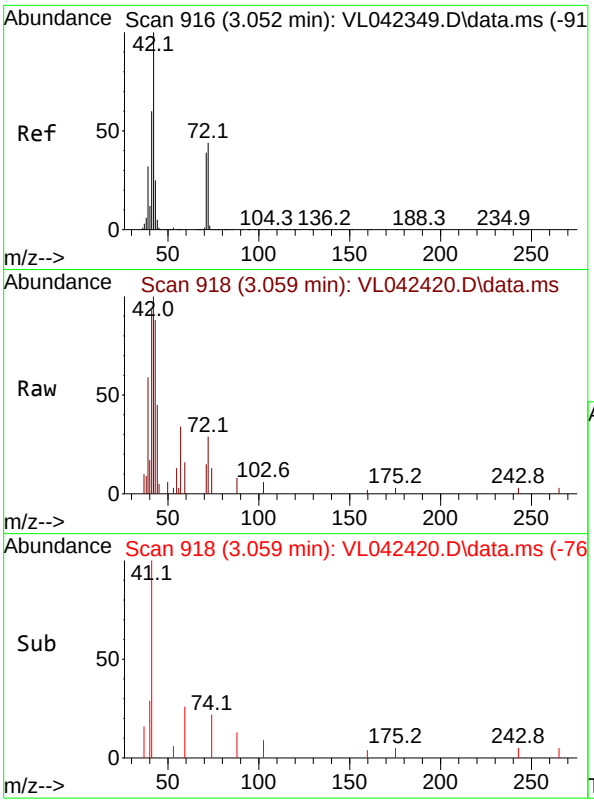


#39
1,2-Dichloropropane
Concen: 6.746 ppbv
RT: 3.946 min Scan# 1192
Delta R.T. -0.366 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 63 Resp: 109025

Ion	Ratio	Lower	Upper
63	100		
41	0.0	64.2	96.2#
62	20.1	54.3	81.5#



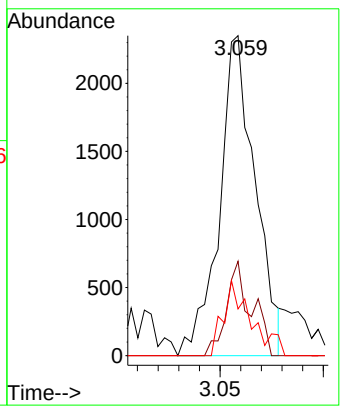


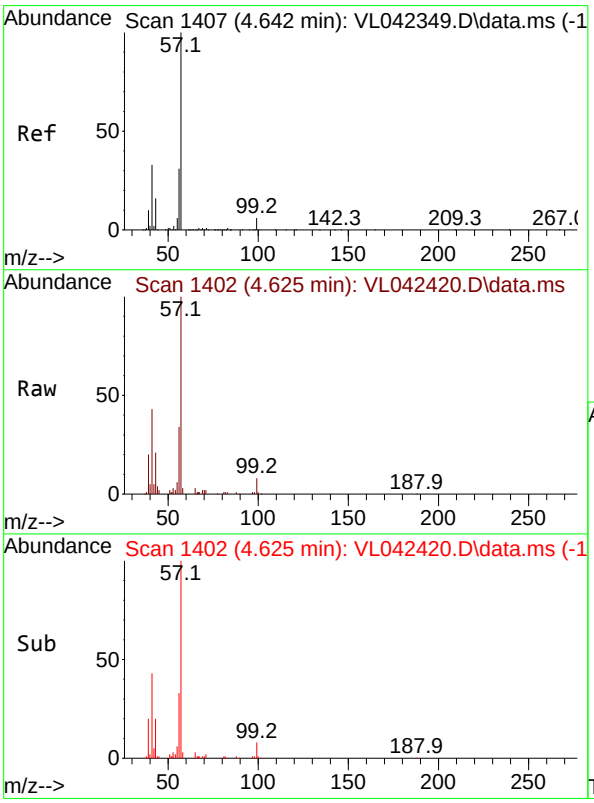
#41
Tetrahydrofuran
Concen: 0.153 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.006 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 42 Resp: 2829

Ion	Ratio	Lower	Upper
42	100		
72	20.6	32.3	48.5#
71	18.3	31.4	47.2#

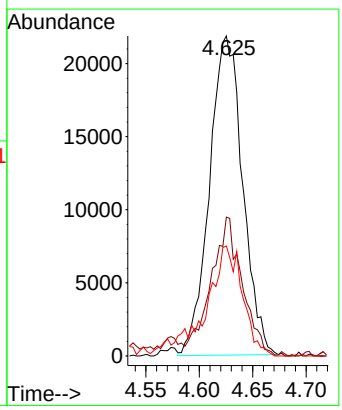


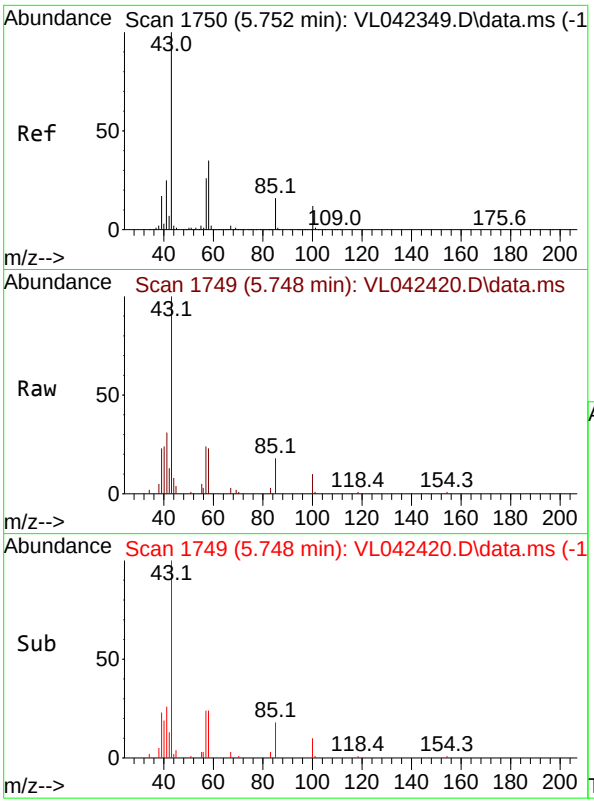


#44
2,2,4-Trimethylpentane
Concen: 0.631 ppbv
RT: 4.625 min Scan# 1402
Delta R.T. -0.016 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 57 Resp: 47245

Ion	Ratio	Lower	Upper
57	100		
41	44.6	27.2	40.8#
56	38.4	25.7	38.5



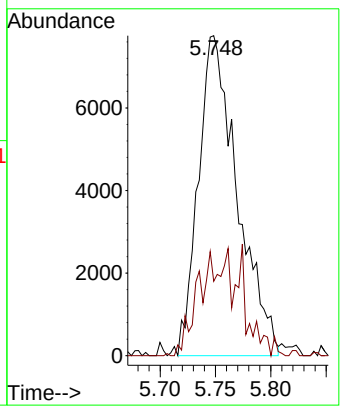


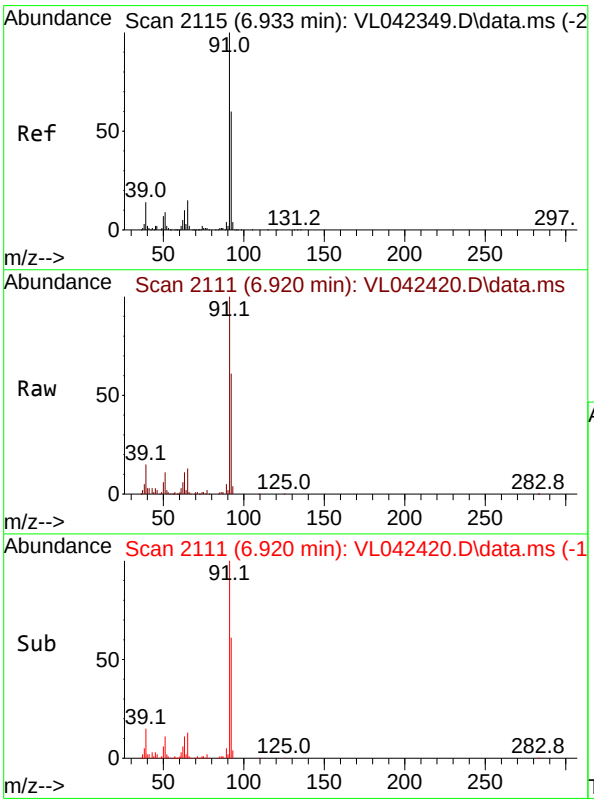
#50
4-Methyl-2-Pentanone
Concen: 0.359 ppbv
RT: 5.748 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 43 Resp: 18997

Ion	Ratio	Lower	Upper
43	100		
58	35.5	28.6	43.0

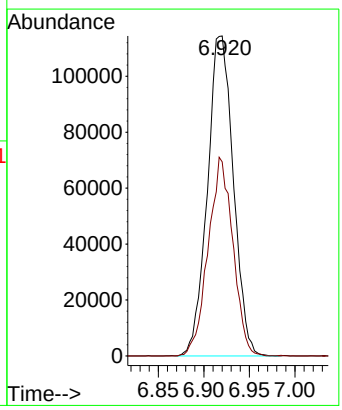


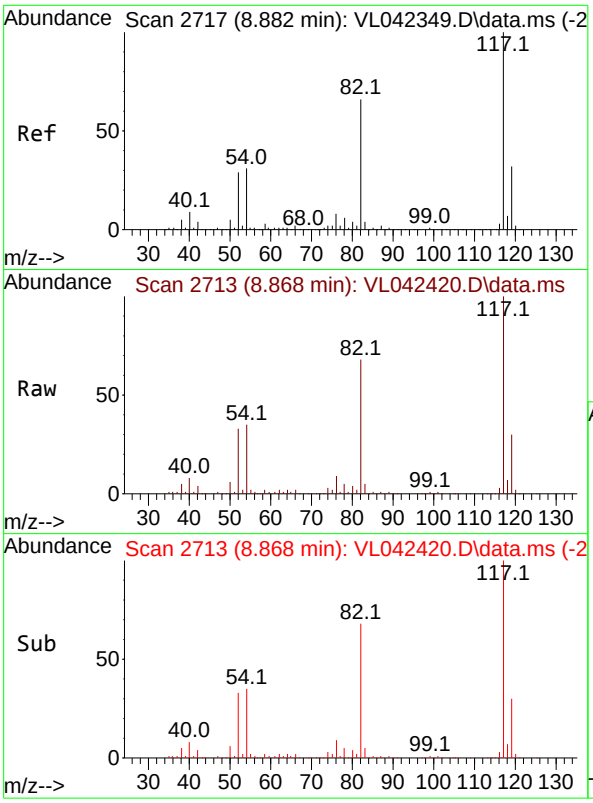


#53
Toluene
Concen: 4.360 ppbv
RT: 6.920 min Scan# 2111
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 226903

Ion	Ratio	Lower	Upper
91	100		
92	59.2	48.2	72.4



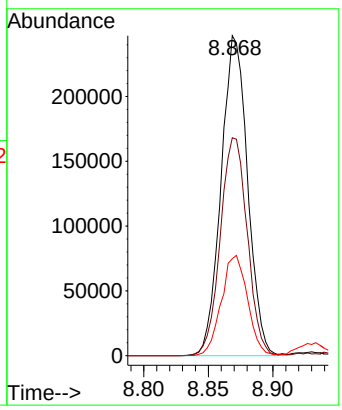


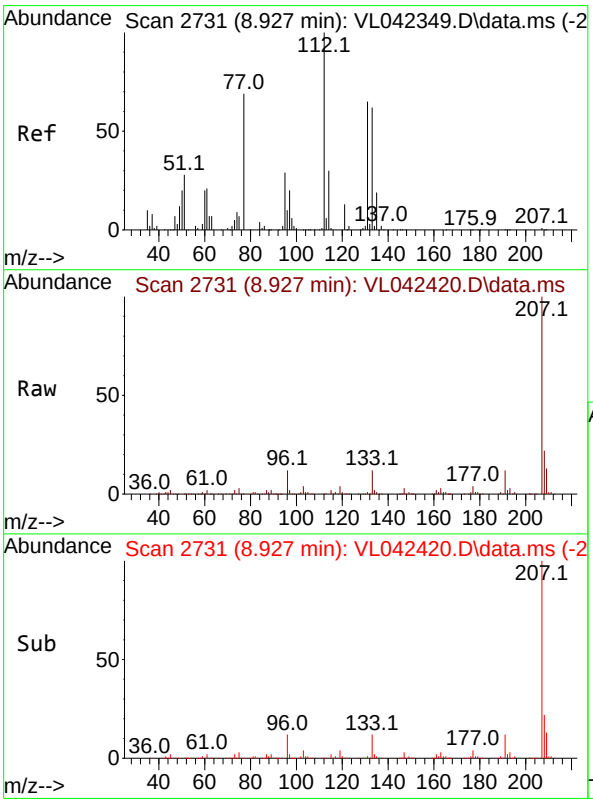
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.868 min Scan# 2
Delta R.T. -0.013 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion:117 Resp: 352885

Ion	Ratio	Lower	Upper
117	100		
82	69.3	57.8	86.6
119	31.0	25.2	37.8

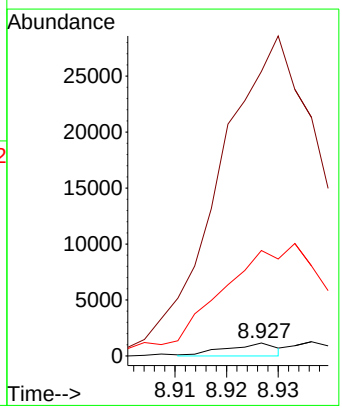


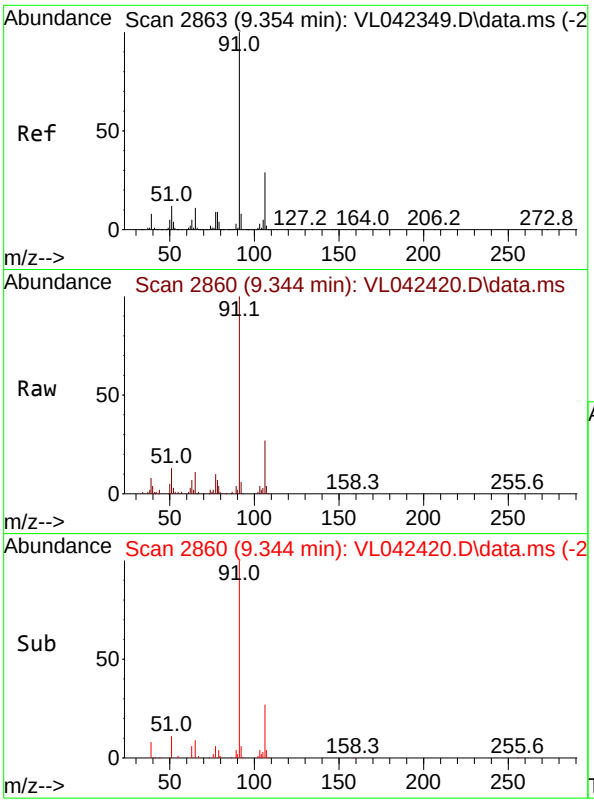


#56
1,1,1,2-Tetrachloroethane
Concen: 0.037 ppbv
RT: 8.927 min Scan# 2731
Delta R.T. -0.000 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:131 Resp: 786

Ion	Ratio	Lower	Upper
131	100		
133	0.0	78.3	117.5#
119	0.0	48.7	73.1#



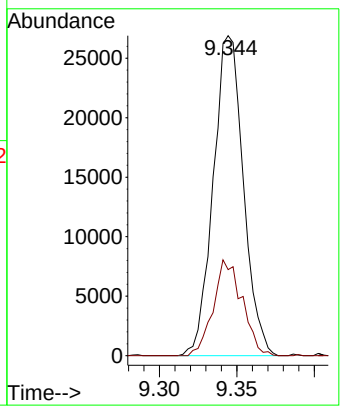


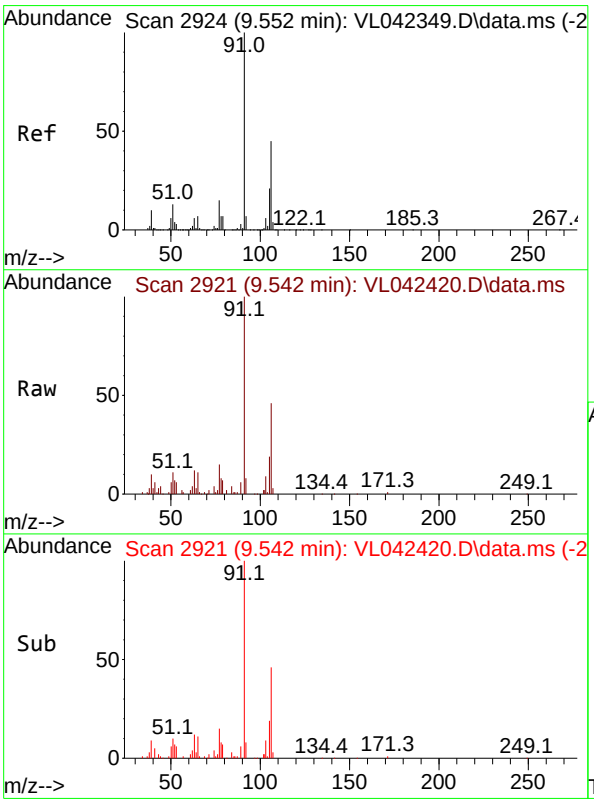
#58
Ethyl Benzene
Concen: 0.521 ppbv
RT: 9.344 min Scan# 2
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 91 Resp: 36433

Ion	Ratio	Lower	Upper
91	100		
106	26.9	23.0	34.4

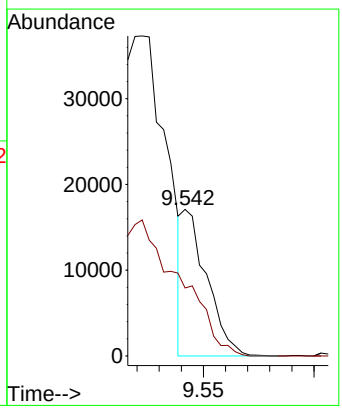


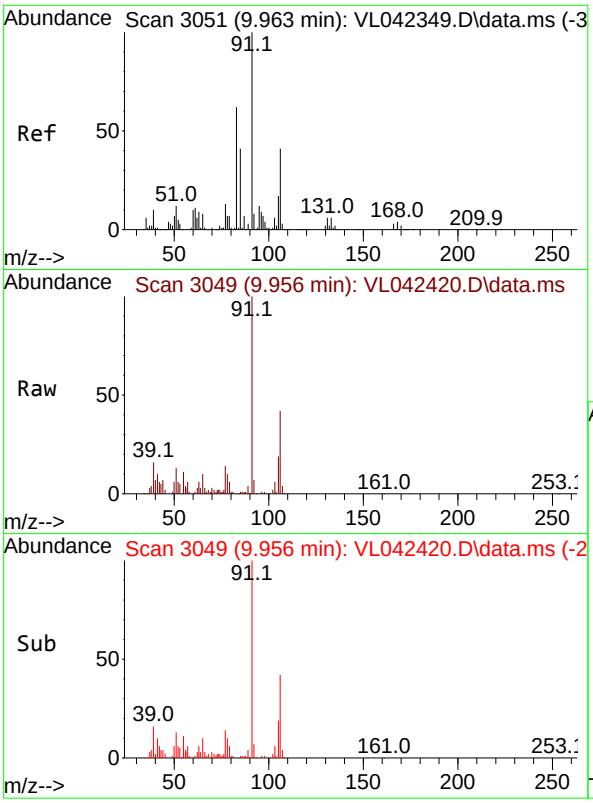


#59
m/p-Xylene
Concen: 0.234 ppbv
RT: 9.542 min Scan# 2921
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion: 91 Resp: 13197

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#



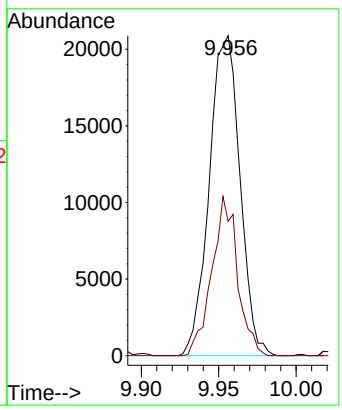


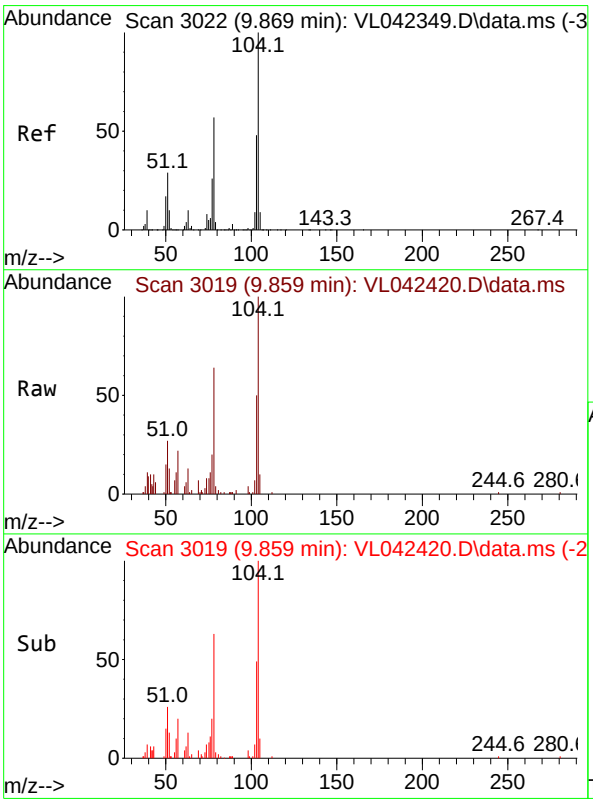
#60
o-Xylene
Concen: 0.508 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 91 Resp: 28805

Ion	Ratio	Lower	Upper
91	100		
106	41.5	21.1	63.4

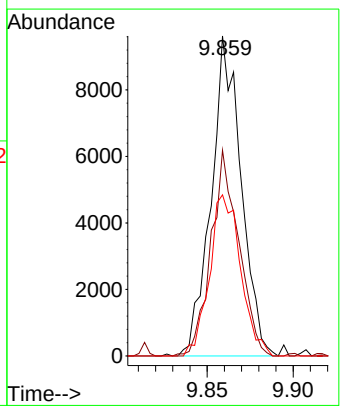


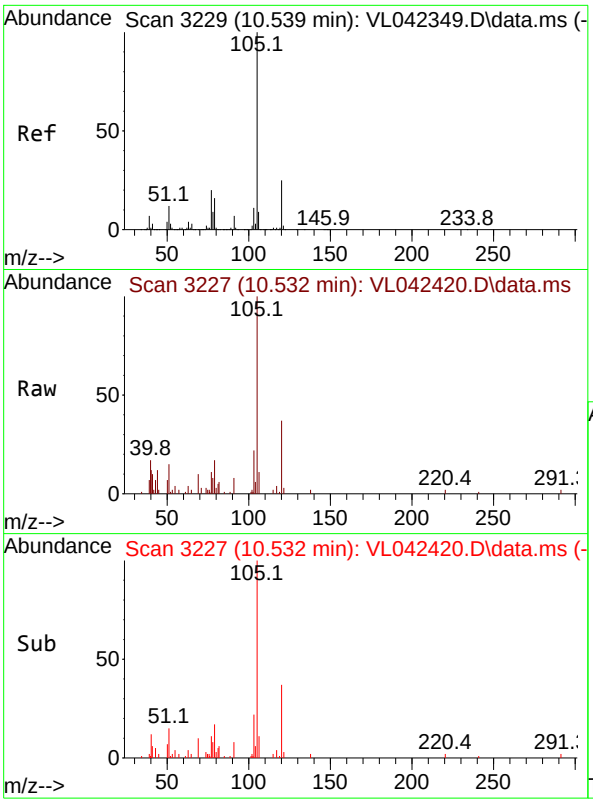


#61
Styrene
Concen: 0.430 ppbv
RT: 9.859 min Scan# 3019
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:104 Resp: 11652

Ion	Ratio	Lower	Upper
104	100		
78	59.6	44.6	66.8
103	52.4	37.4	56.0



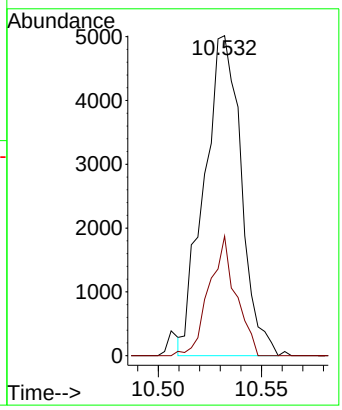


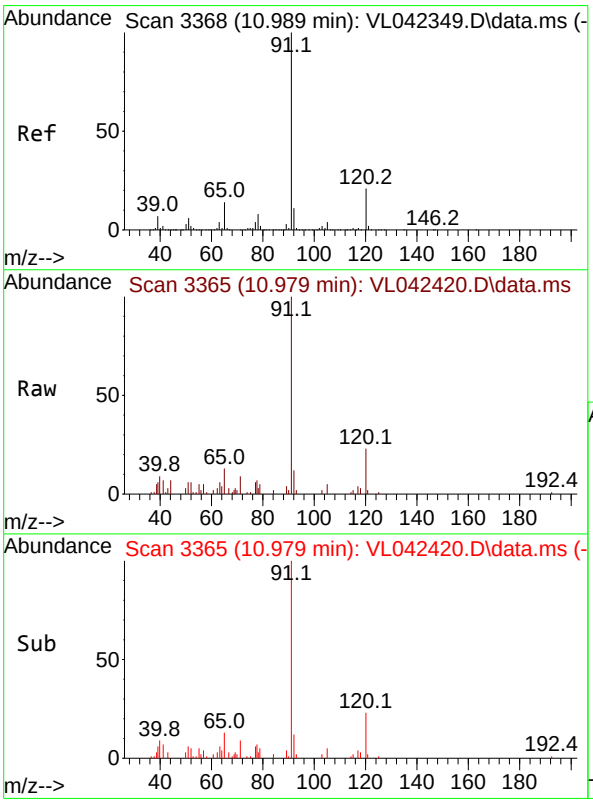
#62
Isopropylbenzene
Concen: 0.075 ppbv
RT: 10.532 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion:105 Resp: 6243

Ion	Ratio	Lower	Upper
105	100		
120	27.1	19.8	29.8

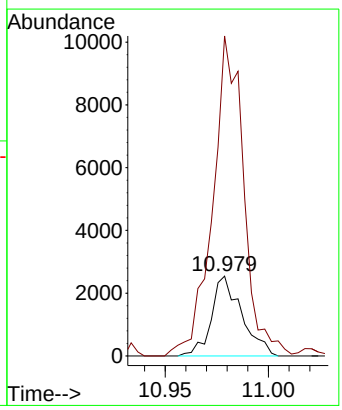


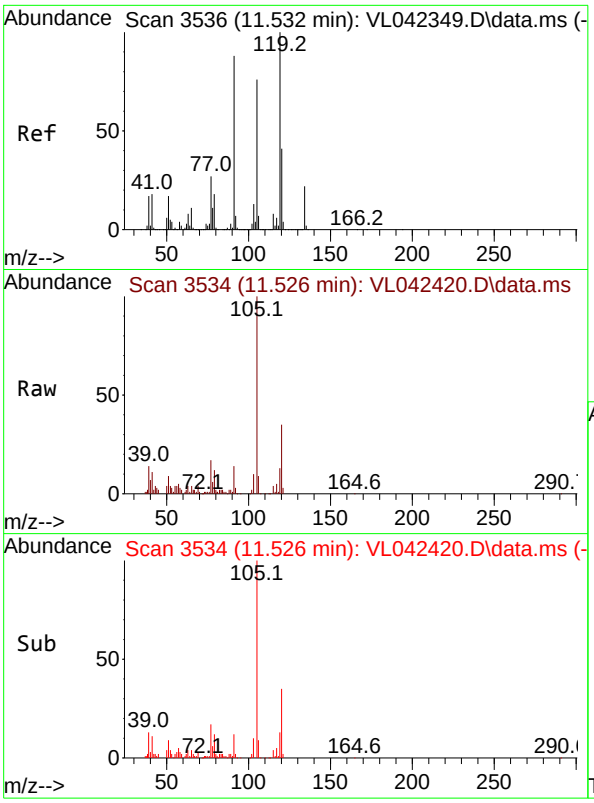


#64
n-propylbenzene
Concen: 0.124 ppbv
RT: 10.979 min Scan# 3365
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:120 Resp: 2601

Ion	Ratio	Lower	Upper
120	100		
91	415.6	392.4	588.6



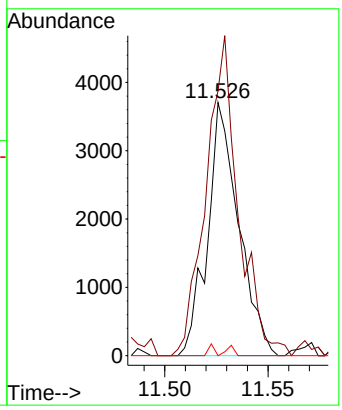


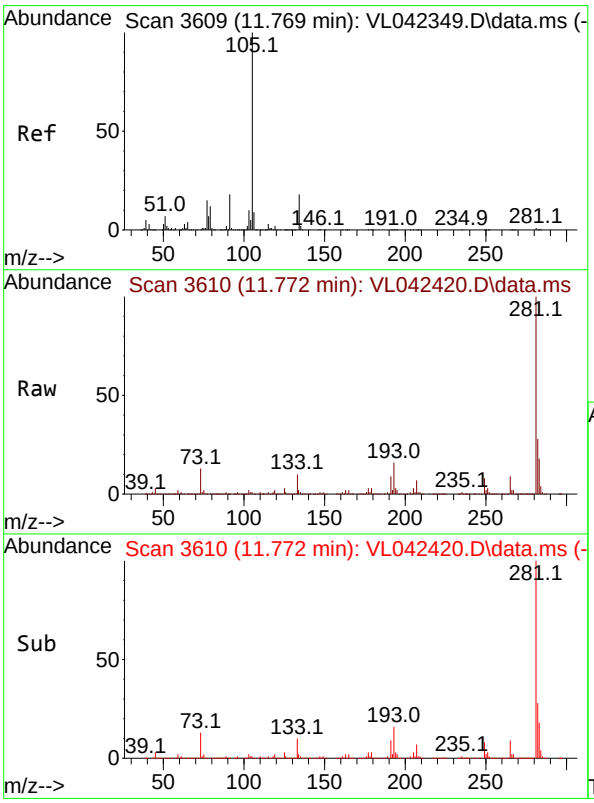
#65
tert-Butylbenzene
Concen: 0.051 ppbv
RT: 11.526 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion:119 Resp: 3906

Ion	Ratio	Lower	Upper
119	100		
91	134.7	74.6	111.8#
134	0.0	18.8	28.2#

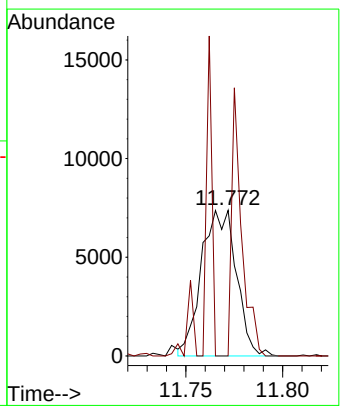


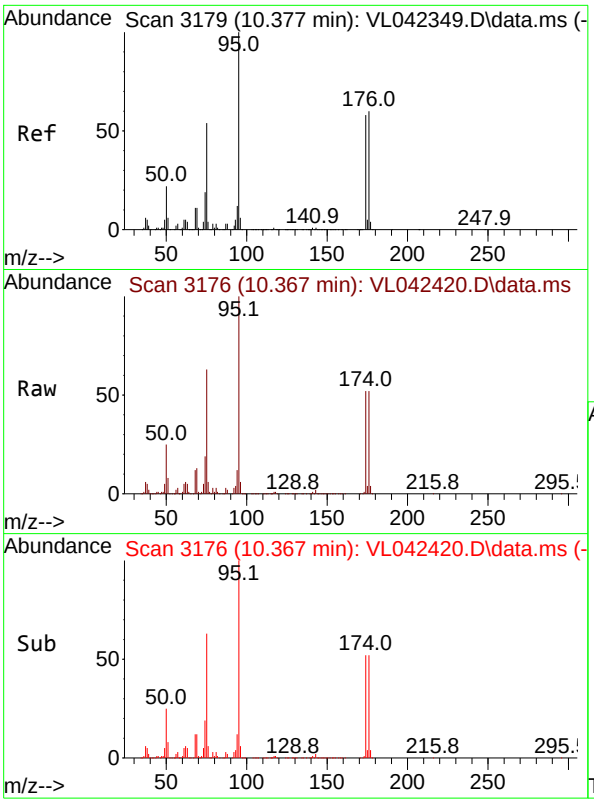


#67
sec-Butylbenzene
Concen: 0.087 ppbv
RT: 11.772 min Scan# 3610
Delta R.T. 0.003 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 9253

Ion	Ratio	Lower	Upper
105	100		
134	98.7	14.6	21.8#



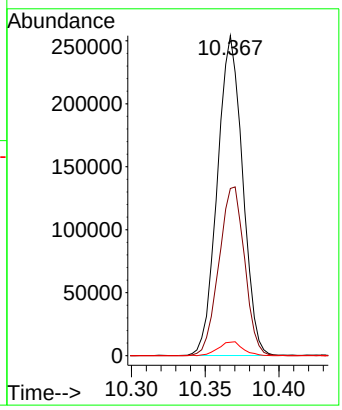


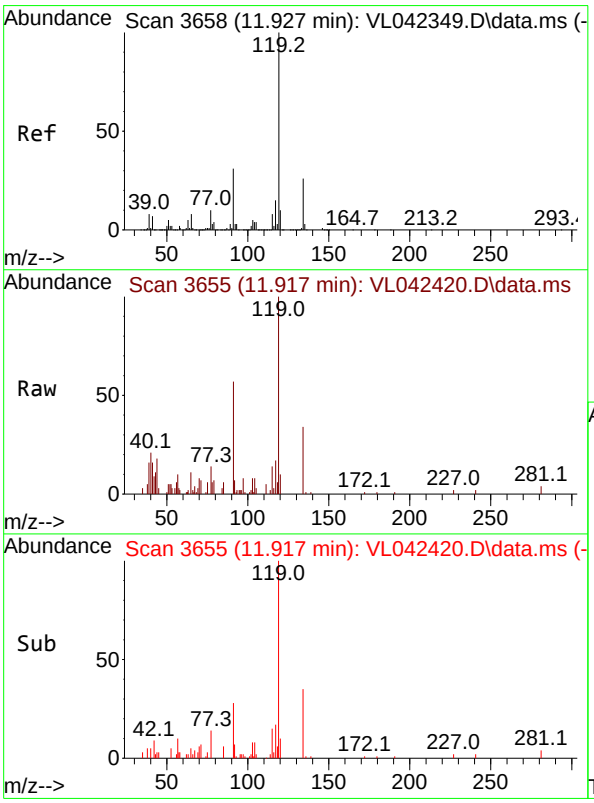
#68
1-Bromo-4-Fluorobenzene
Concen: 10.426 ppbv
RT: 10.367 min Scan# 3
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 95 Resp: 302328

Ion	Ratio	Lower	Upper
95	100		
174	53.7	48.5	72.7
175	4.2	3.7	5.5

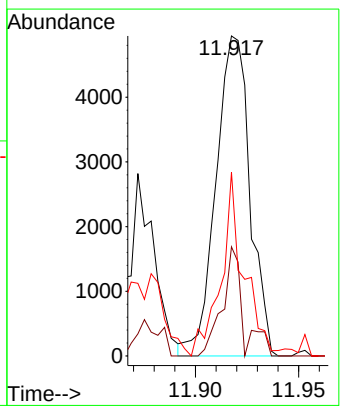


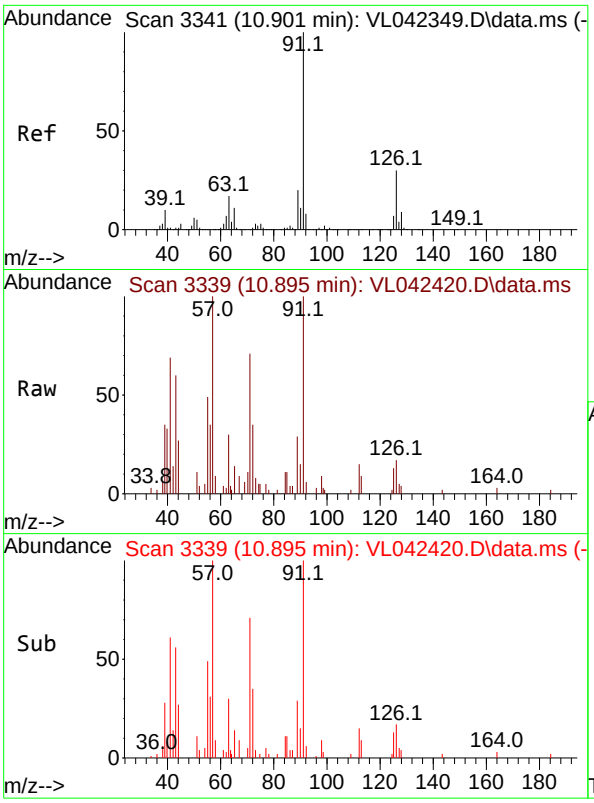


#69
p-Isopropyltoluene
Concen: 0.061 ppbv
RT: 11.917 min Scan# 3655
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:119 Resp: 5675

Ion	Ratio	Lower	Upper
119	100		
134	21.0	20.0	30.0
91	40.4	24.4	36.6#



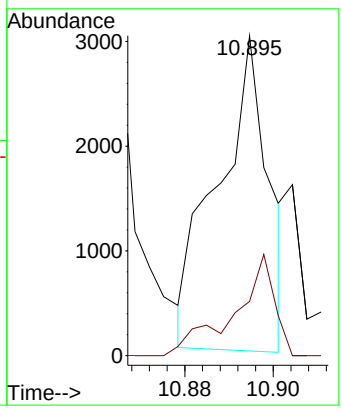


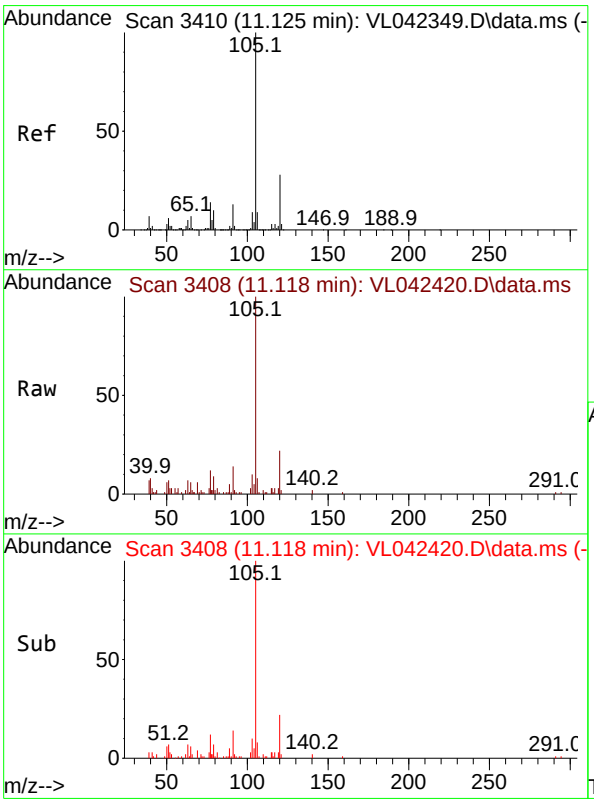
#71
2-Chlorotoluene
Concen: 0.037 ppbv
RT: 10.895 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion: 91 Resp: 2387

Ion	Ratio	Lower	Upper
91	100		
126	25.4	11.4	45.4

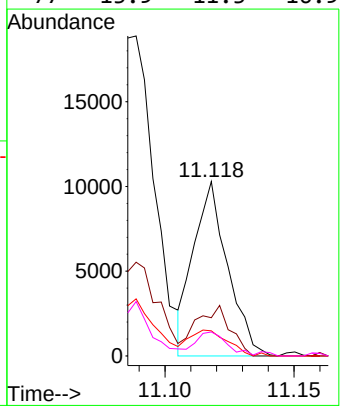


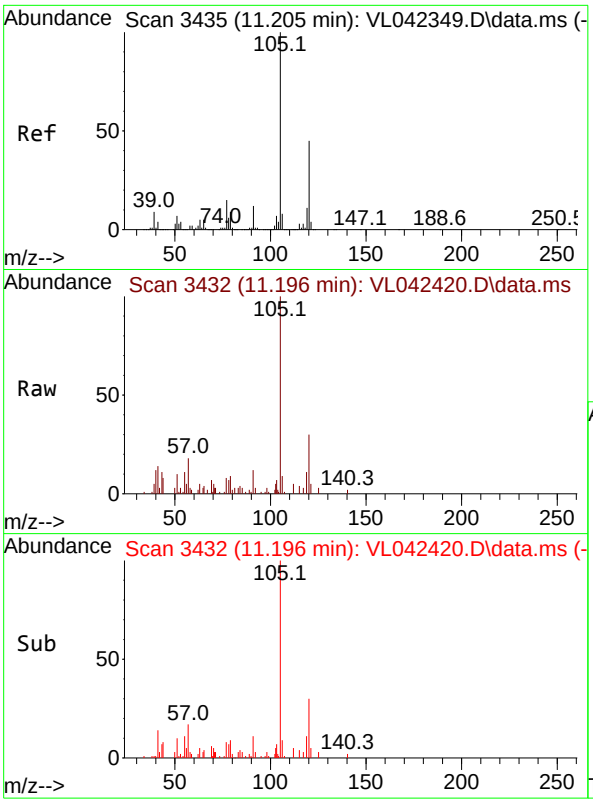


#72
4-Ethyltoluene
Concen: 0.137 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 9487

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	13.9	11.3	16.9



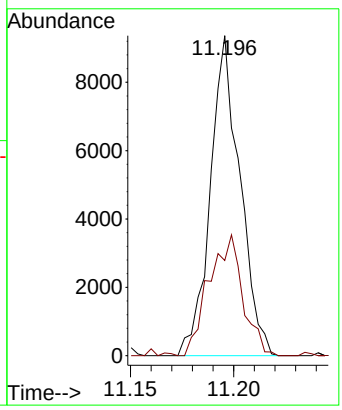


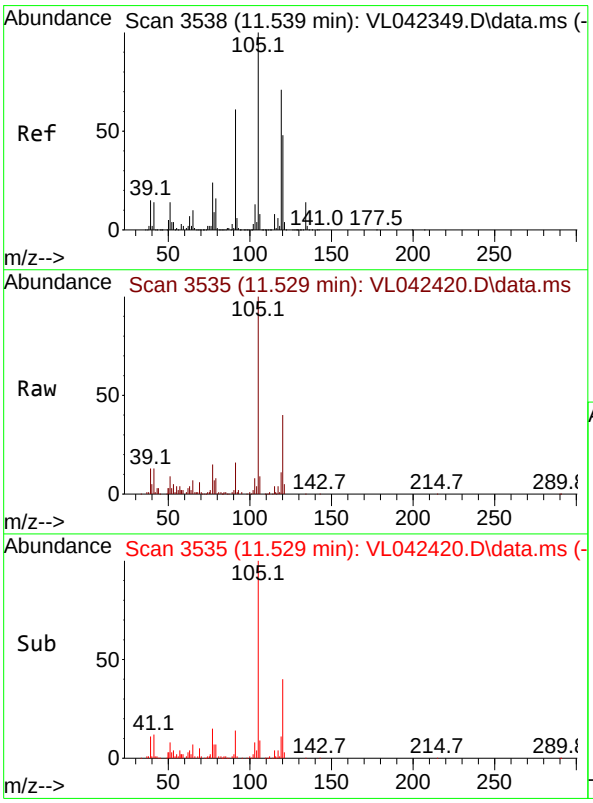
#73
1,3,5-Trimethylbenzene
Concen: 0.153 ppbv
RT: 11.196 min Scan# 3
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion:105 Resp: 9349

Ion	Ratio	Lower	Upper
105	100		
120	29.8	35.6	53.4#

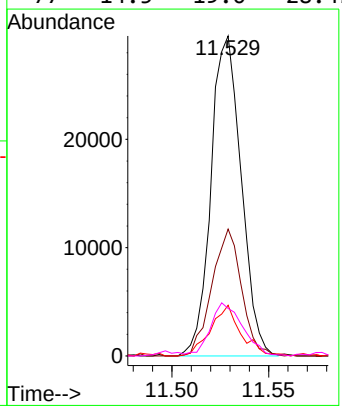


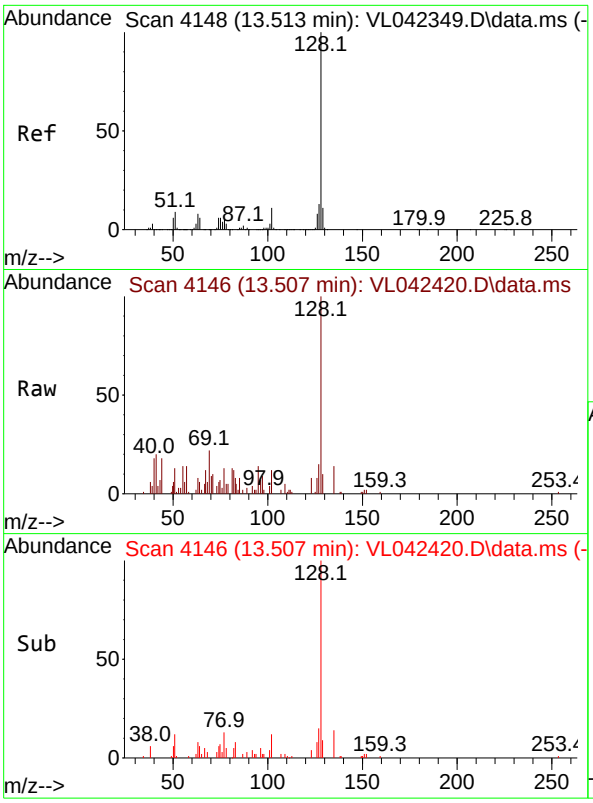


#74
1,2,4-Trimethylbenzene
Concen: 0.449 ppbv
RT: 11.529 min Scan# 3535
Delta R.T. -0.010 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Tgt Ion:105 Resp: 32107

Ion	Ratio	Lower	Upper
105	100		
120	39.7	38.1	57.1
91	15.9	48.8	73.2#
77	14.5	19.0	28.4#



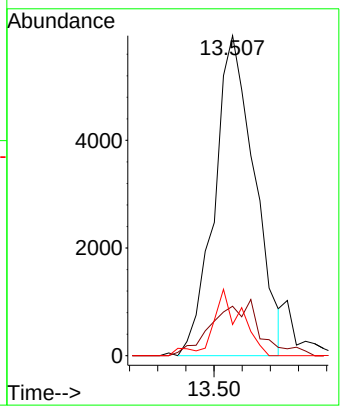


#79
Naphthalene
Concen: 0.069 ppbv
RT: 13.507 min Scan# 4
Delta R.T. -0.007 min
Lab File: VL042420.D
Acq: 28 Apr 2025 11:33

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025

Tgt Ion:128 Resp: 5874

Ion	Ratio	Lower	Upper
128	100		
127	14.4	10.6	15.8
129	9.8	8.6	12.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.781	49	140992	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.953	114	398020	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.875	117	341014	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.371	95	295244	10.536	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 105.400%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	11407	0.458	ppbv		97
3) Chlorodifluoromethane	1.464	51	18645	0.786	ppbv	#	77
4) Chloromethane	1.532	50	5396	0.547	ppbv		89
9) Propene	1.557	41	608473	56.326	ppbv		96
10) Heptane	4.972	43	9796	0.323	ppbv		91
11) Trichlorofluoromethane	1.875	101	5389	0.227	ppbv		95
12) 1,1,2-Trichlorotrifluo...	2.137	101	1178	0.061	ppbv	#	76
13) Ethanol	1.719	45	124500	72.509	ppbv		76
15) Acetone	1.842	43	548904	23.782	ppbv	#	68
16) 1,3-Butadiene	1.619	39	12032	1.090	ppbv	#	21
17) tert-Butyl alcohol	2.040	59	53033	1.854	ppbv	#	71
19) Isopropyl Alcohol	1.881	45	791511	61.732	ppbv	#	34
20) Methylene Chloride	2.059	84	39463	4.366	ppbv	#	77
21) Allyl Chloride	2.040	41	13024	0.817	ppbv	#	57
23) Vinyl Acetate	2.460	43	53220	5.696	ppbv	#	94
25) Ethyl Acetate	2.820	43	82058	1.442	ppbv	#	81
26) Hexane	2.820	57	111715	4.851	ppbv	#	33
27) Carbon Disulfide	2.143	76	1149	0.047	ppbv	#	1
30) Cyclohexane	3.852	84	2492	0.134	ppbv	#	1
34) 2-Butanone	2.554	43	25006	0.794	ppbv		99
35) Carbon Tetrachloride	3.755	117	1756	0.049	ppbv	#	73
36) Benzene	3.645	78	8034	0.187	ppbv		95
37) 1,2-Dichloroethane	3.205	62	1519	0.059	ppbv	#	87
39) 1,2-Dichloropropane	3.949	63	108761	6.798	ppbv	#	22
41) Tetrahydrofuran	3.059	42	870	0.047	ppbv	#	55
44) 2,2,4-Trimethylpentane	4.632	57	15729	0.212	ppbv	#	65
50) 4-Methyl-2-Pentanone	5.749	43	54716	1.046	ppbv		96
53) Toluene	6.921	91	71766	1.393	ppbv		99
58) Ethyl Benzene	9.345	91	33666	0.498	ppbv		96
59) m/p-Xylene	9.552	91	4106	0.075	ppbv	#	32
60) o-Xylene	9.957	91	18390	0.336	ppbv		97
61) Styrene	9.863	104	11677	0.446	ppbv		91
62) Isopropylbenzene	10.529	105	9651	0.120	ppbv		98
64) n-propylbenzene	10.986	120	2331	0.115	ppbv	#	51
65) tert-Butylbenzene	11.530	119	5655	0.076	ppbv	#	69
70) n-Butylbenzene	12.277	91	4101	0.044	ppbv	#	79
72) 4-Ethyltoluene	11.118	105	10909	0.163	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.199	105	11852	0.200	ppbv		92
74) 1,2,4-Trimethylbenzene	11.533	105	45414	0.657	ppbv	#	59
79) Naphthalene	13.514	128	6445	0.078	ppbv		96
80) Naphthalene,2-methyl-	14.452	142	2419	0.051	ppbv	#	64

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

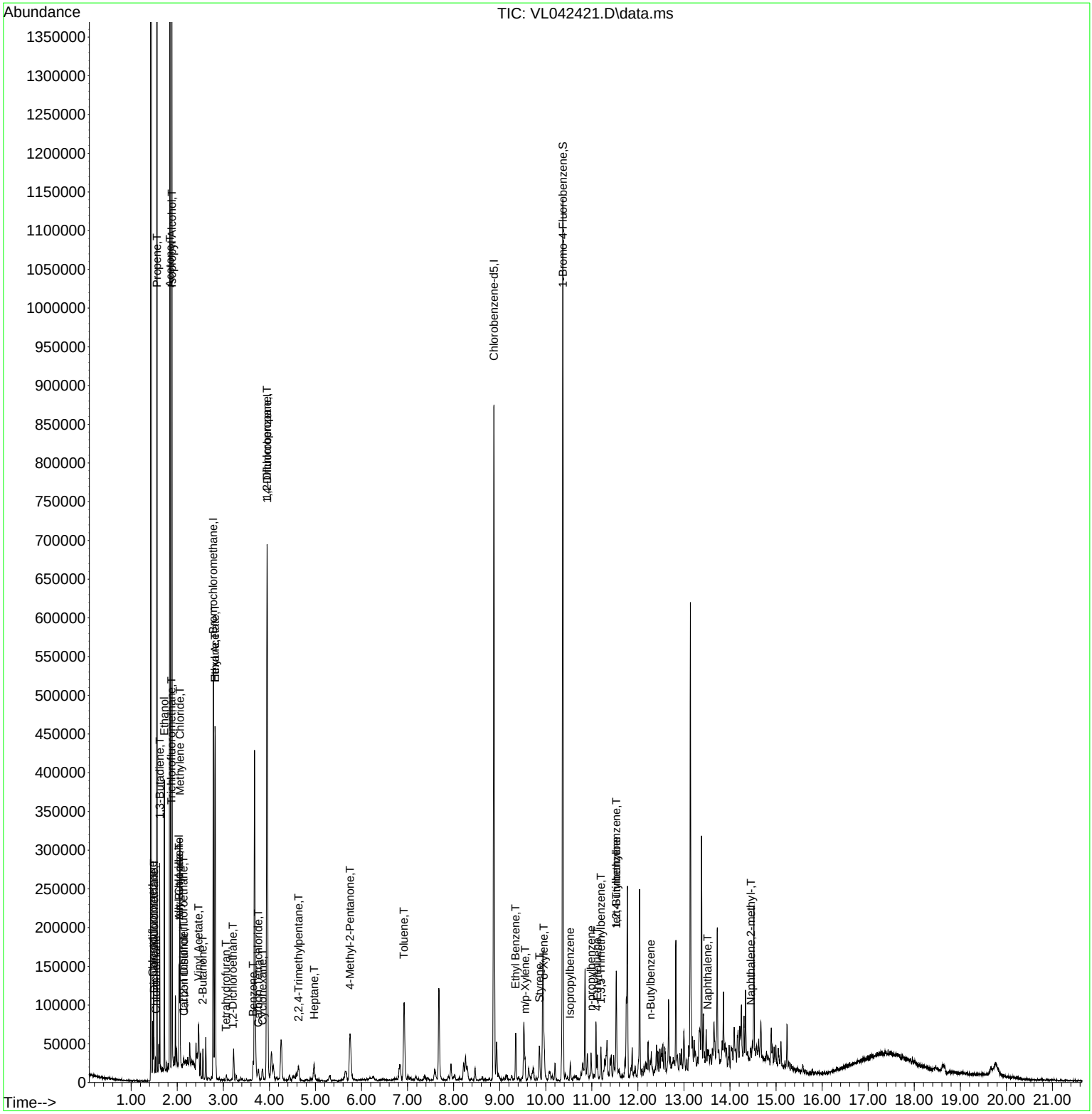
(#) = qualifier out of range (m) = manual integration (+) = signals summed

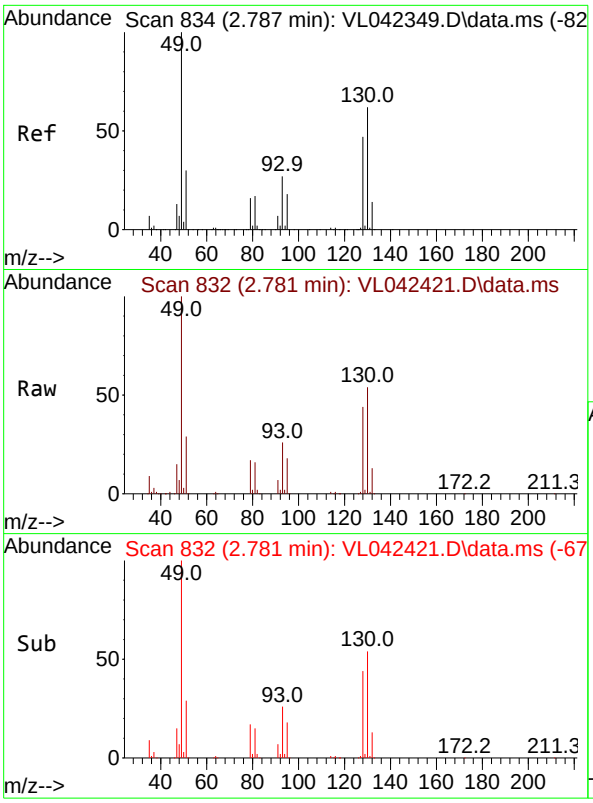
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042421.D
Acq On : 28 Apr 2025 12:17
Operator : SY/MD
Sample : Q1665-12
Misc : 400mL/MSVOA_L
ALS Vial : 8 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Quant Time: Apr 29 01:35:07 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



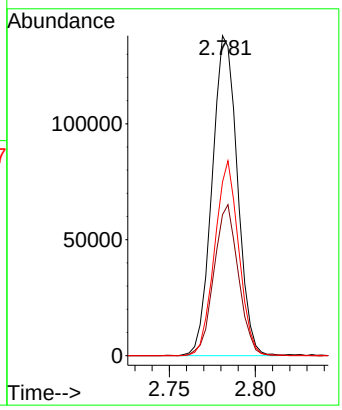


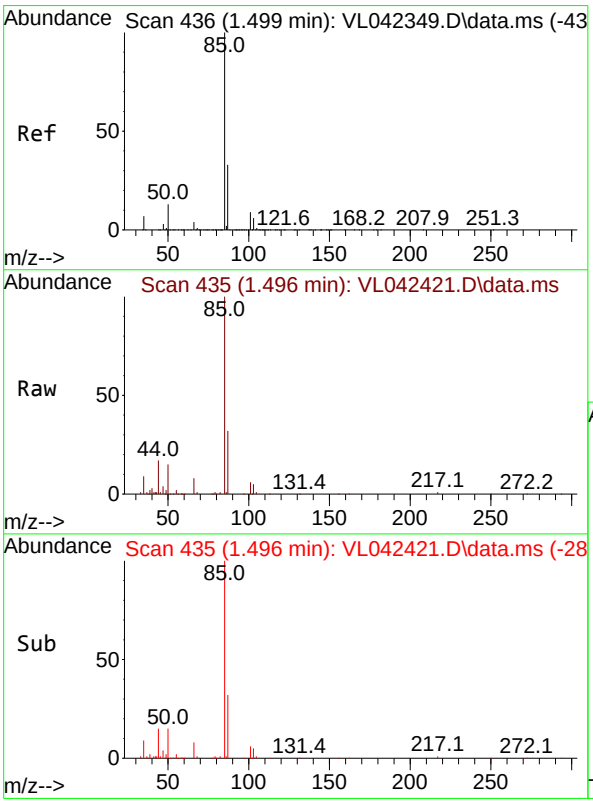
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.781 min Scan# 8
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 49 Resp: 140992

Ion	Ratio	Lower	Upper
49	100		
128	45.9	22.8	68.4
130	58.0	29.3	88.0

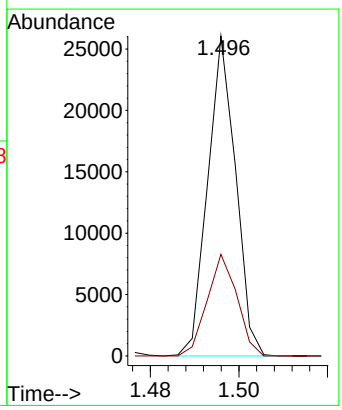


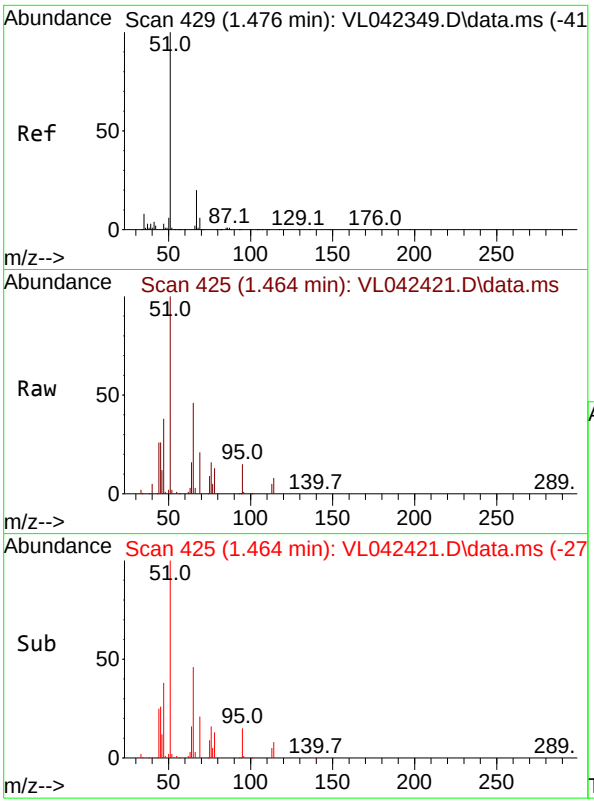


#2
Dichlorodifluoromethane
Concen: 0.458 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 85 Resp: 11407

Ion	Ratio	Lower	Upper
85	100		
87	31.7	26.6	39.8



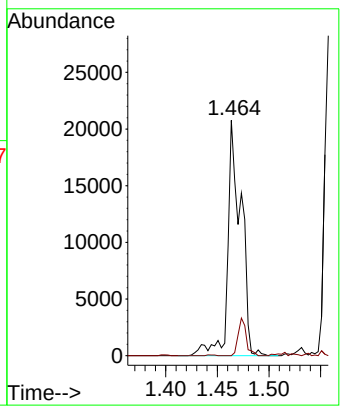


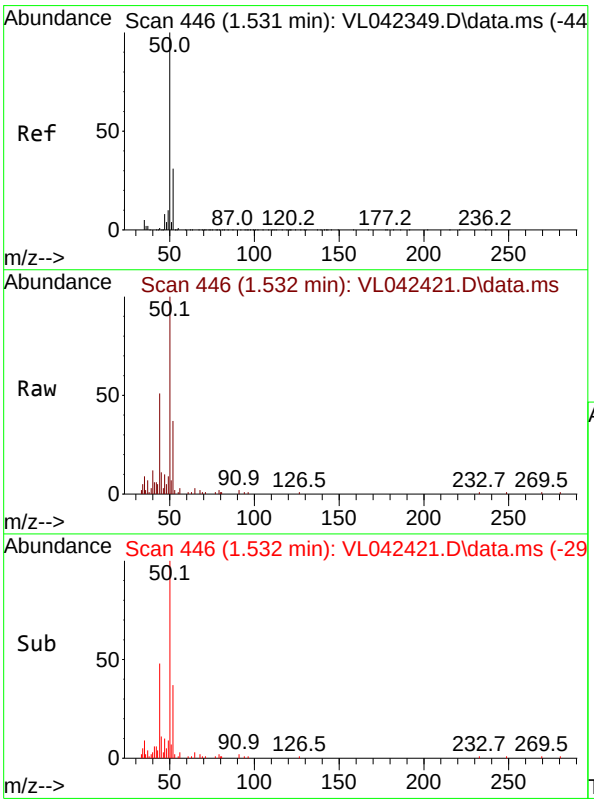
#3
Chlorodifluoromethane
Concen: 0.786 ppbv
RT: 1.464 min Scan# 4
Delta R.T. -0.013 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 51 Resp: 18645

Ion	Ratio	Lower	Upper
51	100		
67	9.8	16.2	24.4#

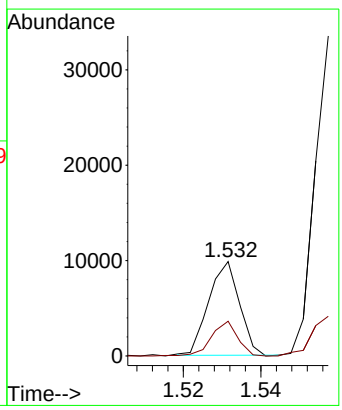


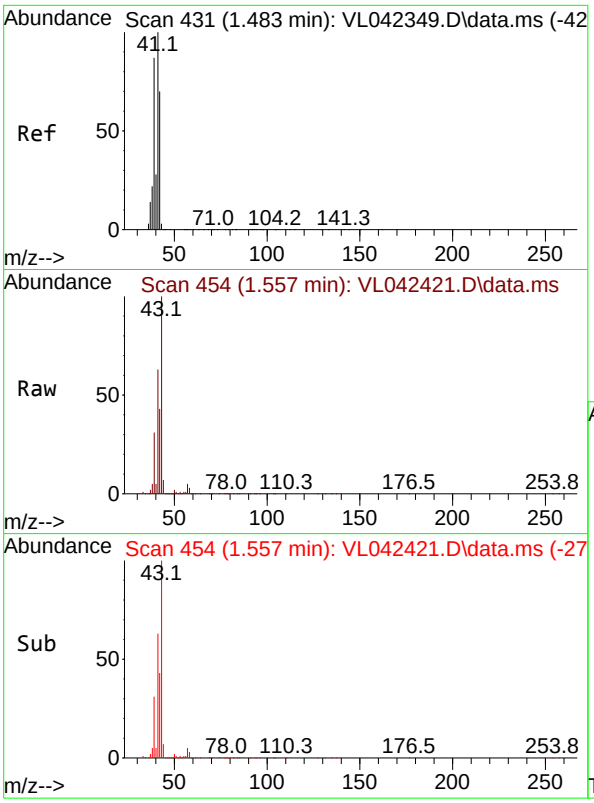


#4
Chloromethane
Concen: 0.547 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 50 Resp: 5396

Ion	Ratio	Lower	Upper
50	100		
52	37.0	24.7	37.1



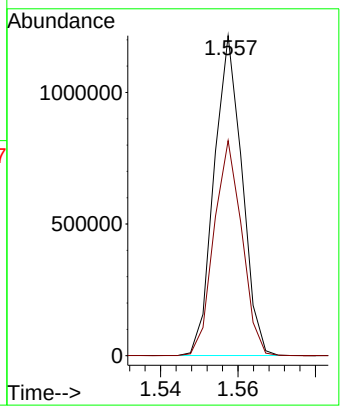


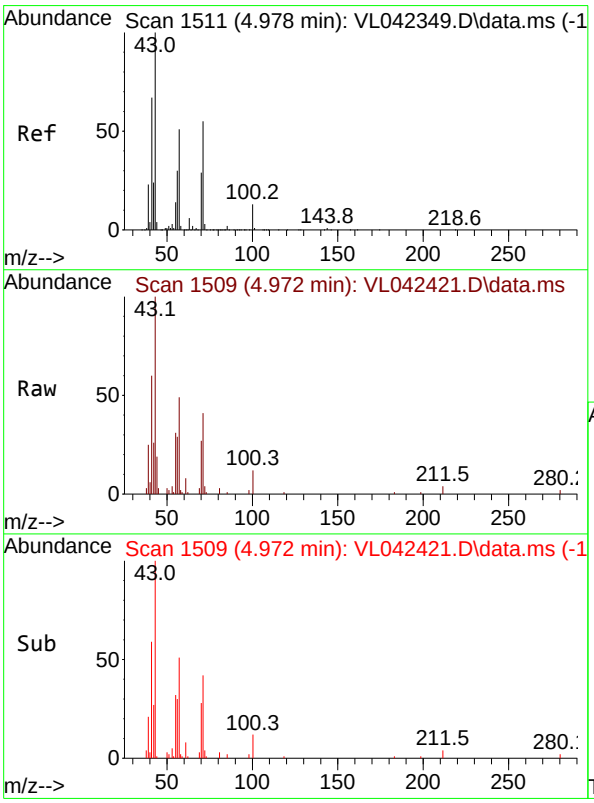
#9
Propene
Concen: 56.326 ppbv
RT: 1.557 min Scan# 4
Delta R.T. 0.075 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 41 Resp: 608473

Ion	Ratio	Lower	Upper
41	100		
42	67.3	56.2	84.4

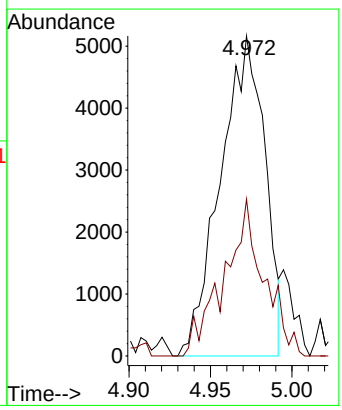


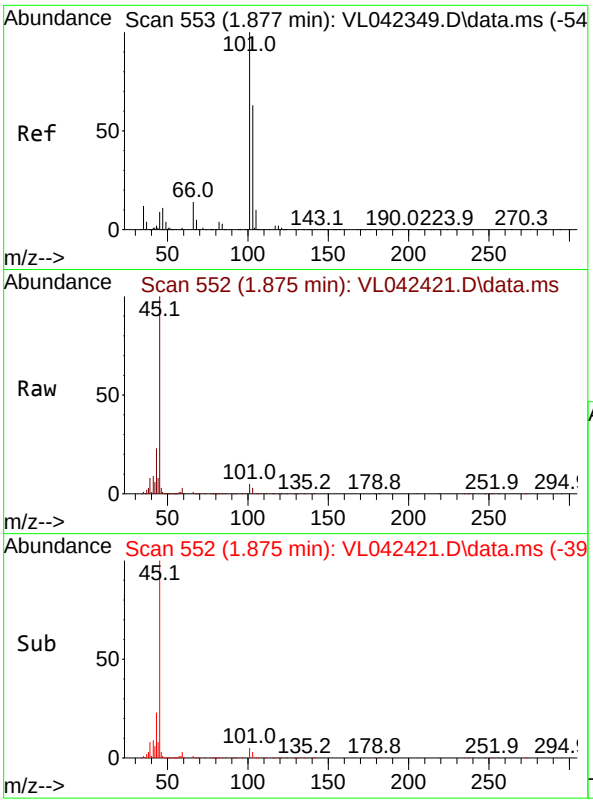


#10
Heptane
Concen: 0.323 ppbv
RT: 4.972 min Scan# 1509
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 9796

Ion	Ratio	Lower	Upper
43	100		
57	44.0	39.9	59.9



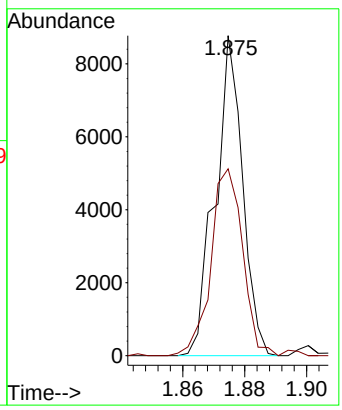


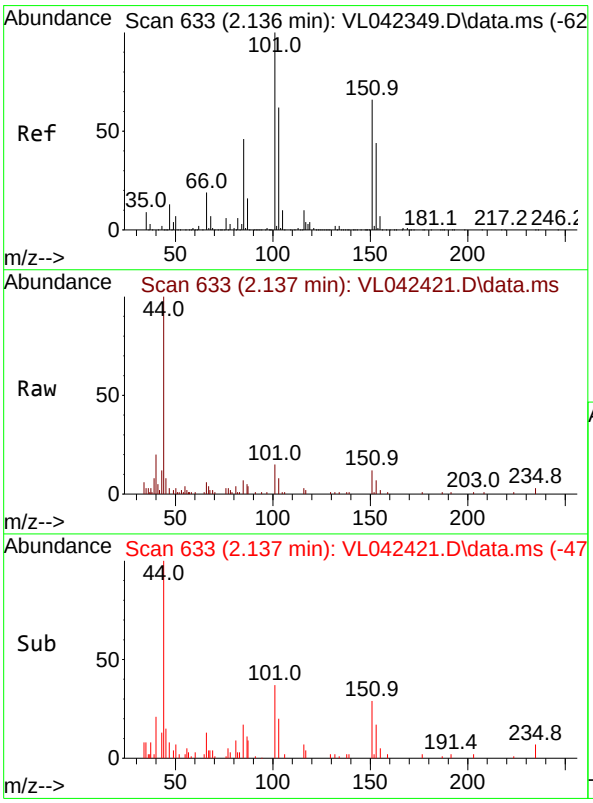
#11
Trichlorofluoromethane
Concen: 0.227 ppbv
RT: 1.875 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:101 Resp: 5389

Ion	Ratio	Lower	Upper
101	100		
103	58.4	50.1	75.1

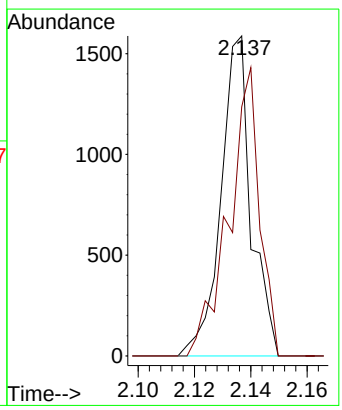


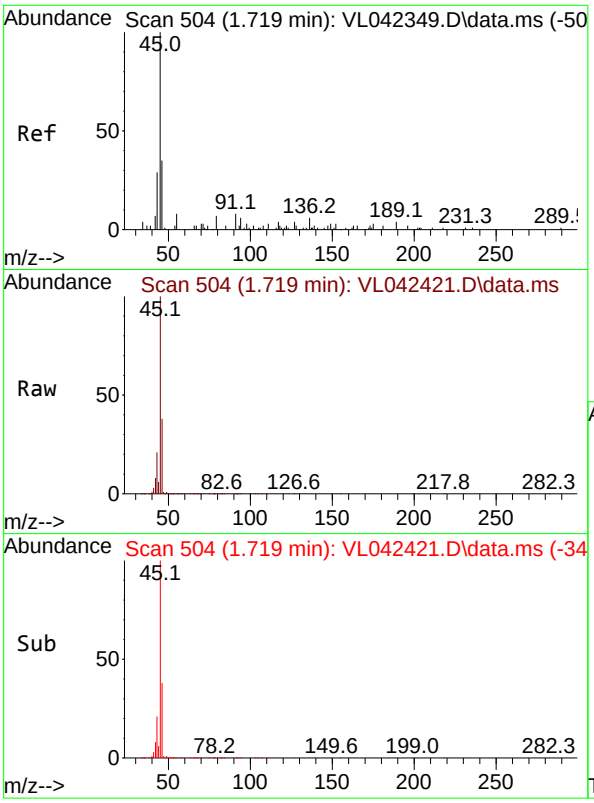


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.061 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:101 Resp: 1178

Ion	Ratio	Lower	Upper
101	100		
151	91.6	57.0	85.6#



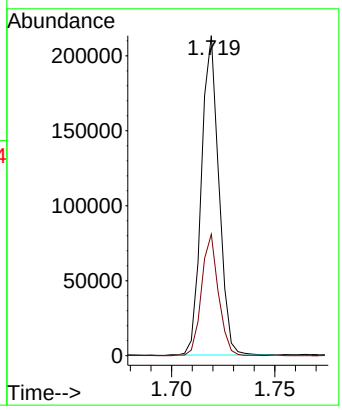


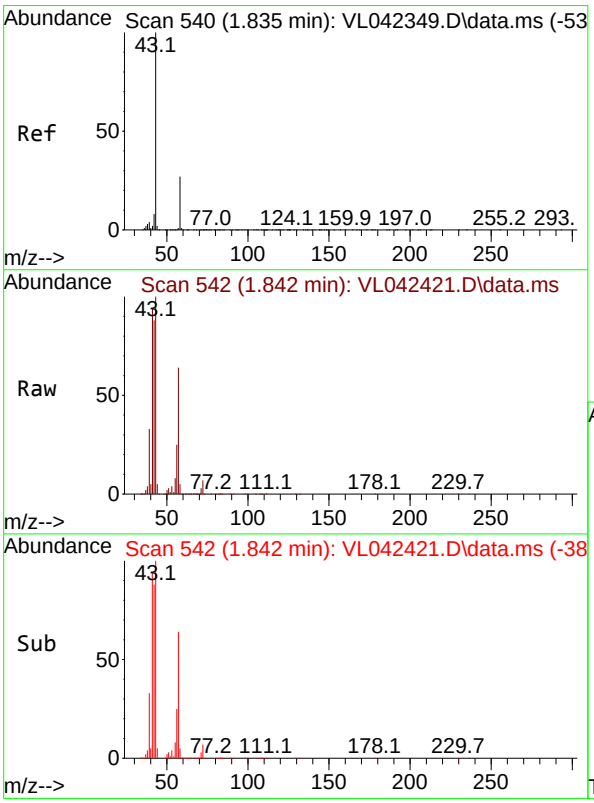
#13
Ethanol
Concen: 72.509 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 45 Resp: 124500

Ion	Ratio	Lower	Upper
45	100		
46	37.4	21.9	87.7

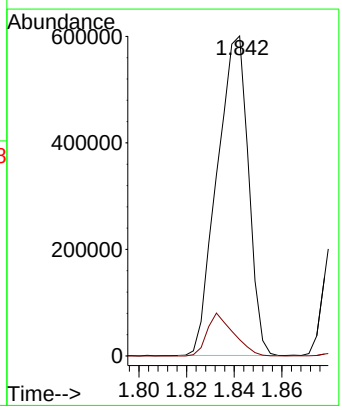


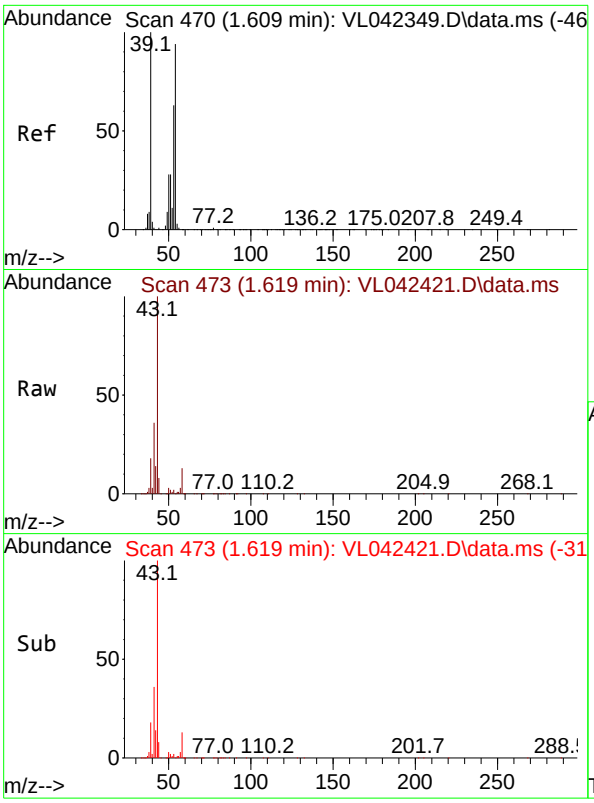


#15
Acetone
Concen: 23.782 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.007 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 548904

Ion	Ratio	Lower	Upper
43	100		
58	11.3	22.4	33.6#



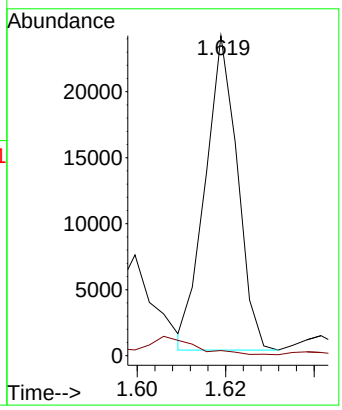


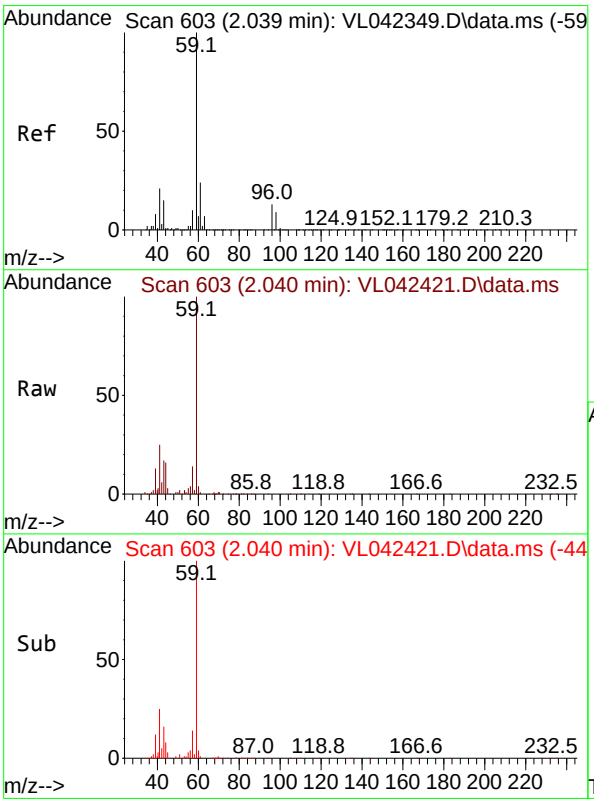
#16
1,3-Butadiene
Concen: 1.090 ppbv
RT: 1.619 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 39 Resp: 12032

Ion	Ratio	Lower	Upper
39	100		
54	11.2	64.9	97.3#

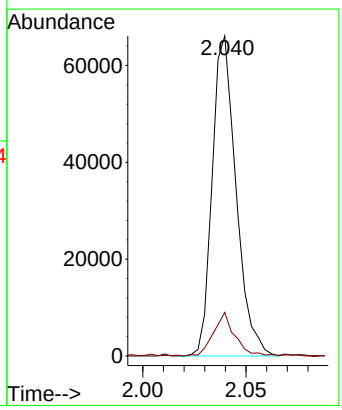


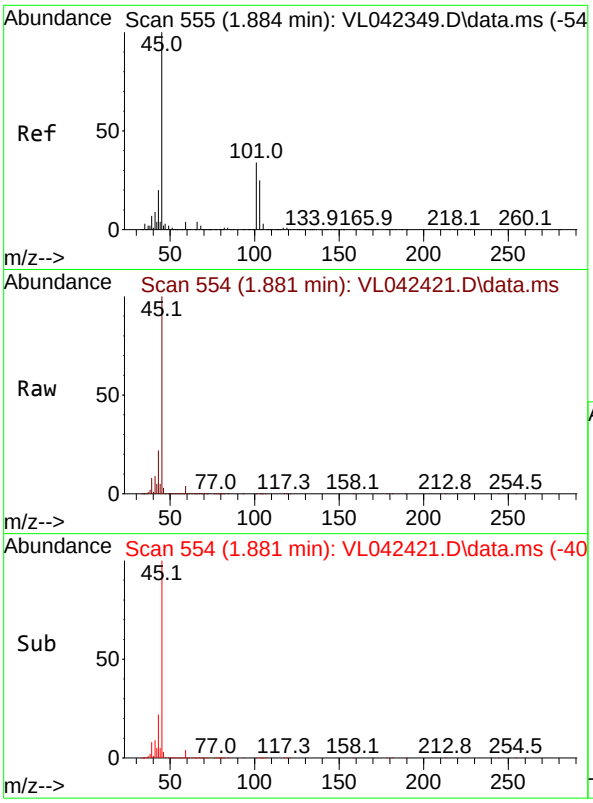


#17
tert-Butyl alcohol
Concen: 1.854 ppbv
RT: 2.040 min Scan# 603
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 59 Resp: 53033

Ion	Ratio	Lower	Upper
59	100		
57	0.0	8.7	13.1#



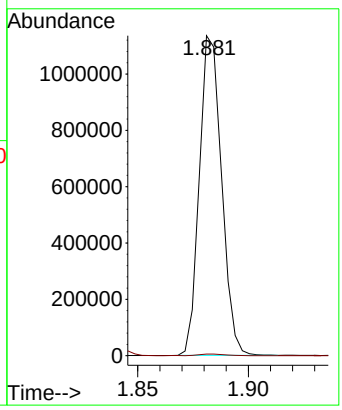


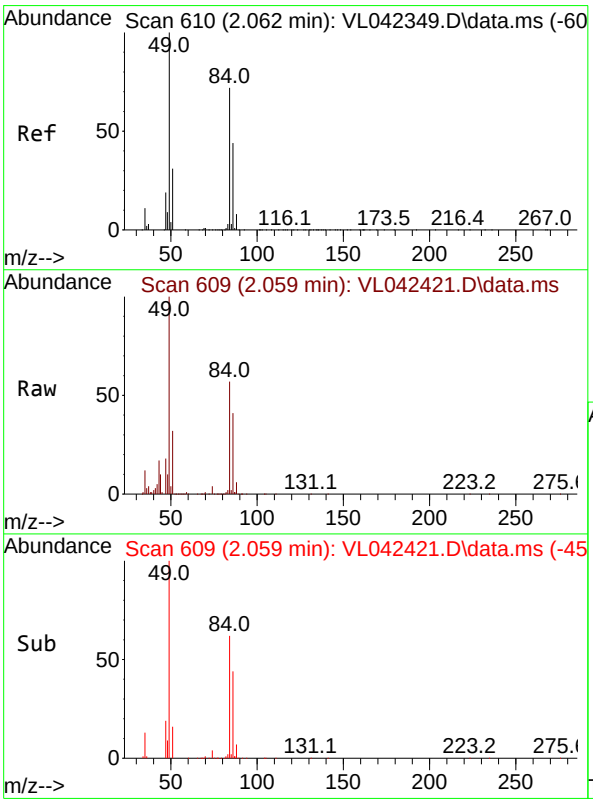
#19
Isopropyl Alcohol
Concen: 61.732 ppbv
RT: 1.881 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 45 Resp: 791511

Ion	Ratio	Lower	Upper
45	100		
58	0.6	34.5	51.7#

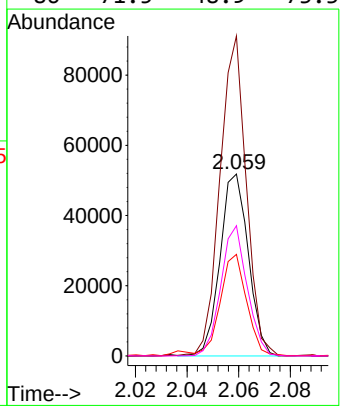


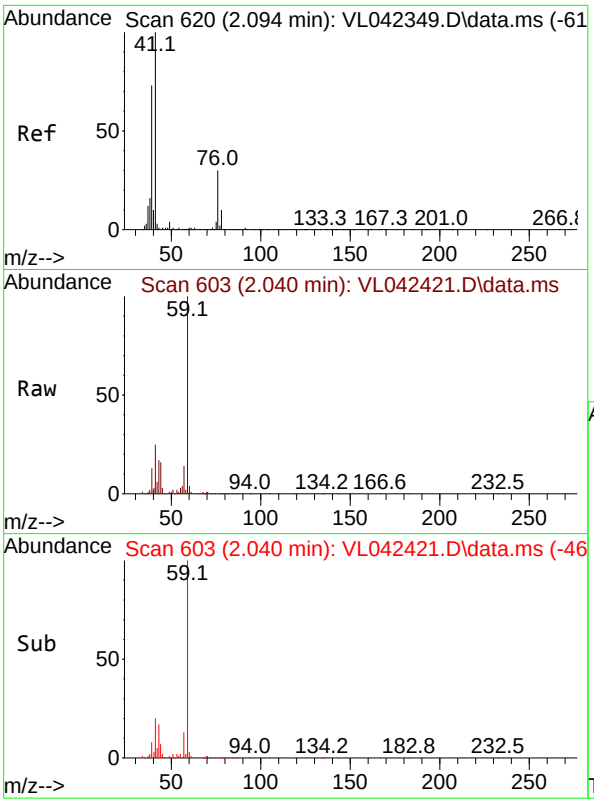


#20
Methylene Chloride
Concen: 4.366 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 84 Resp: 39463

Ion	Ratio	Lower	Upper
84	100		
49	175.5	111.6	167.4#
51	55.1	35.1	52.7#
86	71.5	48.9	73.3



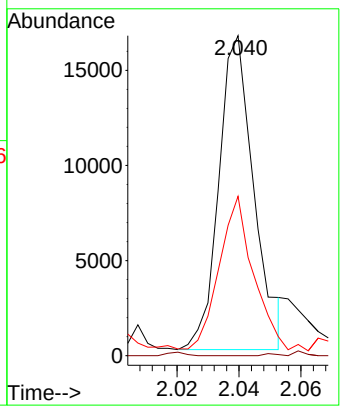


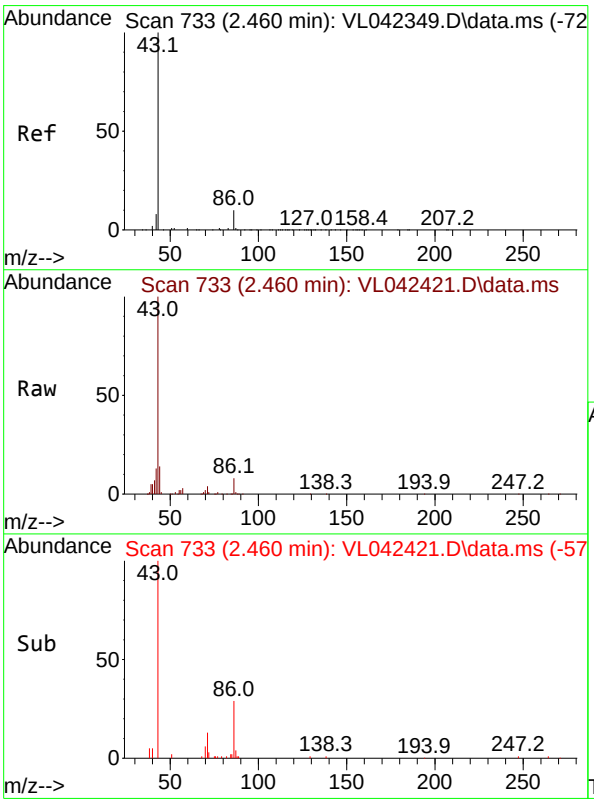
#21
Allyl Chloride
Concen: 0.817 ppbv
RT: 2.040 min Scan# 6
Delta R.T. -0.055 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 41 Resp: 13024

Ion	Ratio	Lower	Upper
41	100		
76	0.5	24.8	37.2#
39	43.7	60.6	90.8#

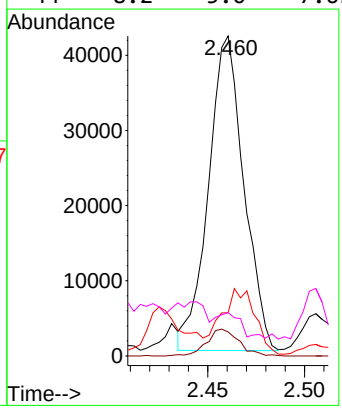


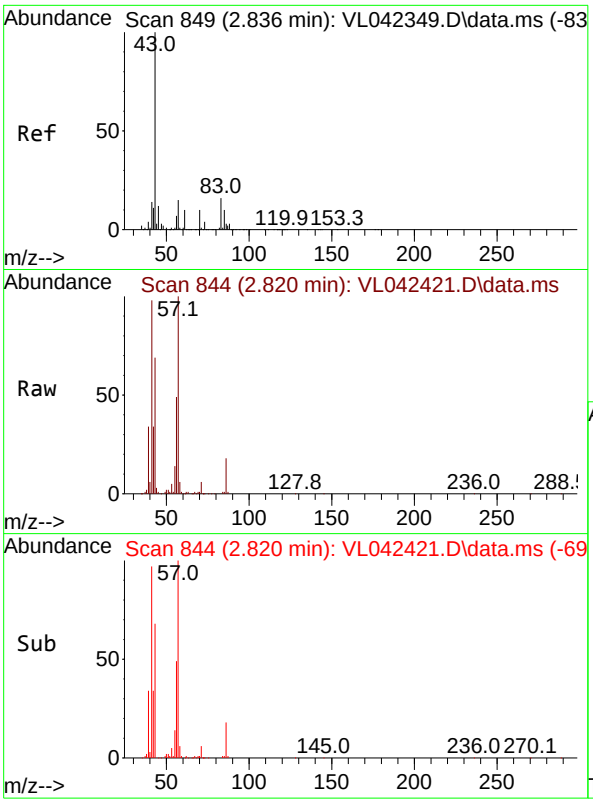


#23
Vinyl Acetate
Concen: 5.696 ppbv
RT: 2.460 min Scan# 733
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 53220

Ion	Ratio	Lower	Upper
43	100		
86	7.5	6.5	9.7
42	13.1	7.8	11.8#
44	8.2	5.0	7.6#



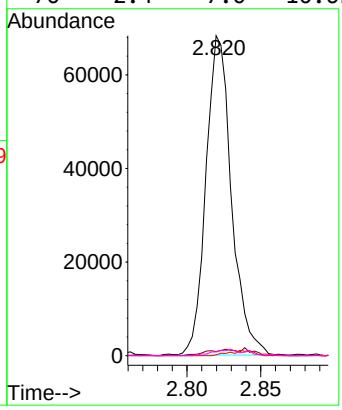


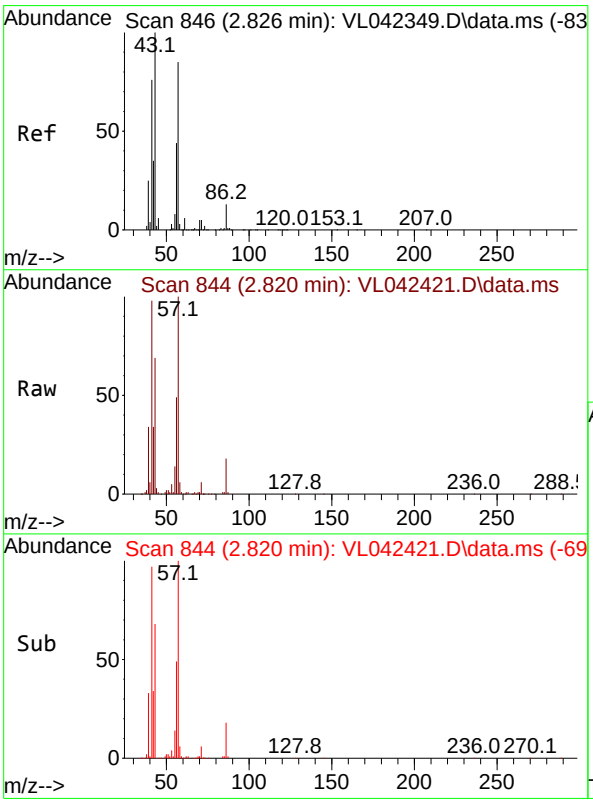
#25
Ethyl Acetate
Concen: 1.442 ppbv
RT: 2.820 min Scan# 84
Delta R.T. -0.016 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 43 Resp: 82058

Ion	Ratio	Lower	Upper
43	100		
45	3.6	8.3	12.5#
61	1.7	7.3	10.9#
70	2.4	7.0	10.6#

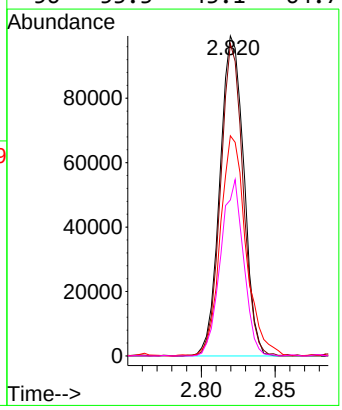


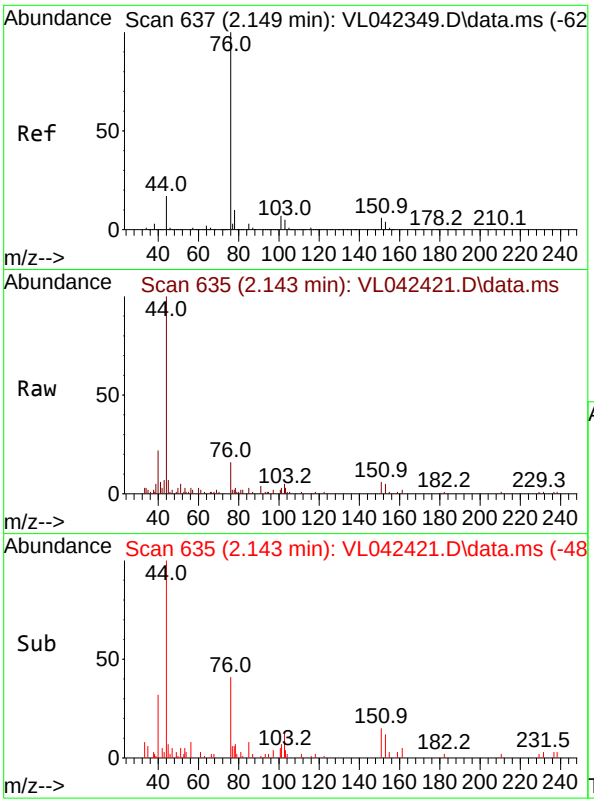


#26
Hexane
Concen: 4.851 ppbv
RT: 2.820 min Scan# 844
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 57 Resp: 111715

Ion	Ratio	Lower	Upper
57	100		
41	92.0	77.9	116.9
43	74.4	208.4	312.6#
56	53.3	43.1	64.7



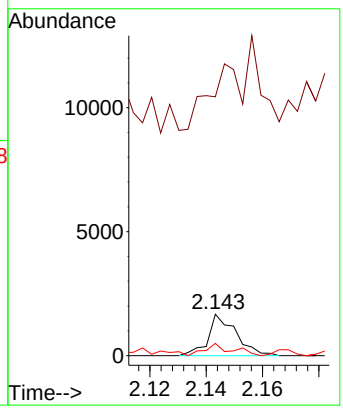


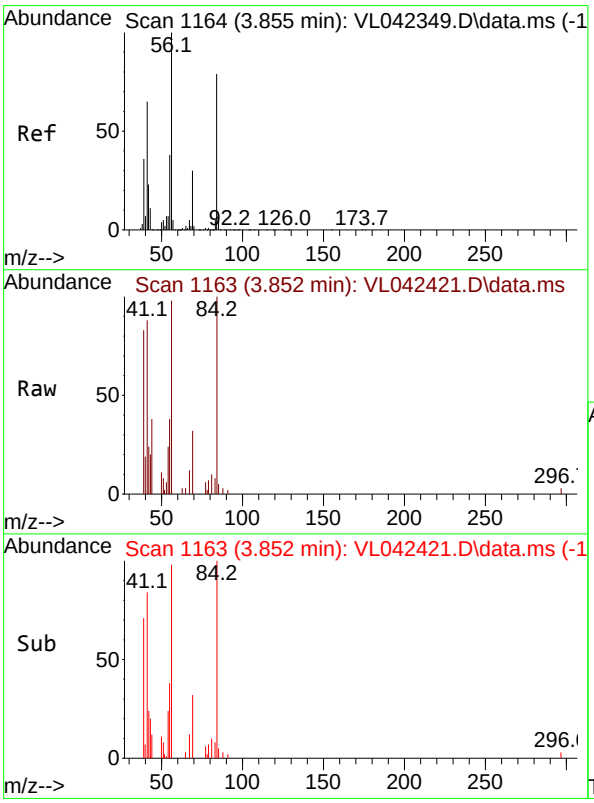
#27
Carbon Disulfide
Concen: 0.047 ppbv
RT: 2.143 min Scan# 6
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 76 Resp: 1149

Ion	Ratio	Lower	Upper
76	100		
44	1354.1	15.5	23.3#
78	36.2	9.3	13.9#

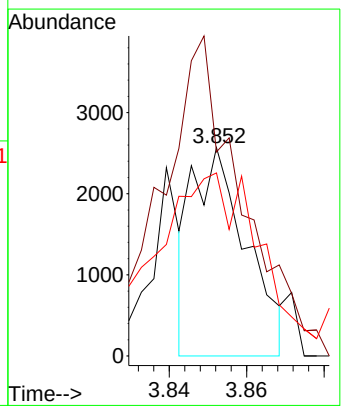


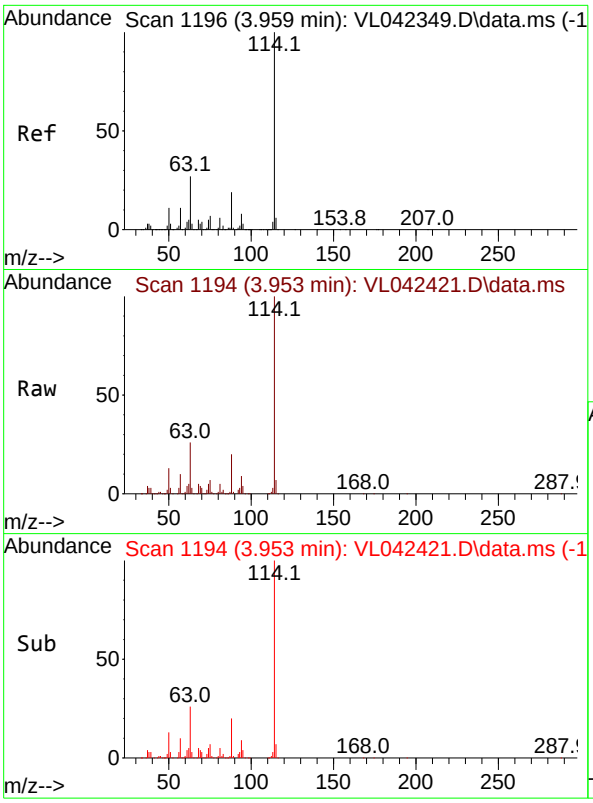


#30
Cyclohexane
Concen: 0.134 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 84 Resp: 2492

Ion	Ratio	Lower	Upper
84	100		
56	255.2	101.0	151.4#
41	0.0	67.4	101.0#



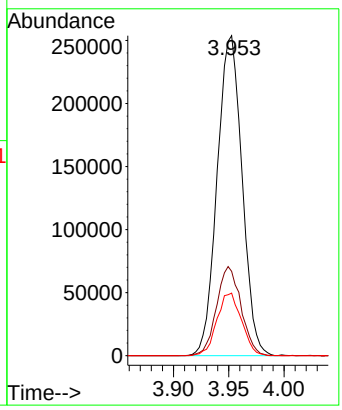


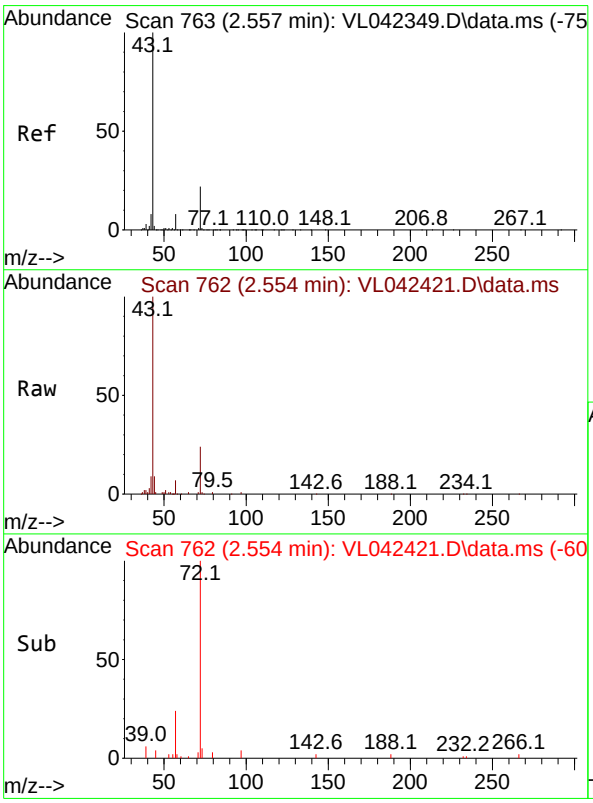
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.953 min Scan# 11
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:114 Resp: 398020

Ion	Ratio	Lower	Upper
114	100		
63	27.3	21.8	32.6
88	19.3	15.5	23.3

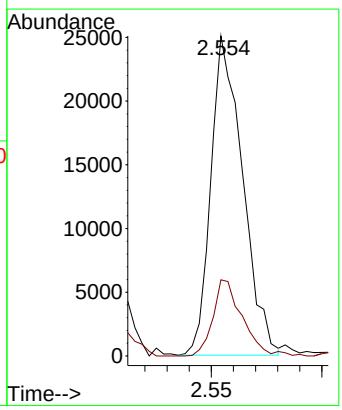


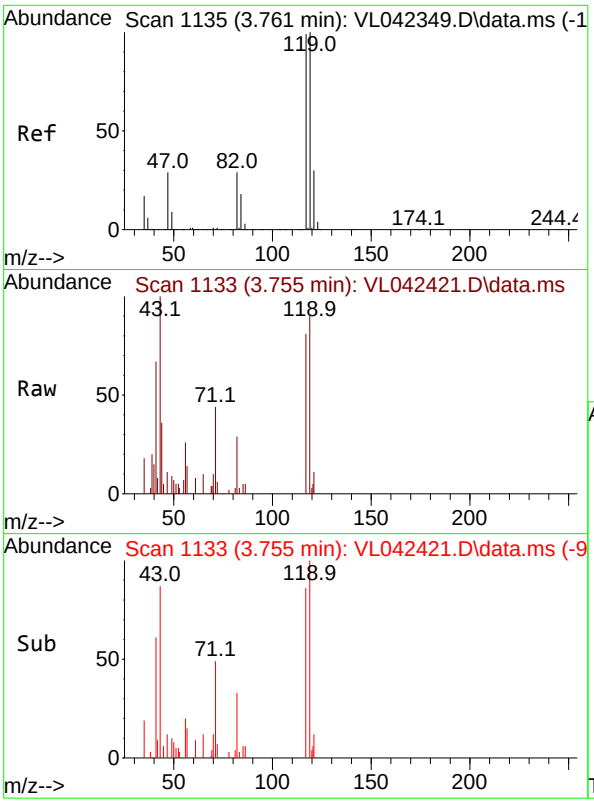


#34
2-Butanone
Concen: 0.794 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 43 Resp: 25006

Ion	Ratio	Lower	Upper
43	100		
72	22.5	18.2	27.2



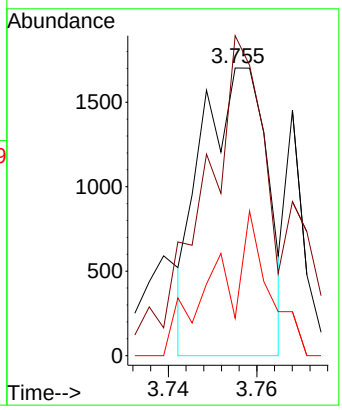


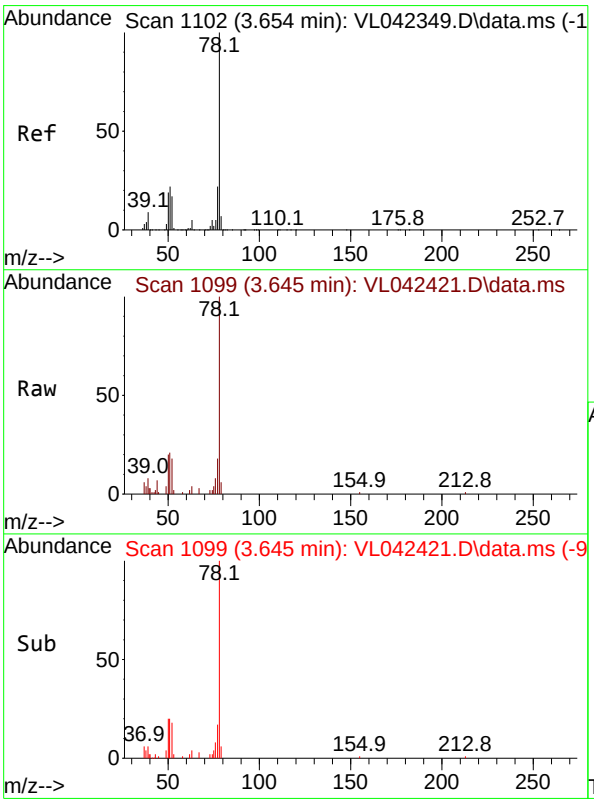
#35
Carbon Tetrachloride
Concen: 0.049 ppbv
RT: 3.755 min Scan# 1
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:117 Resp: 1756

Ion	Ratio	Lower	Upper
117	100		
119	119.0	80.5	120.7
121	0.0	24.2	36.2#

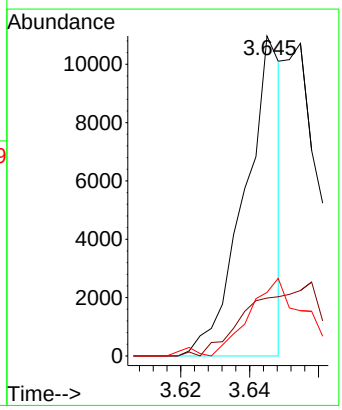


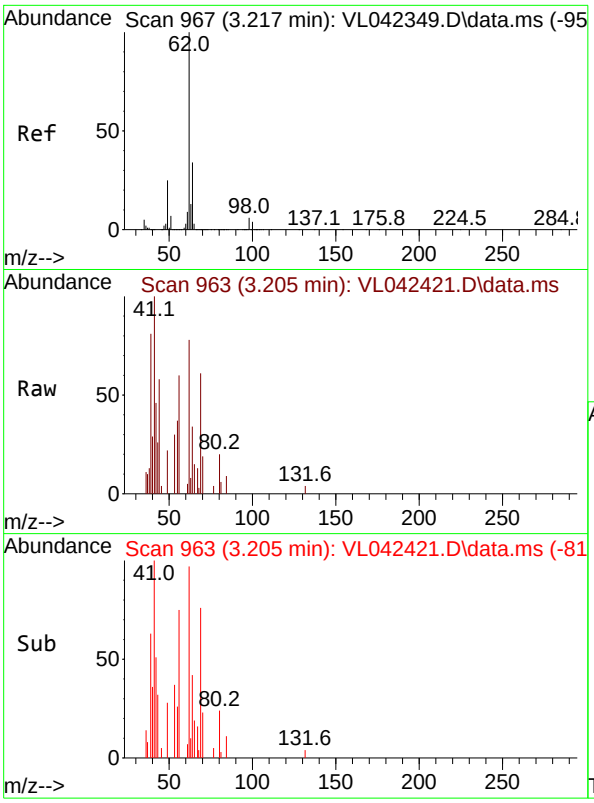


#36
Benzene
Concen: 0.187 ppbv
RT: 3.645 min Scan# 1099
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 78 Resp: 8034

Ion	Ratio	Lower	Upper
78	100		
77	18.1	17.4	26.0
50	18.5	15.5	23.3



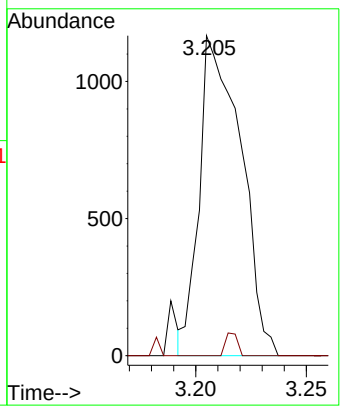


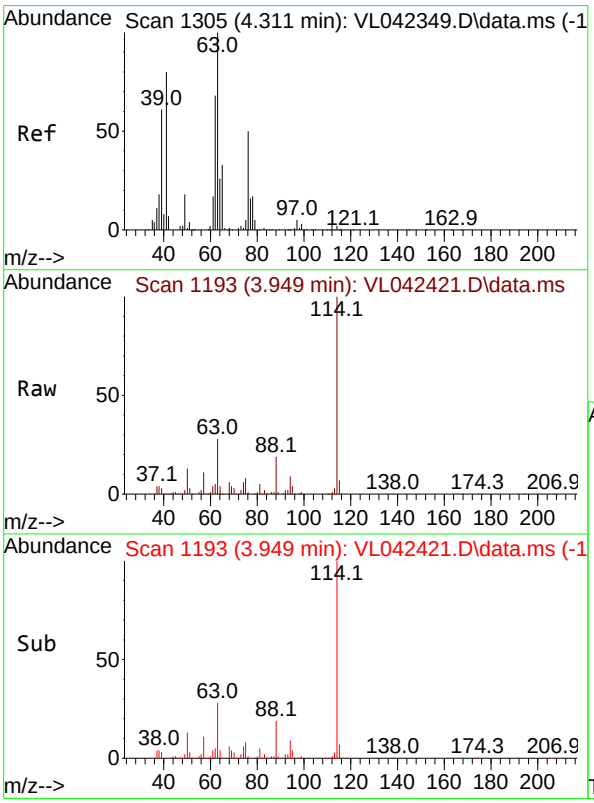
#37
1,2-Dichloroethane
Concen: 0.059 ppbv
RT: 3.205 min Scan# 9
Delta R.T. -0.013 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 62 Resp: 1519

Ion	Ratio	Lower	Upper
62	100		
98	2.0	5.1	7.7#

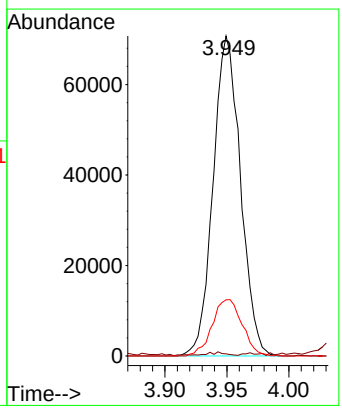


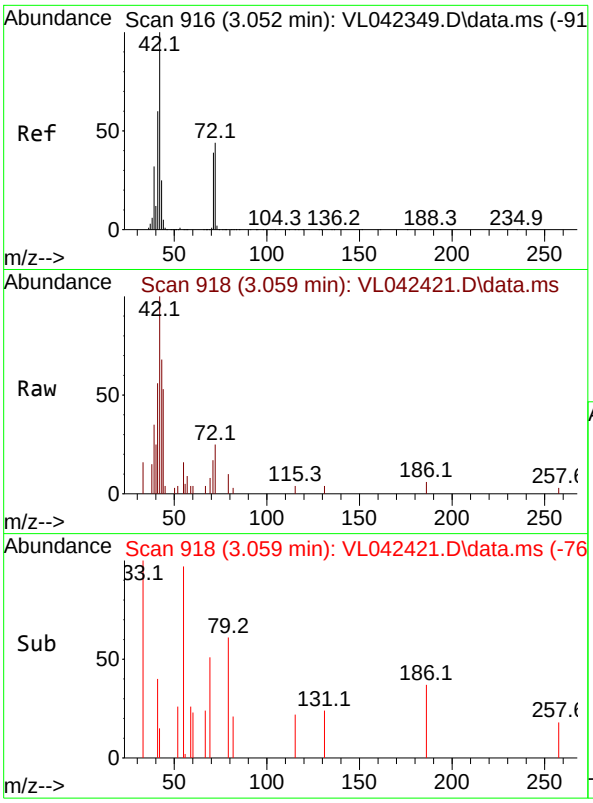


#39
1,2-Dichloropropane
Concen: 6.798 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.362 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 63 Resp: 108761

Ion	Ratio	Lower	Upper
63	100		
41	0.1	64.2	96.2#
62	17.6	54.3	81.5#



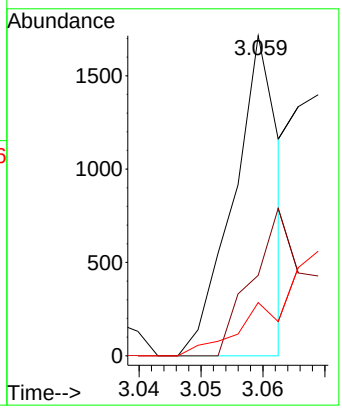


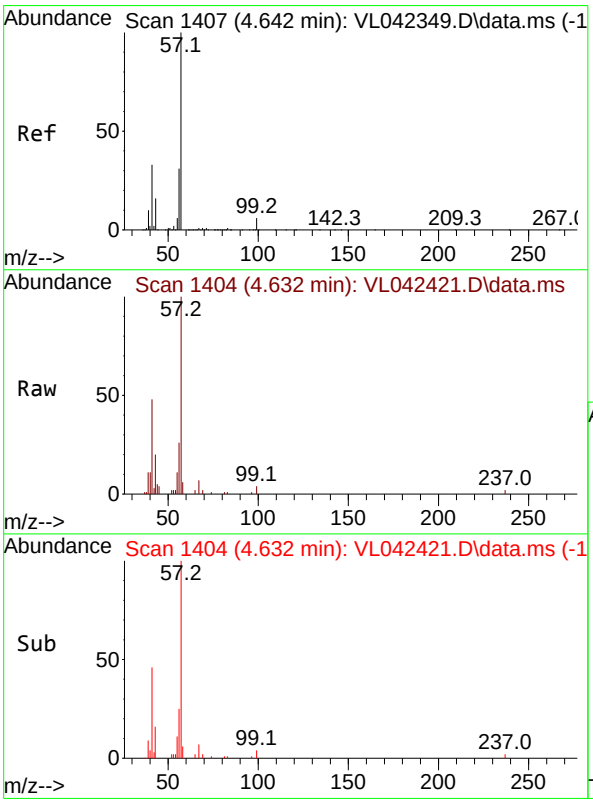
#41
Tetrahydrofuran
Concen: 0.047 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 42 Resp: 870

Ion	Ratio	Lower	Upper
42	100		
72	56.9	32.3	48.5#
71	0.0	31.4	47.2#

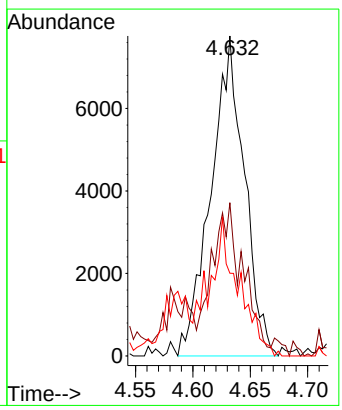


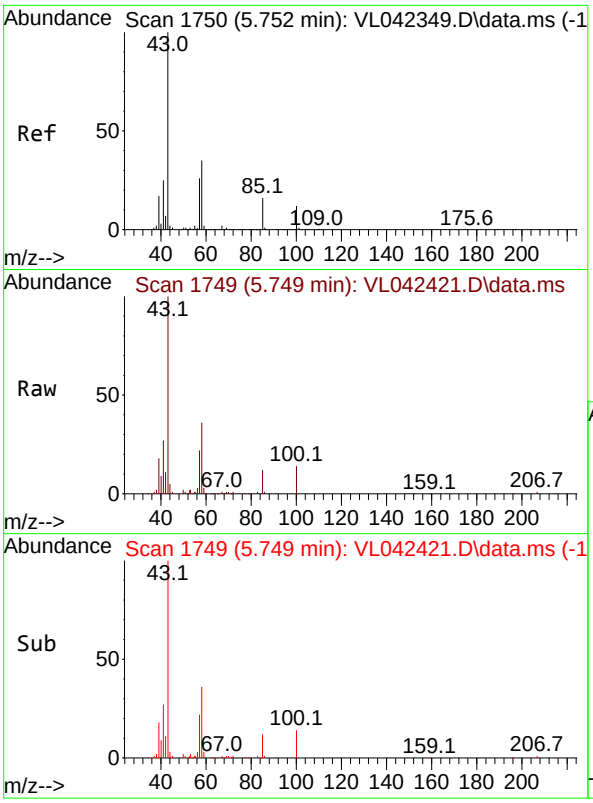


#44
2,2,4-Trimethylpentane
Concen: 0.212 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 57 Resp: 15729

Ion	Ratio	Lower	Upper
57	100		
41	52.6	27.2	40.8#
56	53.5	25.7	38.5#



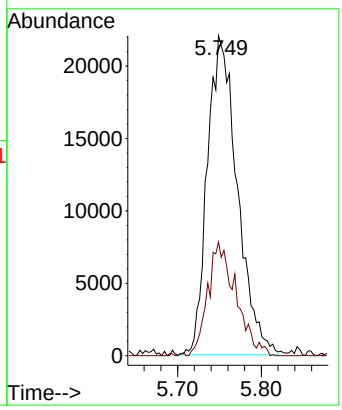


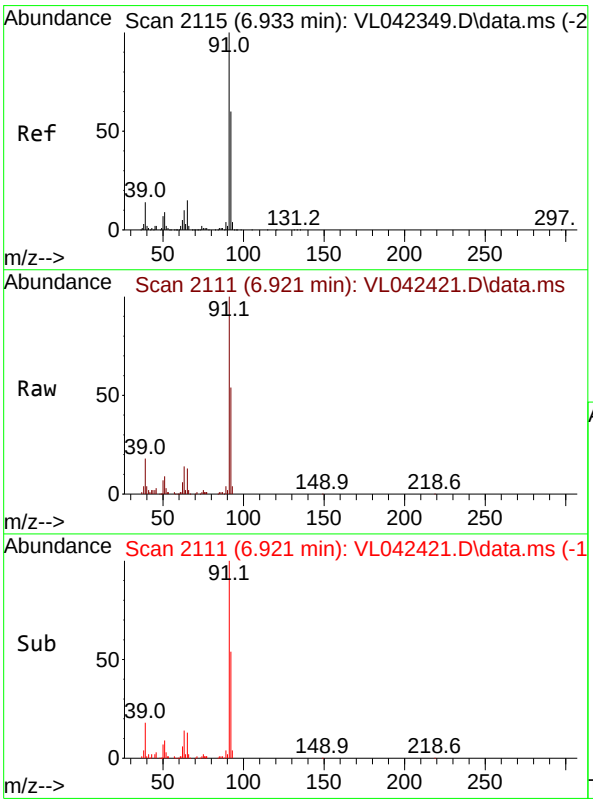
#50
4-Methyl-2-Pentanone
Concen: 1.046 ppbv
RT: 5.749 min Scan# 1
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 43 Resp: 54716

Ion	Ratio	Lower	Upper
43	100		
58	33.7	28.6	43.0

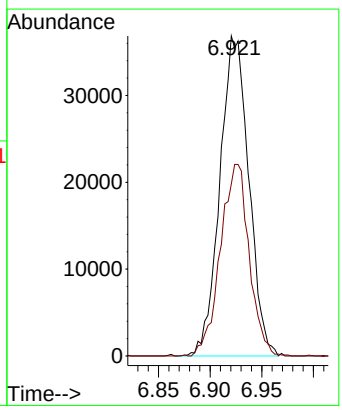


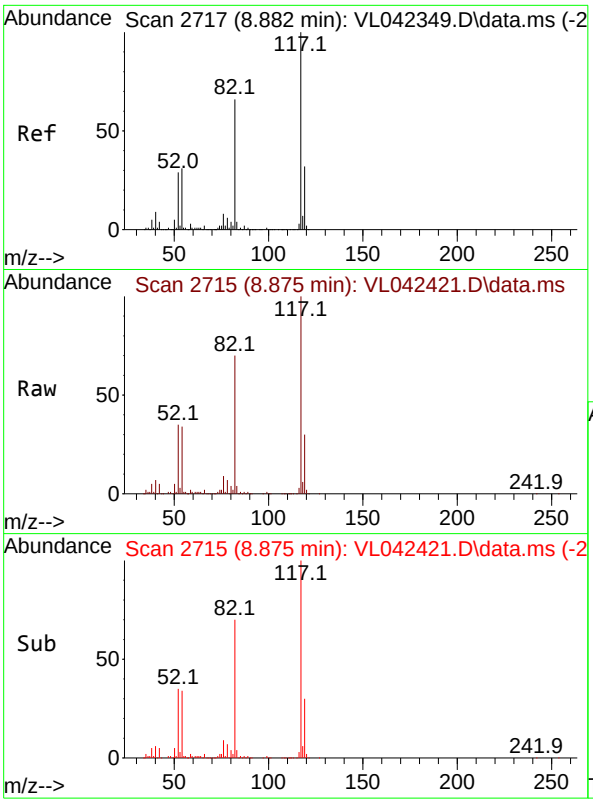


#53
Toluene
Concen: 1.393 ppbv
RT: 6.921 min Scan# 2111
Delta R.T. -0.013 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 71766

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4



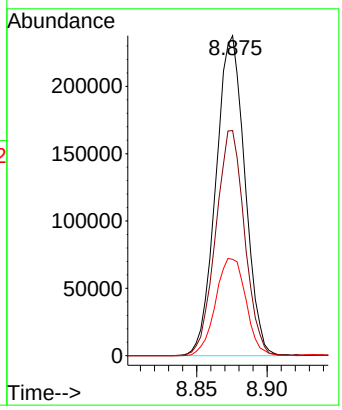


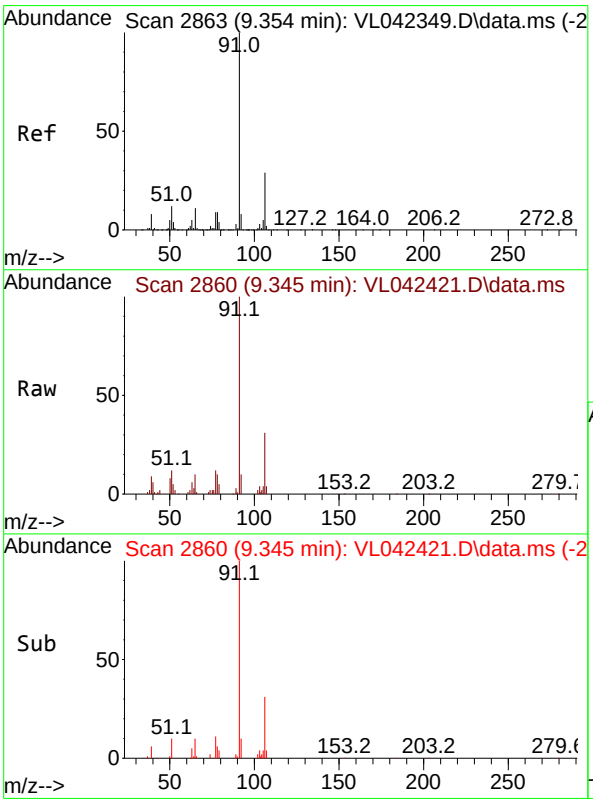
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.875 min Scan# 2
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:117 Resp: 341014

Ion	Ratio	Lower	Upper
117	100		
82	70.2	57.8	86.6
119	31.8	25.2	37.8

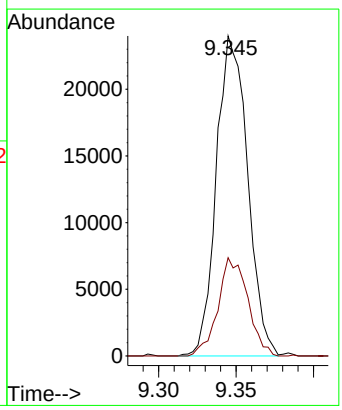


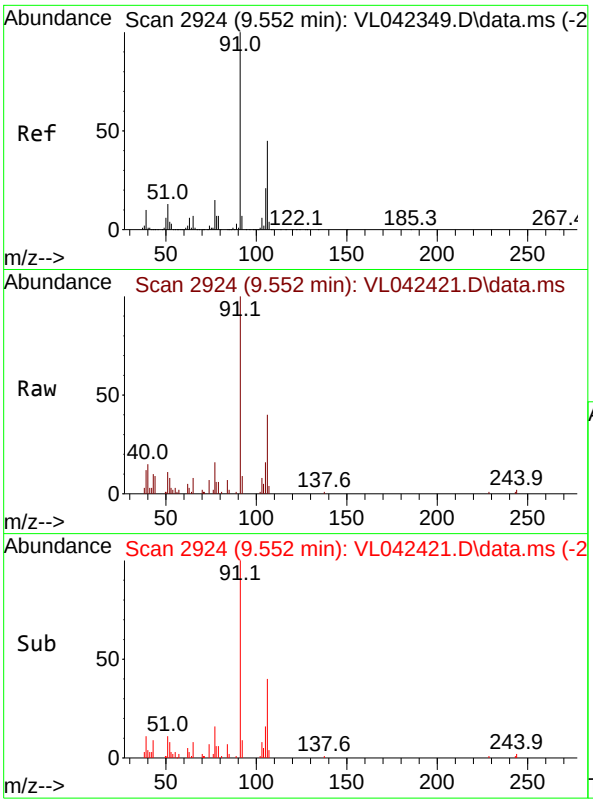


#58
Ethyl Benzene
Concen: 0.498 ppbv
RT: 9.345 min Scan# 2860
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 33666

Ion	Ratio	Lower	Upper
91	100		
106	30.7	23.0	34.4



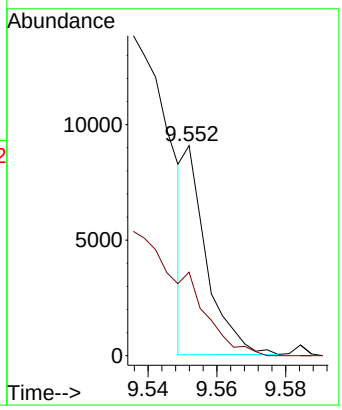


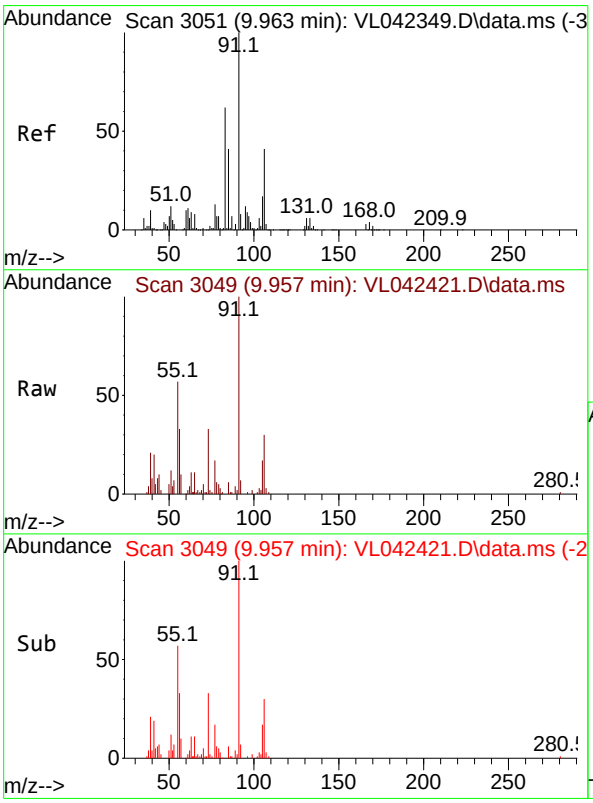
#59
m/p-Xylene
Concen: 0.075 ppbv
RT: 9.552 min Scan# 2
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 91 Resp: 4106

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

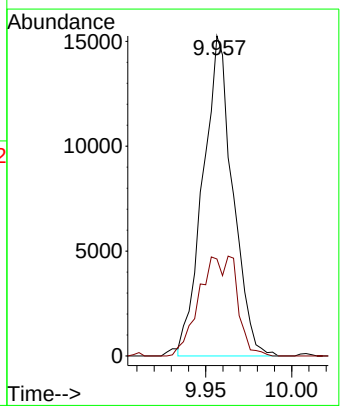


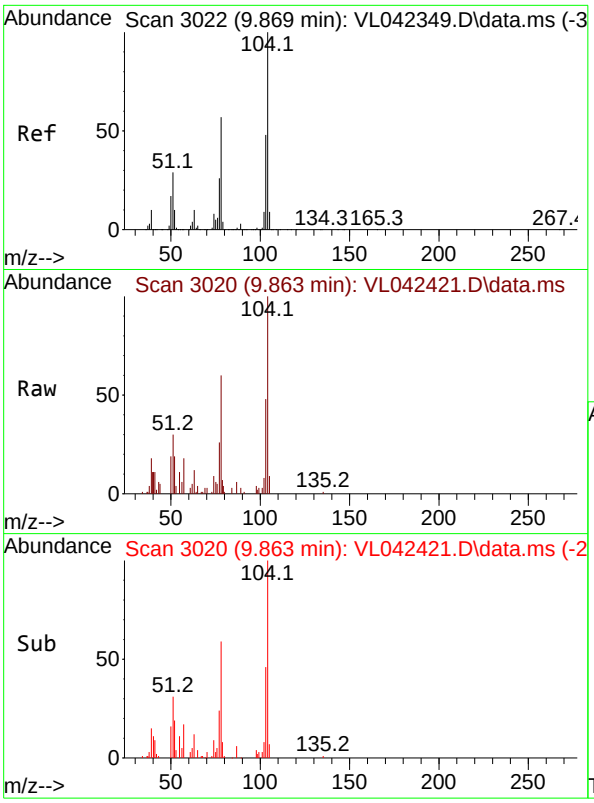


#60
o-Xylene
Concen: 0.336 ppbv
RT: 9.957 min Scan# 3049
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 18390

Ion	Ratio	Lower	Upper
91	100		
106	40.3	21.1	63.4



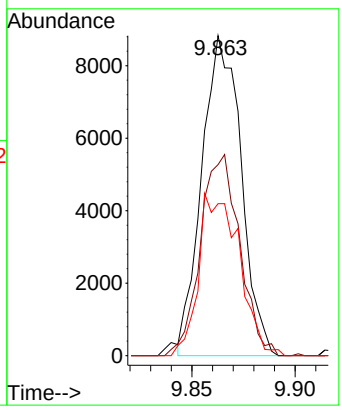


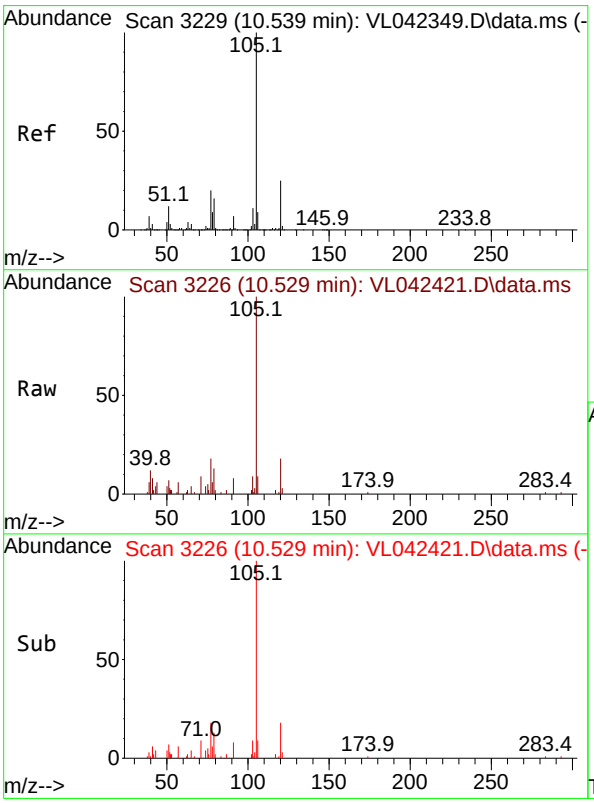
#61
Styrene
Concen: 0.446 ppbv
RT: 9.863 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:104 Resp: 11677

Ion	Ratio	Lower	Upper
104	100		
78	62.9	44.6	66.8
103	52.1	37.4	56.0

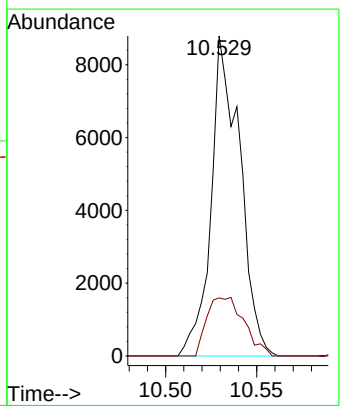


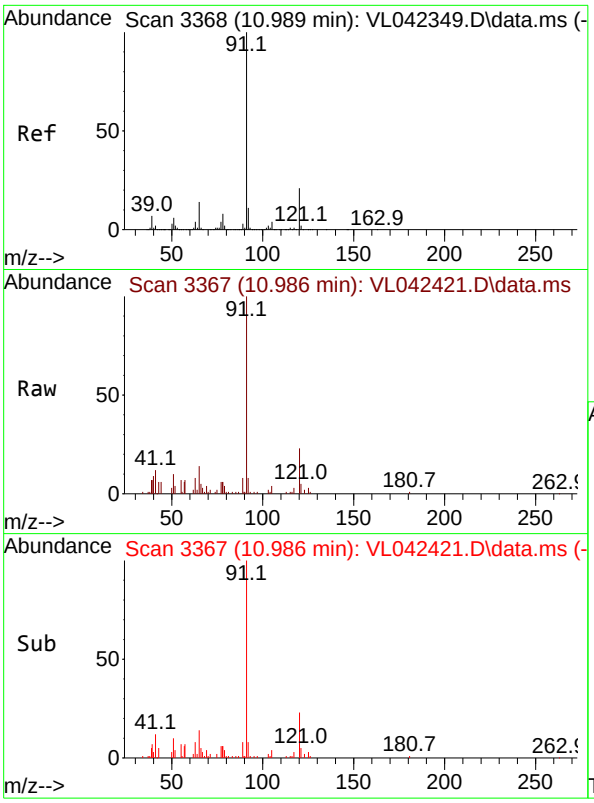


#62
Isopropylbenzene
Concen: 0.120 ppbv
RT: 10.529 min Scan# 3226
Delta R.T. -0.009 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 9651

Ion	Ratio	Lower	Upper
105	100		
120	23.7	19.8	29.8



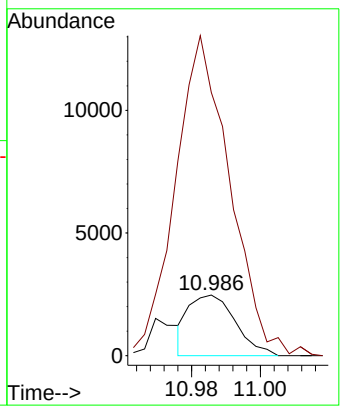


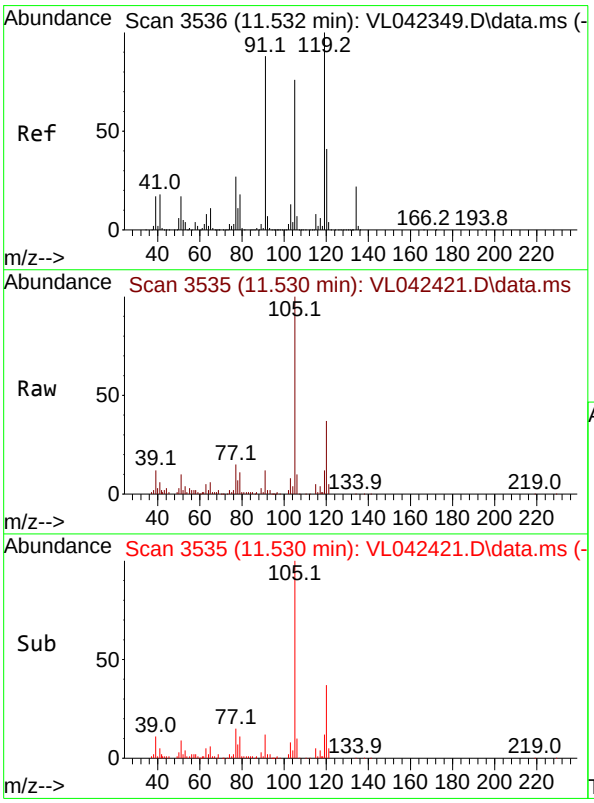
#64
n-propylbenzene
Concen: 0.115 ppbv
RT: 10.986 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:120 Resp: 2331

Ion	Ratio	Lower	Upper
120	100		
91	623.9	392.4	588.6#

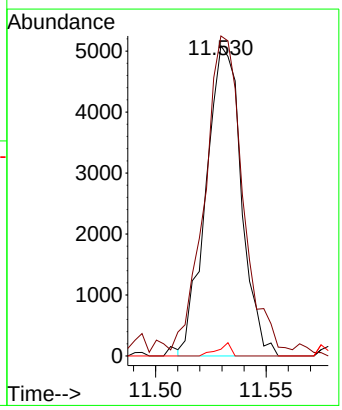


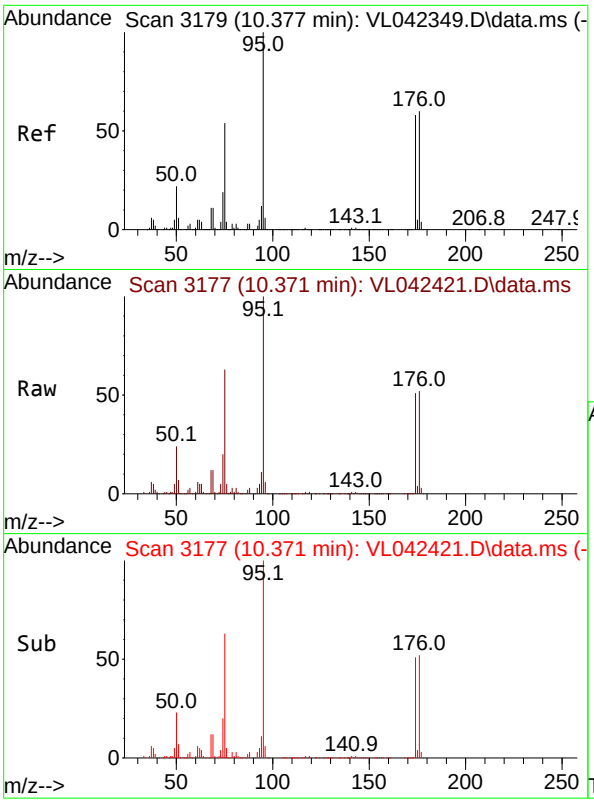


#65
tert-Butylbenzene
Concen: 0.076 ppbv
RT: 11.530 min Scan# 3535
Delta R.T. -0.003 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:119 Resp: 5655

Ion	Ratio	Lower	Upper
119	100		
91	119.4	74.6	111.8#
134	1.6	18.8	28.2#



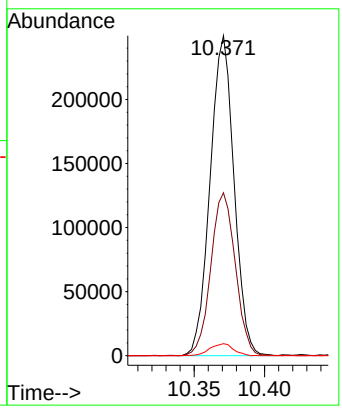


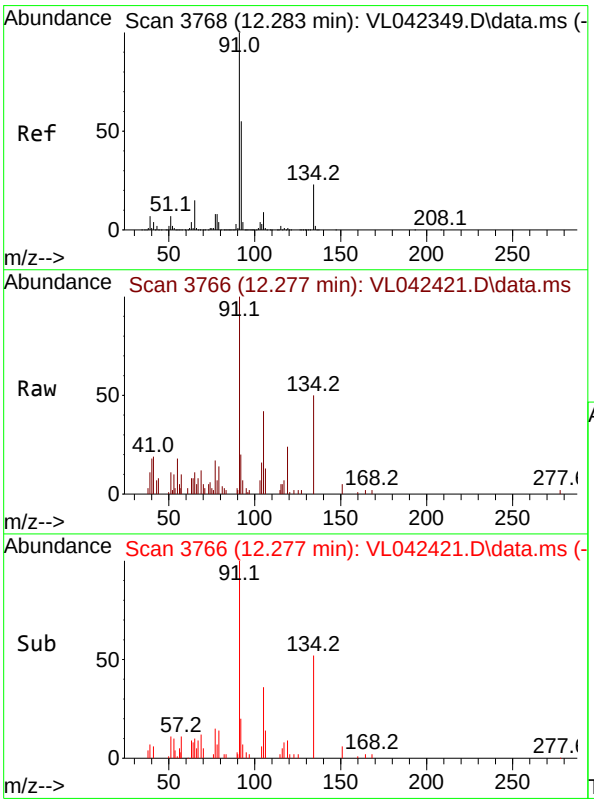
#68
1-Bromo-4-Fluorobenzene
Concen: 10.536 ppbv
RT: 10.371 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion: 95 Resp: 295244

Ion	Ratio	Lower	Upper
95	100		
174	52.1	48.5	72.7
175	3.7	3.7	5.5

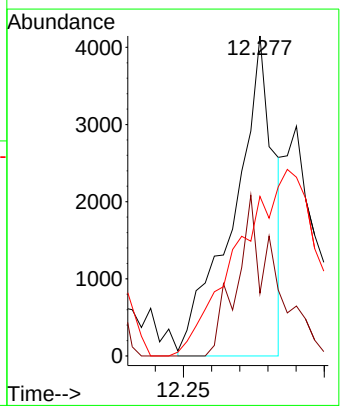


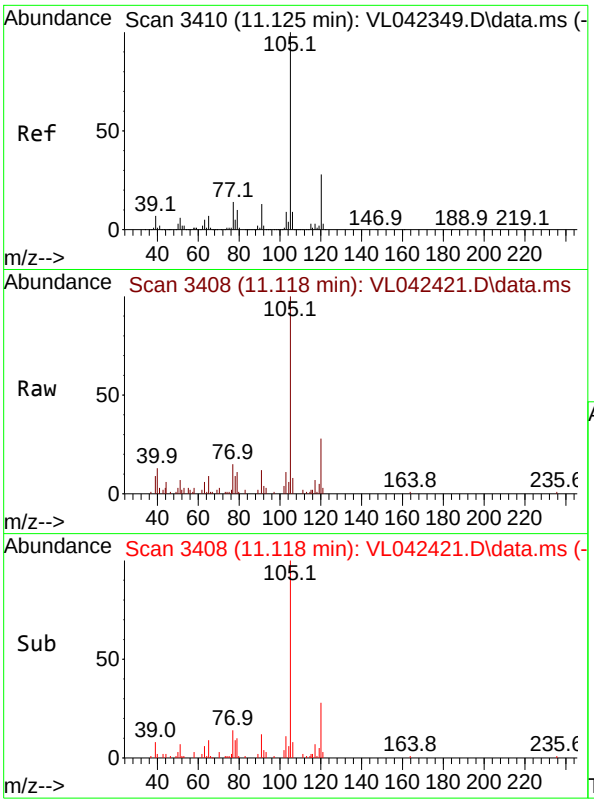


#70
n-Butylbenzene
Concen: 0.044 ppbv
RT: 12.277 min Scan# 3766
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion: 91 Resp: 4101

Ion	Ratio	Lower	Upper
91	100		
92	47.7	44.2	66.4
134	0.0	18.2	27.4#



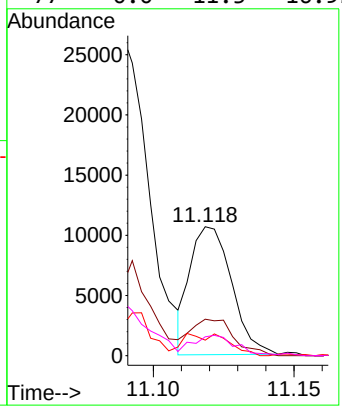


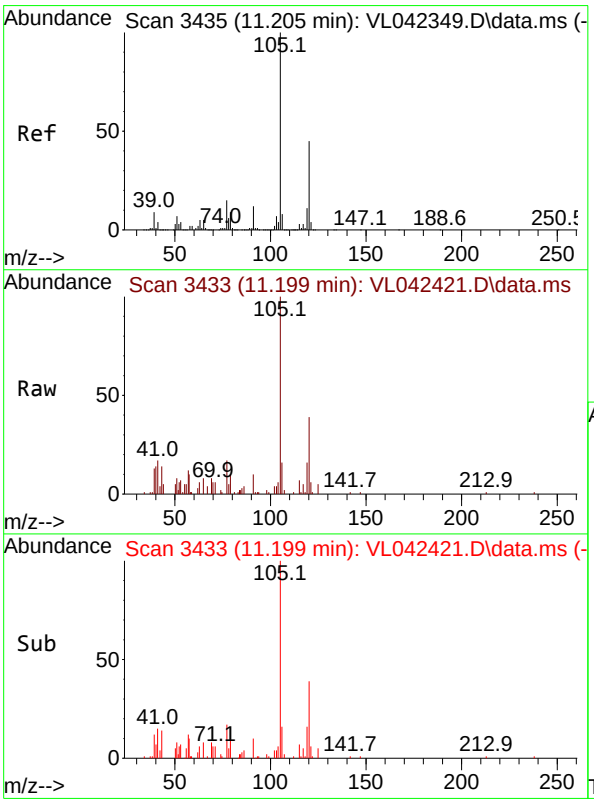
#72
4-Ethyltoluene
Concen: 0.163 ppbv
RT: 11.118 min Scan# 34
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:105 Resp: 10909

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

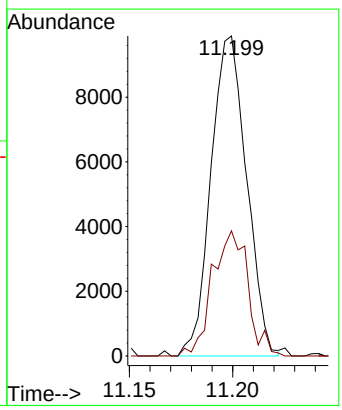


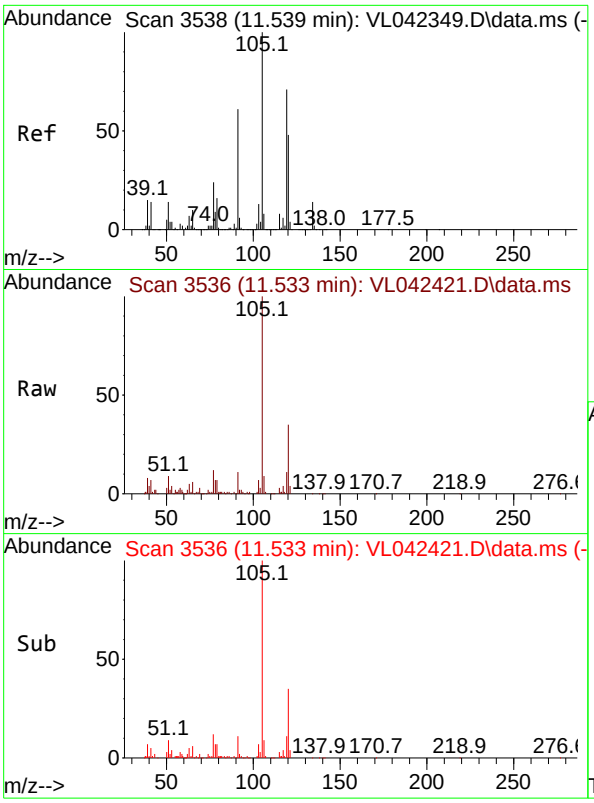


#73
1,3,5-Trimethylbenzene
Concen: 0.200 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:105 Resp: 11852

Ion	Ratio	Lower	Upper
105	100		
120	39.1	35.6	53.4



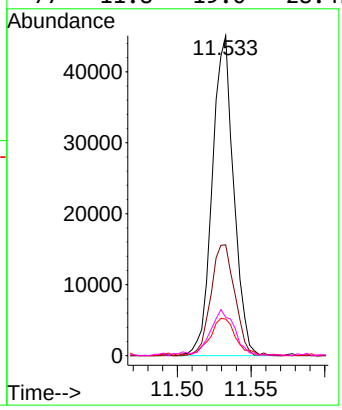


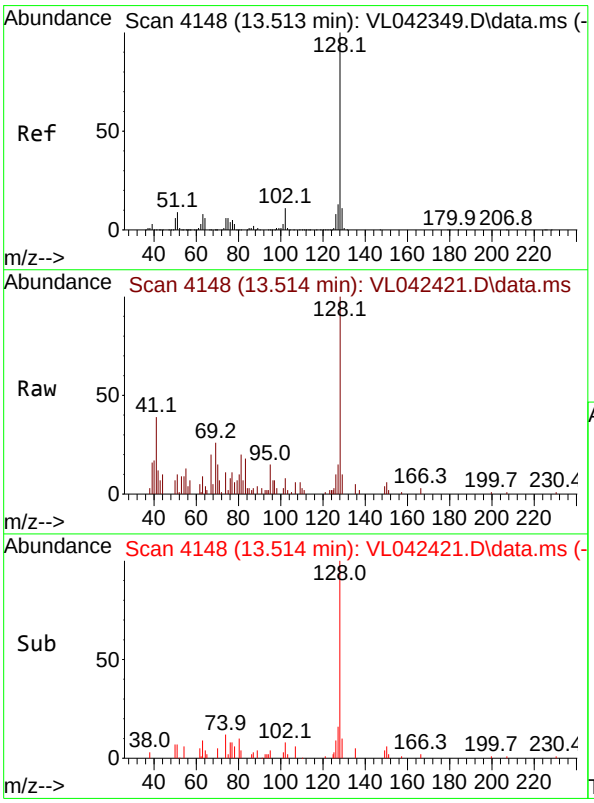
#74
1,2,4-Trimethylbenzene
Concen: 0.657 ppbv
RT: 11.533 min Scan# 3
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:105 Resp: 45414

Ion	Ratio	Lower	Upper
105	100		
120	34.6	38.1	57.1#
91	11.1	48.8	73.2#
77	11.8	19.0	28.4#

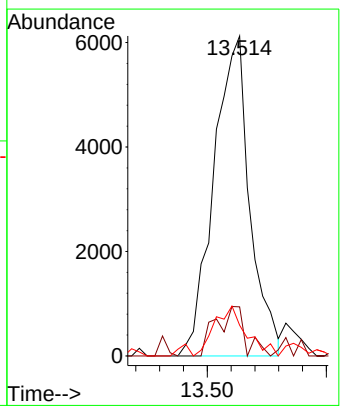


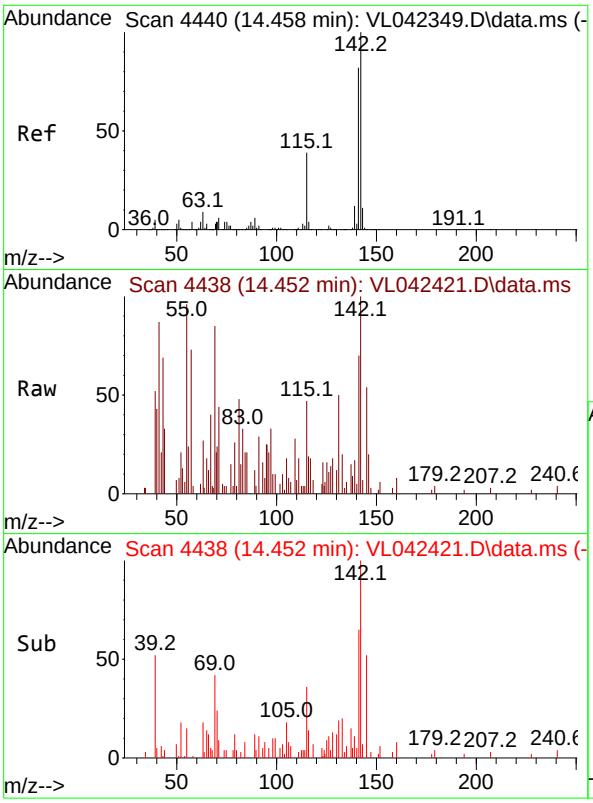


#79
Naphthalene
Concen: 0.078 ppbv
RT: 13.514 min Scan# 4148
Delta R.T. 0.000 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Tgt Ion:128 Resp: 6445

Ion	Ratio	Lower	Upper
128	100		
127	15.3	10.6	15.8
129	9.6	8.6	12.8



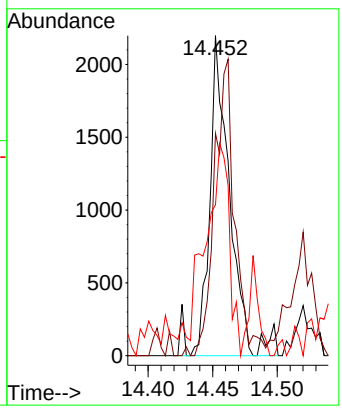


#80
Naphthalene,2-methyl-
Concen: 0.051 ppbv
RT: 14.452 min Scan# 44
Delta R.T. -0.006 min
Lab File: VL042421.D
Acq: 28 Apr 2025 12:17

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-6-3242025

Tgt Ion:142 Resp: 2419

Ion	Ratio	Lower	Upper
142	100		
141	91.8	66.8	100.2
115	98.7	33.4	50.2#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Time: Apr 29 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.780	49	143445	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.949	114	401346	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.872	117	346372	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.367	95	304530	10.699	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 107.000%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	10522	0.415	ppbv		95
3) Chlorodifluoromethane	1.473	51	12210	0.506	ppbv	#	85
4) Chloromethane	1.528	50	10118	1.009	ppbv	#	85
6) Bromomethane	1.657	94	391	0.083	ppbv	#	65
7) Chloroethane	1.699	64	218	0.055	ppbv	#	1
9) Propene	1.881	41	34854	3.171	ppbv		89
10) Heptane	4.968	43	10743	0.348	ppbv	#	36
11) Trichlorofluoromethane	1.874	101	5172	0.215	ppbv		93
12) 1,1,2-Trichlorotrifluo...	2.130	101	1404	0.071	ppbv		93
13) Ethanol	1.719	45	834583	477.751	ppbv		78
15) Acetone	1.832	43	273996	11.668	ppbv		98
16) 1,3-Butadiene	1.596	39	3748	0.334	ppbv	#	41
17) tert-Butyl alcohol	1.881	59	14338	0.493	ppbv		94
19) Isopropyl Alcohol	1.881	45	382160	29.296	ppbv	#	34
20) Methylene Chloride	2.059	84	5939	0.646	ppbv	#	95
21) Allyl Chloride	2.072	41	1537	0.095	ppbv	#	29
23) Vinyl Acetate	2.454	43	28036	2.950	ppbv	#	87
25) Ethyl Acetate	2.819	43	61724	1.066	ppbv	#	86
26) Hexane	2.816	57	74514	3.180	ppbv	#	37
27) Carbon Disulfide	2.143	76	1174	0.047	ppbv	#	1
29) Chloroform	2.839	83	6046	0.183	ppbv	#	82
30) Cyclohexane	3.849	84	9447	0.499	ppbv		90
34) 2-Butanone	2.554	43	25286	0.797	ppbv		99
35) Carbon Tetrachloride	3.751	117	2834	0.078	ppbv	#	70
36) Benzene	3.645	78	29627	0.684	ppbv	#	91
37) 1,2-Dichloroethane	3.211	62	1391	0.054	ppbv	#	88
39) 1,2-Dichloropropane	3.949	63	109010	6.758	ppbv	#	23
40) 1,4-Dioxane	4.606	88	398	0.045	ppbv	#	21
41) Tetrahydrofuran	3.052	42	900	0.049	ppbv	#	35
44) 2,2,4-Trimethylpentane	4.632	57	38897	0.520	ppbv	#	12
53) Toluene	6.923	91	350451	6.746	ppbv		99
58) Ethyl Benzene	9.348	91	39720	0.579	ppbv		94
59) m/p-Xylene	9.522	91	108081	1.955	ppbv		97
60) o-Xylene	9.956	91	38480	0.691	ppbv		95
61) Styrene	9.862	104	6199	0.233	ppbv		99
62) Isopropylbenzene	10.532	105	4427	0.054	ppbv		91
64) n-propylbenzene	10.982	120	2864	0.139	ppbv	#	46
65) tert-Butylbenzene	11.875	119	2272	0.030	ppbv		90
69) p-Isopropyltoluene	11.921	119	17184	0.189	ppbv		98
71) 2-Chlorotoluene	10.895	91	20426	0.319	ppbv		94
72) 4-Ethyltoluene	11.118	105	16614	0.244	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.199	105	16186	0.269	ppbv		92
74) 1,2,4-Trimethylbenzene	11.529	105	53644	0.764	ppbv	#	61

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Time: Apr 29 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

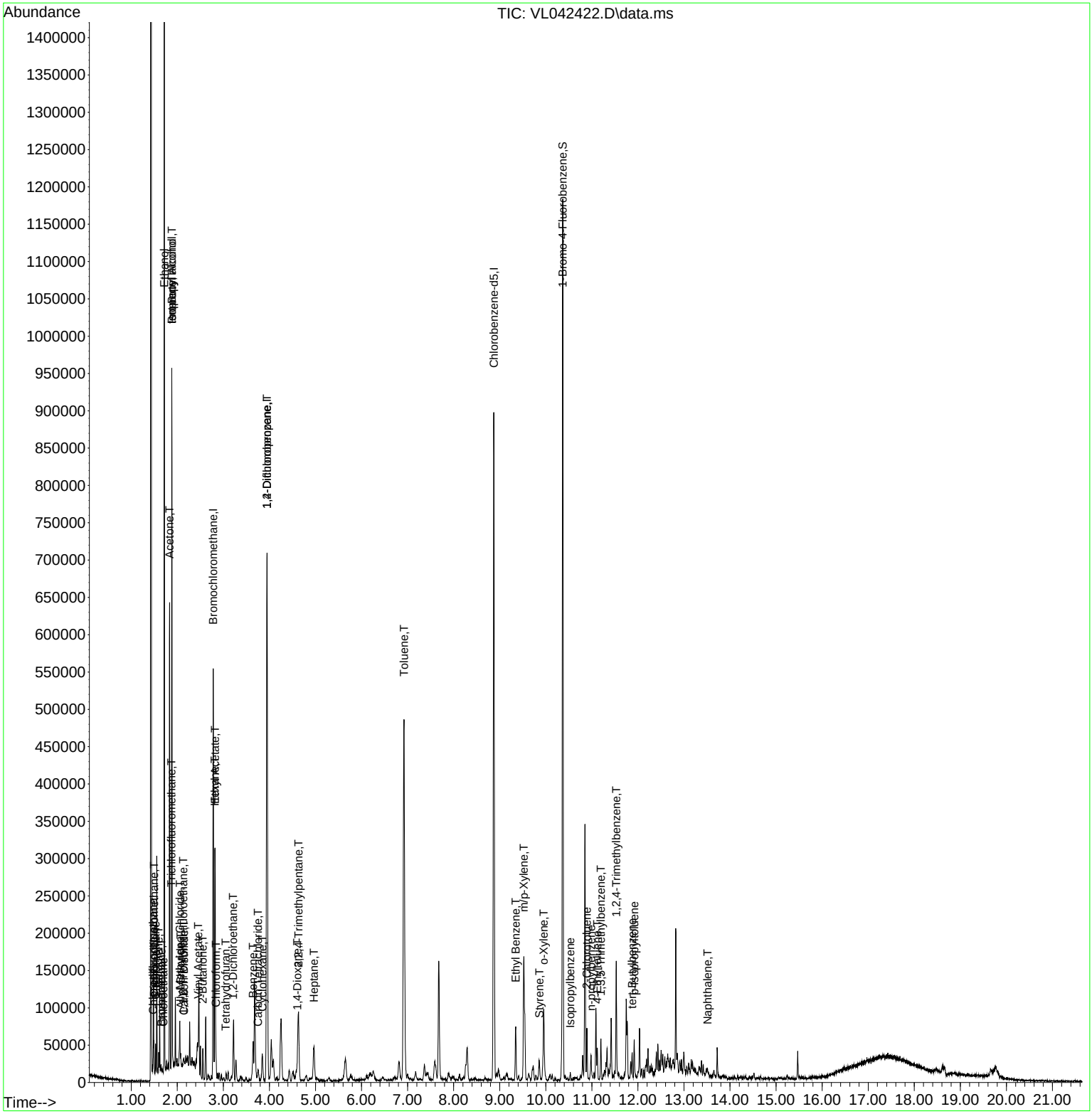
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
79) Naphthalene	13.510	128	3307	0.039	ppbv #	88

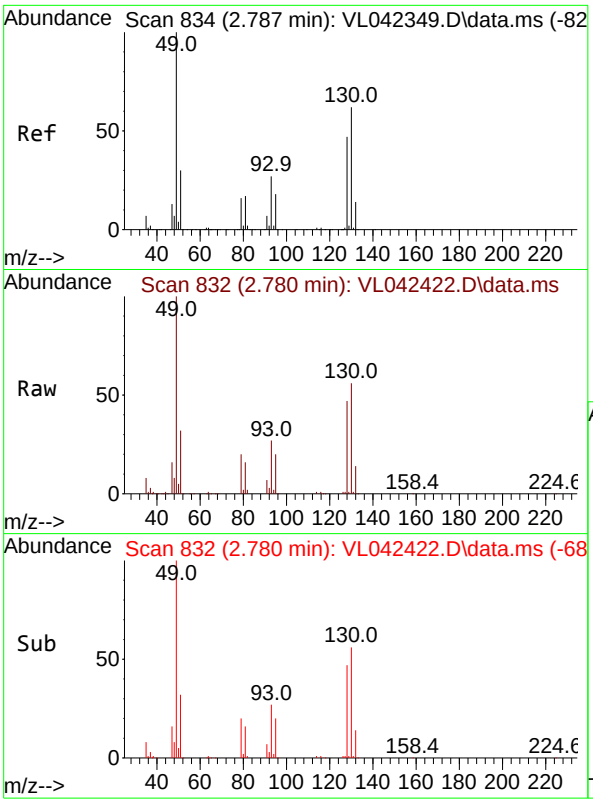
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042422.D
Acq On : 28 Apr 2025 12:51
Operator : SY/MD
Sample : Q1665-16
Misc : 400mL/MSVOA_L
ALS Vial : 9 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Quant Time: Apr 29 01:35:45 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



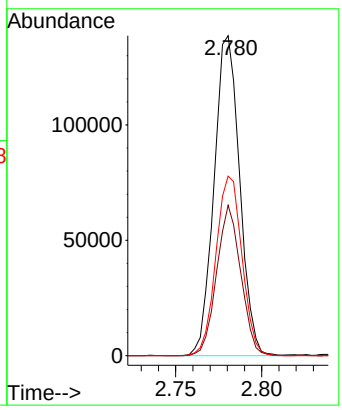


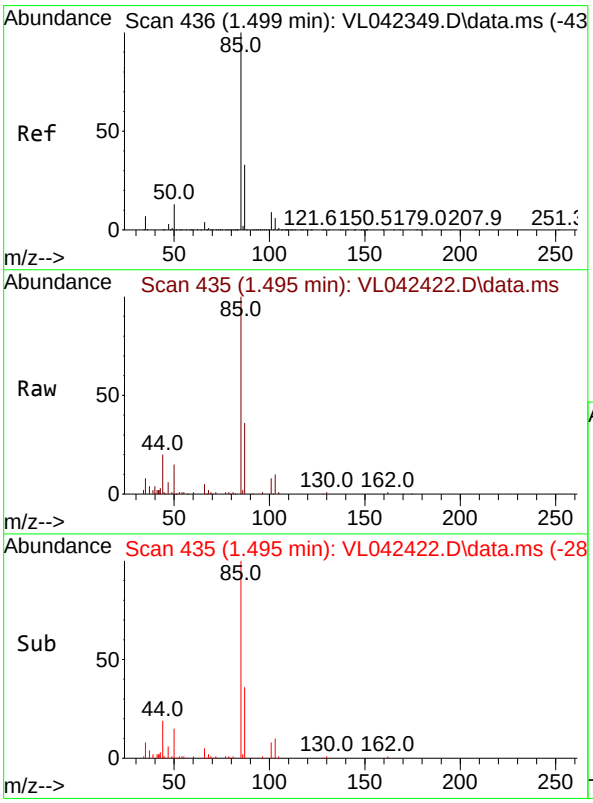
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 49 Resp: 143445

Ion	Ratio	Lower	Upper
49	100		
128	44.3	22.8	68.4
130	57.0	29.3	88.0

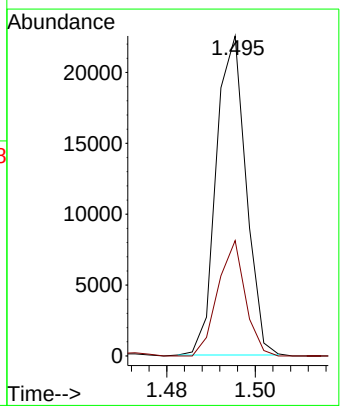


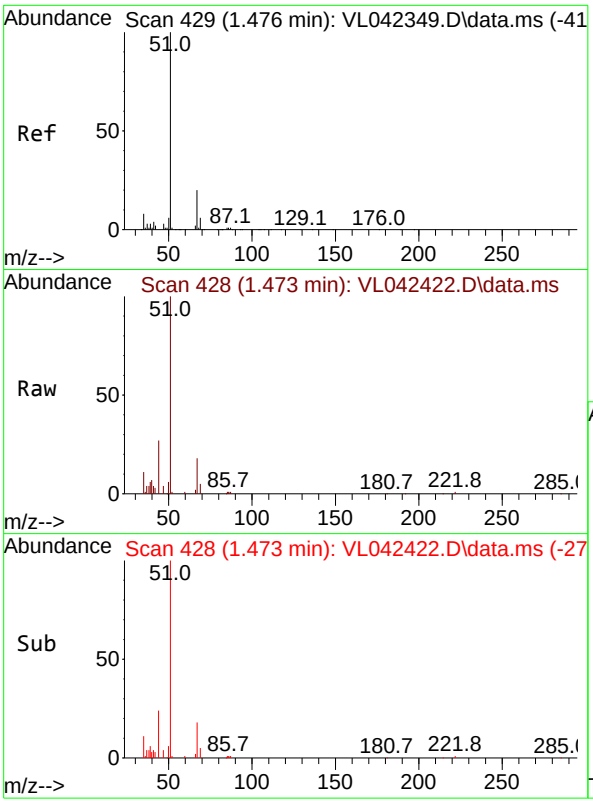


#2
Dichlorodifluoromethane
Concen: 0.415 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 85 Resp: 10522

Ion	Ratio	Lower	Upper
85	100		
87	36.2	26.6	39.8



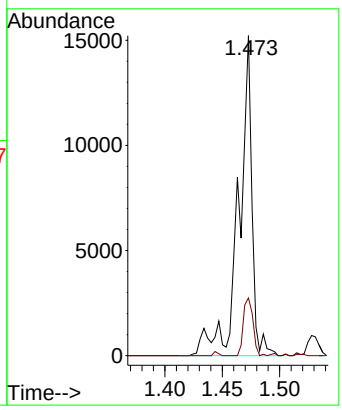


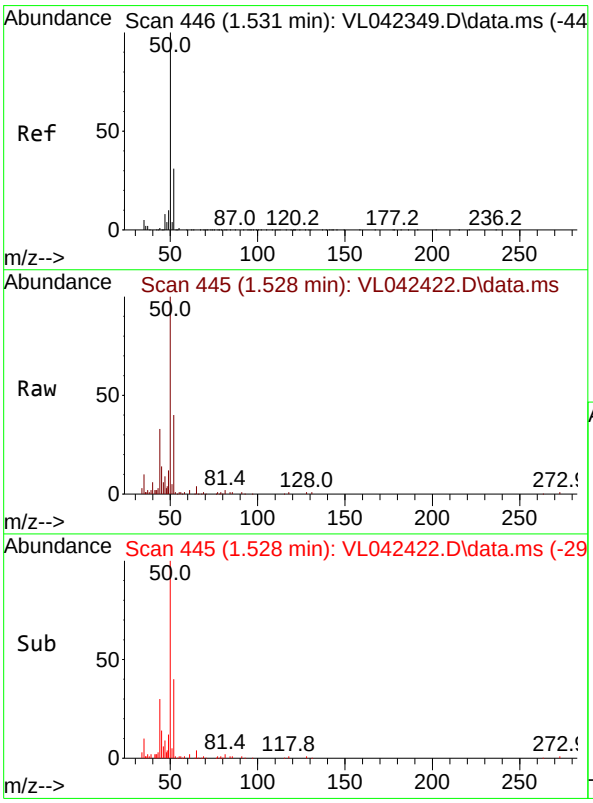
#3
Chlorodifluoromethane
Concen: 0.506 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 51 Resp: 12210

Ion	Ratio	Lower	Upper
51	100		
67	13.3	16.2	24.4#

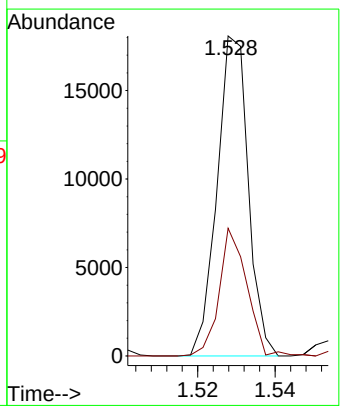


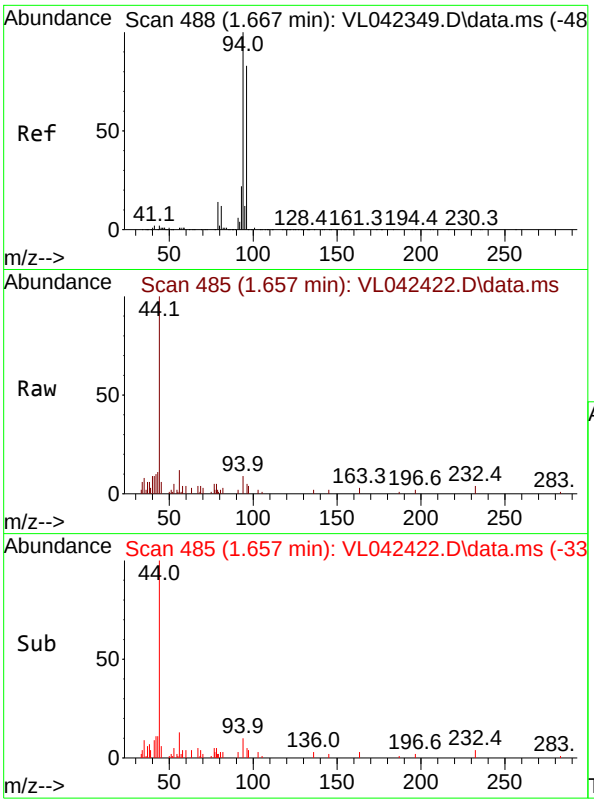


#4
Chloromethane
Concen: 1.009 ppbv
RT: 1.528 min Scan# 445
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 50 Resp: 10118

Ion	Ratio	Lower	Upper
50	100		
52	39.3	24.7	37.1#



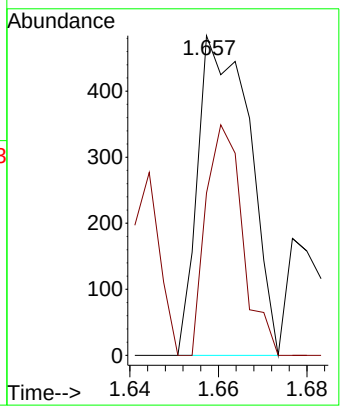


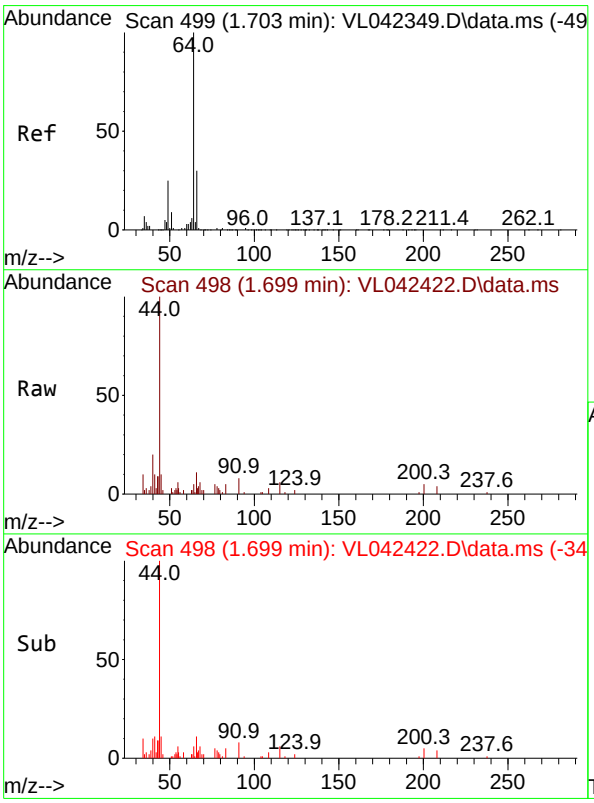
#6
Bromomethane
Concen: 0.083 ppbv
RT: 1.657 min Scan# 4
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 94 Resp: 391

Ion	Ratio	Lower	Upper
94	100		
96	50.8	66.2	99.2#

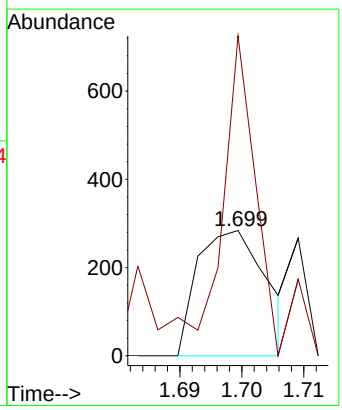


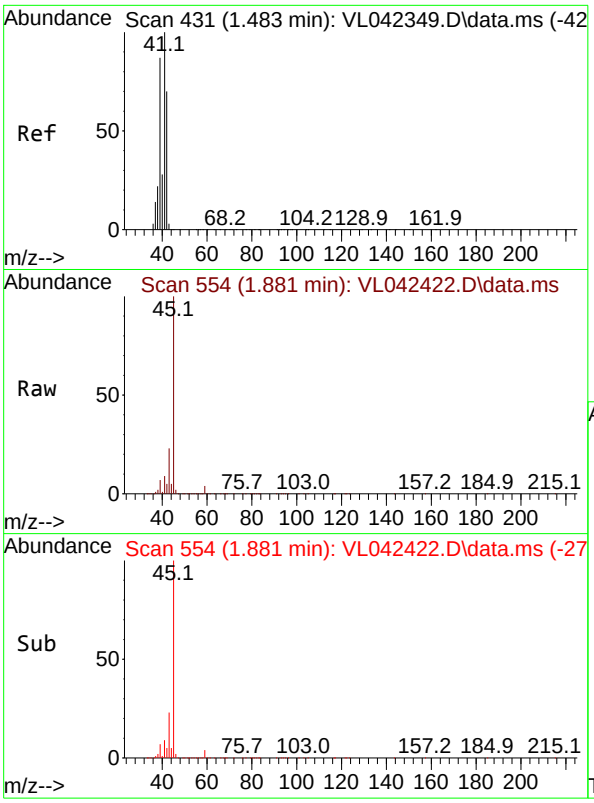


#7
Chloroethane
Concen: 0.055 ppbv
RT: 1.699 min Scan# 498
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 64 Resp: 218

Ion	Ratio	Lower	Upper
64	100		
66	212.0	24.6	37.0#



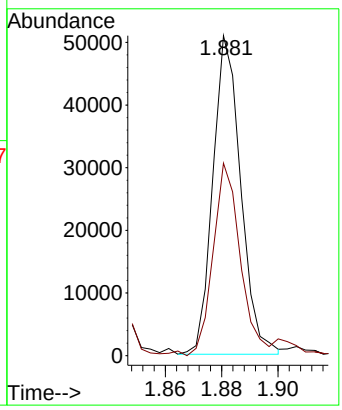


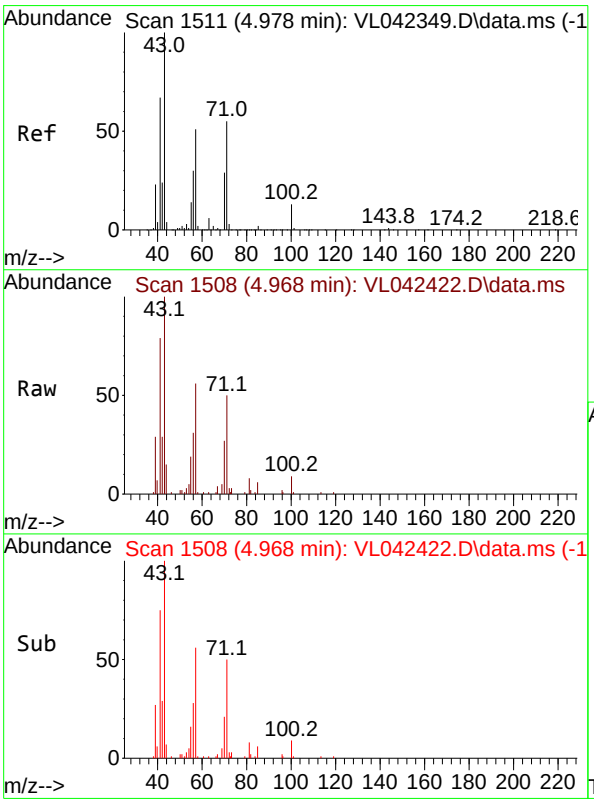
#9
Propene
Concen: 3.171 ppbv
RT: 1.881 min Scan# 5
Delta R.T. 0.398 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 41 Resp: 34854

Ion	Ratio	Lower	Upper
41	100		
42	61.6	56.2	84.4

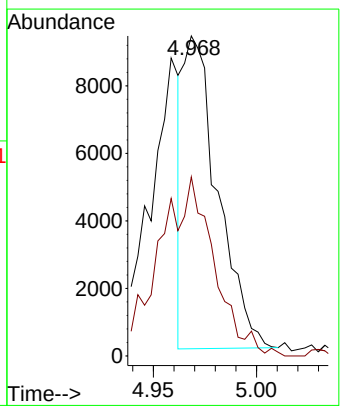


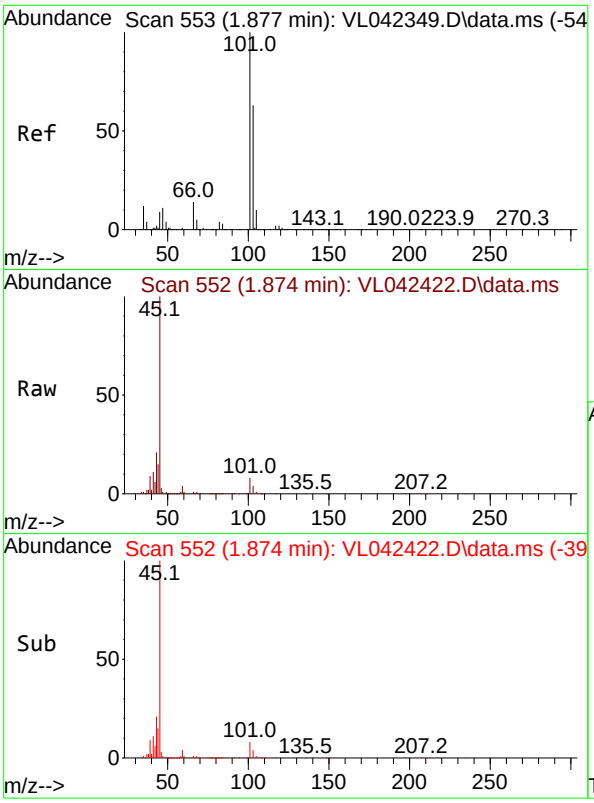


#10
Heptane
Concen: 0.348 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 10743

Ion	Ratio	Lower	Upper
43	100		
57	93.6	39.9	59.9#



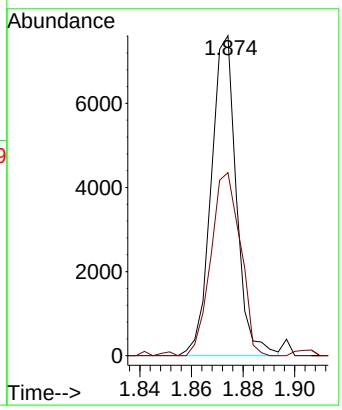


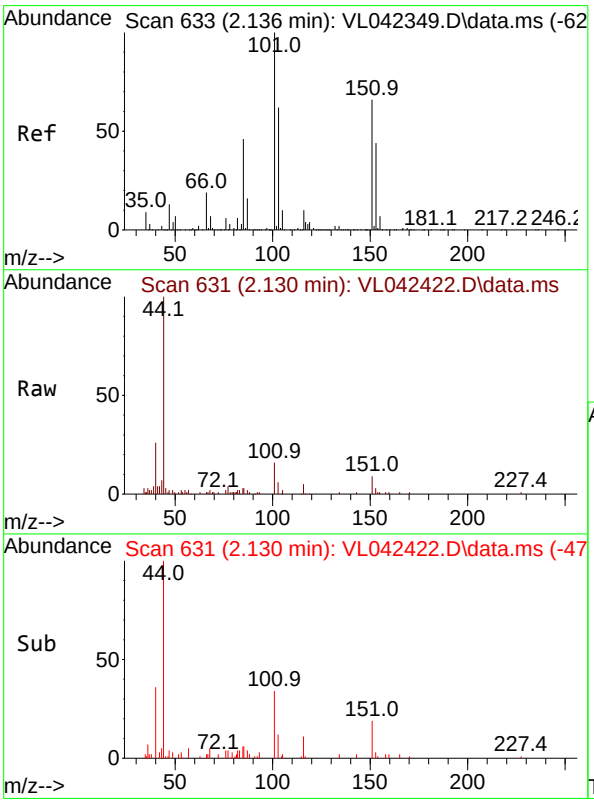
#11
Trichlorofluoromethane
Concen: 0.215 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:101 Resp: 5172

Ion	Ratio	Lower	Upper
101	100		
103	57.2	50.1	75.1

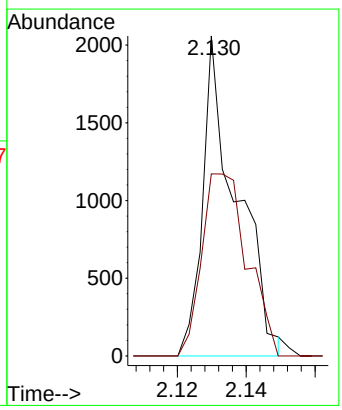


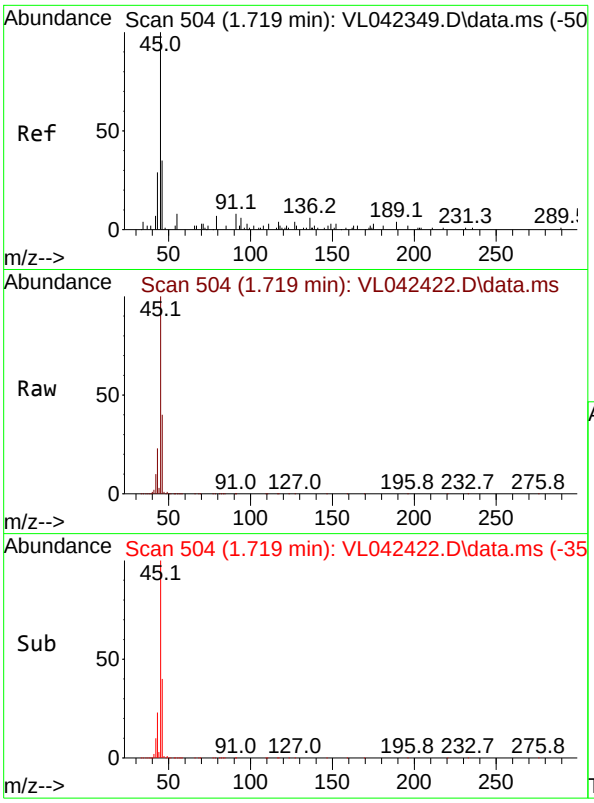


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.071 ppbv
RT: 2.130 min Scan# 631
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:101 Resp: 1404

Ion	Ratio	Lower	Upper
101	100		
151	76.8	57.0	85.6



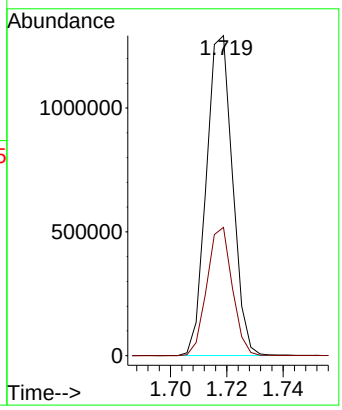


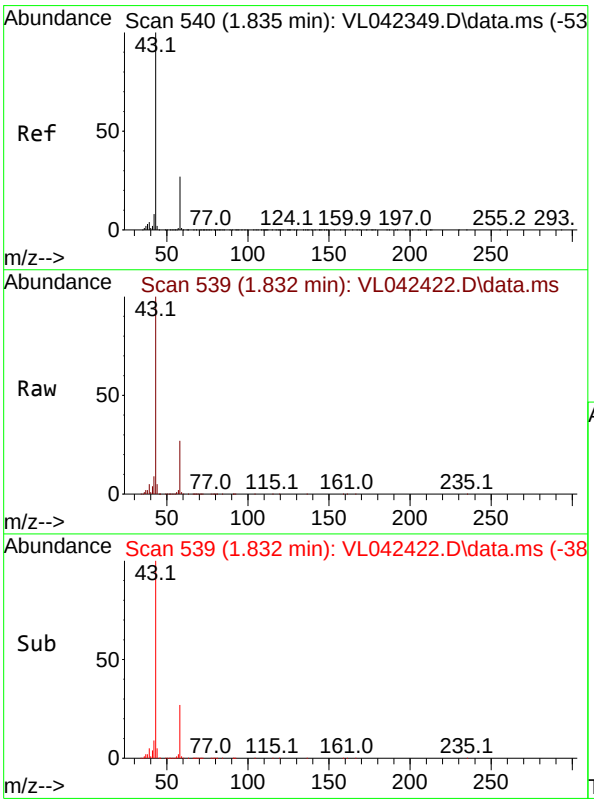
#13
Ethanol
Concen: 477.751 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 45 Resp: 834583

Ion	Ratio	Lower	Upper
45	100		
46	39.0	21.9	87.7

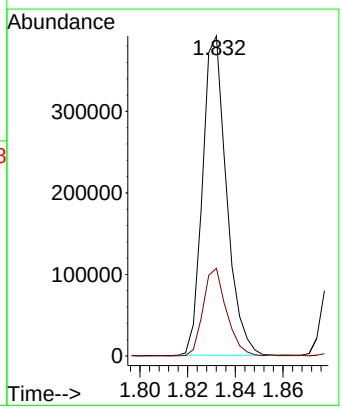


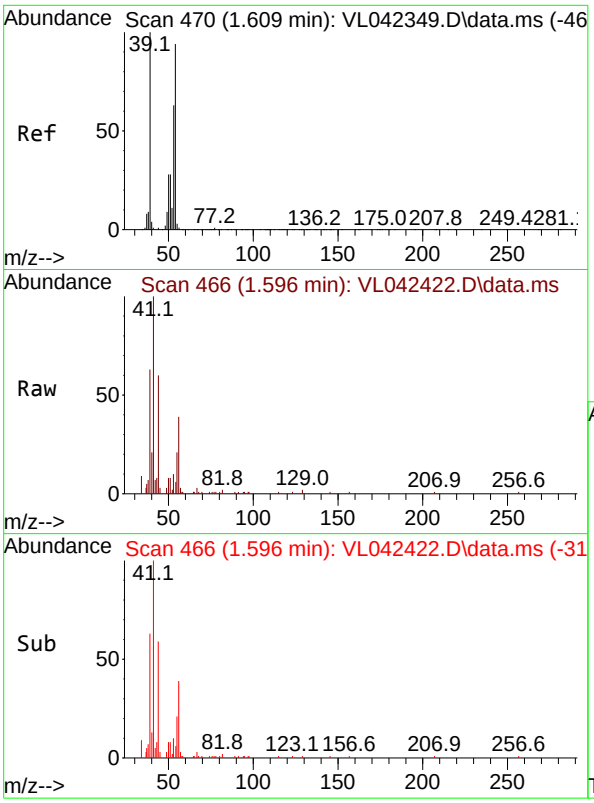


#15
Acetone
Concen: 11.668 ppbv
RT: 1.832 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 273996

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.4	33.6



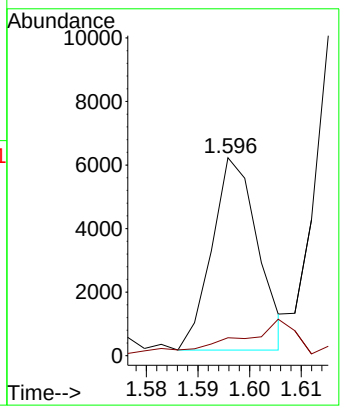


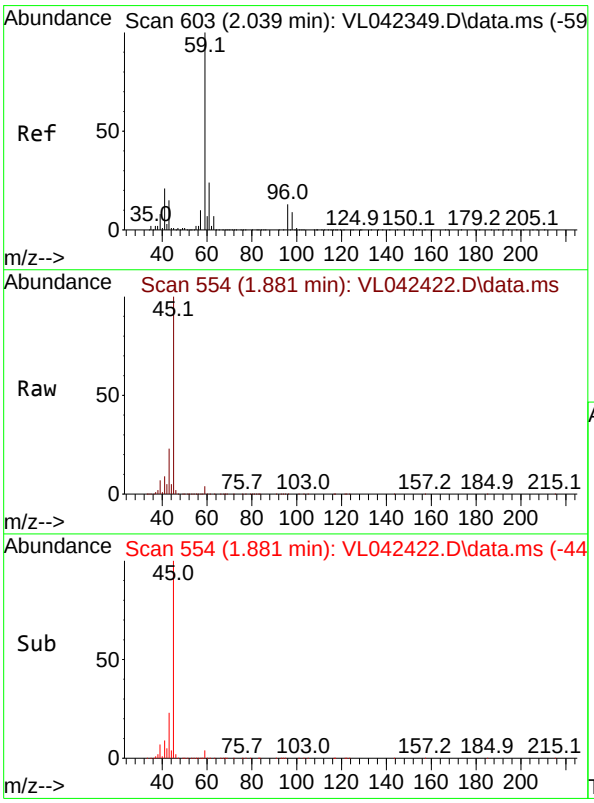
#16
1,3-Butadiene
Concen: 0.334 ppbv
RT: 1.596 min Scan# 4
Delta R.T. -0.013 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 39 Resp: 3748

Ion	Ratio	Lower	Upper
39	100		
54	28.5	64.9	97.3#

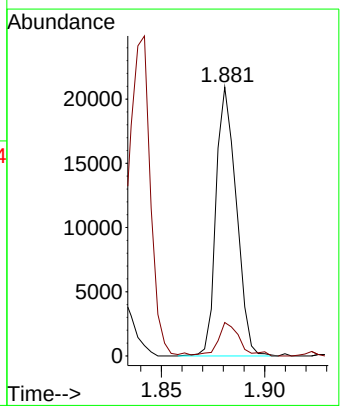


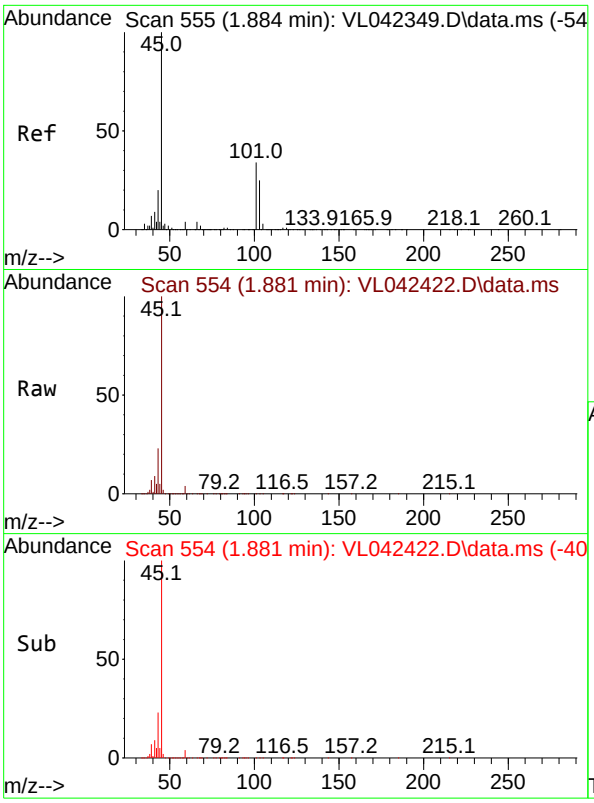


#17
tert-Butyl alcohol
Concen: 0.493 ppbv
RT: 1.881 min Scan# 554
Delta R.T. -0.159 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 59 Resp: 14338

Ion	Ratio	Lower	Upper
59	100		
57	13.1	8.7	13.1



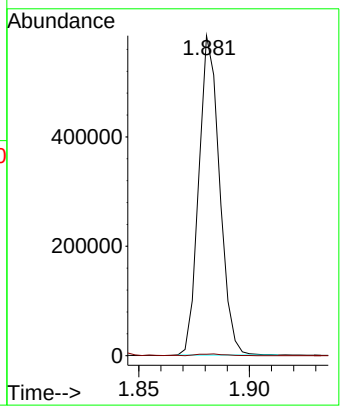


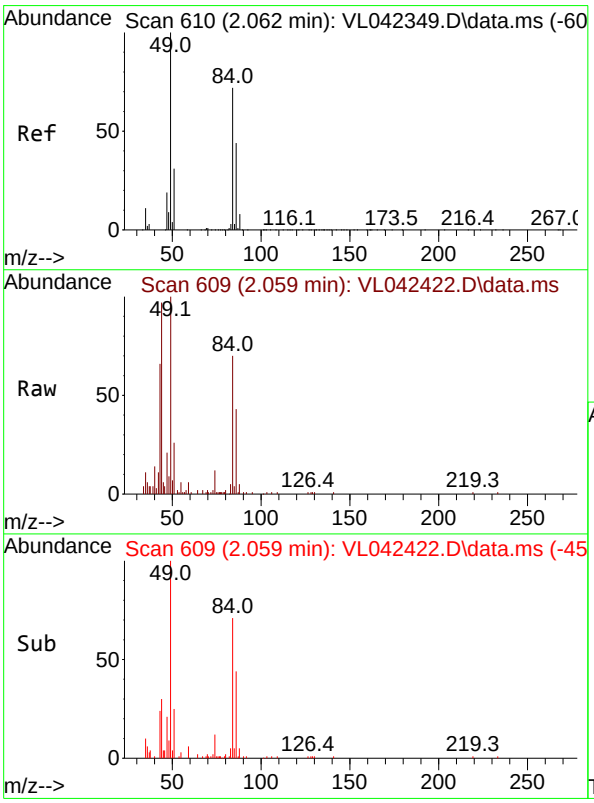
#19
Isopropyl Alcohol
Concen: 29.296 ppbv
RT: 1.881 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 45 Resp: 382160

Ion	Ratio	Lower	Upper
45	100		
58	0.8	34.5	51.7#

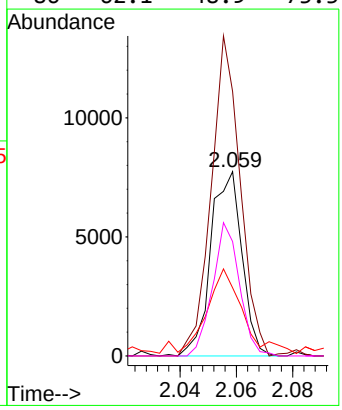


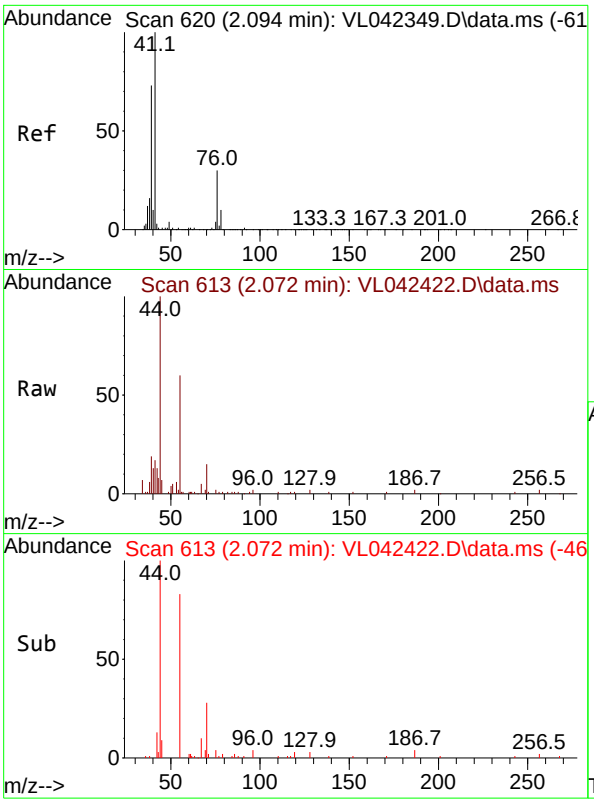


#20
Methylene Chloride
Concen: 0.646 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 84 Resp: 5939

Ion	Ratio	Lower	Upper
84	100		
49	143.4	111.6	167.4
51	35.0	35.1	52.7#
86	62.1	48.9	73.3



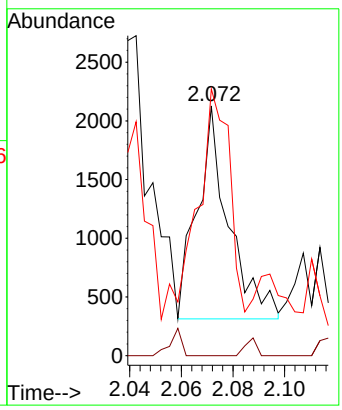


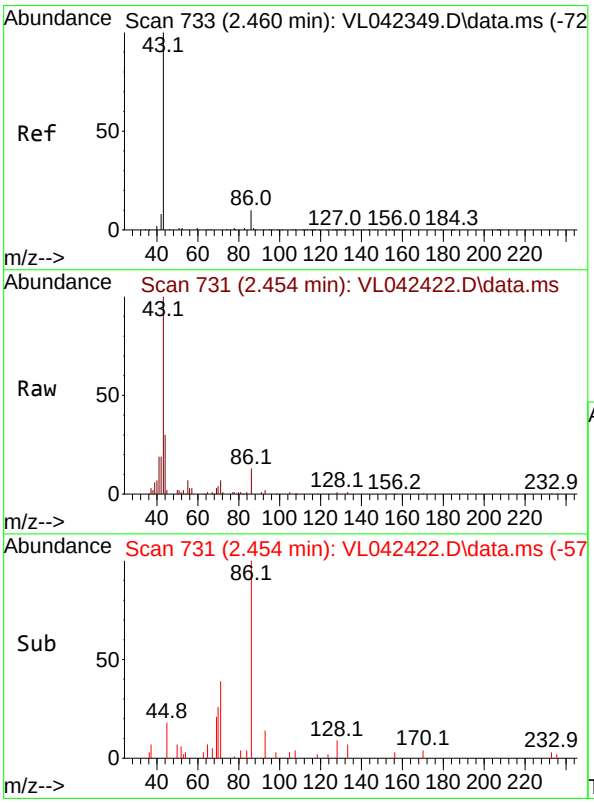
#21
Allyl Chloride
Concen: 0.095 ppbv
RT: 2.072 min Scan# 61
Delta R.T. -0.023 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 41 Resp: 1537

Ion	Ratio	Lower	Upper
41	100		
76	4.6	24.8	37.2#
39	144.6	60.6	90.8#

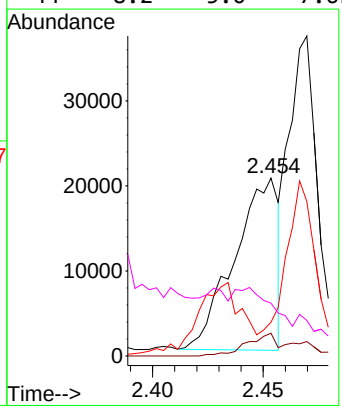


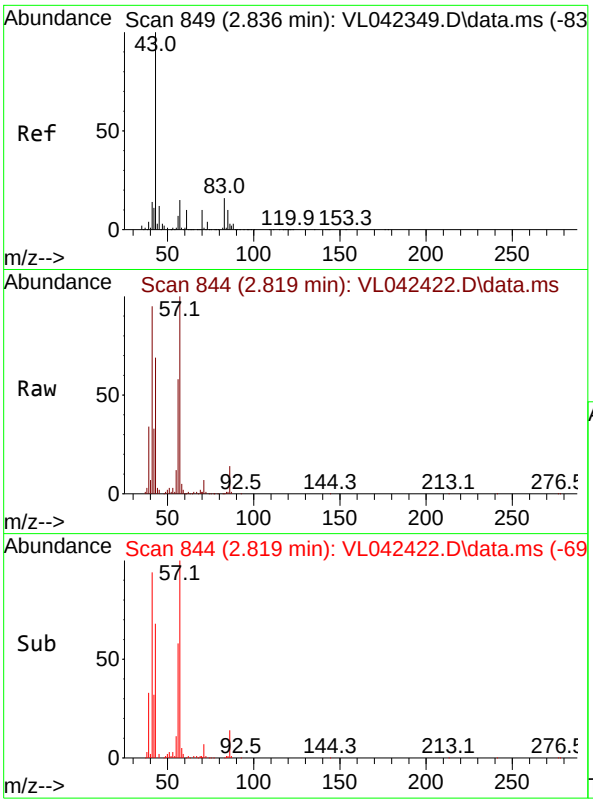


#23
Vinyl Acetate
Concen: 2.950 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 43 Resp: 28036

Ion	Ratio	Lower	Upper
43	100		
86	13.3	6.5	9.7#
42	15.9	7.8	11.8#
44	8.2	5.0	7.6#



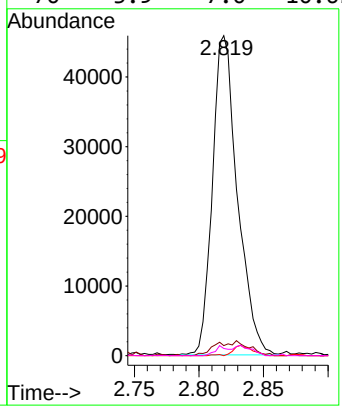


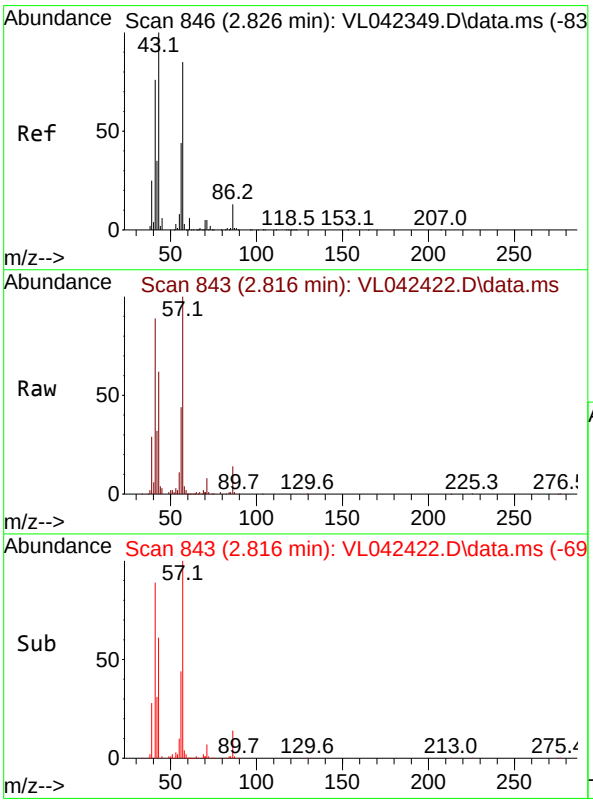
#25
Ethyl Acetate
Concen: 1.066 ppbv
RT: 2.819 min Scan# 84
Delta R.T. -0.016 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 43 Resp: 61724

Ion	Ratio	Lower	Upper
43	100		
45	6.3	8.3	12.5#
61	2.5	7.3	10.9#
70	3.9	7.0	10.6#

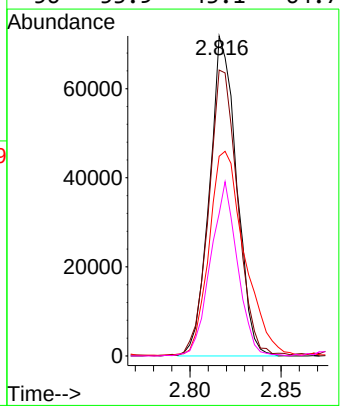


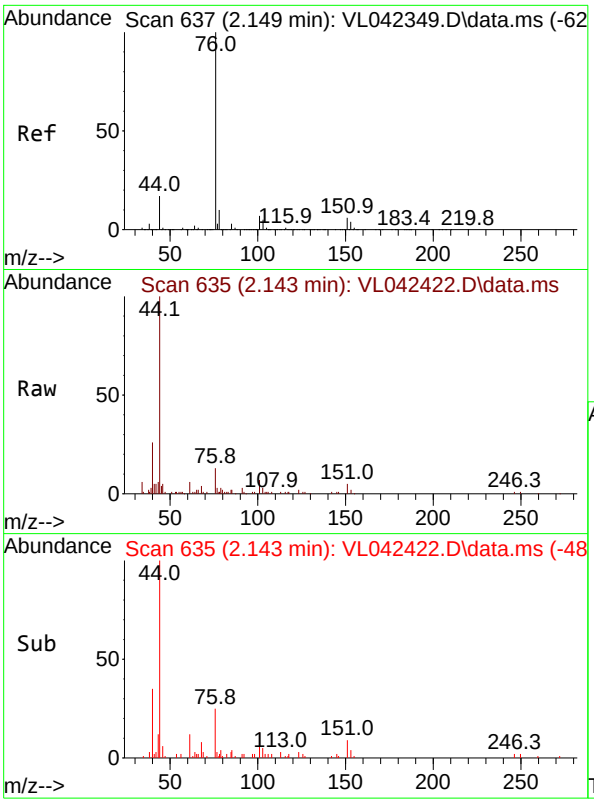


#26
Hexane
Concen: 3.180 ppbv
RT: 2.816 min Scan# 843
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 57 Resp: 74514

Ion	Ratio	Lower	Upper
57	100		
41	95.0	77.9	116.9
43	82.5	208.4	312.6#
56	53.9	43.1	64.7



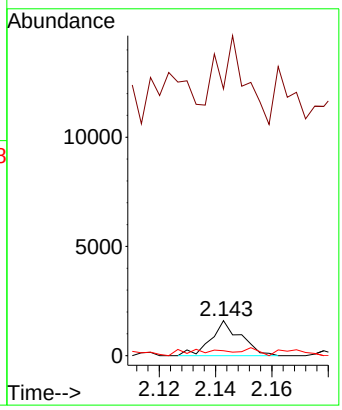


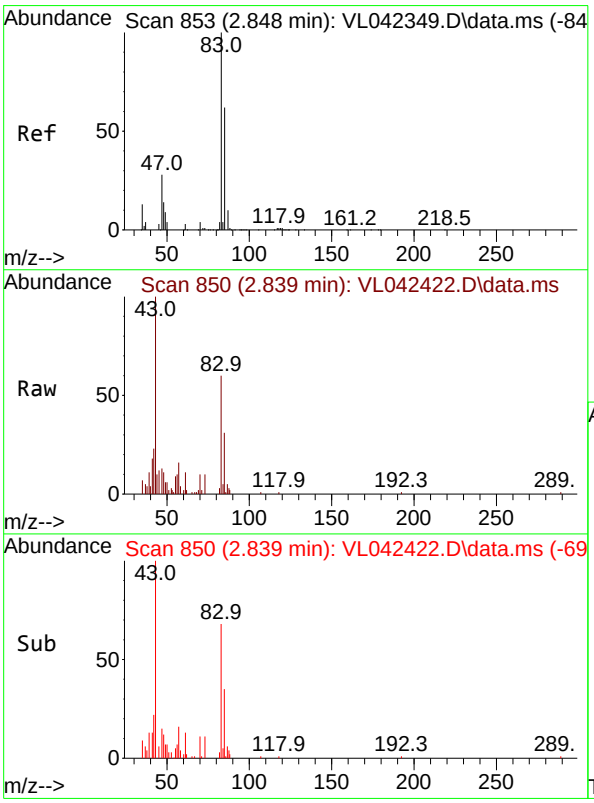
#27
Carbon Disulfide
Concen: 0.047 ppbv
RT: 2.143 min Scan# 6
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 76 Resp: 1174

Ion	Ratio	Lower	Upper
76	100		
44	1071.4	15.5	23.3#
78	36.2	9.3	13.9#

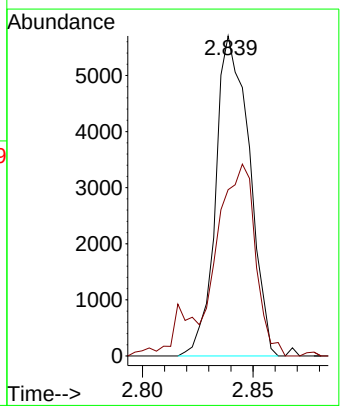


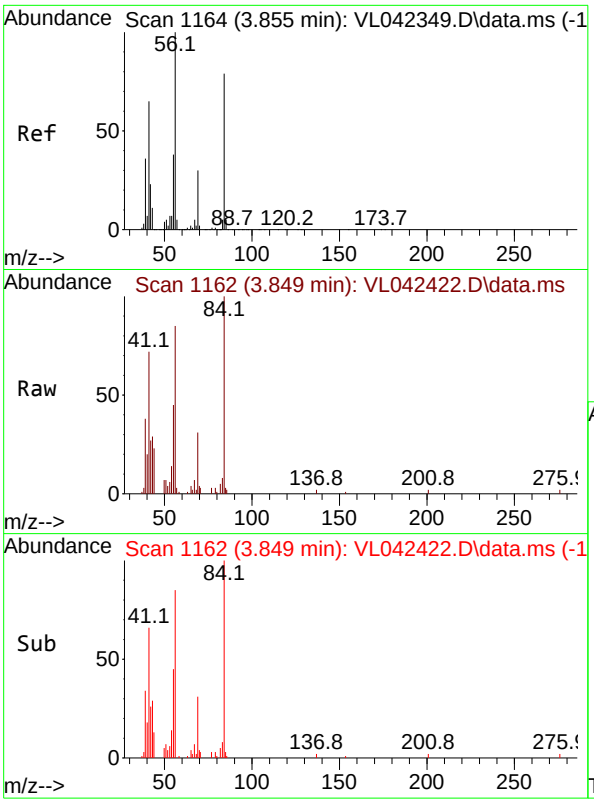


#29
Chloroform
Concen: 0.183 ppbv
RT: 2.839 min Scan# 850
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 83 Resp: 6046

Ion	Ratio	Lower	Upper
83	100		
85	49.0	50.0	75.0#



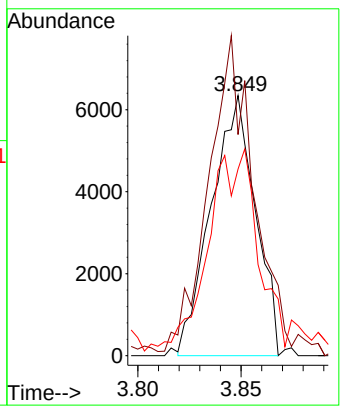


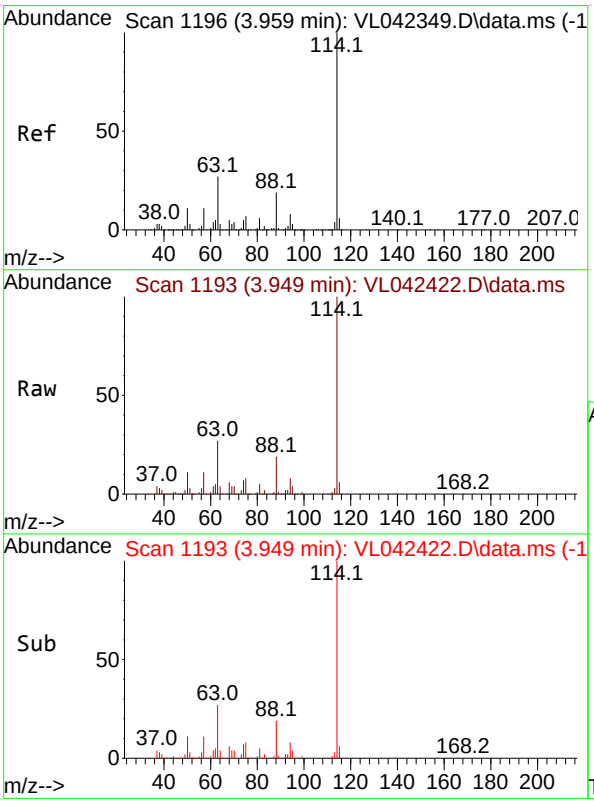
#30
Cyclohexane
Concen: 0.499 ppbv
RT: 3.849 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 84 Resp: 9447

Ion	Ratio	Lower	Upper
84	100		
56	135.0	101.0	151.4
41	96.3	67.4	101.0

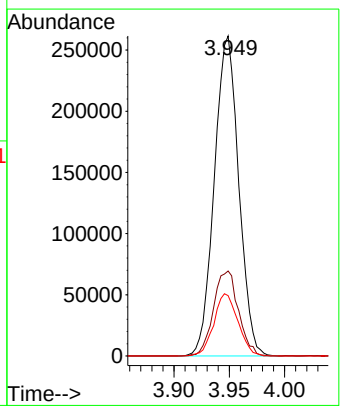


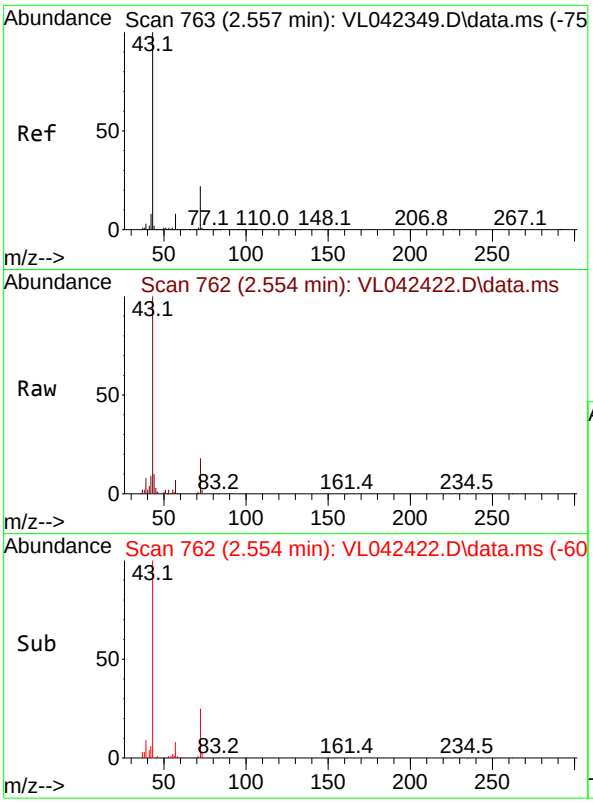


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.949 min Scan# 1193
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:114 Resp: 401346

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.2	15.5	23.3



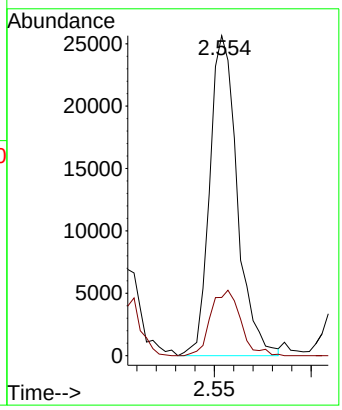


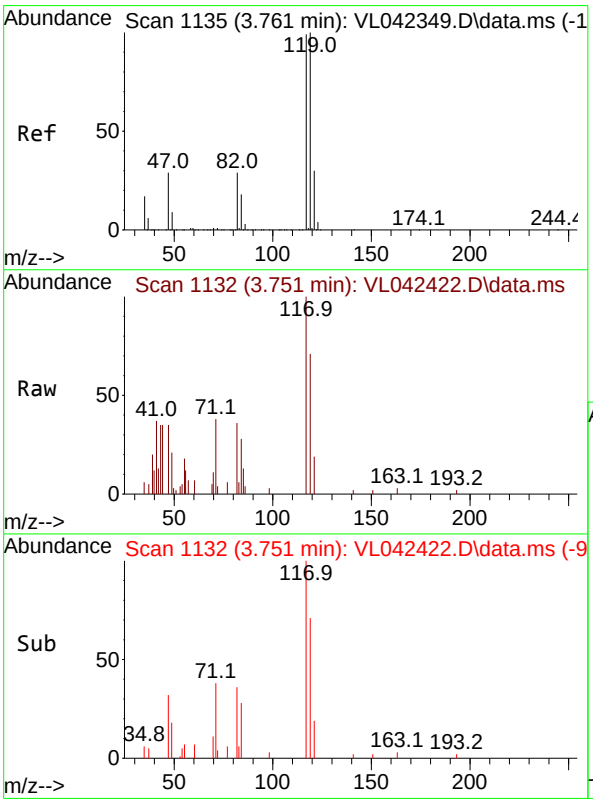
#34
2-Butanone
Concen: 0.797 ppbv
RT: 2.554 min Scan# 7
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 43 Resp: 25286

Ion	Ratio	Lower	Upper
43	100		
72	22.2	18.2	27.2

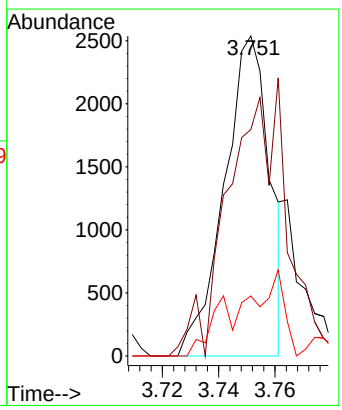


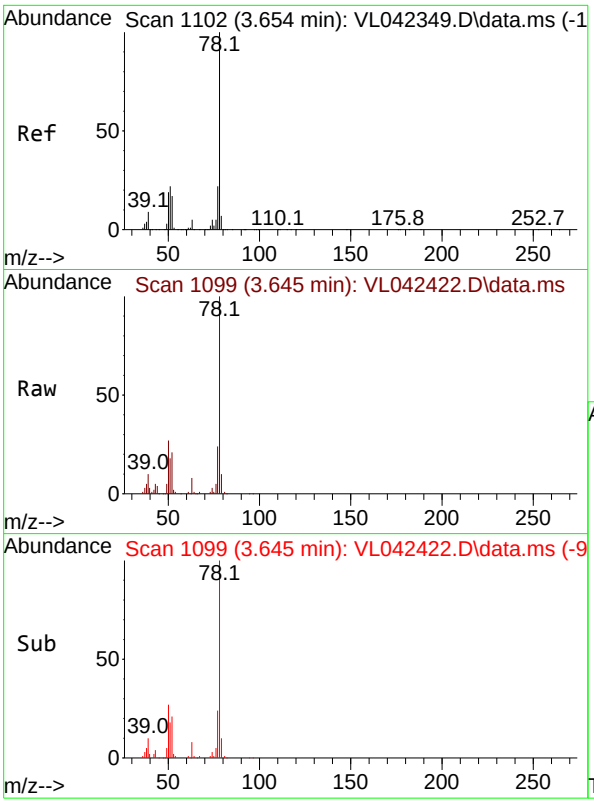


#35
Carbon Tetrachloride
Concen: 0.078 ppbv
RT: 3.751 min Scan# 1132
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:117 Resp: 2834

Ion	Ratio	Lower	Upper
117	100		
119	67.8	80.5	120.7#
121	18.8	24.2	36.2#



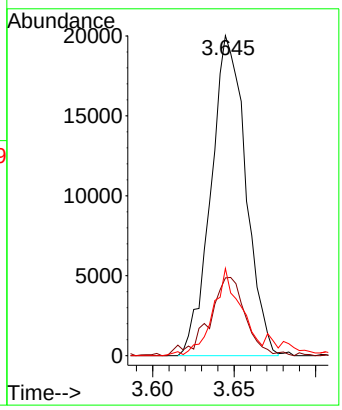


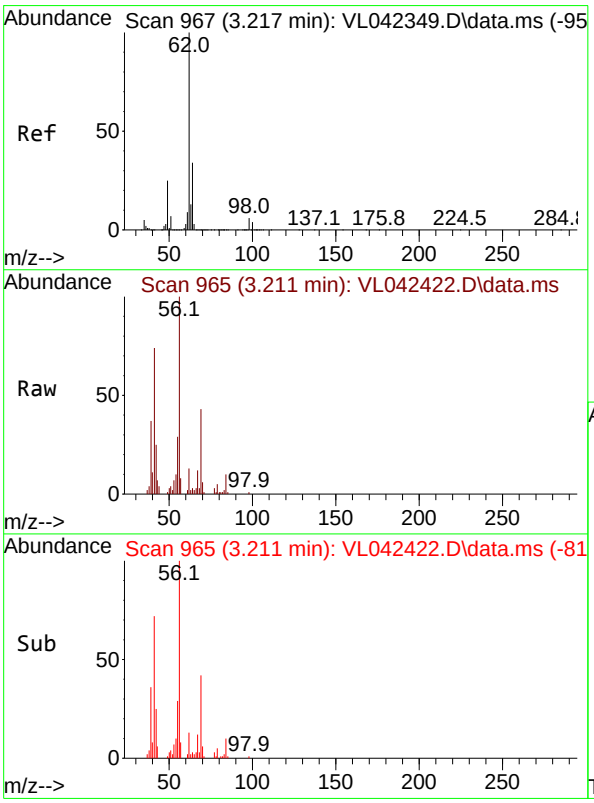
#36
Benzene
Concen: 0.684 ppbv
RT: 3.645 min Scan# 1
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 78 Resp: 29627

Ion	Ratio	Lower	Upper
78	100		
77	23.4	17.4	26.0
50	26.0	15.5	23.3#

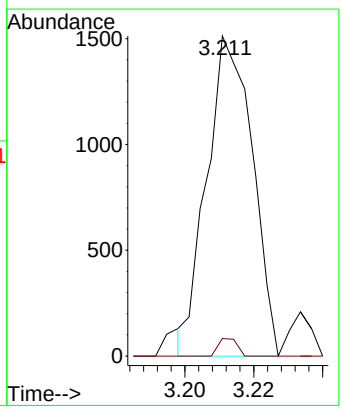


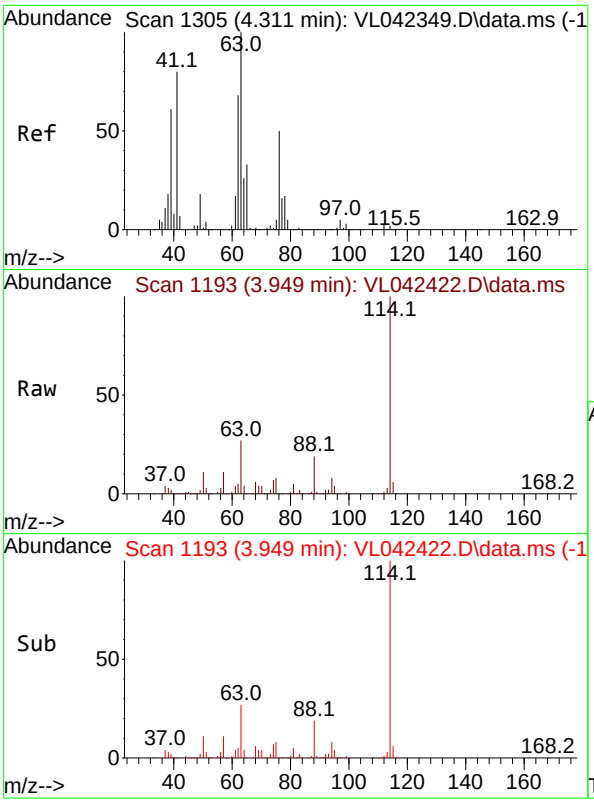


#37
1,2-Dichloroethane
Concen: 0.054 ppbv
RT: 3.211 min Scan# 965
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 62 Resp: 1391

Ion	Ratio	Lower	Upper
62	100		
98	2.2	5.1	7.7#



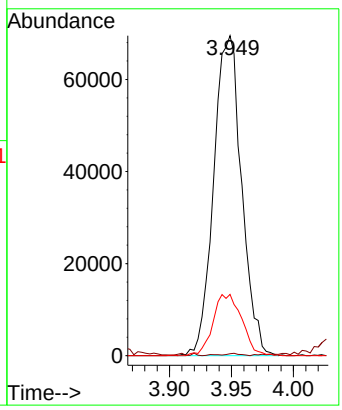


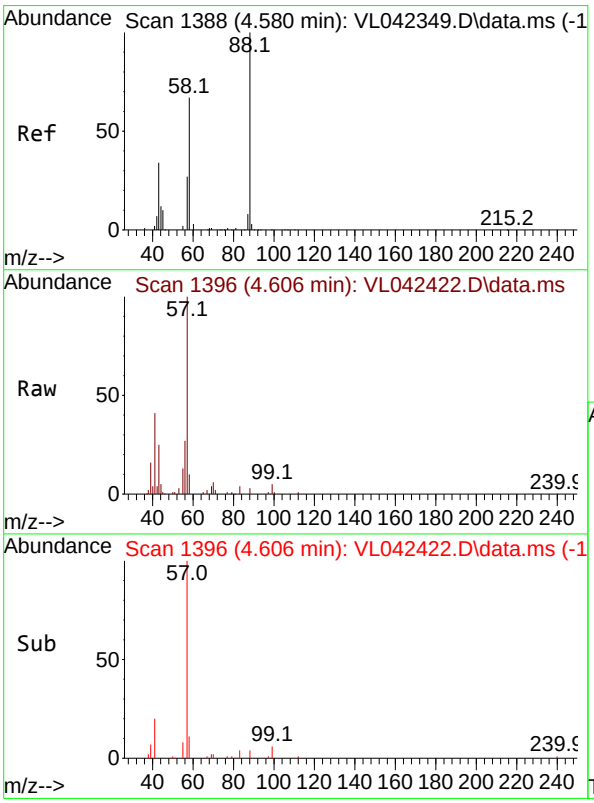
#39
1,2-Dichloropropane
Concen: 6.758 ppbv
RT: 3.949 min Scan# 11
Delta R.T. -0.363 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 63 Resp: 109010

Ion	Ratio	Lower	Upper
63	100		
41	0.2	64.2	96.2#
62	19.1	54.3	81.5#

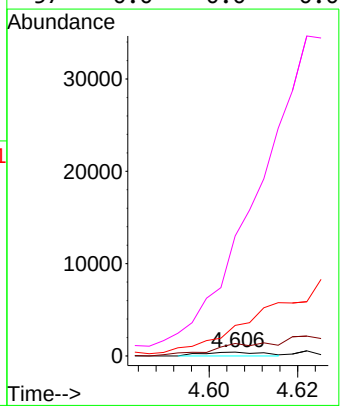


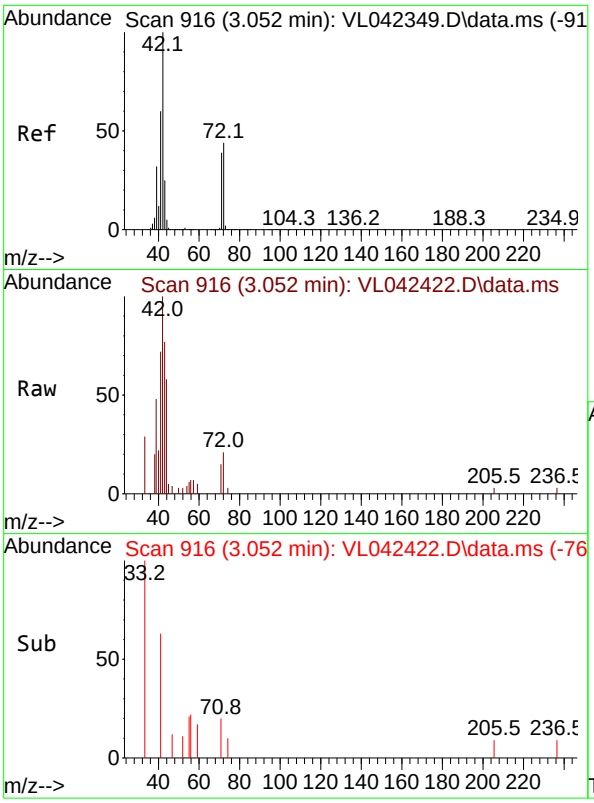


#40
1,4-Dioxane
Concen: 0.045 ppbv
RT: 4.606 min Scan# 1396
Delta R.T. 0.026 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 88 Resp: 398

Ion	Ratio	Lower	Upper
88	100		
58	0.0	61.4	92.0#
43	0.0	23.2	34.8#
57	0.0	0.0	0.0



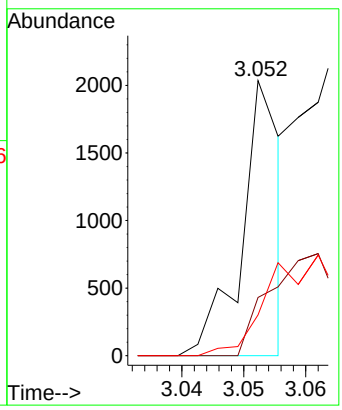


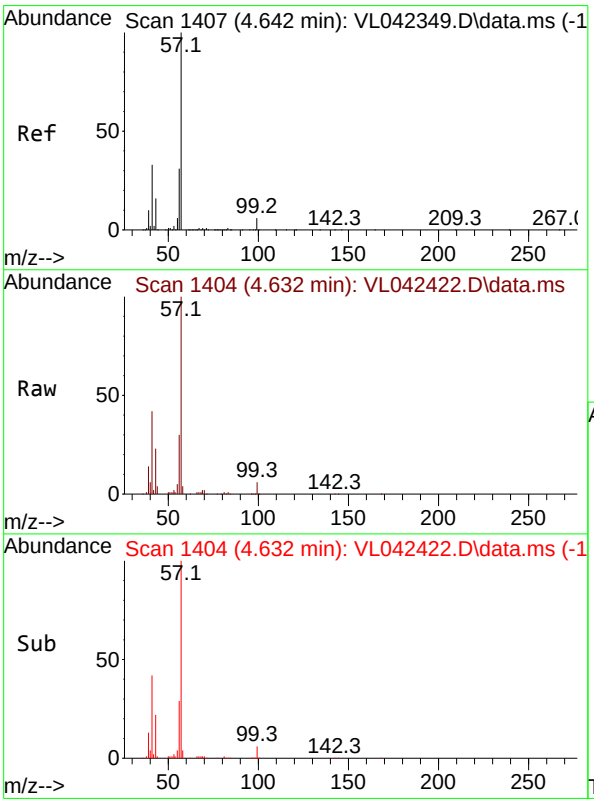
#41
Tetrahydrofuran
Concen: 0.049 ppbv
RT: 3.052 min Scan# 91
Delta R.T. -0.000 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 42 Resp: 900

Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.3	48.5#
71	0.0	31.4	47.2#

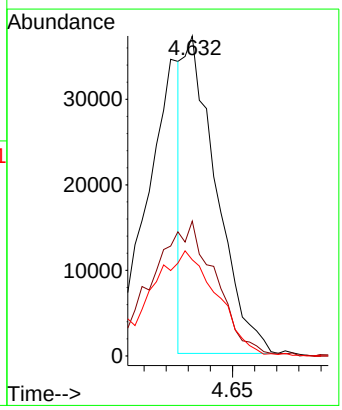


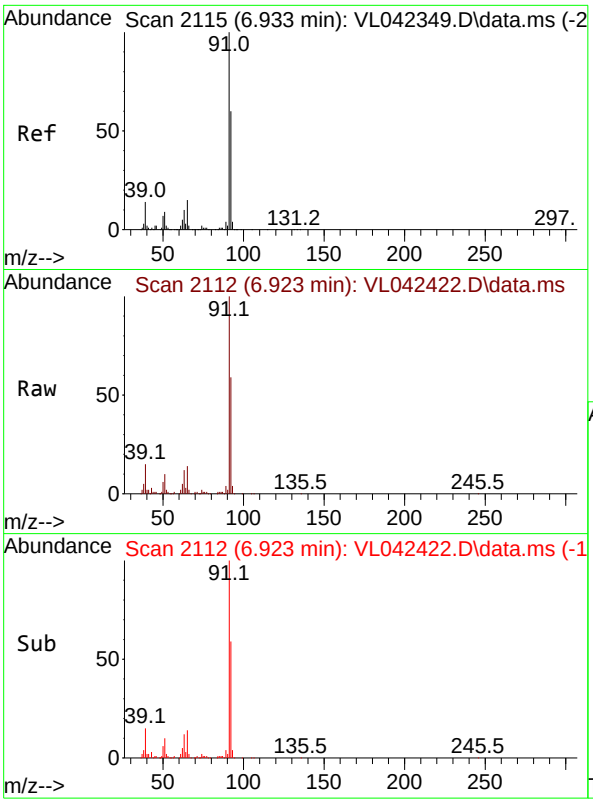


#44
2,2,4-Trimethylpentane
Concen: 0.520 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 57 Resp: 38897

Ion	Ratio	Lower	Upper
57	100		
41	88.3	27.2	40.8#
56	77.3	25.7	38.5#



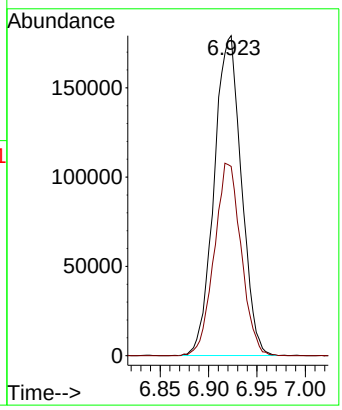


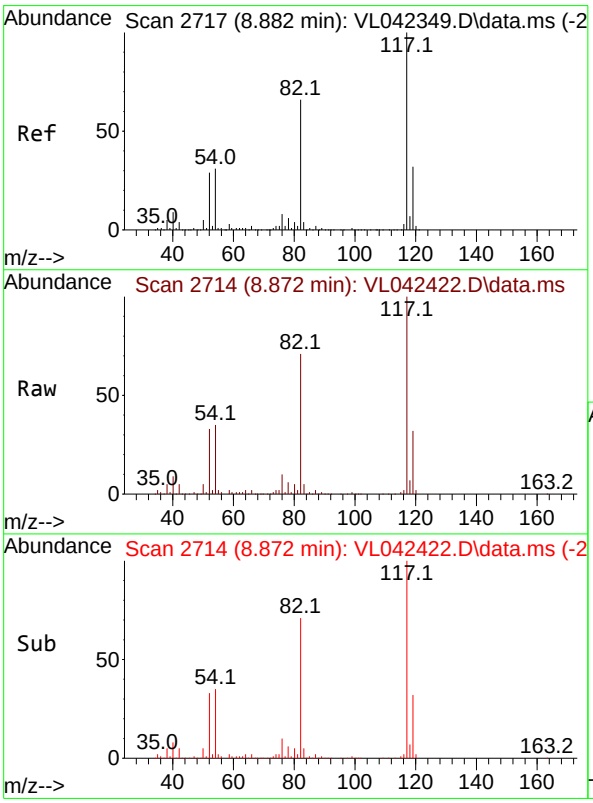
#53
Toluene
Concen: 6.746 ppbv
RT: 6.923 min Scan# 21
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 91 Resp: 350451

Ion	Ratio	Lower	Upper
91	100		
92	59.5	48.2	72.4

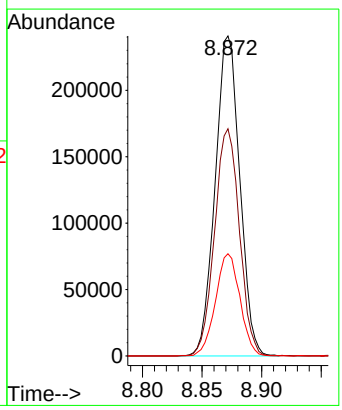


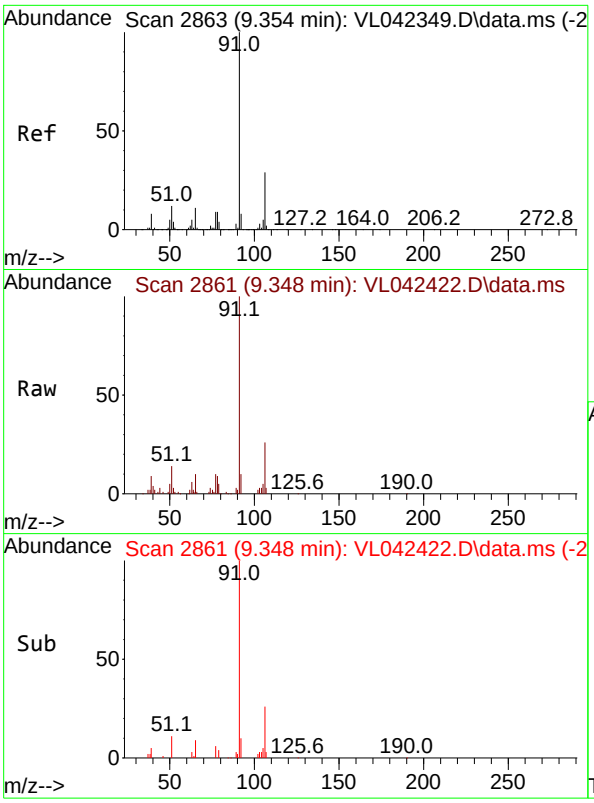


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.872 min Scan# 2714
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:117 Resp: 346372

Ion	Ratio	Lower	Upper
117	100		
82	71.5	57.8	86.6
119	31.7	25.2	37.8



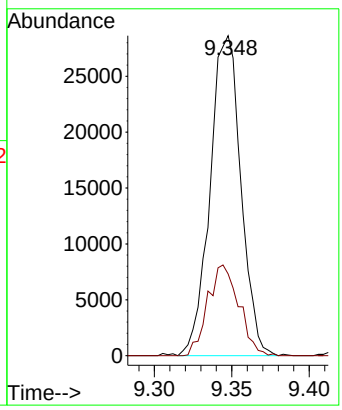


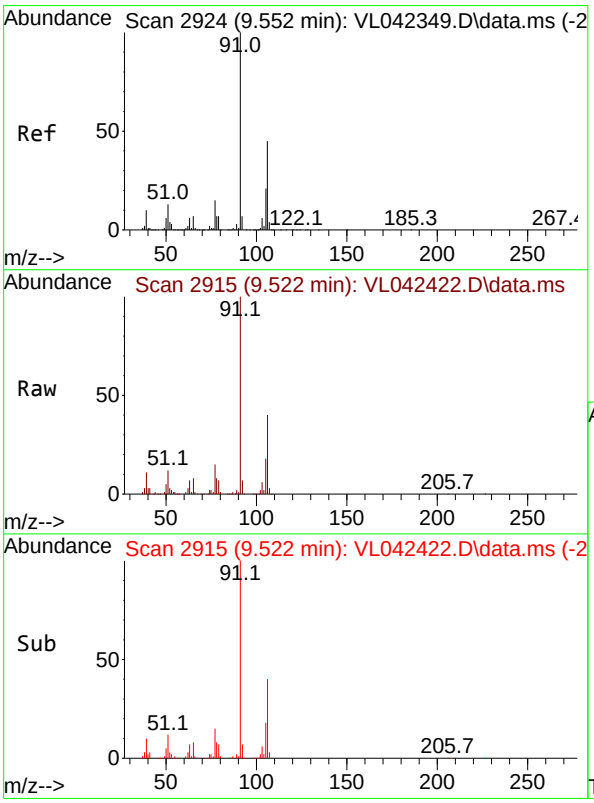
#58
Ethyl Benzene
Concen: 0.579 ppbv
RT: 9.348 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 91 Resp: 39720

Ion	Ratio	Lower	Upper
91	100		
106	25.5	23.0	34.4

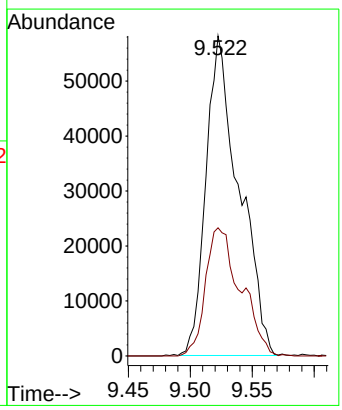


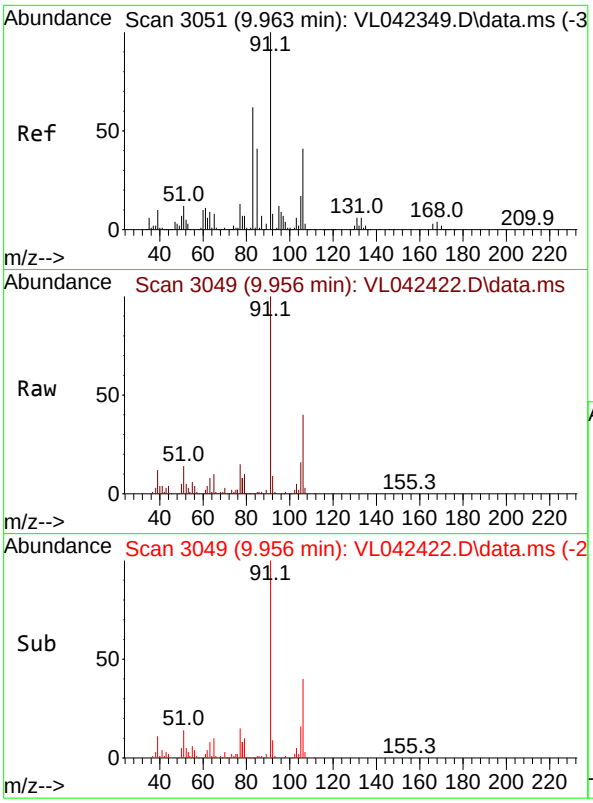


#59
m/p-Xylene
Concen: 1.955 ppbv
RT: 9.522 min Scan# 2915
Delta R.T. -0.029 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 108081

Ion	Ratio	Lower	Upper
91	100		
106	42.5	35.4	53.2



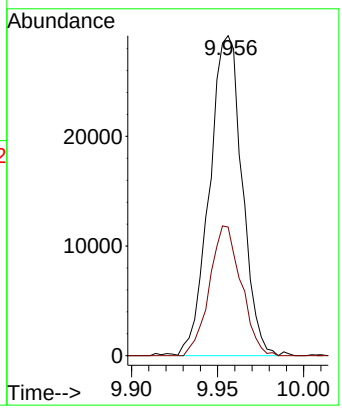


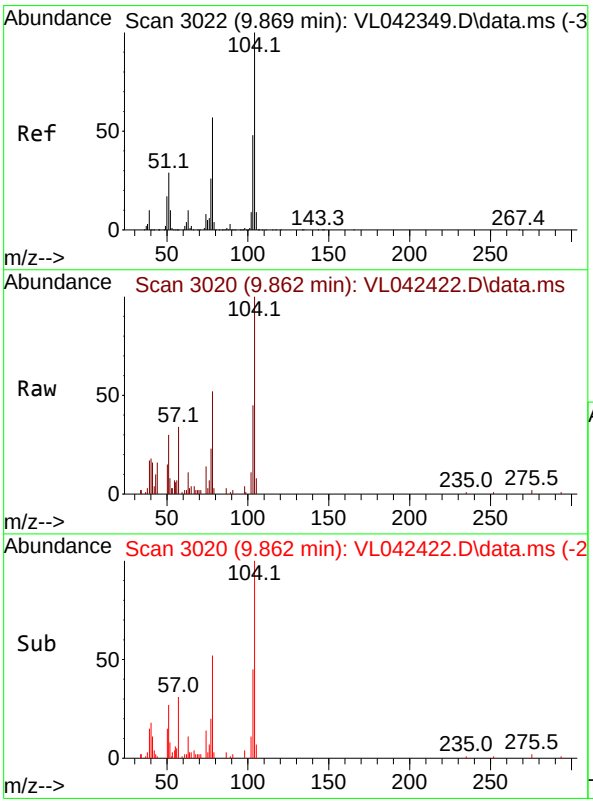
#60
o-Xylene
Concen: 0.691 ppbv
RT: 9.956 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion: 91 Resp: 38480

Ion	Ratio	Lower	Upper
91	100		
106	39.4	21.1	63.4

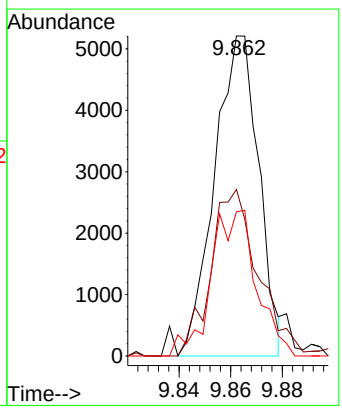


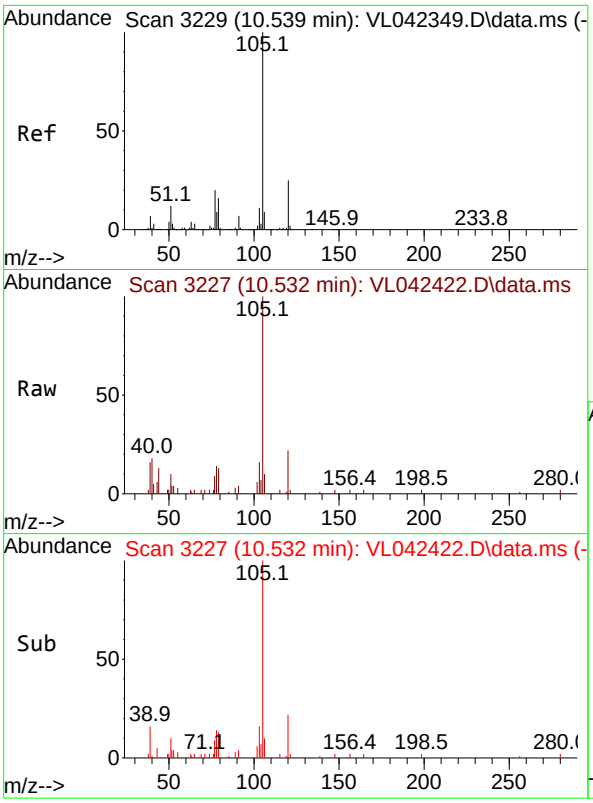


#61
Styrene
Concen: 0.233 ppbv
RT: 9.862 min Scan# 3020
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:104 Resp: 6199

Ion	Ratio	Lower	Upper
104	100		
78	56.9	44.6	66.8
103	46.9	37.4	56.0



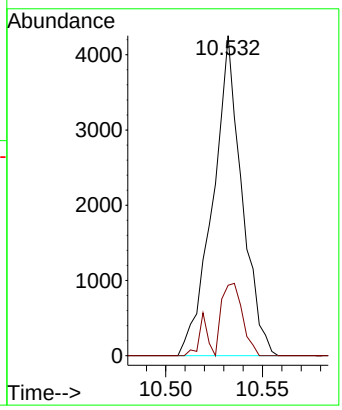


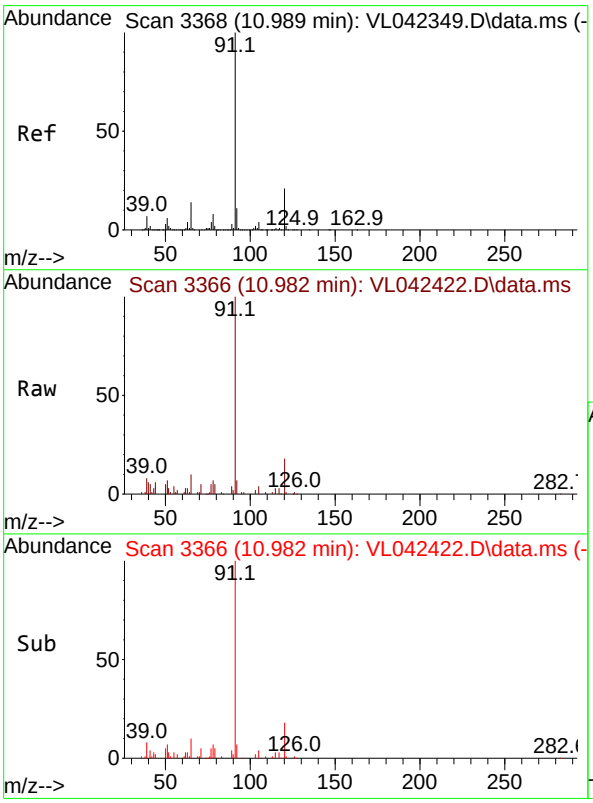
#62
Isopropylbenzene
Concen: 0.054 ppbv
RT: 10.532 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:105 Resp: 4427

Ion	Ratio	Lower	Upper
105	100		
120	20.1	19.8	29.8

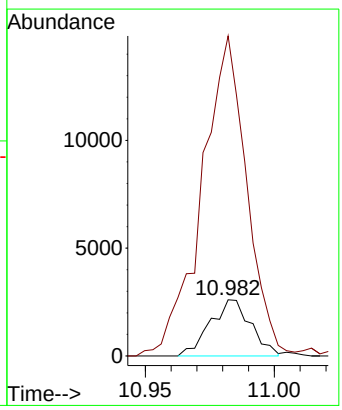


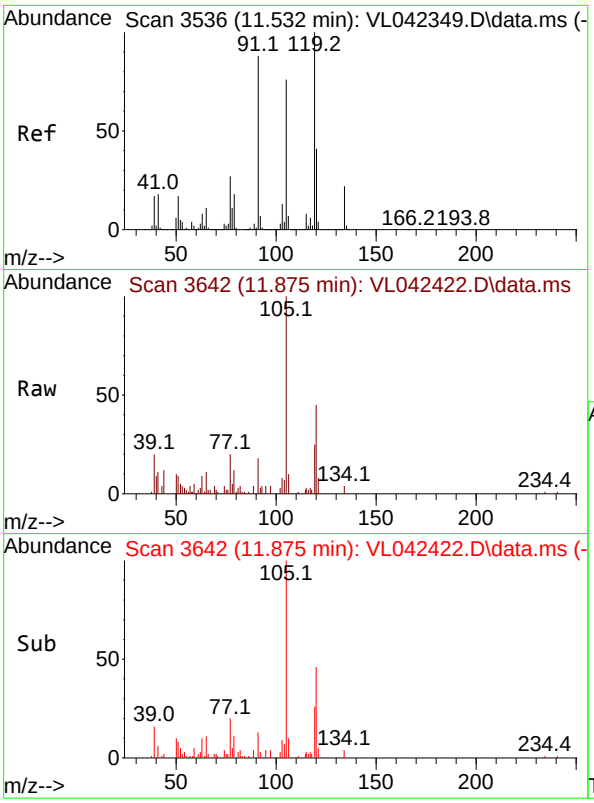


#64
n-propylbenzene
Concen: 0.139 ppbv
RT: 10.982 min Scan# 3366
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:120 Resp: 2864

Ion	Ratio	Lower	Upper
120	100		
91	636.1	392.4	588.6#



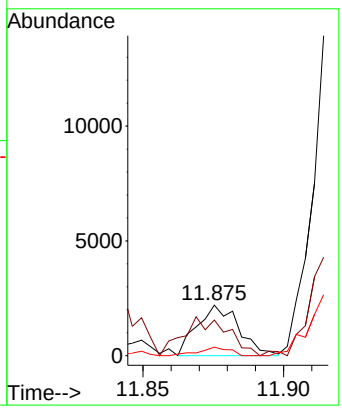


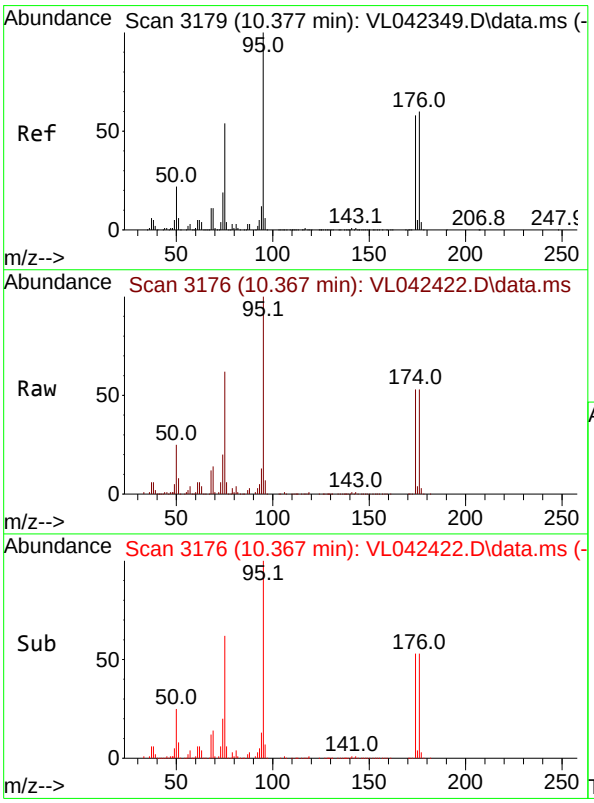
#65
tert-Butylbenzene
Concen: 0.030 ppbv
RT: 11.875 min Scan# 3
Delta R.T. 0.343 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:119 Resp: 2272

Ion	Ratio	Lower	Upper
119	100		
91	83.0	74.6	111.8
134	18.9	18.8	28.2

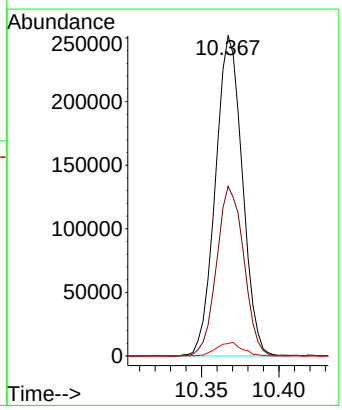


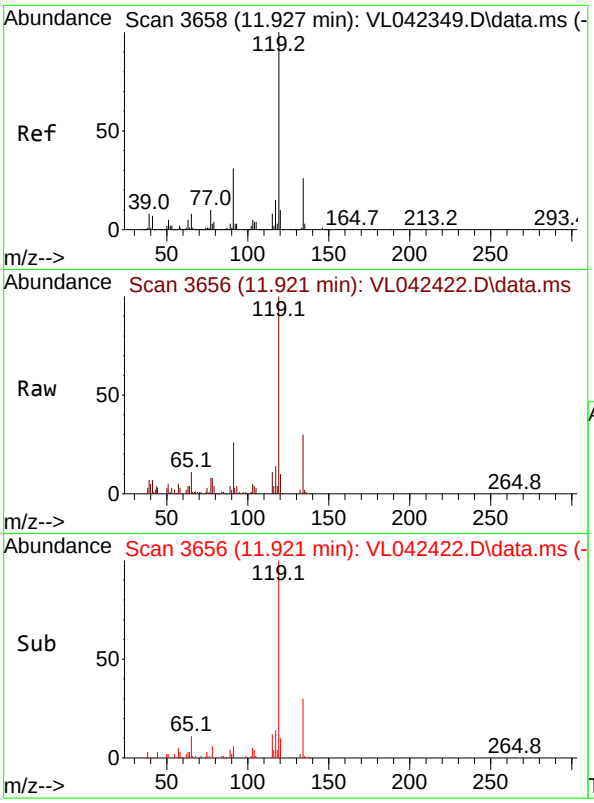


#68
1-Bromo-4-Fluorobenzene
Concen: 10.699 ppbv
RT: 10.367 min Scan# 3176
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 95 Resp: 304530

Ion	Ratio	Lower	Upper
95	100		
174	53.5	48.5	72.7
175	4.1	3.7	5.5



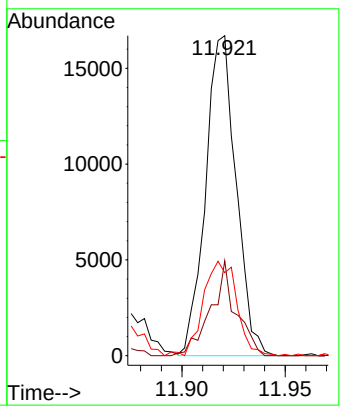


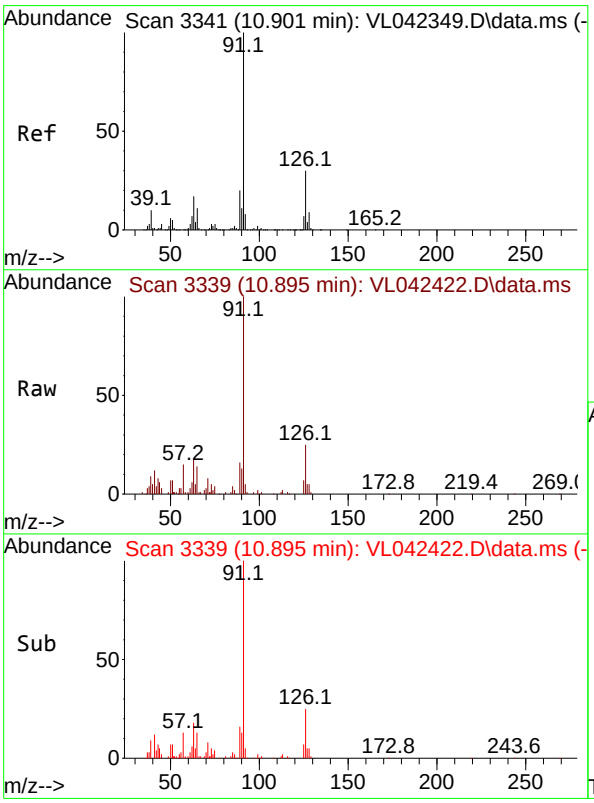
#69
p-Isopropyltoluene
Concen: 0.189 ppbv
RT: 11.921 min Scan# 3
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:119 Resp: 17184

Ion	Ratio	Lower	Upper
119	100		
134	24.4	20.0	30.0
91	32.0	24.4	36.6

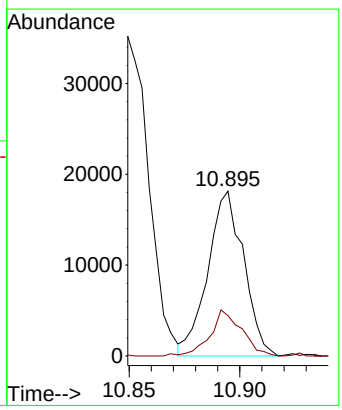


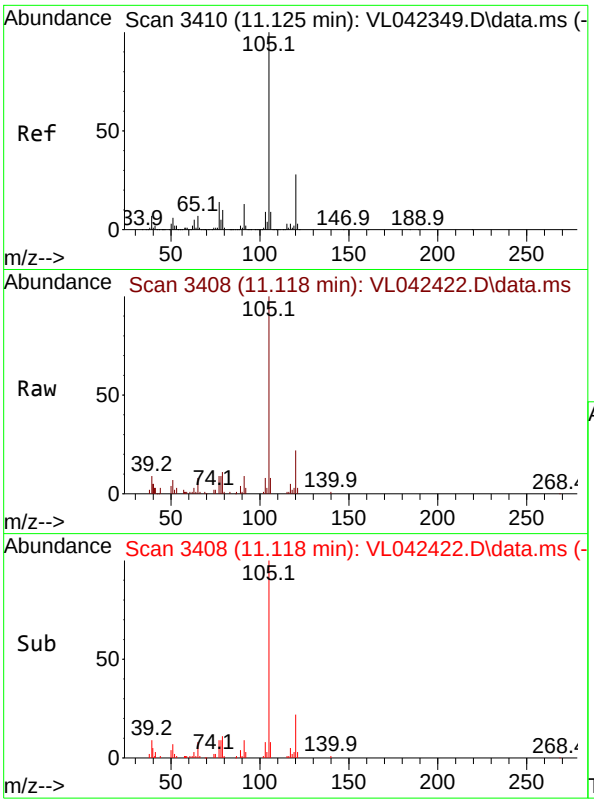


#71
2-Chlorotoluene
Concen: 0.319 ppbv
RT: 10.895 min Scan# 3339
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion: 91 Resp: 20426

Ion	Ratio	Lower	Upper
91	100		
126	25.0	11.4	45.4



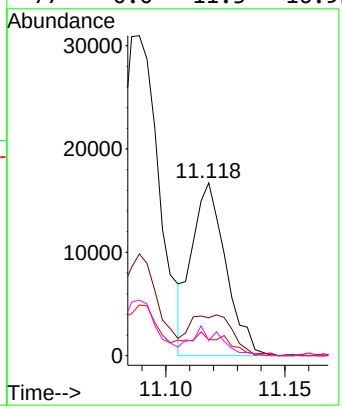


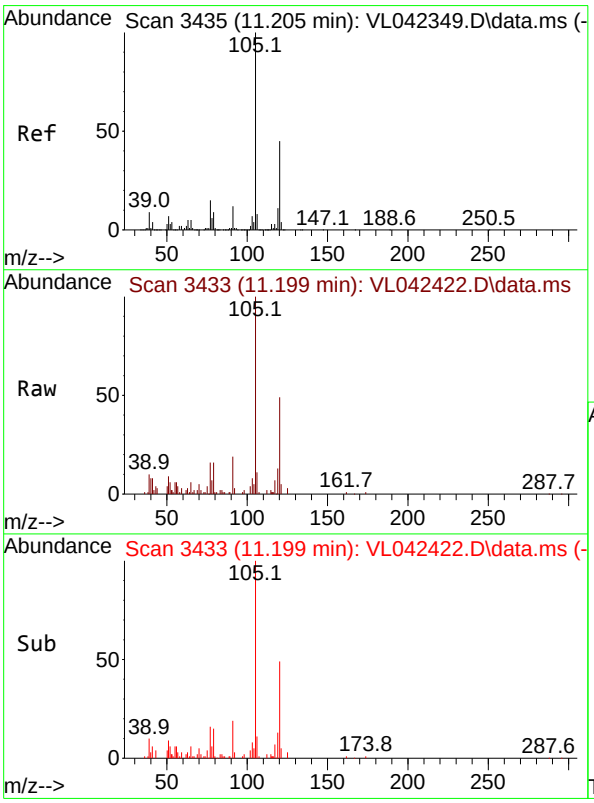
#72
4-Ethyltoluene
Concen: 0.244 ppbv
RT: 11.118 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:105 Resp: 16614

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

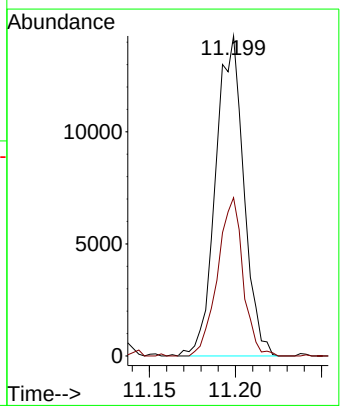


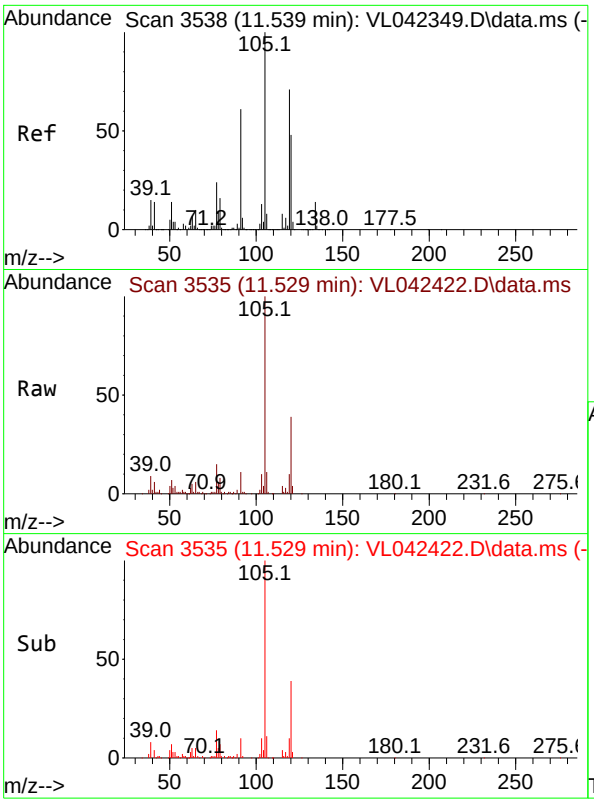


#73
1,3,5-Trimethylbenzene
Concen: 0.269 ppbv
RT: 11.199 min Scan# 3433
Delta R.T. -0.007 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:105 Resp: 16186

Ion	Ratio	Lower	Upper
105	100		
120	49.5	35.6	53.4



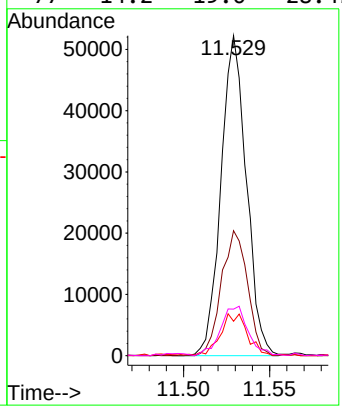


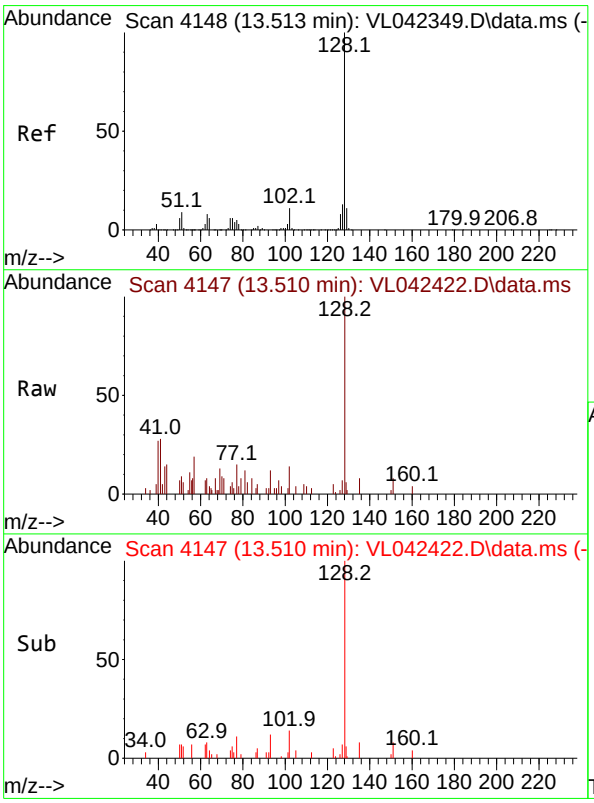
#74
1,2,4-Trimethylbenzene
Concen: 0.764 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.010 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-5-3242025

Tgt Ion:105 Resp: 53644

Ion	Ratio	Lower	Upper
105	100		
120	39.0	38.1	57.1
91	10.4	48.8	73.2#
77	14.2	19.0	28.4#

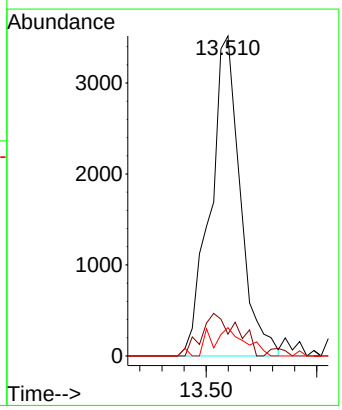




#79
Naphthalene
Concen: 0.039 ppbv
RT: 13.510 min Scan# 4147
Delta R.T. -0.003 min
Lab File: VL042422.D
Acq: 28 Apr 2025 12:51

Tgt Ion:128 Resp: 3307

Ion	Ratio	Lower	Upper
128	100		
127	6.4	10.6	15.8#
129	8.3	8.6	12.8#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Time: Apr 29 01:36:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	134276	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.953	114	394249	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.879	117	337638	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	295822	10.662	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 106.600%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.496	85	10922	0.460	ppbv		97
3) Chlorodifluoromethane	1.467	51	412384	18.254	ppbv	#	57
4) Chloromethane	1.532	50	6178	0.658	ppbv		94
6) Bromomethane	1.671	94	139	0.032	ppbv		94
7) Chloroethane	1.467	64	20785	5.624	ppbv		98
9) Propene	1.557	41	376978	36.642	ppbv		99
10) Heptane	4.969	43	9743	0.337	ppbv	#	61
11) Trichlorofluoromethane	1.875	101	5064	0.224	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.137	101	1205	0.065	ppbv	#	61
13) Ethanol	1.719	45	530749	324.570	ppbv		75
15) Acetone	1.833	43	545564	24.819	ppbv	#	85
16) 1,3-Butadiene	1.599	39	6851	0.652	ppbv	#	9
17) tert-Butyl alcohol	2.043	59	80244	2.946	ppbv		100
19) Isopropyl Alcohol	1.884	45	390564	31.985	ppbv	#	77
20) Methylene Chloride	2.059	84	7626	0.886	ppbv		89
21) Allyl Chloride	2.040	41	19768	1.302	ppbv	#	67
23) Vinyl Acetate	2.454	43	51200	5.754	ppbv	#	93
25) Ethyl Acetate	2.823	43	48635	0.897	ppbv	#	75
26) Hexane	2.826	57	51632	2.354	ppbv	#	42
27) Carbon Disulfide	2.150	76	1071	0.046	ppbv	#	38
28) Methyl tert-Butyl Ether	2.441	73	751	0.052	ppbv	#	48
29) Chloroform	2.842	83	1349	0.044	ppbv	#	57
30) Cyclohexane	3.852	84	1658	0.094	ppbv	#	1
34) 2-Butanone	2.558	43	49884	1.600	ppbv		96
35) Carbon Tetrachloride	3.762	117	1314	0.037	ppbv	#	83
36) Benzene	3.655	78	19225	0.452	ppbv	#	86
37) 1,2-Dichloroethane	3.215	62	11718	0.459	ppbv		97
39) 1,2-Dichloropropane	3.956	63	106631	6.729	ppbv	#	23
41) Tetrahydrofuran	3.059	42	1802	0.099	ppbv	#	35
44) 2,2,4-Trimethylpentane	4.632	57	25912	0.353	ppbv	#	35
50) 4-Methyl-2-Pentanone	5.755	43	10827	0.209	ppbv	#	45
52) Tetrachloroethene	8.215	164	561	0.034	ppbv	#	70
53) Toluene	6.930	91	202018	3.959	ppbv		100
58) Ethyl Benzene	9.351	91	33321	0.498	ppbv		99
59) m/p-Xylene	9.526	91	66442	1.233	ppbv		97
60) o-Xylene	9.963	91	27079	0.499	ppbv		97
61) Styrene	9.869	104	8176	0.316	ppbv		94
62) Isopropylbenzene	10.539	105	5624	0.071	ppbv		99
64) n-propylbenzene	10.986	120	2190	0.109	ppbv		89
65) tert-Butylbenzene	11.536	119	3014	0.041	ppbv	#	49
69) p-Isopropyltoluene	11.924	119	3785	0.043	ppbv	#	75
72) 4-Ethyltoluene	11.118	105	3726	0.056	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.203	105	8221	0.140	ppbv	#	83

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Time: Apr 29 01:36:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

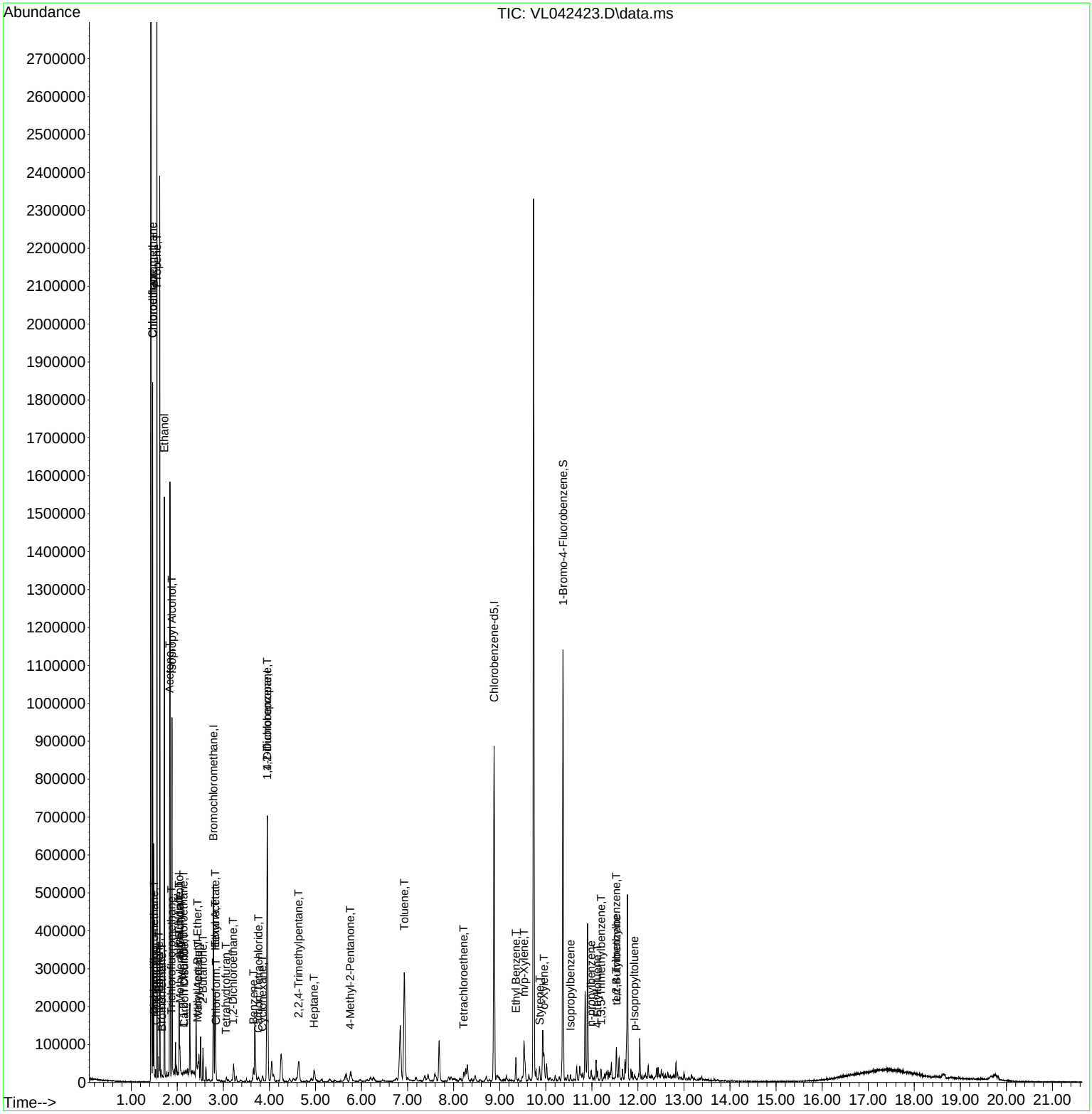
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 1,2,4-Trimethylbenzene	11.533	105	26441	0.387	ppbv #	63

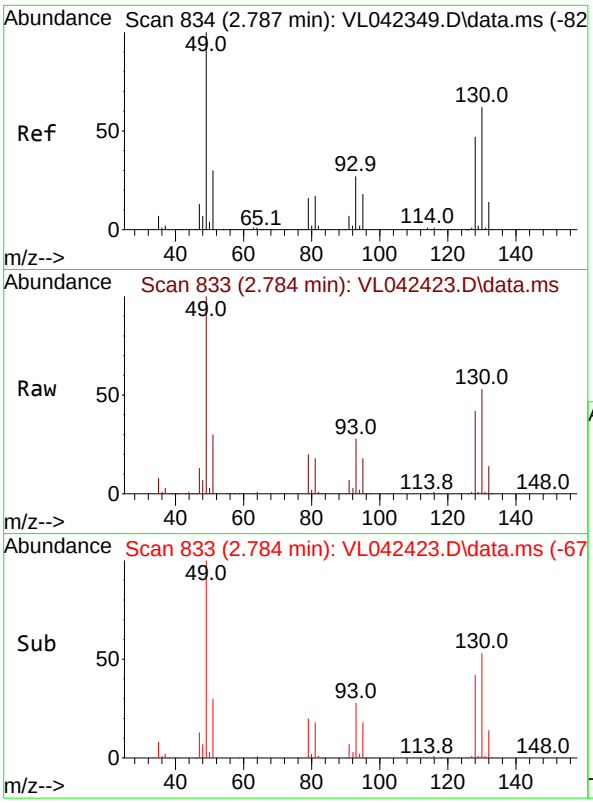
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042423.D
Acq On : 28 Apr 2025 13:26
Operator : SY/MD
Sample : Q1665-19
Misc : 400mL/MSVOA_L
ALS Vial : 10 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Quant Time: Apr 29 01:36:28 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



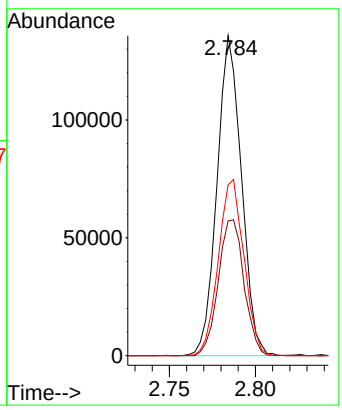


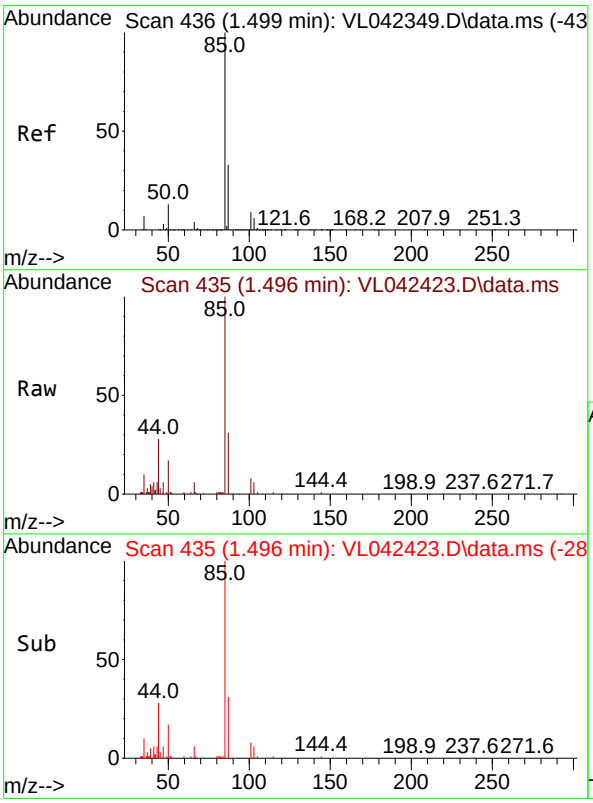
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 49 Resp: 134276

Ion	Ratio	Lower	Upper
49	100		
128	44.7	22.8	68.4
130	57.8	29.3	88.0

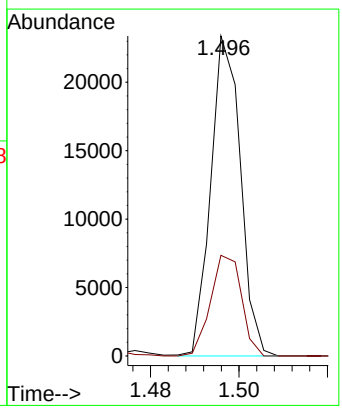


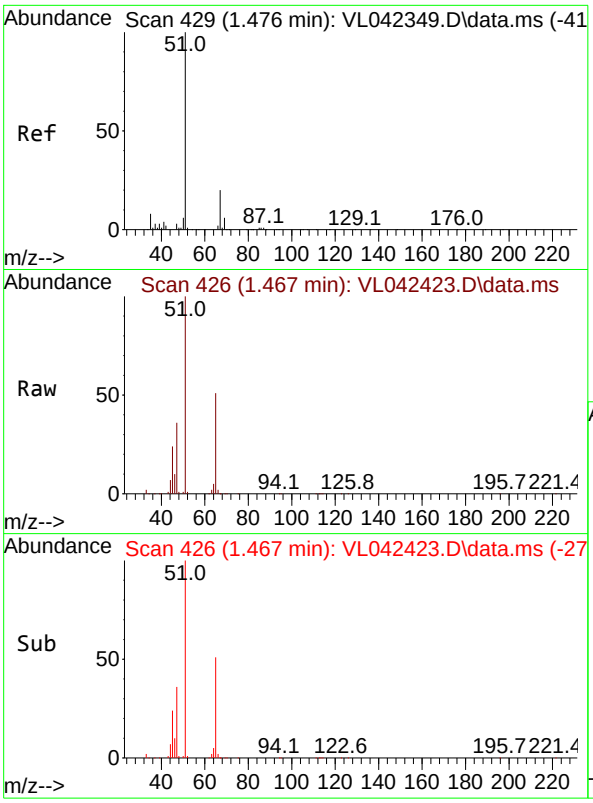


#2
Dichlorodifluoromethane
Concen: 0.460 ppbv
RT: 1.496 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 85 Resp: 10922

Ion	Ratio	Lower	Upper
85	100		
87	31.5	26.6	39.8



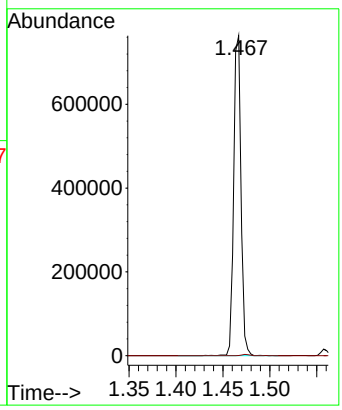


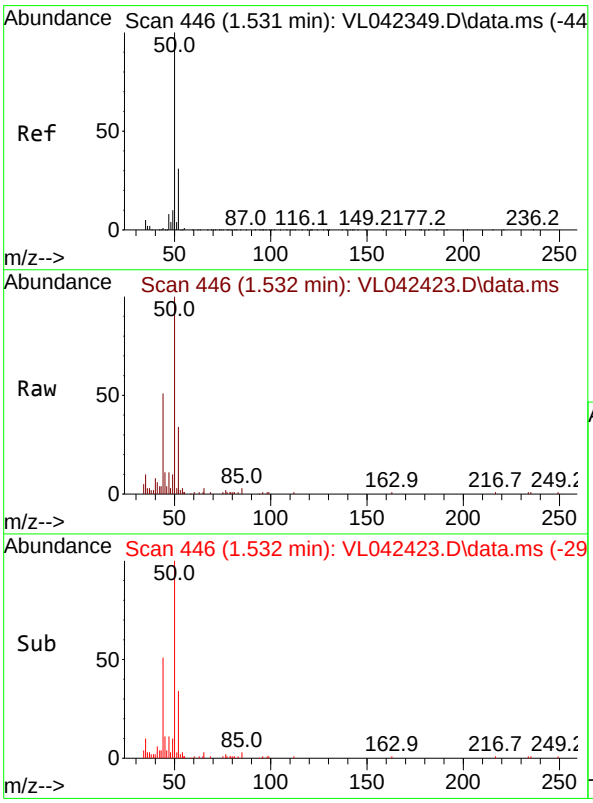
#3
Chlorodifluoromethane
Concen: 18.254 ppbv
RT: 1.467 min Scan# 4
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 51 Resp: 412384

Ion	Ratio	Lower	Upper
51	100		
67	0.4	16.2	24.4#

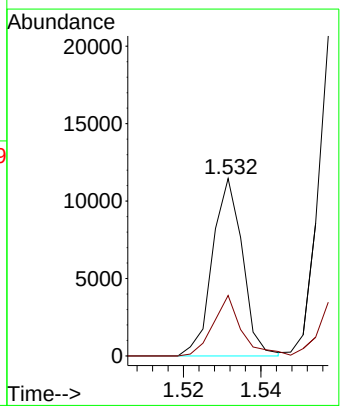


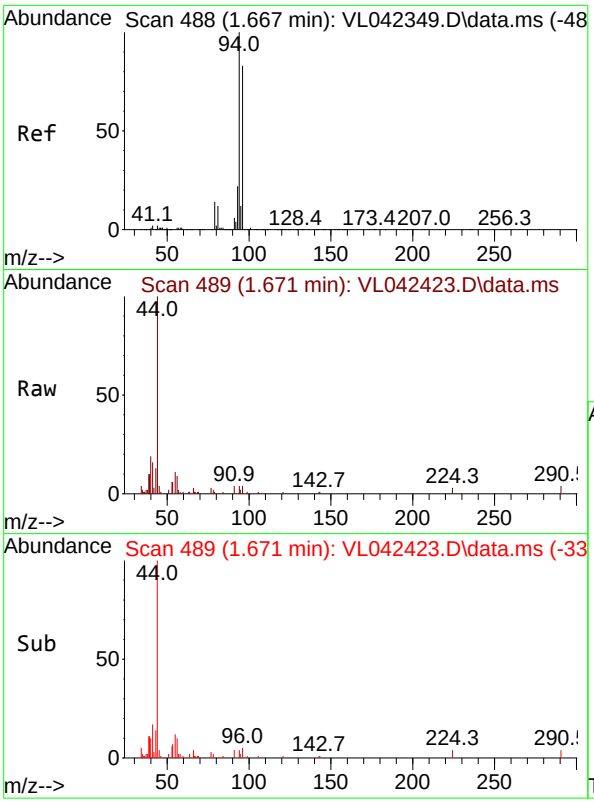


#4
Chloromethane
Concen: 0.658 ppbv
RT: 1.532 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 50 Resp: 6178

Ion	Ratio	Lower	Upper
50	100		
52	34.1	24.7	37.1



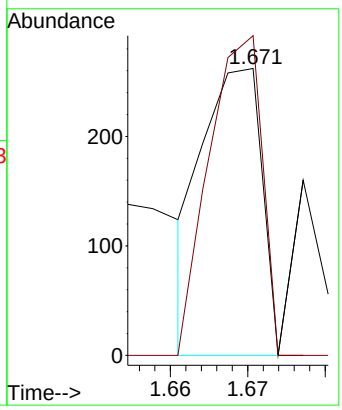


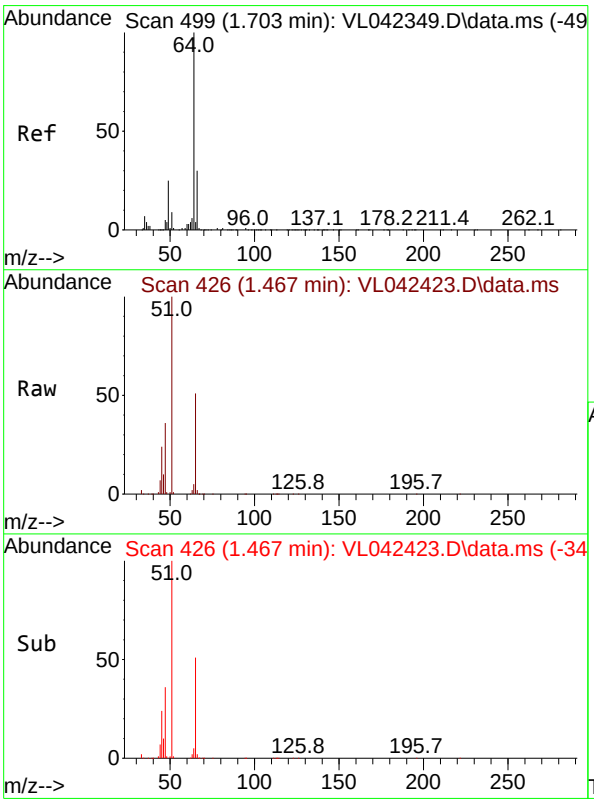
#6
Bromomethane
Concen: 0.032 ppbv
RT: 1.671 min Scan# 4
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 94 Resp: 139

Ion	Ratio	Lower	Upper
94	100		
96	77.0	66.2	99.2

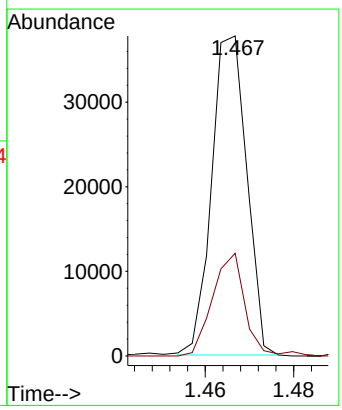


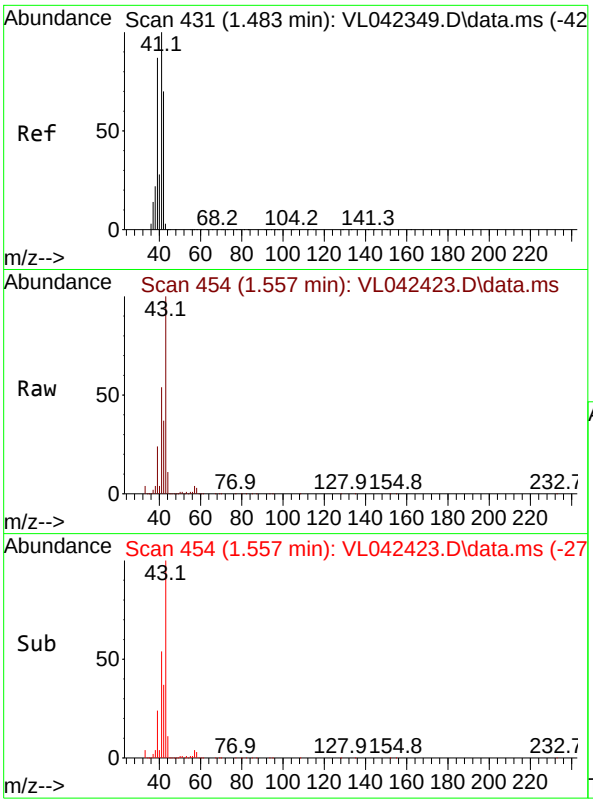


#7
Chloroethane
Concen: 5.624 ppbv
RT: 1.467 min Scan# 426
Delta R.T. -0.236 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 64 Resp: 20785

Ion	Ratio	Lower	Upper
64	100		
66	32.1	24.6	37.0



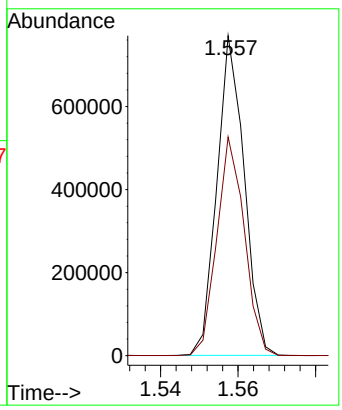


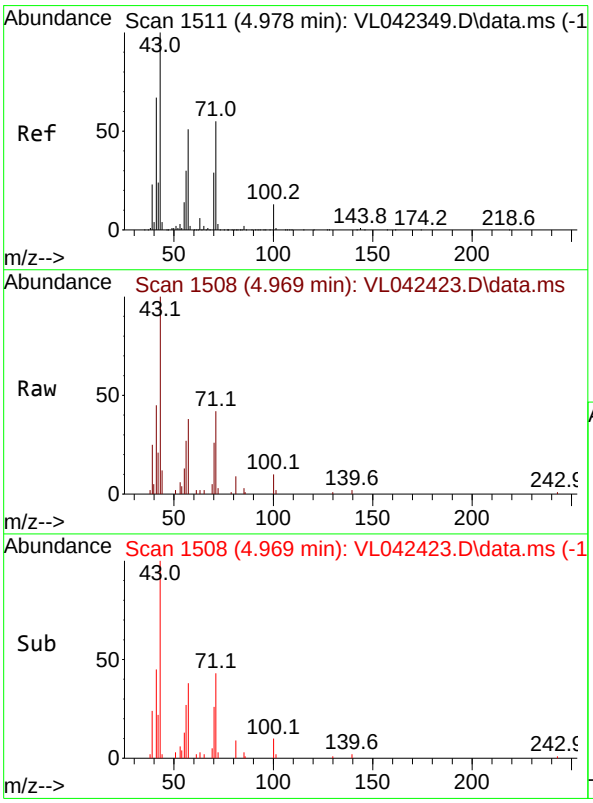
#9
Propene
Concen: 36.642 ppbv
RT: 1.557 min Scan# 4
Delta R.T. 0.075 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 41 Resp: 376978

Ion	Ratio	Lower	Upper
41	100		
42	69.4	56.2	84.4

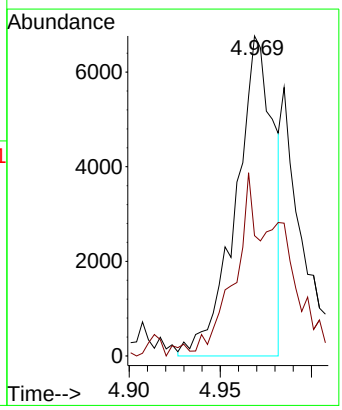


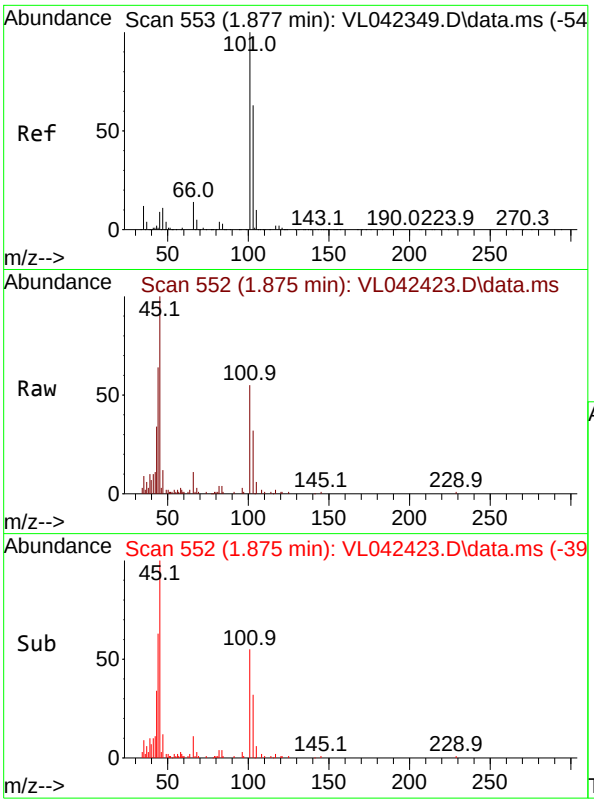


#10
Heptane
Concen: 0.337 ppbv
RT: 4.969 min Scan# 1508
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 9743

Ion	Ratio	Lower	Upper
43	100		
57	77.0	39.9	59.9#



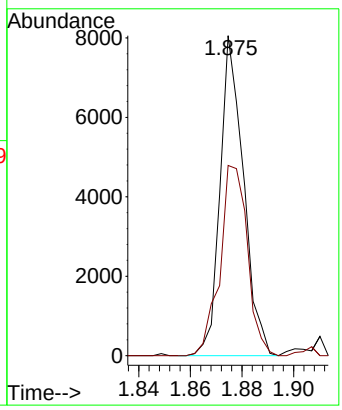


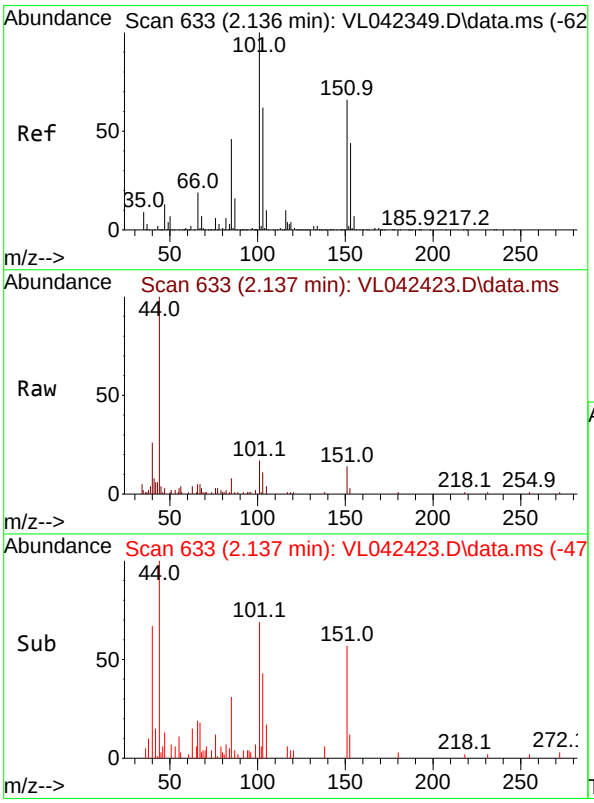
#11
Trichlorofluoromethane
Concen: 0.224 ppbv
RT: 1.875 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:101 Resp: 5064

Ion	Ratio	Lower	Upper
101	100		
103	59.4	50.1	75.1

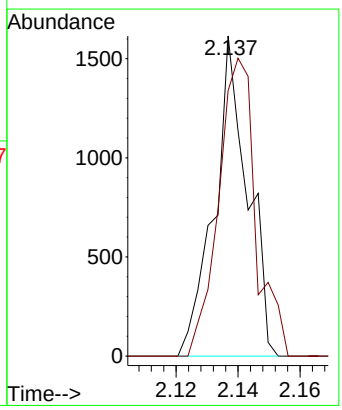


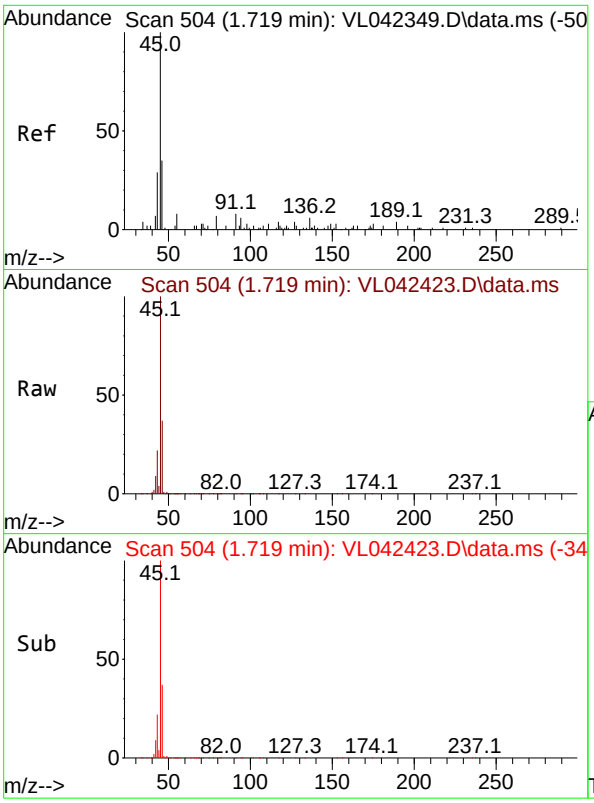


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.065 ppbv
RT: 2.137 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:101 Resp: 1205

Ion	Ratio	Lower	Upper
101	100		
151	103.7	57.0	85.6#



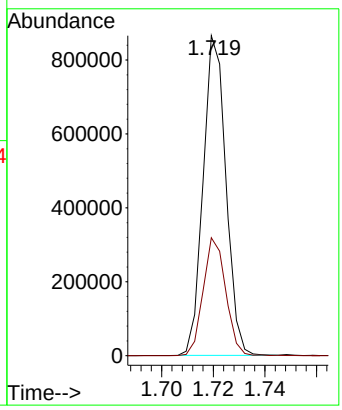


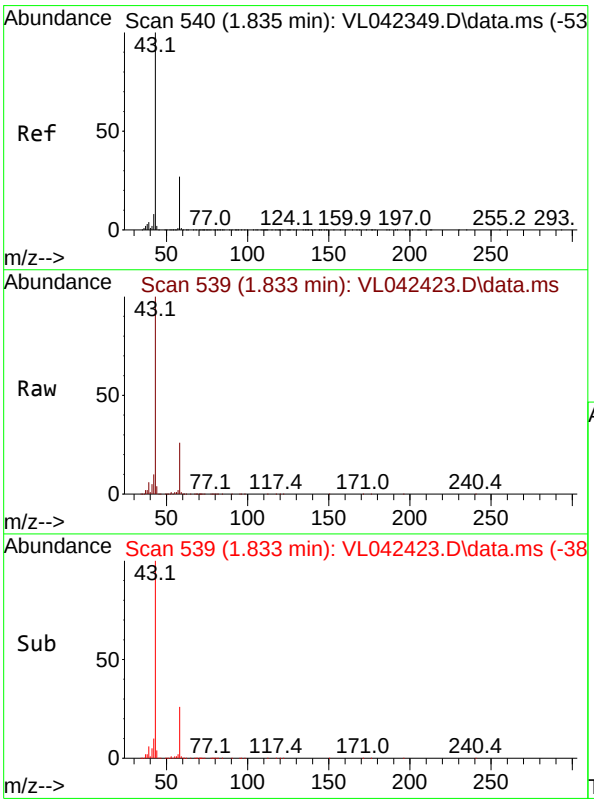
#13
Ethanol
Concen: 324.570 ppbv
RT: 1.719 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 45 Resp: 530749

Ion	Ratio	Lower	Upper
45	100		
46	36.6	21.9	87.7

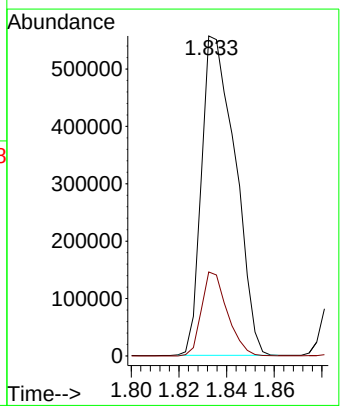


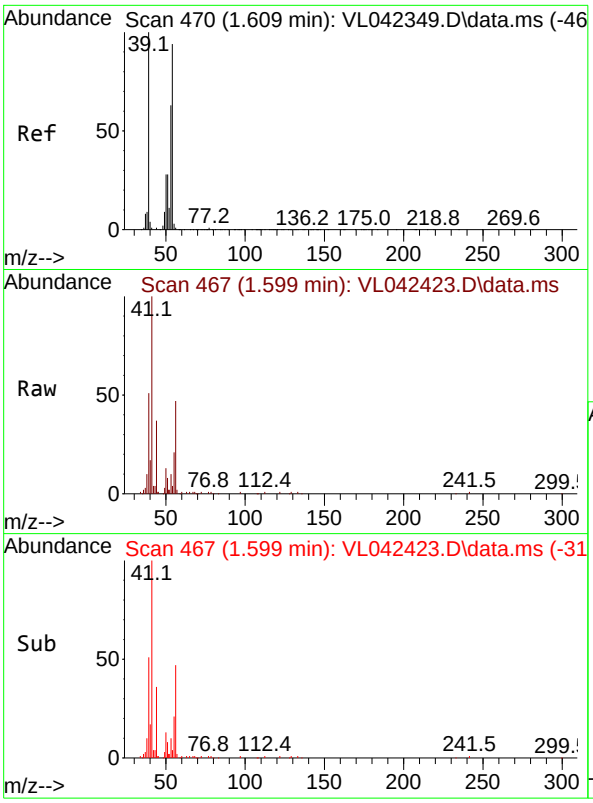


#15
Acetone
Concen: 24.819 ppbv
RT: 1.833 min Scan# 539
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 545564

Ion	Ratio	Lower	Upper
43	100		
58	20.3	22.4	33.6#



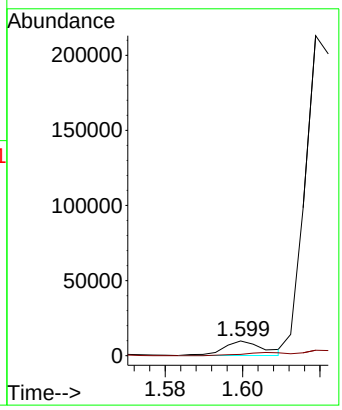


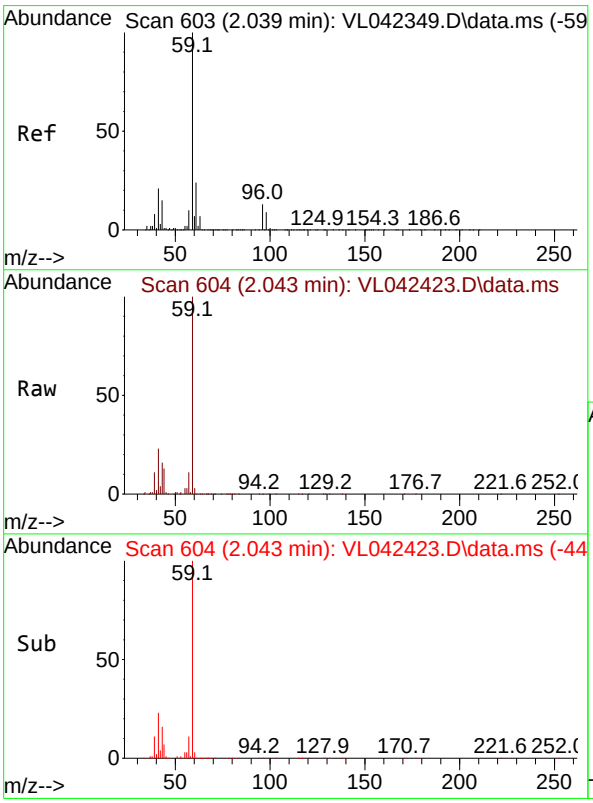
#16
1,3-Butadiene
Concen: 0.652 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 39 Resp: 6851

Ion	Ratio	Lower	Upper
39	100		
54	0.0	64.9	97.3#

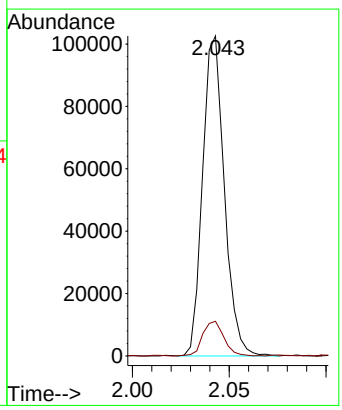


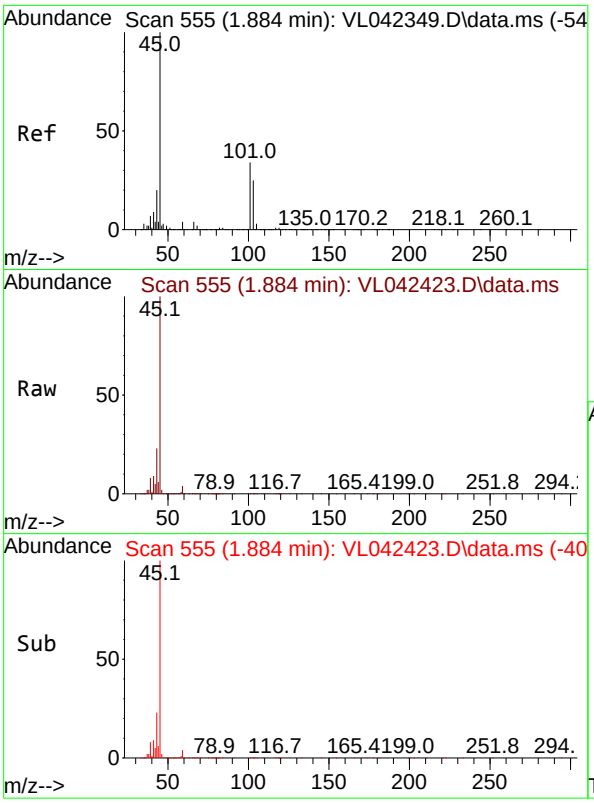


#17
tert-Butyl alcohol
Concen: 2.946 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 59 Resp: 80244

Ion	Ratio	Lower	Upper
59	100		
57	11.0	8.7	13.1



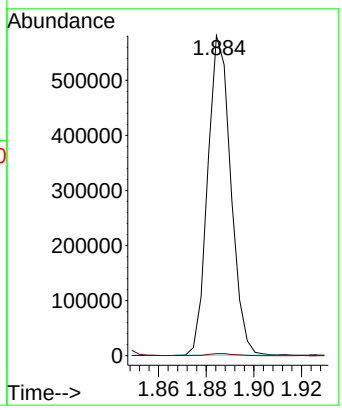


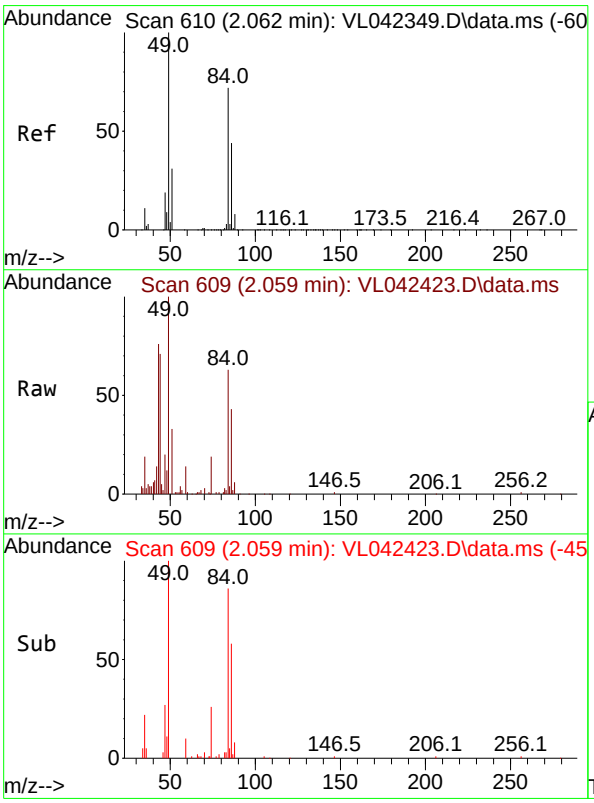
#19
Isopropyl Alcohol
Concen: 31.985 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 45 Resp: 390564

Ion	Ratio	Lower	Upper
45	100		
58	28.3	34.5	51.7#

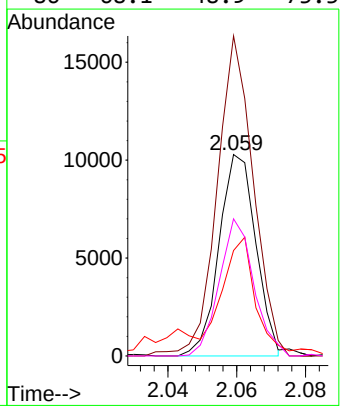


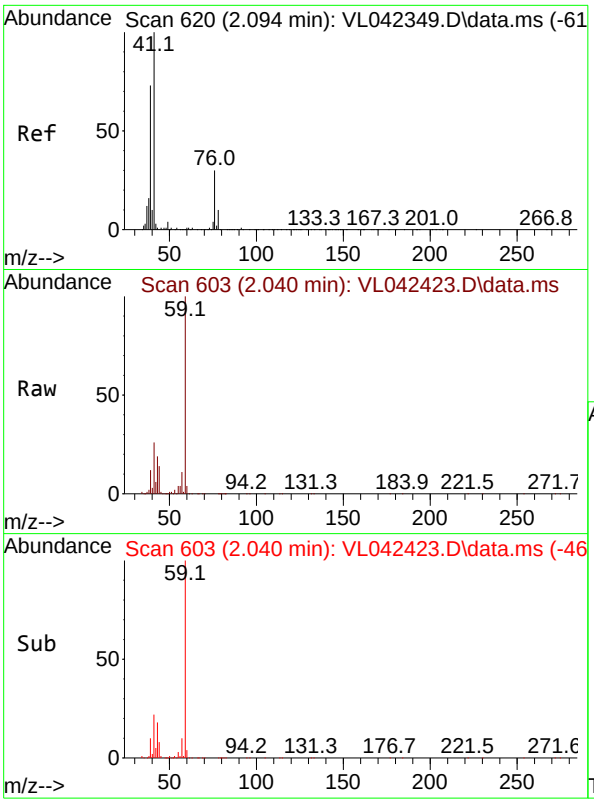


#20
Methylene Chloride
Concen: 0.886 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 84 Resp: 7626

Ion	Ratio	Lower	Upper
84	100		
49	156.3	111.6	167.4
51	47.0	35.1	52.7
86	68.1	48.9	73.3



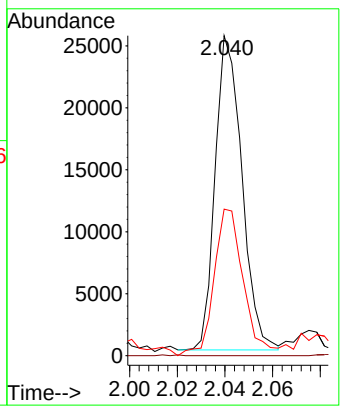


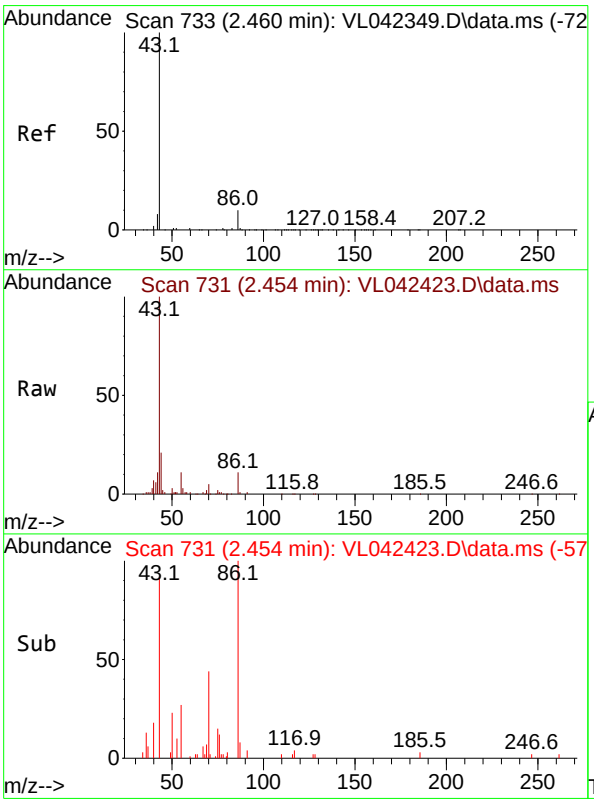
#21
Allyl Chloride
Concen: 1.302 ppbv
RT: 2.040 min Scan# 6
Delta R.T. -0.055 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 41 Resp: 19768

Ion	Ratio	Lower	Upper
41	100		
76	5.9	24.8	37.2#
39	52.4	60.6	90.8#

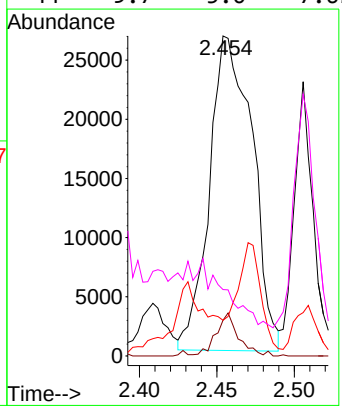


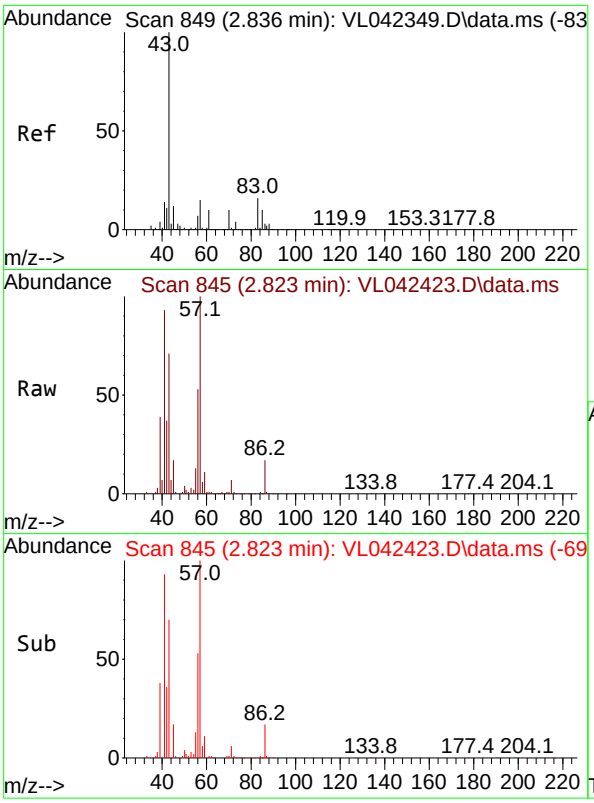


#23
Vinyl Acetate
Concen: 5.754 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 51200

Ion	Ratio	Lower	Upper
43	100		
86	11.8	6.5	9.7#
42	9.3	7.8	11.8
44	9.7	5.0	7.6#



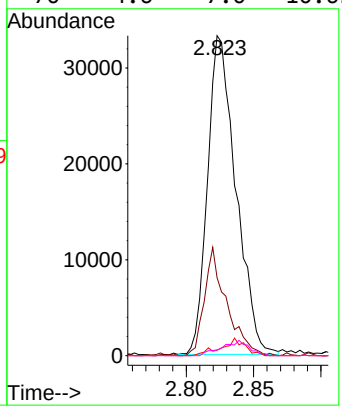


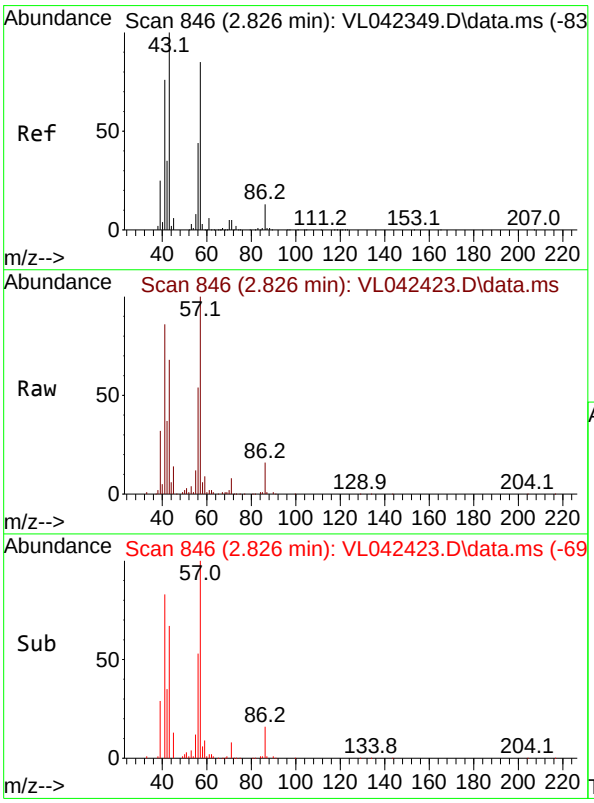
#25
Ethyl Acetate
Concen: 0.897 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.013 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 43 Resp: 48635

Ion	Ratio	Lower	Upper
43	100		
45	27.5	8.3	12.5#
61	4.6	7.3	10.9#
70	4.6	7.0	10.6#

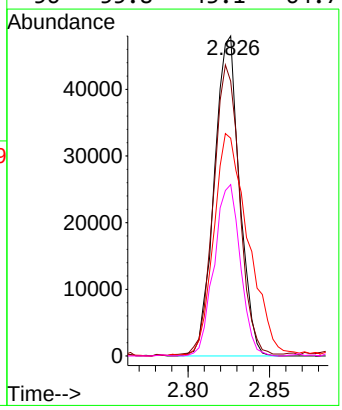


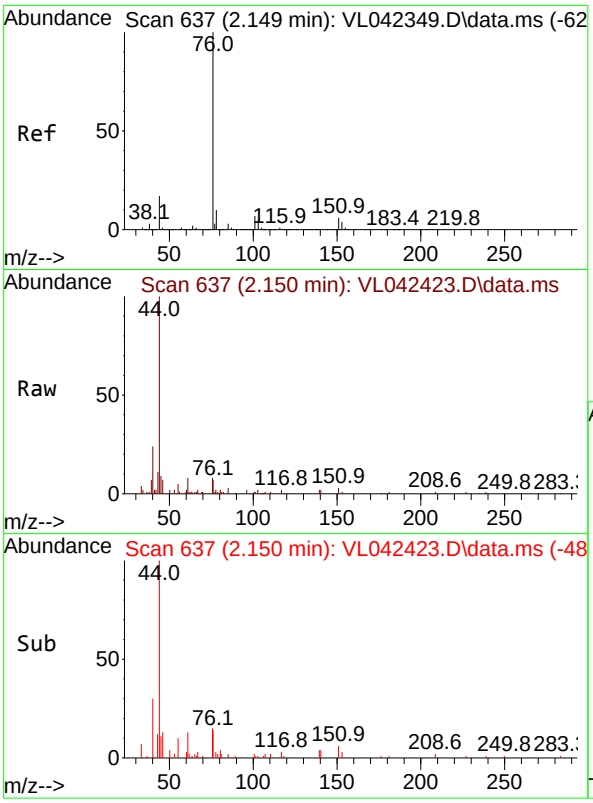


#26
Hexane
Concen: 2.354 ppbv
RT: 2.826 min Scan# 846
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 57 Resp: 51632

Ion	Ratio	Lower	Upper
57	100		
41	95.5	77.9	116.9
43	97.6	208.4	312.6#
56	55.8	43.1	64.7



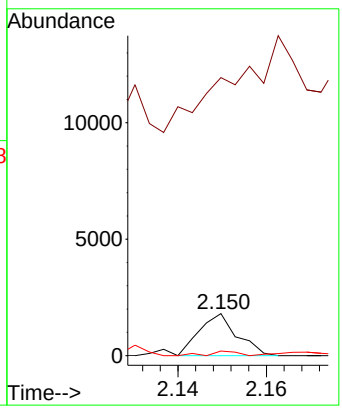


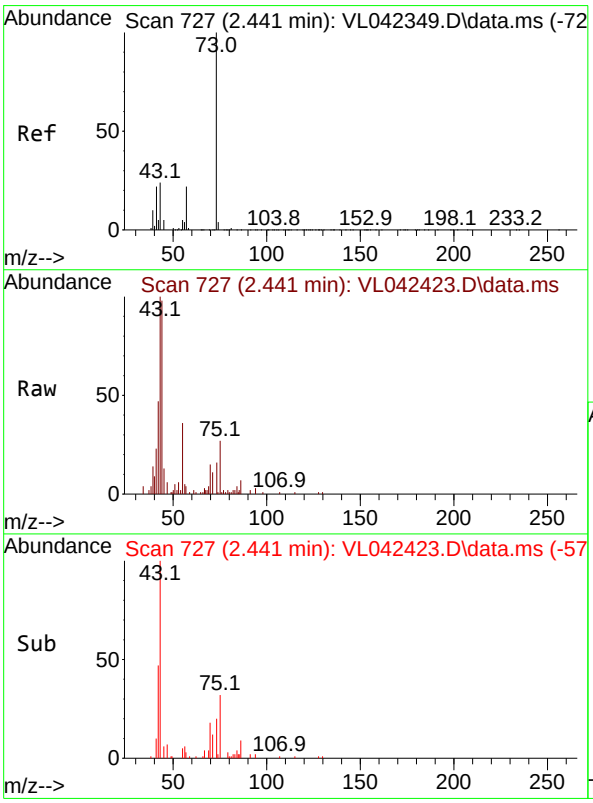
#27
Carbon Disulfide
Concen: 0.046 ppbv
RT: 2.150 min Scan# 6
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 76 Resp: 1071

Ion	Ratio	Lower	Upper
76	100		
44	0.0	15.5	23.3#
78	48.4	9.3	13.9#

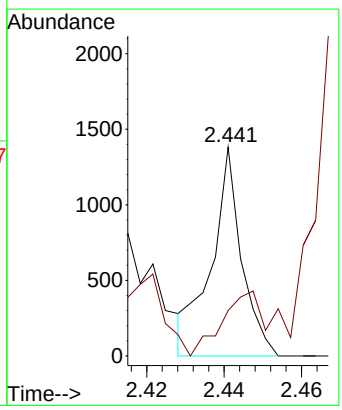


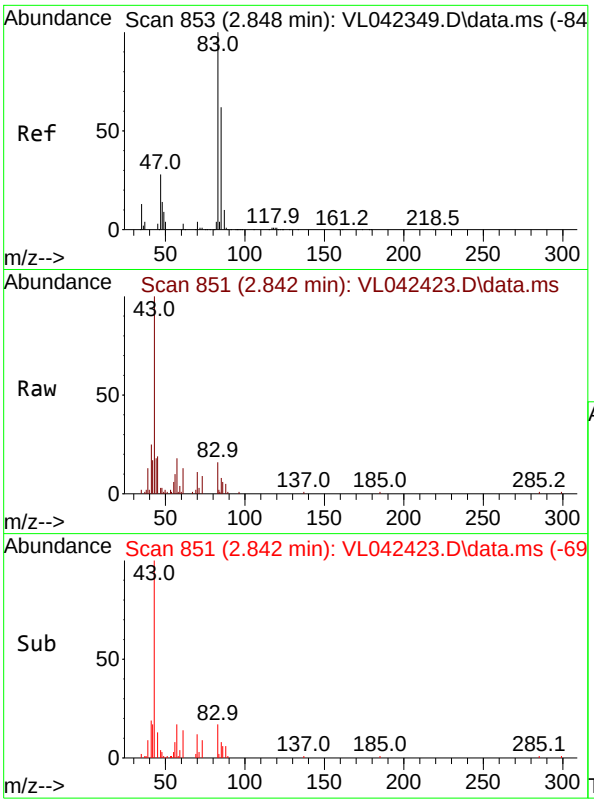


#28
Methyl tert-Butyl Ether
Concen: 0.052 ppbv
RT: 2.441 min Scan# 727
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 73 Resp: 751

Ion	Ratio	Lower	Upper
73	100		
57	0.0	21.3	31.9#



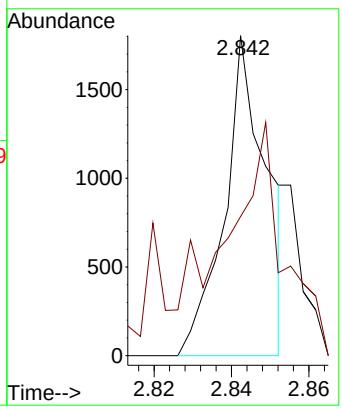


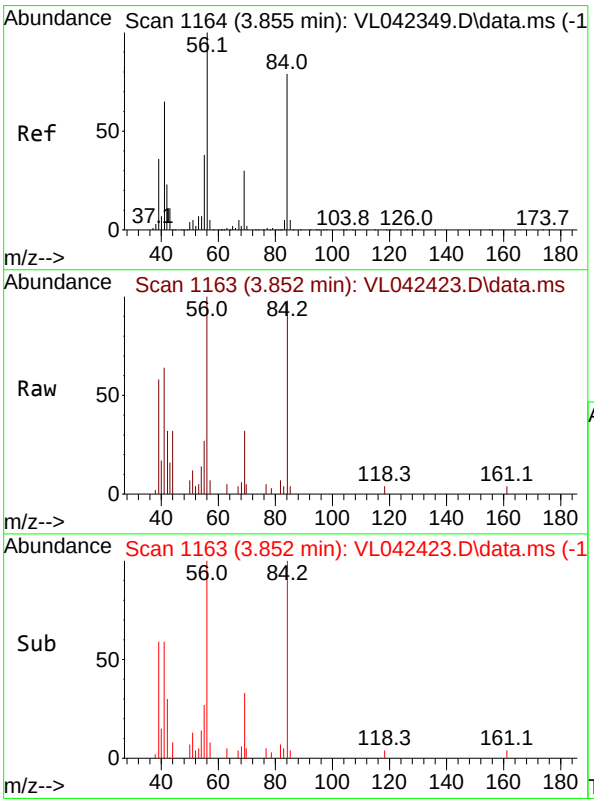
#29
Chloroform
Concen: 0.044 ppbv
RT: 2.842 min Scan# 8
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 83 Resp: 1349

Ion	Ratio	Lower	Upper
83	100		
85	29.2	50.0	75.0#

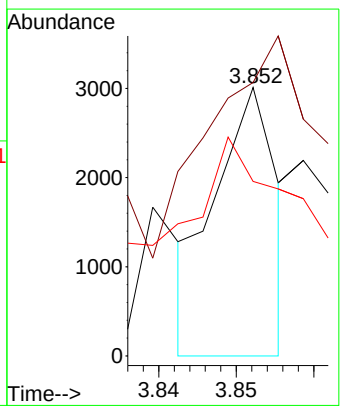


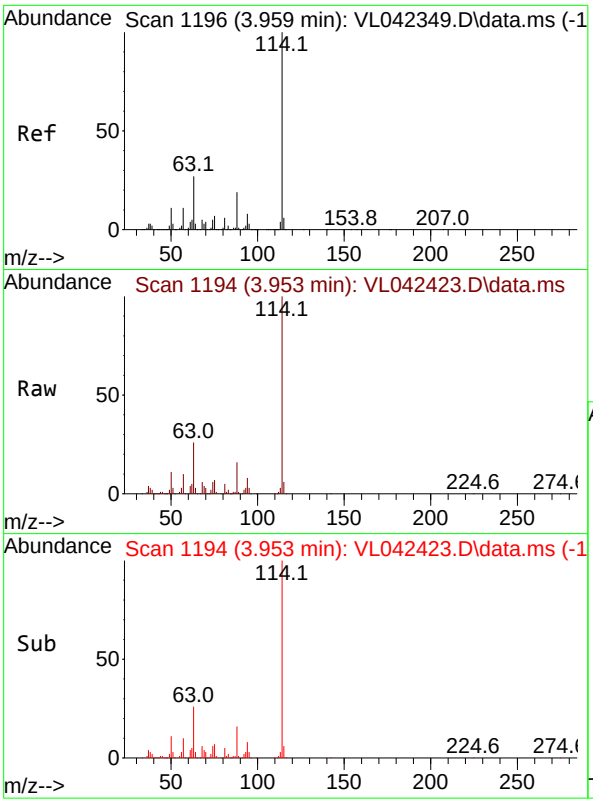


#30
Cyclohexane
Concen: 0.094 ppbv
RT: 3.852 min Scan# 1163
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 84 Resp: 1658

Ion	Ratio	Lower	Upper
84	100		
56	333.9	101.0	151.4#
41	230.3	67.4	101.0#



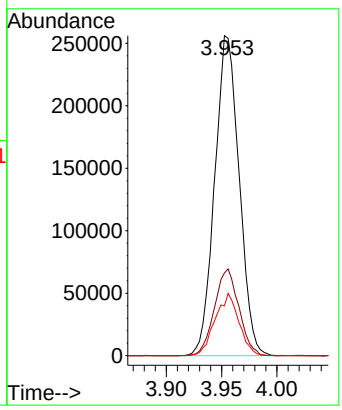


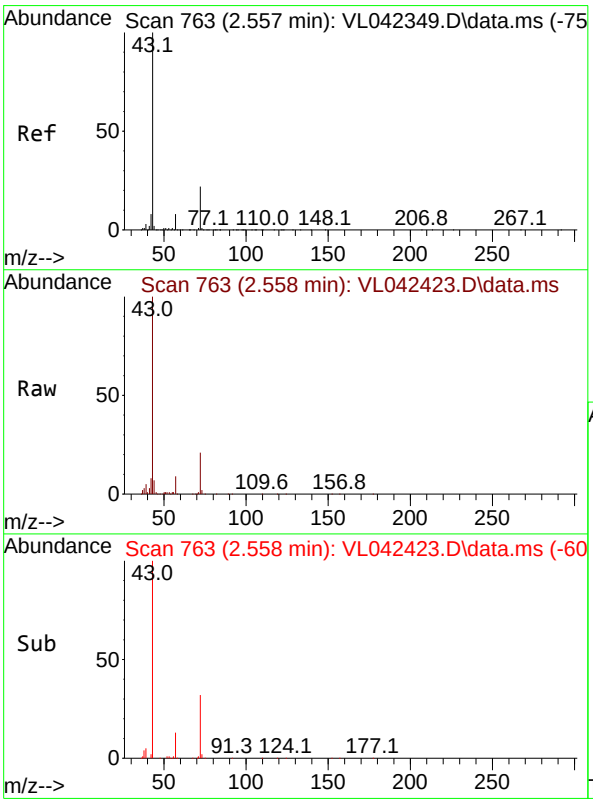
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.953 min Scan# 11
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:114 Resp: 394249

Ion	Ratio	Lower	Upper
114	100		
63	27.1	21.8	32.6
88	19.0	15.5	23.3

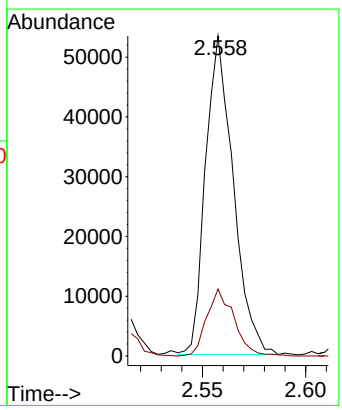


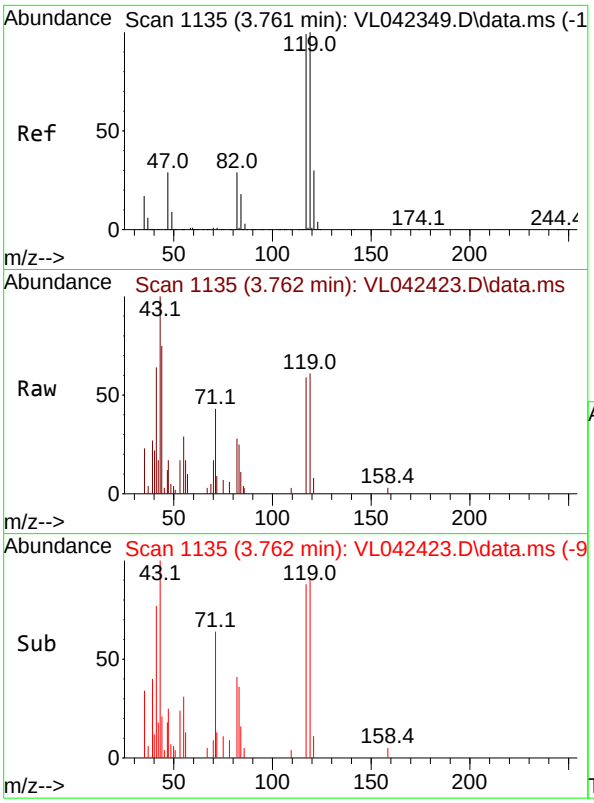


#34
2-Butanone
Concen: 1.600 ppbv
RT: 2.558 min Scan# 763
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 43 Resp: 49884

Ion	Ratio	Lower	Upper
43	100		
72	20.7	18.2	27.2



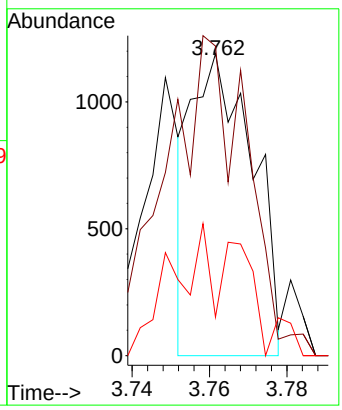


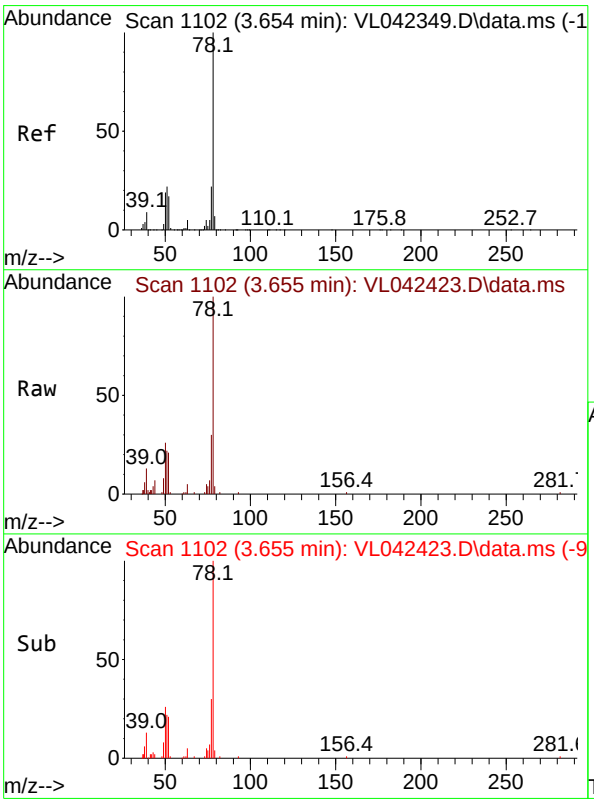
#35
Carbon Tetrachloride
Concen: 0.037 ppbv
RT: 3.762 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:117 Resp: 1314

Ion	Ratio	Lower	Upper
117	100		
119	106.2	80.5	120.7
121	0.3	24.2	36.2#

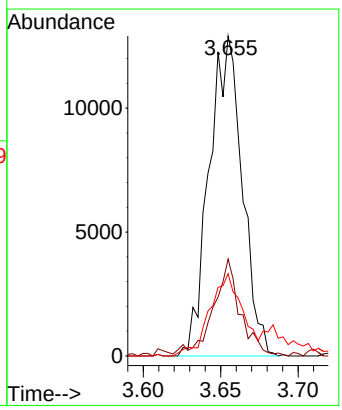


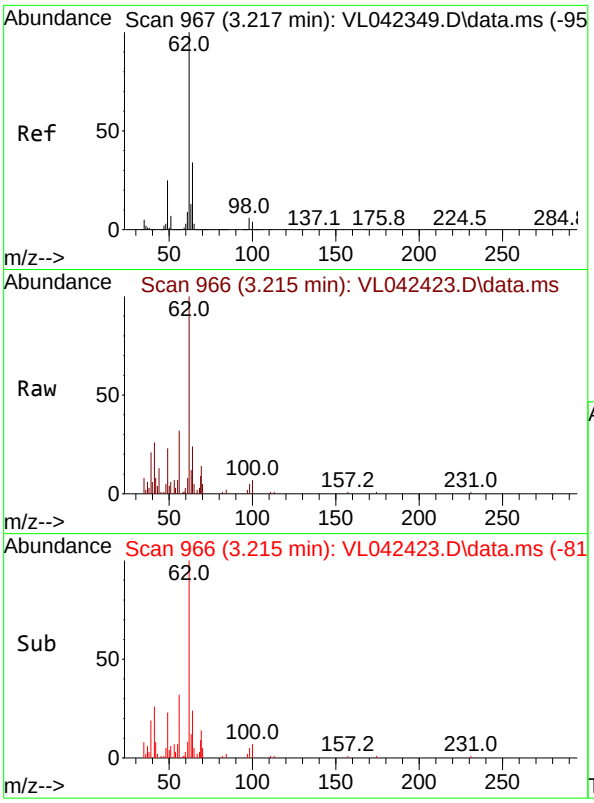


#36
Benzene
Concen: 0.452 ppbv
RT: 3.655 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 78 Resp: 19225

Ion	Ratio	Lower	Upper
78	100		
77	29.4	17.4	26.0#
50	24.8	15.5	23.3#



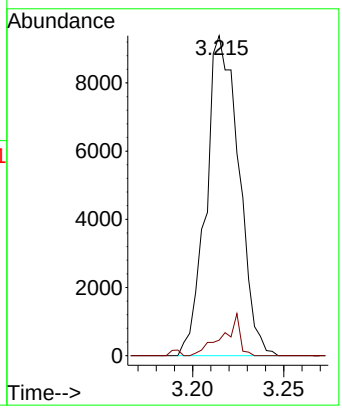


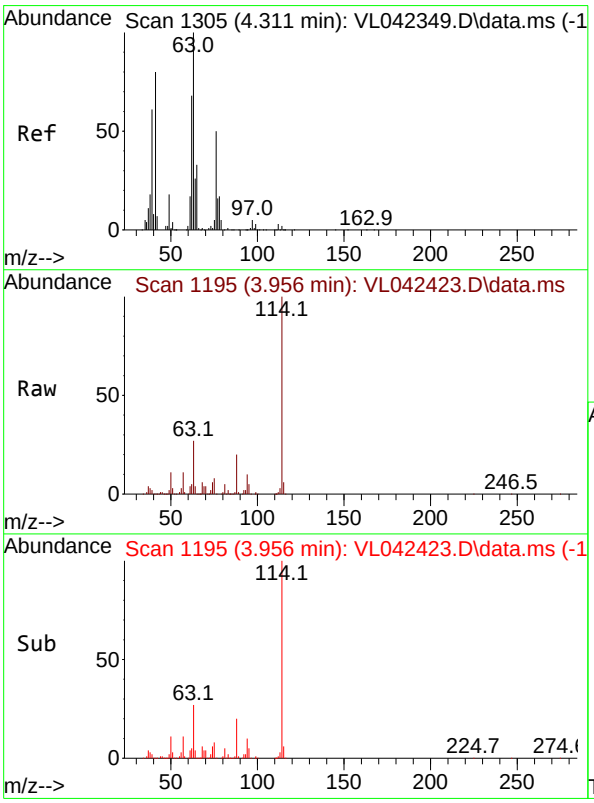
#37
1,2-Dichloroethane
Concen: 0.459 ppbv
RT: 3.215 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 62 Resp: 11718

Ion	Ratio	Lower	Upper
62	100		
98	7.4	5.1	7.7

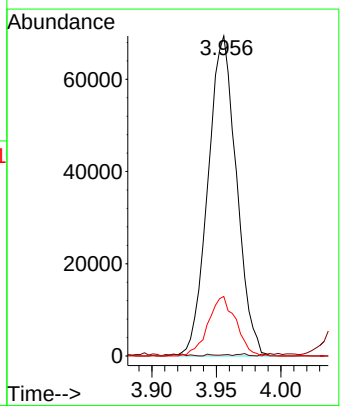


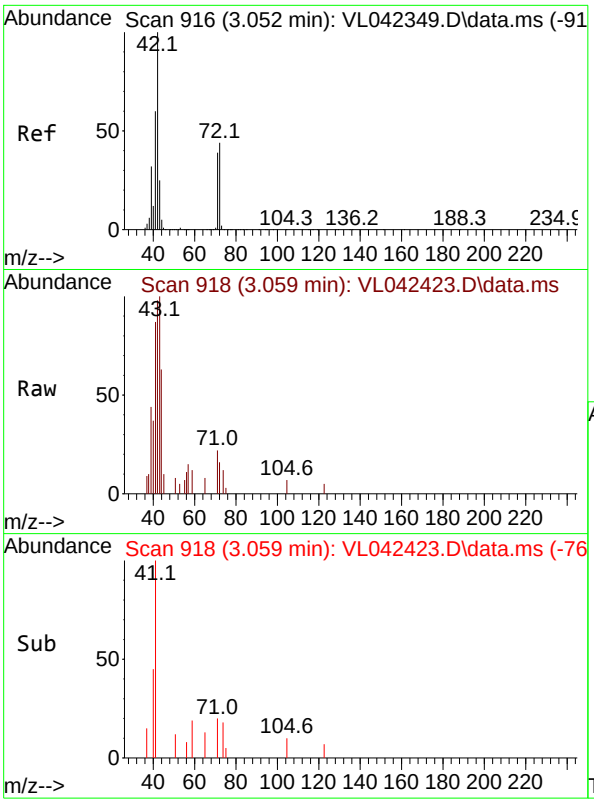


#39
1,2-Dichloropropane
Concen: 6.729 ppbv
RT: 3.956 min Scan# 1195
Delta R.T. -0.356 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 63 Resp: 106631

Ion	Ratio	Lower	Upper
63	100		
41	0.0	64.2	96.2#
62	18.6	54.3	81.5#



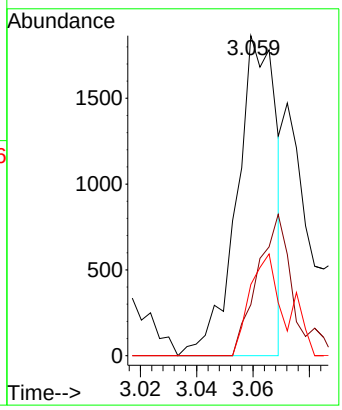


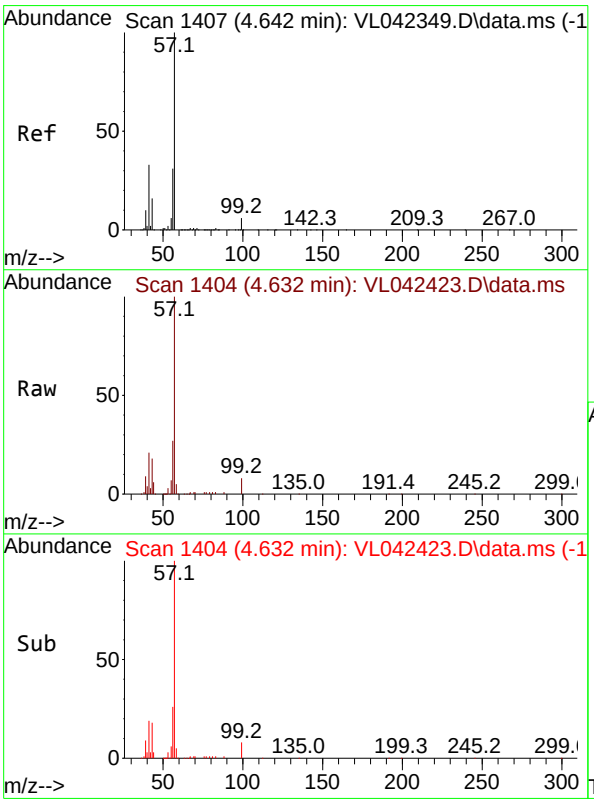
#41
Tetrahydrofuran
Concen: 0.099 ppbv
RT: 3.059 min Scan# 91
Delta R.T. 0.007 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 42 Resp: 1802

Ion	Ratio	Lower	Upper
42	100		
72	0.0	32.3	48.5#
71	0.0	31.4	47.2#

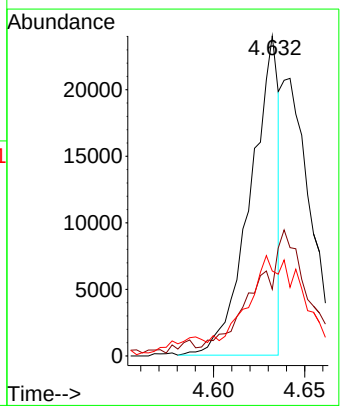


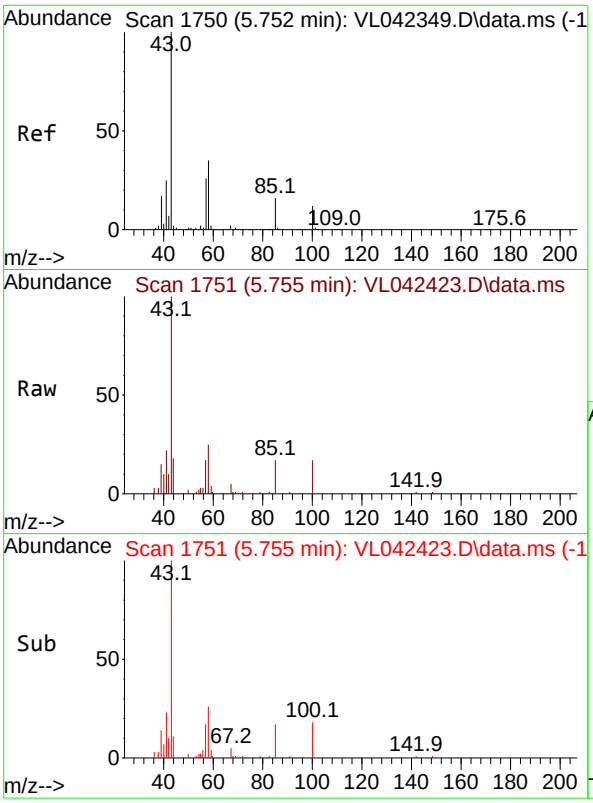


#44
2,2,4-Trimethylpentane
Concen: 0.353 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 57 Resp: 25912

Ion	Ratio	Lower	Upper
57	100		
41	0.0	27.2	40.8#
56	72.0	25.7	38.5#



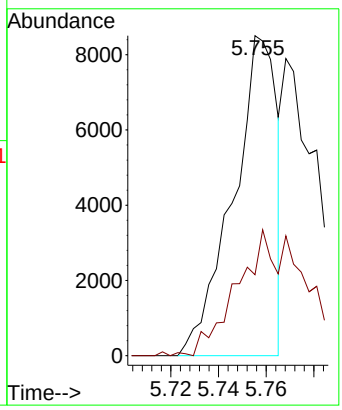


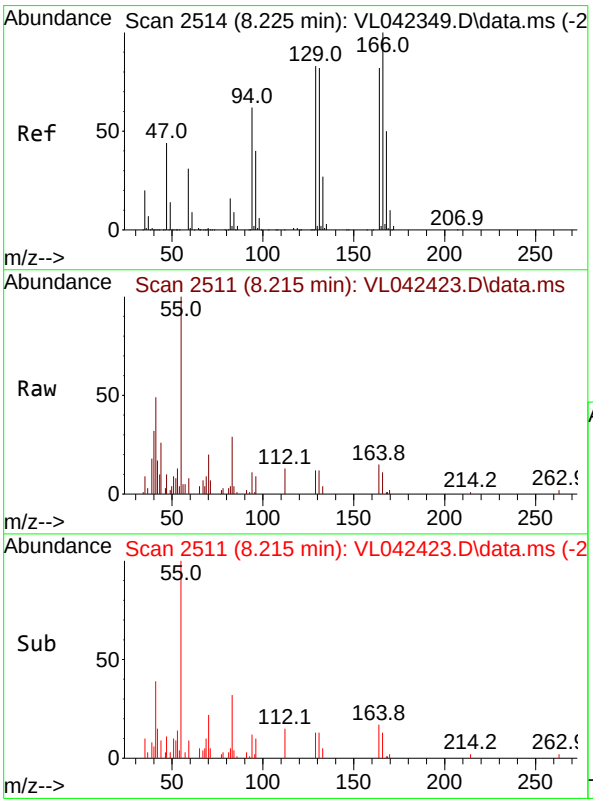
#50
4-Methyl-2-Pentanone
Concen: 0.209 ppbv
RT: 5.755 min Scan# 1
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 43 Resp: 10827

Ion	Ratio	Lower	Upper
43	100		
58	68.1	28.6	43.0#

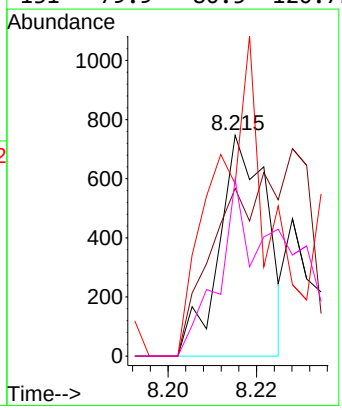


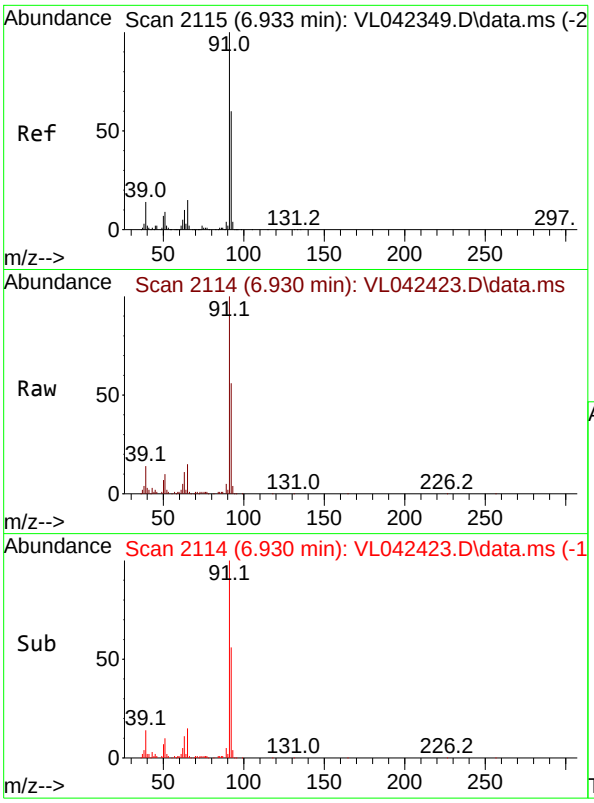


#52
Tetrachloroethene
Concen: 0.034 ppbv
RT: 8.215 min Scan# 2511
Delta R.T. -0.009 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:164 Resp: 561

Ion	Ratio	Lower	Upper
164	100		
166	75.9	98.2	147.2#
129	78.0	81.8	122.8#
131	79.9	80.5	120.7#



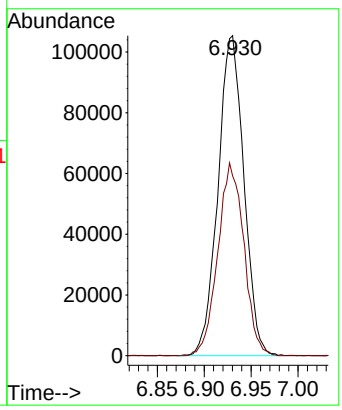


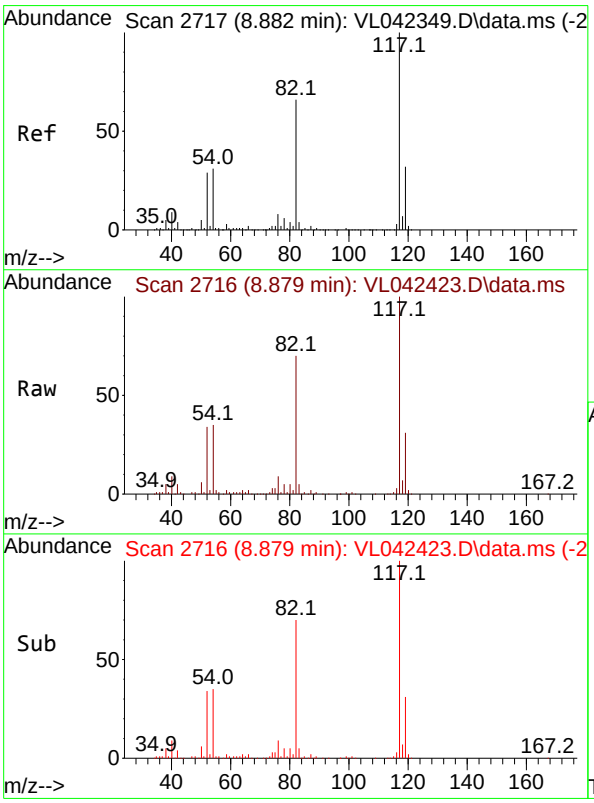
#53
Toluene
Concen: 3.959 ppbv
RT: 6.930 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 91 Resp: 202018

Ion	Ratio	Lower	Upper
91	100		
92	60.6	48.2	72.4

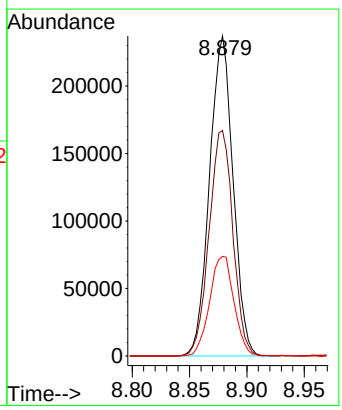


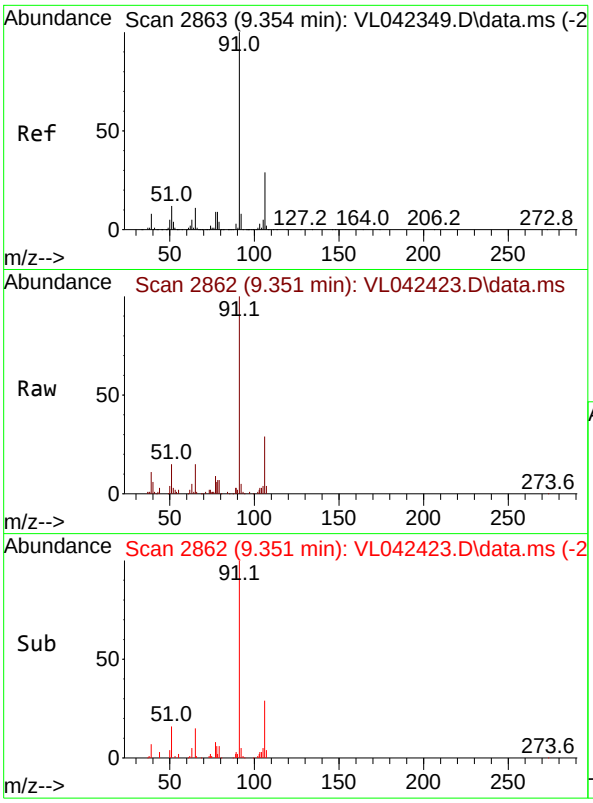


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.879 min Scan# 2716
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:117 Resp: 337638

Ion	Ratio	Lower	Upper
117	100		
82	71.5	57.8	86.6
119	32.3	25.2	37.8



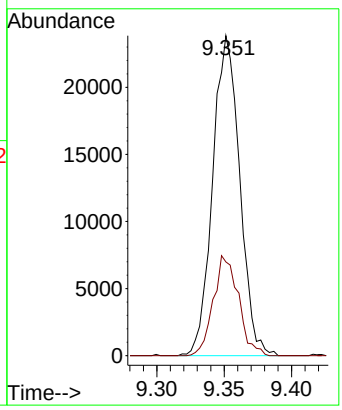


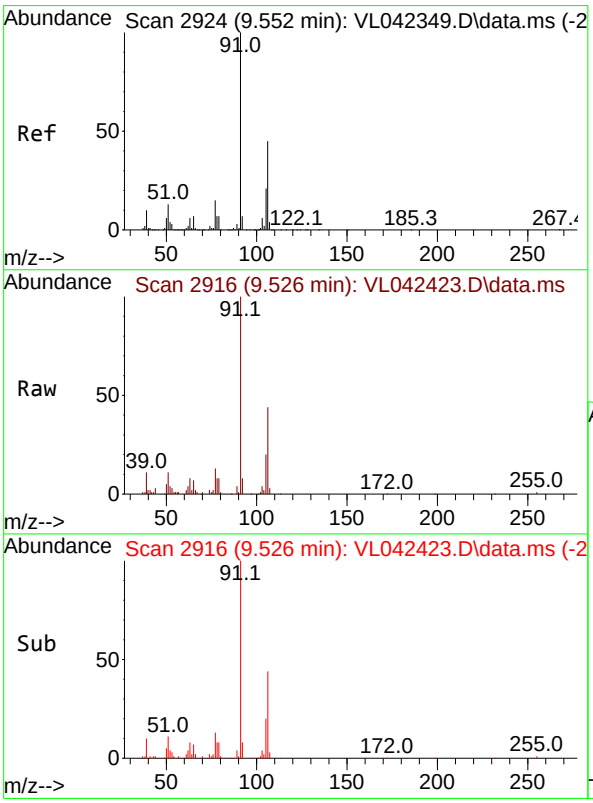
#58
Ethyl Benzene
Concen: 0.498 ppbv
RT: 9.351 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 91 Resp: 33321

Ion	Ratio	Lower	Upper
91	100		
106	29.3	23.0	34.4

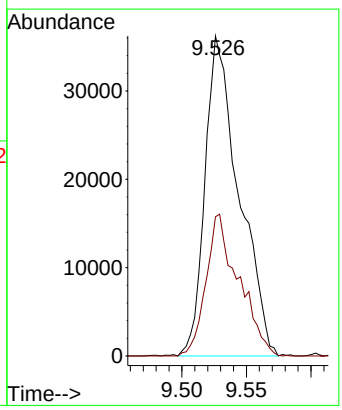


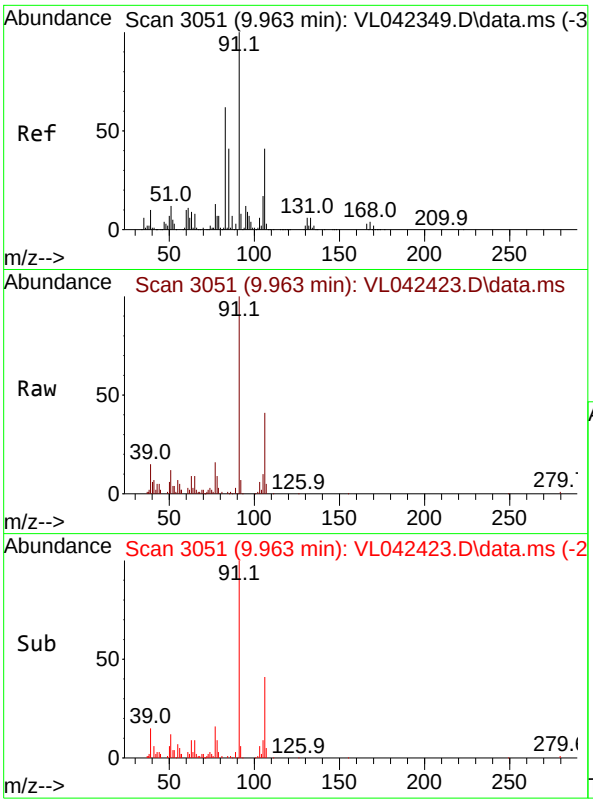


#59
m/p-Xylene
Concen: 1.233 ppbv
RT: 9.526 min Scan# 2916
Delta R.T. -0.026 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 91 Resp: 66442

Ion	Ratio	Lower	Upper
91	100		
106	42.5	35.4	53.2



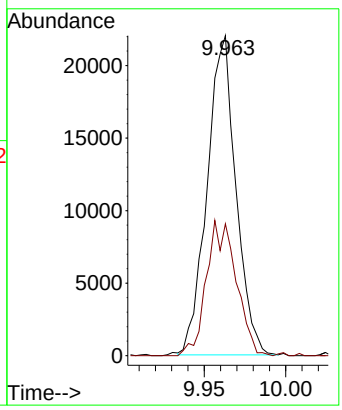


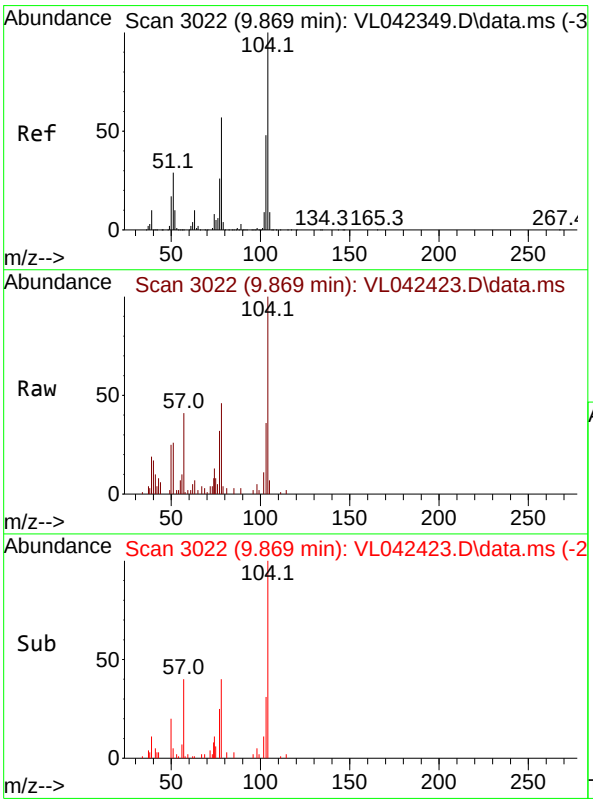
#60
o-Xylene
Concen: 0.499 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion: 91 Resp: 27079

Ion	Ratio	Lower	Upper
91	100		
106	43.9	21.1	63.4

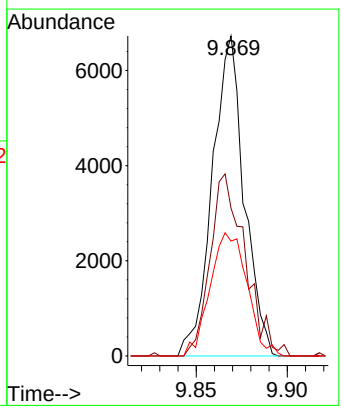


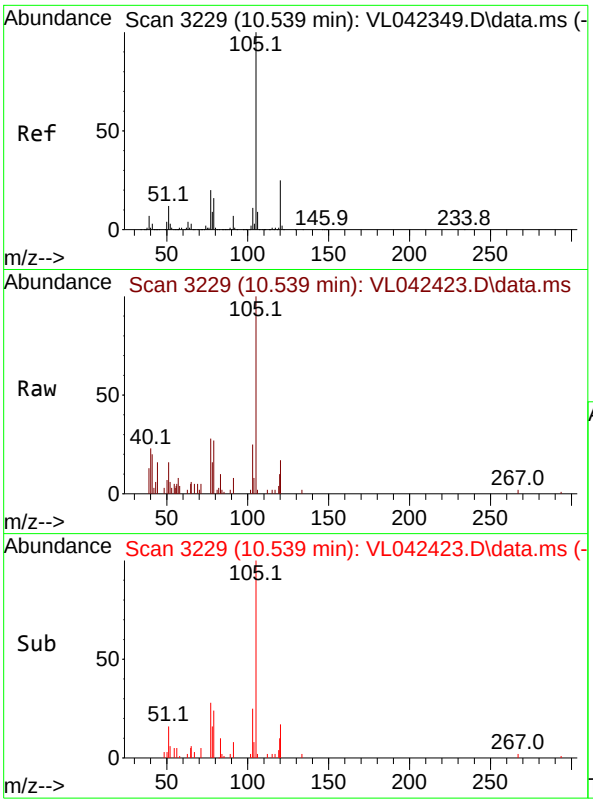


#61
Styrene
Concen: 0.316 ppbv
RT: 9.869 min Scan# 3022
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:104 Resp: 8176

Ion	Ratio	Lower	Upper
104	100		
78	62.6	44.6	66.8
103	44.8	37.4	56.0



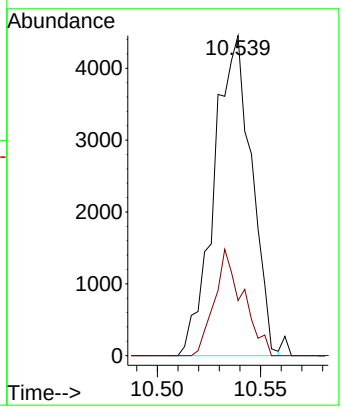


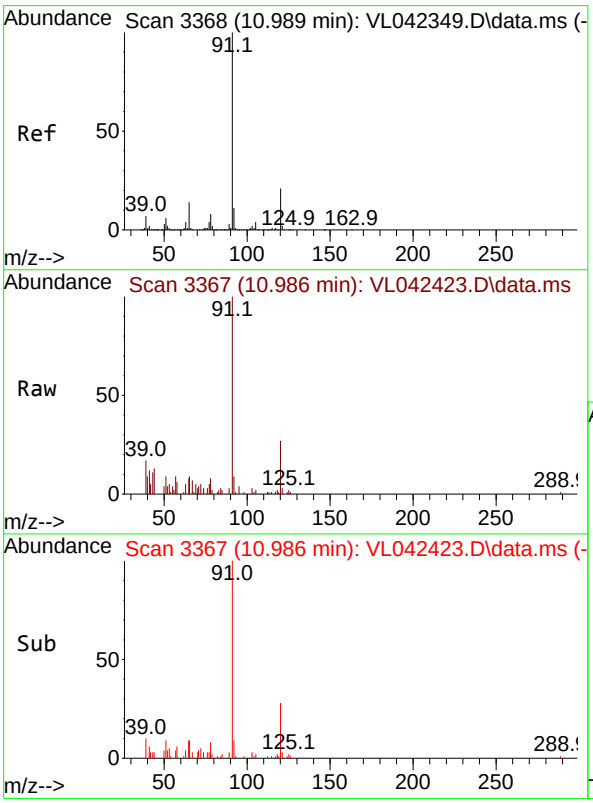
#62
Isopropylbenzene
Concen: 0.071 ppbv
RT: 10.539 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:105 Resp: 5624

Ion	Ratio	Lower	Upper
105	100		
120	25.3	19.8	29.8

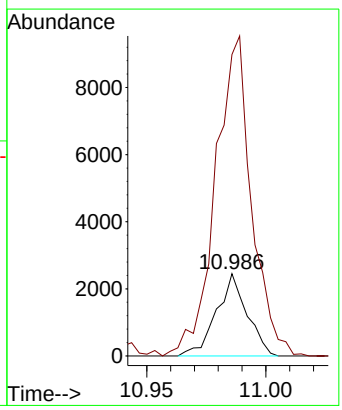


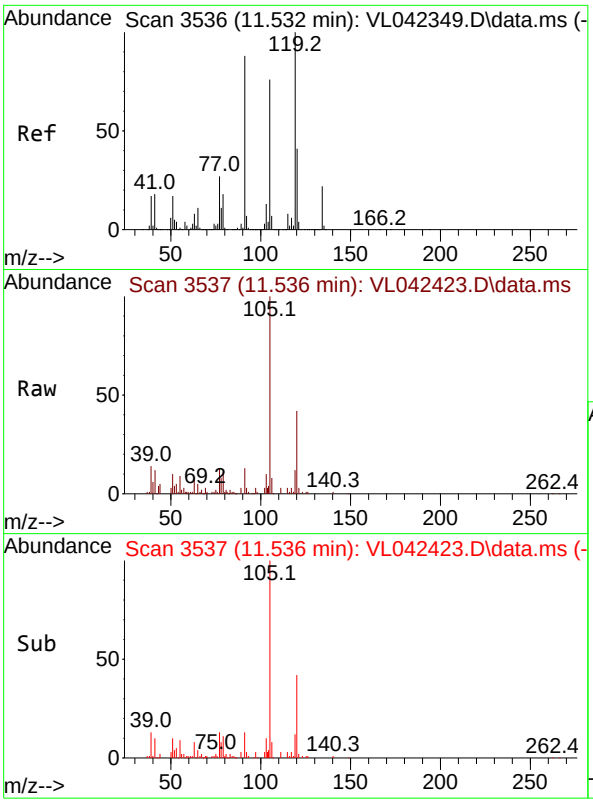


#64
n-propylbenzene
Concen: 0.109 ppbv
RT: 10.986 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:120 Resp: 2190

Ion	Ratio	Lower	Upper
120	100		
91	459.9	392.4	588.6



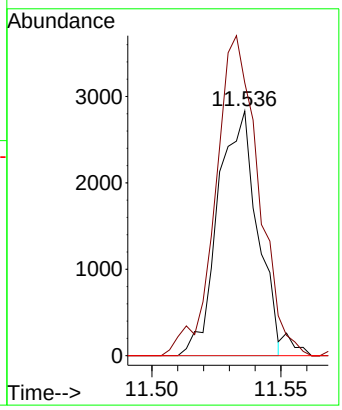


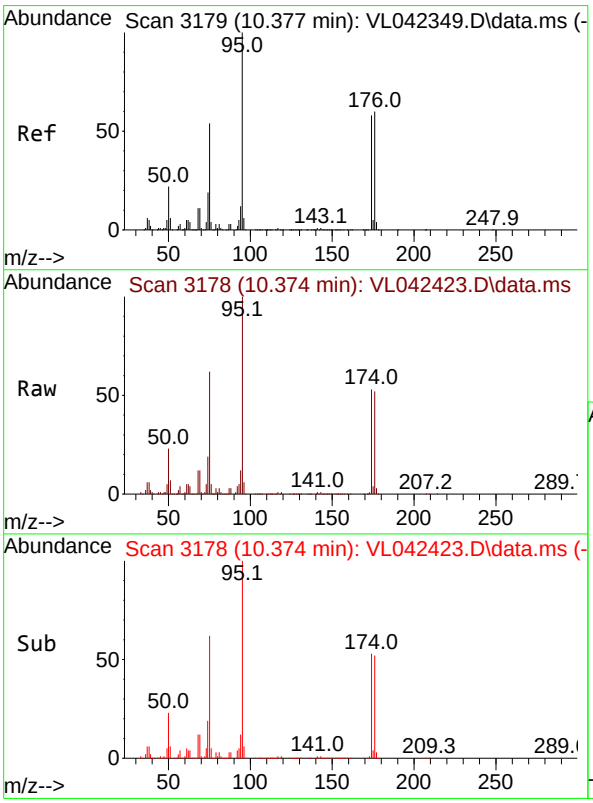
#65
tert-Butylbenzene
Concen: 0.041 ppbv
RT: 11.536 min Scan# 3
Delta R.T. 0.004 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:119 Resp: 3014

Ion	Ratio	Lower	Upper
119	100		
91	142.7	74.6	111.8#
134	0.0	18.8	28.2#

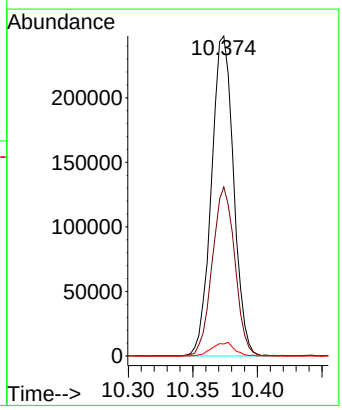


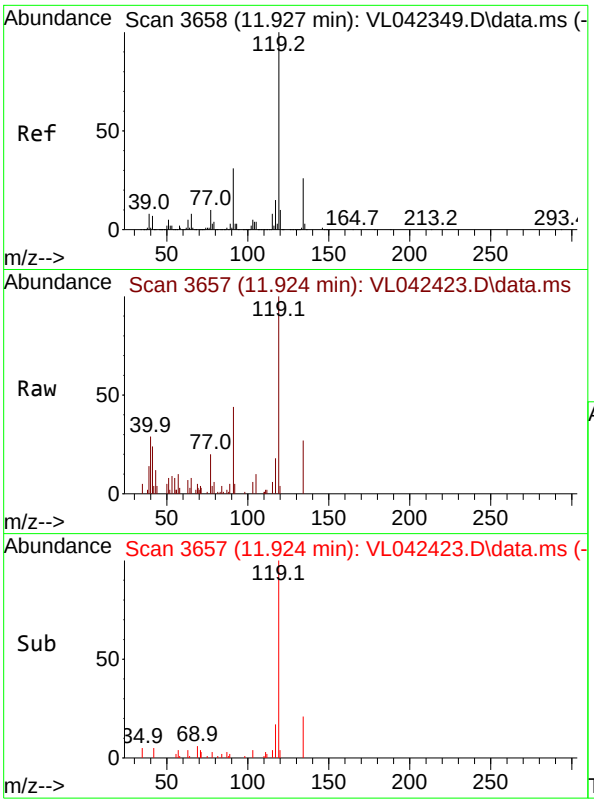


#68
1-Bromo-4-Fluorobenzene
Concen: 10.662 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion: 95 Resp: 295822

Ion	Ratio	Lower	Upper
95	100		
174	53.7	48.5	72.7
175	4.2	3.7	5.5



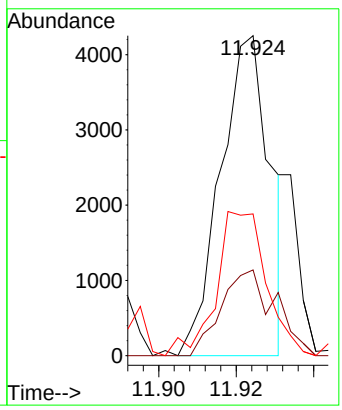


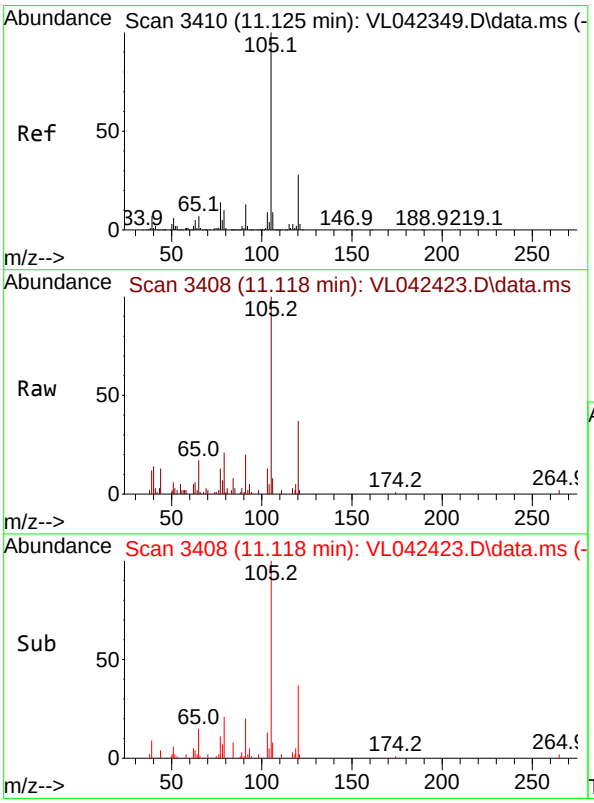
#69
p-Isopropyltoluene
Concen: 0.043 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:119 Resp: 3785

Ion	Ratio	Lower	Upper
119	100		
134	29.1	20.0	30.0
91	51.5	24.4	36.6#

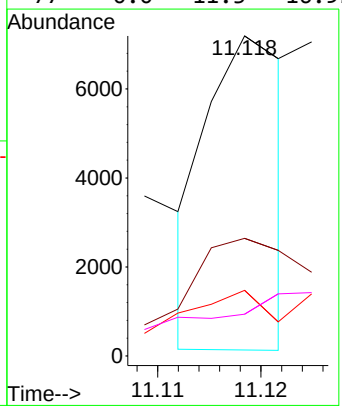


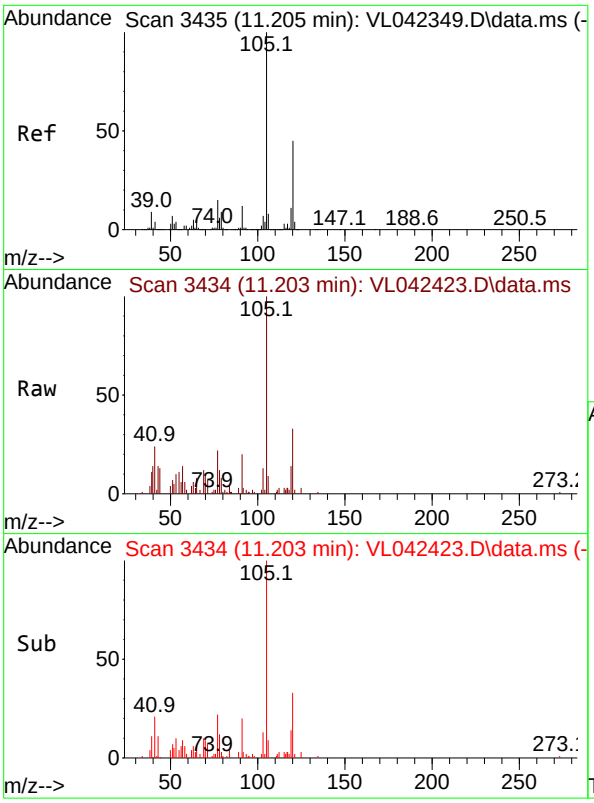


#72
4-Ethyltoluene
Concen: 0.056 ppbv
RT: 11.118 min Scan# 3408
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:105 Resp: 3726

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#



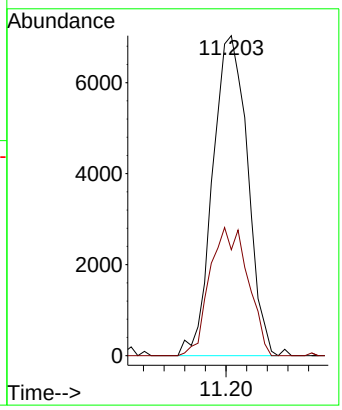


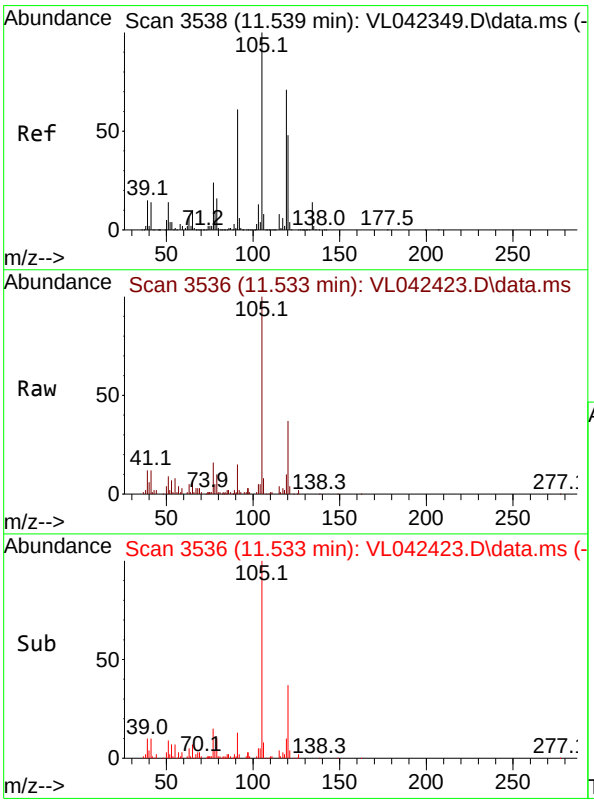
#73
1,3,5-Trimethylbenzene
Concen: 0.140 ppbv
RT: 11.203 min Scan# 34
Delta R.T. -0.003 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025

Tgt Ion:105 Resp: 8221

Ion	Ratio	Lower	Upper
105	100		
120	33.1	35.6	53.4#

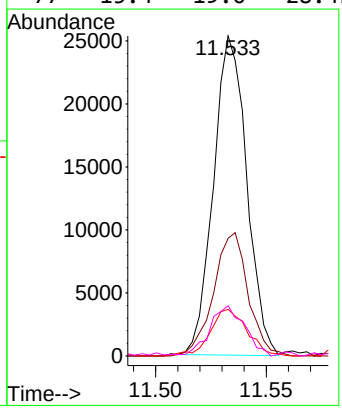




#74
1,2,4-Trimethylbenzene
Concen: 0.387 ppbv
RT: 11.533 min Scan# 3536
Delta R.T. -0.006 min
Lab File: VL042423.D
Acq: 28 Apr 2025 13:26

Tgt Ion:105 Resp: 26441

Ion	Ratio	Lower	Upper
105	100		
120	36.4	38.1	57.1#
91	14.0	48.8	73.2#
77	15.4	19.0	28.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Time: Apr 29 01:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.784	49	134924	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.955	114	377834	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	330143	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.374	95	284407	10.483	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.800%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	10943	0.459	ppbv		93
3) Chlorodifluoromethane	1.476	51	12765	0.562	ppbv	#	90
4) Chloromethane	1.531	50	6517	0.691	ppbv		93
6) Bromomethane	1.670	94	217	0.049	ppbv	#	8
7) Chloroethane	1.706	64	126	0.034	ppbv	#	42
9) Propene	1.884	41	43468	4.205	ppbv		87
10) Heptane	4.968	43	4448	0.153	ppbv	#	27
11) Trichlorofluoromethane	1.877	101	4919	0.217	ppbv		92
12) 1,1,2-Trichlorotrifluo...	2.136	101	1302	0.070	ppbv		94
13) Ethanol	1.722	45	1134596	690.509	ppbv		81
15) Acetone	1.835	43	335719	15.200	ppbv		100
16) 1,3-Butadiene	1.619	39	7122	0.674	ppbv	#	29
17) tert-Butyl alcohol	2.043	59	7751	0.283	ppbv		97
19) Isopropyl Alcohol	1.884	45	490461	39.973	ppbv	#	63
20) Methylene Chloride	2.059	84	13523	1.563	ppbv		95
21) Allyl Chloride	2.078	41	1344	0.088	ppbv	#	21
23) Vinyl Acetate	2.454	43	26458	2.959	ppbv	#	79
25) Ethyl Acetate	2.826	43	62430	1.146	ppbv	#	89
26) Hexane	2.826	57	65044	2.951	ppbv	#	42
27) Carbon Disulfide	2.146	76	1316	0.056	ppbv	#	1
29) Chloroform	2.848	83	1950	0.063	ppbv	#	75
30) Cyclohexane	3.855	84	5289	0.297	ppbv		92
31) cis-1,2-Dichloroethene	2.836	61	2740	0.131	ppbv	#	25
34) 2-Butanone	2.560	43	21181	0.709	ppbv		100
35) Carbon Tetrachloride	3.761	117	1182	0.035	ppbv	#	32
36) Benzene	3.654	78	17661	0.433	ppbv	#	94
37) 1,2-Dichloroethane	3.214	62	1133	0.046	ppbv	#	84
39) 1,2-Dichloropropane	3.959	63	102487	6.749	ppbv	#	23
41) Tetrahydrofuran	3.065	42	982	0.056	ppbv	#	66
44) 2,2,4-Trimethylpentane	4.632	57	16799	0.239	ppbv	#	20
53) Toluene	6.930	91	417734	8.542	ppbv		100
58) Ethyl Benzene	9.351	91	24772	0.379	ppbv		95
59) m/p-Xylene	9.529	91	65650	1.246	ppbv		93
60) o-Xylene	9.963	91	27701	0.522	ppbv		97
61) Styrene	9.865	104	6130	0.242	ppbv		91
62) Isopropylbenzene	10.535	105	3004	0.039	ppbv		96
64) n-propylbenzene	10.985	120	1011	0.052	ppbv	#	1
69) p-Isopropyltoluene	11.924	119	4355	0.050	ppbv	#	76
71) 2-Chlorotoluene	10.901	91	6948	0.114	ppbv		82
72) 4-Ethyltoluene	11.125	105	7865	0.121	ppbv	#	56
73) 1,3,5-Trimethylbenzene	11.205	105	7185	0.125	ppbv		95
74) 1,2,4-Trimethylbenzene	11.536	105	17740	0.265	ppbv	#	68

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Time: Apr 29 01:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

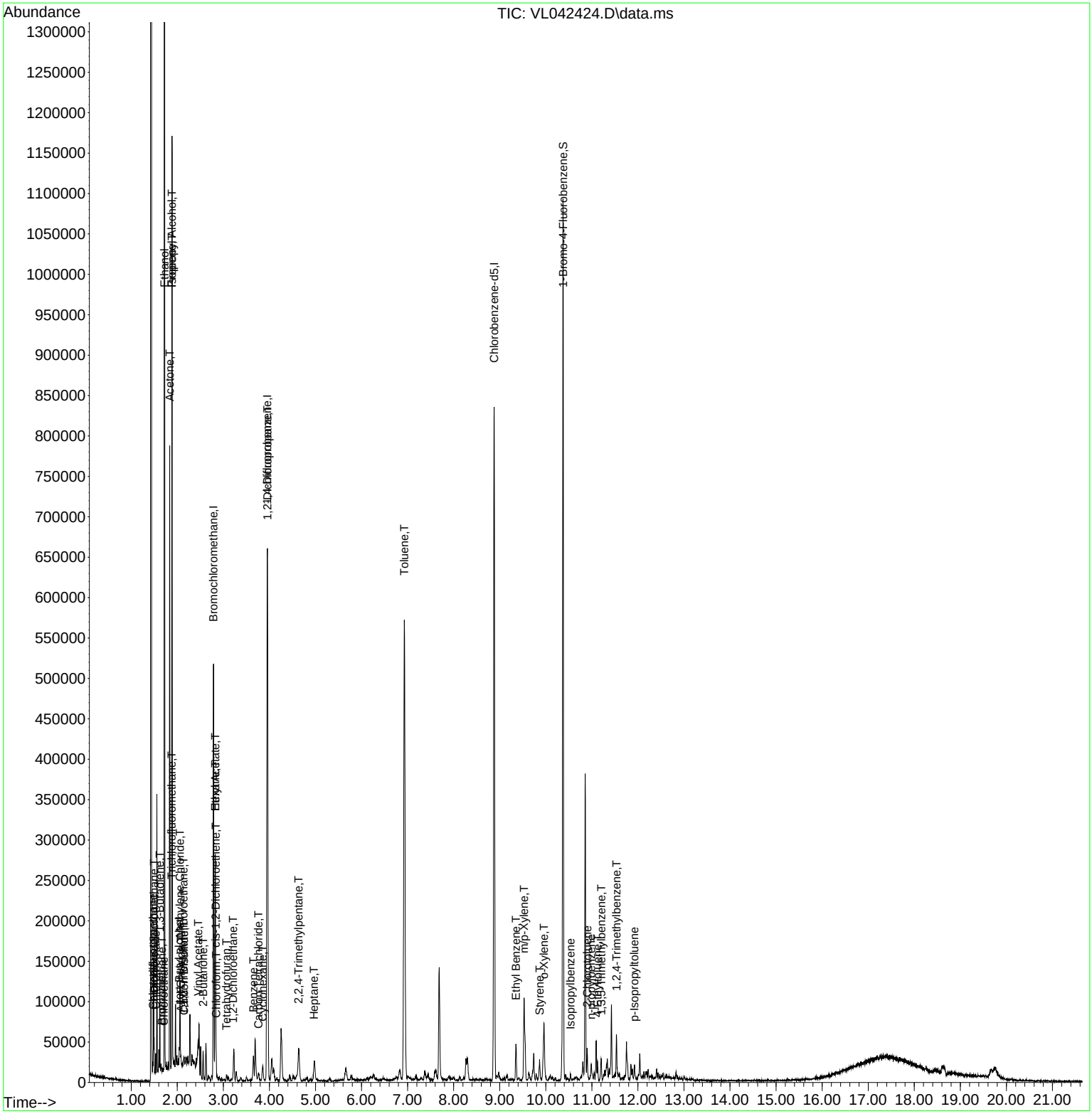
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

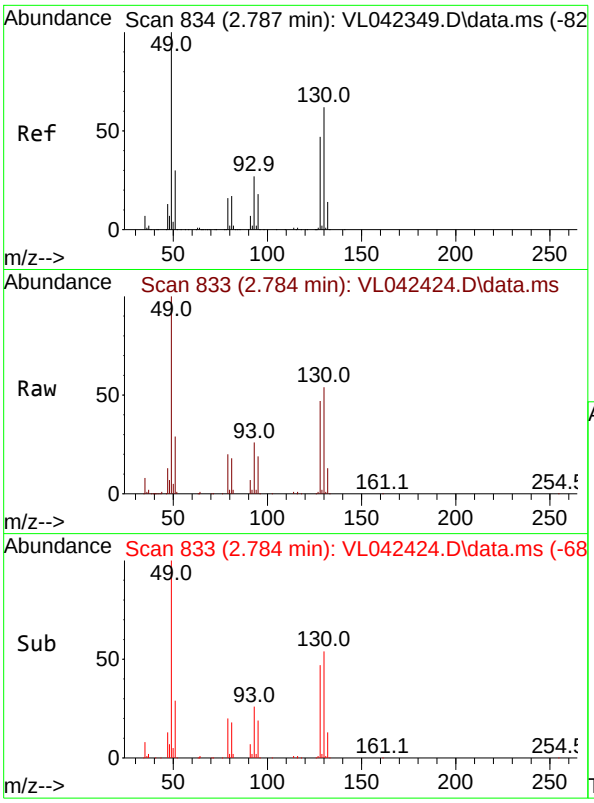
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042424.D
Acq On : 28 Apr 2025 14:00
Operator : SY/MD
Sample : Q1665-21
Misc : 400mL/MSVOA_L
ALS Vial : 11 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Quant Time: Apr 29 01:37:10 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



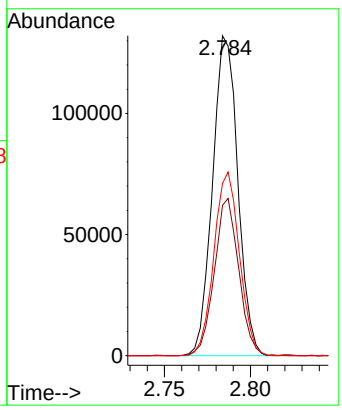


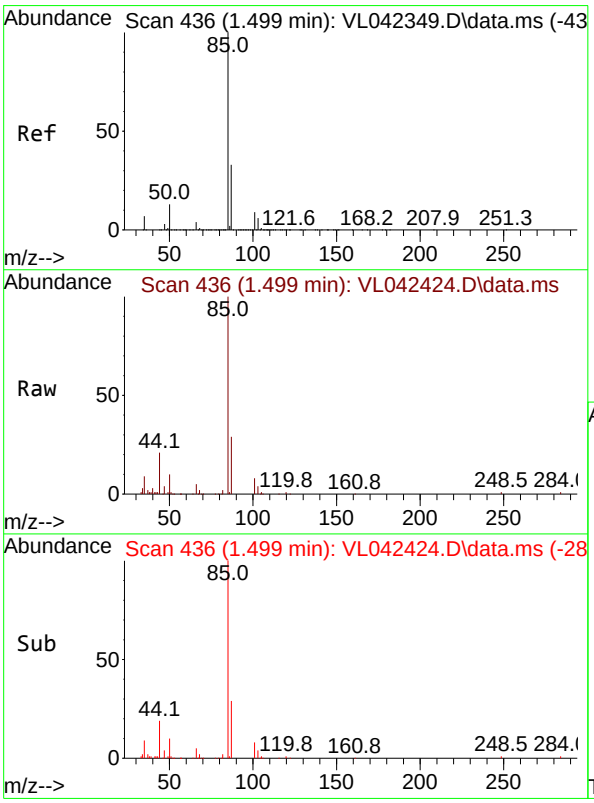
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 49 Resp: 134924

Ion	Ratio	Lower	Upper
49	100		
128	47.5	22.8	68.4
130	57.9	29.3	88.0

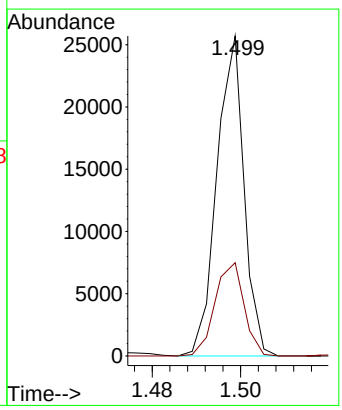


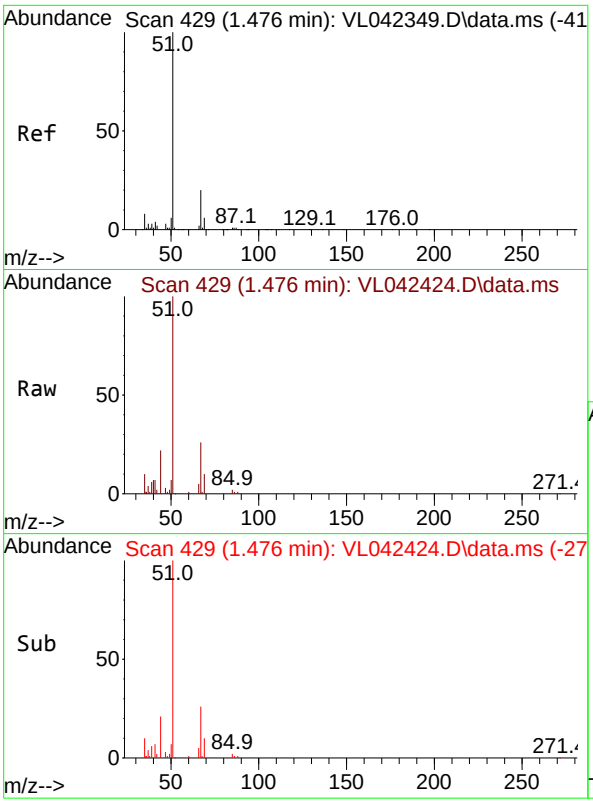


#2
Dichlorodifluoromethane
Concen: 0.459 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 85 Resp: 10943

Ion	Ratio	Lower	Upper
85	100		
87	29.1	26.6	39.8



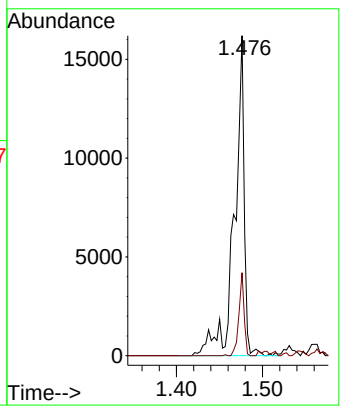


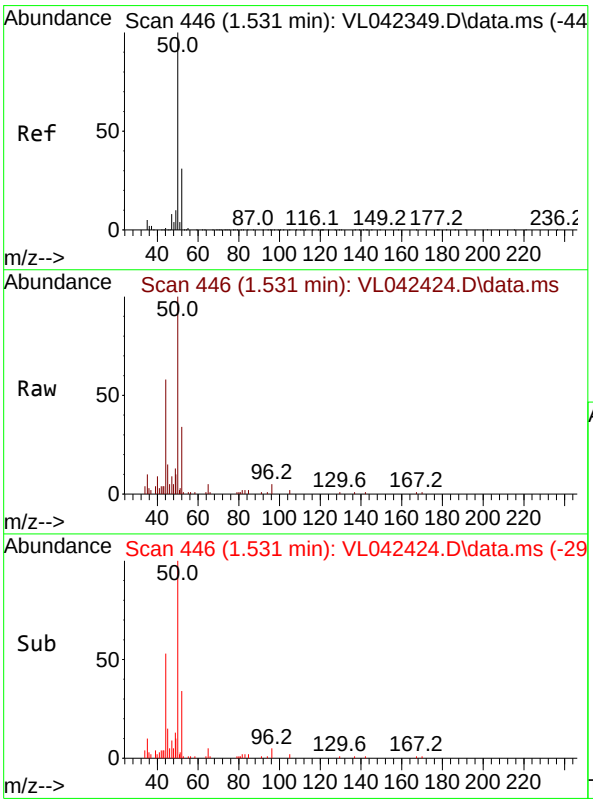
#3
Chlorodifluoromethane
Concen: 0.562 ppbv
RT: 1.476 min Scan# 4
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 51 Resp: 12765

Ion	Ratio	Lower	Upper
51	100		
67	15.7	16.2	24.4#

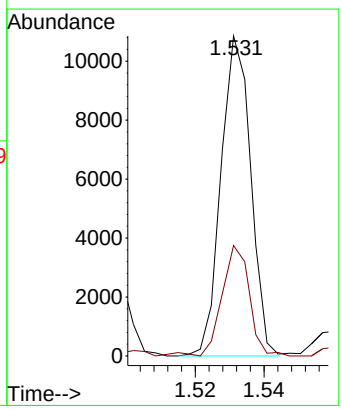


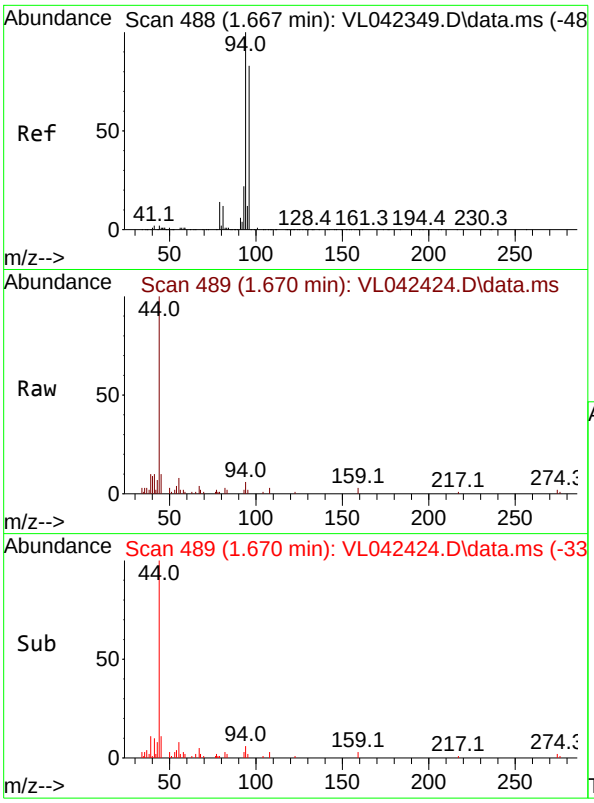


#4
Chloromethane
Concen: 0.691 ppbv
RT: 1.531 min Scan# 446
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 50 Resp: 6517

Ion	Ratio	Lower	Upper
50	100		
52	34.6	24.7	37.1



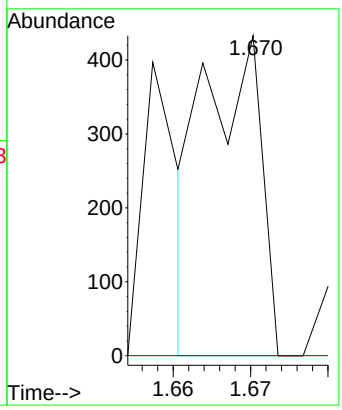


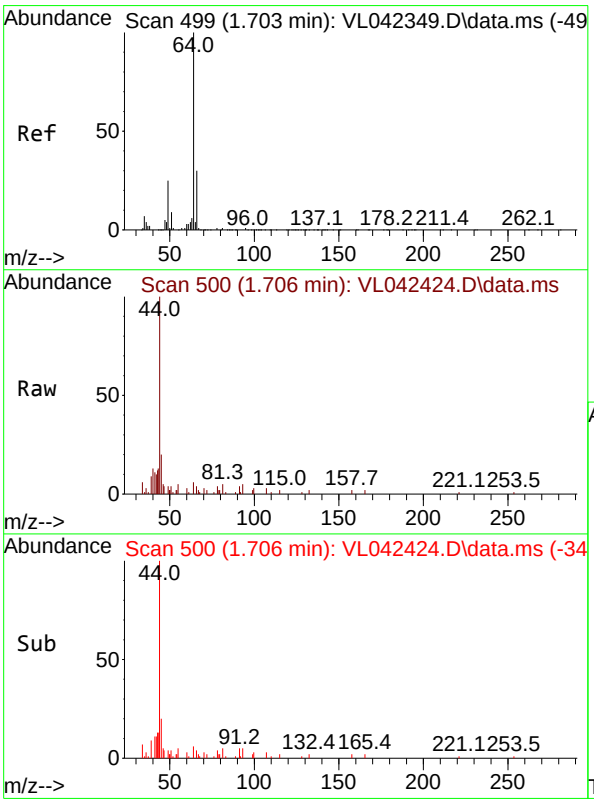
#6
Bromomethane
Concen: 0.049 ppbv
RT: 1.670 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 94 Resp: 217

Ion	Ratio	Lower	Upper
94	100		
96	0.0	66.2	99.2#

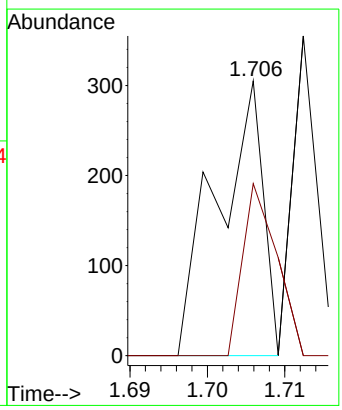


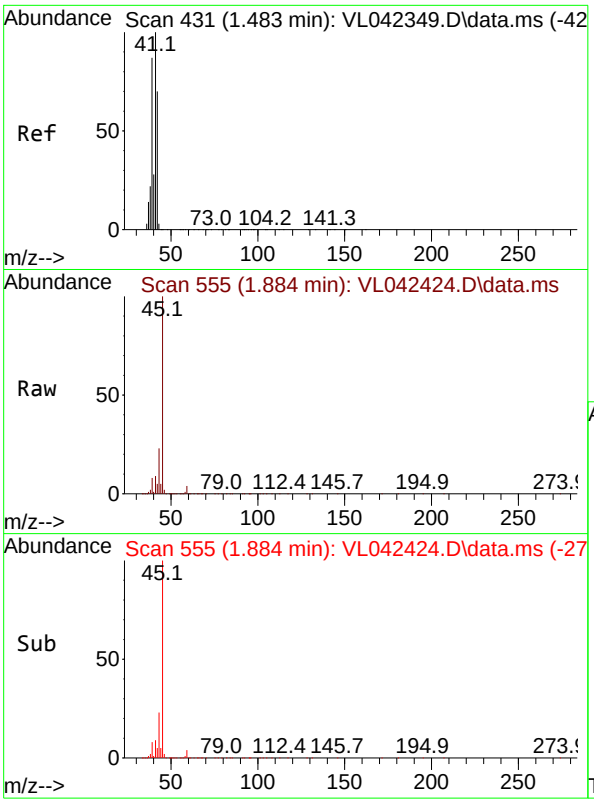


#7
Chloroethane
Concen: 0.034 ppbv
RT: 1.706 min Scan# 500
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 64 Resp: 126

Ion	Ratio	Lower	Upper
64	100		
66	62.6	24.6	37.0#



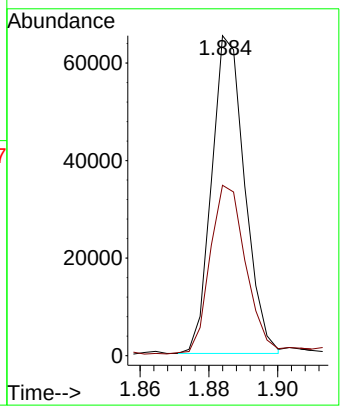


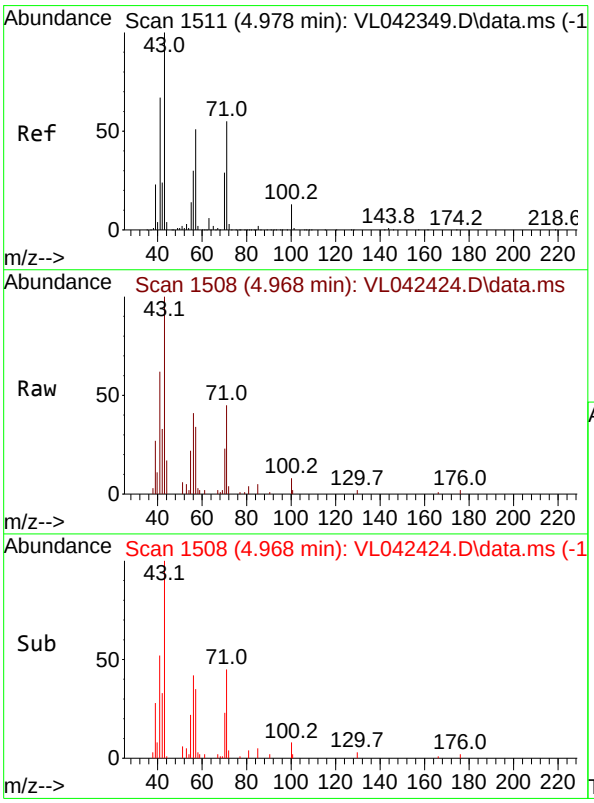
#9
Propene
Concen: 4.205 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.401 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 41 Resp: 43468

Ion	Ratio	Lower	Upper
41	100		
42	60.0	56.2	84.4

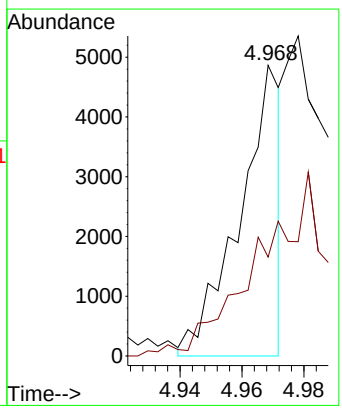


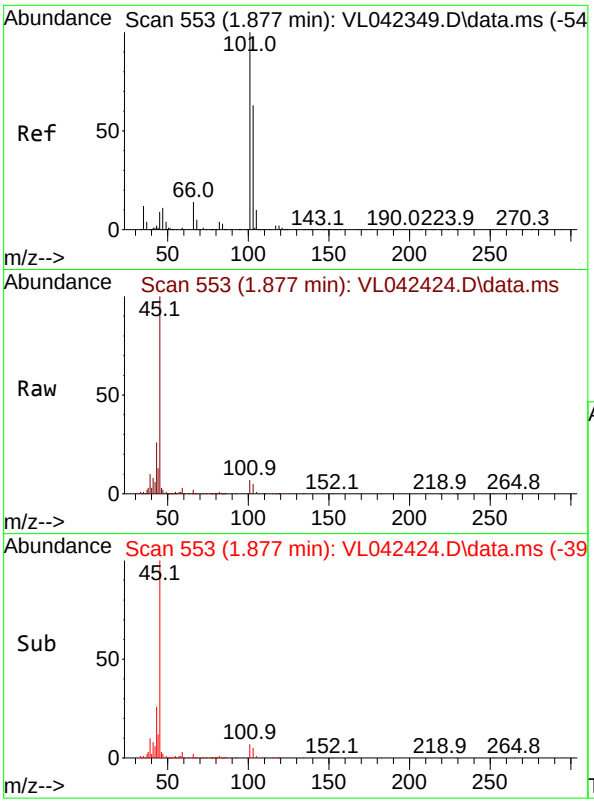


#10
Heptane
Concen: 0.153 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 4448

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.9	59.9#



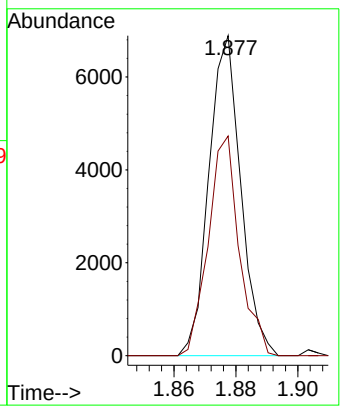


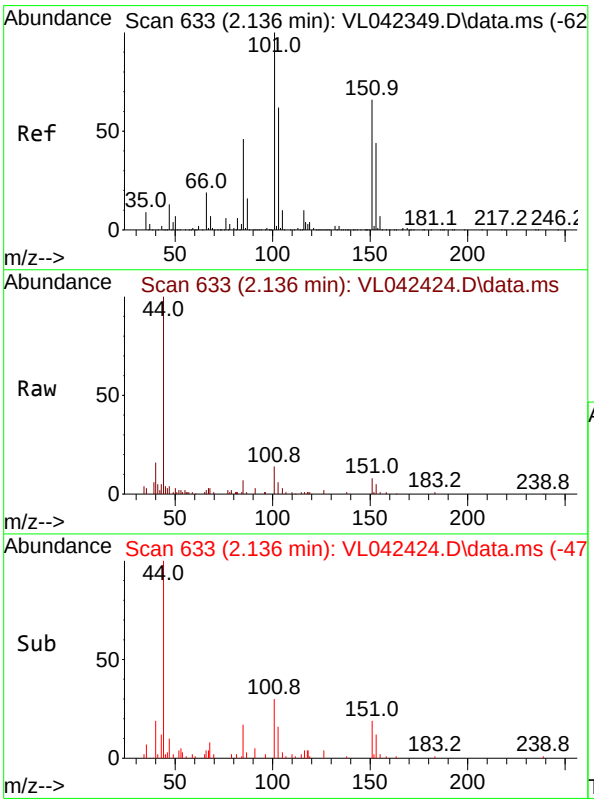
#11
Trichlorofluoromethane
Concen: 0.217 ppbv
RT: 1.877 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:101 Resp: 4919

Ion	Ratio	Lower	Upper
101	100		
103	68.7	50.1	75.1

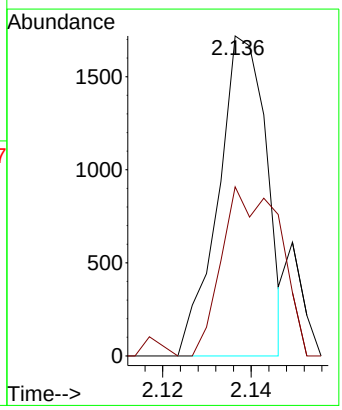


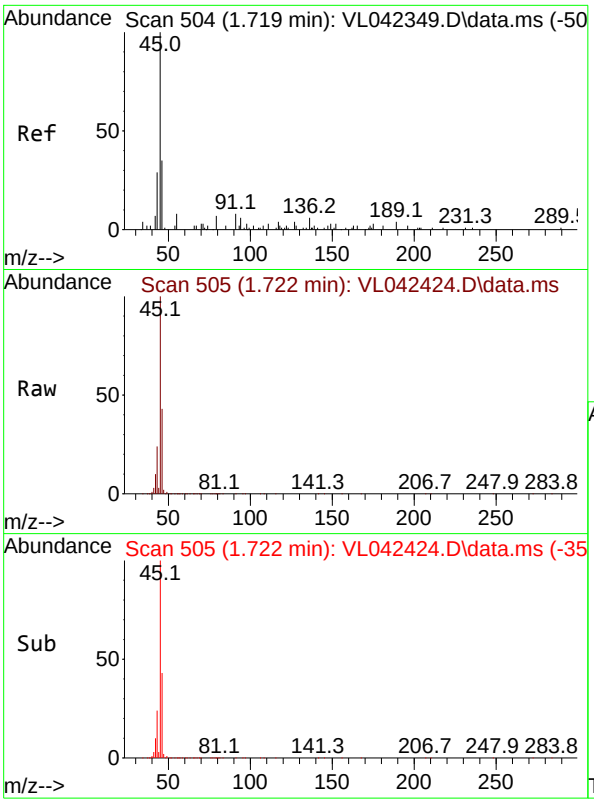


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.070 ppbv
RT: 2.136 min Scan# 633
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:101 Resp: 1302

Ion	Ratio	Lower	Upper
101	100		
151	66.0	57.0	85.6



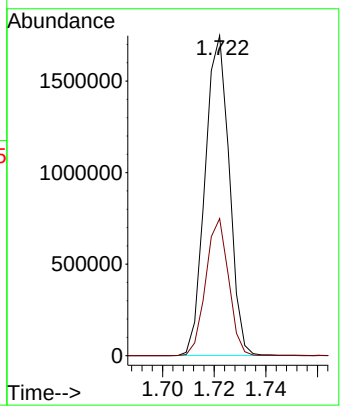


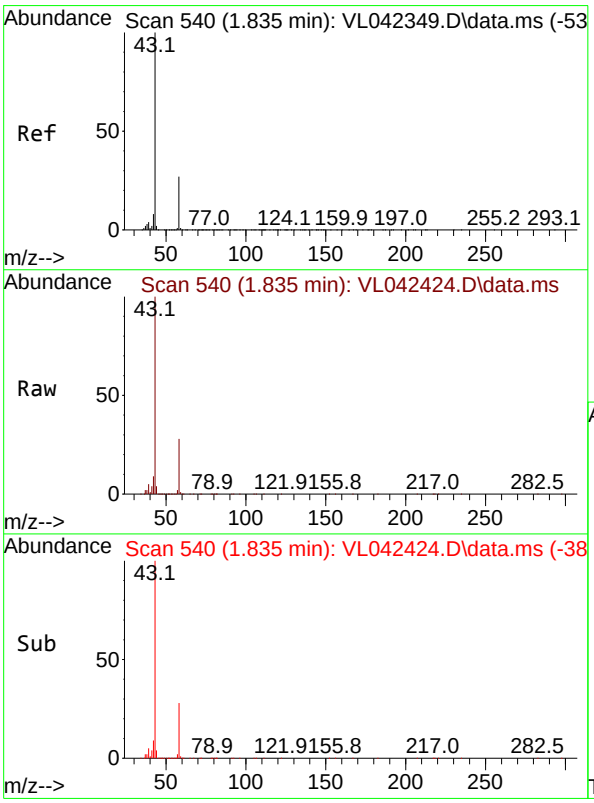
#13
Ethanol
Concen: 690.509 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 45 Resp: 1134596

Ion	Ratio	Lower	Upper
45	100		
46	40.7	21.9	87.7

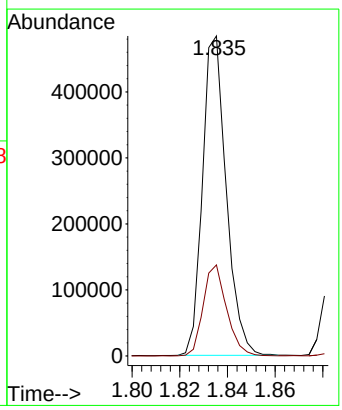


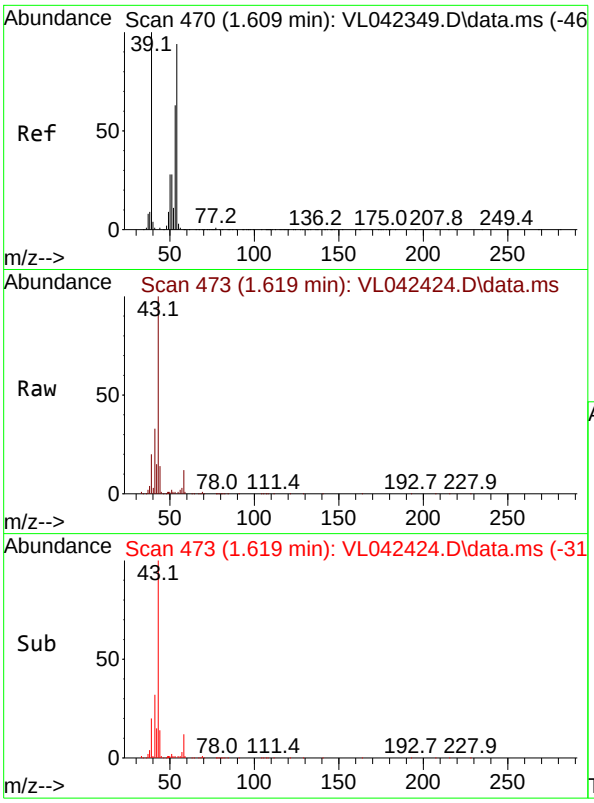


#15
Acetone
Concen: 15.200 ppbv
RT: 1.835 min Scan# 540
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 335719

Ion	Ratio	Lower	Upper
43	100		
58	28.2	22.4	33.6



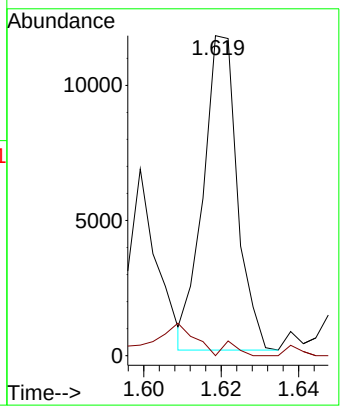


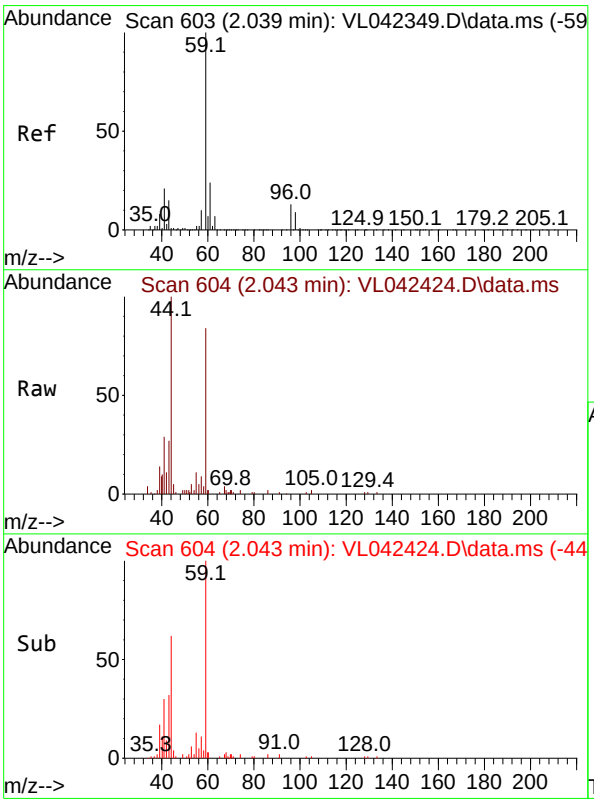
#16
1,3-Butadiene
Concen: 0.674 ppbv
RT: 1.619 min Scan# 4
Delta R.T. 0.010 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 39 Resp: 7122

Ion	Ratio	Lower	Upper
39	100		
54	17.8	64.9	97.3#

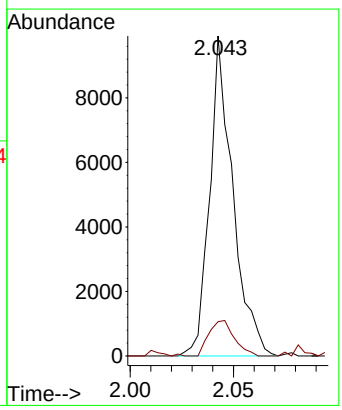


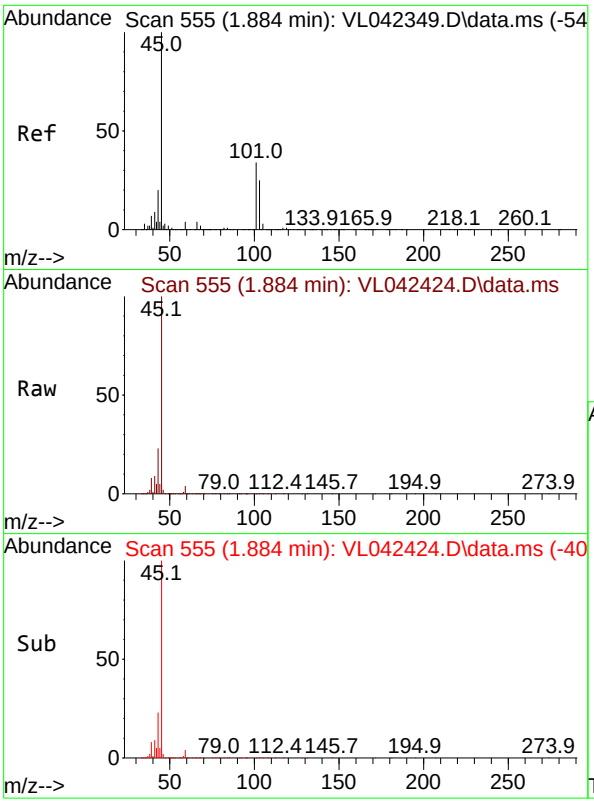


#17
tert-Butyl alcohol
Concen: 0.283 ppbv
RT: 2.043 min Scan# 604
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 59 Resp: 7751

Ion	Ratio	Lower	Upper
59	100		
57	12.1	8.7	13.1



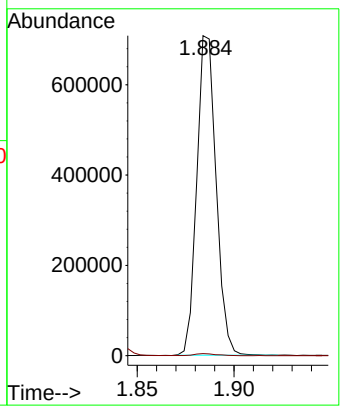


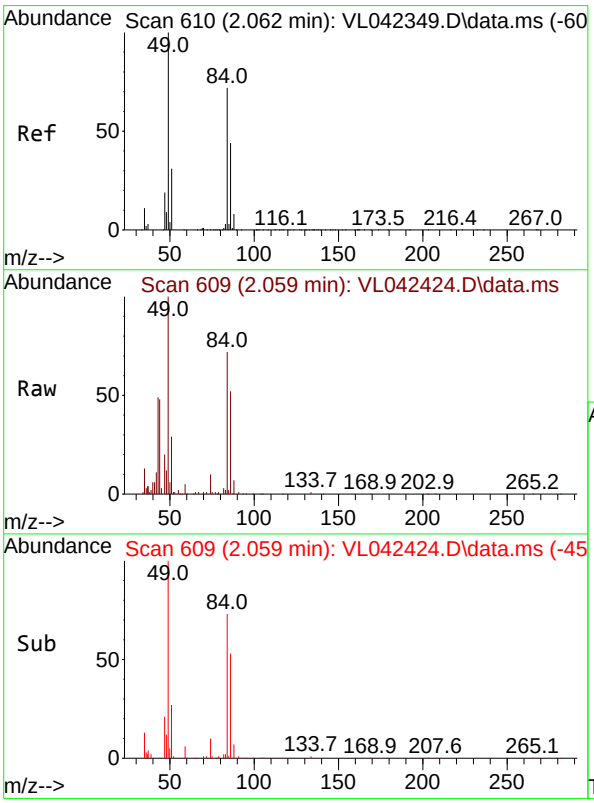
#19
Isopropyl Alcohol
Concen: 39.973 ppbv
RT: 1.884 min Scan# 5
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 45 Resp: 490461

Ion	Ratio	Lower	Upper
45	100		
58	19.3	34.5	51.7#

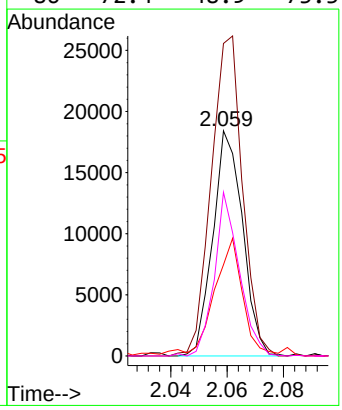


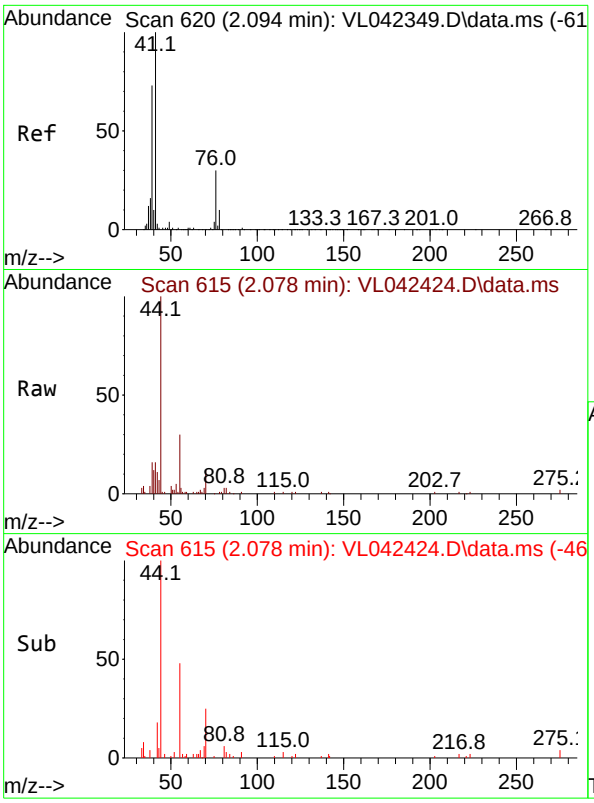


#20
Methylene Chloride
Concen: 1.563 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 84 Resp: 13523

Ion	Ratio	Lower	Upper
84	100		
49	138.8	111.6	167.4
51	39.3	35.1	52.7
86	72.4	48.9	73.3



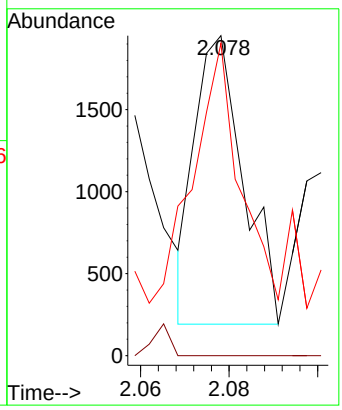


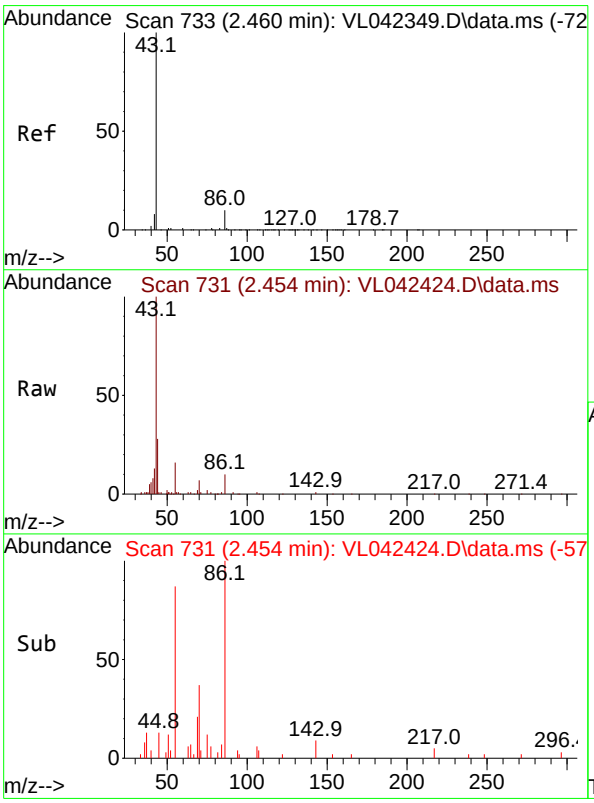
#21
Allyl Chloride
Concen: 0.088 ppbv
RT: 2.078 min Scan# 61
Delta R.T. -0.016 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 41 Resp: 1344

Ion	Ratio	Lower	Upper
41	100		
76	0.0	24.8	37.2#
39	0.0	60.6	90.8#

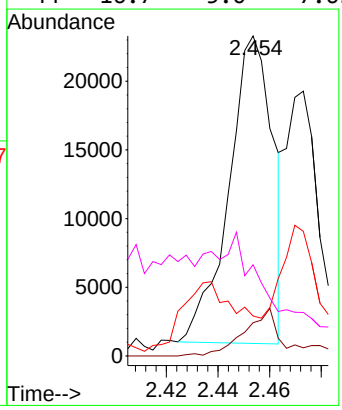


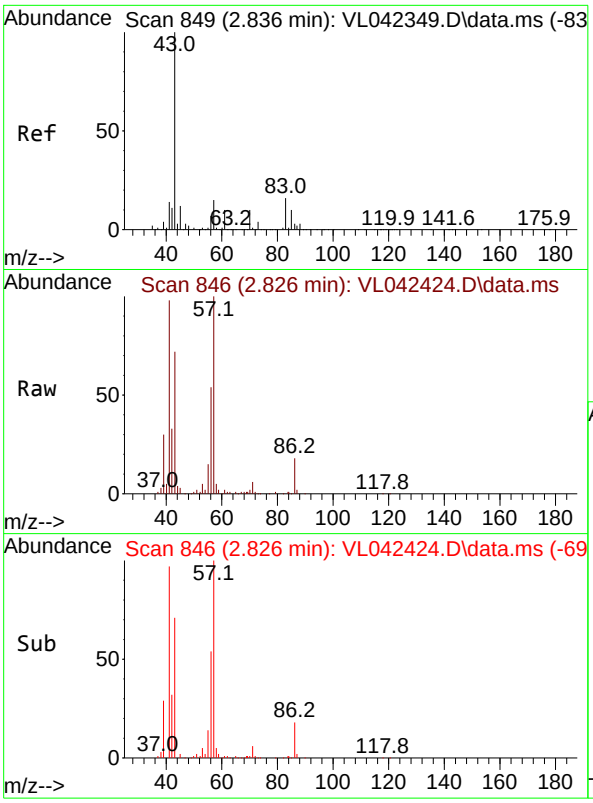


#23
Vinyl Acetate
Concen: 2.959 ppbv
RT: 2.454 min Scan# 731
Delta R.T. -0.006 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 26458

Ion	Ratio	Lower	Upper
43	100		
86	10.9	6.5	9.7#
42	0.0	7.8	11.8#
44	16.7	5.0	7.6#



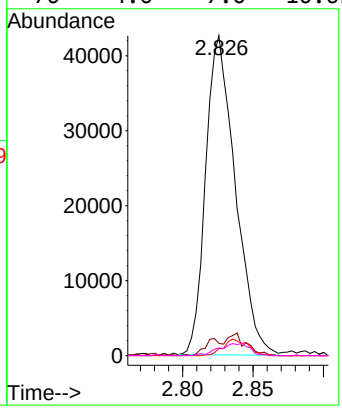


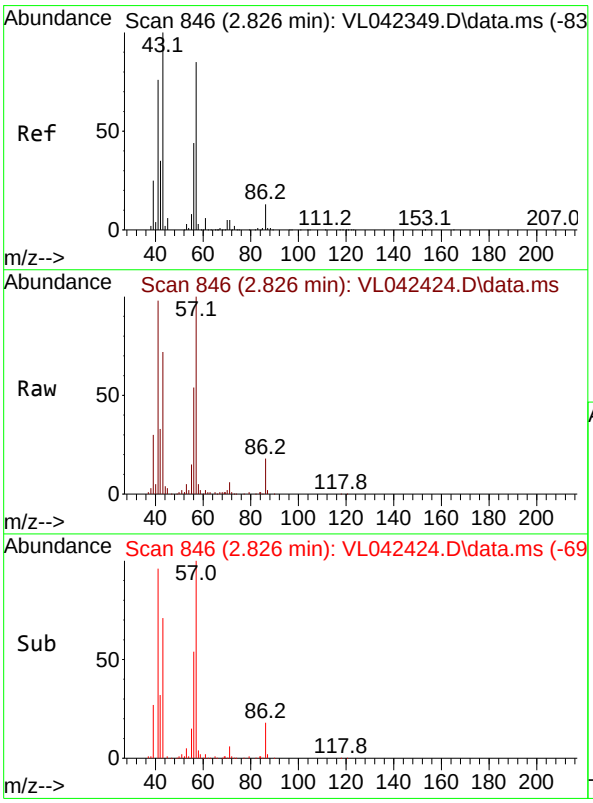
#25
Ethyl Acetate
Concen: 1.146 ppbv
RT: 2.826 min Scan# 84
Delta R.T. -0.010 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 43 Resp: 62430

Ion	Ratio	Lower	Upper
43	100		
45	7.5	8.3	12.5#
61	4.4	7.3	10.9#
70	4.0	7.0	10.6#

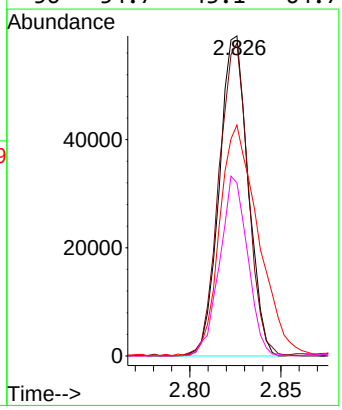


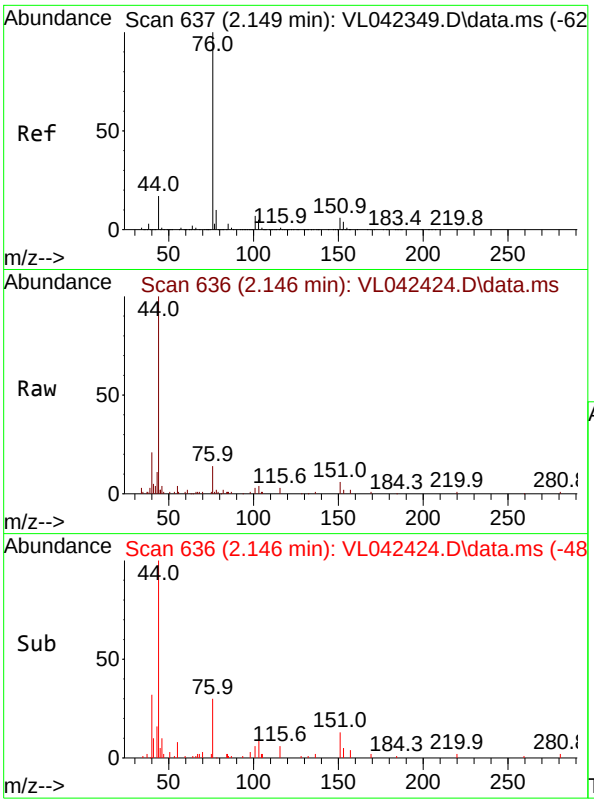


#26
Hexane
Concen: 2.951 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 57 Resp: 65044

Ion	Ratio	Lower	Upper
57	100		
41	100.1	77.9	116.9
43	98.3	208.4	312.6#
56	54.7	43.1	64.7



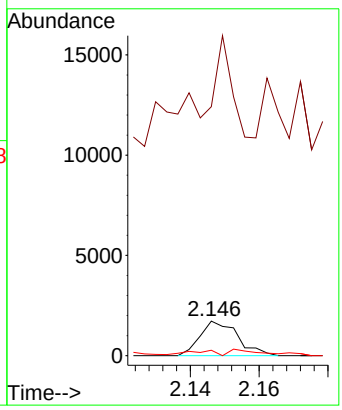


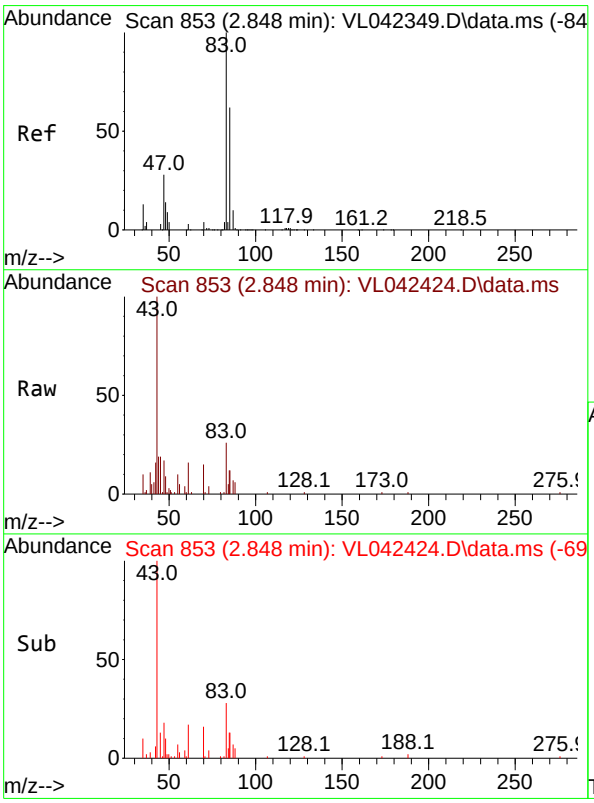
#27
Carbon Disulfide
Concen: 0.056 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 76 Resp: 1316

Ion	Ratio	Lower	Upper
76	100		
44	702.4	15.5	23.3#
78	41.8	9.3	13.9#

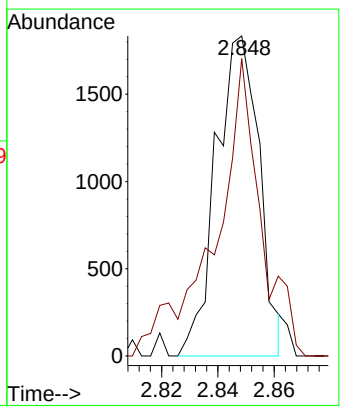


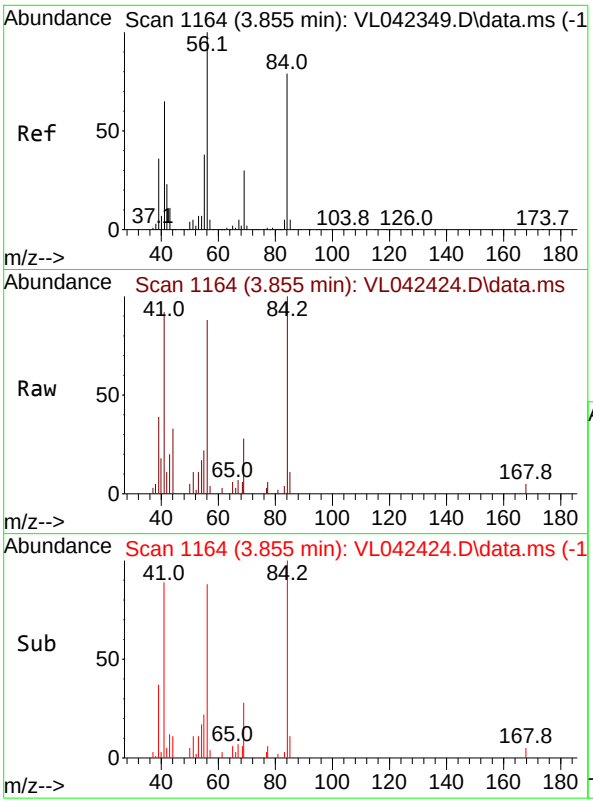


#29
Chloroform
Concen: 0.063 ppbv
RT: 2.848 min Scan# 853
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 83 Resp: 1950

Ion	Ratio	Lower	Upper
83	100		
85	81.5	50.0	75.0#



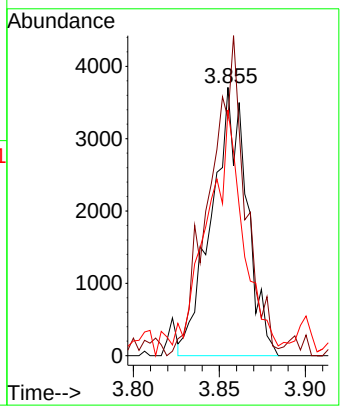


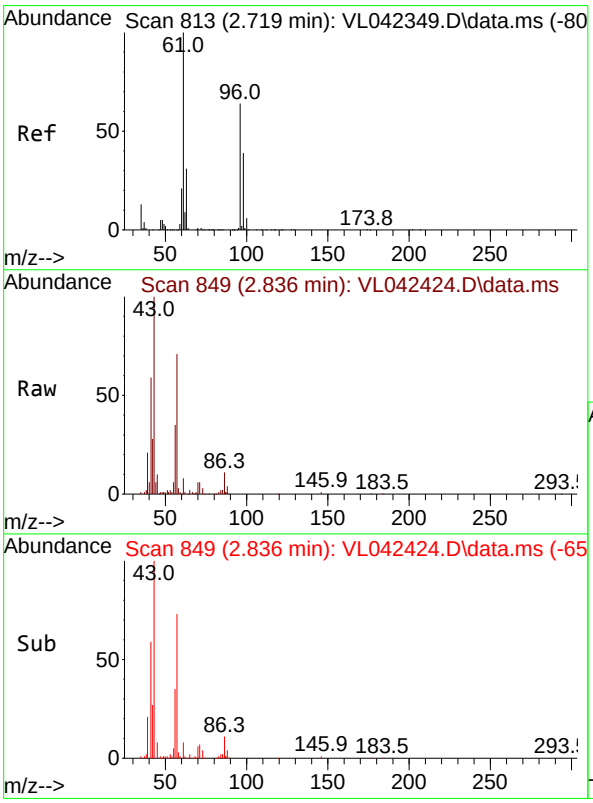
#30
Cyclohexane
Concen: 0.297 ppbv
RT: 3.855 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 84 Resp: 5289

Ion	Ratio	Lower	Upper
84	100		
56	130.1	101.0	151.4
41	98.5	67.4	101.0

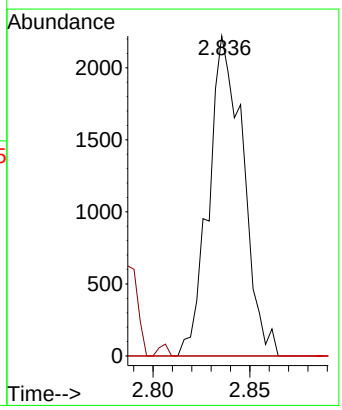


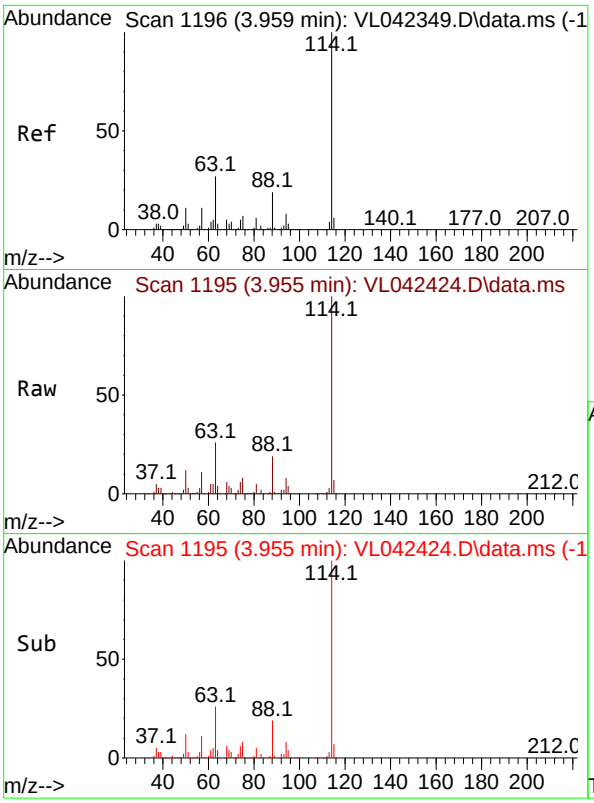


#31
cis-1,2-Dichloroethene
Concen: 0.131 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.117 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 61 Resp: 2740

Ion	Ratio	Lower	Upper
61	100		
96	0.0	50.8	76.2#
98	0.0	30.9	46.3#



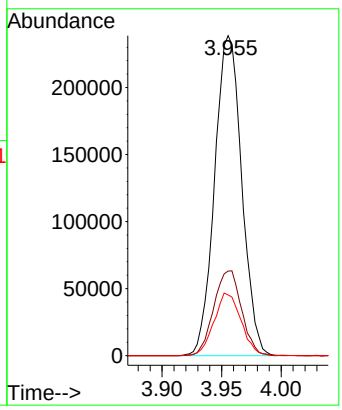


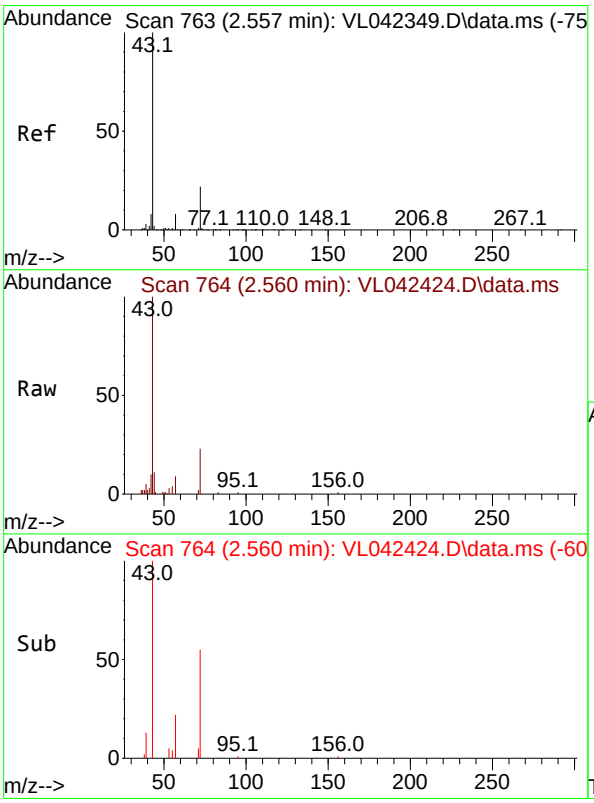
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 11
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:114 Resp: 377834

Ion	Ratio	Lower	Upper
114	100		
63	27.2	21.8	32.6
88	19.5	15.5	23.3

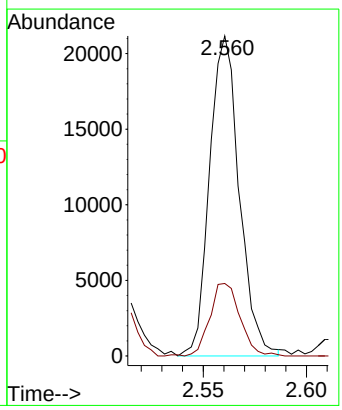


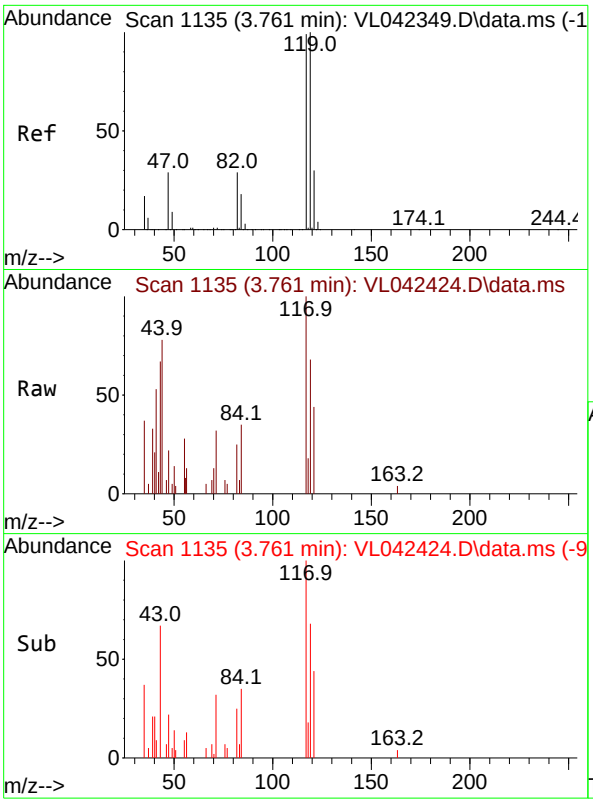


#34
2-Butanone
Concen: 0.709 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 43 Resp: 21181

Ion	Ratio	Lower	Upper
43	100		
72	22.9	18.2	27.2



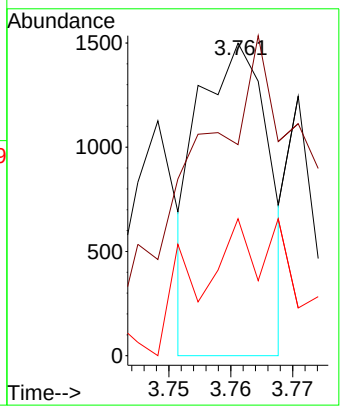


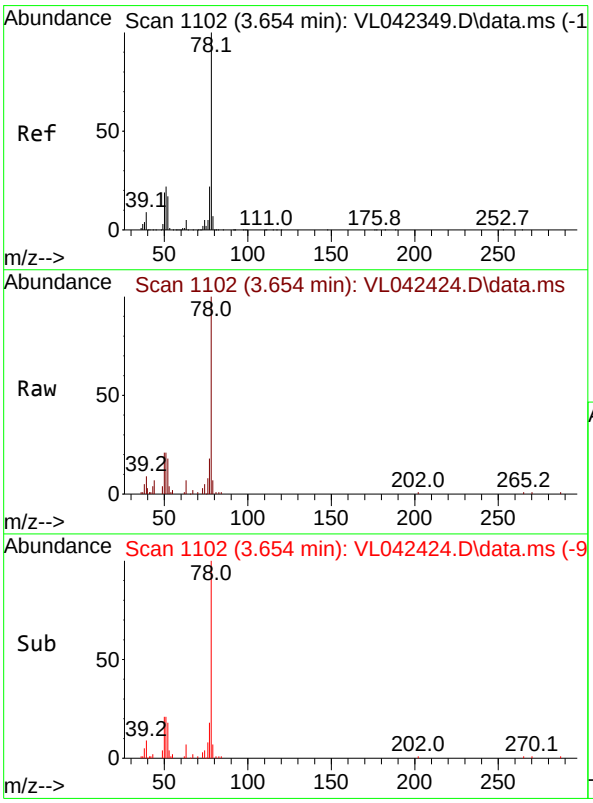
#35
Carbon Tetrachloride
Concen: 0.035 ppbv
RT: 3.761 min Scan# 11
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:117 Resp: 1182

Ion	Ratio	Lower	Upper
117	100		
119	20.4	80.5	120.7#
121	15.2	24.2	36.2#

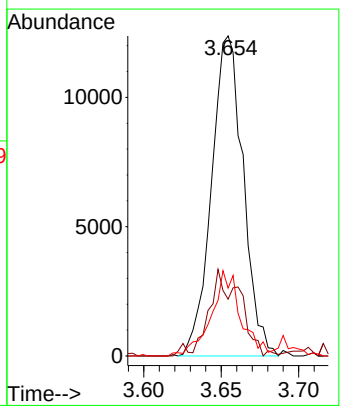


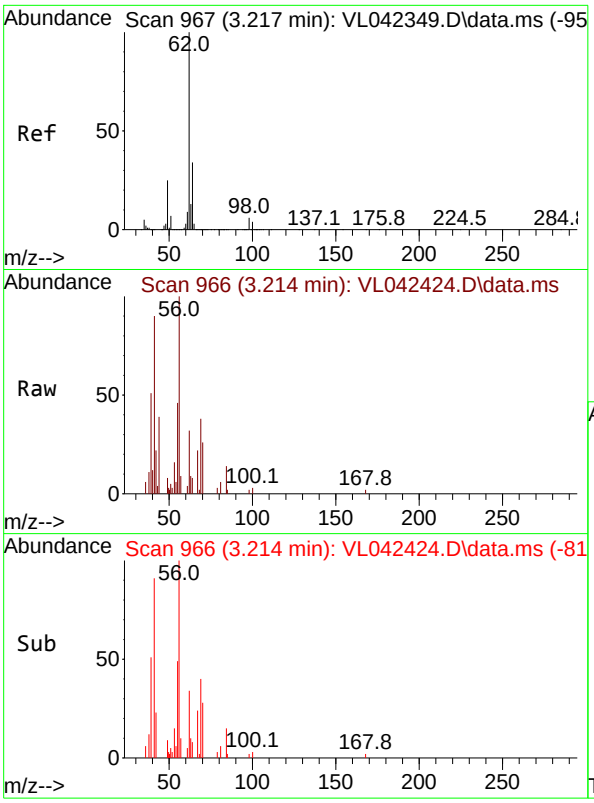


#36
Benzene
Concen: 0.433 ppbv
RT: 3.654 min Scan# 1102
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 78 Resp: 17661

Ion	Ratio	Lower	Upper
78	100		
77	17.3	17.4	26.0#
50	20.2	15.5	23.3



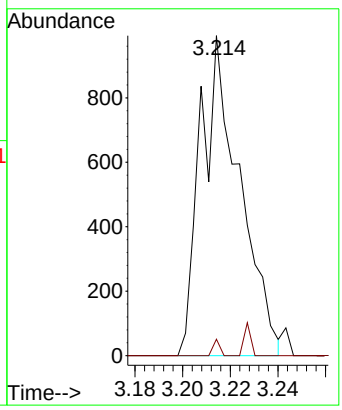


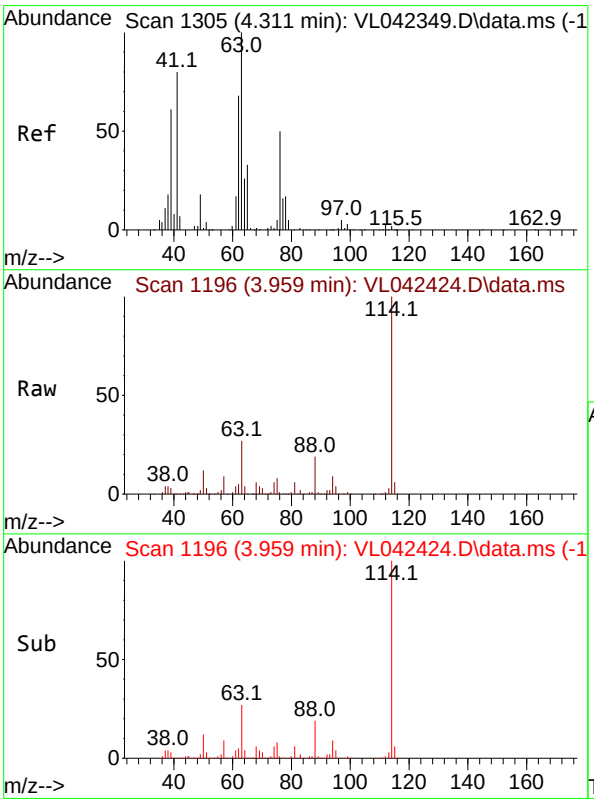
#37
1,2-Dichloroethane
Concen: 0.046 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 62 Resp: 1133

Ion	Ratio	Lower	Upper
62	100		
98	1.1	5.1	7.7#

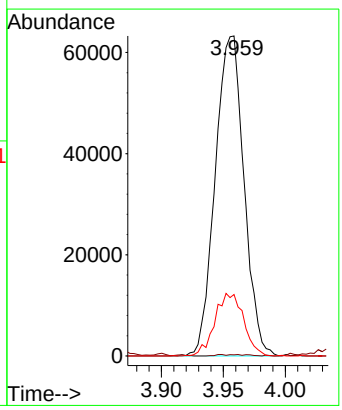


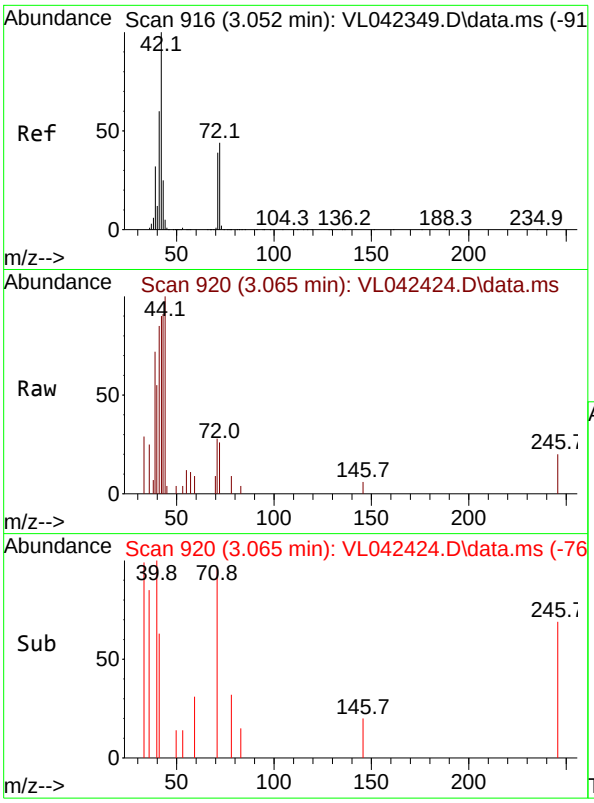


#39
1,2-Dichloropropane
Concen: 6.749 ppbv
RT: 3.959 min Scan# 1196
Delta R.T. -0.353 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 63 Resp: 102487

Ion	Ratio	Lower	Upper
63	100		
41	0.4	64.2	96.2#
62	19.2	54.3	81.5#



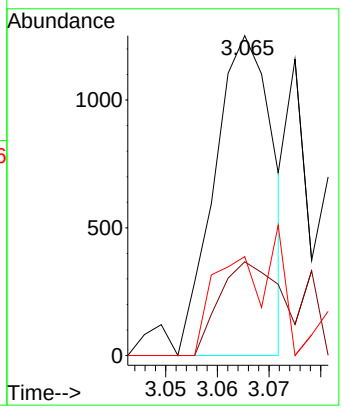


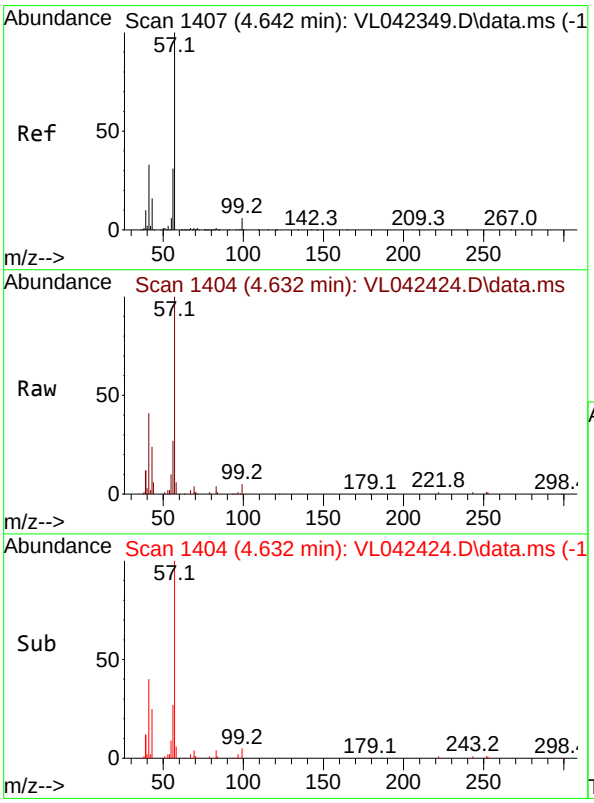
#41
Tetrahydrofuran
Concen: 0.056 ppbv
RT: 3.065 min Scan# 9
Delta R.T. 0.013 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 42 Resp: 982

Ion	Ratio	Lower	Upper
42	100		
72	37.4	32.3	48.5
71	0.0	31.4	47.2#

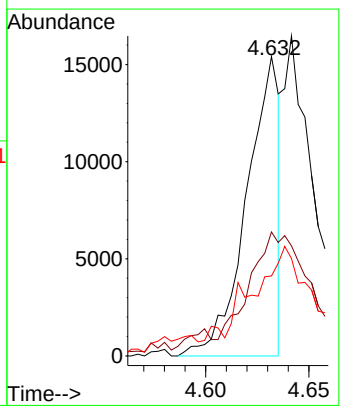


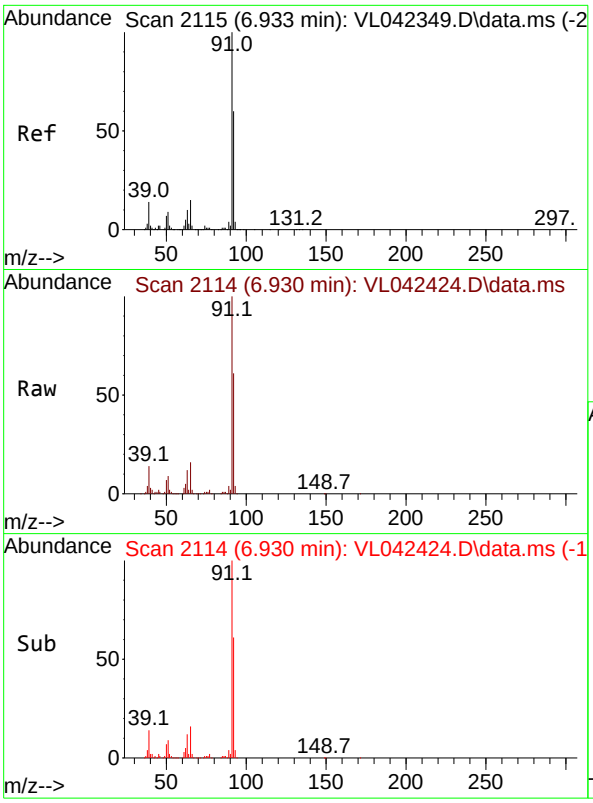


#44
2,2,4-Trimethylpentane
Concen: 0.239 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.010 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 57 Resp: 16799

Ion	Ratio	Lower	Upper
57	100		
41	91.8	27.2	40.8#
56	0.0	25.7	38.5#



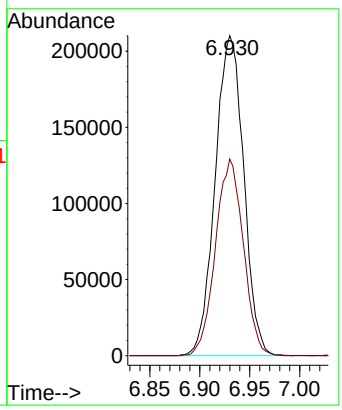


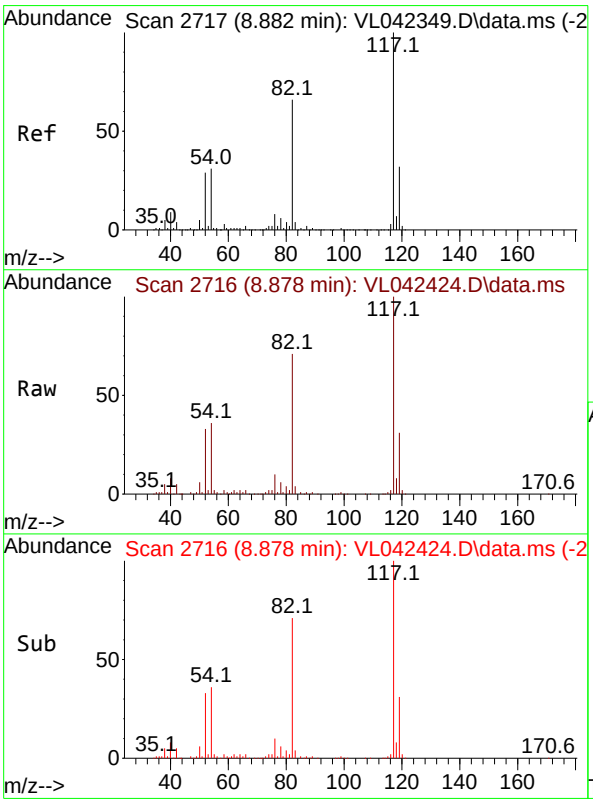
#53
Toluene
Concen: 8.542 ppbv
RT: 6.930 min Scan# 21
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 91 Resp: 417734

Ion	Ratio	Lower	Upper
91	100		
92	60.0	48.2	72.4

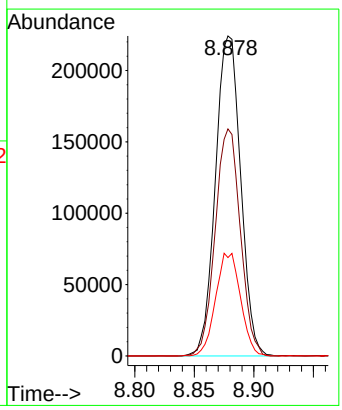


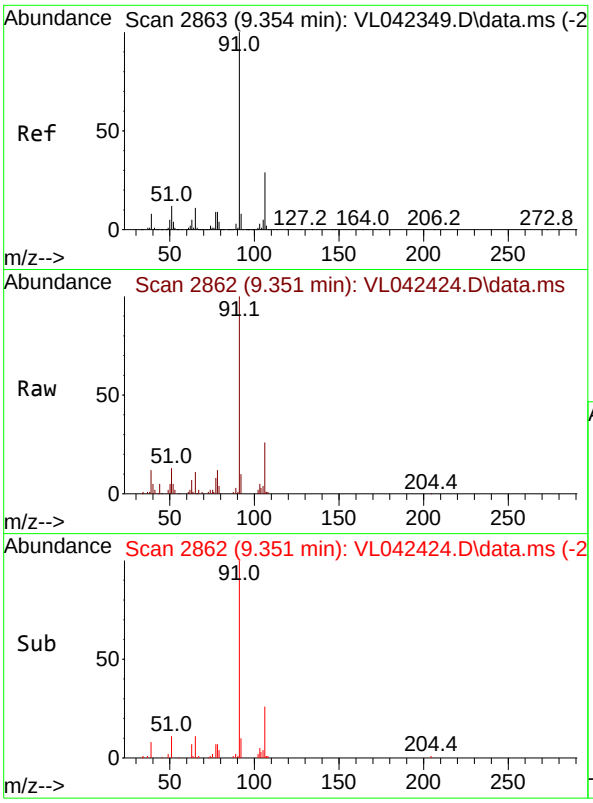


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2716
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:117 Resp: 330143

Ion	Ratio	Lower	Upper
117	100		
82	70.7	57.8	86.6
119	31.8	25.2	37.8



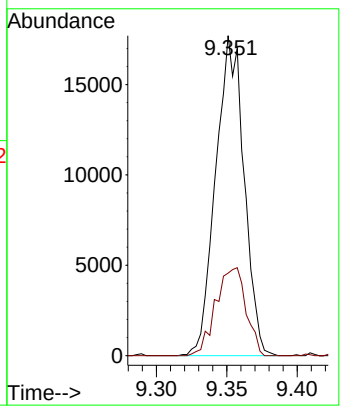


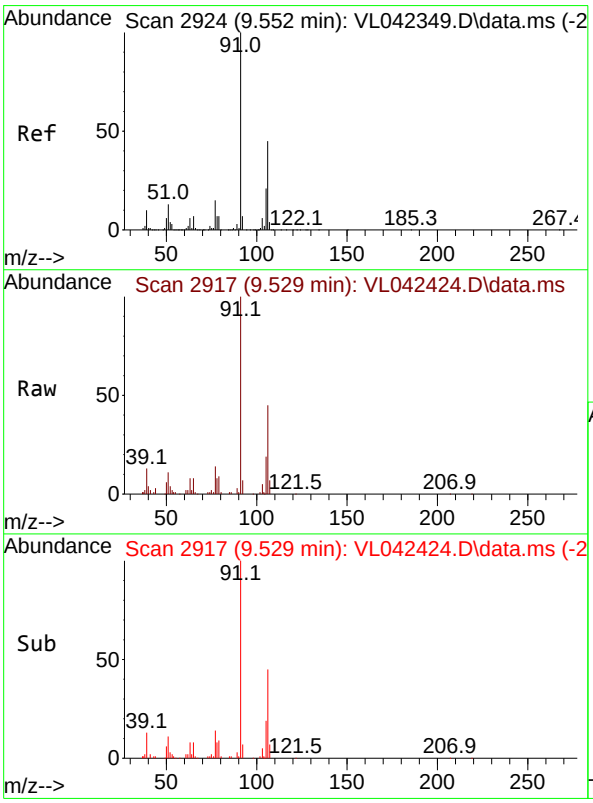
#58
Ethyl Benzene
Concen: 0.379 ppbv
RT: 9.351 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 91 Resp: 24772

Ion	Ratio	Lower	Upper
91	100		
106	25.8	23.0	34.4

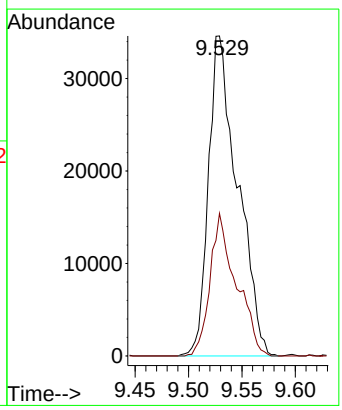


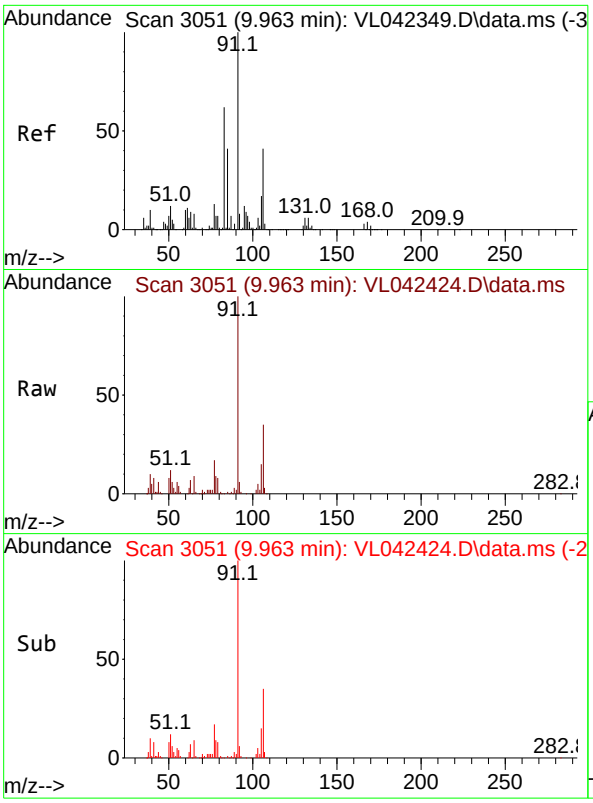


#59
m/p-Xylene
Concen: 1.246 ppbv
RT: 9.529 min Scan# 2917
Delta R.T. -0.023 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion: 91 Resp: 65650

Ion	Ratio	Lower	Upper
91	100		
106	40.1	35.4	53.2



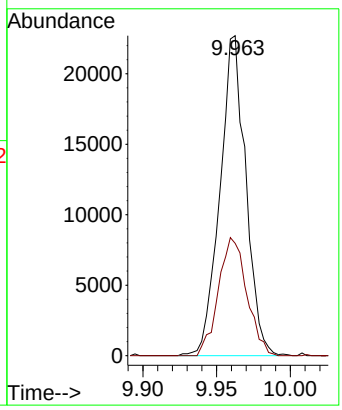


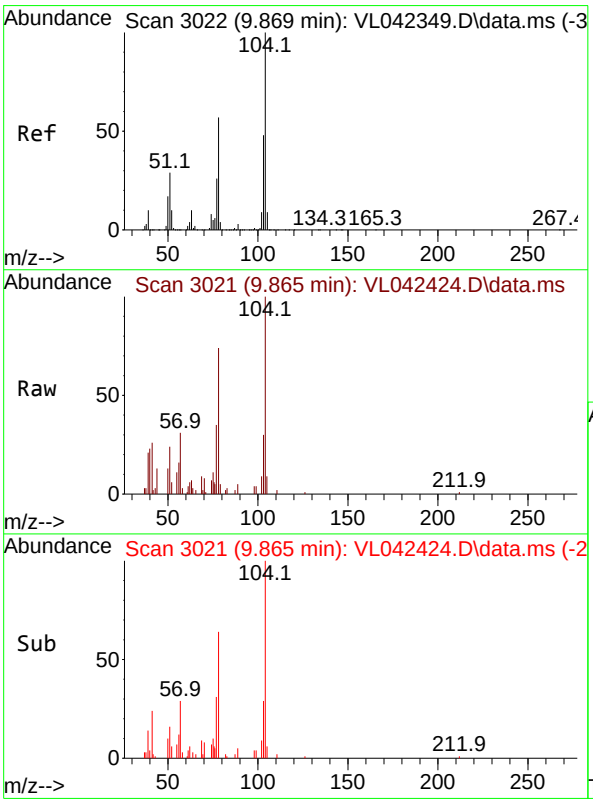
#60
o-Xylene
Concen: 0.522 ppbv
RT: 9.963 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 91 Resp: 27701

Ion	Ratio	Lower	Upper
91	100		
106	40.5	21.1	63.4

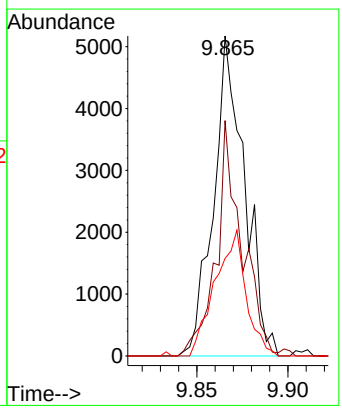


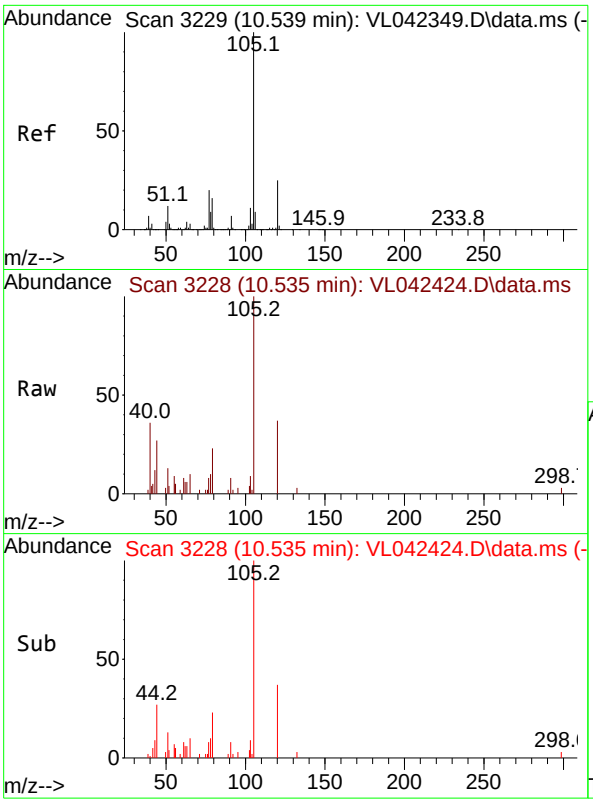


#61
Styrene
Concen: 0.242 ppbv
RT: 9.865 min Scan# 3021
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:104 Resp: 6130

Ion	Ratio	Lower	Upper
104	100		
78	61.0	44.6	66.8
103	39.2	37.4	56.0



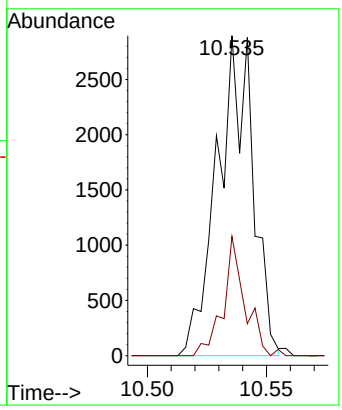


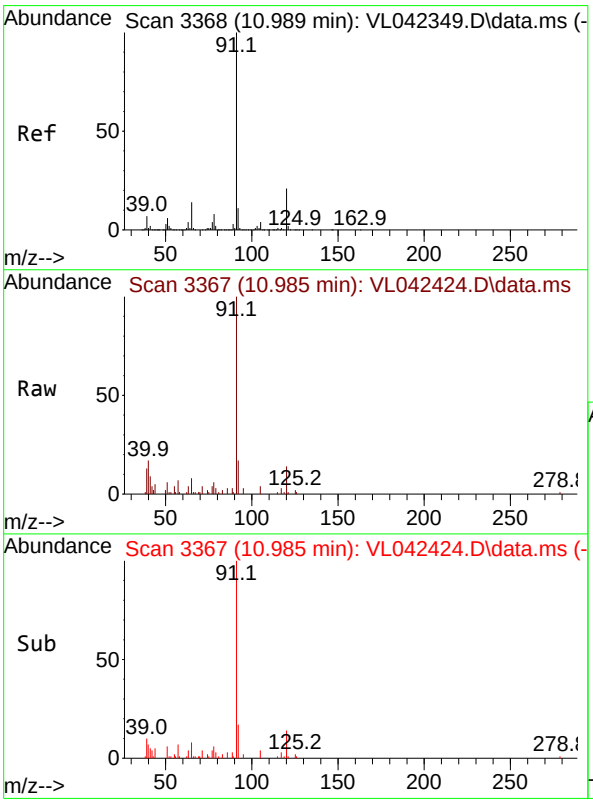
#62
Isopropylbenzene
Concen: 0.039 ppbv
RT: 10.535 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:105 Resp: 3004

Ion	Ratio	Lower	Upper
105	100		
120	22.8	19.8	29.8

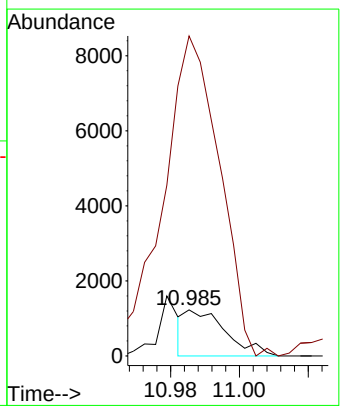


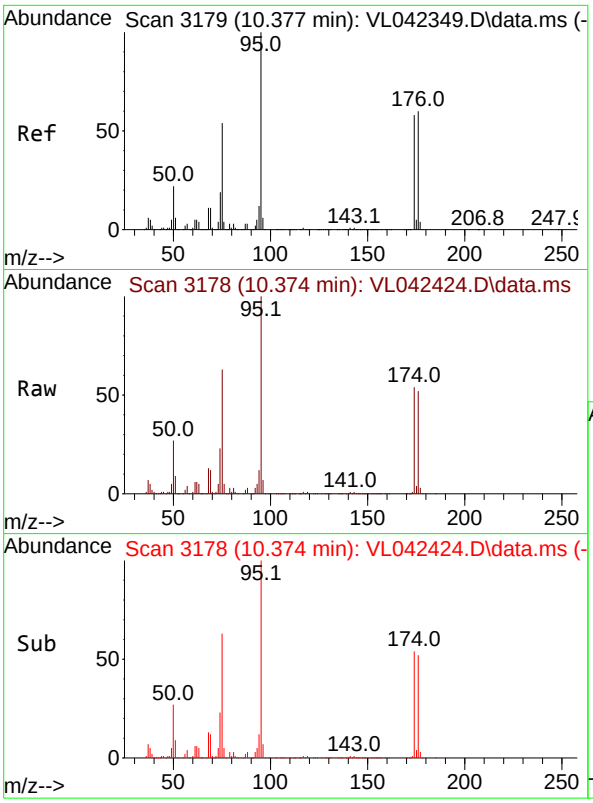


#64
n-propylbenzene
Concen: 0.052 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:120 Resp: 1011

Ion	Ratio	Lower	Upper
120	100		
91	1017.2	392.4	588.6#



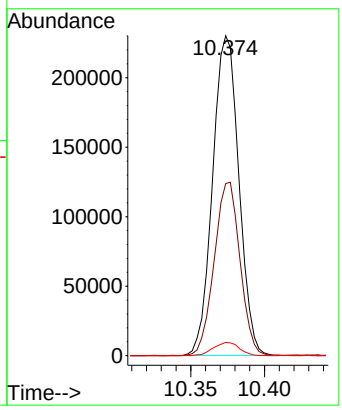


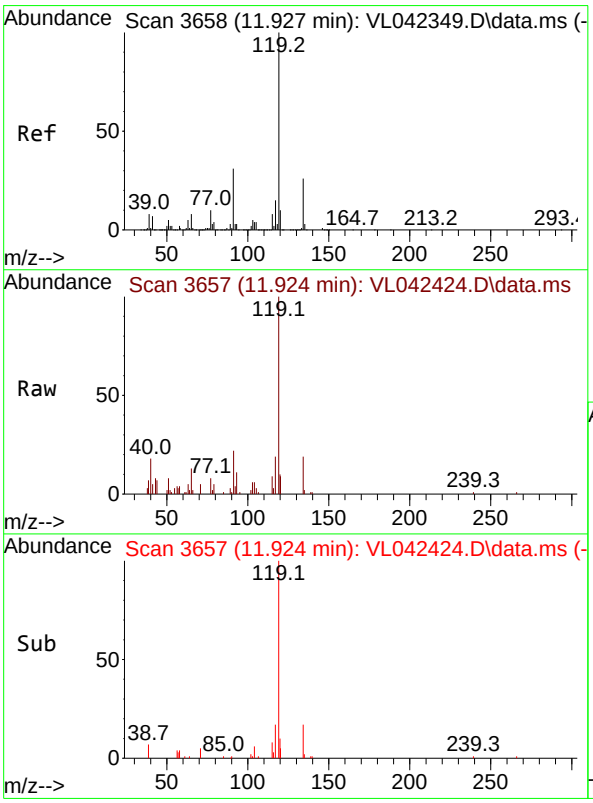
#68
1-Bromo-4-Fluorobenzene
Concen: 10.483 ppbv
RT: 10.374 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 95 Resp: 284407

Ion	Ratio	Lower	Upper
95	100		
174	53.4	48.5	72.7
175	4.1	3.7	5.5

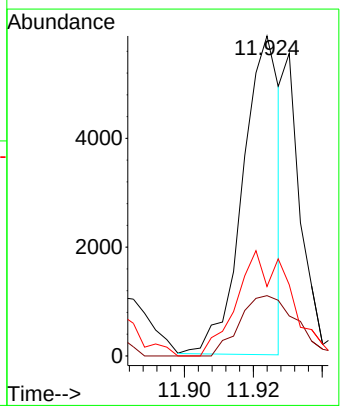


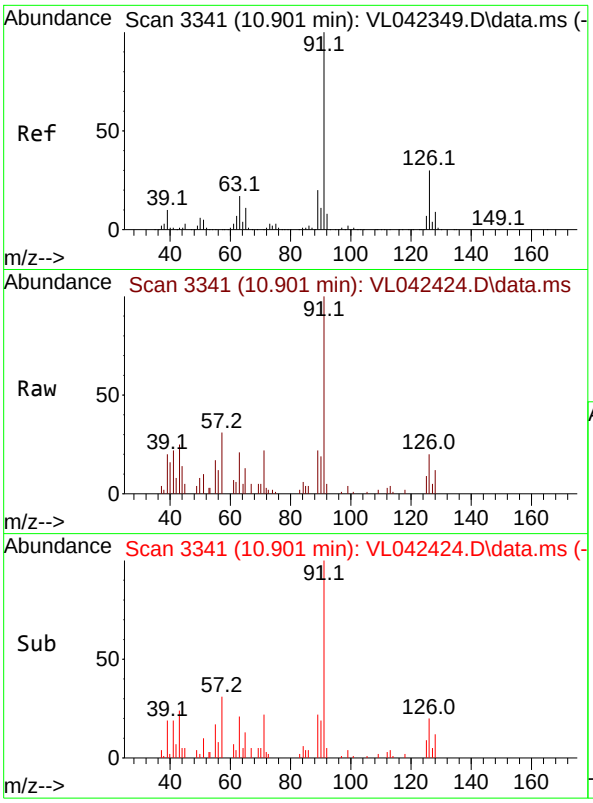


#69
p-Isopropyltoluene
Concen: 0.050 ppbv
RT: 11.924 min Scan# 3657
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:119 Resp: 4355

Ion	Ratio	Lower	Upper
119	100		
134	29.1	20.0	30.0
91	50.5	24.4	36.6#



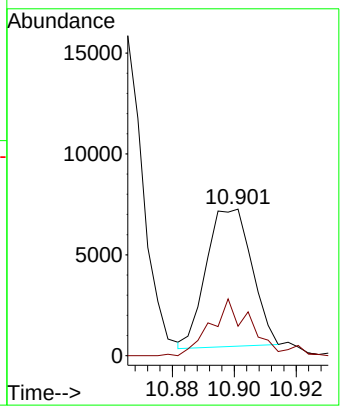


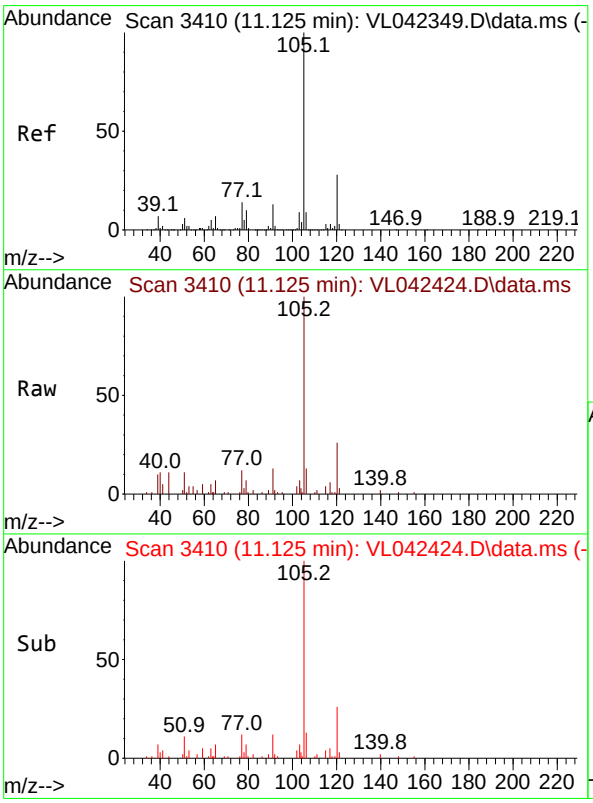
#71
2-Chlorotoluene
Concen: 0.114 ppbv
RT: 10.901 min Scan# 3
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion: 91 Resp: 6948

Ion	Ratio	Lower	Upper
91	100		
126	37.9	11.4	45.4

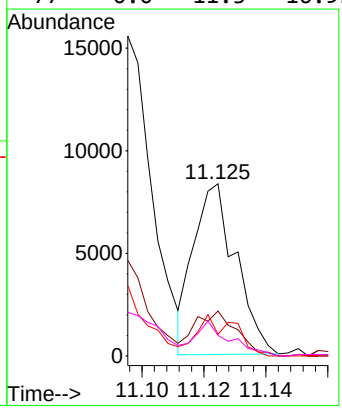


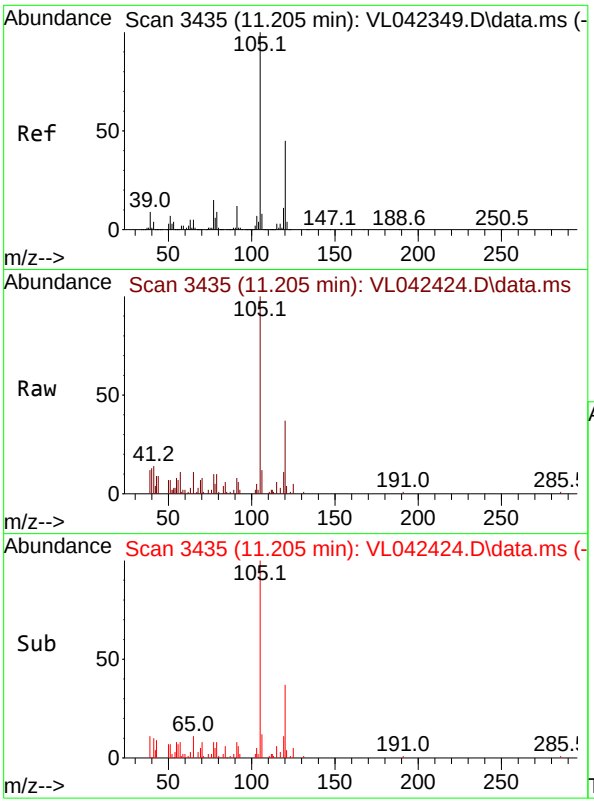


#72
4-Ethyltoluene
Concen: 0.121 ppbv
RT: 11.125 min Scan# 3410
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 7865

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#



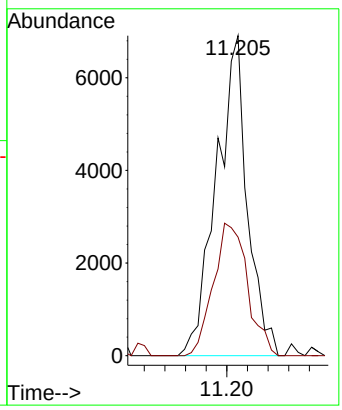


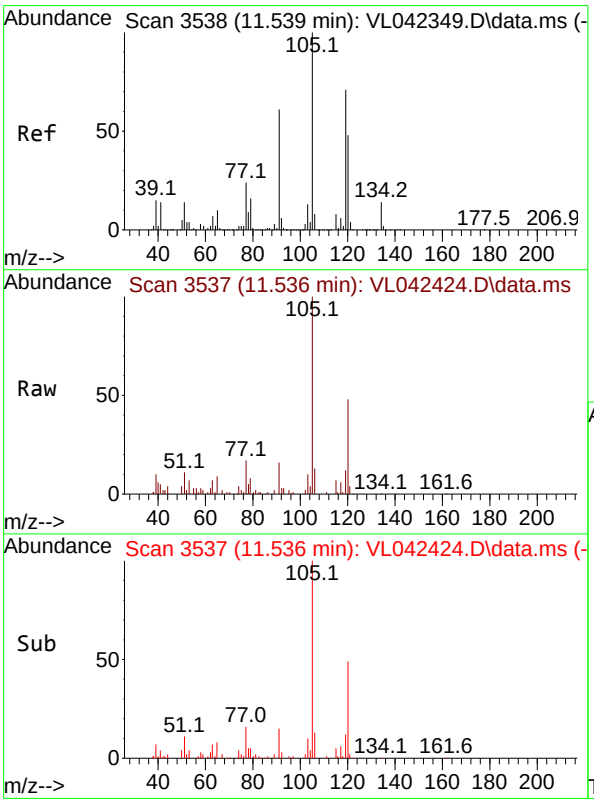
#73
1,3,5-Trimethylbenzene
Concen: 0.125 ppbv
RT: 11.205 min Scan# 34
Delta R.T. 0.000 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025

Tgt Ion:105 Resp: 7185

Ion	Ratio	Lower	Upper
105	100		
120	41.4	35.6	53.4

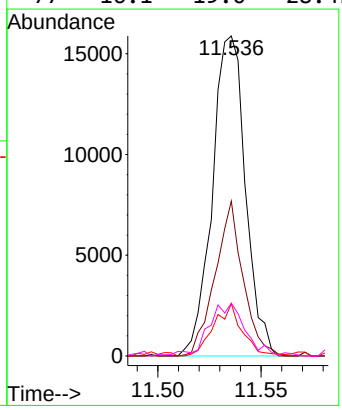




#74
1,2,4-Trimethylbenzene
Concen: 0.265 ppbv
RT: 11.536 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042424.D
Acq: 28 Apr 2025 14:00

Tgt Ion:105 Resp: 17740

Ion	Ratio	Lower	Upper
105	100		
120	52.3	38.1	57.1
91	16.4	48.8	73.2#
77	16.1	19.0	28.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Time: Apr 29 01:37:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.784	49	133015	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.955	114	381932	10.000	ppbv	0.00
55) Chlorobenzene-d5	8.878	117	330693	10.000	ppbv	0.00
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.374	95	282648	10.401	ppbv	0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 104.000%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	11713	0.498	ppbv #	86
3) Chlorodifluoromethane	1.476	51	13184	0.589	ppbv #	84
4) Chloromethane	1.531	50	5550	0.597	ppbv	99
9) Propene	1.486	41	12230	1.200	ppbv	85
10) Heptane	4.975	43	11187	0.391	ppbv #	61
11) Trichlorofluoromethane	1.877	101	5207	0.233	ppbv	98
12) 1,1,2-Trichlorotrifluo...	2.136	101	1409	0.077	ppbv	95
13) Ethanol	1.719	45	406613	251.014	ppbv	76
15) Acetone	1.835	43	324431	14.899	ppbv	94
16) 1,3-Butadiene	1.599	39	4434	0.426	ppbv #	59
17) tert-Butyl alcohol	1.884	59	13126	0.486	ppbv	99
19) Isopropyl Alcohol	1.884	45	341849	28.261	ppbv #	34
20) Methylene Chloride	2.059	84	5072	0.595	ppbv	87
21) Allyl Chloride	2.078	41	1511	0.101	ppbv #	50
23) Vinyl Acetate	2.450	43	2880	0.327	ppbv #	87
25) Ethyl Acetate	2.823	43	44445	0.828	ppbv #	86
26) Hexane	2.823	57	57941	2.667	ppbv #	36
30) Cyclohexane	3.849	84	2059	0.117	ppbv #	1
34) 2-Butanone	2.560	43	15646	0.518	ppbv	97
35) Carbon Tetrachloride	3.758	117	1464	0.042	ppbv #	81
36) Benzene	3.654	78	23147	0.562	ppbv	95
37) 1,2-Dichloroethane	3.214	62	1080	0.044	ppbv #	81
39) 1,2-Dichloropropane	3.952	63	107133	6.979	ppbv #	22
41) Tetrahydrofuran	3.065	42	602	0.034	ppbv	89
44) 2,2,4-Trimethylpentane	4.638	57	84397	1.186	ppbv #	91
53) Toluene	6.933	91	232100	4.695	ppbv	99
58) Ethyl Benzene	9.354	91	33267	0.508	ppbv	98
59) m/p-Xylene	9.529	91	92347	1.750	ppbv	100
60) o-Xylene	9.959	91	36544	0.688	ppbv	97
61) Styrene	9.869	104	3587	0.141	ppbv	91
62) Isopropylbenzene	10.529	105	3313	0.042	ppbv	94
64) n-propylbenzene	10.985	120	2357	0.120	ppbv	86
69) p-Isopropyltoluene	11.927	119	3573	0.041	ppbv	92
71) 2-Chlorotoluene	10.901	91	4240	0.069	ppbv	91
72) 4-Ethyltoluene	11.118	105	11801	0.182	ppbv #	56
73) 1,3,5-Trimethylbenzene	11.202	105	10642	0.186	ppbv	88
74) 1,2,4-Trimethylbenzene	11.536	105	34307	0.512	ppbv #	67
79) Naphthalene	13.510	128	2447	0.031	ppbv	98

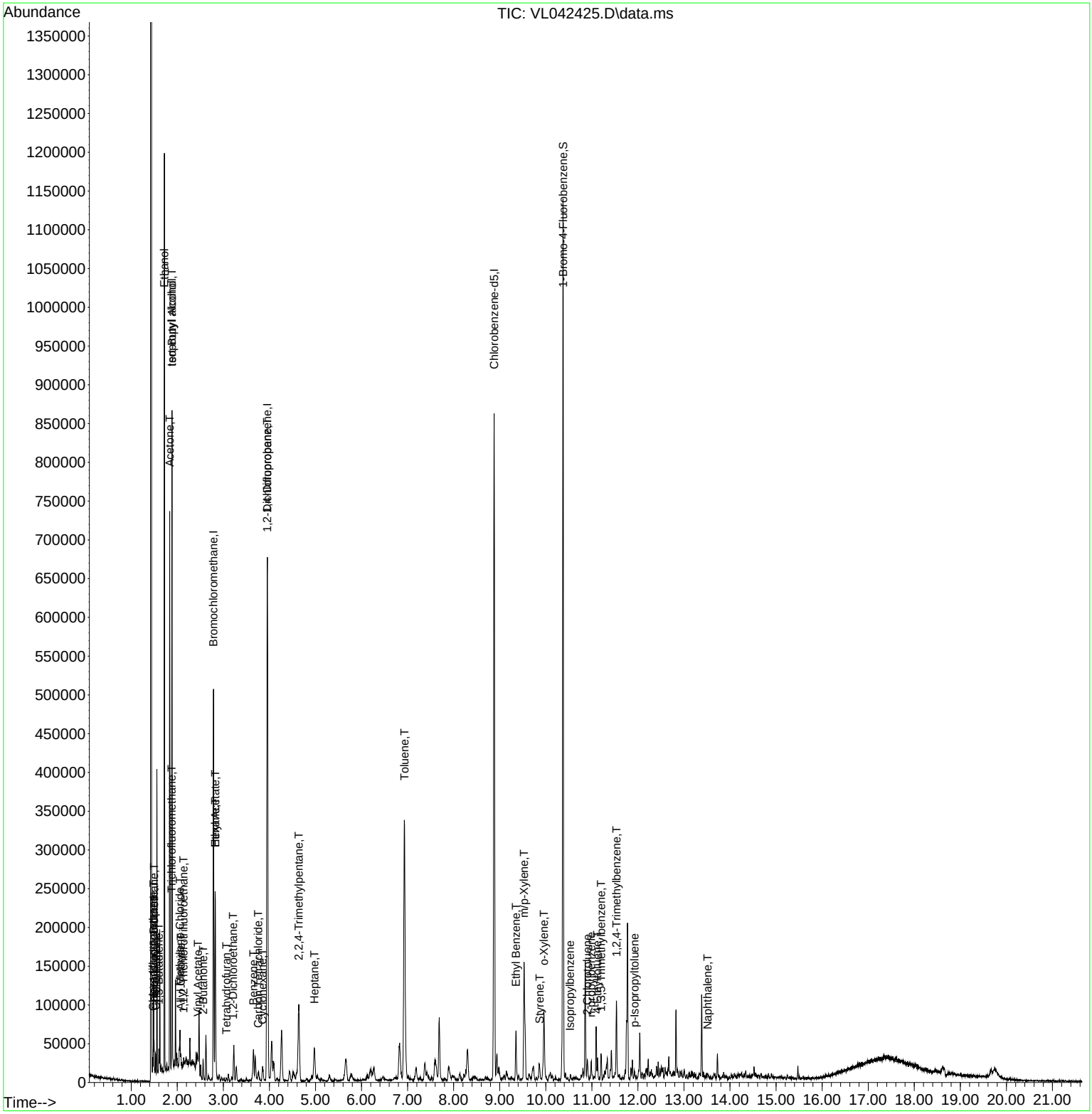
(#) = qualifier out of range (m) = manual integration (+) = signals summed

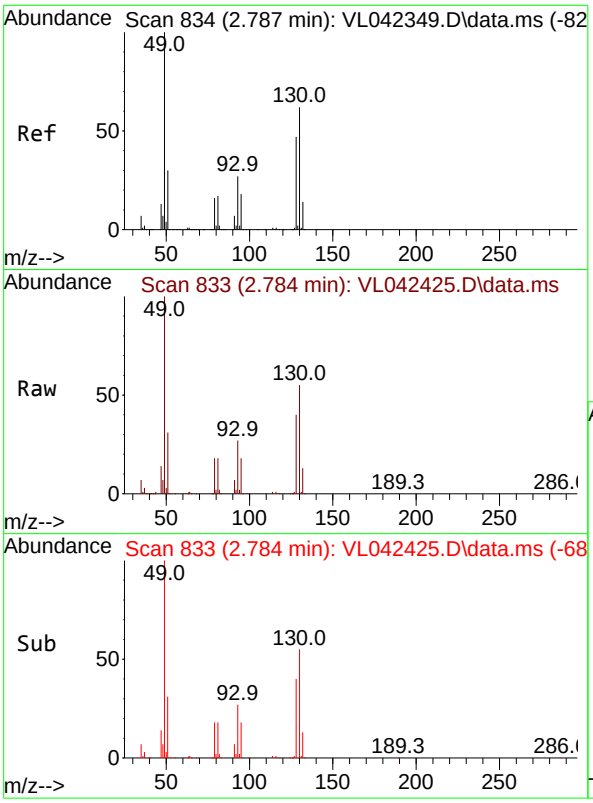
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042825\
Data File : VL042425.D
Acq On : 28 Apr 2025 14:34
Operator : SY/MD
Sample : Q1665-22
Misc : 400mL/MSVOA_L
ALS Vial : 12 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Quant Time: Apr 29 01:37:52 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



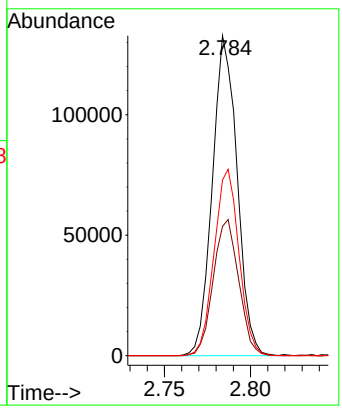


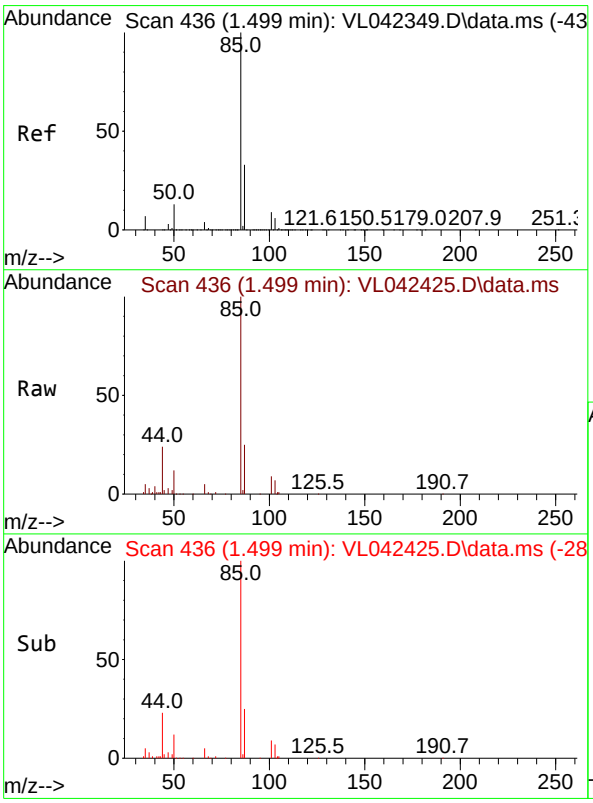
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.784 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 49 Resp: 133015

Ion	Ratio	Lower	Upper
49	100		
128	43.7	22.8	68.4
130	58.6	29.3	88.0

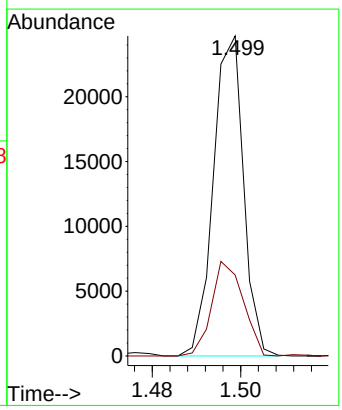


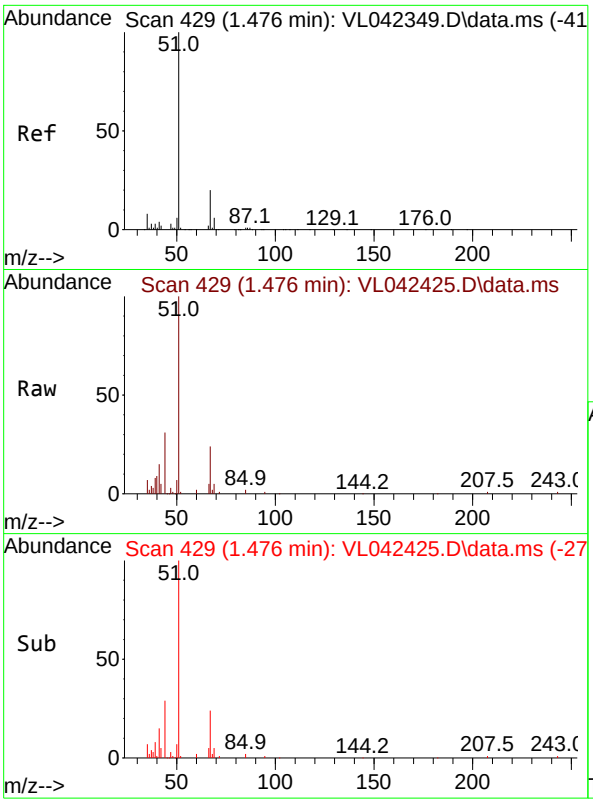


#2
Dichlorodifluoromethane
Concen: 0.498 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 85 Resp: 11713

Ion	Ratio	Lower	Upper
85	100		
87	25.3	26.6	39.8#



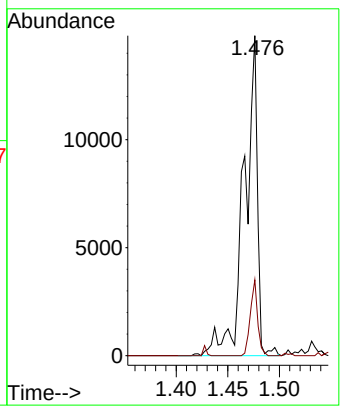


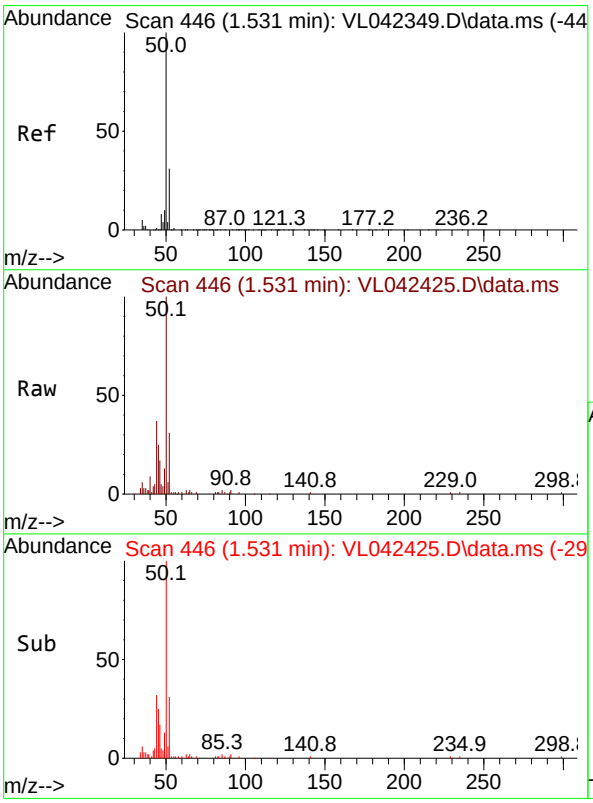
#3
Chlorodifluoromethane
Concen: 0.589 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 51 Resp: 13184

Ion	Ratio	Lower	Upper
51	100		
67	13.1	16.2	24.4#

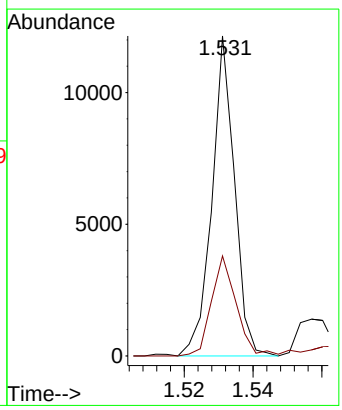


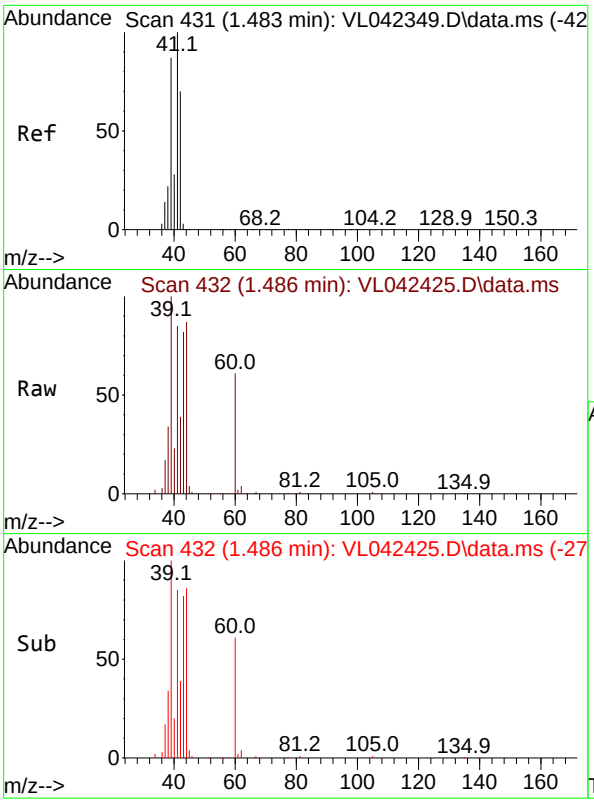


#4
Chloromethane
Concen: 0.597 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 50 Resp: 5550

Ion	Ratio	Lower	Upper
50	100		
52	31.2	24.7	37.1



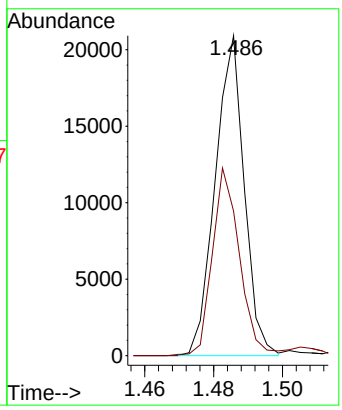


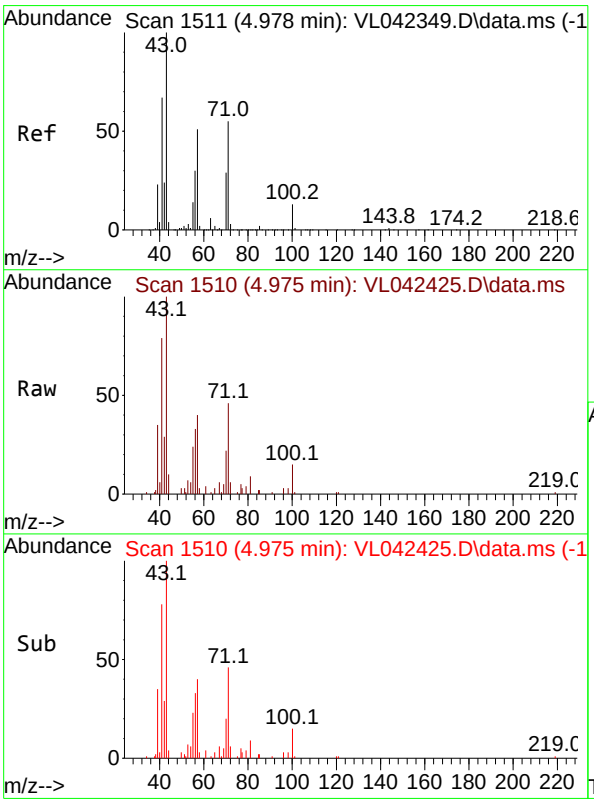
#9
Propene
Concen: 1.200 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 41 Resp: 12230

Ion	Ratio	Lower	Upper
41	100		
42	57.6	56.2	84.4

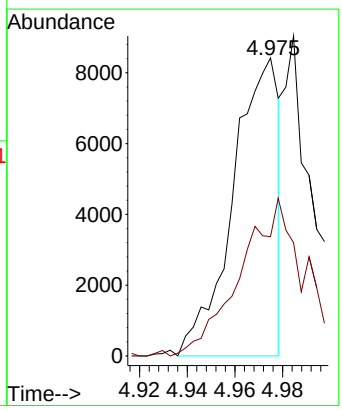


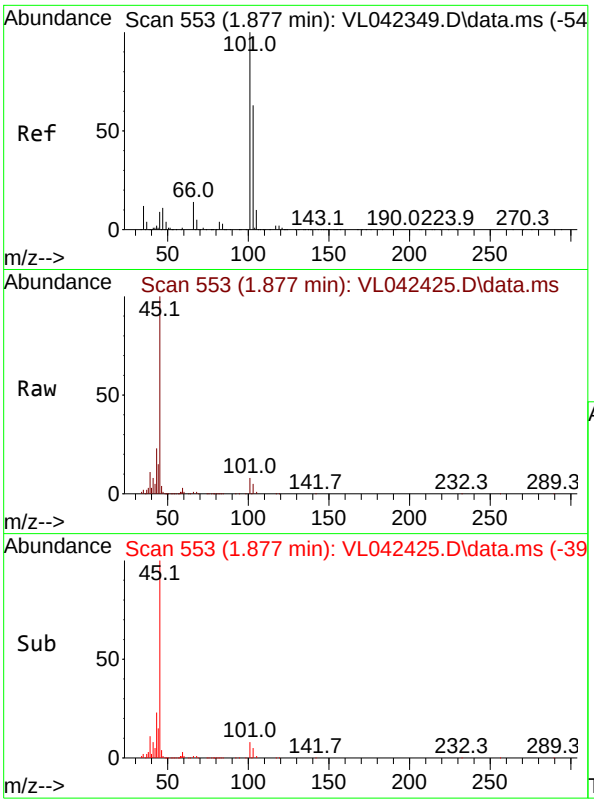


#10
Heptane
Concen: 0.391 ppbv
RT: 4.975 min Scan# 1510
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 11187

Ion	Ratio	Lower	Upper
43	100		
57	76.6	39.9	59.9#



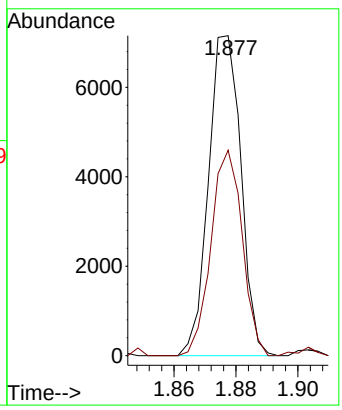


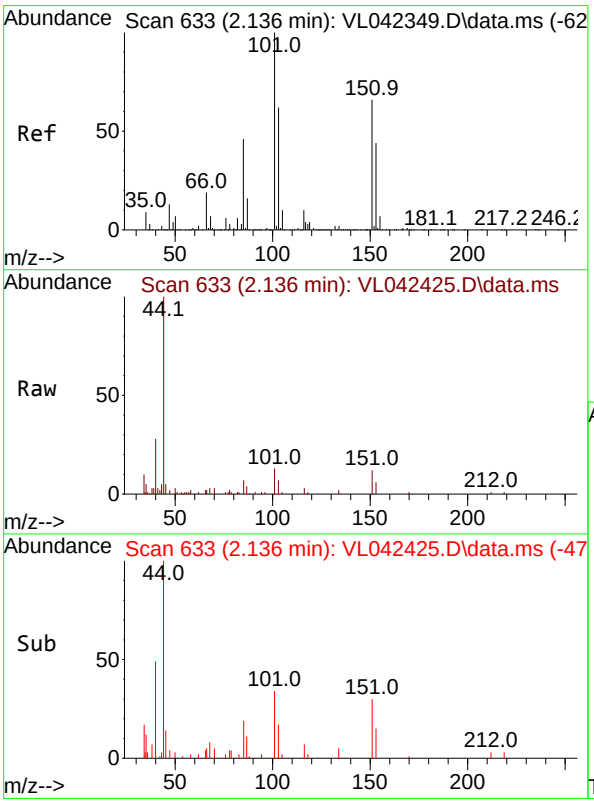
#11
Trichlorofluoromethane
Concen: 0.233 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:101 Resp: 5207

Ion	Ratio	Lower	Upper
101	100		
103	64.2	50.1	75.1

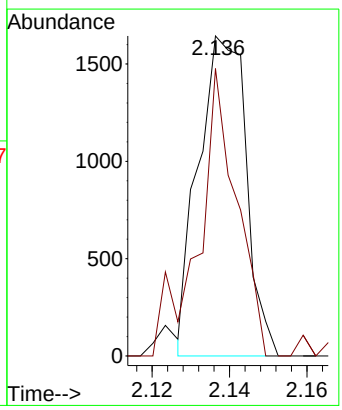


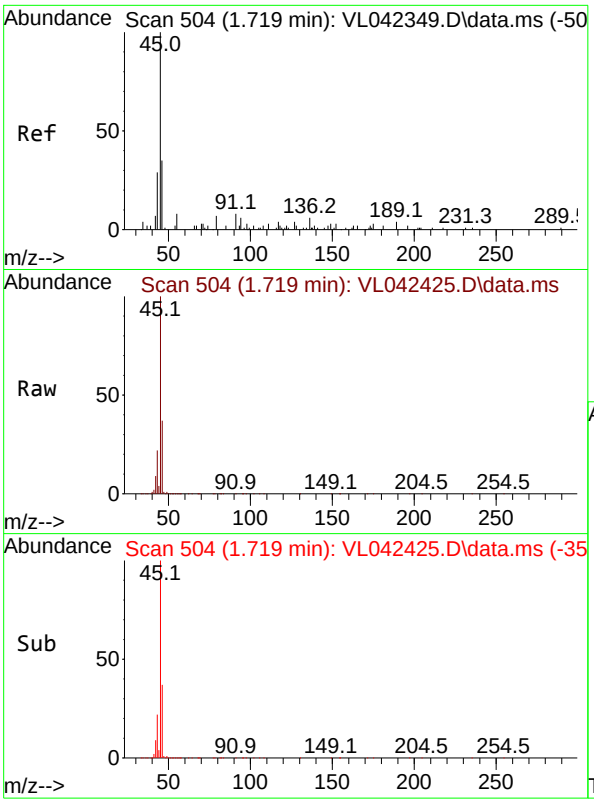


#12
1,1,2-Trichlorotrifluoroethane
Concen: 0.077 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:101 Resp: 1409

Ion	Ratio	Lower	Upper
101	100		
151	75.1	57.0	85.6



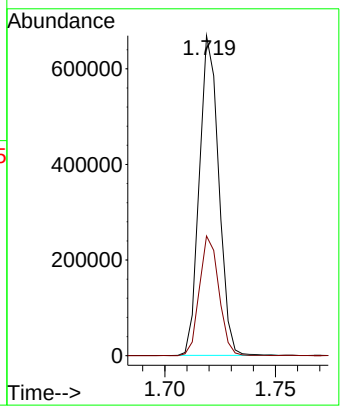


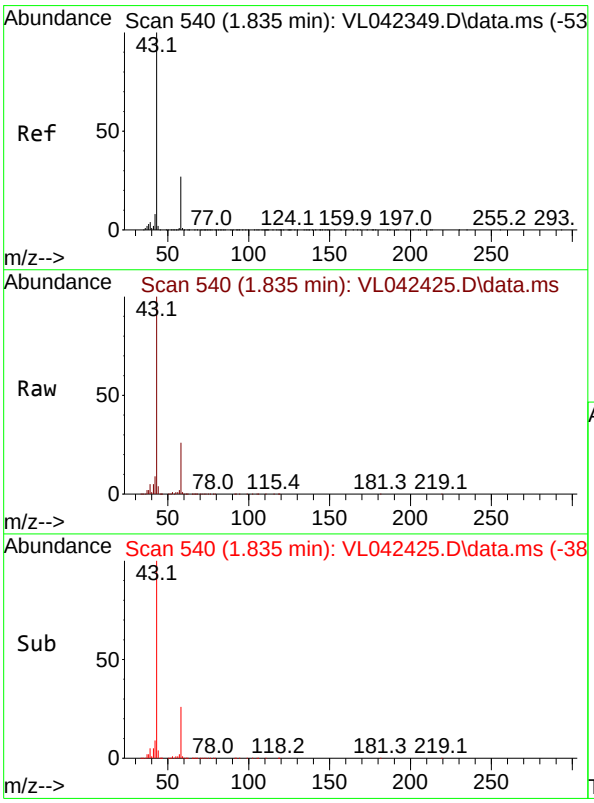
#13
Ethanol
Concen: 251.014 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 45 Resp: 406613

Ion	Ratio	Lower	Upper
45	100		
46	37.8	21.9	87.7

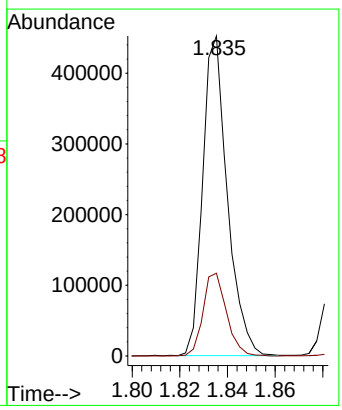


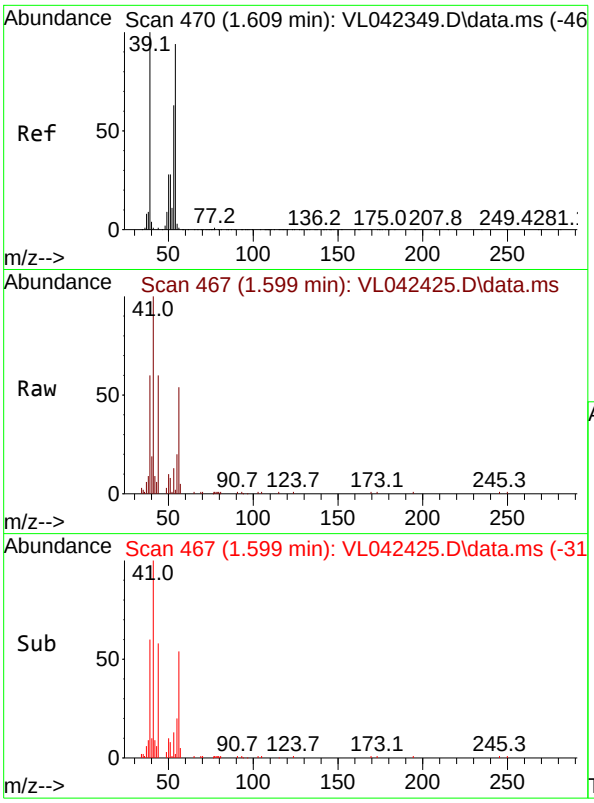


#15
Acetone
Concen: 14.899 ppbv
RT: 1.835 min Scan# 540
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 324431

Ion	Ratio	Lower	Upper
43	100		
58	24.7	22.4	33.6



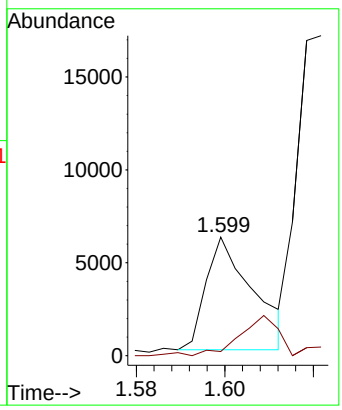


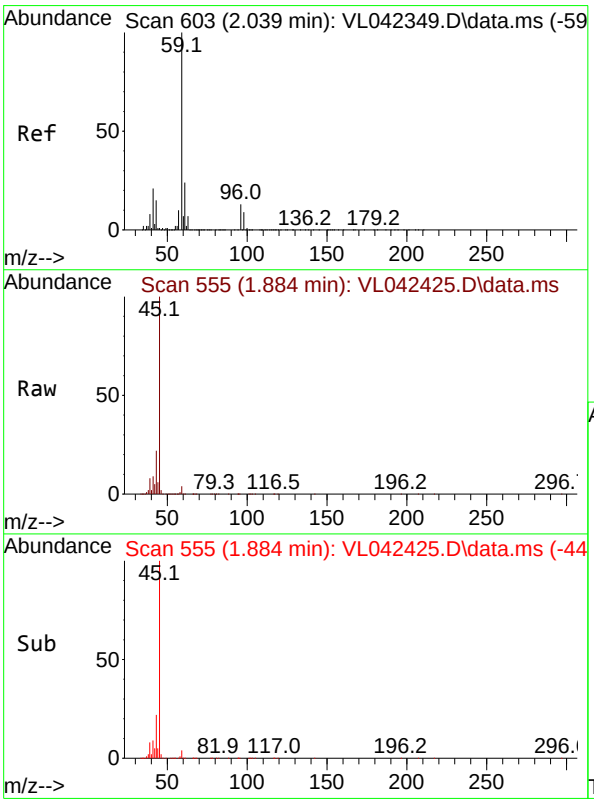
#16
1,3-Butadiene
Concen: 0.426 ppbv
RT: 1.599 min Scan# 4
Delta R.T. -0.010 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 39 Resp: 4434

Ion	Ratio	Lower	Upper
39	100		
54	44.7	64.9	97.3#

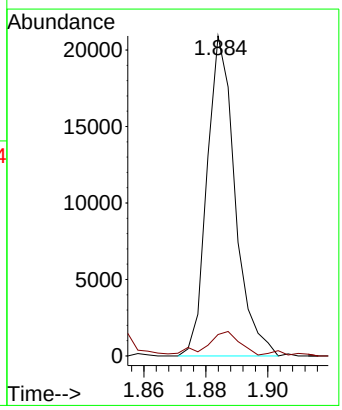


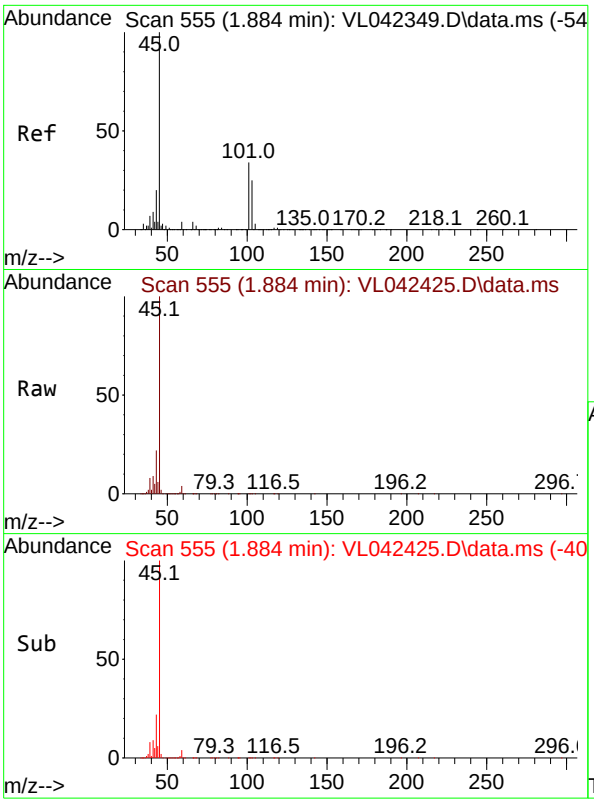


#17
tert-Butyl alcohol
Concen: 0.486 ppbv
RT: 1.884 min Scan# 555
Delta R.T. -0.155 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 59 Resp: 13126

Ion	Ratio	Lower	Upper
59	100		
57	10.5	8.7	13.1



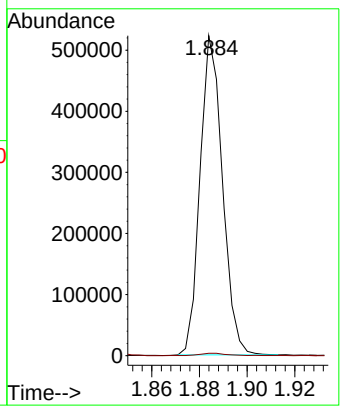


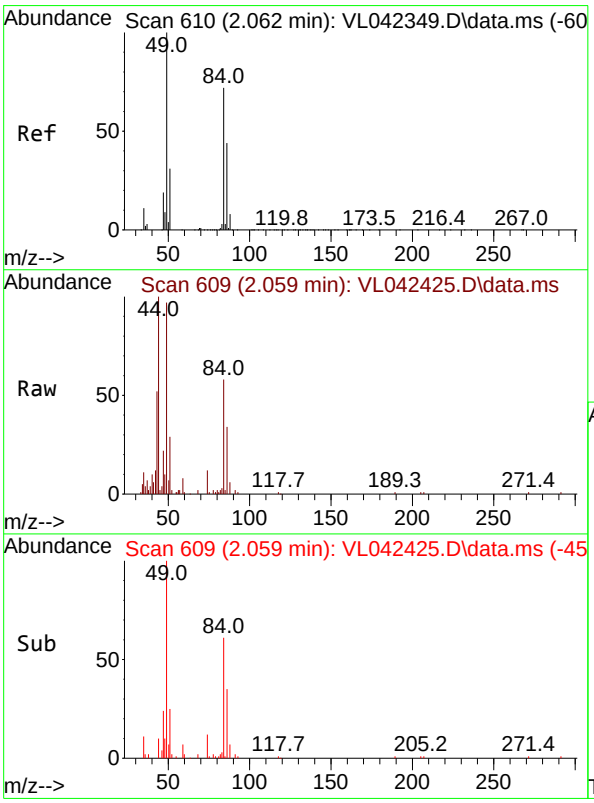
#19
Isopropyl Alcohol
Concen: 28.261 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 45 Resp: 341849

Ion	Ratio	Lower	Upper
45	100		
58	1.1	34.5	51.7#

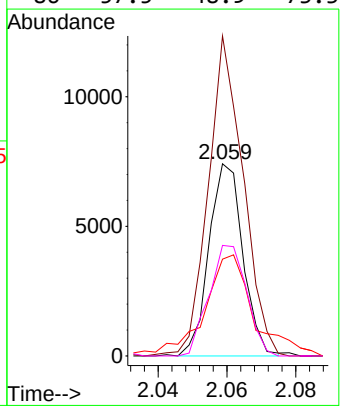


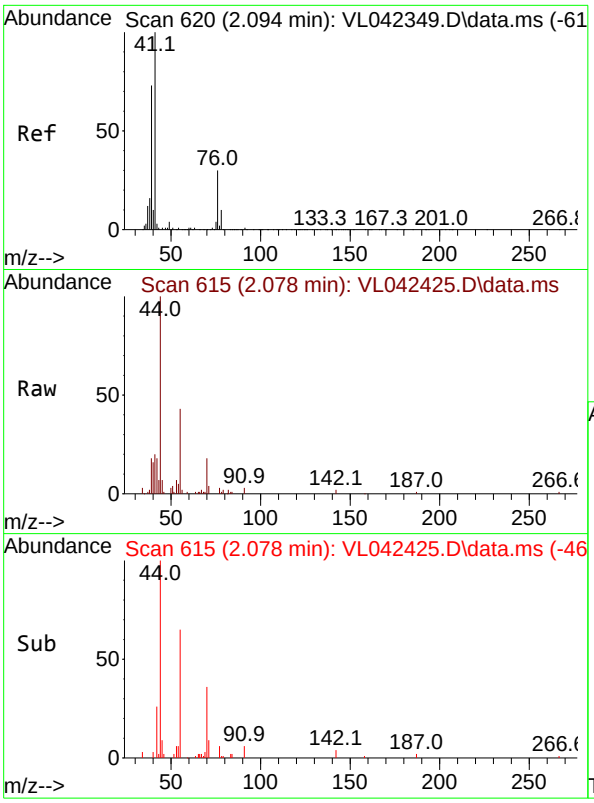


#20
Methylene Chloride
Concen: 0.595 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 84 Resp: 5072

Ion	Ratio	Lower	Upper
84	100		
49	165.2	111.6	167.4
51	44.3	35.1	52.7
86	57.5	48.9	73.3



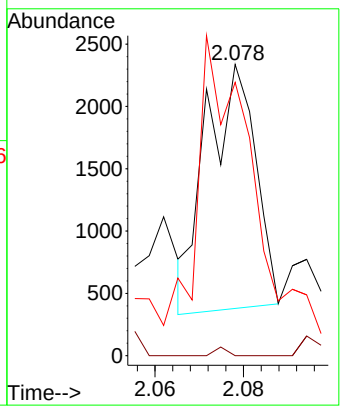


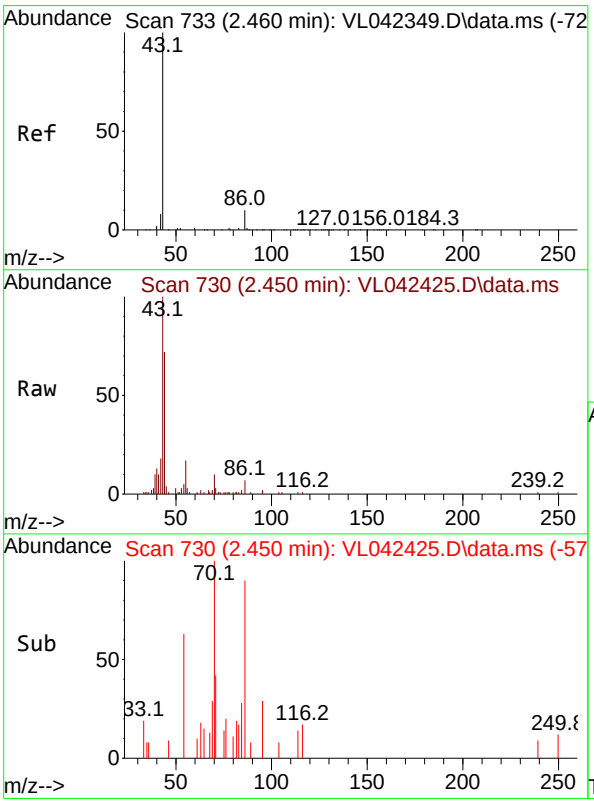
#21
Allyl Chloride
Concen: 0.101 ppbv
RT: 2.078 min Scan# 61
Delta R.T. -0.016 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 41 Resp: 1511

Ion	Ratio	Lower	Upper
41	100		
76	3.8	24.8	37.2#
39	119.1	60.6	90.8#

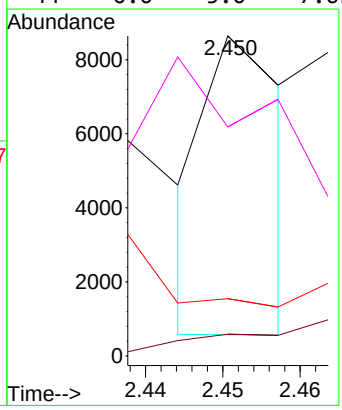


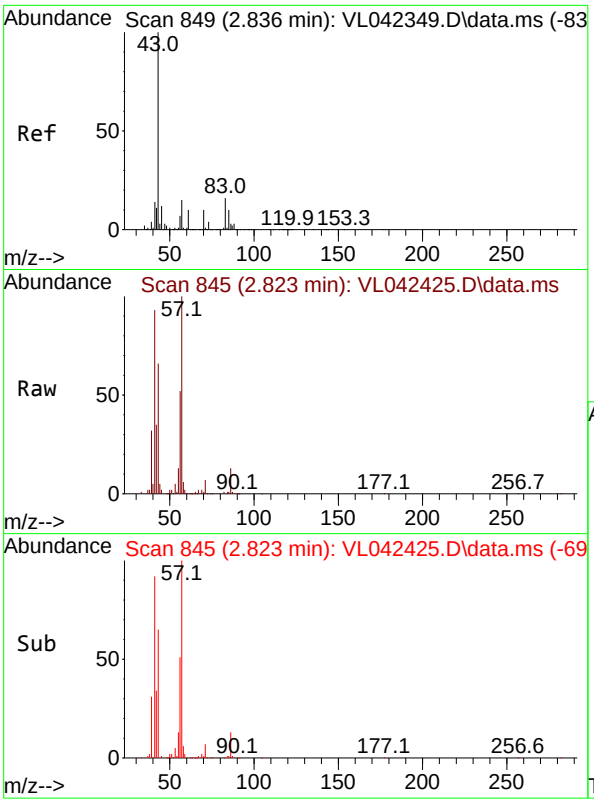


#23
Vinyl Acetate
Concen: 0.327 ppbv
RT: 2.450 min Scan# 730
Delta R.T. -0.010 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 43 Resp: 2880

Ion	Ratio	Lower	Upper
43	100		
86	4.2	6.5	9.7#
42	5.6	7.8	11.8#
44	0.0	5.0	7.6#



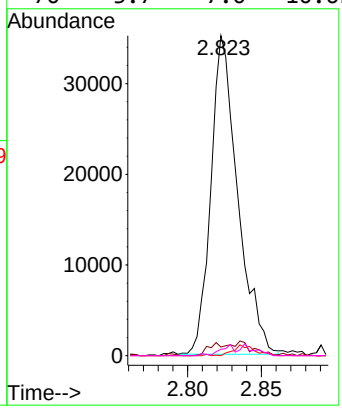


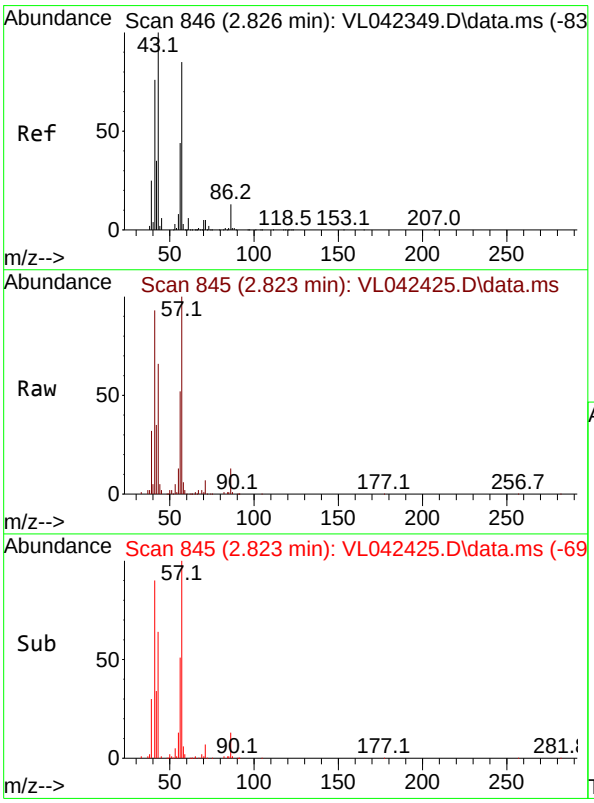
#25
Ethyl Acetate
Concen: 0.828 ppbv
RT: 2.823 min Scan# 84
Delta R.T. -0.013 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 43 Resp: 44445

Ion	Ratio	Lower	Upper
43	100		
45	6.4	8.3	12.5#
61	2.7	7.3	10.9#
70	3.7	7.0	10.6#

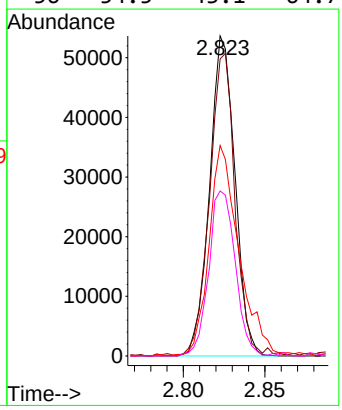


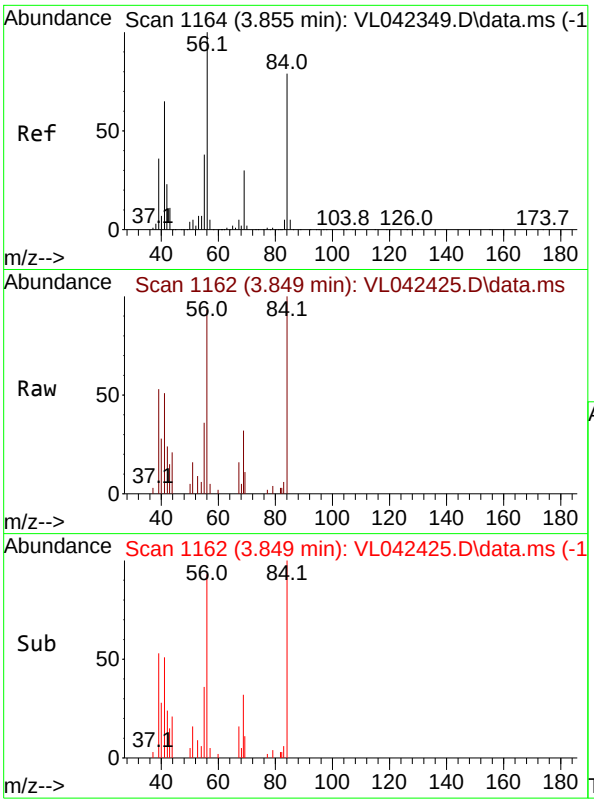


#26
Hexane
Concen: 2.667 ppbv
RT: 2.823 min Scan# 845
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 57 Resp: 57941

Ion	Ratio	Lower	Upper
57	100		
41	96.5	77.9	116.9
43	79.5	208.4	312.6#
56	54.5	43.1	64.7



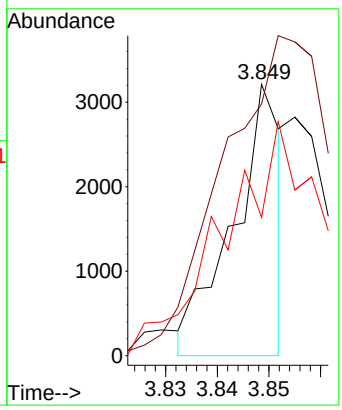


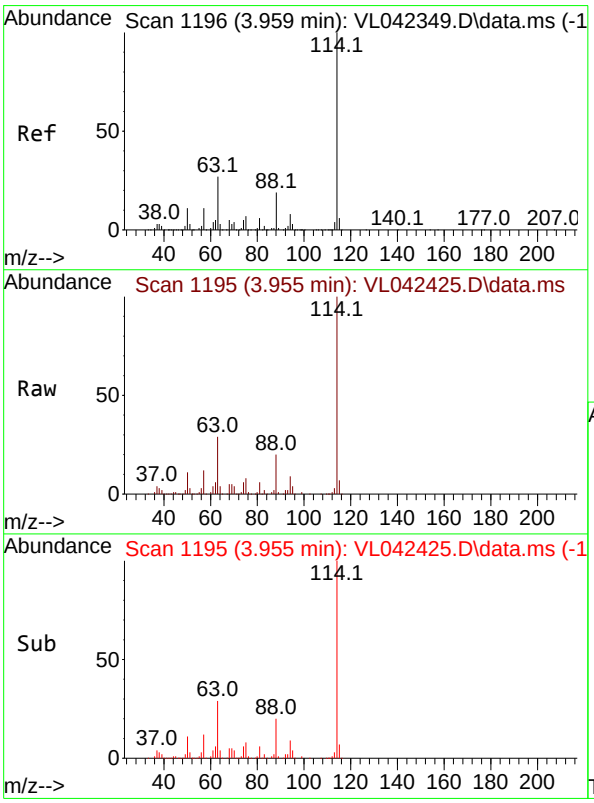
#30
Cyclohexane
Concen: 0.117 ppbv
RT: 3.849 min Scan# 11
Delta R.T. -0.006 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 84 Resp: 2059

Ion	Ratio	Lower	Upper
84	100		
56	0.0	101.0	151.4#
41	0.0	67.4	101.0#

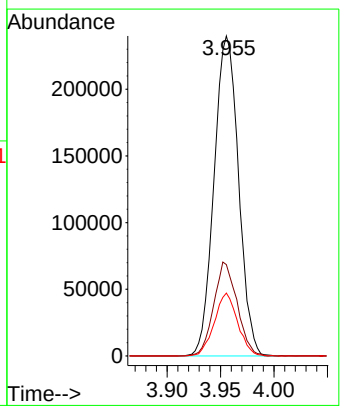


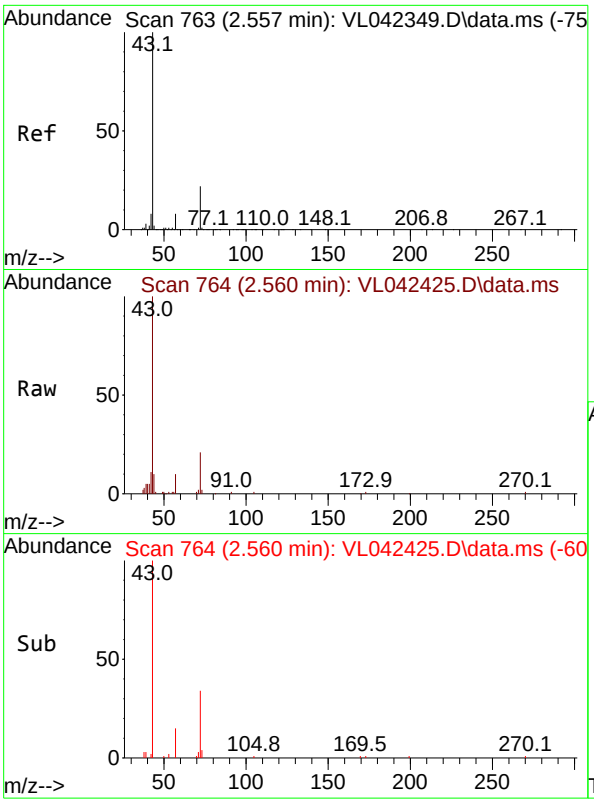


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.955 min Scan# 1195
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:114 Resp: 381932

Ion	Ratio	Lower	Upper
114	100		
63	28.1	21.8	32.6
88	18.8	15.5	23.3



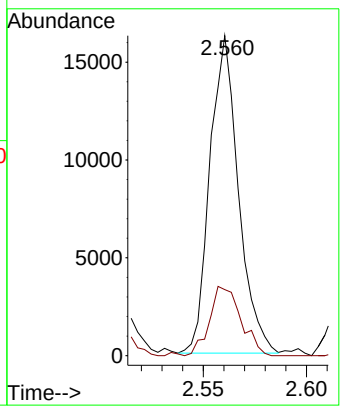


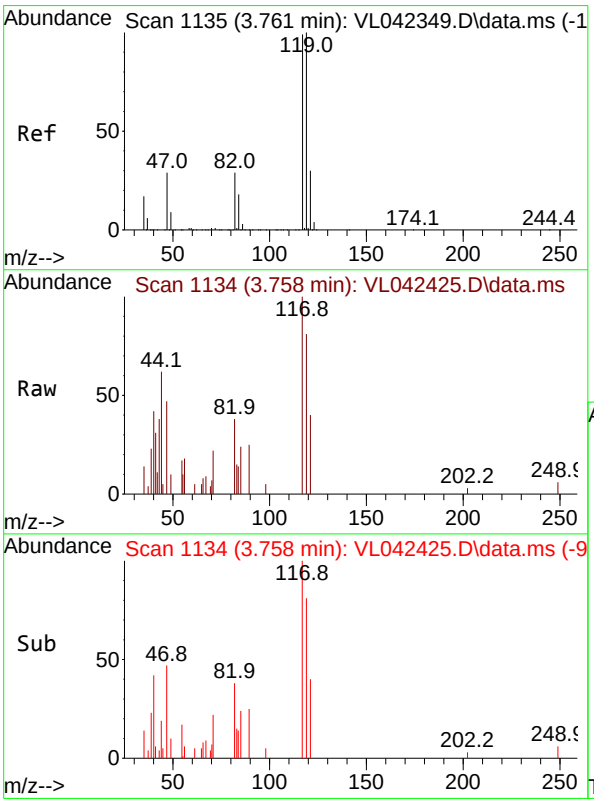
#34
2-Butanone
Concen: 0.518 ppbv
RT: 2.560 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 43 Resp: 15646

Ion	Ratio	Lower	Upper
43	100		
72	23.9	18.2	27.2

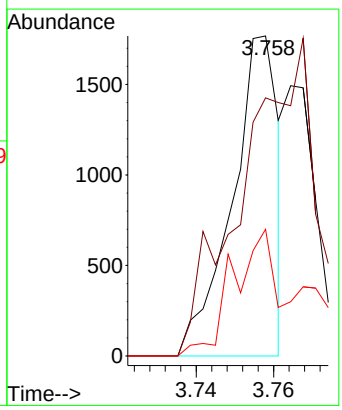


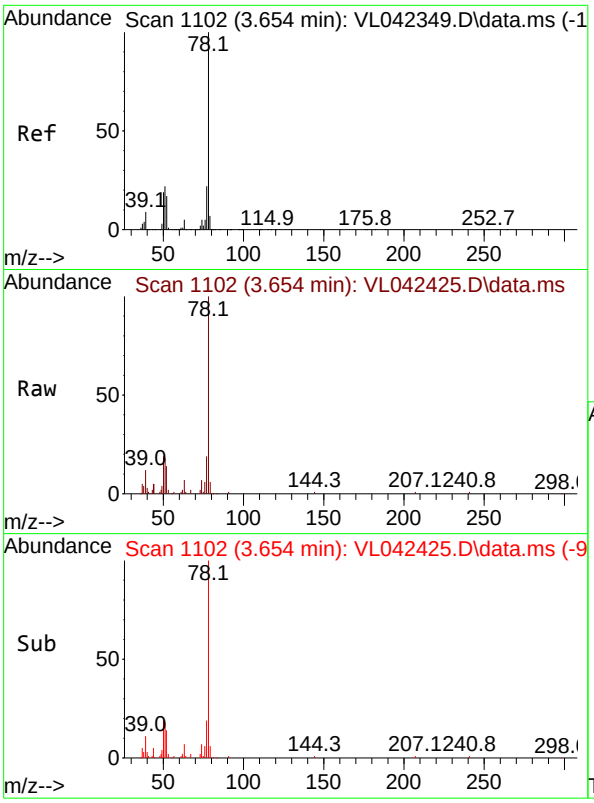


#35
Carbon Tetrachloride
Concen: 0.042 ppbv
RT: 3.758 min Scan# 1134
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:117 Resp: 1464

Ion	Ratio	Lower	Upper
117	100		
119	80.7	80.5	120.7
121	39.6	24.2	36.2#



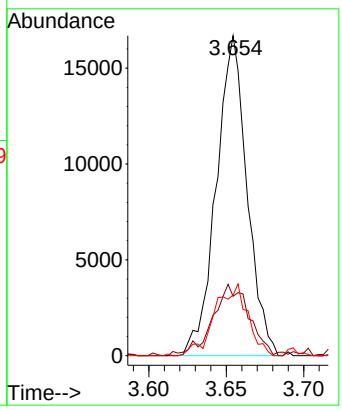


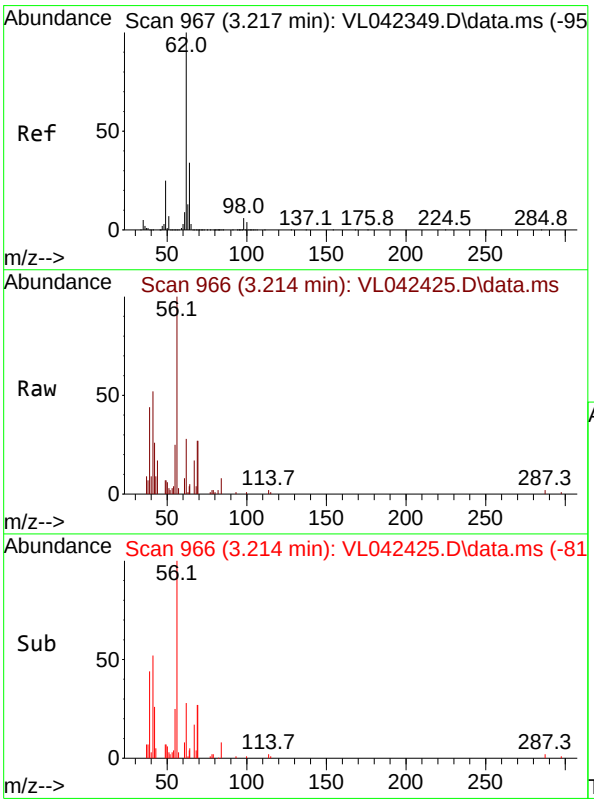
#36
Benzene
Concen: 0.562 ppbv
RT: 3.654 min Scan# 11
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 78 Resp: 23147

Ion	Ratio	Lower	Upper
78	100		
77	17.7	17.4	26.0
50	18.9	15.5	23.3

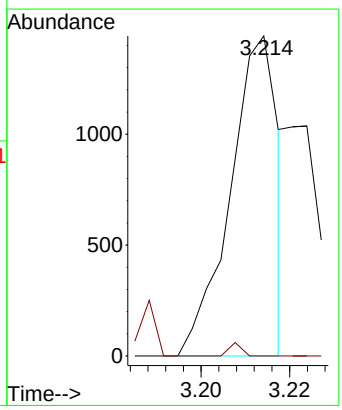


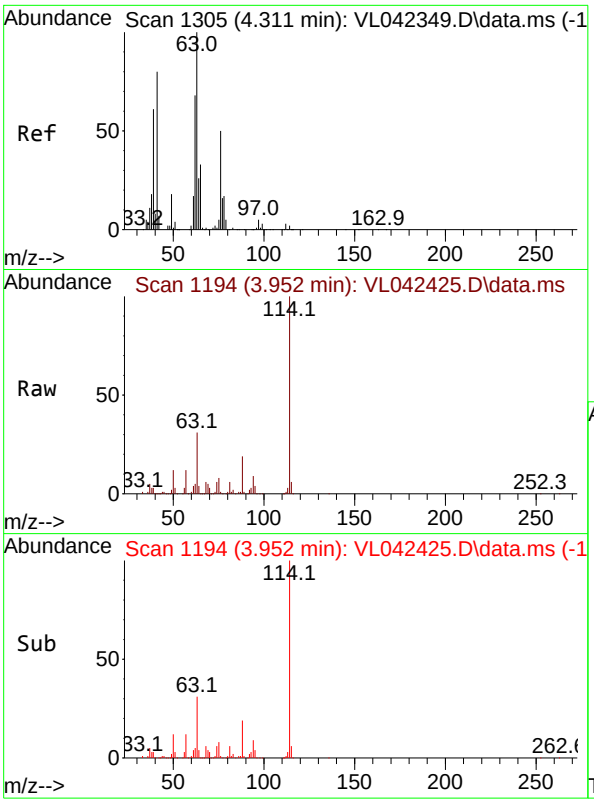


#37
1,2-Dichloroethane
Concen: 0.044 ppbv
RT: 3.214 min Scan# 966
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 62 Resp: 1080

Ion	Ratio	Lower	Upper
62	100		
98	0.0	5.1	7.7#



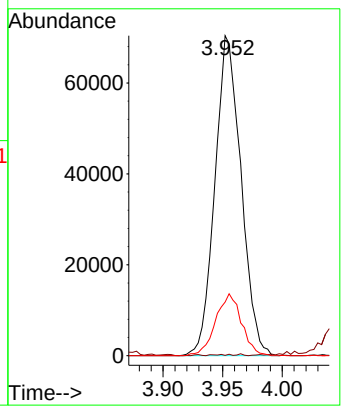


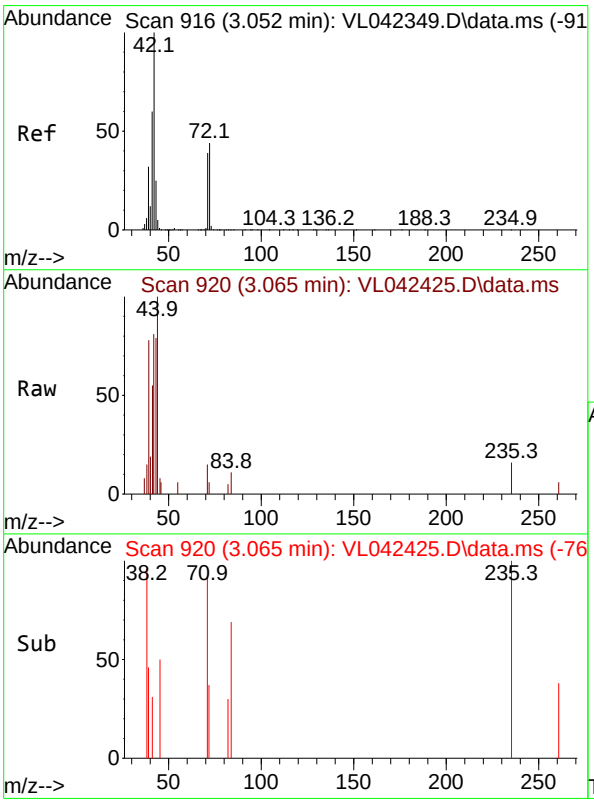
#39
1,2-Dichloropropane
Concen: 6.979 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.359 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 63 Resp: 107133

Ion	Ratio	Lower	Upper
63	100		
41	0.1	64.2	96.2#
62	16.8	54.3	81.5#

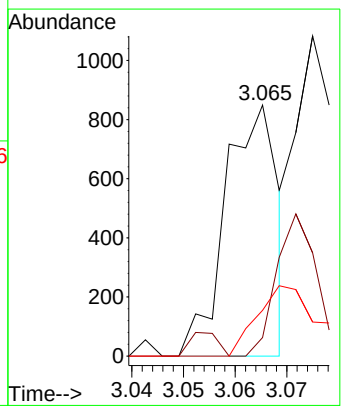


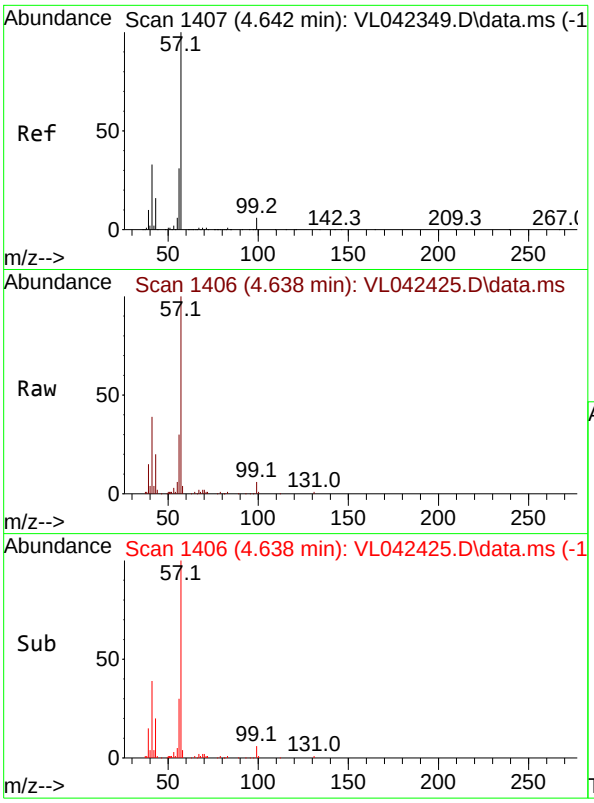


#41
Tetrahydrofuran
Concen: 0.034 ppbv
RT: 3.065 min Scan# 920
Delta R.T. 0.013 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 42 Resp: 602

Ion	Ratio	Lower	Upper
42	100		
72	47.5	32.3	48.5
71	45.3	31.4	47.2



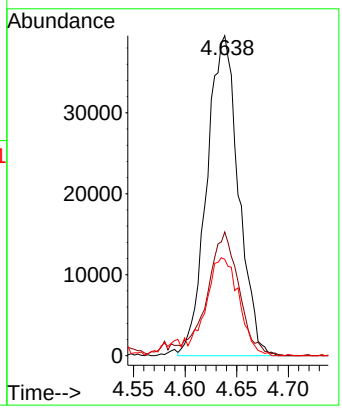


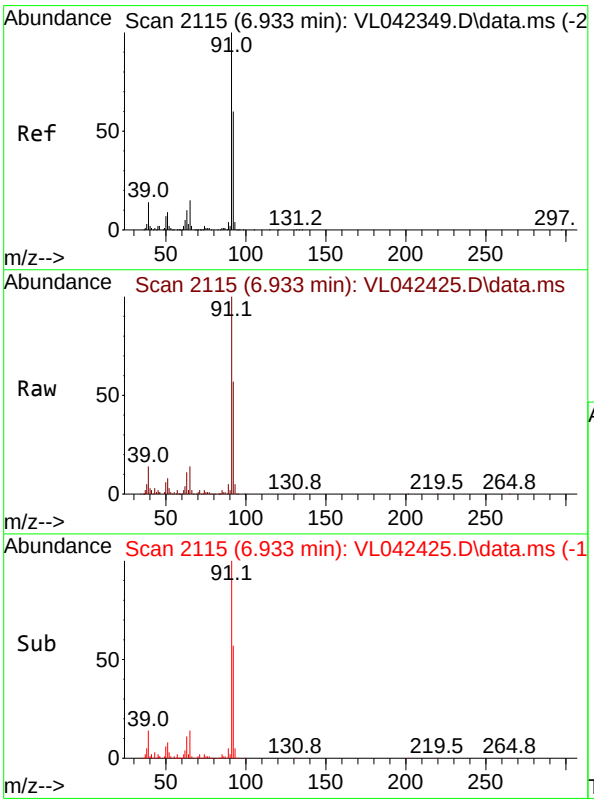
#44
2,2,4-Trimethylpentane
Concen: 1.186 ppbv
RT: 4.638 min Scan# 14
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 57 Resp: 84397

Ion	Ratio	Lower	Upper
57	100		
41	40.9	27.2	40.8#
56	35.2	25.7	38.5

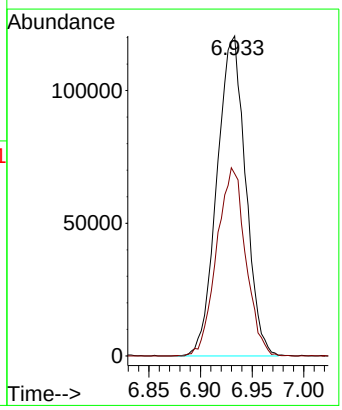


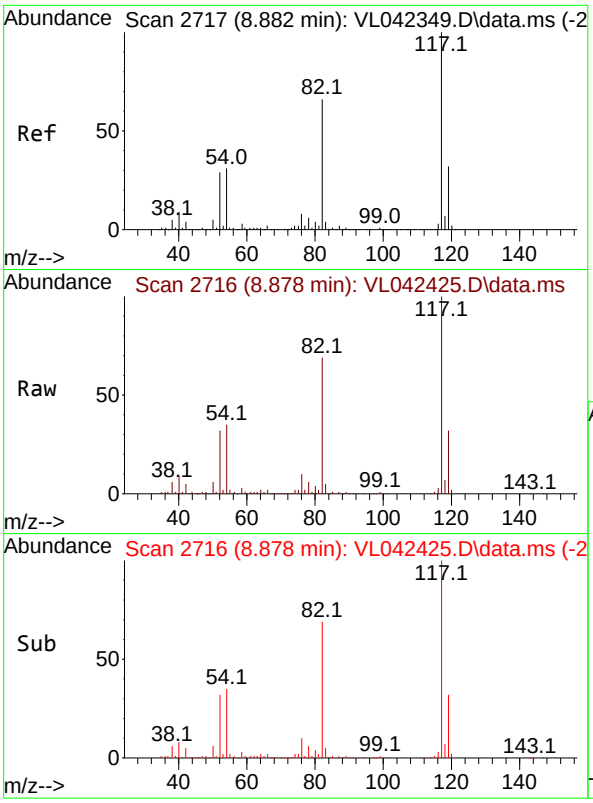


#53
Toluene
Concen: 4.695 ppbv
RT: 6.933 min Scan# 2115
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 232100

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4



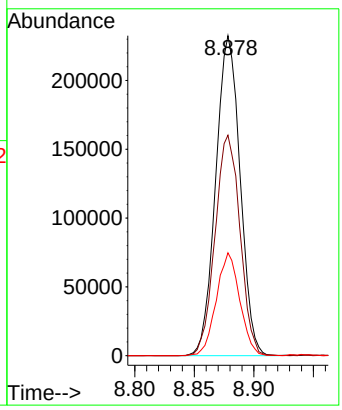


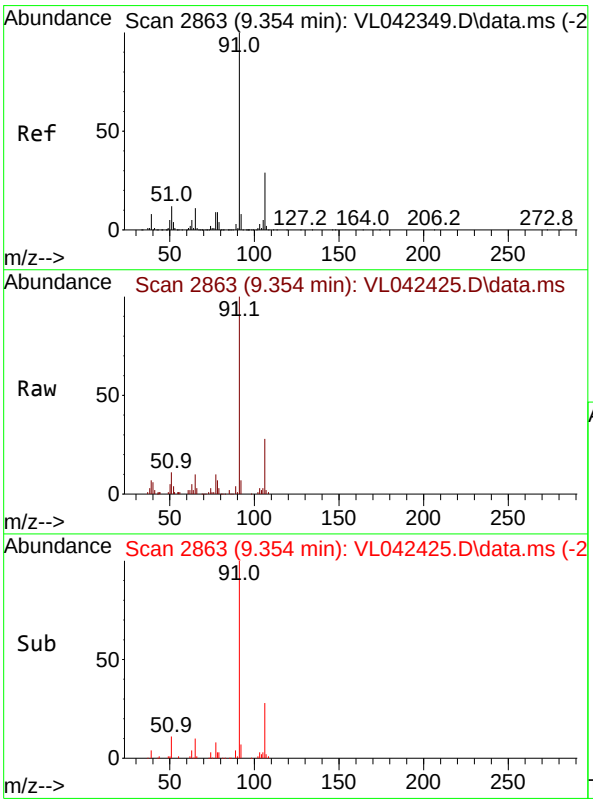
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:117 Resp: 330693

Ion	Ratio	Lower	Upper
117	100		
82	70.5	57.8	86.6
119	31.0	25.2	37.8

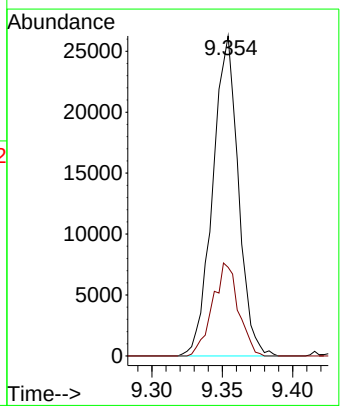


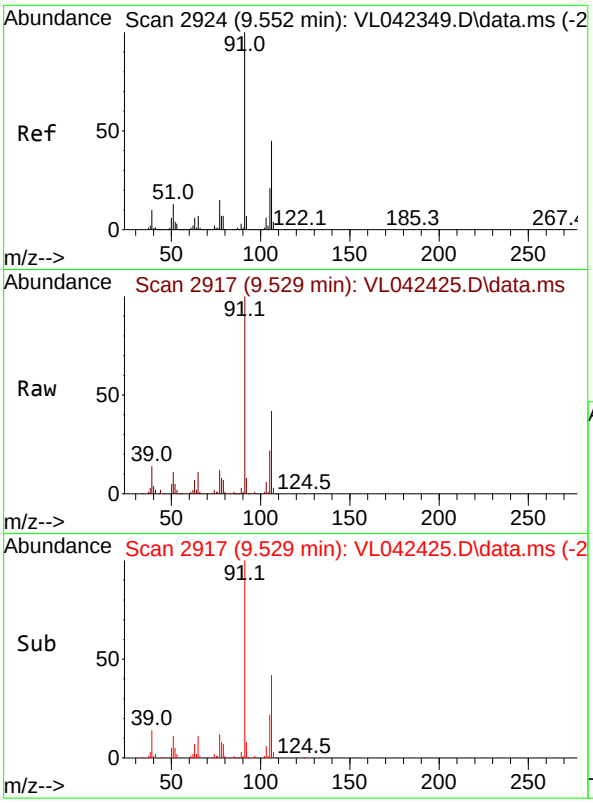


#58
Ethyl Benzene
Concen: 0.508 ppbv
RT: 9.354 min Scan# 2863
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 33267

Ion	Ratio	Lower	Upper
91	100		
106	27.7	23.0	34.4



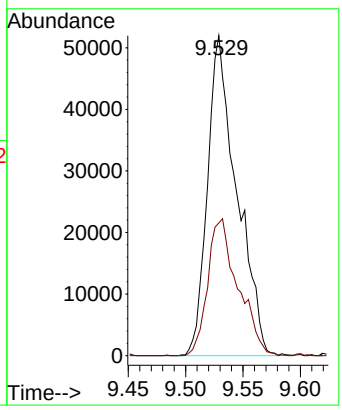


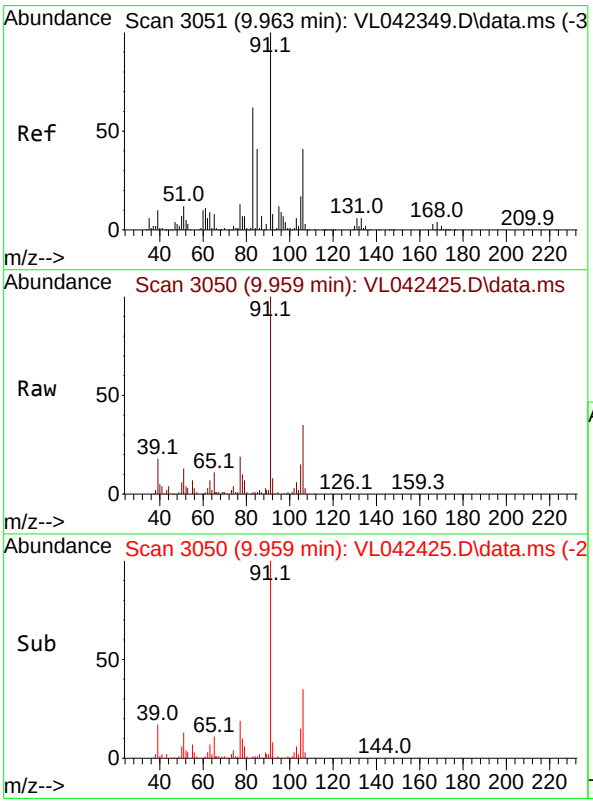
#59
m/p-Xylene
Concen: 1.750 ppbv
RT: 9.529 min Scan# 2
Delta R.T. -0.023 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion: 91 Resp: 92347

Ion	Ratio	Lower	Upper
91	100		
106	44.3	35.4	53.2

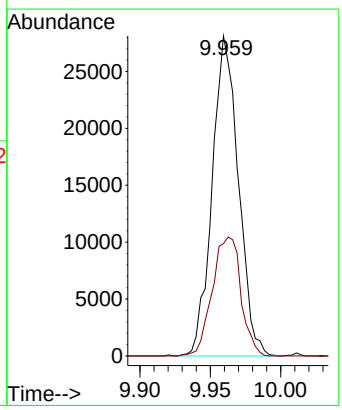


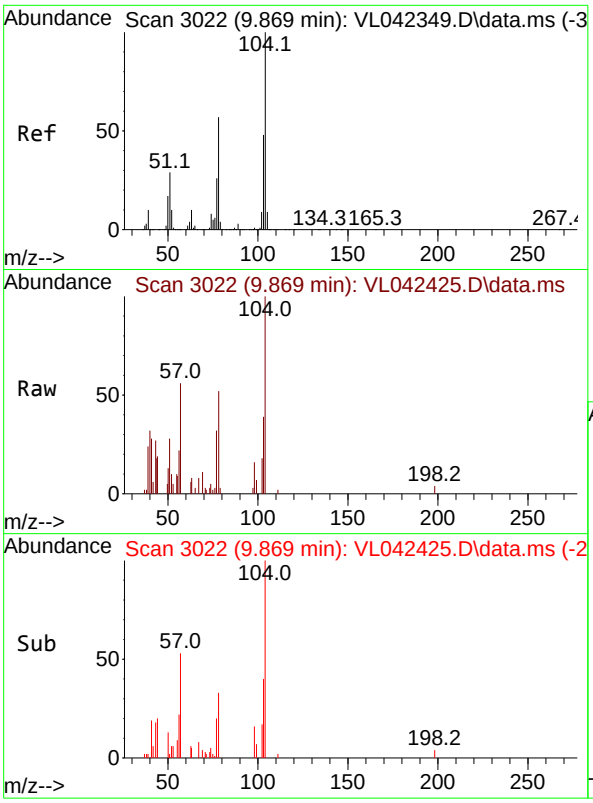


#60
o-Xylene
Concen: 0.688 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 36544

Ion	Ratio	Lower	Upper
91	100		
106	40.5	21.1	63.4



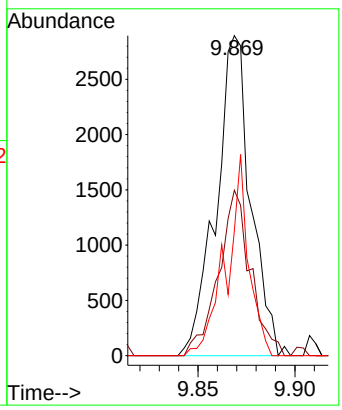


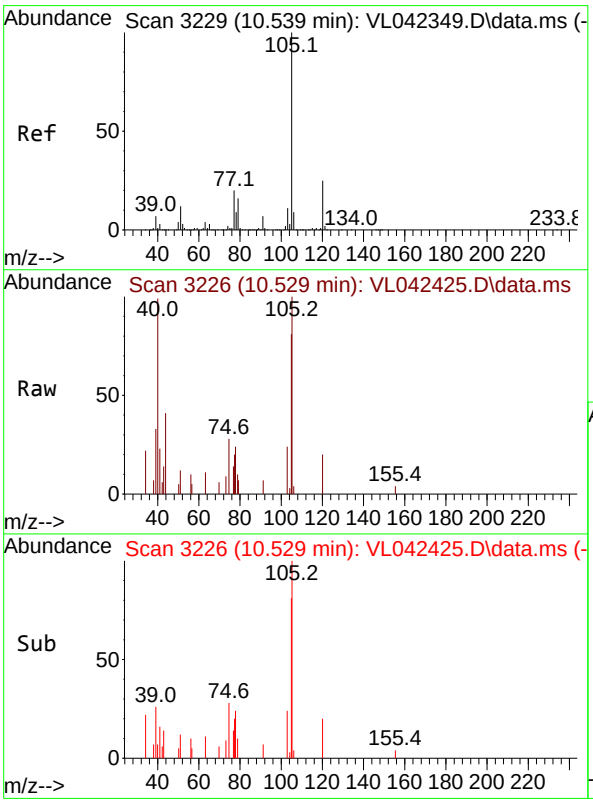
#61
Styrene
Concen: 0.141 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:104 Resp: 3587

Ion	Ratio	Lower	Upper
104	100		
78	48.8	44.6	66.8
103	41.0	37.4	56.0

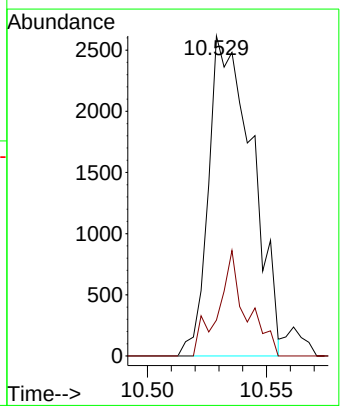


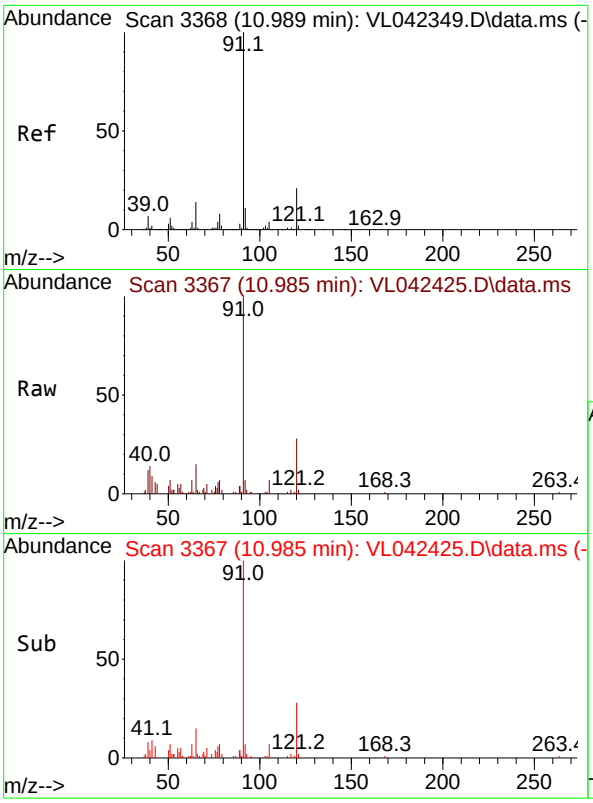


#62
Isopropylbenzene
Concen: 0.042 ppbv
RT: 10.529 min Scan# 3226
Delta R.T. -0.010 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:105 Resp: 3313

Ion	Ratio	Lower	Upper
105	100		
120	21.6	19.8	29.8



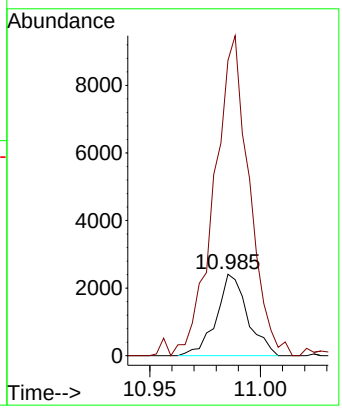


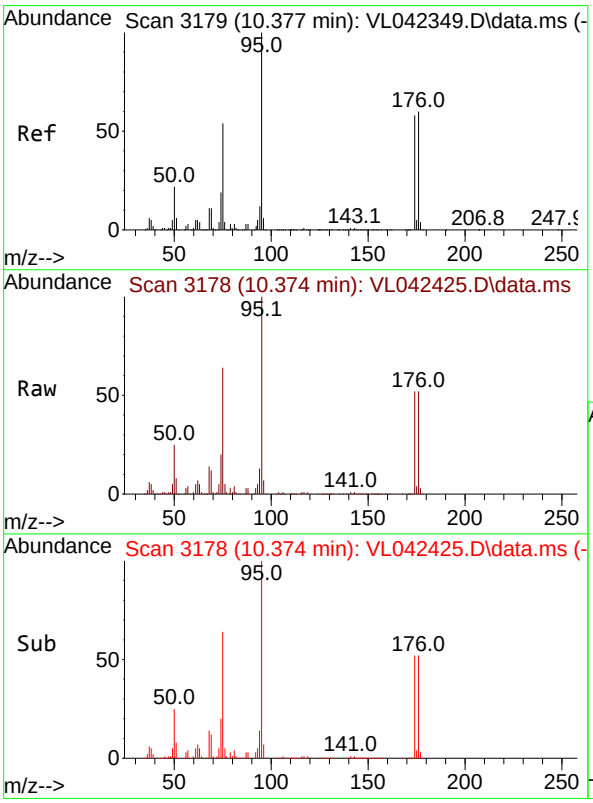
#64
n-propylbenzene
Concen: 0.120 ppbv
RT: 10.985 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:120 Resp: 2357

Ion	Ratio	Lower	Upper
120	100		
91	452.8	392.4	588.6

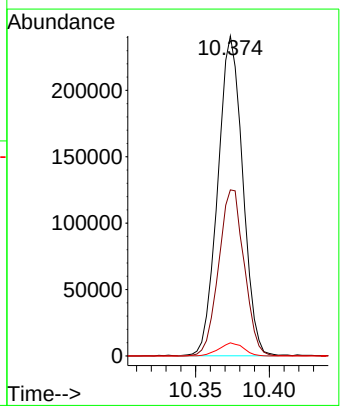


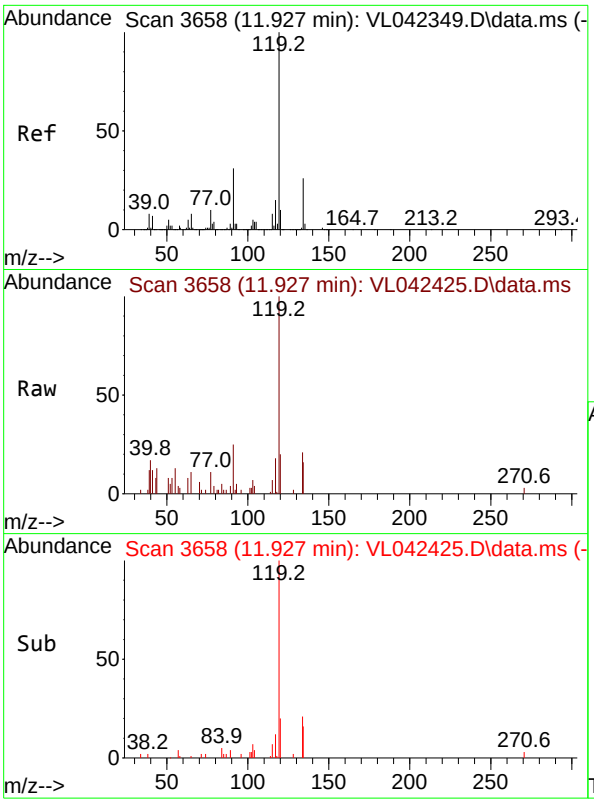


#68
1-Bromo-4-Fluorobenzene
Concen: 10.401 ppbv
RT: 10.374 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 95 Resp: 282648

Ion	Ratio	Lower	Upper
95	100		
174	53.4	48.5	72.7
175	4.1	3.7	5.5



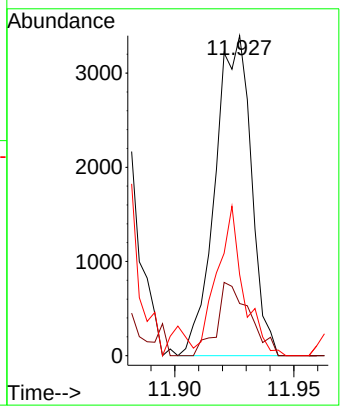


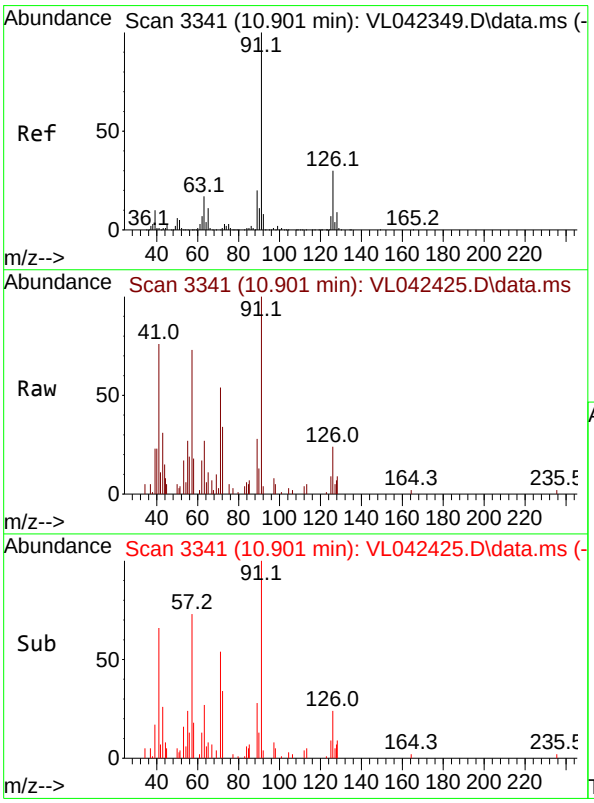
#69
p-Isopropyltoluene
Concen: 0.041 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:119 Resp: 3573

Ion	Ratio	Lower	Upper
119	100		
134	20.8	20.0	30.0
91	34.6	24.4	36.6

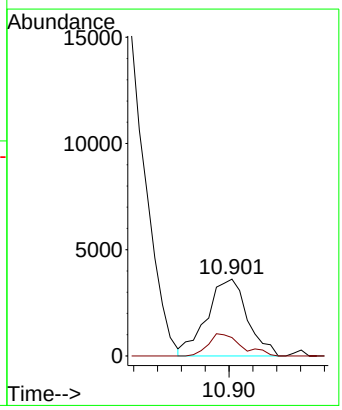


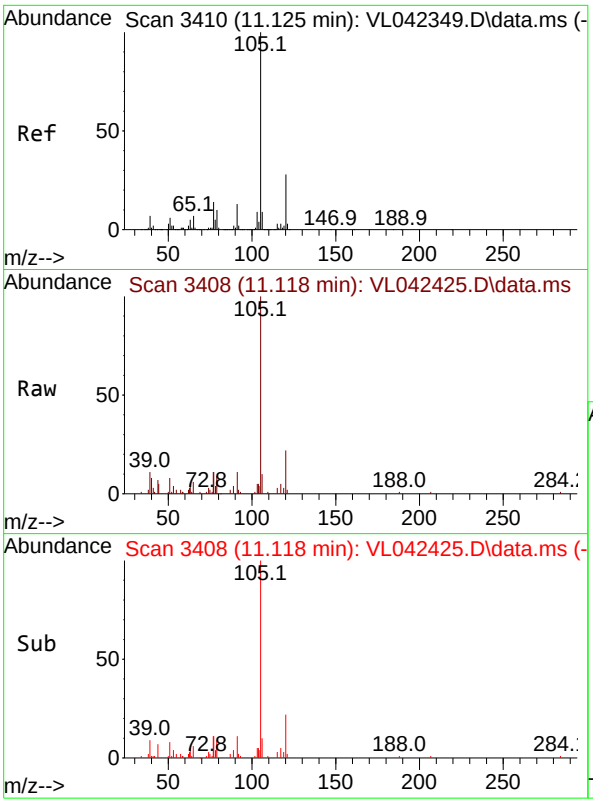


#71
2-Chlorotoluene
Concen: 0.069 ppbv
RT: 10.901 min Scan# 3341
Delta R.T. -0.000 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion: 91 Resp: 4240

Ion	Ratio	Lower	Upper
91	100		
126	23.7	11.4	45.4



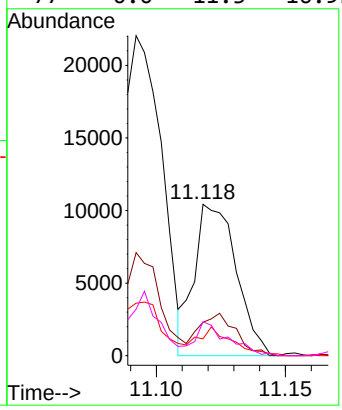


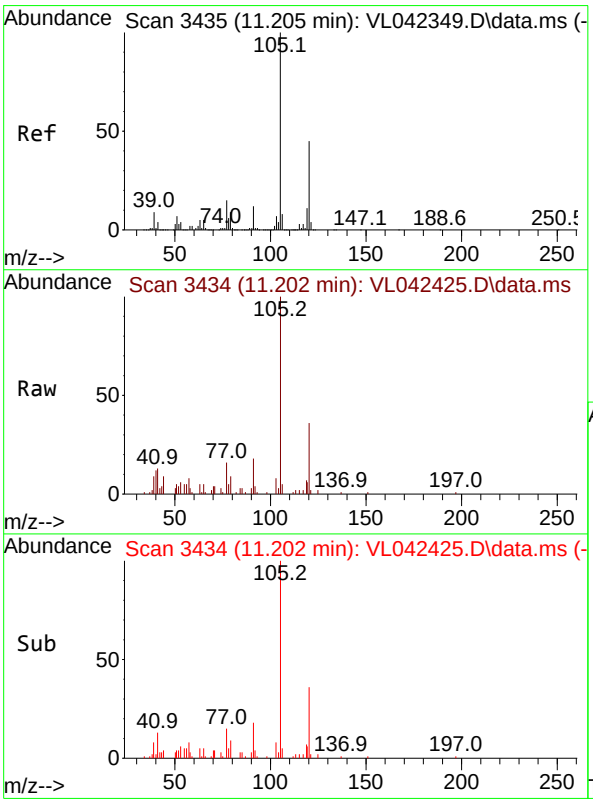
#72
4-Ethyltoluene
Concen: 0.182 ppbv
RT: 11.118 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:105 Resp: 11801

Ion	Ratio	Lower	Upper
105	100		
120	0.0	23.2	34.8#
91	0.0	10.4	15.6#
77	0.0	11.3	16.9#

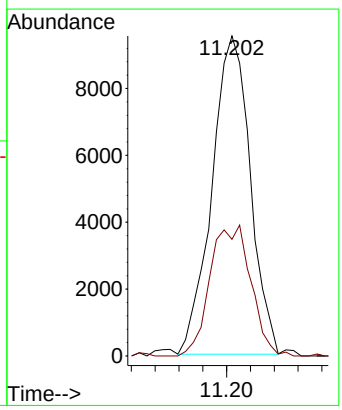


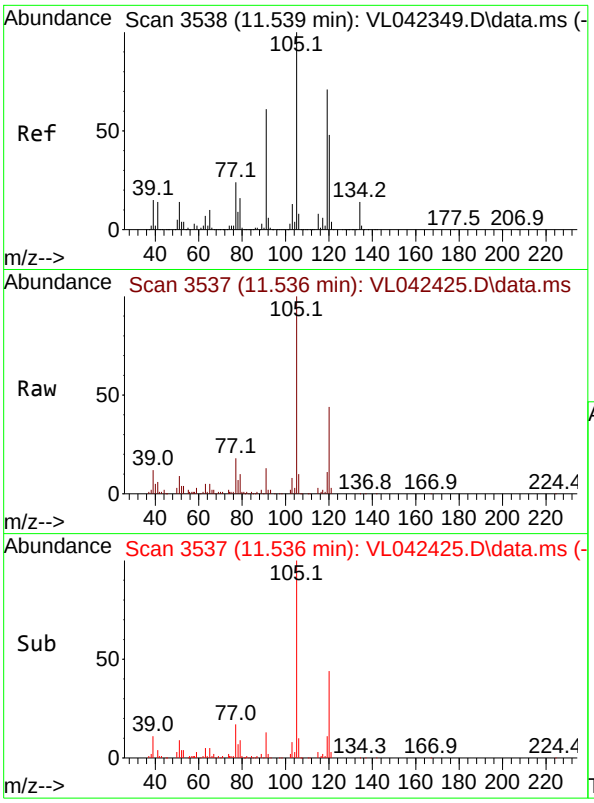


#73
1,3,5-Trimethylbenzene
Concen: 0.186 ppbv
RT: 11.202 min Scan# 3434
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:105 Resp: 10642

Ion	Ratio	Lower	Upper
105	100		
120	36.6	35.6	53.4



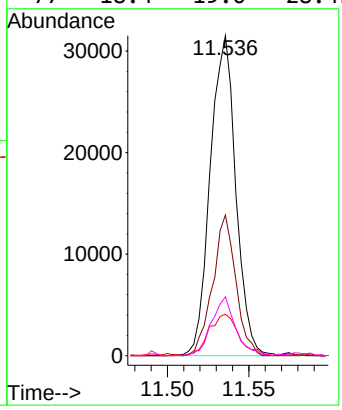


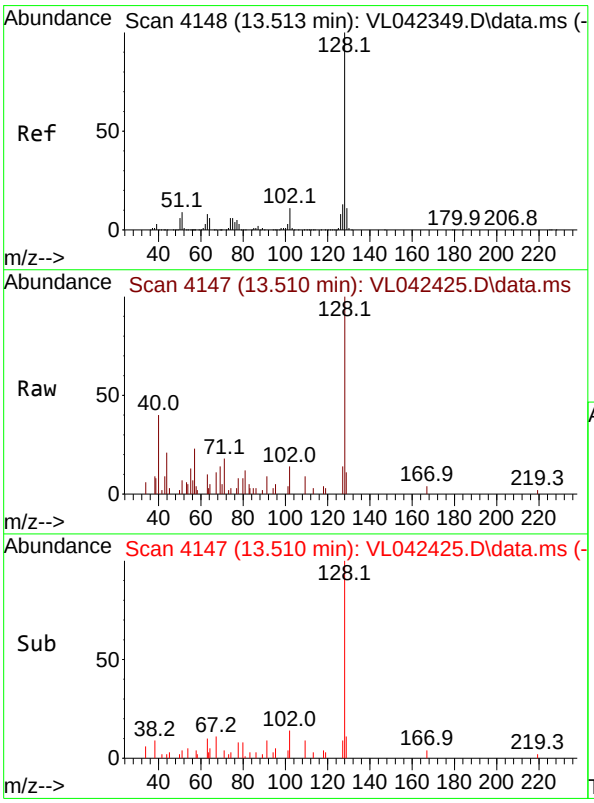
#74
1,2,4-Trimethylbenzene
Concen: 0.512 ppbv
RT: 11.536 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-4-3242025

Tgt Ion:105 Resp: 34307

Ion	Ratio	Lower	Upper
105	100		
120	44.0	38.1	57.1
91	13.0	48.8	73.2#
77	18.4	19.0	28.4#

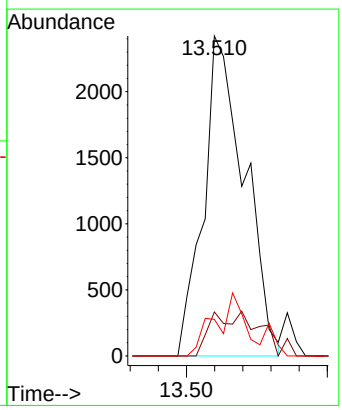




#79
Naphthalene
Concen: 0.031 ppbv
RT: 13.510 min Scan# 4147
Delta R.T. -0.003 min
Lab File: VL042425.D
Acq: 28 Apr 2025 14:34

Tgt Ion:128 Resp: 2447

Ion	Ratio	Lower	Upper
128	100		
127	12.3	10.6	15.8
129	10.3	8.6	12.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.780	49	114553	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.952	114	311268	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.878	117	269987	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.373	95	253216	11.413	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 114.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.495	85	234841	11.603	ppbv		97
3) Chlorodifluoromethane	1.473	51	188007	9.755	ppbv		95
4) Chloromethane	1.531	50	90298	11.274	ppbv		100
5) Vinyl Chloride	1.576	62	86603	9.933	ppbv		96
6) Bromomethane	1.664	94	41020	10.952	ppbv		85
7) Chloroethane	1.703	64	35167	11.153	ppbv		95
8) Dichlorotetrafluoroethane	1.550	85	199977	11.508	ppbv		94
9) Propene	1.482	41	69189	7.883	ppbv		98
10) Heptane	4.968	43	184737	7.492	ppbv		99
11) Trichlorofluoromethane	1.874	101	227979	11.845	ppbv		96
12) 1,1,2-Trichlorotrifluo...	2.136	101	172070	10.934	ppbv		99
13) Ethanol	1.719	45	4336	3.108	ppbv		81
14) Bromoethene	1.777	108	63597	10.721	ppbv		97
15) Acetone	1.832	43	184887	9.859	ppbv		98
16) 1,3-Butadiene	1.605	39	88889	9.910	ppbv		95
17) tert-Butyl alcohol	2.036	59	229627	9.881	ppbv		99
18) 1,1-Dichloroethene	2.029	96	75451	10.263	ppbv		94
19) Isopropyl Alcohol	1.884	45	101987	9.790	ppbv		91
20) Methylene Chloride	2.059	84	67278	9.161	ppbv		95
21) Allyl Chloride	2.091	41	131864	10.184	ppbv		98
22) trans-1,2-Dichloroethene	2.337	96	86577	10.343	ppbv		95
23) Vinyl Acetate	2.460	43	61601	8.115	ppbv	#	95
24) 1,1-Dichloroethane	2.405	63	172555	10.852	ppbv		98
25) Ethyl Acetate	2.832	43	408744	8.840	ppbv		100
26) Hexane	2.819	57	153801	8.220	ppbv		96
27) Carbon Disulfide	2.146	76	212793	10.622	ppbv		99
28) Methyl tert-Butyl Ether	2.437	73	114108	9.308	ppbv		93
29) Chloroform	2.845	83	290965	11.002	ppbv		100
30) Cyclohexane	3.848	84	130608	8.635	ppbv		97
31) cis-1,2-Dichloroethene	2.716	61	174659	9.818	ppbv		97
32) 1,1,1-Trichloroethane	3.363	97	312430	10.493	ppbv		99
34) 2-Butanone	2.554	43	232034	9.426	ppbv		98
35) Carbon Tetrachloride	3.755	117	316689	11.242	ppbv		94
36) Benzene	3.651	78	314493	9.367	ppbv		95
37) 1,2-Dichloroethane	3.214	62	244516	12.134	ppbv	#	96
38) Trichloroethene	4.541	130	123997	8.450	ppbv	#	88
39) 1,2-Dichloropropane	4.305	63	110315	8.817	ppbv	#	84
40) 1,4-Dioxane	4.577	88	54364	7.907	ppbv	#	90
41) Tetrahydrofuran	3.049	42	121700	8.479	ppbv		100
42) Bromodichloromethane	4.483	83	312029	11.127	ppbv		98
43) Methyl Methacrylate	4.874	69	126594	8.367	ppbv		94
44) 2,2,4-Trimethylpentane	4.632	57	522427	9.010	ppbv		94
45) t-1,3-Dichloropropene	6.409	75	139508	9.026	ppbv		89

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.587	75	169355	8.953	ppbv		90
47) 1,1,2-Trichloroethane	6.570	97	86392	6.778	ppbv		97
48) Dibromochloromethane	7.380	129	232818	10.339	ppbv		100
49) Bromoform	9.477	173	188896	9.593	ppbv		99
50) 4-Methyl-2-Pentanone	5.742	43	325855	7.965	ppbv		99
51) 2-Hexanone	7.428	43	269915	7.357	ppbv	#	93
52) Tetrachloroethene	8.218	164	101642	7.833	ppbv	#	84
53) Toluene	6.926	91	361317	8.968	ppbv		100
54) 1,2-Dibromoethane	7.645	107	179895	9.861	ppbv		97
56) 1,1,1,2-Tetrachloroethane	8.917	131	182759	11.184	ppbv		95
57) Chlorobenzene	8.920	112	283210	10.086	ppbv		97
58) Ethyl Benzene	9.351	91	536634	10.032	ppbv		96
59) m/p-Xylene	9.545	91	469573	10.897	ppbv	#	43
60) o-Xylene	9.959	91	463713	10.686	ppbv		96
61) Styrene	9.869	104	195813	9.454	ppbv		98
62) Isopropylbenzene	10.535	105	672630	10.558	ppbv		98
63) 1,1,2,2-Tetrachloroethane	9.959	83	272746	9.699	ppbv		99
64) n-propylbenzene	10.985	120	160736	10.037	ppbv		90
65) tert-Butylbenzene	11.529	119	616872	10.535	ppbv		98
66) Benzyl Chloride	11.613	91	49841	7.746	ppbv		98
67) sec-Butylbenzene	11.765	105	869595	10.677	ppbv		99
69) p-Isopropyltoluene	11.924	119	738863	10.442	ppbv		96
70) n-Butylbenzene	12.280	91	787717	10.688	ppbv		98
71) 2-Chlorotoluene	10.898	91	528205	10.571	ppbv		96
72) 4-Ethyltoluene	11.121	105	559285	10.542	ppbv		96
73) 1,3,5-Trimethylbenzene	11.199	105	493949	10.546	ppbv		93
74) 1,2,4-Trimethylbenzene	11.535	105	554136	10.130	ppbv		96
75) 1,3-Dichlorobenzene	11.603	146	285025	10.024	ppbv		97
76) 1,4-Dichlorobenzene	11.668	146	291795	10.210	ppbv		98
77) 1,2-Dichlorobenzene	11.943	146	283700	10.261	ppbv		97
78) Hexachloro-1,3-Butadiene	13.879	225	263477	9.437	ppbv		99
79) Naphthalene	13.510	128	615408	9.408	ppbv		99
80) Naphthalene,2-methyl-	14.455	142	316788	8.497	ppbv		96
81) 1,2,4-Trichlorobenzene	13.439	180	263006	9.363	ppbv		98

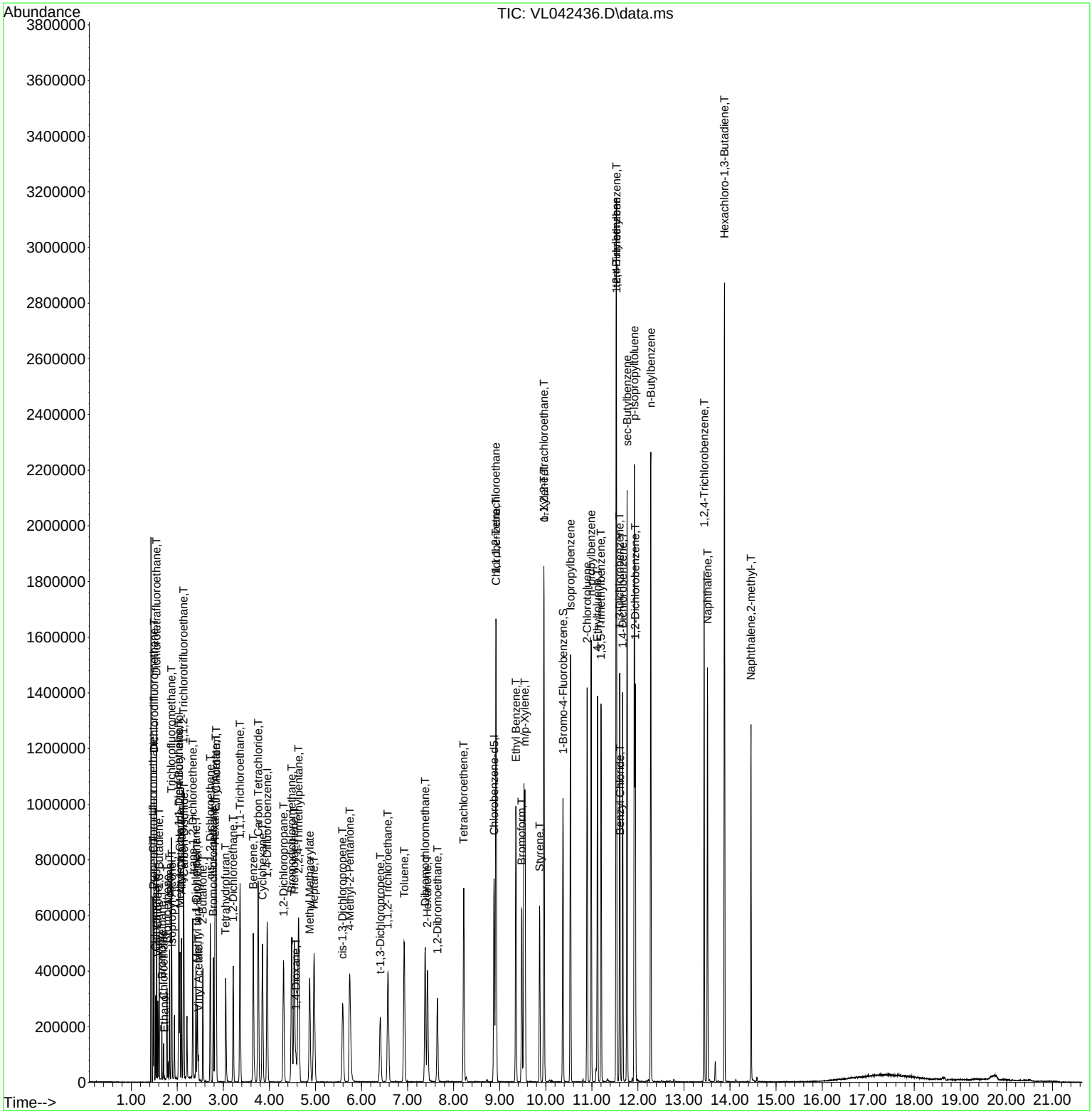
(#) = qualifier out of range (m) = manual integration (+) = signals summed

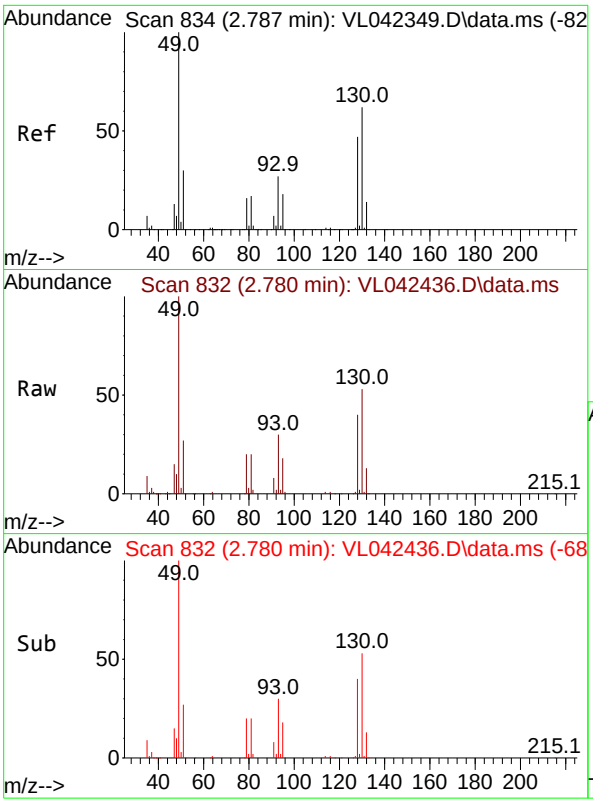
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042436.D
Acq On : 29 Apr 2025 08:39
Operator : SY/MD
Sample : VSTDCCC010
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Quant Time: Apr 30 01:15:51 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



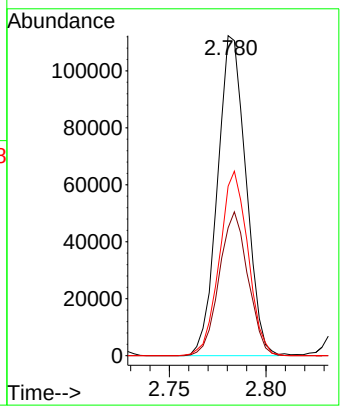


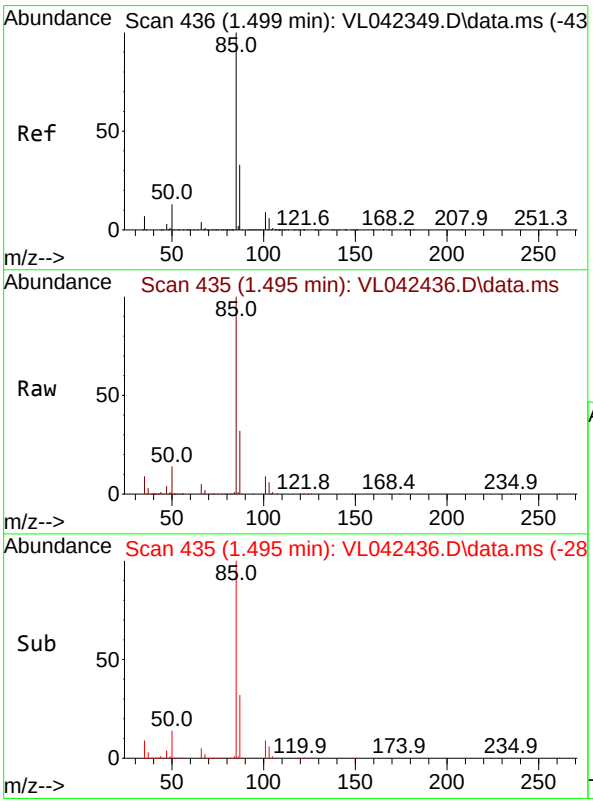
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.780 min Scan# 8
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 49 Resp: 114553

Ion	Ratio	Lower	Upper
49	100		
128	45.3	22.8	68.4
130	57.8	29.3	88.0

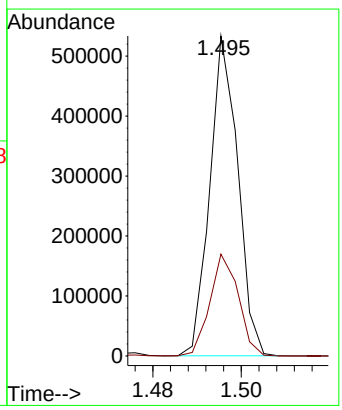


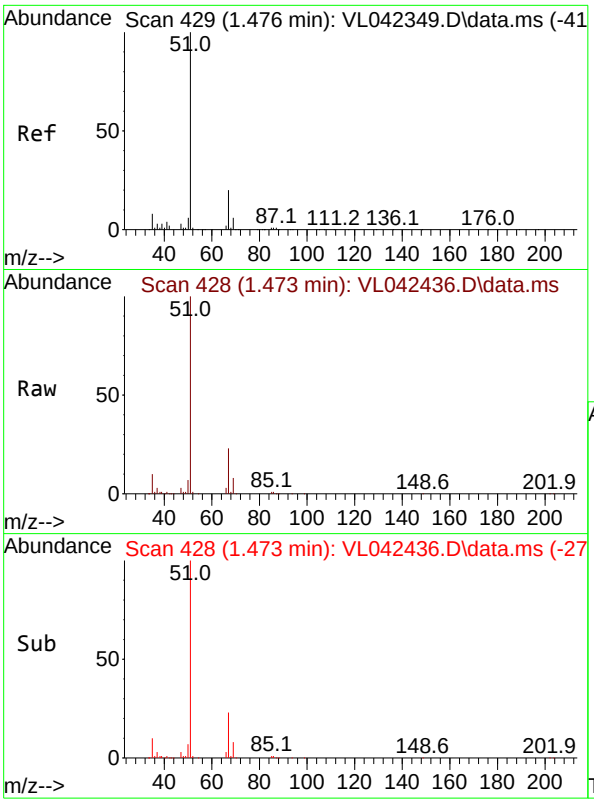


#2
Dichlorodifluoromethane
Concen: 11.603 ppbv
RT: 1.495 min Scan# 435
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 85 Resp: 234841

Ion	Ratio	Lower	Upper
85	100		
87	31.8	26.6	39.8



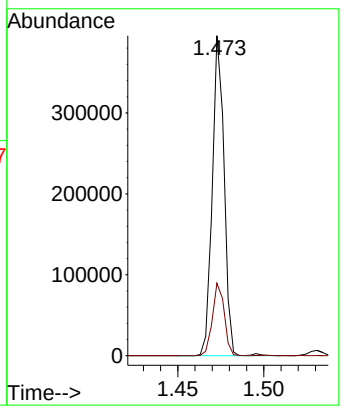


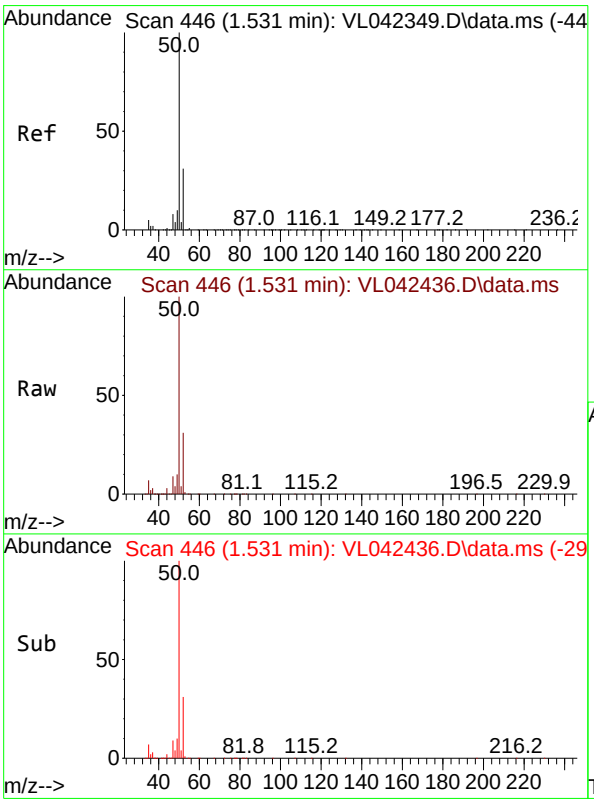
#3
Chlorodifluoromethane
Concen: 9.755 ppbv
RT: 1.473 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 51 Resp: 188007

Ion	Ratio	Lower	Upper
51	100		
67	22.8	16.2	24.4

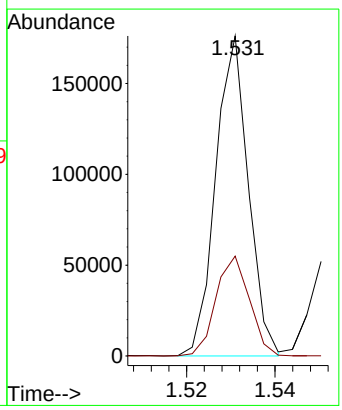


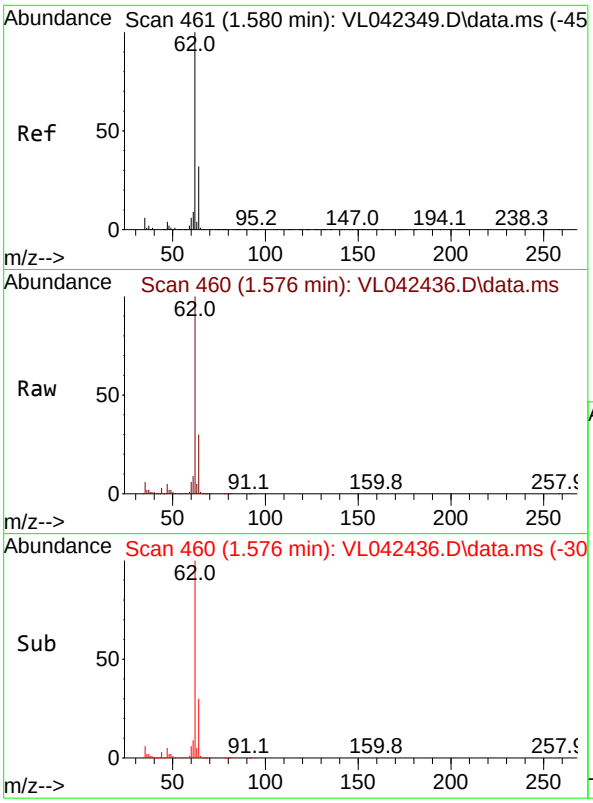


#4
Chloromethane
Concen: 11.274 ppbv
RT: 1.531 min Scan# 446
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 50 Resp: 90298

Ion	Ratio	Lower	Upper
50	100		
52	31.2	24.7	37.1



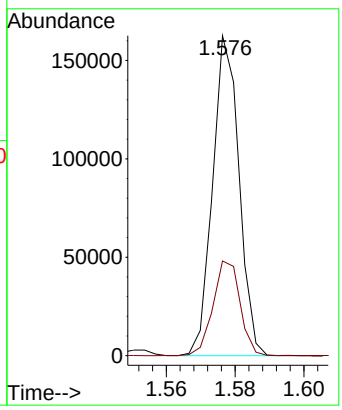


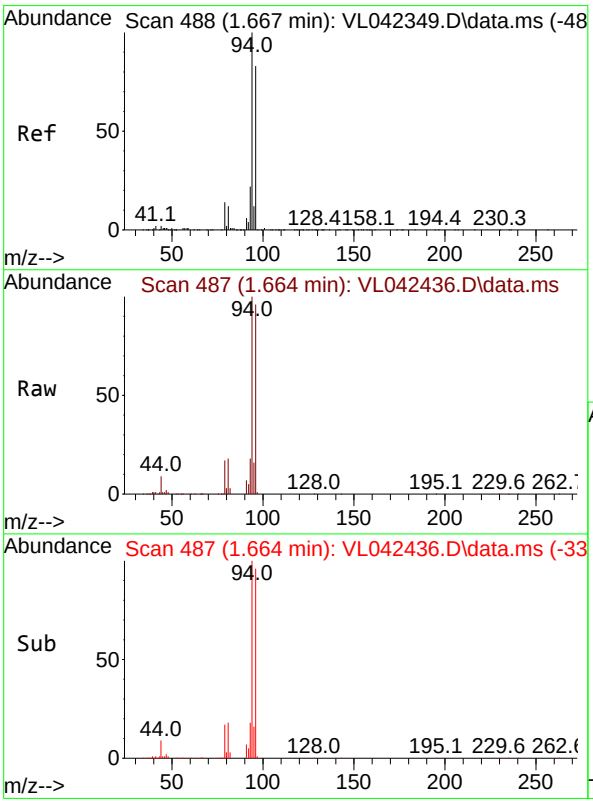
#5
Vinyl Chloride
Concen: 9.933 ppbv
RT: 1.576 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 86603

Ion	Ratio	Lower	Upper
62	100		
64	29.6	25.4	38.0

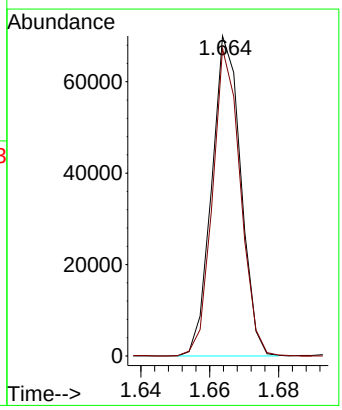


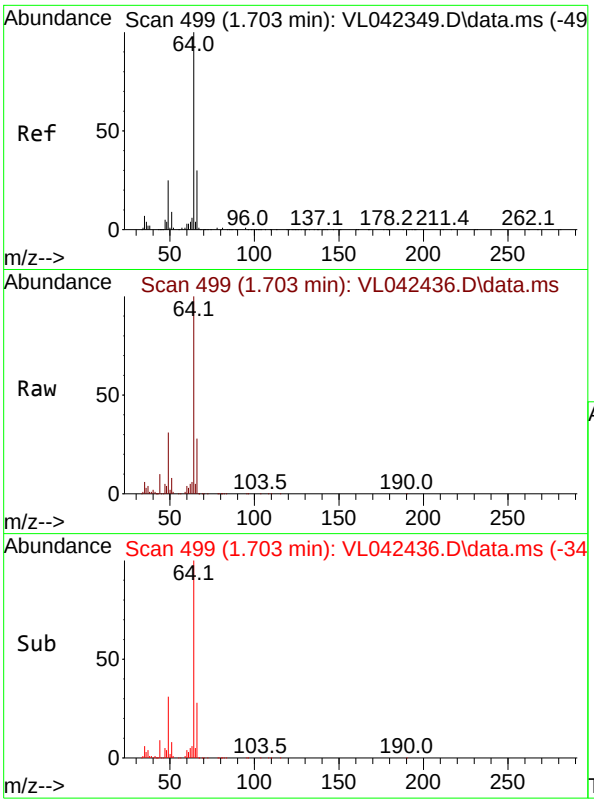


#6
Bromomethane
Concen: 10.952 ppbv
RT: 1.664 min Scan# 487
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 94 Resp: 41020

Ion	Ratio	Lower	Upper
94	100		
96	95.9	66.2	99.2



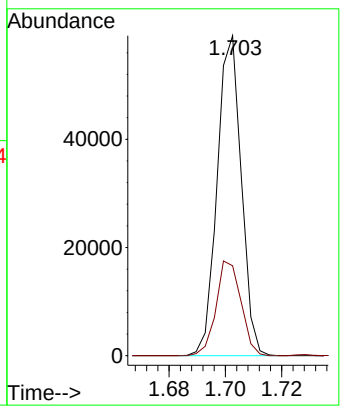


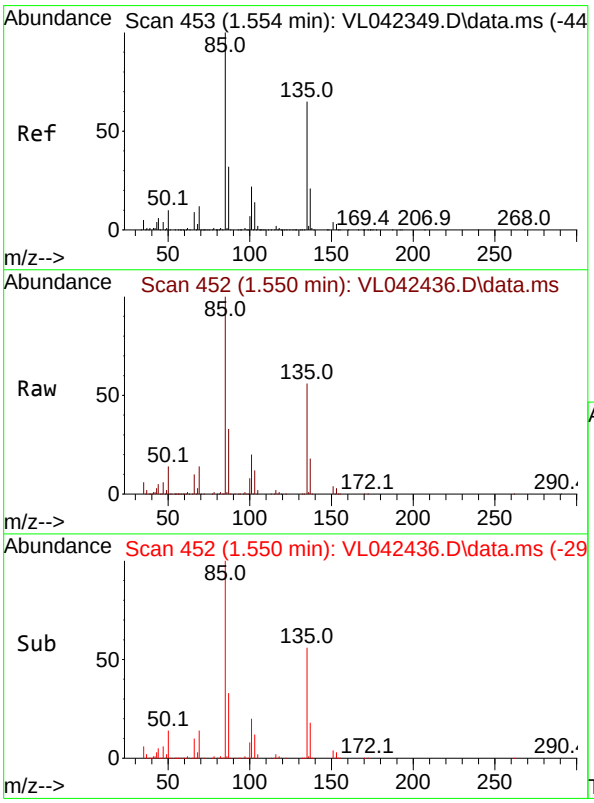
#7
Chloroethane
Concen: 11.153 ppbv
RT: 1.703 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 64 Resp: 35167

Ion	Ratio	Lower	Upper
64	100		
66	28.1	24.6	37.0

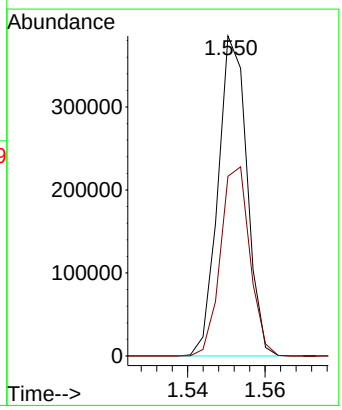


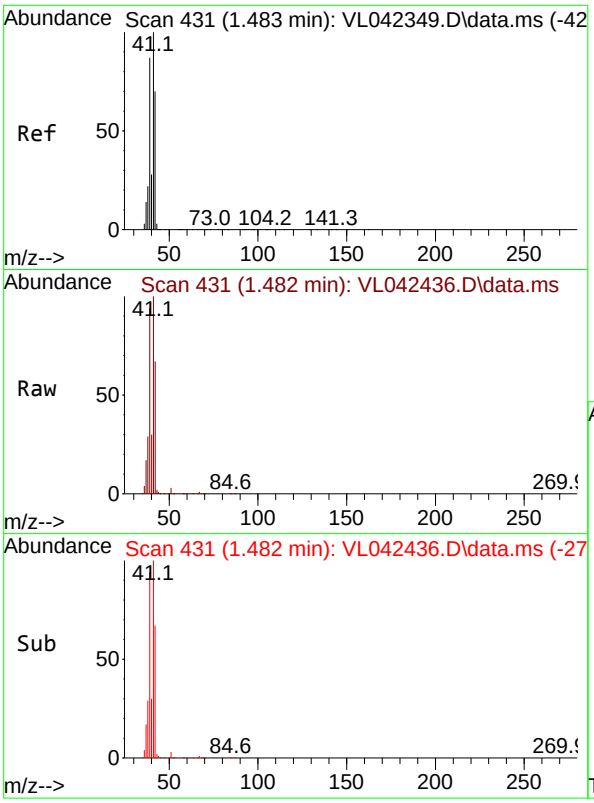


#8
Dichlorotetrafluoroethane
Concen: 11.508 ppbv
RT: 1.550 min Scan# 452
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 85 Resp: 199977

Ion	Ratio	Lower	Upper
85	100		
135	60.1	52.2	78.2



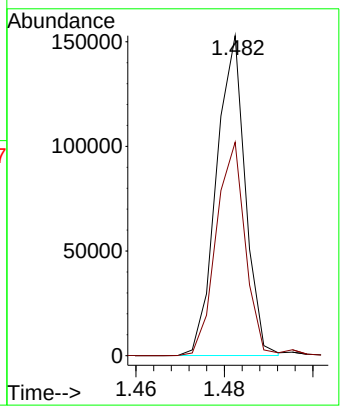


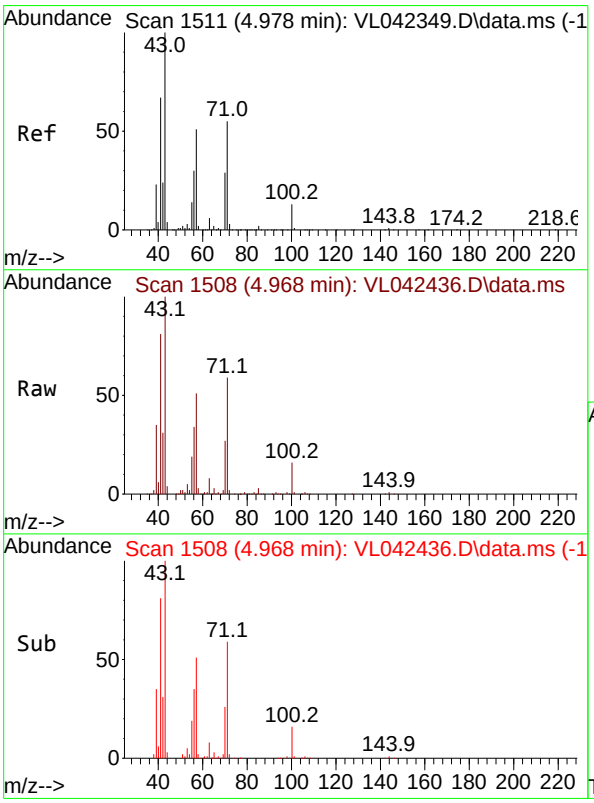
#9
Propene
Concen: 7.883 ppbv
RT: 1.482 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 69189

Ion	Ratio	Lower	Upper
41	100		
42	68.7	56.2	84.4

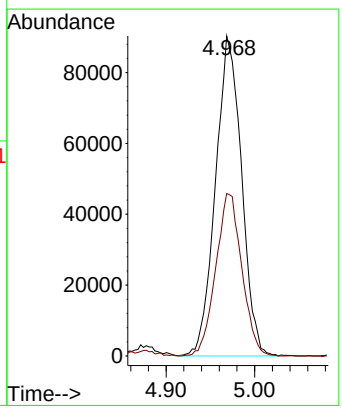


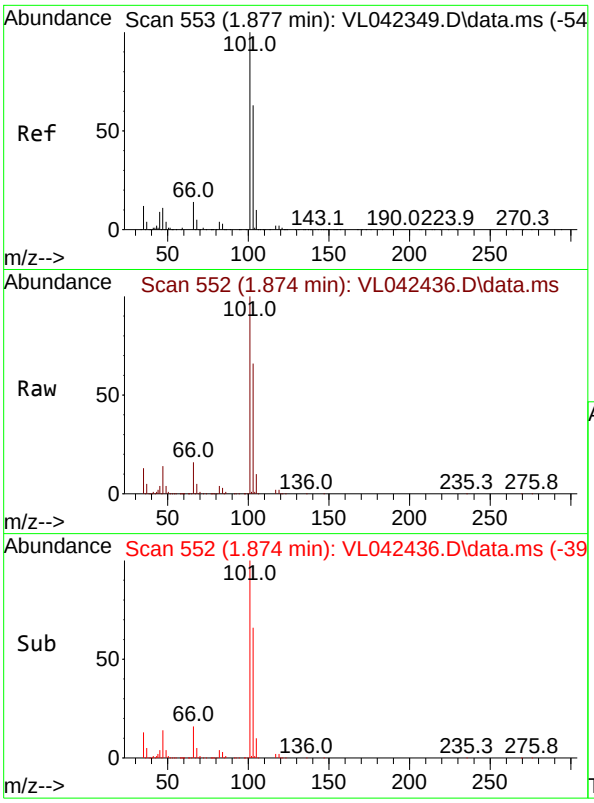


#10
Heptane
Concen: 7.492 ppbv
RT: 4.968 min Scan# 1508
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 184737

Ion	Ratio	Lower	Upper
43	100		
57	50.9	39.9	59.9



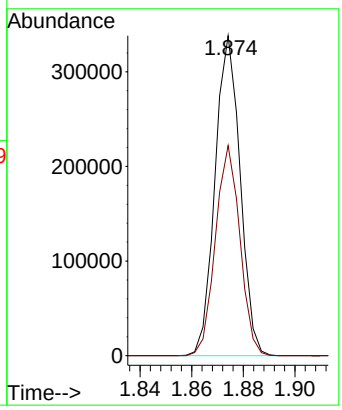


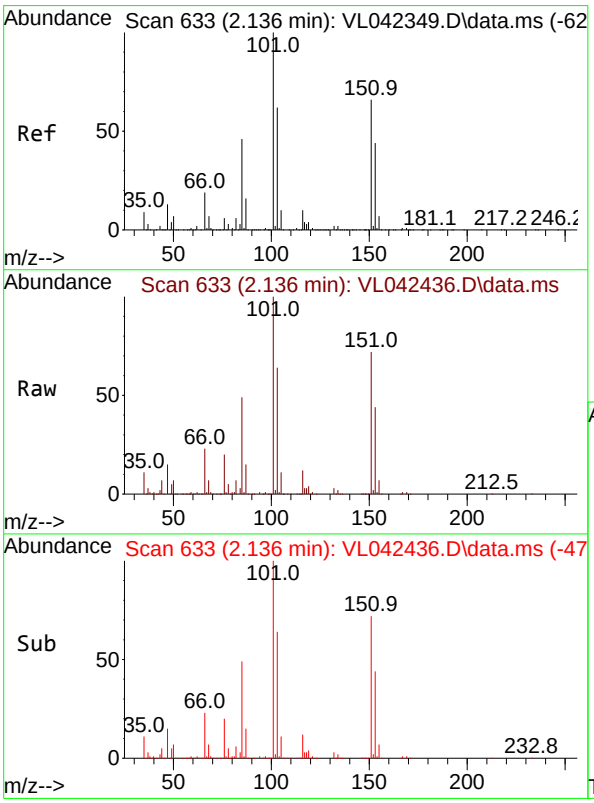
#11
Trichlorofluoromethane
Concen: 11.845 ppbv
RT: 1.874 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:101 Resp: 227979

Ion	Ratio	Lower	Upper
101	100		
103	65.6	50.1	75.1

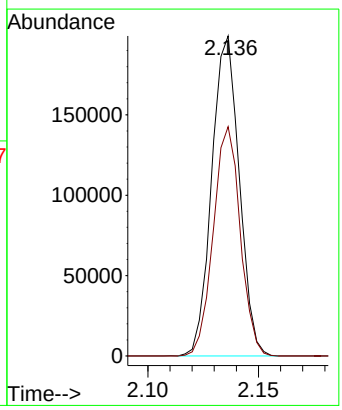


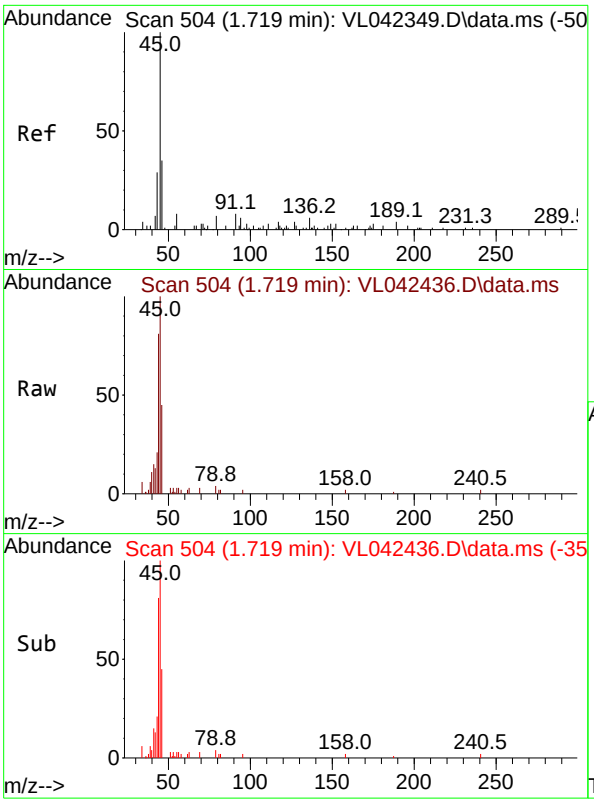


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.934 ppbv
RT: 2.136 min Scan# 633
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:101 Resp: 172070

Ion	Ratio	Lower	Upper
101	100		
151	70.1	57.0	85.6



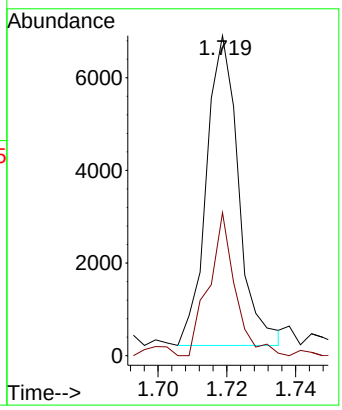


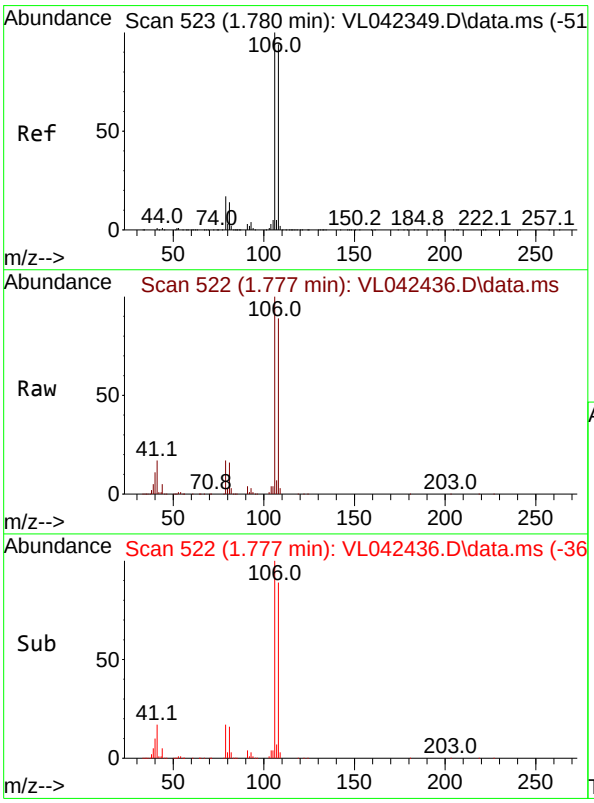
#13
Ethanol
Concen: 3.108 ppbv
RT: 1.719 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 4336

Ion	Ratio	Lower	Upper
45	100		
46	41.1	21.9	87.7

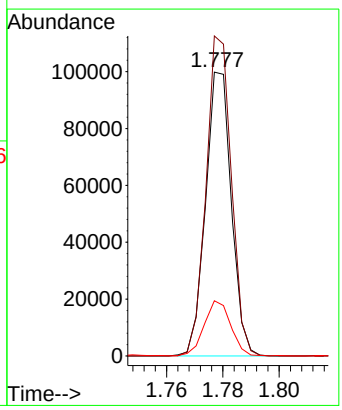


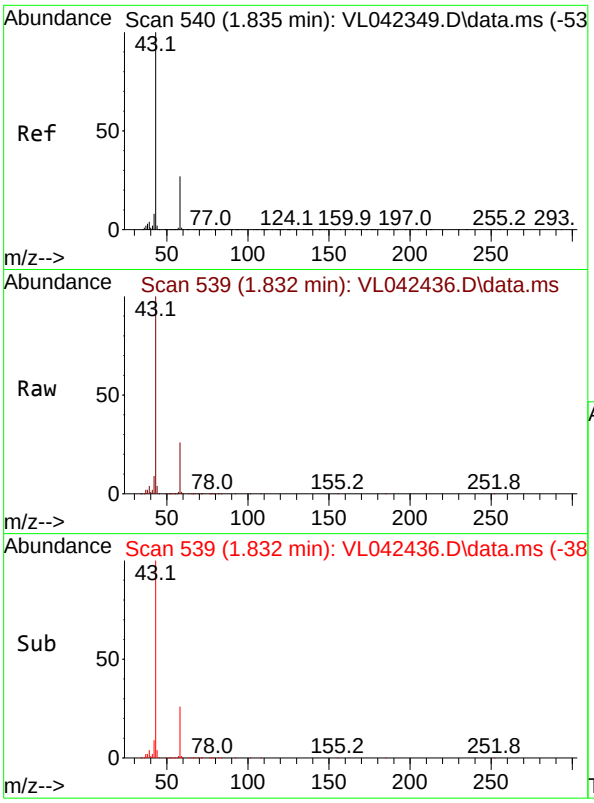


#14
Bromoethene
Concen: 10.721 ppbv
RT: 1.777 min Scan# 522
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:108 Resp: 63597

Ion	Ratio	Lower	Upper
108	100		
106	110.4	85.9	128.9
79	20.1	13.9	20.9



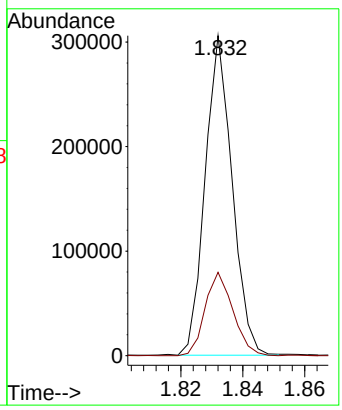


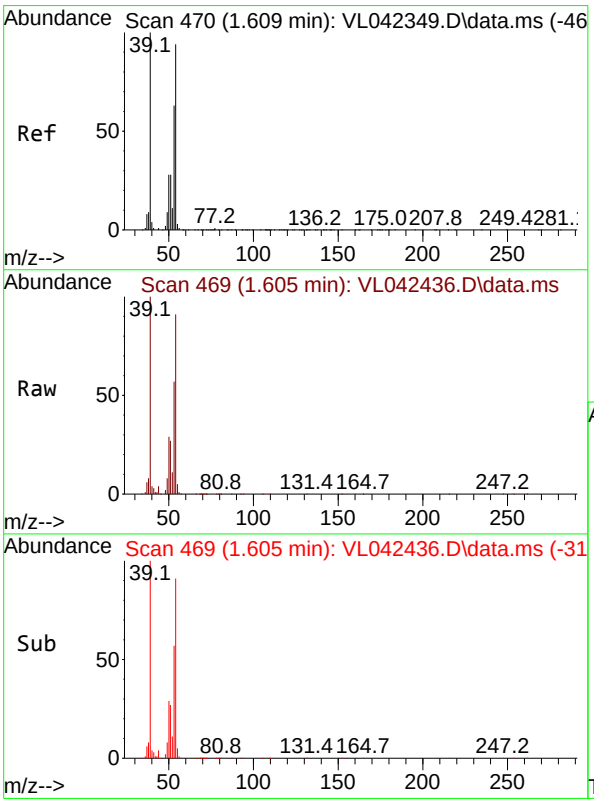
#15
Acetone
Concen: 9.859 ppbv
RT: 1.832 min Scan# 5
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 184887

Ion	Ratio	Lower	Upper
43	100		
58	27.0	22.4	33.6

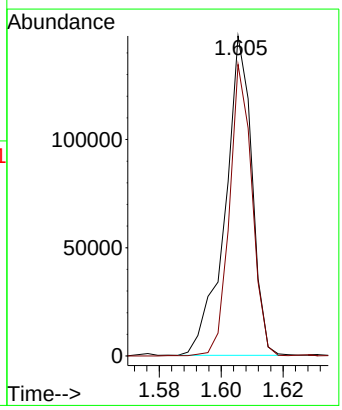


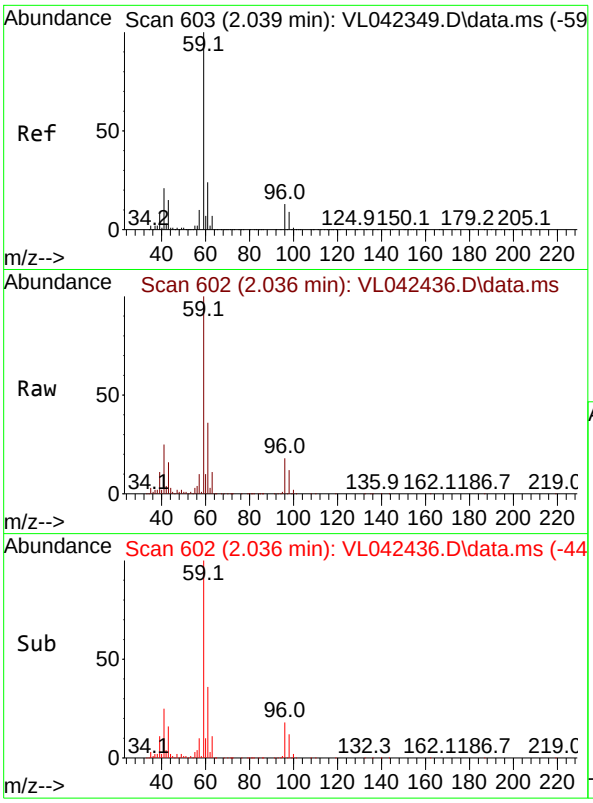


#16
1,3-Butadiene
Concen: 9.910 ppbv
RT: 1.605 min Scan# 469
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 39 Resp: 88889

Ion	Ratio	Lower	Upper
39	100		
54	76.7	64.9	97.3



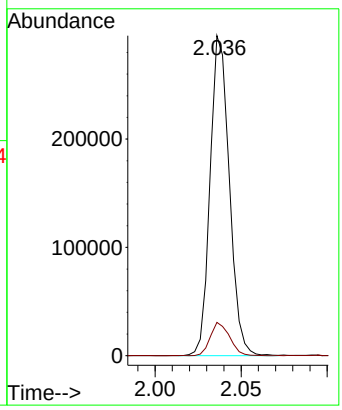


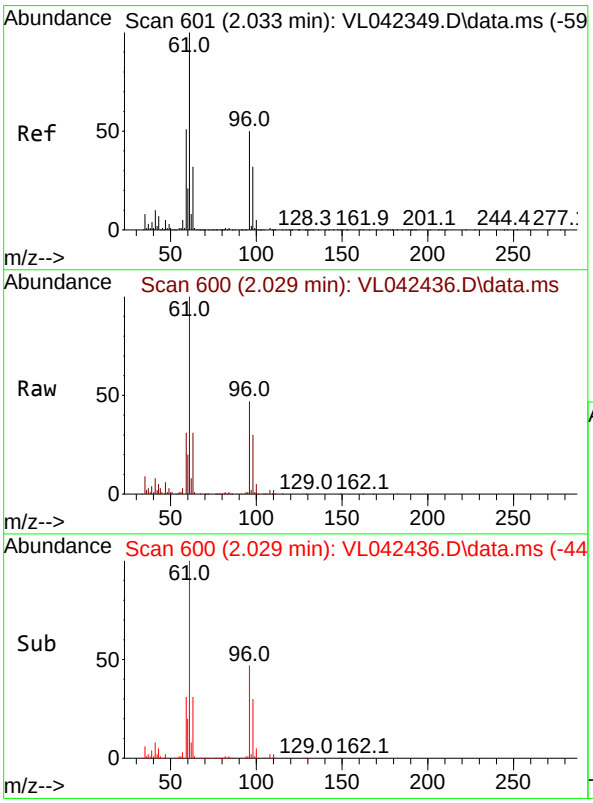
#17
tert-Butyl alcohol
Concen: 9.881 ppbv
RT: 2.036 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 59 Resp: 229627

Ion	Ratio	Lower	Upper
59	100		
57	10.4	8.7	13.1

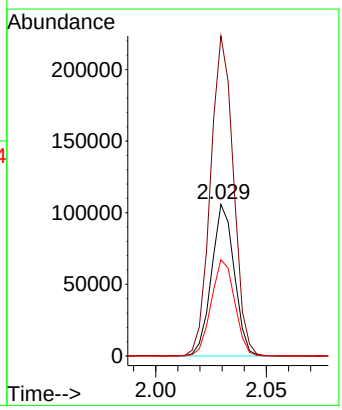


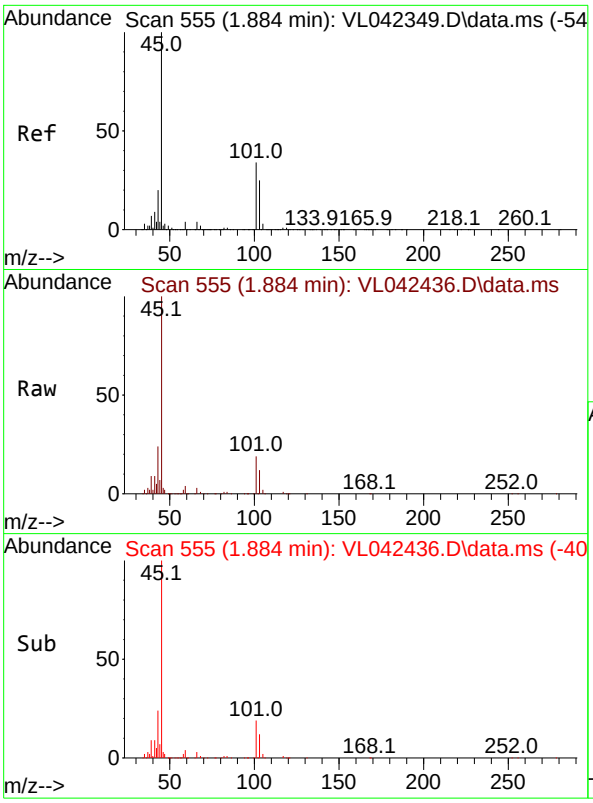


#18
1,1-Dichloroethene
Concen: 10.263 ppbv
RT: 2.029 min Scan# 600
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 96 Resp: 75451

Ion	Ratio	Lower	Upper
96	100		
61	211.2	160.2	240.2
98	63.6	51.0	76.4



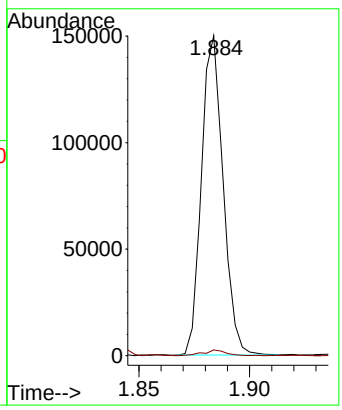


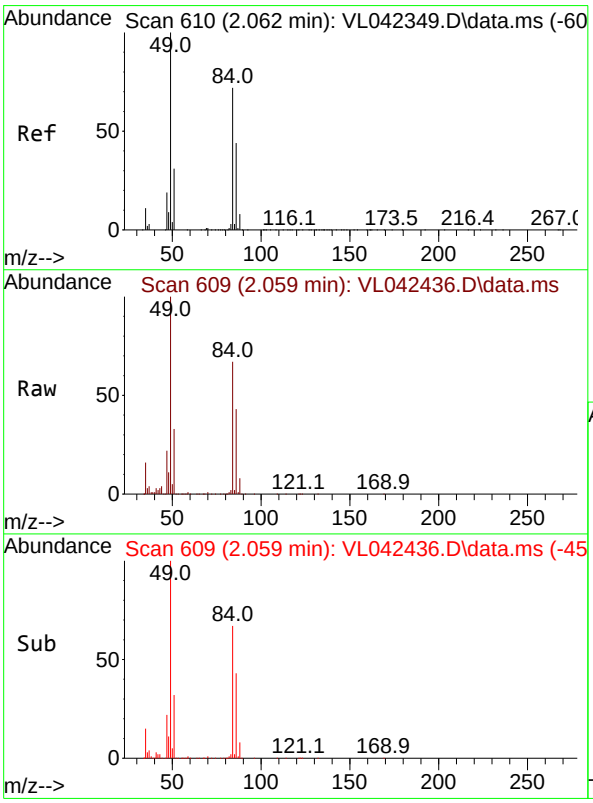
#19
Isopropyl Alcohol
Concen: 9.790 ppbv
RT: 1.884 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 45 Resp: 101987

Ion	Ratio	Lower	Upper
45	100		
58	49.0	34.5	51.7

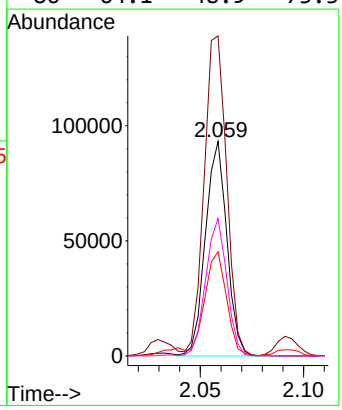


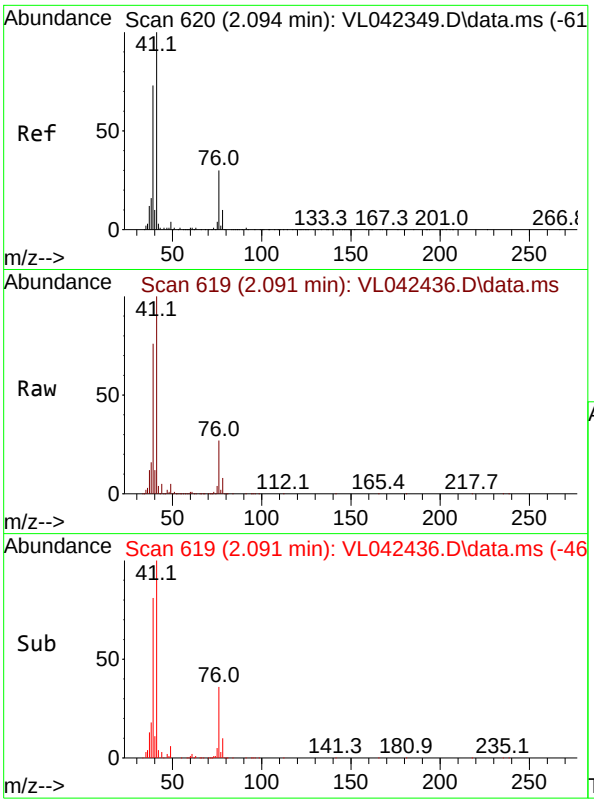


#20
Methylene Chloride
Concen: 9.161 ppbv
RT: 2.059 min Scan# 609
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 84 Resp: 67278

Ion	Ratio	Lower	Upper
84	100		
49	146.9	111.6	167.4
51	45.9	35.1	52.7
86	64.1	48.9	73.3



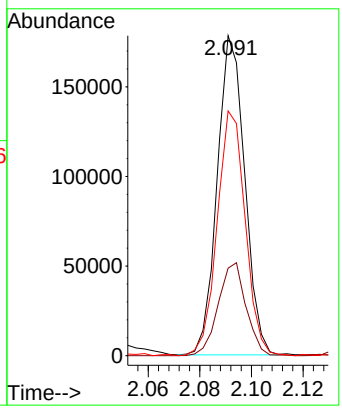


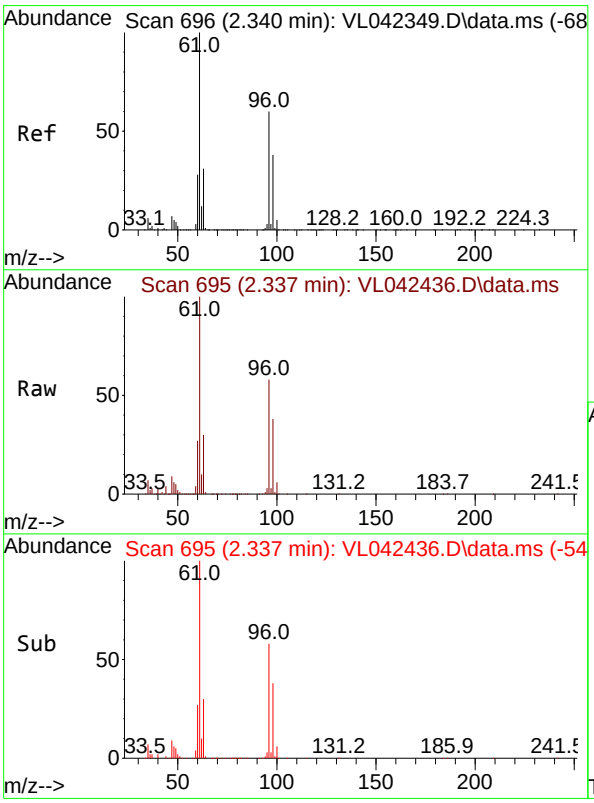
#21
Allyl Chloride
Concen: 10.184 ppbv
RT: 2.091 min Scan# 61
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 41 Resp: 131864

Ion	Ratio	Lower	Upper
41	100		
76	29.4	24.8	37.2
39	77.4	60.6	90.8

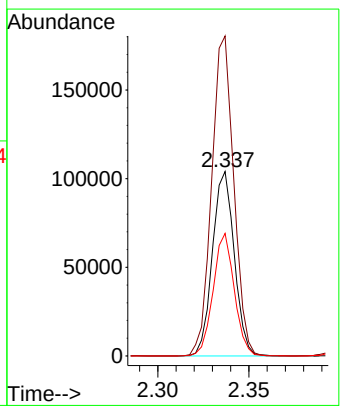


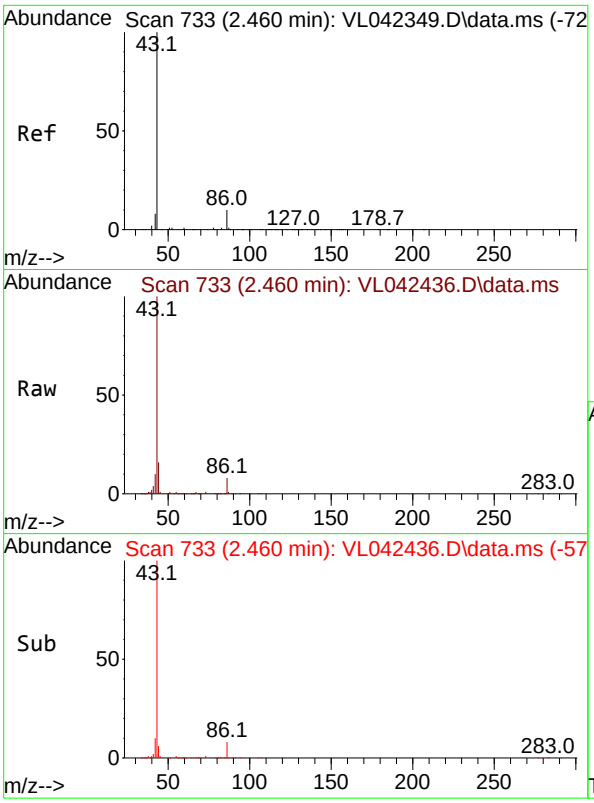


#22
trans-1,2-Dichloroethene
Concen: 10.343 ppbv
RT: 2.337 min Scan# 695
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 96 Resp: 86577

Ion	Ratio	Lower	Upper
96	100		
61	173.4	133.7	200.5
98	66.4	50.3	75.5



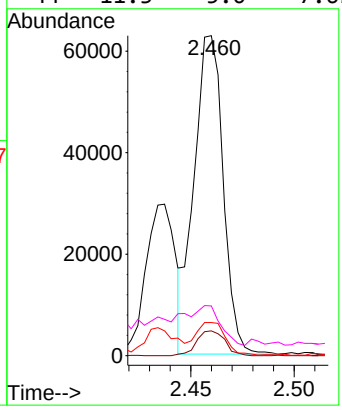


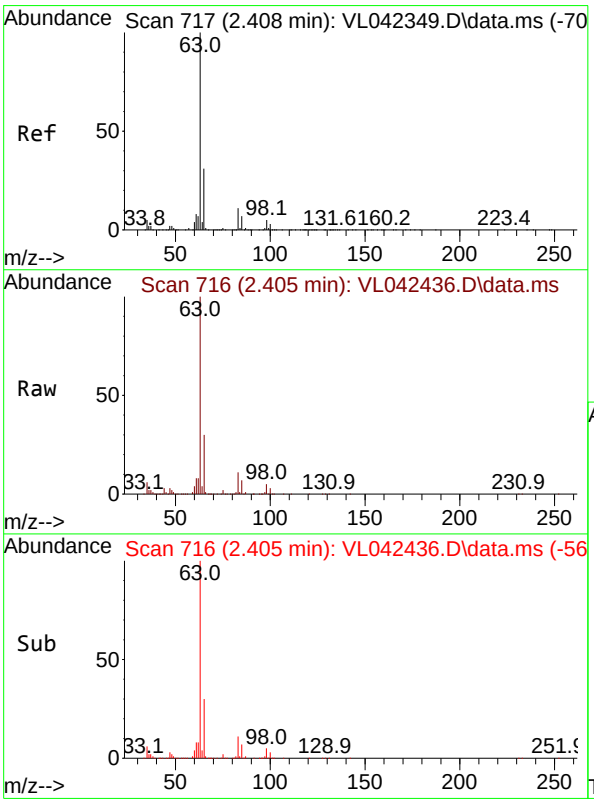
#23
Vinyl Acetate
Concen: 8.115 ppbv
RT: 2.460 min Scan# 7
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 61601

Ion	Ratio	Lower	Upper
43	100		
86	7.6	6.5	9.7
42	10.2	7.8	11.8
44	11.3	5.0	7.6#

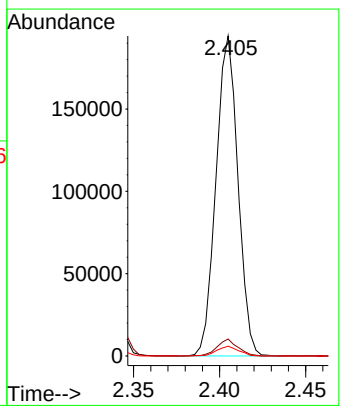


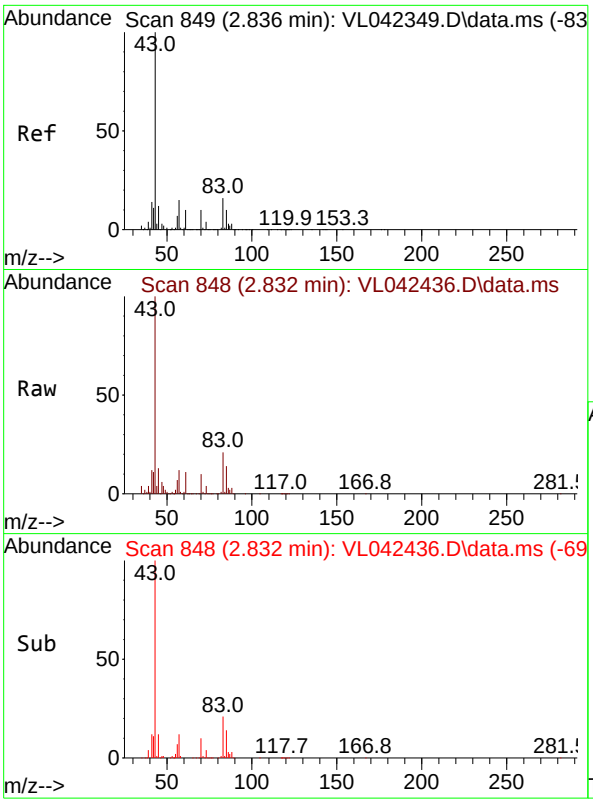


#24
1,1-Dichloroethane
Concen: 10.852 ppbv
RT: 2.405 min Scan# 716
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 63 Resp: 172555

Ion	Ratio	Lower	Upper
63	100		
98	5.3	2.3	6.8
100	3.0	1.6	4.8



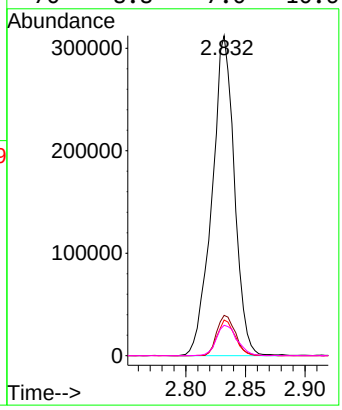


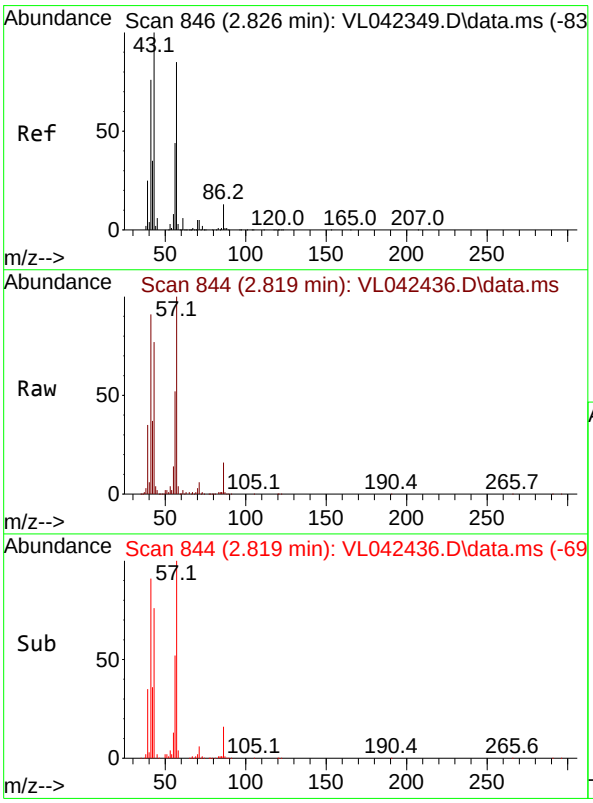
#25
Ethyl Acetate
Concen: 8.840 ppbv
RT: 2.832 min Scan# 84
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 408744

Ion	Ratio	Lower	Upper
43	100		
45	10.5	8.3	12.5
61	8.9	7.3	10.9
70	8.8	7.0	10.6

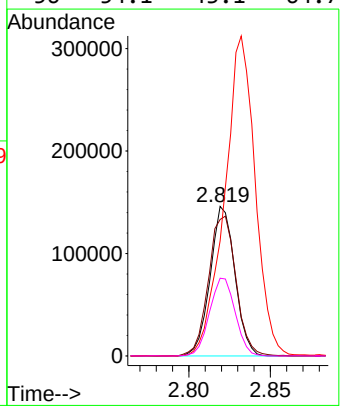


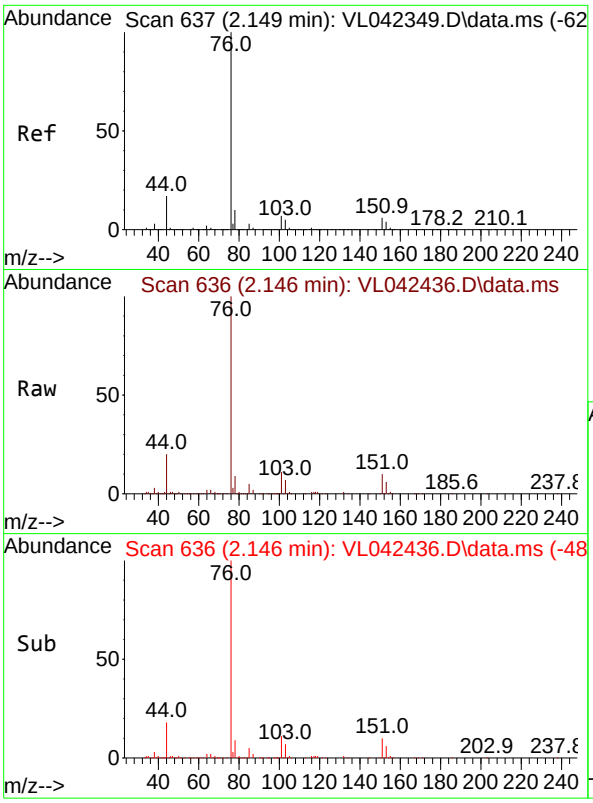


#26
Hexane
Concen: 8.220 ppbv
RT: 2.819 min Scan# 844
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 57 Resp: 153801

Ion	Ratio	Lower	Upper
57	100		
41	104.3	77.9	116.9
43	266.3	208.4	312.6
56	54.1	43.1	64.7



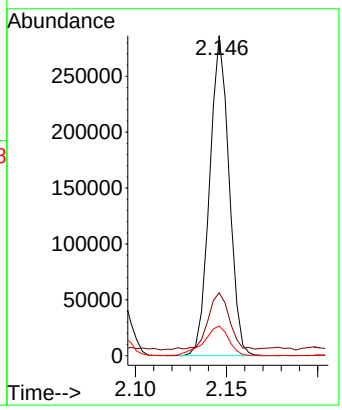


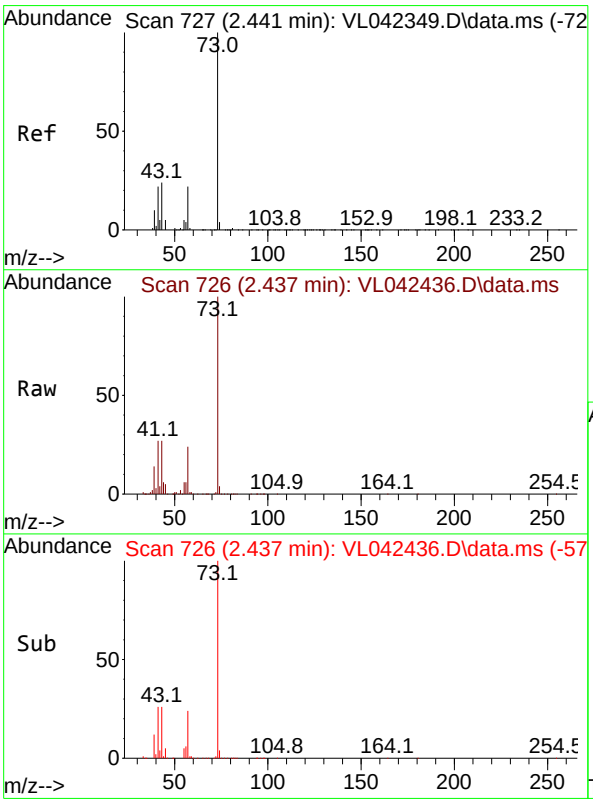
#27
Carbon Disulfide
Concen: 10.622 ppbv
RT: 2.146 min Scan# 6
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 76 Resp: 212793

Ion	Ratio	Lower	Upper
76	100		
44	18.9	15.5	23.3
78	11.9	9.3	13.9

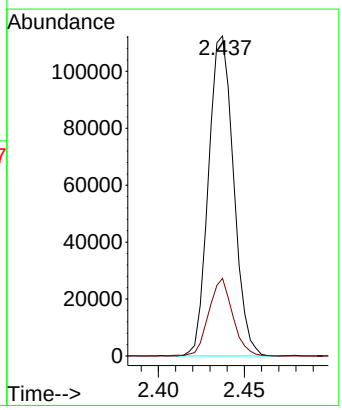


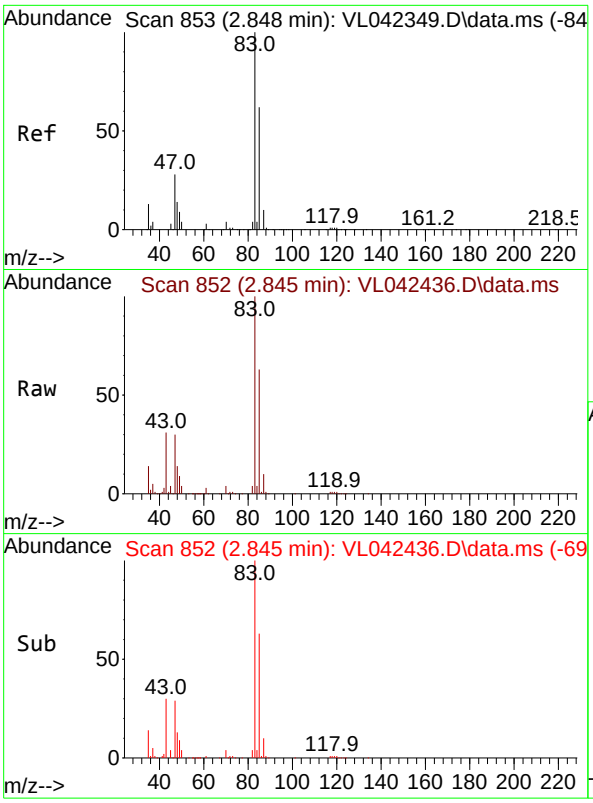


#28
Methyl tert-Butyl Ether
Concen: 9.308 ppbv
RT: 2.437 min Scan# 726
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 73 Resp: 114108

Ion	Ratio	Lower	Upper
73	100		
57	23.1	21.3	31.9



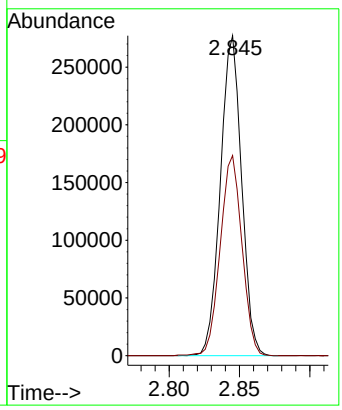


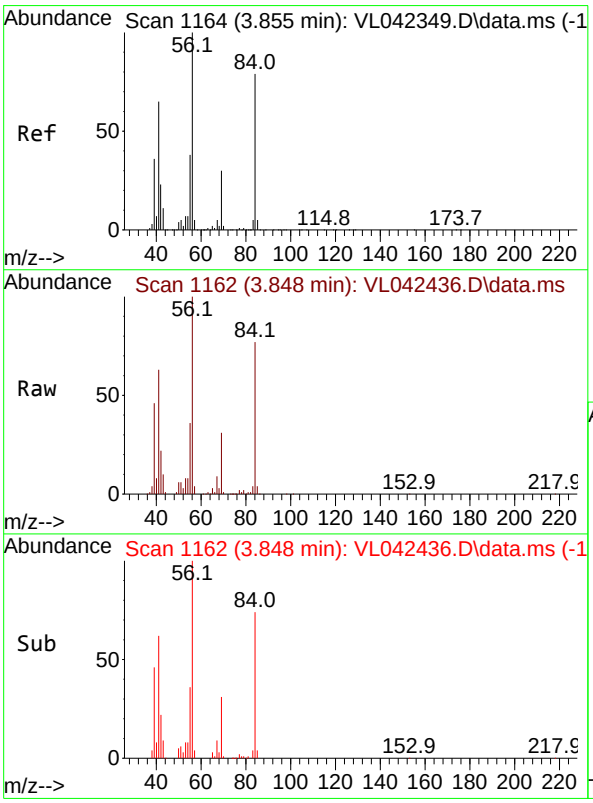
#29
Chloroform
Concen: 11.002 ppbv
RT: 2.845 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 290965

Ion	Ratio	Lower	Upper
83	100		
85	62.6	50.0	75.0

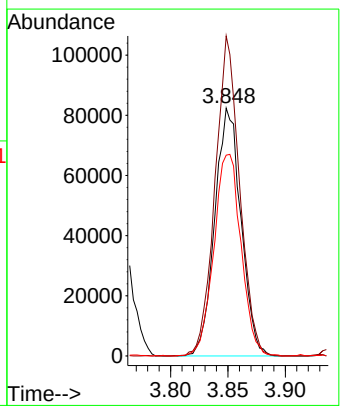


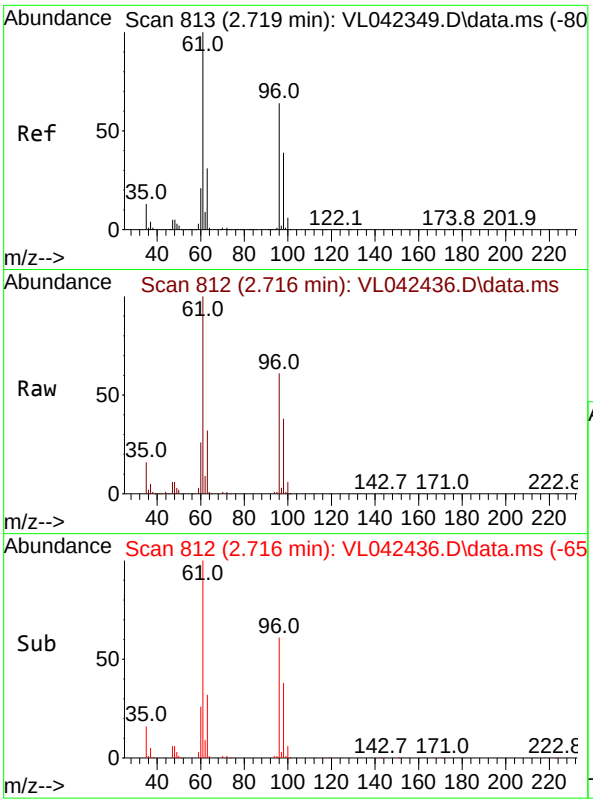


#30
Cyclohexane
Concen: 8.635 ppbv
RT: 3.848 min Scan# 1162
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 84 Resp: 130608

Ion	Ratio	Lower	Upper
84	100		
56	121.2	101.0	151.4
41	84.8	67.4	101.0



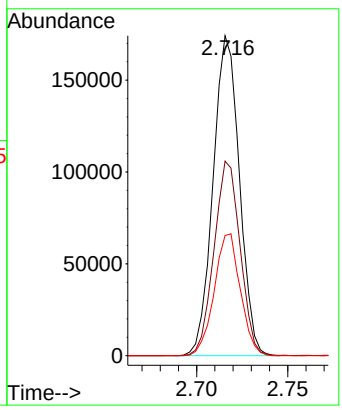


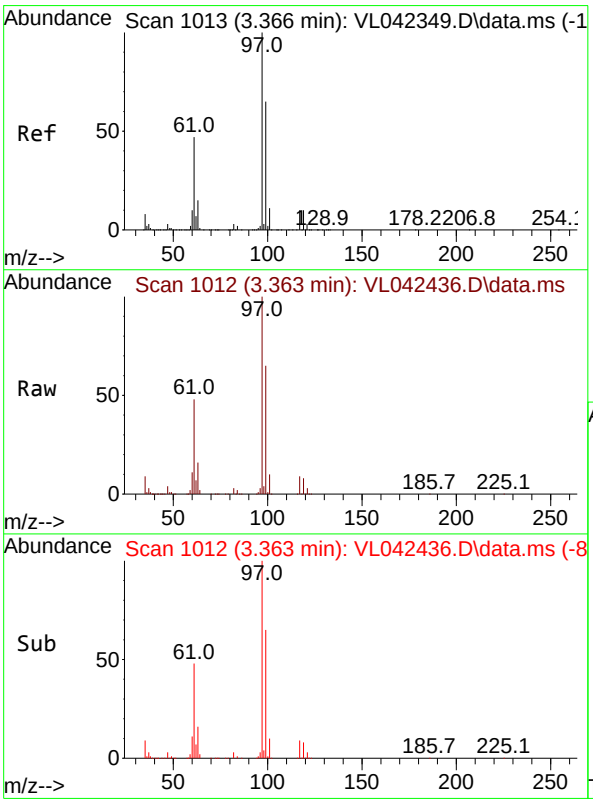
#31
cis-1,2-Dichloroethene
Concen: 9.818 ppbv
RT: 2.716 min Scan# 8
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 61 Resp: 174659

Ion	Ratio	Lower	Upper
61	100		
96	60.8	50.8	76.2
98	37.6	30.9	46.3

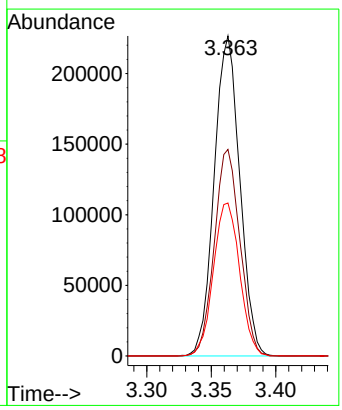


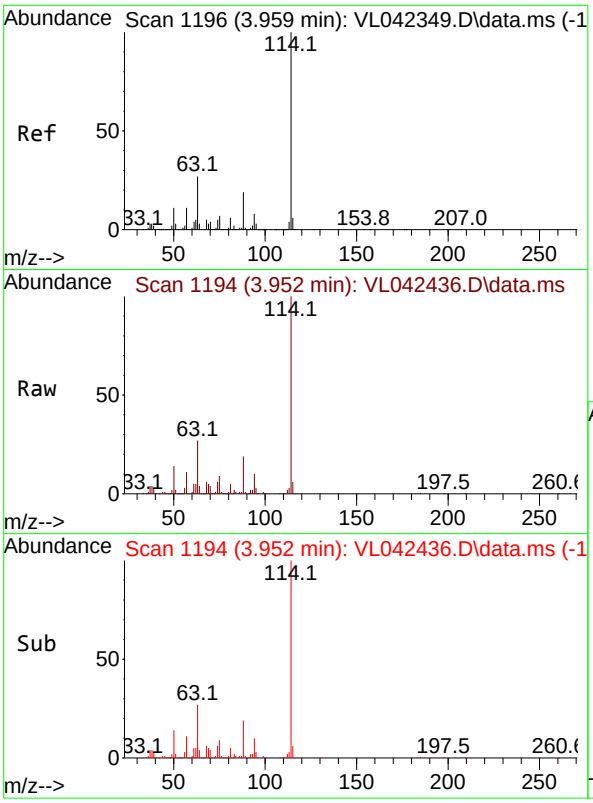


#32
1,1,1-Trichloroethane
Concen: 10.493 ppbv
RT: 3.363 min Scan# 1012
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 97 Resp: 312430

Ion	Ratio	Lower	Upper
97	100		
99	64.5	51.0	76.4
61	49.1	38.8	58.2



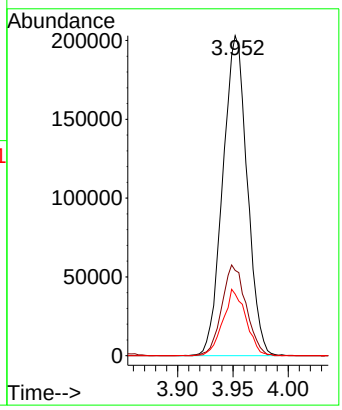


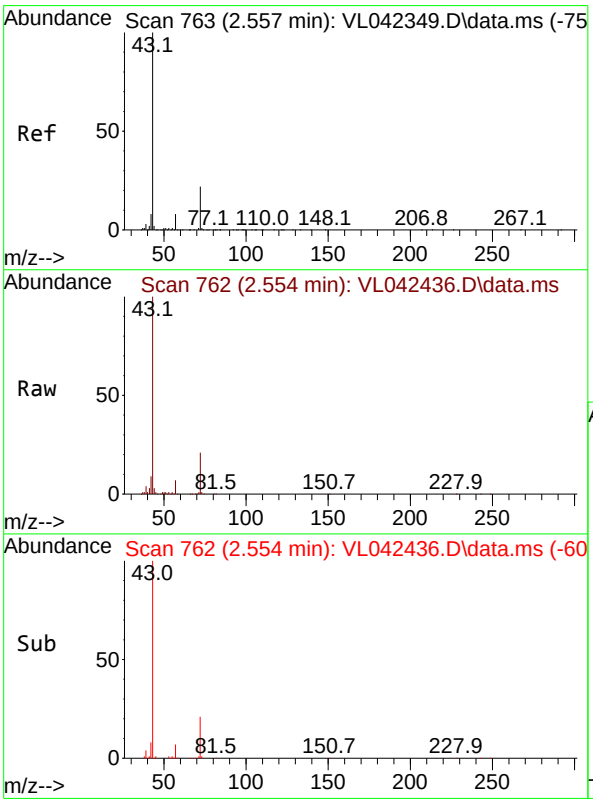
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.952 min Scan# 11
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:114 Resp: 311268

Ion	Ratio	Lower	Upper
114	100		
63	28.3	21.8	32.6
88	19.5	15.5	23.3

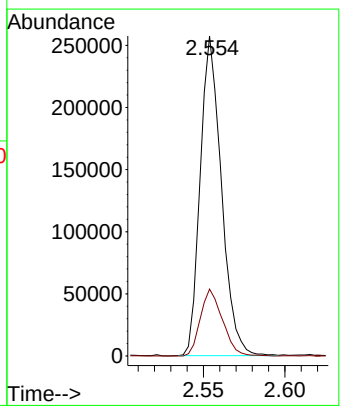


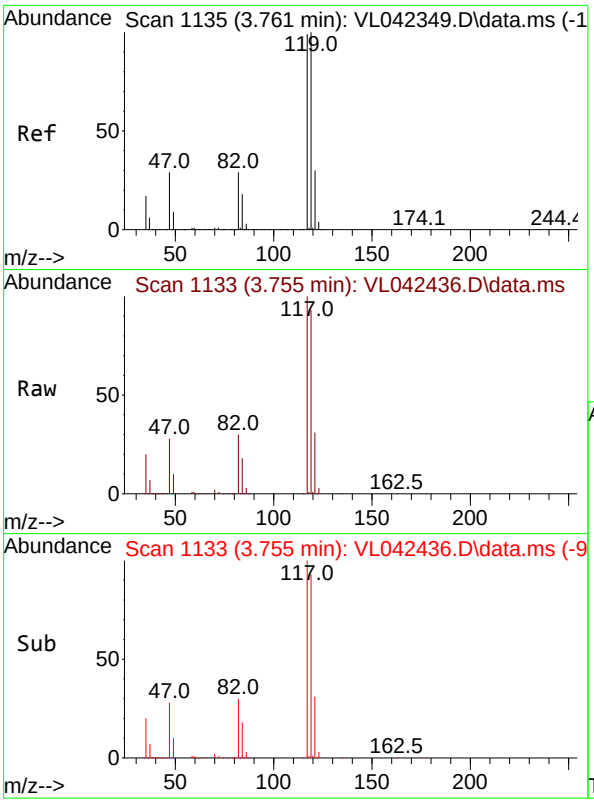


#34
2-Butanone
Concen: 9.426 ppbv
RT: 2.554 min Scan# 762
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 232034

Ion	Ratio	Lower	Upper
43	100		
72	21.8	18.2	27.2



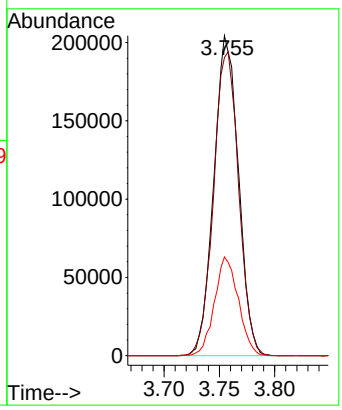


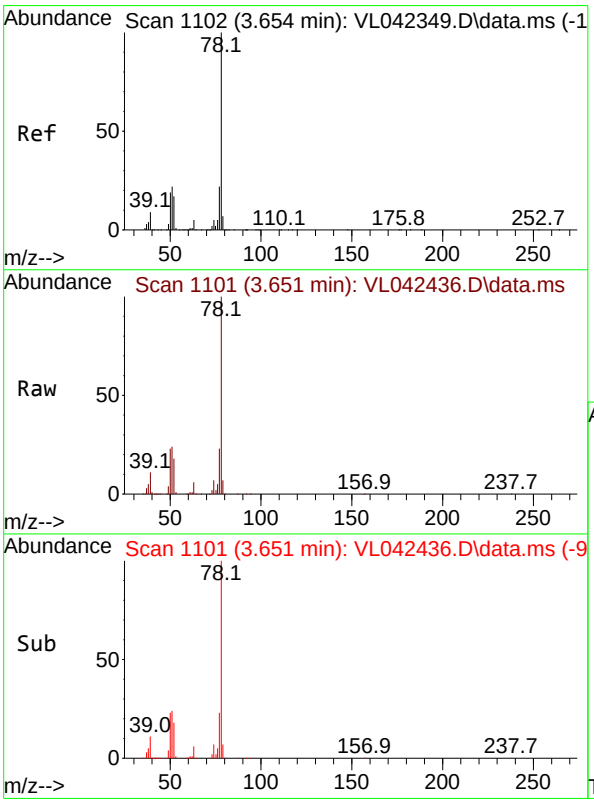
#35
Carbon Tetrachloride
Concen: 11.242 ppbv
RT: 3.755 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 316689

Ion	Ratio	Lower	Upper
117	100		
119	93.1	80.5	120.7
121	30.9	24.2	36.2

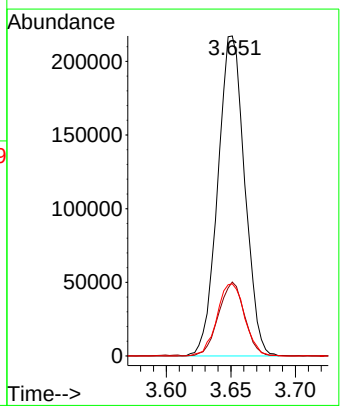


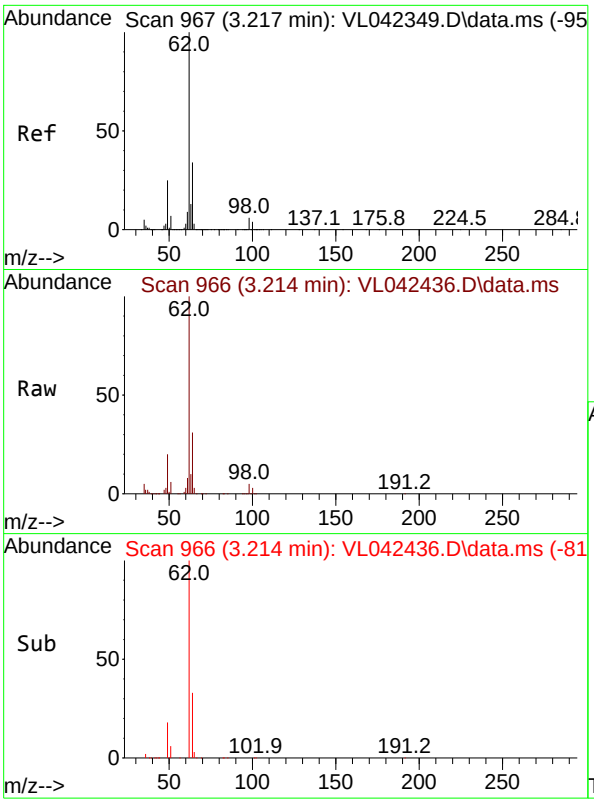


#36
Benzene
Concen: 9.367 ppbv
RT: 3.651 min Scan# 1101
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 78 Resp: 314493

Ion	Ratio	Lower	Upper
78	100		
77	23.1	17.4	26.0
50	22.6	15.5	23.3



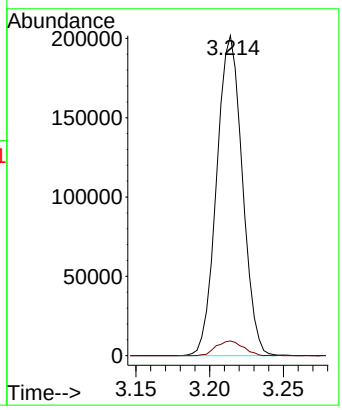


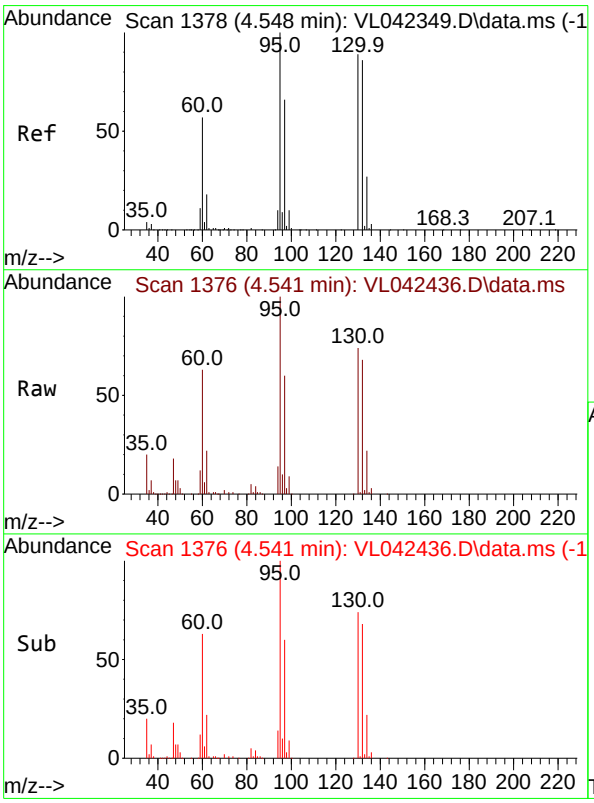
#37
1,2-Dichloroethane
Concen: 12.134 ppbv
RT: 3.214 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 62 Resp: 244516

Ion	Ratio	Lower	Upper
62	100		
98	4.9	5.1	7.7#

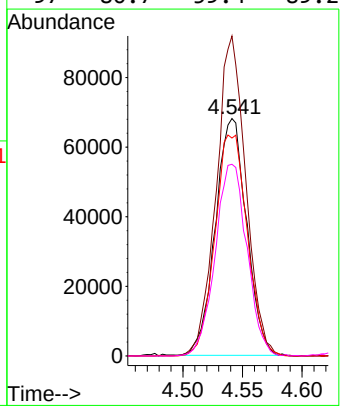


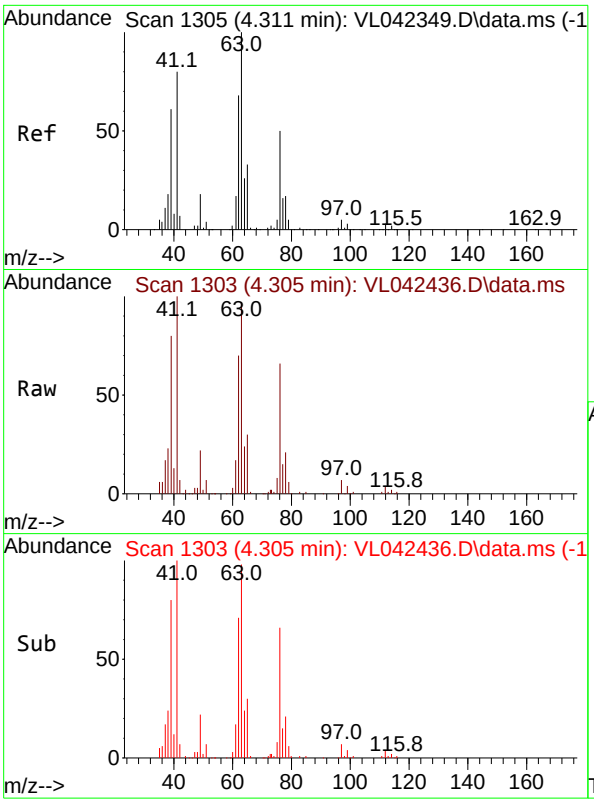


#38
Trichloroethene
Concen: 8.450 ppbv
RT: 4.541 min Scan# 1376
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:130 Resp: 123997

Ion	Ratio	Lower	Upper
130	100		
95	134.8	89.8	134.6#
132	92.0	77.7	116.5
97	80.7	59.4	89.2



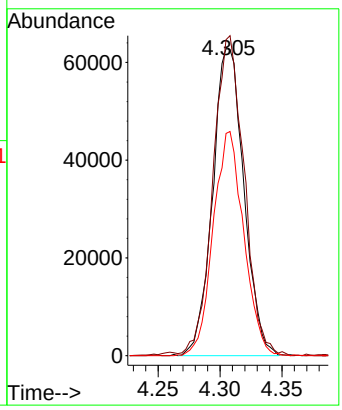


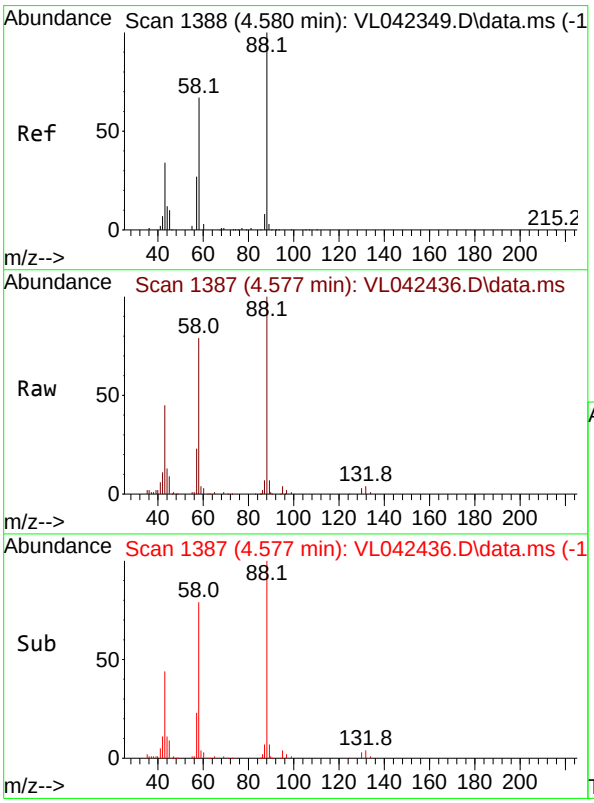
#39
1,2-Dichloropropane
Concen: 8.817 ppbv
RT: 4.305 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 63 Resp: 110315

Ion	Ratio	Lower	Upper
63	100		
41	102.2	64.2	96.2#
62	72.1	54.3	81.5

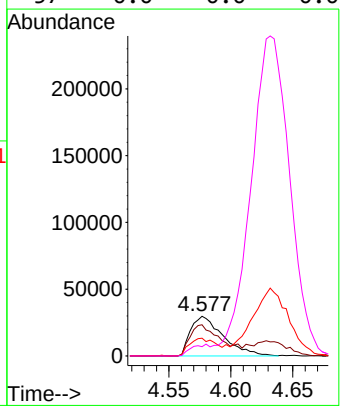


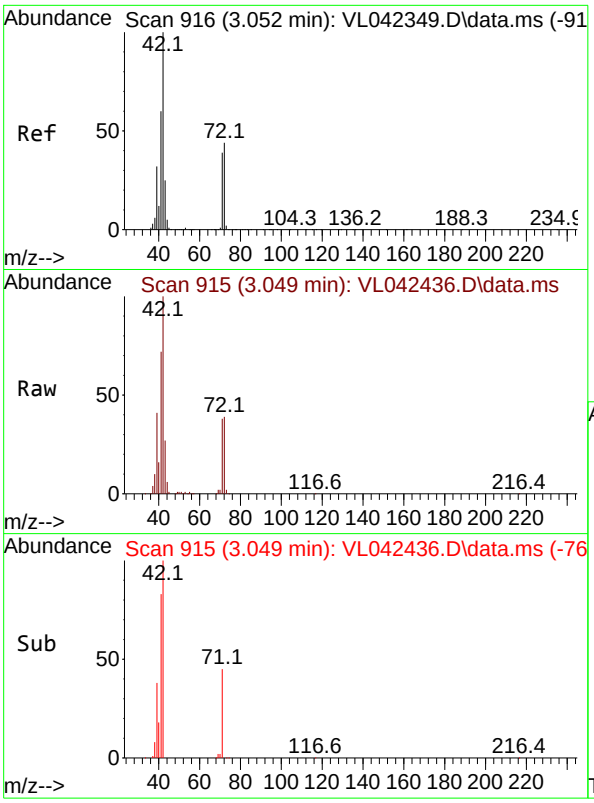


#40
1,4-Dioxane
Concen: 7.907 ppbv
RT: 4.577 min Scan# 1387
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 88 Resp: 54364

Ion	Ratio	Lower	Upper
88	100		
58	81.3	61.4	92.0
43	40.1	23.2	34.8#
57	0.0	0.0	0.0



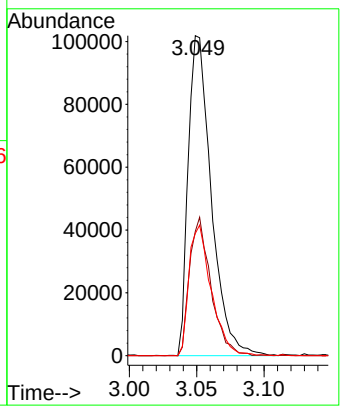


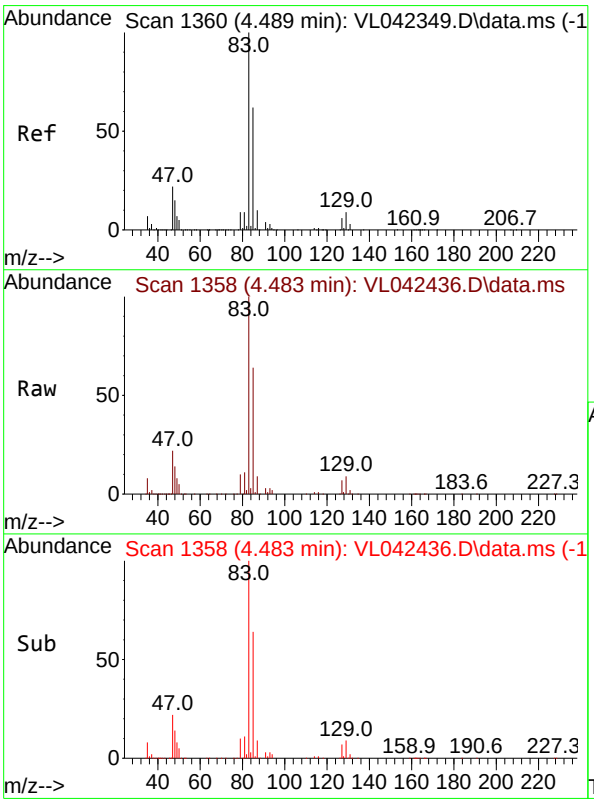
#41
Tetrahydrofuran
Concen: 8.479 ppbv
RT: 3.049 min Scan# 9
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 42 Resp: 121700

Ion	Ratio	Lower	Upper
42	100		
72	40.2	32.3	48.5
71	39.5	31.4	47.2

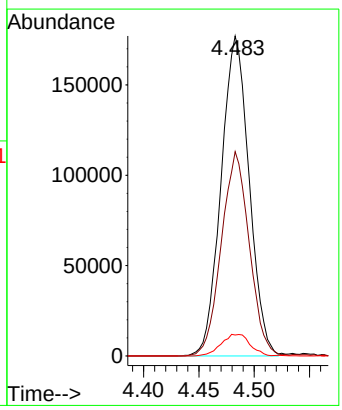


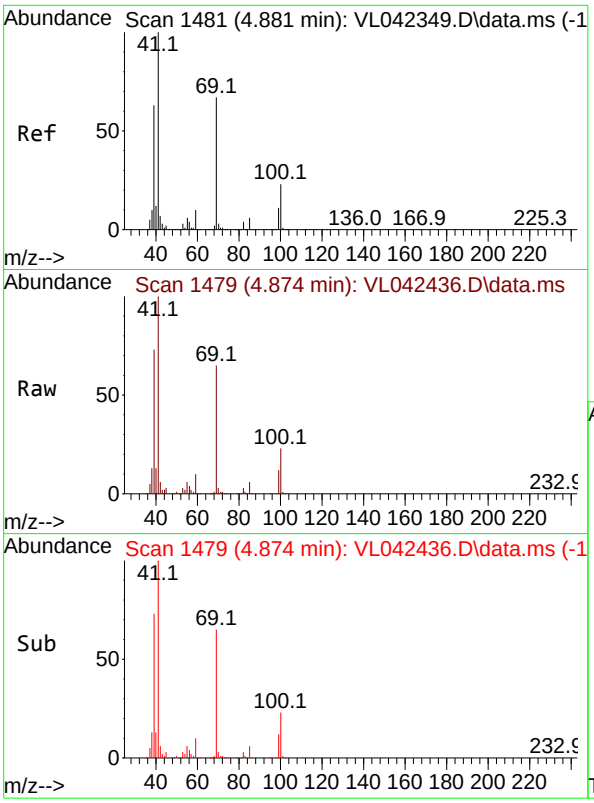


#42
Bromodichloromethane
Concen: 11.127 ppbv
RT: 4.483 min Scan# 1358
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 83 Resp: 312029

Ion	Ratio	Lower	Upper
83	100		
85	63.8	49.7	74.5
127	6.6	5.1	7.7



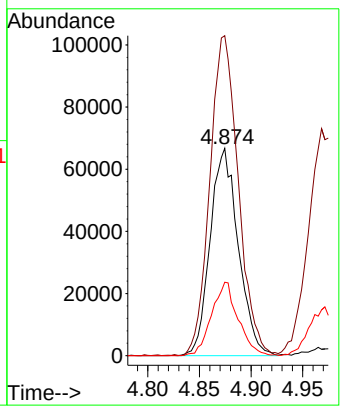


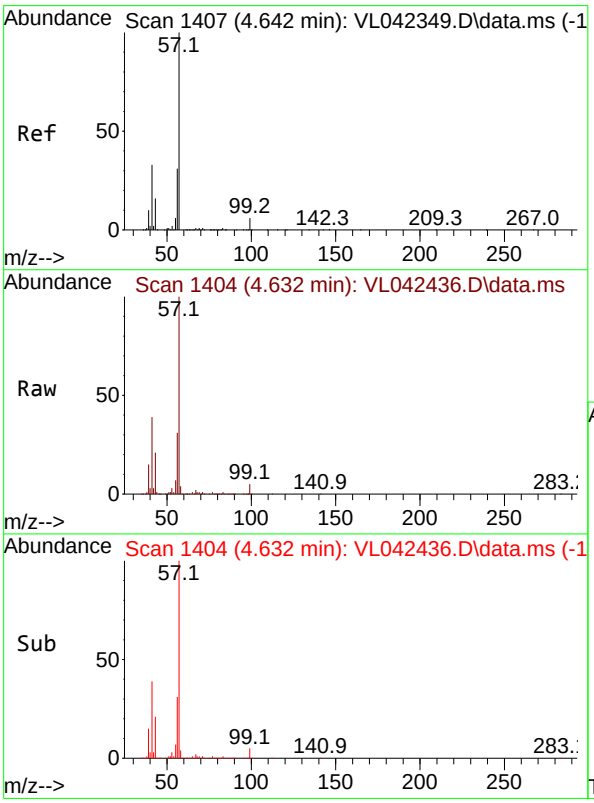
#43
Methyl Methacrylate
Concen: 8.367 ppbv
RT: 4.874 min Scan# 14
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 69 Resp: 126594

Ion	Ratio	Lower	Upper
69	100		
41	156.3	118.6	177.8
100	33.3	28.2	42.2

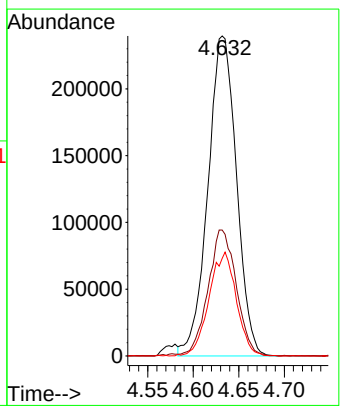


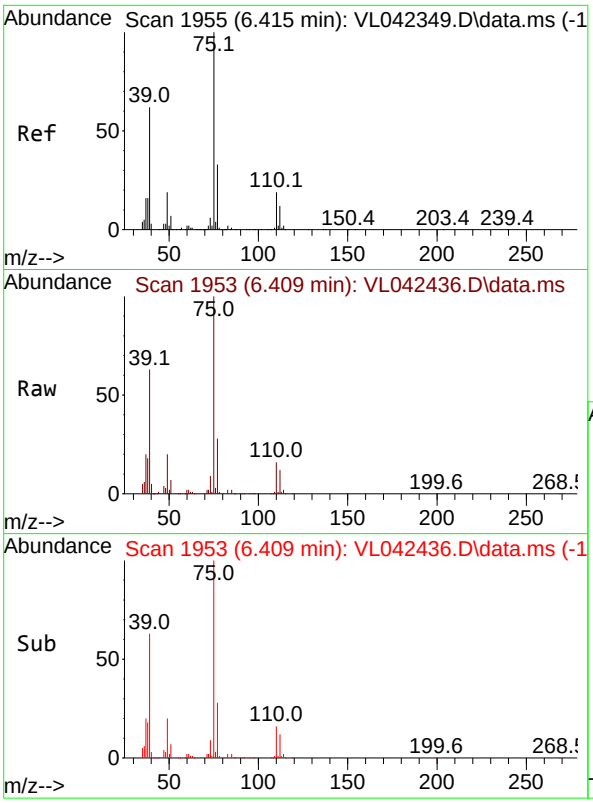


#44
2,2,4-Trimethylpentane
Concen: 9.010 ppbv
RT: 4.632 min Scan# 1404
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 57 Resp: 522427

Ion	Ratio	Lower	Upper
57	100		
41	39.2	27.2	40.8
56	31.1	25.7	38.5



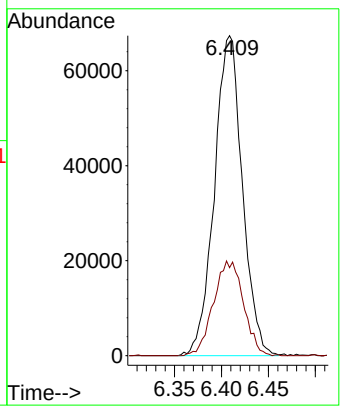


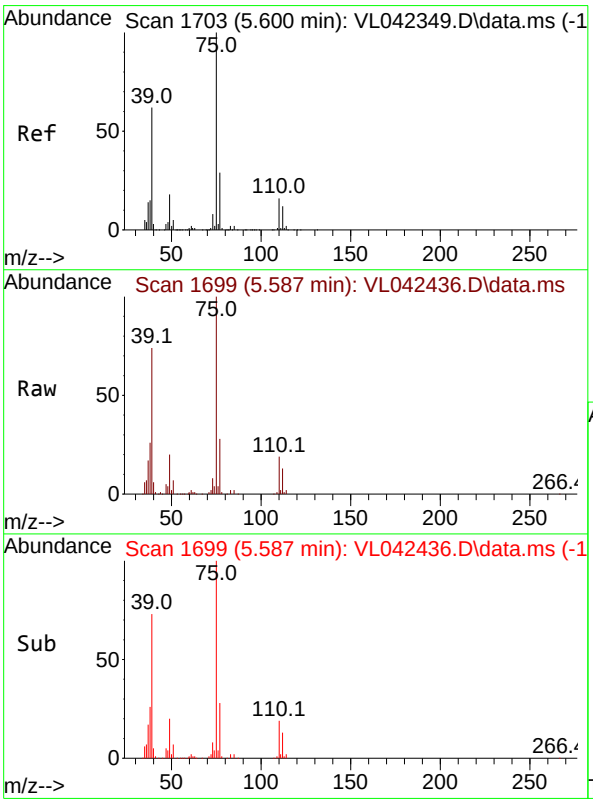
#45
t-1,3-Dichloropropene
Concen: 9.026 ppbv
RT: 6.409 min Scan# 1
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 75 Resp: 139508

Ion	Ratio	Lower	Upper
75	100		
77	27.5	27.0	40.6

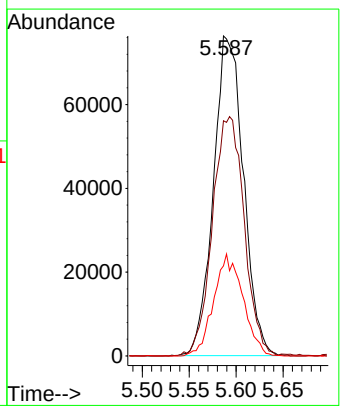


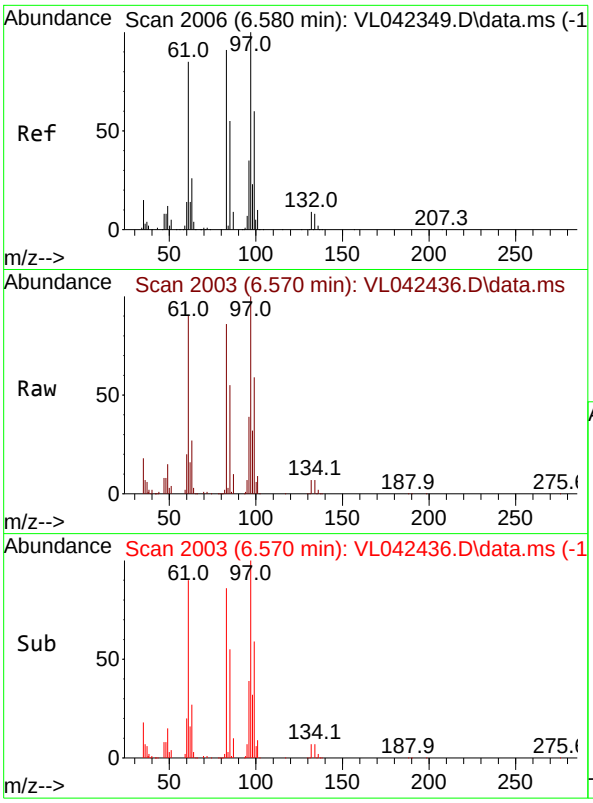


#46
cis-1,3-Dichloropropene
Concen: 8.953 ppbv
RT: 5.587 min Scan# 1699
Delta R.T. -0.013 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 75 Resp: 169355

Ion	Ratio	Lower	Upper
75	100		
39	73.4	50.0	75.0
77	28.2	23.0	34.6



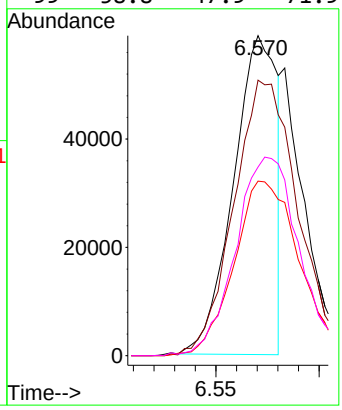


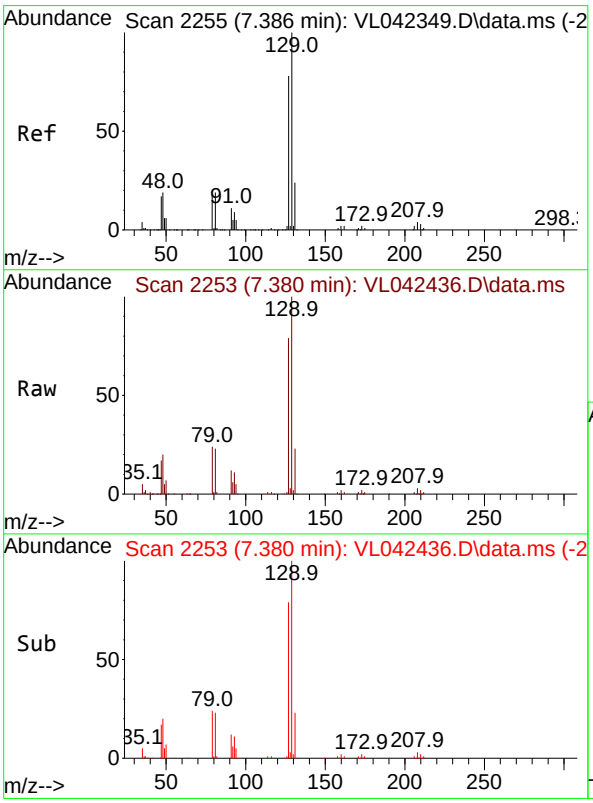
#47
1,1,2-Trichloroethane
Concen: 6.778 ppbv
RT: 6.570 min Scan# 2
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 97 Resp: 86392

Ion	Ratio	Lower	Upper
97	100		
83	86.3	72.8	109.2
85	54.1	44.2	66.4
99	58.8	47.9	71.9

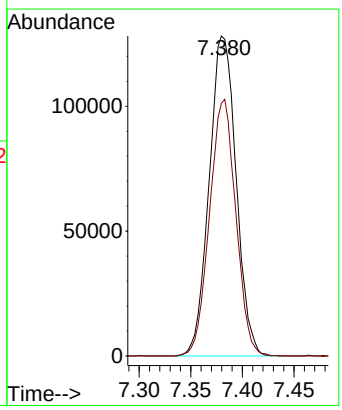


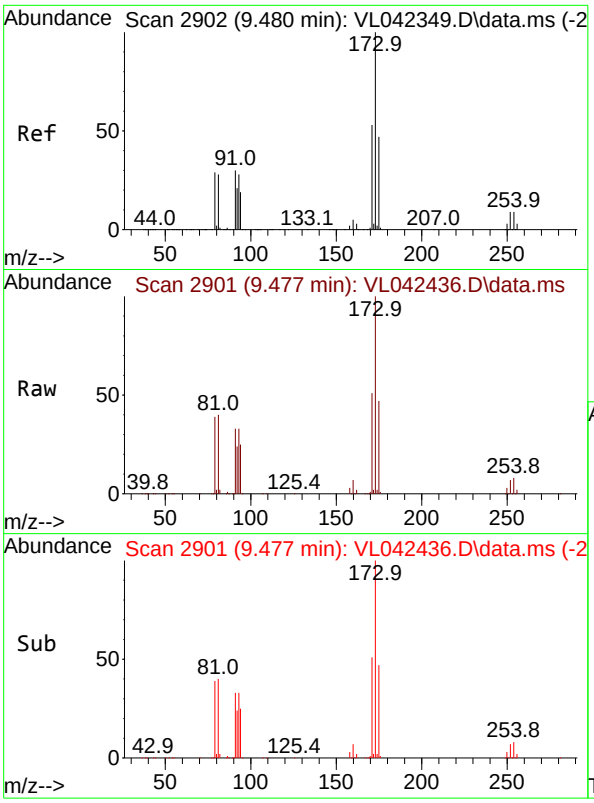


#48
Dibromochloromethane
Concen: 10.339 ppbv
RT: 7.380 min Scan# 2253
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:129 Resp: 232818

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3



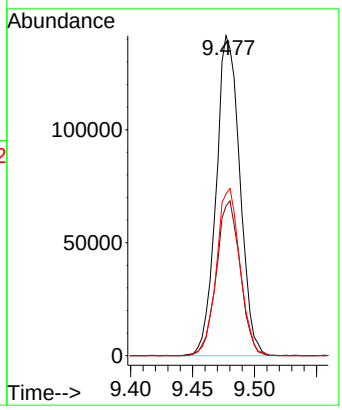


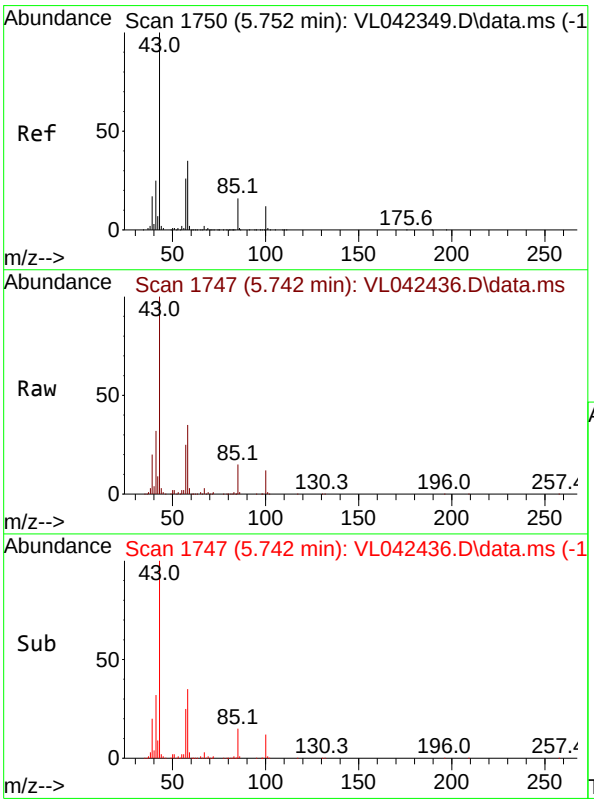
#49
Bromoform
Concen: 9.593 ppbv
RT: 9.477 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:173 Resp: 188896

Ion	Ratio	Lower	Upper
173	100		
175	48.7	38.2	57.2
171	52.0	40.9	61.3

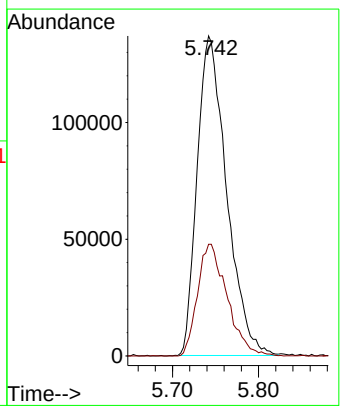


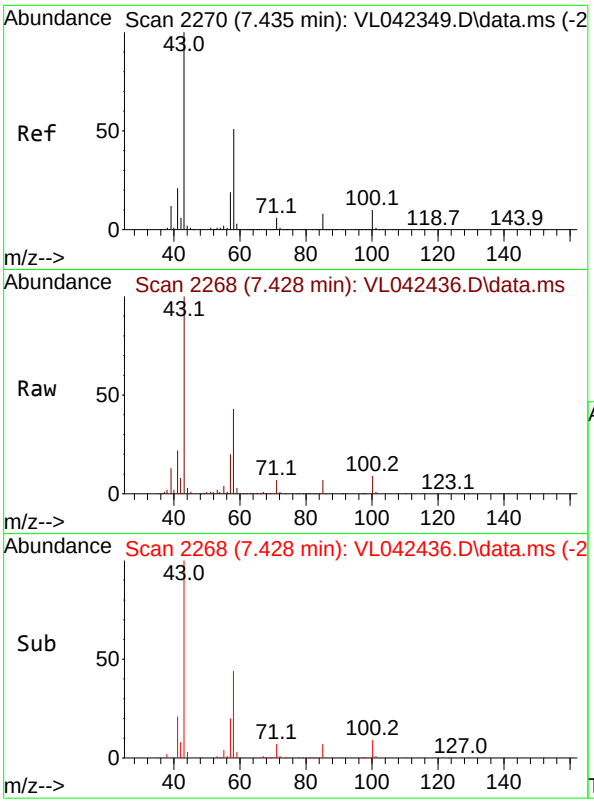


#50
4-Methyl-2-Pentanone
Concen: 7.965 ppbv
RT: 5.742 min Scan# 1747
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 43 Resp: 325855

Ion	Ratio	Lower	Upper
43	100		
58	35.1	28.6	43.0



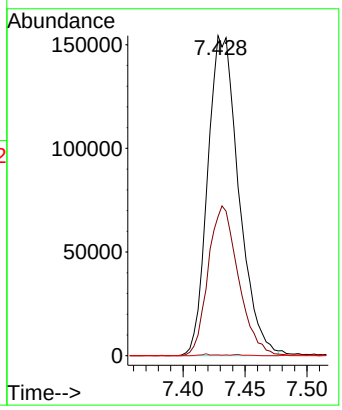


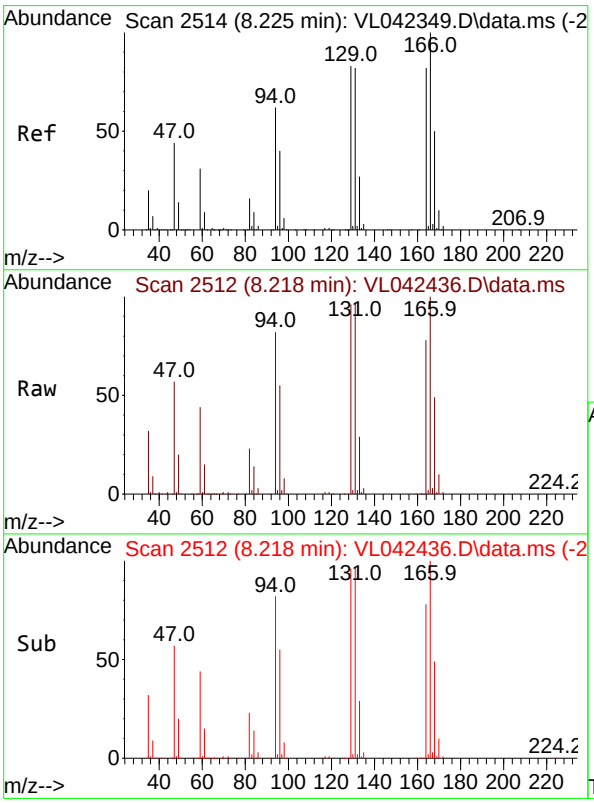
#51
2-Hexanone
Concen: 7.357 ppbv
RT: 7.428 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 43 Resp: 269915

Ion	Ratio	Lower	Upper
43	100		
58	45.8	40.2	60.4
98	0.4	0.1	0.1#

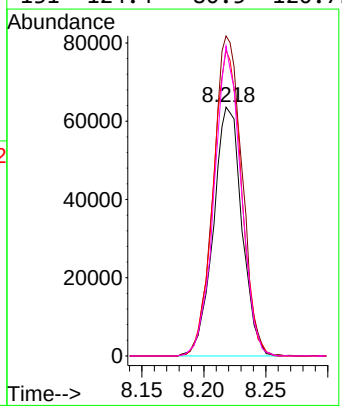


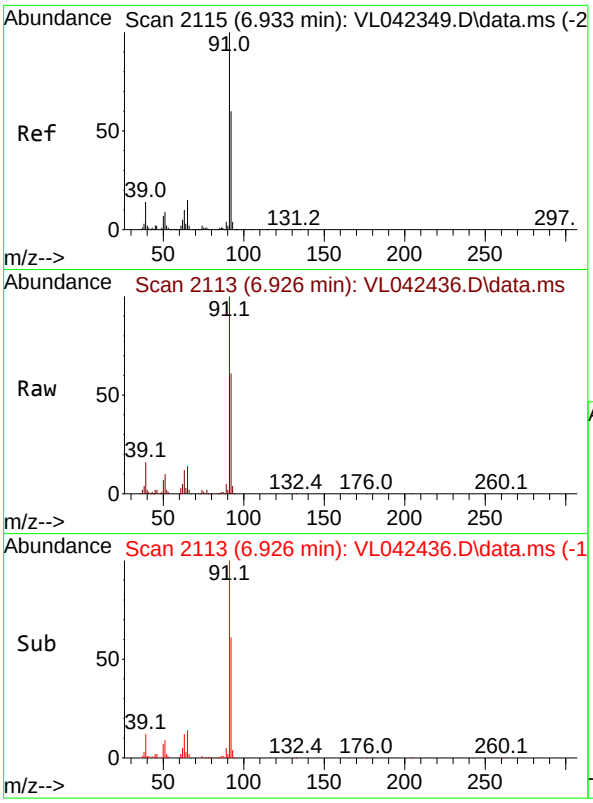


#52
Tetrachloroethene
Concen: 7.833 ppbv
RT: 8.218 min Scan# 2512
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:164 Resp: 101642

Ion	Ratio	Lower	Upper
164	100		
166	128.6	98.2	147.2
129	122.8	81.8	122.8#
131	124.4	80.5	120.7#



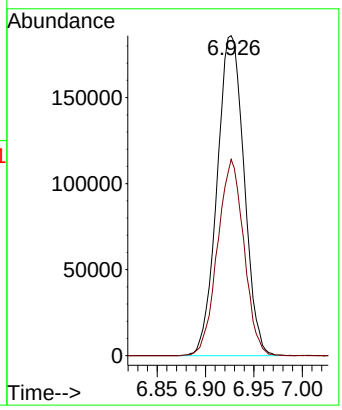


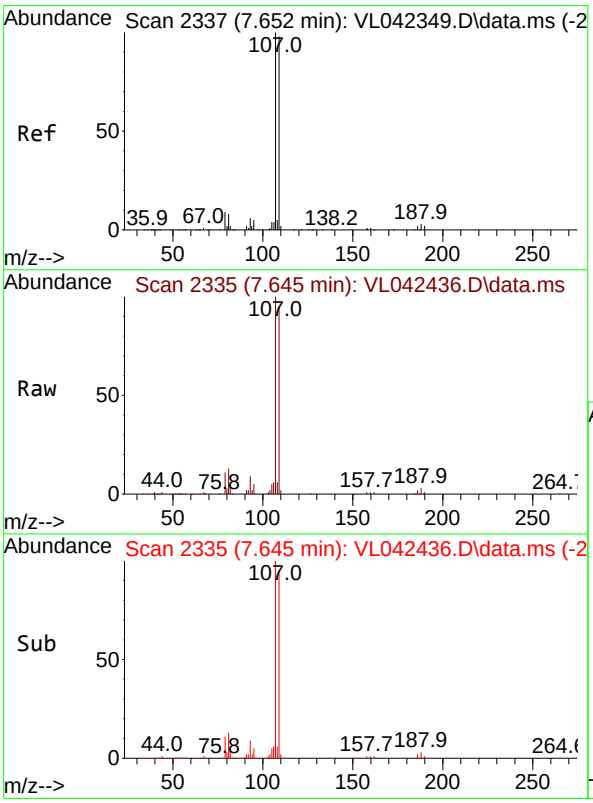
#53
Toluene
Concen: 8.968 ppbv
RT: 6.926 min Scan# 21
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 361317

Ion	Ratio	Lower	Upper
91	100		
92	59.9	48.2	72.4

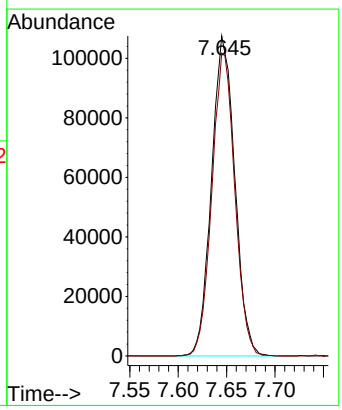


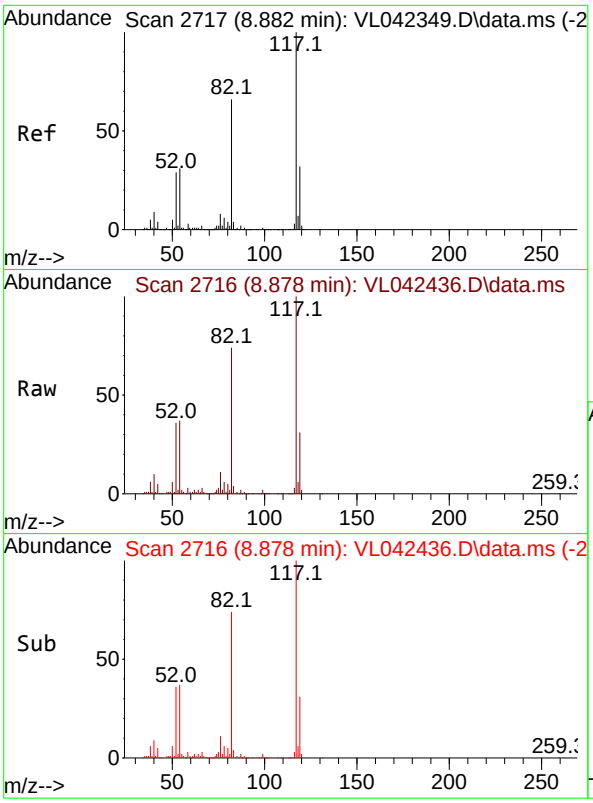


#54
1,2-Dibromoethane
Concen: 9.861 ppbv
RT: 7.645 min Scan# 2335
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:107 Resp: 179895

Ion	Ratio	Lower	Upper
107	100		
109	94.7	78.2	117.4



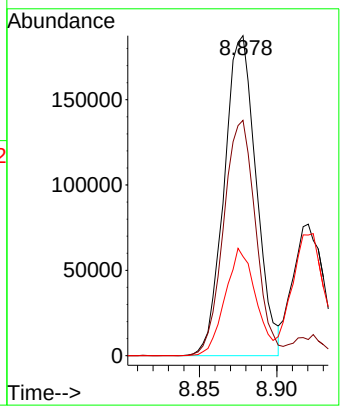


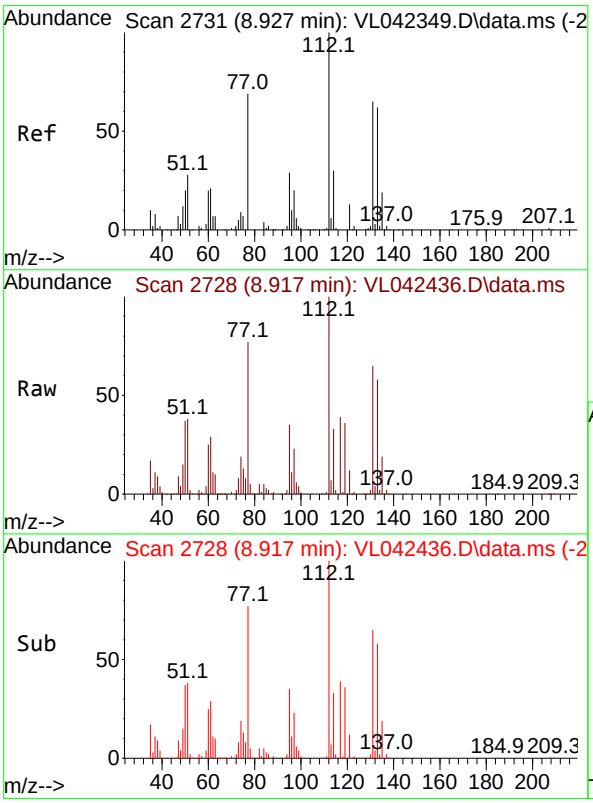
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.878 min Scan# 2
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:117 Resp: 269987

Ion	Ratio	Lower	Upper
117	100		
82	79.6	57.8	86.6
119	32.9	25.2	37.8

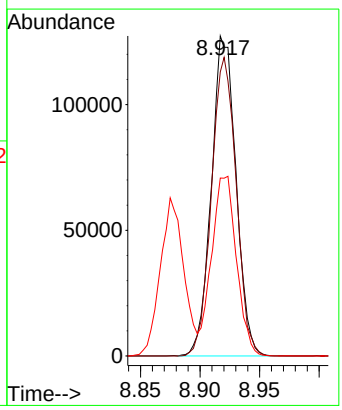


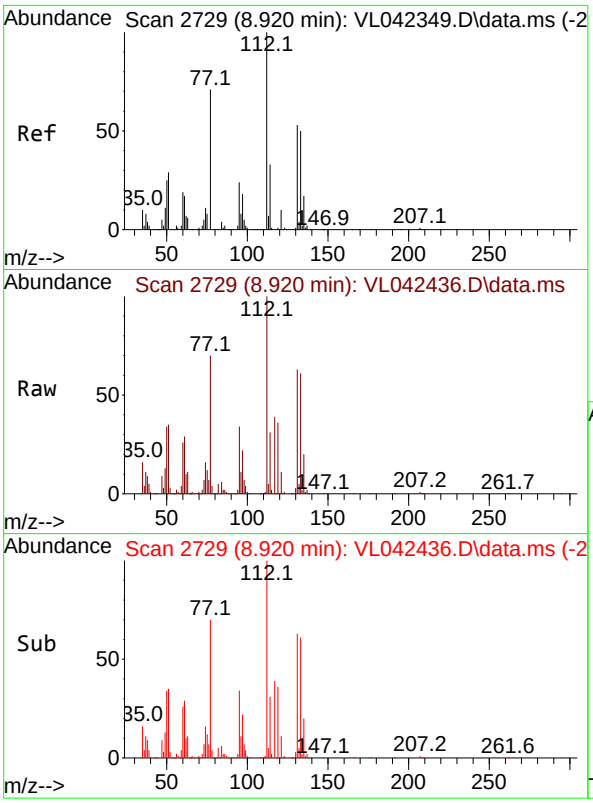


#56
1,1,1,2-Tetrachloroethane
Concen: 11.184 ppbv
RT: 8.917 min Scan# 2728
Delta R.T. -0.010 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:131 Resp: 182759

Ion	Ratio	Lower	Upper
131	100		
133	93.9	78.3	117.5
119	55.8	48.7	73.1



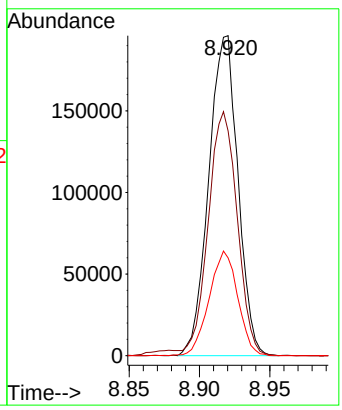


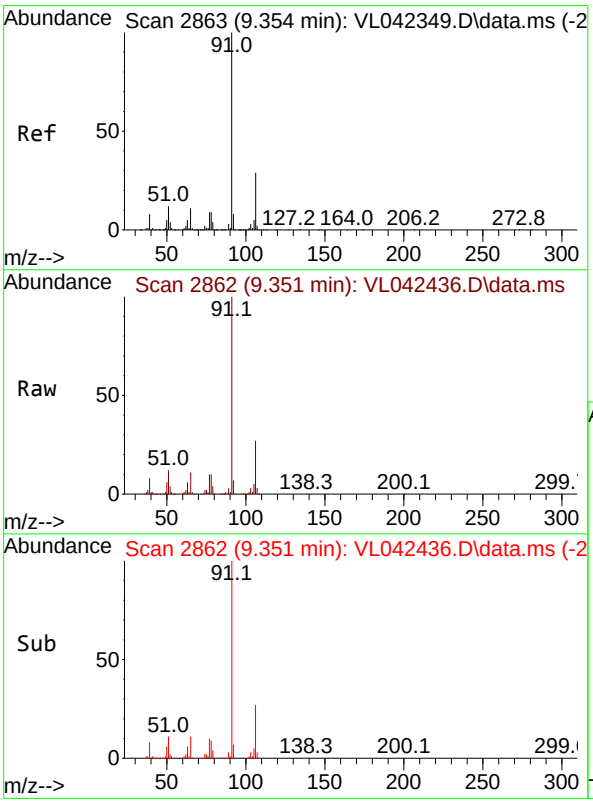
#57
Chlorobenzene
Concen: 10.086 ppbv
RT: 8.920 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:112 Resp: 283210

Ion	Ratio	Lower	Upper
112	100		
77	70.2	57.8	86.6
114	30.6	29.3	35.9

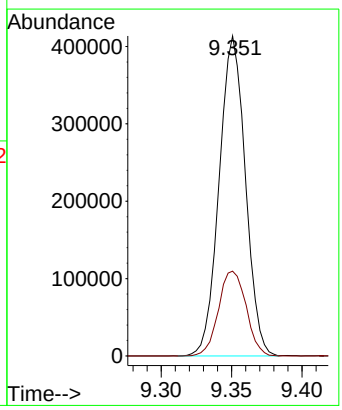


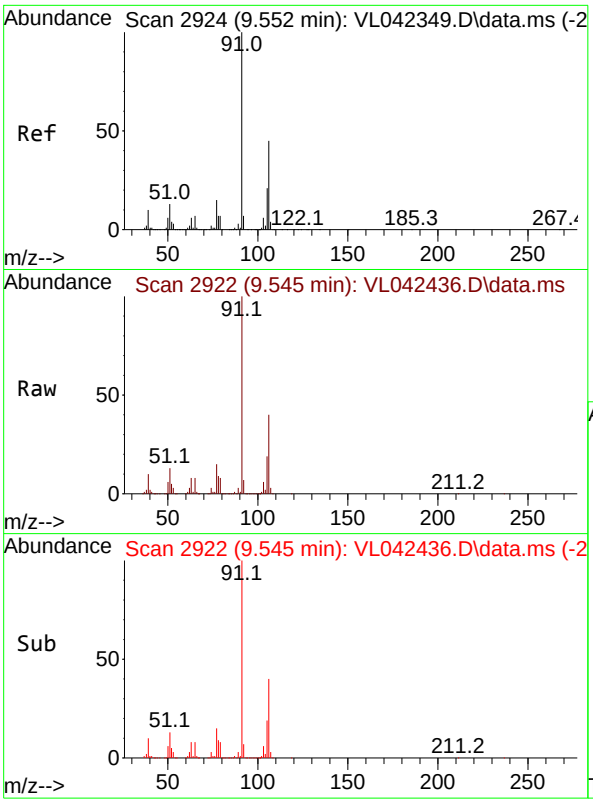


#58
Ethyl Benzene
Concen: 10.032 ppbv
RT: 9.351 min Scan# 2862
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 536634

Ion	Ratio	Lower	Upper
91	100		
106	26.5	23.0	34.4



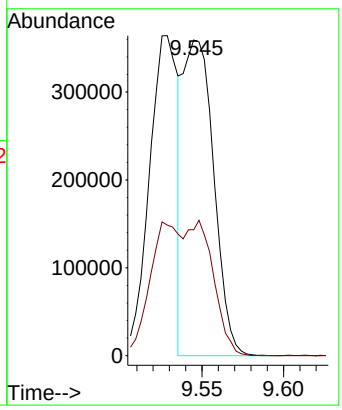


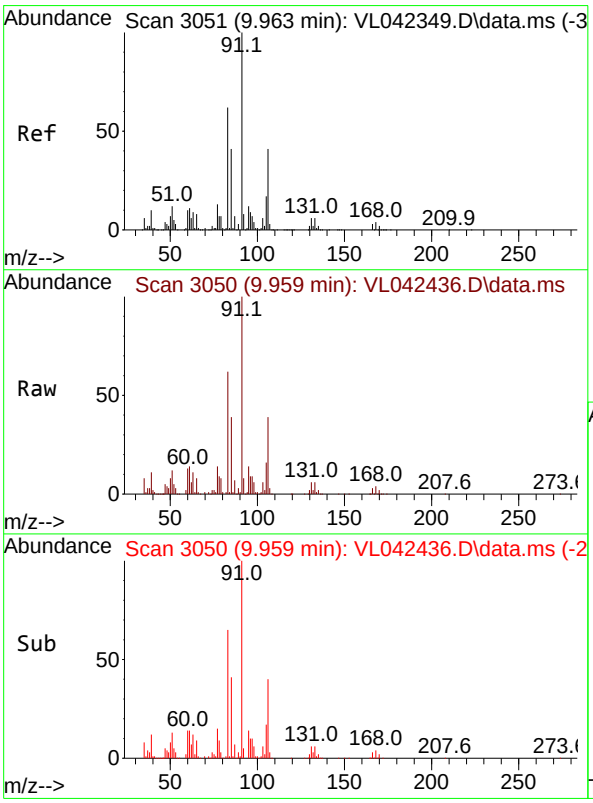
#59
m/p-Xylene
Concen: 10.897 ppbv
RT: 9.545 min Scan# 2
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 469573

Ion	Ratio	Lower	Upper
91	100		
106	81.2	35.4	53.2#

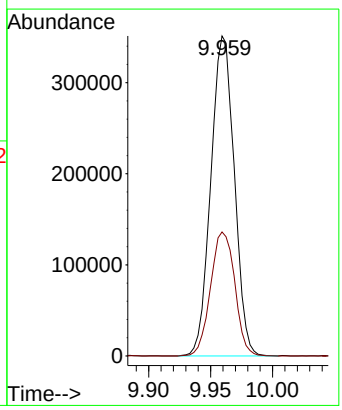


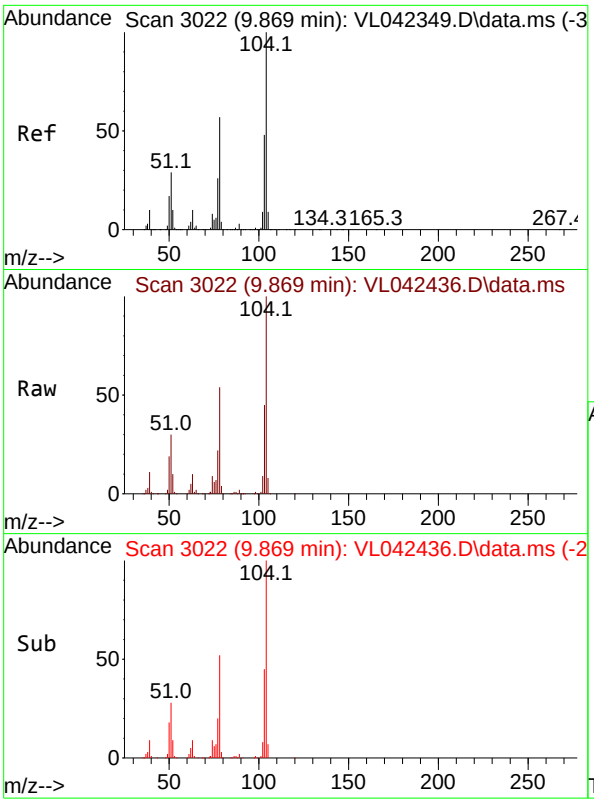


#60
o-Xylene
Concen: 10.686 ppbv
RT: 9.959 min Scan# 3050
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 463713

Ion	Ratio	Lower	Upper
91	100		
106	40.0	21.1	63.4



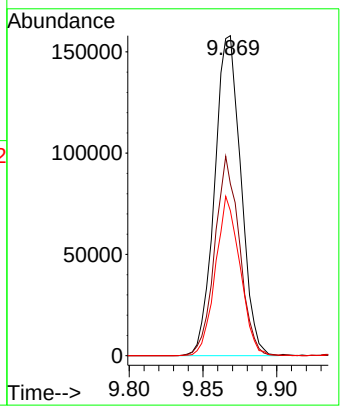


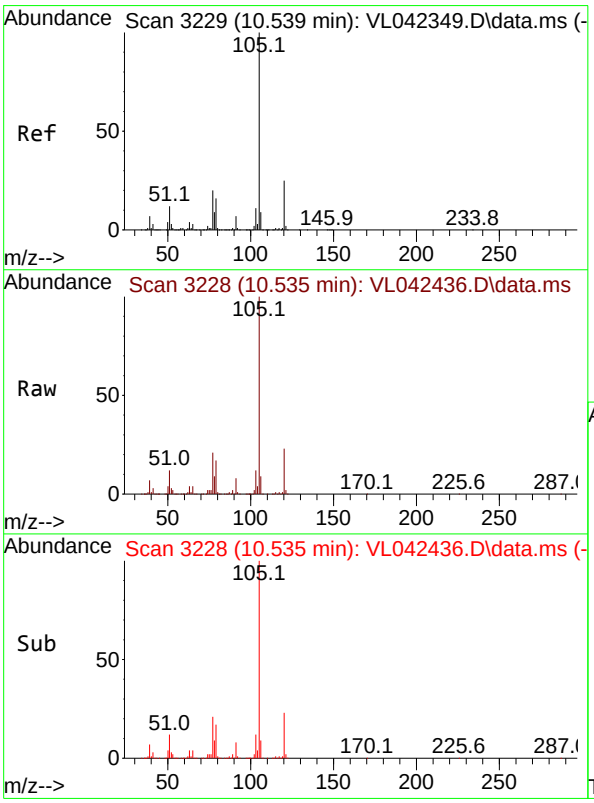
#61
Styrene
Concen: 9.454 ppbv
RT: 9.869 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:104 Resp: 195813

Ion	Ratio	Lower	Upper
104	100		
78	58.5	44.6	66.8
103	46.7	37.4	56.0

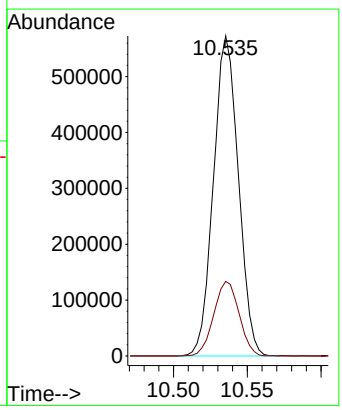


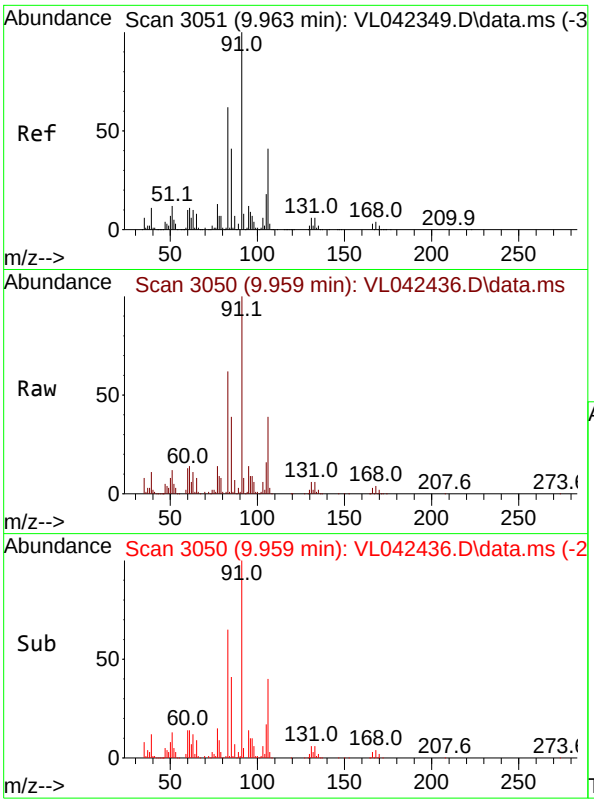


#62
Isopropylbenzene
Concen: 10.558 ppbv
RT: 10.535 min Scan# 3228
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 672630

Ion	Ratio	Lower	Upper
105	100		
120	23.7	19.8	29.8



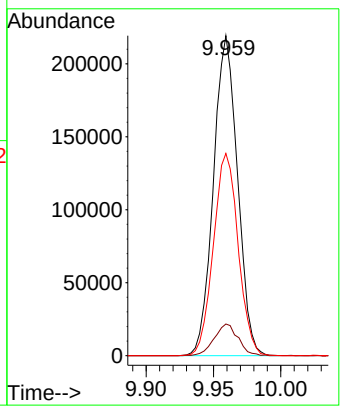


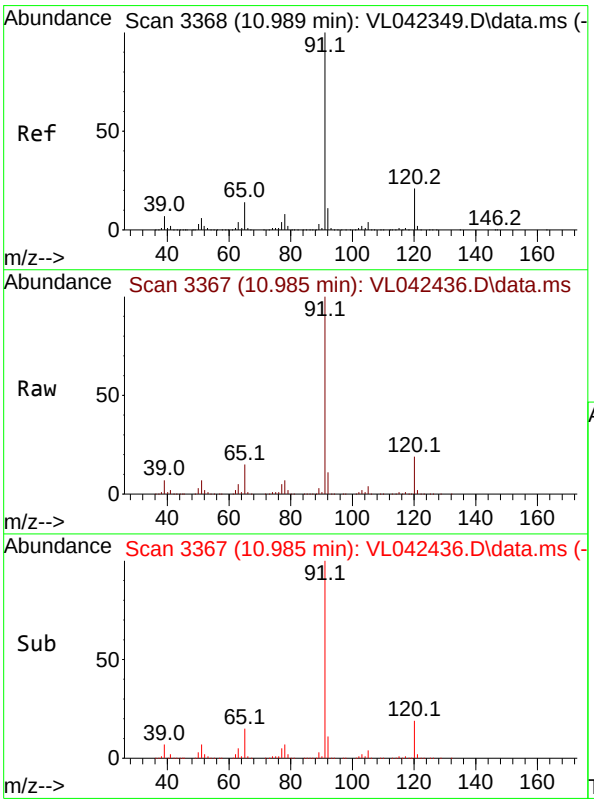
#63
1,1,2,2-Tetrachloroethane
Concen: 9.699 ppbv
RT: 9.959 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 83 Resp: 272746

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	65.0	32.4	97.0

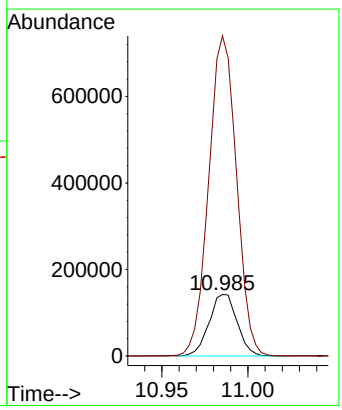


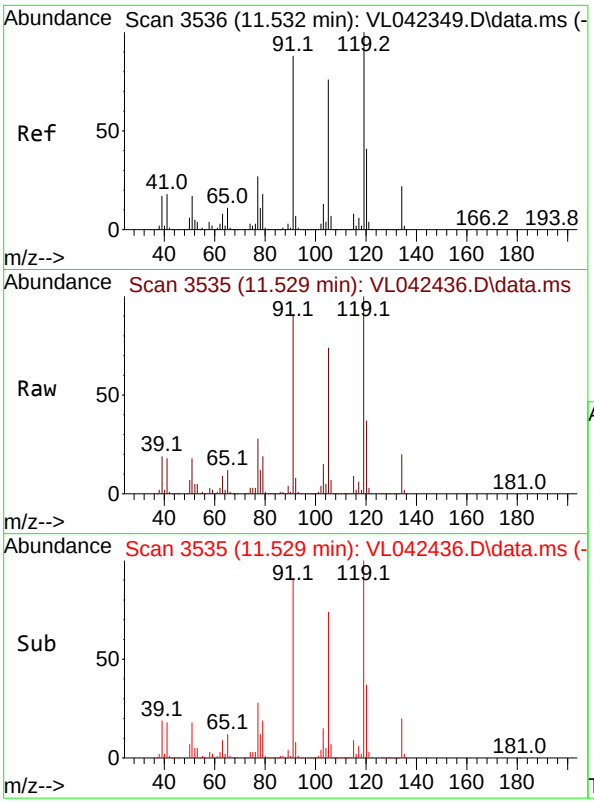


#64
n-propylbenzene
Concen: 10.037 ppbv
RT: 10.985 min Scan# 3367
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:120 Resp: 160736

Ion	Ratio	Lower	Upper
120	100		
91	518.7	392.4	588.6



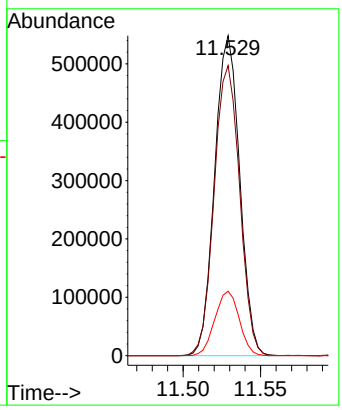


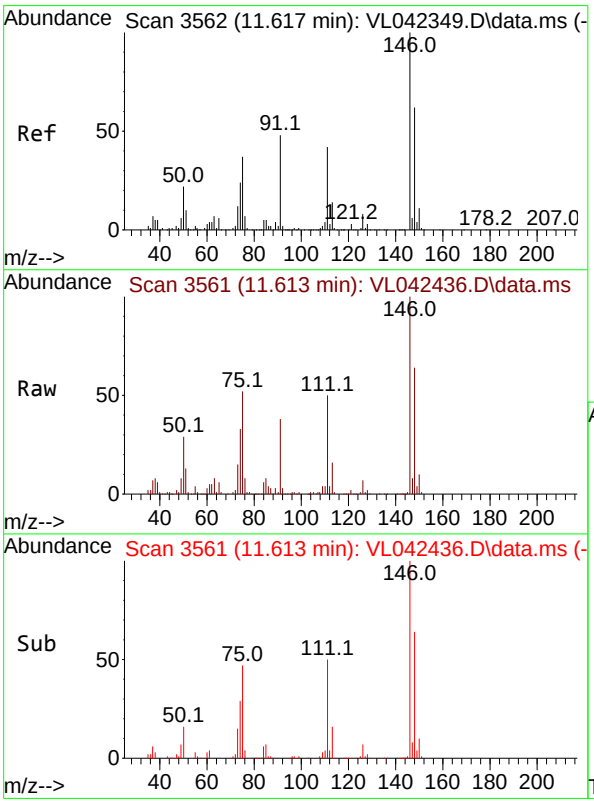
#65
tert-Butylbenzene
Concen: 10.535 ppbv
RT: 11.529 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 616872

Ion	Ratio	Lower	Upper
119	100		
91	92.2	74.6	111.8
134	19.6	18.8	28.2

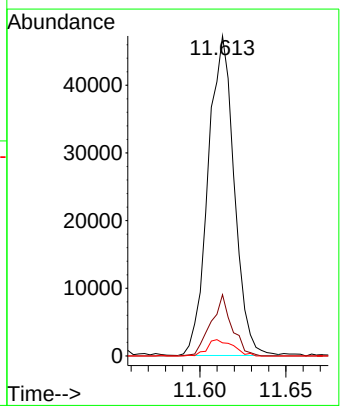


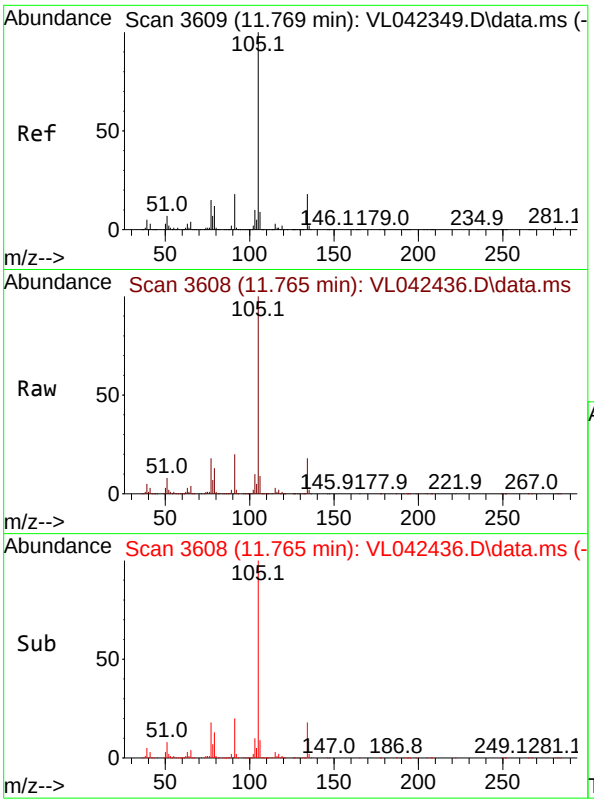


#66
Benzyl Chloride
Concen: 7.746 ppbv
RT: 11.613 min Scan# 3561
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 49841

Ion	Ratio	Lower	Upper
91	100		
126	15.4	11.8	17.6
128	5.1	4.5	6.7



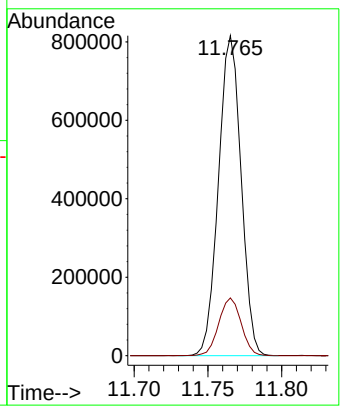


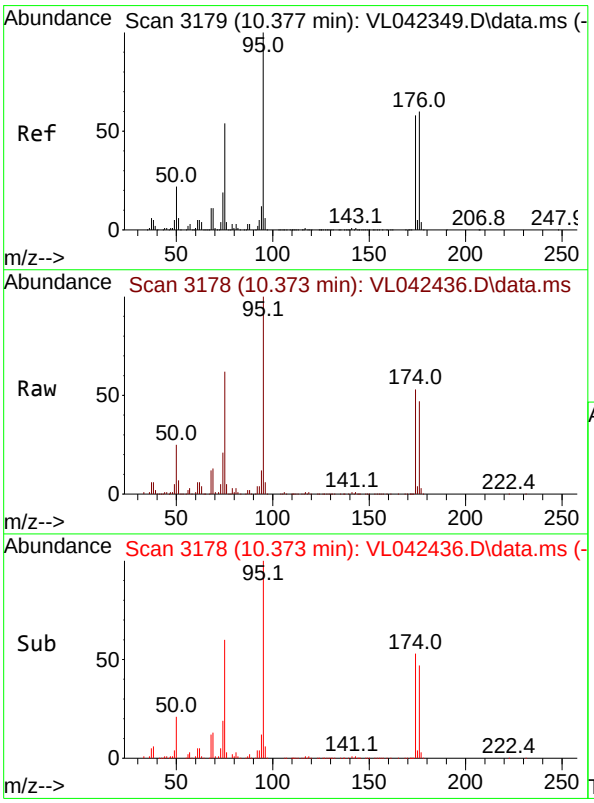
#67
sec-Butylbenzene
Concen: 10.677 ppbv
RT: 11.765 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 869595

Ion	Ratio	Lower	Upper
105	100		
134	17.9	14.6	21.8

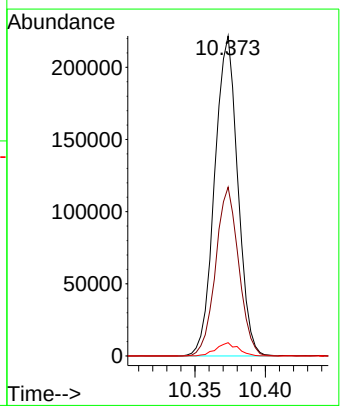


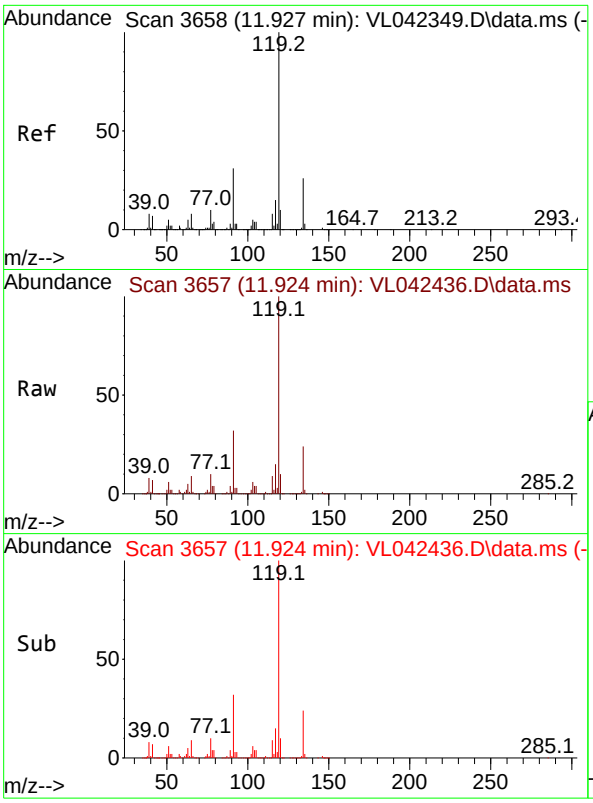


#68
1-Bromo-4-Fluorobenzene
Concen: 11.413 ppbv
RT: 10.373 min Scan# 3178
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 95 Resp: 253216

Ion	Ratio	Lower	Upper
95	100		
174	52.8	48.5	72.7
175	4.0	3.7	5.5



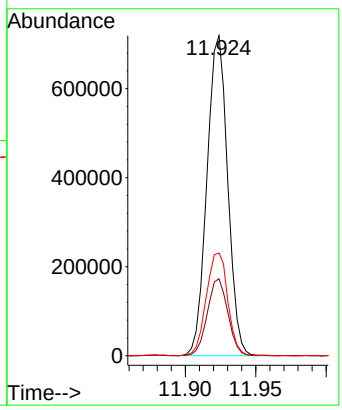


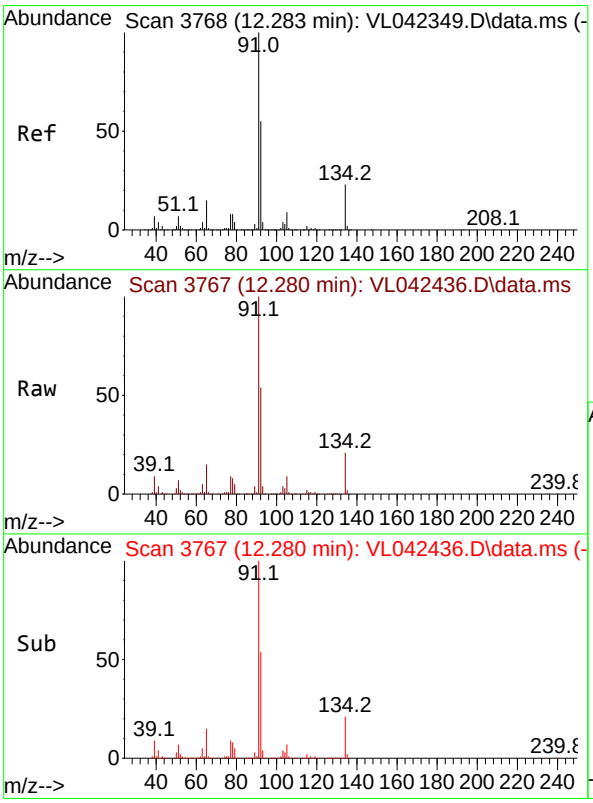
#69
p-Isopropyltoluene
Concen: 10.442 ppbv
RT: 11.924 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:119 Resp: 738863

Ion	Ratio	Lower	Upper
119	100		
134	23.9	20.0	30.0
91	33.5	24.4	36.6

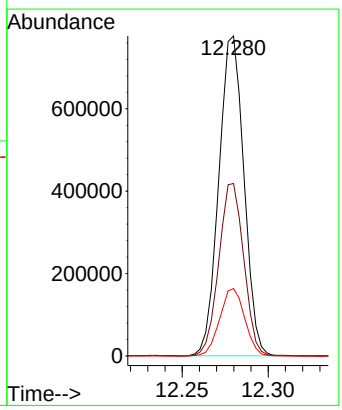


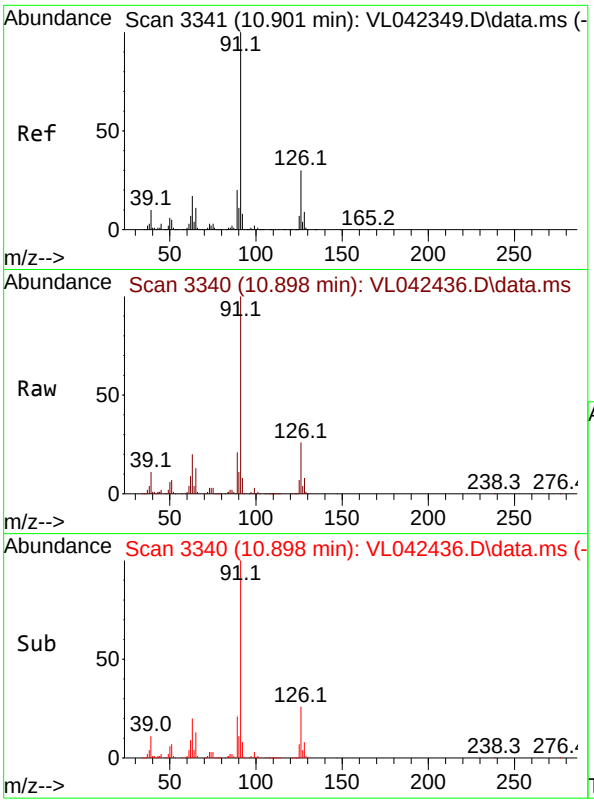


#70
n-Butylbenzene
Concen: 10.688 ppbv
RT: 12.280 min Scan# 3767
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion: 91 Resp: 787717

Ion	Ratio	Lower	Upper
91	100		
92	53.9	44.2	66.4
134	21.0	18.2	27.4



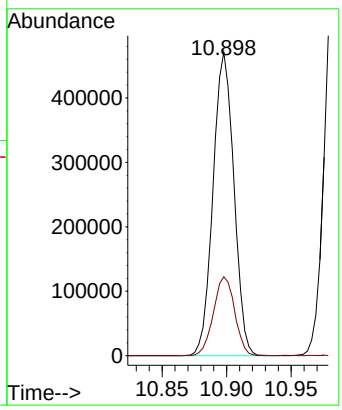


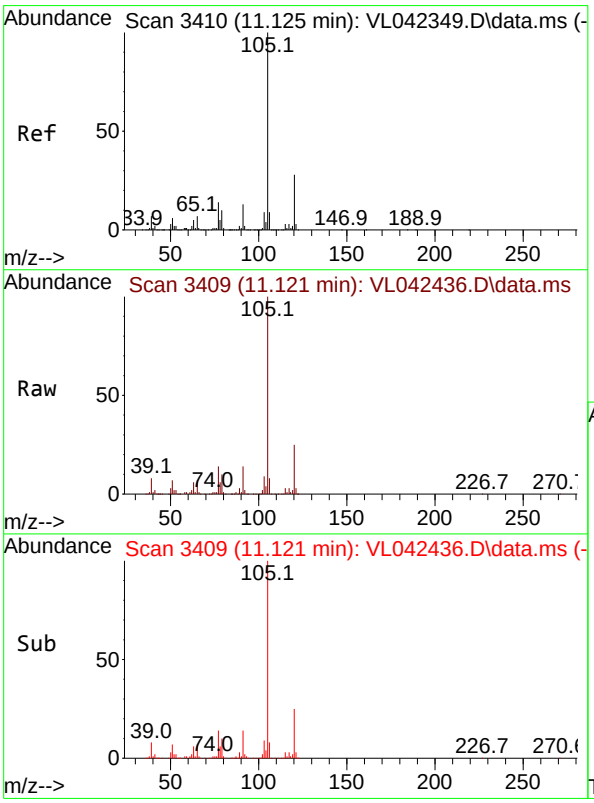
#71
2-Chlorotoluene
Concen: 10.571 ppbv
RT: 10.898 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion: 91 Resp: 528205

Ion	Ratio	Lower	Upper
91	100		
126	26.5	11.4	45.4

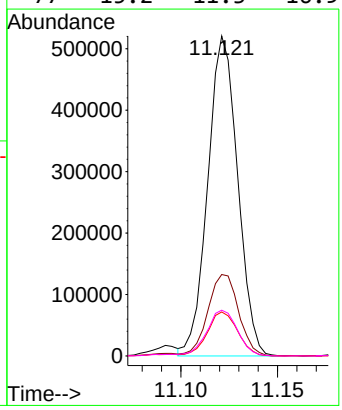


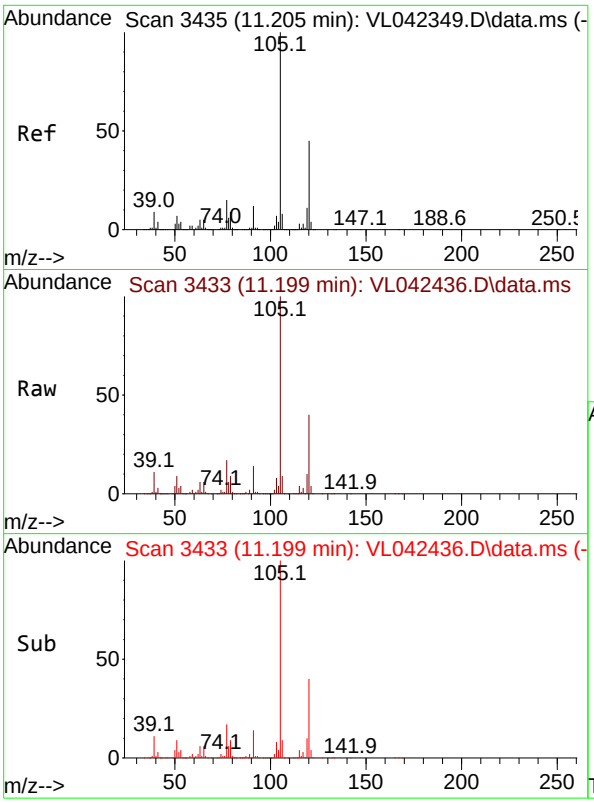


#72
4-Ethyltoluene
Concen: 10.542 ppbv
RT: 11.121 min Scan# 3409
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 559285

Ion	Ratio	Lower	Upper
105	100		
120	27.0	23.2	34.8
91	14.5	10.4	15.6
77	15.2	11.3	16.9



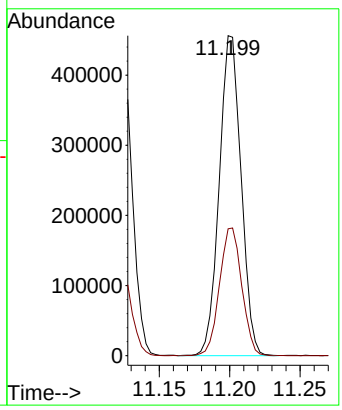


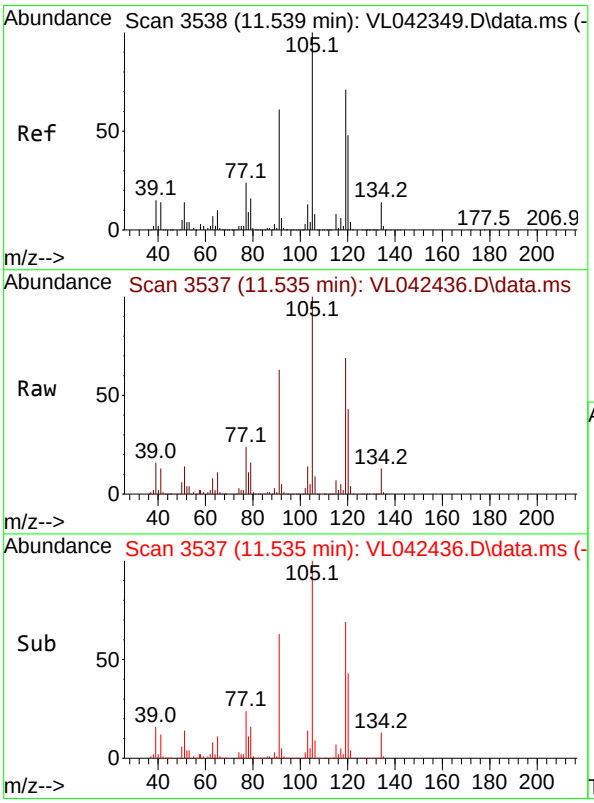
#73
1,3,5-Trimethylbenzene
Concen: 10.546 ppbv
RT: 11.199 min Scan# 34
Delta R.T. -0.007 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:105 Resp: 493949

Ion	Ratio	Lower	Upper
105	100		
120	39.6	35.6	53.4

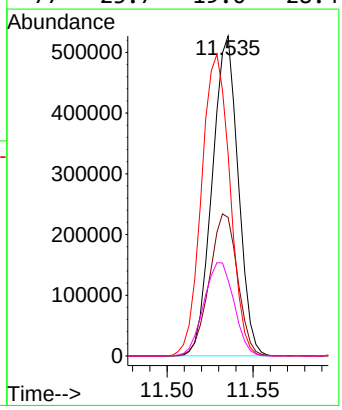


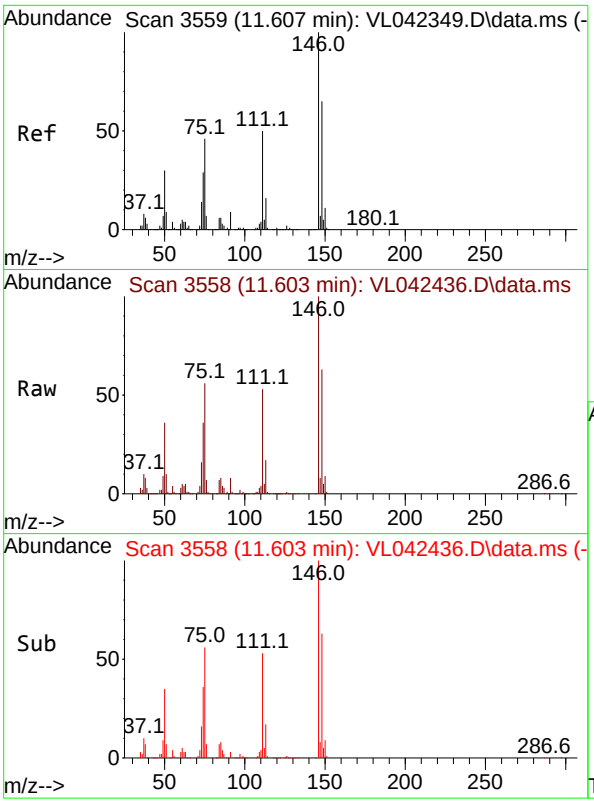


#74
1,2,4-Trimethylbenzene
Concen: 10.130 ppbv
RT: 11.535 min Scan# 3537
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:105 Resp: 554136

Ion	Ratio	Lower	Upper
105	100		
120	43.3	38.1	57.1
91	63.1	48.8	73.2
77	23.7	19.0	28.4



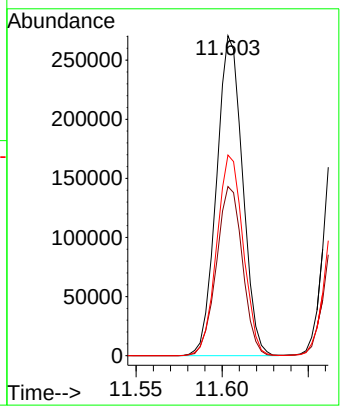


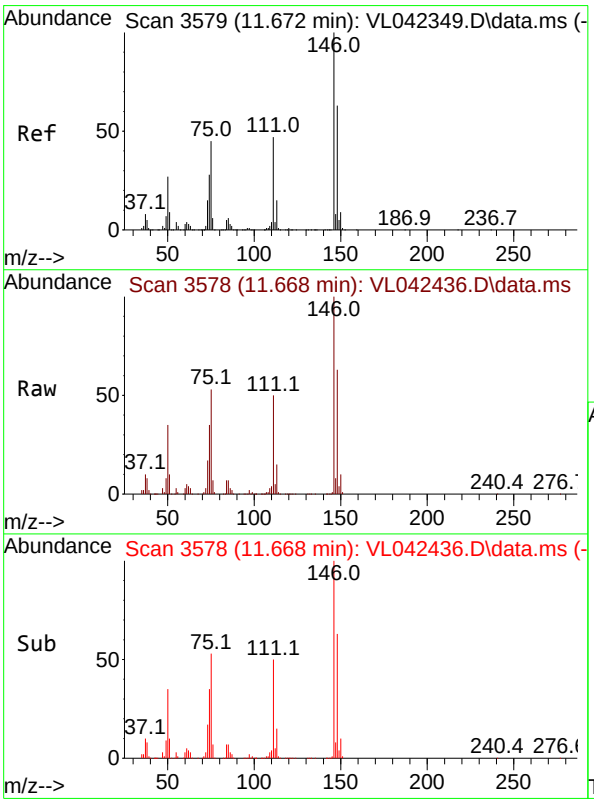
#75
1,3-Dichlorobenzene
Concen: 10.024 ppbv
RT: 11.603 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 285025

Ion	Ratio	Lower	Upper
146	100		
111	52.9	24.3	72.8
148	63.6	31.6	94.8

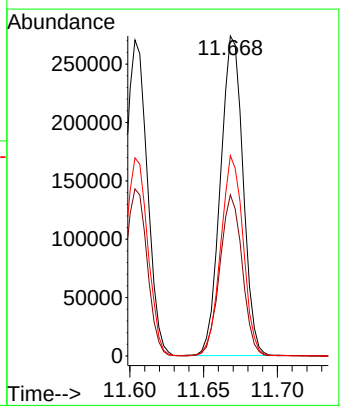


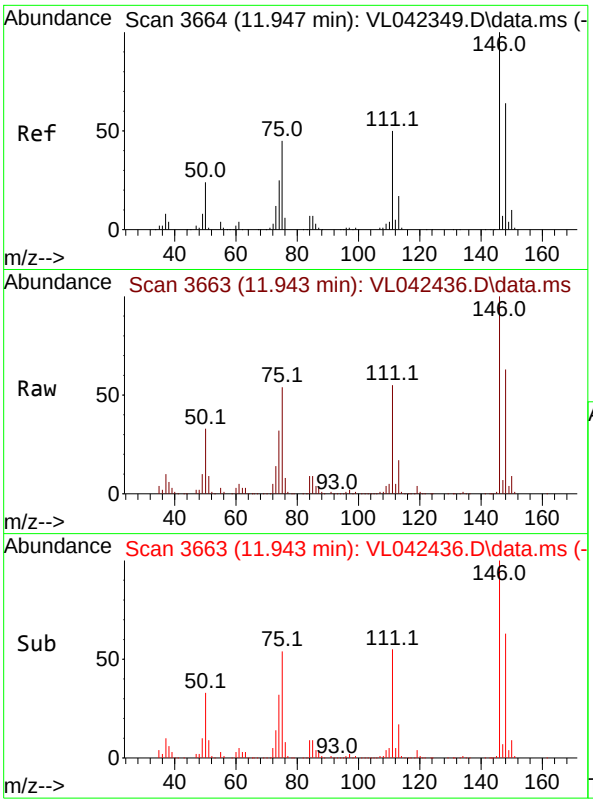


#76
1,4-Dichlorobenzene
Concen: 10.210 ppbv
RT: 11.668 min Scan# 3578
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:146 Resp: 291795

Ion	Ratio	Lower	Upper
146	100		
111	50.1	24.2	72.6
148	62.4	32.1	96.5



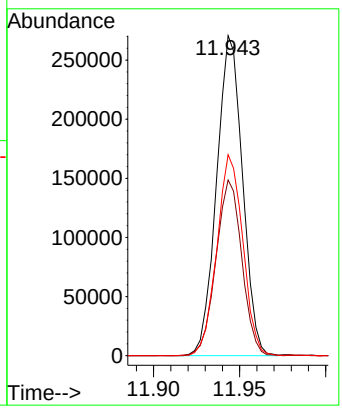


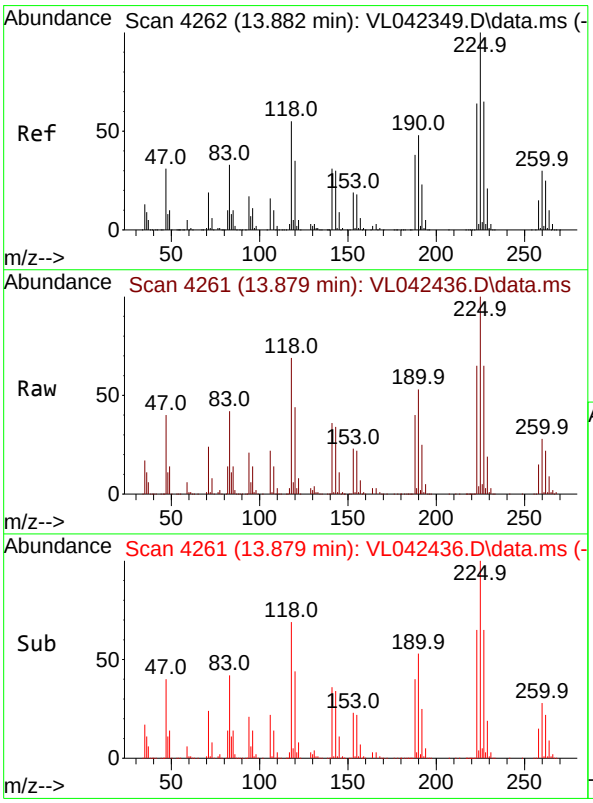
#77
1,2-Dichlorobenzene
Concen: 10.261 ppbv
RT: 11.943 min Scan# 3
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:146 Resp: 283700

Ion	Ratio	Lower	Upper
146	100		
111	54.8	25.3	75.9
148	63.1	31.5	94.5

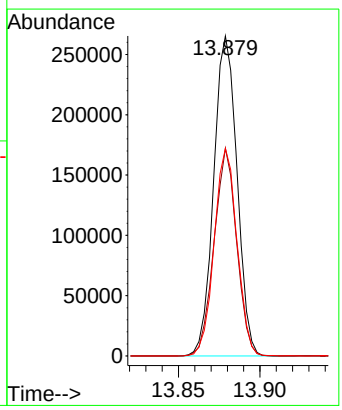


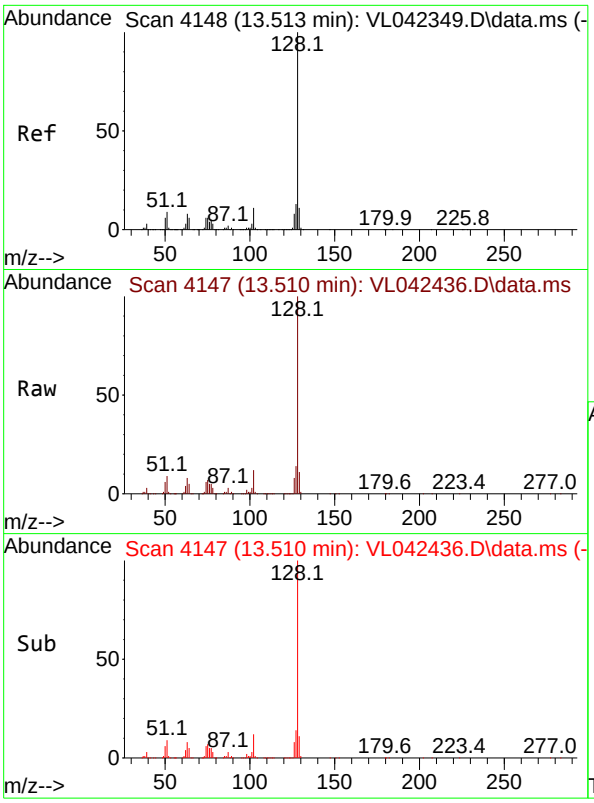


#78
Hexachloro-1,3-Butadiene
Concen: 9.437 ppbv
RT: 13.879 min Scan# 4261
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:225 Resp: 263477

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.3	75.5
227	63.6	51.5	77.3



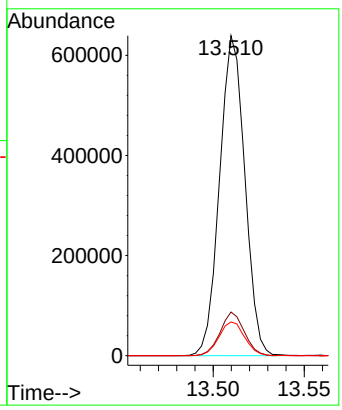


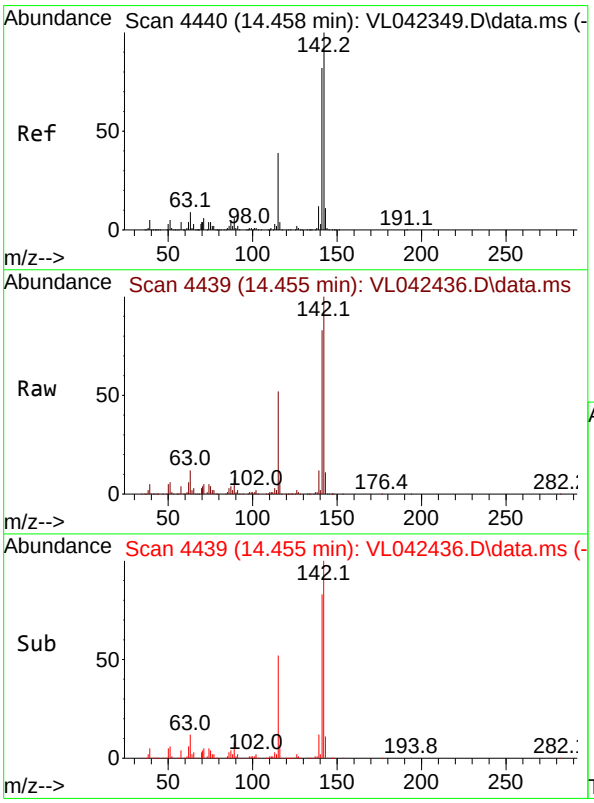
#79
Naphthalene
Concen: 9.408 ppbv
RT: 13.510 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:128 Resp: 615408

Ion	Ratio	Lower	Upper
128	100		
127	13.7	10.6	15.8
129	10.5	8.6	12.8

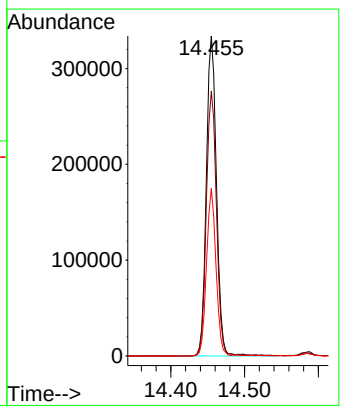


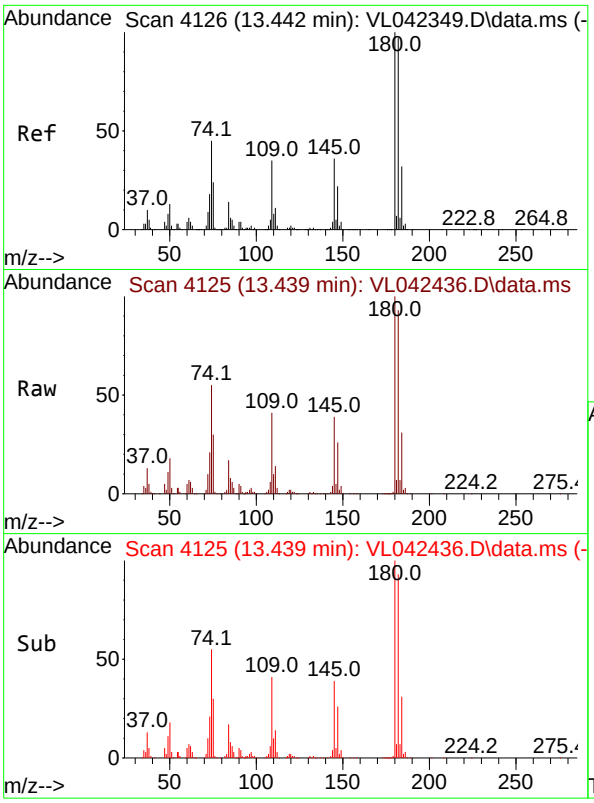


#80
Naphthalene,2-methyl-
Concen: 8.497 ppbv
RT: 14.455 min Scan# 4439
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Tgt Ion:142 Resp: 316788

Ion	Ratio	Lower	Upper
142	100		
141	83.6	66.8	100.2
115	49.6	33.4	50.2



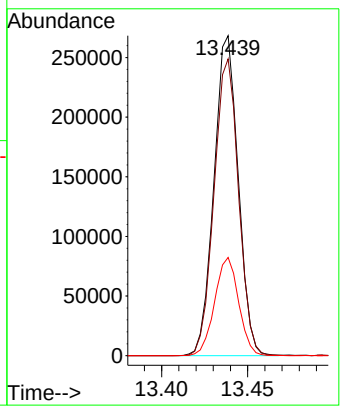


#81
1,2,4-Trichlorobenzene
Concen: 9.363 ppbv
RT: 13.439 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042436.D
Acq: 29 Apr 2025 08:39

Instrument :
MSVOA_L
ClientSampleId :
VSTDCCC010

Tgt Ion:180 Resp: 263006

Ion	Ratio	Lower	Upper
180	100		
182	93.8	76.8	115.2
184	30.4	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.790	49	116772	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.962	114	317590	10.000	ppbv		0.00
55) Chlorobenzene-d5	8.881	117	272312	10.000	ppbv		0.00
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.380	95	253021	11.307	ppbv		0.00
Spiked Amount 10.000	Range 65 - 135		Recovery = 113.100%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.499	85	238539	11.562	ppbv		96
3) Chlorodifluoromethane	1.476	51	192670	9.807	ppbv		92
4) Chloromethane	1.534	50	89832	11.003	ppbv		94
5) Vinyl Chloride	1.580	62	85334	9.601	ppbv		99
6) Bromomethane	1.667	94	40758	10.676	ppbv		94
7) Chloroethane	1.706	64	33756	10.502	ppbv		97
8) Dichlorotetrafluoroethane	1.554	85	198106	11.184	ppbv		95
9) Propene	1.486	41	70111	7.836	ppbv		97
10) Heptane	4.981	43	190583	7.582	ppbv		99
11) Trichlorofluoromethane	1.877	101	225308	11.484	ppbv		99
12) 1,1,2-Trichlorotrifluo...	2.140	101	174111	10.854	ppbv		97
13) Ethanol	1.722	45	4137	2.909	ppbv		90
14) Bromoethene	1.783	108	64544	10.674	ppbv	#	98
15) Acetone	1.835	43	189432	9.910	ppbv		98
16) 1,3-Butadiene	1.609	39	90473	9.895	ppbv		93
17) tert-Butyl alcohol	2.042	59	230217	9.718	ppbv		99
18) 1,1-Dichloroethene	2.036	96	76749	10.241	ppbv		96
19) Isopropyl Alcohol	1.887	45	103692	9.765	ppbv	#	36
20) Methylene Chloride	2.062	84	67298	8.989	ppbv		91
21) Allyl Chloride	2.097	41	130014	9.851	ppbv		95
22) trans-1,2-Dichloroethene	2.340	96	84797	9.938	ppbv		90
23) Vinyl Acetate	2.463	43	61036	7.888	ppbv	#	95
24) 1,1-Dichloroethane	2.408	63	177233	10.934	ppbv		98
25) Ethyl Acetate	2.839	43	416465	8.836	ppbv		99
26) Hexane	2.826	57	157544	8.260	ppbv		97
27) Carbon Disulfide	2.149	76	211824	10.372	ppbv		99
28) Methyl tert-Butyl Ether	2.441	73	116769	9.344	ppbv		94
29) Chloroform	2.852	83	286397	10.623	ppbv		96
30) Cyclohexane	3.858	84	132615	8.601	ppbv		95
31) cis-1,2-Dichloroethene	2.722	61	174328	9.613	ppbv		99
32) 1,1,1-Trichloroethane	3.369	97	312429	10.294	ppbv		99
34) 2-Butanone	2.560	43	233037	9.278	ppbv		98
35) Carbon Tetrachloride	3.764	117	317207	11.036	ppbv		93
36) Benzene	3.658	78	317350	9.264	ppbv		96
37) 1,2-Dichloroethane	3.221	62	247446	12.035	ppbv	#	96
38) Trichloroethene	4.551	130	127601	8.523	ppbv		91
39) 1,2-Dichloropropane	4.318	63	115449	9.044	ppbv		92
40) 1,4-Dioxane	4.586	88	52820	7.529	ppbv	#	92
41) Tetrahydrofuran	3.055	42	124059	8.471	ppbv		98
42) Bromodichloromethane	4.493	83	317253	11.088	ppbv		99
43) Methyl Methacrylate	4.887	69	61150	3.961	ppbv	#	1
44) 2,2,4-Trimethylpentane	4.641	57	531439	8.983	ppbv		95
45) t-1,3-Dichloropropene	6.418	75	140981	8.940	ppbv		100

Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
46) cis-1,3-Dichloropropene	5.606	75	170063	8.811	ppbv	#	84
47) 1,1,2-Trichloroethane	6.583	97	128662	9.893	ppbv		95
48) Dibromochloromethane	7.389	129	233350	10.156	ppbv		100
49) Bromoform	9.487	173	189484	9.431	ppbv		99
50) 4-Methyl-2-Pentanone	5.755	43	327508	7.846	ppbv		98
51) 2-Hexanone	7.438	43	262697	7.018	ppbv	#	95
52) Tetrachloroethene	8.228	164	106031	8.008	ppbv		90
53) Toluene	6.936	91	363707	8.848	ppbv		99
54) 1,2-Dibromoethane	7.658	107	178709	9.601	ppbv		96
56) 1,1,1,2-Tetrachloroethane	8.930	131	180979	10.981	ppbv		96
57) Chlorobenzene	8.924	112	290861	10.270	ppbv		99
58) Ethyl Benzene	9.357	91	545497	10.111	ppbv		98
59) m/p-Xylene	9.555	91	424567	9.768	ppbv	#	31
60) o-Xylene	9.966	91	465645	10.639	ppbv		94
61) Styrene	9.872	104	191741	9.178	ppbv		97
62) Isopropylbenzene	10.542	105	667839	10.393	ppbv		97
63) 1,1,2,2-Tetrachloroethane	9.966	83	278491	9.819	ppbv		99
64) n-propylbenzene	10.992	120	161309	9.987	ppbv		91
65) tert-Butylbenzene	11.535	119	605972	10.260	ppbv		98
66) Benzyl Chloride	11.620	91	46913	7.229	ppbv		99
67) sec-Butylbenzene	11.772	105	868275	10.569	ppbv		98
69) p-Isopropyltoluene	11.927	119	733796	10.282	ppbv		96
70) n-Butylbenzene	12.283	91	796622	10.717	ppbv		98
71) 2-Chlorotoluene	10.904	91	534951	10.614	ppbv		96
72) 4-Ethyltoluene	11.128	105	553879	10.351	ppbv		97
73) 1,3,5-Trimethylbenzene	11.205	105	491459	10.403	ppbv		95
74) 1,2,4-Trimethylbenzene	11.539	105	548408	9.939	ppbv	#	86
75) 1,3-Dichlorobenzene	11.610	146	284809	9.931	ppbv		97
76) 1,4-Dichlorobenzene	11.675	146	285571	9.907	ppbv		98
77) 1,2-Dichlorobenzene	11.950	146	282424	10.128	ppbv		96
78) Hexachloro-1,3-Butadiene	13.885	225	280954	9.977	ppbv		98
79) Naphthalene	13.516	128	621879	9.425	ppbv		100
80) Naphthalene,2-methyl-	14.458	142	312733	8.317	ppbv		95
81) 1,2,4-Trichlorobenzene	13.442	180	269082	9.498	ppbv		99

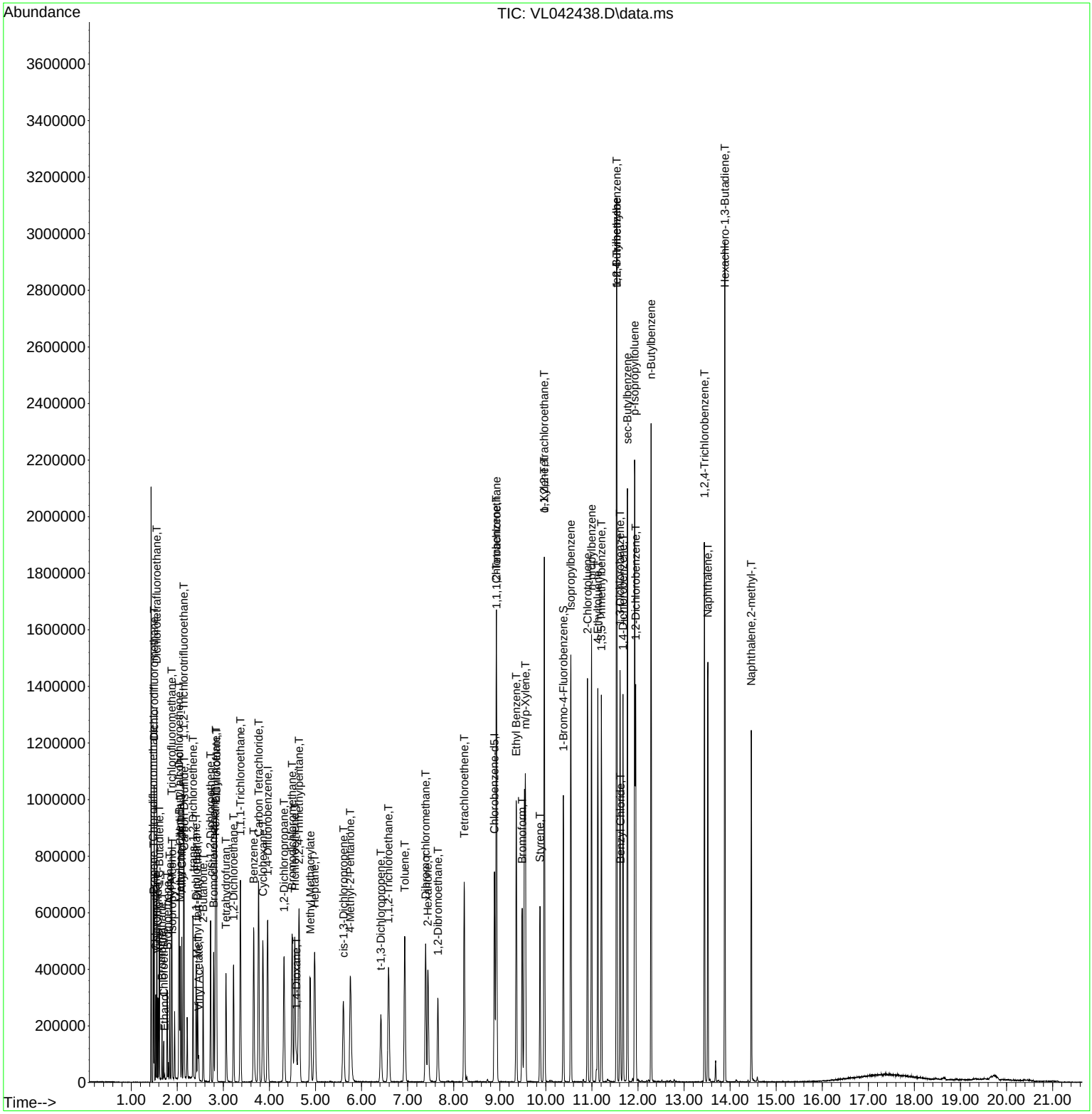
(#) = qualifier out of range (m) = manual integration (+) = signals summed

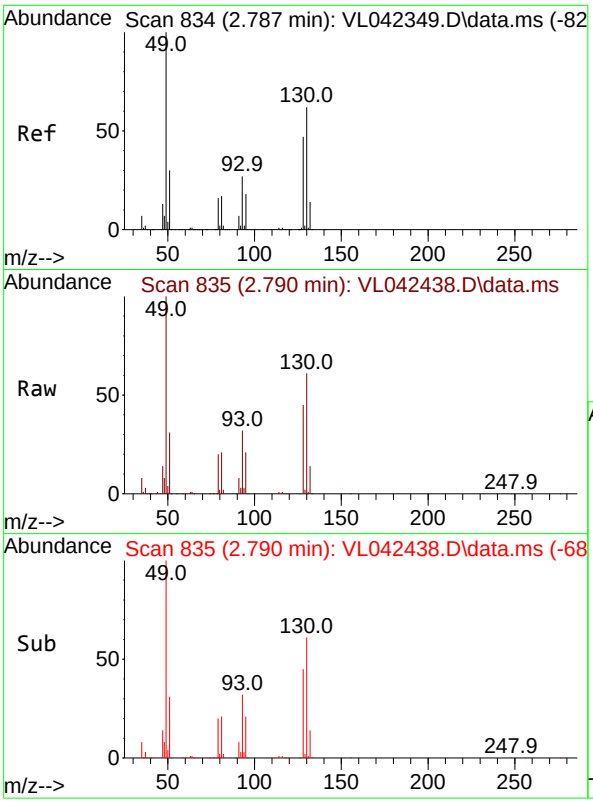
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042438.D
Acq On : 29 Apr 2025 10:08
Operator : SY/MD
Sample : VL0429ABS01
Misc : 400mL/MSVOA_L
ALS Vial : 1 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Quant Time: Apr 30 01:17:14 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



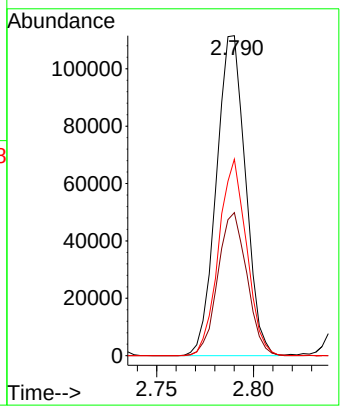


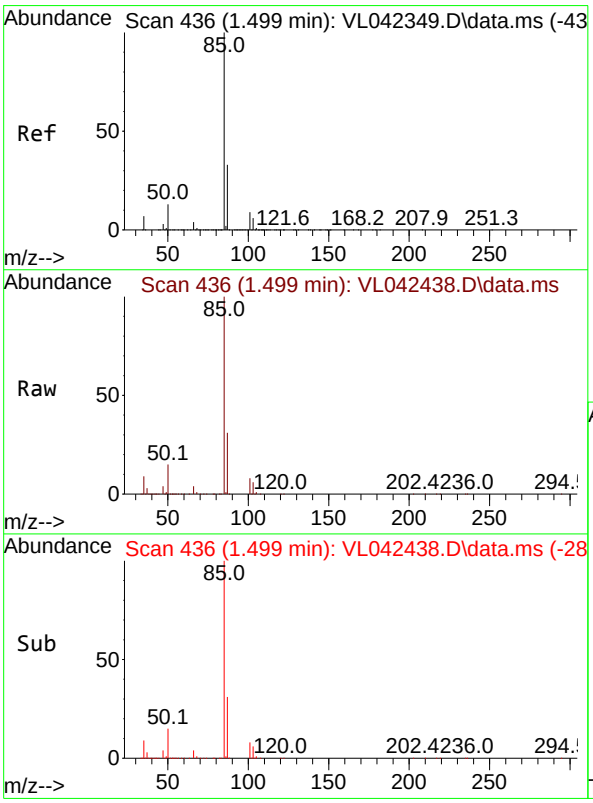
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.790 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 49 Resp: 116772

Ion	Ratio	Lower	Upper
49	100		
128	44.5	22.8	68.4
130	58.8	29.3	88.0

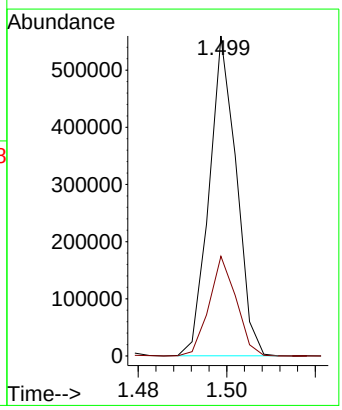


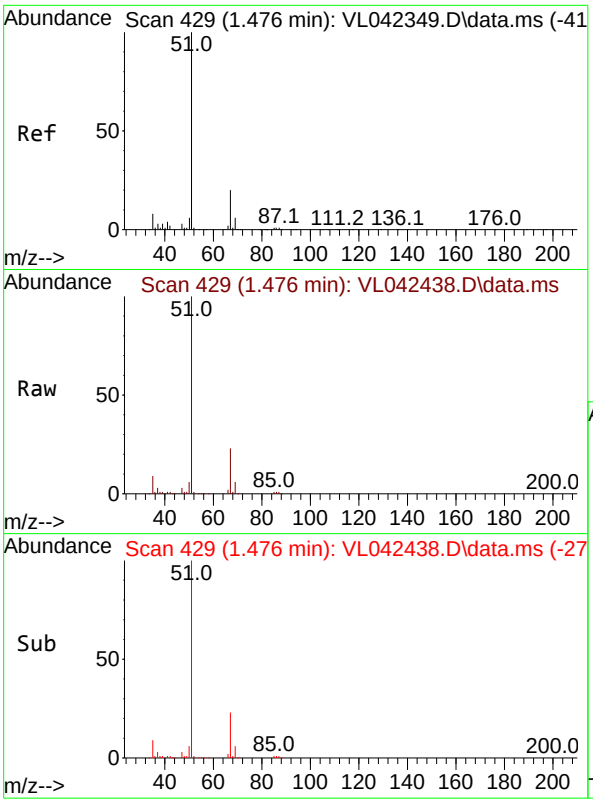


#2
Dichlorodifluoromethane
Concen: 11.562 ppbv
RT: 1.499 min Scan# 436
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 85 Resp: 238539

Ion	Ratio	Lower	Upper
85	100		
87	31.2	26.6	39.8



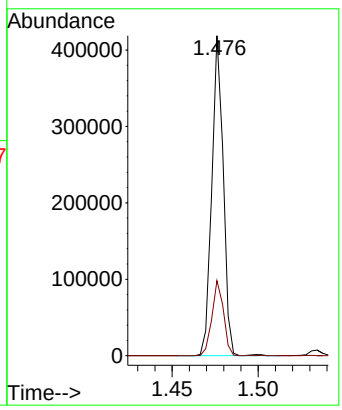


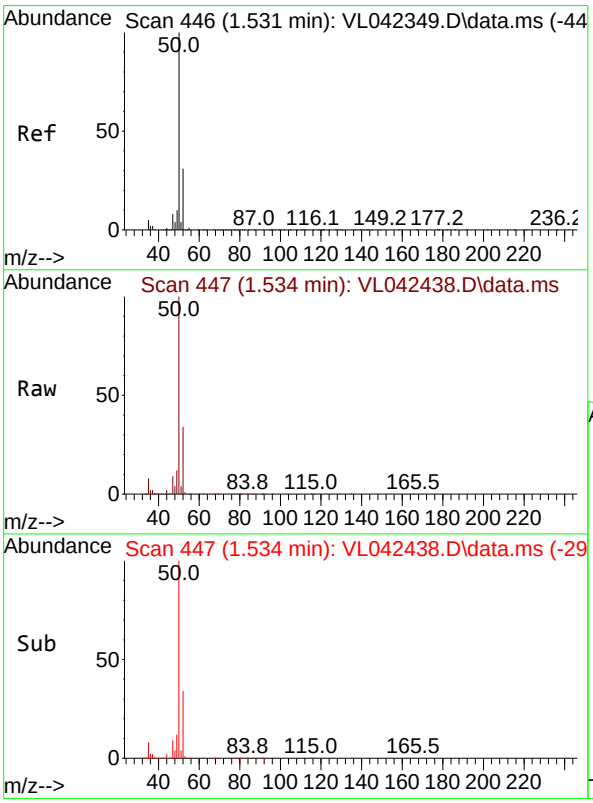
#3
Chlorodifluoromethane
Concen: 9.807 ppbv
RT: 1.476 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 51 Resp: 192670

Ion	Ratio	Lower	Upper
51	100		
67	23.8	16.2	24.4

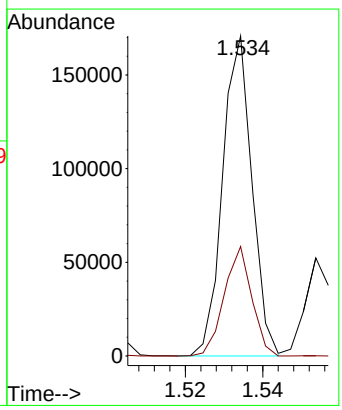


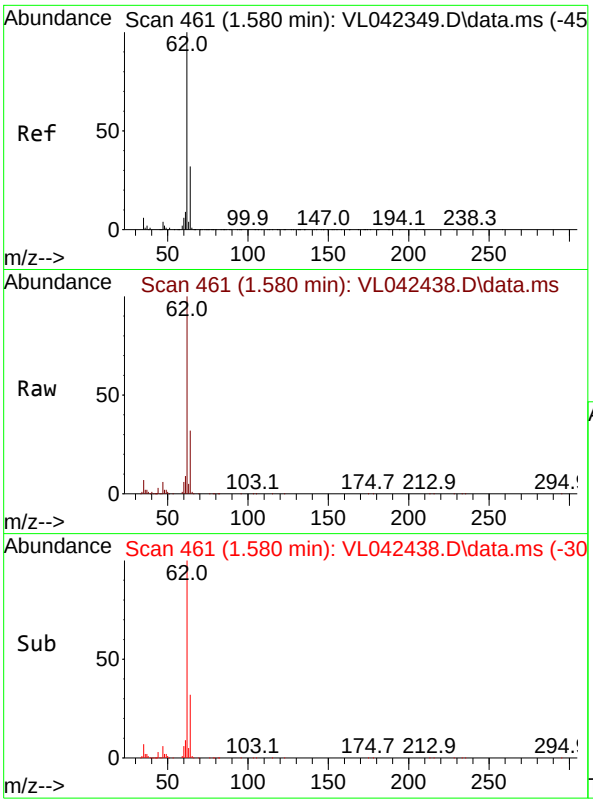


#4
Chloromethane
Concen: 11.003 ppbv
RT: 1.534 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 50 Resp: 89832

Ion	Ratio	Lower	Upper
50	100		
52	34.2	24.7	37.1



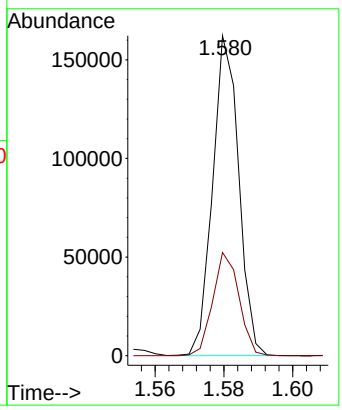


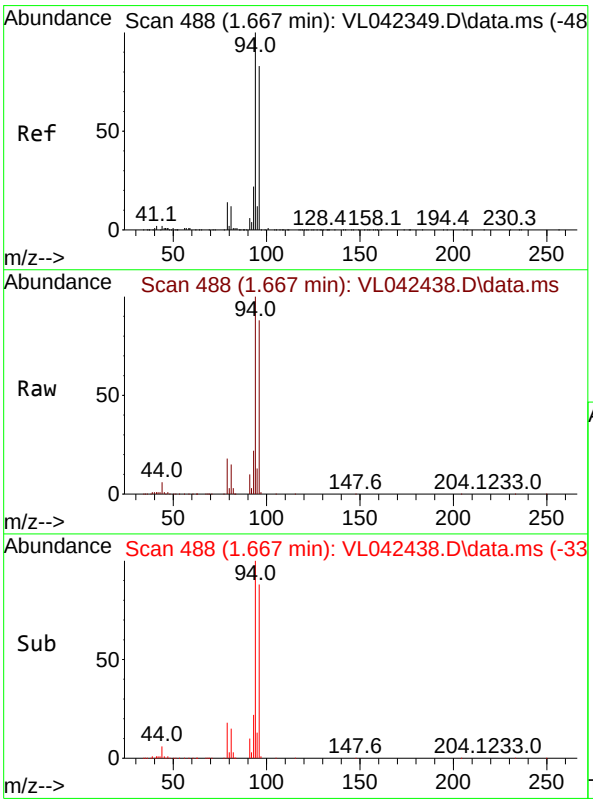
#5
Vinyl Chloride
Concen: 9.601 ppbv
RT: 1.580 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 62 Resp: 85334

Ion	Ratio	Lower	Upper
62	100		
64	32.3	25.4	38.0

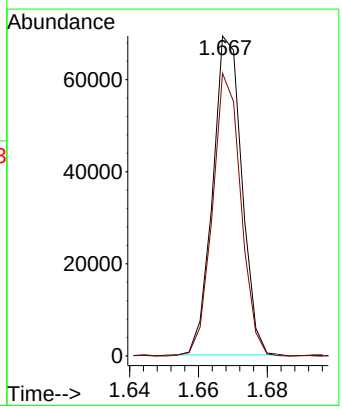


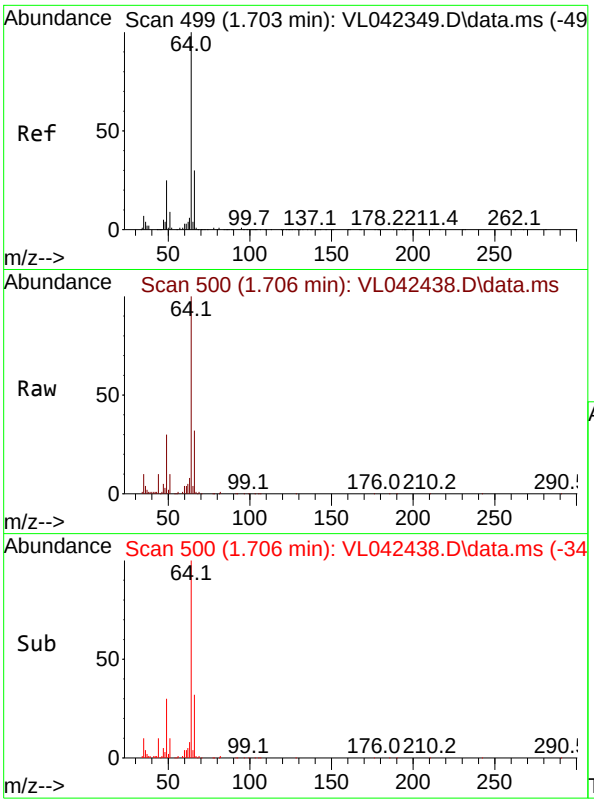


#6
Bromomethane
Concen: 10.676 ppbv
RT: 1.667 min Scan# 488
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 94 Resp: 40758

Ion	Ratio	Lower	Upper
94	100		
96	88.5	66.2	99.2



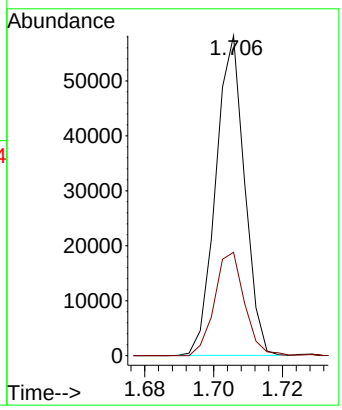


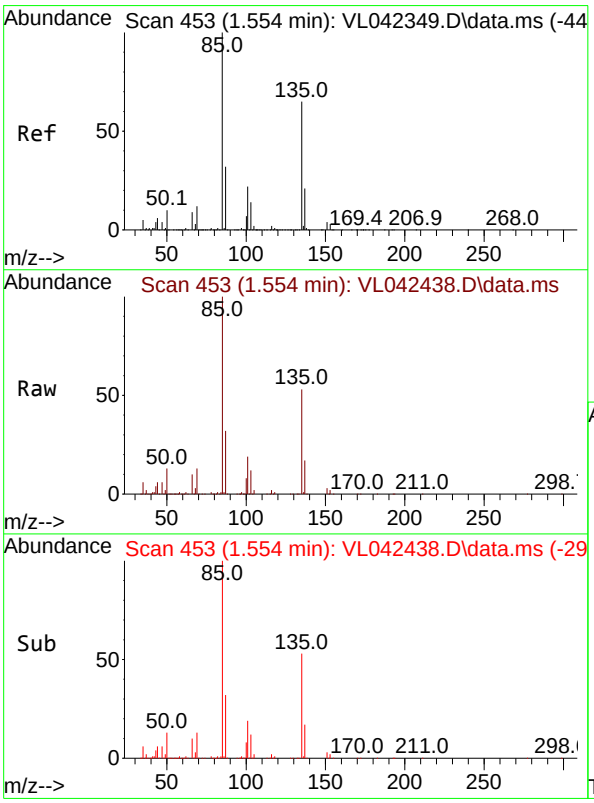
#7
Chloroethane
Concen: 10.502 ppbv
RT: 1.706 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 64 Resp: 33756

Ion	Ratio	Lower	Upper
64	100		
66	32.3	24.6	37.0

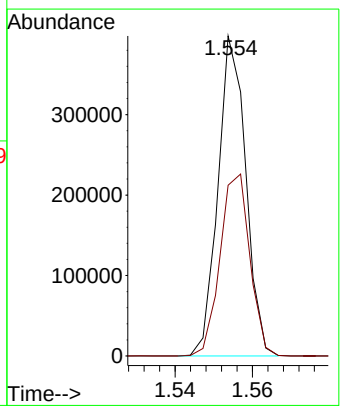


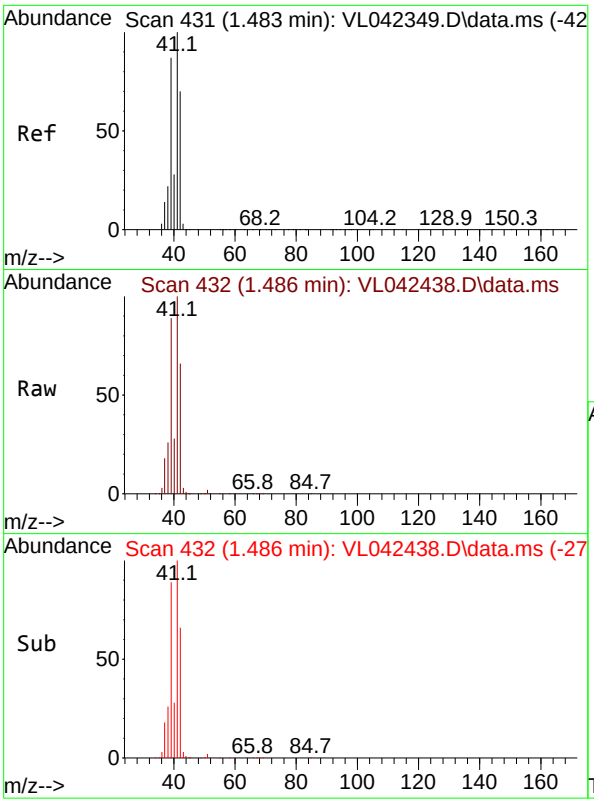


#8
Dichlorotetrafluoroethane
Concen: 11.184 ppbv
RT: 1.554 min Scan# 453
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 85 Resp: 198106

Ion	Ratio	Lower	Upper
85	100		
135	61.2	52.2	78.2



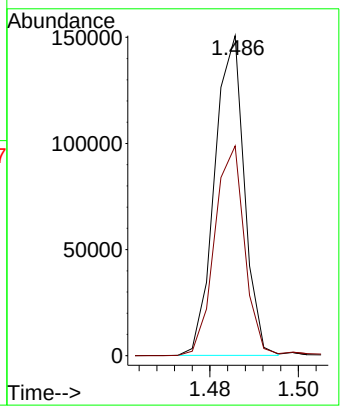


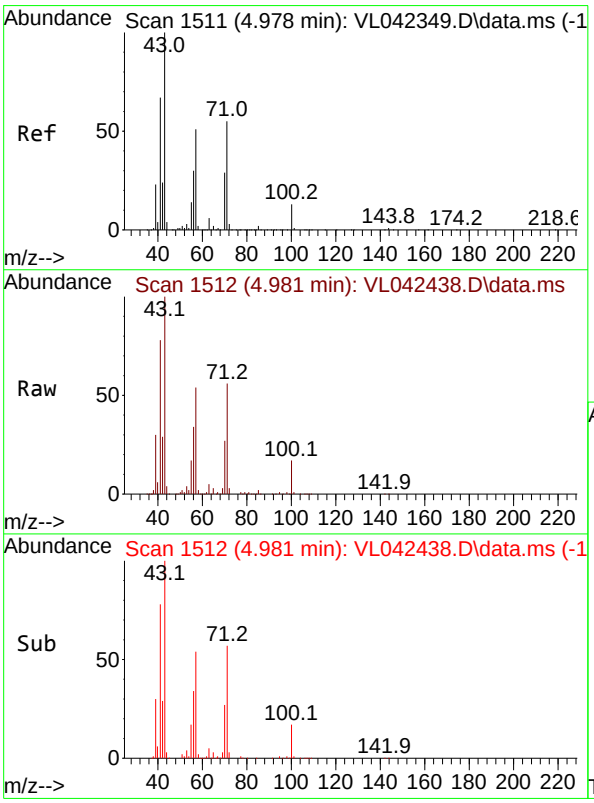
#9
Propene
Concen: 7.836 ppbv
RT: 1.486 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 41 Resp: 70111

Ion	Ratio	Lower	Upper
41	100		
42	67.7	56.2	84.4

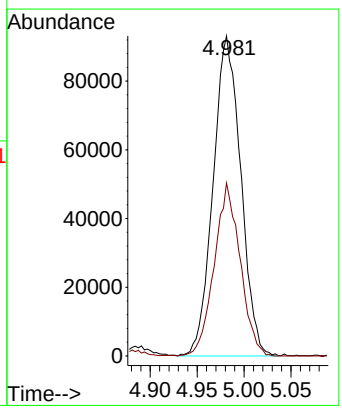


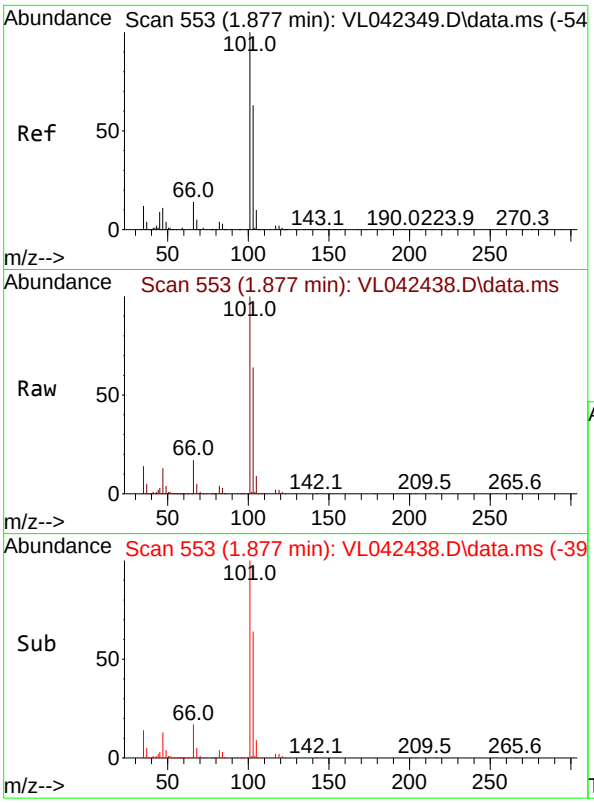


#10
Heptane
Concen: 7.582 ppbv
RT: 4.981 min Scan# 1512
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 190583

Ion	Ratio	Lower	Upper
43	100		
57	50.6	39.9	59.9



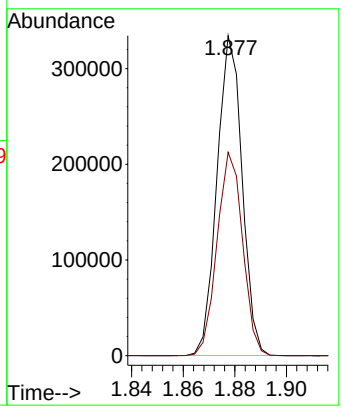


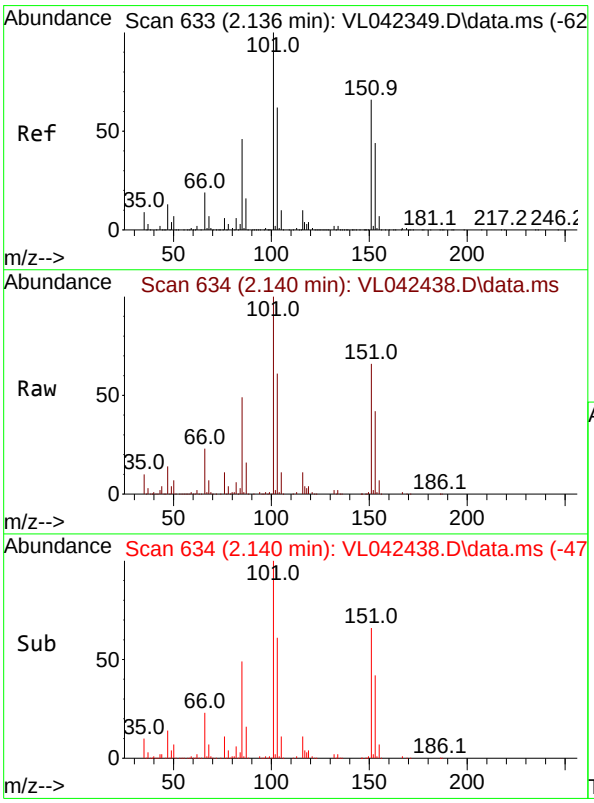
#11
Trichlorofluoromethane
Concen: 11.484 ppbv
RT: 1.877 min Scan# 5
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:101 Resp: 225308

Ion	Ratio	Lower	Upper
101	100		
103	63.6	50.1	75.1

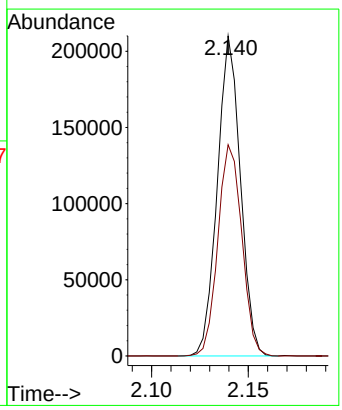


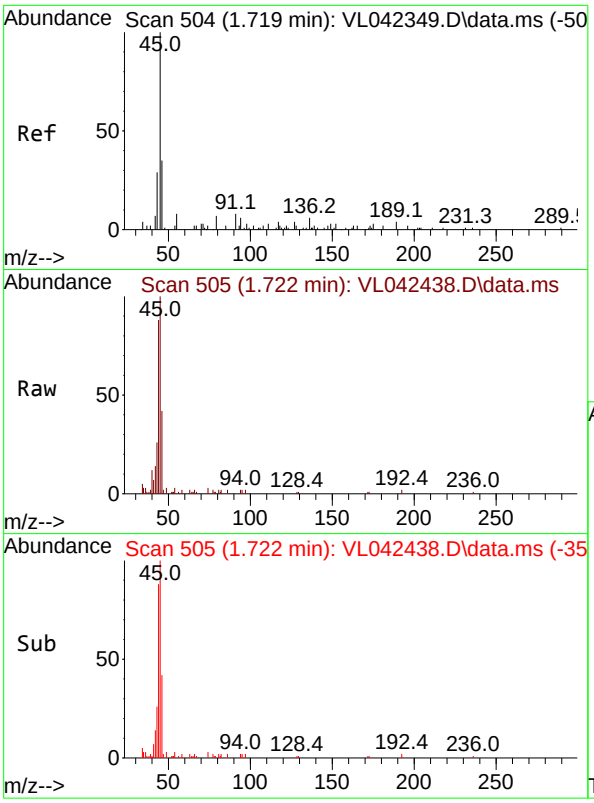


#12
1,1,2-Trichlorotrifluoroethane
Concen: 10.854 ppbv
RT: 2.140 min Scan# 634
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:101 Resp: 174111

Ion	Ratio	Lower	Upper
101	100		
151	68.5	57.0	85.6



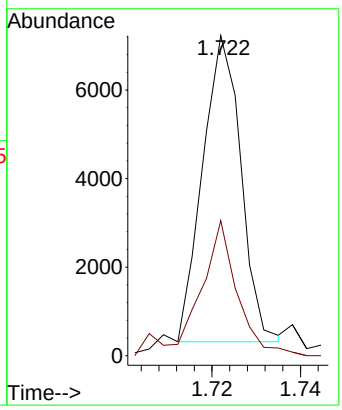


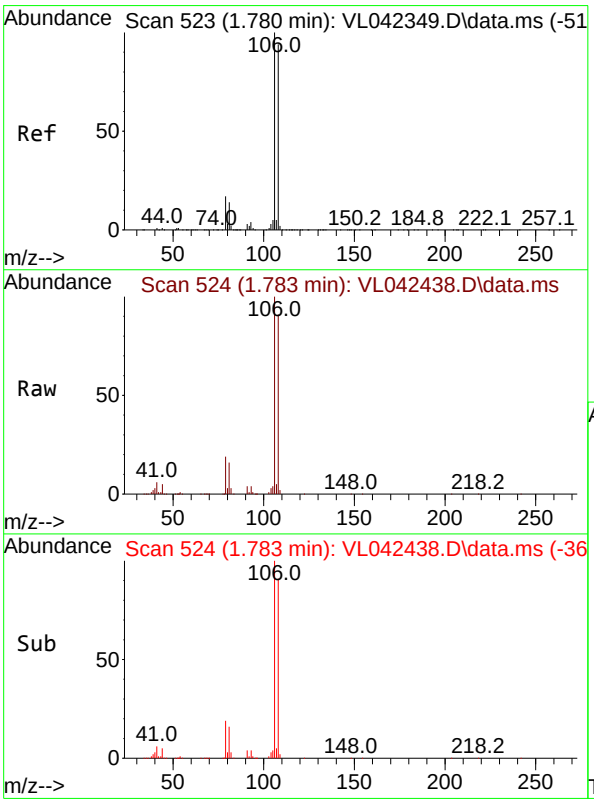
#13
Ethanol
Concen: 2.909 ppbv
RT: 1.722 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 45 Resp: 4137

Ion	Ratio	Lower	Upper
45	100		
46	47.5	21.9	87.7

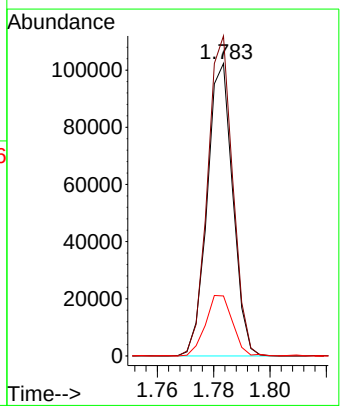


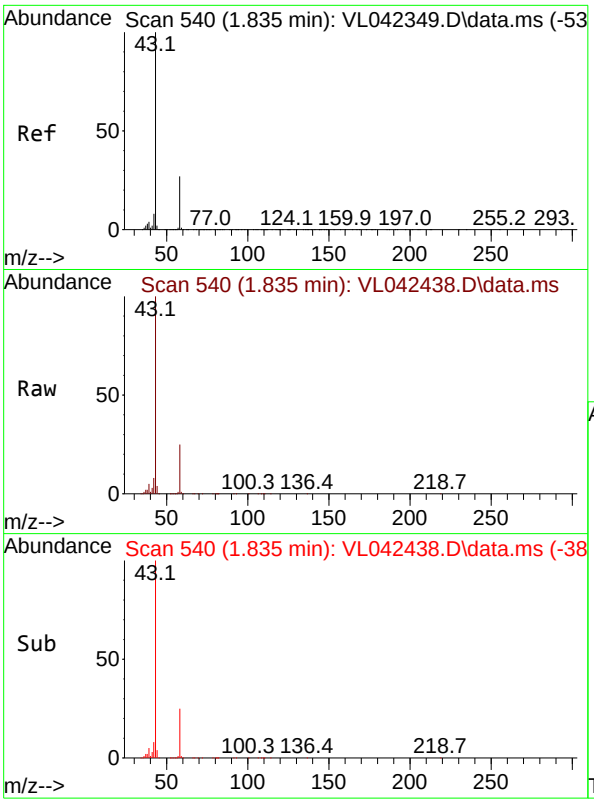


#14
Bromoethene
Concen: 10.674 ppbv
RT: 1.783 min Scan# 524
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:108 Resp: 64544

Ion	Ratio	Lower	Upper
108	100		
106	108.0	85.9	128.9
79	22.1	13.9	20.9#



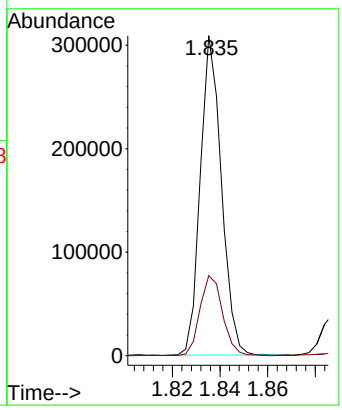


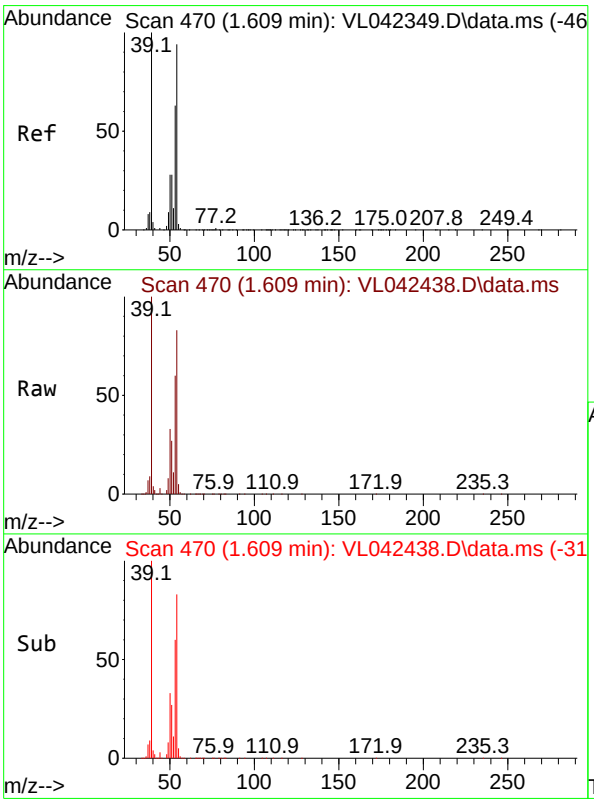
#15
Acetone
Concen: 9.910 ppbv
RT: 1.835 min Scan# 54
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 43 Resp: 189432

Ion	Ratio	Lower	Upper
43	100		
58	27.1	22.4	33.6

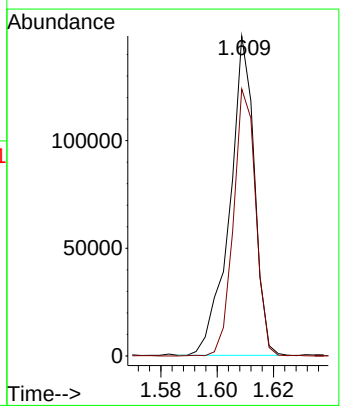


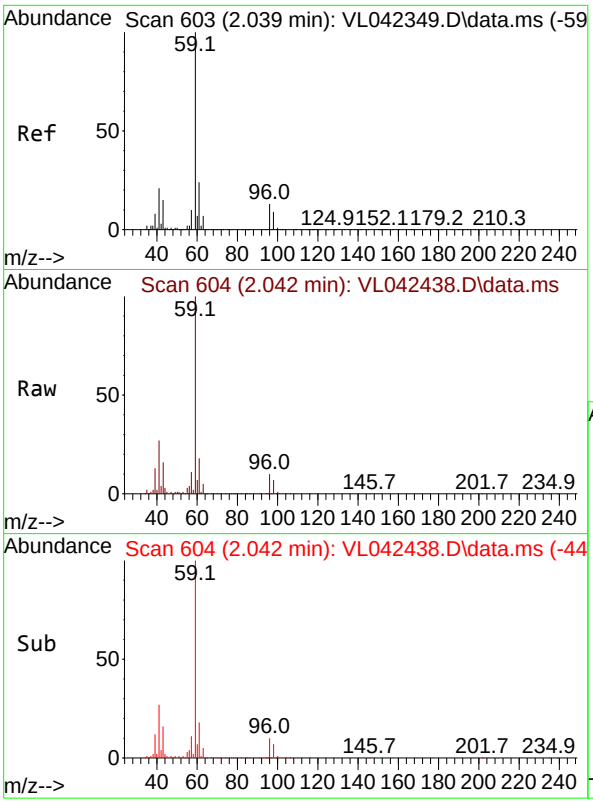


#16
1,3-Butadiene
Concen: 9.895 ppbv
RT: 1.609 min Scan# 470
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 39 Resp: 90473

Ion	Ratio	Lower	Upper
39	100		
54	75.1	64.9	97.3



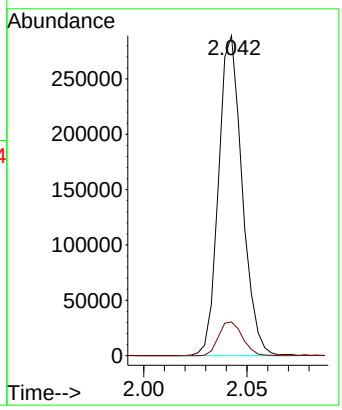


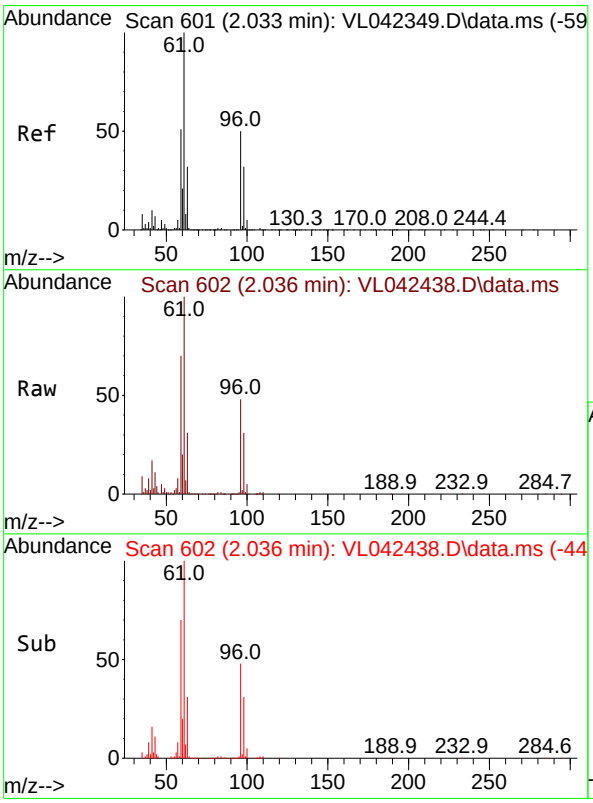
#17
tert-Butyl alcohol
Concen: 9.718 ppbv
RT: 2.042 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 59 Resp: 230217

Ion	Ratio	Lower	Upper
59	100		
57	10.7	8.7	13.1

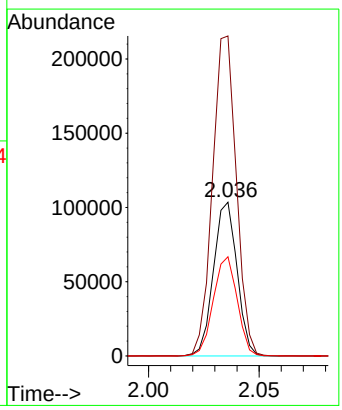


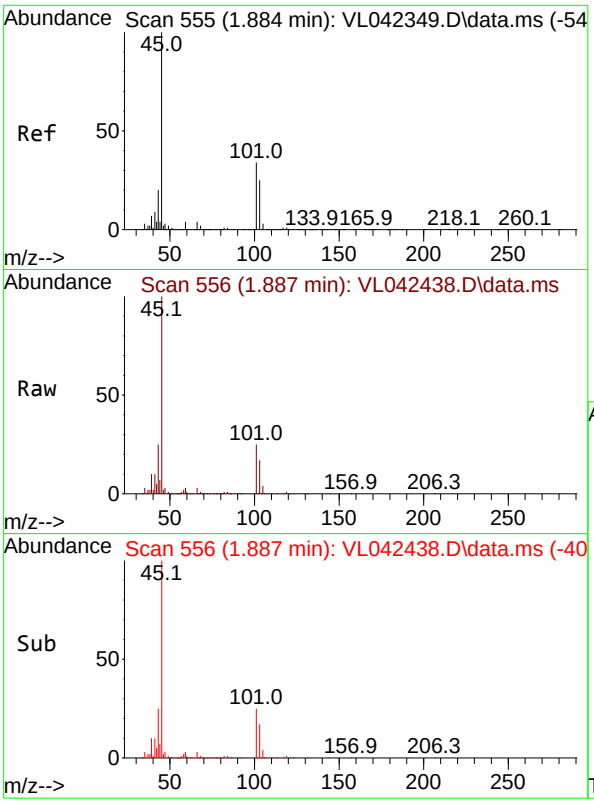


#18
1,1-Dichloroethene
Concen: 10.241 ppbv
RT: 2.036 min Scan# 602
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 96 Resp: 76749

Ion	Ratio	Lower	Upper
96	100		
61	208.1	160.2	240.2
98	64.5	51.0	76.4



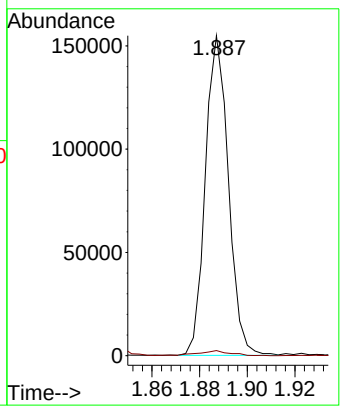


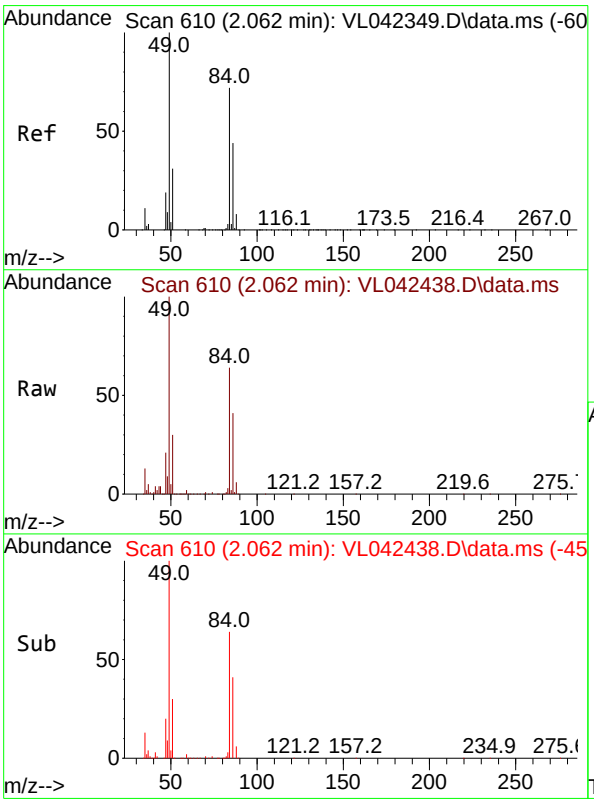
#19
Isopropyl Alcohol
Concen: 9.765 ppbv
RT: 1.887 min Scan# 5
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 45 Resp: 103692

Ion	Ratio	Lower	Upper
45	100		
58	2.2	34.5	51.7#

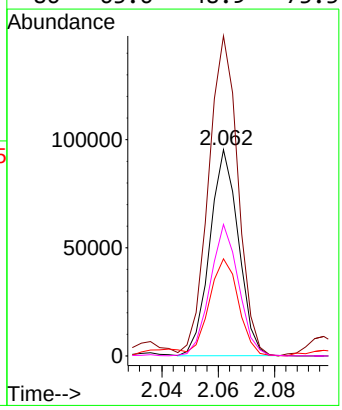


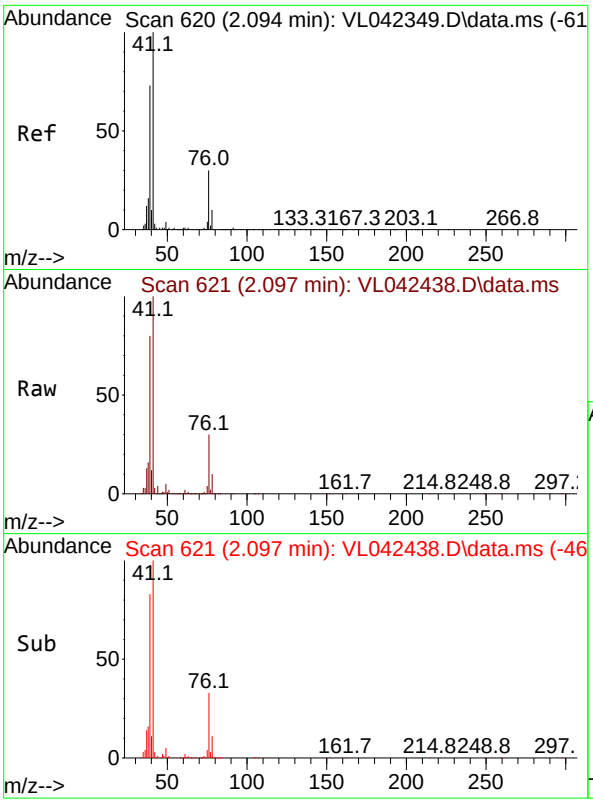


#20
Methylene Chloride
Concen: 8.989 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 84 Resp: 67298

Ion	Ratio	Lower	Upper
84	100		
49	155.2	111.6	167.4
51	47.0	35.1	52.7
86	63.6	48.9	73.3



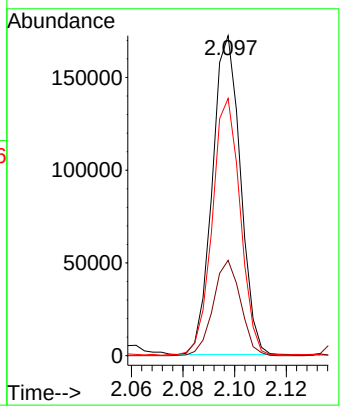


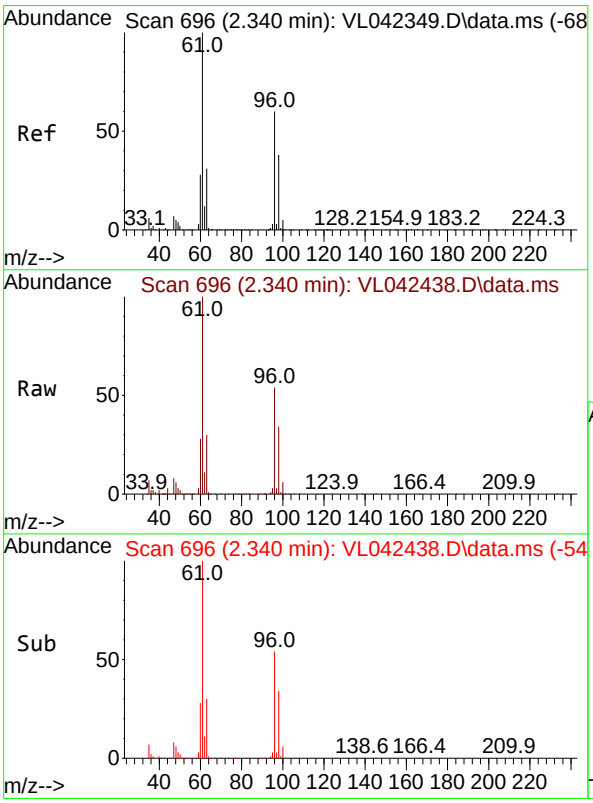
#21
Allyl Chloride
Concen: 9.851 ppbv
RT: 2.097 min Scan# 6
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 41 Resp: 130014

Ion	Ratio	Lower	Upper
41	100		
76	29.2	24.8	37.2
39	80.1	60.6	90.8

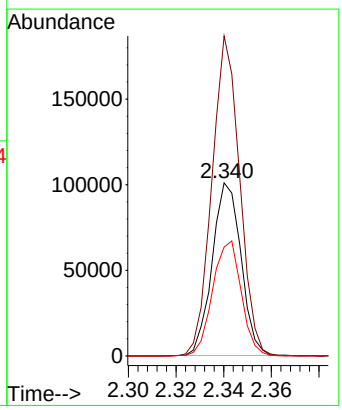


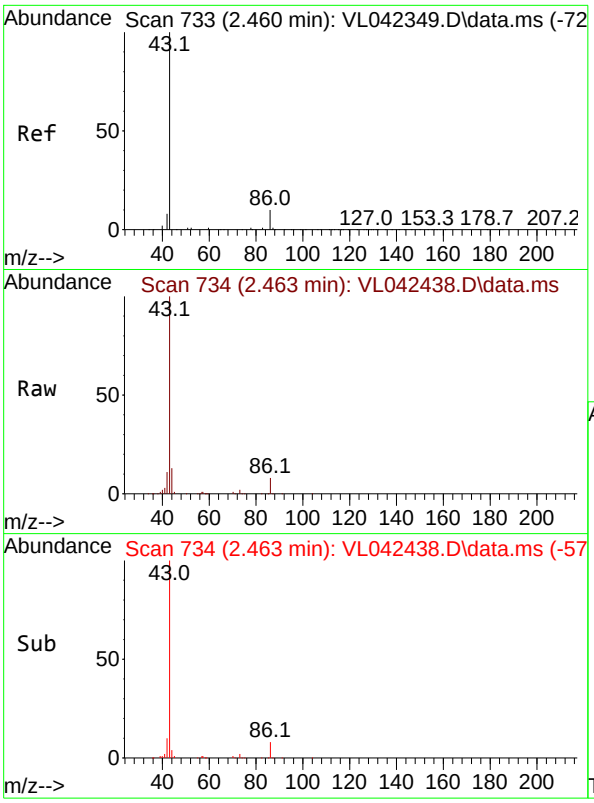


#22
trans-1,2-Dichloroethene
Concen: 9.938 ppbv
RT: 2.340 min Scan# 696
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 96 Resp: 84797

Ion	Ratio	Lower	Upper
96	100		
61	185.1	133.7	200.5
98	63.1	50.3	75.5



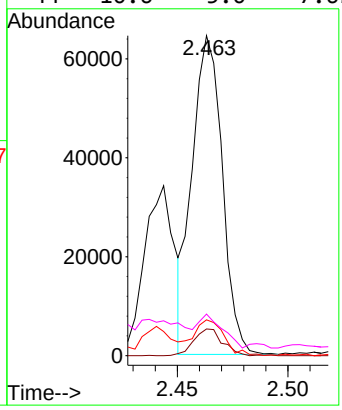


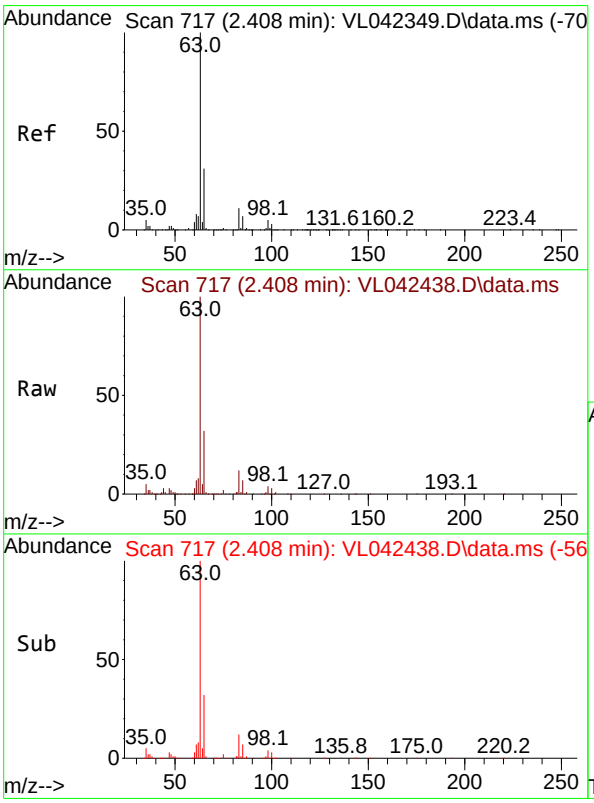
#23
Vinyl Acetate
Concen: 7.888 ppbv
RT: 2.463 min Scan# 7
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 43 Resp: 61036

Ion	Ratio	Lower	Upper
43	100		
86	8.4	6.5	9.7
42	11.0	7.8	11.8
44	10.6	5.0	7.6#

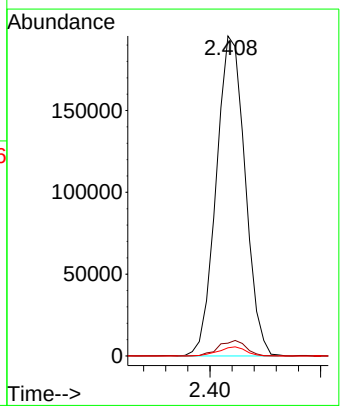


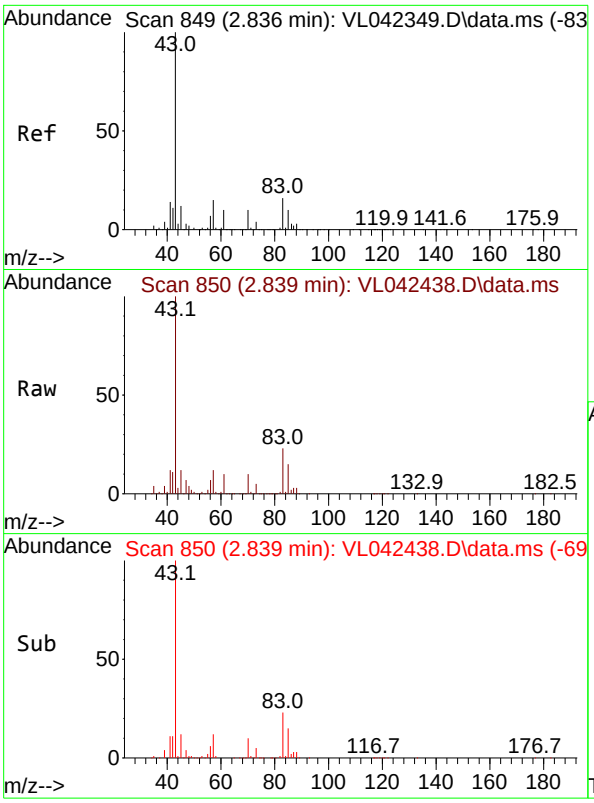


#24
1,1-Dichloroethane
Concen: 10.934 ppbv
RT: 2.408 min Scan# 717
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 63 Resp: 177233

Ion	Ratio	Lower	Upper
63	100		
98	4.0	2.3	6.8
100	2.6	1.6	4.8



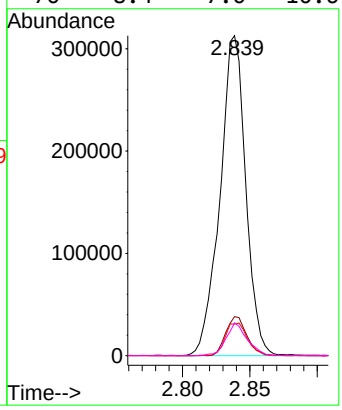


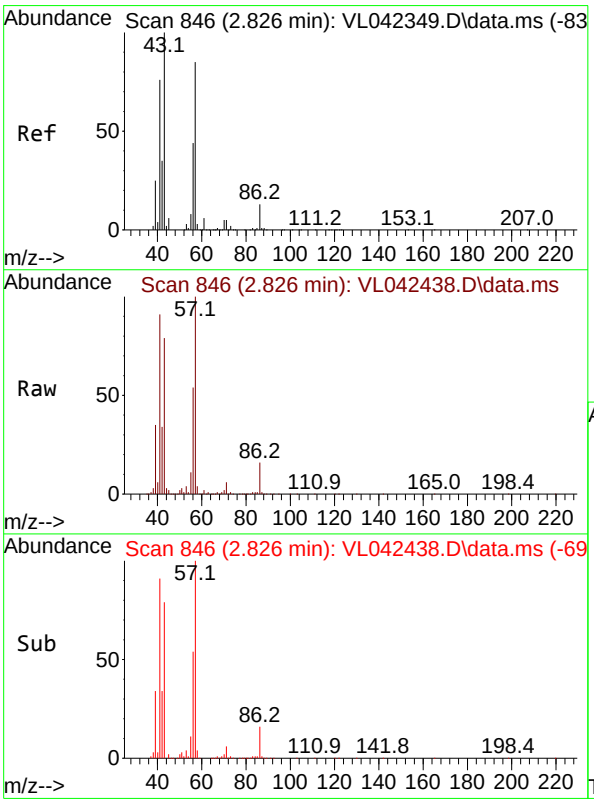
#25
Ethyl Acetate
Concen: 8.836 ppbv
RT: 2.839 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 43 Resp: 416465

Ion	Ratio	Lower	Upper
43	100		
45	10.0	8.3	12.5
61	8.8	7.3	10.9
70	8.4	7.0	10.6

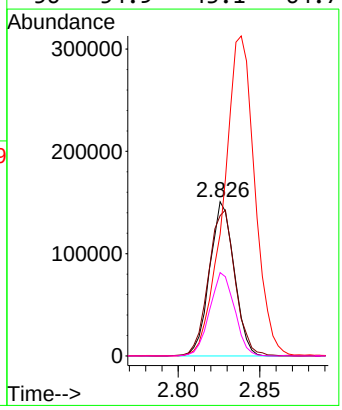


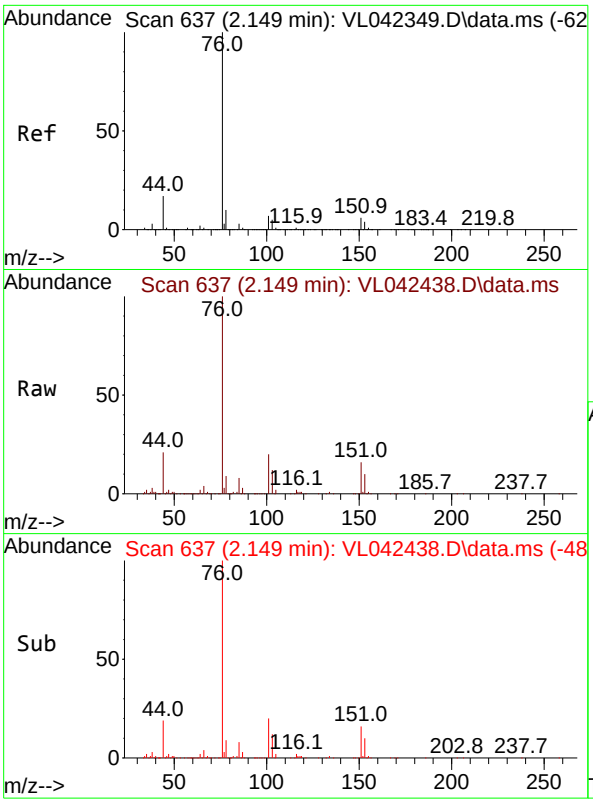


#26
Hexane
Concen: 8.260 ppbv
RT: 2.826 min Scan# 846
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 57 Resp: 157544

Ion	Ratio	Lower	Upper
57	100		
41	103.2	77.9	116.9
43	265.6	208.4	312.6
56	54.9	43.1	64.7



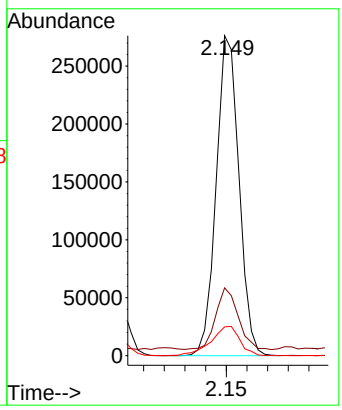


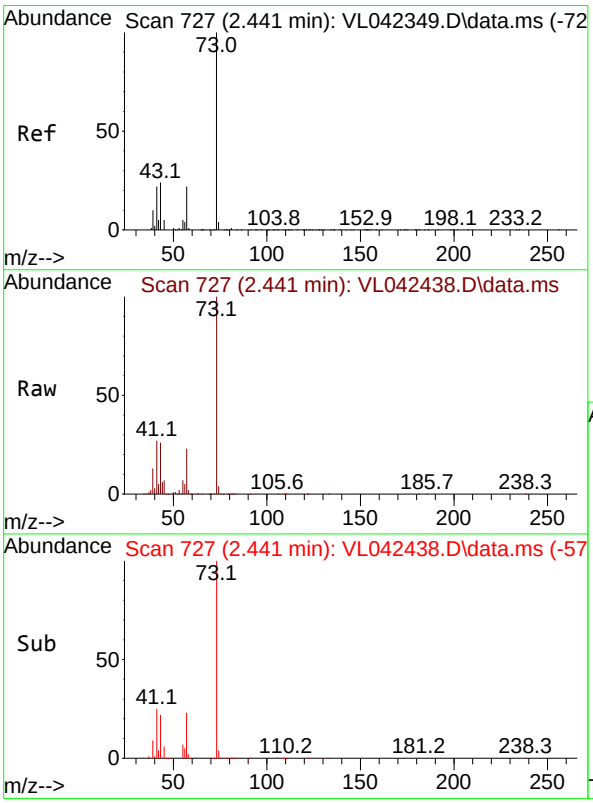
#27
Carbon Disulfide
Concen: 10.372 ppbv
RT: 2.149 min Scan# 6
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 76 Resp: 211824

Ion	Ratio	Lower	Upper
76	100		
44	19.8	15.5	23.3
78	11.7	9.3	13.9

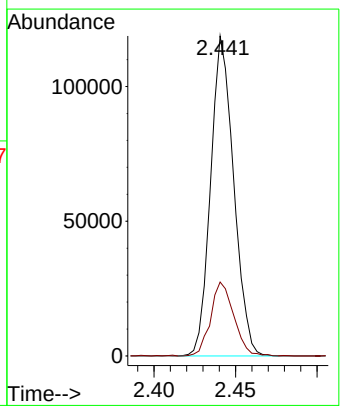


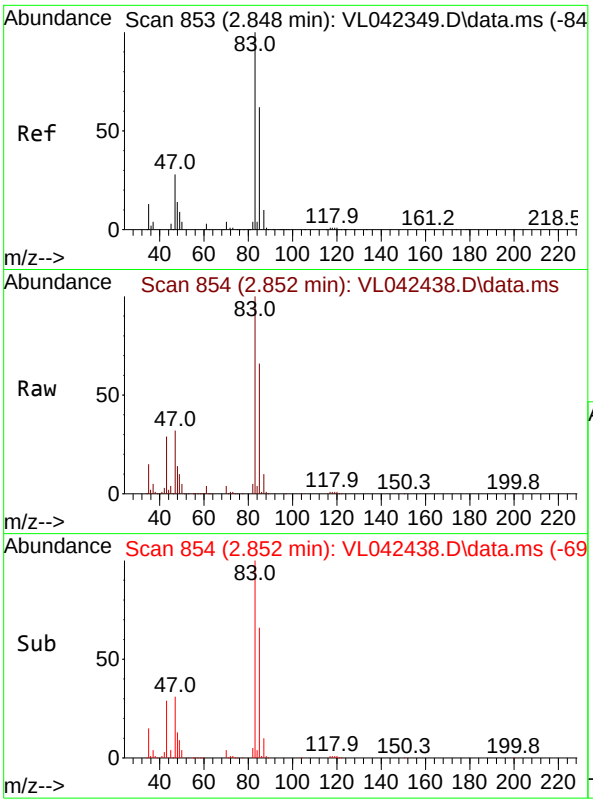


#28
Methyl tert-Butyl Ether
Concen: 9.344 ppbv
RT: 2.441 min Scan# 727
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 73 Resp: 116769

Ion	Ratio	Lower	Upper
73	100		
57	23.4	21.3	31.9



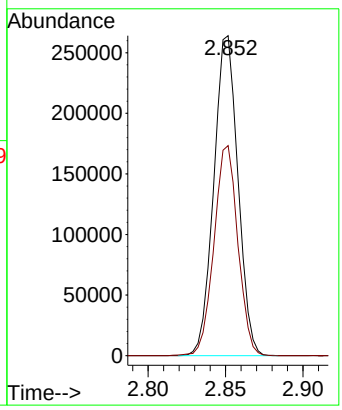


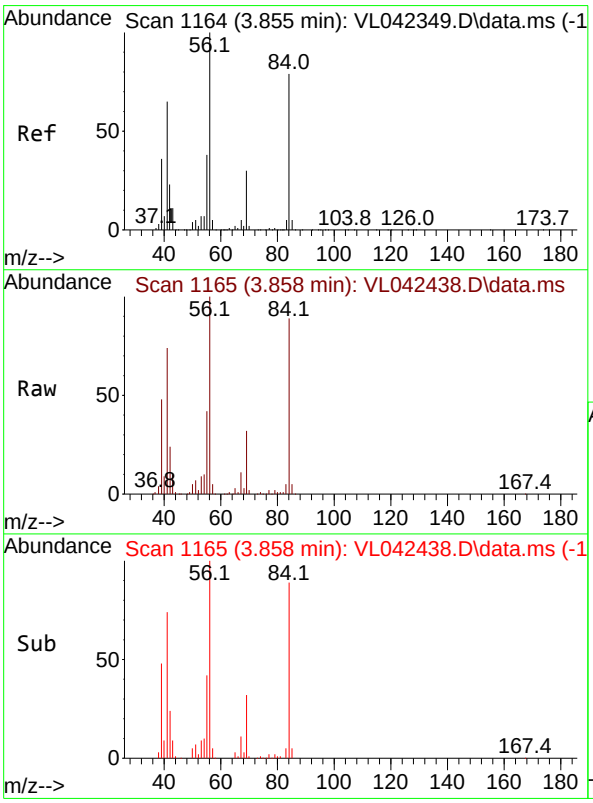
#29
Chloroform
Concen: 10.623 ppbv
RT: 2.852 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 83 Resp: 286397

Ion	Ratio	Lower	Upper
83	100		
85	65.6	50.0	75.0

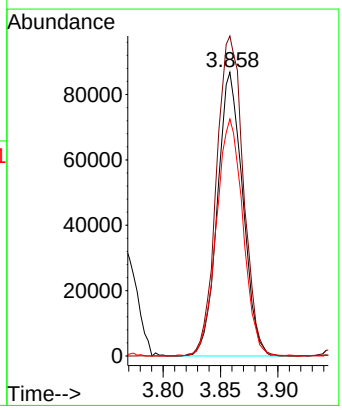


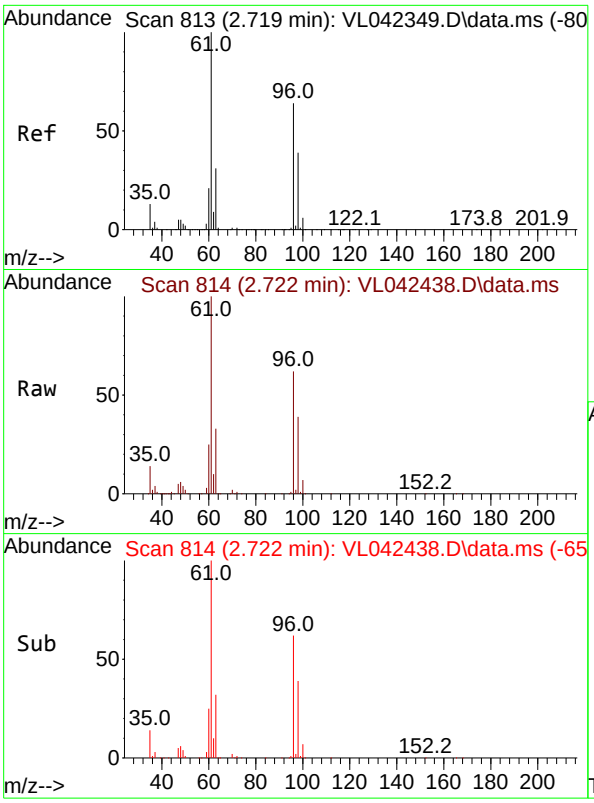


#30
Cyclohexane
Concen: 8.601 ppbv
RT: 3.858 min Scan# 1165
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 84 Resp: 132615

Ion	Ratio	Lower	Upper
84	100		
56	119.9	101.0	151.4
41	88.0	67.4	101.0



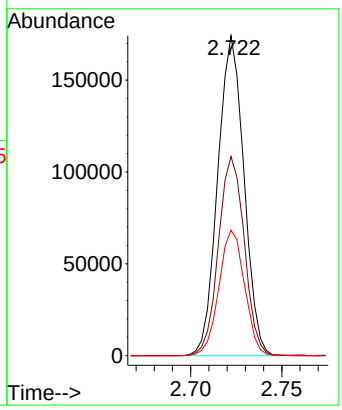


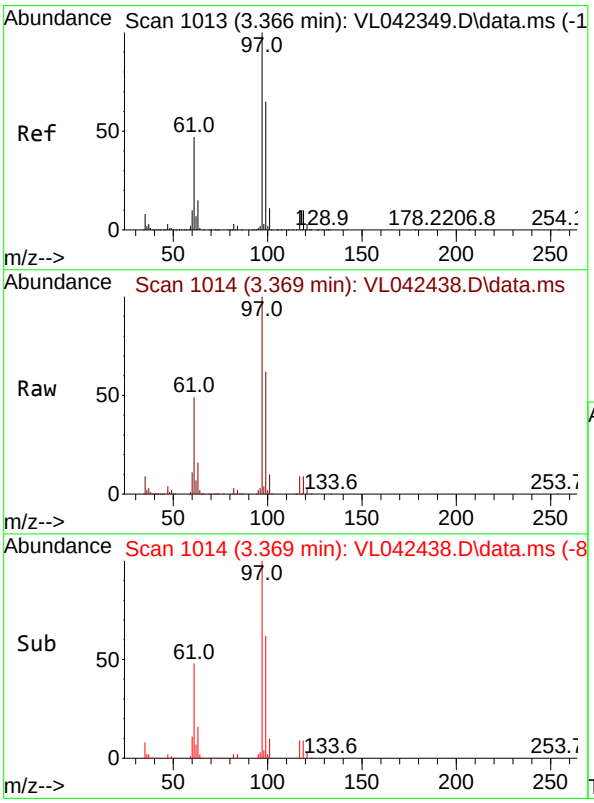
#31
cis-1,2-Dichloroethene
Concen: 9.613 ppbv
RT: 2.722 min Scan# 8
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 61 Resp: 174328

Ion	Ratio	Lower	Upper
61	100		
96	62.3	50.8	76.2
98	39.2	30.9	46.3

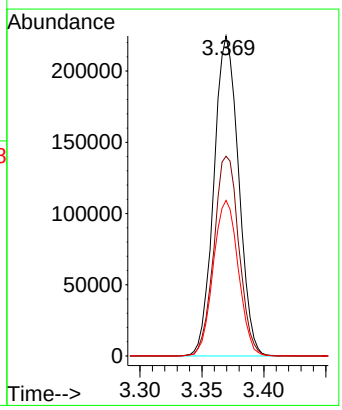


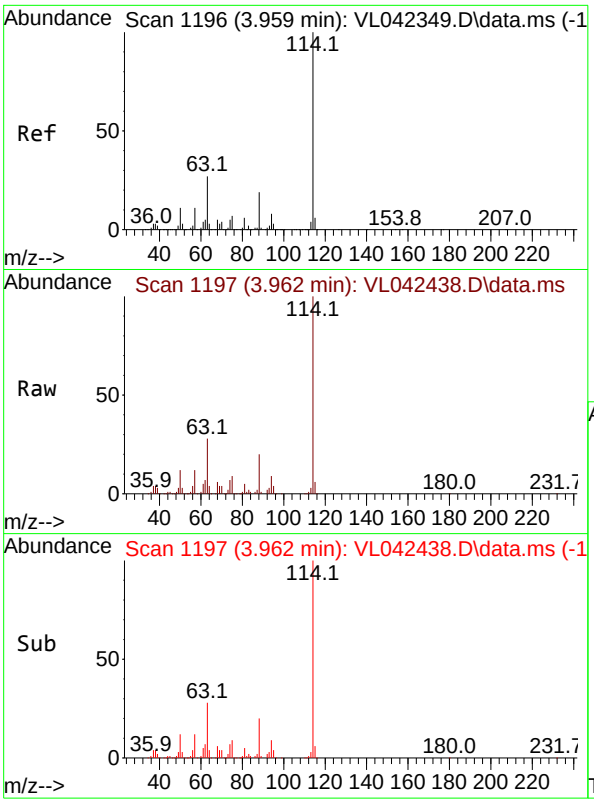


#32
1,1,1-Trichloroethane
Concen: 10.294 ppbv
RT: 3.369 min Scan# 1014
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 97 Resp: 312429

Ion	Ratio	Lower	Upper
97	100		
99	63.2	51.0	76.4
61	49.4	38.8	58.2



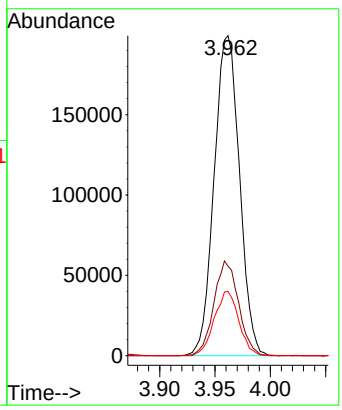


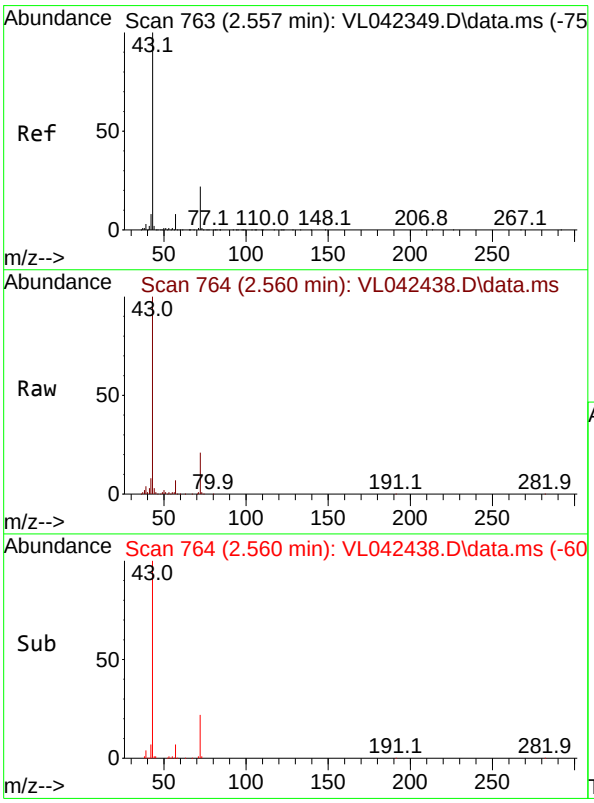
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.962 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:114 Resp: 317590

Ion	Ratio	Lower	Upper
114	100		
63	28.7	21.8	32.6
88	19.4	15.5	23.3

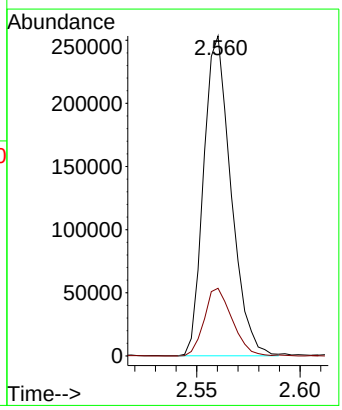


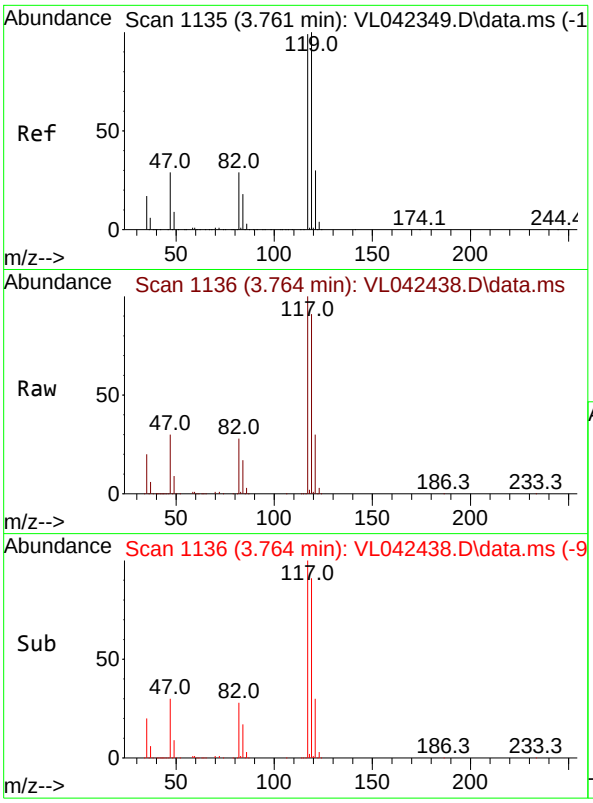


#34
2-Butanone
Concen: 9.278 ppbv
RT: 2.560 min Scan# 764
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 233037

Ion	Ratio	Lower	Upper
43	100		
72	21.7	18.2	27.2



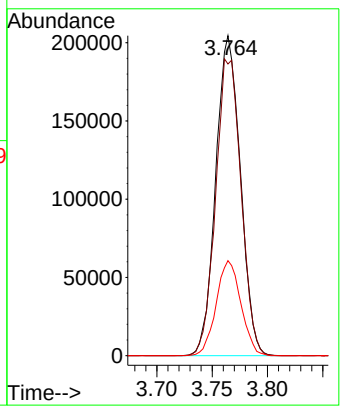


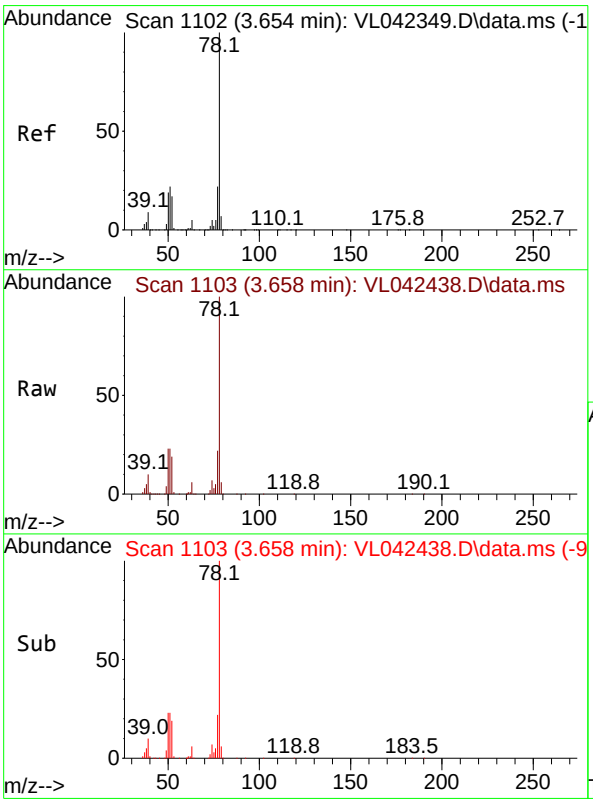
#35
Carbon Tetrachloride
Concen: 11.036 ppbv
RT: 3.764 min Scan# 11
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:117 Resp: 317207

Ion	Ratio	Lower	Upper
117	100		
119	91.1	80.5	120.7
121	29.7	24.2	36.2

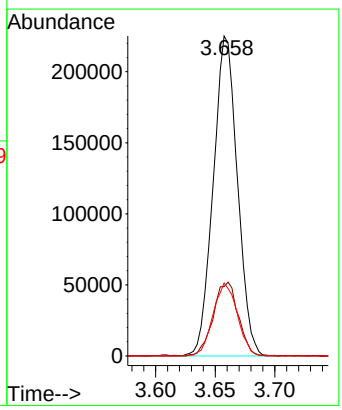


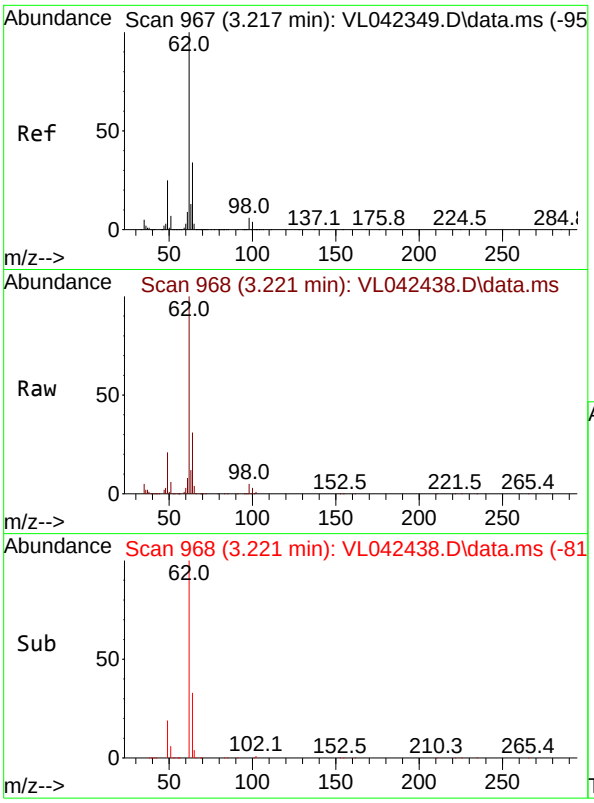


#36
Benzene
Concen: 9.264 ppbv
RT: 3.658 min Scan# 1103
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 78 Resp: 317350

Ion	Ratio	Lower	Upper
78	100		
77	21.7	17.4	26.0
50	22.8	15.5	23.3



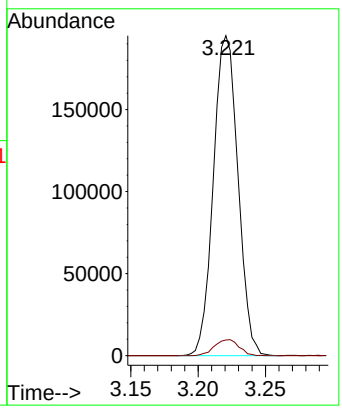


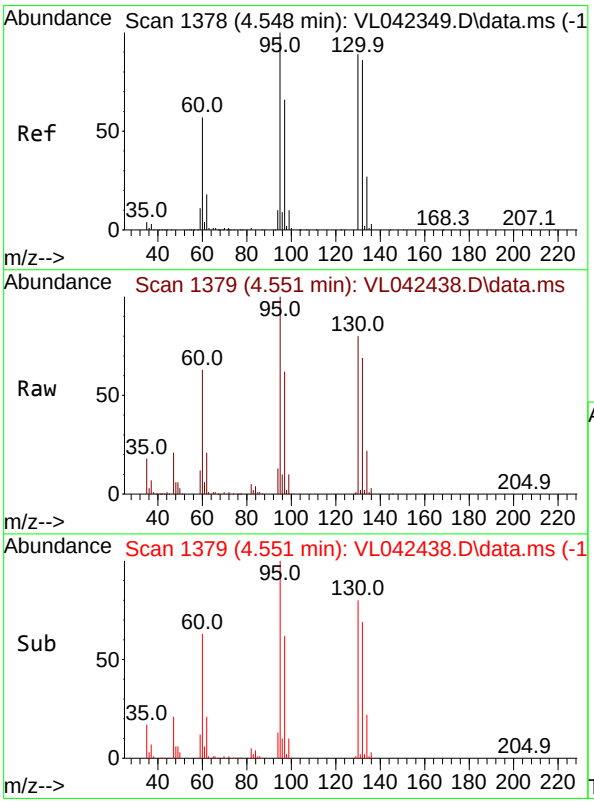
#37
1,2-Dichloroethane
Concen: 12.035 ppbv
RT: 3.221 min Scan# 9
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 62 Resp: 247446

Ion	Ratio	Lower	Upper
62	100		
98	5.0	5.1	7.7#

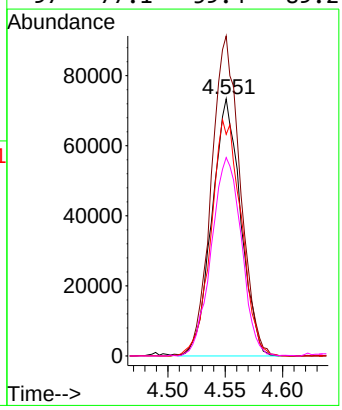


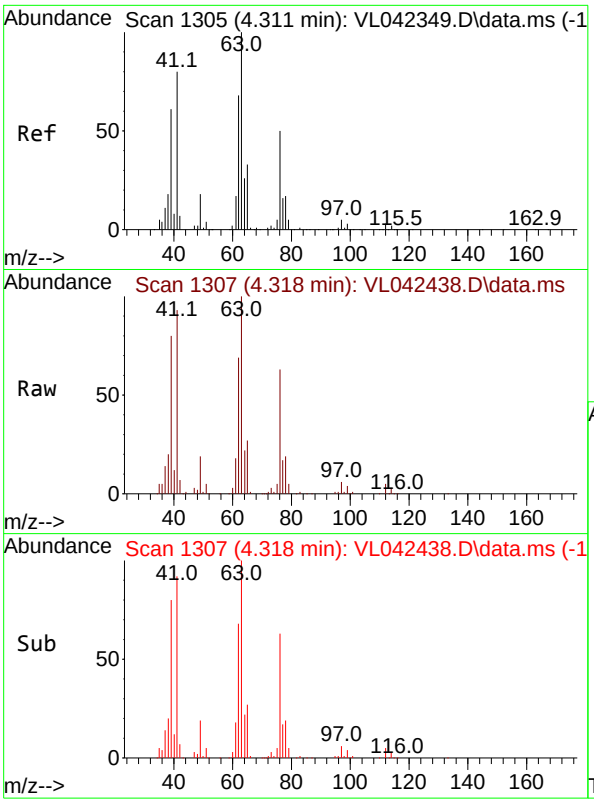


#38
Trichloroethene
Concen: 8.523 ppbv
RT: 4.551 min Scan# 1379
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:130 Resp: 127601

Ion	Ratio	Lower	Upper
130	100		
95	124.2	89.8	134.6
132	86.0	77.7	116.5
97	77.1	59.4	89.2



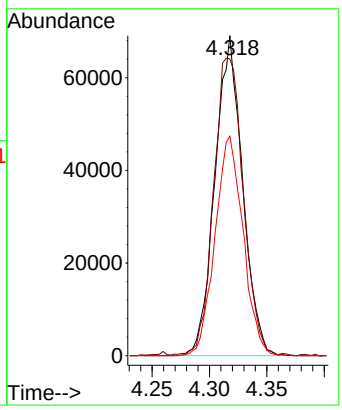


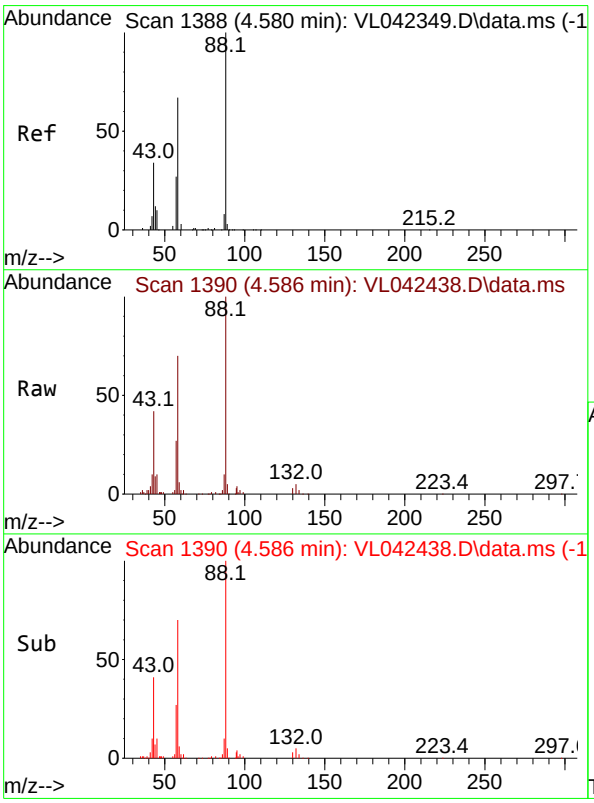
#39
1,2-Dichloropropane
Concen: 9.044 ppbv
RT: 4.318 min Scan# 1
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 63 Resp: 115449

Ion	Ratio	Lower	Upper
63	100		
41	92.4	64.2	96.2
62	68.4	54.3	81.5

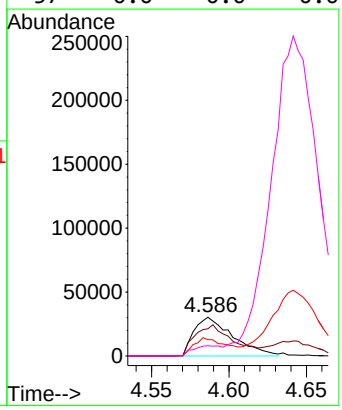


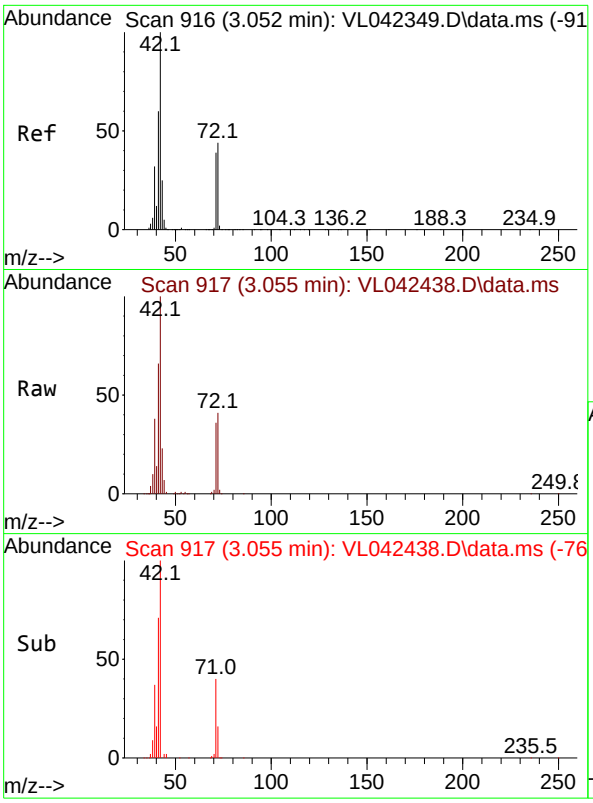


#40
1,4-Dioxane
Concen: 7.529 ppbv
RT: 4.586 min Scan# 1390
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 88 Resp: 52820

Ion	Ratio	Lower	Upper
88	100		
58	78.5	61.4	92.0
43	41.9	23.2	34.8#
57	0.0	0.0	0.0



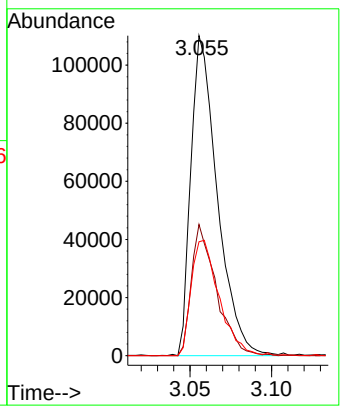


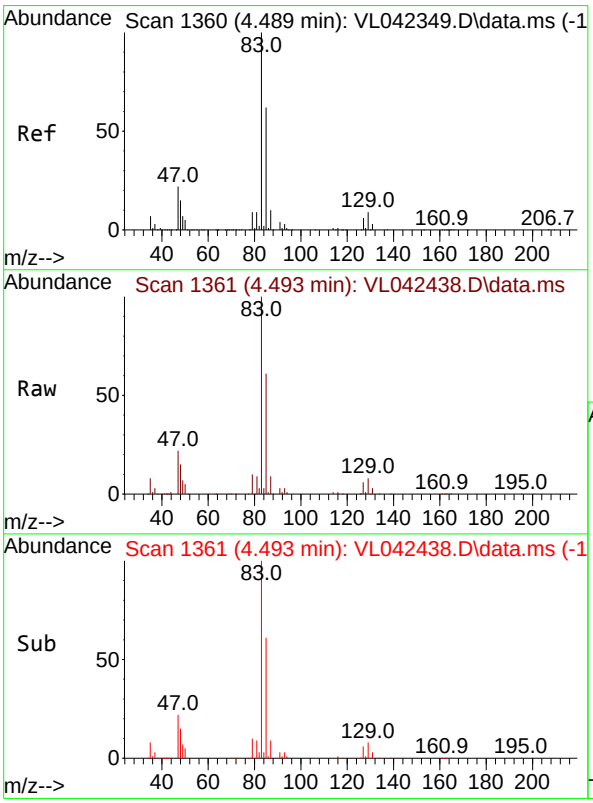
#41
Tetrahydrofuran
Concen: 8.471 ppbv
RT: 3.055 min Scan# 91
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 42 Resp: 124059

Ion	Ratio	Lower	Upper
42	100		
72	38.9	32.3	48.5
71	38.4	31.4	47.2

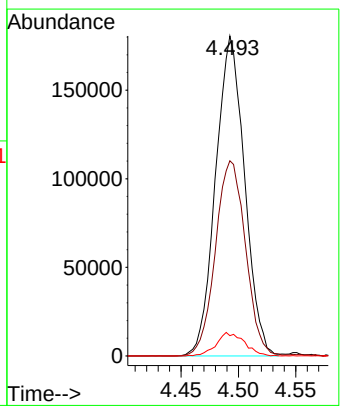


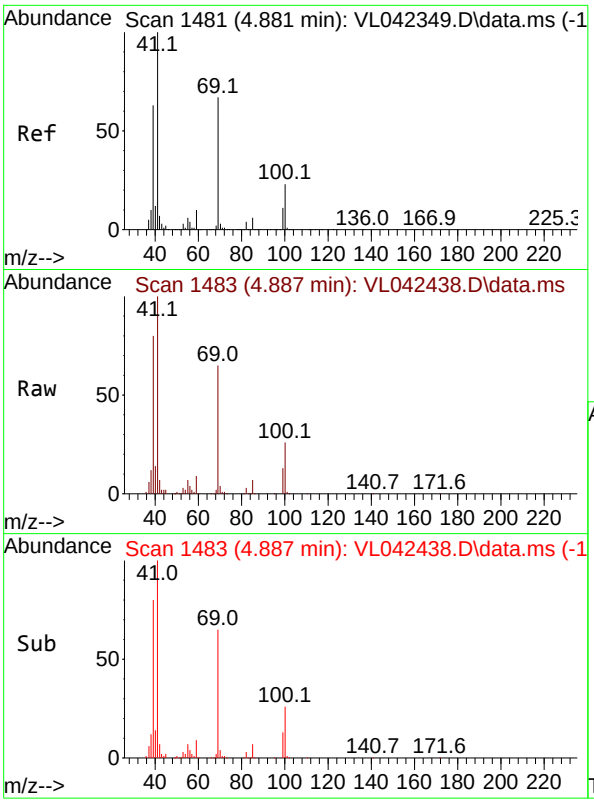


#42
Bromodichloromethane
Concen: 11.088 ppbv
RT: 4.493 min Scan# 1361
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 83 Resp: 317253

Ion	Ratio	Lower	Upper
83	100		
85	61.0	49.7	74.5
127	6.4	5.1	7.7



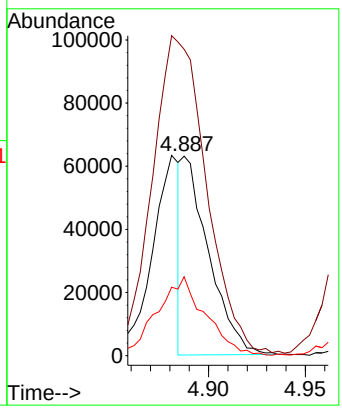


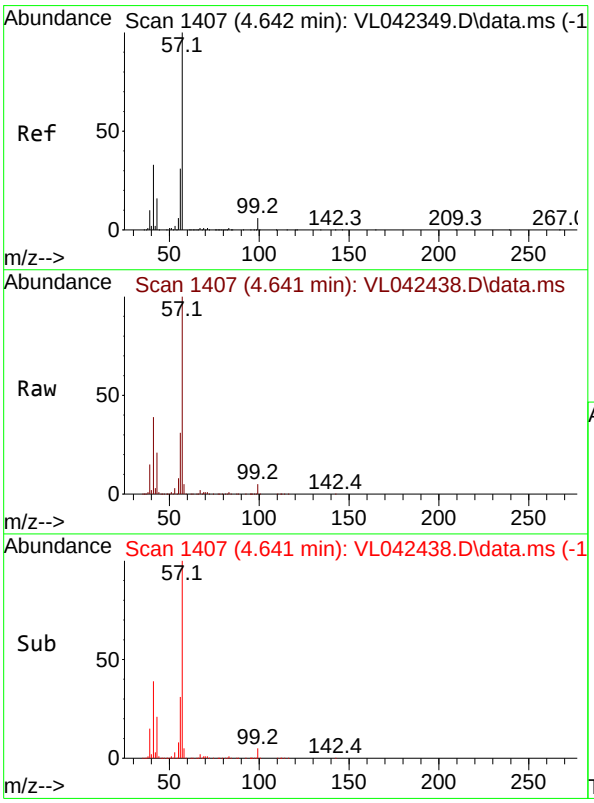
#43
Methyl Methacrylate
Concen: 3.961 ppbv
RT: 4.887 min Scan# 14
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 69 Resp: 61150

Ion	Ratio	Lower	Upper
69	100		
41	0.0	118.6	177.8#
100	71.6	28.2	42.2#

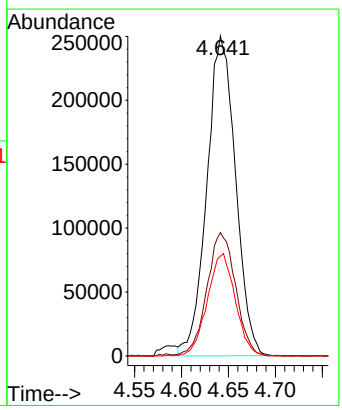


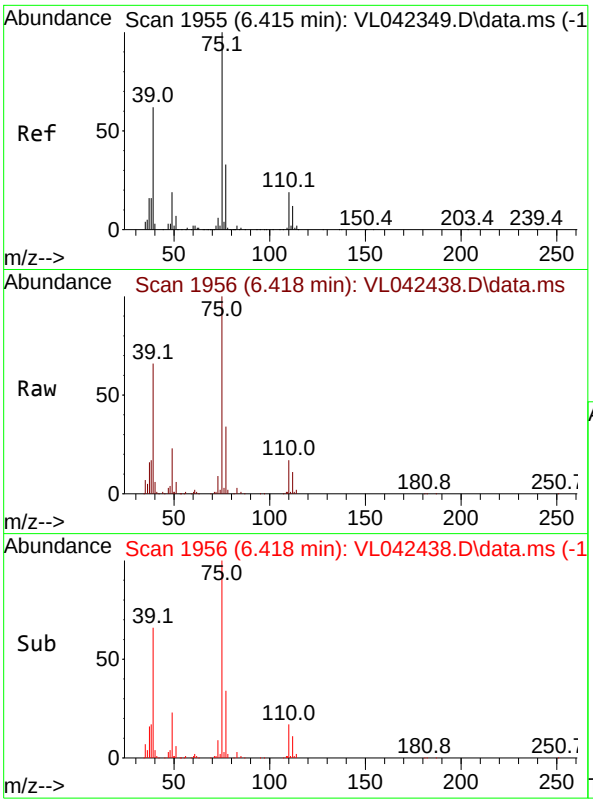


#44
2,2,4-Trimethylpentane
Concen: 8.983 ppbv
RT: 4.641 min Scan# 1407
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 57 Resp: 531439

Ion	Ratio	Lower	Upper
57	100		
41	39.1	27.2	40.8
56	31.1	25.7	38.5



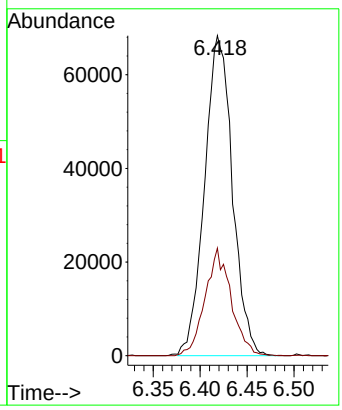


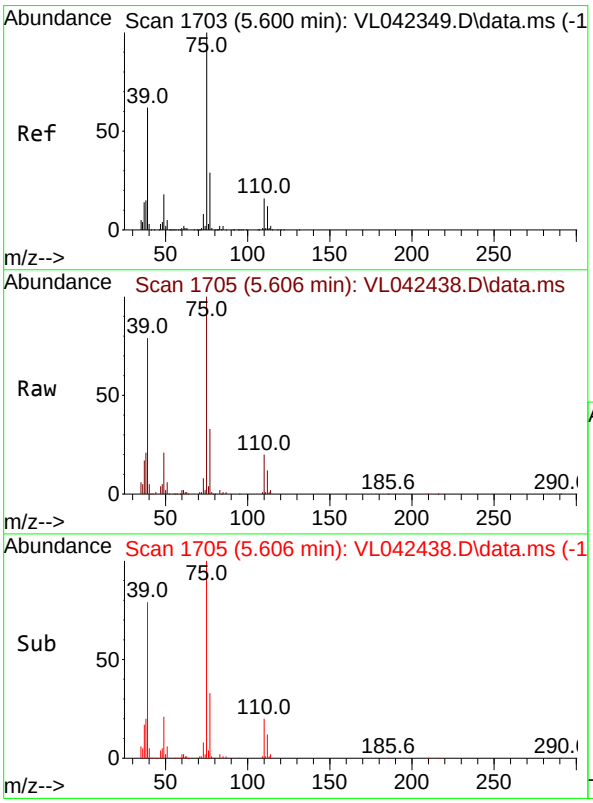
#45
t-1,3-Dichloropropene
Concen: 8.940 ppbv
RT: 6.418 min Scan# 1
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 75 Resp: 140981

Ion	Ratio	Lower	Upper
75	100		
77	33.6	27.0	40.6

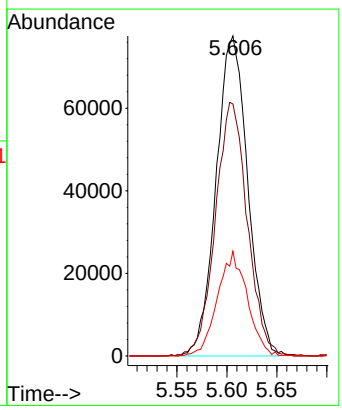


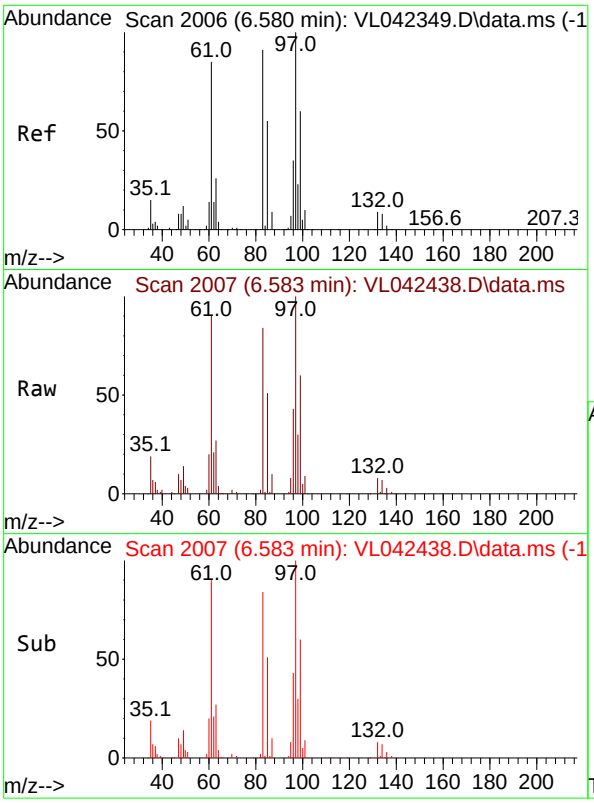


#46
cis-1,3-Dichloropropene
Concen: 8.811 ppbv
RT: 5.606 min Scan# 1705
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 75 Resp: 170063

Ion	Ratio	Lower	Upper
75	100		
39	78.3	50.0	75.0#
77	32.7	23.0	34.6



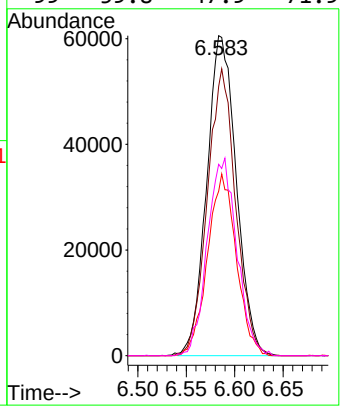


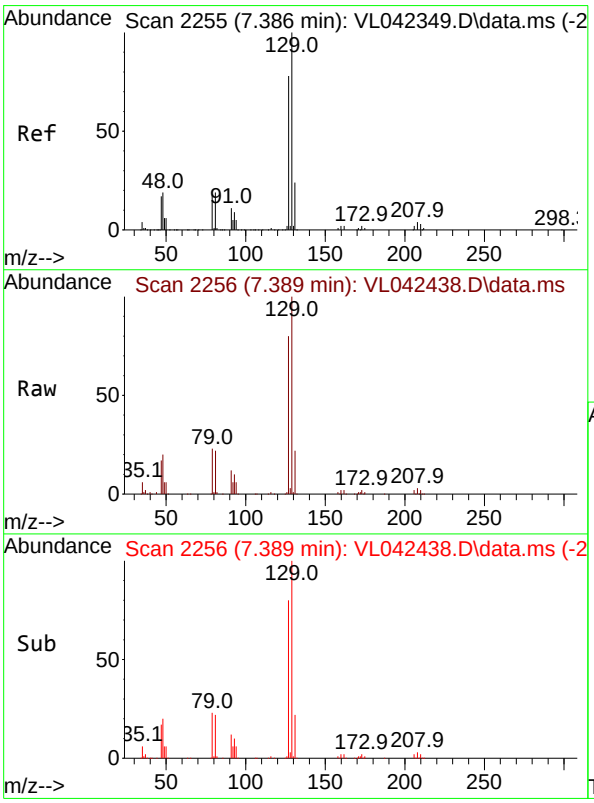
#47
1,1,2-Trichloroethane
Concen: 9.893 ppbv
RT: 6.583 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 97 Resp: 128662

Ion	Ratio	Lower	Upper
97	100		
83	84.0	72.8	109.2
85	51.4	44.2	66.4
99	59.8	47.9	71.9

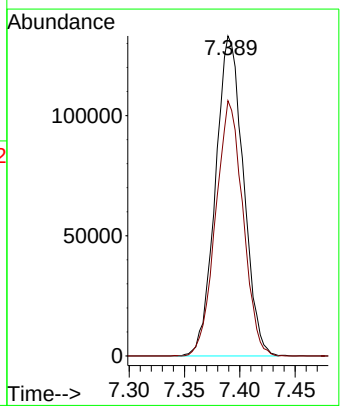


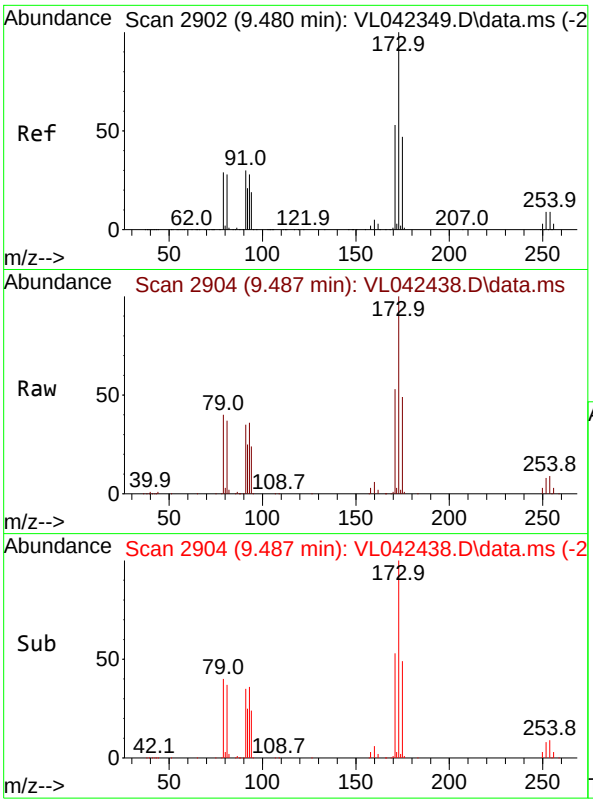


#48
Dibromochloromethane
Concen: 10.156 ppbv
RT: 7.389 min Scan# 2256
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:129 Resp: 233350

Ion	Ratio	Lower	Upper
129	100		
127	78.1	39.1	117.3



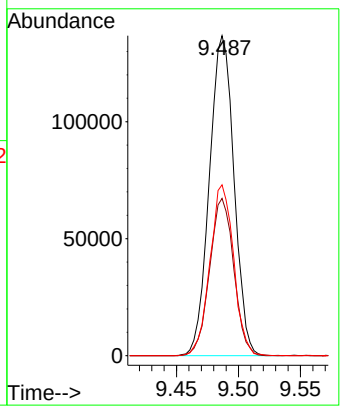


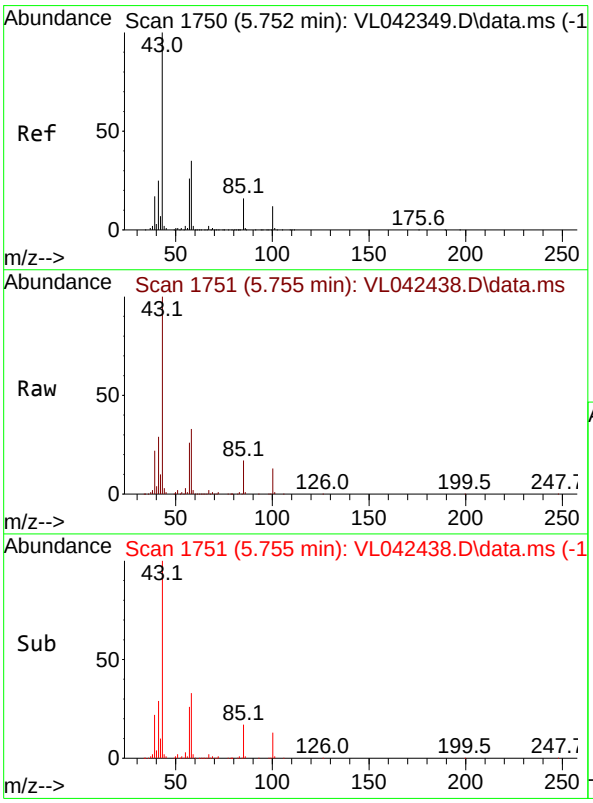
#49
Bromoform
Concen: 9.431 ppbv
RT: 9.487 min Scan# 2
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:173 Resp: 189484

Ion	Ratio	Lower	Upper
173	100		
175	48.2	38.2	57.2
171	51.4	40.9	61.3

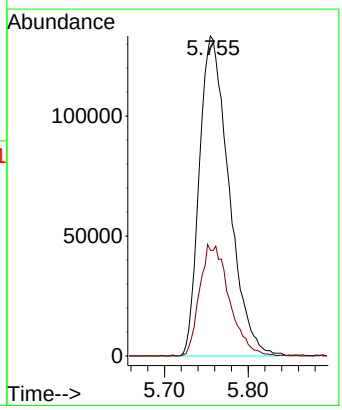


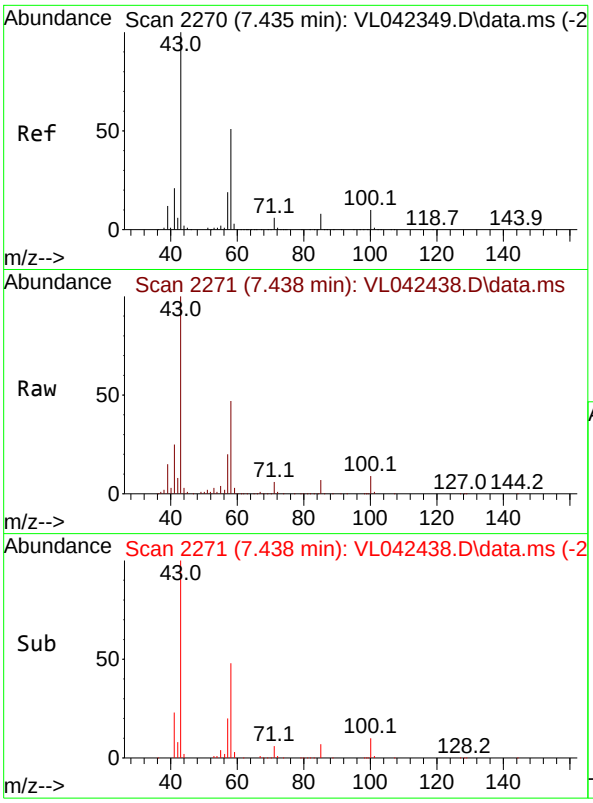


#50
4-Methyl-2-Pentanone
Concen: 7.846 ppbv
RT: 5.755 min Scan# 1751
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 43 Resp: 327508

Ion	Ratio	Lower	Upper
43	100		
58	34.9	28.6	43.0



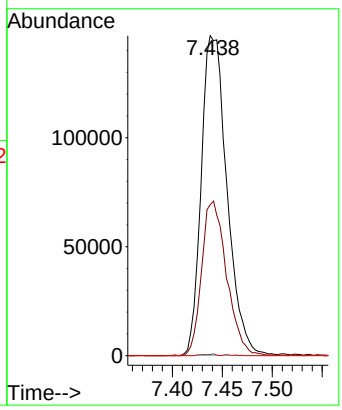


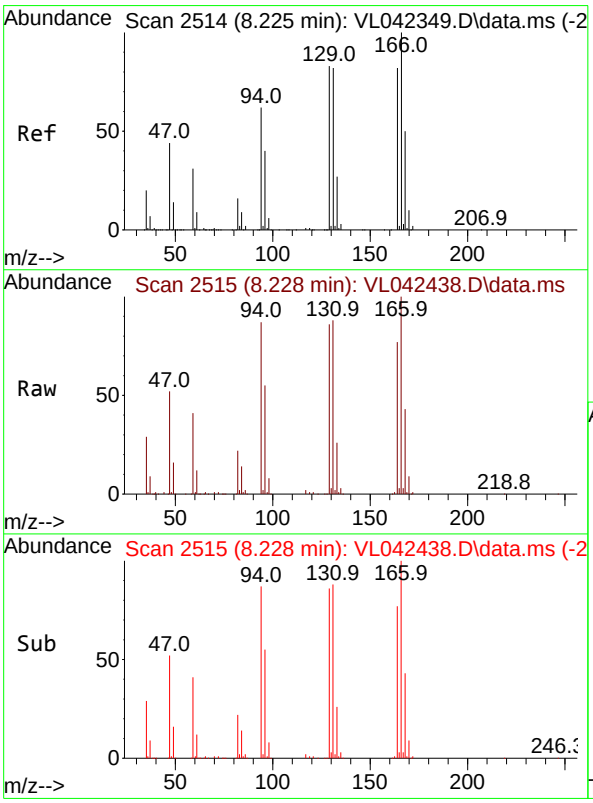
#51
2-Hexanone
Concen: 7.018 ppbv
RT: 7.438 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 43 Resp: 262697

Ion	Ratio	Lower	Upper
43	100		
58	47.0	40.2	60.4
98	0.4	0.1	0.1#

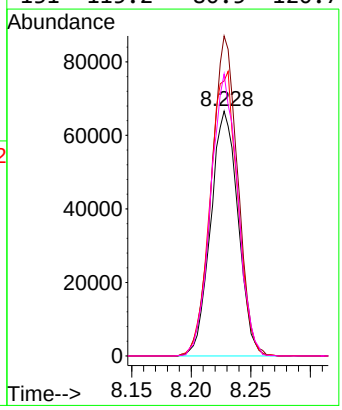


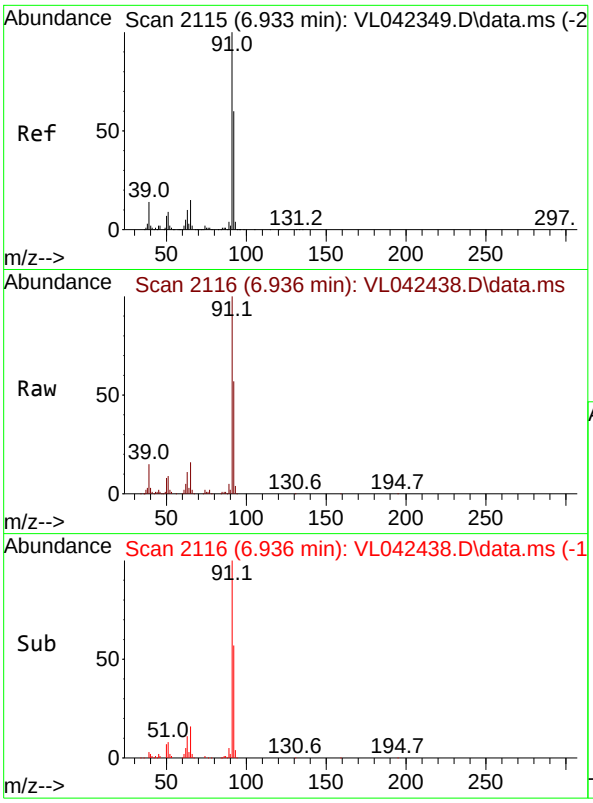


#52
Tetrachloroethene
Concen: 8.008 ppbv
RT: 8.228 min Scan# 2515
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:164 Resp: 106031

Ion	Ratio	Lower	Upper
164	100		
166	130.7	98.2	147.2
129	112.3	81.8	122.8
131	115.2	80.5	120.7



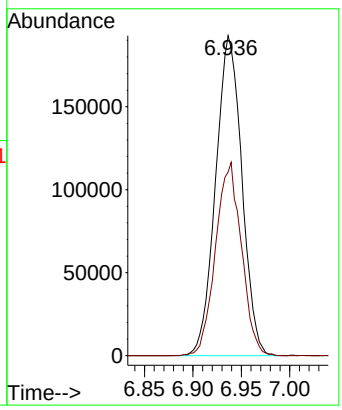


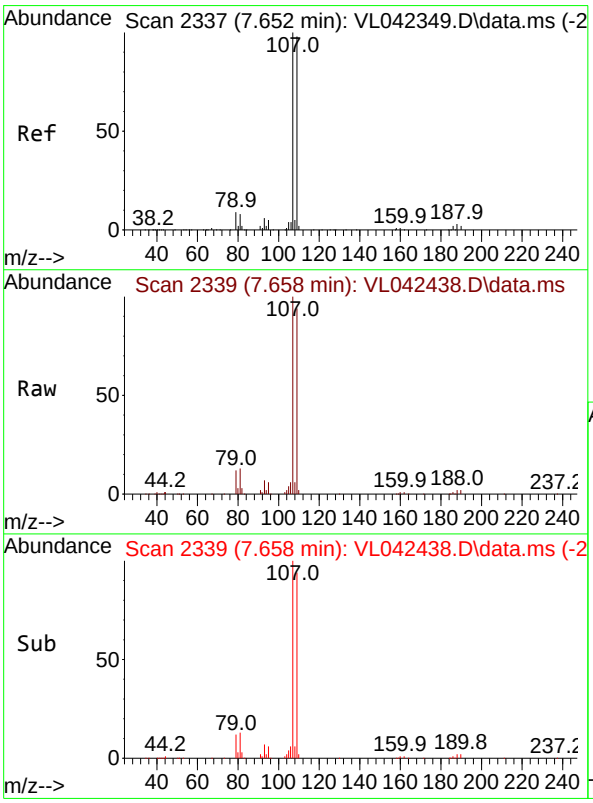
#53
Toluene
Concen: 8.848 ppbv
RT: 6.936 min Scan# 21
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 91 Resp: 363707

Ion	Ratio	Lower	Upper
91	100		
92	59.6	48.2	72.4

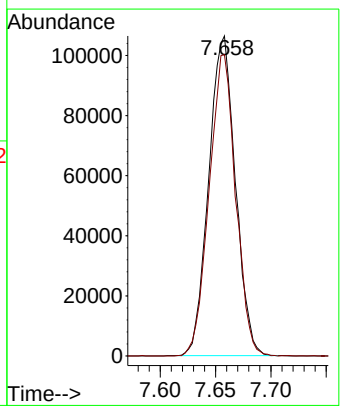


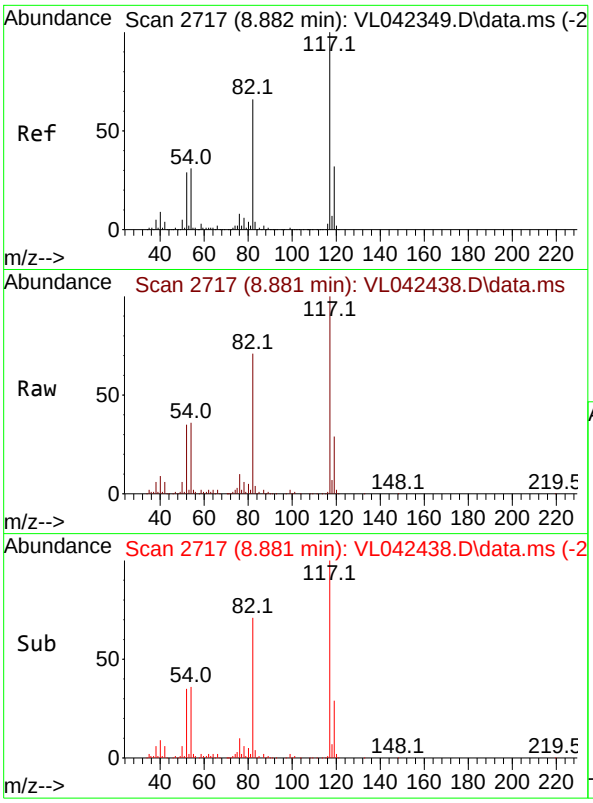


#54
1,2-Dibromoethane
Concen: 9.601 ppbv
RT: 7.658 min Scan# 2339
Delta R.T. 0.006 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:107 Resp: 178709

Ion	Ratio	Lower	Upper
107	100		
109	94.3	78.2	117.4



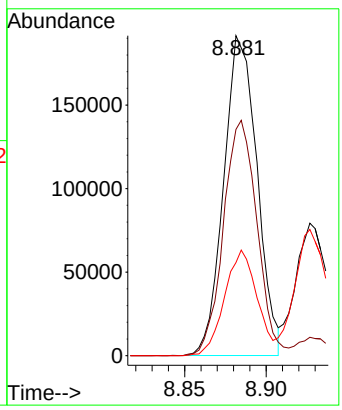


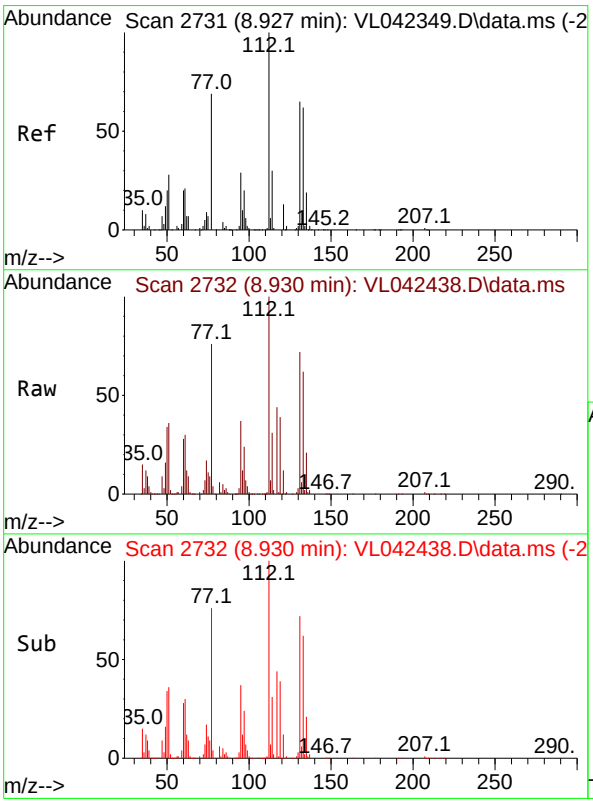
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.881 min Scan# 2
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:117 Resp: 272312

Ion	Ratio	Lower	Upper
117	100		
82	79.2	57.8	86.6
119	32.0	25.2	37.8

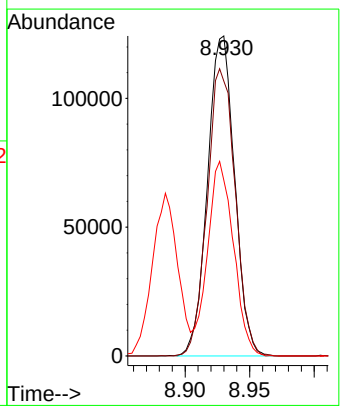


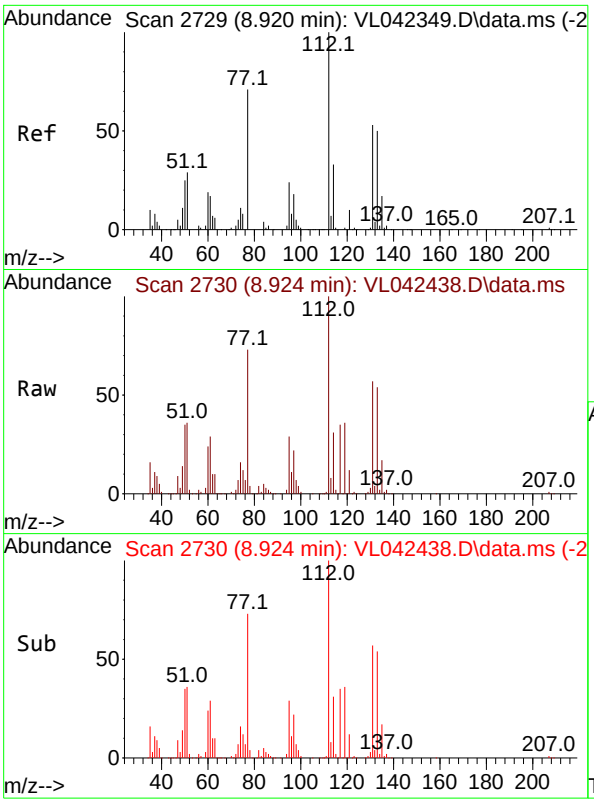


#56
1,1,1,2-Tetrachloroethane
Concen: 10.981 ppbv
RT: 8.930 min Scan# 2732
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:131 Resp: 180979

Ion	Ratio	Lower	Upper
131	100		
133	93.2	78.3	117.5
119	58.6	48.7	73.1



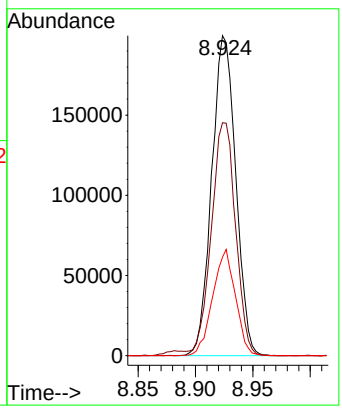


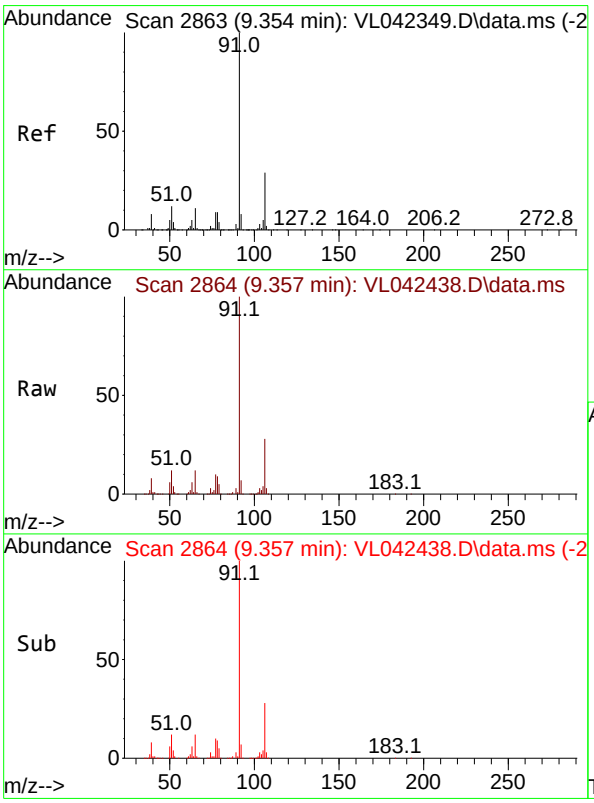
#57
Chlorobenzene
Concen: 10.270 ppbv
RT: 8.924 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:112 Resp: 290861

Ion	Ratio	Lower	Upper
112	100		
77	72.8	57.8	86.6
114	30.8	29.3	35.9

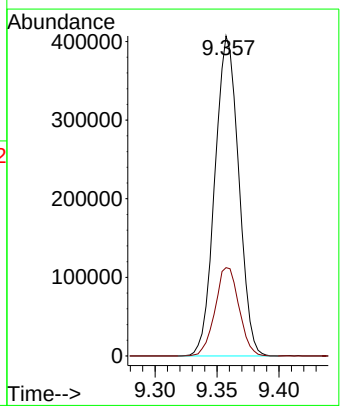


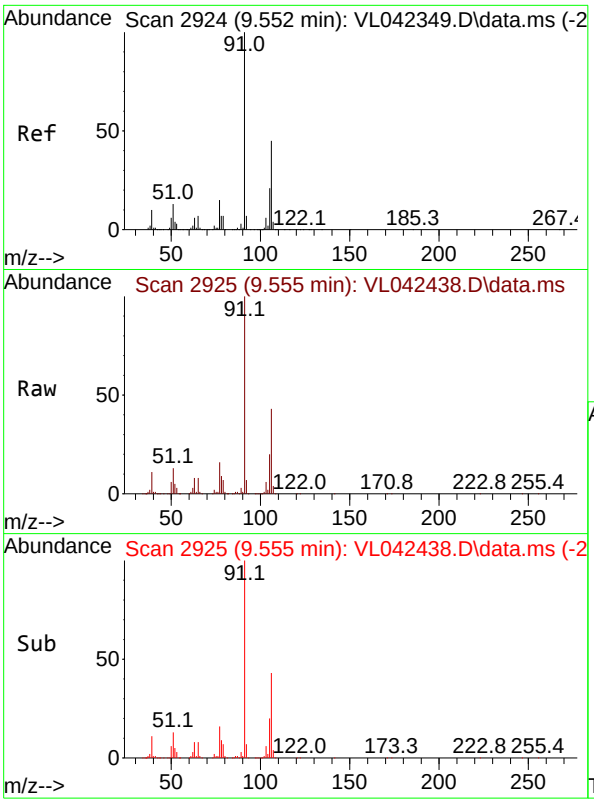


#58
Ethyl Benzene
Concen: 10.111 ppbv
RT: 9.357 min Scan# 2864
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 545497

Ion	Ratio	Lower	Upper
91	100		
106	27.6	23.0	34.4



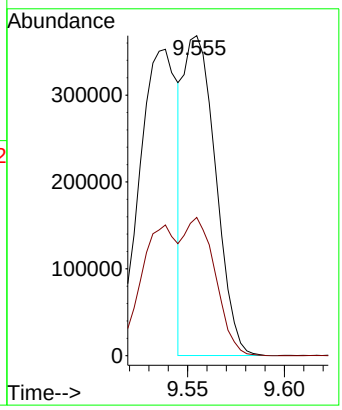


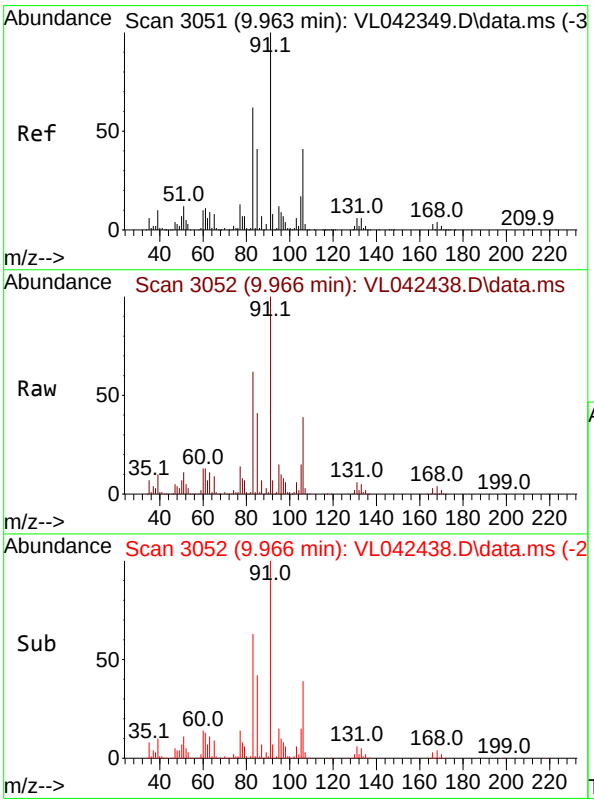
#59
m/p-Xylene
Concen: 9.768 ppbv
RT: 9.555 min Scan# 2
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 91 Resp: 424567

Ion	Ratio	Lower	Upper
91	100		
106	89.3	35.4	53.2#

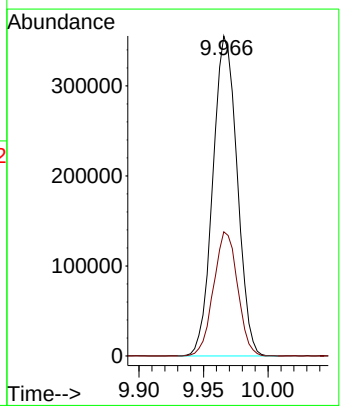


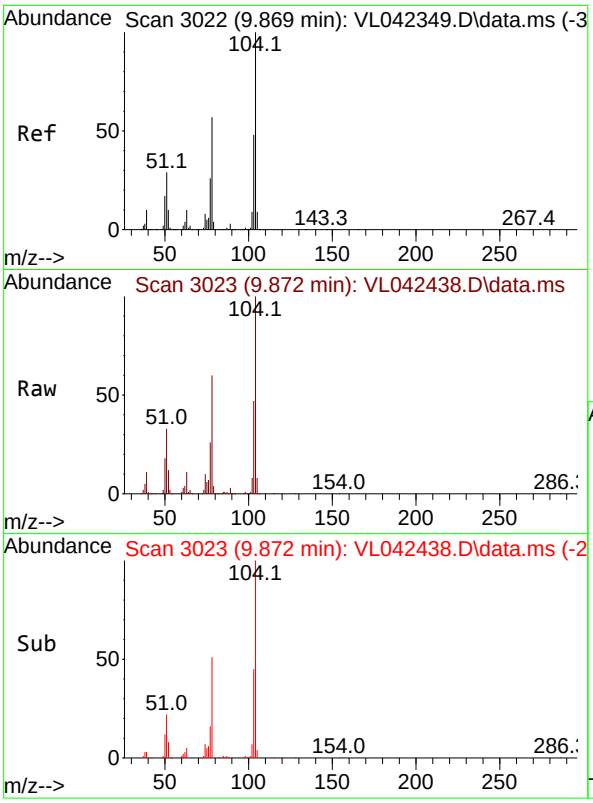


#60
o-Xylene
Concen: 10.639 ppbv
RT: 9.966 min Scan# 3052
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 465645

Ion	Ratio	Lower	Upper
91	100		
106	38.4	21.1	63.4



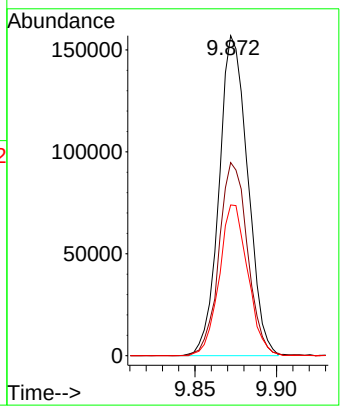


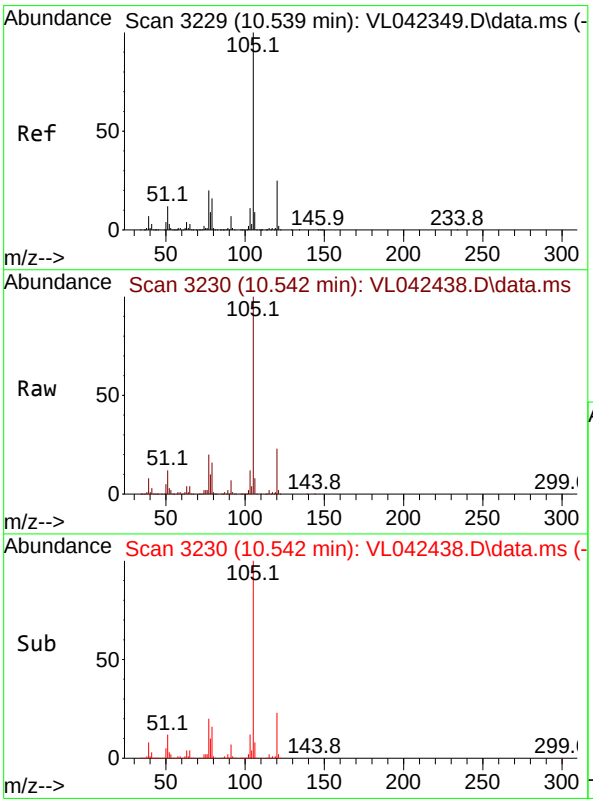
#61
Styrene
Concen: 9.178 ppbv
RT: 9.872 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:104 Resp: 191741

Ion	Ratio	Lower	Upper
104	100		
78	60.1	44.6	66.8
103	47.0	37.4	56.0

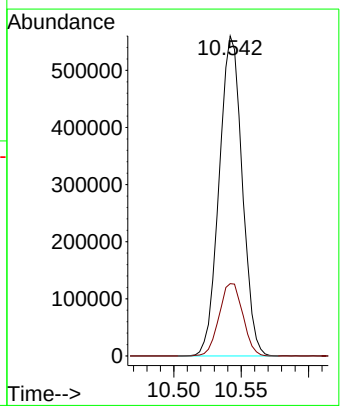


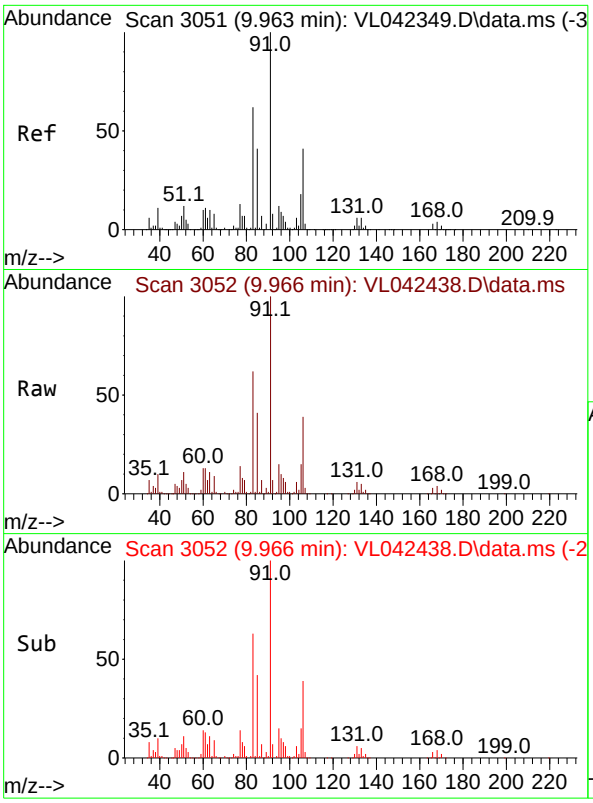


#62
Isopropylbenzene
Concen: 10.393 ppbv
RT: 10.542 min Scan# 3230
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 667839

Ion	Ratio	Lower	Upper
105	100		
120	23.2	19.8	29.8



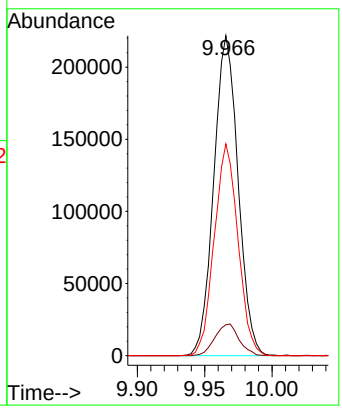


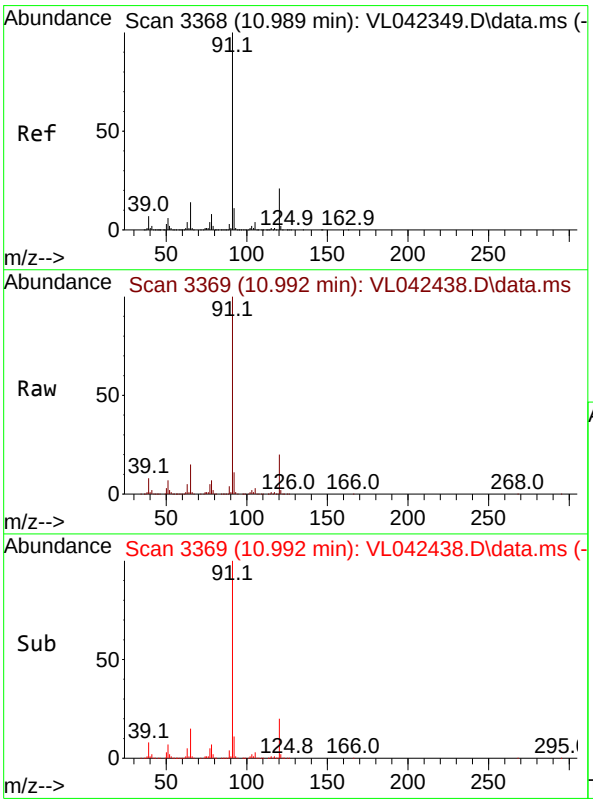
#63
1,1,2,2-Tetrachloroethane
Concen: 9.819 ppbv
RT: 9.966 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 83 Resp: 278491

Ion	Ratio	Lower	Upper
83	100		
131	9.8	4.5	13.7
85	64.4	32.4	97.0

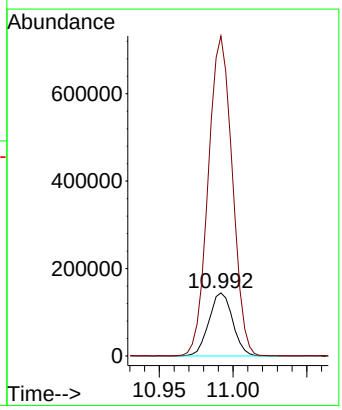


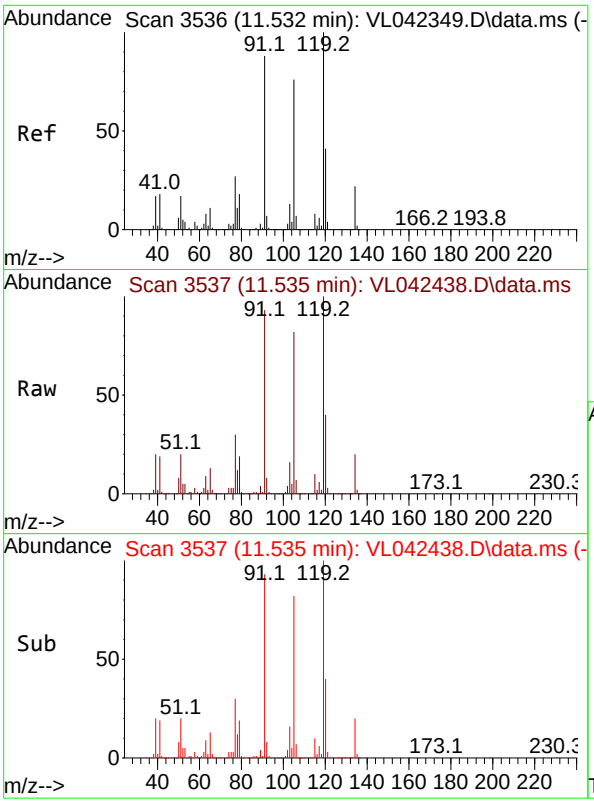


#64
n-propylbenzene
Concen: 9.987 ppbv
RT: 10.992 min Scan# 3369
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:120 Resp: 161309

Ion	Ratio	Lower	Upper
120	100		
91	515.8	392.4	588.6



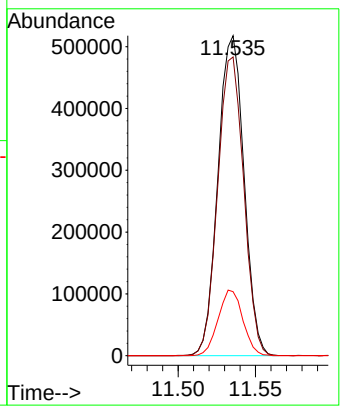


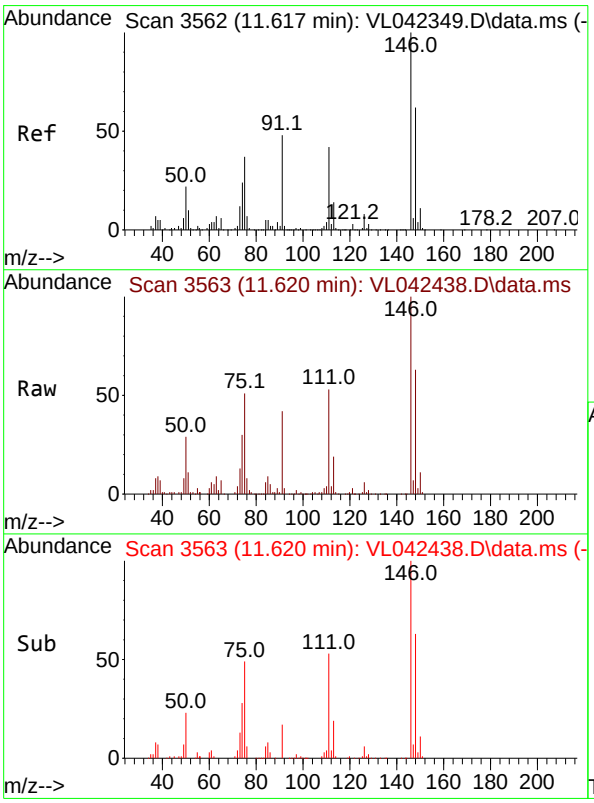
#65
tert-Butylbenzene
Concen: 10.260 ppbv
RT: 11.535 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:119 Resp: 605972

Ion	Ratio	Lower	Upper
119	100		
91	93.3	74.6	111.8
134	19.5	18.8	28.2

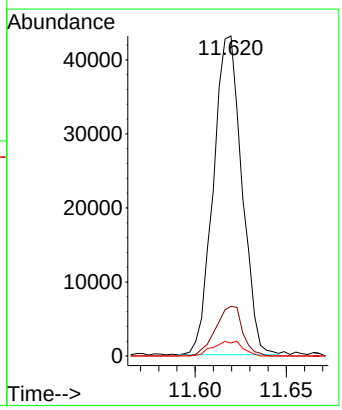


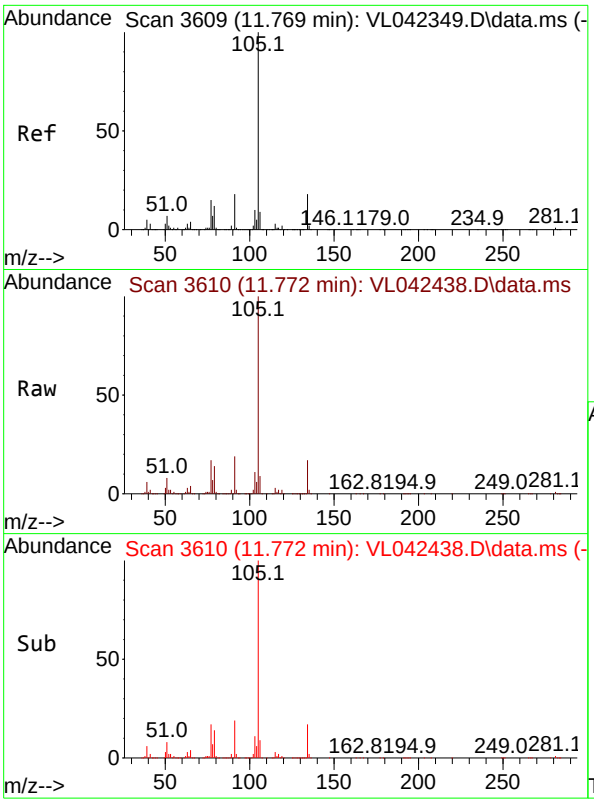


#66
Benzyl Chloride
Concen: 7.229 ppbv
RT: 11.620 min Scan# 3563
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 46913

Ion	Ratio	Lower	Upper
91	100		
126	14.8	11.8	17.6
128	4.8	4.5	6.7



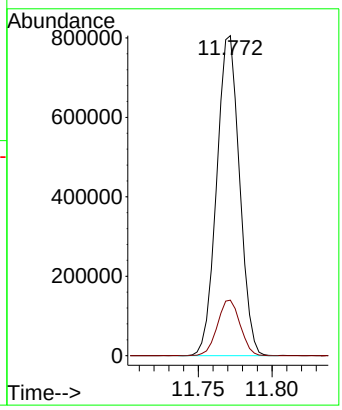


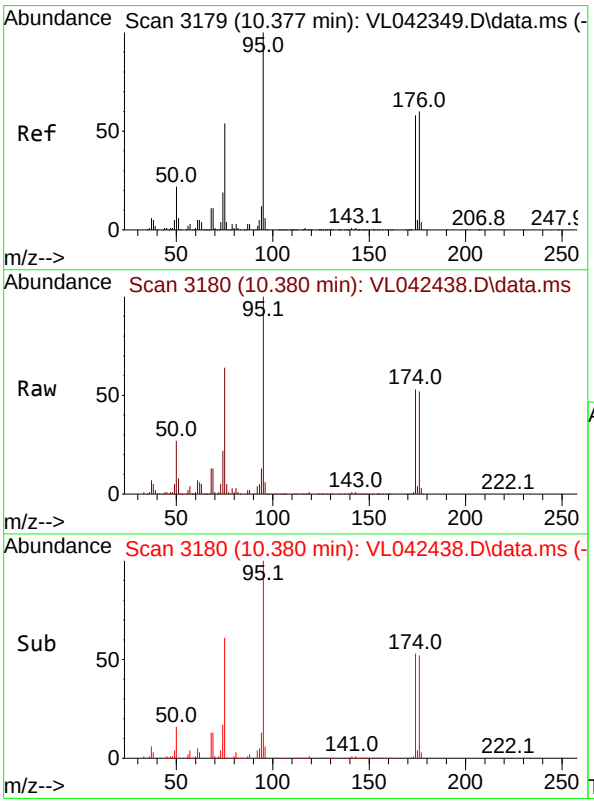
#67
sec-Butylbenzene
Concen: 10.569 ppbv
RT: 11.772 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:105 Resp: 868275

Ion	Ratio	Lower	Upper
105	100		
134	17.3	14.6	21.8

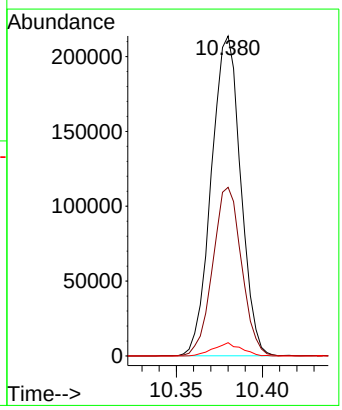


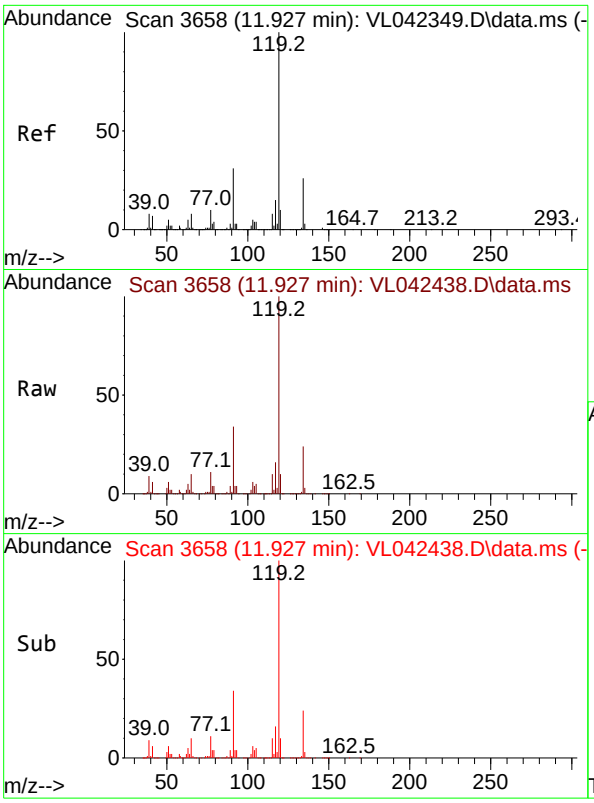


#68
1-Bromo-4-Fluorobenzene
Concen: 11.307 ppbv
RT: 10.380 min Scan# 3180
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 95 Resp: 253021

Ion	Ratio	Lower	Upper
95	100		
174	52.0	48.5	72.7
175	3.9	3.7	5.5



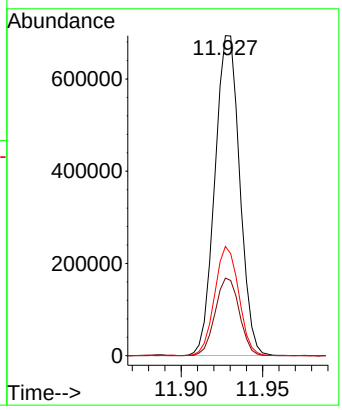


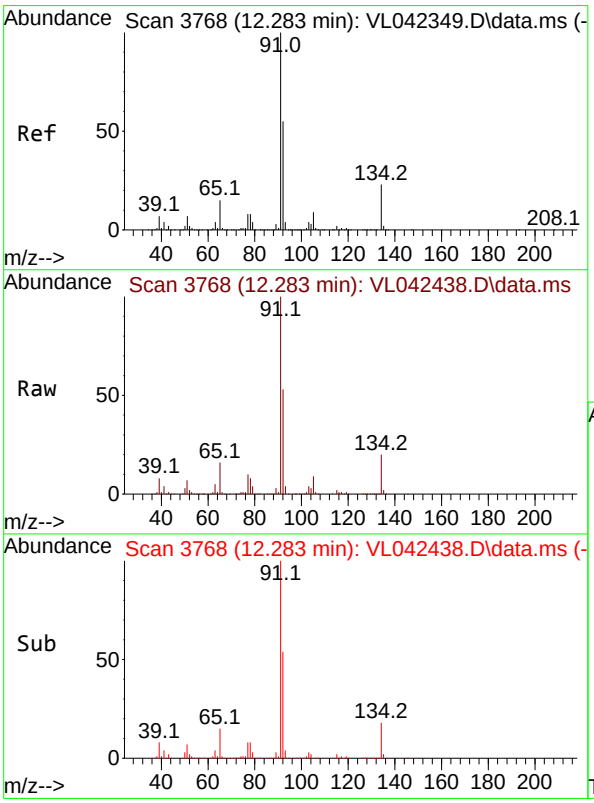
#69
p-Isopropyltoluene
Concen: 10.282 ppbv
RT: 11.927 min Scan# 3
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:119 Resp: 733796

Ion	Ratio	Lower	Upper
119	100		
134	23.7	20.0	30.0
91	33.4	24.4	36.6

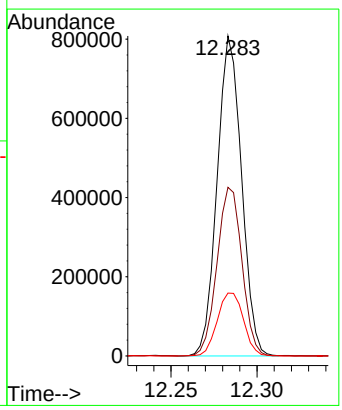


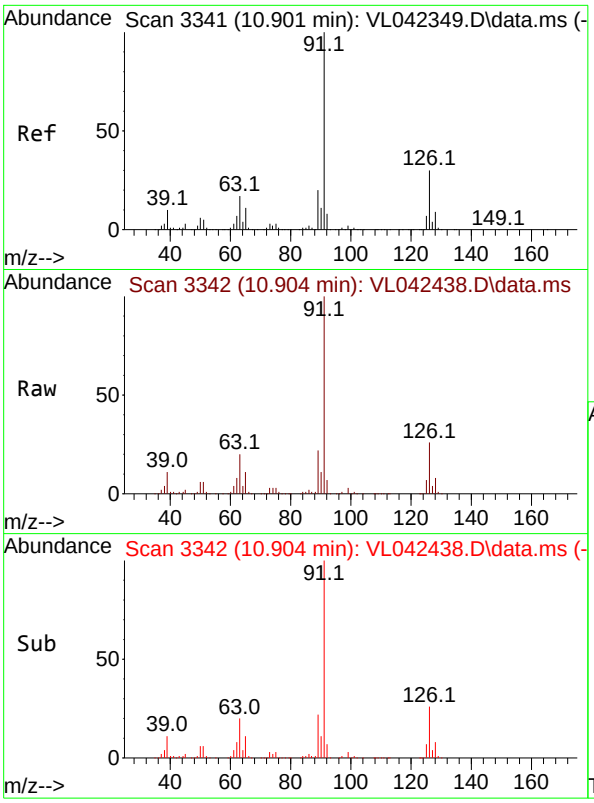


#70
n-Butylbenzene
Concen: 10.717 ppbv
RT: 12.283 min Scan# 3768
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion: 91 Resp: 796622

Ion	Ratio	Lower	Upper
91	100		
92	54.1	44.2	66.4
134	21.1	18.2	27.4



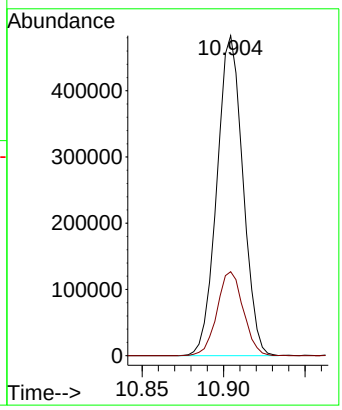


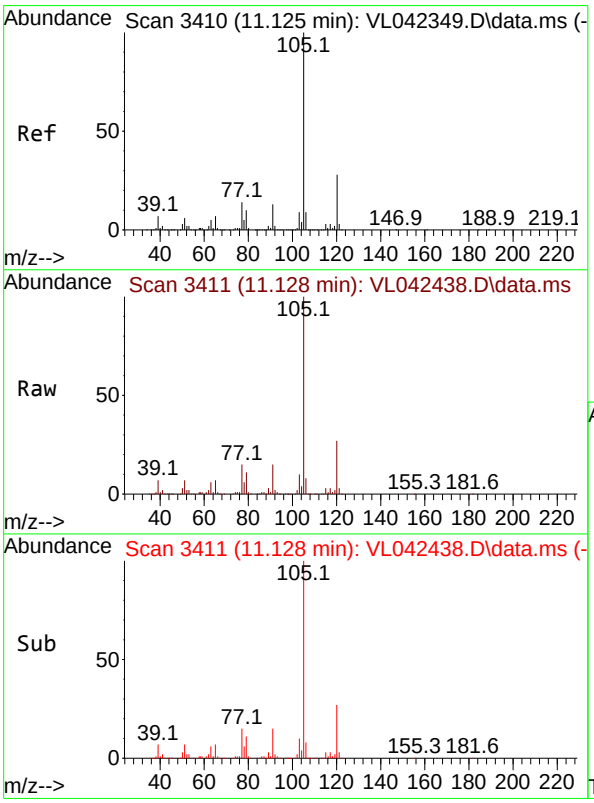
#71
2-Chlorotoluene
Concen: 10.614 ppbv
RT: 10.904 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion: 91 Resp: 534951

Ion	Ratio	Lower	Upper
91	100		
126	26.4	11.4	45.4

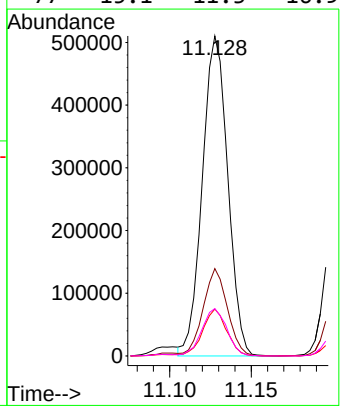


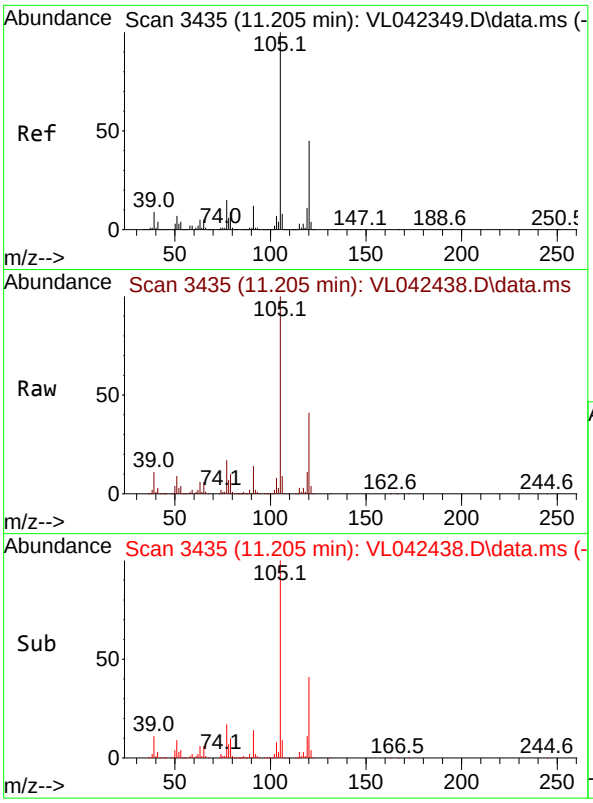


#72
4-Ethyltoluene
Concen: 10.351 ppbv
RT: 11.128 min Scan# 3411
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 553879

Ion	Ratio	Lower	Upper
105	100		
120	26.9	23.2	34.8
91	14.3	10.4	15.6
77	15.1	11.3	16.9



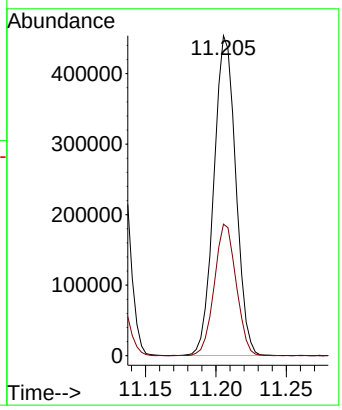


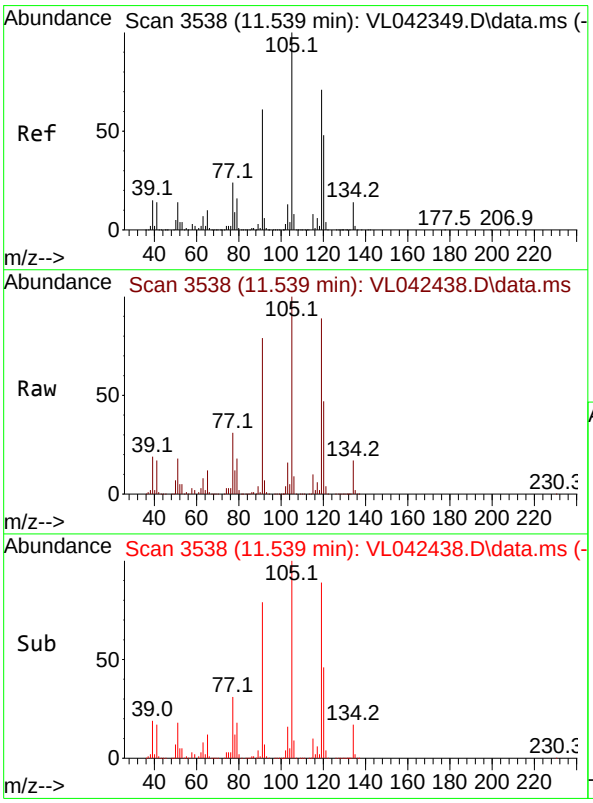
#73
1,3,5-Trimethylbenzene
Concen: 10.403 ppbv
RT: 11.205 min Scan# 34
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:105 Resp: 491459

Ion	Ratio	Lower	Upper
105	100		
120	41.1	35.6	53.4

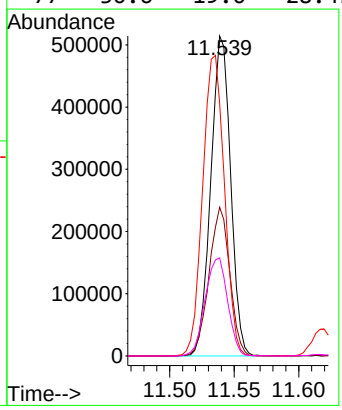


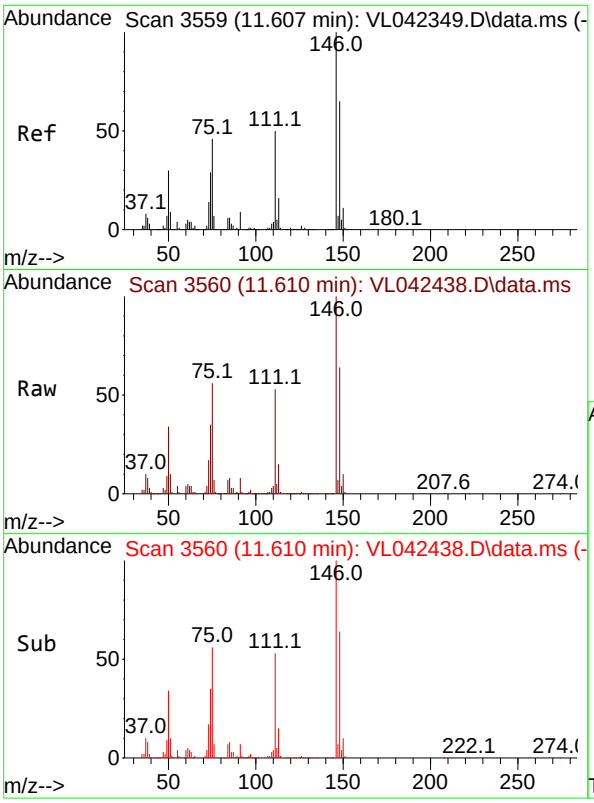


#74
1,2,4-Trimethylbenzene
Concen: 9.939 ppbv
RT: 11.539 min Scan# 3538
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:105 Resp: 548408

Ion	Ratio	Lower	Upper
105	100		
120	46.5	38.1	57.1
91	79.0	48.8	73.2#
77	30.6	19.0	28.4#



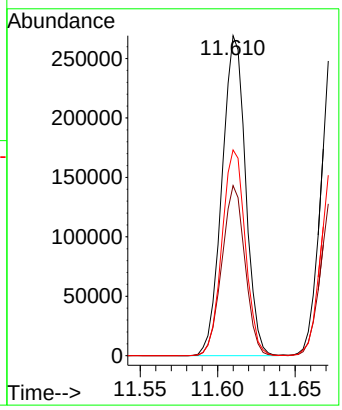


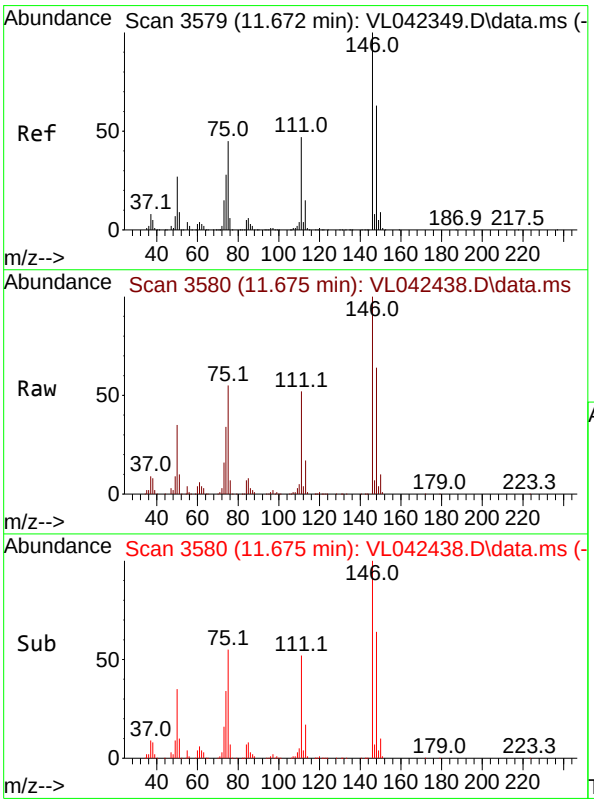
#75
1,3-Dichlorobenzene
Concen: 9.931 ppbv
RT: 11.610 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:146 Resp: 284809

Ion	Ratio	Lower	Upper
146	100		
111	52.1	24.3	72.8
148	63.8	31.6	94.8

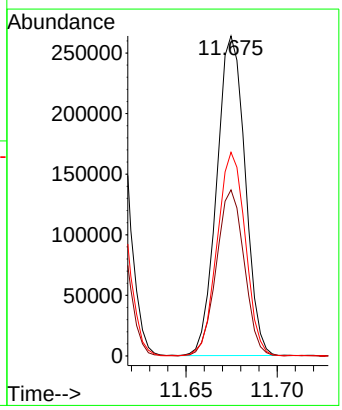


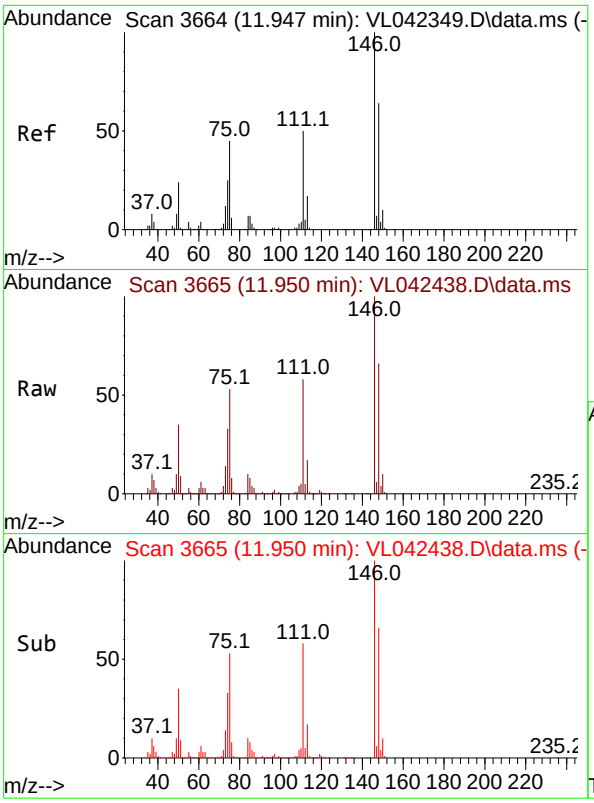


#76
1,4-Dichlorobenzene
Concen: 9.907 ppbv
RT: 11.675 min Scan# 3580
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:146 Resp: 285571

Ion	Ratio	Lower	Upper
146	100		
111	51.1	24.2	72.6
148	63.6	32.1	96.5



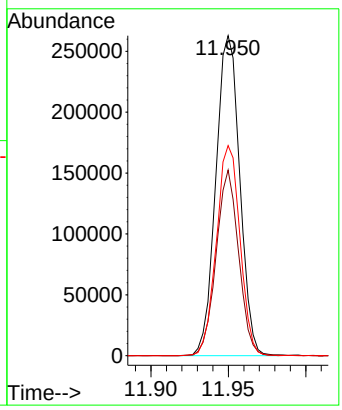


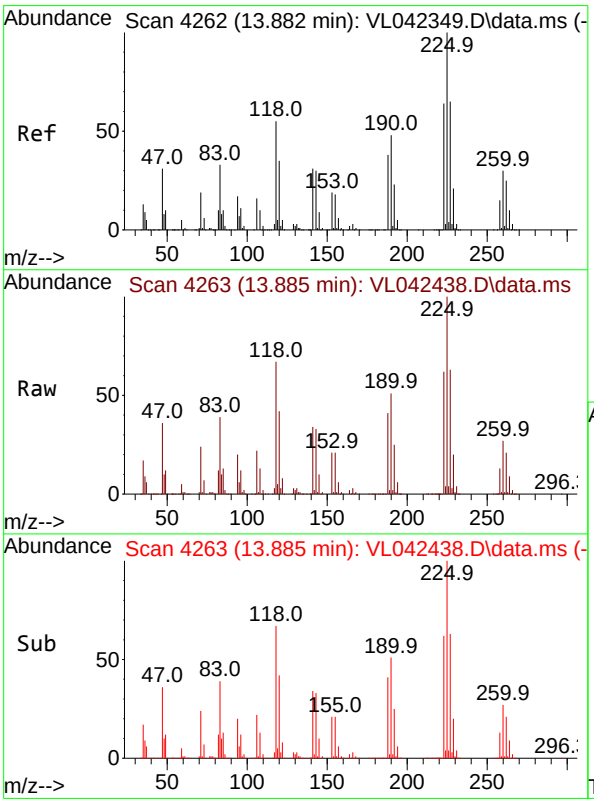
#77
1,2-Dichlorobenzene
Concen: 10.128 ppbv
RT: 11.950 min Scan# 3
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:146 Resp: 282424

Ion	Ratio	Lower	Upper
146	100		
111	54.6	25.3	75.9
148	64.8	31.5	94.5

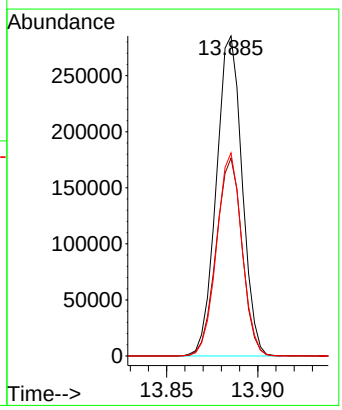


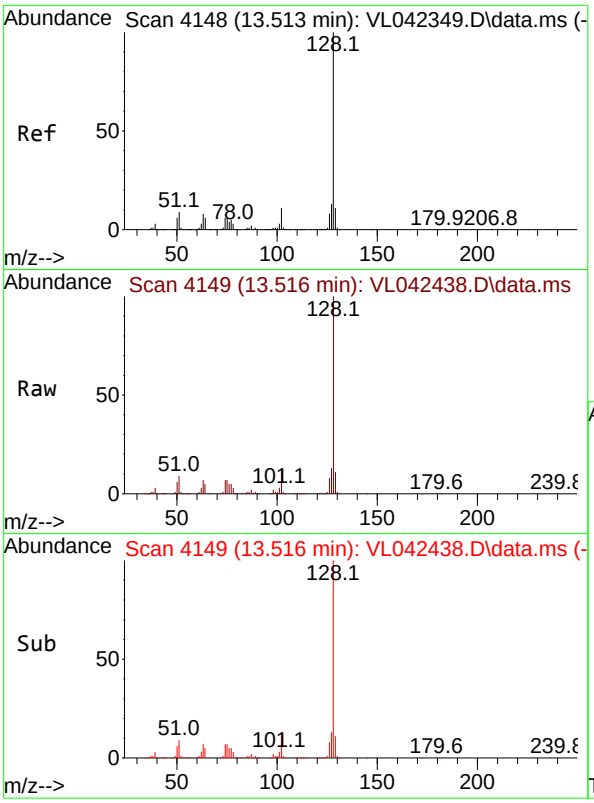


#78
Hexachloro-1,3-Butadiene
Concen: 9.977 ppbv
RT: 13.885 min Scan# 4263
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:225 Resp: 280954

Ion	Ratio	Lower	Upper
225	100		
223	61.8	50.3	75.5
227	61.9	51.5	77.3



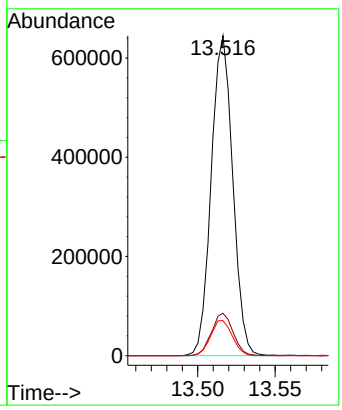


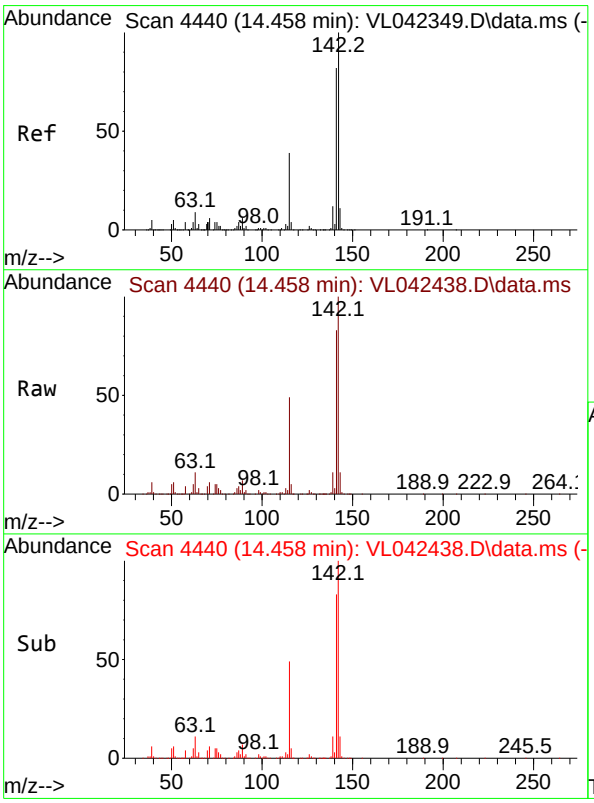
#79
Naphthalene
Concen: 9.425 ppbv
RT: 13.516 min Scan# 4
Delta R.T. 0.003 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:128 Resp: 621879

Ion	Ratio	Lower	Upper
128	100		
127	13.2	10.6	15.8
129	11.0	8.6	12.8

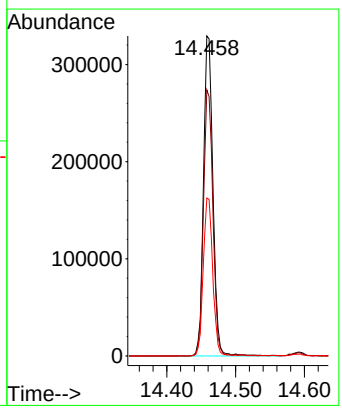


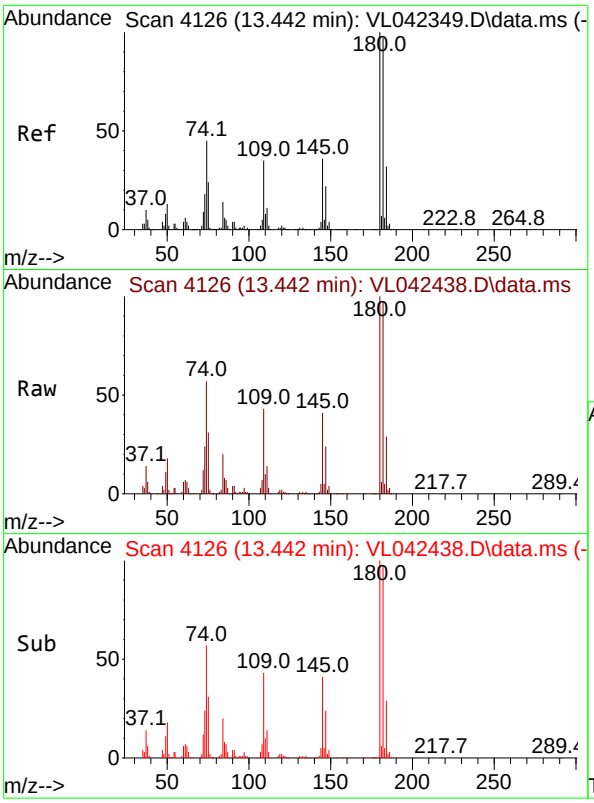


#80
Naphthalene,2-methyl-
Concen: 8.317 ppbv
RT: 14.458 min Scan# 4440
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Tgt Ion:142 Resp: 312733

Ion	Ratio	Lower	Upper
142	100		
141	84.1	66.8	100.2
115	49.9	33.4	50.2



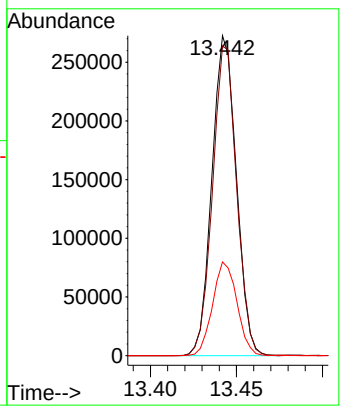


#81
1,2,4-Trichlorobenzene
Concen: 9.498 ppbv
RT: 13.442 min Scan# 4
Delta R.T. -0.000 min
Lab File: VL042438.D
Acq: 29 Apr 2025 10:08

Instrument :
MSVOA_L
ClientSampleId :
VL0429ABS01

Tgt Ion:180 Resp: 269082

Ion	Ratio	Lower	Upper
180	100		
182	95.8	76.8	115.2
184	29.3	24.6	36.8



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042451.D
Acq On : 29 Apr 2025 17:37
Operator : SY/MD
Sample : Q1665-07DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Quant Time: Apr 30 01:23:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) Bromochloromethane	2.797	49	116268	10.000	ppbv		0.00
33) 1,4-Difluorobenzene	3.972	114	307149	10.000	ppbv		0.01
55) Chlorobenzene-d5	8.895	117	260772	10.000	ppbv		0.01
System Monitoring Compounds							
68) 1-Bromo-4-Fluorobenzene	10.390	95	230005	10.733	ppbv		0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 107.300%				
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.502	85	2557	0.124	ppbv		93
3) Chlorodifluoromethane	1.470	51	16756	0.857	ppbv	#	61
4) Chloromethane	1.535	50	1596	0.196	ppbv	#	69
6) Bromomethane	1.680	94	149	0.039	ppbv	#	8
9) Propene	1.492	41	3728	0.418	ppbv		89
10) Heptane	4.994	43	838	0.033	ppbv	#	1
11) Trichlorofluoromethane	1.887	101	1551	0.079	ppbv	#	62
13) Ethanol	1.725	45	99875	70.537	ppbv		75
15) Acetone	1.842	43	107854	5.667	ppbv	#	81
16) 1,3-Butadiene	1.606	39	1522	0.167	ppbv	#	46
17) tert-Butyl alcohol	2.049	59	16691	0.708	ppbv	#	88
19) Isopropyl Alcohol	1.894	45	84766	8.017	ppbv	#	36
20) Methylene Chloride	2.069	84	3055	0.410	ppbv	#	91
21) Allyl Chloride	2.049	41	5640	0.429	ppbv	#	78
23) Vinyl Acetate	2.470	43	2885	0.374	ppbv	#	50
25) Ethyl Acetate	2.849	43	2944	0.063	ppbv	#	73
26) Hexane	2.839	57	7600	0.400	ppbv	#	41
34) 2-Butanone	2.570	43	5426	0.223	ppbv		96
36) Benzene	3.671	78	3299	0.100	ppbv		95
37) 1,2-Dichloroethane	3.234	62	2395	0.120	ppbv	#	87
39) 1,2-Dichloropropane	3.972	63	87837	7.115	ppbv	#	23
44) 2,2,4-Trimethylpentane	4.658	57	4356	0.076	ppbv	#	30
53) Toluene	6.956	91	32058	0.806	ppbv		99
58) Ethyl Benzene	9.374	91	1871	0.036	ppbv		93
60) o-Xylene	9.972	91	3798	0.091	ppbv		98
61) Styrene	9.882	104	1303	0.065	ppbv		95
74) 1,2,4-Trimethylbenzene	11.549	105	3330	0.063	ppbv	#	59

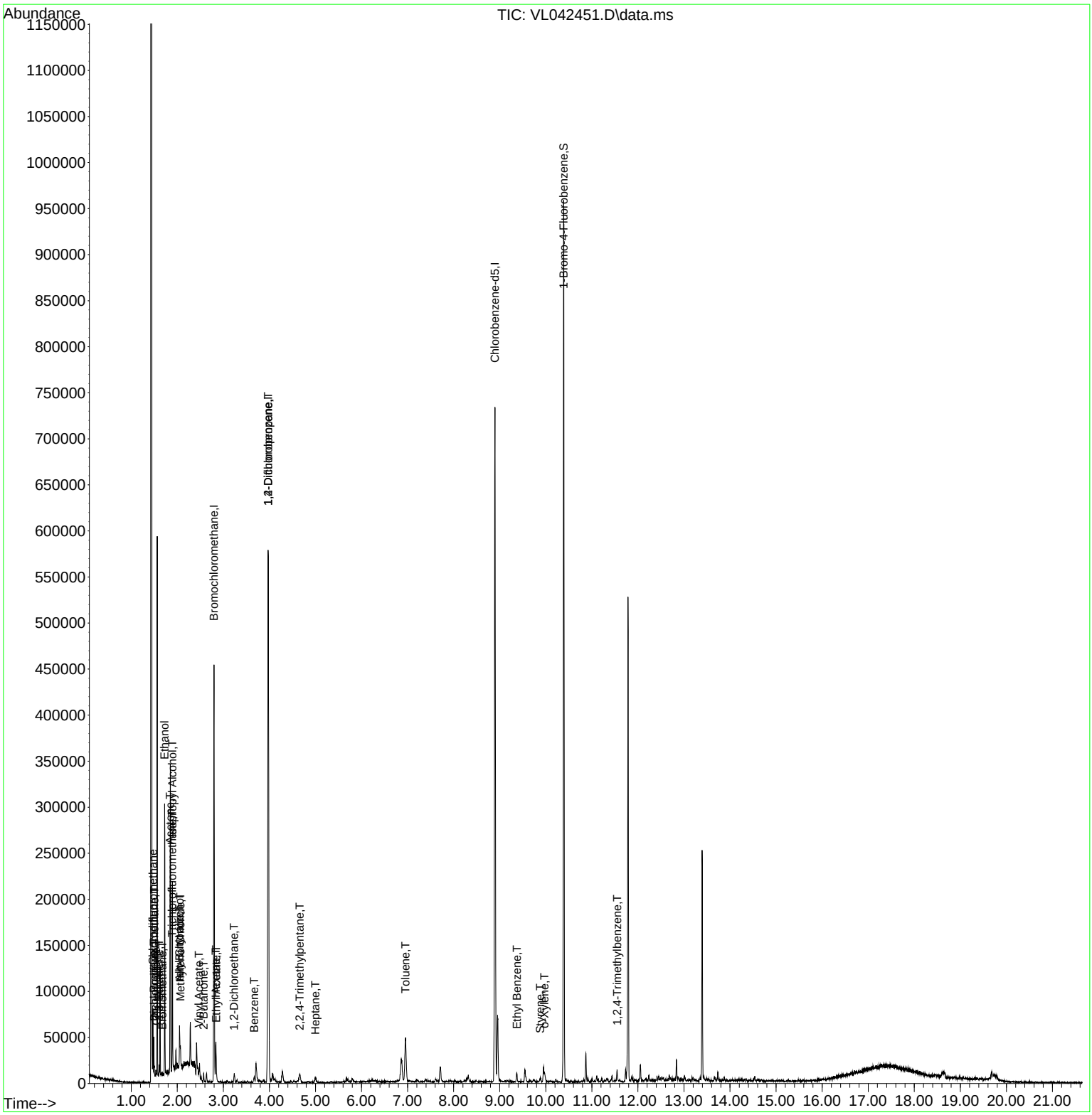
(#) = qualifier out of range (m) = manual integration (+) = signals summed

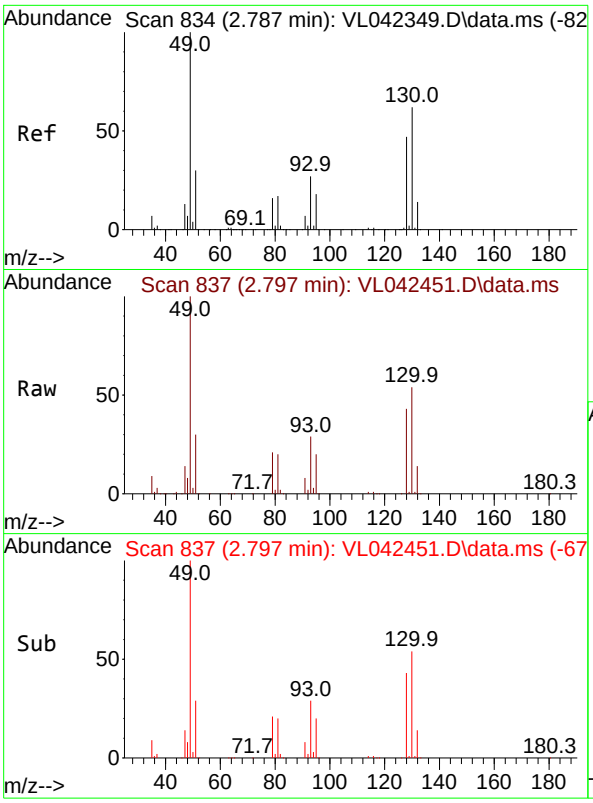
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042451.D
Acq On : 29 Apr 2025 17:37
Operator : SY/MD
Sample : Q1665-07DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 13 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Quant Time: Apr 30 01:23:43 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



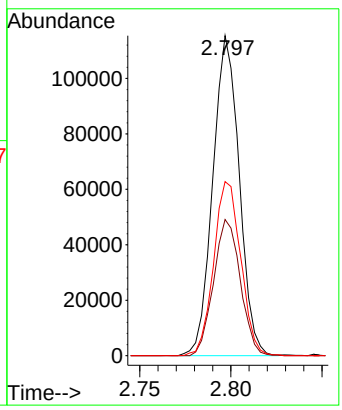


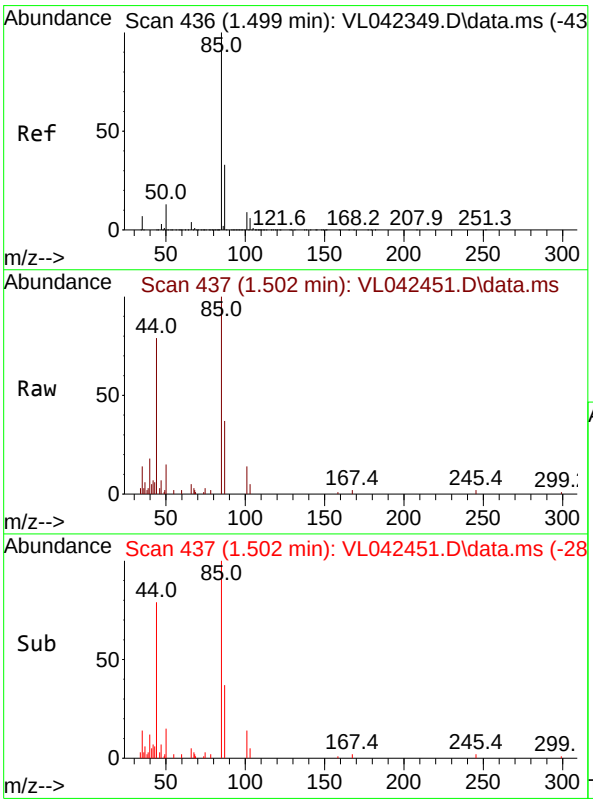
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 8
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 49 Resp: 116268

Ion	Ratio	Lower	Upper
49	100		
128	43.0	22.8	68.4
130	55.7	29.3	88.0

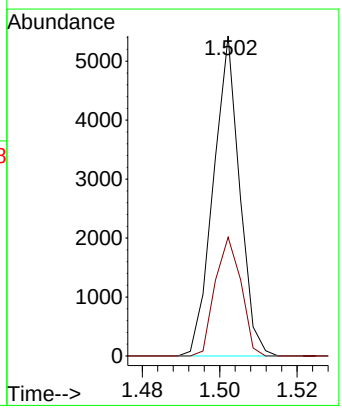


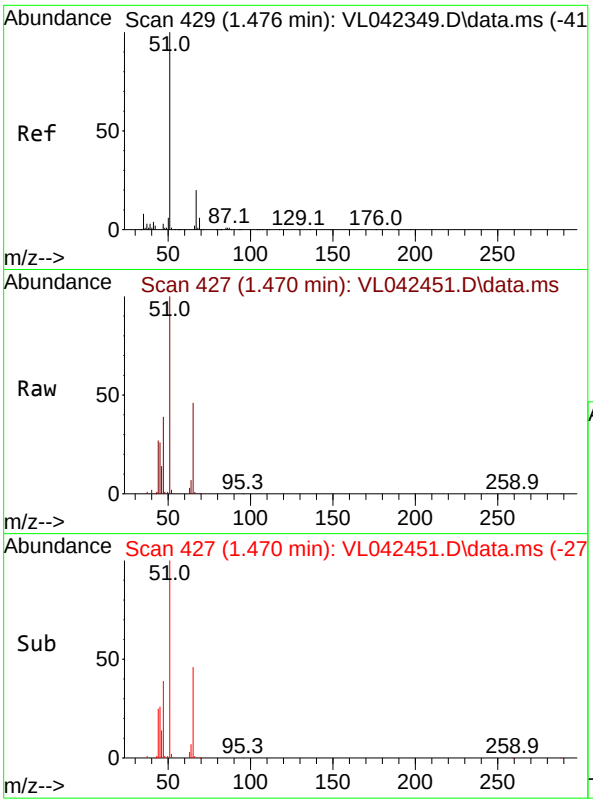


#2
Dichlorodifluoromethane
Concen: 0.124 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.003 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 85 Resp: 2557

Ion	Ratio	Lower	Upper
85	100		
87	37.1	26.6	39.8



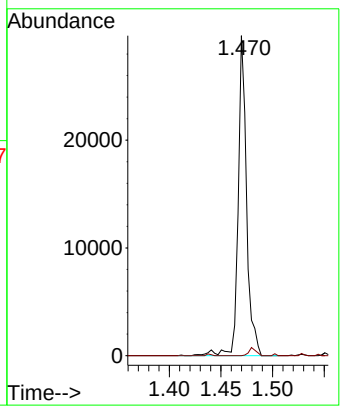


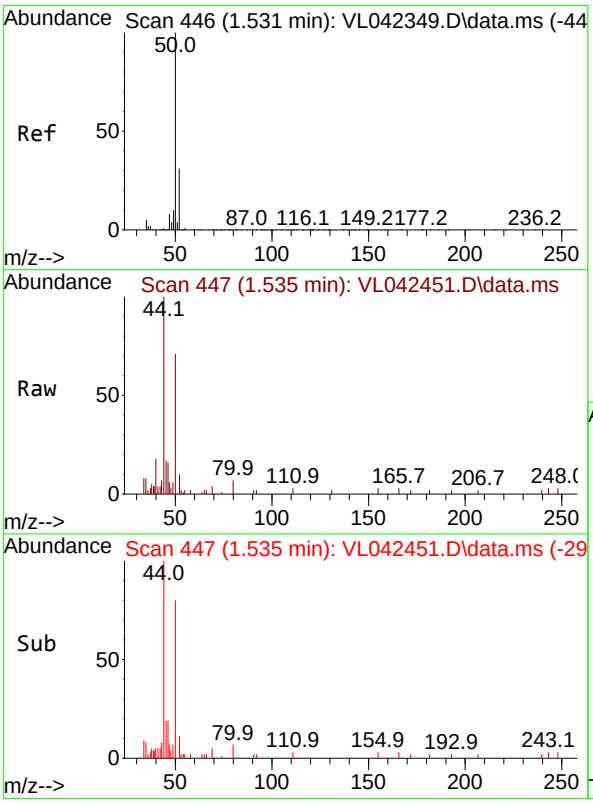
#3
Chlorodifluoromethane
Concen: 0.857 ppbv
RT: 1.470 min Scan# 4
Delta R.T. -0.006 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 51 Resp: 16756

Ion	Ratio	Lower	Upper
51	100		
67	2.3	16.2	24.4#

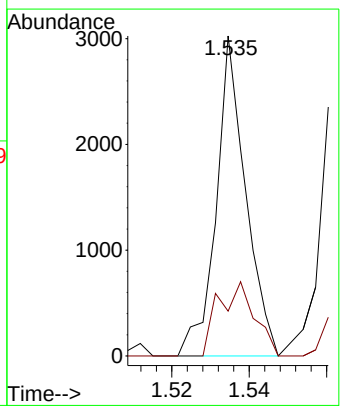


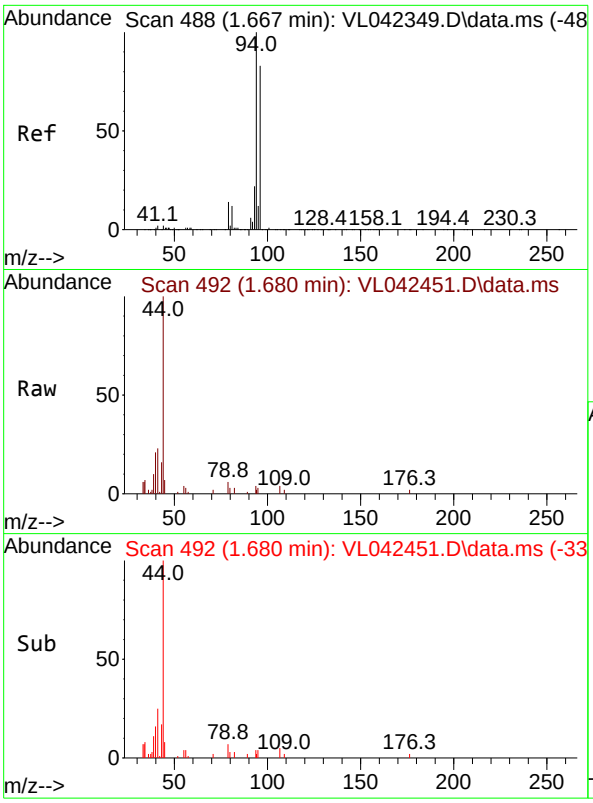


#4
Chloromethane
Concen: 0.196 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.003 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 50 Resp: 1596

Ion	Ratio	Lower	Upper
50	100		
52	14.0	24.7	37.1#



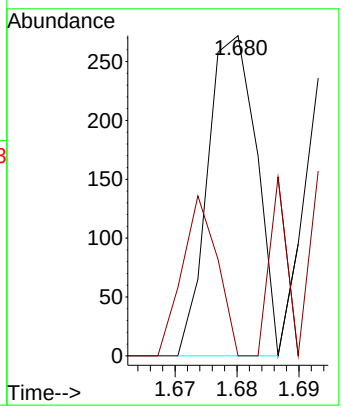


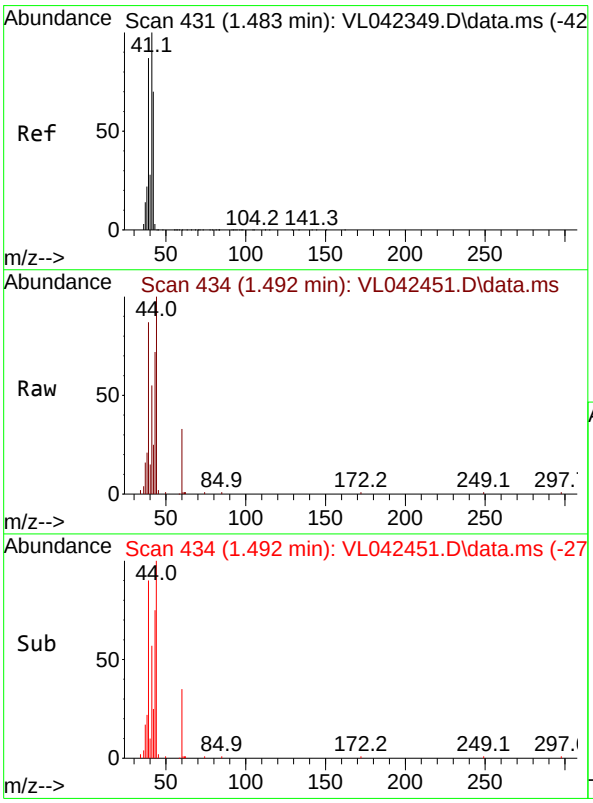
#6
Bromomethane
Concen: 0.039 ppbv
RT: 1.680 min Scan# 4
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 94 Resp: 149

Ion	Ratio	Lower	Upper
94	100		
96	0.0	66.2	99.2#

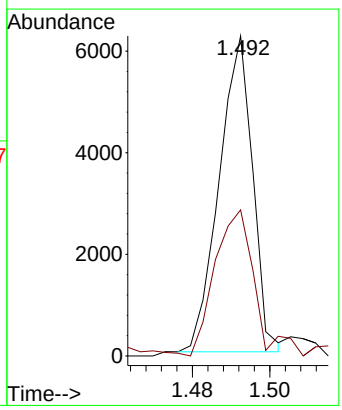


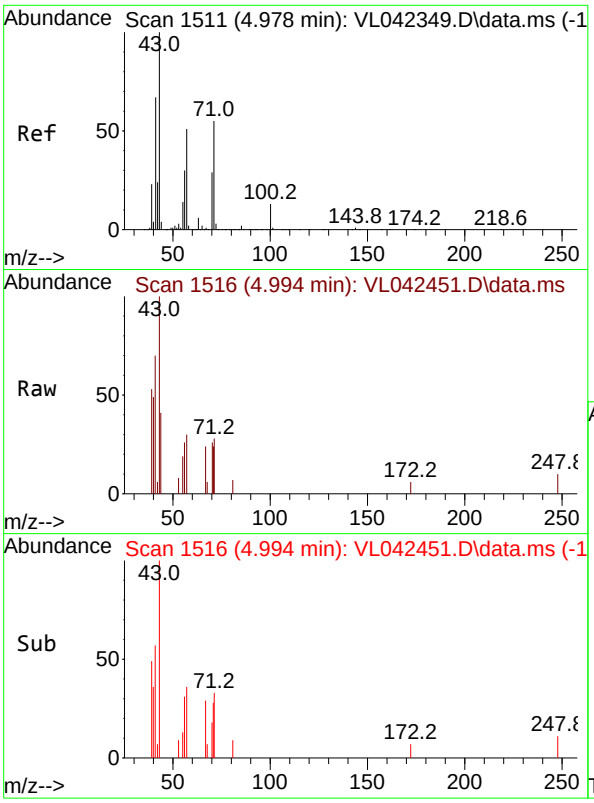


#9
Propene
Concen: 0.418 ppbv
RT: 1.492 min Scan# 434
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 41 Resp: 3728

Ion	Ratio	Lower	Upper
41	100		
42	61.4	56.2	84.4



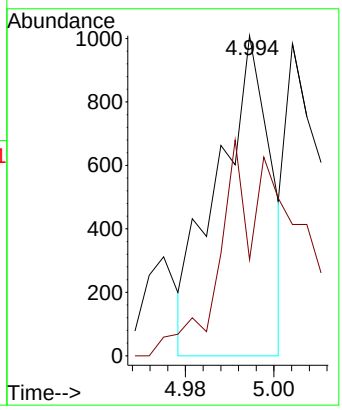


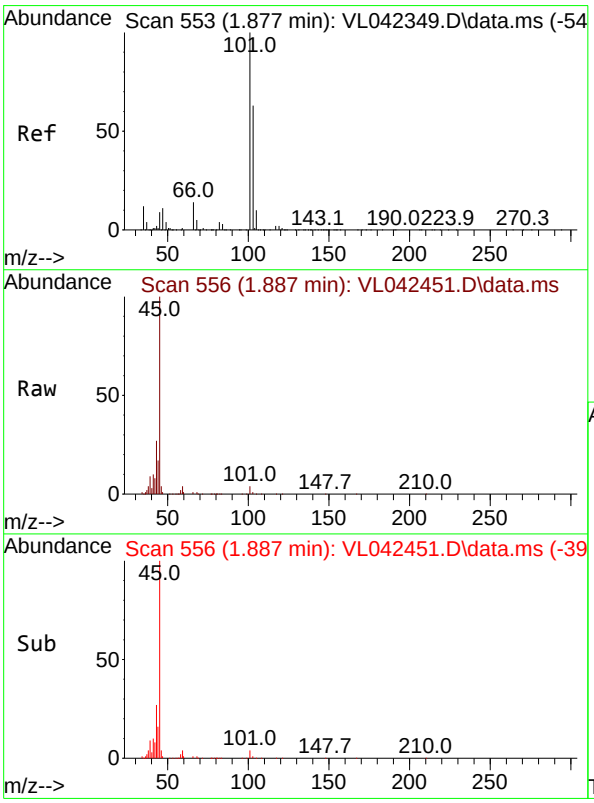
#10
Heptane
Concen: 0.033 ppbv
RT: 4.994 min Scan# 1
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 43 Resp: 838

Ion	Ratio	Lower	Upper
43	100		
57	118.3	39.9	59.9#

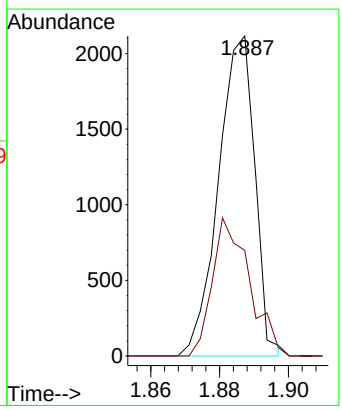


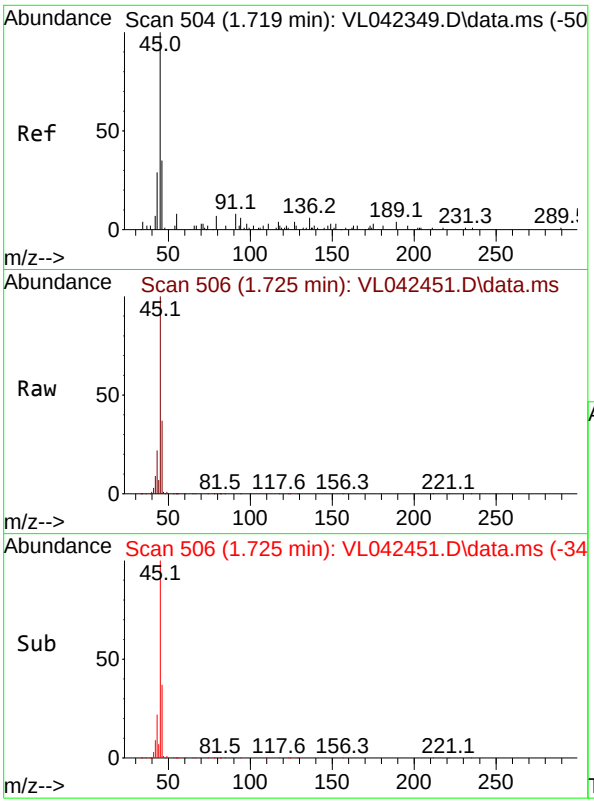


#11
Trichlorofluoromethane
Concen: 0.079 ppbv
RT: 1.887 min Scan# 556
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion:101 Resp: 1551

Ion	Ratio	Lower	Upper
101	100		
103	33.0	50.1	75.1#



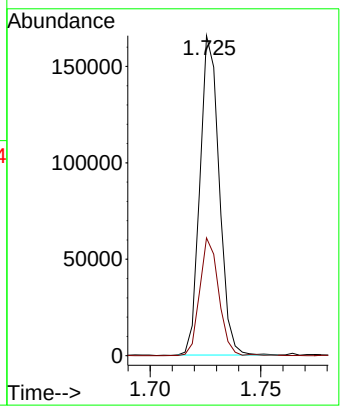


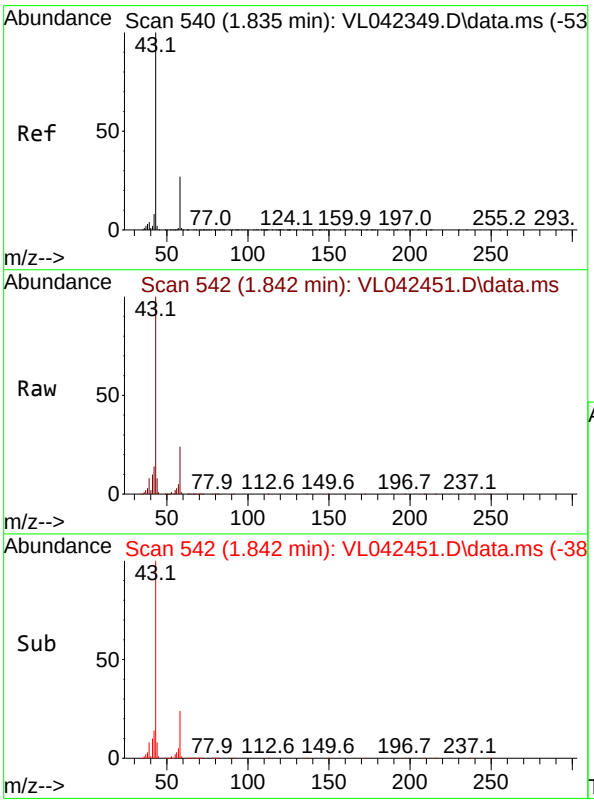
#13
Ethanol
Concen: 70.537 ppbv
RT: 1.725 min Scan# 5
Delta R.T. 0.007 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 45 Resp: 99875

Ion	Ratio	Lower	Upper
45	100		
46	36.8	21.9	87.7

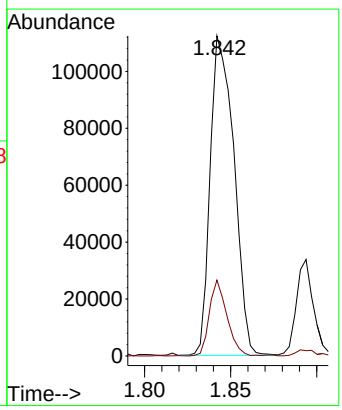


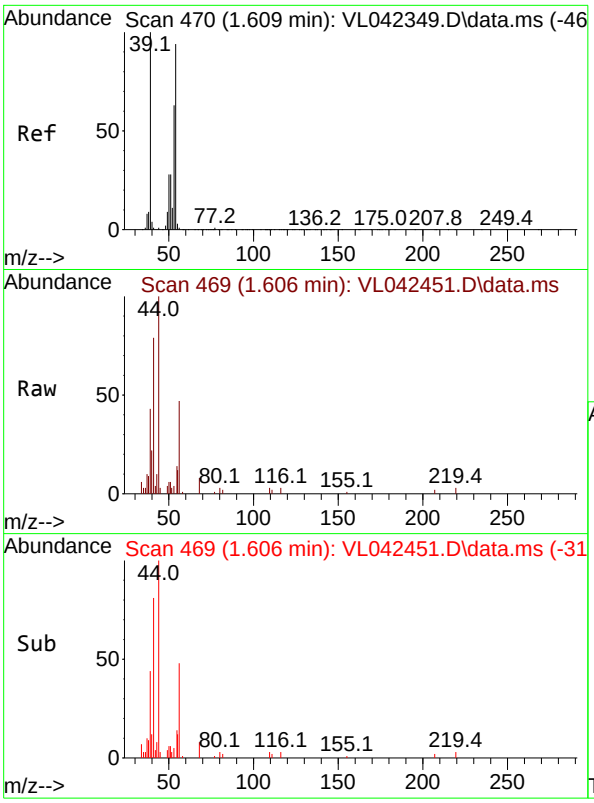


#15
Acetone
Concen: 5.667 ppbv
RT: 1.842 min Scan# 542
Delta R.T. 0.007 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 43 Resp: 107854

Ion	Ratio	Lower	Upper
43	100		
58	17.9	22.4	33.6#



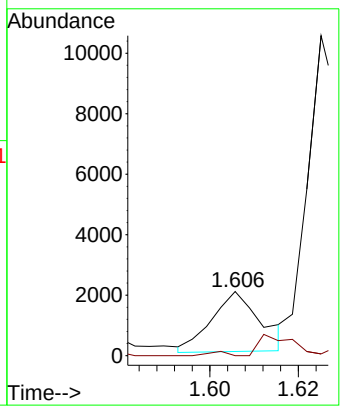


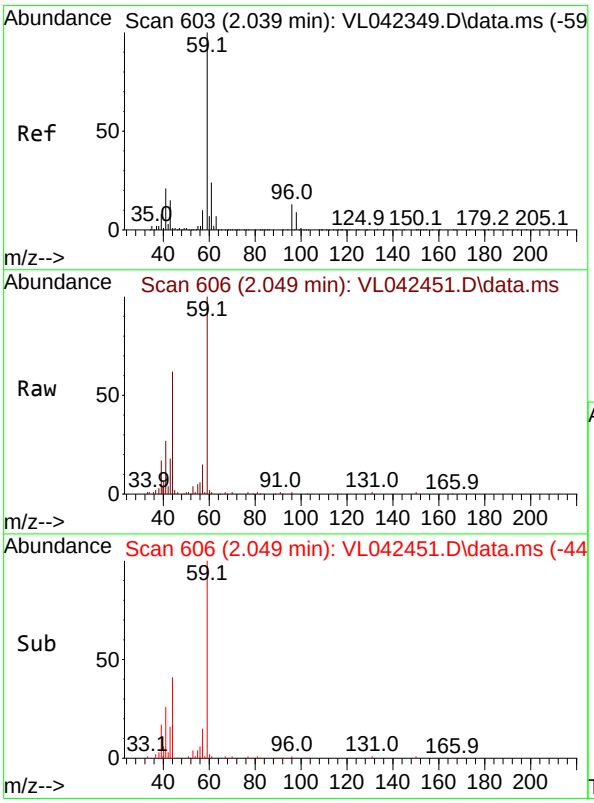
#16
1,3-Butadiene
Concen: 0.167 ppbv
RT: 1.606 min Scan# 4
Delta R.T. -0.003 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 39 Resp: 1522

Ion	Ratio	Lower	Upper
39	100		
54	33.4	64.9	97.3#

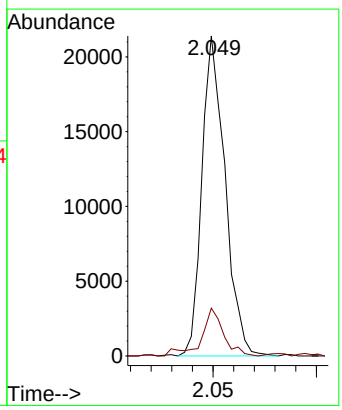


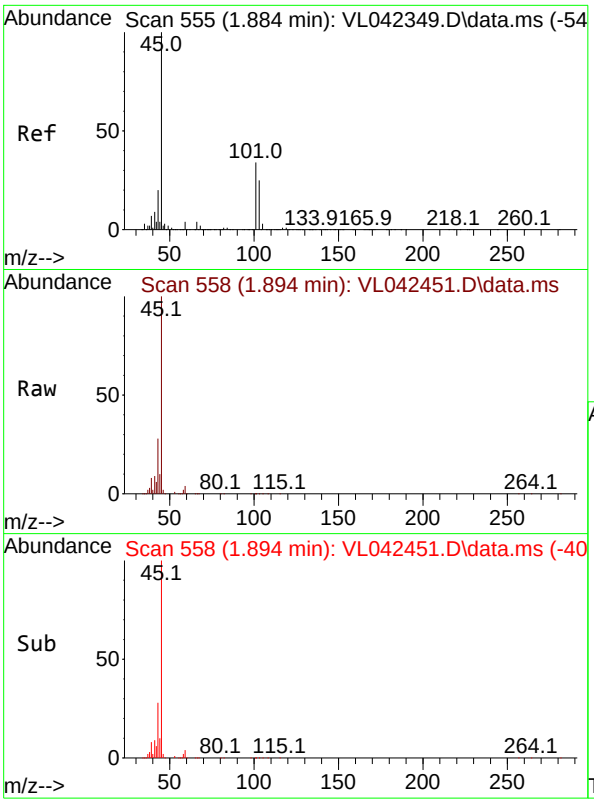


#17
tert-Butyl alcohol
Concen: 0.708 ppbv
RT: 2.049 min Scan# 606
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 59 Resp: 16691

Ion	Ratio	Lower	Upper
59	100		
57	15.5	8.7	13.1#



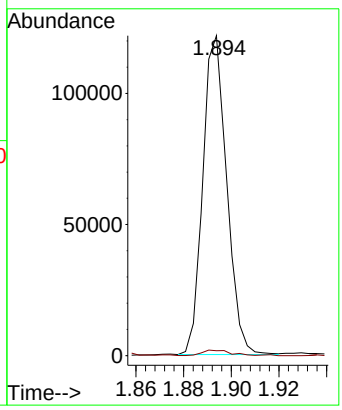


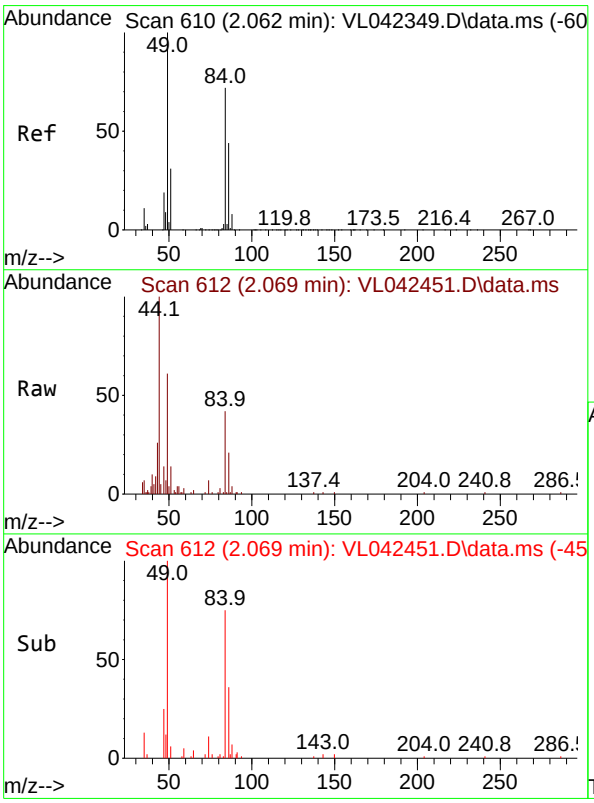
#19
Isopropyl Alcohol
Concen: 8.017 ppbv
RT: 1.894 min Scan# 5
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 45 Resp: 84766

Ion	Ratio	Lower	Upper
45	100		
58	2.1	34.5	51.7#

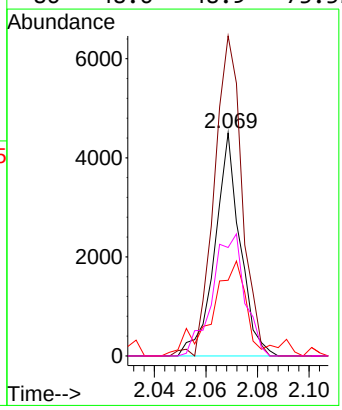


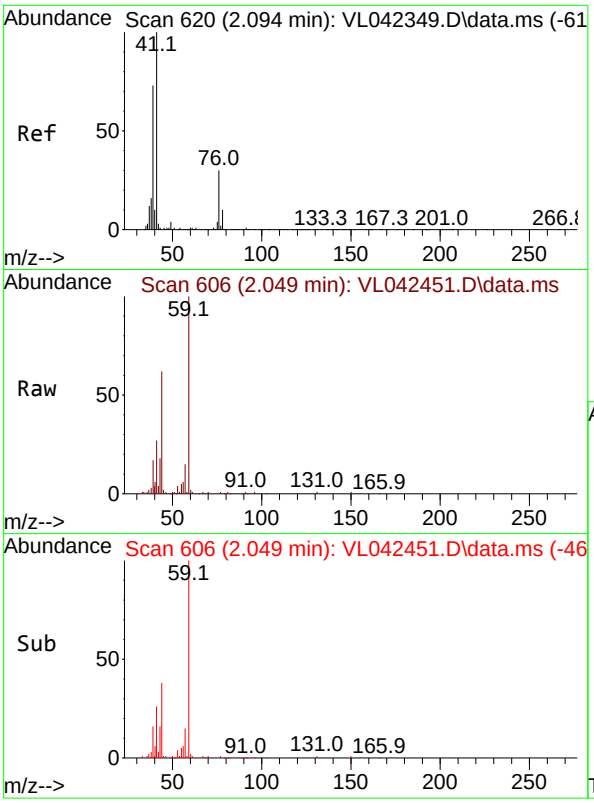


#20
Methylene Chloride
Concen: 0.410 ppbv
RT: 2.069 min Scan# 612
Delta R.T. 0.007 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 84 Resp: 3055

Ion	Ratio	Lower	Upper
84	100		
49	143.5	111.6	167.4
51	31.2	35.1	52.7#
86	48.6	48.9	73.3#



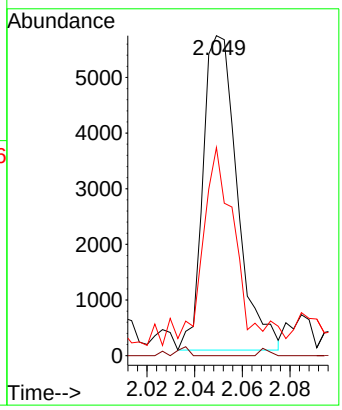


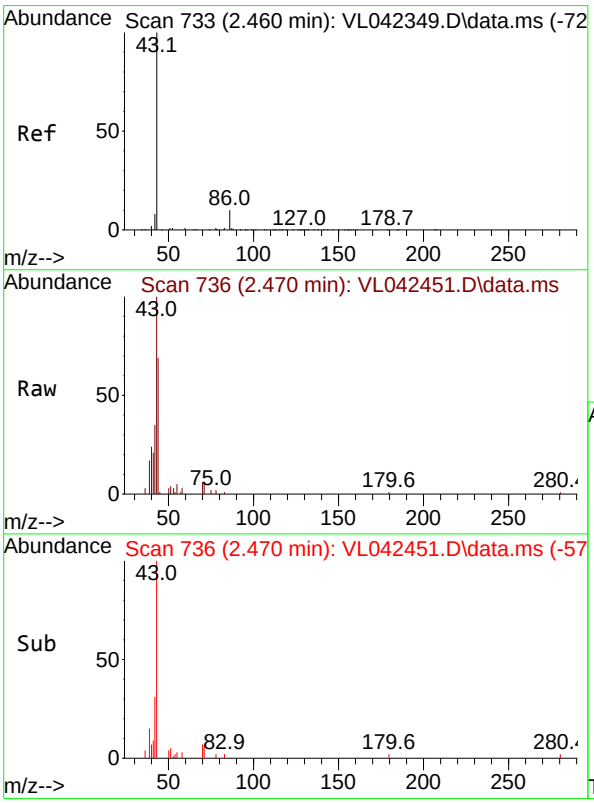
#21
Allyl Chloride
Concen: 0.429 ppbv
RT: 2.049 min Scan# 6
Delta R.T. -0.045 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 41 Resp: 5640

Ion	Ratio	Lower	Upper
41	100		
76	1.2	24.8	37.2#
39	83.0	60.6	90.8

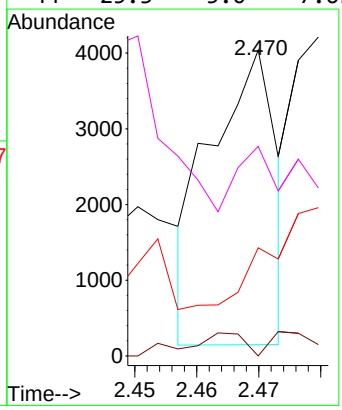


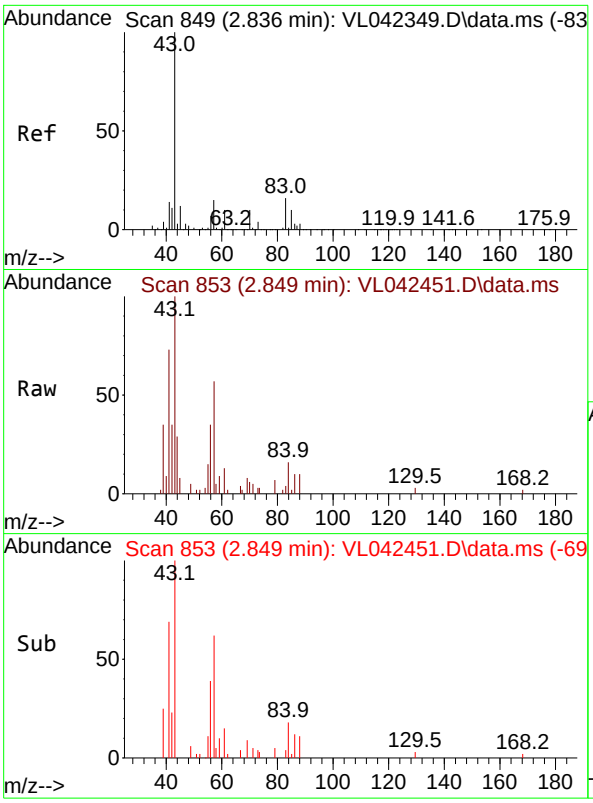


#23
Vinyl Acetate
Concen: 0.374 ppbv
RT: 2.470 min Scan# 736
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 43 Resp: 2885

Ion	Ratio	Lower	Upper
43	100		
86	0.0	6.5	9.7#
42	35.0	7.8	11.8#
44	25.3	5.0	7.6#



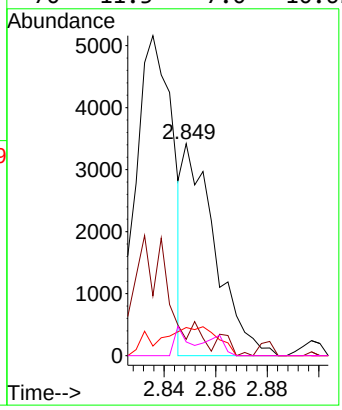


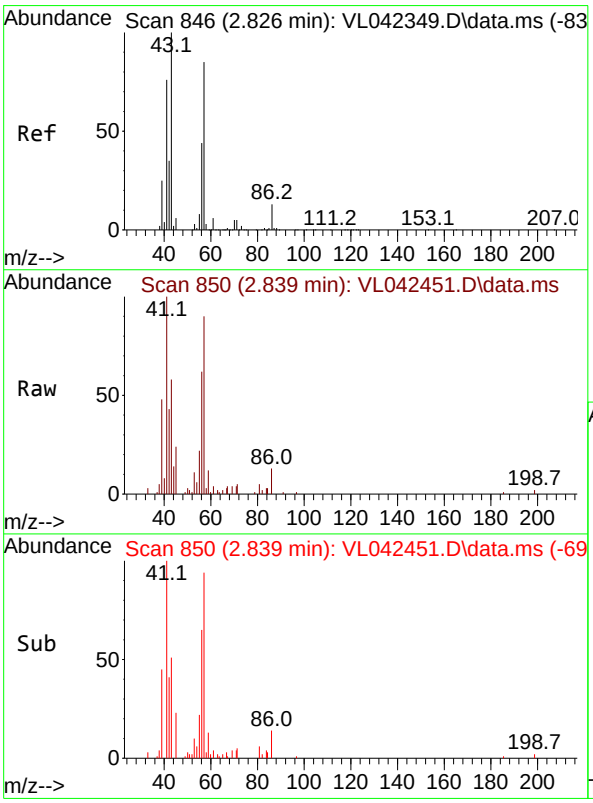
#25
Ethyl Acetate
Concen: 0.063 ppbv
RT: 2.849 min Scan# 8
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 43 Resp: 2944

Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.3	12.5#
61	25.2	7.3	10.9#
70	11.3	7.0	10.6#

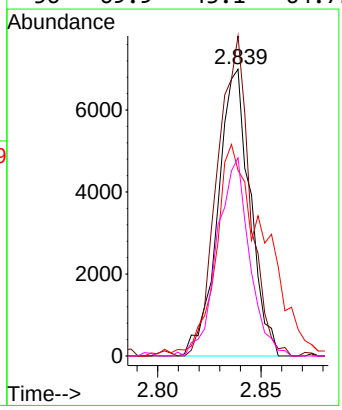


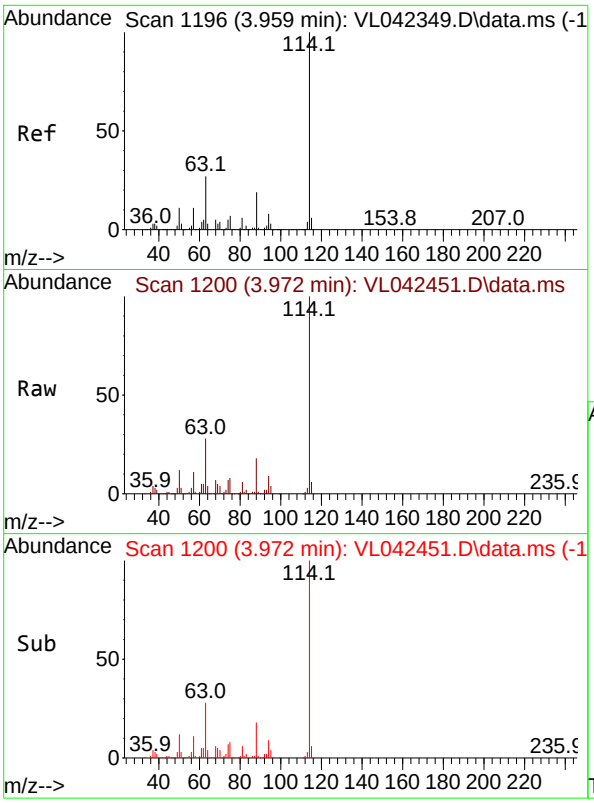


#26
Hexane
Concen: 0.400 ppbv
RT: 2.839 min Scan# 850
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 57 Resp: 7600

Ion	Ratio	Lower	Upper
57	100		
41	113.7	77.9	116.9
43	111.5	208.4	312.6#
56	69.9	43.1	64.7#



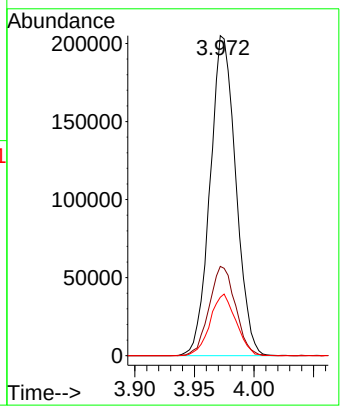


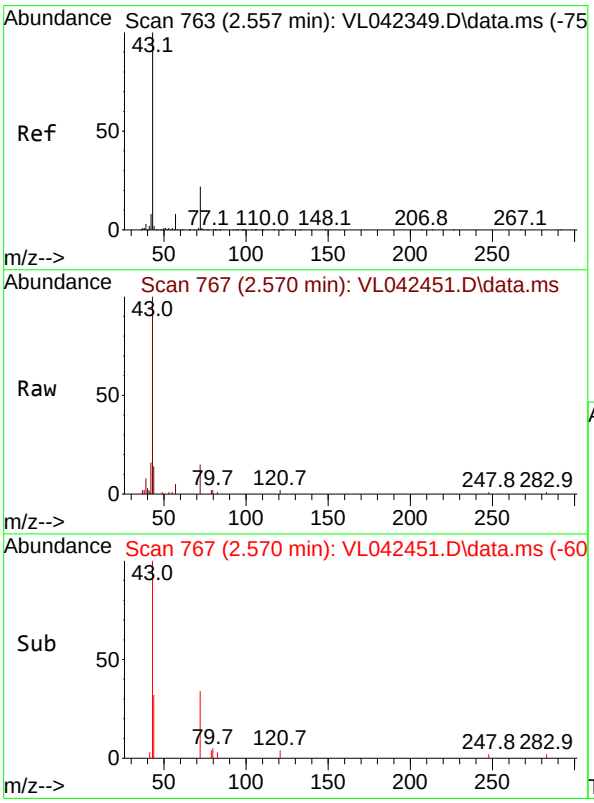
#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion:114 Resp: 307149

Ion	Ratio	Lower	Upper
114	100		
63	28.6	21.8	32.6
88	19.5	15.5	23.3

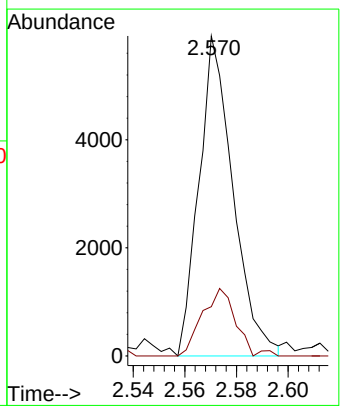


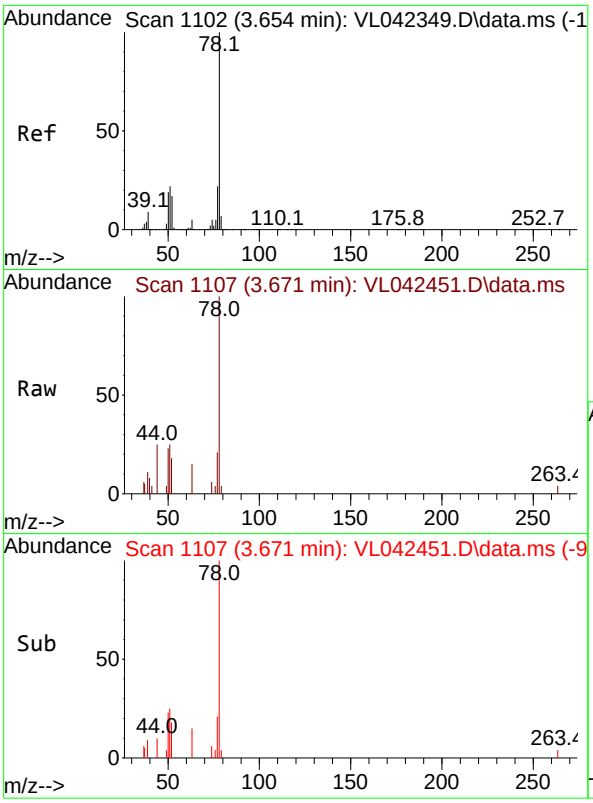


#34
2-Butanone
Concen: 0.223 ppbv
RT: 2.570 min Scan# 767
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 43 Resp: 5426

Ion	Ratio	Lower	Upper
43	100		
72	20.8	18.2	27.2



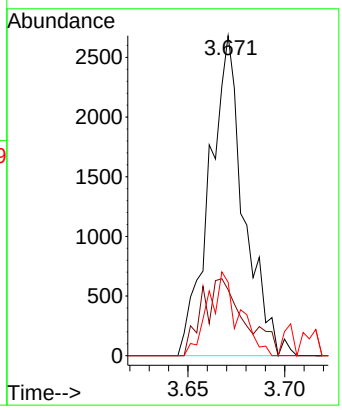


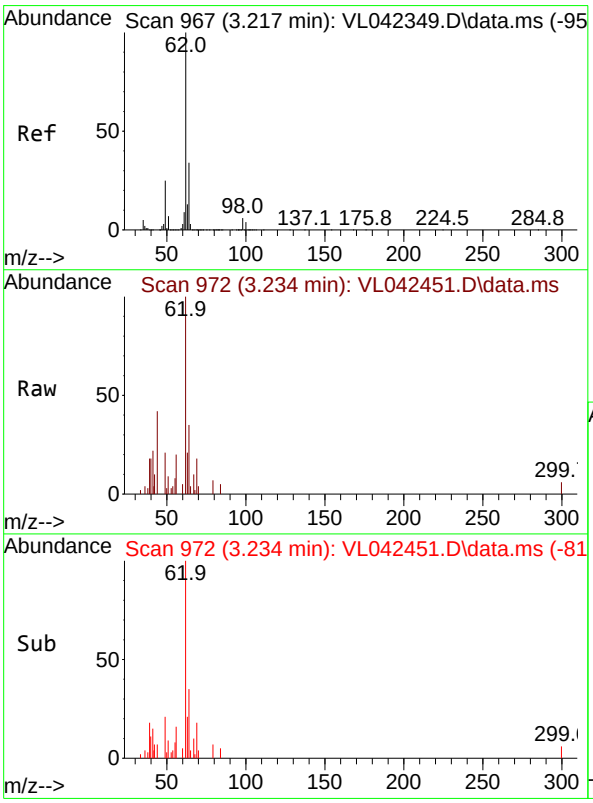
#36
Benzene
Concen: 0.100 ppbv
RT: 3.671 min Scan# 11
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 78 Resp: 3299

Ion	Ratio	Lower	Upper
78	100		
77	20.6	17.4	26.0
50	23.0	15.5	23.3

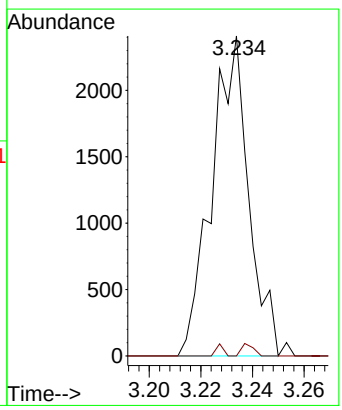


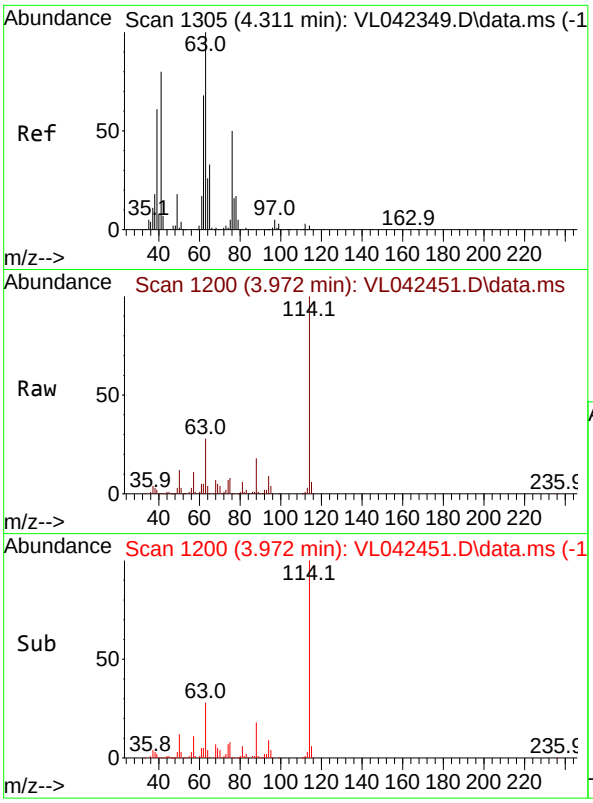


#37
1,2-Dichloroethane
Concen: 0.120 ppbv
RT: 3.234 min Scan# 972
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 62 Resp: 2395

Ion	Ratio	Lower	Upper
62	100		
98	2.0	5.1	7.7#



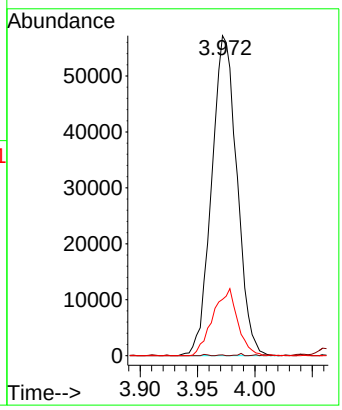


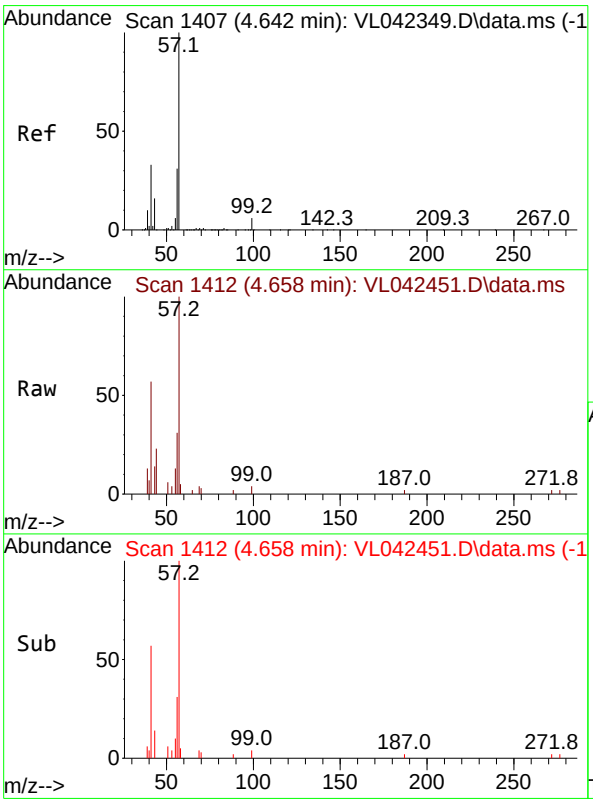
#39
1,2-Dichloropropane
Concen: 7.115 ppbv
RT: 3.972 min Scan# 1
Delta R.T. -0.340 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 63 Resp: 87837

Ion	Ratio	Lower	Upper
63	100		
41	0.6	64.2	96.2#
62	17.6	54.3	81.5#

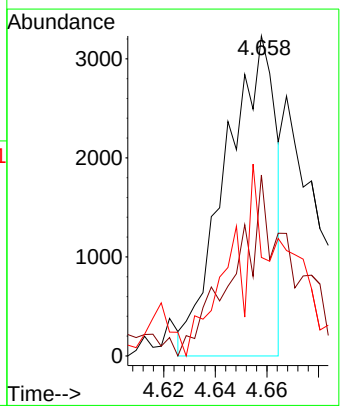


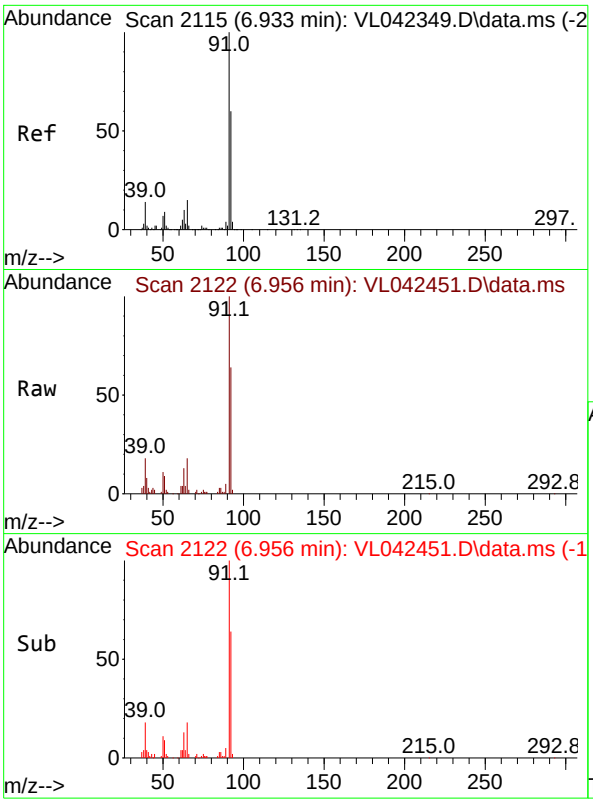


#44
2,2,4-Trimethylpentane
Concen: 0.076 ppbv
RT: 4.658 min Scan# 1412
Delta R.T. 0.016 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 57 Resp: 4356

Ion	Ratio	Lower	Upper
57	100		
41	72.5	27.2	40.8#
56	73.4	25.7	38.5#



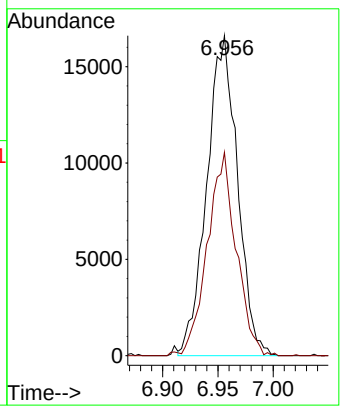


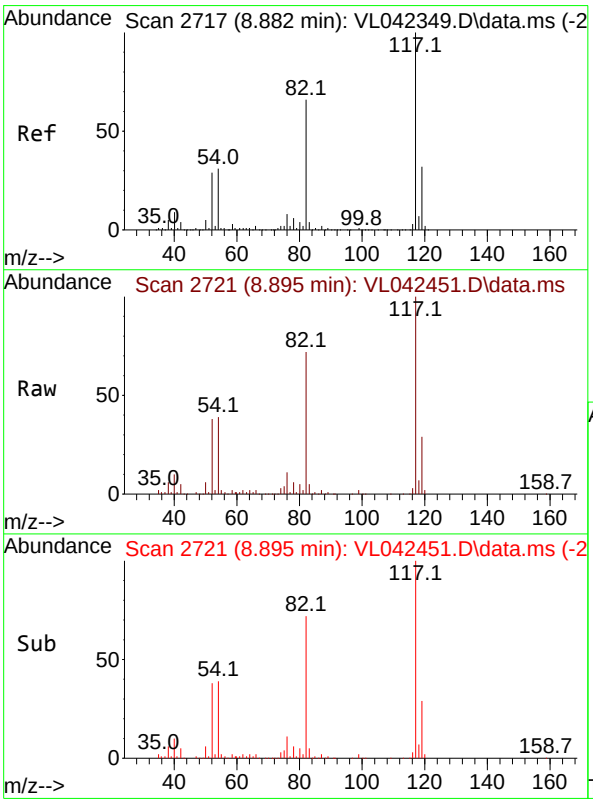
#53
Toluene
Concen: 0.806 ppbv
RT: 6.956 min Scan# 21
Delta R.T. 0.023 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 91 Resp: 32058

Ion	Ratio	Lower	Upper
91	100		
92	59.8	48.2	72.4

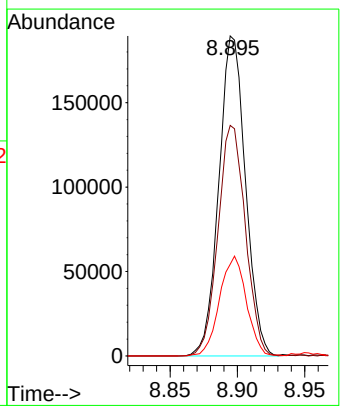


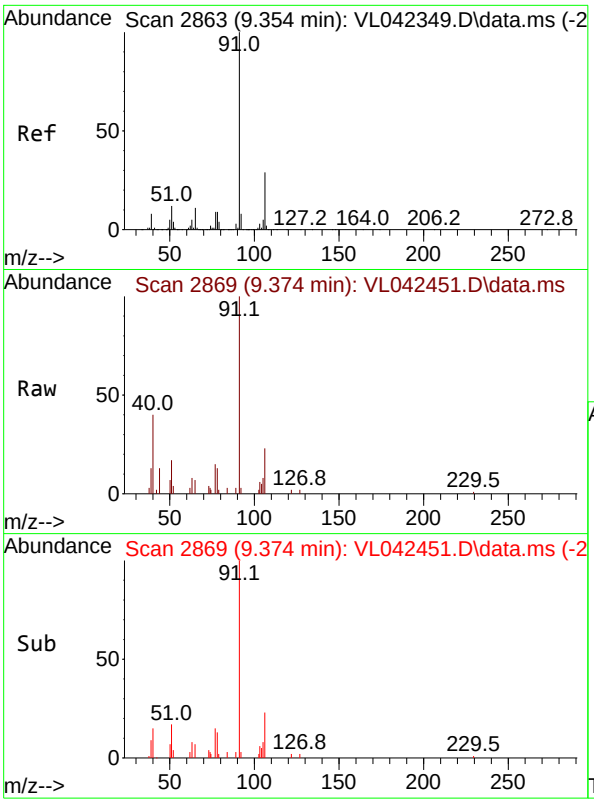


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2721
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion:117 Resp: 260772

Ion	Ratio	Lower	Upper
117	100		
82	74.0	57.8	86.6
119	31.5	25.2	37.8



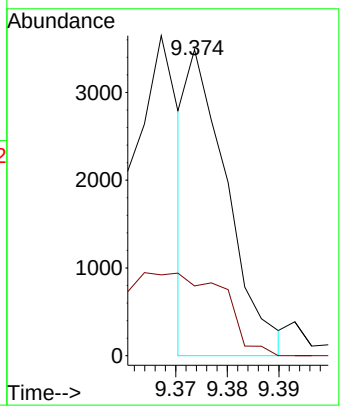


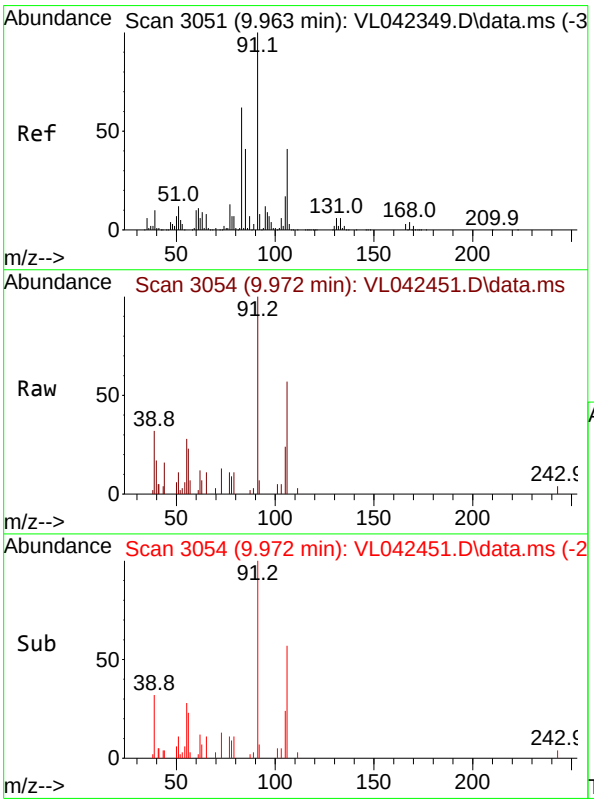
#58
Ethyl Benzene
Concen: 0.036 ppbv
RT: 9.374 min Scan# 2
Delta R.T. 0.020 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion: 91 Resp: 1871

Ion	Ratio	Lower	Upper
91	100		
106	24.9	23.0	34.4

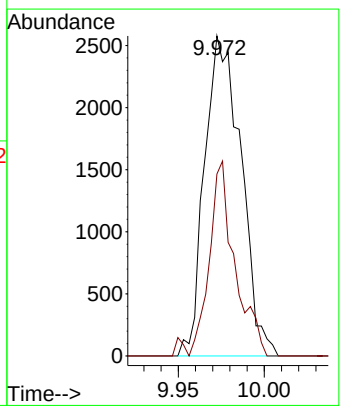


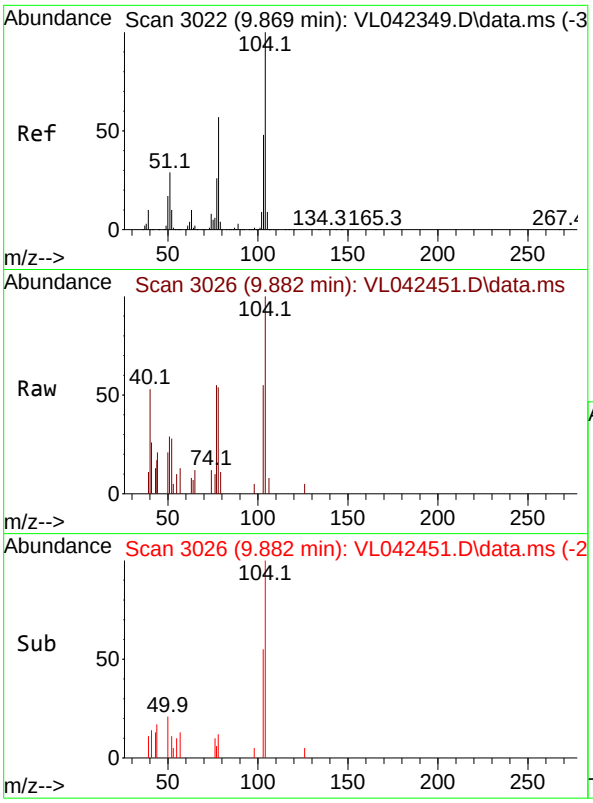


#60
o-Xylene
Concen: 0.091 ppbv
RT: 9.972 min Scan# 3054
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 91 Resp: 3798

Ion	Ratio	Lower	Upper
91	100		
106	43.5	21.1	63.4



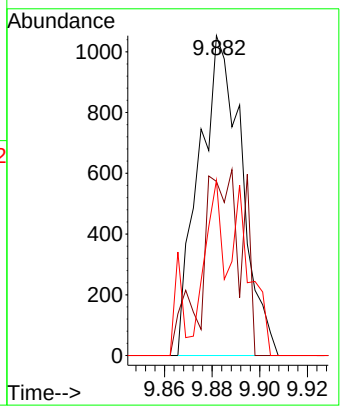


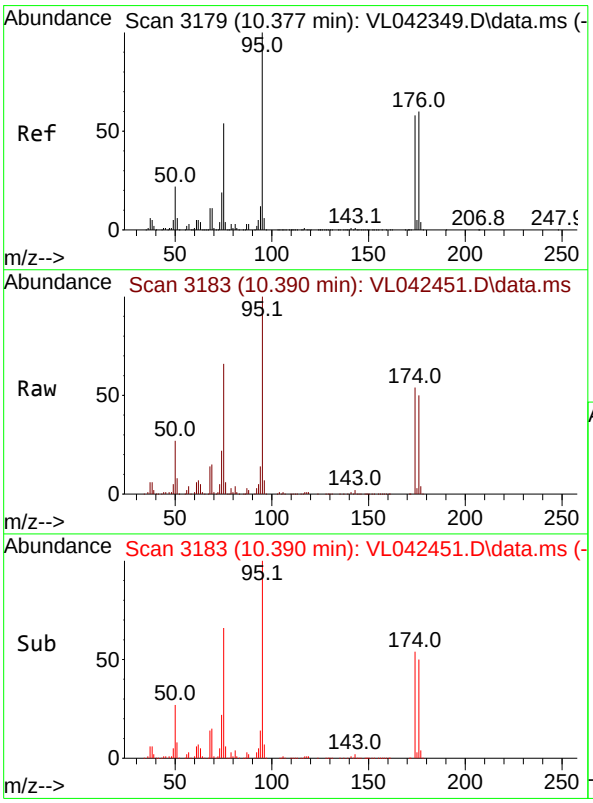
#61
Styrene
Concen: 0.065 ppbv
RT: 9.882 min Scan# 3
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion:104 Resp: 1303

Ion	Ratio	Lower	Upper
104	100		
78	54.4	44.6	66.8
103	52.6	37.4	56.0

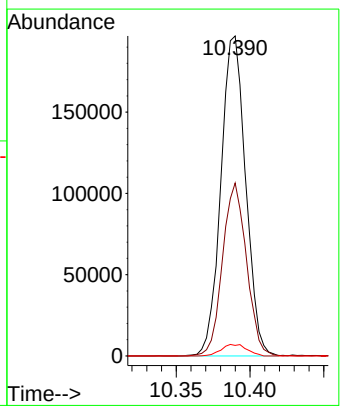


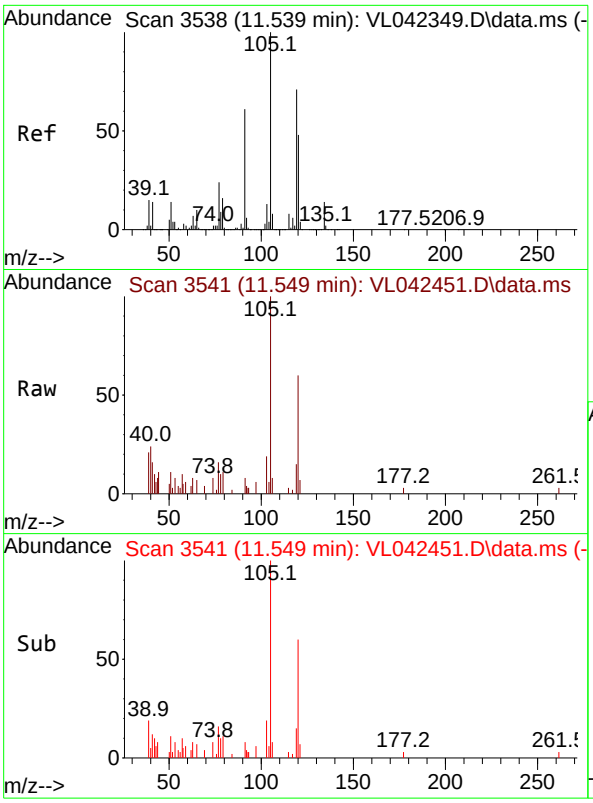


#68
1-Bromo-4-Fluorobenzene
Concen: 10.733 ppbv
RT: 10.390 min Scan# 3183
Delta R.T. 0.013 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Tgt Ion: 95 Resp: 230005

Ion	Ratio	Lower	Upper
95	100		
174	52.2	48.5	72.7
175	3.8	3.7	5.5



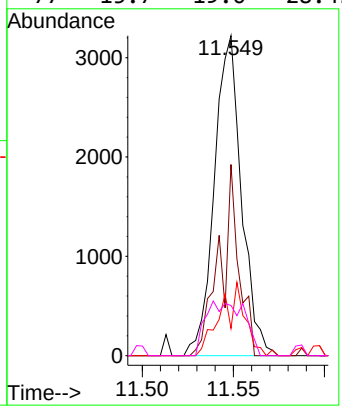


#74
1,2,4-Trimethylbenzene
Concen: 0.063 ppbv
RT: 11.549 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042451.D
Acq: 29 Apr 2025 17:37

Instrument :
MSVOA_L
ClientSampleId :
IA-DUP-1-3242025DL

Tgt Ion:105 Resp: 3330

Ion	Ratio	Lower	Upper
105	100		
120	59.7	38.1	57.1#
91	8.5	48.8	73.2#
77	15.7	19.0	28.4#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042452.D
Acq On : 29 Apr 2025 18:09
Operator : SY/MD
Sample : Q1665-19DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Quant Time: Apr 30 01:24:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

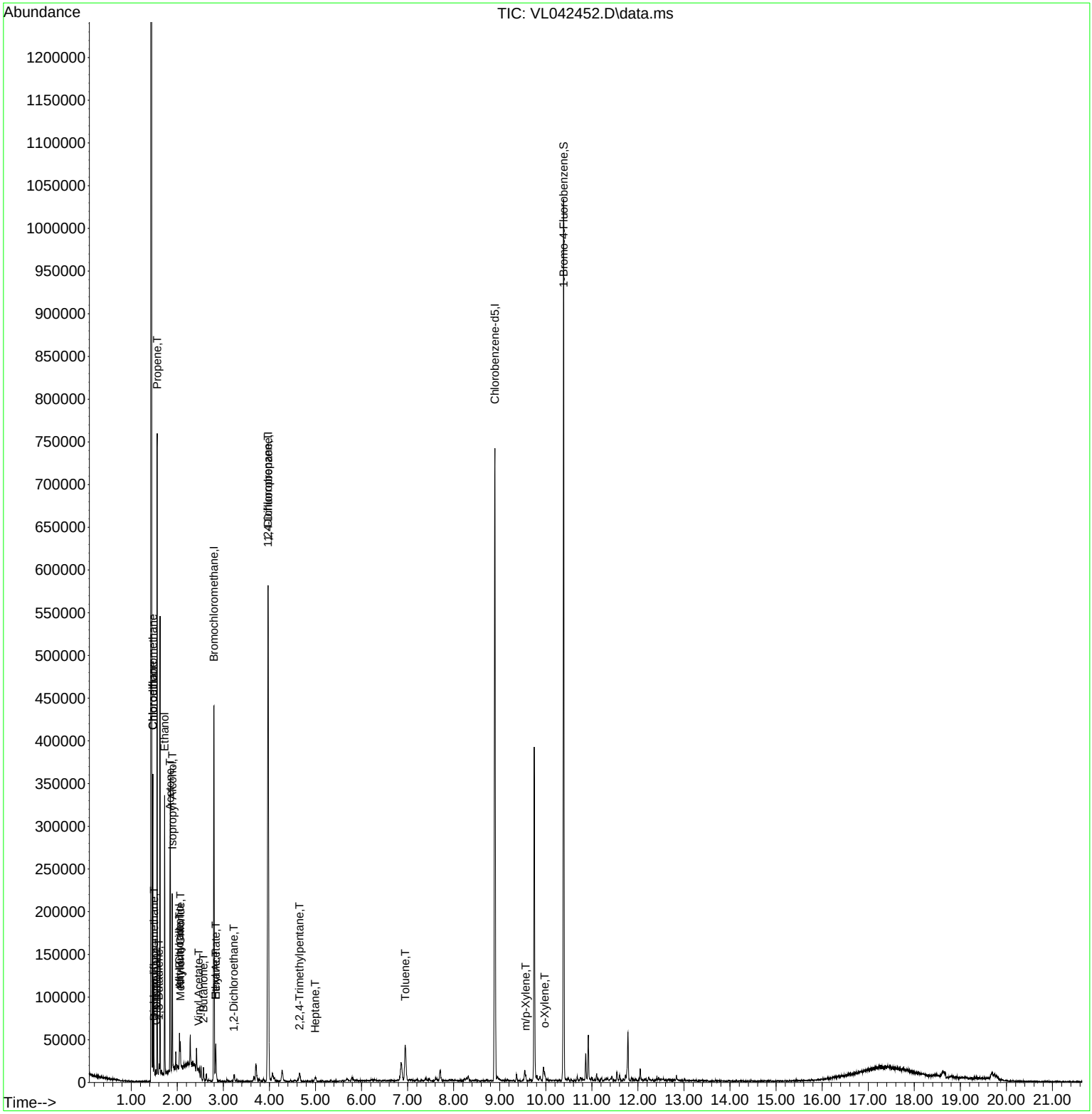
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.794	49	114403	10.000	ppbv	0.00
33) 1,4-Difluorobenzene	3.972	114	305602	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.895	117	261578	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	242040	11.260	ppbv	0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 112.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.499	85	2645	0.131	ppbv	99
3) Chlorodifluoromethane	1.470	51	74252	3.858	ppbv #	57
4) Chloromethane	1.535	50	1338	0.167	ppbv #	44
7) Chloroethane	1.470	64	3753	1.192	ppbv	100
9) Propene	1.564	41	86624	9.882	ppbv	97
10) Heptane	4.991	43	811	0.033	ppbv #	27
13) Ethanol	1.726	45	110989	79.664	ppbv	76
15) Acetone	1.842	43	115137	6.148	ppbv #	85
16) 1,3-Butadiene	1.603	39	1421	0.159	ppbv #	9
17) tert-Butyl alcohol	2.049	59	15817	0.681	ppbv #	92
19) Isopropyl Alcohol	1.891	45	80028	7.692	ppbv #	36
20) Methylene Chloride	2.069	84	3847	0.525	ppbv #	83
21) Allyl Chloride	2.049	41	4493	0.347	ppbv #	85
23) Vinyl Acetate	2.464	43	6705	0.884	ppbv #	72
25) Ethyl Acetate	2.836	43	3860	0.084	ppbv #	74
26) Hexane	2.836	57	8047	0.431	ppbv #	42
34) 2-Butanone	2.567	43	8758	0.362	ppbv	97
37) 1,2-Dichloroethane	3.227	62	2347	0.119	ppbv #	81
39) 1,2-Dichloropropane	3.969	63	89205	7.262	ppbv #	23
44) 2,2,4-Trimethylpentane	4.655	57	2244	0.039	ppbv #	1
53) Toluene	6.950	91	15746	0.398	ppbv #	39
59) m/p-Xylene	9.565	91	1536	0.037	ppbv #	32
60) o-Xylene	9.976	91	2743	0.065	ppbv	85

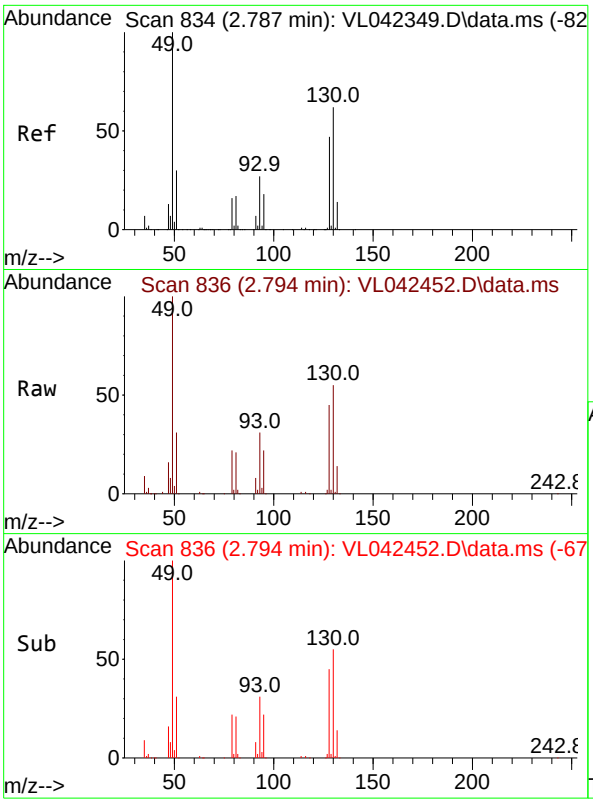
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042452.D
Acq On : 29 Apr 2025 18:09
Operator : SY/MD
Sample : Q1665-19DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 14 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Quant Time: Apr 30 01:24:12 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



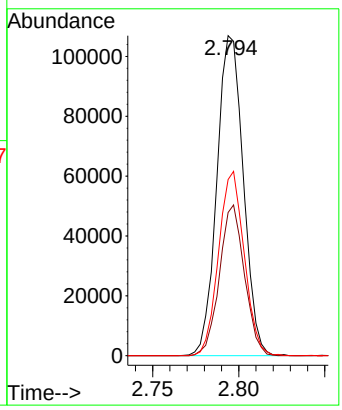


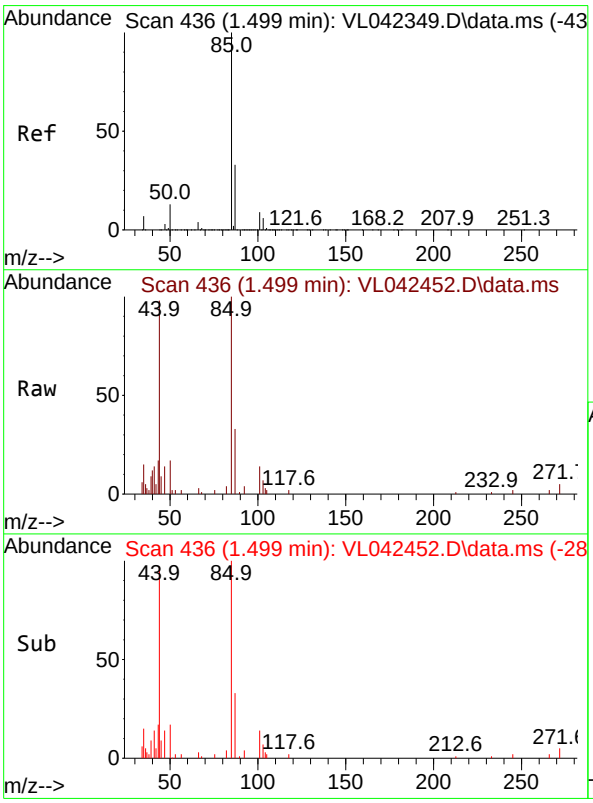
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.794 min Scan# 8
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 49 Resp: 114403

Ion	Ratio	Lower	Upper
49	100		
128	44.4	22.8	68.4
130	55.9	29.3	88.0

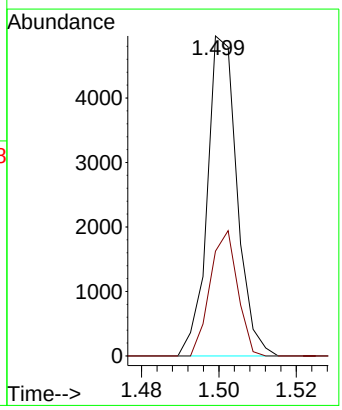


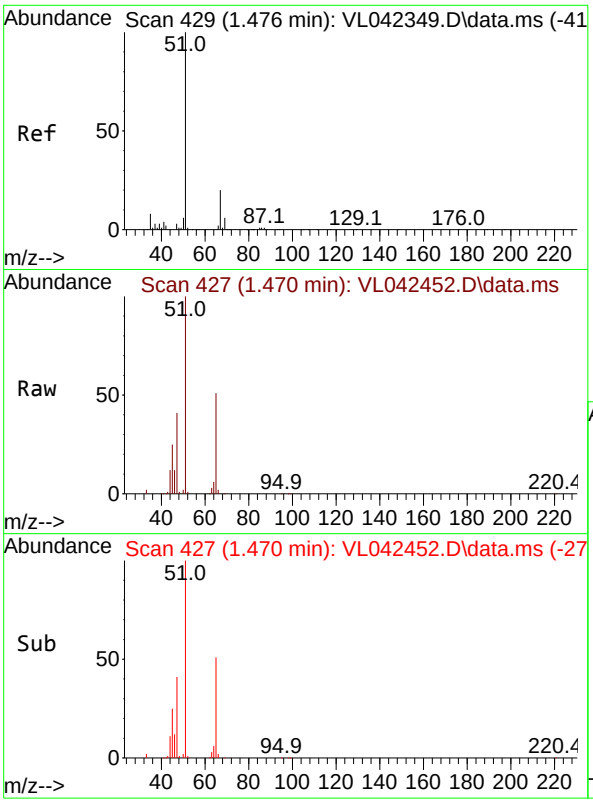


#2
Dichlorodifluoromethane
Concen: 0.131 ppbv
RT: 1.499 min Scan# 436
Delta R.T. 0.000 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 85 Resp: 2645

Ion	Ratio	Lower	Upper
85	100		
87	32.8	26.6	39.8



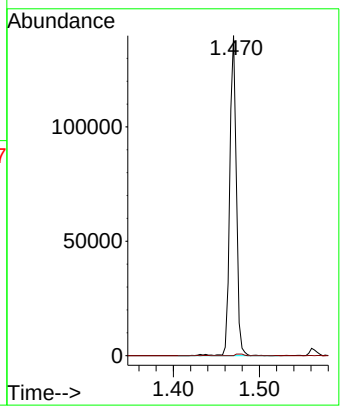


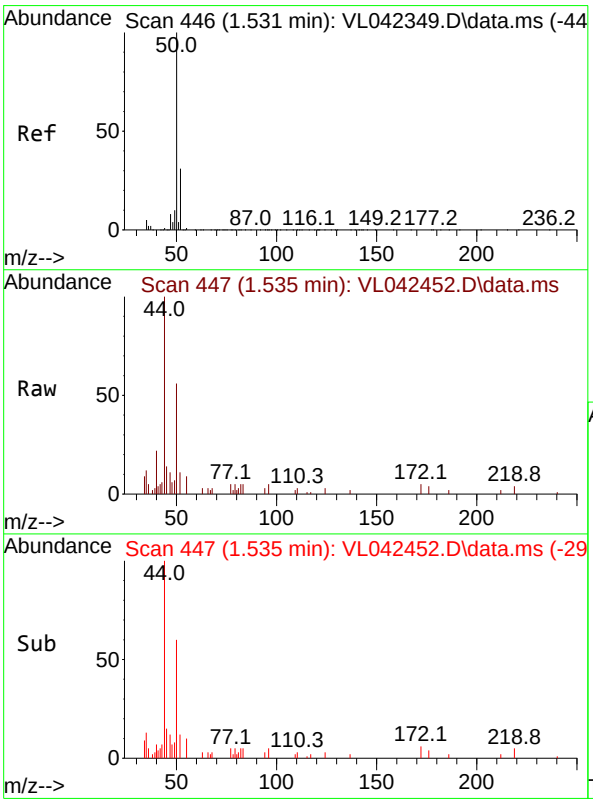
#3
Chlorodifluoromethane
Concen: 3.858 ppbv
RT: 1.470 min Scan# 4
Delta R.T. -0.006 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 51 Resp: 74252

Ion	Ratio	Lower	Upper
51	100		
67	0.6	16.2	24.4#

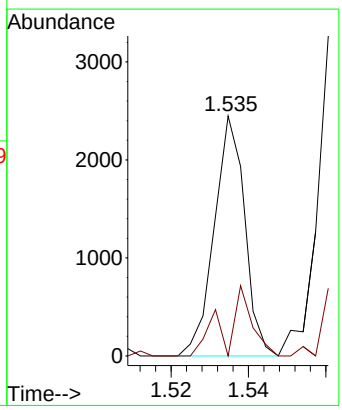


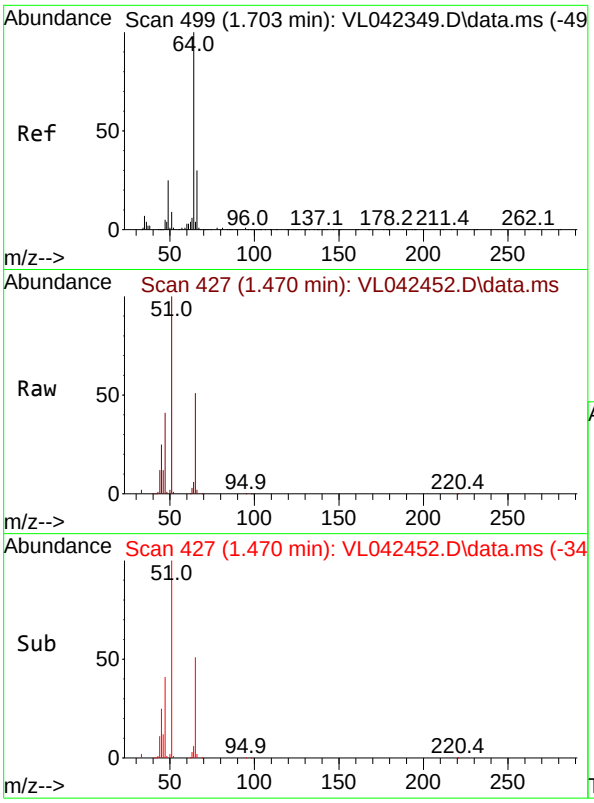


#4
Chloromethane
Concen: 0.167 ppbv
RT: 1.535 min Scan# 447
Delta R.T. 0.004 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 50 Resp: 1338

Ion	Ratio	Lower	Upper
50	100		
52	0.0	24.7	37.1#



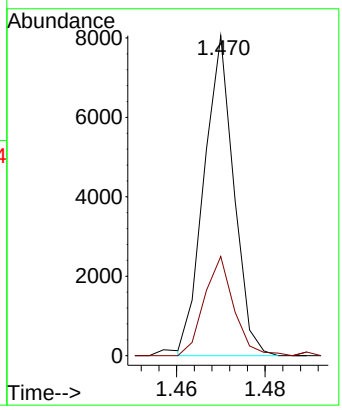


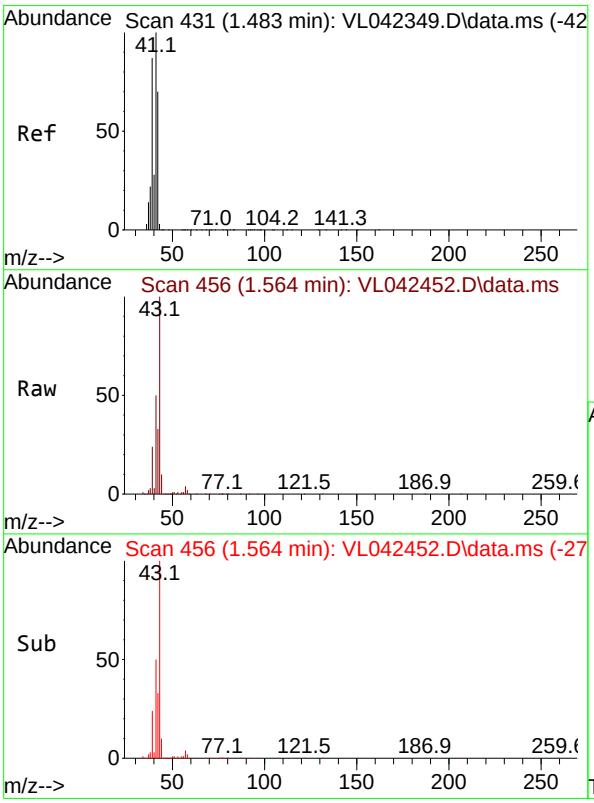
#7
Chloroethane
Concen: 1.192 ppbv
RT: 1.470 min Scan# 4
Delta R.T. -0.233 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 64 Resp: 3753

Ion	Ratio	Lower	Upper
64	100		
66	31.0	24.6	37.0

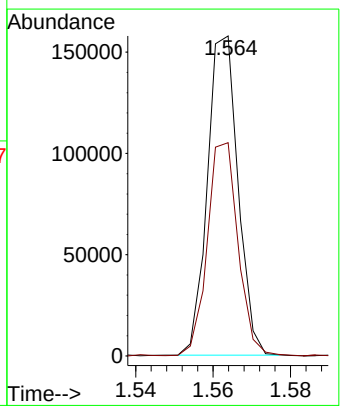


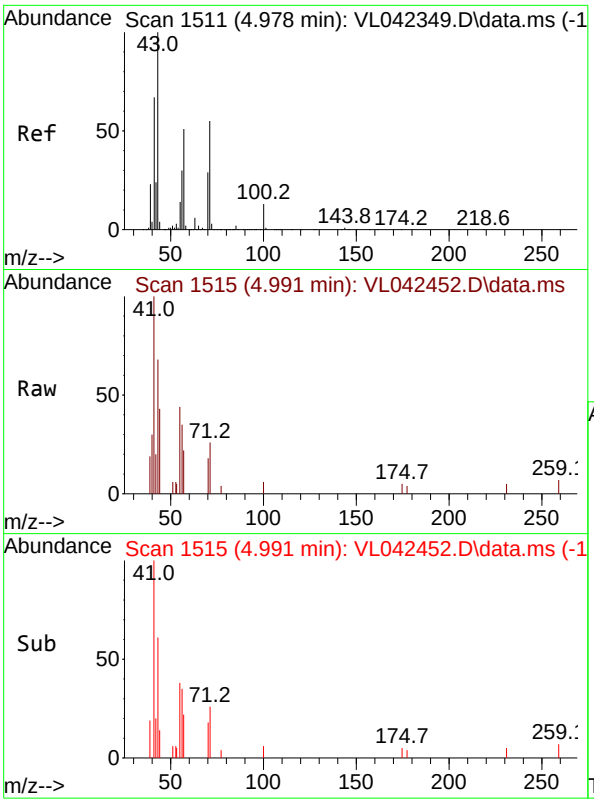


#9
Propene
Concen: 9.882 ppbv
RT: 1.564 min Scan# 456
Delta R.T. 0.081 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 41 Resp: 86624

Ion	Ratio	Lower	Upper
41	100		
42	68.0	56.2	84.4



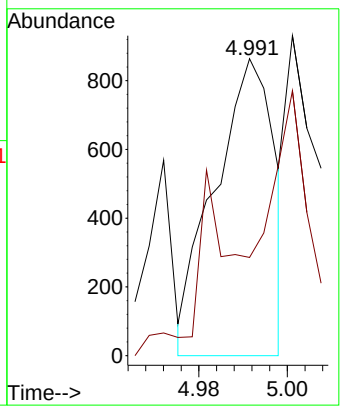


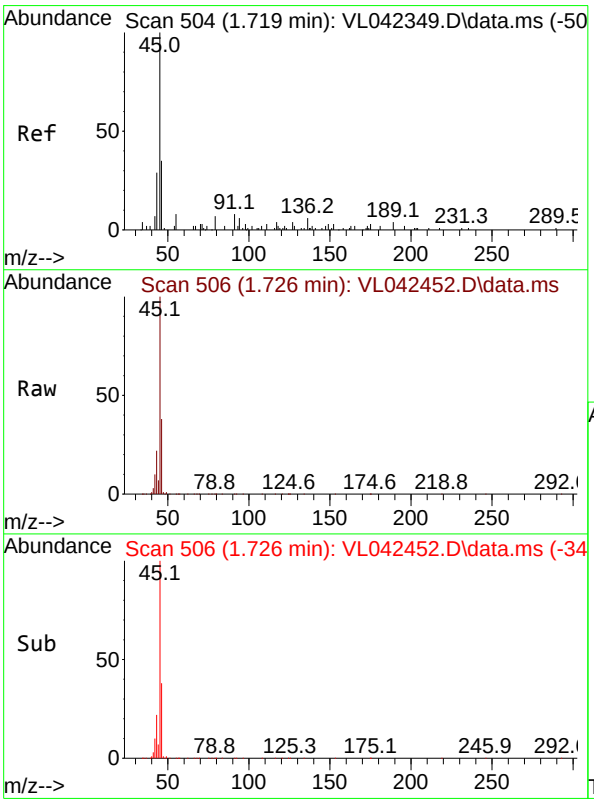
#10
Heptane
Concen: 0.033 ppbv
RT: 4.991 min Scan# 1
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 43 Resp: 811

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.9	59.9#

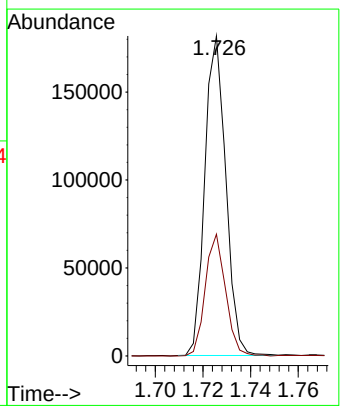


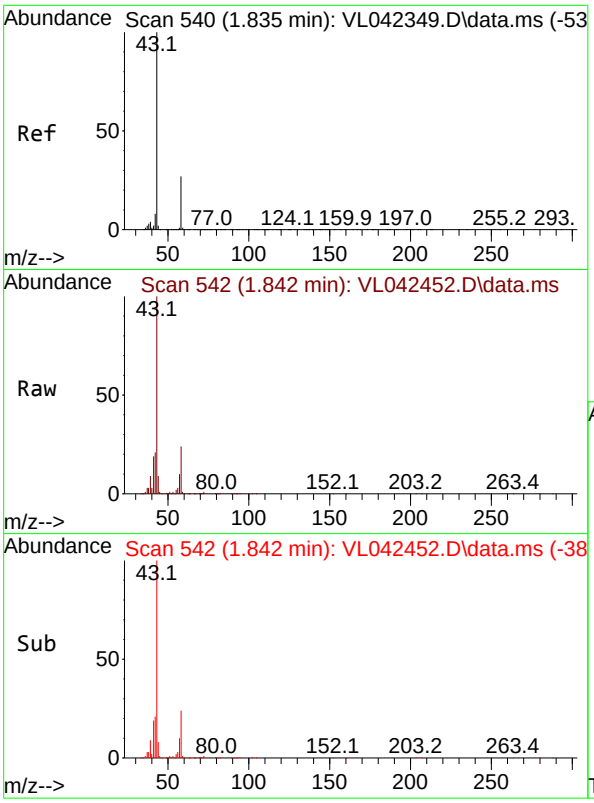


#13
Ethanol
Concen: 79.664 ppbv
RT: 1.726 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 45 Resp: 110989

Ion	Ratio	Lower	Upper
45	100		
46	37.3	21.9	87.7



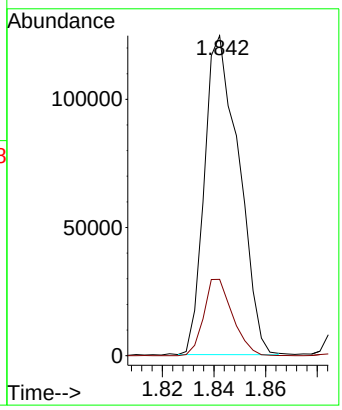


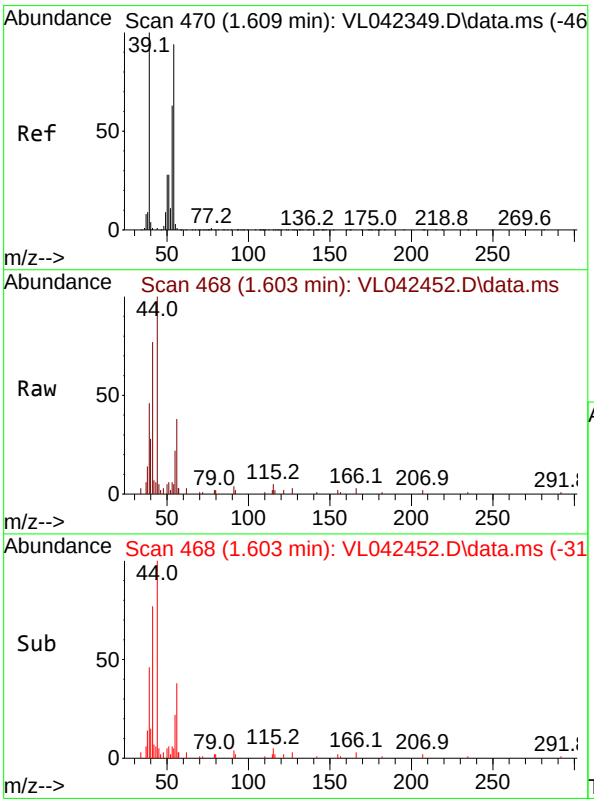
#15
Acetone
Concen: 6.148 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 43 Resp: 115137

Ion	Ratio	Lower	Upper
43	100		
58	20.2	22.4	33.6#

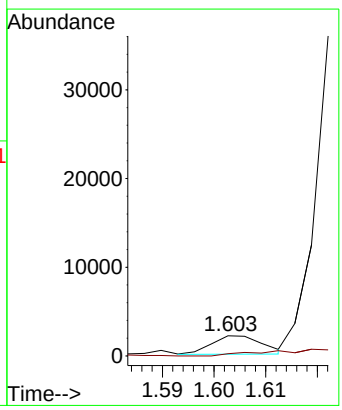


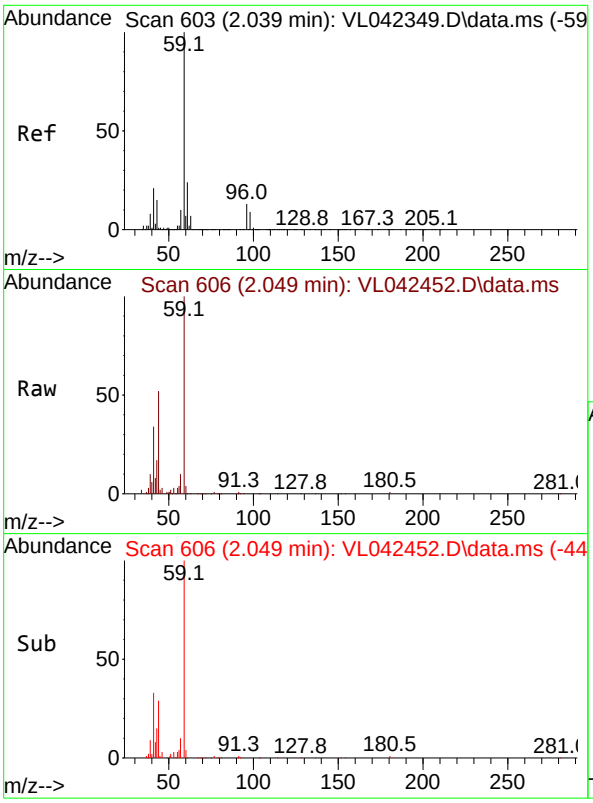


#16
1,3-Butadiene
Concen: 0.159 ppbv
RT: 1.603 min Scan# 468
Delta R.T. -0.006 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 39 Resp: 1421

Ion	Ratio	Lower	Upper
39	100		
54	0.0	64.9	97.3#



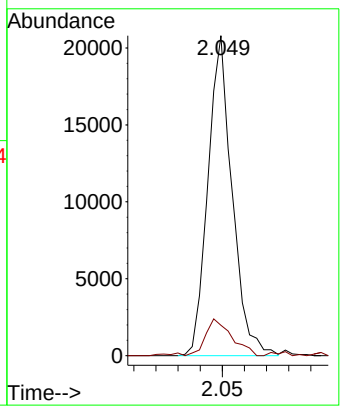


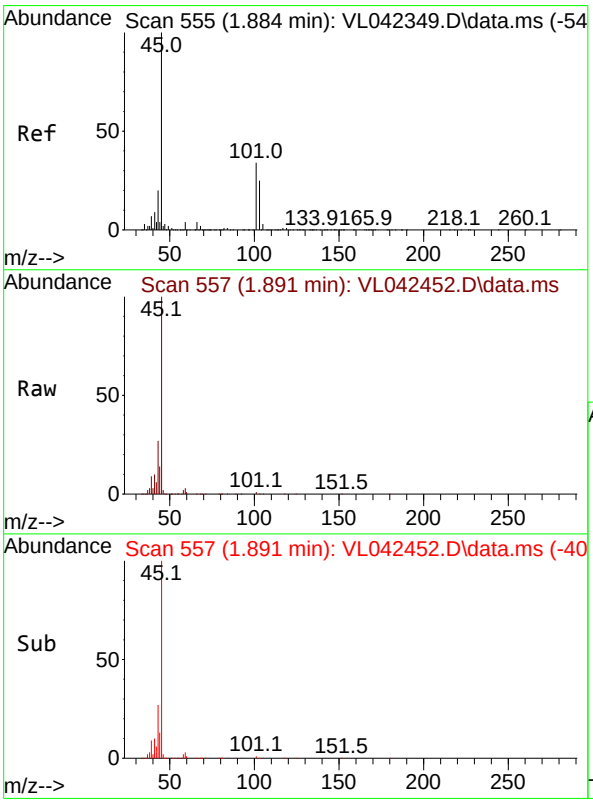
#17
tert-Butyl alcohol
Concen: 0.681 ppbv
RT: 2.049 min Scan# 6
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 59 Resp: 15817

Ion	Ratio	Lower	Upper
59	100		
57	14.1	8.7	13.1#

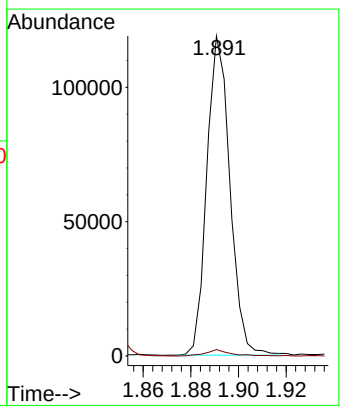


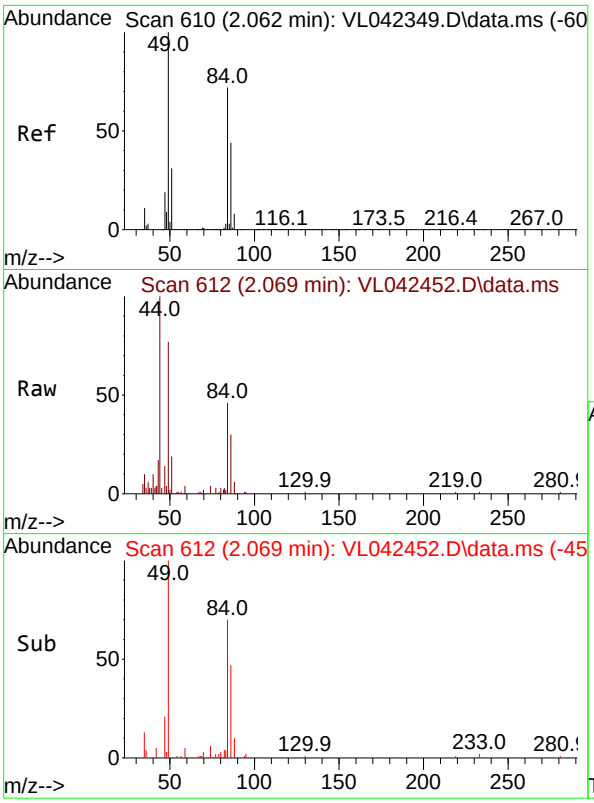


#19
Isopropyl Alcohol
Concen: 7.692 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 45 Resp: 80028

Ion	Ratio	Lower	Upper
45	100		
58	2.3	34.5	51.7#



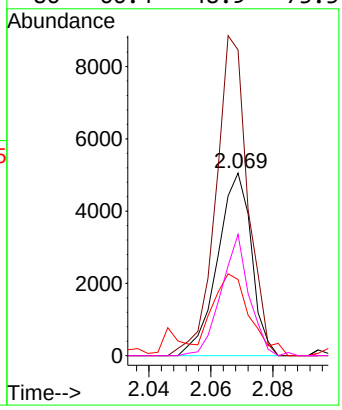


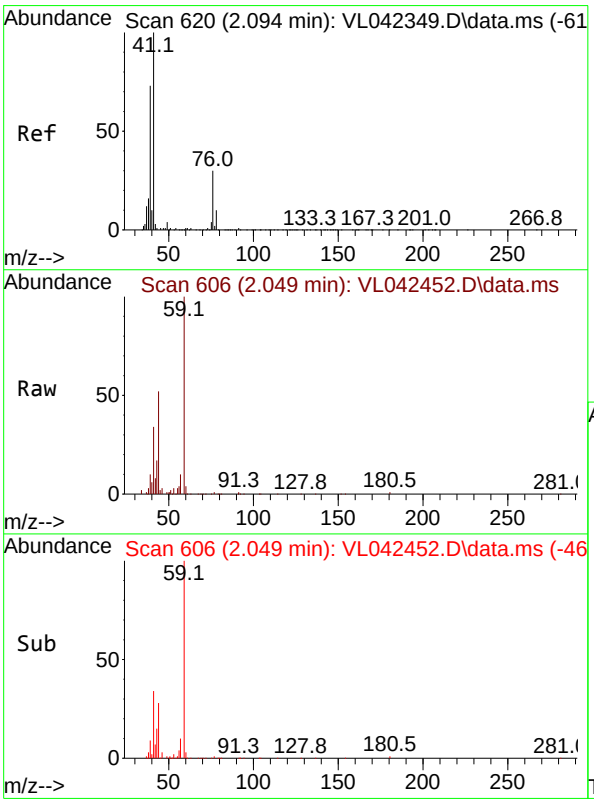
#20
Methylene Chloride
Concen: 0.525 ppbv
RT: 2.069 min Scan# 61
Delta R.T. 0.007 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 84 Resp: 3847

Ion	Ratio	Lower	Upper
84	100		
49	167.5	111.6	167.4#
51	35.0	35.1	52.7#
86	66.4	48.9	73.3

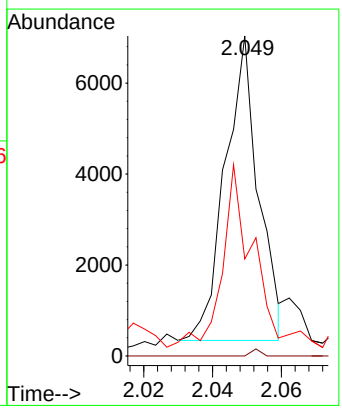


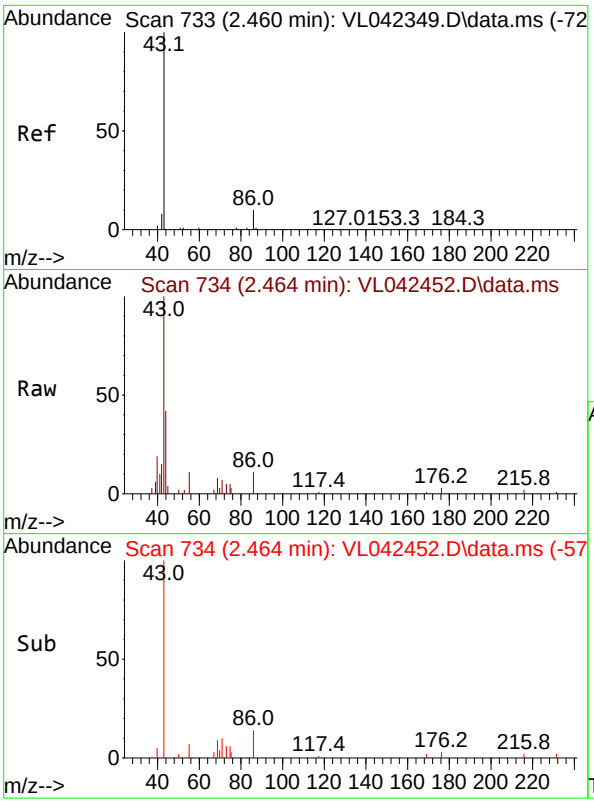


#21
Allyl Chloride
Concen: 0.347 ppbv
RT: 2.049 min Scan# 606
Delta R.T. -0.045 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 41 Resp: 4493

Ion	Ratio	Lower	Upper
41	100		
76	8.6	24.8	37.2#
39	72.2	60.6	90.8



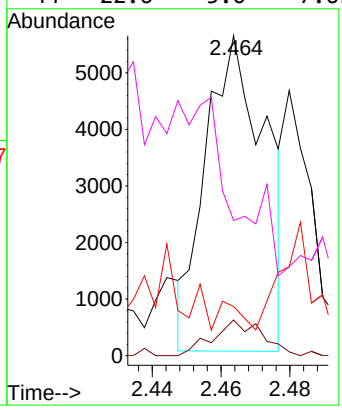


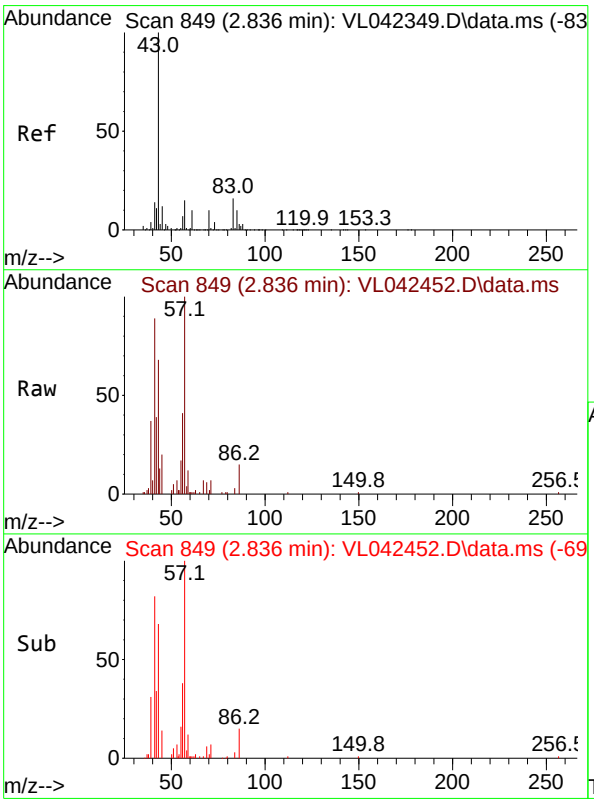
#23
Vinyl Acetate
Concen: 0.884 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.004 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 43 Resp: 6705

Ion	Ratio	Lower	Upper
43	100		
86	14.6	6.5	9.7#
42	1.7	7.8	11.8#
44	22.6	5.0	7.6#

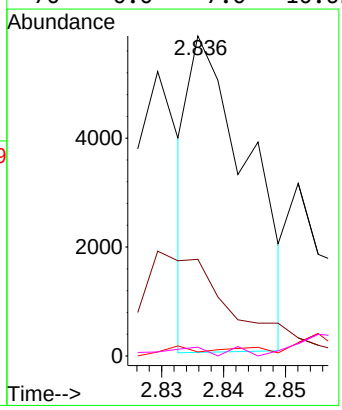


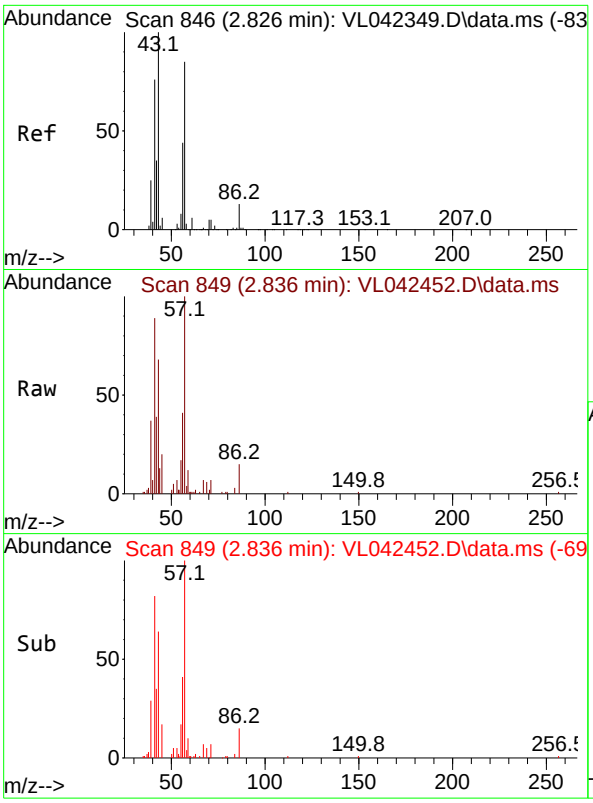


#25
Ethyl Acetate
Concen: 0.084 ppbv
RT: 2.836 min Scan# 849
Delta R.T. 0.000 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 43 Resp: 3860

Ion	Ratio	Lower	Upper
43	100		
45	0.0	8.3	12.5#
61	0.0	7.3	10.9#
70	0.0	7.0	10.6#



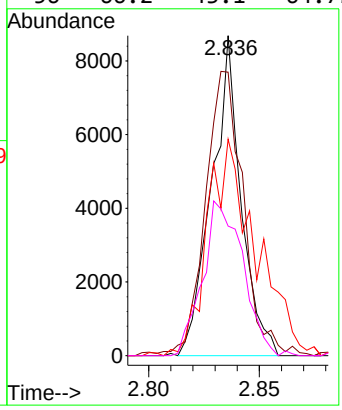


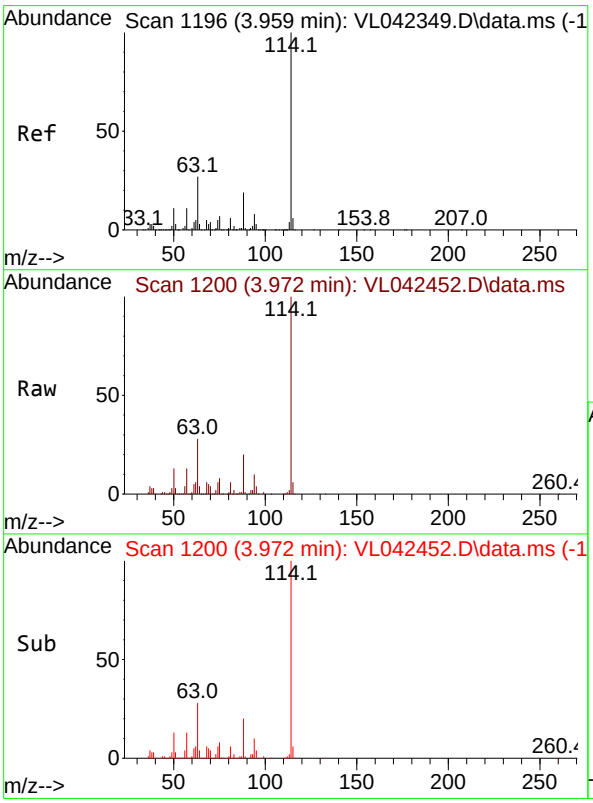
#26
Hexane
Concen: 0.431 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 57 Resp: 8047

Ion	Ratio	Lower	Upper
57	100		
41	114.0	77.9	116.9
43	112.8	208.4	312.6#
56	66.2	43.1	64.7#

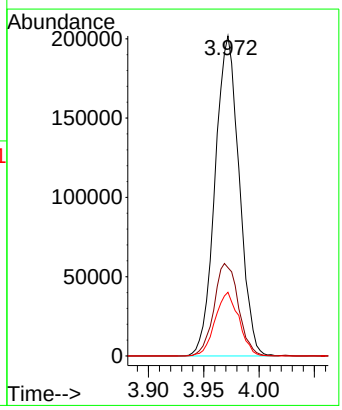


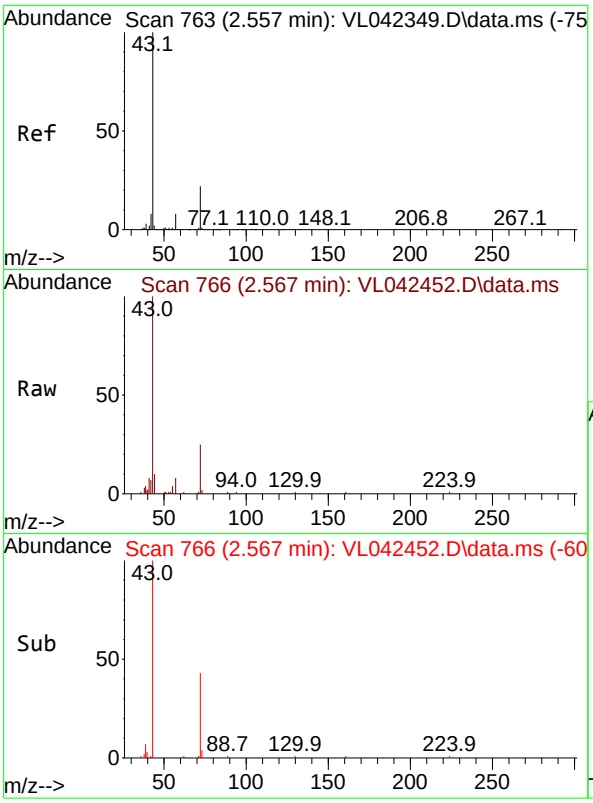


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion:114 Resp: 305602

Ion	Ratio	Lower	Upper
114	100		
63	29.3	21.8	32.6
88	19.7	15.5	23.3



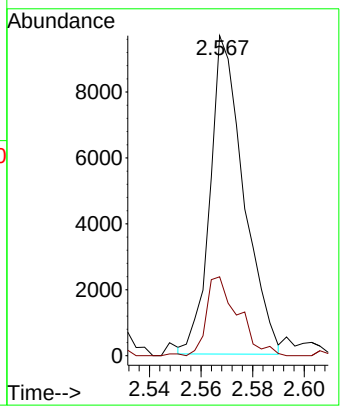


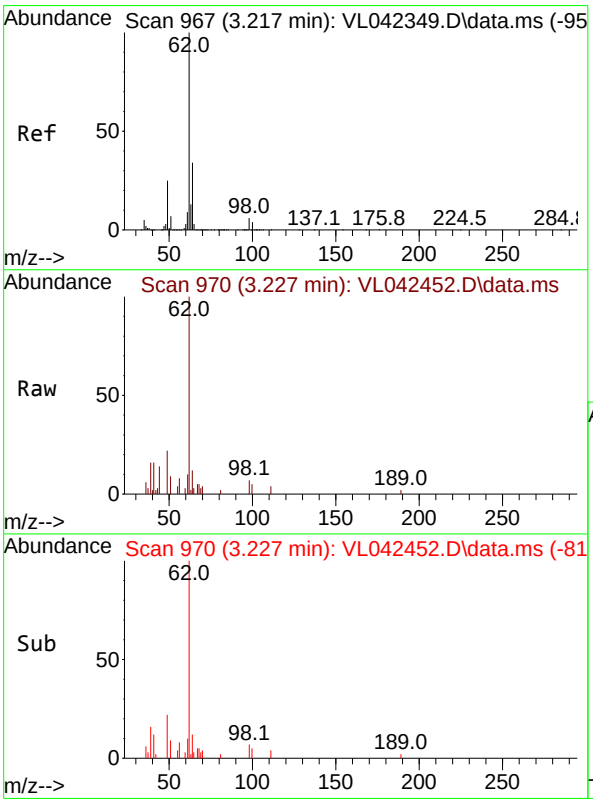
#34
2-Butanone
Concen: 0.362 ppbv
RT: 2.567 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 43 Resp: 8758

Ion	Ratio	Lower	Upper
43	100		
72	24.0	18.2	27.2

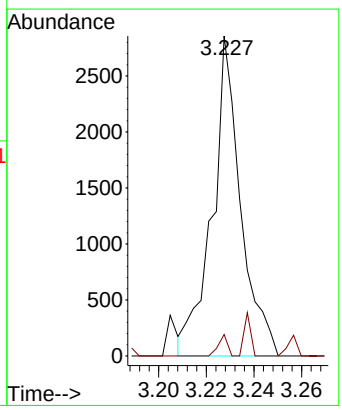


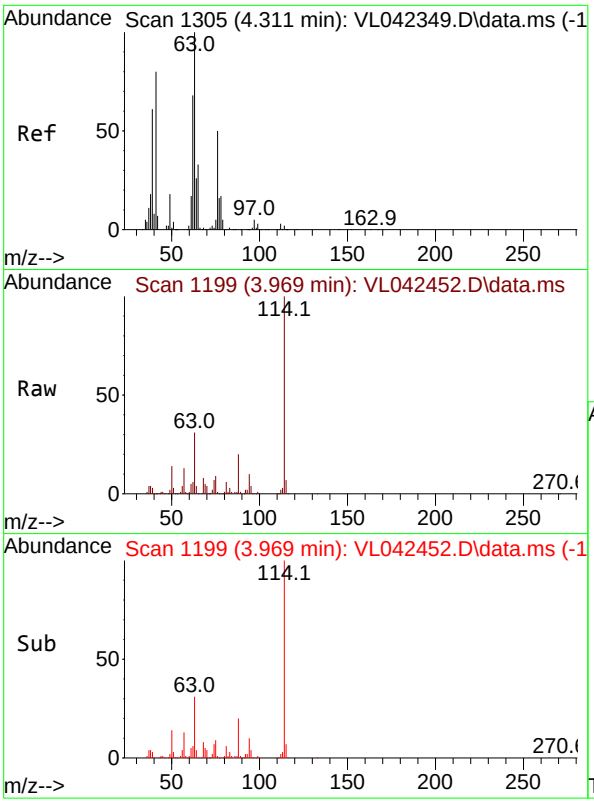


#37
1,2-Dichloroethane
Concen: 0.119 ppbv
RT: 3.227 min Scan# 970
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 62 Resp: 2347

Ion	Ratio	Lower	Upper
62	100		
98	0.0	5.1	7.7#



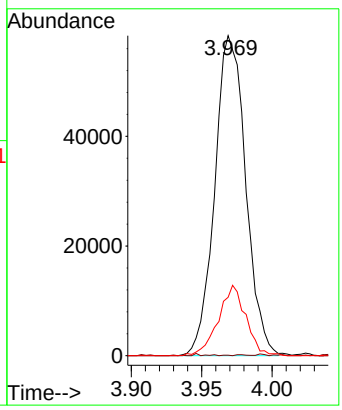


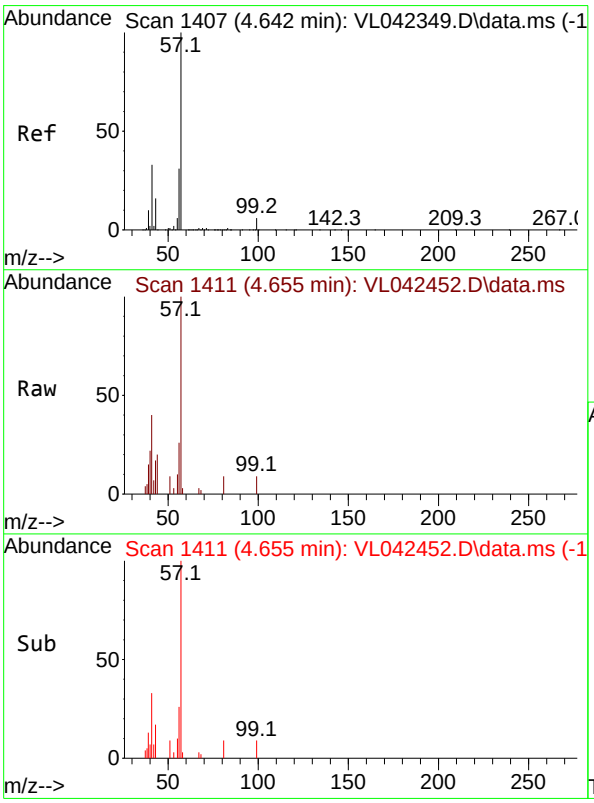
#39
1,2-Dichloropropane
Concen: 7.262 ppbv
RT: 3.969 min Scan# 11
Delta R.T. -0.343 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 63 Resp: 89205

Ion	Ratio	Lower	Upper
63	100		
41	0.2	64.2	96.2#
62	18.3	54.3	81.5#

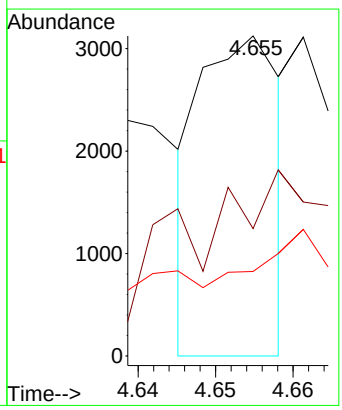


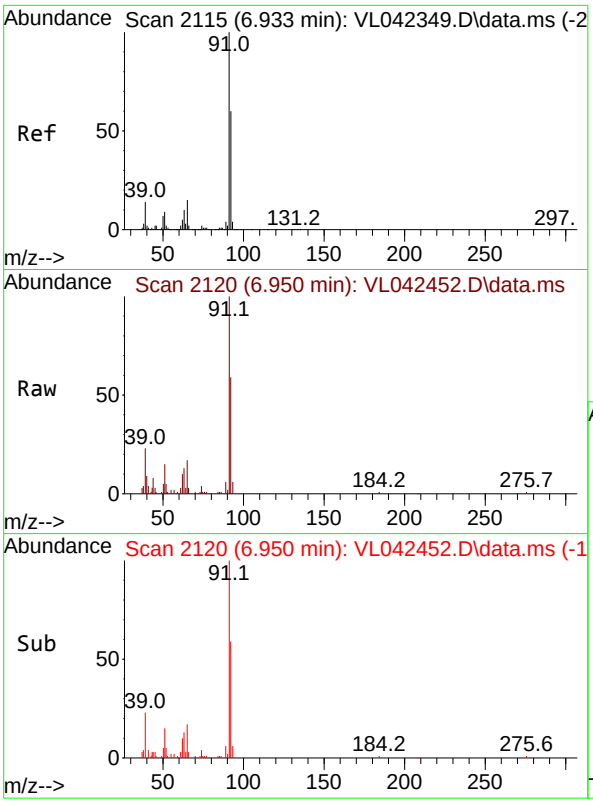


#44
2,2,4-Trimethylpentane
Concen: 0.039 ppbv
RT: 4.655 min Scan# 1411
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 57 Resp: 2244

Ion	Ratio	Lower	Upper
57	100		
41	169.2	27.2	40.8#
56	0.0	25.7	38.5#



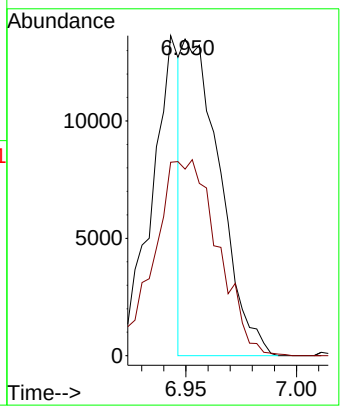


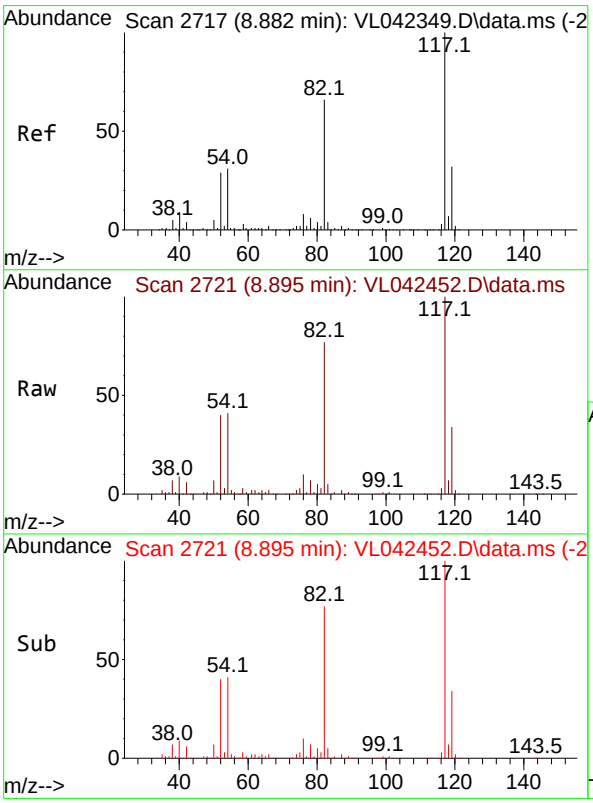
#53
Toluene
Concen: 0.398 ppbv
RT: 6.950 min Scan# 21
Delta R.T. 0.017 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 91 Resp: 15746

Ion	Ratio	Lower	Upper
91	100		
92	106.4	48.2	72.4#

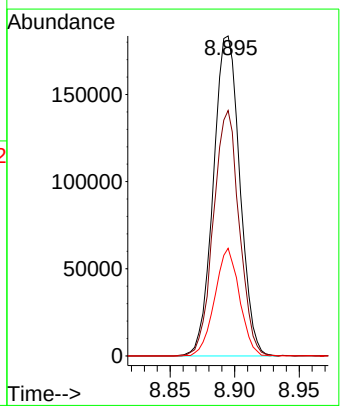


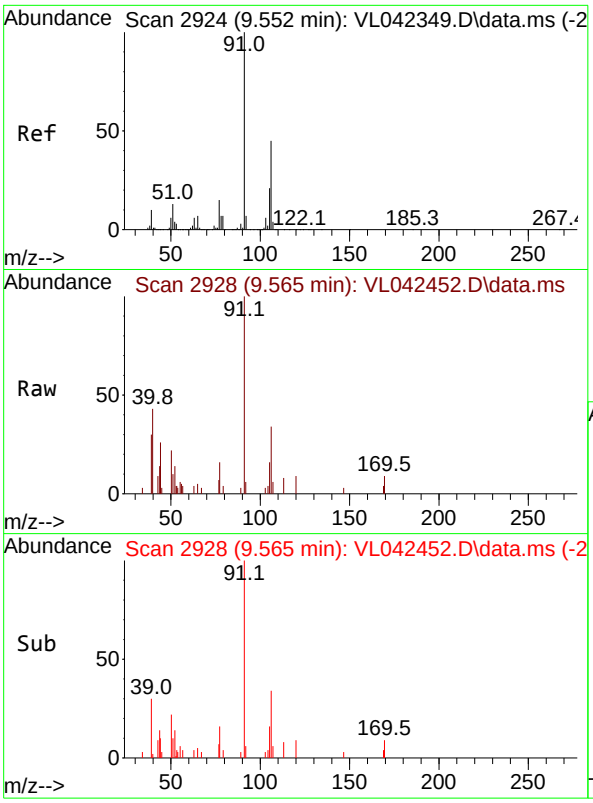


#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2721
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion:117 Resp: 261578

Ion	Ratio	Lower	Upper
117	100		
82	74.7	57.8	86.6
119	31.6	25.2	37.8



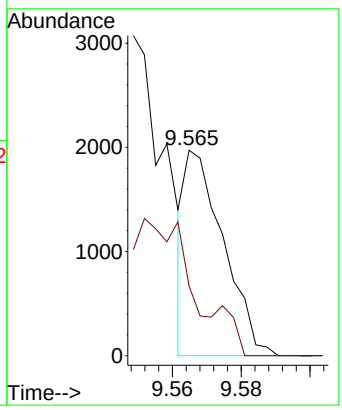


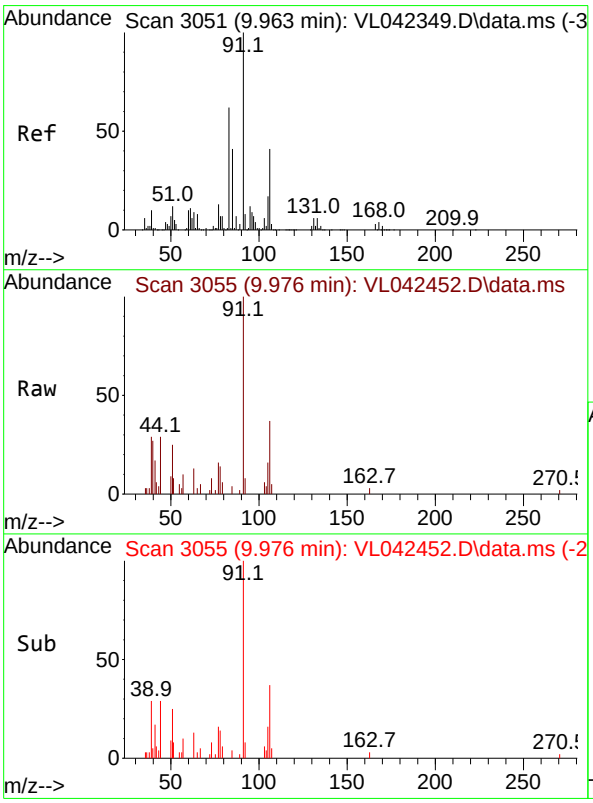
#59
m/p-Xylene
Concen: 0.037 ppbv
RT: 9.565 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 91 Resp: 1536

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

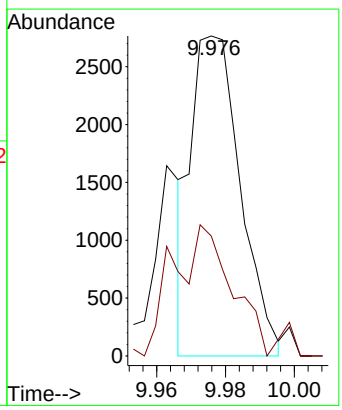


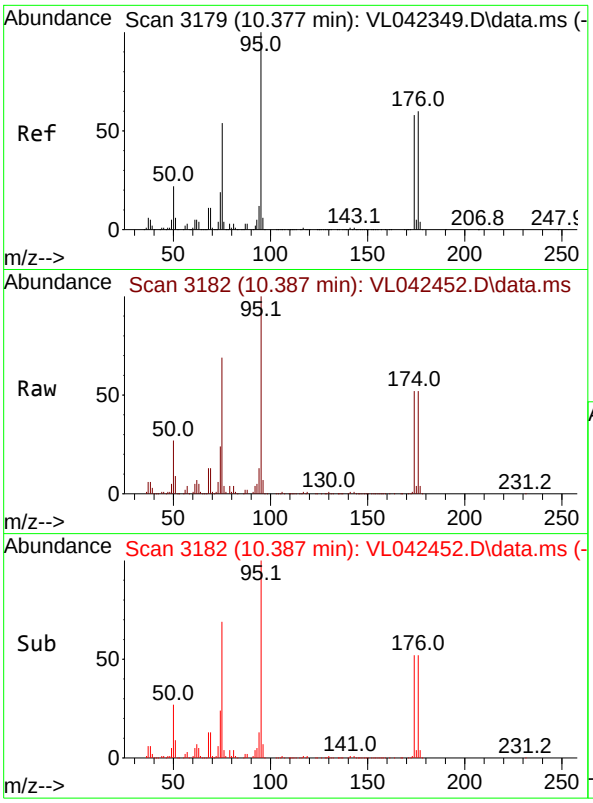


#60
o-Xylene
Concen: 0.065 ppbv
RT: 9.976 min Scan# 3055
Delta R.T. 0.013 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Tgt Ion: 91 Resp: 2743

Ion	Ratio	Lower	Upper
91	100		
106	52.1	21.1	63.4



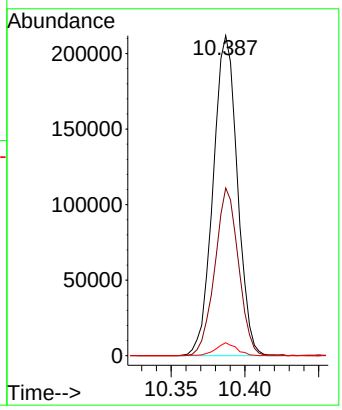


#68
1-Bromo-4-Fluorobenzene
Concen: 11.260 ppbv
RT: 10.387 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042452.D
Acq: 29 Apr 2025 18:09

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-2-3242025DL

Tgt Ion: 95 Resp: 242040

Ion	Ratio	Lower	Upper
95	100		
174	51.1	48.5	72.7
175	3.5	3.7	5.5#



Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042453.D
Acq On : 29 Apr 2025 18:42
Operator : SY/MD
Sample : Q1665-21DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Quant Time: Apr 30 01:24:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Bromochloromethane	2.797	49	114227	10.000	ppbv	0.01
33) 1,4-Difluorobenzene	3.972	114	302811	10.000	ppbv	0.01
55) Chlorobenzene-d5	8.895	117	257605	10.000	ppbv	0.01
System Monitoring Compounds						
68) 1-Bromo-4-Fluorobenzene	10.387	95	229916	10.861	ppbv	0.01
Spiked Amount 10.000	Range 65 - 135		Recovery = 108.600%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.502	85	2620	0.130	ppbv #	72
4) Chloromethane	1.535	50	1272	0.159	ppbv #	87
9) Propene	1.625	41	2938	0.336	ppbv	99
10) Heptane	4.998	43	849	0.035	ppbv #	27
13) Ethanol	1.726	45	267493	192.292	ppbv	76
15) Acetone	1.842	43	73473	3.929	ppbv	100
16) 1,3-Butadiene	1.625	39	1878	0.210	ppbv #	9
17) tert-Butyl alcohol	2.053	59	1524	0.066	ppbv #	47
19) Isopropyl Alcohol	1.891	45	95671	9.210	ppbv #	36
20) Methylene Chloride	2.069	84	5787	0.790	ppbv	92
21) Allyl Chloride	2.062	41	421	0.033	ppbv #	1
23) Vinyl Acetate	2.464	43	5507	0.728	ppbv #	67
25) Ethyl Acetate	2.833	43	10846	0.235	ppbv #	92
26) Hexane	2.836	57	10634	0.570	ppbv #	39
34) 2-Butanone	2.567	43	4171	0.174	ppbv	94
36) Benzene	3.668	78	2348	0.072	ppbv #	83
39) 1,2-Dichloropropane	3.972	63	88088	7.237	ppbv #	23
53) Toluene	6.950	91	56027	1.429	ppbv	97
58) Ethyl Benzene	9.539	91	4000	0.078	ppbv	98
59) m/p-Xylene	9.562	91	2048	0.050	ppbv #	32
60) o-Xylene	9.982	91	1346	0.033	ppbv #	26
74) 1,2,4-Trimethylbenzene	11.542	105	2240	0.043	ppbv #	64

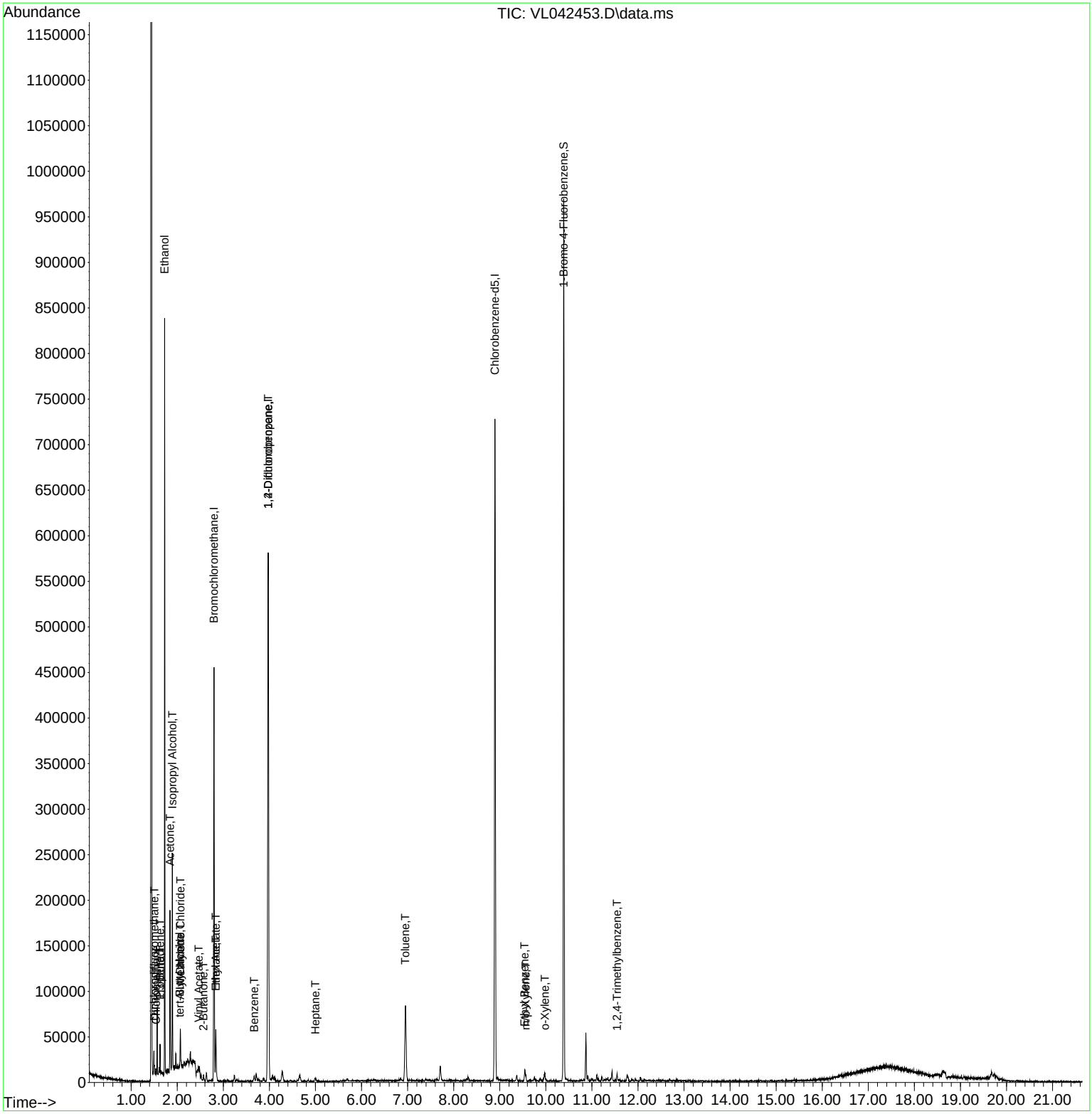
(#) = qualifier out of range (m) = manual integration (+) = signals summed

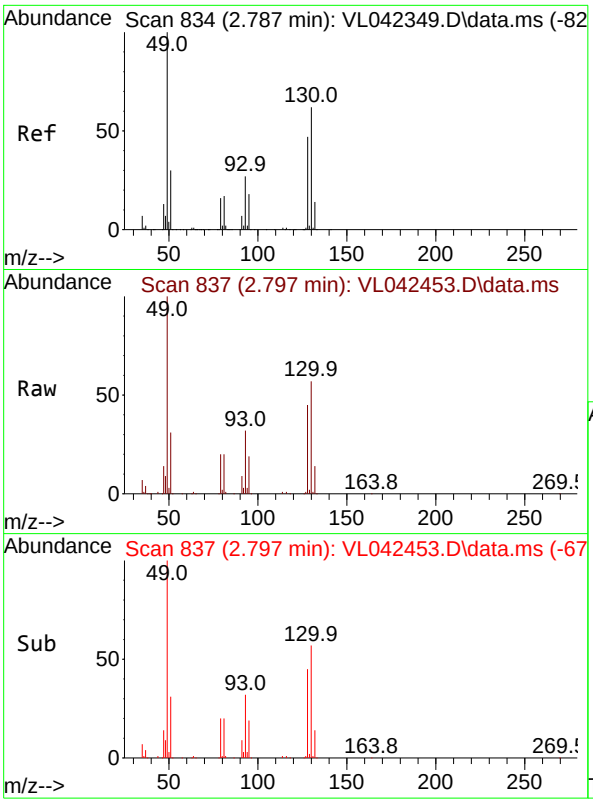
Quantitation Report (Not Reviewed)

Data Path : Z:\voasrv\HPCHEM1\MSVOA_L\Data\VL042925\
Data File : VL042453.D
Acq On : 29 Apr 2025 18:42
Operator : SY/MD
Sample : Q1665-21DL 4X
Misc : 400mL/MSVOA_L
ALS Vial : 15 Sample Multiplier: 1

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Quant Time: Apr 30 01:24:39 2025
Quant Method : Z:\voasrv\HPCHEM1\MSVOA_L\methods\VL041725AIR.M
Quant Title : AIR ANALYSIS BY METHOD TO-15 Instrument: MSVOA_LFri Aug 26 06:05:16 2022
QLast Update : Fri Apr 18 02:14:00 2025
Response via : Initial Calibration



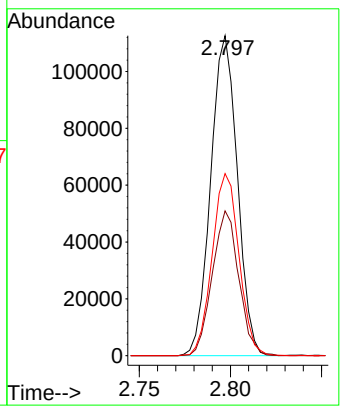


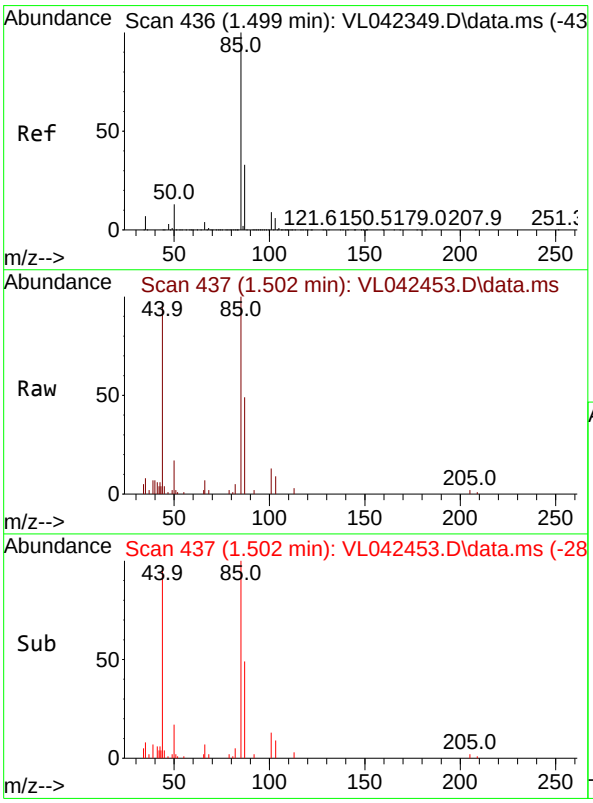
#1
Bromochloromethane
Concen: 10.000 ppbv
RT: 2.797 min Scan# 8
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 49 Resp: 114227

Ion	Ratio	Lower	Upper
49	100		
128	44.9	22.8	68.4
130	57.3	29.3	88.0

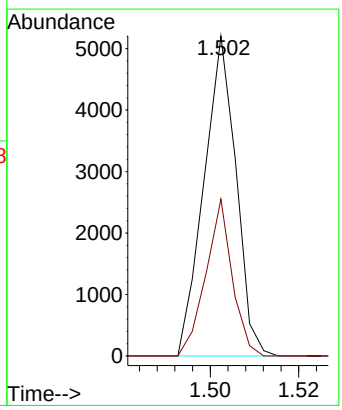


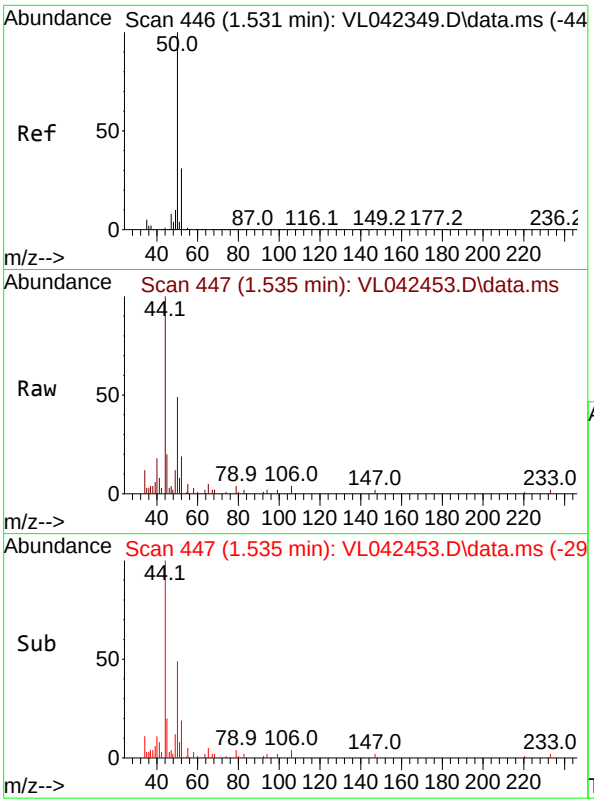


#2
Dichlorodifluoromethane
Concen: 0.130 ppbv
RT: 1.502 min Scan# 437
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 85 Resp: 2620

Ion	Ratio	Lower	Upper
85	100		
87	49.0	26.6	39.8#



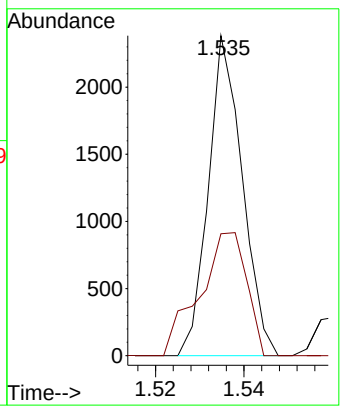


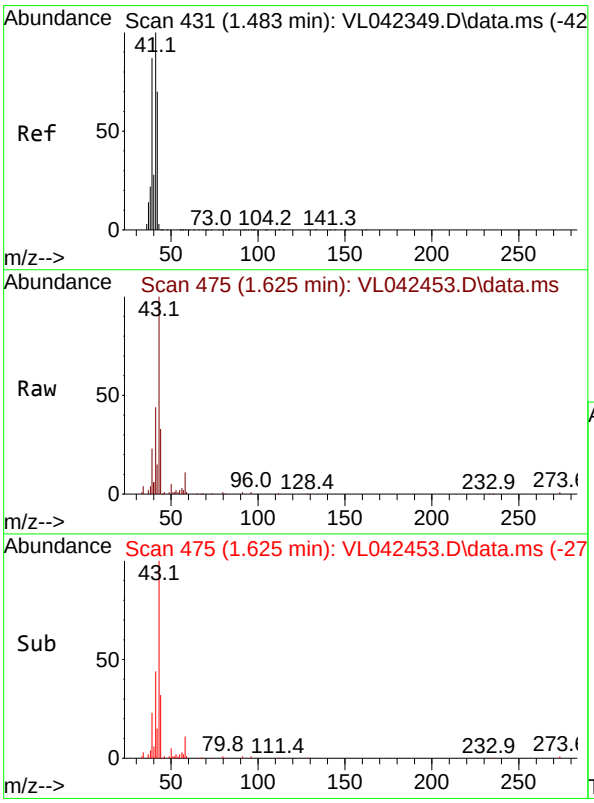
#4
Chloromethane
Concen: 0.159 ppbv
RT: 1.535 min Scan# 44
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 50 Resp: 1272

Ion	Ratio	Lower	Upper
50	100		
52	38.1	24.7	37.1#

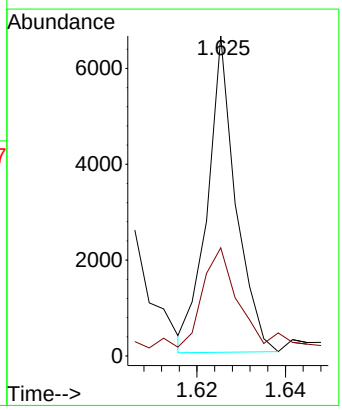


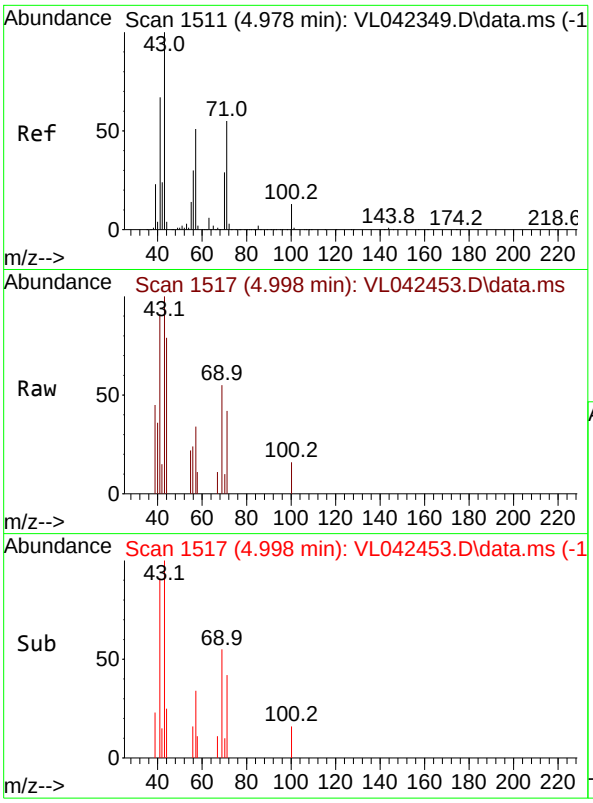


#9
Propene
Concen: 0.336 ppbv
RT: 1.625 min Scan# 475
Delta R.T. 0.143 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 41 Resp: 2938

Ion	Ratio	Lower	Upper
41	100		
42	69.7	56.2	84.4



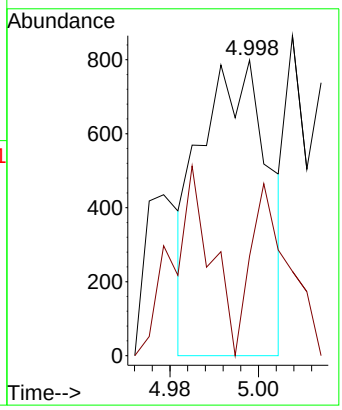


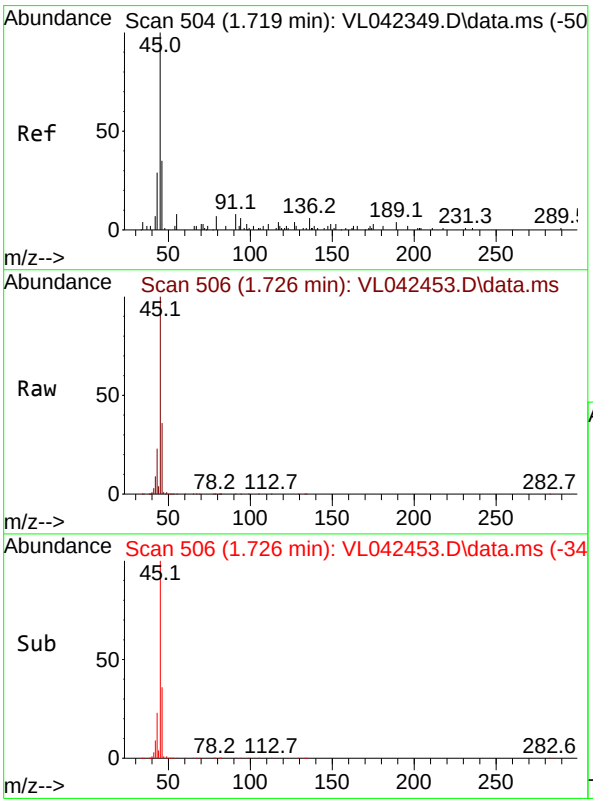
#10
Heptane
Concen: 0.035 ppbv
RT: 4.998 min Scan# 1
Delta R.T. 0.020 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 43 Resp: 849

Ion	Ratio	Lower	Upper
43	100		
57	0.0	39.9	59.9#

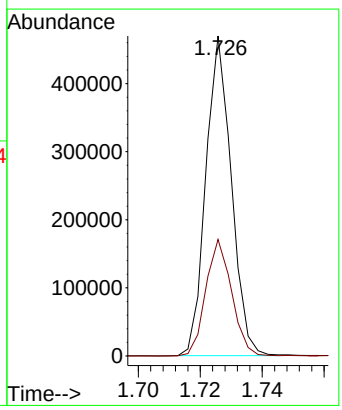


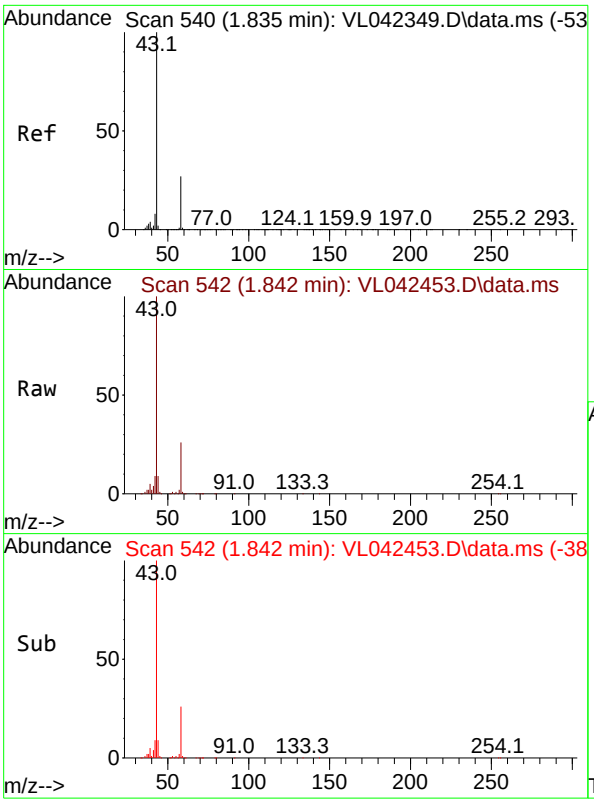


#13
Ethanol
Concen: 192.292 ppbv
RT: 1.726 min Scan# 506
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 45 Resp: 267493

Ion	Ratio	Lower	Upper
45	100		
46	37.5	21.9	87.7



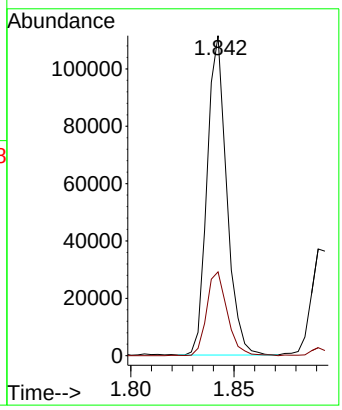


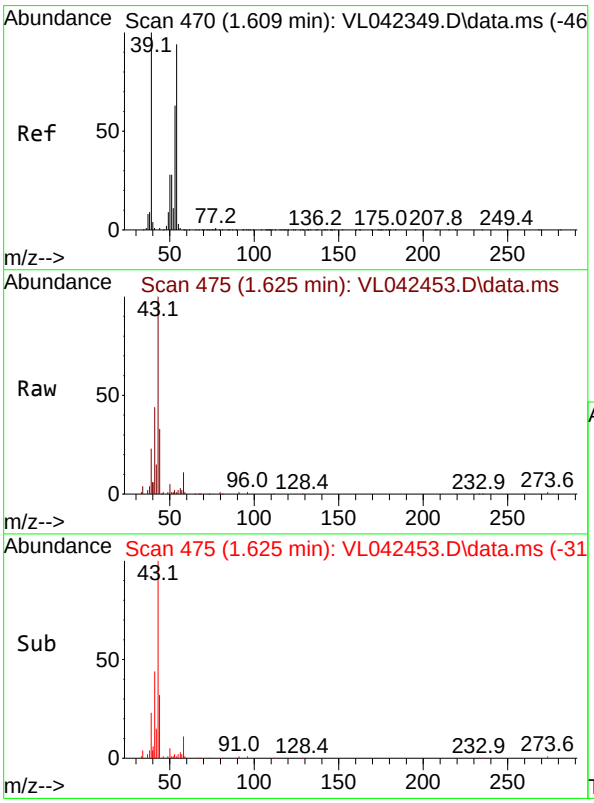
#15
Acetone
Concen: 3.929 ppbv
RT: 1.842 min Scan# 54
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 43 Resp: 73473

Ion	Ratio	Lower	Upper
43	100		
58	27.8	22.4	33.6

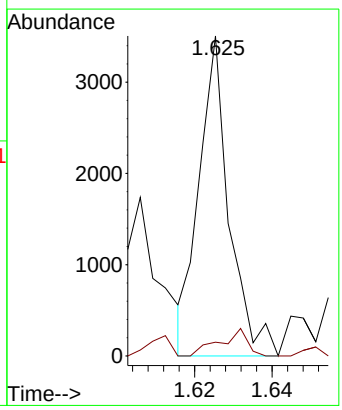


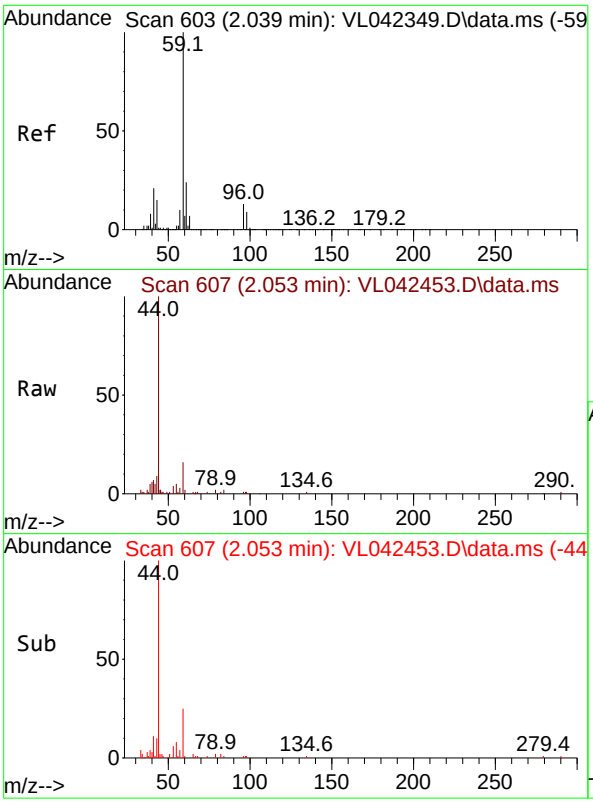


#16
1,3-Butadiene
Concen: 0.210 ppbv
RT: 1.625 min Scan# 475
Delta R.T. 0.017 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 39 Resp: 1878

Ion	Ratio	Lower	Upper
39	100		
54	0.0	64.9	97.3#



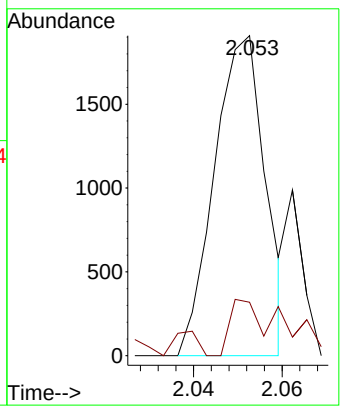


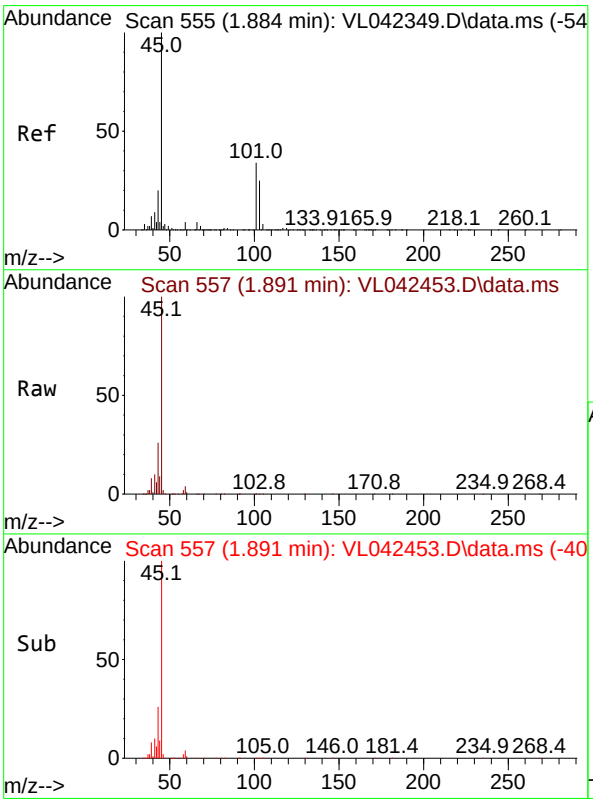
#17
tert-Butyl alcohol
Concen: 0.066 ppbv
RT: 2.053 min Scan# 6
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 59 Resp: 1524

Ion	Ratio	Lower	Upper
59	100		
57	31.0	8.7	13.1#

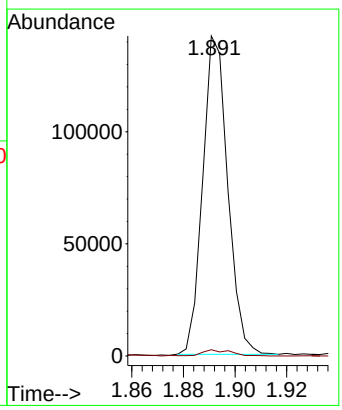


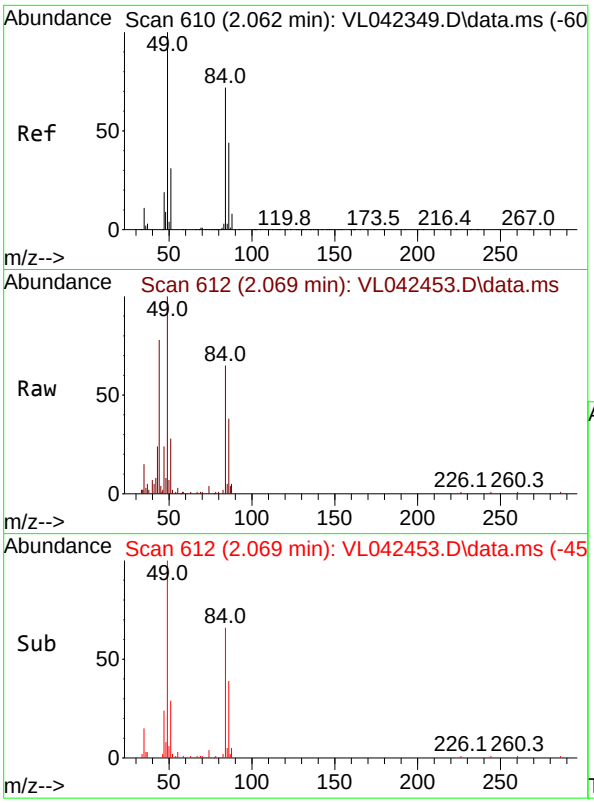


#19
Isopropyl Alcohol
Concen: 9.210 ppbv
RT: 1.891 min Scan# 557
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 45 Resp: 95671

Ion	Ratio	Lower	Upper
45	100		
58	2.3	34.5	51.7#



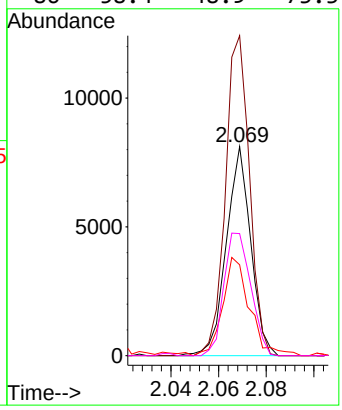


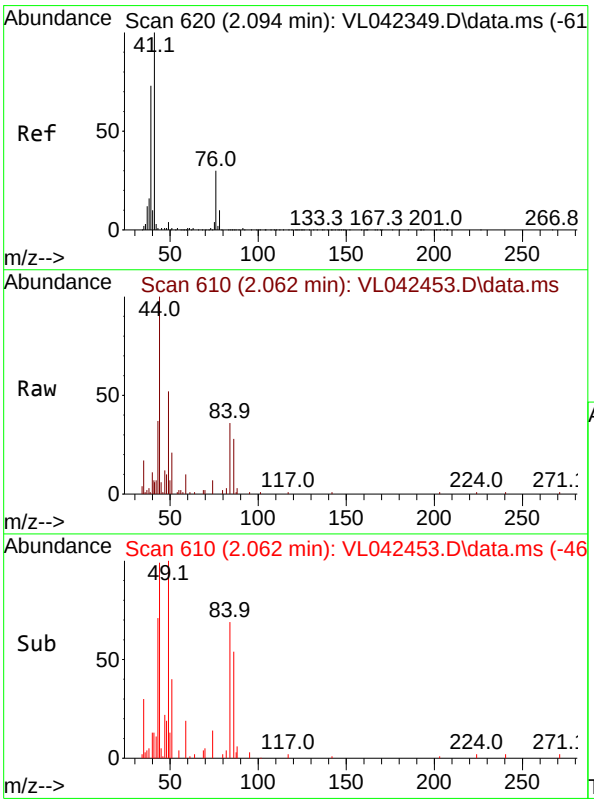
#20
Methylene Chloride
Concen: 0.790 ppbv
RT: 2.069 min Scan# 61
Delta R.T. 0.007 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 84 Resp: 5787

Ion	Ratio	Lower	Upper
84	100		
49	153.1	111.6	167.4
51	42.5	35.1	52.7
86	58.4	48.9	73.3

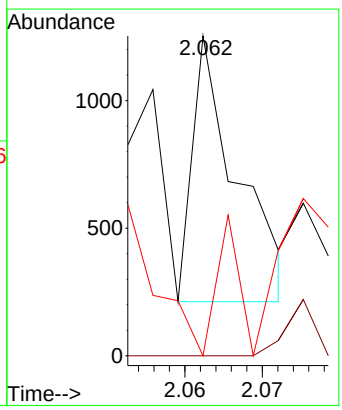


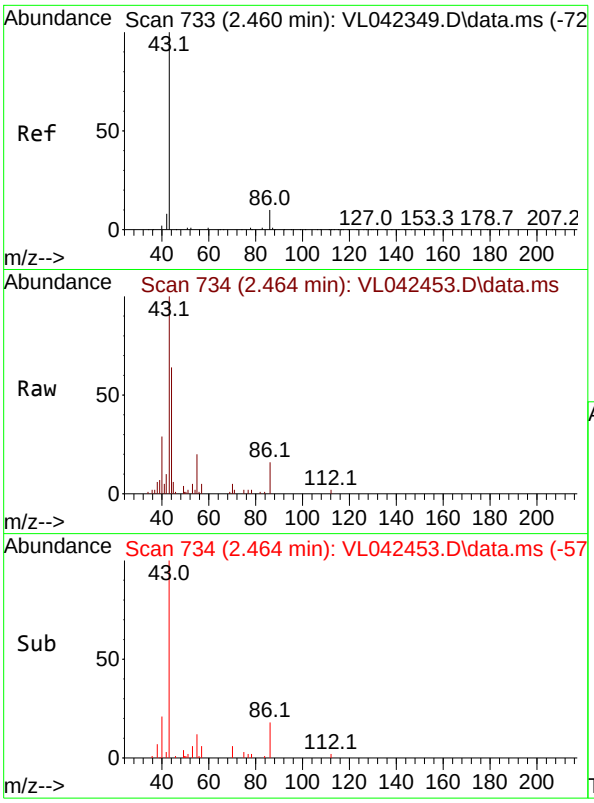


#21
Allyl Chloride
Concen: 0.033 ppbv
RT: 2.062 min Scan# 610
Delta R.T. -0.032 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 41 Resp: 421

Ion	Ratio	Lower	Upper
41	100		
76	13.1	24.8	37.2#
39	292.4	60.6	90.8#



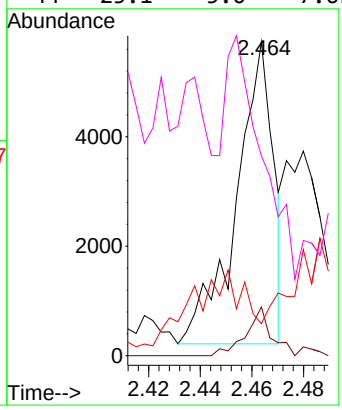


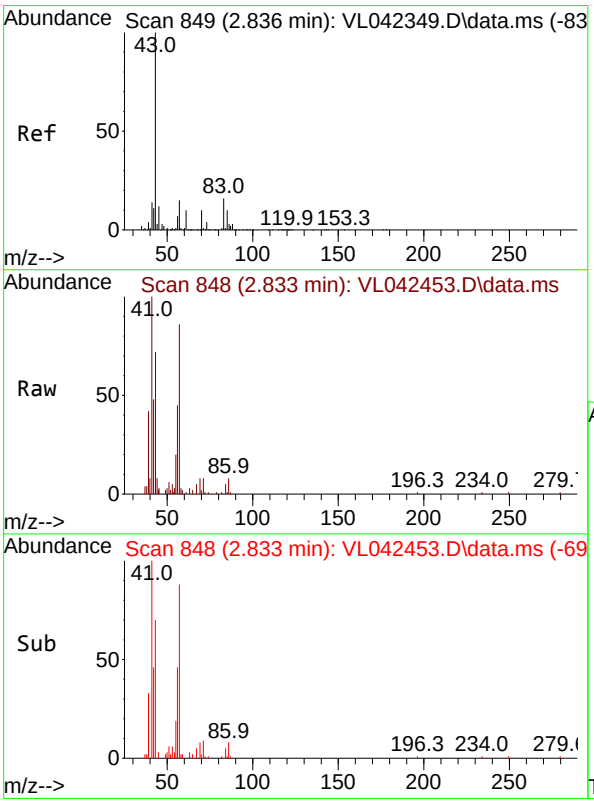
#23
Vinyl Acetate
Concen: 0.728 ppbv
RT: 2.464 min Scan# 7
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 43 Resp: 5507

Ion	Ratio	Lower	Upper
43	100		
86	16.1	6.5	9.7#
42	0.0	7.8	11.8#
44	25.1	5.0	7.6#

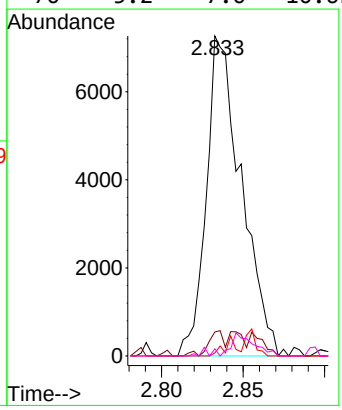


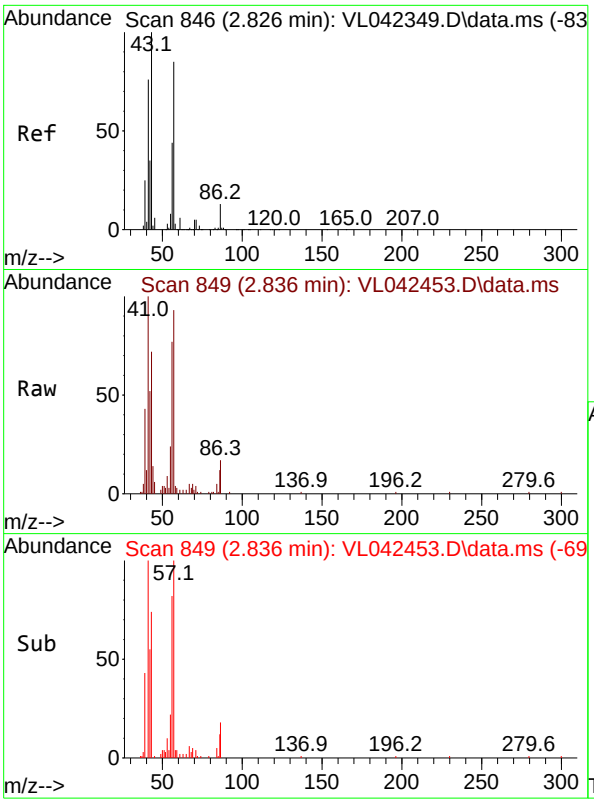


#25
Ethyl Acetate
Concen: 0.235 ppbv
RT: 2.833 min Scan# 848
Delta R.T. -0.003 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 43 Resp: 10846

Ion	Ratio	Lower	Upper
43	100		
45	9.8	8.3	12.5
61	4.3	7.3	10.9#
70	5.2	7.0	10.6#



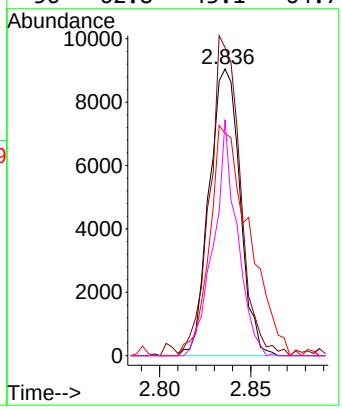


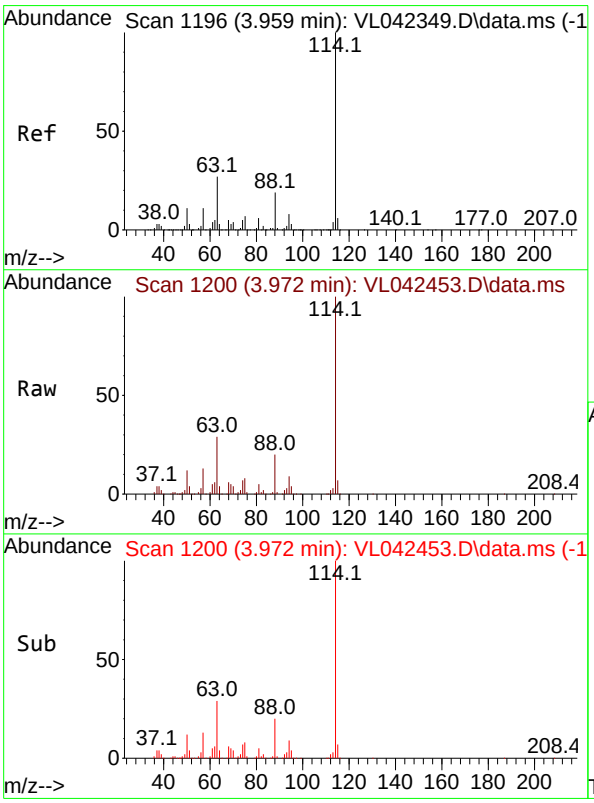
#26
Hexane
Concen: 0.570 ppbv
RT: 2.836 min Scan# 84
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 57 Resp: 10634

Ion	Ratio	Lower	Upper
57	100		
41	112.6	77.9	116.9
43	102.9	208.4	312.6#
56	62.8	43.1	64.7

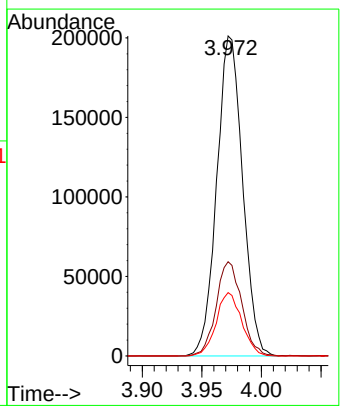


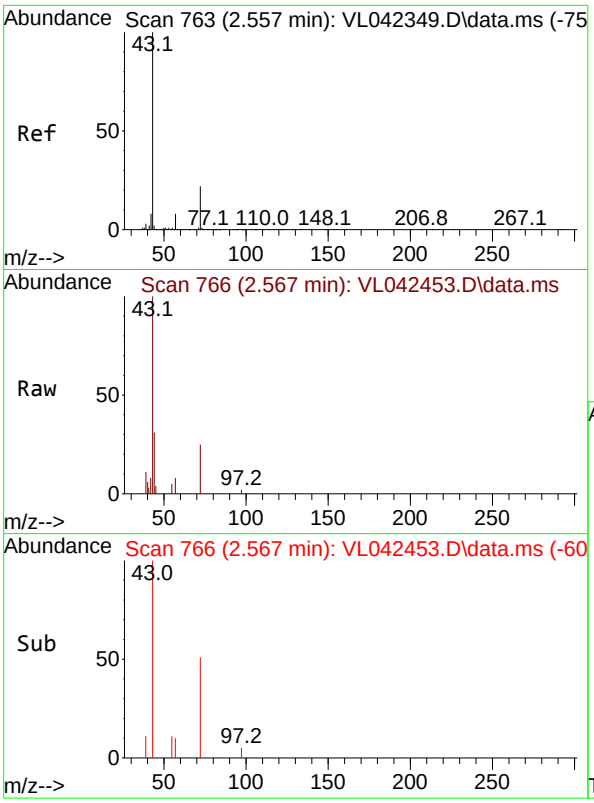


#33
1,4-Difluorobenzene
Concen: 10.000 ppbv
RT: 3.972 min Scan# 1200
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion:114 Resp: 302811

Ion	Ratio	Lower	Upper
114	100		
63	29.1	21.8	32.6
88	19.6	15.5	23.3



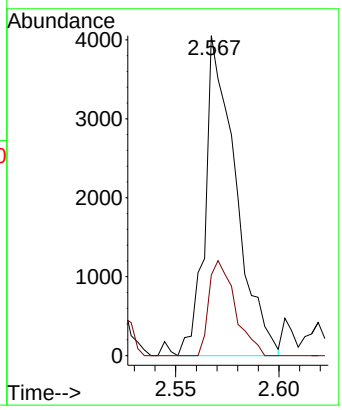


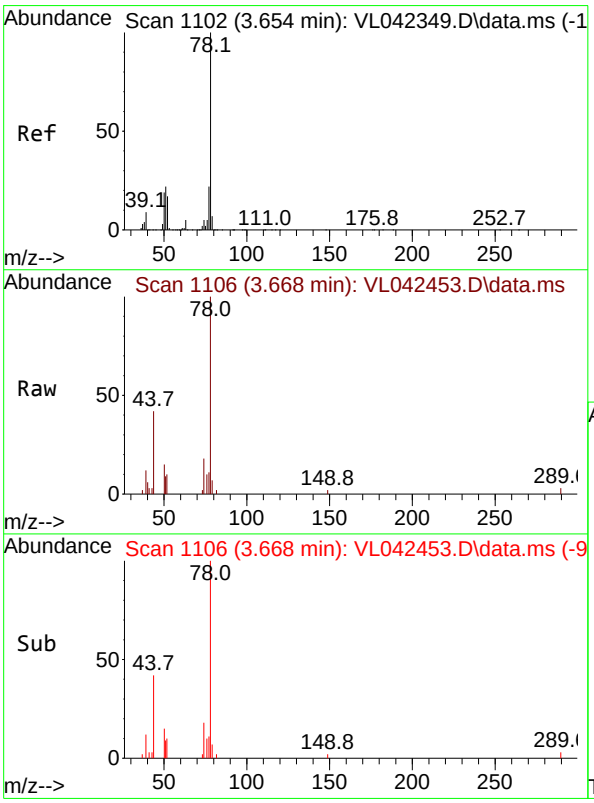
#34
2-Butanone
Concen: 0.174 ppbv
RT: 2.567 min Scan# 7
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 43 Resp: 4171

Ion	Ratio	Lower	Upper
43	100		
72	25.4	18.2	27.2

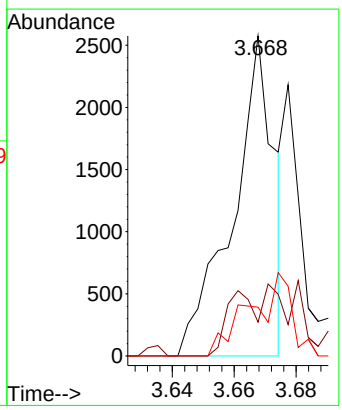


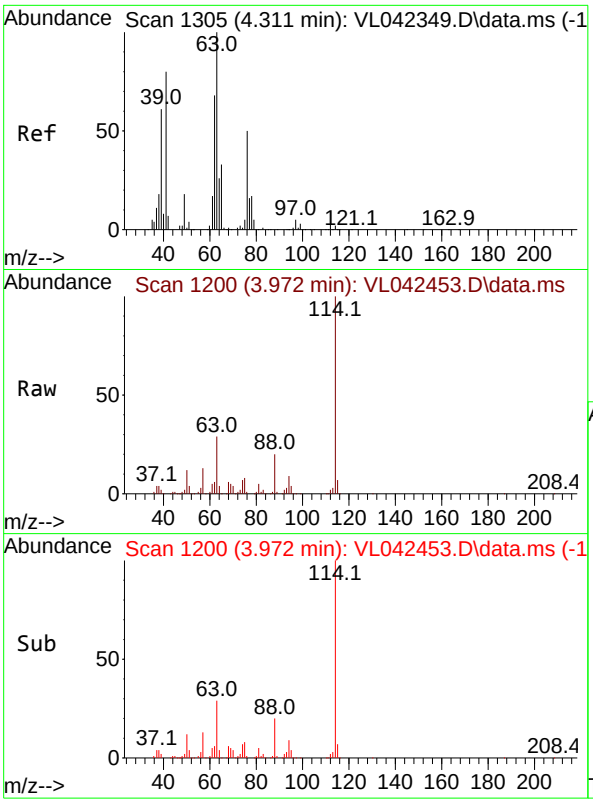


#36
Benzene
Concen: 0.072 ppbv
RT: 3.668 min Scan# 1106
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 78 Resp: 2348

Ion	Ratio	Lower	Upper
78	100		
77	10.6	17.4	26.0#
50	15.3	15.5	23.3#



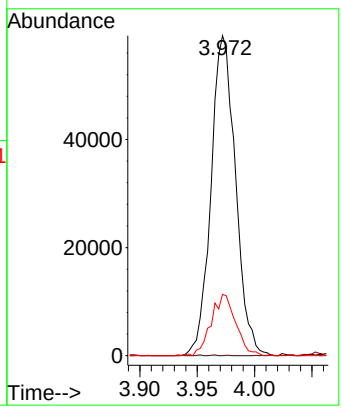


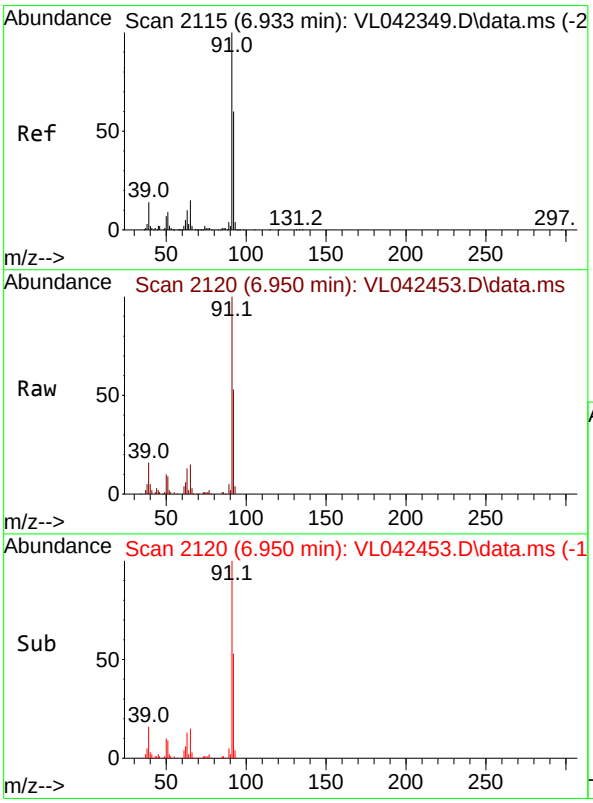
#39
1,2-Dichloropropane
Concen: 7.237 ppbv
RT: 3.972 min Scan# 1
Delta R.T. -0.339 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 63 Resp: 88088

Ion	Ratio	Lower	Upper
63	100		
41	0.0	64.2	96.2#
62	19.1	54.3	81.5#

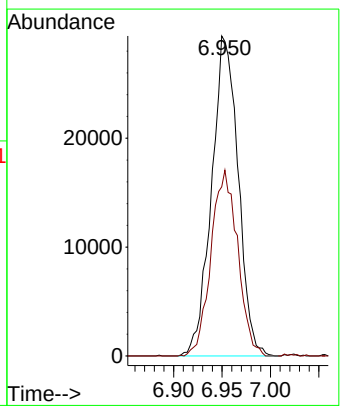


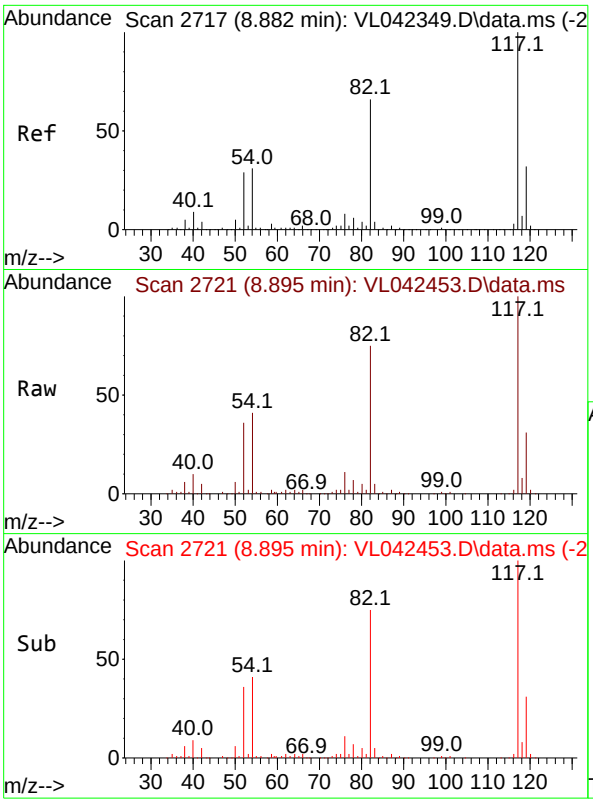


#53
Toluene
Concen: 1.429 ppbv
RT: 6.950 min Scan# 2120
Delta R.T. 0.017 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 91 Resp: 56027

Ion	Ratio	Lower	Upper
91	100		
92	58.2	48.2	72.4



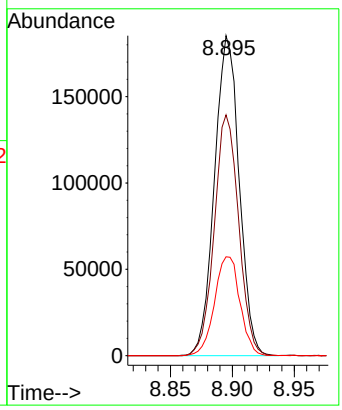


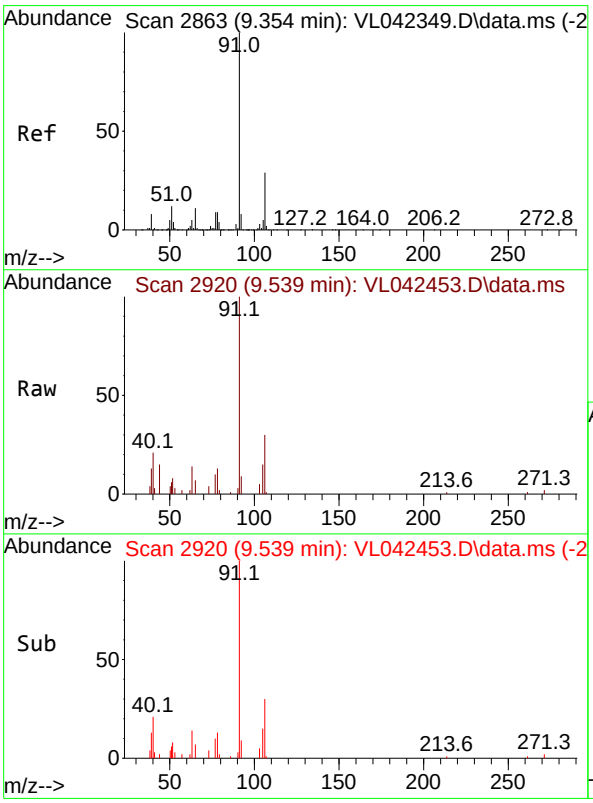
#55
Chlorobenzene-d5
Concen: 10.000 ppbv
RT: 8.895 min Scan# 2
Delta R.T. 0.013 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion:117 Resp: 257605

Ion	Ratio	Lower	Upper
117	100		
82	74.3	57.8	86.6
119	31.9	25.2	37.8

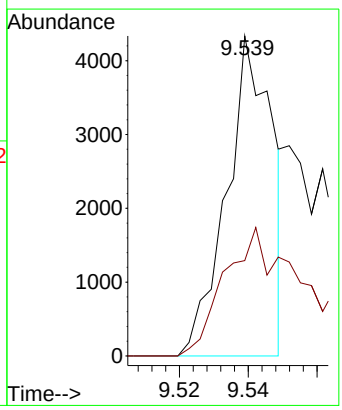


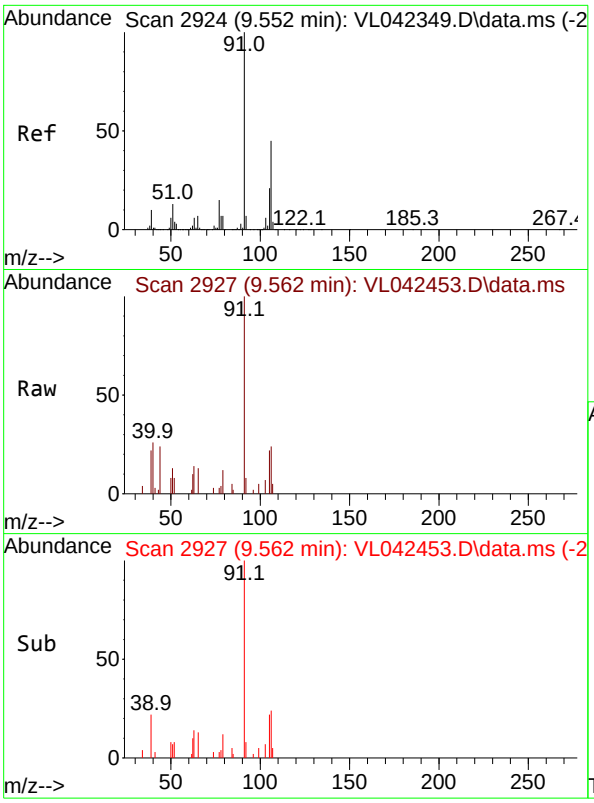


#58
Ethyl Benzene
Concen: 0.078 ppbv
RT: 9.539 min Scan# 2920
Delta R.T. 0.185 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 91 Resp: 4000

Ion	Ratio	Lower	Upper
91	100		
106	29.8	23.0	34.4



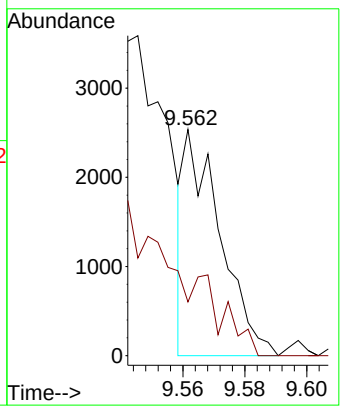


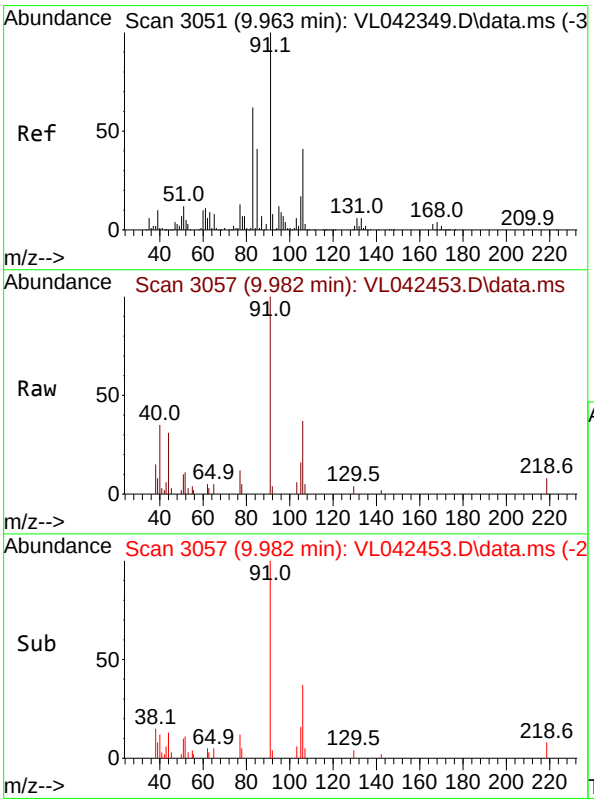
#59
m/p-Xylene
Concen: 0.050 ppbv
RT: 9.562 min Scan# 2
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

Tgt Ion: 91 Resp: 2048

Ion	Ratio	Lower	Upper
91	100		
106	0.0	35.4	53.2#

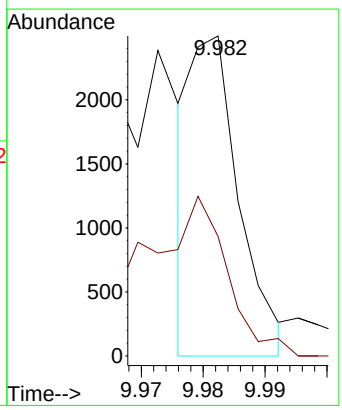


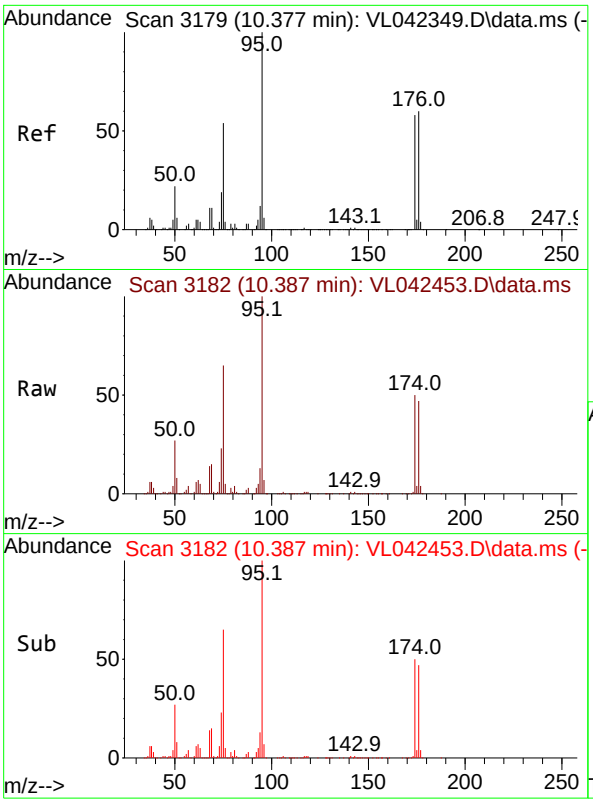


#60
o-Xylene
Concen: 0.033 ppbv
RT: 9.982 min Scan# 3057
Delta R.T. 0.020 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion: 91 Resp: 1346

Ion	Ratio	Lower	Upper
91	100		
106	89.4	21.1	63.4#



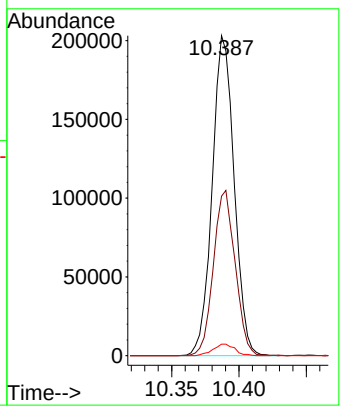


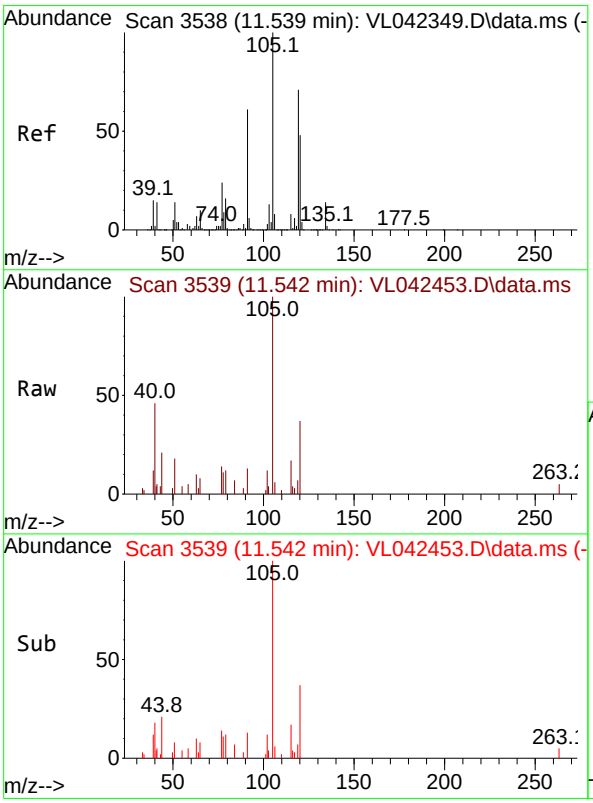
#68
1-Bromo-4-Fluorobenzene
Concen: 10.861 ppbv
RT: 10.387 min Scan# 3
Delta R.T. 0.010 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Instrument :
MSVOA_L
ClientSampleId :
IA-B2-1-3242025DL

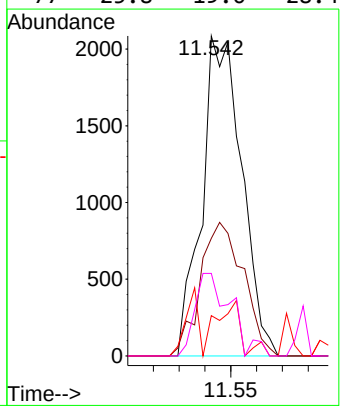
Tgt Ion: 95 Resp: 229916

Ion	Ratio	Lower	Upper
95	100		
174	51.3	48.5	72.7
175	3.6	3.7	5.5#





#74
1,2,4-Trimethylbenzene
Concen: 0.043 ppbv
RT: 11.542 min Scan# 3539
Delta R.T. 0.004 min
Lab File: VL042453.D
Acq: 29 Apr 2025 18:42

Tgt Ion:105 Resp: 2240

Ion	Ratio	Lower	Upper
105	100		
120	36.7	38.1	57.1#
91	12.6	48.8	73.2#
77	25.8	19.0	28.4